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, June 16, 2020

6:00 P.M. REGULAR CITY COUNCIL

Under authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to social distancing protocol, the Council Chambers Audience Occupancy Capacity is 15.

Social Distancing will be required.

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 June 16, 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

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.

Oral – Via electronic call is allowed based on Governor Little's Open Meeting Law suspension proclamation of March 13, 2020.

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

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 June 2, 2020

B. Accounts Payable Dated June 11, 2020 in the amount of $953,694.45

C. Resolutions:

1. Resolution No. R32-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE STATEWIDE COPIER AND PRINTER CONTRACT LEASE AGREEMENT WITH VALLEY OFFICE SYSTEMS TO LEASE EQUIPMENT, AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT.

2. Resolution No. R33-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "AUTHORIZATION FOR ADDITIONAL SERVICES" FOR AN EAST KUNA ELIGIBILITY STUDY WITHIN THE "PROFESSIONAL SERVICES AGREEMENT" ESTABLISHED WITH JUB ENGINEERING, INC. FROM AUGUST 6, 2019 (RESOLUTION NO. R56-2019) FOR URBAN RENEWAL SERVICES; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT.

3. Resolution No. R34-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "PARK USE AGREEMENT" WITH THE IDAHO BLACK SOX ASSOCIATION, PURSUANT TO THE TERMS OF THE AGREEMENT; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND THE CITY CLERK TO ATTEST TO SAID SIGNATURE.

4. Resolution No. R35-2020

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE *"DEED OF PUBLIC UTILITIES EASEMENT, AND GRANTEE ACCEPTANCE KUNA MIDDLE SCHOOL EASEMENT"* FROM KUNA JOINT SCHOOL DISTRICT #3; AND AUTHORIZING THE MAYOR TO EXECUTE THE DEED EASEMENT.

5. External Reports or Requests:

City of Kuna 2019 Financial Audit Presentation and Consideration to approve Resolution No. R37-2020 – Cassie Zattiero, Bailey & Co. ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE CITY OF KUNA, IDAHO REPORT ON AUDITED BASIC FINANCIAL STATEMENTS AND OTHER INFORMATION FOR THE YEAR ENDED SEPTEMBER 30, 2019.

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.

Public Hearing 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.

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.

7. Business Items:

A. Urban Renewal District Update and Consideration to approve Resolution No. R36-2020 – Lisa Holland, Economic Development Director ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "*PROFESSIONAL SERVICES AGREEMENT*" WITH JUB ENGINEERING, INC. FACILITATING AN URBAN RENEWAL DISTRICT PLAN FOR THE KUNA URBAN RENEWAL AGENCY; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT AND THE CITY CLERK TO ATTEST TO SAID SIGNATURE.

B. *Informational Only* Budget Presentation – Jared Empey, City Treasurer

8. Ordinances: *None*

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, June 2, 2020

2:00 P.M. REGULAR CITY COUNCIL

Under authority of the Governor's partial Open Meeting Law Suspension Proclamation dated March 13, 2020, and due to social distancing protocol, the Council Chambers Audience Occupancy Capacity is 15.

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https://www.facebook.com/CityofKunaIdaho/

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

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 – Via Zoom
Council Member Warren Christensen - Via Zoom
Council Member Greg McPherson

CITY STAFF PRESENT:
Chris Engels, City Clerk
Bill Gigray, City Attorney
Bobby Withrow, Parks Director – Via Zoom
Bill Jackson, Deputy Treasurer
Doug Hanson, Planner I
Nathan Stanley, Deputy City Clerk

2. Invocation: *None*

3. Pledge of Allegiance: Mayor Stear

4. Consent Agenda: ALL OF THE LISTED CONSENT AGENDA ITEMS ARE ACTION ITEMS
(Timestamp 00:03:09)

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 May 19, 2020

B. Accounts Payable Dated May 28, 2020 in the amount of $270,712.40

C. Final Plats:
- ***1.*** Case No. 20-08-FP (Final Plat) for Cazador Subdivision No. 2
- ***2.*** Case No. 20-10-FP (Final Plat) for Red Cloud Subdivision No. 1

Council Member Cardoza had a question regarding a bill for integrated behavioral health.

Deputy Treasurer Bill Jackson explained it was an expense for payroll for an EAP, employee assistance program, the City paid out.

Council President Buban-Vonder Haar moved to approve the consent agenda. Seconded by Council Member Christensen. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

5. Community Reports or Requests: *None*

6. Public Hearings: *None*

7. Business Items:

A. Consideration to approve 20-01-LLA (Lot Line Adjustment) – Doug Hanson, Planner I
ACTION ITEM
(Timestamp 00:06:02)

B&A Engineers seeks Lot Line Adjustment approval. The subject properties, two parcels, located at W. Kuna Road and 2420 W. Kuna Road, Kuna ID 83634.

Planner I Doug Hanson presented the application and stood for questions.

David Crawford, B&A Engineers, 5505 W Franklin Road, Boise, Idaho 83705, wanted to let Council know they agreed with the conditions of approval as listed, respectfully requested approval, and stood for questions.

Council President Buban-Vonder Haar moved to approve 20-01-LLA. Seconded by Council Member McPherson. Motion carried 4-0.

B. Consideration to approve 20-02-LLA (Lot Line Adjustment) – Doug Hanson, Planner I ACTION ITEM
(Timestamp 00:09:03)

B&A Engineers seeks Lot Line Adjustment approval. The subject properties, two parcels, located at 1206 N. Black Cat Road, Kuna ID 83634.

Planner I Doug Hanson presented the application and stood for questions.

Council President Buban-Vonder Haar clarified this was for 1206 N. Black Cat Road.

Mr. Hanson had accidently mixed up his presentations. He confirmed 1206 N. Black Cat Road was the correct address for 20-02-LLA and 2420 W. Kuna Road was the correct address for 20-01-LLA. The agenda and the packet had the correct information. He apologized for the confusion.

Council President Buban-Vonder Haar moved to approve 20-02-LLA. Seconded by Council Member McPherson. Motion carried 4-0.

C. Consideration to approve Informed Consent to Representation – Bill Gigray, City Attorney ACTION ITEM
(Timestamp 00:14:53)

City Attorney Bill Gigray explained why this informed consent was needed. He represented the Kuna Rural Fire District as well as the City of Kuna and the following agenda item was for an agreement between the City of Kuna and the Kuna Rural Fire District. He reviewed the purpose of the following agreement and changes that had been made to it. He stood for questions and noted he felt it made more sense to address both items at the same time.

D. Consideration to approve Resolution No. R31-2020 – Bill Gigray, City Attorney ACTION ITEM

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KUNA:

- MAKING CERTAIN FINDINGS; AND
- APPROVING AND AUTHORIZING THE MAYOR AND CITY CLERK TO EXECUTE ON BEHALF OF THE CITY COUNCIL THAT CERTAIN AGREEMENT WITH THE KUNA RURAL FIRE DISTRICT ENTITLED "FIRST AMENDED AND REFORMED INTERGOVERNMENTAL AND JOINT

POWERS AGREEMENT FOR THE COLLECTION AND EXPENDITURE OF DEVELOPMENT IMPACT FEES FOR FIRE DISTRICT SYSTEM IMPROVEMENTS"; AND
- DIRECTING THE CITY CLERK; AND
- SETTING AN EFFECTIVE DATE.

Council President Buban-Vonder Haar moved to approve Resolution No. R31-2020. Seconded by Council Member McPherson. Motion carried 4-0.

E. Request to Confirm Appointment of Paul Stevens to the position of City of Kuna Public Works Director – Mayor Stear ACTION ITEM
(Timestamp 00:20:47)

Mayor Stear shared Bob Bachman moved on to other things. Paul Stevens had a good working knowledge of the City's Public Works Department and had had a hand in it for quite some time. Mr. Stevens had already made some steps in moving things around to the way he wanted to see them done and Mayor Stear was fully on board with the way he was doing things. Mr. Bachman was helping finish out the downtown project. Once that was taken care of, they would begin looking for a second engineer; probably someone fresh out of school that could learn from Mr. Stevens and move up from there. Mr. Bachman would come in at a later date so the City could thank him for his service. Mayor Stear asked that Council confirm Paul Stevens as the Kuna Public Works Director.

Council President Buban-Vonder Haar moved to confirm the appointment of Paul Stevens to the position of City of Kuna Public Works Director. Seconded by Council Member McPherson. Motion carried 4-0.

8. Ordinances:

A. Consideration to approve Ordinance No. 2020-20 ACTION ITEM
(Timestamp 00:23:16)

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 VIPER INVESTMENTS 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 BOISE~KUNA 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

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2020-20. Seconded by Council Member McPherson. Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2020-20. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

B. Consideration to approve Ordinance No. 2020-21 ACTION ITEM
(Timestamp 00:25:01)

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 SDN 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 BOISE~KUNA 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

Council President Buban-Vonder Haar moved to waive three readings of Ordinance No. 2020-21. Seconded by Council Member McPherson. Motion carried 4-0.

Council President Buban-Vonder Haar moved to approve Ordinance No. 2020-21. Seconded by Council Member McPherson. Approved by the following roll call vote:
Voting Aye: Council Members Cardoza, Christensen, Buban-Vonder Haar, and McPherson
Voting No: None
Absent: None
Motion carried 4-0.

9. Executive Session: *None*

10. Mayor/Council Announcements:

(Timestamp 00:26:42)

Council Member Christensen asked for an update on the Splash Pad.

Parks Director Bobby Withrow stated it had opened the day before so it was open and ready to go.

Council Member Christensen thanked Mr. Withrow.

Mayor Stear commented on the protests that had been occurring. There had been some protests at the Capital. Law enforcement had been watching that type of thing closely. He had been on a phone call with the Department of Justice and the FBI that morning. It sounded like they were just trying to keep everyone on the same page and were willing to offer whatever was necessary for anyone. He hadn't seen anything concerning in Kuna though and hoped it remained that way. For the most part he felt Kuna was staying safe and doing well. He stated again how proud he was to live in the City of Kuna.

11. Adjournment: **2:29 P.M.**

_____

Joe L. Stear, Mayor

ATTEST:

_____

Chris Engels, City Clerk

Minutes prepared by Ariana Welker, Deputy City Clerk
Date Approved: CCM 06.16.2020

City of Kuna | Payment Approval Report - City Council Approval | Page: 1
Report dates: 5/29/2020-6/11/2020 | Jun 11, 2020 10:14AM

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.	20168582-00	10141	SPRINKLER PARTS, M. MEADE, JUNE '20	06/05/2020	67.45	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 20168582-00:						67.45	.00					
Total 2M COMPANY, INC.:						67.45	.00					
A COMPANY, INC.												
1463	A COMPANY, INC.	114-10432342		ADA WHEELCHAIR ACCESSIBLE PORTABLE RESTROOM, WEEKLY SERVICE, 5/29-6/25/20 - BUTLER PARK	05/31/2020	199.80	.00	01-6212 RENT-EQUIPMENT	1004	6/20		
Total 114-10432342:						199.80	.00					
Total A COMPANY, INC.:						199.80	.00					
ABC STAMP, SIGNS & AWARDS												
277	ABC STAMP, SIGNS & AWARDS	0542918		6 NAME PLATES AND HOLDERS, ECONOMIC DEVELOPMENT, JUN.'20	06/08/2020	144.72	.00	01-6165 OFFICE SUPPLIES	4000	6/20		
Total 0542918:						144.72	.00					
Total ABC STAMP, SIGNS & AWARDS:						144.72	.00					
ADA COUNTY HIGHWAY DISTRICT (IMPACT)												
5	ADA COUNTY HIGHWAY DISTRICT (IMPACT)	05312020ACH		ACHD IMPACT FEES, MAY. '20	06/05/2020	196,995.00	196,995.00	01-2510 ACHD IMPACT FEE TRANSFER	0	6/20	06/05/2020	

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 05312020ACHDI:						196,995.00	196,995.00					
Total ADA COUNTY HIGHWAY DISTRICT (IMPACT):						196,995.00	196,995.00					
ADA COUNTY SHERIFF'S OFFICE												
6	ADA COUNTY SHERIFF'S OFFICE	069160		SHERIFF SERVICES FOR JUNE 2020	06/01/2020	208,449.56	.00	01-6000 LAW ENFORCEMENT SERVICES	0	6/20		
Total 069160:						208,449.56	.00					
Total ADA COUNTY SHERIFF'S OFFICE:						208,449.56	.00					
ADVANCED COMMUNICATIONS, INC.												
1566	ADVANCED COMMUNICATIONS, INC.	000010230601		INTERNET SERVICE AT THE PARKS OFFICE, 6/1-30/20	06/01/2020	164.75	.00	01-6290 UTILITIES	1004	6/20		
Total 0000102306012020:						164.75	.00					
Total ADVANCED COMMUNICATIONS, INC.:						164.75	.00					
ALLSTREAM BUSINESS US, INC												
1411	ALLSTREAM BUSINESS US, INC	16859508		TELEPHONE, DATA, AND NETWORK SERVICES FOR JUNE 2020 - ADMIN	06/01/2020	349.12	.00	01-6255 TELEPH0NE	0	6/20		
1411	ALLSTREAM BUSINESS US, INC	16859508		TELEPHONE, DATA, AND NETWORK SERVICES FOR JUNE 2020 - P & Z	06/01/2020	124.68	.00	01-6255 TELEPH0NE	1003	6/20		
1411	ALLSTREAM BUSINESS US, INC	16859508		TELEPHONE, DATA, AND NETWORK SERVICES FOR JUNE 2020 - WATER	06/01/2020	324.18	.00	20-6255 TELEPH0NE EXPENSE	0	6/20		
1411	ALLSTREAM BUSINESS US, INC	16859508		TELEPHONE, DATA, AND NETWORK SERVICES FOR JUNE 2020 - SEWER	06/01/2020	324.18	.00	21-6255 TELEPH0NE EXPENSE	0	6/20		
1411	ALLSTREAM BUSINESS US, INC	16859508		TELEPHONE, DATA, AND NETWORK SERVICES FOR JUNE 2020 - P.I	06/01/2020	124.68	.00	25-6255 TELEPH0NE EXPENSE	0	6/20		

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 16859508:						1,246.84	.00					
Total ALLSTREAM BUSINESS US, INC:						1,246.84	.00					
ANALYTICAL LABORATORIES												
1	ANALYTICAL LABORATORIES	72229		MONTHLY BACTERIA SAMPLES, MAY'20	05/31/2020	380.00	.00	20-6152 M & R - LABORATORY COSTS	0	6/20		
Total 72229:						380.00	.00					
1	ANALYTICAL LABORATORIES	72230		LAB TESTS, MAY'20	05/31/2020	2,595.40	.00	21-6152 M & R - LABORATORY COSTS	0	6/20		
Total 72230:						2,595.40	.00					
Total ANALYTICAL LABORATORIES:						2,975.40	.00					
AUMA ACTUATORS INC												
2021	AUMA ACTUATORS INC	6283130	10008	REPLACEMENT PARTS FOR VALVE ACTUATORS, MAY. 20	05/19/2020	2,018.64	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 6283130:						2,018.64	.00					
Total AUMA ACTUATORS INC:						2,018.64	.00					
BONNEVILLE BLUEPRINT SUPPLY, INC.												
1378	BONNEVILLE BLUEPRINT SUPPLY, INC.	65565/2	10002	12 ROLLS OF PRINTER PAPER, M.BORZICK, MAY'20	05/08/2020	41.16	.00	01-6165 OFFICE SUPPLIES	1003	6/20		
1378	BONNEVILLE BLUEPRINT SUPPLY, INC.	65565/2	10002	12 ROLLS OF PRINTER PAPER, M.BORZICK, MAY'20	05/08/2020	57.62	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1378	BONNEVILLE BLUEPRINT SUPPLY, INC.	65565/2	10002	12 ROLLS OF PRINTER PAPER, M.BORZICK, MAY'20	05/08/2020	57.62	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1378	BONNEVILLE BLUEPRINT SUPPLY, INC.	65565/2		12 ROLLS OF PRINTER PAPER, M.BORZICK, MAY'20	05/08/2020	8.24	.00	25-6165 OFFICE SUPPLIES	0	6/20		

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 65565/2:						164.64	.00					
1378	BONNEVILLE BLUEPRINT SUPPLY, INC.	66340/2	10122	16 ROLLS OF PRINTER PAPER, D.STEPHENS, JUN.'20	06/01/2020	219.52	.00	01-6165 OFFICE SUPPLIES	0	6/20		
Total 66340/2:						219.52	.00					
Total BONNEVILLE BLUEPRINT SUPPLY, INC.:						384.16	.00					
BUYWYZ LLC												
1795	BUYWYZ LLC	150799.1	9711	1 CASE DISINFECTING WIPES, D.STEPHENS, JUN.'20	06/05/2020	39.91	.00	01-6165 OFFICE SUPPLIES	1005	6/20		
1795	BUYWYZ LLC	150799.1	9711	24 BOTTLES HAND SANITIZER, J.REID, JUN.'20	06/05/2020	167.76	.00	01-6165 OFFICE SUPPLIES	1003	6/20		
Total 150799.1:						207.67	.00					
1795	BUYWYZ LLC	154137	10092	5" BINDER, D.STEPHENS, MAY'20	05/27/2020	17.75	.00	01-6165 OFFICE SUPPLIES	1005	6/20		
1795	BUYWYZ LLC	154137	10092	1 DOZEN PENS, T.FLEMING, MAY'20	05/27/2020	20.17	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1795	BUYWYZ LLC	154137	10092	1 ROLL SHIPPING TAPE, CITY HALL, MAY'20	05/27/2020	10.74	.00	01-6165 OFFICE SUPPLIES	0	6/20		
Total 154137:						48.66	.00					
1795	BUYWYZ LLC	154446	10139	1 OFFICE CHAIR, D.CROSSLEY, JUN.'20 - WATER	06/05/2020	98.02	.00	20-6175 SMALL TOOLS	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 OFFICE CHAIR, D.CROSSLEY, JUN.'20 - SEWER	06/05/2020	98.02	.00	21-6175 SMALL TOOLS	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 OFFICE CHAIR, D.CROSSLEY, JUN.'20 - P.I	06/05/2020	37.35	.00	25-6175 SMALL TOOLS	0	6/20		
1795	BUYWYZ LLC	154446	10139	2 SETS FILE DIVIDERS, JUN.'20	06/05/2020	2.20	.00	01-6165 OFFICE SUPPLIES	0	6/20		

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	154446	10139	1 EA ADDING MACHINE, N.STAUFFER, JUN.'20 - ADMIN	06/05/2020	13.97	.00	01-6165 OFFICE SUPPLIES	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 EA ADDING MACHINE, N.STAUFFER, JUN.'20 - WATER	06/05/2020	18.44	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 EA ADDING MACHINE, N.STAUFFER, JUN.'20 - SEWER	06/05/2020	18.44	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 EA ADDING MACHINE, N.STAUFFER, JUN.'20 - P.I	06/05/2020	5.02	.00	25-6165 OFFICE SUPPLIES	0	6/20		
1795	BUYWYZ LLC	154446	10139	1 PENCIL HOLDER AND 2 CASES COPY PAPER, J.REID, JUN.'20	06/05/2020	82.67	.00	01-6165 OFFICE SUPPLIES	1003	6/20		
Total 154446:						374.13	.00					
Total BUYWYZ LLC:						630.46	.00					
CAMPBELL TRACTOR & IMPLEMENT COMPANY												
135	CAMPBELL TRACTOR & IMPLEMENT COMPANY	N53166	10067	OIL AND AIR FILTERS FOR TRACTOR, DISC BLADES, R. WARWICK, MAY. '20	05/27/2020	549.40	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total N53166:						549.40	.00					
Total CAMPBELL TRACTOR & IMPLEMENT COMPANY:						549.40	.00					
CASELLE INC												
1239	CASELLE INC	102656		ADDITIONAL CASELLE LICENSE, CONTRACT SUPPORT AND MAINTENANCE, 7/1-31/2020	06/01/2020	50.00	.00	01-6045 C0NTINGENCY	1219	6/20		
1239	CASELLE INC	102656		CONTRACT SUPPORT AND MAINTENANCE FOR 7/1-31/20 - ADMIN	06/01/2020	606.80	.00	01-6052 CONTRACT SERVICES	0	6/20		
1239	CASELLE INC	102656		CONTRACT SUPPORT AND MAINTENANCE FOR 7/1-31/20 - WATER	06/01/2020	434.60	.00	20-6052 CONTRACT SERVICES	0	6/20		

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
1239	CASELLE INC	102656		CONTRACT SUPPORT AND MAINTENANCE FOR 7/1-31/20 - SEWER	06/01/2020	434.60	.00	21-6052 C0NTRACT SERVICES	0	6/20		
1239	CASELLE INC	102656		CONTRACT SUPPORT AND MAINTENANCE FOR 7/1-31/20 - P.I	06/01/2020	164.00	.00	25-6052 C0NTRACT SERVICES	0	6/20		
Total 102656:						1,690.00	.00					
Total CASELLE INC:						1,690.00	.00					
CITY OF BOISE												
571	CITY OF BOISE	394		APRIL-JUNE 2020 CONTRIBUTION FOR ALLUMBAUGH HOUSE	05/22/2020	3,219.74	.00	01-6070 D0NATI0NS EXPENSE	0	6/20		
Total 394:						3,219.74	.00					
Total CITY OF BOISE:						3,219.74	.00					
COASTLINE EQUIPMENT COMPANY												
1788	COASTLINE EQUIPMENT COMPANY	684428		CONTROL ARM REPAIR ON THE BACKHOE, B.WITHROW, APR.'20	04/16/2020	62.08	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		
Total 684428:						62.08	.00					
Total COASTLINE EQUIPMENT COMPANY:						62.08	.00					
CONRAD & BISCHOFF INC												
2020	CONRAD & BISCHOFF INC	733012A-IN	10095	1500 GALLONS UNLEADED GASOLINE, T.SHAFFER, MAY'20	05/28/2020	3,232.50	.00	21-6300 FUEL	0	6/20		
Total 733012A-IN:						3,232.50	.00					
Total CONRAD & BISCHOFF INC:						3,232.50	.00					
CORE & MAIN LP												

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
63	CORE & MAIN LP	M355267	10111	METER GASKETS, B.BURR, MAY. '20	05/29/2020	20.00	.00	20-6150 M & R - SYSTEM	0	6/20		
Total M355267:						20.00	.00					
63	CORE & MAIN LP	M415781	10091	6 INCH MJ PLUG FOR N. PALOMAR BACKFLOW, J. OSBORN, MAY '20	05/28/2020	45.94	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total M415781:						45.94	.00					
63	CORE & MAIN LP	M423957	10107	3" HYDRO METERS, T.FLEMING, MAY'20 - WATER	05/29/2020	1,463.00	.00	20-6150 M & R - SYSTEM	0	6/20		
Total M423957:						1,463.00	.00					
63	CORE & MAIN LP	M436687	10120	4 INCH METER GASKET, B.BURR, JUNE. '20	06/02/2020	5.59	.00	20-6150 M & R - SYSTEM	0	6/20		
Total M436687:						5.59	.00					
Total CORE & MAIN LP:						1,534.53	.00					
CUSTOM ELECTRIC, INC.												
147	CUSTOM ELECTRIC, INC.	8401	10108	MULTITUDE OF SERVICE AT CRIMSON POINT, SPRING HILL, SUTTERS MILL AND SADIE CREEK MAY'20	05/28/2020	765.00	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 8401:						765.00	.00					
147	CUSTOM ELECTRIC, INC.	8402	10109	INSTALLED OUTLETS AT THE WEST WELL, T.FLEMING, MAY'20	05/28/2020	950.00	.00	21-6090 FARM EXPENDITURES	0	6/20		
Total 8402:						950.00	.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
147	CUSTOM ELECTRIC, INC.	8407		REPLACE DISCONNECT & REWIRE ON BLOWER, T.SHAFFER, JUNE. 20	06/06/2020	1,658.61	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 8407:						1,658.61	.00					
Total CUSTOM ELECTRIC, INC.:						3,373.61	.00					
D & B SUPPLY												
75	D & B SUPPLY	13655	10118	TRIMMER LINE, J.OSBORN, MAY'20 - WATER	05/29/2020	39.99	.00	20-6150 M & R - SYSTEM	0	6/20		
75	D & B SUPPLY	13655	10118	TRIMMER LINE, J.OSBORN, MAY'20 - P.I	05/29/2020	10.00	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 13655:						49.99	.00					
75	D & B SUPPLY	17382	10104	WIRE STRIPPERS, M.MEADE, MAY'20	05/28/2020	16.99	.00	01-6175 SMALL TOOLS	1004	6/20		
Total 17382:						16.99	.00					
75	D & B SUPPLY	18532	10149	TREE FERTILIZER, M.MEADE, JUN.'20	06/08/2020	30.98	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 18532:						30.98	.00					
75	D & B SUPPLY	18559	10164	CHAINSAW BAR, S.HOWELL, JUN.'20	06/09/2020	38.99	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		
Total 18559:						38.99	.00					
75	D & B SUPPLY	26996	10137	8' LADDER, B.WITHROW, JUN.'20	06/03/2020	129.99	.00	01-6175 SMALL TOOLS	1004	6/20		

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 26996:						129.99	.00					
75	D & B SUPPLY	40923	10112	SPRAYER PARTS FOR THE FARM, R. WARWICK, MAY. '20	05/29/2020	41.13	.00	21-6090 FARM EXPENDITURES	0	6/20		
Total 40923:						41.13	.00					
Total D & B SUPPLY:						308.07	.00					
DIGLINE												
25	DIGLINE	0063476-IN		DIG FEES, MAY'20 - WATER	05/31/2020	399.02	.00	20-6065 DIG LINE EXPENSE	0	6/20		
25	DIGLINE	0063476-IN		DIG FEES, MAY'20 - SEWER	05/31/2020	399.02	.00	21-6065 DIG LINE EXPENSE	0	6/20		
25	DIGLINE	0063476-IN		DIG FEES, MAY'20 - P.I	05/31/2020	152.00	.00	25-6065 DIG LINE EXPENSE	0	6/20		
Total 0063476-IN:						950.04	.00					
Total DIGLINE:						950.04	.00					
DMH ENTERPRISES												
1745	DMH ENTERPRISES	05312020DMH		PLUMBING PERMITS, MAY. '20	06/05/2020	10,872.22	10,872.22	01-6052 CONTRACT SERVICES	1005	6/20	06/05/2020	
Total 05312020DMH:						10,872.22	10,872.22					
Total DMH ENTERPRISES:						10,872.22	10,872.22					
DUBOIS CHEMICALS INC												
512	DUBOIS CHEMICALS INC	IN-1978913	10079	ONE TOTE OF CHLORINE FOR THE WELLS, D. CROSSLEY, MAY '20	05/28/2020	751.06	.00	20-6151 M & R - PROCESS CHEMICALS	0	6/20		
Total IN-1978913:						751.06	.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 DUBOIS CHEMICALS INC:						751.06	.00					
DYKMAN ELECTRICAL, INC.												
1706	DYKMAN ELECTRICAL, INC.	0536074-IN	10123	MOTORS FOR THE CHEMROOM, M.NADEAU, JUN.'20	06/03/2020	536.00	.00	21-6150 M & R - SYSTEM	0	6/20		
Total 0536074-IN:						536.00	.00					
Total DYKMAN ELECTRICAL, INC.:						536.00	.00					
ELECTRICAL CONTROLS & INSTRUMENTATION												
1744	ELECTRICAL CONTROLS & INSTRUMENTATION	05312020		ELECTRICAL PERMITS, MAY. '20	06/05/2020	12,368.97	12,368.97	01-6052 CONTRACT SERVICES	1005	6/20	06/05/2020	
Total 05312020:						12,368.97	12,368.97					
Total ELECTRICAL CONTROLS & INSTRUMENTATION:						12,368.97	12,368.97					
FATBEAM LLC												
1831	FATBEAM LLC	12778		MONTHLY RECURRING CHARGE FOR CONNECT INTERNET SERVICE, JUNE 2020 - ADMIN	06/01/2020	95.00	.00	01-6052 CONTRACT SERVICES	0	6/20		
1831	FATBEAM LLC	12778		MONTHLY RECURRING CHARGE FOR CONNECT INTERNET SERVICE, JUNE 2020 - WATER	06/01/2020	65.00	.00	20-6052 CONTRACT SERVICES	0	6/20		
1831	FATBEAM LLC	12778		MONTHLY RECURRING CHARGE FOR CONNECT INTERNET SERVICE, JUNE 2020 - SEWER	06/01/2020	65.00	.00	21-6052 C0NTRACT SERVICES	0	6/20		
1831	FATBEAM LLC	12778		MONTHLY RECURRING CHARGE FOR CONNECT INTERNET SERVICE, JUNE 2020 - P.I	06/01/2020	25.00	.00	25-6052 C0NTRACT SERVICES	0	6/20		
Total 12778:						250.00	.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 FATBEAM LLC:						250.00	.00					
FERGUSON ENTERPRISES INC												
219	FERGUSON ENTERPRISES INC	0745343		1 EA CHECK VALVE, FOR THE WATER TOWER, MAY'20	05/26/2020	810.89	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 0745343:						810.89	.00					
219	FERGUSON ENTERPRISES INC	0746395		DANSKIN PUMPHOUSE, T. SHAFFER, MAY. '20	05/22/2020	800.00	.00	20-6150 M & R - SYSTEM	0	6/20		
Total 0746395:						800.00	.00					
219	FERGUSON ENTERPRISES INC	0746892	10102	6 INCH COUPLER, J MORFIN, MAY. '20	05/28/2020	189.65	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 0746892:						189.65	.00					
Total FERGUSON ENTERPRISES INC:						1,800.54	.00					
FLUID CONNECTOR PRODUCTS, INC.												
1083	FLUID CONNECTOR PRODUCTS, INC.	7580545	9889	HOSES, M.NADEAU, APR.'20	04/21/2020	432.26	432.26	21-6150 M & R - SYSTEM	0	6/20	06/05/2020	
Total 7580545:						432.26	432.26					
1083	FLUID CONNECTOR PRODUCTS, INC.	7609119	10105	HYDRAULIC HOSE CAPS, S. HOWELL, MAY. '20	05/28/2020	6.45	.00	01-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
1083	FLUID CONNECTOR PRODUCTS, INC.	7609119	10105	HYDRAULIC HOSE CAPS, S. HOWELL, MAY. '20	05/28/2020	2.58	.00	20-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
1083	FLUID CONNECTOR PRODUCTS, INC.	7609119	10105	HYDRAULIC HOSE CAPS, S. HOWELL, MAY. '20	05/28/2020	2.58	.00	21-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		

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
1083	FLUID CONNECTOR PRODUCTS, INC.	7609119	10105	HYDRAULIC HOSE CAPS, S. HOWELL, MAY. '20	05/28/2020	1.29	.00	25-6305 VEHICLE MAINTENANCE & REPAIR	0	6/20		
Total 7609119:						12.90	.00					
Total FLUID CONNECTOR PRODUCTS, INC.:						445.16	432.26					
FREUND PROPERTIES LLC												
2014	FREUND PROPERTIES LLC	1919		MARATHON AND GUARDIAN CONTRACT SERVICES W/UNLIMITED REMOTE AND ONSITE SUPPORT, MAY'20 - ADMIN	06/01/2020	1,134.30	.00	01-6045 C0NTINGENCY	1210	6/20		
2014	FREUND PROPERTIES LLC	1919		MARATHON AND GUARDIAN CONTRACT SERVICES W/UNLIMITED REMOTE AND ONSITE SUPPORT, MAY'20 - WATER	06/01/2020	776.10	.00	20-6045 C0NTINGENCY	1210	6/20		
2014	FREUND PROPERTIES LLC	1919		MARATHON AND GUARDIAN CONTRACT SERVICES W/UNLIMITED REMOTE AND ONSITE SUPPORT, MAY'20 - SEWER	06/01/2020	776.10	.00	21-6045 C0NTINGENCY	1210	6/20		
2014	FREUND PROPERTIES LLC	1919		MARATHON AND GUARDIAN CONTRACT SERVICES W/UNLIMITED REMOTE AND ONSITE SUPPORT, MAY'20 - P.I	06/01/2020	298.50	.00	25-6045 C0NTINGENCY FUND	1210	6/20		
Total 1919:						2,985.00	.00					
Total FREUND PROPERTIES LLC:						2,985.00	.00					
GLOBAL EQUIPMENT COMPANY INC												
1963	GLOBAL EQUIPMENT COMPANY INC	116052106	10133	2 EA NON-CONTACT THERMOMETERS, COVID19, J.MORFIN, JUN.'20	06/03/2020	185.42	.00	01-6175 SMALL TOOLS	1004	6/20		
Total 116052106:						185.42	.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 GLOBAL EQUIPMENT COMPANY INC:						185.42	.00					
IDAHO BUREAU OF OCCUPATIONAL LICENSES												
710	IDAHO BUREAU OF OCCUPATIONAL LICENSES	05292020MN		APPLICATION FEE FOR CLASS III & IV, WASTEWATER LICENSURE, M.NADEAU	05/29/2020	25.00	25.00	21-6265 TRAINING & SCH00LING EXPENSE	0	5/20	05/29/2020	
Total 05292020MN:						25.00	25.00					
Total IDAHO BUREAU OF OCCUPATIONAL LICENSES:						25.00	25.00					
IDAHO DEPARTMENT OF LABOR												
179	IDAHO DEPARTMENT OF LABOR	01/2020		QTR1/2020 UNEMPLOYMENT INSURANCE	06/05/2020	14.34	14.34	01-6280 UNEMPL0YMENT EXPENSES	0	6/20	06/10/2020	
Total 01/2020:						14.34	14.34					
Total IDAHO DEPARTMENT OF LABOR:						14.34	14.34					
IDAHO HUMANE SOCIETY												
833	IDAHO HUMANE SOCIETY	6/2020		ANIMAL CONTROL CONTRACT SERVICES FOR JUNE 2020	06/01/2020	9,281.75	.00	01-6005 ANIMAL CONTROL SERVICES	0	6/20		
Total 6/2020:						9,281.75	.00					
Total IDAHO HUMANE SOCIETY:						9,281.75	.00					
IDAHO POWER CO												
38	IDAHO POWER CO	05282020I		ELECTRIC SERVICE FOR MAY'20 - STREET LIGHTS	05/28/2020	1,155.51	.00	01-6290 UTILITIES	1002	6/20		
Total 05282020I:						1,155.51	.00					
Total IDAHO POWER CO:						1,155.51	.00					
IDAHO PRESS TRIBUNE, LLC												

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
1802	IDAHO PRESS TRIBUNE, LLC	1208674	10028	AD#2014041 & 2014085, LEGAL NOTICES, CITY IMPACT BOUNDARY AND FILE 20-01-0A, MAY'20	05/27/2020	321.60	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1208674	10058	AD#2015593, LEGAL NOTICE ORDINANCE 2020-17, MUNICIPAL ANNEXATION & ZONING, A. WELKER, MAY'20	05/27/2020	432.26	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1208674	10058	AD#2015597, LEGAL NOTICE, ORDINANCE 2020-18, REZONING, MAY'20	05/27/2020	221.52	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1208674	10058	AD#2015606, LEGAL NOTICE, ORDINANCE 2020-19, IRRIGATION BOUNDARY AMENDING, MAY'20	05/27/2020	309.88	.00	25-6125 LEGAL PUBLICATI0NS	0	6/20		
Total 1208674:						1,285.26	.00					
1802	IDAHO PRESS TRIBUNE, LLC	1209274	10077	AD# 2016849, LEGAL NOTICE, URBAN RENEWAL AGENCY MEETING DATES, N.STANLEY, MAY'20	06/03/2020	24.98	.00	01-6125 LEGAL PUBLICATI0NS	0	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1209274	10098	AD#2017588, LEGAL NOTICE, 20-01-SUP, IN HOME CHILD CARE, D.HANSON, MAY'20	06/03/2020	47.92	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1209274	10116	AD# 2017559, LEGAL NOTICE, FILE 19-08-ZC & 19-10-S, MAY'20	06/03/2020	59.76	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
1802	IDAHO PRESS TRIBUNE, LLC	1209274	10077	AD#2017546, LEGAL NOTICE, FILE #19-09-S, MAY'20	06/03/2020	60.50	.00	01-6125 LEGAL PUBLICATI0NS	1003	6/20		
Total 1209274:						193.16	.00					
Total IDAHO PRESS TRIBUNE, LLC:						1,478.42	.00					
IDAHO TOOL & EQUIPMENT, INC.												
1667	IDAHO TOOL & EQUIPMENT, INC.	1483573-0001-	10088	1 EA IMPACT DRILL, DRILL BITS, AND VICE, FOR THE FARM, R.WARWICK, MAY'20	05/27/2020	536.27	.00	21-6090 FARM EXPENDITURES	0	6/20		

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 1483573-0001-01:						536.27	.00					
Total IDAHO TOOL & EQUIPMENT, INC.:						536.27	.00					
INTEGRITY PUMP SOLUTIONS INC												
2032	INTEGRITY PUMP SOLUTIONS INC	FY20M5-004	10001	72 BUCKETS CALCIUM HYPOCHLORITE TABS, T. SHAFFER, MAY. '20	05/28/2020	7,560.00	.00	21-6151 M & R - PROCESS CHEMICALS	0	6/20		
Total FY20M5-004:						7,560.00	.00					
2032	INTEGRITY PUMP SOLUTIONS INC	FY20M5-005	10049	72 BUCKETS OF CALCIUM HYPOCHLORITE, T SHAFFER, MAY. '20	05/28/2020	7,560.00	.00	21-6151 M & R - PROCESS CHEMICALS	0	6/20		
Total FY20M5-005:						7,560.00	.00					
Total INTEGRITY PUMP SOLUTIONS INC:						15,120.00	.00					
INTERMOUNTAIN GAS CO												
37	INTERMOUNTAIN GAS CO	482135196042		NATURAL GAS CONSUMPTION AT SENIOR CENTER, 4/28-5/27/20	05/28/2020	121.61	121.61	01-6290 UTILITIES	1001	6/20	06/10/2020	
Total 482135196042805272020:						121.61	121.61					
37	INTERMOUNTAIN GAS CO	482327707042		NATURAL GAS CONSUMPTION AT THE ORCHARD PARKS OFFICE, 4/28-5/27/20	05/28/2020	9.40	9.40	01-6290 UTILITIES	1004	6/20	06/10/2020	
Total 482327707042805272020:						9.40	9.40					
37	INTERMOUNTAIN GAS CO	482634665042		NATURAL GAS CONSUMPTION AT CITY HALL, 4/28-5/27/20 - ADMIN	05/28/2020	35.27	35.27	01-6290 UTILITIES	0	6/20	06/10/2020	
37	INTERMOUNTAIN GAS CO	482634665042		NATURAL GAS CONSUMPTION AT CITY HALL, 4/28-5/27/20 - WATER	05/28/2020	24.13	24.13	20-6290 UTILITIES EXPENSE	0	6/20	06/10/2020	

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
37	INTERMOUNTAIN GAS CO	482634665042		NATURAL GAS CONSUMPTION AT CITY HALL, 4/28-5/27/20 - SEWER	05/28/2020	24.13	24.13	21-6290 UTILITIES EXPENSE	0	6/20	06/10/2020	
37	INTERMOUNTAIN GAS CO	482634665042		NATURAL GAS CONSUMPTION AT CITY HALL, 4/28-5/27/20 - P.I	05/28/2020	9.29	9.29	25-6290 UTILITIES EXPENSE	0	6/20	06/10/2020	
Total 482634665042805272020:						92.82	92.82					
Total INTERMOUNTAIN GAS CO:						223.83	223.83					
J & M SANITATION, INC.												
230	J & M SANITATION, INC.	05222020-052		SANITATION RECEIPT TRANSFER 05/22-05/28/20	05/29/2020	11,063.13	11,063.13	26-7000 SOLID WASTE SERVICE FEES	0	5/20	05/29/2020	
230	J & M SANITATION, INC.	05222020-052		SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES 05/22-05/28/2020	05/29/2020	-1,093.03	-1,093.03	01-4170 FRANCHISE FEES	0	5/20	05/29/2020	
Total 05222020-05282020:						9,970.10	9,970.10					
230	J & M SANITATION, INC.	05292020-060		SANITATION RECEIPT TRANSFER 05/29-062020	06/05/2020	30,586.75	30,586.75	26-7000 SOLID WASTE SERVICE FEES	0	6/20	06/05/2020	
230	J & M SANITATION, INC.	05292020-060		SANITATION RECEIPT TRANSFER LESS FRANCHISE FEES 05/29-062020	06/05/2020	-3,021.97	-3,021.97	01-4170 FRANCHISE FEES	0	6/20	06/05/2020	
Total 05292020-06042020:						27,564.78	27,564.78					
230	J & M SANITATION, INC.	06022020J		SLUDGE REMOVAL, MAY'20	06/02/2020	5,040.00	.00	21-6153 M & R - SLUDGE DISPOSAL	0	6/20		
Total 06022020J:						5,040.00	.00					
230	J & M SANITATION, INC.	06022020JMM		CONTAINER RENTAL, MAINTENANCE YARD, APR.'20 - ADMIN	06/02/2020	15.00	.00	01-6212 RENT-EQUIPMENT	1004	6/20		

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
230	J & M SANITATION, INC.	06022020JMM		CONTAINER RENTAL, MAINTENANCE YARD, APR.'20 - WATER	06/02/2020	6.00	.00	20-6212 RENT - EQUIPMENT	0	6/20		
230	J & M SANITATION, INC.	06022020JMM		CONTAINER RENTAL, MAINTENANCE YARD, APR.'20 - SEWER	06/02/2020	6.00	.00	21-6212 RENT-EQUIPMENT	0	6/20		
230	J & M SANITATION, INC.	06022020JMM		CONTAINER RENTAL, MAINTENANCE YARD, APR.'20 - P.I	06/02/2020	3.00	.00	25-6212 RENT - EQUIPMENT	0	6/20		
Total 06022020JMMY:						30.00	.00					
Total J & M SANITATION, INC.:						42,604.88	37,534.88					
J-U-B ENGINEERS, INC.												
1236	J-U-B ENGINEERS, INC.	0134161		PROFESSIONAL SERVICES FOR KUNA DOWNTOWN REVITALIZATION PHASE IIA & IIB, 3/29-5/2/20	05/22/2020	22,504.32	.00	03-6370 EXP. - DOWNTOWN REVITALIZATION	0	6/20		
Total 0134161:						22,504.32	.00					
1236	J-U-B ENGINEERS, INC.	0134200		PROFESSIONAL SERVICES FOR THE PARKS OFFICE PARKING LOT DESIGN, B. WITHROW, MAY'20	05/27/2020	5,175.75	.00	40-6020 CAPITAL IMPROVEMENTS	1173	6/20		
Total 0134200:						5,175.75	.00					
1236	J-U-B ENGINEERS, INC.	0134204		PROFESIONAL SERVICES FOR THE 4TH STREET REVITALIZATION CONCEPT PLAN, GRANT MATCHING, 3/29-5/2/20	05/27/2020	1,772.00	.00	40-6020 CAPITAL IMPROVEMENTS	1126	6/20		
Total 0134204:						1,772.00	.00					
1236	J-U-B ENGINEERS, INC.	0134371		PROFESSIONAL SERVICES FOR KUNA DOWNTOWN DESIGN STANDARDS, 3/29-5/2/20	05/31/2020	932.50	.00	01-6045 C0NTINGENCY	1221	6/20		

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 0134371:						932.50	.00					
1236	J-U-B ENGINEERS, INC.	0134372		PROFESSIONAL SERVICES FOR KUNA URD ELIGIBILITY STUDY, 3/29-5/2/20	05/31/2020	364.80	.00	40-6020 CAPITAL IMPROVEMENTS	1217	6/20		
Total 0134372:						364.80	.00					
1236	J-U-B ENGINEERS, INC.	0134373		PROFESSIONAL SERVICES FOR KUNA CDBG PHASE 2, FROM 3/29-5/2/20	05/31/2020	2,075.00	.00	03-6370 EXP. - DOWNTOWN REVITALIZATION	0	6/20		
Total 0134373:						2,075.00	.00					
Total J-U-B ENGINEERS, INC.:						32,824.37	.00					
K & L VENTURES												
1949	K & L VENTURES	2		SECOND SATURDAY CONCERT SERIES, ARTS COMMISSION, JUN.'20	06/13/2020	50.00	.00	01-6070 D0NATI0NS EXPENSE	0	6/20		
Total 2:						50.00	.00					
Total K & L VENTURES:						50.00	.00					
KNIFE RIVER CORPORATION - MOUNTAIN WEST												
1524	KNIFE RIVER CORPORATION - MOUNTAIN WEST	06052020KR		PROJECT CT-20143, MAIN STREET, AVENUE C TO AVENUE A	06/05/2020	289,314.19	.00	03-6370 EXP. - DOWNTOWN REVITALIZATION	0	6/20		
Total 06052020KR:						289,314.19	.00					
Total KNIFE RIVER CORPORATION - MOUNTAIN WEST:						289,314.19	.00					
KNK WATER TREATMENT LLC												
2036	KNK WATER TREATMENT LLC	2758		5 GALLONS HAND SANITIZER, FOR RANGER PROGRAM, JUN.'20	05/27/2020	184.97	.00	01-6265 TRAINING & SCH00LING	1086	6/20		

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 2758:					184.97	.00					
	Total KNK WATER TREATMENT LLC:					184.97	.00					
KODY NEWTON												
1956	KODY NEWTON	2205	10038	PARK PHOTOS FOR THE WEBSITE, C.ENGELS, MAY'20	05/27/2020	180.00	.00	01-6155 MEETINGS/COMMITTEES	1032	6/20		
1956	KODY NEWTON	2205	10038	PARK PHOTOS FOR THE WEBSITE, C.ENGELS, MAY'20	05/27/2020	8.00	.00	20-6155 MEETINGS/COMMITTEES	1032	6/20		
1956	KODY NEWTON	2205	10038	PARK PHOTOS FOR THE WEBSITE, C.ENGELS, MAY'20	05/27/2020	8.00	.00	21-6155 MEETINGS/COMMITTEES	1032	6/20		
1956	KODY NEWTON	2205	10038	PARK PHOTOS FOR THE WEBSITE, C.ENGELS, MAY'20	05/27/2020	4.00	.00	25-6155 MEETING/COMMITTEES	1032	6/20		
	Total 2205:					200.00	.00					
	Total KODY NEWTON:					200.00	.00					
KUNA LUMBER												
499	KUNA LUMBER	A114160	10119	DISC GOLF BUILDING ROOF REPAIR, B. WITHROW, MAY'20	05/29/2020	95.88	.00	01-6140 MAINT. & REPAIR BUILDING	1004	6/20		
499	KUNA LUMBER	A114160	10119	BULBS, STAIN, LAMINATE, PARTICLEBOARD, FOAM COVER, PRO CHAMFER, TREATMENT PLANT, MAY'20	05/29/2020	68.61	.00	20-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
499	KUNA LUMBER	A114160	10119	BULBS, STAIN, LAMINATE, PARTICLEBOARD, FOAM COVER, PRO CHAMFER, TREATMENT PLANT, MAY'20	05/29/2020	68.61	.00	21-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
499	KUNA LUMBER	A114160	10119	BULBS, STAIN, LAMINATE, PARTICLEBOARD, FOAM COVER, PRO CHAMFER, TREATMENT PLANT, MAY'20	05/29/2020	26.15	.00	25-6020 CAPITAL IMPR0VEMENTS	1209	6/20		

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
499	KUNA LUMBER	A114160	10119	BLACK FLEX TAPE, CITY HALL, MAY.'20	05/29/2020	4.61	.00	01-6140 MAINT. & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	BLACK FLEX TAPE, CITY HALL, MAY.'20	05/29/2020	3.15	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	SPONGE, WHT FLANGED TP, FUNNELS, BOWL BRUSH, FLEET SHOP, MAY. '20	05/29/2020	17.59	.00	01-6140 MAINT. & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	BLACK FLEX TAPE, CITY HALL, MAY.'20	05/29/2020	1.23	.00	25-6140 MAINT & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	BLACK FLEX TAPE, CITY HALL, MAY.'20	05/29/2020	3.15	.00	21-6140 MAINT & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	SPONGE, WHT FLANGED TP, FUNNELS, BOWL BRUSH, FLEET SHOP, MAY. '20	05/29/2020	7.03	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160	10119	SPONGE, WHT FLANGED TP, FUNNELS, BOWL BRUSH, FLEET SHOP, MAY. '20	05/29/2020	7.03	.00	21-6140 MAINT & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160		LED BULBS, TREATMENT PLANT, MAY '20	05/29/2020	11.74	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160		SPONGE, WHT FLANGED TP, FUNNELS, BOWL BRUSH, FLEET SHOP, MAY. '20	05/29/2020	3.54	.00	25-6140 MAINT & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160		LED BULBS, TREATMENT PLANT, MAY '20	05/29/2020	11.74	.00	21-6140 MAINT & REPAIR BUILDING	0	6/20		
499	KUNA LUMBER	A114160		LED BULBS, TREATMENT PLANT, MAY '20	05/29/2020	4.48	.00	25-6140 MAINT & REPAIR BUILDING	0	6/20		
Total A114160:						334.54	.00					
499	KUNA LUMBER	B138700	10025	WIRE MESH, J PEREZ, MAY. '20	05/13/2020	132.73	.00	21-6090 FARM EXPENDITURES	0	6/20		
Total B138700:						132.73	.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
499	KUNA LUMBER	B139254	10096	ELECTRIC ENGRAVER, R. WARWICK, MAY. '20	05/24/2020	22.49	.00	21-6175 SMALL TOOLS	0	6/20		
Total B139254:						22.49	.00					
499	KUNA LUMBER	B139299	10101	6 EA -1" ADAPTERS, J. WEBB, MAY. '20	05/28/2020	5.35	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total B139299:						5.35	.00					
499	KUNA LUMBER	B139305		STAIN FOR COVID SANITIZER STATIONS, B. WITHROW, MAY. '20	05/28/2020	35.09	.00	01-6140 MAINT. & REPAIR BUILDING	1004	6/20		
Total B139305:						35.09	.00					
499	KUNA LUMBER	B139351	10114	SUPER GLUE AND PICTURE WIRE, T.SHAFFER, MAY. '20	05/29/2020	9.88	.00	21-6165 OFFICE SUPPLIES	0	6/20		
Total B139351:						9.88	.00					
499	KUNA LUMBER	B139474	10124	HOSE BIB FOR PI FOR TOMORROW PUMP STATION, J. COX, JUNE. '20	06/01/2020	6.56	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total B139474:						6.56	.00					
499	KUNA LUMBER	B139484	10126	PVC NIPPLE, REDUCER BUSHINGS, CONNECT NEW MOTOR, CHEMICAL ROOM, M. NADEAU, JUNE. '20	06/01/2020	3.02	.00	21-6150 M & R - SYSTEM	0	6/20		
Total B139484:						3.02	.00					
499	KUNA LUMBER	B139841	10151	DANSKIN WELL ALARM BATTERY, J.WEBB, JUN.'20	06/08/2020	.63	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		

