**OFFICIALS**
Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

**CITY OF KUNA**
**Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634**

# City Council Meeting
# AGENDA
# Tuesday, August 4, 2020

## 6:00 P.M. REGULAR CITY COUNCIL

***Per the Order issued by Central District Health on July 14, 2020,***
***Social distancing and face masks will be required.***

***Due to social distancing protocol,***
***the Council Chambers Audience Occupancy Capacity is 15.***

***The first 15 persons who appear will be allowed in Council Chambers. All other persons may access the meeting via Live Streaming. Elected Officials and staff will be participating virtually. Those attending in person can watch the meeting on the Council Chambers screen.***

***Live Streaming Instructions:***
*Members of the public may watch the August 4, 2020 Council Meeting via Facebook Live. Live feed will start at 6:00 P.M. on the City of Kuna Idaho Facebook page linked below:*
https://www.facebook.com/CityofKunaIdaho/

***For questions please call the Kuna City Clerk's Office at (208) 387-7726.***

***Public testimony will be received on the cases listed under Public Hearings within this Agenda. The instructions and options available for public testimony are listed below.***

***APPLICANT/PUBLIC ORAL PUBLIC HEARING TESTIMONY PROCESS:***

**Written – Up to noon the day of the Public Hearing**

1. Submit any below stated option **prior to noon the day of** the Public Hearing meeting. Late submissions will not be included.
2. Submit testimony via our website on the Public Testimony Form. Kunacity.id.gov > Doing Business > Forms and Applications > Frequently Requested Applications and Forms > ONLINE Public Testimony Form
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
   City of Kuna
   Attention: City Clerk's Office
   PO Box 13
   Kuna, ID 83634

**Oral – Via electronic call during the Public Hearing**

1. Submit request **no later than noon the day of** the Public Hearing meeting.
2. Email PublicHearingTestimony@KunaID.gov
   - ✓ Your name

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- ✓ Address
- ✓ Phone Number you will be calling from to give testimony
- ✓ Email Address
- ✓ Date of Public Hearing
- ✓ Case number or Identification of Public Hearing

3. Watch your email for a reply email with the information to join the meeting electronically. (Check your spam/junk folder as a precaution)
4. Follow the dial in information.
5. Call into the virtual lobby a minimum of 5 minutes prior to the meeting.

**Oral – In Person Testimony during the Public Hearing**.
All persons wishing to testify must, state their name and residential address. No person shall speak until recognized by the Mayor. A three (3) minute time limit will be placed on all testimonies.

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***If you have questions regarding public testimony, please call the Kuna City Clerk's Office at (208) 387-7726.***

## *1. Call to Order and Roll Call*

## *2. Invocation:* None

## *3. Pledge of Allegiance:* Mayor Stear

## *4. Consent Agenda:* ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

*All items listed under the Consent Agenda are considered to be routine and are acted on with one motion by the City Council. There will be no separate discussion on these items unless the Mayor, Council Member, or City Staff requests an item to be removed from the Consent Agenda for discussion. Items removed from the Consent Agenda will be placed on the Regular Agenda under Business or as instructed by the City Council.*

***A.*** Regular City Council Meeting Minutes Dated July 21, 2020

***B.*** Accounts Payable Dated July 30, 2020 in the amount of $384,217.32

***C.*** Resolutions:

***1.*** Consideration to approve Resolution No. R38-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO, APPROVING AND ADOPTING AN AMENDMENT TO THE CITY OF KUNA PERSONNEL POLICY MANUAL SECTION 6.19 REGARDING CELL PHONE USE WHILE DRIVING; DIRECTING THE HUMAN RESOURCES DIRECTOR; AND PROVIDING AN EFFECTIVE DATE.

***2.*** Consideration to approve Resolution No. R40-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "REIMBURSEMENT AGREEMENT" BETWEEN THE CITY OF KUNA AND THE LETE FAMILY REVOCABLE TRUST FOR 4" SEWER SERVICE LINES IN THE PROSPECTOR SEWER PROJECT; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND THE CITY CLERK TO ATTEST TO SAID SIGNATURE.

## *5. External Reports or Requests:* None

## *6. Public Hearings:*

*Due to current health precautions associated with the Coronavirus, the City of Kuna is providing alternative ways for the community to submit comments at public hearings. To learn more about the process for written and oral testimony please follow the directions above or call the City of Kuna Clerk's Office at (208) 387-7726.*

***A.*** *Public Hearing continued from June 16, 2020 and tabled from July 7 and July 21, 2020, for additional public testimony* and Consideration to approve Case No. 19-10-AN (Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat) & a DA (Development Agreement) for Spring Rock Subdivision – Troy Behunin, Planner III & Dave Yorgason, Ten Mile Creek, LLC (Applicant) ACTION ITEM

Ten Mile Creek, LLC, requests approval for Annexation, Planned Unit Development (PUD), Preliminary Plat, and a Development Agreement. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Development proposing up to 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, one school lot and two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project site is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the northeast corner of Cloverdale and Kuna Roads.

*Re-Open Public Hearing*
*Receive evidence*
*Consideration to close evidence presentation and proceed to deliberation*

*Potential Motions:*

*Consideration to either:*

*Option 1: Approve or Deny Case Nos. 19-10-AN (Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat), a DA (Development Agreement), and the Findings of Fact, Conclusions of Law and Order of Decision as presented in the packet and Close the Public Hearing.*

*Option 2: Continue the Public Hearing to a time and date certain and direct staff to prepare a draft Findings of Fact, Conclusions of Law and Order of Decision for consideration by the Council.*

***B.*** *Public Hearing tabled from July 21,2020* on the Status of CDBG Funded Grant Activities – Chris Engels, City Clerk and Lisa Bachman, JUB Engineers Project Manager

## *7. Business Items:*

***A.*** *Tabled from July 21, 2020* Consideration to approve 20-03-LLA (Lot Line Adjustment) for Kelleher Subdivision No. 2 – Jessica Reid, Customer Service Specialist III ACTION ITEM

On behalf of Open Door Rentals, LLC (Owner), Shawn Brownlee with Trilogy Development seeks Lot Line Adjustment approval to ensure proper building setback requirements. The subject properties are located at 1585 W. Hubbard Road and 1595 W. Hubbard Road, Kuna, ID, 83634 (APNS: R4865430140 and R4865430160).

***B.*** Consideration to approve Resolution No. R41-2020 – Lisa Holland, Economic Development Director ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KUNA:
- SETTING FORTH CERTAIN PURPOSES, AND
- ESTABLISHING A CITY OF KUNA BUSINESS CONFIDENTIALITY MANAGEMENT POLICY; AND
- DIRECTING THE CITY CLERK; AND
- SETTING AN EFFECTIVE DATE.

***C.*** *Informational Only* Economic Development Update on Urban Renewal – Lisa Holland, Economic Development Director

***D.*** *Informational Only* Budget Results Report – Jared Empey, City Treasurer

***E.*** Consideration to approve Tentative FY 2021 Budget – Jared Empey, City Treasurer ACTION ITEM

## *8. Ordinances:*

***A.*** *Tabled from July 21, 2020* Consideration to approve Ordinance No. 2020-24 ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:
- AMENDING CHAPTER 8, TITLE 3; AND
- PROVIDING FOR ADDITIONAL DEFINITIONS; AND
- MAKING TECHNICAL CHANGES; AND
- PROVIDING FOR SPECIAL EVENTS REGULATIONS AND PERMITS;

- AND PROVIDING FOR PARADE SPECIAL EVENT REGULATIONS AND PERMITS; AND
- PROVIDING FOR BLOCK EVENT REGULATIONS; AND
- PROVIDING FOR TECHNICAL CORRECTIONS TO THE ATTENDEE PROJECTION GOOD FAITH ESTIMATE SPECIAL APPLICATION REGULATIONS; AND
- PROVIDING FOR PERMIT DENIAL AND PROCEDURE; AND
- PROVIDING FOR LIBERAL CONSTRUCTION OF ADMINISTRATIVE REGULATORY POWERS AND AUTHORITY PROVIDED; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

*Consideration to Waive Three Readings of Ordinance*
*Consideration to Approve Ordinance*
*Consideration to Approve Summary Publication*

***B.*** Consideration to approve Ordinance No. 2020-25 ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:
- MAKING CERTAIN FINDINGS; AND
- ENLARGING THE BOUNDARIES OF THE KUNA MUNICIPAL IRRIGATION SYSTEM BY THE INCLUSION OF ADA COUNTY ASSESSOR'S PATAGONIA DEVELOPMENT LLC.; AND
- DECLARING WATER RIGHTS APPURTENANT THERETO ARE POOLED FOR DELIVERY PURPOSES; AND
- DIRECTING THE CITY CLERK TO RECORD THIS ORDINANCE AS PROVIDED BY LAW; AND
- DIRECTING THE CITY ENGINEER TO PROVIDE NOTICE OF THIS ORDINANCE TO THE NEW YORK IRRIGATION DISTRICT, THE OWNERS AND UPDATE THE IRRIGATION SYSTEM MAP; AND
- PROVIDING AN EFFECTIVE DATE.

*Consideration to Waive Three Readings of Ordinance*
*Consideration to Approve Ordinance*

**9.** ***Executive Session:*** *None*

***10. Mayor/Council Announcements:***

**11.** ***Adjournment:***

**OFFICIALS**
Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

**CITY OF KUNA**
**Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634**

# City Council Meeting
# MINUTES
# Tuesday, July 21, 2020

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## *1. Call to Order and Roll Call*

**COUNCIL MEMBERS PRESENT:**
Mayor Joe Stear
Council President Briana Buban-Vonder Haar – Via Zoom
Council Member Richard Cardoza
Council Member Warren Christensen – Via Zoom
Council Member Greg McPherson

**CITY STAFF PRESENT:**
Chris Engels, City Clerk
Jared Empey, City Treasurer
Bill Gigray, City Attorney
Lisa Holland, Economic Development Director
Wendy Howell, Planning & Zoning Director
Nancy Stauffer, Human Resources Director
Paul Stevens, Public Works Director – Via Zoom?
Bobby Withrow, Parks Director
Troy Behunin, Planner III
Jace Hellman, Planner II
Jessica Reid, Customer Service Specialist III

Mayor Stear stated they were working through some difficulties with the audio but a new system would hopefully be up and running by the next Council Meeting. That would straighten some of that out. He asked that anyone Zooming in announce who they were before they spoke. Also, they were under Central District Health Orders for mask wearing where it was not possible to social distance. The chairs were set up at 6 feet so, if folks were more comfortable with it, they could lower their masks, as long as they weren't intermingling, and still be in compliance. He appreciated everyone doing their part.

***2. Invocation:*** *None*

***3. Pledge of Allegiance:*** Mayor Stear

***4. Consent Agenda:*** ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

*(Timestamp 00:02:20)*

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***A.*** Regular City Council Meeting Minutes Dated July 7, 2020

***B.*** Accounts Payable Dated July 16, 2020 in the amount of $1,076,527.21

**Motion To:** Approve the Consent Agenda
**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson
**Further Discussion:** None
**Approved by the Following Roll Call Vote:**
**Voting Aye:** Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
**Voting No:** None
**Absent:** None
**Motion Passed:** 4-0**.**

***5. External Reports or Requests:*** *None*

***6. Public Hearings:***

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***A.*** *Public Hearing continued from June 16, 2020, and tabled from July 7, 2020, for additional public testimony and any comments or suggested changes to the Development Agreement from the City Attorney* and Consideration to approve Case No. 19-10-AN

(Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat) & a DA (Development Agreement) for Spring Rock Subdivision – Troy Behunin, Planner III & Dave Yorgason, Ten Mile Creek, LLC (Applicant) ACTION ITEM
*(Timestamp 00:03:28)*

Ten Mile Creek, LLC, requests approval for Annexation, Planned Unit Development (PUD), Preliminary Plat, and a Development Agreement. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Development proposing up to 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, one school lot and two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project site is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the northeast corner of Cloverdale and Kuna Roads.

Mayor Stear asked if City Attorney Bill Gigray had any comments to make on the Development Agreement.

Mr. Gigray appreciated the opportunity. He had a chance to review it and he could say the applicant was very cooperative. He only had a few comments. It looked like it had all been worked out fine. There were some minor edits needed; some numbering issues and he wanted to clarify who the trustees of the trusts were that were parties to the agreement so they were correctly reflected in the development agreement. The City would want to be sure they were dealing with the party involved in the agreement. Also, that those were current and there was verification they were registered and they were the current and acting trustees. Mr. Bower, the applicant's representative, was very cooperative in this regard. They provided the City with all of the updated affirmations of the trusts and trustees and they were updated and recorded. It was important to remember, when not dealing with LLCs or corporations or some entity that was registered with the Secretary of State, which trusts were not, the trustees were the ones that had to have the authority to act on behalf of the trust and in this instance it was a pretty significant situation with this development and property. They wanted to be sure they were identifying the trustees that had the authority to act on behalf of the trust and that they had, in fact, in the trust agreement the authority to take action in the development agreement which had all been verified and provided. He believed Planner III Troy Behunin, through the developer, worked out all the edits they talked about. He appreciated their cooperation and was comfortable with the agreement as it was now being presented. He stood for questions.

Mayor Stear asked if there were any questions and if there were any questions from Council on Zoom.

City Clerk Chris Engels reiterated Mayor's question for Zoom attendees.

Council Member Christensen said he did not have any questions.

Planner III Troy Behunin added Mr. Gigray and his team jumped on the edits for the development agreement. It was really great. There were just some minor changes from when Council last saw it. Dave Yorgason's team and Jeffry Bower took care of those things. He knew the applicant had a discussion with the Kuna Police Department between the June 16, 2020 Council Meeting and that meeting. He believed the applicant wanted to present that discussion. Also, there were two additional exhibits added to the packet; a July 1, 2020 Spring Rock letter submitted by Dave Yorgason and his team and an economic development letter. Also, the Development Agreement final draft both sides agreed on was there as well. All of those items were frontloaded at the beginning of the packet. He stood for questions.

Mayor Stear re-opened the public hearing.

Support:

Dave Yorgason, the applicant, 14254 W Battenberg Drive, Boise, Idaho 83713, thanked the Council for tabling at the last meeting when he was unable to be there. He reiterated Mr. Gigray's and Mr. Behunin's statements regarding the Development Agreement. There were minor edits and they accepted all of them. They did a quick rush to get the trustee certifications in place. They were all submitted. They were comfortable with all of those. They did submit a letter but before touching on that he wanted to comment on the economic development letter that was provided and answer any questions. It focused primarily on CIDs. They had stated before a CID was not required for this development to move forward but it would enhance and allow some of the improvements potentially, specifically public improvements, to be built quicker. It was not a financial risk to the City and it was not a requirement for this development to be built. They appreciated that consideration and he was happy to answer any questions on CIDs. In regard to his letter, there were several items identified in the letter to address some of the comments made after their initial presentation. He did have the opportunity to speak with Police Chief Jon McDaniel a few weeks prior. He appreciated that opportunity and they talked about a couple things. Their intent had always been, whether police, fire, streets, or schools, to work with the associations and agencies. If there was a need they were there to help them. His track record was such that, he didn't advertise it publicly but since he was there to maybe sell the project he would do it, it was not uncommon once a school opened that they needed something, books, desks, something, and they didn't advertise it but they liked to go to the school and ask what they needed. It wasn't that they wanted public attention but rather they recognized the importance of being a community partner. Same for the police department, fire, and others. That was their intent; to work closely with the agencies as there was need. That was the conversation he had with Chief McDaniel. He was so thankful for the opportunity to be there. They worked really hard to get to that point. They decided to keep moving forward and requested approval. He stood for questions.

Mayor Stear asked if there were any questions for Mr. Yorgason.

Ms. Engels repeated Mayor Stear's question for Council President Buban-Vonder Haar and Council Member Christensen.

They did not have any questions.

Mayor Stear asked if they were able to hear okay.

Ms. Engels said they were not. They had both messaged that they were not able to hear very well. There was also a comment on social media that they were unable to hear as well. Audio was not cooperating.

Mr. Gigray stated that needed to be fixed or they would have an Open Meeting Law problem.

Mayor Stear knew Ms. Engels had worked on that but the new equipment wasn't there. He hoped it would be there by the next meeting but there was no way to get anything done by this meeting. She had tweaked a few things and they were hoping that would help.

Mr. Gigray wanted to be sure that even if it was hard to hear they were still hearing what was going on. That was the main thing.

Mayor Stear stated that was his concern too. They technically didn't have a quorum hearing what was happening.

Ms. Engels shared the comments she had. Kristi Inselman, ACHD, was having a hard time hearing people speak with the audio and the echo. She said if anyone had questions for her to let her know in the chat room. Council President Buban-Vonder Haar said she was holding her laptop up to her ear to try to hear when Ms. Engels asked if she could hear Mr. Behunin. Ms. Engels asked previously if they were able to hear. They were not able to hear clearly and indicated it was very hard to hear the Mayor. Council Member Christensen had agreed with that as well. She had tried a couple things during that process and it had not been effective.

Mayor Stear was not sure what to do.

Mr. Gigray suggested trying to speak a lot louder. That might help. As long as they could hear it was fine. He was just nervous about Council Members not being able to hear because of the Open Meeting Law. They didn't want to mess this up.

Mayor Stear agreed.

Planning & Zoning Director Wendy Howell commented they were able to get it to where everyone could hear in planning and zoning by having everyone wear headphones *(unintelligible).*

Ms. Engels explained the echo was on this end; the speakers for them to be able to hear. That was where the echo was coming from because she could hear the echo right there.

Mayor Stear said he moved his mic a little further away because that was where he thought he was starting to cause an echo. He asked if Council President Buban-Vonder Haar and Council Member Christensen could hear him speaking tight on the microphone.

Council President Buban-Vonder Haar said that was better. She had been having the biggest problem hearing the Mayor. She could hear the podium better but it still wasn't ideal. However, whatever Mayor had just done made it easier.

Council Member Christensen agreed.

Ms. Engels asked Mayor Stear to try again and she would move the mic.

Mayor Stear asked if that sounded any better.

Council Member Christensen said yes.

Council President Buban-Vonder Haar said as long as he was continuously talking it was fine but if there were breaks at all it gave the echo time to catch up and muddled it a bit. If there was going to be a break in speech it would need to be a pronounced break.

Mr. Yorgason asked if it would help if the Mayor muted himself when not speaking.

Ms. Engels said no.

Mayor Stear asked if Council President Buban-Vonder Haar and Council Member Christensen had been able to hear Mr. Yorgason's presentation.

Council Member Christensen said yes, it was tough at times but he was able to hear and understand what he was saying.

Council President Buban-Vonder Haar said same.

Mayor Stear asked if they were comfortable with moving on.

Council Member Christensen was okay to continue on with the conversation. He was able to hear it.

Council President Buban-Vonder Haar said they could proceed and she would speak up if they had any more audio issues.

Mr. Gigray asked if any of the people listening in could hear.

Mayor Stear asked the public listening in if they could hear better.

Ms. Engels relayed the comments from the public; someone in the back doesn't have a mic, no one can hear, they need to come to the podium, headphones for listeners helps, and Nancy Finley just commented yes to Mayor's question.

Mayor Stear asked Mr. Gigray what he thought.

Mr. Gigray said as long as they established the other Council Members could hear what Mayor was saying and what was being said from the podium, because they were not taking testimony from anywhere else, and the members of the public could hear what was being said there and by Mayor and the Council, he thought they were fine. He appreciated them taking the time to clarify this and make sure everyone was hearing. The record would be clear they had taken that extra precaution. His recommendation was if there was anyone listening in that needed a part repeated, they take the time to do that so it was clear they heard everything that was being presented and they could move on. He encouraged everyone to speak loudly.

Council Member Cardoza was having a hard time hearing Council President Buban-Vonder Haar and Council Member Christensen. He asked if everyone in the audience was able to hear them.

They were.

Ms. Engels explained when they spoke, she had to turn the speaker up for them to hear but she couldn't do that to much otherwise there was echo. She was trying to catch that.

Mayor Stear said that was all he had signed up to testify in this matter. He asked if there was anyone else that wished to testify that didn't get a chance to sign in. Seeing none he put the question rightfully before Council.

Against: None

Neutral: None

Rebuttal: None

Mayor Stear shared he had some major concerns with the ability to supply wastewater and that type of thing to the project because he didn't know that running lines that far to the City plant was reasonable. He had a real concern with a lot of times on these projects they wanted to get into the reimbursement programs and the City didn't really have funding at that point to do a lot of reimbursement on these types of things. That was one of his biggest concerns with this project.

Ms. Engels said Council President Buban-Vonder had a comment.

Council President Buban-Vonder Haar asked if that was a continuing concern. They were going to put in a new regional onsite sewer waste water treatment facility. She asked if

that was going to for sure be happening or if it would be possible to get an assurance that was the direction they would go instead of running lines.

Mayor Stear replied the problem with the regional lift station as far as he knew, and it was what they had been running into lately, was those were eligible for reimbursement. He didn't know that they would have a lot of projects between here and there and he certainly didn't want to force their hand in having to hurry up with projects between here and there so those projects could be reimbursed. He invited Mr. Yorgason to speak to that.

Mr. Yorgason explained they were not requesting reimbursement for the lift station; the waste water treatment plant. They were building it to the capacity of their site. They had looked at two different options for sewer. Both were allowed as options in the Development Agreement. However, over the past few months they'd had good discussion with the City Engineer, Paul Stevens, and they were moving that direction. That was their preferred direction and they were not requesting reimbursement because it would be designed for the capacity of their site. He hoped that answered Mayor Stear's question.

Mayor Stear asked about the piping to get it where it needed to go. He wanted to know if that would be funded by Mr. Yorgason.

Mr. Yorgason responded yes, it was their cost and their responsibility.

Mayor Stear asked Mr. Yorgason to elaborate on the conversation he'd had with Chief McDaniel.

Mr. Yorgason explained he'd met with Chief McDaniel about two weeks prior on a Monday. It was a good conversation. Specifically, discussion on the coordination north of this area by the Ada County Sheriff's Department that serviced this general area. However, it was also through the Kuna Police Department. One discussion was the possibility, and it would be a greater community benefit not just for Spring Rock and the police department, of building an accommodation facility for the City that would be a parks department and a public works facility as well as, the police chief asked if they had a need, could they have a room or two for police officers to check in and have a desk space to do some of their work out in that regional area. It wouldn't be a full police substation because that wasn't what was needed. They said if that was the need they were happy to serve and help in that way. Specific details were not identified. If there was need at a later date, they were happy to make that expansion to make it work for the City. He thought that captured the conversation and said, for the record, Chief McDaniel, who was present, was nodding his head yes. It was a great conversation. Their goal was to not only take care of the current needs. They recognized in five or ten years there could be further needs as the project was built and it was their commitment to do that.

Mayor Stear asked if Council Member Christensen had any questions.

Council Member Christensen did not.

Council President Buban-Vonder Haar felt a lot of the outstanding issues were addressed in the letter since the last public hearing. She knew this was a big edition but also thought this was the type of growth, if she could pick any it would be this, where there was a whole area planned with a mix of housing types and commercial interspersed. Dealing with road issues and all of that up front and planning it all out because they knew exactly how the whole area would be laid out. It looked like it complied with the comp plan and all the requirements had been met for City Code and that sort of thing. She noted they were providing significantly more open space than was required under City Code and that was great and school sites. It seemed like overall it would be a net benefit so she was inclined to approve it but wanted to hear if anyone else had any thoughts or comments.

Mayor Stear noted Ada County Highway District expressed some concerns. He asked if they were comfortable moving forward based on the comments. One of the things was Ada County Highway District was policy driven not a land use agency so they did not tend to make comments beyond what their polices were. This was the first time they made comment beyond what their policy needs were. They usually just accepted what Council gave them and were required to serve that. He asked if Council had given that some consideration. He knew one of the comments was, he couldn't remember if it was in this letter or not, but they had been talking with them and one of their concerns was their general fund budget and being able to match; impact fees being collected weren't keeping up with each other. The concern was being able to build projects if Kuna kept spreading out like they were. If Kuna built in a general direction and they only had to work on one set of roads at a time, obviously that made things easier for them. That was one of the biggest comments he got from the public in any of these discussions; the road capacities and getting from point A to point B. His concern with the comments made was if they didn't get some of these projects done, they would end up land locking themselves just because of traffic load and that type of thing. They were going north, south, east, and west and, at some point in time, they would need to get some projects caught up so people could even get out of town. That was one of the concerns he wanted to make sure they vetted very well.

Mr. Yorgason reviewed in their letter they had a paragraph addressing ACHD. He agreed with ACHD's letter that there should be some concerns, whether small, medium, or large projects, especially medium and large sized projects given if there were capacity issues or constraints. That was why they approved this project. In fact, ACHD approved it 4-1 because of the offsite improvements they were committing to do. He had never done a project this large in his career of development with this much offsite road improvement requirements. It would have more than $10 million of impact fees in addition to all of the offsite improvements they would be doing. There were two main routes identified; east and west on Ten Mile Creek Road but once at the northwest corner the primary route north was Cloverdale as identified in the Traffic Impact Study. They had commitments to improve some sections of Hubbard as well as portions of Cloverdale road along with ACHD's existing capital improvements plan. So, there was a plan put in place. On top of all of that they would be doing additional traffic impact studies phased along the way as the development progressed. There would be requirements then and later all of which were outlined in the ACHD staff report and conditions of approval. They agreed with all of the conditions of approval. He hoped that addressed the question raised about general

growth because he knew they were concerned not just for Kuna but the entire Treasure Valley and how to keep up with growth and the limited dollars they had. That was why they made the commitment to agree to those offsite improvements. He hoped that helped.

Mayor Stear said yes.

Ms. Engels stated, for the record, Kristi Inselman from ACHD was on Zoom and indicated she was unable to hear or understand the comments; just picked up a few ACHD words. Also, she was continuing to have a couple other people indicate on Facebook they were unable to understand what was being said.

Council Member McPherson asked, while they were figuring out what to do, what was the projected final built out date, in years, for 100% completion of the whole project if they were to break ground tomorrow.

Mr. Yorgason replied approximately 20 years, plus or minus a couple, which lined up nicely with COMPASS Communities in Motion 2040 and others.

Mayor Stear thanked Mr. Yorgason then asked Mr. Gigray what he thought. He was concerned about having a public hearing where the public couldn't actually be there then further have them not able to hear. It concerned him deeply.

Mr. Gigray was concerned too. From his prospective it was his job to protect the interest of the City. He wanted to make sure they were complying with the Open Meeting Law and they were also complying with the hearing provisions and requirements of the Land Use Planning Act as it was associated with all of the hearings for the evening. If he were sitting in Mr. Yorgason's position, he would have a similar concern as well. Whatever action taken out of this would need to be defendable and not precipitate any unnecessary litigation. He thought, if they were having hearing problems and there were people listening in, ACHD, which would be a stakeholder in a sense of this particular matter, they might want to err on the side of caution and continue the public hearing. Then have the new system in place so they could continue the record and make sure everybody could hear and that everything that was said and was part of the record would not have someone later saying they didn't hear it, they weren't available, and they couldn't come in, and this denied their ability to attend the public hearing. He could see those arguments being raised. Whether they would be meritorious and the court would end up saying in the long run this was a significant legal interest on their part and could carry weight, he couldn't say for sure. He just knew it seemed like they could get into thousands of dollars for every issue that was raised. They obviously had on the record there were some hearing issues with this proceeding. He thought they were doing fine to that point in the deliberation process. If they could correct it so the ACHD person, as well as anyone else, could hear what was going on, they could continue; but if it was going to get worse, he was concerned because they were going to go in to deliberation which was part of the hearing.

Mayor Stear shared his concern. It seemed like they would kind of get there and then lose it. His biggest concern was they weren't hearing everything, only portions, so when

asking someone what they didn't hear; they don't know because they didn't hear it. He thought they were pretty confident they could have the new system up by the August 4, 2020 meeting. He thought that might be the best way to do this so they didn't end up with legal ramifications. It was a public hearing and there were three more. That concerned him.

Mr. Gigray said his opinion was if it was problematic for this hearing, unless it was cleared up, it would be problematic for the others. With most of the meeting that wasn't public hearing they were in the Open Meeting Law and Council needed to communicate. Although the argument could be made that people were denied the right to attend. That was what the Open Meeting Law statute said. An argument was raised with regards to when the Governor's March 13, 2020 proclamation suspending part of the Open Meeting Law regarding denial of attendance went off on June 24, 2020 and where that put things. His opinion was, as long as they followed the mandates coming down from Central District Health with regards to public health and safety and they opened the room up to as could be accommodated following those rules and they provided everybody the opportunity to hear what was being said through the virtual appearance process even though they weren't testifying because it wasn't a public hearing, they were in compliance with the Open Meeting Law because they were, in a sense, attending. There was no definition for attending in the Open Meeting Law but if they couldn't hear there was issue there as well. If there was a challenge on an Open Meeting Law question they could come back and claim there was a violation of the Open Meeting Law. Then Council would have to go through a process to correct it and redo it. This hearing thing could be a problem in both directions.

Mayor Stear explained it worked fine when they were just doing Zoom and Facebook but now the added element with having the public there created an issue. He didn't see that they had any choice. He didn't know what else they could do about it and still follow the law to make sure people could hear. His recommendation was to table the public hearings that night until they could get this resolved, hopefully by the August 4, 2020 meeting. He didn't think they could do anymore public hearings that night based on what they were experiencing so far.

Mr. Gigray commended City Clerk Chris Engels for advising them of the hearing issues. That was her job and she did a good job. It was important everyone was aware of that.

Mayor Stear said it was up to Council to have a motion to table it. That was his recommendation.

Council President Buban-Vonder Haar agreed. She asked if Council was interested in receiving additional testimony next time as well.

Mr. Gigray's recommendation was to leave this open. Then if someone wasn't able to hear they would be able to comment at the continued hearing where they would be able to hear. They could give the applicant a chance to repeat any information they provided so it would be very clear that everyone involved, the public as well as Council and Mayor, had the opportunity to hear what was said. He thought that was the safe play.

Mayor Stear asked if it would be reasonable to make minutes of what was discussed part of the record for the next meeting so they knew what had already been covered. That way people did get a chance to hear since it would be in the minutes. He thought it would clear that up so there wouldn't be that concern.

Mr. Gigray thought that was a good idea. It could be transcribed and put as part of the packet and available for people to see before the hearing was continued when it came out in the packet. That transcript could be provided to Council before the meeting. It would be available to the applicant and anyone else when the agenda notice was sent out.

Planning & Zoning Director Wendy Howell said they hadn't had any issues in Planning & Zoning meetings but they set up differently than Council. They could hear everyone and there hadn't been any problems with people hearing them online.

Mayor Stear said the last one he saw on Facebook people were saying they couldn't hear.

Ms. Howell said that was only until they changed it. They had it figured out. It was an art.

Mayor Stear said ok. He thought this was the safe play until the new system was set up.

Ms. Engels said, according to the people who handled the chambers system, the vendor indicated they were shipping out on July 28, 2020. She had asked them if it would be set up by August 4, 2020. They said they thought it would be. If anything changed, she would update Mayor Stear.

Mayor Stear asked if there was any further discussion.

Council Member Cardoza asked if they were still having problems. He asked if Ms. Engels was still getting messages they couldn't hear.

Mayor Stear said ACHD couldn't hear.

Ms. Engels said that was correct. She got the message from ACHD saying they couldn't hear. She got some messages saying they can hear, some saying they can't, some asking for captions, someone saying all Zoom was working well. There were people that hadn't been able to hear; including ACHD. She thought it wasn't as transparent as they would like it that go around.

Mayor Stear asked if Council President Buban-Vonder Haar was willing to make the motion.

**Motion To:** Continue the consideration to approve Case Nos. 19-10-AN (Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat), a DA (Development Agreement) for Spring Rock Subdivision and the associated public hearing to the August 4, 2020 Council Meeting.
**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson

Mayor Stear clarified the motion was to continue the public hearing and leave it open for testimony.
**Further Discussion:** None
**Motion Passed:** 4-0.

Council Member Cardoza asked if the entire City Council Meeting should be tabled if people couldn't hear. He wondered if all the issues should be tabled.

Mr. Gigray said his preference would be that Mayor Stear open the other noticed public hearings and then continue them. That way they would not have to re-advertise them. If they decided to end the meeting his recommendation was the City re-advertise the new date of those hearings because it was advertised they would open those hearings that night.

Council Member Cardoza asked, with the Open Meeting Law, since they couldn't hear, were they actually…

Mr. Gigray interrupted saying it was problematic. There was no question about it. The safe play would be, if they ended the meeting because there was a hearing problem and the Open Meeting Law, to direct staff to re-notice those hearings. Not that he would want them to have to do that but he thought it was the safe play to do that. Then they would set a date and time. The question was would they have time to re-notice those hearings for August 4, 2020. They might need to run those later since they hadn't been opened.

Mayor Stear did not think they would have proper time to have them republished for August 4, 2020.

Council Member Cardoza felt, since it was a public meeting, it should be attainable to everybody listening.

Mr. Gigray said that was correct. That was the problem with virtual attendance. People could attend the meetings under the Open Meeting Law virtually. They had the right to do that under these circumstances but, if they couldn't hear the question, was it was really an open meeting. The main point of the Open Meeting Law was that people were able to hear what was going on. That would be the safe play on those as well.

Council Member McPherson clarified they would open them and then table them.

Mr. Gigray thought Council Member Cardoza had a good point. If there were hearing problems out there, continuing them would be an action. He thought they would just have to end the meeting and direct that they be re-noticed for the second meeting in August which he thought would be enough time. They could ask staff what they thought would be enough time.

Mayor Stear said the second meeting would be fine. He did not think they had anything. He thought Spring Rock was probably the only one they really wanted to get through that night that had to be done. He did not think the Area of City Impact was an emergency.

The other was an ordinance for signage. He asked if they needed to have the public hearing on the status on the CDBG funding grant; if there was a time on that.

Lisa Bachman, JUB Engineers, stated actually it needed to be done before construction was completed. She knew they would be getting close by August 17, 2020. She asked if it was possible for staff to write on Zoom and Facebook about the continuation of each one as a way to notify instead of re-advertising.

Mr. Gigray deferred to staff as to whether that could be done.

City Clerk Chris Engels clarified she was asking if she could put comment on the meeting on Facebook live saying each of these public hearings was being tabled to August 4, 2020 and if that would meet the publication obligation.

Mr. Gigray said that would be an approach. He looked at it from a conservative legal standpoint. Someone could make an argument that something was put on there but they still couldn't hear what was going on and were denied attendance of a public meeting. Then they would have an argument if they wanted to challenge whether or not there was an Open Meeting Law violation. That was one side. The remedy was to go to court, he thought within 180 days, and file an action trying to overturn the action or go to the prosecuting attorney claiming there was a violation. They would notify the City there was and the City would decide if they made a violation or not. That was the Open Meeting Law side. The public hearing law side, depended on each of these, under the local Land Use Planning Act with the land use matters it would be a judicial review where they would claim there was a denial of due process because they did not have an opportunity to hear the testimony presented. Then the question would be if it was a significant enough issue that the court would overturn it; who knows. It just invited issues.

Mayor Stear thought particularly on item 6D, it was just a short and sweet sentence stating "Public Hearing on the Status of CDBG Funded Grant Activities", it would be pretty easy to put out without creating a lot of confusion. He did not think there would be a lot of issue with that. Then they could still at least have that one on the August 4, 2020 meeting and meet that requirement for the grant funding. He thought if they tried to do a lot of those and confuse the issue it would be hard to say they had notice of that. He understood the concern on the others that were longer but that one seemed short and cut and dry. He didn't think there would be issue with that.

Mr. Gigray said the evidence and the circumstances were what they were and they had to decided and exercise their discretion and authority as to what to do.

Mayor Stear thought the issue with it was the time line. As Ms. Bachman had said, if they were done by the 17th and the next meeting was the 18th there would be a problem. They had to get that one through and he thought it was worth taking a chance on. It was just meeting a requirement and giving an update on the status. He thought it was reasonable and did not create a lot of issue.

Ms. Howell was wondering about considering a special meeting. If they didn't, and she had gotten yelled at before, there would be five to six public hearings just with P&Z on the next one.

Ms. Engels said there was no equipment to do a special meeting before August 4, 2020.

Ms. Howell said she could guarantee they could get this set up correctly.

Ms. Engels asked what was the option for setting things up correctly.

Ms. Howell said she would have to have Planner II Jace Hellman come in to explain the whole thing but they had been able to do it for P&Z.

Ms. Engels said she would not have equipment until August 4, 2020. That was her best hope but certainly at Mayor and Council's discretion.

Mayor Stear recommended they re-advertise items 6B and 6C and table item 6D, the public hearing on the status of CDBG funded grant activities, until the August 4, 2020 meeting and do their best to type in comment on the meeting for that night so that would be advertised. He didn't think they would get a lot of problems with that. He asked if they needed to do any action on the other two or just postpone them for re-advertisement.

Mr. Gigray thought at that point they would need to entertain a motion that due to the virtual appearance problems being experienced in the meeting there be a motion to end the meeting. In that regard, they had already made sure they made action to continue the hearing that night so they weren't re-advertising that and they would direct staff with regards to the other hearings that could not be heard that night to re-advertise those to a date future and then they could allow that for staff discretion. He thought staff could set those hearings they had before when they came to them to put on the agenda. He thought that was within their authority to do that. He thought they ought to be re-advertised since they were in this situation. If they decided they wanted to move forward with the one grant situation Ms. Bachman talked about then they could go ahead and proceed and it would be on their agenda; just continue it to cover that.

Mayor Stear said at the very end he had a few updates to give Council which he could do loudly. He asked for a motion and if Council President Buban-Vonder Haar heard that okay and if it made sense.

Council President Buban-Vonder Haar thought so. She asked if she was moving to continue the public hearing for 6D or if it needed to be opened first or were they just tabling it.

Mayor Stear said item 6D would be tabled to the August 4, 2020 meeting and the rest of the meeting would be cancelled and re-advertised.

**Motion To:** Table to the August 4, 2020 meeting the Public Hearing on the Status of CDBG Funded Grant Activities.

**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson
**Further Discussion:** None
**Motion Passed:** 4-0.

Planner III Troy Behunin wanted to clarify Spring Rock was continued to August 4, 2020 and no re-advertising was necessary.

Mayor Stear said that was correct. He said for further consideration, since they were having audio difficulties, the rest of the meeting with the remaining items, except item 7A which was going to be removed anyway, would be carried on to the August 4, 2020 meeting.

Mayor Stear gave a quick update to Council on the Governor's property tax proposal. The City of Kuna did not participate in the program because they did not qualify. It was for public safety and Kuna had a fire district that took care of fire and EMS and contracted through Ada County for police services. Kuna did not provide direct payroll for those officers. That left Kuna out of the ability to participate in those programs but with the budget proposal Council had been talking about they hadn't been including the 3%. That was what it was tied to. If Council didn't take the 3% the result would be the same for the tax payers as far as their property taxes went. This thing had kind of been misrepresented from what he had seen. They were saying there would be a possibility of a 10-20% tax savings on people's property taxes. There was no feasible way that was even possible. With Kuna not taking their 3% that was the maximum people could save there. They would be saving people property tax money even though Kuna was not participating in the program. The list was put out and Kuna was not on that list. They said Kuna could be on the list because Ada County was participating but that felt a little deceptive to him because Kuna was not participating. He didn't think it was proper to deceive the public by saying Kuna was participating in something they didn't qualify for. That was why he chose not to put Kuna's name on the list.

Mayor Stear also shared he and Council President Buban-Vonder Haar met with the Ada County Commissioners. They were letting Kuna know they going be starting the stages for doing a study for impact fees. That meant for the Coroner's Office and things like that they were having issues keeping up with on their projects. Their initial guess was that it would be somewhere around $230. Council President Buban-Vonder Haar could correct him he was wrong but that number would not be set until they actually got through their study and came back to Council later. Basically, they just met with them to see if Kuna would absolutely say no or entertain the idea. They relayed to them Kuna had for the most part been pretty receptive to impact fees so growth would help pay for itself as much as possible. The Commission just wanted to give Council a heads up so they weren't shocked when they came down with something later. He asked if Council President Buban-Vonder Haar had anything she wanted to add to that.

Council President Buban-Vonder Haar said no, he covered it all. She thanked him.

Mayor Stear asked if anyone had anything else they wanted to announce. He added it was a blessing to live in the Kuna community as opposed to some others with the things going on in the world. The folks in this community had been, for the most part, pretty respectful and doing the best they could with things. He said go Kuna Strong and adjourned the meeting.

***B.*** Public Hearing and Consideration to Approve Northern Boundary Area of City Impact Expansion – Jace Hellman, Planner II ACTION ITEM

The City of Kuna requests consideration from the City Council for the expansion of Kuna's most northern boundary of its Area of City Impact (ACI) Boundary. This expansion, if approved, will align Kuna's ACI with the City of Meridian's ACI by extending the boundary from its current location at West Lake Hazel road to encompass previous annexed parcels south of Amity Road and West of Meridian Road.

*Open Public Hearing*
*Receive evidence*
*Consideration to close evidence presentation and proceed to deliberation*

*Potential Motions:*

*Consideration to either:*

*Option 1: Approve or Deny Northern Boundary Area of City Impact Expansion and the Findings of Fact, Conclusions of Law and Order of Decision as presented in the packet and Close the Public Hearing.*

*Option 2: Continue the Public Hearing to a time and date certain and direct staff to prepare a draft Findings of Fact, Conclusions of Law and Order of Decision for consideration by the Council.*

***C.*** Public Hearing and Consideration to approve Ordinance No. 2020-23 – Jace Hellman, Planner II ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:

- MAKING CERTAIN FINDINGS; AND
- AMENDING SUBSECTION 2 OF SECTION 6, CHAPTER 1, TITLE 5 ADDING DEFINITIONS ASSOCIATED WITH SIGNAGE; AND
- REPEALING CHAPTER 10 OF TITLE 5; AND
- AMENDING TITLE 5 BY THE ADDITION OF A NEW CHAPTER 10; AND
- PROVIDING A SEVERABILITY CLAUSE; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

*Open Public Hearing*
*Receive evidence*
*Consideration to close evidence presentation and proceed to deliberation*

*Potential Motions:*

*Consideration to waive three readings*
*Consideration to approve ordinance*
*Consideration to approve summary publication*

***D.*** Public Hearing on the Status of CDBG Funded Grant Activities – Chris Engels, City Clerk

## *7. Business Items:*

***A.*** Discussion on Old Town Pressure Irrigation and Gravity Irrigation Customers and consideration to waive certain connections fees – Mike Borzick, GIS Manager ACTION ITEM

***B.*** Consideration to approve 20-03-LLA (Lot Line Adjustment) for Kelleher Subdivision No. 2 – Jessica Reid, Customer Service Specialist III ACTION ITEM

On behalf of Open Door Rentals, LLC (Owner), Shawn Brownlee with Trilogy Development seeks Lot Line Adjustment approval to ensure proper building setback requirements. The subject properties are located at 1585 W. Hubbard Road and 1595 W. Hubbard Road, Kuna, ID, 83634 (APNS: R4865430140 and R4865430160).

## *8. Ordinances:*

Consideration to approve Ordinance No. 2020-24 ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:
- AMENDING CHAPTER 8, TITLE 3; AND
- PROVIDING FOR ADDITIONAL DEFINITIONS; AND
- MAKING TECHNICAL CHANGES; AND
- PROVIDING FOR SPECIAL EVENTS REGULATIONS AND PERMITS;
- AND PROVIDING FOR PARADE SPECIAL EVENT REGULATIONS AND PERMITS; AND
- PROVIDING FOR BLOCK EVENT REGULATIONS; AND
- PROVIDING FOR TECHNICAL CORRECTIONS TO THE ATTENDEE PROJECTION GOOD FAITH ESTIMATE SPECIAL APPLICATION REGULATIONS; AND
- PROVIDING FOR PERMIT DENIAL AND PROCEDURE; AND
- PROVIDING FOR LIBERAL CONSTRUCTION OF ADMINISTRATIVE REGULATORY POWERS AND AUTHORITY PROVIDED; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

*Consideration to Waive Three Readings of Ordinance*
*Consideration to Approve Ordinance*
*Consideration to Approve Summary Publication*

## *9. Executive Session: None*

## *10. Mayor/Council Announcements:*

***11. Adjournment:* 7:10 P.M.**

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

*Minutes prepared by Ariana Welker, Deputy City Clerk*
*Date Approved: CCM 08.04.2020*

**CITY OF KUNA**
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5274
Fax: (208) 922-5989 • www.Kunacity.Id.gov

## SIGN-UP SHEET
## July 21, 2020 – City Council Public Hearing (TABLED)

**Case Name:** **19-10-AN (Annex.), 19-01-PUD (Planned Unit Develop.), 19-06-S (Prelim. Plat) And a DA (Development Agreement) –Spring Rock Subdivision**

**Case Type:** Ten Mile Creek, LLC, requests approval for Annexation, a PUD, Preliminary Plat & a Development Agreement. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Project with *up to* 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, two school lots 7 two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the NEC of Cloverdale and Kuna Roads.

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission or City Council.

| IN FAVOR | NEUTRAL | IN OPPOSITION |
|---|---|---|
| ☒ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Dave Yorgason | | |
| Print Name | Print Name | Print Name |
| 14254 W Battenberg Drive | | |
| Print Address | Print Address | Print Address |
| Boise Id 83713 | | |
| City State, Zip | City State, Zip | City State, Zip |
| ☒ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
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## SIGN-UP SHEET

**July 21, 2020 – City Council Public Hearing**

**Case Name: Northern Boundary Area of City Impact Expansion**

**Case Type:** The City of Kuna requests consideration from the City Council for the expansion of Kuna's most northern boundary of its Area of City Impact (ACI) Boundary. This expansion, if approved, will align Kuna's ACI with the City of Meridian's ACI by extending the boundary from its current location at West Lake Hazel road to encompass previous annexed parcels south of Amity Road and West of Meridian Road.

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission or City Council.

| IN FAVOR | NEUTRAL | IN OPPOSITION |
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| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
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| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5274
Fax: (208) 922-5989 • www.Kunacity.Id.gov

# SIGN-UP SHEET

## July 21, 2020 – City Council Public Hearing

**Case Name: 20-01-OA – Sign Ordinance Amendment**

**Case Type:** Consideration from the City Council of an Ordinance for the City of Kuna, Idaho, making certain findings; and amending Subsection 2 of Section 6, Chapter 1, Title 5 Adding Definitions Associated with signage; and repealing Chapter 10 of Title 5; and amending Title 5 by the addition of a new Chapter 10; and providing a severability clause; and directing the City Clerk; and providing an effective date.

Please print your name below if you would like to present oral testimony or written exhibits about this item to the Commission or City Council.

| IN FAVOR | NEUTRAL | IN OPPOSITION |
|---|---|---|
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |

CITY OF KUNA
751 W. 4th Street • Kuna, Idaho • 83634 • Phone (208) 922-5546
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# PUBLIC HEARING SIGN-UP SHEET

Kuna City Council Meeting 6:00 p.m.
July 21, 2020

## Status of CDBG Funded Grant Activities

Please print your name below if you would like to present oral testimony or written exhibits about this item to the City Council.

| IN FAVOR | NEUTRAL | IN OPPOSITION |
|---|---|---|
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |
| ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify | ☐ Testify ☐ Not Testify |
| Print Name | Print Name | Print Name |
| Print Address | Print Address | Print Address |
| City State, Zip | City State, Zip | City State, Zip |

City of Kuna | Payment Approval Report - City Council Approval | Page: 1
Report dates: 7/17/2020-7/30/2020 | Jul 30, 2020 09:50AM

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2M COMPANY, INC.** | | | | | | | | | | | | |
| 1461 | 2M COMPANY, INC. | 20184752-00 | 10285 | 2 EA SUBMERSIBLE ROTORS, REPAIR & STOCK FOR SADIE CREEK M.DAVILA, JUL.'20 | 07/14/2020 | 5,501.60 | .00 | 25-6150 MAINT. & REPAIRS - SYSTEM (PI) | 0 | 7/20 | | |
| Total 20184752-00: | | | | | | 5,501.60 | .00 | | | | | |
| 1461 | 2M COMPANY, INC. | 20189376-00 | 10322 | SPRINKLER PARTS FOR BERNIE & DOWNTOWN PARK REVITALIZATION B. WITHROW, JULY. '20 | 07/23/2020 | 872.78 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total 20189376-00: | | | | | | 872.78 | .00 | | | | | |
| Total 2M COMPANY, INC.: | | | | | | 6,374.38 | .00 | | | | | |
| **A COMPANY, INC.** | | | | | | | | | | | | |
| 1463 | A COMPANY, INC. | 114-10665399 | | STANDARD PORTABLE RESTROOM RENTAL, #T273, BI-WEEKLY SERVICE, 6/22-7/19/20 - THE CITY FARM | 07/20/2020 | 93.96 | .00 | 21-6090 FARM EXPENDITURES | 0 | 7/20 | | |
| Total 114-10665399: | | | | | | 93.96 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665400 | | ADA ACCESSIBLE AND STANDARD PORTABLE RESTROOM RENTAL, #ADA493 & KK099, WEEKLY SERVICE, 6/22-7/19/20 - GREENBELT AT CITY HALL | 07/20/2020 | 308.76 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665400: | | | | | | 308.76 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665402 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, #ADANO10, WEEKLY SERVICE, | | | | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 6/22-7/19/20 - THE FARM PARK | 07/20/2020 | 201.90 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665402: | | | | | | 201.90 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665403 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, #ADA188, WEEKLY SERVICE, 6/22-7/19/20 - ARBOR RIDGE PARK | 07/20/2020 | 201.90 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665403: | | | | | | 201.90 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665404 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, #ADA392, BI-WEEKLY SERVICE, 6/22-7/19/20 - SADIE CREEK PARK | 07/20/2020 | 163.02 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665404: | | | | | | 163.02 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665405 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, #ADA412, WEEKLY SERVICE, 6/22-7/19/20 - NICHOLSON PARK | 07/20/2020 | 206.22 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665405: | | | | | | 206.22 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10665406 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, #ADA397, BI-WEEKLY SERVICE, 6/22-7/19/20 - WINCHESTER PARK | 07/20/2020 | 163.02 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10665406: | | | | | | 163.02 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10671051 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, ADDITIONAL WEEKLY SERVICE, GREENBELT AT CITY HALL, 6/23-7/20/20 | 07/21/2020 | 162.00 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 114-10671051: | | | | | | 162.00 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10671052 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, ADDITIONAL WEEKLY SERVICE, 6/23-7/20/20, THE FARM PARK | 07/21/2020 | 162.00 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10671052: | | | | | | 162.00 | .00 | | | | | |
| 1463 | A COMPANY, INC. | 114-10710302 | | ADA ACCESSIBLE PORTABLE RESTROOM RENTAL, WEEKLY SERVICE, 7/24-8/20/20 - BUTLER PARK | 07/28/2020 | 199.80 | .00 | 01-6212 RENT-EQUIPMENT | 1004 | 7/20 | | |
| Total 114-10710302: | | | | | | 199.80 | .00 | | | | | |
| Total A COMPANY, INC.: | | | | | | 1,862.58 | .00 | | | | | |
| **ADA COUNTY HIGHWAY DISTRICT (RENT)** | | | | | | | | | | | | |
| 1037 | ADA COUNTY HIGHWAY DISTRICT (RENT) | 16046 | | SHOP RENT FOR AUG 2020 - PARKS | 07/15/2020 | 148.50 | .00 | 01-6211 RENT-BUILDINGS & LAND | 1004 | 7/20 | | |
| 1037 | ADA COUNTY HIGHWAY DISTRICT (RENT) | 16046 | | SHOP RENT FOR AUG 2020 - WATER | 07/15/2020 | 126.00 | .00 | 20-6211 RENT-BUILDINGS & LAND | 0 | 7/20 | | |
| 1037 | ADA COUNTY HIGHWAY DISTRICT (RENT) | 16046 | | SHOP RENT FOR AUG 2020 - SEWER | 07/15/2020 | 121.50 | .00 | 21-6211 RENT - BUILDINGS & LAND | 0 | 7/20 | | |
| 1037 | ADA COUNTY HIGHWAY DISTRICT (RENT) | 16046 | | SHOP RENT FOR AUG 2020 - PI | 07/15/2020 | 54.00 | .00 | 25-6211 RENT - BUILDINGS & LAND | 0 | 7/20 | | |
| Total 16046: | | | | | | 450.00 | .00 | | | | | |
| Total ADA COUNTY HIGHWAY DISTRICT (RENT): | | | | | | 450.00 | .00 | | | | | |
| **ADA COUNTY PROSECUTING ATTORNE** | | | | | | | | | | | | |
| 176 | ADA COUNTY PROSECUTING ATTORNE | 07202020ACP | | PROSECUTORIAL SERVICES FOR AUGUST 2020 | 07/20/2020 | 4,500.00 | .00 | 01-6203 PROSECUTORIAL SERVICES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 07202020ACPA: | | | | | | 4,500.00 | .00 | | | | | |
| Total ADA COUNTY PROSECUTING ATTORNE: | | | | | | 4,500.00 | .00 | | | | | |
| **ANALYTICAL LABORATORIES** | | | | | | | | | | | | |
| 1 | ANALYTICAL LABORATORIES | 73105 | | MONTHLY BACTERIA SAMPLES JUNE. '20 - WATER | 06/30/2020 | 399.95 | .00 | 20-6152 M & R - LABORATORY COSTS | 0 | 7/20 | | |
| Total 73105: | | | | | | 399.95 | .00 | | | | | |
| Total ANALYTICAL LABORATORIES: | | | | | | 399.95 | .00 | | | | | |
| **AUMA ACTUATORS INC** | | | | | | | | | | | | |
| 2021 | AUMA ACTUATORS INC | 6284295 | 10214 | 2 AUMA ACTUATOR CONTROL PARTS, M.NADEAU, JUN.'20 | 07/15/2020 | 2,245.60 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total 6284295: | | | | | | 2,245.60 | .00 | | | | | |
| Total AUMA ACTUATORS INC: | | | | | | 2,245.60 | .00 | | | | | |
| **AUTOZONE, INC.** | | | | | | | | | | | | |
| 1606 | AUTOZONE, INC. | 4126212949 | 10337 | 2 EA 6 PK BLUE SHOP TOWELS, R. HERRERA, JULY'20 | 07/24/2020 | 24.16 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| Total 4126212949: | | | | | | 24.16 | .00 | | | | | |
| Total AUTOZONE, INC.: | | | | | | 24.16 | .00 | | | | | |
| **BOLEN'S CONTROL HOUSE, INC.** | | | | | | | | | | | | |
| 617 | BOLEN'S CONTROL HOUSE, INC. | S1307712.001 | 10251 | 10 EA 3A 600/VAC FUSES, T.SHAFFER, JULY.'20 | 07/01/2020 | 142.18 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total S1307712.001: | | | | | | 142.18 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total BOLEN'S CONTROL HOUSE, INC.: | | | | | | 142.18 | .00 | | | | | |
| **BUYWYZ LLC** | | | | | | | | | | | | |
| 1795 | BUYWYZ LLC | 151599.3 | 9781 | DISINFECTANT SPRAY, CLERKS OFFICE FOR COVID, JUL.'20 | 07/27/2020 | 9.38 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 151599.3 | 9781 | DISINFECTANT SPRAY, CLERKS OFFICE FOR COVID, JUL.'20 | 07/27/2020 | .20 | .00 | 20-6165 0FFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 151599.3 | 9781 | DISINFECTANT SPRAY, CLERKS OFFICE FOR COVID, JUL.'20 | 07/27/2020 | .20 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 151599.3 | 9781 | DISINFECTANT SPRAY, CLERKS OFFICE FOR COVID, JUL.'20 | 07/27/2020 | .09 | .00 | 25-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| Total 151599.3: | | | | | | 9.87 | .00 | | | | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 PKG AA BATTERIES & 1 PKG CLAMPS, CLERKS' OFFICE, JUL.'20 | 07/16/2020 | 23.35 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 PKG AA BATTERIES & 1 PKG CLAMPS, CLERKS' OFFICE, JUL.'20 | 07/16/2020 | .49 | .00 | 20-6165 0FFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 PKG AA BATTERIES & 1 PKG CLAMPS, CLERKS' OFFICE, JUL.'20 | 07/16/2020 | .49 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 PKG AA BATTERIES & 1 PKG CLAMPS, CLERKS' OFFICE, JUL.'20 | 07/16/2020 | .25 | .00 | 25-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 EA WIRELESS MOUSE, B.JACKSON, JUL.'20 | 07/16/2020 | 7.97 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 EA WIRELESS MOUSE, B.JACKSON, JUL.'20 | 07/16/2020 | 10.53 | .00 | 20-6165 0FFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 EA WIRELESS MOUSE, B.JACKSON, JUL.'20 | 07/16/2020 | 10.53 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 EA WIRELESS MOUSE, B.JACKSON, JUL.'20 | 07/16/2020 | 2.88 | .00 | 25-6165 OFFICE SUPPLIES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 BOX AA BATTERIES, 1 BOX D CELL BATTERIES, 1 BOX AAA BATTERIES, CITY HALL STOCK, JUL.'20 | 07/16/2020 | 27.07 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | 10298 | 1 BOX AA BATTERIES, 1 BOX D CELL BATTERIES, 1 BOX AAA BATTERIES, CITY HALL STOCK, JUL.'20 | 07/16/2020 | 18.52 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | | 1 BOX AA BATTERIES, 1 BOX D CELL BATTERIES, 1 BOX AAA BATTERIES, CITY HALL STOCK, JUL.'20 | 07/16/2020 | 18.52 | .00 | 20-6165 0FFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146 | | 1 BOX AA BATTERIES, 1 BOX D CELL BATTERIES, 1 BOX AAA BATTERIES, CITY HALL STOCK, JUL.'20 | 07/16/2020 | 7.15 | .00 | 25-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| Total 156146: | | | | | | 127.75 | .00 | | | | | |
| 1795 | BUYWYZ LLC | 156146.1 | 10298 | 2 PKS WHITE CARD STOCK & 1 PR HEADPHONES, CLERKS OFFICE, JUL.'20 | 07/20/2020 | 47.95 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146.1 | 10298 | 2 PKS WHITE CARD STOCK & 1 PR HEADPHONES, CLERKS OFFICE, JUL.'20 | 07/20/2020 | 1.01 | .00 | 20-6165 0FFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146.1 | 10298 | 2 PKS WHITE CARD STOCK & 1 PR HEADPHONES, CLERKS OFFICE, JUL.'20 | 07/20/2020 | 1.01 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| 1795 | BUYWYZ LLC | 156146.1 | 10298 | 2 PKS WHITE CARD STOCK & 1 PR HEADPHONES, CLERKS OFFICE, JUL.'20 | 07/20/2020 | .50 | .00 | 25-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| Total 156146.1: | | | | | | 50.47 | .00 | | | | | |
| 1795 | BUYWYZ LLC | 156406 | 10328 | 2 CASES COPY PAPER, 3 EA RULERS, 1 PR SCISSORS, 2 PKS POSTIT NOTES, 1 BOX FOLDER DIVIDERS, J.REID, JULY'20 | 07/24/2020 | 181.94 | .00 | 01-6165 OFFICE SUPPLIES | 1003 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total 156406: | | | | | 181.94 | .00 | | | | | |
| | Total BUYWYZ LLC: | | | | | 370.03 | .00 | | | | | |
| **CAPITAL PAVING CO** | | | | | | | | | | | | |
| 20 | CAPITAL PAVING CO | 9878 | | PATCH REPAIR ON BROKEN SERVICE LINE AT 676 N ASH, JULY. '20 - SEWER | 07/20/2020 | 490.24 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| | Total 9878: | | | | | 490.24 | .00 | | | | | |
| | Total CAPITAL PAVING CO: | | | | | 490.24 | .00 | | | | | |
| **CENTURYLINK** | | | | | | | | | | | | |
| 62 | CENTURYLINK | 208922917954 | | DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 07/6-8/6/20-ADMIN | 07/07/2020 | 13.94 | 13.94 | 01-6255 TELEPH0NE | 0 | 7/20 | 07/24/2020 | |
| 62 | CENTURYLINK | 208922917954 | | DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 07/6-8/6/20-P&Z | 07/07/2020 | 4.99 | 4.99 | 01-6255 TELEPH0NE | 1003 | 7/20 | 07/24/2020 | |
| 62 | CENTURYLINK | 208922917954 | | DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 07/6-8/6/20-WATER | 07/07/2020 | 12.95 | 12.95 | 20-6255 TELEPH0NE EXPENSE | 0 | 7/20 | 07/24/2020 | |
| 62 | CENTURYLINK | 208922917954 | | DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 07/6-8/6/20-SEWER | 07/07/2020 | 12.95 | 12.95 | 21-6255 TELEPH0NE EXPENSE | 0 | 7/20 | 07/24/2020 | |
| 62 | CENTURYLINK | 208922917954 | | DEDICATED LANDLINE TO ELEVATOR AT CITY HALL, 07/6-8/6/20-P&Z | 07/07/2020 | 4.99 | 4.99 | 25-6255 TELEPH0NE EXPENSE | 0 | 7/20 | 07/24/2020 | |
| | Total 208922917954B070720: | | | | | 49.82 | 49.82 | | | | | |
| | Total CENTURYLINK: | | | | | 49.82 | 49.82 | | | | | |
| **CONRAD & BISCHOFF INC** | | | | | | | | | | | | |
| 2020 | CONRAD & BISCHOFF INC | 0773176-IN | 10283 | 1499 GALLONS NON ETHANOL UNLEADED GAS, T.SHAFFER, JUL.'20 | 07/14/2020 | 3,435.86 | .00 | 21-6300 FUEL | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 0773176-IN: | | | | | | 3,435.86 | .00 | | | | | |
| Total CONRAD & BISCHOFF INC: | | | | | | 3,435.86 | .00 | | | | | |
| **CORE & MAIN LP** | | | | | | | | | | | | |
| 63 | CORE & MAIN LP | M639341 | | 110 EA WATER METERS, 200 METER GASKETS, 78 EA REGISTER PROCODER, 10 BOLT KIT, 11 EA METER ANTENNA, ,B. BURR, JUNE. '20 | 07/14/2020 | 58,892.86 | .00 | 20-6020 CAPITAL IMPR0VEMENTS | 1089 | 7/20 | | |
| Total M639341: | | | | | | 58,892.86 | .00 | | | | | |
| Total CORE & MAIN LP: | | | | | | 58,892.86 | .00 | | | | | |
| **CUSTOM ELECTRIC, INC.** | | | | | | | | | | | | |
| 147 | CUSTOM ELECTRIC, INC. | 8433 | 10312 | TROUBLESHOOTING ALARMS AT TOMORROW, SADIE CREEK & CHAPAROSA IRRIGATION STATIONS, D. CROSSLEY, JULY'20 | 07/13/2020 | 425.00 | .00 | 25-6150 MAINT. & REPAIRS - SYSTEM (PI) | 0 | 7/20 | | |
| Total 8433: | | | | | | 425.00 | .00 | | | | | |
| 147 | CUSTOM ELECTRIC, INC. | 8440 | 10310 | HEAT SHRINK, COPPER WIRE, CRIMP SLEEVE AND LABOR TO REPAIR DAMAGED CONDUCTORS AT SADIE CREEK IRRIGATION STATION, D. CROSSLEY, JULY. '20 | 07/17/2020 | 381.74 | .00 | 25-6150 MAINT. & REPAIRS - SYSTEM (PI) | 0 | 7/20 | | |
| Total 8440: | | | | | | 381.74 | .00 | | | | | |
| 147 | CUSTOM ELECTRIC, INC. | 8441 | 10314 | TROUBLESHOOTING & RELOCATING CONDUCTORS AT HUBBARD LIFT STATION. T.FLEMING, JUL.'20 | 07/17/2020 | 127.50 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| Total 8441: | | | | | | 127.50 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total CUSTOM ELECTRIC, INC.: | | | | | 934.24 | .00 | | | | | |
| **D & A DOOR & SPECIALTIES INC** | | | | | | | | | | | | |
| 1861 | D & A DOOR & SPECIALTIES INC | SI018223 | 9901 | REPLACEMENT DOORS FOR THE WASTEWATER TREAMENT PLANT PROCESS BLD, T. SHAFFER, MAY. '20 | 05/26/2020 | 1,899.22 | .00 | 21-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| | Total SI018223: | | | | | 1,899.22 | .00 | | | | | |
| | Total D & A DOOR & SPECIALTIES INC: | | | | | 1,899.22 | .00 | | | | | |
| **D & B SUPPLY** | | | | | | | | | | | | |
| 75 | D & B SUPPLY | 30904 | 10297 | PUMP AND TIP FOR THE SPRAYER, M.MEADE, JUL.'20 | 07/15/2020 | 159.98 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1004 | 7/20 | | |
| | Total 30904: | | | | | 159.98 | .00 | | | | | |
| 75 | D & B SUPPLY | 49063 | 10320 | REPLACEMENT FAN FOR LEAF BLOWER , AIR FILTERS FOR WEEDEATER, PARKS, S. HOWELL, JULY. "20 | 07/21/2020 | 21.95 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1004 | 7/20 | | |
| | Total 49063: | | | | | 21.95 | .00 | | | | | |
| | Total D & B SUPPLY: | | | | | 181.93 | .00 | | | | | |
| **DELL MARKETING L.P.** | | | | | | | | | | | | |
| 1466 | DELL MARKETING L.P. | 10410763021 | | 2 EA INTERACTIVE TOUCH MONITORS WITH MOUNTING KITS, COVID19, M. BORZICK, JULY. '20 | 07/25/2020 | 4,361.35 | .00 | 01-6175 SMALL TOOLS | 1003 | 7/20 | | |
| 1466 | DELL MARKETING L.P. | 10410763021 | | 2 EA INTERACTIVE TOUCH MONITORS WITH MOUNTING KITS, COVID19, M. BORZICK, JULY. '20 | 07/25/2020 | 4,361.35 | .00 | 01-6175 SMALL TOOLS | 1004 | 7/20 | | |
| | Total 10410763021: | | | | | 8,722.70 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total DELL MARKETING L.P.: | | | | | | 8,722.70 | .00 | | | | | |
| **DUBOIS CHEMICALS INC** | | | | | | | | | | | | |
| 512 | DUBOIS CHEMICALS INC | IN-1997168 | | STERILECLEAN 330G TOTE,LABOR, JULY. '20 | 07/20/2020 | 901.06 | .00 | 20-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| Total IN-1997168: | | | | | | 901.06 | .00 | | | | | |
| 512 | DUBOIS CHEMICALS INC | IN-1998616 | 10303 | 450# CHEMFLOC, POLYMER T. SHAFFER, JULY. '20 | 07/23/2020 | 2,362.50 | .00 | 21-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| Total IN-1998616: | | | | | | 2,362.50 | .00 | | | | | |
| Total DUBOIS CHEMICALS INC: | | | | | | 3,263.56 | .00 | | | | | |
| **EC COMPANY** | | | | | | | | | | | | |
| 1797 | EC COMPANY | W201DF | | ANNUAL SERVICE AND LOAD TESTING, ON GENERATOR SERIAL #G080192925, T.SHAFFER, | 07/20/2020 | 2,050.00 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total W201DF: | | | | | | 2,050.00 | .00 | | | | | |
| 1797 | EC COMPANY | W201DG | 10276 | ANNUAL SERVICE AND LOAD TESTING, GENERATOR SERIAL #G080192929, T.SHAFFER, JULY. '20 | 07/20/2020 | 2,050.00 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total W201DG: | | | | | | 2,050.00 | .00 | | | | | |
| Total EC COMPANY: | | | | | | 4,100.00 | .00 | | | | | |
| **FERGUSON ENTERPRISES INC** | | | | | | | | | | | | |
| 219 | FERGUSON ENTERPRISES INC | 0746248 | 10176 | 8 INCH CHECK VALVE WITH PAK AND GASKETS FOR DANSKIN WELL, C. DEYOUNG, JUNE. 20 | 07/07/2020 | 1,564.67 | .00 | 20-6150 M & R - SYSTEM | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 0746248: | | | | | | 1,564.67 | .00 | | | | | |
| 219 | FERGUSON ENTERPRISES INC | 0750943 | 10269 | 16 EA GASKETS FOR SPLASH PAD REPAIR, J.MORFIN, JUL.'20 | 07/08/2020 | 34.01 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total 0750943: | | | | | | 34.01 | .00 | | | | | |
| 219 | FERGUSON ENTERPRISES INC | 0751158 | 10295 | SUMP PUMP FOR SPLASH PAD REPAIR, M. MEADE, JULY. '20 | 07/15/2020 | 411.45 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total 0751158: | | | | | | 411.45 | .00 | | | | | |
| 219 | FERGUSON ENTERPRISES INC | 0751606 | | SENSUS SUPPORT, SOFTWARE 1 YR COVERAGE FROM 09/07/20-09/06/21, JULY. '20 | 07/21/2020 | 2,599.92 | .00 | 20-6075 DUES & MEMBERSHIPS | 0 | 7/20 | | |
| Total 0751606: | | | | | | 2,599.92 | .00 | | | | | |
| 219 | FERGUSON ENTERPRISES INC | 0751939 | 10305 | 80 EA PIPE FOR TENNIS COURT DRAINS, B. WITHROW, JULY'20 | 07/17/2020 | 761.20 | .00 | 01-6045 C0NTINGENCY | 1206 | 7/20 | | |
| Total 0751939: | | | | | | 761.20 | .00 | | | | | |
| Total FERGUSON ENTERPRISES INC: | | | | | | 5,371.25 | .00 | | | | | |
| **FREUND PROPERTIES LLC** | | | | | | | | | | | | |
| 2014 | FREUND PROPERTIES LLC | 2062 | | INSTALL AND SETUP THE NANO BEAMS & COMPUTER FOR THE MAINTENANCE SHOP -ADMIN, JULY . '20 | 07/24/2020 | 274.24 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 0 | 7/20 | | |
| 2014 | FREUND PROPERTIES LLC | 2062 | | INSTALL AND SETUP THE NANO BEAMS & COMPUTER FOR THE MAINTENANCE SHOP -WATER, JULY . '20 | 07/24/2020 | 109.70 | .00 | 20-6150 M & R - SYSTEM | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2014 | FREUND PROPERTIES LLC | 2062 | | INSTALL AND SETUP THE NANO BEAMS & COMPUTER FOR THE MAINTENANCE SHOP -SEWER JULY . '20 | 07/24/2020 | 109.70 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| 2014 | FREUND PROPERTIES LLC | 2062 | | INSTALL AND SETUP THE NANO BEAMS & COMPUTER FOR THE MAINTENANCE SHOP -PI JULY. '20 | 07/24/2020 | 54.84 | .00 | 25-6150 MAINT. & REPAIRS - SYSTEM (PI) | 0 | 7/20 | | |
| Total 2062: | | | | | | 548.48 | .00 | | | | | |
| Total FREUND PROPERTIES LLC: | | | | | | 548.48 | .00 | | | | | |
| **IDAHO MATERIALS & CONSTRUCTION** | | | | | | | | | | | | |
| 418 | IDAHO MATERIALS & CONSTRUCTION | 5303100 | | FILL FOR TENNIS COURT PROJECT, B. WITHROW, JULY. '20 | 07/21/2020 | 109.22 | .00 | 01-6045 C0NTINGENCY | 1206 | 7/20 | | |
| Total 5303100: | | | | | | 109.22 | .00 | | | | | |
| Total IDAHO MATERIALS & CONSTRUCTION: | | | | | | 109.22 | .00 | | | | | |
| **IDAHO POWER CO** | | | | | | | | | | | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - ADMIN | 07/28/2020 | 285.24 | .00 | 01-6290 UTILITIES | 0 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - SENIOR CENTER | 07/28/2020 | 314.75 | .00 | 01-6290 UTILITIES | 1001 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - STREETLIGHTS | 07/28/2020 | 5,832.77 | .00 | 01-6290 UTILITIES | 1002 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - PARKS | 07/28/2020 | 1,254.58 | .00 | 01-6290 UTILITIES | 1004 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - WATER | 07/28/2020 | 9,600.49 | .00 | 20-6290 UTILITIES EXPENSE | 0 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - SEWER | 07/28/2020 | 23,795.83 | .00 | 21-6290 UTILITIES EXPENSE | 0 | 7/20 | | |
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - FARM | 07/28/2020 | 10,114.33 | .00 | 21-6090 FARM EXPENDITURES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | IDAHO POWER CO | 07282020I | | ELECTRIC SERVICE FOR JULY. '20 - PI | 07/28/2020 | 19,228.30 | .00 | 25-6290 UTILITIES EXPENSE | 0 | 7/20 | | |
| Total 07282020I: | | | | | | 70,426.29 | .00 | | | | | |
| Total IDAHO POWER CO: | | | | | | 70,426.29 | .00 | | | | | |
| **IDAHO PRESS TRIBUNE, LLC** | | | | | | | | | | | | |
| 1802 | IDAHO PRESS TRIBUNE, LLC | 1212569 | 10272 | AD#2025706, LEGAL NOTICE, ASSET AUCTION, A. WELKER, JULY. '20 | 07/15/2020 | 33.12 | .00 | 01-6125 LEGAL PUBLICATI0NS | 0 | 7/20 | | |
| 1802 | IDAHO PRESS TRIBUNE, LLC | 1212569 | | AD#2025779, LEGAL PUBLICATION, ORDINANCE 2020-22, A. WELKER, JULY. '20 | 07/15/2020 | 264.67 | .00 | 25-6125 LEGAL PUBLICATI0NS | 0 | 7/20 | | |
| Total 1212569: | | | | | | 297.79 | .00 | | | | | |
| 1802 | IDAHO PRESS TRIBUNE, LLC | 1213120 | 10294 | AD#2026524, LEGAL NOTICE, FILE#19-09-S, CORBIN COVE, T. BEHUNIN, JULY."20 | 07/22/2020 | 78.27 | .00 | 01-6125 LEGAL PUBLICATI0NS | 1003 | 7/20 | | |
| 1802 | IDAHO PRESS TRIBUNE, LLC | 1213120 | 10302 | AD#2027093, LEGAL NOTICE, FILE# 20-03-SUP, D. HANSON, JULY. '20 | 07/22/2020 | 152.48 | .00 | 01-6125 LEGAL PUBLICATI0NS | 1003 | 7/20 | | |
| 1802 | IDAHO PRESS TRIBUNE, LLC | 1213120 | 10294 | AD#2027207, LEGAL NOTICE, FILE#20-01-V, D. HANSON, JULY. '20 | 07/22/2020 | 152.48 | .00 | 01-6125 LEGAL PUBLICATI0NS | 1003 | 7/20 | | |
| Total 1213120: | | | | | | 383.23 | .00 | | | | | |
| Total IDAHO PRESS TRIBUNE, LLC: | | | | | | 681.02 | .00 | | | | | |
| **INTEGRITY PUMP SOLUTIONS INC** | | | | | | | | | | | | |
| 2032 | INTEGRITY PUMP SOLUTIONS INC | FY20M7-036 | 10316 | CHLORINE HYPOCHLORITE TABLETS, T.SHAFFER, JUL.'20 | 07/24/2020 | 7,560.00 | .00 | 21-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| Total FY20M7-036: | | | | | | 7,560.00 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total INTEGRITY PUMP SOLUTIONS INC: | | | | | | 7,560.00 | .00 | | | | | |
| **J & M SANITATION, INC.** | | | | | | | | | | | | |
| 230 | J & M SANITATION, INC. | 07102020-071 | | SANITATION RECEIPT TRANSFER 7/10-16/20 | 07/17/2020 | 110,037.63 | 110,037.63 | 26-7000 SOLID WASTE SERVICE FEES | 0 | 7/20 | 07/17/2020 | |
| 230 | J & M SANITATION, INC. | 07102020-071 | | SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES 07/10-16/20 | 07/17/2020 | -10,871.72 | -10,871.72 | 01-4170 FRANCHISE FEES | 0 | 7/20 | 07/17/2020 | |
| Total 07102020-07162020: | | | | | | 99,165.91 | 99,165.91 | | | | | |
| 230 | J & M SANITATION, INC. | 07172020-072 | | SANITATION RECEIPT TRANSFER 7/17-23/20 | 07/24/2020 | 28,361.20 | 28,361.20 | 26-7000 SOLID WASTE SERVICE FEES | 0 | 7/20 | 07/24/2020 | |
| 230 | J & M SANITATION, INC. | 07172020-072 | | SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES 7/17-23/20 | 07/24/2020 | -2,802.08 | -2,802.08 | 01-4170 FRANCHISE FEES | 0 | 7/20 | 07/24/2020 | |
| Total 07172020-07232020: | | | | | | 25,559.12 | 25,559.12 | | | | | |
| Total J & M SANITATION, INC.: | | | | | | 124,725.03 | 124,725.03 | | | | | |
| **JACK HENRY & ASSOCIATES, INC.** | | | | | | | | | | | | |
| 1328 | JACK HENRY & ASSOCIATES, INC. | 3455091 | | ENTERPRISE MONTHLY PAYMENT FEE, JUNE. '20-ADMIN | 07/01/2020 | 44.88 | .00 | 01-6505 BANK FEES | 0 | 7/20 | | |
| 1328 | JACK HENRY & ASSOCIATES, INC. | 3455091 | | ENTERPRISE MONTHLY PAYMENT FEE, JUNE. '20-WATER | 07/01/2020 | 30.72 | .00 | 20-6505 BANK FEES | 0 | 7/20 | | |
| 1328 | JACK HENRY & ASSOCIATES, INC. | 3455091 | | ENTERPRISE MONTHLY PAYMENT FEE, JUNE. '20-SEWER | 07/01/2020 | 30.72 | .00 | 21-6505 BANK FEES | 0 | 7/20 | | |
| 1328 | JACK HENRY & ASSOCIATES, INC. | 3455091 | | ENTERPRISE MONTHLY PAYMENT FEE, JUNE. '20-PI | 07/01/2020 | 11.81 | .00 | 25-6505 BANK FEES | 0 | 7/20 | | |
| Total 3455091: | | | | | | 118.13 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total JACK HENRY & ASSOCIATES, INC.: | | | | | | 118.13 | .00 | | | | | |
| **JOHN ALLEN GURN** | | | | | | | | | | | | |
| 2046 | JOHN ALLEN GURN | KCH-001 | | MUD, TEXTURE, PRE-PRIMER, MASKING MATERIALS TO HANG, SCRAP, TAPE & TEXTURE NEW OFFICES, N. STAUFFER, JULY. '20 | 07/13/2020 | 4,575.00 | .00 | 01-6045 C0NTINGENCY | 1220 | 7/20 | | |
| Total KCH-001: | | | | | | 4,575.00 | .00 | | | | | |
| Total JOHN ALLEN GURN: | | | | | | 4,575.00 | .00 | | | | | |
| **JONATHAN STRICKLAND** | | | | | | | | | | | | |
| 1976 | JONATHAN STRICKLAND | 284 | | WATER TREATMENT PLANT JULY JANITORIAL SERVICES, JULY'20 - WATER | 07/16/2020 | 100.80 | .00 | 20-6025 JANITORIAL | 0 | 7/20 | | |
| 1976 | JONATHAN STRICKLAND | 284 | | WATER TREATMENT PLANT JULY JANITORIAL SERVICES, JULY'20 - SEWER | 07/16/2020 | 100.80 | .00 | 21-6025 JANITORIAL | 0 | 7/20 | | |
| 1976 | JONATHAN STRICKLAND | 284 | | WATER TREATMENT PLANT JULY JANITORIAL SERVICES, JULY'20 - PI | 07/16/2020 | 38.40 | .00 | 25-6025 JANITORIAL | 0 | 7/20 | | |
| Total 284: | | | | | | 240.00 | .00 | | | | | |
| 1976 | JONATHAN STRICKLAND | 285 | | SENIOR CENTER JULY JANITORIAL SERVICES, JULY'20 | 07/16/2020 | 446.00 | .00 | 01-6025 JANITORIAL | 1001 | 7/20 | | |
| Total 285: | | | | | | 446.00 | .00 | | | | | |
| 1976 | JONATHAN STRICKLAND | 286 | | CITY HALL JULY JANITORIAL SERVICES, JULY'20 | 07/16/2020 | 212.80 | .00 | 01-6025 JANITORIAL | 0 | 7/20 | | |
| 1976 | JONATHAN STRICKLAND | 286 | | CITY HALL JULY JANITORIAL SERVICES, JULY'20 | 07/16/2020 | 145.60 | .00 | 20-6025 JANITORIAL | 0 | 7/20 | | |
| 1976 | JONATHAN STRICKLAND | 286 | | CITY HALL JULY JANITORIAL SERVICES, JULY'20 | 07/16/2020 | 145.60 | .00 | 21-6025 JANITORIAL | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1976 | JONATHAN STRICKLAND | 286 | | CITY HALL JULY JANITORIAL SERVICES, JULY'20 | 07/16/2020 | 56.00 | .00 | 25-6025 JANITORIAL | 0 | 7/20 | | |
| Total 286: | | | | | | 560.00 | .00 | | | | | |
| Total JONATHAN STRICKLAND: | | | | | | 1,246.00 | .00 | | | | | |
| **J-U-B ENGINEERS, INC.** | | | | | | | | | | | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135341 | | PROFESSIONAL SERVICES FOR KUNA CDBG PHASE 2, FROM 05/04-06/30/20 | 07/23/2020 | 7,055.00 | .00 | 03-6370 EXP. - DOWNTOWN REVITALIZATION | 0 | 7/20 | | |
| Total 0135341: | | | | | | 7,055.00 | .00 | | | | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135342 | | PROFFESIONAL SERVICES FOR THE KUNA DOWNTOWN DESIGN STANDARDS , FROM 05/31-06/30/2020 | 07/13/2020 | 3,562.50 | .00 | 01-6045 C0NTINGENCY | 1221 | 7/20 | | |
| Total 0135342: | | | | | | 3,562.50 | .00 | | | | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135556 | | PROFESSIONAL SERVICES FOR KUNA TEN MILE LIFT STATION EVALUATION 05/31-06/30/20 | 07/17/2020 | 4,052.89 | .00 | 21-6020 CAPITAL IMPR0VEMENTS | 1222 | 7/20 | | |
| Total 0135556: | | | | | | 4,052.89 | .00 | | | | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135567 | | PROFESSIONAL SERVICES FOR THE ZAMZOW PARK MASTER PLAN, SERVICES THROUGH 06/30/20, B. WITHROW, JULY. '20 | 07/17/2020 | 3,531.25 | .00 | 50-6045 CONTINGENCY | 0 | 7/20 | | |
| Total 0135567: | | | | | | 3,531.25 | .00 | | | | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135695 | | PROFESSIONAL SERVICES FOR UPPR GREENBELT PROPERTY SURVEY & ROS, THROUGH 04/30/2020, B. WITHROW, JULY. '20 | 07/23/2020 | 855.00 | .00 | 40-6020 CAPITAL IMPROVEMENTS | 1207 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1236 | J-U-B ENGINEERS, INC. | 0135695 | | PROFESSIONAL SERVICES FOR FIELD SURVEY & ROS BALLPARK/SPLASH PAD THROUGH 04/30/2020, B. WITHROW, JULY. '20 | 07/23/2020 | 245.00 | .00 | 40-6020 CAPITAL IMPROVEMENTS | 1207 | 7/20 | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135695 | | PROFESSIONAL SERVICES FOR TOPOGRAPHIC SURVEY & BASE MAPPING THROUGH 04/30/2020, B. WITHROW, JULY. '20 | 07/23/2020 | 5,380.00 | .00 | 20-6020 CAPITAL IMPR0VEMENTS | 1207 | 7/20 | | |
| 1236 | J-U-B ENGINEERS, INC. | 0135695 | | PROFESSIONAL SERVICES FOR ZAMZOWS PROP. SURVEY & RECORD OF SURVEY, THROUGH 04/30/2020, B. WITHROW, JULY. '20 | 07/23/2020 | 2,250.00 | .00 | 50-6045 CONTINGENCY | 0 | 7/20 | | |
| Total 0135695: | | | | | | 8,730.00 | .00 | | | | | |
| Total J-U-B ENGINEERS, INC.: | | | | | | 26,931.64 | .00 | | | | | |
| **KUNA LUMBER** | | | | | | | | | | | | |
| 499 | KUNA LUMBER | A115955 | | 3 EA BAGS OF CONCRETE FOR SEGO PLAYGROUND SIGN REPAIR, M. MEADE, JULY. '20 | 07/14/2020 | 10.95 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total A115955: | | | | | | 10.95 | .00 | | | | | |
| 499 | KUNA LUMBER | A115995 | 10299 | RED AND ORANGE MARKING PAINT, J.COULTER, JUL.'20 | 07/15/2020 | 11.68 | .00 | 01-6165 OFFICE SUPPLIES | 1005 | 7/20 | | |
| Total A115995: | | | | | | 11.68 | .00 | | | | | |
| 499 | KUNA LUMBER | A116122 | | 2 EA PIPE FITTING, 2 EA RODENT KILLER, B. WITHROW, JULY. '20 | 07/22/2020 | 15.62 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| 499 | KUNA LUMBER | A116122 | | 2 EA HAND TOWELS, 1 EA HAND TRANSPLANTER, B. WITHROW, JULY. '20 | 07/22/2020 | 15.99 | .00 | 01-6175 SMALL TOOLS | 1004 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total A116122: | | | | | | 31.61 | .00 | | | | | |
| 499 | KUNA LUMBER | A116173 | 10338 | NYLON BUSHING AND 3/8" ELBOW, J.DURHAM, JUL.'20 | 07/24/2020 | 3.13 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total A116173: | | | | | | 3.13 | .00 | | | | | |
| 499 | KUNA LUMBER | A116177 | | RETURN OF NYLON BUSHING AND 3/8" ELBOW, J.DURHAM, JUL.'20 | 07/24/2020 | -3.13 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total A116177: | | | | | | -3.13 | .00 | | | | | |
| 499 | KUNA LUMBER | B141438 | 10290 | 2 EA BAGS OF CONCRETE FOR SEGO PLAYGROUND SIGN REPAIR, J. DURHAM, JULY'20 | 07/14/2020 | 8.56 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total B141438: | | | | | | 8.56 | .00 | | | | | |
| 499 | KUNA LUMBER | B141744 | 10327 | LUMBER, SCREWS, PAINT, FOR DANSKIN LIFT STATION COVER, R.DAVILA, JUL.'20 | 07/22/2020 | 95.33 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| Total B141744: | | | | | | 95.33 | .00 | | | | | |
| 499 | KUNA LUMBER | B141746 | | DANSKIN LIFT STATION SHADE COVER FOR AC UNIT, T. SHAFFER, JULY. 20 | 07/22/2020 | 4.59 | .00 | 21-6150 M & R - SYSTEM | 0 | 7/20 | | |
| Total B141746: | | | | | | 4.59 | .00 | | | | | |
| Total KUNA LUMBER: | | | | | | 162.72 | .00 | | | | | |
| **KUNA WELDING** | | | | | | | | | | | | |
| 46 | KUNA WELDING | 5974 | 10319 | CUTTING AND MACHINING TUBING FOR WHEEL LINES AT FARM, R.WARWICK, JULY. '20 | 07/20/2020 | 235.65 | .00 | 21-6090 FARM EXPENDITURES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 5974: | | | | | | 235.65 | .00 | | | | | |
| 46 | KUNA WELDING | 5979 | 10324 | SHEET METAL FOR WELL #6 AC UNIT, R.JONES, JUL.'20 | 07/22/2020 | 83.10 | .00 | 20-6140 MAINT. & REPAIR BUILDING | 0 | 7/20 | | |
| Total 5979: | | | | | | 83.10 | .00 | | | | | |
| Total KUNA WELDING: | | | | | | 318.75 | .00 | | | | | |
| **LES SCHWAB TIRES** | | | | | | | | | | | | |
| 221 | LES SCHWAB TIRES | 12800432105 | 10278 | 2 EA TURN DRUMS & ROTORS FOR #7 SEWER TRUCK BRAKE JOB, S. HOWELL, JULY'20 | 07/10/2020 | 55.98 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| Total 12800432105: | | | | | | 55.98 | .00 | | | | | |
| 221 | LES SCHWAB TIRES | 12800433811 | 10318 | TIRE REPAIR FOR UNIT #23, J.PEREZ, JUL.'20 | 07/21/2020 | 37.03 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| Total 12800433811: | | | | | | 37.03 | .00 | | | | | |
| 221 | LES SCHWAB TIRES | 12800434869 | 10342 | NEW SET TIRES FOR #54, TAHOE, T.RIVERA, JUL.'20 - WATER | 07/27/2020 | 451.86 | .00 | 20-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| 221 | LES SCHWAB TIRES | 12800434869 | 10342 | NEW SET TIRES FOR #54, TAHOE, T.RIVERA, JUL.'20 - SEWER | 07/27/2020 | 451.86 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| 221 | LES SCHWAB TIRES | 12800434869 | 10342 | NEW SET TIRES FOR #54, TAHOE, T.RIVERA, JUL.'20 - P.I | 07/27/2020 | 172.16 | .00 | 25-6305 VEHICLE MAINTENANCE & REPAIR | 0 | 7/20 | | |
| Total 12800434869: | | | | | | 1,075.88 | .00 | | | | | |
| Total LES SCHWAB TIRES: | | | | | | 1,168.89 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOCAHAN LLC | | | | | | | | | | | | |
| 1619 | LOCAHAN LLC | AR864807 | | MONTHLY LEASE/COPYCARE INCLUDING PARTS, LABOR TONER & STAPLES, MODEL # MPC307SPF SERIAL # C509P900318 7/1-31/20 | 07/21/2020 | 47.20 | .00 | 01-6212 RENT-EQUIPMENT | 0 | 7/20 | | |
| 1619 | LOCAHAN LLC | AR864807 | | MONTHLY CONTRACT COPY COUNT OVERAGES FOR 6/1/-30/20-ADMIN | 07/21/2020 | 17.93 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 0 | 7/20 | | |
| 1619 | LOCAHAN LLC | AR864807 | | MONTHLY CONTRACT COPY COUNT OVERAGES FOR 6/1/-30/20-WATER | 07/21/2020 | 12.27 | .00 | 20-6142 MAINT. & REPAIRS-EQUIPMENT | 0 | 7/20 | | |
| 1619 | LOCAHAN LLC | AR864807 | | MONTHLY CONTRACT COPY COUNT OVERAGES FOR 6/1/-30/20-SEWER | 07/21/2020 | 12.27 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| 1619 | LOCAHAN LLC | AR864807 | | MONTHLY CONTRACT COPY COUNT OVERAGES FOR 6/1/-30/20-PI | 07/21/2020 | 4.73 | .00 | 25-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total AR864807: | | | | | | 94.40 | .00 | | | | | |
| Total LOCAHAN LLC: | | | | | | 94.40 | .00 | | | | | |
| **NICK'S CUSTOM CURBS & DECORATIVE CONCRET** | | | | | | | | | | | | |
| 1403 | NICK'S CUSTOM CURBS & DECORATIVE CONCRET | 1024 | 10335 | 42 EA 2X6 CONCRETE ECOLOGY BLOCKS & DELIVERY, JULY'20 - WATER | 07/15/2020 | 1,199.52 | .00 | 20-6166 PP&E PURCHASES OPERATIONS | 1226 | 7/20 | | |
| 1403 | NICK'S CUSTOM CURBS & DECORATIVE CONCRET | 1024 | 10335 | 42 EA 2X6 CONCRETE ECOLOGY BLOCKS & DELIVERY, JULY'20 - SEWER | 07/15/2020 | 1,199.52 | .00 | 21-6166 PP&E PURCHASES - OPERATIONS | 1226 | 7/20 | | |
| 1403 | NICK'S CUSTOM CURBS & DECORATIVE CONCRET | 1024 | 10335 | 42 EA 2X6 CONCRETE ECOLOGY BLOCKS & DELIVERY, JULY'20 - PI | 07/15/2020 | 456.96 | .00 | 25-6166 PP&E PURCHASES - OPERATIONS | 1226 | 7/20 | | |
| Total 1024: | | | | | | 2,856.00 | .00 | | | | | |
| Total NICK'S CUSTOM CURBS & DECORATIVE CONCRET: | | | | | | 2,856.00 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PAIGE MECHANICAL GROUP, INC. | | | | | | | | | | | | |
| 1654 | PAIGE MECHANICAL GROUP, INC. | 18523 | 10282 | HVAC REPAIR, REFRIGERANT ADDED ON 2 COMPONENTS THAT ARE LEAKING, T. SHAFFER, JULY'20 | 07/16/2020 | 430.94 | .00 | 21-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| Total 18523: | | | | | | 430.94 | .00 | | | | | |
| 1654 | PAIGE MECHANICAL GROUP, INC. | 18526 | 10235 | SEMI ANNUAL HVAC MAINTENANCE, SPRING, T. SHAFFER, JULY'20 | 07/16/2020 | 1,816.00 | .00 | 21-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| Total 18526: | | | | | | 1,816.00 | .00 | | | | | |
| Total PAIGE MECHANICAL GROUP, INC.: | | | | | | 2,246.94 | .00 | | | | | |
| **PARTS, INC.** | | | | | | | | | | | | |
| 470 | PARTS, INC. | 216275 | 10262 | 2 BATTERY CABLE LUGS, TRUCK #39 FOR INVERTER INSTALLATION, JUL.'20 - WATER | 07/06/2020 | 2.85 | .00 | 20-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216275 | 10262 | 2 BATTERY CABLE LUGS, TRUCK #39 FOR INVERTER INSTALLATION, JUL.'20 - P.I | 07/06/2020 | .71 | .00 | 25-6305 VEHICLE MAINTENANCE & REPAIR | 0 | 7/20 | | |
| Total 216275: | | | | | | 3.56 | .00 | | | | | |
| 470 | PARTS, INC. | 216570 | 10277 | 1 EA REAR BRAKE PAD, 2 EA TRANSMISSION FLUID FOR FOR TRUCK #7, S. HOWELL, JULY '20 | 07/10/2020 | 68.72 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| Total 216570: | | | | | | 68.72 | .00 | | | | | |
| 470 | PARTS, INC. | 216669 | | 1 EA REAR BRAKE PAD, TRUCK #7, JULY'20 | 07/13/2020 | 39.77 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216669 | | RETURNED 1 DISC BRAKE PAD, INVOICE #216570, JULY'20 | 07/13/2020 | -56.34 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 216669: | | | | | | -16.57 | .00 | | | | | |
| 470 | PARTS, INC. | 216814 | 10291 | 5 EA FLAT WASHER, 5 EA SCREWS FOR SEGO PLAYGROUND SIGN REPAIR, J. DURHAM, JULY'20 | 07/14/2020 | 2.50 | .00 | 01-6150 MAINTENANCE & REPAIRS - SYSTEM | 1004 | 7/20 | | |
| Total 216814: | | | | | | 2.50 | .00 | | | | | |
| 470 | PARTS, INC. | 216883 | 10296 | 1 EA DISTRIBUTOR CAP, 1 EA DISTRIBUTOR ROTOR, 1 EA THERMO HOUSING SEAL, 1 EA THERMOSTAT, FOR SEWER TRUCK #7, S. HOWELL, JULY'20 | 07/15/2020 | 66.65 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| Total 216883: | | | | | | 66.65 | .00 | | | | | |
| 470 | PARTS, INC. | 216897 | 10296 | 1 EA DISTRIBUTOR, SEWER TRUCK #7, S. HOWELL, JULY'20 | 07/15/2020 | 94.49 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216897 | 10296 | 1 EA CORE DEPOSIT, SEWER TRUCK #7, S. HOWELL, JULY'20 | 07/15/2020 | 55.56 | .00 | 21-6097 DEPOSITS ON ACCOUNT | 0 | 7/20 | | |
| Total 216897: | | | | | | 150.05 | .00 | | | | | |
| 470 | PARTS, INC. | 216963 | 10301 | JOINT ADAPTER TOOL FOR FLEET SHOP, S. HOWELL, JULY'20 - ADMIN | 07/16/2020 | 2.00 | .00 | 01-6175 SMALL TOOLS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216963 | 10301 | JOINT ADAPTER TOOL FOR FLEET SHOP, S. HOWELL, JULY'20 - WATER | 07/16/2020 | .80 | .00 | 20-6175 SMALL TOOLS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216963 | 10301 | JOINT ADAPTER TOOL FOR FLEET SHOP, S. HOWELL, JULY'20 - SEWER | 07/16/2020 | .80 | .00 | 21-6175 SMALL TOOLS | 0 | 7/20 | | |
| 470 | PARTS, INC. | 216963 | 10301 | JOINT ADAPTER TOOL FOR FLEET SHOP, S. HOWELL, JULY'20 - P.I | 07/16/2020 | .39 | .00 | 25-6175 SMALL TOOLS | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 216963: | | | | | | 3.99 | .00 | | | | | |
| 470 | PARTS, INC. | 217008 | 10304 | CRANKCASE CAP FOR THE WHEEL LINE AT LAGOONS, C.MCDANIEL, JUL.'20 | 07/16/2020 | 5.24 | .00 | 21-6090 FARM EXPENDITURES | 0 | 7/20 | | |
| Total 217008: | | | | | | 5.24 | .00 | | | | | |
| 470 | PARTS, INC. | 217046 | | RETURN ITEM, CORE DEPOSIT, INVOICE #216897 7/15/2020, JULY'20 | 07/17/2020 | -55.56 | .00 | 21-6097 DEPOSITS ON ACCOUNT | 0 | 7/20 | | |
| Total 217046: | | | | | | -55.56 | .00 | | | | | |
| 470 | PARTS, INC. | 217393 | 10321 | 2 EA QTS OF 10W40 OIL, JACOBSON MOWER, B.VILLANUEVA, JULY'20 | 07/22/2020 | 6.54 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1004 | 7/20 | | |
| Total 217393: | | | | | | 6.54 | .00 | | | | | |
| 470 | PARTS, INC. | 217418 | 10326 | FRONT BRAKE PADS FOR TRUCK #26, S.HOWELL, JULY. '20 | 07/22/2020 | 61.28 | .00 | 21-6305 VEHICLE MAINTENANCE & REPAIRS | 0 | 7/20 | | |
| Total 217418: | | | | | | 61.28 | .00 | | | | | |
| 470 | PARTS, INC. | 217556 | 10334 | 8 EA BARRICADE HOSE, FOR THE SPRAY RIG, J.DURHAM, JULY'20 | 07/24/2020 | 17.60 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1004 | 7/20 | | |
| Total 217556: | | | | | | 17.60 | .00 | | | | | |
| 470 | PARTS, INC. | 217569 | 10339 | 4 EA HYDRAULIC HOSES AND FITTINGS FOR THE WHEEL LINE AT THE FARM, C. MCDANIELS, JULY. '20 | 07/24/2020 | 134.65 | .00 | 21-6090 FARM EXPENDITURES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 217569: | | | | | | 134.65 | .00 | | | | | |
| Total PARTS, INC.: | | | | | | 448.65 | .00 | | | | | |
| **PEAK ALARM COMPANY, INC** | | | | | | | | | | | | |
| 1021 | PEAK ALARM COMPANY, INC | 1045355 | | ALARM MONITORING FOR WELLS (SEGO PRAIRIE, SNOWHAWK, BUTLER, BEST BATH, EL CAJON, & CEDAR). WATER, 08/01-08/31/20 | 08/01/2020 | 215.01 | .00 | 20-6140 MAINT. & REPAIR BUILDING | 0 | 7/20 | | |
| 1021 | PEAK ALARM COMPANY, INC | 1045355 | | ALARM MONITORING FOR WELLS (SEGO PRAIRIE, SNOWHAWK, BUTLER, BEST BATH, EL CAJON, & CEDAR). WATER, 08/01-08/31/20 | 08/01/2020 | 53.75 | .00 | 25-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| Total 1045355: | | | | | | 268.76 | .00 | | | | | |
| Total PEAK ALARM COMPANY, INC: | | | | | | 268.76 | .00 | | | | | |
| **REXEL USA, INC.** | | | | | | | | | | | | |
| 1613 | REXEL USA, INC. | 0M48564 | 10254 | LIGHT BULBS FOR SEGO PRAIRIE PUMP HOUSE, S. HOWELL, JULY'20 | 07/02/2020 | 59.92 | .00 | 25-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| Total 0M48564: | | | | | | 59.92 | .00 | | | | | |
| 1613 | REXEL USA, INC. | 0M79830 | 10266 | 2 EA LGD LED 50W 50K, 5 EA PHOTO CONTROL FOR STREET LIGHT REPAIR, S. HOWELL, JULY'20 | 07/08/2020 | 188.06 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1002 | 7/20 | | |
| Total 0M79830: | | | | | | 188.06 | .00 | | | | | |
| Total REXEL USA, INC.: | | | | | | 247.98 | .00 | | | | | |
| **SEID CRANE SERVICE, INC** | | | | | | | | | | | | |
| 1766 | SEID CRANE SERVICE, INC | 13447 | 10311 | CRANE FOR DRAINAGE VAULT AT MIDDLE SCHOOL TENNIS/PICKLE BALL COURT, | | | | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | M. MEADE, JULY'20 | 07/17/2020 | 255.00 | .00 | 01-6045 C0NTINGENCY | 1206 | 7/20 | | |
| Total 13447: | | | | | | 255.00 | .00 | | | | | |
| Total SEID CRANE SERVICE, INC: | | | | | | 255.00 | .00 | | | | | |
| **SPECIALTY CONSTRUCTION SUPPLY** | | | | | | | | | | | | |
| 780 | SPECIALTY CONSTRUCTION SUPPLY | 0197922-IN | 10315 | 8 EA TRAFFIC CONES, C.DEYOUNG, JUL.'20 - WATER | 07/20/2020 | 134.40 | .00 | 20-6230 SAFETY TRAINING & EQUIPMENT | 0 | 7/20 | | |
| 780 | SPECIALTY CONSTRUCTION SUPPLY | 0197922-IN | 10315 | 8 EA TRAFFIC CONES, C.DEYOUNG, JUL.'20 - P.I | 07/20/2020 | 33.60 | .00 | 25-6230 SAFETY TRAINING & EQUIPMENT | 0 | 7/20 | | |
| Total 0197922-IN: | | | | | | 168.00 | .00 | | | | | |
| Total SPECIALTY CONSTRUCTION SUPPLY: | | | | | | 168.00 | .00 | | | | | |
| **SPECIALTY PLASTICS & FABRICATI, INC.** | | | | | | | | | | | | |
| 1477 | SPECIALTY PLASTICS & FABRICATI, INC. | 78113 | 10286 | 3 EA 1-1/2 PVC REPLACEMENT ELBOW ON D.O. PROBE MOUNT, M. DAVILA, JULY '20 | 07/10/2020 | 23.40 | .00 | 21-6140 MAINT & REPAIR BUILDING | 0 | 7/20 | | |
| Total 78113: | | | | | | 23.40 | .00 | | | | | |
| Total SPECIALTY PLASTICS & FABRICATI, INC.: | | | | | | 23.40 | .00 | | | | | |
| **SPF WATER ENGINEERING, L.L.C.** | | | | | | | | | | | | |
| 1498 | SPF WATER ENGINEERING, L.L.C. | 28172 | | PROFESSIONAL SERVICES FOR WELL CONSTRUCTION SUPPORT, PATAGONIA TEST WELL, MAY'20 | 05/31/2020 | 12,898.81 | 12,898.81 | 20-6020 CAPITAL IMPR0VEMENTS | 1225 | 7/20 | 07/24/2020 | |
| Total 28172: | | | | | | 12,898.81 | 12,898.81 | | | | | |
| Total SPF WATER ENGINEERING, L.L.C.: | | | | | | 12,898.81 | 12,898.81 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SUPERIOR BLASTING, INC. | | | | | | | | | | | | |
| 1721 | SUPERIOR BLASTING, INC. | 5056-575 | | DRILL MOBILIZATION AND TEST DRILL AT 50' ON 10 MILE RD, PROSPECTOR GRAVITY SEWER, JULY 2020 | 07/14/2020 | 1,146.00 | .00 | 21-6020 CAPITAL IMPR0VEMENTS | 1140 | 7/20 | | |
| Total 5056-575: | | | | | | 1,146.00 | .00 | | | | | |
| Total SUPERIOR BLASTING, INC.: | | | | | | 1,146.00 | .00 | | | | | |
| **SWANK MOTION PICTURES INC** | | | | | | | | | | | | |
| 1877 | SWANK MOTION PICTURES INC | 2885538 | 9471 | MOVIES FOR THE SUMMER, ABOMINABLE 7/24/20, JUL.'20 | 07/22/2020 | 385.00 | .00 | 03-6375 EXPENDITURE-MOVIES IN THE PAR | 0 | 7/20 | | |
| Total 2885538: | | | | | | 385.00 | .00 | | | | | |
| 1877 | SWANK MOTION PICTURES INC | 2885641 | 9471 | JUMANJI WELCOME TO THE JUNGLE 7/31/20 TO 7/31/20, J .MORFIN, JULY'20 | 07/23/2020 | 192.00 | .00 | 03-6375 EXPENDITURE-MOVIES IN THE PAR | 0 | 7/20 | | |
| Total 2885641: | | | | | | 192.00 | .00 | | | | | |
| Total SWANK MOTION PICTURES INC: | | | | | | 577.00 | .00 | | | | | |
| **TREASURE VALLEY COFFEE** | | | | | | | | | | | | |
| 992 | TREASURE VALLEY COFFEE | 2160:06827699 | 10309 | 6 EA 5-GALLON WATER BOTTLES AND COOLER RENTAL, MAINTENANCE SHOP, C. MERRITT, JULY '20 | 07/17/2020 | 45.20 | .00 | 01-6165 OFFICE SUPPLIES | 1004 | 7/20 | | |
| Total 2160:06827699: | | | | | | 45.20 | .00 | | | | | |
| 992 | TREASURE VALLEY COFFEE | 2160:06828119 | 10309 | 9 EA 5-GALLON WATER BOTTLES AND COOLER RENTAL, CITY HALL, C. MERRITT, JULY '20 | 07/17/2020 | 66.30 | .00 | 01-6165 OFFICE SUPPLIES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total 2160:06828119: | | | | | 66.30 | .00 | | | | | |
| 992 | TREASURE VALLEY COFFEE | 2160:06828237 | 10309 | 4 EA 5-GALLON WATER BOTTLES AND COOLER RENTAL, PARKS OFFICE, C. MERRITT, JULY '20 | 07/17/2020 | 35.80 | .00 | 01-6165 OFFICE SUPPLIES | 1004 | 7/20 | | |
| | Total 2160:06828237: | | | | | 35.80 | .00 | | | | | |
| | Total TREASURE VALLEY COFFEE: | | | | | 147.30 | .00 | | | | | |
| **TURF EQUIPMENT & IRRIGATION INC** | | | | | | | | | | | | |
| 1969 | TURF EQUIPMENT & IRRIGATION INC | 759861-00 | | 4 EA GATOR BLADES, 3 EA GATOR BLADES, FOR JACOBSEN, M. MEADE, JULY'20 | 07/17/2020 | 167.92 | .00 | 01-6142 MAINT. & REPAIR - EQUIPMENT | 1004 | 7/20 | | |
| | Total 759861-00: | | | | | 167.92 | .00 | | | | | |
| | Total TURF EQUIPMENT & IRRIGATION INC: | | | | | 167.92 | .00 | | | | | |
| **U.S. BANK NATIONAL ASSOC (EQUIP FINANCE)** | | | | | | | | | | | | |
| 1891 | U.S. BANK NATIONAL ASSOC (EQUIP FINANCE) | 419502083 | | CITY HALL COPIER CONTRACT #500-0519539-000, MPC450EX SERIAL NUMBER C737M540938 & SERIAL NUMBER C737M540155, JULY'20 | 07/17/2020 | 412.85 | .00 | 01-6212 RENT-EQUIPMENT | 0 | 7/20 | | |
| | Total 419502083: | | | | | 412.85 | .00 | | | | | |
| | Total U.S. BANK NATIONAL ASSOC (EQUIP FINANCE): | | | | | 412.85 | .00 | | | | | |
| **ULTIMATE HEATING & AIR, INC.** | | | | | | | | | | | | |
| 1538 | ULTIMATE HEATING & AIR, INC. | 92803 | | DIAGNOSED AND REPAIRED A/C IN WELLHOUSE #6, JUL.'20 | 07/22/2020 | 523.00 | .00 | 20-6140 MAINT. & REPAIR BUILDING | 0 | 7/20 | | |
| | Total 92803: | | | | | 523.00 | .00 | | | | | |
| | Total ULTIMATE HEATING & AIR, INC.: | | | | | 523.00 | .00 | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **UNIVAR SOLUTIONS USA, INC.** | | | | | | | | | | | | |
| 1410 | UNIVAR SOLUTIONS USA, INC. | 48653724 | 10270 | ALUMINUM SULFATE, T. SHAFFER, JULY. '20 | 07/15/2020 | 6,651.22 | .00 | 21-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| Total 48653724: | | | | | | 6,651.22 | .00 | | | | | |
| 1410 | UNIVAR SOLUTIONS USA, INC. | 48660622 | 10317 | CITRIC ACID AND SODIUM HYPOCHLORITE, T.SHAFFER, JUL.'20 | 07/21/2020 | 1,742.74 | .00 | 21-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| 1410 | UNIVAR SOLUTIONS USA, INC. | 48660622 | 10317 | POLY CONTAINER DEPOSIT, JUL.'20 | 07/21/2020 | 1,400.00 | .00 | 21-6097 DEPOSITS ON ACCOUNT | 0 | 7/20 | | |
| Total 48660622: | | | | | | 3,142.74 | .00 | | | | | |
| 1410 | UNIVAR SOLUTIONS USA, INC. | 48660623 | 10317 | CITRIC ACID, T.SHAFFER, JUL'20 | 07/21/2020 | 4,828.24 | .00 | 21-6151 M & R - PROCESS CHEMICALS | 0 | 7/20 | | |
| Total 48660623: | | | | | | 4,828.24 | .00 | | | | | |
| Total UNIVAR SOLUTIONS USA, INC.: | | | | | | 14,622.20 | .00 | | | | | |
| **USA BLUE BOOK** | | | | | | | | | | | | |
| 265 | USA BLUE BOOK | 299446 | 9761 | 8 EA 2L BOTTLES OF HAND SANITIZER W/PUMP, COVID19, T.SHAFFER, JUL.'20 | 07/17/2020 | 280.80 | .00 | 21-6165 OFFICE SUPPLIES | 0 | 7/20 | | |
| Total 299446: | | | | | | 280.80 | .00 | | | | | |
| Total USA BLUE BOOK: | | | | | | 280.80 | .00 | | | | | |
| **UTILITY REFUND #10** | | | | | | | | | | | | |
| 2044 | UTILITY REFUND #10 | 100200.01 | | ANDRES BARRIA, 237 S ALLIE AVE, UTILITY REFUND | 07/20/2020 | 9.81 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 100200.01 | | ANDRES BARRIA, 237 S ALLIE AVE, UTILITY REFUND | 07/20/2020 | 26.46 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 100200.01 | | ANDRES BARRIA, 237 S ALLIE AVE, UTILITY REFUND | 07/20/2020 | 22.69 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| Total 100200.01: | | | | | | 58.96 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 160230.02 | | JENNY PALMER, 311 W HESSTON ST, UTILITY REFUND | 07/26/2020 | 21.41 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 160230.02 | | JENNY PALMER, 311 W HESSTON ST, UTILITY REFUND | 07/26/2020 | 36.61 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 160230.02 | | JENNY PALMER, 311 W HESSTON ST, UTILITY REFUND | 07/26/2020 | 21.15 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 160230.02 | | JENNY PALMER, 311 W HESSTON ST, UTILITY REFUND | 07/26/2020 | 11.43 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 160230.02: | | | | | | 90.60 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 170780.02 | | RICKY H PARKER, 1926 W POTOSI WAY, UTILITY REFUND | 07/22/2020 | 19.44 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 170780.02 | | RICKY H PARKER, 1926 W POTOSI WAY, UTILITY REFUND | 07/22/2020 | 27.79 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 170780.02 | | RICKY H PARKER, 1926 W POTOSI WAY, UTILITY REFUND | 07/22/2020 | 23.00 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 170780.02 | | RICKY H PARKER, 1926 W POTOSI WAY, UTILITY REFUND | 07/22/2020 | 10.63 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 170780.02: | | | | | | 80.86 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 182710.02 | | BRETT C LAHORGUE, 1680 N ALCATRAZ AVE, UTIITY REFUND | 07/22/2020 | 4.72 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 182710.02 | | BRETT C LAHORGUE, 1680 N ALCATRAZ AVE, UTIITY REFUND | 07/22/2020 | 2.08 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 182710.02 | | BRETT C LAHORGUE, 1680 N ALCATRAZ AVE, UTIITY REFUND | 07/22/2020 | 4.56 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| Total 182710.02: | | | | | | 11.36 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 182790.04 | | CHRISTA L BROOKS, 1268 W HAVER STREET, UTILITY REFUND | 07/27/2020 | 8.15 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| Total 182790.04: | | | | | | 8.15 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 183840.02 | | DAVID ROSS JONES, 1649 N BUCKLER WAY, UTILITY REFUND | 07/22/2020 | 23.07 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 183840.02 | | DAVID ROSS JONES, 1649 N BUCKLER WAY, UTILITY REFUND | 07/22/2020 | 31.48 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 183840.02 | | DAVID ROSS JONES, 1649 N BUCKLER WAY, UTILITY REFUND | 07/22/2020 | 26.68 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 183840.02 | | DAVID ROSS JONES, 1649 N BUCKLER WAY, UTILITY REFUND | 07/22/2020 | 7.66 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 183840.02: | | | | | | 88.89 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 201045.02 | | TRAVIS J KRASSELT, 2099 N COOL SPRINGS AVE, UTILITY REFUND | 07/20/2020 | 6.13 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| Total 201045.02: | | | | | | 6.13 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 240135.01 | | WESLEY ANDERSON, 615 N QUARTZ AVE, UTILITY REFUND | 07/20/2020 | 18.20 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 240135.01 | | WESLEY ANDERSON, 615 N QUARTZ AVE, UTILITY REFUND | 07/20/2020 | 24.31 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 240135.01 | | WESLEY ANDERSON, 615 N QUARTZ AVE, UTILITY REFUND | 07/20/2020 | 18.65 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 240135.01 | | WESLEY ANDERSON, 615 N QUARTZ AVE, UTILITY REFUND | 07/20/2020 | 13.84 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 240135.01: | | | | | | 75.00 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 266063.02 | | JAYSON D KOTTER, 2240 N GLACIER BLUE RD, UTILITY REFUND | 07/17/2020 | 39.37 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 266063.02 | | JAYSON D KOTTER, 2240 N GLACIER BLUE RD, UTILITY REFUND | 07/17/2020 | 62.87 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 266063.02 | | JAYSON D KOTTER, 2240 N GLACIER BLUE RD, UTILITY REFUND | 07/17/2020 | 57.60 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 266063.02 | | JAYSON D KOTTER, 2240 N GLACIER BLUE RD, UTILITY REFUND | 07/17/2020 | 10.11 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 266063.02: | | | | | | 169.95 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 274530.02 | | NATHAN COHN, 567 W TREEHOUSE WAY, UTILITY REFUND | 07/26/2020 | 3.58 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 274530.02 | | NATHAN COHN, 567 W TREEHOUSE WAY, UTILITY REFUND | 07/26/2020 | 6.38 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| Total 274530.02: | | | | | | 9.96 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 274745.03 | | DALE S KERR, 2853 W STAYMAN WAY, UTILITY REFUND | 07/26/2020 | 25.90 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 274745.03 | | DALE S KERR, 2853 W STAYMAN WAY, UTILITY REFUND | 07/26/2020 | 34.36 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 274745.03 | | DALE S KERR, 2853 W STAYMAN WAY, UTILITY REFUND | 07/26/2020 | 33.03 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 274745.03 | | DALE S KERR, 2853 W STAYMAN WAY, UTILITY REFUND | 07/26/2020 | 8.23 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 274745.03: | | | | | | 101.52 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 276034.02 | | VIKTOR LAVOR, 2290 N CORKTREE WAY, UTILITY REFUND | 07/26/2020 | 50.98 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 276034.02 | | VIKTOR LAVOR, 2290 N CORKTREE WAY, UTILITY REFUND | 07/26/2020 | 62.21 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 276034.02 | | VIKTOR LAVOR, 2290 N CORKTREE WAY, UTILITY REFUND | 07/26/2020 | 50.04 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 276034.02 | | VIKTOR LAVOR, 2290 N CORKTREE WAY, UTILITY REFUND | 07/26/2020 | 12.76 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 276034.02: | | | | | | 175.99 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 280105.03 | | MATTHEW S MYERS, 1781 N AZURITE DR, UTILITY REFUND | 07/17/2020 | 21.18 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 280105.03 | | MATTHEW S MYERS, 1781 N AZURITE DR, UTILITY REFUND | 07/17/2020 | 28.52 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 280105.03 | | MATTHEW S MYERS, 1781 N AZURITE DR, UTILITY REFUND | 07/17/2020 | 25.71 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 280105.03 | | MATTHEW S MYERS, 1781 N AZURITE DR, UTILITY REFUND | 07/17/2020 | 5.56 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 280105.03: | | | | | | 80.97 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 280275.02 | | MIGUEL RODRIGUEZ, 1016 W ROSE QUARTZ ST, UTILITY REFUND | 07/22/2020 | 12.03 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 280275.02 | | MIGUEL RODRIGUEZ, 1016 W ROSE QUARTZ ST, UTILITY REFUND | 07/22/2020 | 9.34 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| Total 280275.02: | | | | | | 21.37 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 290460.01 | | WALTER WILLIAMS, 8110 S BUFFALO CREEK LN, UTILITY REFUND | 07/20/2020 | 63.29 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 290460.01 | | WALTER WILLIAMS, 8110 S BUFFALO CREEK LN, UTILITY REFUND | 07/20/2020 | 47.31 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 290460.01 | | WALTER WILLIAMS, 8110 S BUFFALO CREEK LN, UTILITY REFUND | 07/20/2020 | 11.82 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| Total 290460.01: | | | | | | 122.42 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 302121.01 | | SHADOW MOUNTAIN HOMES, 1001 E ANDES DR, UTILITY REFUND | 07/08/2020 | 66.26 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 302121.01 | | SHADOW MOUNTAIN HOMES, 1001 E ANDES DR, UTILITY REFUND | 07/08/2020 | 3.81 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 302121.01 | | SHADOW MOUNTAIN HOMES, 1001 E ANDES DR, UTILITY REFUND | 07/08/2020 | 2.23 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302121.01: | | | | | | 72.30 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 302357.00 | | KW HOMES, 580 E PASCUA DR, UTILITY REFUND | 07/02/2020 | 26.21 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 302357.00 | | KW HOMES, 580 E PASCUA DR, UTILITY REFUND | 07/02/2020 | 44.01 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 302357.00 | | KW HOMES, 580 E PASCUA DR, UTILITY REFUND | 07/02/2020 | 28.05 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302357.00: | | | | | | 98.27 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 30250.02 | | JUDY L SCHEPIS, 1336 W OWYHEE ST, UTILITY REFUND | 07/22/2020 | 11.30 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 30250.02 | | JUDY L SCHEPIS, 1336 W OWYHEE ST, UTILITY REFUND | 07/22/2020 | 19.81 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 30250.02 | | JUDY L SCHEPIS, 1336 W OWYHEE ST, UTILITY REFUND | 07/22/2020 | 17.17 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| Total 30250.02: | | | | | | 48.28 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 310015.02 | | DEANNA BUTCHER, 9585 S MACADAN WAY, UTILITY REFUND | 07/26/2020 | 23.51 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 310015.02 | | DEANNA BUTCHER, 9585 S MACADAN WAY, UTILITY REFUND | 07/26/2020 | 31.94 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 310015.02 | | DEANNA BUTCHER, 9585 S MACADAN WAY, UTILITY REFUND | 07/26/2020 | 31.63 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 310015.02 | | DEANNA BUTCHER, 9585 S MACADAN WAY, UTILITY REFUND | 07/26/2020 | 11.21 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 310015.02: | | | | | | 98.29 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 310102.02 | | KATHERINE M SHIPLEY, 9317 S UPDALE AVE, UTILITY REFUND | 07/17/2020 | 10.84 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2044 | UTILITY REFUND #10 | 310102.02 | | KATHERINE M SHIPLEY, 9317 S UPDALE AVE, UTILITY REFUND | 07/17/2020 | 12.42 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 310102.02 | | KATHERINE M SHIPLEY, 9317 S UPDALE AVE, UTILITY REFUND | 07/17/2020 | 9.34 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 310102.02 | | KATHERINE M SHIPLEY, 9317 S UPDALE AVE, UTILITY REFUND | 07/17/2020 | 2.27 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 310102.02: | | | | | | 34.87 | .00 | | | | | |
| 2044 | UTILITY REFUND #10 | 70110.02 | | NATHAN S VOGT, 930 N PILAR CT, UTILITY REFUND | 07/20/2020 | 47.06 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 70110.02 | | NATHAN S VOGT, 930 N PILAR CT, UTILITY REFUND | 07/20/2020 | 16.29 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 70110.02 | | NATHAN S VOGT, 930 N PILAR CT, UTILITY REFUND | 07/20/2020 | 13.50 | .00 | 26-4975 SOLID WASTE USER FEES | 0 | 7/20 | | |
| 2044 | UTILITY REFUND #10 | 70110.02 | | NATHAN S VOGT, 930 N PILAR CT, UTILITY REFUND | 07/20/2020 | 1.89 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 70110.02: | | | | | | 78.74 | .00 | | | | | |
| Total UTILITY REFUND #10: | | | | | | 1,532.88 | .00 | | | | | |
| **UTILITY REFUND #9** | | | | | | | | | | | | |
| 2004 | UTILITY REFUND #9 | 174218.00 | | CBH, 1419 W SAHARA DR, UTILITY REFUND | 07/14/2020 | 80.26 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174218.00 | | CBH, 1419 W SAHARA DR, UTILITY REFUND | 07/14/2020 | 26.20 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174218.00 | | CBH, 1419 W SAHARA DR, UTILITY REFUND | 07/14/2020 | 18.51 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 174218.00: | | | | | | 124.97 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 174226.00 | | CBH, 973 S RANGIPO AVE, UTILITY REFUND | 07/14/2020 | 68.59 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174226.00 | | CBH, 973 S RANGIPO AVE, UTILITY REFUND | 07/14/2020 | 6.87 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174226.00 | | CBH, 973 S RANGIPO AVE, UTILITY REFUND | 07/14/2020 | 8.29 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 174226.00: | | | | | | 83.75 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 174229.00 | | CBH, 900 S RANGIPO AVE, UTILITY REFUND | 07/06/2020 | 65.97 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174229.00 | | CBH, 900 S RANGIPO AVE, UTILITY REFUND | 07/06/2020 | 6.92 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 174229.00 | | CBH, 900 S RANGIPO AVE, UTILITY REFUND | 07/06/2020 | 4.56 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 174229.00: | | | | | | 77.45 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 268104.01 | | CBH, 2778 W MIDNIGHT DR, UTILITY REFUND | 07/08/2020 | 63.95 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 268104.01 | | CBH, 2778 W MIDNIGHT DR, UTILITY REFUND | 07/08/2020 | 1.72 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 268104.01 | | CBH, 2778 W MIDNIGHT DR, UTILITY REFUND | 07/08/2020 | 2.21 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 268104.01: | | | | | | 67.88 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 268302.00 | | CBH, 1677 N THISTLE DR, UTILITY REFUND | 07/08/2020 | 60.74 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004 | UTILITY REFUND #9 | 268302.00 | | CBH, 1677 N THISTLE DR, UTILITY REFUND | 07/08/2020 | 1.65 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 268302.00 | | CBH, 1677 N THISTLE DR, UTILITY REFUND | 07/08/2020 | 1.89 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 268302.00: | | | | | | 64.28 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 268307.00 | | CBH, 2679 W QUILCEDA ST, UTILITY REFUND | 07/08/2020 | 64.67 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 268307.00 | | CBH, 2679 W QUILCEDA ST, UTILITY REFUND | 07/08/2020 | 1.97 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 268307.00 | | CBH, 2679 W QUILCEDA ST, UTILITY REFUND | 07/08/2020 | 1.74 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 268307.00: | | | | | | 68.38 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 281027.00 | | INTEGRITY HOMES, 1323 W CERULEAN ST, UTILITY REFUND | 07/08/2020 | .88 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 281027.00 | | INTEGRITY HOMES, 1323 W CERULEAN ST, UTILITY REFUND | 07/08/2020 | 6.80 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| Total 281027.00: | | | | | | 7.68 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 292019.00 | | CBH, 2648 W PEAR APPLE ST, UTILITY REFUND | 07/08/2020 | 83.52 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 292019.00 | | CBH, 2648 W PEAR APPLE ST, UTILITY REFUND | 07/08/2020 | 29.36 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 292019.00 | | CBH, 2648 W PEAR APPLE ST, UTILITY REFUND | 07/08/2020 | 10.41 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 292019.00: | | | | | | 123.29 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 292045.00 | | CBH, 8700 S INARA AVE, UTILITY DEPOSIT | 07/02/2020 | 64.84 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 292045.00 | | CBH, 8700 S INARA AVE, UTILITY DEPOSIT | 07/02/2020 | 1.53 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 292045.00 | | CBH, 8700 S INARA AVE, UTILITY DEPOSIT | 07/02/2020 | 32.54 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 292045.00: | | | | | | 98.91 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 302250.00 | | FLAHERTY HOMES, 558 E ANDES DR, UTILITY REFUND | 07/08/2020 | 63.52 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302250.00 | | FLAHERTY HOMES, 558 E ANDES DR, UTILITY REFUND | 07/08/2020 | 2.06 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302250.00 | | FLAHERTY HOMES, 558 E ANDES DR, UTILITY REFUND | 07/08/2020 | 1.43 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302250.00: | | | | | | 67.01 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 302308.00 | | RIVERWOOD HOMES, 9164 S LA PAMPA WAY, UTILITY REFUND | 07/14/2020 | 62.16 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302308.00 | | RIVERWOOD HOMES, 9164 S LA PAMPA WAY, UTILITY REFUND | 07/14/2020 | 7.26 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302308.00 | | RIVERWOOD HOMES, 9164 S LA PAMPA WAY, UTILITY REFUND | 07/14/2020 | 6.69 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302308.00: | | | | | | 76.11 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 302332.00 | | EAGLEWOOD HOMES, 8948 S FORMOSA WAY, UTILITY | | | | | | | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | REFUND | 07/14/2020 | 59.51 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302332.00 | | EAGLEWOOD HOMES, 8948 S FORMOSA WAY, UTILITY REFUND | 07/14/2020 | 3.93 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302332.00 | | EAGLEWOOD HOMES, 8948 S FORMOSA WAY, UTILITY REFUND | 07/14/2020 | 4.01 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302332.00: | | | | | | 67.45 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 302345.00 | | RIVERWOOD HOMES, 8901 S FORMOSA WAY, UTILITY REFUND | 07/02/2020 | 79.65 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302345.00 | | RIVERWOOD HOMES, 8901 S FORMOSA WAY, UTILITY REFUND | 07/02/2020 | 27.30 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 302345.00 | | RIVERWOOD HOMES, 8901 S FORMOSA WAY, UTILITY REFUND | 07/02/2020 | 18.44 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 302345.00: | | | | | | 125.39 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 320058.00 | | HAYDEN HOMES, 1188 N WARM RIVER AVE, UTILITY REFUND | 07/02/2020 | 76.61 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 320058.00 | | HAYDEN HOMES, 1188 N WARM RIVER AVE, UTILITY REFUND | 07/02/2020 | 25.86 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 320058.00 | | HAYDEN HOMES, 1188 N WARM RIVER AVE, UTILITY REFUND | 07/02/2020 | 27.99 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 320058.00: | | | | | | 130.46 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 320062.00 | | HAYDEN HOMES, 1098 N WARM RIVER AVE, UTILITY REFUND | 07/07/2020 | 76.68 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004 | UTILITY REFUND #9 | 320062.00 | | HAYDEN HOMES, 1098 N WARM RIVER AVE, UTILITY REFUND | 07/07/2020 | 25.99 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 320062.00 | | HAYDEN HOMES, 1098 N WARM RIVER AVE, UTILITY REFUND | 07/07/2020 | 27.79 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 320062.00: | | | | | | 130.46 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 323021.00 | | TODD CAMPBELL CONSTRUCTION, 1727 N RYDE AVE, UTILITY REFUND | 07/08/2020 | 80.36 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 323021.00 | | TODD CAMPBELL CONSTRUCTION, 1727 N RYDE AVE, UTILITY REFUND | 07/08/2020 | 32.02 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 323021.00 | | TODD CAMPBELL CONSTRUCTION, 1727 N RYDE AVE, UTILITY REFUND | 07/08/2020 | 16.23 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 323021.00: | | | | | | 128.61 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 323091.00 | | TODD CAMPBELL CUSTOM HOMES, 2135 E BEXLEY ST, UTILITY REFUND | 07/02/2020 | 20.95 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 323091.00 | | TODD CAMPBELL CUSTOM HOMES, 2135 E BEXLEY ST, UTILITY REFUND | 07/02/2020 | 35.17 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 323091.00 | | TODD CAMPBELL CUSTOM HOMES, 2135 E BEXLEY ST, UTILITY REFUND | 07/02/2020 | 22.43 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 323091.00: | | | | | | 78.55 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 323114.00 | | TRESIDIO HOMES, 1708 N RYDE AVE, UTILITY REFUND | 07/02/2020 | 79.00 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 323114.00 | | TRESIDIO HOMES, 1708 N RYDE AVE, UTILITY REFUND | 07/02/2020 | 25.86 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004 | UTILITY REFUND #9 | 323114.00 | | TRESIDIO HOMES, 1708 N RYDE AVE, UTILITY REFUND | 07/02/2020 | 16.77 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 323114.00: | | | | | | 121.63 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 330155.00A | | TOLL BROS INC, 987 E WHITETAIL ST, UTILITY REFUND | 07/26/2020 | 63.56 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| Total 330155.00A: | | | | | | 63.56 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 33016.00A | | TOLL BROS INC, 875 E WHITETAIL ST, UTILITY REFUND | 07/26/2020 | 63.72 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| Total 33016.00A: | | | | | | 63.72 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 330167.00A | | TOLL BROS INC, 1677 N GREENVILLE AVE, UTILITY REFUND | 07/26/2020 | 63.56 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| Total 330167.00A: | | | | | | 63.56 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 330205.00 | | TOLL BROS INC, 1929 N WINDMILL WAY, UTILITY REFUND | 07/08/2020 | 173.37 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 330205.00 | | TOLL BROS INC, 1929 N WINDMILL WAY, UTILITY REFUND | 07/08/2020 | 48.49 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 330205.00 | | TOLL BROS INC, 1929 N WINDMILL WAY, UTILITY REFUND | 07/08/2020 | 28.30 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 330205.00: | | | | | | 250.16 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 330225.00A | | TOLL BROS INC, 1194 E IMLAY ST, UTILITY REFUND | 07/26/2020 | 63.56 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total 330225.00A: | | | | | | 63.56 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 340009.01 | | CBH, 6977 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 69.73 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 340009.01 | | CBH, 6977 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 11.51 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 340009.01 | | CBH, 6977 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 8.07 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 340009.01: | | | | | | 89.31 | .00 | | | | | |
| 2004 | UTILITY REFUND #9 | 340012.01 | | CBH, 7031 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 64.64 | .00 | 20-4500 METERED WATER SALES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 340012.01 | | CBH, 7031 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 2.18 | .00 | 21-4600 SEWER USER FEES | 0 | 7/20 | | |
| 2004 | UTILITY REFUND #9 | 340012.01 | | CBH, 7031 S BIRCH CREEK AVE, UTILITY REFUND | 07/08/2020 | 2.95 | .00 | 25-4700 PRESS. IRRIGATI0N USER FEES | 0 | 7/20 | | |
| Total 340012.01: | | | | | | 69.77 | .00 | | | | | |
| Total UTILITY REFUND #9: | | | | | | 2,305.90 | .00 | | | | | |
| **W.W. GRAINGER** | | | | | | | | | | | | |
| 162 | W.W. GRAINGER | 9439188997 | 9561 | 1 EA IEC MAGNETIC CONTACTOR 120 VAC FOR REPAIR ON AUMA ACTUATORS, T. SHAFFER, FEB'20 | 02/11/2020 | 90.45 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |
| Total 9439188997: | | | | | | 90.45 | .00 | | | | | |
| 162 | W.W. GRAINGER | 9439534414 | 9561 | 3 EA IEC MAGNETIC CONTACTOR120 VAC FOR REPAIR ON AUMA ACTUATOR, T. SHAFFER, FEB '20 | 02/11/2020 | 271.35 | .00 | 21-6142 MAINT. & REPAIRS - EQUIPMENT | 0 | 7/20 | | |

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total 9439534414: | | | | | 271.35 | .00 | | | | | |
| | Total W.W. GRAINGER: | | | | | 361.80 | .00 | | | | | |
| **ZAMP INC** | | | | | | | | | | | | |
| 2033 | ZAMP INC | 32663 | 10300 | 1000 EA PROTECTIVE MASKS FOR COVID, L. HOLLAND, JULY'20 | 07/15/2020 | 350.00 | .00 | 01-6165 OFFICE SUPPLIES | 4000 | 7/20 | | |
| | Total 32663: | | | | | 350.00 | .00 | | | | | |
| | Total ZAMP INC: | | | | | 350.00 | .00 | | | | | |
| | Grand Totals: | | | | | 384,217.32 | 137,673.66 | | | | | |

Dated: _____

Mayor: _____

City Council: _____

_____

_____

_____

_____

_____

City Treasurer: _____

| Vendor # | Vendor Name | Invoice Number | PO # | Description | Invoice Date | Net Invoice Amount | Amount Paid | GL Account and Title | GL Activity # | GL Period | Date Paid | Voided |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

Report Criteria:
Detail report.
Invoices with totals above $0.00 included.
Paid and unpaid invoices included.

**RESOLUTION NO. R38-2020**
**CITY OF KUNA, IDAHO**

**A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO, APPROVING AND ADOPTING AN AMENDMENT TO THE CITY OF KUNA PERSONNEL POLICY MANUAL SECTION 6.19 REGARDING CELL PHONE USE WHILE DRIVING; DIRECTING THE HUMAN RESOURCES DIRECTOR; AND PROVIDING AN EFFECTIVE DATE.**

**BE IT HEREBY RESOLVED** by the Mayor and Council of the City of Kuna, Idaho as follows:

Section 1. The amendment to section 6.19 of the City of Kuna, Idaho Personnel Policy shall read as follows:

6.19 Special Restrictions Related to Driving

6.19.1 Safe driving is an absolute top priority of the City.

6.19.2 Under Idaho State law, drivers can only use electronic devices in hands-free mode and are only permitted to touch devices to activate the hands-free mode. Holding or supporting the electronic devices is not allowed while driving. The following are exceptions to this policy:

6.19.2.1 The use of an electronic device for emergency purposes, including a text messaging device to contact a 911 system; an emergency call to a law enforcement agency, health care provider, fire district, or other emergency services agency or entity; reporting a fire, traffic accident, serious road hazard, or medical or hazardous materials emergency to appropriate authorities; reporting the operator of another motor vehicle who is driving in a reckless or otherwise unsafe manner or who appears to be driving under the influence of alcohol or drugs; or reporting a crime;

6.19.2.2 The use of a global positioning or navigation system feature of an electronic device, provided that the operator of the vehicle is not manually entering information into the global positioning or navigation system feature of the device.

6.19.2.3 The selection of a telephone number or name for the purpose of making or receiving a telephone call, provided that the action is performed through one-touch access or by voice command;

6.19.2.3 The use of an electronic device by a City employee during the performance of that employee's official duties, as long as the electronic device is being used in a similar manner as a commercial two-way radio communication device

6.19.3 Employees shall not operate a vehicle when conducting City business or when operating a City vehicle while watching motion upon the screen of an electronic device other than motion related to the functioning or navigation of the vehicle.

6.19.4 If a cell call is received on an electronic device while driving, safety must come before all other concerns. Regardless of the circumstances, including slow or stopped traffic, employees should pull off to the side of the road and safely stop the vehicle before placing or accepting a call.

6.19.5 Under no circumstances are employees by reason of their driving to put themselves, any passengers or other users of the road or adjacent pedestrians or property at risk of injury or damage

6.19.6 Violation of this policy will be the subject of disciplinary action, depending upon its severity, up to and including termination.

Section 2. The amendment to section 6.19 of the City of Kuna, Idaho Personnel Policy is hereby approved and adopted;

Section 3. The Human Resources Director shall distribute copies of this policy change to the holders of the personnel policy.

Section 4. This resolution shall be effective as of the date of adoption.

**PASSED BY THE COUNCIL** of Kuna, Idaho this 4th day of August, 2020.

**APPROVED BY THE MAYOR** of Kuna, Idaho this 4th day of August, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

Section 6.19 Special Restrictions Related to Driving

6.19.1 Safe driving is an absolute top priority of the City.

6.19.2 ~~Any cell phone use while driving should only be used to report an accident, car trouble, or if there is imminent danger.~~ Under Idaho State law, drivers' can only use electronic devices in hands-free mode and are only permitted to touch devices to activate the hands free mode. Holding or supporting the electronic devices is not allowed while driving. The following are exceptions to this policy:

6.19.2.1 The use of an electronic device for emergency purposes, including a text messaging device to contact a 911 system; an emergency call to a law enforcement agency, health care provider, fire district, or other emergency services agency or entity; reporting a fire, traffic accident, serious road hazard, or medical or hazardous materials emergency to appropriate authorities; reporting the operator of another motor vehicle who is driving in a reckless or otherwise unsafe manner or who appears to be driving under the influence of alcohol or drugs; or reporting a crime;

6.19.2.2 The use of a global positioning or navigation system feature of an electronic device, provided that the operator of the vehicle is not manually entering information into the global positioning or navigation system feature of the device.

6.19.2.3 The selection of a telephone number or name for the purpose of making or receiving a telephone call, provided that the action is performed through one-touch access or by voice command;

6.19.2.3 The use of an electronic device by a City employee during the performance of that employee's official duties, as long as the electronic device is being used in a similar manner as a commercial two-way radio communication device

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6.19.3 ~~Texting while driving is a violation of the law and is strictly prohibited~~Employees shall not operate a vehicle when conducting City business or when operating a City vehicle while watching motion upon the screen of an electronic device other than motion related to the functioning or navigation of the vehicle.

6.19.4 If a cell call is received on an electronic device while driving, safety must come before all other concerns. Regardless of the circumstances, including slow or stopped traffic, employees ~~are strongly encouraged to~~should pull off

to the side of the road and safely stop the vehicle before placing or accepting a call.

6.19.5 ~~If acceptance of a cell call is unavoidable and pulling over is not a safe option: use the voice-activated or "speed dial" feature; keep the call short; do not take notes, text message or e-mail while driving; refrain from discussion of complicated or emotional issues; and, keep eyes and attention on the road.~~ Under no circumstances are employees by reason of their driving to put themselves, any passengers or other users of the road or adjacent pedestrians or property at risk of injury or damage

6.19.6 ~~Under no circumstances are employees allowed to place themselves at risk to fulfill business needs. Employees who are charged with traffic violations resulting from the use of his/her phone while driving will be solely responsible for all liabilities that result from such actions. Violations of this policy will be subject to discipline, including termination.~~ Violation of this policy will be the subject of disciplinary action, depending upon its severity, up to and including termination.

**RESOLUTION NO. R40-2020**
**CITY OF KUNA, IDAHO**

**A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "*REIMBURSEMENT AGREEMENT*" BETWEEN THE CITY OF KUNA AND THE LETE FAMILY REVOCABLE TRUST FOR 4" SEWER SERVICE LINES IN THE PROSPECTOR SEWER PROJECT; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND THE CITY CLERK TO ATTEST TO SAID SIGNATURE.**

**BE IT HEREBY RESOLVED** by the Mayor and Council of the City of Kuna, Idaho as follows:

Section 1. The "*Reimbursement Agreement*" between the City of Kuna and the Lete Family Revocable Trust for 4" Sewer Service Lines in the Prospector Sewer Project, in substantially the format, as attached hereto as "**EXHIBIT A**" is hereby approved.

Section 2. The Mayor of the City of Kuna, Idaho is hereby authorized to execute said Agreement and the City Clerk is hereby authorized to attest to said execution as so authorized and approved for on behalf of the City of Kuna, Idaho.

**PASSED BY THE COUNCIL** of Kuna, Idaho this 4th day of August, 2020.

**APPROVED BY THE MAYOR** of Kuna, Idaho this 4th day of August, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

**REIMBURSEMENT AGREEMENT**
**Between City of Kuna and the Lete Family Revocable Trust**

THIS REIMBURSEMENT AGREEMENT (THIS "Agreement") is effective on the date last executed below (the "Effective Date") by and between the City of Kuna, a municipal corporation organized and existing under the State of Idaho, by and through it Mayor ("Kuna" or "City") and the Lete Family Revocable Trust ("Developer"). The City and the developer are sometimes referred to herein individually as a "Party" or collectively as the "Parties".

RECITALS

A. On May 5, 2020 the City of Kuna accepted the low bid from Cougar Excavation ("Contractor")for the Prospector Sewer Project (the "Project") in the amount of $419,902.00 for construction of approximately 2,400 lineal feet of gravity sewer project extending a new sewer main in Ten Mile Road and the Kuna School District Property.

B. The parties acknowledge that the new sewer alignment will be extended in Ten Mile Road past the proposed development known as the Lete Commercial Subdivision currently being planned by the "developer" for Ada County Assessor Parcel S1322111060.

C. In order to facilitate sewer service to four of the proposed lots along Ten Mile Road for the "developer" agrees to reimburse the City the cost of four (4) 4-inch sewer services to be installed by the City with the "Project".

**AGREEMENT**

NOW, THEREFORE for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and agreed, and in consideration of the recitals above, which are incorporated below, the City and Developer represent, covenant and agree as follows:

1. **Design Plans**: The construction plans showing the four sewer services shall be the construction set of plans signed and dated by Kent D. Gingrich on June 8, 2020 on sheets C2.01 and C2.02 and are attached as Exhibit A.

2. **Construction Cost**: The Developer shall reimburse the City the construction cost for Bid Item 504.4.1.A.1 for installation of 300 lineal feet of 4-inch sewer services on a unit price of $60.00 as noted in Cougar Excavations bid received by the City on April 21, 2020 and attached as Exhibit B. The Developer reduced the number of services to four (4) and therefore reduces the cost of reimbursement to $18,000.

3. The total price of the reimbursement may be higher or lower than noted above and shall include any additional unforeseen costs or change orders submitted and approved by the City for the complete installation of the service line including excavation, fittings, connection to sewer main, backfill, compaction, testing, surface repairs and all associated appurtenances.

4. Payment: The developer shall pay to the City the cost of reimbursement upon completion of the work by the Contractor and following acceptance of the sewer service laterals by the City.

5. This payment by the Developer does not include payment of any related development or plan review fees, connection fees, trunk line fees or any other related fee that may be due for the Lete Commercial Subdivision upon submittal of improvements plans.

In WITNESS WHEREOF the Parties hereto, have been duly authorized, have executed this Reimbursement Agreement to be effective as of the Effective Date.

THE CITY:

THE CITY OF KUNA, IDAHO, a municipal Corporation organized and existing under the Laws of the State of Idaho

By: _____
Joe Sear, Mayor

Attest:

_____

Dated:

DEVELOPER:

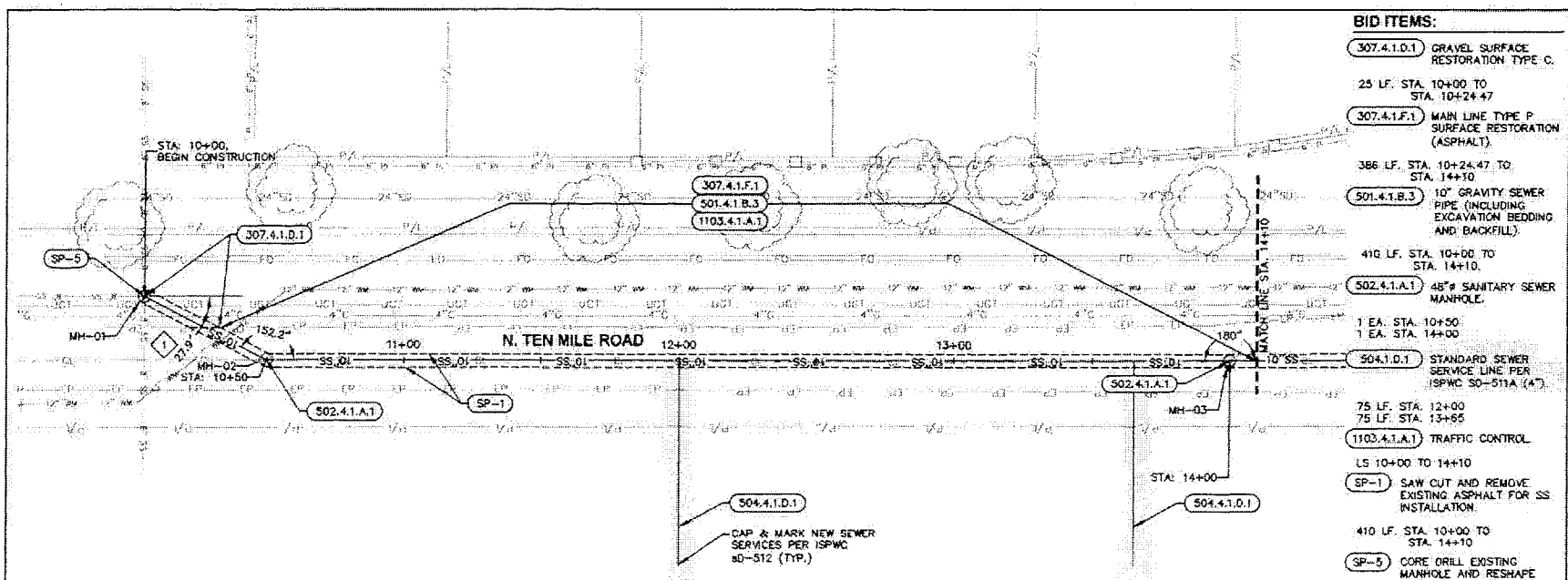
Lete Family Revocable Trust

By: _____
Inaki Lete

Dated: 7/30/2020

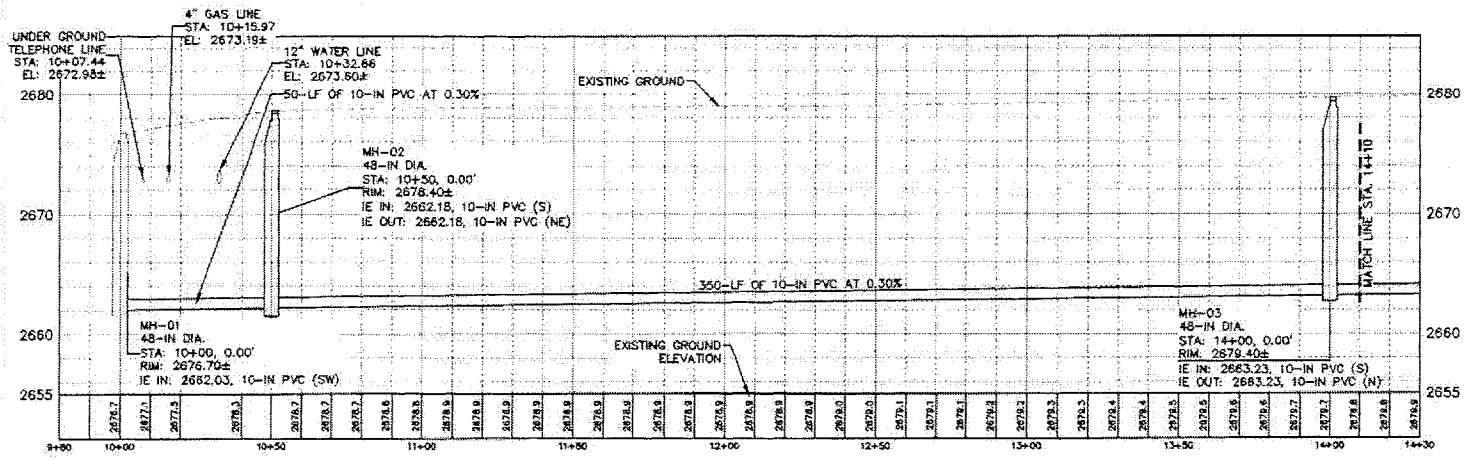
Carlee Oswald
July 30, 2020

CARLEE OSWALD
NOTARY
PUBLIC
STATE OF IDAHO




## PLAN VIEW - SANITARY SEWER

20' 0 20' 40'




## PROFILE VIEW - STA. 10+00 TO 14+10

20' 0 20' 40' H
5' 0 5' 10' V

**BID ITEMS:**

- 307.4.1.D.1 GRAVEL SURFACE RESTORATION TYPE C. — 25 LF, STA. 10+00 TO STA. 10+24.47
- 307.4.1.F.1 MAIN LINE TYPE P SURFACE RESTORATION (ASPHALT). — 386 LF, STA. 10+24.47 TO STA. 14+10
- 501.4.1.B.3 10" GRAVITY SEWER PIPE (INCLUDING EXCAVATION BEDDING AND BACKFILL). — 410 LF, STA. 10+00 TO STA. 14+10.
- 502.4.1.A.1 48"ø SANITARY SEWER MANHOLE. — 1 EA. STA. 10+50, 1 EA. STA. 14+00
- 504.1.D.1 STANDARD SEWER SERVICE LINE PER ISPWC SD-511A (4"). — 75 LF, STA. 12+00, 75 LF, STA. 13+65
- 1103.4.1.A.1 TRAFFIC CONTROL. — LS 10+00 TO 14+10
- SP-1 SAW CUT AND REMOVE EXISTING ASPHALT FOR SS INSTALLATION. — 410 LF, STA. 10+00 TO STA. 14+10
- SP-5 CORE DRILL EXISTING MANHOLE AND RESHAPE CHANNEL.

**KEYNOTES:** (#)

1. EXISTING UTILITIES ARE APPROXIMATE LOCATION ONLY. CONTRACTOR TO VERIFY DEPTH AND LOCATION.

EXHIBIT A

HECO ENGINEERS

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|
| 1 | 4/4/20 | MP | REVISED GROUND ELEVATION PROFILE |

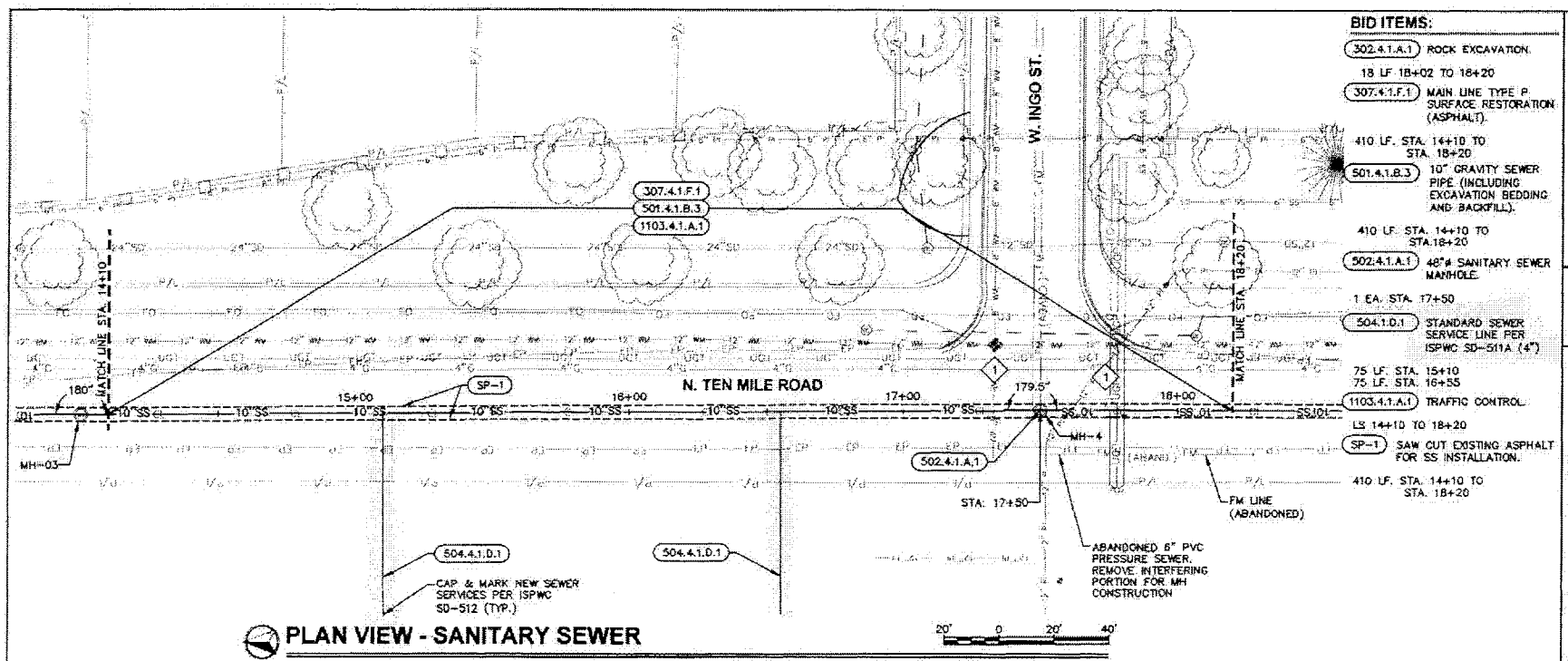
PROSPECTOR GRAVITY SEWER PROJECT
CONSTRUCTION DOCUMENTS
CITY OF KUNA
ADA COUNTY, IDAHO

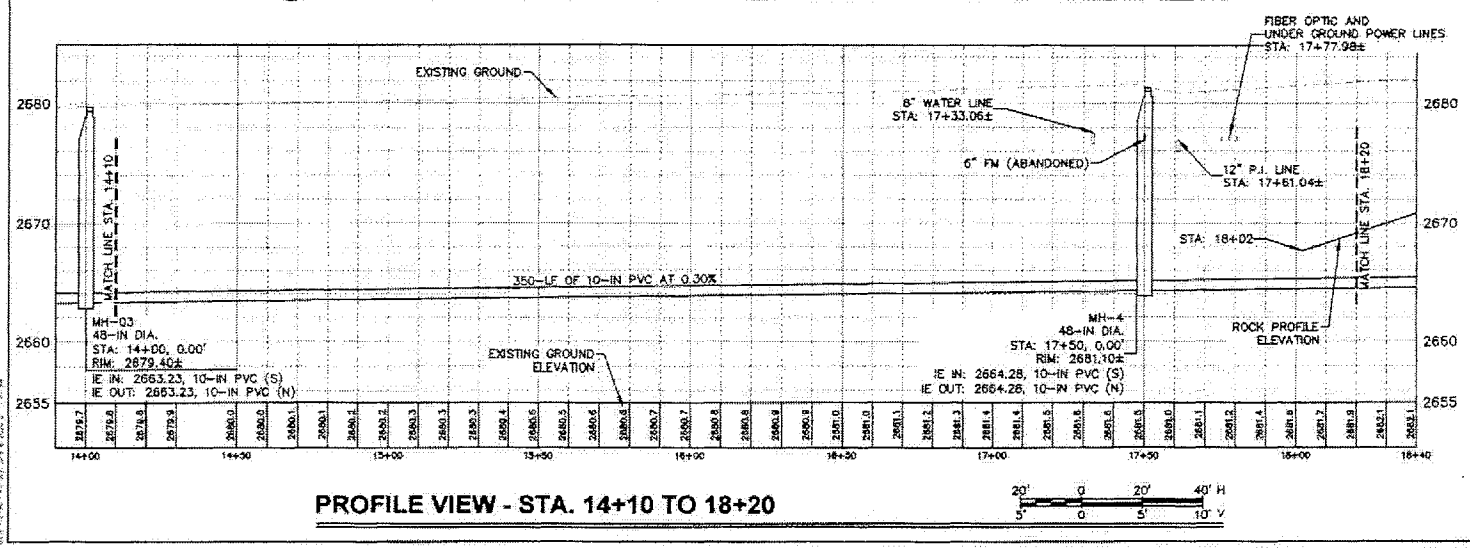
| | |
|---|---|
| PROJECT NO.: | KU19-0311 |
| DESIGNED BY: | K. GINGRICH |
| DRAWN BY: | M. PATZER |
| DWG CHECKED BY: | B. DALEY |
| QC BY: | J. CHRISTENSEN |

PROFESSIONAL ENGINEER REGISTERED 8321 6/8/2020 STATE OF IDAHO KENT D. GINGRICH

CONSTRUCTION SET

PLAN AND PROFILE
SANITARY SEWER
C2.01
SHEET 5 OF 15




**BID ITEMS:**

- 302.4.1.A.1 ROCK EXCAVATION. 18 LF 18+02 TO 18+20
- 307.4.1.F.1 MAIN LINE TYPE P SURFACE RESTORATION (ASPHALT). 410 LF. STA. 14+10 TO STA. 18+20
- 501.4.1.B.3 10" GRAVITY SEWER PIPE (INCLUDING EXCAVATION BEDDING AND BACKFILL). 410 LF. STA. 14+10 TO STA.18+20
- 502.4.1.A.1 48"ø SANITARY SEWER MANHOLE. 1 EA. STA. 17+50
- 504.1.D.1 STANDARD SEWER SERVICE LINE PER ISPWC SD-511A (4") 75 LF. STA. 15+10 75 LF. STA. 16+55
- 1103.4.1.A.1 TRAFFIC CONTROL. LS 14+10 TO 18+20
- SP-1 SAW CUT EXISTING ASPHALT FOR SS INSTALLATION. 410 LF. STA. 14+10 TO STA. 18+20

**KEYNOTES:**

1. EXISTING UTILITIES ARE APPROXIMATE LOCATION ONLY. CONTRACTOR TO VERIFY DEPTH AND LOCATION.

HECO ENGINEERS

| NO. | DATE | BY | REVISIONS |
|---|---|---|---|
| 1 | 6/5/20 | MP | REVISED GROUND ELEVATION PROFILE |

PROSPECTOR GRAVITY SEWER PROJECT
CONSTRUCTION DOCUMENTS
CITY OF KUNA
ADA COUNTY, IDAHO

| | |
|---|---|
| PROJECT NO.: | KU19-0311 |
| DESIGNED BY: | K. GINGRICH |
| DRAWN BY: | M. PATZER |
| DWG CHECKED BY: | B. DALEY |
| QC BY: | J. CHRISTENSEN |

PROFESSIONAL ENGINEER REGISTERED 8321 6/8/2020 STATE OF IDAHO KENT D. GINGRICH

PLAN AND PROFILE
SANITARY SEWER
C2.02
SHEET 6 OF 15

CONSTRUCTION SET

Exhibit A

Cougar Excavation Bid
Prospector Sewer Project
Exhibit B

### 9.1.1 Base Bid

| Bid Item * | Description | Unit | Quantity | Unit Price | Extended Total Amount |
|---|---|---|---|---|---|
| 2010.4.1.A.1 | Mobilization | LS | 1 | 16,866.00 | 16,866.00 |
| 302.4.1.A.1 | Rock Excavation for area in Ten Mile Road and on the school grounds including all labor materials and equipment necessary to complete the work. | CY | 45 | 125.00 | 5,625.00 |
| 307.4.1.A.1 | Miscellaneous Surface Restoration on school grounds (landscaping) – 25 ft wide Grass Preparation and seeding | LF | 1,300 | 28.00 | 36,400.00 |
| 307.4.1.E.1 | Type C Gravel Surface Restoration of shoulder areas along Ten Mile Road and Lift Station Site | LF | 70 | 20.00 | 1,400.00 |
| 307.4.1.F.1 | Ten Mile Road Type P Surface Restoration (asphalt) in accordance with plans and ACHD requirements | LF | 1,115 | 41.00 | 45,715.00 |
| 501.4.1.B.1 | 10-inch PVC Gravity Sewer Pipe (SDR 35) with including excavation, Class A-1 Bedding, Type A-1 Trench Backfill, Compaction, testing, and associated work | LF | 2,430 | 62.00 | 150,660.00 |
| 502.4.1.A.1 | 48" Sanitary Sewer Manhole, including cast in place manhole base and associated appurtenances. | EA | 7 | 2860.00 | 20,020.00 |
| 504.4.1.A.1 | 4" Sewer Service Line excavation, pipe, fittings, connection to sewer main, backfill, compaction, testing, surface repair and all appurtenances. | LF | 375 | 60.00 | 22,500.00 |
| 1103.4.1.A.1 | Construction Traffic Control | LS | 1 | 15,000.00 | 15,000.00 |

**OFFICIALS**
Joe Stear, Mayor
Briana Buban-Vonder Haar, Council President
Richard Cardoza, Council Member
Warren Christensen, Council Member
Greg McPherson, Council Member

**CITY OF KUNA**
**Kuna City Hall Council Chamber, 751 W 4th Street, Kuna, Idaho 83634**

# City Council Meeting
# MINUTES
# Tuesday, July 21, 2020

## 6:00 P.M. REGULAR CITY COUNCIL

***Per the Order issued by Central District Health on July 14, 2020,***
***Social distancing and face masks will be required.***

***Due to social distancing protocol,***
***the Council Chambers Audience Occupancy Capacity is 15.***

***The first 15 persons who appear, in addition to Mayor, City Council, and staff, will be allowed in Council Chambers. All other persons may access the meeting via Live Streaming.***

***Live Streaming Instructions:***
*Members of the public may watch the July 21, 2020 Council Meeting via Facebook Live. Live feed will start at 6:00 P.M. on the City of Kuna Idaho Facebook page linked below:*
https://www.facebook.com/CityofKunaIdaho/

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***For questions please call the Kuna City Clerk's Office at (208) 387-7726.***

***Public testimony will be received on the cases listed under Public Hearings within this Agenda. The instructions and options available for public testimony are listed below.***

***APPLICANT/PUBLIC ORAL PUBLIC HEARING TESTIMONY PROCESS:***

**Written – Up to noon the day of the Public Hearing**

1. Submit any below stated option **prior to noon the day of** the Public Hearing meeting. Late submissions will not be included.
2. Submit testimony via our website on the Public Testimony Form.
   Kunacity.id.gov > Doing Business > Forms and Applications > Frequently Requested Applications and Forms > ONLINE Public Testimony Form
3. Submit testimony via email to PublicHearingTestimony@KunaID.gov
4. Submit via mail to:
   City of Kuna
   Attention: City Clerk's Office
   PO Box 13
   Kuna, ID 83634

**Oral – Via electronic call during the Public Hearing**

1. Submit request **no later than noon the day of** the Public Hearing meeting.
2. Email PublicHearingTestimony@KunaID.gov

NOTICE: Copies of all agenda materials are available for public review in the Office of the City Clerk. Persons who have questions concerning any agenda item may call the City Clerk's Office at (208) 922-5546. In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at 922-5546 at least forty-eight (48) hours prior to the meeting to allow the City to make reasonable arrangements to ensure accessibility to this meeting.

- ✓ Your name
- ✓ Address
- ✓ Phone Number you will be calling from to give testimony
- ✓ Email Address
- ✓ Date of Public Hearing
- ✓ Case number or Identification of Public Hearing

3. Watch your email for a reply email with the information to join the meeting electronically. (Check your spam/junk folder as a precaution)
4. Follow the dial in information.
5. Call into the virtual lobby a minimum of 5 minutes prior to the meeting.

**Oral – In Person Testimony during the Public Hearing**.
All persons wishing to testify must, state their name and residential address. No person shall speak until recognized by the Mayor. A three (3) minute time limit will be placed on all testimonies.

*PLEASE NOTE:* Due to social distancing protocol, the Council Chambers Audience Occupancy Capacity is 15. The first 15 persons who appear, in addition to Mayor, City Council, and staff, will be allowed in Council Chambers.

***If you have questions regarding public testimony, please call the Kuna City Clerk's Office at (208) 387-7726.***

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## *1. Call to Order and Roll Call*

**COUNCIL MEMBERS PRESENT:**
Mayor Joe Stear
Council President Briana Buban-Vonder Haar – Via Zoom
Council Member Richard Cardoza
Council Member Warren Christensen – Via Zoom
Council Member Greg McPherson

**CITY STAFF PRESENT:**
Chris Engels, City Clerk
Jared Empey, City Treasurer
Bill Gigray, City Attorney
Lisa Holland, Economic Development Director
Wendy Howell, Planning & Zoning Director
Nancy Stauffer, Human Resources Director
Paul Stevens, Public Works Director – Via Zoom?
Bobby Withrow, Parks Director
Troy Behunin, Planner III
Jace Hellman, Planner II
Jessica Reid, Customer Service Specialist III

Mayor Stear stated they were working through some difficulties with the audio but a new system would hopefully be up and running by the next Council Meeting. That would straighten some of that out. He asked that anyone Zooming in announce who they were before they spoke. Also, they were under Central District Health Orders for mask wearing where it was not possible to social distance. The chairs were set up at 6 feet so, if folks were more comfortable with it, they could lower their masks, as long as they weren't intermingling, and still be in compliance. He appreciated everyone doing their part.

***2. Invocation:*** *None*

***3. Pledge of Allegiance:*** Mayor Stear

***4. Consent Agenda:*** ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS

*(Timestamp 00:02:20)*

*All items listed under the Consent Agenda are considered to be routine and are acted on with one motion by the City Council. There will be no separate discussion on these items unless the Mayor, Council Member, or City Staff requests an item to be removed from the Consent Agenda for discussion. Items removed from the Consent Agenda will be placed on the Regular Agenda under Business or as instructed by the City Council.*

DRAFT

***A.*** Regular City Council Meeting Minutes Dated July 7, 2020

***B.*** Accounts Payable Dated July 16, 2020 in the amount of $1,076,527.21

**Motion To:** Approve the Consent Agenda
**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson
**Further Discussion:** None
**Approved by the Following Roll Call Vote:**
**Voting Aye:** Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
**Voting No:** None
**Absent:** None
**Motion Passed:** 4-0**.**

***5. External Reports or Requests:*** *None*

***6. Public Hearings:***

*Due to current health precautions associated with the Coronavirus, the City of Kuna is providing alternative ways for the community to submit comments at public hearings. To learn more about the process for written and oral testimony please follow the directions above or call the City of Kuna Clerk's Office at (208) 387-7726.*

***A.*** *Public Hearing continued from June 16, 2020, and tabled from July 7, 2020, for additional public testimony and any comments or suggested changes to the Development Agreement from the City Attorney* and Consideration to approve Case No. 19-10-AN

(Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat) & a DA (Development Agreement) for Spring Rock Subdivision – Troy Behunin, Planner III & Dave Yorgason, Ten Mile Creek, LLC (Applicant) ACTION ITEM
*(Timestamp 00:03:28)*

Ten Mile Creek, LLC, requests approval for Annexation, Planned Unit Development (PUD), Preliminary Plat, and a Development Agreement. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Development proposing up to 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, one school lot and two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project site is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the northeast corner of Cloverdale and Kuna Roads.

Mayor Stear asked if City Attorney Bill Gigray had any comments to make on the Development Agreement.

DRAFT

Mr. Gigray appreciated the opportunity. He had a chance to review it and he could say the applicant was very cooperative. He only had a few comments. It looked like it had all been worked out fine. There were some minor edits needed; some numbering issues and he wanted to clarify who the trustees of the trusts were that were parties to the agreement so they were correctly reflected in the development agreement. The City would want to be sure they were dealing with the party involved in the agreement. Also, that those were current and there was verification they were registered and they were the current and acting trustees. Mr. Bower, the applicant's representative, was very cooperative in this regard. They provided the City with all of the updated affirmations of the trusts and trustees and they were updated and recorded. It was important to remember, when not dealing with LLCs or corporations or some entity that was registered with the Secretary of State, which trusts were not, the trustees were the ones that had to have the authority to act on behalf of the trust and in this instance it was a pretty significant situation with this development and property. They wanted to be sure they were identifying the trustees that had the authority to act on behalf of the trust and that they had, in fact, in the trust agreement the authority to take action in the development agreement which had all been verified and provided. He believed Planner III Troy Behunin, through the developer, worked out all the edits they talked about. He appreciated their cooperation and was comfortable with the agreement as it was now being presented. He stood for questions.

Mayor Stear asked if there were any questions and if there were any questions from Council on Zoom.

City Clerk Chris Engels reiterated Mayor's question for Zoom attendees.

Council Member Christensen said he did not have any questions.

Planner III Troy Behunin added Mr. Gigray and his team jumped on the edits for the development agreement. It was really great. There were just some minor changes from when Council last saw it. Dave Yorgason's team and Jeffry Bower took care of those things. He knew the applicant had a discussion with the Kuna Police Department between the June 16, 2020 Council Meeting and that meeting. He believed the applicant wanted to present that discussion. Also, there were two additional exhibits added to the packet; a July 1, 2020 Spring Rock letter submitted by Dave Yorgason and his team and an economic development letter. Also, the Development Agreement final draft both sides agreed on was there as well. All of those items were frontloaded at the beginning of the packet. He stood for questions.

Mayor Stear re-opened the public hearing.

Support:

Dave Yorgason, the applicant, 14254 W Battenberg Drive, Boise, Idaho 83713, thanked the Council for tabling at the last meeting when he was unable to be there. He reiterated Mr. Gigray's and Mr. Behunin's statements regarding the Development Agreement. There were minor edits and they accepted all of them. They did a quick rush to get the trustee certifications in place. They were all submitted. They were comfortable with all of those. They did submit a letter but before touching on that he wanted to comment on the economic development letter that was provided and answer any questions. It focused primarily on CIDs. They had stated before a CID was not required for this development to move forward but it would enhance and allow some of the improvements potentially, specifically public improvements, to be built quicker. It was not a financial risk to the City and it was not a requirement for this development to be built. They appreciated that consideration and he was happy to answer any questions on CIDs. In regard to his letter, there were several items identified in the letter to address some of the comments made after their initial presentation. He did have the opportunity to speak with Police Chief Jon McDaniel a few weeks prior. He appreciated that opportunity and they talked about a couple things. Their intent had always been, whether police, fire, streets, or schools, to work with the associations and agencies. If there was a need they were there to help them. His track record was such that, he didn't advertise it publicly but since he was there to maybe sell the project he would do it, it was not uncommon once a school opened that they needed something, books, desks, something, and they didn't advertise it but they liked to go to the school and ask what they needed. It wasn't that they wanted public attention but rather they recognized the importance of being a community partner. Same for the police department, fire, and others. That was their intent; to work closely with the agencies as there was need. That was the conversation he had with Chief McDaniel. He was so thankful for the opportunity to be there. They worked really hard to get to that point. They decided to keep moving forward and requested approval. He stood for questions.

Mayor Stear asked if there were any questions for Mr. Yorgason.

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Ms. Engels repeated Mayor Stear's question for Council President Buban-Vonder Haar and Council Member Christensen.

They did not have any questions.

Mayor Stear asked if they were able to hear okay.

Ms. Engels said they were not. They had both messaged that they were not able to hear very well. There was also a comment on social media that they were unable to hear as well. Audio was not cooperating.

Mr. Gigray stated that needed to be fixed or they would have an Open Meeting Law problem.

Mayor Stear knew Ms. Engels had worked on that but the new equipment wasn't there. He hoped it would be there by the next meeting but there was no way to get anything done by this meeting. She had tweaked a few things and they were hoping that would help.

Mr. Gigray wanted to be sure that even if it was hard to hear they were still hearing what was going on. That was the main thing.

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Mayor Stear stated that was his concern too. They technically didn't have a quorum hearing what was happening.

Ms. Engels shared the comments she had. Kristi Inselman, ACHD, was having a hard time hearing people speak with the audio and the echo. She said if anyone had questions for her to let her know in the chat room. Council President Buban-Vonder Haar said she was holding her laptop up to her ear to try to hear when Ms. Engels asked if she could hear Mr. Behunin. Ms. Engels asked previously if they were able to hear. They were not able to hear clearly and indicated it was very hard to hear the Mayor. Council Member Christensen had agreed with that as well. She had tried a couple things during that process and it had not been effective.

Mayor Stear was not sure what to do.

Mr. Gigray suggested trying to speak a lot louder. That might help. As long as they could hear it was fine. He was just nervous about Council Members not being able to hear because of the Open Meeting Law. They didn't want to mess this up.

Mayor Stear agreed.

Planning & Zoning Director Wendy Howell commented they were able to get it to where everyone could hear in planning and zoning by having everyone wear headphones *(unintelligible).*

Ms. Engels explained the echo was on this end; the speakers for them to be able to hear. That was where the echo was coming from because she could hear the echo right there.

Mayor Stear said he moved his mic a little further away because that was where he thought he was starting to cause an echo. He asked if Council President Buban-Vonder Haar and Council Member Christensen could hear him speaking tight on the microphone.

Council President Buban-Vonder Haar said that was better. She had been having the biggest problem hearing the Mayor. She could hear the podium better but it still wasn't ideal. However, whatever Mayor had just done made it easier.

Council Member Christensen agreed.

Ms. Engels asked Mayor Stear to try again and she would move the mic.

Mayor Stear asked if that sounded any better.

Council Member Christensen said yes.

Council President Buban-Vonder Haar said as long as he was continuously talking it was fine but if there were breaks at all it gave the echo time to catch up and muddled it a bit. If there was going to be a break in speech it would need to be a pronounced break.

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Mr. Yorgason asked if it would help if the Mayor muted himself when not speaking.

Ms. Engels said no.

Mayor Stear asked if Council President Buban-Vonder Haar and Council Member Christensen had been able to hear Mr. Yorgason's presentation.

Council Member Christensen said yes, it was tough at times but he was able to hear and understand what he was saying.

Council President Buban-Vonder Haar said same.

Mayor Stear asked if they were comfortable with moving on.

Council Member Christensen was okay to continue on with the conversation. He was able to hear it.

Council President Buban-Vonder Haar said they could proceed and she would speak up if they had any more audio issues.

Mr. Gigray asked if any of the people listening in could hear.

Mayor Stear asked the public listening in if they could hear better.

Ms. Engels relayed the comments from the public; someone in the back doesn't have a mic, no one can hear, they need to come to the podium, headphones for listeners helps, and Nancy Finley just commented yes to Mayor's question.

Mayor Stear asked Mr. Gigray what he thought.

Mr. Gigray said as long as they established the other Council Members could hear what Mayor was saying and what was being said from the podium, because they were not taking testimony from anywhere else, and the members of the public could hear what was being said there and by Mayor and the Council, he thought they were fine. He appreciated them taking the time to clarify this and make sure everyone was hearing. The record would be clear they had taken that extra precaution. His recommendation was if there was anyone listening in that needed a part repeated, they take the time to do that so it was clear they heard everything that was being presented and they could move on. He encouraged everyone to speak loudly.

Council Member Cardoza was having a hard time hearing Council President Buban-Vonder Haar and Council Member Christensen. He asked if everyone in the audience was able to hear them.

They were.

DRAFT

Ms. Engels explained when they spoke, she had to turn the speaker up for them to hear but she couldn't do that to much otherwise there was echo. She was trying to catch that.

Mayor Stear said that was all he had signed up to testify in this matter. He asked if there was anyone else that wished to testify that didn't get a chance to sign in. Seeing none he put the question rightfully before Council.

Against: None

Neutral: None

Rebuttal: None

Mayor Stear shared he had some major concerns with the ability to supply wastewater and that type of thing to the project because he didn't know that running lines that far to the City plant was reasonable. He had a real concern with a lot of times on these projects they wanted to get into the reimbursement programs and the City didn't really have funding at that point to do a lot of reimbursement on these types of things. That was one of his biggest concerns with this project.

Ms. Engels said Council President Buban-Vonder had a comment.

Council President Buban-Vonder Haar asked if that was a continuing concern. They were going to put in a new regional onsite sewer waste water treatment facility. She asked if

that was going to for sure be happening or if it would be possible to get an assurance that was the direction they would go instead of running lines.

Mayor Stear replied the problem with the regional lift station as far as he knew, and it was what they had been running into lately, was those were eligible for reimbursement. He didn't know that they would have a lot of projects between here and there and he certainly didn't want to force their hand in having to hurry up with projects between here and there so those projects could be reimbursed. He invited Mr. Yorgason to speak to that.

Mr. Yorgason explained they were not requesting reimbursement for the lift station; the waste water treatment plant. They were building it to the capacity of their site. They had looked at two different options for sewer. Both were allowed as options in the Development Agreement. However, over the past few months they'd had good discussion with the City Engineer, Paul Stevens, and they were moving that direction. That was their preferred direction and they were not requesting reimbursement because it would be designed for the capacity of their site. He hoped that answered Mayor Stear's question.

Mayor Stear asked about the piping to get it where it needed to go. He wanted to know if that would be funded by Mr. Yorgason.

Mr. Yorgason responded yes, it was their cost and their responsibility.

DRAFT

Mayor Stear asked Mr. Yorgason to elaborate on the conversation he'd had with Chief McDaniel.

Mr. Yorgason explained he'd met with Chief McDaniel about two weeks prior on a Monday. It was a good conversation. Specifically, discussion on the coordination north of this area by the Ada County Sheriff's Department that serviced this general area. However, it was also through the Kuna Police Department. One discussion was the possibility, and it would be a greater community benefit not just for Spring Rock and the police department, of building an accommodation facility for the City that would be a parks department and a public works facility as well as, the police chief asked if they had a need, could they have a room or two for police officers to check in and have a desk space to do some of their work out in that regional area. It wouldn't be a full police substation because that wasn't what was needed. They said if that was the need they were happy to serve and help in that way. Specific details were not identified. If there was need at a later date, they were happy to make that expansion to make it work for the City. He thought that captured the conversation and said, for the record, Chief McDaniel, who was present, was nodding his head yes. It was a great conversation. Their goal was to not only take care of the current needs. They recognized in five or ten years there could be further needs as the project was built and it was their commitment to do that.

Mayor Stear asked if Council Member Christensen had any questions.

Council Member Christensen did not.

Council President Buban-Vonder Haar felt a lot of the outstanding issues were addressed in the letter since the last public hearing. She knew this was a big edition but also thought this was the type of growth, if she could pick any it would be this, where there was a whole area planned with a mix of housing types and commercial interspersed. Dealing with road issues and all of that up front and planning it all out because they knew exactly how the whole area would be laid out. It looked like it complied with the comp plan and all the requirements had been met for City Code and that sort of thing. She noted they were providing significantly more open space than was required under City Code and that was great and school sites. It seemed like overall it would be a net benefit so she was inclined to approve it but wanted to hear if anyone else had any thoughts or comments.

Mayor Stear noted Ada County Highway District expressed some concerns. He asked if they were comfortable moving forward based on the comments. One of the things was Ada County Highway District was policy driven not a land use agency so they did not tend to make comments beyond what their polices were. This was the first time they made comment beyond what their policy needs were. They usually just accepted what Council gave them and were required to serve that. He asked if Council had given that some consideration. He knew one of the comments was, he couldn't remember if it was in this letter or not, but they had been talking with them and one of their concerns was their general fund budget and being able to match; impact fees being collected weren't keeping up with each other. The concern was being able to build projects if Kuna kept spreading out like they were. If Kuna built in a general direction and they only had to work on one set of roads at a time, obviously that made things easier for them. That was one of the biggest comments he got from the public in any of these discussions; the road capacities and getting from point A to point B. His concern with the comments made was if they didn't get some of these projects done, they would end up land locking themselves just because of traffic load and that type of thing. They were going north, south, east, and west and, at some point in time, they would need to get some projects caught up so people could even get out of town. That was one of the concerns he wanted to make sure they vetted very well.

Mr. Yorgason reviewed in their letter they had a paragraph addressing ACHD. He agreed with ACHD's letter that there should be some concerns, whether small, medium, or large projects, especially medium and large sized projects given if there were capacity issues or constraints. That was why they approved this project. In fact, ACHD approved it 4-1 because of the offsite improvements they were committing to do. He had never done a project this large in his career of development with this much offsite road improvement requirements. It would have more than $10 million of impact fees in addition to all of the offsite improvements they would be doing. There were two main routes identified; east and west on Ten Mile Creek Road but once at the northwest corner the primary route north was Cloverdale as identified in the Traffic Impact Study. They had commitments to improve some sections of Hubbard as well as portions of Cloverdale road along with ACHD's existing capital improvements plan. So, there was a plan put in place. On top of all of that they would be doing additional traffic impact studies phased along the way as the development progressed. There would be requirements then and later all of which were outlined in the ACHD staff report and conditions of approval. They agreed with all of the conditions of approval. He hoped that addressed the question raised about general

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growth because he knew they were concerned not just for Kuna but the entire Treasure Valley and how to keep up with growth and the limited dollars they had. That was why they made the commitment to agree to those offsite improvements. He hoped that helped.

Mayor Stear said yes.

Ms. Engels stated, for the record, Kristi Inselman from ACHD was on Zoom and indicated she was unable to hear or understand the comments; just picked up a few ACHD words. Also, she was continuing to have a couple other people indicate on Facebook they were unable to understand what was being said.

Council Member McPherson asked, while they were figuring out what to do, what was the projected final built out date, in years, for 100% completion of the whole project if they were to break ground tomorrow.

Mr. Yorgason replied approximately 20 years, plus or minus a couple, which lined up nicely with COMPASS Communities in Motion 2040 and others.

Mayor Stear thanked Mr. Yorgason then asked Mr. Gigray what he thought. He was concerned about having a public hearing where the public couldn't actually be there then further have them not able to hear. It concerned him deeply.

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Mr. Gigray was concerned too. From his prospective it was his job to protect the interest of the City. He wanted to make sure they were complying with the Open Meeting Law and they were also complying with the hearing provisions and requirements of the Land Use Planning Act as it was associated with all of the hearings for the evening. If he were sitting in Mr. Yorgason's position, he would have a similar concern as well. Whatever action taken out of this would need to be defendable and not precipitate any unnecessary litigation. He thought, if they were having hearing problems and there were people listening in, ACHD, which would be a stakeholder in a sense of this particular matter, they might want to err on the side of caution and continue the public hearing. Then have the new system in place so they could continue the record and make sure everybody could hear and that everything that was said and was part of the record would not have someone later saying they didn't hear it, they weren't available, and they couldn't come in, and this denied their ability to attend the public hearing. He could see those arguments being raised. Whether they would be meritorious and the court would end up saying in the long run this was a significant legal interest on their part and could carry weight, he couldn't say for sure. He just knew it seemed like they could get into thousands of dollars for every issue that was raised. They obviously had on the record there were some hearing issues with this proceeding. He thought they were doing fine to that point in the deliberation process. If they could correct it so the ACHD person, as well as anyone else, could hear what was going on, they could continue; but if it was going to get worse, he was concerned because they were going to go in to deliberation which was part of the hearing.

Mayor Stear shared his concern. It seemed like they would kind of get there and then lose it. His biggest concern was they weren't hearing everything, only portions, so when

asking someone what they didn't hear; they don't know because they didn't hear it. He thought they were pretty confident they could have the new system up by the August 4, 2020 meeting. He thought that might be the best way to do this so they didn't end up with legal ramifications. It was a public hearing and there were three more. That concerned him.

Mr. Gigray said his opinion was if it was problematic for this hearing, unless it was cleared up, it would be problematic for the others. With most of the meeting that wasn't public hearing they were in the Open Meeting Law and Council needed to communicate. Although the argument could be made that people were denied the right to attend. That was what the Open Meeting Law statute said. An argument was raised with regards to when the Governor's March 13, 2020 proclamation suspending part of the Open Meeting Law regarding denial of attendance went off on June 24, 2020 and where that put things. His opinion was, as long as they followed the mandates coming down from Central District Health with regards to public health and safety and they opened the room up to as could be accommodated following those rules and they provided everybody the opportunity to hear what was being said through the virtual appearance process even though they weren't testifying because it wasn't a public hearing, they were in compliance with the Open Meeting Law because they were, in a sense, attending. There was no definition for attending in the Open Meeting Law but if they couldn't hear there was issue there as well. If there was a challenge on an Open Meeting Law question they could come back and claim there was a violation of the Open Meeting Law. Then Council would have to go through a process to correct it and redo it. This hearing thing could be a problem in both directions.

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Mayor Stear explained it worked fine when they were just doing Zoom and Facebook but now the added element with having the public there created an issue. He didn't see that they had any choice. He didn't know what else they could do about it and still follow the law to make sure people could hear. His recommendation was to table the public hearings that night until they could get this resolved, hopefully by the August 4, 2020 meeting. He didn't think they could do anymore public hearings that night based on what they were experiencing so far.

Mr. Gigray commended City Clerk Chris Engels for advising them of the hearing issues. That was her job and she did a good job. It was important everyone was aware of that.

Mayor Stear said it was up to Council to have a motion to table it. That was his recommendation.

Council President Buban-Vonder Haar agreed. She asked if Council was interested in receiving additional testimony next time as well.

Mr. Gigray's recommendation was to leave this open. Then if someone wasn't able to hear they would be able to comment at the continued hearing where they would be able to hear. They could give the applicant a chance to repeat any information they provided so it would be very clear that everyone involved, the public as well as Council and Mayor, had the opportunity to hear what was said. He thought that was the safe play.

Mayor Stear asked if it would be reasonable to make minutes of what was discussed part of the record for the next meeting so they knew what had already been covered. That way people did get a chance to hear since it would be in the minutes. He thought it would clear that up so there wouldn't be that concern.

Mr. Gigray thought that was a good idea. It could be transcribed and put as part of the packet and available for people to see before the hearing was continued when it came out in the packet. That transcript could be provided to Council before the meeting. It would be available to the applicant and anyone else when the agenda notice was sent out.

Planning & Zoning Director Wendy Howell said they hadn't had any issues in Planning & Zoning meetings but they set up differently than Council. They could hear everyone and there hadn't been any problems with people hearing them online.

Mayor Stear said the last one he saw on Facebook people were saying they couldn't hear.

Ms. Howell said that was only until they changed it. They had it figured out. It was an art.

Mayor Stear said ok. He thought this was the safe play until the new system was set up.

Ms. Engels said, according to the people who handled the chambers system, the vendor indicated they were shipping out on July 28, 2020. She had asked them if it would be set up by August 4, 2020. They said they thought it would be. If anything changed, she would update Mayor Stear.

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Mayor Stear asked if there was any further discussion.

Council Member Cardoza asked if they were still having problems. He asked if Ms. Engels was still getting messages they couldn't hear.

Mayor Stear said ACHD couldn't hear.

Ms. Engels said that was correct. She got the message from ACHD saying they couldn't hear. She got some messages saying they can hear, some saying they can't, some asking for captions, someone saying all Zoom was working well. There were people that hadn't been able to hear; including ACHD. She thought it wasn't as transparent as they would like it that go around.

Mayor Stear asked if Council President Buban-Vonder Haar was willing to make the motion.

**Motion To:** Continue the consideration to approve Case Nos. 19-10-AN (Annexation), 19-01-PUD (Planned Unit Development) & 19-06-S (Pre-Plat), a DA (Development Agreement) for Spring Rock Subdivision and the associated public hearing to the August 4, 2020 Council Meeting.
**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson

Mayor Stear clarified the motion was to continue the public hearing and leave it open for testimony.
**Further Discussion:** None
**Motion Passed:** 4-0.

Council Member Cardoza asked if the entire City Council Meeting should be tabled if people couldn't hear. He wondered if all the issues should be tabled.

Mr. Gigray said his preference would be that Mayor Stear open the other noticed public hearings and then continue them. That way they would not have to re-advertise them. If they decided to end the meeting his recommendation was the City re-advertise the new date of those hearings because it was advertised they would open those hearings that night.

Council Member Cardoza asked, with the Open Meeting Law, since they couldn't hear, were they actually…

Mr. Gigray interrupted saying it was problematic. There was no question about it. The safe play would be, if they ended the meeting because there was a hearing problem and the Open Meeting Law, to direct staff to re-notice those hearings. Not that he would want them to have to do that but he thought it was the safe play to do that. Then they would set a date and time. The question was would they have time to re-notice those hearings for August 4, 2020. They might need to run those later since they hadn't been opened.

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Mayor Stear did not think they would have proper time to have them republished for August 4, 2020.

Council Member Cardoza felt, since it was a public meeting, it should be attainable to everybody listening.

Mr. Gigray said that was correct. That was the problem with virtual attendance. People could attend the meetings under the Open Meeting Law virtually. They had the right to do that under these circumstances but, if they couldn't hear the question, was it was really an open meeting. The main point of the Open Meeting Law was that people were able to hear what was going on. That would be the safe play on those as well.

Council Member McPherson clarified they would open them and then table them.

Mr. Gigray thought Council Member Cardoza had a good point. If there were hearing problems out there, continuing them would be an action. He thought they would just have to end the meeting and direct that they be re-noticed for the second meeting in August which he thought would be enough time. They could ask staff what they thought would be enough time.

Mayor Stear said the second meeting would be fine. He did not think they had anything. He thought Spring Rock was probably the only one they really wanted to get through that night that had to be done. He did not think the Area of City Impact was an emergency.

The other was an ordinance for signage. He asked if they needed to have the public hearing on the status on the CDBG funding grant; if there was a time on that.

Lisa Bachman, JUB Engineers, stated actually it needed to be done before construction was completed. She knew they would be getting close by August 17, 2020. She asked if it was possible for staff to write on Zoom and Facebook about the continuation of each one as a way to notify instead of re-advertising.

Mr. Gigray deferred to staff as to whether that could be done.

City Clerk Chris Engels clarified she was asking if she could put comment on the meeting on Facebook live saying each of these public hearings was being tabled to August 4, 2020 and if that would meet the publication obligation.

Mr. Gigray said that would be an approach. He looked at it from a conservative legal standpoint. Someone could make an argument that something was put on there but they still couldn't hear what was going on and were denied attendance of a public meeting. Then they would have an argument if they wanted to challenge whether or not there was an Open Meeting Law violation. That was one side. The remedy was to go to court, he thought within 180 days, and file an action trying to overturn the action or go to the prosecuting attorney claiming there was a violation. They would notify the City there was and the City would decide if they made a violation or not. That was the Open Meeting Law side. The public hearing law side, depended on each of these, under the local Land Use Planning Act with the land use matters it would be a judicial review where they would claim there was a denial of due process because they did not have an opportunity to hear the testimony presented. Then the question would be if it was a significant enough issue that the court would overturn it; who knows. It just invited issues.

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Mayor Stear thought particularly on item 6D, it was just a short and sweet sentence stating "Public Hearing on the Status of CDBG Funded Grant Activities", it would be pretty easy to put out without creating a lot of confusion. He did not think there would be a lot of issue with that. Then they could still at least have that one on the August 4, 2020 meeting and meet that requirement for the grant funding. He thought if they tried to do a lot of those and confuse the issue it would be hard to say they had notice of that. He understood the concern on the others that were longer but that one seemed short and cut and dry. He didn't think there would be issue with that.

Mr. Gigray said the evidence and the circumstances were what they were and they had to decided and exercise their discretion and authority as to what to do.

Mayor Stear thought the issue with it was the time line. As Ms. Bachman had said, if they were done by the 17th and the next meeting was the 18th there would be a problem. They had to get that one through and he thought it was worth taking a chance on. It was just meeting a requirement and giving an update on the status. He thought it was reasonable and did not create a lot of issue.

Ms. Howell was wondering about considering a special meeting. If they didn't, and she had gotten yelled at before, there would be five to six public hearings just with P&Z on the next one.

Ms. Engels said there was no equipment to do a special meeting before August 4, 2020.

Ms. Howell said she could guarantee they could get this set up correctly.

Ms. Engels asked what was the option for setting things up correctly.

Ms. Howell said she would have to have Planner II Jace Hellman come in to explain the whole thing but they had been able to do it for P&Z.

Ms. Engels said she would not have equipment until August 4, 2020. That was her best hope but certainly at Mayor and Council's discretion.

Mayor Stear recommended they re-advertise items 6B and 6C and table item 6D, the public hearing on the status of CDBG funded grant activities, until the August 4, 2020 meeting and do their best to type in comment on the meeting for that night so that would be advertised. He didn't think they would get a lot of problems with that. He asked if they needed to do any action on the other two or just postpone them for re-advertisement.

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Mr. Gigray thought at that point they would need to entertain a motion that due to the virtual appearance problems being experienced in the meeting there be a motion to end the meeting. In that regard, they had already made sure they made action to continue the hearing that night so they weren't re-advertising that and they would direct staff with regards to the other hearings that could not be heard that night to re-advertise those to a date future and then they could allow that for staff discretion. He thought staff could set those hearings they had before when they came to them to put on the agenda. He thought that was within their authority to do that. He thought they ought to be re-advertised since they were in this situation. If they decided they wanted to move forward with the one grant situation Ms. Bachman talked about then they could go ahead and proceed and it would be on their agenda; just continue it to cover that.

Mayor Stear said at the very end he had a few updates to give Council which he could do loudly. He asked for a motion and if Council President Buban-Vonder Haar heard that okay and if it made sense.

Council President Buban-Vonder Haar thought so. She asked if she was moving to continue the public hearing for 6D or if it needed to be opened first or were they just tabling it.

Mayor Stear said item 6D would be tabled to the August 4, 2020 meeting and the rest of the meeting would be cancelled and re-advertised.

**Motion To:** Table to the August 4, 2020 meeting the Public Hearing on the Status of CDBG Funded Grant Activities.

**Motion By:** Council President Briana Buban-Vonder Haar
**Motion Seconded:** Council Member McPherson
**Further Discussion:** None
**Motion Passed:** 4-0.

Planner III Troy Behunin wanted to clarify Spring Rock was continued to August 4, 2020 and no re-advertising was necessary.

Mayor Stear said that was correct. He said for further consideration, since they were having audio difficulties, the rest of the meeting with the remaining items, except item 7A which was going to be removed anyway, would be carried on to the August 4, 2020 meeting.

Mayor Stear gave a quick update to Council on the Governor's property tax proposal. The City of Kuna did not participate in the program because they did not qualify. It was for public safety and Kuna had a fire district that took care of fire and EMS and contracted through Ada County for police services. Kuna did not provide direct payroll for those officers. That left Kuna out of the ability to participate in those programs but with the budget proposal Council had been talking about they hadn't been including the 3%. That was what it was tied to. If Council didn't take the 3% the result would be the same for the tax payers as far as their property taxes went. This thing had kind of been misrepresented from what he had seen. They were saying there would be a possibility of a 10-20% tax savings on people's property taxes. There was no feasible way that was even possible. With Kuna not taking their 3% that was the maximum people could save there. They would be saving people property tax money even though Kuna was not participating in the program. The list was put out and Kuna was not on that list. They said Kuna could be on the list because Ada County was participating but that felt a little deceptive to him because Kuna was not participating. He didn't think it was proper to deceive the public by saying Kuna was participating in something they didn't qualify for. That was why he chose not to put Kuna's name on the list.

Mayor Stear also shared he and Council President Buban-Vonder Haar met with the Ada County Commissioners. They were letting Kuna know they going be starting the stages for doing a study for impact fees. That meant for the Coroner's Office and things like that they were having issues keeping up with on their projects. Their initial guess was that it would be somewhere around $230. Council President Buban-Vonder Haar could correct him he was wrong but that number would not be set until they actually got through their study and came back to Council later. Basically, they just met with them to see if Kuna would absolutely say no or entertain the idea. They relayed to them Kuna had for the most part been pretty receptive to impact fees so growth would help pay for itself as much as possible. The Commission just wanted to give Council a heads up so they weren't shocked when they came down with something later. He asked if Council President Buban-Vonder Haar had anything she wanted to add to that.

Council President Buban-Vonder Haar said no, he covered it all. She thanked him.

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Mayor Stear asked if anyone had anything else they wanted to announce. He added it was a blessing to live in the Kuna community as opposed to some others with the things going on in the world. The folks in this community had been, for the most part, pretty respectful and doing the best they could with things. He said go Kuna Strong and adjourned the meeting.

***B.*** Public Hearing and Consideration to Approve Northern Boundary Area of City Impact Expansion – Jace Hellman, Planner II ACTION ITEM

The City of Kuna requests consideration from the City Council for the expansion of Kuna's most northern boundary of its Area of City Impact (ACI) Boundary. This expansion, if approved, will align Kuna's ACI with the City of Meridian's ACI by extending the boundary from its current location at West Lake Hazel road to encompass previous annexed parcels south of Amity Road and West of Meridian Road.

*Open Public Hearing*
*Receive evidence*
*Consideration to close evidence presentation and proceed to deliberation*

*Potential Motions:*

*Consideration to either:*

*Option 1: Approve or Deny Northern Boundary Area of City Impact Expansion and the Findings of Fact, Conclusions of Law and Order of Decision as presented in the packet and Close the Public Hearing.*

*Option 2: Continue the Public Hearing to a time and date certain and direct staff to prepare a draft Findings of Fact, Conclusions of Law and Order of Decision for consideration by the Council.*

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***C.*** Public Hearing and Consideration to approve Ordinance No. 2020-23 – Jace Hellman, Planner II ACTION ITEM

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:
- MAKING CERTAIN FINDINGS; AND
- AMENDING SUBSECTION 2 OF SECTION 6, CHAPTER 1, TITLE 5 ADDING DEFINITIONS ASSOCIATED WITH SIGNAGE; AND
- REPEALING CHAPTER 10 OF TITLE 5; AND
- AMENDING TITLE 5 BY THE ADDITION OF A NEW CHAPTER 10; AND
- PROVIDING A SEVERABILITY CLAUSE; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

*Open Public Hearing*
*Receive evidence*
*Consideration to close evidence presentation and proceed to deliberation*

*Potential Motions:*

*Consideration to waive three readings*
*Consideration to approve ordinance*
*Consideration to approve summary publication*

***D.*** Public Hearing on the Status of CDBG Funded Grant Activities – Chris Engels, City Clerk

## *7. Business Items:*

***A.*** Discussion on Old Town Pressure Irrigation and Gravity Irrigation Customers and consideration to waive certain connections fees – Mike Borzick, GIS Manager ACTION ITEM

***B.*** Consideration to approve 20-03-LLA (Lot Line Adjustment) for Kelleher Subdivision No. 2 – Jessica Reid, Customer Service Specialist III ACTION ITEM

On behalf of Open Door Rentals, LLC (Owner), Shawn Brownlee with Trilogy Development seeks Lot Line Adjustment approval to ensure proper building setback requirements. The subject properties are located at 1585 W. Hubbard Road and 1595 W. Hubbard Road, Kuna, ID, 83634 (APNS: R4865430140 and R4865430160).

## *8. Ordinances:*

Consideration to approve Ordinance No. 2020-24 ACTION ITEM

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AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:

- AMENDING CHAPTER 8, TITLE 3; AND
- PROVIDING FOR ADDITIONAL DEFINITIONS; AND
- MAKING TECHNICAL CHANGES; AND
- PROVIDING FOR SPECIAL EVENTS REGULATIONS AND PERMITS;
- AND PROVIDING FOR PARADE SPECIAL EVENT REGULATIONS AND PERMITS; AND
- PROVIDING FOR BLOCK EVENT REGULATIONS; AND
- PROVIDING FOR TECHNICAL CORRECTIONS TO THE ATTENDEE PROJECTION GOOD FAITH ESTIMATE SPECIAL APPLICATION REGULATIONS; AND
- PROVIDING FOR PERMIT DENIAL AND PROCEDURE; AND
- PROVIDING FOR LIBERAL CONSTRUCTION OF ADMINISTRATIVE REGULATORY POWERS AND AUTHORITY PROVIDED; AND
- DIRECTING THE CITY CLERK; AND
- PROVIDING AN EFFECTIVE DATE.

*Consideration to Waive Three Readings of Ordinance*
*Consideration to Approve Ordinance*
*Consideration to Approve Summary Publication*

## *9. Executive Session: None*

## *10. Mayor/Council Announcements:*

***11. Adjournment:* 7:10 P.M.**

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

*Minutes prepared by Ariana Welker, Deputy City Clerk*
*Date Approved: CCM 08.04.2020*

DRAFT

Spring Rock
a Master Planned Community

July 1, 2020

Mayor Stear and Members of City Council
751 W. 4th Street
Kuna, Idaho 83634

Re: Spring Rock Subdivision

Dear Mayor Stear and City Council Members:

At the June 16th hearing, after our testimony had concluded, the Mayor and Council raised a few questions about the Spring Rock development. Because the public record is still open, we wanted to provide you with references to information that is included in your record that we believe is responsive to your questions. We also would be happy to answer any further questions you may have for the applicant at the continued July 7th hearing.

Planning Staff and Planning and Zoning Commission: The City's planning staff thoroughly reviewed the Spring Rock applications and recommended approval in a detailed staff report. The Planning and Zoning Commission also unanimously recommended approval. We are in agreement with all recommended conditions of approval.

ACHD: After several months of review by ACHD staff and legal counsel, the ACHD Commission approved the Spring Rock applications, and we are in agreement with all recommended conditions of approval. Two traffic impact studies were prepared (one for the overall master plan and one for the preliminary plat) to provide a complete analysis of project impacts. ACHD held two separate public hearings for the Master Plan and the preliminary plat applications, after which they approved both applications. Along with its approval of Spring Rock, ACHD provided a general comment letter to the city about the growth that may occur under the city's new comprehensive plan. Spring Rock is certainly paying its share of that growth. The estimated ACHD impact fees to be paid by Spring Rock are approximately $10 million and the additional offsite improvements funded by the developer will be millions of dollars more. The offsite street improvements are above and beyond typical ACHD approvals, are in addition to Falcon Crest's required improvements, will be phased based on the approved traffic impact studies, and will be paid for by the developer.

COMPASS and Ada County: The comments about growth made by these agencies are based on Kuna's old comprehensive plan. COMPASS has made similar comments on growth in other cities and unfortunately COMPASS continues to fall short on growth projections in most cities in the Treasure Valley. COMPASS is now updating its regional growth plan and will take into consideration all of the cities' new comprehensive plans, including Kuna's new plan. To mitigate their concerns, some of the things we agreed to do include donating school sites (see below) and paying for additional offsite street improvements.

Sewer: As stated in the previous City council hearing, two viable sewer solutions are identified and allowed in the development agreement. Based on recent discussions and analysis with City Public Works and IDEQ, we are leaning toward the regional onsite sewer wastewater treatment facility as it appears it will be a better solution that will be a net positive for the City.

Schools: We are donating two school sites (one for Kuna School District and one for West Ada School District) to benefit the local and surrounding community. The school districts testified in support of Spring Rock.

Fire and Police: Fire services will be provided by Kuna Rural Fire District. Recently increased impact fees and property taxes paid by Spring Rock will mitigate and pay for a future fire station and fire support as needed. In discussions with planning staff it was suggested that the fire department could use a portion of the 35+ acre large public park for a fire station if it is needed, which we would support. Police/Sherriff services are provided through the Kuna City Police Department. The fairly new City police impact fee along with property tax dollars paid by this development will mitigate the policing needs. If the Police Department needs a site for a substation, we will donate the land at no cost to them. As the Spring Rock development is built out, a new Five Mile road will be built and connect with Kuna Road through Falcon Crest, which will improve access and response times in the area.

Community Infrastructure District (CID): The CID is not required for the project to be built, but it does help enable public infrastructure and amenities (ie City parks) to be built sooner in the development process. This is achieved after a sufficient number of homes is built and value created, then a portion of the dollars are reimbursed and recycled back into the development process for additional public infrastructure to get built quicker, at no financial cost or risk to the City. We are not requesting approval of the CID at this time, but rather the CID is referenced in the development agreement as a place holder (section 4.9) for future approval. We are prepared to answer any questions you may have regarding how the CID may be used for Spring Rock now as well as with a future application.

Development Agreement: The development agreement was recently re-reviewed by the City attorney. Mr. Gigray suggested some minor edits to the agreement, all of which we accept, and an updated DA is provided to City Council for consideration and approval. Mr. Gigray also requested we provide trust certificates for each landowner party prior to the time the development agreement is recorded. We are in the process of gathering the documents to provide to the City attorney. If the last document is not provided to the City prior to the City Council hearing, we agree that a condition of approval be added stating “the trust certifications will be provided to the City prior to the recording of the development agreement.”

Project Benefits: The Spring Rock planned community provides many benefits to Kuna, including:

- Following the new Kuna City comprehensive plan and building the vision for the area
- Providing a mix of housing types (with at least 10 quality local builders) and a mix of uses
- Creating a self-sustaining planned community with supporting neighborhood commercial

- Providing generous and substantial open space exceeding City requirements (16% minimum = estimated 150 acres), including large City park, fishing pond, pathways and trails dedicated to the City, and swimming pools for Spring Rock homeowners
- Installing more open space and amenities in the earlier phases to provide a greater upfront benefit to the community
- Donating two school sites
- Paying for additional offsite street improvements plus impact fees to mitigate traffic impacts
- Paying fees to ACHD and City to mitigate growth impacts, total estimate over $10 million
- Generating property taxes to mitigate growth impacts, total estimate over $7 million annually

We appreciate the thorough review and combined recommendations of approval by ACHD, Kuna City Planning and Zoning Commission, and others. Should you have any questions, we look forward to answering your questions at the public hearing. We wish to express our excitement and commitment to develop the Spring Rock subdivision into a premier community in Kuna.

Sincerely,

Dave Yorgason
Spring Rock Development Team

**Recording Requested By and**
**When Recorded Return to:**

**City of Kuna**
**Attn: City Clerk**
**751 W. 4th Street**
**Kuna, Idaho 83634**

**SPACE ABOVE THIS LINE FOR RECORDER'S USE ONLY**

**City of Kuna / Ten Mile Creek LLC / Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013,**
**& Anne C., George W. and James L. Whitmore**

# DEVELOPMENT AGREEMENT

**[Idaho Code § 67-6511A and Chapter 14 of Title 5 Kuna City Code]**

**Parties to the Agreement:**

| | | |
|---|---|---|
| City of Kuna | "**City**" | City Hall<br>751 W. 4th Street<br>Kuna, ID 83634 |
| Ten Mile Creek LLC | "**Developer**" | Attn: Chris Findlay<br>1211 N Happy Dr<br>Boise, ID 83706 |
| Jay C. Davis and Roberta A. Davis, as co-trustees of the Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009<br>and | "**Owner**" | Attn: Jay C. Davis and Roberta A. Davis co-trustees<br>P.O. Box 16232<br>Boise, ID 83715 |
| Janet Gilmore Kell and Germain Tarrant, as co-trustees of the Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013 | | Attn: Janet Gilmore Kell, and Germain Tarrant, co-trustees<br>3154 E. Rivernest Dr.<br>Boise, ID 83706 |

and

Anne C.,
George W., and
James L. Whitmore

3431 W. Meadow Dr.
Boise, ID 83706

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**EXHIBIT C: OFFSITE SEWERAGE**
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**EXHIBIT G: COMMUNITY INFRASTRUCTURE FINANCING GUIDELINES**
**EXHIBIT H: PUBLIC PARKS & TRAILS PLAN**

**City of Kuna / Ten Mile Creek LLC / Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009.,**
**Keith H. and Ruth E. Gilmore Living Trust,**
**& Anne C., George W. and James L. Whitmore**

**DEVELOPMENT AGREEMENT**

**[Idaho Code § 67-6511A and Chapter 14 of Title 5 Kuna City Code]**

**Spring Rock**

THIS DEVELOPMENT AGREEMENT (this "**Agreement**") is entered into by and between the CITY OF KUNA, a municipal corporation organized and existing under the laws of the state of Idaho, by and through its Mayor ("**City**") and Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013, & Anne C., George W. and James L. Whitmore, ("**Owner**") and Ten Mile Creek LLC, an Idaho limited liability company ("**Developer**") and its successors and/or assigns.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and agreed, and in consideration of the Recitals and Definitions, and in consideration of the premises and the mutual representations, covenants and agreements hereinafter contained, City, Developer and Owner represent, covenant and agree as follows:

## SECTION 1
## DEFINITIONS

For all purposes of this Agreement, the following words in **bold** print that appear in this Agreement have the definitions as herein provided in this Section unless the context of the term clearly requires otherwise and is not capitalized:

**1.1** **ACHD:** Means and refers to the Ada County Highway District, a countywide highway district organized and existing pursuant to Chapter 14 of Title 40, Idaho Code.

**1.2** **Act:** Means and refers to the Local Land Use Planning Act as codified in Chapter 65 of Title 67, Idaho Code**.**

**1.3** **Ada County:** Means and refers to Ada County, Idaho**.**

**1.4** **Additional Property:** Means and refers to real property, not within the Subject Real Property on the Effective Date, that lies adjacent to the Subject Real Property. Additional properties/lands are required to go through the public hearing process, including any required development agreement modifications, new annexations, new preliminary plats or other land use applications as necessary.

**1.5 Agreement:** Means and refers to this "**City of Kuna / Ten Mile Creek LLC / Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013, & Anne C., George W. and James L. Whitmore *Development Agreement***," which may be referred to and cited as the "**Spring Rock Development Agreement**."

**1.6 Annexation Application:** Means and refers to Developer's application to the City regarding the Subject Real Property requesting its annexation into the City**.**

**1.7 Annexation Ordinance:** Means and refers to the annexation ordinance of the City which annexes the Subject Real Property into the City, a true and correct copy of which is attached marked ***Exhibit A***.

**1.8 Applications:** Means and refers collectively to all of Developer's applications to the City regarding the Subject Real Property inclusive of: Annexation Application, Zoning Application, Planned Unit Development Application, Subdivision Application, Special Use Permit and Design Review Application**.**

**1.9 CC&Rs:** Means and refers to the written and recorded covenants, conditions and restrictions that shall encumber portions of the Subject Real Property through one or more Owners' Associations that establish quality control, operation and maintenance both during development and during maturing of the Project**.**

**1.10 CID:** Means one or more Community Infrastructure Districts established by the owner pursuant to Chapter 31 Title 50 Idaho Code [Community Infrastructure District Act].

**1.11 City:** Means and refers to the City of Kuna, an Idaho Municipal Corporation and Party to this Agreement**.**

**1.12 City Council:** Means and refers to the City Council of the City**.**

**1.13 City Fees:** Means and refers to the fees for services as established and charged by the City.

**1.14 Comprehensive Plan:** Means and refers to the City of Kuna Comprehensive Plan, as it exists on the Effective Date**.**

**1.15 Design Review Application:** Means and refers to any application by the Developer for any development of the Subject Real Property requiring Design Review by the City.

**1.16 Design Review Ordinance:** Means and refers to the planning, design guidelines and regulations of the Design Review Overlay District of the City as set forth in Chapter 4 of the Zoning Ordinance**.**

**1.17 Developed:** Means and refers to the completion of development of the Project or phases of the Project by the Developer, including the establishment of the Owners' Association and the CC&Rs associated therewith, and including the acceptance by the City or ACHD of any part of the Project in accordance with the provisions of this Agreement**.**

**1.18 Developer:** Means and refers to Ten Mile Creek LLC, an Idaho limited liability company, authorized to do business in the state of Idaho, which is developing the Project with the permission of the Owner and is a Party to this Agreement**.**

**1.19 Developer's Representative:** Means and refers to the representative for the Developer, which is originally David Yorgason and is inclusive of any designee appointed by Developer as provided herein.

**1.20 Development Rights:** Means and refers to the Subject Real Property land use and development rights in connection with entitlements as provided in this Agreement and as provided in the Permits issued by the City in the process of the Applications.

**1.21 Drainage System:** Means and refers to a drainage and flood control system and facilities for collection, diversion, detention, retention, dispersal, use and discharge of drain water.

**1.22 Driveway**: Means and refers to a private ingress and egress access for vehicular use to and from a parcel or parcels to a private or public roadway or highway.

**1.23 Effective Date:** Means and refers to the date upon which this Agreement takes effect, which is the same date that the City's Annexation Ordinance and Rezone Ordinance upon annexation take effect.

**1.24 Existing Uses:** Means and refers to the existing uses of the Subject Real Property on the Effective Date, which is as follows: agriculture and ancillary related use,.

**1.25 Fire District:** Means and refers to the Kuna Rural Fire District (formerly known as the Kuna Rural Fire Protection District).

**1.26 Green Space:** Means and refers to real property Developed within the Project that is partly or completely covered with grass, trees, shrubs, or other vegetation and may include buildings, equipment, pathways and trails for recreational use and is accessible to the residents, guests and property owners within the Project. This term may appear in this Agreement in the singular or the plural.

**1.27 Impact Area:** Means and refers to the impact area of the City, as of the Effective Date, which lies outside of the City limits and within the unincorporated area of Ada County, as established with Ada County pursuant to the Act.

**1.28 Infrastructure Master Plan:** Means and refers to any of the Infrastructure Master Plans as provided in Section 5 of this Agreement. This term may appear in this Agreement in the singular or the plural.

**1.29 Infrastructure Systems:** Means and refers collectively to Public Streets, Travel Appurtenances, Developer Potable Water System Improvements, Pressure Irrigation System, Sewerage System Improvements, Drainage Systems, Green Space, Public Green Space and Public Park as provided for in this Agreement.

**1.30 Master Plan:** Means and refers to the Master Plan for the Project and the use of the Subject Real Property by the Developer and the Owner in accordance with the Applications attached hereto as ***Exhibit B***.

**1.31 Maximum Density:** Means and refers to the maximum number of residential units within designated areas of the Subject Real Property as stated in the Master Plan which Maximum Density is approximately 2.99 dwelling units/acre or a total of _____2,274 dwelling units.

**1.32 Maximum Phase Density:** Means and refers to a maximum gross residential density for each Phase subject to the limitation on the Maximum Density allowed within each Phase as set forth in the Master Plan and subject to reallocation of density as allowed in this Agreement.

**1.33 Mortgage:** Means and refers to any lien placed upon the Subject Real Property, or any portion thereof, including the lien of any mortgage or deed of trust, as a pledge of real property to a creditor as security for performance of an obligation or repayment of a debt.

**1.34 Offsite Sewerage:** Means and refers to any sewer improvements, including, without limitation, gravity lines, pressure lines, lift station, borings, manholes, and engineering, to connect the Subject Real Property to the existing terminus of the City's sewer system, the alignment of which is shown on ***Exhibit C***.

**1.35 Offsite Potable Water:** Means and refers to any potable water supply network, located outside the boundary of the Subject Real Property, to connect the Project Potable Water System to the Suez Water System, the alignment of which is shown on ***Exhibit D***.

**1.36 Open Space:** Means and refers to any portion of the Subject Real Property that is designated for recreation, agriculture, habitat, scenic or similar uses and inclusive of, without limitation, developed or natural areas; Open Space must be usable space as reasonably determined at the time of preliminary plat by the City planning and zoning director, and may include:

- Green Space and Public Parks;
- fishing ponds;
- sports fields, and trails;
- floodplains and floodways;
- wetlands, wildlife habitat, stream corridors, and

- conservation easements or permanent open space on private lands or lots. Open Space may be publicly or privately owned and may be accessible or inaccessible to the public and as identified on the final plat.

**1.37 Ordinances:** Means and refers to an ordinance passed by the City Council in accordance with the provisions of this Agreement. This term may appear in this Agreement in the singular or the plural.

**1.38 Owner:** Means and refers to **Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013, & Anne C., George W. and James L. Whitmore** who are the owners of the Subject Real Property on the Effective Date and Party to this Agreement, and after the Effective Date of this Agreement shall refer to the owner or owners of the Subject Real Property.

**1.39 Owners' Association:** Means and refers to any non-profit entity created or to be created by Developer, to be responsible for the perpetual maintenance and operation and management of Private Roads, Green Space, Pressure Irrigation System, and Common Areas as such are set forth in the CC&Rs.

**1.40 Parcel:** Means and refers to tract or parcel of distinctly legally described real property located within the Subject Real Property. This term may appear in this Agreement in the singular or the plural.

**1.41 Party or Parties:** Means and refers to the City and/or the Owner and/or the Developer, as the Parties to this Agreement, depending upon the context of the term as used in this Agreement.

**1.42 Phase:** Means and refers to a portion of the Subject Real Property, as so identified and designated on the Master Plan as a "**Phase**." This term may appear in this Agreement in the singular or the plural.

**1.43 Planned Unit Development Application:** Means and refers to the Developer's application to the City regarding Developed phases of the Project requesting a Planned Unit Development Permit.

**1.44 Planning & Zoning Commission:** Means and refers to the City's Planning & Zoning Commission.

**1.45 Potable Water Provider:** Means and refers to Suez Water.

**1.46 Potable Water System:** Means and refers to the Suez Water's domestic potable water system which includes, without limitation, all wells, storage tanks, distribution mains and pump stations necessary to provide Potable Water to users of the Suez Water's Potable Water System.

**1.47 Pressure Irrigation System:** Means and refers to the pressure irrigation system designed and built by the Developer, and owned and maintained by the Owners' Association as set forth in the CC&Rs.

**1.48 Private Road:** Means and refers to any road to be Developed as a part of the Project that will remain private and not be dedicated to ACHD and is intended for perpetual maintenance by the Developer or an Owners' Association. This term may appear in this Agreement in the singular or the plural.

**1.49 Project:** Means and refers to the intended development of the Subject Real Property in accordance with the Master Plan and as governed by this Agreement.

**1.50 Project Potable Water System:** Means and refers to the wells, storage tanks and distribution lines, offsite main lines and pumps planned, designed and constructed by the Developer to serve the Project with potable water, to Suez Water's standards and provide an inter tie-in to the City of Kuna's Water System.

**1.51 Project Sewerage System:** Means and refers to the Sewerage System [not including Offsite Sewerage] designed and constructed by the Developer to serve the Project.

**1.52 Public Infrastructure:** Means and refers to the infrastructure facilities and services improvements, including, without limitation, underlying lands and improvements that are owned or to be conveyed to and owned by the City.

**1.53 Public Park:** Means and refers to real property that is partly or completely covered with grass, trees, shrubs, or other vegetation, and may include buildings, equipment pathways and trails used for recreation and accessible to the public and owned and maintained by the City. This term may appear in this Agreement in the singular or the plural.

**1.54 Public Street:** Means and refers to any street to be developed as a part of the Project that will be dedicated to and intended for acceptance for perpetual maintenance by ACHD. This term may appear in this Agreement in the singular or the plural.

**1.55 PUD:** Means and refers to a planned unit development as defined and by the PUD Ordinance.

**1.56 PUD Modifications:** Those portions of the Subdivision Ordinance and Zoning Ordinance that are being modified as allowed pursuant to the City's Subdivision Ordinance and are attached as Exhibit ***E***.

**1.57 PUD Ordinance:** Means and refers to the planned unit development regulations of the City as a part of the Zoning Ordinance codified in Chapter 7 of Title 5 of Kuna City Code as it exists on the Effective Date.

**1.58 PUD Standards:** Means and refers to the standards in the PUD Ordinance as amended by the PUD Modifications as of the Effective Date.

**1.59 Rezone Ordinance:** Means and refers to a zoning ordinance which rezones the Subject Real Property as R-6, R-12, R-20, C-1 and C-2City zones (as amended by the PUD) in accordance with the provisions of this Agreement.

**1.60 Sewer Provider:** Means and refers to City providing sewerage conveyance and treatment service through the Wastewater System.

**1.61 Sewerage System:** Means and refers to any or all or any combination of the following depending upon the context of this term in the Agreement including, without limitation: intercepting sewers, force mains, collecting sewers, lift stations, structures, buildings, machinery, equipment connections and other appurtenances used for the collection, and transportation to the City's Wastewater System treatment facilities for the treatment and disposal of sewage.

**1.62 Special Use Permit:** Means and refers to a permit granting a special use by the City pursuant to the Special Uses Ordinance.

**1.63 Special Use Ordinance:** Means and refers to Chapter 6 of Title 5 of Kuna City Code, as it exists on the Effective Date, which provides for the processing of application for special use permits.

**1.64 Spring Rock:** Means and refers to the name of the Project, which is constructed and used pursuant to the Development Rights and which may subsequently include some or all of the Additional Property.

**1.65 Subdivision Application:** Means and refers to the Developer's application to the City regarding the subdivision of the Subject Real Property.

**1.66 Subdivision Ordinance:** Means and refers to the subdivision regulations of the City codified in Title 6 Kuna City Code, as it exists on the Effective Date.

**1.67 Subject Real Property:** Means and refers to 761 acres more or less located in Ada County, Idaho, legally described and depicted in ***Exhibit F***.

**1.68 Suez Water:** Means and refers to Suez Water Idaho, Inc. an Idaho corporation who is the Potable Water Provider to the Subject Real Property pursuant to the *2019 Kuna - Suez Water Service Area Agreement*.

**1.69 Term:** Means and refers to the duration of this Agreement as set forth herein unless the word 'term" is not capitalized.

**1.70 Wastewater System:** Means and refers to the City's Sewerage System including, without limitation, all collection lines, lift stations, treatment plants and all appurtenances thereto necessary to provide sewerage service to users of the City's Sewerage System.

**1.71 Zoning Administrator:** Means and refers to the planning & zoning director of the City.

**1.72 Zoning Application:** Means and refers to the Developer's application to the City regarding the rezoning of Subject Real Property upon the Subject Real Property's annexation into the City.

**1.73 Zoning Ordinance:** Means and refers to the zoning regulations of the City codified in Title 5 Kuna City Code, as amended by the PUD Modifications, as it exists on the Effective Date.

## SECTION 2
## RECITALS

The Parties recite and declare:

**2.1** **Municipal Corporation.** City is a municipal corporation established in accordance with Article XII of the Constitution of the State of Idaho and Title 50 Idaho Code; and

**2.2** **Authority.** City is authorized, under the Act [I.C. § 67-6503], to exercise the powers conferred by the Act; and

**2.3** **Comprehensive Plan.** City has the power and duty under the Act [I.C. § 67-6508] to conduct a comprehensive planning process, and to prepare, implement, review and update a comprehensive plan and is exercising its power and duties under the Act and has established a Comprehensive Plan; and

**2.4** **Zoning Ordinance.** City has enacted its Zoning Ordinance, pursuant to its power and duty under the Act [I.C. § 67-6511]; and has established within its boundaries one (1) or more zones or zoning districts with established standards of land use regulation in conformance with its Comprehensive Plan; and

**2.5** **PUD Ordinance.** City, pursuant to its authority under the Act [I.C. § 67-6515], has enacted as a part of its Zoning Ordinance, the PUD Ordinance, providing for the regulation and processing of applications for planned unit development permits for an area of land under a single ownership or control, which a variety of residential, commercial, industrial, and other land uses may be provided with requirements for minimum area, permitted uses, ownership, common open space, utilities, density, arrangements of land uses on a site; and

**2.6** **Development Agreement.** City has the power under the Act [I.C. § 67-6511A], by ordinance, to require or permit as a condition of rezoning of real property that Owner or Developer make written commitment concerning the use or development of the Subject Real Property; and

**2.7** **Subdivision.** City has power and duty under the Act [I.C. § 67-6513] and has enacted the Subdivision Ordinance, which provides for standards and processing of the subdivision of real property under Idaho Code Sections 50-1301 - 50-1329; and

**2.8** **Sewer.** City, has and is exercising its power to construct reconstruct, improve, better and extend within and partially outside of the City and operate pursuant to Idaho Code Sections 50-1028 - 50-1040 a domestic sewerage system; and

**2.9** **Potable Water.** To be provided by the Suez Water and memorialized through a separate document recorded with the County Recorders' office with a copy of said agreement to be provided to the City of Kuna; and

**2.10 Ownership.** Owner owns the Subject Real Property to which the Developer has an option to purchase and which the Developer seeks to develop in accordance with the approved PUD Master Plan; and

**2.11 Impact Area.** The Subject Real Property is within the Impact Area; and

**2.12 Development.** Developer seeks to develop and annex the Subject Real Property into the City in accordance with the Master Plan; and

**2.13 Planning Benefits.** The development of the Subject Real Property pursuant to this Agreement shall result in significant planning and economic benefits to the City and the Developer by, without limitation:

- encouraging investment in and commitment to comprehensive planning for efficient utilization of the City and other public resources to secure quality planning, growth and protection of the environment;

- requiring development of the Subject Real Property consistent with the Comprehensive Plan, the Master Plan, the Kuna City Code, and this Agreement;

- providing for the planning, design, engineering, construction, acquisition, and/or installation of Public Infrastructure in order to support anticipated development of the Subject Real Property and Additional Property;

- increasing tax and other revenues to the City based on a strengthened tax base of improvements to be constructed on and in reasonable proximity to the Subject Real Property;

- creating employment through development of the Subject Real Property consistent with this Agreement; and

- creating quality housing, employment, recreation and other land uses on the Subject Real Property for the residents of the City.

**2.14 Assurances.** This Agreement promotes and encourages the development of the Subject Real Property by providing Developer and Developer's creditors with general permitting and financing assurances of Developer's intentions to develop the Subject Real Property in accordance with the approved PUD Master Plan; and

**2.15 Existing Uses.** Improvements have been made to the Subject Real Property as of the Effective Date which include without limitation underground utilities, drainage, farming and ancillary uses, which provide regional as well as local benefits and it is the mutual intention of the Parties that the Existing Uses and improvements as of the Effective Date are allowed to continue their use subject to conformance with the approved PUD Master Plan.

**2.16 Master Plan.** It is the intention of the Parties that the Developer develop the Subject Real Property in accordance with the approved PUD Master Plan and the Infrastructure Master Plans; and

**2.17 Annexation.** In order for the Developer to develop the Subject Real Property in accordance with the Master Plan, the Subject Real Property must be annexed into the corporate limits of the City; and

**2.18 Applications.** Developer with the Owner's consent has filed the Annexation Application and the Applications for approval of its development and use of the Subject Real Property in accordance with the Master Plan; and

**2.19 City Process.** City will process all of the Applications in accordance with its Zoning Ordinance, Subdivision Ordinance, PUD Ordinance, Special Uses Ordinance and the Act; and

**2.20 Zoning Designations.** The zoning designations contained in the Master Plan are the appropriate City zoning designations for the Subject Real Property and are consistent with the Comprehensive Plan; and

**2.21 Written Commitment.** It is the intention and purpose of the Parties by entering into this Agreement to establish the requirements and conditions as a condition of rezoning the Subject Real Property that the Developer and the Owner are making a written commitment to improve, finance, develop and use the Subject Real Property in accordance with zoning designations of the Rezone Ordinance, the approved PUD, Special Use Permit, Preliminary Plat, Design Review and Final Plat Approvals by the City in accordance with the Master Plan all of which are intended to establish proper and beneficial land use designations and regulations, densities, provisions for Public Infrastructure, design regulations, procedures for administration and implementation and other matters related to the development of the Subject Real Property in accordance with the Master Plan; and

**2.22 CID.** The Owner will petition the City for the approval of CID/CIDs within the Subject Real Property for the funding of Community Infrastructure improvements of the Project.

**2.23 Mutual Benefits.** The Parties agree that the mutual benefits received pursuant to the terms of this Agreement and the rights granted by the City and secured to and required of the Developer and the Owner hereunder constitute sufficient consideration to support the covenants and agreements of the City, the Developer, and the Owner.

## SECTION 3
## ANNEXATION

**3.1 Annexation Application.** Developer, with the Owner's consent, has filed an Annexation Application, which the City has processed.

**3.2** **Annexation Approval.** City Council, together with approving this Agreement, has approved the Annexation Ordinance of the Subject Real Property.

**3.3** **Annexation Ordinance.** The Annexation Ordinance, approved by the City Council, takes effect on the Effective Date.

## SECTION 4
## PROJECT ZONING AND LAND USE APPROVALS

**4.1** **Zoning Application.** Developer, with the Owner's consent, has filed Applications for R-6, R-12, R-20, C-1 and C-2 zoning of the Subject Real Property, in accordance with the Zoning Application, which the City has processed together with the Annexation Ordinance.

**4.2** **Rezone Approval.** City Council approved Rezone Ordinance.

**4.3** **Annexation Ordinance.** The Annexation Ordinance, approved by the City Council, will take effect on the Effective Date.

**4.4** **General Terms.** The following terms and conditions apply to the use and development of the Subject Real Property in accordance with the designations on the PUD Master Plan:

**4.4.1** **Existing Uses.** The Existing Uses are allowed and may continue unless there is a change in use by the Developer in accordance with this Agreement.

**4.4.2** **No Change to Existing Uses.** Developer/Owner shall not change any Existing Uses unless the Developer/Owner files the appropriate Applications with the City in accordance with the Developer/Owner's ability to proceed with its phases of development of the Property in accordance with the PUD Master Plan and in that regard:

**4.4.2.1** File a Planned Unit Development Application for those areas within the Subject Real Property which are identified on the PUD Master Plan with the word "**Phase**" which the City shall process in accordance with and under the provisions of the PUD; and

**4.4.2.2** File a Subdivision Application for plats which the City shall process in accordance with and under the provisions of the Subdivision Ordinance; and

**4.4.2.3** File Applications for any needed Special Use Permits which the City shall process in accordance with and under the provisions of the Special Uses Ordinance; and

**4.4.2.4** File a Design Review Application which the City shall process in accordance with and under the provisions of the Design Review Ordinance.

**4.5 Development Densities**. Subject only to the Maximum Density, the following applies to the terms and conditions of any permitting to be issued by the City as those permits are required by Section 4.4.2 of this Agreement:

**4.5.1 Allocation of Density.** Developer shall have the right to allocate residential density, and the Development Rights associated with such residential density, from Parcels or Phases as shown on the PUD Master Plan to other Phases as shown on the PUD Master Plan at any time, and Developer may reallocate any unused residential density originally allocated to a Phase in the event that the preliminary or final platting of a Phase results in unused residential density, provided such allocation:

**4.5.1.1** does not exceed the allowed underlying Maximum Density for that zone, for each phase of the entire Subject Real Property; and

**4.5.1.2** does not allow a use otherwise prohibited; or

**4.5.1.3** does not cause a material change to this Agreement without prior amendment to this Agreement as required by City Code and compliance with the notice and hearing requirements thereof.

**4.5.2 Allocation Between Phases.** Any allocation of residential density between Phases must be consistent with the planning efforts to encourage planning flexibility based on physical and market conditions while protecting private property rights and changing market conditions in accordance with the Master Plan. Densities for each phase must not exceed the zone in which it is located.

**4.5.3 No Formal Amendment.** Developer shall deliver notice to the City that an allocation of residential density shall be made from one Phase to another Phase and shall provide the City with a statement of the number of residential units per gross acre being allocated and to which Phase. Any allocation in compliance with this Section does not necessitate a formal amendment to this Agreement and shall be retained in the City's official file for the Project.

**4.5.4 No Reduction of Maximum Density.** The approval of any Phase that contains less density than is allocated to that area on the Master Plan shall not have the effect of reducing the Project's overall Maximum Density.

**4.6 PUD Modifications.** Modifications of the requirements of the City's development density, lot size and setback standards, as set forth in the Zoning Ordinance and/or the Subdivision Ordinance, as PUD Modifications, are attached as ***Exhibit E***.

**4.7 Conveyance Subject to this Agreement.** Conveyances from the Developer/Owner of any real property and/or easement together with any improvements thereon shall be subject to the development of the same in accordance with this Agreement.

**4.8 Land Uses.** The uses of the Subject Real Property shall be in accordance with the Existing Uses and/or uses permitted by the City pursuant to this Agreement and the following uses will be allowed as conditions of the City permitting as is applicable to the Project to be governed by the permit:

**4.8.1 Sales Offices.** Sales offices, including marketing trailers, model home complexes and construction trailers shall be allowed during the marketing phase of the Project Development.

**4.8.2 Model Homes**. Upon Developer's notice of approval from the Fire District, City Public Works and ACHD of the all-weather access and fire protection, the City will issue building permits for the construction of model homes and community facilities in compliance with Kuna City Code. Developer shall be allowed up to Six (6) building permits for model homes prior to the recordation of the Final Plat of a subdivision within the Project. Developer and the City agree that the model homes and community facilities cannot be operated as model homes and/or community facilities until Developer completes the Public Infrastructure and the City issues a certificate of occupancy for the model homes and/or community facilities. During the construction of the model homes and/or community facilities, Developer shall provide to the Fire District, the City, and ACHD access in accordance with their standards.

**4.9 CID Formation.** Upon the Developer's submittal of the CID petition and related documents pursuant to Idaho Code 50-3103, the City will take all actions necessary to establish CID(s) pursuant to the Community Infrastructure Financing Guidelines include hereto as ***Exhibit G***. A CID may be approved by City Council through a separate document to be recorded with the County Recorders' office.

## SECTION 5
## PROJECT INFRASTRUCTURE SYSTEMS AND SERVICES

### 5.1 Public Streets.

**5.1.1 Developer Responsibility.** Developer shall:

**5.1.1.1** Include in the PUD Master Plan for approval, a Developer Public Streets System Infrastructure Master Plan, defined below, designating the location of the Public Streets that will serve the Project, as it is fully Developed including considerations that Additional Property may, be added to the Project (the "**Developer Public Streets System Infrastructure Master Plan**"). Developer Public Streets System Infrastructure Master Plan is satisfied by the inclusion of the attached ***Exhibit B***.

**5.1.1.2** The location of Public Streets depicted on the Master Plan is conceptual and may be subject to change during the subdivision approval process by the City and ACHD, as the Project is developed. The Project will be served primarily by Public Streets or Driveways serving the multi-family and commercial areas; said driveways will be owned and maintained by Developer and/or an Owners' Association;

**5.1.1.3** The final designation of the Project's Public Streets and Private Roads will be determined in the Subdivision permitting process by the City and ACHD, as the Project is developed.

**5.1.1.4** Public Streets shall be designed and constructed to meet City of Kuna and ACHD standards for acceptance and in accordance with the approved Master Plan as approved in the subdivision approval process.

**5.1.1.5** All Roads shall be designed and constructed as approved in the subdivision approval process subject to the following:

**5.1.1.5.1** Constructed by the Developer to the City and all ACHD applicable engineering standards including the ACHD storm water manual. Private Roads may modify curb, drainage, storm water retention, widths, parking and other standards in accordance with the PUD Modifications and the City's Subdivision Ordinance.

**5.1.1.5.2** Private driveways, drive aisles, or private parking lots shall be maintained by Developer and/or an Owners' Association; and

**5.1.1.5.3** May be constructed with limited access, through access control structures with gated accesses subject to review and approval of the City, ACHD, Fire District and Ada County Ambulance District; and

**5.1.1.5.4** Private Streets and Common Driveways shall be owned by the Developer until Developed and may subsequently be conveyed to one or more Owners' Associations as designated in each Developed phase of the Project as approved by the City of Kuna; and

**5.1.1.5.5** Identified on the preliminary and final plats of the Subject Real Property; and

**5.1.1.5.6** Accessible to all public service agency providers including, without limitations, police, fire, ambulance, garbage collection, electrical, gas, cable and telephone line installation and repair, and future utilities, domestic and irrigation water or sewer line installation and repair, and other similar public purposes

**5.1.1.6** Parking, pedestrian, bicycle, sidewalks and/or other facilities intended to be used for non-motorized vehicular traffic and/or for e-bicycles and scooters used for ingress and egress to and from or within the Project ("**Travel Appurtenances**"), not included in Private Roads or Public Streets, and Developed within a phase of the Project, shall include, as is relevant and as required by the City, the following:

**5.1.1.6.1** Lighting for all roads, streets, drive aisles and parking lots shall be served with underground electric service distribution; all Roads and Street striping, traffic signals, sign posts, name signs, stop signs, speed limit signs, and all other directional/warning/advisory traffic signage in accordance with the Manual on Uniform Traffic Control Devices.

**5.1.1.7** All Public Streets and related appurtenances are eligible Public Infrastructure costs that may be financed through the CID.

**5.2 Potable Water.** In the permitting process of the development of the Project, it is intended that the Project, as permitted and developed, will be served by a Suez Water . All onsite and offsite improvements are the responsibility of the Developer and/or the Suez Water. See separate agreement with Suez Water for inter tie-in.

**5.3 Irrigation.** In the permitting process of the development of the Project, it is intended that each phase of the Project, as permitted and developed, will be served, owned and operated by a Developer Pressure Irrigation System in accordance with the provisions of this Section. All onsite and offsite improvements are the responsibility of the Developer.

**5.3.1 Developer Responsibility.** Developer shall:

**5.3.1.1** Prepare and submit to the City, for its approval, a Developer Pressure Irrigation System Infrastructure Master Plan, designating the location of Developer Pressure Irrigation System Improvements that will service the Project, as it is fully developed.

**5.3.1.2** Retain all irrigation water rights related to irrigation of the Subject Real Property and those water rights shall continue to be utilized for irrigation of Existing Uses and Green Spaces and Public Parks and shall not be used to serve any other properties not within the Subject Real Property without demonstrating that there are adequate irrigation water rights to serve the Subject Real Property.

**5.4 Wastewater Treatment.** In the permitting process of the development of the Project, it is intended that the Project as permitted and developed will be served by the City of Kuna Wastewater System in accordance with the provisions of this Section.

**5.4.1 Developer Responsibility.** Developer shall:

**5.4.1.1** Prepare and submit to the City, for its approval, a Wastewater System Infrastructure Master Plan designating the approximate location of the Sewerage System main lines, including Offsite sewer lines and lift stations, that will service the Project, as required by the City in order for the City to be the Sewer Provider to the Project as it is fully Developed including considerations that Additional Property may, be added to the Project (the "**Sewer Master Plan**").

**5.4.1.2** Developer, at Developer's expense, shall construct the City-approved ("**Project Sewerage System**") within the Project and shall construct either Onsite Sewerage Treatment or offsite Sewerage trunk line and force main line from the Patagonia Lift Station/Main Line to the Subject Real Property to serve the Project as determined by the City Engineer

**5.4.1.2.1** The Offsite Sewerage, trunk line and force main line, provided by Developer, may follow the Hubbard Road alignment or traverse private property, provided that easements, in a form satisfactory to the City, are provided by the owners of any such private properties.

**5.4.1.3** Design of Developer-constructed onsite Sewerage Treatment or Offsite Sewerage must ensure that, upon completion of the Onsite Sewerage or offsite Sewerage, the Subject Real Property will be served by the Sewer Provider with a capacity to serve the Maximum Density of the approved Project and any project expansions.

**5.4.1.4** **Developer shall secure all offsite** wastewater treatment easements.

**5.4.2 City Responsibility.**

**5.4.2.1** Following the Developer's construction and installation of the Developer Sewerage System Improvements in accordance with the Sewer Master Plan including easements and acceptance by the City, the City will become the Sewer Provider for the Project.

**5.4.2.2** City shall be the Sewer Provider as the Project is developed in accordance with the following:

**5.4.2.2.1** City will provide a "**Will-Serve**" letter for each phase of the Project as it is developed and based on available capacity

**5.4.2.2.2** City has recorded easements for the portion of Offsite Sewerage between the Patagonia Lift Station and Stroebel Road.

**5.4.2.2.3** For the portion of the Offsite Sewerage on Kuna Hubbard Road from approximately Locust Grove to the Property, Developer shall be eligible for reimbursement of the portion of the cost of the Offsite Sewerage in excess of the capacity needed to serve the fully Developed Project. Reimbursement amounts shall be calculated and paid in accordance with the applicable City reimbursement policy in effect when construction commences. A late-comer agreement will be a stand-alone document and/or agreement. Alternatively, these improvements, or a portion thereof, may be funded by the CID in which case the costs funded by the CID would not be subject to reimbursement through the City's reimbursement policy.

**5.4.2.2.4** For the Onsite Sewerage Treatment facilities, Developer shall be entitled to the issuance of a credit against a portion of the City's sewer hookup fees with the amount of the credit or reduced fee to be negotiated with the City Public Works Director. Alternatively, these improvements, or a portion thereof, may be funded by the CID in which case the costs

funded by the CID would not be subject to reimbursement through the City's reimbursement policy.

**5.5 Drainage System.** Developer shall:

**5.5.1 Drainage Master Plan.** Prepare and submit to the City, for its approval, a Drainage System Infrastructure Master Plan designating the location of the "**Developer Drainage System Improvements**" that will service the Project, as it is fully developed including considerations that Additional Property may, be added to the Project (the "**Drainage Master Plan**").

**5.5.2 Private Drainage.** Designate areas with private Drainage Systems to be conveyed to and accepted by and maintained by Developer or a designated Owners' Association and must meet or exceed ACHD's storm water requirements and must be reviewed and approved by the City of Kuna.

**5.5.3 ACHD Standards.** Developer Drainage System Improvements shall be designed and constructed, as the Project phases are developed, to meet ACHD standards on Public Streets, City and any applicable State standards as is relevant to the intended ownership and maintenance of the constructed Developer Drainage System Improvements.

**5.6 Project Public Park(s) and Green Space Infrastructure Master Plan.** The Project shall contain Green Space and Public Park areas totaling a minimum of 16 % of the gross Project acreage in accordance with the following:

**5.6.1 Platting.** Each final plat within the Project shall contain a minimum of 5% of its total gross acres as Green Space, and/or Public Park(s); Unless developer has front-loaded previously recorded phases with Green Space and/or Public Parks in amounts that exceed the 5%. If developer has exceeded 5% in previous phases, the excess may carry over to phases with less than 5%. In no case shall the minimum of 5% open space be avoided for all phases cumulatively – See 5.6 above

**5.6.2 Master Plan.** The Project Public Park(s) and Green Space Infrastructure Master Plan for the Project, attached as ***Exhibit H***, depicts the intent of Project development to link Phases to various common areas and recreational and school uses.

**5.6.3 Pathways.** The pathways and trails shall be located along and within all Public Park(s) and Green Space corridors and provide connectivity to schools and adjacent properties.

**5.6.4 Developer to Designate.** Developer shall specifically designate Public Parks and Green Spaces upon submission of each preliminary and final plat in accordance with the Project Public Park(s) and Green Space Infrastructure Master Plan.

**5.6.5 Ownership.** The ownership of the Public Parks and Green Spaces shall be owned and maintained as follows:

**5.6.5.1** Public Parks by the City;

**5.6.5.2** Green Spaces by Developer/Owners' Association and shall be dedicated for public use

**5.6.6 Pathways.** Project Public Park(s) and Green Space Infrastructure Master Plan (***Exhibit H***) shows a pathway network to be constructed with the Project. The pathways and trails on ***Exhibit H*** are all depicted within Green Space and/or Public Parks and shall be constructed in approved phases.

**5.6.7 Project Public Parks.** The Kuna City Parks & Pathways Master Plan calls for a minimum of one Public Park to be a minimum of ten [10] acres in size and dedicated to the City.

**5.6.7.1** The location of the Public Park(s) may be modified from the location shown on the Kuna City Parks & Pathways Master Plan Master Plan, but shall be located adjacent to a main Public Road in a central location to maximize public access and be compatible with the intent of the Project Public Park(s) and Green Space Infrastructure Master Plan.

**5.6.7.2** The Public Park shall include at least three (3) active amenities such as by way of example:

- Playing fields, playground, basketball court, volleyball court, tennis court, pickle ball courts, a picnic shelter, etc.

**5.6.7.3** Developer and the City will work together on the final design of all Public Park(s).

**5.6.8 Public Park Impact Fee Credits.** If Developer, at no cost or expense to the City, develops and conveys to the City any Public Park within the Subject Real Property, upon approval from City Parks & Recreation Director of the Public Park improvement costs, including the current fair market value of the land ("**Approved Public Park Costs**"), the Developer or the owner of any real property within the Subject Real Property shall be entitled to the issuance of a credit against the City's Public Park impact fee from Project impact fees as will be negotiated with the City Parks & Recreation Director in accordance with the provisions of Kuna City Code Section 12-1-6 including any other applicable provisions of Chapter 1 of Title 12 Kuna City Code. These improvements, or a portion thereof, may be funded by the CID in which case the costs funded by the CID would not be subject to reimbursement through the City's reimbursement policy.

**5.6.9 Green Space Ownership.** Developer shall identify, as phases of the Project are Developed, an Owners' Association or other entity that will own and maintain each Green Space and all improvements within the phase of the Project then being Developed.

**5.6.10 Improvements Within Utility Easements.** The City shall not require the Developer to install any landscape improvements within a utility easement(s) in any Phase until such time as allowed by the utility company that controls the easement. The City and Developer recognize the utility company may limit the improvements that are allowed to be installed in these easement areas. The Developer intends to improve the utility easement areas and shall work with the utility company to enable the installation of any improvements, including grass, trees, shrubs, sprinklers, and/or pathways, if possible.

## SECTION 6
## INFRASTRUCTURE SYSTEMS DEVELOPMENT CONSTRUCTION STANDARDS

**6.1 Infrastructure Systems Development Standards.** Developer/Owner will, in the course of development of each phase of the Project, construct and install all Infrastructure Systems, including any portion thereof that is Offsite, in accordance with the then current relevant engineering and City, ISPWC, IDEQ, ACHD, Ada County, state of Idaho and Federal agency standards.

## SECTION 7
## INFRASTRUCTURE SYSTEMS CONSTRUCTION ACCESS AND OPERATIONS

**7.1 Easements.** Developer and/or CID shall have the right, upon application and issuance of a license or permit from the City or other applicable governmental jurisdiction, subject to their approval, to enter and remain upon and cross over any City-held (or other applicable governmental jurisdiction, if they approve) easements or rights-of-way, to the extent necessary to facilitate Infrastructure Systems construction, or to perform necessary maintenance or repairs of such Infrastructure Systems subject to:

**7.1.1 No Adverse Effect.** Developer's use of such license or permit in a manner that will not impede or adversely affect the City or other applicable governmental jurisdiction's use and enjoyment thereof, and

**7.1.2 Restoration.** Developer shall restore such easements and rights-of-way to their condition prior to the Developer's entry upon and completion of such Infrastructure Systems construction, repair or maintenance.

**7.2 City Cooperation.** City, as is necessary for the Developer and/or CID to construct and install Infrastructure Systems, shall cooperate as is necessary and as the City is legally able, in compliance with City's approval of the applicable Infrastructure Systems plan, as follows:

**7.3 Operations During Construction.** Owner's and Developer's mineral and/or royalty rights on minerals located on or under the Subject Real Property are reserved and the Developer, may as reasonably needed, conduct mining (for purposes of on-site material usage), blasting and batch plant operations on site during each developing phase of the Project in accordance with the procedures of Kuna City Code , all State and Federal Rules and regulations, and this Agreement.

**7.3.1 Review of Construction Operations.** The location of construction operations shall be subject to review and approval by the appropriate governmental agencies that have jurisdiction over such operations.

## SECTION 8
## ADDITIONAL PROPERTY

**8.1 Additional Property.** In the event the Developer acquires any real property within the Additional Property (the "**Acquired Additional Property**") and desires to subject such Acquired Additional Property to the benefits and obligations of this Agreement, Developer may request that the City annex the Acquired Additional Property into the corporate boundaries of the City (if such Acquired Additional Property is not already within City limits) as well as the CID and shall seek amendment of this Agreement through the public hearing process to include such Acquired Additional Property.

**8.2 Revised Utilities Master Plan.** Upon such request, the City shall process the annexation of the Acquired Additional Property, after payment of the City Fees for annexation, zoning, PUD and any other relevant fees, in accordance with the requirements of the City and the state of Idaho. Any such request by the Developer must include a revision of the approved Master Plan(s) which are consistent with and a continuation of the Master Plan and the City approved Infrastructure Master Plans for the Subject Real Property.

**8.3 Amendment to Agreement.** In connection with annexation of any such Acquired Additional Property, any amendment to this Agreement shall go through the public hearing process and follow current City Code, the Comprehensive Plan and Comprehensive Plan Map.

**8.4 Alternative Plans.** An amendment to this Agreement in connection with the annexation of Acquired Additional Property may include alternative plans and land use designations or other planning or entitlement documents according to KCC.

## SECTION 9
## TERM

**9.1 Term.** The Term of this Agreement shall commence on the Effective Date and shall automatically terminate on the 20th anniversary of the Effective Date.

**9.1.1 Additional Property.** The annexation of any Additional Property shall not extend the Term of this Agreement unless the Agreement is amended to extend the Term.

**9.1.2 Automatic Extension.** If more than 75% of the residential units or acres within the Master Plan have been built by the 20th anniversary of the Effective Date, this Agreement shall automatically extend, without necessary notice, agreement, or recording by or between the Parties, by an additional ten (10) years, for a total of thirty (30) years, at which time this Agreement shall automatically terminate as to the Project.

**9.1.3 Partial Termination upon Dedication and Acceptance by Public Agency.** Upon completion of Developed Phases of the Project, which include dedications and or conveyance to and acceptance by the City, ACHD or any other public agency, the Developer may then submit to the City an Application for Partial Termination of provisions of this Agreement ("**Application for Partial Termination**") as they apply to certain legally described real property within a Developed phases of the Project dedicated, conveyed and accepted by the City, ACHD or by any other public agency.

**9.1.3.1** Through the public hearing process, the City Council shall consider an Application for Partial Termination of some of the relevant provisions of this Agreement, only when a phase of the Project has been completely developed and the Developer shall specifically identify the provisions of the Agreement to be terminated in this regard and the subject real property to which it applies. Notwithstanding the foregoing, any such applicable partial termination shall not have any effect on the obligations of the City or the Developer with respect to the any Reimbursement Agreements or obligations of the City to reimburse any fee or costs to the Developer in accordance with this Agreement.

**9.1.3.2** A completed Application submitted by the Developer for Partial Termination shall be reviewed by the Planning and Zoning Director, Public Works Director and the Parks and Recreation Director for consideration for approval by the City Council.

**9.1.3.3** If approved by City Council Application for Partial Termination shall be by an order which shall specify:

- The legal description of the portion of the Subject Real Property to which it applies; and

- The provisions of the Agreement which are terminated.

**9.1.3.4** City Clerk shall certify, acknowledge and record a copy of the order with the Ada County Recorder's Office.

## SECTION 10
## AGREEMENT MODIFICATIONS

**10.1 Effect of New Laws.** In the event State or Federal laws or regulations are enacted and/or there is a decision issued by a court of competent jurisdiction which prevents or precludes a Party's compliance with one or more provisions of this Agreement (individually or collectively, "**New Law**"), the provisions, in whole or in part, as applicable, of this Agreement shall be modified or suspended as may be necessary to comply with such New Law.

**10.1.1 Action.** During the time that the Parties are conferring on such modification or suspension of this Agreement or challenge to the New Law, the Parties may take reasonable action to comply with such New Law.

**10.1.2 Declaration.** Should the Parties be unable to agree to a modification or suspension of this Agreement, either may petition a court of competent jurisdiction for an appropriate declaratory judgment for modification or suspension of this Agreement.

**10.1.3 Ability to Challenge.** Developer and the City each or together shall have the right to challenge the New Law which prevents their compliance with the terms of this Agreement. In the event that such challenge is successful, this Agreement shall remain unmodified and in full force and effect.

**10.2 Technical Amendments.** Technical amendments of this Agreement may be necessary or appropriate from time to time limited to and in accordance with the following:

**10.2.1 Minor Alteration.** Technical amendments are those which only involve minor alteration to the Master Plan such as circulation, Parcel or Phase area boundaries, Green Space boundaries, pathway or trail alignments.

**10.2.2 In Writing.** Technical amendments must be in writing and may be approved by the City Council upon recommendation of the Planning and Zoning Director, Public Works Director and the Parks and Recreation Director without prior or further review by the Planning & Zoning Commission or other public hearings unless such review and public hearings are required by law or by the provisions of any permit issued for the development of any phase of the Project.

**10.2.3 Recordation.** Technical amendments shall be recorded with Ada County Recorders' office.

**10.2.4 Diligence.** The Parties will diligently pursue efforts to process any proposed technical amendments to this Agreement.

**10.3 Limited Termination Amendments.** Any amendment to this Agreement involving a limited termination of the Agreement is governed under Section 9.1.2.

## SECTION 11
## ZONING AND PUD STANDARDS

**11.1 Applicable to Subject Real Property.** Zoning Ordinance, which includes PUD Standards, as they exist on the Effective Date, shall apply to the Subject Real Property for the Term of this Agreement except as modified by those PUD Modifications shown on ***Exhibit E***.

**11.2 Not Applicable to Additional Property.** This Section does not apply to the Additional Property.

## SECTION 12
## VESTED RIGHTS

**12.1 Vested Rights.** Upon the Effective Date, the Developer/Owner shall have vested rights to develop and use the Subject Real Property consistent with this Agreement.

**12.2 Consideration.** The determinations of the City memorialized in this Agreement, together with the assurances provided to the Developer in this Agreement, including this Section, are bargained for and is a consideration for the undertakings of the Developer as set forth herein and contemplated by this Agreement, and are intended to be and have been relied upon by the Developer.

## SECTION 13
## INFRASTRUCTURE SYSTEMS OWNERSHIP AND MAINTENANCE

**13.1 Ownership.** The Infrastructure Systems, provided for in this Agreement, upon their construction, installation, approval and acceptance shall be owned and maintained as follows:

**13.1.1** ***By ACHD:***

- Public Streets; and
- Drainage associated with Public Streets.

**13.1.2** ***By City:***

- Public Wells and Offsite Water Lines, if any, and
- Public Developer Water System Improvements, if any; and
- Developer Sewerage System Improvements; and
- As designated in the Drainage Infrastructure Master Plan, Developer Drainage System Improvements accepted and approved by the City; and
- Public Parks.

**13.1.3** ***By Developer and/or Owners' Association:***

- Private Roads; and
- Drainage associated with Private Roads; and
- Developer Pressure Irrigation System Improvements; and
- Green Spaces.

**13.2 Owners Associations.** Developer, in the process of each Developed phase of the Project, shall create, establish, staff and register with the Secretary of State of the state of Idaho a legal entity under Idaho Law ("**Owners' Association**") and prepare and record with the Ada County Recorder's office appropriate CC&Rs which are consistent with the approved Master Plans.

**13.2.1 Binding on Owners.** The CC&Rs, for each Developed phase of the Project, shall bind all present and future owners of real property within each Developed phase of the Project in order to provide for the perpetual support and maintenance of each of the common improvements within the Developed phase as provided in this Agreement.

**13.2.2 Quality Control.** Each Owners' Association shall establish and perform quality control, maintenance and operation throughout their Developed phase of the Project during development and during maturing of the Developed phase of the Project and continuing in perpetuity.

**13.2.3 Developer Discretion.** Developer shall have the sole and absolute discretion over the content, approval and enforcement rights of the Declarant or other governing agent or agency, formation and adoption of the CC&Rs so long as the same is consistent with the provisions of this Agreement.

## SECTION 14
## DEFAULT

**14.1 Enforcement of Terms and Conditions of the Agreement.** The enforcement of the terms and conditions of this Agreement and any permits issued by the City pursuant to this Agreement are as follows:

**14.1.1 Default.** The failure of the Developer, Owner, Owners' Association, or the failure of the City to comply or perform, in accordance with the terms and conditions of this Agreement or the terms and conditions of any permit issued by the City, pursuant to this Agreement, shall be a default of this Agreement and processed as follows:

**14.1.2 City Default Claims.** A claim of default by the City may be made against the Developer, Owner, Owners' Association by the City's Director of Public Works, Zoning Administrator or Parks and Recreation Director, ("**City Director**"), depending upon the default.

**14.1.3 Developer, Owner or Owners' Association Default Claims:** A claim of default may be made by the Developer, Owner, Owners' Association against the City, depending upon the default.

**14.1.4 Claimant and Accused.** For purposes of this Section of the Agreement, a claim of default is made by a ("**Claimant**") against an ("**Accused**").

**14.1.5 Default Written Notice of Intent.** The Claimant shall serve the Accused with a Default Written Notice of Intent ("**Notice of Intent**").

**14.1.5.1** The written Notice of Intent shall include the matters and facts which form the basis for the notice and a stated reasonable time within which the Accused is to correct and remedy the default. Such reasonable time frame shall depend upon the exigencies surrounding the matters and facts set forth in said Notice.

**14.1.5.2** The written Notice of Intent shall state the factual and legal reasons for the claim of default, the actions to be taken by the Accused to cure the claim of default and a demand that the Accused respond in writing, within a reasonable stated time, as to whether or not the Accused consents to comply with the Notice of Intent of denies the claim of default.

**14.1.5.3** The Accused shall have a minimum of thirty (30) days to remedy any default. If the default is such that more than thirty (30) days would reasonably be required to cure default, then the Accused shall have such additional time as may be necessary to perform or comply so long as the Accused commences performance within such thirty (30) day period and diligently proceeds to complete such performance and timely cures any exigent circumstance of the claim of default that affects public health and safety.

**14.1.5.4** The Notice of Intent shall be served as follows upon:

- *Developer:* by U.S. Mail to the address herein designated by Developer; and
- *Owners' Association:* by U.S. Mail to the address of its registered agent; and
- *Real Property Owner:* By U.S. Mail at their address as listed by the Ada County Assessor's office; and
- *City:* by U.S. Mail to the address herein designated by the City.

**14.1.6 Notice to Show Cause.** In the event the Accused fails to correct and remedy a default or noncompliance, within the reasonable time designated in the Notice of Intent, to the satisfaction of the Claimant, the Claimant shall then request the City Council [or the Planning & Zoning Commission only in the event the Commission has original jurisdiction by reason of a permit which is at issue in the matter] or otherwise request the City Council to proceed to set a hearing and provide written notice of the hearing to show cause to the Accused of the request to take action as identified in the Notice of Intent and to enforce the terms of this Agreement.

**14.1.6.1** The written notice of the hearing to show cause shall be served upon the Claimant and the Accused at least twenty-eight (28) days in advance of the hearing.

**14.1.6.2** At the hearing to show cause, the Accused may present evidence as to why it or they are not in default.

**14.1.6.3** Following any presentation of evidence by the Accused and any rebuttal by the Claimant and any other interested persons, the Planning & Zoning Commission and/or the City Council, as the case may be, shall determine the matter and issue Findings of Fact, Conclusions of Law and an Order of Decision in accordance with the evidence presented at the Show Cause hearing.

**14.1.6.4** Any determination made by the Planning & Zoning Commission may be appealed to the City Council. A notice of appeal must be filed within fourteen (14) days of the final decision of the Planning & Zoning Commission.

**14.1.6.5** The Findings of Fact, Conclusions of Law and Order of Decision issued by the City Council shall be the final administrative remedy of any claim of default under this Agreement and the Parties may thereafter seek legal action in a court of competent jurisdiction for any legal or equitable remedy, including, without limitation, declaratory relief and or specific performance of this Agreement as the case may be, but the Parties shall not be entitled to consequential damages in any such action.

**14.1.7 Prevailing Party.** In the event any Party shall file suit or action at law or equity to interpret or enforce this Agreement, the provisions of Idaho Code Section 12-117, or any subsequent amendment or recodification of the same, shall apply to the determination of the prevailing Party and the award of reasonable attorney's fees, witness fees and other reasonable expenses.

## SECTION 15
## MORTGAGES

**15.1 Senior to Mortgage.** This Agreement shall be superior and senior to any Mortgage of the interests of the Developer or property owner of any real property within the Subject Real Property of record recorded subsequent to this Agreement.

**15.1.1 No Impairment.** No default of this Agreement by the Developer or property owner shall invalidate or impair a Mortgage made in good faith and for value; and

**15.1.2 Subject to Agreement.** Any acquisition or acceptance of title or any right or interest in or with respect to the Subject Real Property, or any portion thereof, by a mortgagee (herein defined to include a beneficiary under a deed of trust), whether under or pursuant to a mortgage foreclosure, trustee's sale or deed in lieu of foreclosure or trustee's sale, or otherwise, except that the same shall be subject to all of the terms and conditions contained in this Agreement.

**15.2 No Mortgage Obligation.** No mortgagee shall have an obligation or duty under this Agreement to perform the Developer's obligations or other affirmative covenants of the Developer hereunder, or to guarantee such performance; except that to the extent that any covenant to be performed by the Developer is a condition to the performance of a covenant by the City, the performance thereof shall continue to be a condition precedent to the City's performance hereunder.

## SECTION 16
## SHARED LEGAL DEFENSE OF THIS AGREEMENT

**16.1 Shared Agreement Legal Defense Costs.** In the event that any legal or equitable action or other proceeding is instituted by a third-party challenging the validity of any provision of this Agreement, the Parties will cooperate in defense of such action or proceeding. The City and the Developer may agree to select mutually agreeable legal counsel to defend such action or proceeding with the Parties sharing equally in the cost of such joint legal counsel, or each Party may select its own legal counsel at each Party's expense. All other costs of such defense(s) shall be shared equally by the Parties. Each Party retains the right to pursue its own independent legal defense.

## SECTION 17
## NOTICES AND FILINGS

**17.1 Manner of Serving.** All notices, filings, consents, approvals and other communications provided for herein or delivered in connection herewith shall be validly delivered, filed, made, or served if in writing and delivered personally or delivered by a nationally recognized overnight courier or sent by certified United States Mail, postage prepaid, return receipt requested, if to:

**City:**

City of Kuna
Attn: Mayor
751 W. 4th Street
Kuna, ID 83634

*With a copy to:*

William F. Gigray, III
WHITE PETERSON
5700 E. Franklin Rd., Suite 200
Nampa, ID 83687

**Developer:**

Ten Mile Creek LLC
Attn: Chris Findlay
1211 N Happy Drive
Boise, ID 83706

*With a copy to:*

David Yorgason
14254 W. Battenberg Drive
Boise, ID 83713

**Owners:**

Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009
P.O. Box 16232
Boise, ID 83715

Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013
Attn: Janet Gilmore Kell, Co-Trustee or
Germain Tarrant, Co-Trustee
3154 E. Rivernest Dr.
Boise, ID 83706

Anne C. ,
George W., and
James L. Whitmore
3431 W. Meadow Dr.
Boise, ID 83706

or to such other addresses as either Party hereto may from time to time designate in writing and delivery in a like manner.

**17.2 Mailing Effective.** Notices, filings, consents, approvals and communication given by mail shall be deemed delivered immediately if personally delivered, 24 hours following deposit with a nationally recognized courier, or 72 hours following deposit in the U.S. mail, postage prepaid and addressed as set forth above.

**17.3 City Notice Prior to Entry on Subject Real Property:** The Developer, Owner and the City will establish a process of reasonable notice by the City to the Developer and Owner for permission to enter and access the Subject Real Property that facilitates the City's need to timely inspect and administer the City's permits which are granted for this Project.

## SECTION 18
## DEVELOPER ASSIGNMENT OF AGREEMENT RIGHTS

**18.1 Developer Assignment:** The assignment of any of the Developer's rights and obligations of this Agreement shall in accordance with the following:

**18.1.1 Complete Assignment of Developer's rights.** A total assignment of the Developer's rights and obligations under this Agreement in connection with all undeveloped portions of the Subject Real Property shall be assigned upon written consent of the City Council which shall not be unreasonably withheld, conditioned or delayed subject only to the following conditions:

**18.1.1.1** Prior written notice from the Developer to the City Council together with the identification of the proposed assignee together with the proposed assignee's written affirmation of their intentions and ability to perform the conditions of this Agreement; and

**18.1.1.2** Developer is not in default of this Agreement or the Assignee tenders to the City a guarantee of the Assignee's performance of the Developer's default upon assignment; and

**18.1.1.3** The total assignment by the Developer shall be by a written instrument including the acceptance of the assignee to the terms and conditions of this Agreement, and the City Council's written consent and shall then be recorded in the official records of Ada County, Idaho, expressly assigning such rights and obligations.

**18.1.1.4** In the event of such total assignment of the Developer's rights and obligations hereunder, the Developer's liability under this Agreement shall then terminate.

**18.1.2 Successors and Assigns.** Notwithstanding any other provisions of this Agreement, the Developer may assign all or part of the Developer's rights and duties under this Agreement as collateral to any financial institution from which the Developer has borrowed funds for use in developing the Property. Such an assignment shall not relieve the Developer from any obligations of this Agreement.

## SECTION 19
## MISCELLANEOUS

**19.1 Agreement runs with the Subject Real Property.** The burdens of this Agreement are binding upon, and the benefits inure to, all successors in interest of the Parties to this Agreement and constitute covenants that run with the Subject Real Property. Each commitment and restriction of this Agreement on the Subject Real Property shall be a burden on the Subject Real Property and shall be appurtenant to and for the benefit of the Subject Real Property and shall run with the land.

**19.1.1** This Agreement shall be binding on the Developer and the Owner, and their respective heirs, administrators, executors, agents, legal representatives, successors, and assigns; provided, however, that the purchasers, from the Owner and/or Developer, of individual lots within Developed phases of the Project are not subject to the obligations arising under this Agreement except for any obligations of the Owners' Association to which they are a member.

**19.2 Choice of Law.** This Agreement shall be construed in accordance with the laws of the state of Idaho in effect on the Effective Date. Any action brought in connection with this Agreement shall be brought in a court of competent jurisdiction located in Ada County, Idaho.

**19.3 Construction.** All Parties hereto have either been represented by separate legal counsel or have had the opportunity to be so represented. Thus, in all cases, the language herein shall be constructed simply in accord with its fair meaning and not strictly for or against a Party, regardless of whether such Party prepared or caused the preparation of this Agreement.

**19.4 Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single document so that the signatures of all Parties may be physically attached to a single document.

**19.5 Entire Agreement.** This Agreement constitutes the entire agreement between the Parties, except for any permits and or approvals issued pursuant to this Agreement, pertaining to the subject matter hereof. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written, are hereby superseded and merged herein. No modification or amendment to this Agreement of any kind whatsoever shall be made or claimed by Developer or City shall have any force or effect whatsoever unless the same shall be endorsed in writing and signed by the Party against which the enforcement of such modification or amendment is sought, and then only to the extent set forth in such instrument. Such approved amendment shall be recorded in the Official Records of Ada County, Idaho.

**19.6 Exhibits and Recitals.** Any exhibit attached hereto shall be deemed to have been incorporated herein with the same force and effect as if fully set forth in the body hereof. The Recitals set forth at the beginning of this Agreement are hereby acknowledged and incorporated herein and the Parties hereby confirm the accuracy thereof. The Definitions set forth prior to the Recitals are hereby acknowledged and incorporated herein.

**19.7 Further Acts.** Each of the Parties shall promptly execute and deliver all such documents and perform all such acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement.

**19.8 Good Standing; Authority.** Each of the Parties represents to the other as follows:

**19.8.1 Developer.** Developer represents that it is an Idaho limited liability company duly qualified to do business in Idaho; and

**19.8.2 City.** City represents that it is an Idaho municipal corporation in the state of Idaho; and

**19.8.3 Owner.** Owner represents that it is an Idaho limited liability company.

**19.8.4 Authority**. Each Party represents to the other that the individual(s) executing this Agreement on behalf of the Parties are authorized and empowered to bind the Party on whose behalf each such individual is signing.

**19.9 Headings.** This Agreement shall be construed according to its fair meaning and as if prepared by both Parties hereto. Table of Contents, titles and captions are for convenience only and shall not constitute a portion of this Agreement. As used in this Agreement, masculine, feminine or neuter gender and the singular or plural number shall each be deemed to include the others wherever and whenever the context so dictates.

**19.10 Names and Plans.** Developer shall be the sole owner of all names, titles, plans, drawings, specifications, ideas, programs, designs and work products of every nature at any time developed, formulated or prepared by or at the request of the Developer in connection with the Property and the Project; provided, however, that in connection with any conveyance of portions of the Subject Real Property to the City, such rights pertaining to the portions of the Subject Real Property so conveyed shall be assigned to the City to the extent that such rights are assignable.

**19.11 No Developer Preliminary Representations.** Nothing contained herein shall be deemed to initially obligate the Developer to complete any part or all of the development of the Project within a specific time line, phasing schedule or other schedules, or any other plan, and this Agreement shall not be deemed a representation unless required as a condition of any permit issued pursuant to this Agreement or required by any Master Plan approved by the City pursuant to this Agreement.

**19.12 No Partnership; Third-Parties.** It is hereby specifically understood, acknowledged and agreed that neither the City nor the Developer shall be deemed to be an agent of the other for any purpose whatsoever. It is not intended by this Agreement to, and nothing contained in this Agreement shall, create any partnership, joint venture or other arrangement between the Developer and the City. No term or provision of this Agreement is intended to, or shall, be for the benefit of any third-party, person, firm, organization or legal entity not a Party hereto, and no such other third-party, person, firm, organization or legal entity shall have any right to cause of action hereunder.

**19.13 Parties' Intent.** It is the Parties' express intention that the terms and conditions be construed and applied as provided herein, to the fullest extent possible. It is the Parties' further intention that, to the extent any such term or condition is found to constitute an impermissible restriction of the police power of the City, such term or condition shall be construed and applied in such lesser fashion as may be necessary to not restrict the police power of the City.

**19.14 Recordation.** After its execution, this Agreement shall be recorded in the real property records of Ada County, Idaho by the City.

**19.15 Severability.** If any provision of this Agreement is declared void or unenforceable, such provision shall be severed from this Agreement, which shall otherwise remain in full force and effect.

**19.16 Time of Essence.** Time is of the essence in implementing the terms of this Agreement.

**19.17 Waiver.** No delay in exercising any right or remedy shall constitute a waiver by either Party thereof, and no waiver by the City or the Developer of the breach of any covenant or condition of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Agreement.

**[signatures on following page]**

**IN WITNESS WHEREOF**, the Parties hereto, having been duly authorized, have executed this Development Agreement to be effective on the Effective Date.

**CITY:**

CITY OF KUNA, Idaho, a municipal corporation organized and existing under the laws of the State of Idaho

By:_____
Joe Stear, Mayor

Attest:

By: _____
Chris Engels, City Clerk

CITY ATTORNEY APPROVAL AS TO FORM AND AUTHORITY

The foregoing Agreement has been received by the undersigned attorney, who has opined that it is in proper form and within the power and authority granted under the laws of the State of Idaho to the City of Kuna

_____
Wm. F. Gigray, III, City Attorney

**DEVELOPER:**

TEN MILE CREEK LLC, an Idaho limited liability company

By: _____
David Yorgason, Member

By: _____
Chris Findlay, Member

By: _____
Patt Duynslager, Member

**OWNER:**

Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009

By:_____
Jay Davis, Co-Trustee

By:_____
Roberta Davis, Co-Trustee

**OWNER:**
Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013

By:_____
Janet Gilmore Kell, Co-Trustee

By:_____
Germain Tarrant, Co-Trustee

**OWNER:**

Anne C.,
George W., and
James L. Whitmore

By:_____
Anne C. Whitmore

By:_____
George W. Whitmore

By:_____
James L. Whitmore

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared **Joe Stear**, known or identified to me to be the Mayor of the City of Kuna, the municipal corporation that executed the instrument or the person who executed the instrument on behalf of said municipal corporation, and acknowledged to me that such municipal corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF _____ )
) ss.
COUNTY OF _____ )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, Members of Ten Mile Creek LLC, an Idaho limited liability company, the limited liability company that executed the instrument, or the person who executed the instrument on behalf of said limited liability company, and acknowledged to me that such limited liability company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for _____
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared Jay Davis, known or identified to me to be the Co-Trustee of the Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, that executed the instrument or the person who executed the instrument on behalf of said Trust, and acknowledged to me that such Trust executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared Roberta Davis, known or identified to me to be the Co-Trustee of the Jay C. and Roberta A. Davis Family Revocable Trust dated December 23, 2009, that executed the instrument or the person who executed the instrument on behalf of said Trust, and acknowledged to me that such Trust executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared Janet Gilmore Kell, known or identified to me to be the Co-Trustee of the Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013, that executed the instrument or the person who executed the instrument on behalf of said Trust, and acknowledged to me that such Trust executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared Germain Tarrant, known or identified to me to be the Co-Trustee of the Keith H. and Ruth E. Gilmore Living Trust dated February 1, 2013, that executed the instrument or the person who executed the instrument on behalf of said Trust, and acknowledged to me that such Trust executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared Anne C. Whitmore, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared George W. Whitmore, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

STATE OF IDAHO )
) ss.
COUNTY OF ADA )

On this ____ day of _____, 2020, before me, the undersigned, a Notary Public in and for said State, personally appeared James L. Whitmore, known or identified to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
[seal] My Commission expires: _____

**EXHIBIT A**
**Annexation Ordinance**

**EXHIBIT B**
**”Master Plan”**

**EXHIBIT C**
**”Offsite Sewerage”**

**EXHIBIT D**
**”As Needed”**

**EXHIBIT E**
**PUD Modification**

**EXHIBIT F**
**Subject Real Property Legal Description**

# EXHIBIT G
# Community Infrastructure District Financing Guidelines

**EXHIBIT H**
**Public Parks & Trails Plan**

EXHIBIT E
PUD Modifications

5-3-3: - OFFICIAL HEIGHT AND AREA STANDARDS:

MINIMUM YARD AND SQUARE FOOTAGE REQUIREMENTS

| Zoning District | Maximum Height | Recommended Minimum Street Frontage* | Front Yard Setback On A Local Road | Front Yard Setback On A Local Road To Residence Or Side Load Garage | Front Yard Setback On An Arterial Or Collector Street | Rear Yard Setback | Interior Side Yard Setback | Street Side Yard Setback | Maximum Lot Coverage | Minimum Lot Size |
|---|---|---|---|---|---|---|---|---|---|---|
| R-6 | 35' | ~~45'~~ 40' | 20' | 12' ^*** | 30'**** | ~~15'~~ 10' | 5'***** | 20' | ~~40%~~ N/A | ~~4,500 SF*~~ N/A |
| R-12 | 40' | 40' | 20' | 5' | 30'**** | ~~15'~~ 10' | 5'***** | 20' | ~~60%~~ N/A | ~~2,200 SF~~ N/A |
| R-20 | ~~40'~~ 48' | 40' | 20' | 20' | 30'**** | 15' | 5' | 20' | 60% | 1300 SF |
| C-1 | 35' | 0** | 15' | 15' | 0 | 5' | 0 | 10' | 100% DR | 2,000 SF |
| C-2 | 60' | 0** | 0 | 0 | 0 | 0 | 0 | 0 | 100% DR | 1,300 SF |

The city has discontinued the R-1, R-3 and R-5 zones and converted these discontinued zones to the following: R-1 see R-2; R-3 see R-4 and R-5 see R-6. The M-3 zone, which is limited to mining uses, has been consolidated with the M-2 zone.

The terms property owner, applicant, controller and developer are used interchangeably.

* The city encourages creativity in the design of its subdivisions; the Planning and Zoning Director may allow the reduction of the street frontage and minimum lot size recommendation after reviewing the entire subdivision plat, which shall consider the overall layout of streets and lots.

** It is presumed the parcel's frontage will be of sufficient width to accommodate the placement of a driveway entrance for those uses fronting on a street where they have driveway access.

*** Building heights above sixty (60) feet, and especially habitable spaces located above that height, may require the procuring of special safety equipment or fire apparatus.