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 B139841:						.63	.00					
499	KUNA LUMBER	E9385	10145	4 KEYS, J. WEBB, JUNE '20	06/04/2020	1.33	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
499	KUNA LUMBER	E9385	10145	4 KEYS, J. WEBB, JUNE '20	06/04/2020	5.31	.00	20-6150 M & R - SYSTEM	0	6/20		
Total E9385:						6.64	.00					
Total KUNA LUMBER:						556.93	.00					
KUNA MACHINE LLC												
1775	KUNA MACHINE LLC	2729	10086	SNEEZE GUARD PLEXI GLASS SHIELD FOR ENTRY WAY, PARKS OFFICE BUILDING/COVID19, S. HOWELL, MAY '20	05/14/2020	532.00	.00	01-6140 MAINT. & REPAIR BUILDING	1004	6/20		
1775	KUNA MACHINE LLC	2729	10086	SHEET METAL FOR RODENT TRAP AT WELL #6, S. HOWELL, MAY '20	05/14/2020	226.40	.00	20-6150 M & R - SYSTEM	0	6/20		
Total 2729:						758.40	.00					
1775	KUNA MACHINE LLC	2764	10097	SNEEZE GUARD FABRICATION AND INSTALLATION, N.STANLEY, MAY'20	05/21/2020	3,231.90	.00	01-6160 MISCELLANE0US EXPENSES	0	6/20		
Total 2764:						3,231.90	.00					
Total KUNA MACHINE LLC:						3,990.30	.00					
KUNA RURAL FIRE DISTRICT (IMPACT)												
1944	KUNA RURAL FIRE DISTRICT (IMPACT)	05312020KRF		KUNA RURAL FIRE DISTRICT IMPACT FEES, MAY. '20	06/05/2020	53,560.00	53,560.00	01-2511 KRFD IMPACT FEE TRANSFER	0	6/20	06/10/2020	

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 05312020KRFDI:						53,560.00	53,560.00					
Total KUNA RURAL FIRE DISTRICT (IMPACT):						53,560.00	53,560.00					
KUNA RURAL FIRE DISTRICT (PLAN REVIEW)												
1945	KUNA RURAL FIRE DISTRICT (PLAN REVIEW)	05312020KRF		KUNA RURAL FIRE DISTRICT PLAN REVIEW FEES, MAY. '20	06/05/2020	73.05	73.05	01-2512 KRFD PLAN REVIEW FEE TRANSFER	0	6/20	06/10/2020	
Total 05312020KRFDPR:						73.05	73.05					
Total KUNA RURAL FIRE DISTRICT (PLAN REVIEW):						73.05	73.05					
LABCONCO CORPORATION												
2034	LABCONCO CORPORATION	690352	10072	GLASSWARE RACK FOR WASHER IN LAB, T.SHAFFER, MAY'20	05/27/2020	2,627.56	.00	21-6152 M & R - LABORATORY COSTS	0	6/20		
Total 690352:						2,627.56	.00					
Total LABCONCO CORPORATION:						2,627.56	.00					
LES SCHWAB TIRES												
221	LES SCHWAB TIRES	12800423844	10083	DISPOSING OLD TIRES FROM FLEET SHOP, S. HOWELL, MAY '20	05/27/2020	19.37	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	0	6/20		
221	LES SCHWAB TIRES	12800423844	10083	DISPOSING OLD TIRES FROM FLEET SHOP, S. HOWELL, MAY '20	05/27/2020	7.75	.00	20-6150 M & R - SYSTEM	0	6/20		
221	LES SCHWAB TIRES	12800423844	10083	DISPOSING OLD TIRES FROM FLEET SHOP, S. HOWELL, MAY '20	05/27/2020	7.75	.00	21-6150 M & R - SYSTEM	0	6/20		
221	LES SCHWAB TIRES	12800423844	10083	DISPOSING OLD TIRES FROM FLEET SHOP, S. HOWELL, MAY '20	05/27/2020	3.88	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 12800423844:						38.75	.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
221	LES SCHWAB TIRES	12800425199	10143	JOHN DEERE BACK HOE TIRE REPAIR, S. HOWELL, JUNE. 20	06/04/2020	100.49	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		
221	LES SCHWAB TIRES	12800425199	10143	JOHN DEERE BACK HOE TIRE REPAIR, S. HOWELL, JUNE. 20	06/04/2020	40.19	.00	20-6142 MAINT. & REPAIRS-EQUIPMENT	0	6/20		
221	LES SCHWAB TIRES	12800425199	10143	JOHN DEERE BACK HOE TIRE REPAIR, S. HOWELL, JUNE. 20	06/04/2020	40.19	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
221	LES SCHWAB TIRES	12800425199	10143	JOHN DEERE BACK HOE TIRE REPAIR, S. HOWELL, JUNE. 20	06/04/2020	20.11	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 12800425199:						200.98	.00					
Total LES SCHWAB TIRES:						239.73	.00					
LOCAHAN LLC												
1619	LOCAHAN LLC	AR851722		CONTRACT BASE RATE (6/3-7/2/20) AND CONTRACT OVERAGE CHARGES (5/3-6/2/20) FOR MODEL #MPC4504EX, SERIAL #C737M540938 & C737M540155, CITY HALL - ADMIN	06/03/2020	108.10	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	0	6/20		
1619	LOCAHAN LLC	AR851722		CONTRACT BASE RATE (6/3-7/2/20) AND CONTRACT OVERAGE CHARGES (5/3-6/2/20) FOR MODEL #MPC4504EX, SERIAL #C737M540938 & C737M540155, CITY HALL - P & Z	06/03/2020	38.60	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1003	6/20		
1619	LOCAHAN LLC	AR851722		CONTRACT BASE RATE (6/3-7/2/20) AND CONTRACT OVERAGE CHARGES (5/3-6/2/20) FOR MODEL #MPC4504EX, SERIAL #C737M540938 & C737M540155, CITY HALL - WATER	06/03/2020	100.38	.00	20-6142 MAINT. & REPAIRS-EQUIPMENT	0	6/20		
1619	LOCAHAN LLC	AR851722		CONTRACT BASE RATE (6/3-7/2/20) AND CONTRACT OVERAGE CHARGES								

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
				(5/3-6/2/20) FOR MODEL #MPC4504EX, SERIAL #C737M540938 & C737M540155, CITY HALL - SEWER	06/03/2020	100.38	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
1619	LOCAHAN LLC	AR851722		CONTRACT BASE RATE (6/3-7/2/20) AND CONTRACT OVERAGE CHARGES (5/3-6/2/20) FOR MODEL #MPC4504EX, SERIAL #C737M540938 & C737M540155, CITY HALL - P.I	06/03/2020	38.60	.00	25-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
	Total AR851722:					386.06	.00					
	Total LOCAHAN LLC:					386.06	.00					
MISCELLANEOUS VENDORS 2												
1849	MISCELLANEOUS VENDORS 2	05292020LH		REIMBURSEMENT OF MEALS AND PARKING FOR FEBRUARY & MARCH, L.HOLLAND	05/29/2020	350.74	.00	01-6155 MEETINGS/COMMITTEES	4000	6/20		
	Total 05292020LH:					350.74	.00					
	Total MISCELLANEOUS VENDORS 2:					350.74	.00					
NORCO, INC.												
222	NORCO, INC.	29355177	10084	CYLINDERS FOR THE FARM, R. WARWICK, MAY '20	05/27/2020	120.05	.00	21-6090 FARM EXPENDITURES	0	6/20		
	Total 29355177:					120.05	.00					
	Total NORCO, INC.:					120.05	.00					
PARTS, INC.												
470	PARTS, INC.	209233-1	9776	SHORTED ORIGINAL INVOICE, RAGS FOR THE SHOP, S.HOWELL, MAR.'20	03/18/2020	3.20	.00	21-6150 M & R - SYSTEM	0	6/20		
	Total 209233-1:					3.20	.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
470	PARTS, INC.	213296	10048	AC RECHARGE GAS FOR SEWER TRUCK #23, S. HOWELL, MAY '20	05/18/2020	30.48	.00	21-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
Total 213296:						30.48	.00					
470	PARTS, INC.	213442	10064	WIPER BLADES FOR TRUCK #25, WATER DEPT, S. HOWELL, MAY. '20	05/20/2020	23.56	.00	20-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
470	PARTS, INC.	213442	10064	WIPER BLADES FOR TRUCK #25, WATER DEPT, S. HOWELL, MAY. '20	05/20/2020	5.90	.00	25-6305 VEHICLE MAINTENANCE & REPAIR	0	6/20		
Total 213442:						29.46	.00					
470	PARTS, INC.	213748	10081	PART FOR TOOL, FLEET SHOP, S. HOWELL, MAY '20	05/26/2020	14.24	.00	01-6175 SMALL TOOLS	0	6/20		
470	PARTS, INC.	213748	10081	PART FOR TOOL, FLEET SHOP, S. HOWELL, MAY '20	05/26/2020	5.69	.00	20-6175 SMALL TOOLS	0	6/20		
470	PARTS, INC.	213748	10081	PART FOR TOOL, FLEET SHOP, S. HOWELL, MAY '20	05/26/2020	5.69	.00	21-6175 SMALL TOOLS	0	6/20		
470	PARTS, INC.	213748	10081	PART FOR TOOL, FLEET SHOP, S. HOWELL, MAY '20	05/26/2020	2.87	.00	25-6175 SMALL TOOLS	0	6/20		
Total 213748:						28.49	.00					
470	PARTS, INC.	213946		3 TON JACK STANDS, M. MEADE, MAY. 20	05/29/2020	29.99	.00	01-6175 SMALL TOOLS	1004	6/20		
Total 213946:						29.99	.00					
470	PARTS, INC.	214264	10138	3 TUBES OF MARINE GREASE FOR BELT PRESS, T. SHAFFER, JUNE '20	06/03/2020	24.69	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		

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 214264:						24.69	.00					
470	PARTS, INC.	214334	10142	TRAILER PLUG FOR MARSHALLS TRUCK, JUNE. '20	06/04/2020	60.68	.00	01-6305 VEHICLE MAINTENANCE & REPAIRS	1004	6/20		
Total 214334:						60.68	.00					
470	PARTS, INC.	214347	10144	GREASE FITTING FOR MOWER, B. VILLANUEVA, JUNE '20	06/04/2020	3.99	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		
Total 214347:						3.99	.00					
470	PARTS, INC.	214522	10148	BATTERY FOR WATER TRUCK, S.HOWELL, JUNE.'20	06/08/2020	120.79	.00	20-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
470	PARTS, INC.	214522	10148	BATTERY FOR WATER TRUCK, S.HOWELL, JUNE.'20	06/08/2020	30.20	.00	25-6305 VEHICLE MAINTENANCE & REPAIR	0	6/20		
Total 214522:						150.99	.00					
470	PARTS, INC.	214530		CORE DEPOSIT REFUND, INV #214522, JUNE. '20	06/08/2020	-14.40	.00	20-6305 VEHICLE MAINTENANCE & REPAIRS	0	6/20		
470	PARTS, INC.	214530		CORE DEPOSIT REFUND, INV #214522, JUNE. '20	06/08/2020	-3.60	.00	25-6305 VEHICLE MAINTENANCE & REPAIR	0	6/20		
Total 214530:						-18.00	.00					
Total PARTS, INC.:						343.97	.00					
RAIN FOR RENT												
144	RAIN FOR RENT	1491151	10082	WHEEL LINE HOODS FOR THE MOTORS FOR THE FARM, R. WARWICK, MAY. '20	05/27/2020	555.00	.00	21-6090 FARM EXPENDITURES	0	6/20		

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 1491151:						555.00	.00					
Total RAIN FOR RENT:						555.00	.00					
RANDY DUCKER												
2039	RANDY DUCKER	06082020RD		REMOVAL OF 2 TREES AND STUMPS, SENIOR CENTER, JUN.'20	06/08/2020	2,000.00	.00	01-6140 MAINT. & REPAIR BUILDING	1001	6/20		
Total 06082020RD:						2,000.00	.00					
Total RANDY DUCKER:						2,000.00	.00					
RICOH USA, INC. (MAINTENANCE)												
1422	RICOH USA, INC. (MAINTENANCE)	5059703411		COPY COUNTS FOR COPIER AT PARKS OFFICE, MODEL #IMC2000, SERIAL #C86262110, 5/1-31/20	06/01/2020	24.18	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		
Total 5059703411:						24.18	.00					
Total RICOH USA, INC. (MAINTENANCE):						24.18	.00					
RIMI INC												
1991	RIMI INC	05312020RIMI		COMMERCIAL MECHANICAL PERMIT FEES, MAY. '20	06/05/2020	2,586.20	2,586.20	01-6052 CONTRACT SERVICES	1005	6/20	06/05/2020	
Total 05312020RIMI:						2,586.20	2,586.20					
Total RIMI INC:						2,586.20	2,586.20					
SPECIALTY PLASTICS & FABRICATI, INC.												
1477	SPECIALTY PLASTICS & FABRICATI, INC.	77698	10015	VALVES TO REPAIR THE CHLORINE PIPE IN THE PROCESS BUILDING, T.SHAFFER, MAY'20	05/26/2020	819.89	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		

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 77698:						819.89	.00					
Total SPECIALTY PLASTICS & FABRICATI, INC.:						819.89	.00					
TECHNOLOGY SOLUTIONS LLC												
1823	TECHNOLOGY SOLUTIONS LLC	3972		RESET INSTALLER CODE ON HONEYWELL ALARM PANEL, CITY HALL, MAY'20 - ADMIN	05/29/2020	32.30	.00	01-6140 MAINT. & REPAIR BUILDING	0	6/20		
1823	TECHNOLOGY SOLUTIONS LLC	3972		RESET INSTALLER CODE ON HONEYWELL ALARM PANEL, CITY HALL, MAY'20 - WATER	05/29/2020	22.10	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		
1823	TECHNOLOGY SOLUTIONS LLC	3972		RESET INSTALLER CODE ON HONEYWELL ALARM PANEL, CITY HALL, MAY'20 - SEWER	05/29/2020	22.10	.00	21-6140 MAINT & REPAIR BUILDING	0	6/20		
1823	TECHNOLOGY SOLUTIONS LLC	3972		RESET INSTALLER CODE ON HONEYWELL ALARM PANEL, CITY HALL, MAY'20 - P.I	05/29/2020	8.50	.00	25-6140 MAINT & REPAIR BUILDING	0	6/20		
1823	TECHNOLOGY SOLUTIONS LLC	3972		WORK ON SPLASH PAD CAMERA AND RECORDER, MAY'20	05/29/2020	170.00	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 3972:						255.00	.00					
Total TECHNOLOGY SOLUTIONS LLC:						255.00	.00					
THE JORDEL COMPANY												
1523	THE JORDEL COMPANY	00000004750	9987	ROUGH ELECTRICAL PASSES, CORRECTION NOTICES, D. STEPHENS, MAY. '20	05/06/2020	187.50	.00	01-6165 OFFICE SUPPLIES	1005	6/20		
Total 00000004750:						187.50	.00					
Total THE JORDEL COMPANY:						187.50	.00					
TREASURE VALLEY COFFEE												
992	TREASURE VALLEY COFFEE	2160:06742433	10106	5 EA 5 GALLON WATER BOTTLES, CUPS, COFFEE, MAY. '20	05/28/2020	39.96	.00	20-6165 0FFICE SUPPLIES	0	6/20		

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
992	TREASURE VALLEY COFFEE	2160:06742433	10106	5 EA 5 GALLON WATER BOTTLES, CUPS, COFFEE, MAY. '20	05/28/2020	39.96	.00	21-6165 OFFICE SUPPLIES	0	6/20		
992	TREASURE VALLEY COFFEE	2160:06742433		5 EA 5 GALLON WATER BOTTLES, CUPS, COFFEE, MAY. '20	05/28/2020	15.23	.00	25-6165 OFFICE SUPPLIES	0	6/20		
Total 2160:06742433:						95.15	.00					
992	TREASURE VALLEY COFFEE	2160:06755869	10146	4 EA 5 GALLON WATER BOTTLES, JUNE. '20	06/05/2020	22.80	.00	01-6165 OFFICE SUPPLIES	1004	6/20		
Total 2160:06755869:						22.80	.00					
992	TREASURE VALLEY COFFEE	2160:06755917	10146	5 EA 5 GALLON WATER BOTTLES, JUNE. '20	06/05/2020	28.50	.00	01-6165 OFFICE SUPPLIES	0	6/20		
Total 2160:06755917:						28.50	.00					
992	TREASURE VALLEY COFFEE	2160:06755929	10146	2 EA 5 GALLON WATER BOTTLES, JUNE. '20	06/05/2020	11.40	.00	01-6165 OFFICE SUPPLIES	1004	6/20		
Total 2160:06755929:						11.40	.00					
992	TREASURE VALLEY COFFEE	59687	10157	GLOVES, SANITIZING WIPES, MASKS FOR COVID, J. LORENTZ, JUNE '20	06/09/2020	620.19	.00	01-6025 JANITORIAL	1004	6/20		
Total 59687:						620.19	.00					
Total TREASURE VALLEY COFFEE:						778.04	.00					
TURF EQUIPMENT & IRRIGATION INC												
1969	TURF EQUIPMENT & IRRIGATION INC	759392.00		PARTS FOR REPAIRS ON THE JACOBSON MOWER, M.MEADE, APR.'20	04/09/2020	4,211.00	.00	01-6142 MAINT. & REPAIR - EQUIPMENT	1004	6/20		

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 759392.00:						4,211.00	.00					
Total TURF EQUIPMENT & IRRIGATION INC:						4,211.00	.00					
U.S. BANK (VISA)												
1444	U.S. BANK (VISA)	064101270935		DROPBOX, SUBSCRIPTION/MEMBERSHIP, 3 LICENSES, M.BORZICK, MAY'20 - WATER	05/06/2020	189.00	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	064101270935		DROPBOX, SUBSCRIPTION/MEMBERSHIP, 3 LICENSES, M.BORZICK, MAY'20 - SEWER	05/06/2020	189.00	.00	21-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	064101270935		DROPBOX, SUBSCRIPTION/MEMBERSHIP, 3 LICENSES, M.BORZICK, MAY'20 - P.I	05/06/2020	72.00	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		
Total 06410127093565286084:						450.00	.00					
1444	U.S. BANK (VISA)	104301290101		THE HOME DEPOT, RADON SEAL FOR CITY HALL EXPANSION, MAY'20	05/07/2020	199.00	.00	01-6045 C0NTINGENCY	1220	6/20		
Total 10430129010192628234:						199.00	.00					
1444	U.S. BANK (VISA)	107301252069		CONDOR USA, PRESSURE SWITCHES FOR THE AIR COMPRESSORS IN THE PROCESS BUILDING, T.SHAFFER, MAY'20	05/04/2020	89.05	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 10730125206911100023:						89.05	.00					
1444	U.S. BANK (VISA)	170501417314	10055	SPORTSMANS WAREHOUSE, TRAIL CAMS AND LOCK FOR PARKS, J. LORENTZ, MAY '20	05/19/2020	272.97	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		

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 17050141731418098751:						272.97	.00					
1444	U.S. BANK (VISA)	215701228104		FLEXIBLE ASSEMBLY SYSTEMS, 2 EA PUMP SOLENOIDS, T.SHAFFER, JUN.'20	04/30/2020	111.60	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 21570122810499473149:						111.60	.00					
1444	U.S. BANK (VISA)	263801414000	10055	WALMART, TOTE AND BATTERIES FOR CPR EQUIPMENT, J.LORENTZ, JUN.'20	05/19/2020	50.20	.00	01-6265 TRAINING & SCH00LING	1004	6/20		
1444	U.S. BANK (VISA)	263801414000	10055	WALMART, SD CARDS AND BATTERIES FOR TRAIL CAMS, J.LORENTZ, JUN.'20	05/19/2020	69.20	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
1444	U.S. BANK (VISA)	263801414000	10055	WALMART, WALL CLOCK, DOCUMENT FRAMES, AND CARD READER, J.LORENTZ, MAY'20	05/19/2020	31.07	.00	01-6165 OFFICE SUPPLIES	1004	6/20		
Total 26380141400004904724:						150.47	.00					
1444	U.S. BANK (VISA)	273301227202		RIDLEYS, DISHSOAP AND LAUNDRY SOAP FOR THE TREATMENT PLANT, MAY'20 - WATER	05/01/2020	6.87	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	273301227202		RIDLEYS, DISHSOAP AND LAUNDRY SOAP FOR THE TREATMENT PLANT, MAY'20 - SEWER	05/01/2020	6.87	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	273301227202		RIDLEYS, DISHSOAP AND LAUNDRY SOAP FOR THE TREATMENT PLANT, MAY'20 - P.I	05/01/2020	2.62	.00	25-6165 OFFICE SUPPLIES	0	6/20		
Total 27330122720202826386:						16.36	.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
1444	U.S. BANK (VISA)	310601300267		ADOBE CREATIVE CLOUD, SUBSCRIPTION RENEWAL, L.HOLLAND, MAY'20	05/09/2020	599.88	.00	01-6075 DUES & MEMBERSHIPS	4000	6/20		
Total 31060130026786774704:						599.88	.00					
1444	U.S. BANK (VISA)	310601370833	9913	AMAZON.COM, DEPARTURE GIFT FOR B.BACHMAN, MAY'20	05/16/2020	9.58	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1005	6/20		
1444	U.S. BANK (VISA)	310601370833	9913	AMAZON.COM, DEPARTURE GIFT FOR B.BACHMAN, MAY'20	05/16/2020	8.99	.00	20-6150 M & R - SYSTEM	0	6/20		
1444	U.S. BANK (VISA)	310601370833	9913	AMAZON.COM, DEPARTURE GIFT FOR B.BACHMAN, MAY'20	05/16/2020	8.99	.00	21-6150 M & R - SYSTEM	0	6/20		
1444	U.S. BANK (VISA)	310601370833	9913	AMAZON.COM, DEPARTURE GIFT FOR B.BACHMAN, MAY'20	05/16/2020	2.39	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 31060137083329346840:						29.95	.00					
1444	U.S. BANK (VISA)	310601400268		IDAHO GOV STATE OF ID, ID STATE BOARD OF ACCOUNTANCY, ISBA RENEWAL, J.EMPEY, MAY'20 - ADMIN	05/19/2020	30.00	.00	01-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	310601400268		IDAHO GOV STATE OF ID, ID STATE BOARD OF ACCOUNTANCY, ISBA RENEWAL, J.EMPEY, MAY'20 - WATER	05/19/2020	39.60	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	310601400268		IDAHO GOV STATE OF ID, ID STATE BOARD OF ACCOUNTANCY, ISBA RENEWAL, J.EMPEY, MAY'20 - SEWER	05/19/2020	39.60	.00	21-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	310601400268		IDAHO GOV STATE OF ID, ID STATE BOARD OF ACCOUNTANCY, ISBA RENEWAL, J.EMPEY, MAY'20 - P.I	05/19/2020	10.80	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		

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 31060140026848542956:						120.00	.00					
1444	U.S. BANK (VISA)	316801210277	9949	CAB STORE BOISE, DIGITAL SCALE FOR CALIBRATE SPRAYER/SPREADER, J. LORENTZ, APRIL. '20	04/29/2020	69.99	.00	01-6175 SMALL TOOLS	1004	6/20		
Total 31680121027741380452:						69.99	.00					
1444	U.S. BANK (VISA)	316801214000	9948	HARBOR FREIGHT, RUBBER GLOVES, J. LORENTZ, APRIL. '20	04/29/2020	21.18	.00	01-6230 SAFETY TRAINING & EQUIPMENT	1004	6/20		
Total 31680121400044997290:						21.18	.00					
1444	U.S. BANK (VISA)	316801420140	10069	DISCOUNT MUGS.COM, FOR RANGERS, STRESS BALLS, FLYING DISCS, SUNSCREEN, COOL DOWN TOWELS, J. LORENTZ, MAY .'20	05/21/2020	998.37	.00	01-6265 TRAINING & SCH00LING	1086	6/20		
Total 31680142014000451385:						998.37	.00					
1444	U.S. BANK (VISA)	330901344005	10017	IBOL, LICENSE RENEWAL FOR M.DAVILA, MAY'20 - WATER	05/13/2020	25.00	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901344005	10017	IBOL, LICENSE RENEWAL FOR M.DAVILA, MAY'20 - P.I	05/13/2020	5.00	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		
Total 33090134400543005884:						30.00	.00					
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - WATER	05/18/2020	12.60	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - SEWER	05/18/2020	12.60	.00	21-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - P.I	05/18/2020	4.80	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		

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 33090139400548002139:						30.00	.00					
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - WATER	05/18/2020	12.60	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - SEWER	05/18/2020	12.60	.00	21-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - P.I	05/18/2020	4.80	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		
Total 33090139400548002212:						30.00	.00					
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - WATER	05/18/2020	12.60	.00	20-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - SEWER	05/18/2020	12.60	.00	21-6075 DUES & MEMBERSHIPS	0	6/20		
1444	U.S. BANK (VISA)	330901394005	10043	IBOL, LICENSE RENEWALS, D.CROSSLEY, MAY'20 - P.I	05/18/2020	4.80	.00	25-6075 DUES & MEMBERSHIPS EXPENSE	0	6/20		
Total 33090139400548002287:						30.00	.00					
1444	U.S. BANK (VISA)	365401300110		LEXJET, PRINTER INK, M.BORZICK, MAY'20	05/08/2020	357.58	.00	01-6165 OFFICE SUPPLIES	1005	6/20		
Total 36540130011027985711:						357.58	.00					
1444	U.S. BANK (VISA)	374701280000	9986	CWI, M.SMITH REGISTRATION, MAY'20 - P.I	05/06/2020	5.00	.00	25-6265 TRAINING & SCH00LING EXPENSE	0	6/20		
1444	U.S. BANK (VISA)	374701280000	9986	CWI, M.SMITH REGISTRATION, MAY'20 - WATER	05/06/2020	20.00	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	6/20		

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 37470128000019447000:						25.00	.00					
1444	U.S. BANK (VISA)	374701280000	9989	CWI, REGISTRATION FOR J.PEREZ, MAY	05/06/2020	25.00	.00	21-6265 TRAINING & SCH00LING EXPENSE	0	6/20		
Total 37470128000019478138:						25.00	.00					
1444	U.S. BANK (VISA)	593001229000	9969	IDAHO NURSERY AND LANDSCAPE, MEMBERSHIP RENEWAL, B.WITHROW, MAY'20	05/01/2020	75.00	.00	01-6075 DUES & MEMBERSHIPS	1004	6/20		
Total 59300122900012106186:						75.00	.00					
1444	U.S. BANK (VISA)	650101407261	10050	DOG WASTE DEPOT, 6400 DOG WASTE BAGS FOR DOG PARK, J.LORENTZ, JUN.'20	05/19/2020	217.78	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1004	6/20		
Total 65010140726102393035:						217.78	.00					
1444	U.S. BANK (VISA)	710501286271	9986	IRWA, M.SMITH REGISTRATION, MAY'20	05/07/2020	96.00	.00	20-6265 TRAINING & SCH00LING EXPENSE	0	6/20		
1444	U.S. BANK (VISA)	710501286271	9986	IRWA, M.SMITH REGISTRATION, MAY'20	05/07/2020	24.00	.00	25-6265 TRAINING & SCH00LING EXPENSE	0	6/20		
Total 71050128627138072695:						120.00	.00					
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, D.WALTMAN, APR.'20 - WATER	04/29/2020	42.00	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, D.WALTMAN, APR.'20 - WATER	04/29/2020	42.00	.00	21-6165 OFFICE SUPPLIES	0	6/20		

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
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, D.WALTMAN, APR.'20 - P.I	04/29/2020	15.99	.00	25-6165 OFFICE SUPPLIES	0	6/20		
Total 92150121852197339241:						99.99	.00					
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, P. STEVENS, APR.'20 - WATER	04/29/2020	42.00	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, P. STEVENS, APR.'20 - SEWER	04/29/2020	42.00	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	921501218521		PAYPAL LASHANDRAFE, ADOBE ACROBAT PRO DOWNLOAD, P. STEVENS, APR.'20 - P.I	04/29/2020	15.99	.00	25-6165 OFFICE SUPPLIES	0	6/20		
Total 92150121852198014801:						99.99	.00					
1444	U.S. BANK (VISA)	921501258525		PAYPAL FIELDSB150, ADOBE ACROBAT PRO DOWNLOADS, TREATMENT PLANT CONFERENCE ROOM, MAY'20 - WATER	05/04/2020	42.00	.00	20-6165 0FFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	921501258525		PAYPAL FIELDSB150, ADOBE ACROBAT PRO DOWNLOADS, TREATMENT PLANT CONFERENCE ROOM, MAY'20 - SEWER	05/04/2020	42.00	.00	21-6165 OFFICE SUPPLIES	0	6/20		
1444	U.S. BANK (VISA)	921501258525		PAYPAL FIELDSB150, ADOBE ACROBAT PRO DOWNLOADS, TREATMENT PLANT CONFERENCE ROOM, MAY'20 - P.I	05/04/2020	15.99	.00	25-6165 OFFICE SUPPLIES	0	6/20		
Total 92150125852511187488:						99.99	.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
1444	U.S. BANK (VISA)	921501258525		PAYPAL, ALEXTHIBAUL EBAY, WEBCAM, TREATMENT PLANT, D.WALTMAN, MAY'20 - WATER	05/04/2020	75.68	.00	20-6175 SMALL TOOLS	0	6/20		
1444	U.S. BANK (VISA)	921501258525		PAYPAL, ALEXTHIBAUL EBAY, WEBCAM, TREATMENT PLANT, D.WALTMAN, MAY'20 - SEWER	05/04/2020	75.68	.00	21-6175 SMALL TOOLS	0	6/20		
1444	U.S. BANK (VISA)	921501258525		PAYPAL, ALEXTHIBAUL EBAY, WEBCAM, TREATMENT PLANT, D.WALTMAN, MAY'20 - P.I	05/04/2020	28.83	.00	25-6175 SMALL TOOLS	0	6/20		
Total 92150125852514315417:						180.19	.00					
1444	U.S. BANK (VISA)	921601211004		LOWES, CUPBOARDS FOR THE TREATMENT PLANT OFFICES, APR.'20 - WATER	04/30/2020	84.00	.00	20-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CUPBOARDS FOR THE TREATMENT PLANT OFFICES, APR.'20 - SEWER	04/30/2020	84.00	.00	21-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CUPBOARDS FOR THE TREATMENT PLANT OFFICES, APR.'20 - P.I	04/30/2020	32.00	.00	25-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CONSTRUCTION GRADE STAPLER W/STAPLES, APR.'20 - ADMIN	04/30/2020	137.74	.00	01-6175 SMALL TOOLS	0	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CONSTRUCTION GRADE STAPLER W/STAPLES, APR.'20 - WATER	04/30/2020	55.10	.00	20-6175 SMALL TOOLS	0	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CONSTRUCTION GRADE STAPLER W/STAPLES, APR.'20 - SEWER	04/30/2020	55.10	.00	21-6175 SMALL TOOLS	0	6/20		
1444	U.S. BANK (VISA)	921601211004		LOWES, CONSTRUCTION GRADE STAPLER W/STAPLES, APR.'20 - P.I	04/30/2020	27.54	.00	25-6175 SMALL TOOLS	0	6/20		
Total 92160121100477238288:						475.48	.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
1444	U.S. BANK (VISA)	921601281001		LOWES, 3 GALLONS DRYLOK EXTREME SEALANT AND PAINT ROLLERS FOR CITY HALL EXPANSION, MAY'20	05/07/2020	109.92	.00	01-6045 C0NTINGENCY	1220	6/20		
Total 92160128100101989531:						109.92	.00					
1444	U.S. BANK (VISA)	921601281002		LOWES, CREDIT/RETURN OF UNUSED PRODUCT, SEALANT, B.GILLOGLY, CITY HALL EXPANSION	05/07/2020	-98.94	.00	01-6045 C0NTINGENCY	1220	6/20		
Total 92160128100201170045:						-98.94	.00					
1444	U.S. BANK (VISA)	921601291009		LOWES, WOOD FOR THE CUPBOARDS AT THE TREATMENT PLANT, MAY'20 - WATER	05/08/2020	18.26	.00	20-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
1444	U.S. BANK (VISA)	921601291009		LOWES, WOOD FOR THE CUPBOARDS AT THE TREATMENT PLANT, MAY'20 - SEWER	05/08/2020	18.26	.00	21-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
1444	U.S. BANK (VISA)	921601291009		LOWES, WOOD FOR THE CUPBOARDS AT THE TREATMENT PLANT, MAY'20 - P.I	05/08/2020	6.95	.00	25-6020 CAPITAL IMPR0VEMENTS	1209	6/20		
Total 92160129100923215759:						43.47	.00					
1444	U.S. BANK (VISA)	921601331008		PERSONALIZATION MALL, CREDIT/RETURN PREVIOUSLY ORDERED ITEM FOR DEPARTURE GIFT FOR B.BACHMAN, MAY'20 - BUILDING DEPT	05/12/2020	-16.44	.00	01-6150 MAINTENANCE & REPAIRS - SYSTEM	1005	6/20		
1444	U.S. BANK (VISA)	921601331008		PERSONALIZATION MALL, CREDIT/RETURN PREVIOUSLY ORDERED ITEM FOR DEPARTURE GIFT FOR B.BACHMAN, MAY'20 - WATER	05/12/2020	-15.42	.00	20-6150 M & R - SYSTEM	0	6/20		

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
1444	U.S. BANK (VISA)	921601331008		PERSONALIZATION MALL, CREDIT/RETURN PREVIOUSLY ORDERED ITEM FOR DEPARTURE GIFT FOR B.BACHMAN, MAY'20 - SEWER	05/12/2020	-15.42	.00	21-6150 M & R - SYSTEM	0	6/20		
1444	U.S. BANK (VISA)	921601331008		PERSONALIZATION MALL, CREDIT/RETURN PREVIOUSLY ORDERED ITEM FOR DEPARTURE GIFT FOR B.BACHMAN, MAY'20 - P.I	05/12/2020	-4.11	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 92160133100896658638:						-51.39	.00					
1444	U.S. BANK (VISA)	921601391000		LOWES, SINK FOR THE FLEET SHOP, MAY'20 - ADMIN	05/18/2020	69.50	.00	01-6140 MAINT. & REPAIR BUILDING	0	6/20		
1444	U.S. BANK (VISA)	921601391000		LOWES, SINK FOR THE FLEET SHOP, MAY'20 - WATER	05/18/2020	27.80	.00	20-6140 MAINT. & REPAIR BUILDING	0	6/20		
1444	U.S. BANK (VISA)	921601391000		LOWES, SINK FOR THE FLEET SHOP, MAY'20 - SEWER	05/18/2020	27.80	.00	21-6140 MAINT & REPAIR BUILDING	0	6/20		
1444	U.S. BANK (VISA)	921601391000		LOWES, SINK FOR THE FLEET SHOP, MAY'20 - P.I	05/18/2020	13.90	.00	25-6140 MAINT & REPAIR BUILDING	0	6/20		
Total 92160139100020674435:						139.00	.00					
1444	U.S. BANK (VISA)	921601401006	10032	AMAZON.COM, ORGANIZATION ITEMS FOR DESK, M.NADEAU, MAY'20	05/19/2020	61.59	.00	21-6165 OFFICE SUPPLIES	0	6/20		
Total 92160140100644187555:						61.59	.00					
1444	U.S. BANK (VISA)	921601411001	10030	AMAZON, 5 SETS OF CORNHOLE BAGS, ITEMS FOR OUTDOOR IDAHO EVENT, N.STANLEY, MAY'20	05/20/2020	144.75	.00	01-6135 PUBLIC ENTERTAINMENT	0	6/20		
Total 92160141100157549406:						144.75	.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
1444	U.S. BANK (VISA)	921601411004	10030	AMAZON, TREASURE CHEST TOYS, N.STANLEY, MAY'20	05/20/2020	126.98	.00	01-6135 PUBLIC ENTERTAINMENT	0	6/20		
Total 92160141100411749859:						126.98	.00					
1444	U.S. BANK (VISA)	921601411004	10030	AMAZON, CORNHOLE BAGS, ITEMS FOR OUTDOOR IDAHO EVENT, N.STANLEY, MAY'20	05/20/2020	107.82	.00	01-6135 PUBLIC ENTERTAINMENT	0	6/20		
Total 92160141100486970851:						107.82	.00					
1444	U.S. BANK (VISA)	921601421007	10059	AMAZON.COM, 2 EA NO-TOUCH THERMOMETERS, FOR RANGER PROGRAM, J.LORENTZ, MAY'20	05/21/2020	109.96	.00	01-6265 TRAINING & SCH00LING	1086	6/20		
Total 92160142100788890608:						109.96	.00					
1444	U.S. BANK (VISA)	921601431006	10059	AMAZON.COM, 2 EA SPRAY BOTTLES, FOR RANGER PROGRAM, J.LORENTZ, MAY'20	05/22/2020	55.80	.00	01-6265 TRAINING & SCH00LING	1086	6/20		
Total 92160143100617500146:						55.80	.00					
1444	U.S. BANK (VISA)	921601451000		AMAZON.COM, 2 EA SPRAY BOTTLES, FOR THE RANGER PROGRAM, J.LORENTZ, MAY'20	05/24/2020	55.80	.00	01-6265 TRAINING & SCH00LING	1086	6/20		
Total 92160145100058342386:						55.80	.00					
1444	U.S. BANK (VISA)	921601451000	10030	AMAZON, 6 BEGINNER GOLF SETS, ITEMS FOR OUTDOOR IDAHO EVENT, N.STANLEY, MAY'20	05/24/2020	89.28	.00	01-6135 PUBLIC ENTERTAINMENT	0	6/20		
Total 92160145100090742718:						89.28	.00					
1444	U.S. BANK (VISA)	921601451001	10030	AMAZON, 2 SETS TRAFFIC CONES, ITEMS FOR OUTDOOR IDAHO EVENT, N.STANLEY,								

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
				MAY'20	05/24/2020	49.81	.00	01-6135 PUBLIC ENTERTAINMENT	0	6/20		
Total 92160145100163562209:						49.81	.00					
Total U.S. BANK (VISA):						5,968.67	.00					
UNIVAR SOLUTIONS USA, INC.												
1410	UNIVAR SOLUTIONS USA, INC.	48599121	10065	ALUMINUM SULFATE, T.SHAFFER, MAY. '20	05/27/2020	6,675.28	.00	21-6151 M & R - PROCESS CHEMICALS	0	6/20		
Total 48599121:						6,675.28	.00					
1410	UNIVAR SOLUTIONS USA, INC.	97637319		RETURN/CREDIT ON CONTAINER DEPOSIT, MAY'20	05/29/2020	-700.00	.00	21-6151 M & R - PROCESS CHEMICALS	0	6/20		
1410	UNIVAR SOLUTIONS USA, INC.	97637319		RETURN/CREDIT ON CONTAINER DEPOSIT, MAY'20	05/29/2020	-700.00	.00	21-6097 DEPOSITS ON ACCOUNT	0	6/20		
Total 97637319:						-1,400.00	.00					
Total UNIVAR SOLUTIONS USA, INC.:						5,275.28	.00					
USA BLUE BOOK												
265	USA BLUE BOOK	241537	10054	HACH DPD SAMPLES, D. CROSSLEY, MAY '20	05/19/2020	205.25	.00	20-6152 M & R - LABORATORY COSTS	0	6/20		
Total 241537:						205.25	.00					
265	USA BLUE BOOK	248490	10087	SAFETY SUNGLASSES FOR CREW, D. CROSSLEY, MAY '20	05/27/2020	17.77	.00	25-6230 SAFETY TRAINING & EQUIPMENT	0	6/20		
265	USA BLUE BOOK	248490	10087	SAFETY SUNGLASSES FOR CREW, D. CROSSLEY, MAY '20	05/27/2020	71.11	.00	20-6230 SAFETY TRAINING & EQUIPMENT	0	6/20		

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 248490:						88.88	.00					
265	USA BLUE BOOK	248496	10089	REPLACEMENT LEVEL TRANSMITTER FOR MEMBRANE TANKS, WASTEWATER, T. SHAFFER, MAY. '20	05/27/2020	1,396.76	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 248496:						1,396.76	.00					
Total USA BLUE BOOK:						1,690.89	.00					
UTILITY REFUND #9												
2004	UTILITY REFUND #9	110150.01A		RICHARD FARNES, 530 N KATIE WAY, UTILITY REFUND	06/08/2020	29.19	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	110150.01A		RICHARD FARNES, 530 N KATIE WAY, UTILITY REFUND	06/08/2020	32.70	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	110150.01A		RICHARD FARNES, 530 N KATIE WAY, UTILITY REFUND	06/08/2020	24.87	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	110150.01A		RICHARD FARNES, 530 N KATIE WAY, UTILITY REFUND	06/08/2020	1.71	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 110150.01A:						88.47	.00					
2004	UTILITY REFUND #9	110380.01		RICHARD N HEDDEN, 491 N SHADY GROVE WAY, UTILITY REFUND	06/08/2020	78.91	.00	20-4500 METERED WATER SALES	0	6/20		
Total 110380.01:						78.91	.00					
2004	UTILITY REFUND #9	111605.02		TYLER P PAUL, 590 N MELDGOLD AVE, UTILITY REFUND	06/02/2020	30.81	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	111605.02		TYLER P PAUL, 590 N MELDGOLD AVE, UTILITY REFUND	06/02/2020	34.56	.00	21-4600 SEWER USER FEES	0	6/20		

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	111605.02		TYLER P PAUL, 590 N MELDGOLD AVE, UTILITY REFUND	06/02/2020	26.49	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 111605.02:						91.86	.00					
2004	UTILITY REFUND #9	111650.02		SAMUEL BEATTY, 580 E ANDREA ST, UTILITY REFUND	06/02/2020	19.54	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	111650.02		SAMUEL BEATTY, 580 E ANDREA ST, UTILITY REFUND	06/02/2020	20.33	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	111650.02		SAMUEL BEATTY, 580 E ANDREA ST, UTILITY REFUND	06/02/2020	17.91	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 111650.02:						57.78	.00					
2004	UTILITY REFUND #9	160860.03		LAYNE THORNTON, 250 W CASE ST, UTILITY REFUND	05/28/2020	31.79	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	160860.03		LAYNE THORNTON, 250 W CASE ST, UTILITY REFUND	05/28/2020	30.09	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	160860.03		LAYNE THORNTON, 250 W CASE ST, UTILITY REFUND	05/28/2020	29.45	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	160860.03		LAYNE THORNTON, 250 W CASE ST, UTILITY REFUND	05/28/2020	7.34	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 160860.03:						98.67	.00					
2004	UTILITY REFUND #9	17039.03		LARRY L CARTER, 462 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	24.64	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	17039.03		LARRY L CARTER, 462 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	44.38	.00	21-4600 SEWER USER FEES	0	6/20		

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	17039.03		LARRY L CARTER, 462 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	34.94	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	17039.03		LARRY L CARTER, 462 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	15.66	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 17039.03:						119.62	.00					
2004	UTILITY REFUND #9	170660.04		CRYSTAL F TRELOAR, 584 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	10.18	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	170660.04		CRYSTAL F TRELOAR, 584 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	20.12	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	170660.04		CRYSTAL F TRELOAR, 584 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	15.83	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	170660.04		CRYSTAL F TRELOAR, 584 S WHITEHORSE AVE, UTILITY REFUND	05/28/2020	16.60	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 170660.04:						62.73	.00					
2004	UTILITY REFUND #9	174212.00		CBH, 838 S TANAMI AVE, UTILITY REFUND	05/13/2020	73.55	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	174212.00		CBH, 838 S TANAMI AVE, UTILITY REFUND	05/13/2020	12.73	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	174212.00		CBH, 838 S TANAMI AVE, UTILITY REFUND	05/13/2020	13.21	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 174212.00:						99.49	.00					
2004	UTILITY REFUND #9	174213.00		CBH, 860 S TANAMI AVE, UTILITY REFUND	05/13/2020	79.47	.00	20-4500 METERED WATER SALES	0	6/20		

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	174213.00		CBH, 860 S TANAMI AVE, UTILITY REFUND	05/13/2020	21.36	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	174213.00		CBH, 860 S TANAMI AVE, UTILITY REFUND	05/13/2020	19.06	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 174213.00:						119.89	.00					
2004	UTILITY REFUND #9	174215.00		CBH, 904 S TANAMI AVE, UTILITY REFUND	05/13/2020	65.27	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	174215.00		CBH, 904 S TANAMI AVE, UTILITY REFUND	05/13/2020	.08	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	174215.00		CBH, 904 S TANAMI AVE, UTILITY REFUND	05/13/2020	6.22	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 174215.00:						71.57	.00					
2004	UTILITY REFUND #9	184000.02		WILLIAM PIPER, 1110 W CRENSHAW ST, UTILITY REFUND	06/10/2020	62.22	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	184000.02		WILLIAM PIPER, 1110 W CRENSHAW ST, UTILITY REFUND	06/10/2020	61.98	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	184000.02		WILLIAM PIPER, 1110 W CRENSHAW ST, UTILITY REFUND	06/10/2020	56.60	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 184000.02:						180.80	.00					
2004	UTILITY REFUND #9	201860.03		DERRICK L WYATT, 157 E HILLGREEN DR, UTILITY REFUND	06/08/2020	29.13	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	201860.03		DERRICK L WYATT, 157 E HILLGREEN DR, UTILITY REFUND	06/08/2020	32.09	.00	21-4600 SEWER USER FEES	0	6/20		

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	201860.03		DERRICK L WYATT, 157 E HILLGREEN DR, UTILITY REFUND	06/08/2020	26.37	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 201860.03:						87.59	.00					
2004	UTILITY REFUND #9	20520.04		MICHAEL E VINCEN-BROWN, 461 E BLUE SKY DR, UTILITY REFUND	06/02/2020	25.23	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	20520.04		MICHAEL E VINCEN-BROWN, 461 E BLUE SKY DR, UTILITY REFUND	06/02/2020	26.62	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	20520.04		MICHAEL E VINCEN-BROWN, 461 E BLUE SKY DR, UTILITY REFUND	06/02/2020	21.94	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 20520.04:						73.79	.00					
2004	UTILITY REFUND #9	210195.04		CHAD J QUEEN, 153 E HARRIS HAWK DR, UTILITY REFUND	06/10/2020	16.45	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	210195.04		CHAD J QUEEN, 153 E HARRIS HAWK DR, UTILITY REFUND	06/10/2020	32.59	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	210195.04		CHAD J QUEEN, 153 E HARRIS HAWK DR, UTILITY REFUND	06/10/2020	20.46	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	210195.04		CHAD J QUEEN, 153 E HARRIS HAWK DR, UTILITY REFUND	06/10/2020	11.06	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 210195.04:						80.56	.00					
2004	UTILITY REFUND #9	221535.03		BRYCE D SCHOUTEN, 953 S RUMNEY AVE, UTILITY REFUND	06/02/2020	34.81	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	221535.03		BRYCE D SCHOUTEN, 953 S RUMNEY AVE, UTILITY REFUND	06/02/2020	33.84	.00	21-4600 SEWER USER FEES	0	6/20		

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	221535.03		BRYCE D SCHOUTEN, 953 S RUMNEY AVE, UTILITY REFUND	06/02/2020	26.84	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 221535.03:						95.49	.00					
2004	UTILITY REFUND #9	221690.03		EDWARD FRY, 870 S THREAVE AVE, UTILITY REFUND	05/28/2020	49.12	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	221690.03		EDWARD FRY, 870 S THREAVE AVE, UTILITY REFUND	05/28/2020	15.69	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	221690.03		EDWARD FRY, 870 S THREAVE AVE, UTILITY REFUND	05/28/2020	10.91	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 221690.03:						75.72	.00					
2004	UTILITY REFUND #9	230465.04		CORY W ALLEN, 704 S WILLOW SPRINGS PL, UTILITY REFUND	05/28/2020	18.95	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	230465.04		CORY W ALLEN, 704 S WILLOW SPRINGS PL, UTILITY REFUND	05/28/2020	9.61	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	230465.04		CORY W ALLEN, 704 S WILLOW SPRINGS PL, UTILITY REFUND	05/28/2020	46.14	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	230465.04		CORY W ALLEN, 704 S WILLOW SPRINGS PL, UTILITY REFUND	05/28/2020	9.22	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 230465.04:						83.92	.00					
2004	UTILITY REFUND #9	230505.03		RICHARD N HEGGESTAD, 631 S WILLOW SPRING PL, UTILITY REFUND	06/02/2020	37.63	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	230505.03		RICHARD N HEGGESTAD, 631 S WILLOW SPRING PL, UTILITY REFUND	06/02/2020	40.17	.00	21-4600 SEWER USER FEES	0	6/20		