**** Residential access to a functionally classified roadway is limited.

^ Front setbacks that are less than fifteen feet (15') when on a radius corner lot will need approval from the city to confirm that there is not a site distance issue.

| Original Code | Redline Changes to Code |
|---|---|
| 5-7-3: - PLANNED UNIT DEVELOPMENT STANDARDS:<br><br>M. *Structures*: Attached and detached dwelling units are permitted in PUD's in accordance with the city's adopted Uniform Building Code (UBC) requirements. The minimum separation distance between detached dwelling units shall be ten (10) feet, unless fire or building codes required greater separation distances. The separation distance of uninhabitable accessory buildings (from dwelling units, lot lines and easements) will be according to city and fire district requirements (see KCC 5-3-4-5:I). | 5-7-3: - PLANNED UNIT DEVELOPMENT STANDARDS:<br><br>M. *Structures*: Attached and detached dwelling units are permitted in PUD's in accordance with the city's adopted ~~Uniform~~ International Building Code (~~U~~IBC) requirements. The minimum separation distance between detached dwelling units shall be ten (10) feet, unless fire or building codes required greater separation distances. The separation distance of uninhabitable accessory buildings (from dwelling units, lot lines and easements) will be according to city and fire district requirements (see KCC 5-3-4-5:I).<br><br>(Ord. No. 2011-10, Sec. 1, 12-20-2011; Ord. No. 2018-08, Sec. 2, 3-6-2018) |
| 5-7-24: -IMPROVEMENT GUARANTEES:<br><br>D. The applicant shall file with the agreement one (1) of the following to assure their full and faithful performance:<br><br>1. Certified check;<br><br>2. An irrevocable letter of credit issued by a financial institution authorized to do business in the State of Idaho; | 5-7-24: -IMPROVEMENT GUARANTEES:<br><br>D. The applicant shall file with the agreement one (1) of the following to assure their full and faithful performance:<br><br>1. Certified check;<br><br>2. An irrevocable letter of credit issued by a financial institution authorized to do business in the State of Idaho;<br><br>3. Other surety acceptable to the city.<br><br>(Ord. No. 2011, Sec. 1, 12-20-2011) |

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| 5-10-4: -GENERAL REQUIREMENTS FOR ALL SIGNS AND DISTRICTS:<br><br>O. Subdivision signs:<br><br>2. Subdivision signs shall not exceed six (6) feet in height and the sign area shall not exceed forty (40) square feet per side. | 5-10-4: -GENERAL REQUIREMENTS FOR ALL SIGNS AND DISTRICTS:<br><br>O. Subdivision signs:<br><br>2. Subdivision signs shall not exceed six (6) feet in height and the sign area shall not exceed forty (40) square feet per side unless approved by the planning department. Subdivision signs shall also not be placed in the vision triangle. Any denial from the planning department may be appealed to the city council. |
| 4. Subdivision advertising: Any sign advertising a commercial enterprise, including real estate developers or subdividers, in a district zoned residential shall not exceed twelve (12) square feet in area and shall advertise only the names of the owners, trade names, products sold and/or the business or activity conducted on the premises where such sign is located. Signage installed along a residential subdivision's street frontage for advertising purposes shall be limited to the installation of two (2) in ground signs that do not exceed twelve (12) square feet in area or ten (10) feet in height. The signs shall advertise only names, products sold and/or the business or activity conducted on the premises where such sign is located. The signs shall be maintained in good condition and removed when ninety-five (95) percent of the subdivision's lots have been sold. | 4. Subdivision advertising: Any sign advertising a commercial enterprise, including real estate developers or subdividers, in a district zoned residential shall not exceed ~~twelve~~ forty-eight (~~12~~ 48) square feet in area and shall advertise only the names of the owners, trade names, products sold and/or the business or activity conducted on the premises where such sign is located. Signage installed along a residential subdivision's street frontage for advertising purposes shall be limited to the installation of ~~two~~ four (~~2~~ 4) in ground signs that do not exceed ~~twelve~~ forty-eight (~~12~~ 48) square feet in area or ten (10) feet in height. The signs shall advertise only names, products sold and/or the business or activity conducted on the premises where such sign is located. The signs shall be maintained in good condition and removed when ninety-five (95) percent of the subdivision's lots have been sold. |
| 5-17-12: -BUFFER AREAS; COMMON LOTS:<br><br>C. *Common area landscapes:* New residential subdivision common area landscapes shall be comprised of the following:<br><br>2. A minimum of one (1) deciduous shade tree per one thousand (1,000) square feet of site. | 5-17-12: -BUFFER AREAS; COMMON LOTS:<br><br>C. *Common area landscapes:* New residential subdivision common area landscapes shall be comprised of the following:<br><br>2. A minimum of one (1) deciduous shade tree per one thousand (1,000) square feet of site except in park areas where there are turf play fields or other activities that may not warrant densely planted areas. |

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| 6-2-3: -PRELIMINARY PLAT:<br><br>*Note:* Subdivider and developer are intended to be interchangeable terms.<br><br>*J. Approval period, phased development, time extension, and expiration:*<br><br>1. A preliminary plat approval shall be valid for two (2) years from the date of approval of the findings of facts and conclusions of law by city council, unless extended as provided for herein. | 6-2-3: -PRELIMINARY PLAT:<br><br>*Note:* Subdivider and developer are intended to be interchangeable terms.<br><br>*J. Approval period, phased development, time extension, and expiration:*<br><br>1. A preliminary plat approval shall be valid for ~~two~~ three (~~2~~ 3)years from the date of approval of the findings of facts and conclusions of law by city council, unless extended as provided for herein. |
| 2. In the event that the preliminary plat is approved in construction phases (more than one (1) phase), the subdivider shall have two (2) years to complete the plat's first phase from the time the council approves the plat's findings of fact. When the preliminary plat includes phases, each successive phase is to be completed within one (1) year of the preceding phase's recording date. | ~~2. In the event that the preliminary plat is approved in construction phases (more than one (1) phase), the subdivider shall have two (2) years to complete the plat's first phase from the time the council approves the plat's findings of fact. When the preliminary plat includes phases, each successive phase is to be completed within one (1) year of the preceding phase's recording date.~~<br>2. In the event that the preliminary plat is approved in construction phases (more than one (1) phase), the subdivider shall have two (2) years to complete a phase from the time the council approves the plat's findings of fact. When the preliminary plat includes phases, a phase must be completed within three (3) years of a preceding phase's recording date. When a project or master planned community contains multiple plats, a phase must be completed within three (3) years of a preceding phase's recording date within the entire project for all preliminary plats within the project not to expire. |
| 6-3-3: -LOCATION:<br><br>Street and road location shall conform to the following:<br><br>G. C*ul-de-sac streets:* Cul-de-sac streets shall not be more than five hundred (500) feet in length and shall terminate with an adequate turnaround having a minimum radius of fifty (50) feet for right-of-way<br><br>(Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. No. 2018-08, Sec. 3, 3-6-2018) | 6-3-3: -LOCATION:<br><br>Street and road location shall conform to the following:<br><br>G. *Cul-de-sac streets:* Cul-de-sac streets shall not be more than five hundred ~~seven hundred~~ (500 ~~700~~) feet in length and shall terminate with an adequate turnaround having a minimum radius of fifty (50) feet for right-of-way; ~~cul-de-sacs may be extended further with approval from Kuna Rural Fire Department and emergency access.~~<br><br>(Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. No. 2018-08, Sec. 3, 3-6-2018) |

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| 6-3-4: -SPECIFICATIONS<br><br>A. *Street right-of-way widths:* Street and road right-of-way widths shall conform to the adopted major street plan or comprehensive development plan and the rules of the state department of highways and the highway district or department having jurisdiction. Minimum right-of-way standards are as follows:<br><br>(Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. 639, 5-28-2003; Ord. 2007-02, 2-20-2007; Ord. No. 2012-24, Sec. 1, 11-6-2012; Ord. No. 2017-1, Sec. 1, 1-17-2017) | 6-3-4: -SPECIFICATIONS<br><br>A. *Street right-of-way widths:* Public Street and road right-of-way widths shall conform to the adopted major street plan or comprehensive development plan and the rules of the state department of highways and the highway district or department having jurisdiction. Minimum right-of-way standards are as follows:<br><br>D. *Minimum road width*: The minimum road width within the Kuna city limits on public roads and shall be thirty-three (33) feet back of curb to back of curb for parking on both sides of the street and twenty-seven (27) feet for parking on one side, in all zoning districts. Exceptions may be considered by the public works director, city engineer and/or the planning and zoning director on a case-by-case basis.<br><br>(Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. 639, 5-28-2003; Ord. 2007-02, 2-20-2007; Ord. No. 2012-24, Sec. 1, 11-6-2012; Ord. No. 2017-1, Sec. 1, 1-17-2017) |
| 6-3-9: -BLOCKS:<br><br>Every block shall be so designed as to provide two (2) tiers of lots, except where lots back onto an arterial street, natural feature or subdivision boundary.<br><br>(Ord. 414, 2-1-1994) | 6-3-9: -BLOCKS:<br><br>Every block shall be so designed as to provide two (2) tiers of lots, except where lots back onto an arterial street, collector street, natural feature, open space or subdivision boundary.<br><br>(Ord. 414, 2-1-1994) |

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| 6-4-2: -REQUIRED PUBLIC IMPROVEMENTS:<br><br>E. *Fencing:* Fencing shall be installed according to the approved fencing plan. The subdivision shall feature permanent fencing along its outer perimeter with the exception of those portions of its perimeter that feature common open space or park area accessible from the street. The fencing that is placed next to an arterial or collector road shall be punctuated with a minimum three (3) feet of parallel fencing offset, every two hundred fifty (250) linear feet [maximum] to minimize the monotony of the fence's facade. Fences shall be a maximum six (6) feet in height (measured from the crest of the road), permanent in nature and maintenance free. Fencing shall be constructed of metal, rock or vinyl materials with an approved post hole footing. Wood and chain link fencing is not permitted in a subdivision, except for school related purposes. The school authority may rely upon a powder coated or vinyl coated chain link type fencing for security related purposes. Ditch or irrigation fencing shall be determined with input from the irrigation purveyor. Fencing placed along a subdivision's internal pathways shall be of a see-through type construction to minimize tunneling effects and provide for pedestrian safety. If fencing is used in combination with a landscaped berm, the fence shall be placed behind the berm, and under no circumstances, placed on the berm. | 6-4-2: -REQUIRED PUBLIC IMPROVEMENTS:<br><br>E. *Fencing:* Fencing shall be installed according to the approved fencing plan. The subdivision shall feature permanent fencing along its outer perimeter with the exception of those portions of its perimeter that feature common open space or park area accessible from the street. The fencing that is placed next to an arterial or collector road shall be punctuated with a minimum three (3) feet of parallel fencing offset, every ~~two hundred fifty~~ five hundred (~~250~~ 500) linear feet [maximum] to minimize the monotony of the fence's facade. Fences shall be a maximum six (6) feet in height ~~(measured from the crest of the road)~~, permanent in nature and maintenance free. Fencing shall be constructed of metal, rock or vinyl materials with an approved post hole footing. Wood and chain link fencing is not permitted in a subdivision, except for school related purposes. The school authority may rely upon a powder coated or vinyl coated chain link type fencing for security related purposes. Ditch or irrigation fencing shall be determined with input from the irrigation purveyor. Fencing placed along a subdivision's internal pathways shall be of a see-through type construction to minimize tunneling effects and provide for pedestrian safety. If fencing is used in combination with a landscaped berm, the fence shall be placed behind the berm, and under no circumstances, placed on the berm. |

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| G. *Flaglot:* Residential subdivision flag lots shall be developed via a common private driveway access that connects with a public street. The driveway shall not extend more than one hundred fifty (150) feet from the public street right-of-way. A common [or shared] driveway shall be relied upon to access the lots contained within the flag lot configuration, with a maximum of three (3) contiguous lots contained within a flag lot. A cross-access driveway agreement qualifying the methods of common driveway care and maintenance responsibility shall be recorded with each lot of the flag lot. The pole portion of the flag lot and designed and constructed with a minimum twenty-foot-wide curb cut to include a concrete apron. The common driveway shall be constructed of a material approved by the city engineer. The flag lot is subject to street frontage improvements. The area of the flag lot pole is exclusive of each lot's minimum square footage. Each flag lot shall meet the zoning conditions of the underlying zone. Structure(s) placed on the flag lot shall face the public street and be setback a minimum of twenty (20) feet from edge of driveway. Commercial flag lots shall be evaluated on a case by case basis. | G. *Flaglot:* Residential subdivision flag lots shall be developed via a common private driveway access that connects with a public street. The driveway shall not extend more than one hundred fifty (150) feet from the public street right-of-way. A common [or shared] driveway shall be relied upon to access the lots contained within the ~~flag~~ common lot configuration, with a maximum of ~~three~~ six (~~3~~ 6) contiguous lots~~ contained within a flag lot~~ accessed by a single common driveway that shall not extend more than two hundred (200) feet. A cross-access driveway agreement qualifying the methods of common driveway care and maintenance responsibility shall be recorded with each lot ~~of the flag lot~~ accessing via the common driveway. The pole portion of the flag lot and designed and constructed with a minimum twenty-foot-wide curb cut to include a concrete apron. The common driveway shall be constructed of a material approved by the city engineer. The flag lot and common drive is subject to street frontage improvements. The area of the flag lot pole is exclusive of each lot's minimum square footage. Each flag lot shall meet the zoning conditions of the underlying zone. Structure(s) placed on the flag lot shall face the public street and be setback a minimum of twenty (20) feet from edge of driveway. Commercial flag lots shall be evaluated on a case by case basis. |
| I. *Irrigation system:* The city engineer is authorized to establish rules, regulations and standards for pressurized irrigation systems and these systems shall comply with those standards, rules and regulations. Pressure irrigation systems shall be constructed in accordance with the specifications of the city's adopted pressure irrigation plan. The subdivider is obligated to annex the subdivision's lands into the Kuna Municipal Irrigation District [KMID]. Pressure irrigation facilities shall be constructed and dedicated to the city, in compliance with KMID standards and requirements. The irrigation system's design and functionality shall follow the requirements of the irrigation entity that will own, operate and maintain the system. Subdivisions shall rely upon a nonportable water source for all irrigation and watering purposes. The subdivider shall provide an underground conduit to provide pressurized irrigation water to every lot within the subdivision. Potable municipal water may not be used for subdivision irrigation purposes. | I. *Irrigation system*: The city engineer is authorized to establish rules, regulations and standards for pressurized irrigation systems and these systems shall comply with those standards, rules and regulations. Pressure irrigation systems shall be constructed in accordance with the specifications of the city's adopted pressure irrigation plan. The subdivider ~~is obligated to~~ may at subdivider's discretion annex the subdivision's lands into the Kuna Municipal Irrigation District [KMID]. Pressure irrigation facilities shall be constructed ~~and dedicated to the city,~~ in compliance with KMID standards and requirements. The irrigation system's design and functionality shall follow the requirements of the irrigation entity that will own, operate and maintain the system. Subdivisions shall rely upon a nonportable water source for all irrigation and watering purposes. If adequate water supply is not available then subdivider may use alternative water source to meet development needs. The subdivider shall provide an underground conduit to provide pressurized irrigation water to every lot within the subdivision. Potable municipal water may not be used for subdivision irrigation purposes. |

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| N. *Pathways:* A pathway is intended to connect people to and through a subdivision as opposed to a sidewalk that is intended to protect people from the adjoining roadway. Pathways shall be centered in a public easement and be at least ten (10) feet in width. The pathway surface shall be a minimum five (5) feet in width and constructed of an impervious surface that is acceptable to the city engineer and in compliance with Americans with Disabilities Act [ADA] accessibility guidelines. | N. *Pathways:* A pathway is intended to connect people to and through a subdivision as opposed to a sidewalk that is intended to protect people from the adjoining roadway. Pathways shall be centered in a public easement and be at least ten (10) feet in width or in a public or private right-of-way with a minimum of five (5) feet of landscaping on both sides combined. The pathway surface shall be a minimum five (5) feet in width and constructed of an impervious surface that is acceptable to the city engineer and in compliance with Americans with Disabilities Act [ADA] accessibility guidelines. |
| Q. *Sidewalk:* Attached or detached sidewalks shall be constructed on both sides of the subdivision's streets except where its average street lot frontage is more than one hundred (100) feet in width. In this circumstance, a sidewalk is only required on one (1) side of the street, unless there is an overriding health or safety concern that would dictate sidewalk placement on both sides of the street. Additionally, ACHD has a minor local street section whose usage affords the placement of a sidewalk on one (1) side of the street, unless there is an overriding consideration requiring sidewalk placement on both sides of the street. Sidewalks shall be designed and built to Americans with Disabilities Act [ADA] accessibility guidelines, and in accordance with ACHD and city engineer standards and specifications. The minimum width of any city sidewalk shall be (5) feet. Arterial or collector streets shall feature eight-foot detached sidewalks on both sides of the street frontage regardless of subdivision lot widths. The accompanying parking strip shall also be eight (8) feet wide and landscaped with an irrigation system. A public easement shall accompany any sidewalk placed outside the right-of-way. The placement of a sidewalk outside the right-of-way requires city approval. Sidewalks constructed as part of a curb cut installation shall be designed to accommodate the additional loading requirements placed upon it. | Q. *Sidewalk:* Attached or detached sidewalks shall be constructed on both sides of the subdivision's streets except where its average street lot frontage is more than one hundred (100) feet in width. In this circumstance, a sidewalk is only required on one (1) side of the street, unless there is an overriding health or safety concern that would dictate sidewalk placement on both sides of the street. Additionally, ACHD has a minor local street section whose usage affords the placement of a sidewalk on one (1) side of the street, unless there is an overriding consideration requiring sidewalk placement on both sides of the street. Sidewalks shall be designed and built to Americans with Disabilities Act [ADA] accessibility guidelines, and in accordance with ACHD and city engineer standards and specifications. The minimum width of any city sidewalk shall be (5) feet. Arterial or collector streets shall feature eight-foot detached sidewalks on both sides of the street frontage, or five (5) feet on one side and ten (10) feet on the other side, regardless of subdivision lot widths. The accompanying parking strip shall also be eight (8) feet wide and landscaped with an irrigation system. A public easement shall accompany any sidewalk placed outside the right-of-way. The placement of a sidewalk outside the right-of-way requires city approval. Sidewalks constructed as part of a curb cut installation shall be designed to accommodate the additional loading requirements placed upon it. |

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| S. *Street and alleys*: All streets and alleys shall be constructed in accordance with the standards and specifications adopted by the City of Kuna [city], Ada County Highway District [ACHD] and Idaho Transportation Department [ITD]. Street functionality shall be determined according to the city's adopted "2030 Functional Classified Road Map." The street right-of-way widths shall be according to the street typologies identified in Kuna City Code section 6-3-4. The distance separation for the edge of the street pavement to the developer's right-of-way requires a landscape treatment. For distance separation distances of less than ten (10) feet, provide a city approved landscape treatment to include a nonpotable underground irrigation source. For distance separations of greater than ten (10) feet, provide the remainder of the area separation with a rock application treatment acceptable to the city and the transportation authority. The developer shall enter into a license agreement with the transportation authority for landscape maintenance within the public right-of-way. Highway treatment applications will be determined on a case by case basis. A subdivider shall provide a non-connecting [dead end] subdivision street, whose length is longer than five hundred (500) feet, with a secondary access. If the non-connecting street terminates in a turn-around, the maximum five hundred-foot street length is to be measured from the center point of the turn-around to the point where it intersects with an intersecting street. Should the fire district approve a longer roadway length, the city may defer to their judgement. The city prohibits private streets and alleys unless there is a hardship circumstance that warrants this consideration and not of the controller's making. In the limited circumstances where they are approved, private streets and alleyways shall be owned and maintained by private individuals or entities and not by government agencies. | S. *Street and alleys*: All public streets and alleys shall be constructed in accordance with the standards and specifications adopted by the City of Kuna [city], Ada County Highway District [ACHD] and Idaho Transportation Department [ITD]. Street functionality shall be determined according to the city's adopted "2030 Functional Classified Road Map." The public street right-of-way widths shall be according to the street typologies identified in Kuna City Code section 6-3-4. The distance separation for the edge of the street pavement to the developer's right-of-way requires a landscape treatment. For distance separation distances of less than ten (10) feet, provide a city approved landscape treatment to include a nonpotable underground irrigation source. For distance separations of greater than ten (10) feet, provide the remainder of the area separation with a rock application treatment acceptable to the city and the transportation authority. The developer shall enter into a license agreement with the transportation authority for landscape maintenance within the public right-of-way. Highway treatment applications will be determined on a case by case basis. Subdivider shall provide a non-connecting [dead end] subdivision street, whose length is longer than five ~~seven~~ hundred (500 ~~700~~) feet ~~(not including any private streets),~~ with a secondary access. If the non-connecting street terminates in a turn-around, the maximum five ~~seven~~ hundred-foot street length is to be measured from the center point of the turn-around to the point where it intersects with an intersecting street. Should the fire district approve a longer roadway length, the city may defer to their judgement. Exceptions may be considered by the public works director, city engineer and/or the planning and zoning director on a case-by-case basis. ~~The city prohibits private streets and alleys unless there is a hardship circumstance that warrants this consideration and not of the controller's making. In the limited circumstances where they are approved,~~ Private streets and alleyways shall be owned and maintained by private individuals or entities and not by government agencies. |

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| T. *Street lighting:* Street lights shall be installed within the subdivision at intersections, fire hydrants, cul-de-sacs and other types of turn around, pedestrian shelters and bus stops and according to the approved lighting plan. The subdivider shall place lighting facilities a maximum spacing of two hundred fifty (250) feet and proportionately dispersed throughout the interior and exterior of the subdivision. The street lighting shall alternate along the course of the subdivision roadways from one (1) side of the road to the other at maximum two hundred fifty-foot intervals. The subdivider shall conform to street lighting standards, as adopted by resolution of the city council. Lighting facilities shall be designed and installed according to "Dark Skies" standards. Lighting facilities will be reviewed by city staff to assure they are energy efficient, and if not, the subdivider shall provide an alternative lighting product acceptable to the city. The street lighting facilities shall be of a design standard that makes them easily exchangeable with minimal replacement cost outlay. | T. *Street lighting:* Street lights shall be installed within the subdivision at intersections, fire hydrants, cul-de-sacs and other types of turn around, pedestrian shelters and bus stops and according to the approved lighting plan. The subdivider shall place lighting facilities a maximum spacing of ~~two hundred fifty~~ three hundred twenty-five (~~250~~ 325) feet and proportionately dispersed throughout the interior and exterior of the subdivision. The street lighting shall alternate along the course of the subdivision roadways from one (1) side of the road to the other at maximum two hundred fifty-foot intervals. The subdivider shall conform to street lighting standards, as adopted by resolution of the city council. Lighting facilities shall be designed and installed according to "Dark Skies" standards. Lighting facilities will be reviewed by city staff to assure they are energy efficient, and if not, the subdivider shall provide an alternative lighting product acceptable to the city. The street lighting facilities shall be of a design standard that makes them easily exchangeable with minimal replacement cost outlay. |

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| X. *Water supply system:* The city engineer is authorized to establish rules, regulations and standards for water supply systems and these systems shall comply with those standards rules and regulations. Each public water supply systems shall be constructed in accordance with the specifications of the city's adopted water plan. Subdivision water supply systems shall be installed as an extension of the city's public system. Buildable subdivision lots shall have a water service capable of supplying the site with potable water in sufficient volume and pressure for domestic use, and fire protection in accordance with City Code and Kuna Fire District requirements. Water supply shall meet the International Fire Code's minimum fire flow requirements. The water rights appurtenant to a tract of land, subject to subdivision, shall be dedicated to the city in sufficient water quantities to offset the subdivision's potential water demands as determined by the city engineer. The subdivision's water rights shall not be sold, abandoned, or transferred outside the city or its area of city impact. Condominium units shall have individual water meters. Planned unit development [PUD] and master planned communities require a master utility plan that addresses potable water issues. IC Sec. 50-1326 requires all water plans to be submitted to the Idaho State Department of Environmental and Community Services or its authorized agent for approval. The city engineer, or their designate, shall serve as the Idaho State's qualified licensed professional engineer [QLPE] for purposes of reviewing the city's water plan submittals.<br><br>(Ord. 231, 12-7-1977; and. 1985 Code; Ord. 359, 9-3-1991; Ord. 439, 2-20-1996; Ord. 550, 8-28-2000; Ord. 553, 1-22-2001; Ord. 2006-100, 12-19-2006; and. Ord. 2007-03, 2-6-2007; Ord. 2007-02, 2-20-2007; Ord. No. 2010-15, Sec. 1, 8-3-2010; Ord. No. 2014-20, Sec. 1, 10-21-2014; Ord. No. 2016-08, Sec. 1, 4-5-2016) | X. *Water supply system:* The city engineer is authorized to establish rules, regulations and standards for water supply systems and these systems shall comply with those standards rules and regulations. Each public water supply system shall be constructed in accordance with the specifications of the city's adopted water plan, unless approved by the city. Subdivision water supply systems shall be installed as an extension of the city's public system unless approved by the city. Buildable subdivision lots shall have a water service capable of supplying the site with potable water in sufficient volume and pressure for domestic use, and fire protection in accordance with City Code and Kuna Fire District requirements. Water supply shall meet the International Fire Code's minimum fire flow requirements. ~~The water rights appurtenant to a tract of land, subject to subdivision, shall be dedicated to the city in sufficient water quantities to offset the subdivision's potential water demands as determined by the city engineer.~~ The subdivision's water rights shall not be sold, abandoned, or transferred outside the city or its area of city impact. Condominium units shall have individual water meters. Planned unit development [PUD] and master planned communities require a master utility plan that addresses potable water issues. IC Sec. 50-1326 requires all water plans to be submitted to the Idaho State Department of Environmental and Community Services or its authorized agent for approval. The city engineer, or their designate, shall serve as the Idaho State's qualified licensed professional engineer [QLPE] for purposes of reviewing the city's water plan submittals.<br><br>(Ord. 231, 12-7-1977; and. 1985 Code; Ord. 359, 9-3-1991; Ord. 439, 2-20-1996; Ord. 550, 8-28-2000; Ord. 553, 1-22-2001; Ord. 2006-100, 12-19-2006; and. Ord. 2007-03, 2-6-2007; Ord. 2007-02, 2-20-2007; Ord. No. 2010-15, Sec. 1, 8-3-2010; Ord. No. 2014-20, Sec. 1, 10-21-2014; Ord. No. 2016-08, Sec. 1, 4-5-2016) |

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| 6-4-3: -FINANCIAL GUARANTEE RELATING TO COMPLETION OF SUBDIVISION IMPROVEMENTS: | 6-4-3: -FINANCIAL GUARANTEE RELATING TO COMPLETION OF SUBDIVISION IMPROVEMENTS: |
| C. *Methods of financial guarantee:* Financial guarantees shall be submitted to and accepted by the city engineer prior to any city signatures on the final plat according to the following protocol: | C. *Methods of financial guarantee:* Financial guarantees shall be submitted to and accepted by the city engineer prior to any city signatures on the final plat according to the following protocol: |
| 2. The city engineer's estimated cost of the remaining work shall be determined, in part, from the detailed bids provided by the subdivider's contractors on contractor's letterhead. To the initial one hundred ten (110) percent estimated cost may be added sums for the following considerations: Three (3) to ten (10) percent for inflation; ten (10) to fifteen (15) percent for the city's bidding disadvantage; and twelve (12) percent to twenty (20) percent for city project management as determined by the city engineer. | 2. The city engineer's estimated cost of the remaining work shall be determined, in part, from the detailed bids provided by the subdivider's contractors on contractor's letterhead. To the initial one hundred ten (110) percent estimated cost may be added sums for the following considerations: Three (3) to ten (10) percent for inflation; ten (10) to fifteen (15) percent for the city's bidding disadvantage; and twelve (12) percent to twenty (20) percent for city project management as determined by the city engineer. In no event shall the final amount be more than one hundred twenty (120) percent of the detailed bids provided by the subdivider. |
| (Ord. 21=31, 12-7-1977; Ord. 2007-02, 2-20-2007; Ord. No. 2010-14, Sec. 1, 8-3-2010) | (Ord. 21=31, 12-7-1977; Ord. 2007-02, 2-20-2007; Ord. No. 2010-14, Sec. 1, 8-3-2010) |

**CITY OF KUNA**
**P.O. BOX 13**
**KUNA, ID 83634**
**www.kunacity.id.gov**

# MEMO

**Date:** July 7, 2020

**From:** Lisa Holland (Economic Development Director)

**To:** Mayor and Council

**RE:** Spring Rock Subdivision

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Mayor and Council Members,

On June 16, City council heard the Spring Rock application and continued it to the date of July 7th for time to have legal review the development agreement. There were also questions during the last meeting related to the note within the development agreement that mentioned a CID (Community Infrastructure District).

In June of last year we held a workshop that looked at financing tools for development. One of the tools discussed was a Community Infrastructure District, which allows a developer to collect a special tax on homes and projects within a development district to pay for infrastructure needs. In order for a developer to take advantage of this type of tool, they would have to get a vote of property owners within the district, create a detailed infrastructure and financing plan on what they need those funds to accomplish, and present that to the City of Kuna to form a CID board that would help oversee and implement the District. I've attached a few slides for your reference from our previous workshop that explains a little more about how CID's work in case it's helpful.

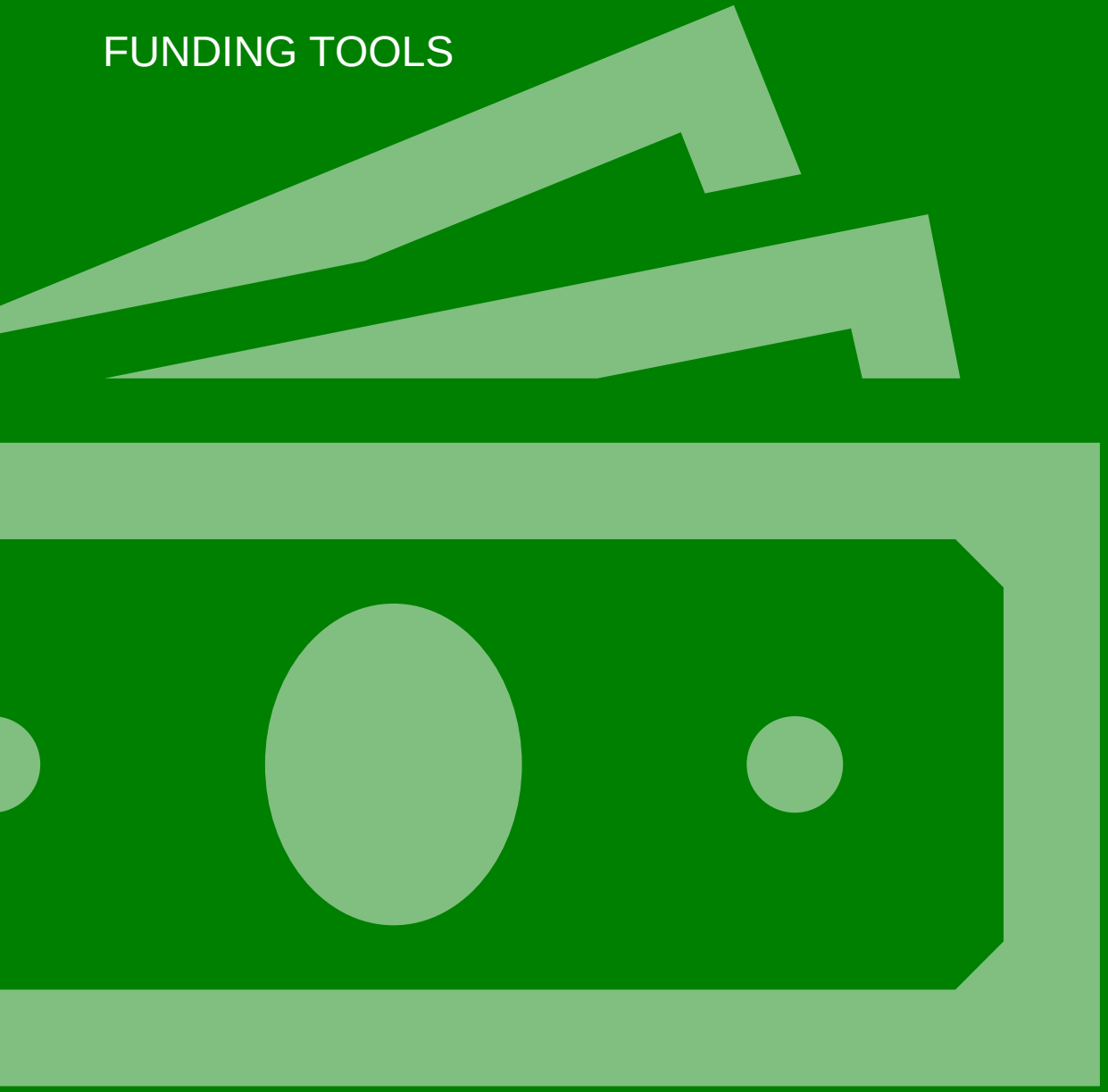
If the developer decided to pursue a CID, they would need to bring it back to council in the future for approval. It is my understanding that this Project could still move forward without the CID if needed, but here are a few questions that you might consider asking the applicant to address related to the Spring Rock Subdivision to get some additional context:

- Can you explain what a potential CID would be used to fund specifically?
- What would be the timeline that you would consider coming back before the City with a proposal?
- Do you need to have a CID in order for your project to continue moving forward?
- Can you explain briefly how the CID would work, what the added tax might look like for residents in the boundary, and if there are liabilities the City could face if we do consider a CID in the future?
- One of the biggest challenges raised by ACHD was the ability to expand roadways to meet the growth of Kuna. Can you talk about what Spring Rock is planning to do to help mitigate traffic concerns?

This project should be evaluated on its plan and application directly, not on the CID. I thought information about CIDs would be good context to understand and the developer expressed their desire to be transparent with council on this project. There are certainly many benefits to consider for a master planned community including school sites, commercial spaces, larger park spaces, and a cohesive plan that prevents the need for awkward infill parcels in the future. It is up to council's discretion to determine if this project fits the guidelines and needs of the community as outlined in the Kuna Comprehensive plan.

I hope these questions are helpful in your deliberation this evening.

Lisa Holland
Economic Development Director
lholland@kunaid.gov
208-559-5926



# COMMUNITY INFRASTRUCTURE DISTRICT (CID)

IDAHO STATUTE 50-31

# HOW IT WORKS

- Funded through property taxes for a specific area
- Special purpose district and political subdivision apart from the municipality
- Used to acquire/construct public improvements
- Project financed with tax exempt bonds
- Bond obligations are passed on to benefiting property owners

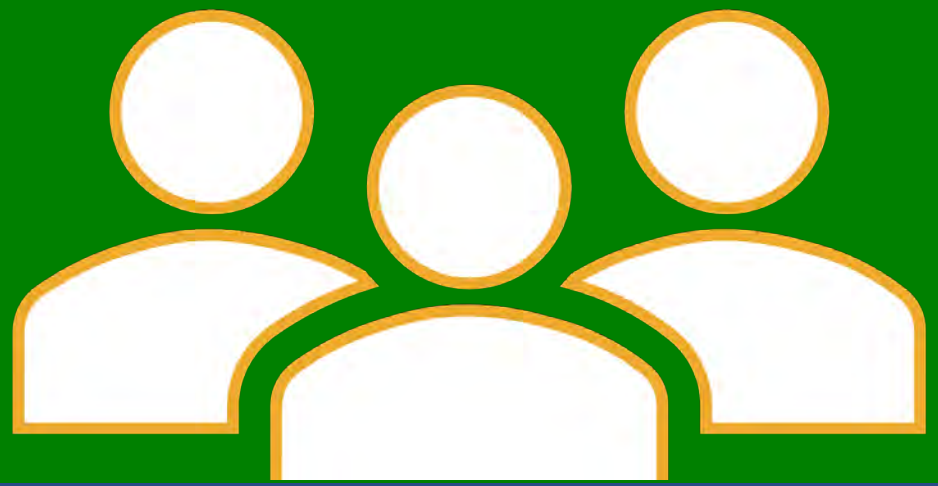
| Tax District | Levy | Description |
|---|---|---|
| 1 | 0.002755643 | ADA COUNTY |
| 3 | 0.000136265 | EMERGENCY MEDICAL |
| 6 | 0.000861981 | ADA COUNTY HIGHWAY DIST |
| 7 | 0.004658773 | SCHOOL DISTRICT NO. 1 |
| 14 | 0.006600852 | BOISE CITY |
| 43 | 0.000026 | MOSQUITO ABATEMENT |
| 100 | 0.000143147 | COLLEGE OF WESTERN IDAHO |
| 151 | 0.002751607 | CID HARRIS RANCH 1 ADMIN/BOND |

# HOW IT WORKS *(continued)*

- Property can be in an incorporated City or a City's comprehensive planning area (i.e., County) with the City's consent
- City/County is not responsible for debt of the CID
- Requires public bidding of CID public infrastructure

**BOARD COMPOSITION / ADMINISTRATION**

Three City Council Members
City Treasurer, Clerk, etc.



*Content Credit:* Carter Froelich, CPA; Launch Development Finance Advisors

# FUNDING TOOLS • **COMMUNITY INFRASTRUCTURE DISTRICT (CID)** IDAHO STATUTE 50-31

PROCESS

**Form District** - Petition by 2/3 District Residents;
Prepare Plan; Submit to City Clerk; Public Hearing

**Track Compliance** - Public Bid Process; Cost Tracking
as Eligible Infrastructure is Built

**Administer District** - Meetings, Accounting, Disclosures

# FUNDING TOOLS • COMMUNITY INFRASTRUCTURE DISTRICT (CID) IDAHO STATUTE 50-31




## Harris Ranch • Boise

Warm Springs Avenue Roundabouts

## Harris Ranch • Boise

Fire Station No. 15



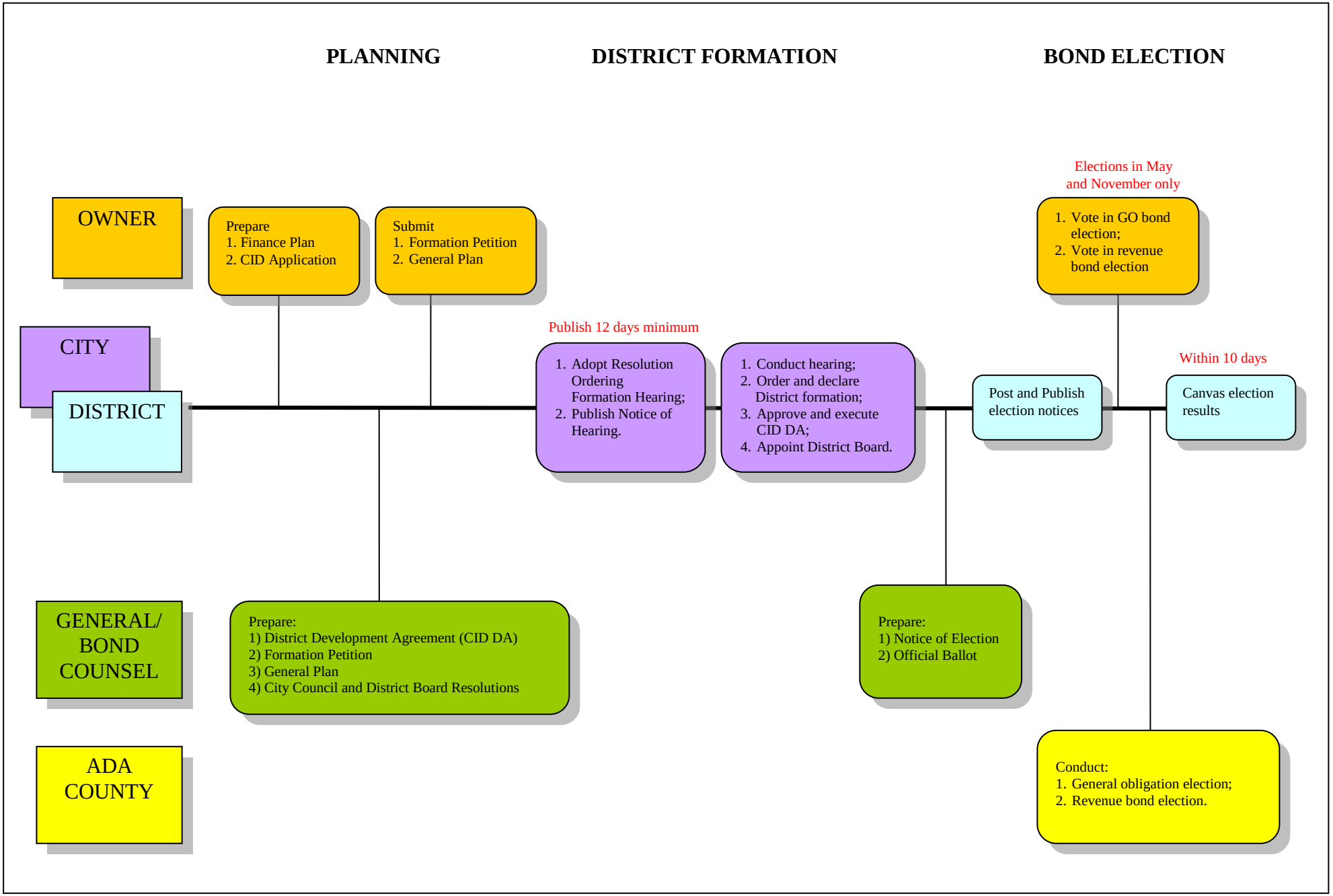
# KEYS TO SUCCESS

- Good collaboration between the City of Kuna and Developer
- If Kuna embraces CID financing this could make the City much more competitive with other communities as the private sector will want to do projects in a city that is allowing the use of CIDs rather than cities that are not

## OPPORTUNITIES

Multi-phased Planned Unit Development (PUD)

Activity Center/Multi-use Development


PLANNING
DISTRICT FORMATION
BOND ELECTION
OWNER
CITY
DISTRICT
GENERAL/ BOND COUNSEL
ADA COUNTY
Prepare
1. Finance Plan
2. CID Application
Submit
1. Formation Petition
2. General Plan
Publish 12 days minimum
1. Adopt Resolution Ordering Formation Hearing;
2. Publish Notice of Hearing.
1. Conduct hearing;
2. Order and declare District formation;
3. Approve and execute CID DA;
4. Appoint District Board.
Post and Publish election notices
Elections in May and November only
1. Vote in GO bond election;
2. Vote in revenue bond election
Within 10 days
Canvas election results
Prepare:
1) District Development Agreement (CID DA)
2) Formation Petition
3) General Plan
4) City Council and District Board Resolutions
Prepare:
1) Notice of Election
2) Official Ballot
Conduct:
1. General obligation election;
2. Revenue bond election.

## Troy Behunin

**From:** Wendy Howell
**Sent:** Tuesday, June 16, 2020 5:22 PM
**To:** Troy Behunin
**Subject:** FW: Spring Rock Testimony for KCC meeting tonight

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**From:** Lisa Holland <lholland@kunaid.gov>
**Sent:** Tuesday, June 16, 2020 1:58 PM
**To:** Wendy Howell <whowell@kunaid.gov>
**Subject:** FW: Spring Rock Testimony for KCC meeting tonight

Lisa Holland
Economic Development Director
City of Kuna
C: (208) 559-5926
lholland@kunaid.gov

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**From:** Cindy Giesen <cmthewiz@yahoo.com>
**Sent:** Tuesday, June 16, 2020 1:53 PM
**To:** PublicHearingTestimony <PublicHearingTestimony@kunaid.gov>
**Subject:** Re: Spring Rock Testimony for KCC meeting tonight

Forgive me for pestering you but I might need another correction on my testimony if there is time or a ways to do that....

Now that I've had more time to look closer and zoom into the packages maps, I may have mistaken the blue lines/water and the Ten Mile 'Creek' Road text next to them, as that blue area on the map being Indian Creek.

MY CORRECTION:

Please strike my mention of 'Indian Creek or Creek' by replacing the original paragraph of **'My first request'**, with the following rewrite of the paragraph. Or let me know if there is another means to correct this before the hearing. The replacement paragraph follows...

**My first request** is that you assure that the public continues to have easy access to bodies of water that presently are, or can be assigned as, having public access privileges for fishing, floating, walking or bikes etc... It would be ideal if the council would require that a continuous bike path and walkway be developed along a waterway or connecting bodies of water from this development into our city center, for the Kuna citizen's enjoyment and ease of travel, without walking or riding beside car traffic.

Thank you,

***Cindy Giesen***

On Tuesday, June 16, 2020, 12:13:12 PM MDT, Cindy Giesen <cmthewiz@yahoo.com> wrote:

I did submitted this testimony on the website using the form and realized an extra amount of text was still with my copy/paste after my salutation - so here is a less confusing copy with that error removed..This would be my public record.

Kuna City Council Members and Mayor, 6/16/2020

Having little time to go through the 698 pages of the **Spring Rock** request before you today, I do have two items I would like you to consider and to possibly add as conditions to your approval, Two items which will reduce the impact that this huge PUD will have on our community.

**My first request** is that you assure the public has complete access to Indian Creek, as at points the property lines of the requested annexation and subdivision intersect. Developments approved in the past have cut off this access and it is public land (creek plus several feet on each side, I believe). It would be ideal if you would require a continuous bike path and walkway be developed along the creek, from the far end of this development into the city center. See D. General Projects Facts on p154 of package – The map on page 2/10 of Spring Rock Subdivision.

**My second request** is that you require and enforce the installment of only responsible lighting fixtures and lighting practices within the Spring Rock PUD. These requirements will minimize the light pollution and will avoid light trespassing in our region.

As you are aware, I have been before you numerous times asking that you carefully consider the best plans for responsible lighting in the various zones – residential, commercial, industrial, open space, outdoor sports areas and other public and private facilities. We both realize that there are a few recommendations, for what we both call 'Dark Sky' practices, in our zoning codes, but unfortunately we do not agree on who provides the best 'dark sky' standards for these practices. Our zoning codes basically request or recommend, **but do not require or enforce**, that these responsible lighting practices are being planned for and used. Rarely do you receive a development request that includes a imporatan lighting plan which this council can review and consider, while minor detailed information like bush types are included and considered in areas of landscaping.

So therefore, I request that you specifically require the planners, developers and builders to be familiar with and use the research and resources made available from the International Dark- Sky Association (IDA). They are the only highly recognized and proven organization that works together with all the lighting experts, engineers, cities planners, governments and citizens to define methods and plans for responsible lighting which helps to protect our health, our wildlife, our safety and our skies. Their website at www.darksky.org and provides many resources for actual city planning, the city plans and codes developed for successful 'dark sky' communities, and example guidelines and brochure for the best lighting practices and light types. They qualify fixtures that will include required light colors for the zone, shielding, timers, sensors, locations, heights, curfews and how to responsibly use electronic messaging signs and advertisements. They consider the type of zones and land uses.

Thank you for considering these two request before approving the Spring Rock annexation and development requests.

Sincerely,

Cindy Giesen

1363 S. Ash Avenue, Kuna Idaho

City of Kuna

City Council Staff Memo

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
Kunacity.id.gov

**To:** City Council

**Case Numbers:** 19-10-AN (Annex), 19-01-PUD (Planned Unit Development), 19-06-S (Subdivision), and a Development Agreement for the: *Spring Rock Subdivision*

**Location:** Southwest Corner (SEC) of Hubbard and Kay Ave. Roads, Kuna, Idaho 83634

**Planner:** Troy Behunin, Planner III

**Hearing Date:** *June 16, 2020*
*Tabled until:* *August 4, 2020*

**Applicant(s):** ***Dave Yorgason***
Ten Mile Creek, LLC
Boise, ID 83706
208.850.1070
dyorgason6@gmail.com

**Engineer:** ***David Powell***
Riveridge Engineers
2447 S. Vista Ave.
Boise, ID 83705
208.344.1180
dpowell@rvrdg.com

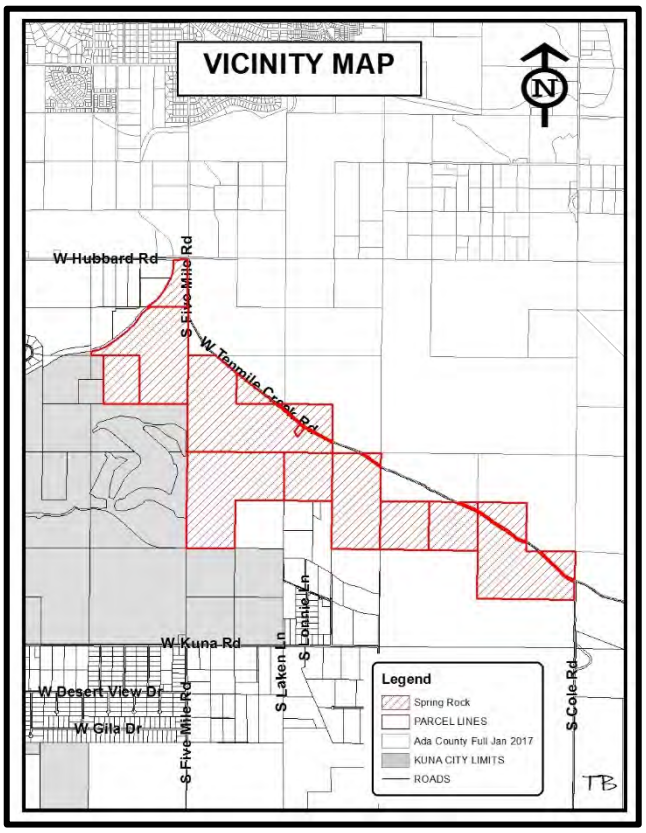



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G. Comprehensive Plan Analysis
H. Kuna City Code Analysis
I. Commission's Recommendation to the City Council
J. Proposed Order of Decision By Council
K. Recommended Conditions of Approval

## A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that annexations, PUD's, subdivision and Development Agreement applications are designated as *public hearings*, with the Planning and Zoning Commission as the recommending body, and the City Council as the decision-making body. These land use applications were given proper public notice and have followed the requirements set forth in Idaho Code, Chapter 65, Local Land Use Planning Act (LLUPA).

**a. Notifications**

| | | |
|---|---|---|
| **i.** | Neighborhood Meeting | June 24, 2019 (Fifteen persons attended) |
| **ii.** | Agencies | August 2, 2019 |
| **iii.** | 800' Property Owner Letters | May 29, 2020 |
| **iv.** | Site Posted for Public Hearing | May 27, 2020 |
| **v.** | Kuna, Melba Newspaper | May 20, 2020 |

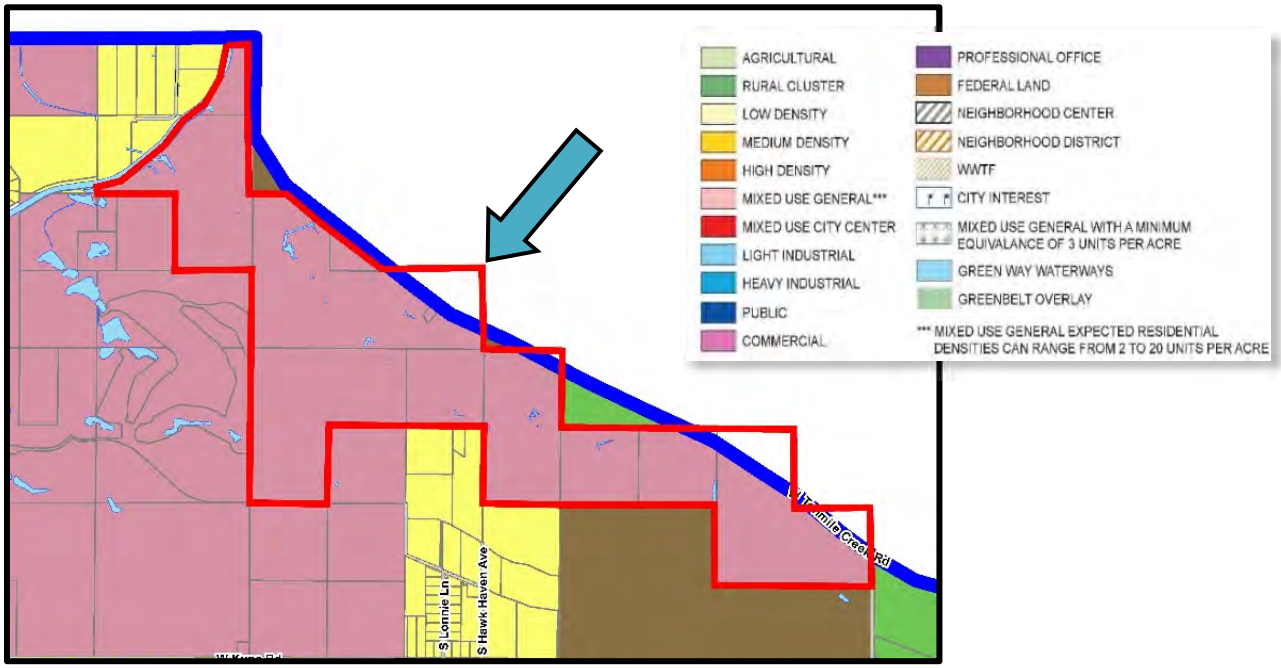
**B. Applicant Request:**

1. The applicant, Ten Mile Creek, LLC, requests approval for Annexation**,** Planned Unit Development (PUD), Preliminary Plat, Development Agreement and Design Review. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Development proposing *up to* 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, one school lot and two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project site is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the northeast corner of Cloverdale and Kuna Roads.

**C. Site History:** The subject site is comprised of multiple parcels; totaling approximately 761.50 acres. All parcels are currently in Ada County and zoned Rural Residential (RR), however, they are contiguous to Kuna City limits on the east and southern sides, and several parcels have historically been used as single family residences and used for Agricultural purposes.

**D. General Projects Facts:**

1. **Comprehensive Plan Designation:** The Future Land Use Map (Comp Plan Map) is intended to serve as a *guide* for the decision-making body for the City. The Comp Plan map indicates land use designations generally speaking, it is not the actual zone. The Future Land Use Map identifies the approx. 39.33-acre site as Medium Density Residential (4-8 DUA).




2. **Kuna Recreation and Pathways Master Plan Map:**
The Kuna Recreation and Master Pathways Plan map identifies two (2) future bike in the northwest part of the project and on the south side of the project. See Master Plan behind this report.

3. **Surrounding Existing Land Uses and Zoning Designations:**

| | | |
|---|---|---|
| **North** | RR & RP | Rural Residential, Rural Preservation – Ada County |
| **South** | R-6, RP & RR | Medium Density Residential - Kuna City, Rural Preserve, Rural Residential – Ada County |
| **East** | RP | Rural Preservation – Ada County |
| **West** | R-6 & RR | Medium Density Residential – KUNA CITY, & Rural Residential – Ada County |

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

| Property Owner | Parcel Size – Approx. | Current Zone | Parcel Number |
|---|---|---|---|
| James L. Whitmore | 18.05 acres | RR - Rural Residential | S1415110103 |
| James L. Whitmore | 94.3 acres | RR - Rural Residential | S1415141900 |
| James L. Whitmore | 30.19 acres | RR - Rural Residential | S1415427805 |
| James L. Whitmore | 135.43 acres | RR - Rural Residential | S1414336000 |
| James L. Whitmore | 10.68 acres | RR - Rural Residential | S1414315000 |
| James L. Whitmore | 1 acre | RR - Rural Residential | S1414438900 |
| James L. Whitmore | 19.34 acres | RP - Rural Preservation | S1414438400 |
| Gilmore Keith H. & Ruth E. Living Trust | 120 acres | RR - Rural Residential | S1423211000 |
| James L. Whitmore | 40 acres | RR - Rural Residential | S1423120000 |
| James L. Whitmore | 77.60 acres | RR - Rural Residential | S1423110000 |
| James L. Whitmore | 2.4 acres | RR - Rural Residential | S1423111000 |
| James L. Whitmore | 40 acres | RP - Rural Preservation | S1424233600 |
| Davis Jay C. & Robert A. Rev. Trust | 40 acres | RP - Rural Preservation | S1424240000 |
| James L. Whitmore | 120 acres | RP - Rural Preservation | S1424131800 |

5. **Services:**

Sanitary Sewer– City of Kuna
Potable Water – Suez Water Company
Pressurized Irrigation– On Site Wells - HOA
Fire Protection – Kuna Rural Fire District
Police Protection – Kuna City Police (A.C.S.O.)
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:** Currently there are two residence on the Davis property. One on the north side of Tenmile Creek Road, and on one the south side with approximately six (6) accompanying out-buildings, with agriculture uses on site. One of the Whitmore properties appears to have two (2) outbuildings in the northwest corner of the project and various Ag. uses throughout the remainder. The Gilmore parcel appears to be free of a residence and used for Ag. purposes with an accompanying pond (irrigation source). Topographical variation is present that appears to run east-west through most of the south part of the overall project. A large portion of the topography appears to be steep with elevation changes that are at, or exceed 80 feet in elevation difference. The vast majority of the site appears to be relatively flat and suitable for development.

**Transportation / Connectivity:** The site has significant frontage along Tenmile Creek Road and a large part of the overall project straddles both sides of Tenmile Creek. This project has significant frontage along Five Mile Road on the north side of the site. The project has limited frontage along Hubbard Road. Applicant shall connect to existing roads as required in Kuna City Code (KCC) and provide stubs for future connections to serve the connection/traffic needs of the site. Applicant shall satisfy Kuna City and ACHD's requirements for

roadway improvements, including but not limited to, road widening and vertical/rolled curb, gutter and sidewalks appropriately.

Staff notes in the report from ACHD on the preliminary plat identifies a number of improvements placed on the applicant on and off/site. Through discussions with the applicant, they are prepared to do what is necessary to comply with the ACHD requirements, including significant on and off site roadwork, and the re-aligning of a portion of Five Mile Road as it runs through the south part of the site, due to topography.

7. **Environmental Issues:** Staff is not aware of any environmental issues, health or safety conflicts. Idaho Department of Environmental Quality (DEQ) has provided recommendations for surface and groundwater protection practices and requirements for development of the site. The applicant is in process of obtaining a conditional letter of map revision from FEMA.

8. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:
   - City Engineer (Paul Stevens) - Exhibit B 1
   - Ada County Highway District (ACHD) PUD - Exhibit B 2
   - Ada County Highway District (ACHD) Pre Plat - Exhibit B 3
   - Boise Project Board of Control – Exhibit B 4
   - Central District Health Department (CDHD) – Exhibit B 5
   - COMPASS (Community Planning Association) - Exhibit B 6
   - Department of Environmental Quality (DEQ) – Exhibit B 7
   - Idaho Transportation Department (ITD) – Exhibit B 8
   - Kuna Rural Fire District (KRFD) - Exhibit B 9
   - Kuna School District No. 3 (KSD 3) - Exhibit B 10
   - Kuna Police Department - Exhibit B 11
   - Suez Water Systems - Exhibit B 12
   - Ada County Commissioners Exhibit B 13
   - West Ada School District - Exhibit B 14
   - Ada County Commissioner Rick Visser - Exhibit B 15
   - Boise Police Department - Exhibit B 16
   - Ada County Paramedics - Exhibit B 17
   - Ada County Commissioner Rick Visser - Exhibit B 18

**E. Staff Analysis:**

The subject site begins at the southwest corner (SWC) of Hubbard and Five Mile Roads, then follows the curve of Five Mile as it turns into Tenmile Creek and ends at Cole Road. The applicants request is in line with the Comprehensive Plan (Comp Plan) and the Comprehensive Plan Map (CPM) designation of *Mixed-Use* by proposing three residential zones and two commercial zones throughout the subject site. This request will complement the development to its west and will provide project wide continuity as a multi-phased, master Planned Unit Development (PUD), consisting of approximately 761.44 acres.

The applicant requests annexation into Kuna City limits applying the Category "A" process for approximately 761.44 acres. The lands in this application touch City limits on the west side of the site and are therefore eligible for annexation. Applicant has submitted an application for annexation for 761.44 acres (approximately) and is seeking five (5) different zoning designations for the designated parcels: as follows:

- Approximately 660.78 acres are proposed to be annexed with a zone change from Rural Residential (RR) and Rural Preservation (RP) ***TO*** R-6 Medium Density Residential (MDR),
- Approximately 33.67 acres from Rural Residential (RR), ***TO*** R-12, High Density Residential (HDR),
- Approximately 18.89 acres from Rural Preservation (RP), ***TO*** R-20, High Density (HDR),
- Approximately 12.21 acres from Rural Residential (RR), ***TO*** C-1 , Neighborhood Commercial,
- Approximately 35.87 acres from Rural Preservation (RP), ***TO*** C-2, Area Commercial.

Kuna's Comprehensive Plan (Comp Plan), encourages a variety of housing types for all income levels numerous times throughout the document. Additionally, the City attempts to balance all housing types within the City. Pertinent sections of the Comp Plan that address housing types are included below, in Section G (Comp Plan Analysis) of this report.

The applicant seeks to apply the PUD process and proposes a mix of various uses throughout the project to include; zones for commercial, zones for medium and high density residential uses, (single family and multi-family lots), *two* school sites, commercial lots, public service lots, open spaces to include several City parks, multiple private parks, with a considerable pathway network (*85.00 acres of open space in the first preliminary plat, or 17.8% in the first preliminary plat*). The applicant proposes a master-planned community for all ages and proposes all public streets that will be built to Kuna and ACHD standards (curb, gutters & sidewalks) and must meet Kuna Fire Department requirements. Proposing a large network of biking and walking pathways, will help reduce vehicle trips for basic needs, recreation and even daily services including safer routes to schools. Using the PUD process and exceeding the required 10% usable open space requirement, the applicant is eligible to request relief from certain development standards to accommodate mixed-uses and design criteria in order to create a unique and different development within Kuna.

A Development Agreement (DA) accompanies this application to guide the entire development of this master-planned community from start to finish. Staff has met multiple times with the applicant and has sought direction from the City's legal Counsel to discuss the contents of the DA. The DA included with this packet is the end product of multiple negotiations between staff, legal counsel and the applicant. As allowed through the PUD process, the applicant proposes a number of changes to City standards and requirements and have listed those items they seek relief from in exhibit 'E' of the DA. That list is included for your review. The requested changes are presented side-by-side to show current code, compared with the *requested* changes and are listed as Exhibit 'E' as a companion to the DA. Staff highlights the following specific items for the Council to consider during the hearing:

- Page 3 of 12; KCC 5-10-4–O-4: *Subdivision Advertising*,
- Page 4 of 12; 6-2-3-J-1 and 2: *Pre Plat approval timeframes*, and 6-3-3-G: Cul-de-sac lengths: staff recommends that the applicant be conditioned to work with the KRFD for acceptable lengths,
- Page 5 of 12; 6-3-4-D: *Minimum road width*,
- Page 7 of 12; 6-3-9-G– *Flag Lots*: noting that the City Engineer prefers no more than 3 contiguous lots on a flag lot, (*Request withdrawn by applicant*),
- Page 9 of 12; 6-4-2-S: *Streets and Alleys*: staff recommends that the applicant be conditioned to work with the KRFD for acceptable lengths.

Within the DA is discussion about a funding mechanism called a CID (Community Improvement District). This is a different funding mechanism than the previous 2006 LID (Local Improvement District). The City of Kuna and its current residents will not be exposed or at risk as this funding mechanism reimburses the investors of the project, and a leaves a bank/lending institution out of the equation. Staff recommends that if this project is approved, the applicant return and go through the CID processes in order to establish said CID district.

Staff has reviewed the preliminary plat application and it appears to follow KCC standards and requirements. All roads will be public and will be built to Kuna City and ACHD standards, except those specific streets which may receive limited KCC relief if the proposals are approved as noted in the applicants request (listed above). Staff notes that through discussions with the City Engineer that narrowing the back-of-curb to back-of-curb section of public roads is generally supported for specific situations and not intended to be an overall approval. Staff recommends that in the event this application is approved, any narrowing of public streets within this project will need specific prior approval from the City Engineer and will be limited to a case by case scenario. Staff also highlights that along arterial roads, KCC calls for full roadway improvements, including curb/gutter, road widening, and sidewalks at eight feet (either separated or attached). The City does not allow for borrow ditches for any roads, unless a classified road does not meet the ACHD standards/policies for

vertical curb. If the need arises for borrow ditches on classified roads *and* if ACHD does not specifically allow vertical curb, the applicant shall be conditioned to obtain a license agreement from ACHD to provide grass and watering source in the borrow ditches as allowed with sand windows for draining. Gravel and/or bare ground is not an acceptable ground-cover. Staff notes that the subject property will be connected to the City's public sewer facilities, and will connect to Suez Water Systems for potable water and use existing on-site wells for a private pressure irrigation system. Staff notes that ad discussed within the DA, in Section 5.4, there is a discussion about the possibility for an on-site wastewater treatment system. This is a new development that took shape after the Commission meeting and has been discussed with the City Engineer and P&Z Staff.

The applicant met with the Kuna School District (KSD) on January 10, 2020, and the results of that meeting produced a second elementary school site, a 10 acre site to be placed within the KSD boundaries.

Staff has determined the preliminary plat and design review generally complies with the goals and policies for Kuna City, Title 5 and Title 6 of the Kuna City Code; Idaho Statute § 67-6511; and the Kuna Comprehensive Plan. Staff recommends that if the Council approves Case No's 19-10-AN (Annexation) 1901-PUD and 19-06-S (Preliminary Plat) and accompanying DA, the applicant be subject to the conditions of approval listed in section K of this report, as well as any additional conditions by the Council.

**F. Applicable Standards:**

1. City of Kuna Zoning Ordinance Title 5.
2. City of Kuna Subdivision Ordinance Title 6.
3. City of Kuna Comprehensive Plan.
4. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

**G. Comprehensive Plan Analysis:**

Kuna City Council accepts the Comprehensive Plan components, and have determined the proposed annexation, PUD, preliminary plat, and DA requests for the site ***are/are not*** consistent with the following Comprehensive Plan components as described below:

**Goal Area 3: Kuna's land uses will support a desirable, distinctive and well-designed community.**

- Goal 3.D: Encourage development of housing options and strong neighborhoods.
  - Objective 3.D.1: Encourage development of housing options for all citizens.
    - Policy 3.D.1.a: Encourage preservation and development of housing that meets demand for household sizes, lifestyles and settings.
- Goal 3.G: Respect and protect private property rights.
  - Objective 3.G.1: Ensure land use policies, restrictions, and fees do not violate private property rights.
    - Policy 3.G.1.b: Ensure City land use actions, decisions and regulations will not cause an unconstitutional regulatory taking of private property; and do not effectively eliminate all economic value of the subject property.
    - Policy 3.G.1.c: Ensure City land use actions, decisions and regulations do not prevent a private property owner from taking advantage of a fundamental property right. Ensure city actions do not impose a substantial and significant limitation on the use of the property.

**Goal Area 4: Kuna will be a connected community through strong transportation and infrastructure systems.**

- Goal 4.D: Promote a connected street network that incorporates mid-mile collectors and crossing for improved neighborhood connectivity.
  - Objective 4.D.2: Ensure the continued expansion/development of mid-mile collector system throughout the community.
    - Policy 4.D.2.a: Extend and expand mid-mile roads as growth occurs.
    - Policy 4.D.1.b: Preserve adequate right-of-way along all mid-mile roads or other approved alternative locations to align roads.

## H. Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with Kuna City Code (KCC).
   **Comment:** *The proposed project meets the land use and area standards in Chapter 3, Title 5 of KCC. Staff also finds that the proposed project meets all applicable requirements of Title 6 of KCC.*

2. The site **is** physically suitable for a subdivision.
   **Comment:** *The approx. 761.44 acre subdivision has sufficient size to include a mix of lot sizes, community landscape buffer(s).*

3. The annexation and subdivision uses are not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.
   **Comment:** *The land to be annexed is not used as wildlife habitat. Roads, homes and open spaces are planned for construction according the City requirements and best practices. Staff is not aware of any environmental damage or loss of habitat associated with the proposed development.*

4. The annexation and subdivision application is not likely to cause adverse public health problems.
   **Comment:** *The annexation of the property requires a zoning designation per Kuna Code 5-13-9. The proposed densities and uses require connection to public sewer and water, therefore eliminating the occurrence of adverse public health problems. Through correspondence with public service providers and application evaluation, this project appears to avoid detriment to surrounding uses.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.
   **Comment:** *The annexation, PUD and subdivision design did consider the location of the property, classified roadways and the system. The subject property may be connected to the City's public sewer facilities, and will connect to Suez Water Systems for potable water and use existing on-site wells for a private pressure irrigation system. The adjacent uses are complimentary uses (Kuna) as proposed in the Kuna Comprehensive Plan Future Land Use Map.*

6. The existing and proposed streets and utility services in proximity to the site are suitable and adequate for residential purposes predicated on approved designs to extend *and/or* improve each accordingly.

## I. Recommendation of the Commission to City Council:

Based on the facts outlined in the Comprehensive Plan, Kuna City Code, Staff's Memorandum, including the exhibits, and the testimony during the public hearing with the Planning and Zoning Commission of Kuna, Idaho, the Commission hereby *recommends* ***approval*** to the City Council for Case No's **19-10-AN**, **19-01-PUD**, **19-06-S** and a **DA** a request for annexation, PUD, preliminary plat and a DA, approval by Ten Mile Creek, LLC for Spring Rock Subdivision with the following conditions of approval:

- Follow all conditions outlined in the staff report,
- Work with staff Kuna School District and ACHD for site layout of the schools and the applicable access roads,
- Work with ACHD on traffic calming measures within the streets as indicated in the ACHD report,
- Applicant shall work with the city to provide amenities in the park and lifesaving stations at the pond,
- Applicant to work with the city and City Engineer in regards to Exhibit E, Section 6-3-3-G: Cul-de-sac Lengths, Section 6-3-4-D: Minimum Road Width, Section 6-3-9-G: Flag Lots (*Withdrawn*), Section 6-4-2-S: Streets and Alleyways,
- Provide a park and ride or ride sharing lot within the commercial area.

**J. Proposed Order of Decision by the Council:**

**19-10-AN (**Annex**) 19-01-PUD (**Planned Unit Development**), 19-06-S (**Preliminary Plat**),** and a **DA (**Development Agreement**)** *Note: This proposed motion is for* ***approval/conditional approval/denial****. If the Council wishes to approve or deny specific parts of the requests as detailed in this report, those changes must be specified.*

Based upon the record contained in Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA including the Comprehensive Plan, KCC, Staff's Memorandum, including the exhibits, and the testimony during the public hearing, the City Council hereby ***approves/conditionally approves/denies*** the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA a request for annexation, PUD, preliminary plat and a DA, approval by Ten Mile Creek, LLC for Spring Rock Subdivision with the following conditions of approval:

**K. Recommended Conditions of Approval:**

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve drainage and grading plans.
    c. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".
    d. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    e. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    f. The *Boise Project and Board of Control* shall approval any modifications to the existing irrigation system.
    g. Approval from Ada County Highway District shall be obtained and Impact Fees must be paid prior to issuance of any building permit.
    h. Idaho Transportation Department. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
    i. All public rights-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District,
2. Installation of utility service facilities shall comply with requirements of the public utility or irrigation district providing services. All utilities shall be installed underground, see KCC 6-4-2-W.
3. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site.
4. Street lighting shall use LED lights, with spacing and wattages meeting KCC 5-4-6; applicant shall coordinate a street light plan for P & Z approval in concert with the prepared construction drawings for the project.
5. Parking within the site shall comply with KCC 5-9-3.
6. Fencing within and around the site shall comply with Kuna City standards – KCC 5-5-5- A-J and KCC 6-4-2-E.
7. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within three days or as the planting season permits as required to meet KCC 5-17-7 standards. Maintenance and planting within public rights-of-way shall be approved from the public entities owning the property.
8. The land owner/applicant/developer and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the Commission and/or Council, or seek amending them through public hearing processes.

9. The applicant's proposed preliminary plat (dated May 2019) shall be considered a binding site plan, *or as modified and approved* through the public hearing process.
10. The applicant's proposed Landscape Plan (dated 07.01.2019) shall be considered a binding site plan, *or as modified and approved* through the public hearing process.
11. Applicant shall annex any portions of the site not in a Fire District, into a recognized Fire District Boundary.
12. Applicant shall follow staff, city engineer and other agency recommended requirements as applicable.
13. Compliance with all local, state and federal laws is required.

City of Kuna
Planning and Zoning Commission
Findings of Fact and Conclusions of Law

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

Based upon the record contained in Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA, including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna City Council hereby ***approves/conditionally approves/denies*** the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA, a request for annexation PUD, preliminary plat from Ten Mile Creek, LLC, for Spring Rock Subdivision:

1. *The Kuna City Council* ***approves/conditionally approves/denies*** *the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.*

   ***Comment:*** *The Kuna City Council* ***will hold*** *a public hearing on the subject applications on June 16, 2020, to hear from City staff, the applicant and to accept public testimony. The decision by the Council is based on the application, staff report and public testimony, both oral and written.*

2. *Based on the evidence contained in Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA*, this proposal generally* ***does/does not comply*** *with the Comprehensive Plan and City Code.*

   ***Comment:*** *The Comp Plan has listed numerous goals for promoting and supporting a diverse and sustainable economy that will allow more Kuna residents to work in their community and encouraging a balance of land uses to ensure that Kuna remains desirable, stable and a self-sufficient community.*

3. *Based on the evidence contained in Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA*, this proposal generally* ***does/does not comply*** *with the Kuna City Code.*

   ***Comment:*** *The applicant has submitted a complete application, and following staff review the application appears to be in general compliance with the design requirements, public improvement requirements, objectives and considerations listed in Kuna City Code Title 5 and Title 6.*

4. *The City Council has the authority* to ***approve / conditionally approve / deny*** *Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA*.*

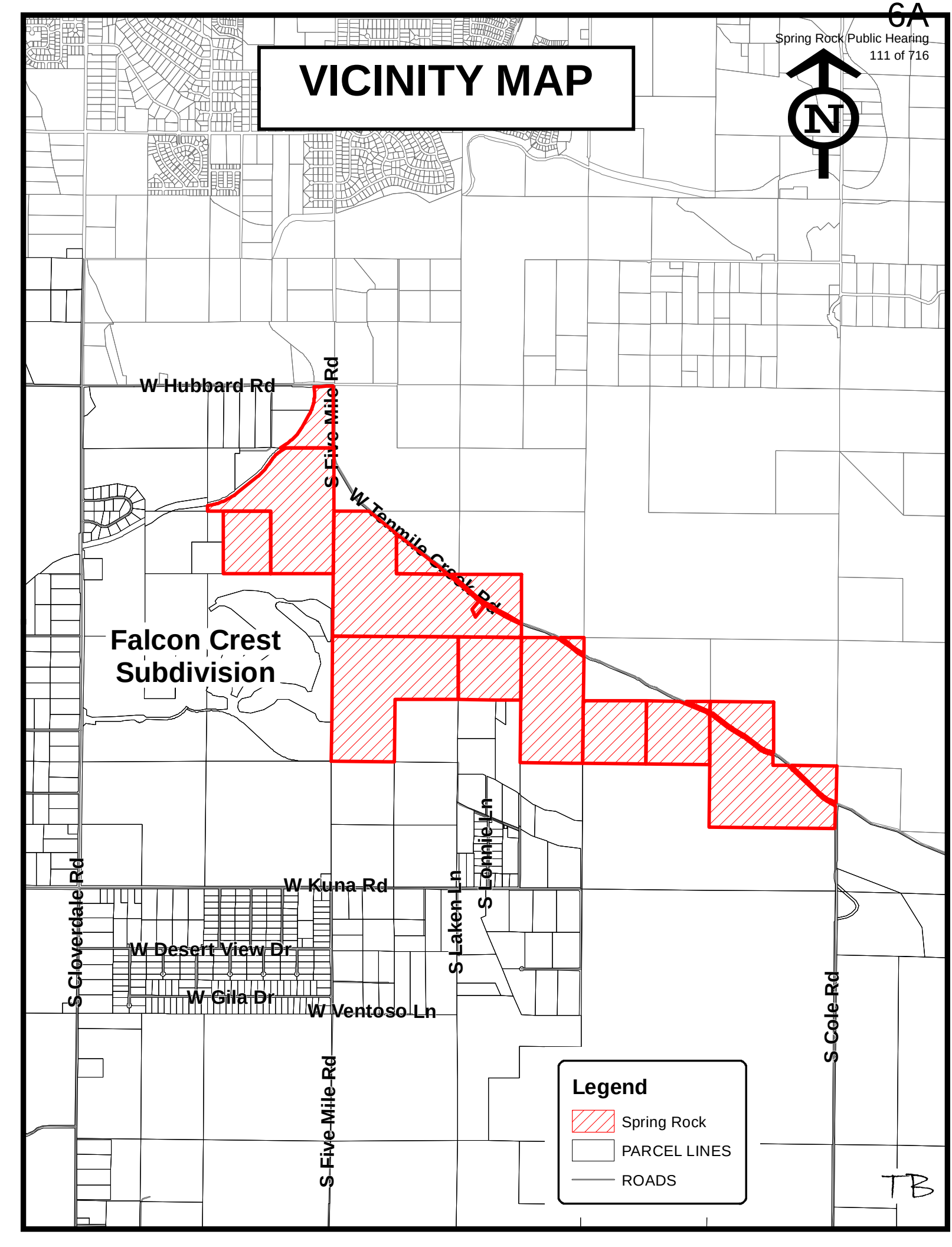
   ***Comment:*** *On June 16, 2020, the Kuna City Council will vote* to ***approve/conditionally approve/deny*** *Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA.

5. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

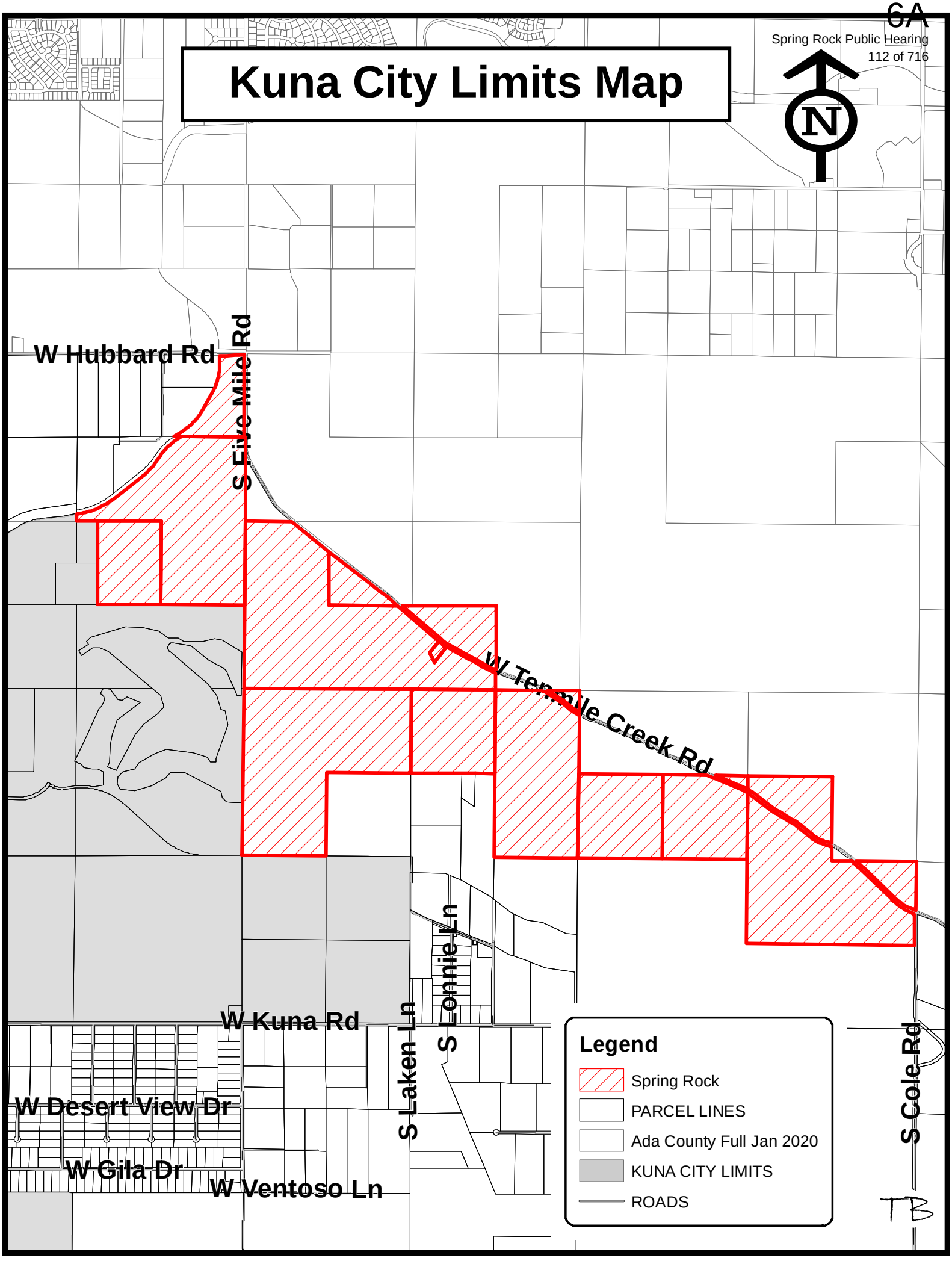
   ***Comment:*** *Land Owner Notices were mailed out to residents within 800-FT of the proposed project site on May 29, 2020, and a legal notice was published in the Kuna Melba Newspaper on May 20, 2020. The applicant placed a sign on the property on May 27, 2020.*

**DATED: this _____ day of _____, 2020.**

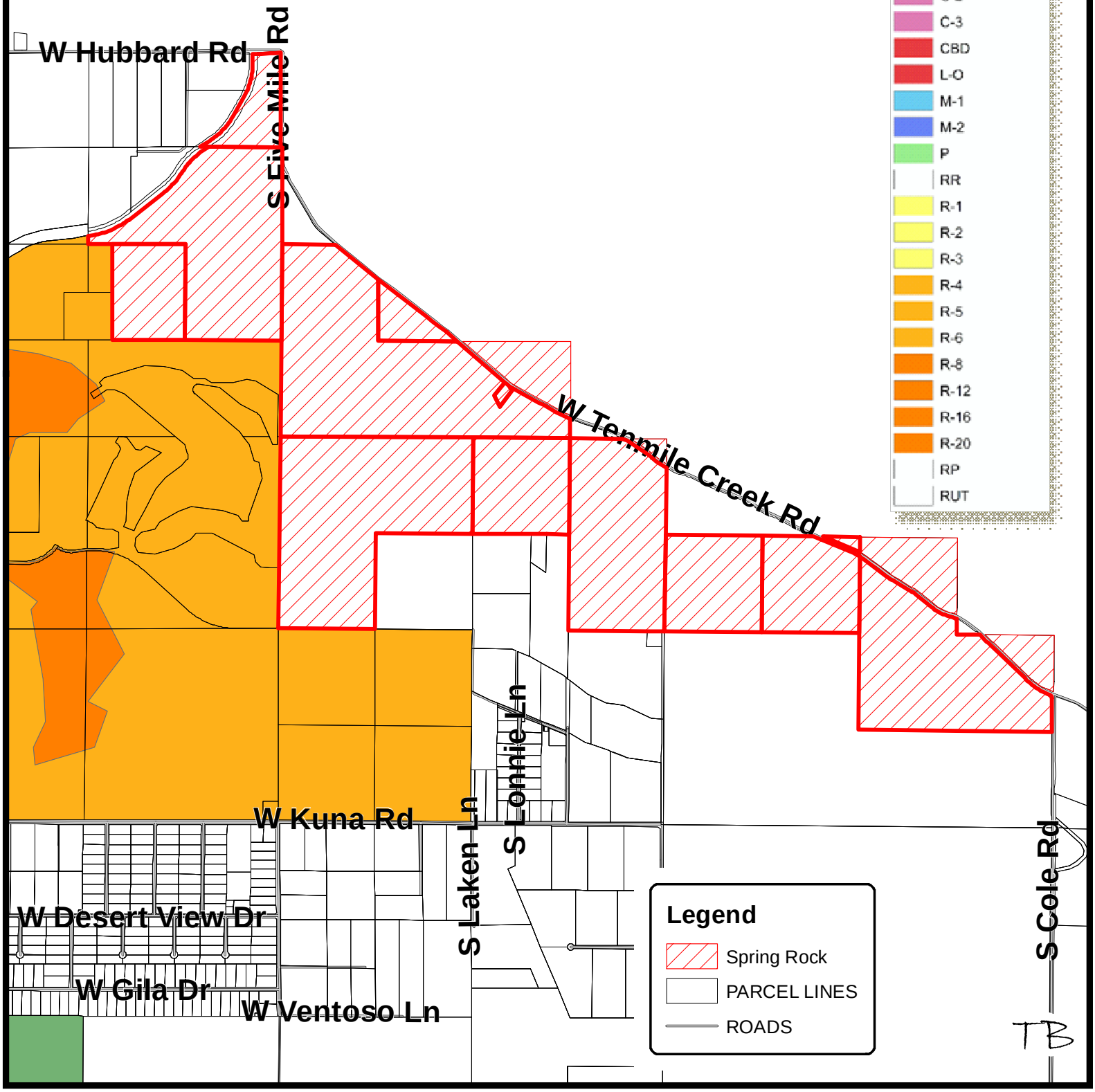
# VICINITY MAP



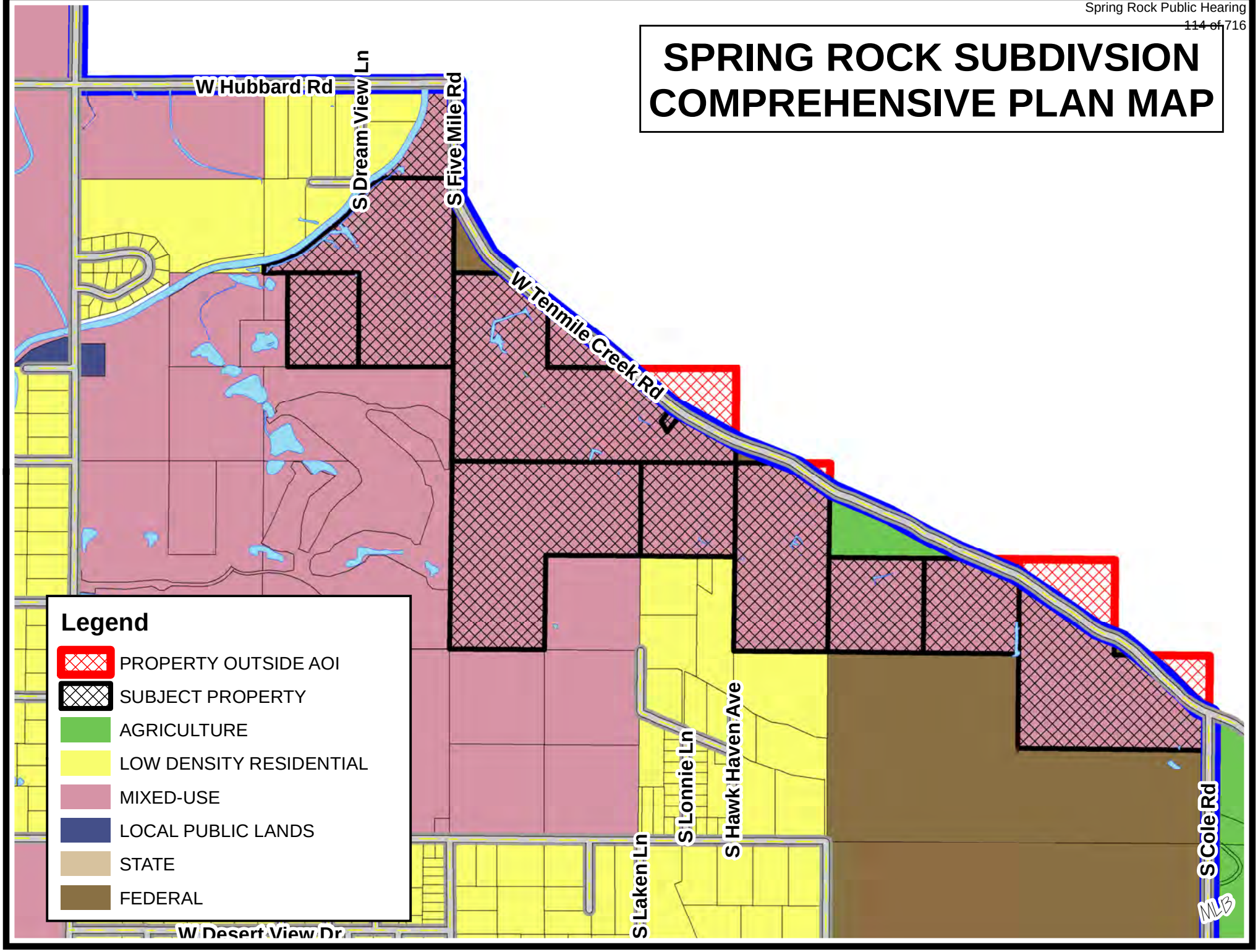
# Kuna City Limits Map



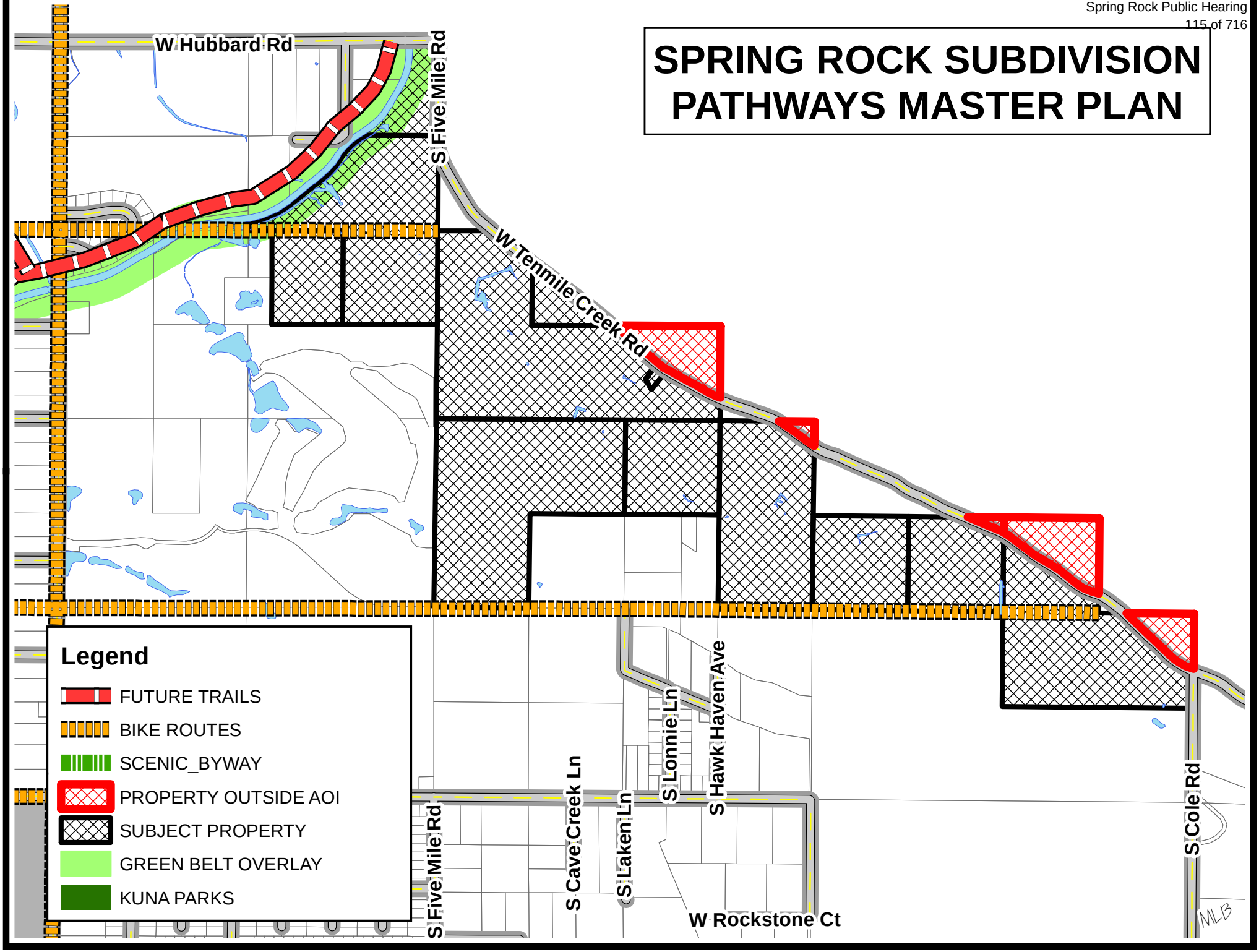
# Kuna City Zoning Map



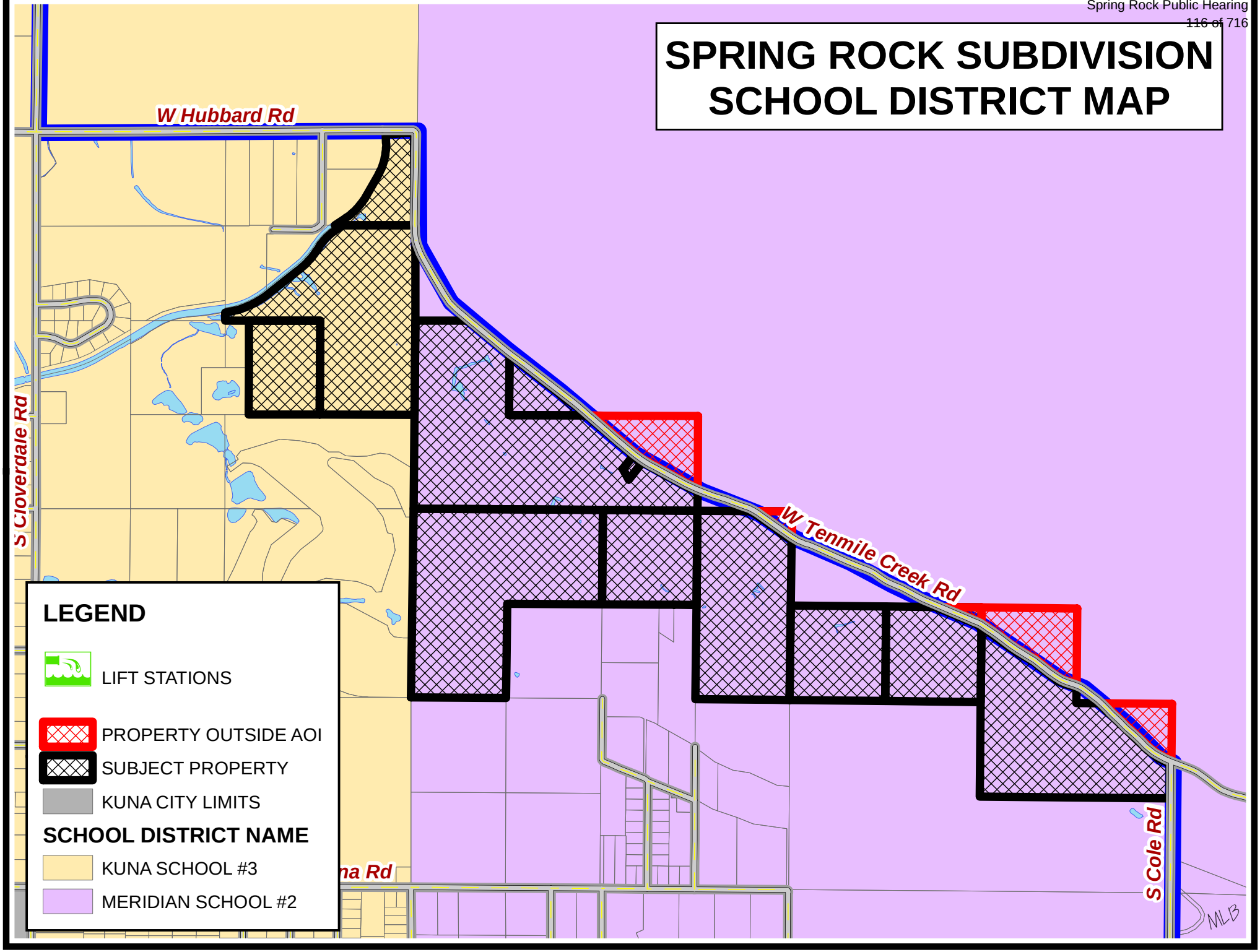
# SPRING ROCK SUBDIVSION COMPREHENSIVE PLAN MAP



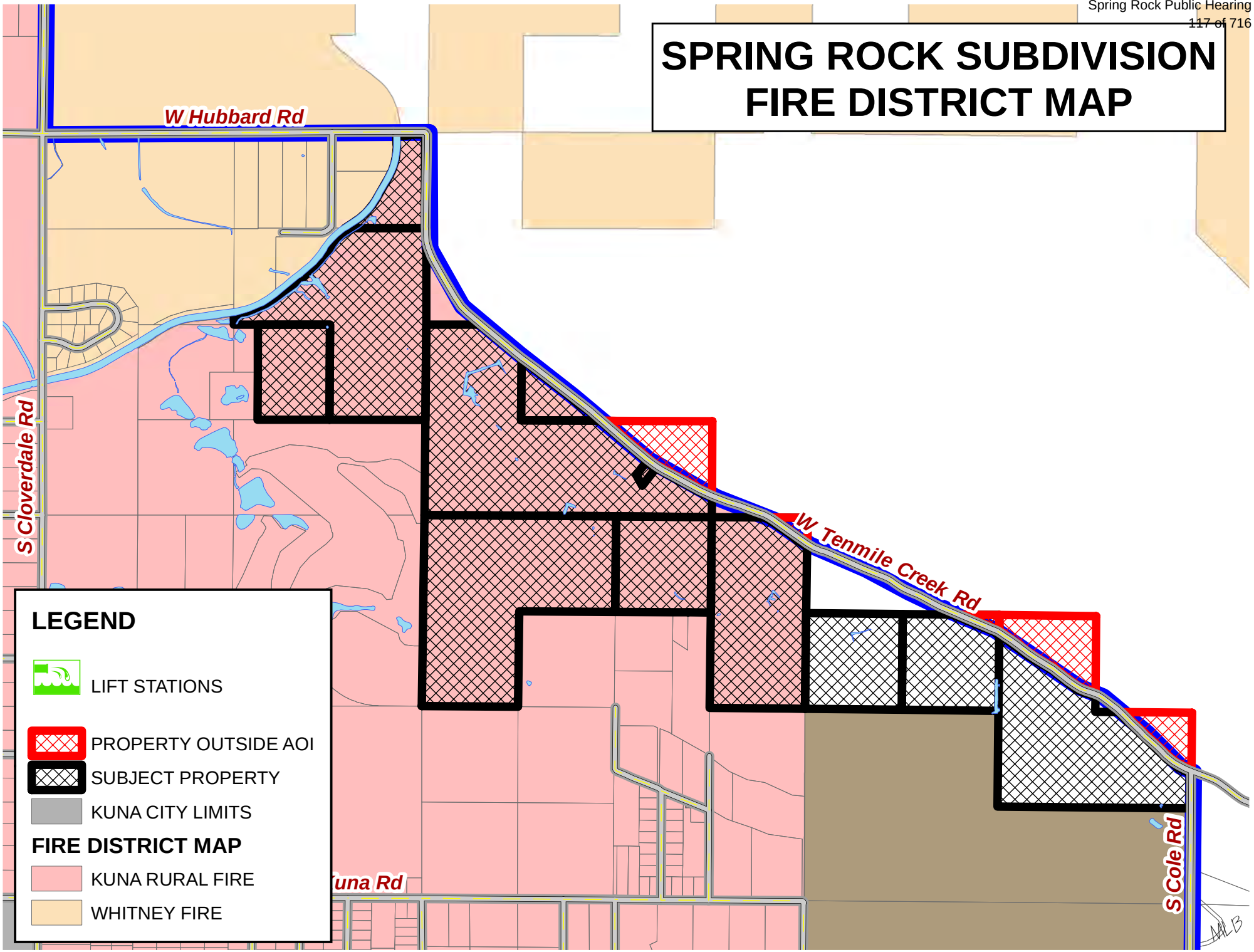
# SPRING ROCK SUBDIVISION PATHWAYS MASTER PLAN



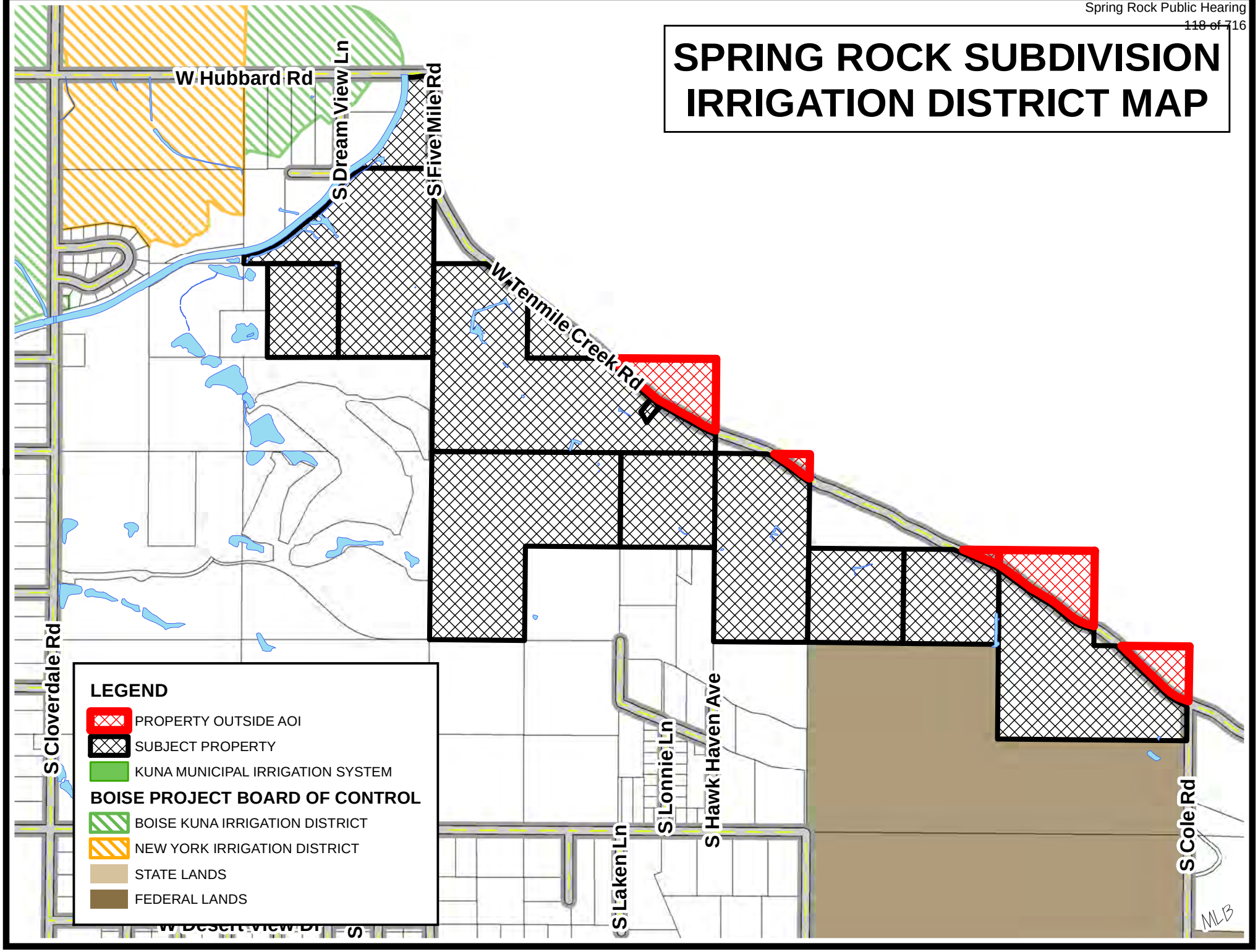
# SPRING ROCK SUBDIVISION SCHOOL DISTRICT MAP



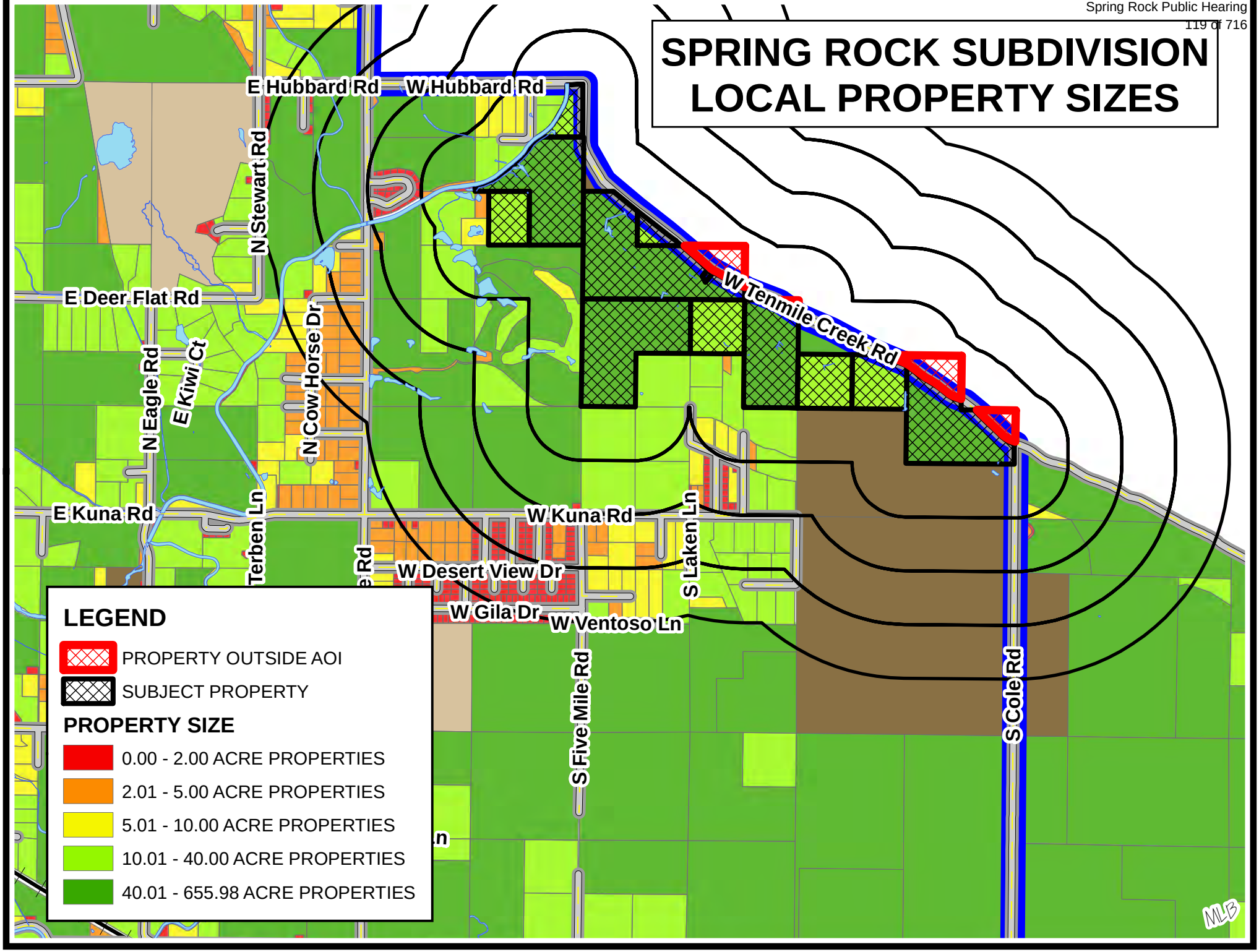
# SPRING ROCK SUBDIVISION
# FIRE DISTRICT MAP

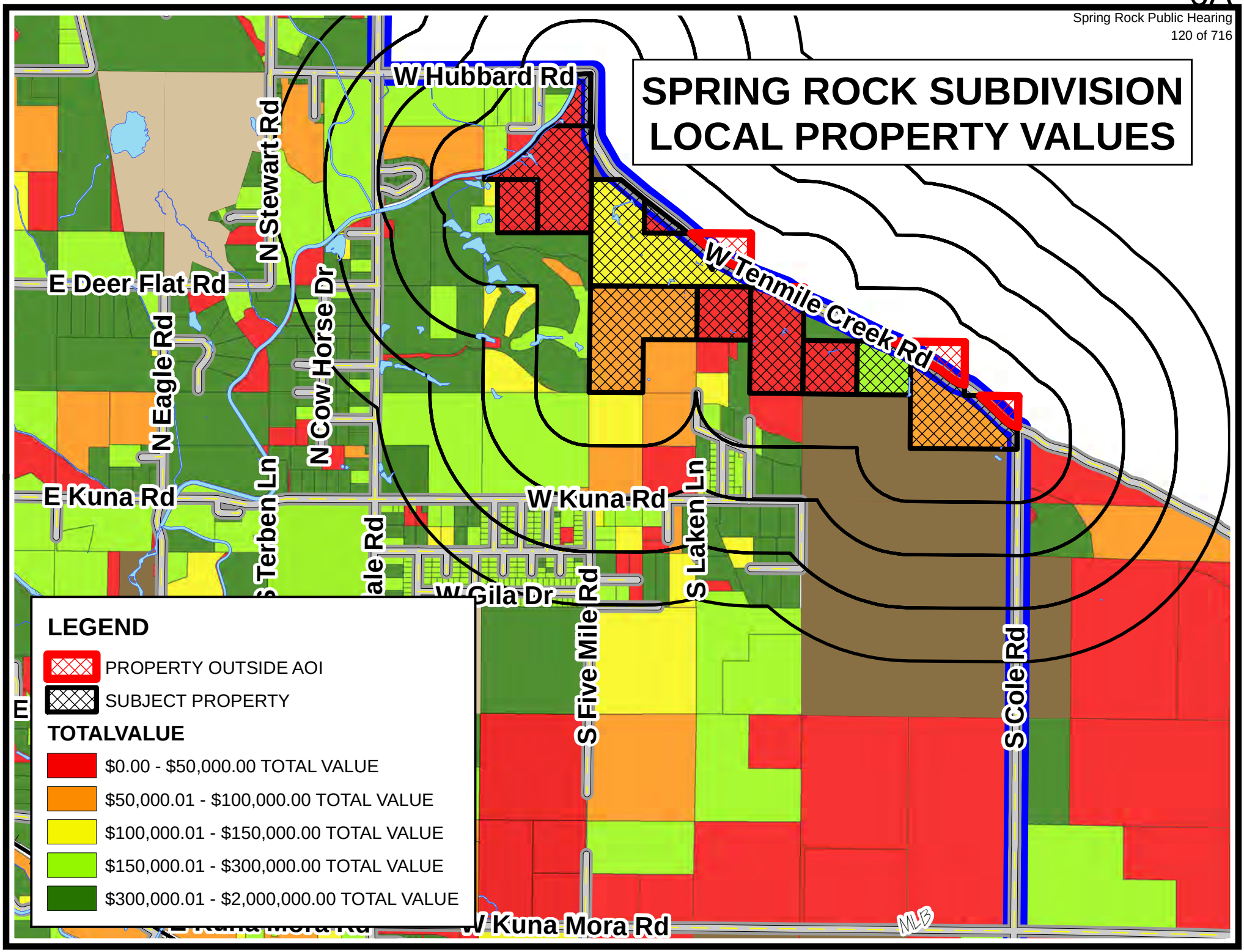


# SPRING ROCK SUBDIVISION IRRIGATION DISTRICT MAP

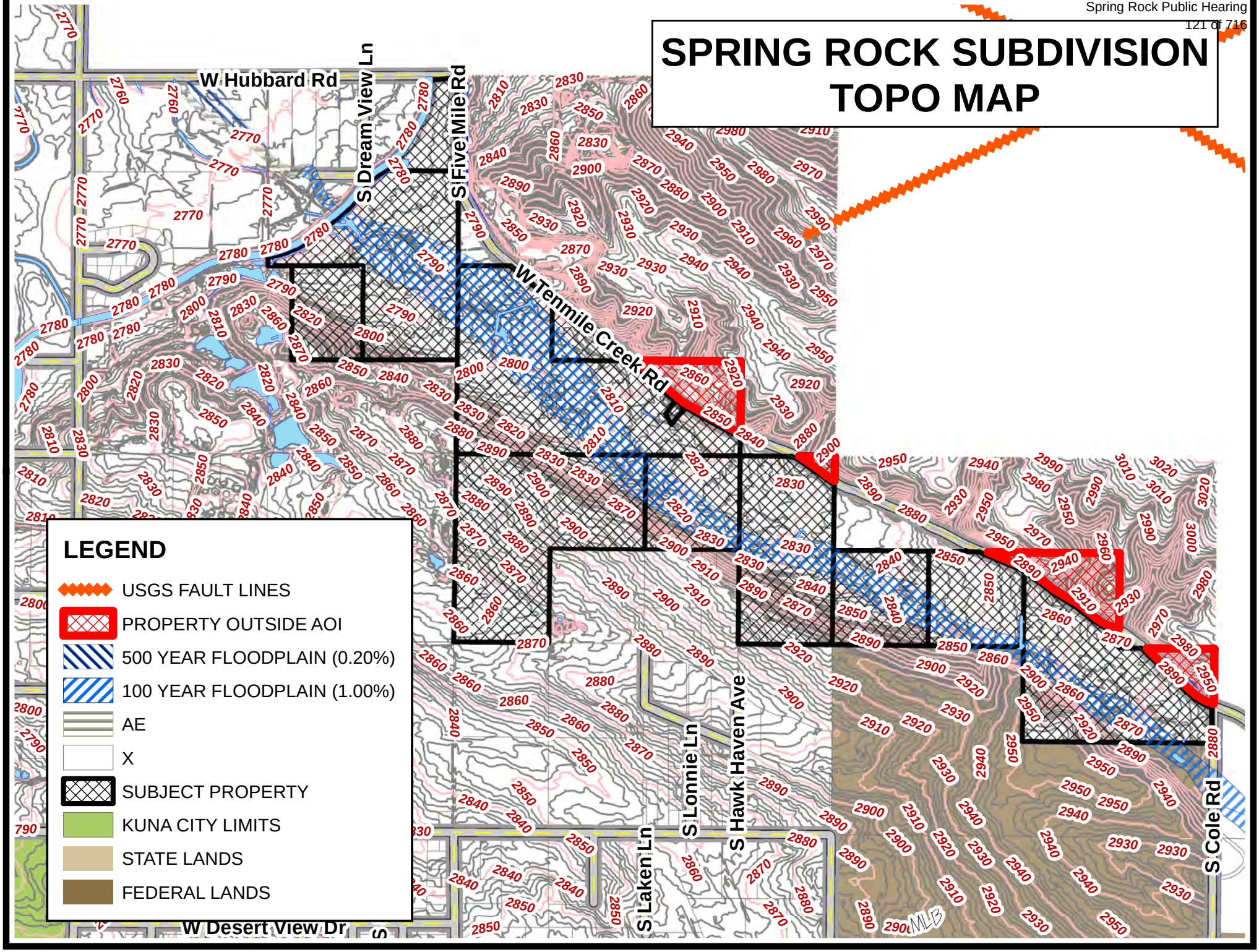


# SPRING ROCK SUBDIVISION LOCAL PROPERTY SIZES

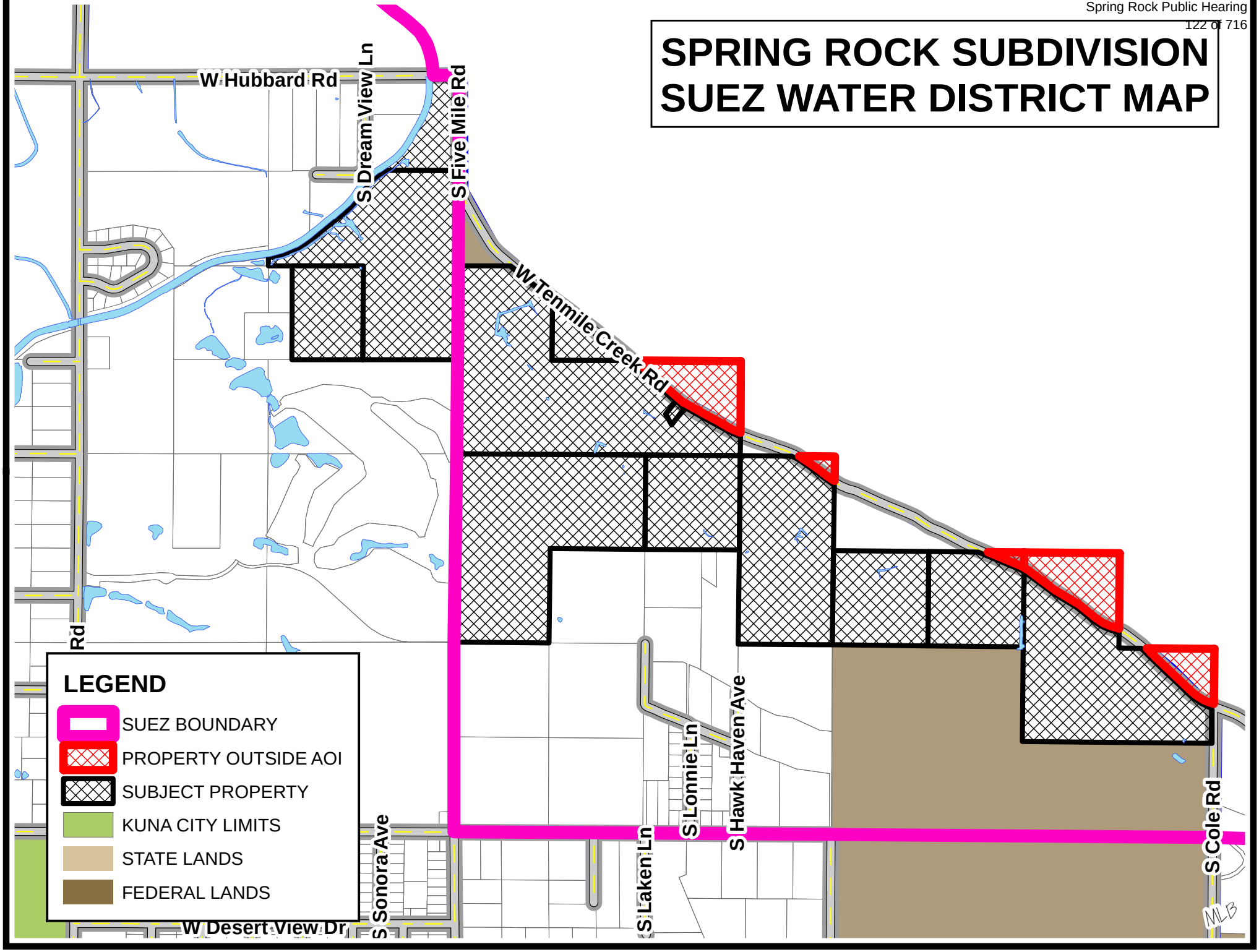



SPRING ROCK SUBDIVISION
LOCAL PROPERTY VALUES
W Hubbard Rd
N Stewart Rd
E Deer Flat Rd
N Eagle Rd
N Cow Horse Dr
W Tenmile Creek Rd
E Kuna Rd
W Kuna Rd
S Terben Ln
S Laken Ln
W Gila Dr
S Five Mile Rd
S Cole Rd
W Kuna Mora Rd
LEGEND
PROPERTY OUTSIDE AOI
SUBJECT PROPERTY
TOTALVALUE
$0.00 - $50,000.00 TOTAL VALUE
$50,000.01 - $100,000.00 TOTAL VALUE
$100,000.01 - $150,000.00 TOTAL VALUE
$150,000.01 - $300,000.00 TOTAL VALUE
$300,000.01 - $2,000,000.00 TOTAL VALUE

# SPRING ROCK SUBDIVISION TOPO MAP



# SPRING ROCK SUBDIVISION
# SUEZ WATER DISTRICT MAP



Falcon Crest Subdivision

Spring Rock Subdivision

S Cloverdale Rd

10 Mile Creek Rd

W Tenmile Creek Rd

Kuna Rd

W Gila Dr

W Ventoso Ln

S Maple Grove Rd

S Cole Rd

2019 Google

July 18, 2019

City of Kuna
751 W. 4th Street
Kuna, ID 83634

Letter Of Intent

**RE: SPRING ROCK SUBDIVISION – ANNEXATION, REZONE, DEVELOPMENT AGREEMENT, PLANNED UNIT DEVELOPMENT, PRELIMINARY PLAT AND DESIGN REVIEW**

To Whom It May Concern:

We are pleased to submit to the City this request for Annexation, Rezone, Development Agreement, Planned Unit Development, Preliminary Plat and Design Review for the Spring Rock Subdivision generally located on the south side of Ten mile Creek Road in Kuna, Idaho. A legal description and maps are included with this application to show the total boundary and master plan for this new community.

**Annexation**

With the recent annexation of the Falcon Crest Subdivision, the current city limits of Kuna touch the southwestern parcels of our development and created a contiguous annexation path of annexation for the proposed project.

We are requesting annexation of approximately 761 acres into the incorporated city limits of Kuna, Idaho with this application. The annexation application will provide entitlements for a multi-phase residential and mixed-use development.

Due to the lower elevation of the site, the developer will install a sewer wastewater lift station on the western boundary of the site and extend a sewer force main line down Hubbard Road to the west and connect to the existing City sewer line(s) near the Patagonia subdivision. The development is primarily in the Suez Water service area as defined by the Idaho Department of Water resources and Suez has stated they will serve domestic drinking water to this development. The developer will be required to install all water infrastructure throughout the community. Emergency services will be available through the Kuna Police Department and Kuna Fire District. A pressurized irrigation system will be provided by onsite irrigation wells currently being used for agricultural use and would irrigate common areas and public parks throughout the community. Storm water will be retained on site and designed by a civil engineer in accordance with City of Kuna and ACHD requirements.

**Parcels**

The parcels that are included within this application are:

Parcel S1415110103
Parcel S1415427805
Parcel S1415141900
Parcel S1414336000
Parcel S1414315000
Parcel S1414438400
Parcel S1414438900
Parcel S1423120000
Parcel S1423110000
Parcel S1423111000
Parcel S1424233600
Parcel S1424131800
Parcel S1423211000
Parcel S1424240000

**Rezone**

The rezone request is for the entire development. Currently, all parcels are zoned RR (Ada County Zone Rural Residential). A master zoning map is included in this application to show the different requested zoning areas. This request is to annex all 761 acres into the incorporated city limits of Kuna, Idaho and to zone 660.78 acres from RR (Ada County Zone, Rural Residential) to R-6 (Medium Density Residential), and 13.00 acres from RR (Ada County Zone, Rural Residential) to R-12 (High Density Residential), and 18.89 acres from RR (Ada County Zone, Rural Residential) to R-20 (High Density Multi-Family Residential), and 12.21 acres from RR (Ada County Zone, Rural Residential) to C-1 (Neighborhood Commercial District), and 10.34 acres from RR (Ada County Zone, Rural Residential) to C-2 (Area Commercial District). Portions of the rezoned areas will be developed within a preliminary plat application which is included with this submittal, as well as future preliminary plats.

The annexation application will provide entitlements for a multi-phase residential and mixed-use development for the entire site. The C-1 neighborhood commercial area will have approximately 21,000 square feet of building that will include neighborhood office, restaurant and other uses that are intended to support the new residences. The overall buildout, including future preliminary plats, is estimated to have approximately 60,000 square feet of buildings. To further support the future residential homes, a coffee shop with gathering place will be added. Additionally, a small convenience store, a cell tower site, and a mini-storage facility are potential uses in the future C-1 and C-2 areas.

Letter Of Intent

**Development Agreement**

A draft development agreement has been submitted with this application in accordance with Title 5, Chapter 14 of the Kuna City Code. Upon approval of these applications, this development agreement will be updated with the conditions of development determined by Kuna City Council and ACHD and will include an updated concept plan that reflects those requirements.

Within the Development Agreement are proposed financing policies and procedures for a Community Infrastructure District (CID) that upon City Council approval will setup a structure to help pay for some of the significant public and/or offsite improvements. The property owners responsible to be a part of this CID are only the property owners within this application.

Attachments in the development agreement include the overall master plan, annexation request, (as shown on the color master plans and landscape plan), dimensional requirements and community infrastructure district financing guidelines.

**Planned Unit Development**

The planned unit development proposes a mix of uses including commercial, residential and recreational uses.

The design of the project is intended to provide a variety of housing product types and cluster the residential units to provide a variety of open space areas. The overall 761 acres will be divided into various development areas and phases as shown on the enclosed master plan. These different areas will include single-family residential, multi-family residential, commercial areas (ie neighborhood office, mini-self storage, potential cell tower site, etc), an elementary school site, and private and public common area open spaces. The amenities within the common area open spaces will include: parks, pathways, trails, and swimming pools for the Spring Rock residents. The open space and the landscaping will be in compliance with the provisions listed in Kuna City Code and will be subject to Design Review. The parks and pathways will include combinations of active and passive amenities. There are 2 large proposed city parks that will be dedicated to the City of Kuna: one for fishing and the other to be a large area for soccer, football and other sports. The pathways will be open to the public even though a portion of them will be owned and maintained by the private homeowners association.

Letter Of Intent

The overall development plan categorizes the areas as follows:

**Preliminary Plat #1**

| Area Description | Gross Acres | Lot/Unit Count |
|---|---|---|
| Commercial | 10 | |
| Residential | 150 | 791/893 |
| School | 10 | |
| Roads | 45 | |
| Open space | 85 | |
| Future Development Area | 177 | |
| **Totals** | **477** | |

**Overall Master Plan**

| Area Description | Est. Gross Acres | Lot/Unit Count |
|---|---|---|
| Commercial | 44 | |
| Residential (SF & MF) (includes roads) | 547 | 1,954/2,274 |
| School | 10 | |
| Open Space | 160 | |
| **Total** | **761** | |

For the first Preliminary Plat, the gross density is 1.9 Dwelling Units per Acre (893 units / 477 acres) and the net density (excluding roads) is 2.57. The gross density for the overall master plan site is 2.99 Dwelling Units per Acre (2,274/761) and the net density (excluding roads is 4.5 unknown at this time as the final layout is to be determined.

The proposed development is designed to meet all requirements outlined in Kuna City Code Title 5, Chapter 7 in regard to Planned Unit Developments. Amenities to be provided include: a large community park, a fishing pond, local and regional pathways and trails with access to BLM lands, and private swimming pools for Spring Rock community residents that will be constructed to accommodate all age groups and will meet ADA accessibility standards. The project will contain open space totaling a minimum of 20% of the gross project acreage. Private common area open spaces, amenities, and private driveways (for a portion of multi-family and commercial areas) will all be owned and maintained by the Homeowner's Association as outlined in the Development Agreement and Covenants, Conditions and Restrictions that will be recorded with this development and each phase as it progresses. Additionally, street lights will be dark sky compliant and actual light fixture specifications will be provided to the city for further review and approval.

Letter Of Intent

Access to the development will be provided at various points along Ten Mile Creek Road and Hubbard Road. The development will extend Five Mile Road from north to South to make a connection to the future extension of Five Mile Road to Kuna Road when installed by the Falcon Crest developer. We are working with ACHD and are proposing a new round about at the intersection of Ten Mile Creek Road and Five Mile Road to slow down speed traffic in the area. Additionally, there will be a residential collector road connecting Ten Mile Creek Road to Five Mile Road within the development to provide connectivity within the project and to filter traffic throughout, rather than guide all traffic out to the main roads. Many of the trips for food service, recreation, and basic commercial services will be within walking, biking, or a golf cart ride from the residences in the community.

A traffic impact study by CR Engineering, Inc. has been submitted to ACHD for review. Upon completion of their review ACHD will provide a final staff report to the city to be considered during the application review and hearing process.

**PUD – Code Change Request**

The developer is also requesting certain code changes to Kuna City Code Title 5, Chapter 7, Chapter 10 and Chapter 17 and Title 6, Chapter 2, Chapter 3, and Chapter 4. The code changes are outlined in Exhibit E of the Development Agreement. The changes requested, which are similar to and fewer than the code change requests for the Falcon Crest subdivision, refer to total required open space, structure separation, performance bonding, subdivision signage, landscaping, allowable uses, potable water source, and various subdivision requirements. These changes will accommodate the proposed mixed-use layout.

**Preliminary Plat**

The first preliminary plat proposed within this Planned Unit Development consists of 476.76 acres, includes the C-1, C-2, R-6 and R-12 zoning designations and will be divided into 825 lots. This will include 7 commercial lots (6 buildable and 1 future commercial lot), 791 residential lots (893 dwelling units), 23 common lots, 1 school lot, 1 future MF lot, and 2 public utility lots. There are also 3 common private accesses (not separate lots) that will be used for the commercial area, a portion of the northern 4-plex area and the multi-family area. The common area for the first preliminary plat will incorporate 85 acres, which is 17.8% of the platted area. The average lot size is 8,267 square feet. Though the overall density for the entire development will be 2.99 dwelling units per acre, to show a commitment to provide more active and developed open space up front within the development the density for the first preliminary plat is only 1.9 dwelling units per acre.

There will be common driveways or private streets to access the commercial areas and a small portion of the multifamily area. This first preliminary plat will occur in approximately 13

Letter Of Intent

phases and will begin with phase 1 taking access from Five Mile Road. This preliminary plat area is intended to provide future residents with a variety of housing types that will range from 4-plex rentals to traditional single-family homes to custom homes. We intend to own and/or manage the 4-plex rentals to ensure long-term quality and upkeep. Additionally, several of the single-family homesites are intended to have smaller yards due to the significant open space and clustering the homesites in the master plan design as the general public is moving towards healthy and social living.

**Design Review**

The landscaping proposed in this development includes elements that are outlined in Chapter 17 of the Kuna City Code. The elements that have been designed are the required numbers and species of trees and bushes within the 20' – 25' landscape buffers and internal open (common) space areas, around the pool areas, pathways, and includes irrigation and fencing. The proposed fencing ranges from a 4' solid and/or 6' wrought iron along the pathways and other common areas and 6' solid privacy fencing around at the back of the landscape buffers and residences.

As noted on the enclosed plans, the landscaping shall be installed in accordance with Chapter 17 of the Kuna City Code. On-site stormwater retention methods will be explored further at the time of final plat and construction review. Proposed structures will be evaluated as building permits are requested for the recorded lots. Maintenance will be provided by the homeowner's association for the development.

**Overall Development Schedule**

Development is planned to proceed immediately following project and engineering approvals. Development of the first preliminary plat will occur in phases over the course of 5-10 years depending on market conditions. We anticipate developing 1-2 phases per year in the first preliminary plat and continuing to develop various portions of the property over the course of 20+ years at a pace that is determined by the market.

The enclosed applications have been submitted in accordance with the requirements of the City of Kuna and will comply with all applicable local, state and federal requirements. The development has been designed in accordance with the City of Kuna's Code and Comprehensive Plan. Please contact me at 208-850-1070 if you have any questions regarding this application.

Sincerely,

Dave Yorgason

Letter Of Intent

received
7.18.19

CityofKuna
Planning& Zoning
Department
P.O. Box 13
Kuna, Idaho 83634
208.922.5274
Fax: 208.922.5989
Website: www.kunacity.id.gov

# Commission & Council Review Application

Note: Engineering fees shall be paid by the applicant if required.

*Please submit the appropriate checklist (s) with application

| For Office Use Only | |
|---|---|
| File Number (s) | 19-06-S, 19-10-AN, 19-05-ZC, 1901-PUD, 19-21-DR |
| Project name | Springrock Sub |
| Date Received | 7.18.19 |
| Date Accepted/ Complete | |
| Cross Reference Files | |
| Commission Hearing Date | |
| City Council Hearing Date | |

**Type of Review (check all that apply):**

- [X] Annexation
- [ ] Appeal
- [ ] Comprehensive Plan Amendment
- [X] Design Review
- [X] Development Agreement
- [ ] Final Planned Unit Development
- [ ] Final Plat
- [ ] Lot Line Adjustment
- [ ] Lot Split
- [X] Planned Unit Development
- [X] Preliminary Plat
- [X] Rezone
- [ ] Special Use
- [ ] Temporary Business
- [ ] Vacation
- [ ] Variance

## Contact/Applicant Information

Owners of Record: See Affidavits
Address:
City, State, Zip:
Phone Number:
E-Mail:
Fax #:

Applicant (Developer): Ten Mile Creek LLC
Address: 1211 N Happy Dr.
City, State, Zip: Boise ID 83706
Phone Number: 208-850-1070
E-Mail: dyorgason6@gmail.com
Fax #:

Engineer/Representative: RiveRidge Engineering
Address: 2447 S Vista
City, State, Zip: Boise ID 83705
Phone Number: 208-344-1180
E-Mail: dpowell@rvrdg.com
Fax #:

## Subject Property Information

Site Address: Ten Mile Creek Rd
Site Location (Cross Streets): Hubbard Rd & Five Mile Rd, Ten Mile Creek & Cole
Parcel Number (s): See Parcels List attached
Section, Township, Range: Township: 2N Range: 1E
Property size : 761 Acres
Current land use: Agriculture
Proposed land use: Residential, Commercial
Current zoning district: AG
Proposed zoning district: R-6, R-12, C-1, R-20, C-2

## Project Description

Project / subdivision name: Spring Rock Subdivision

General description of proposed project / request: Master Plan includes residential, multi-family, neighborhood commercial, City pond & parks, elementary school site.

Type of use proposed (check all that apply):

- [X] Residential
- [X] Commercial
- [ ] Office
- [ ] Industrial
- [ ] Other

Amenities provided with this development (if applicable): Pathways, active outdoor features, City pond & parks, HOA community pools.

## Residential Project Summary (if applicable)

Are there existing buildings? [X] Yes [X] No

Please describe the existing buildings: Existing residence

Any existing buildings to remain? [X] Yes [X] No Existing residence

Number of residential units: 893 Prelim-Plat Number of building lots: 791-Prelim Plat

Number of common and/or other lots: 34

Type of dwellings proposed:

- [X] Single-Family
- [ ] Townhouses
- [ ] Duplexes
- [X] Multi-Family
- [ ] Other

Minimum Square footage of structure (s): NA

Gross density (DU/acre-total property): 2.99 Net density (DU/acre-excluding roads): 4.5

Percentage of open space provided: 20% Acreage of open space: 160 (see narrative)

Type of open space provided (i.e. landscaping, public, common, etc.): Landscaping buffers along collector & arterial streets, public pathways & parks

## Non-Residential Project Summary (if applicable)

Number of building lots: 6 Other lots: 4

Gross floor area square footage: 21,000 Existing (if applicable):

Hours of operation (days & hours): Building height:

Total number of employees: Max. number of employees at one time:

Number and ages of students/children: Seating capacity:

Fencing type, size & location (proposed or existing to remain):

Proposed Parking:

a. Handicapped spaces: Dimensions:
b. Total Parking spaces: Dimensions:
c. Width of driveway aisle:

Proposed Lighting:

Proposed Landscaping (berms, buffers, entrances, parking areas, common areas, etc.):

Applicant's Signature: Date: 7/19/2019

See App's LOI for a Units breakdown.

# City of Kuna

## Planned Unit Development (PUD) Application

P.O. Box 13
Kuna, Id 83634
(208) 922-5274
Fax: (208) 922-5989
Website: www.kunacity.id.gov

File No. : 19-06-S, 19-10-AN, 19-05-ZC, 19-01-PUD, 19-23-DR

Cross Ref. :

File Name:

The City of Kuna has adopted a Planned Unit Development (PUD) process whose purpose is to make Kuna a pleasant and comfortable place to live and work. This PUD process is based on standards and guidelines found in PUD Ordinance No. 2008-15. This document can be found online (www.cityofkuna.com) or can be picked up in the City's Planning and Zoning department is located at 763 W Avalon, Kuna ID. Staff is glad to assist you with your application form.

**The Planned Unit Development application applies to the following land use actions:**

- ▶Multi- family dwellings (3 or more)
- ▶Commercial
- ▶Technical Uses
- ▶Office
- ▶Common Area
- ▶Subdivision
- ▶Variety of Building Types and Densities
- ▶Common Open Space Variations
- ▶Clustered Development and Recreational Facilities

### Application Submittal Requirements

| Applicant Use | | Staff Use |
|---|---|---|
| X | Date of pre-application meeting: 6/13/2019<br>*Note: Pre-Applications are valid for a period of three (3) months.* | ☐ |
| X | A complete Planned Unit Development Application form<br>*Note: It is the applicant's responsibility to use a current application.* | ☐ |
| X | Detailed letter of explanation or justification for the application, describing the project and design elements, and how the project complies with the Planned Unit Development. | ☐ |
| X | One (1) Vicinity Map (8 ½" x 11") at 1" = 300' scale (or similar), label the location of the property and adjacent streets. Show all relevant current conditions (no older than one (1) year) | ☐ |
| X | One 8 ½" x 11" colored aerial photo depicting proposed site, street names, and surrounding area within five-hundred feet (500'). The purpose of this photo is to view the site for existing features and adjacent sites. | ☐ |
| X | Copy of Deed; **and an original** notarized Affidavit of Legal Interest for all parties involved | ☐ |



Exhibit A7

[X] **Preliminary Development Plan**; which shall include drawings and supplementary written narrative materials to include: [ ]

- [X] Sketches or illustrations portraying the proposed character of the development; and sketches or illustrations of items subject to design review [ ]
- [X] Description of how the PUD relates to surrounding land uses [ ]
- [X] Vicinity map identifying neighborhood features within ½ mile of the location [ ]
- [X] The nature of other land use actions requested [ ]
- [X] If the PUD involves a preliminary plat, ***include the number of phases and a description of each one*** [ ]
- [X] A narrative identifying and addressing the following: [ ]
  - X Land use allocation by type ___
  - X Percentage ___
  - X Density ___
  - X Open Space ___
  - X Roads ___
  - NA Parking ___
  - X Housing ___
  - NA Commercial ___
  - X Services provided and public or private ownership and other information that may be pertinent and or material. ___

[X] **Preliminary Drawings**; at a minimum scale of 1" = 100' displaying the following: [ ]

- [X] The name of the proposed PUD [ ]
- [X] Date, north point and scale of drawing and identity of the person(s) preparing the drawing [ ]
- [X] A boundary survey legal description of the PUD [ ]
- [X] Names, addresses and telephone numbers of the controller and any of the following involved in the project: architect, landscape architect, designer, engineer, planner and nurseryman [ ]
- [X] Date of survey and name of surveyor [ ]
- Appropriate identification of the drawing(s) as a preliminary plan

[X] **Natural Features Map**; showing an inventory of existing site features including: [ ]

- [X] Ground elevation shown by contour lines at two foot (2') intervals or less – five foot (5') intervals may be accepted for slopes greater than ten percent (10%) [ ]
- [X] General soil types as documented by a soils engineer or engineering geologist [ ]
- [X] **Hydrology;** Analysis of natural drainage patterns and water resources including an analysis of streams, natural drainage swales, wetlands, floodplain areas or other areas subject to flooding, poorly drained areas, permanent high ground water areas and seasonally high ground water areas as they may be located on site or be affected by on-site activity: [ ]
  - X Proposed and existing storm water facilities ___
  - X Water conveyance facilities ___
  - X Water features, such as ponds, wetlands and permanent or intermittent watercourses ___
  - X Areas subject to flooding ___
- [X] Natural features, such as trees, vegetation and ground cover, historic sites, major rock outcroppings, and similar type amenities. [ ]
- [X] Sanitary sewer, storm drainage and water supply facilities. ***If such facilities are not on or abutting the site, indicate the direction and distance to the nearest such facilities.*** [ ]
- [X] Width, location and purpose of all existing easements of record on/and abutting the site. [ ]
- [X] A map describing land areas contiguous within three hundred feet (300') and adjacent to the proposed PUD, including zoning classifications, land uses, densities, circulation systems, public facilities, unique natural features, and approximate locations of nearby structures. [ ]

[X] **Site Plan**; which shall include: [ ]

- [X] North arrow [ ]
- [X] To scale drawing (minimum 1" = 100') [ ]
- [X] All drawings need to be signed and stamped by a licensed engineer; and dated with contact information. ***With the exception of concept drawings and residential structures that do not require a licensed engineer's review.*** [ ]
- [X] Name of project [ ]
- [X] The locations of all existing and proposed dwelling units and/or individual lots [ ]
- [X] Location of major streets [ ]
- [X] The proposed yard requirements or locations of single family homes for individual lots [ ]
- [X] The existing and proposed traffic circulation system serving the PUD including: [ ]
  - NA Off-street parking and maneuvering ____
  - X Points of access to existing public rights-of-way ____
  - X A plan notation or description narrative outlining ownership of streets ____
  - NA Parking areas ____
- [X] The existing and proposed pedestrian and bicycle circulation system [ ]
- [X] Conceptual plans for all services including their location and whether the services will be publicly or privately owned and maintained including location of utility connections. ***Note: Any services intended to be privately owned (sewer, water, street, etc.) requires the City Engineer's prior review and approval*** [ ]
- [X] Proposed location and treatment of any public or private common areas or structures including open spaces, park or recreation areas, and school sites [ ]
- [X] The general landscape treatment proposed along the site's periphery and in accordance with provisions of the City's landscape ordinance [ ]
- [X] The approximate amount, location and type of buffering and/or landscaping [ ]
- [ ] Proposed architectural styles [ ]
- [X] The subdivider may be required to submit proposed restrictive covenants, in outline form [ ]

[X] Environmental assessment, traffic study, grading plan or other studies as may be appropriate for the proposed site as determined by the Commission or Director. [ ]

[X] If the applicant is requesting preliminary subdivision plat approval concurrent with the preliminary PUD approval, a **Preliminary Subdivision Plat** shall be submitted along with the PUD conceptual site plan. [ ]

[X] Development Schedule: A development schedule indicating the approximate date on which construction of all phases of the entire project can be expected to begin. If the schedule is approved by the Commission it shall become a part of the final development plan. [ ]

[X] Additional Information as may be required by City staff or deciding bodies. [ ]

# Planned Unit Development Application

Applicant: Ten Mile Creek LLC Phone: 208-850-1070

[ ] Owner [X] Purchaser [ ] Lessee Fax/Email: dyorgason6@gmail.com

Applicant's Address: 1211 N Happy Dr.

Boise ID Zip: 83706

Owner: Whitmore Family,Gilmore Living Trust Phone:
Davis Family Revocable Trust

Owner's Address: Email:

Zip:

Represented By: *(if different from above)* Applicant Phone:

Address: Email:

Zip:

Address of Property: Ten Mile Creek Rd. (Five Mile east to Cole Rd.)
See list of parcel numbers

Distance from Major Cross Street: adjacent to Five Mile & Hubbard RD Street Name(s): Five Mile & Hubbard Rd's

*Please Check the box that reflects the amenities used :*

X **Active recreational amenities such as playgrounds; basketball or tennis courts; baseball, soccer or rugby fields; swimming pools; natatoriums; walking/ running paths; clubhouse; school sites; etc.**

X **Other amenities appropriate to the size and uses intended in the PUD**

X **Pedestrian and bicycle pathway systems within and through the project (exclusive of required sidewalks adjacent to public right-of-way) and designed to connect into existing or planned pedestrian or bicycle routes outside the PUD.**

This Planned Unit Development application is a request to construct, add or change the following: *(Briefly explain the nature of the request.)*
This is a mixed use development that incorporates various residential lot sizes,neighborhood commercial,multi-family and City parks, school site

1. Dimension of Property: 761 acres(approx 477 Acres in Prelim-Plat
2. Current Land Use(s): Agriculture
3. What are the land uses of the adjoining properties?
   North: BLM,RP, RR
   South: Golf Course,R-6, RR
   East: Agriculture
   West: Golf Course, R-6, RR
4. Is the project intended to be phased, if so what is the phasing time period? Yes
   Please explain: Overall 20-25 years
   First Preliminary Plat, Phase 1-12 2020-2024
5. Are there any irrigation ditches/canals on or adjacent to the property? Yes.New York Canal
   If yes, do you know the name of the irrigation or drainage provider? Boise Project Board of Controls
6. Fencing: *(Please provide information about new fencing material as well as any existing fencing material)*
   Mixture of wrought iron and solid privacy
   Type: Vinyl,Wood
   Size: 4-6 feet
   Location: Wrought iron around Golf Course, solid privacy for residences & streets
   *(Please note that the City has height limitations for fencing material and requires a fence permit to be obtained prior to installation)*
7. Storm Drainage:
   Proposed Method of On-site Drainage Retention/Detention:
   On-site drainage will be in ponds and seepage beds
8. Percentage of Site Devoted to Building Coverage: Overall Master Plan extends beyond current
   % of Site Devoted to Landscaping: Greater than 10% Square Footage: tbd Plat request
   % of Site that is hard Surfaces
   *(paving, driveways, walkways, etc.)*: tbd Square Footage: tbd
   % of Site Devoted to Other Uses: tbd
   Describe: 11.4 acre public fishing pond, 5.3 acres C-1, Future City parks
   % of landscaping within the parking lot (landscaped islands, etc.): *(Please see Kuna City Ordinance 2006-100)* tbd
9. For details, please provide dimensions of landscaped areas within public right-of-way:
   NA
10. Are there any existing trees of 4" or greater in caliper on the property? *(Please provide the information on the site plans.)*
    If yes, what type, size and the general location? *(The City's goal is to preserve existing trees with greater than a four inch (4") caliper whenever possible):*
    None
11. Pedestrian Amenities: *(bike racks, receptacles, drinking fountains, benches, etc.)*
    Walking & biking pathways throughout, benches/lookouts and neighbor connectivity to amenities and public (BLM) property adjacent
12. Parking requirements: NA
    Total Number of Parking Spaces: NA Width and Length of Spaces:
    Total Number of Compact Spaces (8'x17'):
13. Is any portion of the property subject to flooding conditions? Yes X No
    *(If yes, you must submit a Floodplain Development Permit Application with this Design Review application.)*

**IF THE PLANNING DIRECTOR OR DESIGNEE, THE COMMISSION AND/OR THE CITY COUNCIL DETERMINE THAT ADDITIONAL AND/OR REVISED INFORMATION IS NEEDED, AND/OR IF OTHER UNFORESEEN CIRCUMSTANCES ARISE, ANY DATES OUTLINED FOR PROCESSING MAY BE RESCHEDULED BY THE CITY. APPLICANT/REPRESENTATIVE MUST ATTEND ALL SCHEDULED MEETINGS.**

**The Ada County Highway District may also conduct public meetings regarding this application. If you have questions about the meeting date or the traffic that this development may generate or the impact of that traffic on streets in the area, please contact the Ada County Highway District at 387-6170. In order to expedite your request, please have ready the file number indicated in this notice.**

Signature of Applicant _____ Date_____
City staff comments:

_____

_____

Signature of receipt by City Staff_____ Date_____

**FOR ADDITIONAL INFORMATION:**
(Please list page number and item in reference)

See narrative

**FOR ADDITIONAL INFORMATION:**
(Please list page number and item in reference)

Exhibit A

# Spring Rock Subdivision
## Master Plan

HUBBARD ROAD

FIVE MILE ROAD

TENMILE CREEK ROAD

AREA "A"

| | |
|---|---|
| 4-PLEX LOTS | 34 |
| 75' LOTS | 100 |
| 60' - 65' LOTS | 160 |
| 50' - 55' LOTS | 134 |
| TOTAL COUNT | 428 |
| TOTAL 4-PLEX UNITS | 136 |

TOTAL ACRES = 145
DENSITY = 2.95 LOTS/ACRE
DENSITY = 3.6 UNITS/ACRE

AREA "B"

| | |
|---|---|
| 75' - 100' LOTS | 145 |
| 60' - 70' LOTS | 138 |
| 50' - 55' LOTS | 80 |
| TOTAL COUNT | 363 |

TOTAL ACRES = 98.9
DENSITY = 3.67 LOTS/ACRE

KEY

- = 70'+ LOTS
- = 60'-65' LOTS
- = 50'-55' LOTS
- = 4-PLEX LOTS
- = COMMERCIAL LOTS
- = SCHOOL ZONE
- = OPEN SPACE / PARKS
- = FUTURE DEVELOPMENT

AREA "A"

FUTURE COMMERCIAL

PARK
37.6 ACRES +/-

SCHOOL SITE
12.4 ACRES +/-

FUTURE DEVELOPMENT R-20 ZONE

AREA "C"
FUTURE DEVELOPMENT

FUTURE DEVELOPMENT R-12 ZONE

FUTURE DEVELOPMENT R-6 ZONE

AREA "C"
FUTURE DEVELOPMENT

FALCON CREST GOLF COURSE

AREA "B"

FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT

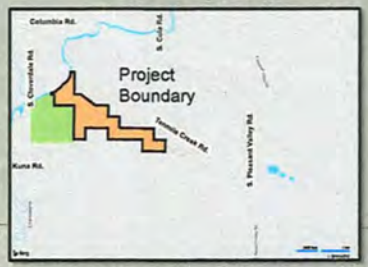
FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT C-2 ZONE

FUTURE DEVELOPMENT R-6 ZONE

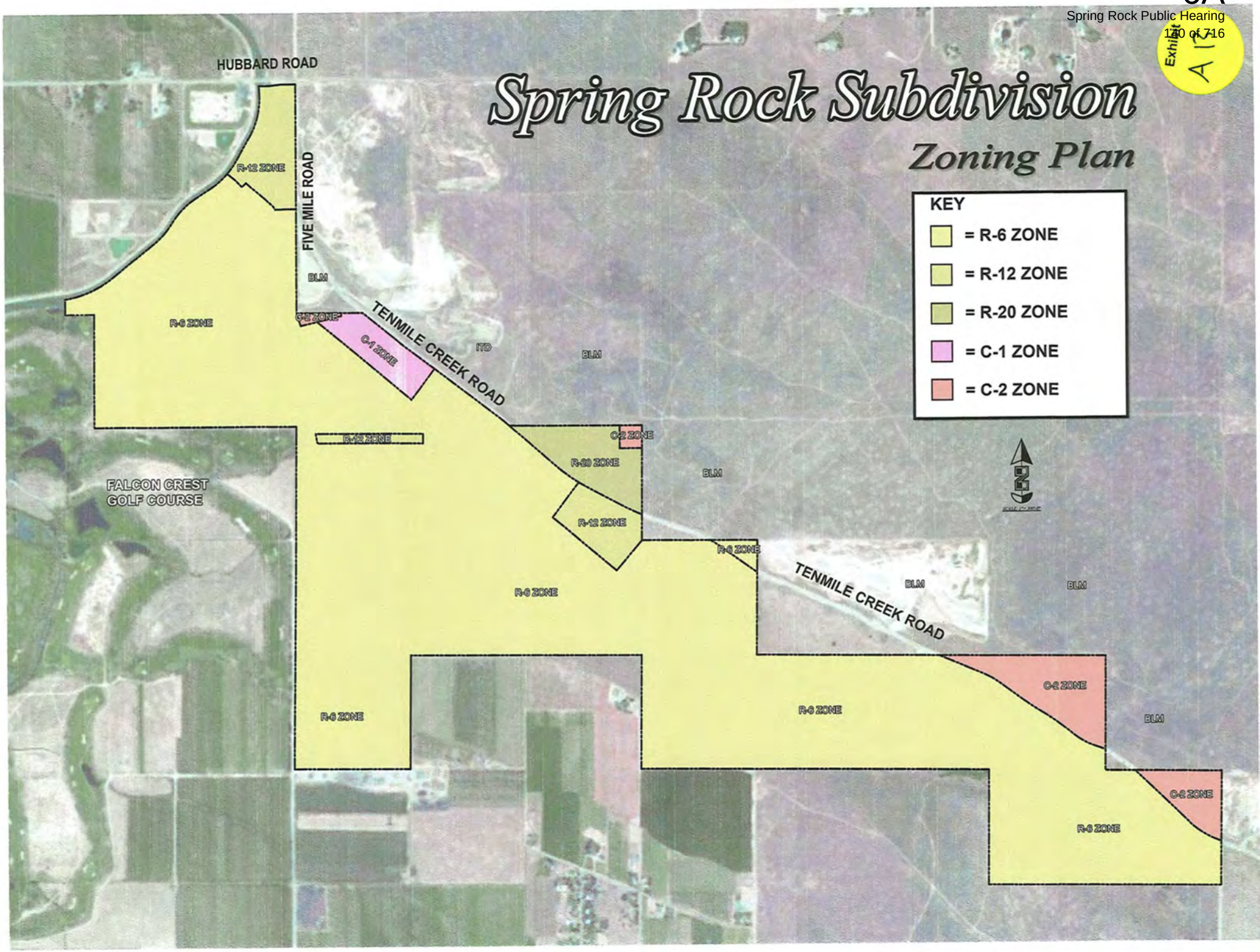
FUTURE DEVELOPMENT C-2 ZONE

FUTURE DEVELOPMENT R-6 ZONE




Site Location Map

Exhibit A 17


Spring Rock Subdivision
Zoning Plan
KEY
= R-6 ZONE
= R-12 ZONE
= R-20 ZONE
= C-1 ZONE
= C-2 ZONE
HUBBARD ROAD
FIVE MILE ROAD
TENMILE CREEK ROAD
TENMILE CREEK ROAD
FALCON CREST GOLF COURSE
R-12 ZONE
R-6 ZONE
C-2 ZONE
C-1 ZONE
R-20 ZONE
BLM
ITD

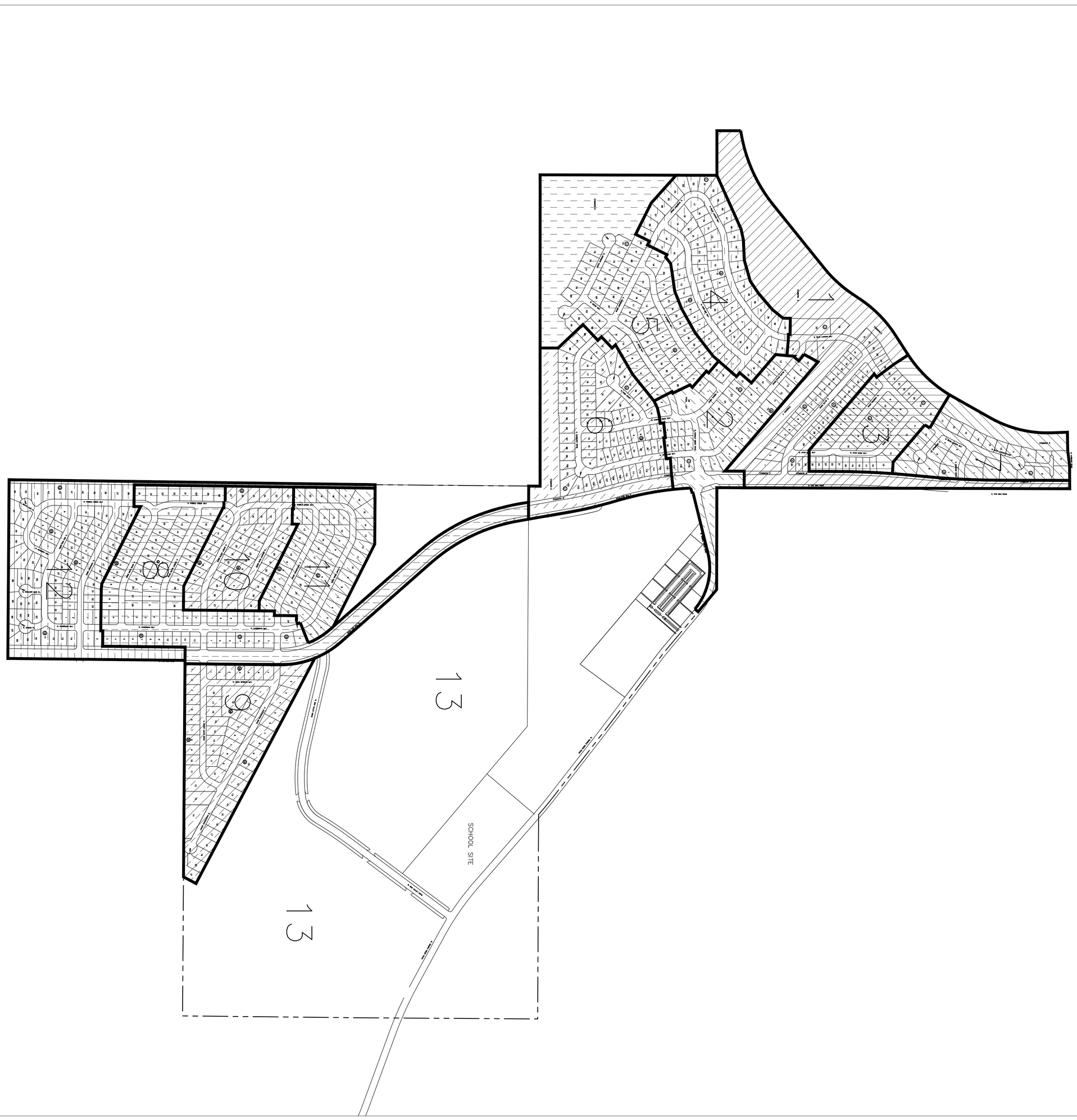
## PUD / DR Parcel List

| Parcel Number | Acreage | Owner |
|---|---|---|
| #1. Parcel S1415110103 | 18.05 Acres | Whitmore |
| #2. Parcel S1415427805 | 30.1950 Acres | Whitmore |
| #3. Parcel S1415141900 | 94.30 Acres | Whitmore |
| #4. Parcel S1414336000 | 135.43 Acres (partial) | Whitmore |
| #5. Parcel S1423211000 | 120 Acres | Gilmore |

## Annexation, Zoning Parcel List

| Parcel Number | Acreage | Owner |
|---|---|---|
| #1. Parcel S1415110103 | 18.05 Acres | Whitmore |
| #2. Parcel S1415427805 | 30.1950 Acres | Whitmore |
| #3. Parcel S1415141900 | 94.30 Acres | Whitmore |
| #4. Parcel S1414336000 | 135.43 Acres | Whitmore |
| #5. Parcel S1414315000 | 10.68 Acres | Whitmore |
| #6. Parcel S1414438400 | 19.34 Acres | Whitmore |
| #7. Parcel S1414438900 | 1.0 Acre | Whitmore |
| #8. Parcel S1423120000 | 40 Acres | Whitmore |
| #9. Parcel S1423110000 | 77.60 Acres | Whitmore |
| #10. Parcel S1423111000 | 2.4 Acres | Whitmore |
| #11. Parcel S1424233600 | 40 Acres | Whitmore |
| #12. Parcel S1424131800 | 120 Acres | Whitmore |
| #13. Parcel S1423211000 | 120 Acres | Gilmore |
| #14. Parcel S1424240000 | 40 Acres | Davis |

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Phasing Plan

**PROJECT PHASING PLAN**

# SPRING ROCK
## PRELIMINARY PLAT

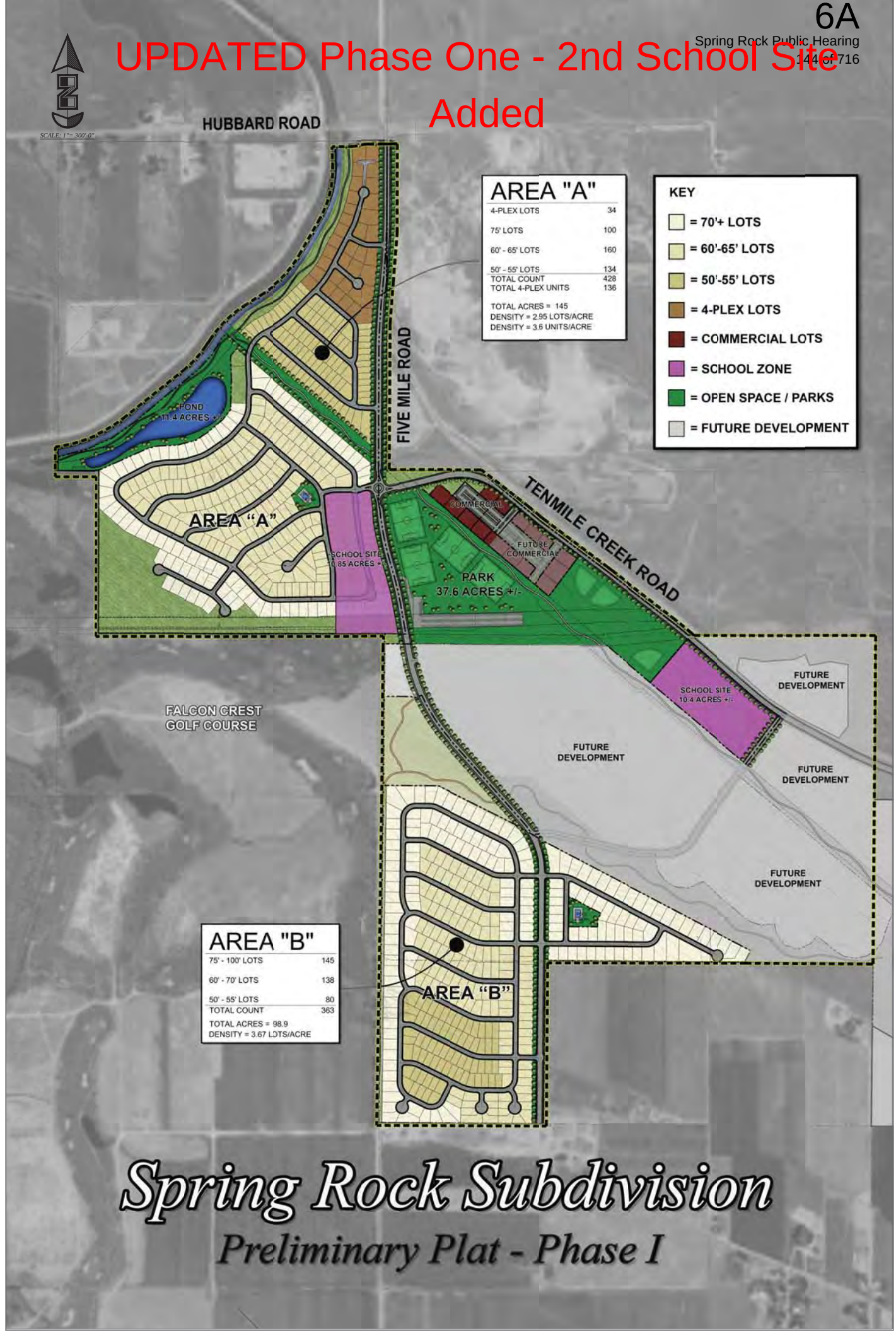
PROFESSIONAL REGISTERED ENGINEER
STATE OF IDAHO
G. POWELL
5756

| REVISIONS | | | E-FILE NAME |
|---|---|---|---|
| NO. | ITEM | DATE | |
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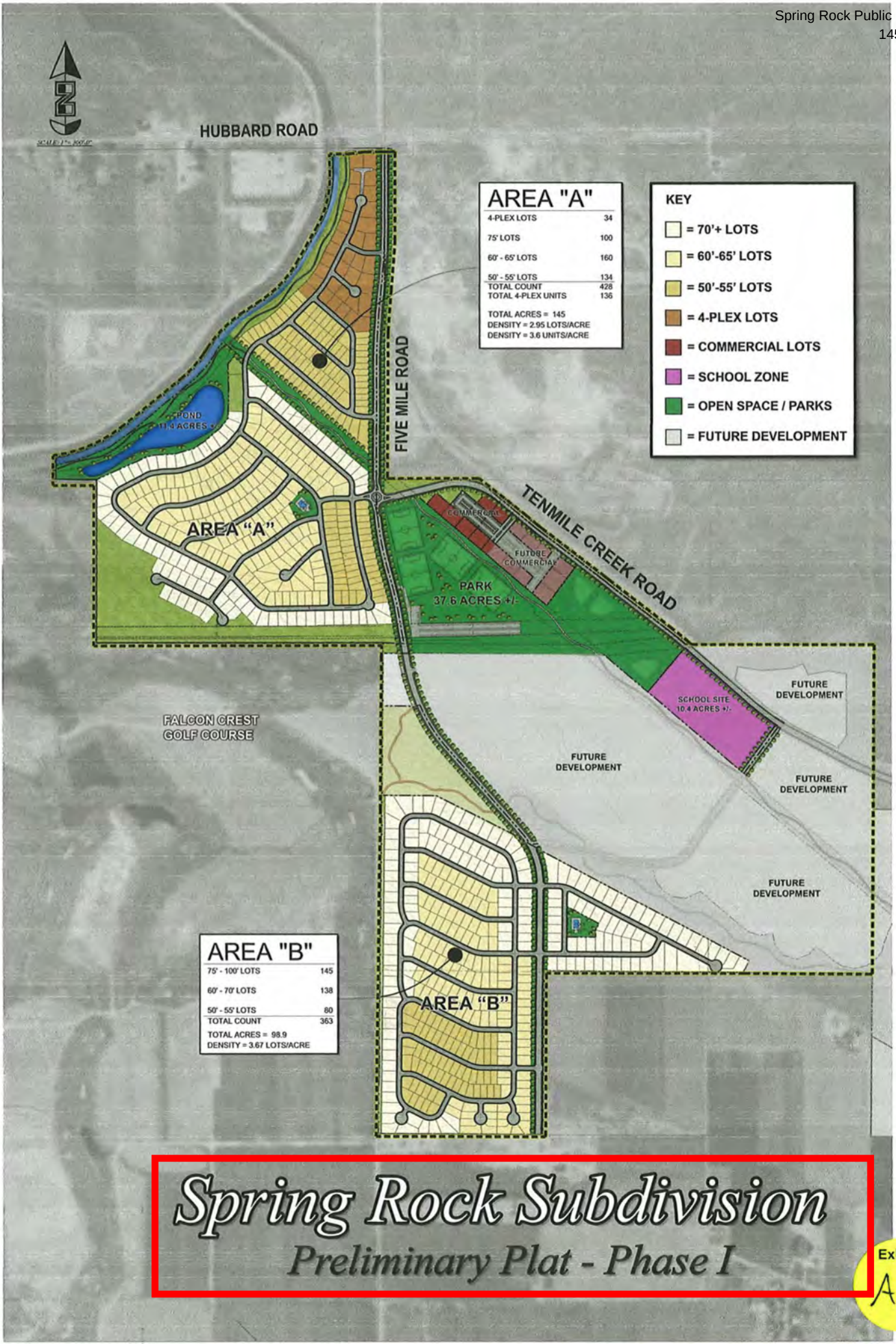
SHEET 1 OF 1
DATE: MAY.2019
PROJECT: 18042

# UPDATED Phase One - 2nd School Site Added




# Spring Rock Subdivision

## Preliminary Plat - Phase I




# Spring Rock Subdivision

## Preliminary Plat - Phase I

Exhibit A11

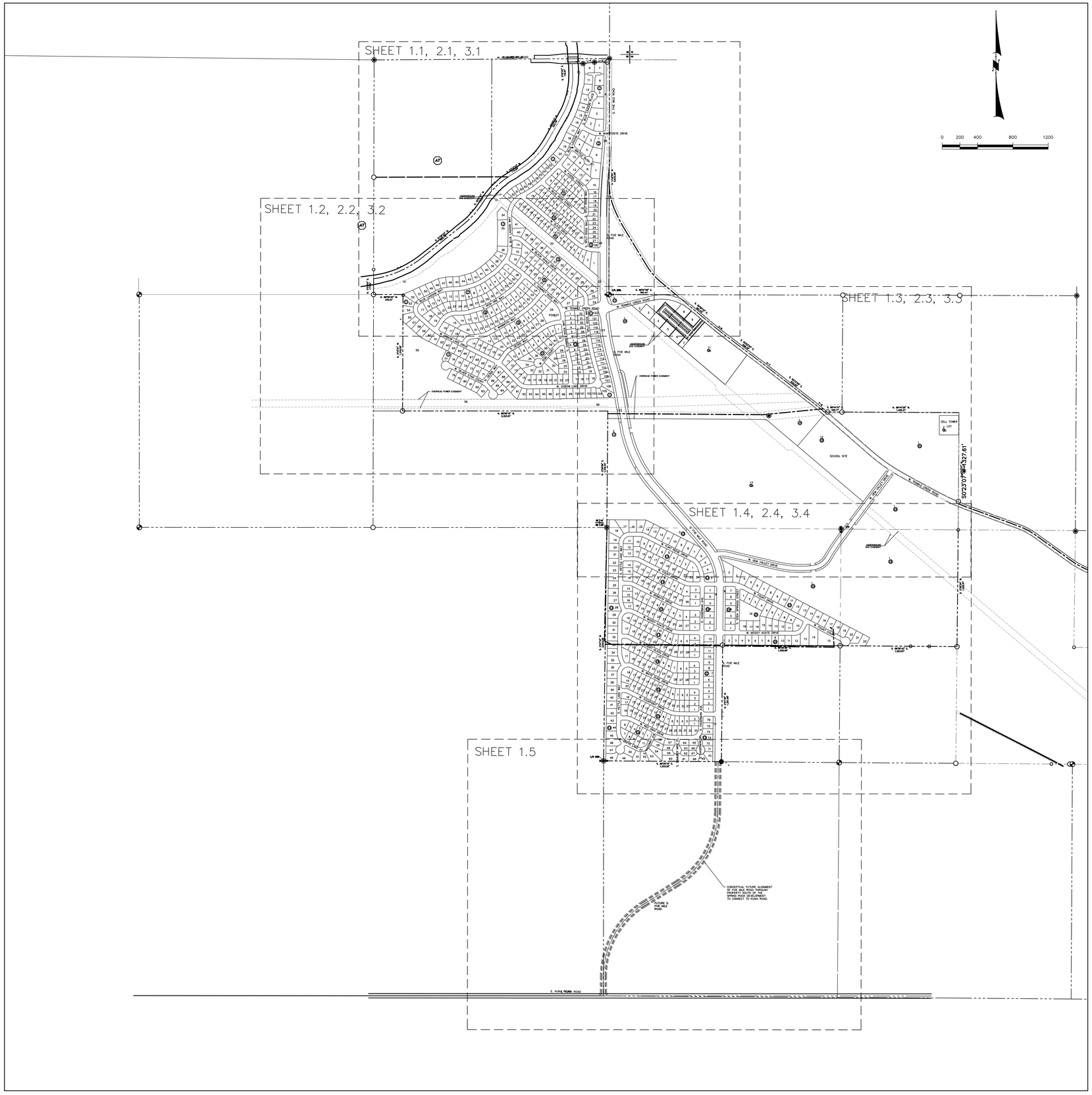
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**DRAWING INDEX**

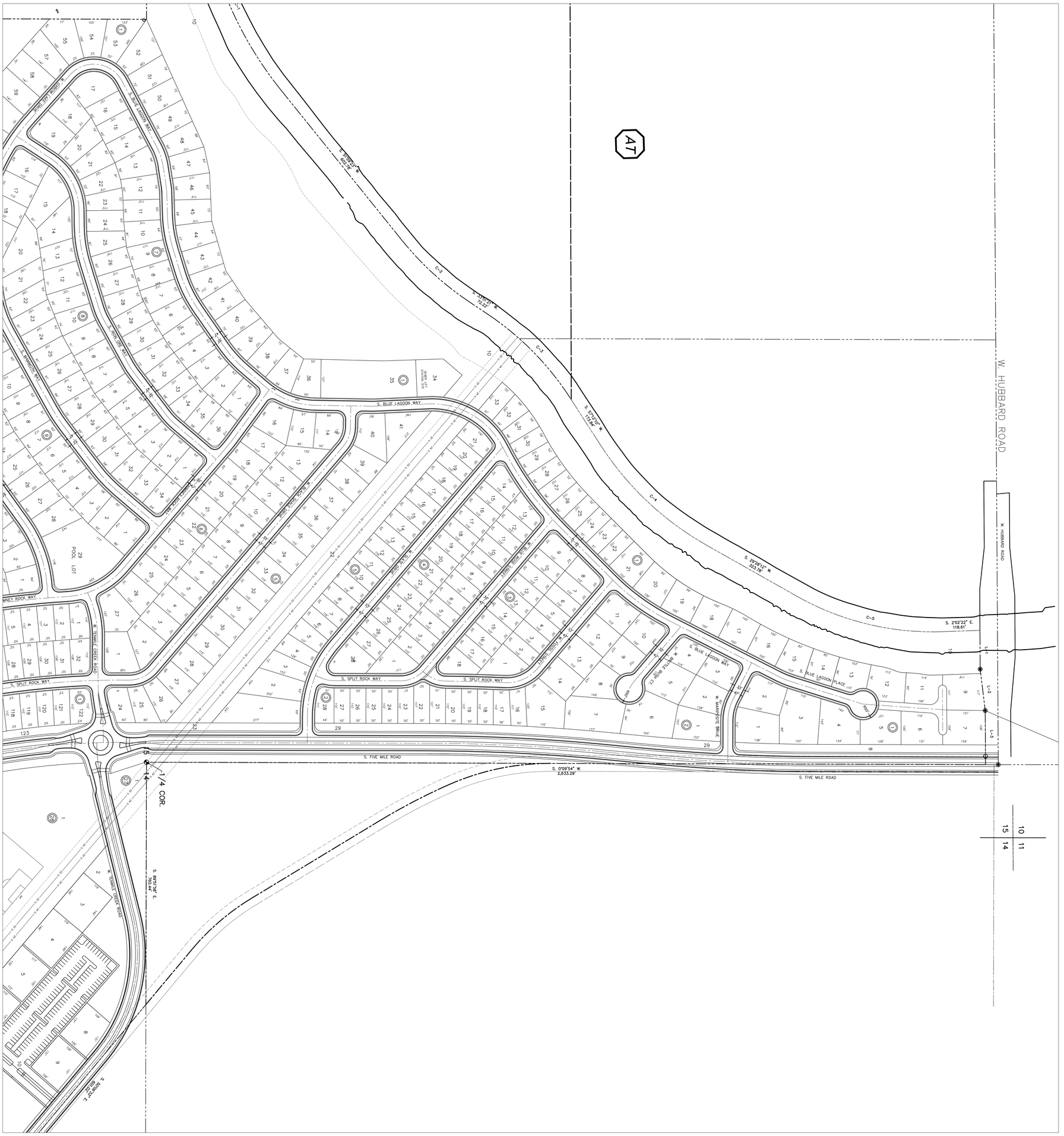


| SHEET | DESCRIPTION |
|---|---|
| 1.0 | COVER SHEET |
| 1.1 | AREA 1 SITE PLAN |
| 1.2 | AREA 2 SITE PLAN |
| 1.3 | AREA 3 SITE PLAN |
| 1.4 | AREA 4 SITE PLAN |
| 1.5 | AREA 4 SITE PLAN |
| 1.6 | TYPICAL ROADWAY DETAILS |
| 2.1 | AREA 1 GRADING AND DRAINAGE PLAN |
| 2.2 | AREA 2 GRADING AND DRAINAGE PLAN |
| 2.3 | AREA 3 GRADING AND DRAINAGE PLAN |
| 2.4 | AREA 4 GRADING AND DRAINAGE PLAN |
| 3.1 | AREA 1 UTILITY PLAN |
| 3.2 | AREA 2 UTILITY PLAN |
| 3.3 | AREA 3 UTILITY PLAN |
| 3.4 | AREA 4 UTILITY PLAN |




SHEET 1.1, 2.1, 3.1
SHEET 1.2, 2.2, 3.2
SHEET 1.3, 2.3, 3.3
SHEET 1.4, 2.4, 3.4
SHEET 1.5
N
0 200 400 800 1200
E. FIVE MILE ROAD
N. HAMPSHIRE DRIVE
W. SCHOOL CREEK ROAD
W. CREEK LAKE DRIVE
N. SUN VALLEY DRIVE
N. MOUNT ALLEN DRIVE
N. MOUNT HARRIS DRIVE
N. MOUNT HOOD DRIVE
N. MOUNT JEFFERSON DRIVE
N. MOUNT MITCHELL DRIVE
N. MOUNT RAINIER DRIVE
N. MOUNT SHASTA DRIVE
N. MOUNT WHITNEY DRIVE
N. MOUNT WILLIAMS DRIVE
N. MOUNT YALE DRIVE
N. MOUNT ZION DRIVE
N. MOUNT ZION PLACE
N. MOUNT ZION WAY
N. MOUNT ZION COURT
N. MOUNT ZION CIRCLE
N. MOUNT ZION LAN

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| | | | |
|---|---|---|---|
| SHEET 1.1 OF 15 | DATE: MAY 2019 | **SITE LAYOUT PLAN** | **SPRING ROCK** |
| | PROJECT: 19042 | SHEET 1 OF 6 | **PRELIMINARY PLAT** |

| REVISIONS | | | E-FILE NAME |
|---|---|---|---|
| NO. | ITEM | DATE | |
| | | | DESIGNED |
| | | | DRAWN |
| | | | CHECKED |
| | | | APPROVED |

**RiveRidge Engineering Company**
**2447 S. Vista Ave. Boise, Idaho 83705**
**Ph. (208) 344-1180, Fax (208) 344-1182**

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**SITE LAYOUT PLAN**

SHEET 2 OF 6

# SPRING ROCK
## PRELIMINARY PLAT

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SHEET 1.2 OF 15
DATE: MAY/2018
PROJECT: 18042

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15 | 14
22 | 23
N. 0°29'59" E.
1,319.34'
S. KETTLE LAKE WAY
S. PINE BLUFF ROAD
W. FOREST RIDGE RIDGE
W. FOREST RIDGE DRIVE
W. ROCK CREEK CORNER
S. PINE VALLEY ROAD
W. TIMBER CREST ROAD
W. TIMBER CREST WAY
W. TIMBER CREST ROAD
W. TIMBER CREST ROAD
W. TIMBER CREST ROAD

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| | |
|---|---|
| SHEET 1.4 OF 15 | |
| DATE: | MAY-2019 |
| PROJECT: | 18042 |

**SITE LAYOUT PLAN**

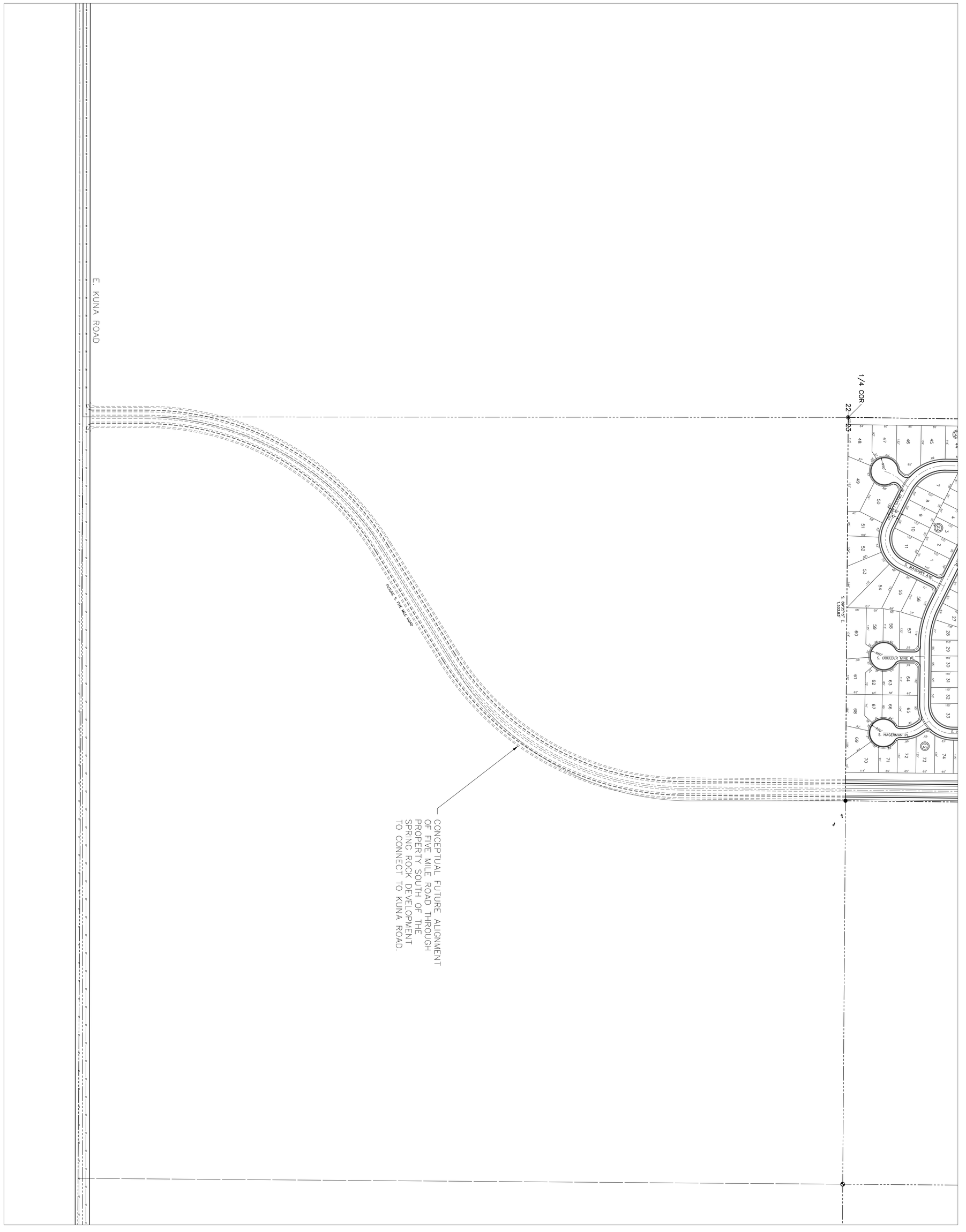
SHEET 4 OF 6

# SPRING ROCK
## PRELIMINARY PLAT

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| | | | DESIGNED |
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| | | | CHECKED |
| | | | APPROVED |

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**SITE LAYOUT PLAN**

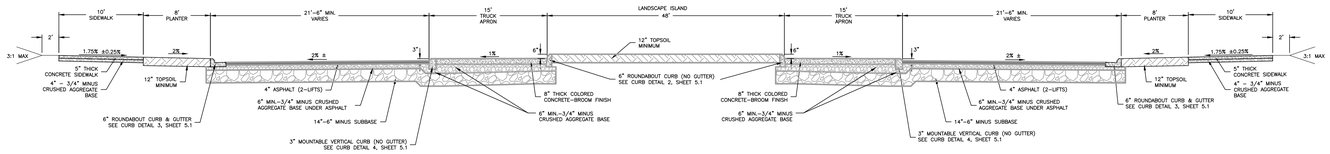
SHEET 5 OF 6

# SPRING ROCK
## PRELIMINARY PLAT

| REVISIONS | | | E-FILE NAME |
|---|---|---|---|
| NO. | ITEM | DATE | |
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| | | | DRAWN |
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| | | | APPROVED |

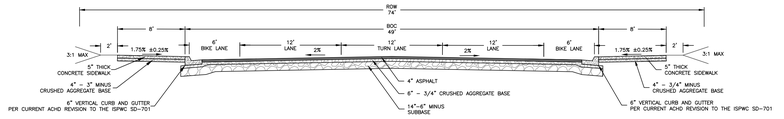
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PROJECT: 18042
SHEET 1.5 OF 15



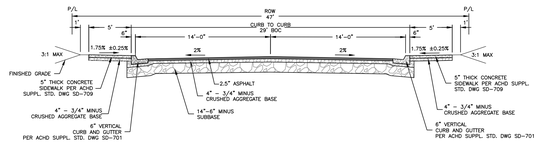

**TYPICAL ROUNDABOUT SECTION**
**N. FIVE MILE ROAD AND E. TEN MILE ROAD**

SCALE: NONE




**TRAILWOOD WAY**
**S. FIVE MILE ROAD, E. TENMILE ROAD,**
**W. GEM VALLEY DRIVEW**

SCALE: NONE




**ALL INTERNAL STREETS**

SCALE: NONE

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| | | | APPROVED |

PROFESSIONAL ENGINEER REGISTERED 5756 5-15-19 STATE OF IDAHO DAVID G. POWELL

# SPRING ROCK
# PRELIMINARY PLAT

## ROADWAY TYPICAL SECTIONS

SHEET 5 OF 6

DATE: MAY.2019
PROJECT: 18042
**SHEET 1.6 OF 15**

Annexation Description for
**Spring Rock Subdivision**
*May 29, 2020*

A parcel of land situated within the South 1/2 of Section 14, the East 1/2 of Section 15, the North 1/2 of Section 23, and Section 24, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

**BEGINNING** at an aluminum cap monument, marking the corner common to said Sections 10, 11, 14, and 15;

thence South 00°09'54" West, 2,673.29 feet to a brass cap monument, marking the 1/4 corner common to said Sections 14 and 15;

thence along the east-west centerline of said Section 14, South 89°51'58" East, 767.20 feet to the centerline of W. Ten Mile Creek Road;

thence along said centerline the following seven (7) courses and distances:

South 50°06'33" East, 588.66 feet;

48.13 feet along the arc of curve to the left having a radius of 1,000.00 feet, a central angle of 02°45'27" and a long chord which bears South 51°29'16" East, 48.12 feet;

South 52°52'00" East, 628.18 feet;

60.41 feet along the arc of curve to the right having a radius of 5,000.00 feet, a central angle of 00°41'32" and a long chord which bears South 52°31'14" East, 60.41 feet;

South 52°10'28" East, 559.69 feet;

173.73 feet along the arc of curve to the right having a radius of 3,000.00 feet, a central angle of 03°19'05" and a long chord which bears South 50°30'55" East, 173.71 feet

South 48°51'23" East, 78.09 feet to the North boundary line of the Southeast 1/4 of the Southwest 1/4 of said Section 14;

thence along said North boundary line, South 89°44'32" East, 199.62 feet to 5/8" iron pin, PLS 5461, marking the Center-South 1/16 corner of said Section 14;

thence South 89°44'29" East, 1,325.12 feet to the Southeast 1/16 corner of said Section 14;



thence South 00°23'07" West, 1,327.57 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23;

thence South 89°37'22" East, 1,326.43 feet to an aluminum cap monument marking the section corner common to said Sections 13, 14, 23, and 24;

thence South 00°43'11" West, 1,322.80 feet to a 1/2" iron pin, marking the North 1/16 corner common to said Sections 23 and 24;

thence South 89°28'05" East, 2,674.58 feet to the Center-North 1/16 corner of said Section 24;

thence South 89°24'35" East, 1,342.21 feet to a 5/8" iron pin, PLS 4431, marking the Northeast 1/16 corner of said Section 24;

thence South 00°31'46" West, 1,327.37 feet to the Center-East 1/16 corner of said Section 24;

thence South 89°23'00" East, 1,341.67 feet to an aluminum cap monument, marking the 1/4 corner common to Section 19, Township 2 North, Range 2 East, B.M., and said Section 24;

thence South 00°43'12" West, 1,323.20 feet to the South 1/16 corner common to said Sections 24 and 19;

thence North 89°27'22" West, 2,678.41 feet to the Center-South 1/16 corner of said Section 24;

thence North 00°30'23" East, 1,326.60 feet to the Center 1/4 corner of said Section 24;

thence North 89°23'00" West, 2,679.51 feet to a brass cap monument, marking the 1/4 corner common to said Sections 23 and 24;

thence North 89°36'00" West, 1,320.59 feet to a 5/8" iron pin, marking the Center-East 1/16 corner of Section 23;

thence North 00°35'36" East, 1,322.52 feet to a 5/8" iron pin, marking the North-East 1/16 corner of Section 23;

thence North 89°36'42" West, 1,323.87 feet to a 5/8" iron pin, PLS 1923, marking the Center-North 1/16 corner of said Section 23;



thence North 89°36'26" West, 1,329.66 feet to a 5/8" iron pin, marking the North-West 1/16 corner of said Section 23;

thence South 00°37'35" West, 1,321.98 feet to the Center-West 1/16 corner of said Section 23;

thence North 89°35'15" West, 1,333.83 feet to an aluminum cap monument, marking the 1/4 corner common to Section 22, Township 2 North, Range 1 East, B.M., and said Section 23;

thence North 00°47'19" East, 2,643.08 feet to an aluminum cap monument, marking the corner common to said Sections 14, 15, 22, and 23;

thence North 00°29'59" East, 1,319.34 feet to a 1/2" iron pin, PLS 2471, marking the South 1/16 corner common to said Sections 14 and 15;

thence on the South boundary line of the North 1/2 of the Southeast 1/4 of said Section 15, North 89°59'19" West, 2,323.61 feet to a 5/8" iron pin on the East boundary line of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Southeast 1/4 of said Section 15;

thence on said East boundary line, North 00°10'31" East, 1,319.06 feet to the East-West centerline of said Section 15;

thence along said East-West centerline, North 89°59'40" West, 333.01 feet to a 5/8" iron pin, PLS 4998, marking the Center 1/4 of said Section 15;

thence on the North-South centerline of said Section 15, North 00°07'54" East, 177.81 feet to the centerline of the New York Canal;

thence along said centerline the following ten (10) courses and distances:

613.35 feet along the arc of a curve to the left having a radius of 1,165.00 feet, a central angle of 30°09'54" and a long chord which bears North 66°14'17" East, 606.29 feet;

North 51°09'23" East, 602.78 feet;

288.36 feet along the arc of curve to the left having a radius of 955.00 feet, a central angle of 17°18'02" and a long chord which bears North 42°30'22" East, 287.27 feet;

North 33°51'21" East, 72.22 feet;

PROFESSIONAL LAND SURVEYOR REGISTERED 11779 STATE OF IDAHO DOUG M. MCCAMMON 5/21/2020

370.81 feet along the arc of curve to the right having a radius of 910.00 feet, a central angle of 23°20'49" and a long chord which bears North 45°31'45" East, 368.25 feet;

North 57°12'10" East, 173.84 feet;

464.67 feet along the arc of curve to the left having a radius of 960.00 feet, a central angle of 27°43'58" and a long chord which bears North 43°20'11" East, 460.15 feet;

North 29°28'12" East, 323.78 feet;

475.70 feet along the arc of curve to the left having a radius of 865.00 feet, a central angle of 31°30'34" and a long chord which bears North 13°42'55" East, 469.73 feet;

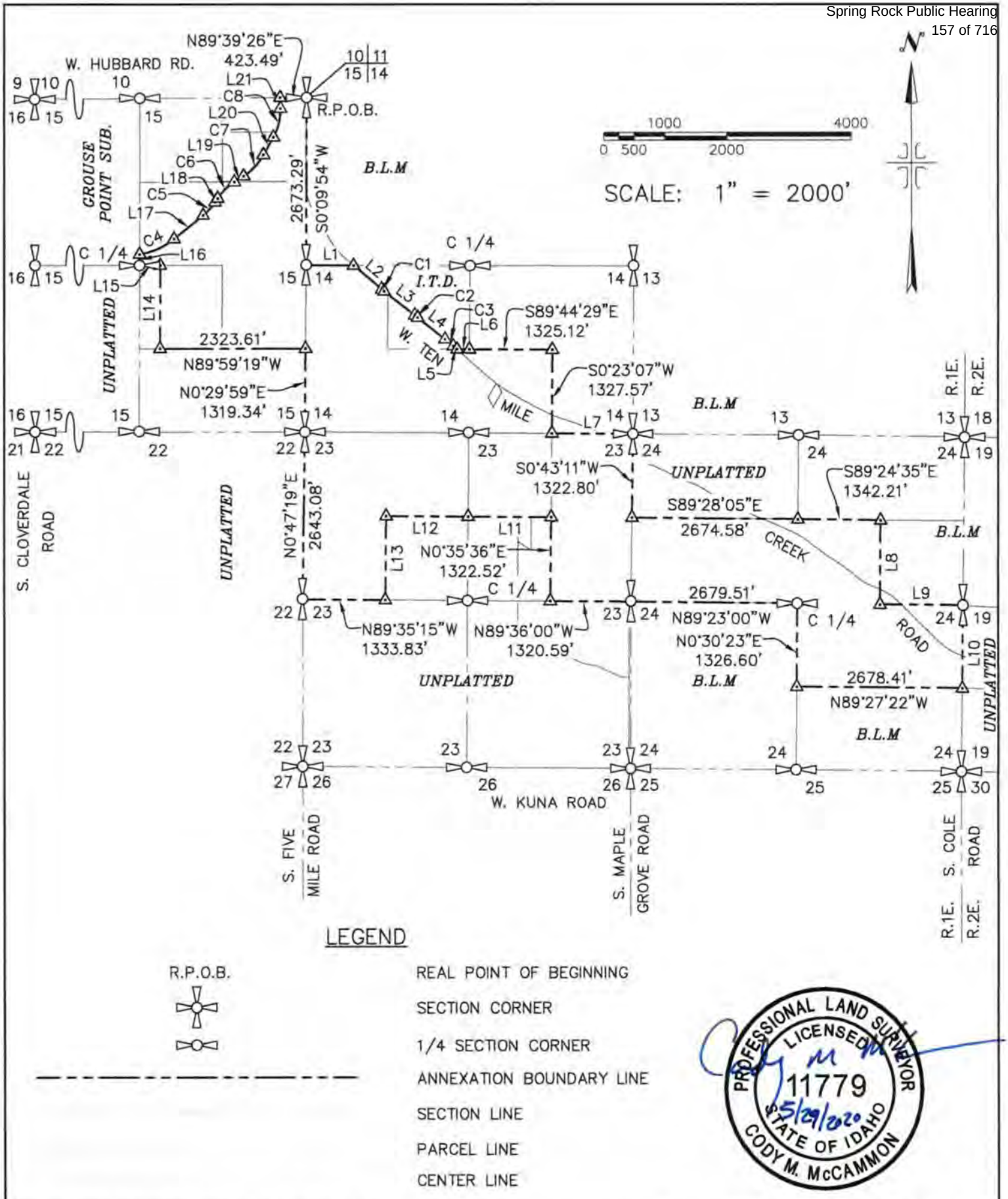
North 02°02'22" West, 173.63 feet to the north boundary line of said Section 15 and the centerline of W. Hubbard Road;

thence along said north boundary line and centerline, North 89°39'26" East, 423.49 feet to the **REAL POINT OF BEGINNING**.

Containing 761.63 acres, more or less.

End of Description.






## LEGEND

| | |
|---|---|
| R.P.O.B. | REAL POINT OF BEGINNING |
| | SECTION CORNER |
| | 1/4 SECTION CORNER |
| | ANNEXATION BOUNDARY LINE |
| | SECTION LINE |
| | PARCEL LINE |
| | CENTER LINE |

PROFESSIONAL LAND SURVEYOR
LICENSED
11779
5/29/2020
STATE OF IDAHO
CODY M. McCAMMON

IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

# EXHIBIT MAP FOR
# SPRING ROCK SUBDIVISION ANNEXATION

LOCATED IN THE S 1/2 OF SECTION 14, THE E 1/2 OF SECTION 15, THE N 1/2 OF SECTION 23, AND SECTION 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 2
DWG. DATE 5/29/2020

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | S89°51'58"E | 767.20 |
| L2 | S50°06'33"E | 588.66 |
| L3 | S52°52'00"E | 628.18 |
| L4 | S52°10'28"E | 559.69 |
| L5 | S48°51'23"E | 78.09 |
| L6 | S89°44'32"E | 199.62 |
| L7 | S89°37'22"E | 1326.43 |
| L8 | S0°31'46"W | 1327.37 |
| L9 | S89°23'00"E | 1341.67 |
| L10 | S0°43'12"W | 1323.20 |
| L11 | N89°36'42"W | 1323.87 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L12 | N89°36'26"W | 1329.66 |
| L13 | S0°37'35"W | 1321.98 |
| L14 | N0°10'31"E | 1319.06 |
| L15 | N89°59'40"W | 333.01 |
| L16 | N0°07'54"E | 177.81 |
| L17 | N51°09'23"E | 602.78 |
| L18 | N33°51'21"E | 72.22 |
| L19 | N57°12'10"E | 173.84 |
| L20 | N29°28'12"E | 323.78 |
| L21 | N2°02'22"W | 173.63 |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 48.13 | 1000.00 | 2°45'27" | S51°29'16"E | 48.12 |
| C2 | 60.41 | 5000.00 | 0°41'32" | S52°31'14"E | 60.41 |
| C3 | 173.73 | 3000.00 | 3°19'05" | S50°30'55"E | 173.71 |
| C4 | 613.35 | 1165.00 | 30°09'54" | N66°14'17"E | 606.29 |
| C5 | 288.36 | 955.00 | 17°18'02" | N42°30'22"E | 287.27 |
| C6 | 370.81 | 910.00 | 23°20'49" | N45°31'46"E | 368.25 |
| C7 | 464.67 | 960.00 | 27°43'58" | N43°20'11"E | 460.15 |
| C8 | 475.70 | 865.00 | 31°30'34" | N13°42'55"E | 469.73 |






IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

EXHIBIT MAP FOR
SPRING ROCK SUBDIVISION ANNEXATION

LOCATED IN THE S 1/2 OF SECTION 14, THE E 1/2 OF SECTION 15, THE N 1/2 OF SECTION 23, AND SECTION 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 2 OF 2
DWG. DATE 5/29/2020

Preliminary Plat Boundary Description for
**Spring Rock Subdivision**
*May 29, 2020*

A parcel of land situated within the South 1/2 of Section 14, the East 1/2 of Section 15, and the North 1/2 of Section 23, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at an aluminum cap monument, marking the corner common to said Sections 10, 11, 14, and 15; thence along the West boundary line of said Section 15, South 00°09'54" West, 40.00 feet to the **REAL POINT OF BEGINNING**;

thence continuing along said West boundary line, South 00°09'54" West, 2,633.29 feet to a brass cap monument, marking the 1/4 corner common to said Sections 14 and 15;

thence along the east-west centerline of said Section 14, South 89°51'58" East, 767.20 feet to the centerline of W. Ten Mile Creek Road;

thence along said centerline the following seven (7) courses and distances:

South 50°06'33" East, 588.66 feet;

48.13 feet along the arc of curve to the left having a radius of 1,000.00 feet, a central angle of 02°45'27" and a long chord which bears South 51°29'16" East, 48.12 feet;

South 52°52'00" East, 628.18 feet;

60.41 feet along the arc of curve to the right having a radius of 5,000.00 feet, a central angle of 00°41'32" and a long chord which bears South 52°31'14" East, 60.41 feet;

South 52°10'28" East, 559.69 feet;

173.73 feet along the arc of curve to the right having a radius of 3,000.00 feet, a central angle of 03°19'05" and a long chord which bears South 50°30'55" East, 173.71 feet

South 48°51'23" East, 78.09 feet to the North boundary line of the Southeast 1/4 of the Southwest 1/4 of said Section 14;



thence along said North boundary line, South 89°44'32" East, 199.62 feet to 5/8" iron pin, PLS 5461, marking the Center-South 1/16 corner of said Section 14;

thence South 89°44'29" East, 1,325.12 feet to the Southeast 1/16 corner of said Section 14;

thence South 00°23'07" West, 1,327.57 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23;

thence South 00°35'36" West, 1,322.53 feet to a 5/8" iron pin, no cap, marking the Northeast 1/16 corner to said Section 23;

thence North 89°36'42" West, 1,323.87 feet to a 5/8" iron pin, PLS 1923, marking the Center-North 1/16 corner of said Section 23;

thence North 89°36'26" West, 1,329.66 feet to a 5/8" iron pin, marking the North-West 1/16 corner of said Section 23;

thence South 00°37'35" West, 1,321.98 feet to the Center-West 1/16 corner of said Section 23;

thence North 89°35'15" West, 1,333.83 feet to an aluminum cap monument, marking the 1/4 corner common to Section 22, Township 2 North, Range 1 East, B.M., and said Section 23;

thence North 00°47'19" East, 2,643.08 feet to an aluminum cap monument, marking the corner common to said Sections 14, 15, 22, and 23;

thence North 00°29'59" East, 1,319.34 feet to a 1/2" iron pin, PLS 2471, marking the South 1/16 corner common to said Sections 14 and 15;

thence on the South boundary line of the North 1/2 of the Southeast 1/4 of said Section 15, North 89°59'19" West, 2,323.61 feet to a 5/8" iron pin on the East boundary line of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Southeast 1/4 of said Section 15;

thence on said East boundary line, North 00°10'31" East, 1,319.06 feet to the East-West centerline of said Section 15;

thence along said East-West centerline, North 89°59'40" West, 333.01 feet to a 5/8" iron pin, PLS 4998, marking the Center 1/4 of said Section 15;

thence on the North-South centerline of said Section 15, North 00°07'54" East, 177.81 feet to the centerline of the New York Canal;



thence along said centerline the following ten (10) courses and distances:

613.35 feet along the arc of a curve to the left having a radius of 1,165.00 feet, a central angle of 30°09'54" and a long chord which bears North 66°14'17" East, 606.29 feet;

North 51°09'23" East, 602.78 feet;

288.36 feet along the arc of curve to the left having a radius of 955.00 feet, a central angle of 17°18'02" and a long chord which bears North 42°30'22" East, 287.27 feet;

North 33°51'21" East, 72.22 feet;

370.81 feet along the arc of curve to the right having a radius of 910.00 feet, a central angle of 23°20'49" and a long chord which bears North 45°31'45" East, 368.25 feet;

North 57°12'10" East, 173.84 feet;

464.67 feet along the arc of curve to the left having a radius of 960.00 feet, a central angle of 27°43'58" and a long chord which bears North 43°20'11" East, 460.15 feet;

North 29°28'12" East, 323.78 feet;

475.70 feet along the arc of curve to the left having a radius of 865.00 feet, a central angle of 31°30'34" and a long chord which bears North 13°42'55" East, 469.73 feet;

North 02°02'22" West, 118.61 feet to the South right-of-way line of W. Hubbard Road;

thence along said South right-of-way line the following three (3) courses and distances:

North 89°39'26" East, 121.85 feet;

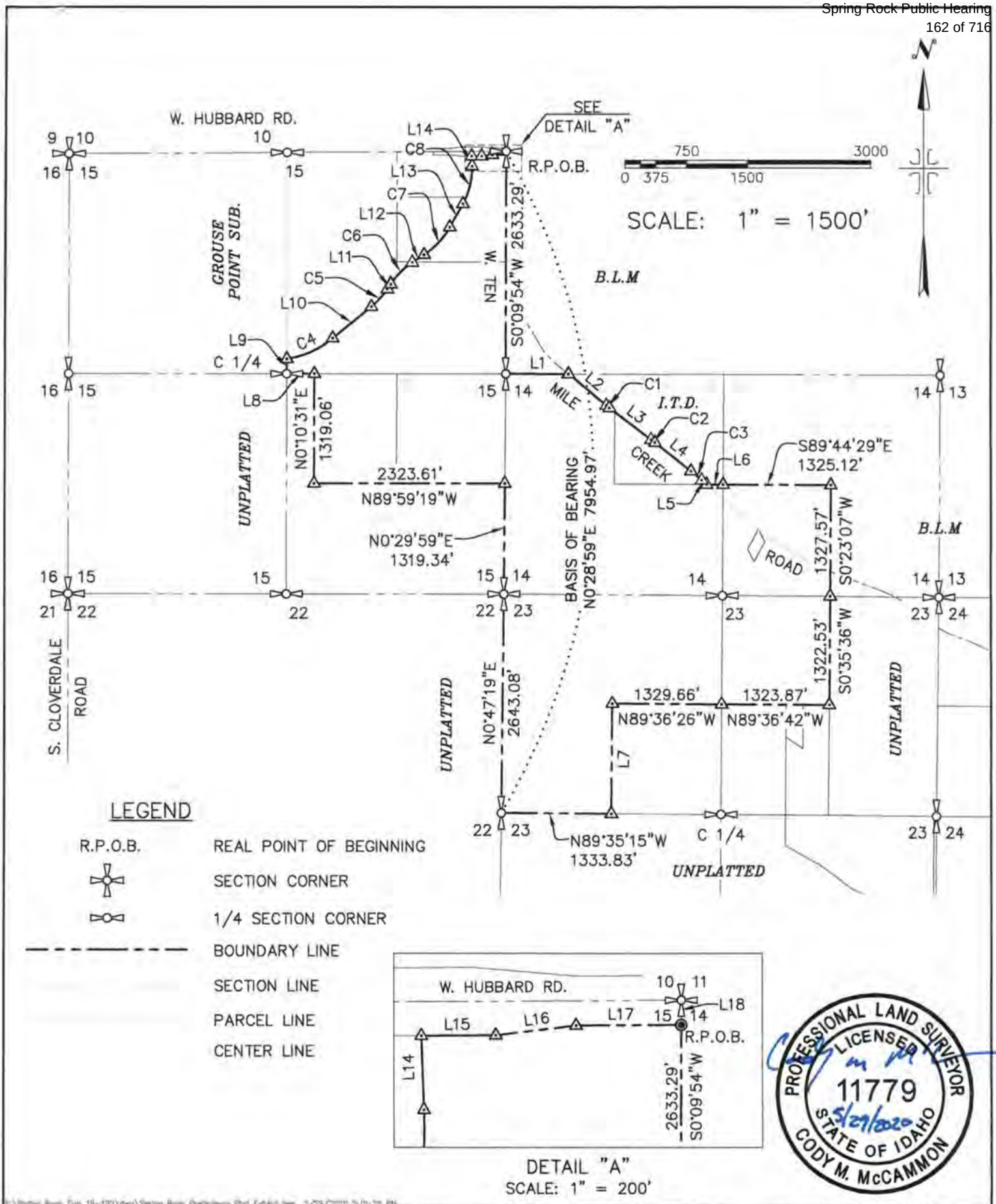
North 83°04'31" East, 130.86 feet;

North 89°39'26" East, 169.66 feet to the **REAL POINT OF BEGINNING.**

Containing 476.97 acres, more or less.

End of Description.

PROFESSIONAL LAND SURVEYOR
REGISTERED
11779
5/29/2020
STATE OF IDAHO
CODY M. MCCAMMON




## LEGEND

| | |
|---|---|
| R.P.O.B. | REAL POINT OF BEGINNING |
| | SECTION CORNER |
| | 1/4 SECTION CORNER |
| | BOUNDARY LINE |
| | SECTION LINE |
| | PARCEL LINE |
| | CENTER LINE |




DETAIL "A"
SCALE: 1" = 200'

PROFESSIONAL LAND SURVEYOR
LICENSED
11779
5/29/2020
STATE OF IDAHO
CODY M. McCAMMON

IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST
BOISE, IDAHO 83704
(208) 846-8570

# PRELIMINARY PLAT BOUNDARY EXHIBIT MAP FOR SPRING ROCK SUBDIVISION

LOCATED IN THE S 1/2 OF SECTION 14, THE E 1/2 OF SECTION 15, AND THE N 1/2 OF SECTION 23, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 2
DG. DATE 5/29/2020

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | S89°51'58"E | 767.20 |
| L2 | S50°06'33"E | 588.66 |
| L3 | S52°52'00"E | 628.18 |
| L4 | S52°10'28"E | 559.69 |
| L5 | S48°51'23"E | 78.09 |
| L6 | S89°44'32"E | 199.62 |
| L7 | S0°37'35"W | 1321.98 |
| L8 | N89°59'40"W | 333.01 |
| L9 | N0°07'54"E | 177.81 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L10 | N51°09'23"E | 602.78 |
| L11 | N33°51'21"E | 72.22 |
| L12 | N57°12'10"E | 173.84 |
| L13 | N29°28'12"E | 323.78 |
| L14 | N2°02'22"W | 118.61 |
| L15 | N89°39'26"E | 121.85 |
| L16 | N83°04'31"E | 130.86 |
| L17 | N89°39'26"E | 169.66 |
| L18 | S0°09'54"W | 40.00 |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 48.13 | 1000.00 | 2°45'27" | S51°29'16"E | 48.12 |
| C2 | 60.41 | 5000.00 | 0°41'32" | S52°31'14"E | 60.41 |
| C3 | 173.73 | 3000.00 | 3°19'05" | S50°30'55"E | 173.71 |
| C4 | 613.35 | 1165.00 | 30°09'54" | N66°14'17"E | 606.29 |
| C5 | 288.36 | 955.00 | 17°18'02" | N42°30'22"E | 287.27 |
| C6 | 370.81 | 910.00 | 23°20'49" | N45°31'46"E | 368.25 |
| C7 | 464.67 | 960.00 | 27°43'58" | N43°20'11"E | 460.15 |
| C8 | 475.70 | 865.00 | 31°30'34" | N13°42'55"E | 469.73 |

PROFESSIONAL LAND SURVEYOR
LICENSED
11779
5/27/2020
STATE OF IDAHO
CODY M. McCAMMON

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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST
BOISE, IDAHO 83704
(208) 846-8570

PRELIMINARY PLAT EXHIBIT MAP FOR
SPRINGROCK SUBDIVISION

LOCATED IN THE S 1/2 OF SECTION 14, THE E 1/2 OF SECTION 15, AND THE N 1/2 OF SECTION 23, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 2 OF 2
DG. DATE 5/29/2020

C-1 Zone Description for

**Spring Rock Subdivision**

*June 5, 2020*

A parcel of land situated within the Southwest 1/4 of Section 14, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at a brass cap monument marking the 1/4 corner common to said Section 14 and Section 15, Township 2 North, Range 1 East, B.M., from which an aluminum cap monument marking the corner common to Sections 10, 11, 14 and 15, Township 2 North, Range 1 East, B.M., bears North 00°09'54" East, 2,673.29 feet; thence on the East-West centerline of said Section 14; South 89°51'58" East, 513.30 feet to the **REAL POINT OF BEGINNING;**

thence continuing on said East-West centerline, South 89°51'58" East, 253.90 feet to the centerline of W. Ten Mile Creek Road;

thence on said centerline the following three (3) courses and distances:

South 50°06'33" East, 588.66 feet;

48.13 feet along the arc of a curve to the left, having a radius of 1,000.00 feet, a central angle of 02°45'27" and a long chord which bears South 51°29'16" East, 48.12 feet;

South 52°52'00" East, 412.19 feet;

thence leaving said centerline, South 36°33'37" West, 450.77 feet;

thence North 49°41'09" West, 1,417.19 feet;

thence North 76°09'11" East, 252.92 feet;

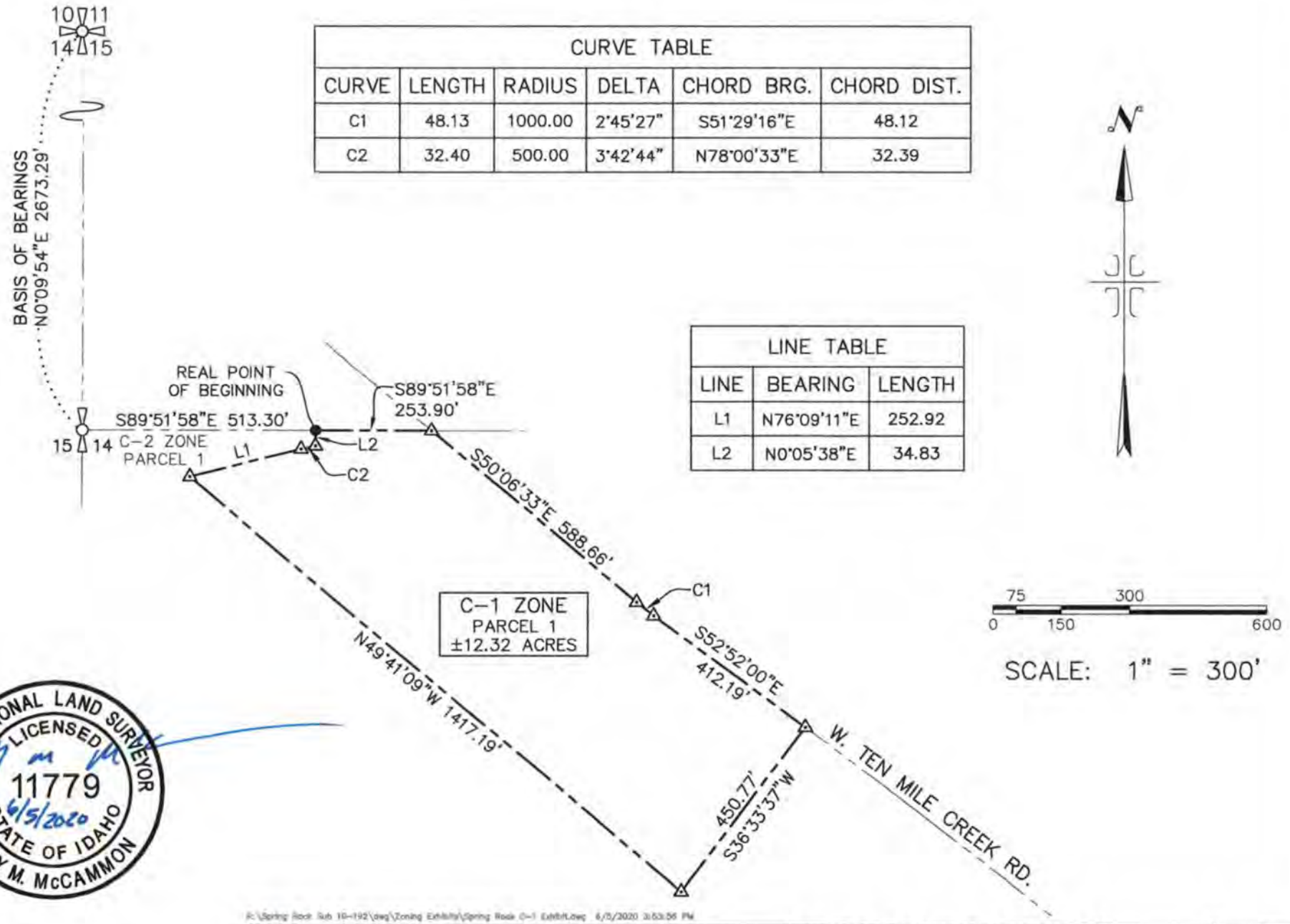
thence 32.40 feet along the arc of a curve to the right, having a radius of 500.00 feet, a central angle of 03°42'44" and a long chord which bears North 78°00'33" East, 32.39 feet;

thence North 00°05'38" East, 34.83 feet to the **REAL POINT OF BEGINNING**.

Containing 12.32 acres, more or less.

End of Description.






| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 48.13 | 1000.00 | 2°45'27" | S51°29'16"E | 48.12 |
| C2 | 32.40 | 500.00 | 3°42'44" | N78°00'33"E | 32.39 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N76°09'11"E | 252.92 |
| L2 | N0°05'38"E | 34.83 |

PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
C-1 ZONE

LOCATED IN THE SW 1/4 OF SECTION 14,
T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 1
DWG. DATE 6-5-20

C-2 Zone Description for

# Spring Rock Subdivision

*June 5, 2020*

**Parcel 1**

A parcel of land situated within the Northwest 1/4 of the Southwest 1/4 of Section 14 and the Northwest 1/4 of the Southeast 1/4 of Section 15, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

**BEGINNING** at a brass cap monument marking the 1/4 corner common to said Section 14 and Section 15, Township 2 North, Range 1 East, B.M., from which an aluminum cap monument marking the corner common to Sections 10, 11, 14 and 15, Township 2 North, Range 1 East, B.M., bears North 00°09'54" East, 2,673.29 feet;

thence on the east-west centerline of said Section 14, South 89°51'58" East, 513.30 feet;

thence leaving said east-west centerline, South 00°05'38" West, 34.83 feet;

thence 32.40 feet along the arc of a curve to the left, having a radius of 500.00 feet, a central angle of 03°42'44" and a long chord which bears South 78°00'33" West, 32.39 feet;

thence South 76°09'11" West, 371.10 feet;

thence 184.28 feet along the arc of curve to the right having a radius of 860.75 feet, a central angle of 12°16'00" and a long chord which bears South 82°17'11" West, 183.93 feet;

thence 82.27 feet along the arc of a curve to the right having a radius of 2,365.50 feet, a central angle of 01°59'33" and a long chord which bears North 00°49'53" West, 82.26 feet;

thence North 00°09'54" East, 74.15 feet to the North boundary line of the Northwest 1/4 of the Southeast 1/4 of said Section 15;

thence on said North boundary line, South 89°51'58" East, 62.00 feet to the **REAL POINT OF BEGINNING**.

Containing 1.36 acres, more or less.

**AND**

**Parcel 2**

A parcel of land situated within the Southwest 1/4 of the Southeast 1/4 of Section 14, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:



Commencing at an aluminum cap monument marking the corner common to Sections 13, 14, 23 and 24, Township 2 North, Range 1 East, B.M., from which an aluminum cap monument marking the 1/4 corner common to said Sections 14 and 23, bears North 89°37'22" West, 2,652.85 feet; thence North 89°37'22" West, 1,326.43 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23; thence on the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14, North 00°23'07" East, 1062.99 feet to the **REAL POINT OF BEGINNING;**

thence leaving said East boundary line, South 90°00'00" West, 255.54 feet;

thence North 00°00'00" East, 265.74 feet to the North boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14;

thence on said North boundary line, South 89°44'29" East, 257.32 feet to the Southeast 1/16 corner of said Section 14;

thence on the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14, South 00°23'07" West, 264.58 feet to the **REAL POINT OF BEGINNING**.

Containing 1.56 acres, more or less.

**AND**

**Parcel 3**

A parcel of land situated within the Southwest 1/4 of the Northeast 1/4 and the Southeast 1/4 of the Northwest 1/4 of Section 24, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at an aluminum cap monument marking the 1/4 corner common to said Section 24 and Section 19, from which a brass cap monument marking the corner common to Sections 19, 24, 25 and 30, bears South 00°44'12" West, 2,646.71 feet; thence on the east-west centerline of said Section 24, North 89°23'00" West, 1341.68 feet to the Center-East 1/16 corner of said Section 24; thence on the East boundary line of the Southwest 1/4 of the Northeast 1/4, North 00°31'46" East, 239.61 feet to the centerline of W. Ten Mile Creek Road and the **REAL POINT OF BEGINNING;**

thence on said centerline the following eight (8) courses and distances:

105.82 feet along the arc of a curve to the left, having a radius of 1,025.00 feet, a central angle of 05°54'54" and a long chord which bears North 69°18'17" West, 105.77 feet;



307.21 fee along the arc of a curve to the right, having a radius of 800.00 feet, a central angle of 22°00'08" and a long chord which bears North 61°15'40" West, 305.32 feet;

466.89 feet along the arc of a curve to the left, having a radius of 3,000.00 feet, a central angle of 08°55'01" and a long chord which bears North 54°43'07" West, 466.42 feet;

252.60 feet along the arc of a curve to the right, having a radius of 2,500.00 feet, a central angle of 05°47'21" and a long chord which bears North 56°16'56" West, 252.50 feet;

North 53°23'16" West, 302.04 feet;

252.98 feet along the arc of a curve to the left, having a radius of 1,093.00 feet, a central angle of 13°15'42" and a long chord which bears North 60°01'06" West, 252.42 feet;

North 66°38'57" West, 323.90 feet;

199.88 feet along the arc of a curve to the left, having a radius of 22,600.00 feet, a central angle of 00°30'24" and a long chord which bears North 66°54'09" West, 199.88 feet to the North boundary line of the Southeast 1/4 of the Northwest 1/4 of Section 24;

thence along said North boundary line, South 89°28'05" East, 567.69 feet to the Center-North 1/16 corner of said Section 24;

thence on the North boundary line of the Southwest 1/4 of the Northeast 1/4, South 89°24'35" East, 1,342.21 feet to a 5/8" iron pin, PLS 4431, marking the Northeast 1/16 corner of said Section 24;

thence on the East boundary line of the Southwest 1/4 of the Northeast 1/4, South 00°31'46" West, 1,087.76 feet to the **REAL POINT OF BEGINNING**.

Containing 22.84 acres, more or less.

**AND**

**Parcel 4**

A parcel of land situated within the Northeast 1/4 of the Southeast 1/4 of Section 24, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:



**BEGINNING** at an aluminum cap monument marking the 1/4 corner common to said Section 24 and Section 19, from which a brass cap monument marking the corner common to Sections 19, 24, 25 and 30, bears South 00°44'12" West, 2,646.71 feet;

thence on the section line common to said Sections 19 and 24, South 00°43'12" West, 808.19 feet to the centerline of W. Ten Mile Creek Road;

thence on said centerline the following three (3) courses and distances:

North 69°39'03" West, 33.99 feet;

404.18 feet along the arc of a curve to the right, having a radius of 978.00 feet, a central angle of 23°40'44" and a long chord which bears North 57°48'42" West, 401.31 feet;

North 45°58'20" West, 853.58 feet to the east-west centerline of said Section 24;

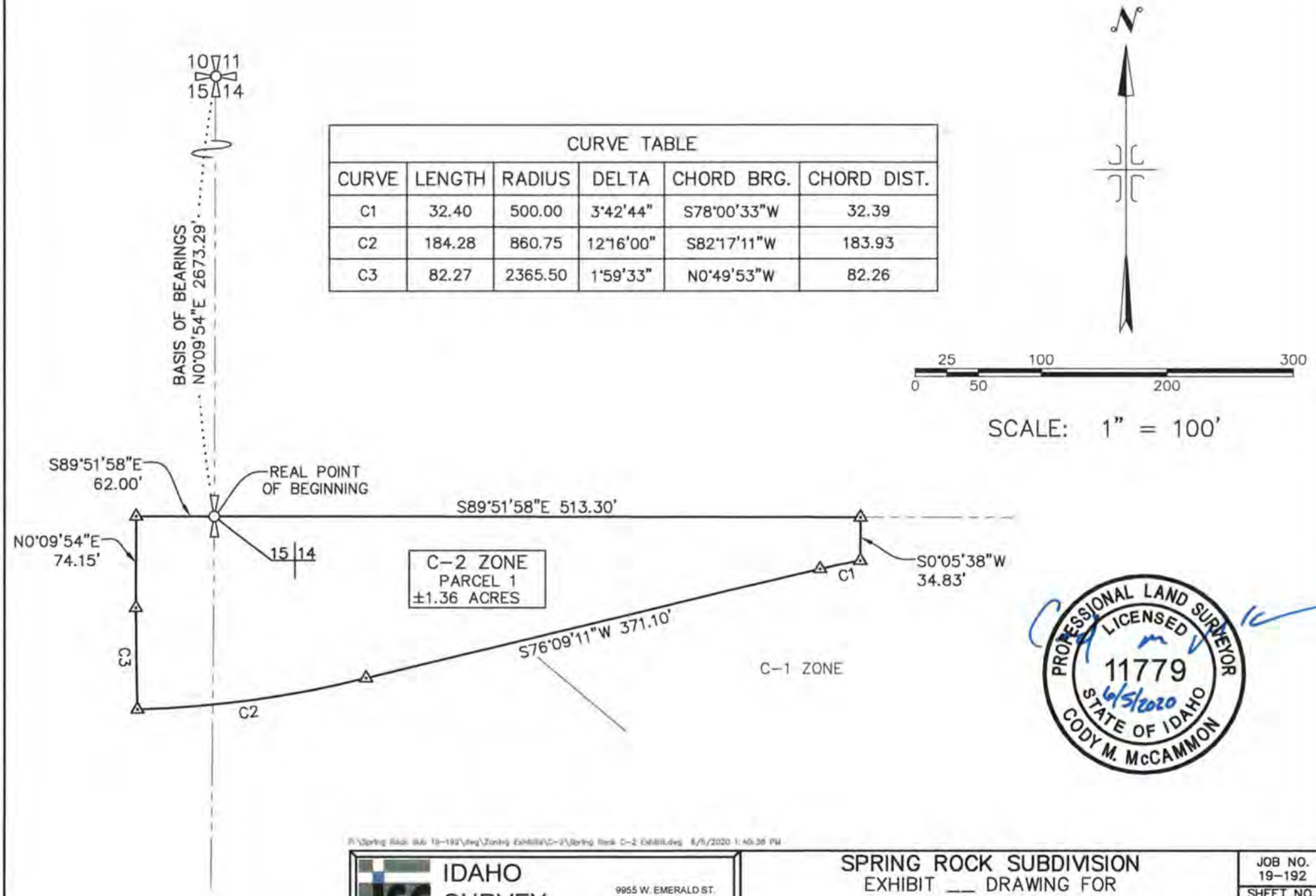
thence on said east-west centerline, South 89°23'00" East, 995.44 feet to the **REAL POINT OF BEGINNING**.

Containing 10.34 acres, more or less.

End of Description.

PROFESSIONAL LAND SURVEYOR
REGISTERED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 32.40 | 500.00 | 3°42'44" | S78°00'33"W | 32.39 |
| C2 | 184.28 | 860.75 | 12°16'00" | S82°17'11"W | 183.93 |
| C3 | 82.27 | 2365.50 | 1°59'33" | N0°49'53"W | 82.26 |



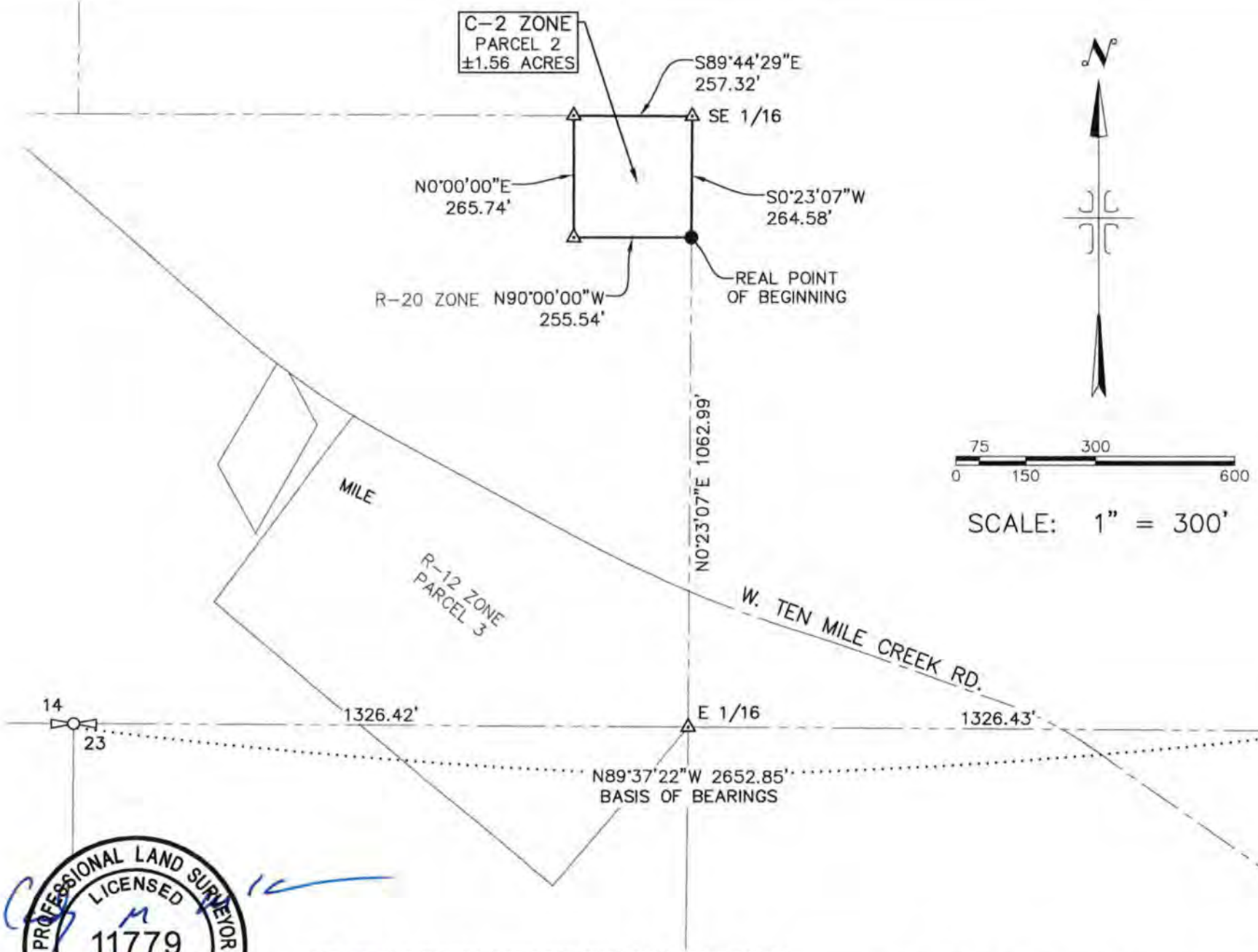

PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
C-2 ZONE (PARCEL 1)
LOCATED IN THE NW 1/4 OF THE SW 1/4 OF SECTION 14,
T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 3
DWG. DATE 7-14-19




PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

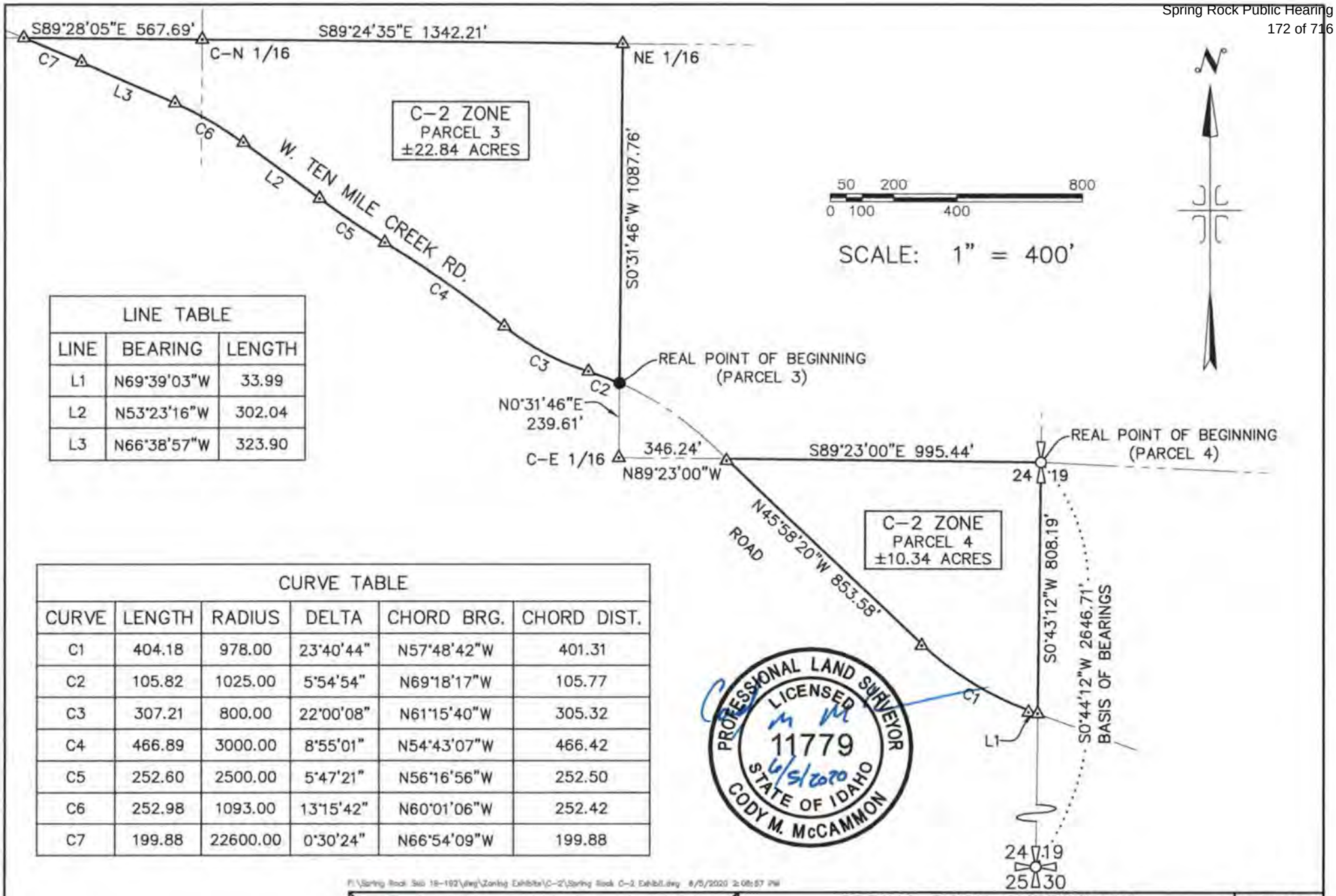
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(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
C–2 ZONE (PARCEL 2)

LOCATED IN THE SW 1/4 OF THE SE 1/4 OF SECTION 14, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19–192
SHEET NO. 2 OF 3
DWG. DATE 7–12–19




| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N69°39'03"W | 33.99 |
| L2 | N53°23'16"W | 302.04 |
| L3 | N66°38'57"W | 323.90 |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 404.18 | 978.00 | 23°40'44" | N57°48'42"W | 401.31 |
| C2 | 105.82 | 1025.00 | 5°54'54" | N69°18'17"W | 105.77 |
| C3 | 307.21 | 800.00 | 22°00'08" | N61°15'40"W | 305.32 |
| C4 | 466.89 | 3000.00 | 8°55'01" | N54°43'07"W | 466.42 |
| C5 | 252.60 | 2500.00 | 5°47'21" | N56°16'56"W | 252.50 |
| C6 | 252.98 | 1093.00 | 13°15'42" | N60°01'06"W | 252.42 |
| C7 | 199.88 | 22600.00 | 0°30'24" | N66°54'09"W | 199.88 |

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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST
BOISE, IDAHO 83704
(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
## C-2 ZONE (PARCEL'S 3 AND 4)
LOCATED IN THE NW 1/4, THE NE 1/4 AND THE SE 1/4 OF SECTION 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 3 OF 3
DWG. DATE 7-14-19

R-6 Zone Description for

# Spring Rock Subdivision

*June 8, 2020*

A parcel of land situated within the South 1/2 of Section 14, the East 1/2 of Section 15, the North 1/2 of Section 23, and Section 24, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

**BEGINNING** at a brass cap monument marking the 1/4 corner common to said Sections 14 and 15, from which an aluminum cap monument marking the corner common to said Sections 10, 11, 14 and 15 bears North 00°09'54" East, 2,673.29 feet;

thence on the North boundary line of the Northwest 1/4 of the Southeast 1/4 of said Section 15, North 89°51'58" West, 62.00 feet to the

thence leaving said North boundary line, South 00°09'54" West, 74.15 feet;

thence 82.27 feet along the arc of a curve to the left having a radius of 2,365.50 feet, a central angle of 01°59'33" and a long chord which bears South 00°49'53" East, 82.26 feet;

thence 184.28 feet along the arc of curve to the left having a radius of 860.75 feet, a central angle of 12°16'00" and a long chord which bears North 82°17'11" East, 183.93 feet;

thence North 76°09'11" East, 118.18 feet;

thence South 49°41'09" East, 1,417.19 feet;

thence North 36°33'37" East, 450.77 feet to the centerline of W. Ten Mile Creek Road;

thence on said centerline the following six (6) courses and distances:

South 52°52'00" East, 215.98 feet;

60.41 feet along the arc of a curve to the right, having a radius of 5,000.00 feet, a central angle of 00°41'32" and a long chord which bears South 52°31'14" East, 60.41 feet;

South 52°10'28" East, 559.69 feet;

173.73 feet along the arc of a curve to the right, having a radius of 3,000.00 feet, a central angle of 03°19'05" and a long chord which bears South 50°30'55" East, 173.71 feet;



South 48°51'37" East, 774.73 feet;

310.00 feet along the arc of a curve to the left, having a radius of 2,100.00 feet, a central angle of 08°27'29" and a long chord which bears South 53°05'21" East, 309.72 feet;

thence leaving said centerline, South 36°45'53" West, 495.07 feet;

thence South 49°41'09" East, 982.84 feet;

thence North 40°17'57" East, 449.02 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23;

thence South 89°37'22" East, 1,326.43 feet to an aluminum cap monument marking the section corner common to said Sections 13, 14, 23, and 24;

thence South 00°43'11" West, 1,322.80 feet to a 1/2" iron pin, marking the North 1/16 corner common to said Sections 23 and 24;

thence on the North boundary of the South 1/2 of the Northwest 1/4 of said Section 24, South 89°28'05" East, 2,106.89 feet to said centerline of W. Ten Mile Creek Road;

thence on said centerline the following eight (8) courses and distances:

199.88 feet along the arc of a curve to the right, having a radius of 22,600.00 feet, a central angle of 00°30'24" and a long chord which bears South 66°54'09" East, 199.88 feet;

South 66°38'57" East, 323.90 feet;

252.98 feet along the arc of a curve to the right, having a radius of 1,093.00 feet, a central angle of 13°15'42" and a long chord which bears South 60°01'06" East, 252.42 feet;

South 53°23'16" East, 302.04 feet;

252.60 feet along the arc of a curve to the left, having a radius of 2,500.00 feet, a central angle of 05°47'21" and a long chord which bears South 56°16'56" East, 252.50 feet;



466.89 feet along the arc of a curve to the right, having a radius of 3,000.00 feet, a central angle of 08°55'01" and a long chord which bears South 54°43'07" East, 466.42 feet;

307.21 feet along the arc of a curve to the left, having a radius of 800.00 feet, a central angle of 22°00'08" and a long chord which bears South 61°15'40" East, 305.32 feet;

105.82 feet along the arc of a curve to the right, having a radius of 1,025.00 feet, a central angle of 05°54'54" and a long chord which bears South 69°18'17" East, 105.77 feet to the West boundary line of the Southeast 1/4 of the Northeast 1/4 of said Section 24;

thence on said West boundary line, South 00°31'46" West, 239.61 feet to the Center-East 1/16 corner of said Section 24;

thence along the South boundary line of the Southeast 1/4 of the Northeast 1/4, South 89°23'00" East, 346.24 feet to said centerline of W. Ten Mile Creek Road;

thence on said centerline the following three (3) courses and distances:

South 45°58'20" East, 853.58 feet;

404.18 feet along the arc of a curve to the left, having a radius of 978.00 feet, a central angle of 23°40'44" and a long chord which bears South 57°48'42" East, 401.31 feet;

South 69°39'03" East, 33.99 feet to the East boundary line of said Section 24;

thence on said East boundary line, South 00°43'12" West, 515.01 feet to the South 1/16 corner common to said Sections 24 and 19;

thence North 89°27'22" West, 2,678.41 feet to the Center-South 1/16 corner of said Section 24;

thence North 00°30'23" East, 1,326.60 feet to the Center 1/4 corner of said Section 24;

thence North 89°23'00" West, 2,679.51 feet to a brass cap monument, marking the 1/4 corner common to said Sections 23 and 24;

thence North 89°36'00" West, 1,320.59 feet to a 5/8" iron pin, marking the Center-East 1/16 corner of Section 23;



thence North 00°35'36" East, 1,322.52 feet to a 5/8" iron pin, marking the North-East 1/16 corner of Section 23;

thence North 89°36'42" West, 1,323.87 feet to a 5/8" iron pin, PLS 1923, marking the Center-North 1/16 corner of said Section 23;

thence North 89°36'26" West, 1,329.66 feet to a 5/8" iron pin, marking the North-West 1/16 corner of said Section 23;

thence South 00°37'35" West, 1,321.98 feet to the Center-West 1/16 corner of said Section 23;

thence North 89°35'15" West, 1,333.83 feet to an aluminum cap monument, marking the 1/4 corner common to Section 22 and Section 23;

thence North 00°47'19" East, 2,643.08 feet to an aluminum cap monument, marking the corner common to said Sections 14, 15, 22, and 23;

thence North 00°29'59" East, 1,319.34 feet to a 1/2" iron pin, PLS 2471, marking the South 1/16 corner common to said Sections 14 and 15;

thence on the South boundary line of the North 1/2 of the Southeast 1/4 of said Section 15, North 89°59'19" West, 2,323.61 feet to a 5/8" iron pin on the East boundary line of the West 1/2 of the West 1/2 of the Northwest 1/4 of the Southeast 1/4 of said Section 15;

thence on said East boundary line, North 00°10'31" East, 1,319.06 feet to the East-West centerline of said Section 15;

thence along said East-West centerline, North 89°59'40" West, 333.01 feet to a 5/8" iron pin, PLS 4998, marking the Center 1/4 of said Section 15;

thence on the North-South centerline of said Section 15, North 00°07'54" East, 177.81 feet to the centerline of the New York Canal;

thence along said centerline the following seven (7) courses and distances:

613.35 feet along the arc of a curve to the left, having a radius of 1,165.00 feet, a central angle of 30°09'54" and a long chord which bears North 66°14'17" East, 606.29 feet;

North 51°09'23" East, 602.78 feet;



288.36 feet along the arc of curve to the left, having a radius of 955.00 feet, a central angle of 17°18'02" and a long chord which bears North 42°30'22" East, 287.27 feet;

North 33°51'21" East, 72.22 feet;

370.81 feet along the arc of curve to the right, having a radius of 910.00 feet, a central angle of 23°20'49" and a long chord which bears North 45°31'46" East, 368.25 feet;

North 57°12'10" East, 173.84 feet;

291.70 feet along the arc of a curve to the left, having a radius of 960.00 feet, a central angle of 17°24'35" and a long chord which bears North 48°29'53" East, 290.58 feet;

thence leaving said centerline, South 44°53'03" East, 254.75 feet;

thence North 45°06'57" East, 33.56 feet;

thence 5.19 feet along the arc of a curve to the right having a radius of 700.00 feet, a central angle of 00°25'28" and a long chord which bears North 44°54'13" East, 5.19 feet;

thence South 49°31'42" East, 365.35 feet;

thence 101.94 feet along the arc of a curve to the left having a radius of 125.00 feet, a central angle of 46°43'31" and a long chord which bears South 26°09'57" East, 99.14 feet;

thence North 87°11'27" East, 253.19 feet to the East boundary line of said Section 15;

thence on the East boundary line of said Section 15, South 00°09'54" West, 1150.02 feet to the **REAL POINT OF BEGINNING**.

**EXCEPTING** therefrom the following described parcel:

A parcel of land situated within the South 1/2 of the Southwest 1/4 of Section 14, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:



Commencing at a brass cap monument marking the 1/4 corner common to said Section 14 and Section 15, Township 2 North, Range 2 East, B.M., from which an aluminum cap monument marking the corner common to Sections 10, 11, 14 and 15, Township 2 North, Range 1 East B.M. bears North 00°09'54" East, 2,673.29 feet; thence South 00°29'59" West, 1,319.34 feet to a 1/2" iron pin, PLS 2471, marking the South 1/16 corner common to said Sections 14 and 15; thence South 66°42'43" East, 198.49 feet to the **REAL POINT OF BEGINNING "B"**;

thence South 89°36'42" East, 1,274.79 feet;

thence South 00°23'18" West, 133.50 feet;

thence North 89°36'42" West, 1,249.99 feet;

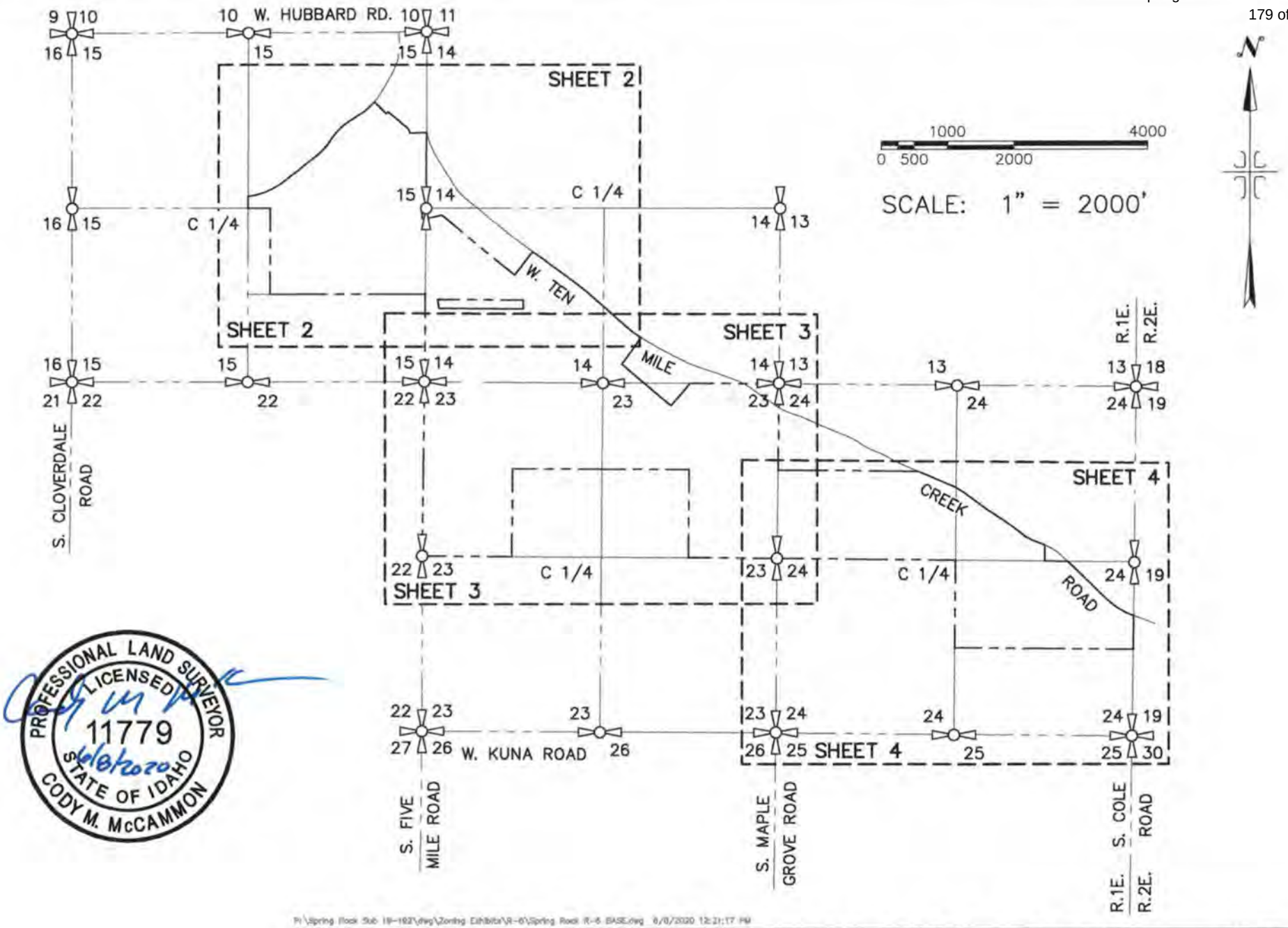
thence 36.82 feet along the arc of a curve to the right having a radius of 1,388.20 feet, a central angle of 01°31'11" and a long chord which bears North 10°41'12" West, 36.82 feet;

thence North 09°55'37" West, 98.97 feet to the **REAL POINT OF BEGINNING**.

Containing 659.19 acres, more or less.

End of Description.






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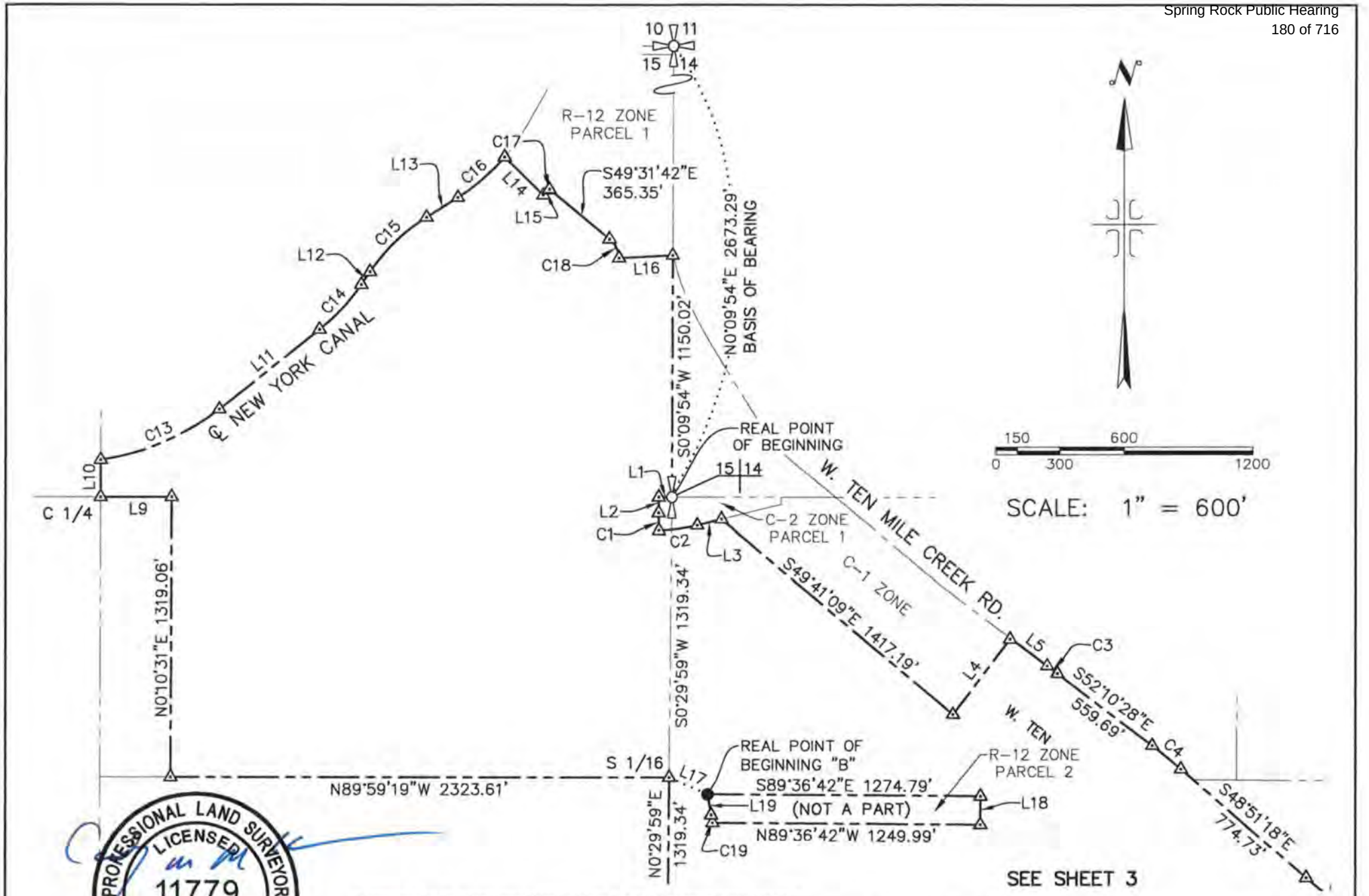
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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-6 ZONE

LOCATED IN THE S 1/2 OF SEC. 14, THE E 1/2 OF SEC. 15, THE N 1/2 OF SEC. 23 AND SEC. 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 5
DWG. DATE 6-8-20




PROFESSIONAL LAND SURVEYOR
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6/8/2020
STATE OF IDAHO
CODY M. McCAMMON

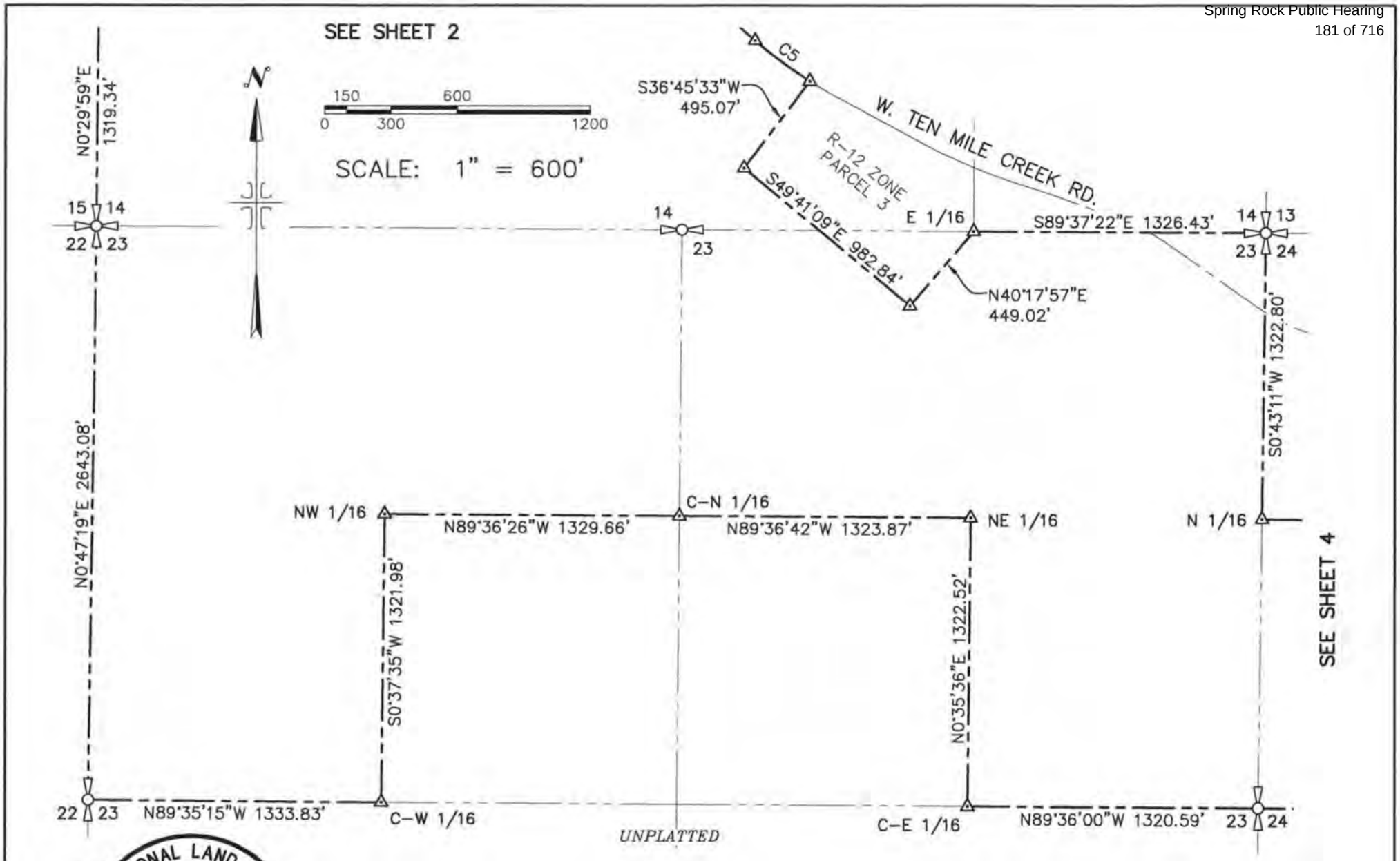
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(208) 846-6570

# SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-6 ZONE

LOCATED IN THE S 1/2 OF SEC. 14, THE E 1/2 OF SEC. 15, THE N 1/2 OF SEC. 23 AND SEC. 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 2 OF 5
DWG. DATE 6-8-20




PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/8/2020
STATE OF IDAHO
CODY M. McCAMMON

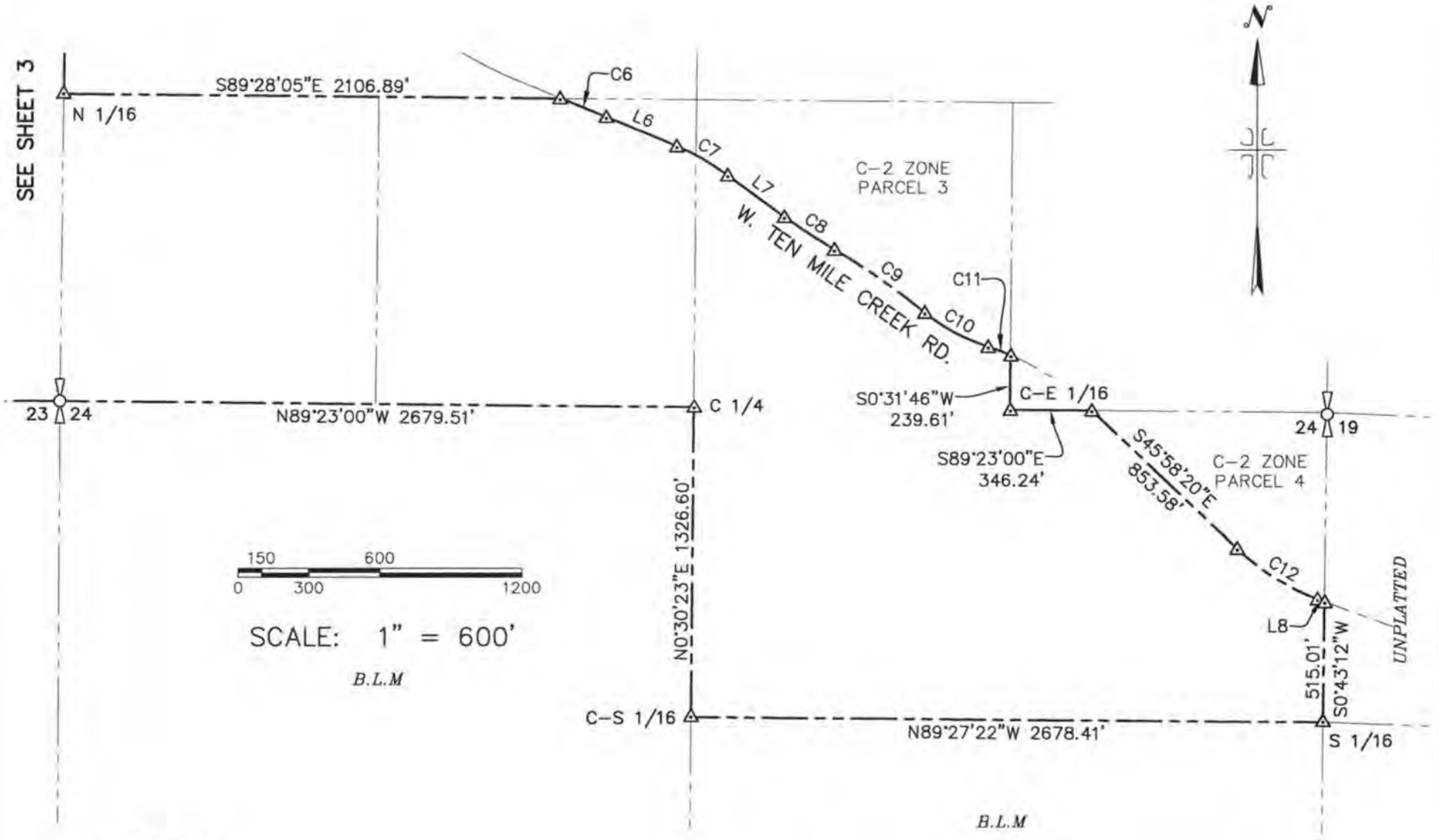
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(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-6 ZONE

LOCATED IN THE S 1/2 OF SEC. 14, THE E 1/2 OF SEC. 15, THE N 1/2 OF SEC. 23 AND SEC. 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 3 OF 5
DWG. DATE 6-8-20




PROFESSIONAL LAND SURVEYOR
LICENSED
11779
STATE OF IDAHO
CODY M. McCAMMON
6/8/2020

IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST
BOISE, IDAHO 83704
(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
R-6 ZONE

LOCATED IN THE S 1/2 OF SEC. 14, THE E 1/2 OF SEC. 15, THE N 1/2 OF SEC. 23 AND SEC. 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 4 OF 5
DWG. DATE 6-8-20

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | N89°51'58"W | 62.00 |
| L2 | S0°09'54"W | 74.15 |
| L3 | N76°09'11"E | 118.18 |
| L4 | N36°33'37"E | 450.77 |
| L5 | S52°52'00"E | 215.98 |
| L6 | S66°38'57"E | 323.90 |
| L7 | S53°23'16"E | 302.04 |
| L8 | S69°39'03"E | 33.99 |
| L9 | N89°59'40"W | 333.01 |
| L10 | N0°07'54"E | 177.81 |
| L11 | N51°09'23"E | 602.78 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L12 | N33°51'21"E | 72.22 |
| L13 | N57°12'10"E | 173.84 |
| L14 | S44°53'03"E | 254.75 |
| L15 | N45°06'57"E | 33.56 |
| L16 | N87°11'27"E | 253.19 |
| L17 | S66°42'43"E | 198.49 |
| L18 | S0°23'18"W | 133.50 |
| L19 | N9°55'37"W | 98.97 |

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 82.27 | 2365.50 | 1°59'33" | S0°49'53"E | 82.26 |
| C2 | 184.28 | 860.75 | 12°16'00" | N82°17'11"E | 183.93 |
| C3 | 60.41 | 5000.00 | 0°41'32" | S52°31'14"E | 60.41 |
| C4 | 173.73 | 3000.00 | 3°19'05" | S50°30'55"E | 173.71 |
| C5 | 310.00 | 2100.00 | 8°27'29" | S53°05'21"E | 309.72 |
| C6 | 199.88 | 22600.00 | 0°30'24" | S66°54'09"E | 199.88 |
| C7 | 252.98 | 1093.00 | 13°15'42" | S60°01'06"E | 252.42 |
| C8 | 252.60 | 2500.00 | 5°47'21" | S56°16'56"E | 252.50 |
| C9 | 466.89 | 3000.00 | 8°55'01" | S54°43'07"E | 466.42 |
| C10 | 307.21 | 800.00 | 22°00'08" | S61°15'40"E | 305.32 |
| C11 | 105.82 | 1025.00 | 5°54'54" | S69°18'17"E | 105.77 |
| C12 | 404.18 | 978.00 | 23°40'44" | S57°48'42"E | 401.31 |
| C13 | 613.35 | 1165.00 | 30°09'54" | N66°14'17"E | 606.29 |
| C14 | 288.36 | 955.00 | 17°18'02" | N42°30'22"E | 287.27 |
| C15 | 370.81 | 910.00 | 23°20'49" | N45°31'46"E | 368.25 |
| C16 | 291.70 | 960.00 | 17°24'35" | N48°29'53"E | 290.58 |
| C17 | 5.19 | 700.00 | 0°25'28" | N44°54'13"E | 5.19 |
| C18 | 101.94 | 125.00 | 46°43'31" | S26°09'57"E | 99.14 |
| C19 | 36.82 | 1388.20 | 1°31'11" | N10°41'12"W | 36.82 |




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9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-6 ZONE

LOCATED IN THE S 1/2 OF SEC. 14, THE E 1/2 OF SEC. 15, THE N 1/2 OF SEC. 23 AND SEC. 24, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 5 OF 5
DWG. DATE 6-8-20

R-12 Zone Description for

# Spring Rock Subdivision

*June 5, 2020*

**Parcel 1**

A parcel of land situated in the Northeast 1/4 of Section 15, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

**BEGINNING** at an aluminum cap monument marking the corner common to Sections 10, 11, 14 and 15, Township 2 North, Range 1 East, B.M., from which a brass cap monument marking the 1/4 corner common to Sections 14 and 15, Township 2 North, Range 1 East, B.M., bears South 00°09'54" West, 2,673.29 feet;

thence on the East boundary line of said Section 15, South 00°09'54" West, 1523.27 feet;

thence South 87°11'27" West, 253.19 feet;

thence 101.94 feet along the arc of a curve to the left having a radius of 125.00 feet, a central angle of 46°43'31" and a long chord which bears North 26°09'57" West, 99.14 feet;

thence North 49°31'42" West, 365.35 feet;

thence 5.19 feet along the arc of a curve to the right having a radius of 700.00 feet, a central angle of 00°25'28" and a long chord which bears South 44°54'13" West, 5.19 feet;

thence South 45°06'57" West, 33.56 feet;

thence North 44°53'03" West, 254.75 feet to the centerline of the New York Canal;

thence on said centerline the following four (4) courses and distances:

172.97 feet along the arc of a curve to the left, having a radius of 960.00 feet, a central angle of 10°19'23" and a long chord which bears North 34°37'53" East, 172.73 feet;

North 29°28'12" East, 323.78 feet;

475.70 feet along the arc of a curve to the left, having a radius of 865.00 feet, a central angle of 31°30'34" and a long chord which bears North 13°42'55" East, 469.73 feet;

PROFESSIONAL LAND SURVEYOR
REGISTERED
11779
6/5/2020
STATE OF IDAHO

R-20 Zone Description for

# Spring Rock Subdivision

*June 8, 2020*

A parcel of land situated within the South 1/2 of Section 14, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at an aluminum cap monument marking the corner common to Sections 13, 14, 23 and 24, Township 2 North, Range 1 East, B.M., from which an aluminum cap monument marking the 1/4 corner common to said Sections 14 and 23, bears North 89°37'22" West, 2,652.85 feet; thence North 89°37'22" West, 1,326.43 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23; thence North 00°23'07" East, 294.83 feet to the centerline of W. Ten Mile Creek Road and the **REAL POINT OF BEGINNING;**

thence on said centerline the following four (4) courses and distances:

280.54 feet along the arc of a curve to the right, having a radius of 2,800.00 feet, a central angle of 05°44'26" and a long chord which bears North 64°22'10" West, 280.42 feet;

North 61°29'57" West, 410.41 feet;

463.38 feet along the arc of a curve to the right, having a radius of 2,100.00 feet, a central angle of 12°38'34" and a long chord which bears North 55°10'40" West, 462.44 feet;

North 48°51'23" West, 696.69 feet to the North boundary line of the Southeast 1/4 of the Southwest 1/4 of said Section 14;

thence on said North boundary line, South 89°44'32" East, 199.62 feet to 5/8" iron pin, PLS 5461, marking the Center-South 1/16 corner of said Section 14;

thence on the North boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14, South 89°44'29" East, 1,067.80 feet;

thence leaving said North boundary line, South 00°00'00" East, 265.74 feet;

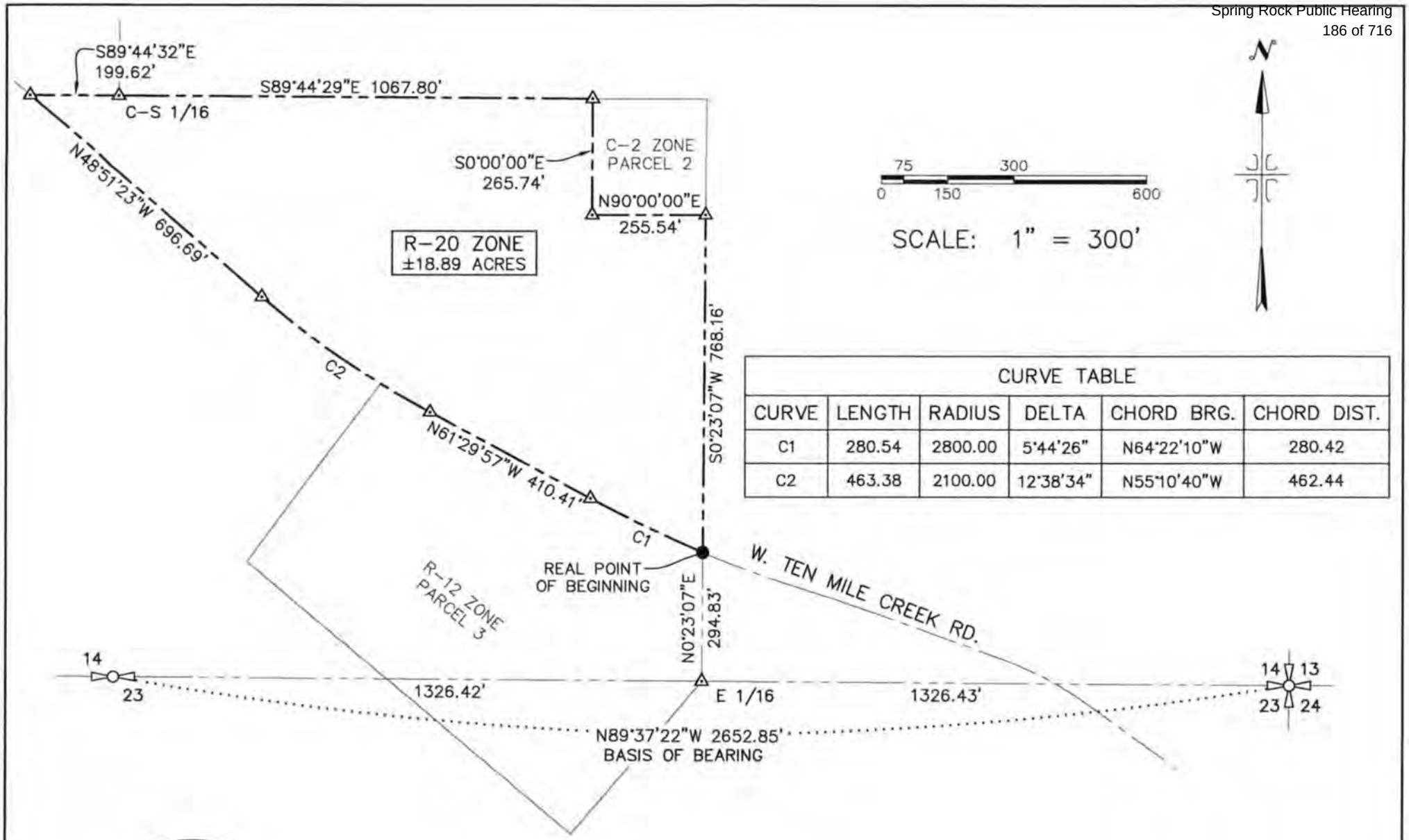
thence North 90°00'00" East, 255.54 feet to the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14;

thence on said East boundary line, South 00°23'07" West, 768.16 feet to the **REAL POINT OF BEGINNING**.

Containing 18.89 acres, more or less.

End of Description.






| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 280.54 | 2800.00 | 5°44'26" | N64°22'10"W | 280.42 |
| C2 | 463.38 | 2100.00 | 12°38'34" | N55°10'40"W | 462.44 |

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LICENSED
11779
6/8/2020
STATE OF IDAHO
CODY M. McCAMMON

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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-20 ZONE
LOCATED IN THE S 1/2 OF SECTION 14,
T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 1
DWG. DATE 6-8-20

North 02°02'22" West, 173.63 feet to the North boundary line of said Section 15;

thence on said North Boundary line, North 89°39'26" East, 423.49 feet the **REAL POINT OF BEGINNING**.

Containing 18.09 acres, more or less.

**AND**

**Parcel 2**

A parcel of land situated within the South 1/2 of the Southwest 1/4 of Section 14, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at a brass cap monument marking the 1/4 corner common to said Section 14 and Section 15, Township 2 North, Range 2 East, B.M., from which an aluminum cap monument marking the corner common to Sections 10, 11, 14 and 15, Township 2 North, Range 1 East B.M. bears North 00°09'54" East, 2,673.29 feet; thence South 00°29'59" West, 1,319.34 feet to a 1/2" iron pin, PLS 2471, marking the South 1/16 corner common to said Sections 14 and 15; thence South 66°42'43" East, 198.49 feet to the **REAL POINT OF BEGINNING;**

thence South 89°36'42" East, 1,274.79 feet;

thence South 00°23'18" West, 133.50 feet;

thence North 89°36'42" West, 1,249.99 feet;

thence 36.82 feet along the arc of a curve to the right having a radius of 1,388.20 feet, a central angle of 01°31'11" and a long chord which bears North 10°41'12" West, 36.82 feet;

thence North 09°55'37" West, 98.97 feet to the **REAL POINT OF BEGINNING**.

Containing 3.87 acres, more or less.

**AND**



**Parcel 3**

A parcel of land situated within the Southwest 1/4 of the Southeast 1/4 of Section 14 and the Northwest 1/4 of the Northeast 1/4 of Section 23, Township 2 North, Range 1 East, B.M., Ada County, Idaho, more particularly described as follows:

Commencing at an aluminum cap monument marking the corner common to Sections 13, 14, 23 and 24, Township 2 North, Range 1 East, B.M., from which an aluminum cap monument marking the 1/4 corner common to said Sections 14 and 23, bears North 89°37'22" West, 2,652.85 feet; thence North 89°37'22" West, 1,326.43 feet to a 1/2" iron pin, no cap, marking the East 1/16 corner common to said Sections 14 and 23 and the **REAL POINT OF BEGINNING;**

thence South 40°17'57" West, 449.02 feet;

thence North 49°41'09" West, 982.84 feet;

thence North 36°45'33" East, 495.07 feet to the centerline of W. Ten Mile Creek Road;

thence on said centerline the following three (3) courses and distances:

153.38 feet along the arc of a curve to the left, having a radius of 2,100.00 feet, a central angle of 04°11'05" and a long chord which bears South 59°24'38" East, 153.35 feet;

South 61°30'11" East, 410.41 feet;

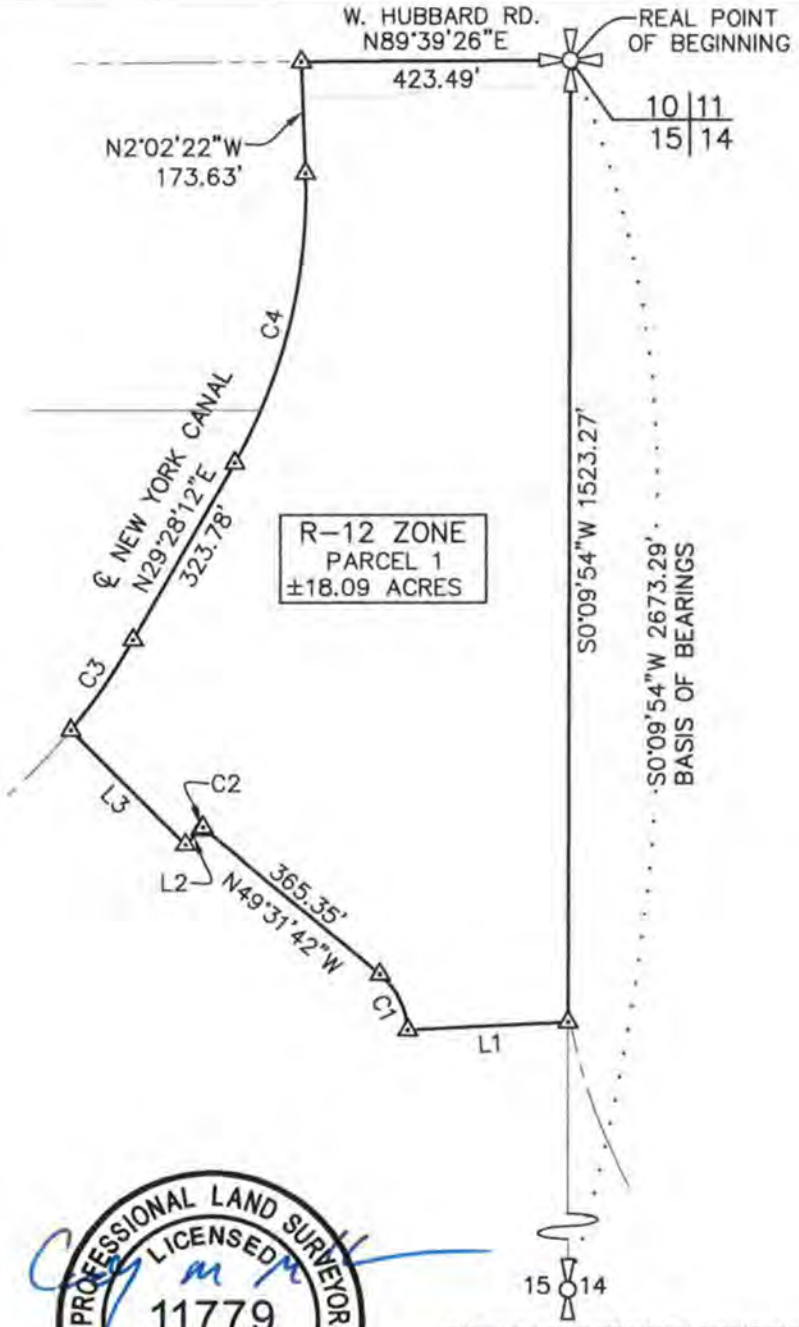
280.56 feet along the arc of a curve to the left, having a radius of 2,800.00 feet, a central angle of 05°44'28" and a long chord which bears South 64°22'24" East, 280.44 feet to the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14;

thence on said East boundary line, South 00°23'07" West, 294.91 feet to the **REAL POINT OF BEGINNING**.

Containing 13.18 acres, more or less.

End of Description.









SCALE: 1" = 300'




| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 101.94 | 125.00 | 46°43'31" | N26°09'57"W | 99.14 |
| C2 | 5.19 | 700.00 | 0°25'28" | S44°54'13"W | 5.19 |
| C3 | 172.97 | 960.00 | 10°19'23" | N34°37'53"E | 172.73 |
| C4 | 475.70 | 865.00 | 31°30'34" | N13°42'55"E | 469.73 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | S87°11'27"W | 253.19 |
| L2 | S45°06'57"W | 33.56 |
| L3 | N44°53'03"W | 254.75 |

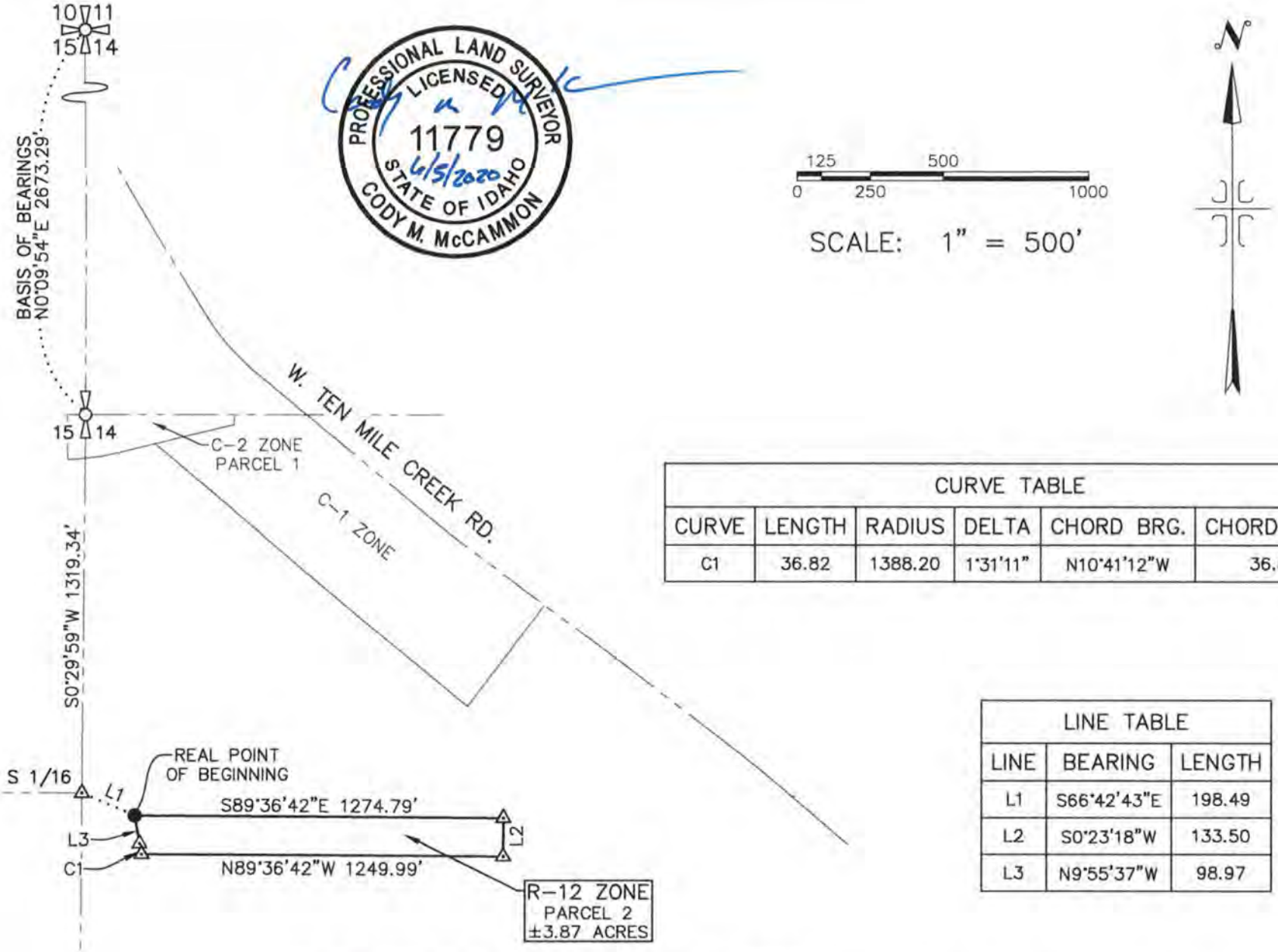



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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
R-12 ZONE (PARCEL 1)
LOCATED IN THE NE 1/4 OF SECTION 15,
T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 1 OF 3
DWG. DATE 7-14-19




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STATE OF IDAHO
CODY M. McCAMMON

125 500
0 250 1000
SCALE: 1" = 500'

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| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 36.82 | 1388.20 | 1°31'11" | N10°41'12"W | 36.82 |

| LINE TABLE | | |
|---|---|---|
| LINE | BEARING | LENGTH |
| L1 | S66°42'43"E | 198.49 |
| L2 | S0°23'18"W | 133.50 |
| L3 | N9°55'37"W | 98.97 |

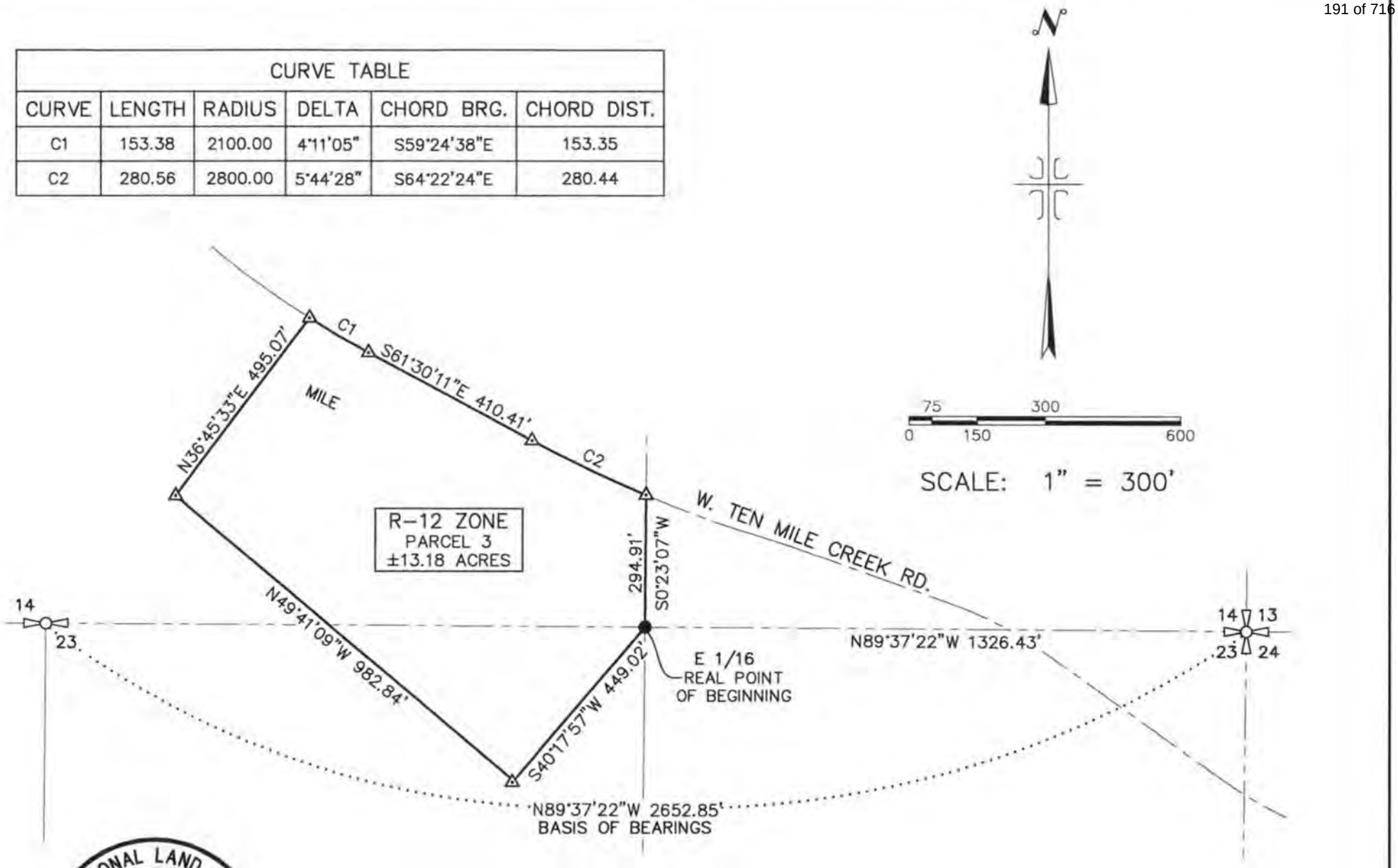
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IDAHO SURVEY GROUP, LLC
9955 W EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT ___ DRAWING FOR
R-12 ZONE (PARCEL 2)
LOCATED IN THE SOUTH 1/2 OF THE SOUTHWEST 1/4
OF SECTION 14, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 2 OF 3
DWG. DATE 7-14-19

| CURVE TABLE | | | | | |
|---|---|---|---|---|---|
| CURVE | LENGTH | RADIUS | DELTA | CHORD BRG. | CHORD DIST. |
| C1 | 153.38 | 2100.00 | 4°11'05" | S59°24'38"E | 153.35 |
| C2 | 280.56 | 2800.00 | 5°44'28" | S64°22'24"E | 280.44 |




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11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

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9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

# SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
## R-12 ZONE (PARCEL 3)

LOCATED IN THE SE 1/4 OF SECTION 14 AND THE NE 1/4 OF SECTION 23, T.2N., R.1E., B.M., ADA COUNTY, IDAHO

JOB NO. 19-192
SHEET NO. 3 OF 3
DWG. DATE 7-14-19

MATERIALS TESTING & INSPECTION
AN ATLAS COMPANY



❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

**Mr. Chris Findlay**
**Ten Mile Creek LLC**
**1211 Happy Drive**
**Boise, ID 83706**
**208-867-3884**

**Re: Limited Geotechnical Engineering Report**
**Ten Mile Creek Development**
**South of Ten Mile Creek Road & Hubbard Road**
**Kuna, ID**

Dear Mr. Findlay:

In compliance with your instructions, MTI has conducted a limited soils exploration for the above referenced development. Fieldwork for this investigation was conducted on 12 and 19 February 2019. The proposed development is in the eastern portion of the City of Kuna, Ada County, ID, and occupies portions of Sections 14, 23, and 24, Township 2 North, Range 1 East, Boise Meridian. This project is expected to consist of a new master plan community with 2,500 to 3,000 building lots. Currently, the total area planned for development is roughly 709 acres in size. The development will consist of approximately 500 acres of single-family residential land, 125 acres of parks and/or pathways, 20 acres of commercial lots, 15 acres of multi-family apartments, and a 30 acre school site.

**Authorization**

Authorization to perform this exploration and analysis was given in the form of a written authorization to proceed from Mr. Chris Findlay of Ten Mile Creek LLC to Nick Stevens of Materials Testing and Inspection (MTI), on 13 November 2018. Said authorization is subject to terms, conditions, and limitations described in the Professional Services Contract entered into between Ten Mile Creek LLC and MTI. Our scope of services for the proposed development has been provided in our proposal dated 7 November 2018 and repeated below.

**Regional Geology**

The project site is located within the western Snake River Plain of southwestern Idaho and eastern Oregon. The plain is a northwest trending rift basin, about 45 miles wide and 200 miles long, that developed about 14 million years ago (Ma) and has since been occupied sporadically by large inland lakes. Geologic materials found within and along the plain's margins reflect volcanic and fluvial/lacustrine sedimentary processes that have led to an accumulation of approximately 1 to 2 km of interbedded volcanic and sedimentary deposits within the plain. Along the margins of the plain, streams that drained the highlands to the north and south provided coarse to fine-grained sediments eroded from granitic and volcanic rocks, respectively. About 2 million years ago the last of the lakes was drained and since that time fluvial erosion and deposition has dominated the evolution of the landscape.



Exhibit A10

The northern (lower) portion of the project site is underlain by "Sandy Alluvium of Side-Stream Valleys and Gulches" as mapped by Othberg and Stanford (1993). Locally, these deposits are composed of medium to coarse sand interbedded with silty fine sand and silt and are mostly derived from weathered granite and reworked Tertiary sediments of the Boise Foothills. The thickness of this unit is variable. Because of the relative youthfulness of these deposits they contain only minor pedogenic clay and calcium carbonate.

The southern (upper) portion of the project site is underlain by "Tenmile Gravel" (Othberg and Stanford, 1993) thought to have been deposited at about the time of the Pliocene-Pleistocene boundary (~5 Ma). Deposits consist of sandy pebble and cobble gravel grading westward to sandy pebble gravel and pebbly sand at depth and extending to a unit thickness of about 45 feet. Tenmile Gravel makes up the eighth terrace above the modern Boise River floodplain in the eastern Boise Valley whereas remnants in the western Boise Valley form the fifth terrace above the floodplain. Side slopes of terrace remnants expose underlying Glenns Ferry Fm. Several normal faults offset these deposits and are exposed in local gravel pits and road cuts. The surface of the terrace shows prominent NW-trending gulches and gently sloping fault-line escarpments. Much of the Tenmile Gravel is mantled with loess that can be 3-6 feet thick, contains up to 50% pedogenic clay, and exhibits a well developed duripan horizon up to 6 feet thick.

The very southwest extent of the project site may be underlain by "Basalt Flows of Indian Creek, Undivided" as mapped by Othberg and Stanford (1993). This volcanic deposit is composed of multiple flows of medium to dark gray olivine basalt. These flows erupted from numerous vents found south of the Boise River and north of the Snake River, southeast of the City of Boise, Idaho. At the time of eruption lavas flowed into and down ancestral Indian Creek and Boise River valleys. Northwest-trending, gently sloping escarpments suggest faulting of the basalt. These basalts are mantled with loess 2-12 feet thick that contains about 35% pedogenic clay and a duripan that can be 3 feet thick.

**General Site Characteristics**

This proposed development is approximately 709 acres in size. Roughly 465 acres of the site encompasses a near level to gently sloping, northwest trending valley that contains the braided channel of Ten Mile Creek. Ten Mile Creek is a perennial stream that is comprised of multiple dry channel beds and numerous year-round springs. The creek is fed by Blacks Creek Reservoir and crosses the New York Canal at the northwest corner of the site. The New York Canal is generally southwest trending and follows the northwest site boundary. The drainage valley portion of the property is currently used for ranching and surficial soils mostly consist of sandy lean clays. Vegetation throughout the drainage floor consists of mature trees, shrubs, bunchgrass, and other native grass varieties typical of arid to semi-arid environments.

The Ten Mile Creek drainage is bordered to the south by a near level plateau throughout the southern portion of the property. Slopes rise to the south above the drainage floor and range from 2.5 feet horizontal to 1 foot vertical (2.5:1) to 8:1, gradually leveling out onto the bench. Within the southwest portion of the site, land use is predominantly agricultural and is currently planted with winter wheat crops. Slopes above the drainage floor and portions of the bench further to the south and east within the project site are relatively undisturbed and vegetated with native sagebrush, bunchgrass, and other native grass varieties typical of arid to semi-arid environments.

An east to west trending ridgeline rises above the project site and Ten Mile Creek Road to the north. Sections of the project site ranging from 1.98 to 20.47 acres in size are located to the north of Ten Mile Creek Road. These portions of the project site are predominantly sloping terrain, with slopes rising above Ten Mile Creek Road at 2:1 to 4:1 gradients. A majority of this land is currently undeveloped and is covered with native vegetation.

Regional drainage is north and west toward the Boise River via Ten Mile Creek. Stormwater drainage for the site is achieved by both sheet runoff and percolation through surficial soils. Runoff predominates for the steeper slopes while percolation prevails across the gently sloping and near level areas. From the north, northeast, and southeast, intermittent off-site stormwater may drain onto the project site. Natural stormwater drainage collection is achieved on the project site via Ten Mile Creek and is limited to culvert crossing along Ten Mile Creek Road.

**Exploration and Sampling Procedures**

Field exploration conducted to determine engineering characteristics of subsurface materials included a reconnaissance of the project site and investigation by test pit. Test pit locations were selected by Chris Findlay of Ten Mile Creek LLC and provided to MTI via a site map. Actual test pit sites were located in the field by means of a Global Positioning System (GPS) device and are reportedly accurate to within ten feet. Upon completion of investigation, each test pit was backfilled with loose excavated materials. Re-excavation and compaction of these test pit areas are required prior to construction of overlying structures.

In addition, samples were obtained from representative soil strata encountered. Samples obtained have been visually classified in the field by professional staff, identified according to test pit number and depth, placed in sealed containers, and transported to our laboratory for additional testing. Subsurface materials have been described in detail on logs provided in the **Enclosures** section. Results of field and laboratory tests are also presented in the **Enclosures** section. MTI recommends that these logs **not** be used to estimate fill material quantities.

**Laboratory Testing Program**

Along with our field investigation, a supplemental laboratory testing program was conducted to determine additional pertinent engineering characteristics of subsurface materials necessary in an analysis of anticipated behavior of the proposed structures. Laboratory tests were conducted in accordance with current applicable American Society for Testing and Materials (ASTM) specifications, and results of these tests are to be found on the accompanying logs located in the **Enclosures** section. The laboratory testing program for this report included: Atterberg Limits Testing – ASTM D4318 and Grain Size Analysis – ASTM C117/C136.

**Soil and Sediment Profile**

The profile below represents a generalized interpretation for the project site. Note that on site soils strata, encountered between test pit locations, may vary from the individual soil profiles presented in the logs, which can be found in the **Enclosures** section.



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**Ten Mile Creek Drainage (Lower Portion)**

The materials encountered during exploration were quite typical for the geologic area mapped as Sandy Alluvium of Side-Stream Valleys and Gulches. Surficial soils were predominately sandy lean clays and borderline lean clays with sand/sandy lean clays. Clays were brown to dark brown, dry to slightly moist, and soft to very stiff, with fine to medium-grained sand. In test pits 6 and 7, sandy lean clays also contained fine to coarse gravels. Sandy silt soils were encountered beneath surficial soils in test pit 1. These fine-grained soils were gray to light brown, slightly moist to moist, and stiff to very stiff, with fine to medium-grained sand. Intermittent weak calcium carbonate cementation was noted throughout this horizon. Organic materials were often noted to depths of roughly 1.6 feet if encountered, and frozen soils usually reached a depth of 0.4 foot if present.