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	230505.03		RICHARD N HEGGESTAD, 631 S WILLOW SPRING PL, UTILITY REFUND	06/02/2020	34.37	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 230505.03:						112.17	.00					
2004	UTILITY REFUND #9	240015.04		MICHAEL J MUSGRAVE, 857 E FOURTH CT, UTILITY REFUND	05/28/2020	19.81	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	240015.04		MICHAEL J MUSGRAVE, 857 E FOURTH CT, UTILITY REFUND	05/28/2020	37.85	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	240015.04		MICHAEL J MUSGRAVE, 857 E FOURTH CT, UTILITY REFUND	05/28/2020	14.13	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
2004	UTILITY REFUND #9	240015.04		MICHAEL J MUSGRAVE, 857 E FOURTH CT, UTILITY REFUND	05/28/2020	24.34	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 240015.04:						96.13	.00					
2004	UTILITY REFUND #9	240625.03		JOSHUA C STALENSKI, 677 N SILTSTONE AVE, UTILITY REFUND	06/08/2020	54.69	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	240625.03		JOSHUA C STALENSKI, 677 N SILTSTONE AVE, UTILITY REFUND	06/08/2020	62.43	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	240625.03		JOSHUA C STALENSKI, 677 N SILTSTONE AVE, UTILITY REFUND	06/08/2020	53.15	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 240625.03:						170.27	.00					
2004	UTILITY REFUND #9	241023.00		HATHAWAY HOMES, 1085 E FOLGADO ST, UTILITY REFUND	05/20/2020	40.31	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	241023.00		HATHAWAY HOMES, 1085 E FOLGADO ST, UTILITY REFUND	05/20/2020	57.16	.00	21-4600 SEWER USER FEES	0	6/20		

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	241023.00		HATHAWAY HOMES, 1085 E FOLGADO ST, UTILITY REFUND	05/20/2020	62.43	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 241023.00:						159.90	.00					
2004	UTILITY REFUND #9	241024.00		HATHAWAY HOMES, 1097 E FOLGADO ST, UTILITY REFUND	05/20/2020	34.50	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	241024.00		HATHAWAY HOMES, 1097 E FOLGADO ST, UTILITY REFUND	05/20/2020	49.07	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	241024.00		HATHAWAY HOMES, 1097 E FOLGADO ST, UTILITY REFUND	05/20/2020	54.01	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 241024.00:						137.58	.00					
2004	UTILITY REFUND #9	253045.03		JOHN M MUELLER, 635 W TEST CT, UTILITY REFUND	05/28/2020	18.41	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	253045.03		JOHN M MUELLER, 635 W TEST CT, UTILITY REFUND	05/28/2020	36.02	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	253045.03		JOHN M MUELLER, 635 W TEST CT, UTILITY REFUND	05/28/2020	24.81	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	253045.03		JOHN M MUELLER, 635 W TEST CT, UTILITY REFUND	05/28/2020	13.59	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 253045.03:						92.83	.00					
2004	UTILITY REFUND #9	264600.02		DEBORAH DELFINO, 2036 N ROSEDUST DR, UTILITY REFUND	06/02/2020	49.34	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	264600.02		DEBORAH DELFINO, 2036 N ROSEDUST DR, UTILITY REFUND	06/02/2020	23.25	.00	21-4600 SEWER USER FEES	0	6/20		

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	264600.02		DEBORAH DELFINO, 2036 N ROSEDUST DR, UTILITY REFUND	06/02/2020	18.04	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 264600.02:						90.63	.00					
2004	UTILITY REFUND #9	268312.00		CBH, 2593 W QUILCEDA ST, UTILITY REFUND	05/20/2020	21.82	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	268312.00		CBH, 2593 W QUILCEDA ST, UTILITY REFUND	05/20/2020	24.94	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	268312.00		CBH, 2593 W QUILCEDA ST, UTILITY REFUND	05/20/2020	15.49	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 268312.00:						62.25	.00					
2004	UTILITY REFUND #9	268339.00		CBH, 1628 N RHODAMINE AVE, UTILITY REFUND	05/20/2020	27.68	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	268339.00		CBH, 1628 N RHODAMINE AVE, UTILITY REFUND	05/20/2020	35.80	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	268339.00		CBH, 1628 N RHODAMINE AVE, UTILITY REFUND	05/20/2020	36.02	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 268339.00:						99.50	.00					
2004	UTILITY REFUND #9	268340.00		CBH, 1640 N RHODAMINE AVE, UTILITY REFUND	05/15/2020	43.52	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	268340.00		CBH, 1640 N RHODAMINE AVE, UTILITY REFUND	05/15/2020	61.27	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	268340.00		CBH, 1640 N RHODAMINE AVE, UTILITY REFUND	05/15/2020	47.25	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 268340.00:						152.04	.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
2004	UTILITY REFUND #9	274810.02		JAMES P KEENE, 2966 W GINGER GOLD, UTILITY REFUND	06/02/2020	33.23	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	274810.02		JAMES P KEENE, 2966 W GINGER GOLD, UTILITY REFUND	06/02/2020	32.77	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	274810.02		JAMES P KEENE, 2966 W GINGER GOLD, UTILITY REFUND	06/02/2020	27.76	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 274810.02:						93.76	.00					
2004	UTILITY REFUND #9	277138.01		CBH, 676 W QUAKING ASPEN DR, UTILITY REFUND	05/20/2020	52.32	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	277138.01		CBH, 676 W QUAKING ASPEN DR, UTILITY REFUND	05/20/2020	25.50	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	277138.01		CBH, 676 W QUAKING ASPEN DR, UTILITY REFUND	05/20/2020	9.81	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 277138.01:						87.63	.00					
2004	UTILITY REFUND #9	301055.02		SAMUEL J CARROLL, 935 E SHADY RIDGE DR, UTILITY REFUND	06/08/2020	3.73	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	301055.02		SAMUEL J CARROLL, 935 E SHADY RIDGE DR, UTILITY REFUND	06/08/2020	3.89	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	301055.02		SAMUEL J CARROLL, 935 E SHADY RIDGE DR, UTILITY REFUND	06/08/2020	3.45	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 301055.02:						11.07	.00					
2004	UTILITY REFUND #9	302205.00		SCHROEDER ENTERPRISES, 439 E FOX BAY ST, UTILITY REFUND	05/13/2020	3.32	.00	20-4500 METERED WATER SALES	0	6/20		

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	302205.00		SCHROEDER ENTERPRISES, 439 E FOX BAY ST, UTILITY REFUND	05/13/2020	1.05	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	302205.00		SCHROEDER ENTERPRISES, 439 E FOX BAY ST, UTILITY REFUND	05/13/2020	3.64	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 302205.00:						8.01	.00					
2004	UTILITY REFUND #9	302251.00		STACY CONSTRUCTION, 576 E ANDES DR, UTILITY REFUND	05/13/2020	65.26	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	302251.00		STACY CONSTRUCTION, 576 E ANDES DR, UTILITY REFUND	05/13/2020	1.97	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	302251.00		STACY CONSTRUCTION, 576 E ANDES DR, UTILITY REFUND	05/13/2020	1.50	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 302251.00:						68.73	.00					
2004	UTILITY REFUND #9	303016.02		JOHN O FERRO, 1102 E SHADY RIDGE DR, UTILITY REFUND	06/10/2020	28.89	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	303016.02		JOHN O FERRO, 1102 E SHADY RIDGE DR, UTILITY REFUND	06/10/2020	30.21	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	303016.02		JOHN O FERRO, 1102 E SHADY RIDGE DR, UTILITY REFUND	06/10/2020	32.39	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
Total 303016.02:						91.49	.00					
2004	UTILITY REFUND #9	318356.00		HOPE DEVELOPMENT, 1134 E ODYSSEY ST, UTILITY REFUND	05/22/2020	28.83	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	318356.00		HOPE DEVELOPMENT, 1134 E ODYSSEY ST, UTILITY REFUND	05/22/2020	33.12	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	318356.00		HOPE DEVELOPMENT, 1134 E ODYSSEY ST, UTILITY REFUND	05/22/2020	9.62	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		

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 318356.00:						71.57	.00					
2004	UTILITY REFUND #9	320090.00		HAYDEN HOMES, 1898 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	17.14	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	320090.00		HAYDEN HOMES, 1898 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	24.97	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	320090.00		HAYDEN HOMES, 1898 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	29.45	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 320090.00:						71.56	.00					
2004	UTILITY REFUND #9	320091.00		HAYDEN HOMES, 1914 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	17.46	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	320091.00		HAYDEN HOMES, 1914 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	21.70	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	320091.00		HAYDEN HOMES, 1914 E CAVE FALLS ST, UTILITY REFUND	05/13/2020	29.55	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 320091.00:						68.71	.00					
2004	UTILITY REFUND #9	323016.00		TRESIDIO HOMES, 2069 E WHITETAIL ST, UTILITY REFUND	05/22/2020	21.70	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	323016.00		TRESIDIO HOMES, 2069 E WHITETAIL ST, UTILITY REFUND	05/22/2020	26.68	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	323016.00		TRESIDIO HOMES, 2069 E WHITETAIL ST, UTILITY REFUND	05/22/2020	24.89	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 323016.00:						73.27	.00					
2004	UTILITY REFUND #9	323085.00		TODD CAMPBELL CONSTRUCTION, 2116 E								

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
				BEXLEY ST, UTILITY REFUND	05/26/2020	13.27	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	323085.00		TODD CAMPBELL CONSTRUCTION, 2116 E BEXLEY ST, UTILITY REFUND	05/26/2020	17.45	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	323085.00		TODD CAMPBELL CONSTRUCTION, 2116 E BEXLEY ST, UTILITY REFUND	05/26/2020	10.86	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 323085.00:						41.58	.00					
2004	UTILITY REFUND #9	330164.00		TOLL BROS INC, 1641 N GREENVILLE AVE, UTILITY REFUND	05/13/2020	21.07	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	330164.00		TOLL BROS INC, 1641 N GREENVILLE AVE, UTILITY REFUND	05/13/2020	25.71	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	330164.00		TOLL BROS INC, 1641 N GREENVILLE AVE, UTILITY REFUND	05/13/2020	13.68	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 330164.00:						60.46	.00					
2004	UTILITY REFUND #9	330193.00		TOLL BROS INC, 879 E BUCK DR, UTILITY REFUND	05/15/2020	4.48	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	330193.00		TOLL BROS INC, 879 E BUCK DR, UTILITY REFUND	05/15/2020	3.52	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	330193.00		TOLL BROS INC, 879 E BUCK DR, UTILITY REFUND	05/15/2020	5.11	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 330193.00:						13.11	.00					
2004	UTILITY REFUND #9	330207.00		TOLL BROS INC, 1209 E TIMBER TRAIL DR, UTILITY REFUND	05/20/2020	3.92	.00	20-4500 METERED WATER SALES	0	6/20		

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	330207.00		TOLL BROS INC, 1209 E TIMBER TRAIL DR, UTILITY REFUND	05/20/2020	1.73	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	330207.00		TOLL BROS INC, 1209 E TIMBER TRAIL DR, UTILITY REFUND	05/20/2020	5.76	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 330207.00:						11.41	.00					
2004	UTILITY REFUND #9	340007.01		CBH, 1534 W QUEENS RIVER ST, UTILITY REFUND	05/20/2020	27.88	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	340007.01		CBH, 1534 W QUEENS RIVER ST, UTILITY REFUND	05/20/2020	27.11	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	340007.01		CBH, 1534 W QUEENS RIVER ST, UTILITY REFUND	05/20/2020	29.64	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 340007.01:						84.63	.00					
2004	UTILITY REFUND #9	60800.01		KENT WILSON, 563 W DAWN CT, UTILITY REFUND	06/08/2020	35.49	.00	20-4500 METERED WATER SALES	0	6/20		
2004	UTILITY REFUND #9	60800.01		KENT WILSON, 563 W DAWN CT, UTILITY REFUND	06/08/2020	72.01	.00	21-4600 SEWER USER FEES	0	6/20		
2004	UTILITY REFUND #9	60800.01		KENT WILSON, 563 W DAWN CT, UTILITY REFUND	06/08/2020	49.25	.00	26-4975 SOLID WASTE USER FEES	0	6/20		
2004	UTILITY REFUND #9	60800.01		KENT WILSON, 563 W DAWN CT, UTILITY REFUND	06/08/2020	26.34	.00	25-4700 PRESS. IRRIGATI0N USER FEES	0	6/20		
Total 60800.01:						183.09	.00					
Total UTILITY REFUND #9:						3,780.24	.00					
VALLI INFORMATION SYSTEMS, INC												
857	VALLI INFORMATION SYSTEMS, INC	59421		POSTAGE, IMAGING, PRINTING BILLS, AND MONTHLY								

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
				SHREDDING FOR MAY 2020 - ADMIN	05/31/2020	980.20	.00	01-6190 P0STAGE & BILLING	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59421		POSTAGE, IMAGING, PRINTING BILLS, AND MONTHLY SHREDDING FOR MAY 2020 - WATER	05/31/2020	1,540.31	.00	20-6190 P0STAGE & BILLING	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59421		POSTAGE, IMAGING, PRINTING BILLS, AND MONTHLY SHREDDING FOR MAY 2020 - SEWER	05/31/2020	1,540.31	.00	21-6190 P0STAGE & BILLING	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59421		POSTAGE, IMAGING, PRINTING BILLS, AND MONTHLY SHREDDING FOR MAY 2020 - P.I	05/31/2020	606.79	.00	25-6190 P0STAGE & BILLING	0	6/20		
Total 59421:						4,667.61	.00					
857	VALLI INFORMATION SYSTEMS, INC	59422		LOCKBOX TRANSACTIONS FOR MAY 2020 - ADMIN	05/31/2020	40.14	.00	01-6505 BANK FEES	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59422		LOCKBOX TRANSACTIONS FOR MAY 2020 - WATER	05/31/2020	63.08	.00	20-6505 BANK FEES	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59422		LOCKBOX TRANSACTIONS FOR MAY 2020 - SEWER	05/31/2020	63.08	.00	21-6505 BANK FEES	0	6/20		
857	VALLI INFORMATION SYSTEMS, INC	59422		LOCKBOX TRANSACTIONS FOR MAY 2020 - P.I	05/31/2020	24.85	.00	25-6505 BANK FEES	0	6/20		
Total 59422:						191.15	.00					
Total VALLI INFORMATION SYSTEMS, INC:						4,858.76	.00					
VERIZON WIRELESS												
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - ADMIN	05/28/2020	141.22	.00	01-6255 TELEPH0NE	0	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - P & Z	05/28/2020	53.64	.00	01-6255 TELEPH0NE	1003	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - PARKS	05/28/2020	523.71	.00	01-6255 TELEPH0NE	1004	6/20		

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
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - BUILDING INSPECTION	05/28/2020	95.39	.00	01-6255 TELEPH0NE	1005	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - WATER	05/28/2020	468.90	.00	20-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - SEWER	05/28/2020	553.06	.00	21-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - P.I	05/28/2020	128.00	.00	25-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855579570		CELL PHONE SERVICE, 4/29-5/28/20 - ECONOMIC DEVELOPMENT	05/28/2020	46.76	.00	01-6255 TELEPH0NE	4000	6/20		
Total 9855579570:						2,010.68	.00					
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - ADMIN	06/01/2020	3.68	.00	01-6255 TELEPH0NE	0	6/20		
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - PARKS	06/01/2020	8.09	.00	01-6255 TELEPH0NE	1004	6/20		
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - BUILDING INSPECTION	06/01/2020	30.87	.00	01-6255 TELEPH0NE	1005	6/20		
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - WATER	06/01/2020	42.04	.00	20-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - SEWER	06/01/2020	50.86	.00	21-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855712182		TABLET SERVICE, 5/2-6/1/20 - P.I	06/01/2020	11.46	.00	25-6255 TELEPH0NE EXPENSE	0	6/20		
Total 9855712182:						147.00	.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
1575	VERIZON WIRELESS	9855712183		IPAD SERVICE, 5/2-6/1/20 - ADMIN	06/01/2020	5.01	.00	01-6255 TELEPH0NE	0	6/20		
1575	VERIZON WIRELESS	9855712183		IPAD SERVICE, 5/2-6/1/20 - PARKS	06/01/2020	20.02	.00	01-6255 TELEPH0NE	1004	6/20		
1575	VERIZON WIRELESS	9855712183		IPAD SERVICE, 5/2-6/1/20 - WATER	06/01/2020	6.61	.00	20-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855712183		IPAD SERVICE, 5/2-6/1/20 - SEWER	06/01/2020	6.61	.00	21-6255 TELEPH0NE EXPENSE	0	6/20		
1575	VERIZON WIRELESS	9855712183		IPAD SERVICE, 5/2-6/1/20 - P.I	06/01/2020	1.79	.00	25-6255 TELEPH0NE EXPENSE	0	6/20		
Total 9855712183:						40.04	.00					
Total VERIZON WIRELESS:						2,197.72	.00					
VICTORY GREENS												
364	VICTORY GREENS	523167	10075	60 ROLLS SOD FOR OMPHALE PI PROJECT, J.WEBB, MAY'20	05/22/2020	17.40	.00	25-6150 MAINT. & REPAIRS - SYSTEM (PI)	0	6/20		
Total 523167:						17.40	.00					
Total VICTORY GREENS:						17.40	.00					
WESTERN RECORDS DESTRUCTION, INC.												
1633	WESTERN RECORDS DESTRUCTION, INC.	0488839		RECORDS DESTRUCTION, 5/1-31/20 - ADMIN	06/01/2020	11.78	.00	01-6052 CONTRACT SERVICES	0	6/20		
1633	WESTERN RECORDS DESTRUCTION, INC.	0488839		RECORDS DESTRUCTION, 5/1-31/20 - WATER	06/01/2020	8.06	.00	20-6052 CONTRACT SERVICES	0	6/20		
1633	WESTERN RECORDS DESTRUCTION, INC.	0488839		RECORDS DESTRUCTION, 5/1-31/20 - SEWER	06/01/2020	8.06	.00	21-6052 C0NTRACT SERVICES	0	6/20		

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
1633	WESTERN RECORDS DESTRUCTION, INC.	0488839		RECORDS DESTRUCTION, 5/1-31/20 - P.I	06/01/2020	3.10	.00	25-6052 C0NTRACT SERVICES	0	6/20		
Total 0488839:						31.00	.00					
Total WESTERN RECORDS DESTRUCTION, INC.:						31.00	.00					
WEX BANK												
1234	WEX BANK	65784974		FUEL, MAY'20 - ADMIN	05/31/2020	1.74	.00	01-6300 FUEL	0	6/20		
1234	WEX BANK	65784974		FUEL, MAY'20 - PARKS	05/31/2020	218.74	.00	01-6300 FUEL	1004	6/20		
1234	WEX BANK	65784974		FUEL, MAY'20 - BUILDING INSPECTION	05/31/2020	153.53	.00	01-6300 FUEL	1005	6/20		
1234	WEX BANK	65784974		FUEL, MAY'20 - WATER	05/31/2020	262.85	.00	20-6300 FUEL	0	6/20		
1234	WEX BANK	65784974		FUEL, MAY'20 - SEWER	05/31/2020	64.52	.00	21-6300 FUEL	0	6/20		
1234	WEX BANK	65784974		FUEL, MAY'20 - P.I	05/31/2020	68.76	.00	25-6300 FUEL	0	6/20		
Total 65784974:						770.14	.00					
Total WEX BANK:						770.14	.00					
WHITE, PETERSON, GIGRAY, & NICHOLS P.A.												
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	05312020WPG		LEGAL SERVICES, MAY'20 - ADMIN	05/31/2020	2,245.50	.00	01-6202 PR0FESSI0NAL SERVICES	0	6/20		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	05312020WPG		LEGAL SERVICES, MAY'20 - SEWER	05/31/2020	328.50	.00	21-6202 PR0FESSI0NAL SERVICES	0	6/20		
1958	WHITE, PETERSON, GIGRAY, & NICHOLS P.A.	05312020WPG		LEGAL SERVICES, MAY'20	05/31/2020	1,135.50	.00	40-6020 CAPITAL IMPROVEMENTS	1207	6/20		
Total 05312020WPGN:						3,709.50	.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 WHITE, PETERSON, GIGRAY, & NICHOLS P.A.:						3,709.50	.00					
XYLEM WATER SOLUTIONS U.S.A., INC.												
1623	XYLEM WATER SOLUTIONS U.S.A., INC.	401011878		TROUBLESHOOT MIXER ON BIOTRAIN.T. SHAFFER, JUNE. '20	06/01/2020	325.00	.00	21-6142 MAINT. & REPAIRS - EQUIPMENT	0	6/20		
Total 401011878:						325.00	.00					
Total XYLEM WATER SOLUTIONS U.S.A., INC.:						325.00	.00					
Grand Totals:						953,694.45	314,685.75					

Dated: _____

Mayor: _____

City Council: _____

_____

_____

_____

_____

_____

City Treasurer: _____

City of Kuna

Payment Approval Report - City Council Approval
Report dates: 5/29/2020-6/11/2020

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. R32-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE STATEWIDE COPIER AND PRINTER CONTRACT LEASE AGREEMENT WITH VALLEY OFFICE SYSTEMS TO LEASE EQUIPMENT, AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT.

WHEREAS, the City would like to lease the Sharp MX-2651 printer and copier.

WHEREAS, the contract is to replace the current expiring lease of the MX-2615, placed at the North Waste Water Treatment Plant.

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

Section 1. The Equipment Placement Form with Valley Office Systems, 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.

PASSED BY THE COUNCIL of Kuna, Idaho this 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

STATEWIDE COPIER AND PRINTER CONTRACT
EQUIPMENT PLACEMENT FORM

PO Date: _____ Agency PO # _____

Agency: City of Kuna

Agency Contact: Jared Empey Contractor: Sharp Electronics Corporation c/o Valley Office Systems

Street / PO Box: 751 W 4th St

City, Zip: Kuna, ID 83634 Delivery _____ Business Days ARO

		Sharp	MX-2651	_____ Day Warranty (Purchases Only)
Category	Area	Brand	Model	

Lease				
Lease Period	# of Years		Yes	No
(3, 4 or 5 years)	5	Equip Maintenance	X	
		Supplies Included	X	

For Purchased Equipment		
	Yes	No
Equipment Maintenance		
Supplies Included		

Note: ***Monthly Lease Price*** INCLUDES equipment maintenance below - Supplies are ONLY included in per impression charge.

Note: ***Monthly Price*** for PURCHASED machines with maintenance includes lubrication, cleaning, routine & preventive maintenance, travel, labor and materials including all replacement parts. Does not include supplies.

Note: ***Impression Charge*** for PURCHASED machines with maintenance includes all additional service over and above that covered in the Monthly Charge agreement, and all supplies except paper; does not include after hours service.

Copier / Printer Location: **Kuna Waste Water Treatment Plant**
6950 N Ten Mile Rd
City, State, Zip **Meridian, ID 83642**
Agency Contact: **Carlee Oswald** Phone: **208.287.1728**
coswald@KunaID.gov

		LEASE		PURCHASE		
EQUIPMENT AND ACCESSORIES		Equipment Service Only	Equip Service w/ Supplies		Equipment Service Only	Equip Service w/ Supplies
Equipment / Option Description	Product Code	Monthly Lease Price	(per Impression Charge)	Purchase Price	Monthly Price	(per Impression Charge)
26 PPM B&W / 26 PPM Full-Color Workgroup	MX-2651	$43.34	$.0089 /ea B&W	$	$	/ea
3 x 550 Sheet Paper Feed Desk Unit	MX-DE27N	$15.46	$.053/ea Color	$	$	/ea
Inner Finisher 50 Sheet Stapler	MX-FN27N	$19.70	/ea	$	$	/ea
Facsimile Expansion Kit	MX-FX15	$13.40	/ea	$	$	/ea
Exit Tray Unit (right side)	MX-TR19N	$1.58	/ea	$	$	/ea
15 AMP Power Filter	AR-D5133NT	$2.07	/ea	$	$	/ea
			/ea	$	$	/ea
			/ea	$	$	/ea
			/ea	$	$	/ea
Total for Equipment & Accessories/Options		$95.55	/ea	$	$	/ea

Special Instructions: Pickup Sharp MX-2615N #B4574 and return to leasing company.

This order is placed pursuant to the Master Agreement #3091 executed by and between the Contractor and the State of Nevada, and PADD#16201163 as executed by the Division of Purchasing and the Contractor. By signing below the agency agrees to the terms and conditions contained therein.

_____
(Agency Authorized Signature)

The Agency shall send One (1) complete copy of this Equipment Placement Form to the Division of Purchasing. email to purchasing@adm.idaho.gov when issued.

RESOLUTION NO. R33-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "AUTHORIZATION FOR ADDITIONAL SERVICES" FOR AN EAST KUNA ELIGIBILITY STUDY WITHIN THE "*PROFESSIONAL SERVICES AGREEMENT*" ESTABLISHED WITH JUB ENGINEERING, INC. FROM AUGUST 6, 2019 (RESOLUTION NO. R56-2019) FOR URBAN RENEWAL SERVICES; AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT.

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

Section 1. The "*Authorization for Additional Services*" with JUB Engineering, Inc. for City of Kuna Urban Renewal District Eligibility Study, 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.

PASSED BY THE COUNCIL of Kuna, Idaho this 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

J-U-B ENGINEERS, INC.

J-U-B ENGINEERS, Inc.
AGREEMENT FOR PROFESSIONAL SERVICES

Authorization for Additional Services

CLIENT: City of Kuna

Project Name: Kuna URD Eligibility Study

J-U-B Project Number: 10-19-093

1. *Additional Services.* The following additional items of work on the project referenced above have been or will be provided by J-U-B ENGINEERS, Inc. (J-U-B). These Additional Services are a supplement to the scope of services contained in J-U-B's existing Agreement for Professional Services for this Project, dated August 6, 2019. All other TERMS AND CONDITIONS of said Agreement remain in full force and effect.

   Eligibility Study for East Kuna Urban Renewal District. Assumes one draft and one final version.

2. *Verbal Authorization by CLIENT, if Applicable.* J-U-B was verbally authorized by the CLIENT to provide these Additional Services by:

   N/A _____ _____
   Name *Date*

3. *Payment for Additional Services.* Unless otherwise noted below, J-U-B will provide these Additional Services on a time and materials basis, using J-U-B's standard billing rates or, if applicable, the billing rates established in the initial Agreement for Professional Services.

   Other Basis for Payment:

   $5,000 lump sum

4. *Schedule of Services.* Due to the Additional Services, the Schedule of Services to be performed under the original Agreement for Professional Services is modified as follows:

   To be completed by December 31, 2020.

Dated this 22nd day of April, 2020,

CLIENT

By: _____
Project Representative or Authorized Signatory for CLIENT

_____
Print or Type Name and Title

J-U-B ENGINEERS, Inc.

By: _____
Project Representative or Authorized Signatory for J-U-B

Lisa M. Bachman, AICP, Boise Area Manager
Print or Type Name and Title

RESOLUTION NO. 56-2019
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL FOR KUNA, IDAHO APPROVING THE "*PROFESSIONAL SERVICES AGREEMENT*" WITH JUB ENGINEERING, INC. FOR THE ECONOMIC DEVELOPMENT DEPARTMENT IN FACILITATING AN URBAN RENEWAL DISTRICT ELIGIBILITY STUDY; 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 "*Professional Services Agreement*" with JUB Engineering, Inc. for City of Kuna Urban Renewal District Eligibility Study, 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 6th day of August, 2019.

APPROVED BY THE MAYOR of Kuna, Idaho this 6th day of August, 2019.

Joe L. Stear, Mayor

ATTEST:

Chris Engels, City Clerk

CITY OF KUNA CORPORATE SEAL STATE OF IDAHO

CITY OF KUNA, IDAHO
PROFESSIONAL SERVICES AGREEMENT

This AGREEMENT is made between the City of Kuna, Idaho, a political subdivision of the state of Idaho, herein "*KUNA*" and J-U-B ENGINEERS, Inc., herein "*CONTRACTOR*").

THE PARTIES AGREE AS FOLLOWS:

1. SCOPE OF WORK:

KUNA engages *CONTRACTOR* to assist the City of Kuna with developing an Urban Renewal District Eligibility Study as detailed in "**Exhibit A**" attached hereto.

2. KUNA'S RESPONSIBILITIES:

1. *KUNA* agrees to provide *CONTRACTOR* with information as to *KUNA's* requirements for the *Project*, including design objectives, capacity and performance requirements, and other documents in its possession, or reasonably obtainable.

2. *KUNA* agrees to obtain, arrange and pay for all advertisements for bids, permits and licenses, and similar fees and charges required, and provide all land, easements, rights-of-ways and access necessary for *CONTRACTOR's* services and the *Project*.

3. *KUNA* agrees to provide right of access to all properties as required during the execution of the work.

3. CONTRACTOR'S RESPONSIBILITIES:

1. *CONTRACTOR* agrees to provide the services of all professional and technical personnel required by this Agreement and detailed in **Exhibit A**.

4. RISK ALLOCATION:

KUNA agrees that *CONTRACTOR* is not responsible for damages arising directly or indirectly from any delays for causes beyond *CONTRACTOR's* control. For purposes of this Agreement, such causes include, but are not limited to, strikes or labor disputes; severe weather disruptions or other natural disasters; fire, riots, war or other emergencies or acts of God; failure of any government agency or other third party to act in a timely manner; failure of performance by *KUNA* or KUNA's contractors or consultants; or discovery of any hazardous substance or differing site conditions. In addition, if said delays directly result in the increase in cost or time required by *CONTRACTOR* to perform its services in an orderly and efficient manner, *CONTRACTOR* shall be entitled to request an equitable adjustment in the schedule and payment.

5. PAYMENT:

KUNA agrees to pay *CONTRACTOR* for its services rendered under this Agreement an amount

not to exceed the total sum of **$18,240** for said services rendered from for the Project. The parties agree that *CONTRACTOR* will invoice *KUNA* for payment under this Agreement for services rendered herein.

6. **RIGHT OF CONTROL:**

KUNA agrees that it will have no right to control or direct the details, manner, or means by which *CONTRACTOR* accomplishes the results of the services performed hereunder. *CONTRACTOR* has no obligation to work any particular hours or days or any particular number of hours or days. *CONTRACTOR* agrees, however, that his other contracts or services shall not interfere with the performance of his services under this Agreement.

7. **INDEPENDENT CONTRACTOR RELATIONSHIP:**

CONTRACTOR is an independent contractor and is not an employee, servant, agent, partner, or joint venturer of *KUNA*. *KUNA* shall determine the work to be done by *CONTRACTOR*, but *CONTRACTOR* shall determine the legal means by which it accomplishes the work specified by *KUNA*.

8. **FEDERAL, STATE, AND LOCAL PAYROLL TAXES:**

Neither federal, state or local income taxes, nor payroll taxes of any kind shall be withheld and paid by KUNA on behalf of *CONTRACTOR* or the employees of *CONTRACTOR*. *CONTRACTOR* shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes. *CONTRACTOR* understands that *CONTRACTOR* is responsible to pay, according to law, *CONTRACTOR's* income tax. *CONTRACTOR* further understands that *CONTRACTOR* may be liable for self-employment (Social Security) tax to be paid by *CONTRACTOR* according to law.

9. **LICENSES AND LAW:**

CONTRACTOR represents that he possess the skill and experience necessary and all licenses required to perform the services under this agreement. *CONTRACTOR* further agrees to comply with all applicable laws in the performance of the services hereunder.

10. **FRINGE BENEFITS:**

Because *CONTRACTOR* is engaged in its own independently established business, *CONTRACTOR* is not eligible for, and shall not participate in, any employee pension, health, or other fringe benefit plans of *KUNA*.

11. **WORKER'S COMPENSATION:**

CONTRACTOR shall maintain in full force and effect worker's compensation for *CONTRACTOR* and any agents, employees, and staff that the *CONTRACTOR* may employ, and provide proof to *KUNA* of such coverage or that such worker's compensation insurance is not required under the circumstances.

12. **EQUIPMENT, TOOLS, MATERIALS OR SUPPLIES:**

CONTRACTOR shall supply, at *CONTRACTOR's* sole expense, all equipment, tools, materials and/or supplies to accomplish the services to be provided herein.

13. **DATE OF COMPLETION:**

This contract shall be completed on or before January 31, 2020.

14. WARRANTY:

CONTRACTOR warrants that work performed in this agreement shall be in accordance with and limited to the applicable standard of care for like professional services. *CONTRACTOR* acknowledges that it will be liable for any breach of this warranty.

15. INDEMNIFICATION AND INSURANCE PROVISIONS:

CONTRACTOR agrees to the following:

1. As respects acts, errors or omissions in the performance of professional services, *CONTRACTOR* agrees to indemnify and hold harmless KUNA, its officers, employees, and KUNA-designated volunteers from and against any and all claims, demands, defense costs, or liability of any kind or nature to the extent arising directly out of *CONTRACTOR*'s negligent acts, errors or omissions in the performance of its professional services under the terms of this contract.

2. As respects all acts or omissions which do not arise directly out of the performance of professional services, but limited to those acts or omissions ~~ally~~ covered by CONTRACTOR's general and automobile liability insurance, *CONTRACTOR* agrees to indemnify, defend (at *KUNA*'s option), and hold harmless *KUNA*, its officers, agents, employees, representatives, and volunteers from and against any and all claims, demands, defense costs, liability, or consequential damages of any kind or nature arising out of or in connection with *CONTRACTOR*'s (or *CONTRACTOR*'s subcontractors, if any) performance or failure to perform, under the terms of this contract; excepting those which CONTRACTOR is not legally liable.

Without limiting *KUNA*'s right to indemnification, it is agreed that *CONTRACTOR* shall secure prior to commencing any activities under this Agreement, and maintain during the term of this Agreement, insurance coverage as follows:

1. Worker's compensation insurance as required by Idaho statutes.

2. Comprehensive general liability insurance or commercial general liability insurance, including coverage for premises and operations, contractual liability, personal injury liability, products/completed operations liability, broad-form property damage (if applicable) and independent contractor's liability (if applicable), in an amount of not less than One Million Dollars ($1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

3. Comprehensive automobile liability coverage including, as applicable, owned, non-owned and hired autos, in an amount of not less than One Million Dollars ($1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

4. Professional liability insurance coverage, in an amount not less than One Million Dollars ($1,000,000.00), and *CONTRACTOR* shall maintain such coverage for at least four (4) years from the termination of this Agreement; and during this four-

year period, *CONTRACTOR* shall use *CONTRACTOR*'s best efforts to ensure that there is no change of the retroactive date on this insurance coverage.

The policy or policies shall provide CONTRACTOR thirty (30) days prior notice in case of cancellation, non-renewal, or significant coverage changes. CONTRACTOR shall immediately provide notice to KUNA in such an event.

KUNA is hereby authorized to reduce the requirements set forth above in the event he/she determines that such reduction is in *KUNA*'s best interest.

It is agreed that any insurance maintained by *KUNA* shall apply in excess of and not contribute with insurance provided by this policy.

Each insurance policy required by this Agreement, excepting policies for worker's compensation and professional liability shall provide that:

KUNA, its officers, agents, employees, representatives and volunteers are added as additional insureds as respects operations and activities of, or on behalf of, the named insured, performed under contract with KUNA. Prior to commencing any work under this Agreement, *CONTRACTOR* shall deliver to *KUNA* insurance certificates confirming the existence of the insurance required by this Agreement, and including the applicable clauses referenced above. Also, within thirty (30) days of the execution date of this Agreement, *CONTRACTOR* shall provide to *KUNA* endorsements to the above-required policies, which add to these policies the applicable clauses referenced above. Said endorsements shall be signed by an authorized representative of the insurance company and shall include the signature's company affiliation and title. Should it be deemed necessary by *KUNA*, it shall be *CONTRACTOR's* responsibility to see that *KUNA* receives documentation acceptable to *KUNA* which sustains that the individual signing said endorsements is indeed authorized to do so by the insurance company. Also, *KUNA* has the right to demand, and to receive within a reasonable time period, copies of any insurance policies required under this Agreement.

In addition to any other remedies *KUNA* may have if *CONTRACTOR* fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, KUNA may, at its sole option:

1. Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;

   A. Order *CONTRACTOR* to stop work under this Agreement and/or withhold any payment(s) which become due to *CONTRACTOR* hereunder until *CONTRACTOR* demonstrates compliance with the requirements hereof.
   B. Terminate this Agreement.

Exercise of any of the above remedies, however, is an alternative to other remedies *KUNA* may have and is not the exclusive remedy for *CONTRACTOR's* failure to maintain insurance or secure appropriate endorsements.

Nothing herein contained shall be construed as limiting in any way the extent to which *CONTRACTOR* may be held responsible for payments of damages to persons or property resulting from *CONTRACTOR's*, or its subcontractor's, negligent performance of the work covered under this Agreement.

16. NON-WAIVER:

Failure of either party to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

17. CHOICE OF LAW:

Any dispute under this Agreement, or related to this Agreement, shall be decided in accordance with the laws of the state of Idaho.

18. ENTIRE AGREEMENT:

This is the entire Agreement of the parties and can only be modified or amended in writing by the parties.

19. SEVERABILITY:

If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will nevertheless remain in full force and effect.

20. ATTORNEY FEES:

Determination of how reasonable attorney fees shall be awarded in any action to enforce this Agreement or to declare or termination of this Agreement shall be in accordance with Idaho Code Section 12-117 (1) or recodification or amendment of said statute.

DATED this 6th day of August, 2019.

KUNA:

KUNA

Joe Stear
Mayor

CONTRACTOR:

By _____
Brian D. Smith, P.E.
J-U-B ENGINEERS, Inc.
250 S. Beechwood Ave., Suite No. 201
Boise, Idaho 83709
Its Area Manager

ATTEST:

Chris Engels
City Clerk

CITY OF KUNA SEAL STATE OF ID

WITNESS:

(Signature of Witness or Notary Public)

Form and content approved by WLP, as attorney *KUNA*.
For WFH

J-U-B ENGINEERS, Inc.
AGREEMENT FOR PROFESSIONAL SERVICES

City of Kuna
Urban Renewal District Eligibility Study
August 2019

Exhibit A – Scope of Services, Schedule, and Basis of Fee

The Agreement for Professional Services is amended and supplemented to include the following provisions regarding the Scope of Services, Schedule of Services, and the Basis of Fee:

For the purposes of this exhibit, 'Agreement for Professional Services' and 'the Agreement' shall refer to the document entitled 'Agreement for Professional Services,' executed between J-U-B and the CITY OF KUNA (CITY) to which this exhibit and any other exhibits have been attached.

PROJECT UNDERSTANDING

The goal of the project is to assist the CITY with developing an urban renewal district eligibility study.

The scope of services for J-U-B is identified with five (5) primary tasks, described in detail in Part 1:

Urban Renewal Eligibility Study

- Task 010 – Project Management, Meetings and Coordination
- Task 020 – Stakeholder Outreach Assistance
- Task 030 – Information Gathering, Analysis & Mapping
- Task 040 – Eligibility Study Document
- Task 050 – Presentation Materials

PART 1 - SCOPE OF SERVICES

A. Basic Services - J-U-B's Basic Services under this Agreement are limited to the following tasks. CITY reserves the right to add subsequent phases or related work to the scope of services upon mutual agreement of scope, additional fees, and schedule.

Task 010 – Project Management, Meetings and Coordination

J-U-B will develop a study process schedule with tasks, dates and responsible persons; manage the project with monthly meetings, monthly billings and frequent communication with the City and project staff throughout the study process. The duration of this project is anticipated to take up to three (3) months.

Deliverables:

1) Study Process Schedule
2) Monthly meeting notes (3)
3) Monthly invoices (3)

Assumptions:

1) Monthly meetings are expected to take a maximum of 1.5 hours in duration, and can take place either through a conference call or in person. Up to two (2) J-U-B staff will attend each meeting.

Task 020 – Stakeholder Outreach Assistance

J-U-B will work with city staff on developing a Frequently Asked Questions (FAQ's) sheet, list of stakeholder questionnaire, and will provide a cursory review of a stakeholder list produced by the City of Kuna. The City of Kuna will be responsible for conducting stakeholder interviews and providing maps for discussion regarding possible Urban Renewal District areas to evaluate.

Deliverables:

1) FAQ's sheet
2) Stakeholder Assessment Questions
3) Stakeholder List (to be interviewed)

Assumptions:

1) City staff will provide stakeholder interview list for J-U-B to review.
2) City staff will be responsible for providing all maps.
3) City staff will conduct all stakeholder interviews.

Task 030 – Information Gathering, Analysis and Mapping

J-U-B will conduct the following activities within this task:

1) Review potential district areas with the city
2) Complete a site visit of the area(s)
3) Review and document deteriorating/deteriorated area characteristics based on site visit, assessor data, City data, GIS data, and other available sources.
4) Perform a Legislation review for conformity with the law (not a legal review, assume URA legal counsel will provide legal review).
5) Prepare Exhibit maps of the selected area(s) including:
    a. Study area(s)
    b. Field observed land use
    c. Deterioration of structures
    d. Blocks within study area
    e. Large lots within study area
    f. Rights-of-way within study area
    g. Bike and pedestrian connectivity
    h. Deterioration of sites in study area
    i. FEMA and flood hazards in study area

Assumptions:

1) J-U-B's work does not include a legal review.
2) The City will be responsible for legal counsel review.

Task 040 – Eligibility Study Document

J-U-B will prepare an Eligibility Study document. It is anticipated the Eligibility Study document will consist of 15-20 pages including text and maps. This task includes up to three (3) versions: draft, final draft and final.

Deliverables:

1) Version 1 – draft for City staff and legal counsel review
2) Version 2 – final draft for city council/urban renewal agency Board review
3) Version 2 – final for adoption

Assumptions:

1) City staff will be responsible for distribution of plan for review and will facilitate comments to be addressed by J-U-B.
2) City will compile comments into a single format for J-U-B to address.

Task 050 – Presentation Materials

J-U-B will prepare presentation materials for city staff's use. Presentation materials will consist of a power point presentation (up to 20 slides), an electronic version of the Eligibility Study and up to ten (10) hard copies.

Deliverables:

1) Power point presentation – up to 20 slides
2) Electronic pdf version of the Eligibility Study
3) Ten (10) hard copies of the Eligibility Study

Assumptions:

1) City staff will present the Eligibility Study to stakeholders, appointed and elected officials.
2) J-U-B will prepare one (1) draft power point for city staff review and one (1) final power point for presentation purposes

B. CITY's Responsibilities/Exclusions from Current Scope - CITY is responsible for completing, authorizing J-U-B to complete as Additional Services, or authorizing others to complete all tasks not specifically included above in J-U-B's Basic Services that may be required for the project, including, but not limited to:

1. Ensure staff availability to review documents and provide active direction and timely decisions in writing pertaining this scope of work.
2. Furnish to J-U-B any other available information pertinent to the Project including reports and data relative to this scope of work.

PART 2 - SCHEDULE OF SERVICES

A. The following table summarizes the anticipated schedule for the identified Basic Services predicated upon timely receipt of CITY-provided information, typical review periods, and active direction during

work. CITY acknowledges that the J-U-B will not be responsible for impacts to the schedule by events or actions of others over which J-U-B has no control.

Task Number	Task Name	Anticipated Schedule
010	Project Management, Meetings and Coordination	August-October 2019
020	Stakeholder Outreach Assistance	August 2019
030	Information Gathering, Analysis & Mapping	August-September 2019
040	Eligibility Study Document	August-October 2019
050	Presentation Materials	October 2019

PART 3 - BASIS OF FEE

A. CITY shall pay J-U-B for the identified Basic Services as follows:

1. The CITY will pay up to $8,000 for FY 2019 budget, with the remaining contract amount (approximately $10,240) pending City Council approval of the FY 2020 budget.

2. For Lump Sum fees:

   a. The portion of the Lump Sum amount billed for J-U-B's services will be based upon J-U-B's estimate of the percentage of the total services actually completed during the billing period.

3. For Time and Materials (T&M) fees:

   a. CITY shall pay J-U-B an amount equal to the cumulative hours charged to the Project by each J-U-B employee times that employees' standard billing rate for all services performed on the Project, plus Reimbursable Expenses and J-U-B's J-U-Bs' charges, if any.

B. The fee types and amounts for each task are presented in the following table:

Task Number	Task Name	Fee Type	Amount
010	Project Management, Meetings and Coordination	Lump Sum	$1,600
020	Stakeholder Outreach Assistance	Lump Sum	$1,800
030	Information Gathering, Analysis & Mapping	Lump Sum	$6,900
040	Eligibility Study Document	Lump Sum	$6,000
050	Presentation Materials	Lump Sum	$1,140
060	Reimbursables (travel, mileage, copies)	Lump Sum	$800
			Total: $18,240

C. Period of Service: If the period of service for the task identified above is extended beyond 18 months, the compensation amount for J-U-B's services shall be appropriately adjusted to account for inflation and salary adjustments.

RESOLUTION NO. R34-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE *"PARK USE AGREEMENT"* WITH THE IDAHO BLACK SOX ASSOCIATION, PURSUANT TO THE TERMS OF THE AGREEMENT; 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 *"Park Use Agreement"* with the Idaho Black Sox Association, in substantially the form as attached hereto as "**EXHIBIT A**" is hereby approved.

Section 2. The Mayor of the City of Kuna, Idaho is hereby authorized to execute the 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 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

PARK USE AGREEMENT
CITY OF KUNA, IDAHO AND IDAHO BLACK SOX ASSOCIATION
BERNIE FISHER CITY PARK

This Park Use Agreement (AGREEMENT) is entered into by and between the City of Kuna, Idaho, (CITY), an Idaho municipal corporation and the Idaho Black Sox Association (IBS), an independent AAU youth athletic team, jointly referred to herein as the PARTIES.

WHEREAS, CITY owns and maintains Bernie Fisher City Park (PARK) located at Kuna, Idaho; and

WHEREAS, the PARK has certain improvements including baseball fields, excluding the concession stand; and

WHEREAS, IBS desires to use the PARK for its baseball clinics, practices and games during specified times of the year; and

WHEREAS, CITY grants IBS permission to use the PARK in exchange for certain contributions including maintenance, care, and improvements at the PARK.

NOW, THEREFORE, in consideration of the above recitals, which recitals are contractual in nature, the mutual covenants herein contained and such other and further consideration as is hereby acknowledged, the parties agree as follows:

1. USE: IBS agrees to use the PARK for the sole purpose of operating baseball activities to provide athletic opportunities for the children of Kuna, Idaho.

2. RESPONSIBILITIES:

   The CITY Will:

   2.1. Have the PARK field reserved for IBS' exclusive use according to the following schedule:

   From June 10th to the third Sunday in July, Monday through Friday after 4:00 PM until dark, and all-day Saturday.

   2.2. At all other times individuals and/or groups may use the fields. Groups using the fields must contact the City of Kuna Parks & Recreation Department to ensure fields are available, register for their use, and review and sign the City's Baseball Field Use Agreement, which will include a training on maintaining the fields.

   2.3. Send out a Notice of Intent to Renew this Agreement on or before December 31, as provided for in paragraph 5.

2.4. Maintain the fields including mowing, over-seeding, and irrigating during the schedule set by the CITY. Maintain the irrigation system.

IBS Will:

2.5. Operate and manage the youth baseball program, including programs and clinics.

2.6. On or about November 1, provide the City Clerk with the names of the officers for IBS for the upcoming year.

2.7. If there is going to be a change in the reserved schedule as provided for in paragraph 2.1, provide the change to the City of Kuna Parks & Recreation Department on or before January 31.

2.8. After January 31, reservations for the fields for unscheduled dates and times, as provided for in paragraph 2.1., will be first come, first served.

2.9. IBS may, upon good cause, modify the reserved schedule during the season, however any prior reservation, as provided for in paragraph 2.8, will have priority to use the fields.

2.10. Return the Notice of Intent to Renew acknowledgement by January 31.

2.11. Hire and staff the umpires.

2.12. Ensure that the fields are in presentable and playable condition prior to each use.

2.13. Purchase and apply diamond dust as needed.

2.14. Provide trashcans during IBS events, practice and games and keep the area clean.

3. USAGE FEE: There will be no usage fee.

4. TERM: The term of this AGREEMENT shall be February 1, 2020 to January 31, 2021.

5. The City will send out a Notice of Intent to Renew to the IBS organization's address on file. The Notice of Intent to Renew will allow for the extension of this AGREEMENT for additional one (1) year terms.

6. INSPECTION: IBS has inspected and hereby accepts the PARK in the condition at the beginning of this AGREEMENT.

7. ALTERATIONS: IBS shall not make any renovations, alterations, additions, or install any fixtures, equipment, fencing, etc., without the express written consent of CITY. All

fixtures and improvements shall become the property of CITY at no cost to the City at termination or expiration of this AGREEMENT.

8. OTHER REQUIREMENTS: IBS shall maintain oversight and control of the participants in its program. Littering, vandalizing, destroying or otherwise damaging CITY property is prohibited.

9. COMPLIANCE WITH GOVERNING LAW: Each PARTY shall comply with all federal, state and local laws, rules and regulations, now in force or which may hereafter be in force pertaining to the use of the PARK.

10. INDEMNIFICATION: IBS shall indemnify, hold harmless and defend the CITY and its elected or appointed officials, employees and agents from and against all liabilities, claims, suits, losses and expenses, including reasonable attorney' s fees and court costs, arising out of or in the course of the use contemplated by this AGREEMENT that is caused in whole or in part by any act or omission of IBS, any act or omission of anyone directly or indirectly employed by IBS, or any act or omission for which IBS may be liable, whether or not it is caused in whole or in part by the party indemnified.

11. INSURANCE: IBS shall, at all times, obtain, pay for, and maintain insurance for the coverages and amounts of coverage not less than those set forth as follows:

    11.1. Worker's Compensation - in compliance with the state and federal laws, if required.

    11.2. Comprehensive Automobile Liability Policy - a minimum coverage of $1,000,000.00 combined single limits of liability for bodily injuries, death and property damage resulting from anyone occurrence.

    11.3. Comprehensive Premises Liability Policy- a minimum coverage of $1,000,000.00 including the following coverage:

        11.3.1. Premises and operations; and

        11.3.2. Broad Form Commercial General Liability Endorsement to include blanket contractual liability (specifically covering but not limited to the contractual obligations assumed by the organization; and

        11.3.3. Personal injury (with employment and contractual exclusions deleted); and

        11.3.4. Broad Form Property Damages coverage.

    11.4. IBS shall provide to CITY original Certificates of Insurance satisfactory to evidence such coverages before operations pursuant to this AGREEMENT commence.

11.5. CITY shall be named as an additional insured on all policies related to this Agreement, excluding Workers Compensation. Such policies shall provide that there shall be no termination, non-renewal, modification, or expiration of such coverage without forty-five (45) calendar days written notice to the CITY.

11.6. All insurance shall be written with a company having an A.M. Best rating of at least the "A" category and size categories of VII.

12. UTILITIES: CITY will provide general field maintenance, including lawn mowing, fertilizing, seeding, irrigation and irrigation system maintenance. Any other utility, including electricity shall be provided by IBS.

13. RUBBISH: IBS shall be responsible for garbage or refuse removal during its use of the PARK.

14. DAMAGE BY FIRE OR OTHER CASUALTY: If the PARK., or any part thereof is damaged by fire or other casualty to such an extent that it is rendered unusable, in whole or in part, the CITY shall have the option to terminate this AGREEMENT, or repair the premises. IBS shall have no claim for any loss of use during the period that the PARK. is being repaired.

15. NOTICES: Any notice required or intended to be given to the other PARTY under the terms of this AGREEMENT shall be in writing and shall be deemed to be duly delivered the earlier of (a) actual receipt by personal delivery to the representative (as defined herein), or in lieu of personal service, (b) by way of private courier, such as Federal Express or United Parcel Service addressed to the appropriate party and address as set forth herein, or in lieu of private courier, (c) U.S. Mail, registered, postage prepaid, return receipt requested.

15.1. CITY notice shall be sent to:

City Clerk for the City of Kuna, Idaho
Post Office Box 13
Kuna, Idaho 83634

15.2. IBS notice shall be sent to:

Kristoffer Sperry
1960 S. Meridian Rd.
Meridian, Idaho 83642

16. TERMINATION: Either Party reserves the right to terminate this AGREEMENT by providing written notice of its election to terminate to the other Party at least sixty (60) days prior to the date of termination.

17. ASSIGNMENT: This AGREEMENT is not assignable without the written consent of CITY.

18. WAIVER: No failure of the CITY to enforce any term hereof shall be deemed to be a waiver.

19. ENTIRE AGREEMENT: This AGREEMENT contains the entire agreement between the parties and may be modified only by an addendum to this AGREEMENT or by a new AGREEMENT in writing, signed by CITY and IBS.

20. ATTORNEY'S FEES: In the event of any controversy, claim or action being made, filed or, instituted between the PARTIES to this AGREEMENT to enforce the terms and conditions of this Agreement or any of the other documents to be executed hereunder or arising from the breach of any provision hereof, the award of attorney fees and costs and expenses is governed by Idaho Code Section 12-117 (1) and (2).

In witness whereof, the parties hereto have set their hands and seals on the day and year first written above.

CITY OF KUNA, IDAHO

Dated this _____ day of _____, _____.

BY: _____

Joe L. Stear, Mayor

ATTEST:

Dated this _____ day of _____, _____.

BY: _____
Chris Engels, City Clerk

IDAHO BLACK SOX

Dated this _____ day of _____, _____.

BY: _____
Kristoffer Sperry

RESOLUTION NO. R35-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE *"DEED OF PUBLIC UTILITIES EASEMENT, AND GRANTEE ACCEPTANCE KUNA MIDDLE SCHOOL EASEMENT"* FROM KUNA JOINT SCHOOL DISTRICT #3; AND AUTHORIZING THE MAYOR TO EXECUTE THE DEED EASEMENT.

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

Section 1. The *"Deed of Public Utilities Easement, and Grantee Acceptance Kuna Middle School Easement"* from KUNA JOINT SCHOOL DISTRICT #3, attached hereto as **"EXHIBIT A"** is hereby approved by the City of Kuna, Idaho as the beneficiary of said easement.

Section 2. The Mayor of the City of Kuna, Idaho is hereby authorized to execute said Deed Easement on behalf of the City of Kuna, Idaho.

PASSED BY THE COUNCIL of Kuna, Idaho this 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

After recording, return to:

Chris Engels, City Clerk
City of Kuna
751 W. 4th Street
P.O. Box 13
Kuna, Idaho 83634

Above space for recording

DEED OF PUBLIC UTILITIES EASEMENT,
and GRANTEE ACCEPTANCE
Kuna Middle School Easement

PARTIES:

Kuna Joint School District #3, an Idaho local education agency	*Grantor*	711 E. Porter St. Kuna, Idaho 83634
City of Kuna, an Idaho municipal corporation	*Grantee*	P.O. Box 13 Kuna, Idaho 83634

This DEED OF PUBLIC UTILITIES EASEMENT and GRANTEE ACCEPTANCE made, effective as of the date of the Parties' signatures hereon, by and between KUNA JOINT SCHOOL DISTRICT #3, an Idaho local education agency, Grantor (hereinafter referred to as "Grantor"), whose address is 711 E. Porter St., Kuna, Idaho 83634, and the CITY OF KUNA, an Idaho municipal corporation, Grantee (hereinafter referred to as "Grantee"), whose address is P.O. Box 13, Kuna, Idaho 83634.

SECTION I
DEFINITIONS

For all purposes of this *Deed of Public Utilities Easement and Grantee Acceptance*, the following terms in **bold** shall have the meaning herein provided unless the context of the term clearly requires otherwise as follows:

1.1 Deed of Easement: means and refers to this *Deed of Public Utilities Easement and Grantee Acceptance.*

1.2 **Grantee:** means and refers to CITY OF KUNA, an Idaho municipal corporation, whose address is P.O. Box 13, Kuna, Idaho 83634, and Grantee Party to this Deed of Easement.

1.3 **Grantor:** means and refers to KUNA JOINT SCHOOL DISTRICT #3, an Idaho local education agency, whose address is 711 E. Porter St., Kuna, Idaho 83634, and Grantor Party to this Deed of Easement.

1.4 **Parties:** means and refers to the Grantor and the Grantee to this Deed of Easement.

1.5 **Public Utility Easement:** means and refers to a perpetual easement within the Real Property for access, construction, maintenance, operation and replacement of the Utility Pipelines and Grantee's municipal sewer pipelines together with the right of ingress and egress on the Real Property for the purpose of constructing, operating, and maintaining sewer pipelines and the necessary appurtenances thereto.

1.6 **Real Property:** means that certain real property more particularly described in Exhibit A attached hereto and by this reference incorporated herein as if set forth at length.

1.7 **Utility Pipelines:** means and refers to PVC pipeline sized as needed for the project of sanitary sewer.

SECTION II
RECITALS

The parties recite and declare:

2.1 Grantor is the owner of the Real Property; and

2.2 The Grantee has the authority and the right to acquire easement rights and constructed and installed Utility Pipelines for its public utility systems inclusive of sewer; and

2.3 The Grantor is willing to grant and convey to the Grantee, and the Grantee is willing to accept, the Public Utility Easement subject to the conditions stated herein in this Deed of Easement.

In consideration of the mutual covenants contained in this Deed of Easement, the Parties agree as follows:

SECTION III
GRANT OF PUBLIC UTILITY EASEMENT

3.1 Grantor does hereby grant, convey and release unto the Grantee, and or its assigns as hereinafter provided for, from the effective date hereof, the Public Utility Easement. The

public utility easement shall consist of two separate easements. A fifty foot (50') wide temporary construction easement extending the full length of the project and a twenty-five foot (25') wide permanent utility easement also extending the full length of the project as shown on Figures 1 & 2. The temporary construction easement shall terminate when the project is complete; and

3.2 Grantee agrees to remove the rail car from the Real Property at Grantee's sole cost and expense; and

3.3 Grantee agrees to install, at its sole cost and expense, all necessary sewer lines and appurtenances necessary to connect Initial Point High School (IPHS) to Grantee's Utility Pipelines; and

3.4 Grantee agrees to construct, at its sole cost and expense, a nine foot (9') wide paved path/road along the north boundary of the Real Property per Grantor specifications (Attachment 1).

SECTION IV
PUBLIC UTILITY EASEMENT CONDITIONS

4.1 The Public Utility Easement is granted and conveyed subject to the following conditions:

4.1.1 The Public Utility Easement is reserved for the utility purposes herein set forth and no structures other than those for utility purposes are to be erected within the limits of said Public Utility Easement.

4.1.2 The Grantee, or its assigns, shall have the right at any time to access said improvements to perform any necessary maintenance, repair or replacement, and to cut, trim, and clear all trees, brush, and other obstructions that may injure, endanger, or interfere with the construction, operation, or maintenance of Grantees utilities within the Public Utility Easement.

4.1.3 In exercising the Public Utility Easement rights granted and conveyed herein, the Grantee, or its assigns, will not unreasonably interfere with the normal use of the real property within which it lies and will, at its sole cost and expense and with due diligence, restore the real property within which it lies to its original or better condition following any use of the Public Utility Easement either for construction, repair, maintenance, and/or replacement of said facilities and appurtenances thereto.

SECTION V
ACCEPTANCE OF GRANT OF PUBLIC UTILITY EASEMENT

5.1 The Grantee does hereby accept the grant and conveyance from the Grantor of the Public Utility Easement subject to the terms and conditions of this Deed of Easement.

SECTION VI
PUBLIC UTILITY EASEMENT SUBJECT TO LAW OF VACATION

6.1 Any transfer by the Grantee of this grant and conveyance of this Public Utility Easement is subject to the laws of the state of Idaho governing the vacation of city easements currently codified at Idaho Code §50-1325.

IN WITNESS WHEREOF, this Deed Easement has been executed on the 11th day of June, 2020, with the intent that it shall be recorded in the office of the recorder of the County of Ada, state of Idaho.

Grantor:
KUNA JOINT SCHOOL DISTRICT #3

By: _____
J.D. Grant, Board Chairman

Grantee:
CITY OF KUNA

By: _____
Joe L. Stear, *Mayor*

Attest:

_____
Chris Engels, *City Clerk*

STATE OF IDAHO)
: ss.
County of Ada)

On this 11th day of June, in the year of 2020, before me a notary public for the State of Idaho, personally appeared J.D. GRANT, known or identified to me to be the Board Chairman of KUNA JOINT SCHOOL DISTRICT #3, and acknowledged to me that school district executed the same.



Deann Greany
Notary Public for Idaho
My Commission Expires: July 26 2023

STATE OF IDAHO)
: ss.
County of Ada)

On this ____ day of _____, in the year of 2020, before me a notary public for the State of Idaho, personally appeared JOE L. STEAR and CHRIS ENGELS, known or identified to me to be the persons whose names are subscribed to the within instrument as Mayor and as City Clerk of the City of Kuna, and acknowledged to me that they executed the same as Mayor and as City Clerk of the City of Kuna.

_____
Notary Public for Idaho
My Commission Expires: _____

(SEAL)

LEGAL DESCRIPTION FOR
KUNA SEWER DISTRICT
25' WIDE TEMPORARY EASEMENT

The following describes a 25 foot wide Temporary Easement located in the Southwest 1/4 of the Northwest 1/4 of Section 23, Township 2 North, Range 1 West, Boise Meridian, Ada County, Idaho. Being further described as follows:

BASIS OF BEARING:

The West line of the Northwest 1/4 of the Northwest 1/4 of Section 23, Township 2 North, Range 1 West, Boise Meridian, derived from found monuments and taken as North 00°04'20" East with the distance between monuments found to be 1321.40 feet.

BEGINNING at a point on the West line of the Southwest 1/4 of the Northwest 1/4 said Section 23, Township 2 North, Range 1 West, Boise Meridian from which the North 1/16 Corner of said Section 23 bears North 00°04'20" East a distance of 25 feet;

Thence leaving said West line, South 89°56'33" East, to a point on the East line of the Southwest 1/4 of the Northwest 1/4 said Section 23, a distance of 1,320.55 feet;

Thence along said East South 00°04'55" West, a distance of 25.00 feet;

Thence leaving said East line, North 89°56'33" West, to a point on the West line of the Southwest 1/4 of the Northwest 1/4 said Section 23, a distance of 1,320.55 feet;

Thence along said West line North 00°04'20" East, a distance of 25.00 feet to the **POINT OF BEGINNING**.

Said Parcel containing 33,014 square feet or 0.76 acres, more or less and is subject to all existing easements and rights-of-ways of record or implied.

END OF DESCRIPTION.

Kenneth H. Cook, P.L.S. 9895
Timberline Surveying
847 Park Centre Way, Suite 3
Nampa, Idaho 83651
(208) 465-5687



LEGAL DESCRIPTION FOR
KUNA SEWER DISTRICT
25' WIDE PERMANENT EASEMENT

The following describes a 25 foot wide Permanent Easement located in the Southwest 1/4 of the Northwest 1/4 of Section 23, Township 2 North, Range 1 West, Boise Meridian, Ada County, Idaho. Being further described as follows:

BASIS OF BEARING:

The West line of the Northwest 1/4 of the Northwest 1/4 of Section 23, Township 2 North, Range 1 West, Boise Meridian, derived from found monuments and taken as North 00°04'20" East with the distance between monuments found to be 1321.40 feet.

BEGINNING at North 1/16 Corner of said Section 23, Township 2 North, Range 1 West, Boise Meridian;

Thence along the South line of the Northwest 1/4 of the Northwest 1/4 of said Section 23, South 89°56'33" East, to the Northwest 1/4 Corner of said Section, a distance of 1,320.56 feet;

Thence leaving said North line and along the East line of the Southwest 1/4 of the Northwest 1/4 of said Section 23, South 00°04'55" West, a distance of 25.00 feet;

Thence leaving said East line, North 89°56'33" West, to a point on the West line of the Southwest 1/4 of the Northwest 1/4 of said Section 23, a distance of 1,320.55 feet;

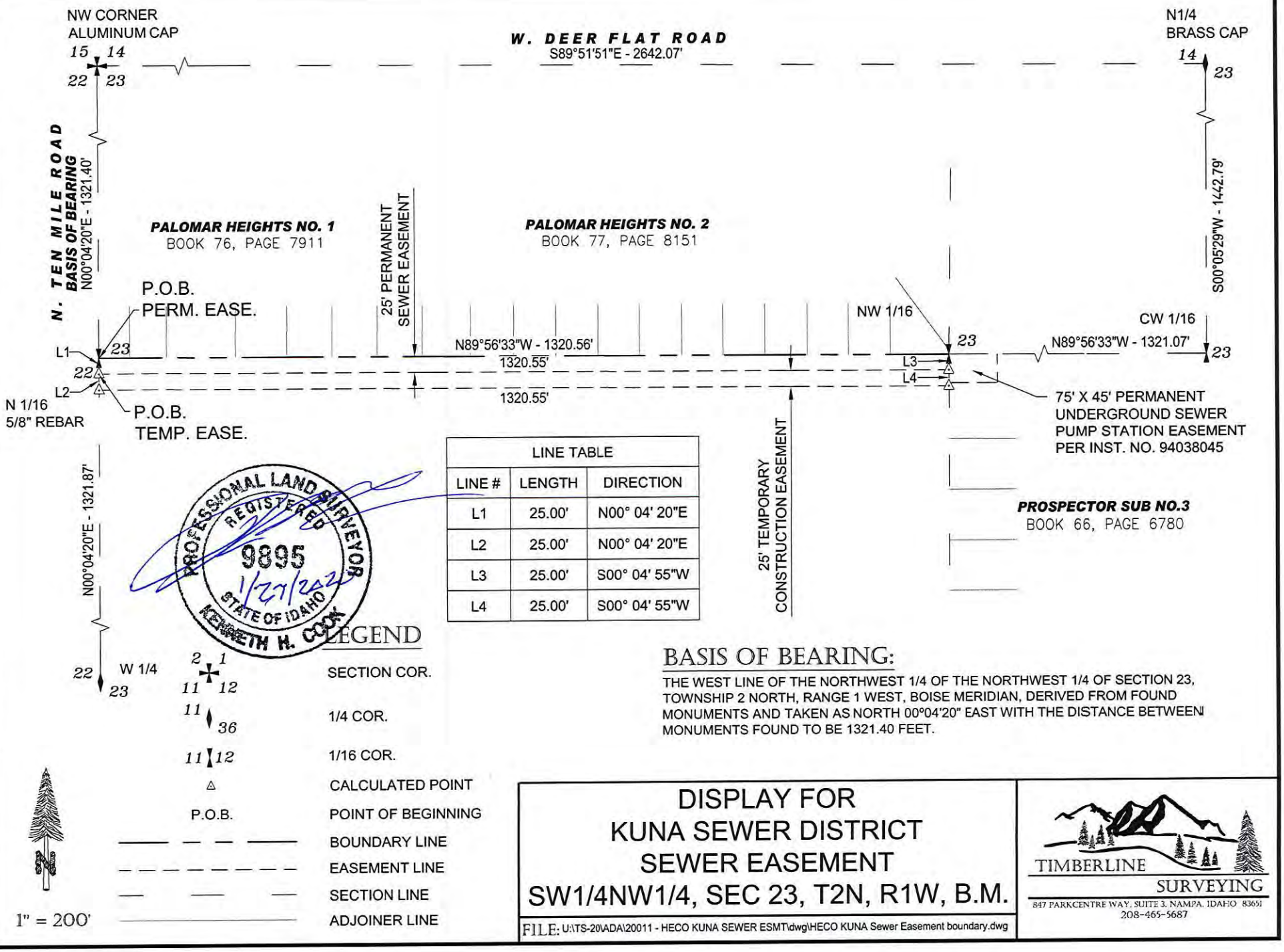
Thence along said West line North 00°04'20" East, a distance of 25.00 feet to the **POINT OF BEGINNING**.

Said Parcel containing 33,014 square feet or 0.76 acres, more or less and is subject to all existing easements and rights-of-ways of record or implied.

END OF DESCRIPTION.

Kenneth H. Cook, P.L.S. 9895
Timberline Surveying
847 Park Centre Way, Suite 3
Nampa, Idaho 83651
(208) 465-5687





LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	25.00'	N00° 04' 20"E
L2	25.00'	N00° 04' 20"E
L3	25.00'	S00° 04' 55"W
L4	25.00'	S00° 04' 55"W

PROFESSIONAL LAND SURVEYOR
REGISTERED
9895
1/27/2020
STATE OF IDAHO
KENNETH H. COOK

BASIS OF BEARING:

THE WEST LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 23, TOWNSHIP 2 NORTH, RANGE 1 WEST, BOISE MERIDIAN, DERIVED FROM FOUND MONUMENTS AND TAKEN AS NORTH 00°04'20" EAST WITH THE DISTANCE BETWEEN MONUMENTS FOUND TO BE 1321.40 FEET.

DISPLAY FOR
KUNA SEWER DISTRICT
SEWER EASEMENT
SW1/4NW1/4, SEC 23, T2N, R1W, B.M.

FILE: U:\TS-20\ADA\20011 - HECO KUNA SEWER ESMT\dwg\HECO KUNA Sewer Easement boundary.dwg

TIMBERLINE SURVEYING
847 PARKCENTRE WAY, SUITE 3, NAMPA, IDAHO 83651
208-465-5687

Bailey & Company Chtd.
Certified Public Accountants

James Washburn, CPA
Weston Flamm, CPA
Cassie Zattiero, CPA

812-B 12th Ave. South
P.O. Box 876
Nampa, ID 83653-0876
208 466-2493
FAX 208 467-2000
www.BaileyCPAs.com

June 2, 2020

To the City Council
City of Kuna, Idaho

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of City of Kuna, Idaho for the year ended September 30, 2019. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated August 22, 2019. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Matters

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by City of Kuna, Idaho are described in the notes to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2019. We noted no transactions entered into by the City during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimate affecting the governmental activities and the business-type activities' financial statements was:

> Management's estimate of the current portion of compensated absences is based on prior history of employees' use of compensated absences. We evaluated the key factors and assumptions used to develop the current portion of compensated absences in determining that it is reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. The schedule attached to the management representation letter summarizes uncorrected misstatements of the financial statements. Management has determined that their effects are immaterial, both individually and in the aggregate, to the financial statements taken as a whole. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated June 2, 2020.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to City of Kuna, Idaho's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the City's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the Schedule of Employer's Share of Net Pension Liability, Schedule of Employer Contributions, Budgetary (GAAP Basis) Comparison Schedule – General fund, and the Budgetary (GAAP Basis) Comparison Schedule – Late Comers' Fee fund, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the combining nonmajor fund financial statements, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

We were not engaged to report on the Schedules of Revenues by Source and Expenditures by Object – Budget and Actual – General fund, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Restriction on Use

This information is intended solely for the information and use of the City Council and management of City of Kuna, Idaho and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Bailey & Co.

RESOLUTION NO. R37-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE CITY OF KUNA, IDAHO REPORT ON AUDITED BASIC FINANCIAL STATEMENTS AND OTHER INFORMATION FOR THE YEAR ENDED SEPTEMBER 30, 2019.

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

The City of Kuna, Idaho Report on Audited Basic Financial Statements and Other Information for the Year Ended September 30, 2019 in substantially the form as attached hereto as "**EXHIBIT A**" is hereby approved.

PASSED BY THE COUNCIL of Kuna, Idaho this 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

CITY OF KUNA, IDAHO

Report on Audited
Basic
Financial Statements
and
Other Information

For the Year Ended September 30, 2019

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Bailey & Company Chtd.
Certified Public Accountants

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P.O. Box 876
Nampa, ID 83653-0876
208 466-2493
FAX 208 467-2000
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Independent Auditor's Report

To the Honorable Mayor
and City Council
City of Kuna, Idaho

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of City of Kuna, Idaho (the City), as of and for the year ended September 30, 2019, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Summary of Opinions

Opinion Unit	Type of Opinion
Governmental Activities	Qualified
Business-type Activities	Qualified
General Fund	Unmodified
Late Comers' Fee Fund	Unmodified
Water Fund	Qualified
Sewer Fund	Qualified
Irrigation Fund	Qualified
Trash Fund	Unmodified
Aggregate Remaining Fund Information	Unmodified

Basis for Qualified Opinions on Governmental Activities, Business-type Activities, Water Fund, Sewer Fund, and Irrigation Fund

Management has not performed or contracted to perform the actuarial calculations for other post-employment benefits and, accordingly, has not considered the City's other post-employment benefit liability. Accounting principles general accepted in the United States of America require that a liability be recorded for other post-employment benefits, which would initially decrease net position, increase liabilities, and increase expenses in each of the affected opinion units. The amount by which this departure would affect net position, liabilities, and expenses in the relevant opinion units is not reasonably determinable.

Qualified Opinions

In our opinion, except for the effects of the matter described in the "Basis for Qualified Opinions on Governmental Activities, Business-type Activities, Water Fund, Sewer Fund, and Irrigation Fund" paragraph, the financial statements referred to above present fairly, in all material respects, the financial position of the governmental activities, business-type activities, water fund, sewer fund, and irrigation fund of City of Kuna, Idaho, as of September 30, 2019, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Unmodified Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the general fund, late comers' fee fund, trash fund, and the aggregate remaining fund information of City of Kuna, Idaho, as of September 30, 2019, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the schedule of employer's share of net pension liability, schedule of employer contributions, and budgetary comparison information as listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

The City has omitted management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinion on the basic financial statements is not affected by this missing information.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise City of Kuna, Idaho's basic financial statements. The combining nonmajor fund financial statements and the supplemental schedules of revenues by source and expenditures by object – budget and actual – general fund are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining nonmajor fund financial statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the

underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining nonmajor fund financial statements are fairly stated in all material respects in relation to the basic financial statements as a whole.

The schedules of revenues by source and expenditures by object – budget and actual – general fund have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated June 2, 2020, on our consideration of City of Kuna, Idaho's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

Bailey & Co.

Nampa, Idaho
June 2, 2020

City of Kuna, Idaho
Statement of Net Position
September 30, 2019

	Governmental Activities	Business-type Activities	Total
Assets			
Current Assets:			
Cash and Cash Equivalents	$ 6,215,740	$ 17,108,943	$ 23,324,683
Prepaid Items	39,705	61,925	101,630
Receivables, Net:			
Property Taxes	52,979	0	52,979
Interest	21,693	43,630	65,323
Accounts and Notes	9,268	666,673	675,941
Intergovernmental	403,397	0	403,397
Total Current Assets	6,742,782	17,881,171	24,623,953
Noncurrent Assets:			
Restricted Cash	1,124,006	0	1,124,006
Note Receivables, Net	0	26,436	26,436
Capital Assets:			
Land and Construction in Progress	1,819,123	2,283,577	4,102,700
Buildings, Net	528,399	29,541,272	30,069,671
Equipment/Vehicles, Net	353,592	521,846	875,438
Improvements, Net	2,019,518	17,970,654	19,990,172
Intangibles, Net	191,561	0	191,561
Total Capital Assets	4,912,193	50,317,349	55,229,542
Total Noncurrent Assets	6,036,199	50,343,785	56,379,984
Total Assets	12,778,981	68,224,956	81,003,937
Deferred Outflows			
Pension	132,772	228,560	361,332
Liabilities			
Current Liabilities:			
Accounts Payable and Other Current Liabilities	371,877	1,068,204	1,440,081
Unearned Revenue	67	13,645	13,712
Total Current Liabilities	371,944	1,081,849	1,453,793
Long-term Liabilities:			
Due Within One Year:			
Compensated Absences	93,184	119,120	212,304
Due in More Than One Year:			
Compensated Absences	22,578	39,122	61,700
Net Pension Liability	341,438	496,553	837,991
Total Long-term Liabilities	457,200	654,795	1,111,995
Total Liabilities	829,144	1,736,644	2,565,788
Deferred Inflows			
Pension	162,906	228,797	391,703
Net Position			
Net Investment in Capital Assets	4,912,193	50,317,349	55,229,542
Restricted	3,376,324	0	3,376,324
Unrestricted	3,631,186	16,170,726	19,801,912
Total Net Position	$ 11,919,703	$ 66,488,075	$ 78,407,778

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Statement of Activities
For the Year Ended September 30, 2019

		Program Revenues			Net (Expense) Revenue and Changes in Net Position		
	Expenses	Charges for Services and Sales	Operating Grants and Contributions	Capital Grants and Contributions	Governmental Activities	Business-type Activities	Total
Primary Government:							
Governmental Activities:							
General Administration	$ 6,086,766	$ 5,213,725	$ 16,418	$ 226,073	$ (630,550)	$ 0	$ (630,550)
Total Governmental Activities	6,086,766	5,213,725	16,418	226,073	(630,550)	0	(630,550)
Business-type Activities:							
Water	1,575,142	3,496,651	0	0	0	1,921,509	1,921,509
Sewer	3,568,270	3,800,597	0	0	0	232,327	232,327
Irrigation	740,075	1,781,245	0	0	0	1,041,170	1,041,170
Trash	2,187,225	2,189,217	0	0	0	1,992	1,992
Total Business-type Activities	8,070,712	11,267,710	0	0	0	3,196,998	3,196,998
Total Primary Government	$ 14,157,478	$ 16,481,435	$ 16,418	$ 226,073	(630,550)	3,196,998	2,566,448
General Revenues and Special Items:							
Property Taxes					2,766,331	0	2,766,331
State Sources					1,414,951	0	1,414,951
Other					66,276	0	66,276
Disposal of Assets					(3,660)	764	(2,896)
Investment Earnings					140,784	340,800	481,584
Total General Revenues and Special Items					4,384,682	341,564	4,726,246
Change in Net Position					3,754,132	3,538,562	7,292,694
Net Position, Beginning					8,165,571	62,949,513	71,115,084
Net Position, Ending					$ 11,919,703	$ 66,488,075	$ 78,407,778

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Balance Sheet -
Governmental Funds
September 30, 2019

	General	Late Comers' Fee	Nonmajor Funds	Total Governmental Funds
Assets				
Cash and Cash Equivalents	$ 3,630,127	$ 2,246,583	$ 339,030	$ 6,215,740
Prepaid Items	39,705	0	0	39,705
Receivables, Net:				
Property Taxes	52,979	0	0	52,979
Interest	12,607	7,203	1,883	21,693
Accounts	8,996	72	200	9,268
Intergovernmental	403,397	0	0	403,397
Restricted Cash	0	0	1,124,006	1,124,006
Total Assets	4,147,811	2,253,858	1,465,119	7,866,788
Deferred Outflows	0	0	0	0
Total Assets and Deferred Outflows	$ 4,147,811	$ 2,253,858	$ 1,465,119	$ 7,866,788
Liabilities				
Accounts Payable	$ 282,640	$ 0	$ 10,432	$ 293,072
Benefits and Wages Payable	64,253	0	0	64,253
Payroll Taxes Payable	14,552	0	0	14,552
Unearned Revenues	67	0	0	67
Total Liabilities	361,512	0	10,432	371,944
Deferred Inflows				
Unavailable Property Taxes	49,397	0	0	49,397
Fund Balances:				
Nonspendable	39,705	0	0	39,705
Restricted	0	2,253,858	1,122,466	3,376,324
Assigned	5,426	0	332,221	337,647
Unassigned	3,691,771	0	0	3,691,771
Total Fund Balances	3,736,902	2,253,858	1,454,687	7,445,447
Total Liabilities, Deferred Inflows, and Fund Balances	$ 4,147,811	$ 2,253,858	$ 1,465,119	$ 7,866,788

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Reconciliation of the Balance Sheet of the Governmental
Funds to the Statement of Net Position
September 30, 2019

Total Fund Balances - Governmental Funds		$ 7,445,447
Amounts reported for governmental activities in the Statement of Net Position are different because of the following:		
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in governmental funds. The cost of assets consist of:		
Land and Construction in Progress	$ 1,819,123	
Buildings, Net of $409,107 Accumulated Depreciation	528,399	
Equipment/Vehicles, Net of $820,499 Accumulated Depreciation	353,592	
Improvements, Net of $384,069 Accumulated Depreciation	2,019,518	
Intangibles, Net of $10,101 Accumulated Depreciation	191,561	
		4,912,193
In the government-wide statements, deferred inflows represent acquisitions of net position that are applicable to a future reporting period and deferred outflows represent the consumption of resources that are applicable to a future reporting period. These deferrals consist of:		
Deferred Outflows Related to Net Pension Liability	132,772	
Deferred Inflows Related to Net Pension Liability	(162,906)	
		(30,134)
Long-term liabilities applicable to the City's governmental activities are not due and payable in the current period and, accordingly, are not reported as fund liabilities. Long-term liabilities at year end consist of:		
Compensated Absences	(115,762)	
Net Pension Liability	(341,438)	
		(457,200)
Property taxes receivable will be collected this year, but are not available soon enough to pay for current period's expenditures, and therefore, are unavailable in the funds.		49,397
Net Position of Governmental Activities		$ 11,919,703

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Revenues, Expenditures, and
Changes in Fund Balances -
Governmental Funds
For the Year Ended September 30, 2019

	General	Late Comers' Fee	Nonmajor Funds	Total Governmental Funds
Revenues				
Property Taxes	$ 2,764,015	$ 0	$ 0	$ 2,764,015
Licenses and Permits	28,749	0	0	28,749
Charges for Services	2,319,577	0	0	2,319,577
Grants and Contributions	0	0	16,418	16,418
Intergovernmental	1,414,951	0	0	1,414,951
Interest	82,172	46,101	12,511	140,784
Other	66,276	2,130,577	734,822	2,931,675
Total Revenues	6,675,740	2,176,678	763,751	9,616,169
Expenditures				
Current:				
Salaries and Benefits	1,756,638	0	0	1,756,638
Maintenance and Operations	3,205,552	842,695	16,097	4,064,344
Capital Outlay	195,486	0	726,984	922,470
Total Expenditures	5,157,676	842,695	743,081	6,743,452
Excess (Deficiency) of Revenues Over Expenditures	1,518,064	1,333,983	20,670	2,872,717
Other Financing Sources (Uses)				
Transfers In	250,108	0	636,500	886,608
Transfers Out	(636,500)	0	(250,108)	(886,608)
Total Other Financing Sources (Uses)	(386,392)	0	386,392	0
Net Change in Fund Balances	1,131,672	1,333,983	407,062	2,872,717
Fund Balances - Beginning	2,605,230	919,875	1,047,625	4,572,730
Fund Balances - Ending	$ 3,736,902	$ 2,253,858	$ 1,454,687	$ 7,445,447

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Reconciliation of the Statement
of Revenues, Expenditures, and Changes in Fund Balances
of the Governmental Funds to the Statement of Activities
For the Year Ended September 30, 2019

Total Net Change in Fund Balance - Governmental Funds		$ 2,872,717
Amounts reported for governmental activities in the Statement of Activities are different because of the following:		
Capital outlays are reported in governmental funds as expenditures. However, in the Statement of Activities, the cost of those assets is allocated over their useful lives as depreciation expense. In the current period these amounts are:		
Capital Outlay	$ 902,488	
Contributed Assets	226,073	
Disposal of Assets	(3,660)	
Depreciation Expense	(201,104)	
Net		923,797
Because some property taxes will not be collected for several months after the City's fiscal year ends, they are not considered as "available" revenues in the governmental funds and are, instead, counted as deferred inflows. They are, however, recorded as revenues in the Statement of Activities.		2,316
Some expenses in the Statement of Activities do not require the use of current financial resources and, therefore, are not reported as expenditures in governmental funds.		
Compensated Absences Liability Changes	(19,982)	
Net Pension Liability and Related Deferral Changes	(24,716)	
		(44,698)
Change in Net Position of Governmental Activities		$ 3,754,132

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Net Position -
Proprietary Funds
September 30, 2019

	Business-type Activities - Enterprise Funds		
	Water	Sewer	Irrigation
Assets			
Current Assets:			
Cash and Cash Equivalents	$ 8,473,779	$ 4,796,646	$ 3,742,129
Prepaid Items	35,591	22,891	3,443
Interest Receivable	22,118	12,054	9,401
Accounts and Notes Receivable, Net	210,174	245,148	4,468
Total Current Assets	8,741,662	5,076,739	3,759,441
Noncurrent Assets:			
Notes Receivable, Net	0	2,904	23,532
Capital Assets:			
Land and Construction in Progress	289,394	1,688,457	305,726
Buildings, Net	692,286	28,010,600	838,386
Equipment/Vehicles, Net	137,357	327,812	56,677
Improvements, Net	5,146,646	10,016,450	2,807,558
Total Noncurrent Assets	6,265,683	40,046,223	4,031,879
Total Assets	15,007,345	45,122,962	7,791,320
Deferred Outflows			
Pension	93,209	111,671	23,680
Liabilities			
Current Liabilities:			
Accounts Payable	77,625	139,878	31,332
Benefits and Wages Payable	31,746	33,986	8,520
Payroll Taxes Payable	6,284	7,335	1,700
Deposits from Others	429,027	0	0
Due to KeyBank LID	0	290,197	0
Unearned Revenues	0	0	13,645
Compensated Absences	52,396	52,543	14,181
Total Current Liabilities	597,078	523,939	69,378
Long-term Liabilities:			
Compensated Absences	17,899	16,760	4,463
Net Pension Liability	203,984	241,590	50,979
Total Long-term Liabilities	221,883	258,350	55,442
Total Liabilities	818,961	782,289	124,820
Deferred Inflows			
Pension	96,467	109,546	22,784
Net Position			
Net Investment in Capital Assets	6,265,683	40,043,319	4,008,347
Unrestricted	7,919,443	4,299,479	3,659,049
Total Net Position	$ 14,185,126	$ 44,342,798	$ 7,667,396

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Net Position -
Proprietary Funds (continued)
September 30, 2019

	Business-type Activities - Enterprise Funds	
	Trash	Total
Assets		
Current Assets:		
Cash and Cash Equivalents	$ 96,389	$ 17,108,943
Prepaid Items	0	61,925
Interest Receivable	57	43,630
Accounts and Notes Receivable, Net	206,883	666,673
Total Current Assets	303,329	17,881,171
Noncurrent Assets:		
Notes Receivable, Net	0	26,436
Capital Assets:		
Land and Construction in Progress	0	2,283,577
Buildings, Net	0	29,541,272
Equipment/Vehicles, Net	0	521,846
Improvements, Net	0	17,970,654
Total Noncurrent Assets	0	50,343,785
Total Assets	303,329	68,224,956
Deferred Outflows		
Pension	0	228,560
Liabilities		
Current Liabilities:		
Accounts Payable	10,574	259,409
Benefits and Wages Payable	0	74,252
Payroll Taxes Payable	0	15,319
Deposits from Others	0	429,027
Due to KeyBank LID	0	290,197
Unearned Revenues	0	13,645
Compensated Absences	0	119,120
Total Current Liabilities	10,574	1,200,969
Long-term Liabilities:		
Compensated Absences	0	39,122
Net Pension Liability	0	496,553
Total Long-term Liabilities	0	535,675
Total Liabilities	10,574	1,736,644
Deferred Inflows		
Pension	0	228,797
Net Position		
Net Investment in Capital Assets	0	50,317,349
Unrestricted	292,755	16,170,726
Total Net Position	$ 292,755	$ 66,488,075

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Revenues, Expenses, and Changes
in Fund Net Position - Proprietary Funds
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds		
	Water	Sewer	Irrigation
Operating Revenues			
Charges for Services	$ 2,198,046	$ 2,773,896	$ 743,796
Hook Ups	1,149,154	863,416	697,520
Delinquent Fees	55,161	69,024	17,087
Miscellaneous	94,290	94,261	322,842
Total Operating Revenues	3,496,651	3,800,597	1,781,245
Operating Expenses			
Salaries and Benefits	776,541	897,136	209,155
Contractor Services	38,728	29,968	10,906
Maintenance and Operations	359,326	788,948	307,008
Depreciation	400,547	1,852,218	213,006
Total Operating Expenses	1,575,142	3,568,270	740,075
Operating Income (Loss)	1,921,509	232,327	1,041,170
Nonoperating Revenues (Expenses)			
Interest Earned	168,338	99,648	70,853
Disposal of Assets	3,650	(2,160)	(726)
Total Nonoperating Revenues (Expenses)	171,988	97,488	70,127
Change in Net Position	2,093,497	329,815	1,111,297
Net Position - Beginning	12,091,629	44,012,983	6,556,099
Net Position - Ending	$ 14,185,126	$ 44,342,798	$ 7,667,396

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Revenues, Expenses, and Changes
in Fund Net Position - Proprietary Funds (continued)
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds	
	Trash	Total
Operating Revenues		
Charges for Services	$ 2,189,217	$ 7,904,955
Hook Ups	0	2,710,090
Delinquent Fees	0	141,272
Miscellaneous	0	511,393
Total Operating Revenues	2,189,217	11,267,710
Operating Expenses		
Salaries and Benefits	0	1,882,832
Contractor Services	0	79,602
Maintenance and Operations	2,187,225	3,642,507
Depreciation	0	2,465,771
Total Operating Expenses	2,187,225	8,070,712
Operating Income (Loss)	1,992	3,196,998
Nonoperating Revenues (Expenses)		
Interest Earned	1,961	340,800
Disposal of Assets	0	764
Total Nonoperating Revenues (Expenses)	1,961	341,564
Change in Net Position	3,953	3,538,562
Net Position - Beginning	288,802	62,949,513
Net Position - Ending	$ 292,755	$ 66,488,075

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Statement of Cash Flows -
Proprietary Funds
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds		
	Water	Sewer	Irrigation
Cash Flows From Operating Activities			
Receipts from Customers	$ 3,440,683	$ 3,786,085	$ 1,477,353
Payments to Suppliers for Goods or Services	(392,214)	(1,485,711)	(317,721)
Payments to Employees for Services	(761,759)	(875,867)	(205,702)
Other Receipts	94,290	94,261	322,842
Net Cash Provided (Used) by Operating Activities	2,381,000	1,518,768	1,276,772
Cash Flows From Noncapital Financing Activities	0	0	0
Cash Flows From Capital and Related Financing Activities			
Purchases and Construction of Capital Assets	(396,361)	(2,127,969)	(98,690)
Proceeds from Sale of Capital Assets	5,379	0	0
Net Cash Used by Capital and Related Financing Activities	(390,982)	(2,127,969)	(98,690)
Cash Flows From Investing Activities			
Interest and Dividends	155,099	95,016	64,906
Net Change in Cash and Cash Equivalents	2,145,117	(514,185)	1,242,988
Cash and Cash Equivalents - Beginning	6,328,662	5,310,831	2,499,141
Cash and Cash Equivalents - Ending	$ 8,473,779	$ 4,796,646	$ 3,742,129
Displayed As:			
Cash and Cash Equivalents	$ 8,473,779	$ 4,796,646	$ 3,742,129

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Statement of Cash Flows -
Proprietary Funds (continued)
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds	
	Trash	Total
Cash Flows From Operating Activities		
Receipts from Customers	$ 2,185,508	$ 10,889,629
Payments to Suppliers for Goods or Services	(2,181,031)	(4,376,677)
Payments to Employees for Services	0	(1,843,328)
Other Receipts	0	511,393
Net Cash Provided (Used) by Operating Activities	4,477	5,181,017
Cash Flows From Noncapital Financing Activities	0	0
Cash Flows From Capital and Related Financing Activities		
Purchases and Construction of Capital Assets	0	(2,623,020)
Proceeds from Sale of Capital Assets	0	5,379
Net Cash Used by Capital and Related Financing Activities	0	(2,617,641)
Cash Flows From Investing Activities		
Interest and Dividends	2,031	317,052
Net Change in Cash and Cash Equivalents	6,508	2,880,428
Cash and Cash Equivalents - Beginning	89,881	14,228,515
Cash and Cash Equivalents - Ending	$ 96,389	$ 17,108,943
Displayed As:		
Cash and Cash Equivalents	$ 96,389	$ 17,108,943

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Statement of Cash Flows -
Proprietary Funds (continued)
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds		
	Water	Sewer	Irrigation
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:			
Operating Income (Loss)	$ 1,921,509	$ 232,327	$ 1,041,170
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:			
Depreciation	400,547	1,852,218	213,006
Pension Income (Expense)	10,268	10,137	2,791
Changes in Assets and Liabilities:			
(Increase) Decrease in Accounts Receivable	(37,078)	29,318	241
(Increase) Decrease in Prepaid Items	(1,446)	(2,011)	(419)
(Increase) Decrease in Notes Receivable	0	1,148	5,064
Increase (Decrease) in Accounts Payable	7,286	(664,784)	612
Increase (Decrease) in Due to KeyBank LID	0	49,283	0
Increase (Decrease) in Benefits and Wages Payable	3,031	9,602	302
Increase (Decrease) in Payroll Taxes Payable	1,483	1,530	360
Increase (Decrease) in Deposits From Others	75,400	0	0
Increase (Decrease) in Unearned Revenues	0	0	13,645
Net Cash Provided by Operating Activities	$ 2,381,000	$ 1,518,768	$ 1,276,772

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Statement of Cash Flows -
Proprietary Funds (continued)
For the Year Ended September 30, 2019

	Business-type Activities - Enterprise Funds	
	Trash	Total
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	$ 1,992	$ 3,196,998
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation	0	2,465,771
Pension Income (Expense)	0	23,196
Changes in Assets and Liabilities:		
(Increase) Decrease in Accounts Receivable	(3,709)	(11,228)
(Increase) Decrease in Prepaid Items	0	(3,876)
(Increase) Decrease in Notes Receivable	0	6,212
Increase (Decrease) in Accounts Payable	6,194	(650,692)
Increase (Decrease) in Due to KeyBank LID	0	49,283
Increase (Decrease) in Benefits and Wages Payable	0	12,935
Increase (Decrease) in Payroll Taxes Payable	0	3,373
Increase (Decrease) in Deposits From Others	0	75,400
Increase (Decrease) in Unearned Revenues	0	13,645
Net Cash Provided by Operating Activities	$ 4,477	$ 5,181,017

The accompanying notes are an integral part of the financial statements.

City of Kuna, Idaho
Statement of Fiduciary Net Position -
Fiduciary Funds
September 30, 2019

	Agency Funds
Assets	
Cash and Cash Equivalents	$ 1,610,147
Total Assets	1,610,147
Deferred Outflows	0
Liabilities	
Due to Others	1,610,147
Total Liabilities	1,610,147
Deferred Inflows	0
Net Position	$ 0

The accompanying notes are an integral
part of the financial statements.

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

The accompanying financial statements present the activities of City of Kuna, Idaho (the City), which has responsibility and control over all activities related to general operations, parks, public safety, planning and zoning, and utilities within the City. The City receives funding from local, state, and federal government sources and must comply with all of the requirements of these funding source entities. However, the City is not included in any other governmental reporting entity as defined by generally accepted accounting principles. City Council members are elected by the public and have decision-making authority, the power to designate management, the ability to significantly influence operations, and the primary accountability for fiscal matters. In addition, the City's reporting entity does not contain any component units as defined by the Governmental Accounting Standards Board.

Basis of Presentation

Government-wide Statements: The Statement of Net Position and the Statement of Activities display information about the financial activities of the City, except for fiduciary activities. Eliminations have been made to minimize the double counting of internal activities. These statements distinguish between the governmental and business-type activities of the City. Governmental activities generally are financed through taxes, intergovernmental revenues, and other non-exchange transactions. Business-type activities are financed in whole or in part by fees charged to external parties.

The Statement of Activities presents a comparison between direct expenses and program revenues for each activity of the business-type activities of the City and for each function of the City's governmental activities.

- Direct expenses are those that are specifically associated with a program or function and, therefore, are clearly identifiable to a particular function.
- Indirect expenses of the general government related to the administration and support of the City's programs, such as personnel and accounting (but not interest on long-term debt) are allocated to programs based on their percentage of total primary government expenses. Interest expenses are allocated to the programs that manage the capital assets financed with long-term debt.
- Program revenues include (a) charges paid by the recipients of goods or services offered by the programs and (b) grants and contributions that are restricted to meeting the operational or capital requirements of a particular program. Revenues that are not classified as program revenues, including all taxes and state formula aid, are presented as general revenues.

Fund Financial Statements: The fund financial statements provide information about the City's funds, including fiduciary funds. Separate statements for each fund category - *governmental, proprietary, and fiduciary* - are presented. The emphasis of fund financial statements is on major governmental and enterprise funds, each displayed in a separate column. All remaining governmental and enterprise funds are aggregated and reported as nonmajor funds.

The City reports the following major governmental funds:

- *General fund.* This is the City's primary operating fund. It accounts for all financial resources of the City, except those required to be accounted for in another fund.
- *Late Comers' Fee fund*. This fund accumulates monies received for new building permits to reimburse development agreements for oversizing the utility lines when installed in an initial development.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Proprietary fund operating revenues and expenses are related to providing water, sewer, irrigation, trash, and well mitigation services to the residents and businesses of the City and providing services to other parts of the City government. Revenue and expenses arising from capital and non-capital financing activities and from investing activities are presented as non-operating revenues or expenses.

The City has the following major enterprise funds:

- *Water fund.* This fund accounts for the activities of the City's water supply system, pumping stations, and collection systems.
- *Sewer fund.* This fund accounts for the operations and collections of the City's sewer system.
- *Irrigation fund.* This fund accounts for the operations and collections of the City's irrigation system.
- *Trash fund.* This fund accounts for the operations and collections of the City's trash services.

Fiduciary funds consist of one agency fund. This fund accounts for monies collected and held for others. The City is responsible for ensuring that all the assets reported in this fund is used for its intended purpose. The City's fiduciary activity is reported in a separate Statement of Fiduciary Net Position.

Basis of Accounting

The government-wide, proprietary, and fiduciary fund financial statements are reported using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place.

Non-exchange transactions, in which the City receives value without directly giving equal value in return, include property taxes, intergovernmental revenues, grants, and donations. On an accrual basis, revenue from property taxes is recognized in the fiscal year in which the taxes are levied. Revenue from intergovernmental revenues, grants, and donations is recognized in the fiscal year in which all eligibility requirements have been satisfied.

Governmental funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available. The City considers revenues reported in the governmental funds to be available if they are collected within sixty days after year-end. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, and claims and judgments, which are recognized as expenditures to the extent they have matured. General capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of general long-term liabilities and acquisitions under capital leases are reported as other financing sources.

Fund Balance Reporting in Governmental Funds

The City uses the following fund balance categories in the governmental fund financial statements:

- *Nonspendable.* Prepaid items that are permanently precluded from conversion to cash.
- *Restricted.* Balances constrained to a specific purpose by enabling legislation, external parties, or constitutional provisions.
- *Assigned*. Limitations imposed on balances through intentions of the City Council or a body or official designated by the City Council.
- *Unassigned.* Balances available for any purpose.

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The remaining fund balance classification (committed) was not in use. However, if there had been committed funds, these amounts would have been decided by the City Council, the City's highest level of decision-making authority, through a formal action (resolution).

Under the terms of grant agreements, the City funds certain programs by a combination of specific cost-reimbursement grants, categorical block grants, and general revenues. Thus, when program expenses are incurred, there are both restricted and unrestricted resources available to finance the program. When both restricted and unrestricted resources are available for use, it is the City's intent to use restricted resources first, then unrestricted resources as they are needed.

There is also no formal policy regarding the use of committed, assigned, or unassigned fund balances. However, it is the City's intent that when an expenditure is incurred for purposes for which amounts in any of the unrestricted classifications of fund balance could be used, the City considers the committed amounts to be reduced first, followed by the assigned amounts, and then the unassigned amounts.

The City Council has authorized the City Treasurer to assign funds. As of September 30, 2019, $332,221 has been assigned for capital improvement projects. Another $5,426 has been assigned for use by the City's art commission.

Details of restricted funds are as follows:

Fund	Purpose	
Impact Fee	Fees that are collected at the time a new building permit is issued and restricted by Idaho Code 67-8210 for the development of parks and police facilities as the City continues to grow. Cash is required to be maintained in interest bearing accounts in capital project funds.	$ 1,122,466
Late Comers' Fee Fund	Development agreements between the City and developers dictate that certain future monies received by the City are to be reimbursed to the developers following receipt.	2,253,858
		$ 3,376,324

Cash Equivalents

The City requires all cash belonging to the City to be placed in custody of the Treasurer. A "Pooled Cash" concept is therefore used in maintaining the cash and investment accounts in the accounting records. Under this method, all cash is pooled for investment purposes and each fund has equity in the pooled amount. All amounts included in the pooled cash and investment accounts are considered to be cash and cash equivalents. See Note 2.

Receivables

All receivables are shown net of an allowance for uncollectible amounts. The City has estimated $697 of its account receivables are doubtful.

Property Tax Calendar

The City receives tax revenue from Ada County. The County is responsible for property valuation and collection of tax levies. The taxes that have not been remitted to the City as at September 30, 2019, are considered by the City as a receivable.

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

The City levies its real property taxes through the county in September of each year based upon the assessed valuation as of the previous July 1. Property taxes are due in two installments on December 20 and June 20 and are considered delinquent on January 1 and July 1, at which time the property is subject to lien.

Capital Assets

Capital assets are reported at actual or estimated historical cost based on appraisals or deflated current replacement cost. Contributed assets are reported at estimated fair value at the time received.