At depth, various sand/gravel sediments with varying silt and clay content were noted across the site. Poorly graded sands were tan to gray, moist to saturated, and medium dense to dense, with fine to coarse-grained sand and 4-inch minus cobbles. Poorly graded gravels were tan to brown or gray in color. These sediments ranged from dry to saturated and medium dense to very dense. Fine to coarse-grained sand and 14-inch minus boulders were noted throughout. Varying amounts of silt and clay were observed throughout poorly graded gravel and sand sediments.

**Southern Bench (Upper Portion)**

The materials encountered during exploration were quite typical for the geologic area mapped as Tenmile Gravel and at the southwest extent (near test pit 12) as Basalt Flows of Indian Creek, Undivided. Surficial materials were predominately sandy lean clay with gravel fills. In test pit 9, silty sand with gravel fill materials were noted below these surficial fills. Fill materials were tan to dark brown and gray, dry to slightly moist, and soft to very stiff/medium dense. Fine to coarse-grained sand, 6-inch minus cobbles, and some garbage debris were noted within these materials. Organic materials were noted at limited test pit sites, and reached depths up to 1.0 foot below ground surface where encountered. Lean clay soils were encountered beneath fill materials within test pits 11 through 13. Lean clays were brown to dark brown, dry to slightly moist, and stiff to very stiff. Across the site, sandy silt with gravel soils were encountered below fill materials and lean clay soils. Sandy silts with gravel varied from tan to whitish-tan and whitish-pink. These fine-grained soils were dry throughout. The consistency of this horizon was hard and contained some degree of calcium carbonate cementation (hardpan).

In many of the more deeply developed soils, poorly graded gravel with sand sediments were encountered. Poorly graded gravels with sand were most often classified as orangish-tan to gray, dry, and varied in relative density from dense to very dense. Hardpan cementation also extended through the upper zone of this horizon. Lenses of poorly graded sand with silt sediments were noted throughout the poorly graded gravels and were also encountered at depth in test pit 13. These sediments were tan, dry, and loose to medium dense, with fine to coarse-grained sand. Some fine to coarse gravel and excessive sidewall caving was observed throughout. In test pit 12, basalt rock was noted at depth. Basalt was noted as black to gray, fresh to slightly weathered, widely to closely fractured, and moderately strong to very strong. Hand specimens contained calcic veining and some vesicles.

Competency of test pit walls varied little across the site. In general, fine-grained soils remained stable while more granular sediments readily sloughed. However, moisture contents will also affect wall competency with saturated soils having a tendency to readily slough when under load and unsupported.

**Groundwater**

**Ten Mile Creek Drainage (Lower Portion)**

During this field investigation, groundwater was encountered in test pits throughout the Ten Mile Creek drainage (test pits 1 through 8) at depths ranging from 5.0 to 7.1 feet bgs. Soil moistures in the test pits were generally dry to slightly moist within surficial soils. Within the varying poorly graded sands and poorly graded gravel sediments, soil moistures graded from slightly moist to saturated as the water table was approached and penetrated. In the vicinity of the lower portion of the site, groundwater levels are controlled in large part by the stage and flow of Ten Mile Creek and seasonal precipitiation. Ten Mile Creek is considered a perennial stream and will have continuous, variable flow in portions of the drainage year-round. In the proximity of the Ten Mile Creek drainage, groundwater levels could be as shallow as ground surface during portions of the year. Since this is an estimated depth and seasonal groundwater levels fluctuate, actual levels should be confirmed by periodic groundwater data collected from piezometers installed in test pits 1 through 8. If desired, MTI is available to perform this monitoring.

**Southern Plateau (Upper Portion)**

During this field investigation, groundwater was not encountered in the southern (upper) portion of the site (test pits 9 through 13) in test pits excavated to depths up to 17.4 feet bgs. Soil moistures in test pits were generally dry to slightly moist throughout. In the vicinity of the upper portion of the project site, groundwater levels are controlled in large part by commercial (agricultural) irrigation activity and leakage from nearby canals. Maximum groundwater elevations likely occur during the later portion of the irrigation season. According to Idaho Department of Water Resources (IDWR) well logs and United States Geological Survey (USGS) monitoring well data within approximately ¼-mile of the project site, groundwater was measured at depths ranging between 107 to 324 feet bgs. For construction purposes, groundwater depth can be assumed to remain greater than 20 feet bgs throughout the year.

**Soil Infiltration Rates**

Soil permeability, which is a measure of the ability of a soil to transmit a fluid, was not tested in the field. Given the absence of direct measurements, for this report an estimation of infiltration is presented using generally recognized values for each soil type and gradation. Of soils comprising the generalized soil profile for this study, lean clay soils generally offer little permeability, with typical hydraulic infiltration rates of less than 2 inches per hour. Sandy silt with gravel soils will commonly exhibit infiltration rates from 2 to 4 inches per hour; though calcium carbonate cementation may reduce this value to near zero. Poorly graded sand and gravel sediments typically exhibit infiltration values in excess of 12 inches per hour. However, varying clay and silt content within these sediments may reduce infiltration rates variably. Infiltration rates through basalt rock can be highly variable, ranging from nearly zero to greater than 6 inches per hour in some cases.



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## Warranty and Limiting Conditions

MTI warrants that findings and conclusions contained herein have been formulated in accordance with generally accepted professional engineering practice in the fields of foundation engineering, soil mechanics, and engineering geology only for the site and project described in this report. These engineering methods have been developed to provide the client with information regarding apparent or potential engineering conditions relating to the site within the scope cited above and are necessarily limited to conditions observed at the time of the site visit and research. Field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for the purposes cited above.

**Exclusive Use**

**This report was prepared for exclusive use of the property owner(s), at the time of the report, and their retained design consultants ("Client").** Conclusions and recommendations presented in this report are based on the agreed-upon scope of work outlined in this report together with the Contract for Professional Services between the Client and Materials Testing and Inspection ("Consultant"). Use or misuse of this report, or reliance upon findings hereof, by parties other than the Client is at their own risk. Neither Client nor Consultant make representation of warranty to such other parties as to accuracy or completeness of this report or suitability of its use by such other parties for purposes whatsoever, known or unknown, to Client or Consultant. Neither Client nor Consultant shall have liability to indemnify or hold harmless third parties for losses incurred by actual or purported use or misuse of this report. No other warranties are implied or expressed.

**Report Recommendations are Limited and Subject to Misinterpretation**

There is a distinct possibility that conditions may exist that could not be identified within the scope of the investigation or that were not apparent during our site investigation. Findings of this report are limited to data collected from noted explorations advanced and do not account for unidentified fill zones, unsuitable soil types or conditions, and variability in soil moisture and groundwater conditions. To avoid possible misinterpretations of findings, conclusions, and implications of this report, MTI should be retained to explain the report contents to other design professionals as well as construction professionals.

Since actual subsurface conditions on the site can only be verified by earthwork, note that construction recommendations are based on general assumptions from selective observations and selective field exploratory sampling. Upon commencement of construction, such conditions may be identified that require corrective actions, and these required corrective actions may impact the project budget. Therefore, construction recommendations in this report should be considered preliminary, and MTI should be retained to observe actual subsurface conditions during earthwork construction activities to provide additional construction recommendations as needed.

Since geotechnical reports are subject to misinterpretation, **do not** separate the soil logs from the report. Rather, provide a copy of, or authorize for their use, the complete report to other design professionals or contractors. Locations of exploratory sites referenced within this report should be considered approximate locations only. For more accurate locations, services of a professional land surveyor are recommended.



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This report is also limited to information available at the time it was prepared. In the event additional information is provided to MTI following publication of our report, it will be forwarded to the client for evaluation in the form received.

**Environmental Concerns**

Comments in this report concerning either onsite conditions or observations, including soil appearances and odors, are provided as general information. These comments are not intended to describe, quantify, or evaluate environmental concerns or situations. Since personnel, skills, procedures, standards, and equipment differ, a geotechnical investigation report is not intended to substitute for a geoenvironmental investigation or a Phase II/III Environmental Site Assessment. If environmental services are needed, MTI can provide, via a separate contract, those personnel who are trained to investigate and delineate soil and water contamination.

**General Comments**

Often, questions arise concerning soil conditions because of design and construction details that occur on a project. MTI would be pleased to continue our role as geotechnical engineers during project implementation. Additionally, MTI can provide materials testing and special inspection services during construction of this project. If you will advise us of the appropriate time to discuss these engineering services, we will meet with you at your convenience.

MTI appreciates this opportunity to be of service to you and looks forward to working with you in the future. If you have questions, please call (208) 376-4748.

Respectfully Submitted,
**Materials Testing & Inspection**

Nick Stevens, G.I.T.
Staff Geologist

*Reviewed by:* Monica Sacullles, P.E.
Senior Geotechnical Engineer

PROFESSIONAL ENGINEER LICENSED 14919 2-27-19 STATE OF IDAHO MONICA SACULLES

*Reviewed by:* Clint Wyllie, G.I.T.
Staff Geologist

Enclosures:
*Geotechnical General Notes*
*Geotechnical Investigation Test Pit Logs*
*Vicinity Map*
*Site Map*

MATERIALS TESTING & INSPECTION
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# GEOTECHNICAL GENERAL NOTES

| RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION | | | |
|---|---|---|---|
| **Coarse-Grained Soils** | **SPT Blow Counts (N)** | **Fine-Grained Soils** | **SPT Blow Counts (N)** |
| Very Loose: | < 4 | Very Soft: | < 2 |
| Loose: | 4-10 | Soft: | 2-4 |
| Medium Dense: | 10-30 | Medium Stiff: | 4-8 |
| Dense: | 30-50 | Stiff: | 8-15 |
| Very Dense: | >50 | Very Stiff: | 15-30 |
| | | Hard: | >30 |

| Moisture Content | |
|---|---|
| **Description** | **Field Test** |
| Dry | Absence of moisture, dusty, dry to touch |
| Moist | Damp but not visible moisture |
| Wet | Visible free water, usually soil is below water table |

| Cementation | |
|---|---|
| **Description** | **Field Test** |
| Weakly | Crumbles or breaks with handling or slight finger pressure |
| Moderately | Crumbles or beaks with considerable finger pressure |
| Strongly | Will not crumble or break with finger pressure |

| PARTICLE SIZE | | | | | |
|---|---|---|---|---|---|
| Boulders: | >12 in. | Coarse-Grained Sand: | 5 to 0.6 mm | Silts: | 0.075 to 0.005 mm |
| Cobbles: | 12 to 3 in. | Medium-Grained Sand: | 0.6 to 0.2 mm | Clays: | <0.005 mm |
| Gravel: | 3 in. to 5 mm | Fine-Grained Sand: | 0.2 to 0.075 mm | | |

| UNIFIED SOIL CLASSIFICATION SYSTEM | | | |
|---|---|---|---|
| **Major Divisions** | | **Symbol** | **Soil Descriptions** |
| Coarse-Grained Soils <50% passes No.200 sieve | Gravel & Gravelly Soils <50% coarse fraction passes No.4 sieve | GW | Well-graded gravels; gravel/sand mixtures with little or no fines |
| | | GP | Poorly-graded gravels; gravel/sand mixtures with little or no fines |
| | | GM | Silty gravels; poorly-graded gravel/sand/silt mixtures |
| | | GC | Clayey gravels; poorly-graded gravel/sand/clay mixtures |
| | Sand & Sandy Soils >50% coarse fraction passes No.4 sieve | SW | Well-graded sands; gravelly sands with little or no fines |
| | | SP | Poorly-graded sands; gravelly sands with little or no fines |
| | | SM | Silty sands; poorly-graded sand/gravel/silt mixtures |
| | | SC | Clayey sands; poorly-graded sand/gravel/clay mixtures |
| Fine Grained Soils >50% passes No.200 sieve | Silts & Clays LL < 50 | ML | Inorganic silts; sandy, gravelly or clayey silts |
| | | CL | Lean clays; inorganic, gravelly, sandy, or silty, low to medium-plasticity clays |
| | | OL | Organic, low-plasticity clays and silts |
| | Silts & Clays LL > 50 | MH | Inorganic, elastic silts; sandy, gravelly or clayey elastic silts |
| | | CH | Fat clays; high-plasticity, inorganic clays |
| | | OH | Organic, medium to high-plasticity clays and silts |
| Highly Organic Soils | | PT | Peat, humus, hydric soils with high organic content |


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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-1 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.51015 **Longitude:** -116.32144
**Depth to Water Table:** 6.5 Feet bgs **Total Depth:** 7.7 Feet bgs
**Notes:** Piezometer installed to 7.7 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.7 | Sandy Lean Clay (CL): *Brown to dark brown, dry to slightly moist, stiff to very stiff, with fine to medium-grained sand.* *--Frozen soils noted to 0.4 foot bgs.* *--Organic materials noted to 0.9 foot bgs.* | | | 2.0-2.25 | |
| 2.7-4.1 | Sandy Silt (ML): *Gray to light brown, slightly moist to moist, stiff to very stiff, with fine to medium-grained sand.* *--Intermittent weak calcium carbonate cementation noted throughout.* | | | | |
| 4.1-7.7 | Poorly Graded Sand with Gravel (SP): *Tan to gray, moist to saturated, medium dense to dense, with fine to coarse-grained sand and 4-inch minus cobbles.* | | | | |


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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-2 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.51161 **Longitude:** -116.31945
**Depth to Water Table:** 5.0 Feet bgs **Total Depth:** 5.5 Feet bgs
**Notes:** Piezometer installed to 5.5 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-1.6 | Sandy Lean Clay (CL): *Brown to dark brown, dry to slightly moist, soft to medium stiff, with fine to medium-grained sand.*<br>*--Frozen soils noted to 0.3 foot bgs.*<br>*--Organic materials noted throughout.* | | | 0.25-0.5 | |
| 1.6-5.5 | Poorly Graded Gravel with Sand (GP): *Tan to gray, slightly moist to saturated, medium dense to dense, with fine to coarse-grained sand and 10-inch minus cobbles.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-3 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.50944 **Longitude:** -116.31553
**Depth to Water Table:** 5.0 Feet bgs **Total Depth:** 5.9 Feet bgs
**Notes:** Piezometer installed to 5.9 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.9 | Borderline Lean Clay with Sand/Sandy Lean Clay (CL): *Brown to dark brown, dry to slightly moist, soft to medium stiff, with fine to medium-grained sand.* *--Frozen soils noted to 0.2 foot bgs.* *--Organic materials noted to 1.0 foot bgs.* | GS | 0.5-1.0 | 0.25-0.5 | A |
| 2.9-5.9 | Poorly Graded Gravel with Silt and Sand (GP-GM): *Light brown to brown, gray, slightly moist to saturated, medium dense to dense, with fine to coarse-grained sand and 8-inch minus cobbles.* *--Intermittent 6 to 20-inch thick lenses of silty sand sediments noted throughout.* | | | | |

| Lab Test ID | M | LL | PI | Sieve Analysis | | | | |
|---|---|---|---|---|---|---|---|---|
| - | % | - | - | #4 | #10 | #40 | #100 | #200 |
| A | 24.8 | 29 | 12 | 100 | 100 | 97 | 87 | 69.2 |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-4 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.50944 **Longitude:** -116.31553
**Depth to Water Table:** 5.4 Feet bgs **Total Depth:** 6.2 Feet bgs
**Notes:** Piezometer installed to 6.2 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-4.2 | Sandy Lean Clay (CL): *Brown to dark brown, dry to moist, soft to stiff, with fine to medium-grained sand.*<br>*--Frozen soils noted to 0.2 foot bgs.*<br>*--Organic materials noted to 1.0 foot bgs.* | | | 0.5-1.75 | |
| 4.2-6.2 | Poorly Graded Sand with Silt (SP-SM): *Tan to gray, moist to saturated, medium dense to dense, with fine to coarse-grained sand.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-5 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.50203 **Longitude:** -116.30441
**Depth to Water Table:** 7.1 Feet bgs **Total Depth:** 7.8 Feet bgs
**Notes:** Piezometer installed to 7.8 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-1.4 | Sandy Lean Clay (CL): *Brown to dark brown, dry to moist, stiff to very stiff, with fine to medium-grained sand.* *--Frozen soils noted to 0.1 foot bgs.* *--Organic materials noted to 0.4 foot bgs.* | | | 1.75-2.25 | |
| 1.4-7.8 | Poorly Graded Gravel with Clay and Sand (GP-GC): *Light brown to brown, gray, dry to saturated, medium dense to very dense, with fine to coarse-grained sand and 8-inch minus cobbles.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-6 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49877 **Longitude:** -116.29747
**Depth to Water Table:** 6.8 Feet bgs **Total Depth:** 16.6 Feet bgs
**Notes:** Piezometer installed to 16.6 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.1 | Sandy Lean Clay with Gravel (CL): *Brown to dark brown, dry to slightly moist, soft to stiff, with fine to medium-grained sand and fine to coarse gravel.*<br>*--Frozen soils noted to 0.2 foot bgs.*<br>*--Organic materials noted to 1.3 feet bgs.* | | | 0.25-1.0 | |
| 2.1-16.6 | Poorly Graded Gravel with Clay and Sand (GP-GC): *Light brown or gray, dry to saturated, medium dense to dense, with fine to coarse-grained sand and 14-inch minus boulders.*<br>*--Varying clay content noted throughout.*<br>*--Lens of clayey gravel with sand sediments noted from 6.1 to 6.6 feet bgs.*<br>*--Groundwater was observed slowly seeping through sidewalls as test pit was advanced.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-7 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49859 **Longitude:** -116.29214
**Depth to Water Table:** 6.1 Feet bgs **Total Depth:** 7.8 Feet bgs
**Notes:** Piezometer installed to 7.8 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.2 | Sandy Lean Clay with Gravel (CL): *Brown to dark brown, dry to moist, stiff to very stiff, with fine to medium-grained sand and fine to coarse gravel.*<br>*--Frozen soils noted to 0.1 foot bgs.*<br>*--Organic materials noted to 0.7 foot bgs.* | | | 1.5-2.25 | |
| 2.2-7.8 | Poorly Graded Gravel with Silt and Sand (GP-GM): *Light brown to gray, slightly moist to saturated, medium dense to very dense, with fine to coarse-grained sand and 14-inch minus boulders.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-8 **Date Advanced:** 12 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49577 **Longitude:** -116.28413
**Depth to Water Table:** 6.9 Feet bgs **Total Depth:** 8.3 Feet bgs
**Notes:** Piezometer installed to 8.3 feet bgs.

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.6 | Sandy Lean Clay (CL): *Dark brown, slightly moist to moist, soft to medium stiff, with fine to medium-grained sand.* *--Frozen soils noted to 0.2 foot bgs.* *--Organic materials noted to 1.3 feet bgs.* | GS | 1.0-1.5 | 0.25-0.75 | B |
| 2.6-8.3 | Poorly Graded Gravel with Clay and Sand (GP-GC): *Light brown to brown to gray, slightly moist to saturated, medium dense to very dense, with fine to coarse-grained sand and 10-inch minus cobbles.* | | | | |

| Lab Test ID | M | LL | PI | Sieve Analysis | | | | |
|---|---|---|---|---|---|---|---|---|
| - | % | - | - | #4 | #10 | #40 | #100 | #200 |
| B | 23.0 | 31 | 16 | 88 | 86 | 78 | 66 | 56.9 |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-9 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.50286 **Longitude:** -116.31264
**Depth to Water Table:** Not Encountered **Total Depth:** 12.4 Feet bgs

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-1.4 | Sandy Lean Clay with Gravel Fill (CL-FILL): *Dark brown, dry to slightly moist, soft to medium stiff, with fine to medium-grained sand and fine to coarse-gravel.* *--Organic materials noted to 1.0 foot bgs.* | | | 0.5-0.75 | |
| 1.4-3.0 | Silty Sand with Gravel Fill (SM-FILL): *Tan to gray, dry, medium dense, with fine to coarse-grained sand and fine to coarse gravel.* | | | | |
| 3.0-5.2 | Sandy Silt with Gravel (ML): *Tan, dry, hard, with fine to medium-grained sand and 8-inch minus cobbles.* *--Weak to moderate calcium carbonate cementation noted throughout.* | | | | |
| 5.2-12.4 | Poorly Graded Gravel with Sand (GP): *Tan to gray, dry, dense to very dense, with fine to coarse-grained sand and 11-inch minus cobbles.* *--Weak to moderate calcium carbonate cementation noted from 5.2 to 6.2 feet bgs.* *--Layer of loose to medium dense poorly graded sand with silt sediments from 7.2 to 9.1 feet bgs.* *--Excessive sidewall caving noted from 7.2 to 9.1 feet bgs.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-10 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.50289 **Longitude:** -116.312439
**Depth to Water Table:** Not Encountered **Total Depth:** 12.9 Feet bgs

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-2.1 | Sandy Lean Clay with Gravel Fill (CL-FILL): *Dark brown to tan, dry to slightly moist, medium stiff to stiff, with fine to medium-grained sand and 6-inch minus cobbles.*<br>*--Organic materials noted to 0.5 foot bgs.* | | | 0.75-1.75 | |
| 2.1-4.2 | Sandy Silt with Gravel (ML): *Whitish-pink, dry, hard, with fine to coarse-grained sand and fine to coarse gravel.*<br>*--Strong calcium carbonate cementation noted throughout.* | | | | |
| 4.2-12.9 | Poorly Graded Gravel with Sand (GP): *Tan to gray, dry, dense to very dense, with fine to coarse-grained sand and 10-inch minus cobbles.*<br>*--Intermittent weak calcium carbonate cementation noted from 4.2 to 4.5 feet bgs.*<br>*--Intermittent 10 to 16 inch thick lenses of loose to medium dense poorly graded sand with silt sediments noted throughout.*<br>*--Excessive sidewall caving noted within poorly graded sand with silt and gravel sediments.* | | | | |


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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-11 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49864 **Longitude:** -116.31435
**Depth to Water Table:** Not Encountered **Total Depth:** 17.4 Feet bgs

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-1.4 | Sandy Lean Clay with Gravel Fill (CL-FILL): *Dark brown to tan, dry to slightly moist, stiff to very stiff, with fine to medium-grained sand and fine to coarse gravel.* | | | 1.25-2.5 | |
| 1.4-2.9 | Lean Clay (CL): *Brown to dark brown, dry to slightly moist, stiff to very stiff.* | GS | 1.6-2.1 | 2.0-3.0 | C |
| 2.9-4.5 | Sandy Silt with Gravel (ML): *Whitish-tan, dry, hard, with fine to coarse-grained sand and fine to coarse gravel.*<br>*--Strong calcium carbonate cementation noted throughout.* | | | | |
| 4.5-17.4 | Poorly Graded Gravel with Sand (GP): *Orangish-tan to gray, dry, very dense, with fine to coarse-grained sand and 12-inch minus cobbles.*<br>*--Intermittent weak calcium carbonate cementation noted from 4.5 to 6.7 feet bgs.*<br>*--Some clay content noted from 4.5 to 9.0 feet bgs.*<br>*--Intermittent 20-inch minus boulders noted throughout.* | | | | |

| Lab Test ID | M | LL | PI | Sieve Analysis | | | | |
|---|---|---|---|---|---|---|---|---|
| - | % | - | - | #4 | #10 | #40 | #100 | #200 |
| C | 25.2 | 35 | 20 | 98 | 97 | 92 | 89 | 85.8 |


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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-12 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49572 **Longitude:** -116.31439
**Depth to Water Table:** Not Encountered **Total Depth:** 11.8 Feet bgs

| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-1.8 | Sandy Lean Clay with Gravel Fill (CL-FILL): *Dark brown to tan, dry to slightly moist, stiff to very stiff, with fine to medium-grained sand and 4-inch minus cobbles* | | | 1.75-3.0 | |
| 1.4-2.9 | Lean Clay (CL): *Brown to dark brown, dry to slightly moist, very stiff.* | | | 2.5-3.5 | |
| 3.4-11.8 | Sandy Silt with Gravel (ML): *Whitish-tan, dry, very stiff to hard, with fine to coarse-grained sand and fine to coarse gravel.* *--Moderate to strong calcium carbonate cementation noted from 3.4 to 10.6 feet bgs.* | | | | |
| Below 11.8 | Basalt: *Black to gray, fresh to slightly weathered, widely to closely fractured, moderately strong to very strong.* *--Calcic veining and some vesicles noted on hand specimens.* | | | | |



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## GEOTECHNICAL INVESTIGATION TEST PIT LOG

**Test Pit Log #:** TP-13 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
**Excavated by:** Struckman's Backhoe Service **Location:** See Site Map Plates
**Latitude:** 43.49924 **Longitude:** -116.30942
**Depth to Water Table:** Not Encountered **Total Depth:** 13.2 Feet bgs

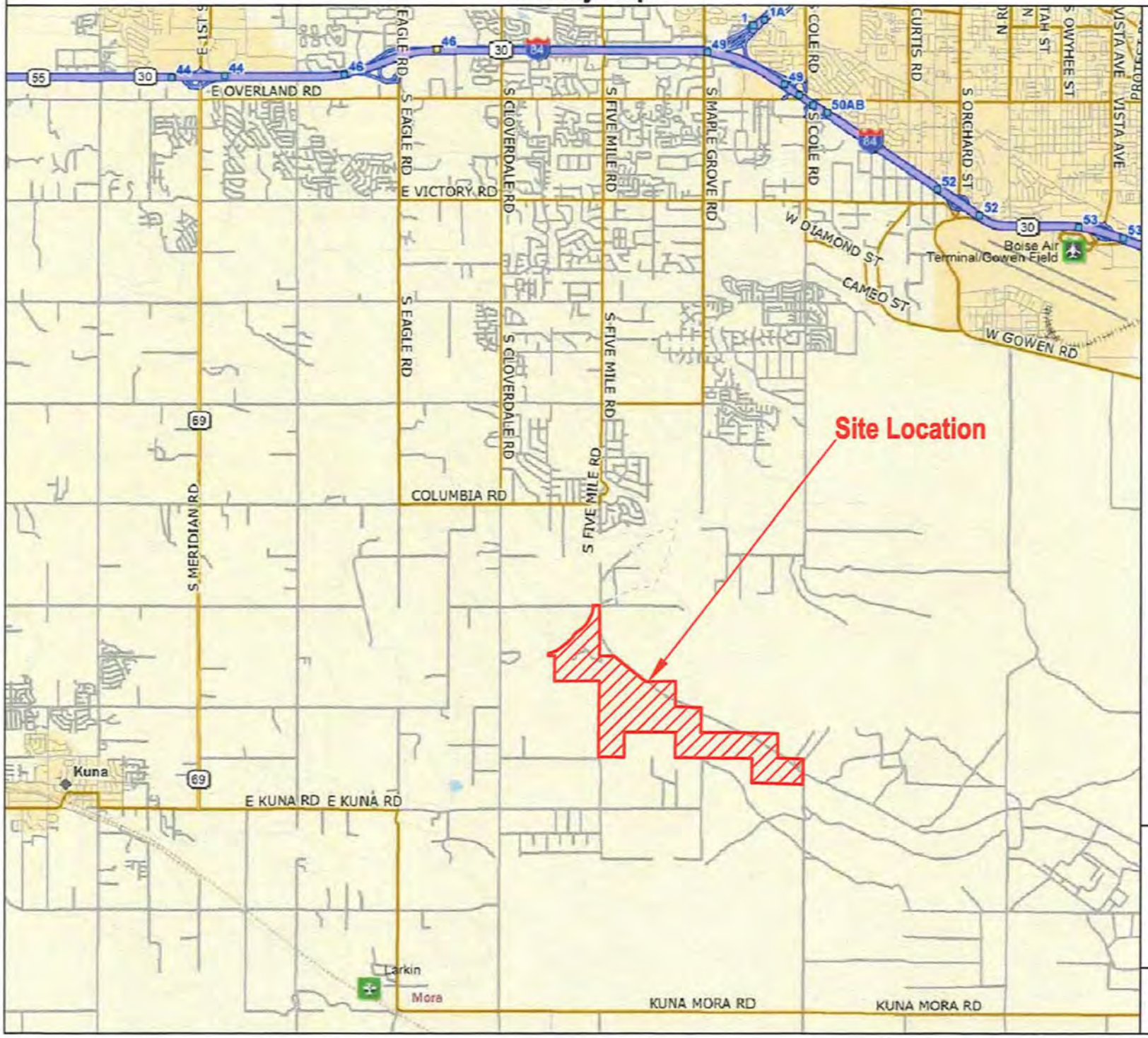
| Depth (Feet bgs) | Field Description and USCS Soil and Sediment Classification | Sample Type | Sample Depth (Feet bgs) | Qp | Lab Test ID |
|---|---|---|---|---|---|
| 0.0-0.8 | Sandy Lean Clay with Gravel Fill (CL-FILL): *Dark brown to tan, dry to slightly moist, stiff to very stiff, with fine to medium-grained sand and 4-inch minus cemented clasts.* *--Some garbage and debris noted throughout.* | | | | |
| 0.8-2.4 | Lean Clay (CL): *Brown to dark brown, dry to slightly moist, stiff to very stiff.* | | | 1.5-2.25 | |
| 2.4-5.6 | Sandy Silt with Gravel (ML): *Whitish-tan, dry, hard, with fine to coarse-grained sand and fine to coarse gravel.* *--Moderate to strong calcium carbonate cementation noted throughout.* | | | | |
| 5.6-7.9 | Poorly Graded Gravel with Sand (GP): *Tan to gray, dry, very dense, with fine to coarse-grained sand and 10-inch minus cobbles.* *--Strong calcium carbonate cementation noted from 5.6 to 7.9 feet bgs.* | | | | |
| 7.9-13.2 | Poorly Graded Sand with Silt (SP-SM): *Tan, dry, loose to medium dense, with fine to coarse-grained sand.* *--Some fine to coarse gravel noted throughout.* *--Excessive sidewall caving noted throughout.* | | | | |



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# Vicinity Map

Plate 1




**MAP NOTES:**

- Delorme Street Atlas
- Not to Scale

**LEGEND**

Approximate Site Location

N

**Ten Mile Creek Development**
South of Ten Mile Creek Road
and Hubbard Road
Kuna, ID

Modified from DeLorme by: NGS
25 February 2019
Drawing: B181928g

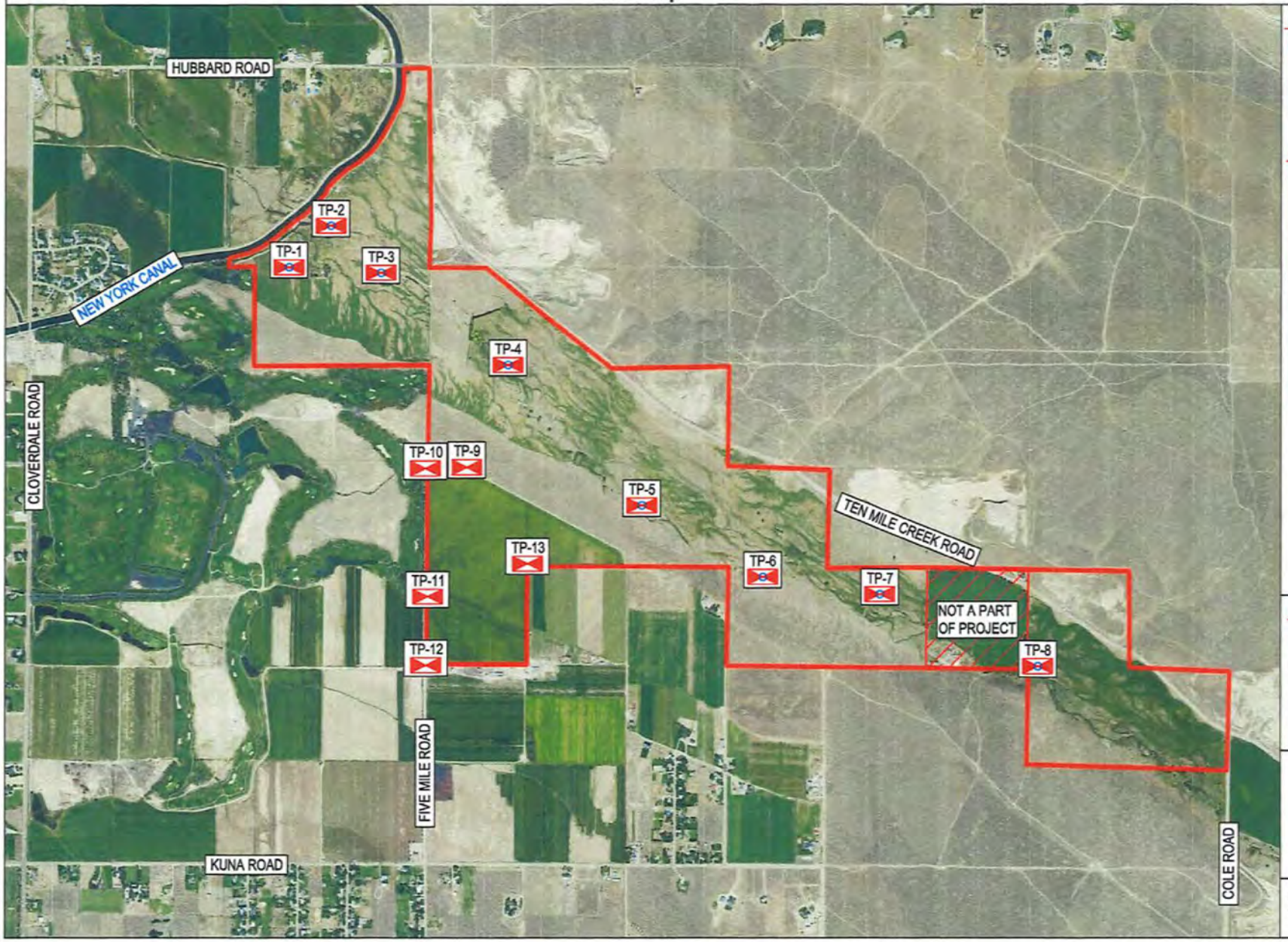
MATERIALS TESTING & INSPECTION
AN ATLAS COMPANY

2791 S. Victory View Way
Boise, ID 83709-2835

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

# Site Map

Plate 2




**NOTES:**

- Not to Scale
- Aerial photography by USDA-FSA

**LEGEND**

Approximate Site Boundary

Approximate MTI Test Pit Location

Approximate MTI Test Pit Location with Piezometer

N

**Ten Mile Creek Development**
South of Ten Mile Creek Road
and Hubbard Road
Kuna, ID

Modified by: NGS
25 February 2019
Drawing: B181928g

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2791 S Victory View Way
Boise, ID 83709

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

Subdivision Name Reservation

## Jerry Hastings

**From:** Sub Name Mail
**Sent:** Friday, March 22, 2019 5:04 PM
**To:** David Yorgason
**Cc:** codym@idahosurvey.com
**Subject:** Spring Rock Subdivision Name Reservation

March 25, 2019

Cody McCammon, Idaho Survey Group
Dave Yorgason, Ten Mile Creek LLC

RE: Subdivision Name Reservation: **SPRING ROCK SUBDIVISION**

At your request, I will reserve the name **Spring Rock Subdivision** for your project.
Due to the size of this development, the name reservation is subject to conditions. The use of this name is subject to the current Ada County Subdivision Name Policy & requirements of Idaho Code 50-1307.
The following items are included in the current policy, but are reiterated herein for emphasis.

1. Subsequent phases of this development must be adjoining. If the plat boundary phases are not adjoining, the primary name "**SPRING ROCK**" may be used but a new secondary name must be chosen and reserved prior to the plat being submitted to the Ada County Surveyor's office.
2. The use of this name across Ten Mile Creek Road may not be allowed, unless the Ten Mile Creek Road right-of-way is included in the plat. Without a review of all of the deeds, it would appear that Ten Mile Creek Road appears to be a prescriptive ( as opposed to dedicated) right-of-way.

I can honor this reservation only as long as your project is in the approval process. Final approval can only take place when the final plat is recorded.
This reservation is available for the project as long as it is in the approval process, unless the project is either terminated by the client, the jurisdiction, or the conditions of approval have not been met, in which case the name can be re-used by others.

Sincerely,

**Jerry L. Hastings, PLS 5359**
***County Surveyor***
**Deputy Clerk Recorder**
**Ada County Development Services**
200 W. Front St., Boise, ID 83702
(208) 287-7912 *office*
(208) 287-7909 *fax*
*E-mail: jhastings@adacounty.id.gov*

---

-----Original Message-----
From: David Yorgason [mailto:dyorgason6@gmail.com]
Sent: Thursday, March 21, 2019 11:31 AM
To: Sub Name Mail
Cc: Dave Yorgason
Subject: Subdivision Name Request: Springrock

Subdivision Naming:

We are requesting the name Springrock for a subdivision name. Please let us know if this is approved. Here is the information you need:

| Parcels: | Township Range Sections |
|---|---|
| S1415110103 | T2N R1&2E Sec 15 |
| S1415427805 | T2N R1E Sec 15 |
| S1415141900 | T2N R1E Sec 15 |
| S1414336000 | T2N R1&2E Sec 14 |
| S1414315000 | T2N R1E Sec 14 |
| S1414438400 | T2N R1E Sec 14 |
| S1414438900 | T2N R1E Sec 14 |
| S1423120000 | T2N R1E Sec 23 |
| S1423110000 | T2N R1E Sec 23 |
| S1423111000 | T2N R1E Sec 23 |
| S1424233600 | T2N R1E Sec 24 |
| S1424131800 | T2N R1E Sec 24 |
| | |
| S1424240000 | T2N R1E Sec 24 (Davis) |
| S1423211000 | T2N R1E Sec 23 (Gilmore) |

Surveyor: Idaho Survey Group (Cody McCammon)

Developer: Ten Mile Creek, LLC (contact Dave Yorgason)

Please advise if you need more info.

Thanks,
Dave Yorgason
208-850-1070

Subdivision Name Reservation

## Glen Smallwood

**From:** Sub Name Mail
**To:** David Yorgason; Sub Name Mail
**Cc:** Cody McCammon
**Subject:** RE: [EXTERNAL] Re: Springrock Subdivision Name Reservation

Since the name was already accepted, we changed the name in our system, adding a space.
I have modified the original letter and re-attached it.

**Glen Smallwood**
***Surveying Technician***
**Ada County Development Services**
200 W. Front St., Boise, ID 83702
(208) 287-7926 *office*
(208) 287-7909 *fax*

---

**From:** David Yorgason [mailto:dyorgason6@gmail.com]
**Sent:** Tuesday, July 2, 2019 4:30 PM
**To:** Sub Name Mail
**Cc:** Cody McCammon; Dave Yorgason
**Subject:** [EXTERNAL] Re: Springrock Subdivision Name Reservation

Jerry / Subdivision Naming Group,

Thank you again for approving the name for our subdivision. We are getting feedback that it would be better to have this name as two words if possible … can you change the name of our subdivision and approve it as Spring Rock Subdivision?

Thanks,
Dave Yorgason

On Mar 25, 2019, at 11:50 AM, Sub Name Mail <subnamemail@adacounty.id.gov> wrote:

March 25, 2019

Cody McCammon, Idaho Survey Group
Dave Yorgason, Ten Mile Creek LLC

RE: Subdivision Name Reservation: **SPRINGROCK SUBDIVISION**

At your request, I will reserve the name **Springrock Subdivision** for your project.
Due to the size of this development, the name reservation is subject to conditions. The use of this name is subject to the current Ada County Subdivision Name Policy & requirements of Idaho Code 50-1307.
The following items are included in the current policy, but are reiterated herein for emphasis.



Subdivision Name Reservation

1. Subsequent phases of this development must be adjoining. If the plat boundary phases are not adjoining, the primary name "**SPRINGROCK**" may be used but a new secondary name must be chosen and reserved prior to the plat being submitted to the Ada County Surveyor's office.
2. The use of this name across Ten Mile Creek Road may not be allowed, unless the Ten Mile Creek Road right-of-way is included in the plat. Without a review of all of the deeds, it would appear that Ten Mile Creek Road appears to be a prescriptive ( as opposed to dedicated) right-of-way.

I can honor this reservation only as long as your project is in the approval process. Final approval can only take place when the final plat is recorded.
This reservation is available for the project as long as it is in the approval process, unless the project is either terminated by the client, the jurisdiction, or the conditions of approval have not been met, in which case the name can be re-used by others.

Sincerely,

<image001.png>

**Jerry L. Hastings, PLS 5359**
***County Surveyor***
**Deputy Clerk Recorder**
**Ada County Development Services**
200 W. Front St., Boise, ID 83702
(208) 287-7912 *office*
(208) 287-7909 *fax*
*E-mail: jhastings@adacounty.id.gov*

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|---|---|
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| S1415427805 | T2N R1E Sec 15 |
| S1415141900 | T2N R1E Sec 15 |
| S1414336000 | T2N R1&2E Sec 14 |
| S1414315000 | T2N R1E Sec 14 |
| S1414438400 | T2N R1E Sec 14 |
| S1414438900 | T2N R1E Sec 14 |
| S1423120000 | T2N R1E Sec 23 |
| S1423110000 | T2N R1E Sec 23 |
| S1423111000 | T2N R1E Sec 23 |
| S1424233600 | T2N R1E Sec 24 |
| S1424131800 | T2N R1E Sec 24 |
| | |
| S1424240000 | T2N R1E Sec 24 (Davis) |
| S1423211000 | T2N R1E Sec 23 (Gilmore) |



Subdivision Name Reservation

Surveyor: Idaho Survey Group (Cody McCammon)

Developer: Ten Mile Creek, LLC (contact Dave Yorgason)

Please advise if you need more info.

Thanks,
Dave Yorgason
208-850-1070

CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.kunacity.id.gov

Paul A. Stevens, P.E.
Kuna City Engineer

# MEMORANDUM

**Date:** **20 August 2019**

**From:** **Paul A. Stevens, P.E.**

**To:** **Wendy Howell, Planning and Zoning Director**

**RE:** **Spring Rock Subdivision 19-10-AN, 19-01-PUD, 19-06-S, & DEVELOPMENT AGREEMENT.**

---

The Spring Rock 19-10-AN, 19-01-PUD, 19-06-S, DA dated 18 June 2019 has been reviewed. The application provides a preliminary plat, a narrative explaining the developers vision for the subdivision, a landscape plan, various explanatory maps and pictures, and a draft Development Agreement (DA). These comments apply to the preliminary plat and the rezone as they affect public works infrastructure. Landscaping, population density, parking requirements, emergency access, intense pedestrian and vehicular traffic in the proposed R 20 zone and similar topics are evaluated by the Planning and Zoning Department. Review and evaluation of civil design drawings is accomplished separately, when received.

These comments may be expanded or refined based on future land-use actions. The following comments apply considering current, effective requirements:

1. **General**
   a. The Spring Rock Subdivision site is approximately 761 acres and is currently zoned RR (ADA County Zone Rural Residential).
   b. Rezone requests:
      a. 660.78 acres R-6 (City of Kuna (COK) Medium Density Residential).
      b. 13 acres R-12 (COK High Density Residential).
      c. 18.89 acres R-20 (COK High Density Multi-Family Residential).
      d. 12.21 acres C-1 (COK Neighborhood Commercial District).
      e. 10.34 acres C-2 (COK Area Commercial District).
      f. An average Dwelling Units per Acre (DUA) for the overall project was not provided.
   c. Typical dwelling units are reckoned at approximately 3.18 people per household. At this rate the projected population for this subdivision will be approximately 14,000 people or 21 people per acre.
   d. A commensurate impact on the City of Kuna's, sewer, will result.
   e. Pressurized irrigation will be provided by the development utilizing existing wells.
   f. Potable water is recommended to be furnished by SUEZ because this property lies within their service boundary.
   g. A commensurate impact to traffic volumes and densities will follow.

h. Access to Spring Rock Subdivision is from W Ten Mile Creek Road.
i. Areas for outside activities are incorporated into the project. Connection to the City of Kuna pathways presents a long term goal that should be considered.
j. A plan approval letter will be required if this project affects any local irrigation districts.
k. Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties.
l. State the vertical datum used for elevations on all drawings.
m. Provide engineering certification on all final engineering drawings.

**2. Inspection Fees**

a. An inspection fee will be levied for City inspection of water, sewer and irrigation facilities construction associated with this development. The current inspection fee is $1.00 per lineal foot of sewer, water and pressure irrigation pipe. Payment is due and payable prior to City's approval of final construction plans.
b. The developer shall retain a qualified responsible, Idaho registered professional engineer to provide sufficient inspection to certify to DEQ that the project was completed in accordance with approved plans and specifications and to provide accurate as-built drawings to the City. IDAPA 10.01.02 lists the professional engineer's project responsibilities.
c. The developer's engineer and the City's inspector are encouraged to coordinate inspections.

**3. Right-of-Way**

a. Spring Rock Subdivision will impact travel on W Ten Mile Creek Road and adjoining roads.
a. All street construction must meet or exceed ACHD and City of Kuna development standards.
b. Sufficient right-of-way for existing and future classified streets shall be provided pursuant to City & ACHD standards.
c. Approaches onto classified streets must comply with ACHD and City of Kuna approach policies.
d. Sidewalk, curb and gutter, street widening and any related storm drainage facilities, consistent with city code and policies, shall be provided in connection with property development.
e. All city mainlines crossing proposed lots, running along the back of lots and sides of lots shall have easements that allow the City of Kuna to access and maintain the utilities.
f. All mainlines owned by the development shall be placed in easements large enough to allow maintenance and repairs.

**4. Sanitary Sewer & Potable Water**

a. It is recommended that this application be conditioned to conform to the sewer and water master plans as applicable.
b. Even though it is recommended that SUEZ will provide water to the development, water system improvements must meet or exceed the quality requirements of the City of Kuna.
c. If SUEZ is approved to be the water provider, an emergency intertie between SUEZ and City of Kuna with written agreement is required.
d. The applicant's property is not connected to City services and is subject to connection fees for the ultimate connected sewer load as provided in the City's Standard Tables. City Code (6-4-2) requires connection to the City sewer system for all sanitary sewer needs.
e. All sewer infrastructure must meet or exceed City of Kuna requirements.

f. Sewer flows from this development are expected to be substantial and will exceed the capacity of the receiving sewer lift stations (Patagonia then on to Memory). It is expected that the development shall provide the additional lift station capacity needed to serve the property.
g. Sewer collection pipe shall be evaluated and a determination made regarding adequacy for the projected sewage flows. Upsizing and or participation in a main trunk line construction project may be needed.
h. Water and sewer flow models will be required to verify adequate water supply and fire suppression and sewage removal.
i. Sewer and water connection fees apply to each lot containing a home or other facility.
j. All existing sewage treatment facilities (septic tank and drain field) must be decommissioned in accordance with Idaho Department of Environmental Quality requirements. Documentation shall be provided to the City of Kuna.
k. Decommission wells as needed, in accordance with Idaho Department of Water Resources (IDWR) requirements. Documentation shall be provided to the City of Kuna.

**5. Pressurized Irrigation**

a. It is recommended that this application be conditioned to conform to the Pressure Irrigation Master Plan.
b. The applicant's property is not connected to the City's pressurized irrigation system. Relying on drinking water for irrigation purposes conflicts with City Code (6-4-2).
c. All pressurized irrigation infrastructure shall meet or exceed City of Kuna standards.
d. Irrigation of Spring Rock subdivision shall be from on site, existing irrigation wells.
e. Existing irrigation ditches (supply & drain) must be relocated as needed and as approved by the irrigation ditch company/users.
f. Pressurized irrigation flow model will be required to verify adequate pressurized irrigation supply.

**6. Grading and Storm Drainage**

a. Verify that existing and proposed elevations match at property boundaries such that a slope burden is not imposed on adjacent properties. Slopes shall not be steeper than 3:1 on lots adjacent to a street or common lot and no steeper than 4:1 for lots with common rear lot lines.
b. Provide a grading and drainage plan which supports and maintains all upstream drainage rights and all downstream irrigation delivery rights as they presently exist for this property.
c. The City of Kuna relies on the ACHD Stormwater Policy Manual to establish the requirements for design of private storm water disposal systems.
d. Provide a storm water disposal & treatment plan which accounts for increased storm water runoff volumes. Provide detailed drawings of drainage & treatment facilities with supporting calculations for review and approval.
e. Runoff from public right-of-way is regulated by ACHD. On site storm water retention shall be reviewed by the City Engineer in conjunction with the Civil Engineering construction improvements review.

**7. As-Built Drawings**

a. As-built drawings are required at the conclusion of any public facility construction project and are the responsibility of the developer's engineer. The city may help track changes but will not be responsible for the finished product. As-built drawings will be required before occupancy or final plat approval is granted.

**8. Property Description**

**a.** The applicant provided a preliminary plat and supporting documents as part of the application.

This report is the Master Plan Report. The Preliminary Plat Report will be a separate report.

Exhibit B 2



Rebecca W. Arnold, President
Mary May, 1st Vice-President
Sara M. Baker, 2nd Vice-President
Jim D. Hansen, Commissioner
Kent Goldthorpe, Commissioner

December 12, 2019

To: Dave Yorgason
Ten Mile Creek, LLC
1211 North Happy Drive
Boise, ID 83706

Subject: MAS19-0002/ Spring Rock Master Plan

On December 12, 2019 the Ada County Highway District Commission acted on your application for the above referenced project.

If you have any questions, please feel free to contact me at (208) 387-6178.

Sincerely,

Mindy Wallace, AICP
Planning Review Supervisor
Development Services

cc: City of Kuna

This report is the Master Plan Report. The Preliminary Plat Report will be a separate report.

Exhibit B 2

Sara M. Baker, President
Rebecca W. Arnold, Vice President
Jim D. Hansen, Commissioner
Kent Goldthorpe, Commissioner
Paul Woods, Commissioner

December 11, 2019

To: Dave Yorgason
Ten Mile Creek, LLC
1211 North Happy Drive
Boise, ID 83706

Subject: Spring Rock Master Plan Community

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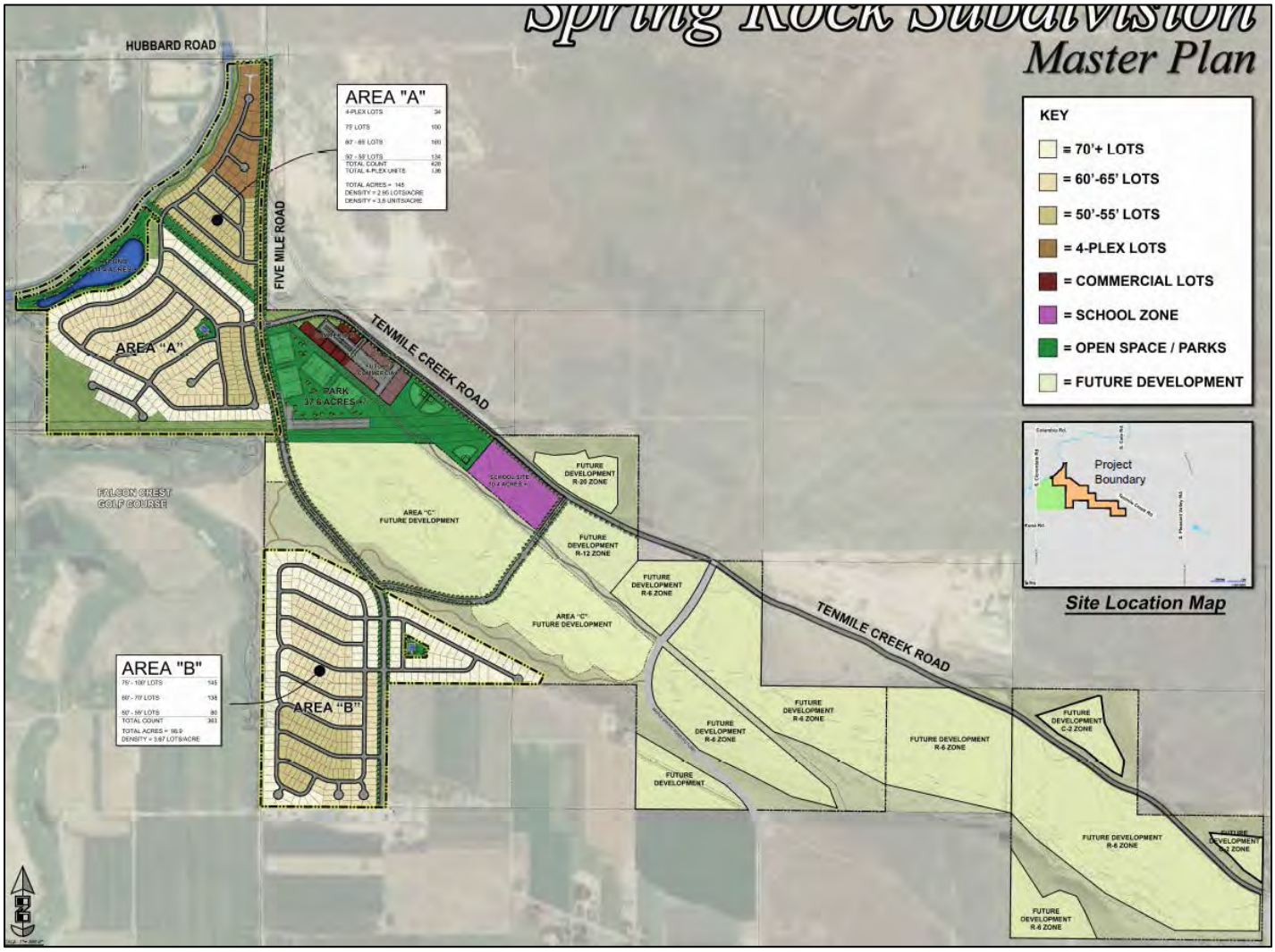
**Application Information & Introduction**

The applicant, Ten Mile Creek LLC, is requesting approval of a Master Planned Community, Spring Rock Subdivision.

The Master Plan is for 761 acres and includes all the land that is anticipated to be incorporated into this project. The applicant has requested commercial, high density multi-family and medium and high-density residential designations as part of their application. The site will be divided into various development areas. Those areas include single family and multi-family residential, office, restaurants, mini-self storage, elementary school, pathways, private parks and public parks. The site is located south of and adjacent to Ten Mile Creek Road extending between Pleasant Valley Road west, to west of Five Mile Road to the New York Canal and Falcon Crest Golf Course. The applicant intends to submit preliminary plats for the individual phases of the 761 acres. As individual preliminary plats are submitted under this Plan, the Ada County Highway District (ACHD) will provide detailed analysis of impacts to the transportation system, mitigation, street layout, street design and construction, and will be a signatory on the plat.

For the current application, ACHD is a commenting agency to the City of Kuna. ACHD has no objections to the application and will review preliminary plat applications and provide site specific conditions of approval with each future preliminary plat prior to any roadway construction, or scheduling of a final plat for signature.

**Vicinity Map and Conceptual Site Plan**



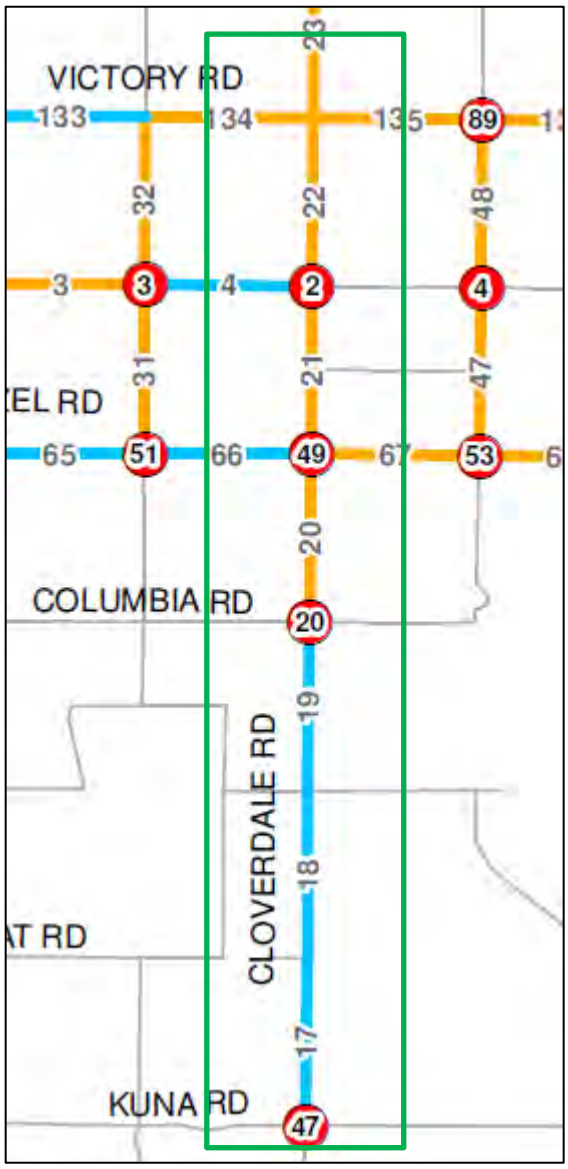
## ACHD Comments to the City of Kuna

1. **Capital Improvement Plan (CIP)/Integrated Five Year Work Plan (IFYWP)**
   The following improvements are scheduled in ACHD's IFYWP or listed in the CIP:

   - The intersection of Lake Hazel Road and Cloverdale Road is scheduled in the IFYWP to be widened to 5-lanes on the north leg, 5-lanes on the south, 6-lanes east, and 5-lanes on the west leg and is scheduled for 2024. (Project #49)
   - The intersection of Amity Road and Cloverdale Road is listed in the CIP to be replaced with a multi-lane roundabout with 4-lanes on the north leg, 4-lanes on the south, 2-lanes east, 2-lanes on the west leg between 2021 and 2025. (Project #2)
   - The intersection of Cloverdale Road and Columbia Road is listed in the CIP to be replaced with a single-lane roundabout with 3-lanes on the north leg, 2-lanes on the south, 2-lanes east, 3-lanes on the west leg with a westbound right turn bypass lane between 2026 and 2030. (Project #20)
   - The intersection of Cloverdale Road and Kuna Road is listed in the CIP to be replaced with a single-lane roundabout with 2-lanes on the north leg, 2-lanes on the south, 2-lanes east, 2-lanes on the west leg with a westbound right turn bypass lane between 2031 and 2035. (Project #47)
   - Cloverdale Road is listed in the CIP to be widened to 3-lanes from Kuna Road to Deer Flat Road between 2031 and 2035. (Project #17)
   - Cloverdale Road is listed in the CIP to be widened to 3-lanes from Deer Flat Road to Hubbard Road between 2031 and 2035. (Project #18)
   - Cloverdale Road is listed in the CIP to be widened to 3-lanes from Hubbard Road to Columbia Road between 2031 and 2035. (Project #19)
   - Cloverdale Road is listed in the CIP to be widened to 5-lanes from Columbia Road to Lake Hazel Road between 2026 and 2030. (Project #20)
   - Cloverdale Road is listed in the CIP to be widened to 5-lanes from Lake Hazel Road to Amity Road between 2026 and 2030. (Project #21)

Due to current and future budgets forecasts ACHD may be unable to complete the improvements necessary to the north/south corridors.

CIP Project Map



**2. Traffic Impact Study**

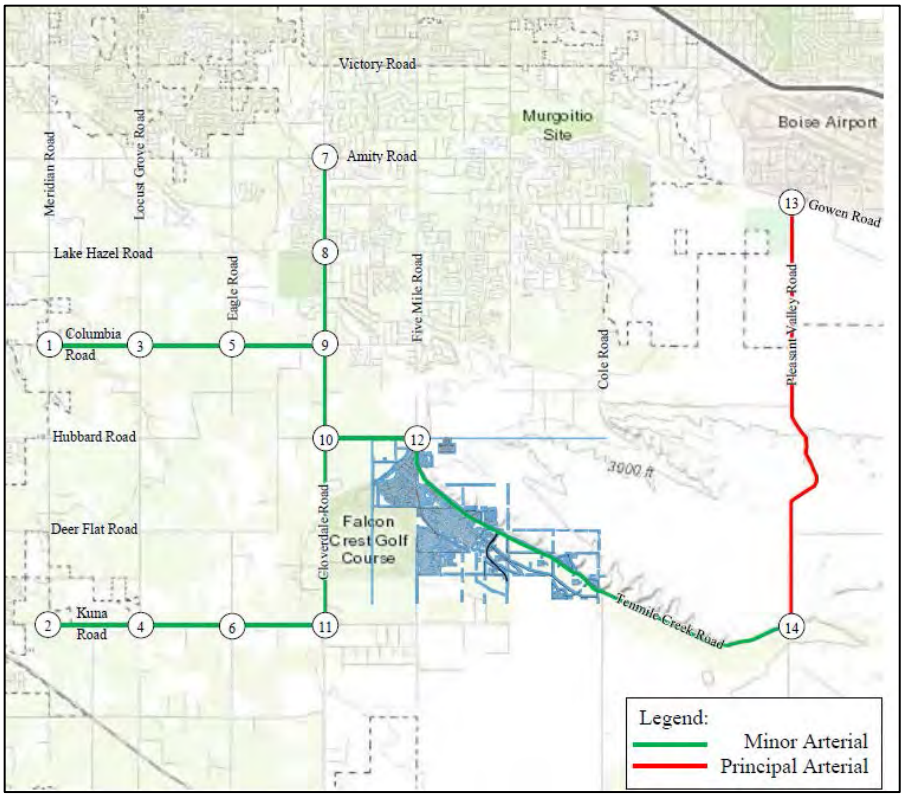
The purpose of the study was to provide a planning level roadway analysis for the full build out of the Spring Rock Master Plan and to highlight roadway improvements due to site generated traffic at full build out of the site.

Traffic Impact Study Area

With the traffic impact study for the Spring Rock Master Plan the study area was extended to beyond the roadways adjacent to the development to allow for analysis of all the traffic impacts. The study area included the following roadway segments:

- Cloverdale Road – Kuna Road to Amity Road
- Columbia Road – Meridian Road to Cloverdale Road
- Kuna Road – Meridian Road to Cloverdale Road
- Hubbard Road – Cloverdale Road to Five Mile Road
- Ten Mile Creek Road – Five Mile Road to Pleasant Valley Road
- Pleasant Valley Road – Gowen Road to Ten Mile Creek Road

A planning level analysis for intersections was not recommended as part of planning level analysis for the Spring Rock Master Plan. There are several intersections in the study area identified for improvements in ACHD's (Capital Improvement Plan) and intersections will be identified and studied as part of future traffic impact studies for individual preliminary plat phases.




The applicant's TIS analyzed the impacts of the subject development alone and identified the street improvements necessary to address the projected impacts. A complete

executive summary of the study is included as Attachment C. Below is an identification of the scope:

- Trip Generation of the proposed developments
- Site traffic distribution and traffic assignment
- Planning level threshold roadway capacity analysis
- Recommended roadway sizes and improvements to serve the site in 2040

**ACHD Comment**: District Traffic Services and Planning Review staff have reviewed the submitted traffic impact study for accuracy in results and assumptions as well as for completeness. ACHD comments and recommendations are noted below.

a. Build-Out Year and Off-Site Traffic Projections
The projected build-out year for the Spring Rock Master Plan development is 2040. The study provides an analysis of the 2040 traffic conditions with and without the Spring Rock Master Plan development and provides a comparison of the improvements necessary to mitigate the site generated traffic impacts to the improvements listed in ACHD's CIP.

b. Offsite Improvements
The planning level roadway analysis includes 14 roadway segments in the study area. The current CIP has roadway improvements planned through 2035 and only has planned improvements for 6 miles of Cloverdale Road between Deer Flat Road and Overland Road. No other study area roadways are currently planned for improvements.

The tables below identify the study roadway segments, the number of lanes the roadways are anticipated to have in 2040 based on the CIP and notes whether the roadways will be over capacity for 2040 total traffic conditions with the background and site generated traffic.

**Table 5.5 – Roadway Segment Level of Service Analysis – 2040 Background Plus Build-Out Site Traffic**

| Roadway | Segment | Functional Classification (No. of Lanes) (CIP Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? (Need Lanes) |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (5) | LOS E 1,540 | 1,700 | 1,815 | No (7) |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (5) | LOS E 1,540 | 1,845 | 2,067 | No (7) |
| | Columbia Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | 1,757 | 1,743 | No (7) |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | 851 | 861 | No (3) |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 621 | 785 | No (3) |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 594 | 735 | No (5) |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 708 | 785 | No (5) |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 718 | 914 | No (5) |
| Hubbard Rd | Five Mile Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 995 | 1,029 | No (5) |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | 991 | 1,027 | No (5) |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (3/2) | LOS E 720/575 | 529 | 721 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 589 | 789 | No (5) |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 505 | 731 | No (5) |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 530 | 695 | No (3) |

The following lists roadway segments anticipated to need widening beyond the CIP under 2040 total traffic conditions:

- Cloverdale Road between Amity Road and Hubbard Road – widen from 3/5 to 7 lanes.
- Pleasant Valley Road between Gowen Road and Ten Mile Creek Road – widen from 2 to 3 lanes.
- Columbia Road between Meridian Road and Cloverdale Road – Widen from 2 to 5 lanes.
- Hubbard Road between Five Mile Road and Cloverdale Road – widen from 2 to 5 lanes.
- Five Mile Road between Ten Mile Creek Road and Hubbard Road – widen from 2 to 5 lanes.

- Kuna Road between Meridian Road and Eagle Road – widen from 2 to 5 lanes.

- Kuna Road between Eagle Road and Cloverdale Road – widen from 2 to 3 lanes.

**ACHD Comment:** Due to the changes in land use assumptions in the City of Kuna and throughout Ada County, changes to ACHD's CIP may be warranted as part of the next CIP updated, planned for 2020. The current Integrated Five Year Work Plan (IFYWP) does not include any planned roadway improvements in the study area.

The traffic impact study identifies the following roadway segments as needing improvements to accommodate the building of the Spring Rock Master Plan development in 2040:

- Cloverdale Road between Amity Road and Hubbard Road – widen from 3/5 to 7 lanes.

- Pleasant Valley Road between Gowen Road and Ten Mile Creek Road – widen from 2 to 3 lanes.

- Columbia Road between Meridian Road and Cloverdale Road – Widen from 2 to 5 lanes.

- Hubbard Road between Five Mile Road and Cloverdale Road – widen from 2 to 5 lanes.

- Five Mile Road between Ten Mile Creek Road and Hubbard Road – widen from 2 to 5 lanes.

- Kuna Road between Meridian Road and Eagle Road – widen from 2 to 5 lanes.

- Kuna Road between Eagle Road and Cloverdale Road – widen from 2 to 3 lanes.

If improvements are not made to impacted roadway segments and intersections, the applicant may need to make improvements or wait for ACHD to make them.

All roadway improvements necessary to serve the site will be verified through traffic impact studies submitted with future preliminary plat applications.

In Table 5.5 above, the TIS states the future number of lanes needed on Cloverdale Road is 7. At this time ACHD has no plans to widen Cloverdale Road between Columbia Road and Amity Road beyond the 5 lanes currently listed in ACHD's CIP and Master Street Map.

ACHD has no planned improvements for Ten Mile Creek Road, Pleasant Valley Road, Columbia Road, Hubbard Road, Five Mile Road, or Kuna Road within the study area.

**3. Trip Generation and Trip Capture**

**a.** Land Use Assumptions

i. 2,297 dwelling units
   1. 1,925 single-family detached housing
   2. 252 Multi-family housing (low-rise)
   3. 120 Multi-family housing (mid-rise)

ii. 83,000 square feet of commercial/office
   1. Includes 60,000 square feet of small office uses
   2. Includes 23,000 square feet of commercial uses

iii. Elementary School – 600 students

**b.** Total Trip Generation

i. At the time of full build-out in 2040 the Spring Rock Master Plan is anticipated to generate:
   1. 26,351 vehicles per day, and
   2. 2,563 vehicles per hour during the PM peak hour

**c.** Propose Trip Capture Percentages

i. The submitted traffic impact study estimates that approximately 12% of the site generated traffic will be retained within the development due to the proposed mixed uses.

**ACHD Comment:** District Traffic Services staff has reviewed the methodology utilized by CR Engineering, Inc. for the Spring Rock Master Plan trip capture, and is supportive of the methodology utilized, as the applicant's engineer used the procedure outlined in the ITE Trip Generation Handbook for calculating the trip captured as required by ACHD. The applicant's engineer estimated 12% of the daily trips would be captured within the site. ACHD agrees with the 12% trip capture rate presented by the applicant's engineer. The actual trip capture rate will need to be verified with each revised traffic study.

**d. ACHD Recommendation for Trip Capture Rates**

i. Each preliminary plat must include actual traffic counts of all phases to date, plus the projected traffic for the proposed phase.

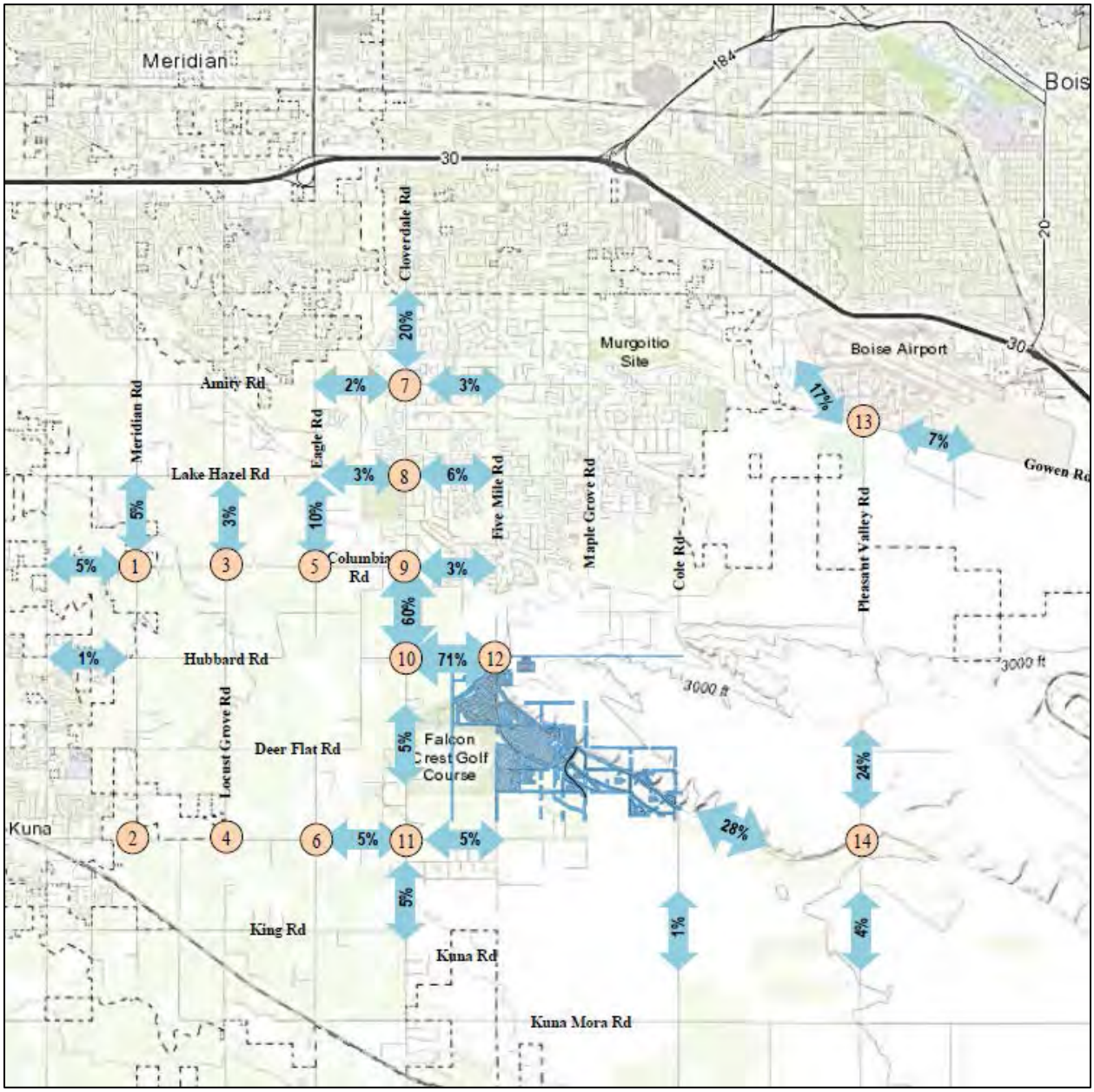
ii. No assumed trip capture or reductions will be allowed at this time, only actual verified trip capture may be utilized for the existing phases at the time of the future studies. Estimated trip capture will only be allowed for the proposed future phase based on ITE standards. The future evaluation must utilize the trip capture methodology outlined in the ITE Trip Generation Handbook.

iii. The traffic impacts will be evaluated with the updated traffic impact studies described above and the applicable street improvements will be required with each preliminary plat phase that necessitates the street improvement.

**4. Trip Distribution**

**a.** The submitted traffic impact study estimates that over 70% of site generated traffic will travel east/west on Hubbard Road and north/south on Cloverdale Road, and 30% will travel east/west on Ten Mile Creek Road. From those points, the traffic was distributed based on COMPASS's 2040 regional travel demand model.

**b. ACHD Comment:** ACHD will require that the site traffic distribution be reviewed with each phase and preliminary plat submittal as part of the required future traffic impact studies. This will allow ACHD to evaluate whether additional mitigation measures are necessary if site traffic distribution is not as estimated in the TIS by the applicant's consultant.




**5. Phasing Plan/Future Traffic Impact Studies**

**a.** A phasing plan for the entire Spring Rock Master Plan was not provided as part of this application; however, the application materials indicate that the Spring Rock Master Planned Community is proposed to be constructed in multiple phases over the next 20+ years depending on market conditions. The first preliminary plat within the development consists of 791 residential lots, 7

commercial lots, 23 common lots, 1 school lot, 1 multi-family lot, and 2 public utility lots. A traffic impact study with specific findings and recommendations for the first final plat was submitted to ACHD for review and approval. District policy 7106.7.2 states that for large scale developments, like planned communities or specific area plans, ACHD will require that a phasing analysis be submitted with the initial TIS or with the first preliminary plat submittal. This phasing analysis shall include the size and type of the proposed land uses within each phase and the anticipated mitigation measures necessary with each phase. Prior to the approval for each subsequent phase of the development, the applicant shall submit an updated TIS. The updated TIS shall include information from the built environment to date including actual traffic counts and actual trip capture; projected traffic for the current phase and anticipated trip capture based on development of applicable land uses, and necessary mitigation measures for the current phase. In addition, the updated TIS shall include updated traffic counts for the impacted roadway segments and intersections consistent with Section 7106.6.

**b. Comments/ Recommendations:** Consistent with District policy, the applicant should be required to provide an updated traffic impact study with each phase of the development. In addition, a TIS should be required with all development applications that include a change to the Planned Unit Development that may alter traffic impact projections at the sole discretion of ACHD. All TIS submittals, including updates to the TIS, must meet ACHD policy requirements at the time of submittal.

**TIS Update Requirements**: An update to the TIS should include the following items:

- Updated traffic counts for the impacted roadway segments and intersections listed in the previous TIS;
- Information from the built development to date including actual traffic counts and actual measured trip capture;
- Projected trip generation, trip distribution and assignment, and anticipated trip capture for the current phase under consideration (preliminary plat application), based on development of the applicable land uses;
- Necessary mitigation measures for the current phase;
- Updates to all analysis, conclusions and recommendation found to be out of date or in need of correction based on the updated information
- Meet all ACHD policy requirements for a TIS at the time of submittal.

**6. Arterial Roads – Ten Mile Creek Road, Hubbard Road, and Five Mile Road**

**a. Street Section and Right-of-Way Width Policy:** District Policy 7205.2.1 & 7205.5.2 states that the standard 3-lane street section shall be 46-feet (back-of-curb to back-of-curb) within 70 feet of right-of-way. This width typically accommodates a

single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Street Section and Right-of-Way Width Policy:** District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

**ACHD Master Street Map:** ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. The segments of Five Mile Road and Ten Mile Creek Road abutting the site are designated in the MSM as Rural Arterials with 3-lanes, a 46-foot street section within 74-feet of right-of-way. The segment of Hubbard Road abutting the site is designated in the MSM as a Residential Arterial with 5-lanes and on-street bike lanes, a 72-foot street section with 96-feet of right-of-way.

**b. Comments/Recommendations:**

**Ten Mile Creek Road:** ACHD's MSM identifies Ten Mile Creek Road as a future 3-lane rural arterial roadway between Pleasant Valley Road and Hubbard Road. This is consistent with the traffic impact study, which notes that Pleasant Valley Road is anticipated to be at the maximum level of service planning threshold for a 3-lane arterial at build-out of the development in 2040.

Based on information provided in the traffic impact study and the MSM, if the City approves the rezone, the MSM will need to be modified to change Ten Mile Creek Road to a future 3-lane residential arterial roadway from Pleasant Valley Road to Hubbard Road.

To accommodate the construction of future 3-lane roadway additional right-of-way dedication will be necessary. Due to slope constraints and land ownership (BLM) on the north side of Ten Mile Creek Road across from the site and that the Spring Rock Master Plan development is necessitating the need for the widening of Ten Mile Creek Road to 3-lanes, staff recommends that all of the additional right-of-way dedication come from the south side of the roadway abutting the site. Therefore, the applicant will be required to dedicate 24-feet of additional right-of-way to totaling 49-feet of right-of-way from centerline of Ten Mile Creek Road abutting the site with the first preliminary plat. Preserving right-of-way for future roadways will ensure the roadways will accommodate future traffic volumes and provide design options for the future roadway.

The traffic impact study notes that in 2040 with build-out of the development Pleasant Valley Road is anticipated to be at the maximum level of service planning threshold for a 3-lane arterial. The need for additional roadway widening on Ten Mile Creek Road will need to be evaluated as part of future traffic impact studies to ensure that the roadway operates at an acceptable planning level of service threshold at build-out of the development in 2040.

**Hubbard Road:** ACHD's MSM identifies Hubbard Road as a future 5-lane residential arterial roadway from the site west to Cloverdale Road. The submitted traffic impact study indicates that Hubbard Road between Five Mile Road and Cloverdale Road will need to be widened to 5-lanes to accommodate the site

generated traffic under 2040 total traffic conditions. This segment of Hubbard Road is not scheduled in the IFYWP or CIP.

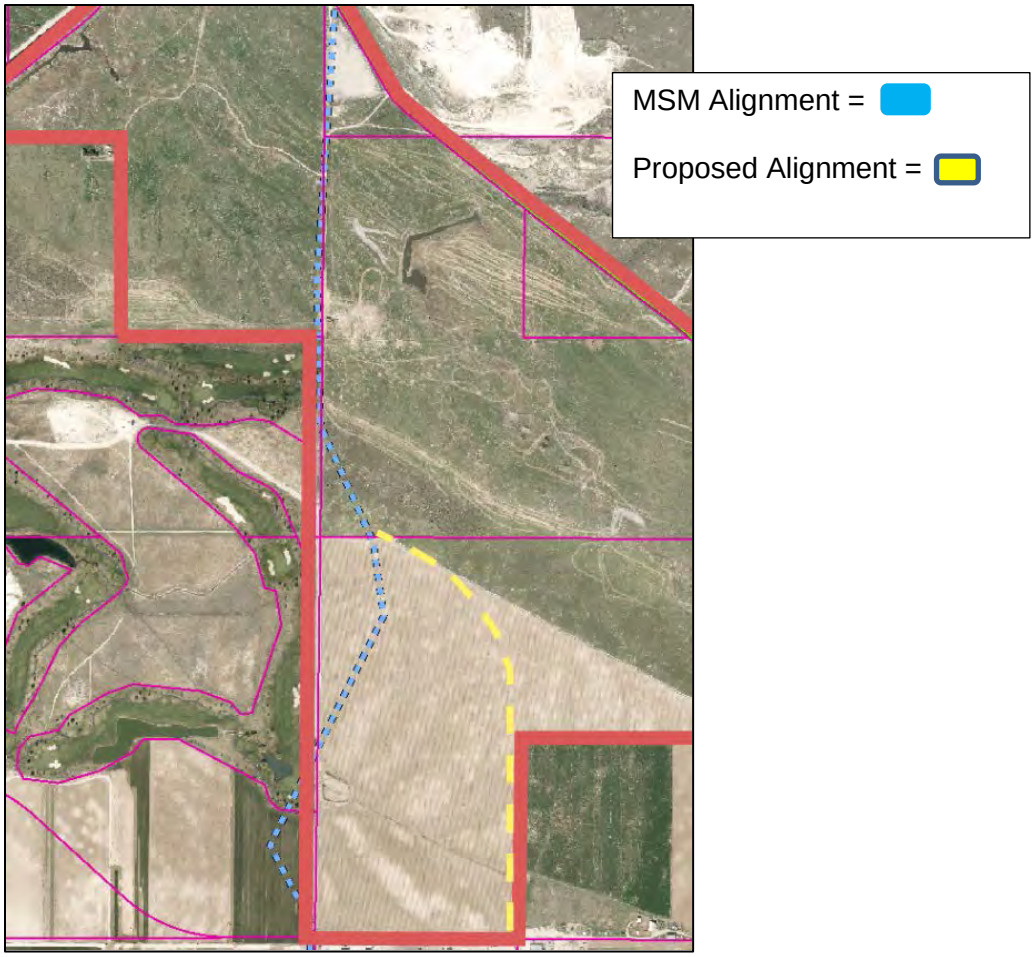
To accommodate the construction of future 5 lane roadway, the applicant will be required to dedicate 48-feet of right-of-way from centerline of Hubbard Road abutting the site with the first preliminary plat. Preserving right-of-way for future roadways will ensure the roadways will accommodate future traffic volumes and provide design options for the future roadway.

**Five Mile Road:** ACHD's MSM identifies Five Mile Road as a future 3-lane residential arterial roadway between the site's south property and Ten Mile Creek Road. North of Ten Mile Creek Road to Hubbard Road the MSM designation changes to a 3-lane rural arterial. However, the submitted traffic impact study indicates that Five Mile Road will need a 5-lane roadway between Ten Mile Creek Road and Hubbard Road to accommodate site generated traffic at build out of the development in 2040.

Based on information provided in the traffic impact study, if the City approves the rezone, the MSM will need to be modified to change Five Mile Road to a future 5-lane residential arterial roadway from Ten Mile Creek Road north to Hubbard Road.

To accommodate the construction of future 5 lane roadway, the applicant will be required to dedicate 48-feet of right-of-way from centerline of Five Mile Road abutting the site between Ten Mile Creek Road and Hubbard Road and to accommodate the construction of a 3 lane roadway, dedicate 37-feet from the centerline of Five Mile Road from Ten Mile Creek Road south to the site's south property line with the first preliminary plat. Preserving right-of-way for future roadways will ensure the roadways will accommodate future traffic volumes and provide design options for the future roadway.

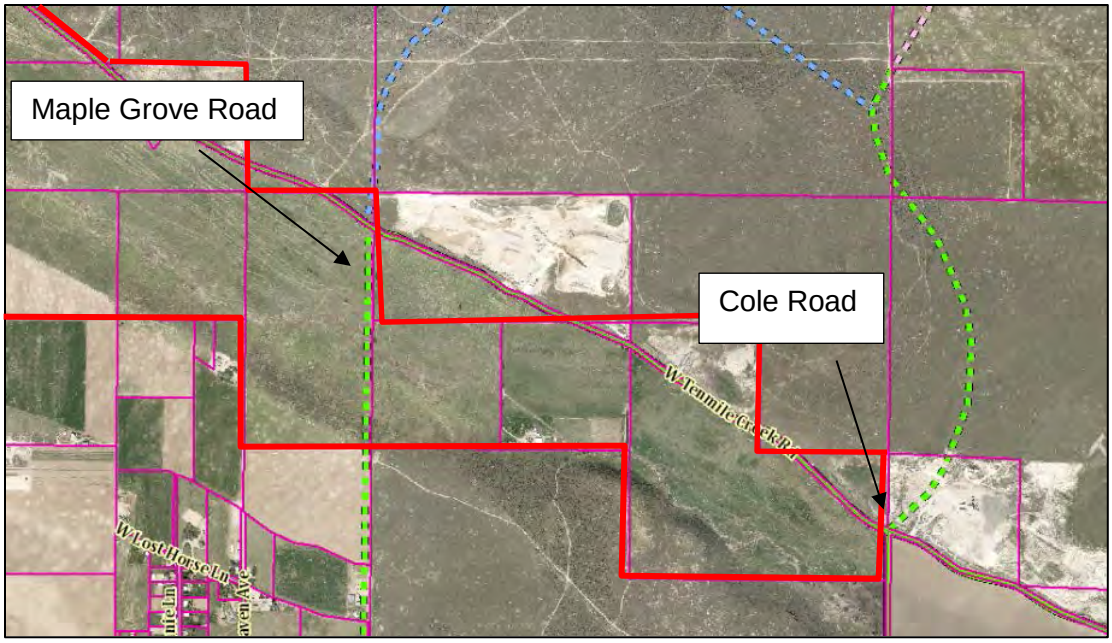
7. **Five Mile Road – Alignment**
   a. **Applicant's proposal:** The applicant has proposed an alternative alignment for the extension of Five Mile Road though the site stubbing to the south property line. The applicant's proposal is consistent with the re-alignment of Five Mile Road previously approved as part of Falcon Crest Master Plan planning are in 2018.




**b. Staff Comments/Recommendations:** The applicant's proposal is consistent with the re-alignment of Five Mile Road previously approved as part of Falcon Crest Master Plan planning in 2018 and should be approved, as proposed. The exact alignment and design of Five Mile Road at the south property line should be coordinated with the applicant of the Falcon Crest Master Plan, M3 Companies.

**8. Arterial Roadway Extensions – Maple Grove Road and Cole Road**

**a. Staff Comments:** ACHD's MSM and the COMPASS 2040 Functional Classification map both identify the extension of Maple Grove Road and Cole Road from their current terminus south of Lake Hazel Road through the site south to Kuna Mora Road.




**b. Maple Grove Road – Staff Recommendations:** The MSM identifies the segment of Maple Grove Road through the site as a future 3-lane residential arterial, north of Ten Mile Creek Road and a future 3-lane rural arterial south of Ten Mile Creek Road. Staff recommends a modification to the MSM to change the designation of Maple Grove Road south of Ten Mile Creek Road to Kuna Road from a rural arterial to a 3-lane residential arterial roadway, a 46-foot street section within 74-feet of right-of-way. Staff's recommendation is due to land uses proposed within the Spring Rock Master Plan planning area, which include urban residential densities of R-6 and R-4 in the vicinity of the Maple Grove extension area.

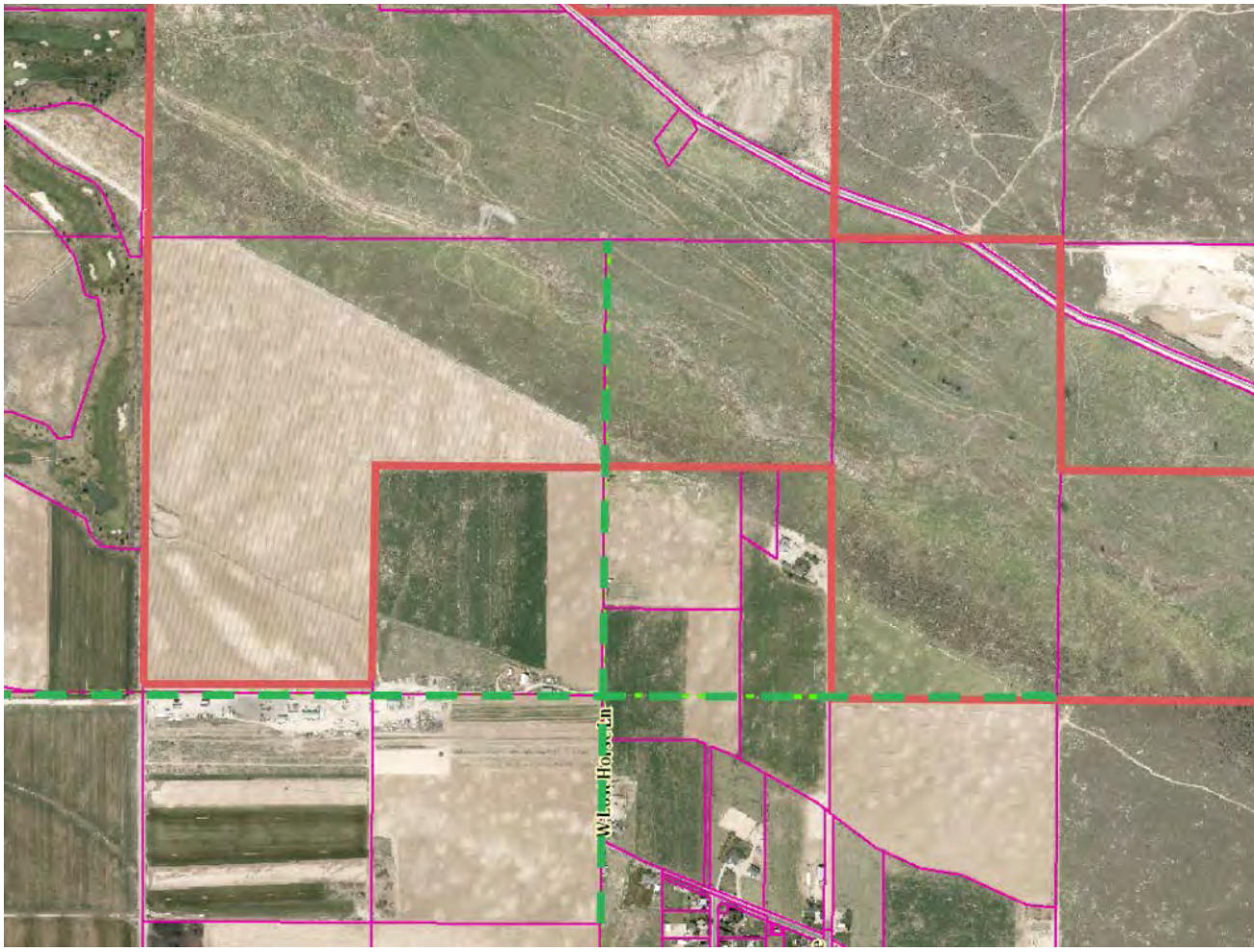
To accommodate the future extension of Maple Grove Road, the applicant should be required to dedicate 74-feet of right-of-way and to construct roadway improvements necessary to serve the site; including, but not limited to 2-travel lanes, gravel shoulder, barrow ditch, and detached concrete sidewalks as part of a future preliminary plat application.

**c. Cole Road – Staff Recommendations:** The MSM identifies the segment of Cole Road through the site as a future 3-lane rural arterial. Staff recommends a modification to the MSM to change the designation of Cole Road south of Ten Mile Creek Road to Kuna Road from a rural arterial to a 3-lane residential arterial roadway, a 46-foot street section within 74-feet of right-of-way. Staff's recommendation is due to land uses proposed within the Spring Rock Master Plan planning area, which include urban residential densities of R-6 in the vicinity of the Cole Road extension area.

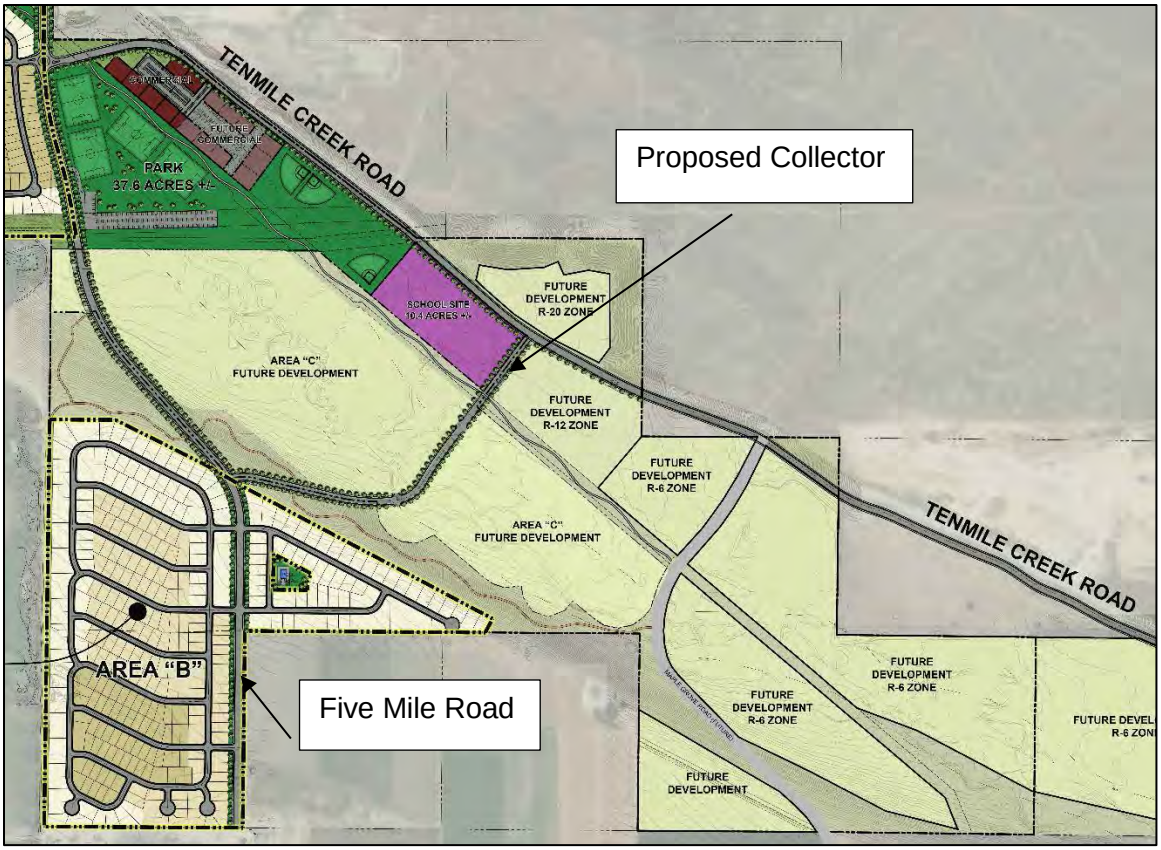
To accommodate the future extension of Cole Road, the applicant should be required to dedicate 74-feet of right-of-way and to construct roadway improvements necessary to serve the site; including, but not limited to 2-travel lanes, gravel shoulder, barrow ditch, and detached concrete sidewalks as part of a future preliminary plat application.

**9. Collector Roadways**

**a. Staff Comments:** ACHD's MSM identifies 2 collector roadways within the Spring Rock Master Plan planning area. The east-west collector is proposed to be located at the half-mile between Kuna Road and Deer Flat Road at the south boundary of the site, and the north/south collector is proposed to extend a mile north of Kuna Road. Both collectors are designated as rural collector roadways.



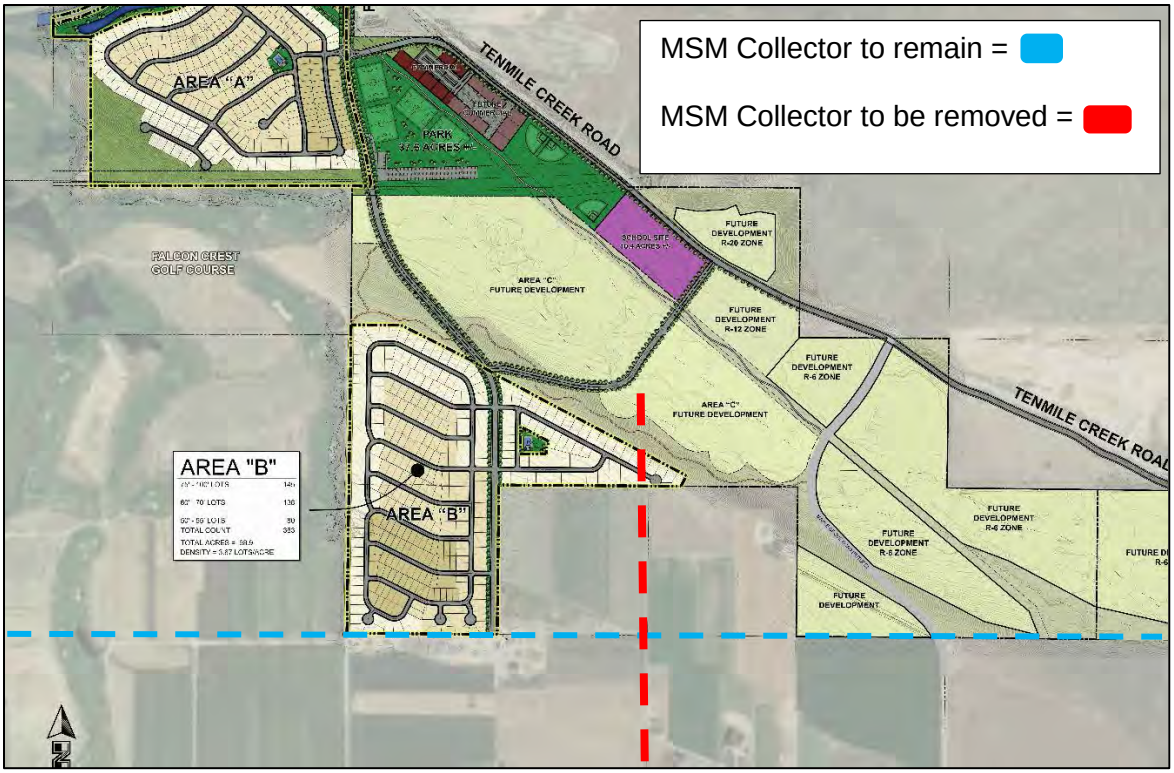

**b. Applicant's Proposal:** The applicant is proposing to construct one collector roadway, Gem Valley Road, with the first phase of the development. The collector is proposed to run north/south between Ten Mile Creek Road and Five Mile Road and be constructed as 3-lane collector roadway a 46-foot wide street section within 74-feet of right-of-way. No other collector roadways are shown on the master plan for the Spring Rock Master Planned planning area.




**c. Staff Recommendations:** The applicant's proposal to construct a new collector roadway to extend north/south between Ten Mile Creek Road and Five Mile Road should be approved, as proposed. This collector roadway will provide alternative access between the southern proportion of the site and Five Mile Road.

Consistent with the MSM, the applicant will be required to construct the new east/west collector roadways abutting the site's south property line, as a collector roadway in this alignment is planned to be stubbed to this site as part of the Falcon Crest Master Planned Community. The MSM designates this collector as a rural collector. Staff recommends a modification to the MSM to change the designation of the roadway to a residential collector from the site's west property line to Maple Grove Road due to the urban residential densities of R-6 and R-4 planned in the vicinity of collector roadway extension area.

Staff recommends a modification to the MSM to remove the north/south rural collector proposed to extend a mile north of Kuna Road, as the applicant has proposed to construct a north/south collector to serve the site between Ten Mile Creek Road and Five Mile Road.




As other areas of the Spring Rock Master Planned planning area are preliminary platted, additional collector roadways maybe need to serve the site. This will be determined through the design of future preliminary plats and traffic impact studies.

**10. Internal Local Street Sections**

The applicant has not proposed any internal street sections as a part of the master plan application.

**11. School Site**

A 10-acre school site is proposed at the southwest corner of the Ten Mile Creek Road and Gem Valley Drive intersection. This parcel has approximately 960-feet of frontage on Ten Mile Creek Road, a minor arterial roadway and 450-feet of frontage on Gem Valley Drive, a collector roadway. Staff has concerns regarding the location and configuration of the proposed school parcel, as ACHD policy prohibits direct lot access to arterial roadways (Ten Mile Creek Road) when a site has frontage on a less classified street (Gem Valley Drive). This is the case with the proposed school parcel.

Typically, elementary schools have multiple driveways to separate the parent drop-off/pick-up loop from the bus loop. This creates better on-site circulation and improves the flow of traffic in and out of the school site during the peak drop-off and pick-up time periods. As the proposed school site is currently configured, There would not be enough frontage on Gem Valley Drive to provide enough driveway access to serve the school, as the location of driveways will be limited within the influence area of the Gem Valley Drive/Ten Mile Creek intersection and it is unknown if additional control (roundabout, signalization) of the intersection will be needed in the future. Additionally, staff has concerns with pedestrians possibly needing to walk along Ten Mile Creek Road to access the site, as this roadway will still carry heavy industrial truck traffic due to the near-by gravel pit operations.

Staff recommends that the school site be relocated to someplace within Lot 28, Block 13 adjacent to Gem Valley Drive. This will allow for the construction of the driveways needed to serve the school site, increases safety by moving the school away for Ten Mile Creek Road, an arterial roadway, and would move the school closer to the single family residential portion of the development which would allow for better pedestrian access to the school.

**12. Summary/Disclaimer**

I. Below is a summary of the primary issues that will be required to be addressed with future preliminary plats:

a. Traffic Impact Studies – Staff recommends updated traffic impact studies be required with each phase of the development to verify assumptions.

b. Disclaimer: No waiver or modification of policy is approved or recommended unless specifically called out by policy section and specifically approved in this report. Additional requirements may be required at each preliminary plat phase.

**Attachments:**

A. Vicinity Map

B. Master Plan

C. Traffic Impact Study Summary

Mary May, President
Kent Goldthorpe, Vice-President
Rebecca W. Arnold, Commissioner
Sara M. Baker, Commissioner
Jim D. Hansen, Commissioner

January 24, 2020

To: Troy Behunin, Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634

Subject: KPP19-0004/19-10-AN/19-01-PUD/19-06-S
Spring Rock Subdivision
*This is a preliminary plat application to allow for the development of 825 lots on 477 acres.*

On January 22, 2020 the Ada County Highway District Commission acted on the application for the above referenced project. The attached report includes site specific conditions of approval.

Additionally, the Commission had the following comments:

The Commission is very concerned about future growth in this area and the impacts of additional traffic on the existing infrastructure. The Commission cautions the City of Kuna to take a hard look at any future development in this area to make sure that it is consistent with the City's Comprehensive Plan and zoning ordinances and determine if the existing infrastructure and public services can accommodate that future growth. Additionally, due to current and future ACHD budgets forecasts, ACHD may not be able to timely complete improvements to the north/south corridors that may be necessary to accommodate growth that Kuna has approved and any anticipated future growth in this area.

If you have any questions, please feel free to contact me at (208) 387-6178.

Sincerely,

Mindy Wallace, AICP
Planning Review Supervisor
Development Services

cc: Dave Yorgason

*Development Services Department*

**Project/File:** **Spring Rock Subdivision/ KPP19-0004/ 19-10-AN/19-01-PUD/19-06-S**
*This is a preliminary plat application to allow for the development of 825 lots on 477 acres. This is the first phase of the Spring Rock Master Plan.*

**Lead Agency:** City of Kuna

**Site address:** SE of Five Mile Road and Hubbard Road and South of Ten Mile Creek Road and Five Mile Road

**Commission Meeting:** January 22, 2020
*Regular Agenda*

**Commission Approval:** January 22, 2020

**Applicant:** Dave Yorgason
Ten Mile Creek LLC
1211 North Happy Drive
Boise, ID 83706

**Representative:** David Powell
RiveRidge Engineers
2447 South Vista Avenue
Boise, ID 83705

**Staff Contact:** Paige Bankhead
Phone: 387-6293
E-mail: pbankhead@achdidaho.org

Mindy Wallace
Phone: 387-6178
E-mail: mwallace@achdidaho.org

# A. Findings of Fact

1. **Description of Application:** This is a preliminary plat application to allow for the development of a 825 lot subdivision consisting of 757 single family building lots, 136 4-plex units, 7 commercial lots, 23 common lots, 1 school lot, 1 multi-family lot, and 2 public utility lots. The property is proposed to be rezoned to Commercial (C-1, C-2), Medium Density Residential (R-6) and High Density Residential (R-12) as a part of the rezoning application for the overall Spring Rock Subdivision development. This is the first phase of a multi-phase development anticipated to be constructed over the next 20+ years.

**2. Description of Adjacent Surrounding Area:**

| Direction | Land Use | Zoning |
|---|---|---|
| North | Rural Residential/Rural Preservation (Ada County) | RR/RP |
| South | Rural Residential (Ada County)/Medium Density Residential | RR/R-6 |
| East | Rural Preservation (Ada County) | RP |
| West | Medium Density Residential, High Density Residential, Rural Residential (Ada County) | R-6/R-12/RR |

**3. Site History:** ACHD has previously reviewed this site as part of the Spring Rock Master Plan planning area in December of 2019. The conditions of this staff report are consistent with the prior action.

**4. Adjacent Development:** The following developments are pending or underway in the vicinity of the site:

- Falcon Crest Master Plan planning area located south and west of the site was approved by ACHD in December of 2018. ACHD has approved 2 preliminary plats within the Falcon Crest Master Plan planning area. Falcon Crest Subdivision located at the north east corner of Cloverdale Road and Kuna Road, approved by ACHD in December of 2018 and Robinhood Subdivision located west of the site off Cloverdale Road, approved by ACHD in September of 2019.

**5. Transit:** Transit services are not available to serve this site.

**6. Gas Pipeline:** The Williams/Tesoro Pipeline falls within the proposed development. Coordination with the owner of the pipeline prior to final design is recommended to insure that their requirements are met. ACHD requires written approval from the owner of the pipeline prior to plan acceptance if public street improvements are proposed or required within the pipeline easement.

**7. New Center Line Miles:** The proposed development includes 9.5 centerline miles of new public road.

**8. Impact Fees:** There will be an impact fee that is assessed and due prior to issuance of any building permits. The assessed impact fee will be based on the impact fee ordinance that is in effect at that time.

**9. Capital Improvements Plan (CIP)/ Integrated Five Year Work Plan (IFYWP):**

- The intersection of Lake Hazel Road and Cloverdale Road is scheduled in the IFYWP to be widened to 5-lanes on the north leg, 5-lanes on the south, 6-lanes east, and 5-lanes on the west leg in 2024. This project is funded.
- The intersection of Amity Road and Cloverdale Road is listed in the CIP to be replaced with a multi-lane roundabout with 4-lanes on the north leg, 4-lanes on the south, 2-lanes east, 2-lanes on the west leg between 2021 and 2025.
- The intersection of Cloverdale Road and Columbia Road is listed in the CIP to be replaced with a single-lane roundabout with 3-lanes on the north leg, 2-lanes on the south, 2-lanes east, 3-lanes on the west leg with a westbound right turn bypass lane between 2026 and 2030.
- The intersection of Cloverdale Road and Kuna Road is listed in the CIP to be replaced with a single-lane roundabout with 2-lanes on the north leg, 2-lanes on the south, 2-lanes east, 2-lanes on the west leg with a westbound right turn bypass lane between 2031 and 2035.

- Cloverdale Road is listed in the CIP to be widened to 3-lanes from Kuna Road to Deer Flat Road between 2031 and 2035.
- Cloverdale Road is listed in the CIP to be widened to 3-lanes from Deer Flat Road to Hubbard Road between 2031 and 2035.
- Cloverdale Road is listed in the CIP to be widened to 3-lanes from Hubbard Road to Columbia Road between 2031 and 2035.
- Cloverdale Road is listed in the CIP to be widened to 5-lanes from Columbia Road to Lake Hazel Road between 2026 and 2030.
- Cloverdale Road is listed in the CIP to be widened to 5-lanes from Lake Hazel Road to Amity Road between 2026 and 2030.

# B. Traffic Findings for Consideration

1. **Trip Generation:** This development is estimated to generate 9,718 vehicle trips per day; 1,017 vehicle trips per hour in the PM peak hour, based on the traffic impact study.

2. **Traffic Impact Study**
CR Engineering, Inc. prepared a traffic impact study for the proposed Spring Rock Subdivision Master Plan, that includes the Phase I impacts. An executive summary of the findings **as presented by CR Engineering, Inc** can be found as attachment 3. The executive summary is **not the opinion of ACHD staff**. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices, and may have additional requirements beyond what is noted in the summary.

3. **Mitigation/Required Improvements**

   a. **Policy:**

   **Mitigation Proposals:** Mitigation recommendations shall be provided within the report. At a minimum, for each roadway segment and intersection that does not meet the minimum acceptable level of service planning threshold or v/c ratio, the report must discuss feasible measures to avoid or reduce the impact to the system. To be considered adequate, measures should be specific and feasible. Mitigation may also include:

   - Revision to the Phasing Plan to coincide with the District's planning Capital Projects.
   - Reducing the scope and/or scale of the project.

   **Alternative Mitigation Measures:** 7106.7.3 states that if traditional mitigation measures such as roadway widening and intersection improvements are infeasible as determined by ACHD, the TIS may recommend alternative mitigation measures. Alternative mitigation measures shall demonstrate that impacts from the project will be offset.

   - If the impacted roadway segments and/or intersections are programmed as funded in the Integrated Five Year Work Plan (IFYWP) or the Capital Improvements Plan (CIP); no alternative mitigation is required.
   - If the impacted roadway segments and/or intersections are not programmed in either the IFYWP or the CIP; the applicant may (i) analyze the shoulder hour and (ii) provide a safety analysis to determine alternative mitigation requirements.
     - If the impacted roadway segments and intersections meet the minimum acceptable level of service planning thresholds in the shoulder hour the applicant may suggest feasible alternative mitigation such as: sidewalks, bike facilities, connectivity, safety improvements, etc. within 1.5 miles of the proposed development.

- If the shoulder hour planning thresholds are exceeded the applicant may request to enter into a Development Agreement and pay into the Priority Corridor Fund an amount determined by the ACHD to offset impacts from the project.

- Alternative Mitigation may also include:
  - Revision to the Phasing Plan to coincide with the District's future Capital Projects.
  - Reducing the scope and/or scale of the project.

**Level of Service Planning Thresholds**: District Policy 7206.4.1 states that, Level of Service Planning Thresholds have been established for principal arterials and minor arterials within ACHD's Capital Improvement Plan and are also listed in section 7106. Unless otherwise required to provide a Traffic Impact Study under section 7106, a proposed development with site traffic less than 10% of the existing downstream roadway or intersection peak hour traffic shall not be required to provide mitigation for a roadway or intersection that currently exceeds the minimum acceptable level of service planning threshold or V/C ratio.

**b. Staff Comments/Recommendations:** The traffic impact study recommends the construction of a dedicated southbound right turn lane at the Cloverdale Road/Hubbard Road intersection and the Pleasant Valley/Ten Mile Creek Road intersection. Site generated traffic does not contribute to the southbound right turn movement at the Cloverdale Road/Hubbard Road intersection; and is not required as part of this application. Consistent with the findings and recommendations of the traffic impact study, staff recommends the construction of a dedicated southbound right turn lane at the Pleasant Valley/Ten Mile Creek Road intersection, as 31% of the total site generated traffic is anticipated to use this intersection to access the site during PM peak.

The traffic impact study notes that the Cloverdale Road/Columbia Road intersection and the Cloverdale Road/Hubbard Road intersection will need to be signalized and that Hubbard Road between Five Mile and Cloverdale Road will need to be widened to 3 lanes when the site generates 900 trips in the PM peak hour. However, staff believes these improvements may be necessary sooner than anticipated in the traffic impact study.

The traffic study notes that there are 225 existing PM peak hour trips on Hubbard Road between Five Mile Road and Cloverdale Road; allowing an additional 350 PM peak hour trips on this segment of Hubbard Road before reaching ACHD's acceptable level of service planning threshold of 575 PM peak hour trips. To ensure that improvements are made when necessary to serve the site staff recommends that the applicant submit an updated traffic impact study prior to plan approval and signature on the final plat that contains the 350$^{th}$ building lot or generates the equivalent of 350 PM peak hour trips.

If it is determined through the review of the updated traffic impact study that improvements are needed at the Cloverdale Road/Columbia Road intersection, Cloverdale Road/Hubbard Road intersection, and the Hubbard Road segment between Five Mile Road and Cloverdale Road then the applicant should be required to install interim signals within the existing right-of-way at both intersections and to widen Hubbard Road to 3-lanes. If it is determined that the installation of interim signals or the widening of Hubbard Road is infeasible, then the applicant will be required to recommend alternative mitigation measures for consideration, or as an alternative they may stop platting and wait for ACHD to make improvements.

At the Pleasant Valley/Ten Mile Creek Road intersection the traffic impact study recommends the construction of an eastbound left-turn lane when the site generates 700 PM peak hour trips and the construction of the northbound left-turn lane when the site generates 950 PM peak hour trips. This intersection should be included as part of the traffic impact study update to determine if the turn lanes or other mitigation is needed at the intersection sooner than

anticipated in the traffic impact study. If it is determined through the review of future traffic impact studies that the turn lanes or other mitigation is warranted, then it should be constructed at that time.

To verify the assumptions of the traffic impact study and to ensure that improvements are made when warranted; prior to ACHD's signature on the final plat which contains the 350th lot the applicant should be required to submit an updated traffic impact study to ACHD. At a minimum the updated traffic impact study should include an analysis of the Cloverdale Road/Columbia Road intersection, Cloverdale Road/Hubbard Road intersection, Hubbard Road segment between Five Mile Road and Cloverdale Road, and a turn lane analysis for the Pleasant Valley/Ten Mile Creek Road intersection. The applicant should be required to coordinate the full scope of work for the updated traffic impact study with staff. ACHD may have additional requirements based on the findings at that time. A subsequent traffic impact study update will be required based on the findings and recommendations of the updated traffic impact study. The timing of the second traffic impact study update will be determined at that time.

The traffic impact study (see attachment 3) identified several off-site intersections and roadway segments that are anticipated to be impacted by the proposed development and exceed ACHD's acceptable level of service planning thresholds under existing, background, and total traffic conditions. The impacted intersections and roadway segments are as follows:

- Lake Hazel Road/Cloverdale Road intersection – IFYWP
- Amity Road/Cloverdale Road intersection – CIP
- Cloverdale Road between Amity Road and Lake Hazel Road – CIP
- Cloverdale Road between Lake Hazel Road and Columbia Road – CIP
- Cloverdale Road between Columbia Road and Hubbard Road - CIP

The traffic impact study recommended mitigation however, no feasible mitigation is possible. All of the intersections and roadway segments above are listed as funding projects in either ACHD's IFYWP or CIP. Therefore, consistent with District policy 7106.7.3 Alternative Mitigation Measures, which states, if an impacted roadway segment or intersection are programmed as funded in the IFYWP, or the CIP; no mitigation is required; no improvements are required at the intersections and roadway segments listed above.

**4. Condition of Area Roadways**

Traffic Count is based on Vehicles per hour (VPH)

| Roadway | Frontage | Functional Classification | PM Peak Hour Traffic Count | PM Peak Hour Level of Service |
|---|---|---|---|---|
| Five Mile Road | 1,516-feet | Minor Arterial | 217 | Better than "D" |
| Ten Mile Creek Road | 5,397-feet | Minor Arterial | 201 | Better than "D" |
| Hubbard Road | 395-feet | Minor Arterial | 225 | Better than "D" |
| Cloverdale Road (south of Hubbard Road) | 0-feet | Minor Arterial | 184 | Better than "D" |
| Cloverdale Road (south of Columbia Rd) | 0-feet | Minor Arterial | 264 | Better than "D" |

* Acceptable level of service for a two-lane minor arterial is "E" (575 VPH).

**5. Average Daily Traffic Count (VDT)**

*Average daily traffic counts are based on ACHD's most current traffic counts.*

- The average daily traffic count for Five Mile Road north of Ten Mile Creek Road was 1,937 on 03/13/19.
- The average daily traffic count for Ten Mile Creek Road from Pleasant Valley Road to Five Mile Road was 1,937 on 03/13/19.
- The average daily traffic count for Hubbard Road east of Cloverdale Road was 1,934 on 11/28/18.
- The average daily traffic count for Cloverdale Road south of Hubbard Road was 3,317 on 11/28/18.
- The average daily traffic count for Cloverdale Road south of Columbia Road was 4,743 on 11/28/18.

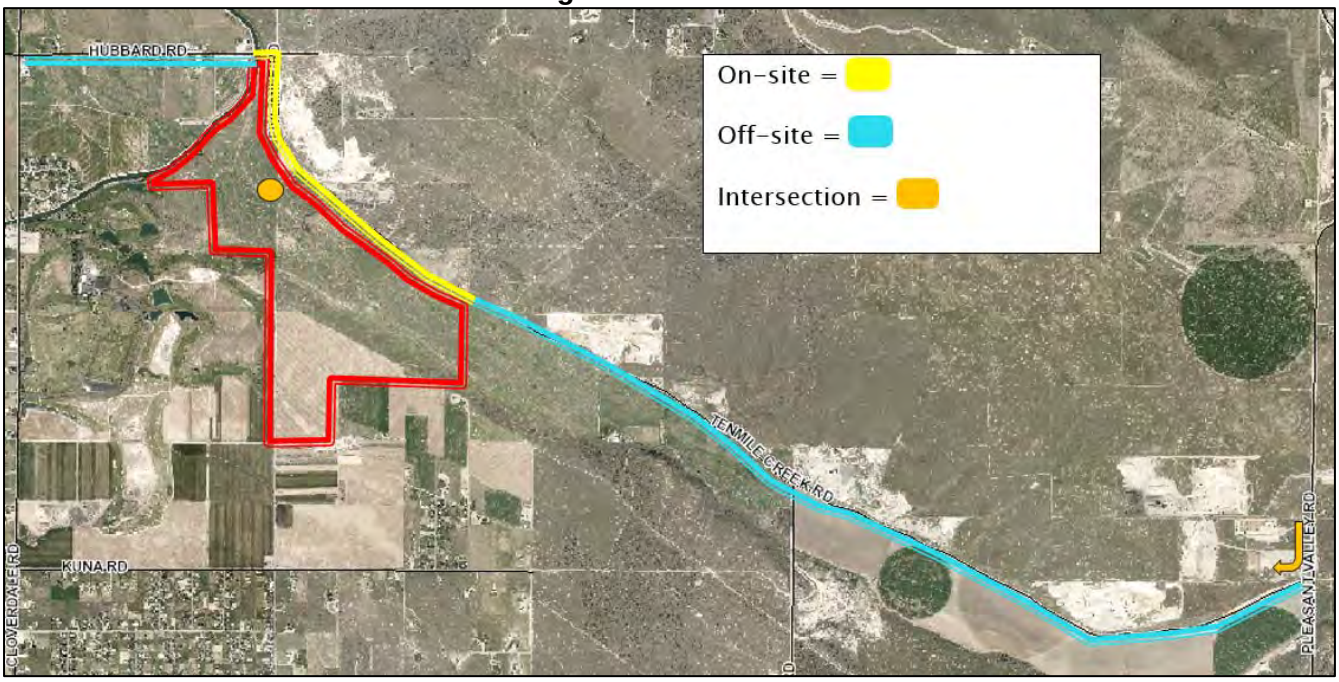
# C. Findings for Consideration

## 1. Recommended On-site and Off-site Mitigation:

Consistent with the findings and recommendations of the traffic impact study and ACHD policy staff has recommended the following minimum mitigation measures and improvements for on-site and off-site roadway segments and intersections. The policies and findings related to each improvement are detailed in the findings for consideration noted below.

On and off-site frontage improvements required per policy and intersection improvements recommended in the traffic impact study are shown on the image below and detailed in the following table.

**Recommended On-Site and Off-Site Mitigation Locations**



**Recommended On-Site and Off-Site Mitigation – Roadway Segments**

| Road Segment | Distance | Pavement/Street Section Improvements | Sidewalks | Turn Lanes |
|---|---|---|---|---|
| **Ten Mile Creek Road** (abutting the site) | 1.20 Miles | Widen the pavement to a minimum of 17-feet from centerline with 3-foot wide gravel shoulders | 5-foot wide detached concrete sidewalks | Center left turn lanes at all street intersections |
| **Ten Mile Creek Road** (off-site) | 3.70 Miles | Widen pavement to a minimum width of 30-feet with 3-foot wide gravel shoulders | Not required | N/A |
| **Five Mile Road** (abutting the site) | 0.50 Miles | Widen pavement to a minimum width of 34-feet with 3-foot wide gravel shoulders | 5-foot wide detached concrete sidewalks | Center left turn lanes at all street intersections |
| **Hubbard Road** (abutting the site) | 0.07 Miles | Widen the pavement to a minimum of 17-feet from centerline with 3-foot wide gravel shoulders | 5-foot wide detached concrete sidewalks | N/A |
| **Hubbard Road** (off-site) | 0.93 Miles | Widen pavement to a minimum width of 30-feet with 3-foot wide gravel shoulders | Not Required | N/A |

***Yellow and blue on map above**

**Recommended On-Site and Off-Site Mitigation – Intersections**

| Intersection | Improvement |
|---|---|
| Pleasant Valley/Ten Mile Creek Road (off-site) | Construct dedicated westbound right turn lane |
| Five Mile/Ten Mile Creek Road (new intersection) | Multi-lane roundabout |

***Orange on map above**

## Additional Off-Site Mitigation:

The traffic impact study (see attachment 3) identified several off-site intersections and roadway segments that are anticipated to exceed ACHD's acceptable level of service planning thresholds under existing, background, and total traffic conditions. There is no feasible mitigation for the intersections and roadway segments listed below. Additionally, these intersections and roadway segments are listed as funded improvements in either ACHD's IFYWP or CIP. Therefore, the Alternative Mitigation Measures policy applies, and no improvements are required.

- Lake Hazel Road/Cloverdale Road intersection – IFYWP
- Amity Road/Cloverdale Road intersection – CIP
- Cloverdale Road between Amity Road and Lake Hazel Road – CIP
- Cloverdale Road between Lake Hazel Road and Columbia Road – CIP
- Cloverdale Road between Columbia Road and Hubbard Road - CIP

To mitigate the impacts of the development staff has recommended improvements to the intersections and roadway segment not planned for improvements by ACHD. These improvements will be made at

the following intersections and roadway segments when warranted based on updated traffic impact studies.

- Cloverdale Road/Columbia Road intersection
- Cloverdale Road/Hubbard Road intersection
- Hubbard Road – Cloverdale Road to Five Mile Road

## Additional Off-Site Mitigation




*Blue – ACHD planned projects, no mitigation required, per policy.

**Recommended Off-Site Mitigation – Roadway Segments**

| Road Segment | Distance | Pavement/Street Section Improvements | Sidewalks | Turn Lanes |
|---|---|---|---|---|
| **Hubbard Road** (on & off site) | 1 Mile | Widen to from 2 to 3 travel lanes with 3-foot wide gravel shoulders | 5-foot wide detached concrete sidewalks abutting the site | N/A |

***Yellow on map above**

**Recommended Off-Site Mitigation – Intersections**

| Intersection | Distance from Site | Improvement |
|---|---|---|
| Cloverdale Road/Columbia Road (off-site) | 1 Mile | Install interim 3 x 3 signal |
| Cloverdale Road/Hubbard Road (off-site) | 2 Miles | Install interim 3 x 3 signal |

***Yellow circles on map above**

## 2. Cloverdale Road/Columbia Road Intersection

The traffic impact study notes that the Cloverdale Road/Columbia Road intersection will exceed acceptable LOS "E" and will need to be improved with an interim signal. To verify the assumptions of the traffic impact study and to ensure that improvements are made when warranted; staff has recommended that an updated traffic impact study be provided, which includes an updated analysis of the Linder Road/Columbia Road intersection. The updated traffic impact study should be submitted prior to ACHD's signature on the final plat which contains the 350$^{th}$ lot.

If the updated traffic impact study shows that Cloverdale Road/Columbia Road intersection will exceed acceptable LOS "E" and that signal warrants are met, then the applicant will be required to install an interim signal prior to ACHD's signature on the final plat which contains the 351$^{st}$ lot. Additionally, the applicant will need to obtain plan approval and enter into a signal agreement with ACHD.

The signal agreement should include that the intersection should be designed to provide a 3 X 3 intersection with three 12-foot wide travel lanes; one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach, that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement.

In order to ensure the Cloverdale Road/Columbia Road intersection will be improved when warranted, the following items must be in place prior to plans acceptance for the final plat which necessitates the improvement based on the findings of the updated traffic impact study:

- Signal Agreement
- Full design and approved plans for the intersection

## 3. Cloverdale Road/Hubbard Road Intersection

The traffic impact study notes that the Cloverdale Road/Hubbard Road intersection will exceed acceptable LOS "E" and will need to be improved with an interim signal. To verify the assumptions of the traffic impact study and to ensure that improvements are made when warranted; staff has recommended that an updated traffic impact study be provided, which includes an updated analysis of the Cloverdale Road/Hubbard Road intersection. The updated

traffic impact study should be submitted prior to ACHD's signature on the final plat which contains the 350th lot.

If the updated traffic impact study shows that Cloverdale Road/Hubbard Road intersection will exceed acceptable LOS "E" and that signal warrants are met, then the applicant will be required to install an interim signal prior to ACHD's signature on the final plat which contains the 351st lot. Additionally, the applicant will need to obtain plan approval and enter into a signal agreement with ACHD.

The signal agreement should include that the intersection should be designed to provide a 3 X 3 intersection with three 12-foot wide travel lanes; one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach, that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement.

In order to ensure the Cloverdale Road/Hubbard Road intersection will be improved when warranted, the following items must be in place prior to plans acceptance for the final plat which necessitates the improvement based on the findings of the updated traffic impact study:

- Signal Agreement
- Full design and approved plans for the intersection

## 4. Ten Mile Creek Road

**a. Existing Conditions:** Ten Mile Creek Road is improved with 2-travel lanes and no curb, gutter or sidewalk abutting the site. There is 50-feet of right-of-way for Ten Mile Creek Road (25-feet from centerline).

**b. Policy:**

**Arterial Roadway Policy:** District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

**Master Street Map and Typology Policy:** District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

**Street Section and Right-of Way Width Policy:** District Policy 7205.2.1 & 7205.5.2 states that the standard 3-lane street section shall be 46-feet (back-of-curb to back-of-curb) within 70 feet of right-of-way. This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Right-of-Way Dedication:** District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

**Sidewalk Policy:** District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed

within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**Off-Site Streets:** District Policy 72045.2.1 states that if the proposed development is not served by a public street that is fully improved to urban standards (curb, gutter, sidewalk) or a minimum of 30-feet of pavement, then the developer shall provide 30-feet of pavement with 3-foot wide gravel shoulders from the site to the public street specified by the District, typically to the nearest public street that meets the District's minimum standards or a maximum of ¼ mile.

Alternatives to pavement widening including sidewalks and pathways or other proposals, may be considered by the District. The extent of roadway improvements (improvement type and length) will be determined by evaluating certain criteria. Criteria to establish improvement type and length include but are not limited to: traffic volumes (existing and projected); number of pedestrians (existing and projected); location of pedestrian "attractors" and "generators" (i.e. parks and schools); number of access points/streets serving the proposed development; usable right-of-way; need for traffic calming; utilities and irrigation facilities. All utility relocation costs associated with the off-site street widening shall be borne by the developer. All utility relocation costs associated with the off-site street widening shall be borne by the developer

**Frontage Improvements Policy:** District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

**ACHD Master Street Map:** ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Ten Mile Creek Road is designated in the MSM, changed with the Spring Rock Master Plan, as a Residential Arterial with 3-lanes with bike lanes, a 46-foot street section within 74-feet of right-of-way.

**c. Applicant Proposal:** The applicant is proposing to reconstruct and realign Ten Mile Creek Road, as a 49-foot street section (back-of-curb to back-of-curb) with two 12-foot travel lanes, a 12-foot turn lane, 6-foot bike lanes, vertical curb, gutter and 8-foot attached concrete sidewalk within 74-feet of right-of-way abutting the site.

The applicant's proposal includes realigning the Ten Mile Creek Road/Five Mile Road intersection.




**d. Staff Comments/Recommendations:** The applicant's proposal to reconstruct Ten Mile Creek Road as a 49-foot wide street section with vertical curb gutter, and an 8-foot wide attached concrete sidewalk exceed ACHD policy which requires right-of-way dedication, pavement widening, and the construction of sidewalks on arterial roadways and the MSM which identifies Ten Mile Creek Road as a 46-foot wide street section.

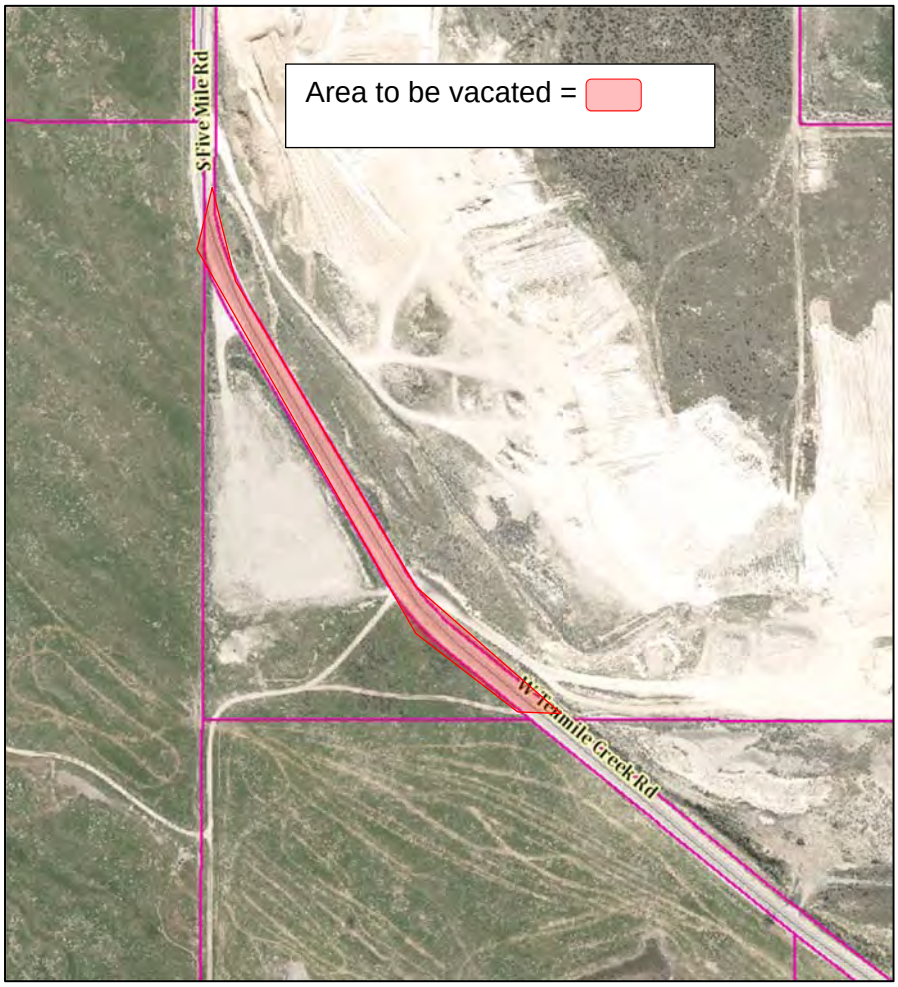
At a minimum the applicant should be required to dedicate an additional 24-feet of right-of-way to total 49-feet from the centerline of Ten Mile Creek Road, consistent with ACHD's action on the Spring Rock Master Plan, widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site , and to construct a 5-foot wide detached concrete sidewalk located a minimum 41-feet from the centerline Ten Mile Creek Road abutting the site. If the minimum improvements are constructed, then center left turn lanes should be constructed on Ten Mile Creek Road at all street intersections.

If the applicant choses to fully improve Ten Mile Creek Road abutting the site then it would be improved as a 3-lane residential arterial roadway; a 46-foot street section with vertical curb, gutter and 5-foot wide detached (or 7-foot attached) concrete sidewalk. If street trees are desired, then 8-foot wide planter strips should be provided.

The site is not served by a public street that is fully improved to urban standards. The applicant should be required to improve Ten Mile Creek Road with 30-feet of pavement with 3-foot wide gravel shoulders meeting ACHD's Offsite Improvement Policy between the site's east property line and Pleasant Valley Road.

Staff is supportive of the applicant's proposal to realign the Ten Mile Creek Road/Five Mile Road intersection, as the proposed realignment will create a standard intersection at Five Mile Road.

The applicant should be required to vacate/exchange the right-of-way for the remnant portion of Ten Mile Creek Road north of the proposed realignment.




If this segment of roadway cannot be vacated due to the underlying ownership (Bureau of Land Management) and lease agreements then the applicant should be required to work with ACHD to terminate the roadway, closing it to public use.

The applicant will not be compensated for any improvements or right-of-way dedication along Ten Mile Creek Road abutting the site, as this roadway is not scheduled for improvements in ACHD's IFYWP or CIP.

## 5. Five Mile Road

**a. Existing Conditions:** Five Mile Road is improved with 2-travel lanes, vertical curb, gutter, and no curb, gutter or sidewalk abutting the site. There is 50-feet of right-of-way for Five Mile Road (25-feet from centerline).

**b. Policy:**

**Arterial Roadway Policy:** District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

**Master Street Map and Typology Policy:** District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

**Street Section and Right-of Way Width Policy:** District Policy 7205.2.1 & 7205.5.2 states that the standard 3-lane street section shall be 46-feet (back-of-curb to back-of-curb) within 70 feet of right-of-way. This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Street Section and Right-of-Way Width Policy:** District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

**Right-of-Way Dedication:** District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

**Sidewalk Policy:** District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**Frontage Improvements Policy:** District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

**ACHD Master Street Map:** ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Five Mile Road is designated in the MSM, as changed with the Spring Rock Subdivision Master Plan, as a Residential Arterial with 3-lanes with bike lanes, a 46-foot street section within 74-feet of right-of-way.

c. **Applicant Proposal:** The applicant is proposing to construct Five Mile Road abutting and through the site extending it to the south along the eastern site boundary as a 49-foot street section (back-of-curb to back-of-curb) with two 12-foot travel lanes, a 12-foot turn lane, 6-foot bike lanes, vertical curb, gutter, and 8-foot attached concrete sidewalk within 74-feet of right-of-way. The applicant has proposed not to construct a center turn lane between Gem Valley Drive and the southern boundary of the northern subdivision due topography in the area.

d. **Staff Comments/Recommendations:** The applicant's proposal to construct Five Mile Road as a 49-foot wide street section with vertical curb gutter, and an 8-foot wide attached concrete sidewalk exceed ACHD policy which requires right-of-way dedication, pavement widening, and

the construction of sidewalks on arterial roadways and the MSM which identifies Five Mile Road as a 72 and 46-foot wide street section.

Consistent with ACHD's prior action on the Spring Rock Master Plan, the applicant should be required to dedicate right-of-way to total 96-feet for Five Mile Road between Ten Mile Creek Road and Hubbard Road. South of Ten Mile Creek Road 74-feet of right-of-way should be dedicated. The applicant should be required to widen the pavement to a minimum width of 34-feet plus a 3-foot wide gravel shoulder, and to construct a 5-foot wide detached concrete sidewalk located a minimum 41-feet from the centerline Five Mile Road between Ten Mile Creek Road and Hubbard Road. South of Ten Mile Creek Road the sidewalks should be located a minimum of 30-feet from the centerline of Five Mile Road abutting the site. If the minimum improvements are constructed, then center left turn lanes should be constructed on Five Mile Road at all street intersections.

If the applicant choses to fully improve Five Mile Road abutting the site then it would be improved as a 3-lane residential arterial roadway; a 46-foot street section with vertical curb, gutter and 5-foot wide detached (or 7-foot attached) concrete sidewalk. If street trees are desired, then 8-foot wide planter strips should be provided.

The applicant will not be compensated for any improvements or right-of-way dedication along Ten Mile Creek Road abutting the site, as this roadway is not scheduled for improvements in ACHD's IFYWP or CIP.

## 6. Ten Mile Creek Road/Five Mile Road Intersection

**a. Applicant's Proposal:** The applicant has proposed to construct a single lane roundabout at the Ten Mile Creek Road/Five Mile Road intersection.

**b. Policy:**

**Intersection Control Policy:** District policy 5108.5 states that roundabout traffic control shall be considered and evaluated as an option if the intersection is being considered for improvement for any of the following reasons:

- A capacity deficiency exists, and an all-way stop and/or traffic signal volume warrant is met as defined in the MUTCD; or
- A safety deficiency exists; or
- Unconventional geometry exists (e.g., five approaches).

An alternatives analysis (potentially including other intersection control types, such as signals and stop signs) shall be conducted at all intersections where a roundabout is being considered. The alternatives analysis shall include a detailed traffic operations analysis and shall consider ACHD costs (e.g., right-of-way, construction, and maintenance) and public costs (e.g., delay, safety, and the environment.) The alternatives analysis should be the decision-making tool used to determine whether or not a roundabout will be constructed. Final discretion for all intersection control decisions rests with ACHD.

**Traffic Operations Analysis Policy:** District Policy 5108.6 states that traffic conditions shall be analyzed for all peak periods of the intersection's construction year and design year(s). The construction year is the year the roundabout will be constructed and opened. For federally funded projects the design year is 20 years after the construction year. There may be multiple design years if considering interim designs.

**Analysis Procedure Policy:** District Policy 5108.6.2 states that traffic analysis procedures shall be consistent with the most recent version of the Highway Capacity Manual (HCM) beginning with the 2010 edition. Prior to the publication of the 2010 HCM the traffic analysis procedures shall be based upon the equations summarized in NCHRP Report 572: Roundabouts in the United States. Additional analytical or simulation tools may be required to

supplement the traffic analysis. The additional analysis tools shall be calibrated to match either the data summarized in NCHRP Report 572, the 2010 HCM (or its subsequent updates), or local conditions. Site selection, data collection, and calibration methods must be pre-approved by ACHD Traffic.

**Result Reporting Policy:** District Policy 5108.6.3 states that roundabout traffic operations shall be reported on a lane-by-lane basis. Volume-to-capacity (V/C), traffic delay, level of service, and 95th percentile queues shall be reported.

**Acceptable Thresholds Policy:** District Policy 5108.6.4 states that the acceptable level of service for all roundabouts shall be based upon the critical/worst lane and a maximum volume-to-capacity (V/C) ratio of 0.85.

**Roundabout Designers Policy:** District Policy 5108.8.1 states that ACHD roundabout projects shall be designed and submitted by ACHD staff or prequalified firms approved to design roundabouts by ACHD. A peer review shall be performed by an ACHD prequalified roundabout peer review firm for all roundabouts designed by ACHD staff. The list of firms approved to design and review roundabouts will be available to the public.

The ACHD prequalified firms approved to design roundabouts are recommended for developer projects. If a roundabout is not designed by a firm prequalified by ACHD to design roundabouts, the developer shall have a roundabout peer review performed by a firm acceptable to ACHD.

**Preliminary Deliverables Policy:**
District Policy 5108.8.2 states that before plat approval, right-of-way dedication or purchase, grading, or other details are designed, the designer shall demonstrate to ACHD's satisfaction that the preliminary roundabout design meets the standards set forth in ACHD Roundabout Policy. All roundabout designs will be required to meet the same standards outlined in the roundabout policy. Preliminary submittal deliverables shall include the following items:

1. Traffic Operation Analysis Summary
   Include input parameter summary sheets and output tables as necessary so analysis can be independently replicated.

2. 1:50 Scale Plan View
   Include curbs and pavement markings. Plan view shall be supplemented with an AutoCAD compatible file.

3. Wheel Path Plots
   Illustrate the wheel paths of the design vehicle(s) making every movement from each approach. Additionally, a side-by-side swept path plot shall be provided with the appropriate design vehicle(s) for multilane roundabout sections.

4. Fastest Path Plots
   Illustrate the fastest path for every movement from each approach. Include a complete speed comparison table.

5. Natural Path Plots
   Illustrate the natural path for every movement from each approach.

**c. Staff Comments/Recommendation:** Staff is supportive of the applicant's proposal to construct a roundabout at the Ten Mile Creek Road/Five Mile Road intersection however a multi-lane roundabout should be constructed.

The traffic impact study notes that Five Mile Road between Hubbard Road and Ten Mile Creek will need to be a 5-lane roadway necessitating the need for a multi-lane roundabout.

Additionally, by-pass maybe needed to accommodate westbound and southbound traffic. The traffic impact study did not include an analysis of this intersection and not does note when the roundabout should be constructed to serve the site.

To ensure that the roundabout is constructed when necessary to serve the site and designed and construct appropriately, the applicant should be required to provide an intersection analysis to staff for review and comment prior to final plat approval for the phase of the development in which the Ten Mile Creek/Five Mile Road intersection is constructed.

The roundabout should be designed meeting the standards of ACHD's Roundabout Design Guide policy section 5188.

The applicant will not be compensated for any improvements or right-of-way dedication at the Ten Mile Creek Road/Five Mile Road intersection, as this intersection is not scheduled for improvements in ACHD's IFYWP or CIP.

## 7. Hubbard Road

**a. Existing Conditions:** Hubbard Road is improved with 2-travel lanes, and no curb, gutter or sidewalk abutting the site. There is 80-feet to 110-feet of right-of-way for Hubbard Road (40-feet to 55-feet from centerline).

**b. Policy:**

**Arterial Roadway Policy:** District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

**Master Street Map and Typology Policy:** District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

**Street Section and Right-of-Way Width Policy:** District Policies 7205.2.1 & 7205.5.2 state that the standard 5-lane street section shall be 72-feet (back-of-curb to back-of-curb) within 96-feet of right-of-way. This width typically accommodates two travel lanes in each direction, a continuous center left-turn lane, and bike lanes on a minor arterial and a safety shoulder on a principal arterial.

**Street Section and Right-of Way Width Policy:** District Policy 7205.2.1 & 7205.5.2 states that the standard 3-lane street section shall be 46-feet (back-of-curb to back-of-curb) within 70 feet of right-of-way. This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Right-of-Way Dedication:** District Policy 7205.2 states that The District will provide compensation for additional right-of-way dedicated beyond the existing right-of-way along arterials listed as impact fee eligible in the adopted Capital Improvements Plan using available impact fee revenue in the Impact Fee Service Area.

No compensation will be provided for right-of-way on an arterial that is not listed as impact fee eligible in the Capital Improvements Plan.

The District may acquire additional right-of-way beyond the site-related needs to preserve a corridor for future capacity improvements, as provided in Section 7300.

**Off-Site Streets:** District Policy 72045.2.1 states that if the proposed development is not served by a public street that is fully improved to urban standards (curb, gutter, sidewalk) or a minimum of 30-feet of pavement, then the developer shall provide 30-feet of pavement with 3-foot wide

gravel shoulders from the site to the public street specified by the District, typically to the nearest public street that meets the District's minimum standards or a maximum of ¼ mile;

**Sidewalk Policy:** District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**Frontage Improvements Policy:** District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

**Off-Site Streets:** District Policy 72045.2.1 states that if the proposed development is not served by a public street that is fully improved to urban standards (curb, gutter, sidewalk) or a minimum of 30-feet of pavement, then the developer shall provide 30-feet of pavement with 3-foot wide gravel shoulders from the site to the public street specified by the District, typically to the nearest public street that meets the District's minimum standards or a maximum of ¼ mile.

Alternatives to pavement widening including sidewalks and pathways or other proposals, may be considered by the District. The extent of roadway improvements (improvement type and length) will be determined by evaluating certain criteria. Criteria to establish improvement type and length include but are not limited to: traffic volumes (existing and projected); number of pedestrians (existing and projected); location of pedestrian "attractors" and "generators" (i.e. parks and schools); number of access points/streets serving the proposed development; usable right-of-way; need for traffic calming; utilities and irrigation facilities. All utility relocation costs associated with the off-site street widening shall be borne by the developer. All utility relocation costs associated with the off-site street widening shall be borne by the developer

**Minor Improvements Policy:** District Policy 7203.3 states that minor improvements to existing streets adjacent to a proposed development may be required. These improvements are to correct deficiencies or replace deteriorated facilities. Included are sidewalk construction or replacement; curb and gutter construction or replacement; replacement of unused driveways with curb, gutter and sidewalk; installation or reconstruction of pedestrian ramps; pavement repairs; signs; traffic control devices; and other similar items

**ACHD Master Street Map:** ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Hubbard Road is designated in the MSM as a Residential Arterial with 5-lanes and on-street bike lanes, a 72-foot street section within 96-feet of right-of-way.

**c. Applicant Proposal:** The applicant has not proposed any improvements to Hubbard Road.

**d. Staff Comments/Recommendations:** Consistent with the MSM the applicant should be required to dedicate 48-feet of right-of-way from the centerline of Hubbard Road abutting the site. The applicant should be required to widen Hubbard Road to a minimum width of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site , and to construct

a 5-foot wide detached concrete sidewalk located a minimum 41-feet from the centerline of Hubbard Road abutting the site.

The a TIS indicates that Hubbard Road will exceed ACHD's acceptable planning level of service thresholds for a 2-lane minor arterial for the existing 2-lanes for the 2025 Phase 1 development traffic but will meet thresholds for a 3-lane minor arterial. The MSM identifies this segment of Hubbard Road as a future 5-lane arterial. Based on the findings and recommendations of the updated traffic impact study, widening to Hubbard Road between Five Mile Road and Cloverdale Road or alternative mitigation measures may be required.

The site is not served by a public street that is fully improved to urban standards. The applicant should be required to improve Hubbard Road from Five Mile Road to Cloverdale Road with 30-feet of pavement with 3-foot wide gravel shoulders meeting ACHD's Offsite Improvement Policy.

The applicant will not be compensated for any improvements or right-of-way dedication along Hubbard Road abutting the site, as this roadway is not scheduled for improvements in ACHD's IFYWP or CIP.

## 8. Gem Valley Drive

**a. Existing Conditions:** There are no collector roadways on the site.

**b. Policy:**

**Collector Street Policy:** District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

**Master Street Map and Typologies Policy:** District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

**Street Section and Right-of-Way Policy:** District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Sidewalk Policy:** District policy 7206.5.6 requires a concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**c. Applicant Proposal:** The applicant has proposed to construct Gem Valley Drive between Ten Mile Creek Road and Five Mile Road as a 49-foot street section (back-of-curb to back-of-curb)

with two 12-foot travel lanes, a 12-foot turn lane, 6-foot bike lanes, vertical curb, gutter, and 8-foot attached concrete sidewalk within 74-feet of right-of-way.

**d. Staff Comments/Recommendations:** The applicant's proposal to construct a collector roadway to run between Ten Mile Creek Road and Five Mile Road should be approved, as proposed.

Staff recommends that the collector roadway be constructed as a 46-foot wide collector street section with 3 travel lanes, vertical curb, gutter, and 5-foot wide detached or 7-foot wide attached concrete sidewalks within 74-feet of right-of-way. If street trees are desired, then 8-foot wide planter strips should be provided.

## 9. East/West Collector

**a. Existing Conditions:** There are no collector roadways within the site.

**b. Policy: Collector Street Policy:** District policy 7206.2.1 states that the developer is responsible for improving all collector frontages adjacent to the site or internal to the development as required below, regardless of whether access is taken to all of the adjacent streets.

**Master Street Map and Typologies Policy:** District policy 7206.5 states that if the collector street is designated with a typology on the Master Street Map, that typology shall be considered for the required street improvements. If there is no typology listed in the Master Street Map, then standard street sections shall serve as the default.

**Street Section and Right-of-Way Policy:** District policy 7206.5.2 states that the standard right-of-way width for collector streets shall typically be 50 to 70-feet, depending on the location and width of the sidewalk and the location and use of the roadway. The right-of-way width may be reduced, with District approval, if the sidewalk is located within an easement; in which case the District will require a minimum right-of-way width that extends 2-feet behind the back-of-curb on each side.

The standard street section shall be 46-feet (back-of-curb to back-of-curb). This width typically accommodates a single travel lane in each direction, a continuous center left-turn lane, and bike lanes.

**Residential Collector Policy:** District policy 7206.5.2 states that the standard street section for a collector in a residential area shall be 36-feet (back-of-curb to back-of-curb). The District will consider a 33-foot or 29-foot street section with written fire department approval and taking into consideration the needs of the adjacent land use, the projected volumes, the need for bicycle lanes, and on-street parking.

**Half Street Policy:** District Policy 7206.2.2 required improvements shall consist of pavement widening to one-half the required width, including curb, gutter and concrete sidewalk (minimum 5-feet), plus 12-feet of additional pavement widening beyond the centerline established for the street to provide an adequate roadway surface, with the pavement crowned at the ultimate centerline. A 3-foot wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff shall be constructed on the unimproved side.

**Sidewalk Policy:** District policy 7206.5.6 requires concrete sidewalks at least 5-feet wide to be constructed on both sides of all collector streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the sidewalk is required to provide increased safety and protection of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

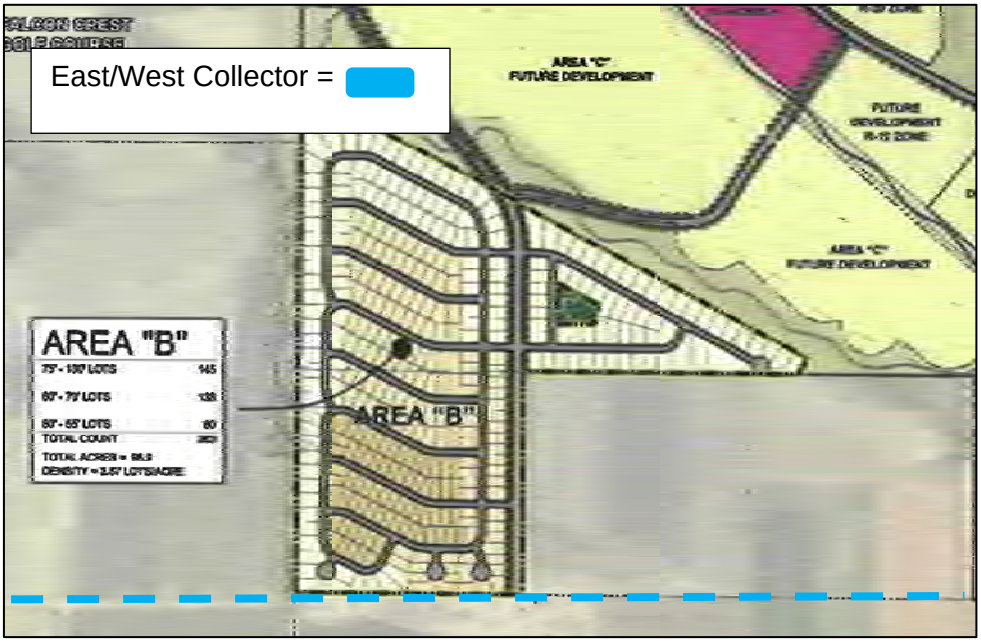
Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**ACHD Master Street Map:** ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, collector street requirements, and specific roadway features required through development. A new collector roadway was identified on the MSM with the street typology of Rural Collector. The new collector roadway should align with Meadow View drive to the west, along the half-mile between Kuna Road and Deer Flat Road, intersecting with the proposed Five Mile Road extension and run along the southern property line stubbing to the west property line. The Residential collector typology as depicted in the Livable Street Design Guide recommends 2-lanes, a 36-foot wide street section with vertical curb, gutter and 5-foot wide detached (or 7-foot wide attached) concrete sidewalks within 54-feet of right-of-way.

c. **Applicant Proposal:** The applicant has not proposed to construct an east/west collector roadway through the site.

d. **Staff Comments/Recommendations:** Consistent with ACHD's action on the Spring Rock Master Plan, the applicant should be required to construct an east/west collector roadway abutting the site's south property line. The roadway will intersect Five Mile Road and stub to the west property line. The collector should be constructed as a half of a 36-foot wide collector street section, plus 12 additional feet of pavement (to total 30-feet) with, vertical curb, gutter, and 5-foot wide detached (or 7-foot wide attached) concrete sidewalks abutting the site with 3-foot wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff on the south side of the roadway. If street trees are desired, then 8-foot wide planter strips should be provided.



## 10. Internal Local Roads

**a. Existing Conditions:** There are no local street within the site.

**b. Policy:**

**Local Roadway Policy:** District Policy 7207.2.1 states that the developer is responsible for improving all local street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

**Street Section and Right-of-Way Policy:** District Policy 7207.5 states that right-of-way widths for all local streets shall generally not be less than 47-feet wide and that the standard street section shall be 33-feet (back-of-curb to back-of-curb).

**Standard Urban Local Street—33-foot Street Section and Right-of-way Policy:** District Policy 7207.5.2 states that the standard street section shall be 33-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 47-feet of right-of-way.
For the City of Kuna and City of Star: Unless otherwise approved by Kuna or Star, the standard street section shall be 36-feet (back-of-curb to back-of-curb) for developments with any buildable lot that is less than 1 acre in size. This street section shall include curb, gutter, and minimum 5-foot wide concrete sidewalks on both sides and shall typically be constructed within 50-feet of right-of-way.

**Sidewalk Policy:** District Policy 7207.5.7 states that five-foot wide concrete sidewalk is required on both sides of all local street, except those in rural developments with net densities of one dwelling unit per 1.0 acre or less, or in hillside conditions where there is no direct lot frontage, in which case a sidewalk shall be constructed along one side of the street. Some local jurisdictions may require wider sidewalks.

The sidewalk may be placed next to the back-of-curb. Where feasible, a parkway strip at least 8-feet wide between the back-of-curb and the street edge of the sidewalk is recommended to provide increased safety and protection of pedestrians and to allow for the planting of trees in accordance with the District's Tree Planting Policy. If no trees are to be planted in the parkway strip, the applicant may submit a request to the District, with justification, to reduce the width of the parkway strip.

Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk. Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

**Cul-de-sac Streets Policy:** District policy 7207.5.8 requires cul-de-sacs to be constructed to provide a minimum turning radius of 45-feet; in rural areas or for temporary cul-de-sacs the emergency service providers may require a greater radius. Landscape and parking islands may be constructed in turnarounds if a minimum 29-foot street section is constructed around the island. The pavement width shall be sufficient to allow the turning around of a standard AASHTO SU design vehicle without backing. The developer shall provide written approval from the appropriate fire department for this design element.

The District will consider alternatives to the standard cul-de-sac turnaround on a case-by-case basis. This will be based on turning area, drainage, maintenance considerations and the written approval of the agency providing emergency fire service for the area where the development is located.

**c. Applicant's Proposal:** The applicant is proposing to construct the internal streets as a 33-foot street section (back-of-curb to back-of-curb) with vertical curb, gutter, and 5-foot attached sidewalks within 47-feet of right-of-way.

The applicant has proposed 9 cul-de-sacs with a minimum radius of 50-feet throughout the site. The applicant should be required to extend the right-of-way at the terminus of Fount Court to the south property line.

The applicant has also proposed a knuckle with a 50-foot radius at the intersection of Oxbow Lake Drive and Split Rock Way.

**d. Staff Comments/Recommendations:** The applicant's proposal meet District policy and should be approved, as proposed.

## 11. Roadway Offsets

**a. Existing Conditions:** There are no roadways within the site.

**b. Policy:**

**Local Street Intersection Spacing on Minor Arterials:** District policy 7205.4.3 states that new local streets should not typically intersect arterials. Local streets should typically intersect collectors. If it is necessary, as determined by ACHD, for a local street to intersect an arterial, the minimum allowable offset shall be 660-feet as measured from all other existing roadways as identified in Table 1a (7205.4.6).

**Collector Offset Policy:** District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting minor arterials is one half-mile.

District policy 7205.4.2 states that the optimum spacing for new signalized collector roadways intersecting principal arterials is one half-mile.

District policy 7206.4.2 states that the preferred spacing for new collectors intersecting existing collectors is ¼ mile to allow for adequate signal spacing and alignment.

District policy 7205.4 Table 1a states that the minimum separation for unsignalized collector streets is 1,320 feet when intersecting a Minor Arterial.

District policy 7206.4.5, requires local roadways to align or offset a minimum of 330-feet when intersecting a collector roadway (measured centerline to centerline).

**Local Offset Policy:** District policy 7207.4.2, requires local roadways to align or provide a minimum offset of 125-feet from any other street (measured centerline to centerline).

**c. Applicant's Proposal:** The applicant has proposed to realign Ten Mile Creek Road to create an intersection with Five Mile Road that will be 2,710 feet to the south of Hubbard Road. The applicant has also proposed to construct Gem Valley Drive to provide a connection from Five Mile Road to Ten Mile Creek Road.

The applicant has proposed to construct the following roadways to intersect Ten Mile Creek Road:

- Gem Valley Drive located approximately 3,800-feet east of Five Mile Road.

The applicant has proposed to construct the following roadways to intersect Five Mile Road:

- Mariposite Drive located approximately 850-feet south of Hubbard Road.
- Slate Drive located approximately 2,170-feet south of Hubbard Road.
- Ten Mile Creek Road (east and west side of the roadway) located approximately 2,820-feet south of Hubbard Road.

- One 33-foot foot wide curb-return approach for a future local street located 1,310-feet south of Ten Mile Creek Road.
- Fount Drive (east and west side of the roadway) located approximately 350-feet south of Gem Valley Drive.
- Mossy Agate Drive (east and west side of the roadway) located approximately 900-feet south of Gem Valley Drive
- Tuckpoint Drive (east and west side of the roadway) located approximately 1,820-feet south of Gem Valley Drive.

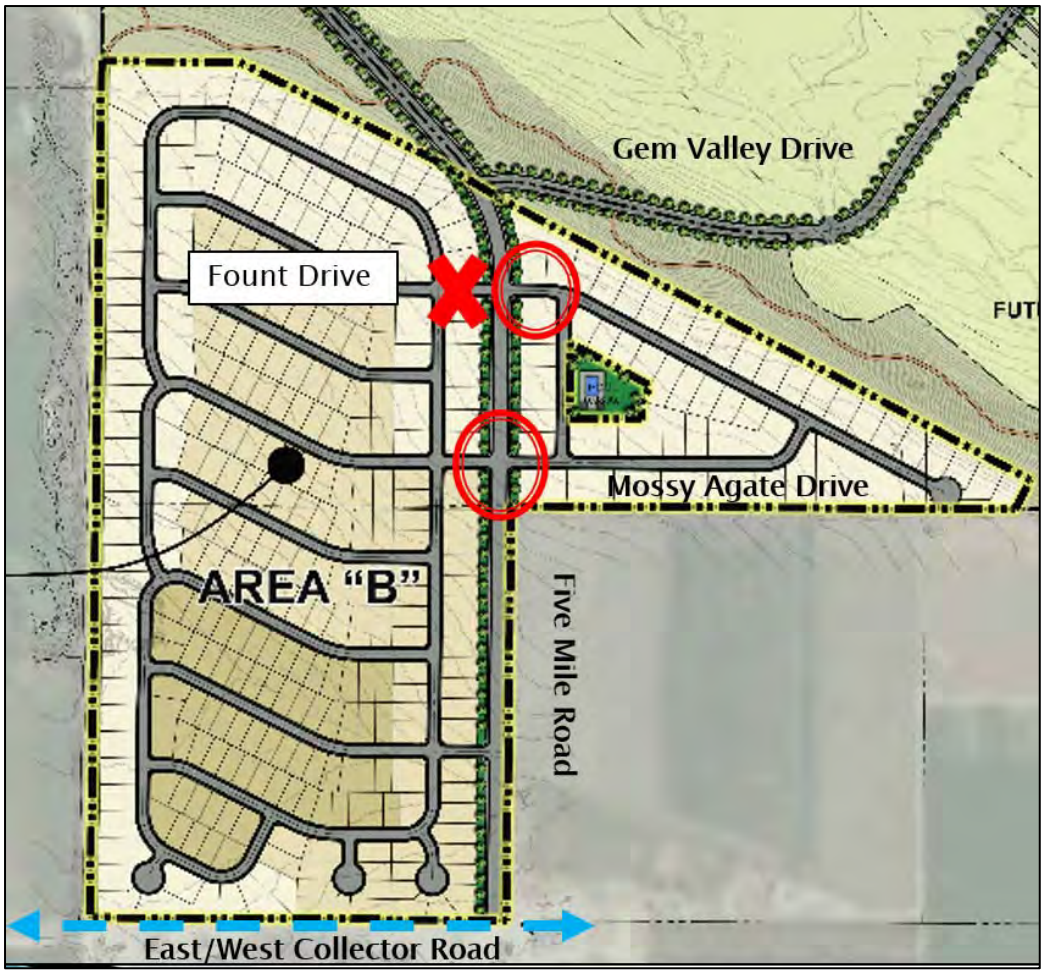
The applicant has proposed to construct several 33-foot foot wide curb-return approaches for future local streets onto Gem Valley Drive. The approaches are proposed to be located as follows:

- Two aligned approaches located 369-feet south of Ten Mile Creek Road.
- Two aligned approaches at 773-feet south of Ten Mile Creek Road.
- Two aligned approaches 1,141-feet to the east of Five Mile Road.

**Staff Comments/Recommendations:** The applicant's proposal to construct Gem Valley Drive to intersect Ten Mile Creek Road and Marposite Drive, Slate Drive, Ten Mile Creek Road and Tuckpointe Drive to intersect Five Mile Road meets District policy and should be approved, as proposed.

The applicant's proposal to construct Fount Drive onto Five Mile Road does not meet District Roadway Offset policy, which requires an offset of 660-feet on minor arterial roadways, as Fount Drive is proposed to offset Gem Valley Drive by 350-feet. Because the proposed offset doesn't meet ACHD policy, is not needed for site circulation, and would be located on the inside of the raising concerns regarding sight distance staff recommends that the Fount Drive intersection on the west side of Five Mile Road not be approved, as proposed. However, staff recommends a modification of policy to allow the Fount Drive intersection on the east side of Five Mile Road to be located, as proposed. Staff is recommending this modification because additional access is needed to Five Mile Road because emergency services require two access points into a subdivision with more than 30 buildable lots, and the intersection will be located on the outside of the curve with adequate sight distance. This is a 47% modification of Policy and can be approved by the Deputy Director of Technical and Development Services.

The applicant's proposal to construct Mossy Agate Drive onto Five Mile Road does not meet District Roadway Offset policy, which requires an offset of 660-feet on minor arterial roadways, as Mossy Agate Drive is proposed to offset Fount Drive by 550-feet. Although the intersection of Mossy Agate Drive does not meet District policy, staff recommends a modification of policy to allow the roadway to be located, as proposed because there is adequate site distance and the applicant has proposed to construct a center turn lane on Five Mile Road which will provide refuge for left turning traffic in and out the site. This is a 17% modification of policy and can be approved by the Development Services Manager.




The proposed roadway approaches onto Gem Valley Drive meet District policy and should be approved, as proposed.

## 12. Stub Streets

**a. Existing Conditions:** There are no stub streets to or from the site.

**b. Policy:**

**Stub Street Policy:** District policy 7205.2 and 7206.2.4 state that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7205.2.5.4, except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE." or ("THIS IS A DESIGNATED ARTERIAL STREET. THIS STREET WILL BE EXTENDED AND WIDENDED IN THE FUTURE.")

District policy 7207.2.4 (local roads) states that stub streets will be required to provide circulation or to provide access to adjoining properties. Stub streets will conform with the requirements described in Section 7207.2.5.4 (local), except a temporary cul-de-sac will not be required if the stub street has a length no greater than 150-feet. A sign shall be installed at the terminus of the stub street stating that, "THIS ROAD WILL BE EXTENDED IN THE FUTURE."

In addition, stub streets must meet the following conditions:

- A stub street shall be designed to slope towards the nearest street intersection within the proposed development and drain surface water towards that intersection; unless an alternative storm drain system is approved by the District.

- The District may require appropriate covenants guaranteeing that the stub street will remain free of obstructions.

**Temporary Dead End Streets Policy:** District policies 7205.2 and 7206.2.4 requires that the design and construction for cul-de-sac streets shall apply to temporary dead end streets. The temporary cul-de-sac shall be paved and shall be the dimensional requirements of a standard cul-de-sac. The developer shall grant a temporary turnaround easement to the District for those portions of the cul-de-sac which extend beyond the dedicated street right-of-way. In the instance where a temporary easement extends onto a buildable lot, the entire lot shall be encumbered by the easement and identified on the plat as a non-buildable lot until the street is extended.

**c. Applicant Proposal:** The applicant has proposed construct one stub street to the south, Five Mile Road.

**d. Staff Comments/Recommendations:** The applicant's proposal to construct one stub street to the south meets District policy and should be approved, as proposed. Additionally, the applicant should be required to construct one stub street to the west the new east/west collector roadway.

The applicant should be required to install a sign at the terminus of Five Mile Road stating that, "THIS IS A DESIGNATED ARTERIAL STREET. THIS STREET WILL BE EXTENDED AND WIDENEND IN THE FUTURE." and at the terminus of the east/west collector roadway that, "THIS IS A DESIGNATED COLLECTOR STREET. THIS STREET WILL BE EXTENDED AND WIDENED IN THE FUTURE.".

## 13. Driveways

### 13.1 Ten Mile Creek Road/Five Mile Road

**a. Existing Conditions:** There are no driveways onto Ten Mile Creek Road or onto Five Mile Road from the site.

**b. Policy**

**Access Points Policy:** District Policy 7205.4.1 states that all access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land use intensifies, changes, or the property redevelops.

**Access Policy:** District policy 7205.4.6 states that direct access to minor arterials is typically prohibited. If a property has frontage on more than one street, access shall be taken from the street having the lesser functional classification. If it is necessary to take access to the higher classified street due to a lack of frontage, the minimum allowable spacing shall be based on Table 1a under District policy 7205.4.6, unless a waiver for the access point has been approved by the District Commission.

**Driveway Location Policy:** District policy 7205.4.5 requires driveways located on minor arterial roadways from a signalized intersection with a single left turn lane shall be located a minimum of 330-feet from the nearest intersection for a right-in/right-out only driveway and a minimum of 660-feet from the intersection for a full-movement driveway.

District policy 7205.4.5 requires driveways located on minor arterial roadways from a signalized intersection with a dual left turn lane shall be located a minimum of 330-feet from the nearest intersection for a right-in/right-out only driveway and a minimum of 710-feet from the intersection for a full-movement driveway.

**Successive Driveways:** District policy 7205.4.6 Table 1a, requires driveways located on minor arterial roadways with a speed limit of 35 MPH to align or offset a minimum of 330-feet from any existing or proposed driveway.

**Driveway Width Policy:** District policy 7205.4.8 restricts high-volume driveways (100 VTD or more) to a maximum width of 36-feet and low-volume driveways (less than 100 VTD) to a maximum width of 30-feet. Curb return type driveways with 30-foot radii will be required for high-volume driveways with 100 VTD or more. Curb return type driveways with 15-foot radii will be required for low-volume driveways with less than 100 VTD.

**Driveway Width Policy:** District policy 7208.4.3 restricts commercial driveways to a maximum width of 40-feet. Most commercial driveways will be constructed as curb-cut type facilities.

**Driveway Paving Policy:** Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7205.4.8, the applicant should be required to pave the driveway its full width and at least 30-feet into the site beyond the edge of pavement of the roadway and install pavement tapers in accordance with Table 2 under District Policy 7205.4.8.

**Cross Access Easements/Shared Access Policy:** District Policy 7202.4.1 states that cross access utilizes a single vehicular connection that serves two or more adjoining lots or parcels so that the driver does not need to re-enter the public street system.

c. **Applicant's Proposal:** The applicant has proposed to construct a 65-foot wide driveway with a median onto Ten Mile Creek Road located 1,210-feet to the east of Five Mile Road.

   The applicant has proposed to construct a 30-foot wide driveway onto Five Mile Road located 740-feet south of Ten Mile Creek Road.

d. **Staff Comments/Recommendations:** The applicant's proposal to construct a driveway onto Ten Mile Creek Road located 1,210-feet east of Five Mile Road meets District policy and should be approved, as proposed. However, the proposed width of the driveway does not meet District policy and should not be approved, as proposed. The driveway will be restricted to a maximum width of 36-feet within the right-of-way and the center landscape island should be located outside of the right-of-way.

   The applicant's proposal to construct a 30-foot wide driveway onto Five Mile Road located 740-feet south of Ten Mile Creek Road meets District policy and should be approved, as proposed.

## 14. Traffic Calming

a. **Speed Control and Traffic Calming Policy** (Collectors Roads)**:** District policy 7206.3.8 states that collector street should be designed to discourage speeds above 35 MPH, and in a residential area collector street should be designed to discourage speeds above 30 MPH. The design of collector street systems should discourage excessive speeds by using passive design elements. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement.

   **Speed Control and Traffic Calming Policy** (Local roads)**:** District policy 7207.3.7 states that the design of local street systems should discourage excessive speeds by using passive design elements. If the design or layout of a development is anticipated to necessitate future traffic calming implementation by the District, then the District will require changes to the layout and/or the addition of passive design elements such as horizontal curves, bulb-outs, chokers, etc. The District will also consider texture changes to the roadway surface (i.e. stamped concrete) as a passive design element. These alternative methods may require a maintenance and/or license agreement.

b. **Staff Comments/Recommendations:** There are several long sections of collector and local roadways proposed within the Spring Rock Subdivision Phase 1, which are greater than 750-

feet in length and will need to be redesigned to reduce the length or the roadways or to include the use of passive design elements. The following roadways should be redesigned:

- Gem Valley Drive
- Blue Lagoon way
- Black Shale Drive
- Slate Drive
- Chimney Rock Way
- Iron Ore Way
- Mammoth Way
- Geode Way
- Oxbow Lake Drive
- Split Rock Way
- Flint Ridge Drive
- Fount Drive
- Mossy Agate Drive – west of Five Mile Road
- Red Onix Drive
- Tuckpoint Drive
- White Dune Drive
- Desert Glass Drive
- Bismuth Drive
- Hagerman Avenue
- Kettle Lake Way (except for the mid-section)

Speed humps/bumps and valley gutter will not be accepted as traffic calming.

The applicant should be required to submit a revised preliminary plat showing the redesigned roadways for review and approval prior to ACHD's signature on the first final plat.

## 15. School Site

A 10-acre school site is proposed at the southwest corner of the Ten Mile Creek Road and Gem Valley Drive intersection. This parcel has approximately 960-feet of frontage on Ten Mile Creek Road, a minor arterial roadway and 450-feet of frontage on Gem Valley Drive, a collector roadway. Staff has concerns regarding the location and configuration of the proposed school parcel, as ACHD policy prohibits direct lot access to arterial roadways (Ten Mile Creek Road) when a site has frontage on a less classified street (Gem Valley Drive). This is the case with the proposed school parcel.

Typically, elementary schools have multiple driveways to separate the parent drop-off/pick-up loop from the bus loop. This creates better on-site circulation and improves the flow of traffic in and out of the school site during the peak drop-off and pick-up time periods. As the proposed school site is currently configured, There would not be enough frontage on Gem Valley Drive to provide enough driveway access to serve the school, as the location of driveways will be limited within the influence area of the Gem Valley Drive/Ten Mile Creek intersection and it is unknown if additional control (roundabout, signalization) of the intersection will be needed in the future.

Additionally, staff has concerns with pedestrians possibly needing to walk along Ten Mile Creek Road to access the site, as this roadway will still carry heavy industrial truck traffic due to the near-by gravel pit operations.

Staff recommends that the school site be relocated to someplace within Lot 28, Block 13 adjacent to Gem Valley Drive. This will allow for the construction of the driveways needed to serve the

school site, increases safety by moving the school away for Ten Mile Creek Road, an arterial roadway, and would move the school closer to the single family residential portion of the development which would allow for better pedestrian access to the school.

### 16. Tree Planters

**Tree Planter Policy:** Tree Planter Policy: The District's Tree Planter Policy prohibits all trees in planters less than 8-feet in width without the installation of root barriers. Class II trees may be allowed in planters with a minimum width of 8-feet, and Class I and Class III trees may be allowed in planters with a minimum width of 10-feet.

### 17. Landscaping

**Landscaping Policy:** A license agreement is required for all landscaping proposed within ACHD right-of-way or easement areas. Trees shall be located no closer than 10-feet from all public storm drain facilities. Landscaping should be designed to eliminate site obstructions in the vision triangle at intersections. District Policy 5104.3.1 requires a 40-foot vision triangle and a 3-foot height restriction on all landscaping located at an uncontrolled intersection and a 50-foot offset from stop signs. Landscape plans are required with the submittal of civil plans and must meet all District requirements prior to signature of the final plat and/or approval of the civil plans.

### 18. Other Access

Ten Mile Creek Road east of Five Mile Road and Five Mile Road are classified as minor arterials roadways, and Ten Mile Creek Road west of Five Mile Road is classified as a collector roadway. Other than the access specifically approved with this application, direct lot access is prohibited to these roadways and should be noted on the final plat.

## D. Site Specific Conditions of Approval

**1.** Submit an updated traffic impact study prior to ACHD's signature on the final plat which contains the 350th lot or the equivalent of 350 PM peak hour trips. At a minimum the updated traffic impact study shall include an analysis of the Cloverdale Road/Columbia Road intersection, Cloverdale Road/Hubbard Road intersection, Hubbard Road segment between Five Mile Road and Cloverdale Road, and a turn lane analysis for the Pleasant Valley/Ten Mile Creek Road intersection. Coordinate the full scope of work for the updated traffic impact study with staff. ACHD may have additional requirements based on the findings at that time.

**2.** A subsequent traffic impact study update will be required based on the findings and recommendations of the updated traffic impact study. The timing of the second traffic impact study update will be determined at that time.

**3.** If the updated traffic impact study shows that signal warrants are met at Cloverdale Road/Columbia Road intersection, then enter into a signal agreement and install an interim signal prior to ACHD's signature on the final plat which contains the 351st lot.

The signal agreement should include that the intersection should be designed to provide a 3 X 3 intersection with three 12-foot wide travel lanes; one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach, that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement.

In order to ensure the Cloverdale Road/Columbia Road intersection will be improved when warranted, the following items must be in place prior to plans acceptance for the final plat which necessitates the improvement based on the findings of the updated traffic impact study:

- Signal Agreement
- Full design and approved plans for the intersection

**4.** If the updated traffic impact study shows that signal warrants are met at Cloverdale Road/Hubbard Road intersection, then enter into a signal agreement and install an interim signal prior to ACHD's signature on the final plat which contains the 351st lot.

The signal agreement should include that the intersection should be designed to provide a 3 X 3 intersection with three 12-foot wide travel lanes; one receiving lane, one dedicated left turn lane, and one thru/right lane on each approach, that the applicant is responsible for all costs associated with the hardware, design, and installation of the interim signal, and that interim improvements are not eligible for reimbursement.

In order to ensure the Cloverdale Road/Hubbard Road intersection will be improved when warranted, the following items must be in place prior to plans acceptance for the final plat which necessitates the improvement based on the findings of the updated traffic impact study:

- Signal Agreement
- Full design and approved plans for the intersection

**5.** Construct a southbound right-turn lane at the Pleasant Valley/Ten Mile Creek Road intersection.

**6.** Construct an eastbound center left-turn lane and a northbound center left turn lane at Pleasant Valley/Ten Mile Creek Road intersection when warranted based on the finding traffic impact study updates.

**7.** Dedicate an additional 24-feet of right-of-way to total 49-feet from the centerline of Ten Mile Creek Road abutting the site. Widen the pavement on Ten Mile Road abutting the site to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Construct a 5-foot wide detached concrete sidewalk located a minimum 42-feet from the centerline Ten Mile Creek Road abutting the site. If the minimum improvements are constructed, then center left turn lanes shall be constructed on Ten Mile Creek Road at all street intersections.

**8.** If the applicant choses to fully improve Ten Mile Creek Road then construct the roadway as a 3-lane residential arterial roadway; a 46-foot street section with vertical curb, gutter and 5-foot wide detached (or 7-foot attached) concrete sidewalk. If street trees are desired, then 8-foot wide planter strips should be provided.

**9.** Improve Ten Mile Creek Road with 30-feet of pavement with 3-foot wide gravel shoulders between the site's east property line and Pleasant Valley Road.

**10.** Realign the Ten Mile Creek Road/Five Mile Road intersection, as proposed. Vacate/exchange the right-of-way for the remnant portion of Ten Mile Creek Road north of the proposed realignment. The vacation/exchange is a separate process requiring a separate application and approval process.

If this segment of roadway cannot be vacated due to the underlying ownership (Bureau of Land Management) and lease agreements then the applicant shall be required to work with ACHD to terminate the roadway, closing it to for public use.

**11.** Dedicated right-of-way to total 96-feet for Five Mile Road between Ten Mile Creek Road and Hubbard Road. South of Ten Mile Creek Road dedicate 74-feet of right-of-way for Five Mile Road. Widen/construct Five Mile Road to a minimum pavement width of 34-feet plus a 3-foot wide gravel shoulder, and to construct a 5-foot wide detached concrete sidewalk located a minimum 41-feet from the centerline Five Mile Road between Ten Mile Creek Road and Hubbard Road. South of Ten Mile Creek Road the sidewalks should be located a minimum of 30-feet from the centerline of Five Mile Road abutting the site. If the minimum improvements

are constructed, then center left turn lanes should be constructed on Five Mile Road at all street intersections.

**12.** If the applicant choses to fully improve Five Mile Road then construct the roadway as a 3-lane residential arterial roadway; a 46-foot street section with vertical curb, gutter and 5-foot wide detached (or 7-foot attached) concrete sidewalk. If street trees are desired, then 8-foot wide planter strips should be provided.

**13.** Construct a multi-lane roundabout at the Five Mile Road/Ten Mile Road intersection. To ensure that the roundabout is constructed when necessary to serve the site and designed and construct appropriately, the applicant should be required to provide an intersection analysis to staff for review and comment prior to final plat approval for the phase of the development in which the Ten Mile Creek/Five Mile Road intersection is constructed. The roundabout shall be designed meeting the standards of ACHD's Roundabout Design Guide policy section 5188.

**14.** The applicant will not be compensated for any improvements or right-of-way dedication at the Dedicate 48-feet of right-of-way from the centerline of Hubbard Road abutting the site. Widen Hubbard Road to a minimum width of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site and construct a 5-foot wide detached concrete sidewalk located a minimum 41-feet from the centerline of Hubbard Road abutting the site.

**15.** Improve Hubbard Road with 30-feet of pavement with 3-foot wide gravel shoulders from Five Mile Road to Cloverdale Road.

**16.** The applicant will not be compensated for any improvements or right-of-way dedication along Ten Mile Creek Road, Five Mile Road, Hubbard Road abutting the site, or the Ten Mile Creek/Five Mile Road intersection, as these roadways and intersection are not scheduled for improvements in ACHD's IFYWP or CIP.

**17.** Construct Gem Valley Drive between Ten Mile Creek Road and Five Mile Road as a 46-foot wide collector street section with 3 travel lanes, vertical curb, gutter, and 5-foot wide detached or 7-foot wide attached concrete sidewalks within 74-feet of right-of-way. If street trees are desired, then 8-foot wide planter strips should be provided.

**18.** Construct the east/west collector roadway abutting the sites south property line between the west property line and Five Mile Road as half of a 36-foot wide collector street section plus 12-additonal feet of pavement to total 30-feet with vertical curb, gutter, and 5-foot wide detached or 7-foot wide attached concrete sidewalks on the north side of the roadway abutting the site and with 3-foot wide gravel shoulder and a borrow ditch sized to accommodate the roadway storm runoff on the south side of the roadway. If street trees are desired, then 8-foot wide planter strips should be provided.

**19.** Construct all of the internal streets as a 33-foot wide local street sections with curb, gutter, and 5-foot attached sidewalks within 47-feet of right-of-way.

**20.** Construct 9 cul-de-sacs with a minimum radius of 50-feet throughout the site. Extend the right-of-way at the terminus of Fount Court to the south property line.

**21.** Construct on knuckle with a 50-foot radius at the intersection of Oxbow Lake Drive and Split Rock Way.

**22.** Construct the following roadways to intersect Ten Mile Creek Road:

- Gem Valley Drive located approximately 3,800-feet east of Five Mile Road.

**23.** Construct the following roadways to intersect Five Mile Road:

- Mariposite Drive located approximately 850-feet south of Hubbard Road.

- Slate Drive located approximately 2,170-feet south of Hubbard Road.
- Ten Mile Creek Road (east and west side of the roadway) located approximately 2,820-feet south of Hubbard Road.
- One 33-foot foot wide curb-return approach for a future local street located 1,310-feet south of Ten Mile Creek Road.
- Fount Drive (east side only) located approximately 350-feet south of Gem Valley Drive.
- Mossy Agate Drive (east and west side of the roadway) located approximately 900-feet south of Gem Valley Drive.
- Tuckpoint Drive (east and west side of the roadway) located approximately 1,820-feet south of Gem Valley Drive.

**24.** Construct the following 33-foot foot wide curb-return approaches for future local streets onto Gem Valley Drive:

- Two aligned approaches located 369-feet south of Ten Mile Creek Road.
- Two aligned approaches located 773-feet south of Ten Mile Creek Road.
- Two aligned approaches 1,141-feet to the east of Five Mile Road.

**25.** Construct one stub street to the south, Five Mile Road. Install a sign at the terminus of Five Mile Road stating that, "THIS IS A DESIGNATED ARTERIAL STREET. THIS STREET WILL BE EXTENDED AND WIDENEND IN THE FUTURE."

**26.** Construct one stub street to the west, the new east/west collector roadway. Install a sign at the terminus of the east/west collector roadway stating that, "THIS IS A DESIGNATED COLLECTOR STREET. THIS STREET WILL BE EXTENDED AND WIDENED IN THE FUTURE.".

**27.** Construct one 36-foot wide curb return driveway onto Ten Mile Creek Road located 1,210-feet east of Five Mile Road, as proposed. The center landscape proposed within the driveway shall be located outside of the right-of-way.

**28.** Construct one 30-foot wide curb return driveway onto Five Mile Road located 740-feet south of Ten Mile Creek Road.

**29.** Redesign the following roadways to reduce the length of the roadways or to include the use of passive design elements and submit a revised preliminary plat showing the redesigned roadways for review and approval prior to ACHD's signature on the first final plat.

- Gem Valley Drive
- Blue Lagoon way
- Black Shale Drive
- Slate Drive
- Chimney Rock Way
- Iron Ore Way
- Mammoth Way
- Geode Way
- Oxbow Lake Drive
- Split Rock Way

- Flint Ridge Drive
- Fount Drive
- Mossy Agate Drive – west of Five Mile Road
- Red Onix Drive
- Tuckpoint Drive
- White Dune Drive
- Desert Glass Drive
- Bismuth Drive
- Hagerman Avenue
- Kettle Lake Way (except for the mid-section)

**30.** Additional improvements may be required at any time due to the findings and recommendations of traffic impact study updates.

**31.** Payment of impact fees is due prior to issuance of a building permit.

**32.** Comply with all Standard Conditions of Approval.

# E. Standard Conditions of Approval

**1.** All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).

**2.** Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.

**3.** In accordance with District policy, 7203.3, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.

**4.** Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.

**5.** A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.

**6.** All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.

**7.** It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.

**8.** Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.

**9.** All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.

**10.** Construction use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.

**11.** No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.

**12.** If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

# F. Conclusions of Law

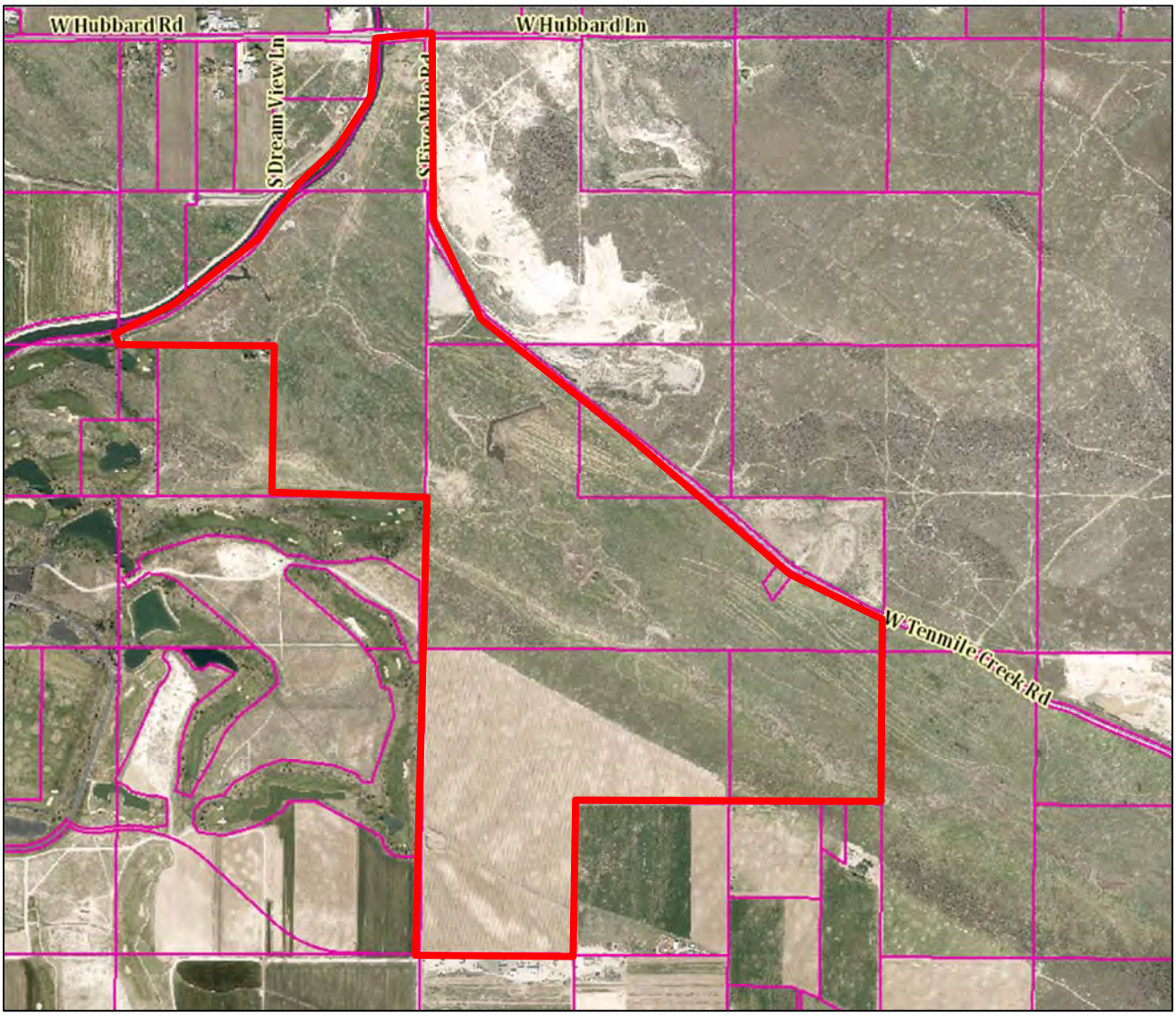
**1.** The proposed site plan is approved, if all of the Site Specific and Standard Conditions of Approval are satisfied.

**2.** ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

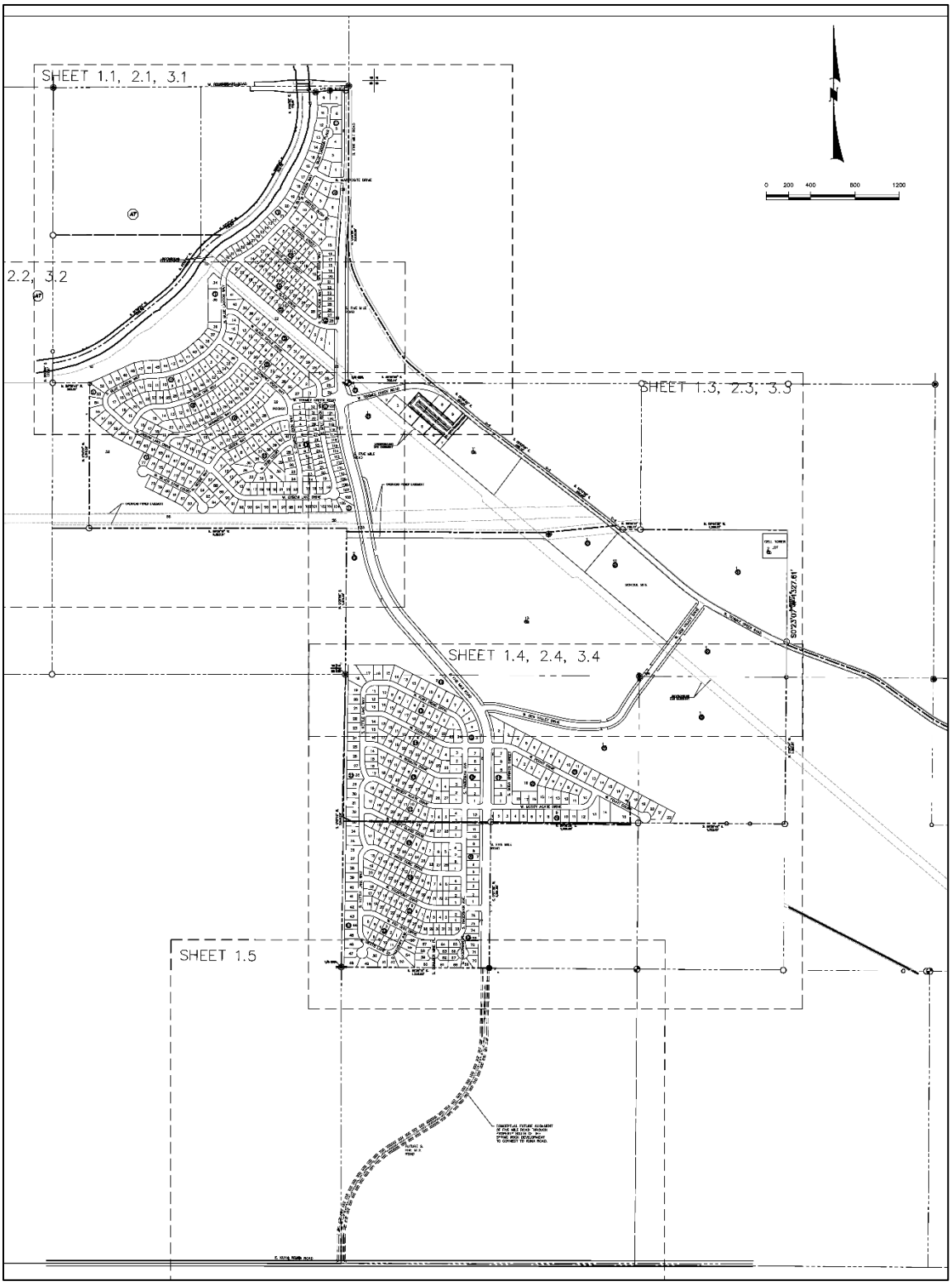
# G. Attachments

**1.** Vicinity Map
**2.** Site Plan
**3.** Traffic Impact Study Summary
**4.** Utility Coordinating Council
**5.** Development Process Checklist
**6.** Request for Reconsideration Guidelines

VICINITY MAP



SITE PLAN



## Traffic Impact Study Summary

### Traffic Impact Study

CR Engineering, Inc. prepared a traffic impact study for the proposed Spring Rock Subdivision Master Plan, that includes the Phase I impacts. Below is an executive summary of the findings **as presented by CR Engineering, Inc**. The following executive summary is **not the opinion of ACHD staff**. ACHD has reviewed the submitted traffic impact study for consistency with ACHD policies and practices, and may have additional requirements beyond what is noted in the summary. ACHD Staff comments on the submitted traffic impact study can be found below under staff comments.

**A. Executive Summary:** Under 2019 existing conditions all study area intersections are anticipated to operate at an acceptable level of service planning threshold. However, the study notes that turn lanes are need at two intersections based on ACHD's turn-lane guidelines, as noted below:

- Hubbard Road and Cloverdale Road intersection – southbound right-turn lane.
- Ten Mile Creek Road and Pleasant Valley intersection – southbound right-turn lane.

One study area roadway segment exceeds ACHD LOS planning thresholds under 2019 existing conditions:

- Cloverdale Road between Amity Road and Lake Hazel Road.
    - The shoulder hour volumes meet ACHD's LOS planning thresholds.

Under 2025 background conditions all study area intersections are anticipated to operate at an acceptable level of service planning threshold expect for the following:

- Amity Road and Cloverdale intersection
    - Option 1 – existing signal: widen Cloverdale Road approaches to two through lanes in each direction.
    - Option 2- roundabout: reconstruct the intersection as a multi-lane roundabout with two entry and exit lanes on all approaches.
- Lake Hazel Road and Cloverdale Road intersection
    - Option 1 – existing signal: Add northbound, southbound, and westbound right-turn lanes.
    - Option 2 – roundabout: reconstruct the intersection as a modified multi-lane roundabout with two entry and exit lanes on the Cloverdale Road approaches and one lane on the Lake Hazel Road approaches.
- Columbia Road and Cloverdale Road intersection:
    - Option 1 – signal: install a traffic signal with left-turn lanes on all approaches.
    - Option 2 – roundabout: reconstruct the intersection as a single-lane roundabout.
- Hubbard Road and Cloverdale Road intersection:
    - Option 1 – signal: install a traffic signal with left-turn lanes on all approaches.
    - Option 2 – roundabout: reconstruct the intersection as a single lane roundabout.

Under 2025 background conditions all study area roadways are anticipated to operate at an acceptable level of service planning threshold except for the following:

- Cloverdale Road is expected to need the following improvements to mitigate 2025 background traffic impacts:
    - Widen to five lanes between Amity Road and Lake Hazel Road.
    - Widen to five lanes between Lake Hazel Road and Columbia Road.

Under 2025 total traffic conditions all study area intersections are anticipated to operate at an acceptable level of service planning threshold expect for the following:

- Amity Road and Cloverdale Road intersection.
    - The intersection is expected to meet minimum operational thresholds as a signalized intersection (if improved as listed in ACHD's CIP).
    - For a multi-lane roundabout, the study recommends a northbound right-turn lane in addition to mitigate the 2025 total traffic impacts in addition to the recommended improvements for the 2025 background traffic.
        - This improvement is needed when the site generates approximately 8,900 trips per day, 1,050 trips during the AM peak hour, or 950 trips during the PM peak hour.
    - The estimated Phase 1 site traffic at this intersection is approximately 9.6% of the total intersection traffic during the AM peak hour and 8.3% during the PM peak hour.
- Lake Hazel Road and Cloverdale Road intersection.
    - As a signalized intersection, two through lanes on the Cloverdale Road approaches are recommended to mitigate the 2025 total traffic in addition to the improvements for 2025 background traffic.
        - This improvement is needed when the site generates approximately 8,700 trips per day, 900 trips during the PM peak hour.
    - For a multi-lane roundabout, it is recommended to expand the two entry and exit lanes on all approaches to mitigate 2025 total traffic in addition to the improvements recommended for 2025 background traffic.
        - This improvement is needed when the site generates approximately 7,700 trips per day, 800 trips during the PM peak hour.
    - The estimated Phase 1 site traffic at the Lake Hazel Road and Cloverdale Road intersection is approximately 14.7% of the total intersection traffic during the AM peak hour and 11.2% during the PM peak hour.
- Columbia Road and Cloverdale Road intersection.
    - This intersection is expected to meet minimum operational thresholds as a signalized intersection for the 2025 total traffic impacts, therefore no additional improvements are recommended in addition to the improvements for the 2025 background traffic.
    - As a single lane roundabout, a northbound and southbound right-turn lane are recommended.
        - These improvements are needed when the site generates approximately 8,700 trips per day, 950 trips during the AM peak hour, or 900 trips during the PM peak hour.

  - The estimated Phase 1 site traffic at Columbia Road and Cloverdale Road intersection is approximately 34.2% of the total intersection traffic during the AM peak hour and 30.8% during the AM peak hour.

- Hubbard Road and Cloverdale Road intersection
  - This intersection is expected to meet minimum operational thresholds as a signalized intersection for the 2025 total traffic impacts, therefore no additional improvements are recommended in addition to the improvements for the 2025 background traffic.
  - As a roundabout, a northbound right-turn lane is recommended in addition to the improvements for the 2025 background traffic to mitigate the 2025 Phase 1 total traffic impacts.
    - This improvement is needed when the site generates approximate 8,700 trips per day, 950 trips during the AM peak hour, or 900 trips during the PM peak hour.
  - The estimated Phase 1 site traffic at the Hubbard Road and Cloverdale Road intersection is approximately 41.5% of the total intersection traffic during the AM peak hour and 34.7% during the PM peak hour.
- Ten Mile Creek Road and Pleasant Valley Road intersection
  - This intersection is expected to require additional turn lanes.
    - An eastbound left-turn lane is recommended when the site generates approximately 6,900 trips per day, 550 trips during the AM peak hour or 700 trips during the PM peak hour.
    - A northbound left-turn lane is needed when the site generates approximately 8,900 trips per day, 1,050 trips during the AM peak hour or 950 trips during the PM peak hour.
  - The Phase 1 site traffic at Ten Mile Creek Road and Pleasant Valley Road intersection is approximately 31.1% of the total intersection traffic during the AM peak hour, 30.7% during the PM peak hour.
- The study recommends that Cloverdale Road be widened to 5 lanes from Columbia Road to Hubbard Road.
    - This improvement is needed when the site generates approximate 5,650 trips per day, 450 trips during the AM peak hour, or 550 trips during the PM peak hour.
  - The estimated Phase 1 site traffic on this Cloverdale Road segment is approximately 45% of the total traffic during the AM peak hour and 42.1% during the PM peak hour.
- The study recommends that Hubbard Road be widened to 3 lanes from Cloverdale Road to Five Mile Road.
    - This improvement is recommended when the site generates approximately 8,700 trips per day, 950 trips during the AM peak hour, or 900 trips during PM peak hour.
  - The estimated Phase 1 site traffic on this Hubbard Road segment is approximately 74% of the total traffic during the AM peak hour and 57.8% during the PM peak hour.

# Ada County Utility Coordinating Council

## Developer/Local Improvement District
## Right of Way Improvements Guideline Request

*Purpose: To develop the necessary avenue for proper notification to utilities of local highway and road improvements, to help the utilities in budgeting and to clarify the already existing process.*

1) **Notification:** Within five (5) working days upon notification of required right of way improvements by Highway entities, developers shall provide written notification to the affected utility owners and the Ada County Utility Coordinating Council (UCC). Notification shall include but not be limited to, project limits, scope of roadway improvements/project, anticipated construction dates, and any portions critical to the right of way improvements and coordination of utilities.

2) **Plan Review:** The developer shall provide the highway entities and all utility owners with preliminary project plans and schedule a plan review conference. Depending on the scale of utility improvements, a plan review conference may not be necessary, as determined by the utility owners. Conference notification shall also be sent to the UCC. During the review meeting the developer shall notify utilities of the status of right of way/easement acquisition necessary for their project. At the plan review conference each company shall have the right to appeal, adjust and/or negotiate with the developer on its own behalf. Each utility shall provide the developer with a letter of review indicating the costs and time required for relocation of its facilities. Said letter of review is to be provided within thirty calendar days after the date of the plan review conference.

3) **Revisions:** The developer is responsible to provide utilities with any revisions to preliminary plans. Utilities may request an updated plan review meeting if revisions are made in the preliminary plans which affect the utility relocation requirements. Utilities shall have thirty days after receiving the revisions to review and comment thereon.

4) **Final Notification:** The developer will provide highway entities, utility owners and the UCC with final notification of its intent to proceed with right of way improvements and include the anticipated date work will commence. This notification shall indicate that the work to be performed shall be pursuant to final approved plans by the highway entity. The developer shall schedule a preconstruction meeting prior to right of way improvements. Utility relocation activity shall be completed within the times established during the preconstruction meeting, unless otherwise agreed upon.

***Notification to the Ada County UCC can be sent to:*** 50 S. Cole Rd. Boise 83707, or Visit iducc.com for e-mail notification information.

# Development Process Checklist

## Items Completed to Date:

☒Submit a development application to a City or to Ada County

☒The City or the County will transmit the development application to ACHD

☒The ACHD **Planning Review Section** will receive the development application to review

☒The **Planning Review Section** will do one of the following:

☐Send a **"No Review"** letter to the applicant stating that there are no site specific conditions of approval at this time.

☐Write a **Staff Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

☒Write a **Commission Level** report analyzing the impacts of the development on the transportation system and evaluating the proposal for its conformance to District Policy.

## Items to be completed by Applicant:

☐For **ALL** development applications, including those receiving a **"No Review"** letter:

- The applicant should submit one set of engineered plans directly to ACHD for review by the **Development Review Section** for plan review and assessment of impact fees. (Note: if there are no site improvements required by ACHD, then architectural plans may be submitted for purposes of impact fee assessment.)
- The applicant is required to get a permit from Construction Services (ACHD) for ANY work in the right-of-way, including, but not limited to, driveway approaches, street improvements and utility cuts.

☐Pay Impact Fees prior to issuance of building permit. Impact fees cannot be paid prior to plan review approval.

*DID YOU REMEMBER:*
*Construction (Non-Subdivisions)*
☐ **Driveway or Property Approach(s)**

- Submit a "Driveway Approach Request" form to ACHD Construction (for approval by Development Services & Traffic Services). There is a one week turnaround for this approval.

☐ **Working in the ACHD Right-of-Way**

- Four business days prior to starting work have a bonded contractor submit a "Temporary Highway Use Permit Application" to ACHD Construction – Permits along with:
  a) Traffic Control Plan
  b) An Erosion & Sediment Control Narrative & Plat, done by a Certified Plan Designer, if trench is >50' or you are placing >600 sf of concrete or asphalt.

*Construction (Subdivisions)*
☐ **Sediment & Erosion Submittal**

- At least one week prior to setting up a Pre-Construction Meeting an Erosion & Sediment Control Narrative & Plan, done by a Certified Plan Designer, must be turned into ACHD Construction to be reviewed and approved by the ACHD Stormwater Section.

☐ **Idaho Power Company**

- Vic Steelman at Idaho Power must have his IPCO approved set of subdivision utility plans prior to Pre-Con being scheduled.

☐ **Final Approval from Development Services is required** prior to scheduling a Pre-Con.

# Request for Reconsideration of Commission Action

1. **Request for Reconsideration of Commission Action:** A Commissioner, a member of ACHD staff or any other person objecting to any final action taken by the Commission may request reconsideration of that action, provided the request is not for a reconsideration of an action previously requested to be reconsidered, an action whose provisions have been partly and materially carried out, or an action that has created a contractual relationship with third parties.

    a. Only a Commission member who voted with the prevailing side can move for reconsideration, but the motion may be seconded by any Commissioner and is voted on by all Commissioners present.

    If a motion to reconsider is made and seconded it is subject to a motion to postpone to a certain time.

    b. The request must be in writing and delivered to the Secretary of the Highway District no later than 11:00 a.m. 2 days prior to the Commission's next scheduled regular meeting following the meeting at which the action to be reconsidered was taken. Upon receipt of the request, the Secretary shall cause the same to be placed on the agenda for that next scheduled regular Commission meeting.

    c. The request for reconsideration must be supported by written documentation setting forth new facts and information not presented at the earlier meeting, or a changed situation that has developed since the taking of the earlier vote, or information establishing an error of fact or law in the earlier action. The request may also be supported by oral testimony at the meeting.

    d. If a motion to reconsider passes, the effect is the original matter is in the exact position it occupied the moment before it was voted on originally. It will normally be returned to ACHD staff for further review. The Commission may set the date of the meeting at which the matter is to be returned. The Commission shall only take action on the original matter at a meeting where the agenda notice so provides.

    e. At the meeting where the original matter is again on the agenda for Commission action, interested persons and ACHD staff may present such written and oral testimony as the President of the Commission determines to be appropriate, and the Commission may take any action the majority of the Commission deems advisable.

    f. If a motion to reconsider passes, the applicant may be charged a reasonable fee, to cover administrative costs, as established by the Commission.

CLINTON C. PLINE
CHAIRMAN OF THE BOARD

RON PLATT
VICE CHAIRMAN OF THE BOARD

ROBERT D. CARTER
PROJECT MANAGER

THOMAS RITTHALER
ASSISTANT PROJECT MANAGER

APRYL GARDNER
SECRETARY-TREASURER

MARY SUE CHASE
ASSISTANT SECRETARY-TREASURER

**BOISE PROJECT BOARD OF CONTROL**

(FORMERLY BOISE U.S. RECLAMATION PROJECT)

2465 OVERLAND ROAD
BOISE, IDAHO 83705-3155

OPERATING AGENCY FOR 167,000 ACRES FOR THE FOLLOWING IRRIGATION DISTRICTS

NAMPA-MERIDIAN DISTRICT
BOISE-KUNA DISTRICT
WILDER DISTRICT
NEW YORK DISTRICT
BIG BEND DISTRICT

TEL: (208) 344-1141
FAX: (208) 344-1437

5 August 2019

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

RE: Spring Rock Subdivision **19-10-AN, 19-01-PUD**
Hubbard Rd. & New York Canal
Main Canal 1042+10
Sec.15, T2N, R1E, BM.

Troy Behunin:

The above-mentioned property is located outside of an irrigation district and does not possess a valid surface irrigation water right for the entire property; however, it does lie adjacent to the United States' New York Canal.

The United States' New York Canal borders this development on the west. The rights of way for this canal are held in the name of the United States through the Bureau of Reclamation under the authority of the Act of August 30, 1890. (26 Stat. 391; 43 U.S.C. 945)

The Boise Project Board of Control is contracted to operate and maintain the New York Canal. The normal limits of this easement are asserted 25' out and parallel to the lower toe of the canal embankment; however, any basement style houses, storm retention and/or detention ponds, catch basins and/or seepage beds planned on being constructed within this development **must be a minimum of 125'** from the lower toe to protect the integrity of the canal due to the underground reach from the storm facilities leaching and/or connecting to the underground reach of the New York Canal.

**It appears that there is a pond being planned within this 100 feet set back that is required by Boise Project. Boise project will not approve this project until this is addressed. All utilities planning on crossing the New York canal must be overhead or attached to a bridge crossing. No crossing will be allowed under the New York canal.**

***The rest of the plans for this development are acceptable to Boise Project.***

No excavation within the New York Canal's easement will be allowed, as this will affect the integrity of the canal's embankment.

Whereas these easements are for the operation and maintenance of our facility, no activity should hinder our ability to do so. The Boise Project does not approve landscaping (other than grass or gravel) within its easements, as this will certainly increase our cost of maintenance. Easements must remain a flat drivable surface.

Fencing/pathways (as may be required) must be constructed just off the canal easement, to insure public safety and prevent encroachments.

Storm Drainage and/or Street Runoff must be retained on site. NO DISCHARGE into the New York Canal system is permitted.

Wording on the preliminary and final recorded plat needs to be noted that this development must adhere to Idaho Statutes, Title 42-1209.

Future preliminary and final plats must call out the Boise Project easements.

Whereas this development is in its preliminary stages, Boise Project Board of Control reserves the right to review plans and require changes when our easements and/or facilities are affected by unknown factors.

**Boise Project Board of Control requests a full set of plans for our review and approval before approval by the City of Kuna.**

If you have any further questions or comments regarding this matter, please do not hesitate to contact me at (208) 344-1141.

Sincerely,



Thomas Ritthaler
Assistant Project Manager-BPBC

tbr/tr
cc Clint McCormick Watermaster, Div; 2 BPBC
File

# CENTRAL DISTRICT HEALTH DEPARTMENT

## Environmental Health Division

**Return to:**

- ☐ ACZ
- ☐ Boise
- ☐ Eagle
- ☐ Garden City
- ☒ Kuna
- ☐ Meridian
- ☐ Star

Rezone # 19-06-S

Conditional Use # _____

Preliminary / Final / Short Plat _____

Spring Rock

RECEIVED
AUG 14 2019
CITY OF KUNA

☐ 1. We have No Objections to this Proposal.

☐ 2. We recommend Denial of this Proposal.

☐ 3. Specific knowledge as to the exact type of use must be provided before we can comment on this Proposal.

☐ 4. We will require more data concerning soil conditions on this Proposal before we can comment.

☐ 5. Before we can comment concerning individual sewage disposal, we will require more data concerning the depth of:
- ☐ high seasonal ground water
- ☐ bedrock from original grade
- ☐ waste flow characteristics
- ☐ other _____

☐ 6. This office may require a study to assess the impact of nutrients and pathogens to receiving ground waters and surface waters.

☐ 7. This project shall be reviewed by the Idaho Department of Water Resources concerning well construction and water availability.

☒ 8. After written approval from appropriate entities are submitted, we can approve this proposal for:
- ☒ central sewage
- ☐ interim sewage
- ☐ individual sewage
- ☐ community sewage system
- ☒ central water
- ☐ individual water
- ☐ community water well

☒ 9. The following plan(s) must be submitted to and approved by the Idaho Department of Environmental Quality:
- ☒ central sewage
- ☐ sewage dry lines
- ☐ community sewage system
- ☒ central water
- ☐ community water

☐ 10. This Department would recommend deferral until high seasonal ground water can be determined if other considerations indicate approval.

☐ 11. If restroom facilities are to be installed, then a sewage system MUST be installed to meet Idaho State Sewage Regulations.

☐ 12. We will require plans be submitted for a plan review for any:
- ☐ food establishment
- ☐ beverage establishment
- ☐ swimming pools or spas
- ☐ grocery store
- ☐ child care center

☒ 13. Infiltration beds for storm water disposal are considered shallow injection wells. An application and fee must be submitted to CDHD.

☐ 14. _____

Reviewed By: _____

Date: 8/9/19

# *Communities in Motion 2040 2.0 Development Review*

The Community Planning Association of Southwest Idaho (COMPASS) is the metropolitan planning organization (MPO) for Ada and Canyon Counties. COMPASS has developed this review as a tool for local governments to evaluate whether land developments are consistent with the goals of *Communities in Motion 2040 2.0* (CIM 2040), the regional long-range transportation plan for Ada and Canyon Counties. This checklist is not intended to be prescriptive, but rather a guidance document based on CIM 2040 2.0 goals.

**Development Name: Spring Rock** **Agency: Kuna**

**CIM Vision Category: Rural**

**New households: 2,274** **New jobs: 700** **Exceeds CIM forecast: Yes**

| | |
|---|---|
| CIM Corridor: **None**<br>Pedestrian level of stress: **R: Kuna Rd**<br>Bicycle level of stress: **R: Kuna Rd** | Level of Stress considers facility type, number of vehicle lanes, and speed. Roads with **G or PG** ratings better support bicyclists and pedestrians of all ages and comfort levels. |
| Housing within 1 mile: **230**<br>Jobs within 1 mile: **140**<br>Jobs/Housing Ratio: **0.6** | A good jobs/housing balance – a ratio between **1 and 1.5** – reduces traffic congestion. Higher numbers indicate the need for more housing and lower numbers indicate an employment need. |
| Nearest police station: **>4 miles**<br>Nearest fire station: **>4 miles** | Developments within **1.5 miles** of police and fire stations ensure that emergency services are more efficient and reduce the cost of these important public services. |
| Farmland consumed: **Yes**<br>Farmland within 1 mile: **1,238 acres** | Farmland contributes to the local economy, creates additional jobs, and provides food security to the region. Development in farm areas decreases the productivity and sustainability of farmland. |
| Nearest bus stop: **>4 miles**<br>Nearest public school: **>4 miles**<br>Nearest public park: **>4 miles**<br>Nearest grocery store: **3.7 miles** | Residents who live or work less than **½ mile** from critical services have more transportation choices. Walking and biking reduces congestion by taking cars off the road, while supporting a healthy and active lifestyle. |

## Recommendations

This proposal exceeds growth forecasted for this area. Coupled with the Falcon Crest proposal to the southwest, transportation infrastructure may not be able to support the new transportation demands. This location is still in a largely farmland area. The proposal identifies future commercial, public school, and open space sites. However, until those are built, services will likely accessed only by vehicle. Although some housing mix and higher density is proposed, there are no public transportation planned for this area. Consider park and ride lots and other transportation demand management approaches to mitigate travel impact. The New York Canal has been identified as a key regional pathway in the *Communities in Motion* 2040 2.0 plan. This pathway will connect downtown Kuna to other parts of the region, including the Boise Airport and Micron.

More information about COMPASS and *Communities in Motion 2040 2.0*:
Web: www.compassidaho.org
Email info@compassidaho.org
More information about the development review process:
http://www.compassidaho.org/dashboard/devreview.htm

COMPASS
COMMUNITY PLANNING ASSOCIATION
of Southwest Idaho

STATE OF IDAHO
DEPARTMENT OF ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE
1445 North Orchard Street•Boise, ID 83706-2239•(208) 373-0550

# *DEQ Response to Request for Environmental Comment*

| | |
|---|---|
| *Date:* | *August 8, 2019* |
| *Agency Requesting Comments:* | *City of Kuna* |
| *Date Request Received:* | *August 2, 2019* |
| *Applicant/Description:* | *Spring Rock Subdivision 19-10-AN, 19-01-PUD, 19-06-S, and Development Agreement* |

*Thank you for the opportunity to respond to your request for comment. While DEQ does not review projects on a project-specific basis, we attempt to provide the best review of the information provided. DEQ encourages agencies to review and utilize the Idaho Environmental Guide to assist in addressing project-specific conditions that may apply. This guide can be found at http://www.deq.idaho.gov/ieg/.*

*The following information does not cover every aspect of this project; however, we have the following general comments to use as appropriate:*

## *1. Air Quality*

- *Please review IDAPA 58.01.01 for all rules on Air Quality, especially those regarding fugitive dust (58.01.01.651), trade waste burning (58.01.01.600-617), and odor control plans (58.01.01.776).*

  *All property owners, developers, and their contractor(s) must ensure that reasonable controls to prevent fugitive dust from becoming airborne are utilized during all phases of construction activities per IDAPA 58.01.01.651.*

  *DEQ recommends the city/county require the development and submittal of a dust prevention and control plan prior to approval. Dust prevention and control plans incorporate appropriate best management practices to control fugitive dust that may be generated at sites.*

  *Information on fugitive dust control plans can be found at: http://www.deq.idaho.gov/media/61833-dust_control_plan.pdf*

- *Per IDAPA 58.01.01.600-617, the open burning of any construction waste is prohibited. The property owner, developer, and their contractor(s) are responsible for ensuring no prohibited open burning occurs during construction.*

  *For questions, contact David Luft, Air Quality Manager, at 373-0550.*

## *2. Wastewater and Recycled Water*

- *DEQ recommends verifying that there is adequate sewer to serve this project prior to approval. Please contact the sewer provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.16 and IDAPA 58.01.17 are the sections of Idaho rules regarding wastewater and recycled water. Please review these rules to determine whether this or future projects will require DEQ approval. IDAPA 58.01.03 is the section of Idaho rules regarding subsurface disposal of wastewater. Please review this rule to determine whether this or future projects will require permitting by the district health department.*

  *All projects for construction or modification of wastewater systems require preconstruction approval. Recycled water projects and subsurface disposal projects require separate permits as well.*

- *DEQ recommends that projects be served by existing approved wastewater collection systems or a centralized community wastewater system whenever possible. Please contact DEQ to discuss potential for development of a community treatment system along with best management practices for communities to protect ground water.*

- *DEQ recommends that cities and counties develop and use a comprehensive land use management plan, which includes the impacts of present and future wastewater management in this area. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  *For questions, contact Todd Crutcher, Engineering Manager, at 373-0550.*

***3. Drinking Water***

- *DEQ recommends verifying that there is adequate water to serve this project prior to approval. Please contact the water provider for a capacity statement, declining balance report, and willingness to serve this project.*

- *IDAPA 58.01.08 is the section of Idaho rules regarding public drinking water systems. Please review these rules to determine whether this or future projects will require DEQ approval.*

  *All projects for construction or modification of public drinking water systems require preconstruction approval.*

- *DEQ recommends verifying if the current and/or proposed drinking water system is a regulated public drinking water system (refer to the DEQ website at http://www.deq.idaho.gov/water-quality/drinking-water.aspx). For non-regulated systems, DEQ recommends annual testing for total coliform bacteria, nitrate, and nitrite.*

- *If any private wells will be included in this project, we recommend that they be tested for total coliform bacteria, nitrate, and nitrite prior to use and retested annually thereafter.*

- *DEQ recommends using an existing drinking water system whenever possible or construction of a new community drinking water system. Please contact DEQ to discuss this project and to explore options to both best serve the future residents of this development and provide for protection of ground water resources.*

- *DEQ recommends cities and counties develop and use a comprehensive land use management plan which addresses the present and future needs of this area for adequate, safe, and sustainable drinking water. Please schedule a meeting with DEQ for further discussion and recommendations for plan development and implementation.*

  *For questions, contact Todd Crutcher, Engineering Manager at 373-0550.*

***4. Surface Water***

- *A DEQ short-term activity exemption (STAE) from this office is required if the project will involve de-watering of ground water during excavation and discharge back into surface water, including a description of the water treatment from this process to prevent excessive sediment and turbidity from entering surface water.*
- *Please contact DEQ to determine whether this project will require a National Pollution Discharge Elimination System (NPDES) Permit. If this project disturbs more than one acre, a stormwater permit from EPA may be required.*
- *If this project is near a source of surface water, DEQ requests that projects incorporate construction best management practices (BMPs) to assist in the protection of Idaho's water resources. Additionally, please contact DEQ to identify BMP alternatives and to determine whether this project is in an area with Total Maximum Daily Load stormwater permit conditions.*
- *The Idaho Stream Channel Protection Act requires a permit for most stream channel alterations. Please contact the Idaho Department of Water Resources (IDWR), Western Regional Office, at 2735 Airport Way, Boise, or call 208-334-2190 for more information. Information is also available on the IDWR website at:*
  *http://www.idwr.idaho.gov/WaterManagement/StreamsDams/Streams/AlterationPermit/AlterationPermit.htm*
- *The Federal Clean Water Act requires a permit for filling or dredging in waters of the United States. Please contact the US Army Corps of Engineers, Boise Field Office, at 10095 Emerald Street, Boise, or call 208-345-2155 for more information regarding permits.*

  *For questions, contact Lance Holloway, Surface Water Manager, at 373-0550.*

***5. Hazardous Waste And Ground Water Contamination***

- ***Hazardous Waste.*** *The types and number of requirements that must be complied with under the federal Resource Conservations and Recovery Act (RCRA) and the Idaho Rules and Standards for Hazardous Waste (IDAPA 58.01.05) are based on the quantity and type of waste generated. Every business in Idaho is required to track the volume of waste generated, determine whether each type of waste is hazardous, and ensure that all wastes are properly disposed of according to federal, state, and local requirements.*
- *No trash or other solid waste shall be buried, burned, or otherwise disposed of at the project site. These disposal methods are regulated by various state regulations including Idaho's Solid Waste Management Regulations and Standards, Rules and Regulations for Hazardous Waste, and Rules and Regulations for the Prevention of Air Pollution.*
- ***Water Quality Standards.*** *Site activities must comply with the Idaho Water Quality Standards (IDAPA 58.01.02) regarding hazardous and deleterious-materials storage, disposal, or accumulation adjacent to or in the immediate vicinity of state waters (IDAPA 58.01.02.800); and the cleanup and reporting of oil-filled electrical equipment (IDAPA 58.01.02.849); hazardous materials (IDAPA 58.01.02.850); and used-oil and petroleum releases (IDAPA 58.01.02.851 and 852).*

  *Petroleum releases must be reported to DEQ in accordance with IDAPA 58.01.02.851.01 and 04. Hazardous material releases to state waters, or to land such*

*that there is likelihood that it will enter state waters, must be reported to DEQ in accordance with IDAPA 58.01.02.850.*

- ***Ground Water Contamination.*** *DEQ requests that this project comply with Idaho's Ground Water Quality Rules (IDAPA 58.01.11), which states that "No person shall cause or allow the release, spilling, leaking, emission, discharge, escape, leaching, or disposal of a contaminant into the environment in a manner that causes a ground water quality standard to be exceeded, injures a beneficial use of ground water, or is not in accordance with a permit, consent order or applicable best management practice, best available method or best practical method."*

  *For questions, contact Albert Crawshaw, Waste & Remediation Manager, at 373-0550.*

***6. Additional Notes***

- *If an underground storage tank (UST) or an aboveground storage tank (AST) is identified at the site, the site should be evaluated to determine whether the UST is regulated by DEQ. EPA regulates ASTs. UST and AST sites should be assessed to determine whether there is potential soil and ground water contamination. Please call DEQ at 373-0550, or visit the DEQ website (http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks.aspx) for assistance.*

- *If applicable to this project, DEQ recommends that BMPs be implemented for any of the following conditions: wash water from cleaning vehicles, fertilizers and pesticides, animal facilities, composted waste, and ponds. Please contact DEQ for more information on any of these conditions.*

*We look forward to working with you in a proactive manner to address potential environmental impacts that may be within our regulatory authority. If you have any questions, please contact me, or any our technical staff at 208-373-0550.*

Sincerely,



Aaron Scheff
aaron.scheff@deq.idaho.gov
Regional Administrator
Boise Regional Office
Idaho Department of Environmental Quality

ec: CM#2019AEK150

**IDAHO TRANSPORTATION DEPARTMENT**
P.O. Box 8028
Boise, ID 83707-2028

(208) 334-8300
itd.idaho.gov

June 25, 2019

Chhang Ream
CR Engineering
181 East 50th St.
Garden City, ID 83714

RE: Springrock Subdivision – Traffic Impact Study Acceptance Letter

Via Email

Dear Mr. Ream,

The Idaho Transportation Department (ITD) has reviewed the Traffic Impact Study (TIS) for the Springrock Subdivision dated June 6, 2019. The development is located approximately four miles east of SH-69 on Hubbard Road. It is not taking direct access off of SH-69.

The TIS only provided intersection analysis for Phase 1 of the subdivision (buildout 2025). This letter acknowledges ITD's acceptance of the Springrock Subdivision TIS for Phase 1. Phase 1 is estimated to generate 1,054 AM and 962 PM trips. The TIS stated additional TIS's will be created for future phases up to and including full build out in 2040.

ITD has determined that no improvements to SH-69 are required for Phase 1 of the Springrock Subdvision as long as the development does not alter from what was proposed in the TIS.

Maintaining safety and mobility for Idaho's motorists is of the utmost importance to ITD. Please let me know if you have any questions. I can be reached by phone at (208) 265-4312 extension 7 or email at erika.bowen@itd.idaho.gov.

Sincerely,

Erika R Bowen
District 3 Traffic Technical Engineer

cc.
Mindy Wallace, ACHD

Your Safety • Your Mobility
Your Economic Opportunity

IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

August 26, 2019

Troy Behunin
City of Kuna, Planning and Zoning Department
P.O. Box 13
Kuna, ID 83634

**VIA EMAIL**

| | |
|---|---|
| **Development Application** | **19-10-AN, 19-01-PUD, 19-06-S** |
| **Project Name** | **SPRINGROCK SUBDIVISION** |
| **Project Location** | Northeast corner of Cloverdale and Kuna Roads, east of SH-69 milepost 3.00 |
| **Project Description** | Annexation of 761 acres into Kuna City limits with C-1 and C-2 (Commercial), R-6 (Medium Density Residential), R-12 and R-20 (High Density Residential) zones. This is a multi-phased, Master-Planned project. Applicant requests pre-plat approval in order to subdivide approximately 476.76 acres into 825 total lots (791 single family, 23 common, 7 commercial, 1 school, 1 future multi-family and 2 public utility) The remaining lands (~284.24 acres) will be developed in the future |
| **Applicant** | David Powell, RiveRidge Engineers |

The Idaho Transportation Department (ITD) reviewed the referenced annexation, planned unit development, and preliminary plat applications and has the following comments:

1. This project does not abut the State Highway system.

2. ITD has received, reviewed, and accepted a Traffic Impact Study for Phase I of Springrock Subdivision. No mitigation for the State Highway system will be required for the construction of Phase I.

3. All subsequent phases will be required to submit a Traffic Impact Study for review to determine if mitigation is required.

4. The Idaho Administrative Procedures Act (IDAPA) 39.03.60 governs advertising along the State highway system. The applicant may contact Justin Pond, Right-of-Way Section Program Manager, at (208) 334-8832 for more information.

5. Idaho Code 40-1910 does not allow advertising within the right-of-way of any State highway.

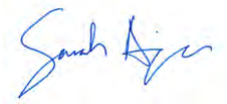
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IDAHO TRANSPORTATION DEPARTMENT
P.O. Box 8028 • Boise, ID 83707-2028
(208) 334-8300 • itd.idaho.gov

6. Provided each subsequent phase provide a Traffic Impact Study for review, ITD does not object to the construction of Springrock Subdivision Phase I.

If you have any questions, you may contact Ken Couch at (208) 332-7190 or me at (208) 334-8338.

Sincerely,



Sarah Arjona
Development Services Coordinator
Sarah.Arjona@itd.idaho.gov

## Troy Behunin

**Subject:** Spring Rock Application - Request for Comments

KRFD

**From:** Phil Roberts [mailto:proberts@kunafire.com]
**Sent:** Wednesday, January 08, 2020 4:09 PM
**To:** Troy Behunin <tbehunin@kunaid.gov>
**Subject:** RE: Spring Rock Application - Request for Comments

No I haven't I have looked through all of my mails from you and did not see it. This attachment is the first I have seen. I may have missed a planning meeting that the development was discussed but these are the first documents that I have seen on the project.

Phase 7, Hammerhead is not one I like to see.

Each phase if over 30 units single residential or 100 Multi-family will need to be addressed for 2nd access. As we have spoken, We can make one temp until connections are made.

It would be nice to have 2 acres no less than 1 ½ set aside for a future Fire station.

Final Site Utilities will provide more of the information that I need.

Very Large.

*Phil Roberts*
*Fire Chief*
*Kuna Rural Fire District*
*208-922-1144 Ext 101*
*208-922-1982 Fax*
*208-870-3057 Cell*

**From:** Troy Behunin
**Sent:** Friday, August 02, 2019 5:00 PM
**To:** 'ACHD' <planningreview@achdidaho.org>; 'Becky Rone - Kuna USPS Addressing ' <rebecca.i.rone@usps.gov>; Bob Bachman <bbachman@kunaid.gov>; 'Boise Project Brd Cntrl' <TRitthaler@boiseproject.org>; 'Boise-Kuna Irrigation Distr.' <laurenboehlke@yahoo.com>; 'Cable One Business' <Adam.ingram@cableone.biz>; 'Cable One t.v.' <cheryl.goettsche@cableone.biz>; 'Central District Health Dept. CDHD' <lbadigia@cdhd.idaho.gov>; 'Chief Phil' <proberts@kunafire.com>; 'COMPASS' <cmiller@compassidaho.org>; 'D. Reinhart' <Dreinhart@kunschools.org>; 'DEQ' <Alicia.martin@deq.idaho.gov>; 'Idaho Power' <bwatson2@idahopower.com>; 'Idaho Power' <ahawkins@idahopower.com>; 'Idaho Power - Jacky Chris' <easements@idahopower.com>; 'Intermountain Gas' <robert.miller@mdu.com>; 'Intermountain Gas' <bryce.ostler@intgas.com>; 'ITD' <D3Development.Services@itd.idaho.gov>; 'J&M Sanitation - Chad Gordon' <Chad.Gordon@jmsanitation.com>; 'Jim O. - KSD' <Jim@kunaschools.org>; 'Julie Stanley - Regional Address Mgmt.' <Julie.R.Stanley@usps.gov>; 'Kuna Police Chief'

<so4217@adaweb.net>; 'Kuna Postmaster - Marc C. Boyer' <marc.c.boyer@usps.gov>; 'Kuna School District' <kbekkedahl@kunaschools.org>; 'Kuna School District' <wjohnson@kunaschools.org>; 'Kuna School District' <bsaxton@kunaschools.org>; Lisa Holland <lholland@kunaid.gov>; Mike Borzick <mborzick@kunaid.gov>; 'New York Irrigation District' <terri@nyid.org>; 'P. Stevens' <Pstevens@kunaid.gov>; 'Planning Mgr: Ada County Development Services' <jboal@adaweb.net>
**Subject:** Spring Rock Application - Request for Comments

Good Evening Everyone,
Please review the packet included with this email and return relevant comments about the services your agency provides to Kuna's Planning and Zoning office, to be used in the public hearings scheduled for this project. Please submit comments to our office on or before ***August 20, 2019*****.** This project is very comprehensive and our office would appreciate your comments.

This project will be scheduled for public hearing with our Commission on ***October 8, 2019***. If you need additional information or additional time to provide comments, please let our office know ASAP.

Thank you in advance.
Troy

Troy Behunin
Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634
TBehunin@KunaId.Gov

CONFIDENTIALITY NOTICE
This e-mail and any attachments may contain confidential or privileged information. If you are not the intended recipient, you are not authorized to use or distribute any information included in this e-mail or its attachments. If you receive this e-mail in error, please delete it from your system and contact the sender.

# Kuna School District

*Inspiring each student to become a lifelong learner and a contributing, responsible citizen.*

October 3, 2019

Dear Honorable Members of the Planning and Zoning Commission,

We appreciate our ability to give input to the Spring Rock proposal and others similar to it. We became aware of Spring Rock at a pre-application meeting.

Our primary concern with this particular development is the placement of the school site. West Ada has had land donated for a new school and yet Kuna School District, which will hold approximately half of the first phase has received no accommodation for a school. This development would have a significant impact in crowding our existing schools of Silver Trail, Fremont Middle School and Kuna High School.

For the sake of our children and for the sake of equality, we request a 10 acre site be donated in the plat west of Five Mile Road. Per ACHD, we ask that it is placed within the development. The placement should be coordinated with our Transportation Dept and ACHD.

The safety of our students is our first and foremost priority. With this in mind, we ask that you encourage the developer to also provide safe walkways, bike paths and pedestrian access for our students. School capacity and transportation is addressed in Idaho Code 67-6508.

Thank you for considering the needs of students in this request.

Regards,

Jim Obert
District Planner
Project Manager

David Reinhart
District Planner
Assistant Superintendent

Brenda Saxton
Transportation Supervisor

711 E. Porter Rd., Kuna, Idaho 83634
Phone: (208) 922-1000 FAX: (208) 922-5646

Wendy Johnson, Superintendent
Kim Bekkedahl, Assistant Superintendent
Dr. Catherine Beals, Administrator of CIA
Eileen O'Shea, Administrator of Student Services
David Reinhart, Administrator of HR

## Troy Behunin

**From:** Jon McDaniel <jmcdaniel@adacounty.id.gov>
**Sent:** Thursday, December 19, 2019 1:35 PM
**To:** Troy Behunin
**Subject:** Spring Rock Subdivision

Hi Troy, Unfortunately, I missed the pre-app meeting for Spring Rock. As I look into the logistics of responding to this N.E. side of KPD's limits, I have a concern.

If KPD was responding from the northern half of our current city limits, Hubbard Road would be a regularly traveled eastern route to toward this development. The fact that Hubbard Reservoir and the surround recreation area currently prevents Hubbard road from continuing directly to Cloverdale, it would add time to our responses to these citizens as we drive around. Is there any option to extend Hubbard from Locust Grove all the way through to Cloverdale?

Thanks, Jon

*Jon McDaniel*
*Kuna Police Chief*

1450 W. Boise St. Kuna, Idaho 83634 (208) 577-3850 jmcdaniel@adacounty.id.gov www.adasheriff.org

"We make safer places for you to live, work, and play."

ADA COUNTY SHERIFF'S OFFICE

Exhibit B 12

Nate Crofts
8248 W. Victory Road
Boise, ID 83709
Phone (208) 362-7329
Fax (208) 362-3858
Nate.Crofts@suez.com

July 2, 2019

Dave Yorgason
1211 Happy Drive
Boise, ID 83706

Dear Mr. Yorgason:

The purpose of this letter is to advise you that **Spring Rock Subdivision** is serviceable with SUEZ under its present tariffs, rules and regulations as filed with the Idaho Public Utilities Commission.

SUEZ Rules and Regulations require that any main extension, booster station, reservoir or source of supply necessary to serve this project will be funded by the owner/developer of the project. Should this be the case, a specific agreement for those facilities is required.

The item(s) necessary to serve this project are indicated below.

1. New water mains, services, meter setters and fire hydrants.
2. New booster station/pressure regulating station.
3. New water storage reservoir.
4. Source of Supply (we do not antipicate needing to add a new source at this time).

Due to the dynamic and changing nature of the SUEZ water system, this letter of serviceability expires and cannot be relied upon twelve months from the date of this letter. Should you require confirmation of serviceability past the twelve months, please let us know at that time.

As noted above, specific written agreements may be required. SUEZ's obligation to proceed with the project is contingent on satisfactory execution of those agreements.

I trust that this letter will aid you in the speedy process of this project.

Best regards,

Nate Crofts
Construction Supervisor

Exhibit
B1

# ADA COUNTY

**COMMISSIONERS' OFFICE**
**200 W. Front Street**
**Boise, Idaho 83702**
**(208) 287-7000**
**Fax: (208) 287-7009**
**bocc1@adaweb.net**
**www.adacounty.id.gov**

October 7, 2019

***Via Email: mayorstear@kunaid.gov***

Mayor Joe Stear
Kuna City Council Members
City of Kuna
PO Box 13
Kuna, ID 83634

RE: Spring Rock Application

Dear Mayor Stear and City Council:

On Friday, August 2nd, the City of Kuna solicited feedback regarding an annexation, planned unit development, preliminary plat, and development agreement for the proposed Spring Rock subdivision comprising of 761 acres within unincorporated Ada County. The County and City of Boise thank you for this opportunity and are in full support of jurisdictions throughout the Treasure Valley working together to create a better quality of life for all residents.

As noted during the *Envision Kuna* comprehensive plan comment period, we believe that there is a disconnect between the future land use designations of this plan and COMPASS' growth projections for the City. The City's current population is almost 20,000 and the most recent COMPASS projections estimate a 2040 population of about 50,000. The *Envision Kuna* future land use map offers potential capacity for up to 344,705 residents within 46,000 acres of incorporated and impact areas. This type of capacity is not considered within the service portfolio of Ada County because when Ada County and its service providers plan for the future public facilities, services, and utilities, they rely on COMPASS' growth projections.

We fully support you, and other city leaders, in your desire to invest in and build a strong downtown core for Kuna as outlined in the *Envision Kuna* comprehensive plan. The Spring Rock subdivision proposes 825 lots on 476 acres and 284 acres of BLM land as far as 7.1 miles from downtown Kuna. This application will pre-maturely expand urban and suburban types of land uses in rural areas of Ada County, extending demands for public facilities, services and utilities in this remote area of Ten Mile Creek. This subdivision will create an increased demand on many of our County services such as the Sheriff, Paramedics, Coroner, Mosquito Abatement, and others. Additionally, this development will result in increased car dependency, increased strain on utility services, loss of open space, and several other negative effects that go directly against the goals of *Envision Kuna*. Ada County also has concerns about the ability of Kuna to preserve existing water resources in the proposed subdivision location.

By supporting such a large application, the City of Kuna will incentivize sprawl and premature development of one of Ada County's beautiful open spaces. Therefore, Ada County and Boise City encourage Kuna to follow best planning practices, resist the lure of short-sighted property tax increases, and deny the Spring Rock Subdivision application for now. As you are aware, COMPASS is currently working with its member cities to conduct a fiscal impact analysis and a tool which would allow us to better understand the costs of allowing such application in rural areas.

Thank you for this opportunity to provide feedback.

Sincerely,

ADA COUNTY BOARD OF COMMISSIONERS

Kendra Kenyon, Commissioner

Diana Lachiondo, Commissioner

Rick Visser, Commissioner

Exhibit B 14

# West Ada
## SCHOOL DISTRICT

September 19, 2019

City of Kuna
PO Box 13
Kuna, ID 83634

Dear Planners:

Joint School District No. 2 (dba West Ada School District) has experienced significant and sustained growth in student enrollment during the last ten years. Many of our schools throughout the district are operating at or above capacity. Based on U.S. census data, we can predict that these homes, when completed, will house **633 (= # homes x 0.8 per census data) school aged children.** Approval of the **Spring Rock Subdivision** will affect enrollments at the following schools in West Ada District:

| | Enrollment | Capacity |
|---|---|---|
| **Lake Hazel Elementary** | **483** | **539** |
| **Silver Sage Elementary** | **296** | **405** |
| **Lake Hazel Middle School** | **1067** | **1000** |
| **Mountain View High School** | **2304** | **1800** |

West Ada School District supports economic growth; however, growth fosters the need for additional school capacity. In order to meet the need for additional school capacity, West Ada School District will accept the donation of land appropriate for a school site. Passage of a bond issue will be required prior to the commencement of new school construction.

New residents cannot be assured of attending the neighborhood school as it may be necessary to bus students to available classrooms across the district. The safety of our students is our first and foremost priority. With this in mind, we ask that you encourage the developer to provide safe walkways, bike baths and pedestrian access for our students. School capacity and transportation is addressed in Idaho Code 67-6508 - future development will continue to have an impact on the district's capacity.

Sincerely,

Joe Yochum
Assistant Superintendent – Operations
West Ada School District

## Troy Behunin

**From:** Rick Visser <rvisser@adacounty.id.gov>
**Sent:** Thursday, November 21, 2019 3:31 PM
**To:** Mayor Stear
**Cc:** Wendy Howell; Troy Behunin; Chris Engels
**Subject:** Re: [EXTERNAL] RE: My support for Envision Kuna

**Categories:** Agency Comments

Mayor Stear,
And *your* residents are what really matters. Keep up the good work of serving Kuna residents !
Rick

On Nov 21, 2019, at 2:19 PM, Mayor Stear <mayorstear@kunaid.gov> wrote:

**CAUTION:** This email originated from outside Ada County email servers. Do not click on links or open attachments unless you recognize the sender and know the content is safe. Verify the sender by mouse-hovering over their display name in order to see the sender's full email address and confirm it is not suspicious. If you are unsure an email is safe, please report the email by using the 'Phish Alert' button in Outlook.

Thank You Commissioner Visser;

I am sending this to our planning and zoning staff as well as City Clerk for the record.

I appreciate your support and that you recognize that Envision Kuna is about what our residents have asked for and is a well thought out plan.

Best always

**Joe Stear**
**Mayor of Kuna Idaho**

751 W. 4th St.
PO Box 13
Kuna Idaho 83634
www.KunaCity.id.gov [kunacity.id.gov]
(208) 922.5546
<image001.jpg>

---

**From:** Rick Visser [mailto:rvisser@adacounty.id.gov]
**Sent:** Thursday, November 21, 2019 1:56 PM
**To:** Mayor Stear <mayorstear@kunaid.gov>
**Subject:** Fwd: My support for Envision Kuna

RE: Letter from Ada County in Regard to the Spring Rock Application

Dear Mayor Stear, City Council Members and Planning & Zoning Commissioners:

I did not sign the October 7, 2019 letter from Ada County to Mayor Stear and the City Council for a few reasons:

1. My main reason for not signing the letter is that I do not believe that Ada County Commissioners, Development Services staff or the City of Boise has the authority to judge your *Envision Kuna* comprehensive plan. The Kuna City Council and Mayor have used a thorough, well-researched analysis with several skilled participants to draft the plan. They know the Kuna community better than others. I respect your work!

2. A coordinated growth plan should not mean that Boise and Meridian have the best comprehensive plans and Ada County's other cities should follow them. Personally, I believe that Boise and Meridian have gone too far with their high density infill development. High density growth has led to increased traffic, longer response time for first responders, poorer air quality, over capacity schools, more vehicle accidents and many disappointed longtime residents.

3. Since Boise and Meridian's comprehensive plans have caused so many problems, a true coordinated growth would depart from high density infill and entertain less apartments but more planned communities and subdivisions.

4. I also am troubled by a "one shoe fits all" coordinated growth plan philosophy of Ada County and COMPASS. Based on the numbers provided by Mayor Stear, Kuna is a commuter city. Boise and Meridian are not, and one should not expect its shoes to fit Kuna. The future SpringRock development is similar to the successful planned communities that were developed at Hillcrest Golf Course, Plantation Golf Course, Eagle Hills Golf Course, Banbury Golf Course, Spurwing Golf Course, Avimor, Harris Ranch, Dry Creek Ranch and Hidden Springs. I believe that a mixed use SpringRock Development would be a great benefit to Kuna residents as it would allow more residents to work in Kuna.

5. The pros outweigh the cons for planned communities. Both Avimor and Dry Creek Ranch have high tech waste water treatment facilities that produce

drinkable water. This water is not used for public consumption, but it is safely used for fishing ponds and irrigation. Avimor and Dry Creek Ranch require water saving plumbing fixtures in every home. Avimor treats 110 gallons of waste water per day per household while Boise treats over 225 gallons of waste water per household per day. Avimor requires hot water circulating systems in all its homes. These systems save an average of 14,000 gallon of water per residence per year. An ITD study revealed that the population in Avimor has 50% less daily vehicle trips than a Boise or Meridian subdivision with the same population. One of my fellow commissioners believes that planned community residents expect the same response time as city dwellers. However, she has no evidence or data to back up that claim. I believe it is likely that people who choose to live away from a city realize it will take longer for first responders to arrive.

I know that there are two sides to every coin, and I believe in the Kuna side. As an Ada County Commissioner, I support *Envision Kuna.*

Respectfully,

BOISE POLICE DEPARTMENT
MAYOR: David H. Bieter | CHIEF: William Bones

RECEIVED
AUG 26 2019
CITY OF KUNA

August 19, 2019

Mayor Joe Stear & Kuna City Council
Kuna City Hall
751 W. 4th Street
Kuna, ID 83634

RE: Spring Rock Subdivision Application

Dear Mayor and City Council Members:

I am writing to express my concern about the recent application for annexation and a planned unit development by River Ridge Engineers. The developers have requested annexation of 761 acres for development of a residential subdivision with a commercial component less than two miles from our shooting range.

In 2016, the Boise Police Department constructed a law enforcement shooting range for the purpose of training our officers and partnering with other local law enforcement agencies. The facility at 5958 Kuna Mora Road includes pistol ranges, a rifle range and a large covered training house consisting of a maze of cinder block walls used for SWAT and special operations training. This facility is a phased project. The City of Boise has not fully developed the 120 acres of property we own City but certainly has plans to do so. At some point in the future, with the growth of the valley's population and the corresponding growth of local law enforcement agencies, this facility will increase in size and scope, with additional pistol and rifle ranges, including a 1000-yard precision rifle range.

The City purchased the shooting range property in this area in order to minimize the impact of such a facility on residential uses. This area of Ada County is sparsely populated, which makes the siting of the range on Kuna Mora Road about the best solution possible given the growth throughout the valley. The idea of constructing 2,274 homes along with parks and other amenities less than two miles away is troublesome, as it is highly unlikely/impossible the City would ever find another alternative to the current Range site.

Officers from several local law enforcement agencies use the shooting range at various times from 8 a.m. until 10 p.m. in accordance with the terms of BPD's Conditional Use Permit. We have learned, in our three years of operating the facility, that noise travels over the flat desert topography increasing the impact of the sound on the existing residential neighbors. Dense residential development in proximity to our range does not seem appropriate under these circumstances. Approval of this development will

exponentially increase the number of upset residents as a result of the regular use of the shooting range.

We respectfully request you deny the application for annexation and development of this property for residential uses.

Sincerely,

William L. Bones
Chief of Police
Boise Police Department

EXHIBIT B 17

AdaCountyParamedics
We're in it for Life!

January 13, 2020

Kuna Planning and Zoning Commission
751 W 4th Street
Kuna, Idaho 83634

Commissioners,

At the request of the Board of Ada County Commissioners, I am sending this letter which includes some response data for Emergency Medical Calls in the area of the proposed Spring Rock Subdivision. Both Ada County Paramedics and the Kuna Rural Fire District respond to requests for service in this area. In general, our goal for Ada County response is to be on scene in 9 minutes or less, on 90% of our calls.

In the area surrounding the Falcon Crest Golf Course, there has been 39 calls in past two years. If the unit is in station the response times are as follows: Kuna Fire KM61 (8:09), ACP M25 (10:09) Average response time is 12.09 minutes, median response time is 11.21 minutes and we get there 90% of the time in under 18:46 minutes.

In the Pleasant Valley/Prison/Range area, there were 413 calls in the past two years. (Pleasant Valley as the center point, immediate areas included). If the unit is in station, the response times are as follows: ACP M25 (13:44) and ACP M18 (14:13). Average response time is 19.35 minutes, median response 18.58 minutes and 90th Percentile is 24.293 minutes. It is important to note that once the crew is south of the prison, it is open desert it can be difficult to find patients. Additionally, the medic unit arrival time gets delayed by the process of getting the unit through security at the prison.

At the Meat Packing facility at 17078 S Cole Road, our CAD (computer aided dispatch) system through network analysis calculates the response times as follows: Kuna Fire KM61 at (16:10), ACP M25 (20:19), and ACP M18 at (20:47).

We believe response times are an important part of our Emergency Medical Service delivery and want to provide you with this data as you consider the Spring Rock Subdivision. With our current coverage and deployment strategy, EMS service delivery will take anywhere from 12-20 minutes to the area under consideration for this development.

Steve Boyenger, Director
370 N. Benjamin Lane · Boise, ID 83704-8331
208-287-2962 phone · 208-287-2999 fax
AdaCountyParamedics.org

If you have any questions, please feel free to contact me.

Sincerely,

Steve Boyenger
Director
Ada County Paramedics

EXHIBIT B 18

# ADA COUNTY

COMMISSIONERS' OFFICE
200 W. Front Street, 3rd Floor
Boise, Idaho 83702
(208) 287-7000
Fax (208) 287-7009
bocc1@adaweb.net
www.adaweb.net

Kuna Planning and Zoning Commission
751 West 4th Street
Kuna, ID 83634

January 14, 2020

Dear Commissioners:

In regard to the letter that you received today from Ada County Paramedics, I need to address some statements in it. The letter begins with "At the request of the Ada County Commissioners," and that is false. Not only did I not request it, I did not know of it until after it had been sent this morning. The Board's COO Steve Rutherford requested it; most likely via the direction of one of the other commissioners.

Commissioners Kenyon and Lachiondo have gone on the public record as being opposed to any planned community. One of commissioner's most frequent arguments is that people who live in planned communities expect the same response times as the response times for city residents. That position has not been ever supported with any empirical evidence. I have asked planned community residents if they have that expectation, and they have told me that they do not. When I lived at the base of foothills northwest of downtown Eagle and its lone fire station, I never expected equal response times that city residents had. I chose to live in the country, and I drove to and from work every day. I knew it would take longer for first responders to reach my house in an emergency.

The letter addresses response times, and I agree that they "are an important part of our Emergency Medical Service delivery. " Comparing the response times to Falcon Crest Golf Course of 8 minutes 9 seconds "8:09" from Kuna Fire and 10:09 from Ada County Paramedics to Fitch & Associates' (a leading designer of EMS systems) recommended response time benchmarks ranging from 8:59 to 12:59, first responders to Falcon Crest are *under* the benchmarks. A variety of carefully considered system factors also impact response times such as traffic, road conditions, type of call, and location in a neighborhood. *Response Times: Myths, Measurement and Management,* Journal of Emergency Medical Services.

When someone opposes something, they often limit the facts they use to one side. However, I favor presenting and hearing both sides of a story. In addition, I oppose the Coordinated Growth Plan of Ada County for the City of Kuna because Kuna citizens, their planning and zoning commission, their mayor, and their city council should be the ones deciding what is best for Kuna.

Respectfully,

Rick Visser
Ada County Commissioner

## Troy Behunin

**From:** Janet Kell <jkellrealestate@gmail.com>
**Sent:** Sunday, January 05, 2020 7:58 AM
**To:** Troy Behunin; Wendy Howell
**Subject:** Spring Rock Application

To Kuna City Council and Planning &
Zoning Commission:

As a long term landowners in Kuna, our family would like to further express our support for the Spring Rock development and its application with Kuna. We are excited to see Kuna participate in Idaho's strong economic growth with the addition of a thoughtful, long-term planned community. I'm also sharing views and observations of the Spring Rock project as a local residential real estate professional since the late 1980s. Since I started representing buyers, and sellers, I have worked with numerous developments across the Treasure Valley including Lakewood, Wood Duck Island, Harris Ranch, Hidden Springs and many others. Similar to other successful developments, Spring Rock is offering quality parks, open space, and a variety of housing options that will appeal to several types of buyers, including apartments, starter homes, for young families and upscale retirement options.

While the state's continued growth has generally been positive, many of us have also observed the costs. Planned communities such as Spring Rock allow for more coordination and better long-term outcomes for the local community. We would also like to acknowledge the city's thorough process "Envision Kuna" report released in July 2019. We were delighted to see how much Spring Rock developers have conformed with this long-term plan.

In summary, our family is very supportive for the development's application to move forward.

Best Regards,
Janet Kell & the Gilmore
Family

January 8th, 2020

James L. Whitmore

850 E Riverpark Ln. Boise ID 83706

Mayor Stear

Kuna City Council

Kuna Planning and Zoning Commission & Staff

RE: Spring Rock Development

We are the landowners for a portion of this development proposal.

For over 100 years our family has been ranching in and around Kuna. In 1908 our grandfather, Jay Whitmore, started his cattle ranch in the Ten Mile Creek Valley and also near Swan Falls. In the 70's our father George Whitmore worked closely with Morley Nelson to establish the Birds of Prey Conservation Area, as well as, initiating the beginning of the World Center for Birds of Prey.

Throughout all that time we have seen Kuna progress and grow. We have been in support of Envision Kuna and the processes for long term planning.

We support the Spring Rock applications and are looking forward to being formally a part of Kuna. This is an opportunity for Kuna to set a cornerstone with a project that provides quality parks, amenities and well thought out design. This proposal avoids patchwork development and is a better long term strategy for planning.

We ask that you approve the Spring Rock applications.

Thank you for your consideration.

Sincerely,



James L. Whitmore

208-867-6416

January 10, 2020,

To the Commissioners and staff of ACHD:

I am writing to the Commissioners and staff of ACHD to express our families support for the Spring Rock Development. I have known Dave Yorgason for over 20 years, and I am privileged to have Dave be spearheading this project. He is a guy that always takes all parties involved into consideration. I'm a neighbor and property owner who plans to live in Kuna for many years to come. I believe the benefits of this development will be prosperous to our community. The developers have shown that the project meets the standards and needs of ACHD and the City of Kuna.

Sincerely,



Ryan and Brenda Colson
11157 West Silver Hawk Lane
Kuna, ID 83634

January10, 2020,

To the Commissioners and staff of ACHD:

I am writing to express our support for the Spring Rock Development applications. I feel that the developers have shown the project will enhance the City of Kuna and that it meets the requirements for ACHD. I have lived in the surrounding area where the Spring Rock Development will be since the 40's and believe this development will bring Kuna families a sense of pride living in such a beautiful area for many years to come.

Sincerely,

The Colson Family Trust



## Troy Behunin

**From:** Bobbie Davis <jcrad003@gmail.com>
**Sent:** Saturday, January 11, 2020 1:00 PM
**To:** Troy Behunin
**Cc:** Patt Duynslager
**Subject:** Re: SPRINGROCK SUBDIVISION

> On Jan 10, 2020, at 4:48 PM, Bobbie Davis <jcrad003@gmail.com> wrote:
>
> To: Wendy Howell
>
> We are sending you this message on the development of the Springrock Subdivision on Ten Mile Creek Rd. My husband and myself are in favor of seeing this project becoming a reality, our residence is on Ten Mile Creek Rd. We are glad to
>
> see the expansion and growth for the Kuna Community. We would like to see this subdivision go forward.
>
>
>
> Sincerely
>
>
>
> Jay and Roberta Davis
> 8425 Ten Mile Creek Rd
> Kuna, Id 83634

January 13, 2019

Kuna City Council, Planning and Zoning Commission and Staff

I am writing to express our support for the Spring Rock development applications. The developers have demonstrated the project is viable and meets the standards for the City of Kuna.

I am a neighbor and property owner and agree with their proposals. I recognize the benefits this will bring to our community.

Sincerely;

Kelly Fulfer
8445 Ten Mile Creek Rd
Kuna, Idaho 83634




January 14, 2020

To Whom It May Concern:

My concerns on this development would be that there would be a fence along the canal that would stop pets and children from the canal. And when the water is out of the canal, the pets cannot get into my livestock pens.

My next concern is weed control, specifically White Top.

The concerns with the round about are the heavy trucks coming from gravel pits and our equipment yard will destroy the round about structure and the tires on the trucks.

Sincerely,

Bob Hall

Owner of H & B Crushing LLC

## Troy Behunin

**From:** Troy Behunin
**Sent:** Friday, January 31, 2020 11:53 AM
**To:** 'grasshopper1156@gmail.com'
**Cc:** Wendy Howell
**Subject:** Spring Rock subdivision

Dear Linda,
There will be another public hearing for Spring Rock, and the next time it will be with the City Council. I can certainly add your email to the list that goes to Council for consideration, or you are welcome to write something else, or something in addition and submit it through email.
Would you like to be added to the mailing list so that you receive a letter when the Council will hear this item? Please let me know.
Thank you for the email.
Troy

Troy Behunin
Planner III
City of Kuna
751 W. 4th Street
Kuna, ID 83634
TBehunin@Kunald.Gov

CONFIDENTIALITY NOTICE
This e-mail and any attachments may contain confidential or privileged information. If you are not the intended recipient, you are not authorized to use or distribute any information included in this e-mail or its attachments. If you receive this e-mail in error, please delete it from your system and contact the sender.

**From:** Aaa Bbb <grasshopper1156@gmail.com>
**Sent:** Wednesday, January 29, 2020 12:23 PM
**To:** Wendy Howell <whowell@kunaid.gov>
**Subject:** Spring Rock subdivision

Hi,

I was wondering if there will be another public hearing about the Spring Rock subdivision. I know there was one last night Jan. 28th. I have some questions and concerns. I live not too far from the proposed site. I am concerned about water. It sounds like with the density of housing as well as burms and parks, this will put an extra strain on our water resources. I am afraid that this will affect my well as far as having to dig it deeper to get water. I am also concerned about how this subdivision will impact wildlife. There are deer, coyotes, birds of prey, etc... who roam that land. With all of the growth in the valley, the wildlife are being squeezed out. Of course, many concerns have been voiced about traffic. Hubbard Rd already has a large volume of traffic in the morning and evening commutes. This subdivision will create even more traffic in our neighborhood. I also have concerns about noise and crime. I hope that the planning and zoning commissioners will take a look at our concerns as we are the one's who will have to live with this. The developers are only interested in making a quick buck. They don't care about the impact it is going to have on our neighborhood.

Sincerely,
Linda Mansfeld
grasshopper1156@gmail.com

# Neighborhood Meeting Certification

CITY OF KUNA PLANNING & ZONING * 763 W. Avalon, Kuna, Idaho, 83634 * www.kunacity.id.gov * (208) 922-5274 * Fax: (208) 922-5989

**GENERAL INFORMATION:**

You must conduct a neighborhood meeting prior to application for variance, conditional use, zoning ordinance map amendment, expansion or extension of a nonconforming use, and/or a subdivision. Please see Section 8-7A-3 of the Kuna City Code or ask one of our planners for more information on neighborhood meetings.

The meeting must be held either on a weekend between 10 a.m. and 7 p.m., or a weekday between 6 p.m. and 8 p.m. Meetings cannot be conducted on holidays, holiday weekends, or the day before or after a holiday or holiday weekend. The meeting must be held at one of the following locations:

- The Subject Property;
- The nearest available public meeting place (Examples include fire stations, libraries and community centers);
- An office space within a 1-mile radius of the subject property.

The meeting cannot take place more than 2 months prior to acceptance of the application and the application will not be accepted before the neighborhood meeting is conducted. You are required to send written notification of your meeting, allowing a reasonable amount of time before your meeting for property owners to plan to attend. Contacting and/or meeting individually with residents will not fulfill Neighborhood Meeting requirements.

You may request a list of the people you need to invite to the neighborhood meeting from our department. This list includes property owners within 300 feet of the subject property. Once you have held your neighborhood meeting, please complete this certification form and include it with your application.

**Please Note: The neighborhood meeting must be conducted in one location for attendance by all neighboring residents. Contacting and/or meeting individually with residents does not comply with the neighborhood meeting requirements.**

**Please include a copy of the sign-in sheet for your neighborhood meeting, so we have written record of who attended your meeting and the letter of intent sent to each recipient. In addition, provide any concerns that may have been addressed by individuals that attended the meeting.**

Description of proposed project: Spring Rock Subdivision

Date and time of neighborhood meeting: June 24th, 2019

Location of neighborhood meeting: Onsite, at the corner of Five Mile and Hubbard Rd'

**SITE INFORMATION:**

Location: Quarter: ____ Section: ____ Township: 2N Range: 1E Total Acres: 761

Subdivision Name: ____ Lot: ____ Block: ____

Site Address: Ten Mile Creek Rd between Five Mile and Cole Rd's Tax Parcel Number(s): (list attached)

Please make sure to include **all** parcels & addresses included in your proposed use.

**CURRENT PROPERTY OWNER:**

Name: Whitmore Family, Gilmore Living Trust, Davis Family

Address: ____ City: ____ State: ____ Zip: ____

**CONTACT PERSON (Mail recipient and person to call with questions):**

Name: Dave Yorgason Business (if applicable): Ten Mile Creek LLC

Address: 1211 N Happy Dr City: Boise State: ID Zip: 83706

**PROPOSED USE:**

I request a neighborhood meeting list for the following proposed use of my property (check all that apply):

| | Application Type | Brief Description |
|---|---|---|
| x | Annexation | 761 Acres |
| x | Re-zone | Ag to single family, multi family & Commercia |
| x | Subdivision (Sketch Plat and/or Prelim. Plat) | Preliminary Plat 476 Acres |
| | Special Use | |
| | Variance | |
| | Expansion of Extension of a Nonconforming Use | |
| | Zoning Ordinance Map Amendment | |

**APPLICANT:**

Name: Ten Mile Creek LLC

Address: 1211 N Happy Dr

City: Boise State: ID Zip: 83706

Telephone: 208-850-1070 Fax:

I certify that a neighborhood meeting was conducted at the time and location noted on this form and in accord with Section 5-1A-2 of the Kuna City Code

Signature: (Applicant) Date 7-9-19

# SIGN IN SHEET

**PROJECT NAME:** Springrock

**Date:** 6-24-2019

| | Name | Address | Zip | Phone |
|---|---|---|---|---|
| 1 | Dave Yorgason | 14254 W. Battenberg, Boise | 83713 | 208-850-1070 |
| 2 | BRYAN WOODELL | 11575 S. HAWK HAVEN | 83634 | 208 869 0658 |
| LYNDA 3 | BOB CEARSLEY | 8955 S. BROKEN WING | 83634 | 208 362 4640 |
| 4 | Jerry Green | 10850 Hubbard Rd | 83634 | 208-401-6501 |
| 5 | Martha Green | " | " | 208-407-2176 |
| 6 | Nyle Olsen | 834 LA CASCATA BOISE | 83705 | 208 602-4912 |
| 7 | Bobbie Davis | 8400 Ten Mile Creek | 83634 | 208 562 0035 |
| 8 | Kelly Falser | 2350 W Merrill | 83642 | 208-870-5891 |
| 9 | Ryan Carlson | 11257 Silver Hawk | 83634 | 208-941-2078 |
| 10 | Bob Hall | 10801 Hubbard | 83634 | 208-866-3461 |
| 11 | | | | |
| 12 | Gregg Rauhe | 11263 Hubbard | | |
| 13 | Darren Cranney | 3606 E Columbia Meridian | 83642 | 208-861-9814 |
| 14 | Kelly Kerl | 11710 Hubbard | 83634 | 208 870 8833 |
| 15 | PATT/DWYN SLAGER | 2896 North Mountain RD | BOISE 83702 | 208-890-2185 |
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June 12, 2019

Re: Neighborhood meeting for the proposed Springrock development located in Kuna, Idaho.

Dear neighbor,

We invite you to attend a neighborhood meeting to discuss an application for future development. The site is approximately 761 acres and is adjacent to the Falcon Crest golf course in Kuna, Idaho. It is generally located on the south side of Tenmile Creek Road. Beginning at the west side of the property at Hubbard and Five Mile Roads, it borders the New York canal and Falcon Crest golf course and extends east to Cole Road (see map on back of this notice).

The first phase preliminary plat is approximately 476 acres and will include:

- Single family dwelling units (R-6 Zoning)
- 4 plex units (R-12 Zoning)
- Small office and other commercial uses (as allowed within C-1 Zoning)
- Two large community park sites
- One elementary school site

The application will include annexation, zoning, preliminary plat, planned unit development and development agreement.

**The neighborhood meeting will be held onsite at the southwest corner of Hubbard and Five Mile Roads on Monday, June 24, 2019 at 7:00 pm.**

The purpose of this meeting is to review the proposed project and give the surrounding neighbors an opportunity to ask questions and express their concerns or support.

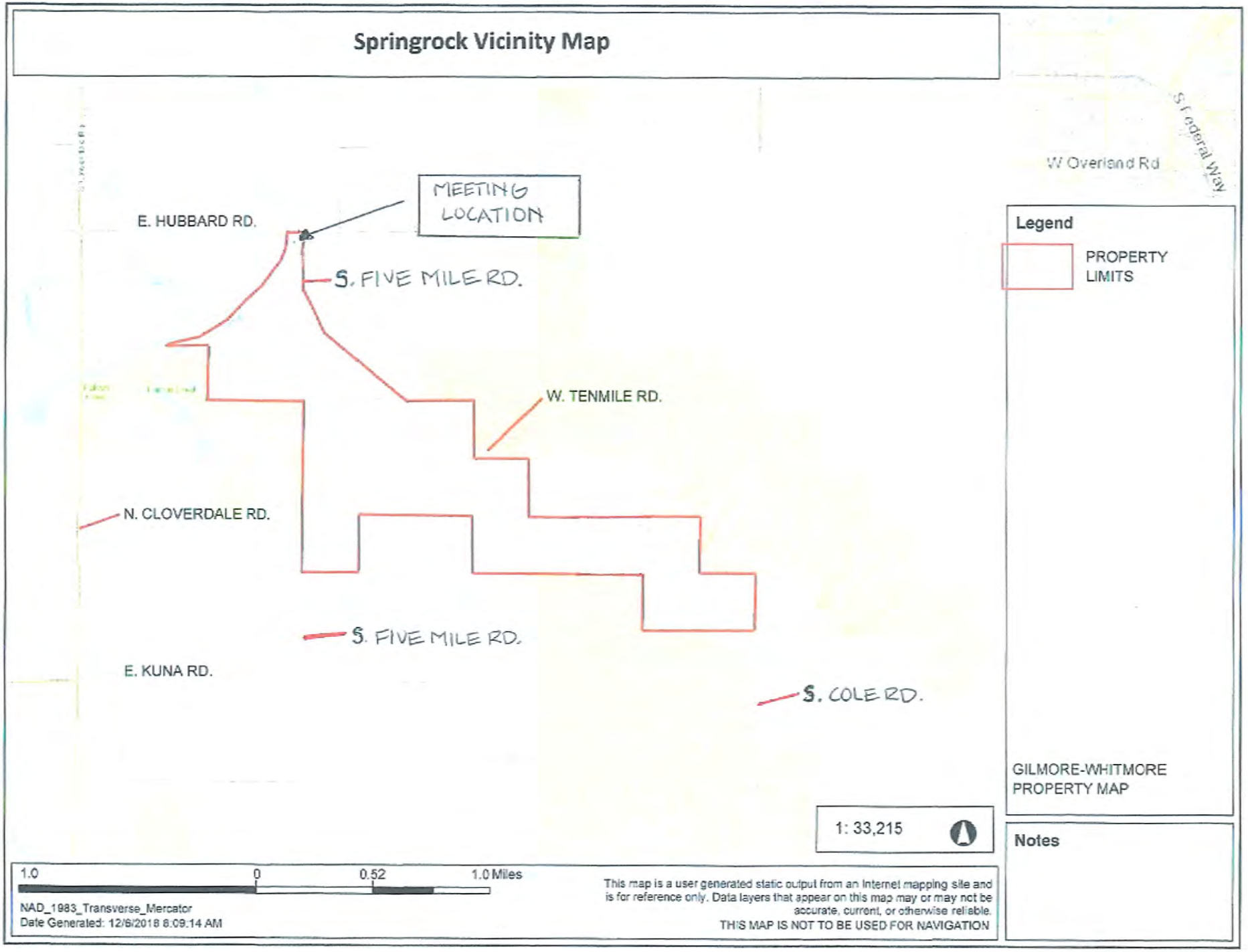
If you are unable to attend and would like additional information, or if you have any additional questions, I can be reached at: dyorgason6@gmail.com or 208-850-1070.

We hope you are able to attend.

Sincerely,

Dave Yorgason
Springrock, LLC

# Springrock Vicinity Map



# NEIGHBORHOOD MEETING MINUTES

Meeting Date: June 6th, 2019 Number of Attendees: 13

Meeting Location: At the corner of Five Mile Rd and Hubbard Rd

Description of Project Presented:

Proposed future development for Springrock Subdivision, including annexation of 761 acres and a preliminary plat of 476 acres. Project includes single family, 4 plex, small commercial, park and schools sites.

Attendee's comments:

-- When will the project start?
-- How will the traffic and roads work?
-- Who will be building the homes?
-- How will the 4 plexes be managed?
-- What is the timing for the school site?
-- What will be the effect on proerty taxes?
-- What will be the impact on Hubbard Rd?

I hereby certify that the above information is complete and correct to the best of by knowledge.

Christopher G. Findlay
Printed Name

Signature

7/18/2019
Date

# DECLARATION OF

# COVENANTS, CONDITIONS AND RESTRICTIONS

# FOR

# SPRING ROCK SUBDIVISION NO. 1

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IN WITNESS WHEREOF, the Grantor has executed this Declaration effective as of the date first set forth above.

_____
David Yorgason

_____
Chris Findlay

_____
Patt Duynslager

State of Idaho }
}ss
County of Ada}

On this ___ day of _____, 2019, before me the undersigned, a notary public in and for the State, personally appeared David Yorgason, known or identified to me to be a member of Ten Mile Creek LLC, an Idaho limited liability company, the person who executed this declaration and acknowledged to me that said limited liability company executed the same.

In witness whereof, I have hereunder set my hand and affixed my official seal the day and year in this certificate first above written.

My Commission Expires _____
Residing At _____

_____
Notary Public for the State of Idaho

State of Idaho }
}ss
County of Ada}

On this ___ day of _____, 2019, before me the undersigned, a notary public in and for the State, personally appeared Chris Findlay, known or identified to me to be a member of Ten Mile Creek LLC, an Idaho limited liability company, the person who executed this declaration and acknowledged to me that said limited liability company executed the same.

In witness whereof, I have hereunder set my hand and affixed my official seal the day and year in this certificate first above written.

My Commission Expires _____
Residing At _____

_____
Notary Public for the State of Idaho

State of Idaho }
}ss
County of Ada}

On this ___ day of _____, 2019, before me the undersigned, a notary public in and for the State, personally appeared Patt Duynslager, known or identified to me to be a member of Ten Mile Creek LLC, an Idaho limited liability company, the person who executed this declaration and acknowledged to me that said limited liability company executed the same.

In witness whereof, I have hereunder set my hand and affixed my official seal the day and year in this certificate first above written.

My Commission Expires _____
Residing At _____

_____
Notary Public for the State of Idaho

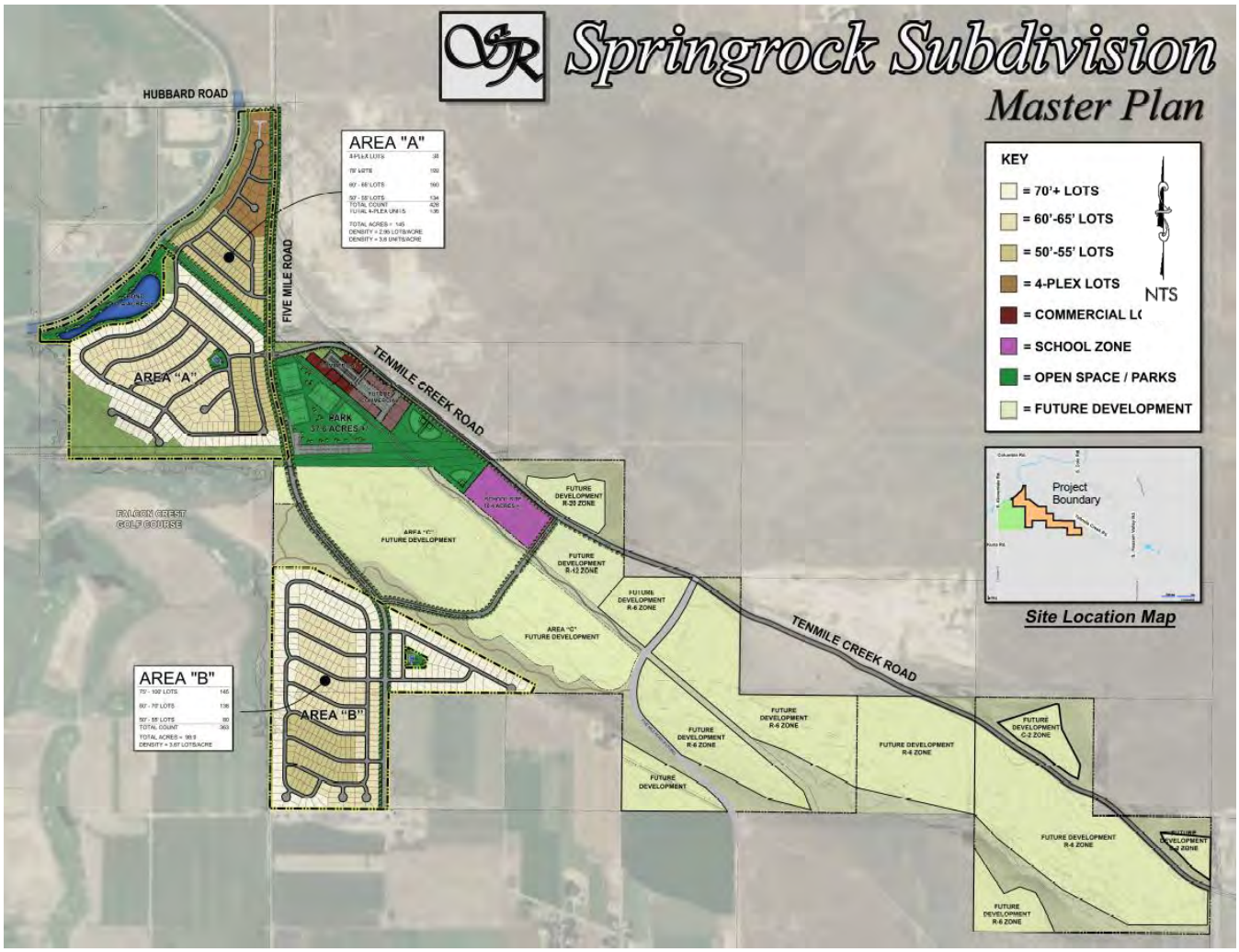
# EXHIBIT A

## Legal Description of the Property

# TRAFFIC IMPACT STUDY

# SPRINGROCK SUBDIVISION

Kuna, Idaho
June 6, 2019




**Prepared For:**

## DAVE YORGASON

**Prepared By:**

GR ENGINEERING, INC.
181 East 50th Street
Garden City, ID 83714
(208) 841-4996

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# EXECUTIVE SUMMARY

CR Engineering, Inc. has been retained to prepare a traffic impact study (TIS) for the proposed Springrock Subdivision located along Tenmile Creek Road between Five Mile Road and Pleasant Valley Road in Kuna, Idaho, as shown in **Figure 1.1**. The scope of this report was determined through coordination with the Ada County Highway District (ACHD) and the Idaho Transportation Department (ITD) with inputs from the Community Planning Association of Southwest Idaho (COMPASS).

Springrock Subdivision is a proposed 761-acre mixed-use development planned to be developed in multiple phases. The initial developments in Phase 1 are planned to be completed by 2025, but may change depending on the market conditions. The remaining developments are planned to be completed in future phases with an expected 2040 full build-out year.

The TIS evaluates the potential traffic impacts resulting from background traffic growth, off-site developments in the area, and the proposed initial Phase 1 developments of Springrock Subdivision, and identifies improvements to mitigate the impacts if needed. Traffic impacts were evaluated under weekday AM and PM peak hour traffic conditions. **Table 1** and **Table 2** summarize the roadway and intersection improvements needed to mitigate the traffic impacts for the following traffic conditions:

- 2019 Existing traffic
- 2025 Phase 1 background traffic
- 2025 Phase 1 total traffic

In addition, a planning-level analysis of the study area roadway segments' level of service was also evaluated under 2040 full build-out year traffic conditions. The purpose of the planning-level analysis is to identify which study area roadway segments are expected to need additional lanes beyond the roadway lanes programmed in ACHD's 2016 Capital Improvement Plan (CIP). **Table 3** summarizes the roadway segment analysis results for the 2040 traffic conditions:

- 2040 Full build-out year background traffic
- 2040 Full build-out year total traffic

It is anticipated that additional TISs will be required for each future phase of the development at the time of submission of a preliminary plat application. Traffic impacts and mitigations for future phases will be identified in future TISs.

## *1.0 Proposed Development*

1.1 At full build-out, Springrock Subdivision is estimated to include the following land uses:

- Single-family residential : 1,925 dwelling units
- 4-Plex residential : 252 dwelling units
- Multi-family residential : 120 dwelling units
- Office : 60,000 square feet (sf)
- Day care center : 5,000 sf
- Coffee shop with drive-thru : 2,000 sf
- Quality restaurant : 6,000 sf
- High-turnover restaurant : 6,000 sf
- Convenience market : 4,000 sf
- Mini-storage facility : 101,000 sf
- Elementary school : 1 with 600 students

1.2 The initial Phase 1 development includes the following land uses with an estimated 2025 build-out year:

- Single-family residential : 757 dwelling units
- 4-Plex residential : 136 dwelling units
- Office : 10,000 sf
- Day care center : 5,000 sf
- Quality restaurant : 6,000 sf
- Elementary school : 1 with 600 students

**Table 1 – Intersection Improvements Summary (Phase 1)**

| Intersection | | 2019 Existing | 2025 Phase 1 | |
|---|---|---|---|---|
| | | | Background | Total |
| 1 | Columbia Road and Meridian Road | None | None[2] | **Signal timing** |
| 2 | Kuna Road and Meridian Road | None | None | None |
| 3 | Columbia Road and Locust Grove Road | None | None | None |
| 4 | Kuna Road and Locust Grove Road | None | None | None |
| 5 | Columbia Road and Eagle Road | None | None | None |
| 6 | Kuna Road and Eagle Road | None | None | None |
| 7 | Amity Road and Cloverdale Road | None | **2 thru lanes on Cloverdale Rd or Multi-lane roundabout** | None beyond prior improvements |
| 8 | Lake Hazel Road and Cloverdale Road | None | **Signal timing**[2] | **Widen intersection to 5x5** |
| 9 | Columbia Road and Cloverdale Road | None | **Single-lane roundabout or Signal with LT lanes** | None beyond prior improvements |
| 10 | Hubbard Road and Cloverdale Road | **SB right-turn lane**[1] | **Single-lane roundabout or Signal with LT lanes** | None beyond prior [2] improvements |
| 11 | Kuna Road and Cloverdale Road | None | None | None |
| 12 | Hubbard Road and Tenmile Creek Road | None | None | None |
| 13 | Gowen Road and Pleasant Valley Road | None | None[2] | None |
| 14 | Tenmile Creek Road and Pleasant Valley Road | **SB right-turn lane**[1] | None beyond prior improvements | **EB left-turn lane NB left-turn lane** |

[1] Turn lane needs are based on ACHD's turn-lane guidelines, intersection meets minimum operational thresholds without turn lane

[2] Overall intersection v/c ratio exceeds 0.90

**Table 2 – Roadway Segment Lane Improvement Summary (Phase 1)**

| Study Area Roadway Segment | 2019 Existing Lanes | 2025 Phase 1 | |
|---|---|---|---|
| | | Background | Total |
| Cloverdale Rd<br>Amity Rd to Lake Hazel Rd | 2 | **Widen to 5 lanes** | 5 |
| Cloverdale Rd<br>Lake Hazel Rd to Columbia Rd | 2/3 | 2/3 | **Widen to 5 lanes** |
| Cloverdale Rd<br>Columbia Rd to Hubbard Rd | 2 | 2 | 2 |
| Pleasant Valley Rd<br>Gowen Rd to Hollilynn Dr | 2 | 2 | 2 |
| Pleasant Valley Rd<br>Hollilynn Dr to Tenmile Creek Rd | 2 | 2 | 2 |
| Columbia Rd<br>Meridian Rd to Locust Grove Rd | 2 | 2 | 2 |
| Columbia Rd<br>Locust Grove Rd to Eagle Rd | 2 | 2 | 2 |
| Columbia Rd<br>Eagle Rd to Cloverdale Rd | 2 | 2 | 2 |
| Hubbard Rd<br>Cloverdale Rd to Five Mile Rd | 2 | 2 | 2 |
| Five Mile Rd<br>Tenmile Creek Rd to Hubbard Rd | 2 | 2 | 2 |
| Tenmile Creek Rd<br>Five Mile Rd to Pleasant Valley Rd | 2 | 2 | 2 |
| Kuna Rd<br>Meridian Rd to Locust Grove Rd | 2 | 2 | 2 |
| Kuna Rd<br>Locust Grove Rd to Eagle Rd | 2 | 2 | 2 |
| Kuna Rd<br>Eagle Rd to Cloverdale Rd | 2 | 2 | 2 |

**Table 3 – Roadway Segment Level of Service Summary (2040 Full Build-Out)**

| Study Area Roadway Segment | 2019 Existing Lanes | CIP Programmed Lanes | Meet LOS Planning Threshold? | |
|---|---|---|---|---|
| | | | 2040 Background | 2040 Total |
| Cloverdale Rd<br>Amity Rd to Lake Hazel Rd | 2 | 5 | Yes | **No** |
| Cloverdale Rd<br>Lake Hazel Rd to Columbia Rd | 2 | 5 | **No** | **No** |
| Cloverdale Rd<br>Columbia Rd to Hubbard Rd | 2 | 3 | **No** | **No** |
| Pleasant Valley Rd<br>Gowen Rd to Hollilynn Dr | 2 | 2 | Yes | **No** |
| Pleasant Valley Rd<br>Hollilynn Dr to Tenmile Creek Rd | 2 | 2 | Yes | **No** |
| Columbia Rd<br>Meridian Rd to Locust Grove Rd | 2 | 2 | **No** | **No** |
| Columbia Rd<br>Locust Grove Rd to Eagle Rd | 2 | 2 | **No** | **No** |
| Columbia Rd<br>Eagle Rd to Cloverdale Rd | 2 | 2 | **No** | **No** |
| Hubbard Rd<br>Cloverdale Rd to Five Mile Rd | 2 | 3 | Yes | **No** |
| Five Mile Rd<br>Tenmile Creek Rd to Hubbard Rd | 2 | 3 | Yes | Yes |
| Tenmile Creek Rd<br>Five Mile Rd to Pleasant Valley Rd | 2 | 3/2 | Yes | Yes |
| Kuna Rd<br>Meridian Rd to Locust Grove Rd | 2 | 2 | Yes | **No** |
| Kuna Rd<br>Locust Grove Rd to Eagle Rd | 2 | 2 | **No** | **No** |
| Kuna Rd<br>Eagle Rd to Cloverdale Rd | 2 | 2 | **No** | **No** |

## 2.0 Improvements Needed to Mitigate 2019 Existing Traffic

2.1 All study area intersections currently meet minimum operational thresholds with 2019 existing traffic conditions analyzed with the existing intersection control and lane configurations. As a result, no intersection control or capacity improvements are needed to mitigate 2019 existing traffic.

2.2 Two study area intersections meet ACHD's turn-lane guidelines:

- Hubbard Road and Cloverdale Road intersection
  - Southbound right-turn lane
- Tenmile Creek Road and Pleasant Valley Road intersection
  - Southbound right-turn lane

2.3 None of the study area roadway segments need additional capacity improvements, except for the turn-lane improvements identified above.

- The Cloverdale Road segment between Amity Road and Lake Hazel Road exceeds ACHD's LOS planning thresholds with 2019 existing traffic. However, based on intersection capacity analysis, the Cloverdale Road approaches do not need additional through lanes at the Amity Road intersection or Lake Hazel Road intersection. As a result, no roadway capacity improvements are recommended to mitigate 2019 existing traffic.

## 3.0 Improvements Needed to Mitigate 2025 Phase 1 Background Traffic

3.1. Six study area intersections are expected to exceed minimum operational thresholds with 2025 background traffic conditions analyzed with the existing intersection control and lane configurations or with the preceding improvements needed to mitigate 2019 existing traffic. The intersections and improvements needed to mitigate the 2025 background traffic impacts are:

- Columbia Road and Meridian Road intersection
  - No improvements are proposed to mitigate 2025 background traffic impacts
    - The intersection is expected to only exceed 0.90 overall intersection v/c ratio during the AM peak hour
    - All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours
- Amity Road and Cloverdale Road intersection (two options)
  - Option 1 – Widen Cloverdale Road approaches to two through lanes in each direction and signal modifications
    - Cloverdale Road is programmed in the 2019-2023 IFYWP to be widened to five lanes from Victory Road to Lake Hazel Road
  - Option 2 – Multi-lane roundabout
    - The Amity Road and Cloverdale Road intersection is programmed in the 2019-2023 IFYWP to be reconstructed as a multi-lane roundabout
- Lake Hazel Road and Cloverdale Road intersection
  - Optimize signal timing for the expected traffic conditions
  - No capacity improvements area proposed to mitigate 2025 background traffic impacts
    - The intersection is expected to only exceed 0.90 overall intersection v/c ratio during the peak hours
    - All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours
- Columbia Road and Cloverdale Road intersection (two options)
  - Option 1 – Signal with left-turn lanes on all approaches
  - Option 2 – Single-lane roundabout
    - The Columbia Road and Cloverdale Road intersection is programmed in the 2016 CIP to be reconstructed as a single-lane roundabout between 2026 and 2030 timeframe

- Hubbard Road and Cloverdale Road intersection (two options
  - Option 1 – Signal with left-turn lanes on all approaches)
  - Option 2 – Single-lane roundabout

  There are no improvements programmed at the Hubbard Road and Cloverdale Road intersection according to ACHD's current transportation plans. The intersection is listed in ACHD's Master Street Map (MSM) as a single-lane roundabout.

- Gowen Road and Pleasant Valley Road intersection
  - No improvements area proposed to mitigate 2025 background traffic impacts
    - The intersection is expected to only exceed 0.90 overall intersection v/c ratio during the PM peak hour
    - All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours

3.2. Cloverdale Road is expected to need the following improvements to mitigate 2025 background traffic impacts:

- Widen to five lanes between Amity Road and Lake Hazel Road
  - Cloverdale Road is programmed in the 2019-2023 IFYWP to be widened to five lanes from Victory Road to Lake Hazel Road.

## 4.0 Improvements Needed to Mitigate 2025 Phase 1 Total Traffic

4.1 Six study area intersections are expected to exceed ACHD's minimum operational thresholds with 2025 total traffic conditions analyzed with the existing intersection control and lane configurations, or with the preceding improvements identified above for 2019 existing and 2025 background traffic. The intersections and improvements needed to mitigate the 2025 total traffic impacts are:

- Columbia Road and Meridian Road intersection
  - Optimize signal timing for the expected traffic conditions
  - No improvements area proposed to mitigate 2025 total traffic impacts
    - The intersection is expected to only exceed 0.90 overall intersection v/c ratio during the AM peak hour
    - All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours

  The estimated Phase 1 site traffic at the Columbia Road and Meridian Road intersection is approximately 3.0% of the total intersection traffic during the PM peak hour.

- Lake Hazel Road and Cloverdale Road intersection
  - Widen intersection to have on left-turn lane, one through lane, and one shared through/right-turn lane on all approaches
    - The Lake Hazel Road and Cloverdale Road intersection is programmed in the 2019-2023 IFYWP to be widened to five lanes on both Lake Hazel Road and Cloverdale Road. The construction years have not been identified and the project is listed as preliminary development.
    - The estimated Phase 1 site traffic is approximately 11.2% of the total intersection traffic during the PM peak hour.

  The estimated Phase 1 site traffic at the Lake Hazel Road and Cloverdale Road intersection is approximately 11.2% of the total intersection traffic during the PM peak hour.

- Columbia Road and Cloverdale Road intersection
  - No improvements are proposed to mitigate 2025 total traffic impacts
    - As a signalized intersection, the intersection is expected to meet minimum operational thresholds

- As a single-lane roundabout, one lane group is expected to slightly exceed 0.85 v/c ratio threshold during the AM peak hour

The estimated Phase 1 site traffic at the Columbia Road and Cloverdale Road intersection is approximately 30.8% of the total intersection traffic during the PM peak hour.