Capitalization thresholds (the dollar value above which asset acquisitions are added to the capital asset accounts), depreciation methods, and estimated useful lives of capital assets reported in the government-wide statements and proprietary funds are shown below:

	Capitalization Policy	Depreciation Method	Estimated Useful Life
Buildings and Improvements	$5,000	Straight-Line	5 - 75 Years
Equipment and Vehicles	$5,000	Straight-Line	5 - 20 Years
Intangibles	$5,000	Straight-Line	3 - 20 Years

General infrastructure assets acquired prior to October 1, 2003, are not reported in the basic financial statements. General infrastructure assets include all roads and bridges and other infrastructure assets acquired subsequent to October 1, 2003. However, the City does not report infrastructure such as roads and streets. These assets are owned and maintained by Ada County Highway District. The City has no control over this entity.

Depreciation is used to allocate the actual or estimated historical cost of all capital assets over their estimated useful lives.

Compensated Absences

The City uses the vesting method to compute compensated absences for vacation time.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Other Post-Employment Benefit Liability

Management has not performed or contracted to perform the actuarial calculations for other post-employment benefits and, accordingly, has not considered the City's other post-employment benefit liability. Accounting principles general accepted in the United States of America require that a liability be recorded for other post-employment benefits, which would initially decrease net position, increase liabilities, and increase expenses in the governmental activities, business-type activities, water fund, sewer fund, and irrigation fund. The effect of this departure from generally accepted accounting principles has not been determined.

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Pensions

For purposes of measuring the net pension liability, related deferrals, and pension expense, information about the fiduciary net position of the Public Employee Retirement System of Idaho Base Plan (Base Plan) and additions to/deductions from the Base Plan's fiduciary net position have been determined on the same basis as they are reported by the Base Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

2. CASH AND INVESTMENTS

Deposits

As of September 30, 2019, the carrying amount of the City's deposits was $16,436,761 and the respective bank balances totaled $16,441,867. $500,000 of the total bank balance was insured by the FDIC.

Custodial Credit Risk – Deposits

Custodial credit risk is the risk that in the event of a bank failure, the government's deposits may not be returned. As of September 30, 2019, $15,941,867 of the City's deposits were not covered by the federal depository insurance or by collateral held by the City's agent or pledging financial institution's trust department or agent in the name of the City, and thus were exposed to custodial credit risk.

The City does not have a formal policy limiting its exposure to custodial credit risk. However, the City uses the following procedures to mitigate the bank default risk of loss associated with the City's demand deposits which exceed the FDIC insurance coverage limit of $250,000 per financial institution:

- Partner with large federally chartered banks with solid histories and strong credit worthiness ratings;
- Subscribe to and monitor online rating agency reports regularly as provided by the "Big Three" rating agencies (Standard & Poor's, Moody's, Fitch Group);
- Monitor online FDIC/NCUA information regarding financial institutions which have been on watch lists and/or which have failed recent stress tests;
- Monitor bank-specific online rating agency reports (Bauer Financial, Inc.; IDC Financial Publishing, Inc.; Veribanc) for bank rating information. The aforementioned entities offer very specific in-depth information for a fee, and also offer free high-level data.

Custodial Risk – Investments

Custodial credit risk is the risk that an issuer or other counter party to an investment will not fulfill its obligations. The City does not have a formal policy limiting its custodial risk for investments. The City uses the following procedures to mitigate the risk of loss associated with the its investments:

The City's only investment resides with the Local Government Investment Pool (LGIP), a diversified investment pool comprised of funds from various Idaho government entities. The pool is managed by the Idaho State Treasurer's Office, which has *safety and preservation of principal* as its primary objective for the pool. An investment in the pool is not guaranteed by the FDIC nor any other government agency and, as it is with any investment, it is possible to lose money by investing in the LGIP. The City regularly monitors the diversified portfolio of the LGIP holdings and has placed a high

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

2. CASH AND INVESTMENTS (continued)

level of trust in the Idaho State Treasurer's Office to effectively manage the City's investment in the pool.

Interest Rate Risk

The City does not have a formal policy limiting investment maturities that would help manage its exposure to fair value losses from increasing interest rates.

Investments

The City participates in the State of Idaho Investment Pool, which has not been rated. The pool is not registered with the Securities and Exchange Commission or any other regulatory body. Oversight of the pool is with the State Treasurer, and Idaho Code defines allowable investments. The value of the City's investment in the pool is reported in the accompanying financial statements at amounts based on the City's amortized cost deposited in the pool. Participants have overnight availability to their funds, up to $10 million. Withdrawals of more than $10 million require 3 business day's notification. The State Treasurer does not provide any legally binding guarantees to support the value of the shares to participants. The City follows Idaho Statute that outlines qualifying investment options as follows:

Idaho Code authorizes the City to invest any available funds in obligations issued or guaranteed by the United States Treasury, the State of Idaho, local Idaho municipalities and taxing districts, the Farm Credit System, or Idaho public corporations, as well as time deposit accounts and repurchase agreements.

At year-end, the cash and investments were reported in the basic financial statements in the following categories, including $1,100 in cash kept on hand:

	Governmental Activities	Business-type Activities	Total	Fiduciary Funds
Cash and cash equivalents	$ 4,238,963	$ 12,499,739	$ 16,738,702	$ 1,176,323
Restricted cash	1,124,006	0	1,124,006	0
Investments categorized as cash equivalents	1,976,777	4,609,204	6,585,981	433,824
	$ 7,339,746	$ 17,108,943	$ 24,448,689	$ 1,610,147

3. COMPENSATED ABSENCES

Vacation leave is granted to all regular City employee after the first month of employment. In the event of termination, an employee is reimbursed for accumulated vacation leave. A summary of the current year activity and year-end liability is as follows:

	Beginning	Earned	Used	Ending	Current
Governmental Activities	$ 95,780	$ 113,166	$ 93,184	$ 115,762	$ 93,184
Business-type Activities	159,915	117,447	119,120	158,242	119,120
	$ 255,695	$ 230,613	$ 212,304	$ 274,004	$ 212,304

4. DUE FROM OTHER GOVERNMENTAL UNITS OR AGENCIES

Amounts due from other governmental units consist of state sales tax of $109,657, liquor apportionment of $43,885, and state revenue sharing of $249,855 from the State of Idaho for a total of $403,397.

5. RISK MANAGEMENT

The City is exposed to a considerable number of risks of loss including, but not limited to, a) damage to and loss of property and contents, b) employee torts, c) professional liabilities, i.e. errors and omissions, d) environmental damage, e) worker's compensation, i.e. employee injuries, and f) medical insurance costs of its employees. Commercial insurance policies are purchased to transfer the risk of loss.

6. PENSION PLAN

Plan Description

The City contributes to the Base Plan, which is a cost-sharing multiple-employer defined benefit pension plan administered by the Public Employee Retirement System of Idaho (PERSI or System) that covers substantially all employees of the State of Idaho, its agencies and various participating political subdivisions. The cost to administer the plan is financed through the contributions and investment earnings of the plan. PERSI issues a publicly available financial report that includes financial statements and the required supplementary information for PERSI. That report may be obtained on the PERSI website at www.persi.idaho.gov.

Responsibility for administration of the Base Plan is assigned to the Board comprised of five members appointed by the Governor and confirmed by the Idaho Senate. State law requires that two members of the Board be active Base Plan members with at least ten years of service, and three members who are Idaho citizens and are not members of the Base Plan, except by reason of having served on the Board.

Pension Benefits

The Base Plan provides retirement, disability, death and survivor benefits of eligible members or beneficiaries. Benefits are based on members' years of service, age, and highest average salary. Members become fully vested in their retirement benefits with five years of credited service (5 months for elected or appointed officials). Members are eligible for retirement benefits upon attainment of the ages specified for their employment classification. The annual service retirement allowance for each month of credited service is 2.0% (2.3% for police/firefighters) of the average monthly salary for the highest consecutive 42 months.

The benefit payments for the Base Plan are calculated using a benefit formula adopted by the Idaho Legislature. The Base Plan is required to provide a 1% minimum cost of living increase per year, provided the Consumer Price Index increases 1% or more. The PERSI Board has the authority to provide higher cost of living increases to a maximum of Consumer Price Index movement or 6%, whichever is less; however, any amount above the 1% minimum is subject to review by the Idaho Legislature.

Member and Employer Contributions

Member and employer contributions paid to the Base Plan are set by statute and are established as a percent of covered compensation. Contribution rates are determined by the PERSI Board within limitations, as defined by state law. The Board may make periodic changes to employer and employee contribution rates (expressed as percentages of annual covered payroll) that are adequate to accumulate sufficient assets to pay benefits when due.

6. PENSION PLAN (continued)

The contribution rates for employees are set by statute at 60% of the employer rate for general employees and 72% for police and firefighters. As of June 30, 2019, it was 6.79% for general employees and 8.36% for police and firefighters. The employer contribution rate as a percent of covered payroll is set by the Retirement Board and was 11.32% for general employees and 11.66% for police and firefighters. Beginning July 1, 2019, the employee contribution rates changed to 7.16% for general employees and 8.81% for police and firefighters. The employer contribution rates changed to 11.94% for general employees and 12.28% for police and firefighters. The City's employer contributions were $300,675 for the year ended September 30, 2019.

Pension Liabilities, Pension Expense (Revenue), and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

As of September 30, 2019, the City reported a liability for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The City's proportion of the net pension liability was based on the City's share of contributions in the Base Plan pension plan relative to the total contributions of all participating PERSI Base Plan employers. As of June 30, 2019, the City's proportion was .0734078%.

For the year ended September 30, 2019, the City recognized pension expense of $348,586. At September 30, 2019, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 77,873	$ 98,754
Changes in assumptions or other inputs	46,610	0
Net difference between projected and actual earnings on pension plan investments	0	285,458
Changes in the City's proportion and differences between the City's contributions and the City's proportionate contributions	148,058	7,491
City contributions subsequent to the measurement date	88,791	0
Total	$ 361,332	$ 391,703

$88,791 reported as deferred outflows of resources related to pensions resulting from City contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ending September 30, 2020.

The average of the expected remaining service lives of all employees that are provided with pensions through the System (active and inactive employees) determined at July 1, 2018, the beginning of the measurement period ended June 30, 2019, is 4.8 years and for the measurement period ended June 30, 2018.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense (revenue) as follows:

6. PENSION PLAN (continued)

Year Ended September 30,		
2020	$	28,817
2021	$	(85,045)
2022	$	(40,259)
2023	$	(22,675)

Actuarial Assumptions

Valuations are based on actuarial assumptions, the benefit formulas, and employee groups. Level percentages of payroll normal costs are determined using the Entry Age Normal Cost Method. Under the Entry Age Normal Cost Method, the actuarial present value of the projected benefits of each individual

included in the actuarial valuation is allocated as a level percentage of each year's earnings of the individual between entry age and assumed exit age. The Base Plan amortizes any unfunded actuarial accrued liability based on a level percentage of payroll. The maximum amortization period for the Base Plan permitted under Section 59-1322, Idaho Code, is 25 years.

The total pension liability in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

- Inflation 3.00%
- Salary increases, including inflation 3.75%
- Investment rate of return 7.05%, net of investment expense
- Cost-of-living adjustments (COLA) 1.00%

Mortality rates were based on the RP – 2000 combined table for healthy males or females as appropriate with the following offsets:

- Set back three years for teachers
- No offset for male police and firefighters
- Forward one year for female police and firefighters
- Set back one year for all general employees and beneficiaries

An experience study was performed for the period July 1, 2011 through June 30, 2017, which reviewed all economic and demographic assumptions other than mortality. Mortality and all economic assumptions were studied in 2014 for the period from July 1, 2011 through June 30, 2017. The total pension liability as of June 30, 2019 is based on the results of an actuarial valuation date of July 1, 2019.

The long-term expected rate of return on pension plan investments was determined using the building block approach and a forward-looking model in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Even though history provides a valuable perspective for setting the investment return assumption, the System relies primarily on an approach which builds upon the latest capital market assumptions. Specifically, the System uses consultants, investment managers, and trustees to develop capital market assumptions in analyzing the System's asset allocation. The assumptions and the System's formal policy

6. PENSION PLAN (continued)

for asset allocation are shown below. The formal asset allocation policy is somewhat more conservative than the current allocation of the System's assets.

The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are as follows:

Asset Class		Target Allocation	Nominal Rate of Return (Arithmetic)	Expected Real Rate of Return (Arithmetic)
Core Fixed Income	Barclays Aggregate	30.00%	3.05%	0.80%
Broad US Equities	Wilshire 5000/Russell 3000	55.00%	8.30%	6.05%
Developed Foreign Equities	MSCI EAFE/World ex US	15.00%	8.45%	6.20%
Assumed Inflation - Mean			2.25%	2.25%
Assumed Inflation - Standard Deviation			1.50%	1.50%
Portfolio Arithmetic Mean Return			6.75%	4.50%
Portfolio Standard Deviation			12.54%	12.54%
Portfolio Long-term (Geometric) Expected Rate of Return			6.13%	3.77%
Assumed Investment Expenses			0.40%	0.40%
Portfolio Long-term (Geometric) Expected Rate of Return, Net of Investment Expenses			5.73%	3.37%
Portfolio Long-term Expected Real Rate of Return, Net of Investment Expenses				4.19%
Portfolio Standard Deviation				14.16%
Valuation Assumptions Chosen by PERSI Board				
Long-term Expected Real Rate of Return, Net of Investment Expenses				4.05%
Assumed Inflation				3.00%
Long-term Expected Geometric Rate of Return, Net of Investment Expenses				**7.05%**

Discount Rate

The discount rate used to measure the total pension liability was 7.05%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate. Based on these assumptions, the pension plan's net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term expected rate of return was determined net of pension plan investment expense but without reduction for pension plan administrative expense.

Sensitivity of the City's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the City's proportionate share of the net pension liability calculated using the discount rate of 7.05%, as well as what the City's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% lower (6.05%) or 1% higher (8.05%) than the current rate:

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

6. PENSION PLAN (continued)

	1% Decrease (6.05%)	Current Discount Rate (7.05%)	1% Increase (8.05%)
City's proportionate share of the net pension liability (asset)	$ 2,530,870	$ 837,930	$ (562,078)

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in the separately issued PERSI financial report. PERSI issues a publicly available financial report that includes financial statements and the required supplementary information for PERSI. That report may be obtained on the PERSI website at www.persi.idaho.gov.

7. TRANSFERS

Transfer activity for the year was as follows:

$ 636,500	Transfer from the General fund to nonmajor funds for capital projects.
250,108	Transfer from nonmajor funds to the General fund for unspent funds.
$ 886,608	

8. LEASE COMMITMENTS

The City is committed to several operating leases. The agreements call for monthly payments ranging from $47 to $349. The leases expire at various times through September 2024. Other operating leases have terms of less than one year. Lease expense for the year totaled $36,431. Future minimum lease payments are as follows:

Year Ending September 30,	Amount
2020	$ 7,392
2021	7,081
2022	6,732
2023	2,894
2024	764
	$ 24,863

9. OTHER COMMITMENTS

The City has two credit cards with credit limits totaling $10,000. Total available credit on the cards as of September 30, 2019, was $3,784.

10. SUBSEQUENT EVENTS

The City has performed an eligibility study to determine the need for resurrecting its existing urban renewal district. After the end of the fiscal year, a board was appointed and details are being worked out to ensure all legal requirements are being met. The City intends for the urban renewal district to be operational within the next year.

11. CAPITAL ASSETS

Capital asset activity for the fiscal year ended September 30, 2019, was as follows:

Governmental Activities:	10/1/2018	Reclass-ifications	Additions	Disposals	09/30/2019
Capital Assets Not Being Depreciated:					
Land	$ 821,118	$ 82,500	$ 673,509	$ 0	$ 1,577,127
Construction in Progress	788,629	(637,224)	91,719	(1,128)	241,996
Total Nondepreciable Assets	1,609,747	(554,724)	765,228	(1,128)	1,819,123
Capital Assets Being Depreciated:					
Buildings	761,248	117,124	59,134	0	937,506
Equipment	620,178	0	73,671	0	693,849
Improvements	2,028,077	270,458	112,738	(7,686)	2,403,587
Vehicles	391,972	0	88,270	0	480,242
Intangibles	5,000	167,142	29,520	0	201,662
Total Depreciable Assets	3,806,475	554,724	363,333	(7,686)	4,716,846
Less: Accumulated Depreciation					
Buildings	386,101	0	23,006	0	409,107
Equipment	467,806	0	36,579	0	504,385
Improvements	307,626	0	81,597	(5,154)	384,069
Vehicles	266,156	0	49,958	0	316,114
Intangibles	137	0	9,964	0	10,101
Total Accumulated Depreciation	1,427,826	0	201,104	(5,154)	1,623,776
Net Depreciable Assets	2,378,649	554,724	162,229	(2,532)	3,093,070
Capital Assets - Net	$ 3,988,396	$ 0	$ 927,457	$ (3,660)	$ 4,912,193

Depreciation expense for governmental activities was charged to the functions of the City as follows:

General Administration	$ 201,104

During the current year, land was donated to the City to be used in its parks. The land is reported in the governmental activities at its acquisition value of $226,073 on the date of donation.

City of Kuna, Idaho
Notes to Financial Statements
For the Year Ended September 30, 2019

11. CAPITAL ASSETS (continued)

Business-type Activities:	10/1/2018	Reclass-ifications	Additions	Disposals	09/30/2019
Capital Assets Not Being Depreciated:					
Land	$ 2,128,331	$ 0	$ 0	$ 0	$ 2,128,331
Construction in Progress	1,081,603	(1,021,414)	95,057	0	155,246
Total Nondepreciable Assets	3,209,934	(1,021,414)	95,057	0	2,283,577
Capital Assets Being Depreciated:					
Buildings	40,621,217	0	0	0	40,621,217
Equipment	1,669,684	7,848	145,512	0	1,823,044
Improvements	28,719,329	1,013,566	2,370,555	(14,008)	32,089,442
Vehicles	702,547	0	11,900	(13,266)	701,181
Total Depreciable Assets	71,712,777	1,021,414	2,527,967	(27,274)	75,234,884
Less: Accumulated Depreciation					
Buildings	9,722,626	0	1,357,319	0	11,079,945
Equipment	1,254,481	0	103,702	0	1,358,183
Improvements	13,156,052	0	972,129	(9,393)	14,118,788
Vehicles	624,841	0	32,621	(13,266)	644,196
Total Accumulated Depreciation	24,758,000	0	2,465,771	(22,659)	27,201,112
Net Depreciable Assets	46,954,777	1,021,414	62,196	(4,615)	48,033,772
Capital Assets - Net	$ 50,164,711	$ 0	$ 157,253	$ (4,615)	$ 50,317,349

REQUIRED SUPPLEMENTARY INFORMATION

City of Kuna, Idaho
Schedule of Employer's Share of Net Pension Liability
PERSI - Base Plan*
Last 10 - Fiscal Years

	2019	2018	2017	2016	2015
Employer's portion of the net pension liability	0.073408%	0.067245%	0.065338%	0.058449%	0.053872%
Employer's proportionate share of the net pension liability	$ 837,930	$ 991,941	$ 1,027,058	$ 1,184,916	$ 709,410
Employer's covered payroll	$ 2,491,955	$ 2,163,259	$ 2,029,073	$ 1,708,869	$ 1,508,950
Employer's proportional share of the net pension liability as a percentage of its covered payroll	33.63%	45.85%	50.62%	69.34%	47.01%
Plan fiduciary net position as a percentage of the total pension liability	93.79%	91.69%	90.68%	87.26%	91.38%

*GASB Statement No. 68 requires ten years of information to be presented in this table. However, until a full 10-year trend is compiled, the City will present information for the years the information is available.

Data reported is measured as of June 30, 2019.

City of Kuna, Idaho
Schedule of Employer Contributions
PERSI - Base Plan*
Last 10 - Fiscal Years

	2019	2018	2017	2016	2015
Statutorily required contribution	$ 300,675	$ 254,964	$ 225,160	$ 217,319	$ 173,753
Contributions in relation to the statutorily required contribution	(300,675)	(254,964)	(225,160)	(217,319)	(173,753)
Contribution (deficiency) excess	$ 0	$ 0	$ 0	$ 0	$ 0
Employer's covered payroll	$ 2,626,070	$ 2,252,065	$ 1,988,773	$ 1,919,620	$ 1,534,916
Contributions as a percentage of covered payroll	11.45%	11.32%	11.32%	11.32%	11.32%

*GASB Statement No. 68 requires ten years of information to be presented in this table. However, until a full 10-year trend is compiled, the City will present information for the years the information is available.

Data is reported as of September 30, 2019.

City of Kuna, Idaho
Budgetary (GAAP Basis) Comparison Schedule
General Fund
For the Year Ended September 30, 2019

	Budgeted Amounts			
	Original	Final	Actual	Variance
Revenues				
Property Taxes	$ 2,656,754	$ 2,656,754	$ 2,764,015	$ 107,261
Licenses and Permits	23,379	23,379	28,749	5,370
Charges for Services	1,472,071	1,472,071	2,319,577	847,506
Intergovernmental	1,130,599	1,130,599	1,414,951	284,352
Interest	3,904	3,904	82,172	78,268
Other	10,337	10,337	66,276	55,939
Total Revenues	5,297,044	5,297,044	6,675,740	1,378,696
Expenditures				
Current:				
Salaries and Benefits	1,829,098	1,829,098	1,756,638	72,460
Maintenance and Operations	3,126,234	3,126,234	3,205,552	(79,318)
Capital Outlay	1,678,240	1,678,240	195,486	1,482,754
Total Expenditures	6,633,572	6,633,572	5,157,676	1,475,896
Excess (Deficiency) of Revenues Over Expenditures	(1,336,528)	(1,336,528)	1,518,064	2,854,592
Other Financing Sources (Uses)				
Transfers In	0	0	250,108	250,108
Transfers Out	(631,500)	(631,500)	(636,500)	(5,000)
Total Other Financing Sources (Uses)	(631,500)	(631,500)	(386,392)	245,108
Net Change in Fund Balances	(1,968,028)	(1,968,028)	1,131,672	3,099,700
Fund Balances - Beginning	1,968,028	1,968,028	2,605,230	637,202
Fund Balances - Ending	$ 0	$ 0	$ 3,736,902	$ 3,736,902

City of Kuna, Idaho
Budgetary (GAAP Basis) Comparison Schedule
Late Comers' Fee Fund
For the Year Ended September 30, 2019

	Budgeted Amounts			
	Original	Final	Actual	Variance
Revenues				
Interest	$ 400	$ 400	$ 46,101	$ 45,701
Other	805,000	805,000	2,130,577	1,325,577
Total Revenues	805,400	805,400	2,176,678	1,371,278
Expenditures				
Current:				
Maintenance and Operations	805,400	805,400	842,695	(37,295)
Contingency	974,551	974,551	0	974,551
Total Expenditures	1,779,951	1,779,951	842,695	937,256
Net Change in Fund Balances	(974,551)	(974,551)	1,333,983	2,308,534
Fund Balances - Beginning	974,551	974,551	919,875	(54,676)
Fund Balances - Ending	$ 0	$ 0	$ 2,253,858	$ 2,253,858

City of Kuna, Idaho
Notes to Required Supplementary Information
For the Year Ended September 30, 2019

1. BUDGETS AND BUDGETARY ACCOUNTING

The City follows these procedures in establishing the budgetary data reflected in the financial statements:

A. Prior to September 1, the Treasurer, Mayor, and City Council prepare a proposed operating budget for the fiscal year commencing the following October 1. The operating budget includes proposed expenditures and the means of financing them.

B. Public hearings are conducted at the City Hall to obtain taxpayer comments.

C. Prior to October 1, the budget is legally enacted through passage of an ordinance.

D. The City is authorized to transfer budgeted amounts between departments within any fund; however, no revision can be made to increase the overall tax supported funds except when federal or state grants are approved. The City, however, must follow the same budgetary procedures as they followed when the original budget was approved. The budget for Enterprise funds may also be revised in the same manner as those situations involving federal and state grants.

E. Formal budgetary integration is employed as a management control device during the year for the General fund and Special Revenue funds.

F. The budget is adopted on a basis consistent with generally accepted accounting principles.

G. Expenditures may not legally exceed budgeted appropriations at the fund level. The City does not use the encumbrance method of accounting.

SUPPLEMENTAL INFORMATION

City of Kuna, Idaho
Supplemental Schedule of Revenues by Source -
Budget (GAAP Basis) and Actual - General Fund
For the Year Ended September 30, 2019

	Budget	Actual	Variance
Property Taxes			
Taxes	$ 2,653,922	$ 2,760,029	$ 106,107
Interest and Penalties	2,832	3,986	1,154
	2,656,754	2,764,015	107,261
Licenses and Permits			
Business Licenses	3,411	4,272	861
Liquor Licenses	6,344	5,625	(719)
Beer Licenses	2,490	3,000	510
Wine Licenses	2,078	2,250	172
Dog Licenses	7,373	11,882	4,509
Catering Permits	240	670	430
Vendor Permits	1,443	1,050	(393)
	23,379	28,749	5,370
Intergovernmental			
State Liquor Apportionment	177,760	205,624	27,864
Sales Tax Revenue Sharing - County	249,206	351,288	102,082
Sales Tax Revenue Sharing - State	703,633	858,039	154,406
	1,130,599	1,414,951	284,352
Other			
Administration Fees	132,639	342,535	209,896
Franchise Fees	317,560	330,544	12,984
Building Rental	11,046	17,077	6,031
Fine Distribution	9,037	10,527	1,490
Interest	3,904	82,172	78,268
Miscellaneous	1,300	55,749	54,449
Planning and Zoning	1,009,141	1,625,308	616,167
RV Dump	1,685	4,113	2,428
	1,486,312	2,468,025	981,713
Total Revenue	$ 5,297,044	$ 6,675,740	$ 1,378,696

City of Kuna, Idaho
Supplemental Schedule of Expenditures by Object of Expenditure -
Budget (GAAP Basis) and Actual - General Fund
For the Year Ended September 30, 2019

	Budget	Actual	Variance
Salaries and Benefits			
FICA	$ 84,606	$ 78,575	$ 6,031
Group Life Insurance	927	838	89
Group Medical Insurance	178,329	188,442	(10,113)
Mayor and City Council Salaries	92,925	97,417	(4,492)
Medicare	19,787	18,377	1,410
Pension	151,713	145,474	6,239
Seasonal Salaries	57,121	41,162	15,959
Staff Salaries	1,214,574	1,161,598	52,976
Unemployment	6,087	6,376	(289)
Workman's Compensation	23,029	18,379	4,650
	1,829,098	1,756,638	72,460
Maintenance and Operations			
Ada County Sheriff	2,206,149	2,206,149	0
Animal Control	70,250	70,278	(28)
Cleaning Offices	10,852	13,909	(3,057)
Code Enforcement	750	0	750
Contract Services	24,591	22,650	1,941
Donations Expenditure	25,848	25,535	313
Dues and Memberships	49,644	44,078	5,566
Elections	750	0	750
Legal Publications	12,600	13,512	(912)
Liability Insurance	30,359	30,358	1
Maintenance and Repair	114,982	87,518	27,464
Meetings	17,751	10,492	7,259
Bank Fees	30,076	27,542	2,534
Supplies	43,959	40,516	3,443
Postage and Billing	12,751	14,399	(1,648)
Professional Services	256,415	398,562	(142,147)
Rent - City Hall	2,082	2,082	0
Rent - Equipment	8,510	25,436	(16,926)
Telephone	16,109	17,842	(1,733)
Training	21,977	15,661	6,316
Travel and Membership Dues	5,245	3,560	1,685
Uniforms	2,250	2,221	29
Utilities	136,869	112,416	24,453
Vehicle Expenditure	25,465	20,836	4,629
	3,126,234	3,205,552	(79,318)
Capital Outlay	1,678,240	195,486	1,482,754
Total Expenditures	$ 6,633,572	$ 5,157,676	$ 1,475,896

City of Kuna, Idaho
Combining Balance Sheet -
Nonmajor Funds
September 30, 2019

	Grant Fund	Capital Projects			Total
		Capital Outlay	Park Impact Fee	Police Impact Fee	
Assets					
Cash and Cash Equivalents	$ 239	$ 338,791	$ 0	$ 0	$ 339,030
Accounts, Receivable, Net	200	0	0	0	200
Interest Receivable	3	0	1,880	0	1,883
Restricted Cash	0	0	1,111,275	12,731	1,124,006
Total Assets	442	338,791	1,113,155	12,731	1,465,119
Deferred Outflows	0	0	0	0	0
Total Assets and Deferred Outflows	$ 442	$ 338,791	$ 1,113,155	$ 12,731	$ 1,465,119
Liabilities					
Accounts Payable	$ 442	$ 6,570	$ 3,420	$ 0	$ 10,432
Total Liabilities	442	6,570	3,420	0	10,432
Deferred Inflows	0	0	0	0	0
Fund Balances					
Restricted	0	0	1,109,735	12,731	1,122,466
Assigned	0	332,221	0	0	332,221
Total Fund Balances	0	332,221	1,109,735	12,731	1,454,687
Total Liabilities, Deferred Inflows, and Fund Balances	$ 442	$ 338,791	$ 1,113,155	$ 12,731	$ 1,465,119

City of Kuna, Idaho
Combining Statement of Revenues, Expenditures,
and Changes in Fund Balances – Nonmajor Funds
For the Year Ended September 30, 2019

	Grant Fund	Capital Projects: Capital Outlay	Capital Projects: Park Impact Fee	Capital Projects: Police Impact Fee	Total
Revenues					
Grants and Contributions	$ 16,418	$ 0	$ 0	$ 0	$ 16,418
Interest	105	0	12,406	0	12,511
Other	0	0	722,091	12,731	734,822
Total Revenues	16,523	0	734,497	12,731	763,751
Expenditures					
Current:					
Maintenance and Operations	16,097	0	0	0	16,097
Capital Outlay	0	264,929	462,055	0	726,984
Total Expenditures	16,097	264,929	462,055	0	743,081
Excess (Deficiency) of Revenues Over Expenditures	426	(264,929)	272,442	12,731	20,670
Other Financing Sources (Uses)					
Transfers In	5,000	631,500	0	0	636,500
Transfers Out	(5,426)	(244,682)	0	0	(250,108)
Total Other Financing Sources (Uses)	(426)	386,818	0	0	386,392
Net Change in Fund Balances	0	121,889	272,442	12,731	407,062
Fund Balances - Beginning	0	210,332	837,293	0	1,047,625
Fund Balances - Ending	$ 0	$ 332,221	$ 1,109,735	$ 12,731	$ 1,454,687

COMPLIANCE REPORT

Bailey & Company Chtd.
Certified Public Accountants

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Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*

To the Honorable Mayor
and City Council
City of Kuna, Idaho

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of City of Kuna, Idaho (the City), as of and for the year ended September 30, 2019, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated June 2, 2020.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Bailey & Co.

Nampa, Idaho
June 2, 2020

City of Kuna

City Council Staff Memo

P.O. Box 13
Phone: (208) 922-5274
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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*

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

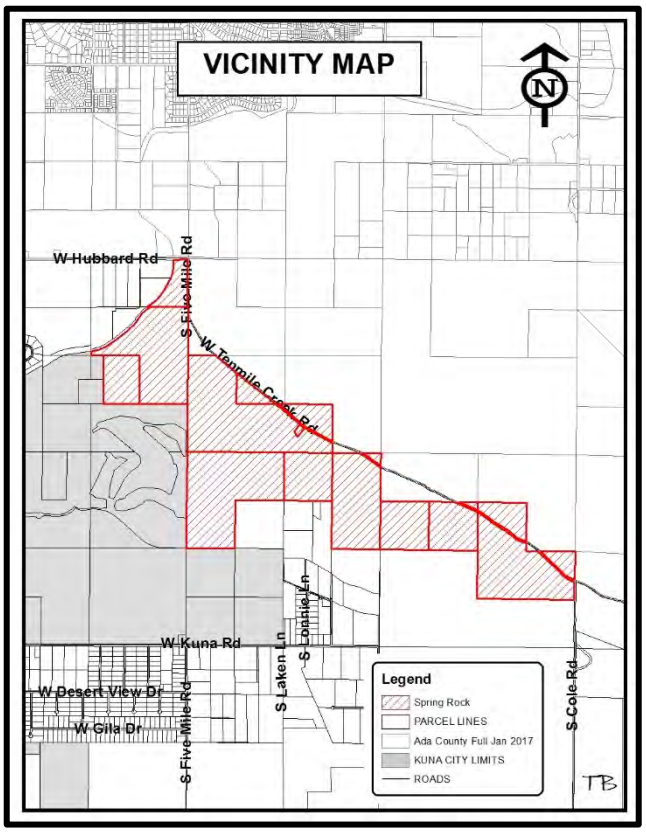


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A. Process and Noticing:

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

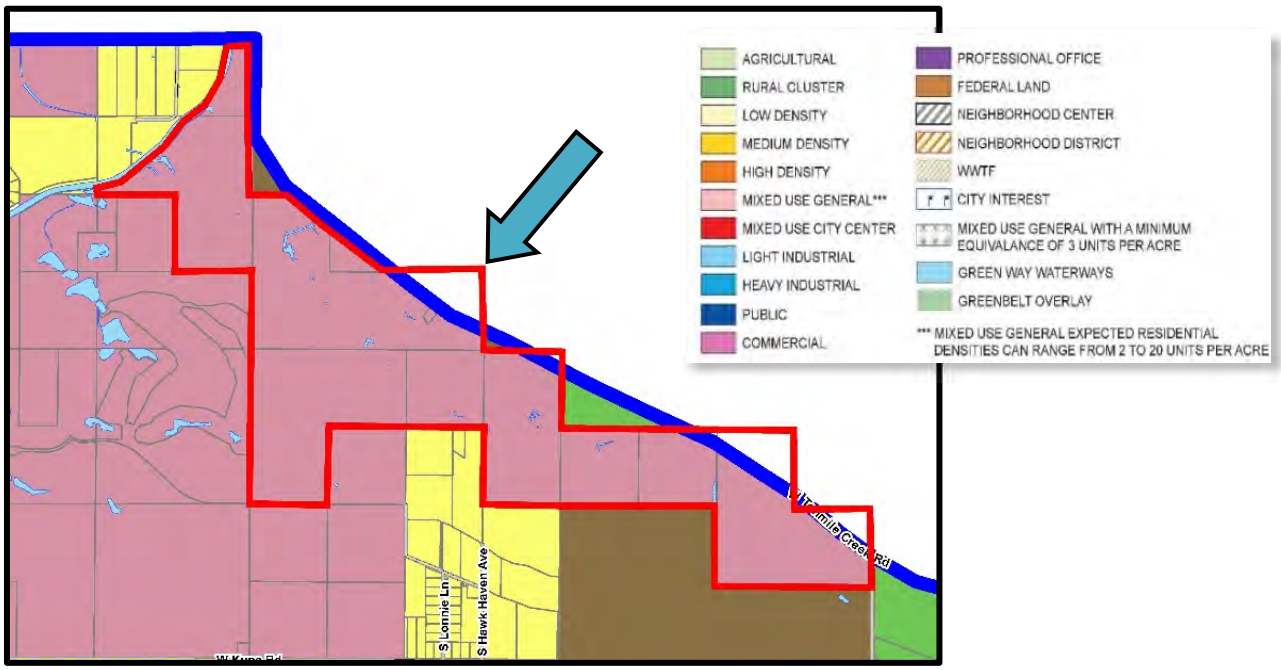
B. Applicant Request:

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. 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. 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.

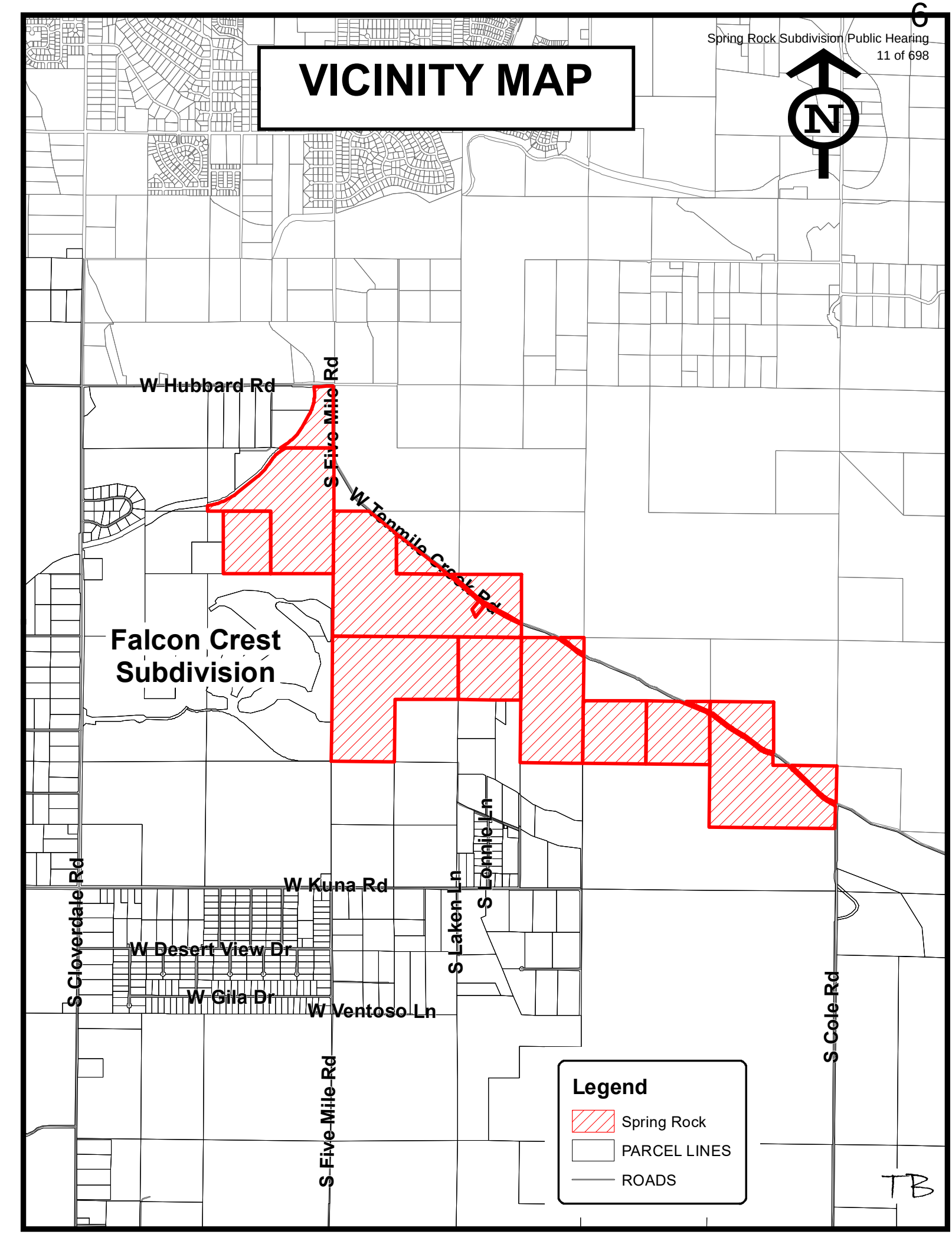
   Comment: *On June 16, 2020, the Kuna City Council will vote* to ***approve/conditionally approve/deny*** *Case No's* 19-10-AN, 19-01-PUD, 19-06-S and a DA.

5. The public notice requirements have been met and the neighborhood meeting was conducted within the guidelines of applicable Idaho Code and City Ordinances.

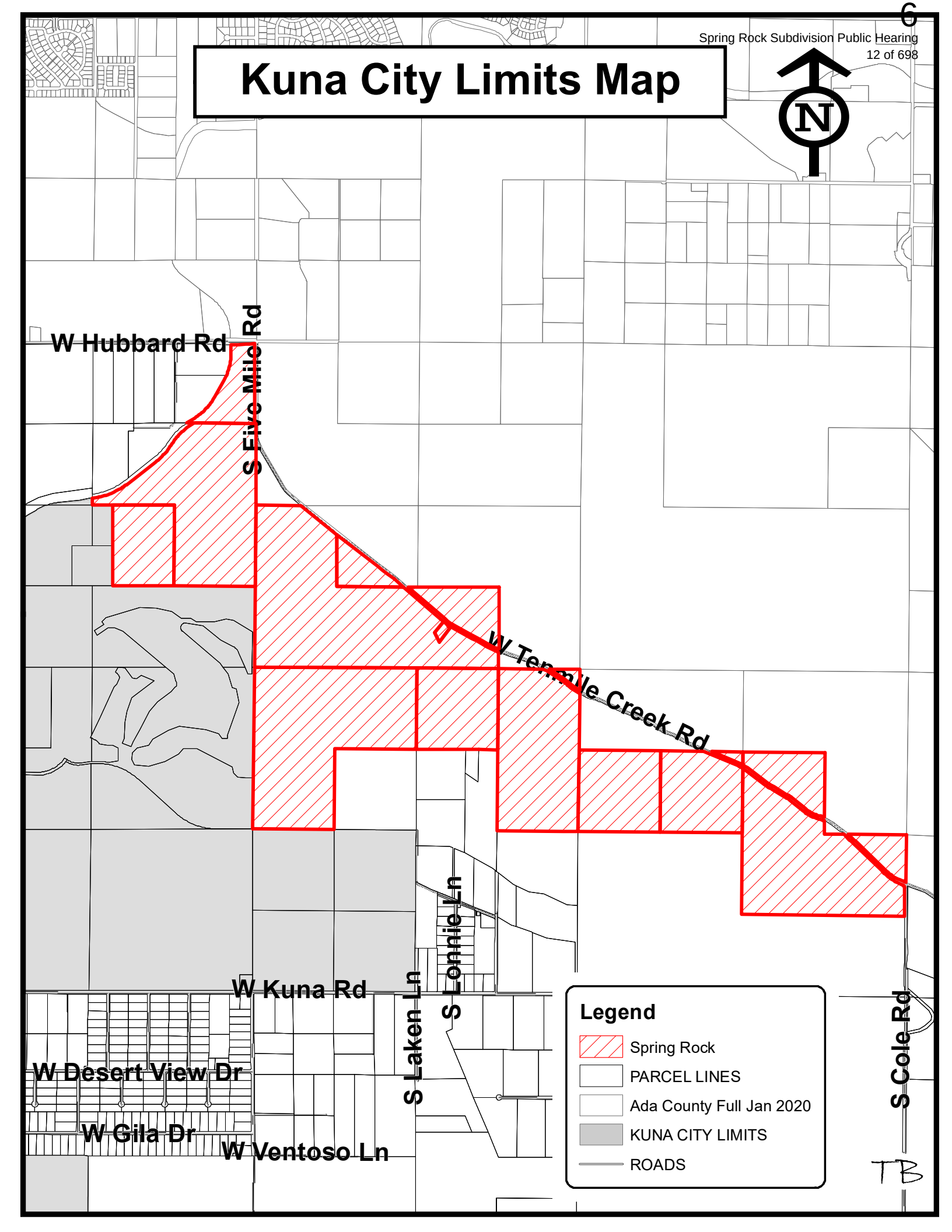
   Comment: *Land Owner Notices were mailed out to residents within 800-FT of the proposed project site on May 29, 2020, and a legal notice was published in the Kuna Melba Newspaper on May 20, 2020. The applicant placed a sign on the property on May 27, 2020.*

DATED: this _____ day of _____, 2020.

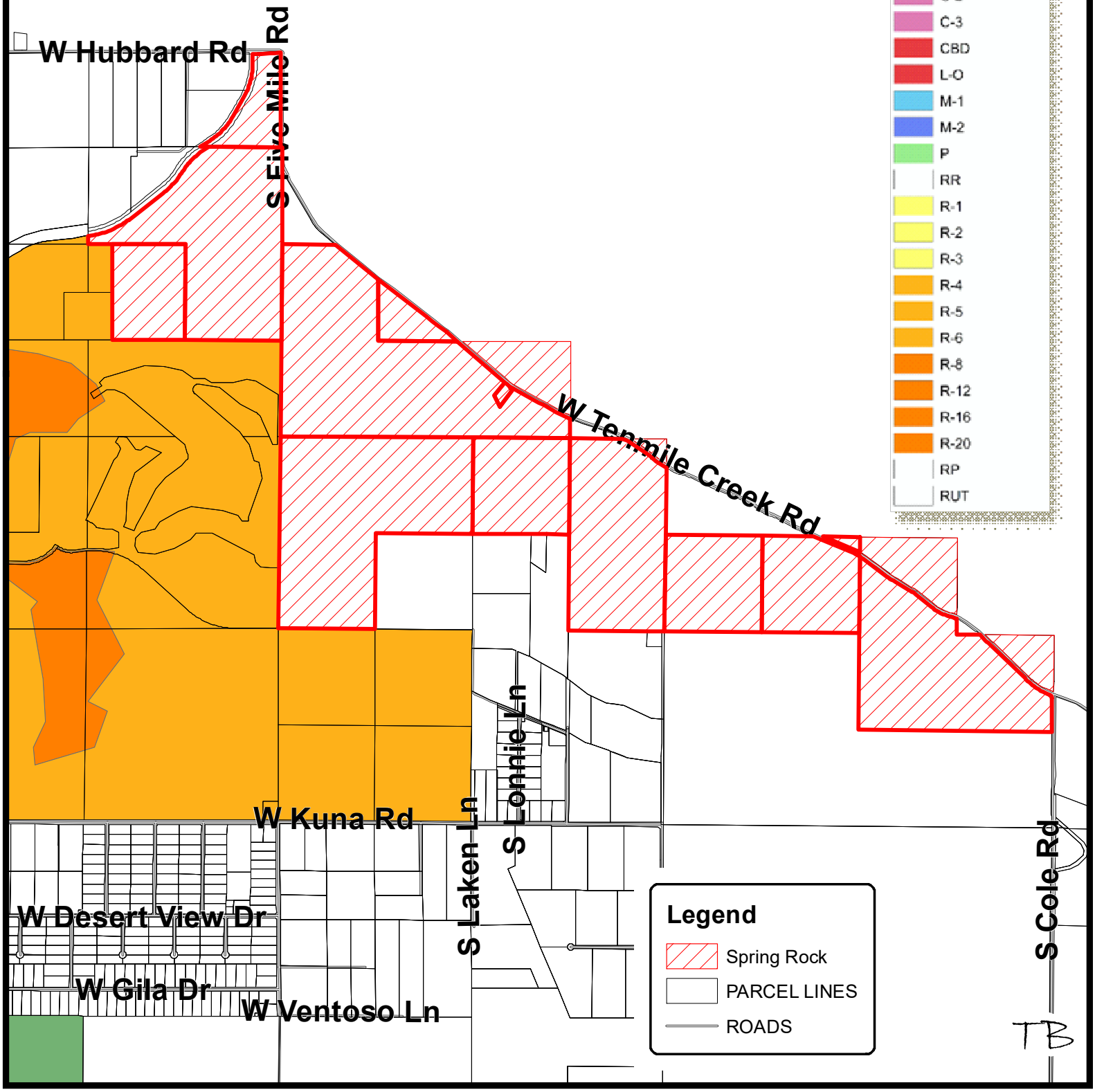
VICINITY MAP



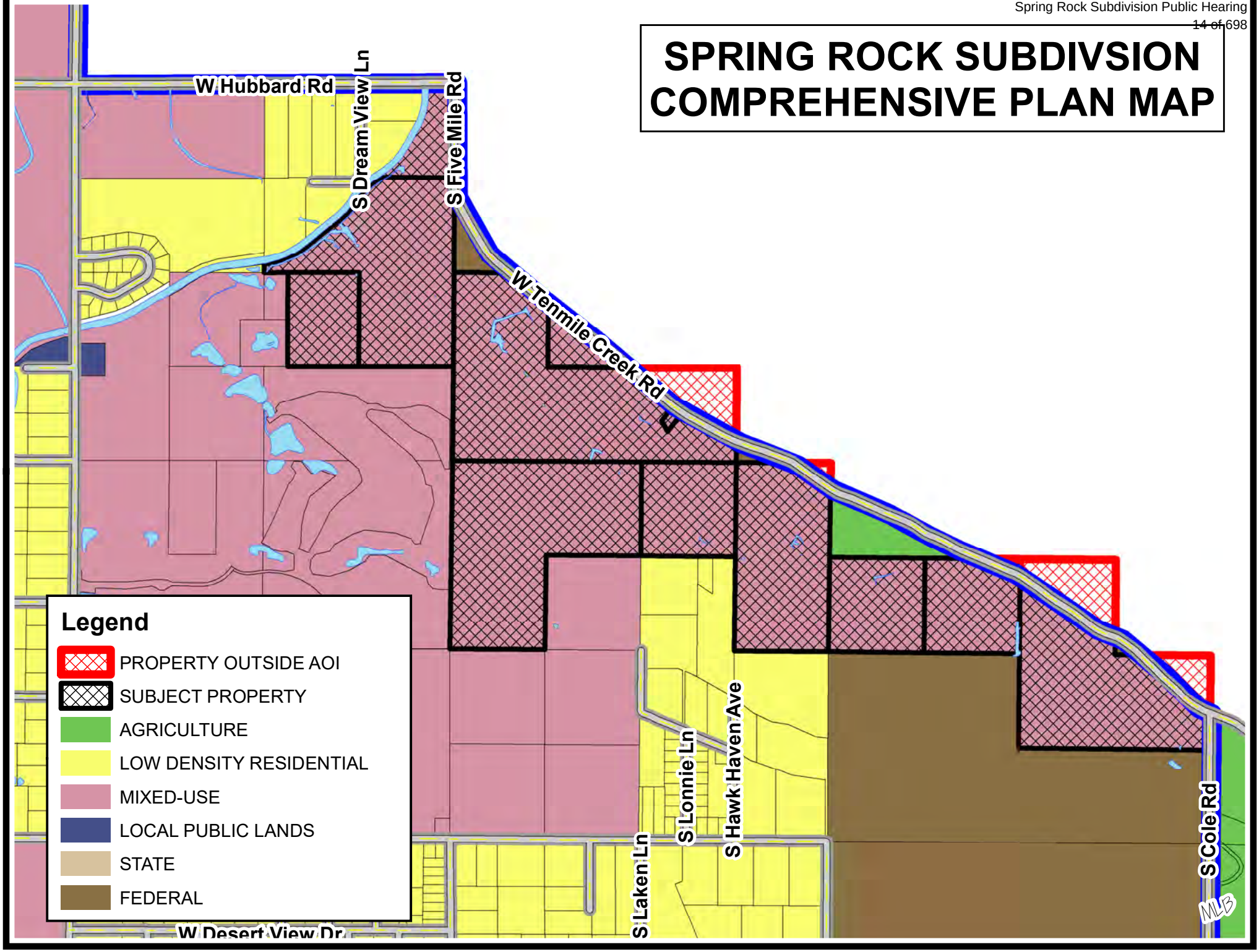
Kuna City Limits Map



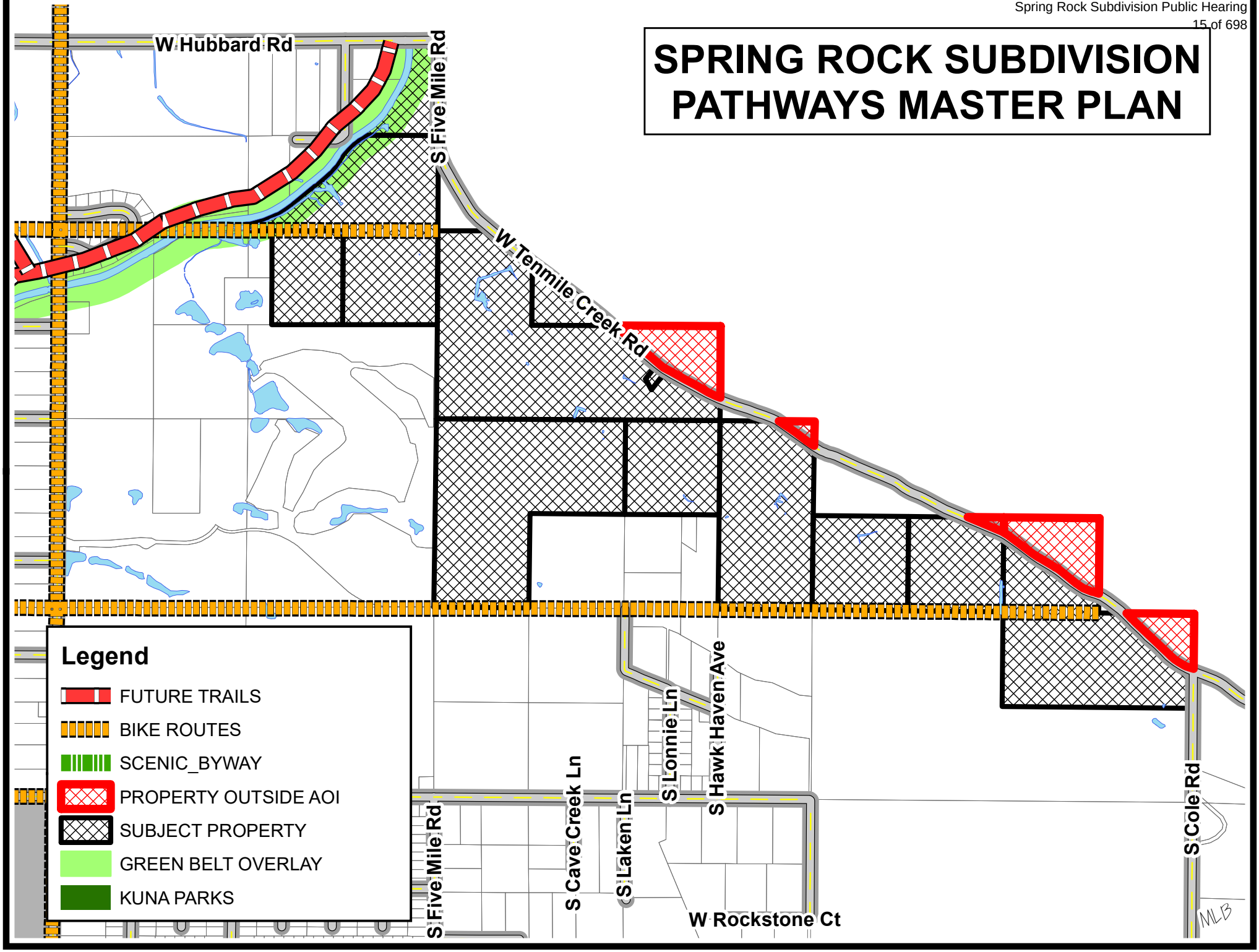
Kuna City Zoning Map



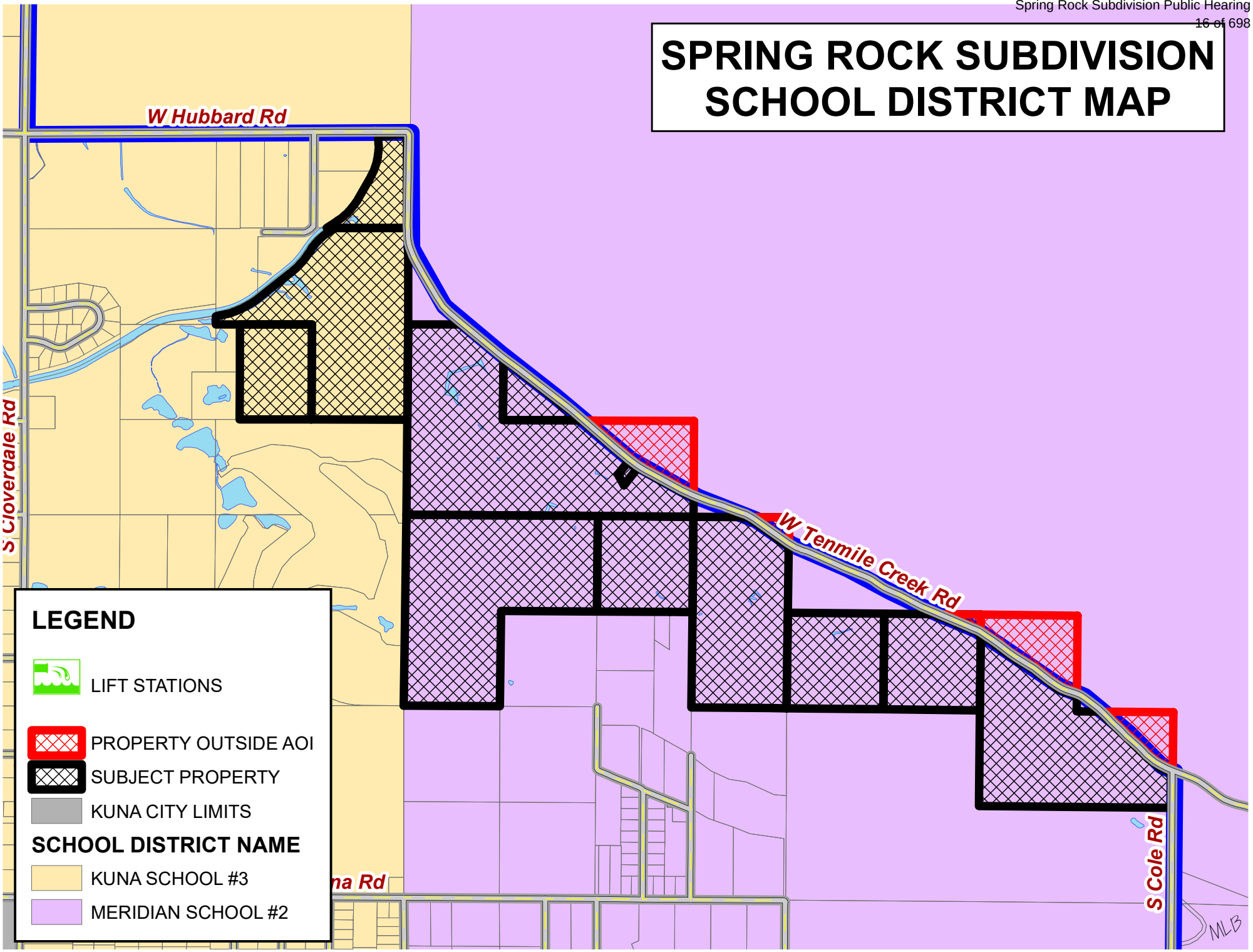
SPRING ROCK SUBDIVSION COMPREHENSIVE PLAN MAP



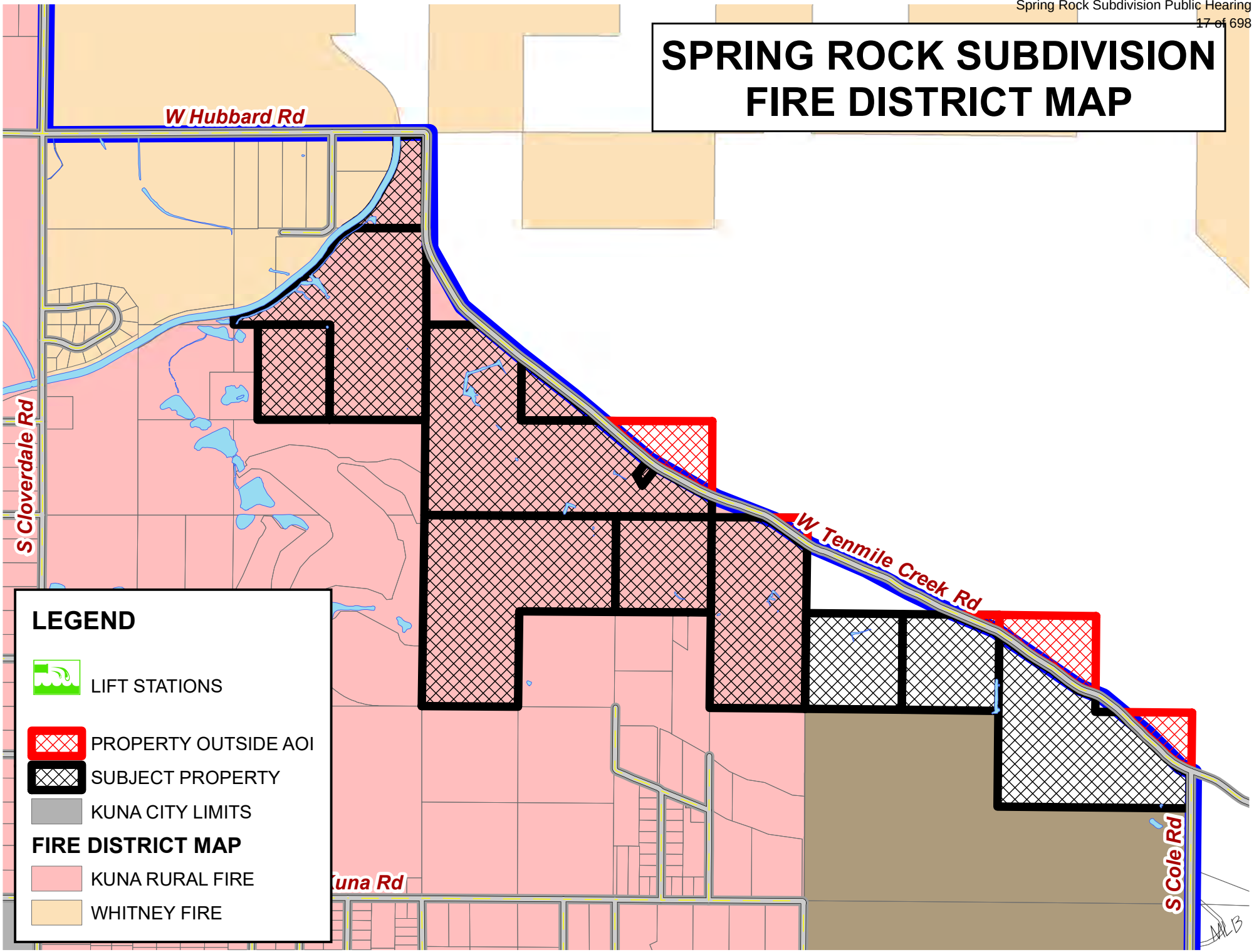
SPRING ROCK SUBDIVISION PATHWAYS MASTER PLAN



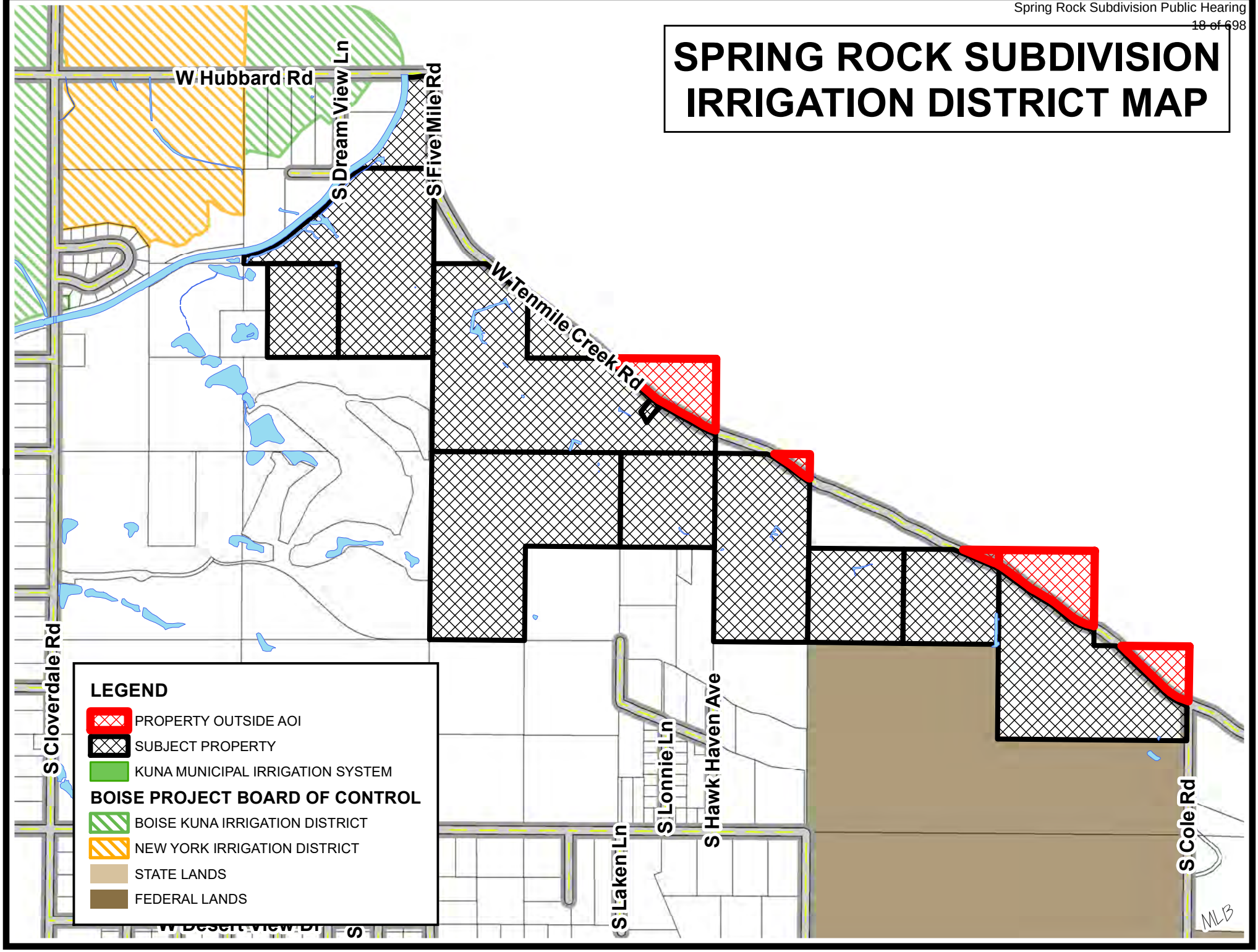
SPRING ROCK SUBDIVISION SCHOOL DISTRICT MAP

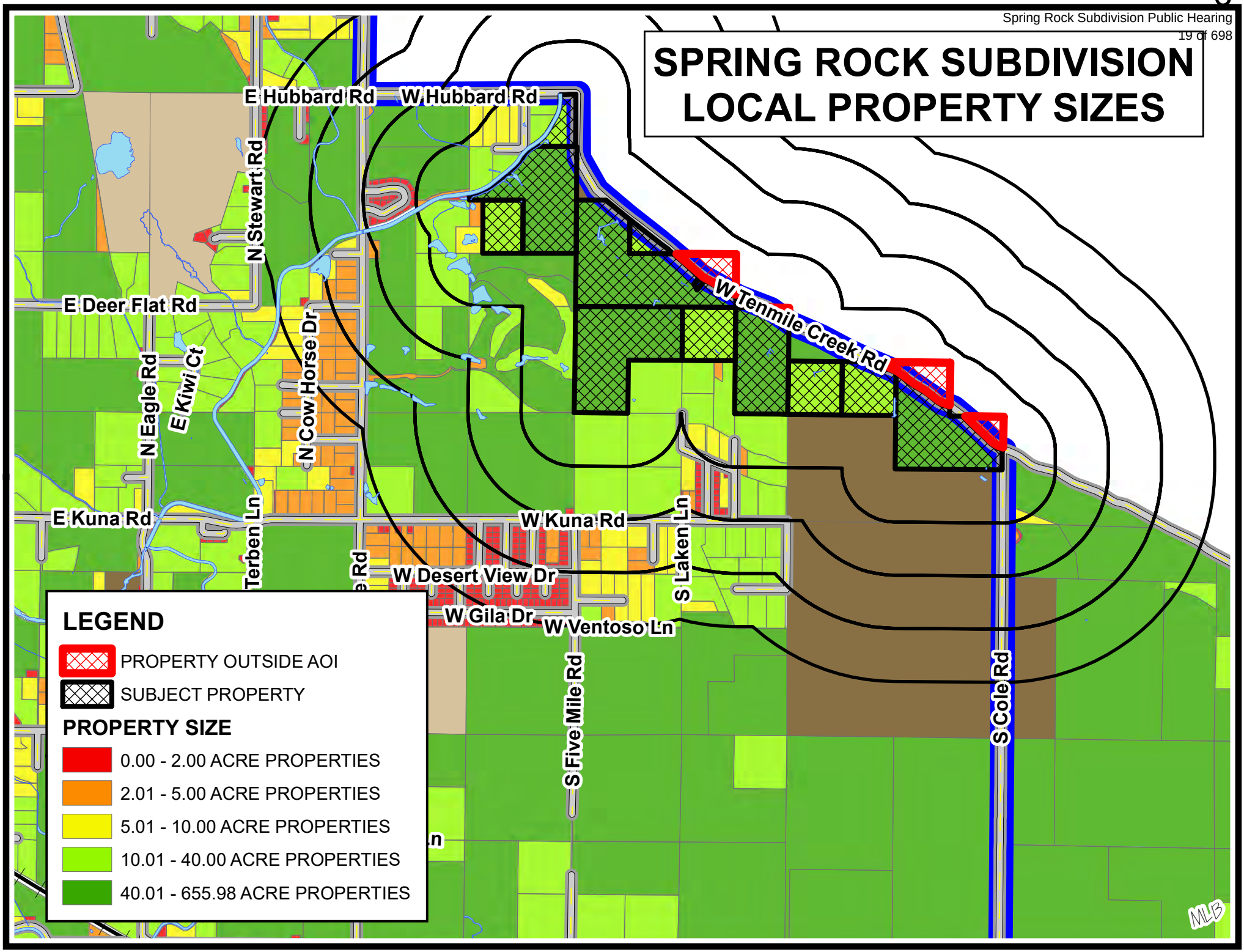


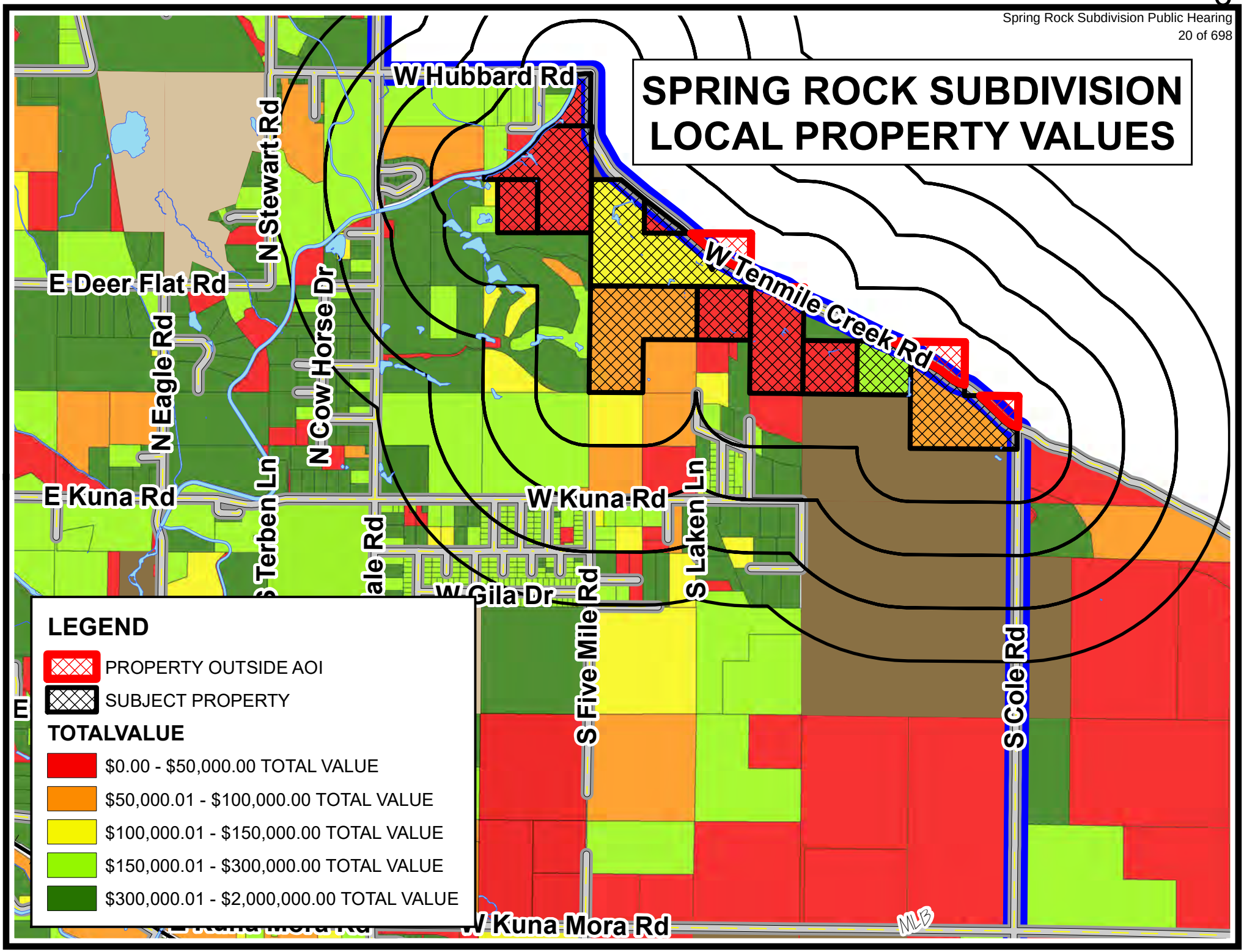
SPRING ROCK SUBDIVISION FIRE DISTRICT MAP



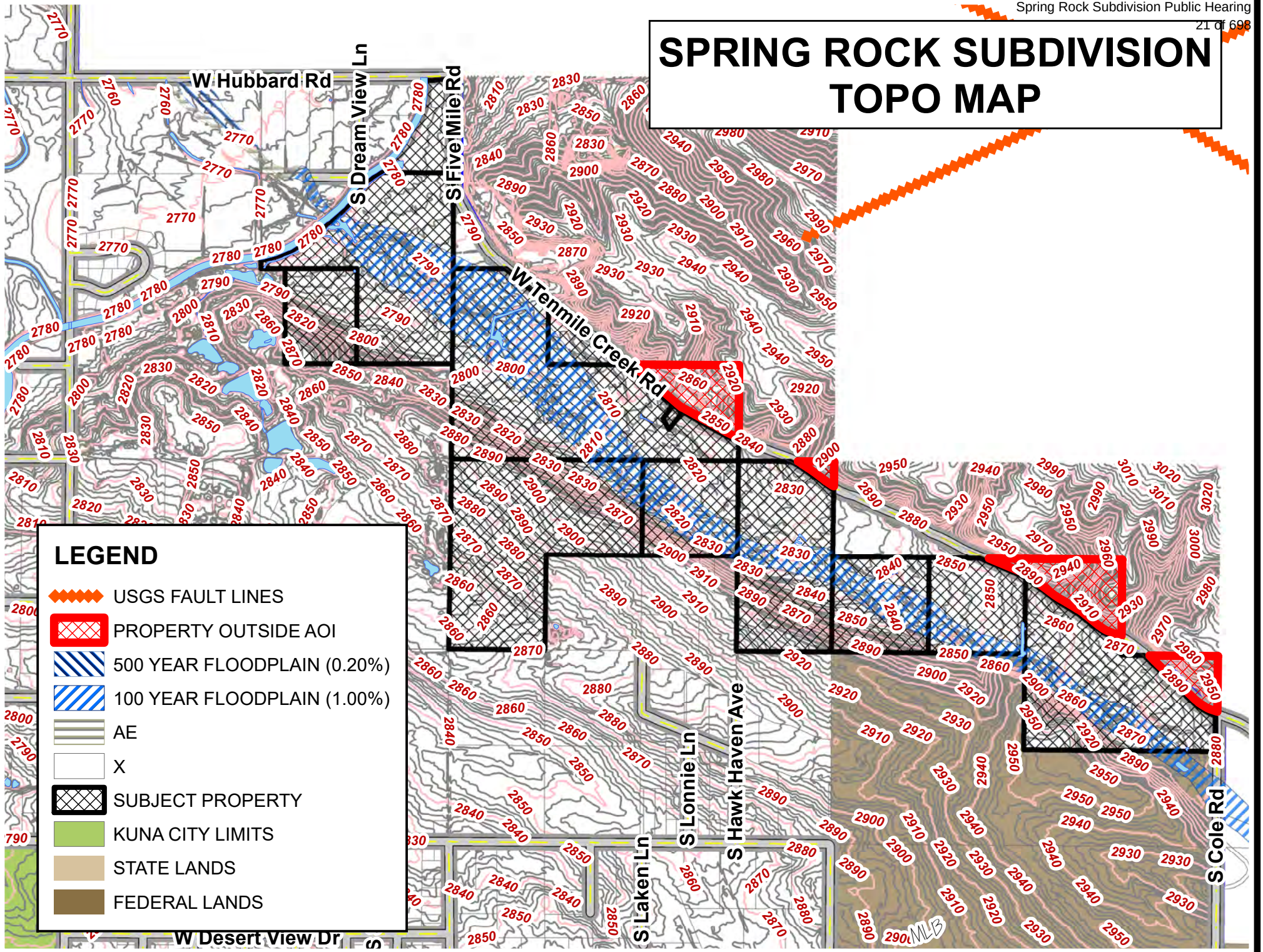
SPRING ROCK SUBDIVISION IRRIGATION DISTRICT MAP



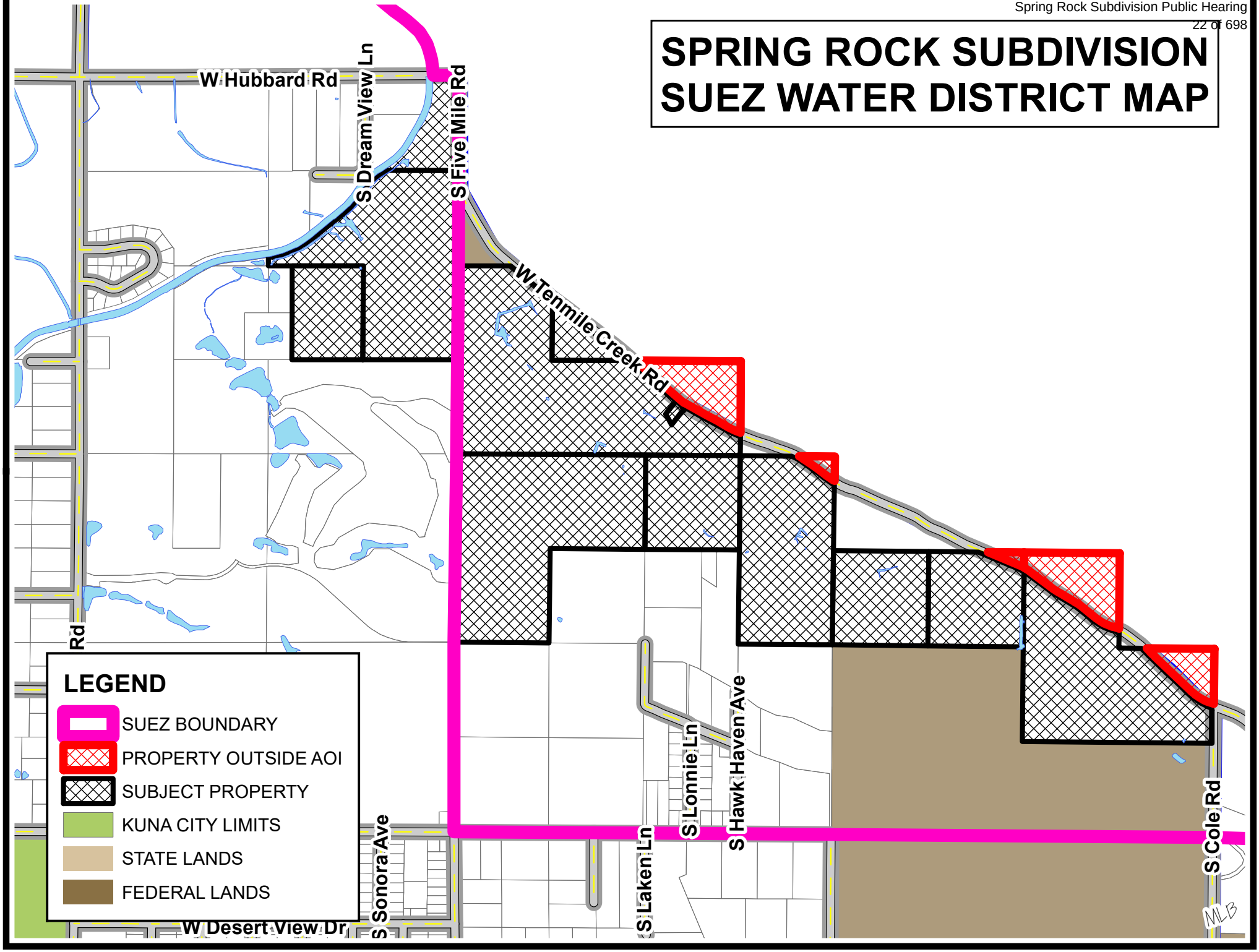

SPRING ROCK SUBDIVISION
LOCAL PROPERTY SIZES
E Hubbard Rd
W Hubbard Rd
N Stewart Rd
E Deer Flat Rd
N Eagle Rd
E Kiwi Ct
N Cow Horse Dr
W Tenmile Creek Rd
E Kuna Rd
Terben Ln
W Kuna Rd
S Laken Ln
W Desert View Dr
W Gila Dr
W Ventoso Ln
S Five Mile Rd
S Cole Rd
LEGEND
PROPERTY OUTSIDE AOI
SUBJECT PROPERTY
PROPERTY SIZE
0.00 - 2.00 ACRE PROPERTIES
2.01 - 5.00 ACRE PROPERTIES
5.01 - 10.00 ACRE PROPERTIES
10.01 - 40.00 ACRE PROPERTIES
40.01 - 655.98 ACRE PROPERTIES
MLB


SPRING ROCK SUBDIVISION
LOCAL PROPERTY VALUES
W Hubbard Rd
N Stewart Rd
N Cow Horse Dr
E Deer Flat Rd
N Eagle Rd
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
Kuna Rd
10 Mile Creek Rd
W Tenmile Creek 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

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.

Letter Of Intent

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

City of Kuna
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

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

For Office Use Only	
File Number (s)	19-06-S, 19-10-AN, 19-05-ZC, 19-01-PUD, 19-23-DR
Project name	Springrock Sub
Date Received	7.18.19
Date Accepted/ Complete	
Cross Reference Files	
Commission Hearing Date	
City Council Hearing Date	

Contact/Applicant Information

Owners of Record: See Affidavits	Phone Number:
Address:	E-Mail:
City, State, Zip:	Fax #:
Applicant (Developer): Ten Mile Creek LLC	Phone Number: 208-850-1070
Address: 1211 N Happy Dr.	E-Mail: dyorgason6@gmail.com
City, State, Zip: Boise ID 83706	Fax #:
Engineer/Representative: RiveRidge Engineering	Phone Number: 208-344-1180
Address: 2447 S Vista	E-Mail: dpowell@rvrdg.com
City, State, Zip: Boise ID 83705	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 *Note: Pre-Applications are valid for a period of three (3) months.*	[ ]
[X]	A complete Planned Unit Development Application form *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)

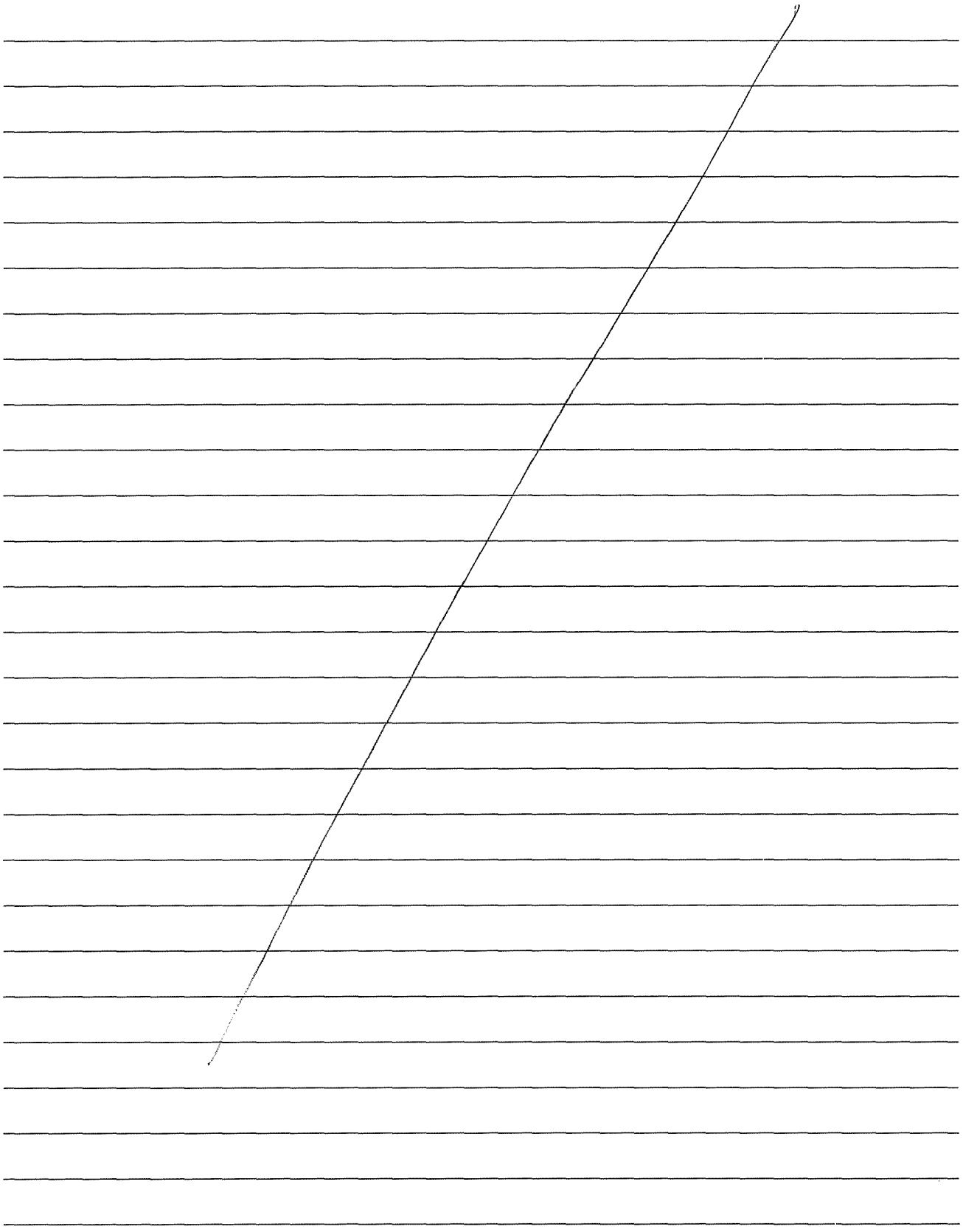


Exhibit A

Spring Rock Subdivision
Master Plan

HUBBARD ROAD

FIVE MILE ROAD

TENMILE CREEK ROAD

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 10.4 ACRES +/-

FUTURE DEVELOPMENT R-20 ZONE

AREA "C" FUTURE DEVELOPMENT

FUTURE DEVELOPMENT R-12 ZONE

FUTURE DEVELOPMENT R-6 ZONE

AREA "C" FUTURE DEVELOPMENT

AREA "B"

FALCON CREST GOLF COURSE

FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT

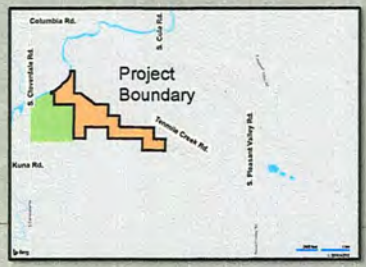
FUTURE DEVELOPMENT R-6 ZONE

FUTURE DEVELOPMENT C-2 ZONE

FUTURE DEVELOPMENT R-6 ZONE

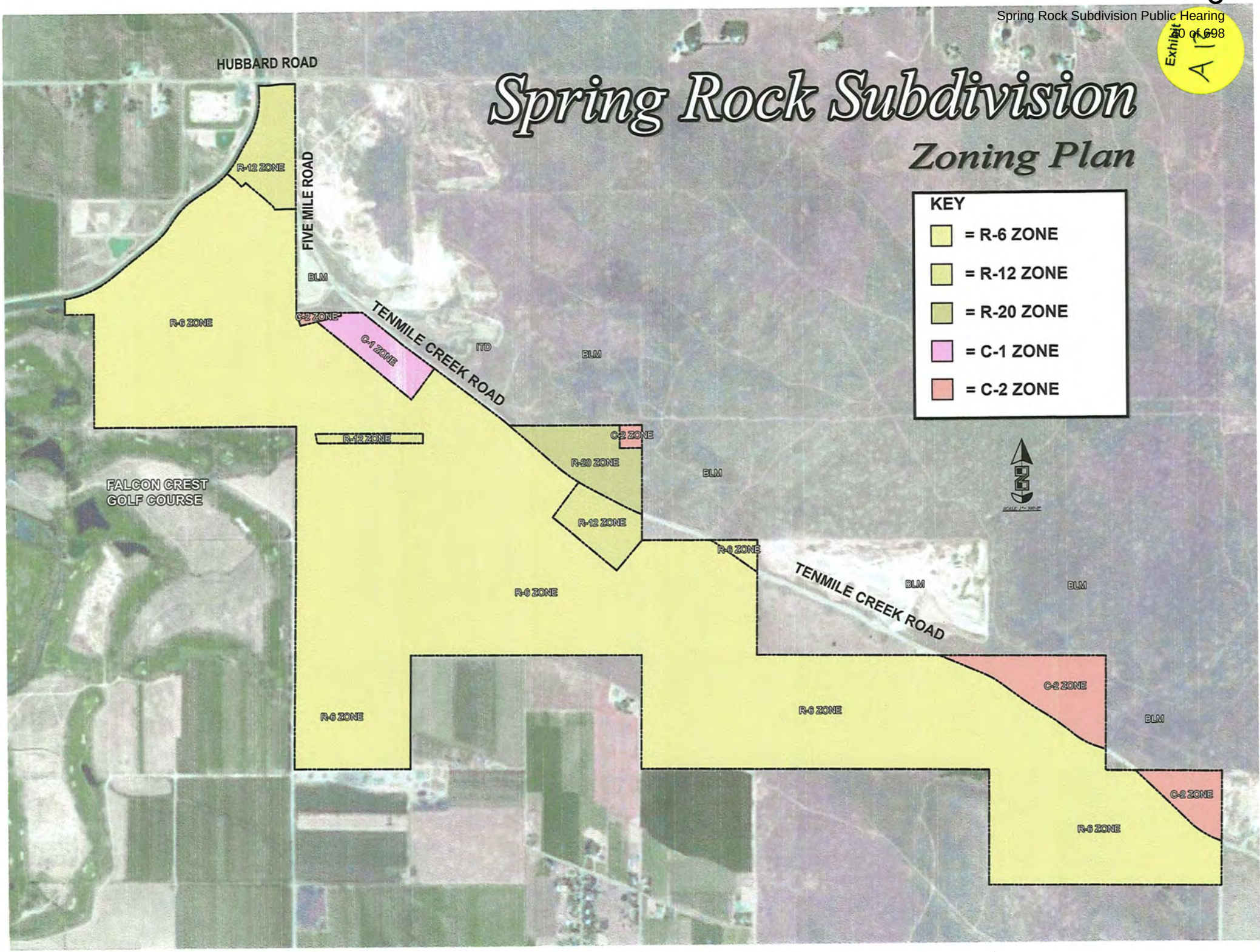
FUTURE DEVELOPMENT C-2 ZONE

FUTURE DEVELOPMENT R-6 ZONE



Site Location Map

Exhibit A 1 of 6



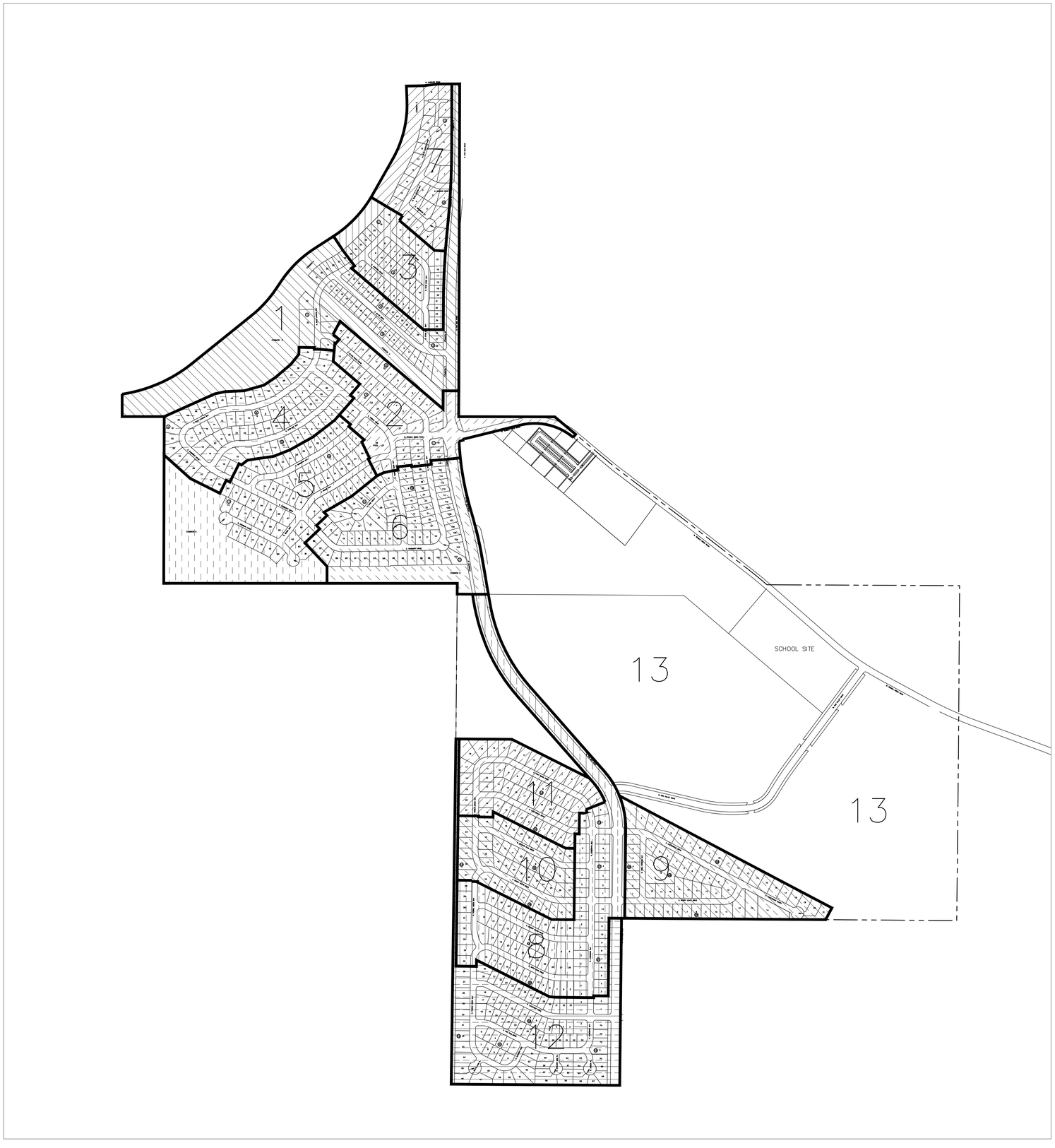
PUD / DR Parcel List

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

Phasing Plan



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Ph. (208) 344-1180, Fax (208) 344-1182

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			APPROVED

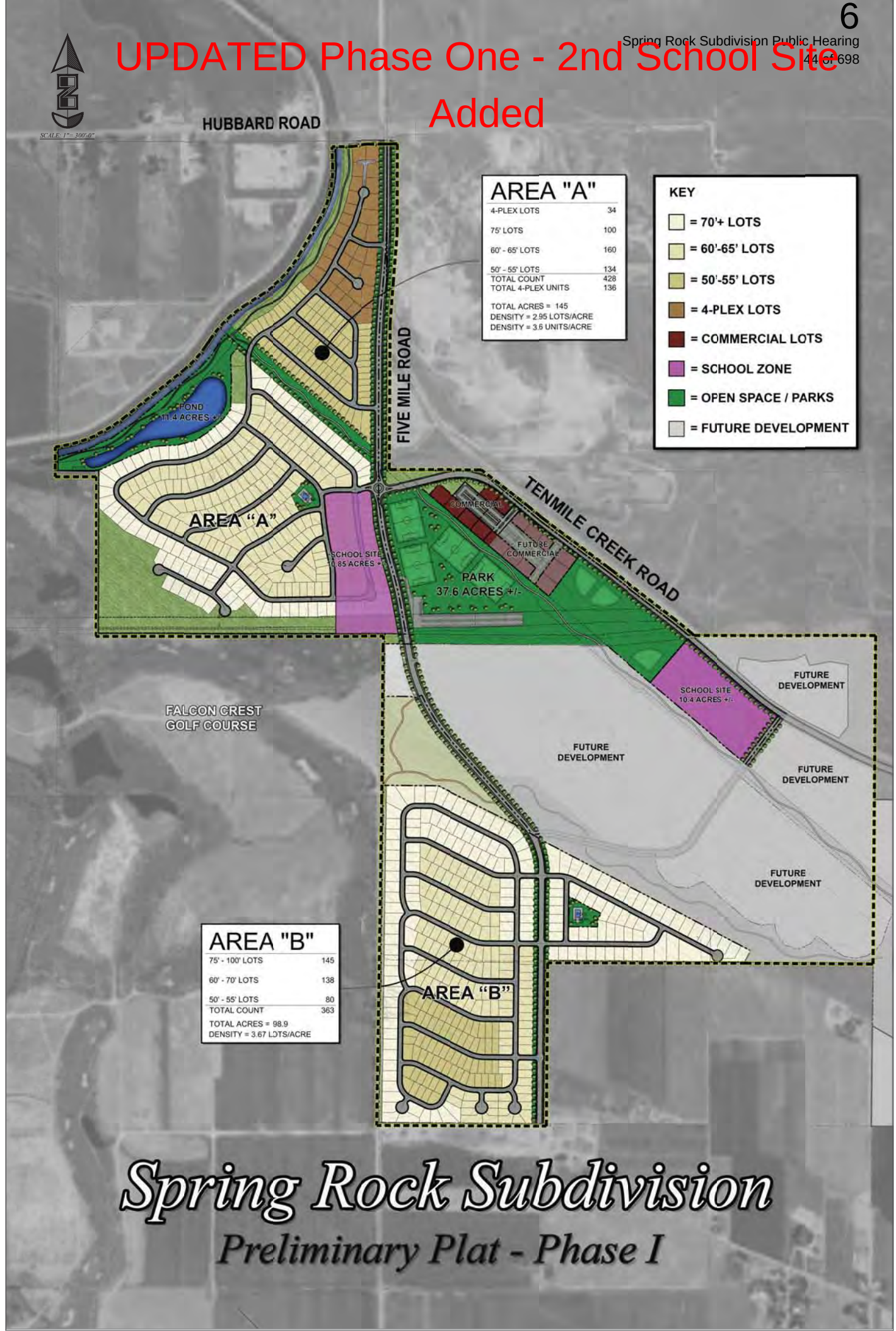
PROFESSIONAL ENGINEER
REGISTERED
5756
5-15-19
STATE OF IDAHO
DAVID G. POWELL