- Hubbard Road and Cloverdale Road intersection
  - No improvements are proposed to mitigate 2025 total traffic impacts
    - As a signalized intersection, the intersection is expected to meet minimum operational thresholds, with the exception of the overall intersection v/c ratio slightly exceeding 0.90 v/c ratio during the AM peak hour
    - As a single-lane roundabout, one lane group is expected to slightly exceed 0.85 v/c ratio threshold during the AM peak hour

The estimated Phase 1 site traffic at the Hubbard Road and Cloverdale Road intersection is approximately 34.7% of the total intersection traffic during the PM peak hour.

- Gowen Road and Pleasant Valley Road intersection
  - No improvements are proposed to mitigate 2025 total traffic impacts
    - The intersection is expected to meet minimum operational threshold, with the exception of the overall intersection v/c ratio exceeding 0.90 threshold during the peak hours.

The estimated Phase 1 site traffic at the Gowen Road and Pleasant Valley Road intersection is approximately 10.3% of the total intersection traffic during the PM peak hour.

4.2 One study area intersection is expected to require turn lanes:

- Tenmile Creek Road and Pleasant Valley Road intersection
  - Eastbound left-turn lane
  - Northbound left-turn lane

The estimated Phase 1 site traffic at the Tenmile Creek Road and Pleasant Valley Road intersection is approximately 30.7% of the total intersection traffic during the PM peak hour.

4.3 Cloverdale Road is expected to need the following improvements to mitigate 2025 total traffic impacts:

- Widen to five lanes from Lake Hazel Road to Columbia Road
  - Cloverdale Road is programmed in the 2016 CIP to be widened to five lanes from Lake Hazel Road to Columbia Road between 2026 and 2030

The estimated Phase 1 site traffic on this Cloverdale Road segment is approximately 20.7% of the total traffic during the PM peak hour.

# 5.0 2040 Full Build-Out Planning-Level Analysis

5.1 With 2040 background traffic, the following study area roadway segments are expected to exceed ACHD's LOS planning thresholds and need additional lanes beyond the lanes programmed in the 2016 CIP:

- Cloverdale Road between Lake Hazel Road and Columbia Road
  - Widen from five lanes to seven lanes
- Cloverdale Road between Columbia Road and Hubbard Road
  - Widen from three lanes to five lanes
- Columbia Road between Meridian Road and Cloverdale Road
  - Widen from two lanes to three lanes
- Kuna Road between Meridian Road and Cloverdale Road
  - Widen from two lanes to three lanes

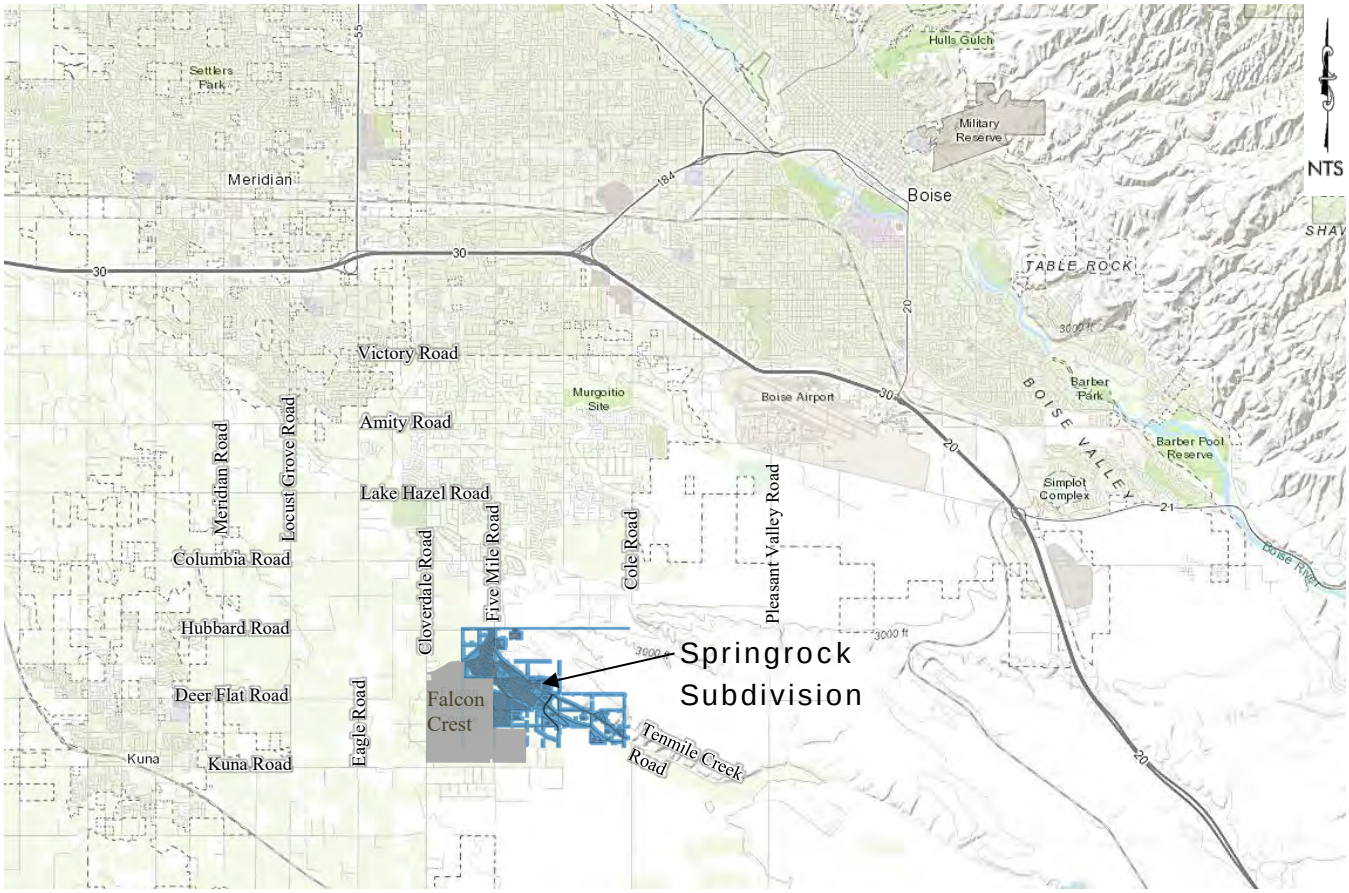
5.2 With 2040 total traffic, the following study area roadway segments are expected to exceed ACHD's LOS planning thresholds and need additional lanes beyond the number of lanes programmed in the 2016 CIP and lanes needed under 2040 background traffic:

- Cloverdale Road between Amity Road and Lake Hazel Road
  - Widen from five lanes to seven lanes
- Cloverdale Road between Columbia Road and Hubbard Road
  - Widen from five lanes to seven lanes
- Pleasant Valley Road between Gowen Road and Tenmile Creek Road
  - Widen from two lanes to three lanes
- Columbia Road between Meridian Road and Cloverdale Road
  - Widen from three lanes to five lanes
- Hubbard Road between Five Mile Road and Cloverdale Road
  - Widen from two lanes to five lanes
- Five Mile Road between Tenmile Creek Road and Hubbard Road
  - Widen from two lanes to five lanes
- Kuna Road between Meridian Road and Locust Grove Road
  - Widen from three lanes to five lanes

# 1.0 INTRODUCTION

CR Engineering, Inc. has been retained to prepare a traffic impact study for the proposed Springrock Subdivision located along Tenmile Creek Road between Five Mile Road and Pleasant Valley Road in Kuna, Idaho. **Figure 1.1** shows the site location and its vicinity. The TIS evaluates the potential traffic impacts resulting from background traffic growth, off-site developments, and the proposed Phase 1 development, and identifies improvements needed to mitigate the impacts. In additional, the TIS also conducted a planning-level analysis of the roadway segment level of service under the full build-out traffic conditions.

**Figure 1.1 – Site Location and Vicinity**



## 1.1 Proposed Development

Springrock Subdivision is a proposed 761-acre mixed-use development planned to be developed in multiple phases. **Figure 1.2** shows the preliminary master site plan. **Figure 1.3** shows the preliminary plan for Phase 1 developments. Detailed lots and internal roadway layouts are available for Phase 1 in areas A, B and C. However, a detailed layout of future phases beyond Phase 1 is not available at the time of this TIS. **Table 1.1** summarizes the proposed land uses for each land use area. The initial Phase 1 developments are planned to be completed by 2025. The full build-out of the Springrock Subdivision is expected in year 2040 but may change depending on the market conditions.

Springrock Subdivision is planning to construct a segment of Five Mile Road along the site frontages. A segment of Tenmile Creek Road will be realigned from Hubbard Road to intersect the proposed Five Mile Road segment. Multiple approaches are proposed on Tenmile Creek Road and the proposed Five Mile Road extension for Phase 1 site access.

**Table 1.1 – Proposed Land Use Summary**

| Land Use Area | Development Area Acreage | Initial Phase 1 | Full Build-Out Total |
|---|---|---|---|
| A | 145 | 394 single-family dwelling units (DU)<br>136 4-plex DU | 394 single-family DU<br>136 4-plex DU |
| B | 99 | 363 single-family DU | 363 single-family DU |
| C | 105 | 1 Elementary school (600 students)<br>10,000 square feet (sf) office<br>5,000 sf day care center<br>6,000 sf quality restaurant | 347 single-family DU<br>1 Elementary school (600 students)<br>60,000 sf office<br>5,000 sf day care center<br>6,000 sf quality restaurant<br>116 single-family DU<br>120 multi-family DU<br>2,000 sf coffee shop<br>6,000 sf high-turnover restaurant |
| Remainder | 221 | None | 821 single-family DU<br>4,000 sf convenience market<br>101,000 sf mini-storage |

**Figure 1.2 – Preliminary Master Site Plan**

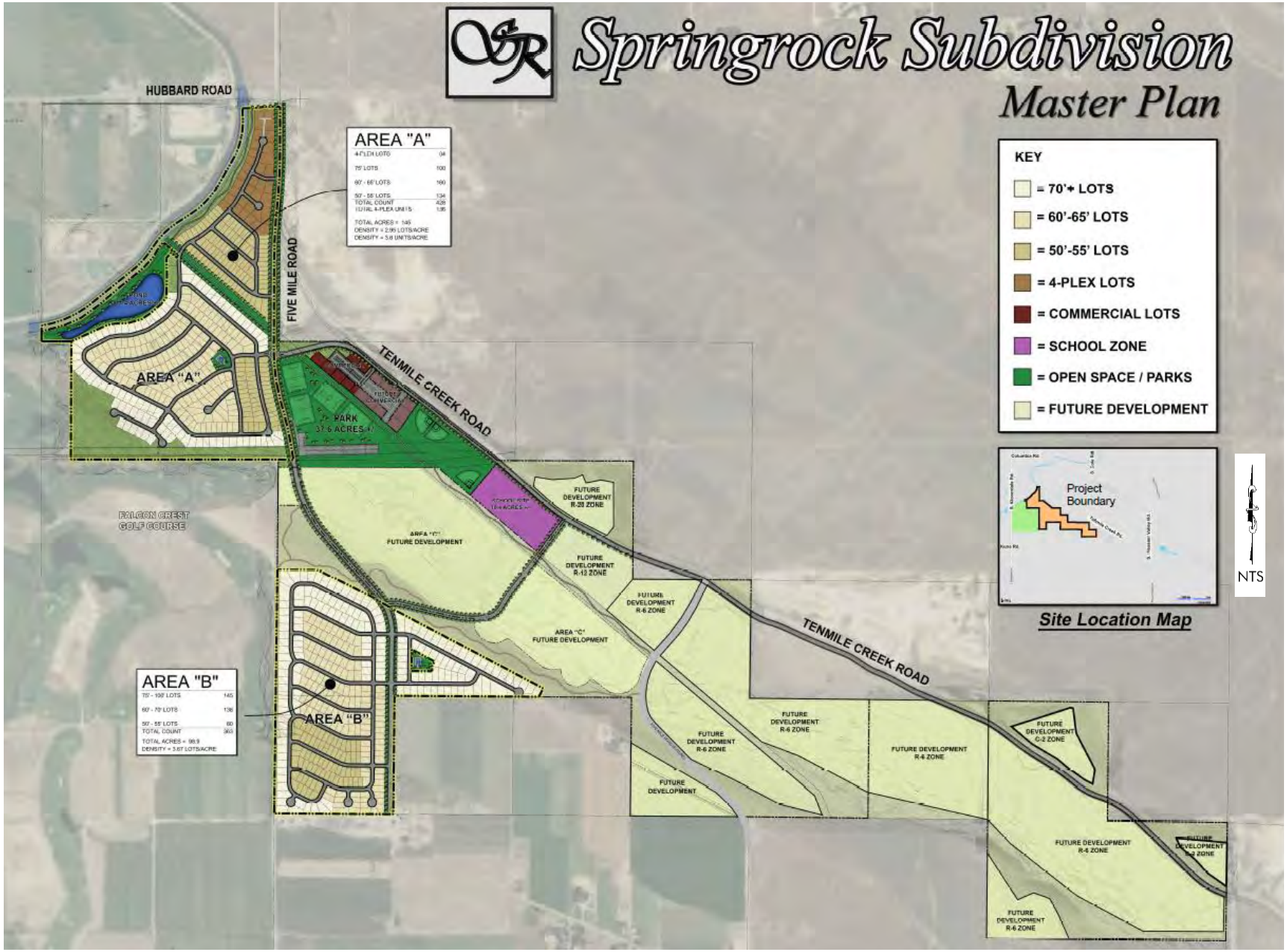
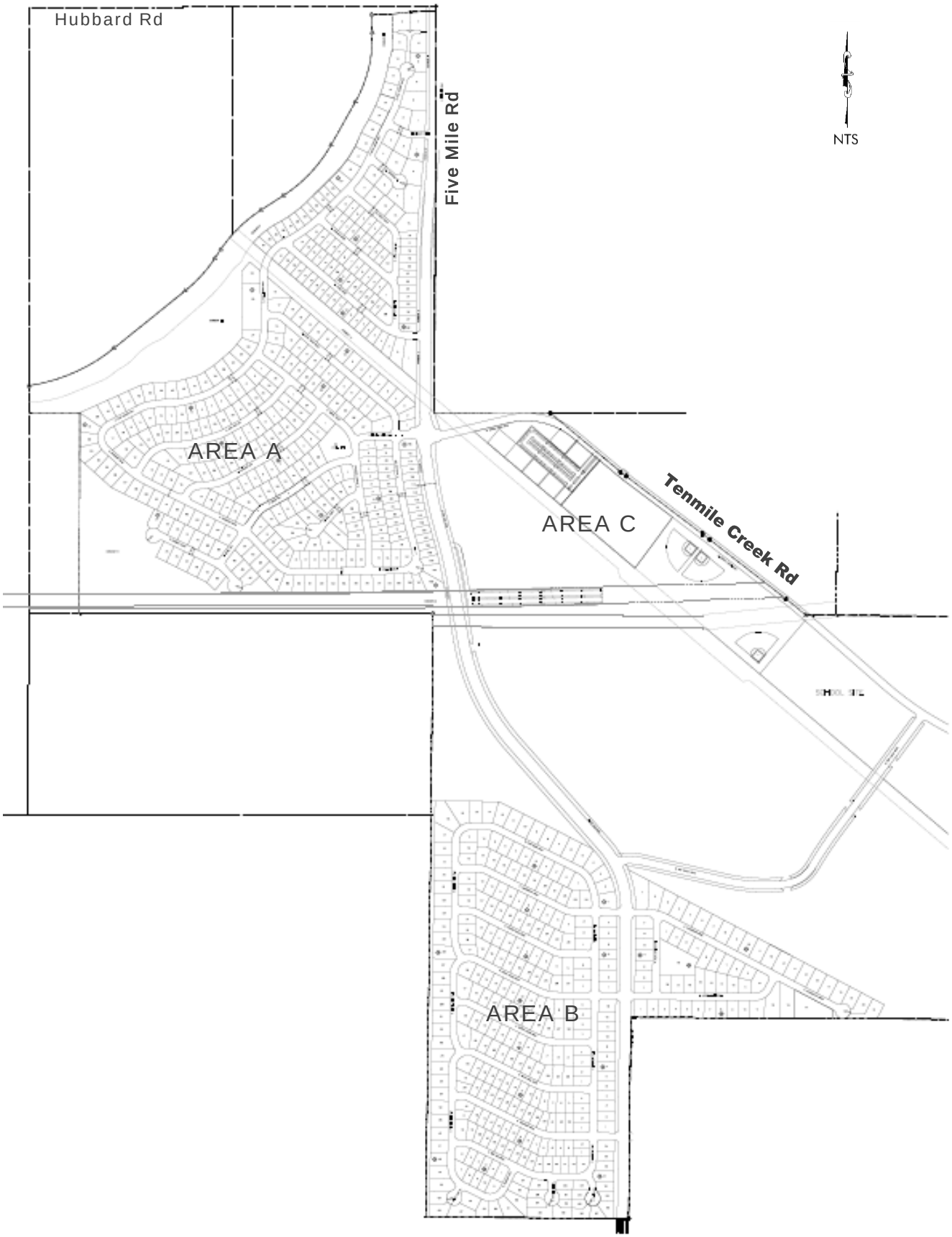


**Figure 1.3 – Phase 1 Preliminary Site Plan**



## 1.2 Study Approach

The TIS was prepared in accordance with ACHD Policy, *Section 7106 – Traffic Impact Studies* and ITD *IDAPA 39.03.42 – Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way*. The scope of this TIS, including the study area, specific parameters, and requirements were determined through coordination with ACHD and ITD with inputs from Community Planning Association of Southwest Idaho (COMPASS) modeling. A scope of work memorandum prepared for ACHD and ITD, including the results from the COMPASS area of influence model runs, is included in the appendix.

## 1.3 Study Area

**Figure 1.3** shows the study area intersections and roadway segments. The following 14 existing intersections were identified by ACHD and ITD for collecting peak hour turning movement counts and conducting traffic impact analysis:

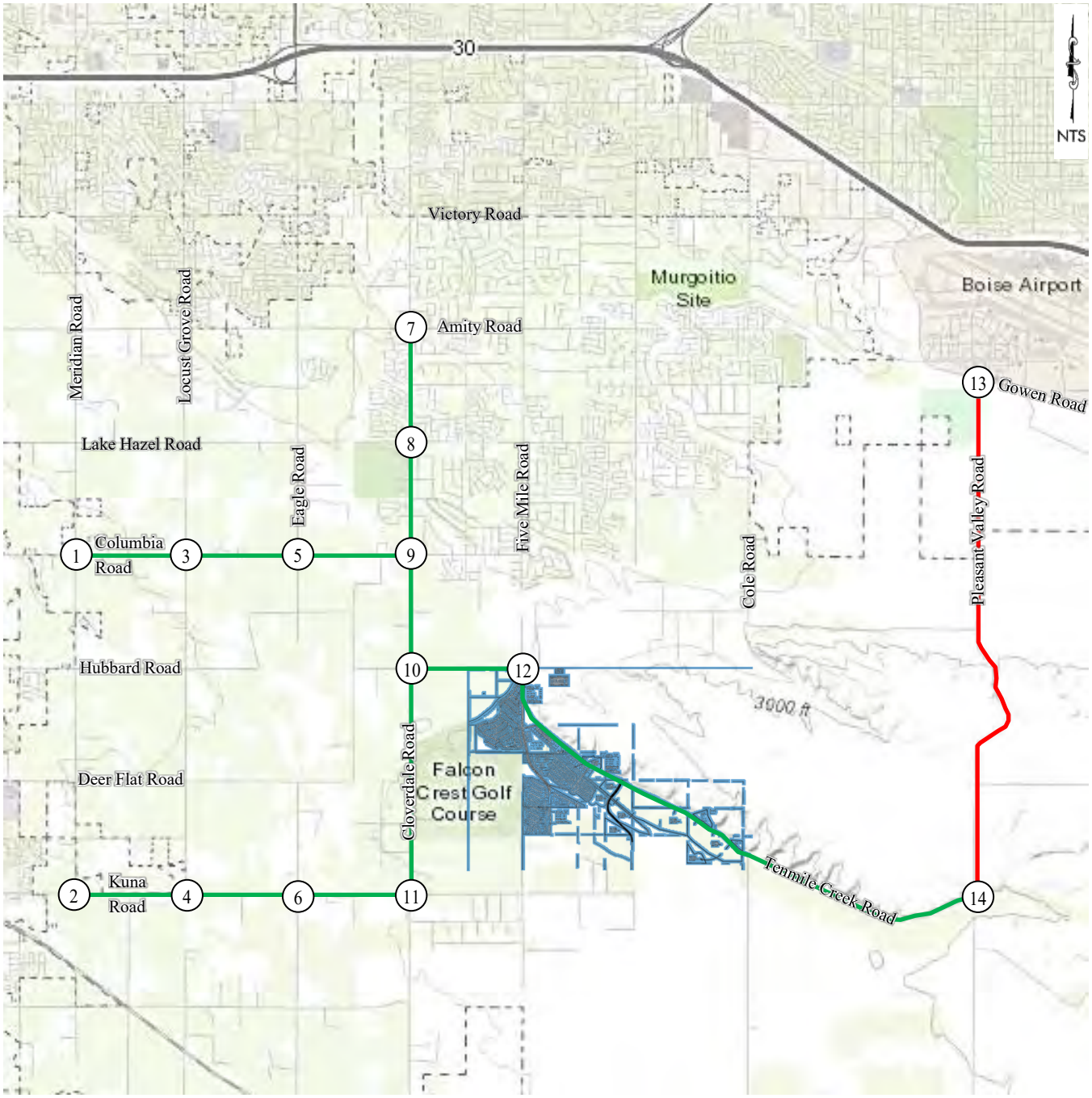
- Columbia Road and Meridian Road
- Kuna Road and Meridian Road
- Columbia Road and Locust Grove Road
- Kuna Road and Locust Grove Road
- Columbia Road and Eagle Road
- Kuna Road and Eagle Road
- Amity Road and Cloverdale Road
- Lake Hazel Road and Cloverdale Road
- Columbia Road and Cloverdale Road
- Hubbard Road and Cloverdale Road
- Kuna Road and Cloverdale Road
- Hubbard Road and Five Mile Road
- Gowen Road and Pleasant Valley Road
- Tenmile Creek Road and Pleasant Valley Road

In addition, major proposed site access intersections are also evaluated.

The following study area roadway segments were identified by ACHD for collecting daily traffic counts and traffic impact analysis:

- Pleasant Valley Road between Gowen Road and Hollilynn Drive
- Pleasant Valley Road between Hollilynn Drive and Ten Mile Creek Road
- Ten Mile Creek Road between Five Mile Road and Pleasant Valley Road
- Five Mile Road between Hubbard Road and Ten Mile Creek Road
- Hubbard Road between Cloverdale Road and Five Mile Road
- Cloverdale Road between Amity Road and Lake Hazel Road
- Cloverdale Road between Lake Hazel Road and Columbia Road
- Cloverdale Road between Columbia Road and Hubbard Road
- Columbia Road between Meridian Road and Locust Grove Road
- Columbia Road between Locust Grove Road and Eagle Road
- Columbia Road between Eagle Road and Cloverdale Road
- Kuna Road between Meridian Road and Locust Grove Road
- Kuna Road between Locust Grove Road and Eagle Road
- Kuna Road between Eagle Road and Cloverdale Road
- All proposed internal collector roadways

**Figure 1.4 – Study Area Roadway and Intersection**



## 1.4 Study Period

The analysis periods are weekday AM and PM peak hours of operation of the transportation system. The analysis years and traffic scenarios are:

- 2019 existing traffic
- 2025 Phase 1 background traffic
- 2025 Phase 1 total traffic
- 2040 Full build-out year background traffic
- 2040 Full build-out year total traffic

## 1.5 Analysis Methods and Performance Measure Thresholds

The study area roadways and intersections fall under ACHD's or ITD's jurisdictions. The operational thresholds of both ACHD and ITD were used to assess the study roadways and intersections.

Roadway segments under ACHD's jurisdiction were evaluated based on the level of service planning thresholds in accordance with Table 2 of ACHD Policy Manual, Section 7106. The roadway segment level of service is based on the maximum peak hour directional volume for different roadway functional classifications, number of through lanes, and left-turn type. The planning level of service is LOS E for principal and minor arterials and LOS D for collector streets.

Intersection capacity analysis was performed using the Synchro 10 (Version 10.3.122.0), which utilizes the HCM 2010 methodologies. All parameters used in the analysis were based on existing data when available or Synchro default values, when not available. Signal timing data for the signalized intersections was obtained from ACHD. The current signal timing data was used for the 2019 existing conditions analysis. For future conditions, the signal timing was optimized in Synchro and adjusted for the intersection lane configuration and traffic conditions. For this TIS, the minimum intersection operational thresholds are v/c ratio of 0.90 for the overall intersection and 1.00 for a lane group. For roundabouts, the v/c ratio threshold is 0.85 for the worst lane group. However, ACHD may allow the maximum v/c ratio to exceed 0.85 to avoid over-building on a case-by-case basis.

The HCM 2010 methodology does not define an overall intersection v/c ratio as a measure of effectiveness (MOE) for signalized intersection. For this study, the overall intersection v/c ratio for signalized intersection was estimated using Synchro based on HCM 2000 methodologies. Neither ACHD nor ITD allow the use of HCM 2000 in the analysis of level of service for traffic impact studies.

## 1.6 Study Assumptions and Limitations

Springrock Subdivision is expected to be developed in multiple phases. At this time, the developer is planning to submit a preliminary plat for Phase 1 only. Preliminary plats for other phases will be submitted in future dates. For this TIS, detailed traffic impacts and mitigation analyses were conducted for the initial Phase 1 developments. For future phases, a planning-level analysis of the study area roadway segments' level of service was evaluated for the full built out of the developments to identify the roadway needs beyond the roadway improvements programmed in the 2016 CIP. ACHD will require a separate TIS for each phase of the development at the time of submission of the preliminary plat.

Detailed site layout for the proposed elementary school was not available at the time of this study. School site checklist per Idaho Code 67-6519(3) will need to be addressed when site plans for the proposed school are available.

# 2.0 EXISTING CONDITIONS

## 2.1 Roadway Network, Intersection Control and Lane Configuration

**Table 2.1** summarizes the study area roadway characteristics. The roadway functional classification is based on COMPASS 2040 Functional Classification Map. **Figure 2.1** summarizes the study area intersection control and lane configuration. The following intersections were adjusted in the analysis:

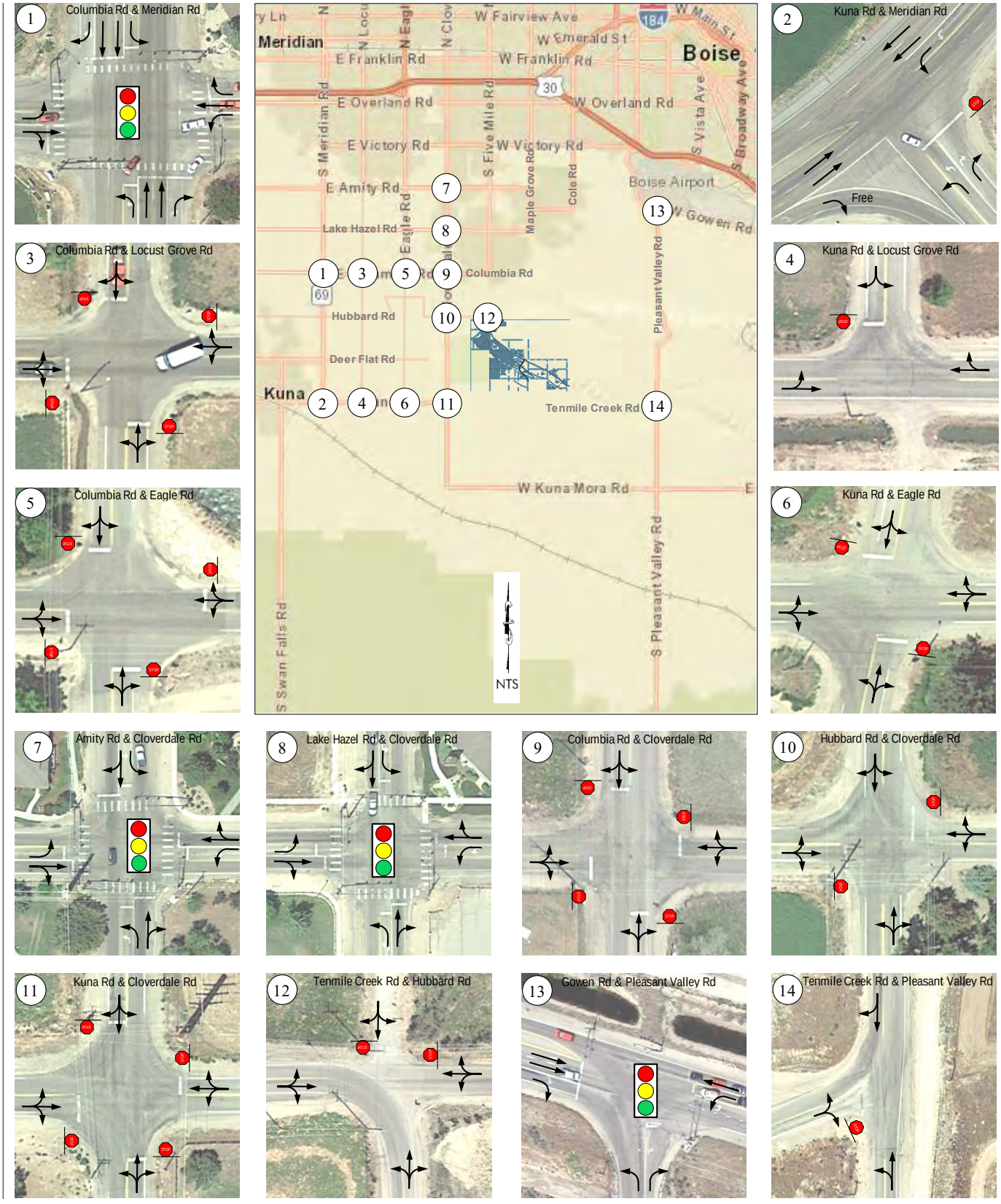
- Locust Grove Road and Kuna Road intersection – The south leg is a private approach providing access for one existing residential dwelling units and was excluded in the analysis.

- Tenmile Creek Road and Hubbard Road intersection – The north and east legs are private approaches. The north leg provides access for one existing residential dwelling units. The east leg provides access for nine existing residential dwelling units. Both of these approaches carry low traffic volumes and are stopped-control. The intersection control orientation is not compliant with the HCM methodology. For this TIS, the southbound and westbound approaches are combined in the analysis. The northbound and eastbound movements are uncontrolled.

**Table 2.1 – Study Area Roadway Characteristics**

| Roadway | Functional Classification | Number of Lanes | Posted Speed Limit (mph) | Pedestrian Facilities |
|---|---|---|---|---|
| Cloverdale Road | Minor Arterial | 2 | 45/50 | Sidewalks along developed frontages |
| Pleasant Valley Road | Minor Arterial (S of Gowen) Principal Arterial | 2/3 | 35/50 | No sidewalks or bicycle lanes |
| Columbia Road | Minor Arterial | 2 | 50 | No sidewalks or bicycle lanes |
| Hubbard Road | Minor Arterial | 2 | 45 | No sidewalks or bicycles lanes |
| Five Mile Road | Minor Arterial | 2 | 35 | No sidewalks or bicycle lanes |
| Tenmile Creek Road | Minor Arterial | 2 | 35 | No sidewalks or bicycle lanes |
| Kuna Road | Minor Arterial (Expressway) | 2 | 35/50 | No sidewalks or bicycle lanes |

**Figure 2.1 – Existing Intersection Control and Lane Configuration**



## 2.2 Existing Traffic Volumes

Weekday AM and PM peak hour traffic counts were obtained at the study intersections in March 2019. The peak hour intersection turning movement counts were collected on a weekday for a 2-hour period at 15-minute intervals between 7:00 and 9:00 during the AM peak travel period hour and between 4:00 and 6:00 during the PM peak travel period. Existing turning movement counts are included in the appendix. **Figure 2.2** and **Figure 2.3** summarize the existing weekday peak hour traffic volumes.

24-hour counts average daily traffic (ADT) were obtained for the study area roadway segments – summarized in **Table 2.2**.

**Table 2.2 – 2019 Existing ADT Summary**

| Roadway | Segment | ADT | Count Date |
|---|---|---|---|
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | 8,678 | 03/05/2019 |
| | Lake Hazel Rd to Columbia Rd | 6,893 | 03/05/2019 |
| | Columbia Rd to Hubbard Rd | 4,743 | 11/28/2018 (ACHD) |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | 8,831 | 03/13-14/2019 |
| | Hollilynn Dr to Tenmile Creek Rd | 5,377 | 03/05/2019 |
| Columbia Rd | Meridian Rd to Locust Grove Rd | 4,122 | 03/05/2019 |
| | Locust Grove Rd to Eagle Rd | 4,212 | 06/05/2018 (ACHD) |
| | Eagle Rd to Cloverdale Rd | 3,905 | 06/05/2018 (ACHD) |
| Hubbard Rd | Five Mile Rd to Cloverdale Rd | 1,934 | 11/28/2018 (ACHD) |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | 1,937 | 03/13-14/2019 |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | 1,937 | 03/13-14/2019 |
| Kuna Rd | Meridian Rd to Locust Grove Rd | 4,482 | 03/05/2019 |
| | Locust Grove Rd to Eagle Rd | 3,725 | 03/5-6/2019 |
| | Eagle Rd to Cloverdale Rd | 3,391 | 01/29/2019 (ACHD) |

**Figure 2.2 – 2019 Existing Weekday AM Peak Hour Traffic**

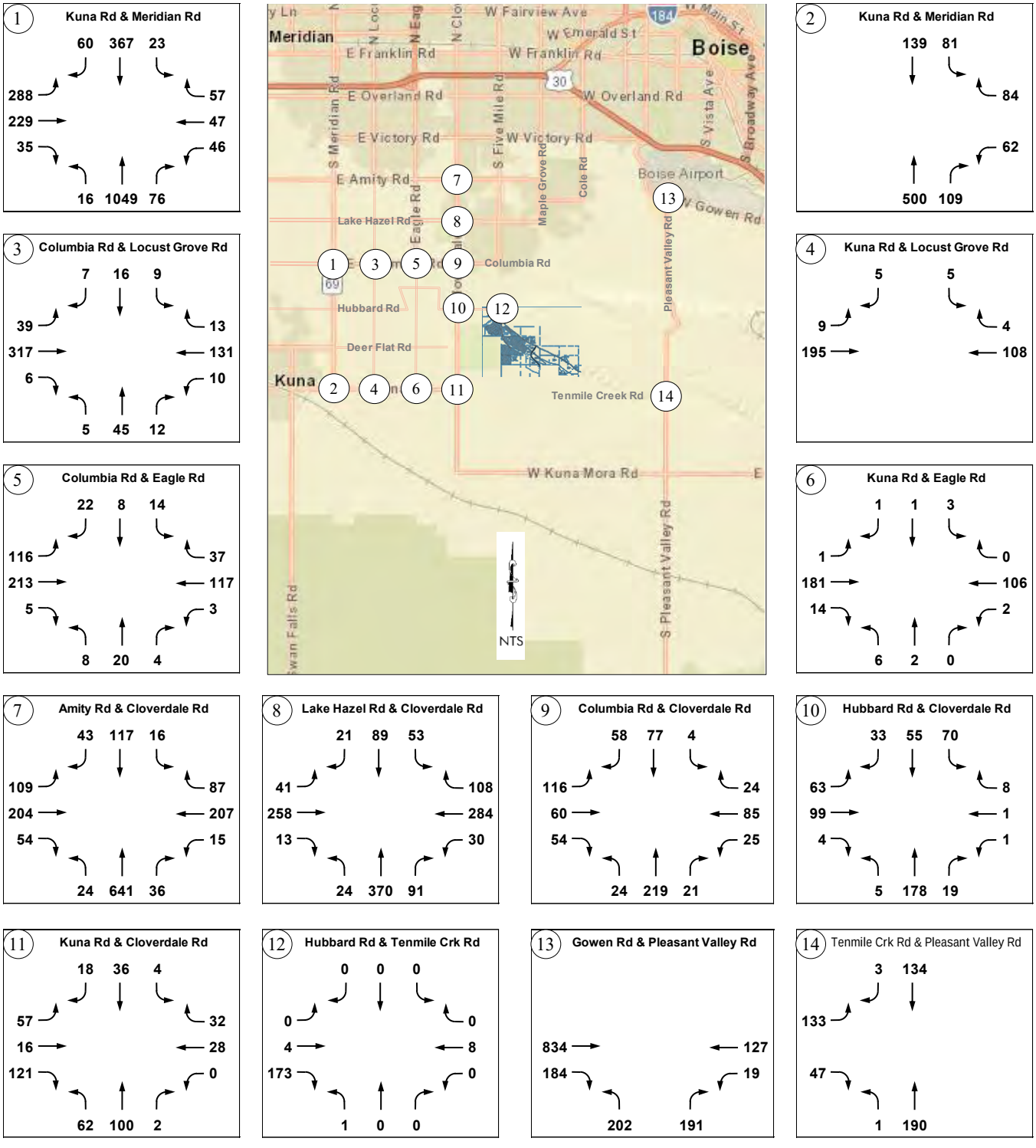
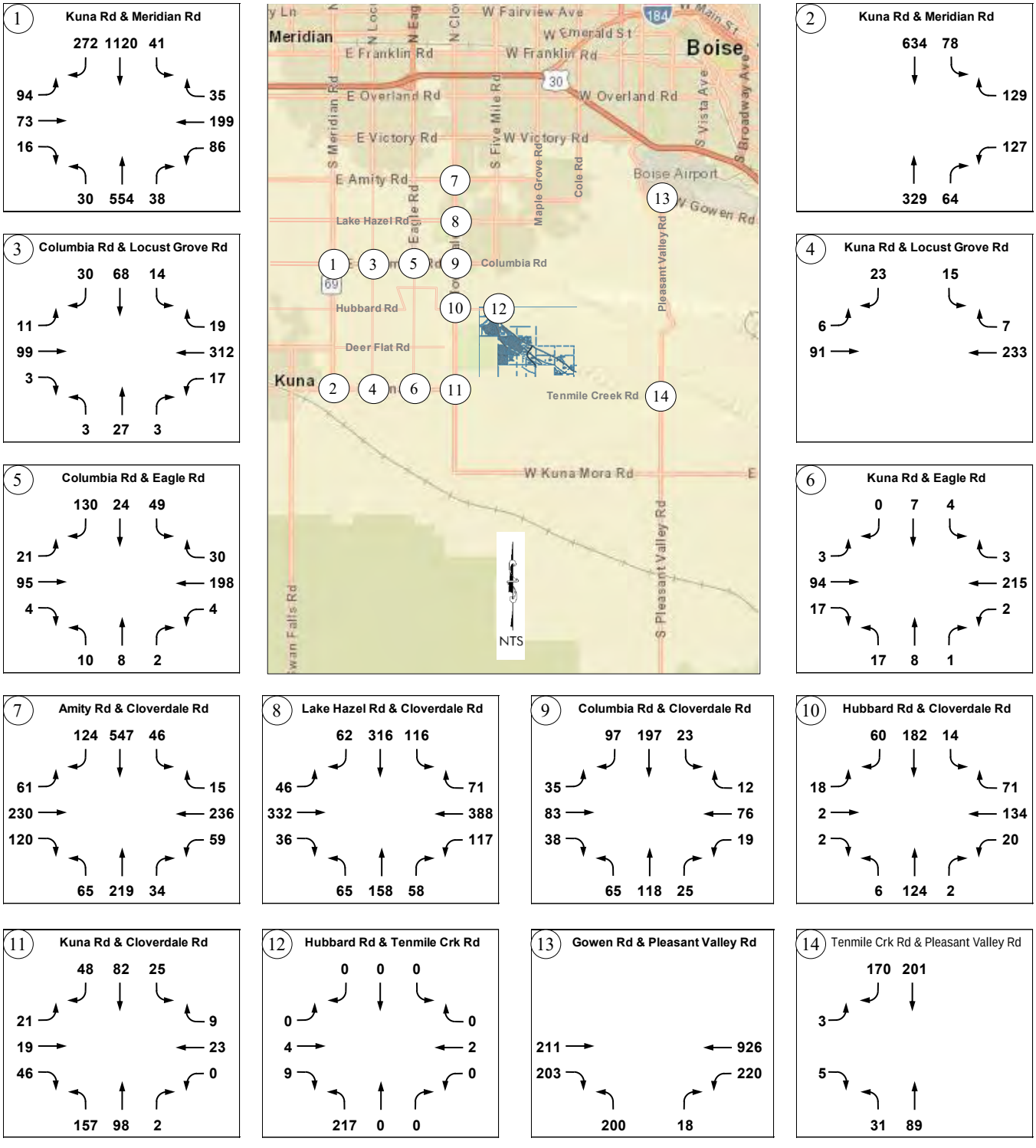


**Figure 2.3 – 2019 Existing Weekday PM Peak Hour Traffic**



## 2.3 Intersection Crash Data

The most current five-year crash data (2013-2017) was obtained from the Local Highway Technical Assistance Council (LHTAC) website (http://gis.lhtac.org/safety). **Table 2.3** summarizes the crash data for the study area intersections. One fatal crash occurred at the Columbia Road and Meridian intersection and Gowen Road and Pleasant Valley Road intersection. The Lake Hazel Road and Cloverdale Road intersection has the highest number of crashes with rear-end (10) and angle/turning (6) as the most common crash types.

**Table 2.3 – Intersection Crash Data (2013-2017)**

| Intersection | | Total Crashes | *Crash Severity* | | | Existing Crash Rate (ACC/MV) |
|---|---|---|---|---|---|---|
| | | | *PDO* | *Injury* | *Fatal* | |
| 1 | Columbia Road and Meridian Road | 19 | *11* | *7* | ***1*** | 0.41 |
| 2 | Kuna Road and Meridian Road | 6 | 5 | 1 | 0 | 0.10 |
| 3 | Columbia Road and Locust Grove Road | 7 | 2 | 5 | 0 | 0.32 |
| 4 | Kuna Road and Locust Grove Road | 2 | 1 | 1 | 0 | 0.29 |
| 5 | Columbia Road and Eagle Road | *No accidents reported at this intersection* | | | | |
| 6 | Kuna Road and Eagle Road | 4 | 1 | 2 | ***1*** | 0.59 |
| 7 | Amity Road and Cloverdale Road | 13 | 10 | 3 | 0 | 0.40 |
| 8 | Lake Hazel Road and Cloverdale Road | 20 | 12 | 8 | 0 | 0.63 |
| 9 | Columbia Road and Cloverdale Road | 8 | 6 | 2 | 0 | 0.56 |
| 10 | Hubbard Road and Cloverdale Road | 7 | 4 | 3 | 0 | 0.60 |
| 11 | Kuna Road and Cloverdale Road | 9 | 4 | 5 | 0 | 0.93 |
| 12 | Hubbard Road and Five Mile Road/Tenmile Creek Road | 1 | 1 | 0 | 0 | 0.24 |
| 13 | Gowen Road and Pleasant Valley Road | 5 | 3 | 1 | ***1*** | 0.15 |
| 14 | Tenmile Creek Road and Pleasant Valley Road | 3 | 3 | 0 | 0 | 0.33 |

## 2.4 Roadway Segment Level of Service

The study area roadway segments are under ACHD jurisdiction and were evaluated based on ACHD's LOS planning thresholds. **Table 2.4** summarizes the roadway segment level of service with the existing number of lanes and 2019 existing traffic. All study area roadway segments currently meet ACHD's LOS planning thresholds, with the exception of one roadway segment:

- Cloverdale Road between Amity Road and Lake Hazel Road

**Table 2.4 – Roadway Segment Level of Service – 2019 Existing Traffic**

| Roadway | Segment | Functional Classification (No. of Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (2) | LOS E 575 | **808** | **726** | **No** |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (2) | LOS E 575 | 489 | 469 | Yes |
| | Columbia Rd to Hubbard Rd | Minor Arterial (2) | LOS E 575 | 264 | 256 | Yes |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | 393 | 423 | Yes |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 323 | 371 | Yes |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 362 | 345 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 338 | 348 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 231 | 238 | Yes |
| Hubbard Rd | Cloverdale Rd to Five Mile Rd | Minor Arterial (2) | LOS E 575 | 188 | 225 | Yes |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (2) | LOS E 575 | 173 | 217 | Yes |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (2) | LOS E 575 | 180 | 201 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 204 | 256 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 200 | 240 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 194 | 228 | Yes |

## 2.5 Intersection Level of Service

To determine the existing traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration and 2019 existing peak hour traffic. Copies of the analysis reports are included in the appendix. **Table 2.5** summarizes the intersection capacity analysis results. The MOEs shown are for the overall intersection and each lane group. All study area intersections currently meet ACHD's or ITD's minimum operational thresholds during the peak hours.

**Table 2.5 – Intersection MOEs – 2019 Existing Traffic**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 1 | Columbia Road and Meridian Road | Signal | Intersection | C | 34 | 0.75 | C | 29 | 0.65 |
| | | | EBL | E | 74 | 0.88 | D | 50 | 0.57 |
| | | | EBTR | E | 55 | 0.82 | E | 55 | 0.36 |
| | | | WBL | D | 51 | 0.32 | D | 48 | 0.34 |
| | | | WBT | D | 54 | 0.21 | E | 65 | 0.83 |
| | | | WBR | D | 55 | 0.30 | D | 54 | 0.17 |
| | | | NBL | B | 14 | 0.03 | B | 18 | 0.16 |
| | | | NBT | C | 24 | 0.64 | B | 19 | 0.34 |
| | | | NBR | B | 16 | 0.10 | B | 16 | 0.05 |
| | | | SBL | B | 18 | 0.11 | B | 14 | 0.10 |
| | | | SBT | B | 16 | 0.21 | C | 24 | 0.63 |
| | | | SBR | B | 15 | 0.02 | B | 19 | 0.34 |
| 2 | Kuna Road and Meridian Road | Stop (Kuna Rd) | WBL | C | 16 | 0.18 | C | 19 | 0.33 |
| | | | WBR | B | 11 | 0.14 | B | 10 | 0.16 |
| | | | NBT | - | - | - | - | - | - |
| | | | NBR | - | - | - | - | - | - |
| | | | SBL | A | 9 | 0.09 | A | 8 | 0.07 |
| | | | SBT | - | - | - | - | - | - |
| 3 | Columbia Road and Locust Grove Road | 4-Way Stop | Intersection | B | 10 | - | B | 10 | - |
| | | | EBLTR | B | 12 | 0.49 | A | 9 | 0.16 |
| | | | WBLTR | A | 9 | 0.22 | B | 11 | 0.45 |
| | | | NBLTR | A | 9 | 0.10 | A | 9 | 0.05 |
| | | | SBLTR | A | 9 | 0.05 | A | 9 | 0.16 |
| 4 | Kuna Road and Locust Grove Road | Stop | EBLT | A | 8 | 0.01 | A | 8 | 0.01 |
| | | | WBTR | - | - | - | - | - | - |
| | | | SBLR | B | 10 | 0.02 | B | 10 | 0.06 |
| 5 | Columbia Road and Eagle Road | 4-Way Stop | Intersection | A | 10 | - | A | 9 | - |
| | | | EBLTR | A | 8 | 0.05 | A | 9 | 0.17 |
| | | | WBLTR | A | 8 | 0.06 | A | 10 | 0.32 |
| | | | NBLTR | B | 11 | 0.42 | A | 8 | 0.03 |
| | | | SBLTR | A | 8 | 0.20 | A | 9 | 0.27 |
| 6 | Kuna Road and Eagle Road | 2-Way Stop | EBLTR | A | 8 | < 0.01 | A | 8 | < 0.01 |
| | | | WBLTR | A | 8 | < 0.01 | A | 8 | < 0.01 |
| | | | NBLTR | B | 11 | 0.02 | B | 11 | 0.05 |
| | | | SBLTR | B | 11 | 0.01 | B | 11 | 0.02 |

**Table 2.5 – Intersection MOEs – 2019 Existing Traffic (continued)**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 7 | Amity Road and Cloverdale Road | Signal | Intersection | D | 36 | 0.82 | C | 34 | 0.77 |
| | | | EBL | C | 32 | 0.62 | C | 29 | 0.24 |
| | | | EBTR | D | 36 | 0.63 | D | 47 | 0.85 |
| | | | WBL | C | 32 | 0.08 | C | 31 | 0.36 |
| | | | WBTR | D | 53 | 0.89 | D | 36 | 0.59 |
| | | | NBL | B | 16 | 0.24 | C | 23 | 0.41 |
| | | | NBTR | D | 36 | 0.87 | B | 19 | 0.33 |
| | | | SBL | C | 24 | 0.13 | B | 15 | 0.09 |
| | | | SBTR | C | 22 | 0.29 | C | 34 | 0.85 |
| 8 | Lake Hazel Road and Cloverdale Road | Signal | Intersection | C | 29 | 0.73 | C | 26 | 0.72 |
| | | | EBL | C | 22 | 0.22 | B | 20 | 0.20 |
| | | | EBTR | C | 25 | 0.51 | C | 26 | 0.68 |
| | | | WBL | B | 20 | 0.11 | B | 19 | 0.37 |
| | | | WBTR | C | 32 | 0.82 | C | 26 | 0.78 |
| | | | NBL | B | 19 | 0.06 | C | 22 | 0.17 |
| | | | NBTR | C | 33 | 0.78 | C | 28 | 0.56 |
| | | | SBL | C | 22 | 0.26 | C | 21 | 0.34 |
| | | | SBTR | C | 22 | 0.21 | C | 29 | 0.74 |
| 9 | Columbia Road and Cloverdale Road | 4-Way Stop | Intersection | B | 11 | - | B | 11 | - |
| | | | EBLTR | B | 12 | 0.38 | B | 11 | 0.26 |
| | | | WBLTR | B | 10 | 0.22 | A | 10 | 0.19 |
| | | | NBLTR | B | 12 | 0.42 | B | 11 | 0.33 |
| | | | SBLTR | A | 10 | 0.23 | B | 12 | 0.48 |
| 10 | Hubbard Road and Cloverdale Road | 2-Way Stop | EBLTR | C | 17 | 0.37 | C | 17 | 0.08 |
| | | | WBLTR | B | 10 | 0.02 | C | 16 | 0.45 |
| | | | NBLTR | A | 7 | < 0.01 | A | 8 | 0.01 |
| | | | SBLTR | A | 8 | 0.06 | A | 8 | 0.01 |
| 11 | Kuna Road and Cloverdale Road | 4-Way Stop | Intersection | A | 9 | - | A | 9 | - |
| | | | EBLTR | A | 9 | 0.26 | A | 8 | 0.12 |
| | | | WBLTR | A | 8 | 0.08 | A | 8 | 0.05 |
| | | | NBLTR | A | 9 | 0.24 | A | 10 | 0.34 |
| | | | SBLTR | A | 8 | 0.08 | A | 9 | 0.20 |
| 12 | Hubbard Road and Tenmile Creek Rd | 2-Way Stop | EBLTR | Low volume on minor approach resulting in no reported MOEs in Synchro outputs. Meet minimum operation thresholds. | | | | | |
| | | | WBLTR | | | | | | |
| | | | NBLTR | | | | | | |
| | | | SBLTR | | | | | | |
| 13 | Gowen Road and Pleasant Valley Road | Signal | Intersection | C | 21 | 0.58 | B | 17 | 0.84 |
| | | | EBT | B | 11 | 0.52 | A | 9 | 0.15 |
| | | | EBR | A | 2 | 0.15 | A | 4 | 0.19 |
| | | | WBL | A | 8 | 0.06 | A | 6 | 0.33 |
| | | | WBT | A | 5 | 0.12 | B | 13 | 0.77 |
| | | | NBL | D | 53 | 0.83 | E | 67 | 0.89 |
| | | | NBR | E | 59 | 0.88 | D | 42 | 0.09 |
| 14 | Tenmile Creek Road and Pleasant Valley Road | Stop (Tenmile) | EBLR | B | 13 | 0.30 | B | 11 | 0.02 |
| | | | NBLT | A | 8 | < 0.01 | A | 9 | 0.04 |
| | | | SBTR | - | - | - | - | - | - |

## 2.6 Roadway Segment Mitigation

Cloverdale Road Between Amity Road and Lake Hazel Road

The Cloverdale Road segment between Amity Road and Lake Hazel Road currently exceeds ACHD's LOS planning thresholds as a two-lane minor arterial. However, both the Amity Road and Lake Hazel Road intersections on Cloverdale Road currently meet ACHD's minimum operational thresholds with one through lane in each direction on Cloverdale Road. As a result, no capacity improvements are recommended on this Cloverdale Road segment to mitigate 2019 existing traffic.

## 2.7 Intersection Mitigation

All study area intersections currently meet minimum operational thresholds. As a result, no intersection control or capacity are proposed to mitigate 2019 existing traffic. Two study area intersections meet ACHD's turn-lane guidelines. The intersections and proposed turn lanes are discussed below:

Hubbard Road and Cloverdale Road Intersection

The Hubbard Road and Cloverdale Road intersection currently meets ACHD's minimum operational thresholds. However, based on ACHD's turn-lane guidelines, the following turn lane is warranted:

- Southbound right-turn lane

Tenmile Creek Road and Pleasant Valley Road

The Tenmile Creek Road and Pleasant Valley Road intersection currently meets ACHD's minimum operational thresholds. However, the following turn lane is warranted based on ACHD's turn-lane guidelines:

- Southbound right-turn lane

According to the current transportation plans, there are no improvements programmed at either of these intersections.

# 3.0 2025 PHASE 1 BACKGROUND TRAFFIC CONDITIONS

## 3.1 Roadway Network

The study area roadways and intersections are expected to remain the same as the existing conditions with the exception of the intersection improvements needed to mitigate 2019 existing traffic as discussed in the previous section. These preceding intersection improvements were included in the 2025 background traffic impact analysis.

There are roadway and intersection improvements planned within the study area based on ACHD's transportation plans. **Table 3.1** summarizes intersection improvements planned within the study area. **Table 3.2** summarizes roadway improvements planned within the study area. These planned roadway and intersection improvements are considered to mitigate 2025 background traffic impacts if necessary.

Additionally, ITD is currently conducting a corridor study on Meridian Road and the results and recommendations are expected to be published in 2020. ACHD is also conducting a signal timing study on the Meridian Road corridor.

**Table 3.1 – Planned Roadway Improvements Summary**

| Transportation Plan | Project | Project Year | Funding |
|---|---|---|---|
| ACHD 2019-2023 IFYWP | **Cloverdale Road**<br>Widen to 5 lanes with curb, gutter, multi-use paths from Victory Road to Lake Hazel Road | Unknown | Unfunded |
| | **Lake Hazel Road**<br>Widen to 5 lanes with curb, gutter, multi-use paths from Eagle Road to Five Mile Road | Preliminary Development | Programmed |
| ACHD 2016 CIP | **Amity Road - Eagle Road to Cloverdale Road**<br>Reconstruct/widen - two to three lanes | 2026-2030 | Unfunded |
| | **Cloverdale Road - Victory Road to Lake Hazel Road**<br>Reconstruct/widen - two to five lanes | 2021-2025 | Unfunded |
| | **Cloverdale Road - Lake Hazel Road to Columbia Road**<br>Reconstruct/widen - two to five lanes | 2026-2030 | Unfunded |
| | **Cloverdale Road - Columbia Road to Kuna Road**<br>Reconstruct/widen - two to three lanes | 2031-2035 | Unfunded |
| | **Lake Hazel Road - Eagle Road to Cloverdale Road**<br>Reconstruct/widen - two to three lanes | 2021-2025 | Unfunded |
| | **Lake Hazel Road - Cloverdale Road to Five Mile Road**<br>Reconstruct/widen - two to five lanes | 2021-2025 | Unfunded |
| | **Pleasant Valley Extension – Orchard Ext. to Pleasant Valley Road**<br>New Road. Construct new 5-lane roadway | 2031-2035 | Unfunded |

**Table 3.2 – Planned Intersection Improvement Summary**

| Transportation Plan | Project | Project Year | Funding |
|---|---|---|---|
| ACHD 2019-2023 FYWP | **Lake Hazel Road and Cloverdale Road intersection** Widen intersection to 5 lanes on all approaches | Unknown | Unfunded |
| | **Amity Road and Cloverdale Road intersection** Install a multi-lane roundabout | Preliminary Development | Programmed |
| ACHD 2016 CIP | **Amity Road and Cloverdale Road intersection** Construct a multi-lane roundabout with 2 lanes for Cloverdale Road approaches and 1 lane for Amity Road approaches | 2021-2025 | Unfunded |
| | **Columbia Road and Cloverdale Road intersection** Construct a single-lane roundabout with a westbound right-turn bypass lane | 2026-2030 | Unfunded |
| | **Kuna Road and Cloverdale Road intersection** Construct a single-lane roundabout | 2031-2035 | Unfunded |
| | **Lake Hazel Road and Cloverdale Road intersection** Reconstruct/widen approaches for dual left-turn lanes on Lake Hazel approaches, two through lanes on Cloverdale and eastbound Lake Hazel approaches, and an exclusive westbound right-turn lane | 2031-2035 | Unfunded |
| | **Lake Hazel Road Extension and Pleasant Valley Road Intersection:** Single-lane Roundabout | Unknown | Unfunded |
| ITD FY19-25 STIP | None | | |

## 3.2 Background Traffic

2025 background traffic was estimated by extrapolating the 2019 existing traffic counts with the following annual growth rates:

- Meridian Road – 3%
- Locust Grove Road – 10%
- Cloverdale Road – 8%
- Five Mile Road – 2%
- Pleasant Valley Road – 3%
- Amity Road – 4%
- Gowen Road – 2%
- Lake Hazel Road – 5%
- Columbia Road – 5%
- Hubbard Road – 10%
- Kuna Road – 8%
- Tenmile Creek Road – 6%

These growth rates are based on COMPASS forecasts assumed to account for all of the entitled off-site developments in area. Falcon Crest Subdivision developments beyond Phase 1 are not entitled and were included in the background traffic as off-site traffic. **Figure 3.1** and **Figure 3.2** summarizes 2025 weekday peak hour background traffic.

**Figure 3.1 – 2025 Phase 1 AM Peak Hour Background Traffic**

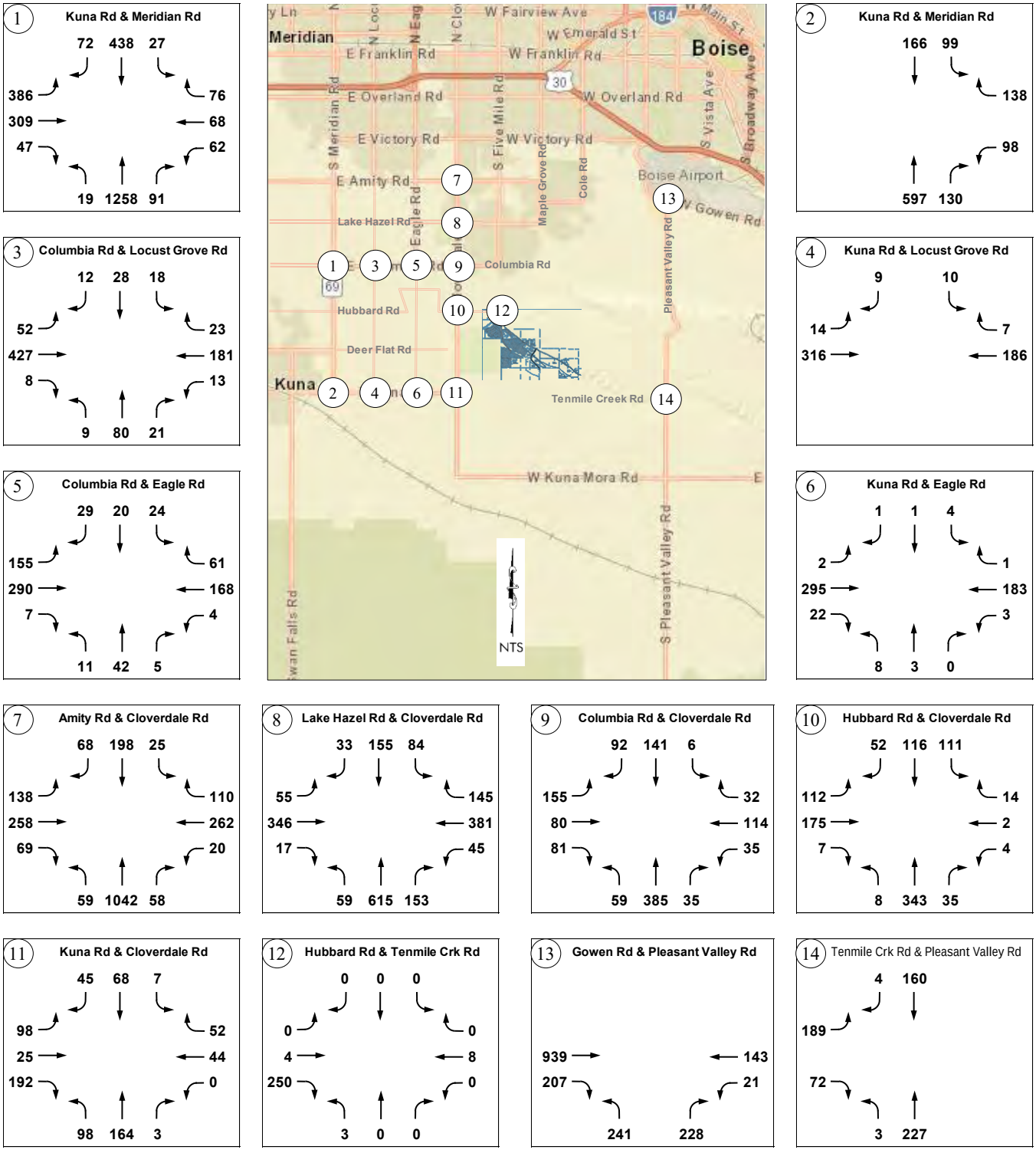
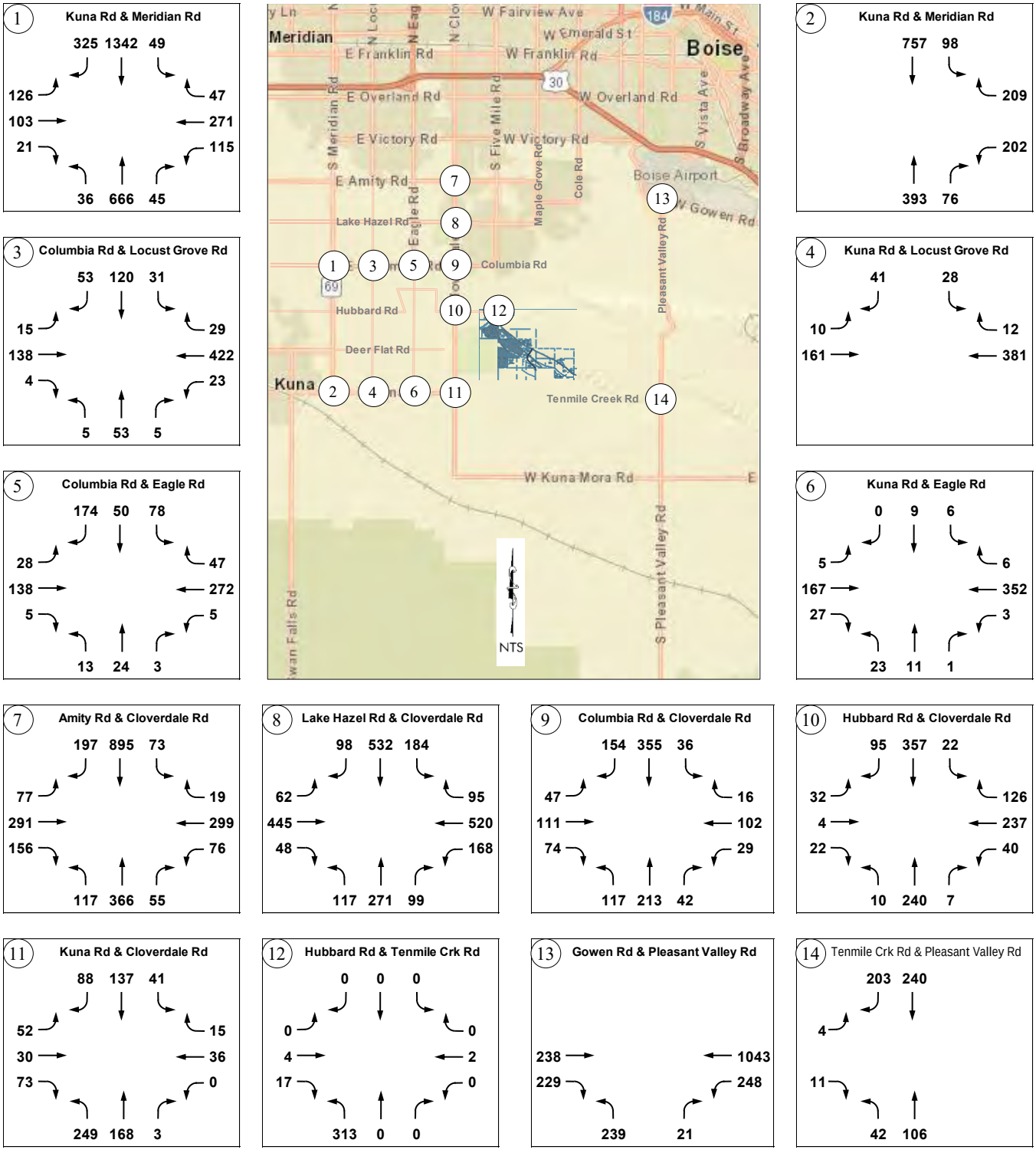


**Figure 3.2 – 2025 Phase 1 PM Peak Hour Background Traffic**



## 3.3 Roadway Segment Level of Service

The study area roadway segments were evaluated based on ACHD's LOS planning thresholds. **Table 3.3** summarizes the roadway segment level of service with the existing number of lanes and 2025 background traffic. All study area roadway segments are expected to meet ACHD's LOS planning thresholds, with the exception of two roadway segments:

- Cloverdale Road between Amity Road and Lake Hazel Road
- Cloverdale Road between Lake Hazel Road and Columbia Road

**Table 3.3 – Roadway Segment Level of Service – 2025 Phase 1 Background Traffic**

| Roadway | Segment | Functional Classification (No. of Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (2) | LOS E 575 | **1,310** | **1,127** | **No** |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (2) | LOS E 575 | **812** | **748** | **No** |
| | Columbia Rd to Hubbard Rd | Minor Arterial (2) | LOS E 575 | 479 | 474 | Yes |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | 505 | 566 | Yes |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 275 | 490 | Yes |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 487 | 480 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 466 | 474 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 319 | 373 | Yes |
| Hubbard Rd | Cloverdale Rd to Five Mile Rd | Minor Arterial (2) | LOS E 575 | 321 | 403 | Yes |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (2) | LOS E 575 | 250 | 313 | Yes |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (2) | LOS E 575 | 261 | 245 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 330 | 422 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 326 | 393 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 315 | 373 | Yes |

## 3.4 Intersection Level of Service

To determine the 2025 background traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2019 existing traffic. Copies of the analysis reports are included in the appendix. **Table 3.4** summarizes the intersection capacity analysis results. All study area intersections are expected to meet ITD's or ACHD's minimum operational thresholds, with the exception of six intersections:

- Columbia Road and Meridian Road intersection
- Amity Road and Cloverdale Road intersection
- Lake Hazel Road and Cloverdale Road intersection
- Columbia Road and Cloverdale Road intersection
- Hubbard Road and Cloverdale Road intersection
- Gowen Road and Pleasant Valley Road intersection

**Table 3.4 – Intersection MOEs – 2025 Phase 1 Background Traffic**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 1 | Columbia Road and Meridian Road | Signal | Intersection | D | 46 | **0.92** | C | 35 | 0.78 |
| | | | EBL | F | 95 | 0.99 | E | 78 | 0.82 |
| | | | EBTR | E | 61 | 0.86 | D | 51 | 0.38 |
| | | | WBL | D | 52 | 0.43 | D | 50 | 0.43 |
| | | | WBT | D | 55 | 0.25 | E | 70 | 0.87 |
| | | | WBR | E | 56 | 0.34 | D | 50 | 0.18 |
| | | | NBL | B | 18 | 0.05 | C | 25 | 0.27 |
| | | | NBT | D | 38 | 0.84 | C | 22 | 0.41 |
| | | | NBR | C | 21 | 0.14 | B | 17 | 0.06 |
| | | | SBL | C | 28 | 0.21 | B | 16 | 0.14 |
| | | | SBT | C | 22 | 0.28 | C | 31 | 0.78 |
| | | | SBR | B | 20 | 0.10 | C | 23 | 0.42 |
| 2 | Kuna Road and Meridian Road | Stop (Kuna Rd) | WBL | C | 20 | 0.32 | D | 32 | 0.63 |
| | | | WBR | B | 12 | 0.23 | B | 11 | 0.28 |
| | | | NBT | - | - | - | - | - | - |
| | | | NBR | - | - | - | - | - | - |
| | | | SBL | A | 9 | 0.12 | A | 9 | 0.09 |
| | | | SBT | - | - | - | - | - | - |
| 3 | Columbia Road and Locust Grove Road | 4-Way Stop | Intersection | C | 16 | -- | B | 15 | -- |
| | | | EBLTR | C | 20 | 0.71 | B | 10 | 0.25 |
| | | | WBLTR | B | 11 | 0.34 | C | 19 | 0.69 |
| | | | NBLTR | B | 10 | 0.20 | A | 10 | 0.11 |
| | | | SBLTR | A | 10 | 0.11 | B | 12 | 0.34 |
| 4 | Kuna Road and Locust Grove Road | Stop | EBLT | A | 8 | 0.01 | A | 8 | 0.01 |
| | | | WBTR | - | - | - | - | - | - |
| | | | SBLR | B | 11 | 0.04 | B | 12 | 0.13 |
| 5 | Columbia Road and Eagle Road | 4-Way Stop | Intersection | B | 12 | - | B | 12 | - |
| | | | EBLTR | B | 14 | 0.60 | B | 11 | 0.28 |
| | | | WBLTR | A | 10 | 0.31 | B | 13 | 0.49 |
| | | | NBLTR | A | 9 | 0.10 | A | 9 | 0.07 |
| | | | SBLTR | A | 9 | 0.12 | B | 12 | 0.45 |
| 6 | Kuna Road and Eagle Road | 2-Way Stop | EBLTR | A | 8 | < 0.01 | A | 8 | 0.01 |
| | | | WBLTR | A | 8 | < 0.01 | A | 8 | < 0.01 |
| | | | NBLTR | B | 13 | 0.03 | B | 15 | 0.09 |
| | | | SBLTR | B | 13 | 0.01 | B | 14 | 0.04 |
| 7 | Amity Road and Cloverdale Road | Signal | Intersection | **F** | **99** | **1.22** | **F** | **110** | **1.13** |
| | | | EBL | **F** | 189 | **1.19** | D | 43 | 0.42 |
| | | | EBTR | E | 64 | 0.83 | **F** | 114 | **1.07** |
| | | | WBL | D | 45 | 0.16 | E | 79 | 0.81 |
| | | | WBTR | **F** | 122 | **1.07** | D | 53 | 0.72 |
| | | | NBL | B | 15 | 0.36 | **F** | 175 | **1.16** |
| | | | NBTR | **F** | 128 | **1.19** | C | 24 | 0.50 |
| | | | SBL | D | 38 | 0.32 | B | 19 | 0.18 |
| | | | SBTR | C | 21 | 0.33 | **F** | 164 | **1.26** |

**Table 3.4 – Intersection MOEs – 2025 Phase 1 Background Traffic (continued)**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 8 | Lake Hazel Road and Cloverdale Road | Signal | Intersection | D | 53 | **0.95** | D | 44 | **0.95** |
| | | | EBL | E | 77 | 0.57 | E | 57 | 0.43 |
| | | | EBTR | D | 37 | 0.59 | D | 53 | 0.88 |
| | | | WBL | D | 50 | 0.20 | D | 39 | 0.75 |
| | | | WBTR | E | 56 | 0.88 | D | 36 | 0.82 |
| | | | NBL | C | 22 | 0.08 | E | 65 | 0.49 |
| | | | NBTR | E | 68 | 0.99 | D | 47 | 0.75 |
| | | | SBL | E | 56 | 0.75 | C | 32 | 0.64 |
| | | | SBTR | B | 18 | 0.23 | D | 45 | 0.88 |
| 9 | Columbia Road and Cloverdale Road | 4-Way Stop | Intersection | E | 36 | - | E | 47 | - |
| | | | EBLTR | D | 26 | 0.70 | C | 19 | 0.54 |
| | | | WBLTR | C | 17 | 0.43 | C | 16 | 0.37 |
| | | | NBLTR | **F** | 60 | 0.97 | D | 30 | 0.79 |
| | | | SBLTR | C | 18 | 0.53 | **F** | 80 | **1.05** |
| 10 | Hubbard Road and Cloverdale Road | 2-Way Stop | EBLTR | **F** | 135 | **1.14** | **F** | 186 | 0.92 |
| | | | WBLTR | C | 18 | 0.07 | **F** | 167 | **1.25** |
| | | | NBLTR | A | 8 | 0.01 | A | 8 | 0.01 |
| | | | SBLTR | A | 9 | 0.11 | A | 8 | 0.02 |
| 11 | Kuna Road and Cloverdale Road | 4-Way Stop | Intersection | B | 12 | -- | B | 13 | -- |
| | | | EBLTR | B | 13 | 0.48 | B | 11 | 0.26 |
| | | | WBLTR | A | 9 | 0.16 | A | 10 | 0.09 |
| | | | NBLTR | B | 13 | 0.44 | C | 16 | 0.62 |
| | | | SBLTR | A | 10 | 0.20 | B | 11 | 0.39 |
| 12 | Hubbard Road and Tenmile Creek Rd | 2-Way Stop | EBLTR | Low volume on minor approach resulting in no reported MOEs in Synchro outputs. Expected to meet minimum operation thresholds. | | | | | |
| | | | WBLTR | | | | | | |
| | | | NBLTR | | | | | | |
| | | | SBLTR | | | | | | |
| 13 | Gowen Road and Pleasant Valley Road | Signal | Intersection | C | 22 | 0.66 | C | 23 | **0.95** |
| | | | EBT | B | 15 | 0.61 | B | 11 | 0.18 |
| | | | EBR | A | 2 | 0.17 | A | 4 | 0.22 |
| | | | WBL | B | 10 | 0.08 | A | 7 | 0.40 |
| | | | WBT | A | 6 | 0.13 | C | 22 | 0.89 |
| | | | NBL | D | 48 | 0.84 | E | 75 | 0.91 |
| | | | NBR | D | 52 | 0.89 | D | 40 | 0.09 |
| 14 | Tenmile Creek Road and Pleasant Valley Road | Stop (Tenmile) | EBLR | C | 15 | 0.46 | A | 9 | 0.04 |
| | | | NBLT | A | 8 | < 0.01 | B | 10 | 0.02 |
| | | | SBTR | - | - | - | - | - | - |

## 3.5 Roadway Segment Mitigation

Cloverdale Road between Amity Road and Lake Hazel Road

The Cloverdale Road segment between Amity Road and Lake Hazel Road is expected to exceed ACHD's LOS planning thresholds as a 2-lane minor arterial with 2025 background traffic. Based on the intersection improvements discussed below, the Cloverdale Road approaches are expected to need two through lanes in each direction. As a result, this Cloverdale Road segment is recommended to be widened to five lanes to mitigate 2025 background traffic impacts.

Cloverdale Road is programmed in the 2019-2023 IFYWP to be widened to five lanes from Victory Road to Lake Hazel Road.

Cloverdale Road between Lake Hazel Road and Columbia Road

The Cloverdale Road segment between Lake Hazel Road and Columbia Road is expected to exceed ACHD's LOS planning thresholds for a 2-lane minor arterial with 2025 background traffic. Based on the intersection improvements discussed below, Cloverdale Road is not expected to need two through lanes in each direction. As a result, no capacity improvements for this Cloverdale Road segment are recommended to mitigate 2025 background traffic impacts.

## 3.6 Intersection Mitigation

Six study area intersections are expected to exceed minimum operational thresholds with 2025 background traffic. The proposed intersection improvements discussed below are expected to mitigate 2025 background traffic impacts. **Table 3.5** summarizes the analysis results for the proposed mitigations.

Columbia Road and Meridian Road Intersection

The Columbia Road and Meridian Road intersection is expected to only exceed 0.90 overall intersection v/c ratio during the AM peak hour. All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours. As a result, no improvements are proposed to mitigate 2025 background traffic impacts.

Amity Road and Cloverdale Road Intersection

The Amity Road and Cloverdale Road intersection is expected to exceed ACHD's minimum operational thresholds with 2025 background traffic as a signalized intersection with the existing lane configuration. Two improvement options are proposed to mitigate 2025 background traffic impacts:

- Option 1 – widen Cloverdale Road approaches to have two thru lanes and signal modifications
  - Cloverdale Road is programmed in the 2019-2023 IFYWP to be widened to five lanes from Victory Road to Lake Hazel Road.
- Option 2 – reconstruction the intersection as a multi-lane roundabout
  - The Amity Road and Cloverdale Road intersection is programmed in the 2019-2023 IFYWP to be reconstructed as a multi-lane roundabout

Lake Hazel Road and Cloverdale Road Intersection

The Lake Hazel Road and Cloverdale Road intersection is expected to only exceed 0.90 overall intersection v/c ratio during the peak hours with optimized signal timing. All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours. As a result, no capacity improvements are proposed to mitigate 2025 background traffic impacts.

Columbia Road and Cloverdale Road Intersection

The Columbia Road and Cloverdale Road intersection is expected to exceed ACHD's minimum operational thresholds with 2025 background traffic as an unsignalized intersection. Based on the projected 2025 background traffic, the intersection is expected to meet warrants for a signal. Two improvement options are proposed to mitigate 2025 background traffic impacts:

- Option 1 – Signal with left-turn lanes on all approaches
  - The intersection is expected to meet MUTCD preliminary signal Warrants 1 and 2 (8 and 4-hour vehicular volume)
- Option 2 – reconstruction the intersection as a single-lane roundabout
  - The Columbia Road and Cloverdale Road intersection is programmed in the 2016 CIP to be reconstructed as a single-lane roundabout between 2026 and 2030 timeframe

Hubbard Road and Cloverdale Road Intersection

The Hubbard Road and Cloverdale Road intersection is expected to exceed ACHD's minimum operational thresholds as an unsignalized intersection. Based on the projected 2025 background traffic, the intersection is expected to meet warrants for a signal. Two improvement options are proposed to mitigate 2025 background traffic impacts:

- Option 1 – Signal with left-turn lanes on all approaches
  - The intersection is expected to meet MUTCD preliminary signal Warrants 1 and 2 (8 and 4-hour vehicular volume)
- Option 2 – Single-lane roundabout

There are no improvements programmed at the intersection according to ACHD's transportation plans. The intersection is listed as a single-lane roundabout in MSM.

Gowen Road and Pleasant Valley Road Intersection

The Gowen Road and Pleasant Valley Road intersection is expected to only exceed 0.90 overall intersection v/c ratio during the PM peak hour. All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours. As a result, no improvements are proposed to mitigate 2025 background traffic impacts.

**Table 3.5 – Intersection MOEs – 2025 Phase 1 Background Traffic Mitigation**

| Intersection | | Mitigation | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 7 | Amity Road and Cloverdale Road | Signal with 2 thru lanes on Cloverdale Rd | Intersection | C | 33 | 0.79 | D | 38 | 0.81 |
| | | | EBL | C | 34 | 0.66 | C | 28 | 0.28 |
| | | | EBTR | C | 35 | 0.64 | D | 47 | 0.86 |
| | | | WBL | C | 32 | 0.09 | C | 33 | 0.46 |
| | | | WBTR | D | 49 | 0.88 | D | 36 | 0.60 |
| | | | NBL | B | 19 | 0.39 | C | 30 | 0.68 |
| | | | NBTR | C | 31 | 0.76 | C | 25 | 0.31 |
| | | | SBL | C | 31 | 0.76 | C | 25 | 0.32 |
| | | | SBTR | C | 25 | 0.15 | C | 22 | 0.18 |
| | | Multi-lane roundabout | Intersection | C | 18 | - | B | 14 | - |
| | | | EBTL | A | 6 | 0.23 | C | 18 | 0.53 |
| | | | EBTR | A | 6 | 0.24 | C | 16 | 0.52 |
| | | | WBTL | D | 0.31 | 0.62 | A | 8 | 0.25 |
| | | | WBTR | D | 26 | 0.60 | A | 7 | 0.26 |
| | | | NBTL | C | 21 | 0.78 | A | 8 | 0.31 |
| | | | NBTR | C | 22 | 0.81 | A | 7 | 0.33 |
| | | | SBTL | A | 6 | 0.19 | C | 18 | 0.70 |
| | | | SBTR | A | 6 | 0.19 | C | 18 | 0.72 |
| 9 | Columbia Road and Cloverdale Road | Single-lane roundabout | Intersection | A | 7 | - | A | 8 | - |
| | | | EBLTR | A | 6 | 0.31 | A | 7 | 0.29 |
| | | | WBLTR | A | 8 | 0.27 | A | 6 | 0.17 |
| | | | NBLTR | A | 9 | 0.49 | A | 7 | 0.37 |
| | | | SBLTR | A | 6 | 0.24 | B | 11 | 0.57 |
| | | Signal | Intersection | A | 6 | 0.32 | A | 8 | 0.31 |
| | | | EBL | A | 9 | 0.29 | A | 6 | 0.18 |
| | | | EBTR | A | 10 | 0.51 | A | 7 | 0.38 |
| | | | WBL | A | 6 | 0.25 | B | 11 | 0.59 |
| | | | WBTR | B | 11 | 0.54 | B | 11 | 0.59 |
| | | | NBL | B | 12 | 0.35 | B | 16 | 0.15 |
| | | | NBTR | A | 10 | 0.36 | B | 17 | 0.60 |
| | | | SBL | B | 11 | 0.08 | B | 18 | 0.11 |
| | | | SBTR | A | 10 | 0.32 | B | 15 | 0.37 |
| 10 | Hubbard Road and Cloverdale Road | Single-lane roundabout | Intersection | A | 7 | - | A | 8 | - |
| | | | EBLTR | A | 6 | 0.30 | A | 5 | 0.07 |
| | | | WBLTR | A | 4 | 0.02 | A | 8 | 0.43 |
| | | | NBLTR | A | 10 | 0.46 | A | 5 | 0.22 |
| | | | SBLTR | A | 6 | 0.23 | A | 10 | 0.52 |
| | | Signal | Intersection | A | 8 | - | A | 9 | - |
| | | | EBL | A | 7 | 0.31 | A | 5 | 0.08 |
| | | | EBTR | A | 5 | 0.03 | A | 9 | 0.46 |
| | | | WBL | B | 11 | 0.49 | A | 5 | 0.23 |
| | | | WBTR | A | 5 | 0.23 | B | 11 | 0.54 |
| | | | NBL | A | 9 | 0.50 | B | 13 | 0.65 |
| | | | NBTR | B | 11 | 0.24 | B | 17 | 0.13 |
| | | | SBL | B | 12 | 0.55 | A | 10 | 0.06 |
| | | | SBTR | B | 13 | 0.01 | B | 10 | 0.07 |

# 4.0 2025 PHASE 1 TOTAL TRAFFIC CONDITIONS

## 4.1 Roadway Network

The study area roadways and intersections are expected to remain the same as the existing conditions with the exception of the roadway and intersection improvements needed to mitigate 2019 existing traffic and 2025 background traffic as discussed in the previous sections. These preceding roadway and intersection improvements were included in the 2025 total traffic impact analysis.

Springrock Subdivision is planning to construct a segment of Five Mile Road along the site frontages as a three-lane minor arterial roadway. A segment of Tenmile Creek Road will be realigned from Hubbard Road to intersect the proposed Five Mile Road segment as a three-lane minor arterial roadway.

## 4.2 Proposed Development

For the 2025 Phase 1 analysis, the proposed developments in Springrock Subdivision include the followings:

- 757 single-family residential dwelling units
- 136 multi-family residential dwelling units
- One Elementary School with 600 students
- One 5,000-square foot day care center
- 10,000 square feet of office
- One 6,000-square foot quality restaurant

## 4.3 Site Traffic

### 4.3.1 Trip Generation

Site trip generation is estimated using the procedures recommended in the latest edition of the Trip Generation Manual (10th edition), published by the Institute of Transportation Engineer (ITE). **Table 4.1** summarizes the site trip generation. The proposed Phase 1 development is estimated to generate approximately 9,718 trips per weekday, 1,086 trips during the AM peak hour, and 1,017 trips during the PM peak hour.

### 4.3.2 Trip Capture

Internal capture trip was estimated based on ITE methodologies as required by ACHD. Copies of the internal capture worksheets are included in the appendix. Based on the proposed land uses, the development is expected to retain trips approximately 3% during the PM peak hour. Daily capture rates were not available and was assumed 3%, the same as the PM peak hour trip capture rate. The Phase 1 developments are not expected to retain a significant number of trips during the AM peak hour.

### 4.3.3 Pass-by Trips

Based on ITE pass-by rates, the proposed commercial development is expected to attract approximately 20 pass-by trips during the PM peak hour. ITE does not have pass-by rates for the daily or AM peak hour. No pass-by trips were assumed in the AM peak hour analysis.

### 4.3.4 Modal Split

For the traffic analysis purposes, all trips generated by the development were assumed to be made by personal and commercial vehicles.

### 4.3.5 Trip Distribution and Assignment

Site traffic was distributed and assigned to the external roadway system based on the current travel patterns, site layout and the general location of the site within the area. Traffic forecasts from the COMPASS models were also used. **Figure 4.1** summarizes the expected site traffic distribution patterns. **Figure 4.2** and **Figure 4.3** summarize the estimated 2025 Phase 1 peak hour site traffic.

**Table 4.1 – 2025 Phase 1 Site Trip Generation Summary**

| Land Use | ITE Code | Size | Unit | Total Trips | Capture Rate | Internal Capture | Pass-by Rate | Pass-by Trips | Primary Trips Total | Entering | | Exiting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Weekday Daily (vpd)** | | | | | | | | | | | | | |
| Single-Family Detached Housing | 210 | 757 | DU | 6,694 | 3% | 201 | -- | -- | 6,493 | 50% | 3,246 | 50% | 3,247 |
| Multifamily Housing (Low-Rise) | 220 | 136 | DU | 987 | 3% | 30 | -- | -- | 957 | 50% | 478 | 50% | 479 |
| Elementary School | 520 | 600 | Students | 1,134 | 8% | 91 | -- | -- | 1,043 | 50% | 522 | 50% | 521 |
| Day Care Center | 565 | 5 | TSF | 238 | 3% | 7 | -- | -- | 231 | 50% | 116 | 50% | 115 |
| Small Office Building | 712 | 10 | TSF | 162 | 3% | 5 | -- | -- | 157 | 50% | 78 | 50% | 79 |
| Quality Restaurant | 931 | 6 | TSF | 503 | 3% | 15 | -- | -- | 488 | 50% | 244 | 50% | 244 |
| **Weekday Daily Total Trips** | | | | **9,718** | | **349** | | **0** | **9,369** | | **4,684** | | **4,685** |
| **Weekday AM Peak Hour (vph)** | | | | | | | | | | | | | |
| Single-Family Detached Housing | 210 | 757 | DU | 542 | 0% | 0 | -- | -- | 542 | 25% | 135 | 75% | 407 |
| Multifamily Housing (Low-Rise) | 220 | 136 | DU | 64 | 0% | 0 | -- | -- | 64 | 23% | 15 | 77% | 49 |
| Elementary School | 520 | 600 | Students | 402 | 8% | 32 | -- | -- | 370 | 54% | 200 | 46% | 170 |
| Day Care Center | 565 | 5 | TSF | 55 | 0% | 0 | -- | -- | 55 | 53% | 29 | 47% | 26 |
| Small Office Building | 712 | 10 | TSF | 19 | 0% | 0 | -- | -- | 19 | 83% | 16 | 17% | 3 |
| Quality Restaurant | 931 | 6 | TSF | 4 | 0% | 0 | -- | -- | 4 | 67% | 3 | 33% | 1 |
| **Weekday AM Peak Total Trips** | | | | **1,086** | | **32** | | **0** | **1,054** | | **398** | | **656** |
| **Weekday PM Peak Hour (vph)** | | | | | | | | | | | | | |
| Single-Family Detached Housing | 210 | 757 | DU | 709 | 3% | 21 | -- | -- | 688 | 63% | 433 | 37% | 255 |
| Multifamily Housing (Low-Rise) | 220 | 136 | DU | 78 | 3% | 2 | -- | -- | 76 | 63% | 48 | 37% | 28 |
| Elementary School | 520 | 600 | Students | 102 | 8% | 8 | -- | -- | 94 | 48% | 45 | 52% | 49 |
| Day Care Center | 565 | 5 | TSF | 56 | 3% | 2 | -- | -- | 54 | 47% | 25 | 53% | 29 |
| Small Office Building | 712 | 10 | TSF | 25 | 3% | 1 | -- | -- | 24 | 32% | 8 | 68% | 16 |
| Quality Restaurant | 931 | 6 | TSF | 47 | 3% | 1 | 44% | 20 | 26 | 67% | 17 | 33% | 9 |
| **Weekday PM Peak Hour Total Trips** | | | | **1,017** | | **35** | | **20** | **962** | | **576** | | **386** |

## 4.4 Total Traffic

The 2025 site traffic is then added to the 2025 background traffic as determined above to obtain the 2025 total traffic. **Figure 4.4** and **Figure 4.5** summarize the estimated 2025 weekday peak hour total traffic at each intersection.

**Figure 4.1 – Site Traffic Distribution Patterns**

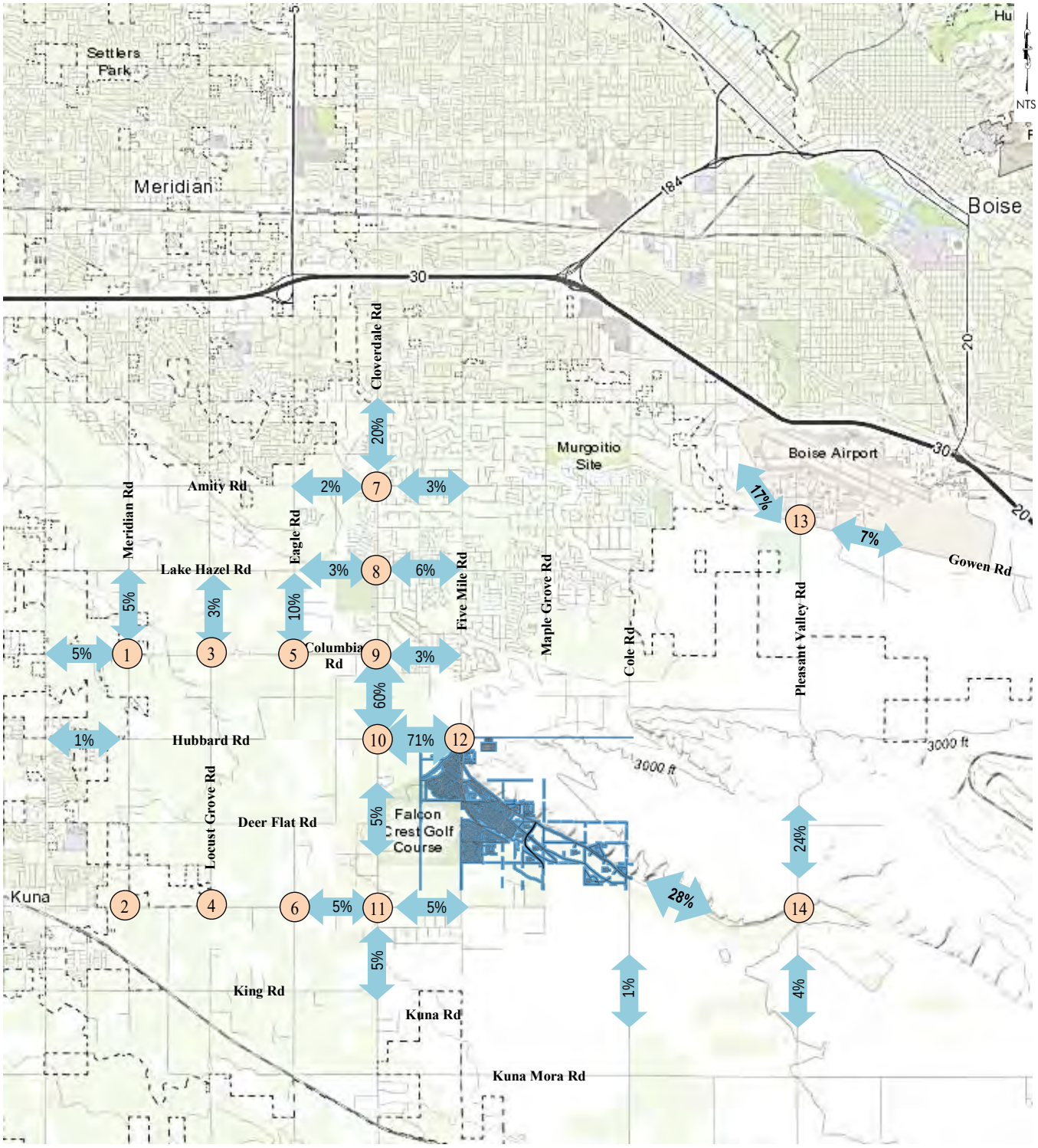


**Figure 4.2 – 2025 Phase 1 AM Peak Hour Site Traffic**

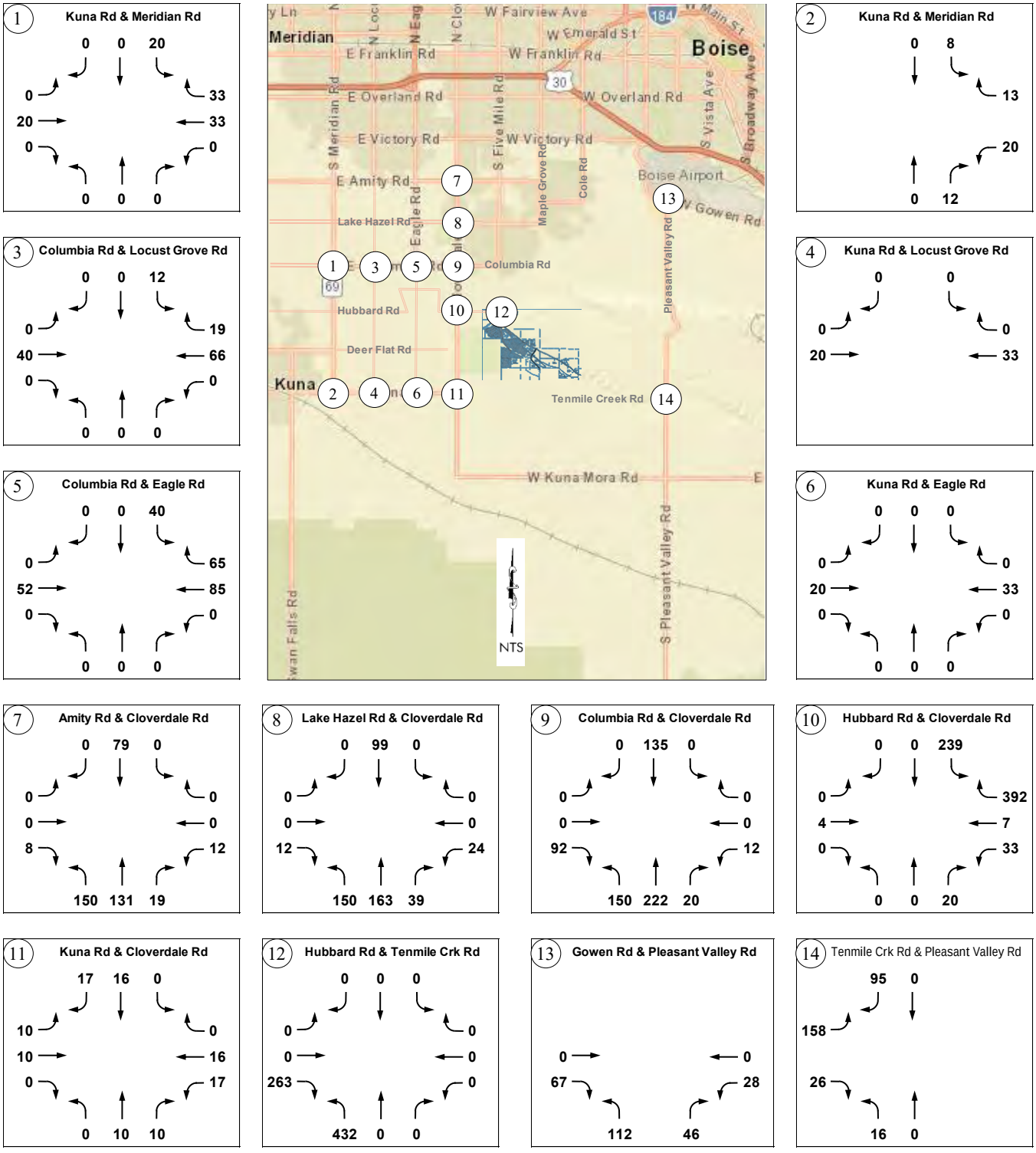


**Figure 4.3 –2025 Phase 1 PM Peak Hour Site Traffic**

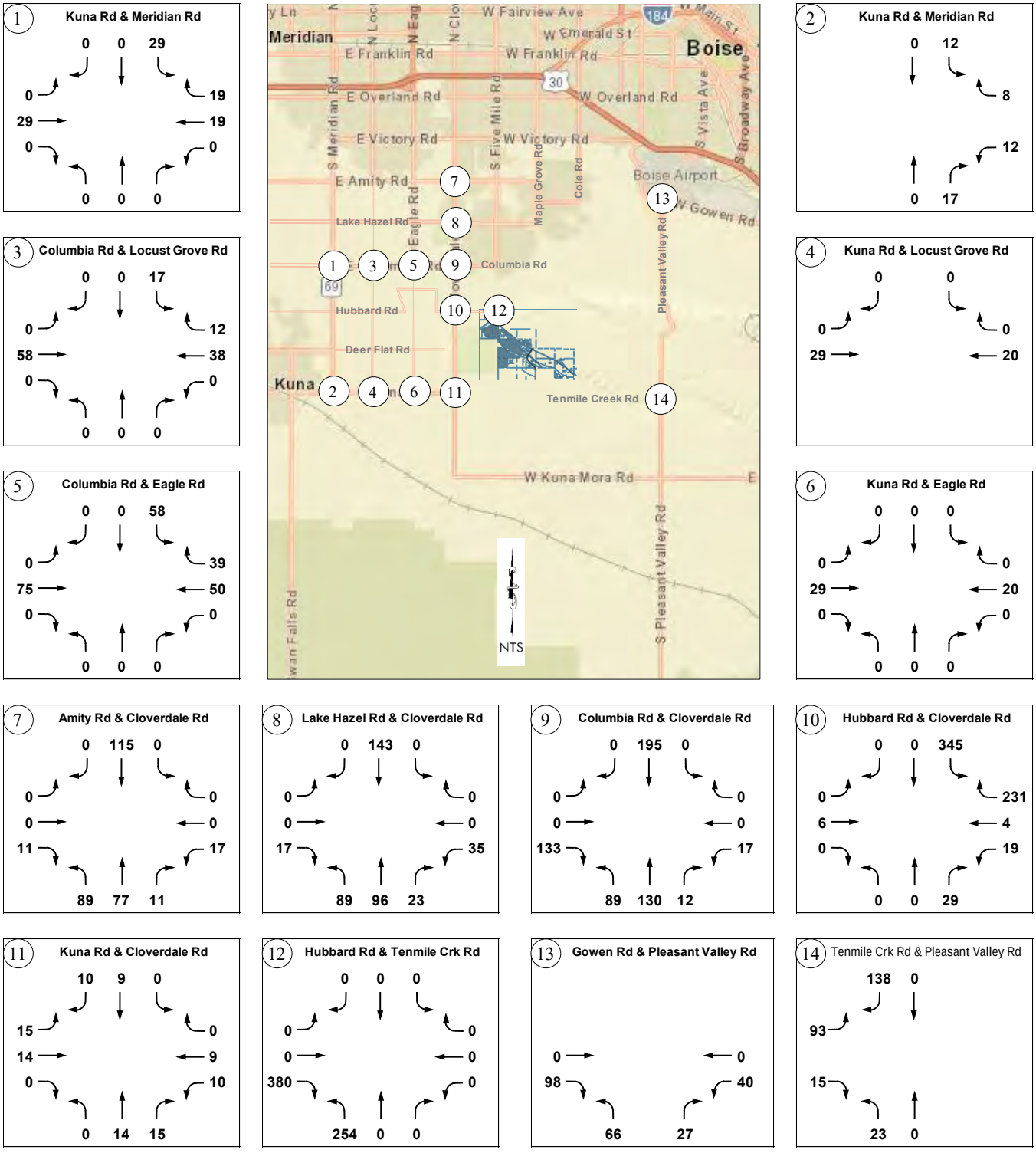
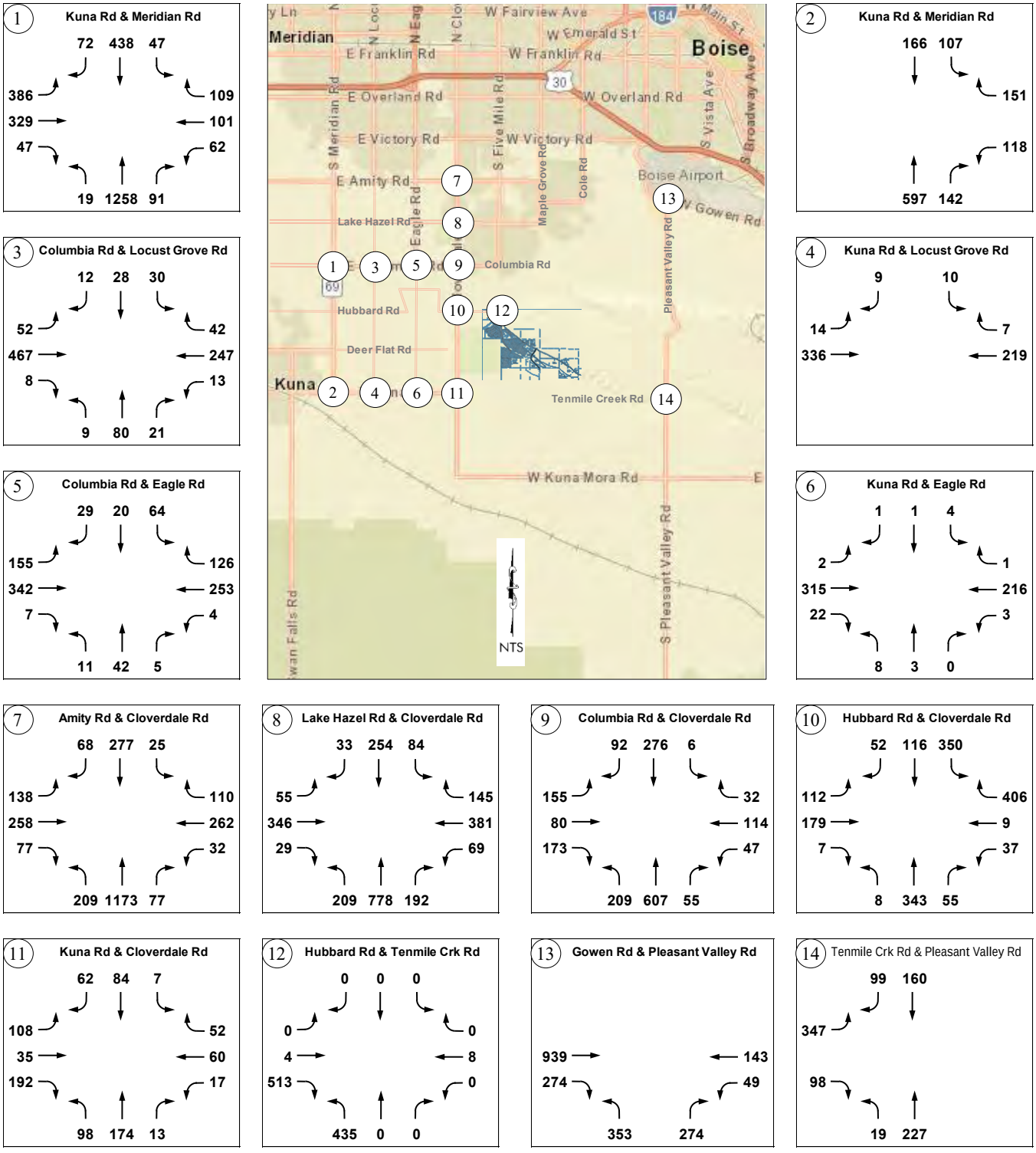
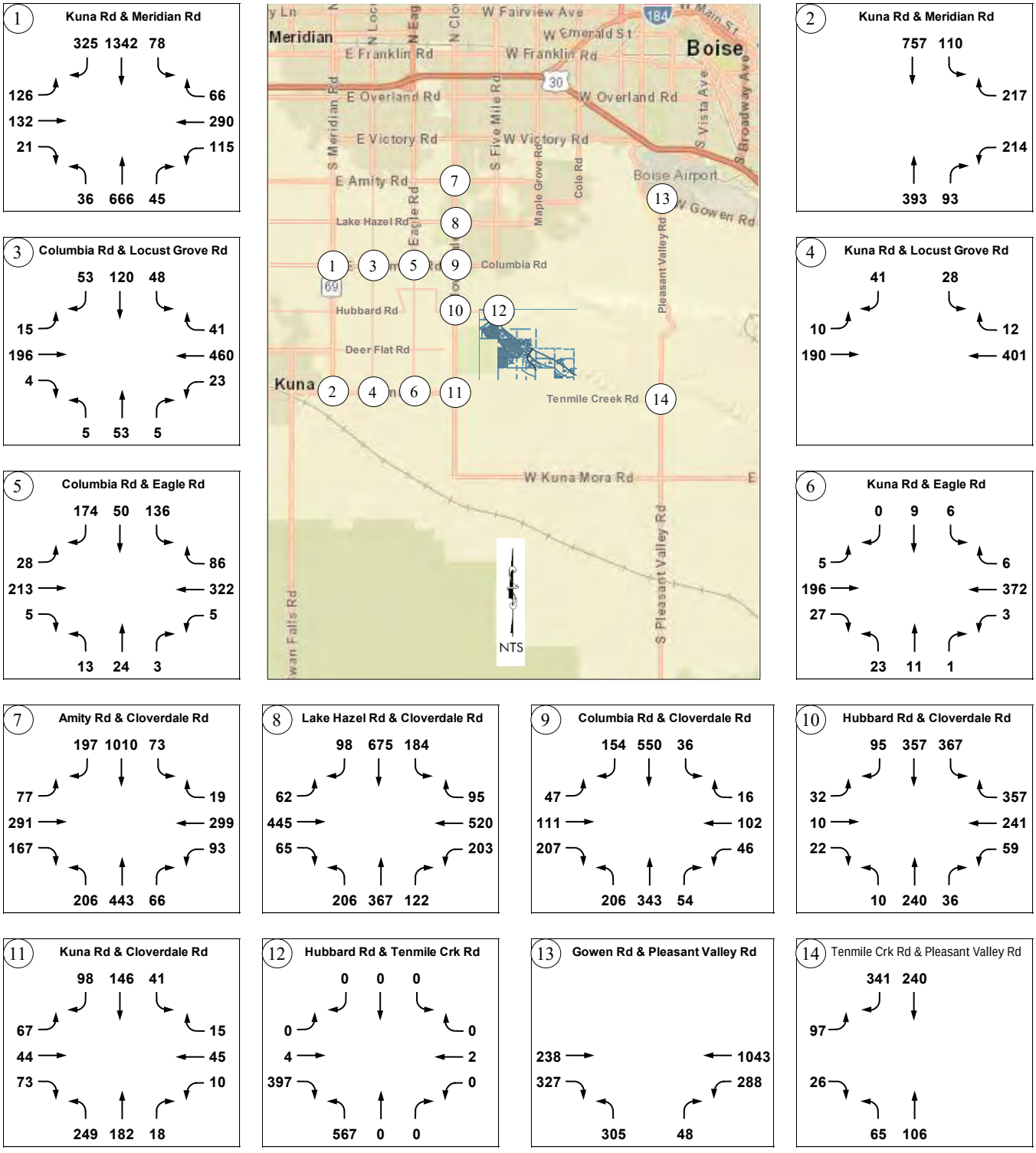


**Figure 4.4 – 2025 Phase 1 AM Peak Hour Total Traffic**



## Figure 4.5 – 2025 Phase 1 PM Peak Hour Total Traffic



## 4.5 Roadway Segment Level of Service

The study area roadway segments were evaluated based on ACHD's LOS planning thresholds. **Table 4.2** summarizes the roadway segment level of service with the existing number of lanes and 2025 total traffic. All study area roadway segments are expected to meet ACHD's LOS planning thresholds, with the exception of three roadway segments:

- Cloverdale Road between Lake Hazel Road and Columbia Road
- Cloverdale Road between Columbia Road and Hubbard Road
- Hubbard Road between Cloverdale Road and Five Mile Road

**Table 4.2 – Roadway Segment Level of Service – 2025 Phase 1 Total Traffic**

| Roadway | Segment | Functional Classification (No. of Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (5) | LOS E 1,540 | 1,473 | 1,270 | Yes |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (2) | LOS E 575 | **1,034** | **943** | **No** |
| | Columbia Rd to Hubbard Rd | Minor Arterial (2) | LOS E 575 | **871** | **819** | **No** |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | 627 | 615 | Yes |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 574 | 581 | Yes |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 527 | 518 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 518 | 524 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 415 | 462 | Yes |
| Hubbard Rd | Cloverdale Rd to Five Mile Rd | Minor Arterial (2) | LOS E 575 | **584** | **657** | **No** |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (3)[1] | LOS E 720 | 513 | 567 | Yes |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (3/2)[1] | LOS E 720/575 | 445 | 406 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 445 | 406 | Yes |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 346 | 413 | Yes |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 335 | 392 | Yes |

[1] Springrock Subdivision planned to be widened this roadway segment to 3 lanes along the site frontages

## 4.6 Intersection Level of Service

To determine the 2025 total traffic impacts, the study area intersections were analyzed with the existing intersection control and lane configuration or with the preceding improvements needed to mitigate 2019 existing traffic and 2025 background traffic. Copies of the analysis reports are included in the appendix. **Table 4.3** summarizes the intersection capacity analysis results. All study area intersections are expected to meet minimum operational thresholds, with the exception of five intersections:

- Columbia Road and Meridian Road intersection
- Lake Hazel Road and Cloverdale Road intersection
- Columbia Road and Cloverdale Road intersection
- Hubbard Road and Cloverdale Road intersection
- Gowen Road and Pleasant Valley Road intersection

**Table 4.3 – Intersection MOEs – 2025 Phase 1 Total Traffic**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 1 | Columbia Road and Meridian Road | Signal | Intersection | D | 50 | **0.91** | D | 37 | 0.81 |
| | | | EBL | E | 79 | 0.95 | E | 71 | 0.81 |
| | | | EBTR | E | 69 | 0.88 | D | 50 | 0.43 |
| | | | WBL | E | 61 | 0.45 | D | 51 | 0.45 |
| | | | WBT | E | 80 | 0.72 | E | 78 | 0.90 |
| | | | WBR | **F** | **119** | 0.91 | D | 50 | 0.24 |
| | | | NBL | B | 19 | 0.05 | C | 26 | 0.28 |
| | | | NBT | D | 41 | 0.86 | C | 23 | 0.43 |
| | | | NBR | C | 22 | 0.14 | B | 18 | 0.06 |
| | | | SBL | C | 31 | 0.37 | B | 18 | 0.22 |
| | | | SBT | C | 23 | 0.28 | C | 33 | 0.80 |
| | | | SBR | C | 21 | 0.10 | C | 24 | 0.43 |
| 2 | Kuna Road and Meridian Road | Stop (Kuna Rd) | WBL | C | 22 | 0.39 | E | 38 | 0.69 |
| | | | WBR | B | 12 | 0.25 | B | 11 | 0.29 |
| | | | NBT | - | - | - | - | - | - |
| | | | NBR | - | - | - | - | - | - |
| | | | SBL | A | 10 | 0.13 | A | 9 | 0.10 |
| | | | SBT | - | - | - | - | - | - |
| 3 | Columbia Road and Locust Grove Road | 4-Way Stop | Intersection | C | 20 | - | C | 19 | - |
| | | | EBLTR | D | 27 | 0.81 | B | 12 | 0.36 |
| | | | WBLTR | B | 13 | 0.49 | 26 | D | 0.79 |
| | | | NBLTR | B | 11 | 0.21 | B | 11 | 0.12 |
| | | | SBLTR | B | 11 | 0.14 | B | 13 | 0.39 |
| 4 | Kuna Road and Locust Grove Road | Stop (Locust) | EBLT | A | 8 | 0.01 | A | 8 | 0.01 |
| | | | WBTR | - | - | - | - | - | - |
| | | | SBLR | B | 12 | 0.04 | B | 13 | 0.14 |
| 5 | Columbia Road and Eagle Road | 4-Way Stop | Intersection | C | 17 | | C | 17 | |
| | | | EBLTR | C | 21 | 0.73 | B | 14 | 0.44 |
| | | | WBLTR | B | 14 | 0.55 | C | 20 | 0.68 |
| | | | NBLTR | B | 10 | 0.11 | B | 11 | 0.08 |
| | | | SBLTR | B | 11 | 0.20 | C | 18 | 0.61 |
| 6 | Kuna Road and Eagle Road | 2-Way Stop | EBLTR | A | 8 | < 0.01 | A | 8 | 0.01 |
| | | | WBLTR | A | 8 | < 0.01 | A | 8 | < 0.01 |
| | | | NBLTR | B | 14 | 0.03 | C | 15 | 0.10 |
| | | | SBLTR | B | 13 | 0.02 | B | 15 | 0.04 |
| 7 | Amity Road and Cloverdale Road | Signal[1] | Intersection | D | 38 | 0.84 | D | 46 | 0.87 |
| | | | EBL | D | 41 | 0.69 | C | 30 | 0.28 |
| | | | EBTR | D | 40 | 0.68 | E | 58 | 0.90 |
| | | | WBL | C | 35 | 0.1 | D | 37 | 0.57 |
| | | | WBTR | E | 59 | 0.90 | D | 38 | 0.58 |
| | | | NBL | B | 19 | 0.44 | D | 44 | 0.81 |
| | | | NBT | D | 37 | 0.82 | C | 28 | 0.38 |
| | | | NBTR | D | 37 | 0.83 | C | 28 | 0.38 |
| | | | SBL | C | 28 | 0.19 | C | 24 | 0.20 |
| | | | SBT | C | 27 | 0.27 | E | 55 | 0.91 |
| | | | SBTR | C | 27 | 0.28 | E | 56 | 0.91 |

**Table 4.3 – Intersection MOEs – 2025 Phase 1 Total Traffic (continued)**

| Intersection | | Control | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 8 | Lake Hazel Road and Cloverdale Road | Signal | Intersection | E | 80 | **1.11** | E | 73 | **1.26** |
| | | | EBL | **F** | **225** | **1.09** | **F** | **85** | 0.66 |
| | | | EBTR | D | 44 | 0.68 | **F** | **100** | **1.04** |
| | | | WBL | E | 60 | 0.40 | **F** | **153** | **1.14** |
| | | | WBTR | **F** | 80 | 0.98 | D | 53 | 0.90 |
| | | | NBL | C | 21 | 0.12 | **F** | **225** | **1.12** |
| | | | NBTR | **F** | **110** | **1.13** | D | 41 | 0.75 |
| | | | SBL | **F** | **92** | 0.89 | E | 61 | 0.81 |
| | | | SBTR | B | 17 | 0.32 | E | 61 | 0.97 |
| 9 | Columbia Road and Cloverdale Road | Roundabout[2] | Intersection | C | 19 | - | C | 17 | - |
| | | | EBLTR | A | 9 | 0.46 | B | 14 | 0.56 |
| | | | WBLTR | B | 14 | 0.41 | A | 8 | 0.24 |
| | | | NBLTR | D | 28 | **0.90** | B | 11 | 0.59 |
| | | | SBLTR | A | 9 | 0.44 | D | 25 | 0.85 |
| 10 | Hubbard Road and Cloverdale Road | Roundabout[3] | Intersection | B | 11 | - | C | 22 | - |
| | | | EBLTR | A | 9 | 0.39 | A | 7 | 0.12 |
| | | | WBLTR | B | 13 | 0.57 | C | 15 | 0.72 |
| | | | NBLTR | C | 16 | 0.61 | A | 8 | 0.35 |
| | | | SBLTR | A | 7 | 0.44 | D | 32 | **0.92** |
| 11 | Kuna Road and Cloverdale Road | 4-Way Stop | Intersection | B | 13 | - | C | 15 | - |
| | | | EBLTR | B | 15 | 0.55 | B | 12 | 0.32 |
| | | | WBLTR | B | 11 | 0.23 | B | 10 | 0.13 |
| | | | NBLTR | B | 14 | 0.50 | C | 20 | 0.70 |
| | | | SBLTR | B | 11 | 0.27 | B | 13 | 0.44 |
| 12 | Hubbard Road and Tenmile Creek Rd | 2-Way Stop | EBLTR | Low volume on minor approach resulting in no reported MOEs in Synchro outputs. Expected to meet minimum operation thresholds. | | | | | |
| | | | WBLTR | | | | | | |
| | | | NBLTR | | | | | | |
| | | | SBLTR | | | | | | |
| 13 | Gowen Road and Pleasant Valley Road | Signal | Intersection | C | 28 | 0.75 | C | 30 | **1.00** |
| | | | EBT | C | 22 | 0.70 | B | 15 | 0.20 |
| | | | EBR | A | 3 | 0.23 | A | 6 | 0.32 |
| | | | WBL | B | 15 | 0.22 | A | 10 | 0.51 |
| | | | WBT | A | 8 | 0.14 | C | 32 | 0.95 |
| | | | NBL | E | 59 | 0.92 | E | 75 | 0.93 |
| | | | NBR | D | 46 | 0.80 | D | 37 | 0.16 |
| 14 | Tenmile Creek Road and Pleasant Valley Road | Stop (Tenmile) | EBLR | D | 35 | 0.84 | B | 15 | 0.27 |
| | | | NBLT | A | 8 | 0.02 | A | 9 | 0.08 |
| | | | SBTR | - | - | - | - | - | - |

[1] Multi-lane roundabout = LOS D with maximum lane group v/c ratio of 0.91

[2] Signal = Overall intersection LOS D with 0.86 v/c ratio and a maximum lane group v/c ratio of 0.94

[3] Signal = Overall intersection LOS D with 0.92 v/c ratio and a maximum lane group v/c ratio of 0.94

## 4.7 Roadway Segment Mitigation

Cloverdale Road between Lake Hazel Road and Columbia Road

The Cloverdale Road segment between Lake Hazel Road and Columbia Road is expected to exceed ACHD's LOS service planning thresholds as a 2-lane minor arterial with 2025 total traffic. Based on the intersection improvements discussed below, the Cloverdale Road approaches are expected to need two through lanes in each direction. As a result, this Cloverdale Road segment is recommended to be widened to five lanes to mitigate 2025 total traffic impacts. Cloverdale Road is programmed in the 2016 CIP to be widened to five lanes from Lake Hazel Road to Columbia Road.

The estimated Phase 1 site traffic on this Cloverdale Road segment is approximately 20.7% of the total traffic during the PM peak hour.

Cloverdale Road between Columbia Road and Hubbard Road

The Cloverdale Road segment between Columbia Road and Hubbard Road is expected to exceed ACHD's LOS planning thresholds for a 2-lane minor arterial with 2025 total traffic. Based on the intersection capacity analysis results, this Cloverdale Road segment is not expected to need two through lanes in each direction. As a result, no roadway capacity improvements for this Cloverdale Road segment are recommended to mitigate 2025 total traffic impacts.

The estimated Phase 1 site traffic on this Cloverdale Road segment is approximately 11.3% of the total traffic during the PM peak hour.

Hubbard Road between Cloverdale Road and Five Mile Road

The Hubbard Road segment between Cloverdale Road and Five Road is expected to exceed ACHD's LOS planning thresholds for a 2-lane minor arterial with 2025 total traffic. Based on the intersection capacity analysis, Hubbard Road is not expected to need two through lanes in each direction. As a result, no roadway capacity improvements for this Hubbard Road segment are recommended to mitigate 2025 total traffic impacts. There are no capacity improvements programmed on Hubbard Road in the current ACHD transportation plans.

The estimated Phase 1 site traffic on this Hubbard Road segment is approximately 79.1% of the total traffic during the PM peak hour.

## 4.8 Intersection Mitigation

Two study area intersections are expected to exceed ITD's or ACHD's minimum operational thresholds with 2025 total traffic. One study area intersection is expected to meet ACHD's turn-lane guidelines. The proposed intersection improvements discussed below are expected to mitigate 2025 total traffic impacts. **Table 4.4** summarizes the analysis results for the proposed mitigations.

Columbia Road and Meridian Road Intersection

The Columbia Road and Meridian Road intersection is expected to slightly exceed 0.90 overall intersection v/c ratio during the AM peak hour with optimized signal timing. The westbound right-turn lane group is expected to operate at LOS F, but under capacity with a 0.91 v/c ratio during the AM peak hour. All other lane groups are also expected to operate under capacity with a v/c ratio of 0.95 or less during the peak hour. As a result, no improvements are proposed to mitigate 2025 total traffic impacts.

The estimated Phase 1 site traffic at the Columbia Road and Meridian Road intersection is approximately 3.0% of the total intersection traffic during the PM peak hour.

Lake Hazel Road and Cloverdale Road Intersection

The Lake Hazel Road and Cloverdale Road intersection is expected to exceed ACHD's minimum operational thresholds as a signalized intersection with one left-turn lane and one shared through/right-turn lane on all approaches. The following improvements are proposed to mitigate 2025 background traffic impacts:

- Widen intersection to have on left-turn lane, one through lane, and one shared through/right-turn lane on all approaches (5x5)
  - The Lake Hazel Road and Cloverdale Road intersection is programmed in the 2019-2023 IFYWP to be widened to five lanes on both Lake Hazel Road and Cloverdale Road. The construction years have not been identified and the project is listed as preliminary development.

The estimated Phase 1 site traffic at the Lake Hazel Road and Cloverdale Road intersection is approximately 11.2% of the total intersection traffic during the PM peak hour.

Columbia Road and Cloverdale Road Intersection

The Columbia Road and Cloverdale Road intersection is expected to meet minimum operational thresholds as a signalized intersection. As a single-lane roundabout, one lane group is expected to slightly exceed 0.85 v/c ratio threshold during the AM peak hour. To avoid over-building the roundabout, no additional improvements are proposed to mitigate 2025 total traffic impacts.

The estimated Phase 1 site traffic at the Columbia Road and Cloverdale Road intersection is approximately 30.8% of the total intersection traffic during the PM peak hour.

Hubbard Road and Cloverdale Road Intersection

The Hubbard Road and Cloverdale Road intersection is expected to meet minimum operational thresholds as a signalized intersection, with the exception of the overall intersection v/c ratio slightly exceeding 0.90 threshold during the AM peak hour. No additional improvements are proposed to reduce the overall intersection v/c ratio.

As a single-lane roundabout, one lane group is expected to slightly exceed 0.85 v/c ratio threshold during the AM peak hour. To avoid over-building the roundabout, no additional improvements are proposed to mitigate 2025 total traffic impacts.

The estimated Phase 1 site traffic at the Hubbard Road and Cloverdale Road intersection is approximately 34.7% of the total intersection traffic during the PM peak hour.

Gowen Road and Pleasant Valley Road Intersection

The Gowen Road and Pleasant Valley Road intersection is expected to only exceed 0.90 overall intersection v/c ratio during the PM peak hour. All lane groups are expected to operate with v/c ratios less than 1.00 during the peak hours. As a result, no improvements are proposed to mitigate 2025 total traffic impacts.

The estimated Phase 1 site traffic at the Gowen Road and Pleasant Valley Road intersection is approximately 10.3% of the total intersection traffic during the PM peak hour.

Tenmile Creek Road and Pleasant Valley Road Intersection

The Tenmile Creek Road and Pleasant Valley Road intersection is expected to meet ACHD's minimum operational thresholds. However, the following turn lanes are warranted based on ACHD's turn-lane guidelines:

- Eastbound left-turn lane
- Northbound left-turn lane

The estimated Phase 1 site traffic at the Tenmile Greek Road and Pleasant Valley Road intersection is approximately 30.7% of the total intersection traffic during the PM peak hour.

**Table 4.4 – Intersection MOEs – 2025 Phase 1 Total Traffic Mitigation**

| Intersection | | Mitigation | Intersection or Lane Group | AM Peak | | | PM Peak | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | LOS | Delay [s/v] | v/c | LOS | Delay [s/v] | v/c |
| 8 | Lake Hazel Road and Cloverdale Road | Widen intersection to 5x5 | Intersection | C | 28 | 0.65 | C | 29 | 0.70 |
| | | | EBL | C | 31 | 0.29 | C | 29 | 0.28 |
| | | | EBT | D | 36 | 0.49 | D | 38 | 0.70 |
| | | | EBTR | D | 36 | 0.50 | D | 38 | 0.71 |
| | | | WBL | C | 30 | 0.27 | C | 26 | 0.65 |
| | | | WBT | D | 39 | 0.69 | C | 33 | 0.66 |
| | | | WBTR | D | 39 | 0.70 | C | 33 | 0.66 |
| | | | NBL | B | 14 | 0.12 | C | 21 | 0.27 |
| | | | NBT | C | 23 | 0.63 | C | 26 | 0.46 |
| | | | NBTR | C | 23 | 0.63 | C | 26 | 0.47 |
| | | | SBL | B | 17 | 0.33 | B | 18 | 0.47 |
| | | | SBT | B | 17 | 0.20 | C | 26 | 0.63 |
| | | | SBTR | B | 18 | 0.20 | C | 26 | 0.63 |
| 14 | Tenmile Creek Road and Pleasant Valley Road | EBL lane and NBL turn lanes | EBL | C | 17 | 0.58 | B | 12 | 0.17 |
| | | | EBR | A | 10 | 0.13 | A | 10 | 0.04 |
| | | | NBL | A | 8 | 0.02 | A | 9 | 0.08 |
| | | | NBT | - | - | - | - | - | - |
| | | | SBT | - | - | - | - | - | - |
| | | | SBR | - | - | - | - | - | - |

## 4.9 Site Access and Circulation

Springrock Subdivision is planning to construct a segment of Five Mile Road along the site frontages. A segment of Tenmile Creek Road will be realigned from Hubbard Road to intersect the proposed Five Mile Road segment. These roadways segments are planned as three-lane minor arterial roadways in the Master Street Map, and are planned to be constructed to three lanes along the site frontages. Based on Phase 1 total traffic projections, these roadway segments are expected to meet ACHD's LOS planning thresholds as 3-lane minor arterials.

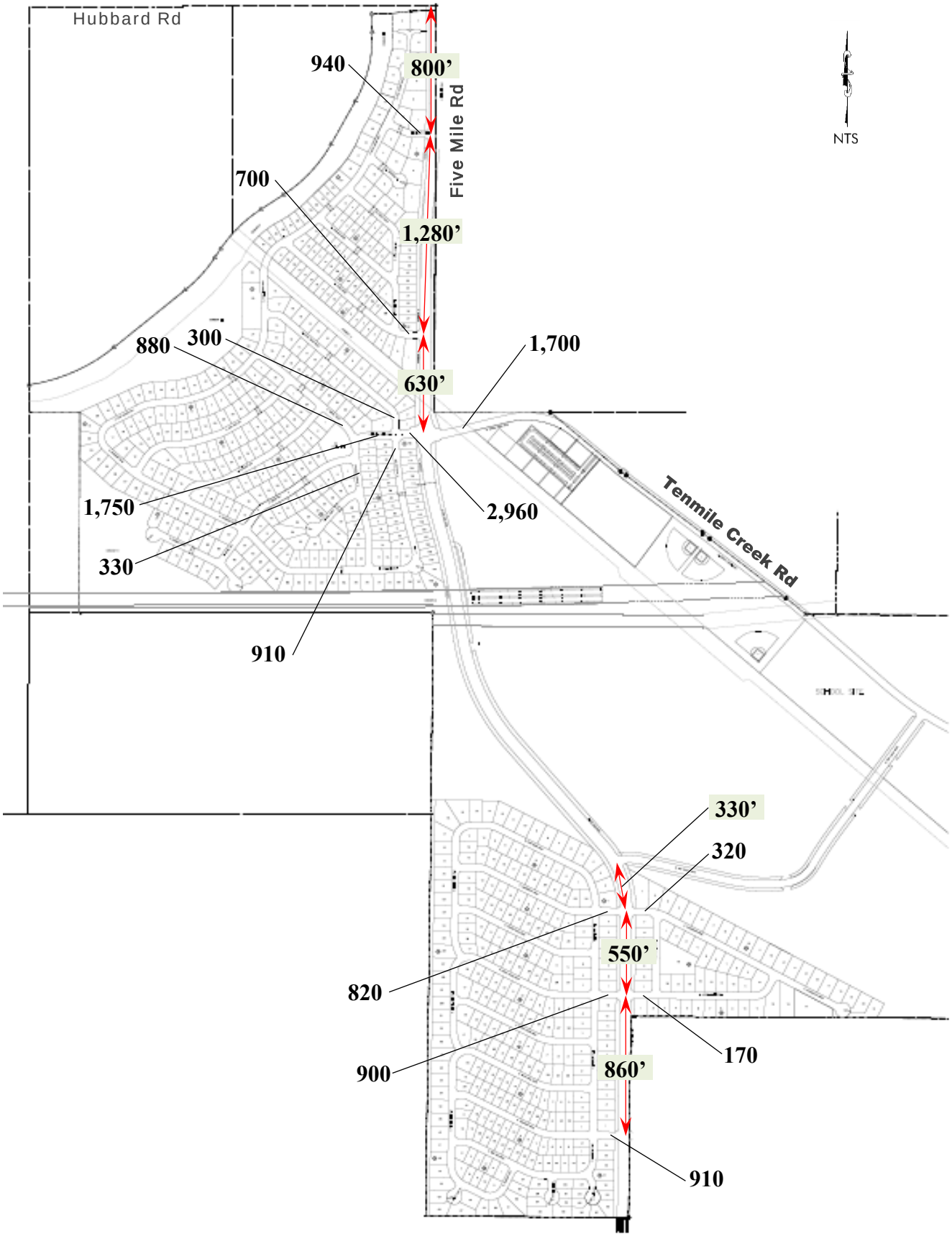
Multiple approaches are proposed on Tenmile Creek Road and the proposed Five Mile Road extension for Phase 1 site access as shown in **Figure 4.6**. We understand the design team has been working with ACHD to ensure the proposed access locations meet ACHD's spacing and requirements. Based on the Phase 1 preliminary site plan, all proposed driveways generally meet ACHD's minimum driveway separation of 330 feet on Five Mile Road and Tenmile Creek Road, a 35-mph minor arterial.

Sight distances at the proposed access intersections should be verified during construction. Building setback and landscaping should be located and designed to ensure adequate intersection sight distance.

Based on the project peak hour volumes, all proposed site access intersections are not expected to warrant right-turn lanes. The Five Mile Road and Tenmile Creek Road segments within the site boundary are expected to be constructed to three lanes with a center turn lane to accommodate left-turning traffic. All proposed site access intersections are expected to meet minimum operational thresholds with 2025 Phase 1 total traffic. Synchro outputs are included in the appendix.

The estimated ADTs on the internal roadways are shown in **Figure 4.6**.

**Figure 4.6 – Phase 1 Site Access and Circulation and Internal Roadway ADTs**



# 5.0 2040 BUILD-OUT YEAR PLANNING-LEVEL ANALYSIS

Planning-level analysis of the study area roadways was completed for the full build-out year traffic conditions. The study area roadways were determined based on COMPASS forecasts and are the same as Phase 1. The scope of the planning-level analysis does not include detailed intersection capacity or mitigation analyses. Separate TIS will be required for future phases.

## 5.1 Roadway Network, Demographics, and Background Traffic

COMPASS models were used to estimate 2040 background traffic. The COMPASS models are developed and calibrated for the Treasure Valley based on the adopted roadway network and demographics. The roadway network included funded and programmed projects. COMPASS 2040 forecasts are included in the appendix. The COMPASS forecasts were not post-processed for use in the planning-level analysis.

Falcon Crest Subdivision developments beyond Phase 1 are not entitled, and therefore were not included in the COMPASS model. Future phases of the proposed Falcon Crest Subdivision were included in the 2040 background traffic as off-site traffic.

## 5.2 Site Traffic

2040 analysis included the full build-out of Springrock Subdivision developments as summarized in **Table 1.1**. Site trip generation is estimated based on ITE trips rates and procedures. **Table 5.1** summarizes the site trip generation. At full build-out, Springrock Subdivision is expected to generated approximately 26,351 trips per weekday, 2,570 trips during the AM peak hour, and 2,563 trips during the PM peak hour. Based on ITE methodologies, approximately 9% of the trips are expected to be retained within the site during the AM peak hour and approximately 12% during the PM peak hour. A trip generation study for Springrock Subdivision should be conducted to verify trip generation and capture rates as developments are completed.

Site traffic was distributed and assigned to the external roadway system based on the estimated distribution patterns shown in **Figure 4.1**. **Table 5.2** summarizes the PM peak hour site traffic as a percentage of the 2040 total traffic for the study area roadway segments.

## Table 5.1 – 2040 Build-Out Site Trip Generation Summary

| Land Use | ITE Code | Size | Unit | Total Trips | Capture Rate | Internal Capture | Pass-by Rate | Pass-by Trips | Primary Trips | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | Total | Entering | | Exiting | |
| **Weekday Daily (vpd)** | | | | | | | | | | | | | |
| Mini-Warehouse | 151 | 101 | TSF | 153 | 12% | 18 | -- | -- | 135 | 50% | 67 | 50% | 68 |
| Single-Family Detached Housing | 210 | 1925 | DU | 15,798 | 12% | 1896 | -- | -- | 13,902 | 50% | 6,951 | 50% | 6,951 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | 1,864 | 12% | 224 | -- | -- | 1,640 | 50% | 820 | 50% | 820 |
| Multifamily Housing (Mid-Rise) | 221 | 120 | DU | 652 | 12% | 78 | -- | -- | 574 | 50% | 287 | 50% | 287 |
| Elementary School | 520 | 600 | Students | 1,134 | 8% | 91 | -- | -- | 1,043 | 50% | 522 | 50% | 521 |
| Day Care Center | 565 | 5 | TSF | 238 | 12% | 29 | -- | -- | 209 | 50% | 104 | 50% | 105 |
| Small Office Building | 710 | 60 | TSF | 646 | 12% | 78 | -- | -- | 568 | 50% | 284 | 50% | 284 |
| Convenience Market | 851 | 4 | TSF | 3,049 | 12% | 366 | -- | -- | 2,683 | 50% | 1,341 | 50% | 1,342 |
| Quality Restaurant | 931 | 6 | TSF | 503 | 12% | 60 | -- | -- | 443 | 50% | 222 | 50% | 221 |
| High-Turnover (Sit-Down) Restaurant | 932 | 6 | TSF | 673 | 12% | 81 | -- | -- | 592 | 50% | 296 | 50% | 296 |
| Coffee/Donut Shop with Drive Thru | 937 | 2 | TSF | 1,641 | 12% | 197 | 60% | 866 | 578 | 50% | 289 | 50% | 289 |
| **Weekday Daily Total Trips** | | | | **26,351** | | **3,118** | | **866** | **22,367** | | **11,183** | | **11,184** |
| **Weekday AM Peak Hour (vph)** | | | | | | | | | | | | | |
| Mini-Warehouse | 151 | 101 | TSF | 10 | 9% | 1 | | -- | 9 | 60% | 5 | 40% | 4 |
| Single-Family Detached Housing | 210 | 1925 | DU | 1,372 | 9% | 123 | | -- | 1,249 | 25% | 312 | 75% | 937 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | 115 | 9% | 10 | | -- | 105 | 23% | 24 | 77% | 81 |
| Multifamily Housing (Mid-Rise) | 221 | 120 | DU | 41 | 9% | 4 | | -- | 37 | 23% | 9 | 77% | 28 |
| Elementary School | 520 | 600 | Students | 402 | 8% | 32 | | -- | 370 | 54% | 200 | 46% | 170 |
| Day Care Center | 565 | 5 | TSF | 55 | 9% | 5 | | -- | 50 | 53% | 27 | 47% | 23 |
| Small Office Building | 710 | 60 | TSF | 83 | 9% | 7 | | -- | 76 | 62% | 47 | 38% | 29 |
| Convenience Market | 851 | 4 | TSF | 250 | 9% | 23 | | -- | 227 | 50% | 114 | 50% | 113 |
| Quality Restaurant | 931 | 6 | TSF | 4 | 9% | 0 | | -- | 4 | 67% | 3 | 33% | 1 |
| High-Turnover (Sit-Down) Restaurant | 932 | 6 | TSF | 60 | 9% | 5 | | -- | 55 | 55% | 30 | 45% | 25 |
| Coffee/Donut Shop with Drive Thru | 937 | 2 | TSF | 178 | 9% | 16 | 60% | 98 | 64 | 51% | 33 | 49% | 31 |
| **Weekday AM Peak Total Trips** | | | | **2,570** | | **226** | | **98** | **2,246** | | **804** | | **1,442** |
| **Weekday PM Peak Hour (vph)** | | | | | | | | | | | | | |
| Mini-Warehouse | 151 | 101 | TSF | 17 | 12% | 2 | | -- | 15 | 47% | 7 | 53% | 8 |
| Single-Family Detached Housing | 210 | 1925 | DU | 1,737 | 12% | 208 | | -- | 1,529 | 63% | 963 | 37% | 566 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | 134 | 12% | 16 | | -- | 118 | 63% | 74 | 37% | 44 |
| Multifamily Housing (Mid-Rise) | 221 | 120 | DU | 58 | 12% | 7 | | -- | 51 | 63% | 32 | 37% | 19 |
| Elementary School | 520 | 600 | Students | 102 | 8% | 8 | | -- | 94 | 48% | 45 | 52% | 49 |
| Day Care Center | 565 | 5 | TSF | 56 | 12% | 7 | | -- | 49 | 16% | 8 | 84% | 41 |
| Small Office Building | 710 | 60 | TSF | 70 | 12% | 8 | | -- | 62 | 16% | 10 | 84% | 52 |
| Convenience Market | 851 | 4 | TSF | 196 | 12% | 24 | 51% | 88 | 84 | 51% | 43 | 49% | 41 |
| Quality Restaurant | 931 | 6 | TSF | 47 | 12% | 6 | 44% | 18 | 23 | 67% | 15 | 33% | 8 |
| High-Turnover (Sit-Down) Restaurant | 932 | 6 | TSF | 59 | 12% | 7 | 43% | 22 | 30 | 62% | 19 | 38% | 11 |
| Coffee/Donut Shop with Drive Thru | 937 | 2 | TSF | 87 | 12% | 10 | 60% | 46 | 31 | 50% | 16 | 50% | 15 |
| **Weekday PM Peak Hour Total Trips** | | | | **2,563** | | **303** | | **174** | **2,086** | | **1,232** | | **854** |

**Table 5.2 – 2040 Percent Site Traffic Estimate**

| Roadway | Segment | % Site Traffic of 2040 PM Peak Total Traffic |
|---|---|---|
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | 17% |
| | Lake Hazel Rd to Columbia Rd | 20% |
| | Columbia Rd to Hubbard Rd | 42% |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | 34% |
| | Hollilynn Dr to Tenmile Creek Rd | 38% |
| Columbia Rd | Meridian Rd to Locust Grove Rd | 17% |
| | Locust Grove Rd to Eagle Rd | 21% |
| | Eagle Rd to Cloverdale Rd | 31% |
| Hubbard Rd | Cloverdale Rd to Five Mile Rd | 79% |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | 79% |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | 48% |
| Kuna Rd | Meridian Rd to Locust Grove Rd | 8% |
| | Locust Grove Rd to Eagle Rd | 8% |
| | Eagle Rd to Cloverdale Rd | 9% |

## 5.3 Roadway Segment Level of Service

The study area roadway segments were evaluated based on ACHD's LOS planning thresholds. **Table 5.3** summarizes the roadway segment level of service analysis with 2040 background traffic. The following roadway segments are expected to need additional lanes beyond the lanes programmed in the 2016 CIP:

- Cloverdale Road between Amity Road and Lake Hazel Road – Widen from five to seven lanes
- Cloverdale Road between Columbia Road and Hubbard Road – Widen from three lanes to five lanes
- Columbia Road between Meridian Road and Cloverdale Road – Widen from two lanes to three lanes
- Kuna Road between Meridian Road and Cloverdale Road – Widen from two lanes to three lanes

**Table 5.4** summarizes the roadway segment level of service analysis with 2040 background plus site traffic. The following roadway segments are expected to need additional lanes beyond the lanes programmed in the 2016 CIP and lanes needed under 2040 background traffic:

- Cloverdale Road between Lake Hazel Road and Columbia Road – Widen from five to seven lanes
- Cloverdale Road between Columbia Road and Hubbard Road – Widen from five lanes to seven lanes
- Pleasant Valley Road between Gowen Road and Tenmile Creek Road – Widen from two lanes to three lanes
- Columbia Road between Meridian Road and Cloverdale Road – Widen from three lanes to five lanes
- Hubbard Road between Five Mile Road and Cloverdale Road – Widen from two lanes to five lanes
- Five Mile Road between Tenmile Creek Road and Hubbard Road – Widen from two lanes to five lanes
- Kuna Road between Meridian Road and Locust Grove Road – Widen from three lanes to five lanes

**Table 5.3 – Roadway Segment Level of Service Analysis – 2040 Build-Out Year Background Traffic**

| Roadway | Segment | Functional Classification (CIP Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? (Lane Needs) |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (5) | LOS E 1,540 | 1,340 | 1,507 | Yes |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (5) | LOS E 1,540 | 1,355 | **1,648** | **No (7)** |
| | Columbia Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | **893** | **1,003** | **No (5)** |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | 505 | 566 | Yes |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 275 | 490 | Yes |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 514 | **650** | **No (3)** |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | **604** | **674** | **No (3)** |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 533 | **718** | **No (3)** |
| Hubbard Rd | Five Mile Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 180 | 466 | Yes |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | 180 | 464 | Yes |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (3/2) | LOS E 720/575 | 125 | 377 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | 549 | **746** | **No (3)** |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 465 | **688** | **No (3)** |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 489 | **652** | **No (3)** |

**Table 5.4 – Roadway Segment Level of Service Analysis – 2040 Build-Out Year Total Traffic**

| Roadway | Segment | Functional Classification (No. of Lanes) (CIP Lanes) | ACHD LOS Planning Threshold [vph] | Peak Hour Directional Volume [vph] | | Meets LOS Planning Threshold? (Need Lanes) |
|---|---|---|---|---|---|---|
| | | | | AM Peak | PM Peak | |
| Cloverdale Rd | Amity Rd to Lake Hazel Rd | Minor Arterial (5) | LOS E 1,540 | **1,700** | **1,815** | **No (7)** |
| | Lake Hazel Rd to Columbia Rd | Minor Arterial (5) | LOS E 1,540 | **1,845** | **2,067** | **No (7)** |
| | Columbia Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | **1,757** | **1,743** | **No (7)** |
| Pleasant Valley Rd | Gowen Rd to Hollilynn Dr | Principal Arterial (2) | LOS E 690 | **851** | **861** | **No (3)** |
| | Hollilynn Dr to Tenmile Creek Rd | Principal Arterial (2) | LOS E 690 | 621 | **785** | **No (3)** |
| Columbia Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | **594** | **735** | **No (5)** |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | **708** | **785** | **No (5)** |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | **718** | **914** | **No (5)** |
| Hubbard Rd | Five Mile Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | **995** | **1,029** | **No (5)** |
| Five Mile Rd | Tenmile Creek Rd to Hubbard Rd | Minor Arterial (3) | LOS E 720 | **991** | **1,027** | **No (5)** |
| Tenmile Creek Rd | Five Mile Rd to Pleasant Valley Rd | Minor Arterial (3/2) | LOS E 720/575 | 529 | 721 | Yes |
| Kuna Rd | Meridian Rd to Locust Grove Rd | Minor Arterial (2) | LOS E 575 | **589** | **789** | **No (5)** |
| | Locust Grove Rd to Eagle Rd | Minor Arterial (2) | LOS E 575 | 505 | **731** | **No (3)** |
| | Eagle Rd to Cloverdale Rd | Minor Arterial (2) | LOS E 575 | 530 | **695** | **No (3)** |

# APPENDIX A: SCOPE AND COMPASS AREA OF INFLUENCE RESULTS

CR ENGINEERING, INC.
181 East 50th Street
Garden City, ID 83714
(208) 841-4996
chhream@gmail.com

# MEMORANDUM – TIS SCOPE

DATE: April 10, 2019

TO: Mindy Wallace, AICP, Ada County Highway District
Erika Bowen, P.E., Idaho Transportation Department

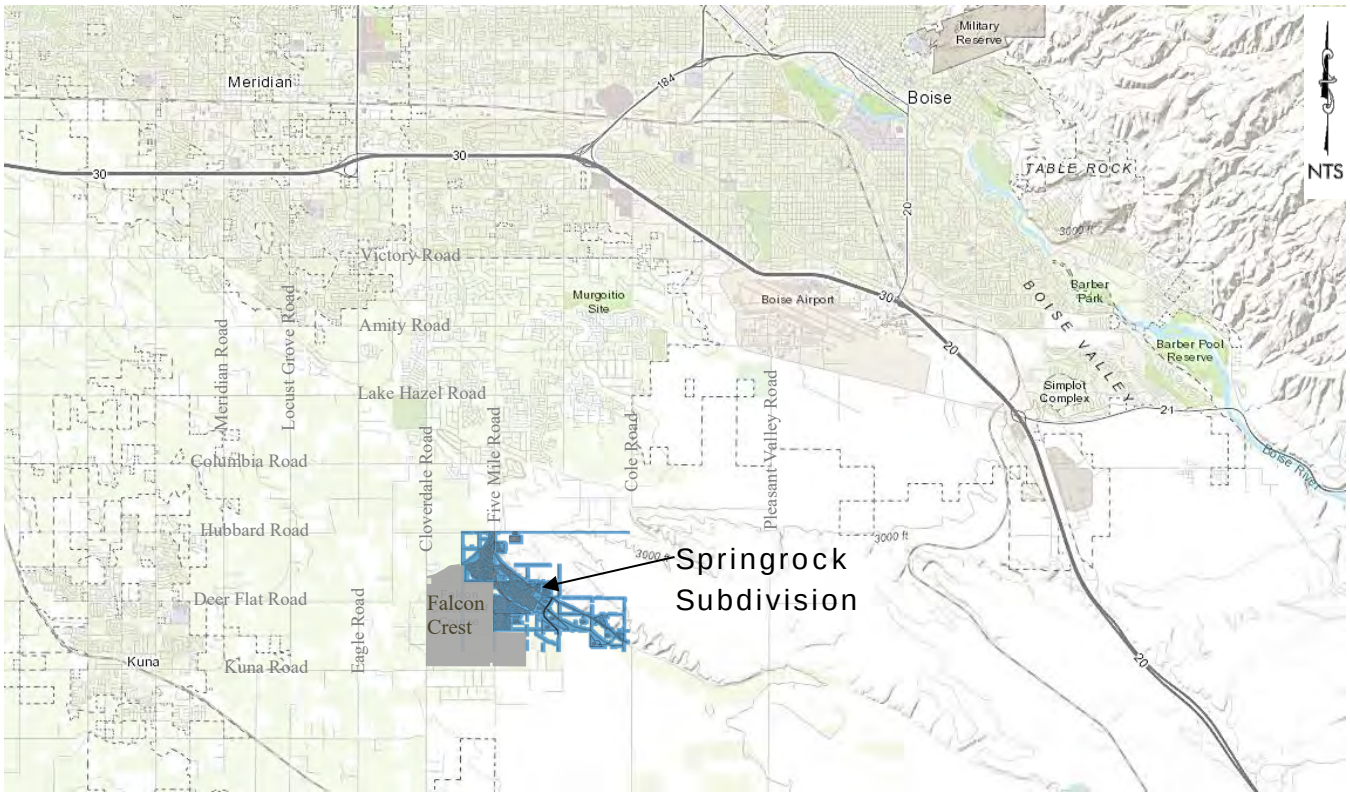
FROM: Chhang Ream
CR Engineering, Inc.

PROJECT: Springrock Subdivision
Ada County, Idaho

SUBJECT: Proposed Scope of Work for Traffic Impact Study

This memorandum summarizes the scope of work for conducting the traffic impact study (TIS) for the proposed development located on Ten Mile Creek Road between Cloverdale Road and Pleasant Valley Road, in Ada County, Idaho, as shown in **Figure 1**. The scope of work is based on the results from COMPASS influence area modeling with the study area intersections and roadway segments as determined by ACHD.

**Figure 1 – Project Location and Vicinity**



The TIS scope of work incudes and address items presented in the following sections:

1. **PROPOSED DEVELOPMENT** (preliminary plat as shown in **Figure 2**)
   - Mixed-use development with proposed land uses as summarized in **Table 1**

**Figure 2 – Springrock Subdivision Preliminary Plat**

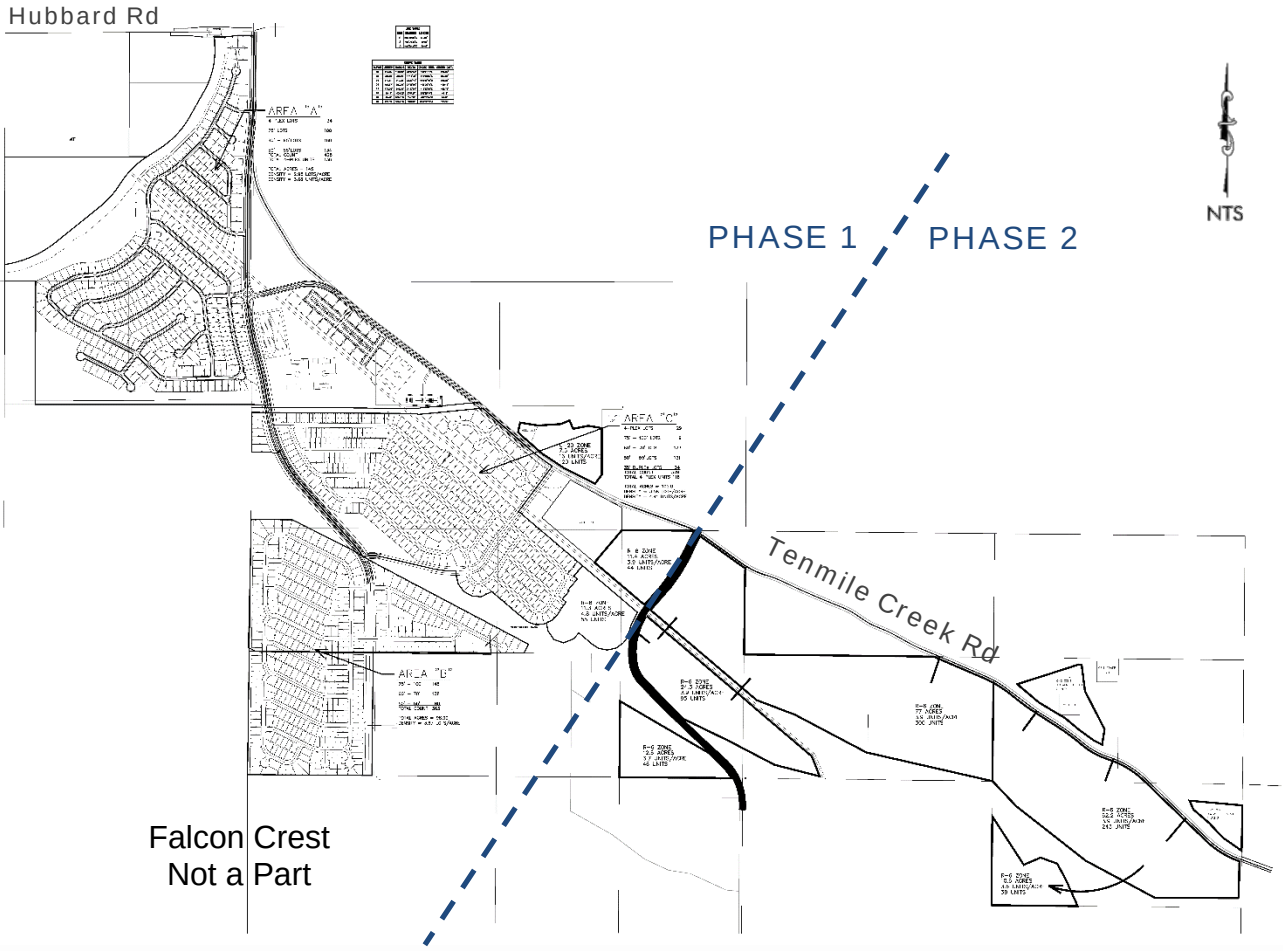



**Table 1 – Proposed Land Use Summary**

| Land Use | Phase 1 (2030 build-out year) | Phase 2 (2040 build-out year) | Total |
|---|---|---|---|
| Single-family residential (DU) | 1,104 | 821 | 1,925 |
| 4-Plex residential (DU) | 252 | - | 252 |
| Multi-family residential (DU) | 120 | | 120 |
| Office (SF) | 60,000 | - | 60,000 |
| Daycare (SF) | 5,000 | - | 5,000 |
| Coffee shop with drive-thru (SF) | 2,000 | - | 2,000 |
| Quality restaurant (SF) | 6,000 | - | 6,000 |
| High-turnover restaurant (SF) | 6,000 | - | 6,000 |
| Convenience market (SF) | - | 4,000 | 4,000 |
| Mini-storage (SF) | - | 101,000 | 101,000 |
| Elementary school (EA) | 1 | - | 1 |
| Community parks (EA) | 2 | - | 2 |

## 2. SITE TRIP GENERATION, MODE SPLIT, TRIP DISTRIBUTION AND ASSIGNMENT

- Estimate site trip generation using ITE Trip Generation Manual (10th Edition)
- Estimate internal capture trips using ITE methodologies
  - Phase 1 – 7% AM peak and 5% PM peak
  - Build-out – 9% AM peak and 12% PM peak
- Pass-by rates are based on ITE data and applied to the following land uses after internal trip capture
  - Coffee shop with drive-thru – assumed 60% AM and PM peak hours pass-by rate
    - ITE Code 938 (Coffee shop with drive-thru and no indoor seating) has a daily pass-by rate of 89%. This is reduced to a more conservative 60%, which has been used in other developments' TIS that included coffee shops with drive-thru windows within Ada County
  - Quality restaurant - 44% average PM peak hour rate as listed in Trip Generation Handbook
  - High-turnover restaurant – 43% average PM peak hour rate as listed in Trip Generation Handbook
  - Convenience Market – 51% average PM peak hour rate as listed in Trip Generation Handbook
- **Table 2** summarizes 2030 Phase 1 trip generation
- **Table 3** summarizes 2040 full build-out trip generation
- Site traffic distribution and assignment is based on COMPASS travel demand model results and adjusted as needed to reflect the proposed land uses and travel patterns in the area. **Figure 3** summarizes site traffic distribution patterns

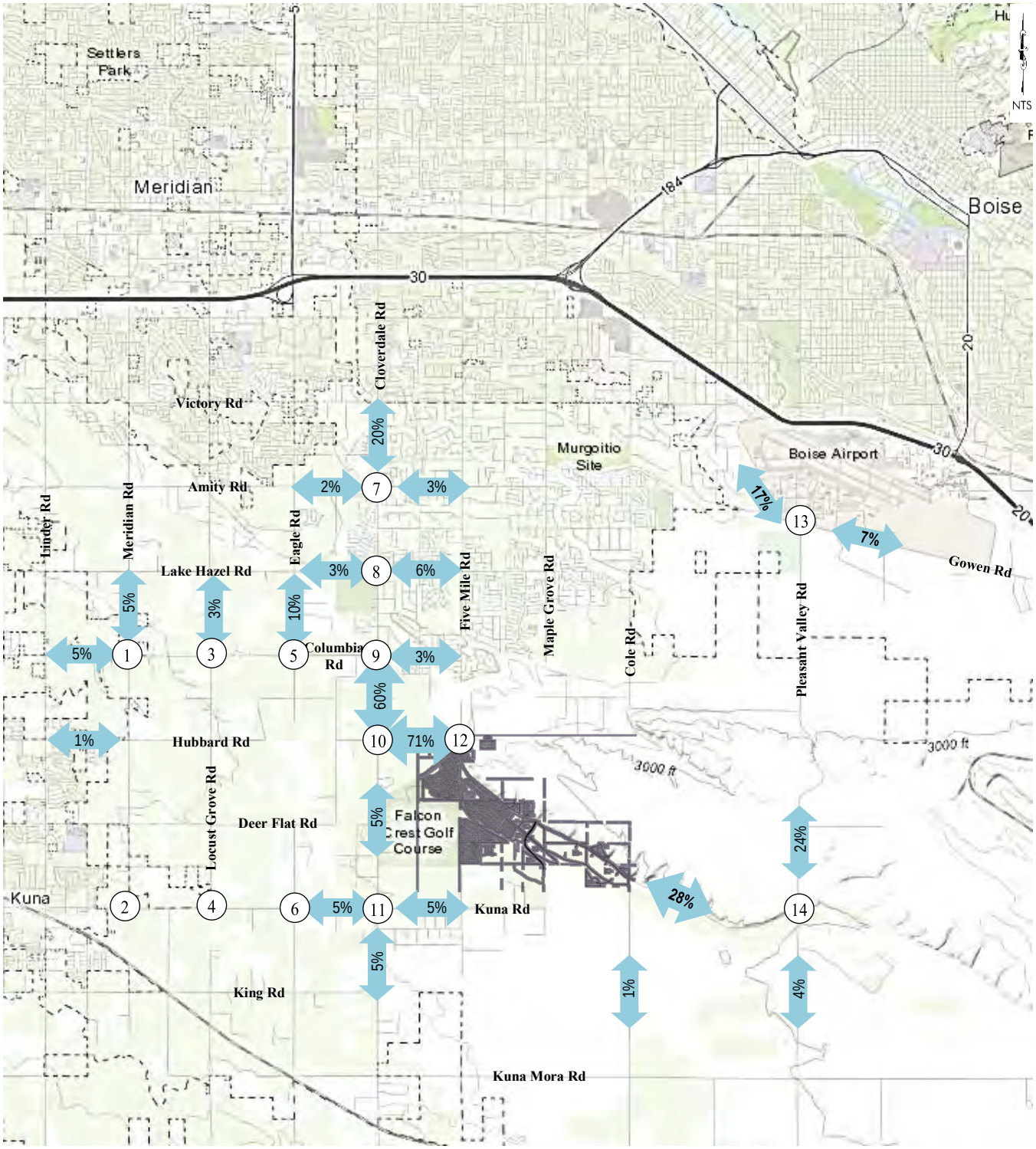
**Table 2 – Phase 1 2030 Build-Out Trip Generation Summary**

| Land Use | ITE Code | Size | Unit | Trips per Unit | Total Trips | Internal Capture | Pass-by Trips | Primary Trips Total | Entering | | Exiting | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Weekday Daily (vpd)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1104 | DU | EXP[0.92(Ln(X)) + 2.71] | 9,473 | 568 | -- | 8,905 | 50% | 4,453 | 50% | 4,452 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | 7.56(X) - 40.86 | 1,865 | 112 | -- | 1,753 | 50% | 877 | 50% | 876 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | 5.45(X) - 1.75 | 653 | 39 | -- | 614 | 50% | 307 | 50% | 307 |
| Flex Office | 710 | 60 | TSF | EXP[0.97(Ln(X))+2.50] | 646 | 39 | -- | 607 | 50% | 303 | 50% | 304 |
| Daycare | 535 | 5 | TSF | 47.62 | 58 | 3 | -- | 55 | 50% | 27 | 50% | 28 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 820.38 | 1,641 | 98 | -- | 1,543 | 50% | 772 | 50% | 771 |
| Quality Restaurant | 931 | 6 | TSF | 83.84 | 503 | 30 | -- | 473 | 50% | 237 | 50% | 236 |
| High Turnover Restaurant | 932 | 6 | TSF | 112.18 | 673 | 40 | -- | 633 | 50% | 316 | 50% | 317 |
| Elementary School | 520 | 600 | Students | 1.89 | 1,134 | 68 | -- | 1,066 | 50% | 533 | 50% | 533 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | -- | 0 | 50% | 0 | 50% | 0 |
| **Weekday Daily Total Trips** | | | | | **16,646** | **997** | | **15,649** | | **7,825** | | **7,824** |
| **Weekday AM Peak Hour (vph)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1104 | DU | 0.71(X) + 4.80 | 789 | 55 | -- | 734 | 25% | 184 | 75% | 550 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | EXP[0.95(Ln(X)) - 0.51] | 115 | 8 | -- | 107 | 23% | 25 | 77% | 82 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | EXP[0.98(Ln(X)) - 0.98] | 41 | 3 | -- | 38 | 23% | 9 | 77% | 29 |
| Flex Office | 710 | 60 | TSF | 0.94(X) + 26.49 | 83 | 6 | -- | 77 | 62% | 48 | 38% | 29 |
| Daycare | 535 | 5 | TSF | 11.00 | 58 | 4 | -- | 54 | 53% | 29 | 47% | 25 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 88.99 | 178 | 12 | 100 | 66 | 51% | 34 | 49% | 32 |
| Quality Restaurant | 931 | 6 | TSF | 0.73 | 4 | 0 | -- | 4 | 67% | 3 | 33% | 1 |
| High Turnover Restaurant | 932 | 6 | TSF | 9.94 | 60 | 4 | -- | 56 | 55% | 31 | 45% | 25 |
| Elementary School | 520 | 600 | Students | 0.67 | 402 | 28 | -- | 374 | 54% | 202 | 46% | 172 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | -- | 0 | 59% | 0 | | 0 |
| **Weekday AM Peak Total Trips** | | | | | **1,730** | **120** | **100** | **1,510** | | **565** | | **945** |
| **Weekday PM Peak Hour (vph)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1104 | DU | EXP[0.96(Ln(X)) + 0.20] | 1,019 | 51 | -- | 968 | 63% | 610 | 37% | 358 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | EXP[0.89(Ln(X)) - 0.02] | 135 | 7 | -- | 128 | 63% | 81 | 37% | 47 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | EXP[0.96(Ln(X)) - 0.63] | 59 | 3 | -- | 56 | 63% | 35 | 37% | 21 |
| Flex Office | 710 | 60 | TSF | EXP[0.95(Ln(X))+0.36] | 70 | 4 | -- | 66 | 16% | 11 | 84% | 55 |
| Daycare | 535 | 5 | TSF | 11.12 | 56 | 3 | -- | 53 | 16% | 8 | 84% | 45 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 43.38 | 87 | 4 | 50 | 33 | 50% | 17 | 50% | 16 |
| Quality Restaurant | 931 | 6 | TSF | 7.80 | 47 | 2 | 20 | 25 | 67% | 17 | 33% | 8 |
| High Turnover Restaurant | 932 | 6 | TSF | 9.77 | 59 | 3 | 24 | 32 | 62% | 20 | 38% | 12 |
| Elementary School | 520 | 600 | Students | 0.17 | 102 | 5 | -- | 97 | 48% | 47 | 52% | 50 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | -- | 0 | | 0 | | 0 |
| **Weekday PM Peak Hour Total Trips** | | | | | **1,634** | **82** | **94** | **1,458** | | **846** | | **612** |

## Table 3 – 2040 Full Build-Out Trip Generation Summary

| Land Use | ITE Code | Size | Unit | Trips per Unit | Total Trips | Internal Capture | Pass-by Trips | Primary Trips | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Total | | Entering | | Exiting |
| **Weekday Daily (vpd)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1925 | DU | EXP[0.92(Ln(X)) + 2.71] | 15,799 | 1896 | -- | 13,903 | 50% | 6,952 | 50% | 6,951 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | 7.56(X) - 40.86 | 1,865 | 224 | -- | 1,641 | 50% | 821 | 50% | 820 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | 5.45(X) - 1.75 | 653 | 78 | -- | 575 | 50% | 288 | 50% | 287 |
| Flex Office | 710 | 60 | TSF | EXP[0.97(Ln(X))+2.50] | 646 | 78 | -- | 568 | 50% | 284 | 50% | 284 |
| Daycare | 535 | 5 | TSF | 47.62 | 58 | 7 | -- | 51 | 50% | 25 | 50% | 26 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 820.38 | 1,641 | 197 | -- | 1,444 | 50% | 722 | 50% | 722 |
| Quality Restaurant | 931 | 6 | TSF | 83.84 | 503 | 60 | -- | 443 | 50% | 222 | 50% | 221 |
| High Turnover Restaurant | 932 | 6 | TSF | 112.18 | 673 | 81 | -- | 592 | 50% | 296 | 50% | 296 |
| Convenience Market | 851 | 4 | TSF | 762.28 | 3,049 | 366 | -- | 2,683 | 50% | 1,341 | 50% | 1,342 |
| Storage | 151 | 101 | TSF | 1.51 | 153 | 18 | -- | 135 | 50% | 67 | 50% | 68 |
| Elementary School | 520 | 600 | Students | 1.89 | 1,134 | 136 | -- | 998 | 50% | 499 | 50% | 499 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | -- | 0 | 50% | 0 | 50% | 0 |
| **Weekday Daily Total Trips** | | | | | **26,174** | **3,141** | | **23,033** | | **11,517** | | **11,516** |
| **Weekday AM Peak Hour (vph)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1925 | DU | 0.71(X) + 4.80 | 1,372 | 123 | -- | 1,249 | 25% | 312 | 75% | 937 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | EXP[0.95(Ln(X)) - 0.51] | 115 | 10 | -- | 105 | 23% | 24 | 77% | 81 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | EXP[0.98(Ln(X)) - 0.98] | 41 | 4 | -- | 37 | 23% | 9 | 77% | 28 |
| Flex Office | 710 | 60 | TSF | 0.94(X) + 26.49 | 83 | 7 | -- | 76 | 62% | 47 | 38% | 29 |
| Daycare | 535 | 5 | TSF | 11.00 | 58 | 5 | -- | 53 | 53% | 28 | 47% | 25 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 88.99 | 178 | 16 | 97 | 65 | 51% | 33 | 49% | 32 |
| Quality Restaurant | 931 | 6 | TSF | 0.73 | 4 | 0 | -- | 4 | 67% | 3 | 33% | 1 |
| High Turnover Restaurant | 932 | 6 | TSF | 9.94 | 60 | 5 | -- | 55 | 55% | 30 | 45% | 25 |
| Convenience Market | 851 | 4 | TSF | 62.54 | 250 | 23 | -- | 227 | 50% | 114 | 50% | 113 |
| Storage | 151 | 101 | TSF | 0.10 | 10 | 1 | -- | 9 | 60% | 5 | 40% | 4 |
| Elementary School | 520 | 600 | Students | 0.67 | 402 | 36 | -- | 366 | 54% | 198 | 46% | 168 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | | 0 | | 0 | | 0 |
| **Weekday AM Peak Total Trips** | | | | | **2,573** | **230** | **97** | **2,246** | | **803** | | **1,443** |
| **Weekday PM Peak Hour (vph)** | | | | | | | | | | | | |
| Single-Family Residential Housing | 210 | 1925 | DU | EXP[0.96(Ln(X)) + 0.20] | 1,738.0 | 209 | -- | 1,529 | 63% | 963 | 37% | 566 |
| Multifamily Housing (Low-Rise) | 220 | 252 | DU | EXP[0.89(Ln(X)) - 0.02] | 135.0 | 16 | -- | 119 | 63% | 75 | 37% | 44 |
| Multifamily Housing (Low-Rise) | 221 | 120 | DU | EXP[0.96(Ln(X)) - 0.63] | 59 | 7 | -- | 52 | 63% | 33 | 37% | 19 |
| Flex Office | 710 | 60 | TSF | EXP[0.95(Ln(X))+0.36] | 70.1 | 8 | -- | 62 | 16% | 10 | 84% | 52 |
| Daycare | 535 | 5 | TSF | 11.12 | 56.0 | 7 | -- | 49 | 16% | 8 | 84% | 41 |
| Coffee Shop with Drive Thru | 937 | 2 | TSF | 43.38 | 86.8 | 10 | 46 | 31 | 50% | 16 | 50% | 15 |
| Quality Restaurant | 931 | 6 | TSF | 7.80 | 46.8 | 6 | 18 | 23 | 67% | 15 | 33% | 8 |
| High Turnover Restaurant | 932 | 6 | TSF | 9.77 | 58.6 | 7 | 22 | 30 | 62% | 19 | 38% | 11 |
| Convenience Market | 851 | 4 | TSF | 49.11 | 196.4 | 24 | 88 | 84 | 51% | 43 | 49% | 41 |
| Storage | 151 | 101 | TSF | 0.17 | 17.2 | 2 | -- | 15 | 47% | 7 | 53% | 8 |
| Elementary School | 520 | 600 | Students | 0.17 | 102.0 | 12 | -- | 90 | 48% | 43 | 52% | 47 |
| Community Park | 411 | 2 | Parks | -- | 0 | 0 | -- | 0 | | 0 | | 0 |
| **Weekday PM Peak Hour Total Trips** | | | | | **2,566** | **308** | **174** | **2,084** | | **1,232** | | **852** |

**Figure 3 – Site Traffic Distribution Patterns**



## 3. STUDY AREA INTERSECTIONS

- Pleasant Valley Road & Gowen Road
- Pleasant Valley Road & Ten Mile Creek Road
- Five Mile Road & Ten Mile Creek Road (future intersection)
- Five Mile Road & Hubbard Road
- Cloverdale Road & Amity Road
- Cloverdale Road & Lake Hazel Road
- Cloverdale Road & Columbia Road
- Cloverdale Road & Hubbard Road
- Cloverdale Road & Kuna Road
- Columbia Road & Eagle Road
- Kuna Road & Eagle Road
- Columbia Road & Locust Grove Road
- Kuna Road & Locust Grove Road
- Columbia Road & SH 69
- Kuna Road & SH 69
- All proposed site access points

## 4. STUDY AREA ROADWAY SEGMENTS

- Pleasant Valley Road between Gowen Road and Hollilynn Drive
- Pleasant Valley Road between Hollilynn Drive and Ten Mile Creek Road
- Ten Mile Creek Road between Pleasant Valley Road and Five Mile Road
- Five Mile Road between Ten Mile Creek Road and Hubbard Road
- Hubbard Road between Five Mile Road and Cloverdale Road
- Cloverdale Road between Hubbard Road and Columbia Road
- Cloverdale Road between Columbia Road and Lake Hazel Road
- Cloverdale Road between Lake Hazel Road and Amity Road
- Columbia Road between Cloverdale Road and Eagle Road
- Columbia Road between Eagle Road and Locust Grove Road
- Columbia Road between Locust Grove Road and SH 69
- Kuna Road between Cloverdale Road and Eagle Road
- Kuna Road between Eagle Road and Locust Grove Road
- Kuna Road between Locust Grove Road and SH 69
- All proposed internal collector roadways

## 5. TRAFFIC DATA COLLECTION

- Intersection peak hour turning movement counts will be collected on a typical weekday (Tuesday-Thursday) for the AM peak period (7:00-9:00 AM) and PM peak period (4:00-6:00 PM)
- 24-hour directional volumes will be collected for the study area roadway segments on a typical weekday

## 6. ANALYSIS YEARS

- 2019 existing traffic
- 2030 Phase 1 build-out year background traffic
- 2030 Phase 1 build-out year background plus site traffic
  - Includes proposed development in Phase 1 only
- 2040 full build-out year background traffic
  - Planning-level analysis of roadway segment level of service
- 2040 full build-out year background plus site traffic
  - Planning-level analysis of roadway segment level of service
  - Includes full build-out of the development

7. ANALYSIS PEAK HOUR PERIODS
   - Weekday AM peak hour of the adjacent transportation system (7:00-9:00 AM)
   - Weekday PM peak hour of the adjacent transportation system (4:00-6:00 PM)
   - 2040 planning-level analysis will be conducted with PM peak hour traffic only

8. BACKGROUND TRAFFIC ESTIMATE
   - 2030 traffic growth will be estimated by expanding the existing traffic counts with the percent annual growth rates estimated from COMPASS forecast as summarized in **Table 4**:

**Table 4 – Background Traffic Growth**

| Roadway | Phase 1 (2019-2030) | 2040 Full Build-Out |
|---|---|---|
| SH 69 | 3% | 2040 PM peak hour background traffic for roadway segments will be based on COMPASS forecasts |
| Locust Grove Road | 10% | |
| Eagle Road | 5% | |
| Cloverdale Road | 8% | |
| Five Mile Road | 2% | |
| Pleasant Valley Road | 3% | |
| Amity Road | 4% | |
| Gowen Road | 2% | |
| Lake Hazel Road | 5% | |
| Columbia Road | 5% | |
| Hubbard Road | 10% | |
| Kuna Road | 8% | |
| Tenmile Creek Road | 6% | |

   - 2040 PM peak hour background traffic for roadways segments will be obtained from COMPASS model forecasts

9. OFF-SITE DEVELOPMENT
   - One proposed off-site development located adjacent to the site will be included in the background traffic in additional to the traffic growth – Falcon Crest Subdivision.
     - Phase 1 (400 DU) of Falcon Crest Subdivision is included in the COMPASS model growth rate. The proposed developments beyond Phase 1 are not included in the COMPASS model demographics and will be included in the background traffic as off-site traffic.

10. ANALYSIS TOOLS AND METHODOLOGIES
    - Signalized and unsignalized intersection capacity analysis will be performed using Synchro 10 (version 10.3.55.0) with 2010 Highway Capacity Manual methodologies
    - Roundabout capacity analysis will be based on the HCM 2016 methodologies, which reflect the latest research on roundabout capacity

11. MINIMUM OPERATIONAL THRESHOLDS
    - ACHD intersections
      - Signalized intersection – overall intersection v/c ratio of 0.90 and 1.00 for a lane group
      - Unsignalized intersection – v/c ratio of 1.00 for the critical lane group
        - We will conduct preliminary signal warrant analysis for ACHD intersections operating at LOS D or worse
    - ACHD roadway segment LOS planning level thresholds
      - Principal and minor arterial – LOS E or better

  - Collector street – LOS D or better
- ITD intersections
  - LOS D with an overall intersection v/c ratio of 0.90 and 1.00 for a lane group

12. PLANNED ROADWAY AND INTERSECTION IMPROVEMENTS
    - Review ACHD transportation plans and identify planned roadway and intersection improvements within the study area to be considered for mitigating the traffic impacts if necessary (summarized in **Table 5**). All ACHD IFYWP improvements are in accordance with the 2016 ACHD CIP unless otherwise stated. If the lane configuration is built to the planned reservation as described in the ACHD Master Street Map, no additional improvements will be recommended as described in the ACHD Policy Manual.

**Table 5 – Roadway Network Improvements**

| Transportation Plan | Project | Project Year | Funding |
|---|---|---|---|
| ACHD 2019-2023 IFYWP | **Cloverdale Road**<br>• Widen to 5 lanes with curb, gutter, multi-use paths from Victory Road to Lake Hazel Road | Unknown | Unfunded |
| | **Lake Hazel Road**<br>• Widen to 5 lanes with curb, gutter, multi-use paths from Eagle Road to Five Mile Road | Preliminary Development | Programmed |
| | **Lake Hazel Road and Cloverdale Road intersection**<br>• Widen intersection to 5 lanes on all approaches | Unknown | Unfunded |
| | **Amity Road and Cloverdale Road intersection**<br>• Install a multi-lane roundabout | Preliminary Development | Programmed |
| ACHD 2016 CIP | **Amity Road - Eagle Road to Cloverdale Road**<br>• Reconstruct/widen - two to three lanes | 2026-2030 | Unfunded |
| | **Cloverdale Road - Victory Road to Lake Hazel Road**<br>• Reconstruct/widen - two to five lanes | 2021-2025 | Unfunded |
| | **Cloverdale Road - Lake Hazel Road to Columbia Road**<br>• Reconstruct/widen - two to five lanes | 2026-2030 | Unfunded |
| | **Cloverdale Road - Columbia Road to Kuna Road**<br>• Reconstruct/widen - two to three lanes | 2031-2035 | Unfunded |
| | **Lake Hazel Road - Eagle Road to Cloverdale Road**<br>• Reconstruct/widen - two to three lanes | 2021-2025 | Unfunded |
| | **Lake Hazel Road - Cloverdale Road to Five Mile Road**<br>• Reconstruct/widen - two to five lanes | 2021-2025 | Unfunded |
| | **Amity Road and Cloverdale Road intersection**<br>• Construct a multi-lane roundabout with 2 lanes for Cloverdale Road approaches and 1 lane for Amity Road approaches | 2021-2025 | Unfunded |
| | **Columbia Road and Cloverdale Road intersection**<br>• Construct a single-lane roundabout with a westbound right-turn bypass lane | 2026-2030 | Unfunded |
| | **Kuna Road and Cloverdale Road intersection**<br>• Construct a single-lane roundabout | 2031-2035 | Unfunded |
| | **Lake Hazel Road and Cloverdale Road intersection**<br>• Reconstruct/widen approaches for dual left-turn lanes on Lake Hazel Road approaches, two through lanes on Cloverdale Road and eastbound Lake Hazel Road approaches, and an exclusive westbound right-turn lane | 2031-2035 | Unfunded |

| | | | |
|---|---|---|---|
| ACHD 2018 MSM | **Amity Road - Eagle Road to Five Mile Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Lake Hazel Road - Eagle Road to Five Mile Road**<br>• Reservation for five lanes | Unknown | Unfunded |
| | **Columbia Road - Eagle Road to Five Mile Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Hubbard Road - Linder Road to Locust Grove Road**<br>• Reservation for three lanes 3 2 5 3(Extend) 5 | Unknown | Unfunded |
| | **Hubbard Road - Locust Grove Road to Eagle Road**<br>• Reservation for two lanes | Unknown | Unfunded |
| | **Hubbard Road - Eagle Road to Five Mile Road**<br>• Reservation for five lanes | Unknown | Unfunded |
| | **Hubbard Road Extension**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Kuna Road - Meridian Road to Eagle Road**<br>• Reservation for two lanes | Unknown | Unfunded |
| | **Kuna Road - Eagle Road to Pleasant Valley Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Ten Mile Creek Road - Five Mile Road to Pleasant Valley Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Locust Grove Road - Lake Hazel Road to Kuna Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Eagle Road - Lake Hazel Road to Hubbard Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Cloverdale Road - Victory Road to Lake Hazel Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Cloverdale Road - Victory Road to Lake Hazel Road**<br>• Reservation for five lanes | Unknown | Unfunded |
| | **Five Mile Road - Columbia Road to 10 Mile Creek Road**<br>• Reservation for three lanes | Unknown | Unfunded |
| | **Pleasant Valley Road south of Gowen Road**<br>• Reservation for five lanes | Unknown | Unfunded |
| | **Pleasant Valley Road at 10 Mile Creek Road**<br>• Reservation for five lanes | Unknown | Unfunded |
| | **Gowen Road at Pleasant Valley Road**<br>• Reservation for five lanes | Unknown | Unfunded |

- Review ITD transportation plans
  - 2019-2025 Idaho Transportation Investment Program
  - SH 69 Corridor Plan (This study is underway)

13. 2030 PHASE 1 TRAFFIC IMPACT ANALYSIS
    - Conduct intersection capacity analysis
    - Conduct roadway segment LOS planning level analysis
    - Conduct turn lane warrant analysis using ACHD guidelines
    - Identify intersection and roadway improvements needed to mitigate the impacts if necessary

14. 2040 FULL BUILD-OUT PLANNING-LEVEL ANALYSIS
    - Conduct planning-level analysis of roadway segment level of service analysis (PM peak hour only)
        - 2040 background traffic
        - 2040 total traffic
    - Identify roadway improvement needed to mitigate the impacts if necessary
    - Detailed intersection capacity analysis will not be conducted with 2040 full build-out traffic conditions
        - An update TIS will be required for future phase preliminary plats

15. PREPARE A REPORT SUMMARIZING THE FINDINGS AND RECOMMENDATIONS

## Ten Mile Creek Road Mixed Use Site Proposed Development

The following summarizes the results of an area of influence model run for a proposed development located along Ten Mile Creek from Hubbard Road to Cole Road. The proposed development will consist of 2,233 single family units, 120 multi-family units, school, park, church and 20 acres of commercial use with an anticipated build out by 2040. See figure 1.

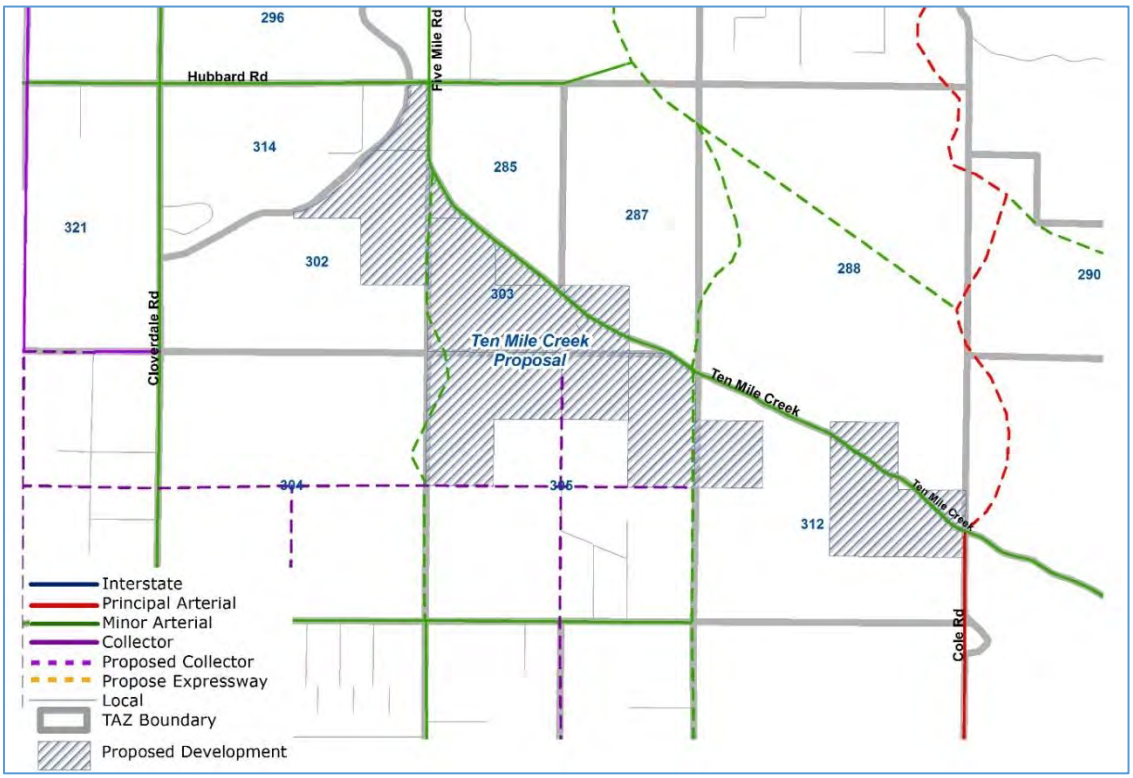



Figure 1: TAZs 302, 303,306, and 312

Table 1 provides the existing demographics for TAZ 302, 303, 306, and 312 and the proposed development's demographics used for the area of influence model run. Temporary TAZs and TAZ splits were used to isolate the proposed development's impact.

**Table 1**

| TAZ | 2018 | | 2040 with proposal | | 2040 | |
|---|---|---|---|---|---|---|
| | HH | Jobs | HH | Jobs | HH | Jobs |
| 302, 303, 305, and 312 | 31 | | 2,384 | 250 | 41 | 51 |
| *Falcon Crest, located in TAZ 304 northwest of Cloverdale and Kuna Roads, is entitled for 400 single family units. These were included in the special model run and the only TAZ with growth assumed. Limited information was provided to COMPASS regarding jobs by type for the proposed Ten Mile Creek development therefore, 50 retail, 150 office and 50 education jobs were assumed for the model run.* | | | | | | |

Figure 2: area of influence results for the proposed development
Figures 3 and 4: peak hour results
Figure 5: surrounding TAZs and demographics
Figures 6, 7 and 8: compounded annual growth rates

**Figure 2: Area of Influence, Peak hour demand contribution to the total peak hour demand**

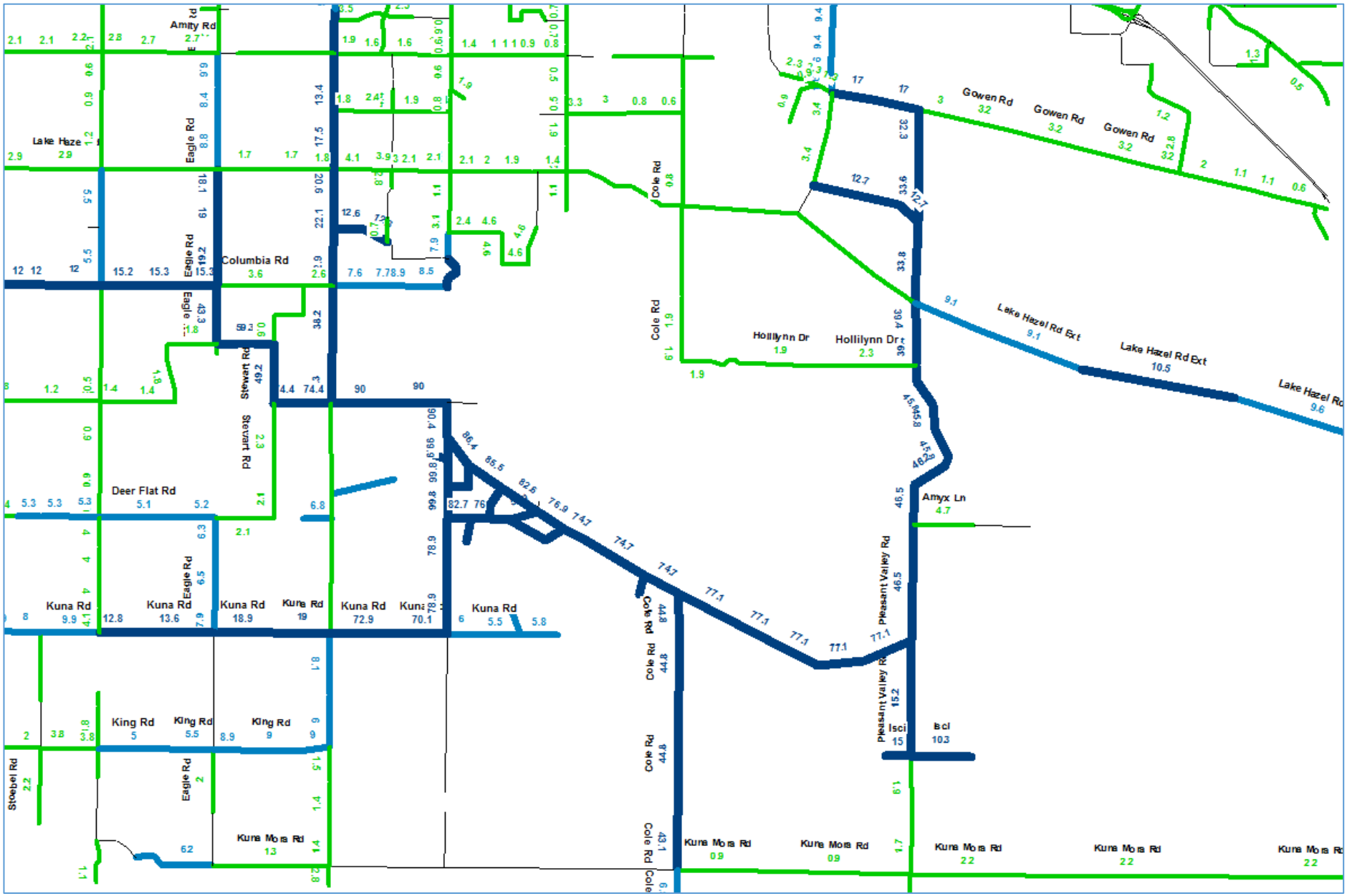


**Figure 3: Peak Hour Demand with Proposed Development**

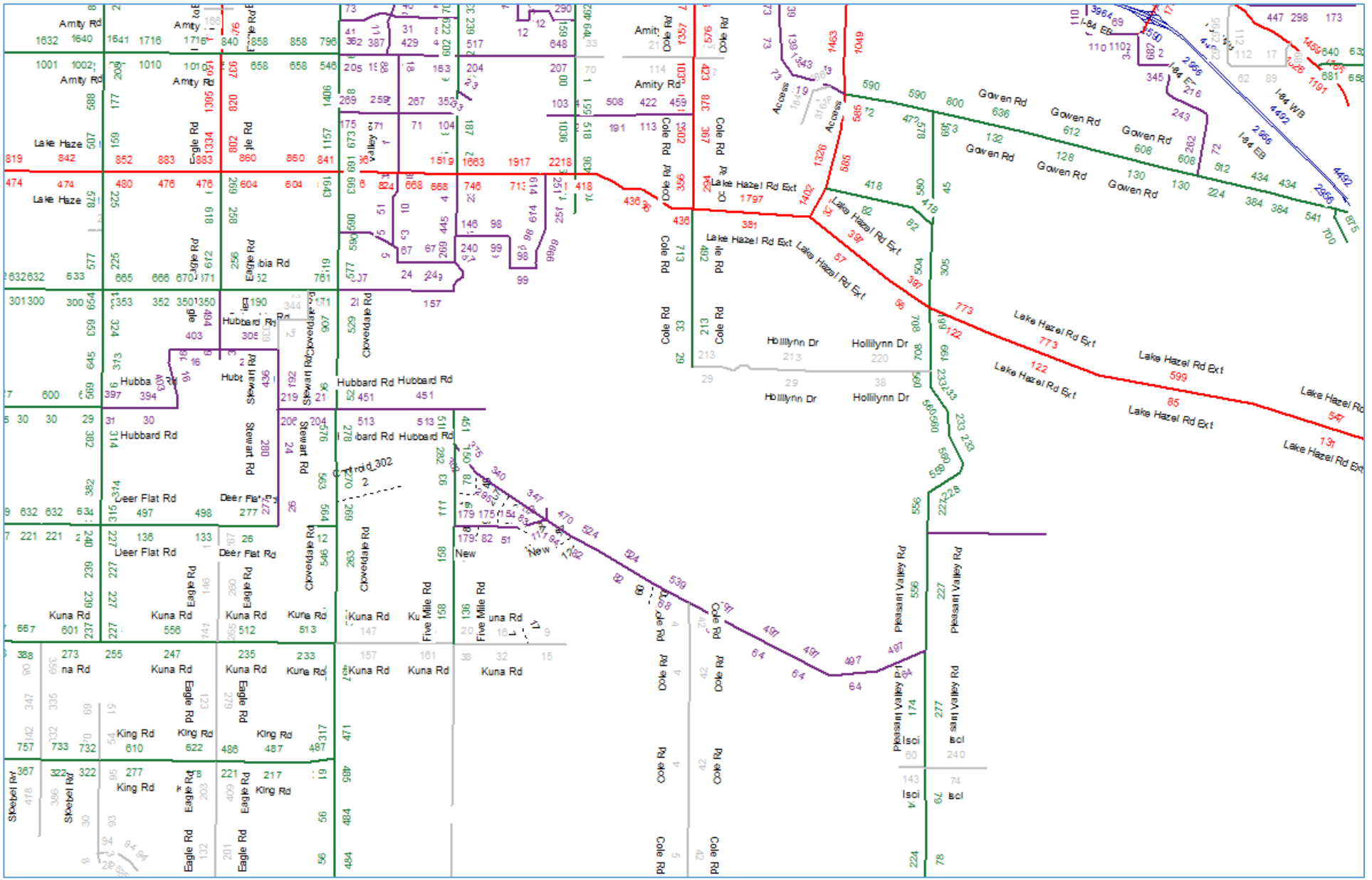
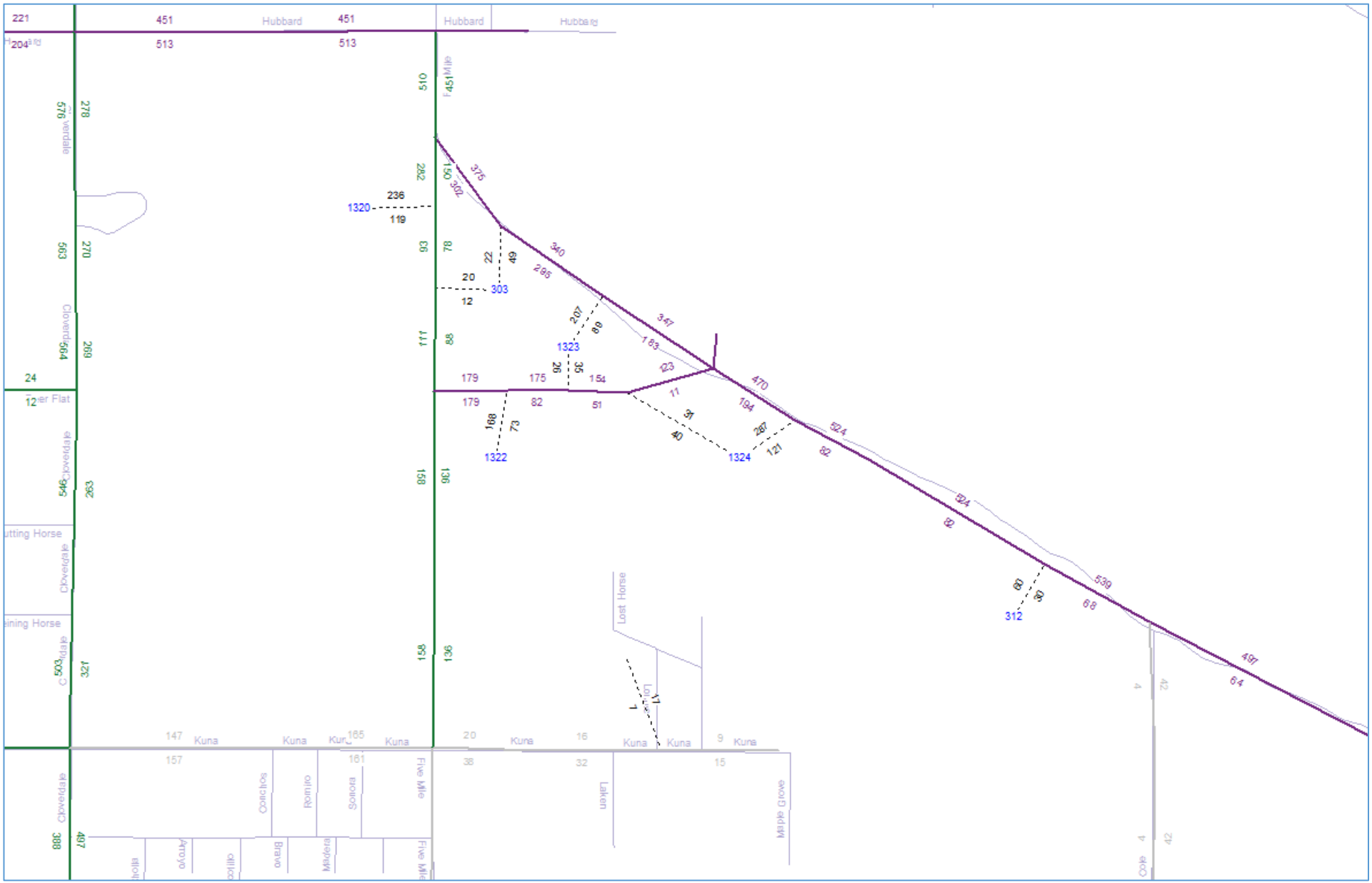


**Figure 4a: Peak Hour Demand with Proposed Development – Detailed Area**



## Figure 5: Peak Hour Demand without Proposed Development

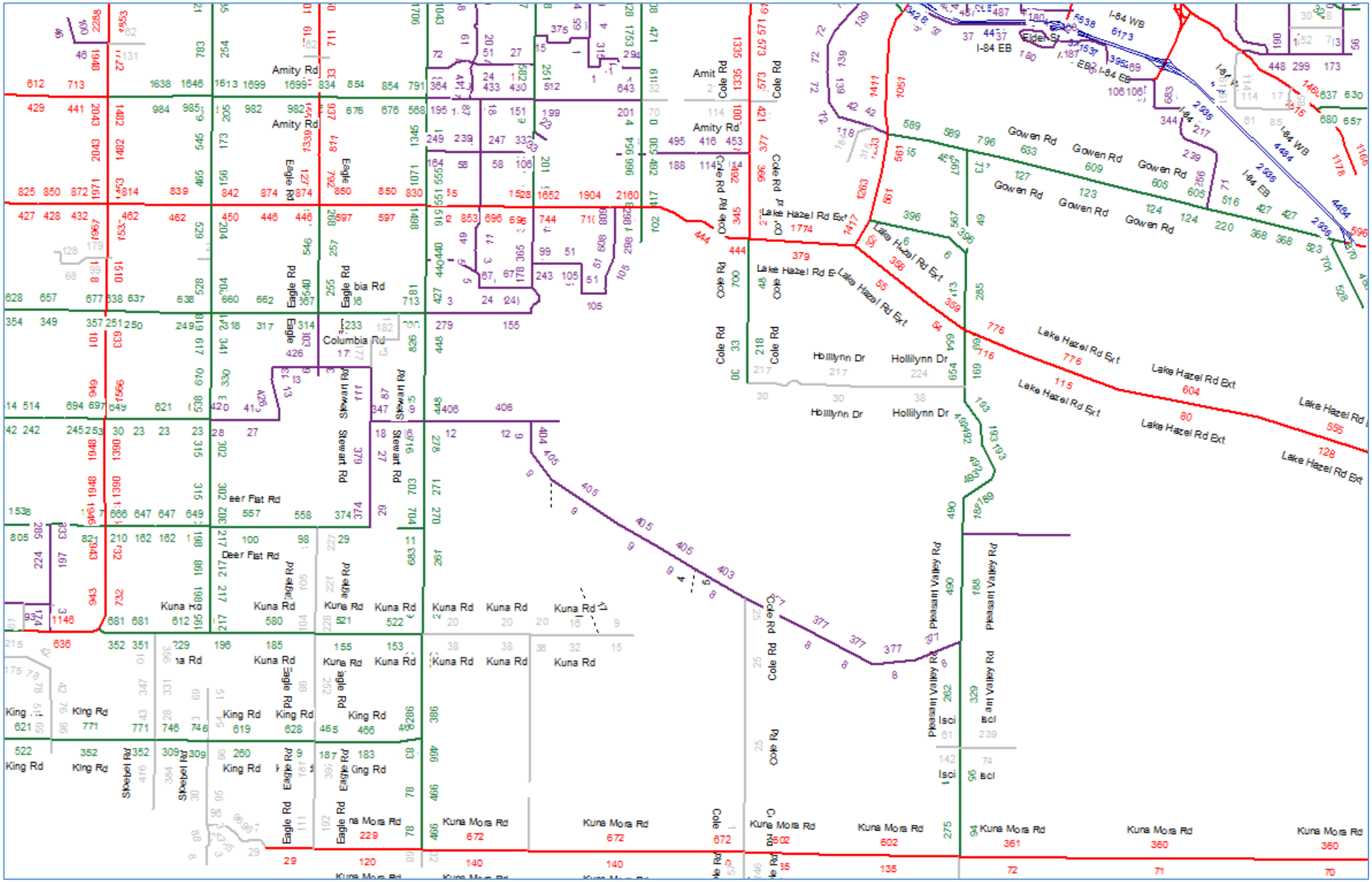
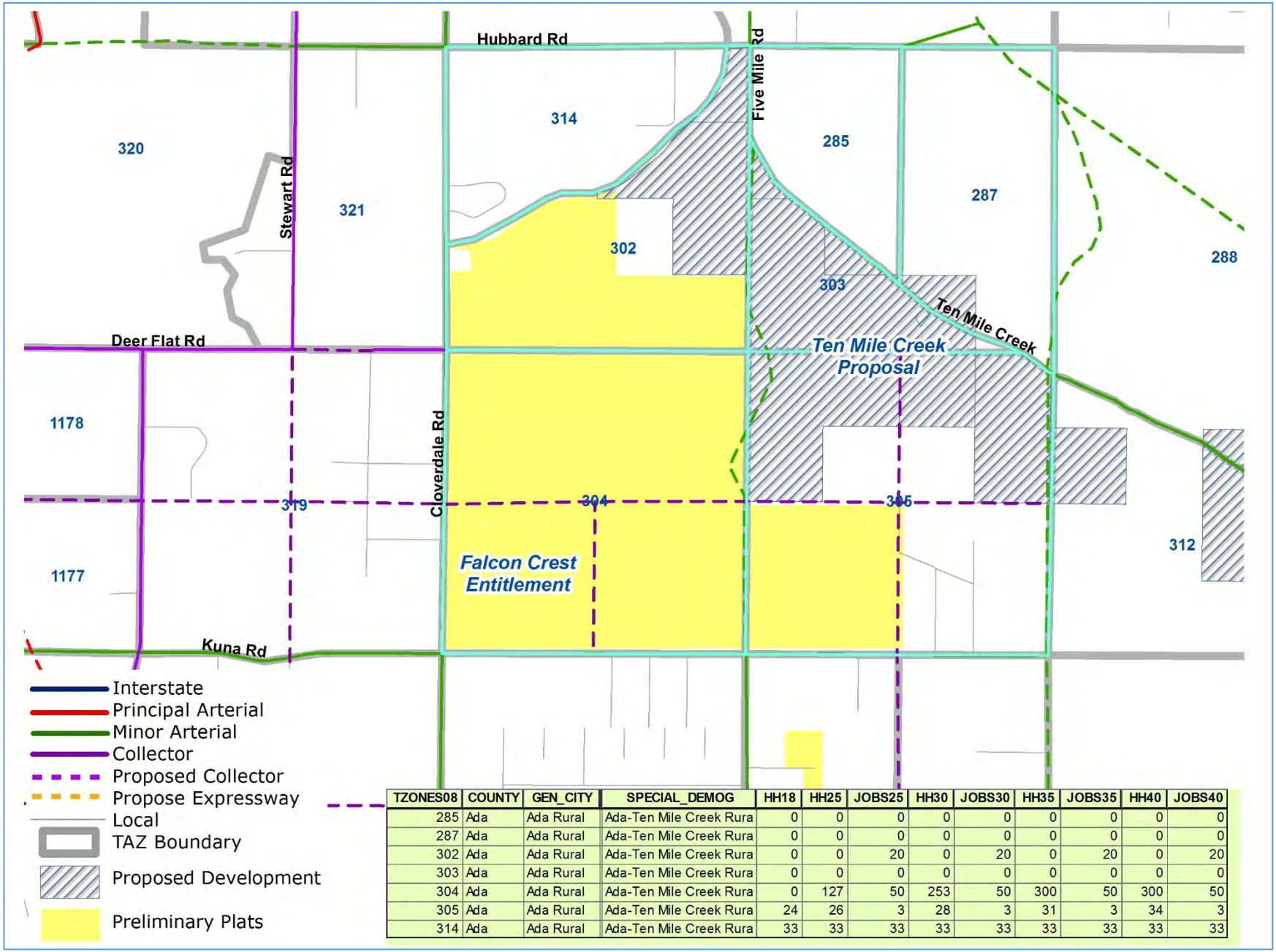
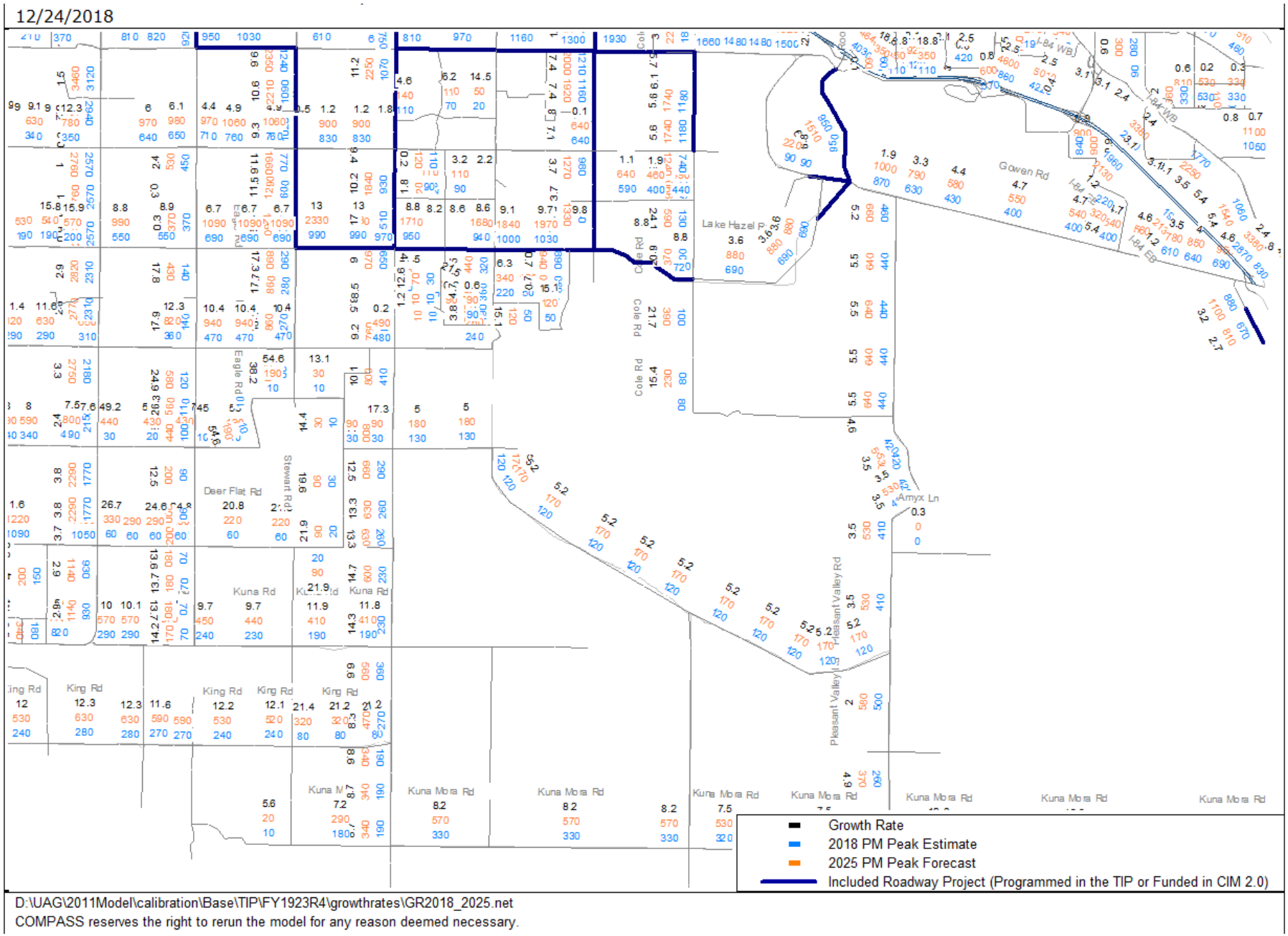


**Figure 6: Surrounding Area TAZs**




| TZONES08 | COUNTY | GEN_CITY | SPECIAL_DEMOG | HH18 | HH25 | JOBS25 | HH30 | JOBS30 | HH35 | JOBS35 | HH40 | JOBS40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 285 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 287 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 302 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 0 | 20 |
| 303 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 304 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 0 | 127 | 50 | 253 | 50 | 300 | 50 | 300 | 50 |
| 305 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 24 | 26 | 3 | 28 | 3 | 31 | 3 | 34 | 3 |
| 314 | Ada | Ada Rural | Ada-Ten Mile Creek Rura | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |

## Figure 7: 2018 to 2025 Compounded Annual Growth Rate




D:\UAG\2011Model\calibration\Base\TIP\FY1923R4\growthrates\GR2018_2025.net
COMPASS reserves the right to rerun the model for any reason deemed necessary.

## Figure 8: 2025 to 2030 Compounded Annual Growth Rate

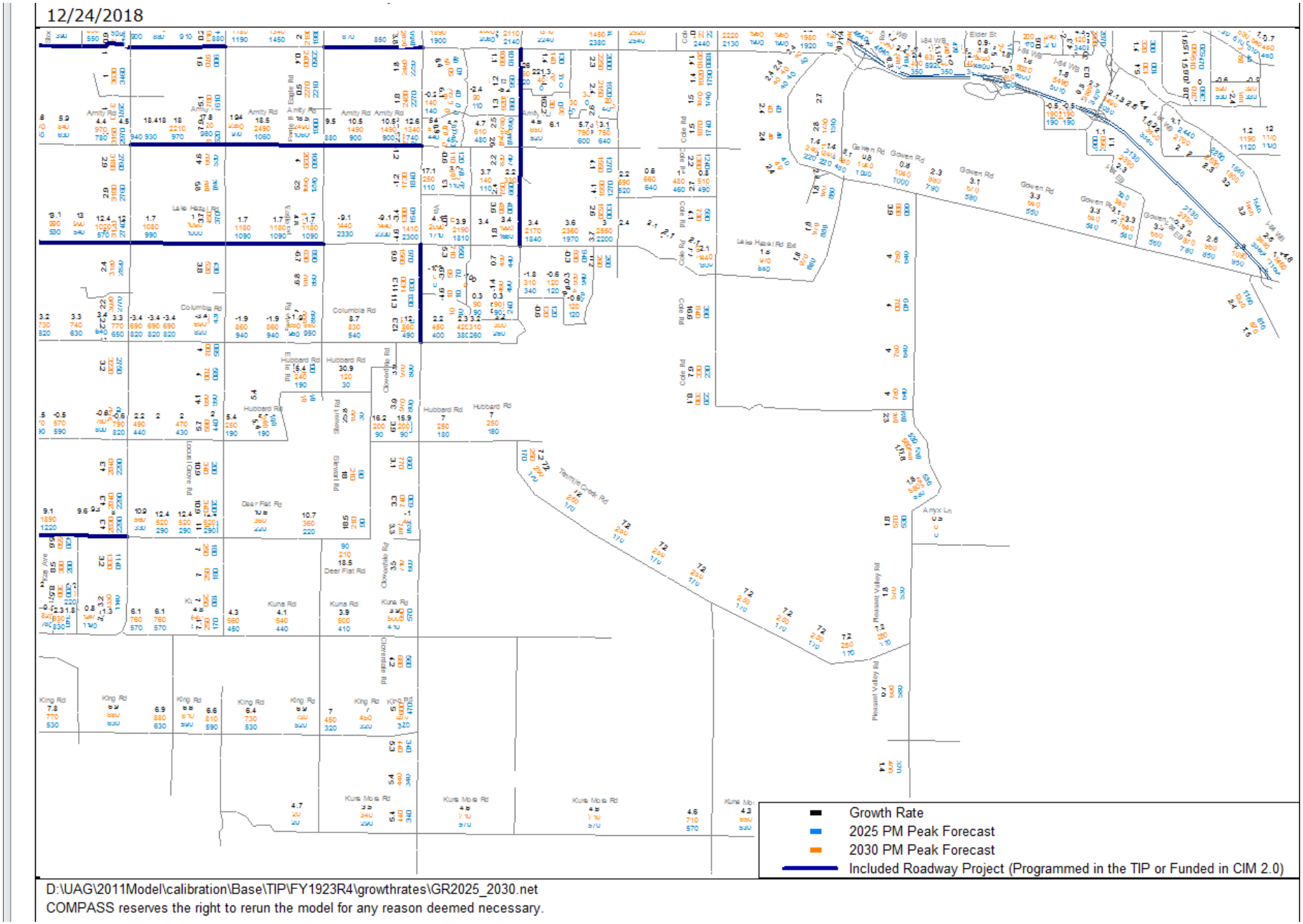
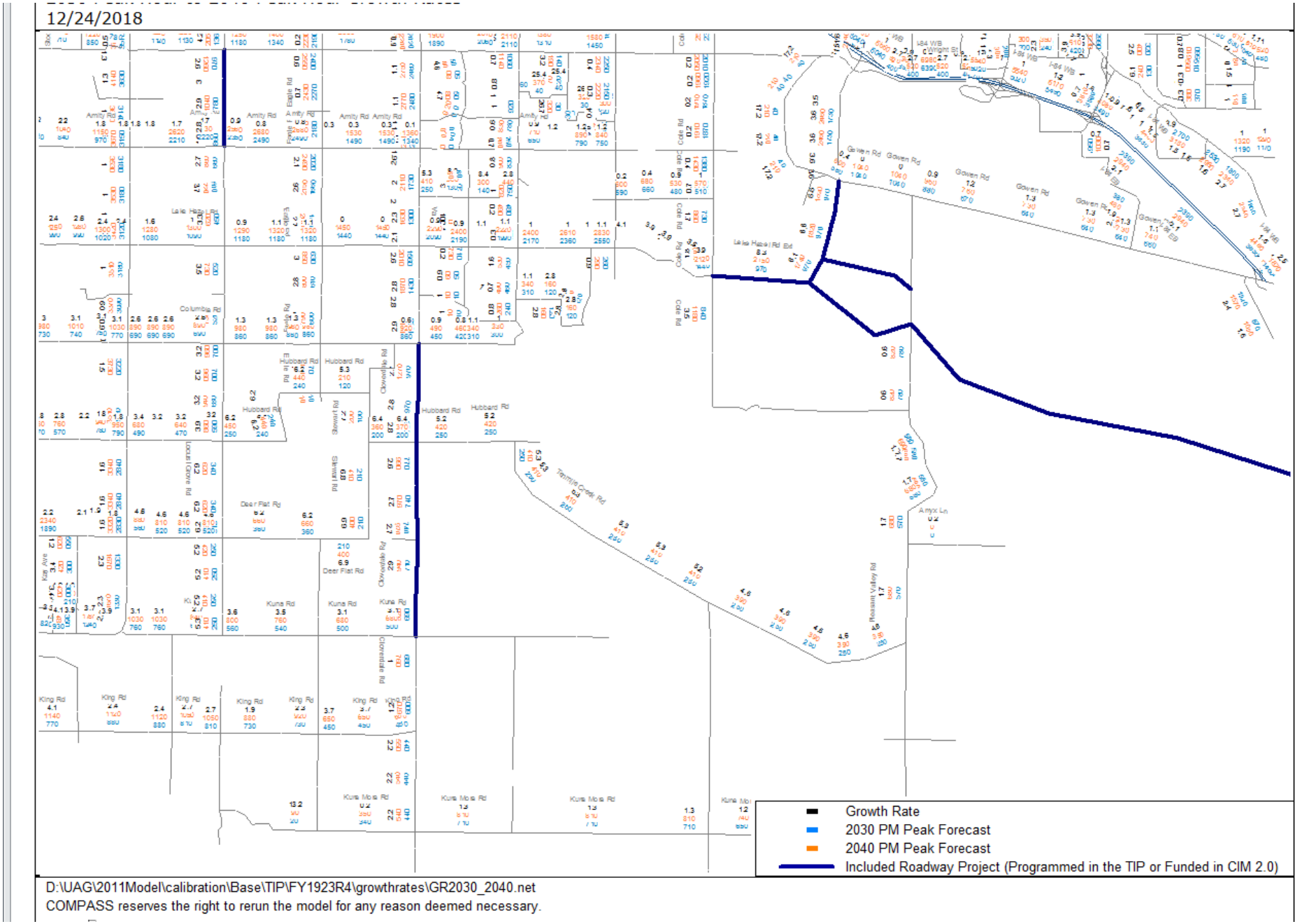


**Figure 8: 2030 to 2040 Compounded Annual Growth Rate**



# APPENDIX B: TRAFFIC COUNTS

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Columbia Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : SH-69 (Meridian Rd) & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

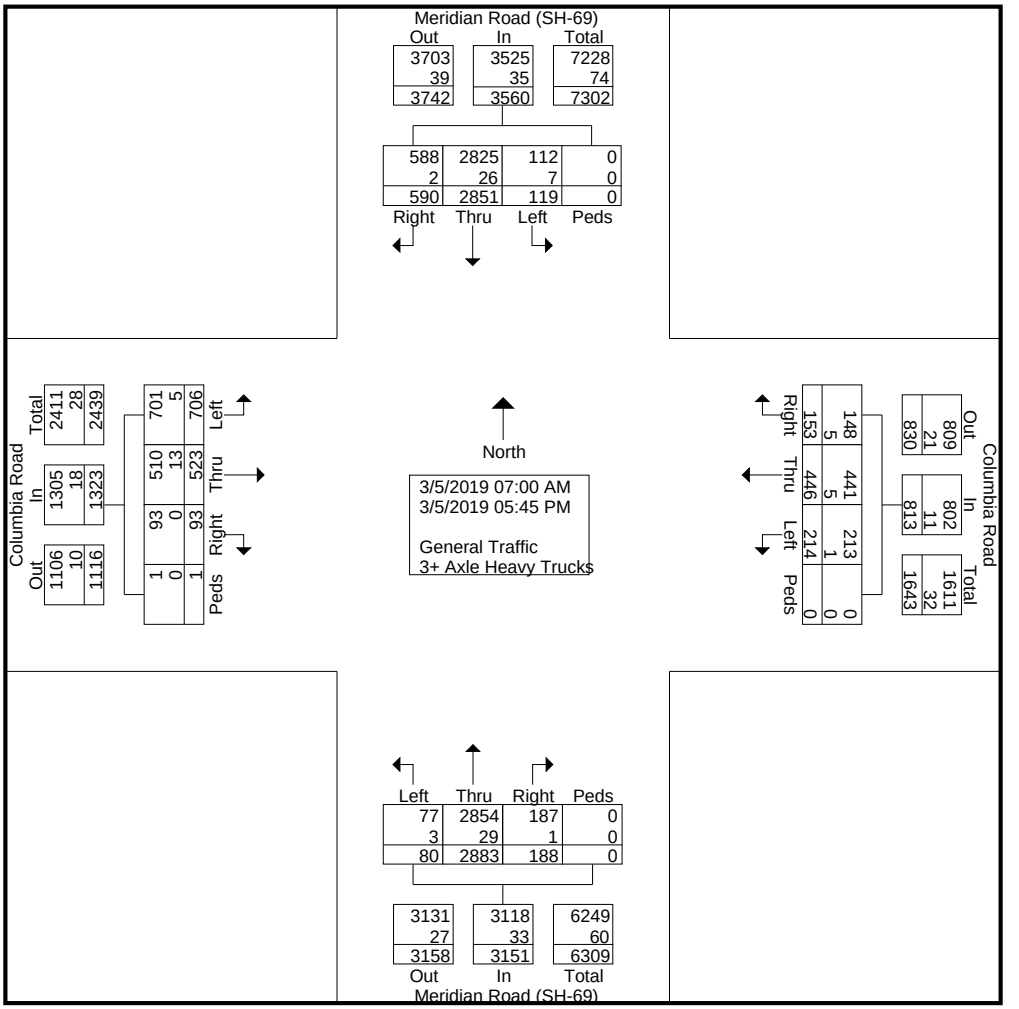
| | Meridian Road (SH-69) From North | | | | | Columbia Road From East | | | | | Meridian Road (SH-69) From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 11 | 84 | 2 | 0 | 97 | 16 | 11 | 10 | 0 | 37 | 15 | 291 | 2 | 0 | 308 | 4 | 45 | 91 | 0 | 140 | 582 |
| 07:15 AM | 13 | 100 | 6 | 0 | 119 | 15 | 9 | 16 | 0 | 40 | 20 | 297 | 3 | 0 | 320 | 9 | 66 | 69 | 0 | 144 | 623 |
| 07:30 AM | 18 | 89 | 6 | 0 | 113 | 9 | 17 | 15 | 0 | 41 | 17 | 246 | 5 | 0 | 268 | 14 | 66 | 68 | 0 | 148 | 570 |
| 07:45 AM | 18 | 94 | 9 | 0 | 121 | 17 | 10 | 5 | 0 | 32 | 24 | 215 | 6 | 0 | 245 | 8 | 52 | 60 | 0 | 120 | 518 |
| Total | 60 | 367 | 23 | 0 | 450 | 57 | 47 | 46 | 0 | 150 | 76 | 1049 | 16 | 0 | 1141 | 35 | 229 | 288 | 0 | 552 | 2293 |
| 08:00 AM | 15 | 79 | 3 | 0 | 97 | 7 | 10 | 4 | 0 | 21 | 11 | 172 | 4 | 0 | 187 | 10 | 47 | 60 | 0 | 117 | 422 |
| 08:15 AM | 10 | 90 | 6 | 0 | 106 | 3 | 16 | 4 | 0 | 23 | 12 | 201 | 6 | 0 | 219 | 5 | 45 | 77 | 0 | 127 | 475 |
| 08:30 AM | 9 | 81 | 5 | 0 | 95 | 9 | 7 | 2 | 0 | 18 | 15 | 210 | 4 | 0 | 229 | 5 | 38 | 51 | 0 | 94 | 436 |
| 08:45 AM | 17 | 89 | 11 | 0 | 117 | 10 | 5 | 5 | 0 | 20 | 11 | 154 | 0 | 0 | 165 | 4 | 21 | 43 | 0 | 68 | 370 |
| Total | 51 | 339 | 25 | 0 | 415 | 29 | 38 | 15 | 0 | 82 | 49 | 737 | 14 | 0 | 800 | 24 | 151 | 231 | 0 | 406 | 1703 |
| --- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 50 | 211 | 6 | 0 | 267 | 11 | 32 | 13 | 0 | 56 | 6 | 133 | 6 | 0 | 145 | 6 | 18 | 24 | 0 | 48 | 516 |
| 04:15 PM | 60 | 301 | 8 | 0 | 369 | 7 | 47 | 17 | 0 | 71 | 6 | 118 | 7 | 0 | 131 | 5 | 20 | 26 | 0 | 51 | 622 |
| 04:30 PM | 48 | 260 | 4 | 0 | 312 | 6 | 39 | 15 | 0 | 60 | 4 | 164 | 3 | 0 | 171 | 4 | 16 | 25 | 0 | 45 | 588 |
| 04:45 PM | 49 | 253 | 12 | 0 | 314 | 8 | 44 | 22 | 0 | 74 | 9 | 128 | 4 | 0 | 141 | 3 | 16 | 18 | 0 | 37 | 566 |
| Total | 207 | 1025 | 30 | 0 | 1262 | 32 | 162 | 67 | 0 | 261 | 25 | 543 | 20 | 0 | 588 | 18 | 70 | 93 | 0 | 181 | 2292 |
| 05:00 PM | 58 | 275 | 9 | 0 | 342 | 10 | 47 | 20 | 0 | 77 | 11 | 139 | 8 | 0 | 158 | 2 | 13 | 27 | 0 | 42 | 619 |
| 05:15 PM | 78 | 285 | 9 | 0 | 372 | 8 | 58 | 31 | 0 | 97 | 10 | 160 | 9 | 0 | 179 | 9 | 23 | 22 | 1 | 55 | 703 |
| 05:30 PM | 64 | 291 | 14 | 0 | 369 | 8 | 43 | 18 | 0 | 69 | 5 | 116 | 5 | 0 | 126 | 2 | 18 | 21 | 0 | 41 | 605 |
| 05:45 PM | 72 | 269 | 9 | 0 | 350 | 9 | 51 | 17 | 0 | 77 | 12 | 139 | 8 | 0 | 159 | 3 | 19 | 24 | 0 | 46 | 632 |
| Total | 272 | 1120 | 41 | 0 | 1433 | 35 | 199 | 86 | 0 | 320 | 38 | 554 | 30 | 0 | 622 | 16 | 73 | 94 | 1 | 184 | 2559 |
| Grand Total | 590 | 2851 | 119 | 0 | 3560 | 153 | 446 | 214 | 0 | 813 | 188 | 2883 | 80 | 0 | 3151 | 93 | 523 | 706 | 1 | 1323 | 8847 |
| Apprch % | 16.6 | 80.1 | 3.3 | 0 | | 18.8 | 54.9 | 26.3 | 0 | | 6 | 91.5 | 2.5 | 0 | | 7 | 39.5 | 53.4 | 0.1 | | |
| Total % | 6.7 | 32.2 | 1.3 | 0 | 40.2 | 1.7 | 5 | 2.4 | 0 | 9.2 | 2.1 | 32.6 | 0.9 | 0 | 35.6 | 1.1 | 5.9 | 8 | 0 | 15 | |
| General Traffic | | 2825 | | | | | | | | | | 2854 | | | | | | | | | |
| % General Traffic | 99.7 | 99.1 | 94.1 | 0 | 99 | 96.7 | 98.9 | 99.5 | 0 | 98.6 | 99.5 | 99 | 96.2 | 0 | 99 | 100 | 97.5 | 99.3 | 100 | 98.6 | 98.9 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0.3 | 0.9 | 5.9 | 0 | 1 | 3.3 | 1.1 | 0.5 | 0 | 1.4 | 0.5 | 1 | 3.8 | 0 | 1 | 0 | 2.5 | 0.7 | 0 | 1.4 | 1.1 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Columbia Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : SH-69 (Meridian Rd) & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



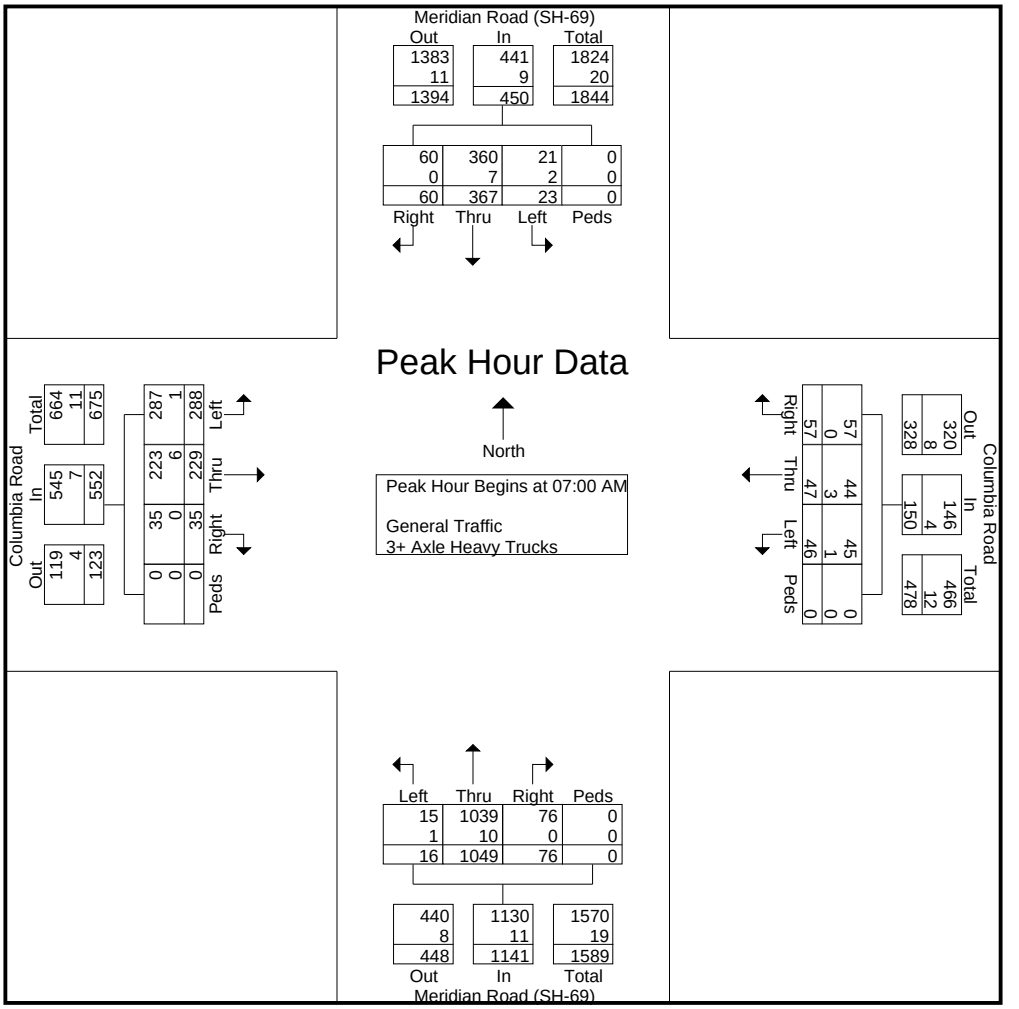
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Page No : 3

| | Meridian Road (SH-69) From North | | | | | Columbia Road From East | | | | | Meridian Road (SH-69) From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 11 | 84 | 2 | 0 | 97 | 16 | 11 | 10 | 0 | 37 | 15 | 291 | 2 | 0 | 308 | 4 | 45 | **91** | 0 | 140 | 582 |
| 07:15 AM | 13 | **100** | 6 | 0 | 119 | 15 | 9 | **16** | 0 | 40 | 20 | **297** | 3 | 0 | **320** | 9 | **66** | 69 | 0 | 144 | **623** |
| 07:30 AM | **18** | 89 | 6 | 0 | 113 | 9 | **17** | 15 | 0 | **41** | 17 | 246 | 5 | 0 | 268 | **14** | 66 | 68 | 0 | **148** | 570 |
| 07:45 AM | 18 | 94 | **9** | 0 | **121** | **17** | 10 | 5 | 0 | 32 | **24** | 215 | **6** | 0 | 245 | 8 | 52 | 60 | 0 | 120 | 518 |
| Total Volume | 60 | 367 | 23 | 0 | 450 | 57 | 47 | 46 | 0 | 150 | 76 | 1049 | 16 | 0 | 1141 | 35 | 229 | 288 | 0 | 552 | 2293 |
| % App. Total | 13.3 | 81.6 | 5.1 | 0 | | 38 | 31.3 | 30.7 | 0 | | 6.7 | 91.9 | 1.4 | 0 | | 6.3 | 41.5 | 52.2 | 0 | | |
| PHF | .833 | .918 | .639 | .000 | .930 | .838 | .691 | .719 | .000 | .915 | .792 | .883 | .667 | .000 | .891 | .625 | .867 | .791 | .000 | .932 | .920 |
| General Traffic | | | | | | | | | | | | 1039 | | | | | | | | | |
| % General Traffic | 100 | 98.1 | 91.3 | 0 | 98.0 | 100 | 93.6 | 97.8 | 0 | 97.3 | 100 | 99.0 | 93.8 | 0 | 99.0 | 100 | 97.4 | 99.7 | 0 | 98.7 | 98.6 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 1.9 | 8.7 | 0 | 2.0 | 0 | 6.4 | 2.2 | 0 | 2.7 | 0 | 1.0 | 6.3 | 0 | 1.0 | 0 | 2.6 | 0.3 | 0 | 1.3 | 1.4 |



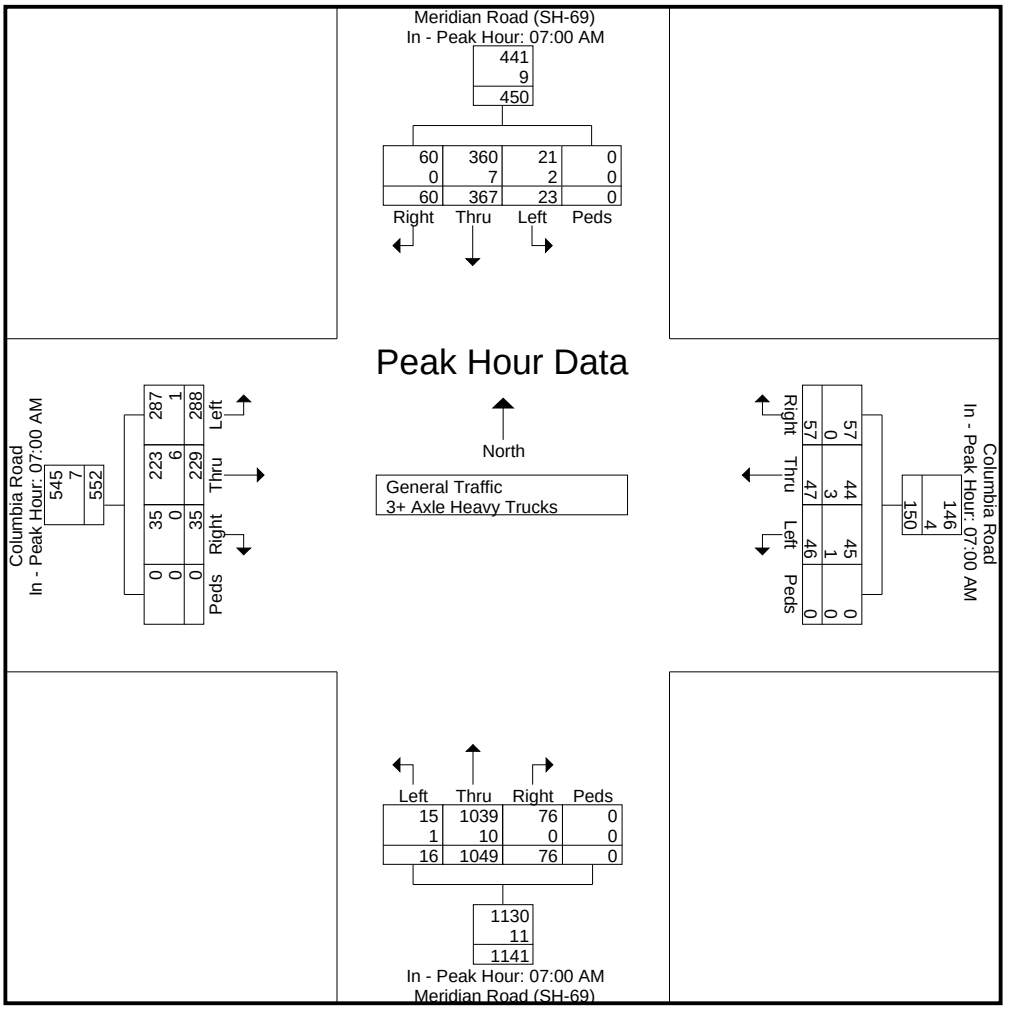
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Study: CR0010
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| | Meridian Road (SH-69) From North | | | | | Columbia Road From East | | | | | Meridian Road (SH-69) From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | 11 | 84 | 2 | 0 | 97 | 16 | 11 | 10 | 0 | 37 | 15 | 291 | 2 | 0 | 308 | 4 | 45 | **91** | 0 | 140 | |
| +15 mins. | 13 | **100** | 6 | 0 | 119 | 15 | 9 | **16** | 0 | 40 | 20 | **297** | 3 | 0 | **320** | 9 | **66** | 69 | 0 | 144 | |
| +30 mins. | **18** | 89 | 6 | 0 | 113 | 9 | **17** | 15 | 0 | **41** | 17 | 246 | 5 | 0 | 268 | **14** | 66 | 68 | 0 | **148** | |
| +45 mins. | 18 | 94 | **9** | 0 | **121** | **17** | 10 | 5 | 0 | 32 | **24** | 215 | **6** | 0 | 245 | 8 | 52 | 60 | 0 | 120 | |
| Total Volume | 60 | 367 | 23 | 0 | 450 | 57 | 47 | 46 | 0 | 150 | 76 | 1049 | 16 | 0 | 1141 | 35 | 229 | 288 | 0 | 552 | |
| % App. Total | 13.3 | 81.6 | 5.1 | 0 | | 38 | 31.3 | 30.7 | 0 | | 6.7 | 91.9 | 1.4 | 0 | | 6.3 | 41.5 | 52.2 | 0 | | |
| PHF | .833 | .918 | .639 | .000 | .930 | .838 | .691 | .719 | .000 | .915 | .792 | .883 | .667 | .000 | .891 | .625 | .867 | .791 | .000 | .932 | |
| General Traffic | 60 | 360 | 21 | 0 | 441 | 57 | 44 | 45 | 0 | 146 | 76 | 1039 | 15 | 0 | 1130 | 35 | 223 | 287 | 0 | 545 | |
| % General Traffic | 100 | 98.1 | 91.3 | 0 | 98 | 100 | 93.6 | 97.8 | 0 | 97.3 | 100 | 99 | 93.8 | 0 | 99 | 100 | 97.4 | 99.7 | 0 | 98.7 | |
| 3+ Axle Heavy Trucks | 0 | 7 | 2 | 0 | 9 | 0 | 3 | 1 | 0 | 4 | 0 | 10 | 1 | 0 | 11 | 0 | 6 | 1 | 0 | 7 | |
| % 3+ Axle Heavy Trucks | 0 | 1.9 | 8.7 | 0 | 2 | 0 | 6.4 | 2.2 | 0 | 2.7 | 0 | 1 | 6.2 | 0 | 1 | 0 | 2.6 | 0.3 | 0 | 1.3 | |



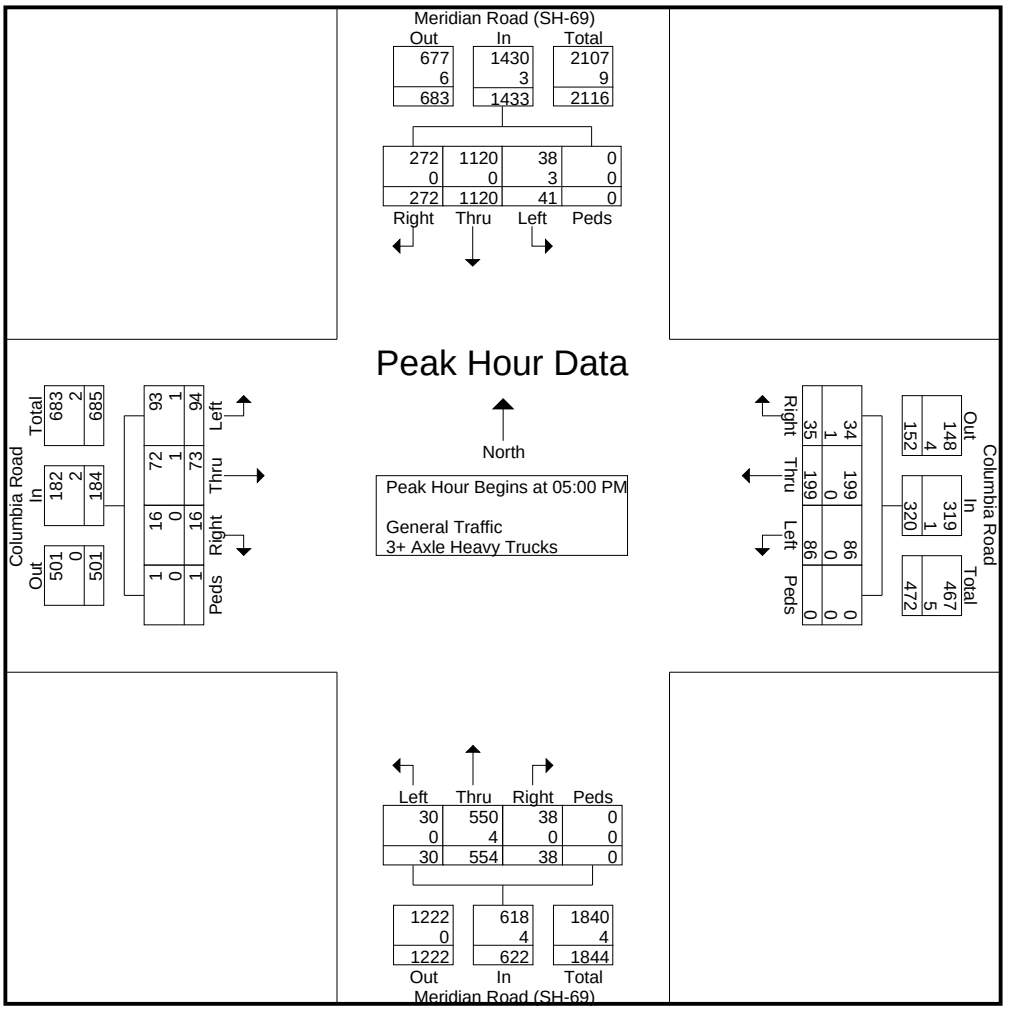
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Columbia Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : SH-69 (Meridian Rd) & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Meridian Road (SH-69) From North | | | | | Columbia Road From East | | | | | Meridian Road (SH-69) From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:00 PM | | | | | | | | | | | | | | | | | | | | | |
| 05:00 PM | 58 | 275 | 9 | 0 | 342 | **10** | 47 | 20 | 0 | 77 | 11 | 139 | 8 | 0 | 158 | 2 | 13 | **27** | 0 | 42 | 619 |
| 05:15 PM | **78** | 285 | 9 | 0 | **372** | 8 | **58** | **31** | 0 | **97** | 10 | **160** | **9** | 0 | **179** | **9** | **23** | 22 | **1** | **55** | **703** |
| 05:30 PM | 64 | **291** | **14** | 0 | 369 | 8 | 43 | 18 | 0 | 69 | 5 | 116 | 5 | 0 | 126 | 2 | 18 | 21 | 0 | 41 | 605 |
| 05:45 PM | 72 | 269 | 9 | 0 | 350 | 9 | 51 | 17 | 0 | 77 | **12** | 139 | 8 | 0 | 159 | 3 | 19 | 24 | 0 | 46 | 632 |
| Total Volume | 272 | 1120 | 41 | 0 | 1433 | 35 | 199 | 86 | 0 | 320 | 38 | 554 | 30 | 0 | 622 | 16 | 73 | 94 | 1 | 184 | 2559 |
| % App. Total | 19 | 78.2 | 2.9 | 0 | | 10.9 | 62.2 | 26.9 | 0 | | 6.1 | 89.1 | 4.8 | 0 | | 8.7 | 39.7 | 51.1 | 0.5 | | |
| PHF | .872 | .962 | .732 | .000 | .963 | .875 | .858 | .694 | .000 | .825 | .792 | .866 | .833 | .000 | .869 | .444 | .793 | .870 | .250 | .836 | .910 |
| General Traffic | | 1120 | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 92.7 | 0 | 99.8 | 97.1 | 100 | 100 | 0 | 99.7 | 100 | 99.3 | 100 | 0 | 99.4 | 100 | 98.6 | 98.9 | 100 | 98.9 | 99.6 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 7.3 | 0 | 0.2 | 2.9 | 0 | 0 | 0 | 0.3 | 0 | 0.7 | 0 | 0 | 0.6 | 0 | 1.4 | 1.1 | 0 | 1.1 | 0.4 |



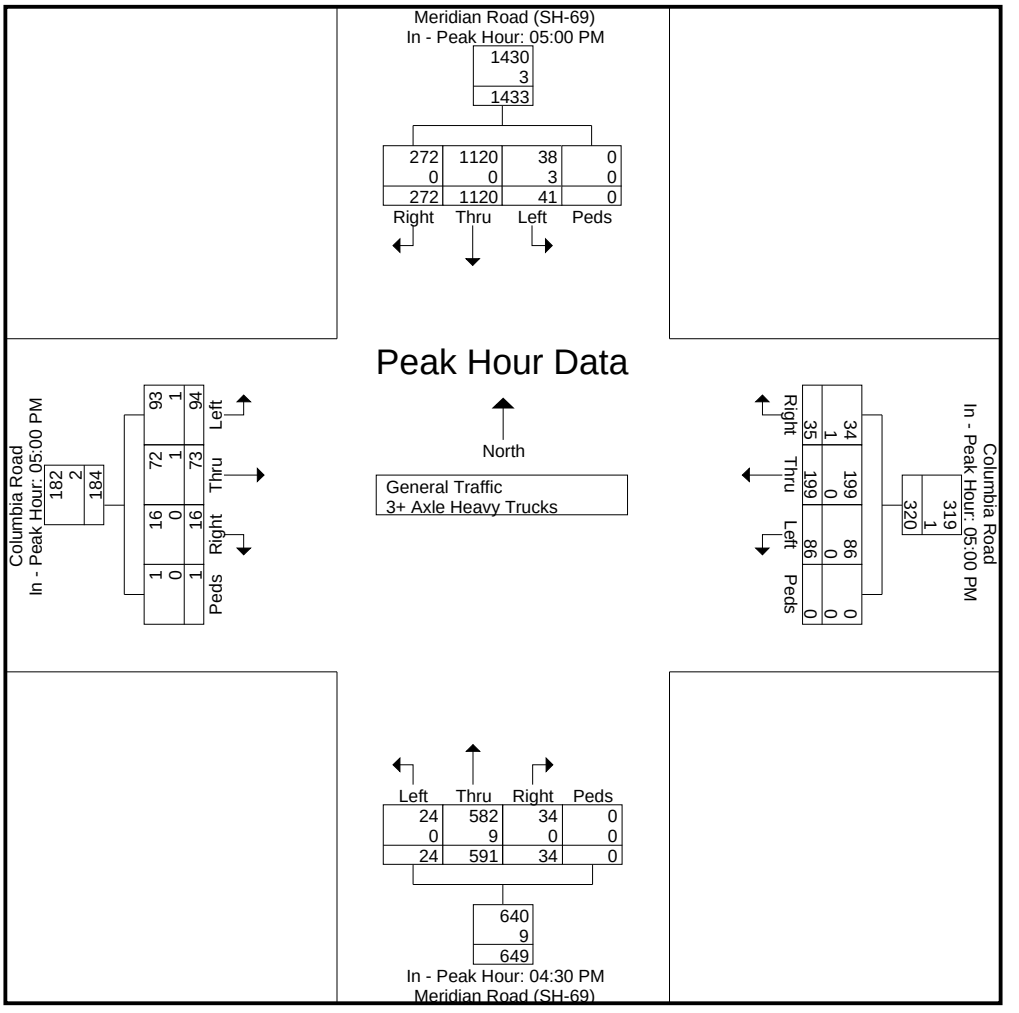
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Columbia Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : SH-69 (Meridian Rd) & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Meridian Road (SH-69) From North | | | | | Columbia Road From East | | | | | Meridian Road (SH-69) From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 05:00 PM | | | | | 05:00 PM | | | | | 04:30 PM | | | | | 05:00 PM | | | | | |
| +0 mins. | 58 | 275 | 9 | 0 | 342 | **10** | 47 | 20 | 0 | 77 | 4 | **164** | 3 | 0 | 171 | 2 | 13 | **27** | 0 | 42 | |
| +15 mins. | **78** | 285 | 9 | 0 | **372** | 8 | **58** | **31** | 0 | **97** | 9 | 128 | 4 | 0 | 141 | **9** | **23** | 22 | **1** | **55** | |
| +30 mins. | 64 | **291** | **14** | 0 | 369 | 8 | 43 | 18 | 0 | 69 | **11** | 139 | 8 | 0 | 158 | 2 | 18 | 21 | 0 | 41 | |
| +45 mins. | 72 | 269 | 9 | 0 | 350 | 9 | 51 | 17 | 0 | 77 | 10 | 160 | **9** | 0 | **179** | 3 | 19 | 24 | 0 | 46 | |
| Total Volume | 272 | 1120 | 41 | 0 | 1433 | 35 | 199 | 86 | 0 | 320 | 34 | 591 | 24 | 0 | 649 | 16 | 73 | 94 | 1 | 184 | |
| % App. Total | 19 | 78.2 | 2.9 | 0 | | 10.9 | 62.2 | 26.9 | 0 | | 5.2 | 91.1 | 3.7 | 0 | | 8.7 | 39.7 | 51.1 | 0.5 | | |
| PHF | .872 | .962 | .732 | .000 | .963 | .875 | .858 | .694 | .000 | .825 | .773 | .901 | .667 | .000 | .906 | .444 | .793 | .870 | .250 | .836 | |
| General Traffic | 272 | 1120 | 38 | 0 | 1430 | 34 | 199 | 86 | 0 | 319 | 34 | 582 | 24 | 0 | 640 | 16 | 72 | 93 | 1 | 182 | |
| % General Traffic | 100 | 100 | 92.7 | 0 | 99.8 | 97.1 | 100 | 100 | 0 | 99.7 | 100 | 98.5 | 100 | 0 | 98.6 | 100 | 98.6 | 98.9 | 100 | 98.9 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 9 | 0 | 0 | 9 | 0 | 1 | 1 | 0 | 2 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 7.3 | 0 | 0.2 | 2.9 | 0 | 0 | 0 | 0.3 | 0 | 1.5 | 0 | 0 | 1.4 | 0 | 1.4 | 1.1 | 0 | 1.1 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Columbia Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : SH-69 (Meridian Rd) & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

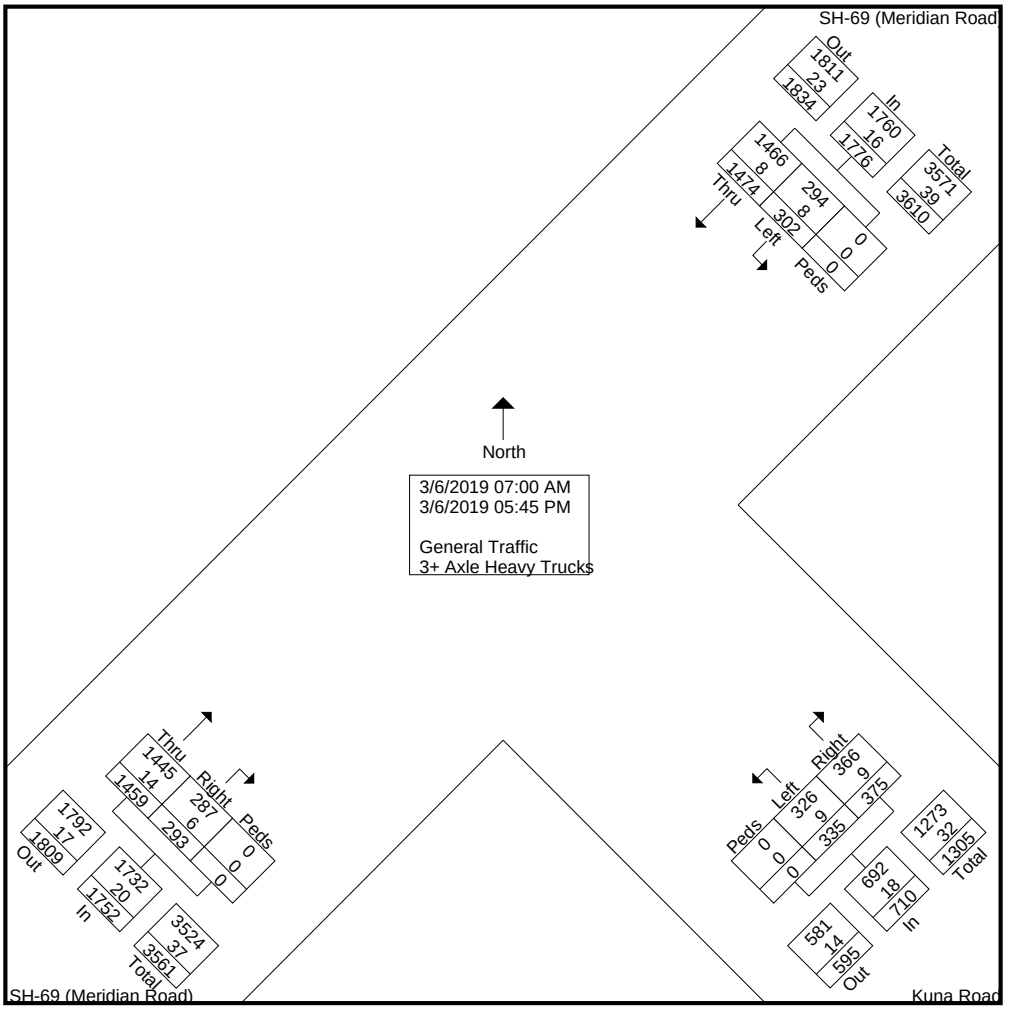
| | SH-69 (Meridian Road) From Northeast | | | | Kuna Road From Southeast | | | | SH-69 (Meridian Road) From Southwest | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| 07:00 AM | 14 | 19 | 0 | 33 | 17 | 9 | 0 | 26 | 21 | 144 | 0 | 165 | 224 |
| 07:15 AM | 42 | 26 | 0 | 68 | 26 | 16 | 0 | 42 | 31 | 138 | 0 | 169 | 279 |
| 07:30 AM | 32 | 23 | 0 | 55 | 27 | 21 | 0 | 48 | 38 | 135 | 0 | 173 | 276 |
| 07:45 AM | 51 | 13 | 0 | 64 | 14 | 16 | 0 | 30 | 19 | 83 | 0 | 102 | 196 |
| Total | 139 | 81 | 0 | 220 | 84 | 62 | 0 | 146 | 109 | 500 | 0 | 609 | 975 |
| 08:00 AM | 41 | 10 | 0 | 51 | 12 | 9 | 0 | 21 | 19 | 92 | 0 | 111 | 183 |
| 08:15 AM | 45 | 22 | 0 | 67 | 12 | 11 | 0 | 23 | 18 | 83 | 0 | 101 | 191 |
| 08:30 AM | 36 | 11 | 0 | 47 | 15 | 5 | 0 | 20 | 19 | 91 | 0 | 110 | 177 |
| 08:45 AM | 46 | 9 | 0 | 55 | 22 | 9 | 0 | 31 | 14 | 75 | 0 | 89 | 175 |
| Total | 168 | 52 | 0 | 220 | 61 | 34 | 0 | 95 | 70 | 341 | 0 | 411 | 726 |
| --- | | | | | | | | | | | | | |
| 04:00 PM | 117 | 20 | 0 | 137 | 20 | 24 | 0 | 44 | 15 | 81 | 0 | 96 | 277 |
| 04:15 PM | 132 | 33 | 0 | 165 | 19 | 33 | 0 | 52 | 12 | 53 | 0 | 65 | 282 |
| 04:30 PM | 135 | 19 | 0 | 154 | 25 | 26 | 0 | 51 | 15 | 79 | 0 | 94 | 299 |
| 04:45 PM | 150 | 28 | 0 | 178 | 29 | 35 | 0 | 64 | 19 | 78 | 0 | 97 | 339 |
| Total | 534 | 100 | 0 | 634 | 93 | 118 | 0 | 211 | 61 | 291 | 0 | 352 | 1197 |
| 05:00 PM | 156 | 14 | 0 | 170 | 32 | 30 | 0 | 62 | 24 | 103 | 0 | 127 | 359 |
| 05:15 PM | 160 | 14 | 0 | 174 | 33 | 25 | 0 | 58 | 10 | 76 | 0 | 86 | 318 |
| 05:30 PM | 168 | 22 | 0 | 190 | 35 | 37 | 0 | 72 | 11 | 72 | 0 | 83 | 345 |
| 05:45 PM | 149 | 19 | 0 | 168 | 37 | 29 | 0 | 66 | 8 | 76 | 0 | 84 | 318 |
| Total | 633 | 69 | 0 | 702 | 137 | 121 | 0 | 258 | 53 | 327 | 0 | 380 | 1340 |
| Grand Total | 1474 | 302 | 0 | 1776 | 375 | 335 | 0 | 710 | 293 | 1459 | 0 | 1752 | 4238 |
| Apprch % | 83 | 17 | 0 | | 52.8 | 47.2 | 0 | | 16.7 | 83.3 | 0 | | |
| Total % | 34.8 | 7.1 | 0 | 41.9 | 8.8 | 7.9 | 0 | 16.8 | 6.9 | 34.4 | 0 | 41.3 | |
| General Traffic | 1466 | 294 | 0 | 1760 | 366 | 326 | 0 | 692 | 287 | 1445 | 0 | 1732 | 4184 |
| % General Traffic | 99.5 | 97.4 | 0 | 99.1 | 97.6 | 97.3 | 0 | 97.5 | 98 | 99 | 0 | 98.9 | 98.7 |
| 3+ Axle Heavy Trucks | 8 | 8 | 0 | 16 | 9 | 9 | 0 | 18 | 6 | 14 | 0 | 20 | 54 |
| % 3+ Axle Heavy Trucks | 0.5 | 2.6 | 0 | 0.9 | 2.4 | 2.7 | 0 | 2.5 | 2 | 1 | 0 | 1.1 | 1.3 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 2



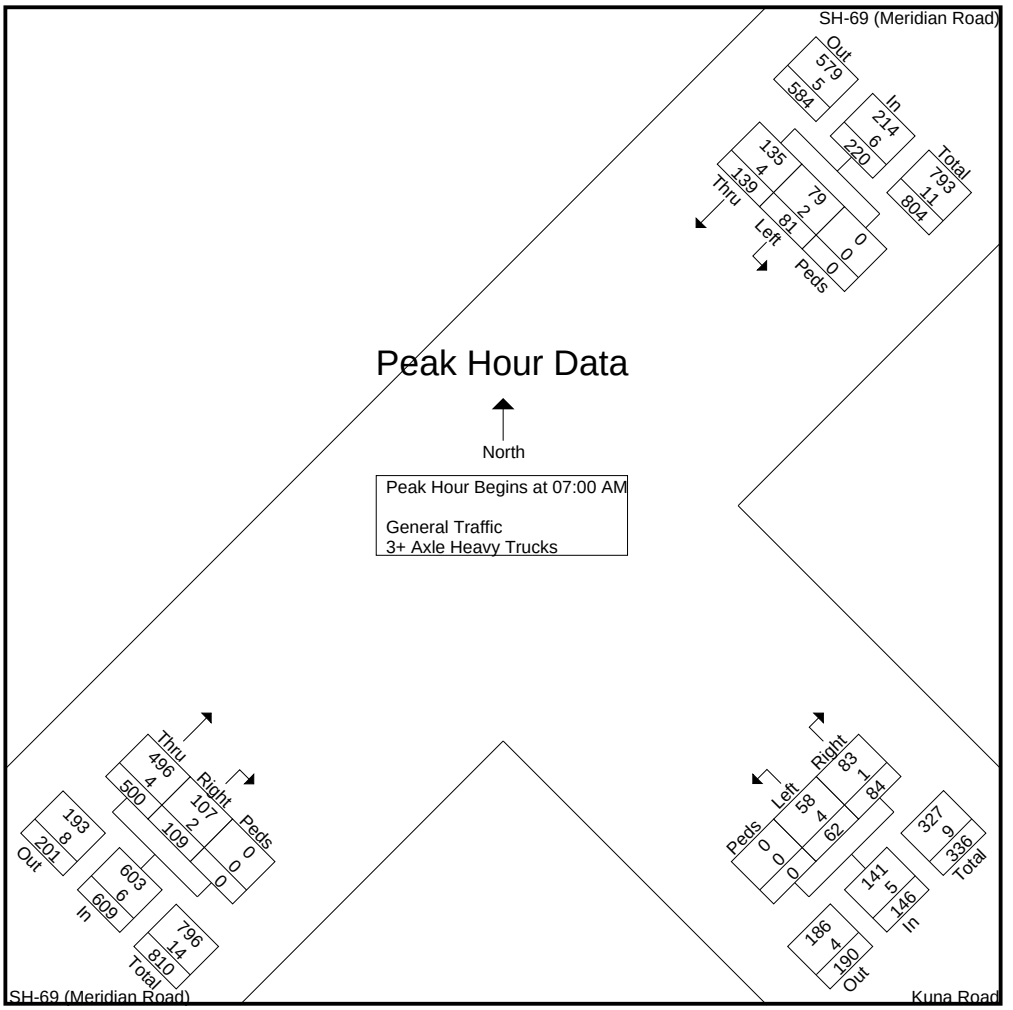
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 3

| | SH-69 (Meridian Road) From Northeast | | | | Kuna Road From Southeast | | | | SH-69 (Meridian Road) From Southwest | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | |
| 07:00 AM | 14 | 19 | 0 | 33 | 17 | 9 | 0 | 26 | 21 | **144** | 0 | 165 | 224 |
| 07:15 AM | 42 | **26** | 0 | **68** | 26 | 16 | 0 | 42 | 31 | 138 | 0 | 169 | **279** |
| 07:30 AM | 32 | 23 | 0 | 55 | **27** | **21** | 0 | **48** | **38** | 135 | 0 | **173** | 276 |
| 07:45 AM | **51** | 13 | 0 | 64 | 14 | 16 | 0 | 30 | 19 | 83 | 0 | 102 | 196 |
| Total Volume | 139 | 81 | 0 | 220 | 84 | 62 | 0 | 146 | 109 | 500 | 0 | 609 | 975 |
| % App. Total | 63.2 | 36.8 | 0 | | 57.5 | 42.5 | 0 | | 17.9 | 82.1 | 0 | | |
| PHF | .681 | .779 | .000 | .809 | .778 | .738 | .000 | .760 | .717 | .868 | .000 | .880 | .874 |
| General Traffic | 135 | 79 | 0 | 214 | 83 | 58 | 0 | 141 | 107 | 496 | 0 | 603 | 958 |
| % General Traffic | 97.1 | 97.5 | 0 | 97.3 | 98.8 | 93.5 | 0 | 96.6 | 98.2 | 99.2 | 0 | 99.0 | 98.3 |
| 3+ Axle Heavy Trucks | 4 | 2 | 0 | 6 | 1 | 4 | 0 | 5 | 2 | 4 | 0 | 6 | 17 |
| % 3+ Axle Heavy Trucks | 2.9 | 2.5 | 0 | 2.7 | 1.2 | 6.5 | 0 | 3.4 | 1.8 | 0.8 | 0 | 1.0 | 1.7 |



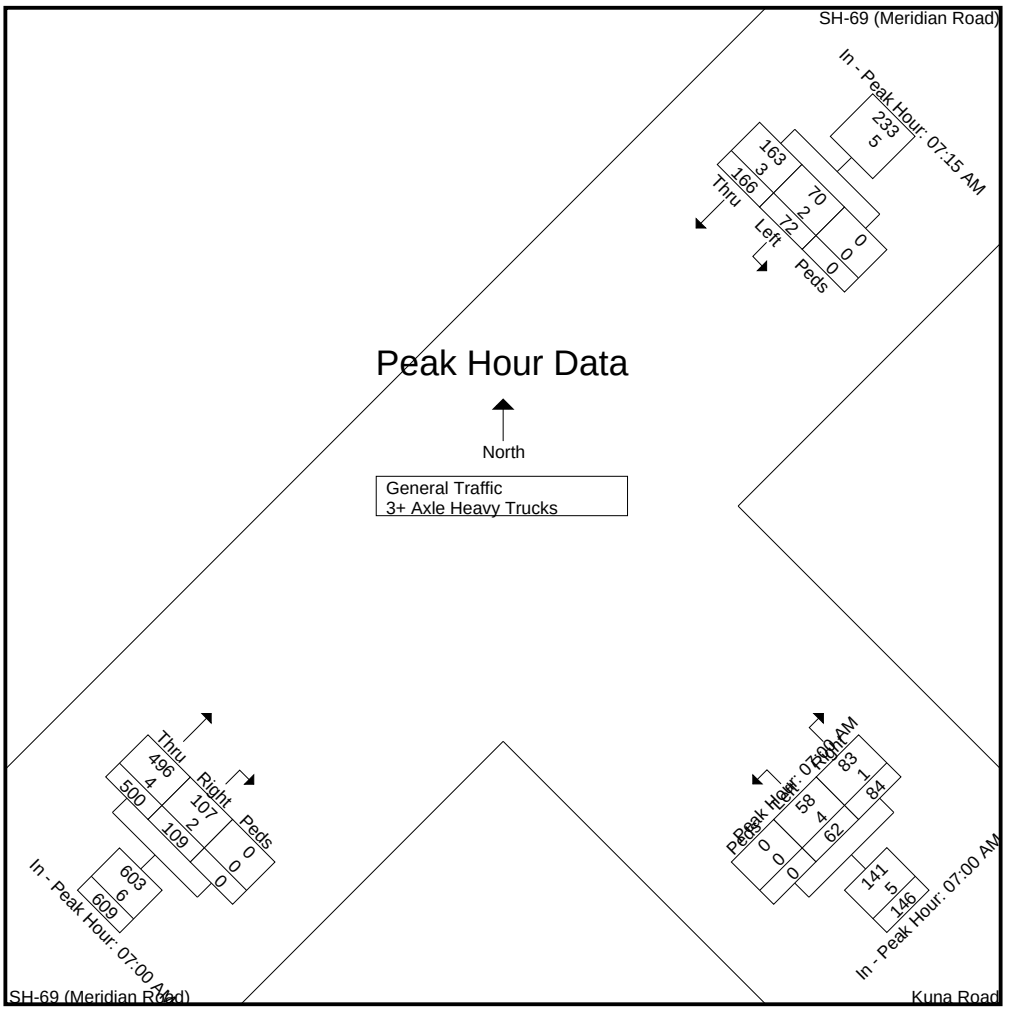
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 4

| | SH-69 (Meridian Road) From Northeast | | | | Kuna Road From Southeast | | | | SH-69 (Meridian Road) From Southwest | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 07:15 AM | | | | 07:00 AM | | | | 07:00 AM | | | | |
| +0 mins. | 42 | **26** | 0 | **68** | 17 | 9 | 0 | 26 | 21 | **144** | 0 | 165 | |
| +15 mins. | 32 | 23 | 0 | 55 | 26 | 16 | 0 | 42 | 31 | 138 | 0 | 169 | |
| +30 mins. | **51** | 13 | 0 | 64 | **27** | **21** | 0 | **48** | **38** | 135 | 0 | **173** | |
| +45 mins. | 41 | 10 | 0 | 51 | 14 | 16 | 0 | 30 | 19 | 83 | 0 | 102 | |
| Total Volume | 166 | 72 | 0 | 238 | 84 | 62 | 0 | 146 | 109 | 500 | 0 | 609 | |
| % App. Total | 69.7 | 30.3 | 0 | | 57.5 | 42.5 | 0 | | 17.9 | 82.1 | 0 | | |
| PHF | .814 | .692 | .000 | .875 | .778 | .738 | .000 | .760 | .717 | .868 | .000 | .880 | |
| General Traffic | 163 | 70 | 0 | 233 | 83 | 58 | 0 | 141 | 107 | 496 | 0 | 603 | |
| % General Traffic | 98.2 | 97.2 | 0 | 97.9 | 98.8 | 93.5 | 0 | 96.6 | 98.2 | 99.2 | 0 | 99 | |
| 3+ Axle Heavy Trucks | 3 | 2 | 0 | 5 | 1 | 4 | 0 | 5 | 2 | 4 | 0 | 6 | |
| % 3+ Axle Heavy Trucks | 1.8 | 2.8 | 0 | 2.1 | 1.2 | 6.5 | 0 | 3.4 | 1.8 | 0.8 | 0 | 1 | |



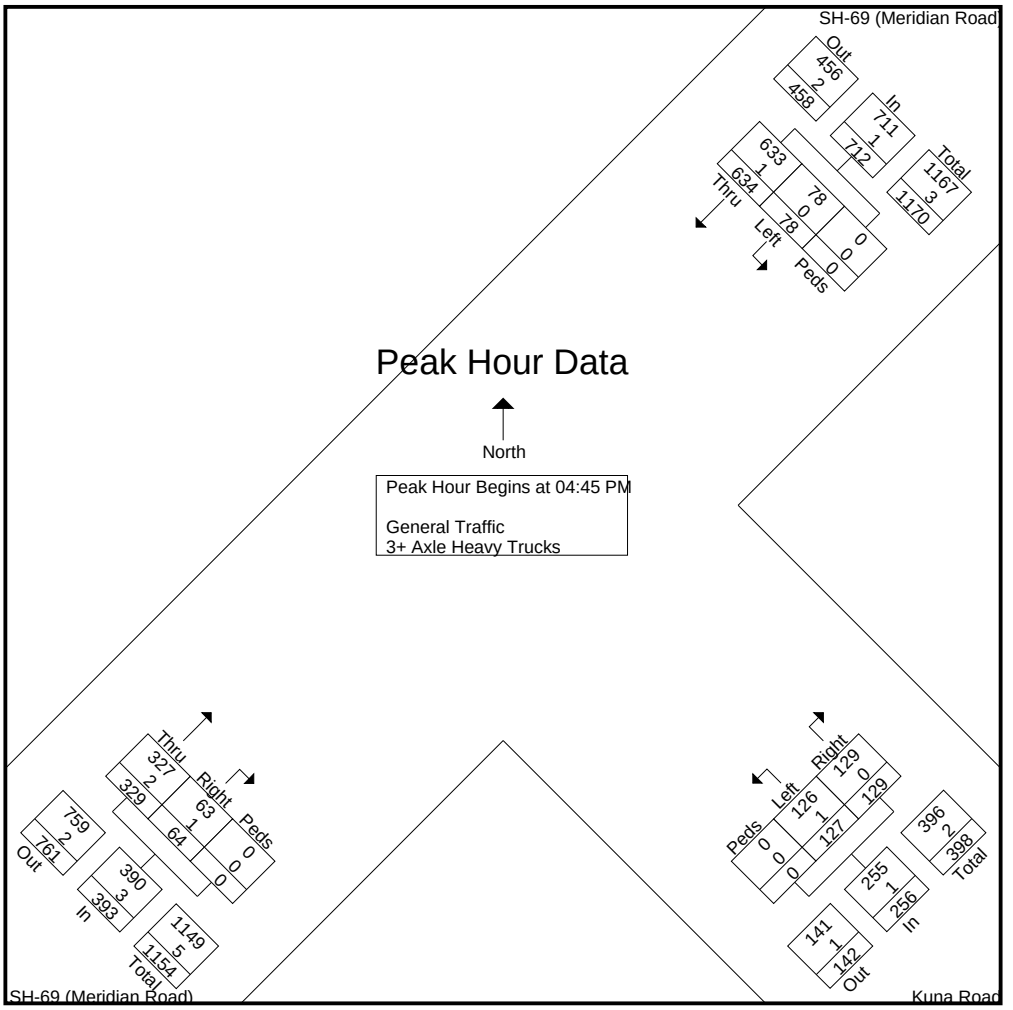
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 5

| | SH-69 (Meridian Road) From Northeast | | | | Kuna Road From Southeast | | | | SH-69 (Meridian Road) From Southwest | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | |
| 04:45 PM | 150 | **28** | 0 | 178 | 29 | 35 | 0 | 64 | 19 | 78 | 0 | 97 | 339 |
| 05:00 PM | 156 | 14 | 0 | 170 | 32 | 30 | 0 | 62 | **24** | **103** | 0 | **127** | **359** |
| 05:15 PM | 160 | 14 | 0 | 174 | 33 | 25 | 0 | 58 | 10 | 76 | 0 | 86 | 318 |
| 05:30 PM | **168** | 22 | 0 | **190** | **35** | **37** | 0 | **72** | 11 | 72 | 0 | 83 | 345 |
| Total Volume | 634 | 78 | 0 | 712 | 129 | 127 | 0 | 256 | 64 | 329 | 0 | 393 | 1361 |
| % App. Total | 89 | 11 | 0 | | 50.4 | 49.6 | 0 | | 16.3 | 83.7 | 0 | | |
| PHF | .943 | .696 | .000 | .937 | .921 | .858 | .000 | .889 | .667 | .799 | .000 | .774 | .948 |
| General Traffic | 633 | 78 | 0 | 711 | 129 | 126 | 0 | 255 | 63 | 327 | 0 | 390 | 1356 |
| % General Traffic | 99.8 | 100 | 0 | 99.9 | 100 | 99.2 | 0 | 99.6 | 98.4 | 99.4 | 0 | 99.2 | 99.6 |
| 3+ Axle Heavy Trucks | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 3 | 5 |
| % 3+ Axle Heavy Trucks | 0.2 | 0 | 0 | 0.1 | 0 | 0.8 | 0 | 0.4 | 1.6 | 0.6 | 0 | 0.8 | 0.4 |



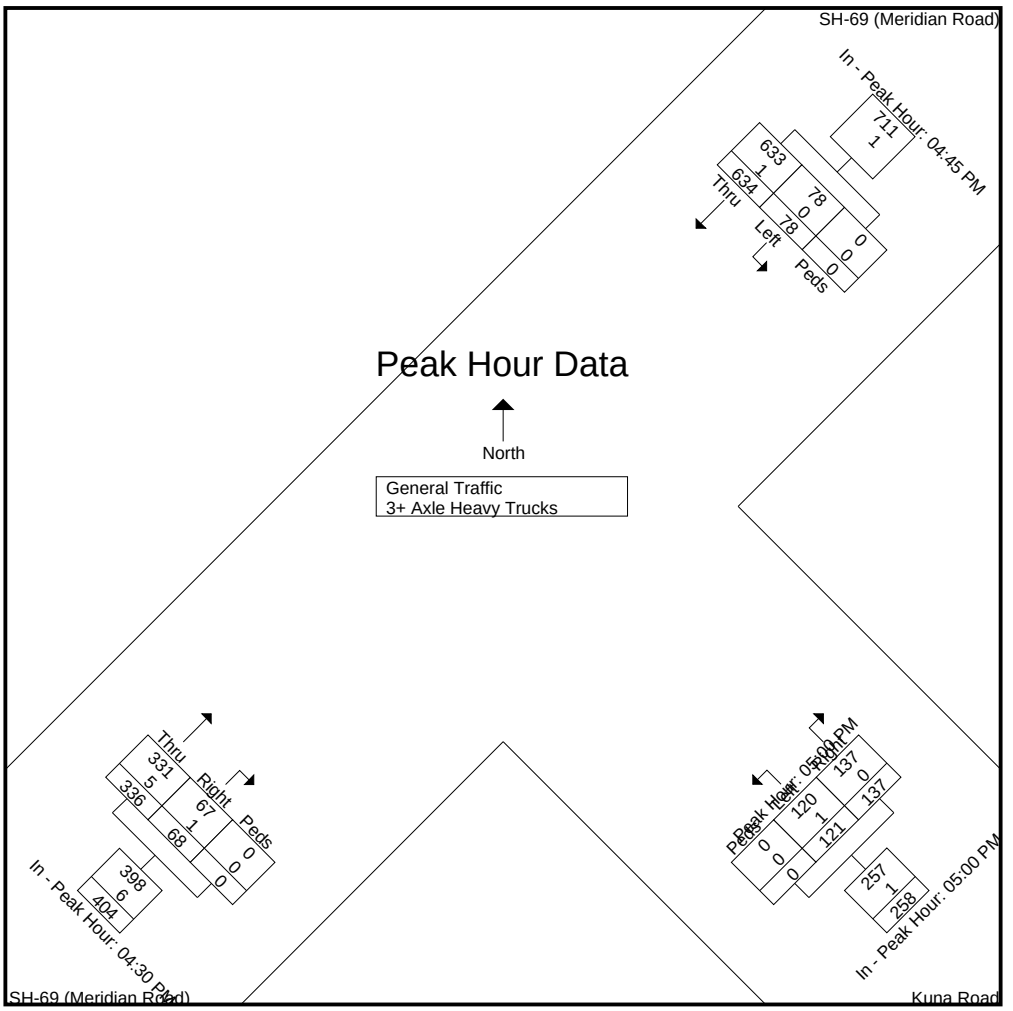
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 6

| | SH-69 (Meridian Road) From Northeast | | | | Kuna Road From Southeast | | | | SH-69 (Meridian Road) From Southwest | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 04:45 PM | | | | 05:00 PM | | | | 04:30 PM | | | | |
| +0 mins. | 150 | **28** | 0 | 178 | 32 | 30 | 0 | 62 | 15 | 79 | 0 | 94 | |
| +15 mins. | 156 | 14 | 0 | 170 | 33 | 25 | 0 | 58 | 19 | 78 | 0 | 97 | |
| +30 mins. | 160 | 14 | 0 | 174 | 35 | **37** | 0 | **72** | **24** | **103** | 0 | **127** | |
| +45 mins. | **168** | 22 | 0 | **190** | **37** | 29 | 0 | 66 | 10 | 76 | 0 | 86 | |
| Total Volume | 634 | 78 | 0 | 712 | 137 | 121 | 0 | 258 | 68 | 336 | 0 | 404 | |
| % App. Total | 89 | 11 | 0 | | 53.1 | 46.9 | 0 | | 16.8 | 83.2 | 0 | | |
| PHF | .943 | .696 | .000 | .937 | .926 | .818 | .000 | .896 | .708 | .816 | .000 | .795 | |
| General Traffic | 633 | 78 | 0 | 711 | 137 | 120 | 0 | 257 | 67 | 331 | 0 | 398 | |
| % General Traffic | 99.8 | 100 | 0 | 99.9 | 100 | 99.2 | 0 | 99.6 | 98.5 | 98.5 | 0 | 98.5 | |
| 3+ Axle Heavy Trucks | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 0 | 6 | |
| % 3+ Axle Heavy Trucks | 0.2 | 0 | 0 | 0.1 | 0 | 0.8 | 0 | 0.4 | 1.5 | 1.5 | 0 | 1.5 | |



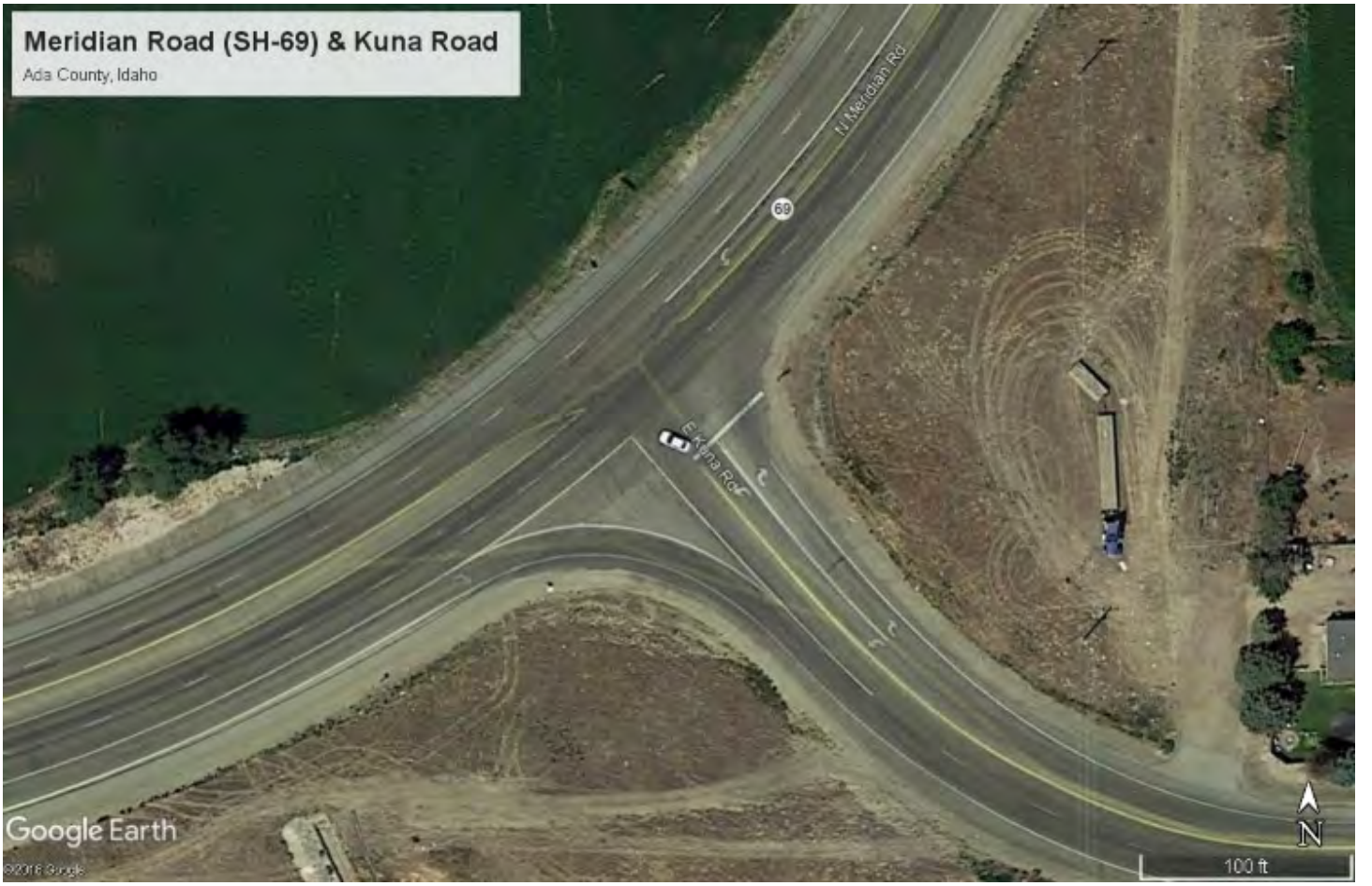
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: SH-69 / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : SH-69 (Meridian Rd) & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

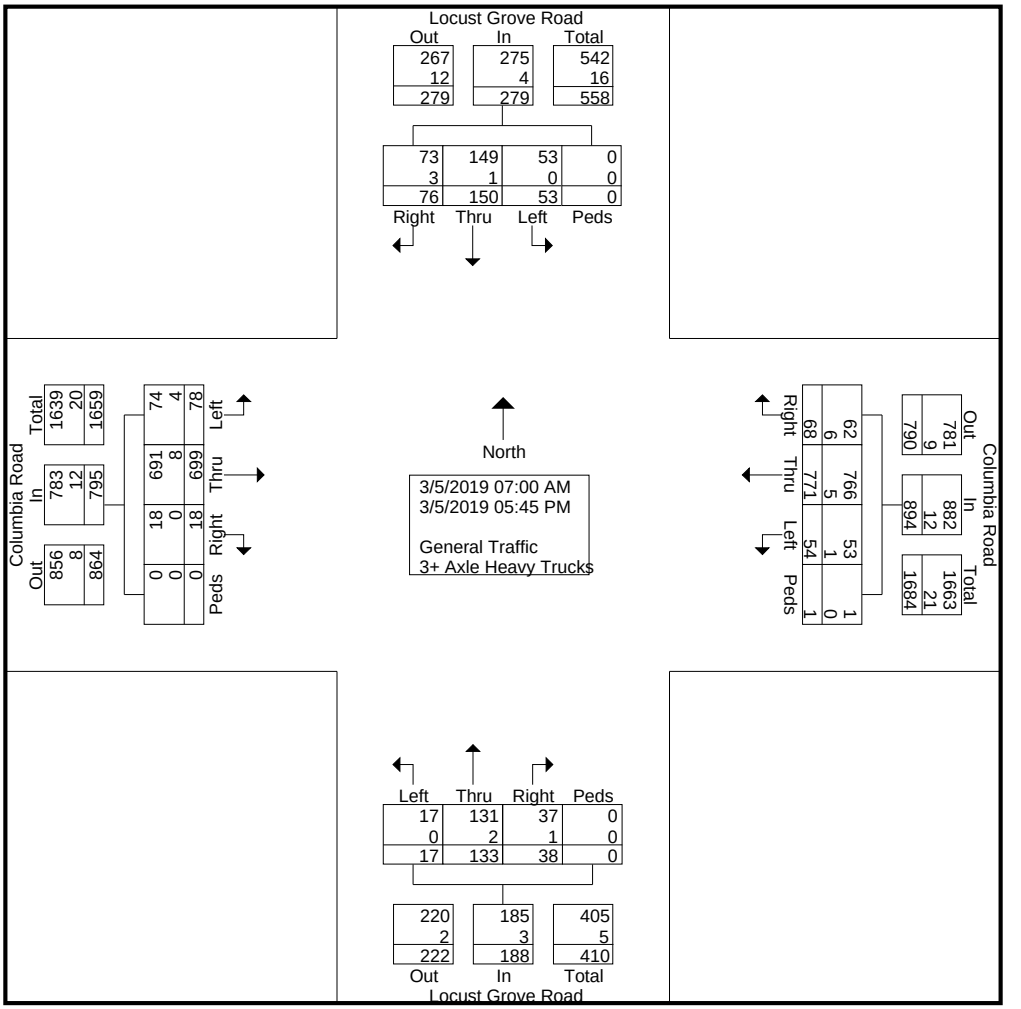
| | Locust Grove Road From North | | | | | Columbia Road From East | | | | | Locust Grove Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 0 | 4 | 3 | 0 | 7 | 4 | 37 | 1 | 0 | 42 | 1 | 15 | 3 | 0 | 19 | 1 | 53 | 6 | 0 | 60 | 128 |
| 07:15 AM | 2 | 7 | 4 | 0 | 13 | 3 | 46 | 2 | 0 | 51 | 3 | 13 | 1 | 0 | 17 | 0 | 74 | 10 | 0 | 84 | 165 |
| 07:30 AM | 2 | 4 | 4 | 0 | 10 | 0 | 29 | 0 | 0 | 29 | 1 | 14 | 0 | 0 | 15 | 2 | 97 | 14 | 0 | 113 | 167 |
| 07:45 AM | 1 | 3 | 0 | 0 | 4 | 3 | 29 | 5 | 0 | 37 | 3 | 13 | 0 | 0 | 16 | 3 | 75 | 9 | 0 | 87 | 144 |
| Total | 5 | 18 | 11 | 0 | 34 | 10 | 141 | 8 | 0 | 159 | 8 | 55 | 4 | 0 | 67 | 6 | 299 | 39 | 0 | 344 | 604 |
| 08:00 AM | 2 | 2 | 1 | 0 | 5 | 7 | 27 | 3 | 0 | 37 | 5 | 5 | 4 | 0 | 14 | 1 | 71 | 6 | 0 | 78 | 134 |
| 08:15 AM | 1 | 2 | 1 | 0 | 4 | 1 | 16 | 2 | 0 | 19 | 5 | 12 | 2 | 0 | 19 | 0 | 51 | 2 | 0 | 53 | 95 |
| 08:30 AM | 2 | 0 | 7 | 0 | 9 | 5 | 16 | 1 | 0 | 22 | 4 | 7 | 1 | 0 | 12 | 0 | 53 | 5 | 0 | 58 | 101 |
| 08:45 AM | 1 | 4 | 2 | 0 | 7 | 5 | 24 | 0 | 0 | 29 | 3 | 8 | 0 | 0 | 11 | 1 | 38 | 5 | 0 | 44 | 91 |
| Total | 6 | 8 | 11 | 0 | 25 | 18 | 83 | 6 | 0 | 107 | 17 | 32 | 7 | 0 | 56 | 2 | 213 | 18 | 0 | 233 | 421 |
| --- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 6 | 9 | 5 | 0 | 20 | 8 | 51 | 2 | 1 | 62 | 1 | 4 | 1 | 0 | 6 | 4 | 25 | 2 | 0 | 31 | 119 |
| 04:15 PM | 6 | 19 | 2 | 0 | 27 | 5 | 59 | 6 | 0 | 70 | 6 | 9 | 1 | 0 | 16 | 0 | 26 | 4 | 0 | 30 | 143 |
| 04:30 PM | 11 | 15 | 6 | 0 | 32 | 5 | 63 | 8 | 0 | 76 | 1 | 4 | 1 | 0 | 6 | 2 | 26 | 2 | 0 | 30 | 144 |
| 04:45 PM | 4 | 22 | 7 | 0 | 33 | 1 | 71 | 5 | 0 | 77 | 1 | 5 | 1 | 0 | 7 | 1 | 24 | 3 | 0 | 28 | 145 |
| Total | 27 | 65 | 20 | 0 | 112 | 19 | 244 | 21 | 1 | 285 | 9 | 22 | 4 | 0 | 35 | 7 | 101 | 11 | 0 | 119 | 551 |
| 05:00 PM | 9 | 22 | 2 | 0 | 33 | 9 | 75 | 4 | 0 | 88 | 2 | 7 | 0 | 0 | 9 | 1 | 25 | 2 | 0 | 28 | 158 |
| 05:15 PM | 8 | 12 | 4 | 0 | 24 | 3 | 84 | 4 | 0 | 91 | 0 | 4 | 0 | 0 | 4 | 1 | 22 | 2 | 0 | 25 | 144 |
| 05:30 PM | 9 | 12 | 1 | 0 | 22 | 6 | 82 | 4 | 0 | 92 | 0 | 11 | 2 | 0 | 13 | 0 | 28 | 4 | 0 | 32 | 159 |
| 05:45 PM | 12 | 13 | 4 | 0 | 29 | 3 | 62 | 7 | 0 | 72 | 2 | 2 | 0 | 0 | 4 | 1 | 11 | 2 | 0 | 14 | 119 |
| Total | 38 | 59 | 11 | 0 | 108 | 21 | 303 | 19 | 0 | 343 | 4 | 24 | 2 | 0 | 30 | 3 | 86 | 10 | 0 | 99 | 580 |
| Grand Total | 76 | 150 | 53 | 0 | 279 | 68 | 771 | 54 | 1 | 894 | 38 | 133 | 17 | 0 | 188 | 18 | 699 | 78 | 0 | 795 | 2156 |
| Apprch % | 27.2 | 53.8 | 19 | 0 | | 7.6 | 86.2 | 6 | 0.1 | | 20.2 | 70.7 | 9 | 0 | | 2.3 | 87.9 | 9.8 | 0 | | |
| Total % | 3.5 | 7 | 2.5 | 0 | 12.9 | 3.2 | 35.8 | 2.5 | 0 | 41.5 | 1.8 | 6.2 | 0.8 | 0 | 8.7 | 0.8 | 32.4 | 3.6 | 0 | 36.9 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 96.1 | 99.3 | 100 | 0 | 98.6 | 91.2 | 99.4 | 98.1 | 100 | 98.7 | 97.4 | 98.5 | 100 | 0 | 98.4 | 100 | 98.9 | 94.9 | 0 | 98.5 | 98.6 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 3.9 | 0.7 | 0 | 0 | 1.4 | 8.8 | 0.6 | 1.9 | 0 | 1.3 | 2.6 | 1.5 | 0 | 0 | 1.6 | 0 | 1.1 | 5.1 | 0 | 1.5 | 1.4 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



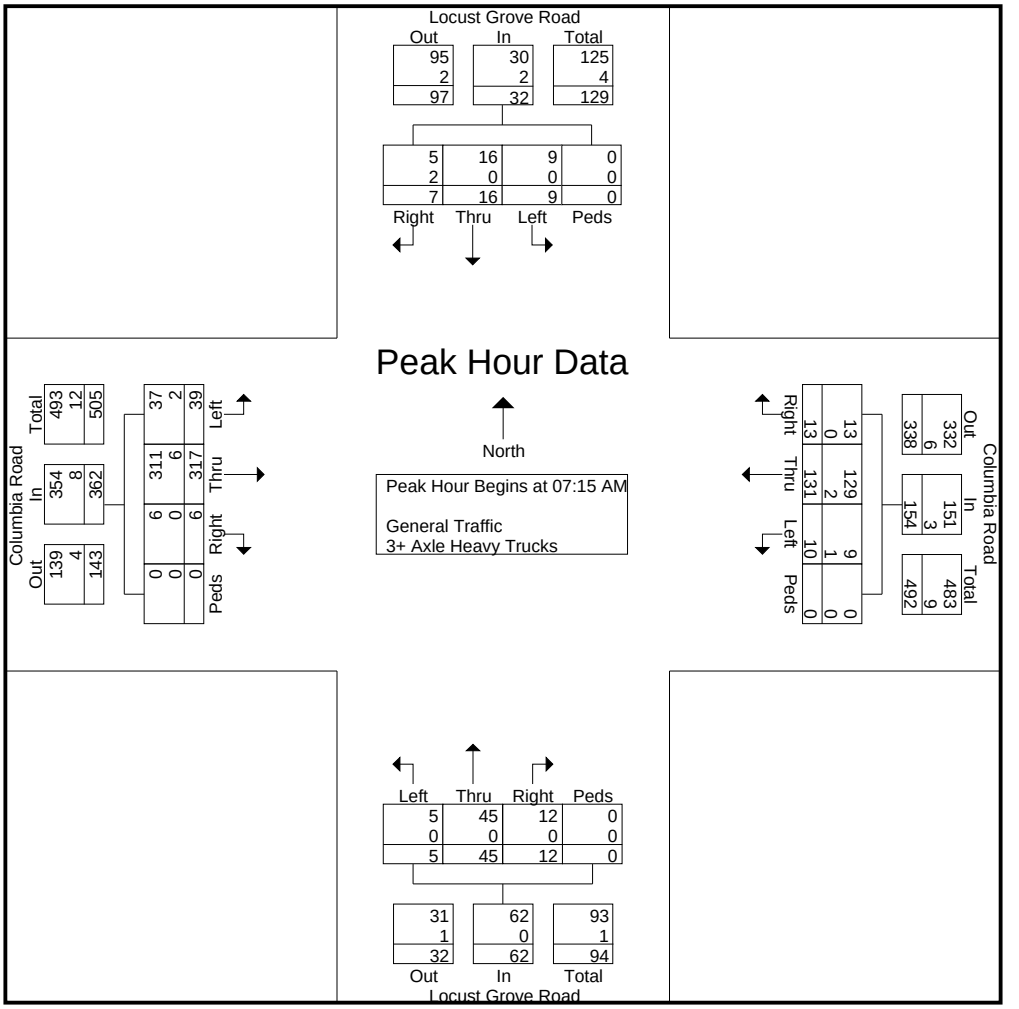
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Locust Grove Road From North | | | | | Columbia Road From East | | | | | Locust Grove Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:15 AM | **2** | **7** | **4** | 0 | **13** | 3 | **46** | 2 | 0 | **51** | 3 | 13 | 1 | 0 | **17** | 0 | 74 | 10 | 0 | 84 | 165 |
| 07:30 AM | 2 | 4 | 4 | 0 | 10 | 0 | 29 | 0 | 0 | 29 | 1 | **14** | 0 | 0 | 15 | 2 | **97** | **14** | 0 | **113** | **167** |
| 07:45 AM | 1 | 3 | 0 | 0 | 4 | 3 | 29 | **5** | 0 | 37 | 3 | 13 | 0 | 0 | 16 | **3** | 75 | 9 | 0 | 87 | 144 |
| 08:00 AM | 2 | 2 | 1 | 0 | 5 | **7** | 27 | 3 | 0 | 37 | **5** | 5 | **4** | 0 | 14 | 1 | 71 | 6 | 0 | 78 | 134 |
| Total Volume | 7 | 16 | 9 | 0 | 32 | 13 | 131 | 10 | 0 | 154 | 12 | 45 | 5 | 0 | 62 | 6 | 317 | 39 | 0 | 362 | 610 |
| % App. Total | 21.9 | 50 | 28.1 | 0 | | 8.4 | 85.1 | 6.5 | 0 | | 19.4 | 72.6 | 8.1 | 0 | | 1.7 | 87.6 | 10.8 | 0 | | |
| PHF | .875 | .571 | .563 | .000 | .615 | .464 | .712 | .500 | .000 | .755 | .600 | .804 | .313 | .000 | .912 | .500 | .817 | .696 | .000 | .801 | .913 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 71.4 | 100 | 100 | 0 | 93.8 | 100 | 98.5 | 90.0 | 0 | 98.1 | 100 | 100 | 100 | 0 | 100 | 100 | 98.1 | 94.9 | 0 | 97.8 | 97.9 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 28.6 | 0 | 0 | 0 | 6.3 | 0 | 1.5 | 10.0 | 0 | 1.9 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 5.1 | 0 | 2.2 | 2.1 |



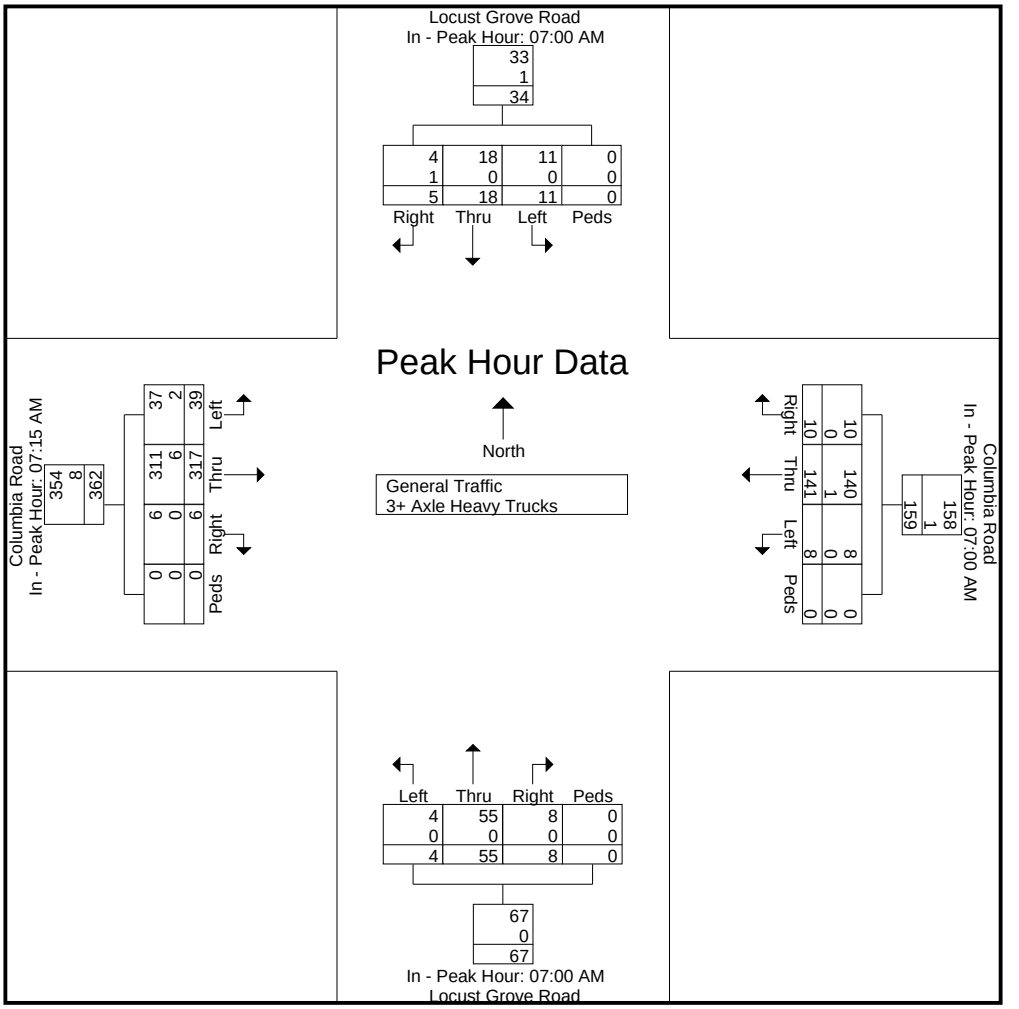
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Locust Grove Road From North | | | | | Columbia Road From East | | | | | Locust Grove Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:15 AM | | | | | |
| +0 mins. | 0 | 4 | 3 | 0 | 7 | **4** | 37 | 1 | 0 | 42 | 1 | **15** | **3** | 0 | **19** | 0 | 74 | 10 | 0 | 84 | |
| +15 mins. | **2** | **7** | **4** | 0 | **13** | 3 | **46** | 2 | 0 | **51** | **3** | 13 | 1 | 0 | 17 | 2 | **97** | **14** | 0 | **113** | |
| +30 mins. | 2 | 4 | 4 | 0 | 10 | 0 | 29 | 0 | 0 | 29 | 1 | 14 | 0 | 0 | 15 | **3** | 75 | 9 | 0 | 87 | |
| +45 mins. | 1 | 3 | 0 | 0 | 4 | 3 | 29 | **5** | 0 | 37 | 3 | 13 | 0 | 0 | 16 | 1 | 71 | 6 | 0 | 78 | |
| Total Volume | 5 | 18 | 11 | 0 | 34 | 10 | 141 | 8 | 0 | 159 | 8 | 55 | 4 | 0 | 67 | 6 | 317 | 39 | 0 | 362 | |
| % App. Total | 14.7 | 52.9 | 32.4 | 0 | | 6.3 | 88.7 | 5 | 0 | | 11.9 | 82.1 | 6 | 0 | | 1.7 | 87.6 | 10.8 | 0 | | |
| PHF | .625 | .643 | .688 | .000 | .654 | .625 | .766 | .400 | .000 | .779 | .667 | .917 | .333 | .000 | .882 | .500 | .817 | .696 | .000 | .801 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 80 | 100 | 100 | 0 | 97.1 | 100 | 99.3 | 100 | 0 | 99.4 | 100 | 100 | 100 | 0 | 100 | 100 | 98.1 | 94.9 | 0 | 97.8 | |
| 3+ Axle Heavy Trucks | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 8 | |
| % 3+ Axle Heavy Trucks | 20 | 0 | 0 | 0 | 2.9 | 0 | 0.7 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 5.1 | 0 | 2.2 | |



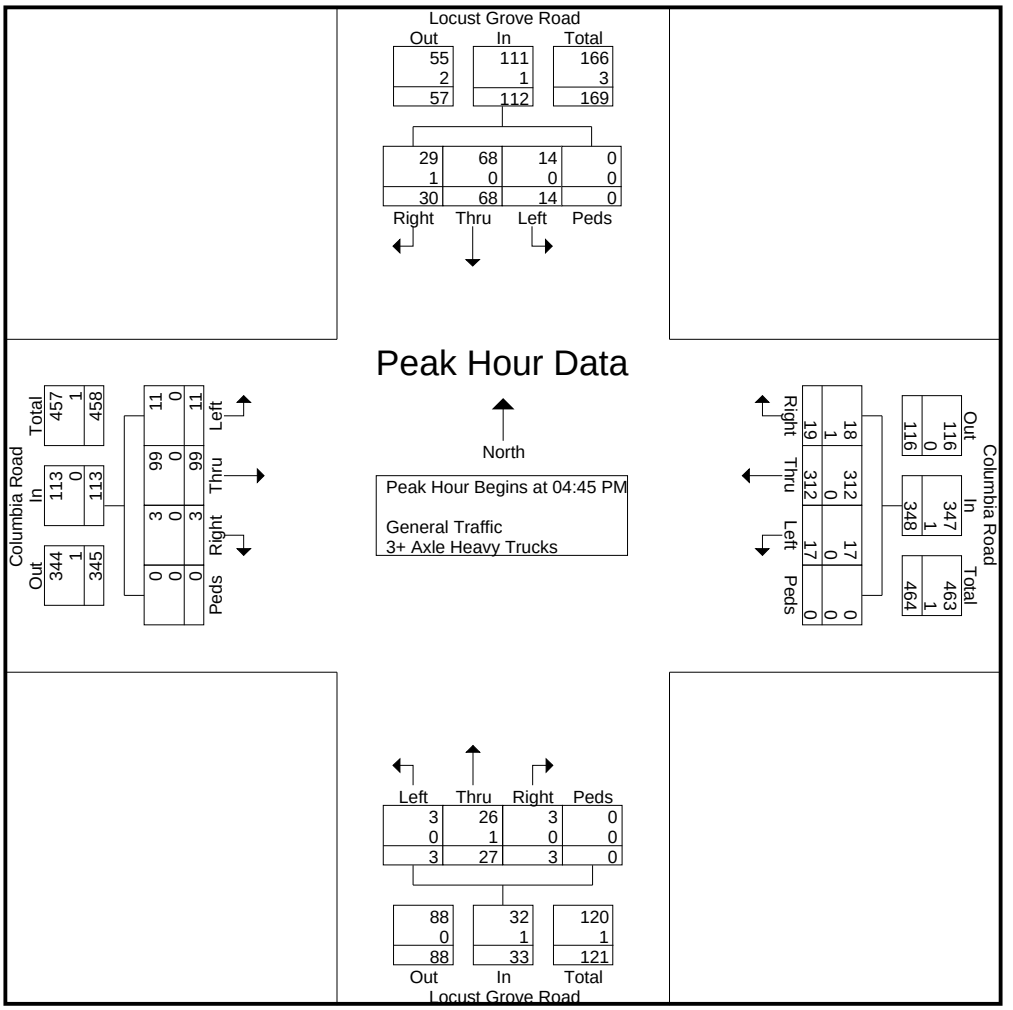
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Locust Grove Road From North | | | | | Columbia Road From East | | | | | Locust Grove Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 4 | **22** | **7** | 0 | **33** | 1 | 71 | **5** | 0 | 77 | 1 | 5 | 1 | 0 | 7 | **1** | 24 | 3 | 0 | 28 | 145 |
| 05:00 PM | **9** | 22 | 2 | 0 | 33 | **9** | 75 | 4 | 0 | 88 | **2** | 7 | 0 | 0 | 9 | 1 | 25 | 2 | 0 | 28 | 158 |
| 05:15 PM | 8 | 12 | 4 | 0 | 24 | 3 | **84** | 4 | 0 | 91 | 0 | 4 | 0 | 0 | 4 | 1 | 22 | 2 | 0 | 25 | 144 |
| 05:30 PM | 9 | 12 | 1 | 0 | 22 | 6 | 82 | 4 | 0 | **92** | 0 | **11** | **2** | 0 | **13** | 0 | **28** | **4** | 0 | **32** | **159** |
| Total Volume | 30 | 68 | 14 | 0 | 112 | 19 | 312 | 17 | 0 | 348 | 3 | 27 | 3 | 0 | 33 | 3 | 99 | 11 | 0 | 113 | 606 |
| % App. Total | 26.8 | 60.7 | 12.5 | 0 | | 5.5 | 89.7 | 4.9 | 0 | | 9.1 | 81.8 | 9.1 | 0 | | 2.7 | 87.6 | 9.7 | 0 | | |
| PHF | .833 | .773 | .500 | .000 | .848 | .528 | .929 | .850 | .000 | .946 | .375 | .614 | .375 | .000 | .635 | .750 | .884 | .688 | .000 | .883 | .953 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 96.7 | 100 | 100 | 0 | 99.1 | 94.7 | 100 | 100 | 0 | 99.7 | 100 | 96.3 | 100 | 0 | 97.0 | 100 | 100 | 100 | 0 | 100 | 99.5 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 3.3 | 0 | 0 | 0 | 0.9 | 5.3 | 0 | 0 | 0 | 0.3 | 0 | 3.7 | 0 | 0 | 3.0 | 0 | 0 | 0 | 0 | 0 | 0.5 |



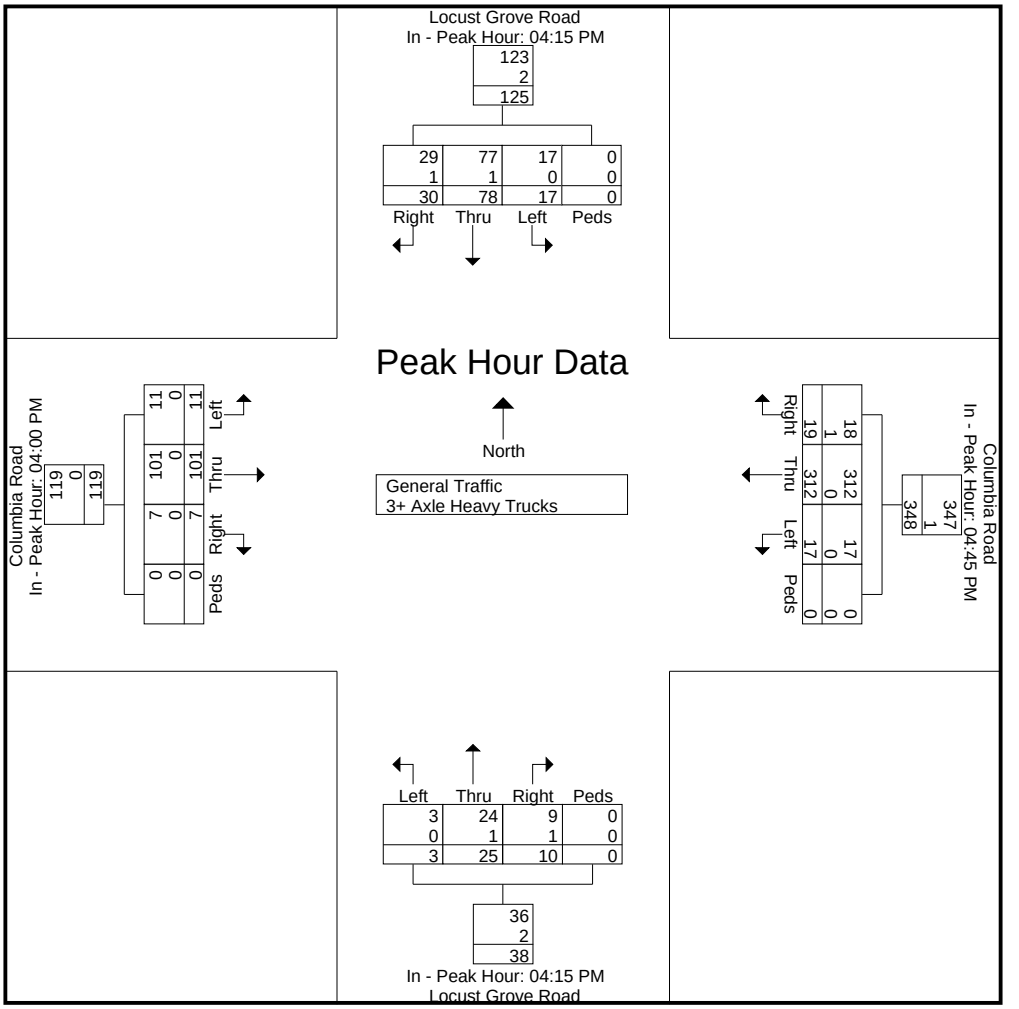
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Locust Grove Road From North | | | | | Columbia Road From East | | | | | Locust Grove Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:15 PM | | | | | 04:45 PM | | | | | 04:15 PM | | | | | 04:00 PM | | | | | |
| +0 mins. | 6 | 19 | 2 | 0 | 27 | 1 | 71 | **5** | 0 | 77 | **6** | **9** | **1** | 0 | **16** | **4** | 25 | 2 | 0 | **31** | |
| +15 mins. | **11** | 15 | 6 | 0 | 32 | **9** | 75 | 4 | 0 | 88 | 1 | 4 | 1 | 0 | 6 | 0 | **26** | **4** | 0 | 30 | |
| +30 mins. | 4 | **22** | **7** | 0 | **33** | 3 | **84** | 4 | 0 | 91 | 1 | 5 | 1 | 0 | 7 | 2 | 26 | 2 | 0 | 30 | |
| +45 mins. | 9 | 22 | 2 | 0 | 33 | 6 | 82 | 4 | 0 | **92** | 2 | 7 | 0 | 0 | 9 | 1 | 24 | 3 | 0 | 28 | |
| Total Volume | 30 | 78 | 17 | 0 | 125 | 19 | 312 | 17 | 0 | 348 | 10 | 25 | 3 | 0 | 38 | 7 | 101 | 11 | 0 | 119 | |
| % App. Total | 24 | 62.4 | 13.6 | 0 | | 5.5 | 89.7 | 4.9 | 0 | | 26.3 | 65.8 | 7.9 | 0 | | 5.9 | 84.9 | 9.2 | 0 | | |
| PHF | .682 | .886 | .607 | .000 | .947 | .528 | .929 | .850 | .000 | .946 | .417 | .694 | .750 | .000 | .594 | .438 | .971 | .688 | .000 | .960 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 96.7 | 98.7 | 100 | 0 | 98.4 | 94.7 | 100 | 100 | 0 | 99.7 | 90 | 96 | 100 | 0 | 94.7 | 100 | 100 | 100 | 0 | 100 | |
| 3+ Axle Heavy Trucks | 1 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 3.3 | 1.3 | 0 | 0 | 1.6 | 5.3 | 0 | 0 | 0 | 0.3 | 10 | 4 | 0 | 0 | 5.3 | 0 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Locust Grove Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

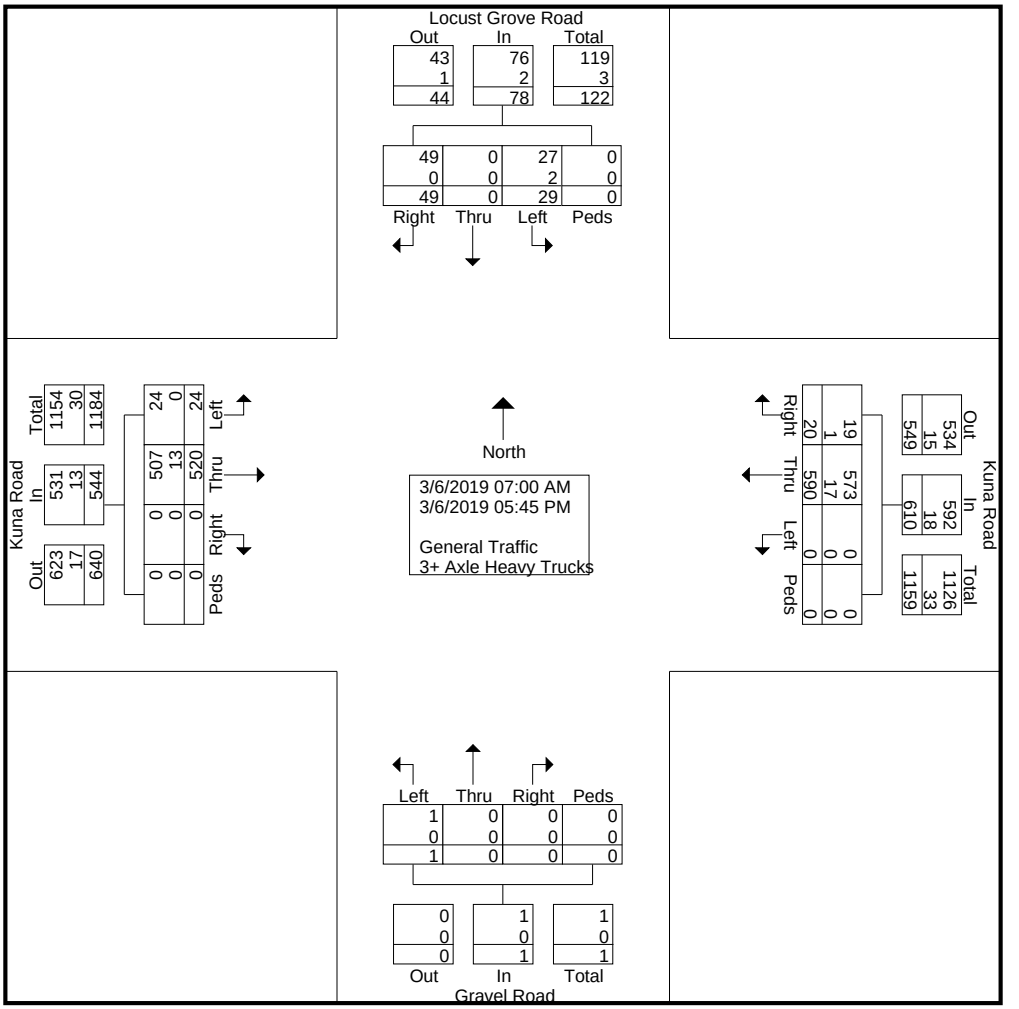
| | Locust Grove Road From North | | | | | Kuna Road From East | | | | | Gravel Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 1 | 0 | 2 | 0 | 3 | 0 | 19 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 3 | 0 | 43 | 65 |
| 07:15 AM | 1 | 0 | 1 | 0 | 2 | 0 | 36 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 3 | 0 | 61 | 99 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 2 | 31 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 1 | 0 | 61 | 94 |
| 07:45 AM | 3 | 0 | 2 | 0 | 5 | 2 | 22 | 0 | 0 | 24 | 0 | 0 | 1 | 0 | 1 | 0 | 37 | 2 | 0 | 39 | 69 |
| Total | 5 | 0 | 5 | 0 | 10 | 4 | 108 | 0 | 0 | 112 | 0 | 0 | 1 | 0 | 1 | 0 | 195 | 9 | 0 | 204 | 327 |
| 08:00 AM | 0 | 0 | 1 | 0 | 1 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 1 | 0 | 35 | 51 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 3 | 0 | 41 | 57 |
| 08:30 AM | 0 | 0 | 1 | 0 | 1 | 0 | 18 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 31 | 50 |
| 08:45 AM | 2 | 0 | 1 | 0 | 3 | 0 | 22 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 17 | 42 |
| Total | 2 | 0 | 3 | 0 | 5 | 1 | 70 | 0 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 4 | 0 | 124 | 200 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 3 | 0 | 3 | 0 | 6 | 4 | 40 | 0 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 2 | 0 | 26 | 76 |
| 04:15 PM | 7 | 0 | 2 | 0 | 9 | 3 | 45 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 2 | 0 | 33 | 90 |
| 04:30 PM | 6 | 0 | 1 | 0 | 7 | 0 | 39 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 30 | 76 |
| 04:45 PM | 3 | 0 | 0 | 0 | 3 | 1 | 55 | 0 | 0 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 1 | 0 | 30 | 89 |
| Total | 19 | 0 | 6 | 0 | 25 | 8 | 179 | 0 | 0 | 187 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 5 | 0 | 119 | 331 |
| 05:00 PM | 7 | 0 | 3 | 0 | 10 | 2 | 51 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 3 | 0 | 33 | 96 |
| 05:15 PM | 8 | 0 | 2 | 0 | 10 | 2 | 58 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 21 | 91 |
| 05:30 PM | 5 | 0 | 7 | 0 | 12 | 1 | 62 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 3 | 0 | 23 | 98 |
| 05:45 PM | 3 | 0 | 3 | 0 | 6 | 2 | 62 | 0 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 90 |
| Total | 23 | 0 | 15 | 0 | 38 | 7 | 233 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 6 | 0 | 97 | 375 |
| Grand Total | 49 | 0 | 29 | 0 | 78 | 20 | 590 | 0 | 0 | 610 | 0 | 0 | 1 | 0 | 1 | 0 | 520 | 24 | 0 | 544 | 1233 |
| Apprch % | 62.8 | 0 | 37.2 | 0 | | 3.3 | 96.7 | 0 | 0 | | 0 | 0 | 100 | 0 | | 0 | 95.6 | 4.4 | 0 | | |
| Total % | 4 | 0 | 2.4 | 0 | 6.3 | 1.6 | 47.9 | 0 | 0 | 49.5 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 42.2 | 1.9 | 0 | 44.1 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 0 | 93.1 | 0 | 97.4 | 95 | 97.1 | 0 | 0 | 97 | 0 | 0 | 100 | 0 | 100 | 0 | 97.5 | 100 | 0 | 97.6 | 97.3 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 6.9 | 0 | 2.6 | 5 | 2.9 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 0 | 0 | 2.4 | 2.7 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 2



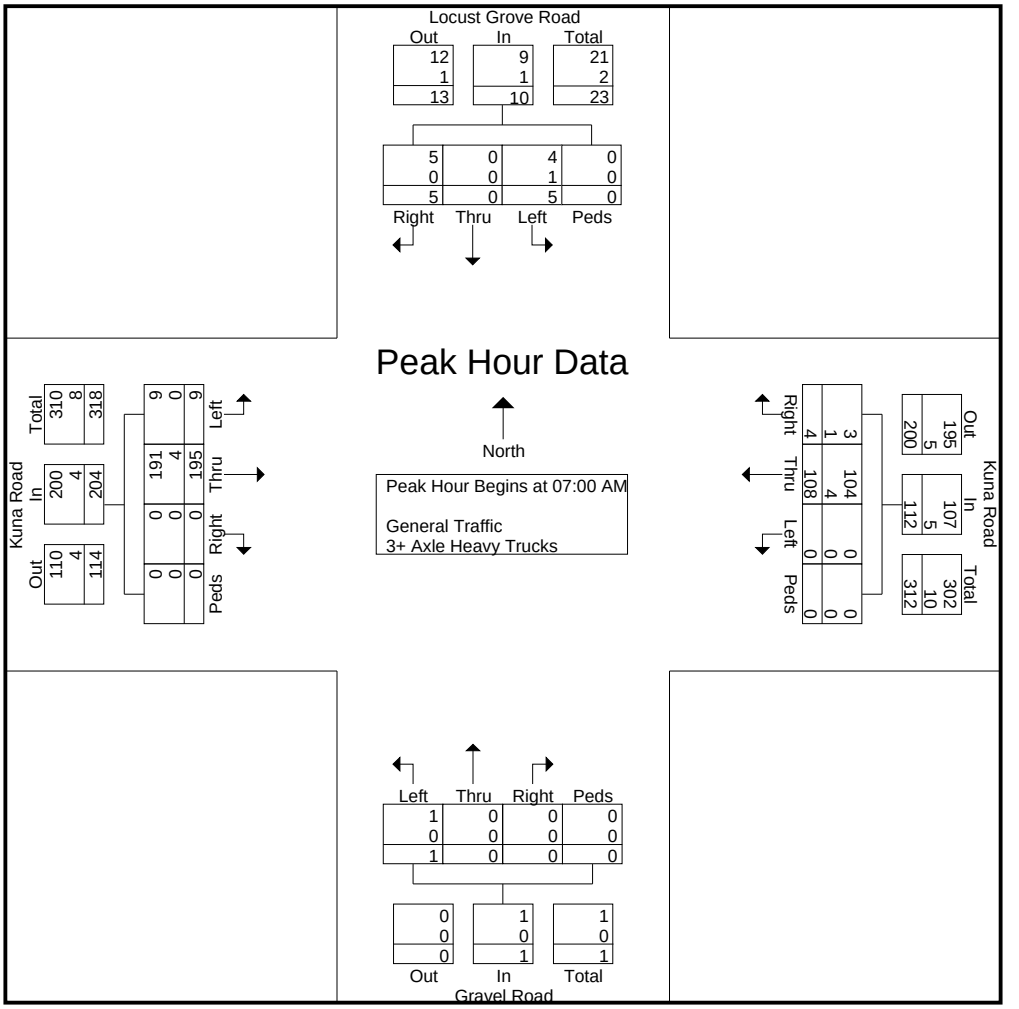
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 3

| | Locust Grove Road From North | | | | | Kuna Road From East | | | | | Gravel Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 1 | 0 | **2** | 0 | 3 | 0 | 19 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | **3** | 0 | 43 | 65 |
| 07:15 AM | 1 | 0 | 1 | 0 | 2 | 0 | **36** | 0 | 0 | **36** | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 3 | 0 | **61** | **99** |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | **2** | 31 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | **60** | 1 | 0 | 61 | 94 |
| 07:45 AM | **3** | 0 | 2 | 0 | **5** | 2 | 22 | 0 | 0 | 24 | 0 | 0 | **1** | 0 | **1** | 0 | 37 | 2 | 0 | 39 | 69 |
| Total Volume | 5 | 0 | 5 | 0 | 10 | 4 | 108 | 0 | 0 | 112 | 0 | 0 | 1 | 0 | 1 | 0 | 195 | 9 | 0 | 204 | 327 |
| % App. Total | 50 | 0 | 50 | 0 | | 3.6 | 96.4 | 0 | 0 | | 0 | 0 | 100 | 0 | | 0 | 95.6 | 4.4 | 0 | | |
| PHF | .417 | .000 | .625 | .000 | .500 | .500 | .750 | .000 | .000 | .778 | .000 | .000 | .250 | .000 | .250 | .000 | .813 | .750 | .000 | .836 | .826 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 0 | 80.0 | 0 | 90.0 | 75.0 | 96.3 | 0 | 0 | 95.5 | 0 | 0 | 100 | 0 | 100 | 0 | 97.9 | 100 | 0 | 98.0 | 96.9 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 20.0 | 0 | 10.0 | 25.0 | 3.7 | 0 | 0 | 4.5 | 0 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 | 0 | 2.0 | 3.1 |



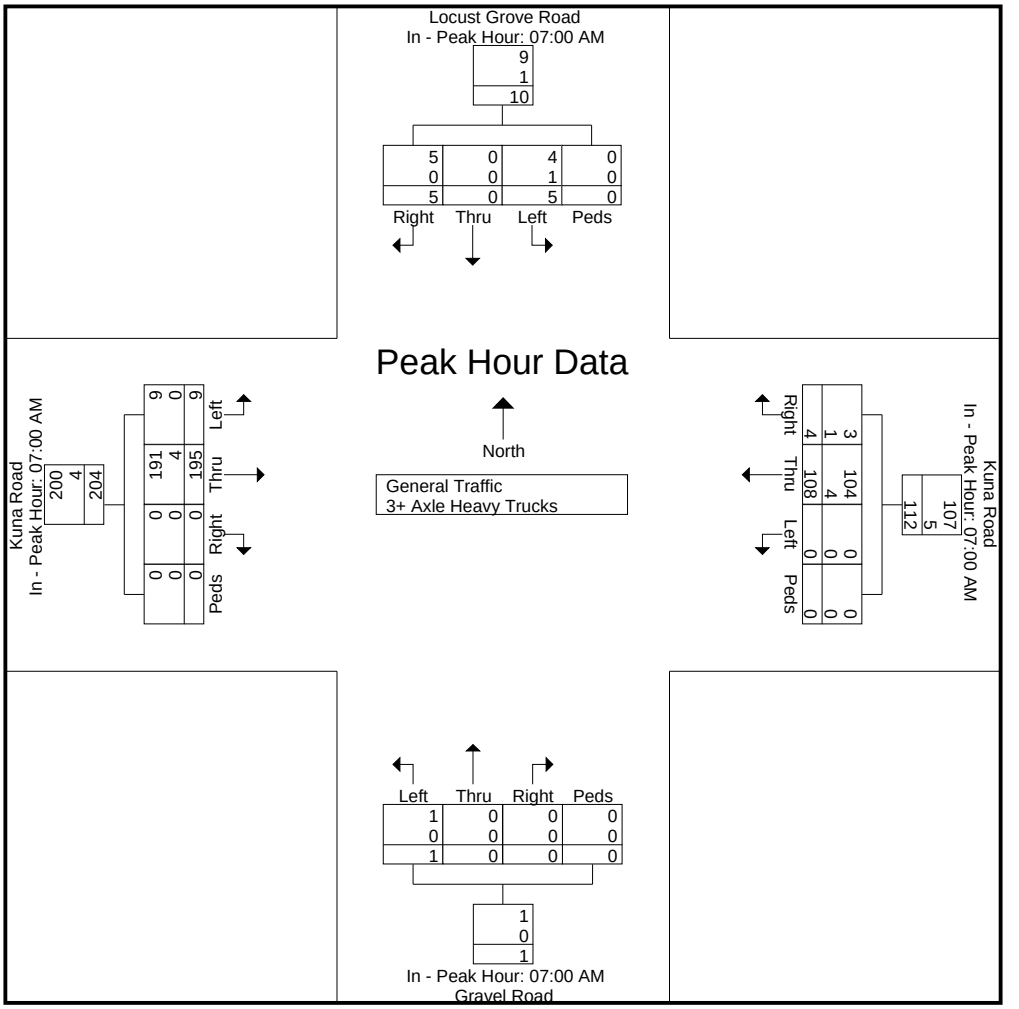
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 4

| | Locust Grove Road From North | | | | | Kuna Road From East | | | | | Gravel Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | 1 | 0 | **2** | 0 | 3 | 0 | 19 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | **3** | 0 | 43 | |
| +15 mins. | 1 | 0 | 1 | 0 | 2 | 0 | **36** | 0 | 0 | **36** | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 3 | 0 | **61** | |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | **2** | 31 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | **60** | 1 | 0 | 61 | |
| +45 mins. | **3** | 0 | 2 | 0 | **5** | 2 | 22 | 0 | 0 | 24 | 0 | 0 | **1** | 0 | **1** | 0 | 37 | 2 | 0 | 39 | |
| Total Volume | 5 | 0 | 5 | 0 | 10 | 4 | 108 | 0 | 0 | 112 | 0 | 0 | 1 | 0 | 1 | 0 | 195 | 9 | 0 | 204 | |
| % App. Total | 50 | 0 | 50 | 0 | | 3.6 | 96.4 | 0 | 0 | | 0 | 0 | 100 | 0 | | 0 | 95.6 | 4.4 | 0 | | |
| PHF | .417 | .000 | .625 | .000 | .500 | .500 | .750 | .000 | .000 | .778 | .000 | .000 | .250 | .000 | .250 | .000 | .813 | .750 | .000 | .836 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 0 | 80 | 0 | 90 | 75 | 96.3 | 0 | 0 | 95.5 | 0 | 0 | 100 | 0 | 100 | 0 | 97.9 | 100 | 0 | 98 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 20 | 0 | 10 | 25 | 3.7 | 0 | 0 | 4.5 | 0 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 | 0 | 2 | |



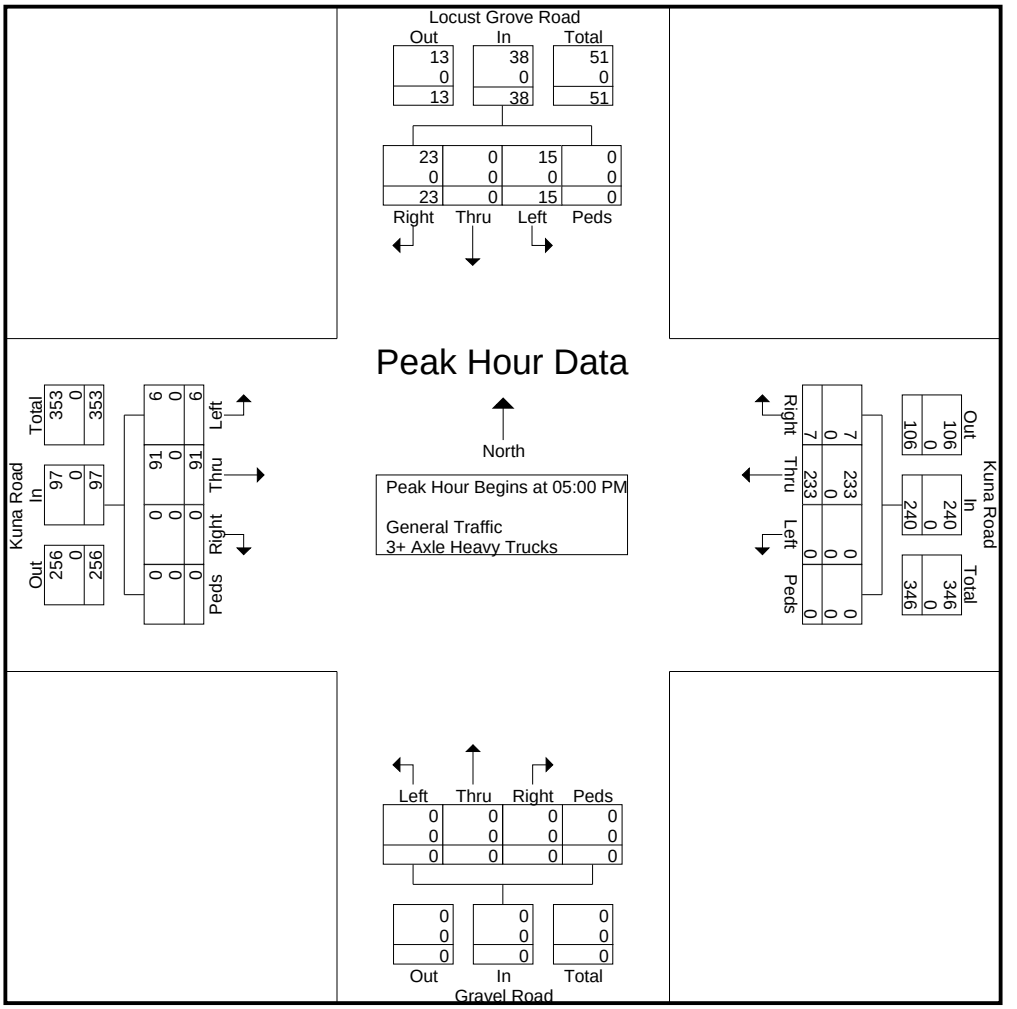
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 5

| | Locust Grove Road From North | | | | | Kuna Road From East | | | | | Gravel Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:00 PM | | | | | | | | | | | | | | | | | | | | | |
| 05:00 PM | 7 | 0 | 3 | 0 | 10 | **2** | 51 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | **30** | **3** | 0 | **33** | 96 |
| 05:15 PM | **8** | 0 | 2 | 0 | 10 | 2 | 58 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 21 | 91 |
| 05:30 PM | 5 | 0 | **7** | 0 | **12** | 1 | **62** | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 3 | 0 | 23 | **98** |
| 05:45 PM | 3 | 0 | 3 | 0 | 6 | 2 | 62 | 0 | 0 | **64** | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 90 |
| Total Volume | 23 | 0 | 15 | 0 | 38 | 7 | 233 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 6 | 0 | 97 | 375 |
| % App. Total | 60.5 | 0 | 39.5 | 0 | | 2.9 | 97.1 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 93.8 | 6.2 | 0 | | |
| PHF | .719 | .000 | .536 | .000 | .792 | .875 | .940 | .000 | .000 | .938 | .000 | .000 | .000 | .000 | .000 | .000 | .758 | .500 | .000 | .735 | .957 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 0 | 100 | 0 | 100 | 100 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 100 | 100 |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



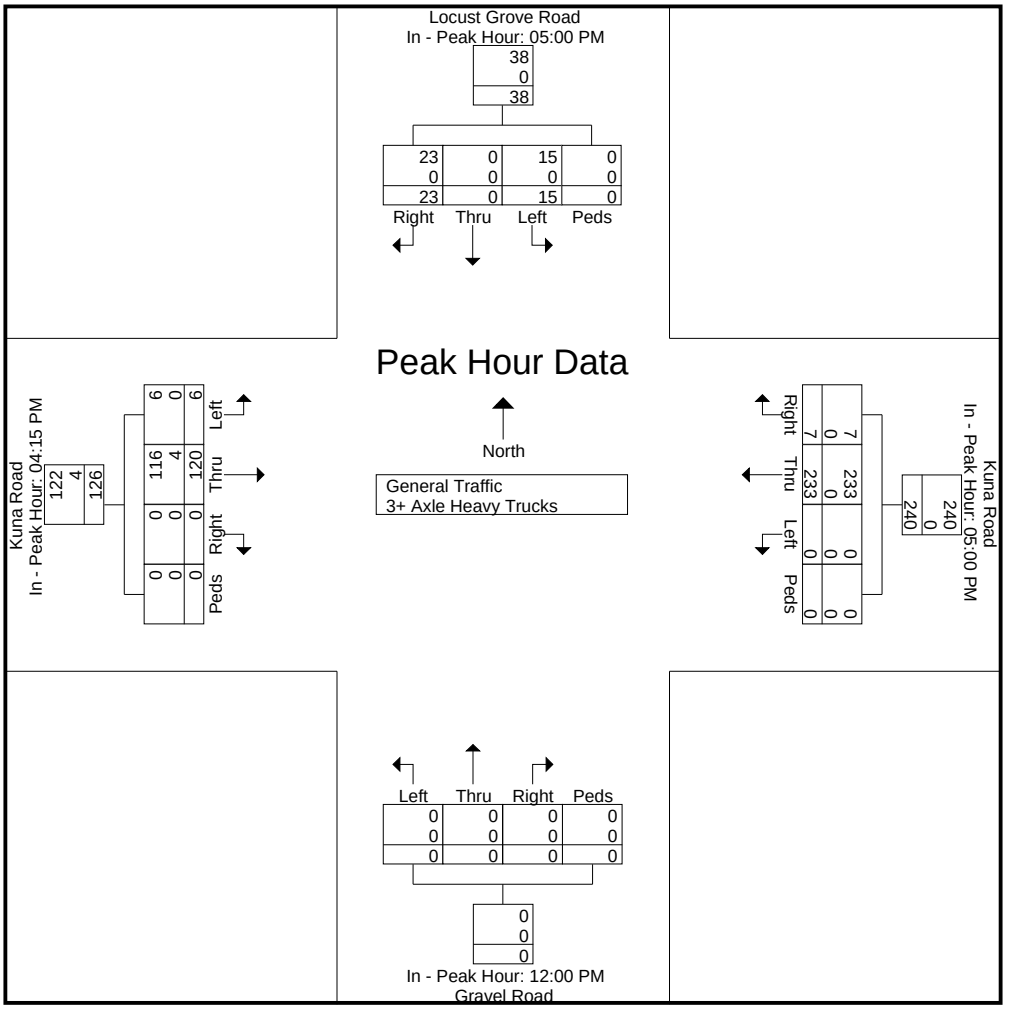
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 6

| | Locust Grove Road From North | | | | | Kuna Road From East | | | | | Gravel Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 05:00 PM | | | | | 05:00 PM | | | | | 12:00 PM | | | | | 04:15 PM | | | | | |
| +0 mins. | 7 | 0 | 3 | 0 | 10 | **2** | 51 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | **31** | 2 | 0 | **33** | |
| +15 mins. | **8** | 0 | 2 | 0 | 10 | 2 | 58 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 30 | |
| +30 mins. | 5 | 0 | **7** | 0 | **12** | 1 | **62** | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 1 | 0 | 30 | |
| +45 mins. | 3 | 0 | 3 | 0 | 6 | 2 | 62 | 0 | 0 | **64** | 0 | 0 | 0 | 0 | 0 | 0 | 30 | **3** | 0 | 33 | |
| Total Volume | 23 | 0 | 15 | 0 | 38 | 7 | 233 | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 6 | 0 | 126 | |
| % App. Total | 60.5 | 0 | 39.5 | 0 | | 2.9 | 97.1 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 95.2 | 4.8 | 0 | | |
| PHF | .719 | .000 | .536 | .000 | .792 | .875 | .940 | .000 | .000 | .938 | .000 | .000 | .000 | .000 | .000 | .000 | .968 | .500 | .000 | .955 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 0 | 100 | 0 | 100 | 100 | 100 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 96.7 | 100 | 0 | 96.8 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 0 | 3.2 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Locust Grove / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Locust Grove Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

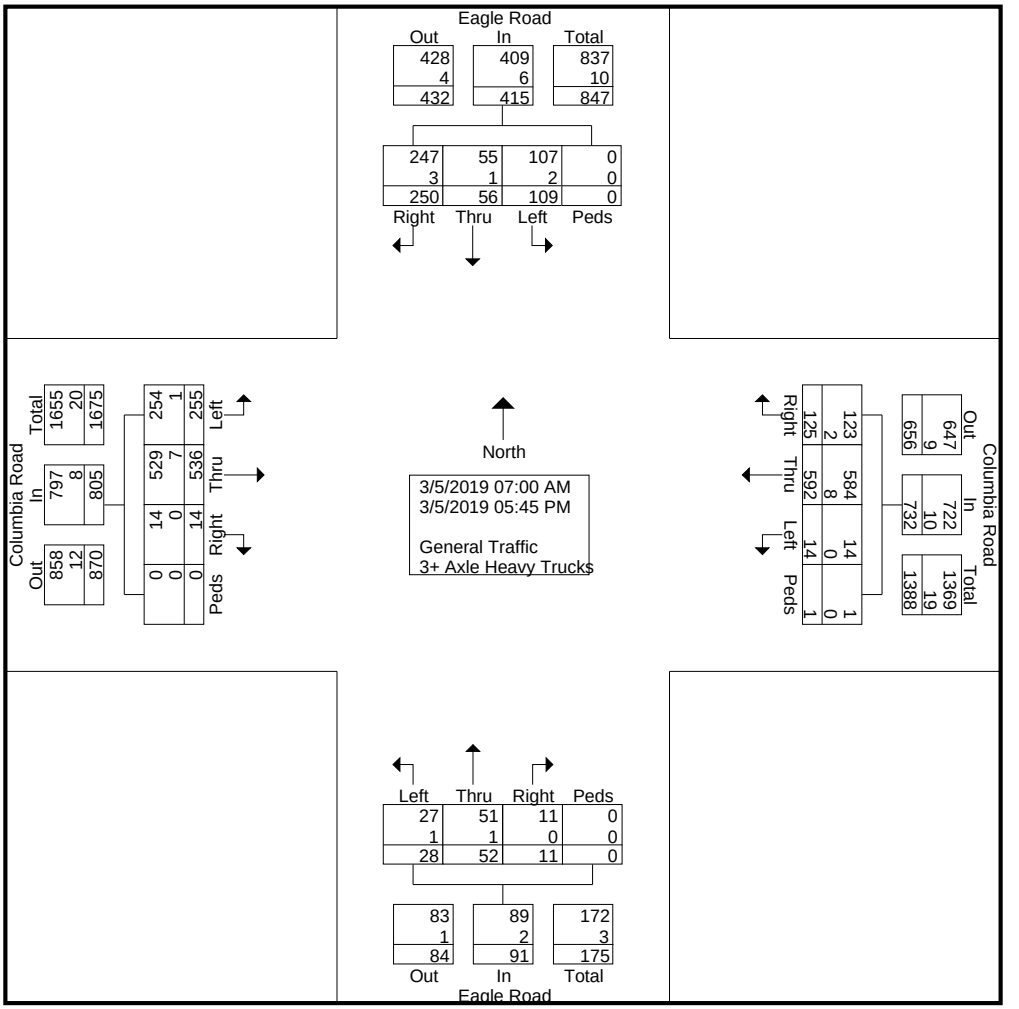
| | Eagle Road From North | | | | | Columbia Road From East | | | | | Eagle Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 2 | 0 | 1 | 0 | 3 | 7 | 40 | 0 | 0 | 47 | 1 | 5 | 0 | 0 | 6 | 0 | 31 | 27 | 0 | 58 | 114 |
| 07:15 AM | 4 | 3 | 2 | 0 | 9 | 7 | 39 | 0 | 0 | 46 | 1 | 3 | 4 | 0 | 8 | 1 | 46 | 31 | 0 | 78 | 141 |
| 07:30 AM | 4 | 3 | 5 | 0 | 12 | 9 | 24 | 1 | 0 | 34 | 1 | 4 | 0 | 0 | 5 | 2 | 64 | 29 | 0 | 95 | 146 |
| 07:45 AM | 8 | 1 | 6 | 0 | 15 | 13 | 27 | 1 | 0 | 41 | 1 | 5 | 3 | 0 | 9 | 2 | 53 | 25 | 0 | 80 | 145 |
| Total | 18 | 7 | 14 | 0 | 39 | 36 | 130 | 2 | 0 | 168 | 4 | 17 | 7 | 0 | 28 | 5 | 194 | 112 | 0 | 311 | 546 |
| 08:00 AM | 6 | 1 | 1 | 0 | 8 | 8 | 27 | 1 | 0 | 36 | 1 | 8 | 1 | 0 | 10 | 0 | 50 | 31 | 0 | 81 | 135 |
| 08:15 AM | 5 | 0 | 4 | 0 | 9 | 2 | 12 | 0 | 0 | 14 | 0 | 4 | 1 | 0 | 5 | 0 | 34 | 28 | 0 | 62 | 90 |
| 08:30 AM | 4 | 0 | 1 | 0 | 5 | 7 | 17 | 0 | 0 | 24 | 2 | 1 | 1 | 0 | 4 | 1 | 39 | 22 | 0 | 62 | 95 |
| 08:45 AM | 5 | 0 | 3 | 0 | 8 | 9 | 23 | 0 | 0 | 32 | 1 | 7 | 0 | 0 | 8 | 0 | 26 | 22 | 0 | 48 | 96 |
| Total | 20 | 1 | 9 | 0 | 30 | 26 | 79 | 1 | 0 | 106 | 4 | 20 | 3 | 0 | 27 | 1 | 149 | 103 | 0 | 253 | 416 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 20 | 7 | 9 | 0 | 36 | 9 | 45 | 1 | 0 | 55 | 0 | 2 | 1 | 0 | 3 | 0 | 29 | 4 | 0 | 33 | 127 |
| 04:15 PM | 21 | 6 | 7 | 0 | 34 | 10 | 41 | 2 | 0 | 53 | 0 | 3 | 1 | 0 | 4 | 1 | 28 | 5 | 0 | 34 | 125 |
| 04:30 PM | 25 | 3 | 13 | 0 | 41 | 6 | 45 | 3 | 0 | 54 | 0 | 1 | 5 | 0 | 6 | 3 | 25 | 8 | 0 | 36 | 137 |
| 04:45 PM | 23 | 4 | 15 | 0 | 42 | 8 | 49 | 1 | 1 | 59 | 1 | 1 | 2 | 0 | 4 | 0 | 23 | 8 | 0 | 31 | 136 |
| Total | 89 | 20 | 44 | 0 | 153 | 33 | 180 | 7 | 1 | 221 | 1 | 7 | 9 | 0 | 17 | 4 | 105 | 25 | 0 | 134 | 525 |
| 05:00 PM | 35 | 9 | 12 | 0 | 56 | 8 | 45 | 0 | 0 | 53 | 1 | 1 | 4 | 0 | 6 | 2 | 24 | 5 | 0 | 31 | 146 |
| 05:15 PM | 37 | 7 | 8 | 0 | 52 | 5 | 50 | 1 | 0 | 56 | 0 | 2 | 3 | 0 | 5 | 2 | 23 | 2 | 0 | 27 | 140 |
| 05:30 PM | 35 | 4 | 14 | 0 | 53 | 9 | 54 | 2 | 0 | 65 | 0 | 4 | 1 | 0 | 5 | 0 | 25 | 6 | 0 | 31 | 154 |
| 05:45 PM | 16 | 8 | 8 | 0 | 32 | 8 | 54 | 1 | 0 | 63 | 1 | 1 | 1 | 0 | 3 | 0 | 16 | 2 | 0 | 18 | 116 |
| Total | 123 | 28 | 42 | 0 | 193 | 30 | 203 | 4 | 0 | 237 | 2 | 8 | 9 | 0 | 19 | 4 | 88 | 15 | 0 | 107 | 556 |
| Grand Total | 250 | 56 | 109 | 0 | 415 | 125 | 592 | 14 | 1 | 732 | 11 | 52 | 28 | 0 | 91 | 14 | 536 | 255 | 0 | 805 | 2043 |
| Apprch % | 60.2 | 13.5 | 26.3 | 0 | | 17.1 | 80.9 | 1.9 | 0.1 | | 12.1 | 57.1 | 30.8 | 0 | | 1.7 | 66.6 | 31.7 | 0 | | |
| Total % | 12.2 | 2.7 | 5.3 | 0 | 20.3 | 6.1 | 29 | 0.7 | 0 | 35.8 | 0.5 | 2.5 | 1.4 | 0 | 4.5 | 0.7 | 26.2 | 12.5 | 0 | 39.4 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 98.8 | 98.2 | 98.2 | 0 | 98.6 | 98.4 | 98.6 | 100 | 100 | 98.6 | 100 | 98.1 | 96.4 | 0 | 97.8 | 100 | 98.7 | 99.6 | 0 | 99 | 98.7 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 1.2 | 1.8 | 1.8 | 0 | 1.4 | 1.6 | 1.4 | 0 | 0 | 1.4 | 0 | 1.9 | 3.6 | 0 | 2.2 | 0 | 1.3 | 0.4 | 0 | 1 | 1.3 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



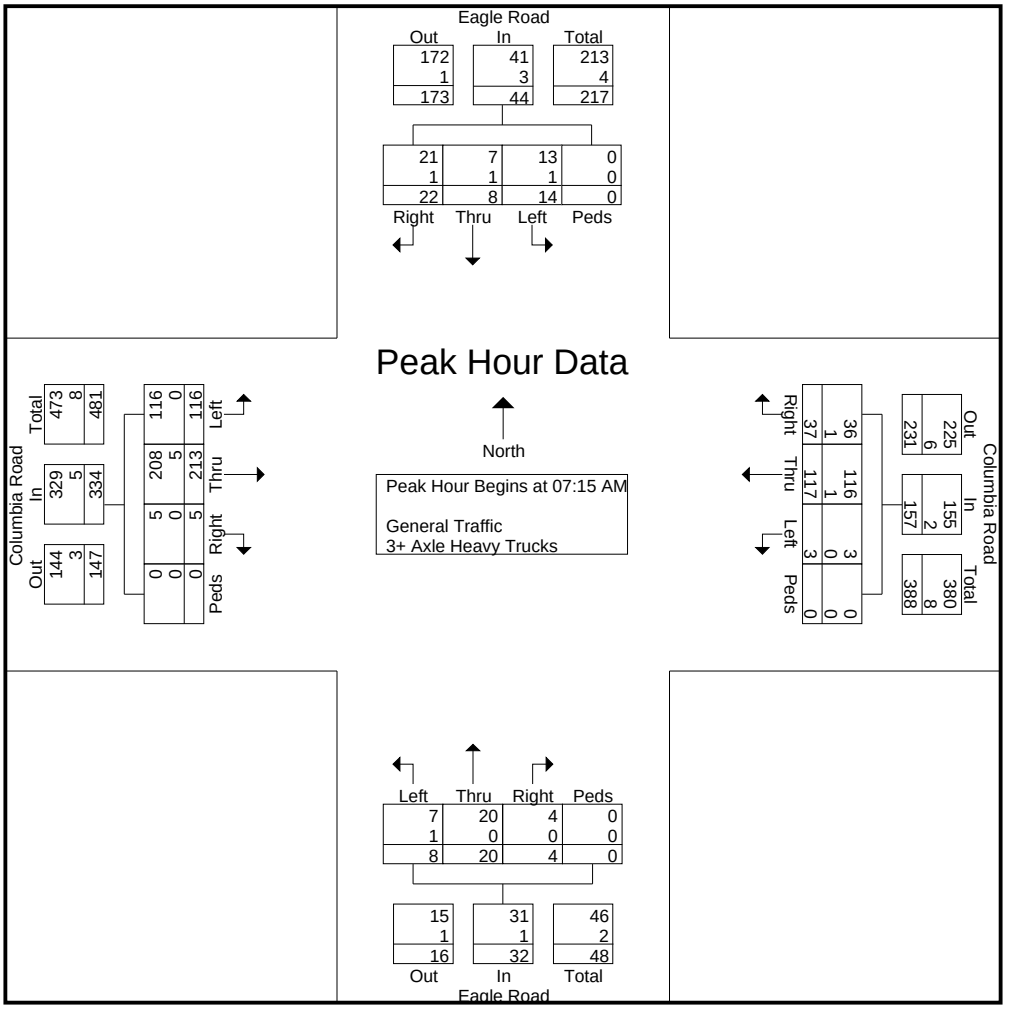
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Eagle Road From North | | | | | Columbia Road From East | | | | | Eagle Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:15 AM | 4 | **3** | 2 | 0 | 9 | 7 | **39** | 0 | 0 | **46** | **1** | 3 | **4** | 0 | 8 | 1 | 46 | **31** | 0 | 78 | 141 |
| 07:30 AM | 4 | 3 | 5 | 0 | 12 | 9 | 24 | **1** | 0 | 34 | 1 | 4 | 0 | 0 | 5 | **2** | **64** | 29 | 0 | **95** | **146** |
| 07:45 AM | **8** | 1 | **6** | 0 | **15** | **13** | 27 | 1 | 0 | 41 | 1 | 5 | 3 | 0 | 9 | 2 | 53 | 25 | 0 | 80 | 145 |
| 08:00 AM | 6 | 1 | 1 | 0 | 8 | 8 | 27 | 1 | 0 | 36 | 1 | **8** | 1 | 0 | **10** | 0 | 50 | 31 | 0 | 81 | 135 |
| Total Volume | 22 | 8 | 14 | 0 | 44 | 37 | 117 | 3 | 0 | 157 | 4 | 20 | 8 | 0 | 32 | 5 | 213 | 116 | 0 | 334 | 567 |
| % App. Total | 50 | 18.2 | 31.8 | 0 | | 23.6 | 74.5 | 1.9 | 0 | | 12.5 | 62.5 | 25 | 0 | | 1.5 | 63.8 | 34.7 | 0 | | |
| PHF | .688 | .667 | .583 | .000 | .733 | .712 | .750 | .750 | .000 | .853 | 1.00 | .625 | .500 | .000 | .800 | .625 | .832 | .935 | .000 | .879 | .971 |
| General Traffic % General Traffic | 95.5 | 87.5 | 92.9 | 0 | 93.2 | 97.3 | 99.1 | 100 | 0 | 98.7 | 100 | 100 | 87.5 | 0 | 96.9 | 100 | 97.7 | 100 | 0 | 98.5 | 98.1 |
| 3+ Axle Heavy Trucks % 3+ Axle Heavy Trucks | 4.5 | 12.5 | 7.1 | 0 | 6.8 | 2.7 | 0.9 | 0 | 0 | 1.3 | 0 | 0 | 12.5 | 0 | 3.1 | 0 | 2.3 | 0 | 0 | 1.5 | 1.9 |



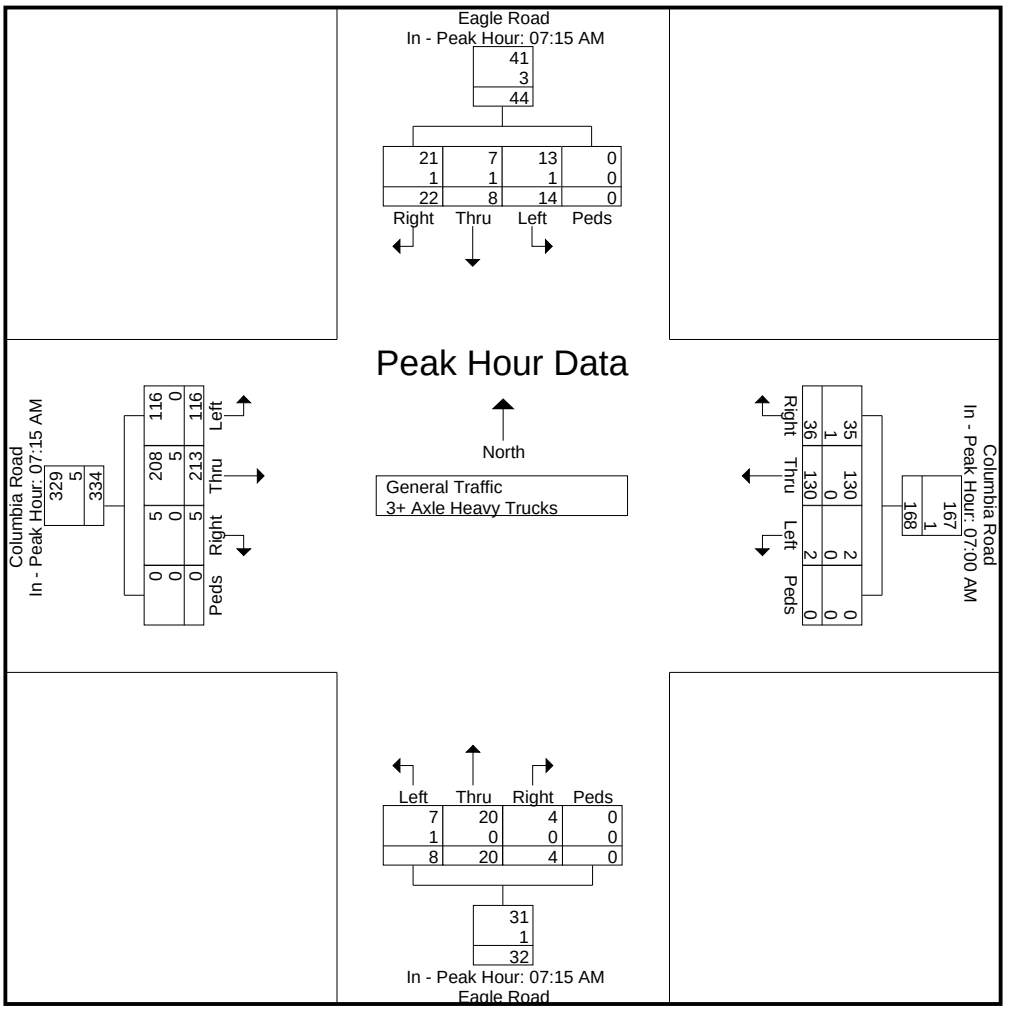
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Eagle Road From North | | | | | Columbia Road From East | | | | | Eagle Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:15 AM | | | | | 07:00 AM | | | | | 07:15 AM | | | | | 07:15 AM | | | | | |
| +0 mins. | 4 | **3** | 2 | 0 | 9 | 7 | **40** | 0 | 0 | **47** | **1** | 3 | **4** | 0 | 8 | 1 | 46 | **31** | 0 | 78 | |
| +15 mins. | 4 | 3 | 5 | 0 | 12 | 7 | 39 | 0 | 0 | 46 | 1 | 4 | 0 | 0 | 5 | **2** | **64** | 29 | 0 | **95** | |
| +30 mins. | **8** | 1 | **6** | 0 | **15** | 9 | 24 | **1** | 0 | 34 | 1 | 5 | 3 | 0 | 9 | 2 | 53 | 25 | 0 | 80 | |
| +45 mins. | 6 | 1 | 1 | 0 | 8 | **13** | 27 | 1 | 0 | 41 | 1 | **8** | 1 | 0 | **10** | 0 | 50 | 31 | 0 | 81 | |
| Total Volume | 22 | 8 | 14 | 0 | 44 | 36 | 130 | 2 | 0 | 168 | 4 | 20 | 8 | 0 | 32 | 5 | 213 | 116 | 0 | 334 | |
| % App. Total | 50 | 18.2 | 31.8 | 0 | | 21.4 | 77.4 | 1.2 | 0 | | 12.5 | 62.5 | 25 | 0 | | 1.5 | 63.8 | 34.7 | 0 | | |
| PHF | .688 | .667 | .583 | .000 | .733 | .692 | .813 | .500 | .000 | .894 | 1.000 | .625 | .500 | .000 | .800 | .625 | .832 | .935 | .000 | .879 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 95.5 | 87.5 | 92.9 | 0 | 93.2 | 97.2 | 100 | 100 | 0 | 99.4 | 100 | 100 | 87.5 | 0 | 96.9 | 100 | 97.7 | 100 | 0 | 98.5 | |
| 3+ Axle Heavy Trucks | 1 | 1 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 0 | 0 | 5 | |
| % 3+ Axle Heavy Trucks | 4.5 | 12.5 | 7.1 | 0 | 6.8 | 2.8 | 0 | 0 | 0 | 0.6 | 0 | 0 | 12.5 | 0 | 3.1 | 0 | 2.3 | 0 | 0 | 1.5 | |



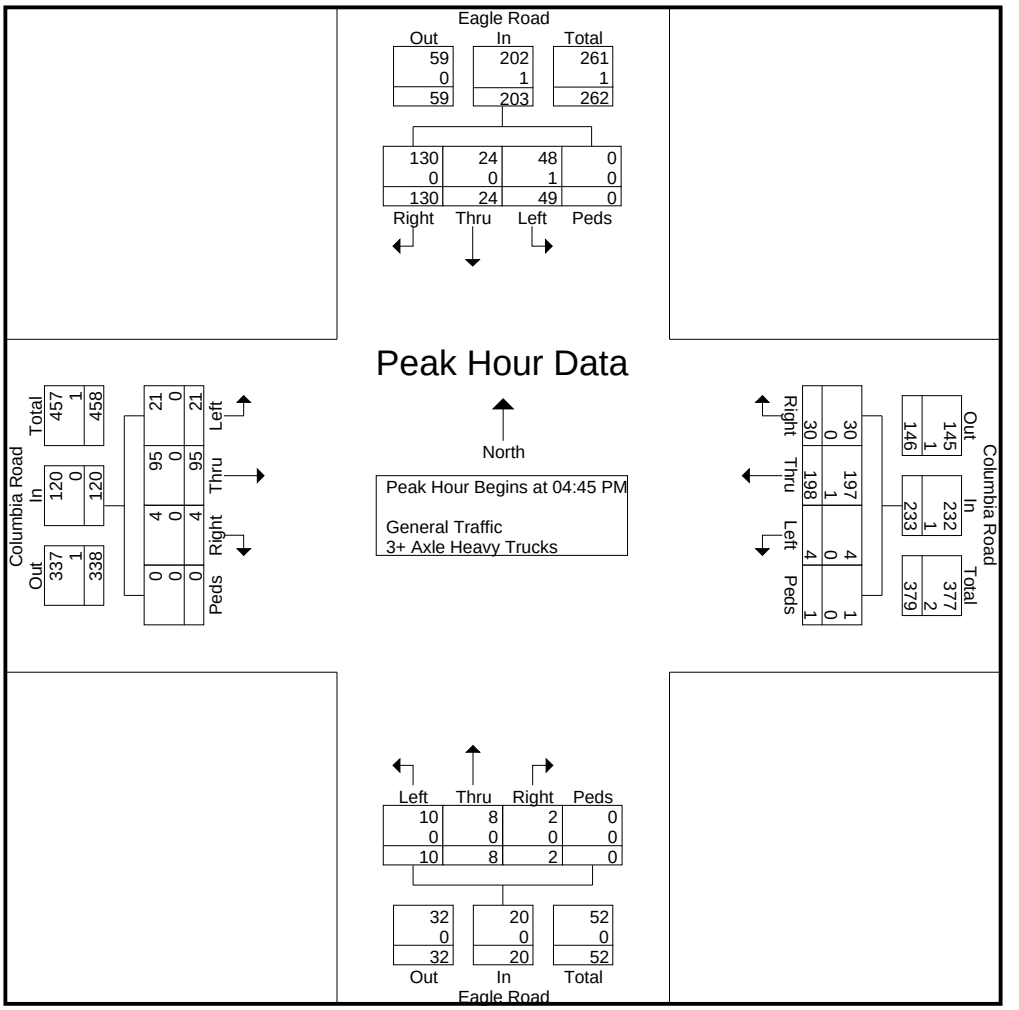
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Eagle Road From North | | | | | Columbia Road From East | | | | | Eagle Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 23 | 4 | **15** | 0 | 42 | 8 | 49 | 1 | **1** | 59 | **1** | 1 | 2 | 0 | 4 | 0 | 23 | **8** | 0 | **31** | 136 |
| 05:00 PM | 35 | **9** | 12 | 0 | **56** | 8 | 45 | 0 | 0 | 53 | 1 | 1 | **4** | 0 | **6** | **2** | 24 | 5 | 0 | 31 | 146 |
| 05:15 PM | **37** | 7 | 8 | 0 | 52 | 5 | 50 | 1 | 0 | 56 | 0 | 2 | 3 | 0 | 5 | 2 | 23 | 2 | 0 | 27 | 140 |
| 05:30 PM | 35 | 4 | 14 | 0 | 53 | **9** | **54** | **2** | 0 | **65** | 0 | **4** | 1 | 0 | 5 | 0 | **25** | 6 | 0 | 31 | **154** |
| Total Volume | 130 | 24 | 49 | 0 | 203 | 30 | 198 | 4 | 1 | 233 | 2 | 8 | 10 | 0 | 20 | 4 | 95 | 21 | 0 | 120 | 576 |
| % App. Total | 64 | 11.8 | 24.1 | 0 | | 12.9 | 85 | 1.7 | 0.4 | | 10 | 40 | 50 | 0 | | 3.3 | 79.2 | 17.5 | 0 | | |
| PHF | .878 | .667 | .817 | .000 | .906 | .833 | .917 | .500 | .250 | .896 | .500 | .500 | .625 | .000 | .833 | .500 | .950 | .656 | .000 | .968 | .935 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 98.0 | 0 | 99.5 | 100 | 99.5 | 100 | 100 | 99.6 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 99.7 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 2.0 | 0 | 0.5 | 0 | 0.5 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 |



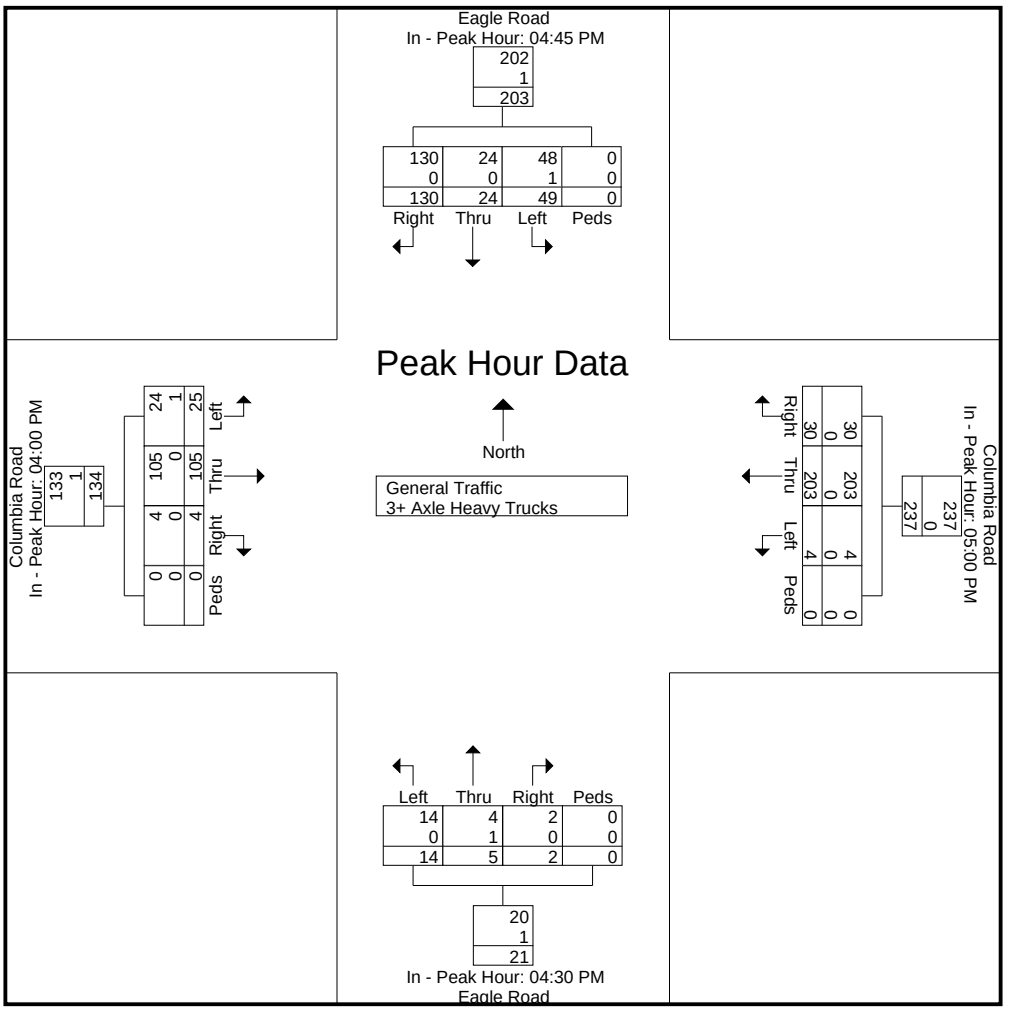
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Eagle Road From North | | | | | Columbia Road From East | | | | | Eagle Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:45 PM | | | | | 05:00 PM | | | | | 04:30 PM | | | | | 04:00 PM | | | | | |
| +0 mins. | 23 | 4 | **15** | 0 | 42 | 8 | 45 | 0 | 0 | 53 | 0 | 1 | **5** | 0 | **6** | 0 | **29** | 4 | 0 | 33 | |
| +15 mins. | 35 | **9** | 12 | 0 | **56** | 5 | 50 | 1 | 0 | 56 | **1** | 1 | 2 | 0 | 4 | 1 | 28 | 5 | 0 | 34 | |
| +30 mins. | **37** | 7 | 8 | 0 | 52 | **9** | **54** | **2** | 0 | **65** | 1 | 1 | 4 | 0 | 6 | **3** | 25 | **8** | 0 | **36** | |
| +45 mins. | 35 | 4 | 14 | 0 | 53 | 8 | 54 | 1 | 0 | 63 | 0 | **2** | 3 | 0 | 5 | 0 | 23 | 8 | 0 | 31 | |
| Total Volume | 130 | 24 | 49 | 0 | 203 | 30 | 203 | 4 | 0 | 237 | 2 | 5 | 14 | 0 | 21 | 4 | 105 | 25 | 0 | 134 | |
| % App. Total | 64 | 11.8 | 24.1 | 0 | | 12.7 | 85.7 | 1.7 | 0 | | 9.5 | 23.8 | 66.7 | 0 | | 3 | 78.4 | 18.7 | 0 | | |
| PHF | .878 | .667 | .817 | .000 | .906 | .833 | .940 | .500 | .000 | .912 | .500 | .625 | .700 | .000 | .875 | .333 | .905 | .781 | .000 | .931 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 98 | 0 | 99.5 | 100 | 100 | 100 | 0 | 100 | 100 | 80 | 100 | 0 | 95.2 | 100 | 100 | 96 | 0 | 99.3 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 2 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 4.8 | 0 | 0 | 4 | 0 | 0.7 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Columbia Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Eagle Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

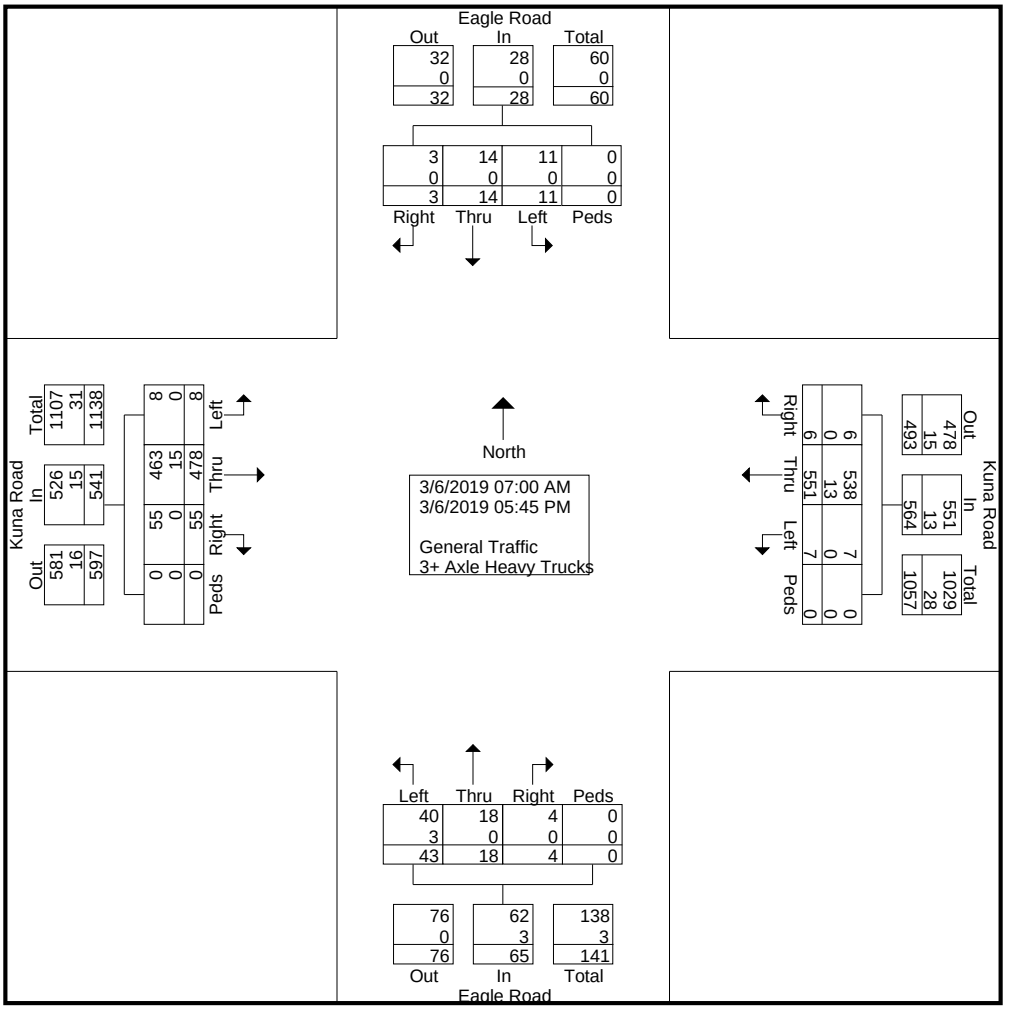
| | Eagle Road From North | | | | | Kuna Road From East | | | | | Eagle Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 0 | 0 | 1 | 0 | 1 | 0 | 18 | 0 | 0 | 18 | 0 | 1 | 2 | 0 | 3 | 3 | 37 | 0 | 0 | 40 | 62 |
| 07:15 AM | 0 | 0 | 1 | 0 | 1 | 0 | 35 | 1 | 0 | 36 | 0 | 0 | 2 | 0 | 2 | 5 | 55 | 0 | 0 | 60 | 99 |
| 07:30 AM | 1 | 0 | 1 | 0 | 2 | 0 | 32 | 1 | 0 | 33 | 0 | 1 | 2 | 0 | 3 | 5 | 51 | 0 | 0 | 56 | 94 |
| 07:45 AM | 0 | 1 | 0 | 0 | 1 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 1 | 38 | 1 | 0 | 40 | 62 |
| Total | 1 | 1 | 3 | 0 | 5 | 0 | 106 | 2 | 0 | 108 | 0 | 2 | 6 | 0 | 8 | 14 | 181 | 1 | 0 | 196 | 317 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 13 | 1 | 2 | 1 | 0 | 4 | 5 | 27 | 0 | 0 | 32 | 49 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 1 | 0 | 16 | 1 | 0 | 2 | 0 | 3 | 3 | 32 | 0 | 0 | 35 | 54 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 15 | 0 | 2 | 0 | 0 | 2 | 5 | 34 | 1 | 0 | 40 | 57 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 1 | 0 | 22 | 0 | 2 | 0 | 0 | 2 | 3 | 14 | 0 | 0 | 17 | 41 |
| Total | 0 | 0 | 0 | 0 | 0 | 1 | 63 | 2 | 0 | 66 | 2 | 6 | 3 | 0 | 11 | 16 | 107 | 1 | 0 | 124 | 201 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 1 | 1 | 0 | 0 | 2 | 0 | 33 | 1 | 0 | 34 | 0 | 0 | 3 | 0 | 3 | 1 | 24 | 1 | 0 | 26 | 65 |
| 04:15 PM | 1 | 2 | 3 | 0 | 6 | 2 | 39 | 0 | 0 | 41 | 1 | 1 | 7 | 0 | 9 | 4 | 27 | 2 | 0 | 33 | 89 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 0 | 37 | 0 | 1 | 3 | 0 | 4 | 2 | 25 | 0 | 0 | 27 | 68 |
| 04:45 PM | 0 | 3 | 1 | 0 | 4 | 1 | 50 | 0 | 0 | 51 | 0 | 1 | 6 | 0 | 7 | 4 | 27 | 0 | 0 | 31 | 93 |
| Total | 2 | 6 | 4 | 0 | 12 | 3 | 159 | 1 | 0 | 163 | 1 | 3 | 19 | 0 | 23 | 11 | 103 | 3 | 0 | 117 | 315 |
| 05:00 PM | 0 | 2 | 1 | 0 | 3 | 0 | 54 | 2 | 0 | 56 | 0 | 3 | 4 | 0 | 7 | 2 | 30 | 1 | 0 | 33 | 99 |
| 05:15 PM | 0 | 1 | 2 | 0 | 3 | 1 | 51 | 0 | 0 | 52 | 0 | 3 | 4 | 0 | 7 | 5 | 17 | 1 | 0 | 23 | 85 |
| 05:30 PM | 0 | 1 | 0 | 0 | 1 | 1 | 60 | 0 | 0 | 61 | 1 | 1 | 3 | 0 | 5 | 6 | 20 | 1 | 0 | 27 | 94 |
| 05:45 PM | 0 | 3 | 1 | 0 | 4 | 0 | 58 | 0 | 0 | 58 | 0 | 0 | 4 | 0 | 4 | 1 | 20 | 0 | 0 | 21 | 87 |
| Total | 0 | 7 | 4 | 0 | 11 | 2 | 223 | 2 | 0 | 227 | 1 | 7 | 15 | 0 | 23 | 14 | 87 | 3 | 0 | 104 | 365 |
| Grand Total | 3 | 14 | 11 | 0 | 28 | 6 | 551 | 7 | 0 | 564 | 4 | 18 | 43 | 0 | 65 | 55 | 478 | 8 | 0 | 541 | 1198 |
| Apprch % | 10.7 | 50 | 39.3 | 0 | | 1.1 | 97.7 | 1.2 | 0 | | 6.2 | 27.7 | 66.2 | 0 | | 10.2 | 88.4 | 1.5 | 0 | | |
| Total % | 0.3 | 1.2 | 0.9 | 0 | 2.3 | 0.5 | 46 | 0.6 | 0 | 47.1 | 0.3 | 1.5 | 3.6 | 0 | 5.4 | 4.6 | 39.9 | 0.7 | 0 | 45.2 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 100 | 0 | 100 | 100 | 97.6 | 100 | 0 | 97.7 | 100 | 100 | 93 | 0 | 95.4 | 100 | 96.9 | 100 | 0 | 97.2 | 97.4 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 0 | 2.3 | 0 | 0 | 7 | 0 | 4.6 | 0 | 3.1 | 0 | 0 | 2.8 | 2.6 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 2



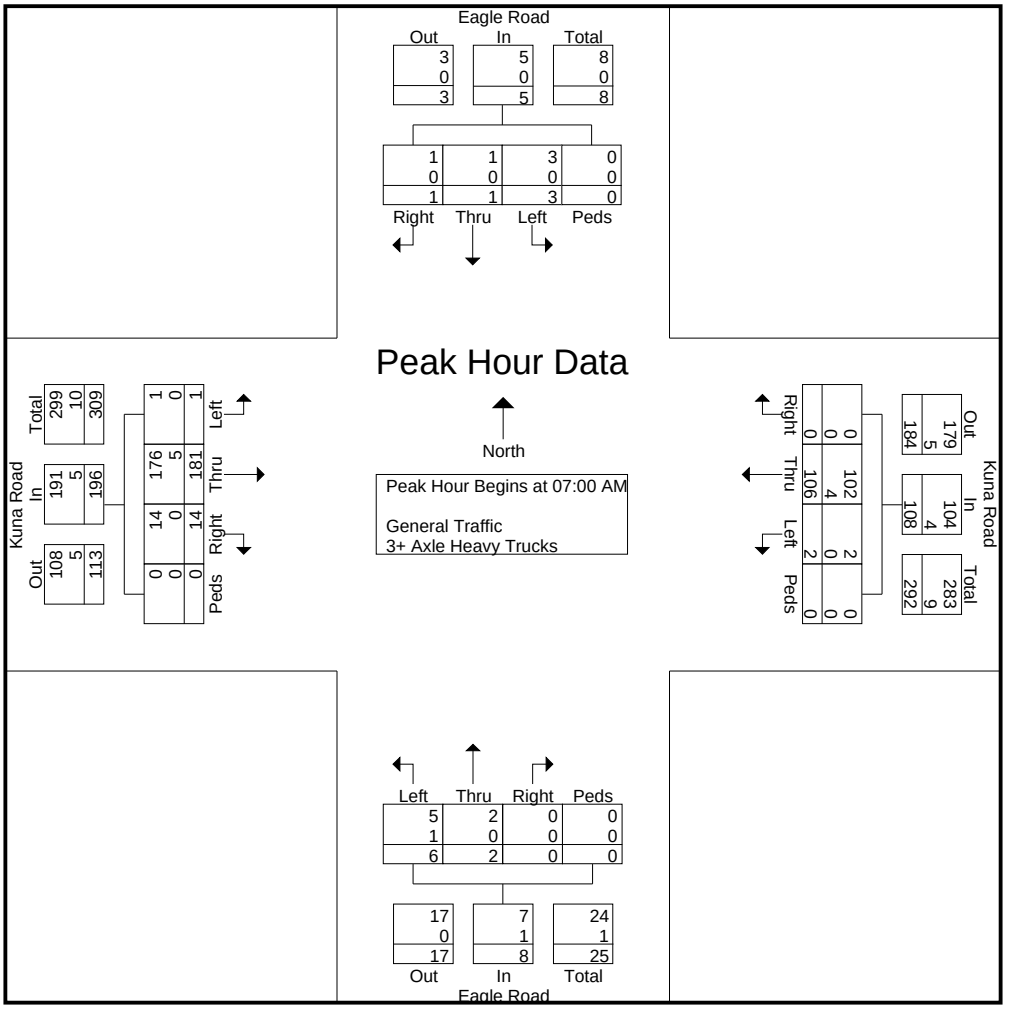
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 3

| | Eagle Road From North | | | | | Kuna Road From East | | | | | Eagle Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | **1** | 0 | 1 | 0 | 18 | 0 | 0 | 18 | 0 | **1** | **2** | 0 | **3** | 3 | 37 | 0 | 0 | 40 | 62 |
| 07:15 AM | 0 | 0 | 1 | 0 | 1 | 0 | **35** | **1** | 0 | **36** | 0 | 0 | 2 | 0 | 2 | **5** | **55** | 0 | 0 | **60** | **99** |
| 07:30 AM | **1** | 0 | 1 | 0 | **2** | 0 | 32 | 1 | 0 | 33 | 0 | 1 | 2 | 0 | 3 | 5 | 51 | 0 | 0 | 56 | 94 |
| 07:45 AM | 0 | **1** | 0 | 0 | 1 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 1 | 38 | **1** | 0 | 40 | 62 |
| Total Volume | 1 | 1 | 3 | 0 | 5 | 0 | 106 | 2 | 0 | 108 | 0 | 2 | 6 | 0 | 8 | 14 | 181 | 1 | 0 | 196 | 317 |
| % App. Total | 20 | 20 | 60 | 0 | | 0 | 98.1 | 1.9 | 0 | | 0 | 25 | 75 | 0 | | 7.1 | 92.3 | 0.5 | 0 | | |
| PHF | .250 | .250 | .750 | .000 | .625 | .000 | .757 | .500 | .000 | .750 | .000 | .500 | .750 | .000 | .667 | .700 | .823 | .250 | .000 | .817 | .801 |
| General Traffic % General Traffic | 100 | 100 | 100 | 0 | 100 | 0 | 96.2 | 100 | 0 | 96.3 | 0 | 100 | 83.3 | 0 | 87.5 | 100 | 97.2 | 100 | 0 | 97.4 | 96.8 |
| 3+ Axle Heavy Trucks % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 3.8 | 0 | 0 | 3.7 | 0 | 0 | 16.7 | 0 | 12.5 | 0 | 2.8 | 0 | 0 | 2.6 | 3.2 |



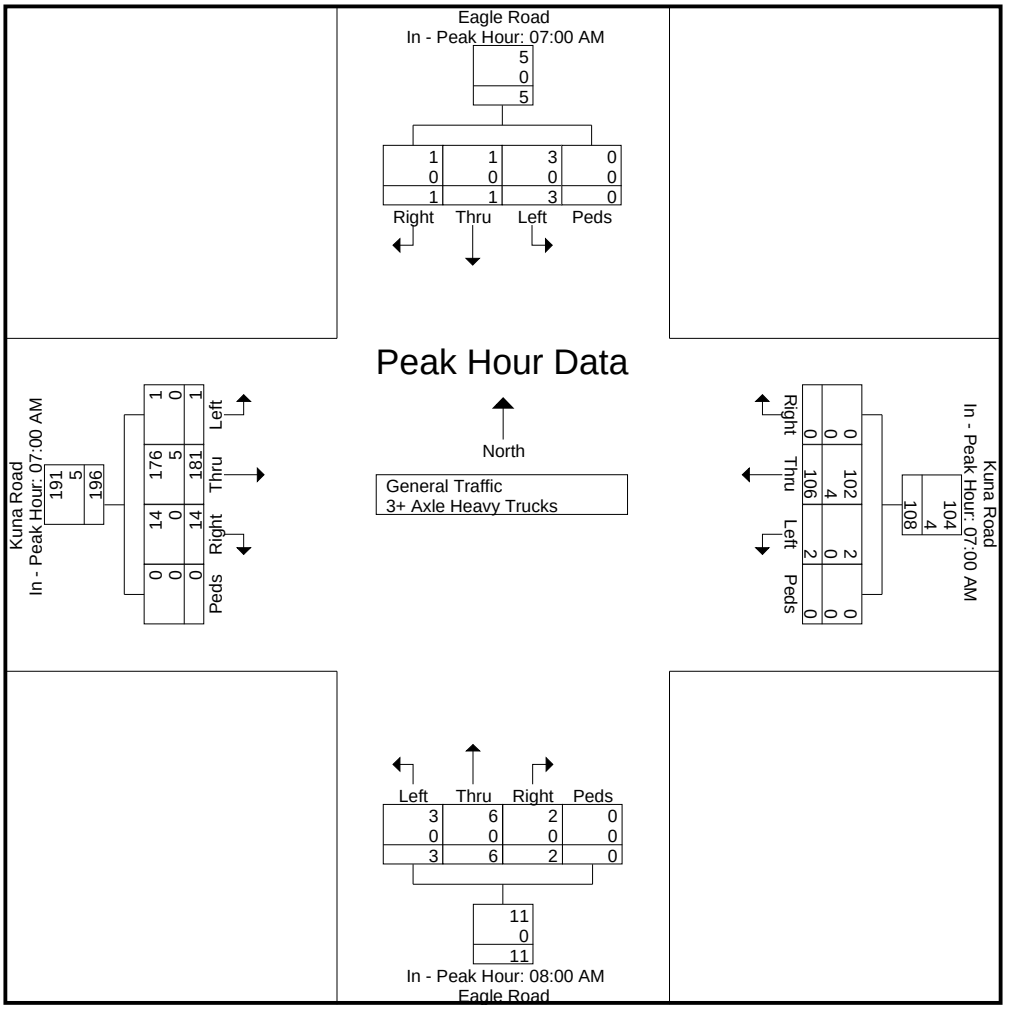
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 4

| | Eagle Road From North | | | | | Kuna Road From East | | | | | Eagle Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:00 AM | | | | | 08:00 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | 0 | 0 | **1** | 0 | 1 | 0 | 18 | 0 | 0 | 18 | **1** | **2** | 1 | 0 | **4** | 3 | 37 | 0 | 0 | 40 | |
| +15 mins. | 0 | 0 | 1 | 0 | 1 | 0 | **35** | **1** | 0 | **36** | 1 | 0 | **2** | 0 | 3 | **5** | **55** | 0 | 0 | **60** | |
| +30 mins. | **1** | 0 | 1 | 0 | **2** | 0 | 32 | 1 | 0 | 33 | 0 | 2 | 0 | 0 | 2 | 5 | 51 | 0 | 0 | 56 | |
| +45 mins. | 0 | **1** | 0 | 0 | 1 | 0 | 21 | 0 | 0 | 21 | 0 | 2 | 0 | 0 | 2 | 1 | 38 | **1** | 0 | 40 | |
| Total Volume | 1 | 1 | 3 | 0 | 5 | 0 | 106 | 2 | 0 | 108 | 2 | 6 | 3 | 0 | 11 | 14 | 181 | 1 | 0 | 196 | |
| % App. Total | 20 | 20 | 60 | 0 | | 0 | 98.1 | 1.9 | 0 | | 18.2 | 54.5 | 27.3 | 0 | | 7.1 | 92.3 | 0.5 | 0 | | |
| PHF | .250 | .250 | .750 | .000 | .625 | .000 | .757 | .500 | .000 | .750 | .500 | .750 | .375 | .000 | .688 | .700 | .823 | .250 | .000 | .817 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 100 | 0 | 100 | 0 | 96.2 | 100 | 0 | 96.3 | 100 | 100 | 100 | 0 | 100 | 100 | 97.2 | 100 | 0 | 97.4 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 3.8 | 0 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 | 0 | 2.8 | 0 | 0 | 2.6 | |



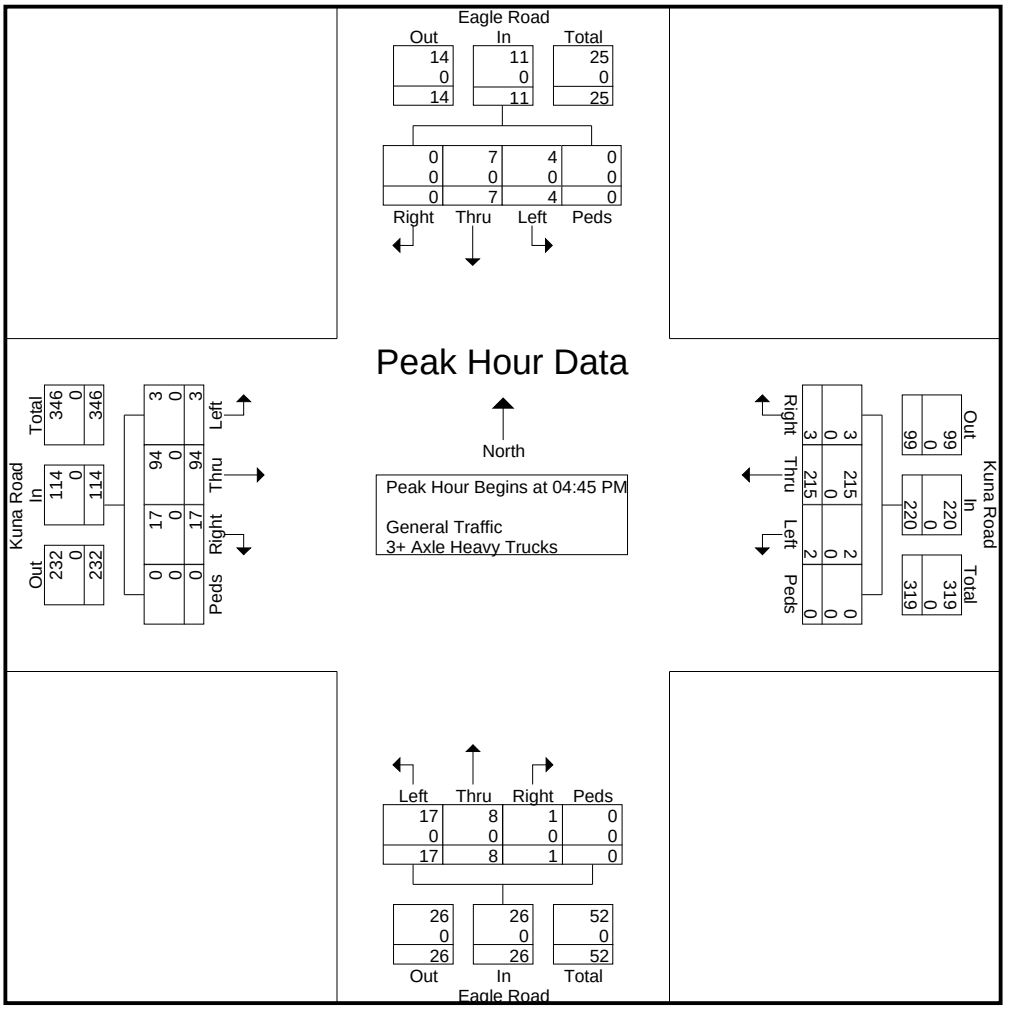
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 5

| | Eagle Road From North | | | | | Kuna Road From East | | | | | Eagle Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | **3** | 1 | 0 | **4** | **1** | 50 | 0 | 0 | 51 | 0 | 1 | **6** | 0 | **7** | 4 | 27 | 0 | 0 | 31 | 93 |
| 05:00 PM | 0 | 2 | 1 | 0 | 3 | 0 | 54 | **2** | 0 | 56 | 0 | **3** | 4 | 0 | 7 | 2 | **30** | **1** | 0 | **33** | **99** |
| 05:15 PM | 0 | 1 | **2** | 0 | 3 | 1 | 51 | 0 | 0 | 52 | 0 | 3 | 4 | 0 | 7 | 5 | 17 | 1 | 0 | 23 | 85 |
| 05:30 PM | 0 | 1 | 0 | 0 | 1 | 1 | **60** | 0 | 0 | **61** | **1** | 1 | 3 | 0 | 5 | **6** | 20 | 1 | 0 | 27 | 94 |
| Total Volume | 0 | 7 | 4 | 0 | 11 | 3 | 215 | 2 | 0 | 220 | 1 | 8 | 17 | 0 | 26 | 17 | 94 | 3 | 0 | 114 | 371 |
| % App. Total | 0 | 63.6 | 36.4 | 0 | | 1.4 | 97.7 | 0.9 | 0 | | 3.8 | 30.8 | 65.4 | 0 | | 14.9 | 82.5 | 2.6 | 0 | | |
| PHF | .000 | .583 | .500 | .000 | .688 | .750 | .896 | .250 | .000 | .902 | .250 | .667 | .708 | .000 | .929 | .708 | .783 | .750 | .000 | .864 | .937 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



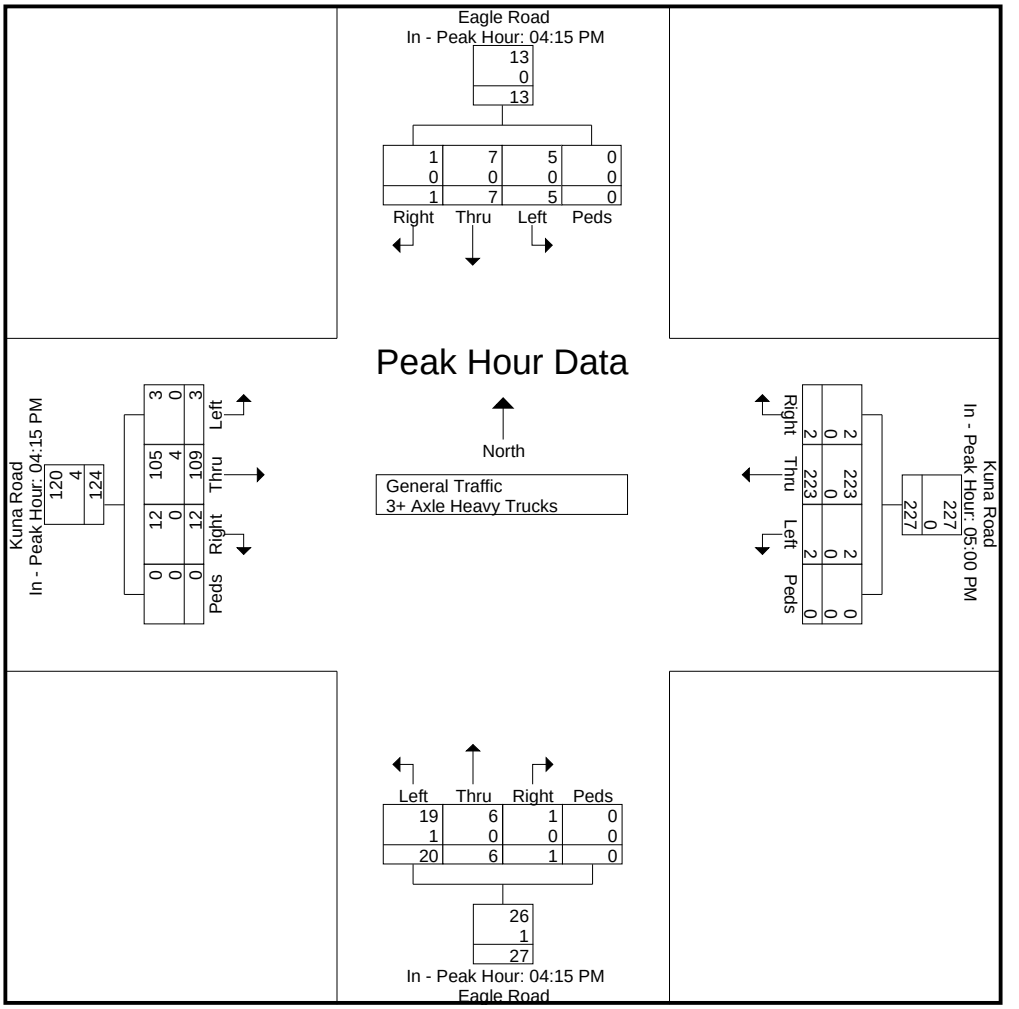
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 6

| | Eagle Road From North | | | | | Kuna Road From East | | | | | Eagle Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:15 PM | | | | | 05:00 PM | | | | | 04:15 PM | | | | | 04:15 PM | | | | | |
| +0 mins. | **1** | 2 | **3** | 0 | **6** | 0 | 54 | **2** | 0 | 56 | **1** | 1 | **7** | 0 | **9** | **4** | 27 | **2** | 0 | **33** | |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **1** | 51 | 0 | 0 | 52 | 0 | 1 | 3 | 0 | 4 | 2 | 25 | 0 | 0 | 27 | |
| +30 mins. | 0 | **3** | 1 | 0 | 4 | 1 | **60** | 0 | 0 | **61** | 0 | 1 | 6 | 0 | 7 | 4 | 27 | 0 | 0 | 31 | |
| +45 mins. | 0 | 2 | 1 | 0 | 3 | 0 | 58 | 0 | 0 | 58 | 0 | **3** | 4 | 0 | 7 | 2 | **30** | 1 | 0 | 33 | |
| Total Volume | 1 | 7 | 5 | 0 | 13 | 2 | 223 | 2 | 0 | 227 | 1 | 6 | 20 | 0 | 27 | 12 | 109 | 3 | 0 | 124 | |
| % App. Total | 7.7 | 53.8 | 38.5 | 0 | | 0.9 | 98.2 | 0.9 | 0 | | 3.7 | 22.2 | 74.1 | 0 | | 9.7 | 87.9 | 2.4 | 0 | | |
| PHF | .250 | .583 | .417 | .000 | .542 | .500 | .929 | .250 | .000 | .930 | .250 | .500 | .714 | .000 | .750 | .750 | .908 | .375 | .000 | .939 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 95 | 0 | 96.3 | 100 | 96.3 | 100 | 0 | 96.8 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3.7 | 0 | 3.7 | 0 | 0 | 3.2 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Eagle Rd / Kuna Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Eagle Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

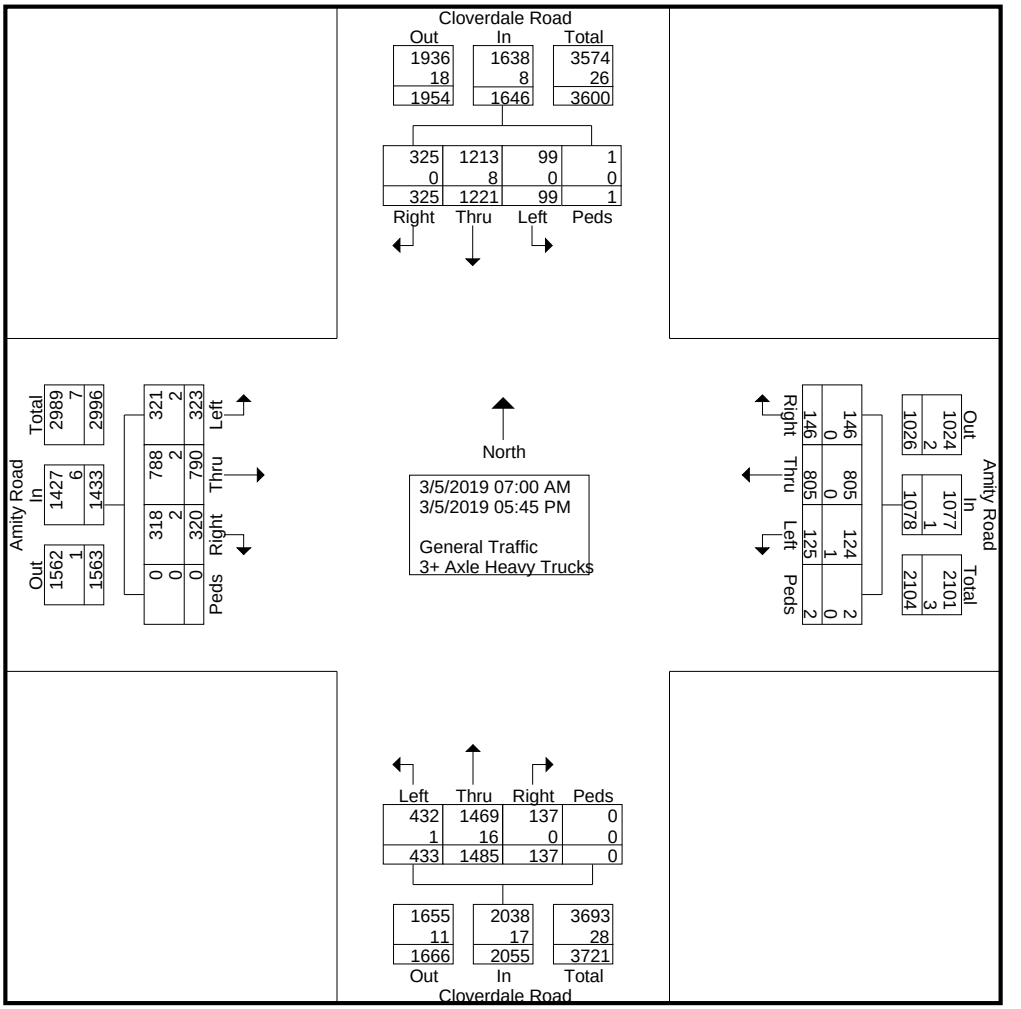
| | Cloverdale Road From North | | | | | Amity Road From East | | | | | Cloverdale Road From South | | | | | Amity Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 11 | 15 | 3 | 0 | 29 | 21 | 50 | 2 | 0 | 73 | 8 | 169 | 39 | 0 | 216 | 6 | 42 | 20 | 0 | 68 | 386 |
| 07:15 AM | 11 | 29 | 5 | 1 | 46 | 35 | 60 | 5 | 0 | 100 | 7 | 166 | 40 | 0 | 213 | 17 | 42 | 34 | 0 | 93 | 452 |
| 07:30 AM | 8 | 30 | 3 | 0 | 41 | 20 | 50 | 5 | 0 | 75 | 15 | 149 | 22 | 0 | 186 | 17 | 78 | 26 | 0 | 121 | 423 |
| 07:45 AM | 13 | 43 | 5 | 0 | 61 | 11 | 47 | 3 | 0 | 61 | 6 | 157 | 30 | 0 | 193 | 14 | 42 | 29 | 0 | 85 | 400 |
| Total | 43 | 117 | 16 | 1 | 177 | 87 | 207 | 15 | 0 | 309 | 36 | 641 | 131 | 0 | 808 | 54 | 204 | 109 | 0 | 367 | 1661 |
| 08:00 AM | 12 | 31 | 0 | 0 | 43 | 13 | 48 | 3 | 0 | 64 | 9 | 109 | 31 | 0 | 149 | 28 | 52 | 34 | 0 | 114 | 370 |
| 08:15 AM | 11 | 21 | 2 | 0 | 34 | 4 | 32 | 2 | 0 | 38 | 3 | 115 | 35 | 0 | 153 | 4 | 41 | 19 | 0 | 64 | 289 |
| 08:30 AM | 11 | 27 | 1 | 0 | 39 | 4 | 47 | 4 | 0 | 55 | 6 | 94 | 22 | 0 | 122 | 8 | 38 | 14 | 0 | 60 | 276 |
| 08:45 AM | 22 | 41 | 5 | 0 | 68 | 8 | 29 | 5 | 0 | 42 | 15 | 90 | 25 | 0 | 130 | 15 | 33 | 21 | 0 | 69 | 309 |
| Total | 56 | 120 | 8 | 0 | 184 | 29 | 156 | 14 | 0 | 199 | 33 | 408 | 113 | 0 | 554 | 55 | 164 | 88 | 0 | 307 | 1244 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 13 | 88 | 8 | 0 | 109 | 5 | 52 | 9 | 0 | 66 | 7 | 68 | 27 | 0 | 102 | 17 | 55 | 28 | 0 | 100 | 377 |
| 04:15 PM | 33 | 99 | 6 | 0 | 138 | 3 | 56 | 4 | 2 | 65 | 12 | 42 | 20 | 0 | 74 | 25 | 54 | 16 | 0 | 95 | 372 |
| 04:30 PM | 19 | 119 | 8 | 0 | 146 | 2 | 51 | 12 | 0 | 65 | 6 | 55 | 33 | 0 | 94 | 25 | 37 | 11 | 0 | 73 | 378 |
| 04:45 PM | 32 | 138 | 11 | 0 | 181 | 6 | 58 | 13 | 0 | 77 | 5 | 62 | 23 | 0 | 90 | 27 | 56 | 12 | 0 | 95 | 443 |
| Total | 97 | 444 | 33 | 0 | 574 | 16 | 217 | 38 | 2 | 273 | 30 | 227 | 103 | 0 | 360 | 94 | 202 | 67 | 0 | 363 | 1570 |
| 05:00 PM | 31 | 132 | 11 | 0 | 174 | 5 | 66 | 16 | 0 | 87 | 11 | 54 | 19 | 0 | 84 | 39 | 58 | 15 | 0 | 112 | 457 |
| 05:15 PM | 32 | 138 | 17 | 0 | 187 | 2 | 49 | 12 | 0 | 63 | 9 | 52 | 21 | 0 | 82 | 28 | 69 | 19 | 0 | 116 | 448 |
| 05:30 PM | 29 | 139 | 7 | 0 | 175 | 2 | 63 | 18 | 0 | 83 | 9 | 51 | 23 | 0 | 83 | 26 | 47 | 15 | 0 | 88 | 429 |
| 05:45 PM | 37 | 131 | 7 | 0 | 175 | 5 | 47 | 12 | 0 | 64 | 9 | 52 | 23 | 0 | 84 | 24 | 46 | 10 | 0 | 80 | 403 |
| Total | 129 | 540 | 42 | 0 | 711 | 14 | 225 | 58 | 0 | 297 | 38 | 209 | 86 | 0 | 333 | 117 | 220 | 59 | 0 | 396 | 1737 |
| Grand Total | 325 | 1221 | 99 | 1 | 1646 | 146 | 805 | 125 | 2 | 1078 | 137 | 1485 | 433 | 0 | 2055 | 320 | 790 | 323 | 0 | 1433 | 6212 |
| Apprch % | 19.7 | 74.2 | 6 | 0.1 | | 13.5 | 74.7 | 11.6 | 0.2 | | 6.7 | 72.3 | 21.1 | 0 | | 22.3 | 55.1 | 22.5 | 0 | | |
| Total % | 5.2 | 19.7 | 1.6 | 0 | 26.5 | 2.4 | 13 | 2 | 0 | 17.4 | 2.2 | 23.9 | 7 | 0 | 33.1 | 5.2 | 12.7 | 5.2 | 0 | 23.1 | |
| General Traffic | | 1213 | | | | | | | | | | 1469 | | | | | | | | | |
| % General Traffic | 100 | 99.3 | 100 | 100 | 99.5 | 100 | 100 | 99.2 | 100 | 99.9 | 100 | 98.9 | 99.8 | 0 | 99.2 | 99.4 | 99.7 | 99.4 | 0 | 99.6 | 99.5 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0.7 | 0 | 0 | 0.5 | 0 | 0 | 0.8 | 0 | 0.1 | 0 | 1.1 | 0.2 | 0 | 0.8 | 0.6 | 0.3 | 0.6 | 0 | 0.4 | 0.5 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



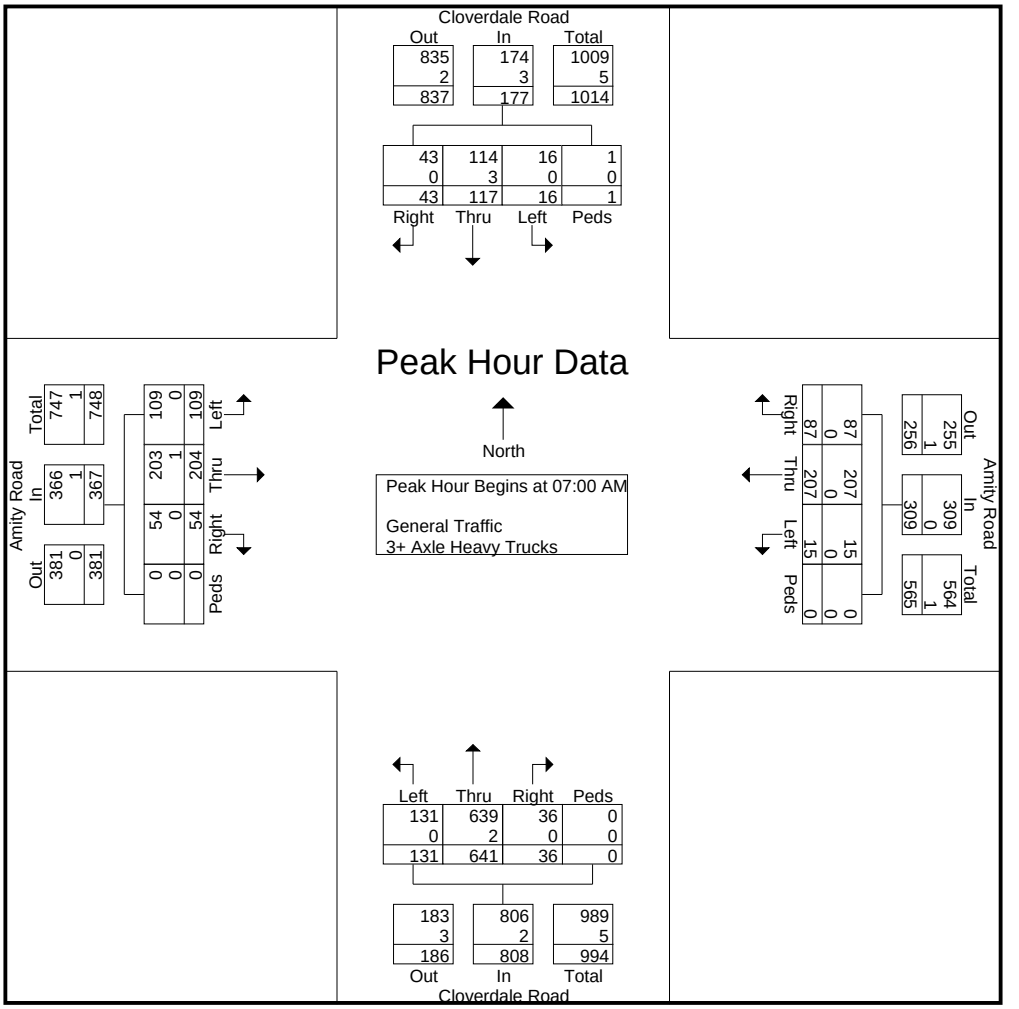
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Cloverdale Road From North | | | | | Amity Road From East | | | | | Cloverdale Road From South | | | | | Amity Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 11 | 15 | 3 | 0 | 29 | 21 | 50 | 2 | 0 | 73 | 8 | **169** | 39 | 0 | **216** | 6 | 42 | 20 | 0 | 68 | 386 |
| 07:15 AM | 11 | 29 | **5** | **1** | 46 | **35** | **60** | **5** | 0 | **100** | 7 | 166 | **40** | 0 | 213 | **17** | 42 | **34** | 0 | 93 | **452** |
| 07:30 AM | 8 | 30 | 3 | 0 | 41 | 20 | 50 | 5 | 0 | 75 | **15** | 149 | 22 | 0 | 186 | 17 | **78** | 26 | 0 | **121** | 423 |
| 07:45 AM | **13** | **43** | 5 | 0 | **61** | 11 | 47 | 3 | 0 | 61 | 6 | 157 | 30 | 0 | 193 | 14 | 42 | 29 | 0 | 85 | 400 |
| Total Volume | 43 | 117 | 16 | 1 | 177 | 87 | 207 | 15 | 0 | 309 | 36 | 641 | 131 | 0 | 808 | 54 | 204 | 109 | 0 | 367 | 1661 |
| % App. Total | 24.3 | 66.1 | 9 | 0.6 | | 28.2 | 67 | 4.9 | 0 | | 4.5 | 79.3 | 16.2 | 0 | | 14.7 | 55.6 | 29.7 | 0 | | |
| PHF | .827 | .680 | .800 | .250 | .725 | .621 | .863 | .750 | .000 | .773 | .600 | .948 | .819 | .000 | .935 | .794 | .654 | .801 | .000 | .758 | .919 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 97.4 | 100 | 100 | 98.3 | 100 | 100 | 100 | 0 | 100 | 100 | 99.7 | 100 | 0 | 99.8 | 100 | 99.5 | 100 | 0 | 99.7 | 99.6 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 2.6 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0.2 | 0 | 0.5 | 0 | 0 | 0.3 | 0.4 |



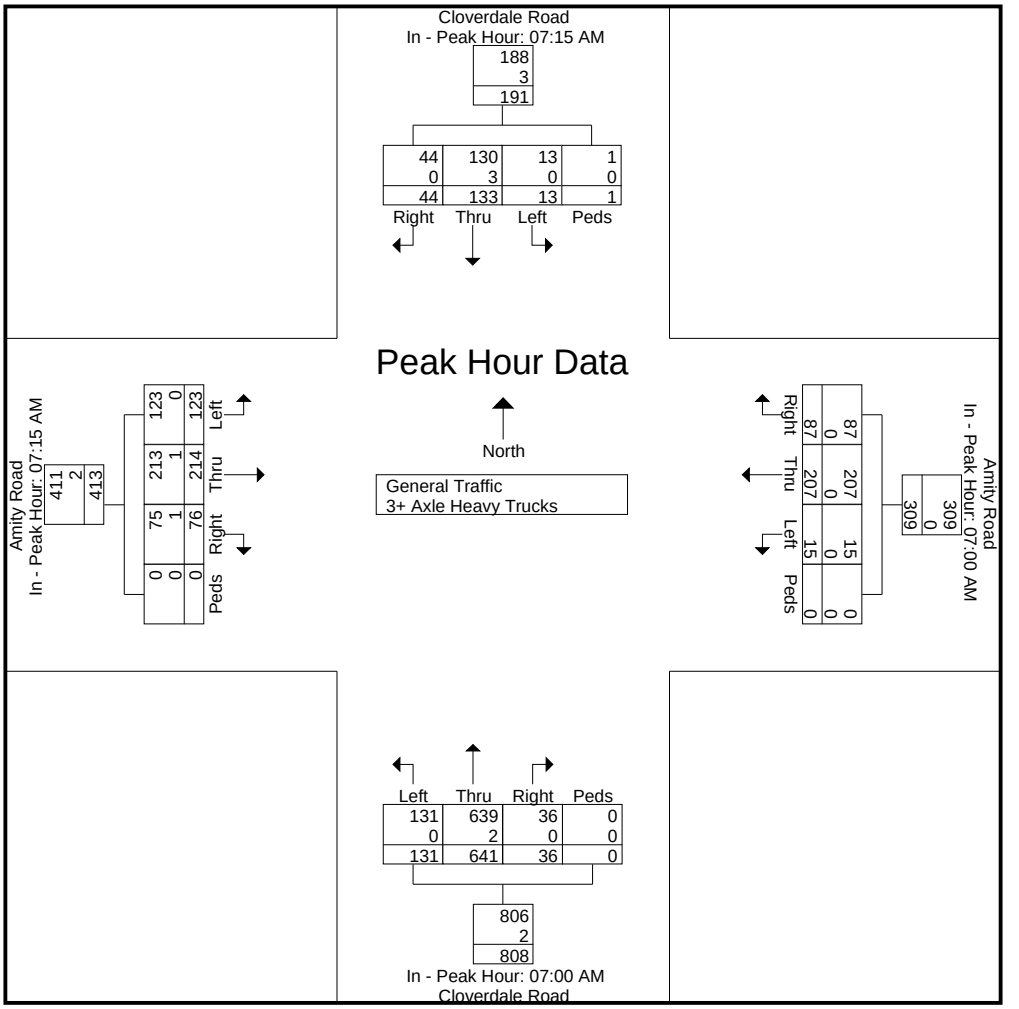
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Cloverdale Road From North | | | | | Amity Road From East | | | | | Cloverdale Road From South | | | | | Amity Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:15 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:15 AM | | | | | |
| +0 mins. | 11 | 29 | **5** | **1** | 46 | 21 | 50 | 2 | 0 | 73 | 8 | **169** | 39 | 0 | **216** | 17 | 42 | **34** | 0 | 93 | |
| +15 mins. | 8 | 30 | 3 | 0 | 41 | **35** | **60** | **5** | 0 | **100** | 7 | 166 | **40** | 0 | 213 | 17 | **78** | 26 | 0 | **121** | |
| +30 mins. | **13** | **43** | 5 | 0 | **61** | 20 | 50 | 5 | 0 | 75 | **15** | 149 | 22 | 0 | 186 | 14 | 42 | 29 | 0 | 85 | |
| +45 mins. | 12 | 31 | 0 | 0 | 43 | 11 | 47 | 3 | 0 | 61 | 6 | 157 | 30 | 0 | 193 | **28** | 52 | 34 | 0 | 114 | |
| Total Volume | 44 | 133 | 13 | 1 | 191 | 87 | 207 | 15 | 0 | 309 | 36 | 641 | 131 | 0 | 808 | 76 | 214 | 123 | 0 | 413 | |
| % App. Total | 23 | 69.6 | 6.8 | 0.5 | | 28.2 | 67 | 4.9 | 0 | | 4.5 | 79.3 | 16.2 | 0 | | 18.4 | 51.8 | 29.8 | 0 | | |
| PHF | .846 | .773 | .650 | .250 | .783 | .621 | .863 | .750 | .000 | .773 | .600 | .948 | .819 | .000 | .935 | .679 | .686 | .904 | .000 | .853 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 97.7 | 100 | 100 | 98.4 | 100 | 100 | 100 | 0 | 100 | 100 | 99.7 | 100 | 0 | 99.8 | 98.7 | 99.5 | 100 | 0 | 99.5 | |
| 3+ Axle Heavy Trucks | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 2 | |
| % 3+ Axle Heavy Trucks | 0 | 2.3 | 0 | 0 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0.2 | 1.3 | 0.5 | 0 | 0 | 0.5 | |



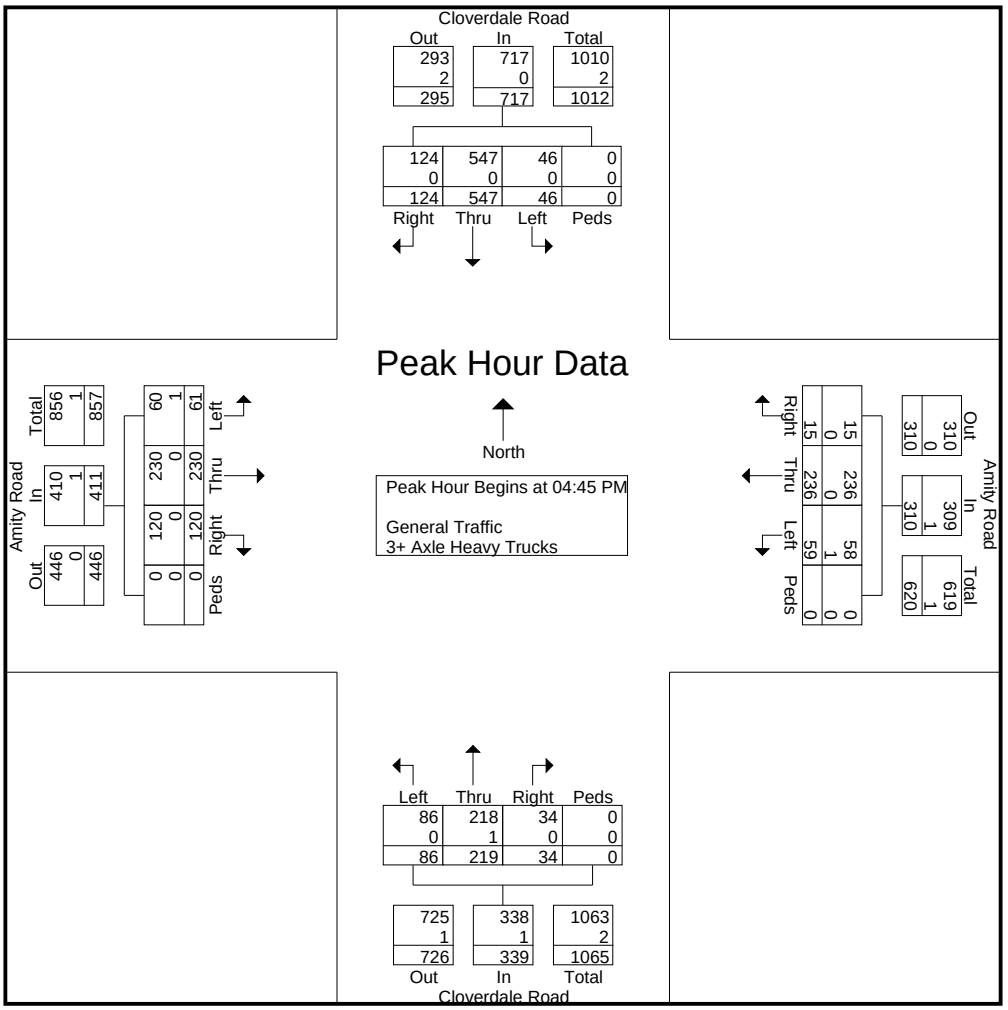
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Cloverdale Road From North | | | | | Amity Road From East | | | | | Cloverdale Road From South | | | | | Amity Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | **32** | 138 | 11 | 0 | 181 | **6** | 58 | 13 | 0 | 77 | 5 | **62** | **23** | 0 | **90** | 27 | 56 | 12 | 0 | 95 | 443 |
| 05:00 PM | 31 | 132 | 11 | 0 | 174 | 5 | **66** | 16 | 0 | **87** | **11** | 54 | 19 | 0 | 84 | **39** | 58 | 15 | 0 | 112 | **457** |
| 05:15 PM | 32 | 138 | **17** | 0 | **187** | 2 | 49 | 12 | 0 | 63 | 9 | 52 | 21 | 0 | 82 | 28 | **69** | **19** | 0 | **116** | 448 |
| 05:30 PM | 29 | **139** | 7 | 0 | 175 | 2 | 63 | **18** | 0 | 83 | 9 | 51 | 23 | 0 | 83 | 26 | 47 | 15 | 0 | 88 | 429 |
| Total Volume | 124 | 547 | 46 | 0 | 717 | 15 | 236 | 59 | 0 | 310 | 34 | 219 | 86 | 0 | 339 | 120 | 230 | 61 | 0 | 411 | 1777 |
| % App. Total | 17.3 | 76.3 | 6.4 | 0 | | 4.8 | 76.1 | 19 | 0 | | 10 | 64.6 | 25.4 | 0 | | 29.2 | 56 | 14.8 | 0 | | |
| PHF | .969 | .984 | .676 | .000 | .959 | .625 | .894 | .819 | .000 | .891 | .773 | .883 | .935 | .000 | .942 | .769 | .833 | .803 | .000 | .886 | .972 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 98.3 | 0 | 99.7 | 100 | 99.5 | 100 | 0 | 99.7 | 100 | 100 | 98.4 | 0 | 99.8 | 99.8 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 | 0 | 0.3 | 0 | 0.5 | 0 | 0 | 0.3 | 0 | 0 | 1.6 | 0 | 0.2 | 0.2 |



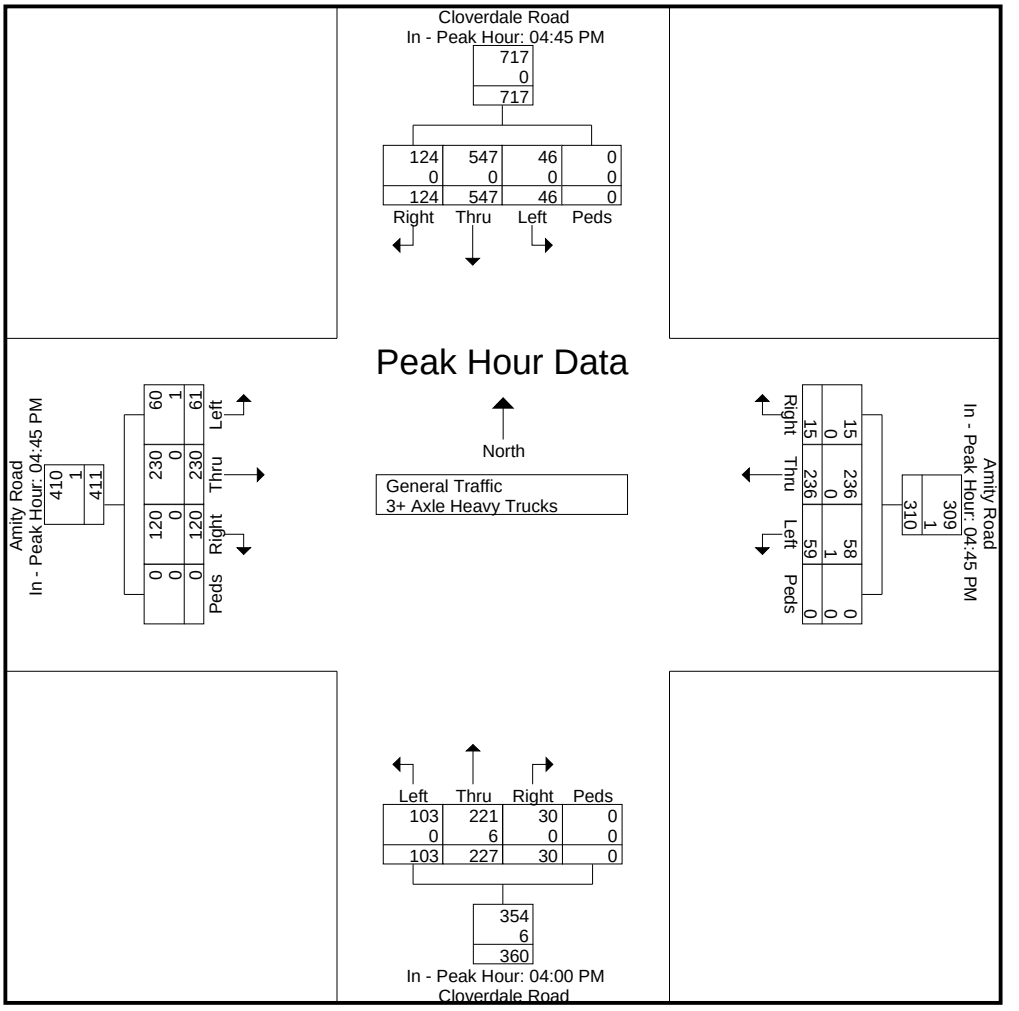
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Cloverdale Road From North | | | | | Amity Road From East | | | | | Cloverdale Road From South | | | | | Amity Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:45 PM | | | | | 04:45 PM | | | | | 04:00 PM | | | | | 04:45 PM | | | | | |
| +0 mins. | **32** | 138 | 11 | 0 | 181 | **6** | 58 | 13 | 0 | 77 | 7 | **68** | 27 | 0 | **102** | 27 | 56 | 12 | 0 | 95 | |
| +15 mins. | 31 | 132 | 11 | 0 | 174 | 5 | **66** | 16 | 0 | **87** | **12** | 42 | 20 | 0 | 74 | **39** | 58 | 15 | 0 | 112 | |
| +30 mins. | 32 | 138 | **17** | 0 | **187** | 2 | 49 | 12 | 0 | 63 | 6 | 55 | **33** | 0 | 94 | 28 | **69** | **19** | 0 | **116** | |
| +45 mins. | 29 | **139** | 7 | 0 | 175 | 2 | 63 | **18** | 0 | 83 | 5 | 62 | 23 | 0 | 90 | 26 | 47 | 15 | 0 | 88 | |
| Total Volume | 124 | 547 | 46 | 0 | 717 | 15 | 236 | 59 | 0 | 310 | 30 | 227 | 103 | 0 | 360 | 120 | 230 | 61 | 0 | 411 | |
| % App. Total | 17.3 | 76.3 | 6.4 | 0 | | 4.8 | 76.1 | 19 | 0 | | 8.3 | 63.1 | 28.6 | 0 | | 29.2 | 56 | 14.8 | 0 | | |
| PHF | .969 | .984 | .676 | .000 | .959 | .625 | .894 | .819 | .000 | .891 | .625 | .835 | .780 | .000 | .882 | .769 | .833 | .803 | .000 | .886 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 98.3 | 0 | 99.7 | 100 | 97.4 | 100 | 0 | 98.3 | 100 | 100 | 98.4 | 0 | 99.8 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 1 | 0 | 1 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1.7 | 0 | 0.3 | 0 | 2.6 | 0 | 0 | 1.7 | 0 | 0 | 1.6 | 0 | 0.2 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Amity Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Amity Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

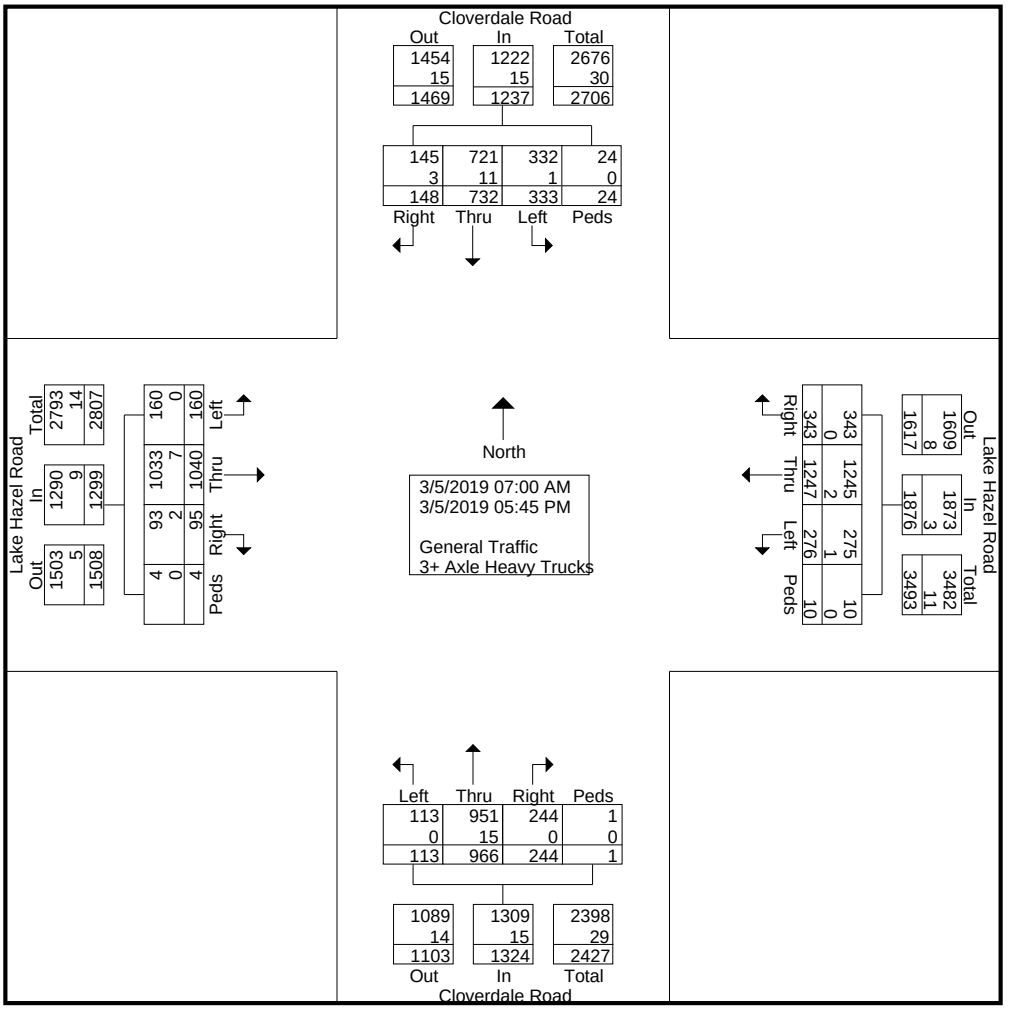
| | Cloverdale Road From North | | | | | Lake Hazel Road From East | | | | | Cloverdale Road From South | | | | | Lake Hazel Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 2 | 18 | 9 | 0 | 29 | 29 | 77 | 7 | 0 | 113 | 16 | 95 | 4 | 0 | 115 | 6 | 34 | 9 | 0 | 49 | 306 |
| 07:15 AM | 4 | 20 | 11 | 0 | 35 | 36 | 92 | 5 | 0 | 133 | 21 | 91 | 10 | 0 | 122 | 4 | 48 | 13 | 0 | 65 | 355 |
| 07:30 AM | 6 | 26 | 17 | 0 | 49 | 25 | 64 | 11 | 0 | 100 | 30 | 90 | 5 | 0 | 125 | 2 | 77 | 9 | 0 | 88 | 362 |
| 07:45 AM | 5 | 29 | 11 | 0 | 45 | 29 | 63 | 6 | 0 | 98 | 21 | 94 | 7 | 0 | 122 | 1 | 54 | 10 | 0 | 65 | 330 |
| Total | 17 | 93 | 48 | 0 | 158 | 119 | 296 | 29 | 0 | 444 | 88 | 370 | 26 | 0 | 484 | 13 | 213 | 41 | 0 | 267 | 1353 |
| 08:00 AM | 6 | 14 | 14 | 0 | 34 | 18 | 65 | 8 | 0 | 91 | 19 | 95 | 6 | 0 | 120 | 6 | 79 | 9 | 0 | 94 | 339 |
| 08:15 AM | 3 | 15 | 23 | 0 | 41 | 17 | 49 | 8 | 0 | 74 | 16 | 68 | 6 | 0 | 90 | 3 | 47 | 5 | 0 | 55 | 260 |
| 08:30 AM | 3 | 15 | 11 | 4 | 33 | 8 | 45 | 4 | 4 | 61 | 14 | 62 | 6 | 0 | 82 | 3 | 41 | 2 | 0 | 46 | 222 |
| 08:45 AM | 3 | 24 | 28 | 3 | 58 | 25 | 63 | 14 | 4 | 106 | 7 | 59 | 8 | 0 | 74 | 5 | 40 | 5 | 0 | 50 | 288 |
| Total | 15 | 68 | 76 | 7 | 166 | 68 | 222 | 34 | 8 | 332 | 56 | 284 | 26 | 0 | 366 | 17 | 207 | 21 | 0 | 245 | 1109 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 7 | 52 | 23 | 8 | 90 | 30 | 76 | 31 | 2 | 139 | 11 | 43 | 8 | 0 | 62 | 6 | 61 | 10 | 0 | 77 | 368 |
| 04:15 PM | 7 | 68 | 18 | 0 | 93 | 18 | 84 | 24 | 0 | 126 | 9 | 31 | 12 | 0 | 52 | 5 | 64 | 9 | 0 | 78 | 349 |
| 04:30 PM | 19 | 60 | 35 | 3 | 117 | 14 | 91 | 26 | 0 | 131 | 14 | 41 | 3 | 0 | 58 | 12 | 76 | 7 | 0 | 95 | 401 |
| 04:45 PM | 21 | 75 | 17 | 3 | 116 | 23 | 90 | 15 | 0 | 128 | 8 | 39 | 4 | 0 | 51 | 6 | 87 | 26 | 1 | 120 | 415 |
| Total | 54 | 255 | 93 | 14 | 416 | 85 | 341 | 96 | 2 | 524 | 42 | 154 | 27 | 0 | 223 | 29 | 288 | 52 | 1 | 370 | 1533 |
| 05:00 PM | 20 | 79 | 35 | 1 | 135 | 14 | 109 | 23 | 0 | 146 | 12 | 33 | 4 | 0 | 49 | 10 | 80 | 16 | 1 | 107 | 437 |
| 05:15 PM | 16 | 82 | 28 | 1 | 127 | 10 | 89 | 32 | 0 | 131 | 12 | 39 | 9 | 0 | 60 | 8 | 97 | 10 | 0 | 115 | 433 |
| 05:30 PM | 11 | 73 | 35 | 1 | 120 | 23 | 99 | 35 | 0 | 157 | 13 | 41 | 10 | 0 | 64 | 8 | 82 | 9 | 2 | 101 | 442 |
| 05:45 PM | 15 | 82 | 18 | 0 | 115 | 24 | 91 | 27 | 0 | 142 | 21 | 45 | 11 | 1 | 78 | 10 | 73 | 11 | 0 | 94 | 429 |
| Total | 62 | 316 | 116 | 3 | 497 | 71 | 388 | 117 | 0 | 576 | 58 | 158 | 34 | 1 | 251 | 36 | 332 | 46 | 3 | 417 | 1741 |
| Grand Total | 148 | 732 | 333 | 24 | 1237 | 343 | 1247 | 276 | 10 | 1876 | 244 | 966 | 113 | 1 | 1324 | 95 | 1040 | 160 | 4 | 1299 | 5736 |
| Apprch % | 12 | 59.2 | 26.9 | 1.9 | | 18.3 | 66.5 | 14.7 | 0.5 | | 18.4 | 73 | 8.5 | 0.1 | | 7.3 | 80.1 | 12.3 | 0.3 | | |
| Total % | 2.6 | 12.8 | 5.8 | 0.4 | 21.6 | 6 | 21.7 | 4.8 | 0.2 | 32.7 | 4.3 | 16.8 | 2 | 0 | 23.1 | 1.7 | 18.1 | 2.8 | 0.1 | 22.6 | |
| General Traffic | | | | | | | 1245 | | | | | | | | | | 1033 | | | | |
| % General Traffic | 98 | 98.5 | 99.7 | 100 | 98.8 | 100 | 99.8 | 99.6 | 100 | 99.8 | 100 | 98.4 | 100 | 100 | 98.9 | 97.9 | 99.3 | 100 | 100 | 99.3 | 99.3 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 2 | 1.5 | 0.3 | 0 | 1.2 | 0 | 0.2 | 0.4 | 0 | 0.2 | 0 | 1.6 | 0 | 0 | 1.1 | 2.1 | 0.7 | 0 | 0 | 0.7 | 0.7 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



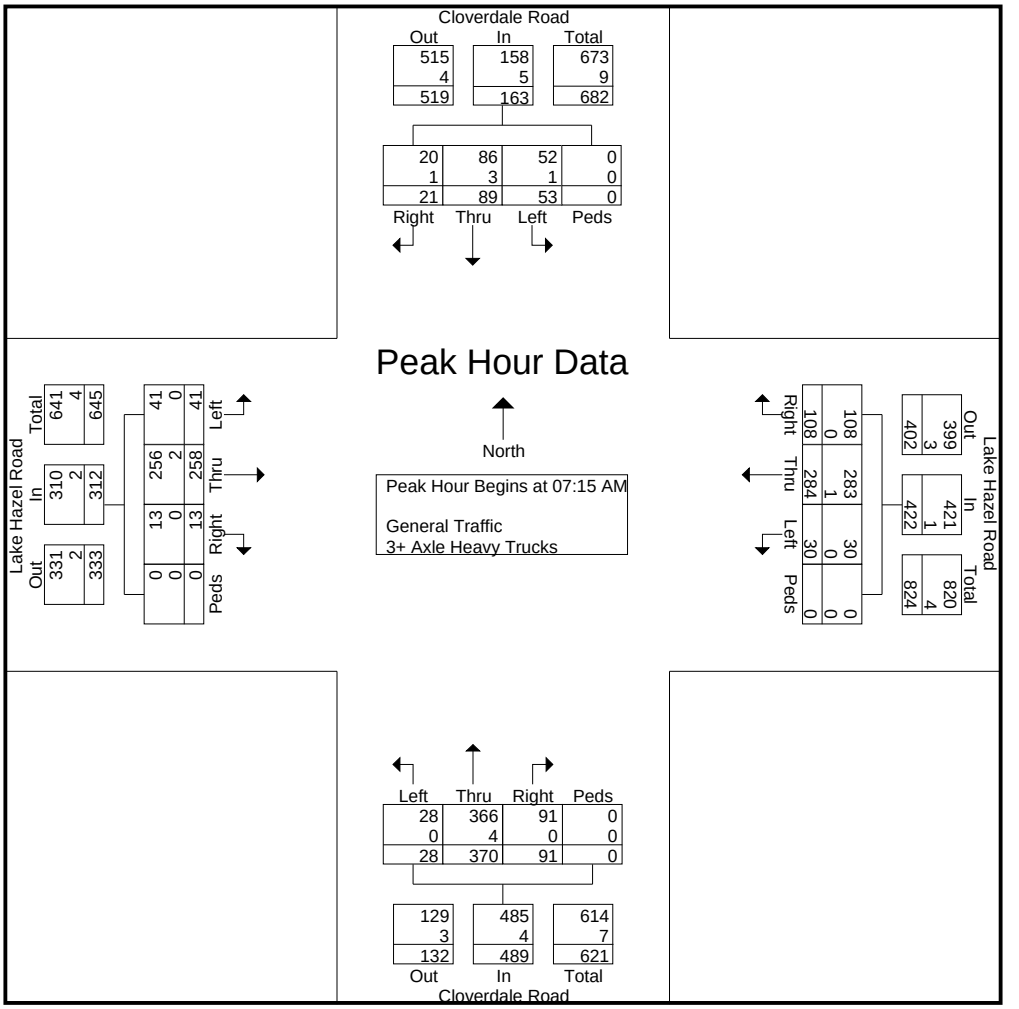
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Cloverdale Road From North | | | | | Lake Hazel Road From East | | | | | Cloverdale Road From South | | | | | Lake Hazel Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:15 AM | 4 | 20 | 11 | 0 | 35 | **36** | **92** | 5 | 0 | **133** | 21 | 91 | **10** | 0 | 122 | 4 | 48 | **13** | 0 | 65 | 355 |
| 07:30 AM | **6** | 26 | **17** | 0 | **49** | 25 | 64 | **11** | 0 | 100 | **30** | 90 | 5 | 0 | **125** | 2 | 77 | 9 | 0 | 88 | **362** |
| 07:45 AM | 5 | **29** | 11 | 0 | 45 | 29 | 63 | 6 | 0 | 98 | 21 | 94 | 7 | 0 | 122 | 1 | 54 | 10 | 0 | 65 | 330 |
| 08:00 AM | 6 | 14 | 14 | 0 | 34 | 18 | 65 | 8 | 0 | 91 | 19 | **95** | 6 | 0 | 120 | **6** | **79** | 9 | 0 | **94** | 339 |
| Total Volume | 21 | 89 | 53 | 0 | 163 | 108 | 284 | 30 | 0 | 422 | 91 | 370 | 28 | 0 | 489 | 13 | 258 | 41 | 0 | 312 | 1386 |
| % App. Total | 12.9 | 54.6 | 32.5 | 0 | | 25.6 | 67.3 | 7.1 | 0 | | 18.6 | 75.7 | 5.7 | 0 | | 4.2 | 82.7 | 13.1 | 0 | | |
| PHF | .875 | .767 | .779 | .000 | .832 | .750 | .772 | .682 | .000 | .793 | .758 | .974 | .700 | .000 | .978 | .542 | .816 | .788 | .000 | .830 | .957 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 95.2 | 96.6 | 98.1 | 0 | 96.9 | 100 | 99.6 | 100 | 0 | 99.8 | 100 | 98.9 | 100 | 0 | 99.2 | 100 | 99.2 | 100 | 0 | 99.4 | 99.1 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 4.8 | 3.4 | 1.9 | 0 | 3.1 | 0 | 0.4 | 0 | 0 | 0.2 | 0 | 1.1 | 0 | 0 | 0.8 | 0 | 0.8 | 0 | 0 | 0.6 | 0.9 |



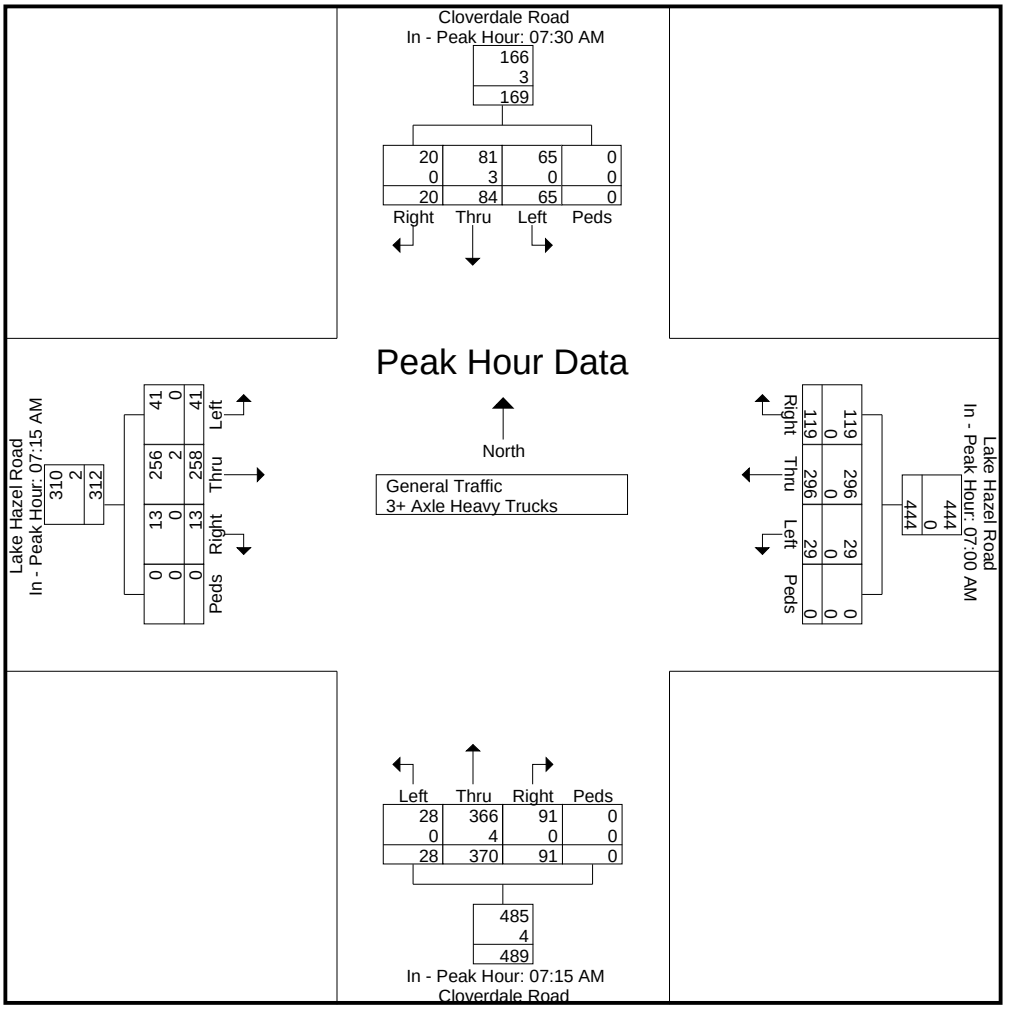
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Cloverdale Road From North | | | | | Lake Hazel Road From East | | | | | Cloverdale Road From South | | | | | Lake Hazel Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:30 AM | | | | | 07:00 AM | | | | | 07:15 AM | | | | | 07:15 AM | | | | | |
| +0 mins. | **6** | 26 | 17 | 0 | **49** | 29 | 77 | 7 | 0 | 113 | 21 | 91 | **10** | 0 | 122 | 4 | 48 | **13** | 0 | 65 | |
| +15 mins. | 5 | **29** | 11 | 0 | 45 | **36** | **92** | 5 | 0 | **133** | **30** | 90 | 5 | 0 | **125** | 2 | 77 | 9 | 0 | 88 | |
| +30 mins. | 6 | 14 | 14 | 0 | 34 | 25 | 64 | **11** | 0 | 100 | 21 | 94 | 7 | 0 | 122 | 1 | 54 | 10 | 0 | 65 | |
| +45 mins. | 3 | 15 | **23** | 0 | 41 | 29 | 63 | 6 | 0 | 98 | 19 | **95** | 6 | 0 | 120 | **6** | **79** | 9 | 0 | **94** | |
| Total Volume | 20 | 84 | 65 | 0 | 169 | 119 | 296 | 29 | 0 | 444 | 91 | 370 | 28 | 0 | 489 | 13 | 258 | 41 | 0 | 312 | |
| % App. Total | 11.8 | 49.7 | 38.5 | 0 | | 26.8 | 66.7 | 6.5 | 0 | | 18.6 | 75.7 | 5.7 | 0 | | 4.2 | 82.7 | 13.1 | 0 | | |
| PHF | .833 | .724 | .707 | .000 | .862 | .826 | .804 | .659 | .000 | .835 | .758 | .974 | .700 | .000 | .978 | .542 | .816 | .788 | .000 | .830 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 96.4 | 100 | 0 | 98.2 | 100 | 100 | 100 | 0 | 100 | 100 | 98.9 | 100 | 0 | 99.2 | 100 | 99.2 | 100 | 0 | 99.4 | |
| 3+ Axle Heavy Trucks | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 2 | 0 | 0 | 2 | |
| % 3+ Axle Heavy Trucks | 0 | 3.6 | 0 | 0 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 1.1 | 0 | 0 | 0.8 | 0 | 0.8 | 0 | 0 | 0.6 | |



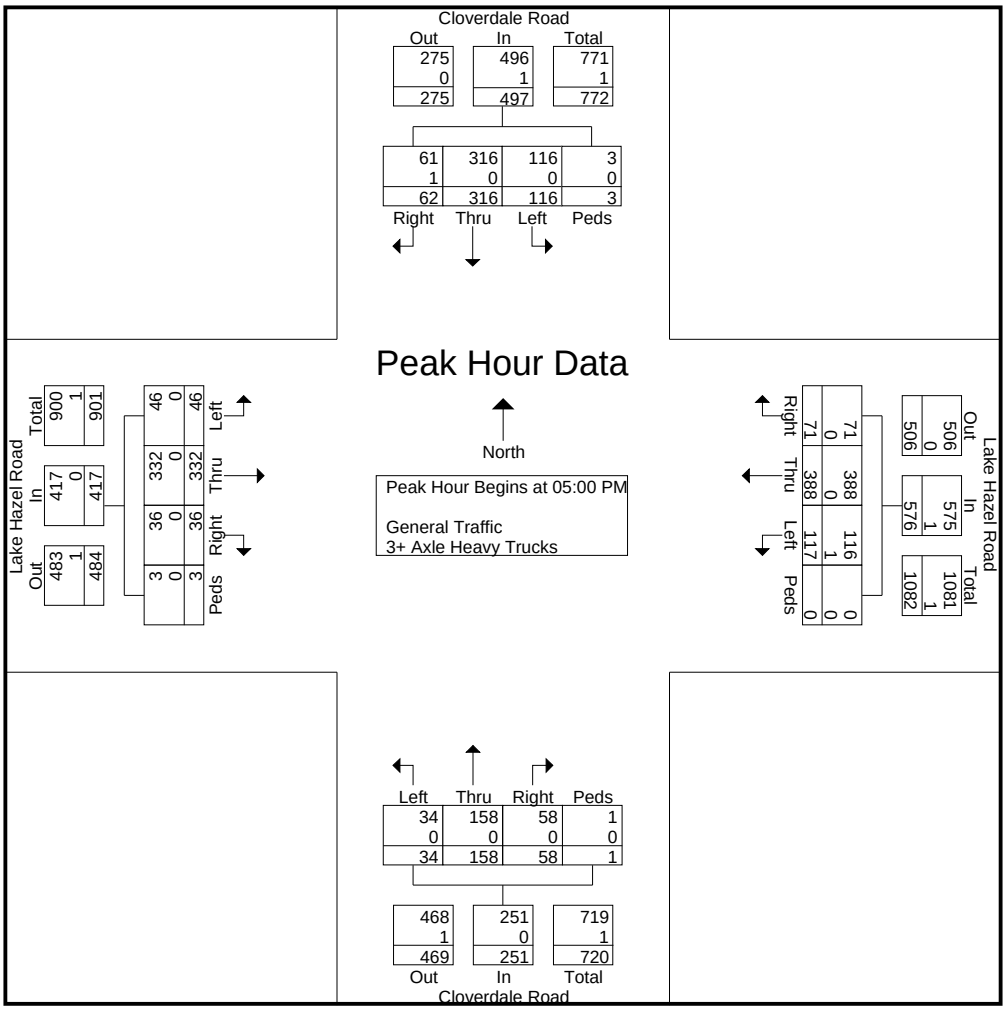
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Cloverdale Road From North | | | | | Lake Hazel Road From East | | | | | Cloverdale Road From South | | | | | Lake Hazel Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Right** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Left** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:00 PM | | | | | | | | | | | | | | | | | | | | | |
| 05:00 PM | **20** | 79 | **35** | **1** | **135** | 14 | **109** | 23 | 0 | 146 | 12 | 33 | 4 | 0 | 49 | **10** | 80 | **16** | 1 | 107 | 437 |
| 05:15 PM | 16 | **82** | 28 | 1 | 127 | 10 | 89 | 32 | 0 | 131 | 12 | 39 | 9 | 0 | 60 | 8 | **97** | 10 | 0 | **115** | 433 |
| 05:30 PM | 11 | 73 | 35 | 1 | 120 | 23 | 99 | **35** | 0 | **157** | 13 | 41 | 10 | 0 | 64 | 8 | 82 | 9 | **2** | 101 | **442** |
| 05:45 PM | 15 | 82 | 18 | 0 | 115 | **24** | 91 | 27 | 0 | 142 | **21** | **45** | **11** | **1** | **78** | 10 | 73 | 11 | 0 | 94 | 429 |
| Total Volume | 62 | 316 | 116 | 3 | 497 | 71 | 388 | 117 | 0 | 576 | 58 | 158 | 34 | 1 | 251 | 36 | 332 | 46 | 3 | 417 | 1741 |
| % App. Total | 12.5 | 63.6 | 23.3 | 0.6 | | 12.3 | 67.4 | 20.3 | 0 | | 23.1 | 62.9 | 13.5 | 0.4 | | 8.6 | 79.6 | 11 | 0.7 | | |
| PHF | .775 | .963 | .829 | .750 | .920 | .740 | .890 | .836 | .000 | .917 | .690 | .878 | .773 | .250 | .804 | .900 | .856 | .719 | .375 | .907 | .985 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 98.4 | 100 | 100 | 100 | 99.8 | 100 | 100 | 99.1 | 0 | 99.8 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99.9 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 1.6 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.9 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |



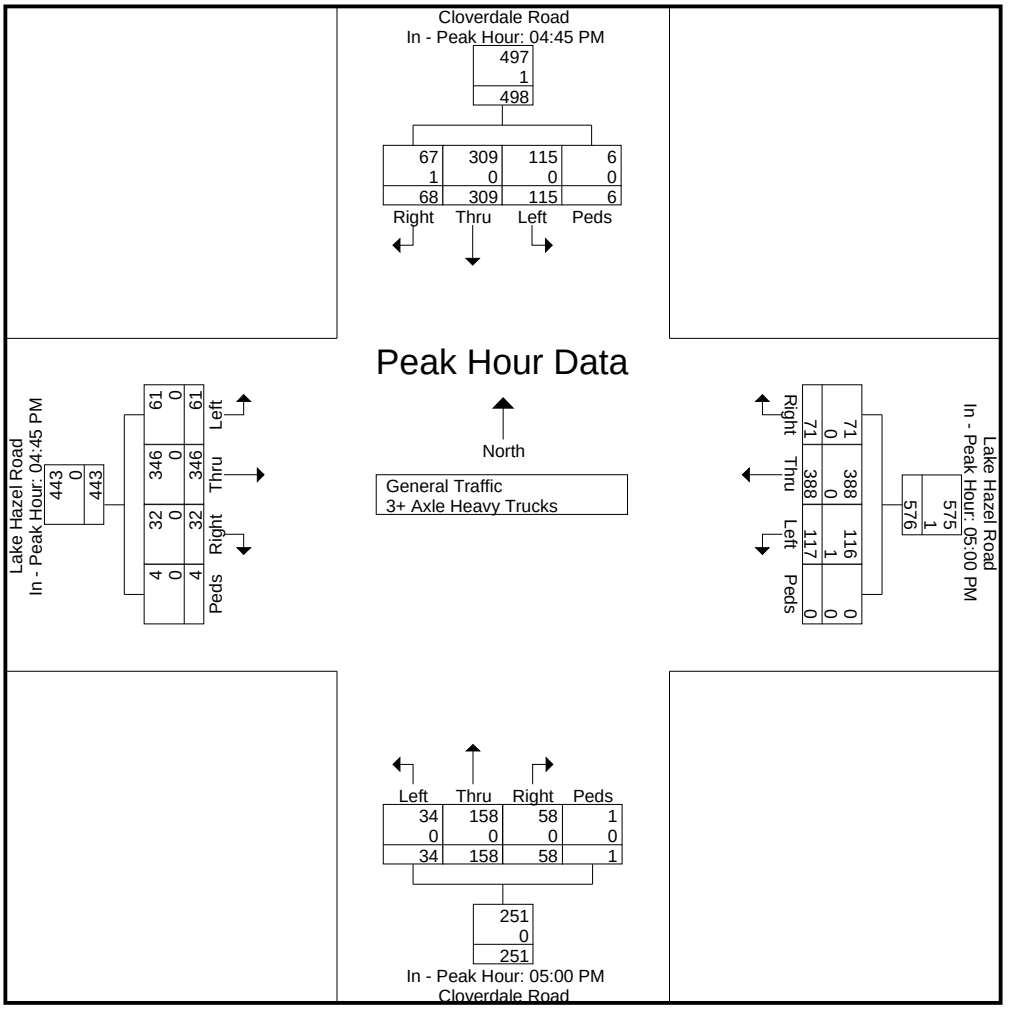
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Cloverdale Road From North | | | | | Lake Hazel Road From East | | | | | Cloverdale Road From South | | | | | Lake Hazel Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:45 PM | | | | | 05:00 PM | | | | | 05:00 PM | | | | | 04:45 PM | | | | | |
| +0 mins. | **21** | 75 | 17 | **3** | 116 | 14 | **109** | 23 | 0 | 146 | 12 | 33 | 4 | 0 | 49 | 6 | 87 | **26** | 1 | **120** | |
| +15 mins. | 20 | 79 | **35** | 1 | **135** | 10 | 89 | 32 | 0 | 131 | 12 | 39 | 9 | 0 | 60 | **10** | 80 | 16 | 1 | 107 | |
| +30 mins. | 16 | **82** | 28 | 1 | 127 | 23 | 99 | **35** | 0 | **157** | 13 | 41 | 10 | 0 | 64 | 8 | **97** | 10 | 0 | 115 | |
| +45 mins. | 11 | 73 | 35 | 1 | 120 | **24** | 91 | 27 | 0 | 142 | **21** | **45** | **11** | **1** | **78** | 8 | 82 | 9 | **2** | 101 | |
| Total Volume | 68 | 309 | 115 | 6 | 498 | 71 | 388 | 117 | 0 | 576 | 58 | 158 | 34 | 1 | 251 | 32 | 346 | 61 | 4 | 443 | |
| % App. Total | 13.7 | 62 | 23.1 | 1.2 | | 12.3 | 67.4 | 20.3 | 0 | | 23.1 | 62.9 | 13.5 | 0.4 | | 7.2 | 78.1 | 13.8 | 0.9 | | |
| PHF | .810 | .942 | .821 | .500 | .922 | .740 | .890 | .836 | .000 | .917 | .690 | .878 | .773 | .250 | .804 | .800 | .892 | .587 | .500 | .923 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 98.5 | 100 | 100 | 100 | 99.8 | 100 | 100 | 99.1 | 0 | 99.8 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | |
| 3+ Axle Heavy Trucks | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 1.5 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.9 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Lake Hazel
City, State: Ada County, Idaho
Control: Signalized

File Name : Cloverdale Rd & Lake Hazel Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

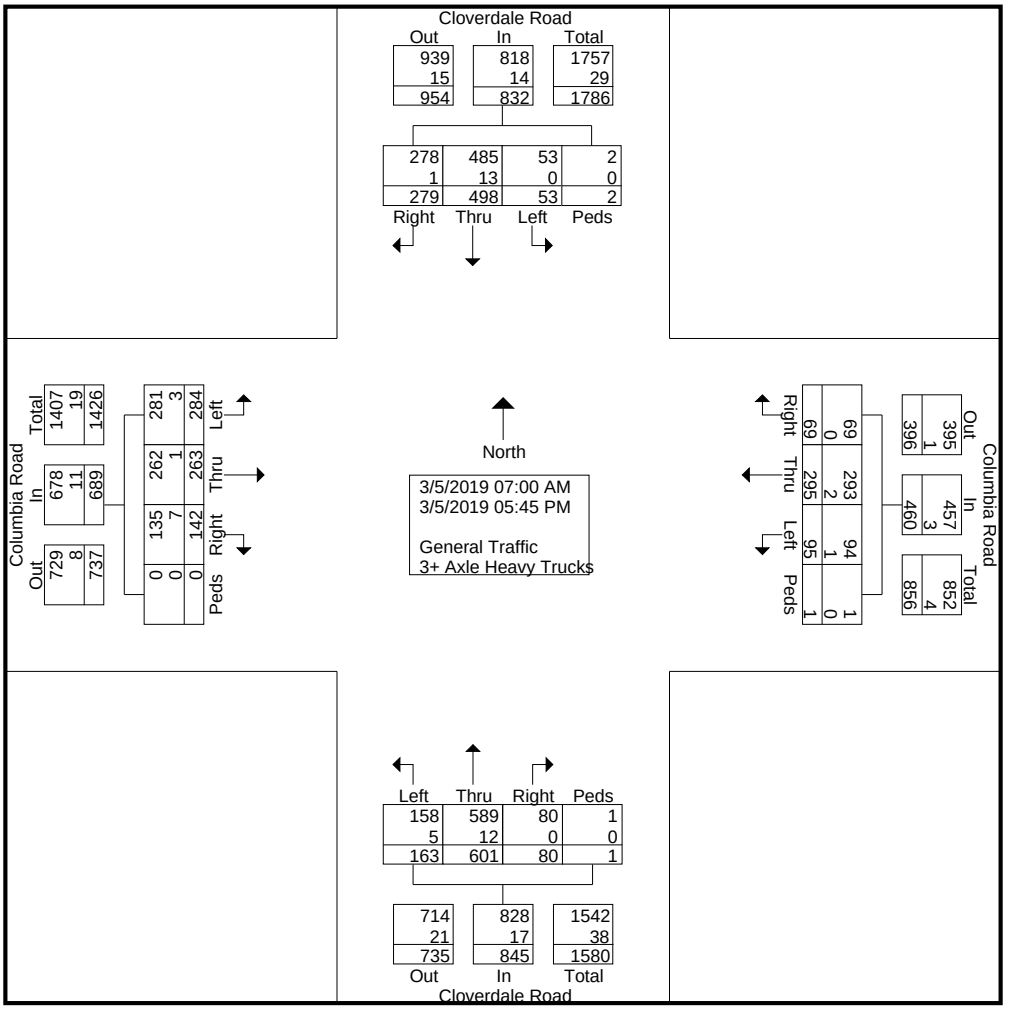
| | Cloverdale Road From North | | | | | Columbia Road From East | | | | | Cloverdale Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 15 | 17 | 0 | 0 | 32 | 4 | 22 | 6 | 1 | 33 | 2 | 59 | 5 | 0 | 66 | 6 | 14 | 20 | 0 | 40 | 171 |
| 07:15 AM | 19 | 16 | 1 | 0 | 36 | 4 | 22 | 9 | 0 | 35 | 7 | 53 | 6 | 0 | 66 | 14 | 13 | 27 | 0 | 54 | 191 |
| 07:30 AM | 12 | 22 | 2 | 0 | 36 | 10 | 22 | 8 | 0 | 40 | 6 | 55 | 6 | 0 | 67 | 15 | 17 | 36 | 0 | 68 | 211 |
| 07:45 AM | 12 | 22 | 1 | 1 | 36 | 6 | 19 | 2 | 0 | 27 | 6 | 52 | 7 | 0 | 65 | 19 | 16 | 33 | 0 | 68 | 196 |
| Total | 58 | 77 | 4 | 1 | 140 | 24 | 85 | 25 | 1 | 135 | 21 | 219 | 24 | 0 | 264 | 54 | 60 | 116 | 0 | 230 | 769 |
| 08:00 AM | 8 | 11 | 1 | 0 | 20 | 8 | 20 | 3 | 0 | 31 | 2 | 42 | 3 | 0 | 47 | 5 | 17 | 26 | 0 | 48 | 146 |
| 08:15 AM | 3 | 12 | 5 | 0 | 20 | 5 | 6 | 3 | 0 | 14 | 3 | 41 | 7 | 0 | 51 | 5 | 14 | 20 | 0 | 39 | 124 |
| 08:30 AM | 2 | 8 | 2 | 0 | 12 | 2 | 14 | 2 | 0 | 18 | 4 | 28 | 7 | 0 | 39 | 8 | 15 | 22 | 0 | 45 | 114 |
| 08:45 AM | 12 | 18 | 1 | 0 | 31 | 5 | 17 | 10 | 0 | 32 | 5 | 34 | 8 | 0 | 47 | 2 | 20 | 14 | 0 | 36 | 146 |
| Total | 25 | 49 | 9 | 0 | 83 | 20 | 57 | 18 | 0 | 95 | 14 | 145 | 25 | 0 | 184 | 20 | 66 | 82 | 0 | 168 | 530 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 19 | 37 | 4 | 0 | 60 | 2 | 22 | 12 | 0 | 36 | 7 | 32 | 14 | 0 | 53 | 11 | 14 | 9 | 0 | 34 | 183 |
| 04:15 PM | 25 | 47 | 2 | 1 | 75 | 4 | 15 | 10 | 0 | 29 | 2 | 24 | 15 | 0 | 41 | 6 | 14 | 19 | 0 | 39 | 184 |
| 04:30 PM | 23 | 51 | 3 | 0 | 77 | 4 | 22 | 8 | 0 | 34 | 5 | 32 | 13 | 1 | 51 | 7 | 15 | 13 | 0 | 35 | 197 |
| 04:45 PM | 26 | 46 | 2 | 0 | 74 | 3 | 15 | 6 | 0 | 24 | 6 | 26 | 15 | 0 | 47 | 15 | 19 | 8 | 0 | 42 | 187 |
| Total | 93 | 181 | 11 | 1 | 286 | 13 | 74 | 36 | 0 | 123 | 20 | 114 | 57 | 1 | 192 | 39 | 62 | 49 | 0 | 150 | 751 |
| 05:00 PM | 18 | 47 | 2 | 0 | 67 | 1 | 14 | 3 | 0 | 18 | 5 | 22 | 24 | 0 | 51 | 5 | 22 | 8 | 0 | 35 | 171 |
| 05:15 PM | 25 | 54 | 12 | 0 | 91 | 3 | 20 | 7 | 0 | 30 | 8 | 37 | 15 | 0 | 60 | 11 | 15 | 10 | 0 | 36 | 217 |
| 05:30 PM | 28 | 50 | 7 | 0 | 85 | 5 | 27 | 3 | 0 | 35 | 6 | 33 | 11 | 0 | 50 | 7 | 27 | 9 | 0 | 43 | 213 |
| 05:45 PM | 32 | 40 | 8 | 0 | 80 | 3 | 18 | 3 | 0 | 24 | 6 | 31 | 7 | 0 | 44 | 6 | 11 | 10 | 0 | 27 | 175 |
| Total | 103 | 191 | 29 | 0 | 323 | 12 | 79 | 16 | 0 | 107 | 25 | 123 | 57 | 0 | 205 | 29 | 75 | 37 | 0 | 141 | 776 |
| Grand Total | 279 | 498 | 53 | 2 | 832 | 69 | 295 | 95 | 1 | 460 | 80 | 601 | 163 | 1 | 845 | 142 | 263 | 284 | 0 | 689 | 2826 |
| Apprch % | 33.5 | 59.9 | 6.4 | 0.2 | | 15 | 64.1 | 20.7 | 0.2 | | 9.5 | 71.1 | 19.3 | 0.1 | | 20.6 | 38.2 | 41.2 | 0 | | |
| Total % | 9.9 | 17.6 | 1.9 | 0.1 | 29.4 | 2.4 | 10.4 | 3.4 | 0 | 16.3 | 2.8 | 21.3 | 5.8 | 0 | 29.9 | 5 | 9.3 | 10 | 0 | 24.4 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 99.6 | 97.4 | 100 | 100 | 98.3 | 100 | 99.3 | 98.9 | 100 | 99.3 | 100 | 98 | 96.9 | 100 | 98 | 95.1 | 99.6 | 98.9 | 0 | 98.4 | 98.4 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0.4 | 2.6 | 0 | 0 | 1.7 | 0 | 0.7 | 1.1 | 0 | 0.7 | 0 | 2 | 3.1 | 0 | 2 | 4.9 | 0.4 | 1.1 | 0 | 1.6 | 1.6 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



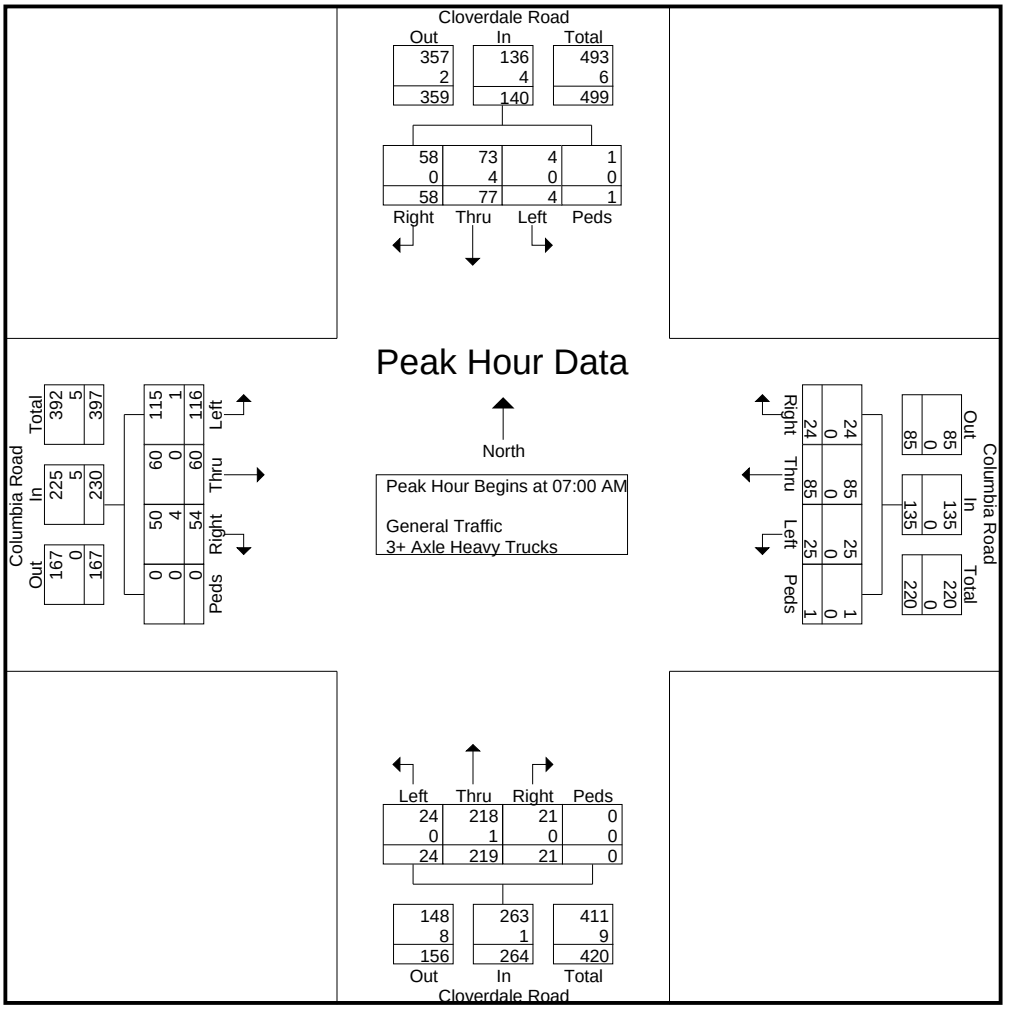
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Cloverdale Road From North | | | | | Columbia Road From East | | | | | Cloverdale Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 15 | 17 | 0 | 0 | 32 | 4 | **22** | 6 | **1** | 33 | 2 | **59** | 5 | 0 | 66 | 6 | 14 | 20 | 0 | 40 | 171 |
| 07:15 AM | **19** | 16 | 1 | 0 | **36** | 4 | 22 | **9** | 0 | 35 | **7** | 53 | 6 | 0 | 66 | 14 | 13 | 27 | 0 | 54 | 191 |
| 07:30 AM | 12 | **22** | **2** | 0 | 36 | **10** | 22 | 8 | 0 | **40** | 6 | 55 | 6 | 0 | **67** | 15 | **17** | **36** | 0 | **68** | **211** |
| 07:45 AM | 12 | 22 | 1 | **1** | 36 | 6 | 19 | 2 | 0 | 27 | 6 | 52 | **7** | 0 | 65 | **19** | 16 | 33 | 0 | 68 | 196 |
| Total Volume | 58 | 77 | 4 | 1 | 140 | 24 | 85 | 25 | 1 | 135 | 21 | 219 | 24 | 0 | 264 | 54 | 60 | 116 | 0 | 230 | 769 |
| % App. Total | 41.4 | 55 | 2.9 | 0.7 | | 17.8 | 63 | 18.5 | 0.7 | | 8 | 83 | 9.1 | 0 | | 23.5 | 26.1 | 50.4 | 0 | | |
| PHF | .763 | .875 | .500 | .250 | .972 | .600 | .966 | .694 | .250 | .844 | .750 | .928 | .857 | .000 | .985 | .711 | .882 | .806 | .000 | .846 | .911 |
| General Traffic % General Traffic | 100 | 94.8 | 100 | 100 | 97.1 | 100 | 100 | 100 | 100 | 100 | 100 | 99.5 | 100 | 0 | 99.6 | 92.6 | 100 | 99.1 | 0 | 97.8 | 98.7 |
| 3+ Axle Heavy Trucks % 3+ Axle Heavy Trucks | 0 | 5.2 | 0 | 0 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0.4 | 7.4 | 0 | 0.9 | 0 | 2.2 | 1.3 |



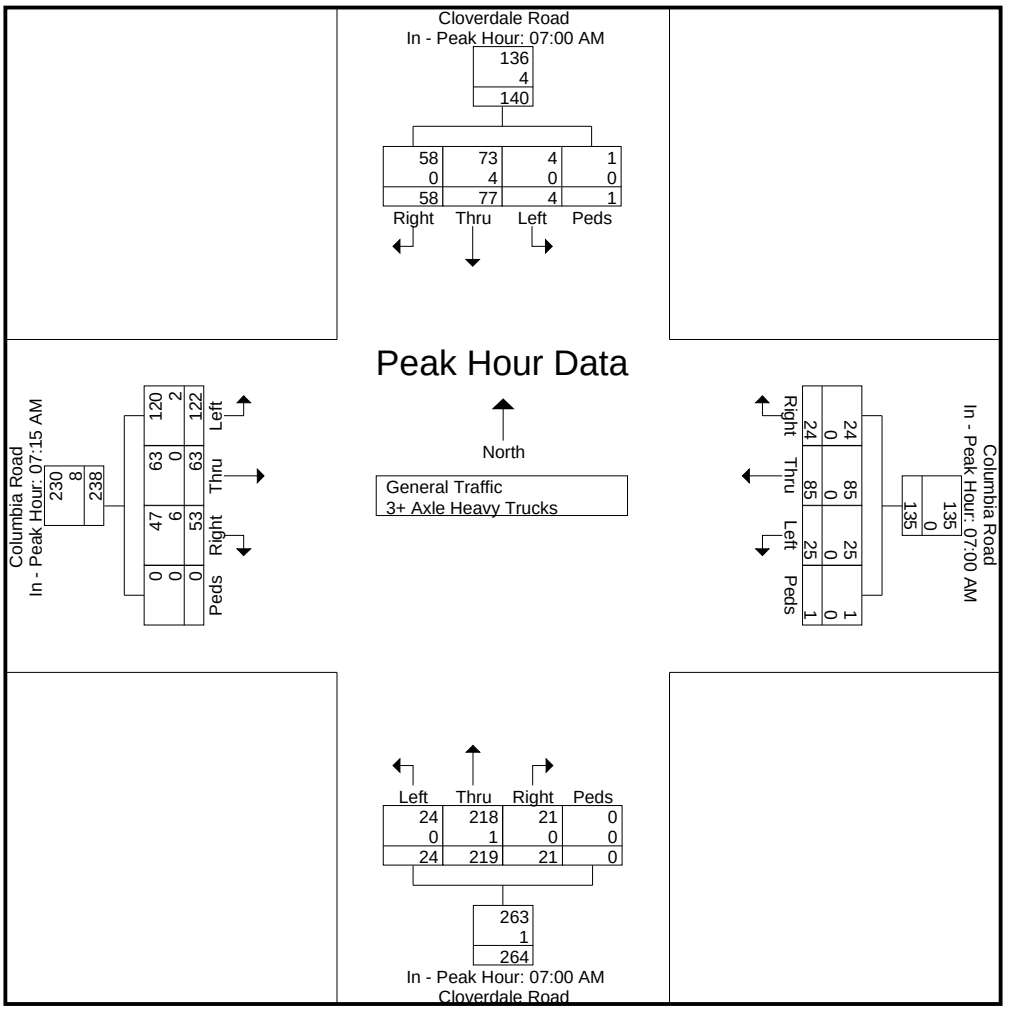
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Cloverdale Road From North | | | | | Columbia Road From East | | | | | Cloverdale Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:15 AM | | | | | |
| +0 mins. | 15 | 17 | 0 | 0 | 32 | 4 | **22** | 6 | **1** | 33 | 2 | **59** | 5 | 0 | 66 | 14 | 13 | 27 | 0 | 54 | |
| +15 mins. | **19** | 16 | 1 | 0 | **36** | 4 | 22 | **9** | 0 | 35 | **7** | 53 | 6 | 0 | 66 | 15 | **17** | **36** | 0 | **68** | |
| +30 mins. | 12 | **22** | **2** | 0 | 36 | **10** | 22 | 8 | 0 | **40** | 6 | 55 | 6 | 0 | **67** | **19** | 16 | 33 | 0 | 68 | |
| +45 mins. | 12 | 22 | 1 | **1** | 36 | 6 | 19 | 2 | 0 | 27 | 6 | 52 | **7** | 0 | 65 | 5 | 17 | 26 | 0 | 48 | |
| Total Volume | 58 | 77 | 4 | 1 | 140 | 24 | 85 | 25 | 1 | 135 | 21 | 219 | 24 | 0 | 264 | 53 | 63 | 122 | 0 | 238 | |
| % App. Total | 41.4 | 55 | 2.9 | 0.7 | | 17.8 | 63 | 18.5 | 0.7 | | 8 | 83 | 9.1 | 0 | | 22.3 | 26.5 | 51.3 | 0 | | |
| PHF | .763 | .875 | .500 | .250 | .972 | .600 | .966 | .694 | .250 | .844 | .750 | .928 | .857 | .000 | .985 | .697 | .926 | .847 | .000 | .875 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 94.8 | 100 | 100 | 97.1 | 100 | 100 | 100 | 100 | 100 | 100 | 99.5 | 100 | 0 | 99.6 | 88.7 | 100 | 98.4 | 0 | 96.6 | |
| 3+ Axle Heavy Trucks | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 6 | 0 | 2 | 0 | 8 | |
| % 3+ Axle Heavy Trucks | 0 | 5.2 | 0 | 0 | 2.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0.4 | 11.3 | 0 | 1.6 | 0 | 3.4 | |



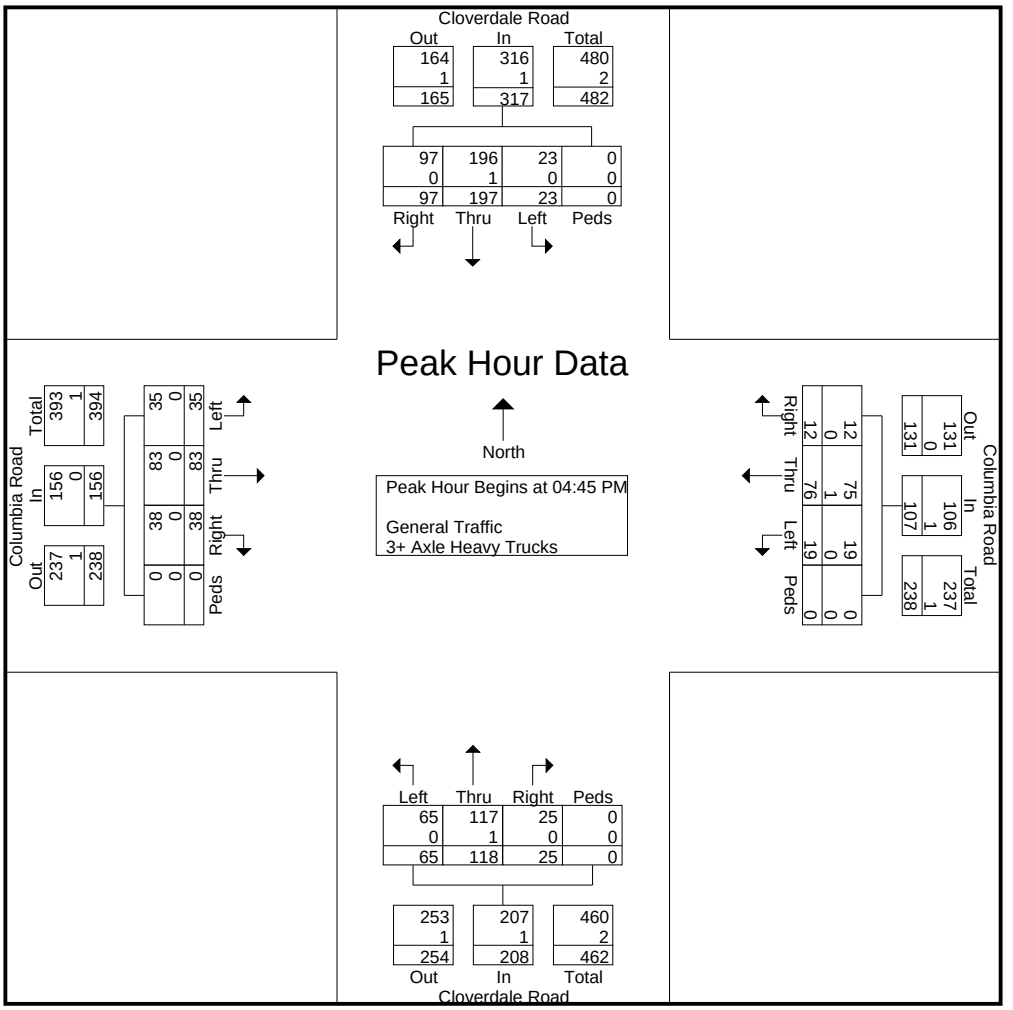
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Cloverdale Road From North | | | | | Columbia Road From East | | | | | Cloverdale Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 26 | 46 | 2 | 0 | 74 | 3 | 15 | 6 | 0 | 24 | 6 | 26 | 15 | 0 | 47 | **15** | 19 | 8 | 0 | 42 | 187 |
| 05:00 PM | 18 | 47 | 2 | 0 | 67 | 1 | 14 | 3 | 0 | 18 | 5 | 22 | **24** | 0 | 51 | 5 | 22 | 8 | 0 | 35 | 171 |
| 05:15 PM | 25 | **54** | **12** | 0 | **91** | 3 | 20 | **7** | 0 | 30 | **8** | **37** | 15 | 0 | **60** | 11 | 15 | **10** | 0 | 36 | **217** |
| 05:30 PM | **28** | 50 | 7 | 0 | 85 | **5** | **27** | 3 | 0 | **35** | 6 | 33 | 11 | 0 | 50 | 7 | **27** | 9 | 0 | **43** | 213 |
| Total Volume | 97 | 197 | 23 | 0 | 317 | 12 | 76 | 19 | 0 | 107 | 25 | 118 | 65 | 0 | 208 | 38 | 83 | 35 | 0 | 156 | 788 |
| % App. Total | 30.6 | 62.1 | 7.3 | 0 | | 11.2 | 71 | 17.8 | 0 | | 12 | 56.7 | 31.2 | 0 | | 24.4 | 53.2 | 22.4 | 0 | | |
| PHF | .866 | .912 | .479 | .000 | .871 | .600 | .704 | .679 | .000 | .764 | .781 | .797 | .677 | .000 | .867 | .633 | .769 | .875 | .000 | .907 | .908 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 99.5 | 100 | 0 | 99.7 | 100 | 98.7 | 100 | 0 | 99.1 | 100 | 99.2 | 100 | 0 | 99.5 | 100 | 100 | 100 | 0 | 100 | 99.6 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0.5 | 0 | 0 | 0.3 | 0 | 1.3 | 0 | 0 | 0.9 | 0 | 0.8 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0.4 |



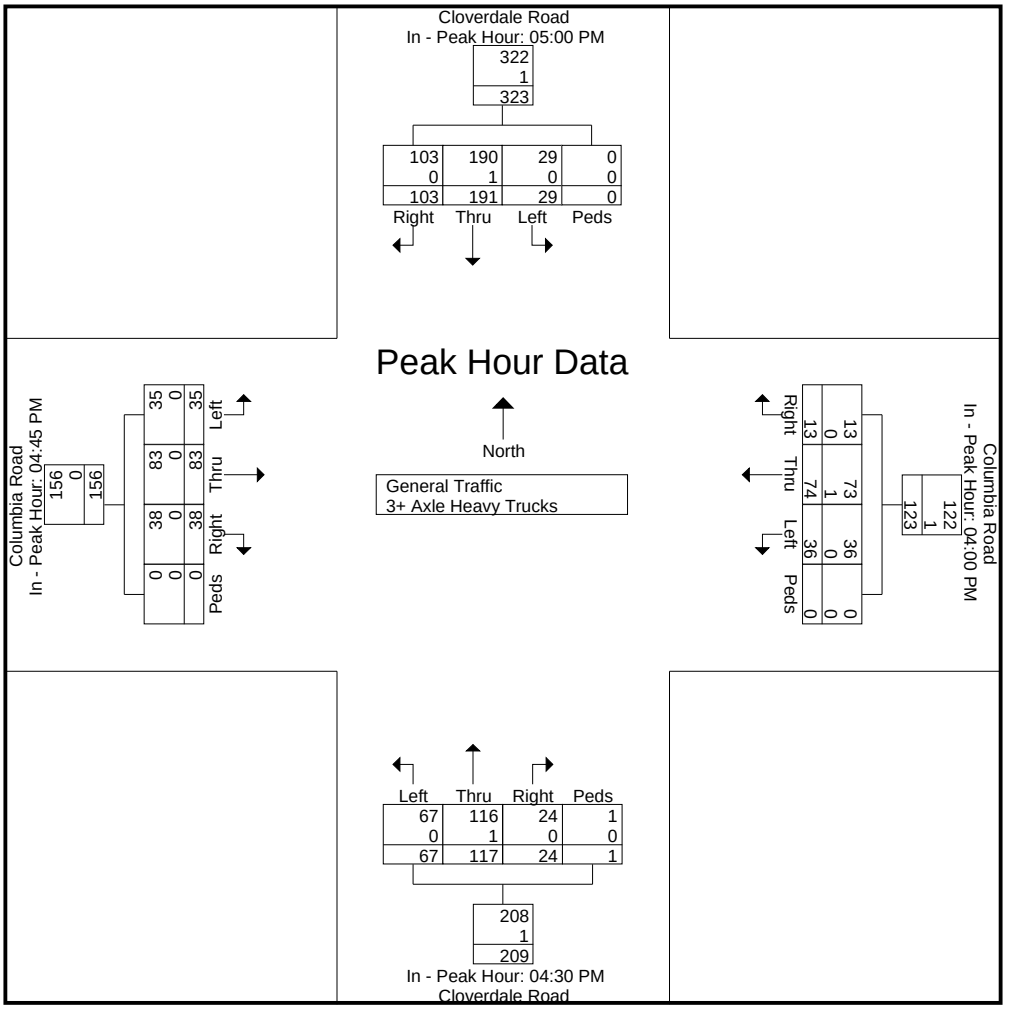
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Cloverdale Road From North | | | | | Columbia Road From East | | | | | Cloverdale Road From South | | | | | Columbia Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 05:00 PM | | | | | 04:00 PM | | | | | 04:30 PM | | | | | 04:45 PM | | | | | |
| +0 mins. | 18 | 47 | 2 | 0 | 67 | 2 | **22** | **12** | 0 | **36** | 5 | 32 | 13 | **1** | 51 | **15** | 19 | 8 | 0 | 42 | |
| +15 mins. | 25 | **54** | **12** | 0 | **91** | **4** | 15 | 10 | 0 | 29 | 6 | 26 | 15 | 0 | 47 | 5 | 22 | 8 | 0 | 35 | |
| +30 mins. | 28 | 50 | 7 | 0 | 85 | 4 | 22 | 8 | 0 | 34 | 5 | 22 | **24** | 0 | 51 | 11 | 15 | **10** | 0 | 36 | |
| +45 mins. | **32** | 40 | 8 | 0 | 80 | 3 | 15 | 6 | 0 | 24 | **8** | **37** | 15 | 0 | **60** | 7 | **27** | 9 | 0 | **43** | |
| Total Volume | 103 | 191 | 29 | 0 | 323 | 13 | 74 | 36 | 0 | 123 | 24 | 117 | 67 | 1 | 209 | 38 | 83 | 35 | 0 | 156 | |
| % App. Total | 31.9 | 59.1 | 9 | 0 | | 10.6 | 60.2 | 29.3 | 0 | | 11.5 | 56 | 32.1 | 0.5 | | 24.4 | 53.2 | 22.4 | 0 | | |
| PHF | .805 | .884 | .604 | .000 | .887 | .813 | .841 | .750 | .000 | .854 | .750 | .791 | .698 | .250 | .871 | .633 | .769 | .875 | .000 | .907 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 99.5 | 100 | 0 | 99.7 | 100 | 98.6 | 100 | 0 | 99.2 | 100 | 99.1 | 100 | 100 | 99.5 | 100 | 100 | 100 | 0 | 100 | |
| 3+ Axle Heavy Trucks | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 0 | 0.5 | 0 | 0 | 0.3 | 0 | 1.4 | 0 | 0 | 0.8 | 0 | 0.9 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Columbia R
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Columbia Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

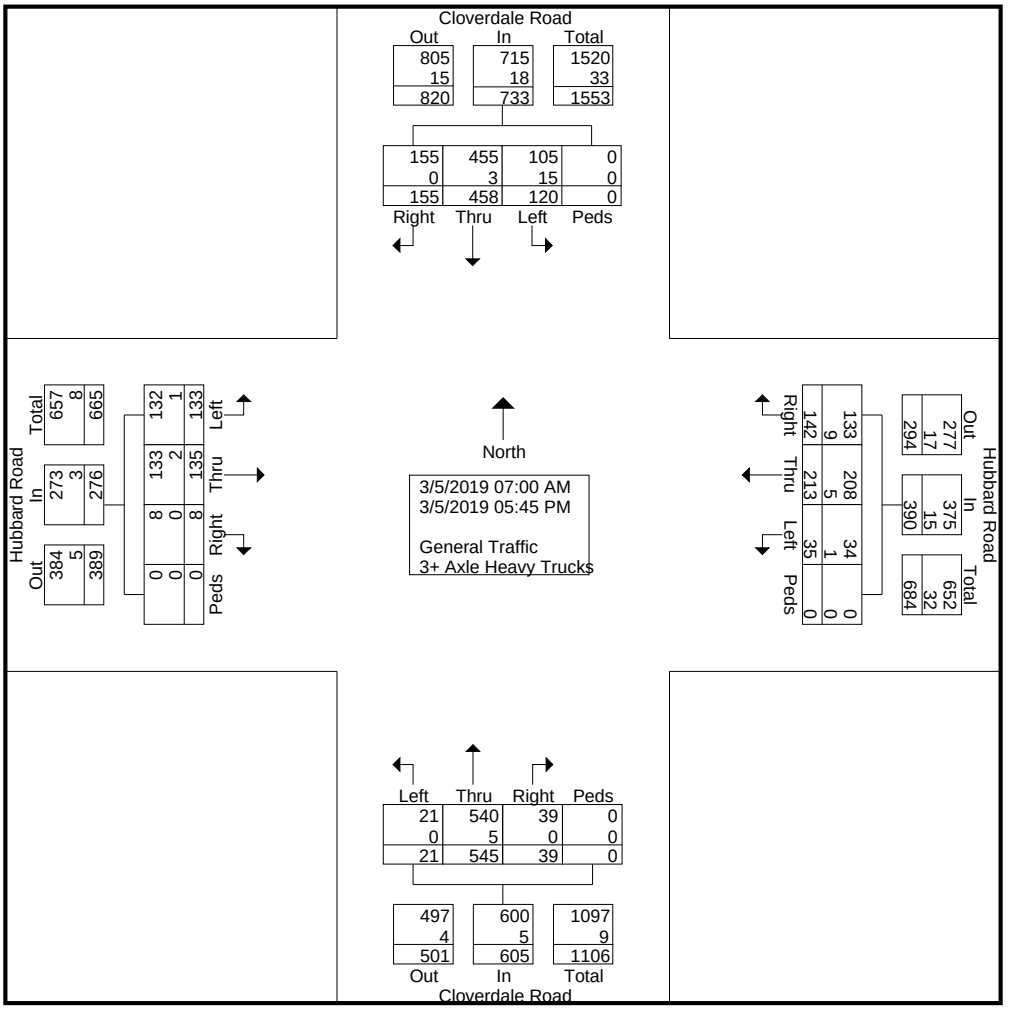
| | Cloverdale Road From North | | | | | Hubbard Road From East | | | | | Cloverdale Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 4 | 9 | 9 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 5 | 44 | 2 | 0 | 51 | 1 | 26 | 23 | 0 | 50 | 123 |
| 07:15 AM | 14 | 14 | 19 | 0 | 47 | 2 | 1 | 0 | 0 | 3 | 6 | 46 | 1 | 0 | 53 | 1 | 33 | 9 | 0 | 43 | 146 |
| 07:30 AM | 8 | 18 | 22 | 0 | 48 | 5 | 0 | 0 | 0 | 5 | 8 | 40 | 1 | 0 | 49 | 1 | 17 | 22 | 0 | 40 | 142 |
| 07:45 AM | 7 | 14 | 20 | 0 | 41 | 1 | 0 | 1 | 0 | 2 | 0 | 48 | 1 | 0 | 49 | 1 | 23 | 9 | 0 | 33 | 125 |
| Total | 33 | 55 | 70 | 0 | 158 | 8 | 1 | 1 | 0 | 10 | 19 | 178 | 5 | 0 | 202 | 4 | 99 | 63 | 0 | 166 | 536 |
| 08:00 AM | 4 | 13 | 7 | 0 | 24 | 2 | 1 | 0 | 0 | 3 | 6 | 36 | 3 | 0 | 45 | 0 | 9 | 9 | 0 | 18 | 90 |
| 08:15 AM | 1 | 18 | 4 | 0 | 23 | 3 | 0 | 0 | 0 | 3 | 7 | 38 | 0 | 0 | 45 | 0 | 12 | 10 | 0 | 22 | 93 |
| 08:30 AM | 3 | 7 | 6 | 0 | 16 | 4 | 3 | 0 | 0 | 7 | 1 | 28 | 0 | 0 | 29 | 1 | 9 | 8 | 0 | 18 | 70 |
| 08:45 AM | 4 | 12 | 8 | 0 | 24 | 1 | 0 | 0 | 0 | 1 | 2 | 35 | 1 | 0 | 38 | 0 | 4 | 6 | 0 | 10 | 73 |
| Total | 12 | 50 | 25 | 0 | 87 | 10 | 4 | 0 | 0 | 14 | 16 | 137 | 4 | 0 | 157 | 1 | 34 | 33 | 0 | 68 | 326 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 13 | 44 | 2 | 0 | 59 | 17 | 20 | 4 | 0 | 41 | 0 | 35 | 2 | 0 | 37 | 1 | 0 | 2 | 0 | 3 | 140 |
| 04:15 PM | 17 | 41 | 4 | 0 | 62 | 17 | 17 | 3 | 0 | 37 | 0 | 15 | 1 | 0 | 16 | 0 | 0 | 8 | 0 | 8 | 123 |
| 04:30 PM | 14 | 45 | 3 | 0 | 62 | 10 | 21 | 4 | 0 | 35 | 1 | 30 | 2 | 0 | 33 | 0 | 0 | 7 | 0 | 7 | 137 |
| 04:45 PM | 18 | 53 | 2 | 0 | 73 | 19 | 22 | 2 | 0 | 43 | 2 | 27 | 2 | 0 | 31 | 2 | 0 | 6 | 0 | 8 | 155 |
| Total | 62 | 183 | 11 | 0 | 256 | 63 | 80 | 13 | 0 | 156 | 3 | 107 | 7 | 0 | 117 | 3 | 0 | 23 | 0 | 26 | 555 |
| 05:00 PM | 17 | 39 | 1 | 0 | 57 | 22 | 30 | 6 | 0 | 58 | 0 | 27 | 0 | 0 | 27 | 0 | 1 | 1 | 0 | 2 | 144 |
| 05:15 PM | 15 | 49 | 6 | 0 | 70 | 14 | 46 | 6 | 0 | 66 | 0 | 37 | 2 | 0 | 39 | 0 | 1 | 7 | 0 | 8 | 183 |
| 05:30 PM | 10 | 41 | 5 | 0 | 56 | 16 | 36 | 6 | 0 | 58 | 0 | 33 | 2 | 0 | 35 | 0 | 0 | 4 | 0 | 4 | 153 |
| 05:45 PM | 6 | 41 | 2 | 0 | 49 | 9 | 16 | 3 | 0 | 28 | 1 | 26 | 1 | 0 | 28 | 0 | 0 | 2 | 0 | 2 | 107 |
| Total | 48 | 170 | 14 | 0 | 232 | 61 | 128 | 21 | 0 | 210 | 1 | 123 | 5 | 0 | 129 | 0 | 2 | 14 | 0 | 16 | 587 |
| Grand Total | 155 | 458 | 120 | 0 | 733 | 142 | 213 | 35 | 0 | 390 | 39 | 545 | 21 | 0 | 605 | 8 | 135 | 133 | 0 | 276 | 2004 |
| Apprch % | 21.1 | 62.5 | 16.4 | 0 | | 36.4 | 54.6 | 9 | 0 | | 6.4 | 90.1 | 3.5 | 0 | | 2.9 | 48.9 | 48.2 | 0 | | |
| Total % | 7.7 | 22.9 | 6 | 0 | 36.6 | 7.1 | 10.6 | 1.7 | 0 | 19.5 | 1.9 | 27.2 | 1 | 0 | 30.2 | 0.4 | 6.7 | 6.6 | 0 | 13.8 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 99.3 | 87.5 | 0 | 97.5 | 93.7 | 97.7 | 97.1 | 0 | 96.2 | 100 | 99.1 | 100 | 0 | 99.2 | 100 | 98.5 | 99.2 | 0 | 98.9 | 98 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0.7 | 12.5 | 0 | 2.5 | 6.3 | 2.3 | 2.9 | 0 | 3.8 | 0 | 0.9 | 0 | 0 | 0.8 | 0 | 1.5 | 0.8 | 0 | 1.1 | 2 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



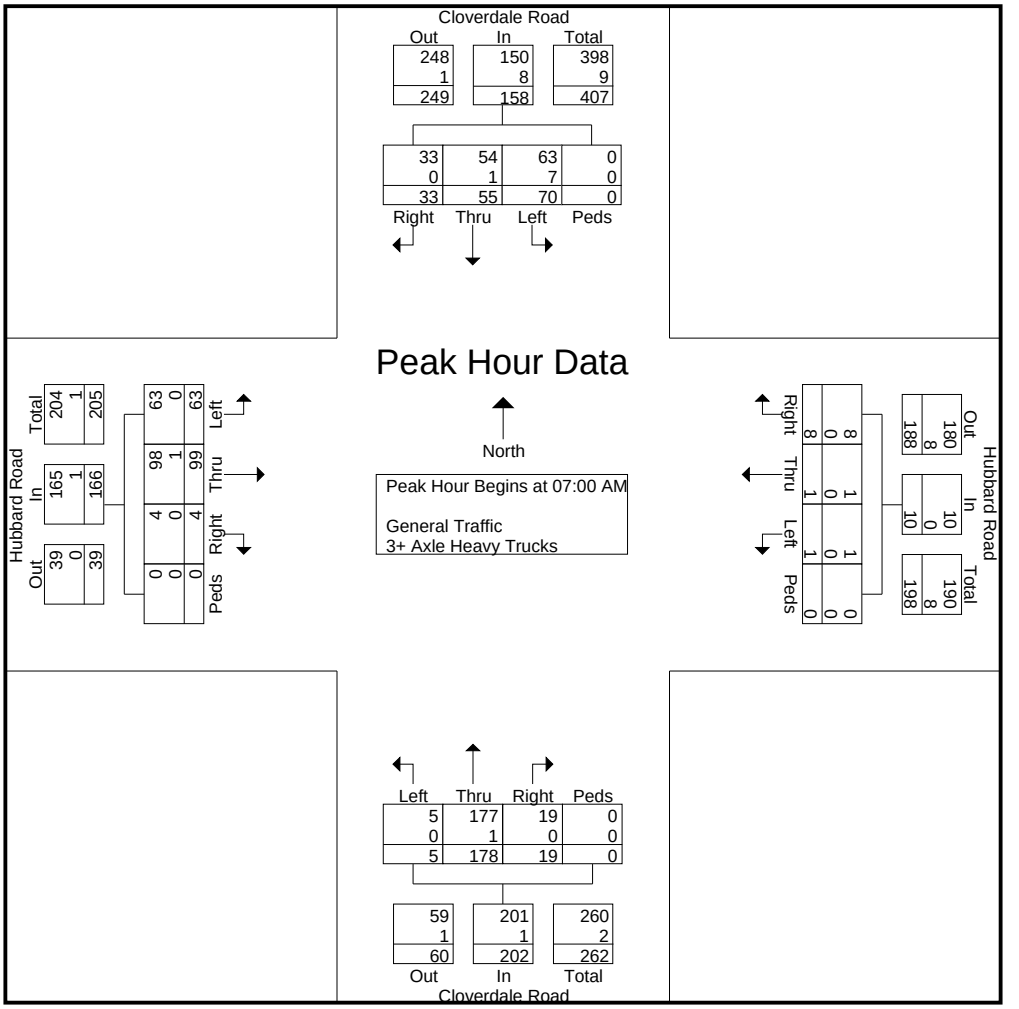
# L2 Data Collection

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Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
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File Name : Cloverdale Rd & Hubbard Rd
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Page No : 3

| | Cloverdale Road From North | | | | | Hubbard Road From East | | | | | Cloverdale Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 4 | 9 | 9 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 5 | 44 | **2** | 0 | 51 | **1** | 26 | **23** | 0 | **50** | 123 |
| 07:15 AM | **14** | 14 | 19 | 0 | 47 | 2 | **1** | 0 | 0 | 3 | 6 | 46 | 1 | 0 | **53** | 1 | **33** | 9 | 0 | 43 | **146** |
| 07:30 AM | 8 | **18** | **22** | 0 | **48** | **5** | 0 | 0 | 0 | **5** | **8** | 40 | 1 | 0 | 49 | 1 | 17 | 22 | 0 | 40 | 142 |
| 07:45 AM | 7 | 14 | 20 | 0 | 41 | 1 | 0 | **1** | 0 | 2 | 0 | **48** | 1 | 0 | 49 | 1 | 23 | 9 | 0 | 33 | 125 |
| Total Volume | 33 | 55 | 70 | 0 | 158 | 8 | 1 | 1 | 0 | 10 | 19 | 178 | 5 | 0 | 202 | 4 | 99 | 63 | 0 | 166 | 536 |
| % App. Total | 20.9 | 34.8 | 44.3 | 0 | | 80 | 10 | 10 | 0 | | 9.4 | 88.1 | 2.5 | 0 | | 2.4 | 59.6 | 38 | 0 | | |
| PHF | .589 | .764 | .795 | .000 | .823 | .400 | .250 | .250 | .000 | .500 | .594 | .927 | .625 | .000 | .953 | 1.00 | .750 | .685 | .000 | .830 | .918 |
| General Traffic % General Traffic | 100 | 98.2 | 90.0 | 0 | 94.9 | 100 | 100 | 100 | 0 | 100 | 100 | 99.4 | 100 | 0 | 99.5 | 100 | 99.0 | 100 | 0 | 99.4 | 98.1 |
| 3+ Axle Heavy Trucks % 3+ Axle Heavy Trucks | 0 | 1.8 | 10.0 | 0 | 5.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0 | 0 | 0.5 | 0 | 1.0 | 0 | 0 | 0.6 | 1.9 |



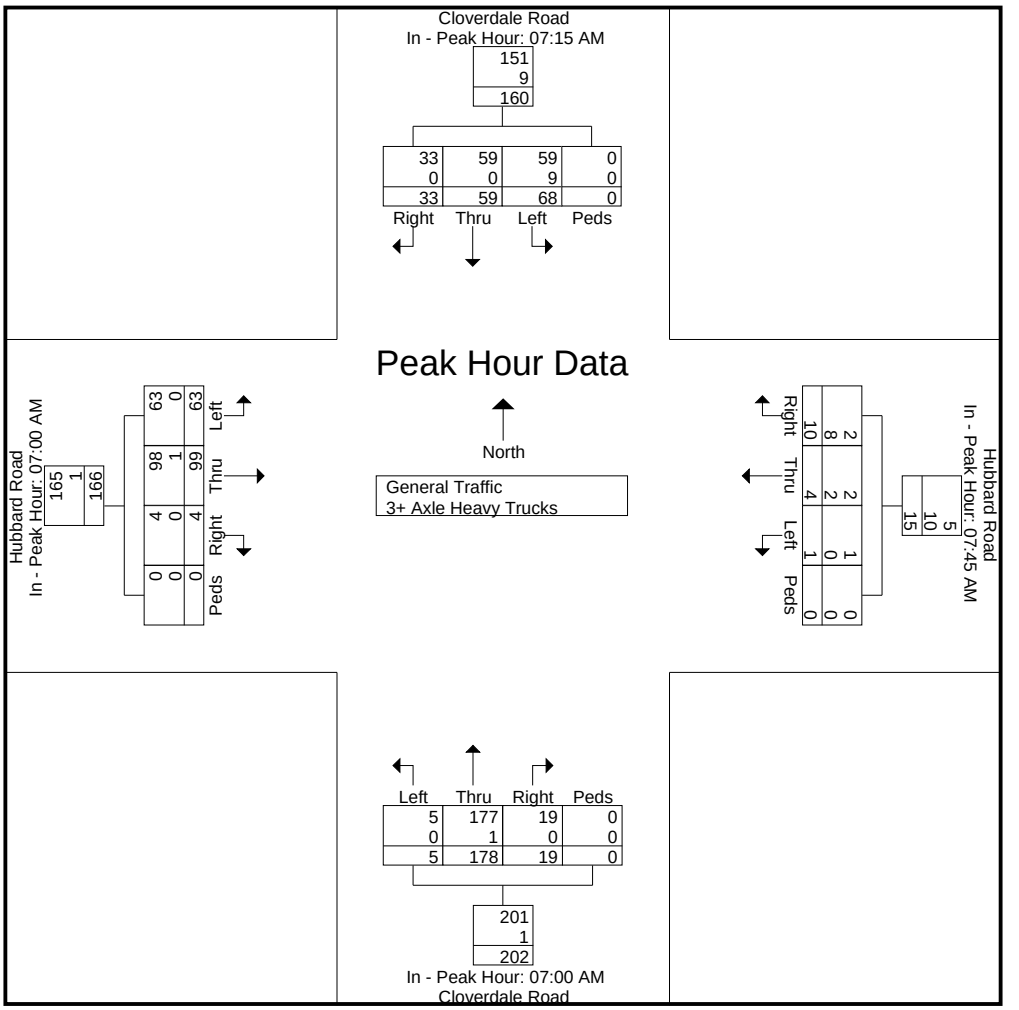
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
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File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Cloverdale Road From North | | | | | Hubbard Road From East | | | | | Cloverdale Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:15 AM | | | | | 07:45 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | **14** | 14 | 19 | 0 | 47 | 1 | 0 | **1** | 0 | 2 | 5 | 44 | **2** | 0 | 51 | **1** | 26 | **23** | 0 | **50** | |
| +15 mins. | 8 | **18** | **22** | 0 | **48** | 2 | 1 | 0 | 0 | 3 | 6 | 46 | 1 | 0 | **53** | 1 | **33** | 9 | 0 | 43 | |
| +30 mins. | 7 | 14 | 20 | 0 | 41 | 3 | 0 | 0 | 0 | 3 | **8** | 40 | 1 | 0 | 49 | 1 | 17 | 22 | 0 | 40 | |
| +45 mins. | 4 | 13 | 7 | 0 | 24 | **4** | **3** | 0 | 0 | **7** | 0 | **48** | 1 | 0 | 49 | 1 | 23 | 9 | 0 | 33 | |
| Total Volume | 33 | 59 | 68 | 0 | 160 | 10 | 4 | 1 | 0 | 15 | 19 | 178 | 5 | 0 | 202 | 4 | 99 | 63 | 0 | 166 | |
| % App. Total | 20.6 | 36.9 | 42.5 | 0 | | 66.7 | 26.7 | 6.7 | 0 | | 9.4 | 88.1 | 2.5 | 0 | | 2.4 | 59.6 | 38 | 0 | | |
| PHF | .589 | .819 | .773 | .000 | .833 | .625 | .333 | .250 | .000 | .536 | .594 | .927 | .625 | .000 | .953 | 1.000 | .750 | .685 | .000 | .830 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 86.8 | 0 | 94.4 | 20 | 50 | 100 | 0 | 33.3 | 100 | 99.4 | 100 | 0 | 99.5 | 100 | 99 | 100 | 0 | 99.4 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 9 | 0 | 9 | 8 | 2 | 0 | 0 | 10 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 13.2 | 0 | 5.6 | 80 | 50 | 0 | 0 | 66.7 | 0 | 0.6 | 0 | 0 | 0.5 | 0 | 1 | 0 | 0 | 0.6 | |



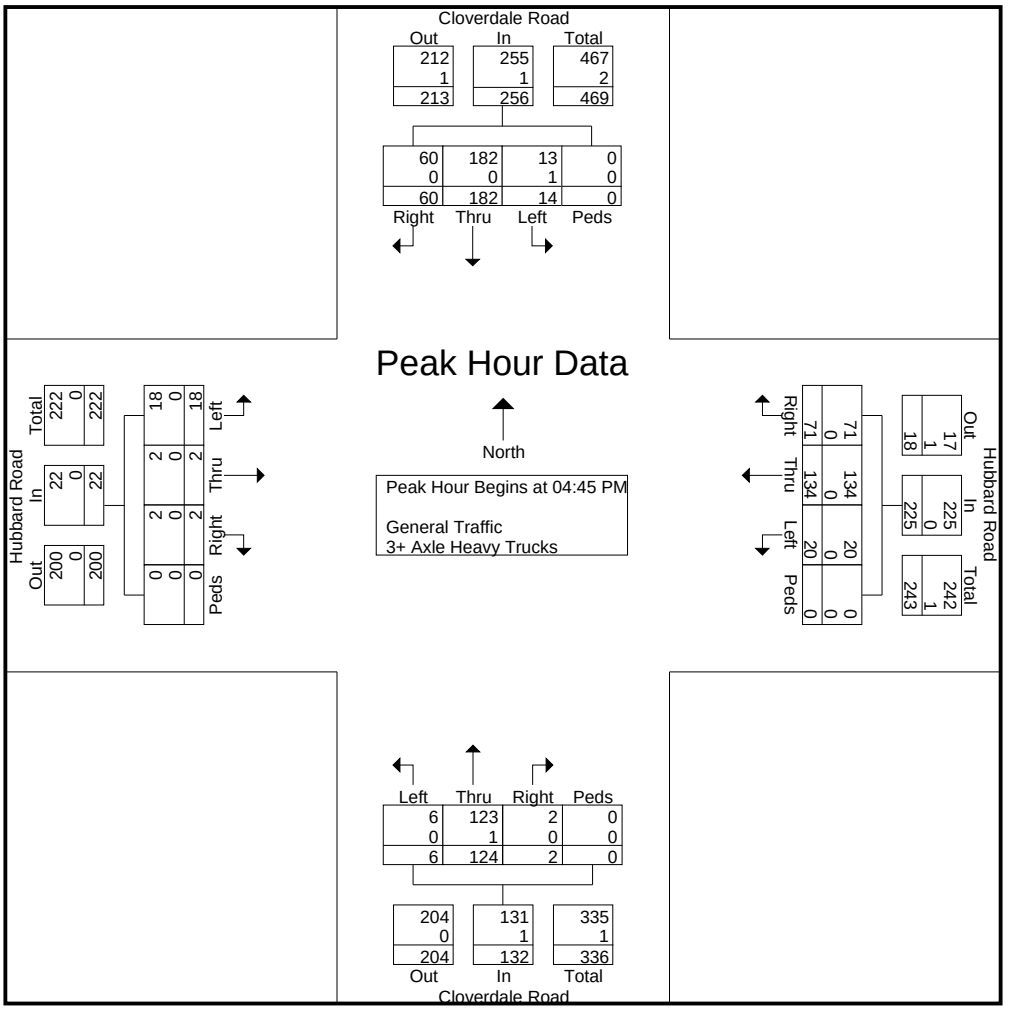
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Cloverdale Road From North | | | | | Hubbard Road From East | | | | | Cloverdale Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | **18** | **53** | 2 | 0 | **73** | 19 | 22 | 2 | 0 | 43 | **2** | 27 | **2** | 0 | 31 | **2** | 0 | 6 | 0 | **8** | 155 |
| 05:00 PM | 17 | 39 | 1 | 0 | 57 | **22** | 30 | **6** | 0 | 58 | 0 | 27 | 0 | 0 | 27 | 0 | **1** | 1 | 0 | 2 | 144 |
| 05:15 PM | 15 | 49 | **6** | 0 | 70 | 14 | **46** | 6 | 0 | **66** | 0 | **37** | 2 | 0 | **39** | 0 | 1 | **7** | 0 | 8 | **183** |
| 05:30 PM | 10 | 41 | 5 | 0 | 56 | 16 | 36 | 6 | 0 | 58 | 0 | 33 | 2 | 0 | 35 | 0 | 0 | 4 | 0 | 4 | 153 |
| Total Volume | 60 | 182 | 14 | 0 | 256 | 71 | 134 | 20 | 0 | 225 | 2 | 124 | 6 | 0 | 132 | 2 | 2 | 18 | 0 | 22 | 635 |
| % App. Total | 23.4 | 71.1 | 5.5 | 0 | | 31.6 | 59.6 | 8.9 | 0 | | 1.5 | 93.9 | 4.5 | 0 | | 9.1 | 9.1 | 81.8 | 0 | | |
| PHF | .833 | .858 | .583 | .000 | .877 | .807 | .728 | .833 | .000 | .852 | .250 | .838 | .750 | .000 | .846 | .250 | .500 | .643 | .000 | .688 | .867 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 100 | 92.9 | 0 | 99.6 | 100 | 100 | 100 | 0 | 100 | 100 | 99.2 | 100 | 0 | 99.2 | 100 | 100 | 100 | 0 | 100 | 99.7 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 7.1 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0.3 |



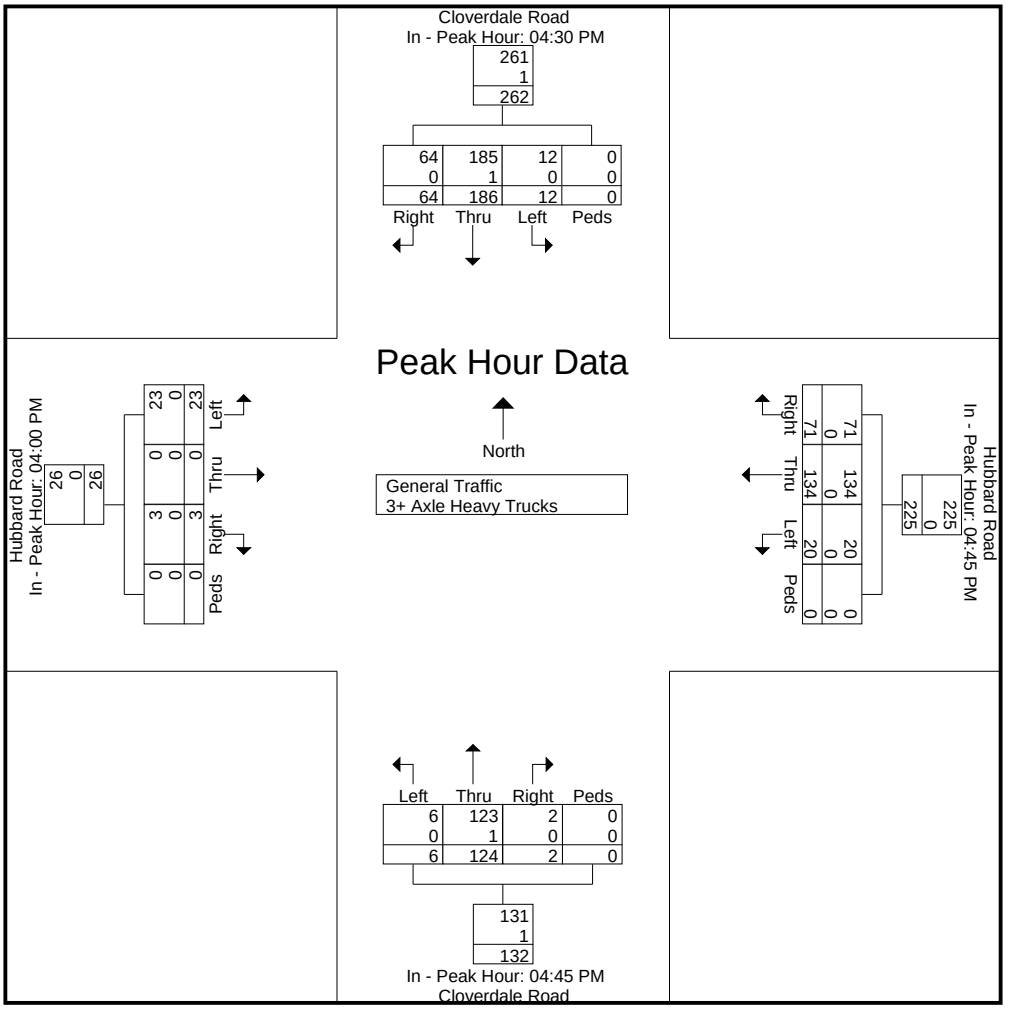
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Cloverdale Road From North | | | | | Hubbard Road From East | | | | | Cloverdale Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:30 PM | | | | | 04:45 PM | | | | | 04:45 PM | | | | | 04:00 PM | | | | | |
| +0 mins. | 14 | 45 | 3 | 0 | 62 | 19 | 22 | 2 | 0 | 43 | **2** | 27 | **2** | 0 | 31 | 1 | 0 | 2 | 0 | 3 | |
| +15 mins. | **18** | **53** | 2 | 0 | **73** | **22** | 30 | **6** | 0 | 58 | 0 | 27 | 0 | 0 | 27 | 0 | 0 | **8** | 0 | **8** | |
| +30 mins. | 17 | 39 | 1 | 0 | 57 | 14 | **46** | 6 | 0 | **66** | 0 | **37** | 2 | 0 | **39** | 0 | 0 | 7 | 0 | 7 | |
| +45 mins. | 15 | 49 | **6** | 0 | 70 | 16 | 36 | 6 | 0 | 58 | 0 | 33 | 2 | 0 | 35 | **2** | 0 | 6 | 0 | 8 | |
| Total Volume | 64 | 186 | 12 | 0 | 262 | 71 | 134 | 20 | 0 | 225 | 2 | 124 | 6 | 0 | 132 | 3 | 0 | 23 | 0 | 26 | |
| % App. Total | 24.4 | 71 | 4.6 | 0 | | 31.6 | 59.6 | 8.9 | 0 | | 1.5 | 93.9 | 4.5 | 0 | | 11.5 | 0 | 88.5 | 0 | | |
| PHF | .889 | .877 | .500 | .000 | .897 | .807 | .728 | .833 | .000 | .852 | .250 | .838 | .750 | .000 | .846 | .375 | .000 | .719 | .000 | .813 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 99.5 | 100 | 0 | 99.6 | 100 | 100 | 100 | 0 | 100 | 100 | 99.2 | 100 | 0 | 99.2 | 100 | 0 | 100 | 0 | 100 | |
| 3+ Axle Heavy Trucks | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 0 | 0.5 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Cloverdale Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

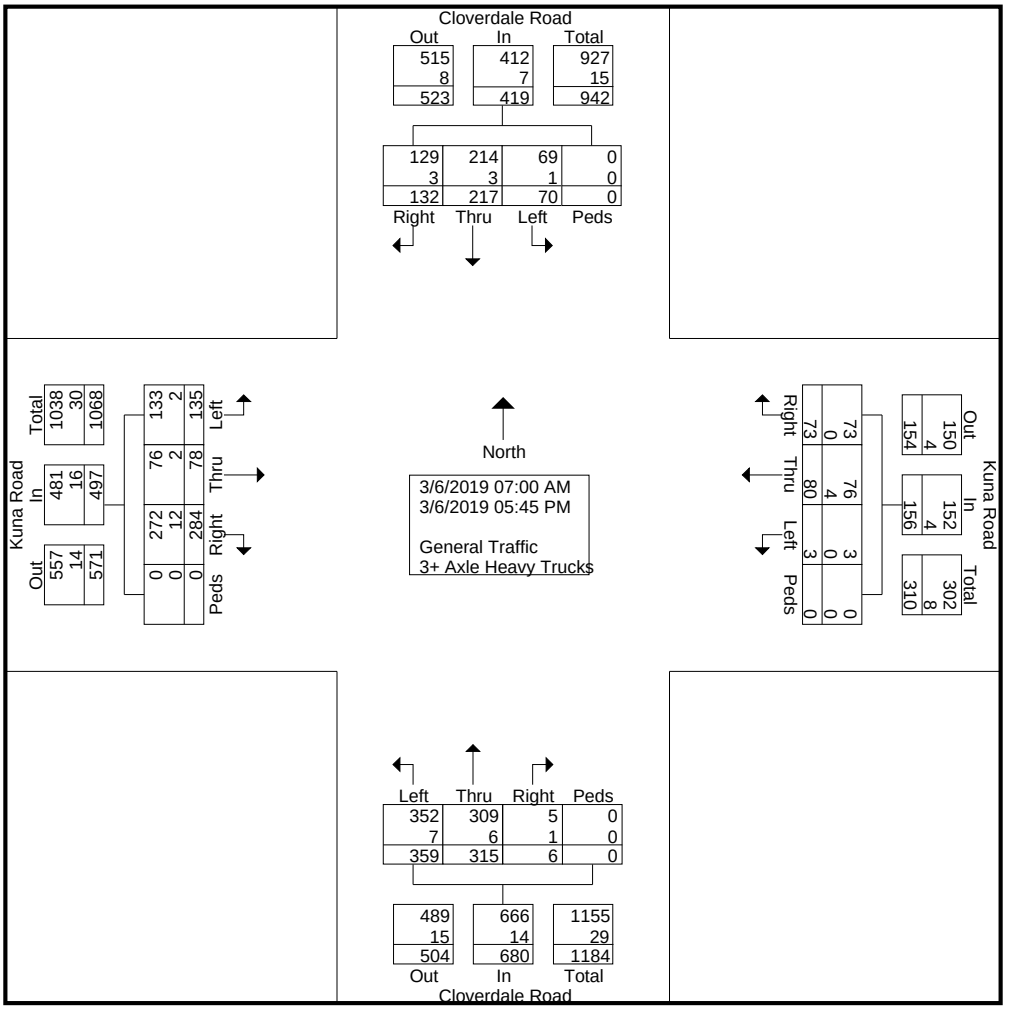
| | Cloverdale Road From North | | | | | Kuna Road From East | | | | | Cloverdale Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 2 | 8 | 0 | 0 | 10 | 14 | 5 | 0 | 0 | 19 | 1 | 30 | 13 | 0 | 44 | 27 | 3 | 10 | 0 | 40 | 113 |
| 07:15 AM | 9 | 8 | 0 | 0 | 17 | 4 | 10 | 0 | 0 | 14 | 0 | 26 | 20 | 0 | 46 | 30 | 6 | 20 | 0 | 56 | 133 |
| 07:30 AM | 5 | 8 | 2 | 0 | 15 | 4 | 6 | 0 | 0 | 10 | 1 | 23 | 18 | 0 | 42 | 28 | 7 | 17 | 0 | 52 | 119 |
| 07:45 AM | 2 | 12 | 2 | 0 | 16 | 10 | 7 | 0 | 0 | 17 | 0 | 21 | 11 | 0 | 32 | 36 | 0 | 10 | 0 | 46 | 111 |
| Total | 18 | 36 | 4 | 0 | 58 | 32 | 28 | 0 | 0 | 60 | 2 | 100 | 62 | 0 | 164 | 121 | 16 | 57 | 0 | 194 | 476 |
| 08:00 AM | 2 | 8 | 1 | 0 | 11 | 8 | 2 | 0 | 0 | 10 | 0 | 21 | 9 | 0 | 30 | 13 | 4 | 13 | 0 | 30 | 81 |
| 08:15 AM | 4 | 5 | 2 | 0 | 11 | 6 | 1 | 1 | 0 | 8 | 0 | 14 | 8 | 0 | 22 | 13 | 4 | 11 | 0 | 28 | 69 |
| 08:30 AM | 4 | 6 | 2 | 0 | 12 | 6 | 2 | 0 | 0 | 8 | 0 | 18 | 11 | 0 | 29 | 21 | 5 | 8 | 0 | 34 | 83 |
| 08:45 AM | 5 | 3 | 3 | 0 | 11 | 9 | 7 | 1 | 0 | 17 | 1 | 7 | 8 | 0 | 16 | 11 | 4 | 4 | 0 | 19 | 63 |
| Total | 15 | 22 | 8 | 0 | 45 | 29 | 12 | 2 | 0 | 43 | 1 | 60 | 36 | 0 | 97 | 58 | 17 | 36 | 0 | 111 | 296 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 17 | 19 | 10 | 0 | 46 | 0 | 4 | 0 | 0 | 4 | 1 | 14 | 17 | 0 | 32 | 12 | 5 | 4 | 0 | 21 | 103 |
| 04:15 PM | 9 | 21 | 6 | 0 | 36 | 1 | 7 | 0 | 0 | 8 | 0 | 8 | 27 | 0 | 35 | 14 | 9 | 8 | 0 | 31 | 110 |
| 04:30 PM | 8 | 20 | 9 | 0 | 37 | 0 | 3 | 0 | 0 | 3 | 0 | 19 | 26 | 0 | 45 | 20 | 9 | 3 | 0 | 32 | 117 |
| 04:45 PM | 17 | 17 | 8 | 0 | 42 | 2 | 3 | 1 | 0 | 6 | 0 | 16 | 34 | 0 | 50 | 13 | 3 | 6 | 0 | 22 | 120 |
| Total | 51 | 77 | 33 | 0 | 161 | 3 | 17 | 1 | 0 | 21 | 1 | 57 | 104 | 0 | 162 | 59 | 26 | 21 | 0 | 106 | 450 |
| 05:00 PM | 20 | 20 | 5 | 0 | 45 | 3 | 10 | 0 | 0 | 13 | 0 | 25 | 24 | 0 | 49 | 13 | 5 | 10 | 0 | 28 | 135 |
| 05:15 PM | 11 | 24 | 12 | 0 | 47 | 4 | 6 | 0 | 0 | 10 | 0 | 29 | 34 | 0 | 63 | 9 | 7 | 3 | 0 | 19 | 139 |
| 05:30 PM | 8 | 19 | 6 | 0 | 33 | 2 | 7 | 0 | 0 | 9 | 2 | 24 | 44 | 0 | 70 | 10 | 4 | 3 | 0 | 17 | 129 |
| 05:45 PM | 9 | 19 | 2 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 55 | 0 | 75 | 14 | 3 | 5 | 0 | 22 | 127 |
| Total | 48 | 82 | 25 | 0 | 155 | 9 | 23 | 0 | 0 | 32 | 2 | 98 | 157 | 0 | 257 | 46 | 19 | 21 | 0 | 86 | 530 |
| Grand Total | 132 | 217 | 70 | 0 | 419 | 73 | 80 | 3 | 0 | 156 | 6 | 315 | 359 | 0 | 680 | 284 | 78 | 135 | 0 | 497 | 1752 |
| Apprch % | 31.5 | 51.8 | 16.7 | 0 | | 46.8 | 51.3 | 1.9 | 0 | | 0.9 | 46.3 | 52.8 | 0 | | 57.1 | 15.7 | 27.2 | 0 | | |
| Total % | 7.5 | 12.4 | 4 | 0 | 23.9 | 4.2 | 4.6 | 0.2 | 0 | 8.9 | 0.3 | 18 | 20.5 | 0 | 38.8 | 16.2 | 4.5 | 7.7 | 0 | 28.4 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 97.7 | 98.6 | 98.6 | 0 | 98.3 | 100 | 95 | 100 | 0 | 97.4 | 83.3 | 98.1 | 98.1 | 0 | 97.9 | 95.8 | 97.4 | 98.5 | 0 | 96.8 | 97.7 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 2.3 | 1.4 | 1.4 | 0 | 1.7 | 0 | 5 | 0 | 0 | 2.6 | 16.7 | 1.9 | 1.9 | 0 | 2.1 | 4.2 | 2.6 | 1.5 | 0 | 3.2 | 2.3 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 2



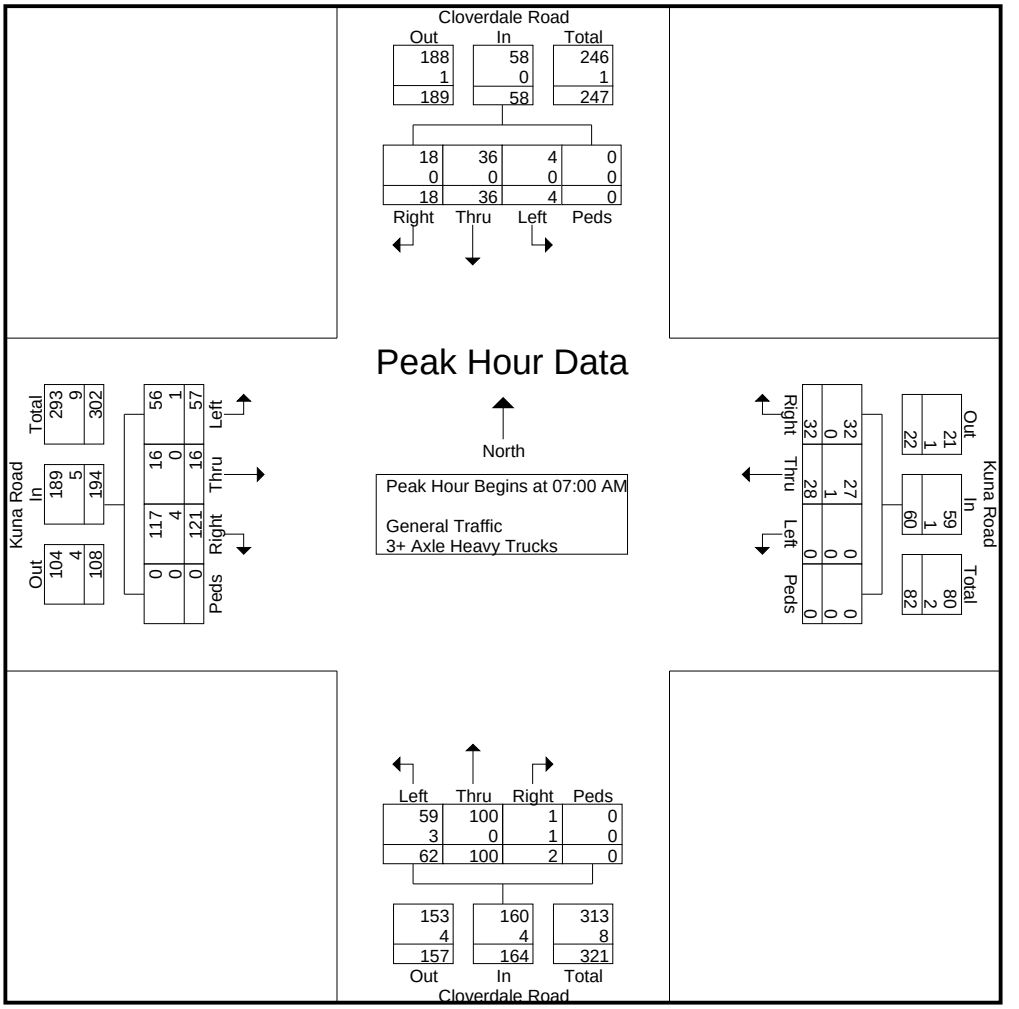
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 3

| | Cloverdale Road From North | | | | | Kuna Road From East | | | | | Cloverdale Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 2 | 8 | 0 | 0 | 10 | **14** | 5 | 0 | 0 | **19** | **1** | **30** | 13 | 0 | 44 | 27 | 3 | 10 | 0 | 40 | 113 |
| 07:15 AM | **9** | 8 | 0 | 0 | **17** | 4 | **10** | 0 | 0 | 14 | 0 | 26 | **20** | 0 | **46** | 30 | 6 | **20** | 0 | **56** | **133** |
| 07:30 AM | 5 | 8 | **2** | 0 | 15 | 4 | 6 | 0 | 0 | 10 | 1 | 23 | 18 | 0 | 42 | 28 | **7** | 17 | 0 | 52 | 119 |
| 07:45 AM | 2 | **12** | 2 | 0 | 16 | 10 | 7 | 0 | 0 | 17 | 0 | 21 | 11 | 0 | 32 | **36** | 0 | 10 | 0 | 46 | 111 |
| Total Volume | 18 | 36 | 4 | 0 | 58 | 32 | 28 | 0 | 0 | 60 | 2 | 100 | 62 | 0 | 164 | 121 | 16 | 57 | 0 | 194 | 476 |
| % App. Total | 31 | 62.1 | 6.9 | 0 | | 53.3 | 46.7 | 0 | 0 | | 1.2 | 61 | 37.8 | 0 | | 62.4 | 8.2 | 29.4 | 0 | | |
| PHF | .500 | .750 | .500 | .000 | .853 | .571 | .700 | .000 | .000 | .789 | .500 | .833 | .775 | .000 | .891 | .840 | .571 | .713 | .000 | .866 | .895 |
| General Traffic % General Traffic | 100 | 100 | 100 | 0 | 100 | 100 | 96.4 | 0 | 0 | 98.3 | 50.0 | 100 | 95.2 | 0 | 97.6 | 96.7 | 100 | 98.2 | 0 | 97.4 | 97.9 |
| 3+ Axle Heavy Trucks % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 3.6 | 0 | 0 | 1.7 | 50.0 | 0 | 4.8 | 0 | 2.4 | 3.3 | 0 | 1.8 | 0 | 2.6 | 2.1 |



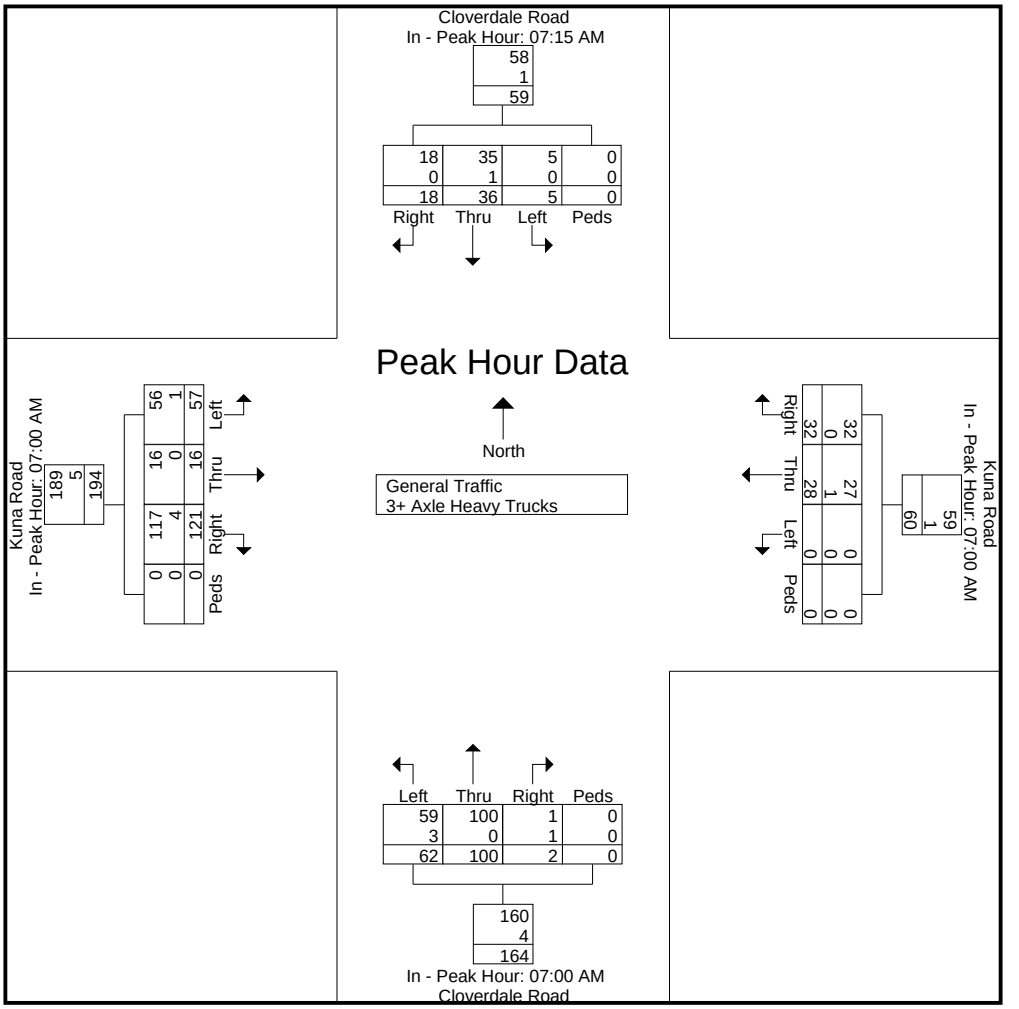
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 4

| | Cloverdale Road From North | | | | | Kuna Road From East | | | | | Cloverdale Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:15 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | **9** | 8 | 0 | 0 | **17** | **14** | 5 | 0 | 0 | **19** | **1** | **30** | 13 | 0 | 44 | 27 | 3 | 10 | 0 | 40 | |
| +15 mins. | 5 | 8 | **2** | 0 | 15 | 4 | **10** | 0 | 0 | 14 | 0 | 26 | **20** | 0 | **46** | 30 | 6 | **20** | 0 | **56** | |
| +30 mins. | 2 | **12** | 2 | 0 | 16 | 4 | 6 | 0 | 0 | 10 | 1 | 23 | 18 | 0 | 42 | 28 | **7** | 17 | 0 | 52 | |
| +45 mins. | 2 | 8 | 1 | 0 | 11 | 10 | 7 | 0 | 0 | 17 | 0 | 21 | 11 | 0 | 32 | **36** | 0 | 10 | 0 | 46 | |
| Total Volume | 18 | 36 | 5 | 0 | 59 | 32 | 28 | 0 | 0 | 60 | 2 | 100 | 62 | 0 | 164 | 121 | 16 | 57 | 0 | 194 | |
| % App. Total | 30.5 | 61 | 8.5 | 0 | | 53.3 | 46.7 | 0 | 0 | | 1.2 | 61 | 37.8 | 0 | | 62.4 | 8.2 | 29.4 | 0 | | |
| PHF | .500 | .750 | .625 | .000 | .868 | .571 | .700 | .000 | .000 | .789 | .500 | .833 | .775 | .000 | .891 | .840 | .571 | .713 | .000 | .866 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 97.2 | 100 | 0 | 98.3 | 100 | 96.4 | 0 | 0 | 98.3 | 50 | 100 | 95.2 | 0 | 97.6 | 96.7 | 100 | 98.2 | 0 | 97.4 | |
| 3+ Axle Heavy Trucks | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 4 | 4 | 0 | 1 | 0 | 5 | |
| % 3+ Axle Heavy Trucks | 0 | 2.8 | 0 | 0 | 1.7 | 0 | 3.6 | 0 | 0 | 1.7 | 50 | 0 | 4.8 | 0 | 2.4 | 3.3 | 0 | 1.8 | 0 | 2.6 | |



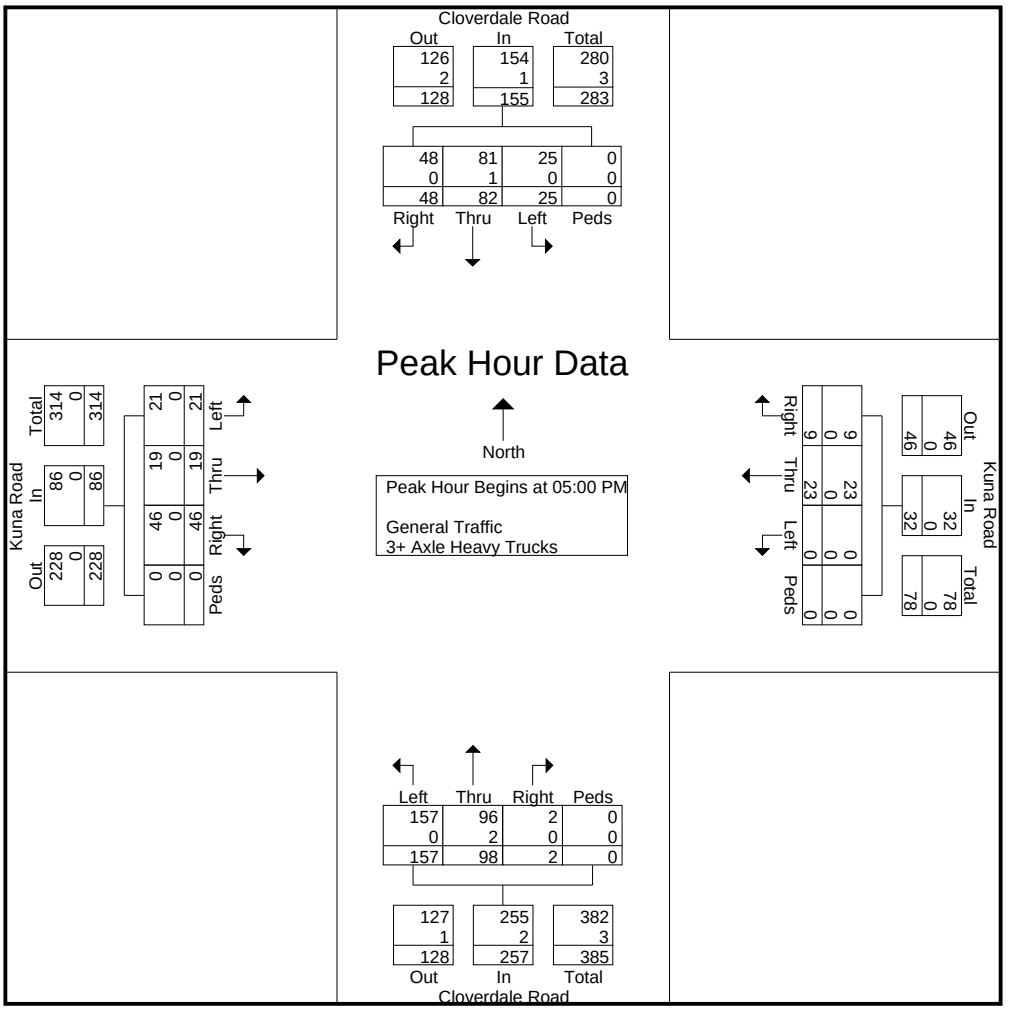
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 5

| | Cloverdale Road From North | | | | | Kuna Road From East | | | | | Cloverdale Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 05:00 PM | | | | | | | | | | | | | | | | | | | | | |
| 05:00 PM | **20** | 20 | 5 | 0 | 45 | 3 | **10** | 0 | 0 | **13** | 0 | 25 | 24 | 0 | 49 | 13 | 5 | **10** | 0 | **28** | 135 |
| 05:15 PM | 11 | **24** | **12** | 0 | **47** | **4** | 6 | 0 | 0 | 10 | 0 | **29** | 34 | 0 | 63 | 9 | **7** | 3 | 0 | 19 | **139** |
| 05:30 PM | 8 | 19 | 6 | 0 | 33 | 2 | 7 | 0 | 0 | 9 | **2** | 24 | 44 | 0 | 70 | 10 | 4 | 3 | 0 | 17 | 129 |
| 05:45 PM | 9 | 19 | 2 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | **55** | 0 | **75** | **14** | 3 | 5 | 0 | 22 | 127 |
| Total Volume | 48 | 82 | 25 | 0 | 155 | 9 | 23 | 0 | 0 | 32 | 2 | 98 | 157 | 0 | 257 | 46 | 19 | 21 | 0 | 86 | 530 |
| % App. Total | 31 | 52.9 | 16.1 | 0 | | 28.1 | 71.9 | 0 | 0 | | 0.8 | 38.1 | 61.1 | 0 | | 53.5 | 22.1 | 24.4 | 0 | | |
| PHF | .600 | .854 | .521 | .000 | .824 | .563 | .575 | .000 | .000 | .615 | .250 | .845 | .714 | .000 | .857 | .821 | .679 | .525 | .000 | .768 | .953 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 100 | 98.8 | 100 | 0 | 99.4 | 100 | 100 | 0 | 0 | 100 | 100 | 98.0 | 100 | 0 | 99.2 | 100 | 100 | 100 | 0 | 100 | 99.4 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 1.2 | 0 | 0 | 0.6 | 0 | 0 | 0 | 0 | 0 | 0 | 2.0 | 0 | 0 | 0.8 | 0 | 0 | 0 | 0 | 0 | 0.6 |



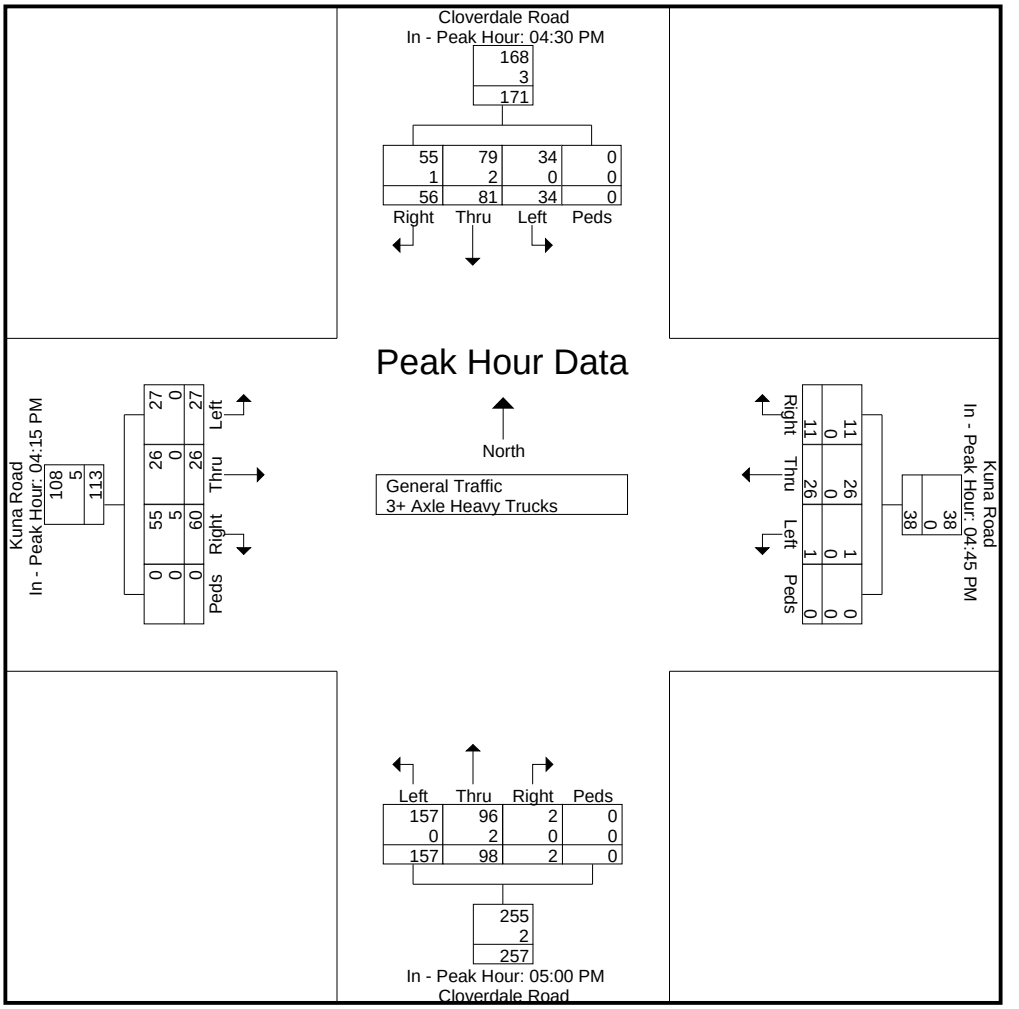
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
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File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
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| | Cloverdale Road From North | | | | | Kuna Road From East | | | | | Cloverdale Road From South | | | | | Kuna Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 04:30 PM | | | | | 04:45 PM | | | | | 05:00 PM | | | | | 04:15 PM | | | | | |
| +0 mins. | 8 | 20 | 9 | 0 | 37 | 2 | 3 | **1** | 0 | 6 | 0 | 25 | 24 | 0 | 49 | 14 | **9** | 8 | 0 | 31 | |
| +15 mins. | 17 | 17 | 8 | 0 | 42 | 3 | **10** | 0 | 0 | **13** | 0 | **29** | 34 | 0 | 63 | **20** | 9 | 3 | 0 | **32** | |
| +30 mins. | **20** | 20 | 5 | 0 | 45 | **4** | 6 | 0 | 0 | 10 | **2** | 24 | 44 | 0 | 70 | 13 | 3 | 6 | 0 | 22 | |
| +45 mins. | 11 | **24** | **12** | 0 | **47** | 2 | 7 | 0 | 0 | 9 | 0 | 20 | **55** | 0 | **75** | 13 | 5 | **10** | 0 | 28 | |
| Total Volume | 56 | 81 | 34 | 0 | 171 | 11 | 26 | 1 | 0 | 38 | 2 | 98 | 157 | 0 | 257 | 60 | 26 | 27 | 0 | 113 | |
| % App. Total | 32.7 | 47.4 | 19.9 | 0 | | 28.9 | 68.4 | 2.6 | 0 | | 0.8 | 38.1 | 61.1 | 0 | | 53.1 | 23 | 23.9 | 0 | | |
| PHF | .700 | .844 | .708 | .000 | .910 | .688 | .650 | .250 | .000 | .731 | .250 | .845 | .714 | .000 | .857 | .750 | .722 | .675 | .000 | .883 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 98.2 | 97.5 | 100 | 0 | 98.2 | 100 | 100 | 100 | 0 | 100 | 100 | 98 | 100 | 0 | 99.2 | 91.7 | 100 | 100 | 0 | 95.6 | |
| 3+ Axle Heavy Trucks | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 5 | 0 | 0 | 0 | 5 | |
| % 3+ Axle Heavy Trucks | 1.8 | 2.5 | 0 | 0 | 1.8 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0.8 | 8.3 | 0 | 0 | 0 | 4.4 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

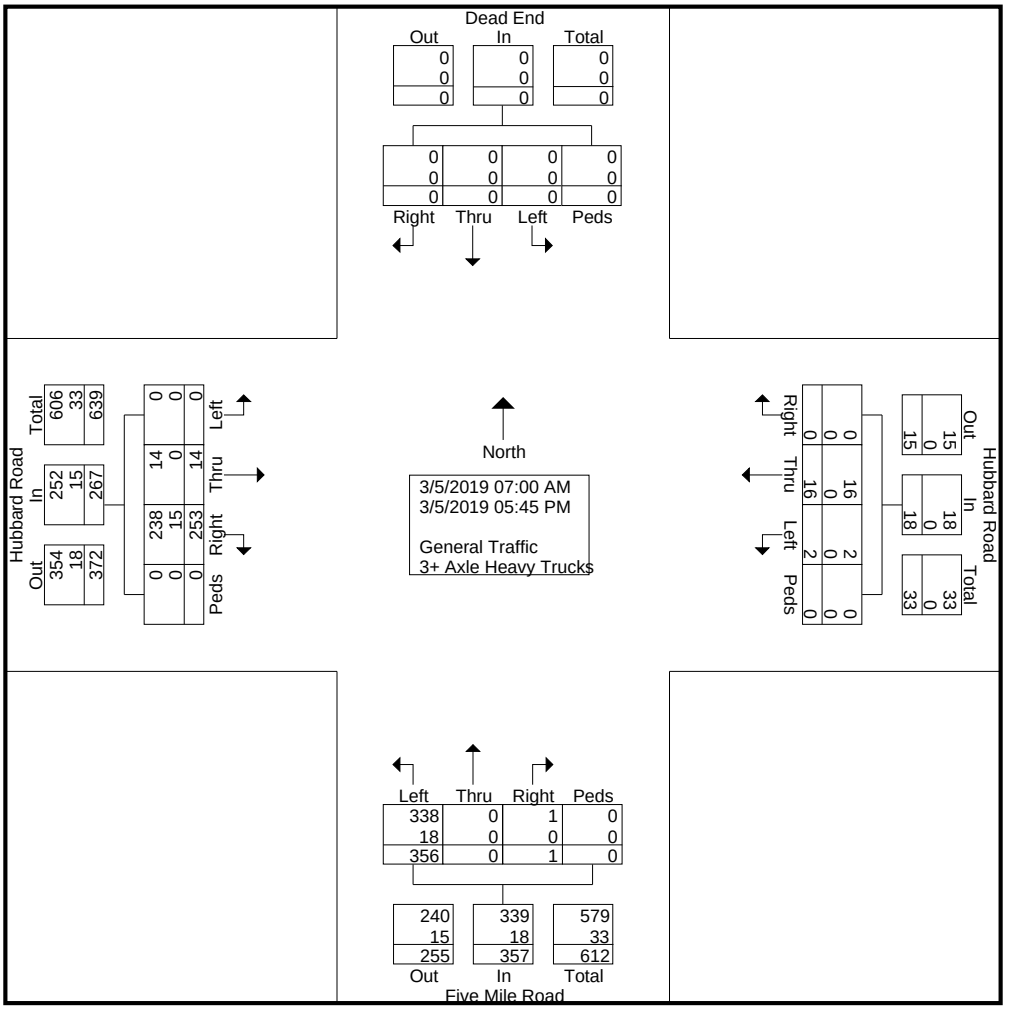
| | Dead End From North | | | | | Hubbard Road From East | | | | | Five Mile Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 32 | 32 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 61 | 0 | 0 | 0 | 61 | 64 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 41 | 1 | 0 | 0 | 42 | 46 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 39 | 3 | 0 | 0 | 42 | 44 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 1 | 173 | 4 | 0 | 0 | 177 | 186 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 3 | 0 | 3 | 20 | 2 | 0 | 0 | 22 | 26 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 3 | 20 | 0 | 0 | 0 | 20 | 24 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 7 | 0 | 7 | 14 | 0 | 0 | 0 | 14 | 22 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 13 | 14 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 4 | 0 | 0 | 13 | 0 | 13 | 67 | 2 | 0 | 0 | 69 | 86 |
| ------- | | | | | | | | | | | | | | | | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 33 | 0 | 34 | 1 | 1 | 0 | 0 | 2 | 36 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 39 | 0 | 39 | 1 | 2 | 0 | 0 | 3 | 45 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 34 | 0 | 34 | 1 | 1 | 0 | 0 | 2 | 37 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 43 | 4 | 2 | 0 | 0 | 6 | 49 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 1 | 0 | 149 | 0 | 150 | 7 | 6 | 0 | 0 | 13 | 167 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 53 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 54 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 62 | 0 | 62 | 2 | 1 | 0 | 0 | 3 | 66 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 59 | 3 | 1 | 0 | 0 | 4 | 63 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 1 | 0 | 0 | 0 | 1 | 20 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 193 | 0 | 193 | 6 | 2 | 0 | 0 | 8 | 203 |
| Grand Total | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 2 | 0 | 18 | 1 | 0 | 356 | 0 | 357 | 253 | 14 | 0 | 0 | 267 | 642 |
| Apprch % | 0 | 0 | 0 | 0 | | 0 | 88.9 | 11.1 | 0 | | 0.3 | 0 | 99.7 | 0 | | 94.8 | 5.2 | 0 | 0 | | |
| Total % | 0 | 0 | 0 | 0 | 0 | 0 | 2.5 | 0.3 | 0 | 2.8 | 0.2 | 0 | 55.5 | 0 | 55.6 | 39.4 | 2.2 | 0 | 0 | 41.6 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 100 | 100 | 0 | 94.9 | 0 | 95 | 94.1 | 100 | 0 | 0 | 94.4 | 94.9 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.1 | 0 | 5 | 5.9 | 0 | 0 | 0 | 5.6 | 5.1 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



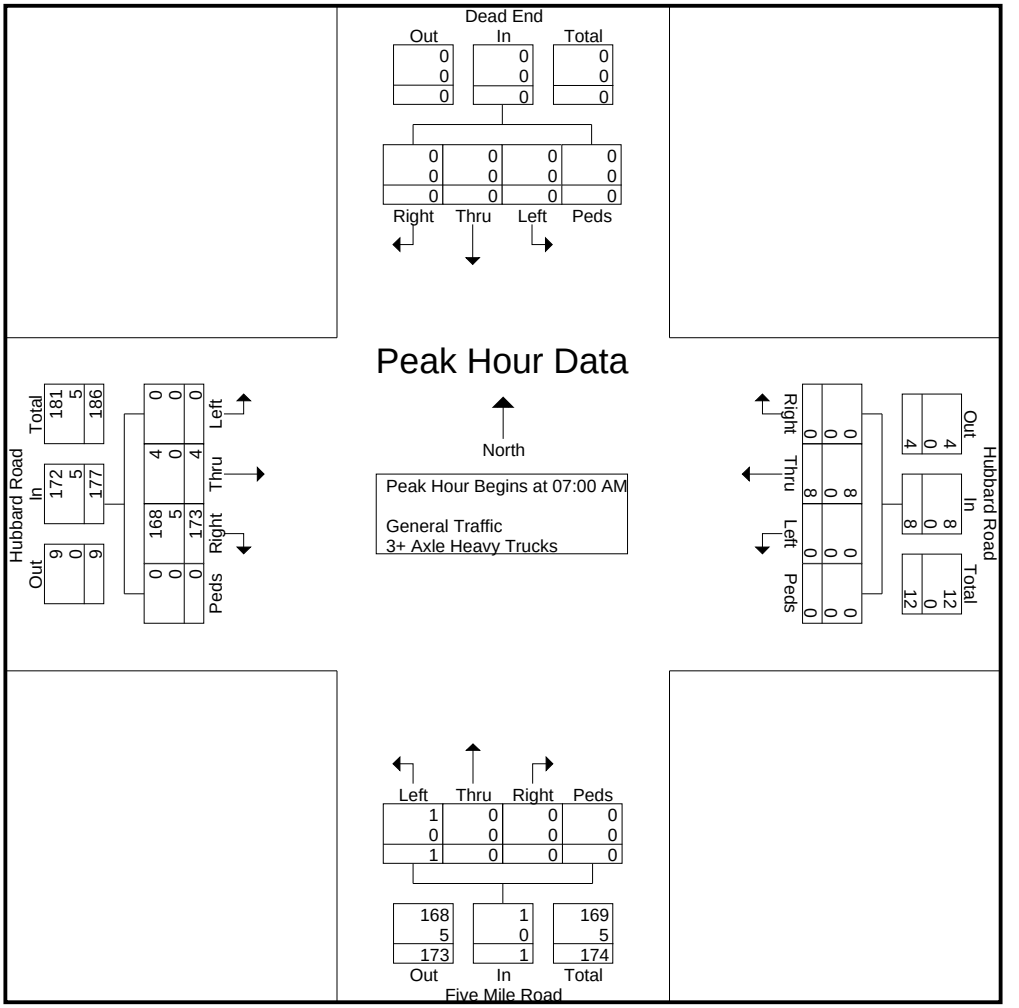
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Dead End From North | | | | | Hubbard Road From East | | | | | Five Mile Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 32 | 32 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | **1** | 0 | **1** | **61** | 0 | 0 | 0 | **61** | **64** |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | **4** | 0 | 0 | 0 | 0 | 0 | 41 | 1 | 0 | 0 | 42 | 46 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 39 | **3** | 0 | 0 | 42 | 44 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 1 | 173 | 4 | 0 | 0 | 177 | 186 |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 100 | 0 | 0 | | 0 | 0 | 100 | 0 | | 97.7 | 2.3 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .500 | .000 | .000 | .500 | .000 | .000 | .250 | .000 | .250 | .709 | .333 | .000 | .000 | .725 | .727 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 100 | 97.1 | 100 | 0 | 0 | 97.2 | 97.3 |
| 3+ Axle Heavy Trucks | | | | | | | | | | | | | | | | | | | | | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.9 | 0 | 0 | 0 | 2.8 | 2.7 |



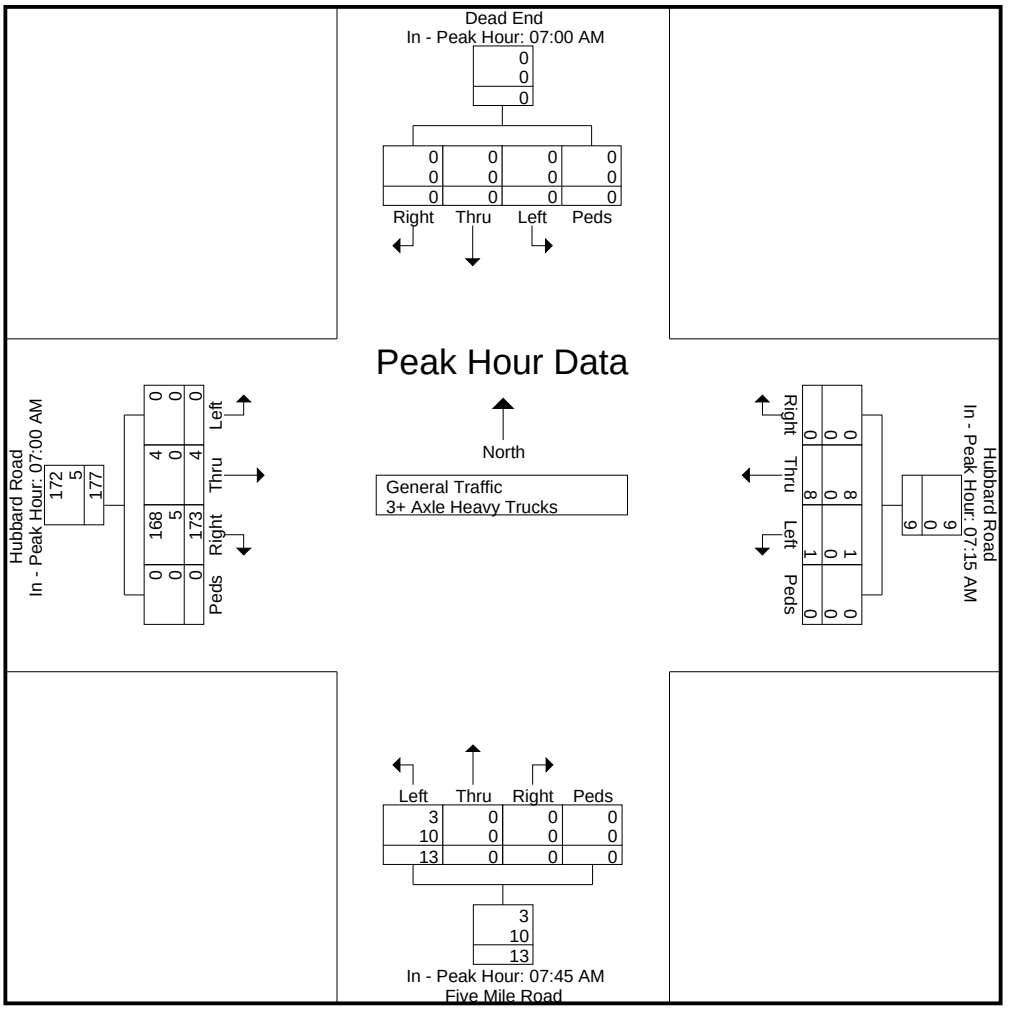
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Dead End From North | | | | | Hubbard Road From East | | | | | Five Mile Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 07:00 AM | | | | | 07:15 AM | | | | | 07:45 AM | | | | | 07:00 AM | | | | | |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 0 | 0 | 32 | |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | **4** | 0 | 0 | **4** | 0 | 0 | 3 | 0 | 3 | **61** | 0 | 0 | 0 | **61** | |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 3 | 0 | 3 | 41 | 1 | 0 | 0 | 42 | |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 0 | 1 | 0 | 0 | **7** | 0 | **7** | 39 | **3** | 0 | 0 | 42 | |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 9 | 0 | 0 | 13 | 0 | 13 | 173 | 4 | 0 | 0 | 177 | |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 88.9 | 11.1 | 0 | | 0 | 0 | 100 | 0 | | 97.7 | 2.3 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .500 | .250 | .000 | .563 | .000 | .000 | .464 | .000 | .464 | .709 | .333 | .000 | .000 | .725 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 100 | 0 | 0 | 23.1 | 0 | 23.1 | 97.1 | 100 | 0 | 0 | 97.2 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 5 | 0 | 0 | 0 | 5 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76.9 | 0 | 76.9 | 2.9 | 0 | 0 | 0 | 2.8 | |



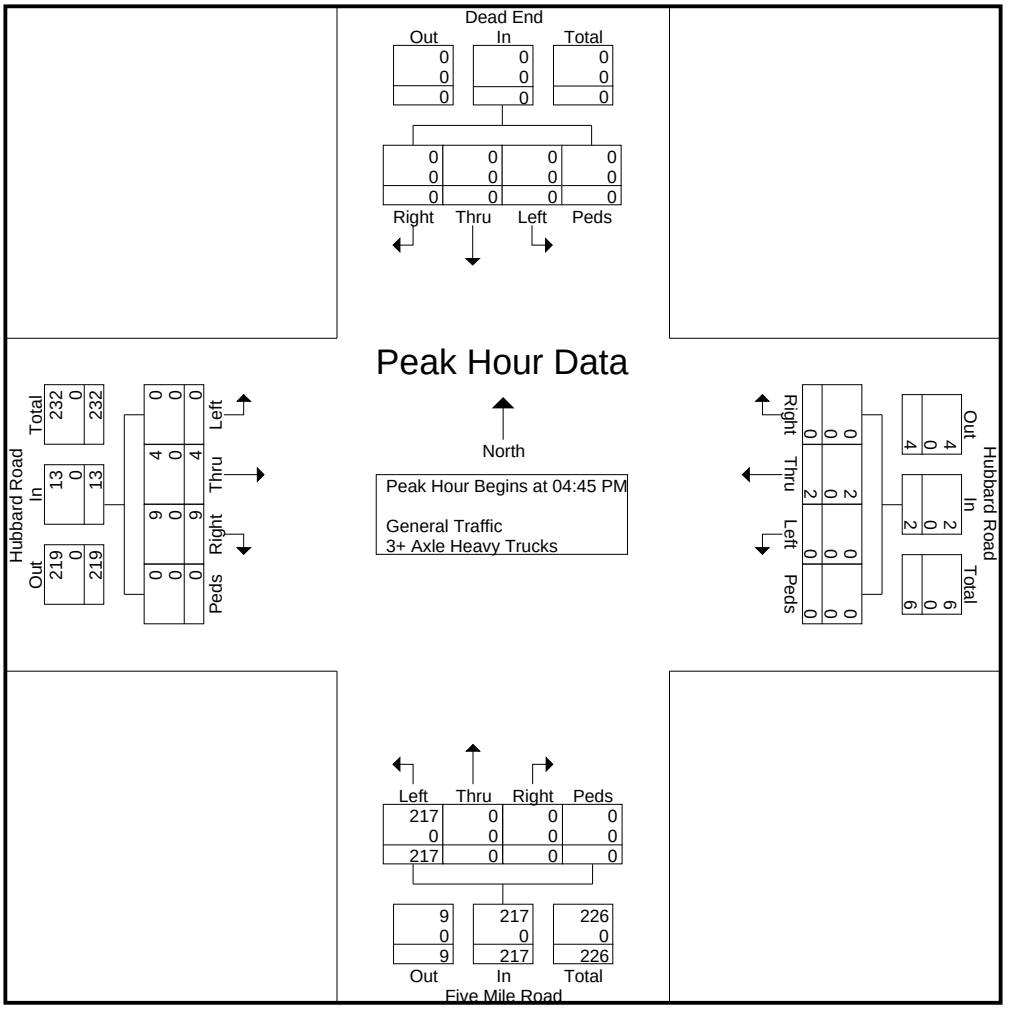
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Dead End From North | | | | | Hubbard Road From East | | | | | Five Mile Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 43 | **4** | **2** | 0 | 0 | **6** | 49 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 53 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 54 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | **62** | 0 | **62** | 2 | 1 | 0 | 0 | 3 | **66** |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 59 | 3 | 1 | 0 | 0 | 4 | 63 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 217 | 0 | 217 | 9 | 4 | 0 | 0 | 13 | 232 |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 100 | 0 | 0 | | 0 | 0 | 100 | 0 | | 69.2 | 30.8 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .500 | .000 | .000 | .500 | .000 | .000 | .875 | .000 | .875 | .563 | .500 | .000 | .000 | .542 | .879 |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 100 | 0 | 0 | 100 | 100 |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