SPRING ROCK
PRELIMINARY PLAT

PROJECT PHASING PLAN

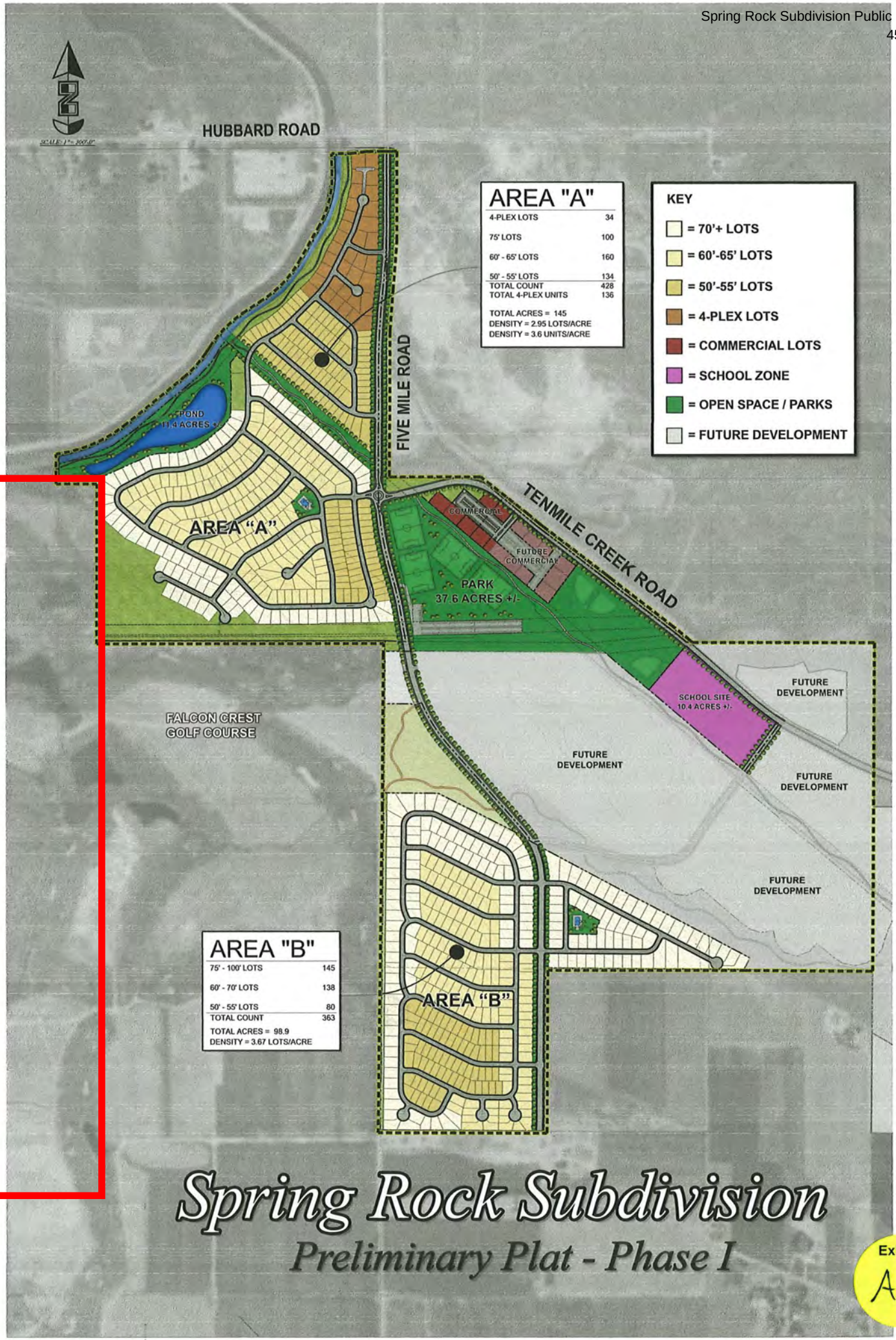
DATE: MAY, 2019
PROJECT: 18042
SHEET 1 OF 1

UPDATED Phase One - 2nd School Site Added



Spring Rock Subdivision

Preliminary Plat - Phase I

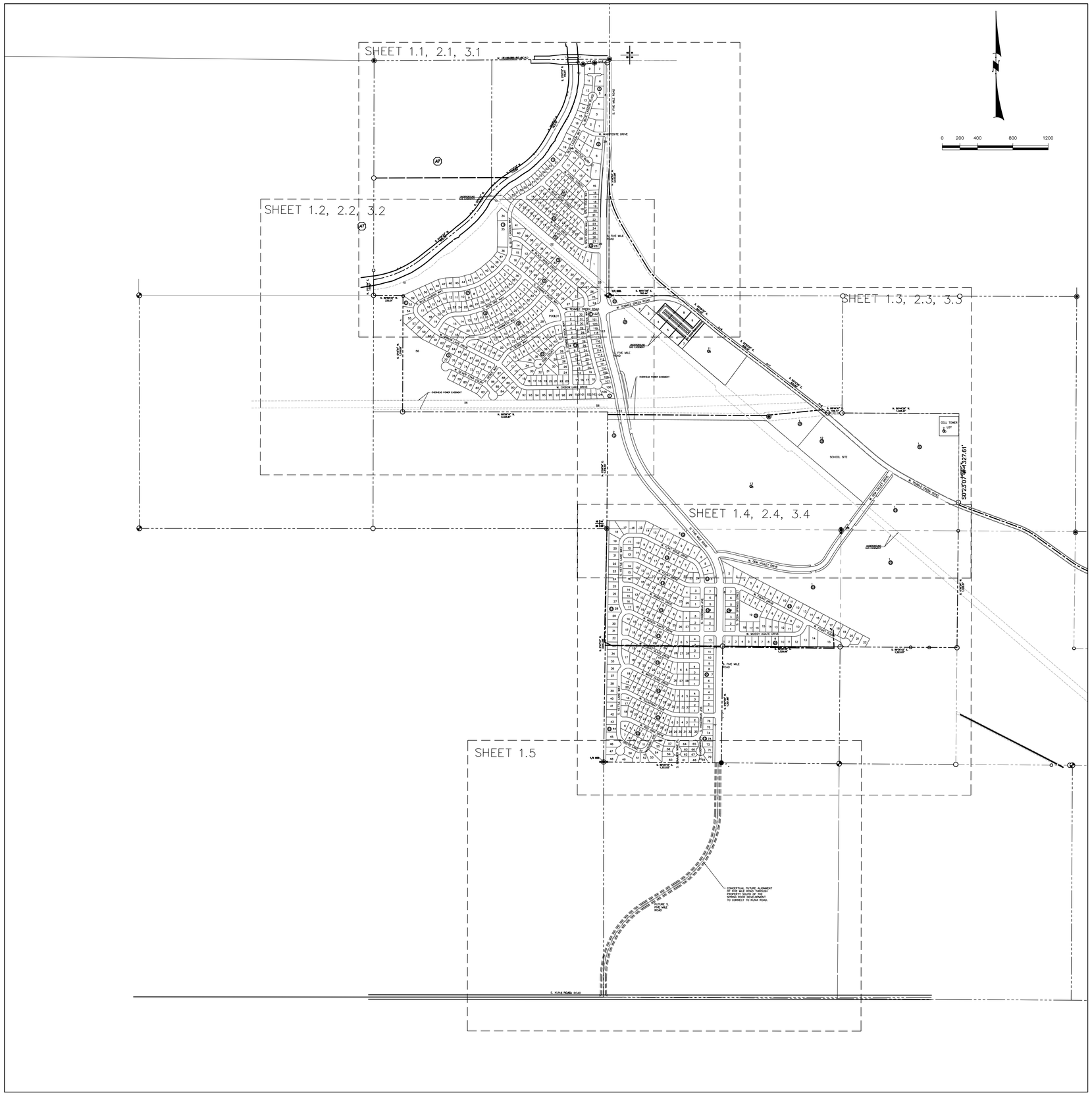


Spring Rock Subdivision

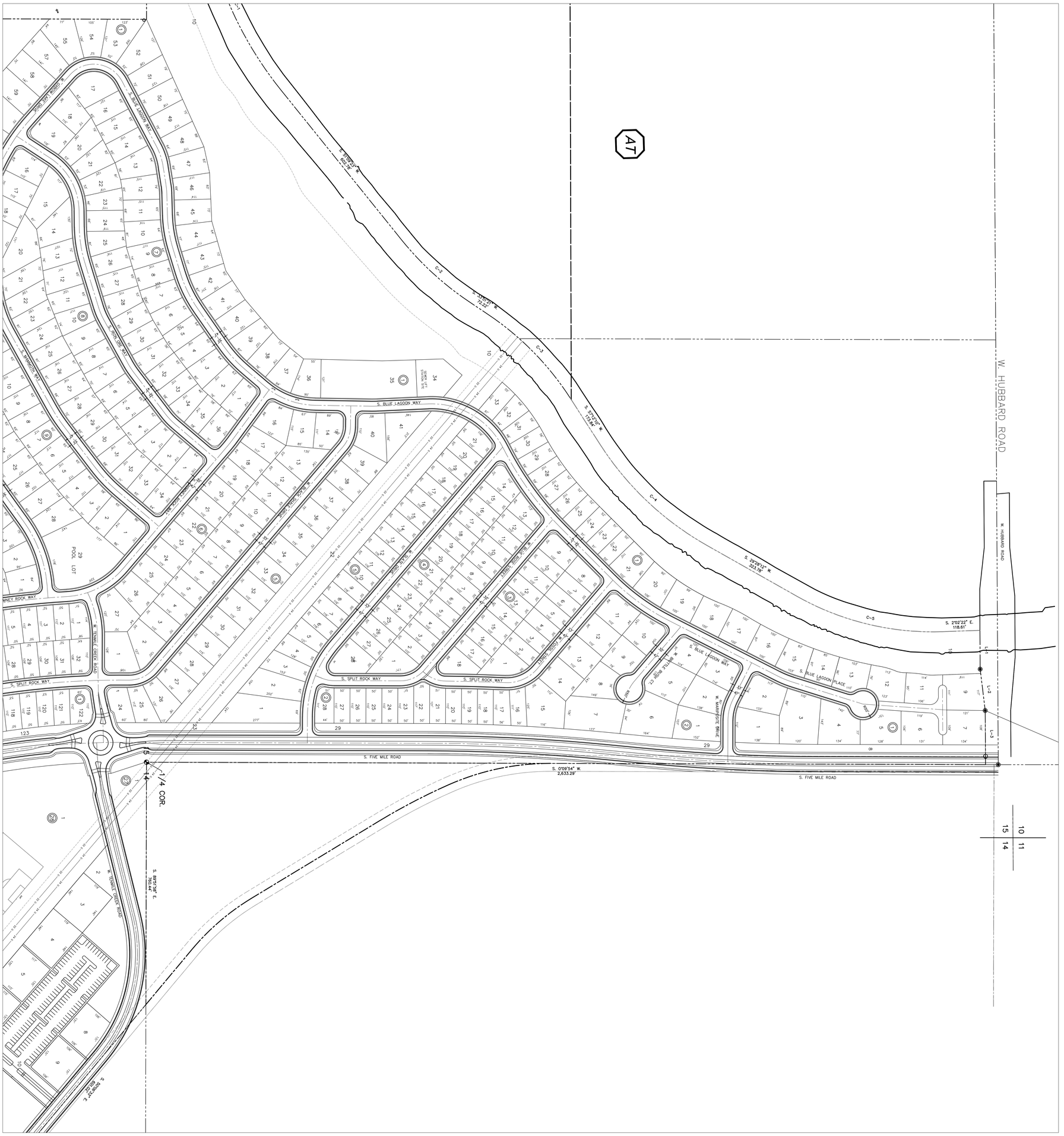
Preliminary Plat - Phase I

Exhibit
A11

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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
S 5TH AVE
S. FIVE MILE ROAD
W. SUNRISE RIDGE DRIVE
W. SUNRISE RIDGE DR.
W. SUNRISE RIDGE LANE
W. SUNRISE RIDGE PLACE
W. SUNRISE RIDGE COURT
W. SUNRISE RIDGE WAY
W. SUNRISE RIDGE STREET
W. SUNRISE RIDGE AVENUE
W. SUNRISE RIDGE CIRCLE
W. SUNRISE RIDGE ALLEY
W. SUNRISE RIDGE
W. SUNRISE RIDGE LOOP
W. SUNRISE RIDGE
W. SUNRISE RIDGE
W. SUNRISE RIDGE

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SHEET 1.1 OF 15

DATE: MAY-2019
PROJECT: 19042

SITE LAYOUT PLAN

SHEET 1 OF 6

SPRING ROCK
PRELIMINARY PLAT

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2447 S. Vista Ave. Boise, Idaho 83705
Ph. (208) 344-1180, Fax (208) 344-1182

Digitally signed by Riveridge Engineering Co
DN: cn=Riveridge Engineering Co, o=Riveridge Engineering Co, ou=Riveridge Engineering Co, email=info@riveridgeengineering.com, c=US
Date: 2019.05.09 16:09:06 -06'00'

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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. FORT RIDGE RIDGE
W. FORT RIDGE RIDGE
W. JEAN VALLEY DRIVE
W. TIMBER CREEK ROAD
S. PINE VALLEY ROAD
W. TIMBER CREEK ROAD
W. TIMBER CREEK ROAD
W. TIMBER CREEK

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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

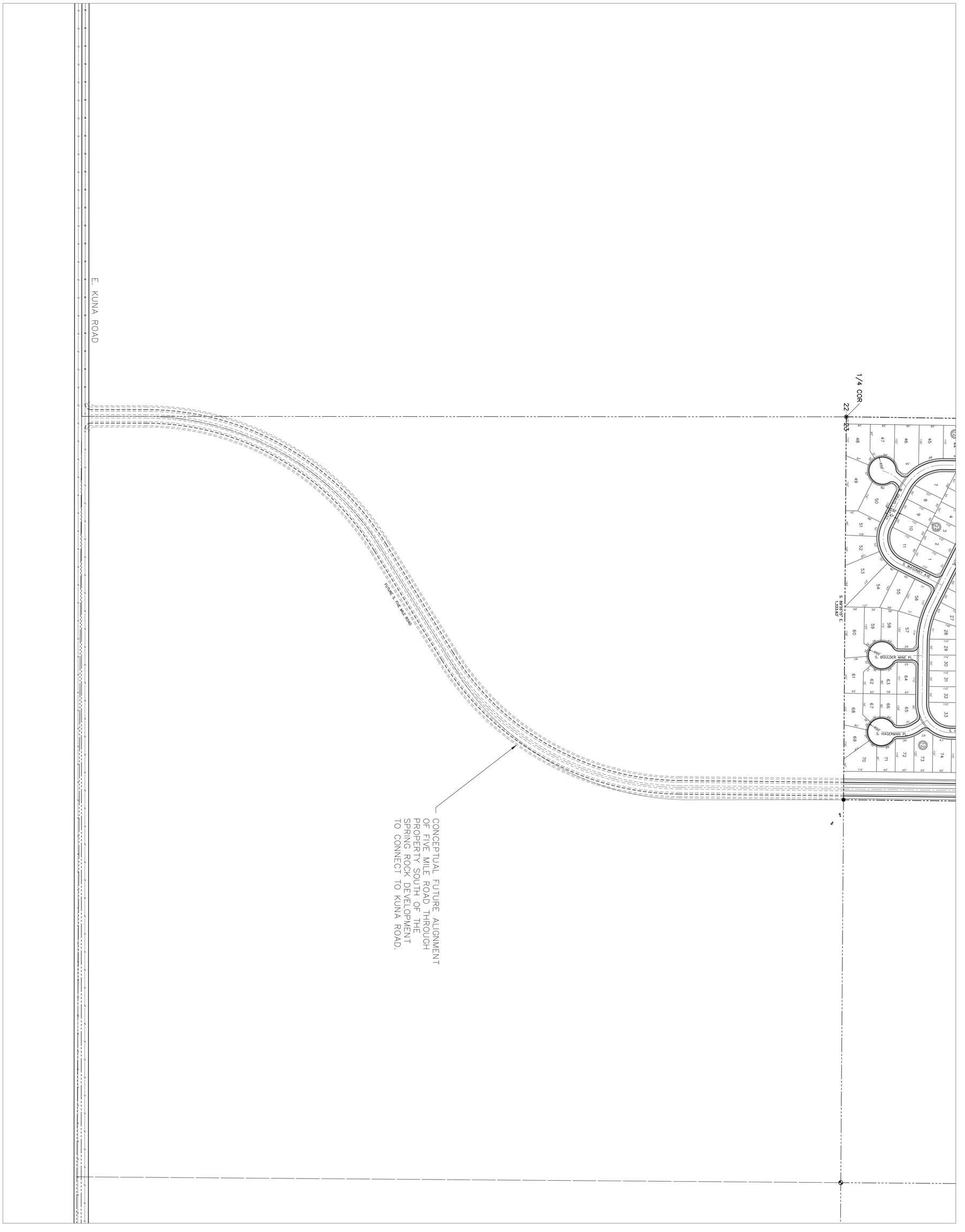
PROFESSIONAL ENGINEER — STATE OF IDAHO — DANIEL S. RIVELLI — 5756

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Spring Rock Subdivision Preliminary Plat

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SITE LAYOUT PLAN

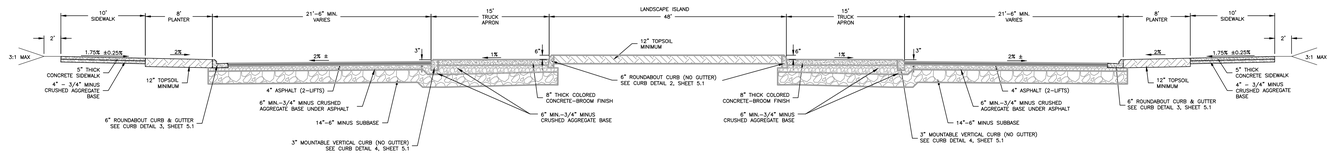
SHEET 5 OF 6

SPRING ROCK
PRELIMINARY PLAT

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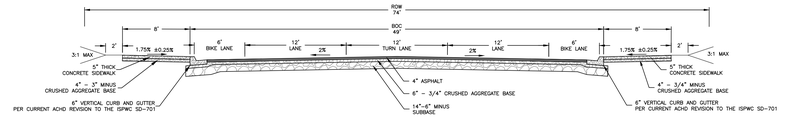
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DATE: MAY.2019
PROJECT: 18042
SHEET 1.5 OF 15



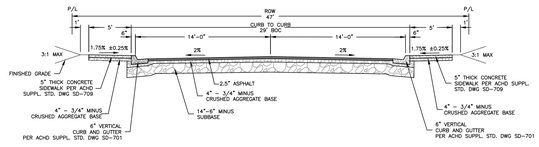
TYPICAL ROUNDABOUT SECTION
N. FIVE MILE ROAD AND E. TEN MILE ROAD

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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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

WFG Draft: 12/21/2019
Staff DRAFT 1.8.2020 & 5.26.2020

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 & Roberta Davis, Gilmore Keith H. and Ruth E. 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]

Parties to the Agreement:

City of Kuna	"**City**"	City Hall 751 W. 4th Street Kuna, ID 83634
Ten Mile Creek LLC	"**Developer**"	Attn: Chris Findlay 1211 N Happy Dr Boise, ID 83706
Davis Jay C & Roberta A Family Revocable Trust and	"**Owner**"	P.O. Box 16232 Boise, ID 83715
Gilmore Keith H & Ruth E Living Trust 1-1-13 and		Attn: Janet Kell Co-trustee or Germain R. Tarrant Co-trustee 3154 E. Rivernest Dr. Boise, ID 83706
Anne C. Whitmore, and George Whitmore, and James L. Whitmore		3431 W. Meadow Dr. Boise, ID 83706

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LIST OF EXHIBITS

EXHIBIT A:	ANNEXATION ORDINANCE
EXHIBIT B:	MASTER PLAN ~~(list all Master plans out specifically)~~
EXHIBIT C:	OFFSITE SEWERAGE
EXHIBIT D:	OFFSITE POTABLE WATER
EXHIBIT E:	PUD MODIFICATIONS
EXHIBIT F:	SUBJECT REAL PROPERTY LEGAL DESCRIPTION
EXHIBIT G:	COMMUNITY INFRASTRUCTURE FINANCING GUIDELINES
EXHIBIT H:	PUBLIC PARKS & TRAILS PLAN

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

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 Davis Jay C & Roberta A Family Revocable Trust, Gilmore Keith H and Ruth E Living Trust, & 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 / Davis Jay C. & Roberta A. Family Revocable Trust, Gilmore Keith H. and Ruth E. Living Trust, & 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]. ~~Idaho Code 50-3101 et seq.~~

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 District:** Means the Community Infrastructure District established pursuant to Idaho Code 50-3101.~~

1.2~~1~~2 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.

1.2~~2~~3 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.

1.2~~3~~4 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,.

1.2~~4~~5 Fire District: Means and refers to the Kuna Rural Fire District (formerly known as the Kuna Rural Fire Protection District).

1.2~~5~~6 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.

1.2~~6~~7 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.

1.2~~7~~8 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.

1.2~~8~~9 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.

1.2930 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***.

1.301 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 ~~2.25~~ dwelling units/acre or a total of 2,274 ~~2,322~~ dwelling units.

1.312 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.

1.323 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.

1.334 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***.

1.345 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***.

1.356 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.

1.367 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.

1.378 **Owner:** Means and refers to **Davis Jay C & Roberta A Family Revocable Trust, Gilmore Keith H and Ruth E Living Trust, & 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.

1.389 **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.

1.3940 **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.

1.401 **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.

1.421 **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.

1.423 **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.

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

1.445 **Potable Water Provider:** Means and refers to Suez Water.~~the private water Companyknown as the Suez Water District.. Applicant must have a separate agreement with Suez Water District for potable water services.~~

1.456 **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.

1.467 **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.

1.478 **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.

1.489 **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.

1.4950 **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 Wwater's District standards and provide an inter tie-in to the City of Kuna's Water System.

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

1.513 **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.

1.524 **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.

1.535 **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.

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

1.557 **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***.

1.568 **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.

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

1.586059 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-2~~C-2, C-1, R-6, and R-12, and R-20~~ City zones (as amended by the PUD) in accordance with the provisions of this Agreement.

1.5961 Sewer Provider: Means and refers to City providing sewerage ~~sewage~~ conveyance and treatment service through the Wastewater System.

1.602 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.

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

1.624 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.

1.635 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.

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

1.657 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.

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

1.679 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.*

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

1.6970 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.

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

1.71 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.

1.723 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~~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 ~~District~~ and memorialized through ~~—~~a separate document recorded with the County Recorders' office with ~~. And~~ a copy of said ~~—~~agreement to ~~shall~~ be provided to the City of Kuna; and

2.10~~9~~ **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~~0~~ **Impact Area.** The Subject Real Property is within the Impact Area; and

2.12~~1~~ **Development.** Developer seeks to develop and annex the Subject Real Property into the City in accordance with the Master Plan; and

2.13~~2~~ **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~~3~~ **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~~4~~ **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.

2.165 **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

2.176 **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

2.187 **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

2.198 **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

2.2019 **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

2.210 **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

2.221 **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. ~~See the standalone recorded agreement/document as approved by the City Council.~~

2.232 **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 ~~City Cooperation.~~ ~~City shall cooperate with the Developer, as is reasonably necessary for the Developer to construct any improvements upon the Subject Real Property as permitted by the City, to provide temporary encroachment permits and or temporary construction easements for the City real property or right-of-way so long as the same is not an unreasonable interference with the City's use thereof and only to the extent reasonably necessary.~~

~~4.8.1 Temporary Permits.~~ ~~Temporary encroachment permits and temporary construction easements shall identify the term, describe the use and provide that the Developer shall substantially restore such easements and rights-of-way to their condition prior to the Developer's entry upon and completion of such construction, repair or maintenance.~~

4.9 ~~Prior Easement Dedication.~~ ~~To the extent permitted by law and subject to obtaining an encroachment permit from the City (or other applicable governmental jurisdiction), the prior dedication of any easements or rights-of-way shall not affect or limit the Developer's right to finance through the CID or to construct, install, and/or provide Public Infrastructure thereon or there over.~~

4.10 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:

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

4.10.2 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.

4.11 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~~the District~~(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 ~~Private Roads and~~ Public Streets.

5.1.1 Developer Responsibility. Developer shall:

5.1.1.1 Include in the PUD Master Plan for approval, a Developer ~~Private Roads and~~ Public Streets System Infrastructure Master Plan, defined below, designating the location of the ~~Private Roads (which may be in the multi-family and commercial areas) and~~ 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 ~~Private Roads and~~ Public Streets System Infrastructure Master Plan**"). Developer ~~Private Roads and~~ 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 ~~and will have some Private Roads~~ 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~~approved Master Plan as approved in the subdivision approval process.

5.1.1.5 ~~Private~~ 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 roads, p~~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 ~~O~~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 ~~Public Street and Private Road l~~Lighting for all roads, streets, drive aisles and parking lots shall be served with underground electric service distribution; all ~~Private~~ 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, and~~developed, will be served by a Suez Water~~private water company~~. All onsite and offsite improvements are the responsibility of the Developer and/or the Suez Water~~private water company~~. See separate agreement with Suez Water ~~District~~ for inter tie-in.

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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 ~~O~~offsite Sewerage trunk line and force main line ~~depicted on ***Exhibit C***~~ from the Patagonia Lift Station/Main Line to the Subject Real Property to serve the Project as determined by the City Engineer

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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 ~~O~~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~~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, ~~as it is developed and in accordance with the City of Kuna wastewater treatment~~wastewater treatment ~~Master Plan~~

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.

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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 ~~District~~ in which case the costs funded by the CID ~~District~~ would not be subject to reimbursement through the City's reimbursement policy.

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5.4.2.2.4 ~~For a portion of the Offsite Sewerage from the Orchard Patagonia Lift Station to the intersection of Kuna Road and Locust Grove Roads, Developer shall be eligible for the reimbursement of 100% of the cost(s) including engineering and a management fee of 5% of the cost(s). The reimbursement shall come from Capital Improvement Plan Funds and be paid back to the Developer within five (5) years of completion of such portion of Offsite Sewerage. City will also adopt a latecomer provision that will be adapted as a separate document and/or agreement.~~

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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.

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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, ~~in the future,~~ be added to the Project (the "**Drainage Master Plan**").

5.5.2 Private Drainage. ~~The Drainage Master Plan shall d~~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~~ shall contain a minimum of 5% of its total gross acres ~~contain a minimum of 5% of its total gross acres must maintain or exceed an overall 5%~~ 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~~., unless at the time of each final plat the Project contains a proportionate amount of Green Space and/or Public Park(s) compared to the percentage of the Project previously developed,.~~

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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~~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.

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5.6.7~~8~~ 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~~8~~.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~~8~~.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~~8~~.3 Developer and the City will work together on the final design of all Public Park(s).

5.6.8~~9~~ 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~~10~~ 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.

5.6.101 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 CIDDistrict 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 DistrictCID 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~~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, ~~the~~ any amendment to this Agreement shall go through the public hearing process and follow current City Code, the Comprehensive Plan and Comprehensive Plan Map. ~~shall reflect either the then existing residential density and/or commercial uses and intensities of such Acquired Additional Property, or, if requested by the Developer, additional residential density and/or commercial uses and intensities consistent with any zoning or plan approvals for the Acquired Additional Property.~~

8.5 **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~~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~~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

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- 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:

David Jay C & Roberta A Family Revocable Trust
P.O. Box 16232
Boise, ID 83715

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Gilmore Keith H & Ruth E Living Trust
Attn: Janet Kell Co-trustee or
Germain R. Tarrant Co-trustee
3154 E. Rivernest Dr.
Boise, ID 83706

Anne C. Whitmore, and
George Whitmore, 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. ~~**City Notice Prior to Entry of Property.** City agrees to notify Owner prior to entry or access on to Owner's property while Owner is the owner of their property.~~

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~~ny~~ ~~assign~~assigns~~s~~ 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:

Davis Jay C & Roberta A Family Revocable Trust

By:

_____

Jay Davis

By:

_____

Roberta Davis

OWNER:
Gilmore Keith H & Ruth E Living Trust

By:

_____

Janet Kell Co-trustee

_____

Germain R. Tarrant Co-trustee

OWNER:

Anne C. Whitmore, and
George W. Whitmore, 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 _____, 202018, 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 _____, 20~~18~~, 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 _____, 20~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be the Trustees of Davis Jay C & Roberta A Family Revocable Trust, 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 _____, 20~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be the Co-Trustee of Gilmore Keith H and Ruth E Living, 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 _____, 20~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be the Co-Trustee of Gilmore Keith H and Ruth E Living, 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 _____, 20~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be Anne C. Whitmore, the persons who executed the instrument.

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 _____, 20~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be George W. Whitmore, the persons who executed the instrument.

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~~18~~, before me, the undersigned, a Notary Public in and for said State, personally appeared _____, known or identified to me to be James L. Whitmore, the persons who executed the instrument.

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: _____

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EXHIBIT A
Annexation Ordinance

EXHIBIT B
”Master Plan”

EXHIBIT C
”Offsite Sewerage”

EXHIBIT D

EXHIBIT D
”As Needed”

EXHIBIT E
PUD Modification

See Exhibit 'E" (the table comparison) right after the Development Agreement.

EXHIBIT F

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: 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: 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). (Ord. No. 2011-10, Sec. 1, 12-20-2011; Ord. No. 2018-08, Sec. 2, 3-6-2018)
5-7-24: -IMPROVEMENT GUARANTEES: D. The applicant shall file with the agreement one (1) of the following to assure their full and faithful performance: 1. Certified check; 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: D. The applicant shall file with the agreement one (1) of the following to assure their full and faithful performance: 1. Certified check; 2. An irrevocable letter of credit issued by a financial institution authorized to do business in the State of Idaho; 3. Other surety acceptable to the city. (Ord. No. 2011, Sec. 1, 12-20-2011)

5-10-4: -GENERAL REQUIREMENTS FOR ALL SIGNS AND DISTRICTS: O. Subdivision signs: 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: O. Subdivision signs: 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: C. *Common area landscapes:* New residential subdivision common area landscapes shall be comprised of the following: 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: C. *Common area landscapes:* New residential subdivision common area landscapes shall be comprised of the following: 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.

6-2-3: -PRELIMINARY PLAT: *Note:* Subdivider and developer are intended to be interchangeable terms. *J. Approval period, phased development, time extension, and expiration:* 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: *Note:* Subdivider and developer are intended to be interchangeable terms. *J. Approval period, phased development, time extension, and expiration:* 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.~~ 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: Street and road location shall conform to the following: 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 (Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. No. 2018-08, Sec. 3, 3-6-2018)	6-3-3: -LOCATION: Street and road location shall conform to the following: 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.~~ (Ord. 231, 12-7-1977; Ord. 439, 2-20-1996; Ord. No. 2018-08, Sec. 3, 3-6-2018)

6-3-4: -SPECIFICATIONS 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: (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 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: 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. (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: 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. (Ord. 414, 2-1-1994)	6-3-9: -BLOCKS: 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. (Ord. 414, 2-1-1994)

6-4-2: -REQUIRED PUBLIC IMPROVEMENTS: 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: 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.

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.

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.

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.

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.

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. (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. (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)

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)

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 CODY M. McCAMMON 5/29/2020

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;

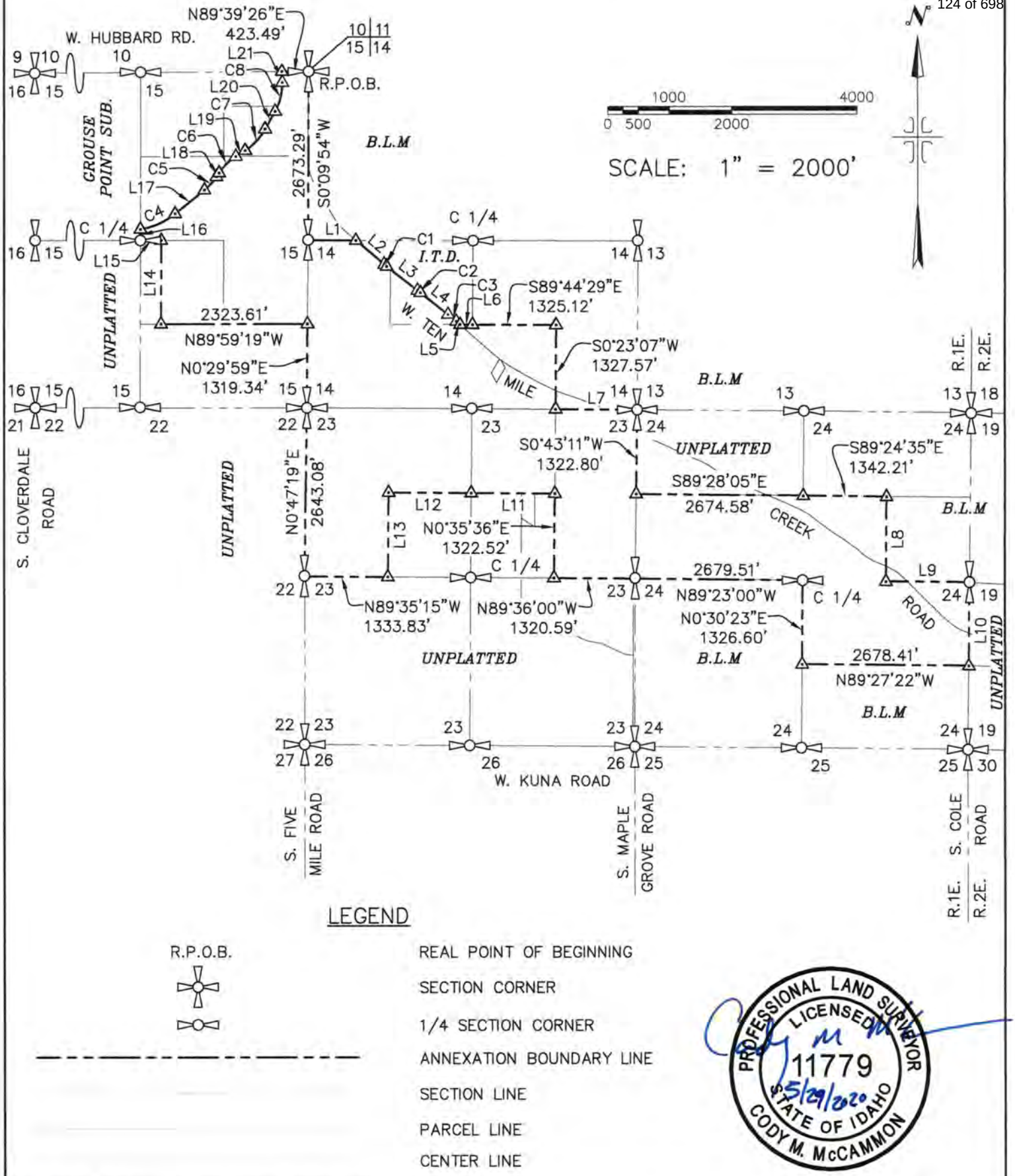
North 02°02'22" West, 173.63 feet to the north boundary line of said Section 15 and the centerline of W. Hubbard Road;

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

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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



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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;

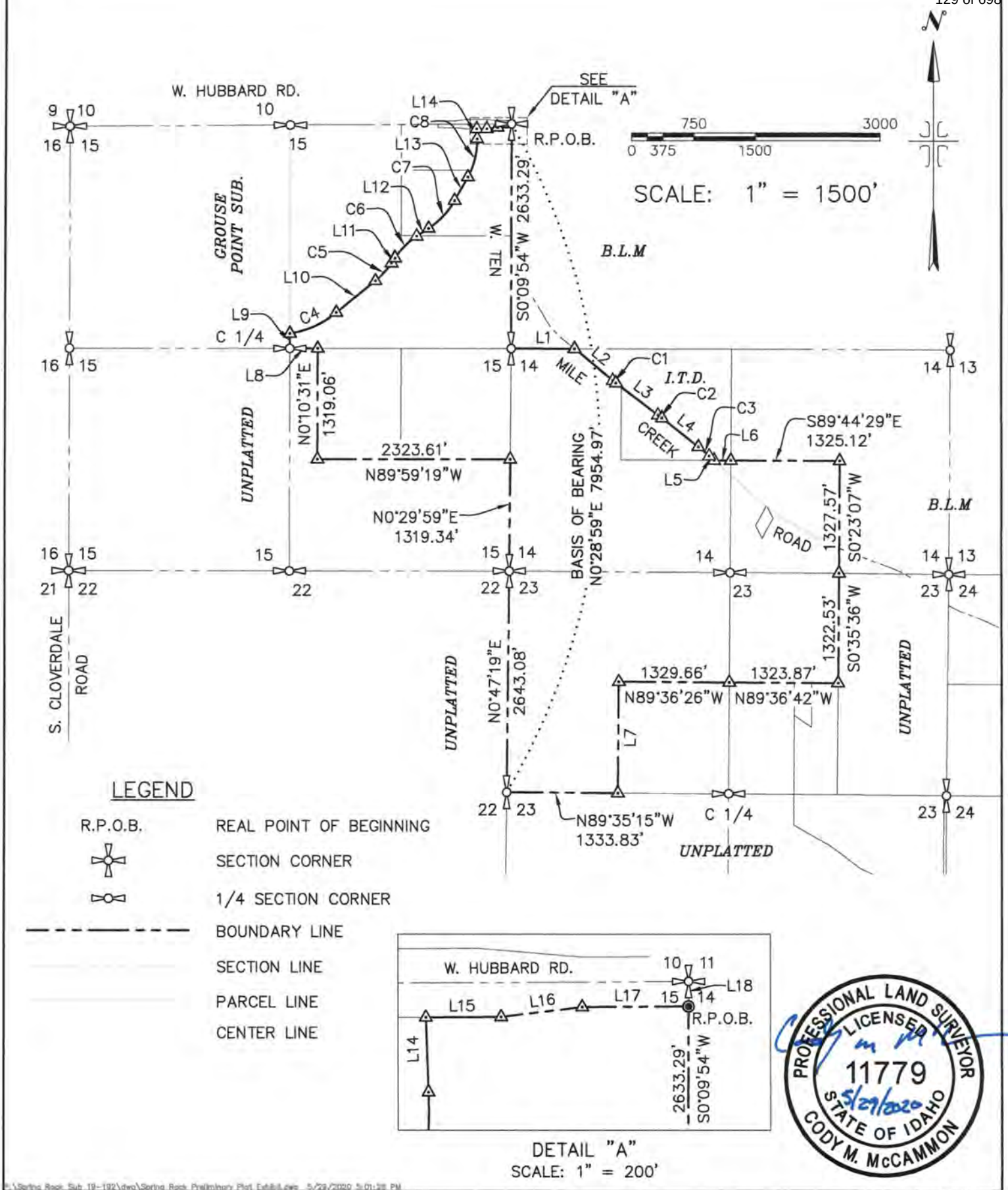
North 83°04'31" East, 130.86 feet;

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

P:\Spring Rock Sub 19-192\dwg\Spring Rock Preliminary Plat Exhibit.pdf 5/29/2020 5:01:38 PM

IDAHO SURVEY GROUP, LLC 9955 W. EMERALD ST. BOISE, IDAHO 83704 (208) 846-8570	PRELIMINARY PLAT BOUNDARY EXHIBIT MAP FOR SPRING ROCK SUBDIVISION	JOB NO. 19-192
		SHEET NO. 1 OF 2
	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	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



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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;

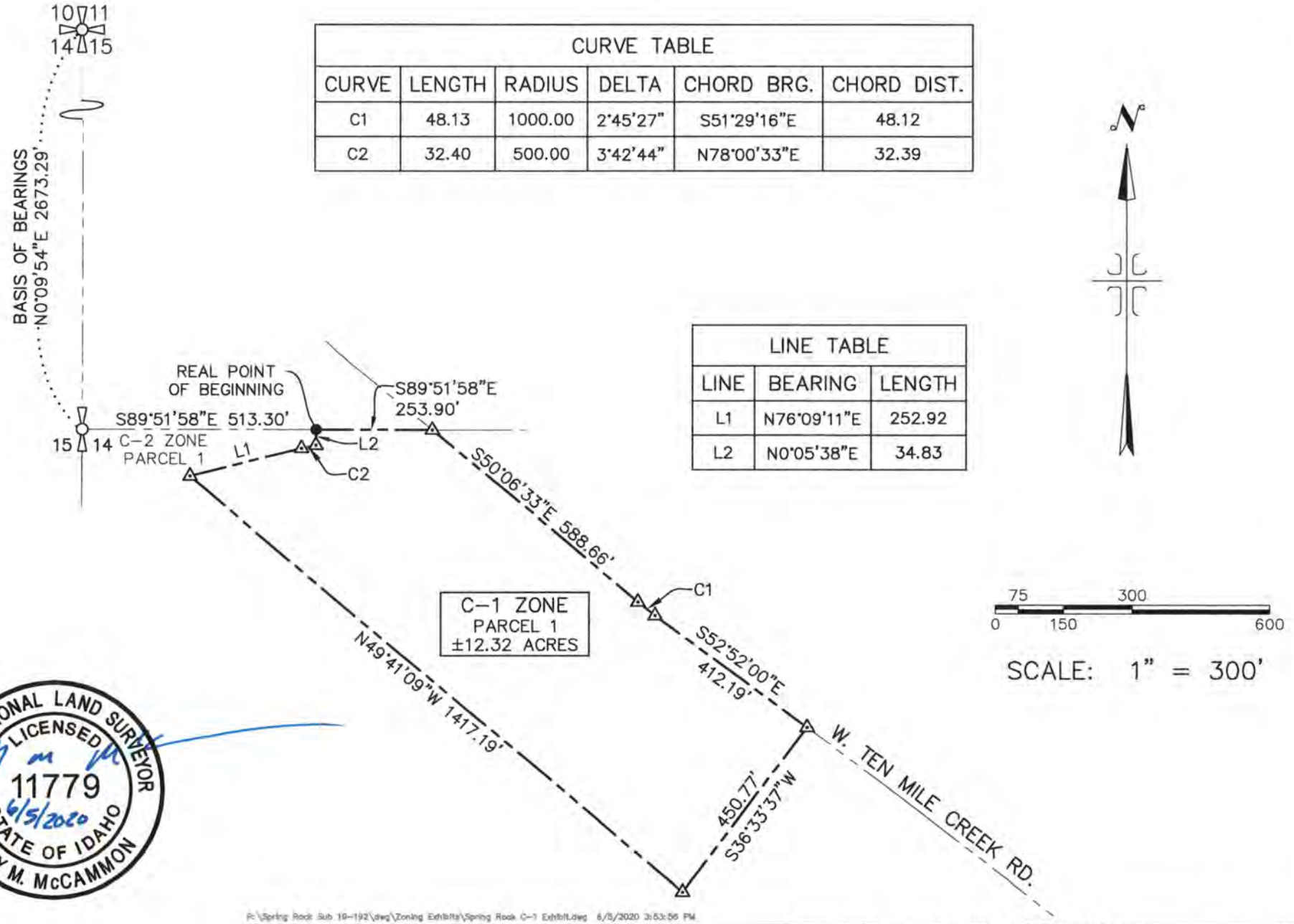
thence 32.40 feet along the arc of a curve to the right, having a radius of 500.00 feet, a central angle of 03°42'44" and a long chord which bears North 78°00'33" East, 32.39 feet;

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.

PROFESSIONAL LAND SURVEYOR
REGISTERED
11779
6/5/2020
STATE OF IDAHO



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;

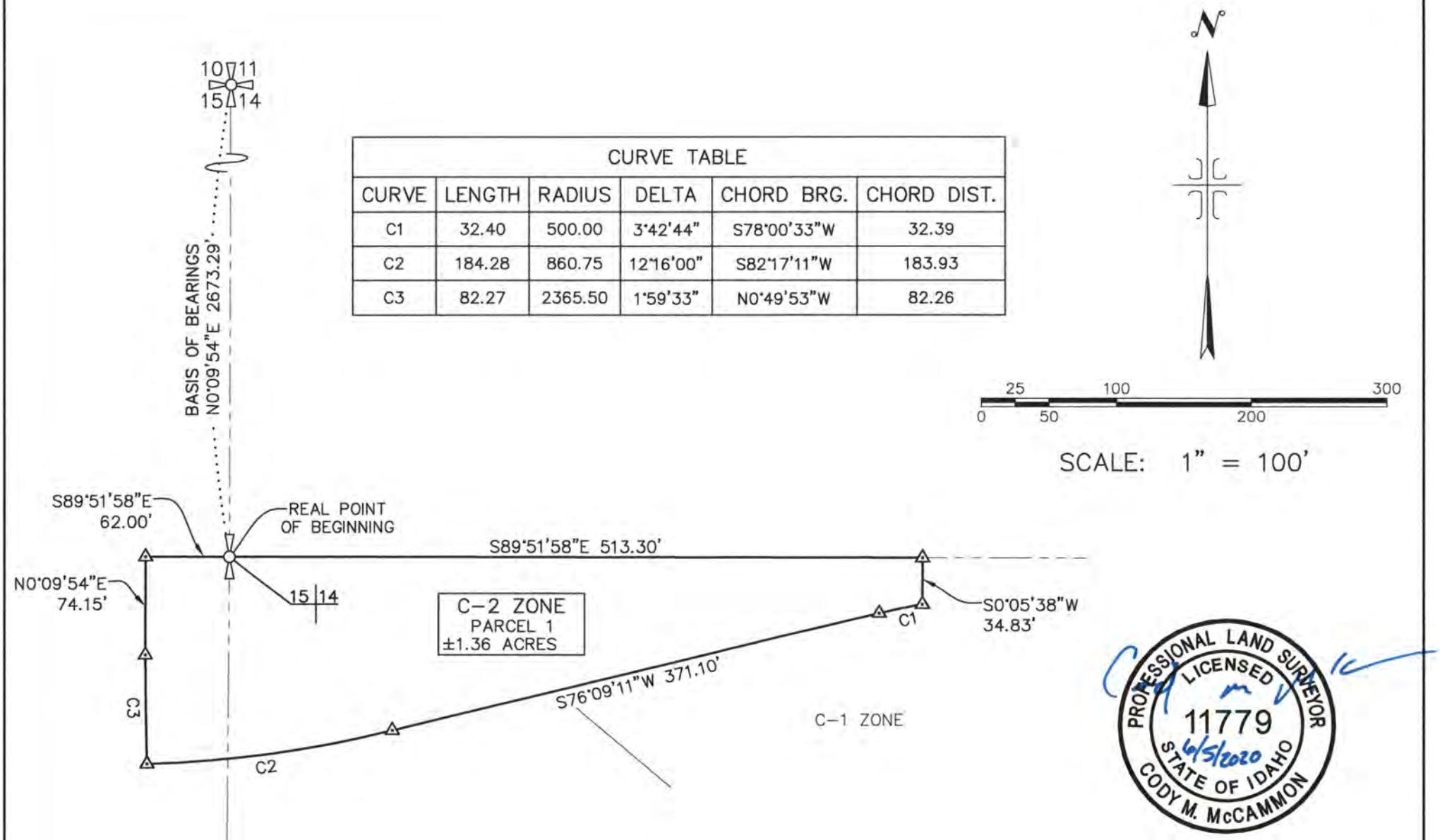
North 45°58'20" West, 853.58 feet to the east-west centerline of said Section 24;

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.