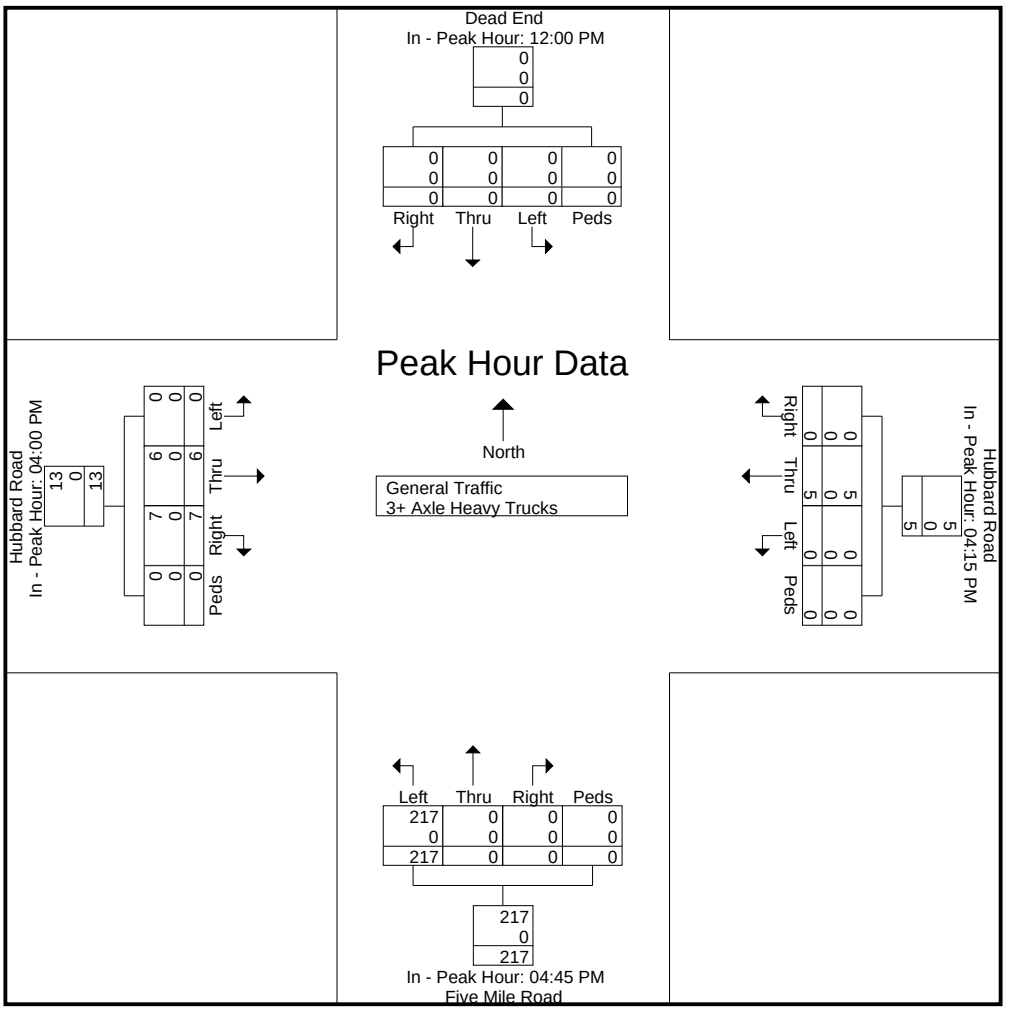
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Dead End From North | | | | | Hubbard Road From East | | | | | Five Mile Road From South | | | | | Hubbard Road From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 12:00 PM | | | | | 04:15 PM | | | | | 04:45 PM | | | | | 04:00 PM | | | | | |
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | 0 | **3** | 0 | 0 | 43 | 0 | 43 | 1 | 1 | 0 | 0 | 2 | |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 53 | 0 | 53 | 1 | **2** | 0 | 0 | 3 | |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **62** | 0 | **62** | 1 | 1 | 0 | 0 | 2 | |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 59 | 0 | 59 | **4** | 2 | 0 | 0 | **6** | |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 217 | 0 | 217 | 7 | 6 | 0 | 0 | 13 | |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 100 | 0 | 0 | | 0 | 0 | 100 | 0 | | 53.8 | 46.2 | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .417 | .000 | .000 | .417 | .000 | .000 | .875 | .000 | .875 | .438 | .750 | .000 | .000 | .542 | |
| General Traffic | | | | | | | | | | | | | | | | | | | | | |
| % General Traffic | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 100 | 0 | 0 | 100 | |
| 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Five Mile Rd & Hubbard Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

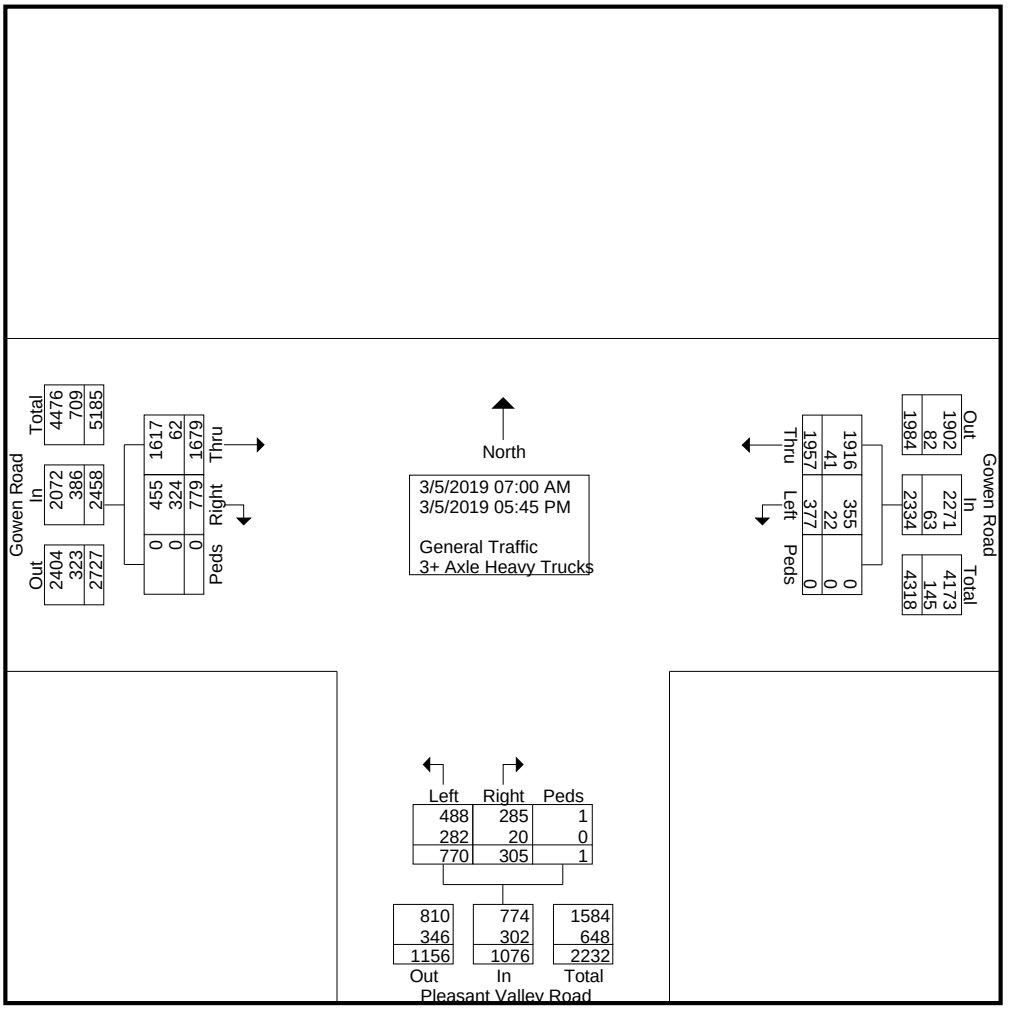
| | Gowen Road From East | | | | Pleasant Valley Road From South | | | | Gowen Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Thru | Left | Peds | App. Total | Right | Left | Peds | App. Total | Right | Thru | Peds | App. Total | Int. Total |
| 07:00 AM | 32 | 3 | 0 | 35 | 46 | 23 | 0 | 69 | 38 | 223 | 0 | 261 | 365 |
| 07:15 AM | 38 | 6 | 0 | 44 | 49 | 59 | 1 | 109 | 57 | 203 | 0 | 260 | 413 |
| 07:30 AM | 23 | 7 | 0 | 30 | 53 | 57 | 0 | 110 | 46 | 211 | 0 | 257 | 397 |
| 07:45 AM | 34 | 3 | 0 | 37 | 43 | 63 | 0 | 106 | 43 | 197 | 0 | 240 | 383 |
| Total | 127 | 19 | 0 | 146 | 191 | 202 | 1 | 394 | 184 | 834 | 0 | 1018 | 1558 |
| | | | | | | | | | | | | | |
| 08:00 AM | 43 | 4 | 0 | 47 | 20 | 56 | 0 | 76 | 42 | 128 | 0 | 170 | 293 |
| 08:15 AM | 47 | 7 | 0 | 54 | 23 | 34 | 0 | 57 | 39 | 122 | 0 | 161 | 272 |
| 08:30 AM | 37 | 8 | 0 | 45 | 16 | 41 | 0 | 57 | 51 | 99 | 0 | 150 | 252 |
| 08:45 AM | 37 | 4 | 0 | 41 | 14 | 47 | 0 | 61 | 42 | 108 | 0 | 150 | 252 |
| Total | 164 | 23 | 0 | 187 | 73 | 178 | 0 | 251 | 174 | 457 | 0 | 631 | 1069 |
| | | | | | | | | | | | | | |
| --- | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 04:00 PM | 190 | 26 | 0 | 216 | 12 | 35 | 0 | 47 | 24 | 33 | 0 | 57 | 320 |
| 04:15 PM | 250 | 35 | 0 | 285 | 5 | 42 | 0 | 47 | 52 | 51 | 0 | 103 | 435 |
| 04:30 PM | 245 | 43 | 0 | 288 | 3 | 59 | 0 | 62 | 35 | 55 | 0 | 90 | 440 |
| 04:45 PM | 229 | 40 | 0 | 269 | 6 | 48 | 0 | 54 | 49 | 49 | 0 | 98 | 421 |
| Total | 914 | 144 | 0 | 1058 | 26 | 184 | 0 | 210 | 160 | 188 | 0 | 348 | 1616 |
| | | | | | | | | | | | | | |
| 05:00 PM | 220 | 58 | 0 | 278 | 5 | 50 | 0 | 55 | 54 | 58 | 0 | 112 | 445 |
| 05:15 PM | 232 | 79 | 0 | 311 | 4 | 43 | 0 | 47 | 65 | 49 | 0 | 114 | 472 |
| 05:30 PM | 179 | 36 | 0 | 215 | 3 | 58 | 0 | 61 | 75 | 43 | 0 | 118 | 394 |
| 05:45 PM | 121 | 18 | 0 | 139 | 3 | 55 | 0 | 58 | 67 | 50 | 0 | 117 | 314 |
| Total | 752 | 191 | 0 | 943 | 15 | 206 | 0 | 221 | 261 | 200 | 0 | 461 | 1625 |
| | | | | | | | | | | | | | |
| Grand Total | 1957 | 377 | 0 | 2334 | 305 | 770 | 1 | 1076 | 779 | 1679 | 0 | 2458 | 5868 |
| Apprch % | 83.8 | 16.2 | 0 | | 28.3 | 71.6 | 0.1 | | 31.7 | 68.3 | 0 | | |
| Total % | 33.4 | 6.4 | 0 | 39.8 | 5.2 | 13.1 | 0 | 18.3 | 13.3 | 28.6 | 0 | 41.9 | |
| General Traffic | 1916 | 355 | 0 | 2271 | 285 | 488 | 1 | 774 | 455 | 1617 | 0 | 2072 | 5117 |
| % General Traffic | 97.9 | 94.2 | 0 | 97.3 | 93.4 | 63.4 | 100 | 71.9 | 58.4 | 96.3 | 0 | 84.3 | 87.2 |
| 3+ Axle Heavy Trucks | 41 | 22 | 0 | 63 | 20 | 282 | 0 | 302 | 324 | 62 | 0 | 386 | 751 |
| % 3+ Axle Heavy Trucks | 2.1 | 5.8 | 0 | 2.7 | 6.6 | 36.6 | 0 | 28.1 | 41.6 | 3.7 | 0 | 15.7 | 12.8 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



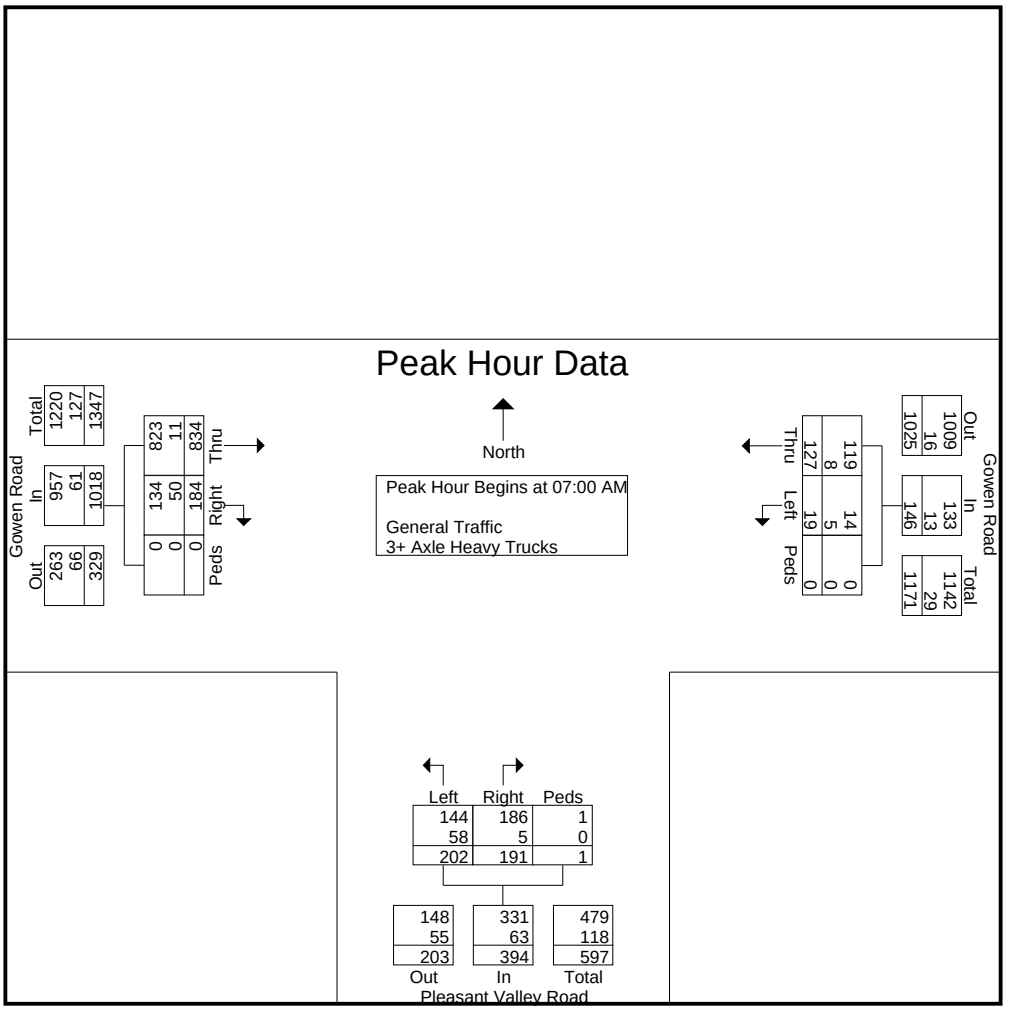
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Gowen Road From East | | | | Pleasant Valley Road From South | | | | Gowen Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | |
| 07:00 AM | 32 | 3 | 0 | 35 | 46 | 23 | 0 | 69 | 38 | **223** | 0 | **261** | 365 |
| 07:15 AM | **38** | 6 | 0 | **44** | 49 | 59 | **1** | 109 | **57** | 203 | 0 | 260 | **413** |
| 07:30 AM | 23 | **7** | 0 | 30 | **53** | 57 | 0 | **110** | 46 | 211 | 0 | 257 | 397 |
| 07:45 AM | 34 | 3 | 0 | 37 | 43 | **63** | 0 | 106 | 43 | 197 | 0 | 240 | 383 |
| Total Volume | 127 | 19 | 0 | 146 | 191 | 202 | 1 | 394 | 184 | 834 | 0 | 1018 | 1558 |
| % App. Total | 87 | 13 | 0 | | 48.5 | 51.3 | 0.3 | | 18.1 | 81.9 | 0 | | |
| PHF | .836 | .679 | .000 | .830 | .901 | .802 | .250 | .895 | .807 | .935 | .000 | .975 | .943 |
| General Traffic | 119 | 14 | 0 | 133 | 186 | 144 | 1 | 331 | 134 | 823 | 0 | 957 | 1421 |
| % General Traffic | 93.7 | 73.7 | 0 | 91.1 | 97.4 | 71.3 | 100 | 84.0 | 72.8 | 98.7 | 0 | 94.0 | 91.2 |
| 3+ Axle Heavy Trucks | 8 | 5 | 0 | 13 | 5 | 58 | 0 | 63 | 50 | 11 | 0 | 61 | 137 |
| % 3+ Axle Heavy Trucks | 6.3 | 26.3 | 0 | 8.9 | 2.6 | 28.7 | 0 | 16.0 | 27.2 | 1.3 | 0 | 6.0 | 8.8 |



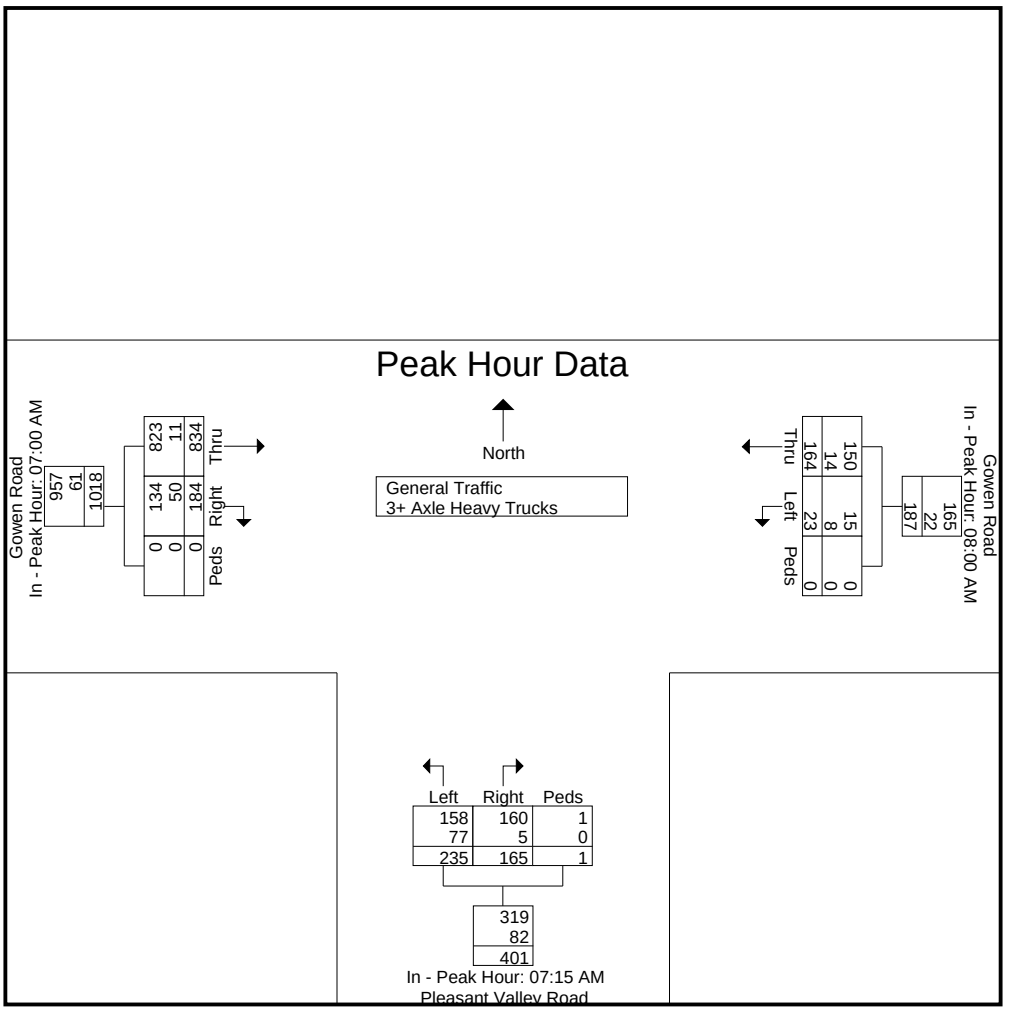
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Gowen Road From East | | | | Pleasant Valley Road From South | | | | Gowen Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 08:00 AM | | | | 07:15 AM | | | | 07:00 AM | | | | |
| +0 mins. | 43 | 4 | 0 | 47 | 49 | 59 | **1** | 109 | 38 | **223** | 0 | **261** | |
| +15 mins. | **47** | 7 | 0 | **54** | **53** | 57 | 0 | **110** | **57** | 203 | 0 | 260 | |
| +30 mins. | 37 | **8** | 0 | 45 | 43 | **63** | 0 | 106 | 46 | 211 | 0 | 257 | |
| +45 mins. | 37 | 4 | 0 | 41 | 20 | 56 | 0 | 76 | 43 | 197 | 0 | 240 | |
| Total Volume | 164 | 23 | 0 | 187 | 165 | 235 | 1 | 401 | 184 | 834 | 0 | 1018 | |
| % App. Total | 87.7 | 12.3 | 0 | | 41.1 | 58.6 | 0.2 | | 18.1 | 81.9 | 0 | | |
| PHF | .872 | .719 | .000 | .866 | .778 | .933 | .250 | .911 | .807 | .935 | .000 | .975 | |
| General Traffic | 150 | 15 | 0 | 165 | 160 | 158 | 1 | 319 | 134 | 823 | 0 | 957 | |
| % General Traffic | 91.5 | 65.2 | 0 | 88.2 | 97 | 67.2 | 100 | 79.6 | 72.8 | 98.7 | 0 | 94 | |
| 3+ Axle Heavy Trucks | 14 | 8 | 0 | 22 | 5 | 77 | 0 | 82 | 50 | 11 | 0 | 61 | |
| % 3+ Axle Heavy Trucks | 8.5 | 34.8 | 0 | 11.8 | 3 | 32.8 | 0 | 20.4 | 27.2 | 1.3 | 0 | 6 | |



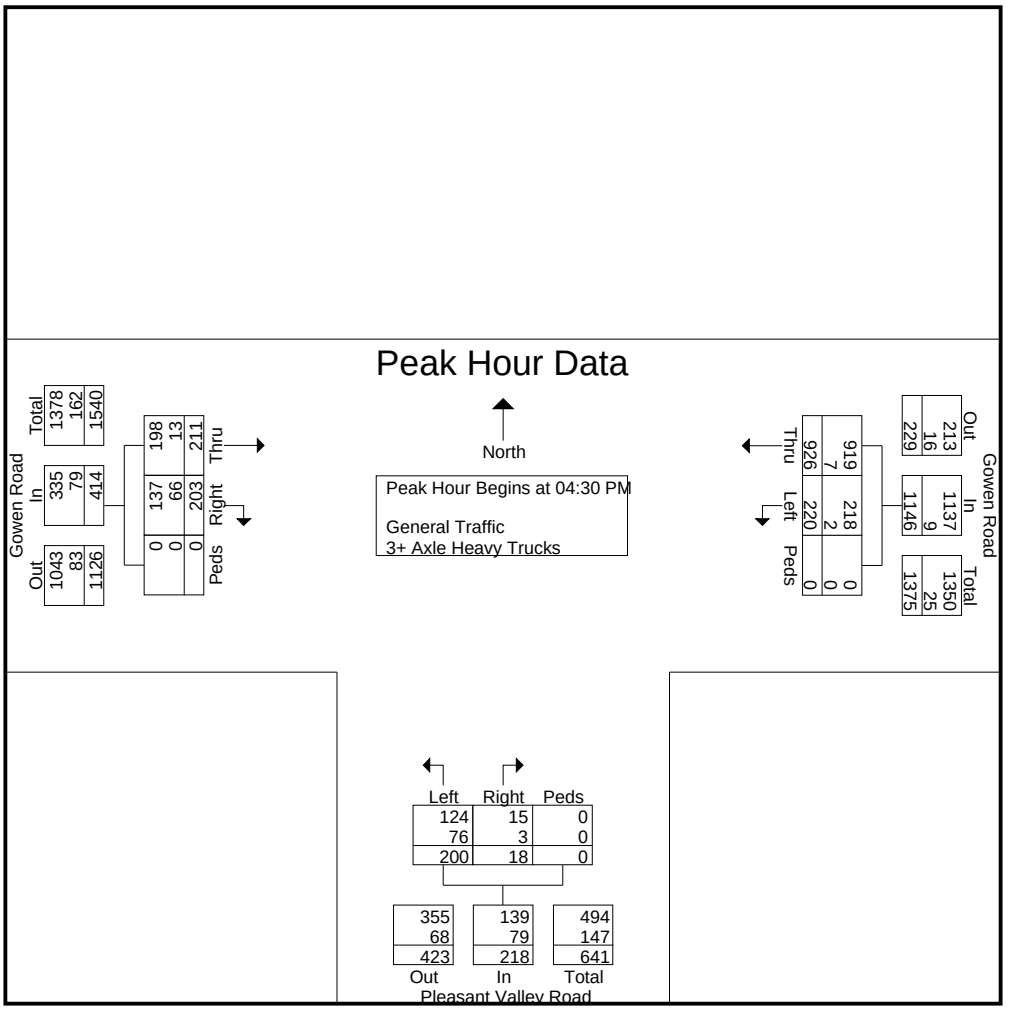
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Gowen Road From East | | | | Pleasant Valley Road From South | | | | Gowen Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | |
| 04:30 PM | **245** | 43 | 0 | 288 | 3 | **59** | 0 | **62** | 35 | 55 | 0 | 90 | 440 |
| 04:45 PM | 229 | 40 | 0 | 269 | **6** | 48 | 0 | 54 | 49 | 49 | 0 | 98 | 421 |
| 05:00 PM | 220 | 58 | 0 | 278 | 5 | 50 | 0 | 55 | 54 | **58** | 0 | 112 | 445 |
| 05:15 PM | 232 | **79** | 0 | **311** | 4 | 43 | 0 | 47 | **65** | 49 | 0 | **114** | **472** |
| Total Volume | 926 | 220 | 0 | 1146 | 18 | 200 | 0 | 218 | 203 | 211 | 0 | 414 | 1778 |
| % App. Total | 80.8 | 19.2 | 0 | | 8.3 | 91.7 | 0 | | 49 | 51 | 0 | | |
| PHF | .945 | .696 | .000 | .921 | .750 | .847 | .000 | .879 | .781 | .909 | .000 | .908 | .942 |
| General Traffic | 919 | 218 | 0 | 1137 | 15 | 124 | 0 | 139 | 137 | 198 | 0 | 335 | 1611 |
| % General Traffic | 99.2 | 99.1 | 0 | 99.2 | 83.3 | 62.0 | 0 | 63.8 | 67.5 | 93.8 | 0 | 80.9 | 90.6 |
| 3+ Axle Heavy Trucks | 7 | 2 | 0 | 9 | 3 | 76 | 0 | 79 | 66 | 13 | 0 | 79 | 167 |
| % 3+ Axle Heavy Trucks | 0.8 | 0.9 | 0 | 0.8 | 16.7 | 38.0 | 0 | 36.2 | 32.5 | 6.2 | 0 | 19.1 | 9.4 |



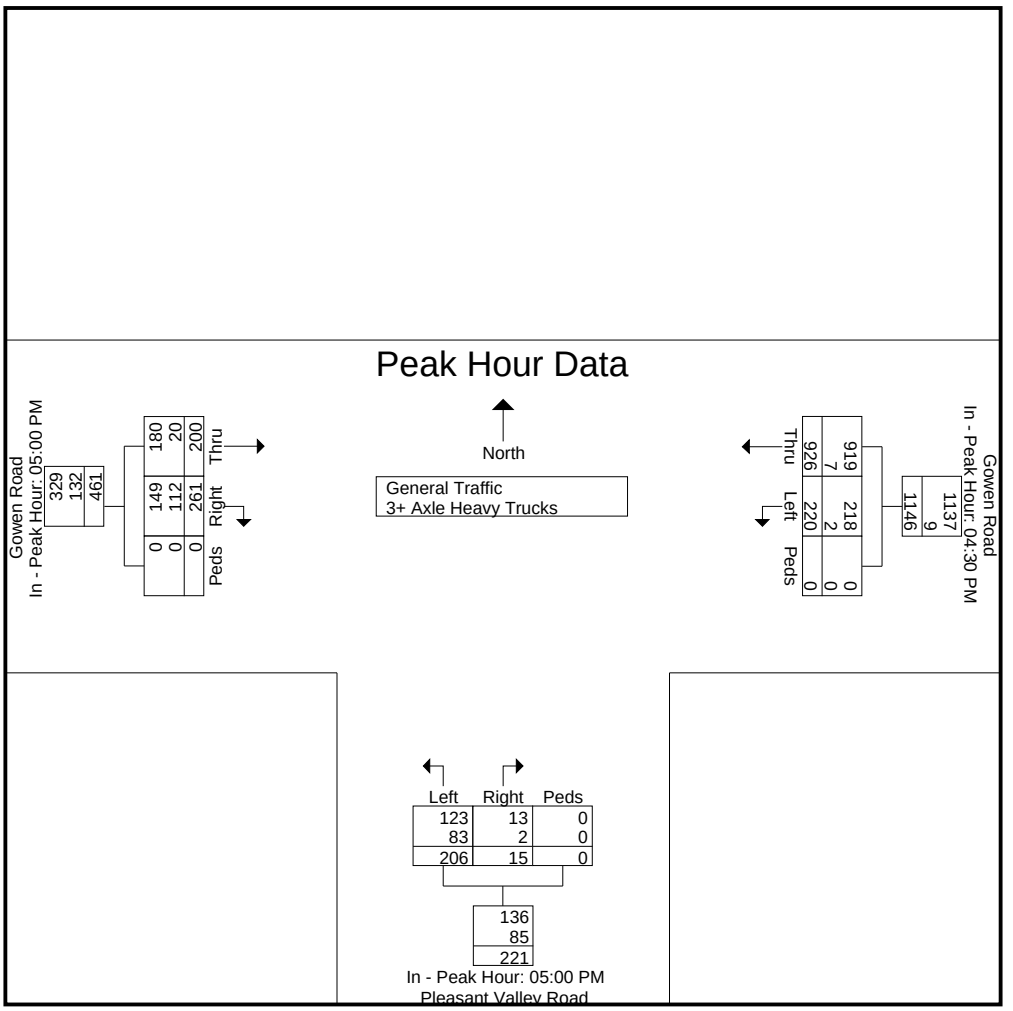
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Gowen Road From East | | | | Pleasant Valley Road From South | | | | Gowen Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Right** | **Thru** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 04:30 PM | | | | 05:00 PM | | | | 05:00 PM | | | | |
| +0 mins. | **245** | 43 | 0 | 288 | **5** | 50 | 0 | 55 | 54 | **58** | 0 | 112 | |
| +15 mins. | 229 | 40 | 0 | 269 | 4 | 43 | 0 | 47 | 65 | 49 | 0 | 114 | |
| +30 mins. | 220 | 58 | 0 | 278 | 3 | **58** | 0 | **61** | **75** | 43 | 0 | **118** | |
| +45 mins. | 232 | **79** | 0 | **311** | 3 | 55 | 0 | 58 | 67 | 50 | 0 | 117 | |
| Total Volume | 926 | 220 | 0 | 1146 | 15 | 206 | 0 | 221 | 261 | 200 | 0 | 461 | |
| % App. Total | 80.8 | 19.2 | 0 | | 6.8 | 93.2 | 0 | | 56.6 | 43.4 | 0 | | |
| PHF | .945 | .696 | .000 | .921 | .750 | .888 | .000 | .906 | .870 | .862 | .000 | .977 | |
| General Traffic | 919 | 218 | 0 | 1137 | 13 | 123 | 0 | 136 | 149 | 180 | 0 | 329 | |
| % General Traffic | 99.2 | 99.1 | 0 | 99.2 | 86.7 | 59.7 | 0 | 61.5 | 57.1 | 90 | 0 | 71.4 | |
| 3+ Axle Heavy Trucks | 7 | 2 | 0 | 9 | 2 | 83 | 0 | 85 | 112 | 20 | 0 | 132 | |
| % 3+ Axle Heavy Trucks | 0.8 | 0.9 | 0 | 0.8 | 13.3 | 40.3 | 0 | 38.5 | 42.9 | 10 | 0 | 28.6 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant Valley / Gowen Rd
City, State: Ada County, Idaho
Control: Signalized

File Name : Pleasant Valley Rd & Gowen Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 1

**Groups Printed- General Traffic - 3+ Axle Heavy Trucks**

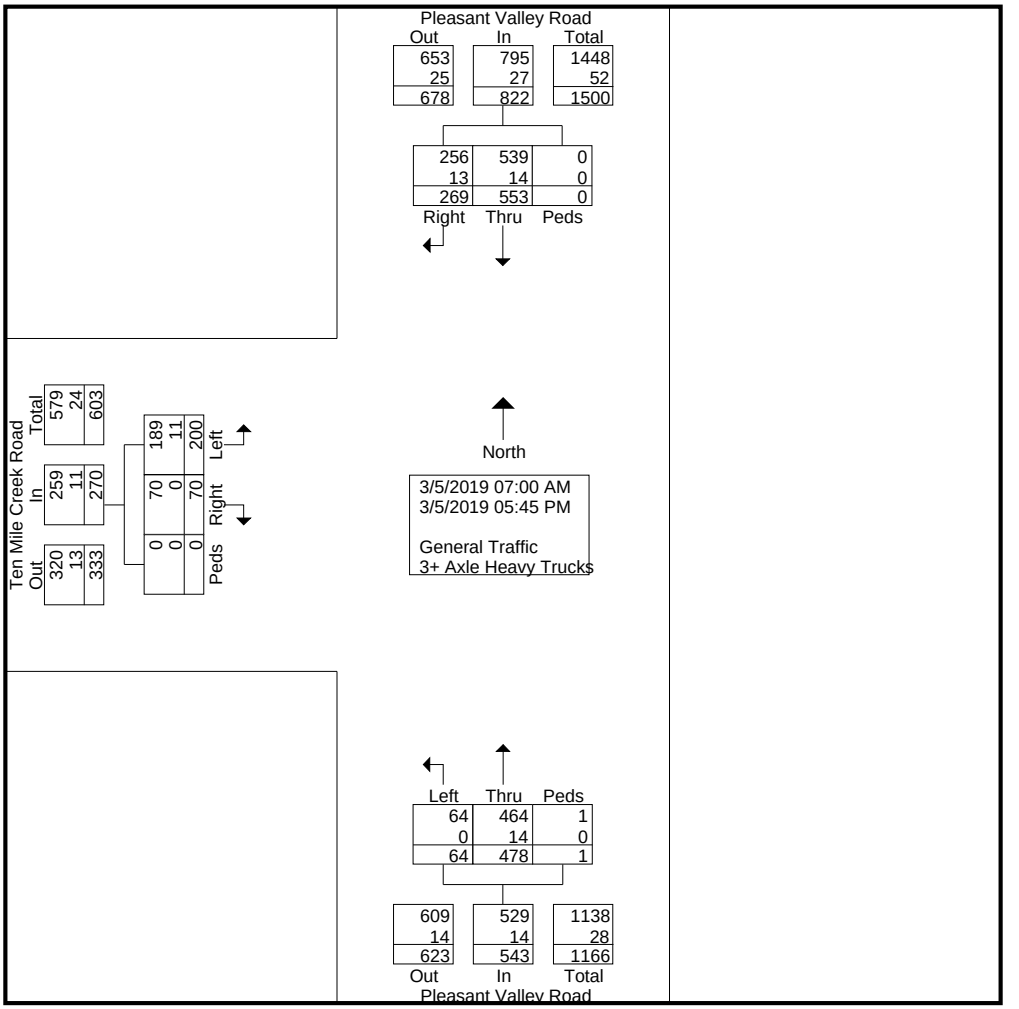
| | Pleasant Valley Road From North | | | | Pleasant Valley Road From South | | | | Ten Mile Creek Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Peds | App. Total | Thru | Left | Peds | App. Total | Right | Left | Peds | App. Total | Int. Total |
| 07:00 AM | 2 | 26 | 0 | 28 | 48 | 1 | 0 | 49 | 7 | 32 | 0 | 39 | 116 |
| 07:15 AM | 0 | 28 | 0 | 28 | 49 | 0 | 0 | 49 | 10 | 42 | 0 | 52 | 129 |
| 07:30 AM | 0 | 39 | 0 | 39 | 50 | 0 | 0 | 50 | 19 | 34 | 0 | 53 | 142 |
| 07:45 AM | 1 | 41 | 0 | 42 | 43 | 0 | 0 | 43 | 11 | 25 | 0 | 36 | 121 |
| Total | 3 | 134 | 0 | 137 | 190 | 1 | 0 | 191 | 47 | 133 | 0 | 180 | 508 |
| | | | | | | | | | | | | | |
| 08:00 AM | 0 | 22 | 0 | 22 | 33 | 0 | 0 | 33 | 8 | 25 | 0 | 33 | 88 |
| 08:15 AM | 3 | 18 | 0 | 21 | 21 | 0 | 0 | 21 | 2 | 15 | 0 | 17 | 59 |
| 08:30 AM | 3 | 16 | 0 | 19 | 15 | 1 | 0 | 16 | 4 | 10 | 0 | 14 | 49 |
| 08:45 AM | 4 | 18 | 0 | 22 | 13 | 0 | 0 | 13 | 3 | 11 | 0 | 14 | 49 |
| Total | 10 | 74 | 0 | 84 | 82 | 1 | 0 | 83 | 17 | 61 | 0 | 78 | 245 |
| | | | | | | | | | | | | | |
| --- | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 04:00 PM | 15 | 27 | 0 | 42 | 30 | 14 | 0 | 44 | 0 | 2 | 0 | 2 | 88 |
| 04:15 PM | 27 | 34 | 0 | 61 | 29 | 8 | 1 | 38 | 0 | 0 | 0 | 0 | 99 |
| 04:30 PM | 24 | 33 | 0 | 57 | 33 | 8 | 0 | 41 | 0 | 1 | 0 | 1 | 99 |
| 04:45 PM | 34 | 48 | 0 | 82 | 10 | 11 | 0 | 21 | 1 | 2 | 0 | 3 | 106 |
| Total | 100 | 142 | 0 | 242 | 102 | 41 | 1 | 144 | 1 | 5 | 0 | 6 | 392 |
| | | | | | | | | | | | | | |
| 05:00 PM | 37 | 33 | 0 | 70 | 29 | 10 | 0 | 39 | 0 | 1 | 0 | 1 | 110 |
| 05:15 PM | 64 | 68 | 0 | 132 | 23 | 7 | 0 | 30 | 1 | 0 | 0 | 1 | 163 |
| 05:30 PM | 35 | 52 | 0 | 87 | 27 | 3 | 0 | 30 | 3 | 0 | 0 | 3 | 120 |
| 05:45 PM | 20 | 50 | 0 | 70 | 25 | 1 | 0 | 26 | 1 | 0 | 0 | 1 | 97 |
| Total | 156 | 203 | 0 | 359 | 104 | 21 | 0 | 125 | 5 | 1 | 0 | 6 | 490 |
| | | | | | | | | | | | | | |
| Grand Total | 269 | 553 | 0 | 822 | 478 | 64 | 1 | 543 | 70 | 200 | 0 | 270 | 1635 |
| Apprch % | 32.7 | 67.3 | 0 | | 88 | 11.8 | 0.2 | | 25.9 | 74.1 | 0 | | |
| Total % | 16.5 | 33.8 | 0 | 50.3 | 29.2 | 3.9 | 0.1 | 33.2 | 4.3 | 12.2 | 0 | 16.5 | |
| General Traffic | 256 | 539 | 0 | 795 | 464 | 64 | 1 | 529 | 70 | 189 | 0 | 259 | 1583 |
| % General Traffic | 95.2 | 97.5 | 0 | 96.7 | 97.1 | 100 | 100 | 97.4 | 100 | 94.5 | 0 | 95.9 | 96.8 |
| 3+ Axle Heavy Trucks | 13 | 14 | 0 | 27 | 14 | 0 | 0 | 14 | 0 | 11 | 0 | 11 | 52 |
| % 3+ Axle Heavy Trucks | 4.8 | 2.5 | 0 | 3.3 | 2.9 | 0 | 0 | 2.6 | 0 | 5.5 | 0 | 4.1 | 3.2 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 2



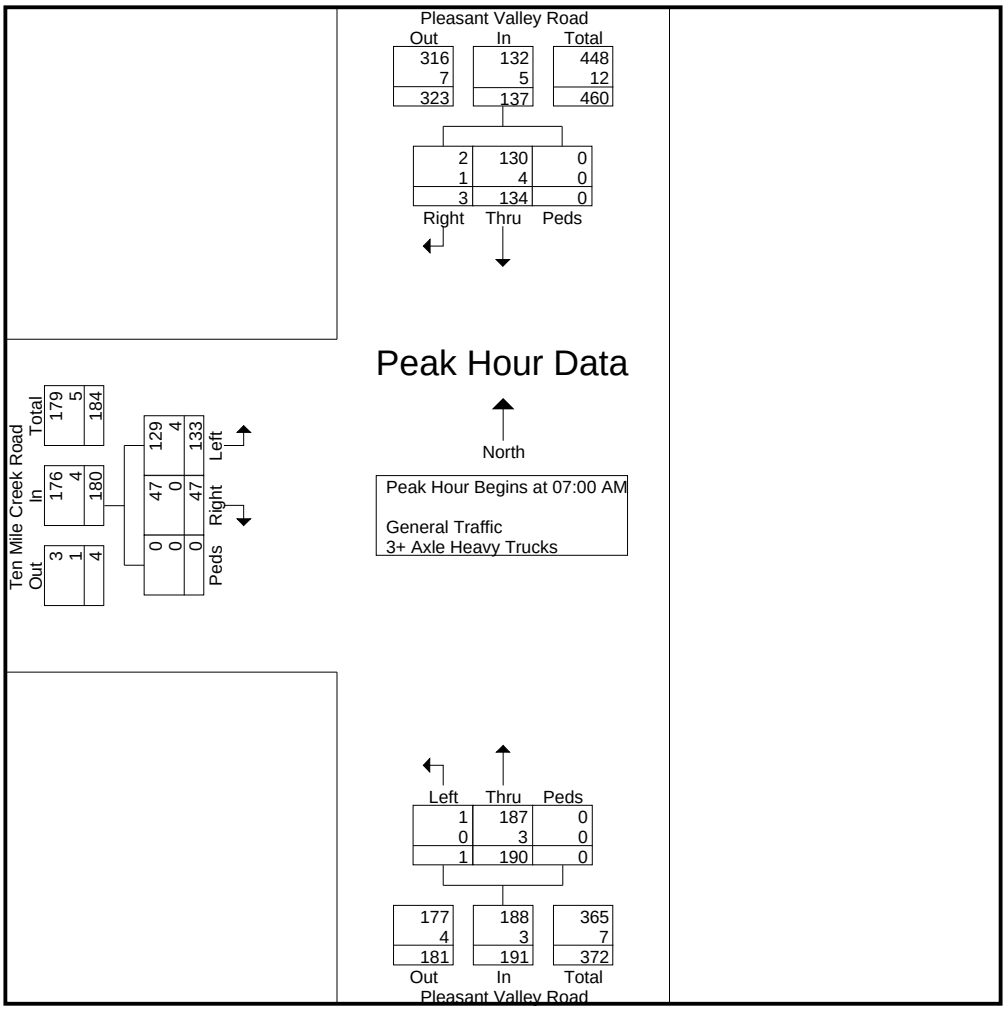
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 3

| | Pleasant Valley Road From North | | | | Pleasant Valley Road From South | | | | Ten Mile Creek Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Right** | **Thru** | **Peds** | **App. Total** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | |
| 07:00 AM | **2** | 26 | 0 | 28 | 48 | **1** | 0 | 49 | 7 | 32 | 0 | 39 | 116 |
| 07:15 AM | 0 | 28 | 0 | 28 | 49 | 0 | 0 | 49 | 10 | **42** | 0 | 52 | 129 |
| 07:30 AM | 0 | 39 | 0 | 39 | **50** | 0 | 0 | **50** | **19** | 34 | 0 | **53** | **142** |
| 07:45 AM | 1 | **41** | 0 | **42** | 43 | 0 | 0 | 43 | 11 | 25 | 0 | 36 | 121 |
| Total Volume | 3 | 134 | 0 | 137 | 190 | 1 | 0 | 191 | 47 | 133 | 0 | 180 | 508 |
| % App. Total | 2.2 | 97.8 | 0 | | 99.5 | 0.5 | 0 | | 26.1 | 73.9 | 0 | | |
| PHF | .375 | .817 | .000 | .815 | .950 | .250 | .000 | .955 | .618 | .792 | .000 | .849 | .894 |
| General Traffic | 2 | 130 | 0 | 132 | 187 | 1 | 0 | 188 | 47 | 129 | 0 | 176 | 496 |
| % General Traffic | 66.7 | 97.0 | 0 | 96.4 | 98.4 | 100 | 0 | 98.4 | 100 | 97.0 | 0 | 97.8 | 97.6 |
| 3+ Axle Heavy Trucks | 1 | 4 | 0 | 5 | 3 | 0 | 0 | 3 | 0 | 4 | 0 | 4 | 12 |
| % 3+ Axle Heavy Trucks | 33.3 | 3.0 | 0 | 3.6 | 1.6 | 0 | 0 | 1.6 | 0 | 3.0 | 0 | 2.2 | 2.4 |



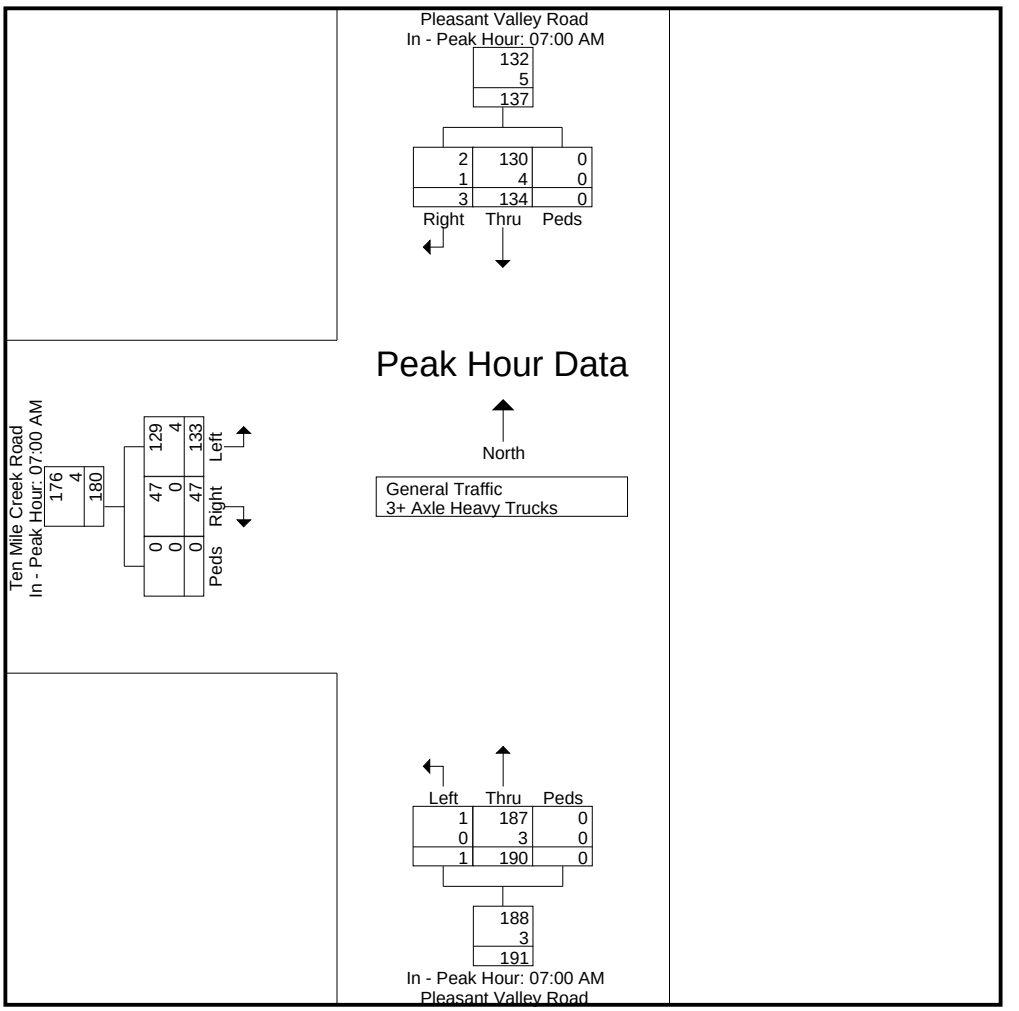
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 4

| | Pleasant Valley Road From North | | | | Pleasant Valley Road From South | | | | Ten Mile Creek Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Right** | **Thru** | **Peds** | **App. Total** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 07:00 AM | | | | 07:00 AM | | | | 07:00 AM | | | | |
| +0 mins. | **2** | 26 | 0 | 28 | 48 | **1** | 0 | 49 | 7 | 32 | 0 | 39 | |
| +15 mins. | 0 | 28 | 0 | 28 | 49 | 0 | 0 | 49 | 10 | **42** | 0 | 52 | |
| +30 mins. | 0 | 39 | 0 | 39 | **50** | 0 | 0 | **50** | **19** | 34 | 0 | **53** | |
| +45 mins. | 1 | **41** | 0 | **42** | 43 | 0 | 0 | 43 | 11 | 25 | 0 | 36 | |
| Total Volume | 3 | 134 | 0 | 137 | 190 | 1 | 0 | 191 | 47 | 133 | 0 | 180 | |
| % App. Total | 2.2 | 97.8 | 0 | | 99.5 | 0.5 | 0 | | 26.1 | 73.9 | 0 | | |
| PHF | .375 | .817 | .000 | .815 | .950 | .250 | .000 | .955 | .618 | .792 | .000 | .849 | |
| General Traffic | 2 | 130 | 0 | 132 | 187 | 1 | 0 | 188 | 47 | 129 | 0 | 176 | |
| % General Traffic | 66.7 | 97 | 0 | 96.4 | 98.4 | 100 | 0 | 98.4 | 100 | 97 | 0 | 97.8 | |
| 3+ Axle Heavy Trucks | 1 | 4 | 0 | 5 | 3 | 0 | 0 | 3 | 0 | 4 | 0 | 4 | |
| % 3+ Axle Heavy Trucks | 33.3 | 3 | 0 | 3.6 | 1.6 | 0 | 0 | 1.6 | 0 | 3 | 0 | 2.2 | |



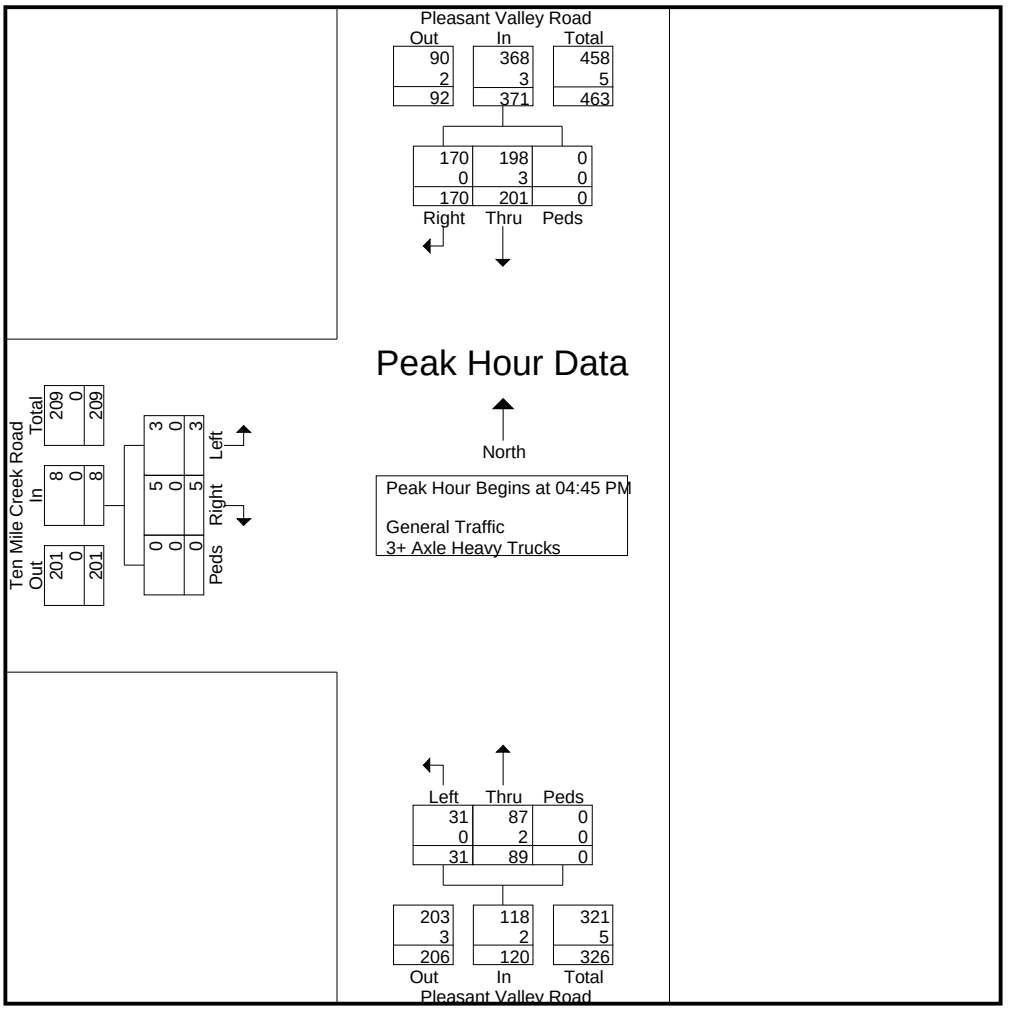
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 5

| | Pleasant Valley Road From North | | | | Pleasant Valley Road From South | | | | Ten Mile Creek Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Right** | **Thru** | **Peds** | **App. Total** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | |
| 04:45 PM | 34 | 48 | 0 | 82 | 10 | **11** | 0 | 21 | 1 | **2** | 0 | **3** | 106 |
| 05:00 PM | 37 | 33 | 0 | 70 | **29** | 10 | 0 | **39** | 0 | 1 | 0 | 1 | 110 |
| 05:15 PM | **64** | **68** | 0 | **132** | 23 | 7 | 0 | 30 | 1 | 0 | 0 | 1 | **163** |
| 05:30 PM | 35 | 52 | 0 | 87 | 27 | 3 | 0 | 30 | **3** | 0 | 0 | 3 | 120 |
| Total Volume | 170 | 201 | 0 | 371 | 89 | 31 | 0 | 120 | 5 | 3 | 0 | 8 | 499 |
| % App. Total | 45.8 | 54.2 | 0 | | 74.2 | 25.8 | 0 | | 62.5 | 37.5 | 0 | | |
| PHF | .664 | .739 | .000 | .703 | .767 | .705 | .000 | .769 | .417 | .375 | .000 | .667 | .765 |
| General Traffic | 170 | 198 | 0 | 368 | 87 | 31 | 0 | 118 | 5 | 3 | 0 | 8 | 494 |
| % General Traffic | 100 | 98.5 | 0 | 99.2 | 97.8 | 100 | 0 | 98.3 | 100 | 100 | 0 | 100 | 99.0 |
| 3+ Axle Heavy Trucks | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 5 |
| % 3+ Axle Heavy Trucks | 0 | 1.5 | 0 | 0.8 | 2.2 | 0 | 0 | 1.7 | 0 | 0 | 0 | 0 | 1.0 |



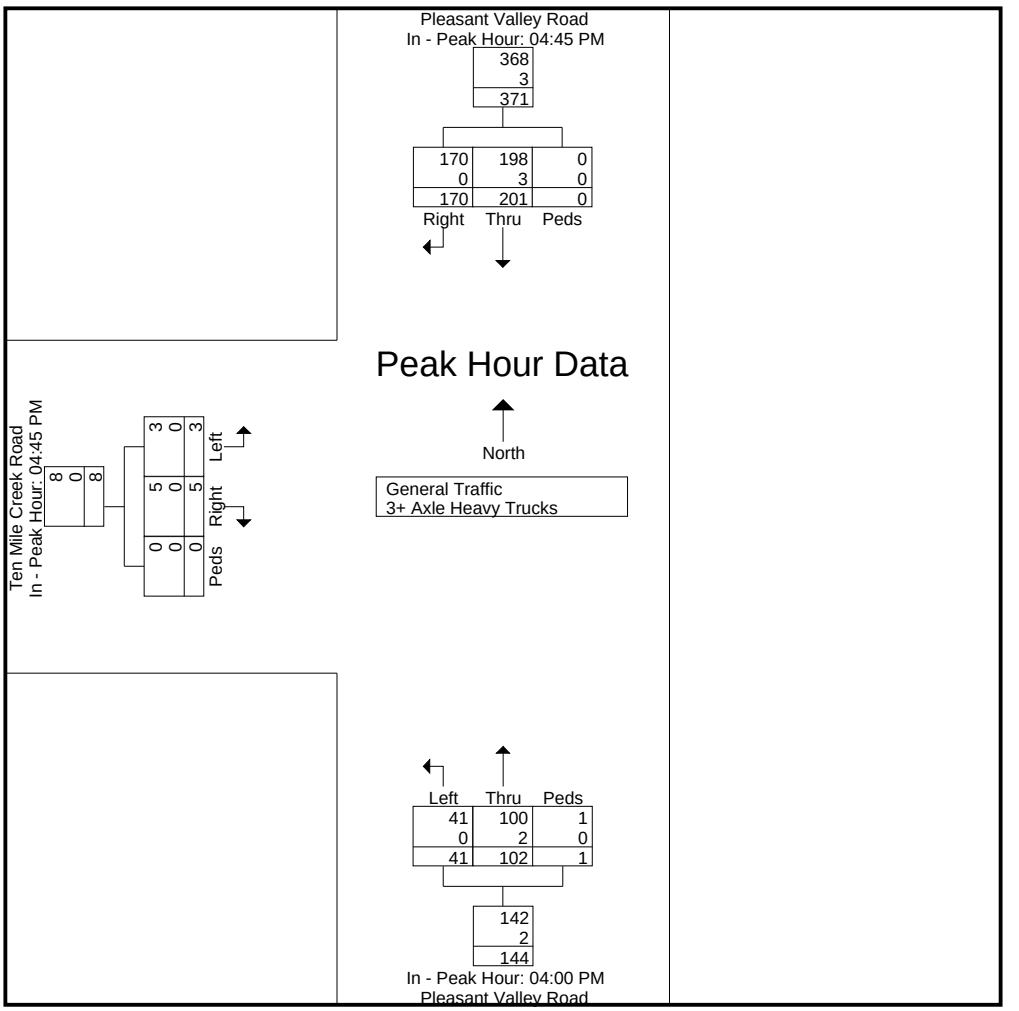
# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 6

| | Pleasant Valley Road From North | | | | Pleasant Valley Road From South | | | | Ten Mile Creek Road From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Start Time** | **Right** | **Thru** | **Peds** | **App. Total** | **Thru** | **Left** | **Peds** | **App. Total** | **Right** | **Left** | **Peds** | **App. Total** | **Int. Total** |
| **Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1** | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | |
| | 04:45 PM | | | | 04:00 PM | | | | 04:45 PM | | | | |
| +0 mins. | 34 | 48 | 0 | 82 | 30 | **14** | 0 | **44** | 1 | **2** | 0 | **3** | |
| +15 mins. | 37 | 33 | 0 | 70 | 29 | 8 | **1** | 38 | 0 | 1 | 0 | 1 | |
| +30 mins. | **64** | **68** | 0 | **132** | **33** | 8 | 0 | 41 | 1 | 0 | 0 | 1 | |
| +45 mins. | 35 | 52 | 0 | 87 | 10 | 11 | 0 | 21 | **3** | 0 | 0 | 3 | |
| Total Volume | 170 | 201 | 0 | 371 | 102 | 41 | 1 | 144 | 5 | 3 | 0 | 8 | |
| % App. Total | 45.8 | 54.2 | 0 | | 70.8 | 28.5 | 0.7 | | 62.5 | 37.5 | 0 | | |
| PHF | .664 | .739 | .000 | .703 | .773 | .732 | .250 | .818 | .417 | .375 | .000 | .667 | |
| General Traffic | 170 | 198 | 0 | 368 | 100 | 41 | 1 | 142 | 5 | 3 | 0 | 8 | |
| % General Traffic | 100 | 98.5 | 0 | 99.2 | 98 | 100 | 100 | 98.6 | 100 | 100 | 0 | 100 | |
| 3+ Axle Heavy Trucks | 0 | 3 | 0 | 3 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | |
| % 3+ Axle Heavy Trucks | 0 | 1.5 | 0 | 0.8 | 2 | 0 | 0 | 1.4 | 0 | 0 | 0 | 0 | |



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554  Utah (801) 431-2993

Study: CR0010
Intersection: Pleasant / Ten Mile Creek
City, State: Ada County, Idaho
Control: Stop Sign

File Name : Pleasant Valley Rd & Ten Mile Creek Rd
Site Code : 00000000
Start Date : 3/5/2019
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Columbia Rd b SH-69 & Locust Grove VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Columbia between SH-69 & Locust Grove Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | Total |
|---|---|---|---|---|
| 12:00 AM | | 0 | 2 | 2 |
| 12:15 | | 0 | 0 | 0 |
| 12:30 | | 0 | 1 | 1 |
| 12:45 | | 2 | 0 | 2 |
| 01:00 | | 1 | 1 | 2 |
| 01:15 | | 1 | 2 | 3 |
| 01:30 | | 1 | 0 | 1 |
| 01:45 | | 0 | 2 | 2 |
| 02:00 | | 0 | 0 | 0 |
| 02:15 | | 1 | 2 | 3 |
| 02:30 | | 1 | 1 | 2 |
| 02:45 | | 1 | 1 | 2 |
| 03:00 | | 0 | 0 | 0 |
| 03:15 | | 1 | 1 | 2 |
| 03:30 | | 0 | 1 | 1 |
| 03:45 | | 2 | 1 | 3 |
| 04:00 | | 3 | 2 | 5 |
| 04:15 | | 2 | 6 | 8 |
| 04:30 | | 1 | 2 | 3 |
| 04:45 | | 1 | 2 | 3 |
| 05:00 | | 3 | 5 | 8 |
| 05:15 | | 4 | 11 | 15 |
| 05:30 | | 7 | 18 | 25 |
| 05:45 | | 5 | 16 | 21 |
| 06:00 | | 8 | 29 | 37 |
| 06:15 | | 14 | 38 | 52 |
| 06:30 | | 12 | 49 | 61 |
| 06:45 | | 20 | 74 | 94 |
| 07:00 | | **39** | 55 | 94 |
| 07:15 | | **49** | **94** | **143** |
| 07:30 | | **36** | **108** | **144** |
| 07:45 | | **34** | **92** | **126** |
| 08:00 | | 39 | **88** | **127** |
| 08:15 | | 20 | 55 | 75 |
| 08:30 | | 26 | 54 | 80 |
| 08:45 | | 26 | 46 | 72 |
| 09:00 | | 20 | 28 | 48 |
| 09:15 | | 20 | 38 | 58 |
| 09:30 | | 10 | 20 | 30 |
| 09:45 | | 14 | 22 | 36 |
| 10:00 | | 18 | 24 | 42 |
| 10:15 | | 16 | 27 | 43 |
| 10:30 | | 17 | 20 | 37 |
| 10:45 | | 15 | 26 | 41 |
| 11:00 | | 12 | 17 | 29 |
| 11:15 | | 20 | 24 | 44 |
| 11:30 | | 22 | 16 | 38 |
| 11:45 | | 16 | 28 | 44 |
| Total | | 560 | 1149 | 1709 |
| Percent | | 32.8% | 67.2% | |
| Peak | - | 07:00 | 07:15 | 07:15 |
| Vol. | - | 158 | 382 | 540 |
| P.H.F. | | 0.806 | 0.884 | 0.938 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Columbia Rd b SH-69 & Locust Grove VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Columbia between SH-69 & Locust Grove Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | | 28 | 22 | | | | | | | 50 |
| 12:15 | | 22 | 22 | | | | | | | 44 |
| 12:30 | | 24 | 23 | | | | | | | 47 |
| 12:45 | | 21 | 13 | | | | | | | 34 |
| 01:00 | | 18 | 12 | | | | | | | 30 |
| 01:15 | | 20 | 34 | | | | | | | 54 |
| 01:30 | | 24 | 26 | | | | | | | 50 |
| 01:45 | | 27 | 27 | | | | | | | 54 |
| 02:00 | | 22 | 22 | | | | | | | 44 |
| 02:15 | | 24 | 22 | | | | | | | 46 |
| 02:30 | | 24 | 24 | | | | | | | 48 |
| 02:45 | | 34 | 24 | | | | | | | 58 |
| 03:00 | | 38 | 32 | | | | | | | 70 |
| 03:15 | | 44 | **32** | | | | | | | 76 |
| 03:30 | | 41 | **38** | | | | | | | 79 |
| 03:45 | | 33 | **34** | | | | | | | 67 |
| 04:00 | | 61 | **34** | | | | | | | 95 |
| 04:15 | | 67 | 32 | | | | | | | 99 |
| 04:30 | | 80 | 32 | | | | | | | 112 |
| 04:45 | | **74** | 28 | | | | | | | **102** |
| 05:00 | | **85** | 28 | | | | | | | **113** |
| 05:15 | | **93** | 26 | | | | | | | **119** |
| 05:30 | | **99** | 32 | | | | | | | **131** |
| 05:45 | | 72 | 22 | | | | | | | 94 |
| 06:00 | | 75 | 24 | | | | | | | 99 |
| 06:15 | | 36 | 28 | | | | | | | 64 |
| 06:30 | | 44 | 16 | | | | | | | 60 |
| 06:45 | | 32 | 25 | | | | | | | 57 |
| 07:00 | | 26 | 23 | | | | | | | 49 |
| 07:15 | | 15 | 14 | | | | | | | 29 |
| 07:30 | | 24 | 19 | | | | | | | 43 |
| 07:45 | | 15 | 6 | | | | | | | 21 |
| 08:00 | | 18 | 10 | | | | | | | 28 |
| 08:15 | | 13 | 12 | | | | | | | 25 |
| 08:30 | | 10 | 25 | | | | | | | 35 |
| 08:45 | | 12 | 12 | | | | | | | 24 |
| 09:00 | | 10 | 12 | | | | | | | 22 |
| 09:15 | | 18 | 11 | | | | | | | 29 |
| 09:30 | | 8 | 11 | | | | | | | 19 |
| 09:45 | | 6 | 9 | | | | | | | 15 |
| 10:00 | | 4 | 5 | | | | | | | 9 |
| 10:15 | | 8 | 11 | | | | | | | 19 |
| 10:30 | | 8 | 4 | | | | | | | 12 |
| 10:45 | | 3 | 5 | | | | | | | 8 |
| 11:00 | | 10 | 8 | | | | | | | 18 |
| 11:15 | | 2 | 1 | | | | | | | 3 |
| 11:30 | | 3 | 1 | | | | | | | 4 |
| 11:45 | | 2 | 3 | | | | | | | 5 |
| Total | | 1477 | 936 | | | | | | | 2413 |
| Percent | | 61.2% | 38.8% | | | | | | | |
| Peak | - | 16:45 | 15:15 | - | - | - | - | - | - | 16:45 |
| Vol. | - | 351 | 138 | - | - | - | - | - | - | 465 |
| P.H.F. | | 0.886 | 0.908 | | | | | | | 0.887 |
| Grand Total | | 2037 | 2085 | | | | | | | 4122 |
| Percent | | 49.4% | 50.6% | | | | | | | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b Locust Grove Rd & Eagle Rd VOL
Date Start: 05-Mar-19
Date End: 06-Mar-19
Kuna Rd between Locust G & Eagle Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | Total |
|---|---|---|---|---|
| 12:00 AM | | 1 | 4 | 5 |
| 12:15 | | 0 | 1 | 1 |
| 12:30 | | 1 | 2 | 3 |
| 12:45 | | 6 | 0 | 6 |
| 01:00 | | 3 | 0 | 3 |
| 01:15 | | 0 | 1 | 1 |
| 01:30 | | 0 | 1 | 1 |
| 01:45 | | 0 | 0 | 0 |
| 02:00 | | 1 | 10 | 11 |
| 02:15 | | 3 | 1 | 4 |
| 02:30 | | 7 | 2 | 9 |
| 02:45 | | 6 | 0 | 6 |
| 03:00 | | 2 | 1 | 3 |
| 03:15 | | 1 | 3 | 4 |
| 03:30 | | 0 | 5 | 5 |
| 03:45 | | 0 | 3 | 3 |
| 04:00 | | 2 | 2 | 4 |
| 04:15 | | 4 | 5 | 9 |
| 04:30 | | 3 | 16 | 19 |
| 04:45 | | 2 | 10 | 12 |
| 05:00 | | 9 | 22 | 31 |
| 05:15 | | 7 | 35 | 42 |
| 05:30 | | 8 | 60 | 68 |
| 05:45 | | 8 | 51 | 59 |
| 06:00 | | 6 | 40 | 46 |
| 06:15 | | 16 | 44 | 60 |
| 06:30 | | 13 | 48 | 61 |
| 06:45 | | 22 | 33 | 55 |
| 07:00 | | **26** | 34 | 60 |
| 07:15 | | **28** | **48** | **76** |
| 07:30 | | **41** | **70** | **111** |
| 07:45 | | **27** | **46** | **73** |
| 08:00 | | 18 | **52** | **70** |
| 08:15 | | 20 | 26 | 46 |
| 08:30 | | 18 | 34 | 52 |
| 08:45 | | 25 | 26 | 51 |
| 09:00 | | 17 | 10 | 27 |
| 09:15 | | 20 | 22 | 42 |
| 09:30 | | 10 | 20 | 30 |
| 09:45 | | 20 | 24 | 44 |
| 10:00 | | 17 | 20 | 37 |
| 10:15 | | 23 | 17 | 40 |
| 10:30 | | 22 | 23 | 45 |
| 10:45 | | 26 | 16 | 42 |
| 11:00 | | 24 | 17 | 41 |
| 11:15 | | 22 | 23 | 45 |
| 11:30 | | 19 | 10 | 29 |
| 11:45 | | 32 | 20 | 52 |
| Total | | 586 | 958 | 1544 |
| Percent | | 38.0% | 62.0% | |
| Peak | - | 07:00 | 07:15 | 07:15 |
| Vol. | - | 122 | 216 | 330 |
| P.H.F. | | 0.744 | 0.771 | 0.743 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b Locust Grove Rd & Eagle Rd VOL
Date Start: 05-Mar-19
Date End: 06-Mar-19
Kuna Rd between Locust G & Eagle Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | Total |
|---|---|---|---|---|
| 12:00 PM | | 24 | 20 | 44 |
| 12:15 | | 22 | 30 | 52 |
| 12:30 | | 14 | 24 | 38 |
| 12:45 | | 20 | 35 | 55 |
| 01:00 | | 18 | 26 | 44 |
| 01:15 | | 30 | 23 | 53 |
| 01:30 | | 30 | 22 | 52 |
| 01:45 | | 33 | 20 | 53 |
| 02:00 | | 22 | 24 | 46 |
| 02:15 | | 24 | 27 | 51 |
| 02:30 | | 37 | 22 | 59 |
| 02:45 | | 30 | 28 | 58 |
| 03:00 | | 34 | 30 | 64 |
| 03:15 | | 28 | 32 | 60 |
| 03:30 | | 30 | 34 | 64 |
| 03:45 | | 37 | 27 | 64 |
| 04:00 | | 34 | 32 | 66 |
| 04:15 | | 37 | 31 | 68 |
| 04:30 | | 47 | 29 | 76 |
| 04:45 | | 66 | **31** | **97** |
| 05:00 | | 60 | **38** | **98** |
| 05:15 | | **69** | **31** | **100** |
| 05:30 | | **65** | **30** | **95** |
| 05:45 | | **64** | 22 | 86 |
| 06:00 | | **68** | 30 | 98 |
| 06:15 | | 32 | 23 | 55 |
| 06:30 | | 39 | 18 | 57 |
| 06:45 | | 72 | 22 | 94 |
| 07:00 | | 38 | 23 | 61 |
| 07:15 | | 14 | 14 | 28 |
| 07:30 | | 24 | 18 | 42 |
| 07:45 | | 15 | 8 | 23 |
| 08:00 | | 10 | 18 | 28 |
| 08:15 | | 14 | 11 | 25 |
| 08:30 | | 2 | 21 | 23 |
| 08:45 | | 4 | 15 | 19 |
| 09:00 | | 1 | 7 | 8 |
| 09:15 | | 11 | 12 | 23 |
| 09:30 | | 6 | 11 | 17 |
| 09:45 | | 4 | 13 | 17 |
| 10:00 | | 0 | 6 | 6 |
| 10:15 | | 4 | 1 | 5 |
| 10:30 | | 3 | 8 | 11 |
| 10:45 | | 5 | 3 | 8 |
| 11:00 | | 6 | 3 | 9 |
| 11:15 | | 2 | 3 | 5 |
| 11:30 | | 3 | 0 | 3 |
| 11:45 | | 2 | 1 | 3 |
| Total | | 1254 | 957 | 2211 |
| Percent | | 56.7% | 43.3% | |
| Peak | - | 17:15 | 16:45 | 16:45 |
| Vol. | - | 266 | 130 | 390 |
| P.H.F. | | 0.964 | 0.855 | 0.975 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b Locust Grove Rd & Eagle Rd VOL
Date Start: 05-Mar-19
Date End: 06-Mar-19
Kuna Rd between Locust G & Eagle Rd
Ada County, Idaho

| Start Time | 06-Mar-19 Wed | WB | EB | Total |
|---|---|---|---|---|
| 12:00 AM | | 1 | 4 | 5 |
| 12:15 | | 0 | 1 | 1 |
| 12:30 | | 1 | 2 | 3 |
| 12:45 | | 6 | 0 | 6 |
| 01:00 | | 0 | 1 | 1 |
| 01:15 | | 0 | 1 | 1 |
| 01:30 | | 0 | 0 | 0 |
| 01:45 | | 0 | 8 | 8 |
| 02:00 | | 0 | 4 | 4 |
| 02:15 | | 0 | 1 | 1 |
| 02:30 | | 4 | 1 | 5 |
| 02:45 | | 9 | 1 | 10 |
| 03:00 | | 2 | 0 | 2 |
| 03:15 | | 0 | 4 | 4 |
| 03:30 | | 1 | 4 | 5 |
| 03:45 | | 0 | 3 | 3 |
| 04:00 | | 2 | 3 | 5 |
| 04:15 | | 6 | 9 | 15 |
| 04:30 | | 4 | 15 | 19 |
| 04:45 | | 2 | 16 | 18 |
| 05:00 | | 8 | 10 | 18 |
| 05:15 | | 9 | 30 | 39 |
| 05:30 | | 10 | 53 | 63 |
| 05:45 | | 10 | 53 | 63 |
| 06:00 | | 6 | 46 | 52 |
| 06:15 | | 12 | 43 | 55 |
| 06:30 | | 16 | 40 | 56 |
| 06:45 | | **30** | 32 | 62 |
| 07:00 | | **23** | **42** | **65** |
| 07:15 | | **39** | **61** | **100** |
| 07:30 | | **35** | **60** | **95** |
| 07:45 | | 28 | **42** | **70** |
| 08:00 | | 18 | 34 | 52 |
| 08:15 | | 18 | 46 | 64 |
| 08:30 | | 19 | 38 | 57 |
| 08:45 | | 26 | 18 | 44 |
| 09:00 | | 9 | 24 | 33 |
| 09:15 | | 18 | 12 | 30 |
| 09:30 | | 13 | 18 | 31 |
| 09:45 | | 22 | 24 | 46 |
| 10:00 | | 28 | 13 | 41 |
| 10:15 | | 16 | 13 | 29 |
| 10:30 | | 16 | 20 | 36 |
| 10:45 | | 20 | 22 | 42 |
| 11:00 | | 16 | 18 | 34 |
| 11:15 | | 24 | 18 | 42 |
| 11:30 | | 28 | 18 | 46 |
| 11:45 | | 24 | 12 | 36 |
| Total | | 579 | 938 | 1517 |
| Percent | | 38.2% | 61.8% | |
| Peak | - | 06:45 | 07:00 | 07:00 |
| Vol. | - | 127 | 205 | 330 |
| P.H.F. | | 0.814 | 0.840 | 0.825 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b Locust Grove Rd & Eagle Rd VOL
Date Start: 05-Mar-19
Date End: 06-Mar-19
Kuna Rd between Locust G & Eagle Rd
Ada County, Idaho

| Start Time | 06-Mar-19 Wed | WB | EB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | | 16 | 21 | | | | | | | 37 |
| 12:15 | | 17 | 27 | | | | | | | 44 |
| 12:30 | | 24 | 26 | | | | | | | 50 |
| 12:45 | | 14 | 31 | | | | | | | 45 |
| 01:00 | | 22 | 28 | | | | | | | 50 |
| 01:15 | | 34 | 18 | | | | | | | 52 |
| 01:30 | | 30 | 22 | | | | | | | 52 |
| 01:45 | | 25 | 23 | | | | | | | 48 |
| 02:00 | | 31 | 24 | | | | | | | 55 |
| 02:15 | | 31 | 29 | | | | | | | 60 |
| 02:30 | | 22 | 26 | | | | | | | 48 |
| 02:45 | | 26 | 22 | | | | | | | 48 |
| 03:00 | | 24 | 28 | | | | | | | 52 |
| 03:15 | | 20 | 28 | | | | | | | 48 |
| 03:30 | | 28 | 28 | | | | | | | 56 |
| 03:45 | | 37 | 26 | | | | | | | 63 |
| 04:00 | | 41 | 27 | | | | | | | 68 |
| 04:15 | | 50 | **40** | | | | | | | 90 |
| 04:30 | | 46 | **32** | | | | | | | 78 |
| 04:45 | | 58 | **30** | | | | | | | **88** |
| 05:00 | | **54** | **34** | | | | | | | **88** |
| 05:15 | | **59** | 24 | | | | | | | **83** |
| 05:30 | | **65** | 28 | | | | | | | **93** |
| 05:45 | | **66** | 22 | | | | | | | 88 |
| 06:00 | | 45 | 30 | | | | | | | 75 |
| 06:15 | | 52 | 23 | | | | | | | 75 |
| 06:30 | | 39 | 26 | | | | | | | 65 |
| 06:45 | | 39 | 20 | | | | | | | 59 |
| 07:00 | | 32 | 15 | | | | | | | 47 |
| 07:15 | | 34 | 18 | | | | | | | 52 |
| 07:30 | | 30 | 14 | | | | | | | 44 |
| 07:45 | | 10 | 12 | | | | | | | 22 |
| 08:00 | | 11 | 14 | | | | | | | 25 |
| 08:15 | | 13 | 12 | | | | | | | 25 |
| 08:30 | | 10 | 18 | | | | | | | 28 |
| 08:45 | | 12 | 19 | | | | | | | 31 |
| 09:00 | | 8 | 12 | | | | | | | 20 |
| 09:15 | | 7 | 20 | | | | | | | 27 |
| 09:30 | | 5 | 5 | | | | | | | 10 |
| 09:45 | | 10 | 6 | | | | | | | 16 |
| 10:00 | | 1 | 4 | | | | | | | 5 |
| 10:15 | | 4 | 6 | | | | | | | 10 |
| 10:30 | | 7 | 4 | | | | | | | 11 |
| 10:45 | | 5 | 6 | | | | | | | 11 |
| 11:00 | | 3 | 10 | | | | | | | 13 |
| 11:15 | | 3 | 5 | | | | | | | 8 |
| 11:30 | | 1 | 0 | | | | | | | 1 |
| 11:45 | | 4 | 5 | | | | | | | 9 |
| Total | | 1225 | 948 | | | | | | | 2173 |
| Percent | | 56.4% | 43.6% | | | | | | | |
| Peak | - | 17:00 | 16:15 | - | - | - | - | - | - | 16:45 |
| Vol. | - | 244 | 136 | - | - | - | - | - | - | 352 |
| P.H.F. | | 0.924 | 0.850 | | | | | | | 0.946 |
| Grand Total | | 3644 | 3801 | | | | | | | 7445 |
| Percent | | 48.9% | 51.1% | | | | | | | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b SH-69 & Locust Grove Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Kuna Rd between SH-69 & Locust Grove Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | Total |
|---|---|---|---|---|
| 12:00 AM | | 2 | 0 | 2 |
| 12:15 | | 1 | 4 | 5 |
| 12:30 | | 2 | 3 | 5 |
| 12:45 | | 1 | 1 | 2 |
| 01:00 | | 5 | 0 | 5 |
| 01:15 | | 0 | 1 | 1 |
| 01:30 | | 0 | 1 | 1 |
| 01:45 | | 0 | 1 | 1 |
| 02:00 | | 2 | 9 | 11 |
| 02:15 | | 2 | 0 | 2 |
| 02:30 | | 8 | 2 | 10 |
| 02:45 | | 4 | 0 | 4 |
| 03:00 | | 4 | 1 | 5 |
| 03:15 | | 0 | 4 | 4 |
| 03:30 | | 2 | 4 | 6 |
| 03:45 | | 0 | 3 | 3 |
| 04:00 | | 2 | 2 | 4 |
| 04:15 | | 4 | 6 | 10 |
| 04:30 | | 2 | 15 | 17 |
| 04:45 | | 6 | 13 | 19 |
| 05:00 | | 11 | 22 | 33 |
| 05:15 | | 10 | 36 | 46 |
| 05:30 | | 10 | 60 | 70 |
| 05:45 | | 12 | 45 | 57 |
| 06:00 | | 8 | 46 | 54 |
| 06:15 | | 20 | 43 | 63 |
| 06:30 | | 20 | 49 | 69 |
| 06:45 | | 32 | 30 | 62 |
| 07:00 | | **32** | 38 | 70 |
| 07:15 | | **40** | **50** | **90** |
| 07:30 | | **54** | **74** | **128** |
| 07:45 | | **34** | **44** | **78** |
| 08:00 | | 32 | **48** | **80** |
| 08:15 | | 24 | 36 | 60 |
| 08:30 | | 29 | 38 | 67 |
| 08:45 | | 30 | 27 | 57 |
| 09:00 | | 20 | 14 | 34 |
| 09:15 | | 19 | 24 | 43 |
| 09:30 | | 12 | 27 | 39 |
| 09:45 | | 26 | 28 | 54 |
| 10:00 | | 16 | 21 | 37 |
| 10:15 | | 28 | 18 | 46 |
| 10:30 | | 26 | 19 | 45 |
| 10:45 | | 28 | 20 | 48 |
| 11:00 | | 30 | 21 | 51 |
| 11:15 | | 30 | 22 | 52 |
| 11:30 | | 26 | 22 | 48 |
| 11:45 | | 38 | 22 | 60 |
| Total | | 744 | 1014 | 1758 |
| Percent | | 42.3% | 57.7% | |
| Peak | - | 07:00 | 07:15 | 07:15 |
| Vol. | - | 160 | 216 | 376 |
| P.H.F. | | 0.741 | 0.730 | 0.734 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Kuna Rd b SH-69 & Locust Grove Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Kuna Rd between SH-69 & Locust Grove Rd
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | WB | EB | Total |
|---|---|---|---|---|
| 12:00 PM | | 31 | 27 | 58 |
| 12:15 | | 30 | 30 | 60 |
| 12:30 | | 19 | 26 | 45 |
| 12:45 | | 29 | 40 | 69 |
| 01:00 | | 24 | 31 | 55 |
| 01:15 | | 36 | 32 | 68 |
| 01:30 | | 30 | 28 | 58 |
| 01:45 | | 40 | 26 | 66 |
| 02:00 | | 28 | 28 | 56 |
| 02:15 | | 30 | 32 | 62 |
| 02:30 | | 44 | 33 | 77 |
| 02:45 | | 40 | 32 | 72 |
| 03:00 | | 39 | **44** | 83 |
| 03:15 | | 37 | **37** | 74 |
| 03:30 | | 38 | **48** | 86 |
| 03:45 | | 44 | **42** | 86 |
| 04:00 | | 42 | 40 | 82 |
| 04:15 | | 40 | 38 | 78 |
| 04:30 | | 56 | 37 | 93 |
| 04:45 | | 68 | 38 | 106 |
| 05:00 | | 68 | 41 | **109** |
| 05:15 | | **69** | 39 | **108** |
| 05:30 | | **73** | 50 | **123** |
| 05:45 | | **82** | 28 | **110** |
| 06:00 | | **70** | 35 | 105 |
| 06:15 | | 40 | 30 | 70 |
| 06:30 | | 36 | 28 | 64 |
| 06:45 | | 86 | 34 | 120 |
| 07:00 | | 44 | 30 | 74 |
| 07:15 | | 18 | 25 | 43 |
| 07:30 | | 26 | 16 | 42 |
| 07:45 | | 20 | 12 | 32 |
| 08:00 | | 14 | 19 | 33 |
| 08:15 | | 13 | 16 | 29 |
| 08:30 | | 12 | 32 | 44 |
| 08:45 | | 4 | 22 | 26 |
| 09:00 | | 2 | 17 | 19 |
| 09:15 | | 12 | 16 | 28 |
| 09:30 | | 8 | 14 | 22 |
| 09:45 | | 5 | 14 | 19 |
| 10:00 | | 0 | 16 | 16 |
| 10:15 | | 5 | 2 | 7 |
| 10:30 | | 2 | 8 | 10 |
| 10:45 | | 6 | 4 | 10 |
| 11:00 | | 7 | 4 | 11 |
| 11:15 | | 3 | 4 | 7 |
| 11:30 | | 4 | 0 | 4 |
| 11:45 | | 3 | 2 | 5 |
| Total | | 1477 | 1247 | 2724 |
| Percent | | 54.2% | 45.8% | |
| Peak | - | 17:15 | 15:00 | 17:00 |
| Vol. | - | 294 | 171 | 450 |
| P.H.F. | | 0.896 | 0.891 | 0.915 |
| Grand Total | | 2221 | 2261 | 4482 |
| Percent | | 49.6% | 50.4% | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Cloverdale b Amity Rd & Lake Hazel Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Cloverdale Rd between Amity & Lake Hazel
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | SB | NB | Total |
|---|---|---|---|---|
| 12:00 AM | | 6 | 2 | 8 |
| 12:15 | | 6 | 2 | 8 |
| 12:30 | | 4 | 5 | 9 |
| 12:45 | | 3 | 2 | 5 |
| 01:00 | | 1 | 2 | 3 |
| 01:15 | | 1 | 1 | 2 |
| 01:30 | | 3 | 4 | 7 |
| 01:45 | | 3 | 2 | 5 |
| 02:00 | | 4 | 2 | 6 |
| 02:15 | | 6 | 4 | 10 |
| 02:30 | | 1 | 1 | 2 |
| 02:45 | | 2 | 3 | 5 |
| 03:00 | | 2 | 2 | 4 |
| 03:15 | | 1 | 1 | 2 |
| 03:30 | | 6 | 2 | 8 |
| 03:45 | | 6 | 5 | 11 |
| 04:00 | | 5 | 7 | 12 |
| 04:15 | | 3 | 5 | 8 |
| 04:30 | | 6 | 9 | 15 |
| 04:45 | | 2 | 16 | 18 |
| 05:00 | | 3 | 16 | 19 |
| 05:15 | | 12 | 24 | 36 |
| 05:30 | | 16 | 37 | 53 |
| 05:45 | | 22 | 25 | 47 |
| 06:00 | | 26 | 50 | 76 |
| 06:15 | | 19 | 81 | 100 |
| 06:30 | | 20 | 100 | 120 |
| 06:45 | | 14 | 106 | 120 |
| 07:00 | | 30 | **150** | 180 |
| 07:15 | | 36 | **160** | **196** |
| 07:30 | | 44 | **150** | **194** |
| 07:45 | | 44 | **155** | **199** |
| 08:00 | | 48 | 142 | **190** |
| 08:15 | | 42 | 122 | 164 |
| 08:30 | | 36 | 90 | 126 |
| 08:45 | | 57 | 106 | 163 |
| 09:00 | | 58 | 104 | 162 |
| 09:15 | | 27 | 70 | 97 |
| 09:30 | | 38 | 53 | 91 |
| 09:45 | | 44 | 74 | 118 |
| 10:00 | | 46 | 46 | 92 |
| 10:15 | | 28 | 54 | 82 |
| 10:30 | | 55 | 71 | 126 |
| 10:45 | | 40 | 48 | 88 |
| 11:00 | | **43** | 55 | 98 |
| 11:15 | | **42** | 58 | 100 |
| 11:30 | | **58** | 64 | 122 |
| 11:45 | | **52** | 52 | 104 |
| Total | | 1071 | 2340 | 3411 |
| Percent | | 31.4% | 68.6% | |
| Peak | - | 11:00 | 07:00 | 07:15 |
| Vol. | - | 195 | 615 | 779 |
| P.H.F. | | 0.841 | 0.961 | 0.979 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Cloverdale b Amity Rd & Lake Hazel Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Cloverdale Rd between Amity & Lake Hazel
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | SB | NB | Total |
|---|---|---|---|---|
| 12:00 PM | | 55 | 69 | 124 |
| 12:15 | | 44 | 51 | 95 |
| 12:30 | | 44 | 63 | 107 |
| 12:45 | | 51 | 62 | 113 |
| 01:00 | | 64 | 52 | 116 |
| 01:15 | | 56 | 51 | 107 |
| 01:30 | | 48 | 56 | 104 |
| 01:45 | | 44 | 62 | 106 |
| 02:00 | | 58 | 54 | 112 |
| 02:15 | | 58 | 50 | 108 |
| 02:30 | | 60 | 64 | 124 |
| 02:45 | | 83 | 70 | 153 |
| 03:00 | | 87 | 70 | 157 |
| 03:15 | | 98 | 63 | 161 |
| 03:30 | | 116 | 77 | 193 |
| 03:45 | | 103 | 58 | 161 |
| 04:00 | | 94 | 100 | 194 |
| 04:15 | | 103 | 64 | 167 |
| 04:30 | | 117 | 68 | 185 |
| 04:45 | | **136** | 94 | **230** |
| 05:00 | | **151** | 74 | **225** |
| 05:15 | | **152** | 72 | **224** |
| 05:30 | | **130** | **91** | **221** |
| 05:45 | | 128 | **86** | 214 |
| 06:00 | | 103 | **88** | 191 |
| 06:15 | | 108 | **87** | 195 |
| 06:30 | | 61 | 82 | 143 |
| 06:45 | | 60 | 50 | 110 |
| 07:00 | | 46 | 40 | 86 |
| 07:15 | | 52 | 36 | 88 |
| 07:30 | | 54 | 27 | 81 |
| 07:45 | | 44 | 24 | 68 |
| 08:00 | | 38 | 27 | 65 |
| 08:15 | | 58 | 22 | 80 |
| 08:30 | | 32 | 30 | 62 |
| 08:45 | | 44 | 24 | 68 |
| 09:00 | | 39 | 21 | 60 |
| 09:15 | | 32 | 18 | 50 |
| 09:30 | | 26 | 14 | 40 |
| 09:45 | | 28 | 7 | 35 |
| 10:00 | | 12 | 10 | 22 |
| 10:15 | | 15 | 8 | 23 |
| 10:30 | | 11 | 4 | 15 |
| 10:45 | | 17 | 8 | 25 |
| 11:00 | | 7 | 9 | 16 |
| 11:15 | | 16 | 3 | 19 |
| 11:30 | | 5 | 4 | 9 |
| 11:45 | | 10 | 5 | 15 |
| Total | | 2998 | 2269 | 5267 |
| Percent | | 56.9% | 43.1% | |
| Peak | - | 16:45 | 17:30 | 16:45 |
| Vol. | - | 569 | 352 | 900 |
| P.H.F. | | 0.936 | 0.967 | 0.978 |
| Grand Total | | 4069 | 4609 | 8678 |
| Percent | | 46.9% | 53.1% | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits /2

Cloverdale b Lake Hazel Rd & Columbia Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Cloverdale between Lake Hazel & Columbia
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | SB | NB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | | 4 | 1 | | | | | | | 5 |
| 12:15 | | 3 | 1 | | | | | | | 4 |
| 12:30 | | 4 | 1 | | | | | | | 5 |
| 12:45 | | 1 | 1 | | | | | | | 2 |
| 01:00 | | 0 | 0 | | | | | | | 0 |
| 01:15 | | 2 | 2 | | | | | | | 4 |
| 01:30 | | 2 | 4 | | | | | | | 6 |
| 01:45 | | 2 | 1 | | | | | | | 3 |
| 02:00 | | 3 | 0 | | | | | | | 3 |
| 02:15 | | 4 | 1 | | | | | | | 5 |
| 02:30 | | 0 | 0 | | | | | | | 0 |
| 02:45 | | 3 | 4 | | | | | | | 7 |
| 03:00 | | 2 | 4 | | | | | | | 6 |
| 03:15 | | 1 | 3 | | | | | | | 4 |
| 03:30 | | 6 | 4 | | | | | | | 10 |
| 03:45 | | 6 | 6 | | | | | | | 12 |
| 04:00 | | 1 | 4 | | | | | | | 5 |
| 04:15 | | 2 | 6 | | | | | | | 8 |
| 04:30 | | 4 | 5 | | | | | | | 9 |
| 04:45 | | 4 | 18 | | | | | | | 22 |
| 05:00 | | 3 | 16 | | | | | | | 19 |
| 05:15 | | 8 | 23 | | | | | | | 31 |
| 05:30 | | 13 | 30 | | | | | | | 43 |
| 05:45 | | 28 | 21 | | | | | | | 49 |
| 06:00 | | 31 | 52 | | | | | | | 83 |
| 06:15 | | 18 | 74 | | | | | | | 92 |
| 06:30 | | 20 | 98 | | | | | | | 118 |
| 06:45 | | 16 | 86 | | | | | | | 102 |
| 07:00 | | 36 | 116 | | | | | | | 152 |
| 07:15 | | 29 | **120** | | | | | | | **149** |
| 07:30 | | 38 | **128** | | | | | | | **166** |
| 07:45 | | 38 | **134** | | | | | | | **172** |
| 08:00 | | 30 | **125** | | | | | | | **155** |
| 08:15 | | 30 | 95 | | | | | | | 125 |
| 08:30 | | 24 | 86 | | | | | | | 110 |
| 08:45 | | 44 | 86 | | | | | | | 130 |
| 09:00 | | 36 | 58 | | | | | | | 94 |
| 09:15 | | 20 | 45 | | | | | | | 65 |
| 09:30 | | 28 | 54 | | | | | | | 82 |
| 09:45 | | 34 | 54 | | | | | | | 88 |
| 10:00 | | 37 | 35 | | | | | | | 72 |
| 10:15 | | 24 | 48 | | | | | | | 72 |
| 10:30 | | 41 | 51 | | | | | | | 92 |
| 10:45 | | **46** | 47 | | | | | | | 93 |
| 11:00 | | **32** | 39 | | | | | | | 71 |
| 11:15 | | **32** | 46 | | | | | | | 78 |
| 11:30 | | **54** | 43 | | | | | | | 97 |
| 11:45 | | 40 | 46 | | | | | | | 86 |
| Total | | 884 | 1922 | | | | | | | 2806 |
| Percent | | 31.5% | 68.5% | | | | | | | |
| Peak | - | 10:45 | 07:15 | - | - | - | - | - | - | 07:15 |
| Vol. | - | 164 | 507 | - | - | - | - | - | - | 642 |
| P.H.F. | | 0.759 | 0.946 | | | | | | | 0.933 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits /2

Cloverdale b Lake Hazel Rd & Columbia Rd VOL
Date Start: 05-Mar-19
Date End: 05-Mar-19
Cloverdale between Lake Hazel & Columbia
Ada County, Idaho

| Start Time | 05-Mar-19 Tue | SB | NB | Total |
|---|---|---|---|---|
| 12:00 PM | | 37 | 52 | 89 |
| 12:15 | | 38 | 42 | 80 |
| 12:30 | | 51 | 51 | 102 |
| 12:45 | | 38 | 41 | 79 |
| 01:00 | | 59 | 40 | 99 |
| 01:15 | | 34 | 42 | 76 |
| 01:30 | | 41 | 51 | 92 |
| 01:45 | | 37 | 48 | 85 |
| 02:00 | | 49 | 41 | 90 |
| 02:15 | | 49 | 44 | 93 |
| 02:30 | | 44 | 48 | 92 |
| 02:45 | | 64 | 56 | 120 |
| 03:00 | | 69 | 44 | 113 |
| 03:15 | | 74 | 44 | 118 |
| 03:30 | | 82 | 61 | 143 |
| 03:45 | | 84 | 49 | 133 |
| 04:00 | | 82 | 64 | 146 |
| 04:15 | | 95 | 52 | 147 |
| 04:30 | | 106 | 56 | 162 |
| 04:45 | | 98 | 52 | 150 |
| 05:00 | | **108** | 44 | **152** |
| 05:15 | | **118** | 56 | **174** |
| 05:30 | | **108** | **62** | **170** |
| 05:45 | | **115** | **64** | **179** |
| 06:00 | | 86 | **54** | 140 |
| 06:15 | | 77 | **59** | 136 |
| 06:30 | | 66 | 50 | 116 |
| 06:45 | | 52 | 46 | 98 |
| 07:00 | | 43 | 33 | 76 |
| 07:15 | | 42 | 32 | 74 |
| 07:30 | | 32 | 16 | 48 |
| 07:45 | | 32 | 22 | 54 |
| 08:00 | | 29 | 27 | 56 |
| 08:15 | | 44 | 15 | 59 |
| 08:30 | | 25 | 12 | 37 |
| 08:45 | | 37 | 21 | 58 |
| 09:00 | | 24 | 17 | 41 |
| 09:15 | | 29 | 11 | 40 |
| 09:30 | | 24 | 8 | 32 |
| 09:45 | | 19 | 10 | 29 |
| 10:00 | | 4 | 4 | 8 |
| 10:15 | | 12 | 12 | 24 |
| 10:30 | | 6 | 6 | 12 |
| 10:45 | | 20 | 6 | 26 |
| 11:00 | | 3 | 5 | 8 |
| 11:15 | | 12 | 1 | 13 |
| 11:30 | | 4 | 4 | 8 |
| 11:45 | | 6 | 4 | 10 |
| Total | | 2408 | 1679 | 4087 |
| Percent | | 58.9% | 41.1% | |
| Peak | - | 17:00 | 17:30 | 17:00 |
| Vol. | - | 449 | 239 | 675 |
| P.H.F. | | 0.951 | 0.934 | 0.943 |
| Grand Total | | 3292 | 3601 | 6893 |
| Percent | | 47.8% | 52.2% | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction / Speed / Class
Tech: Judd / Klaren
Count: Axle Hits / 2

Pleasant Valley b Gowen Rd & Hollilynn Dr VOL D2
Date Start: 13-Mar-19
Date End: 14-Mar-19
Pleasant Vly Rd b Gowen Rd & Hollilynn D
Ada County, Idaho

| Start Time | 13-Mar-19 Wed | SB | NB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | | * | * | | | | | | | * |
| 12:15 | | * | * | | | | | | | * |
| 12:30 | | * | * | | | | | | | * |
| 12:45 | | * | * | | | | | | | * |
| 01:00 | | * | * | | | | | | | * |
| 01:15 | | * | * | | | | | | | * |
| 01:30 | | * | * | | | | | | | * |
| 01:45 | | * | * | | | | | | | * |
| 02:00 | | * | * | | | | | | | * |
| 02:15 | | * | * | | | | | | | * |
| 02:30 | | * | * | | | | | | | * |
| 02:45 | | * | * | | | | | | | * |
| 03:00 | | * | * | | | | | | | * |
| 03:15 | | * | * | | | | | | | * |
| 03:30 | | * | * | | | | | | | * |
| 03:45 | | * | * | | | | | | | * |
| 04:00 | | * | * | | | | | | | * |
| 04:15 | | * | * | | | | | | | * |
| 04:30 | | * | * | | | | | | | * |
| 04:45 | | * | * | | | | | | | * |
| 05:00 | | * | * | | | | | | | * |
| 05:15 | | * | * | | | | | | | * |
| 05:30 | | * | * | | | | | | | * |
| 05:45 | | * | * | | | | | | | * |
| 06:00 | | * | * | | | | | | | * |
| 06:15 | | * | * | | | | | | | * |
| 06:30 | | * | * | | | | | | | * |
| 06:45 | | * | * | | | | | | | * |
| 07:00 | | * | * | | | | | | | * |
| 07:15 | | * | * | | | | | | | * |
| 07:30 | | * | * | | | | | | | * |
| 07:45 | | * | * | | | | | | | * |
| 08:00 | | * | * | | | | | | | * |
| 08:15 | | * | * | | | | | | | * |
| 08:30 | | * | * | | | | | | | * |
| 08:45 | | * | * | | | | | | | * |
| 09:00 | | * | * | | | | | | | * |
| 09:15 | | * | * | | | | | | | * |
| 09:30 | | * | * | | | | | | | * |
| 09:45 | | * | * | | | | | | | * |
| 10:00 | | * | * | | | | | | | * |
| 10:15 | | * | * | | | | | | | * |
| 10:30 | | * | * | | | | | | | * |
| 10:45 | | * | * | | | | | | | * |
| 11:00 | | * | * | | | | | | | * |
| 11:15 | | * | * | | | | | | | * |
| 11:30 | | * | * | | | | | | | * |
| 11:45 | | * | * | | | | | | | * |
| Total | | 0 | 0 | | | | | | | 0 |
| Percent | | 0.0% | 0.0% | | | | | | | |
| Peak | - | - | - | - | - | - | - | - | - | - |
| Vol. | - | - | - | - | - | - | - | - | - | - |
| P.H.F. | | | | | | | | | | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction / Speed / Class
Tech: Judd / Klaren
Count: Axle Hits / 2

Pleasant Valley b Gowen Rd & Hollilynn Dr VOL D2
Date Start: 13-Mar-19
Date End: 14-Mar-19
Pleasant Vly Rd b Gowen Rd & Hollilynn D
Ada County, Idaho

| Start Time | 13-Mar-19 Wed | SB | NB | Total |
|---|---|---|---|---|
| 12:00 PM | | 97 | 85 | 182 |
| 12:15 | | 84 | 67 | 151 |
| 12:30 | | 64 | 91 | 155 |
| 12:45 | | 71 | 77 | 148 |
| 01:00 | | 96 | 52 | 148 |
| 01:15 | | 96 | 99 | 195 |
| 01:30 | | **96** | 100 | 196 |
| 01:45 | | **98** | 73 | 171 |
| 02:00 | | **102** | **94** | **196** |
| 02:15 | | **115** | **109** | **224** |
| 02:30 | | 70 | **132** | **202** |
| 02:45 | | 64 | **140** | **204** |
| 03:00 | | 104 | 85 | 189 |
| 03:15 | | 80 | 60 | 140 |
| 03:30 | | 88 | 124 | 212 |
| 03:45 | | 86 | 90 | 176 |
| 04:00 | | 85 | 70 | 155 |
| 04:15 | | 92 | 70 | 162 |
| 04:30 | | 82 | 74 | 156 |
| 04:45 | | 104 | 52 | 156 |
| 05:00 | | 102 | 40 | 142 |
| 05:15 | | 88 | 36 | 124 |
| 05:30 | | 88 | 50 | 138 |
| 05:45 | | 72 | 41 | 113 |
| 06:00 | | 48 | 32 | 80 |
| 06:15 | | 33 | 33 | 66 |
| 06:30 | | 28 | 32 | 60 |
| 06:45 | | 18 | 29 | 47 |
| 07:00 | | 16 | 21 | 37 |
| 07:15 | | 16 | 22 | 38 |
| 07:30 | | 12 | 14 | 26 |
| 07:45 | | 7 | 16 | 23 |
| 08:00 | | 7 | 6 | 13 |
| 08:15 | | 10 | 18 | 28 |
| 08:30 | | 12 | 35 | 47 |
| 08:45 | | 12 | 18 | 30 |
| 09:00 | | 9 | 8 | 17 |
| 09:15 | | 6 | 21 | 27 |
| 09:30 | | 18 | 10 | 28 |
| 09:45 | | 26 | 16 | 42 |
| 10:00 | | 9 | 9 | 18 |
| 10:15 | | 5 | 8 | 13 |
| 10:30 | | 6 | 24 | 30 |
| 10:45 | | 4 | 18 | 22 |
| 11:00 | | 6 | 10 | 16 |
| 11:15 | | 8 | 0 | 8 |
| 11:30 | | 4 | 3 | 7 |
| 11:45 | | 1 | 2 | 3 |
| Total | | 2445 | 2316 | 4761 |
| Percent | | 51.4% | 48.6% | |
| Peak | - | 13:30 | 14:00 | 14:00 |
| Vol. | - | 411 | 475 | 826 |
| P.H.F. | | 0.893 | 0.848 | 0.922 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction / Speed / Class
Tech: Judd / Klaren
Count: Axle Hits / 2

Pleasant Valley b Gowen Rd & Hollilynn Dr VOL D2
Date Start: 13-Mar-19
Date End: 14-Mar-19
Pleasant Vly Rd b Gowen Rd & Hollilynn D
Ada County, Idaho

| Start Time | 14-Mar-19 Thu | SB | NB | Total |
|---|---|---|---|---|
| 12:00 AM | | 2 | 3 | 5 |
| 12:15 | | 0 | 0 | 0 |
| 12:30 | | 3 | 1 | 4 |
| 12:45 | | 1 | 0 | 1 |
| 01:00 | | 0 | 1 | 1 |
| 01:15 | | 2 | 2 | 4 |
| 01:30 | | 2 | 0 | 2 |
| 01:45 | | 6 | 2 | 8 |
| 02:00 | | 5 | 2 | 7 |
| 02:15 | | 1 | 1 | 2 |
| 02:30 | | 4 | 7 | 11 |
| 02:45 | | 4 | 6 | 10 |
| 03:00 | | 0 | 2 | 2 |
| 03:15 | | 1 | 4 | 5 |
| 03:30 | | 1 | 4 | 5 |
| 03:45 | | 4 | 2 | 6 |
| 04:00 | | 1 | 6 | 7 |
| 04:15 | | 7 | 2 | 9 |
| 04:30 | | 16 | 6 | 22 |
| 04:45 | | 4 | 4 | 8 |
| 05:00 | | 16 | 6 | 22 |
| 05:15 | | 34 | 12 | 46 |
| 05:30 | | 44 | 18 | 62 |
| 05:45 | | 60 | 30 | 90 |
| 06:00 | | 71 | 22 | 93 |
| 06:15 | | 48 | 40 | 88 |
| 06:30 | | 56 | 56 | 112 |
| 06:45 | | 89 | 96 | 185 |
| 07:00 | | 36 | 72 | 108 |
| 07:15 | | 50 | **112** | 162 |
| 07:30 | | 82 | **115** | **197** |
| 07:45 | | 82 | **124** | **206** |
| 08:00 | | 58 | **112** | **170** |
| 08:15 | | 66 | 100 | **166** |
| 08:30 | | 70 | 77 | 147 |
| 08:45 | | 80 | 92 | 172 |
| 09:00 | | **107** | 60 | 167 |
| 09:15 | | **102** | 86 | 188 |
| 09:30 | | **84** | 102 | 186 |
| 09:45 | | **85** | 66 | 151 |
| 10:00 | | 78 | 93 | 171 |
| 10:15 | | 84 | 84 | 168 |
| 10:30 | | 78 | 50 | 128 |
| 10:45 | | 88 | 87 | 175 |
| 11:00 | | 74 | 82 | 156 |
| 11:15 | | 73 | 90 | 163 |
| 11:30 | | 80 | 56 | 136 |
| 11:45 | | 90 | 46 | 136 |
| Total | | 2029 | 2041 | 4070 |
| Percent | | 49.9% | 50.1% | |
| Peak | - | 09:00 | 07:15 | 07:30 |
| Vol. | - | 378 | 463 | 739 |
| P.H.F. | | 0.883 | 0.933 | 0.897 |
| Grand Total | | 4474 | 4357 | 8831 |
| Percent | | 50.7% | 49.3% | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Pleasant Valley b Hollilynn Dr & Tenmile Creek Rd VOL
Date Start: 05-Mar-18
Date End: 05-Mar-18
Pleasant Valley b Hollilynn & Tenmile Cr
Ada County, Idaho

| Start Time | 05-Mar-18 Mon | SB | NB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | | 1 | 0 | | | | | | | 1 |
| 12:15 | | 3 | 0 | | | | | | | 3 |
| 12:30 | | 2 | 1 | | | | | | | 3 |
| 12:45 | | 4 | 1 | | | | | | | 5 |
| 01:00 | | 1 | 0 | | | | | | | 1 |
| 01:15 | | 1 | 1 | | | | | | | 2 |
| 01:30 | | 4 | 0 | | | | | | | 4 |
| 01:45 | | 0 | 1 | | | | | | | 1 |
| 02:00 | | 9 | 1 | | | | | | | 10 |
| 02:15 | | 3 | 4 | | | | | | | 7 |
| 02:30 | | 3 | 9 | | | | | | | 12 |
| 02:45 | | 6 | 3 | | | | | | | 9 |
| 03:00 | | 1 | 4 | | | | | | | 5 |
| 03:15 | | 0 | 0 | | | | | | | 0 |
| 03:30 | | 1 | 0 | | | | | | | 1 |
| 03:45 | | 1 | 3 | | | | | | | 4 |
| 04:00 | | 3 | 2 | | | | | | | 5 |
| 04:15 | | 2 | 4 | | | | | | | 6 |
| 04:30 | | 7 | 9 | | | | | | | 16 |
| 04:45 | | 12 | 6 | | | | | | | 18 |
| 05:00 | | 14 | 7 | | | | | | | 21 |
| 05:15 | | 34 | 9 | | | | | | | 43 |
| 05:30 | | 37 | 20 | | | | | | | 57 |
| 05:45 | | **62** | 20 | | | | | | | 82 |
| 06:00 | | **90** | 27 | | | | | | | 117 |
| 06:15 | | **43** | 55 | | | | | | | 98 |
| 06:30 | | **43** | 74 | | | | | | | 117 |
| 06:45 | | 38 | **78** | | | | | | | 116 |
| 07:00 | | 39 | **89** | | | | | | | **128** |
| 07:15 | | 40 | **100** | | | | | | | **140** |
| 07:30 | | 54 | **104** | | | | | | | **158** |
| 07:45 | | 56 | 76 | | | | | | | **132** |
| 08:00 | | 28 | 64 | | | | | | | 92 |
| 08:15 | | 34 | 58 | | | | | | | 92 |
| 08:30 | | 50 | 30 | | | | | | | 80 |
| 08:45 | | 45 | 38 | | | | | | | 83 |
| 09:00 | | 31 | 64 | | | | | | | 95 |
| 09:15 | | 32 | 33 | | | | | | | 65 |
| 09:30 | | 32 | 34 | | | | | | | 66 |
| 09:45 | | 37 | 40 | | | | | | | 77 |
| 10:00 | | 44 | 29 | | | | | | | 73 |
| 10:15 | | 44 | 46 | | | | | | | 90 |
| 10:30 | | 46 | 55 | | | | | | | 101 |
| 10:45 | | 24 | 41 | | | | | | | 65 |
| 11:00 | | 28 | 32 | | | | | | | 60 |
| 11:15 | | 27 | 39 | | | | | | | 66 |
| 11:30 | | 57 | 26 | | | | | | | 83 |
| 11:45 | | 53 | 42 | | | | | | | 95 |
| Total | | 1226 | 1379 | | | | | | | 2605 |
| Percent | | 47.1% | 52.9% | | | | | | | |
| Peak | - | 05:45 | 06:45 | - | - | - | - | - | - | 07:00 |
| Vol. | - | 238 | 371 | - | - | - | - | - | - | 558 |
| P.H.F. | | 0.661 | 0.892 | | | | | | | 0.883 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Pleasant Valley b Hollilynn Dr & Tenmile Creek Rd VOL
Date Start: 05-Mar-18
Date End: 05-Mar-18
Pleasant Valley b Hollilynn & Tenmile Cr
Ada County, Idaho

| Start Time | 05-Mar-18 Mon | SB | NB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | | 37 | 40 | | | | | | | 77 |
| 12:15 | | 25 | 52 | | | | | | | 77 |
| 12:30 | | 42 | 22 | | | | | | | 64 |
| 12:45 | | 39 | 42 | | | | | | | 81 |
| 01:00 | | 52 | 35 | | | | | | | 87 |
| 01:15 | | 48 | 50 | | | | | | | 98 |
| 01:30 | | 43 | 42 | | | | | | | 85 |
| 01:45 | | 42 | 55 | | | | | | | 97 |
| 02:00 | | 52 | 36 | | | | | | | 88 |
| 02:15 | | 26 | 34 | | | | | | | 60 |
| 02:30 | | 30 | **72** | | | | | | | 102 |
| 02:45 | | 28 | **42** | | | | | | | 70 |
| 03:00 | | 35 | **56** | | | | | | | 91 |
| 03:15 | | 26 | **46** | | | | | | | 72 |
| 03:30 | | 34 | 38 | | | | | | | 72 |
| 03:45 | | 54 | 65 | | | | | | | 119 |
| 04:00 | | 47 | 40 | | | | | | | 87 |
| 04:15 | | 60 | 29 | | | | | | | 89 |
| 04:30 | | 62 | 36 | | | | | | | 98 |
| 04:45 | | **87** | 20 | | | | | | | **107** |
| 05:00 | | **72** | 32 | | | | | | | **104** |
| 05:15 | | **138** | 24 | | | | | | | **162** |
| 05:30 | | **80** | 28 | | | | | | | **108** |
| 05:45 | | 76 | 29 | | | | | | | 105 |
| 06:00 | | 42 | 29 | | | | | | | 71 |
| 06:15 | | 32 | 34 | | | | | | | 66 |
| 06:30 | | 24 | 30 | | | | | | | 54 |
| 06:45 | | 20 | 38 | | | | | | | 58 |
| 07:00 | | 12 | 8 | | | | | | | 20 |
| 07:15 | | 3 | 16 | | | | | | | 19 |
| 07:30 | | 5 | 10 | | | | | | | 15 |
| 07:45 | | 9 | 8 | | | | | | | 17 |
| 08:00 | | 6 | 12 | | | | | | | 18 |
| 08:15 | | 2 | 11 | | | | | | | 13 |
| 08:30 | | 4 | 9 | | | | | | | 13 |
| 08:45 | | 6 | 6 | | | | | | | 12 |
| 09:00 | | 12 | 16 | | | | | | | 28 |
| 09:15 | | 10 | 9 | | | | | | | 19 |
| 09:30 | | 7 | 5 | | | | | | | 12 |
| 09:45 | | 12 | 4 | | | | | | | 16 |
| 10:00 | | 12 | 20 | | | | | | | 32 |
| 10:15 | | 4 | 11 | | | | | | | 15 |
| 10:30 | | 1 | 28 | | | | | | | 29 |
| 10:45 | | 2 | 16 | | | | | | | 18 |
| 11:00 | | 5 | 6 | | | | | | | 11 |
| 11:15 | | 2 | 4 | | | | | | | 6 |
| 11:30 | | 2 | 3 | | | | | | | 5 |
| 11:45 | | 2 | 3 | | | | | | | 5 |
| Total | | 1471 | 1301 | | | | | | | 2772 |
| Percent | | 53.1% | 46.9% | | | | | | | |
| Peak | - | 16:45 | 14:30 | - | - | - | - | - | - | 16:45 |
| Vol. | - | 377 | 216 | - | - | - | - | - | - | 481 |
| P.H.F. | | 0.683 | 0.750 | | | | | | | 0.742 |
| Grand Total | | 2697 | 2680 | | | | | | | 5377 |
| Percent | | 50.2% | 49.8% | | | | | | | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Ten Mile Creek b Hubbard & Pleasant Vally Rd VOL
Date Start: 13-Mar-19
Date End: 14-Mar-19
Ten Mile Creek Rd b Hubbard & Pleasant V
Ada County, Idaho

| Start Time | 13-Mar-19 Wed | WB | EB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | | * | * | | | | | | | * |
| 12:15 | | * | * | | | | | | | * |
| 12:30 | | * | * | | | | | | | * |
| 12:45 | | * | * | | | | | | | * |
| 01:00 | | * | * | | | | | | | * |
| 01:15 | | * | * | | | | | | | * |
| 01:30 | | * | * | | | | | | | * |
| 01:45 | | * | * | | | | | | | * |
| 02:00 | | * | * | | | | | | | * |
| 02:15 | | * | * | | | | | | | * |
| 02:30 | | * | * | | | | | | | * |
| 02:45 | | * | * | | | | | | | * |
| 03:00 | | * | * | | | | | | | * |
| 03:15 | | * | * | | | | | | | * |
| 03:30 | | * | * | | | | | | | * |
| 03:45 | | * | * | | | | | | | * |
| 04:00 | | * | * | | | | | | | * |
| 04:15 | | * | * | | | | | | | * |
| 04:30 | | * | * | | | | | | | * |
| 04:45 | | * | * | | | | | | | * |
| 05:00 | | * | * | | | | | | | * |
| 05:15 | | * | * | | | | | | | * |
| 05:30 | | * | * | | | | | | | * |
| 05:45 | | * | * | | | | | | | * |
| 06:00 | | * | * | | | | | | | * |
| 06:15 | | * | * | | | | | | | * |
| 06:30 | | * | * | | | | | | | * |
| 06:45 | | * | * | | | | | | | * |
| 07:00 | | * | * | | | | | | | * |
| 07:15 | | * | * | | | | | | | * |
| 07:30 | | * | * | | | | | | | * |
| 07:45 | | * | * | | | | | | | * |
| 08:00 | | * | * | | | | | | | * |
| 08:15 | | * | * | | | | | | | * |
| 08:30 | | * | * | | | | | | | * |
| 08:45 | | * | * | | | | | | | * |
| 09:00 | | * | * | | | | | | | * |
| 09:15 | | * | * | | | | | | | * |
| 09:30 | | * | * | | | | | | | * |
| 09:45 | | * | * | | | | | | | * |
| 10:00 | | * | * | | | | | | | * |
| 10:15 | | * | * | | | | | | | * |
| 10:30 | | * | * | | | | | | | * |
| 10:45 | | * | * | | | | | | | * |
| 11:00 | | * | * | | | | | | | * |
| 11:15 | | * | * | | | | | | | * |
| 11:30 | | * | * | | | | | | | * |
| 11:45 | | * | * | | | | | | | * |
| Total | | 0 | 0 | | | | | | | 0 |
| Percent | | 0.0% | 0.0% | | | | | | | |
| Peak | - | - | - | - | - | - | - | - | - | - |
| Vol. | - | - | - | - | - | - | - | - | - | - |
| P.H.F. | | | | | | | | | | |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Ten Mile Creek b Hubbard & Pleasant Vally Rd VOL
Date Start: 13-Mar-19
Date End: 14-Mar-19
Ten Mile Creek Rd b Hubbard & Pleasant V
Ada County, Idaho

| Start Time | 13-Mar-19 Wed | WB | EB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 PM | | 9 | 20 | | | | | | | 29 |
| 12:15 | | 13 | 6 | | | | | | | 19 |
| 12:30 | | 24 | 14 | | | | | | | 38 |
| 12:45 | | 14 | 5 | | | | | | | 19 |
| 01:00 | | 4 | **24** | | | | | | | 28 |
| 01:15 | | 20 | **17** | | | | | | | 37 |
| 01:30 | | 16 | **17** | | | | | | | 33 |
| 01:45 | | 16 | **16** | | | | | | | 32 |
| 02:00 | | 18 | 22 | | | | | | | 40 |
| 02:15 | | 23 | 8 | | | | | | | 31 |
| 02:30 | | 24 | 18 | | | | | | | 42 |
| 02:45 | | 24 | 14 | | | | | | | 38 |
| 03:00 | | 20 | 8 | | | | | | | 28 |
| 03:15 | | 24 | 16 | | | | | | | 40 |
| 03:30 | | 24 | 10 | | | | | | | 34 |
| 03:45 | | 54 | 8 | | | | | | | **62** |
| 04:00 | | 28 | 6 | | | | | | | **34** |
| 04:15 | | 58 | 6 | | | | | | | **64** |
| 04:30 | | 44 | 2 | | | | | | | **46** |
| 04:45 | | **47** | 2 | | | | | | | 49 |
| 05:00 | | **38** | 2 | | | | | | | 40 |
| 05:15 | | **58** | 5 | | | | | | | 63 |
| 05:30 | | **46** | 7 | | | | | | | 53 |
| 05:45 | | 30 | 3 | | | | | | | 33 |
| 06:00 | | 14 | 2 | | | | | | | 16 |
| 06:15 | | 20 | 2 | | | | | | | 22 |
| 06:30 | | 11 | 7 | | | | | | | 18 |
| 06:45 | | 5 | 4 | | | | | | | 9 |
| 07:00 | | 8 | 0 | | | | | | | 8 |
| 07:15 | | 6 | 2 | | | | | | | 8 |
| 07:30 | | 2 | 1 | | | | | | | 3 |
| 07:45 | | 2 | 2 | | | | | | | 4 |
| 08:00 | | 4 | 0 | | | | | | | 4 |
| 08:15 | | 4 | 1 | | | | | | | 5 |
| 08:30 | | 10 | 0 | | | | | | | 10 |
| 08:45 | | 5 | 2 | | | | | | | 7 |
| 09:00 | | 2 | 1 | | | | | | | 3 |
| 09:15 | | 4 | 3 | | | | | | | 7 |
| 09:30 | | 0 | 1 | | | | | | | 1 |
| 09:45 | | 1 | 0 | | | | | | | 1 |
| 10:00 | | 2 | 4 | | | | | | | 6 |
| 10:15 | | 2 | 1 | | | | | | | 3 |
| 10:30 | | 0 | 0 | | | | | | | 0 |
| 10:45 | | 4 | 0 | | | | | | | 4 |
| 11:00 | | 1 | 0 | | | | | | | 1 |
| 11:15 | | 2 | 0 | | | | | | | 2 |
| 11:30 | | 0 | 0 | | | | | | | 0 |
| 11:45 | | 1 | 0 | | | | | | | 1 |
| Total | | 786 | 289 | | | | | | | 1075 |
| Percent | | 73.1% | 26.9% | | | | | | | |
| Peak | - | 16:45 | 13:00 | - | - | - | - | - | - | 15:45 |
| Vol. | - | 189 | 74 | - | - | - | - | - | - | 206 |
| P.H.F. | | 0.815 | 0.771 | | | | | | | 0.805 |

# L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Type: Volume / Direction
Tech: Judd / Klaren
Count: Axle Hits / 2

Ten Mile Creek b Hubbard & Pleasant Vally Rd VOL
Date Start: 13-Mar-19
Date End: 14-Mar-19
Ten Mile Creek Rd b Hubbard & Pleasant V
Ada County, Idaho

| Start Time | 14-Mar-19 Thu | WB | EB | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 AM | | 1 | 1 | | | | | | | 2 |
| 12:15 | | 0 | 0 | | | | | | | 0 |
| 12:30 | | 0 | 0 | | | | | | | 0 |
| 12:45 | | 0 | 0 | | | | | | | 0 |
| 01:00 | | 0 | 0 | | | | | | | 0 |
| 01:15 | | 0 | 0 | | | | | | | 0 |
| 01:30 | | 1 | 0 | | | | | | | 1 |
| 01:45 | | 0 | 1 | | | | | | | 1 |
| 02:00 | | 0 | 0 | | | | | | | 0 |
| 02:15 | | 1 | 0 | | | | | | | 1 |
| 02:30 | | 0 | 0 | | | | | | | 0 |
| 02:45 | | 2 | 1 | | | | | | | 3 |
| 03:00 | | 0 | 0 | | | | | | | 0 |
| 03:15 | | 0 | 0 | | | | | | | 0 |
| 03:30 | | 1 | 0 | | | | | | | 1 |
| 03:45 | | 0 | 0 | | | | | | | 0 |
| 04:00 | | 0 | 1 | | | | | | | 1 |
| 04:15 | | 0 | 1 | | | | | | | 1 |
| 04:30 | | 0 | 7 | | | | | | | 7 |
| 04:45 | | 2 | 3 | | | | | | | 5 |
| 05:00 | | 0 | 4 | | | | | | | 4 |
| 05:15 | | 2 | 8 | | | | | | | 10 |
| 05:30 | | 0 | 18 | | | | | | | 18 |
| 05:45 | | 0 | 17 | | | | | | | 17 |
| 06:00 | | 1 | 32 | | | | | | | 33 |
| 06:15 | | 2 | 17 | | | | | | | 19 |
| 06:30 | | 4 | 42 | | | | | | | 46 |
| 06:45 | | 8 | 32 | | | | | | | 40 |
| 07:00 | | 4 | **40** | | | | | | | 44 |
| 07:15 | | 10 | **64** | | | | | | | **74** |
| 07:30 | | 2 | **42** | | | | | | | **44** |
| 07:45 | | 6 | **47** | | | | | | | **53** |
| 08:00 | | 7 | 40 | | | | | | | **47** |
| 08:15 | | 8 | 26 | | | | | | | 34 |
| 08:30 | | 2 | 14 | | | | | | | 16 |
| 08:45 | | **14** | 20 | | | | | | | 34 |
| 09:00 | | **11** | 22 | | | | | | | 33 |
| 09:15 | | **16** | 22 | | | | | | | 38 |
| 09:30 | | **19** | 16 | | | | | | | 35 |
| 09:45 | | 8 | 8 | | | | | | | 16 |
| 10:00 | | 6 | 18 | | | | | | | 24 |
| 10:15 | | 6 | 10 | | | | | | | 16 |
| 10:30 | | 25 | 4 | | | | | | | 29 |
| 10:45 | | 1 | 15 | | | | | | | 16 |
| 11:00 | | 14 | 16 | | | | | | | 30 |
| 11:15 | | 10 | 8 | | | | | | | 18 |
| 11:30 | | 11 | 11 | | | | | | | 22 |
| 11:45 | | 21 | 8 | | | | | | | 29 |
| Total | | 226 | 636 | | | | | | | 862 |
| Percent | | 26.2% | 73.8% | | | | | | | |
| Peak | - | 08:45 | 07:00 | - | - | - | - | - | - | 07:15 |
| Vol. | - | 60 | 193 | - | - | - | - | - | - | 218 |
| P.H.F. | | 0.789 | 0.754 | | | | | | | 0.736 |
| Grand Total | | 1012 | 925 | | | | | | | 1937 |
| Percent | | 52.2% | 47.8% | | | | | | | |

# APPENDIX C: 2019 CAPACITY ANALYSIS REPORTS

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2019 Existing
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 288 | 229 | 35 | 46 | 47 | 57 | 16 | 1049 | 76 | 23 | 367 | 60 |
| Future Volume (veh/h) | 288 | 229 | 35 | 46 | 47 | 57 | 16 | 1049 | 76 | 23 | 367 | 60 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 310 | 246 | 38 | 50 | 51 | 62 | 18 | 1179 | 85 | 25 | 395 | 65 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.89 | 0.89 | 0.89 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 352 | 300 | 46 | 156 | 245 | 208 | 537 | 1832 | 819 | 220 | 1846 | 826 |
| Arrive On Green | 0.09 | 0.20 | 0.20 | 0.03 | 0.14 | 0.14 | 0.02 | 0.55 | 0.55 | 0.02 | 0.55 | 0.55 |
| Sat Flow, veh/h | 1681 | 1493 | 231 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 310 | 0 | 284 | 50 | 51 | 62 | 18 | 1179 | 85 | 25 | 395 | 65 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1724 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 13.0 | 0.0 | 22.1 | 3.6 | 3.6 | 5.2 | 0.7 | 34.5 | 3.8 | 0.9 | 8.4 | 2.9 |
| Cycle Q Clear(g_c), s | 13.0 | 0.0 | 22.1 | 3.6 | 3.6 | 5.2 | 0.7 | 34.5 | 3.8 | 0.9 | 8.4 | 2.9 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 352 | 0 | 347 | 156 | 245 | 208 | 537 | 1832 | 819 | 220 | 1846 | 826 |
| V/C Ratio(X) | 0.88 | 0.00 | 0.82 | 0.32 | 0.21 | 0.30 | 0.03 | 0.64 | 0.10 | 0.11 | 0.21 | 0.08 |
| Avail Cap(c_a), veh/h | 352 | 0 | 565 | 160 | 466 | 396 | 567 | 1832 | 819 | 243 | 1846 | 826 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.3 | 0.0 | 53.5 | 50.0 | 53.5 | 54.2 | 13.7 | 22.2 | 15.3 | 17.7 | 16.0 | 14.8 |
| Incr Delay (d2), s/veh | 21.3 | 0.0 | 1.9 | 0.4 | 0.2 | 0.3 | 0.0 | 1.8 | 0.3 | 0.1 | 0.3 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 12.7 | 0.0 | 16.0 | 3.0 | 3.2 | 3.9 | 0.6 | 23.0 | 2.9 | 0.8 | 7.1 | 2.2 |
| LnGrp Delay(d),s/veh | 73.6 | 0.0 | 55.4 | 50.5 | 53.6 | 54.5 | 13.7 | 24.0 | 15.5 | 17.8 | 16.3 | 15.0 |
| LnGrp LOS | E | | E | D | D | D | B | C | B | B | B | B |
| Approach Vol, veh/h | | 594 | | | 163 | | | 1282 | | | 485 | |
| Approach Delay, s/veh | | 64.9 | | | 53.0 | | | 23.3 | | | 16.2 | |
| Approach LOS | | E | | | D | | | C | | | B | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 20.0 | 26.4 | 9.5 | 84.1 | 11.3 | 35.2 | 10.1 | 83.5 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 13.0 | 37.0 | 5.0 | 57.0 | 5.1 | * 46 | 5.0 | 57.0 |
| Max Q Clear Time (g_c+I1), s | 15.0 | 7.2 | 2.7 | 10.4 | 5.6 | 24.1 | 2.9 | 36.5 |
| Green Ext Time (p_c), s | 0.0 | 0.6 | 0.0 | 12.7 | 0.0 | 4.1 | 0.0 | 18.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.6 |
| HCM 2010 LOS | C |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.1 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 62 | 84 | 500 | 109 | 81 | 139 |
| Future Vol, veh/h | 62 | 84 | 500 | 109 | 81 | 139 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 71 | 97 | 575 | 125 | 93 | 160 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 841 | 288 | 0 | - | 575 | 0 |
| Stage 1 | 575 | - | - | - | - | - |
| Stage 2 | 266 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | 304 | 709 | - | 0 | 994 | - |
| Stage 1 | 526 | - | - | 0 | - | - |
| Stage 2 | 754 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 275 | 709 | - | - | 994 | - |
| Mov Cap-2 Maneuver | 393 | - | - | - | - | - |
| Stage 1 | 526 | - | - | - | - | - |
| Stage 2 | 683 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 13.2 | 0 | 3.3 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 393 | 709 | 994 | - |
| HCM Lane V/C Ratio | - | 0.181 | 0.136 | 0.094 | - |
| HCM Control Delay (s) | - | 16.2 | 10.9 | 9 | - |
| HCM Lane LOS | - | C | B | A | - |
| HCM 95th %tile Q(veh) | - | 0.7 | 0.5 | 0.3 | - |

HCM 2010 AWSC
3: Locust Grove Road & Columbia Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.4 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 39 | 317 | 6 | 10 | 131 | 13 | 5 | 45 | 12 | 9 | 16 | 7 |
| Future Vol, veh/h | 39 | 317 | 6 | 10 | 131 | 13 | 5 | 45 | 12 | 9 | 16 | 7 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 43 | 348 | 7 | 11 | 144 | 14 | 5 | 49 | 13 | 10 | 18 | 8 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 11.5 | 8.9 | 8.8 | 8.6 |
| HCM LOS | B | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 8% | 11% | 6% | 28% |
| Vol Thru, % | 73% | 88% | 85% | 50% |
| Vol Right, % | 19% | 2% | 8% | 22% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 62 | 362 | 154 | 32 |
| LT Vol | 5 | 39 | 10 | 9 |
| Through Vol | 45 | 317 | 131 | 16 |
| RT Vol | 12 | 6 | 13 | 7 |
| Lane Flow Rate | 68 | 398 | 169 | 35 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.097 | 0.486 | 0.216 | 0.051 |
| Departure Headway (Hd) | 5.15 | 4.4 | 4.587 | 5.228 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 694 | 819 | 782 | 682 |
| Service Time | 3.2 | 2.427 | 2.621 | 3.282 |
| HCM Lane V/C Ratio | 0.098 | 0.486 | 0.216 | 0.051 |
| HCM Control Delay | 8.8 | 11.5 | 8.9 | 8.6 |
| HCM Lane LOS | A | B | A | A |
| HCM 95th-tile Q | 0.3 | 2.7 | 0.8 | 0.2 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 9 | 195 | 108 | 4 | 5 | 5 |
| Future Vol, veh/h | 9 | 195 | 108 | 4 | 5 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 83 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 235 | 130 | 5 | 6 | 6 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 135 | 0 | - | 0 | 390 | 133 |
| Stage 1 | - | - | - | - | 133 | - |
| Stage 2 | - | - | - | - | 257 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1449 | - | - | - | 614 | 916 |
| Stage 1 | - | - | - | - | 893 | - |
| Stage 2 | - | - | - | - | 786 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1449 | - | - | - | 608 | 916 |
| Mov Cap-2 Maneuver | - | - | - | - | 608 | - |
| Stage 1 | - | - | - | - | 885 | - |
| Stage 2 | - | - | - | - | 786 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1449 | - | - | - | 731 |
| HCM Lane V/C Ratio | 0.007 | - | - | - | 0.016 |
| HCM Control Delay (s) | 7.5 | 0 | - | - | 10 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 116 | 213 | 5 | 3 | 117 | 37 | 8 | 20 | 4 | 14 | 8 | 22 |
| Future Vol, veh/h | 116 | 213 | 5 | 3 | 117 | 37 | 8 | 20 | 4 | 14 | 8 | 22 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 120 | 220 | 5 | 3 | 121 | 38 | 8 | 21 | 4 | 14 | 8 | 23 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.5 | 8.4 | 8.4 | 8.2 |
| HCM LOS | B | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 25% | 35% | 2% | 32% |
| Vol Thru, % | 62% | 64% | 75% | 18% |
| Vol Right, % | 12% | 1% | 24% | 50% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 32 | 334 | 157 | 44 |
| LT Vol | 8 | 116 | 3 | 14 |
| Through Vol | 20 | 213 | 117 | 8 |
| RT Vol | 4 | 5 | 37 | 22 |
| Lane Flow Rate | 33 | 344 | 162 | 45 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.047 | 0.417 | 0.196 | 0.061 |
| Departure Headway (Hd) | 5.092 | 4.359 | 4.352 | 4.862 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 703 | 826 | 825 | 736 |
| Service Time | 3.126 | 2.377 | 2.373 | 2.896 |
| HCM Lane V/C Ratio | 0.047 | 0.416 | 0.196 | 0.061 |
| HCM Control Delay | 8.4 | 10.5 | 8.4 | 8.2 |
| HCM Lane LOS | A | B | A | A |
| HCM 95th-tile Q | 0.1 | 2.1 | 0.7 | 0.2 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 1 | 181 | 14 | 2 | 106 | 0 | 6 | 2 | 0 | 3 | 1 | 1 |
| Future Vol, veh/h | 1 | 181 | 14 | 2 | 106 | 0 | 6 | 2 | 0 | 3 | 1 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 226 | 18 | 3 | 133 | 0 | 8 | 3 | 0 | 4 | 1 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 133 | 0 | 0 | 244 | 0 | 0 | 377 | 376 | 235 | 378 | 385 | 133 |
| Stage 1 | - | - | - | - | - | - | 237 | 237 | - | 139 | 139 | - |
| Stage 2 | - | - | - | - | - | - | 140 | 139 | - | 239 | 246 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1452 | - | - | 1322 | - | - | 580 | 555 | 804 | 580 | 549 | 916 |
| Stage 1 | - | - | - | - | - | - | 766 | 709 | - | 864 | 782 | - |
| Stage 2 | - | - | - | - | - | - | 863 | 782 | - | 764 | 703 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1452 | - | - | 1322 | - | - | 577 | 553 | 804 | 577 | 547 | 916 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 577 | 553 | - | 577 | 547 | - |
| Stage 1 | - | - | - | - | - | - | 765 | 708 | - | 863 | 780 | - |
| Stage 2 | - | - | - | - | - | - | 859 | 780 | - | 761 | 702 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 11.4 | 10.9 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 571 | 1452 | - | - | 1322 | - | - | 616 |
| HCM Lane V/C Ratio | 0.018 | 0.001 | - | - | 0.002 | - | - | 0.01 |
| HCM Control Delay (s) | 11.4 | 7.5 | 0 | - | 7.7 | 0 | - | 10.9 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2019 Existing
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 109 | 204 | 54 | 15 | 207 | 87 | 131 | 641 | 36 | 16 | 117 | 43 |
| Future Volume (veh/h) | 109 | 204 | 54 | 15 | 207 | 87 | 131 | 641 | 36 | 16 | 117 | 43 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 143 | 268 | 71 | 19 | 269 | 113 | 139 | 682 | 38 | 22 | 160 | 59 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.76 | 0.76 | 0.76 | 0.77 | 0.77 | 0.77 | 0.94 | 0.94 | 0.94 | 0.73 | 0.73 | 0.73 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 230 | 423 | 112 | 245 | 303 | 127 | 571 | 781 | 44 | 173 | 552 | 204 |
| Arrive On Green | 0.08 | 0.31 | 0.31 | 0.02 | 0.26 | 0.26 | 0.06 | 0.47 | 0.47 | 0.02 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1681 | 1345 | 356 | 1681 | 1181 | 496 | 1681 | 1656 | 92 | 1681 | 1280 | 472 |
| Grp Volume(v), veh/h | 143 | 0 | 339 | 19 | 0 | 382 | 139 | 0 | 720 | 22 | 0 | 219 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1702 | 1681 | 0 | 1677 | 1681 | 0 | 1748 | 1681 | 0 | 1752 |
| Q Serve(g_s), s | 7.0 | 0.0 | 19.8 | 1.0 | 0.0 | 25.5 | 5.2 | 0.0 | 43.0 | 0.8 | 0.0 | 9.4 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 19.8 | 1.0 | 0.0 | 25.5 | 5.2 | 0.0 | 43.0 | 0.8 | 0.0 | 9.4 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.30 | 1.00 | | 0.05 | 1.00 | | 0.27 |
| Lane Grp Cap(c), veh/h | 230 | 0 | 536 | 245 | 0 | 430 | 571 | 0 | 824 | 173 | 0 | 755 |
| V/C Ratio(X) | 0.62 | 0.00 | 0.63 | 0.08 | 0.00 | 0.89 | 0.24 | 0.00 | 0.87 | 0.13 | 0.00 | 0.29 |
| Avail Cap(c_a), veh/h | 316 | 0 | 571 | 429 | 0 | 563 | 684 | 0 | 918 | 353 | 0 | 920 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 30.5 | 0.0 | 34.1 | 31.5 | 0.0 | 41.5 | 15.9 | 0.0 | 27.6 | 24.1 | 0.0 | 21.5 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 1.4 | 0.0 | 0.0 | 11.0 | 0.1 | 0.0 | 8.7 | 0.1 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.0 | 0.0 | 14.6 | 0.8 | 0.0 | 19.0 | 4.3 | 0.0 | 30.4 | 0.7 | 0.0 | 8.1 |
| LnGrp Delay(d),s/veh | 31.5 | 0.0 | 35.5 | 31.5 | 0.0 | 52.6 | 16.0 | 0.0 | 36.2 | 24.2 | 0.0 | 21.7 |
| LnGrp LOS | C | | D | C | | D | B | | D | C | | C |
| Approach Vol, veh/h | | 482 | | | 401 | | | 859 | | | 241 | |
| Approach Delay, s/veh | | 34.3 | | | 51.6 | | | 33.0 | | | 21.9 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 14.0 | 34.8 | 12.2 | 55.1 | 7.3 | 41.6 | 7.5 | 59.8 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 15.0 | 39.0 | 15.0 | 61.0 | 15.0 | 39.0 | 15.0 | 61.0 |
| Max Q Clear Time (g_c+I1), s | 9.0 | 27.5 | 7.2 | 11.4 | 3.0 | 21.8 | 2.8 | 45.0 |
| Green Ext Time (p_c), s | 0.1 | 2.3 | 0.1 | 4.2 | 0.0 | 4.4 | 0.0 | 9.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 35.7 |
| HCM 2010 LOS | D |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2019 Existing
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 41 | 258 | 13 | 30 | 284 | 108 | 28 | 370 | 91 | 53 | 89 | 21 |
| Future Volume (veh/h) | 41 | 258 | 13 | 30 | 284 | 108 | 28 | 370 | 91 | 53 | 89 | 21 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 49 | 311 | 16 | 38 | 359 | 137 | 29 | 378 | 93 | 64 | 107 | 25 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.79 | 0.79 | 0.79 | 0.98 | 0.98 | 0.98 | 0.83 | 0.83 | 0.83 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 221 | 609 | 31 | 360 | 440 | 168 | 516 | 486 | 120 | 244 | 512 | 120 |
| Arrive On Green | 0.04 | 0.37 | 0.35 | 0.03 | 0.36 | 0.34 | 0.03 | 0.36 | 0.33 | 0.04 | 0.37 | 0.35 |
| Sat Flow, veh/h | 1681 | 1664 | 86 | 1681 | 1218 | 465 | 1681 | 1369 | 337 | 1681 | 1384 | 323 |
| Grp Volume(v), veh/h | 49 | 0 | 327 | 38 | 0 | 496 | 29 | 0 | 471 | 64 | 0 | 132 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1750 | 1681 | 0 | 1683 | 1681 | 0 | 1705 | 1681 | 0 | 1708 |
| Q Serve(g_s), s | 1.8 | 0.0 | 14.3 | 1.4 | 0.0 | 26.3 | 1.1 | 0.0 | 24.2 | 2.3 | 0.0 | 5.2 |
| Cycle Q Clear(g_c), s | 1.8 | 0.0 | 14.3 | 1.4 | 0.0 | 26.3 | 1.1 | 0.0 | 24.2 | 2.3 | 0.0 | 5.2 |
| Prop In Lane | 1.00 | | 0.05 | 1.00 | | 0.28 | 1.00 | | 0.20 | 1.00 | | 0.19 |
| Lane Grp Cap(c), veh/h | 221 | 0 | 641 | 360 | 0 | 608 | 516 | 0 | 606 | 244 | 0 | 631 |
| V/C Ratio(X) | 0.22 | 0.00 | 0.51 | 0.11 | 0.00 | 0.82 | 0.06 | 0.00 | 0.78 | 0.26 | 0.00 | 0.21 |
| Avail Cap(c_a), veh/h | 414 | 0 | 944 | 561 | 0 | 908 | 726 | 0 | 816 | 430 | 0 | 817 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 22.0 | 0.0 | 24.3 | 19.4 | 0.0 | 28.7 | 19.1 | 0.0 | 28.4 | 21.7 | 0.0 | 21.3 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.6 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 4.1 | 0.2 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.5 | 0.0 | 11.4 | 1.1 | 0.0 | 18.6 | 0.9 | 0.0 | 17.8 | 1.9 | 0.0 | 4.5 |
| LnGrp Delay(d),s/veh | 22.2 | 0.0 | 24.9 | 19.5 | 0.0 | 32.3 | 19.1 | 0.0 | 32.5 | 22.0 | 0.0 | 21.5 |
| LnGrp LOS | C | | C | B | | C | B | | C | C | | C |
| Approach Vol, veh/h | | 376 | | | 534 | | | 500 | | | 196 | |
| Approach Delay, s/veh | | 24.6 | | | 31.4 | | | 31.7 | | | 21.7 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.7 | 40.5 | 7.7 | 41.3 | 8.2 | 41.0 | 9.1 | 39.9 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 15.0 | 53.0 | 15.0 | 47.0 | 15.0 | 53.0 | 15.0 | 47.0 |
| Max Q Clear Time (g_c+I1), s | 3.8 | 28.3 | 3.1 | 7.2 | 3.4 | 16.3 | 4.3 | 26.2 |
| Green Ext Time (p_c), s | 0.0 | 7.2 | 0.0 | 2.7 | 0.0 | 4.1 | 0.1 | 8.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 28.7 |
| HCM 2010 LOS | C |

HCM 2010 AWSC
9: Cloverdale Road & Columbia Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.2 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 116 | 60 | 54 | 25 | 85 | 24 | 24 | 219 | 21 | 4 | 77 | 58 |
| Future Vol, veh/h | 116 | 60 | 54 | 25 | 85 | 24 | 24 | 219 | 21 | 4 | 77 | 58 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 127 | 66 | 59 | 27 | 93 | 26 | 26 | 241 | 23 | 4 | 85 | 64 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 11.5 | 10.1 | 12.1 | 9.8 |
| HCM LOS | B | B | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 9% | 50% | 19% | 3% |
| Vol Thru, % | 83% | 26% | 63% | 55% |
| Vol Right, % | 8% | 23% | 18% | 42% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 264 | 230 | 134 | 139 |
| LT Vol | 24 | 116 | 25 | 4 |
| Through Vol | 219 | 60 | 85 | 77 |
| RT Vol | 21 | 54 | 24 | 58 |
| Lane Flow Rate | 290 | 253 | 147 | 153 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.423 | 0.374 | 0.224 | 0.223 |
| Departure Headway (Hd) | 5.245 | 5.327 | 5.472 | 5.254 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 685 | 675 | 655 | 681 |
| Service Time | 3.281 | 3.365 | 3.515 | 3.297 |
| HCM Lane V/C Ratio | 0.423 | 0.375 | 0.224 | 0.225 |
| HCM Control Delay | 12.1 | 11.5 | 10.1 | 9.8 |
| HCM Lane LOS | B | B | B | A |
| HCM 95th-tile Q | 2.1 | 1.7 | 0.9 | 0.9 |

HCM 2010 TWSC
10: Cloverdale Road & Hubbard Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 63 | 99 | 4 | 1 | 1 | 8 | 5 | 178 | 19 | 70 | 55 | 33 |
| Future Vol, veh/h | 63 | 99 | 4 | 1 | 1 | 8 | 5 | 178 | 19 | 70 | 55 | 33 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 68 | 108 | 4 | 1 | 1 | 9 | 5 | 193 | 21 | 76 | 60 | 36 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 449 | 454 | 78 | 500 | 462 | 204 | 96 | 0 | 0 | 214 | 0 | 0 |
| Stage 1 | 230 | 230 | - | 214 | 214 | - | - | - | - | - | - | - |
| Stage 2 | 219 | 224 | - | 286 | 248 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 520 | 502 | 983 | 481 | 497 | 837 | 1498 | - | - | 1356 | - | - |
| Stage 1 | 773 | 714 | - | 788 | 725 | - | - | - | - | - | - | - |
| Stage 2 | 783 | 718 | - | 721 | 701 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 489 | 470 | 983 | 376 | 466 | 837 | 1498 | - | - | 1356 | - | - |
| Mov Cap-2 Maneuver | 489 | 470 | - | 376 | 466 | - | - | - | - | - | - | - |
| Stage 1 | 770 | 672 | - | 785 | 722 | - | - | - | - | - | - | - |
| Stage 2 | 771 | 715 | - | 567 | 660 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 16.8 | 10.3 | 0.2 | 3.5 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1498 | - | - | 483 | 696 | 1356 | - | - |
| HCM Lane V/C Ratio | 0.004 | - | - | 0.374 | 0.016 | 0.056 | - | - |
| HCM Control Delay (s) | 7.4 | 0 | - | 16.8 | 10.3 | 7.8 | 0 | - |
| HCM Lane LOS | A | A | - | C | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.7 | 0 | 0.2 | - | - |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.7 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 57 | 16 | 121 | 0 | 28 | 32 | 62 | 100 | 2 | 4 | 36 | 18 |
| Future Vol, veh/h | 57 | 16 | 121 | 0 | 28 | 32 | 62 | 100 | 2 | 4 | 36 | 18 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 63 | 18 | 134 | 0 | 31 | 36 | 69 | 111 | 2 | 4 | 40 | 20 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.8 | 7.9 | 9.2 | 8.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 38% | 29% | 0% | 7% |
| Vol Thru, % | 61% | 8% | 47% | 62% |
| Vol Right, % | 1% | 62% | 53% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 164 | 194 | 60 | 58 |
| LT Vol | 62 | 57 | 0 | 4 |
| Through Vol | 100 | 16 | 28 | 36 |
| RT Vol | 2 | 121 | 32 | 18 |
| Lane Flow Rate | 182 | 216 | 67 | 64 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.238 | 0.257 | 0.082 | 0.082 |
| Departure Headway (Hd) | 4.701 | 4.287 | 4.446 | 4.608 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 764 | 839 | 805 | 775 |
| Service Time | 2.735 | 2.312 | 2.48 | 2.648 |
| HCM Lane V/C Ratio | 0.238 | 0.257 | 0.083 | 0.083 |
| HCM Control Delay | 9.2 | 8.8 | 7.9 | 8.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.9 | 1 | 0.3 | 0.3 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 173 | 0 | 8 | 1 | 0 |
| Future Vol, veh/h | 4 | 173 | 0 | 8 | 1 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 73 | 73 | 73 | 73 | 73 | 73 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 237 | 0 | 11 | 1 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 124 | 242 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 124 | 242 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 871 | 660 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 902 | 705 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 871 | 0 |
| Mov Cap-2 Maneuver | - | - | 871 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 902 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
# 13: Pleasant Valley Road & Gowen Road

2019 Existing
AM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 834 | 184 | 19 | 127 | 202 | 191 |
| Future Volume (veh/h) | 834 | 184 | 19 | 127 | 202 | 191 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 851 | 188 | 23 | 153 | 224 | 212 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.98 | 0.98 | 0.83 | 0.83 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1631 | 1231 | 361 | 1297 | 270 | 241 |
| Arrive On Green | 0.66 | 0.66 | 0.02 | 0.73 | 0.16 | 0.16 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 851 | 188 | 23 | 153 | 224 | 212 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 20.5 | 3.0 | 0.5 | 2.9 | 14.8 | 15.9 |
| Cycle Q Clear(g_c), s | 20.5 | 3.0 | 0.5 | 2.9 | 14.8 | 15.9 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1631 | 1231 | 361 | 1297 | 270 | 241 |
| V/C Ratio(X) | 0.52 | 0.15 | 0.06 | 0.12 | 0.83 | 0.88 |
| Avail Cap(c_a), veh/h | 1631 | 1231 | 469 | 1297 | 395 | 352 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.1 | 2.1 | 7.6 | 4.4 | 46.7 | 47.2 |
| Incr Delay (d2), s/veh | 1.2 | 0.3 | 0.0 | 0.2 | 6.1 | 11.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 11.7 | 4.3 | 0.4 | 2.6 | 11.8 | 11.8 |
| LnGrp Delay(d),s/veh | 11.3 | 2.4 | 7.6 | 4.6 | 52.8 | 59.0 |
| LnGrp LOS | B | A | A | A | D | E |
| Approach Vol, veh/h | 1039 | | | 176 | 436 | |
| Approach Delay, s/veh | 9.7 | | | 5.0 | 55.8 | |
| Approach LOS | A | | | A | E | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 90.5 | | | 8.6 | 81.9 | | 24.5 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 76.0 | | | 10.0 | 60.0 | | 27.0 |
| Max Q Clear Time (g_c+I1), s | | 4.9 | | | 2.5 | 22.5 | | 17.9 |
| Green Ext Time (p_c), s | | 1.3 | | | 0.0 | 9.9 | | 0.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 21.4 |
| HCM 2010 LOS | C |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2019 Existing
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 133 | 47 | 1 | 190 | 134 | 3 |
| Future Vol, veh/h | 133 | 47 | 1 | 190 | 134 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 149 | 53 | 1 | 213 | 151 | 3 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 368 | 153 | 154 | 0 | - | 0 |
| Stage 1 | 153 | - | - | - | - | - |
| Stage 2 | 215 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 632 | 893 | 1426 | - | - | - |
| Stage 1 | 875 | - | - | - | - | - |
| Stage 2 | 821 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 631 | 893 | 1426 | - | - | - |
| Mov Cap-2 Maneuver | 631 | - | - | - | - | - |
| Stage 1 | 874 | - | - | - | - | - |
| Stage 2 | 821 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 12.5 | 0 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1426 | - | 683 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | 0.296 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | 12.5 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 1.2 | - | - |

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2019 Existing
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 94 | 73 | 16 | 86 | 199 | 35 | 30 | 554 | 38 | 41 | 1120 | 272 |
| Future Volume (veh/h) | 94 | 73 | 16 | 86 | 199 | 35 | 30 | 554 | 38 | 41 | 1120 | 272 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 112 | 87 | 19 | 104 | 240 | 42 | 34 | 637 | 44 | 43 | 1167 | 283 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.83 | 0.83 | 0.83 | 0.87 | 0.87 | 0.87 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 197 | 241 | 53 | 305 | 289 | 246 | 207 | 1857 | 831 | 434 | 1865 | 834 |
| Arrive On Green | 0.07 | 0.17 | 0.17 | 0.06 | 0.16 | 0.16 | 0.03 | 0.55 | 0.55 | 0.03 | 0.56 | 0.56 |
| Sat Flow, veh/h | 1681 | 1404 | 307 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 112 | 0 | 106 | 104 | 240 | 42 | 34 | 637 | 44 | 43 | 1167 | 283 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1711 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 8.2 | 0.0 | 8.2 | 7.6 | 19.7 | 3.6 | 1.3 | 15.7 | 2.0 | 1.6 | 35.5 | 15.5 |
| Cycle Q Clear(g_c), s | 8.2 | 0.0 | 8.2 | 7.6 | 19.7 | 3.6 | 1.3 | 15.7 | 2.0 | 1.6 | 35.5 | 15.5 |
| Prop In Lane | 1.00 | | 0.18 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 197 | 0 | 293 | 305 | 289 | 246 | 207 | 1857 | 831 | 434 | 1865 | 834 |
| V/C Ratio(X) | 0.57 | 0.00 | 0.36 | 0.34 | 0.83 | 0.17 | 0.16 | 0.34 | 0.05 | 0.10 | 0.63 | 0.34 |
| Avail Cap(c_a), veh/h | 229 | 0 | 439 | 349 | 447 | 380 | 310 | 1857 | 831 | 533 | 1865 | 834 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.9 | 0.0 | 54.9 | 47.9 | 60.7 | 53.9 | 18.1 | 18.4 | 15.4 | 14.3 | 22.6 | 18.2 |
| Incr Delay (d2), s/veh | 1.0 | 0.0 | 0.3 | 0.2 | 4.2 | 0.1 | 0.1 | 0.5 | 0.1 | 0.0 | 1.6 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.0 | 0.0 | 7.0 | 6.4 | 15.2 | 2.7 | 1.1 | 11.8 | 1.5 | 1.4 | 23.5 | 10.9 |
| LnGrp Delay(d),s/veh | 49.8 | 0.0 | 55.2 | 48.1 | 64.9 | 54.1 | 18.2 | 18.9 | 15.5 | 14.4 | 24.2 | 19.3 |
| LnGrp LOS | D | | E | D | E | D | B | B | B | B | C | B |
| Approach Vol, veh/h | | 218 | | | 386 | | | 715 | | | 1493 | |
| Approach Delay, s/veh | | 52.4 | | | 59.2 | | | 18.7 | | | 23.0 | |
| Approach LOS | | D | | | E | | | B | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 17.2 | 31.6 | 10.8 | 90.4 | 16.1 | 32.7 | 11.2 | 90.1 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 13.0 | 38.0 | 13.0 | 58.0 | 13.5 | * 39 | 13.0 | 58.0 |
| Max Q Clear Time (g_c+I1), s | 10.2 | 21.7 | 3.3 | 37.5 | 9.6 | 10.2 | 3.6 | 17.7 |
| Green Ext Time (p_c), s | 0.0 | 2.8 | 0.0 | 18.8 | 0.1 | 1.4 | 0.0 | 20.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 29.2 |
| HCM 2010 LOS | C |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.3 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 127 | 129 | 329 | 64 | 78 | 634 |
| Future Vol, veh/h | 127 | 129 | 329 | 64 | 78 | 634 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 134 | 136 | 346 | 67 | 82 | 667 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 844 | 173 | 0 | - | 346 | 0 |
| Stage 1 | 346 | - | - | - | - | - |
| Stage 2 | 498 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | 302 | 840 | - | 0 | 1210 | - |
| Stage 1 | 688 | - | - | 0 | - | - |
| Stage 2 | 576 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 281 | 840 | - | - | 1210 | - |
| Mov Cap-2 Maneuver | 400 | - | - | - | - | - |
| Stage 1 | 688 | - | - | - | - | - |
| Stage 2 | 537 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 14.3 | 0 | 0.9 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 400 | 840 | 1210 | - |
| HCM Lane V/C Ratio | - | 0.334 | 0.162 | 0.068 | - |
| HCM Control Delay (s) | - | 18.5 | 10.1 | 8.2 | - |
| HCM Lane LOS | - | C | B | A | - |
| HCM 95th %tile Q(veh) | - | 1.4 | 0.6 | 0.2 | - |

HCM 2010 AWSC
3: Locust Grove Road & Columbia Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 10.1 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 11 | 99 | 3 | 17 | 312 | 19 | 3 | 27 | 3 | 14 | 68 | 30 |
| Future Vol, veh/h | 11 | 99 | 3 | 17 | 312 | 19 | 3 | 27 | 3 | 14 | 68 | 30 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 12 | 104 | 3 | 18 | 328 | 20 | 3 | 28 | 3 | 15 | 72 | 32 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.6 | 11.1 | 8.5 | 9 |
| HCM LOS | A | B | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 9% | 10% | 5% | 12% |
| Vol Thru, % | 82% | 88% | 90% | 61% |
| Vol Right, % | 9% | 3% | 5% | 27% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 33 | 113 | 348 | 112 |
| LT Vol | 3 | 11 | 17 | 14 |
| Through Vol | 27 | 99 | 312 | 68 |
| RT Vol | 3 | 3 | 19 | 30 |
| Lane Flow Rate | 35 | 119 | 366 | 118 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.05 | 0.156 | 0.451 | 0.162 |
| Departure Headway (Hd) | 5.169 | 4.725 | 4.433 | 4.948 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 689 | 757 | 813 | 723 |
| Service Time | 3.227 | 2.768 | 2.466 | 2.997 |
| HCM Lane V/C Ratio | 0.051 | 0.157 | 0.45 | 0.163 |
| HCM Control Delay | 8.5 | 8.6 | 11.1 | 9 |
| HCM Lane LOS | A | A | B | A |
| HCM 95th-tile Q | 0.2 | 0.6 | 2.4 | 0.6 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.2 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 6 | 91 | 233 | 7 | 15 | 23 |
| Future Vol, veh/h | 6 | 91 | 233 | 7 | 15 | 23 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 95 | 243 | 7 | 16 | 24 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 250 | 0 | - | 0 | 354 | 247 |
| Stage 1 | - | - | - | - | 247 | - |
| Stage 2 | - | - | - | - | 107 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1316 | - | - | - | 644 | 792 |
| Stage 1 | - | - | - | - | 794 | - |
| Stage 2 | - | - | - | - | 917 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1316 | - | - | - | 641 | 792 |
| Mov Cap-2 Maneuver | - | - | - | - | 641 | - |
| Stage 1 | - | - | - | - | 790 | - |
| Stage 2 | - | - | - | - | 917 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 10.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1316 | - | - | - | 725 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.055 |
| HCM Control Delay (s) | 7.7 | 0 | - | - | 10.3 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.3 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 21 | 95 | 4 | 4 | 198 | 30 | 10 | 8 | 2 | 49 | 24 | 130 |
| Future Vol, veh/h | 21 | 95 | 4 | 4 | 198 | 30 | 10 | 8 | 2 | 49 | 24 | 130 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 101 | 4 | 4 | 211 | 32 | 11 | 9 | 2 | 52 | 26 | 138 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.8 | 9.7 | 8.3 | 9.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 50% | 17% | 2% | 24% |
| Vol Thru, % | 40% | 79% | 85% | 12% |
| Vol Right, % | 10% | 3% | 13% | 64% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 20 | 120 | 232 | 203 |
| LT Vol | 10 | 21 | 4 | 49 |
| Through Vol | 8 | 95 | 198 | 24 |
| RT Vol | 2 | 4 | 30 | 130 |
| Lane Flow Rate | 21 | 128 | 247 | 216 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.03 | 0.17 | 0.313 | 0.27 |
| Departure Headway (Hd) | 5.122 | 4.788 | 4.565 | 4.498 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 695 | 747 | 785 | 797 |
| Service Time | 3.18 | 2.836 | 2.607 | 2.538 |
| HCM Lane V/C Ratio | 0.03 | 0.171 | 0.315 | 0.271 |
| HCM Control Delay | 8.3 | 8.8 | 9.7 | 9.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.1 | 0.6 | 1.3 | 1.1 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 94 | 17 | 2 | 215 | 3 | 17 | 8 | 1 | 4 | 7 | 0 |
| Future Vol, veh/h | 3 | 94 | 17 | 2 | 215 | 3 | 17 | 8 | 1 | 4 | 7 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 100 | 18 | 2 | 229 | 3 | 18 | 9 | 1 | 4 | 7 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 232 | 0 | 0 | 118 | 0 | 0 | 353 | 351 | 109 | 355 | 359 | 231 |
| Stage 1 | - | - | - | - | - | - | 115 | 115 | - | 235 | 235 | - |
| Stage 2 | - | - | - | - | - | - | 238 | 236 | - | 120 | 124 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1336 | - | - | 1470 | - | - | 602 | 573 | 945 | 600 | 568 | 808 |
| Stage 1 | - | - | - | - | - | - | 890 | 800 | - | 768 | 710 | - |
| Stage 2 | - | - | - | - | - | - | 765 | 710 | - | 884 | 793 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1336 | - | - | 1470 | - | - | 594 | 571 | 945 | 591 | 566 | 808 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 594 | 571 | - | 591 | 566 | - |
| Stage 1 | - | - | - | - | - | - | 888 | 798 | - | 766 | 709 | - |
| Stage 2 | - | - | - | - | - | - | 755 | 709 | - | 872 | 791 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 11.3 | 11.4 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 595 | 1336 | - | - | 1470 | - | - | 575 |
| HCM Lane V/C Ratio | 0.046 | 0.002 | - | - | 0.001 | - | - | 0.02 |
| HCM Control Delay (s) | 11.3 | 7.7 | 0 | - | 7.5 | 0 | - | 11.4 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2019 Existing
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 61 | 230 | 120 | 59 | 236 | 15 | 86 | 219 | 34 | 46 | 547 | 124 |
| Future Volume (veh/h) | 61 | 230 | 120 | 59 | 236 | 15 | 86 | 219 | 34 | 46 | 547 | 124 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 69 | 258 | 135 | 66 | 265 | 17 | 91 | 233 | 36 | 48 | 570 | 129 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.94 | 0.94 | 0.94 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 282 | 303 | 158 | 184 | 452 | 29 | 222 | 705 | 109 | 535 | 671 | 152 |
| Arrive On Green | 0.04 | 0.28 | 0.28 | 0.04 | 0.28 | 0.28 | 0.04 | 0.47 | 0.47 | 0.03 | 0.46 | 0.46 |
| Sat Flow, veh/h | 1681 | 1092 | 572 | 1681 | 1641 | 105 | 1681 | 1493 | 231 | 1681 | 1449 | 328 |
| Grp Volume(v), veh/h | 69 | 0 | 393 | 66 | 0 | 282 | 91 | 0 | 269 | 48 | 0 | 699 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1664 | 1681 | 0 | 1746 | 1681 | 0 | 1724 | 1681 | 0 | 1777 |
| Q Serve(g_s), s | 3.3 | 0.0 | 25.4 | 3.2 | 0.0 | 15.9 | 3.2 | 0.0 | 11.1 | 1.7 | 0.0 | 39.6 |
| Cycle Q Clear(g_c), s | 3.3 | 0.0 | 25.4 | 3.2 | 0.0 | 15.9 | 3.2 | 0.0 | 11.1 | 1.7 | 0.0 | 39.6 |
| Prop In Lane | 1.00 | | 0.34 | 1.00 | | 0.06 | 1.00 | | 0.13 | 1.00 | | 0.18 |
| Lane Grp Cap(c), veh/h | 282 | 0 | 461 | 184 | 0 | 481 | 222 | 0 | 814 | 535 | 0 | 822 |
| V/C Ratio(X) | 0.24 | 0.00 | 0.85 | 0.36 | 0.00 | 0.59 | 0.41 | 0.00 | 0.33 | 0.09 | 0.00 | 0.85 |
| Avail Cap(c_a), veh/h | 434 | 0 | 571 | 338 | 0 | 599 | 370 | 0 | 925 | 700 | 0 | 954 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.8 | 0.0 | 38.9 | 30.7 | 0.0 | 35.6 | 22.5 | 0.0 | 18.7 | 15.3 | 0.0 | 27.0 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 8.5 | 0.4 | 0.0 | 0.4 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 6.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.8 | 0.0 | 18.6 | 2.7 | 0.0 | 12.3 | 2.7 | 0.0 | 9.1 | 1.4 | 0.0 | 28.4 |
| LnGrp Delay(d),s/veh | 29.0 | 0.0 | 47.4 | 31.1 | 0.0 | 36.0 | 22.9 | 0.0 | 19.0 | 15.3 | 0.0 | 33.6 |
| LnGrp LOS | C | | D | C | | D | C | | B | B | | C |
| Approach Vol, veh/h | | 462 | | | 348 | | | 360 | | | 747 | |
| Approach Delay, s/veh | | 44.7 | | | 35.1 | | | 20.0 | | | 32.4 | |
| Approach LOS | | D | | | D | | | B | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 9.8 | 36.3 | 10.0 | 57.6 | 9.6 | 36.5 | 8.9 | 58.7 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 15.0 | 39.0 | 15.0 | 61.0 | 15.0 | 39.0 | 15.0 | 61.0 |
| Max Q Clear Time (g_c+I1), s | 5.3 | 17.9 | 5.2 | 41.6 | 5.2 | 27.4 | 3.7 | 13.1 |
| Green Ext Time (p_c), s | 0.1 | 2.1 | 0.1 | 11.0 | 0.1 | 4.1 | 0.0 | 5.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.5 |
| HCM 2010 LOS | C |

# HCM 2010 Signalized Intersection Summary
# 8: Cloverdale Road & Lake Hazel Road

2019 Existing
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 46 | 332 | 36 | 117 | 388 | 71 | 34 | 158 | 58 | 116 | 316 | 62 |
| Future Volume (veh/h) | 46 | 332 | 36 | 117 | 388 | 71 | 34 | 158 | 58 | 116 | 316 | 62 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 51 | 365 | 40 | 127 | 422 | 77 | 42 | 198 | 72 | 126 | 343 | 67 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.80 | 0.80 | 0.80 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 254 | 538 | 59 | 339 | 541 | 99 | 250 | 354 | 129 | 370 | 462 | 90 |
| Arrive On Green | 0.04 | 0.34 | 0.34 | 0.07 | 0.37 | 0.37 | 0.04 | 0.29 | 0.29 | 0.07 | 0.32 | 0.32 |
| Sat Flow, veh/h | 1681 | 1563 | 171 | 1681 | 1453 | 265 | 1681 | 1236 | 449 | 1681 | 1435 | 280 |
| Grp Volume(v), veh/h | 51 | 0 | 405 | 127 | 0 | 499 | 42 | 0 | 270 | 126 | 0 | 410 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1734 | 1681 | 0 | 1718 | 1681 | 0 | 1685 | 1681 | 0 | 1715 |
| Q Serve(g_s), s | 1.7 | 0.0 | 17.5 | 4.2 | 0.0 | 22.5 | 1.5 | 0.0 | 11.9 | 4.5 | 0.0 | 18.7 |
| Cycle Q Clear(g_c), s | 1.7 | 0.0 | 17.5 | 4.2 | 0.0 | 22.5 | 1.5 | 0.0 | 11.9 | 4.5 | 0.0 | 18.7 |
| Prop In Lane | 1.00 | | 0.10 | 1.00 | | 0.15 | 1.00 | | 0.27 | 1.00 | | 0.16 |
| Lane Grp Cap(c), veh/h | 254 | 0 | 597 | 339 | 0 | 640 | 250 | 0 | 482 | 370 | 0 | 553 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.68 | 0.37 | 0.00 | 0.78 | 0.17 | 0.00 | 0.56 | 0.34 | 0.00 | 0.74 |
| Avail Cap(c_a), veh/h | 473 | 0 | 1148 | 510 | 0 | 1137 | 476 | 0 | 808 | 535 | 0 | 822 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.5 | 0.0 | 24.6 | 18.3 | 0.0 | 24.3 | 22.1 | 0.0 | 26.6 | 20.3 | 0.0 | 26.5 |
| Incr Delay (d2), s/veh | 0.1 | 0.0 | 1.4 | 0.3 | 0.0 | 2.1 | 0.1 | 0.0 | 1.5 | 0.2 | 0.0 | 2.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.4 | 0.0 | 13.3 | 3.5 | 0.0 | 16.5 | 1.3 | 0.0 | 9.7 | 3.8 | 0.0 | 14.2 |
| LnGrp Delay(d),s/veh | 19.7 | 0.0 | 26.0 | 18.6 | 0.0 | 26.4 | 22.2 | 0.0 | 28.1 | 20.5 | 0.0 | 29.3 |
| LnGrp LOS | B | | C | B | | C | C | | C | C | | C |
| Approach Vol, veh/h | | 456 | | | 626 | | | 312 | | | 536 | |
| Approach Delay, s/veh | | 25.3 | | | 24.8 | | | 27.3 | | | 27.2 | |
| Approach LOS | | C | | | C | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 8.6 | 37.7 | 8.2 | 33.2 | 11.1 | 35.1 | 11.4 | 30.1 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 15.0 | 58.0 | 15.0 | 42.0 | 15.0 | 58.0 | 15.0 | 42.0 |
| Max Q Clear Time (g_c+I1), s | 3.7 | 24.5 | 3.5 | 20.7 | 6.2 | 19.5 | 6.5 | 13.9 |
| Green Ext Time (p_c), s | 0.0 | 8.1 | 0.0 | 7.6 | 0.1 | 5.4 | 0.1 | 5.5 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 26.0 |
| HCM 2010 LOS | C |

HCM 2010 AWSC
9: Cloverdale Road & Columbia Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.3 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 32 | 83 | 38 | 19 | 76 | 12 | 65 | 118 | 25 | 23 | 197 | 97 |
| Future Vol, veh/h | 32 | 83 | 38 | 19 | 76 | 12 | 65 | 118 | 25 | 23 | 197 | 97 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 35 | 91 | 42 | 21 | 84 | 13 | 71 | 130 | 27 | 25 | 216 | 107 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.5 | 10 | 10.9 | 12.4 |
| HCM LOS | B | A | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 31% | 21% | 18% | 7% |
| Vol Thru, % | 57% | 54% | 71% | 62% |
| Vol Right, % | 12% | 25% | 11% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 208 | 153 | 107 | 317 |
| LT Vol | 65 | 32 | 19 | 23 |
| Through Vol | 118 | 83 | 76 | 197 |
| RT Vol | 25 | 38 | 12 | 97 |
| Lane Flow Rate | 229 | 168 | 118 | 348 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.332 | 0.257 | 0.186 | 0.477 |
| Departure Headway (Hd) | 5.236 | 5.511 | 5.68 | 4.925 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 686 | 651 | 631 | 732 |
| Service Time | 3.271 | 3.551 | 3.722 | 2.955 |
| HCM Lane V/C Ratio | 0.334 | 0.258 | 0.187 | 0.475 |
| HCM Control Delay | 10.9 | 10.5 | 10 | 12.4 |
| HCM Lane LOS | B | B | A | B |
| HCM 95th-tile Q | 1.5 | 1 | 0.7 | 2.6 |

HCM 2010 TWSC
10: Cloverdale Road & Hubbard Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 18 | 2 | 2 | 20 | 134 | 71 | 6 | 124 | 2 | 14 | 182 | 60 |
| Future Vol, veh/h | 18 | 2 | 2 | 20 | 134 | 71 | 6 | 124 | 2 | 14 | 182 | 60 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 21 | 2 | 2 | 23 | 154 | 82 | 7 | 143 | 2 | 16 | 209 | 69 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 552 | 435 | 244 | 436 | 468 | 144 | 278 | 0 | 0 | 145 | 0 | 0 |
| Stage 1 | 276 | 276 | - | 158 | 158 | - | - | - | - | - | - | - |
| Stage 2 | 276 | 159 | - | 278 | 310 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 444 | 514 | 795 | 531 | 493 | 903 | 1285 | - | - | 1437 | - | - |
| Stage 1 | 730 | 682 | - | 844 | 767 | - | - | - | - | - | - | - |
| Stage 2 | 730 | 766 | - | 728 | 659 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 300 | 504 | 795 | 520 | 484 | 903 | 1285 | - | - | 1437 | - | - |
| Mov Cap-2 Maneuver | 300 | 504 | - | 520 | 484 | - | - | - | - | - | - | - |
| Stage 1 | 726 | 673 | - | 839 | 762 | - | - | - | - | - | - | - |
| Stage 2 | 527 | 761 | - | 714 | 650 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 16.8 | 16.4 | 0.4 | 0.4 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1285 | - | - | 331 | 571 | 1437 | - | - |
| HCM Lane V/C Ratio | 0.005 | - | - | 0.076 | 0.453 | 0.011 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | - | 16.8 | 16.4 | 7.5 | 0 | - |
| HCM Lane LOS | A | A | - | C | C | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 2.3 | 0 | - | - |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.1 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 21 | 19 | 46 | 0 | 23 | 9 | 157 | 98 | 2 | 25 | 82 | 48 |
| Future Vol, veh/h | 21 | 19 | 46 | 0 | 23 | 9 | 157 | 98 | 2 | 25 | 82 | 48 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 20 | 48 | 0 | 24 | 9 | 165 | 103 | 2 | 26 | 86 | 51 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8.4 | 8.1 | 9.9 | 8.5 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 61% | 24% | 0% | 16% |
| Vol Thru, % | 38% | 22% | 72% | 53% |
| Vol Right, % | 1% | 53% | 28% | 31% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 257 | 86 | 32 | 155 |
| LT Vol | 157 | 21 | 0 | 25 |
| Through Vol | 98 | 19 | 23 | 82 |
| RT Vol | 2 | 46 | 9 | 48 |
| Lane Flow Rate | 271 | 91 | 34 | 163 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.34 | 0.118 | 0.046 | 0.198 |
| Departure Headway (Hd) | 4.523 | 4.685 | 4.866 | 4.377 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 795 | 764 | 734 | 819 |
| Service Time | 2.55 | 2.72 | 2.905 | 2.407 |
| HCM Lane V/C Ratio | 0.341 | 0.119 | 0.046 | 0.199 |
| HCM Control Delay | 9.9 | 8.4 | 8.1 | 8.5 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 1.5 | 0.4 | 0.1 | 0.7 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 9 | 0 | 2 | 217 | 0 |
| Future Vol, veh/h | 4 | 9 | 0 | 2 | 217 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 10 | 0 | 2 | 247 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 10 | 15 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 10 | 15 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 1010 | 879 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 1013 | 883 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 1010 | 0 |
| Mov Cap-2 Maneuver | - | - | 1010 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 1013 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
# 13: Pleasant Valley Road & Gowen Road

2019 Existing
PM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 211 | 203 | 220 | 926 | 200 | 18 |
| Future Volume (veh/h) | 211 | 203 | 220 | 926 | 200 | 18 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 232 | 223 | 239 | 1007 | 227 | 20 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.91 | 0.91 | 0.92 | 0.92 | 0.88 | 0.88 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1545 | 1166 | 721 | 1313 | 255 | 228 |
| Arrive On Green | 0.63 | 0.63 | 0.07 | 0.74 | 0.15 | 0.15 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 232 | 223 | 239 | 1007 | 227 | 20 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 4.5 | 4.5 | 5.5 | 39.1 | 15.2 | 1.3 |
| Cycle Q Clear(g_c), s | 4.5 | 4.5 | 5.5 | 39.1 | 15.2 | 1.3 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1545 | 1166 | 721 | 1313 | 255 | 228 |
| V/C Ratio(X) | 0.15 | 0.19 | 0.33 | 0.77 | 0.89 | 0.09 |
| Avail Cap(c_a), veh/h | 1545 | 1166 | 741 | 1313 | 322 | 287 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 8.9 | 3.4 | 5.9 | 8.8 | 47.8 | 41.9 |
| Incr Delay (d2), s/veh | 0.2 | 0.4 | 0.1 | 4.3 | 19.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.8 | 5.8 | 4.5 | 27.7 | 13.2 | 1.0 |
| LnGrp Delay(d),s/veh | 9.1 | 3.7 | 6.0 | 13.1 | 66.8 | 42.0 |
| LnGrp LOS | A | A | A | B | E | D |
| Approach Vol, veh/h | 455 | | | 1246 | 247 | |
| Approach Delay, s/veh | 6.5 | | | 11.8 | 64.8 | |
| Approach LOS | A | | | B | E | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 91.5 | | | 13.6 | 77.9 | | 23.5 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 81.0 | | | 9.0 | 66.0 | | 22.0 |
| Max Q Clear Time (g_c+I1), s | | 41.1 | | | 7.5 | 6.5 | | 17.2 |
| Green Ext Time (p_c), s | | 17.6 | | | 0.1 | 2.6 | | 0.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 17.2 |
| HCM 2010 LOS | B |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2019 Existing
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

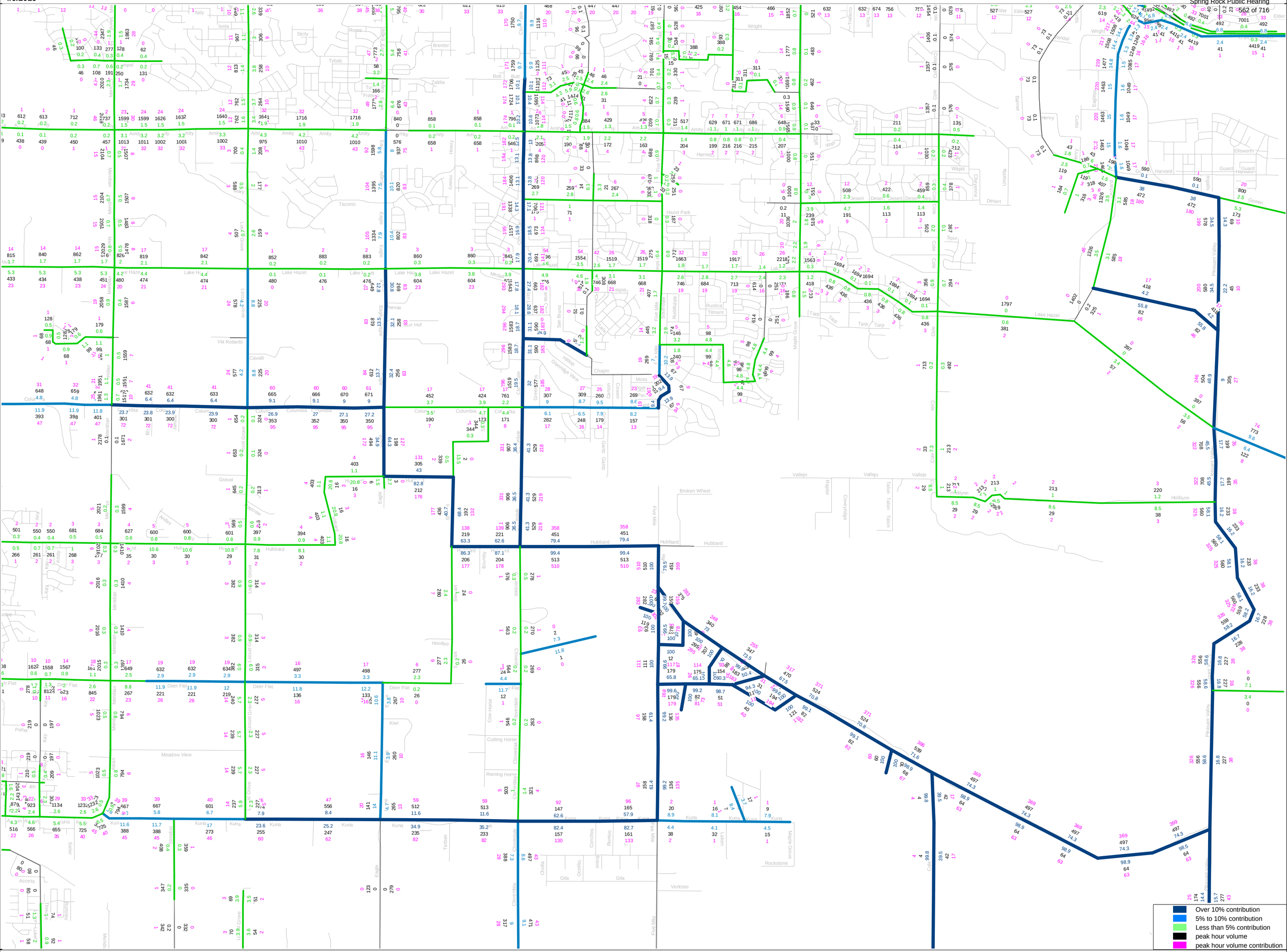
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 3 | 5 | 31 | 89 | 201 | 170 |
| Future Vol, veh/h | 3 | 5 | 31 | 89 | 201 | 170 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 6 | 40 | 116 | 261 | 221 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 568 | 372 | 482 | 0 | - | 0 |
| Stage 1 | 372 | - | - | - | - | - |
| Stage 2 | 196 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 484 | 674 | 1081 | - | - | - |
| Stage 1 | 697 | - | - | - | - | - |
| Stage 2 | 837 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 465 | 674 | 1081 | - | - | - |
| Mov Cap-2 Maneuver | 465 | - | - | - | - | - |
| Stage 1 | 669 | - | - | - | - | - |
| Stage 2 | 837 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 11.4 | 2.2 | 0 |
| HCM LOS | B | | |

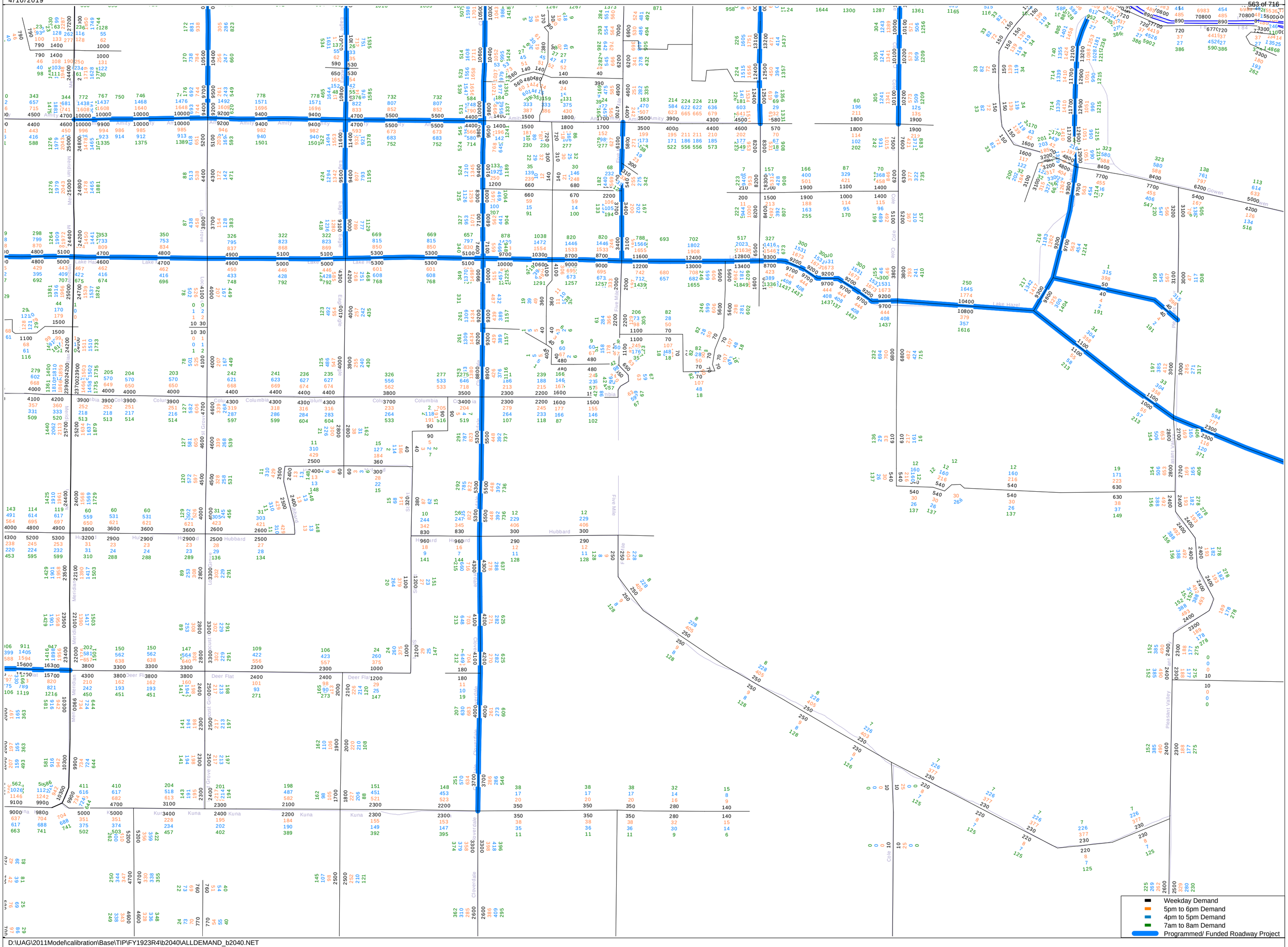
| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1081 | - | 577 | - | - |
| HCM Lane V/C Ratio | 0.037 | - | 0.018 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | 11.4 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |

# APPENDIX D: COMPASS FORECASTS






cube
(Licensed to Community Planning Association)




D:\UAG\2011Model\calibration\Base\TIP\FY1923R4\b2040\ALLDEMAND_b2040.NET
New Regional Model calibrated to 2011/12 conditions - completed in January 2015

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# APPENDIX E: 2025 CAPACITY ANALYSIS REPORTS

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2025 Background
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 386 | 309 | 47 | 62 | 68 | 76 | 19 | 1258 | 91 | 27 | 438 | 72 |
| Future Volume (veh/h) | 386 | 309 | 47 | 62 | 68 | 76 | 19 | 1258 | 91 | 27 | 438 | 72 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 415 | 332 | 51 | 67 | 74 | 83 | 21 | 1398 | 101 | 29 | 471 | 77 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 418 | 386 | 59 | 156 | 291 | 248 | 441 | 1670 | 747 | 136 | 1684 | 753 |
| Arrive On Green | 0.13 | 0.26 | 0.26 | 0.04 | 0.17 | 0.17 | 0.02 | 0.50 | 0.50 | 0.02 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1681 | 1495 | 230 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 415 | 0 | 383 | 67 | 74 | 83 | 21 | 1398 | 101 | 29 | 471 | 77 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1724 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 19.0 | 0.0 | 31.8 | 5.0 | 5.5 | 7.3 | 0.9 | 53.8 | 5.4 | 1.3 | 12.2 | 4.0 |
| Cycle Q Clear(g_c), s | 19.0 | 0.0 | 31.8 | 5.0 | 5.5 | 7.3 | 0.9 | 53.8 | 5.4 | 1.3 | 12.2 | 4.0 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 418 | 0 | 446 | 156 | 291 | 248 | 441 | 1670 | 747 | 136 | 1684 | 753 |
| V/C Ratio(X) | 0.99 | 0.00 | 0.86 | 0.43 | 0.25 | 0.34 | 0.05 | 0.84 | 0.14 | 0.21 | 0.28 | 0.10 |
| Avail Cap(c_a), veh/h | 418 | 0 | 580 | 156 | 424 | 360 | 464 | 1670 | 747 | 153 | 1684 | 753 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 52.7 | 0.0 | 53.0 | 50.9 | 54.6 | 55.3 | 18.1 | 32.4 | 20.3 | 28.0 | 21.6 | 19.6 |
| Incr Delay (d2), s/veh | 41.7 | 0.0 | 8.2 | 0.7 | 0.2 | 0.3 | 0.0 | 5.2 | 0.4 | 0.3 | 0.4 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 19.1 | 0.0 | 22.7 | 4.2 | 4.8 | 5.5 | 0.8 | 34.4 | 4.2 | 1.1 | 9.6 | 3.1 |
| LnGrp Delay(d),s/veh | 94.5 | 0.0 | 61.2 | 51.6 | 54.7 | 55.6 | 18.2 | 37.6 | 20.6 | 28.3 | 22.0 | 19.9 |
| LnGrp LOS | F | | E | D | D | E | B | D | C | C | C | B |
| Approach Vol, veh/h | | 798 | | | 224 | | | 1520 | | | 577 | |
| Approach Delay, s/veh | | 78.5 | | | 54.1 | | | 36.2 | | | 22.1 | |
| Approach LOS | | E | | | D | | | D | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 26.0 | 31.8 | 9.9 | 82.3 | 12.0 | 45.8 | 10.5 | 81.7 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 19.0 | 36.0 | 5.0 | 62.0 | 5.5 | * 51 | 5.0 | 62.0 |
| Max Q Clear Time (g_c+I1), s | 21.0 | 9.3 | 2.9 | 14.2 | 7.0 | 33.8 | 3.3 | 55.8 |
| Green Ext Time (p_c), s | 0.0 | 0.9 | 0.0 | 15.7 | 0.0 | 5.0 | 0.0 | 6.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 45.7 |
| HCM 2010 LOS | D |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.2 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 98 | 138 | 597 | 130 | 99 | 166 |
| Future Vol, veh/h | 98 | 138 | 597 | 130 | 99 | 166 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 109 | 153 | 663 | 144 | 110 | 184 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 975 | 332 | 0 | - | 663 | 0 |
| Stage 1 | 663 | - | - | - | - | - |
| Stage 2 | 312 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | 249 | 664 | - | 0 | 922 | - |
| Stage 1 | 474 | - | - | 0 | - | - |
| Stage 2 | 715 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 219 | 664 | - | - | 922 | - |
| Mov Cap-2 Maneuver | 344 | - | - | - | - | - |
| Stage 1 | 474 | - | - | - | - | - |
| Stage 2 | 630 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 15.4 | 0 | 3.5 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 344 | 664 | 922 | - |
| HCM Lane V/C Ratio | - | 0.317 | 0.231 | 0.119 | - |
| HCM Control Delay (s) | - | 20.2 | 12 | 9.4 | - |
| HCM Lane LOS | - | C | B | A | - |
| HCM 95th %tile Q(veh) | - | 1.3 | 0.9 | 0.4 | - |

HCM 2010 AWSC
3: Locust Grove Road & Columbia Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 15.5 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 52 | 427 | 8 | 13 | 181 | 23 | 9 | 80 | 21 | 18 | 28 | 12 |
| Future Vol, veh/h | 52 | 427 | 8 | 13 | 181 | 23 | 9 | 80 | 21 | 18 | 28 | 12 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 57 | 469 | 9 | 14 | 199 | 25 | 10 | 88 | 23 | 20 | 31 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 19.5 | 10.8 | 10.4 | 9.8 |
| HCM LOS | C | B | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 8% | 11% | 6% | 31% |
| Vol Thru, % | 73% | 88% | 83% | 48% |
| Vol Right, % | 19% | 2% | 11% | 21% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 110 | 487 | 217 | 58 |
| LT Vol | 9 | 52 | 13 | 18 |
| Through Vol | 80 | 427 | 181 | 28 |
| RT Vol | 21 | 8 | 23 | 12 |
| Lane Flow Rate | 121 | 535 | 238 | 64 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.197 | 0.723 | 0.341 | 0.107 |
| Departure Headway (Hd) | 5.869 | 4.863 | 5.142 | 6.039 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 610 | 749 | 699 | 592 |
| Service Time | 3.914 | 2.863 | 3.176 | 4.089 |
| HCM Lane V/C Ratio | 0.198 | 0.714 | 0.34 | 0.108 |
| HCM Control Delay | 10.4 | 19.5 | 10.8 | 9.8 |
| HCM Lane LOS | B | C | B | A |
| HCM 95th-tile Q | 0.7 | 6.3 | 1.5 | 0.4 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 14 | 316 | 186 | 7 | 10 | 9 |
| Future Vol, veh/h | 14 | 316 | 186 | 7 | 10 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 351 | 207 | 8 | 11 | 10 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 215 | 0 | - | 0 | 594 | 211 |
| Stage 1 | - | - | - | - | 211 | - |
| Stage 2 | - | - | - | - | 383 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1355 | - | - | - | 468 | 829 |
| Stage 1 | - | - | - | - | 824 | - |
| Stage 2 | - | - | - | - | 689 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1355 | - | - | - | 461 | 829 |
| Mov Cap-2 Maneuver | - | - | - | - | 461 | - |
| Stage 1 | - | - | - | - | 812 | - |
| Stage 2 | - | - | - | - | 689 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 11.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1355 | - | - | - | 584 |
| HCM Lane V/C Ratio | 0.011 | - | - | - | 0.036 |
| HCM Control Delay (s) | 7.7 | 0 | - | - | 11.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.3 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 155 | 290 | 7 | 4 | 168 | 61 | 11 | 42 | 5 | 24 | 20 | 29 |
| Future Vol, veh/h | 155 | 290 | 7 | 4 | 168 | 61 | 11 | 42 | 5 | 24 | 20 | 29 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 160 | 299 | 7 | 4 | 173 | 63 | 11 | 43 | 5 | 25 | 21 | 30 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 14.4 | 9.9 | 9.3 | 9.3 |
| HCM LOS | B | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 19% | 34% | 2% | 33% |
| Vol Thru, % | 72% | 64% | 72% | 27% |
| Vol Right, % | 9% | 2% | 26% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 58 | 452 | 233 | 73 |
| LT Vol | 11 | 155 | 4 | 24 |
| Through Vol | 42 | 290 | 168 | 20 |
| RT Vol | 5 | 7 | 61 | 29 |
| Lane Flow Rate | 60 | 466 | 240 | 75 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.094 | 0.599 | 0.312 | 0.114 |
| Departure Headway (Hd) | 5.641 | 4.63 | 4.674 | 5.455 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 628 | 774 | 764 | 650 |
| Service Time | 3.738 | 2.685 | 2.739 | 3.548 |
| HCM Lane V/C Ratio | 0.096 | 0.602 | 0.314 | 0.115 |
| HCM Control Delay | 9.3 | 14.4 | 9.9 | 9.3 |
| HCM Lane LOS | A | B | A | A |
| HCM 95th-tile Q | 0.3 | 4.1 | 1.3 | 0.4 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 295 | 22 | 3 | 183 | 1 | 8 | 3 | 0 | 4 | 1 | 1 |
| Future Vol, veh/h | 2 | 295 | 22 | 3 | 183 | 1 | 8 | 3 | 0 | 4 | 1 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 328 | 24 | 3 | 203 | 1 | 9 | 3 | 0 | 4 | 1 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 204 | 0 | 0 | 352 | 0 | 0 | 555 | 554 | 340 | 556 | 566 | 204 |
| Stage 1 | - | - | - | - | - | - | 344 | 344 | - | 210 | 210 | - |
| Stage 2 | - | - | - | - | - | - | 211 | 210 | - | 346 | 356 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1368 | - | - | 1207 | - | - | 442 | 440 | 702 | 442 | 434 | 837 |
| Stage 1 | - | - | - | - | - | - | 671 | 637 | - | 792 | 728 | - |
| Stage 2 | - | - | - | - | - | - | 791 | 728 | - | 670 | 629 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1368 | - | - | 1207 | - | - | 439 | 438 | 702 | 438 | 432 | 837 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 439 | 438 | - | 438 | 432 | - |
| Stage 1 | - | - | - | - | - | - | 670 | 636 | - | 790 | 726 | - |
| Stage 2 | - | - | - | - | - | - | 786 | 726 | - | 665 | 628 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 13.4 | 12.7 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 439 | 1368 | - | - | 1207 | - | - | 475 |
| HCM Lane V/C Ratio | 0.028 | 0.002 | - | - | 0.003 | - | - | 0.014 |
| HCM Control Delay (s) | 13.4 | 7.6 | 0 | - | 8 | 0 | - | 12.7 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Background
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 138 | 258 | 69 | 20 | 262 | 110 | 210 | 1042 | 58 | 25 | 198 | 68 |
| Future Volume (veh/h) | 138 | 258 | 69 | 20 | 262 | 110 | 210 | 1042 | 58 | 25 | 198 | 68 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 153 | 287 | 77 | 22 | 291 | 122 | 223 | 1109 | 62 | 28 | 220 | 76 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 129 | 346 | 93 | 139 | 273 | 114 | 619 | 932 | 52 | 88 | 668 | 231 |
| Arrive On Green | 0.05 | 0.26 | 0.26 | 0.02 | 0.23 | 0.23 | 0.07 | 0.56 | 0.56 | 0.02 | 0.51 | 0.51 |
| Sat Flow, veh/h | 1681 | 1341 | 360 | 1681 | 1182 | 495 | 1681 | 1656 | 93 | 1681 | 1305 | 451 |
| Grp Volume(v), veh/h | 153 | 0 | 364 | 22 | 0 | 413 | 223 | 0 | 1171 | 28 | 0 | 296 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1701 | 1681 | 0 | 1677 | 1681 | 0 | 1748 | 1681 | 0 | 1756 |
| Q Serve(g_s), s | 7.0 | 0.0 | 29.8 | 1.5 | 0.0 | 34.0 | 9.0 | 0.0 | 83.0 | 1.2 | 0.0 | 14.6 |
| Cycle Q Clear(g_c), s | 7.0 | 0.0 | 29.8 | 1.5 | 0.0 | 34.0 | 9.0 | 0.0 | 83.0 | 1.2 | 0.0 | 14.6 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.30 | 1.00 | | 0.05 | 1.00 | | 0.26 |
| Lane Grp Cap(c), veh/h | 129 | 0 | 439 | 139 | 0 | 387 | 619 | 0 | 984 | 88 | 0 | 898 |
| V/C Ratio(X) | 1.19 | 0.00 | 0.83 | 0.16 | 0.00 | 1.07 | 0.36 | 0.00 | 1.19 | 0.32 | 0.00 | 0.33 |
| Avail Cap(c_a), veh/h | 129 | 0 | 439 | 174 | 0 | 387 | 619 | 0 | 984 | 117 | 0 | 929 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.8 | 0.0 | 51.6 | 44.2 | 0.0 | 56.7 | 14.8 | 0.0 | 32.2 | 35.5 | 0.0 | 21.1 |
| Incr Delay (d2), s/veh | 139.0 | 0.0 | 11.8 | 0.5 | 0.0 | 64.9 | 0.1 | 0.0 | 95.5 | 2.1 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 12.5 | 0.0 | 21.8 | 1.2 | 0.0 | 40.8 | 7.5 | 0.0 | 118.9 | 1.1 | 0.0 | 11.5 |
| LnGrp Delay(d),s/veh | 188.8 | 0.0 | 63.5 | 44.7 | 0.0 | 121.6 | 14.9 | 0.0 | 127.7 | 37.6 | 0.0 | 21.4 |
| LnGrp LOS | F | | E | D | | F | B | | F | D | | C |
| Approach Vol, veh/h | | 517 | | | 435 | | | 1394 | | | 324 | |
| Approach Delay, s/veh | | 100.6 | | | 117.7 | | | 109.7 | | | 22.8 | |
| Approach LOS | | F | | | F | | | F | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 12.0 | 39.0 | 16.0 | 80.4 | 8.0 | 43.0 | 8.4 | 88.0 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 7.0 | 34.0 | 11.0 | 78.0 | 6.0 | 35.0 | 6.0 | 83.0 |
| Max Q Clear Time (g_c+I1), s | 9.0 | 36.0 | 11.0 | 16.6 | 3.5 | 31.8 | 3.2 | 85.0 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 6.1 | 0.0 | 1.3 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 98.7 |
| HCM 2010 LOS | F |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Background
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 55 | 346 | 17 | 45 | 381 | 145 | 44 | 615 | 153 | 84 | 155 | 33 |
| Future Volume (veh/h) | 55 | 346 | 17 | 45 | 381 | 145 | 44 | 615 | 153 | 84 | 155 | 33 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 61 | 384 | 19 | 50 | 423 | 161 | 45 | 628 | 156 | 93 | 172 | 37 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 107 | 656 | 32 | 255 | 479 | 182 | 593 | 637 | 158 | 124 | 760 | 164 |
| Arrive On Green | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.47 | 0.47 | 0.47 | 0.04 | 0.54 | 0.54 |
| Sat Flow, veh/h | 828 | 1668 | 83 | 978 | 1219 | 464 | 1168 | 1366 | 339 | 1681 | 1408 | 303 |
| Grp Volume(v), veh/h | 61 | 0 | 403 | 50 | 0 | 584 | 45 | 0 | 784 | 93 | 0 | 209 |
| Grp Sat Flow(s),veh/h/ln | 828 | 0 | 1750 | 978 | 0 | 1683 | 1168 | 0 | 1705 | 1681 | 0 | 1711 |
| Q Serve(g_s), s | 10.6 | 0.0 | 27.2 | 6.4 | 0.0 | 48.4 | 3.2 | 0.0 | 68.1 | 4.2 | 0.0 | 9.6 |
| Cycle Q Clear(g_c), s | 59.0 | 0.0 | 27.2 | 33.6 | 0.0 | 48.4 | 3.2 | 0.0 | 68.1 | 4.2 | 0.0 | 9.6 |
| Prop In Lane | 1.00 | | 0.05 | 1.00 | | 0.28 | 1.00 | | 0.20 | 1.00 | | 0.18 |
| Lane Grp Cap(c), veh/h | 107 | 0 | 688 | 255 | 0 | 662 | 593 | 0 | 796 | 124 | 0 | 924 |
| V/C Ratio(X) | 0.57 | 0.00 | 0.59 | 0.20 | 0.00 | 0.88 | 0.08 | 0.00 | 0.99 | 0.75 | 0.00 | 0.23 |
| Avail Cap(c_a), veh/h | 107 | 0 | 688 | 255 | 0 | 662 | 593 | 0 | 796 | 124 | 0 | 924 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 69.9 | 0.0 | 35.9 | 49.1 | 0.0 | 42.3 | 22.2 | 0.0 | 39.5 | 35.5 | 0.0 | 18.1 |
| Incr Delay (d2), s/veh | 7.1 | 0.0 | 1.3 | 0.4 | 0.0 | 13.3 | 0.1 | 0.0 | 28.2 | 20.1 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.9 | 0.0 | 19.3 | 3.1 | 0.0 | 33.0 | 1.9 | 0.0 | 48.4 | 4.7 | 0.0 | 8.1 |
| LnGrp Delay(d),s/veh | 77.0 | 0.0 | 37.1 | 49.5 | 0.0 | 55.6 | 22.3 | 0.0 | 67.7 | 55.6 | 0.0 | 18.3 |
| LnGrp LOS | E | | D | D | | E | C | | E | E | | B |
| Approach Vol, veh/h | | 464 | | | 634 | | | 829 | | | 302 | |
| Approach Delay, s/veh | | 42.4 | | | 55.1 | | | 65.3 | | | 29.7 | |
| Approach LOS | | D | | | E | | | E | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 64.0 | | 86.0 | | 64.0 | 11.0 | 75.0 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 59.0 | | 81.0 | | 59.0 | 6.0 | 70.0 |
| Max Q Clear Time (g_c+I1), s | | 50.4 | | 11.6 | | 61.0 | 6.2 | 70.1 |
| Green Ext Time (p_c), s | | 4.5 | | 5.2 | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 52.8 |
| HCM 2010 LOS | D |

HCM 2010 AWSC
9: Cloverdale Road & Columbia Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 36.4 |
| Intersection LOS | E |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 155 | 80 | 81 | 35 | 114 | 32 | 59 | 385 | 35 | 6 | 141 | 92 |
| Future Vol, veh/h | 155 | 80 | 81 | 35 | 114 | 32 | 59 | 385 | 35 | 6 | 141 | 92 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 170 | 88 | 89 | 38 | 125 | 35 | 65 | 423 | 38 | 7 | 155 | 101 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 25.6 | 16.6 | 60.1 | 18.1 |
| HCM LOS | D | C | F | C |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 12% | 49% | 19% | 3% |
| Vol Thru, % | 80% | 25% | 63% | 59% |
| Vol Right, % | 7% | 26% | 18% | 38% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 479 | 316 | 181 | 239 |
| LT Vol | 59 | 155 | 35 | 6 |
| Through Vol | 385 | 80 | 114 | 141 |
| RT Vol | 35 | 81 | 32 | 92 |
| Lane Flow Rate | 526 | 347 | 199 | 263 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.98 | 0.699 | 0.428 | 0.525 |
| Departure Headway (Hd) | 6.7 | 7.246 | 7.755 | 7.199 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 542 | 497 | 461 | 499 |
| Service Time | 4.763 | 5.321 | 5.845 | 5.283 |
| HCM Lane V/C Ratio | 0.97 | 0.698 | 0.432 | 0.527 |
| HCM Control Delay | 60.1 | 25.6 | 16.6 | 18.1 |
| HCM Lane LOS | F | D | C | C |
| HCM 95th-tile Q | 13.3 | 5.4 | 2.1 | 3 |

HCM 2010 TWSC
10: Cloverdale Road & Hubbard Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 42.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↰ | ↱ |
| Traffic Vol, veh/h | 112 | 175 | 7 | 4 | 2 | 14 | 8 | 343 | 35 | 111 | 116 | 52 |
| Future Vol, veh/h | 112 | 175 | 7 | 4 | 2 | 14 | 8 | 343 | 35 | 111 | 116 | 52 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 122 | 190 | 8 | 4 | 2 | 15 | 9 | 373 | 38 | 121 | 126 | 57 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 787 | 797 | 126 | 906 | 835 | 392 | 183 | 0 | 0 | 411 | 0 | 0 |
| Stage 1 | 368 | 368 | - | 410 | 410 | - | - | - | - | - | - | - |
| Stage 2 | 419 | 429 | - | 496 | 425 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 309 | 319 | 924 | 257 | 304 | 657 | 1392 | - | - | 1148 | - | - |
| Stage 1 | 652 | 621 | - | 619 | 595 | - | - | - | - | - | - | - |
| Stage 2 | 612 | 584 | - | 556 | 586 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 271 | 279 | 924 | 105 | 266 | 657 | 1392 | - | - | 1148 | - | - |
| Mov Cap-2 Maneuver | 271 | 279 | - | 105 | 266 | - | - | - | - | - | - | - |
| Stage 1 | 647 | 548 | - | 614 | 590 | - | - | - | - | - | - | - |
| Stage 2 | 591 | 579 | - | 318 | 517 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 135.4 | 18 | 0.2 | 3.4 |
| HCM LOS | F | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1392 | - | - | 281 | 299 | 1148 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | - | 1.137 | 0.073 | 0.105 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 135.4 | 18 | 8.5 | 0 | - |
| HCM Lane LOS | A | A | - | F | C | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 13.6 | 0.2 | 0.4 | - | - |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.8 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 98 | 25 | 192 | 0 | 44 | 52 | 98 | 164 | 3 | 7 | 68 | 45 |
| Future Vol, veh/h | 98 | 25 | 192 | 0 | 44 | 52 | 98 | 164 | 3 | 7 | 68 | 45 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 109 | 28 | 213 | 0 | 49 | 58 | 109 | 182 | 3 | 8 | 76 | 50 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 12.6 | 9.4 | 12.7 | 9.8 |
| HCM LOS | B | A | B | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 37% | 31% | 0% | 6% |
| Vol Thru, % | 62% | 8% | 46% | 57% |
| Vol Right, % | 1% | 61% | 54% | 38% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 265 | 315 | 96 | 120 |
| LT Vol | 98 | 98 | 0 | 7 |
| Through Vol | 164 | 25 | 44 | 68 |
| RT Vol | 3 | 192 | 52 | 45 |
| Lane Flow Rate | 294 | 350 | 107 | 133 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.442 | 0.484 | 0.158 | 0.2 |
| Departure Headway (Hd) | 5.41 | 4.981 | 5.336 | 5.405 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 665 | 725 | 671 | 663 |
| Service Time | 3.445 | 3.014 | 3.381 | 3.448 |
| HCM Lane V/C Ratio | 0.442 | 0.483 | 0.159 | 0.201 |
| HCM Control Delay | 12.7 | 12.6 | 9.4 | 9.8 |
| HCM Lane LOS | B | B | A | A |
| HCM 95th-tile Q | 2.3 | 2.7 | 0.6 | 0.7 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road/Private Access

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 250 | 0 | 8 | 3 | 0 |
| Future Vol, veh/h | 4 | 250 | 0 | 8 | 3 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 278 | 0 | 9 | 3 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 143 | 282 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 143 | 282 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 850 | 627 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 884 | 678 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 850 | 0 |
| Mov Cap-2 Maneuver | - | - | 850 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 884 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
## 13: Pleasant Valley Road & Gowen Road

2025 Background
AM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 939 | 207 | 21 | 143 | 241 | 228 |
| Future Volume (veh/h) | 939 | 207 | 21 | 143 | 241 | 228 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 958 | 211 | 23 | 159 | 268 | 253 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1559 | 1231 | 291 | 1246 | 319 | 285 |
| Arrive On Green | 0.63 | 0.63 | 0.02 | 0.71 | 0.19 | 0.19 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 958 | 211 | 23 | 159 | 268 | 253 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 26.9 | 3.4 | 0.5 | 3.3 | 17.7 | 18.9 |
| Cycle Q Clear(g_c), s | 26.9 | 3.4 | 0.5 | 3.3 | 17.7 | 18.9 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1559 | 1231 | 291 | 1246 | 319 | 285 |
| V/C Ratio(X) | 0.61 | 0.17 | 0.08 | 0.13 | 0.84 | 0.89 |
| Avail Cap(c_a), veh/h | 1559 | 1231 | 326 | 1246 | 526 | 470 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.8 | 2.1 | 10.1 | 5.5 | 44.9 | 45.4 |
| Incr Delay (d2), s/veh | 1.8 | 0.3 | 0.0 | 0.2 | 2.8 | 6.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 14.5 | 5.4 | 0.4 | 3.1 | 13.2 | 13.1 |
| LnGrp Delay(d),s/veh | 14.6 | 2.4 | 10.2 | 5.7 | 47.7 | 52.1 |
| LnGrp LOS | B | A | B | A | D | D |
| Approach Vol, veh/h | 1169 | | | 182 | 521 | |
| Approach Delay, s/veh | 12.4 | | | 6.2 | 49.8 | |
| Approach LOS | B | | | A | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 87.2 | | | 8.6 | 78.6 | | 27.8 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 67.0 | | | 5.0 | 56.0 | | 36.0 |
| Max Q Clear Time (g_c+I1), s | | 5.3 | | | 2.5 | 28.9 | | 20.9 |
| Green Ext Time (p_c), s | | 1.6 | | | 0.0 | 11.6 | | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 22.2 |
| HCM 2010 LOS | C |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2025 Background
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.2 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 189 | 72 | 3 | 227 | 160 | 4 |
| Future Vol, veh/h | 189 | 72 | 3 | 227 | 160 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 300 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 210 | 80 | 3 | 252 | 178 | 4 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 436 | 178 | 182 | 0 | - | 0 |
| Stage 1 | 178 | - | - | - | - | - |
| Stage 2 | 258 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 578 | 865 | 1393 | - | - | - |
| Stage 1 | 853 | - | - | - | - | - |
| Stage 2 | 785 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 576 | 865 | 1393 | - | - | - |
| Mov Cap-2 Maneuver | 576 | - | - | - | - | - |
| Stage 1 | 850 | - | - | - | - | - |
| Stage 2 | 785 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 15.4 | 0.1 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1393 | - | 634 | - | - |
| HCM Lane V/C Ratio | 0.002 | - | 0.457 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | 15.4 | - | - |
| HCM Lane LOS | A | A | C | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 2.4 | - | - |

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2025 Background
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 126 | 103 | 21 | 115 | 271 | 47 | 36 | 666 | 45 | 49 | 1342 | 325 |
| Future Volume (veh/h) | 126 | 103 | 21 | 115 | 271 | 47 | 36 | 666 | 45 | 49 | 1342 | 325 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 140 | 114 | 23 | 128 | 301 | 52 | 40 | 740 | 50 | 51 | 1398 | 339 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 170 | 300 | 60 | 297 | 347 | 295 | 150 | 1790 | 801 | 372 | 1797 | 804 |
| Arrive On Green | 0.05 | 0.21 | 0.21 | 0.04 | 0.20 | 0.20 | 0.03 | 0.53 | 0.53 | 0.03 | 0.54 | 0.54 |
| Sat Flow, veh/h | 1681 | 1426 | 288 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 140 | 0 | 137 | 128 | 301 | 52 | 40 | 740 | 50 | 51 | 1398 | 339 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1714 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 8.0 | 0.0 | 10.3 | 6.5 | 24.8 | 4.3 | 1.6 | 19.8 | 2.4 | 2.1 | 49.8 | 20.3 |
| Cycle Q Clear(g_c), s | 8.0 | 0.0 | 10.3 | 6.5 | 24.8 | 4.3 | 1.6 | 19.8 | 2.4 | 2.1 | 49.8 | 20.3 |
| Prop In Lane | 1.00 | | 0.17 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 170 | 0 | 360 | 297 | 347 | 295 | 150 | 1790 | 801 | 372 | 1797 | 804 |
| V/C Ratio(X) | 0.82 | 0.00 | 0.38 | 0.43 | 0.87 | 0.18 | 0.27 | 0.41 | 0.06 | 0.14 | 0.78 | 0.42 |
| Avail Cap(c_a), veh/h | 170 | 0 | 451 | 297 | 435 | 370 | 161 | 1790 | 801 | 379 | 1797 | 804 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 53.0 | 0.0 | 50.8 | 49.4 | 58.3 | 50.1 | 24.3 | 20.9 | 16.9 | 16.2 | 27.7 | 20.9 |
| Incr Delay (d2), s/veh | 25.2 | 0.0 | 0.2 | 0.4 | 12.1 | 0.1 | 0.3 | 0.7 | 0.1 | 0.1 | 3.4 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 9.8 | 0.0 | 8.5 | 3.1 | 19.3 | 3.3 | 1.3 | 14.3 | 1.9 | 1.7 | 31.8 | 13.7 |
| LnGrp Delay(d),s/veh | 78.2 | 0.0 | 51.1 | 49.8 | 70.4 | 50.2 | 24.7 | 21.6 | 17.0 | 16.2 | 31.1 | 22.5 |
| LnGrp LOS | E | | D | D | E | D | C | C | B | B | C | C |
| Approach Vol, veh/h | | 277 | | | 481 | | | 830 | | | 1788 | |
| Approach Delay, s/veh | | 64.8 | | | 62.7 | | | 21.5 | | | 29.0 | |
| Approach LOS | | E | | | E | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 15.0 | 36.5 | 11.1 | 87.4 | 13.0 | 38.5 | 11.4 | 87.1 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 8.0 | 37.0 | 5.0 | 72.0 | 6.5 | * 40 | 5.0 | 72.0 |
| Max Q Clear Time (g_c+I1), s | 10.0 | 26.8 | 3.6 | 51.8 | 8.5 | 12.3 | 4.1 | 21.8 |
| Green Ext Time (p_c), s | 0.0 | 2.8 | 0.0 | 19.5 | 0.0 | 1.9 | 0.0 | 26.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 34.9 |
| HCM 2010 LOS | C |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 5.9 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 202 | 209 | 393 | 76 | 98 | 757 |
| Future Vol, veh/h | 202 | 209 | 393 | 76 | 98 | 757 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 213 | 220 | 414 | 80 | 103 | 797 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1019 | 207 | 0 | - | 414 | 0 |
| Stage 1 | 414 | - | - | - | - | - |
| Stage 2 | 605 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | 233 | 799 | - | 0 | 1141 | - |
| Stage 1 | 635 | - | - | 0 | - | - |
| Stage 2 | 508 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | ~ 212 | 799 | - | - | 1141 | - |
| Mov Cap-2 Maneuver | 337 | - | - | - | - | - |
| Stage 1 | 635 | - | - | - | - | - |
| Stage 2 | 462 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 21.6 | 0 | 1 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 337 | 799 | 1141 | - |
| HCM Lane V/C Ratio | - | 0.631 | 0.275 | 0.09 | - |
| HCM Control Delay (s) | - | 32.3 | 11.2 | 8.5 | - |
| HCM Lane LOS | - | D | B | A | - |
| HCM 95th %tile Q(veh) | - | 4.1 | 1.1 | 0.3 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

HCM 2010 AWSC
3: Locust Grove Road & Columbia Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 14.9 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 15 | 138 | 4 | 23 | 422 | 29 | 5 | 53 | 5 | 31 | 120 | 53 |
| Future Vol, veh/h | 15 | 138 | 4 | 23 | 422 | 29 | 5 | 53 | 5 | 31 | 120 | 53 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 145 | 4 | 24 | 444 | 31 | 5 | 56 | 5 | 33 | 126 | 56 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.4 | 18.5 | 9.9 | 11.6 |
| HCM LOS | B | C | A | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 8% | 10% | 5% | 15% |
| Vol Thru, % | 84% | 88% | 89% | 59% |
| Vol Right, % | 8% | 3% | 6% | 26% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 63 | 157 | 474 | 204 |
| LT Vol | 5 | 15 | 23 | 31 |
| Through Vol | 53 | 138 | 422 | 120 |
| RT Vol | 5 | 4 | 29 | 53 |
| Lane Flow Rate | 66 | 165 | 499 | 215 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.112 | 0.252 | 0.692 | 0.337 |
| Departure Headway (Hd) | 6.054 | 5.485 | 4.996 | 5.652 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 590 | 653 | 723 | 636 |
| Service Time | 4.108 | 3.529 | 3.029 | 3.695 |
| HCM Lane V/C Ratio | 0.112 | 0.253 | 0.69 | 0.338 |
| HCM Control Delay | 9.9 | 10.4 | 18.5 | 11.6 |
| HCM Lane LOS | A | B | C | B |
| HCM 95th-tile Q | 0.4 | 1 | 5.6 | 1.5 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.5 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 161 | 381 | 12 | 28 | 41 |
| Future Vol, veh/h | 10 | 161 | 381 | 12 | 28 | 41 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 168 | 397 | 13 | 29 | 43 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 410 | 0 | - | 0 | 592 | 404 |
| Stage 1 | - | - | - | - | 404 | - |
| Stage 2 | - | - | - | - | 188 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1149 | - | - | - | 469 | 647 |
| Stage 1 | - | - | - | - | 674 | - |
| Stage 2 | - | - | - | - | 844 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1149 | - | - | - | 464 | 647 |
| Mov Cap-2 Maneuver | - | - | - | - | 464 | - |
| Stage 1 | - | - | - | - | 667 | - |
| Stage 2 | - | - | - | - | 844 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0 | 12.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1149 | - | - | - | 558 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.129 |
| HCM Control Delay (s) | 8.2 | 0 | - | - | 12.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.4 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.1 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 28 | 138 | 5 | 5 | 272 | 47 | 13 | 24 | 3 | 78 | 50 | 174 |
| Future Vol, veh/h | 28 | 138 | 5 | 5 | 272 | 47 | 13 | 24 | 3 | 78 | 50 | 174 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 30 | 147 | 5 | 5 | 289 | 50 | 14 | 26 | 3 | 83 | 53 | 185 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.6 | 13 | 9.4 | 12.4 |
| HCM LOS | B | B | A | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 16% | 2% | 26% |
| Vol Thru, % | 60% | 81% | 84% | 17% |
| Vol Right, % | 7% | 3% | 15% | 58% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 171 | 324 | 302 |
| LT Vol | 13 | 28 | 5 | 78 |
| Through Vol | 24 | 138 | 272 | 50 |
| RT Vol | 3 | 5 | 47 | 174 |
| Lane Flow Rate | 43 | 182 | 345 | 321 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.07 | 0.276 | 0.491 | 0.455 |
| Departure Headway (Hd) | 5.905 | 5.456 | 5.126 | 5.103 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 605 | 659 | 703 | 707 |
| Service Time | 3.955 | 3.493 | 3.158 | 3.137 |
| HCM Lane V/C Ratio | 0.071 | 0.276 | 0.491 | 0.454 |
| HCM Control Delay | 9.4 | 10.6 | 13 | 12.4 |
| HCM Lane LOS | A | B | B | B |
| HCM 95th-tile Q | 0.2 | 1.1 | 2.7 | 2.4 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 167 | 27 | 3 | 352 | 6 | 23 | 11 | 1 | 6 | 9 | 0 |
| Future Vol, veh/h | 5 | 167 | 27 | 3 | 352 | 6 | 23 | 11 | 1 | 6 | 9 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 178 | 29 | 3 | 374 | 6 | 24 | 12 | 1 | 6 | 10 | 0 |

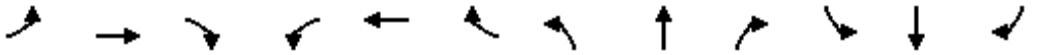
| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 380 | 0 | 0 | 207 | 0 | 0 | 591 | 589 | 193 | 592 | 600 | 377 |
| Stage 1 | - | - | - | - | - | - | 203 | 203 | - | 383 | 383 | - |
| Stage 2 | - | - | - | - | - | - | 388 | 386 | - | 209 | 217 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1178 | - | - | 1364 | - | - | 419 | 421 | 849 | 418 | 415 | 670 |
| Stage 1 | - | - | - | - | - | - | 799 | 733 | - | 640 | 612 | - |
| Stage 2 | - | - | - | - | - | - | 636 | 610 | - | 793 | 723 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1178 | - | - | 1364 | - | - | 409 | 418 | 849 | 406 | 412 | 670 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 409 | 418 | - | 406 | 412 | - |
| Stage 1 | - | - | - | - | - | - | 795 | 729 | - | 637 | 610 | - |
| Stage 2 | - | - | - | - | - | - | 624 | 608 | - | 775 | 719 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 14.5 | 14.1 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 418 | 1178 | - | - | 1364 | - | - | 410 |
| HCM Lane V/C Ratio | 0.089 | 0.005 | - | - | 0.002 | - | - | 0.039 |
| HCM Control Delay (s) | 14.5 | 8.1 | 0 | - | 7.6 | 0 | - | 14.1 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0.1 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Background
PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 77 | 291 | 156 | 76 | 299 | 19 | 138 | 366 | 55 | 73 | 895 | 197 |
| Future Volume (veh/h) | 77 | 291 | 156 | 76 | 299 | 19 | 138 | 366 | 55 | 73 | 895 | 197 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 86 | 323 | 173 | 84 | 332 | 21 | 147 | 389 | 59 | 76 | 932 | 205 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 204 | 303 | 162 | 104 | 460 | 29 | 126 | 779 | 118 | 434 | 739 | 162 |
| Arrive On Green | 0.03 | 0.28 | 0.28 | 0.03 | 0.28 | 0.28 | 0.05 | 0.52 | 0.52 | 0.03 | 0.51 | 0.51 |
| Sat Flow, veh/h | 1681 | 1083 | 580 | 1681 | 1642 | 104 | 1681 | 1497 | 227 | 1681 | 1458 | 321 |
| Grp Volume(v), veh/h | 86 | 0 | 496 | 84 | 0 | 353 | 147 | 0 | 448 | 76 | 0 | 1137 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1662 | 1681 | 0 | 1746 | 1681 | 0 | 1725 | 1681 | 0 | 1779 |
| Q Serve(g_s), s | 5.0 | 0.0 | 42.0 | 5.0 | 0.0 | 27.4 | 7.0 | 0.0 | 25.3 | 3.3 | 0.0 | 76.0 |
| Cycle Q Clear(g_c), s | 5.0 | 0.0 | 42.0 | 5.0 | 0.0 | 27.4 | 7.0 | 0.0 | 25.3 | 3.3 | 0.0 | 76.0 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.06 | 1.00 | | 0.13 | 1.00 | | 0.18 |
| Lane Grp Cap(c), veh/h | 204 | 0 | 465 | 104 | 0 | 489 | 126 | 0 | 897 | 434 | 0 | 901 |
| V/C Ratio(X) | 0.42 | 0.00 | 1.07 | 0.81 | 0.00 | 0.72 | 1.16 | 0.00 | 0.50 | 0.18 | 0.00 | 1.26 |
| Avail Cap(c_a), veh/h | 204 | 0 | 465 | 104 | 0 | 489 | 126 | 0 | 897 | 434 | 0 | 901 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 42.1 | 0.0 | 54.0 | 45.3 | 0.0 | 48.7 | 44.7 | 0.0 | 23.3 | 18.6 | 0.0 | 37.0 |
| Incr Delay (d2), s/veh | 0.5 | 0.0 | 60.3 | 33.7 | 0.0 | 4.5 | 130.4 | 0.0 | 0.4 | 0.1 | 0.0 | 126.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.8 | 0.0 | 48.7 | 6.2 | 0.0 | 20.0 | 17.7 | 0.0 | 17.7 | 2.7 | 0.0 | 123.8 |
| LnGrp Delay(d),s/veh | 42.6 | 0.0 | 114.3 | 79.1 | 0.0 | 53.2 | 175.1 | 0.0 | 23.8 | 18.7 | 0.0 | 163.7 |
| LnGrp LOS | D | | F | E | | D | F | | C | B | | F |
| Approach Vol, veh/h | | 582 | | | 437 | | | 595 | | | 1213 | |
| Approach Delay, s/veh | | 103.7 | | | 58.2 | | | 61.2 | | | 154.6 | |
| Approach LOS | | F | | | E | | | E | | | F | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 10.0 | 47.0 | 12.0 | 81.0 | 10.0 | 47.0 | 10.0 | 83.0 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 5.0 | 42.0 | 7.0 | 76.0 | 5.0 | 42.0 | 5.0 | 78.0 |
| Max Q Clear Time (g_c+I1), s | 7.0 | 29.4 | 9.0 | 78.0 | 7.0 | 44.0 | 5.3 | 27.3 |
| Green Ext Time (p_c), s | 0.0 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 109.6 |
| HCM 2010 LOS | F |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Background
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 62 | 445 | 48 | 168 | 520 | 95 | 54 | 271 | 99 | 184 | 532 | 98 |
| Future Volume (veh/h) | 62 | 445 | 48 | 168 | 520 | 95 | 54 | 271 | 99 | 184 | 532 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 68 | 489 | 53 | 183 | 565 | 103 | 60 | 301 | 110 | 200 | 578 | 107 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 158 | 553 | 60 | 243 | 687 | 125 | 121 | 400 | 146 | 311 | 657 | 122 |
| Arrive On Green | 0.35 | 0.35 | 0.35 | 0.08 | 0.47 | 0.47 | 0.32 | 0.32 | 0.32 | 0.09 | 0.45 | 0.45 |
| Sat Flow, veh/h | 766 | 1565 | 170 | 1681 | 1453 | 265 | 754 | 1234 | 451 | 1681 | 1449 | 268 |
| Grp Volume(v), veh/h | 68 | 0 | 542 | 183 | 0 | 668 | 60 | 0 | 411 | 200 | 0 | 685 |
| Grp Sat Flow(s),veh/h/ln | 766 | 0 | 1735 | 1681 | 0 | 1718 | 754 | 0 | 1685 | 1681 | 0 | 1717 |
| Q Serve(g_s), s | 11.4 | 0.0 | 39.9 | 9.1 | 0.0 | 45.5 | 10.7 | 0.0 | 29.6 | 10.4 | 0.0 | 49.2 |
| Cycle Q Clear(g_c), s | 40.7 | 0.0 | 39.9 | 9.1 | 0.0 | 45.5 | 42.4 | 0.0 | 29.6 | 10.4 | 0.0 | 49.2 |
| Prop In Lane | 1.00 | | 0.10 | 1.00 | | 0.15 | 1.00 | | 0.27 | 1.00 | | 0.16 |
| Lane Grp Cap(c), veh/h | 158 | 0 | 613 | 243 | 0 | 812 | 121 | 0 | 546 | 311 | 0 | 779 |
| V/C Ratio(X) | 0.43 | 0.00 | 0.88 | 0.75 | 0.00 | 0.82 | 0.49 | 0.00 | 0.75 | 0.64 | 0.00 | 0.88 |
| Avail Cap(c_a), veh/h | 203 | 0 | 716 | 278 | 0 | 949 | 121 | 0 | 546 | 354 | 0 | 822 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 55.4 | 0.0 | 41.3 | 31.0 | 0.0 | 30.9 | 61.0 | 0.0 | 41.0 | 29.6 | 0.0 | 33.7 |
| Incr Delay (d2), s/veh | 1.8 | 0.0 | 11.4 | 7.8 | 0.0 | 5.2 | 4.4 | 0.0 | 6.2 | 2.0 | 0.0 | 10.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.5 | 0.0 | 28.6 | 8.3 | 0.0 | 30.5 | 4.3 | 0.0 | 21.1 | 8.6 | 0.0 | 33.8 |
| LnGrp Delay(d),s/veh | 57.2 | 0.0 | 52.6 | 38.9 | 0.0 | 36.0 | 65.4 | 0.0 | 47.3 | 31.6 | 0.0 | 44.6 |
| LnGrp LOS | E | | D | D | | D | E | | D | C | | D |
| Approach Vol, veh/h | | 610 | | | 851 | | | 471 | | | 885 | |
| Approach Delay, s/veh | | 53.1 | | | 36.6 | | | 49.6 | | | 41.6 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 69.2 | | 66.6 | 16.2 | 53.0 | 17.6 | 49.0 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 75.0 | | 65.0 | 14.0 | 56.0 | 16.0 | 44.0 |
| Max Q Clear Time (g_c+I1), s | | 47.5 | | 51.2 | 11.1 | 42.7 | 12.4 | 44.4 |
| Green Ext Time (p_c), s | | 11.0 | | 9.3 | 0.1 | 5.3 | 0.1 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 43.9 |
| HCM 2010 LOS | D |

HCM 2010 AWSC
9: Cloverdale Road & Columbia Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 47.2 |
| Intersection LOS | E |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 47 | 111 | 74 | 29 | 102 | 16 | 117 | 213 | 42 | 36 | 355 | 154 |
| Future Vol, veh/h | 47 | 111 | 74 | 29 | 102 | 16 | 117 | 213 | 42 | 36 | 355 | 154 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 52 | 122 | 81 | 32 | 112 | 18 | 129 | 234 | 46 | 40 | 390 | 169 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 18.7 | 15.6 | 29.5 | 79.9 |
| HCM LOS | C | C | D | F |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 31% | 20% | 20% | 7% |
| Vol Thru, % | 57% | 48% | 69% | 65% |
| Vol Right, % | 11% | 32% | 11% | 28% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 372 | 232 | 147 | 545 |
| LT Vol | 117 | 47 | 29 | 36 |
| Through Vol | 213 | 111 | 102 | 355 |
| RT Vol | 42 | 74 | 16 | 154 |
| Lane Flow Rate | 409 | 255 | 162 | 599 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.768 | 0.522 | 0.353 | 1.06 |
| Departure Headway (Hd) | 6.992 | 7.651 | 8.187 | 6.373 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 519 | 474 | 443 | 569 |
| Service Time | 4.992 | 5.651 | 6.187 | 4.431 |
| HCM Lane V/C Ratio | 0.788 | 0.538 | 0.366 | 1.053 |
| HCM Control Delay | 29.5 | 18.7 | 15.6 | 79.9 |
| HCM Lane LOS | D | C | C | F |
| HCM 95th-tile Q | 6.8 | 3 | 1.6 | 17.2 |

HCM 2010 TWSC
10: Cloverdale Road & Hubbard Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 65.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 32 | 4 | 22 | 40 | 237 | 126 | 10 | 240 | 7 | 22 | 357 | 95 |
| Future Vol, veh/h | 32 | 4 | 22 | 40 | 237 | 126 | 10 | 240 | 7 | 22 | 357 | 95 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 4 | 24 | 44 | 263 | 140 | 11 | 267 | 8 | 24 | 397 | 106 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 940 | 742 | 397 | 805 | 844 | 271 | 503 | 0 | 0 | 275 | 0 | 0 |
| Stage 1 | 445 | 445 | - | 293 | 293 | - | - | - | - | - | - | - |
| Stage 2 | 495 | 297 | - | 512 | 551 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 244 | 344 | 652 | 301 | 300 | 768 | 1061 | - | - | 1288 | - | - |
| Stage 1 | 592 | 575 | - | 715 | 670 | - | - | - | - | - | - | - |
| Stage 2 | 556 | 668 | - | 545 | 515 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 41 | 331 | 652 | 278 | 289 | 768 | 1061 | - | - | 1288 | - | - |
| Mov Cap-2 Maneuver | 41 | 331 | - | 278 | 289 | - | - | - | - | - | - | - |
| Stage 1 | 585 | 560 | - | 706 | 662 | - | - | - | - | - | - | - |
| Stage 2 | 271 | 660 | - | 507 | 502 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 185.6 | 167 | 0.3 | 0.4 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1061 | - | - | 70 | 357 | 1288 | - | - |
| HCM Lane V/C Ratio | 0.01 | - | - | 0.921 | 1.254 | 0.019 | - | - |
| HCM Control Delay (s) | 8.4 | 0 | - | 185.6 | 167 | 7.8 | 0 | - |
| HCM Lane LOS | A | A | - | F | F | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 4.6 | 19.8 | 0.1 | - | - |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 13.3 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 52 | 30 | 73 | 0 | 36 | 15 | 249 | 168 | 3 | 41 | 137 | 88 |
| Future Vol, veh/h | 52 | 30 | 73 | 0 | 36 | 15 | 249 | 168 | 3 | 41 | 137 | 88 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 55 | 32 | 77 | 0 | 38 | 16 | 262 | 177 | 3 | 43 | 144 | 93 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10.6 | 9.5 | 16.1 | 11.2 |
| HCM LOS | B | A | C | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 59% | 34% | 0% | 15% |
| Vol Thru, % | 40% | 19% | 71% | 52% |
| Vol Right, % | 1% | 47% | 29% | 33% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 420 | 155 | 51 | 266 |
| LT Vol | 249 | 52 | 0 | 41 |
| Through Vol | 168 | 30 | 36 | 137 |
| RT Vol | 3 | 73 | 15 | 88 |
| Lane Flow Rate | 442 | 163 | 54 | 280 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.623 | 0.255 | 0.088 | 0.39 |
| Departure Headway (Hd) | 5.072 | 5.625 | 5.907 | 5.016 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 712 | 638 | 605 | 717 |
| Service Time | 3.098 | 3.666 | 3.957 | 3.047 |
| HCM Lane V/C Ratio | 0.621 | 0.255 | 0.089 | 0.391 |
| HCM Control Delay | 16.1 | 10.6 | 9.5 | 11.2 |
| HCM Lane LOS | C | B | A | B |
| HCM 95th-tile Q | 4.4 | 1 | 0.3 | 1.9 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 17 | 0 | 2 | 313 | 0 |
| Future Vol, veh/h | 4 | 17 | 0 | 2 | 313 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 19 | 0 | 2 | 348 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 14 | 23 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 14 | 23 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 1005 | 870 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 1009 | 876 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 1005 | 0 |
| Mov Cap-2 Maneuver | - | - | 1005 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 1009 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
## 13: Pleasant Valley Road & Gowen Road

2025 Background
PM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 238 | 229 | 248 | 1043 | 239 | 21 |
| Future Volume (veh/h) | 238 | 229 | 248 | 1043 | 239 | 21 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 262 | 252 | 270 | 1134 | 266 | 23 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.91 | 0.91 | 0.92 | 0.92 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1463 | 1148 | 674 | 1274 | 292 | 260 |
| Arrive On Green | 0.59 | 0.59 | 0.08 | 0.72 | 0.17 | 0.17 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 262 | 252 | 270 | 1134 | 266 | 23 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 5.6 | 5.4 | 6.9 | 57.5 | 17.9 | 1.5 |
| Cycle Q Clear(g_c), s | 5.6 | 5.4 | 6.9 | 57.5 | 17.9 | 1.5 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1463 | 1148 | 674 | 1274 | 292 | 260 |
| V/C Ratio(X) | 0.18 | 0.22 | 0.40 | 0.89 | 0.91 | 0.09 |
| Avail Cap(c_a), veh/h | 1463 | 1148 | 689 | 1274 | 307 | 274 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.7 | 3.8 | 7.1 | 12.4 | 46.7 | 39.9 |
| Incr Delay (d2), s/veh | 0.3 | 0.4 | 0.1 | 9.6 | 28.2 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.5 | 7.3 | 5.6 | 39.9 | 15.9 | 1.1 |
| LnGrp Delay(d),s/veh | 11.0 | 4.2 | 7.2 | 22.0 | 74.9 | 39.9 |
| LnGrp LOS | B | A | A | C | E | D |
| Approach Vol, veh/h | 514 | | | 1404 | 289 | |
| Approach Delay, s/veh | 7.7 | | | 19.1 | 72.1 | |
| Approach LOS | A | | | B | E | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 89.0 | | | 15.0 | 74.1 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 82.0 | | | 10.0 | 66.0 | | 21.0 |
| Max Q Clear Time (g_c+I1), s | | 59.5 | | | 8.9 | 7.6 | | 19.9 |
| Green Ext Time (p_c), s | | 15.0 | | | 0.1 | 2.9 | | 0.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 23.4 |
| HCM 2010 LOS | C |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2025 Background
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 11 | 42 | 106 | 240 | 203 |
| Future Vol, veh/h | 4 | 11 | 42 | 106 | 240 | 203 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 300 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 12 | 47 | 118 | 267 | 226 |

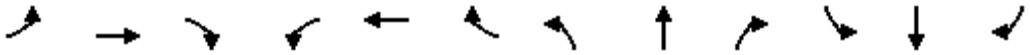
| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 479 | 267 | 493 | 0 | - | 0 |
| Stage 1 | 267 | - | - | - | - | - |
| Stage 2 | 212 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 545 | 772 | 1071 | - | - | - |
| Stage 1 | 778 | - | - | - | - | - |
| Stage 2 | 823 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 519 | 772 | 1071 | - | - | - |
| Mov Cap-2 Maneuver | 519 | - | - | - | - | - |
| Stage 1 | 741 | - | - | - | - | - |
| Stage 2 | 823 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.4 | 2.4 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1071 | - | 683 | - | - |
| HCM Lane V/C Ratio | 0.044 | - | 0.024 | - | - |
| HCM Control Delay (s) | 8.5 | 0 | 10.4 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.1 | - | - |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Background - Mitigation
AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 138 | 258 | 69 | 20 | 262 | 110 | 210 | 1042 | 58 | 25 | 198 | 68 |
| Future Volume (veh/h) | 138 | 258 | 69 | 20 | 262 | 110 | 210 | 1042 | 58 | 25 | 198 | 68 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 153 | 287 | 77 | 22 | 291 | 122 | 223 | 1109 | 62 | 28 | 220 | 76 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 234 | 451 | 121 | 253 | 330 | 138 | 569 | 1467 | 82 | 181 | 985 | 331 |
| Arrive On Green | 0.08 | 0.34 | 0.34 | 0.02 | 0.28 | 0.28 | 0.10 | 0.45 | 0.45 | 0.03 | 0.38 | 0.38 |
| Sat Flow, veh/h | 1681 | 1341 | 360 | 1681 | 1182 | 495 | 1681 | 3229 | 180 | 1681 | 2565 | 862 |
| Grp Volume(v), veh/h | 153 | 0 | 364 | 22 | 0 | 413 | 223 | 576 | 595 | 28 | 148 | 148 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1701 | 1681 | 0 | 1677 | 1681 | 1676 | 1733 | 1681 | 1744 | 1683 |
| Q Serve(g_s), s | 7.7 | 0.0 | 22.2 | 1.1 | 0.0 | 28.9 | 9.5 | 35.1 | 35.1 | 1.2 | 7.0 | 7.3 |
| Cycle Q Clear(g_c), s | 7.7 | 0.0 | 22.2 | 1.1 | 0.0 | 28.9 | 9.5 | 35.1 | 35.1 | 1.2 | 7.0 | 7.3 |
| Prop In Lane | 1.00 | | 0.21 | 1.00 | | 0.30 | 1.00 | | 0.10 | 1.00 | | 0.51 |
| Lane Grp Cap(c), veh/h | 234 | 0 | 573 | 253 | 0 | 468 | 569 | 761 | 787 | 181 | 670 | 646 |
| V/C Ratio(X) | 0.66 | 0.00 | 0.64 | 0.09 | 0.00 | 0.88 | 0.39 | 0.76 | 0.76 | 0.15 | 0.22 | 0.23 |
| Avail Cap(c_a), veh/h | 265 | 0 | 775 | 299 | 0 | 682 | 641 | 846 | 874 | 221 | 724 | 698 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.1 | 0.0 | 34.4 | 31.4 | 0.0 | 42.4 | 18.5 | 27.9 | 27.9 | 24.9 | 25.5 | 25.6 |
| Incr Delay (d2), s/veh | 3.2 | 0.0 | 0.4 | 0.1 | 0.0 | 7.0 | 0.2 | 3.5 | 3.4 | 0.4 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 6.7 | 0.0 | 15.8 | 1.0 | 0.0 | 20.5 | 7.8 | 23.6 | 24.3 | 1.1 | 6.1 | 6.2 |
| LnGrp Delay(d),s/veh | 34.3 | 0.0 | 34.9 | 31.6 | 0.0 | 49.4 | 18.6 | 31.4 | 31.3 | 25.2 | 25.6 | 25.8 |
| LnGrp LOS | C | | C | C | | D | B | C | C | C | C | C |
| Approach Vol, veh/h | | 517 | | | 435 | | | 1394 | | | 324 | |
| Approach Delay, s/veh | | 34.7 | | | 48.5 | | | 29.3 | | | 25.7 | |
| Approach LOS | | C | | | D | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 14.7 | 39.3 | 16.7 | 52.2 | 7.6 | 46.4 | 8.1 | 60.8 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 12.0 | 50.0 | 17.0 | 51.0 | 6.0 | 56.0 | 6.0 | 62.0 |
| Max Q Clear Time (g_c+I1), s | 9.7 | 30.9 | 11.5 | 9.3 | 3.1 | 24.2 | 3.2 | 37.1 |
| Green Ext Time (p_c), s | 0.1 | 3.3 | 0.2 | 5.4 | 0.0 | 6.5 | 0.0 | 18.7 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 33.0 |
| HCM 2010 LOS | C |

HCM 6th Roundabout
9: Cloverdale Road & Columbia Road

2025 Background - Mitigation
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.9 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 347 | 198 | 526 | 263 |
| Demand Flow Rate, veh/h | 354 | 203 | 536 | 268 |
| Vehicles Circulating, veh/h | 204 | 670 | 270 | 232 |
| Vehicles Exiting, veh/h | 296 | 136 | 288 | 640 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.4 | 8.9 | 9.7 | 5.7 |
| Approach LOS | A | A | A | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 354 | 203 | 536 | 268 |
| Cap Entry Lane, veh/h | 1121 | 697 | 1048 | 1089 |
| Entry HV Adj Factor | 0.981 | 0.978 | 0.981 | 0.981 |
| Flow Entry, veh/h | 347 | 198 | 526 | 263 |
| Cap Entry, veh/h | 1099 | 681 | 1027 | 1068 |
| V/C Ratio | 0.316 | 0.291 | 0.512 | 0.246 |
| Control Delay, s/veh | 6.4 | 8.9 | 9.7 | 5.7 |
| LOS | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 3 | 1 |

HCM 6th Roundabout
10: Cloverdale Road & Hubbard Road

2025 Background - Mitigation
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.5 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 320 | 21 | 420 | 304 |
| Demand Flow Rate, veh/h | 326 | 21 | 428 | 310 |
| Vehicles Circulating, veh/h | 256 | 513 | 441 | 15 |
| Vehicles Exiting, veh/h | 69 | 356 | 141 | 519 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.5 | 4.7 | 10.5 | 4.6 |
| Approach LOS | A | A | B | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 326 | 21 | 428 | 310 |
| Cap Entry Lane, veh/h | 1063 | 818 | 880 | 1359 |
| Entry HV Adj Factor | 0.982 | 0.998 | 0.980 | 0.982 |
| Flow Entry, veh/h | 320 | 21 | 420 | 304 |
| Cap Entry, veh/h | 1044 | 816 | 863 | 1335 |
| V/C Ratio | 0.307 | 0.026 | 0.486 | 0.228 |
| Control Delay, s/veh | 6.5 | 4.7 | 10.5 | 4.6 |
| LOS | A | A | B | A |
| 95th %tile Queue, veh | 1 | 0 | 3 | 1 |

HCM 6th Roundabout
7: Cloverdale Road & Amity Road

2025 Background - Mitigation ALT
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 17.7 |
| Intersection LOS | C |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 2 | 2 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 505 | 427 | 1424 | 316 |
| Demand Flow Rate, veh/h | 515 | 435 | 1453 | 322 |
| Vehicles Circulating, veh/h | 269 | 1542 | 467 | 546 |
| Vehicles Exiting, veh/h | 599 | 378 | 317 | 1431 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.6 | 28.5 | 21.4 | 6.2 |
| Approach LOS | A | D | C | A |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| Assumed Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.469 | 0.531 | 0.470 | 0.530 | 0.469 | 0.531 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 |
| Entry Flow, veh/h | 242 | 273 | 204 | 231 | 683 | 770 | 151 | 171 |
| Cap Entry Lane, veh/h | 1054 | 1130 | 327 | 383 | 878 | 955 | 817 | 893 |
| Entry HV Adj Factor | 0.982 | 0.981 | 0.984 | 0.980 | 0.980 | 0.980 | 0.983 | 0.979 |
| Flow Entry, veh/h | 238 | 268 | 201 | 226 | 669 | 755 | 148 | 167 |
| Cap Entry, veh/h | 1034 | 1109 | 322 | 375 | 861 | 936 | 803 | 874 |
| V/C Ratio | 0.230 | 0.242 | 0.624 | 0.603 | 0.778 | 0.806 | 0.185 | 0.192 |
| Control Delay, s/veh | 5.7 | 5.5 | 31.2 | 26.2 | 21.0 | 21.7 | 6.4 | 6.1 |
| LOS | A | A | D | D | C | C | A | A |
| 95th %tile Queue, veh | 1 | 1 | 4 | 4 | 8 | 9 | 1 | 1 |

# HCM 2010 Signalized Intersection Summary
## 9: Cloverdale Road & Columbia Road

2025 Background - Mitigation ALT
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 155 | 80 | 81 | 35 | 114 | 32 | 59 | 385 | 35 | 6 | 141 | 92 |
| Future Volume (veh/h) | 155 | 80 | 81 | 35 | 114 | 32 | 59 | 385 | 35 | 6 | 141 | 92 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 172 | 89 | 90 | 39 | 127 | 36 | 60 | 389 | 35 | 6 | 145 | 95 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.99 | 0.99 | 0.99 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 488 | 245 | 248 | 469 | 402 | 114 | 479 | 557 | 50 | 342 | 348 | 228 |
| Arrive On Green | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Sat Flow, veh/h | 1218 | 806 | 815 | 1200 | 1323 | 375 | 1135 | 1596 | 144 | 959 | 997 | 653 |
| Grp Volume(v), veh/h | 172 | 0 | 179 | 39 | 0 | 163 | 60 | 0 | 424 | 6 | 0 | 240 |
| Grp Sat Flow(s),veh/h/ln | 1218 | 0 | 1621 | 1200 | 0 | 1699 | 1135 | 0 | 1739 | 959 | 0 | 1649 |
| Q Serve(g_s), s | 4.4 | 0.0 | 3.0 | 0.9 | 0.0 | 2.6 | 1.5 | 0.0 | 7.3 | 0.2 | 0.0 | 3.8 |
| Cycle Q Clear(g_c), s | 6.9 | 0.0 | 3.0 | 3.9 | 0.0 | 2.6 | 5.3 | 0.0 | 7.3 | 7.5 | 0.0 | 3.8 |
| Prop In Lane | 1.00 | | 0.50 | 1.00 | | 0.22 | 1.00 | | 0.08 | 1.00 | | 0.40 |
| Lane Grp Cap(c), veh/h | 488 | 0 | 493 | 469 | 0 | 517 | 479 | 0 | 608 | 342 | 0 | 576 |
| V/C Ratio(X) | 0.35 | 0.00 | 0.36 | 0.08 | 0.00 | 0.32 | 0.13 | 0.00 | 0.70 | 0.02 | 0.00 | 0.42 |
| Avail Cap(c_a), veh/h | 2228 | 0 | 2808 | 2184 | 0 | 2943 | 2640 | 0 | 3918 | 2168 | 0 | 3715 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 11.9 | 0.0 | 9.4 | 11.0 | 0.0 | 9.3 | 10.6 | 0.0 | 9.7 | 12.9 | 0.0 | 8.6 |
| Incr Delay (d2), s/veh | 0.4 | 0.0 | 0.4 | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 1.5 | 0.0 | 0.0 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.7 | 0.0 | 2.4 | 0.5 | 0.0 | 2.2 | 0.8 | 0.0 | 6.6 | 0.1 | 0.0 | 3.3 |
| LnGrp Delay(d),s/veh | 12.4 | 0.0 | 9.9 | 11.0 | 0.0 | 9.6 | 10.7 | 0.0 | 11.2 | 12.9 | 0.0 | 9.1 |
| LnGrp LOS | B | | A | B | | A | B | | B | B | | A |
| Approach Vol, veh/h | | 351 | | | 202 | | | 484 | | | 246 | |
| Approach Delay, s/veh | | 11.1 | | | 9.9 | | | 11.1 | | | 9.2 | |
| Approach LOS | | B | | | A | | | B | | | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 16.5 | | 18.1 | | 16.5 | | 18.1 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 60.0 | | 78.0 | | 60.0 | | 78.0 |
| Max Q Clear Time (g_c+I1), s | | 5.9 | | 9.5 | | 8.9 | | 9.3 |
| Green Ext Time (p_c), s | | 1.0 | | 1.5 | | 1.6 | | 2.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 10.5 |
| HCM 2010 LOS | B |

# HCM 2010 Signalized Intersection Summary
## 10: Cloverdale Road & Hubbard Road

2025 Background - Mitigation ALT
AM Peak Hour

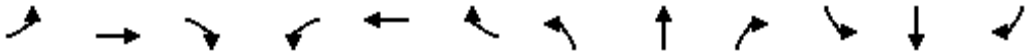
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 112 | 175 | 7 | 4 | 2 | 14 | 8 | 343 | 35 | 111 | 116 | 52 |
| Future Volume (veh/h) | 112 | 175 | 7 | 4 | 2 | 14 | 8 | 343 | 35 | 111 | 116 | 52 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 124 | 194 | 8 | 4 | 2 | 16 | 8 | 361 | 37 | 123 | 129 | 58 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.95 | 0.95 | 0.95 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 510 | 355 | 15 | 357 | 36 | 286 | 624 | 638 | 65 | 455 | 468 | 210 |
| Arrive On Green | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 |
| Sat Flow, veh/h | 1389 | 1683 | 69 | 1175 | 169 | 1356 | 1192 | 1575 | 161 | 983 | 1154 | 519 |
| Grp Volume(v), veh/h | 124 | 0 | 202 | 4 | 0 | 18 | 8 | 0 | 398 | 123 | 0 | 187 |
| Grp Sat Flow(s),veh/h/ln | 1389 | 0 | 1752 | 1175 | 0 | 1525 | 1192 | 0 | 1736 | 983 | 0 | 1673 |
| Q Serve(g_s), s | 2.4 | 0.0 | 3.2 | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 5.5 | 3.5 | 0.0 | 2.3 |
| Cycle Q Clear(g_c), s | 2.7 | 0.0 | 3.2 | 3.3 | 0.0 | 0.3 | 2.5 | 0.0 | 5.5 | 9.0 | 0.0 | 2.3 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.89 | 1.00 | | 0.09 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 510 | 0 | 369 | 357 | 0 | 322 | 624 | 0 | 703 | 455 | 0 | 678 |
| V/C Ratio(X) | 0.24 | 0.00 | 0.55 | 0.01 | 0.00 | 0.06 | 0.01 | 0.00 | 0.57 | 0.27 | 0.00 | 0.28 |
| Avail Cap(c_a), veh/h | 2574 | 0 | 2973 | 2104 | 0 | 2588 | 3384 | 0 | 4725 | 2730 | 0 | 4553 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 10.9 | 0.0 | 11.0 | 12.5 | 0.0 | 9.8 | 7.1 | 0.0 | 7.2 | 10.6 | 0.0 | 6.2 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 1.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.7 | 0.3 | 0.0 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.7 | 0.0 | 3.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 4.8 | 1.7 | 0.0 | 1.9 |
| LnGrp Delay(d),s/veh | 11.2 | 0.0 | 12.3 | 12.5 | 0.0 | 9.9 | 7.1 | 0.0 | 7.9 | 11.0 | 0.0 | 6.4 |
| LnGrp LOS | B | | B | B | | A | A | | A | B | | A |
| Approach Vol, veh/h | | 326 | | | 22 | | | 406 | | | 310 | |
| Approach Delay, s/veh | | 11.8 | | | 10.4 | | | 7.9 | | | 8.2 | |
| Approach LOS | | B | | | B | | | A | | | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 12.6 | | 18.7 | | 12.6 | | 18.7 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 53.0 | | 85.0 | | 53.0 | | 85.0 |
| Max Q Clear Time (g_c+I1), s | | 5.3 | | 11.0 | | 5.2 | | 7.5 |
| Green Ext Time (p_c), s | | 0.1 | | 1.7 | | 1.4 | | 2.4 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 9.2 |
| HCM 2010 LOS | A |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Background - Mitigation
PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 77 | 291 | 156 | 76 | 299 | 19 | 138 | 366 | 55 | 73 | 895 | 197 |
| Future Volume (veh/h) | 77 | 291 | 156 | 76 | 299 | 19 | 138 | 366 | 55 | 73 | 895 | 197 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 86 | 323 | 173 | 84 | 332 | 21 | 147 | 389 | 59 | 76 | 932 | 205 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 308 | 376 | 201 | 182 | 557 | 35 | 217 | 1234 | 186 | 434 | 1122 | 246 |
| Arrive On Green | 0.05 | 0.35 | 0.35 | 0.04 | 0.34 | 0.34 | 0.07 | 0.42 | 0.42 | 0.04 | 0.39 | 0.39 |
| Sat Flow, veh/h | 1681 | 1083 | 580 | 1681 | 1642 | 104 | 1681 | 2923 | 440 | 1681 | 2844 | 625 |
| Grp Volume(v), veh/h | 86 | 0 | 496 | 84 | 0 | 353 | 147 | 222 | 226 | 76 | 571 | 566 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1662 | 1681 | 0 | 1746 | 1681 | 1676 | 1687 | 1681 | 1744 | 1725 |
| Q Serve(g_s), s | 4.3 | 0.0 | 36.3 | 4.3 | 0.0 | 21.9 | 6.7 | 11.5 | 11.7 | 3.5 | 38.5 | 38.6 |
| Cycle Q Clear(g_c), s | 4.3 | 0.0 | 36.3 | 4.3 | 0.0 | 21.9 | 6.7 | 11.5 | 11.7 | 3.5 | 38.5 | 38.6 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.06 | 1.00 | | 0.26 | 1.00 | | 0.36 |
| Lane Grp Cap(c), veh/h | 308 | 0 | 577 | 182 | 0 | 592 | 217 | 708 | 712 | 434 | 688 | 680 |
| V/C Ratio(X) | 0.28 | 0.00 | 0.86 | 0.46 | 0.00 | 0.60 | 0.68 | 0.31 | 0.32 | 0.18 | 0.83 | 0.83 |
| Avail Cap(c_a), veh/h | 308 | 0 | 713 | 182 | 0 | 736 | 297 | 809 | 814 | 445 | 721 | 713 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 28.0 | 0.0 | 39.7 | 31.9 | 0.0 | 35.7 | 28.6 | 25.1 | 25.2 | 22.2 | 35.6 | 35.6 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 7.5 | 0.7 | 0.0 | 0.4 | 1.4 | 0.3 | 0.3 | 0.1 | 7.8 | 8.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.6 | 0.0 | 24.8 | 3.6 | 0.0 | 15.9 | 5.7 | 9.1 | 9.4 | 2.9 | 27.4 | 27.2 |
| LnGrp Delay(d),s/veh | 28.2 | 0.0 | 47.2 | 32.6 | 0.0 | 36.1 | 30.0 | 25.4 | 25.4 | 22.3 | 43.4 | 43.6 |
| LnGrp LOS | C | | D | C | | D | C | C | C | C | D | D |
| Approach Vol, veh/h | | 582 | | | 437 | | | 595 | | | 1213 | |
| Approach Delay, s/veh | | 44.4 | | | 35.4 | | | 26.5 | | | 42.2 | |
| Approach LOS | | D | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 11.0 | 49.3 | 13.8 | 56.5 | 10.0 | 50.3 | 10.2 | 60.1 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 6.0 | 55.0 | 15.0 | 54.0 | 5.0 | 56.0 | 6.0 | 63.0 |
| Max Q Clear Time (g_c+I1), s | 6.3 | 23.9 | 8.7 | 40.6 | 6.3 | 38.3 | 5.5 | 13.7 |
| Green Ext Time (p_c), s | 0.0 | 3.1 | 0.1 | 10.9 | 0.0 | 7.0 | 0.0 | 9.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 38.3 |
| HCM 2010 LOS | D |

HCM 6th Roundabout
9: Cloverdale Road & Columbia Road

2025 Background - Mitigation
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.9 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 255 | 162 | 409 | 599 |
| Demand Flow Rate, veh/h | 260 | 165 | 418 | 611 |
| Vehicles Circulating, veh/h | 472 | 424 | 218 | 279 |
| Vehicles Exiting, veh/h | 418 | 212 | 514 | 310 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.7 | 5.9 | 7.2 | 11.4 |
| Approach LOS | A | A | A | B |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 260 | 165 | 418 | 611 |
| Cap Entry Lane, veh/h | 853 | 895 | 1105 | 1038 |
| Entry HV Adj Factor | 0.979 | 0.980 | 0.979 | 0.981 |
| Flow Entry, veh/h | 255 | 162 | 409 | 599 |
| Cap Entry, veh/h | 835 | 878 | 1082 | 1018 |
| V/C Ratio | 0.305 | 0.184 | 0.378 | 0.589 |
| Control Delay, s/veh | 7.7 | 5.9 | 7.2 | 11.4 |
| LOS | A | A | A | B |
| 95th %tile Queue, veh | 1 | 1 | 2 | 4 |

HCM 6th Roundabout
10: Cloverdale Road & Hubbard Road

2025 Background - Mitigation
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.6 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 64 | 447 | 286 | 527 |
| Demand Flow Rate, veh/h | 65 | 456 | 291 | 537 |
| Vehicles Circulating, veh/h | 474 | 320 | 65 | 324 |
| Vehicles Exiting, veh/h | 387 | 36 | 474 | 452 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.0 | 9.1 | 4.8 | 10.7 |
| Approach LOS | A | A | A | B |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 65 | 456 | 291 | 537 |
| Cap Entry Lane, veh/h | 851 | 996 | 1291 | 992 |
| Entry HV Adj Factor | 0.983 | 0.980 | 0.982 | 0.981 |
| Flow Entry, veh/h | 64 | 447 | 286 | 527 |
| Cap Entry, veh/h | 837 | 975 | 1268 | 973 |
| V/C Ratio | 0.076 | 0.458 | 0.225 | 0.542 |
| Control Delay, s/veh | 5.0 | 9.1 | 4.8 | 10.7 |
| LOS | A | A | A | B |
| 95th %tile Queue, veh | 0 | 2 | 1 | 3 |

HCM 6th Roundabout
7: Cloverdale Road & Amity Road

2025 Background - Mitigation ALT
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 13.8 |
| Intersection LOS | B |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 2 | 2 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 540 | 406 | 576 | 1201 |
| Demand Flow Rate, veh/h | 551 | 414 | 588 | 1224 |
| Vehicles Circulating, veh/h | 1097 | 611 | 463 | 539 |
| Vehicles Exiting, veh/h | 666 | 440 | 1185 | 486 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 17.1 | 7.4 | 7.4 | 17.6 |
| Approach LOS | C | A | A | C |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| Assumed Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.471 | 0.529 | 0.469 | 0.531 | 0.470 | 0.530 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 |
| Entry Flow, veh/h | 259 | 292 | 195 | 219 | 276 | 312 | 575 | 649 |
| Cap Entry Lane, veh/h | 492 | 559 | 769 | 845 | 882 | 958 | 822 | 898 |
| Entry HV Adj Factor | 0.980 | 0.980 | 0.978 | 0.982 | 0.982 | 0.979 | 0.981 | 0.980 |
| Flow Entry, veh/h | 254 | 286 | 191 | 215 | 271 | 306 | 564 | 636 |
| Cap Entry, veh/h | 482 | 548 | 753 | 830 | 865 | 938 | 807 | 881 |
| V/C Ratio | 0.526 | 0.522 | 0.253 | 0.259 | 0.313 | 0.326 | 0.699 | 0.723 |
| Control Delay, s/veh | 18.1 | 16.2 | 7.7 | 7.1 | 7.6 | 7.3 | 17.6 | 17.6 |
| LOS | C | C | A | A | A | A | C | C |
| 95th %tile Queue, veh | 3 | 3 | 1 | 1 | 1 | 1 | 6 | 6 |

# HCM 2010 Signalized Intersection Summary
## 9: Cloverdale Road & Columbia Road

2025 Background - Mitigation ALT
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 47 | 111 | 74 | 29 | 102 | 16 | 117 | 213 | 42 | 36 | 355 | 154 |
| Future Volume (veh/h) | 47 | 111 | 74 | 29 | 102 | 16 | 117 | 213 | 42 | 36 | 355 | 154 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 52 | 122 | 81 | 32 | 113 | 18 | 130 | 237 | 47 | 40 | 394 | 171 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 350 | 203 | 134 | 285 | 304 | 48 | 385 | 718 | 142 | 616 | 586 | 255 |
| Arrive On Green | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Sat Flow, veh/h | 1254 | 991 | 658 | 1174 | 1486 | 237 | 842 | 1431 | 284 | 1091 | 1168 | 507 |
| Grp Volume(v), veh/h | 52 | 0 | 203 | 32 | 0 | 131 | 130 | 0 | 284 | 40 | 0 | 565 |
| Grp Sat Flow(s),veh/h/ln | 1254 | 0 | 1649 | 1174 | 0 | 1723 | 842 | 0 | 1715 | 1091 | 0 | 1675 |
| Q Serve(g_s), s | 1.5 | 0.0 | 4.6 | 1.0 | 0.0 | 2.7 | 5.6 | 0.0 | 4.0 | 0.9 | 0.0 | 10.4 |
| Cycle Q Clear(g_c), s | 4.2 | 0.0 | 4.6 | 5.6 | 0.0 | 2.7 | 16.0 | 0.0 | 4.0 | 5.0 | 0.0 | 10.4 |
| Prop In Lane | 1.00 | | 0.40 | 1.00 | | 0.14 | 1.00 | | 0.17 | 1.00 | | 0.30 |
| Lane Grp Cap(c), veh/h | 350 | 0 | 337 | 285 | 0 | 352 | 385 | 0 | 861 | 616 | 0 | 841 |
| V/C Ratio(X) | 0.15 | 0.00 | 0.60 | 0.11 | 0.00 | 0.37 | 0.34 | 0.00 | 0.33 | 0.06 | 0.00 | 0.67 |
| Avail Cap(c_a), veh/h | 1444 | 0 | 1775 | 1309 | 0 | 1855 | 1900 | 0 | 3943 | 2577 | 0 | 3853 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 15.8 | 0.0 | 14.8 | 17.3 | 0.0 | 14.0 | 13.6 | 0.0 | 6.1 | 7.6 | 0.0 | 7.6 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 1.7 | 0.2 | 0.0 | 0.7 | 0.5 | 0.0 | 0.2 | 0.0 | 0.0 | 0.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 1.0 | 0.0 | 4.0 | 0.6 | 0.0 | 2.4 | 2.4 | 0.0 | 3.5 | 0.5 | 0.0 | 8.6 |
| LnGrp Delay(d),s/veh | 16.0 | 0.0 | 16.5 | 17.5 | 0.0 | 14.7 | 14.2 | 0.0 | 6.3 | 7.6 | 0.0 | 8.6 |
| LnGrp LOS | B | | B | B | | B | B | | A | A | | A |
| Approach Vol, veh/h | | 255 | | | 163 | | | 414 | | | 605 | |
| Approach Delay, s/veh | | 16.4 | | | 15.2 | | | 8.8 | | | 8.5 | |
| Approach LOS | | B | | | B | | | A | | | A | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 14.4 | | 26.5 | | 14.4 | | 26.5 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 44.0 | | 94.0 | | 44.0 | | 94.0 |
| Max Q Clear Time (g_c+I1), s | | 7.6 | | 12.4 | | 6.6 | | 18.0 |
| Green Ext Time (p_c), s | | 0.8 | | 4.1 | | 1.3 | | 2.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 10.7 |
| HCM 2010 LOS | B |

# HCM 2010 Signalized Intersection Summary
## 10: Cloverdale Road & Hubbard Road

2025 Background - Mitigation ALT
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 32 | 4 | 22 | 40 | 237 | 126 | 10 | 240 | 7 | 22 | 357 | 95 |
| Future Volume (veh/h) | 32 | 4 | 22 | 40 | 237 | 126 | 10 | 240 | 7 | 22 | 357 | 95 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 36 | 4 | 24 | 44 | 263 | 140 | 11 | 267 | 8 | 24 | 397 | 106 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 280 | 71 | 427 | 603 | 353 | 188 | 288 | 660 | 20 | 473 | 520 | 139 |
| Arrive On Green | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Sat Flow, veh/h | 978 | 219 | 1314 | 1377 | 1085 | 578 | 892 | 1705 | 51 | 1100 | 1343 | 359 |
| Grp Volume(v), veh/h | 36 | 0 | 28 | 44 | 0 | 403 | 11 | 0 | 275 | 24 | 0 | 503 |
| Grp Sat Flow(s),veh/h/ln | 978 | 0 | 1533 | 1377 | 0 | 1663 | 892 | 0 | 1756 | 1100 | 0 | 1701 |
| Q Serve(g_s), s | 1.4 | 0.0 | 0.5 | 0.9 | 0.0 | 9.0 | 0.5 | 0.0 | 4.7 | 0.7 | 0.0 | 10.7 |
| Cycle Q Clear(g_c), s | 10.4 | 0.0 | 0.5 | 1.5 | 0.0 | 9.0 | 11.2 | 0.0 | 4.7 | 5.4 | 0.0 | 10.7 |
| Prop In Lane | 1.00 | | 0.86 | 1.00 | | 0.35 | 1.00 | | 0.03 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 280 | 0 | 498 | 603 | 0 | 541 | 288 | 0 | 679 | 473 | 0 | 658 |
| V/C Ratio(X) | 0.13 | 0.00 | 0.06 | 0.07 | 0.00 | 0.75 | 0.04 | 0.00 | 0.40 | 0.05 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 1463 | 0 | 2354 | 2269 | 0 | 2553 | 1527 | 0 | 3117 | 2000 | 0 | 3021 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 17.2 | 0.0 | 9.7 | 10.2 | 0.0 | 12.5 | 16.0 | 0.0 | 9.3 | 11.3 | 0.0 | 11.1 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 2.1 | 0.1 | 0.0 | 0.4 | 0.0 | 0.0 | 1.9 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 0.7 | 0.0 | 0.4 | 0.7 | 0.0 | 7.8 | 0.2 | 0.0 | 4.3 | 0.4 | 0.0 | 9.0 |
| LnGrp Delay(d),s/veh | 17.4 | 0.0 | 9.7 | 10.2 | 0.0 | 14.6 | 16.0 | 0.0 | 9.7 | 11.3 | 0.0 | 13.0 |
| LnGrp LOS | B | | A | B | | B | B | | A | B | | B |
| Approach Vol, veh/h | | 64 | | | 447 | | | 286 | | | 527 | |
| Approach Delay, s/veh | | 14.0 | | | 14.2 | | | 9.9 | | | 12.9 | |
| Approach LOS | | B | | | B | | | A | | | B | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 19.5 | | 22.1 | | 19.5 | | 22.1 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 64.0 | | 74.0 | | 64.0 | | 74.0 |
| Max Q Clear Time (g_c+I1), s | | 11.0 | | 12.7 | | 12.4 | | 13.2 |
| Green Ext Time (p_c), s | | 2.5 | | 3.4 | | 0.3 | | 1.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 12.7 |
| HCM 2010 LOS | B |

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2025 Total
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 386 | 329 | 47 | 62 | 101 | 109 | 19 | 1258 | 91 | 47 | 438 | 72 |
| Future Volume (veh/h) | 386 | 329 | 47 | 62 | 101 | 109 | 19 | 1258 | 91 | 47 | 438 | 72 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 415 | 354 | 51 | 67 | 110 | 118 | 21 | 1398 | 101 | 51 | 471 | 77 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 436 | 402 | 58 | 151 | 153 | 130 | 432 | 1623 | 726 | 137 | 1656 | 741 |
| Arrive On Green | 0.21 | 0.27 | 0.27 | 0.04 | 0.09 | 0.09 | 0.02 | 0.48 | 0.48 | 0.03 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1681 | 1509 | 217 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 415 | 0 | 405 | 67 | 110 | 118 | 21 | 1398 | 101 | 51 | 471 | 77 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1726 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 32.0 | 0.0 | 33.7 | 5.5 | 9.1 | 11.7 | 0.9 | 55.4 | 5.6 | 2.3 | 12.4 | 4.1 |
| Cycle Q Clear(g_c), s | 32.0 | 0.0 | 33.7 | 5.5 | 9.1 | 11.7 | 0.9 | 55.4 | 5.6 | 2.3 | 12.4 | 4.1 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 436 | 0 | 460 | 151 | 153 | 130 | 432 | 1623 | 726 | 137 | 1656 | 741 |
| V/C Ratio(X) | 0.95 | 0.00 | 0.88 | 0.45 | 0.72 | 0.91 | 0.05 | 0.86 | 0.14 | 0.37 | 0.28 | 0.10 |
| Avail Cap(c_a), veh/h | 436 | 0 | 466 | 151 | 153 | 130 | 456 | 1623 | 726 | 144 | 1656 | 741 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 48.1 | 0.0 | 52.7 | 60.2 | 66.7 | 67.9 | 19.1 | 34.3 | 21.4 | 30.3 | 22.4 | 20.3 |
| Incr Delay (d2), s/veh | 30.6 | 0.0 | 16.6 | 0.8 | 13.2 | 50.8 | 0.0 | 6.3 | 0.4 | 0.6 | 0.4 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 10.1 | 0.0 | 25.2 | 4.6 | 8.7 | 10.9 | 0.8 | 35.6 | 4.3 | 1.9 | 9.8 | 3.2 |
| LnGrp Delay(d),s/veh | 78.6 | 0.0 | 69.3 | 61.0 | 79.9 | 118.7 | 19.2 | 40.5 | 21.8 | 30.9 | 22.8 | 20.5 |
| LnGrp LOS | E | | E | E | E | F | B | D | C | C | C | C |
| Approach Vol, veh/h | | 820 | | | 295 | | | 1520 | | | 599 | |
| Approach Delay, s/veh | | 74.0 | | | 91.1 | | | 39.0 | | | 23.2 | |
| Approach LOS | | E | | | F | | | D | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 39.0 | 20.0 | 9.9 | 81.1 | 12.0 | 47.0 | 11.4 | 79.6 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 32.0 | 13.0 | 5.0 | 72.0 | 5.5 | * 41 | 5.0 | 72.0 |
| Max Q Clear Time (g_c+I1), s | 34.0 | 13.7 | 2.9 | 14.4 | 7.5 | 35.7 | 4.3 | 57.4 |
| Green Ext Time (p_c), s | 0.0 | 0.0 | 0.0 | 16.7 | 0.0 | 2.0 | 0.0 | 14.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 49.7 |
| HCM 2010 LOS | D |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.8 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 118 | 151 | 597 | 142 | 107 | 166 |
| Future Vol, veh/h | 118 | 151 | 597 | 142 | 107 | 166 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 131 | 168 | 663 | 158 | 119 | 184 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 993 | 332 | 0 | - | 663 | 0 |
| Stage 1 | 663 | - | - | - | - | - |
| Stage 2 | 330 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | 242 | 664 | - | 0 | 922 | - |
| Stage 1 | 474 | - | - | 0 | - | - |
| Stage 2 | 701 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | 211 | 664 | - | - | 922 | - |
| Mov Cap-2 Maneuver | 337 | - | - | - | - | - |
| Stage 1 | 474 | - | - | - | - | - |
| Stage 2 | 611 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 16.6 | 0 | 3.7 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 337 | 664 | 922 | - |
| HCM Lane V/C Ratio | - | 0.389 | 0.253 | 0.129 | - |
| HCM Control Delay (s) | - | 22.3 | 12.2 | 9.5 | - |
| HCM Lane LOS | - | C | B | A | - |
| HCM 95th %tile Q(veh) | - | 1.8 | 1 | 0.4 | - |

# HCM 2010 AWSC
## 3: Locust Grove Road & Columbia Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 19.8 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 52 | 467 | 8 | 13 | 247 | 42 | 9 | 80 | 21 | 30 | 28 | 12 |
| Future Vol, veh/h | 52 | 467 | 8 | 13 | 247 | 42 | 9 | 80 | 21 | 30 | 28 | 12 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 | 0.91 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 57 | 513 | 9 | 14 | 271 | 46 | 10 | 88 | 23 | 33 | 31 | 13 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 26.5 | 13.4 | 11.1 | 10.6 |
| HCM LOS | D | B | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 8% | 10% | 4% | 43% |
| Vol Thru, % | 73% | 89% | 82% | 40% |
| Vol Right, % | 19% | 2% | 14% | 17% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 110 | 527 | 302 | 70 |
| LT Vol | 9 | 52 | 13 | 30 |
| Through Vol | 80 | 467 | 247 | 28 |
| RT Vol | 21 | 8 | 42 | 12 |
| Lane Flow Rate | 121 | 579 | 332 | 77 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.211 | 0.815 | 0.489 | 0.139 |
| Departure Headway (Hd) | 6.297 | 5.067 | 5.302 | 6.503 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 568 | 712 | 677 | 548 |
| Service Time | 4.363 | 3.106 | 3.35 | 4.574 |
| HCM Lane V/C Ratio | 0.213 | 0.813 | 0.49 | 0.141 |
| HCM Control Delay | 11.1 | 26.5 | 13.4 | 10.6 |
| HCM Lane LOS | B | D | B | B |
| HCM 95th-tile Q | 0.8 | 8.6 | 2.7 | 0.5 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 14 | 336 | 219 | 7 | 10 | 9 |
| Future Vol, veh/h | 14 | 336 | 219 | 7 | 10 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 373 | 243 | 8 | 11 | 10 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 251 | 0 | - | 0 | 652 | 247 |
| Stage 1 | - | - | - | - | 247 | - |
| Stage 2 | - | - | - | - | 405 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1314 | - | - | - | 433 | 792 |
| Stage 1 | - | - | - | - | 794 | - |
| Stage 2 | - | - | - | - | 673 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1314 | - | - | - | 427 | 792 |
| Mov Cap-2 Maneuver | - | - | - | - | 427 | - |
| Stage 1 | - | - | - | - | 782 | - |
| Stage 2 | - | - | - | - | 673 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 11.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1314 | - | - | - | 546 |
| HCM Lane V/C Ratio | 0.012 | - | - | - | 0.039 |
| HCM Control Delay (s) | 7.8 | 0 | - | - | 11.9 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 16.8 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 155 | 342 | 7 | 4 | 253 | 126 | 11 | 42 | 5 | 64 | 20 | 29 |
| Future Vol, veh/h | 155 | 342 | 7 | 4 | 253 | 126 | 11 | 42 | 5 | 64 | 20 | 29 |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 160 | 353 | 7 | 4 | 261 | 130 | 11 | 43 | 5 | 66 | 21 | 30 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 21 | 14.1 | 10.3 | 10.9 |
| HCM LOS | C | B | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 19% | 31% | 1% | 57% |
| Vol Thru, % | 72% | 68% | 66% | 18% |
| Vol Right, % | 9% | 1% | 33% | 26% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 58 | 504 | 383 | 113 |
| LT Vol | 11 | 155 | 4 | 64 |
| Through Vol | 42 | 342 | 253 | 20 |
| RT Vol | 5 | 7 | 126 | 29 |
| Lane Flow Rate | 60 | 520 | 395 | 116 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.107 | 0.735 | 0.55 | 0.203 |
| Departure Headway (Hd) | 6.459 | 5.092 | 5.019 | 6.269 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 553 | 712 | 719 | 571 |
| Service Time | 4.522 | 3.125 | 3.056 | 4.323 |
| HCM Lane V/C Ratio | 0.108 | 0.73 | 0.549 | 0.203 |
| HCM Control Delay | 10.3 | 21 | 14.1 | 10.9 |
| HCM Lane LOS | B | C | B | B |
| HCM 95th-tile Q | 0.4 | 6.5 | 3.4 | 0.8 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 315 | 22 | 3 | 216 | 1 | 8 | 3 | 0 | 4 | 1 | 1 |
| Future Vol, veh/h | 2 | 315 | 22 | 3 | 216 | 1 | 8 | 3 | 0 | 4 | 1 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 350 | 24 | 3 | 240 | 1 | 9 | 3 | 0 | 4 | 1 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 241 | 0 | 0 | 374 | 0 | 0 | 614 | 613 | 362 | 615 | 625 | 241 |
| Stage 1 | - | - | - | - | - | - | 366 | 366 | - | 247 | 247 | - |
| Stage 2 | - | - | - | - | - | - | 248 | 247 | - | 368 | 378 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1326 | - | - | 1184 | - | - | 404 | 408 | 683 | 403 | 401 | 798 |
| Stage 1 | - | - | - | - | - | - | 653 | 623 | - | 757 | 702 | - |
| Stage 2 | - | - | - | - | - | - | 756 | 702 | - | 652 | 615 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1326 | - | - | 1184 | - | - | 401 | 406 | 683 | 399 | 399 | 798 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 401 | 406 | - | 399 | 399 | - |
| Stage 1 | - | - | - | - | - | - | 652 | 622 | - | 755 | 700 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 700 | - | 647 | 614 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 14.2 | 13.4 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 402 | 1326 | - | - | 1184 | - | - | 435 |
| HCM Lane V/C Ratio | 0.03 | 0.002 | - | - | 0.003 | - | - | 0.015 |
| HCM Control Delay (s) | 14.2 | 7.7 | 0 | - | 8 | 0 | - | 13.4 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Total
AM Peak Hour

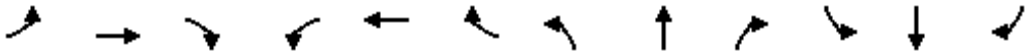
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 138 | 258 | 77 | 32 | 262 | 110 | 223 | 1173 | 77 | 25 | 277 | 68 |
| Future Volume (veh/h) | 138 | 258 | 77 | 32 | 262 | 110 | 223 | 1173 | 77 | 25 | 277 | 68 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 153 | 287 | 86 | 36 | 291 | 122 | 237 | 1248 | 82 | 28 | 308 | 76 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 221 | 423 | 127 | 235 | 323 | 135 | 541 | 1515 | 99 | 151 | 1118 | 272 |
| Arrive On Green | 0.08 | 0.32 | 0.32 | 0.03 | 0.27 | 0.27 | 0.10 | 0.47 | 0.47 | 0.02 | 0.40 | 0.40 |
| Sat Flow, veh/h | 1681 | 1305 | 391 | 1681 | 1182 | 495 | 1681 | 3195 | 210 | 1681 | 2783 | 676 |
| Grp Volume(v), veh/h | 153 | 0 | 373 | 36 | 0 | 413 | 237 | 654 | 676 | 28 | 191 | 193 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1696 | 1681 | 0 | 1677 | 1681 | 1676 | 1728 | 1681 | 1744 | 1716 |
| Q Serve(g_s), s | 8.5 | 0.0 | 25.4 | 2.0 | 0.0 | 31.6 | 10.7 | 44.9 | 45.1 | 1.3 | 9.8 | 10.1 |
| Cycle Q Clear(g_c), s | 8.5 | 0.0 | 25.4 | 2.0 | 0.0 | 31.6 | 10.7 | 44.9 | 45.1 | 1.3 | 9.8 | 10.1 |
| Prop In Lane | 1.00 | | 0.23 | 1.00 | | 0.30 | 1.00 | | 0.12 | 1.00 | | 0.39 |
| Lane Grp Cap(c), veh/h | 221 | 0 | 550 | 235 | 0 | 459 | 541 | 795 | 819 | 151 | 700 | 689 |
| V/C Ratio(X) | 0.69 | 0.00 | 0.68 | 0.15 | 0.00 | 0.90 | 0.44 | 0.82 | 0.83 | 0.19 | 0.27 | 0.28 |
| Avail Cap(c_a), veh/h | 228 | 0 | 661 | 264 | 0 | 591 | 605 | 830 | 855 | 185 | 706 | 695 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 34.4 | 0.0 | 39.0 | 34.6 | 0.0 | 46.7 | 19.1 | 30.2 | 30.3 | 27.4 | 26.8 | 26.9 |
| Incr Delay (d2), s/veh | 7.0 | 0.0 | 1.4 | 0.3 | 0.0 | 12.4 | 0.2 | 6.5 | 6.4 | 0.6 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 7.8 | 0.0 | 17.8 | 1.7 | 0.0 | 22.9 | 8.5 | 29.9 | 30.7 | 1.1 | 8.3 | 8.4 |
| LnGrp Delay(d),s/veh | 41.4 | 0.0 | 40.4 | 34.9 | 0.0 | 59.1 | 19.3 | 36.7 | 36.7 | 28.0 | 27.0 | 27.1 |
| LnGrp LOS | D | | D | C | | E | B | D | D | C | C | C |
| Approach Vol, veh/h | | 526 | | | 449 | | | 1567 | | | 412 | |
| Approach Delay, s/veh | | 40.7 | | | 57.1 | | | 34.1 | | | 27.1 | |
| Approach LOS | | D | | | E | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 15.4 | 41.5 | 17.9 | 58.5 | 8.7 | 48.2 | 8.2 | 68.2 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 11.0 | 47.0 | 18.0 | 54.0 | 6.0 | 52.0 | 6.0 | 66.0 |
| Max Q Clear Time (g_c+I1), s | 10.5 | 33.6 | 12.7 | 12.1 | 4.0 | 27.4 | 3.3 | 47.1 |
| Green Ext Time (p_c), s | 0.0 | 2.8 | 0.2 | 7.3 | 0.0 | 6.0 | 0.0 | 16.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 37.8 |
| HCM 2010 LOS | D |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Total
AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 55 | 346 | 29 | 69 | 381 | 145 | 64 | 778 | 192 | 84 | 254 | 33 |
| Future Volume (veh/h) | 55 | 346 | 29 | 69 | 381 | 145 | 64 | 778 | 192 | 84 | 254 | 33 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 61 | 384 | 32 | 77 | 423 | 161 | 65 | 794 | 196 | 93 | 282 | 37 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 56 | 568 | 47 | 193 | 431 | 164 | 560 | 702 | 173 | 104 | 887 | 116 |
| Arrive On Green | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.51 | 0.51 | 0.51 | 0.03 | 0.58 | 0.58 |
| Sat Flow, veh/h | 828 | 1607 | 134 | 966 | 1219 | 464 | 1056 | 1368 | 338 | 1681 | 1529 | 201 |
| Grp Volume(v), veh/h | 61 | 0 | 416 | 77 | 0 | 584 | 65 | 0 | 990 | 93 | 0 | 319 |
| Grp Sat Flow(s),veh/h/ln | 828 | 0 | 1741 | 966 | 0 | 1683 | 1056 | 0 | 1705 | 1681 | 0 | 1729 |
| Q Serve(g_s), s | 1.4 | 0.0 | 30.5 | 11.0 | 0.0 | 51.6 | 5.1 | 0.0 | 77.0 | 4.0 | 0.0 | 14.3 |
| Cycle Q Clear(g_c), s | 53.0 | 0.0 | 30.5 | 41.5 | 0.0 | 51.6 | 9.3 | 0.0 | 77.0 | 4.0 | 0.0 | 14.3 |
| Prop In Lane | 1.00 | | 0.08 | 1.00 | | 0.28 | 1.00 | | 0.20 | 1.00 | | 0.12 |
| Lane Grp Cap(c), veh/h | 56 | 0 | 615 | 193 | 0 | 595 | 560 | 0 | 875 | 104 | 0 | 1003 |
| V/C Ratio(X) | 1.09 | 0.00 | 0.68 | 0.40 | 0.00 | 0.98 | 0.12 | 0.00 | 1.13 | 0.89 | 0.00 | 0.32 |
| Avail Cap(c_a), veh/h | 56 | 0 | 615 | 193 | 0 | 595 | 560 | 0 | 875 | 104 | 0 | 1003 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 74.9 | 0.0 | 41.2 | 58.8 | 0.0 | 48.0 | 21.2 | 0.0 | 36.5 | 36.9 | 0.0 | 16.2 |
| Incr Delay (d2), s/veh | 147.3 | 0.0 | 2.9 | 1.3 | 0.0 | 32.3 | 0.1 | 0.0 | 73.3 | 54.7 | 0.0 | 0.3 |
| Initial Q Delay(d3),s/veh | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.3 | 0.0 | 21.6 | 5.4 | 0.0 | 38.2 | 2.7 | 0.0 | 96.8 | 9.2 | 0.0 | 11.2 |
| LnGrp Delay(d),s/veh | 224.5 | 0.0 | 44.2 | 60.2 | 0.0 | 80.3 | 21.3 | 0.0 | 109.8 | 91.6 | 0.0 | 16.5 |
| LnGrp LOS | F | | D | E | | F | C | | F | F | | B |
| Approach Vol, veh/h | | 477 | | | 661 | | | 1055 | | | 412 | |
| Approach Delay, s/veh | | 67.2 | | | 78.0 | | | 104.3 | | | 33.4 | |
| Approach LOS | | E | | | E | | | F | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 58.0 | | 92.0 | | 58.0 | 10.0 | 82.0 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 53.0 | | 87.0 | | 53.0 | 5.0 | 77.0 |
| Max Q Clear Time (g_c+I1), s | | 53.6 | | 16.3 | | 55.0 | 6.0 | 79.0 |
| Green Ext Time (p_c), s | | 0.0 | | 8.5 | | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 79.6 |
| HCM 2010 LOS | E |

HCM 6th Roundabout
9: Cloverdale Road & Columbia Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 22.1 |
| Intersection LOS | C |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 448 | 212 | 957 | 411 |
| Demand Flow Rate, veh/h | 457 | 217 | 976 | 419 |
| Vehicles Circulating, veh/h | 369 | 1088 | 270 | 415 |
| Vehicles Exiting, veh/h | 465 | 158 | 556 | 889 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 9.8 | 17.6 | 34.1 | 9.8 |
| Approach LOS | A | C | D | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 457 | 217 | 976 | 419 |
| Cap Entry Lane, veh/h | 947 | 455 | 1048 | 904 |
| Entry HV Adj Factor | 0.981 | 0.979 | 0.980 | 0.981 |
| Flow Entry, veh/h | 448 | 212 | 957 | 411 |
| Cap Entry, veh/h | 929 | 445 | 1027 | 886 |
| V/C Ratio | 0.483 | 0.477 | 0.932 | 0.464 |
| Control Delay, s/veh | 9.8 | 17.6 | 34.1 | 9.8 |
| LOS | A | C | D | A |
| 95th %tile Queue, veh | 3 | 3 | 15 | 2 |

HCM 6th Roundabout
10: Cloverdale Road & Hubbard Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 12.7 |
| Intersection LOS | B |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 325 | 491 | 442 | 563 |
| Demand Flow Rate, veh/h | 331 | 501 | 450 | 575 |
| Vehicles Circulating, veh/h | 558 | 513 | 711 | 60 |
| Vehicles Exiting, veh/h | 77 | 648 | 178 | 954 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 10.2 | 14.4 | 19.4 | 7.3 |
| Approach LOS | B | B | C | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 331 | 501 | 450 | 575 |
| Cap Entry Lane, veh/h | 781 | 818 | 668 | 1298 |
| Entry HV Adj Factor | 0.982 | 0.980 | 0.981 | 0.980 |
| Flow Entry, veh/h | 325 | 491 | 442 | 563 |
| Cap Entry, veh/h | 767 | 801 | 656 | 1272 |
| V/C Ratio | 0.424 | 0.613 | 0.673 | 0.443 |
| Control Delay, s/veh | 10.2 | 14.4 | 19.4 | 7.3 |
| LOS | B | B | C | A |
| 95th %tile Queue, veh | 2 | 4 | 5 | 2 |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 13.4 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 108 | 35 | 192 | 17 | 60 | 52 | 98 | 174 | 13 | 7 | 84 | 62 |
| Future Vol, veh/h | 108 | 35 | 192 | 17 | 60 | 52 | 98 | 174 | 13 | 7 | 84 | 62 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 120 | 39 | 213 | 19 | 67 | 58 | 109 | 193 | 14 | 8 | 93 | 69 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 14.7 | 10.6 | 14.4 | 10.9 |
| HCM LOS | B | B | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 34% | 32% | 13% | 5% |
| Vol Thru, % | 61% | 10% | 47% | 55% |
| Vol Right, % | 5% | 57% | 40% | 41% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 285 | 335 | 129 | 153 |
| LT Vol | 98 | 108 | 17 | 7 |
| Through Vol | 174 | 35 | 60 | 84 |
| RT Vol | 13 | 192 | 52 | 62 |
| Lane Flow Rate | 317 | 372 | 143 | 170 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.501 | 0.548 | 0.229 | 0.269 |
| Departure Headway (Hd) | 5.699 | 5.303 | 5.763 | 5.705 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 630 | 677 | 618 | 626 |
| Service Time | 3.761 | 3.364 | 3.842 | 3.78 |
| HCM Lane V/C Ratio | 0.503 | 0.549 | 0.231 | 0.272 |
| HCM Control Delay | 14.4 | 14.7 | 10.6 | 10.9 |
| HCM Lane LOS | B | B | B | B |
| HCM 95th-tile Q | 2.8 | 3.3 | 0.9 | 1.1 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 513 | 0 | 8 | 435 | 0 |
| Future Vol, veh/h | 4 | 513 | 0 | 8 | 435 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 570 | 0 | 9 | 483 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 289 | 574 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 289 | 574 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 702 | 429 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 760 | 503 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 702 | 0 |
| Mov Cap-2 Maneuver | - | - | 702 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 760 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
## 13: Pleasant Valley Road & Gowen Road

2025 Total
AM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 939 | 274 | 49 | 143 | 353 | 274 |
| Future Volume (veh/h) | 939 | 274 | 49 | 143 | 353 | 274 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 958 | 280 | 54 | 159 | 392 | 304 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1369 | 1212 | 244 | 1133 | 426 | 380 |
| Arrive On Green | 0.55 | 0.55 | 0.04 | 0.64 | 0.25 | 0.25 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 958 | 280 | 54 | 159 | 392 | 304 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 32.5 | 5.1 | 1.5 | 4.1 | 26.1 | 21.8 |
| Cycle Q Clear(g_c), s | 32.5 | 5.1 | 1.5 | 4.1 | 26.1 | 21.8 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1369 | 1212 | 244 | 1133 | 426 | 380 |
| V/C Ratio(X) | 0.70 | 0.23 | 0.22 | 0.14 | 0.92 | 0.80 |
| Avail Cap(c_a), veh/h | 1369 | 1212 | 257 | 1133 | 526 | 470 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.7 | 2.6 | 15.0 | 8.1 | 41.8 | 40.2 |
| Incr Delay (d2), s/veh | 3.0 | 0.4 | 0.2 | 0.3 | 17.3 | 6.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 17.2 | 8.6 | 1.3 | 3.7 | 20.3 | 14.8 |
| LnGrp Delay(d),s/veh | 21.7 | 3.1 | 15.2 | 8.4 | 59.1 | 46.4 |
| LnGrp LOS | C | A | B | A | E | D |
| Approach Vol, veh/h | 1238 | | | 213 | 696 | |
| Approach Delay, s/veh | 17.5 | | | 10.1 | 53.5 | |
| Approach LOS | B | | | B | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 79.8 | | | 10.1 | 69.7 | | 35.2 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 67.0 | | | 5.0 | 56.0 | | 36.0 |
| Max Q Clear Time (g_c+I1), s | | 6.1 | | | 3.5 | 34.5 | | 28.1 |
| Green Ext Time (p_c), s | | 1.6 | | | 0.0 | 10.5 | | 1.1 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 28.4 |
| HCM 2010 LOS | C |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2025 Total
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 16.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 347 | 98 | 19 | 227 | 160 | 99 |
| Future Vol, veh/h | 347 | 98 | 19 | 227 | 160 | 99 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 300 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 386 | 109 | 21 | 252 | 178 | 110 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 472 | 178 | 288 | 0 | - | 0 |
| Stage 1 | 178 | - | - | - | - | - |
| Stage 2 | 294 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 551 | 865 | 1274 | - | - | - |
| Stage 1 | 853 | - | - | - | - | - |
| Stage 2 | 756 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 541 | 865 | 1274 | - | - | - |
| Mov Cap-2 Maneuver | 541 | - | - | - | - | - |
| Stage 1 | 837 | - | - | - | - | - |
| Stage 2 | 756 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 34.9 | 0.6 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1274 | - | 590 | - | - |
| HCM Lane V/C Ratio | 0.017 | - | 0.838 | - | - |
| HCM Control Delay (s) | 7.9 | 0 | 34.9 | - | - |
| HCM Lane LOS | A | A | D | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 8.9 | - | - |

# HCM 2010 Signalized Intersection Summary
## 1: Meridian Road & Columbia Road

2025 Total
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 126 | 132 | 21 | 115 | 290 | 66 | 36 | 666 | 45 | 78 | 1342 | 325 |
| Future Volume (veh/h) | 126 | 132 | 21 | 115 | 290 | 66 | 36 | 666 | 45 | 78 | 1342 | 325 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 140 | 147 | 23 | 128 | 322 | 73 | 40 | 740 | 50 | 81 | 1398 | 339 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 174 | 343 | 54 | 286 | 359 | 305 | 144 | 1733 | 775 | 364 | 1754 | 785 |
| Arrive On Green | 0.06 | 0.23 | 0.23 | 0.04 | 0.20 | 0.20 | 0.03 | 0.52 | 0.52 | 0.03 | 0.52 | 0.52 |
| Sat Flow, veh/h | 1681 | 1490 | 233 | 1681 | 1765 | 1500 | 1681 | 3353 | 1500 | 1681 | 3353 | 1500 |
| Grp Volume(v), veh/h | 140 | 0 | 170 | 128 | 322 | 73 | 40 | 740 | 50 | 81 | 1398 | 339 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1724 | 1681 | 1765 | 1500 | 1681 | 1676 | 1500 | 1681 | 1676 | 1500 |
| Q Serve(g_s), s | 9.0 | 0.0 | 12.6 | 5.5 | 26.7 | 6.1 | 1.7 | 20.5 | 2.5 | 3.4 | 51.2 | 20.9 |
| Cycle Q Clear(g_c), s | 9.0 | 0.0 | 12.6 | 5.5 | 26.7 | 6.1 | 1.7 | 20.5 | 2.5 | 3.4 | 51.2 | 20.9 |
| Prop In Lane | 1.00 | | 0.14 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 174 | 0 | 396 | 286 | 359 | 305 | 144 | 1733 | 775 | 364 | 1754 | 785 |
| V/C Ratio(X) | 0.81 | 0.00 | 0.43 | 0.45 | 0.90 | 0.24 | 0.28 | 0.43 | 0.06 | 0.22 | 0.80 | 0.43 |
| Avail Cap(c_a), veh/h | 174 | 0 | 442 | 286 | 400 | 340 | 154 | 1733 | 775 | 364 | 1754 | 785 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 49.5 | 0.0 | 49.3 | 50.5 | 58.2 | 50.1 | 25.8 | 22.5 | 18.1 | 17.5 | 29.3 | 22.0 |
| Incr Delay (d2), s/veh | 22.0 | 0.0 | 0.3 | 0.4 | 19.8 | 0.1 | 0.4 | 0.8 | 0.2 | 0.1 | 3.9 | 1.7 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 9.5 | 0.0 | 10.1 | 4.0 | 21.4 | 4.6 | 1.4 | 14.7 | 1.9 | 2.9 | 32.8 | 13.9 |
| LnGrp Delay(d),s/veh | 71.4 | 0.0 | 49.6 | 50.9 | 78.0 | 50.2 | 26.2 | 23.2 | 18.3 | 17.7 | 33.1 | 23.8 |
| LnGrp LOS | E | | D | D | E | D | C | C | B | B | C | C |
| Approach Vol, veh/h | | 310 | | | 523 | | | 830 | | | 1818 | |
| Approach Delay, s/veh | | 59.5 | | | 67.5 | | | 23.1 | | | 30.7 | |
| Approach LOS | | E | | | E | | | C | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 16.0 | 37.5 | 11.1 | 85.5 | 12.0 | 41.5 | 12.0 | 84.5 |
| Change Period (Y+Rc), s | 7.0 | 7.0 | 7.0 | 7.0 | 6.5 | * 7 | 7.0 | 7.0 |
| Max Green Setting (Gmax), s | 9.0 | 34.0 | 5.0 | 74.0 | 5.5 | * 39 | 5.0 | 74.0 |
| Max Q Clear Time (g_c+I1), s | 11.0 | 28.7 | 3.7 | 53.2 | 7.5 | 14.6 | 5.4 | 22.5 |
| Green Ext Time (p_c), s | 0.0 | 1.8 | 0.0 | 20.0 | 0.0 | 2.3 | 0.0 | 27.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 37.0 |
| HCM 2010 LOS | D |

Notes

HCM 2010 TWSC
2: Meridian Road & Kuna Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 6.8 |

| Movement | NWL | NWR | NET | NER | SWL | SWT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 214 | 217 | 393 | 93 | 110 | 757 |
| Future Vol, veh/h | 214 | 217 | 393 | 93 | 110 | 757 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | Free | - | None |
| Storage Length | 0 | 0 | - | 150 | 450 | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 225 | 228 | 414 | 98 | 116 | 797 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1045 | 207 | 0 | - | 414 | 0 |
| Stage 1 | 414 | - | - | - | - | - |
| Stage 2 | 631 | - | - | - | - | - |
| Critical Hdwy | 6.84 | 6.94 | - | - | 4.14 | - |
| Critical Hdwy Stg 1 | 5.84 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.84 | - | - | - | - | - |
| Follow-up Hdwy | 3.52 | 3.32 | - | - | 2.22 | - |
| Pot Cap-1 Maneuver | ~ 224 | 799 | - | 0 | 1141 | - |
| Stage 1 | 635 | - | - | 0 | - | - |
| Stage 2 | 492 | - | - | 0 | - | - |
| Platoon blocked, % | | | - | | | - |
| Mov Cap-1 Maneuver | ~ 201 | 799 | - | - | 1141 | - |
| Mov Cap-2 Maneuver | 325 | - | - | - | - | - |
| Stage 1 | 635 | - | - | - | - | - |
| Stage 2 | 442 | - | - | - | - | - |

| Approach | NW | NE | SW |
|---|---|---|---|
| HCM Control Delay, s | 24.4 | 0 | 1.1 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NET | NWLn1 | NWLn2 | SWL | SWT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 325 | 799 | 1141 | - |
| HCM Lane V/C Ratio | - | 0.693 | 0.286 | 0.101 | - |
| HCM Control Delay (s) | - | 37.7 | 11.3 | 8.5 | - |
| HCM Lane LOS | - | E | B | A | - |
| HCM 95th %tile Q(veh) | - | 4.9 | 1.2 | 0.3 | - |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

HCM 2010 AWSC
3: Locust Grove Road & Columbia Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 19.1 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 15 | 196 | 4 | 23 | 460 | 41 | 5 | 53 | 5 | 48 | 120 | 53 |
| Future Vol, veh/h | 15 | 196 | 4 | 23 | 460 | 41 | 5 | 53 | 5 | 48 | 120 | 53 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 206 | 4 | 24 | 484 | 43 | 5 | 56 | 5 | 51 | 126 | 56 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 12 | 25.7 | 10.5 | 12.9 |
| HCM LOS | B | D | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 8% | 7% | 4% | 22% |
| Vol Thru, % | 84% | 91% | 88% | 54% |
| Vol Right, % | 8% | 2% | 8% | 24% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 63 | 215 | 524 | 221 |
| LT Vol | 5 | 15 | 23 | 48 |
| Through Vol | 53 | 196 | 460 | 120 |
| RT Vol | 5 | 4 | 41 | 53 |
| Lane Flow Rate | 66 | 226 | 552 | 233 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.12 | 0.359 | 0.798 | 0.389 |
| Departure Headway (Hd) | 6.508 | 5.712 | 5.206 | 6.026 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 546 | 627 | 695 | 593 |
| Service Time | 4.599 | 3.78 | 3.256 | 4.096 |
| HCM Lane V/C Ratio | 0.121 | 0.36 | 0.794 | 0.393 |
| HCM Control Delay | 10.5 | 12 | 25.7 | 12.9 |
| HCM Lane LOS | B | B | D | B |
| HCM 95th-tile Q | 0.4 | 1.6 | 8.1 | 1.8 |

HCM 2010 TWSC
4: Kuna Road & Locust Grove Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 10 | 190 | 401 | 12 | 28 | 41 |
| Future Vol, veh/h | 10 | 190 | 401 | 12 | 28 | 41 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 198 | 418 | 13 | 29 | 43 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 431 | 0 | - | 0 | 643 | 425 |
| Stage 1 | - | - | - | - | 425 | - |
| Stage 2 | - | - | - | - | 218 | - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | 1129 | - | - | - | 438 | 629 |
| Stage 1 | - | - | - | - | 659 | - |
| Stage 2 | - | - | - | - | 818 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1129 | - | - | - | 434 | 629 |
| Mov Cap-2 Maneuver | - | - | - | - | 434 | - |
| Stage 1 | - | - | - | - | 652 | - |
| Stage 2 | - | - | - | - | 818 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0 | 12.8 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1129 | - | - | - | 532 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.135 |
| HCM Control Delay (s) | 8.2 | 0 | - | - | 12.8 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.5 |

HCM 2010 AWSC
5: Eagle Road & Columbia Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 17.2 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 28 | 213 | 5 | 5 | 322 | 86 | 13 | 24 | 3 | 136 | 50 | 174 |
| Future Vol, veh/h | 28 | 213 | 5 | 5 | 322 | 86 | 13 | 24 | 3 | 136 | 50 | 174 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 30 | 227 | 5 | 5 | 343 | 91 | 14 | 26 | 3 | 145 | 53 | 185 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 13.7 | 19.7 | 10.5 | 17.5 |
| HCM LOS | B | C | B | C |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 33% | 11% | 1% | 38% |
| Vol Thru, % | 60% | 87% | 78% | 14% |
| Vol Right, % | 7% | 2% | 21% | 48% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 40 | 246 | 413 | 360 |
| LT Vol | 13 | 28 | 5 | 136 |
| Through Vol | 24 | 213 | 322 | 50 |
| RT Vol | 3 | 5 | 86 | 174 |
| Lane Flow Rate | 43 | 262 | 439 | 383 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.082 | 0.435 | 0.679 | 0.611 |
| Departure Headway (Hd) | 6.914 | 5.978 | 5.567 | 5.746 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 521 | 597 | 646 | 624 |
| Service Time | 4.914 | 4.073 | 3.648 | 3.827 |
| HCM Lane V/C Ratio | 0.083 | 0.439 | 0.68 | 0.614 |
| HCM Control Delay | 10.5 | 13.7 | 19.7 | 17.5 |
| HCM Lane LOS | B | B | C | C |
| HCM 95th-tile Q | 0.3 | 2.2 | 5.3 | 4.1 |

HCM 2010 TWSC
6: Eagle Road & Kuna Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 196 | 27 | 3 | 372 | 6 | 23 | 11 | 1 | 6 | 9 | 0 |
| Future Vol, veh/h | 5 | 196 | 27 | 3 | 372 | 6 | 23 | 11 | 1 | 6 | 9 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 209 | 29 | 3 | 396 | 6 | 24 | 12 | 1 | 6 | 10 | 0 |

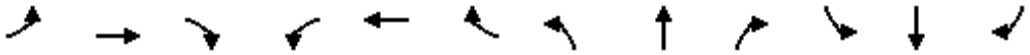
| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 402 | 0 | 0 | 238 | 0 | 0 | 644 | 642 | 224 | 645 | 653 | 399 |
| Stage 1 | - | - | - | - | - | - | 234 | 234 | - | 405 | 405 | - |
| Stage 2 | - | - | - | - | - | - | 410 | 408 | - | 240 | 248 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1157 | - | - | 1329 | - | - | 386 | 392 | 815 | 385 | 387 | 651 |
| Stage 1 | - | - | - | - | - | - | 769 | 711 | - | 622 | 598 | - |
| Stage 2 | - | - | - | - | - | - | 619 | 597 | - | 763 | 701 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1157 | - | - | 1329 | - | - | 376 | 389 | 815 | 373 | 384 | 651 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 376 | 389 | - | 373 | 384 | - |
| Stage 1 | - | - | - | - | - | - | 765 | 707 | - | 619 | 596 | - |
| Stage 2 | - | - | - | - | - | - | 607 | 595 | - | 746 | 697 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 15.3 | 14.9 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 386 | 1157 | - | - | 1329 | - | - | 380 |
| HCM Lane V/C Ratio | 0.096 | 0.005 | - | - | 0.002 | - | - | 0.042 |
| HCM Control Delay (s) | 15.3 | 8.1 | 0 | - | 7.7 | 0 | - | 14.9 |
| HCM Lane LOS | C | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.3 | 0 | - | - | 0 | - | - | 0.1 |

# HCM 2010 Signalized Intersection Summary
## 7: Cloverdale Road & Amity Road

2025 Total
PM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 77 | 291 | 167 | 93 | 299 | 19 | 146 | 443 | 66 | 73 | 1010 | 197 |
| Future Volume (veh/h) | 77 | 291 | 167 | 93 | 299 | 19 | 146 | 443 | 66 | 73 | 1010 | 197 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1835 | 1800 |
| Adj Flow Rate, veh/h | 86 | 323 | 186 | 103 | 332 | 21 | 155 | 471 | 70 | 76 | 1052 | 205 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.94 | 0.94 | 0.94 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 312 | 359 | 207 | 180 | 572 | 36 | 191 | 1250 | 185 | 389 | 1156 | 225 |
| Arrive On Green | 0.04 | 0.34 | 0.34 | 0.05 | 0.35 | 0.35 | 0.07 | 0.43 | 0.43 | 0.04 | 0.40 | 0.40 |
| Sat Flow, veh/h | 1681 | 1052 | 606 | 1681 | 1642 | 104 | 1681 | 2931 | 434 | 1681 | 2913 | 566 |
| Grp Volume(v), veh/h | 86 | 0 | 509 | 103 | 0 | 353 | 155 | 268 | 273 | 76 | 629 | 628 |
| Grp Sat Flow(s),veh/h/ln | 1681 | 0 | 1658 | 1681 | 0 | 1746 | 1681 | 1676 | 1688 | 1681 | 1744 | 1735 |
| Q Serve(g_s), s | 4.6 | 0.0 | 40.7 | 5.5 | 0.0 | 23.0 | 7.5 | 15.3 | 15.4 | 3.7 | 47.5 | 47.8 |
| Cycle Q Clear(g_c), s | 4.6 | 0.0 | 40.7 | 5.5 | 0.0 | 23.0 | 7.5 | 15.3 | 15.4 | 3.7 | 47.5 | 47.8 |
| Prop In Lane | 1.00 | | 0.37 | 1.00 | | 0.06 | 1.00 | | 0.26 | 1.00 | | 0.33 |
| Lane Grp Cap(c), veh/h | 312 | 0 | 566 | 180 | 0 | 609 | 191 | 715 | 720 | 389 | 692 | 689 |
| V/C Ratio(X) | 0.28 | 0.00 | 0.90 | 0.57 | 0.00 | 0.58 | 0.81 | 0.38 | 0.38 | 0.20 | 0.91 | 0.91 |
| Avail Cap(c_a), veh/h | 312 | 0 | 629 | 180 | 0 | 676 | 244 | 769 | 774 | 396 | 699 | 696 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 29.8 | 0.0 | 43.7 | 34.3 | 0.0 | 37.1 | 32.2 | 27.3 | 27.4 | 23.8 | 39.7 | 39.8 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 14.1 | 2.8 | 0.0 | 0.5 | 11.9 | 0.3 | 0.3 | 0.1 | 15.7 | 16.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.9 | 0.0 | 28.4 | 4.9 | 0.0 | 16.6 | 7.3 | 11.5 | 11.7 | 3.1 | 34.2 | 34.4 |
| LnGrp Delay(d),s/veh | 30.0 | 0.0 | 57.8 | 37.1 | 0.0 | 37.6 | 44.1 | 27.7 | 27.7 | 23.9 | 55.4 | 56.2 |
| LnGrp LOS | C | | E | D | | D | D | C | C | C | E | E |
| Approach Vol, veh/h | | 595 | | | 456 | | | 696 | | | 1333 | |
| Approach Delay, s/veh | | 53.8 | | | 37.5 | | | 31.3 | | | 54.0 | |
| Approach LOS | | D | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | 11.0 | 53.6 | 14.6 | 60.4 | 12.0 | 52.6 | 10.4 | 64.5 |
| Change Period (Y+Rc), s | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | 6.0 | 54.0 | 14.0 | 56.0 | 7.0 | 53.0 | 6.0 | 64.0 |
| Max Q Clear Time (g_c+I1), s | 6.6 | 25.0 | 9.5 | 49.8 | 7.5 | 42.7 | 5.7 | 17.4 |
| Green Ext Time (p_c), s | 0.0 | 3.1 | 0.1 | 5.6 | 0.0 | 4.9 | 0.0 | 11.2 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 46.4 |
| HCM 2010 LOS | D |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Total
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 62 | 445 | 65 | 203 | 520 | 95 | 65 | 367 | 122 | 184 | 675 | 98 |
| Future Volume (veh/h) | 62 | 445 | 65 | 203 | 520 | 95 | 65 | 367 | 122 | 184 | 675 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 68 | 489 | 71 | 221 | 565 | 103 | 72 | 408 | 136 | 200 | 734 | 107 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 104 | 472 | 69 | 194 | 630 | 115 | 64 | 541 | 180 | 248 | 753 | 110 |
| Arrive On Green | 0.31 | 0.31 | 0.31 | 0.09 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.04 | 0.50 | 0.50 |
| Sat Flow, veh/h | 766 | 1507 | 219 | 1681 | 1453 | 265 | 651 | 1268 | 423 | 1681 | 1506 | 220 |
| Grp Volume(v), veh/h | 68 | 0 | 560 | 221 | 0 | 668 | 72 | 0 | 544 | 200 | 0 | 841 |
| Grp Sat Flow(s),veh/h/ln | 766 | 0 | 1726 | 1681 | 0 | 1718 | 651 | 0 | 1690 | 1681 | 0 | 1726 |
| Q Serve(g_s), s | 10.9 | 0.0 | 47.0 | 13.0 | 0.0 | 54.1 | 3.7 | 0.0 | 40.8 | 6.0 | 0.0 | 71.3 |
| Cycle Q Clear(g_c), s | 47.0 | 0.0 | 47.0 | 13.0 | 0.0 | 54.1 | 64.0 | 0.0 | 40.8 | 6.0 | 0.0 | 71.3 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 0.15 | 1.00 | | 0.25 | 1.00 | | 0.13 |
| Lane Grp Cap(c), veh/h | 104 | 0 | 541 | 194 | 0 | 744 | 64 | 0 | 721 | 248 | 0 | 863 |
| V/C Ratio(X) | 0.66 | 0.00 | 1.04 | 1.14 | 0.00 | 0.90 | 1.12 | 0.00 | 0.75 | 0.81 | 0.00 | 0.97 |
| Avail Cap(c_a), veh/h | 104 | 0 | 541 | 194 | 0 | 744 | 64 | 0 | 721 | 248 | 0 | 863 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 70.5 | 0.0 | 51.5 | 45.1 | 0.0 | 39.4 | 74.5 | 0.0 | 36.4 | 44.1 | 0.0 | 36.6 |
| Incr Delay (d2), s/veh | 13.9 | 0.0 | 48.1 | 107.8 | 0.0 | 13.7 | 149.5 | 0.0 | 4.8 | 16.4 | 0.0 | 24.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 5.8 | 0.0 | 53.3 | 24.9 | 0.0 | 37.2 | 9.6 | 0.0 | 27.3 | 10.8 | 0.0 | 50.1 |
| LnGrp Delay(d),s/veh | 84.5 | 0.0 | 99.6 | 152.9 | 0.0 | 53.1 | 224.5 | 0.0 | 41.2 | 60.5 | 0.0 | 61.1 |
| LnGrp LOS | F | | F | F | | D | F | | D | E | | E |
| Approach Vol, veh/h | | 628 | | | 889 | | | 616 | | | 1041 | |
| Approach Delay, s/veh | | 98.0 | | | 77.9 | | | 62.6 | | | 61.0 | |
| Approach LOS | | F | | | E | | | E | | | E | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 70.0 | | 80.0 | 18.0 | 52.0 | 11.0 | 69.0 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 65.0 | | 75.0 | 13.0 | 47.0 | 6.0 | 64.0 |
| Max Q Clear Time (g_c+I1), s | | 56.1 | | 73.3 | 15.0 | 49.0 | 8.0 | 66.0 |
| Green Ext Time (p_c), s | | 5.1 | | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 73.4 |
| HCM 2010 LOS | E |

HCM 6th Roundabout
9: Cloverdale Road & Columbia Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 20.4 |
| Intersection LOS | C |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 401 | 181 | 662 | 813 |
| Demand Flow Rate, veh/h | 409 | 184 | 676 | 829 |
| Vehicles Circulating, veh/h | 709 | 669 | 218 | 397 |
| Vehicles Exiting, veh/h | 517 | 225 | 900 | 456 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 16.8 | 8.4 | 11.5 | 32.1 |
| Approach LOS | C | A | B | D |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 409 | 184 | 676 | 829 |
| Cap Entry Lane, veh/h | 670 | 697 | 1105 | 920 |
| Entry HV Adj Factor | 0.979 | 0.982 | 0.980 | 0.981 |
| Flow Entry, veh/h | 401 | 181 | 662 | 813 |
| Cap Entry, veh/h | 656 | 685 | 1083 | 903 |
| V/C Ratio | 0.611 | 0.264 | 0.612 | 0.901 |
| Control Delay, s/veh | 16.8 | 8.4 | 11.5 | 32.1 |
| LOS | C | A | B | D |
| 95th %tile Queue, veh | 4 | 1 | 4 | 13 |

HCM 6th Roundabout
10: Cloverdale Road & Hubbard Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 26.7 |
| Intersection LOS | D |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 71 | 731 | 318 | 911 |
| Demand Flow Rate, veh/h | 72 | 745 | 324 | 929 |
| Vehicles Circulating, veh/h | 888 | 320 | 464 | 351 |
| Vehicles Exiting, veh/h | 392 | 468 | 496 | 714 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 8.2 | 17.5 | 8.7 | 41.8 |
| Approach LOS | A | C | A | E |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 72 | 745 | 324 | 929 |
| Cap Entry Lane, veh/h | 558 | 996 | 860 | 965 |
| Entry HV Adj Factor | 0.983 | 0.981 | 0.980 | 0.981 |
| Flow Entry, veh/h | 71 | 731 | 318 | 911 |
| Cap Entry, veh/h | 548 | 976 | 843 | 946 |
| V/C Ratio | 0.129 | 0.748 | 0.377 | 0.963 |
| Control Delay, s/veh | 8.2 | 17.5 | 8.7 | 41.8 |
| LOS | A | C | A | E |
| 95th %tile Queue, veh | 0 | 7 | 2 | 16 |

HCM 2010 AWSC
11: Cloverdale Road & Kuna Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 15.4 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 67 | 44 | 73 | 10 | 45 | 15 | 249 | 182 | 18 | 41 | 146 | 98 |
| Future Vol, veh/h | 67 | 44 | 73 | 10 | 45 | 15 | 249 | 182 | 18 | 41 | 146 | 98 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 71 | 46 | 77 | 11 | 47 | 16 | 262 | 192 | 19 | 43 | 154 | 103 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 11.8 | 10.3 | 19.6 | 12.5 |
| HCM LOS | B | B | C | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|---|---|---|---|---|
| Vol Left, % | 55% | 36% | 14% | 14% |
| Vol Thru, % | 41% | 24% | 64% | 51% |
| Vol Right, % | 4% | 40% | 21% | 34% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 449 | 184 | 70 | 285 |
| LT Vol | 249 | 67 | 10 | 41 |
| Through Vol | 182 | 44 | 45 | 146 |
| RT Vol | 18 | 73 | 15 | 98 |
| Lane Flow Rate | 473 | 194 | 74 | 300 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.695 | 0.319 | 0.129 | 0.441 |
| Departure Headway (Hd) | 5.296 | 5.926 | 6.287 | 5.292 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 681 | 604 | 567 | 678 |
| Service Time | 3.343 | 3.99 | 4.365 | 3.346 |
| HCM Lane V/C Ratio | 0.695 | 0.321 | 0.131 | 0.442 |
| HCM Control Delay | 19.6 | 11.8 | 10.3 | 12.5 |
| HCM Lane LOS | C | B | B | B |
| HCM 95th-tile Q | 5.6 | 1.4 | 0.4 | 2.3 |

HCM 2010 TWSC
12: Ten Mile Creek Road & Hubbard Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 4 | 397 | 0 | 2 | 567 | 0 |
| Future Vol, veh/h | 4 | 397 | 0 | 2 | 567 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Stop | Stop | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | - | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 441 | 0 | 2 | 630 | 0 |

| Major/Minor | Major1 | | Minor2 | |
|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 225 | 445 |
| Stage 1 | - | - | 0 | 0 |
| Stage 2 | - | - | 225 | 445 |
| Critical Hdwy | - | - | 6.42 | 6.52 |
| Critical Hdwy Stg 1 | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | 5.42 | 5.52 |
| Follow-up Hdwy | - | - | 3.518 | 4.018 |
| Pot Cap-1 Maneuver | - | - | 763 | 508 |
| Stage 1 | - | - | - | - |
| Stage 2 | - | - | 812 | 575 |
| Platoon blocked, % | - | - | | |
| Mov Cap-1 Maneuver | - | - | 763 | 0 |
| Mov Cap-2 Maneuver | - | - | 763 | 0 |
| Stage 1 | - | - | - | 0 |
| Stage 2 | - | - | 812 | 0 |

| Approach | EB | WB |
|---|---|---|
| HCM Control Delay, s | 0 | |
| HCM LOS | | - |

| Minor Lane/Major Mvmt | EBT | EBR | WBLn1 |
|---|---|---|---|
| Capacity (veh/h) | - | - | - |
| HCM Lane V/C Ratio | - | - | - |
| HCM Control Delay (s) | - | - | - |
| HCM Lane LOS | - | - | - |
| HCM 95th %tile Q(veh) | - | - | - |

# HCM 2010 Signalized Intersection Summary
## 13: Pleasant Valley Road & Gowen Road

2025 Total
PM Peak Hour

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 238 | 327 | 288 | 1043 | 305 | 48 |
| Future Volume (veh/h) | 238 | 327 | 288 | 1043 | 305 | 48 |
| Number | 6 | 16 | 5 | 2 | 3 | 18 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1765 | 1765 | 1765 | 1765 |
| Adj Flow Rate, veh/h | 262 | 359 | 313 | 1134 | 339 | 53 |
| Adj No. of Lanes | 2 | 1 | 1 | 1 | 1 | 1 |
| Peak Hour Factor | 0.91 | 0.91 | 0.92 | 0.92 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 1303 | 1115 | 608 | 1200 | 363 | 324 |
| Arrive On Green | 0.53 | 0.53 | 0.10 | 0.68 | 0.22 | 0.22 |
| Sat Flow, veh/h | 3000 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Grp Volume(v), veh/h | 262 | 359 | 313 | 1134 | 339 | 53 |
| Grp Sat Flow(s),veh/h/ln | 1235 | 1500 | 1681 | 1765 | 1681 | 1500 |
| Q Serve(g_s), s | 6.4 | 9.3 | 9.3 | 66.2 | 22.8 | 3.3 |
| Cycle Q Clear(g_c), s | 6.4 | 9.3 | 9.3 | 66.2 | 22.8 | 3.3 |
| Prop In Lane | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 1303 | 1115 | 608 | 1200 | 363 | 324 |
| V/C Ratio(X) | 0.20 | 0.32 | 0.51 | 0.95 | 0.93 | 0.16 |
| Avail Cap(c_a), veh/h | 1303 | 1115 | 644 | 1200 | 365 | 326 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 14.4 | 5.0 | 9.4 | 16.5 | 44.3 | 36.7 |
| Incr Delay (d2), s/veh | 0.3 | 0.8 | 0.3 | 15.8 | 30.3 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.0 | 11.8 | 7.7 | 47.1 | 19.7 | 2.5 |
| LnGrp Delay(d),s/veh | 14.7 | 5.8 | 9.7 | 32.3 | 74.6 | 36.7 |
| LnGrp LOS | B | A | A | C | E | D |
| Approach Vol, veh/h | 621 | | | 1447 | 392 | |
| Approach Delay, s/veh | 9.5 | | | 27.4 | 69.5 | |
| Approach LOS | A | | | C | E | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | | 5 | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 84.2 | | | 17.6 | 66.6 | | 30.8 |
| Change Period (Y+Rc), s | | 6.0 | | | 6.0 | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 78.0 | | | 14.0 | 58.0 | | 25.0 |
| Max Q Clear Time (g_c+I1), s | | 68.2 | | | 11.3 | 11.3 | | 24.8 |
| Green Ext Time (p_c), s | | 7.6 | | | 0.2 | 3.1 | | 0.0 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 29.6 |
| HCM 2010 LOS | C |

HCM 2010 TWSC
14: Pleasant Valley Road & Tenmile Creek Road

2025 Total
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.7 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 97 | 26 | 65 | 106 | 240 | 341 |
| Future Vol, veh/h | 97 | 26 | 65 | 106 | 240 | 341 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 300 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 108 | 29 | 72 | 118 | 267 | 379 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 529 | 267 | 646 | 0 | - | 0 |
| Stage 1 | 267 | - | - | - | - | - |
| Stage 2 | 262 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 510 | 772 | 939 | - | - | - |
| Stage 1 | 778 | - | - | - | - | - |
| Stage 2 | 782 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 468 | 772 | 939 | - | - | - |
| Mov Cap-2 Maneuver | 468 | - | - | - | - | - |
| Stage 1 | 714 | - | - | - | - | - |
| Stage 2 | 782 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 14.6 | 3.5 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 939 | - | 510 | - | - |
| HCM Lane V/C Ratio | 0.077 | - | 0.268 | - | - |
| HCM Control Delay (s) | 9.2 | 0 | 14.6 | - | - |
| HCM Lane LOS | A | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | 1.1 | - | - |

HCM 6th Roundabout
7: Cloverdale Road & Amity Road

2025 Total - ALT
AM Peak Hour

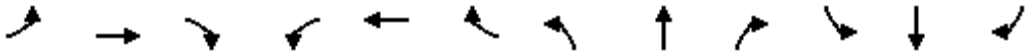
| Intersection | |
|---|---|
| Intersection Delay, s/veh | 25.1 |
| Intersection LOS | D |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 2 | 2 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 514 | 440 | 1601 | 402 |
| Demand Flow Rate, veh/h | 525 | 449 | 1633 | 410 |
| Vehicles Circulating, veh/h | 371 | 1700 | 467 | 574 |
| Vehicles Exiting, veh/h | 613 | 400 | 429 | 1575 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.3 | 41.9 | 31.0 | 7.1 |
| Approach LOS | A | E | D | A |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| Assumed Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.470 | 0.530 | 0.470 | 0.530 | 0.471 | 0.529 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 |
| Entry Flow, veh/h | 247 | 278 | 211 | 238 | 768 | 865 | 193 | 217 |
| Cap Entry Lane, veh/h | 960 | 1036 | 283 | 335 | 878 | 955 | 796 | 872 |
| Entry HV Adj Factor | 0.979 | 0.981 | 0.981 | 0.980 | 0.979 | 0.981 | 0.979 | 0.982 |
| Flow Entry, veh/h | 242 | 273 | 207 | 233 | 752 | 848 | 189 | 213 |
| Cap Entry, veh/h | 939 | 1016 | 277 | 328 | 860 | 936 | 779 | 856 |
| V/C Ratio | 0.257 | 0.268 | 0.747 | 0.711 | 0.874 | 0.906 | 0.242 | 0.249 |
| Control Delay, s/veh | 6.4 | 6.2 | 47.0 | 37.5 | 29.7 | 32.1 | 7.3 | 6.8 |
| LOS | A | A | E | E | D | D | A | A |
| 95th %tile Queue, veh | 1 | 1 | 5 | 5 | 11 | 13 | 1 | 1 |

# HCM 2010 Signalized Intersection Summary
## 9: Cloverdale Road & Columbia Road

2025 Total - ALT
AM Peak Hour



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 155 | 80 | 173 | 47 | 114 | 32 | 209 | 607 | 55 | 6 | 276 | 92 |
| Future Volume (veh/h) | 155 | 80 | 173 | 47 | 114 | 32 | 209 | 607 | 55 | 6 | 276 | 92 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 172 | 89 | 192 | 52 | 127 | 36 | 211 | 613 | 56 | 6 | 285 | 95 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.99 | 0.99 | 0.99 | 0.97 | 0.97 | 0.97 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 376 | 140 | 303 | 263 | 372 | 106 | 403 | 811 | 74 | 280 | 360 | 120 |
| Arrive On Green | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.12 | 0.51 | 0.51 | 0.28 | 0.28 | 0.28 |
| Sat Flow, veh/h | 1218 | 499 | 1076 | 1094 | 1323 | 375 | 1681 | 1593 | 146 | 765 | 1268 | 423 |
| Grp Volume(v), veh/h | 172 | 0 | 281 | 52 | 0 | 163 | 211 | 0 | 669 | 6 | 0 | 380 |
| Grp Sat Flow(s),veh/h/ln | 1218 | 0 | 1575 | 1094 | 0 | 1699 | 1681 | 0 | 1739 | 765 | 0 | 1690 |
| Q Serve(g_s), s | 7.5 | 0.0 | 8.9 | 2.5 | 0.0 | 4.4 | 4.6 | 0.0 | 17.6 | 0.4 | 0.0 | 11.9 |
| Cycle Q Clear(g_c), s | 11.8 | 0.0 | 8.9 | 11.4 | 0.0 | 4.4 | 4.6 | 0.0 | 17.6 | 5.1 | 0.0 | 11.9 |
| Prop In Lane | 1.00 | | 0.68 | 1.00 | | 0.22 | 1.00 | | 0.08 | 1.00 | | 0.25 |
| Lane Grp Cap(c), veh/h | 376 | 0 | 443 | 263 | 0 | 478 | 403 | 0 | 885 | 280 | 0 | 480 |
| V/C Ratio(X) | 0.46 | 0.00 | 0.63 | 0.20 | 0.00 | 0.34 | 0.52 | 0.00 | 0.76 | 0.02 | 0.00 | 0.79 |
| Avail Cap(c_a), veh/h | 1077 | 0 | 1350 | 893 | 0 | 1456 | 849 | 0 | 2708 | 879 | 0 | 1804 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.0 | 0.0 | 18.0 | 23.0 | 0.0 | 16.3 | 12.4 | 0.0 | 11.2 | 18.4 | 0.0 | 18.9 |
| Incr Delay (d2), s/veh | 0.9 | 0.0 | 1.5 | 0.4 | 0.0 | 0.4 | 1.1 | 0.0 | 1.3 | 0.0 | 0.0 | 3.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 4.6 | 0.0 | 7.2 | 1.4 | 0.0 | 3.8 | 3.9 | 0.0 | 13.5 | 0.1 | 0.0 | 9.9 |
| LnGrp Delay(d),s/veh | 21.9 | 0.0 | 19.5 | 23.3 | 0.0 | 16.7 | 13.5 | 0.0 | 12.6 | 18.4 | 0.0 | 21.9 |
| LnGrp LOS | C | | B | C | | B | B | | B | B | | C |
| Approach Vol, veh/h | | 453 | | | 215 | | | 880 | | | 386 | |
| Approach Delay, s/veh | | 20.4 | | | 18.3 | | | 12.8 | | | 21.8 | |
| Approach LOS | | C | | | B | | | B | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 22.1 | 12.8 | 22.2 | | 22.1 | | 35.1 |
| Change Period (Y+Rc), s | | 6.0 | 6.0 | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 49.0 | 22.0 | 61.0 | | 49.0 | | 89.0 |
| Max Q Clear Time (g_c+I1), s | | 13.4 | 6.6 | 13.9 | | 13.8 | | 19.6 |
| Green Ext Time (p_c), s | | 1.0 | 0.5 | 2.4 | | 2.2 | | 4.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 17.0 |
| HCM 2010 LOS | B |

# HCM 2010 Signalized Intersection Summary
## 10: Cloverdale Road & Hubbard Road

2025 Total - ALT
AM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 112 | 179 | 7 | 37 | 9 | 406 | 8 | 343 | 55 | 350 | 116 | 52 |
| Future Volume (veh/h) | 112 | 179 | 7 | 37 | 9 | 406 | 8 | 343 | 55 | 350 | 116 | 52 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 124 | 199 | 8 | 41 | 10 | 451 | 8 | 361 | 58 | 389 | 129 | 58 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.95 | 0.95 | 0.95 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 186 | 685 | 28 | 435 | 13 | 598 | 364 | 389 | 62 | 414 | 585 | 263 |
| Arrive On Green | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.26 | 0.26 | 0.26 | 0.20 | 0.51 | 0.51 |
| Sat Flow, veh/h | 927 | 1685 | 68 | 1170 | 33 | 1472 | 1192 | 1484 | 238 | 1681 | 1154 | 519 |
| Grp Volume(v), veh/h | 124 | 0 | 207 | 41 | 0 | 461 | 8 | 0 | 419 | 389 | 0 | 187 |
| Grp Sat Flow(s),veh/h/ln | 927 | 0 | 1753 | 1170 | 0 | 1505 | 1192 | 0 | 1723 | 1681 | 0 | 1673 |
| Q Serve(g_s), s | 18.2 | 0.0 | 11.0 | 3.4 | 0.0 | 36.1 | 0.7 | 0.0 | 32.7 | 25.1 | 0.0 | 8.6 |
| Cycle Q Clear(g_c), s | 54.4 | 0.0 | 11.0 | 14.3 | 0.0 | 36.1 | 0.7 | 0.0 | 32.7 | 25.1 | 0.0 | 8.6 |
| Prop In Lane | 1.00 | | 0.04 | 1.00 | | 0.98 | 1.00 | | 0.14 | 1.00 | | 0.31 |
| Lane Grp Cap(c), veh/h | 186 | 0 | 712 | 435 | 0 | 611 | 364 | 0 | 451 | 414 | 0 | 848 |
| V/C Ratio(X) | 0.67 | 0.00 | 0.29 | 0.09 | 0.00 | 0.75 | 0.02 | 0.00 | 0.93 | 0.94 | 0.00 | 0.22 |
| Avail Cap(c_a), veh/h | 186 | 0 | 712 | 435 | 0 | 611 | 415 | 0 | 525 | 490 | 0 | 995 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 58.3 | 0.0 | 27.6 | 32.4 | 0.0 | 35.0 | 37.8 | 0.0 | 49.6 | 37.4 | 0.0 | 18.9 |
| Incr Delay (d2), s/veh | 8.8 | 0.0 | 0.2 | 0.1 | 0.0 | 5.3 | 0.0 | 0.0 | 21.4 | 24.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 8.9 | 0.0 | 9.1 | 2.0 | 0.0 | 22.4 | 0.4 | 0.0 | 25.3 | 24.1 | 0.0 | 7.2 |
| LnGrp Delay(d),s/veh | 67.1 | 0.0 | 27.8 | 32.5 | 0.0 | 40.3 | 37.8 | 0.0 | 71.1 | 61.4 | 0.0 | 19.0 |
| LnGrp LOS | E | | C | C | | D | D | | E | E | | B |
| Approach Vol, veh/h | | 331 | | | 502 | | | 427 | | | 576 | |
| Approach Delay, s/veh | | 42.5 | | | 39.7 | | | 70.4 | | | 47.7 | |
| Approach LOS | | D | | | D | | | E | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 62.0 | | 75.8 | | 62.0 | 33.8 | 42.1 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 56.0 | | 82.0 | | 56.0 | 34.0 | 42.0 |
| Max Q Clear Time (g_c+I1), s | | 38.1 | | 10.6 | | 56.4 | 27.1 | 34.7 |
| Green Ext Time (p_c), s | | 2.8 | | 1.1 | | 0.0 | 0.7 | 1.4 |

| Intersection Summary | | |
|---|---|---|
| HCM 2010 Ctrl Delay | 49.8 | |
| HCM 2010 LOS | D | |

HCM 6th Roundabout
7: Cloverdale Road & Amity Road

2025 Total - ALT
PM Peak Hour

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 17.6 |
| Intersection LOS | C |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 2 | 2 | 2 | 2 |
| Conflicting Circle Lanes | 2 | 2 | 2 | 2 |
| Adj Approach Flow, veh/h | 551 | 424 | 676 | 1319 |
| Demand Flow Rate, veh/h | 562 | 432 | 689 | 1345 |
| Vehicles Circulating, veh/h | 1236 | 701 | 463 | 566 |
| Vehicles Exiting, veh/h | 675 | 451 | 1335 | 567 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 22.3 | 8.4 | 8.2 | 23.4 |
| Approach LOS | C | A | A | C |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| Assumed Moves | LT | TR | LT | TR | LT | TR | LT | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.470 | 0.530 | 0.470 | 0.530 | 0.470 | 0.530 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 |
| Entry Flow, veh/h | 264 | 298 | 203 | 229 | 324 | 365 | 632 | 713 |
| Cap Entry Lane, veh/h | 433 | 497 | 708 | 783 | 882 | 958 | 802 | 878 |
| Entry HV Adj Factor | 0.981 | 0.980 | 0.981 | 0.981 | 0.980 | 0.981 | 0.981 | 0.981 |
| Flow Entry, veh/h | 259 | 292 | 199 | 225 | 318 | 358 | 620 | 699 |
| Cap Entry, veh/h | 425 | 487 | 695 | 768 | 864 | 940 | 787 | 861 |
| V/C Ratio | 0.610 | 0.600 | 0.287 | 0.293 | 0.367 | 0.381 | 0.788 | 0.812 |
| Control Delay, s/veh | 23.9 | 20.9 | 8.7 | 8.1 | 8.4 | 8.1 | 23.3 | 23.6 |
| LOS | C | C | A | A | A | A | C | C |
| 95th %tile Queue, veh | 4 | 4 | 1 | 1 | 2 | 2 | 8 | 9 |

# HCM 2010 Signalized Intersection Summary
## 9: Cloverdale Road & Columbia Road

2025 Total - ALT
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 47 | 111 | 207 | 46 | 102 | 16 | 206 | 343 | 54 | 36 | 550 | 154 |
| Future Volume (veh/h) | 47 | 111 | 207 | 46 | 102 | 16 | 206 | 343 | 54 | 36 | 550 | 154 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 52 | 122 | 227 | 51 | 113 | 18 | 229 | 381 | 60 | 40 | 611 | 171 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 323 | 151 | 280 | 125 | 405 | 64 | 256 | 943 | 148 | 520 | 652 | 182 |
| Arrive On Green | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.10 | 0.63 | 0.63 | 0.49 | 0.49 | 0.49 |
| Sat Flow, veh/h | 1254 | 553 | 1030 | 1028 | 1486 | 237 | 1681 | 1489 | 234 | 944 | 1328 | 372 |
| Grp Volume(v), veh/h | 52 | 0 | 349 | 51 | 0 | 131 | 229 | 0 | 441 | 40 | 0 | 782 |
| Grp Sat Flow(s),veh/h/ln | 1254 | 0 | 1583 | 1028 | 0 | 1723 | 1681 | 0 | 1723 | 944 | 0 | 1699 |
| Q Serve(g_s), s | 4.3 | 0.0 | 26.2 | 6.2 | 0.0 | 7.6 | 9.8 | 0.0 | 16.0 | 2.9 | 0.0 | 55.2 |
| Cycle Q Clear(g_c), s | 11.9 | 0.0 | 26.2 | 32.3 | 0.0 | 7.6 | 9.8 | 0.0 | 16.0 | 2.9 | 0.0 | 55.2 |
| Prop In Lane | 1.00 | | 0.65 | 1.00 | | 0.14 | 1.00 | | 0.14 | 1.00 | | 0.22 |
| Lane Grp Cap(c), veh/h | 323 | 0 | 431 | 125 | 0 | 469 | 256 | 0 | 1091 | 520 | 0 | 834 |
| V/C Ratio(X) | 0.16 | 0.00 | 0.81 | 0.41 | 0.00 | 0.28 | 0.90 | 0.00 | 0.40 | 0.08 | 0.00 | 0.94 |
| Avail Cap(c_a), veh/h | 357 | 0 | 473 | 152 | 0 | 515 | 347 | 0 | 1356 | 614 | 0 | 1003 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 41.1 | 0.0 | 43.2 | 58.3 | 0.0 | 36.4 | 32.6 | 0.0 | 11.5 | 17.2 | 0.0 | 30.5 |
| Incr Delay (d2), s/veh | 0.2 | 0.0 | 9.4 | 2.1 | 0.0 | 0.3 | 19.7 | 0.0 | 0.2 | 0.1 | 0.0 | 14.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.7 | 0.0 | 18.4 | 3.3 | 0.0 | 6.6 | 14.3 | 0.0 | 12.2 | 1.4 | 0.0 | 38.0 |
| LnGrp Delay(d),s/veh | 41.4 | 0.0 | 52.6 | 60.4 | 0.0 | 36.7 | 52.4 | 0.0 | 11.7 | 17.3 | 0.0 | 44.6 |
| LnGrp LOS | D | | D | E | | D | D | | B | B | | D |
| Approach Vol, veh/h | | 401 | | | 182 | | | 670 | | | 822 | |
| Approach Delay, s/veh | | 51.1 | | | 43.4 | | | 25.6 | | | 43.3 | |
| Approach LOS | | D | | | D | | | C | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | 3 | 4 | | 6 | | 8 |
| Phs Duration (G+Y+Rc), s | | 40.6 | 18.1 | 68.4 | | 40.6 | | 86.5 |
| Change Period (Y+Rc), s | | 6.0 | 6.0 | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 38.0 | 19.0 | 75.0 | | 38.0 | | 100.0 |
| Max Q Clear Time (g_c+I1), s | | 34.3 | 11.8 | 57.2 | | 28.2 | | 18.0 |
| Green Ext Time (p_c), s | | 0.2 | 0.4 | 5.2 | | 1.5 | | 2.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 39.1 |
| HCM 2010 LOS | D |

# HCM 2010 Signalized Intersection Summary
## 10: Cloverdale Road & Hubbard Road

2025 Total - ALT
PM Peak Hour

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 32 | 10 | 22 | 59 | 241 | 357 | 10 | 240 | 36 | 367 | 357 | 95 |
| Future Volume (veh/h) | 32 | 10 | 22 | 59 | 241 | 357 | 10 | 240 | 36 | 367 | 357 | 95 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 36 | 11 | 24 | 66 | 268 | 397 | 11 | 267 | 40 | 408 | 397 | 106 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 103 | 224 | 489 | 658 | 291 | 432 | 230 | 294 | 44 | 436 | 611 | 163 |
| Arrive On Green | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.45 | 0.20 | 0.20 | 0.20 | 0.21 | 0.45 | 0.45 |
| Sat Flow, veh/h | 768 | 495 | 1079 | 1368 | 643 | 953 | 892 | 1500 | 225 | 1681 | 1343 | 359 |
| Grp Volume(v), veh/h | 36 | 0 | 35 | 66 | 0 | 665 | 11 | 0 | 307 | 408 | 0 | 503 |
| Grp Sat Flow(s),veh/h/ln | 768 | 0 | 1574 | 1368 | 0 | 1597 | 892 | 0 | 1725 | 1681 | 0 | 1701 |
| Q Serve(g_s), s | 6.0 | 0.0 | 1.6 | 3.7 | 0.0 | 50.8 | 1.3 | 0.0 | 22.6 | 24.8 | 0.0 | 29.8 |
| Cycle Q Clear(g_c), s | 56.8 | 0.0 | 1.6 | 5.3 | 0.0 | 50.8 | 1.3 | 0.0 | 22.6 | 24.8 | 0.0 | 29.8 |
| Prop In Lane | 1.00 | | 0.69 | 1.00 | | 0.60 | 1.00 | | 0.13 | 1.00 | | 0.21 |
| Lane Grp Cap(c), veh/h | 103 | 0 | 713 | 658 | 0 | 723 | 230 | 0 | 338 | 436 | 0 | 774 |
| V/C Ratio(X) | 0.35 | 0.00 | 0.05 | 0.10 | 0.00 | 0.92 | 0.05 | 0.00 | 0.91 | 0.94 | 0.00 | 0.65 |
| Avail Cap(c_a), veh/h | 139 | 0 | 787 | 722 | 0 | 798 | 268 | 0 | 411 | 544 | 0 | 955 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 60.0 | 0.0 | 19.9 | 21.4 | 0.0 | 33.4 | 42.6 | 0.0 | 51.1 | 33.1 | 0.0 | 27.4 |
| Incr Delay (d2), s/veh | 2.0 | 0.0 | 0.0 | 0.1 | 0.0 | 14.9 | 0.1 | 0.0 | 21.0 | 21.1 | 0.0 | 1.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 2.4 | 0.0 | 1.3 | 2.5 | 0.0 | 33.6 | 0.6 | 0.0 | 18.7 | 23.7 | 0.0 | 20.4 |
| LnGrp Delay(d),s/veh | 62.0 | 0.0 | 19.9 | 21.5 | 0.0 | 48.3 | 42.6 | 0.0 | 72.1 | 54.2 | 0.0 | 28.6 |
| LnGrp LOS | E | | B | C | | D | D | | E | D | | C |
| Approach Vol, veh/h | | 71 | | | 731 | | | 318 | | | 911 | |
| Approach Delay, s/veh | | 41.3 | | | 45.8 | | | 71.1 | | | 40.0 | |
| Approach LOS | | D | | | D | | | E | | | D | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 64.9 | | 65.2 | | 64.9 | 33.7 | 31.5 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | | 65.0 | | 73.0 | | 65.0 | 36.0 | 31.0 |
| Max Q Clear Time (g_c+I1), s | | 52.8 | | 31.8 | | 58.8 | 26.8 | 24.6 |
| Green Ext Time (p_c), s | | 3.6 | | 3.3 | | 0.1 | 0.9 | 0.9 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 47.0 |
| HCM 2010 LOS | D |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Total - Mitigation
AM Peak Hour

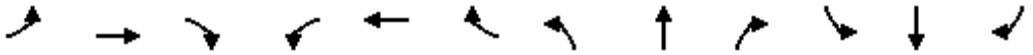
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 55 | 346 | 29 | 69 | 381 | 145 | 64 | 778 | 192 | 84 | 254 | 33 |
| Future Volume (veh/h) | 55 | 346 | 29 | 69 | 381 | 145 | 64 | 778 | 192 | 84 | 254 | 33 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 61 | 384 | 32 | 77 | 423 | 161 | 65 | 794 | 196 | 93 | 282 | 37 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.98 | 0.98 | 0.98 | 0.90 | 0.90 | 0.90 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 163 | 690 | 58 | 300 | 523 | 199 | 484 | 1076 | 266 | 221 | 1462 | 190 |
| Arrive On Green | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.40 | 0.40 | 0.40 | 0.05 | 0.49 | 0.49 |
| Sat Flow, veh/h | 828 | 1607 | 134 | 966 | 1219 | 464 | 1056 | 2667 | 658 | 1681 | 2985 | 388 |
| Grp Volume(v), veh/h | 61 | 0 | 416 | 77 | 0 | 584 | 65 | 499 | 491 | 93 | 157 | 162 |
| Grp Sat Flow(s),veh/h/ln | 828 | 0 | 1741 | 966 | 0 | 1683 | 1056 | 1676 | 1649 | 1681 | 1676 | 1696 |
| Q Serve(g_s), s | 8.6 | 0.0 | 22.2 | 8.0 | 0.0 | 37.5 | 4.8 | 31.3 | 31.3 | 3.9 | 6.5 | 6.7 |
| Cycle Q Clear(g_c), s | 46.1 | 0.0 | 22.2 | 30.2 | 0.0 | 37.5 | 4.8 | 31.3 | 31.3 | 3.9 | 6.5 | 6.7 |
| Prop In Lane | 1.00 | | 0.08 | 1.00 | | 0.28 | 1.00 | | 0.40 | 1.00 | | 0.23 |
| Lane Grp Cap(c), veh/h | 163 | 0 | 748 | 300 | 0 | 723 | 484 | 676 | 665 | 221 | 821 | 831 |
| V/C Ratio(X) | 0.38 | 0.00 | 0.56 | 0.26 | 0.00 | 0.81 | 0.13 | 0.74 | 0.74 | 0.42 | 0.19 | 0.19 |
| Avail Cap(c_a), veh/h | 269 | 0 | 971 | 424 | 0 | 938 | 528 | 745 | 733 | 293 | 962 | 973 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 51.0 | 0.0 | 26.5 | 37.8 | 0.0 | 30.9 | 23.5 | 31.4 | 31.4 | 24.1 | 17.8 | 17.8 |
| Incr Delay (d2), s/veh | 1.4 | 0.0 | 0.7 | 0.4 | 0.0 | 4.1 | 0.2 | 3.9 | 4.0 | 0.5 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.7 | 0.0 | 16.1 | 3.9 | 0.0 | 25.2 | 2.6 | 21.5 | 21.3 | 3.2 | 5.5 | 5.7 |
| LnGrp Delay(d),s/veh | 52.4 | 0.0 | 27.1 | 38.2 | 0.0 | 34.9 | 23.6 | 35.3 | 35.4 | 24.5 | 17.9 | 18.0 |
| LnGrp LOS | D | | C | D | | C | C | D | D | C | B | B |
| Approach Vol, veh/h | | 477 | | | 661 | | | 1055 | | | 412 | |
| Approach Delay, s/veh | | 30.4 | | | 35.3 | | | 34.6 | | | 19.4 | |
| Approach LOS | | C | | | D | | | C | | | B | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 58.1 | | 65.6 | | 58.1 | 10.7 | 54.9 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 69.0 | | 71.0 | | 69.0 | 11.0 | 55.0 |
| Max Q Clear Time (g_c+I1), s | | 39.5 | | 8.7 | | 48.1 | 5.9 | 33.3 |
| Green Ext Time (p_c), s | | 10.2 | | 7.9 | | 5.0 | 0.1 | 16.6 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 31.6 |
| HCM 2010 LOS | C |

# HCM 2010 Signalized Intersection Summary
## 8: Cloverdale Road & Lake Hazel Road

2025 Total - Mitigation
PM Peak Hour

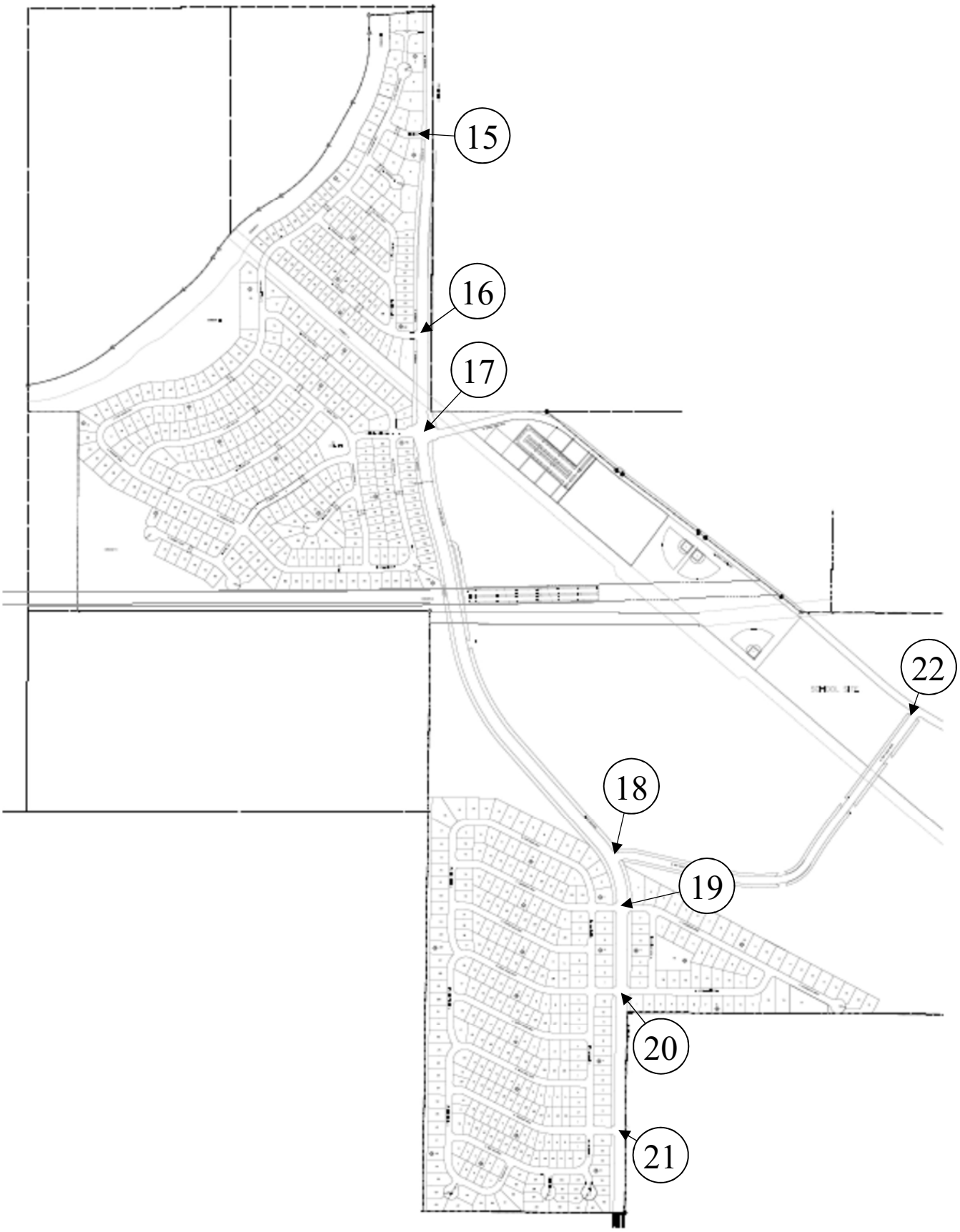


| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 62 | 445 | 65 | 203 | 520 | 95 | 65 | 367 | 122 | 184 | 675 | 98 |
| Future Volume (veh/h) | 62 | 445 | 65 | 203 | 520 | 95 | 65 | 367 | 122 | 184 | 675 | 98 |
| Number | 1 | 6 | 16 | 5 | 2 | 12 | 3 | 8 | 18 | 7 | 4 | 14 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 | 1765 | 1765 | 1800 |
| Adj Flow Rate, veh/h | 68 | 489 | 71 | 221 | 565 | 103 | 72 | 408 | 136 | 200 | 734 | 107 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 0 | 1 | 2 | 0 |
| Peak Hour Factor | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 | 0.92 | 0.90 | 0.90 | 0.90 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 226 | 576 | 84 | 294 | 756 | 138 | 187 | 617 | 203 | 319 | 1159 | 169 |
| Arrive On Green | 0.38 | 0.38 | 0.38 | 0.10 | 0.52 | 0.52 | 0.25 | 0.25 | 0.25 | 0.10 | 0.39 | 0.39 |
| Sat Flow, veh/h | 766 | 1507 | 219 | 1681 | 1453 | 265 | 651 | 2479 | 818 | 1681 | 2938 | 428 |
| Grp Volume(v), veh/h | 68 | 0 | 560 | 221 | 0 | 668 | 72 | 274 | 270 | 200 | 419 | 422 |
| Grp Sat Flow(s),veh/h/ln | 766 | 0 | 1726 | 1681 | 0 | 1718 | 651 | 1676 | 1620 | 1681 | 1676 | 1689 |
| Q Serve(g_s), s | 9.0 | 0.0 | 34.7 | 9.0 | 0.0 | 35.7 | 11.7 | 17.2 | 17.5 | 10.0 | 23.6 | 23.6 |
| Cycle Q Clear(g_c), s | 28.5 | 0.0 | 34.7 | 9.0 | 0.0 | 35.7 | 18.3 | 17.2 | 17.5 | 10.0 | 23.6 | 23.6 |
| Prop In Lane | 1.00 | | 0.13 | 1.00 | | 0.15 | 1.00 | | 0.50 | 1.00 | | 0.25 |
| Lane Grp Cap(c), veh/h | 226 | 0 | 660 | 294 | 0 | 894 | 187 | 417 | 403 | 319 | 661 | 666 |
| V/C Ratio(X) | 0.30 | 0.00 | 0.85 | 0.75 | 0.00 | 0.75 | 0.39 | 0.66 | 0.67 | 0.63 | 0.63 | 0.63 |
| Avail Cap(c_a), veh/h | 352 | 0 | 944 | 349 | 0 | 1233 | 231 | 530 | 512 | 347 | 802 | 808 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 39.6 | 0.0 | 33.0 | 24.9 | 0.0 | 22.0 | 42.9 | 39.5 | 39.6 | 28.6 | 28.6 | 28.6 |
| Incr Delay (d2), s/veh | 0.7 | 0.0 | 5.2 | 5.7 | 0.0 | 1.7 | 1.8 | 2.7 | 3.0 | 2.0 | 1.6 | 1.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(95%),veh/ln | 3.5 | 0.0 | 24.3 | 8.1 | 0.0 | 24.1 | 4.0 | 13.0 | 12.9 | 8.3 | 16.7 | 16.8 |
| LnGrp Delay(d),s/veh | 40.3 | 0.0 | 38.2 | 30.6 | 0.0 | 23.7 | 44.7 | 42.2 | 42.7 | 30.6 | 30.2 | 30.2 |
| LnGrp LOS | D | | D | C | | C | D | D | D | C | C | C |
| Approach Vol, veh/h | | 628 | | | 889 | | | 616 | | | 1041 | |
| Approach Delay, s/veh | | 38.4 | | | 25.4 | | | 42.7 | | | 30.3 | |
| Approach LOS | | D | | | C | | | D | | | C | |

| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Assigned Phs | | 2 | | 4 | 5 | 6 | 7 | 8 |
| Phs Duration (G+Y+Rc), s | | 65.9 | | 51.2 | 16.1 | 49.7 | 17.0 | 34.1 |
| Change Period (Y+Rc), s | | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Max Green Setting (Gmax), s | | 84.0 | | 56.0 | 15.0 | 64.0 | 14.0 | 37.0 |
| Max Q Clear Time (g_c+I1), s | | 37.7 | | 25.6 | 11.0 | 36.7 | 12.0 | 20.3 |
| Green Ext Time (p_c), s | | 13.5 | | 18.3 | 0.2 | 8.0 | 0.1 | 8.8 |

| Intersection Summary | |
|---|---|
| HCM 2010 Ctrl Delay | 32.9 |
| HCM 2010 LOS | C |

# Site Access Numbering for Synchro Outputs



HCM 2010 TWSC
15: Ten Mile Creek Road & Access A

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 42 | 17 | 5 | 393 | 500 | 13 |
| Future Vol, veh/h | 42 | 17 | 5 | 393 | 500 | 13 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 50 | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 47 | 19 | 6 | 437 | 556 | 14 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1012 | 563 | 570 | 0 | - | 0 |
| Stage 1 | 563 | - | - | - | - | - |
| Stage 2 | 449 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 265 | 526 | 1002 | - | - | - |
| Stage 1 | 570 | - | - | - | - | - |
| Stage 2 | 643 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 263 | 526 | 1002 | - | - | - |
| Mov Cap-2 Maneuver | 462 | - | - | - | - | - |
| Stage 1 | 567 | - | - | - | - | - |
| Stage 2 | 643 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.7 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1002 | - | 479 | - | - |
| HCM Lane V/C Ratio | 0.006 | - | 0.137 | - | - |
| HCM Control Delay (s) | 8.6 | - | 13.7 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.5 | - | - |

HCM 2010 TWSC
16: Ten Mile Creek Road & Access B

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 10 | 3 | 373 | 508 | 9 |
| Future Vol, veh/h | 25 | 10 | 3 | 373 | 508 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 50 | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 11 | 3 | 414 | 564 | 10 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 989 | 569 | 574 | 0 | - | 0 |
| Stage 1 | 569 | - | - | - | - | - |
| Stage 2 | 420 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 274 | 522 | 999 | - | - | - |
| Stage 1 | 566 | - | - | - | - | - |
| Stage 2 | 663 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 273 | 522 | 999 | - | - | - |
| Mov Cap-2 Maneuver | 469 | - | - | - | - | - |
| Stage 1 | 564 | - | - | - | - | - |
| Stage 2 | 663 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.1 | 0.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 999 | - | 483 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | 0.081 | - | - |
| HCM Control Delay (s) | 8.6 | - | 13.1 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.3 | - | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 6.9 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 185 | 170 | 149 | 575 |
| Demand Flow Rate, veh/h | 189 | 173 | 152 | 587 |
| Vehicles Circulating, veh/h | 550 | 279 | 676 | 25 |
| Vehicles Exiting, veh/h | 62 | 549 | 63 | 427 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.3 | 5.1 | 7.9 | 7.0 |
| Approach LOS | A | A | A | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 189 | 173 | 152 | 587 |
| Cap Entry Lane, veh/h | 787 | 1038 | 692 | 1345 |
| Entry HV Adj Factor | 0.979 | 0.981 | 0.981 | 0.979 |
| Flow Entry, veh/h | 185 | 170 | 149 | 575 |
| Cap Entry, veh/h | 771 | 1018 | 680 | 1317 |
| V/C Ratio | 0.240 | 0.167 | 0.219 | 0.436 |
| Control Delay, s/veh | 7.3 | 5.1 | 7.9 | 7.0 |
| LOS | A | A | A | A |
| 95th %tile Queue, veh | 1 | 1 | 1 | 2 |

HCM 2010 TWSC
18: Five Mile Road & Access D/Access E

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 134 | 0 | 0 | 56 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 134 | 0 | 0 | 56 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 149 | 0 | 0 | 62 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 211 | 211 | 62 | 211 | 211 | 149 | 62 | 0 | 0 | 149 | 0 | 0 |
| Stage 1 | 62 | 62 | - | 149 | 149 | - | - | - | - | - | - | - |
| Stage 2 | 149 | 149 | - | 62 | 62 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 746 | 686 | 1003 | 746 | 686 | 898 | 1541 | - | - | 1432 | - | - |
| Stage 1 | 949 | 843 | - | 854 | 774 | - | - | - | - | - | - | - |
| Stage 2 | 854 | 774 | - | 949 | 843 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 746 | 686 | 1003 | 746 | 686 | 898 | 1541 | - | - | 1432 | - | - |
| Mov Cap-2 Maneuver | 745 | 678 | - | 745 | 678 | - | - | - | - | - | - | - |
| Stage 1 | 949 | 843 | - | 854 | 774 | - | - | - | - | - | - | - |
| Stage 2 | 854 | 774 | - | 949 | 843 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 | 0 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1541 | - | - | - | - | 1432 | - | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | - | - | 0 | 0 | 0 | - | - |
| HCM Lane LOS | A | - | - | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | - | - | 0 | - | - |

HCM 2010 TWSC
19: Five Mile Road & Springrock Collector

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.8 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 18 | 0 | 147 | 49 | 4 | 52 |
| Future Vol, veh/h | 18 | 0 | 147 | 49 | 4 | 52 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | 50 | - |
| Veh in Median Storage, # | 2 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 20 | 0 | 163 | 54 | 4 | 58 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 256 | 190 | 0 | 0 | 217 | 0 |
| Stage 1 | 190 | - | - | - | - | - |
| Stage 2 | 66 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 733 | 852 | - | - | 1353 | - |
| Stage 1 | 842 | - | - | - | - | - |
| Stage 2 | 957 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 731 | 852 | - | - | 1353 | - |
| Mov Cap-2 Maneuver | 784 | - | - | - | - | - |
| Stage 1 | 842 | - | - | - | - | - |
| Stage 2 | 954 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 9.7 | 0 | 0.5 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 784 | 1353 | - |
| HCM Lane V/C Ratio | - | - | 0.026 | 0.003 | - |
| HCM Control Delay (s) | - | - | 9.7 | 7.7 | - |
| HCM Lane LOS | - | - | A | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 | - |

HCM 2010 TWSC
20: Five Mile Road & Access F/Access G

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 50 | 0 | 1 | 0 | 0 | 20 | 0 | 126 | 0 | 7 | 46 | 17 |
| Future Vol, veh/h | 50 | 0 | 1 | 0 | 0 | 20 | 0 | 126 | 0 | 7 | 46 | 17 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 56 | 0 | 1 | 0 | 0 | 22 | 0 | 140 | 0 | 8 | 51 | 19 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 228 | 217 | 61 | 217 | 226 | 140 | 70 | 0 | 0 | 140 | 0 | 0 |
| Stage 1 | 77 | 77 | - | 140 | 140 | - | - | - | - | - | - | - |
| Stage 2 | 151 | 140 | - | 77 | 86 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 727 | 681 | 1004 | 739 | 673 | 908 | 1531 | - | - | 1443 | - | - |
| Stage 1 | 932 | 831 | - | 863 | 781 | - | - | - | - | - | - | - |
| Stage 2 | 851 | 781 | - | 932 | 824 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 706 | 677 | 1004 | 735 | 669 | 908 | 1531 | - | - | 1443 | - | - |
| Mov Cap-2 Maneuver | 714 | 671 | - | 741 | 669 | - | - | - | - | - | - | - |
| Stage 1 | 932 | 826 | - | 863 | 781 | - | - | - | - | - | - | - |
| Stage 2 | 830 | 781 | - | 926 | 819 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.4 | 9.1 | 0 | 0.8 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1531 | - | - | 718 | 908 | 1443 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.079 | 0.024 | 0.005 | - | - |
| HCM Control Delay (s) | 0 | - | - | 10.4 | 9.1 | 7.5 | - | - |
| HCM Lane LOS | A | - | - | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | 0.1 | 0 | - | - |

HCM 2010 TWSC
21: Access H/Access I & Five Mile Road

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 55 | 0 | 1 | 0 | 0 | 11 | 0 | 60 | 0 | 4 | 24 | 19 |
| Future Vol, veh/h | 55 | 0 | 1 | 0 | 0 | 11 | 0 | 60 | 0 | 4 | 24 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 61 | 0 | 1 | 0 | 0 | 12 | 0 | 67 | 0 | 4 | 27 | 21 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 119 | 113 | 38 | 113 | 123 | 67 | 48 | 0 | 0 | 67 | 0 | 0 |
| Stage 1 | 46 | 46 | - | 67 | 67 | - | - | - | - | - | - | - |
| Stage 2 | 73 | 67 | - | 46 | 56 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 857 | 777 | 1034 | 864 | 767 | 997 | 1559 | - | - | 1535 | - | - |
| Stage 1 | 968 | 857 | - | 943 | 839 | - | - | - | - | - | - | - |
| Stage 2 | 937 | 839 | - | 968 | 848 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 845 | 775 | 1034 | 861 | 765 | 997 | 1559 | - | - | 1535 | - | - |
| Mov Cap-2 Maneuver | 815 | 739 | - | 828 | 733 | - | - | - | - | - | - | - |
| Stage 1 | 968 | 854 | - | 943 | 839 | - | - | - | - | - | - | - |
| Stage 2 | 926 | 839 | - | 964 | 845 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 9.8 | 8.7 | 0 | 0.6 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1559 | - | - | 818 | 997 | 1535 | - | - |
| HCM Lane V/C Ratio | - | - | - | 0.076 | 0.012 | 0.003 | - | - |
| HCM Control Delay (s) | 0 | - | - | 9.8 | 8.7 | 7.4 | - | - |
| HCM Lane LOS | A | - | - | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0 | 0 | - | - |

HCM 2010 TWSC
22: Springrock Collector/School Access & Tenmile Creek Road

2025 Total - Access
AM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 110 | 372 | 2 | 16 | 8 | 90 | 0 | 0 | 19 | 56 | 0 | 114 |
| Future Vol, veh/h | 110 | 372 | 2 | 16 | 8 | 90 | 0 | 0 | 19 | 56 | 0 | 114 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 50 | - | - | 50 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 122 | 413 | 2 | 18 | 9 | 100 | 0 | 0 | 21 | 62 | 0 | 127 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 109 | 0 | 0 | 415 | 0 | 0 | 817 | 803 | 414 | 764 | 754 | 59 |
| Stage 1 | - | - | - | - | - | - | 658 | 658 | - | 95 | 95 | - |
| Stage 2 | - | - | - | - | - | - | 159 | 145 | - | 669 | 659 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1481 | - | - | 1144 | - | - | 295 | 317 | 638 | 321 | 338 | 1007 |
| Stage 1 | - | - | - | - | - | - | 453 | 461 | - | 912 | 816 | - |
| Stage 2 | - | - | - | - | - | - | 843 | 777 | - | 447 | 461 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1481 | - | - | 1144 | - | - | 239 | 286 | 638 | 287 | 305 | 1007 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 327 | 351 | - | 334 | 354 | - |
| Stage 1 | - | - | - | - | - | - | 416 | 423 | - | 837 | 803 | - |
| Stage 2 | - | - | - | - | - | - | 725 | 765 | - | 397 | 423 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 1.7 | 1.2 | 10.8 | 13.6 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 638 | 1481 | - | - | 1144 | - | - | 605 |
| HCM Lane V/C Ratio | 0.033 | 0.083 | - | - | 0.016 | - | - | 0.312 |
| HCM Control Delay (s) | 10.8 | 7.6 | - | - | 8.2 | - | - | 13.6 |
| HCM Lane LOS | B | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0.3 | - | - | 0 | - | - | 1.3 |

HCM 2010 TWSC
15: Ten Mile Creek Road & Access A

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 24 | 10 | 17 | 543 | 356 | 41 |
| Future Vol, veh/h | 24 | 10 | 17 | 543 | 356 | 41 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 50 | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 27 | 11 | 19 | 603 | 396 | 46 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1060 | 419 | 442 | 0 | - | 0 |
| Stage 1 | 419 | - | - | - | - | - |
| Stage 2 | 641 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 248 | 634 | 1118 | - | - | - |
| Stage 1 | 664 | - | - | - | - | - |
| Stage 2 | 525 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 244 | 634 | 1118 | - | - | - |
| Mov Cap-2 Maneuver | 440 | - | - | - | - | - |
| Stage 1 | 653 | - | - | - | - | - |
| Stage 2 | 525 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 13.1 | 0.3 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1118 | - | 484 | - | - |
| HCM Lane V/C Ratio | 0.017 | - | 0.078 | - | - |
| HCM Control Delay (s) | 8.3 | - | 13.1 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | 0.3 | - | - |

HCM 2010 TWSC
16: Ten Mile Creek Road & Access B

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 16 | 6 | 11 | 544 | 340 | 26 |
| Future Vol, veh/h | 16 | 6 | 11 | 544 | 340 | 26 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | 50 | - | - | - |
| Veh in Median Storage, # | 2 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 18 | 7 | 12 | 604 | 378 | 29 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1021 | 393 | 407 | 0 | - | 0 |
| Stage 1 | 393 | - | - | - | - | - |
| Stage 2 | 628 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | 4.12 | - | - | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | 2.218 | - | - | - |
| Pot Cap-1 Maneuver | 262 | 656 | 1152 | - | - | - |
| Stage 1 | 682 | - | - | - | - | - |
| Stage 2 | 532 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 259 | 656 | 1152 | - | - | - |
| Mov Cap-2 Maneuver | 451 | - | - | - | - | - |
| Stage 1 | 675 | - | - | - | - | - |
| Stage 2 | 532 | - | - | - | - | - |

| Approach | EB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 12.7 | 0.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 | SBT | SBR |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1152 | - | 493 | - | - |
| HCM Lane V/C Ratio | 0.011 | - | 0.05 | - | - |
| HCM Control Delay (s) | 8.2 | - | 12.7 | - | - |
| HCM Lane LOS | A | - | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | 0.2 | - | - |

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 6.7 |
| Intersection LOS | A |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| Entry Lanes | 1 | 1 | 1 | 1 |
| Conflicting Circle Lanes | 1 | 1 | 1 | 1 |
| Adj Approach Flow, veh/h | 116 | 525 | 104 | 384 |
| Demand Flow Rate, veh/h | 119 | 535 | 106 | 391 |
| Vehicles Circulating, veh/h | 352 | 175 | 282 | 80 |
| Vehicles Exiting, veh/h | 119 | 213 | 189 | 630 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 5.0 | 8.2 | 4.5 | 5.7 |
| Approach LOS | A | A | A | A |

| Lane | Left | Left | Left | Left |
|---|---|---|---|---|
| Designated Moves | LTR | LTR | LTR | LTR |
| Assumed Moves | LTR | LTR | LTR | LTR |
| RT Channelized | | | | |
| Lane Util | 1.000 | 1.000 | 1.000 | 1.000 |
| Follow-Up Headway, s | 2.609 | 2.609 | 2.609 | 2.609 |
| Critical Headway, s | 4.976 | 4.976 | 4.976 | 4.976 |
| Entry Flow, veh/h | 119 | 535 | 106 | 391 |
| Cap Entry Lane, veh/h | 964 | 1154 | 1035 | 1272 |
| Entry HV Adj Factor | 0.978 | 0.981 | 0.983 | 0.981 |
| Flow Entry, veh/h | 116 | 525 | 104 | 384 |
| Cap Entry, veh/h | 942 | 1132 | 1018 | 1248 |
| V/C Ratio | 0.123 | 0.463 | 0.102 | 0.307 |
| Control Delay, s/veh | 5.0 | 8.2 | 4.5 | 5.7 |
| LOS | A | A | A | A |
| 95th %tile Queue, veh | 0 | 3 | 0 | 1 |

HCM 2010 TWSC
18: Five Mile Road & Access D/Access E

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↔ | | | ↔ | | ↰ | ↑ | | ↰ | ↑ | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 0 | 168 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 0 | 0 | 168 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 | 0 | 0 | 187 | 0 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 290 | 290 | 187 | 290 | 290 | 103 | 187 | 0 | 0 | 103 | 0 | 0 |
| Stage 1 | 187 | 187 | - | 103 | 103 | - | - | - | - | - | - | - |
| Stage 2 | 103 | 103 | - | 187 | 187 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 662 | 620 | 855 | 662 | 620 | 952 | 1387 | - | - | 1489 | - | - |
| Stage 1 | 815 | 745 | - | 903 | 810 | - | - | - | - | - | - | - |
| Stage 2 | 903 | 810 | - | 815 | 745 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 662 | 620 | 855 | 662 | 620 | 952 | 1387 | - | - | 1489 | - | - |
| Mov Cap-2 Maneuver | 690 | 635 | - | 690 | 635 | - | - | - | - | - | - | - |
| Stage 1 | 815 | 745 | - | 903 | 810 | - | - | - | - | - | - | - |
| Stage 2 | 903 | 810 | - | 815 | 745 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 | 0 |
| HCM LOS | A | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1387 | - | - | - | - | 1489 | - | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | - | - | 0 | 0 | 0 | - | - |
| HCM Lane LOS | A | - | - | A | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | - | - | 0 | - | - |

HCM 2010 TWSC
19: Five Mile Road & Springrock Collector

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 51 | 0 | 93 | 34 | 11 | 157 |
| Future Vol, veh/h | 51 | 0 | 93 | 34 | 11 | 157 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | 50 | - |
| Veh in Median Storage, # | 2 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 57 | 0 | 103 | 38 | 12 | 174 |

| Major/Minor | Minor1 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 320 | 122 | 0 | 0 | 141 | 0 |
| Stage 1 | 122 | - | - | - | - | - |
| Stage 2 | 198 | - | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 | - |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 | - |
| Pot Cap-1 Maneuver | 673 | 929 | - | - | 1442 | - |
| Stage 1 | 903 | - | - | - | - | - |
| Stage 2 | 835 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 668 | 929 | - | - | 1442 | - |
| Mov Cap-2 Maneuver | 753 | - | - | - | - | - |
| Stage 1 | 903 | - | - | - | - | - |
| Stage 2 | 828 | - | - | - | - | - |

| Approach | WB | NB | SB |
|---|---|---|---|
| HCM Control Delay, s | 10.2 | 0 | 0.5 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NBT | NBR | WBLn1 | SBL | SBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 753 | 1442 | - |
| HCM Lane V/C Ratio | - | - | 0.075 | 0.008 | - |
| HCM Control Delay (s) | - | - | 10.2 | 7.5 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.2 | 0 | - |

HCM 2010 TWSC
20: Five Mile Road & Access F/Access G

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | ↰ | ↱ | | ↰ | ↱ | |
| Traffic Vol, veh/h | 32 | 0 | 0 | 0 | 0 | 12 | 1 | 83 | 0 | 21 | 134 | 53 |
| Future Vol, veh/h | 32 | 0 | 0 | 0 | 0 | 12 | 1 | 83 | 0 | 21 | 134 | 53 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 0 | 0 | 0 | 0 | 13 | 1 | 92 | 0 | 23 | 149 | 59 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 326 | 319 | 179 | 319 | 348 | 92 | 208 | 0 | 0 | 92 | 0 | 0 |
| Stage 1 | 225 | 225 | - | 94 | 94 | - | - | - | - | - | - | - |
| Stage 2 | 101 | 94 | - | 225 | 254 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 627 | 598 | 864 | 634 | 576 | 965 | 1363 | - | - | 1503 | - | - |
| Stage 1 | 778 | 718 | - | 913 | 817 | - | - | - | - | - | - | - |
| Stage 2 | 905 | 817 | - | 778 | 697 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 611 | 588 | 864 | 626 | 567 | 965 | 1363 | - | - | 1503 | - | - |
| Mov Cap-2 Maneuver | 650 | 605 | - | 657 | 591 | - | - | - | - | - | - | - |
| Stage 1 | 777 | 707 | - | 912 | 816 | - | - | - | - | - | - | - |
| Stage 2 | 892 | 816 | - | 766 | 687 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10.9 | 8.8 | 0.1 | 0.8 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1363 | - | - | 650 | 965 | 1503 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.055 | 0.014 | 0.016 | - | - |
| HCM Control Delay (s) | 7.6 | - | - | 10.9 | 8.8 | 7.4 | - | - |
| HCM Lane LOS | A | - | - | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0 | 0 | - | - |

HCM 2010 TWSC
21: Access H/Access I & Five Mile Road

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | ↰ | ↱ | | ↰ | ↱ | |
| Traffic Vol, veh/h | 35 | 0 | 0 | 0 | 0 | 7 | 1 | 41 | 0 | 11 | 64 | 59 |
| Future Vol, veh/h | 35 | 0 | 0 | 0 | 0 | 7 | 1 | 41 | 0 | 11 | 64 | 59 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | 50 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 1 | - | - | 1 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 39 | 0 | 0 | 0 | 0 | 8 | 1 | 46 | 0 | 12 | 71 | 66 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 180 | 176 | 104 | 176 | 209 | 46 | 137 | 0 | 0 | 46 | 0 | 0 |
| Stage 1 | 128 | 128 | - | 48 | 48 | - | - | - | - | - | - | - |
| Stage 2 | 52 | 48 | - | 128 | 161 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 782 | 717 | 951 | 786 | 688 | 1023 | 1447 | - | - | 1562 | - | - |
| Stage 1 | 876 | 790 | - | 965 | 855 | - | - | - | - | - | - | - |
| Stage 2 | 961 | 855 | - | 876 | 765 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 771 | 711 | 951 | 781 | 682 | 1023 | 1447 | - | - | 1562 | - | - |
| Mov Cap-2 Maneuver | 763 | 692 | - | 767 | 671 | - | - | - | - | - | - | - |
| Stage 1 | 875 | 784 | - | 964 | 854 | - | - | - | - | - | - | - |
| Stage 2 | 953 | 854 | - | 869 | 759 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 10 | 8.5 | 0.2 | 0.6 |
| HCM LOS | B | A | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1447 | - | - | 763 | 1023 | 1562 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.051 | 0.008 | 0.008 | - | - |
| HCM Control Delay (s) | 7.5 | - | - | 10 | 8.5 | 7.3 | - | - |
| HCM Lane LOS | A | - | - | B | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0 | 0 | - | - |

HCM 2010 TWSC
22: Springrock Collector/School Access & Tenmile Creek Road

2025 Total - Access
PM Peak Hour

| Intersection | |
|---|---|
| Int Delay, s/veh | 3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 163 | 0 | 51 | 403 | 20 | 0 | 0 | 37 | 34 | 0 | 69 |
| Future Vol, veh/h | 25 | 163 | 0 | 51 | 403 | 20 | 0 | 0 | 37 | 34 | 0 | 69 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 50 | - | - | 50 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 1 | - | - | 1 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 28 | 181 | 0 | 57 | 448 | 22 | 0 | 0 | 41 | 38 | 0 | 77 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 470 | 0 | 0 | 181 | 0 | 0 | 849 | 821 | 181 | 831 | 810 | 459 |
| Stage 1 | - | - | - | - | - | - | 237 | 237 | - | 573 | 573 | - |
| Stage 2 | - | - | - | - | - | - | 612 | 584 | - | 258 | 237 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1092 | - | - | 1394 | - | - | 281 | 309 | 862 | 289 | 314 | 602 |
| Stage 1 | - | - | - | - | - | - | 766 | 709 | - | 505 | 504 | - |
| Stage 2 | - | - | - | - | - | - | 480 | 498 | - | 747 | 709 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1092 | - | - | 1394 | - | - | 233 | 289 | 862 | 262 | 293 | 602 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 314 | 369 | - | 369 | 379 | - |
| Stage 1 | - | - | - | - | - | - | 746 | 691 | - | 492 | 483 | - |
| Stage 2 | - | - | - | - | - | - | 402 | 478 | - | 693 | 691 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 1.1 | 0.8 | 9.4 | 14.4 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 862 | 1092 | - | - | 1394 | - | - | 498 |
| HCM Lane V/C Ratio | 0.048 | 0.025 | - | - | 0.041 | - | - | 0.23 |
| HCM Control Delay (s) | 9.4 | 8.4 | - | - | 7.7 | - | - | 14.4 |
| HCM Lane LOS | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0.1 | - | - | 0.1 | - | - | 0.9 |

# APPENDIX F: INTERNAL CAPTURE TRIPS WORKSHEETS

| NCHRP 684 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Springrock Subdivision | **Organization:** | CR Engineering, Inc. |
| **Project Location:** | Ada County, Idaho | **Performed By:** | Brandon Atchley |
| **Scenario Description:** | Phase 1 | **Date:** | 09-May-19 |
| **Analysis Year:** | 2025 | **Checked By:** | |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips[3] | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 10 | TSF | 19 | 16 | 3 |
| Retail | | | TSF | 0 | | |
| Restaurant | 931 | 6 | TSF | 4 | 3 | 1 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 210 (220) | 757 (136) | DU | 606 | 150 | 456 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | Other | -- | -- | 457 | 246 | 211 |
| | | | | 1,086 | 415 | 671 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ.[4] | % Transit | % Non-Motorized | Veh. Occ.[4] | % Transit | % Non-Motorized |
| Office | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Retail | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Restaurant | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Cinema/Entertainment | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Residential | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Hotel | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| All Other Land Uses[2] | 1.00 | 0% | 0% | 1.00 | 0% | 0% |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 1 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 0 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 0 | 0 | 1 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 1,086 | 415 | 671 |
| Internal Capture Percentage | 0% | 0% | 0% |
| | | | |
| External Vehicle-Trips[5] | 1,082 | 413 | 669 |
| External Transit-Trips[6] | 0 | 0 | 0 |
| External Non-Motorized Trips[6] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 0% | 33% |
| Retail | N/A | N/A |
| Restaurant | 67% | 0% |
| Cinema/Entertainment | N/A | N/A |
| Residential | 0% | 0% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

| NCHRP 684 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Springrock Subdivision | **Organization:** | CR Engineering, Inc. |
| **Project Location:** | Ada County, Idaho | **Performed By:** | Brandon Atchley |
| **Scenario Description:** | Phase 1 | **Date:** | 09-May-19 |
| **Analysis Year:** | 2025 | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips[3] | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 10 | TSF | 25 | 8 | 17 |
| Retail | | | TSF | 0 | | |
| Restaurant | 931 | 6 | TSF | 47 | 31 | 16 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 210 (220) | 757 (136) | DU | 787 | 496 | 291 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | Other | -- | -- | 158 | 75 | 83 |
| | | | | 1,017 | 610 | 407 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ.[4] | % Transit | % Non-Motorized | Veh. Occ.[4] | % Transit | % Non-Motorized |
| Office | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Retail | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Restaurant | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Cinema/Entertainment | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Residential | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Hotel | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| All Other Land Uses[2] | 1.00 | 0% | 0% | 1.00 | 0% | 0% |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 0 | 1 | 0 | 0 | 0 |
| Retail | 0 | | 0 | 0 | 0 | 0 |
| Restaurant | 0 | 0 | | 0 | 3 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 5 | 0 | 4 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 1,017 | 610 | 407 |
| Internal Capture Percentage | 3% | 2% | 3% |
| | | | |
| External Vehicle-Trips[5] | 991 | 597 | 394 |
| External Transit-Trips[6] | 0 | 0 | 0 |
| External Non-Motorized Trips[6] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 63% | 6% |
| Retail | N/A | N/A |
| Restaurant | 16% | 19% |
| Cinema/Entertainment | N/A | N/A |
| Residential | 1% | 3% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.
[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).
[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made
[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
[6]Person-Trips
*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

| NCHRP 684 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Springrock Subdivision | **Organization:** | CR Engineering, Inc. |
| **Project Location:** | Ada County, Idhao | **Performed By:** | Brandon Atchley |
| **Scenario Description:** | Phase 1 | **Date:** | 05-Apr-19 |
| **Analysis Year:** | 2030 | **Checked By:** | |
| **Analysis Period:** | **AM Street Peak Hour** | **Date:** | |

**Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips[3] | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 60 | TSF | 83 | 51 | 32 |
| Retail | 851 | 4 | TSF | 250 | 125 | 125 |
| Restaurant | Multi | 6, 6, 2 | TSF | 242 | 127 | 115 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 210 (220) | 1925 (252) | DU | 1,487 | 369 | 1,118 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | Other | -- | -- | 403 | 218 | 185 |
| | | | | 2,465 | 890 | 1,575 |

**Table 2-A: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ.[4] | % Transit | % Non-Motorized | Veh. Occ.[4] | % Transit | % Non-Motorized |
| Office | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Retail | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Restaurant | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Cinema/Entertainment | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Residential | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Hotel | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| All Other Land Uses[2] | 1.00 | 0% | 0% | 1.00 | 0% | 0% |

**Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-A: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 9 | 20 | 0 | 0 | 0 |
| Retail | 2 | | 16 | 0 | 7 | 0 |
| Restaurant | 7 | 10 | | 0 | 5 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 2 | 11 | 25 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-A: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 2,465 | 890 | 1,575 |
| Internal Capture Percentage | 9% | 13% | 7% |
| | | | |
| External Vehicle-Trips[5] | 2,237 | 776 | 1,461 |
| External Transit-Trips[6] | 0 | 0 | 0 |
| External Non-Motorized Trips[6] | 0 | 0 | 0 |

**Table 6-A: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 22% | 91% |
| Retail | 24% | 20% |
| Restaurant | 48% | 19% |
| Cinema/Entertainment | N/A | N/A |
| Residential | 3% | 3% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

| NCHRP 684 Internal Trip Capture Estimation Tool | | | |
|---|---|---|---|
| **Project Name:** | Springrock Subdivision | **Organization:** | CR Engineering, Inc. |
| **Project Location:** | Ada County, Idhao | **Performed By:** | Brandon Atchley |
| **Scenario Description:** | Build-Out | **Date:** | 05-Apr-19 |
| **Analysis Year:** | 2040 | **Checked By:** | |
| **Analysis Period:** | **PM Street Peak Hour** | **Date:** | |

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

| Land Use | Development Data (*For Information Only*) | | | Estimated Vehicle-Trips[3] | | |
|---|---|---|---|---|---|---|
| | ITE LUCs[1] | Quantity | Units | Total | Entering | Exiting |
| Office | 710 | 60 | TSF | 70 | 11 | 59 |
| Retail | 851 | 4 | TSF | 196 | 100 | 96 |
| Restaurant | Multi | 6, 6, 2 | TSF | 193 | 112 | 81 |
| Cinema/Entertainment | | | | 0 | | |
| Residential | 210 (220) | 1925 (252) | DU | 1,873 | 1,180 | 693 |
| Hotel | | | | 0 | | |
| All Other Land Uses[2] | Other | -- | -- | 158 | 58 | 100 |
| | | | | 2,490 | 1,461 | 1,029 |

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

| Land Use | Entering Trips | | | Exiting Trips | | |
|---|---|---|---|---|---|---|
| | Veh. Occ.[4] | % Transit | % Non-Motorized | Veh. Occ.[4] | % Transit | % Non-Motorized |
| Office | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Retail | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Restaurant | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Cinema/Entertainment | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Residential | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| Hotel | 1.00 | 0% | 0% | 1.00 | 0% | 0% |
| All Other Land Uses[2] | 1.00 | 0% | 0% | 1.00 | 0% | 0% |

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | | | | | |
| Retail | | | | | | |
| Restaurant | | | | | | |
| Cinema/Entertainment | | | | | | |
| Residential | | | | | | |
| Hotel | | | | | | |

**Table 4-P: Internal Person-Trip Origin-Destination Matrix***

| Origin (From) | Destination (To) | | | | | |
|---|---|---|---|---|---|---|
| | Office | Retail | Restaurant | Cinema/Entertainment | Residential | Hotel |
| Office | | 8 | 2 | 0 | 1 | 0 |
| Retail | 2 | | 28 | 0 | 25 | 0 |
| Restaurant | 2 | 33 | | 0 | 15 | 0 |
| Cinema/Entertainment | 0 | 0 | 0 | | 0 | 0 |
| Residential | 6 | 10 | 16 | 0 | | 0 |
| Hotel | 0 | 0 | 0 | 0 | 0 | |

**Table 5-P: Computations Summary**

| | Total | Entering | Exiting |
|---|---|---|---|
| All Person-Trips | 2,490 | 1,461 | 1,029 |
| Internal Capture Percentage | 12% | 10% | 14% |
| | | | |
| External Vehicle-Trips[5] | 2,194 | 1,313 | 881 |
| External Transit-Trips[6] | 0 | 0 | 0 |
| External Non-Motorized Trips[6] | 0 | 0 | 0 |

**Table 6-P: Internal Trip Capture Percentages by Land Use**

| Land Use | Entering Trips | Exiting Trips |
|---|---|---|
| Office | 91% | 19% |
| Retail | 51% | 57% |
| Restaurant | 41% | 62% |
| Cinema/Entertainment | N/A | N/A |
| Residential | 3% | 5% |
| Hotel | N/A | N/A |

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

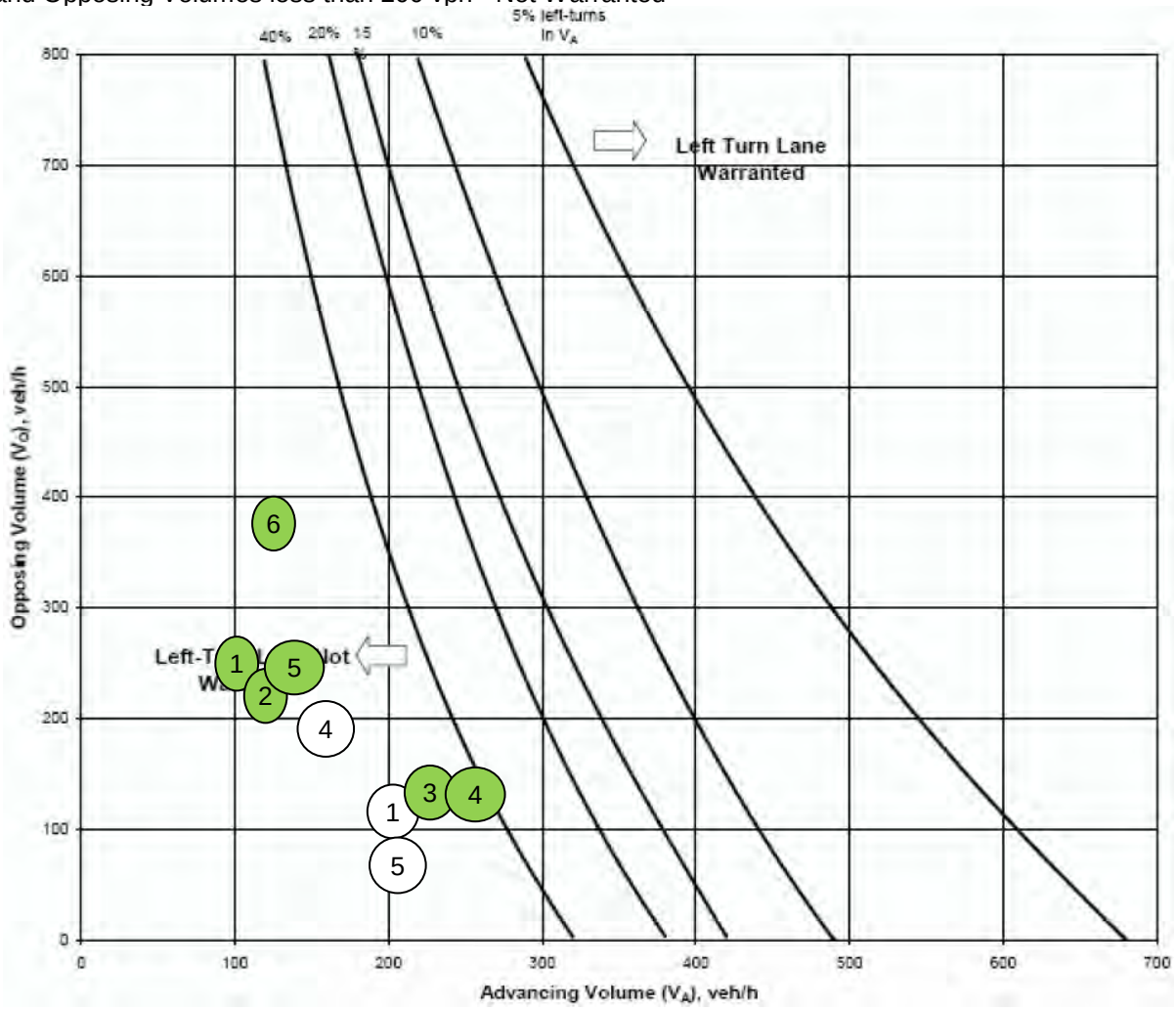
# APPENDIX G: TURN LANE WARRANT WORKSHEETS

**Springrock Subdivision**
ACHD Left-Turn Lane Analysis - Two-Lane Roadway with 50 mph or greater posted speed

**2019 Existing Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Advancing Volume (vph) | Opposing Volume (vph) | Left-Turn Volume (%) | Meet Warrant? |
|---|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | EB | 50 | AM | 204 | 112 | 4% | No |
| | | | | PM | 97 | 240 | 6% | No |
| 2 | Kuna Road & Eagle Road | EB | 50 | AM | 196 | 108 | 1% | No* |
| | | | | PM | 114 | 220 | 3% | No |
| 3 | Kuna Road & Eagle Road | WB | 50 | AM | 108 | 196 | 2% | No* |
| | | | | PM | 220 | 114 | 1% | No |
| 4 | Hubbard Road & Cloverdale Road | SB | 50 | AM | 158 | 197 | 44% | No |
| | | | | PM | 256 | 126 | 5% | No |
| 5 | Hubbard Road & Cloverdale Road | NB | 50 | AM | 202 | 88 | 2% | No |
| | | | | PM | 132 | 242 | 5% | No |
| 6 | Tenmile Creek Road & Pleasant Valley Road | NB | 50 | AM | 191 | 137 | 1% | No* |
| | | | | PM | 120 | 371 | 26% | No |

* Advancing and Opposing Volumes less than 200 vph - Not Warranted

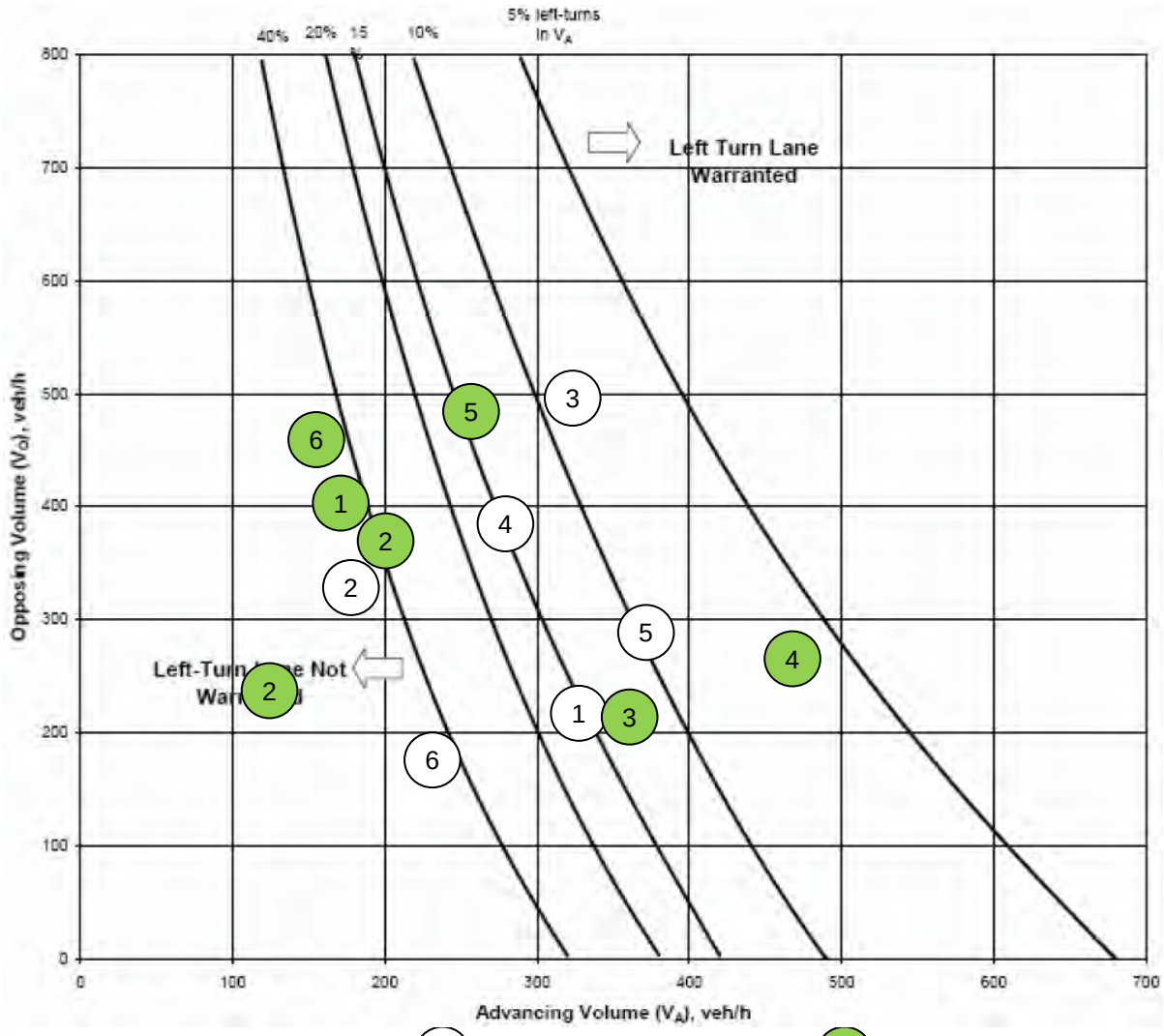



Weekday AM (1)  Weekday PM (1)

**Springrock Subdivision**
ACHD Left-Turn Lane Analysis - Two-Lane Roadway with 50 mph or greater posted speed

**2025 Background Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Advancing Volume (vph) | Opposing Volume (vph) | Left-Turn Volume (%) | Meet Warrant? |
|---|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | EB | 50 | AM | 330 | 193 | 4% | No |
| | | | | PM | 171 | 393 | 6% | No |
| 2 | Kuna Road & Eagle Road | EB | 50 | AM | 319 | 187 | 1% | No |
| | | | | PM | 199 | 361 | 3% | No |
| 3 | Kuna Road & Eagle Road | WB | 50 | AM | 187 | 319 | 2% | No |
| | | | | PM | 361 | 199 | 1% | No |
| 4 | Hubbard Road & Cloverdale Road | SB | 50 | **AM** | **279** | **378** | **40%** | **Yes** |
| | | | | PM | 474 | 247 | 5% | No |
| 5 | Hubbard Road & Cloverdale Road | NB | 50 | AM | 386 | 168 | 2% | No |
| | | | | PM | 257 | 452 | 4% | No |
| 6 | Tenmile Creek Road & Pleasant Valley Road | NB | 50 | AM | 230 | 164 | 1% | No |
| | | | | PM | 148 | 443 | 28% | No |

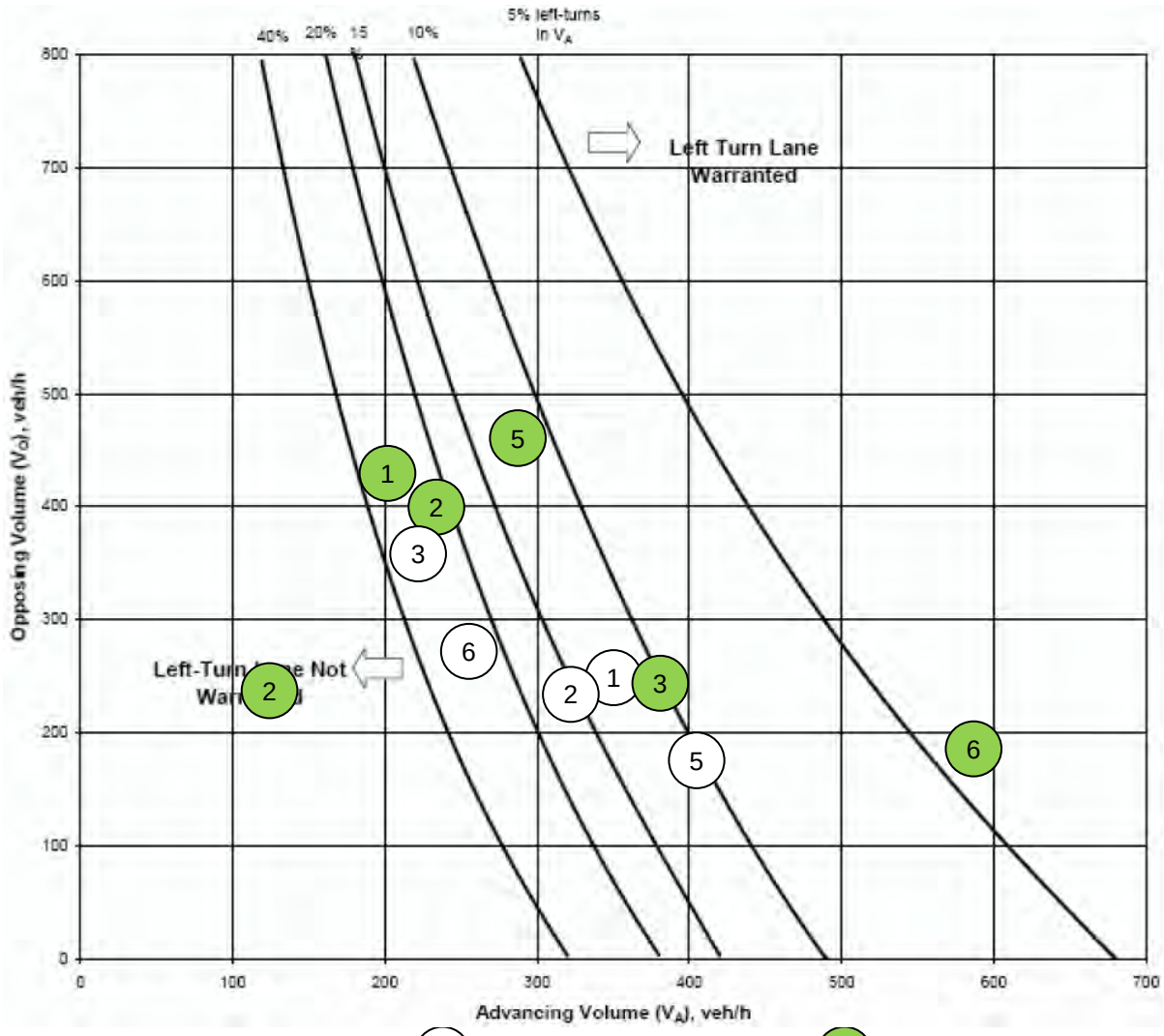



Weekday AM (1) Weekday PM (1)

**Springrock Subdivision**
ACHD Left-Turn Lane Analysis - Two-Lane Roadway with 50 mph or greater posted speed

**2025 Total Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Advancing Volume (vph) | Opposing Volume (vph) | Left-Turn Volume (%) | Meet Warrant? |
|---|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | EB | 50 | AM | 350 | 226 | 4% | No |
| | | | | PM | 200 | 413 | 5% | No |
| 2 | Kuna Road & Eagle Road | EB | 50 | AM | 339 | 220 | 1% | No |
| | | | | PM | 228 | 381 | 2% | No |
| 3 | Kuna Road & Eagle Road | WB | 50 | AM | 220 | 339 | 1% | No |
| | | | | PM | 381 | 228 | 1% | No |
| 4 | Hubbard Road & Cloverdale Road | SB | 50 | **AM** | **Satisfied Under 2025 Background Conditions** | | | |
| | | | | **PM** | | | | |
| 5 | Hubbard Road & Cloverdale Road | NB | 50 | AM | 406 | 168 | 2% | No |
| | | | | PM | 286 | 452 | 3% | No |
| 6 | Tenmile Creek Road & Pleasant Valley Road | NB | 50 | AM | 246 | 259 | 8% | No |
| | | | | **PM** | **171** | **581** | **38%** | **Yes** |

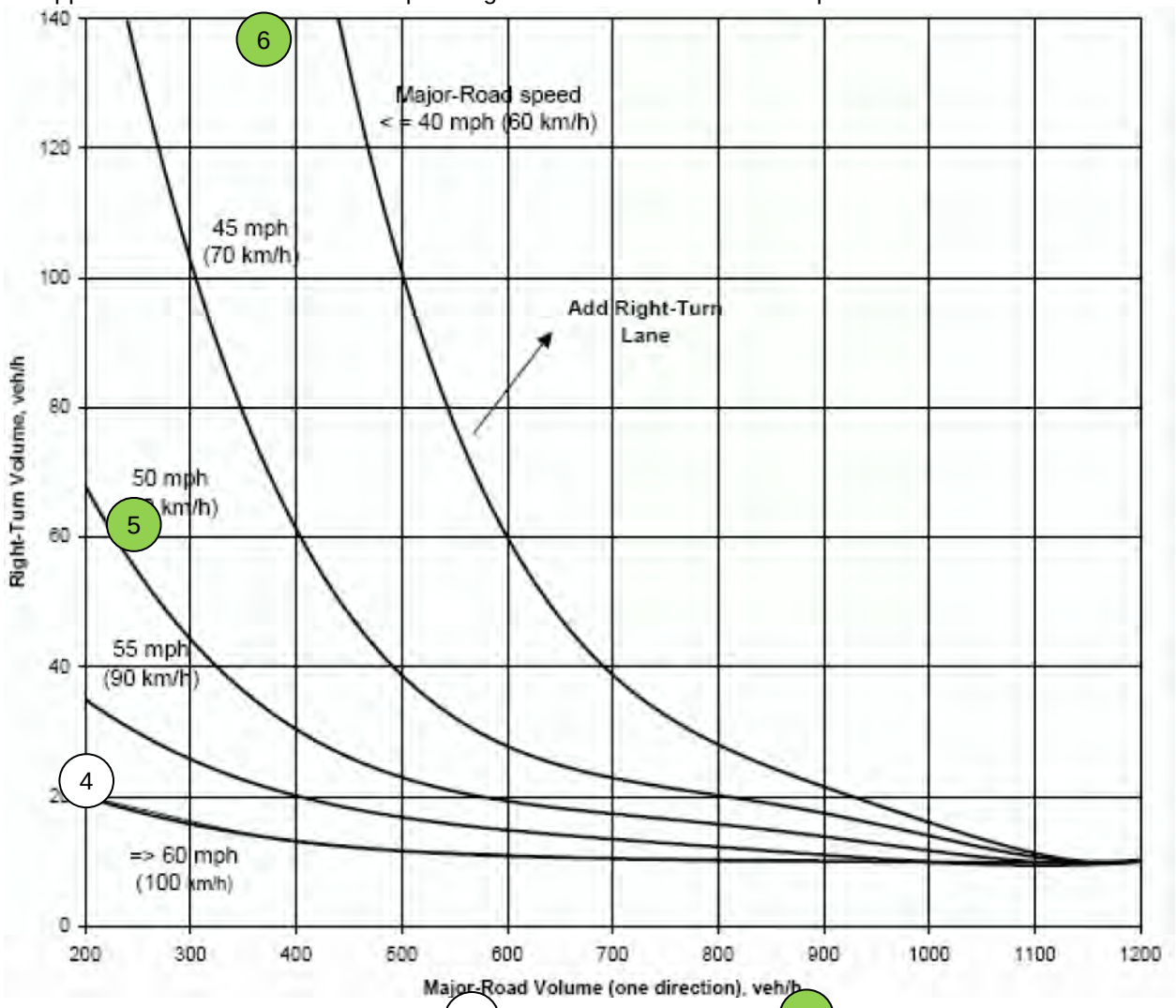


**Springrock Subdivision**
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

**2019 Existing Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Right-Turn Volume (vph) | Major Road Volume (vph) | Meet Warrant? |
|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | WB | 50 | AM | 4 | 112 | No* |
| | | | | PM | 7 | 240 | No* |
| 2 | Kuna Road & Eagle Road | WB | 50 | AM | 0 | 108 | No* |
| | | | | PM | 3 | 220 | No* |
| 3 | Kuna Road & Eagle Road | EB | 50 | AM | 14 | 196 | No* |
| | | | | PM | 17 | 114 | No* |
| 4 | Hubbard Road & Cloverdale Road | NB | 50 | AM | 19 | 202 | No |
| | | | | PM | 2 | 132 | No* |
| 5 | Hubbard Road & Cloverdale Road | SB | 50 | AM | 33 | 158 | No* |
| | | | | **PM** | **60** | **256** | **Yes** |
| 6 | Tenmile Creek Road & Pleasant Valley Road | SB | 50 | AM | 3 | 137 | No* |
| | | | | **PM** | **170** | **371** | **Yes** |

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = not warranted



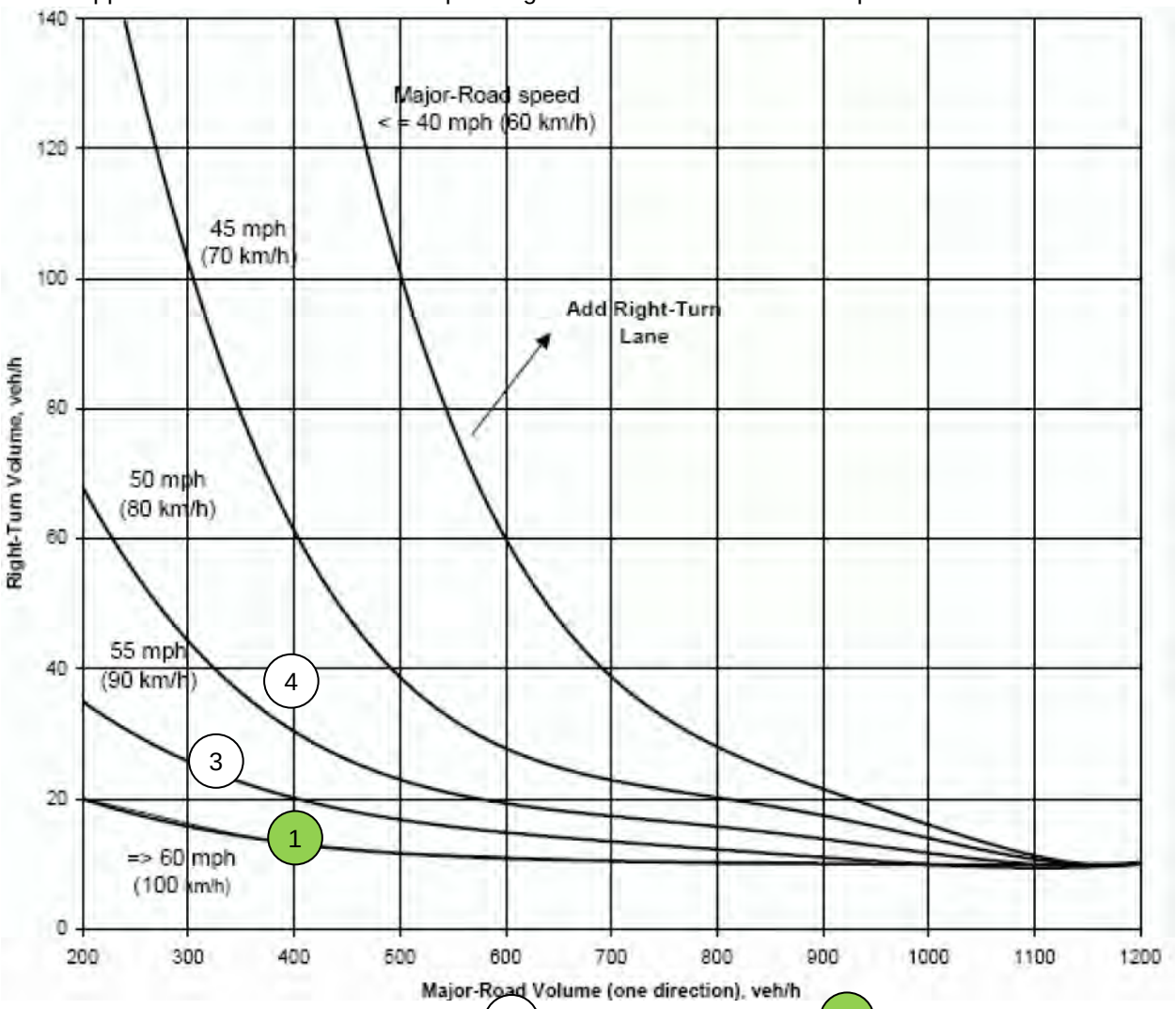

AM Peak 1 PM Peak 1

**Springrock Subdivision**
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

**2025 Background Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Right-Turn Volume (vph) | Major Road Volume (vph) | Meet Warrant? |
|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | WB | 50 | AM | 7 | 193 | No* |
| | | | | PM | 12 | 393 | No |
| 2 | Kuna Road & Eagle Road | WB | 50 | AM | 1 | 187 | No* |
| | | | | PM | 6 | 361 | No* |
| 3 | Kuna Road & Eagle Road | EB | 50 | AM | 22 | 319 | No |
| | | | | PM | 27 | 199 | No* |
| 4 | Hubbard Road & Cloverdale Road | NB | 50 | AM | **35** | **386** | **Yes** |
| | | | | PM | 7 | 257 | No* |
| 5 | Hubbard Road & Cloverdale Road | SB | 50 | AM | Met Under Existing Conditions | | |
| | | | | PM | | | |
| 6 | Tenmile Creek Road & Pleasant Valley Road | SB | 50 | AM | Met Under Existing Conditions | | |
| | | | | PM | | | |

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = not warranted



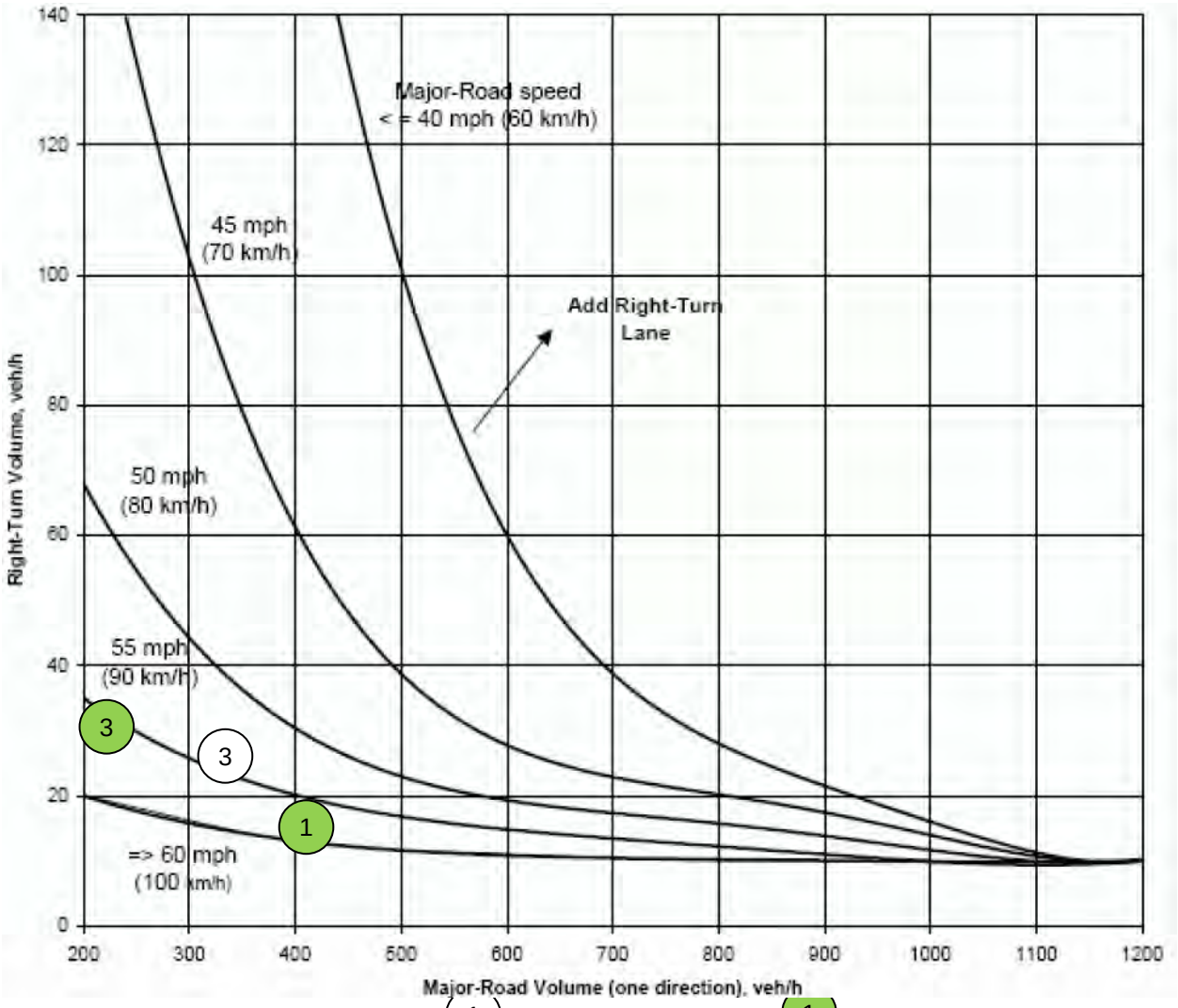

AM Peak 1 PM Peak 1

**Springrock Subdivision**
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

**2025 Total Traffic**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Right-Turn Volume (vph) | Major Road Volume (vph) | Meet Warrant? |
|---|---|---|---|---|---|---|---|
| 1 | Kuna Road & Locust Grove Road | WB | 50 | AM | 7 | 226 | No* |
| | | | | PM | 12 | 413 | No |
| 2 | Kuna Road & Eagle Road | WB | 50 | AM | 1 | 220 | No* |
| | | | | PM | 6 | 381 | No* |
| 3 | Kuna Road & Eagle Road | EB | 50 | AM | 22 | 339 | No |
| | | | | PM | 27 | 228 | No |
| 4 | Hubbard Road & Cloverdale Road | NB | 50 | AM | Met Under Background Conditions | | |
| | | | | PM | | | |
| 5 | Hubbard Road & Cloverdale Road | SB | 50 | AM | Met Under Existing Conditions | | |
| | | | | PM | | | |
| 6 | Tenmile Creek Road & Pleasant Valley Road | SB | 50 | AM | Met Under Existing Conditions | | |
| | | | | PM | | | |

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = not warranted

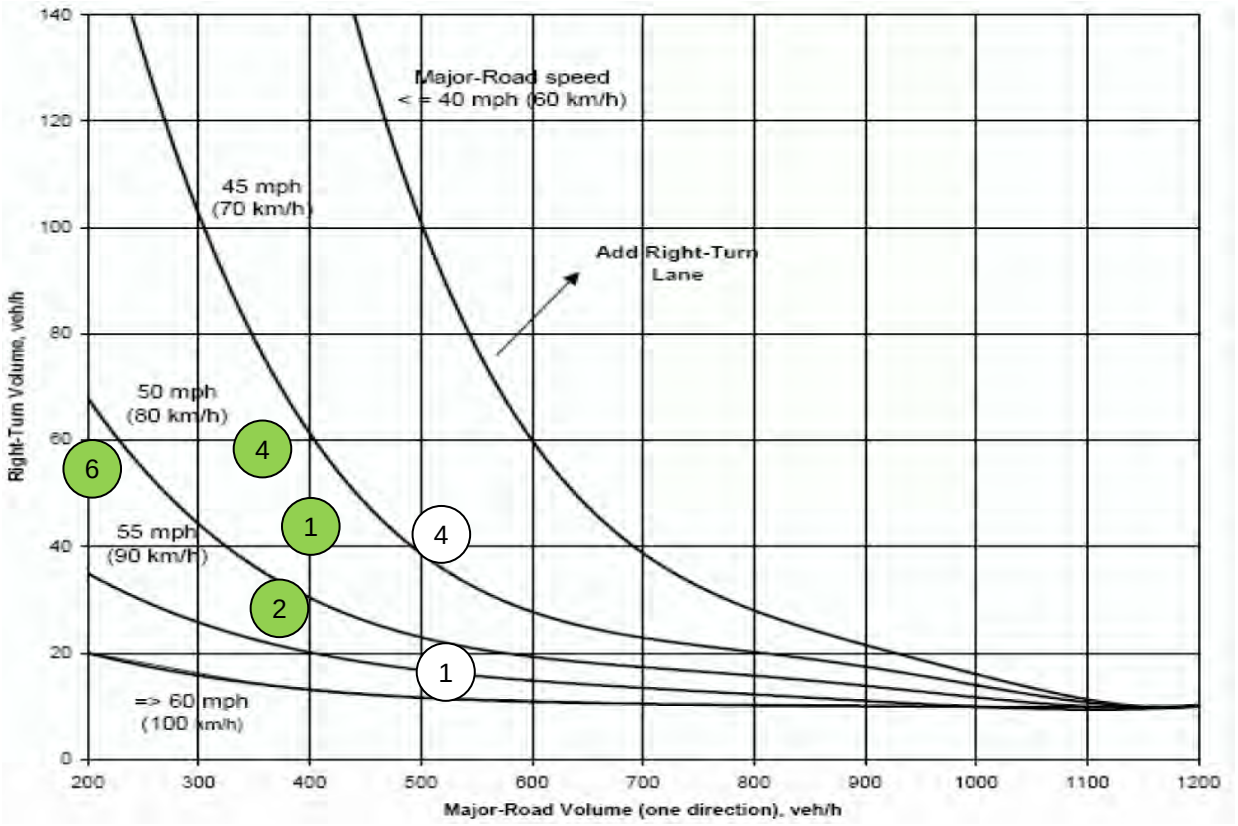


**Springrock Subdivision**
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

**2025 Total Traffic - Site Accesses**

| | Intersection | Approach | Speed Limit (mph) | Peak Hour | Right-Turn Volume (vph) | Major Road Volume (vph) | Meet Warrant? |
|---|---|---|---|---|---|---|---|
| 1 | Access A (Int #15) and Five Mile Rd | SB | 35 | AM | 13 | 513 | No |
| | | | | PM | 41 | 397 | No |
| 2 | Access B (Int #16) and Five Mile Rd | SB | 35 | AM | 9 | 517 | No* |
| | | | | PM | 26 | 366 | No |
| 3 | Internal Collector and Five Mile Rd (Int #17) | NB | 35 | AM | 49 | 196 | No* |
| | | | | PM | 34 | 127 | No* |
| 4 | Access D (Int #19) and Five Mile Rd | SB | 35 | AM | 17 | 70 | No* |
| | | | | PM | 53 | 208 | No |
| 5 | Access E (Int #19) and Five Mile Rd | NB | 35 | AM | 0 | 126 | No* |
| | | | | PM | 0 | 84 | No* |
| 6 | Access F (Int #20) and Five Mile Rd | SB | 35 | AM | 19 | 47 | No* |
| | | | | PM | 59 | 134 | No* |
| 7 | Access G (Int #20) and Five Mile Rd | NB | 35 | AM | 0 | 60 | No* |
| | | | | PM | 0 | 42 | No* |
| 8 | Access H (Int #21) and Five Mile Rd | SB | 35 | AM | 19 | 25 | No* |
| | | | | PM | 60 | 64 | No* |
| 9 | Internal Collector and 10Mile Crk Rd (Int #22) | EB | 35 | AM | 2 | 413 | No* |
| | | | | PM | 6 | 96 | No* |

*Total approach volume less than 200 vph or right-turn volume less than 10 vph = not warranted




AM Peak (1) PM Peak (1)

# APPENDIX H: SIGNAL WARRANT WORKSHEETS

# PRELIMINARY TRAFFIC SIGNAL WARRANTS ANALYSIS SUMMARY

**Intersection:** Columbia Road & Cloverdale Road
**Within Isolated Community or Major Street Speed Exceeds 40 mph:** Yes
**Traffic Conditions:** 2025 Background

## Major Street Information

**Major Street Name:** Cloverdale Road
**Approach Direction:** Northbound-Southbound
**Number of Lanes for Moving Traffic on Each Approach:** 1 lane
**Posted Speed Limit:** 50 mph
**Total Approach Volume:** 9,990 vpd

## Minor Street Information

**Minor Street Name:** Columbia Road
**Approach Direction:** Eastbound-Westbound
**Number of Lanes for Moving Traffic on Each Approach:** 1 lane
**Posted Speed Limit:** 50 mph
**Higher Minor Approach Volume:** 2,970 vpd

## Traffic Signal Warrant Analysis Findings

| Warrants | Applicable? | Warrant Met? |
|---|---|---|
| Warrant 1, Eight-Hour Vehicular Volume | Yes | Yes |
| Warrant 2, Four-Hour Vehicular Volume | Yes | Yes |
| Warrant 3, Peak Hour | No | na |
| Warrant 4, Pedestrian Volume | No | na |
| Warrant 5, School Crossing | No | na |
| Warrant 6, Coordinated Signal System | No | na |
| Warrant 7, Crash Experience | No | na |
| Warrant 8, Roadway Network | No | na |
| Warrant 9, Intersection Near a Grade Crossing | No | na |

| 2025 Build-Out Year Background Traffic Volume | | |
|---|---|---|
| | Cloverdale Road (Major Street) | Columbia Road (Minor Street) |
| Hour Interval Begin | Combined Volume (vph) | Higher Approach Volume (vph) |
| 00:00 | 37 | 11 |
| 01:00 | 35 | 8 |
| 02:00 | 22 | 9 |
| 03:00 | 24 | 5 |
| 04:00 | 48 | 14 |
| 05:00 | 193 | 64 |
| 06:00 | 530 | 172 |
| 07:00 | 657 | 262 |
| 08:00 | 491 | 205 |
| 09:00 | 461 | 159 |
| 10:00 | 466 | 152 |
| 11:00 | 525 | 148 |
| 12:00 | 541 | 162 |
| 13:00 | 526 | 173 |
| 14:00 | 646 | 167 |
| 15:00 | 739 | 190 |
| 16:00 | 904 | 229 |
| 17:00 | 981 | 249 |
| 18:00 | 701 | 175 |
| 19:00 | 482 | 130 |
| 20:00 | 447 | 124 |
| 21:00 | 290 | 82 |
| 22:00 | 168 | 55 |
| 23:00 | 79 | 22 |
| Total | 9,993 | 2,967 |

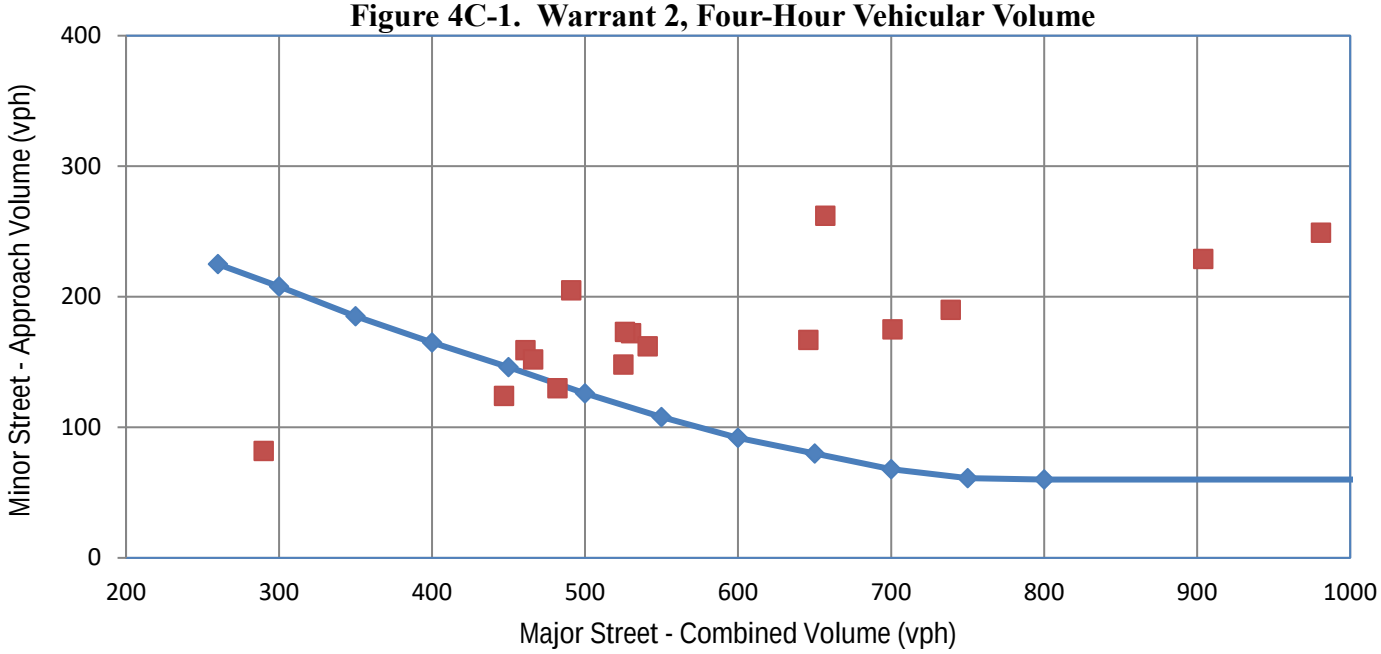
**Warrant 1, Eight-Hour Vehicular Volume**

| Hour Interval Begin | Cloverdale Road (Major Street) Combined Volume (vph) | Columbia Road (Minor Street) Higher Approach Volume (vph) | Hour Satisfied? Condition A | Condition B |
|---|---|---|---|---|
| 00:00 | 37 | 11 | Not Satisfied | Not Satisfied |
| 01:00 | 35 | 8 | Not Satisfied | Not Satisfied |
| 02:00 | 22 | 9 | Not Satisfied | Not Satisfied |
| 03:00 | 24 | 5 | Not Satisfied | Not Satisfied |
| 04:00 | 48 | 14 | Not Satisfied | Not Satisfied |
| 05:00 | 193 | 64 | Not Satisfied | Not Satisfied |
| 06:00 | 530 | 172 | Satisfied | Satisfied |
| 07:00 | 657 | 262 | Satisfied | Satisfied |
| 08:00 | 491 | 205 | Satisfied | Not Satisfied |
| 09:00 | 461 | 159 | Satisfied | Not Satisfied |
| 10:00 | 466 | 152 | Satisfied | Not Satisfied |
| 11:00 | 525 | 148 | Satisfied | Satisfied |
| 12:00 | 541 | 162 | Satisfied | Satisfied |
| 13:00 | 526 | 173 | Satisfied | Satisfied |
| 14:00 | 646 | 167 | Satisfied | Satisfied |
| 15:00 | 739 | 190 | Satisfied | Satisfied |
| 16:00 | 904 | 229 | Satisfied | Satisfied |
| 17:00 | 981 | 249 | Satisfied | Satisfied |
| 18:00 | 701 | 175 | Satisfied | Satisfied |
| 19:00 | 482 | 130 | Satisfied | Not Satisfied |
| 20:00 | 447 | 124 | Satisfied | Not Satisfied |
| 21:00 | 290 | 82 | Not Satisfied | Not Satisfied |
| 22:00 | 168 | 55 | Not Satisfied | Not Satisfied |
| 23:00 | 79 | 22 | Not Satisfied | Not Satisfied |
| | | **Number of Hours Satisfied** | **15** | **10** |
| | | **Warrant 1 Met?** | **Yes** | |

| Warrant 2, Four-Hour Vehicular Volume | | | |
|---|---|---|---|
| | Cloverdale Road (Major Street) | Columbia Road (Minor Street) | |
| Hour Interval Begin | Combined Volume (vph) | Higher Approach Volume (vph) | Hour Satisfied? |
| 00:00 | 37 | 11 | Not Satisfied |
| 01:00 | 35 | 8 | Not Satisfied |
| 02:00 | 22 | 9 | Not Satisfied |
| 03:00 | 24 | 5 | Not Satisfied |
| 04:00 | 48 | 14 | Not Satisfied |
| 05:00 | 193 | 64 | Not Satisfied |
| 06:00 | 530 | 172 | Satisfied |
| 07:00 | 657 | 262 | Satisfied |
| 08:00 | 491 | 205 | Satisfied |
| 09:00 | 461 | 159 | Satisfied |
| 10:00 | 466 | 152 | Satisfied |
| 11:00 | 525 | 148 | Satisfied |
| 12:00 | 541 | 162 | Satisfied |
| 13:00 | 526 | 173 | Satisfied |
| 14:00 | 646 | 167 | Satisfied |
| 15:00 | 739 | 190 | Satisfied |
| 16:00 | 904 | 229 | Satisfied |
| 17:00 | 981 | 249 | Satisfied |
| 18:00 | 701 | 175 | Satisfied |
| 19:00 | 482 | 130 | Not Satisfied |
| 20:00 | 447 | 124 | Not Satisfied |
| 21:00 | 290 | 82 | Not Satisfied |
| 22:00 | 168 | 55 | Not Satisfied |
| 23:00 | 79 | 22 | Not Satisfied |

| | |
|---|---|
| **Number of Hours Satisfied** | **13** |
| **Warrant 2 Met?** | **Yes** |
| **Within isolated community or major roadway speed exceeds 40 mph?** | **Yes** |

**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



# PRELIMINARY TRAFFIC SIGNAL WARRANTS ANALYSIS SUMMARY

**Intersection:** Hubbard Road & Cloverdale Road
**Within Isolated Community or Major Street Speed Exceeds 40 mph:** Yes
**Traffic Conditions:** 2025 Background

## Major Street Information

**Major Street Name:** Cloverdale Road
**Approach Direction:** Northbound-Southbound
**Number of Lanes for Moving Traffic on Each Approach:** 1 lane
**Posted Speed Limit:** 50 mph
**Total Approach Volume:** 9,460 vpd

## Minor Street Information

**Minor Street Name:** Hubbard Road
**Approach Direction:** Eastbound-Westbound
**Number of Lanes for Moving Traffic on Each Approach:** 1 lane
**Posted Speed Limit:** 50 mph
**Higher Minor Approach Volume:** 2,450 vpd

## Traffic Signal Warrant Analysis Findings

| Warrants | Applicable? | Warrant Met? |
|---|---|---|
| Warrant 1, Eight-Hour Vehicular Volume | Yes | Yes |
| Warrant 2, Four-Hour Vehicular Volume | Yes | Yes |
| Warrant 3, Peak Hour | No | na |
| Warrant 4, Pedestrian Volume | No | na |
| Warrant 5, School Crossing | No | na |
| Warrant 6, Coordinated Signal System | No | na |
| Warrant 7, Crash Experience | No | na |
| Warrant 8, Roadway Network | No | na |
| Warrant 9, Intersection Near a Grade Crossing | No | na |

| 2025 Build-Out Year Background Traffic Volume | | |
|---|---|---|
| | Cloverdale Road (Major Street) | Hubbard Road (Minor Street) |
| Hour Interval Begin | Combined Volume (vph) | Higher Approach Volume (vph) |
| 00:00 | 46 | 2 |
| 01:00 | 25 | 4 |
| 02:00 | 29 | 4 |
| 03:00 | 33 | 5 |
| 04:00 | 73 | 16 |
| 05:00 | 283 | 66 |
| 06:00 | 582 | 182 |
| 07:00 | 785 | 276 |
| 08:00 | 573 | 158 |
| 09:00 | 480 | 74 |
| 10:00 | 463 | 84 |
| 11:00 | 509 | 114 |
| 12:00 | 538 | 111 |
| 13:00 | 565 | 127 |
| 14:00 | 557 | 151 |
| 15:00 | 633 | 181 |
| 16:00 | 750 | 313 |
| 17:00 | 750 | 347 |
| 18:00 | 572 | 112 |
| 19:00 | 421 | 35 |
| 20:00 | 345 | 34 |
| 21:00 | 226 | 24 |
| 22:00 | 131 | 20 |
| 23:00 | 87 | 7 |
| Total | 9,456 | 2,447 |

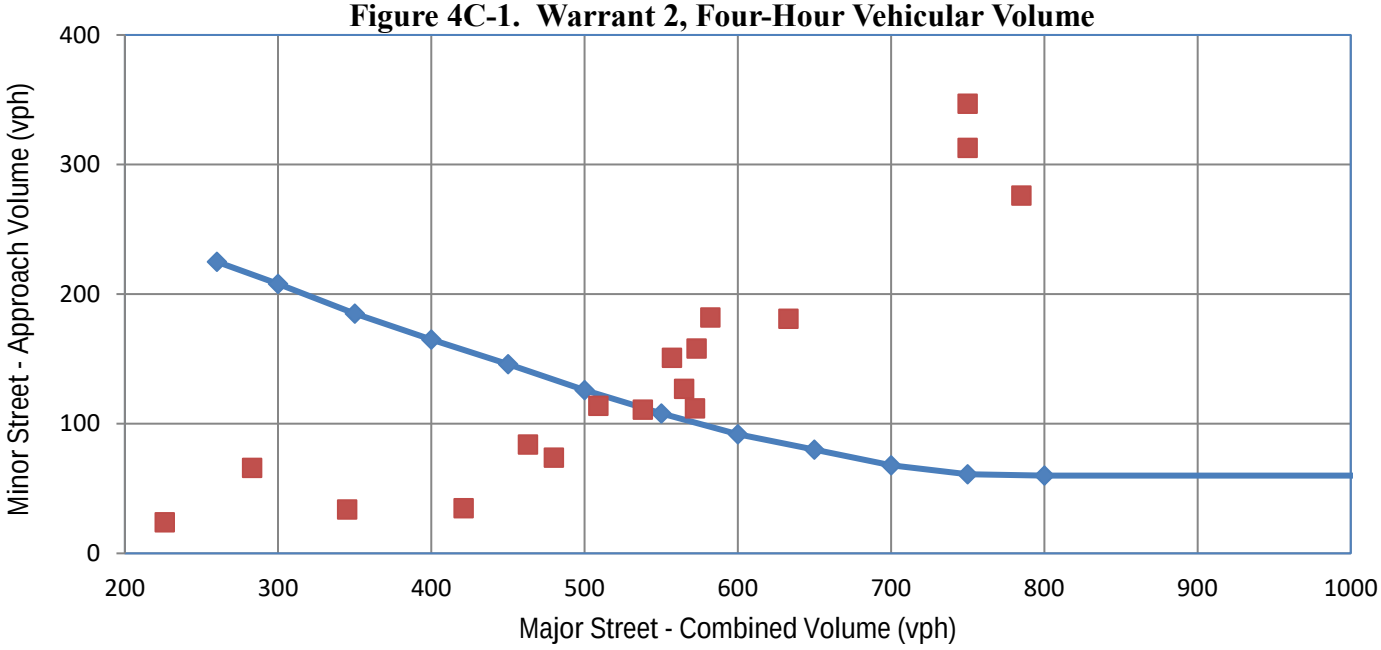
## Warrant 1, Eight-Hour Vehicular Volume

| Hour Interval Begin | Cloverdale Road (Major Street) Combined Volume (vph) | Hubbard Road (Minor Street) Higher Approach Volume (vph) | Hour Satisfied? Condition A | Condition B |
|---|---|---|---|---|
| 00:00 | 46 | 2 | Not Satisfied | Not Satisfied |
| 01:00 | 25 | 4 | Not Satisfied | Not Satisfied |
| 02:00 | 29 | 4 | Not Satisfied | Not Satisfied |
| 03:00 | 33 | 5 | Not Satisfied | Not Satisfied |
| 04:00 | 73 | 16 | Not Satisfied | Not Satisfied |
| 05:00 | 283 | 66 | Not Satisfied | Not Satisfied |
| 06:00 | 582 | 182 | Satisfied | Satisfied |
| 07:00 | 785 | 276 | Satisfied | Satisfied |
| 08:00 | 573 | 158 | Satisfied | Satisfied |
| 09:00 | 480 | 74 | Not Satisfied | Not Satisfied |
| 10:00 | 463 | 84 | Not Satisfied | Not Satisfied |
| 11:00 | 509 | 114 | Satisfied | Not Satisfied |
| 12:00 | 538 | 111 | Satisfied | Satisfied |
| 13:00 | 565 | 127 | Satisfied | Satisfied |
| 14:00 | 557 | 151 | Satisfied | Satisfied |
| 15:00 | 633 | 181 | Satisfied | Satisfied |
| 16:00 | 750 | 313 | Satisfied | Satisfied |
| 17:00 | 750 | 347 | Satisfied | Satisfied |
| 18:00 | 572 | 112 | Satisfied | Satisfied |
| 19:00 | 421 | 35 | Not Satisfied | Not Satisfied |
| 20:00 | 345 | 34 | Not Satisfied | Not Satisfied |
| 21:00 | 226 | 24 | Not Satisfied | Not Satisfied |
| 22:00 | 131 | 20 | Not Satisfied | Not Satisfied |
| 23:00 | 87 | 7 | Not Satisfied | Not Satisfied |
| | | **Number of Hours Satisfied** | **11** | **10** |
| | | **Warrant 1 Met?** | **Yes** | |

| Warrant 2, Four-Hour Vehicular Volume | | | |
|---|---|---|---|
| | Cloverdale Road (Major Street) | Hubbard Road (Minor Street) | |
| Hour Interval Begin | Combined Volume (vph) | Higher Approach Volume (vph) | Hour Satisfied? |
| 00:00 | 46 | 2 | Not Satisfied |
| 01:00 | 25 | 4 | Not Satisfied |
| 02:00 | 29 | 4 | Not Satisfied |
| 03:00 | 33 | 5 | Not Satisfied |
| 04:00 | 73 | 16 | Not Satisfied |
| 05:00 | 283 | 66 | Not Satisfied |
| 06:00 | 582 | 182 | Not Satisfied |
| 07:00 | 785 | 276 | Satisfied |
| 08:00 | 573 | 158 | Satisfied |
| 09:00 | 480 | 74 | Not Satisfied |
| 10:00 | 463 | 84 | Not Satisfied |
| 11:00 | 509 | 114 | Not Satisfied |
| 12:00 | 538 | 111 | Not Satisfied |
| 13:00 | 565 | 127 | Satisfied |
| 14:00 | 557 | 151 | Satisfied |
| 15:00 | 633 | 181 | Satisfied |
| 16:00 | 750 | 313 | Satisfied |
| 17:00 | 750 | 347 | Satisfied |
| 18:00 | 572 | 112 | Satisfied |
| 19:00 | 421 | 35 | Not Satisfied |
| 20:00 | 345 | 34 | Not Satisfied |
| 21:00 | 226 | 24 | Not Satisfied |
| 22:00 | 131 | 20 | Not Satisfied |
| 23:00 | 87 | 7 | Not Satisfied |

| | |
|---|---|
| **Number of Hours Satisfied** | **8** |
| **Warrant 2 Met?** | **Yes** |
| **Within isolated community or major roadway speed exceeds 40 mph?** | **Yes** |

**Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume**



# City of Kuna

## P&Z Findings of Fact & Conclusions of Law

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
**Kunacity.id.gov**

**To:** Planning and Zoning Commission

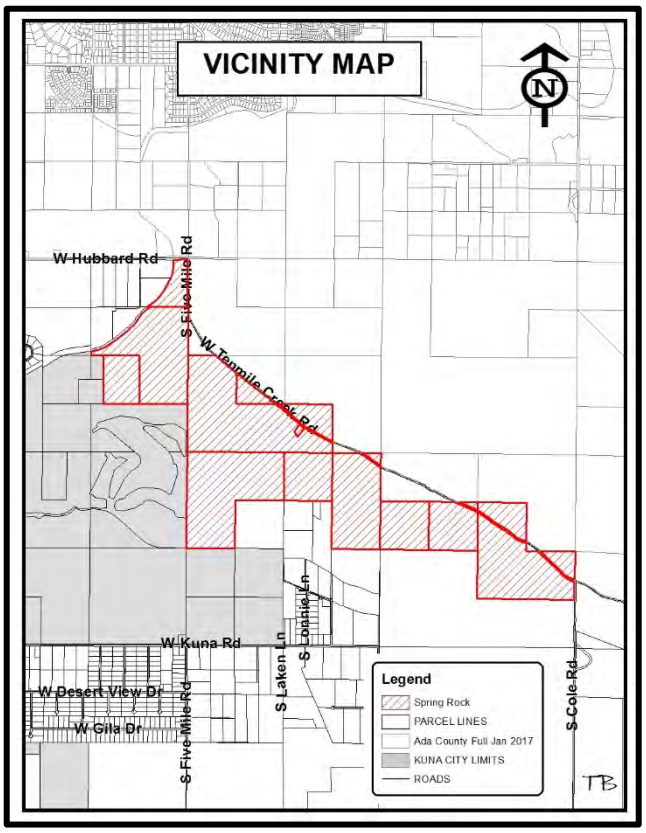
**Case Numbers:** 19-10-AN (Annex), 19-01-PUD (Planned Unit Development), 19-06-S (Subdivision), 19-23-DR (Design Review) & a Development Agreement for the: *Spring Rock Subdivision*

**Location:** Southwest Corner (SEC) of Hubbard and Kay Ave. Roads, Kuna, Idaho 83634

**Planner:** Troy Behunin, Planner III

**Hearing Date:** *January 14, 2020* ***and*** *January 28, 2020*

*Findings of Fact:* *February 11, 2020*




**Applicant(s):** ***Dave Yorgason***
Ten Mile Creek, LLC
Boise, ID 83706
208.850.1070
dyorgason6@gmail.com

**Engineer:** ***David Powell***
Riveridge Engineers
2447 S. Vista Ave.
Boise, ID 83705
208.344.1180
dpowell@rvrdg.com

**Table of Contents:**

A. Process and Noticing
B. Applicants Request
C. Site History
D. General Project Facts
E. Staff Analysis
F. Applicable Standards
G. Comprehensive Plan Analysis
H. Kuna City Code Analysis
I. Commission's Recommendation to the City Council
J. Recommended Conditions of Approval

### A. Process and Noticing:

1. Kuna City Code (KCC), Title 1, Chapter 14, Section 3, states that design reviews are designated as *public meetings*, with the Planning and Zoning Commission (acting as the Design Review Board) as the decision-making body; and that annexations, PUD's and subdivision applications are designated as *public hearings*, with the Planning and Zoning Commission as the recommending body, and the City Council as the decision-making body. These land use applications were given proper public notice and have followed the requirements set forth in Idaho Code, Chapter 65, Local Land Use Planning Act (LLUPA).

**a. Notifications**

| | | |
|---|---|---|
| **i.** | Neighborhood Meeting | June 24, 2019 (Fifteen persons attended) |
| **ii.** | Agencies | August 2, 2019 |
| **iii.** | 800' Property Owners | December 20, 2019 |
| **iv.** | Kuna, Melba Newspaper | December 12, 2019 and January 8, 2020 |

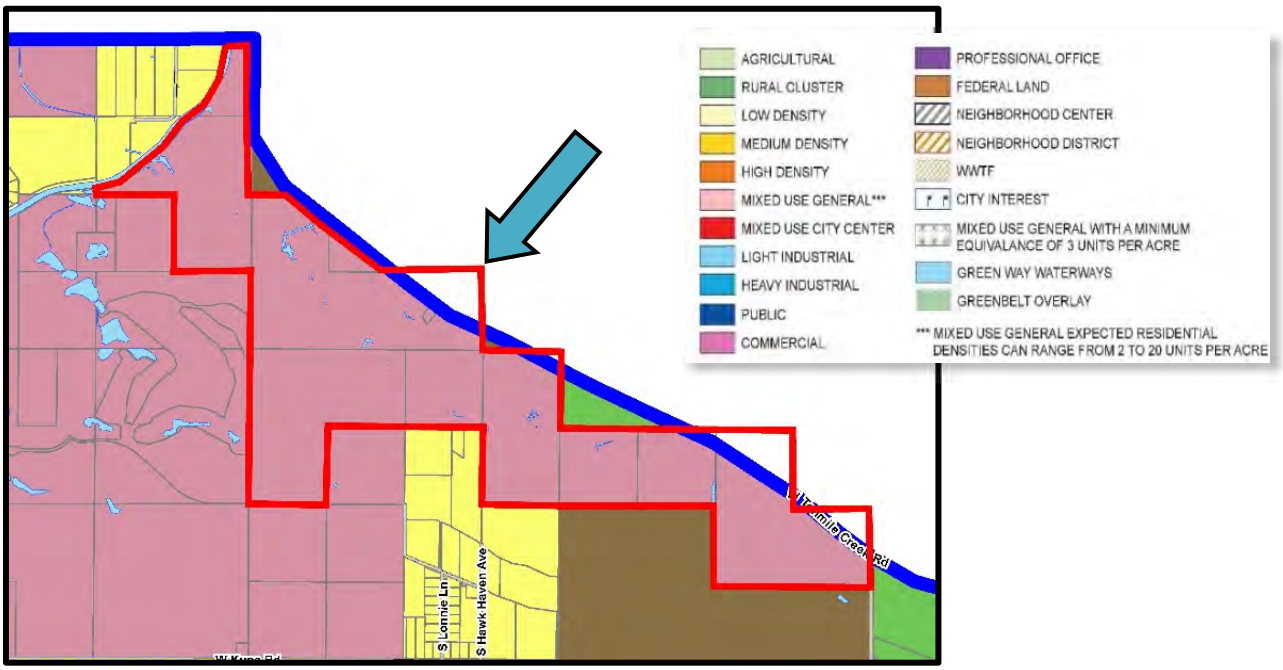
**B. Applicant Request:**

1. The applicant, Ten Mile Creek, LLC, requests approval for Annexation**,** Planned Unit Development (PUD), Preliminary Plat, Development Agreement and Design Review. Applicant requests to annex approximately 761 ac. into Kuna City limits, with a variety of zones throughout the project; including R-6 (Medium Density Residential), R-12 (High Density Residential), R-20 (High Density Residential), C-1 (Neighborhood Commercial) and the C-2 (Area Commercial) zones. This is a multi-phased, Master-Planned Development proposing *up to* 2,274 dwelling units (Single Family [1,886] and Multi-Family [388]). Applicant requests Preliminary Plat approval in order to subdivide approximately 477 of the 761.44 acres into 757 Single family and 136 Multi-family lots, 34 common lots, 7 commercial lots, one school lot and two public facility lots. The remaining lands (approx. 284 ac.) will be developed in the future with separate applications. The project site is in Sections 14, 15, 23 & 24, all in T2N, R1E, near the northeast corner of Cloverdale and Kuna Roads.

**C. Site History:** The subject site is comprised of multiple parcels; totaling approximately 761.50 acres. All parcels are currently in Ada County and zoned Rural Residential (RR), however, they are contiguous to Kuna City limits on the east and southern sides, and has historically been used for a single family residence and for Agricultural purposes. Parcel two has also historically been used for Ag purposes, without a residence, and is already in Kuna City limits, zoned Agriculture.

**D. General Projects Facts:**

1. **Comprehensive Plan Designation:** The Future Land Use Map (Comp Plan Map) is intended to serve as a *guide* for the decision-making body for the City. The Comp Plan map indicates land use designations generally speaking, it is not the actual zone. The Future Land Use Map identifies the approx. 39.33-acre site as Medium Density Residential (4-8 DUA).



2. **Kuna Recreation and Pathways Master Plan Map:**
The Kuna Recreation and Master Pathways Plan map identifies two (2) future bike in the northwest part of the project and on the south side of the project. See Master Plan behind this report.

3. **Surrounding Existing Land Uses and Zoning Designations:**

| | | |
|---|---|---|
| **North** | RR & RP | Rural Residential, Rural Preservation – Ada County |
| **South** | R-6, RP & RR | Medium Density Residential - Kuna City, Rural Preserve, Rural Residential – Ada County |
| **East** | RP | Rural Preservation – Ada County |
| **West** | R-6 & RR | Medium Density Residential – KUNA CITY, & Rural Residential – Ada County |

4. **Parcel Sizes, Current Zoning, Parcel Numbers:**

| Property Owner | Parcel Size – Approx. | Current Zone | Parcel Number |
|---|---|---|---|
| James L. Whitmore | 18.05 acres | RR - Rural Residential | S1415110103 |
| James L. Whitmore | 94.3 acres | RR - Rural Residential | S1415141900 |
| James L. Whitmore | 30.19 acres | RR - Rural Residential | S1415427805 |
| James L. Whitmore | 135.43 acres | RR - Rural Residential | S1414336000 |
| James L. Whitmore | 10.68 acres | RR - Rural Residential | S1414315000 |
| James L. Whitmore | 1 acre | RR - Rural Residential | S1414438900 |
| James L. Whitmore | 19.34 acres | RP - Rural Preservation | S1414438400 |
| Gilmore Keith H. & Ruth E. Living Trust | 120 acres | RR - Rural Residential | S1423211000 |
| James L. Whitmore | 40 acres | RR - Rural Residential | S1423120000 |
| James L. Whitmore | 77.60 acres | RR - Rural Residential | S1423110000 |
| James L. Whitmore | 2.4 acres | RR - Rural Residential | S1423111000 |
| James L. Whitmore | 40 acres | RP - Rural Preservation | S1424233600 |
| Davis Jay C. & Robert A. Rev. Trust | 40 acres | RP - Rural Preservation | S1424240000 |
| James L. Whitmore | 120 acres | RP - Rural Preservation | S1424131800 |

5. **Services:**

Sanitary Sewer– City of Kuna
Potable Water – Suez Water Company
Pressurized Irrigation– On Site Wells - HOA
Fire Protection – Kuna Rural Fire District
Police Protection – Kuna City Police (A.C.S.O.)
Sanitation Services – J & M Sanitation

6. **Existing Structures, Vegetation and Natural Features:** Currently there are two residence on the Davis property. One on the north side of Tenmile Creek Road, and on one the south side with approximately six (6) accompanying out-buildings, with agriculture uses on site. One of the Whitmore properties appears to have two (2) outbuildings in the northwest corner of the project and various Ag uses throughout the remainder. The Gilmore parcel appears to be free of a residence and used for Ag purposes with an accompanying pond (irrigation source). There is some topographical variation that appears to run east-west through most of the south part of the overall project. A large portion of the topography appears to be steep with elevation changes that are at, or exceed 80 feet in elevation difference. The vast majority of the site appears to be relatively flat and suitable for development.

**Transportation / Connectivity:** The site has significant frontage along Tenmile Creek Road and a large part of the overall project straddles both sides of Tenmile Creek. This project has significant frontage along Five Mile Road on the north side of the site. The project has limited frontage along Hubbard Road. Applicant shall connect to existing roads as required in Kuna City Code (KCC) and provide stubs for future connections for to serve the connection/traffic needs of the site. Applicant shall satisfy Kuna City and ACHD's requirements for roadway improvements, including but not limited to, road widening and vertical/rolled curb, gutter and sidewalks appropriately. *When the FINAL ACHD report for the first preliminary plat is available it will be included with the packet and staff may have additional comments at that time concerning the transportation items for the application.*

Staff notes that the *DRAFT* report from ACHD on the preliminary plat identifies a number of improvements placed on the applicant on and off/site. Through discussions with the applicant, they are prepared to do what is necessary to comply with the ACHD requirements, including significant on and off site roadwork, and the re-aligning of a portion of Five Mile Road as it runs through the south part of the site, due to topography.

7. **Environmental Issues:** Staff is not aware of any environmental issues, health or safety conflicts. Idaho Department of Environmental Quality (DEQ) has provided recommendations for surface and groundwater protection practices and requirements for development of the site. The applicant is in process of obtaining a conditional letter of map revision from FEMA.

8. **Agency Responses:** The following responding agency comments are included as exhibits with this case file:
    - City Engineer (Paul Stevens) - Exhibit B 1
    - Ada County Highway District (ACHD) PUD - Exhibit B 2
    - Ada County Highway District (ACHD) Pre Plat - Exhibit B 3
    - Boise Project Board of Control – Exhibit B 4
    - Central District Health Department (CDHD) – Exhibit B 5
    - COMPASS (Community Planning Association) - Exhibit B 6
    - Department of Environmental Quality (DEQ) – Exhibit B 7
    - Idaho Transportation Department (ITD) – Exhibit B 8
    - Kuna Rural Fire District (KRFD) - Exhibit B 9
    - Kuna School District No. 3 (KSD 3) - Exhibit B 10
    - Kuna Police Department - Exhibit B 11
    - Suez Water Systems - Exhibit B 12
    - Ada County Commissioners Exhibit B 13
    - West Ada School District - Exhibit B 14
    - Ada County Commissioner Rick Visser - Exhibit B 15
    - Boise Police Department - Exhibit B 16

**E. Staff Analysis:**

The subject site begins at the southwest corner (SWC) of Hubbard and Five Mile Roads, then follows the curve of Five Mile as it turns into Tenmile Creek and ends at Cole Road. The applicants request is in line with the Comprehensive Plan (Comp Plan) and the Comprehensive Plan Map (CPM) designation of *Mixed-Use* by proposing three residential zones and two commercial zones throughout the subject site. This request will complement the development to its west and will provide project wide continuity as a multi-phased, master Planned Unit Development (PUD), consisting of approximately 761.44 acres.

The applicant requests annexation into Kuna City limits applying the Category "A" process for approximately 761.44 acres. The lands in this application touch City limits on the west side of the site and are therefore eligible for annexation. Applicant has submitted an application for annexation for 761.44 acres

(approximately) and is seeking five (5) different zoning designations for these proposed annexing parcels: as follows:

- Approximately 660.78 acres are proposed to be annexed with a zone change from Rural Residential (RR) & Rural Preservation (RP) ***TO*** R-6 Medium Density Residential (MDR),
- Approximately 33.67 acres from Rural Residential (RR), ***TO*** R-12, High Density Residential (HDR),
- Approximately 18.89 acres from Rural Preservation (RP), ***TO*** R-20, High Density (HDR),
- Approximately 12.21 acres from Rural Residential (RR), ***TO*** C-1 , Neighborhood Commercial,
- Approximately 35.87 acres from Rural Preservation (RP), ***TO*** C-2, Area Commercial.

Kuna's Comprehensive Plan (Comp Plan), encourages a variety of housing types for all income levels numerous times throughout the document. Additionally, the City attempts to balance all housing types within the City. Pertinent sections of the Comp Plan that address housing types are included below, in Section J (Comp Plan Analysis) of this report.

The applicant seeks to apply the PUD process and proposes a mix of various uses throughout the project to include; zones for commercial, zones for medium and high density residential uses, (single family and multi-family lots), a school site, commercial lots, public service lots, open spaces to include several City parks, multiple private parks, with a considerable pathway network (*85.00 acres of open space in the first preliminary plat, or 17.8% in the first preliminary plat*). The applicant proposes a master-planned community for all ages. The applicant is proposing all public streets that will be built to Kuna and ACHD standards (curb, gutters & sidewalks) and must meet Kuna Fire Department requirements. Proposing a large network of biking and walking pathways, will help reduce vehicle trips for basic needs, recreation and even daily services. Using the PUD process and exceeding the required 10% usable open space, the applicant is eligible to request relief from certain development standards to accommodate mixed-uses and design criteria to create a unique and different development.

A Development Agreement (DA) accompanies this application to guide the entire development of this master-planned community from start to finish. Staff has met multiple times with the applicant and has sought direction from the City's legal Counsel to discuss the contents of the DA. The DA before you tonight is the end product of negotiations between staff, legal counsel and the applicant. As allowed through the PUD process, the applicant proposes a number of changes to City standards and requirements and have listed those items they seek relief from in an exhibit of the DA. That list is included for your review. The requested changes are presented side-by-side to show current code, compared with the *requested* changes and are listed as Exhibit E as a companion to the DA. Staff highlights the following specific items for the Commission to consider during the hearing:

- Page 3 of 12; KCC 5-10-4–O-4 – *Subdivision Advertising*,
- Page 4 of 12; 6-2-3-J-1 and 2 – *Pre Plat approval timeframes*, and 6-3-3-G - Cul-de-sac lengths: staff recommends that the applicant be conditioned to work with the KRFD for acceptable lengths,
- Page 5 of 12; 6-3-4-D – *Minimum road width*,
- Page 7 of 12; 6-3-9-G– *Flag Lots*: noting that the City Engineer prefers no more than 3 contiguous lots on a flag lot,
- Page 9 of 12; 6-4-2-S – *Streets and Alleys*: staff recommends that the applicant be conditioned to work with the KRFD for acceptable lengths.

Within the DA is discussion about a funding mechanism called a CID (Community Improvement District). This is a different funding mechanism than the previous LID (Local Improvement District). The City of Kuna and its current residents will not be exposed or at risk as this funding mechanism reimburses the investors of the project, and a leaves a bank/lending institution out of the equation. Staff recommends that if this project is approved, the applicant return and go through the CID processes in order to establish that district.

Staff has reviewed the preliminary plat application and it appears to follow KCC standards and requirements. All roads will be public and will be built to Kuna City and ACHD standards, except those specific streets which may receive limited KCC relief if the proposals are approved as noted in the applicants request (listed above).

Staff notes that through discussions with the City Engineer that narrowing the back-of-curb to back-of-curb section of public roads is generally supported for specific situations and not intended to be an overall approval. Staff recommends that in the event this application is approved, any narrowing of public streets within this project will need specific prior approval from the City Engineer and will be limited to a case by case scenario. Staff also highlights that along arterial roads, KCC calls for full roadway improvements, including curb/gutter, road widening, and sidewalks at eight feet (either separated or attached). The City does not allow for borrow ditches for any roads, unless a classified road does not meet the ACHD standards/policies for vertical curb. If the need arises for borrow ditches on classified roads *and* if ACHD does not specifically allow vertical curb, the applicant shall be conditioned to obtain a license agreement from ACHD to provide grass and watering source in the borrow ditches as allowed. Gravel and bare ground is not an allowed ground cover. Staff notes that the subject property will be connected to the City's public sewer facilities, and will connect to Suez Water Systems for potable water and use existing on-site wells for a private pressure irrigation system.

A design review application for common area landscaping and open space was included as a part of the overall application. Staff finds the proposed landscaping, buffers and open space generally to be in compliance with Kuna City Code. Staff notes that if this project is approved, at the time of civil plan development, landscaping cannot be placed within ten (10) feet of any and all meter pits, pressurized irrigation valves, and/or ACHD underground facilities and must honor all vision triangles. Applicant shall be conditioned to follow all landscape codes and planting requirements to insure field conditions do not change after approval is given. Staff notes that a monument sign for the subdivision was not included with the design review application noting that all monument signs are required to go through design review. This process can be accomplished at a later date without any delay to the project. Staff also notes that the planting details should be changed to reflect KCC; which are requested in the proposed conditions of approval (Condition #13).

The applicant met with the Kuna School District (KSD) on Friday January 10, 2020, and the result of this late meeting produced a second school site within the KSD boundaries and will be a 10 acre elementary site.

Staff has determined the preliminary plat and design review generally complies with the goals and policies for Kuna City, Title 5 and Title 6 of the Kuna City Code; Idaho Statute § 67-6511; and the Kuna Comprehensive Plan. Staff recommends that if the Planning and Zoning Commission recommends approval of Case No's 19-10-AN (Annexation) 1901-PUD and 19-06-S (Preliminary Plat) and approves Case No. 19-23-DR (Design Review), the applicant be subject to the conditions of approval listed in section K of this report, as well as any additional conditions by the Planning and Zoning Commission.

**F. Applicable Standards:**

1. City of Kuna Zoning Ordinance Title 5.
2. City of Kuna Subdivision Ordinance Title 6.
3. City of Kuna Comprehensive Plan.
4. Idaho Code, Title 67, Chapter 65- the Local Land Use Planning Act.

**G. Comprehensive Plan Analysis:**

Kuna Planning and Zoning Commission accept the Comprehensive Plan components, and have determined the proposed annexation, PUD and preliminary plat requests for the site *are* consistent with the following Comprehensive Plan components as described below:

**Goal Area 3: Kuna's land uses will support a desirable, distinctive and well-designed community.**

- Goal 3.D: Encourage development of housing options and strong neighborhoods.
  - Objective 3.D.1: Encourage development of housing options for all citizens.
    - Policy 3.D.1.a: Encourage preservation and development of housing that meets demand for household sizes, lifestyles and settings.
- Goal 3.G: Respect and protect private property rights.

- Objective 3.G.1: Ensure land use policies, restrictions, and fees do not violate private property rights.
  - Policy 3.G.1.b: Ensure City land use actions, decisions and regulations will not cause an unconstitutional regulatory taking of private property; and do not effectively eliminate all economic value of the subject property.
  - Policy 3.G.1.c: Ensure City land use actions, decisions and regulations do not prevent a private property owner from taking advantage of a fundamental property right. Ensure city actions do not impose a substantial and significant limitation on the use of the property.

**Goal Area 4: Kuna will be a connected community through strong transportation and infrastructure systems.**

- Goal 4.D: Promote a connected street network that incorporates mid-mile collectors and crossing for improved neighborhood connectivity.
  - Objective 4.D.2: Ensure the continued expansion/development of mid-mile collector system throughout the community.
    - Policy 4.D.2.a: Extend and expand mid-mile roads as growth occurs.
    - Policy 4.D.1.b: Preserve adequate right-of-way along all mid-mile roads or other approved alternative locations to align roads.

## H. Kuna City Code Analysis:

1. This request appears to be consistent and in compliance with Kuna City Code (KCC).
   **Comment:** *The proposed project meets the land use and area standards in Chapter 3, Title 5 of KCC. Staff also finds that the proposed project meets all applicable requirements of Title 6 of KCC.*

2. The site **is** physically suitable for a subdivision.
   **Comment:** *The approx. 761.44 acre subdivision has sufficient size to include a mix of lot sizes, community landscape buffer(s).*

3. The annexation and subdivision uses are not likely to cause substantial environmental damage or avoidable injury to wildlife or their habitat.
   **Comment:** *The land to be annexed is not used as wildlife habitat. Roads, homes and open spaces are planned for construction according the City requirements and best practices. Staff is not aware of any environmental damage or loss of habitat associated with the proposed development.*

4. The annexation and subdivision application is not likely to cause adverse public health problems.
   **Comment:** *The annexation of the property requires a zoning designation per Kuna Code 5-13-9. The medium density zone requires connection to public sewer and water, therefore eliminating the occurrence of adverse public health problems. Through correspondence with public service providers and application evaluation, this project appears to avoid detriment to surrounding uses.*

5. The application appears to avoid detriment to the present and potential surrounding uses; to the health, safety, and general welfare of the public taking into account the physical features of the site, public facilities and existing adjacent uses.
   **Comment:** *The annexation, PUD and subdivision design did consider the location of the property, classified roadways and the system. The subject property can be connected to the City's public sewer facilities, and will connect to Suez Water Systems for potable water and use existing on-site wells for a private pressure irrigation system. The adjacent uses are complimentary uses (Kuna) as proposed in the Kuna Comprehensive Plan Future Land Use Map.*

6. The existing and proposed streets and utility services in proximity to the site are suitable and adequate for residential purposes predicated on approved designs to extend *and/or* improve each accordingly.

## I. Recommendation of the Commission to City Council:

Based upon the record contained in Case No's **19-10-AN**, **19-01-PUD**, **19-06-S** and a **DA** including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Commission hereby recommends *approval of* the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's **19-10-AN**, **19-01-PUD**, **19-06-S** and a **DA** a request for annexation, PUD, preliminary plat and a DA, approval by Ten Mile Creek, LLC for Spring Rock Subdivision with the following conditions of approval:

- Follow conditions outlined in the staff report,
- Work with staff Kuna School District and ACHD for site layout of the schools and the applicable access roads,
- Work with ACHD on traffic calming measures within the streets as indicated in the ACHD report,
- Applicant shall work with the city to provide amenities in the park and lifesaving stations at the pond,
- Applicant to work with the city and City Engineer in regards to Exhibit E, Section 6-3-3-G: Cul-de-sac Lengths, Section 6-3-4-D: Minimum Road Width, Section 6-3-9-G: Flag Lots, Section 6-4-2-S: Streets and Alleyways,
- Provide a park and ride or ride sharing lot within the commercial area.

Based upon the record contained in Case No. **19-23-DR** including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Commission hereby *approves* the conditions of approval for Case No. 19-23-DR a request for Design Review approval by Ten Mile Creek, LLC, for Spring Rock Subdivision with the following conditions of approval::

- Follow conditions outlined in the staff report,
- Applicant work with ACHD on traffic calming measures.

## J. Recommended Conditions of Approval:

1. The applicant and/or owner shall obtain written approval on letterhead or may be written/stamped on the approved plans of the construction plans from the agencies noted below. All submittals are required to include the lighting, landscaping, drainage, and development plans. All site improvements are prohibited prior to approval of the following agencies:
    a. The City Engineer shall approve the sewer hook-ups.
    b. The City Engineer shall approve drainage and grading plans.
    c. Central District Health Department recommends the plan be designed and constructed in conformance with standards contained in, "Catalog for Best Management Practices for Idaho Cities and Counties".
    d. No construction, grading, filling, clearing or excavation of any kind shall be initiated until the applicant has received approval of the drainage plan.
    e. The Kuna Fire District shall approve fire flow requirements and/or building plans. Installation of fire protection facilities as required by Kuna Fire District is required.
    f. The *Boise Project and Board of Control* shall approval any modifications to the existing irrigation system.
    g. Approval from Ada County Highway District shall be obtained and Impact Fees must be paid prior to issuance of any building permit.
    h. Idaho Transportation Department. No public street construction may be commenced without the approval and permit from Ada County Highway District and Idaho Transportation Department.
    i. All public rights-of-way shall be dedicated and constructed to standards of the City and Ada County Highway District,
2. Installation of utility service facilities shall comply with requirements of the public utility or irrigation district providing services. All utilities shall be installed underground, see KCC 6-4-2-W.
3. Compliance with Idaho Code, Section §31-3805 pertaining to irrigation waters is required. Irrigation/drainage waters shall not be impeded by any construction on site.

4. Street lighting shall use LED lights, with spacing and wattages meeting KCC 5-4-6; applicant shall coordinate a street light plan for P & Z approval in concert with the prepared construction drawings for the project.
5. Parking within the site shall comply with KCC 5-9-3.
6. Fencing within and around the site shall comply with Kuna City standards – KCC 5-5-5- A-J and KCC 6-4-2-E.
7. A sign permit is required prior to subdivision entrance sign construction and shall comply with KCC 5-10-4. *Monument signs will require a separate design review.*
8. All required landscaping shall be permanently maintained in a healthy growing condition. The property owner shall remove and replace unhealthy or dead plant material within three days or as the planting season permits as required to meet KCC 5-17-7 standards. Maintenance and planting within public rights-of-way shall be approved from the public entities owning the property.
9. The land owner/applicant/developer and any future assigns having an interest in the subject property, shall fully comply with all conditions of development as approved by the Commission and/or Council, or seek amending them through public hearing processes.
10. The applicant's proposed preliminary plat (dated May 2019) shall be considered a binding site plan, *or as modified and approved* through the public hearing process.
11. The applicant's proposed Landscape Plan (dated 07.01.2019) shall be considered a binding site plan, *or as modified and approved* through the public hearing process.
12. Applicant shall follow staff, city engineer and other agency recommended requirements as applicable.
13. Applicant shall add the following notes to the landscape plans and resubmit a PDF for Planning and Zoning approved plans, bearing the changes.
    13.1 – Landscape contractor shall remove all twine/ropes and burlap from root balls.
    13.2 – Landscape contractor shall remove the wire basket from the top 1/2 of the root ball.
    13.3 – Grass and a water source shall be placed in any ACHD required borrow ditches and a license agreement obtained from ACHD.
    13.4 - Landscaping cannot be placed within ten (10) feet of any and all meter pits, pressurized irrigation valves, and/or ACHD underground facilities and must honor all vision triangles
14. Compliance with all local, state and federal laws is required.

City of Kuna
Planning and Zoning Commission
Findings of Fact and Conclusions of Law

P.O. Box 13
Phone: (208) 922-5274
Fax: (208) 922-5989
www.Kunacity.id.gov

Based upon the record contained in Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA, including the Comprehensive Plan, Kuna City Code, Staff's Memorandums, including the exhibits, and the testimony during the public hearing, the Kuna Commission hereby recommends *approval* of the Findings of Fact and Conclusions of Law, and conditions of approval for Case No's 19-10-AN, 19-01-PUD, 19-06-S and a DA, a request for annexation PUD, preliminary plat from Ten Mile Creek, LLC, for Spring Rock Subdivision:

1. *The Kuna Commission approves the facts as outlined in the staff report, the public testimony and the supporting evidence list presented.*

   ***Comment:*** *The Kuna Commission held a public hearing on the subject applications on January 14, 2020, to hear from City staff, the applicant and to accept public testimony. The decision by the Commission is based on the application, staff report and public testimony, both oral and written.*

2. *Based on the evidence contained in Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA, *this proposal generally complies with the Comprehensive Plan and City Code.*

   ***Comment:*** *The Comp Plan has listed numerous goals for promoting and supporting a diverse and sustainable economy that will allow more Kuna residents to work in their community and encouraging a balance of land uses to ensure that Kuna remains desirable, stable and a self-sufficient community.*

3. *Based on the evidence contained in Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA, *this proposal generally complies with the Kuna City Code.*

   ***Comment:*** *The applicant has submitted a complete application, and following staff review the application appears to be in general compliance with the design requirements, public improvement requirements, objectives and considerations listed in Kuna City Code Title 5 and Title 6.*

4. *The Commission has the authority* to recommend *approval* for *Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA.

   ***Comment:*** *On January 28, 2020, the Kuna Commission may vote* to recommend *approval for Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA.

5. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

   ***Comment:*** *Neighborhood Notices were mailed out to residents within 800-FT of the proposed project site on December 20,2019, and a legal notice was published in the Kuna Melba Newspaper on December 20, 2019 and January 1,2020. The applicant placed a sign on the property on January 3, 2020.*

**DATED: this 11th day of February, 2020.**

Lee Young, Chairman
Kuna Planning and Zoning Commission

ATTEST:

Troy Behunin, Planner III
Kuna Planning and Zoning Department

KUNA Planning & Zoning

Council Chambers | 751 W 4th Street, Kuna, Idaho 83634 | 6:00 PM

# PLANNING & ZONING COMMISSION
## MINUTES
## Tuesday, January 28, 2020

### 1. *CALL TO ORDER AND ROLL CALL 6:00 PM*

**COMMISSIONERS:**
Chairman Lee Young
Vice Chairman Dana Hennis
Commissioner Cathy Gealy
Commissioner Stephen Damron - Absent
Commissioner John Laraway

**CITY STAFF PRESENT:**
Troy Behunin, Senior Planner
Bill Gigray, Assistant City Attorney
Wendy Howell, Planning and Zoning Director
Jessica Reid, Customer Service Specialist

### 2. *CONSENT AGENDA:* *All Listed Consent Agenda Items are Action Items*

*A.* Planning and Zoning Commission Meeting Minutes, January 14, 2020

*B.* **Findings of Fact and Conclusions of Law**

*1.* Case No. 19-03-AN (Annexation), 19-02-S (Preliminary Plat) & 19-09-DR (Design Review) Chotika Subdivision

*2.* Case No. 19-05-SUP (Special Use Permit) 1195 West Castro Drive

**Commissioner Cathy Gealy moved to approve the consent agenda. Seconded by Commissioner David Hennis. Approved by the following roll call vote:**
**Voting Aye: Chairman Lee Young, Commissioner Dana Hennis, Commissioner Cathy Gealy and Commissioner John Laraway.**
**Voting No: None**
**Absent: 1**
**Motion carried: 4-0-1**

### 3. *PUBLIC HEARING:*

*A.* **Case No. 19-10-AN (Annexation), 19-06-DA (Development Agreement) & 19-23-DR (Design Review) Spring Rock Subdivision – *Continued from January 14, 2020*** **ACTION ITEM**

**C/Young:** First up under Public Hearing we have 19-10-AN, 19-06-DA, 19-23-DR for the Spring Rock Subdivision and we'll have Troy come on up. **Troy Behunin:** Thank you commissioners, for the record Troy Behunin, Senior Planner, 751 W. 4th Street. Staff doesn't have anything new in terms of the application other than staff would like to point out that a number of letters were submitted either after the deadline for the original packet on the 14th of January or they were sent over that weekend; they were hand delivered to you folks and have been included in the packet. The letters were from Ada County Commissioner Steve Visser, the Ada County Paramedics and then a couple of other citizen letters. Additionally, the ACHD staff report, which is the final staff report for the Preliminary Plat, has also been added to your packet, which was not available for the meeting on the 14th. It is a lengthy document and covers a lot of information. Additionally, a site plan was added to the packet, it's an updated Preliminary Plat which shows the intention and the conviction for the applicant to work with the Kuna School District to dedicate a ten plus acre site for an elementary school. Beyond that, I have nothing new and I will stand for any questions you might have at this time. **C/Young:** Any questions for staff at this time? **C/Gealy:** No questions at this time. **C/Laraway:** No. **C/Hennis:** Thanks. **C/Young:**

Then let's have the applicant please come on up. **Chris Findlay:** Mr. Chairman, Commissioners, Christ Findlay, 1211 Happy Drive, Boise, Idaho, 83706. So, you've got a lengthy document, all I'm going to talk about is the traffic study. Basically, we agree with staff on everything, we're paying for most of the offsites ourselves up front; I have pictures of what we're fixing. (Those present are directed to the monitor) This is Cloverdale Road, the yellow we're paying for, the blue is all paid for out of our impact fees which represents about seven million dollars. It's a large number that we're paying both phases. The other yellow is Hubbard Road, that's supposed to get widened to three lanes. We're paying for that to be widened to three lanes; it'll get done right away as that is where we're putting our sewer line and water line from. Suez, comes down from Valley Heights across Boxwood (inaudible) property there then it comes back to our site. So, we would be improving that road anyway because we're tearing it up. And then of course everything inside the subdivision is all us so. (Staff advances slide). This gives the overall view of that and then the yellow is Ten Mile Creek; that gets widened clear out to Pleasant Valley. We all know how narrow Pleasant Valley is, it's going to go out to it's normal, supposed to, width of I think about 27 feet. We also have to put in turn lanes at Pleasant Valley and Ten Mile Creek so that intersection is going to get improved also, at our expense. That's how all of this is going to get paid for. Under the traffic study we didn't have to do anything until 900 homes were built, but we agreed with staff to have a new traffic study at 350 homes. We'll work with ACHD when they want to do all their improvements. The first couple of years will probably, other than Ten Mile Creek where we're having to improve and down Hubbard Road, those will get improved probably upfront just because they are part of getting our roads in to our subdivisions. A majority of the complaints and everything that we hear is that we don't care about traffic or safety and that's the farthest thing, we want the same. My partner has ridden bikes along Ten Mile Creek; Pat's an avid biker, so we take that into consideration. Jay Davis whose property that we're also buying, was hit by a gravel truck on the corner of Pleasant Valley and Ten Mile Creek. We have all these issues that we understand and all the roads are going to get increased, made better due to the quantity of impact fees and the requirements that ACHD has asked us to do. This is also on top of all that Falcon Crest is going to do so, this report, our traffic study, was based on top of what Falcon Crest's traffic study was with ACHD. We studied fourteen intersections, it actually went clear out to Highway 69 on two of the intersections, so it's been really, really well studied. Obviously, you guys had a lot of data there to read and it's a complete report as you can tell. Every time that we go in for a Preliminary Plat it's going to trigger a new traffic study. We're not walking away from any of our responsibilities for ACHD and I don't think that we are walking away from any of the responsibility for the city of Kuna too; we think that's all important. So, this is actually one of the big parts about Ten Mile Creek that every one doesn't want to talk about. (Referring to next slide) This is our entrance into our subdivision and this is the roundabout at Ten Mile Creek and Five Mile. This is going to slow all the traffic down; you're not going to have 50 mile per hour roads on Ten Mile Creek. We're going to have wider roads, better shoulders. Going up Five Mile and onto Hubbard Road you are going to go into three lanes with a center section to it and all the way down to Ten Mile Creek. Cloverdale and Hubbard Road is going to be a controlled intersection as is Columbia. We're paying for both of those intersections and both intersections go in when ACHD deems it necessary to do it. Some of the things that ACHD wants done is in their time frame, not our time frame; they want roads in, they just don't want to take care of those roads before they need to. We agree totally with ACHD on all in our traffic study. (Next slide). This is what the developments going to pay when it's fully built out; impact fees will be around seven million dollars for ACHD, eleven million dollars for the city sewer system, and fire gets about one million five (1.5 million). So, just in our impact fees we're paying good and then, of course you get to see what property taxes are going to generate which is close to seven million dollars. Once again, that's on top of what Falcon Crest is going to do, so that area is going to have lots of tax dollars there working to fix Cloverdale and all the roads going out. I stand for any questions. **C/Gealy:** I do have some questions. **Chris Findlay:** Ok. **C/Gealy:** I'll just start with the ACHD report because that's what you started with. You said you were going to widen Hubbard Road offsite to three lanes? **Chris Findlay:** Two

lanes and a center. **C/Gealy:** In reading the ACHD report it looked like initially there was not going to be anything on Hubbard Road offsite; it would be after that 350th lot and the second traffic impact study. **Chris Findlay:** We'll do it sooner because we're going to tear up Hubbard Road when we put in the pressurized sewer line. **C/Gealy:** When would you anticipate that you would widen that? And I'm talking about that part of Hubbard Road that is not adjacent to the site; that part of Hubbard that goes from the site to Cloverdale. **Chris Findlay:** I don't know if you understand where out sewer line goes? **C/Hennis:** That was going to be my question. **Chris Findlay:** Ok. We start at Five Mile and Hubbard Road, it's actually inside the subdivision, and we go all the way to Locust Grove. **C/Gealy:** So that's why you're tearing up Hubbard. **Chris Findlay:** Down Hubbard. **C/Gealy:** Down Hubbard. **Chris Findlay:** Yes. We're going to put a pressurized line and a gravity line (sewer). We're working with Public Works on that right now. Then we'll hook up into Patagonia Lift Station, which we're going to pay for the upgrade of Patagonia's Lift Station for that sewer site. We're just sizing that pressure line right now. **C/Gealy:** But you'll go around the Hubbard Reservoir? **Chris Findlay:** Actually, we're working a deal where we'll go straight through. **C/Gealy:** You're going to go straight through. Ok, so then when you widen Hubbard, which you anticipate will be sooner rather than later, would that be when you would also install sidewalks? **Chris Findlay:** We don't know that yet. We'll have to work with ACHD on that. **C/Hennis:** So, you're bringing sewer, pressurized irrigation and? **Chris Findlay:** No, pressurized irrigation will be developed on site. **C/Hennis:** Ok. **Chris Findlay:** That's the big pond water's going to come from. **C/Hennis:** Right. **Chris Findlay:** And we'll have irrigation wells onsite that we'll fill that with. And then our water (potable) is with Suez but it's coming from Columbia. We have a Valley Height well site up there, and it's going to come all the way across Boxwood LLC's property there at Columbia clear over to Hubbard and then back to our site. Whether it's a 14- or 16-inch line; we have to work with the Fire District on that to get the pressure that we need. **C/Hennis:** Right. **Chris Findlay:** And we have to pay for those pump well increases too. **C/Hennis:** Ok. **C/Gealy:** You had proposed a single land roundabout and ACHD came back and recommended a multi-lane roundabout there; where does that stand? Do you accept ACHD's recommendation for a multi-lane roundabout? **Chris Findlay:** Yes, we accept all that. How they do it, it might come off first as a single lane roundabout; you basically fill it in with concrete, then you pave it, then you put the concrete on it, then when you want the double lane you take it off and you've got the double lane. **C/Gealy:** And the East – West collector that they recommended at the southern property line? **Chris Findlay:** Yes, we're going to do that. **C/Gealy:** Where will it go? **Chris Findlay:** It goes into Falcon Crest & I think it goes out to Deer Flat. **C/Gealy:** Eventually. **Chris Findlay:** Yes. **C/Gealy:** But for now, it will just be at the bottom of your area B; you'll just put in a road from Five Mile to Falcon Crest. And you're ok with that? **Chris Findlay:** Yes. **C/Gealy:** And you said you'd do that. I think that perhaps the map that ACHD had has different street names then the map that we had; because it says, "Extend the right-of-way at the terminus of Fount Court to the South property line." **Chris Findlay:** We're talking area B in the Plat. **C/Gealy:** I had trouble finding some. **C/Young:** I have the blow-up of one, I just have to find it. **Chris Findlay:** It's page 25 of the ACHD staff report. **C/Gealy:** I thought they changed that one to Castle Rock? Is it Castle Rock on one side of Five Mile and Fount Drive on the other side? It says Fount Drive. **Chris Findlay:** To be honest with you, whatever they want to do names wise on the streets, we're…. **C/Gealy:** You're good with it? **Chris Findlay:** Yes. I'm not going to give the street names, hat's too hard to do. **C/Gealy:** I just was trying to figure out what it said and where this was happening; "Extend the right-of-way of the terminus of Fount Court to the South property line." **Chris Findlay:** So, that's up in area B. **C/Gealy:** Then it's all the way down to your new East – West collector road? **Chris Findlay:** Right. As they come up the hill there wasn't enough distance, they were fighting because they were coming up to the top of the hill and it didn't meet the length that they needed. **C/Gealy:** Between intersections? **C/Hennis:** The visual? **Chris Findlay:** Yes. **C/Hennis:** Ok. **Chris Findlay:** And if we needed to put one farther down, we're in agreement with that; that's not an access into that area…. (inaudible)…. for ingress/egress into that area. **C/Gealy:** They had recommended relocating the school site? **Chris Findlay:** Right.

**C/Gealy:** Because of driveways is what was my understanding. **Chris Findlay:** We're going to take it up from Ten Mile Creek there; we're going to keep it on, I think it's Gem Valley down. There's pipeline that goes across the walking path and we'll just put it in there and give them the access points on the West Ada School District ones. So, it will be more like this instead of like this. (Mr. Findlay gestures). **C/Gealy:** On Gem Valley between Ten Mile Creek? **Chris Findlay:** Right, but it will be below the pathway and the Williams Pipeline. **C/Gealy:** And then they did not see the proposal with the second school site? **Chris Findlay:** Right, but I they're ok with it because it fits into their (trails off). We'll work with the Kuna School District and ACHD. **C/Gealy:** You'll work with Kuna School District and ACHD to make it all fit the way they want? Is that something that we would need to make as a condition that you would do? **Chris Findlay:** If you guys want to make that a condition then you guys can do that too. **C/Gealy:** But you're going to do it whether we make it a condition or not? **Chris Findlay:** Yes. **C/Gealy:** They had, I thought, a long list of roadways that should be redesigned; fifteen roads. **Chris Findlay:** Yes, they want us to calm. **C/Gealy:** Right. **Chris Findlay:** We had too many cul-de-sac's; we have 700 lots but only five cul-de-sacs', I didn't think that was a lot. So, what they don't like is the length. In that area B you come out of where the purple part is, and you see the, those roads going North – South. …. **C/Gealy:** Well, they don't like long straight roads. **Chris Findlay:** Right, and so they want us to put calming…. **C/Gealy:** Traffic calming. **C/Hennis:** Traffic mitigation. **Chris Findlay:** Calming things, so there will be little bulbs and different things like that in there. **C/Gealy:** But no bumps and no dips? **Chris Findlay:** They do not want bumps, they do not want dips because of their equipment. **C/Gealy:** So, my question is, when they suggested the following roadways should be redesigned, do you anticipate that you will keep basically your same plan? **Chris Findlay:** Yes. **C/Gealy:** And put in bulb-outs or traffic calming measures? **Chris Findlay:** Yes, bulbs, but we don't plan on redesigning the Plat. **C/Gealy:** You're not going to move roads or add/take away curbs? **Chris Findlay:** None of that. We'll just put the bulbs in where they want them and we'll work with ACHD staff on all that. Unless you guys have some suggestions on what you want to see. **C/Gealy:** Well, I wanted to know what you were planning. **Chris Findlay:** We're just doing whatever the calming ACHD wants. They just don't want you to get up to 40 miles an hour by the time you hit the end of the road. **C/Gealy:** Right. **Chris Findlay:** So, we'll have the bulb-outs and the current calming that ACHD likes to put in. **C/Gealy:** Without having to redraw the whole Plat? **Chris Findlay:** Yes. **C/Gealy:** Can you tell me where the knuckle is on Oxbow Lake Drive and Split Rock Way? I couldn't find it, doesn't mean it's not there. **Chris Findlay:** That went away. **C/Gealy:** Oh, ok. **Chris Findlay:** It's where the school site was. **C/Hennis:** Oh, ok. **C/Gealy:** So that's gone. **Chris Findlay:** Yes. And they may want, we haven't talked to the school district about it but, they may want a road coming out at that area too; we just have to work with ACHD because those distances they want as you start going up. Right at the end of the purple is where you can start seeing the road curve, the curvature of the ground starts going that direction. **C/Gealy:** And that's where there's a hill? **Chris Findlay:** Yes. And they don't like roads turning in at the bottom of the hill, because we never get snow here (laughter). **C/Gealy:** Those are the only questions that I have on the ACHD final report. **Chris Findlay:** Ok. I'll wait until your next set of questions if you want. And that's up to staff, how they want me to do that. **C/Gealy:** I don't know if anybody else had questions on the ACHD report. **C/Laraway:** Just clarification. We were just talking about Five Mile Road and the school; you said that ACHD doesn't want any bumps or dips? The reason I'm asking is this year, right in front of Pepperhill Elementary, they created a rise. I'm going to call it a bump, and it's the length of a car before it drops back down. So, it's not a bump but it literally slows cars down right there in front of that elementary school. So, are they saying no? **Chris Findlay:** I don't know what to say Commissioner, on that. We're happy to put in and design it however ACHD wants us to do it. **C/Laraway:** Well that's why I ask if they told you no bumps, no dips. **Chris Findlay:** Well, it says in there that they don't like bumps and dips. **C/Laraway:** Like means? **Chris Findlay:** I don't know. I mean (inaudible stunted speech). **Troy Behunin:** It damages their…. **C/Young:** Snowplows. **Chris Findlay:** Snowplows and things. **C/Hennis:** It might be a specific condition for a school site, in front of

the school site, which would be something to work with the districts on because they were just talking about the calming measures in the subdivision and the roadways. **C/Laraway:** Oh, I thought you were talking about Five Mile. **Chris Findlay:** No, there won't be anything there. **C/Laraway:** Ok, my error. **Chris Findlay:** That's a straight shot, that's a major arterial (referring to Five Mile Road). It's going to carry a lot of traffic and we're going to get all the cut through traffic because it goes all the way up to Kuna Road. Five Mile will connect all the way to Kuna Road once Falcon Crest takes it all the way up. **C/Laraway:** Anything to protect the kids on that road? **Chris Findlay:** Yes, there will be curb, gutter, sidewalk and everything on Five Mile. **C/Laraway:** Part of my other follow up question for clarification; on the earlier map, you had Ten Mile Creek off of Hubbard in yellow and that had onsite. **Chris Findlay:** That's us. **C/Laraway:** So, is that road going away, the one that is there now? I see the shadow of what it used to be. **Chris Findlay:** (Referring back to the map on the monitor) Yes, eventually that curve goes away and everything drives back into the subdivision, does the roundabout and goes back up. **C/Laraway:** So, other traffic coming down Ten Mile Creek will be going into your subdivision? **Chris Findlay:** Into the roundabout and then out. **C/Laraway:** My concern is that's a lot of traffic. I know ACHD has a traffic study but you have three shifts at a prison and Gowen employees that are going to be coming into that. **Chris Findlay:** We know that and it will meet ACHD standards of what they want there. We're not going to not put a big enough road into take care of that. I don't know when they're going to take away Ten Mile Creek Road, but eventually, their idea is to one: slow traffic, and two: change the traffic pattern. **C/Laraway:** Ok. **Chris Findlay:** But I don't know Commissioner. I don't know when they are going to take away Ten Mile Creek but, in the future, it will go away, it will go into our subdivision. **C/Laraway:** I understand. Earlier you had a map of ACHD's impact money and what you were paying for on Hubbard. You're subdivisions, your development…. Let me back up…. they're scheduled to widen Cloverdale between 2019 and 2023. **Chris Findlay:** Yes. **C/Laraway:** When is your subdivision development starting? **Chris Findlay:** Probably '21, '22. **C/Laraway:** Ok, so they are going to pick up Five Mile to a five lane all the way to Columbia, so it's just got to be that one mile now. **Chris Findlay:** The rest of it gets widened with the generation of impact fees maybe two years later or five years later or whenever ACHD deems it necessary. **C/Laraway:** ACHD deems when that occurs? **Chris Findlay:** Yes, we don't trigger it, but it is in their Capital Improvement Projects timeframe. **C/Laraway:** Ok. **Chris Findlay:** And I think that's a five-year window. **C/Laraway:** That's all I have, thank you. **C/Young:** Ok. **C/Gealy:** Actually, I had one more question on the ACHD report. They mentioned including eight-foot planting strips on Ten Mile Creek and Hubbard Road where it abuts your property; is that in your landscaping plan? **Chris Findlay:** Yes. The sidewalks are incorporated in that, it's like any subdivision that you see with the berms and trees and all those kinds of things. Actually, I think you guys are a little wider than that too. **C/Gealy:** 10 feet, I think. **Chris Findlay:** Yes, and we'll work with that. And we agree to that. **C/Gealy:** I have other questions. We could have a public hearing. **Chris Findlay:** Do you want to take comments? **C/Gealy:** And then I could ask my questions later. **C/Young:** Yes, we can go ahead and do the public hearing then come back around. **C/Gealy:** Thank you. **C/Hennis:** Thank you. **C/Young:** Is there anything else? No? Ok, then we'll go ahead and open up the public testimony at 6:42 PM. First, I have listed Jim Obert to testify in favor. **Jim Obert:** Commissioners, Jim Obert with the Kuna School District, 711 E. Porter Street, Kuna. We appreciate the opportunity to provide feedback on the Spring Rock subdivision and as you likely know this development straddles two school districts, West Ada School District and the Kuna School District. The area within our district will be developed first and our analysis of impact indicates that it will add 300 – 500 students to the district. Our master plan anticipated the need for two elementary schools East of Meridian Road but the locations of the school had to be determined by where the developments were first approved. On the far East side of the district where this development is proposed, we had no land and this was a concern. So, we met with the representatives of Ten Mile Creek LLC to discuss the impact of the development on our district and requested that they provide land for a school site for our district in addition to the site provided to West Ada School District. After the meeting, they offered to donate a 10.8-acre site

for an elementary school with access off of Five Mile Road. The site is well suited for an elementary school and has access to a planned park and safe walking routes in both areas A and B; the site also has good access for buses for secondary students. Should the project move forward, we have finalized the Donation Agreement with our Board of Trustees. The donation of land would significantly reduce the cost for our patrons as we expand elementary education services in this area because it means the districts property owners will not have to pay the 500 thousand to one million dollar cost to buy land for a school site; however, the district would have to Bond in the future to build the school itself. In conclusion, the donation of land for a school helps mitigate the cost to the district of expanding services for children in this area; without the donation, the anticipated increase in land values in this area would make it a far greater challenge for us to serve district children. We appreciate these types of private and public partnerships that help reduce the impact of development on our tax payers and our grateful to Ten Mile Creek LLC for the donation. Thank you. **C/Hennis:** Thank you. **C/Young:** Are there any questions? Thank you. Ok, next I have listed under neutral, Jim Eberhard. **Jim Eberhard:** Hi, I'm Jim Eberhard of Northridge Drive in Kuna. I don't know much about what goes into what all is going on here and I'm probably going to prove it before I'm done speaking. I heard a lot from, what I assume you're the developers; that we agree and we will but until there's some ink behind it, its pleasant to hear. I don't know your character; I don't know the process of getting these verbal agreements into signed and financed and all that. I don't know a lot about what goes into the infrastructure and the planning and the developing but, I live off Hubbard Road and again I'm here speaking kind of off the cuff and impromptu. Let's just say seven years ago Hubbard Road was paved and beautiful, flat from Linder out to Meridian Road and now, it's down near an obstacle course to drive because every time somebody builds something, they uproot the road and then they half way patch it. It's very rough, also it's disruptive to the traffic flow. I come from the world of HVAC and a lot of times we build buildings and we know that the building is bigger than what is going to be occupied when the construction is basically complete. When you run the duct work across a floor, you don't just run the main trunk, you come off with T's so that then the little short runs into the rooms and offices. It's really very convenient, you don't have to tear down the ceiling, and I say that because it seems like the main pipes are run under the road and then every time there is a connection made, we tear up the road to make the connection. Why not bring those connections out to the side of the road to make it so the road doesn't get torn up, traffic flow isn't disrupted? We all who spent money on having a road re-paved and improved, to have it nothing but destroyed down the road without thinking far enough ahead. And that brings me to my second point that I appreciate the work that you do here. As a citizen, basically my investment is in my home and as developments come, and if they're done right, they help maintain and actually increase my investment. Those homes and the families, and some other family, will be there basically forever; and with no disrespect to the developers, they are here for a short-term to turn a buck and then they leave and go to the next project. So, my request is that whatever agreements are made, please keep our families, our homes and our future forefront in your thoughts and decisions. **C/Young:** Thank you. **Jim Eberhard:** Thank you. **C/Young:** Looking on the list, I do have people that are signed in; everybody I have left on this list is marked not to testify. Is there anybody here who has not signed on here to not testify or that does want to testify that's not on the list? Ok. Are you on the list already? (Audience member responds, inaudible). Ok, well sure; just please come forward and please state your name and address for the record. **Jerry Green:** My name's Jerry Green, I live at 10850 Hubbard Road, Kuna, Idaho, 836434. Excuse me, I'm a little nervous here. I came to this pretty open minded and I was listening but I had concerns about the traffic. I know that the gentleman tried to address that issue but I believe that Commissioner Laraway was actually questioning that. And my quick question is, to live out there where Hubbard Road comes on to Ten Mile Creek Road, then Ten Mile Creek's going to go into their roundabout they're putting in which is Five Mile; how long are they going to be before they take that Five Mile Road to go up and over Falcon Crest to tie into Kuna Road or Kuna Mora? The only way in and out of their subdivision right now will be Hubbard Road onto Ten Mile (Creek) and then Five Mile out to Ten Mile (Creek)

out to Pleasant Valley; that is the only ingress and egress. So, I'm wondering if you guys will take that into consideration and maybe question that because I know living on there right now, we have an extreme amount of traffic with everybody going up the canyon there to either the prison or the back side of Boise, to and from work and the hours from everybody going to work and getting off, it's very busy and you can't even hardly get out into the road right now. That was just something that I would like to address; I know they are trying to address the traffic issues for the subdivision itself but my question is, is the traffic issues to get in and out of the whole area? Right now they only have the egress in from Hubbard onto Ten Mile (Creek) and then out to Pleasant Valley, and there is also Cole Road; will that handle the traffic of the 300…. the first 350 homes they are putting in out of 774 homes, then on down the road? And how long will it take them to get the road built from Five Mile up past Falcon Crest to help relieve some of that traffic. Thank you. **C/Young:** Thank you. **C/Hennis:** Thank you. **C/Young:** Ok, then, that is everybody that I had listed to testify. I'll just ask once more to make sure, is there anybody else? Ok, seeing none, I will go ahead and ask the applicant to come forward and address those comments. **Chris Findlay:** Chairman and Commissioners, Chris Findlay, 1211 Happy Drive, Boise, Idaho, Ten Mile Creek LLC. Just to answer his question, we can't go across Falcon Crest's property without them allowing us to do that; we're taking Five Mile to the end of our property. You also have Gem Valley Road that will hook onto Ten Mile Creek Road; there will be other access points into it. The other thing is when ACHD does their traffic studies they take all that background traffic and everything that everybody is concerned about, is all put into these traffic studies. They know the quantity of how many trucks and everything that are running along Ten Mile Creek, that traffic study has the little rubber hoses across the road and their counting all that traffic. All the requirements that you see in the traffic study that we approve of from ACHD, should take care of pretty much all of the different traffic issues that are being raised here tonight. As far as agreements with how we work with the city and how we work with ACHD, we'll have Development Agreements that are signed, before we ever get through the system. We do have to get approved by the City Council because that's who approves it and we've worked with both staff and Kuna's legal staff in order to come up with the Development Agreement that you guys see in your packets today; and you have probably seen those packets because that was part of Falcon Crest. I don't want to take a lot of time; I think we hit everything. This is going to be a beautiful subdivision for Kuna. The City Council and the Mayor has put this area into your guys' Area of Impact, the Comp Plan has the Multi-Use zoning to it, we're going to have a variety of housing to it, we have over a mile of annexation point with Falcon Crest. This is going to be a beautiful subdivision and it's going to handle the tax load and the development costs that both ACHD and the City of Kuna are going to incur. We're going to pay for that through impact fees, building permit fees and just flat out writing checks to fix roadways and expanding the roads to make them safe for everyone. This has hit a lot of things, we gave two school sites, I don't think you guys have seen a lot of school sites given in your packets and I don't think you've seen a lot of two school sites given. We have a 37-acre field that we've worked with your Parks and Recreation on, they're going to dictate what they want. If they want baseball diamonds, we're going to give them baseball diamonds. If they want soccer fields, they can have soccer fields. If they want football fields, they can have football fields; they just have to tell us what they want. The pond is an actually really cool pond; the reason is it's as large as it is and why it's going down as deep, it's going 28 feet down, is so we can put fish in it. It's an actual fishing pond, Fish and Game stocks it for us; you have one other pond in your parks system that does that same thing, that's what it got modeled off of. We will probably have over 2 ½ miles of pathways and walkways and everything into that. Commercial is changing in the world because of a company called Amazon; our commercial fits this site. We're not on Cloverdale and we're not on Kuna Road, so we don't have big face access points to it. Our commercial is built for this subdivision, doctors' offices, coffee shops, pizza parlors; things that actually going to be on that site. Our home designs are anywhere from starter homes to nice 5 – 6 hundred thousand-dollar houses. The rim view lots in area B are going to be expensive homes and they're wide lots; they're 75 to 80-foot-wide and 150 feet deep. So, there's a lot going on with the site. And your

honor, we just think this is a really good thing. We think we have lots going on here. I stand for questions on how we can make this a better project. **C/Young:** Ok. **C/Laraway:** I just have a follow up question. You referenced the pond; are you planning on putting any lifesaving stations? **Chris Findlay:** Sure. **C/Laraway:** For the kids that are going to be swimming? **Chris Findlay:** Well, I don't know if they swim in them but if they do. **C/Laraway:** They'll swim. **Chris Findlay:** Yes. **C/Hennis:** Well, they may not intentionally. **Chris Findlay:** Right. And you know, next to that too, Commissioner, we gave Public Works a yard for because we have a sewer lift station and all that there. There's going to be facilities for the city so they can maintain the parks and do all that. You guys are getting extra ground there for maintenance yards and if they want to build a building there you can. **C/Laraway:** Ok. **C/Gealy:** And the Boise Project Board of Control did have some concerns about the pond and about the project. They asked that they get a full set of plans for review. **Chris Findlay:** Yes. **C/Gealy:** And so, you will provide those to them? **Chris Findlay:** Yes. And they asked for the 125 feet from the tow. **C/Gealy:** Right. **Chris Findlay:** And we'll do that. We don't need any leakage; we get enough of that already there. The other thing they don't want is anything up on the canal. **C/Gealy:** Right. **Chris Findlay:** We'll probably fence all the way along at the tow there. **C/Gealy:** But then, Communities in Motion asked for pathways along the canal. **Chris Findlay:** Oh, and the ACHD lady that does bikes, she wants to be on the canals too and we've talked to the Board of Controls and they say no way. **C/Gealy:** That kind of puts you in a tough spot. **Chris Findlay:** What you do get with this though is there's going to be pathways all along the bottom of the tow that takes us all the way back out; they interconnect where the four-plexes and there's pathways there for all those. **C/Gealy:** But not along the canals. **Chris Findlay:** They can't go along the canal. It will be on our property. **C/Gealy:** Communities in Motion also asked for Park and Ride lots. **Chris Findlay:** If they want a Park and Ride lot, we'll give them a Park and Ride lot somewhere. **C/Gealy:** You're just going to say yes. **C/Hennis:** Well, I know that there was one thing in there that said Park and Ride lots were, and even ACHD talked about that, but yet there's not any services out that way. **Chris Findlay:** They're talking about the vans and we have a commercial site we'd be happy to designate van parking for them. **C/Gealy:** Or even ride sharing. **Chris Findlay:** Whatever they want to do. **C/Hennis:** Ok. **Chris Findlay:** We have a lot of area underneath the powerlines that can have asphalt put on it. **C/Hennis:** Ok, thank you. **Chris Findlay:** There's not any problem with getting the people these things but there's a certain limit to it; I mean, you don't get everything. **C/Gealy:** Since we seem to be back here into the letters and comments, the Boise Police Department is concerned about the proximity to their shooting range. **Chris Findlay:** That's a long way away. **C/Gealy:** It's two miles away. **Chris Findlay:** Yes, but we're down in a giant valley and their clear out on the other side of the road. I'm not worried about it; I think that was more politically motivated than actual motivated. **C/Gealy:** Just asking. **C/Hennis:** One of the questions that leads into law enforcement in general and the services out there; have you spoken with the fire department or law enforcement? **Chris Findlay:** There's a station going out on Cloverdale Road past Kuna Road. **C/Hennis:** Ok. **Chris Findlay:** And we're going to pay a whole bunch of money so they can. **C/Hennis:** Yes, I figured the impact fees are going to help fund a lot of this. **Chris Findlay:** And they get taxes of 600 thousand dollars a year annually for fire protection out there too. **C/Hennis:** Ok. **Chris Findlay:** I don't know how you guys work the police with Ada County; you have a 90-dollar impact fee, that will generate over 200 thousand dollars for that with our impact fee payment. I don't know how that works in your guys budget. **C/Hennis:** Yes, that's unfortunately out of my scope. **Chris Findlay:** I know Ada County's going to get 1.5 million on their annual taxes when this is totally built out. Hopefully there's enough, and between Falcon Crest and us, there's going to be 4,000 homes; I think Ada County police are going to have stuff there. **C/Laraway:** You had a figure of 200 and something thousand dollars going to the police, I was wondering how? **Chris Findlay:** That's your new impact fee, it's a 90-dollar fee on you building permits. **C/Laraway:** Ok. That's 1.5 deputy. **Chris Findlay:** If they would need 100 then they should probably make it higher. And the same with EMT's there, Ada County's worried about that too. Once again, you're going

to have enough rooftops out there that it's going to be substantial. They're actually going to have better service once all these homes are built; they're going to have faster quicker service. **C/Hennis:** Yes, as long as the facilities get built and the fire department…. obviously, we're getting facilities built out there. I'm a little concerned with the other, they're going to have to come in as well, a substation for law enforcement or something, but our impact fees help. **Chris Findlay:** We'd be willing to work with you on that, it might not be in this first two phases, but as needed in the next phases. If we come forward and you guys seem to deem that that's a need, we'd look at that, I mean, we think that's a benefit. **C/Hennis:** Ok. **C/Gealy:** Look at what? **Chris Findlay:** Helping with police or an EMT station or something like that. We don't feel that that's a bad thing, it just won't be in this first phase. **C/Hennis:** What I think he's saying is that they've been nice enough to donate some land for the schools, there may be something that they can help with in the future for substations. **C/Gealy:** I was just asking for specifics. **Chris Findlay:** Yes, and Falcon Crest can help too. **C/Young:** Ok, are there any other questions at this time? **C/Gealy:** I have a lot of questions. **Chris Findlay:** I'm ready. **C/Gealy:** Since we're talking about fire, there's a fire district map here and the question that I have is there's some that shows its served by Kuna Rural Fire and some that shows that is served by Whitney Fire and then there's some that doesn't appear to be served. **C/Hennis:** Yes, the brown spot down on Cole Road. **C/Gealy:** Well there's BLM ground and then there's ground that's not. Have you talked with Kuna Fire District about extending their services? But this'll be not in your first phase. **C/Hennis:** Correct. **C/Gealy:** This is not first phase but is that a question that we save until we get to that phase? **Troy Behunin:** That could be conditioned at a later Pre-Plat but as this area begins to develop, those boundaries will more than likely change. **Bill Gigray:** Mr. Chairman, Bill Gigray, City Attorney and I also represent the Kuna Rural Fire District. The procedure is if they're not within the bounds of a district they would have to seek to be annexed into the Fire District which is a petition filed with the Board of Commission. Once that has been processed it has to be approved by the Ada County Commissioners and then it's certified for inclusion within their boundaries. So, they would have to choose, I suppose, what Fire District they wanted to be annexed into based on service and then whether adjoining property is; but that's a procedure. Also, just by way of addressing the issue with regards to tax and impact fees, you have in your Comprehensive Plan as attachments, the Capital Improvement Plans for your impact fees. In there you can see what the facilities are that are eligible for impact fees collected through that process. Those plans can be changed though from year to year to year based on an annual review required by statute and they have to be reviewed every five years. Property tax is obviously not collected until the following year, and property tax goes into the General Fund of the city and is then of course subject to appropriation by the City Council at that point as to what is funded through general taxes. Now this may change with the legislature meeting this year, I don't know what the forecasts are but I know that the forecasts here that you are receiving are based probably on current law. So, if there's a ceiling on the amount that can be taxed and collected, that would go into effect, there may not, it depends on what the legislature does. **Chris Findlay:** This is your current (inaudible) it's where we took our information. **C/Gealy:** So, you'll probably want to request annexation into a Fire District before you file that last Plat, sounds like. **Chris Findlay:** Well, and I would think that if you're in the City Limits then you would be in that district. **C/Young:** I would agree. **C/Gealy:** Just a couple of pages back from that is a topographical map, it was on page 203 of the initial packet and it shows the 100 year and 500-year floodplain. **Chris Findlay:** Yes. Right now, we have a CLOMR (Conditional Letter of Map Revision), which is a conditional LOMR; we've changed the whole floodplain and narrowed it down into a flood channel. We are all the way through the federal with FEMA and we have to get annexed into the city because our application is coming through the city. Once we get annexed into the city then our CLOMR gets approved, which is the design of how we build it; then we build it, then they come out and look at it, then they give us our LOMR. So, it takes them all out, none of the homes will be in the floodplain. **C/Gealy:** That was my next question. What I find is confusing to me because the 500-year floodplain on the map says it's .2% of the ground and the 100-year floodplain is 1% of the ground. But just by visual inspection it appears

to cover a good bit more than 1.2% of the ground. **Chris Findlay:** It does. It's huge. **C/Gealy:** It's huge! **Chris Findlay:** It floods across the whole property, that's why we're narrowing it. **C/Gealy:** You're going to dig a channel? **Chris Findlay:** Yes. **C/Gealy:** I see. **Chris Findlay:** We've studied it. Our study has started at Black Creek Reservoir and it's come all the way down; actually, some of our data went all the way up to Atlanta (Idaho) and came back down all the way back through there. SPF Engineering has done all our FEMA map for us so, we know what we're doing and we have a pretty good idea of where all the FEMA maps are. The property to the East of us on Cole Road there, I think the Williams property, they kind of blew out all their channels and everything so, that just kind of floats across there. Actually, Pleasant Valley Road acts as a dam. We've studied it that much; there is a complete design on that Commissioner. **C/Gealy:** Thank you, I appreciate that. And there's no houses being proposed to be built in the floodplain? **Chris Findlay:** You can't do that; we don't want to do that. That's expensive too. **C/Gealy:** Is that where...? **Chris Findlay:** Do you know where the pipeline is? **C/Gealy:** No. **Chris Findlay:** Ok, it's the Williams Pipeline, it's part of our pathways. There's about 75 feet for the pipeline that we have to have and we expanded that to about 125 to 150 feet wide. In that will be pathways in the giant V, then the water will go into that. The other thing about this site is those are all gravel pits out there; you just go down about 10 feet and the water goes away. **C/Gealy:** You just have to get down there? **Chris Findlay:** Yes. **C/Gealy:** That was one of my questions, where are the pathways? **Chris Findlay:** Do you see the green line between where it says area A where there's a black dot? (Referring to monitors) **C/Gealy:** Yes. **Chris Findlay:** And then do you see that green line? That is the Williams Pipeline. **C/Gealy:** In that first bit? **Chris Findlay:** In that first phase. And so, you see the width? That will contain a really nice pathway, kind of zig-zaggy along, so kids can ride bikes, maybe some exercise equipment. It will also maintain our storm drain to it because there will be kind of a lip to it; and then it has the pipeline in it. They have to redo all the pipes in there so it's safe; they have a Federally mandated standard that they have to go to, then it kicks in to go across Five Mile. We have to work through that part because of the BLM ground there at the corner of Ten Mile Creek and Five Mile, we'll get it so it goes across, then it basically goes down between the park and the commercial. Then you can see the gray and the wiggly line going through it? **C/Gealy:** That's the pathway and the pipeline? **Chris Findlay:** Everything in it. Then as you come up the hill, you see all the pathways. Do you see all the pathways along the hill there? And then there will be pathways all along the hillside; bike paths and stuff like that. Those are just extra beyond the big pathway. **C/Gealy:** And then down along the Southern part, that's where the floodplain is? Is that correct? **Chris Findlay:** Yes. It comes all the way to the very end; it goes all the way up to Davis' and then it cuts up and then it goes around, then it lands on BLM ground. **C/Gealy:** Ok, thank you. **Chris Findlay:** And then there's a pathway all along Falcon Crest golf course and area B, just to the west, there's a pathway that interconnects all their pathways with our pathways. Both subdivisions have interconnectivity to it. **C/Gealy:** Oh good. Ok. **Chris Findlay:** So, you can drive your golf cart over to the golf course from our subdivision, we think that's a good idea, then there's bike paths along the hillside. Along the bottom and where the pond is, all the way up to Hubbard Road, we will have a pathway going all the way up there too. That's also part of your guys' code, to have interconnectivity between different living groups and that's what we are trying to do. **C/Gealy:** I was looking for exhibit H, the pathway network. Would you say that's this? **Chris Findlay:** The other part of that too, Commissioner, is some of those pathways we're still working with parks on that too; kind of what they want. **C/Gealy:** Ok. **Chris Findlay:** But the main, the big main pathway, is the one and a half miles of the pipeline that gets built. **C/Gealy:** Where the pipeline is? **Chris Findlay:** Yes. **C/Gealy:** And you said it wasn't 75, it was what? **Chris Findlay:** 125 to 150 feet, it widens and narrows as we need it; particularly right by the schools and things like that. Also, when you talk about the schools and the school site here, one of the reasons we liked that was because we're going to move it down into the, where it runs right along Gem Valley there. **C/Gealy:** And maybe keep it along that pathway perhaps? **Chris Findlay:** Yes, it's going to be able to get to the park and everything. We're always trying to get the schools closer to the parks. We think that's a good intermixing to a certain extent.

Anything else? **C/Gealy:** Yes. **Chris Findlay:** Ok. **C/Gealy:** Some of this is to clarify for my own understanding. **Chris Findlay:** Ok. **C/Gealy:** And some of it, I feel, is to clarify it for the record so we actually have it down. **Chris Findlay:** Ok. **C/Gealy:** I'm looking between the staff report and your letter. **Chris Findlay:** Ok. On what? **C/Gealy:** On the acreage. **Chris Findlay:** Ok. **C/Gealy:** The information is that for the first phase of 477 acres there will be 757 single-family homes and 136 multi-family lots. **Chris Findlay:** No, units. **C/Gealy:** Units. That was my question, is it units or is it lots. **Chris Findlay:** Units. **C/Gealy:** 136 multi-family? **Chris Findlay:** We only have 34 four-plex lots. And we lost 55 lots on the count because of the new Kuna school site. **C/Gealy:** Thank you very much for the school site. 757 single-family, 136 multi-family units, less 55, on that first 477 acres? **Chris Findlay:** Yes. **C/Gealy:** And then that first 477 acres, remind me how much of that is open space? **C/Hennis:** 85 acres. **C/Gealy:** 85 of that is open space. Do you know, does that open space include the school sites? Is that considered open space or? **Chris Findlay:** I don't think that's considered that. **C/Gealy:** We would call it public space. **Chris Findlay:** Yes, that's part of that open space. **C/Gealy:** That's part of your open space, the 85. I'm a little concerned because that's still…. **Chris Findlay:** We're running right at that 17 to 18% open space. **C/Gealy:** Right. **Chris Findlay:** Which is what you guys want in your code. **C/Gealy:** Right, but what we're looking at is a total of 2,274 units. **Chris Findlay:** Yes. You'll probably have 1,875 single-family homes and so the rest is all multi-family. **C/Gealy:** In the remaining? **Chris Findlay:** No, overall. **C/Gealy:** Say that again? I'm sorry. **Chris Findlay:** In the overall count you'll have approximately 1,875 lots. **C/Gealy:** 1,800? **Chris Findlay:** 1,875 single-family lots. Now, that's going to be give or take a couple 100 here or there. **C/Gealy:** And then the remainder? **Chris Findlay:** Is all multi-family. **C/Gealy:** Would be about 350 multi-family but there's only 284 acres remaining so I'm concerned about the density in the coming phases. **Chris Findlay:** Yes but I guess until I get the design on it I don't know how to explain that to you because we didn't design it all, Plat it all the way out, we just Platted this A & B area. Our density….I don't know how to say it; there will be other parks that will be added to it, probably other amenities. We have two pool sites already, inside of the community for the subdivisions; we feel like each section will have its own pool And then there will be parks farther down; we know we're going to have parks farther down because of some of the floodplain issues and things like that, so there will be other ponds and things that will be needed to be built. **C/Young:** In future Plats. **C/Gealy:** So there will be additional open space? **Chris Findlay:** Yes! Oh Yes. **C/Gealy:** But it seems, proportionally, there's going to be more dwelling units in the remaining 284 acres than there is in this initial 477. **Chris Findlay:** Yes, because the two biggest parts, and we have questions with staff on that; what we tried to do was bring in the first phase the two big parks. **C/Gealy:** Right. **Chris Findlay:** I'm not going to put another 40-acre park somewhere else. **C/Gealy:** There might be a pocket park or neighborhood park? **Chris Findlay:** Or we'll do like Falcon Crest and give you another 5-acre park; there's going to be other small parks, pocket parks. The big main park was built because that is what you guys really needed for kids. And we didn't want to do it in the tenth phase. **C/Gealy:** First. **Chris Findlay:** First. **C/Hennis:** And we appreciate that. **Chris Findlay:** Commissioner, when you start doing the numbers with your staff on that and you work through that with them, because the way the code sits, it sometimes doesn't give you the flexibility and that's in our Development Agreement that we get to help, our front end helps us with our back end count of open space. Does that make sense? **C/Gealy:** Yes, it does. But again, I think it's a good thing to have the large parks at the beginning but I am still concerned about how many more units are going to be in the smaller the remaining 284 acres. I think you addressed it when you said the gross density is 1.9 in Phase 1. **Chris Findlay:** It could be up in the threes. **C/Gealy:** At the completion it's going to be more like 2.9 gross dwelling units per acre? **Chris Findlay:** Right. **C/Gealy:** And so that means we're adding one more per acre to a third of the ground. **Chris Findlay:** Yes. **C/Gealy:** I think we just need to be aware that we've got a lower density proposal in Phase 1. **C/Hennis:** Yes. **C/Gealy:** And we're trading it for the potential for a much higher density in the future phases. **Chris Findlay:** And that's just because you've got amenities up front. **C/Gealy:** Because we've got the park up front. **C/Hennis:** Yes.

**Chris Findlay:** I do have to tell you Commissioner, that we did struggle through that when we started with the Development Agreement; that's why there's an overall density of 2.99 to the acre. **C/Young:** (Directing towards Planning and Zoning staff) Is there something you wanted to add to that? **Troy Behunin:** Staff just wanted to clarify that the remaining 284 acres, in rough terms, would be less than five dwelling units per acre based on the numbers that we have at this point. The Development Agreement that Mr. Findlay…. I'm sorry, Troy Behunin for the record, that Mr. Findlay has mentioned several times. We've edited multiple times with staff and also with our legal counsel. They will be locked in to a certain number of homes with that Development Agreement and also with your conditions of approval that you are going to recommend to City Council, and whatever they approve. They're also going to be limited to a zone, they've asked for certain zones, they've given us a legal description for those zones. If they ask for R-6, six is where it limits; that's the ceiling, they can't go to R-7, they can't go to R-8. So, the Development Agreement would limit all of that. We do understand your concern, however, that's kind of how it pencils out. The gross density would be right around five units per acre. **C/Gealy:** In the additional phases? **Troy Behunin:** Correct. And then that would balance out with the 1.9 in the first phase. **C/Gealy:** But the Development Agreement and the letter both said that the first phase gross density is 1.9 dwelling unit per acre and the overall gross density for the entire development would be 2.99 units per acre. **Troy Behunin:** Rough speaking, yes, but you've got a lower in the first part and a higher in the second part so, there's a balance there. **C/Hennis:** Mhm. **C/Gealy:** When we talk about the R-6, that applies to the entire development because? **Troy Behunin:** For certain zones they've requested and those legal descriptions in those areas are defined inside your packet, in their applications, and also in the Development Agreement. **C/Gealy:** For certain areas. **Troy Behunin:** A certain number of acres with certain zones. **C/Gealy:** And then some are multi-family. **Troy Behunin:** Correct. **Chris Findlay:** And so is the commercial; they're all designated. **C/Young:** That's part of the PUD (Planned Unit Development) process itself. **Chris Findlay:** Right. **C/Young:** Where we as the city, in this agreement that we're coming to, it gives the developer and the city a little flexibility where we can ask for a few more amenities up front or in other phases; then also it gives some flexibility for a little more density in some areas then there would typically be. It's kind of a give and take, a trade back and forth. **Chris Findlay:** And under the MU (Mixed Use) we could have come in at R-8 and we chose R-6. **C/Gealy:** Right. I do recognize that. **Chris Findlay:** In the next 200 acres it would have been really dense. **C/Gealy:** I did have a couple of questions about your Letter of Intent, and it's on the first page where it says "Emergency services will be available through Kuna Police and Kuna Fire", I think we talked about that, and then the next sentence is "A pressurized irrigation system will be provided by onsite wells, irrigation wells, currently being used for agricultural use and would irrigate common areas and public parks throughout the community". **Chris Findlay:** Yes. **C/Gealy:** What is the plan for irrigation for the private homes? **Chris Findlay:** Pressurized irrigation. **C/Gealy:** From these same wells? **Chris Findlay:** Yes. We have two big wells. **C/Gealy:** So, it's not just common areas and public parks? **Chris Findlay:** Correct. Yes, and that's just for pressurized irrigation, that's not for domestic. **C/Gealy:** Right. **Chris Findlay:** Suez is brining all the water in. **C/Gealy:** Right. The city is providing the drinking water. **Chris Findlay:** No, Suez. **C/Gealy:** Suez, sorry. **Chris Findlay:** We're in Suez's area. **C/Gealy:** But the pressurized irrigation is not just for common areas and public parks, the pressurized irrigation is for everybody? **Chris Findlay:** It's for everybody. **C/Gealy:** Provided for the homeowners. **Chris Findlay:** Yes, we're not putting cities on it. **C/Gealy:** Thank you. **Chris Findlay:** We're not using potable water. That's why it's twenty-eight feet deep. It keeps the mosquito's away too. **C/Gealy:** I did want to ask about the hammerhead at the very top of the map. Why? **Chris Findlay:** Those are four-plexes. There are four lots up there. **C/Gealy:** And that's met with the approval of the Fire District? **Chris Findlay:** We'll make it so. **C/Gealy:** You'll make it so it will? **Chris Findlay:** Yes. They make them sprinkle four-plexes today, that's a standard code throughout the valley right now. So, it's not like they're trying to pull hoses that far. And things don't burn when they have sprinkler systems to them. **C/Gealy:** Am I the only one asking questions? **C/Hennis:** No, you're just

asking all of ours too. (Laughter from Commission). We're just letting you go. So far, you've answered half of mine. **C/Gealy:** Good, good. Ok. **C/Gealy:** Then I'd like to ask a couple of questions about the Development Agreement if I could? **Chris Findlay:** Ok. And that might have to go to the…. **C/Gealy:** To the attorney? **Chris Findlay:** Yes. **C/Gealy:** The first question I have is the Development Agreement that we have is clearly in draft form and it's marked and has strikethroughs; is it your intention that we would review and approve or deny this Development Agreement as it stands? **Troy Behunin:** That is correct. **C/Gealy:** Thank you. **Troy Behunin:** The final form will not have the strikethroughs and the highlights. **C/Hennis:** If I remember right you said something last time that you left it in this form so that we'd know what the changes were. **Troy Behunin:** That is correct. **C/Gealy:** And these questions may actually be for staff. **Chris Findlay:** That's ok. **C/Gealy:** You're happy with that. (Laughter from Commission). **Chris Findlay:** Yes, absolutely! They answer them better than I do. But we are in about our fifth draft, we've gone back and forth a few times on this. **C/Gealy:** This is where it does state that the master plan maximum density is approximately 2.99 dwelling units per acre. Somewhere else there was a question, on page 19 of the Development Agreement there's been a strikethrough of private roads so all it mentions are public streets, but there's still a discussion of private roads in the text. Is that intentional? **Troy Behunin:** For the record, Troy Behunin. No, that is not. If there is any reference to any public streets then they would need to be stricken through; they are not proposing any private streets anywhere in this project. **C/Gealy:** Alright. You might just want to do a word search for private roads and make sure that you have excluded everything that you want to, because it continues to discuss private roads. **Troy Behunin:** That is not the intention. **Chris Findlay:** I will interject here. In the commercial, there could be some private roads. **C/Gealy:** So, perhaps it stays? **Chris Findlay:** It does. It's not to take them all the way out, it's not the bulk of how we're doing it, but there could be incidences that there might be. **C/Young:** This may answer your question, on 13.1.3 by developer and owner's association, its list's private roads but it also refers to irrigation, support and some those green spaces, and that would go towards the owner's maintenance for some of that. That's on page 31. **C/Gealy:** Right. **Chris Findlay:** Most of all the subdivision, the street frontage roads, none of those are going to be private; those are all ACHD roads. **C/Gealy:** Those are all going to be public streets? **Chris Findlay:** Yes. **C/Gealy:** So, the private roads will be few and far between? **Chris Findlay:** Only for special needs, it could even be for fire access and stuff like that. **Troy Behunin:** And Commissioners…. for the record Troy Behunin, there technically won't be any private roads, there would be private driveways or private drive aisles for the commercial and for the special purposes; there will not be any private roads. Everything that services residential units, whether they are single-family, multi-family, R-6, R-12, R-20; those will all be public roads. **Bill Gigray:** Just a point of information Mr. Chairman, with your permission, and Troy, correct me if I miss-state this; Bill Gigray, City Attorney. The identification of private and public roads and easements and utilities, on and on and on, will all be specified in the Plats. And those will be in the Preliminary Plats and they'll be in the Final Plats, so you folks will have a look at all of those when you review Preliminary and Final Plats because they will not have any roads on there unless they are identified on those plats. **C/Gealy:** So, are there private roads and driveways on the Preliminary Plat that we have in front of us? **Troy Behunin:** There are none. **C/Gealy:** Thank you. **Chris Findlay:** Well, that little area that you were talking about the four-plexes, that's a private drive going into the four-plexes. **C/Gealy:** Going into the four-plexes? **Chris Findlay:** So, that falls into the same thing that the city attorney is talking about. When there's a Final Plat, you'll see that on there and what it is. **C/Gealy:** And then there may be private driveways in the commercial area as you said? **Chris Findlay:** Could be, but they will be identified on the Final Plat before you guys sign off on it and see them. **C/Young:** And its Council that signs off on the Final Plat. **Chris Findlay:** I'm not trying to confuse you. **C/Gealy:** It's ok. **Chris Findlay:** But there's some things there. **C/Gealy:** It's ok. On that same page where you talked about private roads, it's 13.2, it talks about the owner's association and it talks about the CCNR's. Would you anticipate, because the way I read it, it sounds like there would be a CCNR with each phase; is that what you anticipate or did you

anticipate that there would be CCNR's for the entire development? And that new phases would kind of become part of the CCNR? **Chris Findlay:** There will be master CCNR's and then they'll be phases CCNR's that will work within the master CCNR's. **C/Gealy:** So, the answer is both. **Chris Findlay:** Yes. Potentially. **C/Gealy:** So then the homeowner's dues may vary depending upon which phase? **Chris Findlay:** Yes, and we just haven't gotten to that point yet so. **C/Gealy:** And the homeowner's responsibilities might….? **Chris Findlay:** Change. I mean, if you if we had a townhouse project, that would be different than the golf course lots. **C/Gealy:** Right, they would have different CCNR's. **Chris Findlay:** CCNR's due to the structure of the buildings and how they're built, and to the ones along the golf course, access points into the common areas and things like that. **C/Gealy:** My only concern about CCNR's is that we assure that there's a maintenance of the common landscaped areas; it's the responsibility of the homeowner's association? **Chris Findlay:** That would probably carry through on a master plan because that would also go in with pressurized irrigation and things like that. **C/Gealy:** Does anybody have any questions before I move on to my next section. **C/Hennis:** No. **C/Young:** I had the same thing for those too so I'm marking them as you're going. **C/Gealy:** Exhibit E: PUD modifications. We did have some concerns that you work with the City Engineer on some of the modifications that you're requesting. **Chris Findlay:** Ok. What's the question? **C/Gealy:** Especially with respect to road width, driveway lengths, number of homes on a cul-de-sac. **C/Young:** Are you referring to the flag lot portion of that because it solved that. **C/Gealy:** That's all included on the staff report that regarding minimum road width, flag lots; that the City Engineer prefers no more than three contiguous lots on a flag lot. Streets and alleys, the applicant be conditioned to work with Kuna Rural Fire District for acceptable lengths. So those conditions that are in the staff report, you're accepting those? **Chris Findlay:** Yes. **C/Gealy:** On Exhibit E I did have some questions and that was one for staff. There's a footnote here with five stars for an interior side yard setback and I don't know what that footnote indicates. **Troy Behunin:** That's on the table on page 1 of 12 on the comparison chart. There are no five stars below; perhaps the applicant pushed one too many times. **C/Gealy:** Ok. **Troy Behunin:** But maybe Chris can identify what that is. Is that the case Chris? (Inaudible). So, under front yard setbacks in the table, 12 foot for R-6, there's three stars but then if you go over to interior side yard, 5 foot; there's five stars but there's not five stars down below. In the legend, or in the key. (Mr. Behunin shows Mr. Findlay which area he and Commissioner Gealy are referring to on the document). **Chris Findlay:** I think it's just too many stars. **C/Gealy:** You think it's just one more star? Can I just take it off? It won't matter if I do, somebody else needs to take it off. **C/Hennis:** Right, but even the four asterisks down below fit to that. **C/Gealy:** Doesn't fit interior side yard? **C/Hennis:** So, it doesn't seem like that would be the correct legend. **C/Gealy:** You'll fix it before the City Council sees it, right? **Troy Behunin:** We can definitely work with the applicant and work with the Public Works Department and City Engineer. **C/Gealy:** So, most of my questions on Exhibit E are why do you want to do it differently than what we had as the PUD ordinance? So, for instance, on R-20 the maximum height was 40 and you'd like to change it to 48. **Chris Findlay:** Just more flexibility to build something that looks better, particularly in a multi-family setting where you get more pitched roofs. You probably won't get higher than a three-story building out there anyway; I couldn't see us put a four-story building out there. And other municipality's…. we probably took it off of Meridian. **C/Gealy:** Somebody else? **Chris Findlay:** Yes, but Commissioner, it's probably for flexibility. **C/Gealy:** For flexibility. **Chris Findlay:** Yes, which is what the PUD can give us. **C/Gealy:** But it's not to build a four-story structure. **Chris Findlay:** No. **C/Gealy:** The minimum street frontage for R-6 is reduced from 45 to 40? **Chris Findlay:** I think that was just done probably more for narrower road widths, slow traffic down, you have better frontages, it looks nicer; it's just something that probably falls in line more with ACHD. **C/Gealy:** Front yard setback on a local road to residence or sideload garage; you added a whole new section because you anticipate sideloading garages? **Chris Findlay:** Yes, particularly up in area B. All the 75-foot-wide lots, you can put side entry garages in. **C/Hennis:** Mhm. **C/Gealy:** Rear yard setbacks reduced from 15 to 10 for R-6 and R-12? **Chris Findlay:** Yes, there are a couple different reasons for that; it's the new model for

home builders. The design of the lot was brought to us by builders, so they gave us our window opening. Some 10-foot backyards worked better in a townhouse project and the other thing too is just the quantity of water people use. **C/Gealy:** On lawns? **Chris Findlay:** On lawns; we're in an arid area and there's a heavy move to more zero-scape, a less water situation. **Chris Findlay:** And we want people to go use the city parks. **C/Gealy:** And then you're requesting eliminating maximum lot coverage for R-6 and R-12 and you're requesting eliminating the minimum lot size for R-6 and R-12? **Chris Findlay:** Just so it flows. You get to see what you're getting within the Plats that we're bringing towards you. We are actually showing you what those lot sizes are and to get under the multi-use and the variety of different kinds of housing, which the PUD wants. You'll get to see it in a Plat form of what we're proposing so, once again, it just gives us flexibility to give a variety of product on the market. **C/Gealy:** Ok, that's it for that table. Now 5-10-4, general requirements for all signs and districts. You've requested that we add, signs shall not exceed 40 square feet or 6 feet in height unless approved by the Planning Department; subdivisions signs shall also not be placed in the vision triangle; any denial from the Planning Department may be appealed to the City Council. Did you want to change the size? Are you looking at different sizes for signs? **Chris Findlay:** I think what we're trying to do is not have big giant signs and view corridor signs. I think that's why that language is. **C/Gealy:** Signs shall not exceed, in districts zoned residential, signs shall not exceed 12 square feet and you've asked to increase it to 48 square feet? **Chris Findlay:** I think part of it's just for the subdivision sign coming into the subdivision. **C/Gealy:** And then you want to put in 4 signs that do not exceed 48 square feet. **Chris Findlay:** Yes. If you look at that roundabout, those signs are big there; there's these giant rock walls that have signs on them. As you go into the different sections, each section could end up being named too, but they do have to be out of the corridor views. They have those 20-foot view corridors. **C/Gealy:** Regarding the time frame on the Preliminary Plat, changing it from two to three years; that's your request? **Chris Findlay:** Yes. We have 875 lots we're working on; it's going to take a few years to get through it all. And there's a lot of sewer and water to get through. **Troy Behunin:** For the record, Troy Behunin. The timeframe in between Plats or the timeframe that's being talked about, just keep in mind, staff or City Code does not anticipate that they will go through all 761 lots in one phase or in a couple of phases or in three years. Every time a Plat records, the way that code is right now, the two-year clock begins for the next phase. **C/Gealy:** Mhm. **Troy Behunin:** So, it's not like we're expecting 800 homes or 761 homes or townhomes or multi-family units to be built all at the same time or withing three years. The clock for keeping a Pre-Plat alive resets every time a Plat is recorded. **C/Gealy:** Thank you. On cul-de-sac's, you would like to increase the length of a cul-de-sac from 500 to 700 feet; why would that be? **Chris Findlay:** It fits within a Fire Code, also because most of them do that. You don't have that many cul-de-sacs. The four-plex one at the top is a long cul-de-sac, this one by the school site is a longer cul-de-sac; it just gives better flow to it. **C/Gealy:** And then, I'm guessing this is language that was added by staff; "Cul-de-sac's may be extended with approval from Kuna Rural Fire Department and emergency access." **Chris Findlay:** Right. Yes. **C/Gealy:** And then on page 5 it's, "A minimum road width within the Kuna City Limits shall be 33 feet back of curb and 27." Is that a staff comment? "Exceptions may be considered by Public Works Director and City Engineer." **Troy Behunin:** For the record, Troy Behunin. The language that you see on page 5 of 12 in the comparison chart, Exhibit E, the red language actually came from the applicant. They're just asking for the ability to have certain streets, or certain lengths, or segments of road to be at those dimensions with the concurrence of the City Engineer and the Public Works Director. **Chris Findlay:** So, one of the things on that; if ACHD wants a calming bulb, that could affect it, they'll want to make those roads narrower, not wider. We have to have that flexibility with ACHD on that. **C/Gealy:** On page 6, "Fencing placed next to an arterial or collector shall be punctuated with a minimum of 3 feet of parallel fencing offset every…"; it was 250 feet and you're asking for 500 feet. Why? **Chris Findlay:** It had to do with design of how where we were putting fencing. **C/Gealy:** And then on page 7 again, "The common or shared driveways shall be relied upon to access lots contained within the common lot configuration". It was a maximum of 3 and you're asking to change it to 6 contiguous lots? But the City Engineer

requests no more than three. **Chris Findlay:** Once again, it's just more for configuration. It probably won't happen a whole bunch, and it probably had a lot to do with our commercial site. **C/Gealy:** You're not planning on having a lot of that? **Chris Findlay:** No. And once again, all the changes have probably come just so we have flexibility because this is such a large site and there are so many different things. We keep narrowing it down and down, and then you guys are always going to have the ability to look at it and approve it as it comes in front of you and once we get it Platted as well. **C/Gealy:** Alright, thank you. **Chris Findlay:** Is that it? **C/Gealy:** I think so. **Chris Findlay:** Ok. Can I answer any other questions for anybody else? **Bill Gigray:** Mr. Chairman, with your permission, Bill Gigray, City Attorney. Remember as you're going through, you're looking at standards of the city here. When they come back with a Plat, this would be modifications that would be allowed with city approval of those Plats, but they still have to match ACHD's requirements because ACHD has to approve Plats as well as the city when it deals with roads and streets. **C/Young:** Ok, thank you. Are there other questions for the applicant at this time? **C/Gealy:** I have no further questions for the applicant at this time. **C/Young:** Ok, then since we haven't done that yet I'm going to go ahead and close the public testimony at 7:54 PM. That brings things around to our discussion. I don't know if anybody would like to go first? **C/Hennis:** Well I think it's a nicely laid out project, I think it's very well thought through; it's got a nice amount of amenities, it's a good development. I was hesitant on where it was located being so far out and not having services out there; we're basically putting a new city out in the middle of a bunch of farmland. And I was concerned with how we were going to deal with water, sewer, fire, everything; but I think they've done a nice job in bringing about a lot of thought. There's a lot of impact fees going towards law enforcement, substations, schools. They're providing us a lot of the amenities that I was concerned with, they're putting a lot of money out towards capital improvements outside of just even their development to service the roadways, bringing sewer all the way down Locust Grove. That's not an easy task and I think they're serious about doing this the right way so, I'm a lot less hesitant now then at the start of tonight. I'm still questioning why we're putting such a big area out away from everything, kind of creating its own little area but we've done that with Hidden Springs; there's a bunch of other developments throughout the Treasure Valley like that. I still question whether this is the right spot for a lot of this but I think you really can't go anywhere else, without a lot more effect. And like I said, I think they're providing for a lot of the issues that I saw. I think that with Falcon Crest, the golf course, I think this will be a gorgeous area but it's still a lot of homes out there. **C/Young:** I've got to echo a lot of your sentiments but I think the master plan, overall, will work well with the Falcon Crest development to the South. It's always kind of been interesting where development wants to happen versus where people want things to go. But I also know that in some of what the City of Boise wants to do and some of their future planning is R-6 residential from Pleasant Valley Road working to the West. So, it's not an unheard-of thing in what other cities are doing and looking at this area. I think that they have done a good job. I think they've worked well with the city to try and get a lot of the open space amenities, the school sites and things that would be needed in that area for this type and the amount of developments heading that direction. I looked through some of these letters; I think we're over two miles away from the BPD's (Boise Police Department) fire range out there and I think as the applicant indicated, we're down in a valley so I don't share, personally, those same concerns as far as that goes. You look at the COMPASS report and they say it exceeds their growth forecast for this area; I haven't seen a COMPASS report in the last eight years in anywhere in the valley that didn't say we're exceeding the forecasted growth. We've modified our Comp Plan in that area when we did it a year back and it's consistent with that Comp Plan. **C/Hennis:** I also remember too, about 10 years ago, we were looking at 6 developments that were going to be along Kuna Mora Road between 84 (Hwy 84) and downtown; but none of them had the connectivity, none of them had any of the services provided but yet there was development. Where this is kind of centralized and it's nice in the fact that they are putting all of the amenities in first, which we don't get most of the time. With some of the citizens that were reflecting on whether this is actually going to go through and everybody be held accountable for it, but the Development Agreement, they're

going to be held to it but we're also going to get the nice stuff in before all the houses which is usually backwards of what we get in a lot of subdivisions; so it's nice. I think it's just laid out better than trying to cram all these houses in a longer stretch without amenities provided to it; schools, law enforcement, etcetera. **C/Young:** And I think the landscaping that's been proposed and the landscape plans all looks really well from my point of view. I like the pathways, the connectivity to the South with the development that's going there; I think the people that are going to be moving out there between Falcon Crest and this development, will have some very nice pathways and long stretches to bike on as both of those expand and do their thing. And the roads merge North – South with Five Mile and provide that connectivity there. **C/Hennis:** Yes. **C/Young:** And I think that with the applicant agreeing with all of ACHD's comments, the miles of roads that they're modifying; they're redoing pretty much everything from Pleasant Valley all the way to Cloverdale and when they hit their milestones there's signalization that's going in on multiple intersections. And there, as he said, are impact fees that are paying for North – South on Cloverdale. **C/Laraway:** I think the developers have done a good job putting all this all together and I think in the long run this will be a very positive thing for Kuna. I will look at the shorter end of it; the public, I think, is going to have more of an interest in this when you start tearing up roads, causing traffic problems; that's what's going to give this a good taste or a bad taste. I would hope, and I'm going to say this on the record, I hope when it comes to doing the roads you make the roads better than what they were when you started tearing into them. The patchwork and all this other stuff that really makes the roads inconvenient to go on, and the traffic that it causes backing up; a lot of it isn't the developer, it's ACHD and their approval of the roads and the pipes and things like that. We don't control that, half the time the developer doesn't control that. Hopefully, we can work with ACHD to make those roads better than what they are after we're done with them. I think the police are going to be able to respond probably fairly swift, they're only four miles away; fire's going to have a station out there. This valley's going to grow, it's probably one or two in the nation in growth, they're going to come. It'd be nice to have a nice subdivision. I'm assuming you have independent builders that are going to be involved in this, they're going to make this a very nice community next to the golf course. Cloverdale will get widened, ACHD will eventually get around to it. I don't know about the ins and outs of the building in the subdivision, hopefully the staff and the engineers are going to keep an eye on that because once we approve this it's kind of out of sight, out of mind. I don't have any problems with the subdivision. I think it's laid out well, I think the school donation for West Ada and for the Kuna School District; everybody kind of wins with this. It's just my opinion. **C/Young:** Ok, anybody else? **C/Gealy:** Yes. I think that there's been some criticism that it's a patchwork but I'm afraid a patchwork is what we get with individual, unique subdivisions. I don't think a patchwork is what we've got with a Planned Unit Development. I think there are a lot of advantages to a Planned Unit Development, and we're seeing a lot of those advantages in this application; there's a good diversity of housing, it's not all the same. I know you've front loaded the amenities and the parks and I appreciate that, there's good open space available for the people. I do think those are advantages of a Planned Unit Development that we don't get from patchwork subdivisions, so I appreciate that. I'm still a little bit concerned about the density but if it's at 2.9 overall density, I think that's quite acceptable and that's what's in the Development Agreement. I am still concerned about some of the modifications that were requested; I don't want to approve modifications and then later find that we've made a mistake because we didn't quite understand why it was 500 feet or 200 feet or 7 houses or 3 lots. So, I'm still concerned about Exhibit E but, in the scope of things, I think that's not really hugely significant. I would like to see a little bit more…. I guess I would like to ask staff, if staff would recommend approval of the conditions in Exhibit E as they are presented here? **Troy Behunin:** Staff can't make a recommendation about the conditions, however, I know that one reason why the Public Engineer does not like too many homes or too many units on a flag lot deals with moving trucks in and out. And it deals with narrower driveways and things like that for if someone's got an RV and someone's coming to visit, then they need to get in and take care of an easement or something that's going on. Those are the major concerns for that particular section.

**C/Gealy:** I appreciate the attorney's comments that we will see this again, but what typically happens is if something meets the code then we're hard pressed to change it and what we're being asked to do is to modify the code. What I'm wondering is, would we be better served by saying we won't accept the modifications in Exhibit E but we would encourage the applicant to work with staff for exceptions to the PUD ordinance? And that staff and the Director would entertain appeals or exceptions? **Troy Behunin:** For the record, Troy Behunin. Commissioner Gealy, if the Commission feels that a specific exception or something general for the entire Exhibit E, on a case by case basis; if that's the way the Commission feels then staff would support that. **Bill Gigray:** Mr. Chairman, Bill Gigray, City Attorney with your permission. In response to that, my experience with Planned Unit Developments not only in this community and others is that they do provide flexibility and there are requests for either, some city's call the waivers other call them exceptions or modifications. I think this is an issue of how important is this to the applicant, that those be a part of this, and if it is then my recommendation would be that you may want to continue this hearing for one more time so that can be ferreted out so that you get specific staff recommendations as to whether or not those not be waived or waived because I think that is part of your findings in this regard. Now, if it isn't of any major issue for the developer, that they have those modifications and you decide not to give them, then it wouldn't really be much of an issue and you could move on. **C/Young:** Ok, to maybe follow up on yours; for myself, I think that the majority of what they're looking for this specific development, because what they are talking about is specifically for this PUD and this Development Agreement, it doesn't change city code city wide, it's specific to this agreement. And for me, the only one that I may really have any question with is the conflict between what the City Engineer is looking at for the flag lots versus that. **C/Hennis:** Yes. **C/Young:** But maybe move wiping all of that and maybe we can look at a condition for reviewing prior to City Council. The applicant and the City Engineer could get together and maybe come to whatever compromise and present that to Council. **C/Hennis:** As far as this table goes. **C/Gealy:** Well, some of them seem inconsequential but some of them…. I'm concerned there may be an unintended consequence. I would like to have the modifications include a condition to work with staff and City Engineer but these are requests for modification to the PUD ordinance for this subdivision so that they don't have to work with staff and City Engineer. **C/Young:** Well, I guess that's where I was heading if our recommendation we have in the interim, maybe the applicant work with the City Engineer or staff on several specific things of concern. **C/Gealy:** Before it goes to City Council? **C/Young:** Before it goes to Council. And then we address it that way, as a suggestion. **C/Gealy:** Yes, I think that sounds like a good idea. **Wendy Howell:** Chairman Young, Wendy Howell for the record. If you decide to do that, please be specific as to which ones you are referring to. Thank you. **C/Young:** Yes. **C/Hennis:** It appears that kind of on that same common one with the flag lots. It doesn't seem like too much of the others are like you say, kind of inconsequential but I would like flag lots to be evaluated a little further. **C/Gealy:** And I would direct you to page 5 of 10 of the staff report where staff highlights the following specific items for the Commission to consider; subdivision advertising; Pre-Plat approval timeframe; cul-de-sac lengths; minimum road width; flag lots; and street and alleys. Myself, I'm not particularly concerned about the subdivision advertising; they have it in their best interest to advertise in good taste and safety. **C/Hennis:** And it still has to go through sign review anyways. **C/Gealy:** And, I'm not concerned about the Pre-Plat approval timeframes. I am concerned about cul-de-sac length, minimum road width, flag lots and streets and alleys. **C/Young:** I think we can condition that the applicant works with staff on those specific items before presenting to Council. **C/Hennis:** Yes. **Wendy Howell:** Chairman Young, if you could speak a little bit louder or closer, I'd appreciate it. **C/Young:** Yes. I think we could add those specific conditions with our recommendation to Council. **C/Gealy:** Alright, thank you. **C/Young:** Are there any other thoughts? **C/Gealy:** There were some other conditions that I made note of as we went, I don't know if we want to include conditions in addition to ones in the staff report; especially with respect to Exhibit E, on condition thirteen, discusses landscaping but we typically have language that discusses the maintenance of landscaping. Oh, here it is. I'm sorry, number eight.

**C/Hennis:** Yes, it should be there. **C/Gealy:** Do you think condition eight is requiring that the homeowner's association provide landscaping maintenance? It's the public entities owning the property. **C/Young:** I'm not on the same page. **C/Gealy:** Page 9 of the staff report. Is yours different than mine? **C/Young:** Maybe I'm a page off? Oh, it just jumped over. Here we go. **C/Gealy:** No, that's not it. **C/Young:** Number 8? **C/Hennis:** I think you're missing a page. **C/Young:** Am I? About landscaping being permanently…. **C/Hennis:** You're on the wrong page. (Commissioner Hennis assists Chairman Young). **C/Young:** Ok, sorry. Go ahead, now that I can see the same thing. **C/Gealy:** Does this all require landscaping shall be? **C/Hennis:** Well, part of the PUD is that they set up the HOA's and the different phases. And like he described, each one is going to be based on its development type and it's within the PUD that they have to set up these associations. So, I think that's implied in that whole PUD and covered there. **C/Gealy:** I just want to make sure the maintenance of common areas is not implied. **C/Young:** No, I think that's being specific that they have to. **C/Gealy:** Ok. Then I have a condition to work with the schools and ACHD regarding school site driveways. **C/Hennis:** Yes. **C/Gealy:** To work with city staff regarding park amenities, pond amenities, to include lifesaving stations, work with city staff to provide park and ride lots. **C/Hennis:** I also have one here to work with ACHD for the traffic calming for the bump outs and such through the residential areas. So, to work with ACHD for the traffic calming mitigation. **C/Gealy:** Do we need to say anything about private roads or private driveways? **C/Young:** I think it's pretty clear in the PUD. **C/Hennis:** Yes, I think it is in there. Plus, that will all be re-evaluated during the Plats. **C/Gealy:** Just a question for clarification, do we also need to include Planned Unit Development 19-01-PUD in that same motion? **Troy Behunin:** Yes.

**Commissioner Dana Hennis moved to recommend approval of 19-10-AN (Annexation) and 19-06-DA (Development Agreement) with the conditions as outlined in the staff report and with the additional conditions the applicant work with staff, Kuna School District and ACHD for site layout of the schools and the applicable access roads; for applicant to work with ACHD on traffic calming measures within the streets as indicated in the ACHD report; applicant to work with the city to provide amenities in the park and lifesaving stations at the pond; applicant to work with the city and City Engineer in regards to Exhibit E, Section 6-3-3-G: Cul-de-sac Lengths, Section 6-3-4-D: Minimum Road Width, Section 6-3-9-G: Flag Lots, Section 6-4-2-S: Streets and Alleyways; and provide a park and ride or ride sharing lot within the commercial area. Commissioner Hennis moved to approve 19-01-PUD (Planned Unit Development).**
**Seconded by Commissioner Cathy Gealy. Motion carried 4-1-0.**

**Commissioner Dana Hennis moved to recommend approval of 19-23-DR (Design Review) with the conditions outlined in the staff report and with the additional condition the applicant work with ACHD on traffic calming measures. Seconded by Commissioner Cathy Gealy. Motion carried 4-1-0.**

Wendy Howell, Planning and Zoning Director, requested of the Commission a brief recess. Recess began at 8:25 PM.

***B.*** **Case No. 19-05-ZC (Rezone) & 19-04-SUP (Special Use Permit) 763 W. Avalon**
**ACTION ITEM**

**C/Young:** We'll go ahead and come back to order at 8:33 PM. The next item up on the agenda is 19-05-ZC (Rezone) and 19-04-SUP (Special Use Permit) for 763 W. Avalon. We'll have staff come forward. **Troy Behunin:** For the record, Troy Behunin standing in for Doug Hanson, Kuna Planning and Zoning staff, 751 W. 4th Street, Kuna. Good evening Mr. Chairman, members of the Commission. The application before you this evening is for the Rezone of a property located at 763 W. Avalon. The current zone is AC-2, Area Commercial, and they are looking to change

that to a C-1 Neighborhood Commercial. The applicant also seeks a Special Use Permit approval in order to operate a church inside the existing building on the subject property. The proposed zoning is compliant with the Comprehensive Plan and the Future Land Use Map, and staff has determined that this Rezone and Special Use Permit application is compliant with Kuna City Code; KCC. The applicant should be conditioned to follow an alternative method of compliance because of the configuration and the way that the existing conditions of the lot are. An alternative method of compliance was submitted because of the size limitations of the parcel among other existing facilities. The landscape improvements along W. Avalon Street would cause the site to lose approximately 20 parking stalls in order to be compliant with the current city landscaping ordinance, that would be on the northern boundary of the parcel. The removal of the parking stalls would then limit the applicant in providing adequate parking on site, so we have a conundrum. Staff does recommend an additional condition for the installation of two street lights at two locations along the border of the property; the first would be directly on the corner of W. Avalon Street and School Avenue, and the second light would be next to the driveway access from School Avenue which is on the southwest corner of the site. These lights should have a double head to provide lighting for both the parking lot and the walking path; that's a condition that has actually come down from Public Works and City Engineer. With that I would stand for any questions that you might have. Thank you. **C/Young:** Ok, are there any questions for staff at this time? **C/Gealy:** I have no questions. **C/Hennis:** No. **C/Young:** Then we'll have the applicant please come forward. **David Crawford:** Chairman, Commissioners, David Crawford, B&A Engineers, 5505 W. Franklin Road in Boise. I'm here representing the applicant, who's not here tonight, but tonight what we're bringing forward is exactly what staff had indicated, a Rezone from the current C-2 zone to C-1 to allow the use of a church and also the Special Use Permit. Staff did a really good job of discussing the issues with the site related to the additional landscaping requirements; I don't want to belabor the issues too much but the majority of the reason is, as specifically noted in my letter, was really due to the additional right of way dedication that has occurred through the many years out there; particularly along Avalon Street. They dedicated 23 additional feet from the original 25 on the south side of Avalon and an additional 10, I believe, on School Street. This occurred after it was developed over the years and subsequentially, there was improvements made for pedestrian access to place sidewalks on School and Avalon both, so that there is pedestrian travel ways within the right-of-way there. So it really removed the opportunity for the site to be able to be…. we essentially, could lose the majority of the parking along that area. What the concern there is, obviously, is that we wouldn't be able to adequately serve the church patrons and it would drive parking out to the street. That's what we're really trying to avoid there. I think the site plan shows a lot of that, that there is landscaping that is provided on both School and on Avalon Street. There's a large landscaped area at the northwest corner and then of course near the entrance of the northeast corner and also the building frontage on the southwest corner; we believe that landscaping, while it may not meet current city codes, it is there. Specifically related to the additional street lighting, this is the first we heard about the double head streetlighting. We believe that the site has two existing streetlights; one located in the planter at the northeast corner at the west side of the entrance and one located in the larger landscaping area near the northwest corner of Avalon and School; those are specifically noted on the site and landscape plan. While there is not a streetlight located on the south side of the west entrance off of school, we would offer that we could provide lighting on the exterior of the building to add additional lighting for the parking area. And, with those things, I'll stand for any questions you may have. **C/Young:** Ok, are there any questions for the applicant at this time? **C/Hennis:** Just one; it sounds like you guys aren't really willing to do the two streetlights but you're willing to try to come to some compromise to provide the lighting that they're requesting? **David Crawford:** Correct. **C/Hennis:** Thank you. **C/Young:** Alright. Any

other questions for the applicant at this time? **C/Gealy:** No, no questions. **C/Laraway:** No. **C/Young:** Thank you. Alright, then I'll open up the public testimony at 8:40 PM. And all the names I have listed on here, several say not to testify and then there are others that don't have either testify or not. It appears everything in here is in favor, is there anybody that's on the list that would like to testify? Ok, then please come forward. Let's see, is your name on here? **Jeremy Jeans:** Yes sir, the second name. Jeremy Jeans, 681 E. Wild Lilac Court. I'm the reverend or the pastor of the church that is extremely excited to finally a place to call our own. This has been years in the making in an incredible journey, a testimony; a lot of prayer, a lot of sacrifice and, you guys will just never know what this little room has done for me and my wife and our children in the journey that we've been on personally and those that are involved in our church and the growing effort. We are extremely excited to be here in Kuna and we have no plans on being a fly-by-night, flash in the pan group and we're excited about putting roots down in this community and being a blessing to you, to the city, to the young people; whoever we need or require or want to be a part of what we're doing. And I just wanted to thank you, this is a testimony that's going to be heard in a lot of different churches across this country because of the circumstances that brought us here. And, you guys just don't know; I'm extremely honored and privileged to be here. Thank you. **C/Young:** Thank You. **C/Hennis:** Thank you. **C/Young:** Ok, then we'll just make double sure, is there anybody else? Is your name on the list as well? (Answer from audience). Ok. **David Gronbeck:** Mr. David Gronbeck, 1400 E Kokanee Lane, Kuna, ID. I'm just here to respond to the lighting requirement; from a simple perspective, it was at one time, good enough as it is for City Hall. There are parking lot lights on facility right now, so to me it would seem the uses, a daycare is operating out of there now and it's a daytime activity similar to what the church will be. I think the additional lighting is a big request, and if they can accommodate that with some lighting on the side of the building, I would think that should be sufficient. Any questions? **C/Hennis:** Thank you. **C/Young:** Ok. Then with that, it is typically the applicant would come back and offer any rebuttal but I don't know if there's anything you would like to add to that? **David Crawford:** Chairman, Commissioners, David Crawford for the record, B&A Engineers. I'll stand for any questions you may have or if you wanted to ask any specific questions about the site itself. I'd be happy to answer those. **C/Hennis:** Are they planning to add any signage at this point, do you know, or is that just going to be dealt with in the future if they choose to? **David Crawford:** Chairman, Commissioners, any new signing obviously would have to come before the design review committee, there hasn't been any proposed to us. I'm sure in the future that they're definitely going to have to do that and of course be in compliance with the sign ordinance that the City of Kuna has. **C/Hennis:** And they know that they'll have to come back for that? **David Crawford:** They do now. **C/Young:** There is an existing sign up there. **C/Hennis:** Oh, that's right, there is. Ok, thank you. **C/Young:** Alright, any other questions at this time? **C/Gealy:** No questions. **C/Young:** Alright, thank you. Then I'll go ahead and close the public testimony at 8:45 PM. **C/Hennis:** I looked at this lighting thing when I was looking through the packet and with these two being the existing ones, why adding 1 only maybe 10 or 15 yards away; I don't know if this ones all that helpful. I agree something down here on the end towards the building, might be useful but; staff, would you have any input on that? I mean, the proposed location on the corner of School and Avalon is just across that little landscaping area from the existing one. **Troy Behunin:** For the record Troy Behunin. Commissioner Hennis, Commissioners; the discussion that I had with Doug about this project and the streetlight was there's a request for alternate compliance for the landscaping and that this would mitigate some of those landscaping needs; it would also serve as a safety measure for that corner. As you know, there's been a number of incidents there at that pedestrian crossing from the south side to the north side. I think that the reason for that was the lighting that is there is insufficient, I'm not if the distance plays a part of that or not but the fact is there is a dark

corner there where pedestrians are encouraged to walk across. **C/Hennis:** Might it be better suited to replace the head on the existing tower versus putting a whole new tower in that's going to be kind of oddly close to the other one? **Troy Behunin:** For the record, Troy Behunin. Commissioner Hennis, I'm not a lighting engineer but what I do know is that distance does play a part of that; we're not talking a few feet, we're talking 15 or 20 yards from the corner. **C/Hennis:** Ok. **Troy Behunin:** Perhaps staff could agree that lighting on the building along School may offer some better lighting options and be better lighting for pedestrians so long as they're downward facing; we don't want lights projecting into the right-of-way. However, on the corner, I know that was a Public Works concern and it's also a Planning and Zoning concern. **C/Hennis:** Ok, thank you. **C/Young:** I can definitely see the concern with that, I've driven through there at night and it is dark. As far as the hard corner there on School and Avalon, I don't know that there's a need for the secondary pole at the southwest corner of the lot versus building lighting. **C/Hennis:** Maybe we can condition it to where they work with the City Engineer who's requesting it, as opposed to staff who's both not lighting engineers, to look at the possibility of maybe even just replacing the head because that would be a significant reduction in cost but still could be highly effective in what they're trying to do. **C/Young:** If they can get the light coverage the engineer wants? **C/Hennis:** Yes. We all know these are old lights, they've been around since whenever, and we've got a lot better lighting options now. **C/Young:** If they can get the coverage on that. **C/Hennis:** Yes. **C/Young:** Ok. Any others? **C/Hennis:** Just what I've seen in lighting surveys and photometrics. **C/Laraway:** Not being a lighting engineer myself either, it would seem that the new type of lights that are out there could be put on that other pole to accomplish both. **C/Hennis:** Right. **C/Laraway:** We could add, again, more modern lighting heads that probably could accomplish both the Public Works concern and reduce the cost of what we're requiring. **C/Hennis:** Right. **C/Laraway:** And, if I'm not mistaken, there's a spotlight on the roof right above the door. **C/Hennis:** Hm, yes. **C/Laraway:** And that's because that's the old police station. **C/Hennis:** Yes, I agree. I think maybe a compromise would be to investigate the use of a newer head on that tower and save the cost of that. **C/Laraway:** So, are you talking about alleviating the one tower? **C/Hennis:** No. And I think the other one doesn't, over next to the building, doesn't even need to be there; I think it can be transferred to something on the building. **C/Laraway:** Yes, because I think that would be better to have one at the entrance of both. **C/Hennis:** Yes. Oh, so you're talking about leaving the more southern pole there? **C/Laraway:** The more easterly pole, and the one that's on school. The one with the X and the one with the square. **C/Hennis:** Well, the squares are existing. **C/Laraway:** Right. That's what I'm saying; that should be adequate because those are the entrance points. **C/Hennis:** Yes but, we're talking about on the other X at the other entry on School, to use something off the building. **C/Laraway:** Right. I remember that light being there but I don't know if still there anymore. **C/Hennis:** Yes, there may be something. **C/Laraway:** Is there a crosswalk or something at School and Avalon? **C/Hennis:** Evidently, yes. **C/Young:** Yes, that's where that gal got hit. **C/Laraway:** Ok, that's what I was wondering. **C/Laraway:** I think that's part of what's generating a need for more light on that corner. **C/Laraway:** It goes across School, right? **C/Hennis:** It goes across Avalon. **C/Young:** Right across Avalon. **C/Laraway:** Oh, it goes across Avalon. **C/Young:** Yes, north south. **C/Hennis:** I understand the need for the light and I also understand the need for the economic concern, because that gets expensive. I think the pole, in what I remember on photometrics, we should be able to accomplish it with that pole there. **C/Laraway:** They might not even have to put another light on, they could probably just add one to the side to where it's a directional. **C/Hennis:** It'll look funny unless it's the same head but yes, that's out of our realm of experience or expertise. **C/Young:** I think that we can maybe just make that condition to work with them. If they can get that light coverage on the corner that's required, and then the others for the building.

**C/Hennis:** Otherwise, I'm all for it. **C/Young:** Yes. I think that as far as the zoning goes, it started as a church, I think it's awesome that it's going to come back to be a church again. **C/Hennis:** Yes, I agree. **C/Young:** I don't have any issues with that. **C/Gealy:** I think they should work with Public Works to address the concerns of lighting but I would defer to our Public Works people. And I would say they may need to include up to 2 additional light poles, depending upon after they've talked with staff and Public Works. **C/Young:** Yes, see if they could get that. **C/Laraway:** There appears to be a light across the street on a pole; we're going to require another light on this? There's already a light, it looks like, coming off the telephone pole on the north side of Avalon. **C/Young:** Well, I think the issue is there's not adequate light on the southside. That lights old and was probably put up there in the seventies? Honestly, I think the best way to approach it, from my point of view, is if they can get the photometrics to work with adjusting the existing pole and adding a head to that to get the coverage without blowing something out across the street, then I think it would be great to reuse that. But it will have to satisfy the engineer. **C/Gealy:** Right. **C/Hennis:** Yes. **C/Young:** Any other thoughts? **C/Gealy:** Yes, I think the condition has to be to satisfy the concerns of the engineer. **C/Hennis:** Mr. Chairman, I move we approve; Rezone's are approved, right? **Troy Behunin:** For the record, Troy Behunin. Recommendation for the Rezone and a decision from you folks tonight on the Special Use Permit. **Bill Gigray:** Mr. Chairman, members of the Commission, with your permission. I would encourage you to make a definitive decision because if you have ambiguity, then the question is, what have you really ordered here? I think the comment about other considerations is very helpful but the question would be, are you going to require that they meet the requirements of Public Works or not, as a condition? Because working with and with those considerations, you are giving Public Works instructions of you wanting them to look at alternatives but in the end, I would think, that your condition ought to be definitive about whether Public Works approval is needed or not. **C/Hennis:** Ok. In that case, do we have anything from Public Works that says what they are requesting and the specifics behind it? Because it's hard to evaluate this if they just request it. **Troy Behunin:** For the record, Troy Behunin. Commissioner Hennis, there are streetlighting requirements listed in Kuna City Code, but then you also can make the general condition that they satisfy the Public Works requirements. **C/Hennis:** Are we looking at providing streetlighting from a public area? Because doesn't that kind of go away from our Dark Sky's Policy of leaving the parcel? **Troy Behunin:** For the record, Troy Behunin. Yes, but the first consideration is not necessarily for Dark Sky's, the first consideration is for public safety. **C/Laraway:** If I could add two sense on that; I'm not trying to be difficult, but I don't think we should be pushing public safety off on a church. There's a streetlight across the road, that should be the city that makes that a safe crosswalk. That's me being difficult. **Troy Behunin:** For the record, Troy Behunin. Looking at the underlying zoning, it's a commercial zoning. Churches, although they're not taxed the same way other commercial businesses are, they are considered a commercial business. They build to commercial standards, they have to follow commercial requirements, for other considerations. **C/Young:** I think we also need to remember that the additional lighting was in lieu of landscaping requirements that we're not having them do because of the hardships on losing parking stalls; and the lighting was in replacement of those landscaping requirements. So, maybe we need to keep that. This was a trade-off for landscaping, it was either that or all of the sudden now there's a landscaping requirement that's there that would take away their parking stalls. There's that piece and that was part of the request for the change in meeting halfway so to speak. **C/Hennis:** I see your point, but it's kind of one of those where, oh, just so you don't have to worry about landscaping we're going to make you put a light pole in over here. I understand that but it's usually in lieu of we'll take away the trees over here if you put bushes over here because it's all landscaping. I understand the idea behind public safety here, but are we saddling the city's

responsibility with private responsibility. I can see maybe the pole at the corner, but do we need the other pole because we are right next to the building? I get the point on the corner where we've had the incident but.... **Troy Behunin:** For the record, Troy Behunin. Earlier staff did concede that the one on the corner would be sufficient to satisfy Planning and Zoning, and that some downward facing lighting on the building along School Avenue would be a concession that we would be willing to make. **C/Hennis:** Still, I have looked at enough photometrics in my life that I almost think that we can do a condition to where we say in lieu of that light pole, if they can present a head replacement for the existing pole, if it would satisfy Public Works. **C/Young:** I agree with what you just said. **Troy Behunin:** For the record, Troy Behunin. We can't make that recommendation for you but if that's the direction that you would like to go, we can certainly entertain that at public hearing with City Council. **C/Hennis:** Ok. **C/Gealy:** We could also table it. **Troy Behunin:** I'm sorry, I did say the Rezone; it does need to be handled with the Special Use Permit. I Apologize. **C/Gealy:** We could table it for two weeks. **C/Hennis:** What's that going to do though? **C/Gealy:** Well, find out from Public Works exactly what would satisfy; if they would be satisfied with a different head or if they would be satisfied with a lighting on the building. **C/Hennis:** But, instead of tabling that we can condition and say unless they can provide evidence that satisfies the City Engineer to use the other pole and then provide one on the building. It just gives them the option if they can work with the City Engineer and utilize the one pole with a new light fixture that satisfies what he wants, then they don't have to put the other pole in. **C/Gealy:** So, then the motion is to satisfy the City Engineer, not just to work with the City Engineer? **C/Hennis:** Yes. **C/Gealy:** Recognizing that they may be required to put up two new poles? **C/Hennis:** One pole. Well, that's what I'm saying; we'll say one pole on the corner and a light pack on the building in lieu of the second pole. With regards to the one on the corner, if they can work with the City Engineer to satisfy his needs using the existing pole with a new head, that would also be acceptable. **C/Young:** It would have to satisfy the City Engineer or his lighting requirements? **C/Hennis:** Yes. He has a certain photometrics he'll want to see; he'll know if that will work. **C/Gealy:** Does that satisfy the attorneys concern about being specific? **Bill Gigray:** Mr. Chairman, members of the Commission, it's going to be a matter of your direction. I would recommend that your condition be clear about who makes the final decision, is it the Public Works Director or not? **C/Hennis:** Ok. **C/Young:** Yes, I think that's where we're headed, if they can supply a head that works for the photometrics and would satisfy the engineer, then we can alleviate that need but it has to be satisfied. **C/Hennis:** Ok. **C/Gealy:** And then likewise with the one on the building, is that also have to be satisfactory. **C/Hennis:** Yes. **C/Laraway:** That's pretty bright if it's an LED. **C/Hennis:** I'm not sure if that one's still there, come to think of it. Maybe they just haven't turned in on in a while. **C/Young:** Yes, I would be fine just saying on the building to push that one out. **C/Hennis:** Ok, let me revise my motion.

**Commissioner Dana Hennis moved to recommend approval of 19-05-ZC (Rezone) with the conditions as outlined in the staff report and with the additional conditions the applicant provide a light on the end of the building in order to satisfy the City Engineers need for a pole at the School entrance; and to add a light pole at the corner of School and Avalon as requested by the City Engineer unless a replacement head can be found to satisfy the lighting requirements. Seconded by Commissioner John Laraway. Motion carried 4-1-0.**

**Commissioner Dana Hennis moved to approve 19-04-SUP (Special Use Permit) with the conditions as outlined in the staff report and with the additional conditions the applicant provide a light on the end of the building in order to satisfy the City Engineers need for a pole at the School entrance; and to add a light pole at the corner of School and Avalon as requested by the City Engineer unless a replacement head can be found to satisfy the lighting requirements. Seconded by Commissioner John Laraway. Motion carried 4-1-0.**

**4. *ADJOURNMENT:* 9:07 PM**

**Commissioner Dana Hennis moved to adjourn. Seconded by Commissioner Cathy Gealy. Motion carried 4-1-0.**

~~Lee Young, Chairman~~
Kuna Planning and Zoning Commission
Dana Hennis, Vice Chairman

ATTEST:

Wendy I. Howell, Planning and Zoning Director
Kuna Planning and Zoning Department

J-U-B ENGINEERS, INC.

J-U-B COMPANIES | THE LANGDON GROUP | GATEWAY MAPPING INC.

# MEMORANDUM

**DATE:** July 21, 2020

**TO:** City of Kuna Mayor and City Council

**CC:** Chris Engels; Bob Bachman; Paul Stevens, P.E.; Tim Blair, P.E. (J-U-B); Mike Cole (Knife River)

**FROM:** Lisa Bachman, AICP, PCED, Grant Administrator

**SUBJECT:** Public Hearing - Progress of Downtown Revitatlization for CDBG-funded activities

Mayor and Council,

This public hearing is required by the Idaho Department of Commerce to fulfill the requirements of the Idaho Community Development Block Grant (CDBG) for Phase 2 of the Downtown Revitalization project. If you recall, we held a public hearing just before submitting the grant application, and now this is the second public hearing, which is to be held during construction.

**Project Activities**

To date, the south side of Main Street is pretty much complete. Crews are now focusing attention on the north side of Main Street. Business owners and tenants have been really good to work with, and their patience has been very much appreciated, as construction right up to their storefronts has been a bit disruptive.



The final outcome is reflective of the input from the Downtown Revitalization Steering Committee and Downtown Revitalization Plan. Also, all of the underground structural components are included with the project for a future “Welcome to Downtown Kuna”-type archway near Avenue A.

Construction is expected to be complete late-August, and no construction contract change orders have occurred to-date.

**CDBG Budget**

The CDBG budget of $500,000 has remained on track. To date, 81% of the funds have been expended through the first two Request for Funds. The upcoming Request for Funds (no. 3) will exhaust 100% of the CDBG construction funds. The table below provides a snapshot of the CDBG budget to-date.

| | ICDBG Budget | Total of Previous Requests | Total CDBG Funds Dispersed | Unexpended Balance of CDBG Fund Requested |
|---|---|---|---|---|
| **Administration** | $41,500 | $11,620 | $9,454 | $29,880 |
| **Construction** | $458,500 | $392,400 | $103,086 | $66,100 |
| | | | | |
| **Total CDBG Funds Remaining** | | | | **$ 95,980** |

This budget reflects only the CDBG dollars. Other federal-aid grant dollars from ITD, LHTAC and ACHD are being tracked separately, along with the city's required match of 7.34%.

City of Kuna
City Council
Staff Memo

751 W 4th Street
Kuna, ID 83634
Phone :(208) 922-5274
Fax: (208) 922-5989
Kunacity.Id.gov

**To:** **City Council**

**Case Numbers:** 20-03-LLA (Lot Line Adjustment); Kelleher No. 2

**Location:** 1585 & 1595 W. Hubbard Road, Kuna, ID 83634

**Planner:** Jessica Reid, Planning & Zoning Staff

**Meeting Date:** August 4, 2020

**Owner:** *Open Door Rentals, LLC*
1977 E. Overland Road
Meridian, ID 83642

**Applicant:** *Trilogy Development*
9839 Cable Car St, Suite 101
Boise, ID 83709
208.895.8858
shawn@trilogyidaho.com

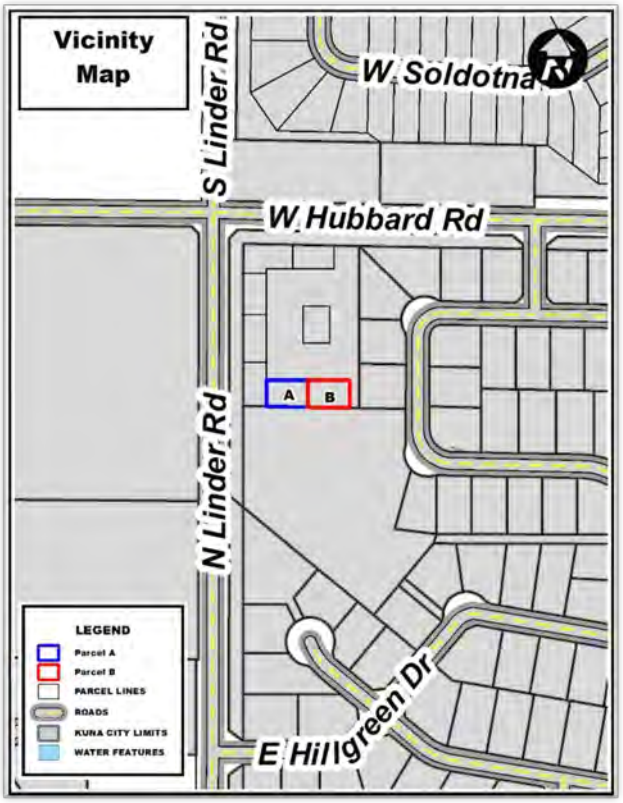



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B. Applicant Request
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## A. Course of Proceedings:

1. A Lot Line Adjustment (LLA) is designated in Kuna City Code (KCC) 1-14-3, as a public meeting, with the City Council as the decision-making body. As a public meeting, this application does not require public notice as set forth in Idaho Code, Chapter 65; Idaho Local Land Use Planning Act. The guidelines for decision making by the City Council as outlined in KCC 1-14-3 have been adhered to.

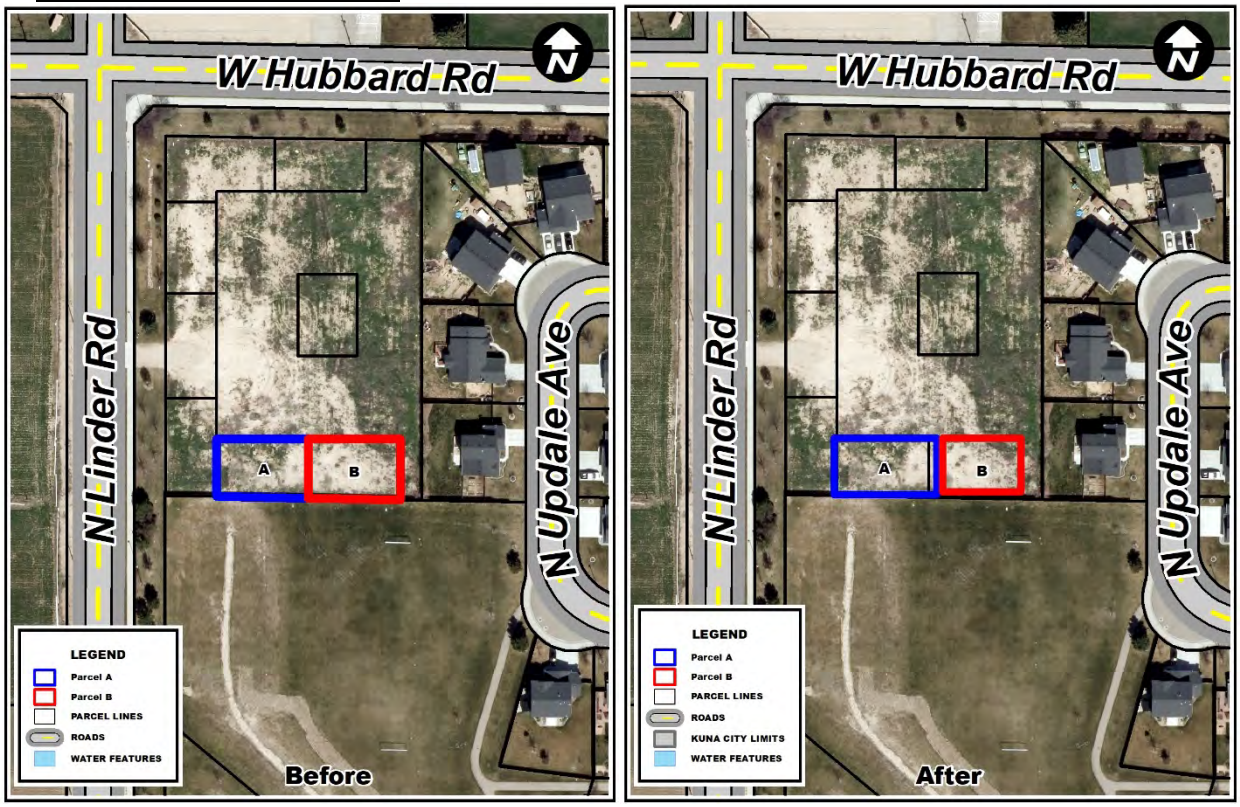
a. Notifications

| | |
|---|---|
| i. Public Works/City Engineer | June 18, 2020 |
| ii. Completeness Letter | June 18, 2020 |
| iii. Agenda | August 4, 2020 |

## B. Applicants Request:

Trilogy Development seeks Lot Line Adjustment approval. The subject properties are located at 1585 & 1595 W. Hubbard Road, Kuna ID 83634.

## C. Concept Before and After:




## D. History:

This parcel is lot 8 block 1 of Kelleher Subdivision. The original final plat for Kelleher Subdivision was recorded on October 12, 2006. In 2017, a previous owner went through the public hearing process in order to rezone the property from R-4 (medium-density residential) to C-1 (neighborhood commercial). City Council approved the rezone on December 19, 2017. The Preliminary Plat for Kelleher Subdivision No. 2 was approved on November 7, 2018 and the Final Plat recorded June 26, 2019.

## E. General Project Facts:

1. **Comprehensive Plan Designation:** The approved Comprehensive Plan Future Land Use Map indicates a *Commercial* designation for these parcels. The two subject parcels are currently zoned C-1 (Neighborhood Commercial).

2. **Surrounding Current Land Uses:**

| Direction | Current Zoning | |
|---|---|---|
| **North** | C-1 | Neighborhood Commercial – Kuna City |
| **South** | R-4 | Medium Density Residential – Kuna City |
| **East** | R-4 | Medium Density Residential – Kuna City |
| **West** | A | Agriculture – Kuna City |

3. **Parcel Numbers:** R4865430140 (Parcel A), R4865430160 (Parcel B).

4. **Parcel Sizes and Current Zoning:**

| Parcel | Current Size (Acres) | Zoning |
|---|---|---|
| 1585 W. Hubbard Road (Parcel A) | 0.113 | C-1 (Neighborhood Commercial) |
| 1595 W. Hubbard Road (Parcel B) | 0.118 | C-1 (Neighborhood Commercial) |

5. **Services:**
   Fire Protection – Kuna Rural Fire District
   Police Protection – Kuna City Police (Ada County Sheriff)
   Sanitary Sewer– City of Kuna
   Potable Water – City of Kuna
   Irrigation District – Kuna Municipal Irrigation District
   Sanitation Services – J&M Sanitation

6. **Existing Structures, Vegetation and Natural Features:**
   All site improvements that were required as a part of the Preliminary Plat approval in terms of the common parking area, sidewalks, and landscaping are nearing completion. The site is relatively flat with an estimated average slope of 0% to 2%. According to the USDA Soil Survey for Ada County, bedrock depth is estimated to be greater than 60 inches on the northern half of the property and between 20 inches and 40 inches on the southern half of the property.

7. **Transportation / Connectivity:** Access to the parcels is via an existing access drive from W. Hubbard Road.

   **Environmental Issues:** Staff is not aware of any environmental issues, health or safety conflicts beyond the designation of being in the nitrate priority area. Idaho Department of Environmental Quality (DEQ) has provided recommendations for surface and groundwater protection practices and requirements for development of the site.

**F. <u>Staff Analysis:</u>**

The goal of the Lot Line Adjustment is to facilitate in maintaining the required building setbacks and easements. The structure being erected on Lot 31, previously approved via Design Review, will encroach on the existing setback and easement by two feet. Moving said lot line east towards Lot 32 by five feet will provide each lot the ability to have correct setbacks and easements. This proposed lot line adjustment request has been determined to be consistent with the surrounding uses and in accordance with KCC 5-3-2, staff views this Lot Line Adjustment request to be consistent with the Future Land Use map. Staff recommends, if City Council approves Case No. 20-03-LLA, that the applicant be subject to the recommended conditions of approval listed in Section "I" of this report.

**G. Applicable Standards:**

1. City of Kuna Zoning Ordinance Title 5;
2. City of Kuna Comprehensive Plan.
3. Idaho Code, Title 67, Chapter 65, Local Land Use Planning Act.

**H. Comprehensive Plan Analysis:**

The Kuna City Council may (accept or reject) the Comprehensive Plan components, and has determined the proposed lot line adjustment for the site (*is/is not)* consistent with the following Comprehensive Plan components as described below:

**Goal Area 3: Kuna's Land Uses will Support a Desirable, Distinct and Well-Designed Community.**

- Goal 3.G: Respect and protect private property rights
  - Objective 3.G.1: Ensure land use policies, restrictions, and fees do not violate private property rights.
    - Policy 3.G.1.b: Ensure City land use actions, decisions, and regulations will not cause an unconstitutional regulatory taking of private property, and do not effectively eliminate all economic value of the subject property.
    - Policy 3.G.1.c: Ensure City land use actions, decisions, and regulations do not prevent a private property owner from taking advantage of a fundamental property right. Ensure city actions do not impose a substantial and significant limitation on the use of the property.

**I. Proposed Decision by the Council:**

*Note: This proposed motion is for approval/conditional approval/denial of this request. However, if the Council wishes to approve or deny specific parts of the request as detailed in the staff report, those changes must be specified.*

Based on the facts outlined in staff's report, the case file and discussion during the public meeting, the City Council of Kuna, Idaho, hereby (*approves/conditionally approves/denies*) Case No. 20-03-LLA, a Lot Line Adjustment request by Trilogy Development; with the following conditions of approval:

1. Have the applicant's representative engineer-surveyor record the following documents:
   a. Record of Survey,
   b. Execute and record the necessary deeds to accomplish the property boundary adjustments as approved,
   c. Provide copies of the **recorded** record of survey and recorded new deeds, to the Planning and Zoning Department as evidence of compliance.
2. Applicant and/or owners shall complete the aforementioned conditions **within one (1) year of the City Council's Order of Decision** for this application; otherwise any approvals will be considered null and void.
3. The applicant shall adhere to all agency and city staff recommendations.
4. The applicant shall comply with all federal, state and local laws.

**DATED: this 4th day of August, 2020**

**From:** noreply@civicplus.com
**To:** Jessica Reid; Doug Hanson
**Subject:** Online Form Submittal: Lot Line Adjustment
**Date:** Tuesday, June 9, 2020 3:53:43 PM

# Lot Line Adjustment

## Step 1

Please complete each section of application in full
*NOTE: Engineering fees shall be paid by the applicant if required.*

| | |
|---|---|
| Date & Time | 5/27/2020 4:30 PM |
| | (Section Break) |
| Contact/Applicant Information | |
| Owner(s) of Record | Open Door Rentals, LLC |
| Phone: | 208.991.4931 |
| Email: | shawn@trilogyidaho.com |
| Address1 | 1977 E. Overland Rd |
| Address2 | *Field not completed.* |
| City | Meridian |
| State | ID |
| Zip | 83642 |
| Applicant (Developer): | Shawn Brownlee |
| Applicant (Developer) Company: | Trilogy Development |
| Phone: | 208.895.8858 |
| Email: | shawn@trilogyidaho.com |
| Address1 | 9839 Cable Car St. |
| Address2 | Suite 101 |
| City | Boise |
| State | ID |

| | |
|---|---|
| Zip | 8.709 |
| Engineer/Representative: | Travis Foster |
| Engineer/Representative Company: | NV5 (formerly WHPacific, Inc.) |
| Phone: | 208-275-8703 |
| Email: | tfoster@whpacific.com |
| Address1 | 690 S Industry Way |
| Address2 | Suite 10 |
| City | MERIDIAN |
| State | Idaho |
| Zip | 83642 |
| (Section Break) | |
| Subject Property Information | |
| Site Address: | 1585 & 1595 W Hubbard Rd, Apartment 201 |
| Nearest Cross Streets: | Linder Rd & Hubbard Rd |
| Parcel Number(s): | R4865430140, R4865430160 |
| Section, Township, Range: | S13, T2N, R1W |
| Property Size: | .113 ac and .118ac |
| Current Land Use: | Multi-Family under Construction |
| Current Zoning District: | C-1 |
| Proposed Land Use: | Multi-Family (Fourplexes) |
| Proposed Zoning District | Same |
| (Section Break) | |
| Project Description | |
| Project/Subdivision Name: | Kelleher Subd. No. 2 Lots 31 & 32, Block 1 |

| | |
|---|---|
| General description of proposed project/request: | Adjust the common lot line between Lots 31 & 32 to accommodate a different Building footprint that what was originally designed. |
| Type of Use Proposed - Check all that apply: | Residential |
| If Other has been selected, please provide a description: | *Field not completed.* |
| Amenities provided with this development: | Common area's per the plat of Kelleher Subd. No. 2. |

(Section Break)

Residential Project Summary (if applicable):

| | |
|---|---|
| Are there existing buildings? | Yes |
| Please describe existing buildings: | New Four-plexes are under construction |
| Any existing buildings to remain? | Yes |
| Number of Residential Units: | 8 |
| Number of buildable lots: | 2 |
| Number of common lots and/or other lots: | 1 |
| Type of dwellings proposed - Check all that apply: | Multi-Family |
| Minimum square footage of structures: | Foundation envelope footprint of each four-plex being constructed is 70' x 36'8". |
| Gross Density (DU/Acre - Total Property): | *Field not completed.* |
| Net Density (DU/Acre - Excluding Roads): | *Field not completed.* |
| % of Open Space provided: | *Field not completed.* |

| | |
|---|---|
| Acreage of Open Space: | *Field not completed.* |
| Type of Open Space provided? | Driveway / Drive Isle / Tenant Parking |

(Section Break)

Non-Residential Project Summary (if applicable):

| | |
|---|---|
| Number of building lots: | *Field not completed.* |
| Other lots: | *Field not completed.* |
| Gross floor area square footage: | *Field not completed.* |
| Existing: | *Field not completed.* |
| Hours of Operation: | *Field not completed.* |
| Building Height: | *Field not completed.* |
| Total Number of Employees: | *Field not completed.* |
| Max. Number of Employees at one time? | *Field not completed.* |
| Number & ages of students/children: | *Field not completed.* |
| Seating Capacity: | *Field not completed.* |
| Existing fencing? Type? Will it remain? | *Field not completed.* |
| Fencing type, size & location? | *Field not completed.* |
| Handicapped parking spaces: | *Field not completed.* |
| Total parking spaces: | *Field not completed.* |
| Width of driveway aisle: | *Field not completed.* |
| Proposed lighting: | *Field not completed.* |
| Proposed landscaping: | *Field not completed.* |

**Step 2**

| | |
|---|---|
| Submittal Letter | LTR Kuna P and Z LLA App 6-4-20.pdf |
| Legal Description | Kelleher No 2_LLA Lots 31-32 Legal-Exhibit-Closure.pdf |
| Proof of Ownership | Proof of Ownership and Affidavit of Legal Interest-Signed.pdf |
| Sketch of Proposed Lot Line Adjustment | Proposed LLA Exhibits.pdf |

(Section Break)

*By checking the "I agree" box below, you agree and acknowledge that 1) Your application will not be signed in the sense of a traditional paper document, 2) By signing in this alternate manner, you authorize your electronic signature to be valid and binding upon you to the same force and effect as a handwritten signature, and 3) You may still be required to provide a traditional signature at a later date.*

| | |
|---|---|
| First Name | Travis |
| Last Name | Foster |
| Electronic Signature Agreement | I Agree |
| Date & Time | 6/9/2020 4:00 PM |

**Step 3**

| | |
|---|---|
| Affidavit of Legal | Click here |

Email not displaying correctly? View it in your browser.

WHPacific
AN NV5 COMPANY

June 4, 2020

City of Kuna Planning & Zoning Department
P.O.Box13
Kuna, Idaho 83634

RE: Kelleher Subdivision No. 2- Lot's 31 & 32 Lot Line Adjustment Application

Dear Kuna P&Z Commission,

This letter is prepared to support the completed Commission and Council Review Application included hereon for the request of a Lot Line Adjustment of the common lot line between Lots 31 and 32 of the Kelleher Subdivision No. 2 plat recorded in Book 116 at Page 17543, Ada County Records.

The purpose of the request is to slide said common lot line 5 feet to the east which will expand the width of Lot 31 by 5 feet and reduce the width of Lot 32 by the same 5 feet. The driving force behind the request is the multi-family four-plex foundation dimensions that were modified for the structures that are planned to be built on said Lots 31 and 32. In order to maintain the required set-backs from the buildings to the property line and between the buildings themselves, it is necessary to adjust said common lot line as proposed and shown in the application package attached hereon.

All of the site improvements in terms of the common drive access from W. Hubbard Road, common parking area, sidewalks and landscaping either has been or will be installed per the approved Construction Plan Documents for Kelleher Subdivision No. 2.

Thank you for your time in reviewing application for this project. If you have any questions or additional comments please feel free to contact me.

Sincerely,

Travis P. Foster

Travis Foster, PLS
Operations Manager / Survey Director

Enc.

WHPacific
AN NV5 COMPANY

Date: June 4, 2020

**LOT LINE ADJUSTMENT – LOTS 31 & 32, KELLEHER SUBDIVISION NO. 2**
**LEGAL DESCRIPTION**

A parcel of land being Lots 31 and 32 of Kelleher Subdivision No. 2, being recorded in Book 116, Page 17543, Ada County Recorder's Office, Ada County, Idaho, situated in the Northwest 1/4 of the Northwest 1/4, of Section 13, Township 2 North, Range 1 West, Boise Meridian, more particularly described as follows:

**COMMENCING** at the Northwest corner of said Section 13, monumented by a 3.25" aluminum cap (Corner Record No. 2017-094753), from which the North 1/16th corner on the West line of said Section 13, monumented by a 1.5" aluminum cap (Corner Record No. 105100196) bears South 00°03'29" West, a distance of 1321.91 feet;

Thence South 00°03'29" West, coincident with said West line of said Section 13, a distance of 411.49 feet;

Thence leaving said West line, South 88°53'10" East, a distance of 65.01 feet to the southwest corner of Lot 30, Block 1, of said Kelleher Subdivision No. 2;

Thence South 88°53'10" East, coincident with the southerly boundary line of said Lot 30, a distance of 49.18 feet, to the common southerly corner to lots 30 and 31 and the **POINT OF BEGINNING;**

Thence North 00°03'29" East, coincident with the westerly line of said Lot 31, a distance of 55.25 feet, to the northwest corner of said Lot 31;

Thence South 89°56'31" East, coincident with the northerly boundary line of said Lot 31 and Lot 32, a distance of 177.00 feet, to the northeast corner of said Lot 32;

Thence South 00°03'29" West, coincident with the easterly boundary line of said Lot 32, a distance of 58.51 feet, to the southeast corner of said Lot 32 and the southerly exterior boundary of said Kelleher Subdivision No. 2;

Thence North 89°53'10" West, coincident with said southerly boundary line, a distance of 177.03 feet to said **POINT OF BEGINNING.**

The above described parcel contains 10,067 square feet or 0.23 acres, more or less.

Together with and subject to covenants, easements, and restrictions of record.

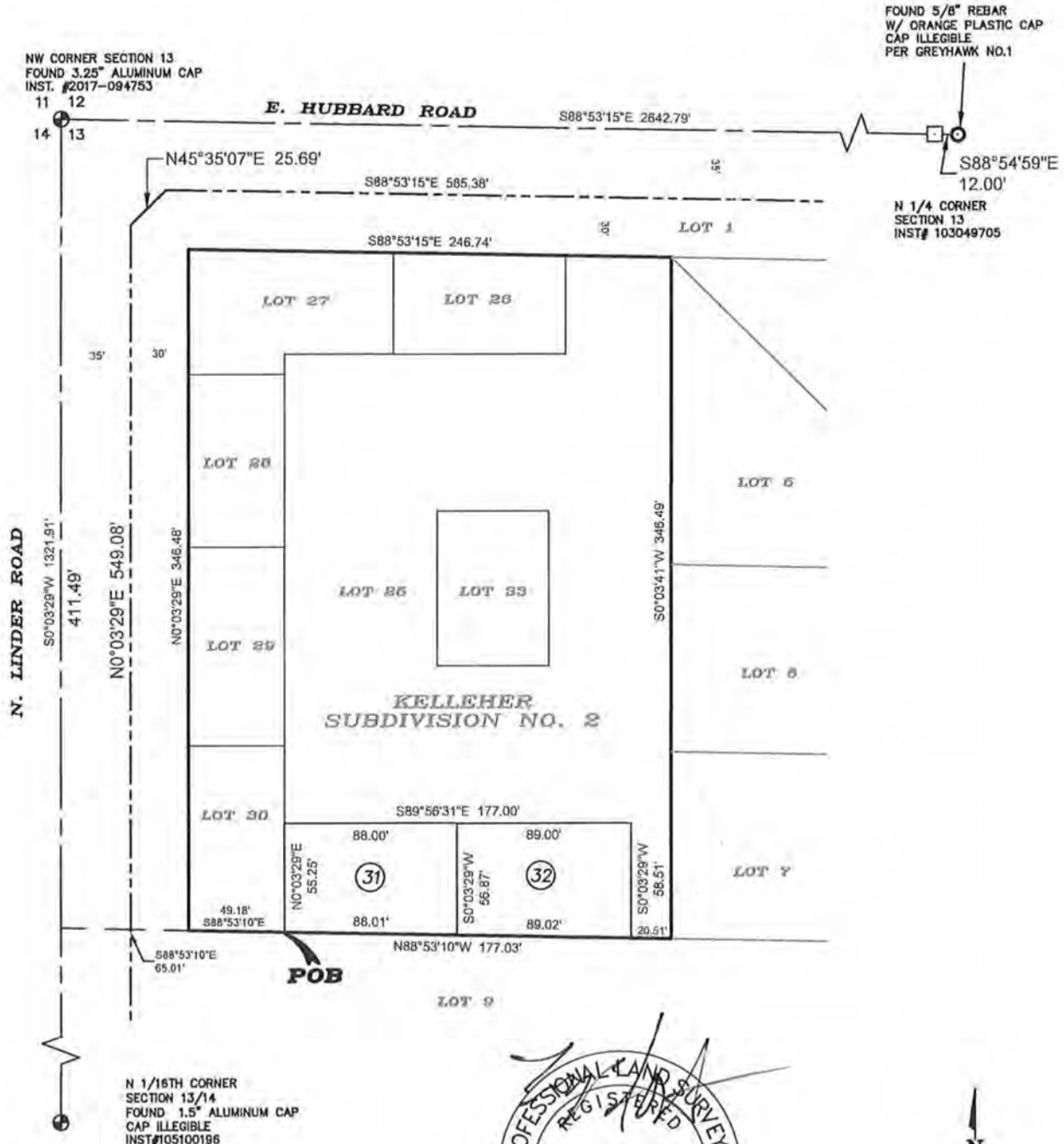
The basis of bearings for this parcel is South 00°03'29" West between the Northwest corner of said Section 13 and the North 1/16th corner common to Sections 13 and 14.

Travis P. Foster, P.L.S. License No. 10729
End of Description



# SKETCH FOR LEGAL EXHIBIT

## A PARCEL OF LAND BEING LOTS 31 & 32, BLOCK 1, KELLEHER SUBDIVISION NO. 2 LOCATED IN THE NW 1/4 OF THE NW 1/4 OF SECTION 13 T.2N, R.1W, B.M. CITY OF KUNA, ADA COUNTY, IDAHO 2020




WHPacific
2141 W Airport Way, Ste 104
Boise, ID 83705
208-342-5400 Fax 208-342-5353
www.whpacific.com

**Lot Line Adjustment – Lots 31 & 32, Kelleher Subdivision No. 2 – Closure Report** 6/4/2020

Mapcheck 10: LLA-L31-L32

Closure Summary

Precision, 1 part in: 224475.05'
Error distance: 0.00'
Error direction: N01°38'02"E
Area: 10068 Sq. Ft.
Square area: 10067.576
Perimeter: 467.79'

Point of Beginning

Easting: 2454000.277'
Northing: 674914.413'

Side 1: Line

Direction: N00°03'29"E
Angle: [-179°56'31"]
Deflection angle: [000°03'29"]
Distance: 55.25'
Easting: 2454000.333'
Northing: 674969.663'

Side 2: Line

Direction: S89°56'31"E
Angle: [-090°00'00"]
Deflection angle: [090°00'00"]
Distance: 177.00'
Easting: 2454177.333'
Northing: 674969.483'

Side 3: Line

Direction: S00°03'29"W
Angle: [-090°00'00"]
Deflection angle: [090°00'00"]
Distance: 58.51'
Easting: 2454177.273'
Northing: 674910.973'

Side 4: Line

Direction: N88°53'10"W
Angle: [-088°56'39"]
Deflection angle: [091°03'21"]
Distance: 177.03'
Easting: 2454000.277'
Northing: 674914.415'

ADA COUNTY RECORDER Christopher D. Rich
BOISE IDAHO Pgs=3 CHE FOWLER
TITLEONE BOISE

2017-098673
10/17/2017 01:21 PM
$15.00

TitleOne
a title & escrow co.

ACCOMMODATION
RECORDING

Order Number: 17300802

# WARRANTY DEED

For Value Received,

**JRL Properties L.P., an Idaho limited partnership and Glasgow Enterprises, L.L.C., an Idaho limited liability company,** the Grantor, does hereby grant, bargain sell and convey unto, **Open Door Rentals, LLC, an Idaho limited liability company,** whose current address is **1977 E. Overland Rd., Meridian, ID 83642,** the Grantee, the following described premises, in **Ada County, Idaho,** To Wit:

**Lot 8 in Block 1 of Kelleher Subdivision, according to the official plat thereof, filed in Book 96 of Plats at Page(s) 11979 through 11982, official records of Ada County, Idaho.**

TO HAVE AND TO HOLD the said premises, with their appurtenances unto the said Grantee, its heirs and assigns forever. And the said Grantor does hereby covenant to and with the said Grantee, that Grantor is the owner in fee simple of said premises; that they are free from all encumbrances EXCEPT those to which this conveyance is expressly made subject and those made, suffered or done by the Grantee; and subject to all existing patent reservations, easements, right(s) of way, protective covenants, zoning ordinances, and applicable building codes, laws and regulations, general taxes and assessments, including irrigation and utility assessments (if any) for the current year, which are not due and payable, and that Grantor will warrant and defend the same from all lawful claims whatsoever. Whenever the context so requires, the singular number includes the plural.

Dated: 10/16/17

JRL Properties L.P., an Idaho limited partnership

By:_____
John A. Laude Sr., General Partner

Glasgow Enterprises, L.L.C., an Idaho limited liability company

By:_____ Signed in Counterpart
Lloyd W. Glasgow, Manager

State of Idaho, County of Ada, ss.

On this 16 day of October in the year of 2017, before me, the undersigned, a Notary Public in and for said State, personally appeared John A. Laude Sr., known or identified to me to be the General Partner of the partners in the partnership of JRL Properties L.P. and the partner(s) who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he/she/they executed the same in said partnership name.

_____, Notary Public
Residing at: Boise ID
My Commission Expires: 9/6/2019
(seal)

DAVID LABRIE
NOTARY
PUBLIC
STATE OF IDAHO

State of Idaho, County of Ada, ss.

On this _____ day of October, 2017, before me, the undersigned, a Notary Public in and for said State, personally appeared Lloyd W. Glasgow, known or identified to me to be a Manager of the limited liability company that executed the within instrument and acknowledged to me that he executed the same for and on behalf of said limited liability company and that such limited liability company executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for Idaho
Residing in: _____
My Commission Expires: _____

JRL Properties L.P., an Idaho limited partnership

Signed in Counterpart

By:_____
John A. Laude Sr., General Partner

Glasgow Enterprises, L.L.C., an Idaho limited liability company

By:_____
Lloyd W. Glasgow, Manager

State of Idaho, County of Ada, ss.

On this _____ day of October in the year of 2017, before me, the undersigned, a Notary Public in and for said State, personally appeared John A. Laude Sr., known or identified to me to be the General Partner of the partners in the partnership of JRL Properties L.P. and the partner(s) who subscribed said partnership's name to the foregoing instrument, and acknowledged to me that he/she/they executed the same in said partnership name.

_____, Notary Public
Residing at: _____
My Commission Expires: _____
(seal)

State of Idaho, County of Ada, ss.

On this 17th day of October, 2017, before me, the undersigned, a Notary Public in and for said State, personally appeared Lloyd W. Glasgow, known or identified to me to be a Manager of the limited liability company that executed the within instrument and acknowledged to me that he executed the same for and on behalf of said limited liability company and that such limited liability company executed it.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Matt Bramwell

Notary Public for Idaho
Residing In: _____
My Commission Expires: _____

MATT BRAMWELL NOTARY PUBLIC STATE OF IDAHO

**Residing in: Meridian, ID**
**Expires: 5/11/2018**

# City of Kuna
# AFFIDAVIT OF LEGAL INTEREST

City of Kuna
P.O. Box 13
Kuna, Idaho 83634

Phone: (208) 922-5274
Fax: (208) 922-5989
Web: www.cityofkuna.com

State of Idaho )
) ss.
County of Ada )

I, Open Door Realty (Corey Barton) 1977 E. Overland
Name Address

Meridian, Id 83642
City State Zip Code

being first duly sworn upon oath, depose and say:

(If Applicant is also Owner of Record, skip to B)

A. That I am the record owner of the property described on the attached, and I grant my permission to _____ _____
Name Address
to submit the accompanying application pertaining to that property.

B. I agree to indemnify, defend and hold City of Kuna and its employees harmless from any claim or liability resulting from any dispute as to the statements contained herein or as to the ownership of the property which is the subject of the application.

C. I hereby grant permission to the City of Kuna staff to enter the subject property for the purpose of site inspections related to processing said application(s).

Dated this 8th day of June, 2020

_____
Signature

Subscribed and sworn to before me the day and year first above written.

ADAM KOLTES NOTARY PUBLIC MY COMMISSION EXPIRES 6-5-2022 STATE OF IDAHO COMMISSION NUMBER 30052

_____
Notary Public for Idaho

Residing at: Nampa, ID

My commission expires: 6-05-22

CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.kunacity.id.gov

Paul A. Stevens, P.E.
Kuna City Engineer
208-287-1727

# LOT LINE ADJUSTMENT MEMORANDUM

**Date:** **14 July 2020**

**From:** **Paul A. Stevens, P.E.**

**To:** **Wendy Howell, Planning and Zoning Director**

**RE:** **Kelleher No. 2 lot line adjustment 19-01-LLA**

---

The Kelleher No. 2 lot line adjustment request by WH Pacific dated June 4, 2020 has been reviewed. The lot line adjustment will not negatively affect the City of Kuna Public Works Department.

## 1. General

a) The lot line adjustment appears necessary to accommodate a revised building location/footprint.
b) Access to and from the properties is unchanged.
c) Utilities to and from the properties is unchanged.
d) Property use is unchanged.

## 2. Property Description

a) The applicant provided a warranty deed, affidavit of legal interest, legal descriptions, figures, and illustrative photographs for the described properties.
b) The proposed lot line adjustment resolves a building change or mis measurement during construction.
c) The lot line is the centerline of a City of Kuna 10' side lot easement. Five feet of the easement goes to each lot.
d) In no case shall the building encroach into the City of Kuna's side lot easement.
**e)** ***Approval of the lot line adjustment is contingent on the City of Kuna side lot easement moving with the lot line.***

**RESOLUTION NO. R41-2020**
**CITY OF KUNA, IDAHO**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KUNA:**

- **SETTING FORTH CERTAIN PURPOSES, AND**
- **ESTABLISHING A CITY OF KUNA BUSINESS CONFIDENTIALITY MANAGEMENT POLICY; AND**
- **DIRECTING THE CITY CLERK; AND**
- **SETTING AN EFFECTIVE DATE.**

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Kuna, Ada County, State of Idaho:

**Section 1: Findings**

It is hereby found by the City Council that:

**1.1** The City of Kuna has and is reasonably anticipated to experience continued significant growth due to its location in the Treasure Valley and its proximity to the mainline of the railroad; and

**1.2** There are businesses which are considering location, maintenance, investment in or making expenditures of their business operations in the City or within the City's impact area; which is reasonably anticipated to continue; and

**1.3** The location, maintenance, investment in or the making of expenditures by business operations in the City or within the City's impact area is good for the City's trade, commerce and industry; and

**1.4** Businesses who are considering location, or maintenance, investment in or making considerable expenditures of business operations in the City or within the City's impact area ("Business Consideration") require information from the City, but as a condition of their Business Consideration and need for information from the City require confidentiality of their Business Consideration; and

**1.5** In order for the City to accommodate the confidentiality of Businesses Consideration in accordance with the law, it is necessary to establish policy which governs the City's administration of providing information in response to Business Consideration which requires confidentiality; and

**1.6** Therefore, the City Council enacts the following *Business Confidentiality Management Policy* as set forth in Section 2 herein.

**Section 2:**

**2.1** **Policy Title:** This policy shall be known and cited as the *City of Kuna Business Confidentiality Management Policy* [the "BCMP"].

**2.2 Definitions:** For all purposes of this Policy, the following words in **bold** print that appear in this Policy have the definitions as herein provided in this Section unless the context of the term clearly requires otherwise and is not capitalized:

**2.2.1 BCPM ("Policy"):** Means and refers to this *City of Kuna Business Confidentiality Management Policy***.**

**2.2.2 Business:** Means and refers to a person or legal entity that is considering the location, or maintenance, investment in or who are considering making considerable expenditures of business operations within the City or within the City's impact area.

**2.2.3 Business Agent:** Means and refers to the person who is the designed by the Business as its agent in the Non-Disclosure Agreement.

**2.2.4 Business Communications:** Means and refers to communications by and between the City and the Business pursuant to the Non-Disclosure Agreement which are inclusive of oral, digital format, and paper format.

**2.2.5 Business Consideration:** Means and refers to the Business' specific intent and consideration of the location, maintenance, invest in or expense of a Business operation within the City or within the City's impact area.

**2.2.6 Business Records:** Means and refers to records of the Business provided by the Business to the City, pursuant to a Non-Disclosure Agreement, and also includes records of the Business provided by the Business to the Idaho Department of Commerce (the "Department") which records are then provided by the Department to the City pursuant to a Non-Disclosure Agreement.

**2.2.7 City:** Means and refers to the City of Kuna**.**

**2.2.8 Director:** Means and refers to the Economic Development Director of the City and or their designee.

**2.2.9 Non-Disclosure Agreement [ the "N-DA"]:** Means and refers to the form Non-Disclosure Agreement, a true and correct copy of which is attached hereto and marked **Exhibit A** and by this reference included in this definition.

**2.3 Policy Application:** This Policy applies to the City's administration of Non-Disclosure Agreements.

**2.4 Policy Management:** This Policy is administered under the direction of the Director.

**2.5 Business Confidentiality matters referred to the Director:** When a Business, with Business Consideration, requires confidentiality of its Business Records and Business Communication and/or insists on an agreement with the City to provide for that confidentiality, such request shall be referred by City Staff to the Director.

**2.6** **Authority to enter into and amendments of Non-Disclosure Agreement**: The Director has the authority, on behalf of the City Council and Mayor, to enter into Non-Disclosure Agreements in the form, which is approved in this Policy, as set forth in the definition in section 2.2.9 of this Policy.

**2.6.1** The Director has authority to terminate a Non-Disclosure Agreement.

**2.6.2** Any amendments of Non-Disclosure Agreements which involve any additional liability of the City require the approval of the City Council.

**2.6.3** The Director has authority, on behalf of the City Council and Mayor, subject to review and advice of the City Attorney to enter into an amendment of a Non-Disclosure Agreement resulting from the Business filing an application with the City for a permit in pursuit of its Business Consideration.

**2.7** **Director City Agent:** The Director shall serve and is appointed as the City's agent and administrator of the City's performance of its Non-Disclosure Agreements.

**2.8** **Administration of Non-Disclosure Agreement:** The Director shall administer Non-Disclosure Agreements in accordance with the terms and conditions of the approved N-DA form as defined in BCMP Section 2.2.9 as set forth in **Exhibit A.**

**Section 3: Directing the City Clerk**

**3.1** The Clerk is hereby directed to retain this Resolution in the official records of the City.

**Section 4. Effective Date**

**4.**1 This resolution shall be in full force and effect after its passage, approval and shall continue until further action by the City Council amending and reforming or terminating this resolution.

**PASSED BY THE COUNCIL** of Kuna Idaho this 4th day of August, 2020.

**APPROVED BY THE MAYOR** of Kuna, Idaho this 4th day of August, 2020.

Joe L. Stear, Mayor

ATTEST:

Chris Engels, City Clerk

Draft 07/28/2020

# NON-DISCLOSURE AGREEMENT
# No. _____

**Parties to the Agreement:**

| | | |
|---|---|---|
| City of Kuna | "**City**" | City Hall<br>Attn: Lisa Holland<br>751 W. 4th Street<br>Kuna, ID 83634 |
| | **"Business"** | Attn: _____<br>_____<br>_____ |

THIS NON-DISCLOSURE AGREEMENT (this "**Agreement**") is entered into by and between the CITY OF KUNA, a municipal corporation organized and existing under the laws of the state of Idaho, by and through its Economic Development Director ("**City**") and _____ ("**Business**").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and agreed, and in consideration of the Recitals and Definitions, and in consideration of the premises and the mutual representations, covenants and agreements hereinafter contained, City, and Business, represent, covenant and agree as follows:

## SECTION 1
## DEFINITIONS

For all purposes of this Agreement, the following words in **bold** print that appear in this Agreement have the definitions as herein provided in this Section unless the context of the term clearly requires otherwise and is not capitalized:

**1.1** **Agreement:** Means and refers to this *Non-Disclosure Agreement* by and between the City and the Business.

**1.2** **Business:** Means and refers to _____, an _____ and Party to this Agreement.

**1.3** **Business Agent:** Means and refers to _____ who is the designed in Section 6 of this Agreement as agent of the Business in the performance of its covenants under this Agreement.

**1.4 Business Communications:** Means and refers to communications by and between the Parties inclusive of oral, digital format, and paper format made in the performance of this Agreement.

**1.5 Business Consideration:** Means and refers to the Business' consideration of the location, maintenance, invest in or expense of a business operation within the City or within the City's impact area.

**1.6 Business Records:** Means and refers to records of the Business provided by the Business to the City pursuant to this Agreement to the City and also includes records of the Business provided by the Business to the Idaho Department of Commerce (the "Department") which records are then provided by the Department to the City pursuant to this Agreement.

**1.7 City:** Means and refers to the City of Kuna, an Idaho Municipal Corporation and Party to this Agreement**.**

**1.8 Director:** Means and refers to the Economic Development Director of the City and or their designee who is designated in Section 6 of this Agreement as the City's agent in the performance of its covenants under this Agreement.

**1.9 Parties:** Means and refers to the City and the Business and when this term is in the singular it refers to either of the Parties in the singular.

## SECTION 2
## RECITALS

The Parties recite and declare:

**2.1 Municipal Corporation:** City is a municipal corporation established and existing in accordance with Article XII of the Constitution of the State of Idaho and Title 50 Idaho Code; and

**2.2 City Authority:** City has the authority pursuant to Idaho Code Section 50-302 (1) to make such rules, regulations and resolutions not inconsistent with the laws of the state of Idaho as may be expedient, for good government and welfare of the City and its trade, commerce and industry; and

**2.3 Confidentiality:** subject to the terms and conditions of this Agreement, the Business requires, as a condition of the pursuit of its Business Consideration, that its Business Records, its Business Communications are and remain confidential

**2.4** **Mutual Agreement:** The City is willing to facilitate the Business Consideration and maintain its confidentiality in the performance of this Agreement in accordance with the terms and conditions of this Agreement to which Agreement terms and conditions the Business is agreeable.

## SECTION 3
## COVENANTS OF BUSINESS

The *Business*:

**3.1** Verifies that its Business Records, which are provided by the Business or provided by the Department, pursuant to this Agreement are the records of the Business which qualify for and are claimed by the Business to be exempt, pursuant to Idaho Code Section 74-107(1) and/or (6), from disclosure under the Idaho Public Records Act.

**3.2** Shall defend the City in any civil action [pursuant to Idaho Code Section 74-115] brought by a public records requester aggrieved by the City's denial of the requester's public records request for the Business Records which are subject to this Agreement.

**3.3** Shall identify a code name for the Business Consideration for use on all Business Records provided and all communications made, pursuit to this Agreement, with the City.

**3.4** Shall provide Business Records to the City and request information from the City exclusively through the Director.

**3.5** Shall schedule any site visits and/or conferences with other City officials exclusively through the Director.

## SECTION 4
## COVENANTS OF CITY

The *City*:

**4.1** Shall use its best efforts, under the law, to maintain the confidentiality of the Business Records, provided to the City and the Business Communications with City Officials pursuant to this Agreement.

**4.2** Shall not provide Business Records or Business Communications to any elected official or Planning and Zoning Commissioner of the City unless authorized in writing by the Business Agent.

**4.3** Shall, in response to public records requests, deny such requests on the basis that the Business Records are exempt from disclosure pursuant to Idaho Code Section 74-107(1) and/or (6), of the Idaho Public Records Act.

**4.4** Shall timely notify and tender the defense to the Business Agent of any civil action brought by an aggrieved person by reason of the City's claim of exemption and denial of their public records request for the Business Records.

**4.5** Shall only refer to the Business Consideration, Business Records and Business Communications by its code name.

**4.6** Shall conduct all of its Business Communications though the Business Agent.

**4.7** Shall maintain and control access to the Business Records provided to the City in office under the direction of the Economic Development Director

**4.8** Shall not disclose the Business Consideration, Business Communications or the Business Records to the public unless specifically authorized in writing by the Business or as required by law.

**4.9** Shall notify the Business Agent in writing with information of the request, in the event the City is requested by subpoena or in a legal proceeding to produce any of the Business Records, or to testify about or produce any Business Communications.

**4.10** Shall return Business Records to the Business when and as requested by the Business Agent in writing.

## SECTION 5
## AGREEMENT TERM

**5.1** The term of this Agreement commences on the date when the Parties have executed this Agreement (the "Effective Date") and shall terminate five [5] years thereafter unless:

**5.1.1** The Business files with the City an application for a permit in pursuit of its Business Consideration at which time as a condition of the City accepting and process such permit the Parties shall negotiate amendments of this Agreement which will be necessary in order for the City to process such application in accordance with applicable City ordinance and Idaho law; or

**5.1.2** Is otherwise amended or terminated by agreement the Parties in writing.

## SECTION 6
## AGENTS AND NOTICES

**6.1** **Manner of Communications:** All Business Communications shall be made on behalf of the Business under the direction the Business Agent for the Business and on behalf of the City under direction of the Director and their contact information is as follows:

| City: | Business: |
|---|---|
| City of Kuna<br>Attn: Economic Development Director<br>751 W. 4th Street<br>Kuna, ID 83634<br>Phone:<br>E-mail: | Business Agent<br>Attn:<br>Address:<br>Phone:<br>E-mail: |

or to such other designee as either Party hereto may from time to time designate in writing and delivery in a like manner.

## SECTION 7
## MISCELLANEOUS

**7.1** **Choice of Law:** This Agreement shall be construed in accordance with the laws of the state of Idaho in effect on the Effective Date. Any action brought in connection with this Agreement shall be brought in a court of competent jurisdiction located in Ada County, Idaho.

**7.2** **Headings:** This Agreement shall be construed according to its fair meaning and as if prepared by both Parties hereto. Titles and captions are for convenience only and shall not constitute a portion of this Agreement. As used in this Agreement, masculine, feminine or neuter gender and the singular or plural number shall each be deemed to include the others wherever and whenever the context so dictates.

**7.3** **Construction:** All Parties hereto have either been represented by separate legal counsel or have had the opportunity to be so represented. Thus, in all cases, the language herein shall be constructed simply in accord with its fair meaning and not strictly for or against a Party, regardless of whether such Party prepared or caused the preparation of this Agreement.

**7.4** **Counterparts:** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single document so that the signatures of all Parties may be physically attached to a single document.

**7.5 Entire Agreement:** This Agreement constitutes the entire agreement between the Parties, except for any permits and or approvals issued pursuant to this Agreement, pertaining to the subject matter hereof. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written, are hereby superseded and merged herein. No modification or amendment to this Agreement of any kind whatsoever shall be made or claimed by Business or City to have any force or effect whatsoever unless the same shall be endorsed in writing and signed by the Parties.

**7.6 No Partnership; Third-Parties:** It is hereby specifically understood, acknowledged and agreed that neither the City nor the Business shall be deemed to be an agent of the other for any purpose whatsoever. It is not intended by this Agreement to, and nothing contained in this Agreement shall, create any partnership, joint venture or other arrangement between the Business and the City. No term or provision of this Agreement is intended to, or shall it be for the benefit of any third-party, person, firm, organization or legal entity not a Party hereto [unless separately agreed to by the Parties in writing which writing identifies the benefitted third-party] and no such other third-party, person, firm, organization or legal entity shall have any right to cause of action hereunder.

**7.7 Parties' Intent:** It is the Parties' express intention that the terms and conditions be construed and applied as provided herein, to the fullest extent possible. It is the Parties' further intention that, to the extent any such term or condition is found to constitute an impermissible restriction of the police power or the duty of the City under law, such term or condition shall be construed and applied in such lesser fashion as may be necessary to not restrict the police power of the City.

**7.8 Severability:** If any provision of this Agreement is declared void or unenforceable, such provision shall be severed from this Agreement, which shall otherwise remain in full force and effect.

**7.9 Waiver:** No delay in exercising any right or remedy shall constitute a waiver by either Party thereof, and no waiver by the City or the Developer of the breach of any covenant or condition of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Agreement.

**IN WITNESS WHEREOF**, the Parties hereto, having been duly authorized, have executed this Non-Disclosure Agreement to be effective on the Effective Date.

**CITY:**

CITY OF KUNA, Idaho, a municipal corporation organized and existing under the laws of the state of Idaho

By:_____
Lisa Holland, Economic Development Director

**BUSINESS:**

By: _____

*W:\Work\K\Kuna, City of 25721\Economic Development\NON-Disclosure Agreement 7-24-2020 lh.docx*

**CITY OF KUNA**
**P.O. BOX 13**
**KUNA, ID 83634**
**www.kunacity.id.gov**

# MEMO

**Date:** August 4, 2020

**From:** Lisa Holland, Economic Development Director

**To:** Mayor & City Council

**RE:** Follow-up Urban Renewal Discussion

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Mayor and City Council,

I wanted to give you an update on the Urban Renewal District (URD) planning process. After reaching out to Ada County property owners within the eligibility study area and also discussing with staff, consultants and support agencies what projects should be priorities for the City within the plan, we have decided to narrow the planning area for the URD. Attached you will find a revised map that shows the area to be included, and the area we plan to remove. We have support from the Ada County Board of Commissioners as well as Ada County Highway District on our proposed planning area.

During the next month, we will be focusing heavily on community outreach to make sure that all the parcel owners within the District planning area are aware of the Urban Renewal efforts taking place. I have enclosed a draft letter that we plan to send out at the beginning of August to property owners along with an FAQ document and a survey.

It is our intent to hold a public virtual workshop on Urban Renewal toward the end of August, and we would welcome Council members to participate if they are able. Once the date and time is confirmed, we will make sure you get an invitation to attend. We will be discussing the list of priorities with the Urban Renewal Agency on August 5th and are hopeful to have a draft plan complete by early September. You will also receive an email draft of plan priorities within the next couple of weeks, and we would welcome your feedback as well either in the public workshop or in email.

I'll be happy to answer any questions at the council meeting you might have related to next steps. We just wanted you to be informed of our community outreach efforts in case you receive questions from the public.

Best Regards,

Lisa Holland
Economic Development Director
lholland@kunaid.gov
208-559-5926

# KUNA URBAN RENEWAL DISTRICT STUDY BOUNDARY CHANGES

WHITE
TERN
GOLD
SLOUGHED
SEGO PRAIRIE
STRIKE
MOWER
TRINI
BOISE
TOPANCA
DAWN
MARTEESON
ELM
FRANKLIN
PORTER
CAMBRICK
KAY
LIMESTONE
MUDSTONE
KOKANEE
MEADOW VIEW
ORCHARD
KATIE
SHADY GROVE
4TH
PARK
OWYHEE
PIONEER
MAIN
3RD
2ND
LINDER
MERIDIAN
KUNA
SHORTLINE
AVALON
YUKON
WHITEHORSE
STIENITE
OMPHALE
STAGECOACH
SPILER
TALLULAH
ACCESS
ASH
SUNBEAM
TEHUTI
JAKE
PLAYGROUND
LITTLE HAWK
WILD YUCCA
THREAVE
TOMEN
SADIE CREEK
PENMARK
RUMNEY
PENCIL
LITTLE OWL
SWAN FALLS
GREAT BEAR
TEN MILE
BOHOCK
CRANE
LUKER
KING
N

Updated URD Study Boundary
New Parcel Additions
County Parcels to be Included in Plan Boundary
County Parcels Not to be Included in Plan Boundary
City Limits
Parcels

P.O. BOX 13
KUNA ID 83634
(208) 922-5546
www.KunaCity.id.gov

**Mayor**
Joe Stear

**City Council**
**Members**
Briana Buban-Vonder Haar
Richard Cardoza
Warren Christensen
Greg McPherson

**Economic Development Director**
Lisa Holland
lholland@kunaid.gov
(208) 559-5926

# City of Kuna Economic Development

PROPERTY OWNER

August 7, 2020

Re: Urban Renewal District for Kuna

Dear PROPERTY OWNER,

When it comes to infrastructure planning and financial resources, there are very few tools available to cities to help spur commercial development. With over 10,000 of our residents commuting to another city for work every day, we know that economic development is a priority to create jobs closer to home for our residents. We are limited in the number of commercial/industrial buildings in our community, as well as shovel-ready sites with infrastructure in place for commercial developments to locate.

The City is working with the Kuna Urban Renewal Agency (URA) to evaluate options to create an Urban Renewal District (URD) within the City of Kuna. If established, the URA would receive an allocation of taxes tied to an increase in property value of parcels within the URD to be used for infrastructure related purposes (roadways, sewer, water, pathways, removing blight, etc). A URA is not a taxing district and the establishment of a URD ***does not*** increase taxes, it helps the City focus dollars from new developments into specific improvement projects.

> ***Example***: If a piece of ground is assessed at $100,000 when an Urban Renewal District is formed, and someone builds a structure on that ground that increases the assessed taxable value to $500,000, the taxes collected on the original $100,000 are allocated to the taxing districts as they always have been. The taxes collected on the additional $400,000 of taxable value would be allocated to and be managed by the Urban Renewal Agency specific to the priorities listed in the District plan. Impact fees are still collected within the Urban Renewal District, so police/fire/Ada County Highway District or any other applicable impact fees would still need to be paid by new developments coming in. *Please refer to the enclosed FAQ document for more information about how Urban Renewal works.*

Once an Urban Renewal District boundary is determined, it is set in place for a period of up to twenty years, and the Agency has limited ability to adjust the boundaries and add new parcels in later. **Your property was identified in the eligibility study as a parcel to be considered, so we wanted to reach out and make sure we addressed any questions you might have (see enclosed questionnaire).** Again, you will not see an increase in taxes once you are included in the district; an Urban Renewal District simply allows us to focus dollars from new developments that take place during the next twenty years.

We are inviting your input on what priorities we should include within the plan. The district funds can only be used for infrastructure improvements, so our draft plan will include items like roadway projects, intersection improvements, sewer and water connections, and other improvements to Downtown Kuna. It helps us move up the timeline on projects that otherwise would be funded down the road.

We will be posting regular updates about the Urban Renewal District on the City's website: https://www.kunacity.id.gov/518/Kuna-Urban-Renewal-Agency. We are also hoping to schedule a virtual workshop for August 27th at X Time (tentative date to still be confirmed prior to letter going out), and would welcome your participation and feedback. Let us know if you'd like to attend and we'll be sure to get the zoom link to you.

Feel free to reach out to Lisa Holland (208) 559-5926, Chris Engels (208) 387-7727 or email lholland@kunaid.gov if you have any questions or an interest in being involved/informed along the way.

Sincerely,

Joe Stear
Mayor of Kuna

Lisa Holland
Economic Development Director

DRAFT

# KUNA URBAN RENEWAL DISTRICT
## *ELIGIBILITY STUDY*
## FREQUENTLY ASKED QUESTIONS

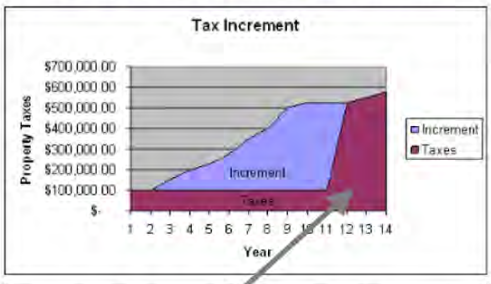
### *What is an Urban Renewal District (URD)?*

An Urban Renewal District is a Tax Increment Finance (TIF) tool that helps fund infrastructure to support redevelopment (downtown), bare undeveloped land (business/industrial parks) and brownfield development (industrial site).

Tax Increment Financing: when a URD is put into place, property tax revenues begin to be separated into two groups – the *base* and the *increment*. After the district closes, the increased revenues are returned to the underlying taxing entities and the tax payer.

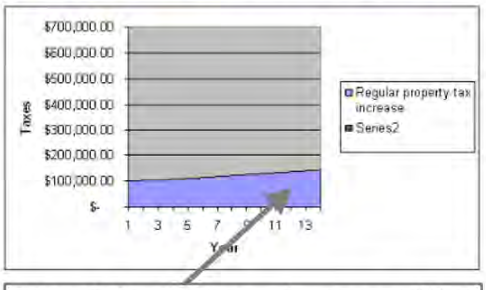
| THE BASE… | THE INCREMENT… |
|---|---|
| The money that is collected based on the value of properties within the boundaries of the urban renewal district at the time the district is formed. | Any increase in revenues based on increased property values within the urban renewal district from the time the district is created until it is closed. The increment is then used to reimburse a developer or other proponents for building and creating public infrastructure that is accepted by the City. |

**TAX INCREMENT FINANCING GRAPH 1**




Money that funds regular taxing entities. After year ten *(or whatever the life of the district may be)*, most of the increased revenue flows back to the taxing districts. These funds open up an option for decreased levy rates and subsequent tax burden when a district closes.

**TAX INCREMENT FINANCING GRAPH 2**




This graph shows how increased revenues would look for taxing districts without a TIF.

Without a TIF, many areas see no major development for many years.

### *What is the process of establishing a URD?*

1. **Develop Eligibility Study** – determine if an area, or areas, determine if the area(s) meet(s) the eligibility requirements set forth in the definitions of a deteriorated area and/or a deteriorating area in the Law and Act.
2. **Approve a Resolution** – by the Kuna City Council to authorize the agency to prepare an urban renewal plan for the area.
3. **Prepare Urban Renewal Plan/Feasibility Study** – a plan, to be approved by the Kuna City Council, identifying improvements and infrastructure needed to redevelop/revitalize the URD area(s).
4. **Review Urban Renewal Plan** – refer URD Plan to the Planning and Zoning Commission; set a public hearing before the Kuna City Council to review the Plan.
5. **Adopt Ordinance** – by the Kuna City Council, after conducting the public hearing approving the Urban Renewal Plan.

## What are the goals of establishing the URD?

The Kuna Downtown Revitalization Plan and Comprehensive Plan identify a URD as a key strategy to achieve many of the community's goals. A URD would help fund improvements that support creating jobs through development or redevelopment that may not have occurred without the URD/TIF.

1. Higher education
2. Transportation
3. Office parks
4. Industrial parks
5. Recreational amenities
6. Public safety

## How is the boundary of the URD determined?

The boundary, or boundaries of the URD(s), are determined by examining areas of the city that are prime for redevelopment (downtown) or development (future business and/or industrial areas). These areas will be evaluated to determine eligibility. Eligibility criteria, per Idaho Code, includes deteriorating buildings or sites, defective street layouts, faulty lot layout, insanitary or unsafe conditions, diversity of ownership, tax delinquency, defective and unusual conditions of title, or endangerment of life or property. An additional eligibility requirement is that the combined district(s) property value must be below 10 percent of all properties within the City.

## Does a URD take money away from other local government services?

A URD/TIF does not raise taxes or affect impact fees. In a properly formed district (where economic disinvestment is evident and revitalization is essential) the taxing districts of local government (schools, emergency services, etc.) receive all revenue to which they are entitled under state law and applicable budget and levy limits.

## Is the URD going to increase taxes?

No, property taxes are not increased when a URD is formed. Assuming the redevelopment activities result in growth that would not have occurred otherwise, the URD's activities help raise property *values* within Kuna's renewal district(s) at a faster rate than Kuna as a whole. This translates into a more valuable property for the owner and in turn, more tax revenue in the district. The tax levy *rate* may rise insignificantly for all property owners in a county to accommodate the TIF mechanism of the districts within the county, but the amount is returned as a benefit at the end of the districts' life. See Tax Increment Financing **Graph 1** and **Graph 2**.

## What projects and/or improvements are anticipated?

Urban renewal districts are formed in areas that are often in need of additional public infrastructure for support of schools, police, housing, roads, utilities, etc. Anticipated improvements may include but are not limited to streets, sidewalks, public utilities, water, sewer, irrigation, lighting, etc.

## How can I be involved?

Contact the Kuna Economic Development Director to be added to the notification list:

**Lisa Holland**
**208-559-5926**
**lholland@kunaid.gov**

# Kuna West Urban Renewal District *Plan*

## STAKEHOLDER QUESTIONAIRE

| | |
|---|---|
| Date | |
| Name | |
| Position/organization | |
| Address / Property Location | |
| Phone | |
| E-mail | |
| Preferred Contact Method? | |
| Want to Receive Updates? | |

## QUESTIONS

**1. Are you familiar with Urban Renewal Districts? Do you have any questions about URDs?**

_____

_____

**2. What types of jobs and businesses should Kuna strive to attract?**

_____

_____

_____

_____

**3. What types of improvements/projects (streets, sidewalks, public utilities, water, sewer, irrigation, lighting) should be included in the URD Plan?**

_____

_____

_____

_____

4. **Do you have any ideas you would like to share, or additional questions?**

_____

_____

_____

_____

_____

## PUBLIC WORKSHOP NOTICE

INSERT DATE, TIME, PLACE

OTHER INFO ABOUT WORKSHOP LOGISTICS



J-U-B THE LANGDON GROUP GATEWAY MAPPING INC.
OTHER J-U-B COMPANIES

# Kuna West Urban Renewal District *Plan*

CITY OF KUNA
COMBINED CASH INVESTMENT
JUNE 30, 2020

COMBINED CASH ACCOUNTS

| | | |
|---|---|---|
| 99-1002 | CASH IN BANK /BOT CASCADES | .00 |
| 99-1004 | CASH-US BANK | .00 |
| 99-1010 | CASH CLEARING | .00 |
| 99-1020 | CASH-BOTC-STATE POOL MMKT 2021 | .00 |
| 99-1021 | CASH-BOTC-LID MMKT 2048 | .00 |
| 99-1030 | CASH-LGIP ACCOUNT | 12,192,836.82 |
| 99-1040 | CASH - US BANK GENERAL CKNG | 2,074,163.10 |
| 99-1041 | CASH - US BANK PAYROLL CKNG | ( 40,564.22) |
| 99-1042 | CASH - LGIP PARK IMPACT FEES | 1,593,242.05 |
| 99-1043 | CASH - XPRESS DEPOSIT ACCOUNT | 65,764.49 |
| 99-1044 | CASH-LGIP AGENCY FUND | 1,833,291.87 |
| 99-1045 | CERTIFICATE OF DEPOSIT ICCU | 15,230,380.70 |
| 99-1070 | RETURNED CHECK CLEARING | .00 |
| 99-1075 | UTILITY CASH CLEARING | .00 |
| | TOTAL COMBINED CASH | 32,949,114.81 |
| 99-2000 | ACCOUNTS PAYABLE | .00 |
| 99-1000 | CASH ALLOCATED TO OTHER FUNDS | ( 32,949,114.81) |
| | TOTAL UNALLOCATED CASH | .00 |

CASH ALLOCATION RECONCILIATION

| | | |
|---|---|---|
| 1 | ALLOCATION TO GENERAL FUND | 2,824,861.48 |
| 3 | ALLOCATION TO GRANT FUND | ( 297,086.25) |
| 5 | ALLOCATION TO LATE COMERS FEE FUND | 4,132,579.76 |
| 6 | ALLOCATION TO JUVENILE JUSTICE FUND | .00 |
| 19 | ALLOCATION TO WELL MITIGATION FUND | .00 |
| 20 | ALLOCATION TO WATER FUND | 10,020,539.94 |
| 21 | ALLOCATION TO SEWER FUND | 6,379,059.93 |
| 22 | ALLOCATION TO LID #2006-1 WWTP FUND | .00 |
| 25 | ALLOCATION TO PRESSURE IRRIGATION FUND | 4,547,636.85 |
| 26 | ALLOCATION TO SOLID WASTE FUND | 90,318.57 |
| 30 | ALLOCATION TO AGENCY FUND | 1,824,879.34 |
| 40 | ALLOCATION TO GOVERNMENTAL CAP. PROJ. FUND | 1,689,509.64 |
| 50 | ALLOCATION TO PARK IMPACT FEE/CAP PROJ FUND | 1,670,682.28 |
| 51 | ALLOCATION TO POLICE IMPACT FEE FUND | 66,139.88 |
| | TOTAL ALLOCATIONS TO OTHER FUNDS | 32,949,121.42 |
| | ALLOCATION FROM COMBINED CASH FUND - 99-1000 | ( 32,949,114.81) |
| | ZERO PROOF IF ALLOCATIONS BALANCE | 6.61 |

Budget Results as of June

| Fund | Account | Title | Fund | Revenue/Expense | As of June | Annual Budget | % of Budget |
|---|---|---|---|---|---|---|---|
| 1 | 4000 | STATE LIQU0R DISTRIBUTION | General | Revenue | 151,655.00 | 197,976.00 | 76.60% |
| 1 | 4001 | SALES TAX REVENUE SHARE-STATE | General | Revenue | 673,556.02 | 850,419.00 | 79.20% |
| 1 | 4100 | PR0PERTY TAX REVENUE | General | Revenue | 3,288,711.74 | 3,181,873.00 | 103.36% |
| 1 | 4110 | PR0PERTY TAX INTEREST & PENALT | General | Revenue | 1,883.68 | 3,169.00 | 59.44% |
| 1 | 4120 | SALES TAX REVENUE SHARE-COUNTY | General | Revenue | 234,739.86 | 343,869.00 | 68.26% |
| 1 | 4130 | COUNTY FINE DISTRIBUTI0N | General | Revenue | 6,750.78 | 8,500.00 | 79.42% |
| 1 | 4155 | ADMINISTRATI0N SERVICES | General | Revenue | 182,665.75 | 276,859.00 | 65.98% |
| 1 | 4170 | FRANCHISE FEES | General | Revenue | 275,574.66 | 320,464.00 | 85.99% |
| 1 | 4173 | INTEREST REVENUE | General | Revenue | 90,272.44 | 45,000.00 | 200.61% |
| 1 | 4180 | LICENSES / BUSINESS | General | Revenue | 5,304.00 | 4,118.00 | 128.80% |
| 1 | 4181 | LICENSES / LIQU0R | General | Revenue | 6,187.00 | 6,250.00 | 98.99% |
| 1 | 4182 | LICENSES / BEER | General | Revenue | 3,075.00 | 3,333.00 | 92.26% |
| 1 | 4183 | LICENSES / WINE | General | Revenue | 2,500.00 | 2,813.00 | 88.87% |
| 1 | 4184 | LICENSES / D0GS | General | Revenue | 6,278.50 | 11,843.00 | 53.01% |
| 1 | 4185 | MISCELLANE0US INC0ME | General | Revenue | 3,154.43 | 50,050.00 | 6.30% |
| 1 | 4190 | PERMITS / CATERING | General | Revenue | 40.00 | 293.00 | 13.65% |
| 1 | 4193 | PERMITS / VEND0RS | General | Revenue | 1,065.00 | 882.00 | 120.75% |
| 1 | 4195 | RENTAL INCOME | General | Revenue | 7,817.85 | 16,826.00 | 46.46% |
| 1 | 4197 | RV DUMP REVENUE | General | Revenue | 2,919.43 | 4,017.00 | 72.68% |
| 1 | 4358 | DEVELOPMENT SUPPORT SERVICES | General | Revenue | 6,450.00 | 6,529.00 | 98.79% |
| 1 | 4360 | BUILDING PERMITS | General | Revenue | 719,707.71 | 1,054,157.00 | 68.27% |
| 1 | 4361 | PLUMBING PERMITS | General | Revenue | 149,519.91 | 196,271.00 | 76.18% |
| 1 | 4362 | ELECTRICAL PERMITS | General | Revenue | 172,059.81 | 213,127.00 | 80.73% |
| 1 | 4391 | IRES CHECK FEES | General | Revenue | 13,875.00 | 18,500.00 | 75.00% |
| 1 | 4392 | MECHANICAL PERMITS | General | Revenue | 92,643.66 | 123,997.00 | 74.71% |
| 1 | 4950 | CARRY 0VER | General | Revenue | 3,629,027.97 | 2,605,966.00 | 139.26% |
| 1 | 5000 | SAL. & WAGES-ELECTED OFFICIALS | General | Expense | 72,031.07 | 96,990.00 | 74.27% |
| 1 | 5005 | SALARIES & WAGES - STAFF | General | Expense | 1,009,247.07 | 1,370,659.00 | 73.63% |
| 1 | 5009 | SALARIES & WAGES - SEASONAL | General | Expense | 8,115.75 | 48,241.00 | 16.82% |
| 1 | 5800 | OASDI - EMPLOYER | General | Expense | 65,859.65 | 93,985.00 | 70.07% |
| 1 | 5810 | MEDICARE - EMPLOYER | General | Expense | 15,400.32 | 21,981.00 | 70.06% |
| 1 | 5820 | GR0UP MEDICAL INSURANCE | General | Expense | 171,597.14 | 213,704.00 | 80.30% |
| 1 | 5830 | GR0UP LIFE INSURANCE | General | Expense | 628.51 | 983.00 | 63.94% |
| 1 | 5840 | PERSI EMPLOYER 401(a) | General | Expense | 128,249.03 | 175,264.00 | 73.17% |
| 1 | 5850 | W0RKERS' C0MPENSATI0N INS. | General | Expense | 14,922.43 | 26,004.00 | 57.39% |
| 1 | 5860 | GROUP DENTAL/VISION INSURANCE | General | Expense | 15,245.84 | 18,740.00 | 81.35% |
| 1 | 6000 | LAW ENFORCEMENT SERVICES | General | Expense | 1,876,046.00 | 2,501,394.00 | 75.00% |
| 1 | 6005 | ANIMAL CONTROL SERVICES | General | Expense | 83,639.85 | 114,138.00 | 73.28% |
| 1 | 6025 | JANITORIAL | General | Expense | 8,831.95 | 16,864.00 | 52.37% |
| 1 | 6027 | CODE ABATEMENT EXPENSE | General | Expense | - | 800.00 | 0.00% |
| 1 | 6036 | PUBLIC TRANSPORTATION | General | Expense | 10,000.00 | 10,000.00 | 100.00% |
| 1 | 6045 | C0NTINGENCY | General | Expense | 46,223.53 | 2,195,983.00 | 2.10% |
| 1 | 6052 | CONTRACT SERVICES | General | Expense | 229,576.26 | 274,359.00 | 83.68% |
| 1 | 6070 | D0NATI0NS EXPENSE | General | Expense | 13,236.05 | 30,643.00 | 43.19% |
| 1 | 6075 | DUES & MEMBERSHIPS | General | Expense | 44,542.51 | 65,940.00 | 67.55% |
| 1 | 6085 | ELECTI0N EXPENSES | General | Expense | - | 750.00 | 0.00% |
| 1 | 6125 | LEGAL PUBLICATI0NS | General | Expense | 10,774.57 | 12,900.00 | 83.52% |
| 1 | 6130 | LIABILITY & PR0PERTY INSURANCE | General | Expense | 32,482.78 | 32,483.00 | 100.00% |
| 1 | 6135 | PUBLIC ENTERTAINMENT | General | Expense | 1,250.34 | 20,000.00 | 6.25% |
| 1 | 6140 | MAINT. & REPAIR BUILDING | General | Expense | 10,949.42 | 16,100.00 | 68.01% |
| 1 | 6142 | MAINT. & REPAIR - EQUIPMENT | General | Expense | 19,335.87 | 32,550.00 | 59.40% |
| 1 | 6150 | MAINTENANCE & REPAIRS - SYSTEM | General | Expense | 66,639.82 | 70,200.00 | 94.93% |
| 1 | 6155 | MEETINGS/COMMITTEES | General | Expense | 6,430.51 | 18,600.00 | 34.57% |
| 1 | 6160 | MISCELLANE0US EXPENSES | General | Expense | (26.62) | 11,850.00 | -0.22% |
| 1 | 6165 | OFFICE SUPPLIES | General | Expense | 13,628.90 | 21,250.00 | 64.14% |
| 1 | 6175 | SMALL TOOLS | General | Expense | 13,173.83 | 33,620.00 | 39.18% |
| 1 | 6188 | SIGNAGE | General | Expense | - | 3,150.00 | 0.00% |
| 1 | 6190 | P0STAGE & BILLING | General | Expense | 10,590.21 | 16,000.00 | 66.19% |
| 1 | 6202 | PR0FESSI0NAL SERVICES | General | Expense | 36,366.03 | 52,500.00 | 69.27% |
| 1 | 6203 | PROSECUTORIAL SERVICES | General | Expense | 40,500.00 | 54,000.00 | 75.00% |
| 1 | 6211 | RENT-BUILDINGS & LAND | General | Expense | 1,785.00 | 2,082.00 | 85.73% |
| 1 | 6212 | RENT-EQUIPMENT | General | Expense | 19,894.42 | 31,750.00 | 62.66% |
| 1 | 6230 | SAFETY TRAINING & EQUIPMENT | General | Expense | 735.29 | 3,300.00 | 22.28% |
| 1 | 6255 | TELEPH0NE | General | Expense | 16,011.96 | 17,313.00 | 92.49% |
| 1 | 6265 | TRAINING & SCH00LING | General | Expense | 9,089.66 | 22,035.00 | 41.25% |
| 1 | 6270 | TRAVEL | General | Expense | 1,243.79 | 6,800.00 | 18.29% |
| 1 | 6280 | UNEMPL0YMENT EXPENSES | General | Expense | 14.34 | 7,000.00 | 0.20% |
| 1 | 6285 | UNIF0RMS | General | Expense | 1,483.10 | 2,800.00 | 52.97% |

Budget Results as of June

| Fund | Account | Title | Fund | Revenue/Expense | As of June | Annual Budget | % of Budget |
|---|---|---|---|---|---|---|---|
| 1 | 6290 | UTILITIES | General | Expense | 80,952.81 | 143,501.00 | 56.41% |
| 1 | 6300 | FUEL | General | Expense | 10,894.69 | 18,940.00 | 57.52% |
| 1 | 6305 | VEHICLE MAINTENANCE & REPAIRS | General | Expense | 3,189.91 | 7,980.00 | 39.97% |
| 1 | 6400 | TRANSFERS OUT | General | Expense | 1,582,259.00 | 1,582,259.00 | 100.00% |
| 1 | 6500 | CASH OVER/SHORT | General | Expense | 0.18 | 50.00 | 0.36% |
| 1 | 6505 | BANK FEES | General | Expense | 25,599.70 | 28,666.00 | 89.30% |
| 3 | 4200 | GRANT REVENUE | Grant | Revenue | 475,572.83 | 2,270,196.00 | 20.95% |
| 3 | 4950 | CARRY 0VER BALANCE | Grant | Revenue | - | 13,233.00 | 0.00% |
| 3 | 6354 | GRANT EXPENDITURES | Grant | Expense | 473,352.10 | 2,283,429.00 | 20.73% |
| 5 | 4173 | INTEREST REVENUE | Late Comers | Revenue | 46,222.34 | 15,000.00 | 308.15% |
| 5 | 4504 | WATER MAIN CAPACITY FEE | Late Comers | Revenue | 814,340.20 | 1,036,969.00 | 78.53% |
| 5 | 4604 | SEWER MAIN CAPACITY FEE | Late Comers | Revenue | 675,594.00 | 721,230.00 | 93.67% |
| 5 | 4704 | PRESSURE IRRIG CAPACITY FEE | Late Comers | Revenue | 354,047.56 | 492,525.00 | 71.88% |
| 5 | 4950 | CARRY 0VER BALANCE | Late Comers | Revenue | 2,246,582.77 | 2,535,532.00 | 88.60% |
| 5 | 6045 | CONTINGENCY | Late Comers | Expense | - | 3,436,457.00 | 0.00% |
| 5 | 6160 | MISCELLANEOUS EXPENDITURES | Late Comers | Expense | 109.67 | - | 100.00% |
| 5 | 6305 | WATER MAIN CAPACITY REIMBBURSE | Late Comers | Expense | - | 400,000.00 | 0.00% |
| 5 | 6306 | SEWER MAIN CAPACITY REIMBURSE | Late Comers | Expense | - | 487,481.00 | 0.00% |
| 5 | 6307 | PR IRR MAIN CAPACITY REIMBURSE | Late Comers | Expense | - | 477,318.00 | 0.00% |
| 20 | 4173 | INTEREST REVENUE | Water | Revenue | 145,085.28 | 100,000.00 | 145.09% |
| 20 | 4185 | MISCELLANEOUS INCOME | Water | Revenue | 1,656.76 | 75,000.00 | 2.21% |
| 20 | 4358 | DEVELOPMENT SUPPORT SERVICES | Water | Revenue | 1,780.00 | 2,000.00 | 89.00% |
| 20 | 4500 | METERED WATER SALES | Water | Revenue | 1,628,852.56 | 2,212,652.00 | 73.62% |
| 20 | 4503 | NEW METER | Water | Revenue | 192,668.00 | 263,240.00 | 73.19% |
| 20 | 4505 | NEW SERVICE CONNECTION | Water | Revenue | 656,425.00 | 881,020.00 | 74.51% |
| 20 | 4507 | WATER TOKEN SALES - BULK WATER | Water | Revenue | 45,986.40 | 45,000.00 | 102.19% |
| 20 | 4510 | SERVICE RECONNECT FEES | Water | Revenue | 7,574.33 | 14,000.00 | 54.10% |
| 20 | 4550 | INSPECTIONS REVENUE | Water | Revenue | 57,881.20 | 45,000.00 | 128.62% |
| 20 | 4775 | LATE PAYMENT FEE | Water | Revenue | 21,602.72 | 32,000.00 | 67.51% |
| 20 | 4950 | CARRY 0VER BALANCE | Water | Revenue | 8,473,779.41 | 7,650,136.00 | 110.77% |
| 20 | 5000 | SAL. & WAGES-ELECTED OFFICIALS | Water | Expense | 3,359.18 | 4,311.00 | 77.92% |
| 20 | 5005 | SALARIES & WAGES - STAFF | Water | Expense | 454,067.19 | 605,013.00 | 75.05% |
| 20 | 5795 | OVERTIME SALARIES & WAGES | Water | Expense | 9,565.15 | 15,125.00 | 63.24% |
| 20 | 5800 | OASDI - EMPLOYER | Water | Expense | 28,128.24 | 38,716.00 | 72.65% |
| 20 | 5810 | MEDICARE - EMPLOYER | Water | Expense | 6,577.31 | 9,055.00 | 72.64% |
| 20 | 5820 | GR0UP MEDICAL INSURANCE | Water | Expense | 65,664.96 | 86,073.00 | 76.29% |
| 20 | 5830 | GR0UP LIFE INSURANCE | Water | Expense | 293.56 | 406.00 | 72.31% |
| 20 | 5840 | PERSI EMPLOYER 401(a) | Water | Expense | 54,456.72 | 74,560.00 | 73.04% |
| 20 | 5850 | W0RKERS' C0MPENSATI0N INS. | Water | Expense | 11,085.61 | 20,563.00 | 53.91% |
| 20 | 5860 | GROUP DENTAL/VISION INSURANCE | Water | Expense | 6,682.67 | 7,724.00 | 86.52% |
| 20 | 6020 | CAPITAL IMPR0VEMENTS | Water | Expense | 255,520.26 | 1,654,480.00 | 15.44% |
| 20 | 6025 | JANITORIAL | Water | Expense | 3,037.18 | 3,700.00 | 82.09% |
| 20 | 6045 | C0NTINGENCY | Water | Expense | 88,880.72 | 7,939,361.00 | 1.12% |
| 20 | 6050 | C0NTRACT LAB0R | Water | Expense | - | 5,000.00 | 0.00% |
| 20 | 6052 | CONTRACT SERVICES | Water | Expense | 10,223.09 | 19,828.00 | 51.56% |
| 20 | 6060 | DEQ ASSESSMENT FEES | Water | Expense | 21,498.00 | 30,671.00 | 70.09% |
| 20 | 6065 | DIG LINE EXPENSE | Water | Expense | 2,557.11 | 2,700.00 | 94.71% |
| 20 | 6075 | DUES & MEMBERSHIPS | Water | Expense | 1,212.05 | 2,793.00 | 43.40% |
| 20 | 6095 | BAD DEBT EXPENSE | Water | Expense | 130.40 | - | 100.00% |
| 20 | 6125 | LEGAL PUBLICATI0NS | Water | Expense | 1,049.40 | 1,000.00 | 104.94% |
| 20 | 6130 | LIABILITY & PR0PERTY INSURANCE | Water | Expense | 18,830.60 | 18,831.00 | 100.00% |
| 20 | 6140 | MAINT. & REPAIR BUILDING | Water | Expense | 7,729.50 | 14,950.00 | 51.70% |
| 20 | 6142 | MAINT. & REPAIRS- EQUIPMENT | Water | Expense | 5,748.89 | 11,500.00 | 49.99% |
| 20 | 6150 | M & R - SYSTEM | Water | Expense | 54,009.58 | 133,000.00 | 40.61% |
| 20 | 6151 | M & R - PROCESS CHEMICALS | Water | Expense | 11,027.05 | 30,000.00 | 36.76% |
| 20 | 6152 | M & R - LABORATORY COSTS | Water | Expense | 3,700.80 | 10,920.00 | 33.89% |
| 20 | 6155 | MEETINGS/COMMITTEES | Water | Expense | 78.21 | 1,050.00 | 7.45% |
| 20 | 6160 | MISCELLANE0US EXPENSES | Water | Expense | 1,005.94 | 20,000.00 | 5.03% |
| 20 | 6165 | 0FFICE SUPPLIES | Water | Expense | 6,813.73 | 4,500.00 | 151.42% |
| 20 | 6166 | PP&E PURCHASES OPERATIONS | Water | Expense | 84,378.43 | 256,350.00 | 32.92% |
| 20 | 6175 | SMALL TOOLS | Water | Expense | 7,990.83 | 15,000.00 | 53.27% |
| 20 | 6190 | P0STAGE & BILLING | Water | Expense | 16,339.85 | 21,700.00 | 75.30% |
| 20 | 6202 | PROFESSIONAL SERVICES | Water | Expense | 4,427.26 | 32,000.00 | 13.84% |
| 20 | 6211 | RENT-BUILDINGS & LAND | Water | Expense | 1,260.00 | 1,512.00 | 83.33% |
| 20 | 6212 | RENT - EQUIPMENT | Water | Expense | 58.00 | 3,000.00 | 1.93% |
| 20 | 6230 | SAFETY TRAINING & EQUIPMENT | Water | Expense | 648.76 | 2,750.00 | 23.59% |
| 20 | 6255 | TELEPH0NE EXPENSE | Water | Expense | 8,863.34 | 13,406.00 | 66.11% |
| 20 | 6265 | TRAINING & SCH00LING EXPENSE | Water | Expense | 1,405.81 | 6,500.00 | 21.63% |

Budget Results as of June

| Fund | Account | Title | Fund | Revenue/Expense | As of June | Annual Budget | % of Budget |
|---|---|---|---|---|---|---|---|
| 20 | 6270 | TRAVEL EXPENSES | Water | Expense | 353.88 | 1,200.00 | 29.49% |
| 20 | 6285 | UNIF0RMS EXPENSE | Water | Expense | 703.96 | 4,800.00 | 14.67% |
| 20 | 6290 | UTILITIES EXPENSE | Water | Expense | 71,244.43 | 150,000.00 | 47.50% |
| 20 | 6300 | FUEL | Water | Expense | 8,150.87 | 14,500.00 | 56.21% |
| 20 | 6305 | VEHICLE MAINTENANCE & REPAIRS | Water | Expense | 2,686.68 | 6,500.00 | 41.33% |
| 20 | 6505 | BANK FEES | Water | Expense | 18,749.26 | 25,000.00 | 75.00% |
| 21 | 4173 | INTEREST REVENUE | Sewer | Revenue | 81,292.14 | 65,000.00 | 125.06% |
| 21 | 4185 | MISCELLANEOUS INCOME | Sewer | Revenue | 474.05 | 50,000.00 | 0.95% |
| 21 | 4358 | DEVELOPMENT SUPPORT SERVICES | Sewer | Revenue | 1,780.00 | 1,500.00 | 118.67% |
| 21 | 4505 | NEW SERVICE CONNECTION | Sewer | Revenue | (10.25) | - | 100.00% |
| 21 | 4510 | SERVICE RECONNECT FEES | Sewer | Revenue | 10,071.98 | 17,000.00 | 59.25% |
| 21 | 4550 | INSPECTIONS REVENUE | Sewer | Revenue | 35,524.11 | 30,000.00 | 118.41% |
| 21 | 4600 | SEWER USER FEES | Sewer | Revenue | 2,383,898.81 | 2,741,199.00 | 86.97% |
| 21 | 4606 | LID REDUCED SEWER CONNECTION | Sewer | Revenue | 660,538.18 | 843,217.00 | 78.34% |
| 21 | 4640 | FARM REVENUE | Sewer | Revenue | 64,017.22 | 115,182.00 | 55.58% |
| 21 | 4775 | LATE PAYMENT FEE | Sewer | Revenue | 30,910.80 | 35,000.00 | 88.32% |
| 21 | 4950 | CARRY 0VER BALANCE | Sewer | Revenue | 4,796,645.57 | 3,863,199.00 | 124.16% |
| 21 | 5000 | SAL. & WAGES-ELECTED OFFICIALS | Sewer | Expense | 3,349.22 | 4,311.00 | 77.69% |
| 21 | 5005 | SALARIES & WAGES - STAFF | Sewer | Expense | 515,805.83 | 689,130.00 | 74.85% |
| 21 | 5795 | OVERTIME SALARIES & WAGES | Sewer | Expense | 6,035.84 | 17,228.00 | 35.04% |
| 21 | 5800 | OASDI - EMPLOYER | Sewer | Expense | 31,981.13 | 44,061.00 | 72.58% |
| 21 | 5810 | MEDICARE - EMPLOYER | Sewer | Expense | 7,478.32 | 10,305.00 | 72.57% |
| 21 | 5820 | GR0UP MEDICAL INSURANCE | Sewer | Expense | 74,422.30 | 100,320.00 | 74.18% |
| 21 | 5830 | GR0UP LIFE INSURANCE | Sewer | Expense | 330.93 | 461.00 | 71.79% |
| 21 | 5840 | PERSI EMPLOYER 401(a) | Sewer | Expense | 62,077.01 | 84,855.00 | 73.16% |
| 21 | 5850 | W0RKERS' C0MPENSATI0N INS. | Sewer | Expense | 8,356.97 | 15,051.00 | 55.52% |
| 21 | 5860 | GROUP DENTAL/VISION INSURANCE | Sewer | Expense | 6,554.48 | 8,657.00 | 75.71% |
| 21 | 6020 | CAPITAL IMPR0VEMENTS | Sewer | Expense | 55,379.61 | 691,480.00 | 8.01% |
| 21 | 6025 | JANITORIAL | Sewer | Expense | 3,037.18 | 3,600.00 | 84.37% |
| 21 | 6045 | C0NTINGENCY | Sewer | Expense | 13,480.72 | 4,435,687.00 | 0.30% |
| 21 | 6050 | C0NTRACT LAB0R | Sewer | Expense | - | 2,500.00 | 0.00% |
| 21 | 6052 | CONTRACT SERVICES | Sewer | Expense | 10,223.08 | 15,500.00 | 65.96% |
| 21 | 6065 | DIG LINE EXPENSE | Sewer | Expense | 2,557.10 | 2,700.00 | 94.71% |
| 21 | 6075 | DUES & MEMBERSHIPS | Sewer | Expense | 756.45 | 3,632.00 | 20.83% |
| 21 | 6090 | FARM EXPENDITURES | Sewer | Expense | 69,556.04 | 116,000.00 | 59.96% |
| 21 | 6095 | BAD DEBT EXPENSE | Sewer | Expense | (645.50) | - | 100.00% |
| 21 | 6125 | LEGAL PUBLICATI0NS EXPENSE | Sewer | Expense | 1,186.01 | 1,300.00 | 91.23% |
| 21 | 6130 | LIABILITY & PR0PERTY INSURANCE | Sewer | Expense | 38,602.74 | 38,603.00 | 100.00% |
| 21 | 6131 | INSURANCE CLAIMS PAID | Sewer | Expense | 230.18 | - | 100.00% |
| 21 | 6140 | MAINT & REPAIR BUILDING | Sewer | Expense | 8,369.84 | 25,000.00 | 33.48% |
| 21 | 6142 | MAINT. & REPAIRS - EQUIPMENT | Sewer | Expense | 55,245.25 | 51,000.00 | 108.32% |
| 21 | 6150 | M & R - SYSTEM | Sewer | Expense | 112,815.02 | 155,210.00 | 72.69% |
| 21 | 6151 | M & R - PROCESS CHEMICALS | Sewer | Expense | 88,695.61 | 119,427.00 | 74.27% |
| 21 | 6152 | M & R - LABORATORY COSTS | Sewer | Expense | 21,238.41 | 25,933.00 | 81.90% |
| 21 | 6153 | M & R - SLUDGE DISPOSAL | Sewer | Expense | 31,320.00 | 36,383.00 | 86.08% |
| 21 | 6155 | MEETINGS/COMMITTEES | Sewer | Expense | 78.21 | 1,450.00 | 5.39% |
| 21 | 6160 | MISCELLANE0US EXPENSES | Sewer | Expense | 4,239.71 | 30,000.00 | 14.13% |
| 21 | 6165 | OFFICE SUPPLIES | Sewer | Expense | 6,614.53 | 5,500.00 | 120.26% |
| 21 | 6166 | PP&E PURCHASES - OPERATIONS | Sewer | Expense | 71,889.53 | 598,350.00 | 12.01% |
| 21 | 6175 | SMALL TOOLS | Sewer | Expense | 4,011.21 | 16,500.00 | 24.31% |
| 21 | 6190 | P0STAGE & BILLING | Sewer | Expense | 16,495.74 | 21,000.00 | 78.55% |
| 21 | 6202 | PR0FESSI0NAL SERVICES | Sewer | Expense | 10,378.28 | 23,557.00 | 44.06% |
| 21 | 6211 | RENT - BUILDINGS & LAND | Sewer | Expense | 1,215.00 | 2,400.00 | 50.63% |
| 21 | 6212 | RENT- EQUIPMENT | Sewer | Expense | 48.00 | 3,000.00 | 1.60% |
| 21 | 6230 | SAFETY TRAINING & EQUIPMENT | Sewer | Expense | 2,122.09 | 2,640.00 | 80.38% |
| 21 | 6255 | TELEPH0NE EXPENSE | Sewer | Expense | 9,830.85 | 14,500.00 | 67.80% |
| 21 | 6265 | TRAINING & SCH00LING EXPENSE | Sewer | Expense | 1,282.91 | 2,500.00 | 51.32% |
| 21 | 6270 | TRAVEL EXPENSES | Sewer | Expense | 353.88 | 750.00 | 47.18% |
| 21 | 6285 | UNIF0RMS EXPENSE | Sewer | Expense | 28.00 | 4,800.00 | 0.58% |
| 21 | 6290 | UTILITIES EXPENSE | Sewer | Expense | 183,201.41 | 280,000.00 | 65.43% |
| 21 | 6300 | FUEL | Sewer | Expense | 12,799.89 | 15,000.00 | 85.33% |
| 21 | 6305 | VEHICLE MAINTENANCE & REPAIRS | Sewer | Expense | 4,353.99 | 16,016.00 | 27.19% |
| 21 | 6505 | BANK FEES | Sewer | Expense | 18,749.27 | 25,000.00 | 75.00% |
| 25 | 4173 | INTEREST REVENUE | Irrigation | Revenue | 63,069.62 | 45,000.00 | 140.15% |
| 25 | 4177 | GRAVITY IRRIGATI0N USER FEES | Irrigation | Revenue | 21,755.42 | 18,268.00 | 119.09% |
| 25 | 4185 | MISCELLANEOUS INCOME | Irrigation | Revenue | - | 20,000.00 | 0.00% |
| 25 | 4358 | DEVELOPMENT SUPPORT SERVICES | Irrigation | Revenue | 640.00 | 800.00 | 80.00% |
| 25 | 4503 | NEW METER | Irrigation | Revenue | - | 500.00 | 0.00% |

Budget Results as of June

| Fund | Account | Title | Fund | Revenue/Expense | As of June | Annual Budget | % of Budget |
|---|---|---|---|---|---|---|---|
| 25 | 4504 | PI MAIN CAPACITY FEE | Irrigation | Revenue | (1,067.25) | - | 100.00% |
| 25 | 4505 | NEW SERVICE CONNECTION | Irrigation | Revenue | 539,843.85 | 687,305.00 | 78.55% |
| 25 | 4510 | SERVICE RECONNECT FEES | Irrigation | Revenue | 3,634.22 | 6,000.00 | 60.57% |
| 25 | 4550 | INSPECTION REVENUE | Irrigation | Revenue | 40,650.20 | 30,000.00 | 135.50% |
| 25 | 4700 | PRESS. IRRIGATION USER FEES | Irrigation | Revenue | 769,834.38 | 670,262.00 | 114.86% |
| 25 | 4775 | LATE PAYMENT FEE | Irrigation | Revenue | 10,241.87 | 10,000.00 | 102.42% |
| 25 | 4950 | CARRY 0VER BALANCE | Irrigation | Revenue | 3,742,128.61 | 3,457,210.00 | 108.24% |
| 25 | 5000 | SAL. & WAGES-ELECTED OFFICIALS | Irrigation | Expense | 1,640.85 | 2,155.00 | 76.14% |
| 25 | 5005 | SALARIES & WAGES - STAFF | Irrigation | Expense | 119,386.08 | 155,988.00 | 76.54% |
| 25 | 5795 | OVERTIME WAGES EXPENSE | Irrigation | Expense | 2,521.72 | 3,900.00 | 64.66% |
| 25 | 5800 | OASDI - EMPLOYER | Irrigation | Expense | 7,527.32 | 10,047.00 | 74.92% |
| 25 | 5810 | MEDICARE - EMPLOYER | Irrigation | Expense | 1,758.69 | 2,350.00 | 74.84% |
| 25 | 5820 | GR0UP MEDICAL INSURANCE | Irrigation | Expense | 17,832.45 | 22,659.00 | 78.70% |
| 25 | 5830 | GR0UP LIFE INSURANCE | Irrigation | Expense | 77.75 | 108.00 | 71.99% |
| 25 | 5840 | PERSI EMPLOYER (401a) | Irrigation | Expense | 14,567.82 | 19,349.00 | 75.29% |
| 25 | 5850 | W0RKERS' C0MPENSATI0N INS. | Irrigation | Expense | 2,803.09 | 5,344.00 | 52.45% |
| 25 | 5860 | GROUP DENTAL/VISION INSURANCE | Irrigation | Expense | 1,891.16 | 2,033.00 | 93.02% |
| 25 | 6020 | CAPITAL IMPR0VEMENTS | Irrigation | Expense | 62,658.09 | 723,900.00 | 8.66% |
| 25 | 6025 | JANITORIAL | Irrigation | Expense | 1,163.96 | 3,600.00 | 32.33% |
| 25 | 6045 | C0NTINGENCY FUND | Irrigation | Expense | 5,184.88 | 3,461,401.00 | 0.15% |
| 25 | 6050 | C0NTRACT LAB0R | Irrigation | Expense | - | 1,000.00 | 0.00% |
| 25 | 6052 | C0NTRACT SERVICES | Irrigation | Expense | 3,794.27 | 6,400.00 | 59.29% |
| 25 | 6065 | DIG LINE EXPENSE | Irrigation | Expense | 974.15 | 1,000.00 | 97.42% |
| 25 | 6075 | DUES & MEMBERSHIPS EXPENSE | Irrigation | Expense | 219.62 | 479.00 | 45.85% |
| 25 | 6095 | BAD DEBT EXPENSE | Irrigation | Expense | (9.32) | - | 100.00% |
| 25 | 6115 | MAINT & REPAIR-SYSTEM-GRAVITY | Irrigation | Expense | 328.99 | 2,250.00 | 14.62% |
| 25 | 6116 | IRRIGATION / WATER COSTS | Irrigation | Expense | 133,860.39 | 150,545.00 | 88.92% |
| 25 | 6125 | LEGAL PUBLICATI0NS | Irrigation | Expense | 2,584.25 | 1,900.00 | 136.01% |
| 25 | 6130 | LIABILITY & PR0PERTY INSURANCE | Irrigation | Expense | 4,236.88 | 4,237.00 | 100.00% |
| 25 | 6140 | MAINT & REPAIR BUILDING | Irrigation | Expense | 1,429.78 | 3,300.00 | 43.33% |
| 25 | 6142 | MAINT. & REPAIRS - EQUIPMENT | Irrigation | Expense | 2,035.05 | 8,800.00 | 23.13% |
| 25 | 6150 | MAINT. & REPAIRS - SYSTEM (PI) | Irrigation | Expense | 47,962.78 | 50,000.00 | 95.93% |
| 25 | 6155 | MEETING/COMMITTEES | Irrigation | Expense | 32.26 | 650.00 | 4.96% |
| 25 | 6160 | MISCELLANE0US EXPENSES | Irrigation | Expense | 10.25 | 20,000.00 | 0.05% |
| 25 | 6165 | OFFICE SUPPLIES | Irrigation | Expense | 2,205.57 | 1,500.00 | 147.04% |
| 25 | 6166 | PP&E PURCHASES - OPERATIONS | Irrigation | Expense | 22,913.46 | 94,250.00 | 24.31% |
| 25 | 6175 | SMALL TOOLS | Irrigation | Expense | 1,941.47 | 6,725.00 | 28.87% |
| 25 | 6190 | P0STAGE & BILLING | Irrigation | Expense | 5,835.77 | 8,000.00 | 72.95% |
| 25 | 6202 | PROFESSIONAL SERVICES | Irrigation | Expense | 1,978.87 | 11,500.00 | 17.21% |
| 25 | 6211 | RENT - BUILDINGS & LAND | Irrigation | Expense | 540.00 | 950.00 | 56.84% |
| 25 | 6212 | RENT - EQUIPMENT | Irrigation | Expense | 24.00 | 1,200.00 | 2.00% |
| 25 | 6230 | SAFETY TRAINING & EQUIPMENT | Irrigation | Expense | 194.47 | 900.00 | 21.61% |
| 25 | 6255 | TELEPH0NE EXPENSE | Irrigation | Expense | 2,877.90 | 4,520.00 | 63.67% |
| 25 | 6265 | TRAINING & SCH00LING EXPENSE | Irrigation | Expense | 400.39 | 930.00 | 43.05% |
| 25 | 6270 | TRAVEL EXPENSES | Irrigation | Expense | 96.69 | 200.00 | 48.35% |
| 25 | 6285 | UNIF0RMS EXPENSE | Irrigation | Expense | 182.99 | 900.00 | 20.33% |
| 25 | 6290 | UTILITIES EXPENSE | Irrigation | Expense | 44,801.72 | 135,000.00 | 33.19% |
| 25 | 6300 | FUEL | Irrigation | Expense | 2,130.95 | 4,000.00 | 53.27% |
| 25 | 6305 | VEHICLE MAINTENANCE & REPAIR | Irrigation | Expense | 654.38 | 1,375.00 | 47.59% |
| 25 | 6505 | BANK FEES | Irrigation | Expense | 6,961.45 | 10,000.00 | 69.61% |
| 26 | 4173 | INTEREST INC0ME | Trash | Revenue | 451.05 | 1,000.00 | 45.11% |
| 26 | 4950 | CARRYOVER | Trash | Revenue | 96,388.92 | 90,000.00 | 107.10% |
| 26 | 4975 | SOLID WASTE USER FEES | Trash | Revenue | 1,810,680.41 | 2,372,055.00 | 76.33% |
| 26 | 6045 | CONTINGENCY | Trash | Expense | - | 90,000.00 | 0.00% |
| 26 | 6095 | BAD DEBT EXPENSE | Trash | Expense | 28.24 | - | 100.00% |
| 26 | 7000 | SOLID WASTE SERVICE FEES | Trash | Expense | 1,803,527.18 | 2,373,055.00 | 76.00% |
| 40 | 4900 | TRANSFERS IN | Capital Projects | Revenue | 1,582,259.00 | 1,582,259.00 | 100.00% |
| 40 | 4950 | CARRY OVER | Capital Projects | Revenue | 338,791.24 | 245,000.00 | 138.28% |
| 40 | 6020 | CAPITAL IMPROVEMENTS | Capital Projects | Expense | 199,285.06 | 61,990.00 | 321.48% |
| 40 | 6045 | CONTINGENCY | Capital Projects | Expense | - | 245,000.00 | 0.00% |
| 40 | 6166 | PP&E PURCHASES OPERATIONS | Capital Projects | Expense | 43,113.28 | 1,520,269.00 | 2.84% |
| 50 | 4173 | INTEREST INCOME | Park Impact | Revenue | 14,138.31 | 18,000.00 | 78.55% |
| 50 | 4650 | PARK IMPACT FEE REVENUE | Park Impact | Revenue | 556,827.00 | 717,396.00 | 77.62% |
| 50 | 4950 | CARRY 0VER | Park Impact | Revenue | 1,111,274.71 | 917,273.00 | 121.15% |
| 50 | 6045 | CONTINGENCY | Park Impact | Expense | 9,017.65 | 1,652,669.00 | 0.55% |
| 51 | 4650 | POLICE IMPACT FEE REVENUE | Police Impact | Revenue | 53,408.64 | 16,380.00 | 326.06% |
| 51 | 4950 | CARRY 0VER | Police Impact | Revenue | 12,731.24 | 4,545.00 | 280.12% |
| 51 | 6045 | CONTINGENCY | Police Impact | Expense | - | 20,925.00 | 0.00% |

| | Tentative Budget | | |
|---|---|---|---|
| | Fiscal Year Ending September 30, 2019 Budget | Fiscal Year Ending September 30, 2020 Budget | Fiscal Year Ending September 30, 2021 Proposed |
| **REVENUES** | | | |
| **GENERAL FUND** | | | |
| Property Taxes | $2,656,754 | $3,185,042 | $3,576,404 |
| Sources Other Than Property Taxes | $4,608,318 | $6,362,058 | $7,245,632 |
| **TOTAL GENERAL FUND** | $7,265,072 | $9,547,100 | $10,822,036 |
| **GRANT FUND** | $1,214,216 | $2,283,429 | $233,769 |
| **LATE COMERS FUND** | $1,779,951 | $4,801,256 | $5,578,076 |
| **CAPITAL PROJECTS FUND** | $731,500 | $1,827,259 | $1,814,339 |
| **PARK IMPACT FEE FUND** | $851,286 | $1,652,669 | $2,376,483 |
| **POLICE IMPACT FEE FUND** | $0 | $20,925 | $127,783 |
| **PROPRIETARY FUNDS** | | | |
| Water Fund | $8,044,638 | $11,320,048 | $12,104,616 |
| Sewer Fund | $7,730,861 | $7,761,297 | $9,971,489 |
| Irrigation Fund | $3,295,360 | $4,945,345 | $5,169,060 |
| Solid Waste Collection Fund | $2,029,335 | $2,463,055 | $2,489,501 |
| **TOTAL PROPRIETARY FUNDS** | $21,100,194 | $26,489,745 | $29,734,666 |
| **GRAND TOTAL ALL FUNDS** | $32,942,219 | $46,622,383 | $50,687,152 |
| **EXPENDITURES** | | | |
| **GENERAL FUND** | | | |
| Operating | $4,301,603 | $5,295,309 | $6,981,298 |
| Debt Service | $0 | $0 | $0 |
| Public Safety | $2,331,969 | $2,669,532 | $2,722,469 |
| Transfers Out to Other Funds | $631,500 | $1,582,259 | $1,118,269 |
| **TOTAL GENERAL FUND** | $7,265,072 | $9,547,100 | $10,822,036 |
| **GRANT** | $1,214,216 | $2,283,429 | $233,769 |
| **LATE COMERS FUND** | $1,779,951 | $4,801,256 | $5,578,076 |
| **CAPITAL PROJECTS FUND** | $731,500 | $1,827,259 | $1,814,339 |
| **PARK IMPACT FEE FUND** | $851,286 | $1,652,669 | $2,376,483 |
| **POLICE IMPACT FEE FUND** | $0 | $20,925 | $127,783 |
| **PROPRIETARY FUNDS** | | | |
| **Water Fund** | **$8,044,638** | **$11,320,048** | **$12,104,616** |
| *Operating* | *$5,185,034* | *$9,409,218* | *$9,823,256* |
| *Debt Service* | *$0* | *$0* | *$0* |
| *Capital* | *$2,859,604* | *$1,910,830* | *$2,281,360* |
| **Sewer Fund** | **$7,730,861** | **$7,761,297** | **$9,971,489** |
| *Operating* | *$5,560,029* | *$6,471,467* | *$7,830,029* |
| *Debt Service* | *$0* | *$0* | *$0* |
| *Capital* | *$2,170,832* | *$1,289,830* | *$2,141,460* |
| **Irrigation Fund** | **$3,295,360** | **$4,945,345** | **$5,169,060** |
| *Operating* | *$2,716,273* | *$4,127,195* | *$4,589,973* |
| *Debt Service* | *$0* | *$0* | *$0* |
| *Capital* | *$579,087* | *$818,150* | *$579,087* |
| **Solid Waste Collection Fund** | **$2,029,335** | **$2,463,055** | **$2,489,501** |
| *Operating* | *$2,029,335* | *$2,463,055* | *$2,489,501* |
| *Debt Service* | *$0* | *$0* | *$0* |
| **TOTAL PROPRIETARY FUNDS** | $21,100,194 | $26,489,745 | $29,734,666 |
| **GRAND TOTAL ALL FUNDS** | $32,942,219 | $46,622,383 | $50,687,152 |

**REVENUE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**GENERAL FUND**

| ACCOUNT # | ACCOUNT NAME | FYE 2021 BUDGET | FYE 2020 ACTUAL* | FYE 2020 BUDGET | FYE 2019 ACTUAL | FYE 2019 BUDGET | FYE 2018 ACTUAL | FYE 2018 BUDGET | FYE 2017 ACTUAL | FYE 2017 BUDGET | FYE 2016 ACTUAL | FYE 2016 BUDGET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TAX REVENUE** | | | | | | | | | | | | |
| 01-4100 | Property Tax Revenue | $3,573,403 | $3,286,683 | $3,181,873 | $2,760,029 | $2,653,922 | $2,406,887 | $2,331,587 | $2,121,168 | $2,067,086 | $1,934,595 | $1,917,767 |
| 01-4110 | Property Tax Interest & Penalty | $3,001 | $3,001 | $3,169 | $3,986 | $2,832 | $3,662 | $5,147 | $5,226 | $4,396 | $3,875 | $5,555 |
| 01-4001 | Sales Tax Revenue Sharing - State | $1,100,000 | $1,251,130 | $850,419 | $858,039 | $703,634 | $761,490 | $654,195 | $625,080 | $623,563 | $656,988 | $545,184 |
| 01-4120 | Sales Tax Revenue Sharing - County | $380,005 | $370,005 | $343,869 | $351,288 | $249,206 | $297,591 | $218,547 | $244,319 | $200,321 | $204,059 | $159,598 |
| | | **$5,056,409** | **$4,910,820** | **$4,379,329** | **$3,973,341** | **$3,609,594** | **$3,469,632** | **$3,209,476** | **$2,995,793** | **$2,895,366** | **$2,799,516** | **$2,628,104** |
| **INTERGOVERNMENTAL REVENUE** | | | | | | | | | | | | |
| 01-4000 | State Liquor Distribution | $224,425 | $219,425 | $197,976 | $205,624 | $177,760 | $183,479 | $155,120 | $157,220 | $143,195 | $146,746 | $131,925 |
| 01-4130 | County Fine Distribution | $8,552 | $8,552 | $8,500 | $10,527 | $9,037 | $10,158 | $29,474 | $27,968 | $42,795 | $41,598 | $32,309 |
| | | **$232,977** | **$227,977** | **$206,476** | **$216,151** | **$186,797** | **$193,637** | **$184,594** | **$185,188** | **$185,990** | **$188,344** | **$164,234** |
| **LICENSES/PERMITS/FEE REVENUE** | | | | | | | | | | | | |
| 01-4170 | Franchise Fees | $349,110 | $339,110 | $320,464 | $330,544 | $317,560 | $314,380 | $287,270 | $277,363 | $267,391 | $269,028 | $275,307 |
| 01-4180 | Business Licenses | $5,000 | $6,500 | $4,118 | $4,272 | $3,411 | $3,066 | $2,531 | $2,164 | $301 | $798 | $184 |
| 01-4183 | Wine Licenses | $2,500 | $2,500 | $2,813 | $2,250 | $2,078 | $2,050 | $800 | $950 | $1,700 | $1,700 | $1,800 |
| 01-4181 | Liquor Licenses | $6,000 | $5,625 | $6,250 | $5,625 | $6,344 | $7,187 | $6,101 | $6,101 | $5,063 | $5,625 | $5,625 |
| 01-4182 | Beer Licenses | $3,000 | $2,875 | $3,333 | $3,000 | $2,490 | $2,813 | $1,897 | $1,788 | $2,375 | $2,575 | $2,500 |
| 01-4184 | Animal Licenses | $11,500 | $7,500 | $11,843 | $11,882 | $7,373 | $7,159 | $6,465 | $6,706 | $6,254 | $6,240 | $5,407 |
| 01-4190 | Catering Permit | $293 | $0 | $293 | $670 | $240 | $420 | $179 | $240 | $241 | $180 | $220 |
| 01-4193 | Vendor Permits | $882 | $1,025 | $882 | $1,050 | $1,443 | $1,305 | $385 | $415 | $525 | $465 | $424 |
| | | **$378,286** | **$365,135** | **$349,997** | **$359,293** | **$340,939** | **$338,381** | **$305,628** | **$295,727** | **$283,850** | **$286,610** | **$291,467** |
| **MISCELLANEOUS REVENUE** | | | | | | | | | | | | |
| 01-4155 | Administrative Services | $5,260 | $9,560 | $5,260 | $5,589 | $1,384 | $5,756 | $1,384 | $1,399 | $1,384 | $1,291 | $1,384 |
| 01-4185 | Miscellaneous Income | $50,000 | $52,699 | $50,000 | $55,749 | $1,300 | $51,255 | $1,300 | $4,112 | $1,300 | $3,389 | $0 |
| 01-4173 | Interest Revenue | $55,000 | $111,574 | $45,000 | $82,172 | $3,904 | $19,137 | $2,933 | $3,235 | $812 | $2,156 | $812 |
| 01-4195 | Rental Income | $3,000 | $2,936 | $3,926 | $4,605 | $3,200 | $4,065 | $2,900 | $2,900 | $2,900 | $2,900 | $2,900 |
| | | **$113,260** | **$176,768** | **$104,186** | **$148,116** | **$9,788** | **$80,212** | **$8,517** | **$11,646** | **$6,396** | **$9,736** | **$5,096** |
| **SENIOR CENTER ACTIVITY - MISCELLANEOUS REVENUE** | | | | | | | | | | | | |
| 01-4195-1001 | Rental Income | **$3,600** | $4,865 | $6,340 | $6,010 | $6,100 | $6,090 | $5,805 | $5,890 | $6,635 | $5,380 | $5,380 |
| **BUILDING- LICENSES/PERMITS/FEES REVENUE (FORMERLY P&Z)** | | | | | | | | | | | | |
| 01-4155-1005 | Administrative Services | $67,900 | $81,905 | $67,900 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-4360-1005 | Building Permits | $936,776 | $936,776 | $1,054,157 | $1,010,733 | $640,890 | $752,314 | $551,645 | $599,596 | $369,891 | $422,639 | $268,595 |
| 01-4391-1005 | IRES Check Fees | $17,895 | $17,895 | $18,500 | $17,925 | $9,833 | $13,225 | $7,520 | $10,130 | $5,695 | $7,640 | $4,631 |
| 01-4392-1005 | Mechanical Permits | $126,652 | $126,652 | $123,997 | $117,953 | $81,862 | $106,775 | $57,960 | $71,039 | $39,953 | $42,838 | $29,245 |
| 01-4361-1005 | Plumbing Permits | $200,814 | $200,814 | $196,271 | $205,795 | $130,627 | $162,501 | $92,486 | $118,579 | $78,156 | $88,772 | $43,846 |
| 01-4362-1005 | Electrical Permits | $225,644 | $225,644 | $213,127 | $227,462 | $141,453 | $182,398 | $107,637 | $132,182 | $119,339 | $121,218 | $62,152 |
| | | **$1,575,681** | **$1,507,781** | **$1,673,951** | **$1,579,868** | **$1,004,664** | **$1,217,213** | **$817,248** | **$931,525** | **$613,034** | **$683,108** | **$408,469** |
| **PLANNING AND ZONING - MISCELLANEOUS REVENUE** | | | | | | | | | | | | |
| 01-4155-1003 | Administrative Services | $147,795 | $147,795 | $203,699 | $336,946 | $131,255 | $134,385 | $148,706 | $145,715 | $84,353 | $110,617 | $86,109 |
| 01-4185-1003 | Miscellaneous Income | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $98 | $0 | $0 | $0 |
| 01-4358-1003 | Development Support Services | $6,529 | $10,567 | $6,529 | $45,440 | $4,476 | $5,500 | $10,410 | $10,240 | $4,173 | $4,395 | $2,573 |
| 01-4550-1003 | Inspection Revenue | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$154,323** | **$158,361** | **$210,228** | **$382,386** | **$135,731** | **$139,885** | **$159,116** | **$156,053** | **$88,526** | **$115,012** | **$88,682** |
| **PARKS ACTIVITY - LICENSES/PERMITS/FEES REVENUE** | | | | | | | | | | | | |
| 01-4195-1004 | Rental Income | **$3,000** | $1,630 | $6,560 | $6,462 | $1,746 | $4,765 | $2,093 | $1,430 | $1,467 | $1,505 | $3,900 |
| **PARKS ACTIVITY - MISCELLANEOUS REVENUE** | | | | | | | | | | | | |
| 01-4197-1004 | RV Dump Revenue | $4,500 | $4,303 | $4,017 | $4,113 | $1,685 | $3,799 | $2,093 | $1,430 | $1,467 | $1,505 | $3,900 |
| 01-4185-1004 | Miscellaneous Income | $0 | $0 | $50 | $0 | $0 | $75 | $0 | $0 | $0 | $0 | $0 |
| | | **$4,500** | **$4,303** | **$4,067** | **$4,113** | **$1,685** | **$3,874** | **$2,093** | **$1,430** | **$1,467** | **$1,505** | **$3,900** |
| **OTHER REVENUE** | | | | | | | | | | | | |
| 01-4900 | Transfer In | $0 | $380,239 | $0 | $244,682 | $0 | $206,712 | $0 | $0 | $0 | $0 | $0 |
| 01-4950 | Carryover | $3,300,000 | $3,623,602 | $2,605,966 | $2,493,184 | $1,968,028 | $2,605,230 | $1,411,604 | $1,587,703 | $1,646,344 | $1,587,703 | $1,206,561 |
| | | **$3,300,000** | **$4,003,841** | **$2,605,966** | **$2,737,866** | **$1,968,028** | **$2,811,942** | **$1,411,604** | **$1,587,703** | **$1,646,344** | **$1,587,703** | **$1,206,561** |
| **GRAND TOTAL REVENUE** | | **$10,822,036** | **$10,981,241** | **$9,547,100** | **$9,413,606** | **$7,265,072** | **$8,265,630** | **$6,106,174** | **$6,172,386** | **$5,729,075** | **$5,678,420** | **$4,805,793** |
| ***GRAND TOTAL WITHOUT CARRYOVER*** | | $7,522,036 | *$7,357,639* | *$6,941,134* | *$6,920,421* | *$5,297,044* | *$5,660,400* | *$4,694,570* | *$4,584,683* | *$4,082,731* | *$4,090,716* | *$3,599,232* |

**EXPENDITURE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**GENERAL FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **PUBLIC SAFETY EXPENDITURES** | | | | | | | | | | | | |
| 01-6000 | Law Enforcement Services | $2,558,929 | $2,501,395 | $2,501,394 | $2,206,149 | $2,206,149 | $1,914,284 | $1,914,284 | $1,594,843 | $1,594,843 | $1,569,904 | $1,569,904 |
| 01-6203 | Prosecutorial Services | $54,000 | $54,000 | $54,000 | $55,570 | $55,570 | $52,552 | $52,552 | $50,794 | $50,794 | $53,700 | $51,711 |
| 01-6005 | Animal Control Services | $109,540 | $111,381 | $114,138 | $70,278 | $70,250 | $66,059 | $66,158 | $61,633 | $61,715 | $59,848 | $59,865 |
| | | **$2,722,469** | **$2,666,776** | **$2,669,532** | **$2,331,997** | **$2,331,969** | **$2,032,895** | **$2,032,994** | **$1,707,270** | **$1,707,352** | **$1,683,452** | **$1,681,480** |
| **LABOR & BENEFITS - ADMIN.** | | | | | | | | | | | | |
| 01-5000 | Salaries & Wages - Elected Officials | $98,844 | $96,248 | $96,988 | $97,417 | $92,925 | $88,556 | $92,400 | $88,200 | $91,350 | $80,711 | $84,750 |
| 01-5005 | Salaries & Wages - Staff | $296,917 | $274,768 | $276,502 | $262,877 | $331,143 | $268,560 | $294,365 | $250,701 | $252,100 | $226,121 | $213,246 |
| 01-5800 | OASDI - Employer | $24,537 | $28,751 | $23,156 | $21,292 | $26,292 | $27,416 | $23,979 | $20,714 | $21,294 | $15,543 | $18,476 |
| 01-5810 | Medicare - Employer | $5,739 | $5,285 | $5,416 | $4,980 | $6,149 | $4,863 | $5,608 | $4,771 | $4,980 | $3,635 | $4,321 |
| 01-5820 | Group Medical Insurance | $63,505 | $65,098 | $53,279 | $45,183 | $52,824 | $54,485 | $47,058 | $44,613 | $44,628 | $35,253 | $33,462 |
| 01-5830 | Group Life Insurance | $229 | $160 | $229 | $196 | $357 | $326 | $326 | $325 | $325 | $316 | $316 |
| 01-5840 | PERSI Employer 401 (a) | $47,281 | $45,434 | $44,622 | $39,597 | $49,520 | $39,979 | $45,203 | $40,187 | $40,187 | $38,991 | $34,496 |
| 01-5850 | Worker's Compensation Insurance | $1,507 | $2,305 | $1,454 | -$1,775 | $3,088 | -$2,549 | $2,844 | $1,971 | $2,177 | $1,601 | $1,658 |
| 01-5860 | Group Dental & Vision Insurance | $7,000 | $6,124 | $4,794 | $4,775 | $4,939 | $4,389 | $4,419 | $4,620 | $4,617 | $3,121 | $3,044 |
| 01-6280 | Unemployment Expenses | $7,000 | $0 | $7,000 | $6,376 | $0 | $1,094 | $0 | $0 | $0 | $0 | $0 |
| | | **$552,560** | **$524,172** | **$513,441** | **$480,917** | **$567,237** | **$487,120** | **$516,202** | **$456,102** | **$461,658** | **$405,292** | **$393,769** |
| **GENERAL GOVERNMENT - ADMIN.** | | | | | | | | | | | | |
| 01-6025 | Janitorial | $5,012 | $4,512 | $3,953 | $2,634 | $1,907 | $1,876 | $1,175 | $1,075 | $1,049 | $949 | $837 |
| 01-6050 | Contract Labor | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $1,287 | $0 |
| 01-6052 | Contract Services | $23,620 | $23,237 | $22,020 | $12,351 | $16,001 | $15,122 | $15,940 | $16,211 | $16,391 | $7,714 | $7,604 |
| 01-6075 | Dues & Memberships | $48,697 | $33,582 | $44,366 | $36,135 | $39,896 | $35,069 | $37,773 | $34,760 | $34,957 | $28,351 | $27,706 |
| 01-6085 | Election Expenses | $750 | $0 | $750 | $0 | $750 | $0 | $1,500 | $0 | $750 | $0 | $6,000 |
| 01-6125 | Legal Publications | $15,000 | $12,312 | $6,500 | $9,657 | $2,000 | $2,695 | $2,000 | $1,880 | $1,800 | $1,530 | $1,800 |
| 01-6130 | Liability & Property Insurance | $21,156 | $19,772 | $19,772 | $18,479 | $18,479 | $17,270 | $17,270 | $16,447 | $16,447 | $16,222 | $16,125 |
| 01-6140 | Maintenance & Repair - Building | $4,000 | $3,896 | $1,600 | $1,666 | $1,600 | $2,102 | $1,600 | $1,120 | $760 | $221 | $480 |
| 01-6141 | IT Small Equipment | $7,350 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6142 | Maintenance & Repair - Equipment | $19,610 | $8,067 | $8,500 | $8,410 | $7,631 | $9,900 | $7,631 | $7,517 | $7,386 | $7,011 | $6,984 |
| 01-6150 | Repairs | $4,500 | $5,738 | $0 | $2,233 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6155 | Meetings/Committees | $10,000 | $3,333 | $10,000 | $3,390 | $9,073 | $8,411 | $11,273 | $9,471 | $10,711 | $5,157 | $11,495 |
| 01-6165 | Office Supplies | $14,166 | $7,586 | $11,500 | $7,659 | $10,564 | $6,746 | $10,564 | $5,300 | $5,274 | $5,300 | $5,274 |
| 01-6175 | Small Tools | $12,100 | $10,723 | $12,100 | $7,770 | $6,810 | $4,324 | $7,359 | $5,100 | $6,000 | $5,201 | $6,000 |
| 01-6188 | Signage | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6190 | Postage & Billing | $17,000 | $15,797 | $15,000 | $13,895 | $12,545 | $12,415 | $12,545 | $13,620 | $14,112 | $14,302 | $15,026 |
| 01-6202 | Professional Services | $55,000 | $39,841 | $35,000 | $38,390 | $5,361 | $9,744 | $5,361 | $7,427 | $8,622 | $4,787 | $4,823 |
| 01-6211 | Rent - Buildings & Land | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $15,522 | $15,522 |
| 01-6212 | Rent - Equipment | $7,200 | $6,226 | $6,750 | $1,730 | $250 | $126 | $250 | $270 | $250 | $0 | $250 |
| 01-6255 | Telephone | $9,500 | $7,782 | $7,782 | $6,787 | $8,503 | $7,931 | $8,503 | $8,311 | $7,906 | $7,899 | $7,735 |
| 01-6265 | Training & Schooling | $7,000 | $4,817 | $7,000 | $7,316 | $7,025 | $5,561 | $6,940 | $6,150 | $7,424 | $470 | $799 |
| 01-6270 | Travel | $2,000 | $1,777 | $1,500 | $188 | $270 | $137 | $270 | $219 | $1,725 | $150 | $1,800 |
| 01-6285 | Uniforms | $300 | $250 | $300 | $120 | $250 | $0 | $250 | $220 | $250 | $270 | $0 |
| 01-6290 | Utilities | $6,500 | $5,689 | $6,000 | $4,987 | $4,263 | $5,969 | $4,263 | $4,227 | $4,196 | $3,752 | $3,659 |
| 01-6300 | Fuel Expenditures | $1,000 | $842 | $500 | -$394 | $900 | $2,182 | $900 | $825 | $600 | $550 | $600 |
| 01-6305 | Maintenance & Repair - Vehicles | $1,000 | $755 | $1,000 | $849 | $300 | $1,646 | $300 | $311 | $113 | $119 | $113 |
| 01-6500 | Cash Over/Short | $50 | $0 | $50 | -$17 | $12,788 | $36 | $0 | -$14 | $0 | $90 | $0 |
| 01-6505 | Bank Fees | $22,000 | $16,602 | $15,138 | $13,768 | $12,788 | $11,444 | $12,788 | $13,311 | $10,163 | $9,621 | $7,443 |
| | | **$314,511** | **$233,134** | **$237,081** | **$198,003** | **$179,953** | **$160,707** | **$166,455** | **$153,758** | **$156,886** | **$136,475** | **$148,072** |

| ACCOUNT # | ACCOUNT NAME | FYE 2021 BUDGET | FYE 2020 ACTUAL* | FYE 2020 BUDGET | FYE 2019 ACTUAL | FYE 2019 BUDGET | FYE 2018 ACTUAL | FYE 2018 BUDGET | FYE 2017 ACTUAL | FYE 2017 BUDGET | FYE 2016 ACTUAL | FYE 2016 BUDGET |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DEBT COVERAGE** | | | | | | | | | | | | |
| 01-6110 | Interest Expense | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6015 | Bond & Loan Payments | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **CAPITAL - ADMIN.** | | | | | | | | | | | | |
| 01-6166 | PP&E - Operations | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | $0 | $0 | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **MISCELLANEOUS - ADMIN.** | | | | | | | | | | | | |
| 01-6070 | Donations | $33,029 | $21,956 | $30,643 | $25,535 | $25,848 | $8,225 | $9,000 | $4,500 | $4,500 | $4,500 | $4,500 |
| 01-6160 | Miscellaneous Expenditures | $33,800 | $5,160 | $11,050 | -$280 | $0 | $180 | $0 | $1,517 | $24,443 | $1,260 | $0 |
| 01-6045 | Contingency | $3,568,482 | $98,532 | $2,195,983 | $165,966 | $1,678,243 | $335,798 | $1,225,849 | $302,869 | $1,227,237 | $188,000 | $1,169,762 |
| 01-6400 | Transfers Out | $152,269 | $1,097,259 | $1,097,259 | $252,500 | $247,500 | $153,833 | $152,810 | $56,075 | $56,075 | $49,700 | $49,700 |
| | | **$3,787,580** | **$1,222,907** | **$3,334,935** | **$443,721** | **$1,951,591** | **$498,036** | **$1,387,659** | **$364,961** | **$1,312,255** | **$243,460** | **$1,223,962** |
| **GENERAL GOVERNMENT - SENIOR CENTER** | | | | | | | | | | | | |
| 01-6140-1001 | Maintenance & Repair - Building | $4,000 | $1,094 | $4,000 | $499 | $18,300 | $2,574 | $8,300 | $2,912 | $3,240 | $2,481 | $1,500 |
| 01-6025-1001 | Janitorial | $6,200 | $5,120 | $5,957 | $5,680 | $4,964 | $3,003 | $4,964 | $4,280 | $4,964 | $4,079 | $4,404 |
| 01-6036-1001 | Public Transportation | $10,000 | $10,000 | $10,000 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6290-1001 | Utilities | $8,500 | $5,760 | $7,101 | $7,044 | $6,928 | $6,687 | $6,928 | $6,397 | $6,928 | $5,886 | $7,515 |
| 01-6255-1001 | Telephone | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $597 | $597 | $597 |
| 01-6130-1001 | Liability & Property Insurance | $504 | $471 | $471 | $440 | $440 | $411 | $411 | $195 | $392 | $230 | $384 |
| | | **$29,204** | **$22,445** | **$27,529** | **$13,663** | **$30,632** | **$12,675** | **$20,603** | **$13,785** | **$16,121** | **$13,273** | **$14,400** |
| **MISCELLANEOUS - SENIOR CENTER** | | | | | | | | | | | | |
| 01-6400-1001 | Transfers Out | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $17,000 | $17,000 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$17,000** | **$17,000** | **$0** | **$0** |
| **GENERAL GOVERNMENT - STREET LIGHTS** | | | | | | | | | | | | |
| 01-6142-1002 | Maintenance & Repair - Equipment | $11,000 | $5,050 | $10,000 | $1,845 | $8,469 | $11,324 | $8,469 | $5,265 | $8,469 | $7,351 | $7,500 |
| 01-6290-1002 | Utilities | $95,000 | $81,229 | $88,900 | $81,982 | $83,084 | $82,252 | $83,084 | $80,513 | $83,084 | $80,057 | $80,000 |
| 01-6300-1002 | Fuel Expenditures | $0 | $0 | $0 | $0 | $315 | $0 | $315 | $0 | $315 | $0 | $0 |
| 01-6305-1002 | Maintenance & Repair - Vehicles | $0 | $0 | $0 | $0 | $150 | $77 | $150 | $0 | $150 | $0 | $0 |
| | | **$106,000** | **$86,278** | **$98,900** | **$83,827** | **$92,018** | **$93,653** | **$92,018** | **$85,778** | **$92,018** | **$87,408** | **$87,500** |
| **LABOR & BENEFITS - P&Z** | | | | | | | | | | | | |
| 01-5005-1003 | Salaries & Wages - Staff | $372,221 | $333,809 | $331,756 | $352,808 | $358,469 | $321,179 | $317,961 | $304,011 | $305,178 | $221,388 | $252,602 |
| 01-5800-1003 | OASDI - Employer | $23,078 | $20,180 | $20,569 | $21,650 | $22,225 | $18,849 | $19,714 | $17,670 | $18,921 | $13,452 | $15,661 |
| 01-5810-1003 | Medicare - Employer | $5,397 | $4,683 | $4,810 | $5,063 | $5,198 | $4,408 | $4,610 | $4,132 | $4,425 | $3,146 | $3,663 |
| 01-5820-1003 | Group Medical Insurance | $43,738 | $37,303 | $43,057 | $43,654 | $42,509 | $38,552 | $42,509 | $38,117 | $38,374 | $25,887 | $40,576 |
| 01-5830-1003 | Group Life Insurance | $193 | $165 | $185 | $221 | $198 | $186 | $198 | $198 | $206 | $130 | $168 |
| 01-5840-1003 | PERSI Employer 401 (a) | $44,443 | $39,843 | $39,612 | $41,313 | $41,467 | $35,593 | $36,781 | $30,714 | $35,302 | $24,948 | $29,220 |
| 01-5850-1003 | Worker's Compensation Insurance | $1,868 | $1,352 | $1,703 | $2,063 | $1,930 | $1,704 | $1,748 | $1,620 | $1,873 | $1,339 | $1,447 |
| 01-5860-1003 | Group Dental & Vision Insurance | $4,460 | $3,547 | $3,781 | $4,824 | $4,138 | $4,848 | $4,138 | $3,701 | $3,798 | $3,129 | $3,191 |
| 01-6280-1003 | Unemployment Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $412 | $0 |
| | | **$495,399** | **$440,882** | **$445,473** | **$471,597** | **$476,133** | **$425,319** | **$427,658** | **$400,163** | **$408,077** | **$293,831** | **$346,528** |
| **GENERAL GOVERNMENT - P&Z** | | | | | | | | | | | | |
| 01-6300-1003 | Fuel Expenditures | $500 | $51 | $300 | $45 | $300 | $137 | $300 | $42 | $200 | $27 | $200 |
| 01-6305-1003 | Maintenance & Repair - Vehicles | $200 | $0 | $100 | $10 | $100 | $0 | $100 | $19 | $38 | $32 | $38 |
| 01-6142-1003 | Maintenance & Repair - Equipment | $3,500 | $2,203 | $3,500 | $2,785 | $2,732 | $4,563 | $2,725 | $3,517 | $2,638 | $3,001 | $2,494 |
| 01-6140-1003 | Maintenance & Repair - Building | $600 | $330 | $500 | $429 | $500 | $727 | $500 | $1,048 | $120 | $8 | $100 |
| 01-6025-1003 | Janitorial | $0 | $0 | $0 | $891 | $681 | $628 | $420 | $536 | $375 | $344 | $299 |
| 01-6211-1003 | Rent - Buildings & Land | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $103 | $0 | $5,569 | $5,543 |
| 01-6290-1003 | Utilities | $0 | $0 | $0 | $731 | $1,094 | $662 | $1,094 | $925 | $1,070 | $606 | $1,187 |
| 01-6255-1003 | Telephone | $3,000 | $2,690 | $2,179 | $2,792 | $2,730 | $2,500 | $2,730 | $3,746 | $2,730 | $2,625 | $2,716 |
| 01-6202-1003 | Professional Services | $12,500 | $6,621 | $12,500 | $331,736 | $189,484 | $298,258 | $221,989 | $227,333 | $286,283 | $129,390 | $70,595 |
| 01-6130-1003 | Liability & Property Insurance | $0 | $0 | $0 | $5,280 | $5,280 | $4,934 | $4,934 | $2,350 | $4,699 | $4,315 | $4,607 |

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| 01-6150-1003 | Maintenance & Repair - System | $0 | $0 | $0 | $2,359 | $0 | $923 | $0 | $0 | $0 | $0 | $0 |
| 01-6190-1003 | Postage & Billing | $1,500 | $531 | $1,000 | $504 | $206 | $548 | $206 | $176 | $206 | $239 | $143 |
| 01-6165-1003 | Office Supplies | $5,000 | $1,989 | $4,600 | $2,411 | $2,750 | $2,170 | $2,750 | $1,802 | $1,500 | $1,432 | $1,500 |
| 01-6160-1003 | Miscellaneous Expenditures | $500 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6265-1003 | Training & Schooling | $4,585 | $1,068 | $4,435 | $2,201 | $4,277 | $1,482 | $4,200 | $839 | $3,816 | $1,498 | $1,650 |
| 01-6175-1003 | Small Tools | $7,320 | $3,044 | $7,320 | $3,473 | $3,535 | $965 | $11,140 | $3,268 | $4,000 | $3,796 | $4,000 |
| 01-6188-1003 | Signage | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6212-1003 | Rent - Equipment | $0 | $0 | $0 | $525 | $0 | $41 | $0 | $0 | $0 | $0 | $0 |
| 01-6155-1003 | Meetings/Committees | $250 | $0 | $250 | -$490 | $328 | $0 | $328 | $200 | $305 | $215 | $300 |
| 01-6270-1003 | Travel | $600 | $282 | $600 | $132 | $450 | $24 | $450 | $82 | $1,000 | $5 | $1,650 |
| 01-6285-1003 | Uniforms | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6500-1003 | Cash Over/Short | $0 | $0 | $0 | $10 | $0 | $10 | $0 | $19 | $0 | $0 | $0 |
| 01-6505-1003 | Bank Fees | $0 | $0 | $0 | $13,723 | $4,500 | $9,396 | $4,500 | $5,017 | $2,400 | $1,409 | $372 |
| 01-6052-1003 | Contract Services | $0 | $0 | $0 | $8,299 | $8,589 | $3,016 | $9,424 | $3,845 | $11,373 | $9,015 | $11,323 |
| 01-6075-1003 | Dues & Memberships | $8,900 | $3,086 | $8,801 | $333 | $1,450 | $403 | $1,450 | $998 | $600 | $353 | $375 |
| 01-6027-1003 | Code Enforcement | $600 | $0 | $800 | $0 | $750 | $0 | $1,500 | $0 | $850 | $0 | $1,500 |
| 01-6125-1003 | Legal Publications | $14,000 | $4,649 | $4,000 | $3,562 | $5,500 | $5,026 | $4,200 | $4,887 | $3,350 | $3,215 | $3,000 |
| | | **$63,555** | **$26,543** | **$50,885** | **$381,738** | **$235,236** | **$336,412** | **$274,940** | **$260,751** | **$327,551** | **$167,093** | **$113,593** |
| **CAPITAL - P&Z** | | | | | | | | | | | | |
| 01-6166-1003 | PP&E - Operations | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| **MISCELLANEOUS - P&Z** | | | | | | | | | | | | |
| 01-6400-1003 | Transfers Out | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| **LABOR & BENEFITS - PARKS** | | | | | | | | | | | | |
| 01-5005-1004 | Salaries & Wages - Staff | $474,391 | $441,123 | $454,434 | $362,622 | $333,709 | $324,134 | $323,896 | $254,168 | $264,222 | $213,554 | $204,790 |
| 01-5009-1004 | Salaries & Wages - Seasonal | $62,108 | $28,751 | $48,241 | $41,162 | $57,121 | $52,925 | $56,646 | $55,675 | $55,216 | $44,866 | $54,389 |
| 01-5800-1004 | OASDI - Employer | $33,263 | $28,468 | $31,166 | $24,069 | $24,231 | $24,058 | $23,594 | $19,794 | $19,805 | $15,025 | $16,069 |
| 01-5810-1004 | Medicare - Employer | $7,779 | $6,336 | $7,289 | $5,630 | $5,667 | $5,626 | $5,518 | $4,629 | $4,632 | $3,514 | $3,758 |
| 01-5820-1004 | Group Medical Insurance | $88,901 | $66,319 | $80,186 | $64,007 | $50,392 | $51,046 | $53,451 | $41,312 | $42,953 | $31,026 | $37,437 |
| 01-5830-1004 | Group Life Insurance | $390 | $316 | $390 | $320 | $276 | $296 | $276 | $224 | $221 | $168 | $175 |
| 01-5840-1004 | PERSI Employer 401 (a) | $56,642 | $51,990 | $54,259 | $43,141 | $38,602 | $36,107 | $37,467 | $30,240 | $30,564 | $24,175 | $23,690 |
| 01-5850-1004 | Worker's Compensation Insurance | $20,179 | $11,843 | $18,907 | $15,373 | $14,927 | $15,756 | $12,732 | $12,866 | $12,725 | $10,139 | $10,711 |
| 01-5860-1004 | Group Dental & Vision Insurance | $7,900 | $6,005 | $6,916 | $5,707 | $4,538 | $5,005 | $4,777 | $3,918 | $4,117 | $2,748 | $2,838 |
| 01-6280-1004 | Unemployment Expenses | $0 | $0 | $0 | $0 | $6,087 | $0 | $6,087 | $0 | $6,087 | $2,160 | $6,026 |
| | | **$751,554** | **$641,152** | **$701,787** | **$562,031** | **$535,551** | **$514,952** | **$524,444** | **$422,827** | **$440,542** | **$347,375** | **$359,883** |
| **GENERAL GOVERNMENT - PARKS** | | | | | | | | | | | | |
| 01-6300-1004 | Fuel Expenditures | $13,500 | $11,022 | $12,200 | $11,624 | $12,200 | $15,138 | $12,200 | $9,213 | $12,200 | $10,679 | $12,200 |
| 01-6305-1004 | Maintenance & Repair - Vehicles | $6,000 | $991 | $6,000 | $3,568 | $5,000 | $3,240 | $5,000 | $3,797 | $3,000 | $4,051 | $5,000 |
| 01-6142-1004 | Maintenance & Repair - Equipment | $10,000 | $7,884 | $10,000 | $11,867 | $8,500 | $9,971 | $8,500 | $7,759 | $8,737 | $11,330 | $8,337 |
| 01-6140-1004 | Maintenance & Repair - Building | $10,000 | $9,867 | $10,000 | $2,824 | $5,000 | $10,587 | $5,000 | $4,565 | $3,750 | $2,530 | $5,500 |
| 01-6025-1004 | Janitorial | $6,954 | $2,069 | $6,954 | $4,705 | $3,300 | $3,046 | $3,000 | $2,643 | $3,000 | $3,265 | $2,500 |
| 01-6052-1004 | Contract Services | $1,000 | $683 | $500 | $0 | $0 | $438 | $0 | $0 | $0 | $0 | $0 |
| 01-6150-1004 | Maintenance & Repair - System | $110,000 | $71,191 | $69,000 | $51,625 | $61,500 | $54,935 | $52,000 | $51,664 | $30,000 | $28,028 | $34,500 |
| 01-6211-1004 | Rent - Buildings & Land | $2,082 | $2,082 | $2,082 | $2,082 | $2,082 | $1,934 | $2,082 | $2,082 | $2,082 | $1,488 | $2,082 |
| 01-6290-1004 | Utilities | $37,000 | $34,188 | $41,500 | $17,671 | $41,500 | $27,261 | $41,558 | $18,783 | $39,203 | $17,693 | $45,624 |
| 01-6255-1004 | Telephone | $9,700 | $8,211 | $5,402 | $6,114 | $3,848 | $4,803 | $3,848 | $3,231 | $3,256 | $2,807 | $2,753 |
| 01-6130-1004 | Liability & Property Insurance | $7,052 | $6,591 | $6,591 | $6,160 | $6,160 | $5,757 | $5,757 | $5,757 | $5,482 | $6,711 | $5,375 |
| 01-6135-1004 | Public Entertainment | $22,000 | $15,197 | $20,000 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6125-1004 | Legal Publications | $300 | $0 | $300 | $293 | $0 | $242 | $0 | $0 | $0 | $0 | $0 |
| 01-6165-1004 | Office Supplies | $3,000 | $1,843 | $3,000 | $4,618 | $1,500 | $2,300 | $1,500 | $1,849 | $700 | $700 | $600 |
| 01-6265-1004 | Training & Schooling | $5,000 | $1,996 | $5,000 | $2,027 | $2,500 | $3,319 | $2,500 | $2,665 | $1,635 | $8,778 | $11,320 |
| 01-6175-1004 | Small Tools | $11,200 | $9,640 | $11,200 | $10,163 | $10,500 | $11,187 | $10,500 | $13,195 | $10,500 | $8,599 | $10,500 |

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| 01-6188-1004 | Signage | $3,000 | $0 | $3,000 | $300 | $3,000 | $218 | $500 | $344 | $275 | $272 | $250 |
| 01-6212-1004 | Rent - Equipment | $26,600 | $24,488 | $25,000 | $23,182 | $8,260 | $14,424 | $8,260 | $7,772 | $5,000 | $3,918 | $5,700 |
| 01-6230-1004 | Safety Training & Equipment | $4,000 | $940 | $3,000 | $1,303 | $2,500 | $972 | $2,000 | $1,089 | $1,819 | $1,149 | $900 |
| 01-6285-1004 | Uniforms | $2,500 | $1,159 | $2,500 | $2,016 | $2,000 | $2,165 | $2,000 | $2,180 | $1,580 | $828 | $750 |
| 01-6075-1004 | Dues & Memberships | $600 | $390 | $600 | $196 | $600 | $450 | $600 | $525 | $415 | $305 | $365 |
| | | **$291,488** | **$210,431** | **$243,829** | **$162,337** | **$179,949** | **$172,388** | **$166,805** | **$139,112** | **$132,634** | **$113,130** | **$154,257** |
| **MISCELLANEOUS - PARKS** | | | | | | | | | | | | |
| 01-6097-1004 | Deposits on Account | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6400-1004 | Transfers Out | $966,000 | $485,000 | $485,000 | $384,000 | $384,000 | $206,300 | $206,300 | $507,000 | $507,000 | $178,676 | $178,676 |
| | | **$966,000** | **$485,000** | **$485,000** | **$384,000** | **$384,000** | **$206,300** | **$206,300** | **$507,000** | **$507,000** | **$178,676** | **$178,676** |
| **CAPITAL - PARKS** | | | | | | | | | | | | |
| 01-6166-1004 | PP&E - Operations | 0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6020-1004 | Capital Improvements | 0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **LABOR & BENEFITS - BUILDING** | | | | | | | | | | | | |
| 01-5005-1005 | Salaries & Wages - Staff | $205,843 | $229,362 | $232,673 | $110,560 | $117,012 | $102,102 | $115,646 | $84,202 | $87,089 | $82,312 | $72,987 |
| 01-5800-1005 | OASDI - Employer | $12,762 | $14,007 | $14,426 | $6,980 | $7,255 | $6,205 | $7,170 | $4,488 | $5,400 | $4,110 | $4,525 |
| 01-5810-1005 | Medicare - Employer | $2,985 | $3,276 | $3,374 | $1,633 | $1,697 | $1,451 | $1,677 | $1,050 | $1,263 | $998 | $1,058 |
| 01-5820-1005 | Group Medical Insurance | $29,998 | $24,808 | $30,452 | $12,109 | $11,287 | $11,003 | $11,287 | $5,979 | $7,650 | $9,330 | $7,919 |
| 01-5830-1005 | Group Life Insurance | $132 | $122 | $144 | $65 | $62 | $57 | $62 | $33 | $45 | $36 | $37 |
| 01-5840-1005 | PERSI Employer 401 (a) | $24,578 | $27,386 | $27,781 | $12,920 | $13,536 | $11,431 | $13,378 | $8,193 | $10,074 | $7,524 | $8,443 |
| 01-5850-1005 | Worker's Compensation Insurance | $2,002 | $3,041 | $3,751 | $2,484 | $2,886 | $2,161 | $2,765 | $1,197 | $1,702 | $1,281 | $1,221 |
| 01-5860-1005 | Group Dental & Vision Insurance | $2,735 | $2,225 | $2,680 | $998 | $1,016 | $937 | $1,016 | $596 | $733 | $564 | $600 |
| 01-6280-1005 | Unemployment Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$281,035** | **$304,227** | **$315,281** | **$147,748** | **$154,751** | **$135,347** | **$153,001** | **$105,738** | **$113,956** | **$106,155** | **$96,791** |
| **GENERAL GOVERNMENT - BUILDING** | | | | | | | | | | | | |
| 01-6052-1005 | Contract Services | $268,540 | $277,656 | $251,839 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6300-1005 | Fuel Expenditures | $7,500 | $6,752 | $5,940 | $5,123 | $5,400 | $2,441 | $5,400 | $1,611 | $2,188 | $1,751 | $2,100 |
| 01-6305-1005 | Maintenance & Repair - Vehicles | $2,000 | $3,951 | $880 | $12 | $800 | $83 | $800 | $737 | $700 | $359 | $500 |
| 01-6255-1005 | Telephone | $2,000 | $1,505 | $1,463 | $1,560 | $1,028 | $1,014 | $1,028 | $761 | $865 | $493 | $627 |
| 01-6165-1005 | Office Supplies | $4,000 | $3,738 | $1,650 | $2,529 | $1,100 | $2,407 | $1,100 | $996 | $1,100 | $586 | $350 |
| 01-6265-1005 | Training & Schooling | $3,000 | $700 | $3,000 | $475 | $3,000 | $2,181 | $3,000 | $1,702 | $2,500 | $599 | $900 |
| 01-6175-1005 | Small Tools | $950 | $85 | $950 | $18 | $750 | $563 | $750 | $150 | $300 | $0 | $200 |
| 01-6188-1005 | Signage | $150 | $0 | $150 | $0 | $150 | $0 | $150 | $20 | $150 | $11 | $150 |
| 01-6130-1005 | Liability & Property Insurance | $6,044 | $5,649 | $5,649 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6125-1005 | Legal Publications | $0 | $0 | $100 | $0 | $100 | $0 | $100 | $0 | $0 | $0 | $0 |
| 01-6142-1005 | Maintenance & Repair - Equipment | $550 | $0 | $550 | $10 | $550 | $5 | $550 | $0 | $0 | $0 | $0 |
| 01-6150-1005 | Maintenance & Repair - System | $1,400 | $47 | $1,200 | $1,501 | $200 | $80 | $200 | $0 | $0 | $0 | $0 |
| 01-6155-1005 | Meetings/Committees | $60 | $0 | $60 | $0 | $60 | $0 | $60 | $0 | $0 | $0 | $0 |
| 01-6230-1005 | Safety Training & Equipment | $600 | $0 | $300 | $0 | $300 | $113 | $300 | $0 | $0 | $0 | $0 |
| 01-6270-1005 | Travel | $0 | $0 | $0 | $0 | $0 | $6 | $0 | $0 | $50 | $0 | $50 |
| 01-6075-1005 | Dues & Memberships | $3,750 | $3,095 | $3,570 | $190 | $1,075 | $190 | $1,075 | $357 | $600 | $582 | $500 |
| 01-6505-1005 | Bank Fees | $14,000 | $11,467 | $13,528 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$314,545** | **$314,645** | **$290,830** | **$11,418** | **$14,513** | **$9,084** | **$14,513** | **$6,334** | **$8,453** | **$4,381** | **$5,377** |
| **MISCELLANEOUS - BUILDING** | | | | | | | | | | | | |
| 01-6400-1005 | Transfers Out | $0 | $0 | $0 | $0 | $0 | $29,000 | $29,000 | $0 | $28,000 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$29,000** | **$29,000** | **$0** | **$28,000** | **$0** | **$0** |
| **LABOR & BENEFITS - ECONOMIC DEVELOPMENT** | | | | | | | | | | | | |
| 01-5005-4000 | Salaries & Wages - Staff | $79,855 | $75,562 | $75,294 | $72,731 | $74,241 | $40,599 | $61,233 | $0 | $0 | $0 | $0 |
| 01-5800-4000 | OASDI - Employer | $4,951 | $4,662 | $4,668 | $4,584 | $4,603 | $2,432 | $3,796 | $0 | $0 | $0 | $0 |
| 01-5810-4000 | Medicare - Employer | $1,158 | $1,091 | $1,092 | $1,072 | $1,076 | $569 | $888 | $0 | $0 | $0 | $0 |
| 01-5820-4000 | Group Medical Insurance | $7,177 | $5,703 | $6,730 | $6,608 | $6,134 | $3,155 | $6,134 | $0 | $0 | $0 | $0 |

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ACCOUNT #** | **ACCOUNT NAME** | **BUDGET** | **ACTUAL*** | **BUDGET** | **ACTUAL** | **BUDGET** | **ACTUAL** | **BUDGET** | **ACTUAL** | **BUDGET** | **ACTUAL** | **BUDGET** |
| 01-5830-4000 | Group Life Insurance | $35 | $31 | $35 | $35 | $34 | $17 | $34 | $0 | $0 | $0 | $0 |
| 01-5840-4000 | PERSI Employer 401 (a) | $9,535 | $9,022 | $8,990 | $8,502 | $8,588 | $4,441 | $7,083 | $0 | $0 | $0 | $0 |
| 01-5850-4000 | Worker's Compensation Insurance | $200 | $180 | $189 | $235 | $198 | $101 | $159 | $0 | $0 | $0 | $0 |
| 01-5860-4000 | Group Dental & Vision Insurance | $581 | $505 | $569 | $576 | $552 | $274 | $552 | $0 | $0 | $0 | $0 |
| | | **$103,492** | **$96,755** | **$97,567** | **$94,344** | **$95,426** | **$51,588** | **$79,879** | **$0** | **$0** | **$0** | **$0** |
| **GENERAL GOVERNMENT - ECONOMIC DEVELOPMENT** | | | | | | | | | | | | |
| 01-6165-4000 | Office Supplies | $500 | $329 | $500 | $225 | $1,000 | $415 | $1,750 | $0 | $0 | $0 | $0 |
| 01-6160-4000 | Miscellaneous Expense | $550 | $0 | $800 | $472 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 01-6265-4000 | Training & Schooling | $3,100 | $2,227 | $2,600 | $2,290 | $2,375 | $2,535 | $1,500 | $0 | $0 | $0 | $0 |
| 01-6175-4000 | Small Tools | $2,000 | $2,000 | $2,050 | $1,350 | $2,000 | $2,525 | $2,000 | $0 | $0 | $0 | $0 |
| 01-6188-4000 | Signage | $0 | $0 | $0 | $0 | $300 | $0 | $300 | $0 | $0 | $0 | $0 |
| 01-6202-4000 | Professional Services | $15,000 | $500 | $5,000 | $1,850 | $6,000 | $90 | $0 | $0 | $0 | $0 | $0 |
| 01-6255-4000 | Telephone | $650 | $556 | $487 | $588 | $0 | $341 | $0 | $0 | $0 | $0 | $0 |
| 01-6155-4000 | Meetings/Committees | $9,353 | $6,681 | $8,290 | $7,592 | $8,290 | $245 | $1,100 | $0 | $0 | $0 | $0 |
| 01-6270-4000 | Travel | $4,700 | $1,064 | $4,700 | $3,241 | $4,525 | $0 | $1,100 | $0 | $0 | $0 | $0 |
| 01-6052-4000 | Contract Services | $0 | $0 | $0 | $2,000 | $0 | $37 | $0 | $0 | $0 | $0 | $0 |
| 01-6075-4000 | Dues & Memberships | $6,790 | $7,800 | $8,603 | $7,224 | $6,623 | $750 | $650 | $0 | $0 | $0 | $0 |
| 01-6125-4000 | Legal Publications | $0 | $300 | $2,000 | $0 | $5,000 | $0 | $5,000 | $0 | $0 | $0 | $0 |
| | | **$42,643** | **$21,457** | **$35,030** | **$26,832** | **$36,113** | **$6,937** | **$13,400** | **$0** | **$0** | **$0** | **$0** |
| **GRAND TOTAL EXPENDITURES** | | **$10,822,036** | **$7,296,805** | **$9,547,100** | **$5,794,173** | **$7,265,072** | **$5,172,413** | **$6,105,872** | **$4,623,580** | **$5,712,503** | **$3,780,000** | **$4,804,288** |
| **GRAND TOTAL WITHOUT CONTINGENCY** | | **$7,253,554** | *$7,198,272* | *$7,351,117* | *$5,628,207* | *$5,586,829* | *$4,836,616* | *$4,880,023* | *$4,320,711* | *$4,485,266* | *$3,592,000* | *$3,634,526* |

*Forecast

**REVENUE & EXPENDITURE STATEMENT - CITY OF KUNA - FYE 2021**
**GRANT FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **GRANT REVENUE** | | | | | | | | | | | | |
| 03-4200 | Grant Revenue | $233,769 | $2,066,427 | $2,270,196 | $24,524 | $1,100,000 | $449,324 | $1,100,000 | $378,635 | $945,000 | $103,635 | $161,550 |
| 03-4950 | Carryover | $0 | $5,261 | $13,233 | ($2,528) | $114,216 | $105,061 | $209,725 | $80,217 | $209,725 | $0 | $0 |
| | | **$233,769** | **$2,071,688** | **$2,283,429** | **$21,996** | **$1,214,216** | **$554,385** | **$1,309,725** | **$458,852** | **$1,154,725** | **$103,635** | **$161,550** |
| **GRANT EXPENDITURES** | | | | | | | | | | | | |
| 03-6354 | Grant Expenditures | $233,769 | $2,066,427 | $2,283,429 | $19,098 | $1,214,216 | $554,385 | $161,550 | $298,418 | $0 | $99,711 | $161,550 |
| **GRAND TOTAL NET** | | **$233,769** | **$2,066,427** | **$2,283,429** | **$19,098** | **$1,214,216** | **$554,385** | **$161,550** | **$298,418** | **$0** | **$99,711** | **$161,550** |

**REVENUE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**LATE COMERS FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **OPERATING REVENUE** | | | | | | | | | | | | |
| 05-4504 | Water Main Capacity Fee | $932,589 | $1,171,000 | $1,036,969 | $979,746 | $350,000 | $760,279 | $350,000 | $595,942 | $205,200 | $369,911 | $205,200 |
| 05-4604 | Sewer Main Capacity Fee | $718,162 | $978,000 | $721,230 | $682,051 | $250,000 | $553,992 | $250,000 | $416,805 | $145,075 | $256,741 | $145,000 |
| 05-4704 | Irrigaton Main Capacity Fee | $410,226 | $504,000 | $492,525 | $468,779 | $205,000 | $355,539 | $205,000 | $265,565 | $108,500 | $216,428 | $108,500 |
| 05-4173 | Interest Revenue | $25,000 | $52,541 | $15,000 | $46,101 | $400 | $12,272 | $400 | $2,165 | $148 | $1,095 | $148 |
| 05-4950 | Carryover | $3,492,098 | $2,246,583 | $2,535,532 | $914,526 | $974,551 | $0 | $0 | $0 | $0 | $116,603 | $0 |
| | | **$5,578,076** | **$4,952,123** | **$4,801,256** | **$3,091,205** | **$1,779,951** | **$1,682,082** | **$805,400** | **$1,280,477** | **$458,923** | **$960,778** | **$458,848** |
| **GRAND TOTAL REVENUE** | | **$5,578,076** | **$4,952,123** | **$4,801,256** | **$3,091,205** | **$1,779,951** | **$1,682,082** | **$805,400** | **$1,280,477** | **$458,923** | **$960,778** | **$458,848** |
| ***GRAND TOTAL WITHOUT CARRYOVER*** | | ***$2,085,978*** | *$2,705,541* | *$2,265,724* | *$2,176,679* | *$805,400* | *$1,682,082* | *$805,400* | *$1,280,477* | *$458,923* | *$844,175* | *$458,848* |

*Forecast

**EXPENDITURE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**LATE COMERS FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **OPERATING EXPENDITURES** | | | | | | | | | | | | |
| 05-6305 | Water Main Capacity Reimburse | $944,146 | $197,114 | $400,000 | $175,561 | $350,000 | $271,591 | $350,000 | $572,001 | $205,275 | $357,008 | $76,861 |
| 05-6306 | Sewer Main Capacity Reimburse | $1,848,502 | $730,342 | $487,481 | $259,163 | $250,000 | $254,184 | $250,000 | $334,787 | $145,075 | $254,366 | $145,074 |
| 05-6307 | PI Main Capacity Reimburse | $407,172 | $480,395 | $477,318 | $407,971 | $205,400 | $303,590 | $205,400 | $267,559 | $108,500 | $206,416 | $32,447 |
| 05-6400 | Transfers Out | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $204,466 |
| | | **$3,199,821** | **$1,407,851** | **$1,364,798** | **$842,696** | **$805,400** | **$829,365** | **$805,400** | **$1,174,347** | **$458,850** | **$817,790** | **$458,848** |
| **OTHER EXPENDITURES** | | | | | | | | | | | | |
| 05-6045 | Contingency | $2,378,255 | $0 | $3,436,458 | $0 | $73 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$2,378,255** | **$0** | **$3,436,458** | **$0** | **$73** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **GRAND TOTAL EXPENDITURES** | | **$5,578,076** | **$1,407,851** | **$4,801,256** | **$842,696** | **$805,473** | **$829,365** | **$805,400** | **$1,174,347** | **$458,850** | **$817,790** | **$458,848** |
| **GRAND TOTAL WITHOUT CONTINGENCY** | | ***$3,199,821*** | *$1,407,851* | *$1,364,798* | *$842,696* | *$805,400* | *$829,365* | *$805,400* | *$1,174,347* | *$458,850* | *$817,790* | *$458,848* |

*Forecast

**REVENUE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**WATER FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **OPERATING REVENUE** | | | | | | | | | | | | |
| 20-4500 | Metered Water Sales | $2,391,048 | $2,332,730 | $2,212,652 | $2,086,026 | $1,849,903 | $1,881,258 | $1,849,903 | $1,738,230 | $1,653,170 | $1,622,727 | $1,546,333 |
| 20-4507 | Water Token Sales - Bulk Water | $39,953 | $39,953 | $45,000 | $47,374 | $21,024 | $38,658 | $21,024 | $29,765 | $10,000 | $23,708 | $3,000 |
| 20-4510 | Service Reconnect Fees | $13,200 | $12,163 | $14,000 | $17,368 | $22,500 | $12,684 | $22,500 | $16,829 | $18,000 | $18,431 | $16,000 |
| 20-4358 | Development Support Services | $1,700 | $1,672 | $2,000 | $1,864 | $4,000 | $2,696 | $4,000 | $2,927 | $3,000 | $4,850 | $1,000 |
| 20-4775 | Late Pay Fees | $27,000 | $27,931 | $32,000 | $37,793 | $34,000 | $37,785 | $34,000 | $35,971 | $0 | $0 | $0 |
| 20-4185 | Miscellaneous Income | $70,000 | $69,487 | $75,000 | $97,805 | $99,907 | $161,971 | $99,907 | $476,767 | $130,055 | $200,243 | $128,413 |
| 20-4550 | Water Line Inspections | $65,334 | $65,334 | $45,000 | $64,646 | $20,000 | $41,546 | $20,000 | $15,232 | $15,000 | $29,619 | $4,000 |
| | | **$2,608,234** | **$2,549,269** | **$2,425,652** | **$2,352,876** | **$2,051,334** | **$2,176,600** | **$2,051,334** | **$2,315,721** | **$1,829,225** | **$1,899,578** | **$1,698,746** |
| **CAPITAL REVENUE** | | | | | | | | | | | | |
| 20-4503 | New Meter Revenue | $240,487 | $240,487 | $263,240 | $254,854 | $127,346 | $192,532 | $56,000 | $141,496 | $56,000 | $100,495 | $56,000 |
| 20-4505 | New Service Connection | $804,176 | $804,176 | $881,020 | $894,300 | $440,024 | $697,293 | $189,875 | $488,915 | $189,875 | $344,350 | $189,875 |
| 20-4173 | Interest Revenue | $75,000 | $143,809 | $100,000 | $168,338 | $4,719 | $50,833 | $2,000 | $4,672 | $2,000 | $3,658 | $1,700 |
| 20-4900 | Transfers In | $0 | $0 | $0 | $0 | $14,000 | $48 | $0 | $0 | $0 | $0 | $165,413 |
| 20-4950 | Carryover | $8,376,718 | $8,473,779 | $7,650,137 | $6,328,662 | $5,407,215 | $0 | $2,754,793 | $0 | $886,104 | $0 | $408,994 |
| | | **$9,496,382** | **$9,662,252** | **$8,894,397** | **$7,646,155** | **$5,993,304** | **$940,706** | **$3,002,668** | **$635,083** | **$1,133,979** | **$448,503** | **$821,982** |
| **GRAND TOTAL REVENUE** | | $12,104,616 | **$12,211,520** | **$11,320,048** | **$9,999,031** | **$8,044,638** | **$3,117,306** | **$5,054,002** | **$2,950,804** | **$2,963,204** | **$2,348,081** | **$2,520,728** |
| ***GRAND TOTAL WITHOUT CARRYOVER*** | | ***$3,727,898*** | *$3,737,741* | *$3,669,912* | *$3,670,368* | *$2,637,423* | *$3,117,306* | *$2,299,209* | *$2,950,804* | *$2,077,100* | *$2,348,081* | *$2,111,734* |

*Forecast

**EXPENDITURE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**WATER FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **LABOR & BENEFITS** | | | | | | | | | | | | |
| 20-5005 | Salaries & Wages - Staff | $642,870 | $604,638 | $605,013 | $544,166 | $583,745 | $483,039 | $520,382 | $423,301 | $462,634 | $410,494 | $401,132 |
| 20-5795 | Salaries - Overtime | $16,072 | $11,114 | $15,125 | $13,057 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 20-5009 | Salaries & Wages - Seasonal | $0 | $0 | $0 | $0 | $0 | $305 | $9,063 | $0 | $0 | $201 | $0 |
| 20-5000 | Salaries & Wages - Elected | $4,393 | $4,473 | $4,311 | $4,385 | $4,130 | $3,961 | $4,107 | $3,920 | $4,060 | $3,587 | $3,767 |
| 20-5800 | OASDI - Employer | $41,127 | $37,574 | $38,716 | $34,194 | $36,448 | $28,733 | $33,080 | $25,704 | $28,935 | $26,202 | $25,104 |
| 20-5810 | Medicare - Employer | $9,618 | $8,788 | $9,055 | $7,997 | $8,524 | $6,095 | $7,737 | $6,012 | $6,767 | $6,073 | $5,245 |
| 20-5820 | Group Medical Insurance | $88,399 | $79,727 | $86,073 | $75,045 | $82,363 | $69,699 | $72,401 | $59,114 | $66,012 | $67,849 | $67,018 |
| 20-5830 | Group Life Insurance | $405 | $375 | $406 | $378 | $393 | $320 | $338 | $289 | $324 | $283 | $308 |
| 20-5840 | PERSI Employer 401 (a) | $79,203 | $73,494 | $74,560 | $64,739 | $68,024 | $51,198 | $60,692 | $45,555 | $54,006 | $47,986 | $46,839 |
| 20-5850 | Worker's Compensation | $20,171 | $13,750 | $20,563 | $15,108 | $22,140 | $11,780 | $18,987 | $11,294 | $11,637 | $16,340 | $10,408 |
| 20-5860 | Group Dental/Vision Insurance | $9,500 | $8,756 | $7,724 | $7,204 | $7,805 | $6,470 | $6,908 | $6,200 | $6,930 | $5,670 | $5,117 |
| 20-6280 | Unemployment Expenses | $0 | $0 | $0 | $0 | $0 | $28 | $0 | $0 | $0 | $0 | $713 |
| | | **$911,758** | **$842,691** | **$861,545** | **$766,272** | **$813,573** | **$661,627** | **$733,695** | **$581,388** | **$641,305** | **$584,686** | **$565,651** |
| **MAINTENANCE & GENERAL OPERATIONS** | | | | | | | | | | | | |
| 20-6025 | Janitorial | $7,000 | $3,913 | $3,700 | $3,473 | $3,000 | $2,410 | $1,449 | $1,852 | $1,449 | $1,332 | $1,533 |
| 20-6050 | Contract Labor | $1,500 | $0 | $5,000 | $0 | $2,500 | $0 | $2,500 | $0 | $2,500 | $89 | $2,500 |
| 20-6052 | Contract Services | $20,000 | $16,899 | $19,828 | $10,418 | $19,828 | $15,207 | $13,522 | $18,864 | $13,522 | $8,707 | $15,297 |
| 20-6060 | DEQ Assessment Fees | $30,671 | $21,498 | $30,671 | $21,498 | $20,447 | $19,650 | $18,564 | $16,812 | $18,564 | $16,812 | $17,337 |
| 20-6065 | Dig Line Expenditures | $29,000 | $2,893 | $2,700 | $3,081 | $2,000 | $2,265 | $2,000 | $1,639 | $2,000 | $1,064 | $2,000 |
| 20-6075 | Dues & Memberships | $2,800 | $788 | $2,793 | $819 | $2,793 | $1,824 | $2,100 | $2,034 | $2,100 | $1,762 | $2,100 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20-6110 | Interest Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $2,500 | $0 | $2,500 | $0 | $2,500 |
| 20-6125 | Legal Publications | $1,000 | $100 | $1,000 | $72 | $1,000 | $533 | $1,000 | $349 | $1,000 | $168 | $1,000 |
| 20-6130 | Liability & Property Insurance | $20,149 | $18,831 | $18,831 | $17,599 | $17,700 | $16,447 | $15,664 | $15,664 | $15,664 | $15,011 | $15,357 |
| 20-6131 | Insurance Claims Paid | $500 | $0 | $0 | $0 | $0 | $0 | $100 | $0 | $100 | $0 | $100 |
| 20-6140 | Maint. & Repair - Bldng. & Grounds | $14,950 | $7,937 | $14,950 | $9,873 | $14,950 | $10,857 | $13,000 | $12,979 | $10,000 | $6,834 | $10,000 |
| 20-6141 | IT Small Equipment | $9,702 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 20-6142 | Maint. & Repair - Equipment | $12,500 | $10,186 | $11,500 | $11,149 | $11,000 | $9,663 | $10,000 | $8,602 | $15,502 | $12,710 | $15,502 |
| 20-6150 | Maint. & Repair - System | $133,000 | $79,999 | $133,000 | $51,323 | $133,000 | $32,777 | $75,000 | $49,475 | $133,000 | $81,680 | $150,000 |
| 20-6151 | Maint. & Repair - Process Chemicals | $30,000 | $17,548 | $30,000 | $14,620 | $15,000 | $20,927 | $10,000 | $9,785 | $8,000 | $0 | $0 |
| 20-6152 | Maint. & Repair - Lab Costs | $10,920 | $7,130 | $10,920 | $2,110 | $9,100 | $10,411 | $9,100 | $8,541 | $9,000 | $0 | $0 |
| 20-6155 | Meetings/Committees | $1,050 | $514 | $1,050 | $40 | $1,050 | $363 | $1,050 | $388 | $930 | $300 | $930 |
| 20-6160 | Miscellaneous Expenditures | $20,000 | $4,006 | $20,000 | $2,913 | $4,313 | $7,496 | $4,313 | $50 | $4,313 | $0 | $4,313 |
| 20-6165 | Office Supplies | $8,000 | $7,286 | $4,500 | $3,980 | $2,625 | $3,019 | $2,100 | $1,737 | $1,800 | $1,048 | $1,750 |
| 20-6175 | Small Tools | $15,000 | $14,131 | $15,000 | $5,559 | $15,000 | $8,268 | $15,000 | $10,057 | $22,248 | $8,900 | $25,425 |
| 20-6190 | Postage & Billing | $27,500 | $25,623 | $21,700 | $20,933 | $21,700 | $19,701 | $21,700 | $16,955 | $23,814 | $20,213 | $21,137 |
| 20-6202 | Professional Services | $32,000 | $3,937 | $32,000 | $28,310 | $14,000 | $17,870 | $8,557 | $3,712 | $6,451 | $3,142 | $8,263 |
| 20-6211 | Rent - Buildings & Land | $1,512 | $1,512 | $1,512 | $1,512 | $1,512 | $1,386 | $1,512 | $2,206 | $1,512 | $15,452 | $15,925 |
| 20-6212 | Rent - Equipment | $3,000 | $568 | $3,000 | $2,127 | $1,500 | $179 | $1,500 | $0 | $1,500 | $0 | $1,500 |
| 20-6230 | Safety Training & Equipment | $2,750 | $1,092 | $2,750 | $235 | $2,750 | $408 | $2,750 | $987 | $2,750 | $521 | $2,750 |
| 20-6255 | Telephone | $17,500 | $11,693 | $13,406 | $11,096 | $13,406 | $11,220 | $13,406 | $12,548 | $11,881 | $11,692 | $13,237 |
| 20-6265 | Training & Schooling | $6,500 | $2,377 | $6,500 | $3,139 | $6,500 | $1,516 | $6,500 | $2,131 | $6,500 | $880 | $6,500 |
| 20-6270 | Travel | $1,200 | $354 | $1,200 | $0 | $1,200 | $78 | $1,200 | $4 | $1,200 | $10 | $1,200 |
| 20-6285 | Uniforms | $4,800 | $1,408 | $4,800 | $1,911 | $4,000 | $1,141 | $4,000 | $2,226 | $3,250 | $1,604 | $3,200 |
| 20-6290 | Utilities | $150,000 | $97,328 | $150,000 | $107,479 | $150,000 | $122,514 | $150,000 | $141,144 | $150,000 | $116,740 | $148,085 |
| 20-6300 | Fuel | $14,500 | $10,748 | $14,500 | $10,093 | $14,500 | $18,393 | $14,500 | $12,717 | $13,000 | $8,725 | $13,000 |
| 20-6305 | Maint. & Repair - Vehicles | $6,500 | $4,770 | $6,500 | $3,268 | $6,500 | $3,140 | $6,500 | $4,243 | $6,500 | $1,165 | $6,500 |
| 20-6505 | Bank Fees | $27,500 | $24,364 | $25,000 | $22,186 | $16,050 | $18,566 | $16,050 | $15,863 | $15,971 | $11,907 | $12,280 |
| | | **$663,003** | **$399,433** | **$608,310** | **$370,814** | **$528,924** | **$378,229** | **$447,137** | **$373,565** | **$508,521** | **$348,469** | **$521,221** |
| **DEBT COVERAGE** | | | | | | | | | | | | |
| 20-6015 | Bond & Loan Payments | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **CAPITAL EXPENDITURES** | | | | | | | | | | | | |
| 20-6020 | Capital Improvements | $2,084,200 | $280,505 | $1,654,480 | $366,326 | $2,500,000 | $39,441 | $1,813,420 | $534,342 | $1,435,000 | $717,477 | $1,133,875 |
| 20-6166 | PP&E | $197,160 | $81,370 | $256,350 | $14,776 | $359,604 | $237,266 | $294,604 | $78,427 | $244,332 | $73,151 | $88,664 |
| | | **$2,281,360** | **$361,876** | **$1,910,830** | **$381,102** | **$2,859,604** | **$276,706** | **$2,108,024** | **$612,769** | **$1,679,332** | **$790,628** | **$1,222,539** |
| **OTHER EXPENDITURES** | | | | | | | | | | | | |
| 20-6045 | Contingency | $8,248,195 | $46,152 | $7,939,363 | $42,397 | $3,838,542 | $39,235 | $2,061,085 | $4,739 | $124,380 | $0 | $202,722 |
| 20-6095 | Bad Debts Expense | $300 | $74 | $0 | $105 | $4,000 | $294 | $4,000 | $0 | $4,000 | $0 | $4,000 |
| 20-6400 | Transfers Out | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 20-6500 | Cash Over/Short | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,000 | -$9 | $2,000 |
| | | **$8,248,495** | **$46,226** | **$7,939,363** | **$42,502** | **$3,842,542** | **$39,529** | **$2,065,085** | **$4,739** | **$130,380** | **-$9** | **$208,722** |
| **GRAND TOTAL EXPENDITURES** | | $12,104,616 | **$1,650,225** | **$11,320,048** | **$1,560,691** | **$8,044,644** | **$1,356,091** | **$5,353,941** | **$1,572,461** | **$2,959,538** | **$1,723,774** | **$2,518,133** |
| **GRAND TOTAL WITHOUT CONTINGENCY** | | ***$3,856,421*** | *$1,604,073* | *$3,380,685* | *$1,518,294* | *$4,206,101* | *$1,316,856* | *$3,292,856* | *$1,567,722* | *$2,835,158* | *$1,723,774* | *$2,315,411* |

**REVENUE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**SEWER FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **OPERATING REVENUE** | | | | | | | | | | | | |
| 21-4600 | Sewer User Fees | $3,888,000 | $3,294,173 | $2,741,199 | $2,611,732 | $2,227,403 | $2,366,842 | $2,227,403 | $2,117,037 | $2,041,173 | $1,965,466 | $1,892,948 |
| 21-4640 | Sewer Farm Revenue | $102,714 | $102,714 | $115,182 | $111,810 | $139,570 | $124,192 | $139,570 | $131,226 | $139,750 | $136,810 | $139,750 |
| 21-4185 | Miscellaneous Income | $50,000 | $68,307 | $50,000 | $92,482 | $138,450 | $78,198 | $138,450 | $58,948 | $900 | $80,139 | $76,550 |
| 21-4510 | Service Reconnect Fees | $17,000 | $17,272 | $17,000 | $21,748 | $13,000 | $26,111 | $13,000 | $16,829 | $0 | $0 | $0 |
| 21-4550 | Sewer Line Inspections | $35,000 | $49,570 | $30,000 | $50,354 | $9,000 | $33,422 | $9,000 | $18,509 | $8,000 | $30,154 | $4,000 |
| 21-4775 | Late Payment Fee | $35,000 | $34,454 | $35,000 | $47,276 | $23,000 | $42,580 | $23,000 | $35,970 | $0 | $0 | $0 |
| 21-4358 | Development Support Services | $1,500 | $1,610 | $1,500 | $1,780 | $4,000 | $2,696 | $4,000 | $3,127 | $2,000 | $4,850 | $2,000 |
| | | **$4,129,214** | **$3,568,100** | **$2,989,881** | **$2,937,182** | **$2,554,423** | **$2,674,042** | **$2,554,423** | **$2,381,647** | **$2,191,823** | **$2,217,420** | **$2,115,248** |
| **CAPITAL REVENUE** | | | | | | | | | | | | |
| 21-4505 | New Service Connection | $0 | $0 | $0 | $276 | $0 | $4,555 | $0 | $3,277 | $0 | $1,092 | $0 |
| 21-4606 | LID Reduced Sewer Connection | $825,000 | $826,469 | $843,217 | $863,140 | $474,978 | $677,315 | $474,978 | $485,814 | $112,608 | $248,988 | $84,216 |
| 21-4173 | Interest Revenue | $50,000 | $93,396 | $65,000 | $99,648 | $5,900 | $42,617 | $5,900 | $6,886 | $2,300 | $4,535 | $1,750 |
| 21-4900 | Transfers In | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 21-4950 | Carryover | $4,967,275 | $4,796,646 | $3,863,199 | $5,310,831 | $4,695,560 | $0 | $2,984,664 | $0 | $1,229,447 | $2,937,035 | $1,234,602 |
| | | **$5,842,275** | **$5,716,511** | **$4,771,416** | **$6,273,894** | **$5,176,438** | **$724,487** | **$3,465,542** | **$495,977** | **$1,344,355** | **$3,191,650** | **$1,320,568** |
| **GRAND TOTAL REVENUE** | | **$9,971,489** | **$9,284,611** | **$7,761,297** | **$9,211,076** | **$7,730,861** | **$3,398,529** | **$6,019,965** | **$2,877,623** | **$3,536,178** | **$5,409,070** | **$3,435,816** |
| ***GRAND TOTAL WITHOUT CARRYOVER*** | | ***$5,004,214*** | *$4,487,965* | *$3,898,098* | *$3,900,245* | *$3,035,301* | *$3,398,529* | *$3,035,301* | *$2,877,623* | *$2,306,731* | *$2,472,035* | *$2,201,214* |

*Forecast

**EXPENDITURE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**SEWER FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **LABOR & BENEFITS** | | | | | | | | | | | | |
| 21-5005 | Salaries & Wages - Staff | $717,897 | $693,070 | $689,130 | $645,042 | $685,953 | $562,304 | $601,422 | $497,062 | $542,051 | $484,887 | $488,434 |
| 21-5795 | Salaries - Overtime | $17,947 | $8,065 | $17,228 | $6,952 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 21-5009 | Salaries & Wages - Seasonal | $0 | $0 | $0 | $0 | $0 | $223 | $11,329 | $0 | $0 | $201 | $0 |
| 21-5000 | Salaries & Wages - Elected | $4,393 | $4,254 | $4,311 | $4,478 | $4,130 | $3,961 | $4,107 | $3,920 | $4,060 | $3,587 | $0 |
| 21-5800 | OASDI - Employer | $45,895 | $43,040 | $44,061 | $39,697 | $42,785 | $34,246 | $38,245 | $30,512 | $33,859 | $31,279 | $30,283 |
| 21-5810 | Medicare - Employer | $10,733 | $10,067 | $10,305 | $9,284 | $10,006 | $7,283 | $8,944 | $7,136 | $7,919 | $7,326 | $6,364 |
| 21-5820 | Group Medical Insurance | $106,587 | $91,191 | $100,320 | $87,153 | $74,151 | $71,780 | $74,004 | $60,218 | $67,561 | $71,362 | $77,314 |
| 21-5830 | Group Life Insurance | $461 | $343 | $461 | $443 | $387 | $371 | $386 | $329 | $372 | $323 | $356 |
| 21-5840 | PERSI Employer 401 (a) | $88,386 | $86,813 | $84,855 | $75,133 | $79,847 | $59,937 | $70,066 | $53,556 | $63,193 | $56,764 | $56,502 |
| 21-5850 | Worker's Compensation | $13,912 | $10,555 | $15,051 | $11,597 | $18,366 | $8,684 | $14,795 | $7,919 | $14,132 | $13,394 | $12,651 |
| 21-5860 | Group Dental/Vision Insurance | $8,419 | $8,649 | $8,657 | $7,220 | $6,638 | $5,844 | $6,625 | $5,787 | $7,157 | $6,391 | $5,897 |
| 21-6280 | Unemployment Expenses | $0 | $0 | $0 | $0 | $0 | $28 | $0 | $0 | $0 | $0 | $713 |
| | | **$1,014,629** | **$956,046** | **$974,379** | **$887,000** | **$922,263** | **$754,659** | **$829,923** | **$666,439** | **$740,304** | **$675,513** | **$678,514** |
| **MAINTENANCE & GENERAL OPERATIONS** | | | | | | | | | | | | |
| 21-6025 | Janitorial | $7,000 | $3,913 | $3,600 | $3,473 | $3,000 | $2,476 | $1,700 | $2,308 | $1,449 | $1,332 | $1,533 |
| 21-6050 | Contract Labor | $2,000 | $0 | $2,500 | $0 | $2,500 | $0 | $0 | $0 | $2,500 | $0 | $2,500 |
| 21-6052 | Contract Services | $17,000 | $15,712 | $15,500 | $10,413 | $15,500 | $12,527 | $15,500 | $11,344 | $15,079 | $8,787 | $15,573 |
| 21-6065 | Dig Line Expenditures | $3,500 | $2,893 | $2,700 | $3,081 | $2,000 | $2,265 | $2,000 | $1,421 | $2,000 | $1,064 | $2,000 |
| 21-6075 | Dues & Memberships | $3,500 | $797 | $3,632 | $1,178 | $3,632 | $1,428 | $2,731 | $2,315 | $2,731 | $2,153 | $2,575 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21-6090 | Farm Expenditures | $102,714 | $118,588 | $116,000 | $73,606 | $116,000 | $97,057 | $116,000 | $92,699 | $112,000 | $116,341 | $110,000 |
| 21-6110 | Interest Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 21-6125 | Legal Publications | $1,300 | $474 | $1,300 | $267 | $1,300 | $683 | $1,300 | $647 | $1,300 | $33 | $1,300 |
| 21-6130 | Liability & Property Insurance | $41,305 | $38,603 | $38,603 | $36,077 | $36,077 | $33,717 | $33,717 | $32,111 | $32,111 | $30,614 | $31,481 |
| 21-6131 | Insurance Claims Paid | $500 | $230 | $0 | $1,503 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 21-6140 | Maint. & Repair - Bldng. & Grounds | $25,000 | $20,908 | $25,000 | $17,284 | $23,900 | $27,509 | $18,500 | $14,902 | $23,900 | $6,768 | $23,900 |
| 21-6141 | IT Small Equipment | $9,702 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 21-6142 | Maint. & Repair - Equipment | $60,000 | $54,748 | $51,000 | $28,213 | $51,000 | $42,845 | $51,000 | $36,686 | $62,000 | $39,249 | $62,000 |
| 21-6150 | Maint. & Repair - System | $155,210 | $96,514 | $155,210 | $132,747 | $141,100 | $88,155 | $111,100 | $74,314 | $54,600 | $257,784 | $215,000 |
| 21-6151 | Maint. & Repair - Process Chemicals | $119,427 | $101,615 | $119,427 | $113,034 | $108,570 | $119,112 | $103,400 | $85,436 | $123,400 | $0 | $0 |
| 21-6152 | Maint. & Repair - Lab Costs | $28,000 | $24,172 | $25,933 | $24,211 | $23,575 | $30,247 | $20,500 | $24,660 | $19,000 | $0 | $0 |
| 21-6153 | Maint. & Repair - Sludge Disposal | $37,500 | $35,120 | $36,383 | $36,030 | $34,650 | $34,110 | $33,000 | $34,300 | $34,000 | $0 | $0 |
| 21-6155 | Meetings/Committees | $1,450 | $514 | $1,450 | $40 | $1,450 | $612 | $1,450 | $245 | $1,450 | $323 | $1,450 |
| 21-6160 | Miscellaneous Expenditures | $35,000 | $17,740 | $30,000 | $45,147 | $242,473 | $4,938 | $242,473 | $1,708 | $4,813 | $236,973 | $3,813 |
| 21-6165 | Office Supplies | $8,500 | $7,284 | $5,500 | $5,165 | $4,000 | $2,909 | $3,700 | $2,053 | $3,700 | $1,464 | $3,700 |
| 21-6175 | Small Tools | $16,500 | $7,444 | $16,500 | $10,074 | $15,000 | $4,411 | $15,000 | $11,556 | $0 | $6,741 | $24,783 |
| 21-6190 | Postage & Billing | $27,500 | $25,935 | $21,000 | $20,933 | $17,955 | $19,685 | $17,955 | $19,532 | $23,814 | $19,255 | $23,612 |
| 21-6202 | Professional Services | $25,000 | $10,538 | $23,557 | $19,555 | $23,557 | $15,537 | $23,557 | $23,671 | $2,715 | $11,372 | $8,263 |
| 21-6211 | Rent - Buildings & Land | $2,400 | $1,458 | $2,400 | $1,458 | $2,400 | $1,337 | $2,400 | $2,139 | $1,512 | $15,739 | $15,925 |
| 21-6212 | Rent - Equipment | $3,000 | $490 | $3,000 | $2,254 | $2,000 | $1,505 | $2,000 | $1,185 | $2,000 | $1,177 | $1,750 |
| 21-6230 | Safety Training & Equipment | $3,500 | $3,276 | $2,640 | $3,351 | $2,400 | $1,445 | $2,400 | $2,438 | $2,400 | $1,435 | $2,400 |
| 21-6255 | Telephone | $20,000 | $13,071 | $14,500 | $12,374 | $14,500 | $11,838 | $14,500 | $14,048 | $11,917 | $12,123 | $13,343 |
| 21-6265 | Training & Schooling | $2,500 | $1,903 | $2,500 | $2,006 | $2,500 | $720 | $2,500 | $1,232 | $2,500 | $584 | $5,000 |
| 21-6270 | Travel | $750 | $708 | $750 | $0 | $750 | $78 | $750 | $4 | $2,500 | $10 | $2,500 |
| 21-6285 | Uniforms | $4,800 | $806 | $4,800 | $2,719 | $4,000 | $914 | $4,000 | $2,130 | $3,100 | $2,831 | $3,000 |
| 21-6290 | Utilities | $280,000 | $241,185 | $280,000 | $257,774 | $280,000 | $247,736 | $280,000 | $245,771 | $275,000 | $247,417 | $271,085 |
| 21-6300 | Fuel | $19,500 | $16,964 | $15,000 | $16,508 | $15,000 | $13,468 | $12,500 | $11,978 | $25,000 | $9,266 | $25,000 |
| 21-6305 | Maint. & Repair - Vehicles | $15,000 | $5,573 | $16,016 | $13,452 | $12,320 | $3,755 | $11,200 | $11,095 | $11,000 | $3,808 | $11,000 |
| 21-6505 | Bank Fees | $27,500 | $24,364 | $25,000 | $22,186 | $16,900 | $18,566 | $16,900 | $16,017 | $15,971 | $16,008 | $12,280 |
| | | **$1,106,558** | **$893,540** | **$1,061,400** | **$916,114** | **$1,220,009** | **$841,584** | **$1,163,733** | **$779,945** | **$875,462** | **$1,050,652** | **$896,766** |
| **DEBT COVERAGE** | | | | | | | | | | | | |
| 21-6015 | Bond & Loan Payments | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **CAPITAL EXPENDITURES** | | | | | | | | | | | | |
| 21-6020 | Capital Improvements | $1,882,200 | $47,752 | $691,480 | $1,399,213 | $1,861,482 | $948,025 | $2,107,420 | $698,808 | $1,534,000 | $517,895 | $1,551,000 |
| 21-6166 | PP&E | $259,260 | $525,046 | $598,350 | $160,379 | $309,350 | $10,586 | $309,350 | $176,067 | $210,259 | $53,769 | $98,793 |
| | | **$2,141,460** | **$572,798** | **$1,289,830** | **$1,559,592** | **$2,170,832** | **$958,610** | **$2,416,770** | **$874,875** | **$1,744,259** | **$571,664** | **$1,649,793** |
| **OTHER EXPENDITURES** | | | | | | | | | | | | |
| 21-6045 | Contingency | $5,708,842 | $36,929 | $4,435,688 | $470,481 | $3,411,206 | $21,085 | $1,624,342 | $4,768 | $168,153 | $0 | $198,743 |
| 21-6095 | Bad Debts Expense | $0 | $0 | $0 | $697 | $4,000 | $0 | $4,000 | $0 | $0 | $0 | $4,000 |
| 21-6400 | Transfers Out | $0 | $0 | $0 | $0 | $6,000 | $0 | $6,000 | $0 | $6,000 | $0 | $6,000 |
| 21-6500 | Cash Over/Short | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $2,000 | $36 | $2,000 |
| | | **$5,708,842** | **$36,929** | **$4,435,688** | **$471,178** | **$3,421,206** | **$21,085** | **$1,634,342** | **$4,768** | **$176,153** | **$36** | **$210,743** |
| **GRAND TOTAL EXPENDITURES** | | **$9,971,489** | **$2,459,314** | **$7,761,297** | **$3,833,884** | **$7,734,310** | **$2,575,939** | **$6,044,768** | **$2,326,027** | **$3,536,178** | **$2,297,865** | **$3,435,816** |
| **GRAND TOTAL WITHOUT CONTINGENCY** | | ***$4,262,647*** | *$2,422,385* | *$3,325,609* | *$3,363,403* | *$4,323,104* | *$2,554,854* | *$4,420,426* | *$2,321,259* | *$3,368,025* | *$2,297,865* | *$3,237,073* |

*Forecast

**REVENUE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**IRRIGATION FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **OPERATING REVENUE** | | | | | | | | | | | | |
| 25-4700 | Pressurized Irrigation User Fees | $780,000 | $726,128 | $670,262 | $657,525 | $592,377 | $634,512 | $592,377 | $576,475 | $554,840 | $527,099 | $483,000 |
| 25-4177 | Gravity Irrigation User Fees | $18,000 | $22,852 | $18,268 | $18,157 | $26,210 | $20,424 | $26,210 | $24,417 | $22,000 | $23,929 | $12,000 |
| 25-4185 | Miscellaneous Income | $20,000 | $23,500 | $20,000 | $322,202 | $109,003 | $204,578 | $109,003 | $175,450 | $104,724 | $156,397 | $76,053 |
| 25-4510 | Service Reconnect Fees | $4,000 | $4,934 | $6,000 | $5,421 | $4,000 | $7,360 | $4,000 | $6,411 | $100 | $20 | $100 |
| 25-4550 | Irrigation Line Inspections | $30,000 | $60,309 | $30,000 | $68,124 | $20,000 | $55,812 | $20,000 | $24,736 | $10,000 | $38,819 | $4,000 |
| 25-4775 | Late Pay Fees | $10,000 | $9,574 | $10,000 | $11,666 | $8,500 | $13,799 | $8,500 | $14,246 | $400 | $801 | $800 |
| 25-4358 | Development Support Services | $700 | $686 | $800 | $640 | $1,200 | $1,027 | $1,200 | $1,115 | $750 | $1,863 | $200 |
| | | **$862,700** | **$847,983** | **$755,329** | **$1,083,735** | **$761,290** | **$937,512** | **$761,290** | **$822,850** | **$692,814** | **$748,927** | **$576,153** |
| **CAPITAL REVENUE** | | | | | | | | | | | | |
| 25-4505 | New Service Connection | $636,488 | $636,488 | $687,305 | $697,169 | $315,557 | $506,686 | $315,557 | $385,807 | $180,000 | $305,850 | $157,500 |
| 25-4503 | New Service Tap | $0 | $0 | $500 | $351 | $500 | $429 | $500 | $756 | $0 | $2,348 | $0 |
| 25-4173 | Interest Revenue | $35,000 | $74,943 | $45,000 | $70,853 | $2,500 | $20,047 | $2,500 | $4,669 | $2,000 | $2,937 | $800 |
| 25-4900 | Transfers In | $0 | $0 | $0 | $0 | $100 | $0 | $100 | $0 | $100 | $0 | $100 |
| 25-4950 | Carryover | $3,634,872 | $3,742,129 | $3,457,211 | $2,499,141 | $2,215,413 | $0 | $1,588,537 | $0 | $505,944 | $1,584,954 | $536,037 |
| | | **$4,306,360** | **$4,453,560** | **$4,190,016** | **$3,267,514** | **$2,534,070** | **$527,162** | **$1,907,194** | **$391,232** | **$688,044** | **$1,896,089** | **$694,437** |
| **GRAND TOTAL REVENUE** | | **$5,169,060** | **$5,301,542** | **$4,945,345** | **$4,351,249** | **$3,295,360** | **$1,464,674** | **$2,668,484** | **$1,214,082** | **$1,380,858** | **$2,645,016** | **$1,270,590** |
| ***GRAND TOTAL WITHOUT CARRYOVER*** | | ***$1,534,188*** | *$1,559,414* | *$1,488,134* | *$1,852,109* | *$1,079,947* | *$1,464,674* | *$1,079,947* | *$1,214,082* | *$874,914* | *$1,060,062* | *$734,553* |

*Forecast

**EXPENDITURE BUDGET PROPOSAL - CITY OF KUNA - FYE 2021**
**IRRIGATION FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **LABOR & BENEFITS** | | | | | | | | | | | | |
| 25-5005 | Salaries & Wages - Staff | $161,164 | $160,396 | $155,988 | $145,782 | $156,113 | $142,583 | $135,462 | $117,510 | $118,488 | $113,355 | $112,919 |
| 25-5795 | Salaries - Overtime | $4,029 | $3,017 | $3,900 | $3,264 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 25-5009 | Salaries & Wages - Seasonal | $0 | $0 | $0 | $0 | $0 | $111 | $2,268 | $0 | $0 | $77 | $0 |
| 25-5000 | Salaries & Wages - Elected | $2,197 | $2,183 | $2,155 | $2,181 | $2,065 | $1,972 | $2,053 | $1,960 | $2,030 | $1,794 | $0 |
| 25-5800 | OASDI - Employer | $10,378 | $10,182 | $10,047 | $9,224 | $9,807 | $8,754 | $8,666 | $7,229 | $7,472 | $7,244 | $7,001 |
| 25-5810 | Medicare - Employer | $2,427 | 2,379.55 | $2,350 | $2,156 | $2,294 | $1,897 | $2,027 | $1,690 | $1,748 | $1,696 | $1,445 |
| 25-5820 | Group Medical Insurance | $25,000 | $21,934 | $22,659 | $20,363 | $22,049 | $19,939 | $19,522 | $16,140 | $17,181 | $18,182 | $18,215 |
| 25-5830 | Group Life Insurance | $106 | $100 | $108 | $103 | $108 | $94 | $94 | $80 | $86 | $78 | $85 |
| 25-5840 | PERSI Employer 401 (a) | $19,987 | $19,904 | $19,349 | $17,437 | $18,308 | $15,221 | $15,918 | $12,755 | $13,951 | $13,099 | $13,063 |
| 25-5850 | Worker's Compensation | $5,212 | $3,571 | $5,344 | $3,917 | $5,836 | $2,909 | $5,021 | $2,854 | $3,017 | $2,810 | $2,832 |
| 25-5860 | Group Dental/Vision Insurance | $3,500 | $2,552 | $2,033 | $1,936 | $2,098 | $1,863 | $1,870 | $1,682 | $1,799 | $1,528 | $1,394 |
| 25-6280 | Unemployment Expenses | $0 | $0 | $0 | $0 | $0 | $14 | $0 | $0 | $0 | $0 | $272 |
| | | **$233,999** | **$226,218** | **$223,933** | **$206,364** | **$218,677** | **$195,358** | **$192,901** | **$161,900** | **$165,772** | **$159,862** | **$157,226** |
| **MAINTENANCE & GENERAL OPERATIONS** | | | | | | | | | | | | |
| 25-6025 | Janitorial | $4,000 | $1,286 | $3,600 | $1,337 | $900 | $917 | $765 | $845 | $527 | $488 | $587 |
| 25-6050 | Contract Labor | $1,000 | $0 | $1,000 | $0 | $1,000 | $0 | $1,000 | $0 | $1,000 | $0 | $1,000 |
| 25-6052 | Contract Services | $6,700 | $6,343 | $6,400 | $4,131 | $6,400 | $5,455 | $6,400 | $5,249 | $5,762 | $3,300 | $5,857 |
| 25-6065 | Dig Line Expenditures | $1,500 | $1,102 | $1,000 | $1,174 | $600 | $863 | $600 | $0 | $500 | $405 | $500 |
| 25-6075 | Dues & Memberships | $500 | $195 | $479 | $261 | $479 | $561 | $360 | $316 | $360 | $283 | $240 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25-6115 | M&R - Gravity | $2,500 | $429 | $2,250 | $891 | $1,500 | $1,192 | $1,000 | $1,699 | $1,000 | $408 | $1,000 |
| 25-6110 | Interest Expenses | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 25-6116 | Irrigation Water Costs | $150,545 | $133,860 | $150,545 | $118,010 | $125,454 | $106,849 | $114,049 | $106,429 | $114,049 | $104,168 | $92,000 |
| 25-6125 | Legal Publications | $1,900 | $101 | $1,900 | $1,597 | $1,900 | $365 | $1,900 | $556 | $1,900 | $651 | $1,900 |
| 25-6130 | Liability & Property Insurance | $4,533 | $4,237 | $4,237 | $3,960 | $5,701 | $3,701 | $3,701 | $3,524 | $3,524 | $3,716 | $3,455 |
| 25-6131 | Insurance Claims Paid | $300 | $0 | $0 | $0 | $100 | $0 | $100 | $0 | $100 | $0 | $100 |
| 25-6140 | Maint. & Repair - Bldng. & Grounds | $3,300 | $2,024 | $3,300 | $1,767 | $3,300 | $2,578 | $3,300 | $2,425 | $3,100 | $1,027 | $3,100 |
| 25-6141 | IT Small Equipment | $2,646 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 25-6142 | Maint. & Repair - Equipment | $8,800 | $3,711 | $8,800 | $4,458 | $8,800 | $3,761 | $8,800 | $3,640 | $8,800 | $4,573 | $8,800 |
| 25-6150 | Maint. & Repair - Pressure | $75,000 | $79,599 | $50,000 | $29,526 | $50,000 | $43,160 | $50,000 | $26,611 | $50,000 | $18,721 | $50,000 |
| 25-6155 | Meetings/Committees | $650 | $263 | $650 | $18 | $650 | $197 | $650 | $63 | $650 | $103 | $590 |
| 25-6160 | Miscellaneous Expenditures | $20,000 | $21 | $20,000 | $3,399 | $69,293 | -$19 | $69,293 | $0 | $5,313 | $0 | $1,313 |
| 25-6165 | Office Supplies | $3,600 | $2,303 | $1,500 | $1,369 | $969 | $1,006 | $775 | $687 | $750 | $365 | $750 |
| 25-6175 | Small Tools | $6,725 | $4,965 | $6,725 | $1,694 | $6,725 | $1,459 | $6,725 | $3,562 | $8,725 | $3,693 | $9,112 |
| 25-6190 | Postage & Billing | $9,500 | $8,904 | $8,000 | $8,070 | $7,125 | $7,720 | $7,125 | $7,638 | $9,336 | $7,985 | $8,327 |
| 25-6202 | Professional Services | $11,500 | $958 | $11,500 | $6,775 | $6,435 | $5,758 | $6,435 | $5,674 | $6,435 | $1,378 | $6,315 |
| 25-6211 | Rent - Buildings & Land | $950 | $648 | $950 | $648 | $950 | $594 | $950 | $934 | $648 | $6,029 | $6,191 |
| 25-6212 | Rent - Equipment | $1,200 | $274 | $1,200 | $914 | $800 | $110 | $800 | $4 | $800 | $0 | $800 |
| 25-6230 | Safety Training & Equipment | $900 | $329 | $900 | $77 | $900 | $140 | $900 | $263 | $900 | $157 | $900 |
| 25-6255 | Telephone | $4,520 | $4,041 | $4,520 | $3,638 | $4,520 | $3,819 | $4,520 | $4,450 | $3,977 | $3,955 | $4,159 |
| 25-6265 | Training & Schooling | $930 | $647 | $930 | $873 | $620 | $365 | $620 | $490 | $500 | $615 | $500 |
| 25-6270 | Travel | $200 | $193 | $200 | $0 | $200 | $22 | $200 | $1 | $200 | $4 | $200 |
| 25-6285 | Uniforms | $900 | $366 | $900 | $663 | $750 | $326 | $750 | $563 | $750 | $201 | $750 |
| 25-6290 | Utilities | $135,000 | $118,048 | $135,000 | $115,148 | $106,384 | $115,203 | $106,384 | $95,075 | $96,190 | $96,493 | $81,187 |
| 25-6300 | Fuel | $4,000 | $2,777 | $4,000 | $2,590 | $4,000 | $4,948 | $4,000 | $3,394 | $4,000 | $2,205 | $3,500 |
| 25-6305 | Maint. & Repair - Vehicles | $1,375 | $1,118 | $1,375 | $959 | $1,250 | $663 | $1,250 | $453 | $1,250 | $184 | $1,250 |
| 25-6505 | Bank Fees | $11,500 | $9,594 | $10,000 | $8,736 | $6,292 | $7,311 | $6,292 | $6,309 | $6,292 | $4,698 | $4,838 |
| | | **$476,674** | **$388,335** | **$441,861** | **$322,682** | **$423,997** | **$319,023** | **$409,644** | **$280,854** | **$337,338** | **$265,805** | **$299,221** |
| **DEBT COVERAGE** | | | | | | | | | | | | |
| 25-6015 | Bond & Loan Payments | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **CAPITAL EXPENDITURES** | | | | | | | | | | | | |
| 25-6020 | Capital Improvements | $586,600 | $62,590 | $723,900 | $32,772 | $496,620 | $121,027 | $496,620 | $712,750 | $676,500 | $219,330 | $604,175 |
| 25-6166 | PP&E | $66,080 | $38,869 | $94,250 | $33,778 | $82,467 | $1,369 | $82,467 | $15,191 | $59,650 | $11,419 | $42,951 |
| | | **$652,680** | **$101,459** | **$818,150** | **$66,550** | **$579,087** | **$122,396** | **$579,087** | **$727,941** | **$736,150** | **$230,749** | **$647,126** |
| **OTHER EXPENDITURES** | | | | | | | | | | | | |
| 25-6045 | Contingency | $3,805,707 | $14,587 | $3,461,402 | $27,372 | $2,073,501 | $10,101 | $1,486,754 | $1,845 | $141,498 | $101,300 | $150,982 |
| 25-6095 | Bad Debts Expense | $0 | $0 | $0 | $12 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 25-6400 | Transfers Out | $0 | $0 | $0 | $0 | $100 | $0 | $100 | $0 | $100 | $0 | $15,000 |
| 25-6500 | Cash Over/Short | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | -$3 | $0 |
| | | **$3,805,707** | **$14,587** | **$3,461,402** | **$27,383** | **$2,073,601** | **$10,101** | **$1,486,854** | **$1,845** | **$141,598** | **$101,297** | **$165,982** |
| **GRAND TOTAL EXPENDITURES** | | **$5,169,060** | **$730,599** | **$4,945,345** | **$622,980** | **$3,295,362** | **$646,878** | **$2,668,486** | **$1,172,540** | **$1,380,858** | **$757,713** | **$1,269,555** |
| **GRAND TOTAL WITHOUT CONTINGENCY** | | ***$1,363,353*** | *$716,012* | *$1,483,943* | *$595,608* | *$1,221,861* | *$636,777* | *$1,181,732* | *$1,170,695* | *$1,239,360* | *$656,413* | *$1,118,573* |

*Forecast

**REVENUE & EXPENDITURE STATEMENT - CITY OF KUNA - FYE 2021**
**SOLID WASTE FUND**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **SOLID WASTE REVENUE** | | | | | | | | | | | | |
| 26-4173 | Interest Revenue | $200 | $618 | $1,000 | $1,961 | $0 | $810 | $0 | $202 | $0 | $120 | $0 |
| 26-4950 | Carryover | $90,000 | $96,389 | $90,000 | $89,881 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 26-4975 | Solid Waste User Fees | $2,399,301 | $2,329,418 | $2,372,055 | $2,189,217 | $2,029,335 | $1,933,037 | $1,858,827 | $1,753,386 | $1,674,519 | $1,620,715 | $1,456,066 |
| | | **$2,489,501** | **$2,426,425** | **$2,463,055** | **$2,281,059** | **$2,029,335** | **$1,933,847** | **$1,858,827** | **$1,753,588** | **$1,674,519** | **$1,620,835** | **$1,456,066** |
| **SOLID WASTE EXPENDITURES** | | | | | | | | | | | | |
| 26-6045 | Contingency | $126,171 | $131,930 | $90,000 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 26-7000 | Solid Waste Service Fees | $2,363,330 | $2,294,495 | $2,373,055 | $2,187,225 | $2,029,335 | $1,912,978 | $1,858,827 | $1,749,562 | $1,674,519 | $1,613,549 | $1,456,066 |
| | | **$2,489,501** | **$2,426,425** | **$2,463,055** | **$2,187,225** | **$2,029,335** | **$1,912,978** | **$1,858,827** | **$1,749,562** | **$1,674,519** | **$1,613,549** | **$1,456,066** |
| **GRAND TOTAL NET** | | **$0** | **$0** | **$0** | **$93,834** | **$0** | **$20,869** | **$0** | **$4,026** | **$0** | **$7,286** | **$0** |

* Forecast

**REVENUE & EXPENDITURE STATEMENT - CITY OF KUNA - FYE 2021**
**CAPITAL PROJECTS FUND (GOVERNMENTAL FUNDS)***

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **CAPITAL PROJECTS REVENUE** | | | | | | | | | | | | |
| 40-4900 | Transfers In | $1,118,269 | $1,582,259 | $1,582,259 | $631,500 | $631,500 | $388,110 | $388,110 | $631,875 | $608,075 | $147,200 | $147,200 |
| 40-4950 | Fund Balance Carryover | $696,070 | $258,998 | $245,000 | $213,419 | $100,000 | $182,390 | $75,000 | $75,000 | $55,000 | $25,000 | $25,000 |
| | | **$1,814,339** | **$1,841,257** | **$1,827,259** | **$844,919** | **$731,500** | **$570,500** | **$463,110** | **$706,875** | **$663,075** | **$172,200** | **$172,200** |
| **CAPITAL PROJECTS EXPENDITURES** | | | | | | | | | | | | |
| 40-6166 | PP&E - Operations | $131,000 | $43,113 | $1,520,269 | $169,836 | $252,600 | $96,665 | $214,650 | $83,029 | $225,375 | $62,200 | $62,200 |
| 40-6020 | Capital Improvements | $1,576,269 | $795,058 | $61,990 | $95,093 | $378,900 | $56,790 | $173,460 | $200,426 | $382,700 | $35,905 | $60,000 |
| 40-6400 | Transfers Out | $96,687 | $380,239 | $0 | $244,682 | $0 | $206,712 | $0 | $50,095 | $0 | $0 | $0 |
| 40-6045 | Contingency | $10,383 | $0 | $245,000 | $0 | $100,000 | $0 | $75,000 | $0 | $55,000 | $0 | $50,000 |
| | | **$1,814,339** | **$1,218,410** | **$1,827,259** | **$509,611** | **$731,500** | **$360,167** | **$463,110** | **$333,550** | **$663,075** | **$98,105** | **$172,200** |
| **GRAND TOTAL NET** | | **$0** | **$622,846** | **$0** | **$335,308** | **$0** | **$210,332** | **$0** | **$373,325** | **$0** | **$74,095** | **$0** |

*Capital projects in the enterprise funds are handled within the funds themselves.

| | | | | | | | | | Grant | CPF (40) | | Water (20) | | Sewer (21) | | Irrigation (25) | | Park Impact |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Activity Number | Priority | Project | Contact | Details | Proposed Amount | Approved Amount | Carryover Project | Transfer In to Fund 40 | Various | 6020 | 6166 | 6020 | 6166 | 6020 | 6166 | 6020 | 6166 | 6045 |
| | 1 | Park Restroom Sinking Fund | Bobby | Sinking fund for park restrooms | 175,000.00 | | 150,000.00 | 25,000.00 | | 175,000.00 | | | | | | | | |
| | 1 | Well 2 Rehabilitation | Bobby | Rehabilitation of the irrigation well used to irrigate BF Park, Greenbelt, and ball fields | 100,000.00 | | | 100,000.00 | | 100,000.00 | | | | | | | | |
| | 1 | Pathways | Bobby | Add additional park pathways | 15,000.00 | | | 15,000.00 | | 15,000.00 | | | | | | | | |
| | 2 | Splash Pad Concessions Stand | Bobby | Addition of a concession stand near the splash pad | 15,000.00 | | | 15,000.00 | | 15,000.00 | | | | | | | | |
| | 1 | Maglocks at Restrooms | Bobby | Addition of maglocks for restrooms | 22,000.00 | | | 22,000.00 | | | 22,000.00 | | | | | | | |
| | 1 | Concrete at Bernie Fisher Park | Bobby | Concrete pad at Bernie Fisher basketball court | 24,000.00 | | 24,000.00 | - | | 24,000.00 | | | | | | | | |
| | 2 | Picnic Table Shelter | Bobby | Addition of Bernie Fisher picnic table shelter | 30,000.00 | | | 30,000.00 | | 30,000.00 | | | | | | | | |
| | 1 | Land Improvements | Bobby | Park development not covered by impact fees | 350,000.00 | | 150,000.00 | 200,000.00 | | 350,000.00 | | | | | | | | |
| | 1 | Large Area Mower | Bobby | Mower needed due to additional 27 acres of parks: Patagonia (7), Ashton Estates (3), Zamzows (14), other (3) | 76,000.00 | | | 76,000.00 | | | 76,000.00 | | | | | | | |
| | 1 | UTV | Bobby | New UTV to replace UTVs that have broken down | 23,000.00 | | | 23,000.00 | | | 23,000.00 | | | | | | | |
| | 1 | Rock Rake | Bobby | Attachment for the bobcat skidsteer and toolcat, which will assist in park construction | 10,000.00 | | | 10,000.00 | | | 10,000.00 | | | | | | | |
| | 1 | Bernie Fisher Playground Equipment | Bobby | Refresh of Bernie Fisher Park playground equipment due to safety concerns | 450,000.00 | | | 450,000.00 | | 450,000.00 | | | | | | | | |
| | 1 | Greenbelt Purchase | Chris | Purchase of portion of greenbelt from Union Pacific | 367,538.00 | | 150,000.00 | 33,769.00 | 183,769.00 | 183,769.00 | | | | | | | | |
| | 2 | Grant Matching | Chris | Grant Matching for grants that are currently unplanned that may arise | 81,000.00 | | | 81,000.00 | | 81,000.00 | | | | | | | | |
| | 1 | Retail Incubator | Lisa | Construction of small retail locations to be used for promotion of start up businesses | 100,000.00 | | 100,000.00 | - | | 100,000.00 | | | | | | | | |
| | 1 | Urban Renewal District | Lisa | Eligibility (10-15), Feasibilty (20-40), Legal (25-30), Misc (15) | 81,687.36 | | 66,687.36 | 30,000.00 | | | | | | | | | | |
| | 2 | City Hall Basement | Paul | Finish constructing wall to secure IT equipment and City records | 7,500.00 | | | 7,500.00 | | 7,500.00 | | | | | | | | |
| | 2 | Senior Center Exterior | Paul | Face lift of Senior Building; fix potential problems with roof. | 15,000.00 | | 15,000.00 | - | | 15,000.00 | | | | | | | | |
| | 1 | Energy Efficiency | Paul | Potentially upgrading our operational systems city-wide to save on expenses long-term. | 95,000.00 | | 90,000.00 | - | | 30,000.00 | | 27,300.00 | | 27,300.00 | | 10,400.00 | | |
| 1097 | 1 | Downtown Gravity to PI | Paul | Converting old gravity system to pressure in prep for phase II of downtown revitalization | 100,000.00 | | 100,000.00 | | | | | | | | | 100,000.00 | | |
| 1156 | 1 | Ashton Pump and Pond | Paul | Irrigation storage for east side of hwy 69 | 400,000.00 | | 400,000.00 | | | | | | | | | 400,000.00 | | |
| | 1 | Chaparosa and Tomorrow Pump Station Roof | Paul | Roof installation or rehabilitation to prolong the life of the pump station | 15,000.00 | | | | | | | | | | | 15,000.00 | | |
| | 2 | Lightpole at Patagonia Pump Station | Paul | Installation of lightpole at Patagonia pump station for security purposes | 11,000.00 | | | | | | | | | | | 11,000.00 | | |
| | 1 | Chaparosa and Tomorrow Panel Upgrades | Paul | Panel upgrades at pump stations to improve performance | 35,000.00 | | | | | | | | | | | 35,000.00 | | |
| 1057 | 1 | Misc Pumps, Motors, Equipment | Paul | Misc Pumps, Motors, Equipment | 220,000.00 | | 220,000.00 | | | | | | 80,000.00 | | 90,000.00 | | 50,000.00 | |
| | 1 | Scada Upgrade Phase II | Paul | Scada Upgrade and Synchronization | 60,000.00 | | | | | | | | 25,200.00 | | 25,200.00 | | 9,600.00 | |
| | 2 | NWWTP Remodel | Paul | Improve entryway and increase security measures at Ten Mile Plant | 20,000.00 | | | | | | | 12,600.00 | | 12,600.00 | | 4,800.00 | | |
| | 1 | West Well Rehabilitation | Paul | Lagoons West Well Rehab Phase III | 40,000.00 | | | | | | | | | 40,000.00 | | | | |
| | 1 | Membrane Replacement | Paul | Emergency budget for membrane replacement (getting to the end of the life of current) | 315,000.00 | | 105,000.00 | | | | | | | 105,000.00 | | | | |
| | 1 | Lift Station Pump Around | Paul | Emergency budget to allow for pumping to occur in event of failure of lift station | 20,000.00 | | 20,000.00 | | | | | | | 20,000.00 | | | | |
| | 1 | Mempulse +VFD | Paul | Membrane upgrade at NWWTP to improve longevity and output of facility | 125,000.00 | | 125,000.00 | | | | | | | 125,000.00 | | | | |
| | 1 | Danskin Feasibility Study | Paul | Capacity study at Danskin lift station | 50,000.00 | | | | | | | | | 50,000.00 | | | | |
| | 1 | Fine Screen Overhaul | Paul | Planned replacement of aging component | 15,000.00 | | 15,000.00 | | | | | | | 15,000.00 | | | | |
| | 1 | Autoclave | Paul | Laboratory equipment to provide completely sterile equipment for bacterial tests | 6,500.00 | | 6,500.00 | | | | | | | | 6,500.00 | | | |
| | 2 | Sewer Pickup | Paul | Replacement of aging vehicle at Sewer Lagoons | 30,000.00 | | 30,000.00 | | | | | | | | 35,000.00 | | | |
| | 1 | Storage Building | Paul | Storage building construction for Vac Truck purchased in 2020 and other misc PW equipment | 30,000.00 | | | | | | | 12,600.00 | | 12,600.00 | | 4,800.00 | | |
| | 2 | Parking Lot NWWTP | Paul | Addition of parking at NWWTP in order to add 5-6 spaces | 35,000.00 | | | | | | | 14,700.00 | | 14,700.00 | | 5,600.00 | | |
| | 2 | Dump Trailer | Paul | Dump trailer for public works use | 18,000.00 | | | | | | | | 7,560.00 | | 7,560.00 | | 2,880.00 | |
| | 2 | Solids Trailer | Paul | Trailer to dispose of solids currently handled by J&M | 90,000.00 | | | | | | | | | | 90,000.00 | | | |
| | 2 | Pond 3 Rehabilitation | Paul | To dredge pond and replace liner at lagoons on Swan Falls Road | 400,000.00 | | | | | | | | | 400,000.00 | | | | |
| | 1 | Aeration Lines Pond 7 | Paul | Improvements at lagoons to ensure bacterial efficacy in solid and waste break down | 350,000.00 | | | | | | | | | 350,000.00 | | | | |
| | 1 | Hubbard Lift Station Rehabilitation | Paul | Lift station rehabilitation to address capacity concerns | 35,000.00 | | | | | | | | | 35,000.00 | | | | |
| | 1 | Falcon Crest Storage Tank | Paul | Water storage tank for Falcon Crest Development | 750,000.00 | | 700,000.00 | | | | | 750,000.00 | | | | | | |
| | 1 | Water Meters | Paul | Water Meters for building | 350,000.00 | | | | | | | 350,000.00 | | | | | | |
| | 1 | Water Rights Strategy | Paul | Future needs and management of water rights | 30,000.00 | | 30,000.00 | | | | | 30,000.00 | | | | | | |
| | 1 | New Production Well | Paul | Well to preserve water rights | 800,000.00 | | | | | | | 800,000.00 | | | | | | |
| | 1 | Scissor Hydrants | Paul | Replacement of obselete hydrants that are prone to fail and not serviceable | 30,000.00 | | | | | | | | 30,000.00 | | | | | |
| | 1 | Access Point | Mike | Tool for field operaters to be able to access critical info with their phone or tablet | 5,000.00 | | | | | | | | | | 5,000.00 | | | |
| | 1 | Fixed Base Meter Reading | Paul | New system for taking water meter readings from stationary towers instead of through readings taken by driving at close proximity | 40,000.00 | | | | | | | | 40,000.00 | | | | | |
| | 2 | Fence for Well Heads | Paul | Security measures to protect various well heads | 12,000.00 | | | | | | | 12,000.00 | | | | | | |
| | 2 | Rain Gutters at Well Houses | Paul | Installation of gutters at well houses in order to improve longevity of facility | 20,000.00 | | | | | | | 20,000.00 | | | | | | |
| | 2 | Pavement at Danskin Well | Paul | Installation of turnaround at Danskin well to improve access | 15,000.00 | | | | | | | 15,000.00 | | | | | | |
| | 2 | Parking Lot at Pavement/New Well | Paul | Enlargement of Arbor Ridge parking lot in order to promote public safety | 40,000.00 | | | | | | | 40,000.00 | | | | | | |
| | 2 | Service Truck Crane Retrofit | Paul | Installation of crane for service truck | 18,000.00 | | | | | | | | 14,400.00 | | | | 3,600.00 | |
| | 1 | Patagonia Lift Station Rehabilitation | Paul | Rehabilitation of Patagonia Lift Station to increase capacity | 100,000.00 | | | | | | | | | 100,000.00 | | | | |
| | 1 | Danskin Rehabilitation | Paul | Rehabtilitation of Danskin Lift Station to increase capacity | 75,000.00 | | | | | | | | | 75,000.00 | | | | |
| | 1 | Ten Mile Lift Station | Paul | | 500,000.00 | | | | | | | | | 500,000.00 | | | | |
| | | | | | 7,243,225.36 | - | 2,497,187.36 | 1,118,269.00 | 183,769.00 | 1,576,269.00 | 131,000.00 | 2,084,200.00 | 197,160.00 | 1,882,200.00 | 259,260.00 | 586,600.00 | 66,080.00 | - |

**REVENUE & EXPENDITURE STATEMENT - CITY OF KUNA - FYE 2021**
**PARK IMPACT FEE FUND & CAPITAL PROJECTS FUND (GOVERNMENTAL FUNDS)**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **CAPITAL PROJECTS REVENUE** | | | | | | | | | | | | |
| 50-4173 | Interest Revenue | $15,000 | $17,370 | $18,000 | $12,406 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 50-4650 | Park Impact Fee Revenue | $699,555 | $699,555 | $717,396 | $722,091 | $413,279 | $563,457 | $403,241 | $456,364 | $187,800 | $0 | $0 |
| 50-4950 | Carryover | $1,661,928 | $1,111,275 | $917,273 | $837,293 | $438,007 | $0 | $448,045 | $0 | $0 | $0 | $0 |
| | | **$2,376,483** | **$1,828,200** | **$1,652,669** | **$1,571,790** | **$851,286** | **$563,457** | **$851,286** | **$456,364** | **$187,800** | **$0** | **$0** |
| **CAPITAL PROJECTS EXPENDITURES** | | | | | | | | | | | | |
| 50-6045 | Contingency | $2,376,483 | $15,000 | $1,652,669 | $462,056 | $851,286 | $204,124 | $851,286 | $0 | $187,800 | $0 | $0 |
| | | **$2,376,483** | **$15,000** | **$1,652,669** | **$462,056** | **$851,286** | **$204,124** | **$851,286** | **$0** | **$187,800** | **$0** | **$0** |
| **GRAND TOTAL NET** | | **$0** | **$1,813,200** | **$0** | **$1,109,735** | **$0** | **$359,333** | **$0** | **$456,364** | **$0** | **$0** | **$0** |

*Forecast

**REVENUE & EXPENDITURE STATEMENT - CITY OF KUNA - FYE 2021**
**POLICE IMPACT FEE FUND (GOVERNMENTAL FUNDS)**

| | | FYE 2021 | FYE 2020 | | FYE 2019 | | FYE 2018 | | FYE 2017 | | FYE 2016 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACCOUNT # | ACCOUNT NAME | BUDGET | ACTUAL* | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET | ACTUAL | BUDGET |
| **CAPITAL PROJECTS REVENUE** | | | | | | | | | | | | |
| 51-4650 | Police Impact Fee Revenue | $57,526 | $57,526 | $16,380 | $12,731 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| 51-4950 | Carryover | $70,257 | $12,731 | $4,545 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$127,783** | **$70,257** | **$20,925** | **$12,731** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **CAPITAL PROJECTS EXPENDITURES** | | | | | | | | | | | | |
| 51-6045 | Contingency | $127,783 | $0 | $20,925 | $0 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| | | **$127,783** | **$0** | **$20,925** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |
| **GRAND TOTAL NET** | | **$0** | **$70,257** | **$0** | **$12,731** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** | **$0** |

*Forecast

**ORDINANCE NO. 2020-24**
**CITY OF KUNA**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:**

- **AMENDING CHAPTER 8, TITLE 3; AND**
- **PROVIDING FOR ADDITIONAL DEFINITIONS; AND**
- **MAKING TECHNICAL CHANGES; AND**
- **PROVIDING FOR SPECIAL EVENTS REGULATIONS AND PERMITS;**
- **AND PROVIDING FOR PARADE SPECIAL EVENT REGULATIONS AND PERMITS; AND**
- **PROVIDING FOR BLOCK EVENT REGULATIONS; AND**
- **PROVIDING FOR TECHNICAL CORRECTIONS TO THE ATTENDEE PROJECTION GOOD FAITH ESTIMATE SPECIAL APPLICATION REGULATIONS; AND**
- **PROVIDING FOR PERMIT DENIAL AND PROCEDURE; AND**
- **PROVIDING FOR LIBERAL CONSTRUCTION OF ADMINISTRATIVE REGULATORY POWERS AND AUTHORITY PROVIDED; AND**
- **DIRECTING THE CITY CLERK; AND**
- **PROVIDING AN EFFECTIVE DATE.**

**The Mayor and City Council make the following findings:**

1. That Article XII, Section 2 of the Idaho Constitution and Idaho Code Section 50-302 allow municipal corporations to adopt regulations which are not contrary to the general laws; and
2. Idaho Code Section 50-302 grants to cities the power to make ordinances to promote the health, safety and general welfare and provides for enforcement of such ordinances by criminal penalty; and
3. The Kuna City Council finds Special Events which are offered to the public that attract large gatherings of people which may cause adverse public health and safety conditions requiring municipal regulation to ensure adequate protection of public health and safety; and
4. Subsequent to the adoption of Chapter 8 of Title 3 Kuna City Code, Special Events Regulations, the City Council appointed a committee to review it, which committee completed its review and submitted its recommendations for amendments to said Chapter 8; and
5. It is therefore the intent of the Kuna City Council that Chapter 8 of Title 3 Kuna City Code be amended to further protect and promote the health, welfare and safety of the residents, property owners, and visitors to the City of Kuna, and to amend the regulations of Special Events for the benefit and protection of public health and safety; and
6. To provide that Special Event applicants, promoters and sponsors whose Special Events require the use of extraordinary City resources, as a result of their anticipated attendance or heightened security concerns, will pay for those extraordinary resources.
7. It is the further intent of the Kuna City Council that Chapter 8 of Title 3 Kuna City Code be construed liberally in favor of protecting and promoting the health, welfare and safety of the residents of and visitors to the City of Kuna.

**NOW, THEREFORE, BE IT ORDAINED** by the Mayor and City Council of the City of Kuna, Ada County, Idaho:

**Section 1:** Chapter 8 of Title 3, titled "Special Events" of the Kuna City Code be and the same is hereby amended to read as follows:

**CHAPTER 8 - SPECIAL EVENTS**

**SECTION:**

**3-8-1: DEFINITIONS:**

As used in this chapter, each of the terms in all capital letters defined in this section shall have the meaning given in this section and include the plural form depending upon the context of the term in this Chapter.

*ACHD:* The Ada County Highway District organized and existing pursuant to chapter 14 of title 40 Idaho Code.

*APPLICANT:* Person making application to the City of Kuna for a special event permit to plan and operate a special event within the City of Kuna. As used herein, applicant also includes the terms promoter or sponsor and said terms may be used interchangeably.

*ATTENDEE PROJECTION*: The Applicant's estimated number of persons who are expected and/or reasonably likely to attend or participate in the special event.

*BLOCK EVENT*: A special event that requires the use of a street sponsored solely by persons who are owners, residents, or tenants of properties fronting the street and which special event requires the closure of the entire street, or a portion thereof, to vehicular traffic.

*CITY PROPERTY:* All property including the greenbelt that is owned, operated, leased or maintained by the City of Kuna.

*DEADLY WEAPON:* Includes the definition of "deadly weapon" as defined by Idaho Code §18-3302(2)(b).

*EXTRAORDINARY RESOURCES:* Any government, public health and safety personnel, equipment or other resources which would not, in the absence of the special event, be required or expended.

*INSURANCE:* A general liability policy and, if necessary, an automobile liability policy for each permitted event in the amount designated within this chapter written by an insurer authorized by the State of Idaho to write insurance policies, and continuously in force for the full term of the permit.

*ORGANIZATION:* An organized body of persons which has a written statement of organization identifying its purpose and defining its membership.

*PARADE:* Any organized dash, demonstration, march, marathon, meeting, motorcade, parade, procession, race, rally, gathering, or like activity consisting of persons, animals, or vehicles, or a combination thereof, upon the streets within the City that interferes with or has a potential to interfere with the normal flow or regulation of vehicular and or pedestrian use of a street or streets.

*PERMITTEE:* Person having received a City special event permit that is in full force and effect, and issued hereunder, to plan and operate a special event within the City of Kuna.

*PROHIBITED ACTIVITIES:* No sales of tobacco, tobacco product, item to ingest tobacco or other substance, including any paraphernalia, or any item depicting any nudity, sexual act or profanity shall be sold on any city property.

*PERSON*: Includes any natural person, legal entity under law and an organization.

*PUBLIC ASSEMBLY*: Any meeting, demonstration, rally, or gathering of more than twenty-five (25) persons for a common purpose that interferes with the normal flow or regulation of vehicular and or pedestrian use of a street or streets.

*SIDEWALK*: Any area or way set aside or open to the general public for purpose of pedestrian traffic use.

*STREET*: Any public highway that is a part of the ACHD ’s Highway System or the State highway system.

*SPECIAL EVENT:* A gathering or event that is planned to occur on a day, consecutive days, or a recurring schedule that is expected to draw a gathering of persons where;

1. The event is held on a street or city property and/or

2. Alcohol available for consumption and a catering permit is required, and/or

3. A deadly weapon is available for sale or trade, excluding a private sale, and/or

4. The event requires a permit from any other jurisdiction or agency, such as ACHD or the fire district; and/or

5. The event is of an entertainment, cultural, recreational, educational, or sporting nature.

Examples of special events include, by way of illustration and without limitation, public assembly, block events, concerts, dances, parades, circuses, fairs, festivals, retail sales, community events, mass participation sports (such as, marathons and running events, bicycle races or tours, sports tournaments), other organized activity conducted for a

common or collective use. A special event does not include a gathering or event that is private and not open to the general public.

*SPECIAL EVENT APPLICATION FEES:* Special event application fees under this chapter as established and adopted by resolution of the Kuna City Council.

**3-8-2: SPECIAL EVENT PERMIT REQUIRED:**

A. No person or entity shall hold any special event within the City, as defined by this chapter, without first obtaining a special event permit from the city clerk or the city clerk's designee and paying any application fees. The requirements for permitting under this chapter shall not apply to:

1. First Amendment events, where the expressive or associative activity being exercised is protected by the Idaho Constitution and the First and Fourteenth Amendments to the United States Constitution;

2. Funeral processions;

3. Spontaneous events for the purpose of expressive activity that occur in response to breaking or emerging news;

4. Lawful picketing on sidewalks;

5. School sponsored events for the benefit of the school on school property; unless weapons are offered for sale;

6. Church sponsored events for the benefit of the church held exclusively on church property; unless alcohol is available for consumption and a catering permit is required, excluding alcohol consumed during religious services, or a deadly weapon or weapons is/are offered for sale or as a prize, if the weapon is displayed during the event;

7. Public Events on private property, unless KCC 3-8-2(B) is applicable.

B. An event on private property shall require a special event permit if:

1. Alcohol is being served and a catering permit is required; and/or

2. Weapons are being offered for sale; and/or

3. Attendance is estimated to exceed five hundred (500) persons and the event has the potential to impact traffic, safety or public services as determined by the city clerk or other city department or pertinent agency.

C. In determining whether an event is exempt, no consideration shall be given to the content of any constitutionally-protected expression connected with the planned activity. No

permit shall be required under this chapter, nor any condition imposed on any permit, if requiring a permit or imposing the condition would violate rights protected by the Constitution of the United States or by the Constitution of the State of Idaho.

D. The Attendee Projection shall be provided and shall be based upon the type of special event, format, size, location, and history if annual or part of a series of special events.

E. No fee, extraordinary resource cost, or insurance requirement shall be imposed when prohibited by the First and Fourteenth Amendments to the United States Constitution. Political or religious activity intended primarily for the communication or expression of ideas shall be presumed to be a constitutionally protected event. First Amendment events include those for the exercise of the right to speech, press, assembly and the right to petition, but does not include commercial advertising. Factors that may be considered in evaluating whether or not an event or an activity is constitutionally protected and therefore exempt include the nature of the event, the extent of commercial activity, the extent of any advertising or promotion of goods or services, the sales of food, goods, and services, any other business participation in the event, the use or application of any funds raised, and, if part of any annual tradition or series, previous events in the sequence.

F. Conditions of Special Event Permits for Parades, Public Assemblies, and Block Events on Streets and Sidewalks:

Special event permits for parades, public assemblies, and block events occurring on streets and/or sidewalks shall include conditions that:

1. Assure that emergency services such as police, fire, and ambulance services are available for a parade, public assembly, or block event taking place within the corporate limits of the City of Kuna;

2. Assure that emergency services such as police, fire, and ambulance services are not unreasonably inhibited in their ability to travel on and cross public streets and sidewalks by parades, public assemblies, or block events; at a minimum, an emergency access twenty feet (20') wide shall be required to all parts of the event;

3. Assure that business activities in the City are not unreasonably impacted by parades, public assemblies, or block events; and

4. Assure that traffic is not unreasonably disturbed by parades, public assemblies, or block events.

**3-8-3: PERMIT APPLICATION; FEES; INSURANCE AND INDEMNIFICATION:**

A. All persons holding an event that requires a special event permit shall first obtain a special event application from the city clerk.

B. The completed special event permit application shall be submitted to the city clerk.

The application for special event permit shall be submitted no later than twenty (20) days and no earlier than one (1) year prior to the date of commencement of the special event. Upon good cause shown, a late application may be submitted less than twenty (20) days prior to the event, however, in such a case, there is no guarantee that the permit will be issued.

C. The application for a special event permit shall contain the required information as determined by the city clerk.

Special events involving parades, public assemblies and block events applications shall include:

1. The full name, street address, telephone number, e-mail address, and facsimile number, if any, of the person sponsoring the special event;

2. The name, street address, telephone number, e-mail address, and facsimile number, if any, of the person with operational authority over the special event;

3. The date when the special event is to be conducted;

4. The name of the special event, if any;

5. The time the special event will begin to form, and the time the special event will begin to proceed;

6. The anticipated duration in hours and minutes of the special event;

7. The place the special event will form or be held;

8. The route or location of the special event;

9. The attendee projection, the maximum number who will be allowed to participate, and the estimated number of spectators;

10. The approximate number of animals, floats, automobiles, or other vehicles in the special event;

11. The place the special event will end and disband;

12. The prior special event history of the applicant and sponsor, including the number of permits previously applied for;

13. All drivers shall be required to be age 18 years or older and to provide proof of their valid motor vehicle driver's license

14. A public safety plan which shall include a detailed plan for controlling disorderly or violent conduct for public safety, maintaining traffic flow to commercial, other establishments, for sanitary and medical facilities, and for cleanup;

15. The information may be requested in the permit application form, through written instructions available from the City Clerk or by written or oral inquiries addressed to the applicant. The time for considering the permit shall be extended by the time taken by the applicant in responding satisfactorily to any inquiry. The required public safety plan, or parts thereof, may be waived by the Chief of Police, and/or their designees.

16. Any other relevant and necessary information as required by the city clerk.

D. The permit application fees shall be set by resolution of the Kuna City Council and published on the Kuna City Clerk fee schedule.

E. Upon submission of the completed application for the special event permit, the city clerk shall review the application for completeness. If any additional information is needed, the city clerk shall advise the applicant of the additional information that is required.

F. When the application is deemed complete, the applicant and the city clerk shall schedule a pre-permit issuance hearing if needed by the city clerk to review the information contained in the application. The city clerk, the city attorney, the Kuna Police Department, and any other party that the city clerk deems necessary, shall be responsible for reviewing the application.

G. Public safety plans for parades, public assemblies and block events shall be submitted and approved by Kuna Police Department and ACHD prior to and as a condition of the issuance of a permit. The public plan, as required by the Kuna City Police and/or the ACHD may include:

A transportation plan that will establish and define measures and means by which the applicant intends to accommodate the movement of people to, from, and around the special event.

H. The applicant for any parade or block event must have a traffic control plan approved by the Kuna Police Department and Ada County Highway District and shall be solely responsible for obtaining, placing, and removing any required barricades or traffic control devices.

I. Approval by the Kuna Police Department of a transportation plan is subject to the availability of police officers of the city to properly police the special event without jeopardizing normal police protection of the city.

J. At the pre-permit issuance meeting, the parties shall determine what requirements or conditions are necessary before the special event permit will be issued; the requirements to be considered, include but are not limited to:

1. Event security plan that provides for emergency and contingency plans to ensure that the event is conducted in a safe and secure manner.

2. Emergency personnel needed.

3. Any sanitary facilities, such as porta-potties and trash removal that may be required by local, state or federal regulation or law.

4. Any other condition or conditions, as recommended by the City or other governmental agency.

5. The amount of the special event fee to be charged.

6. Any damage deposits that may be required after reviewing the event plan.

K. In addition to the application, separate licenses and/or permits and/or permissions may be required for the following;

1. Sale and/or consumption of alcoholic beverages on public or private property, as required by Idaho law, or the applicable laws, policies, and procedures of Kuna City Code. (Applications for events which provide for the sale and/or consumption of alcohol or alcoholic beverages may require a transportation plan to be submitted with the application).

2. Use of any portion of the public right-of-way (road, sidewalk or street parking area) requires a use permit, pursuant to Idaho law, or the applicable laws, policies, and procedures of the Ada County Highway District, Idaho Transportation Department and/or Kuna City Code.

3. Any use permits that may be required.

4. Firework permits.

L. If the event is held on City property, applicants shall provide a copy of the comprehensive general liability insurance policy in the amount of one million dollars ($1,000,000.00) with the City of Kuna or Ada County Highway District (or both, depending upon the location of the special event) named as a certificate holder, and written by a company authorized to write insurance policies within the State of Idaho, and filed with the Kuna City Clerk's Office. Applicants must also execute indemnification and hold harmless provisions contained within the application.

**3-8-4: ISSUANCE OF PERMIT; EXTRAORDINARY RESOURCES; CONDITIONS OF APPROVAL; GROUNDS FOR DENIAL:**

A. Within ten (10) business days of the receipt of an application, the city clerk shall provide a written notice to the applicant for any additional items that may be required before the

permit will be issued. The applicant has ten (10) business days to provide the additional requested information unless the city clerk and the applicant agree on the amount of additional time. Upon receipt of the items as specified by the city clerk, the city clerk shall within five (5) business days, either approve a permit with standard or special conditions, or a combination of each, or deny a permit.

B. An applicant, whose special event may require the use of extraordinary city resources as a result of anticipated attendance or increased security demands, shall be required to pay for those extraordinary resources, as determined by the city or affected agency prior to the event. If there is additional extraordinary expenses or damages, the applicant shall pay for the same within fifteen (15) days following the conclusion of the special event, and as condition of approval, the city may require a cash deposit, as a security for any additional extraordinary resources or damage.

C. Special event application may be denied or revoked if the city clerk determines:

1. The applicant has made any false material representation in the application;

2. The applicant fails to provide any of the items or information required by this chapter;

3. The applicant failed to pay for extraordinary resources or potential estimated damages attributable to the event as specified in subsection 3-8-4-B of this chapter or to pay costs associated with extraordinary resources or damage to city property for a previously-permitted event.

4. The applicant failed to gain required licenses, permits, conditions, or permissions from the police department, fire department, central district health department, ACHD, City Planning and Zoning and/or City Clerk's Office.

5. The special event will substantially interfere with a special event where the other special event has applied for a special event permit and its fee and any other costs have been paid for in full.

D. The city clerk may condition the issuance of a special event permit by imposing reasonable requirements concerning the time, place, and manner of the event, and such requirements as are necessary to protect the safety and rights of persons and property, and the control of traffic as recommended by City staff or external agencies.

E. The following conditions apply to all special event permits:

1. The time, place and manner of the event proposed on the application may not be altered or modified;

2. The area of the event or the facility must be returned immediately to its original pre-event condition, reasonable wear and tear excluded, including:

a. Removal and appropriate disposal of trash and/or recyclables generated by event activities and by the event's spectators and attendees in coordination with the city's designated trash service company;
b. Removal of vehicles, equipment, portable toilets, and other support equipment which are used for the event; and
c. Removal of facilities, cones, barricades, and markings along a route.

3. Special conditions as recommended by the City or other agencies.

F. If a special event permit is denied, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

**3-8-5: PARADE SPECIAL EVENT REGULATIONS**

A. Parade special event permits shall contain the following conditions:

1. Licenses. All drivers must be at least 18 years of age and shall be required to provide proof of a valid driver's license to operate a motor vehicle in the state of Idaho.

2. Debris removal. Following the conclusion of the parade, organizers shall plan or agree to pay the City for cleaning of debris left by participants or observers in the areas through which the parade passes.

3. Applicants shall identify on maps and in written documentation the locations for assembly and disassembly of participants. If loading docks, truck routes, or highways are impacted, the organizer shall notify affected businesses by certified mail at least 60 days prior to the event of such impact.

4. Throwing from floats. No candy, pamphlets, trinkets, or other items shall be tossed to viewers of parades from parade floats. Violation of this provision is cause for the Kuna City Police Department to ask the violator to pull out of the parade formation or halt the event.

B. The Kuna Police have the authority, when reasonably necessary, to prohibit or restrict the parking of vehicles along any street or part thereof constituting a part of the route of a parade.

**3-8-6: REVOCATION OR SUSPENSION OF PERMIT:**

The city clerk, with the approval of the city attorney, may summarily suspend or revoke a permit issued under this chapter for violation of any provision of this chapter; for violation by the applicant of any federal, state or local laws or ordinances during the special event; for a violation of the conditions of the permit; or for making any material false representation in an application for a permit or for an exemption certificate. In the event of a suspension or revocation, the appeal provisions shall apply, commencing upon the date of the suspension or revocation notice. If a

permit is revoked or suspended, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

**3-8-7: PUBLIC CONDUCT DURING PARADES:**

A. Interference: It shall be unlawful for any person to interfere, block, obstruct or impede, or interfere with conduct of the Parade.

B. No person (except participants of the parade) shall drive any vehicle, walk, run, or ride a bicycle, skateboard or similar device between participants, vehicles or animals in a parade.

C. No person shall drop, throw or roll any object toward, among or between participants, vehicles or animals in a parade, which object could cause injury or damage to a person, animal or vehicle struck by such object.

D. No person shall grab at, take hold of, hit, pull or push any participant, vehicle or animal in a parade or anything in the possession of any participant in a parade.

**3-8-8: BLOCK EVENT REGULATIONS:**

Local streets not exceeding one City block or one intersection may be temporarily closed for block events provided that the following requirements are met:

A. At least two-thirds ($^2/_3$) of the area abutting the street or intersection to be closed is residentially zoned and the block event is consistent with purposes of the residential zoning district;

B. The applicant agrees to indemnify and hold harmless the City and its officers and employees from any and all claims, damages, or suits that may arise or in any way be occasioned by the granting of a special event permit for the block event; and

C. The applicant agrees to clean all debris and litter from the street and sidewalks within four (4) hours after the block event.

D. Proof of mailing of written notice to all abutting or adjacent property owners, as well as the property owners on the corner lots immediately across the intersection on the opposite side of the street closure, of the date, time and purpose of the block event and of the their right to file with the City Clerk a written objection to the block event 10 business days prior to the issuance of the special event permit..

E. The applicant for any block event must have an approved traffic control plan from Kuna Police Department and Ada County Highway District and shall be solely responsible for obtaining, placing, and removing any required barricades or traffic control devices.

**3-8-9: PROHIBITIONS AND PENALTIES:**

It shall be unlawful for any person to:

A. Conduct, present, or stage a special event without a permit.

B. Violate any provision of this chapter.

C. Serve or cause to be served alcohol in violation of Idaho Code or Kuna City Code.

D. Violate any condition of a special event permit. A permittee may, by virtue of a lawful special event permit, utilize or allow performers to utilize sound amplification equipment that would otherwise violate City Code and/or state law.

E. Conduct an event that violates the approved use or is outside the permitted or licensed use of a premise, facility, or location.

**3-8-10: ATTENDANCE AND PARTICIPANT GOOD FAITH ESTIMATE:**

Attendee projections shall be a good faith estimate provided by the applicant, promoter, or sponsor which shall accompany the special event application. The applicant shall provide a short, written statement explaining the basis for the attendee projection. The statement shall include all the relevant factors known at the time, the price of admission and the extent of advertising and promotion contemplated.

**3-8-11: SPECIAL EVENT PERMIT GENERAL RESTRICTIONS:**

A. Vendors must keep the area of operation free of debris. Vendors selling food or beverages must provide trash receptacles and waste removal adjacent to or as a part of their operations. All spilled food, beverages, grease, or other trash or debris accumulating within twenty (20) feet of vending unit shall be cleaned and collected by the vendor and deposited in the vendor's trash receptacle.

B. The vendor is prohibited from depositing its waste, ice, and any grey or wastewater into sidewalk waste receptacles, privately owned dumpster, City planters, gutters or the street drainage system.

C. All grey water shall be disposed of at the dump station at the City park. No grey water shall be disposed of in any unapproved location such as the curb, gutter or anywhere else on public property.

**3-8-12: BASIS FOR PERMIT DENIAL; OR HALTING OF PARADE, PUBLIC ASSEMBLY OR BLOCK EVENT:**

A permit may be denied where the City Clerk determines, based upon probable cause from the police department or ACHD that the parade, public assembly, or block event would unreasonably

disrupt traffic, vehicular or pedestrian, or public services, or where there is substantial evidence that the applicant, the applicant's agents, or participants in the parade, public assembly, or block event intend to engage in violence. A parade, public assembly, or block event may be halted by the Chief of Police if at any time the participants fail to comply with the requirements of the permit or violate the law.

**3-8-13: REVOCATION OF PERMIT; NOTICE OF HEARING:**

Any violation of the provisions of this chapter or a violation of any local, state or federal law committed and connected to the use of the permit issued pursuant to this chapter shall be grounds for the city clerk to revoke the permit. If a permit is revoked, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

**3-8-14: UNLAWFUL CONDUCT:**

No temporary permit holder hereunder shall:

A. Fail to comply with any of the requirements and restrictions set forth in this chapter.

B. Misrepresent the purpose of, or affiliation of, those engaged in vending or make any false statement on the application.

**3-8-15: APPEAL FROM DENIAL OR REVOCATION OF A LICENSE:**

Any person aggrieved by any action of the city clerk according to the provisions of this chapter shall have a right to appeal pursuant to KCC 1-15-1.

**3-8-16: CRIMINAL CODE VIOLATIONS AND PENALTY:**

Any person, business, firm, company or corporation who shall violate any of the provisions of this chapter shall be punished according KCC 1-4-1.

**3-8-17: GRANT OF REGULATORY ADMINISTRATIVE POWERS AND AUTHORITY TO BE LIBERALLY CONSTRUED**

The grant of regulatory administrative powers and authority provided in this chapter to the city clerk and the other City of Kuna officials and agents; shall be liberally construed, as a broad and general grant of administrative powers and authority to the end that special events are authorized and conducted in a manner that protects the health, safety and welfare of persons and property within the boundaries of the City of Kuna. The enumeration of certain powers that for the free and efficient exercise of powers expressly granted in this Chapter.

**3-8-18: SEVERANCE CLAUSE:**

If any clause, sentence, paragraph, section, or any part of this chapter, shall be declared and adjudged to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect, invalidate, or nullify the remainder of this chapter.

**Section 2:** Directing the City Clerk

The City Clerk is directed to file, this Ordinance in the official records of the City and to provide the same to the City's codifier for inclusion and publication in the Kuna City Code as Chapter 8 of Title 3.

**Section 3:** Effective Date

This Ordinance shall take effect and be in force from and after its passage, approval, and publication as required by law and at the discretion of the City Clerk and in lieu of publication of the entire ordinance, a summary thereof in compliance with Section 50-901A, Idaho Code, may be published.

DATED this _____day of _____, 2020

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

**ORDINANCE NO. 2020-24**
**CITY OF KUNA**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:**

- **AMENDING CHAPTER 8, TITLE 3; AND**
- **PROVIDING FOR ADDITIONAL DEFINITIONS; AND**
- **MAKING TECHNICAL CHANGES; AND**
- **PROVIDING FOR SPECIAL EVENTS REGULATIONS AND PERMITS;**
- **AND PROVIDING FOR PARADE SPECIAL EVENT REGULATIONS AND PERMITS; AND**
- **PROVIDING FOR BLOCK EVENT REGULATIONS; AND**
- **PROVIDING FOR TECHNICAL CORRECTIONS TO THE ATTENDEE PROJECTION GOOD FAITH ESTIMATE SPECIAL APPLICATION REGULATIONS; AND**
- **PROVIDING FOR PERMIT DENIAL AND PROCEDURE; AND**
- **PROVIDING FOR LIBERAL CONSTRUCTION OF ADMINISTRATIVE REGULATORY POWERS AND AUTHORITY PROVIDED; AND**
- **DIRECTING THE CITY CLERK; AND**
- **PROVIDING AN EFFECTIVE DATE.**

**The Mayor and City Council make the following findings:**

1. That Article XII, Section 2 of the Idaho Constitution and Idaho Code Section 50-302 allow municipal corporations to adopt regulations which are not contrary to the general laws; and
2. Idaho Code Section 50-302 grants to cities the power to make ordinances to promote the health, safety and general welfare and provides for enforcement of such ordinances by criminal penalty; and
3. The Kuna City Council finds Special Events which are offered to the public that attract large gatherings of people which may cause adverse public health and safety conditions requiring municipal regulation to ensure adequate protection of public health and safety; and
4. Subsequent to the adoption of Chapter 8 of Title 3 Kuna City Code, Special Events Regulations, the City Council appointed a committee to review it, which committee completed its review and submitted its recommendations for amendments to said Chapter 8; and
5. It is therefore the intent of the Kuna City Council that Chapter 8 of Title 3 Kuna City Code be amended to further protect and promote the health, welfare and safety of the residents, property owners, and visitors to the City of Kuna, and to amend the regulations of Special Events for the benefit and protection of public health and safety; and
6. To provide that Special Event applicants, promoters and sponsors whose Special Events require the use of extraordinary City resources, as a result of their anticipated attendance or heightened security concerns, will pay for those extraordinary resources.
7. It is the further intent of the Kuna City Council that Chapter 8 of Title 3 Kuna City Code be construed liberally in favor of protecting and promoting the health, welfare and safety of the residents of and visitors to the City of Kuna.

**NOW, THEREFORE, BE IT ORDAINED** by the Mayor and City Council of the City of Kuna, Ada County, Idaho:

**Section 1:** Chapter 8 of Title 3, titled "Special Events" of the Kuna City Code be and the same is hereby amended to read as follows:

**CHAPTER 8 - SPECIAL EVENTS**

**SECTION:**

**3-8-1: - DEFINITIONS:**

As used in this chapter, each of the terms in all capital letters defined in this section shall have the meaning given in this section and include the plural form depending upon the context of the term in this Chapter.

*ACHD.* The Ada County Highway District organized and existing pursuant to chapter 14 of title 40 Idaho Code.

*APPLICANT:* Person making application to the City of Kuna for a special event permit to plan and operate a special event within the City of Kuna. As used herein, applicant also includes the terms promoter or sponsor and said terms may be used interchangeably.

*ATTENDEE PROJECTION*: The Applicant's estimated number of persons who are expected and/or reasonably likely to attend or participate in the special event.

*BLOCK EVENT*: A special event that requires the use of a street sponsored solely by persons who are owners, residents, or tenants of properties fronting the street and which special event requires the closure of the entire street, or a portion thereof, to vehicular traffic.

*CITY PROPERTY:* All property including the greenbelt that is owned, operated, leased or maintained by the City of Kuna.

*DEADLY WEAPON:* Includes the definition of "deadly weapon" as defined by Idaho Code §18-3302(2)(b).

*EXTRAORDINARY RESOURCES:* Any government, public health and safety personnel, equipment or other resources which would not, in the absence of the special event, be required or expended.

*INSURANCE:* A general liability policy and, if necessary, an automobile liability policy for each permitted event in the amount designated within this chapter written by an insurer authorized by the State of Idaho to write insurance policies, and continuously in force for the full term of the permit.

ORGANIZATION: An organized body of persons which has a written statement of organization identifying its purpose and defining its membership.

PARADE: Any organized dash, demonstration, march, marathon, meeting, motorcade, parade, procession, race, rally, gathering, or like activity consisting of persons, animals, or vehicles, or a combination thereof, upon the streets within the City that interferes with or has a potential to interfere with the normal flow or regulation of vehicular and or pedestrian use of a street or streets.

*PERMITTEE:* Person having received a City special event permit that is in full force and effect, and issued hereunder, to plan and operate a special event within the City of Kuna.

*PROHIBITED ACTIVITIES:* No sales of tobacco, tobacco product, item to ingest tobacco or other substance, including any paraphernalia, or any item depicting any nudity, sexual act or profanity shall be sold on any city property.

*PERSON*: Includes any natural person, legal entity under law and an organization.

*PUBLIC ASSEMBLY*: Any meeting, demonstration, rally, or gathering of more than twenty-five (25) persons for a common purpose that interferes with the normal flow or regulation of vehicular and or pedestrian use of a street or streets.

*SIDEWALK*: Any area or way set aside or open to the general public for purpose of pedestrian traffic use.

*STREET*: Any public highway that is a part of the ACHD 's Highway System or the State highway system.

*SPECIAL EVENT:* A gathering or event that is planned to occur on a day, consecutive days, or a recurring schedule that is expected to draw a gathering of persons where;

1. The event is held on a street or city property and/or
2. Alcohol available for consumption and a catering permit is required, and/or
3. A deadly weapon is available for sale or trade, excluding a private sale, and/or
4. The event requires a permit from any other jurisdiction or agency, such as ACHD or the fire district ~~department;~~ and/or
5. The event is of an entertainment, cultural, recreational, educational, or sporting nature.

Examples of special events include, by way of illustration and without limitation, public assembly, block events, concerts, dances, ~~assemblages,~~ parades, circuses, fairs, festivals, retail sales, community events, mass participation sports (such as, marathons and running events, bicycle races or tours, sports tournaments), other organized activity conducted for a common or collective use.

A special event does not include a gathering or event that is private and not open to the general public.

*SPECIAL EVENT APPLICATION FEES:* Special event a~~A~~pplication fees under this chapter as established and adopted by resolution of the Kuna City Council.

3-8-2: - SPECIAL EVENT PERMIT REQUIRED:

A. No person or entity shall hold any special event within the City, as defined by this chapter, without first obtaining a special event permit from the city clerk or the city clerk's designee and paying any application fees. The requirements for permitting under this chapter shall not apply to:

1. First Amendment events, where the expressive or associative activity being exercised is protected by the Idaho Constitution and the First and Fourteenth Amendments to the United States Constitution;

2. Funeral processions;

3. Spontaneous events for the purpose of expressive activity that occur in response to breaking or emerging news;

4. Lawful picketing on sidewalks;

5. School sponsored events for the benefit of the school on school property; ~~or~~unless weapons are offered for sale;

6. Church sponsored events for the benefit of the church held exclusively on church property; unless alcohol is available for consumption and a catering permit is required, excluding alcohol consumed during religious services, or a deadly weapon or weapons is/are offered for sale or as a prize, if the weapon is displayed during the event;

7. Public Events on private property, unless KCC 3-8-2(B) is applicable.

B. An event on private property shall require a special event permit if:

1. Alcohol is being served and a catering permit is required; and/or

2. Weapons are being offered for sale; and/or

3. Attendance is estimated to exceed five hundred (500) persons and the event has the potential to impact traffic, safety or public services as determined by the city clerk or other city department or pertinent agency.

C. In determining whether an event is exempt, no consideration shall be given to the content of any constitutionally-protected expression connected with the planned activity. No

permit shall be required under this chapter, nor any condition imposed on any permit, if requiring a permit or imposing the condition would violate rights protected by the Constitution of the United States or by the Constitution of the State of Idaho.

D. The Attendee Projection shall be provided and shall be based upon the type of special event, format, size, location, and history if annual or part of a series of special events.. ~~In determining the estimated attendance of a special event, all special events occurring during the event time period shall be used in the attendance calculation.~~

E. No fee, extraordinary resource cost, or insurance requirement shall be imposed when prohibited by the First and Fourteenth Amendments to the United States Constitution. Political or religious activity intended primarily for the communication or expression of ideas shall be presumed to be a constitutionally protected event. First Amendment events include those for the exercise of the right to speech, press, assembly and the right to petition, but does not include commercial advertising. Factors that may be considered in evaluating whether or not an event or an activity is constitutionally protected and therefore exempt include the nature of the event, the extent of commercial activity, the extent of any advertising or promotion of goods or services, the sales of food, goods, and services, any other business participation in the event, the use or application of any funds raised, and, if part of any annual tradition or series, previous events in the sequence.

F. Conditions of Special Event Permits for Parades, Public Assemblies, and Block Events on Streets and Sidewalks:

Special event permits for parades, public assemblies, and block events occurring on streets and/or sidewalks shall include conditions that:

1. Assure that emergency services such as police, fire, and ambulance services are available for a parade, public assembly, or block event taking place within the corporate limits of the City of Kuna;

2. Assure that emergency services such as police, fire, and ambulance services are not unreasonably inhibited in their ability to travel on and cross public streets and sidewalks by parades, public assemblies, or block events; at a minimum, an emergency access twenty feet (20') wide shall be required to all parts of the event;

3. Assure that business activities in the City are not unreasonably impacted by parades, public assemblies, or block events; and

4. Assure that traffic is not unreasonably disturbed by parades, public assemblies, or block events.

## 3-8-3: - PERMIT APPLICATION; FEES; INSURANCE AND INDEMNIFICATION:

A. All persons holding an event that requires a special event permit shall first obtain a special event application from the city clerk.

B. The completed special event permit application shall be submitted to the city clerk.

~~1.~~ The application for special event permit shall be submitted no later than twenty (20) days and no earlier than one (1) year prior to the date of commencement of the special event. Upon good cause shown, a late application may be submitted less than twenty (20) days prior to the event, however, in such a case, there is no guarantee that the permit will be issued.

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C. The application for a special event permit shall contain the required information as determined by the city clerk.

~~1.~~ Special events involving parades, public assemblies and block events applications ~~The information~~ shall include:

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1. ~~The name of the person or entity submitting the application;~~ The full name, street address, telephone number, e-mail address, and facsimile number, if any, of the person sponsoring the special event;

2. ~~The event dates;~~ The name, street address, telephone number, e-mail address, and facsimile number, if any, of the person with operational authority over the special event;

3. ~~Event times;~~ The date when the special event is to be conducted;

4. ~~Contact information;~~ The name of the special event, if any;

5. ~~Number of attendees;~~ The time the special event will begin to form, and the time the special event will begin to proceed;

6. ~~Event specifics to include but not limited to boundaries, vendor locations, seating areas, fenced areas, accommodations for disabled, traffic blockades, vehicle parking, unloading and loading locations, locations of portable restrooms and locations of alcohol areas;~~ The anticipated duration in hours and minutes of the special event;

7. ~~The estimated number of vendors and type of vending who will be operating at the special event. The applicant shall provide a list of actual vendors who are participating prior to the event;~~ The place the special event will form or be held;

8. ~~Any other relevant and necessary information as required by the city clerk.~~ The route or location of the special event;

9. The attendee projection, the maximum number who will be allowed to participate, and the estimated number of spectators;

10. The approximate number of animals, floats, automobiles, or other vehicles in the special event;

11. The place the special event will end and disband;

12. The prior special event history of the applicant and sponsor, including the number of permits previously applied for;

13. All drivers shall be required to be age 18 years or older and to provide proof of their valid motor vehicle driver's license

14. A public safety plan which shall include a detailed plan for controlling disorderly or violent conduct for public safety, maintaining traffic flow to commercial, other establishments, for sanitary and medical facilities, and for cleanup;

15. The information may be requested in the permit application form, through written instructions available from the City Clerk or by written or oral inquiries addressed to the applicant. The time for considering the permit shall be extended by the time taken by the applicant in responding satisfactorily to any inquiry. The required public safety plan, or parts thereof, may be waived by the Chief of Police, and/or their designees.

16. Any other relevant and necessary information as required by the city clerk.

D. The permit application fees shall be set by resolution of the Kuna City Council and published on the Kuna City Clerk fee schedule.

E. Upon submission of the completed application for the special event permit, the city clerk shall review the application for completeness. If any additional information is needed, the city clerk shall advise the applicant of the additional information that is required.

F. When the application is deemed complete, the applicant and the city clerk shall schedule a pre-permit issuance hearing if needed by the city clerk to review the information contained in the application. The city clerk, the city attorney, the Kuna Police Department, and any other party that the city clerk deems necessary, shall be responsible for reviewing the application.

~~1. At the pre-permit issuance meeting, the parties shall determine what requirements or conditions are necessary before the special event permit will be issued; the requirements to be considered, include but are not limited to:~~

~~a. A safety plan, as recommended by the Kuna City Police which may include:~~

~~(1) A transportation plan that will establish and define measures and means by which the applicant intends to accommodate the movement of people to, from, and around the event.~~

~~(2) Event security plan that provides for emergency and contingency plans to ensure that the event is conducted in a safe and secure manner.~~

~~b. Emergency personnel needed.~~

~~c. Any sanitary facilities, such as porta-potties and trash removal that may be required by local, state or federal regulation or law.~~

~~d. Any other condition or conditions, as recommended by the city or other governmental agency.~~

~~e. The amount of the special event fee to be charged.~~

~~f. Any damage deposits that may be required after reviewing the event plan.~~

G. Public safety plans for parades, public assemblies and block events shall be submitted and approved by Kuna Police Department and ACHD prior to and as a condition of the issuance of a permit. The public plan, as required by the Kuna City Police and/or the ACHD may include:

A transportation plan that will establish and define measures and means by which the applicant intends to accommodate the movement of people to, from, and around the special event.

~~G In addition to the application, separate licenses and/or permits and/or permissions may be required for the following;~~

~~1. Sale and/or consumption of alcoholic beverages on public or private property, as required by Idaho law, or the applicable laws, policies, and procedures of Kuna City Code. (Applications for events which provide for the sale and/or consumption of alcohol or alcoholic beverages may require a transportation plan to be submitted with the application).~~

~~2. Use of any portion of the public right-of-way (road, sidewalk or street parking area) requires a use permit, pursuant to by Idaho law, or the applicable laws, policies, and procedures of the Ada County Highway District, Idaho Transportation Department and/or Kuna City Code.~~

~~3. Any use permits that may be required.~~

~~4. Firework permits.~~

H. The applicant for any parade or block event must have a traffic control plan approved by the Kuna Police Department and Ada County Highway District and shall be solely responsible for obtaining, placing, and removing any required barricades or traffic control devices.

~~H. If the event is held on city property, applicants shall provide a copy of the comprehensive general liability insurance policy in the amount of one million dollars ($1,000,000.00) with the City of Kuna or Ada County Highway District (or both, depending upon the location of the special event) named as a certificate holder, and written by a company authorized to write insurance policies within the State of Idaho, and filed with the Kuna City Clerk's office. Applicants must also execute indemnification and hold harmless provisions contained within the application.~~

I. Approval by the Kuna Police Department of a transportation plan is subject to the availability of police officers of the city to properly police the special event without jeopardizing normal police protection of the city.

J. At the pre-permit issuance meeting, the parties shall determine what requirements or conditions are necessary before the special event permit will be issued; the requirements to be considered, include but are not limited to:

1. Event security plan that provides for emergency and contingency plans to ensure that the event is conducted in a safe and secure manner.

2. Emergency personnel needed.

3. Any sanitary facilities, such as porta-potties and trash removal that may be required by local, state or federal regulation or law.

4. Any other condition or conditions, as recommended by the City or other governmental agency.

5. The amount of the special event fee to be charged.

6. Any damage deposits that may be required after reviewing the event plan.

K. In addition to the application, separate licenses and/or permits and/or permissions may be required for the following;

1. Sale and/or consumption of alcoholic beverages on public or private property, as required by Idaho law, or the applicable laws, policies, and procedures of Kuna City Code. (Applications for events which provide for the sale and/or consumption of alcohol or alcoholic beverages may require a transportation plan to be submitted with the application).

2. Use of any portion of the public right-of-way (road, sidewalk or street parking area) requires a use permit, pursuant to Idaho law, or the applicable laws, policies, and procedures of the Ada County Highway District, Idaho Transportation Department and/or Kuna City Code.

3. Any use permits that may be required.

4. Firework permits.

L. If the event is held on City property, applicants shall provide a copy of the comprehensive general liability insurance policy in the amount of one million dollars ($1,000,000.00) with the City of Kuna or Ada County Highway District (or both, depending upon the location of the special event) named as a certificate holder, and written by a company authorized to write insurance policies within the State of Idaho, and filed with the Kuna City Clerk's Office. Applicants must also execute indemnification and hold harmless provisions contained within the application.

3-8-4: - ISSUANCE OF PERMIT; EXTRAORDINARY RESOURCES; CONDITIONS OF APPROVAL; GROUNDS FOR DENIAL:

A. Within ten (10) business days of the receipt of an application, the city clerk shall provide a written notice to the applicant for any additional items that may be required before the permit will be issued. The applicant has ten (10) business days to provide the additional requested information unless the city clerk and the applicant agree on the amount of additional time. Upon receipt of the items as specified by the city clerk, the city clerk shall within five (5) business days, either approve a permit with standard or special conditions, or a combination of each, or deny a permit.

B. An applicant, whose special event may require the use of extraordinary city resources as a result of anticipated attendance or increased security demands, shall be required to pay for those extraordinary resources, as determined by the city or affected agency prior to the event. If there is additional extraordinary expenses or damages, the applicant shall pay for the same within fifteen (15) days following the conclusion of the special event, and as condition of approval, the city may require a cash deposit, as a security for any additional extraordinary resources or damage.

C. Special event application may be denied or revoked if the city clerk determines:

1. The applicant has made any false material representation in the application;

2. The applicant fails to provide any of the items or information required by this chapter;

3. The applicant failed to pay for extraordinary resources or potential estimated damages attributable to the event as specified in subsection 3-8-4-B of this chapter or to pay costs

associated with extraordinary resources or damage to city property for a previously-permitted event.

4. The applicant failed to gain required licenses, permits, conditions, or permissions from the police department, fire department, central district health department, ACHD ~~Ada County Highway District,~~ City Planning and Zoning and/or City Clerk's Office.

5. The special event will substantially interfere with a special event where the other special event has applied for a special event permit and its fee and any other costs have been paid for in full.

D. The city clerk may condition the issuance of a special event permit by imposing reasonable requirements concerning the time, place, and manner of the event, and such requirements as are necessary to protect the safety and rights of persons and property, and the control of traffic as recommended by City staff or external agencies.

E. The following conditions apply to all special event permits:

1. The time, place and manner of the event proposed on the application may not be altered or modified;

2. The area of the event or the facility must be returned immediately to its original pre-event condition, reasonable wear and tear excluded, including:
   a. Removal and appropriate disposal of trash and/or recyclables generated by event activities and by the event's spectators and attendees in coordination with the city's designated trash service company;
   b. Removal of vehicles, equipment, portable toilets, and other support equipment which are used for the event; and
   c. Removal of facilities, cones, barricades, and markings along a route.

3. Special conditions as recommended by the City or other agencies.

F. If a special event permit is denied, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

3-8-5: PARADE SPECIAL EVENT REGULATIONS

A. Parade special event permits shall contain the following conditions:

1. Licenses. All drivers must be at least 18 years of age and shall be required to provide proof of a valid driver's license to operate a motor vehicle in the state of Idaho.

2. Debris removal. Following the conclusion of the parade, organizers shall plan or agree to pay the City for cleaning of debris left by participants or observers in the areas through which the parade passes.

3. Applicants shall identify on maps and in written documentation the locations for assembly and disassembly of participants. If loading docks, truck routes, or highways are impacted, the organizer shall notify affected businesses by certified mail at least 60 days prior to the event of such impact.

4. Throwing from floats. No candy, pamphlets, trinkets, or other items shall be tossed to viewers of parades from parade floats. Violation of this provision is cause for the Kuna City Police Department to ask the violator to pull out of the parade formation or halt the event.

B. The Kuna Police have the authority, when reasonably necessary, to prohibit or restrict the parking of vehicles along any street or part thereof constituting a part of the route of a parade.

3-8-~~5~~ 6: - REVOCATION OR SUSPENSION OF PERMIT:

The city clerk, with the approval of the city attorney, may summarily suspend or revoke a permit issued under this chapter for violation of any provision of this chapter; for violation by the applicant of any federal, state or local laws or ordinances during the special event; for a violation of the conditions of the permit; or for making any material false representation in an application for a permit or for an exemption certificate. In the event of a suspension or revocation, the appeal provisions shall apply, commencing upon the date of the suspension or revocation notice. If a permit is revoked or suspended, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

3-8-7: PUBLIC CONDUCT DURING PARADES:

A. Interference: It shall be unlawful for any person to interfere, block, obstruct or impede, or interfere with conduct of the Parade.

B. No person (except participants of the parade) shall drive any vehicle, walk, run, or ride a bicycle, skateboard or similar device between participants, vehicles or animals in a parade.

C. No person shall drop, throw or roll any object toward, among or between participants, vehicles or animals in a parade, which object could cause injury or damage to a person, animal or vehicle struck by such object.

D. No person shall grab at, take hold of, hit, pull or push any participant, vehicle or animal in a parade or anything in the possession of any participant in a parade.

3-8-8 BLOCK EVENT REGULATIONS:

Local streets not exceeding one City block or one intersection may be temporarily closed for block events provided that the following requirements are met:

A. At least two-thirds ($^2/_3$) of the area abutting the street or intersection to be closed is residentially zoned and the block event is consistent with purposes of the residential zoning district;

B. The applicant agrees to indemnify and hold harmless the City and its officers and employees from any and all claims, damages, or suits that may arise or in any way be occasioned by the granting of a special event permit for the block event; and

C. The applicant agrees to clean all debris and litter from the street and sidewalks within four (4) hours after the block event.

D. Proof of mailing of written notice to all abutting or adjacent property owners, as well as the property owners on the corner lots immediately across the intersection on the opposite side of the street closure, of the date, time and purpose of the block event and of the their right to file with the City Clerk a written objection to the block event 10 business days prior to the issuance of the special event permit..

E. The applicant for any block event must have an approved traffic control plan from Kuna Police Department and Ada County Highway District and shall be solely responsible for obtaining, placing, and removing any required barricades or traffic control devices.

3-8-~~6~~ 9: - PROHIBITIONS AND PENALTIES:

~~A.~~ It shall be unlawful for any person to:

A. ~~1.~~ Conduct, present, or stage a special event without a permit.

B. ~~2.~~ Violate any provision of this chapter.

C. ~~3.~~ Serve or cause to be served alcohol in violation of Idaho Code or Kuna City Code.

D. ~~4.~~ Violate any condition of a special event permit. A permittee may, by virtue of a lawful special event permit, utilize or allow performers to utilize sound amplification equipment that would otherwise violate City Code and/or state law.

E. ~~5.~~ Conduct an event that violates the approved use or is outside the permitted or licensed use of a premise, facility, or location.

3-8-~~7~~10: - ATTENDANCE AND PARTICIPANT GOOD FAITH ESTIMATE:

Attendee projections ~~the attendance~~ shall be a good faith estimate provided by the applicant, promoter, or sponsor which shall accompany the special event application. The applicant shall provide a short, written statement explaining the basis for the attendee projection.

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The statement shall include all the relevant factors known at the time, the price of admission and the extent of advertising and promotion contemplated.

3-8-~~8~~ 11: - SPECIAL EVENT PERMIT GENERAL RESTRICTIONS:

A. Vendors must keep the area of operation free of debris. Vendors selling food or beverages must provide trash receptacles and waste removal adjacent to or as a part of their operations. All spilled food, beverages, grease, or other trash or debris accumulating within twenty (20) feet of vending unit shall be cleaned and collected by the vendor and deposited in the vendor's trash receptacle.

B. The vendor is prohibited from depositing its waste, ice, and any grey or wastewater into sidewalk waste receptacles, privately owned dumpster, City planters, gutters or the street drainage system.

C. All grey water shall be disposed of at the dump station at the City park. No grey water shall be disposed of in any unapproved location such as the curb, gutter or anywhere else on public property.

3-8-12: BASIS FOR PERMIT DENIAL; OR HALTING OF PARADE, PUBLIC ASSEMBLY OR BLOCK EVENT:

A permit may be denied where the City Clerk determines, based upon probable cause from the police department or ACHD that the parade, public assembly, or block event would unreasonably disrupt traffic, vehicular or pedestrian, or public services, or where there is substantial evidence that the applicant, the applicant's agents, or participants in the parade, public assembly, or block event intend to engage in violence. A parade, public assembly, or block event may be halted by the Chief of Police if at any time the participants fail to comply with the requirements of the permit or violate the law.

3-8-~~9~~ 13: - REVOCATION OF PERMIT ~~LICENSE~~; NOTICE OF HEARING:

Any violation of the provisions of this chapter or a violation of any local, state or federal law committed and connected to the use of the permit issued pursuant to this chapter ~~license~~ shall be grounds for the city clerk to revoke the permit. If a permit is revoked, the applicant has the right to appeal to the Kuna City Council pursuant to KCC 1-15-1.

3-8-~~10~~ 14: - UNLAWFUL CONDUCT:

~~A.~~ No temporary permit holder hereunder shall:

A. ~~1.~~ Fail to comply with any of the requirements and restrictions set forth in this chapter.
B. ~~2.~~ Misrepresent the purpose of, or affiliation of, those engaged in ~~the~~ vending or make any false statement on the application;

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3-8-~~11~~ 15: - APPEAL FROM DENIAL OR REVOCATION OF A LICENSE:

Any person aggrieved by any action of the city clerk according to the provisions of this chapter shall have a right to appeal pursuant to KCC 1-15-1.

3-8-~~12~~ 16: - CRIMINAL CODE VIOLATIONS AND PENALTY:

Any person, business, firm, company or corporation who shall violate any of the provisions of this chapter shall be punished according KCC 1-4-1.

3-8-17 GRANT OF REGULATORY ADMINISTRATIVE POWERS AND AUTHORITY TO BE LIBERALLY CONSTRUED

The grant of regulatory administrative powers and authority provided in this chapter to the city clerk and the other City of Kuna officials and agents; shall be liberally construed, as a broad and general grant of administrative powers and authority to the end that special events are authorized and conducted in a manner that protects the health, safety and welfare of persons and property within the boundaries of the City of Kuna. The enumeration of certain powers that for the free and efficient exercise of powers expressly granted in this Chapter.

3-8-~~13~~ 18: - SEVERANCE CLAUSE:

If any clause, sentence, paragraph, section, or any part of this chapter, shall be declared and adjudged to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect, invalidate, or nullify the remainder of this chapter.

**Section 2:** Directing the City Clerk

The City Clerk is directed to file, this Ordinance in the official records of the City and to provide the same to the City's codifier for inclusion and publication in the Kuna City Code as Chapter 8 of Title 3.

**Section 3:** Effective Date

This Ordinance shall take effect and be in force from and after its passage, approval, and publication as required by law and at the discretion of the City Clerk and in lieu of publication of the entire ordinance, a summary thereof in compliance with Section 50-901A, Idaho Code, may be published.

DATED this _____day of _____, 2020

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

*(Space above reserved for recording)*

**ORDINANCE NO. 2020-25**
**CITY OF KUNA, IDAHO**

**ORDINANCE AMENDING THE EXTERIOR BOUNDARIES OF THE KUNA MUNICIPAL IRRIGATION SYSTEM [PATAGONIA DEVELOPMENT LLC. real property]**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF KUNA:**

- **MAKING CERTAIN FINDINGS; AND**
- **ENLARGING THE BOUNDARIES OF THE KUNA MUNICIPAL IRRIGATION SYSTEM BY THE INCLUSION OF ADA COUNTY ASSESSOR'S PATAGONIA DEVELOPMENT LLC.; AND**
- **DECLARING WATER RIGHTS APPURTENANT THERETO ARE POOLED FOR DELIVERY PURPOSES; AND**
- **DIRECTING THE CITY CLERK TO RECORD THIS ORDINANCE AS PROVIDED BY LAW; AND**
- **DIRECTING THE CITY ENGINEER TO PROVIDE NOTICE OF THIS ORDINANCE TO THE NEW YORK IRRIGATION DISTRICT, THE OWNERS AND UPDATE THE IRRIGATION SYSTEM MAP; AND**
- **PROVIDING AN EFFECTIVE DATE.**

**The City Council findings:** The City Council makes the following findings of its authority, purpose and the history of the enactment of this ordinance:

1.1 The City of Kuna has established and operates, as authorized by Title 50, Chapter 18, Idaho Code, a municipal irrigation system, known and referred to as *Kuna Municipal Irrigation System* (the "KMIS"); and

1.2 Commencing with the establishment of the KMIS and with every additional real property enlarging KMIS, the City Council has passed and enacted an ordinance pursuant to Idaho Code Section 50-1832 describing and enlarging the exterior boundaries of KMIS; and

1.3 It is the intention of the City Council to include that certain real property identified by the Ada County Assessor's office as PATAGONIA DEVELOPMENT LLC. [legally described in **Exhibit A** attached to this Ordinance and by this reference incorporated herein] (the "SUBJECT REAL PROPERTIES") within the boundaries of KMIS and which SUBJECT REAL PROPERTIES are depicted on the attached **Exhibit B** Location Map; and

1.4 It is therefore necessary as required by Idaho Code Section 50-1832 to approve and enact this Ordinance in order to include the Subject Real Properties within the boundaries of KMIS.

**NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF KUNA, Ada County, Idaho, as follows:**

Section 1: The boundaries of the Kuna Municipal Irrigation System are enlarged by the inclusion of the SUBJECT REAL PROPERTIES and the boundaries thereof are adjusted accordingly, said SUBJECT REAL PROPERTY being described as follows in **Exhibit A** attached hereto this Ordinance.

Section 2: Declaring the water rights appurtenant thereto are hereby pooled for delivery purposes.

Section 3: The City Clerk is hereby directed to record, in the office of the recorder for Ada County, a certified copy of this ordinance as required by Section 50-1832, Idaho Code.

Section 4: The City Engineer is hereby directed to give notice of this action by forwarding a certified copy of this Ordinance to New York Irrigation District, the owner of the SUBJECT REAL PROPERTIES and to update the official City map of the exterior boundaries of KMIS.

Section 5: Effective Date: This Ordinance shall take effect and be in force from and after its passage, approval, and publication as required by law.

DATED this 4th day of August 2020.

CITY OF KUNA

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

# EXHIBIT A

## LEGAL DESCRIPTION FOR WATER RIGHTS ON PATAGONIA DEVELOPMENT LLC. PATAGONIA ESTATES NO. 7

A parcel located in the S ½ of Section 7, Township 2 North, Range 1 East, Boise Meridian, City of Kuna, Ada County, Idaho, and more particularly described as follows:

Commencing at an Aluminum Cap monument marking the southeast corner of the SE ¼ of said Section 7, from which an Aluminum Cap monument marking the southwest corner of said SE ¼ of Section 7 bears N 89°25'45" W a distance of 2651.45 feet;

Thence N 89°25'45" W along the southerly boundary of said SE ¼ a distance of 1325.73 feet to a point marking the southeast corner of the SW ¼ of the SE ¼ of said Section 7;

Thence N 0°28'57" E along the easterly boundary of said SW ¼ of the SE ¼ and also partially along the easterly boundary of Patagonia Subdivision No. 2, as filed for record in Book 112 of Plats at Pages 16476 through 16480, records of Ada County, Idaho, and the future easterly boundary of Patagonia Subdivision No. 5 a distance of 686.50 feet to a point marking the northeasterly corner of said Patagonia Subdivision No. 5 and the **POINT OF BEGINNING**;

Thence along the northerly boundary of said Patagonia Subdivision No. 5 the following courses and distances:

Thence N 89°25'45" W a distance of 347.52 feet to a point;

Thence N 55°36'52" W a distance of 1296.86 feet to a point;

Thence N 34°33'52" E a distance of 125.97 feet to a point;

Thence S 55°26'08" E a distance of 40.83 feet to a point;

Thence N 34°33'52" E a distance of 69.00 feet to a point;

Thence continuing along said northerly boundary and the extension thereof N 34°23'08" E a distance of 175.04 feet to a point;

Thence leaving said northerly boundary extension S 89°19'11" E a distance of 921.19 feet to a point;

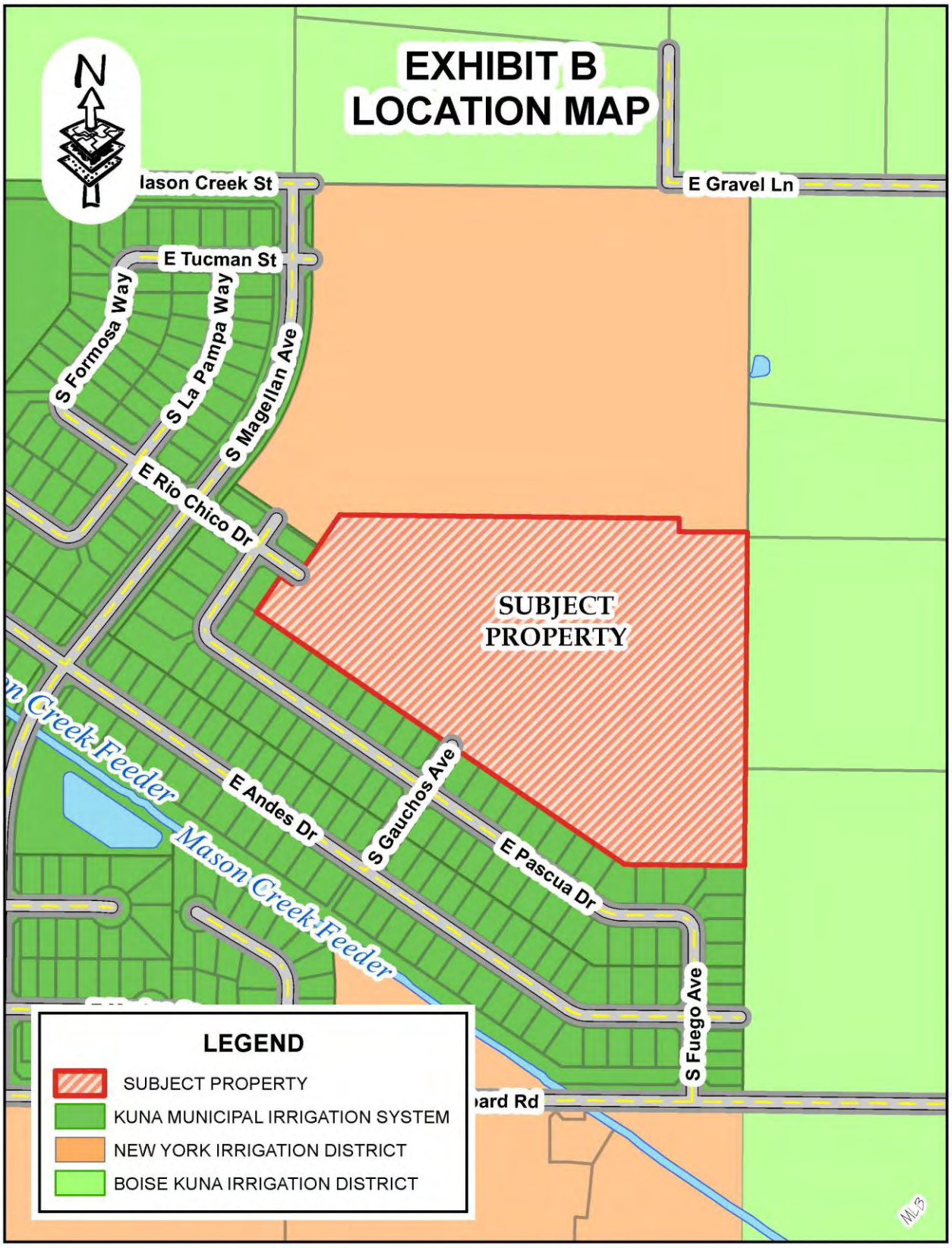
Thence S 89°31'03" E a distance of 64.00 feet to a point;

Thence S 0°28'57" W a distance of 38.91 feet to a point;

Thence S 89°31'03" E a distance of 198.00 feet to a point on the easterly boundary of the West ½ of the SE ¼ of said Section 7;

Thence along said easterly boundary S 0°28'57" W a distance of 965.71 feet to the **POINT OF BEGINNING.**

This parcel contains 22.92 acres.


EXHIBIT B
LOCATION MAP
N
lason Creek St
E Gravel Ln
E Tucman St
S Formosa Way
S La Pampa Way
S Magellan Ave
E Rio Chico Dr
SUBJECT PROPERTY
n Creek Feeder
Mason Creek Feeder
E Andes Dr
S Gauchos Ave
E Pascua Dr
S Fuego Ave
ard Rd
LEGEND
SUBJECT PROPERTY
KUNA MUNICIPAL IRRIGATION SYSTEM
NEW YORK IRRIGATION DISTRICT
BOISE KUNA IRRIGATION DISTRICT