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

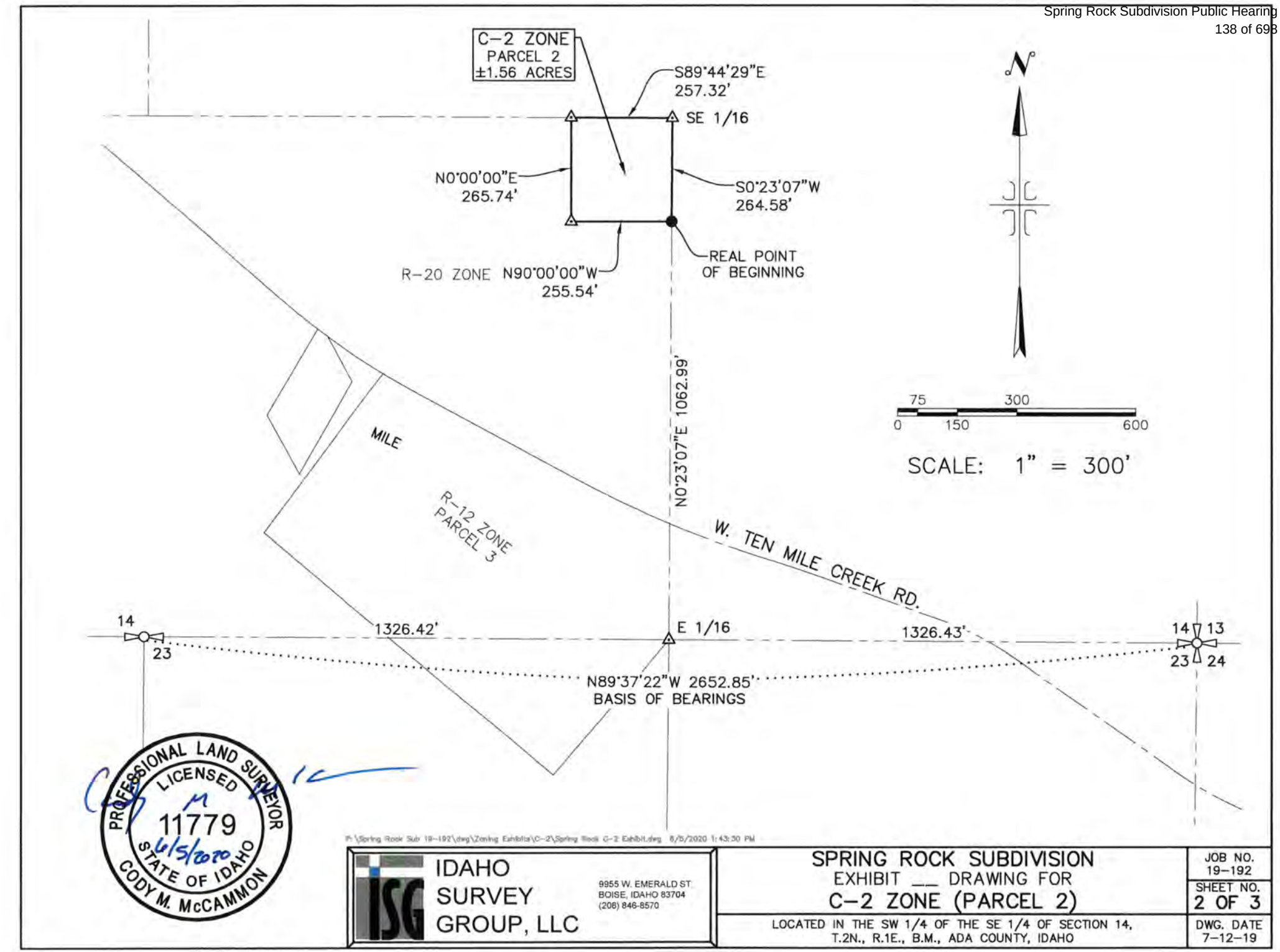
PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

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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

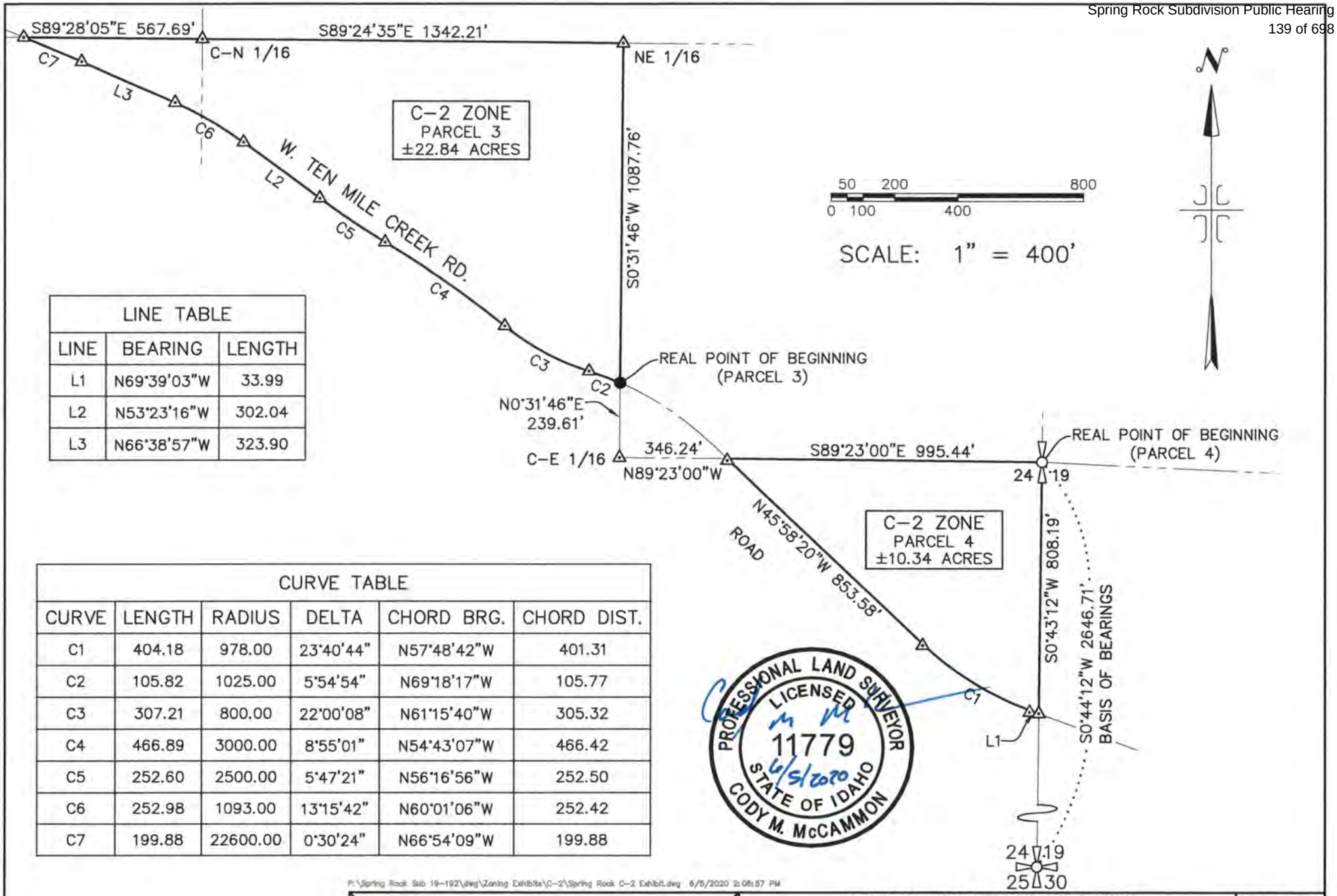
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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

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;

PROFESSIONAL LAND SURVEYOR REGISTERED 11779 6/8/2020 STATE OF IDAHO CORY M. McCAMMON

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;

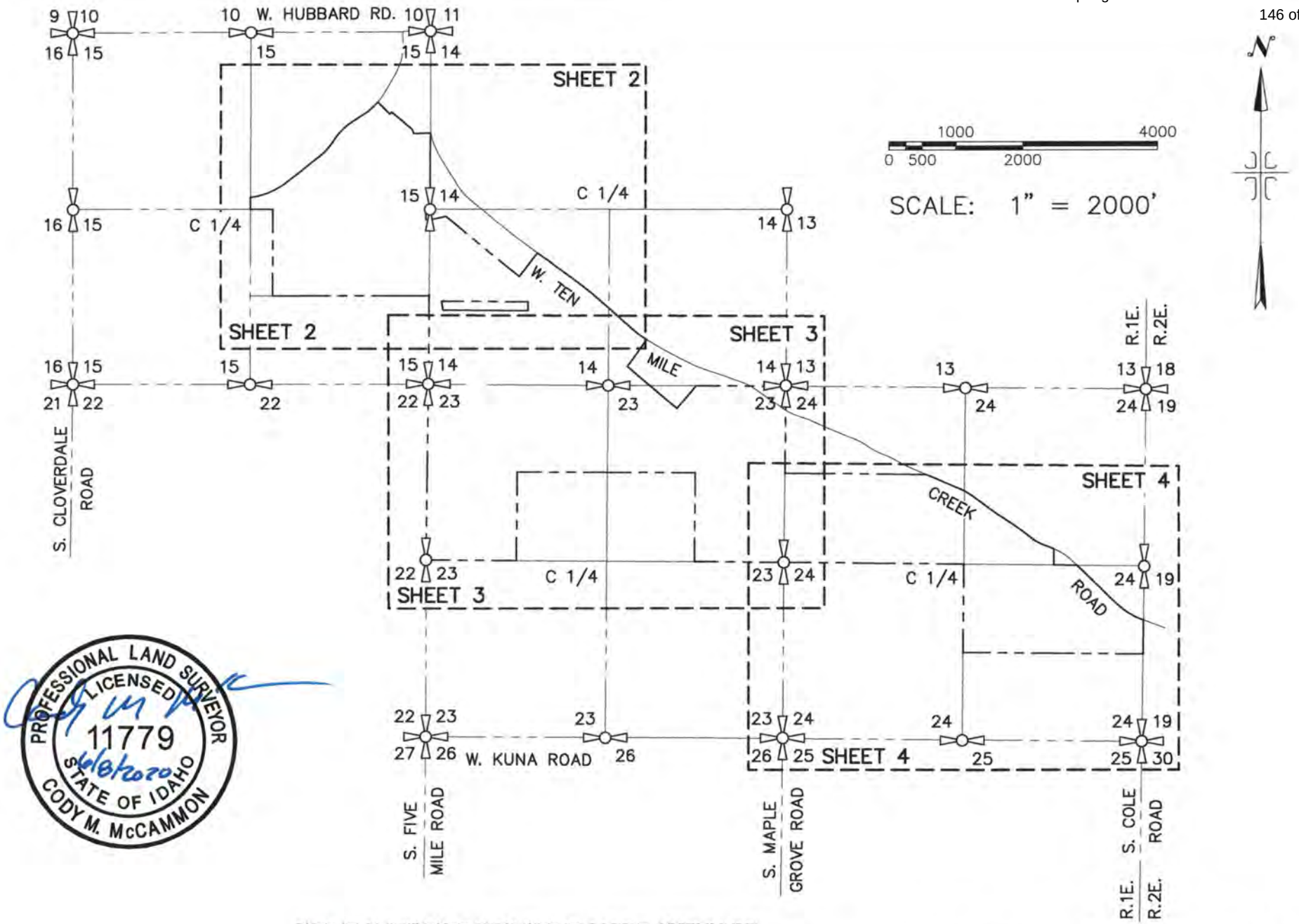
thence 36.82 feet along the arc of a curve to the right having a radius of 1,388.20 feet, a central angle of 01°31'11" and a long chord which bears North 10°41'12" West, 36.82 feet;

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.





PROFESSIONAL LAND SURVEYOR LICENSED 11779 6/8/2020 STATE OF IDAHO CODY M. McCAMMON

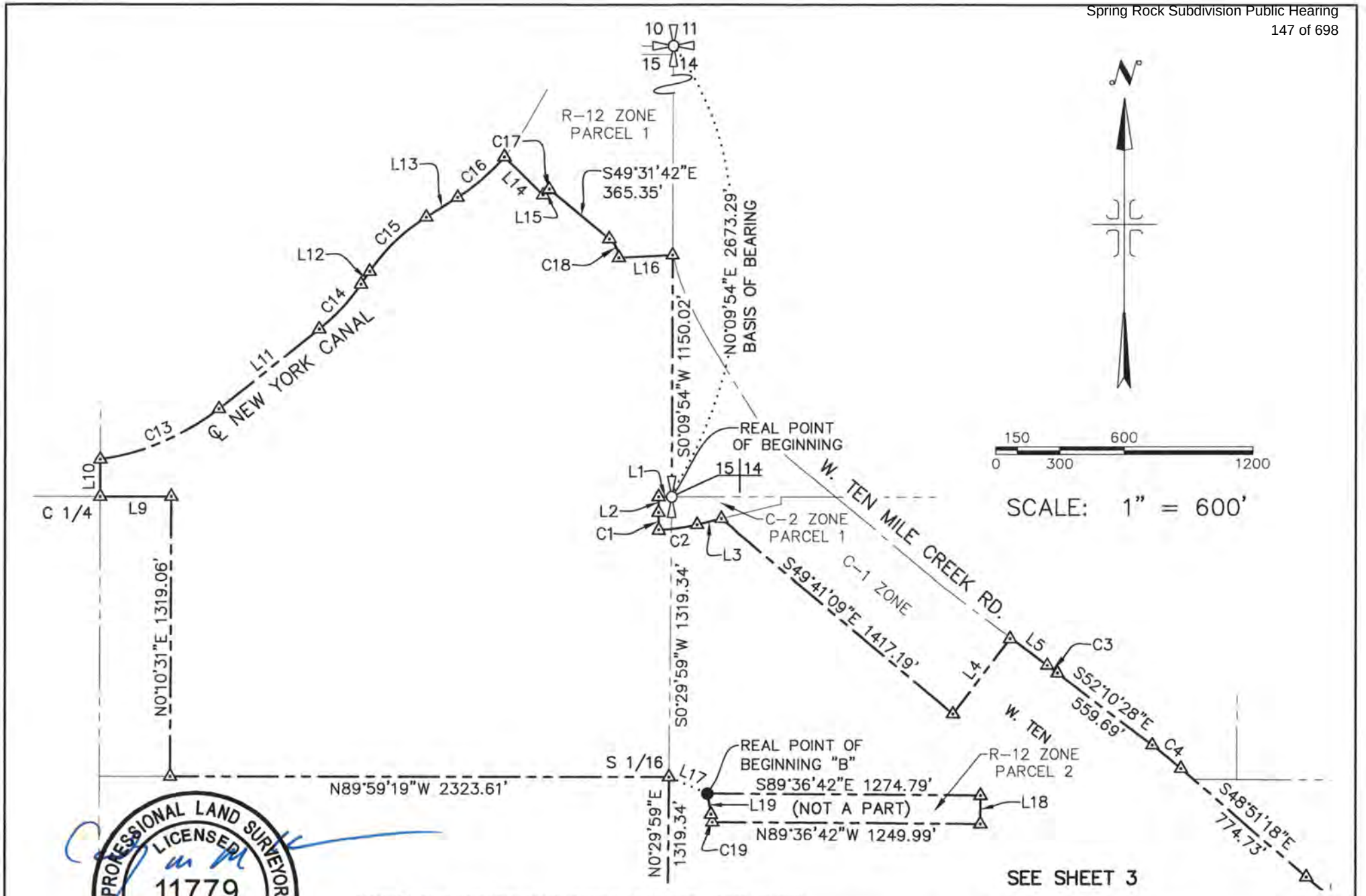
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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-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



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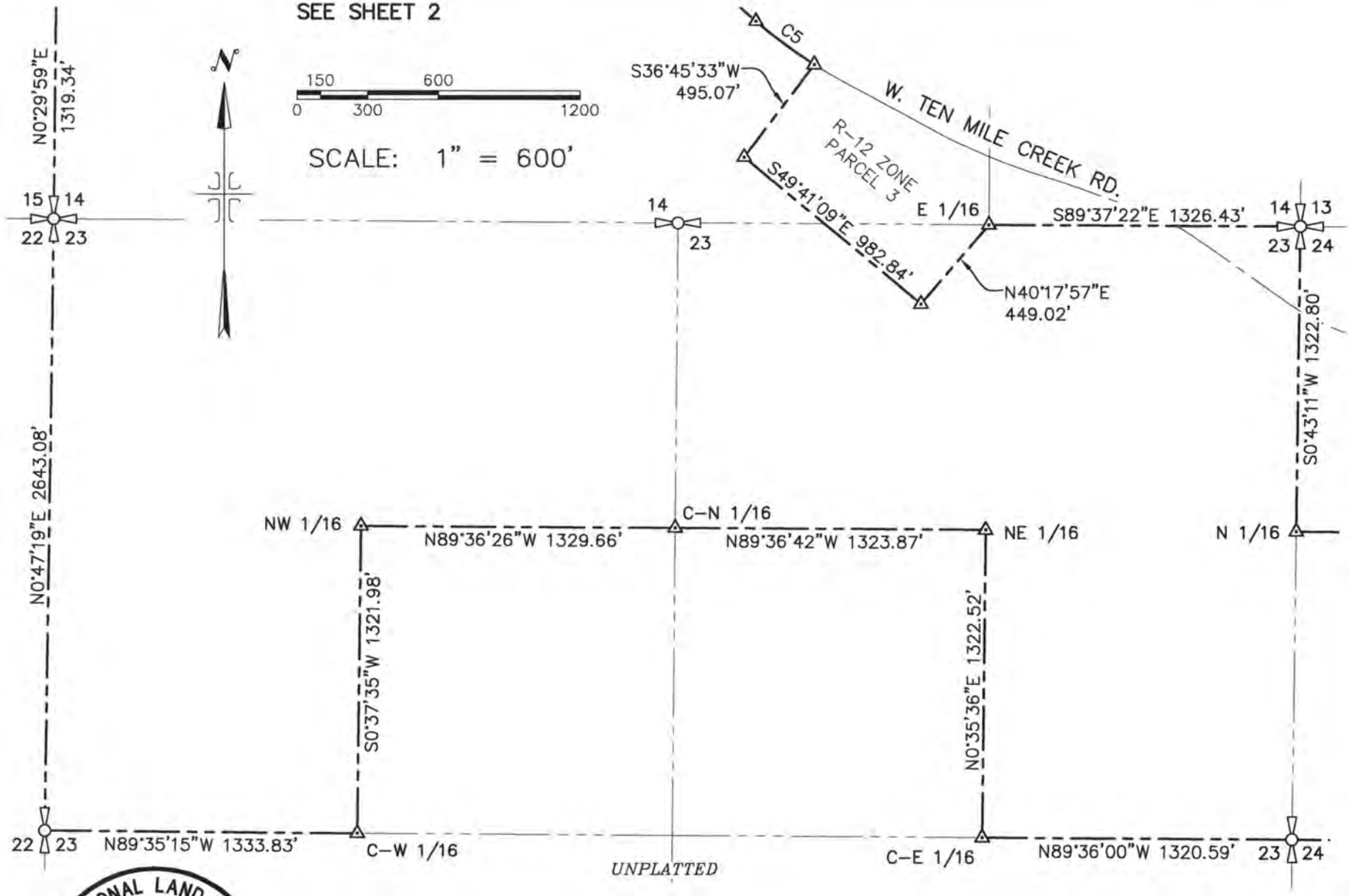
PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/8/2020
STATE OF IDAHO
CODY M. McCAMMON

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. 2 OF 5
DWG. DATE 6-8-20



PROFESSIONAL LAND SURVEYOR
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11779
6/8/2020
STATE OF IDAHO
CODY M. McCAMMON

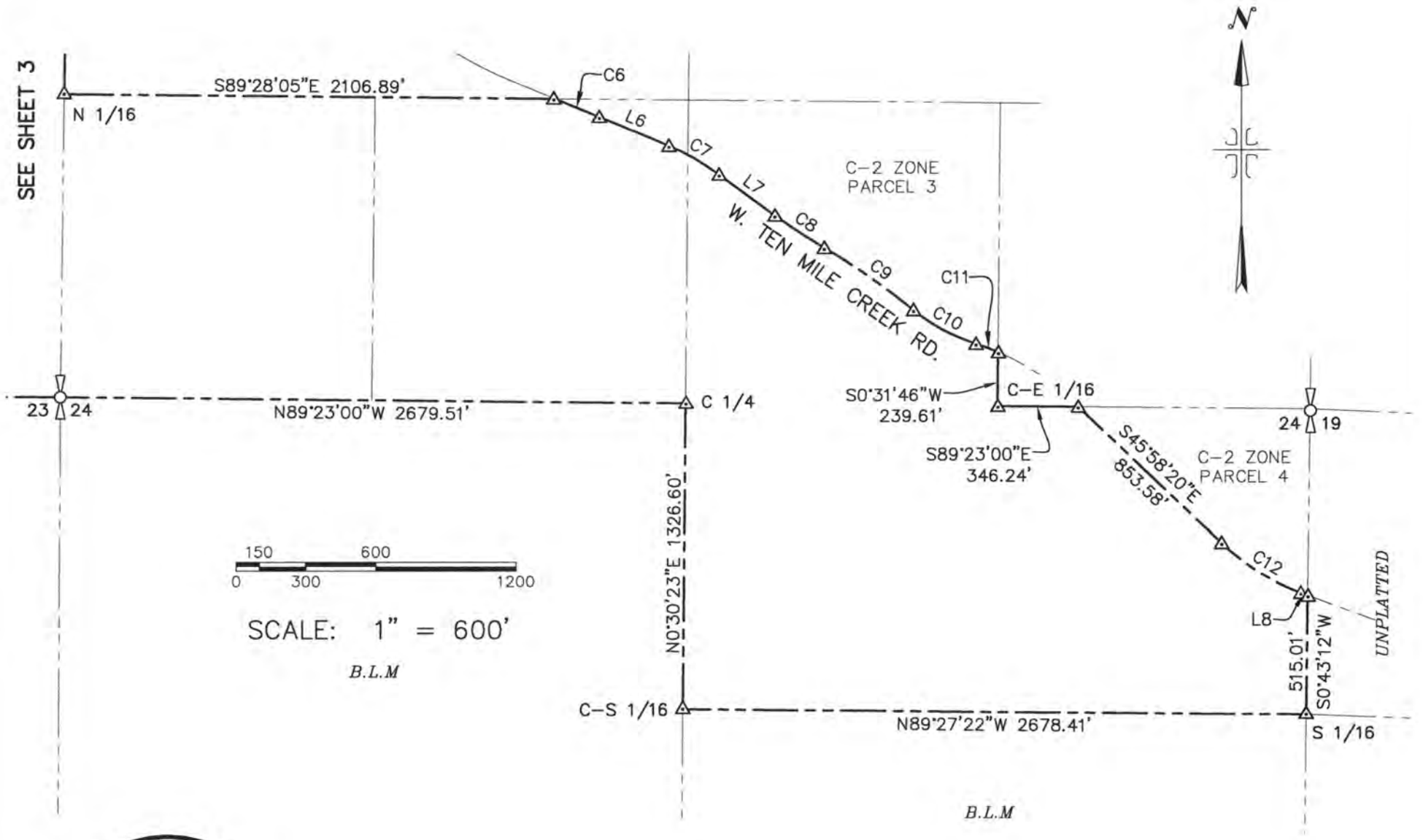
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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST
BOISE, IDAHO 83704
(208) 846-8570

SPRING ROCK SUBDIVISION
EXHIBIT __ DRAWING FOR
R-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

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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. 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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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. 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
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11779
6/5/2020
STATE OF IDAHO
COEUR D'ALENE

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;

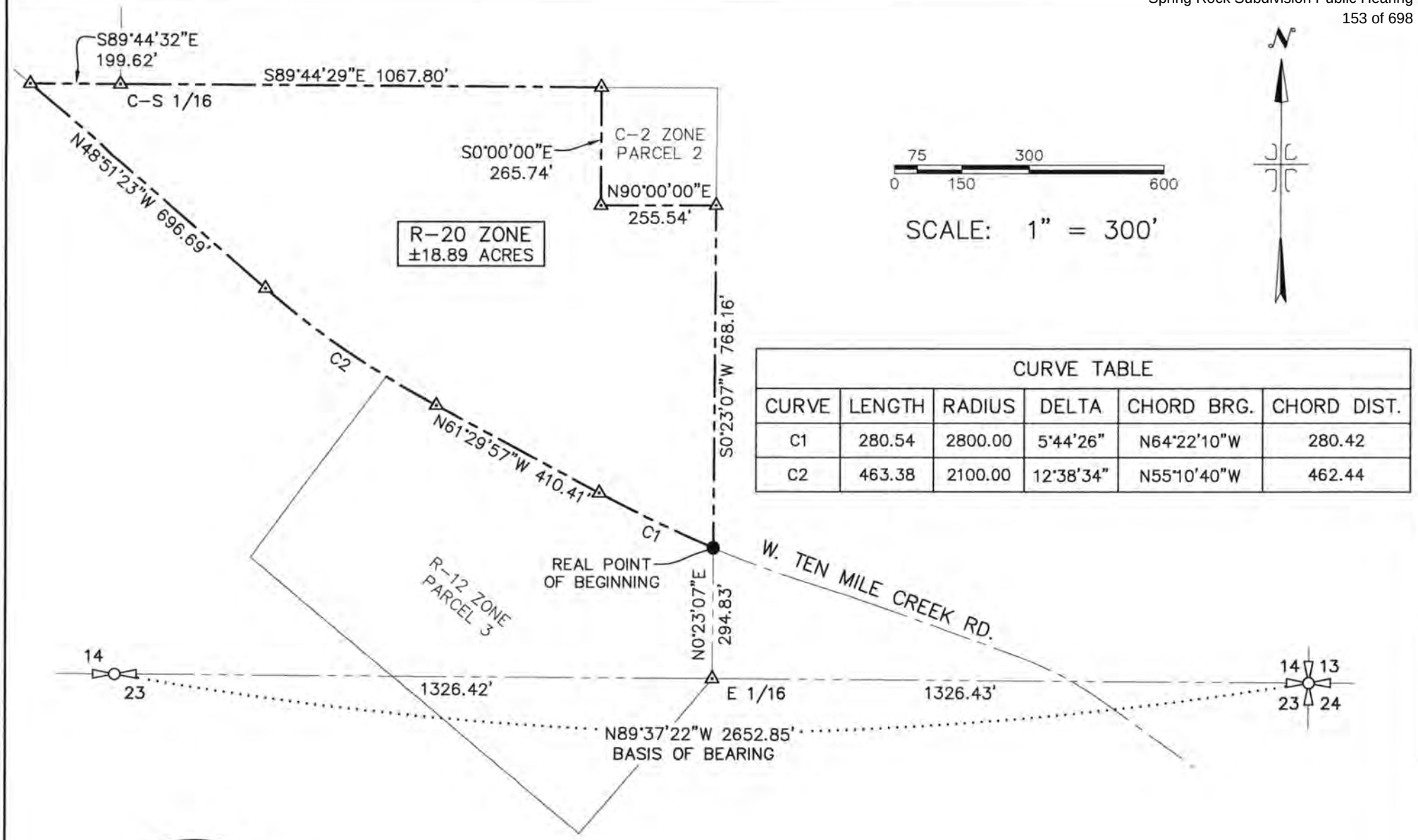
thence North 90°00'00" East, 255.54 feet to the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14;

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

PROFESSIONAL LAND SURVEYOR
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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;

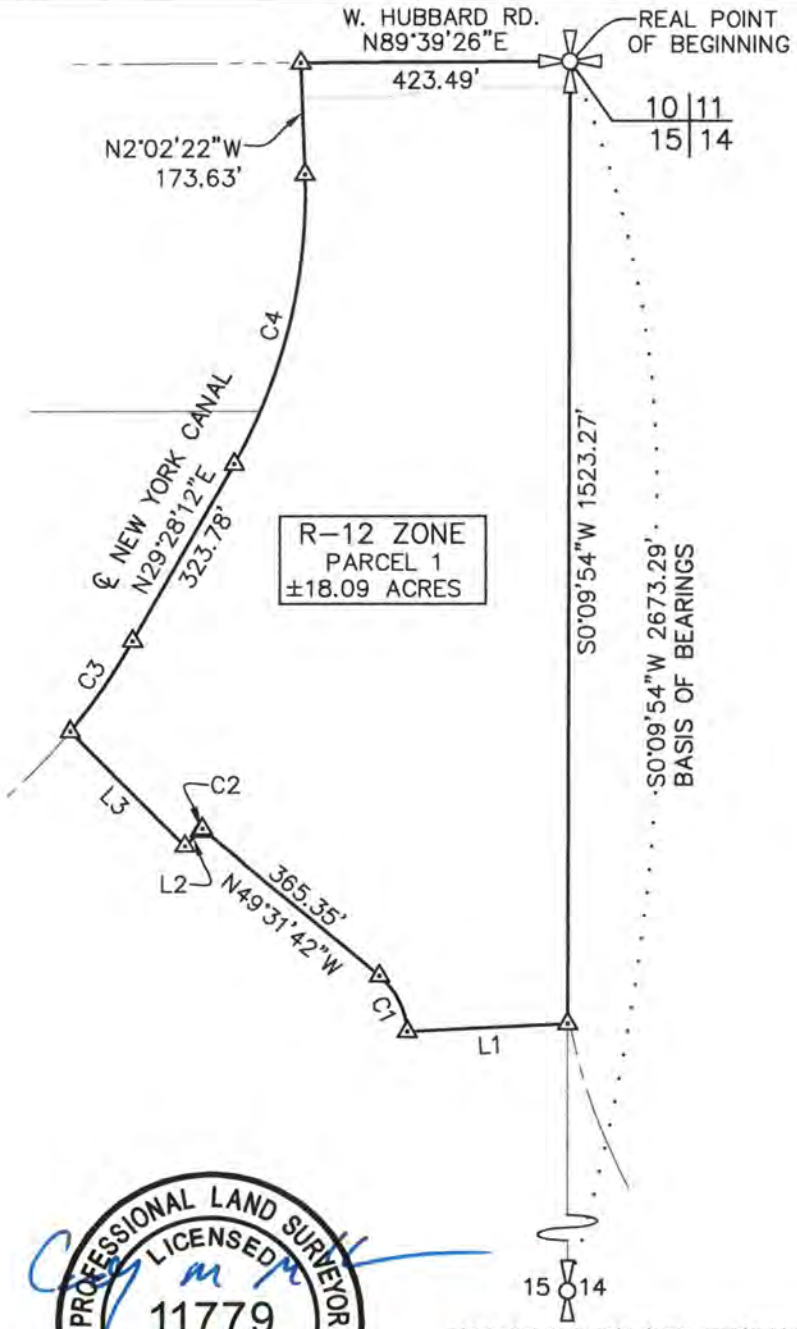
280.56 feet along the arc of a curve to the left, having a radius of 2,800.00 feet, a central angle of 05°44'28" and a long chord which bears South 64°22'24" East, 280.44 feet to the East boundary line of the Southwest 1/4 of the Southeast 1/4 of said Section 14;

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

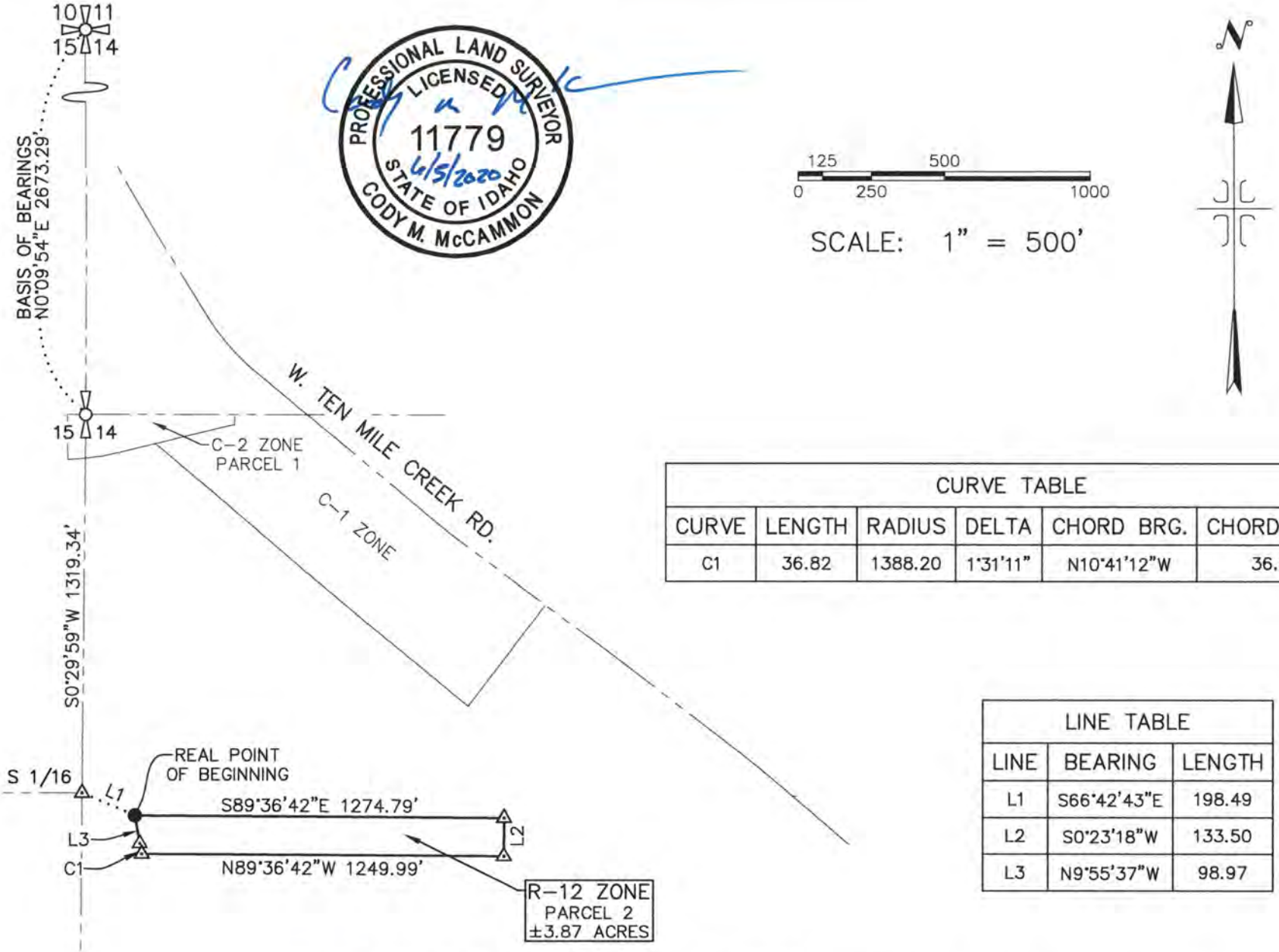


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IDAHO SURVEY GROUP, LLC
9955 W. EMERALD ST.
BOISE, IDAHO 83704
(208) 846-8570

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



PROFESSIONAL LAND SURVEYOR
LICENSED
11779
6/5/2020
STATE OF IDAHO
CODY M. McCAMMON

125 0 250 500 1000

SCALE: 1" = 500'

N

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

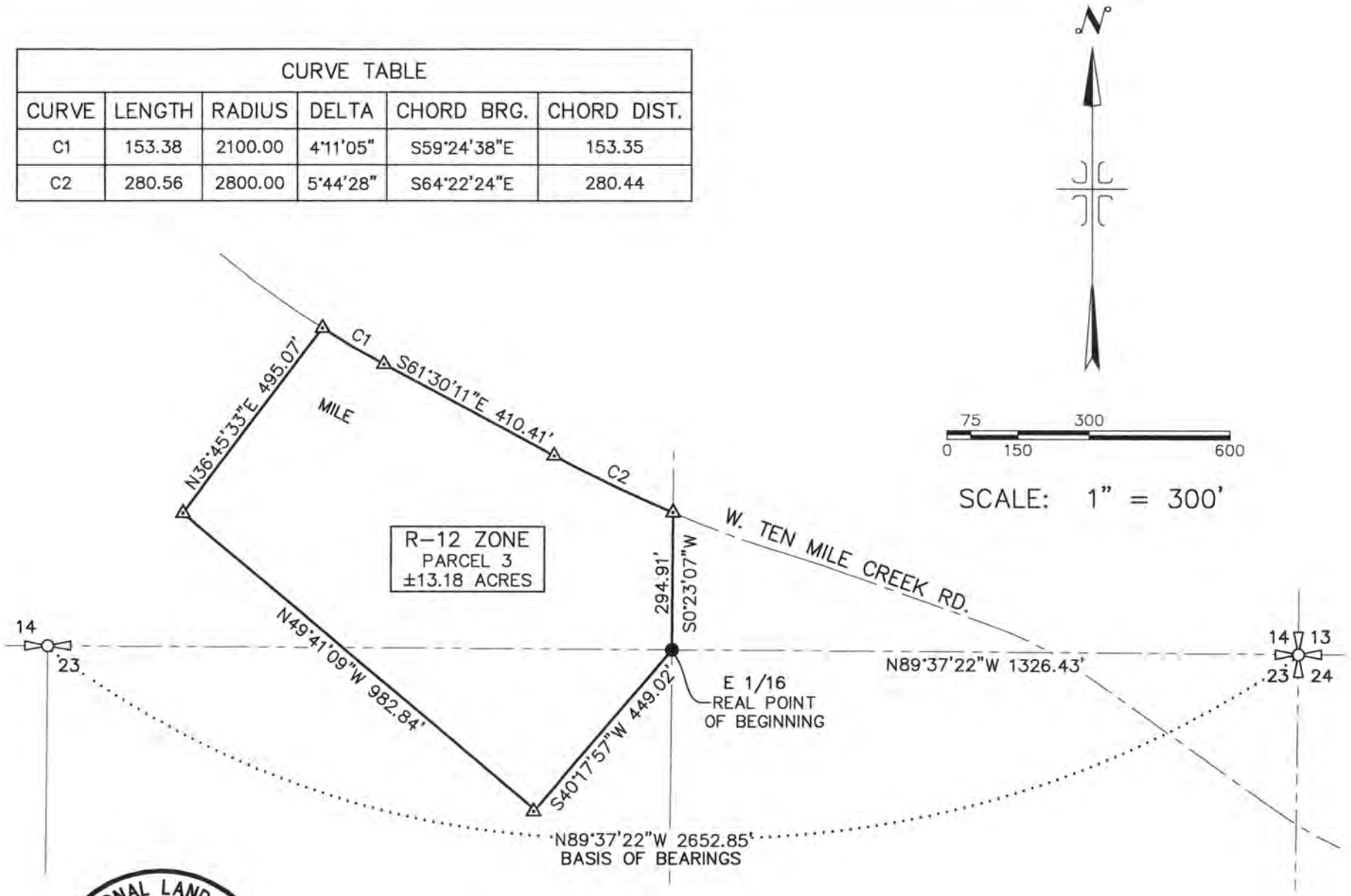
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BOISE, IDAHO 83704
(208) 846-8570

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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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-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

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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.

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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.

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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.

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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

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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.* *--Frozen soils noted to 0.3 foot bgs.* *--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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AN ATLAS COMPANY

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

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.* *--Frozen soils noted to 0.2 foot bgs.* *--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.* *--Frozen soils noted to 0.2 foot bgs.* *--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.* *--Varying clay content noted throughout.* *--Lens of clayey gravel with sand sediments noted from 6.1 to 6.6 feet bgs.* *--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.* *--Frozen soils noted to 0.1 foot bgs.* *--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.* *--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.* *--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.* *--Intermittent weak calcium carbonate cementation noted from 4.2 to 4.5 feet bgs.* *--Intermittent 10 to 16 inch thick lenses of loose to medium dense poorly graded sand with silt sediments noted throughout.* *--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.* *--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.* *--Intermittent weak calcium carbonate cementation noted from 4.5 to 6.7 feet bgs.* *--Some clay content noted from 4.5 to 9.0 feet bgs.* *--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

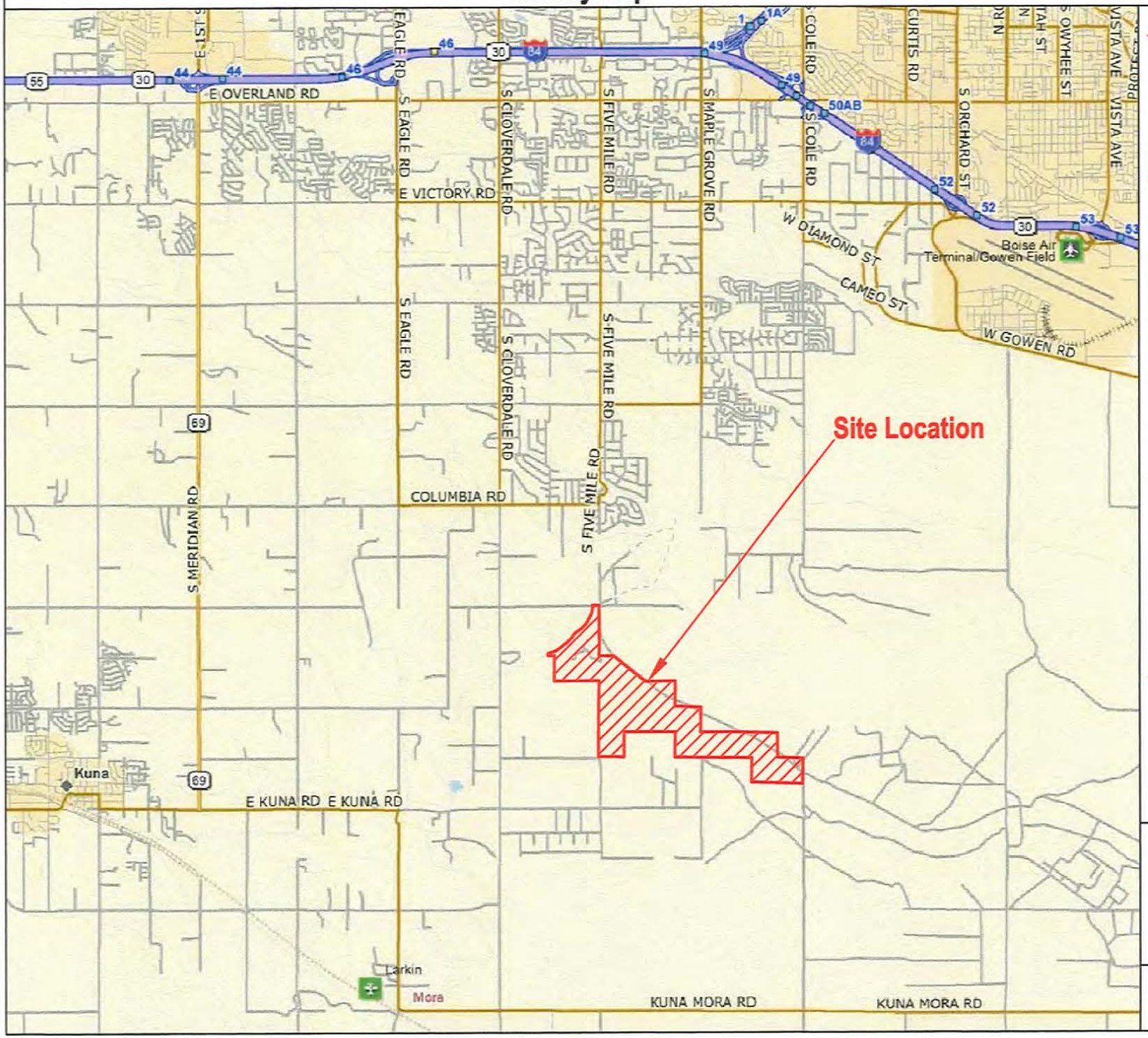
Test Pit Log #: TP-13 **Date Advanced:** 19 Feb 2019 **Logged by:** Nick Stevens, G.I.T.
Excavated by: Struckman's Backhoe Service **Location:** See Site Map Plates
Latitude: 43.49924 **Longitude:** -116.30942
Depth to Water Table: Not Encountered **Total Depth:** 13.2 Feet bgs

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

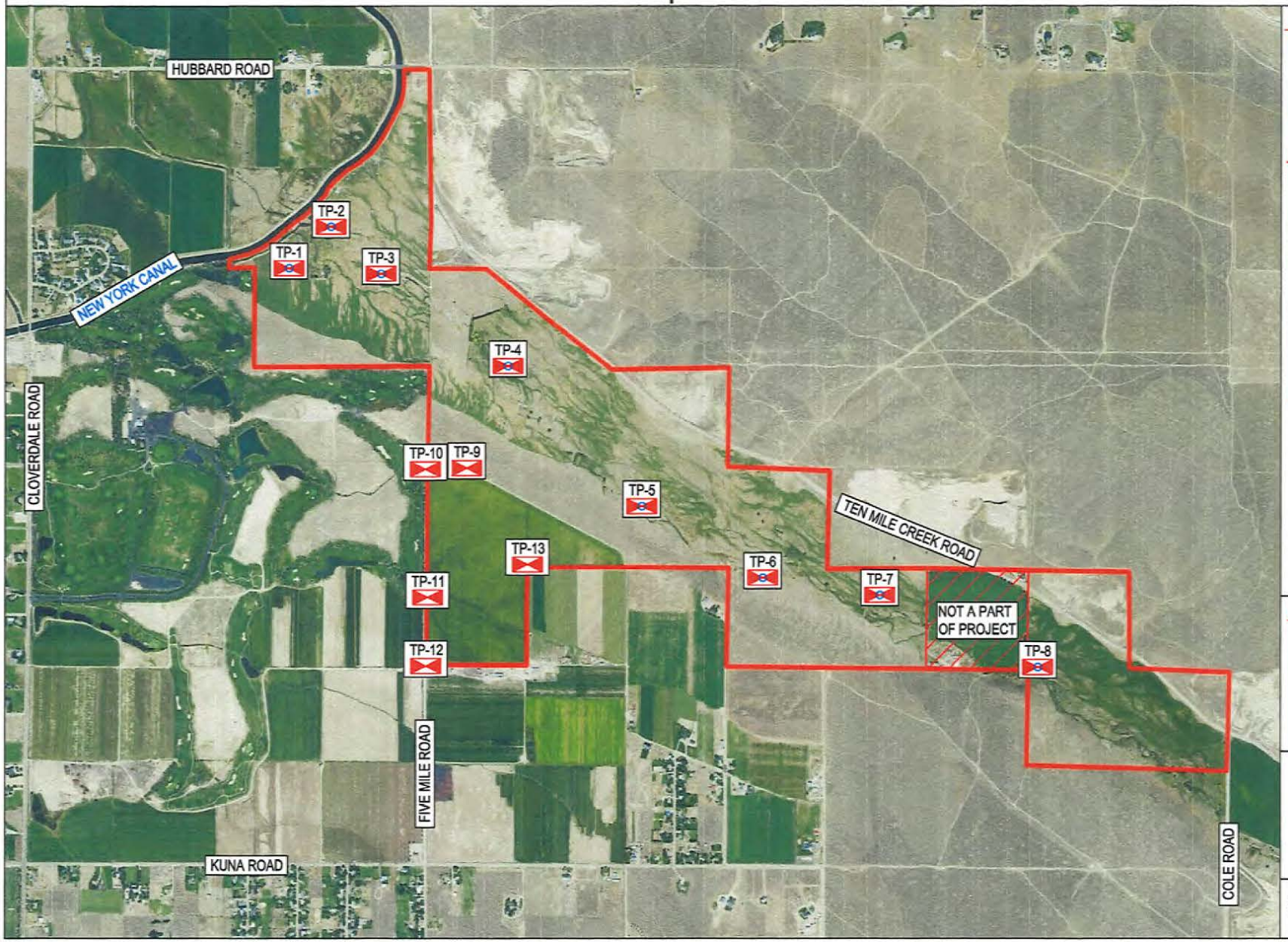
Modified from DeLorme by: NGS
25 February 2019
Drawing: B181928g

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

MATERIALS TESTING & INSPECTION
AN ATLAS COMPANY

2791 S Victory View Way
Boise, ID 83709

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

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 Name Reservation

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,



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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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)

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

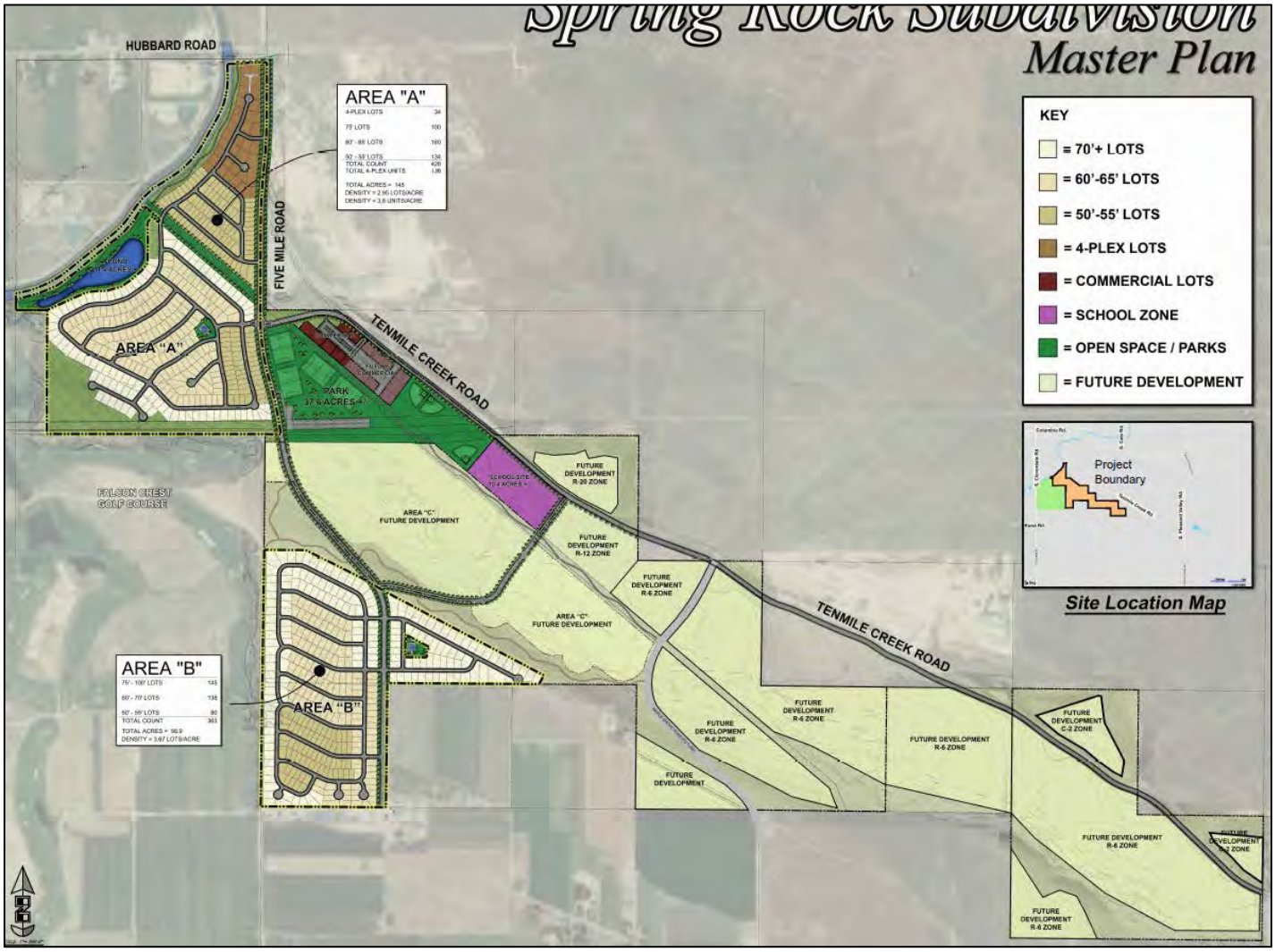
Application Information & Introduction

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



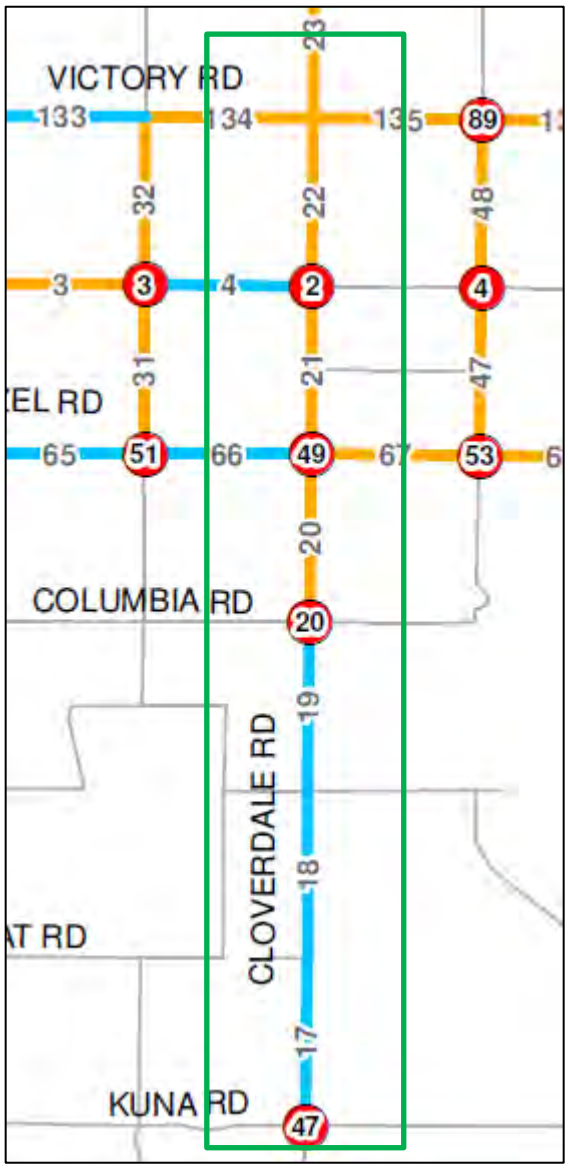
ACHD Comments to the City of Kuna

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

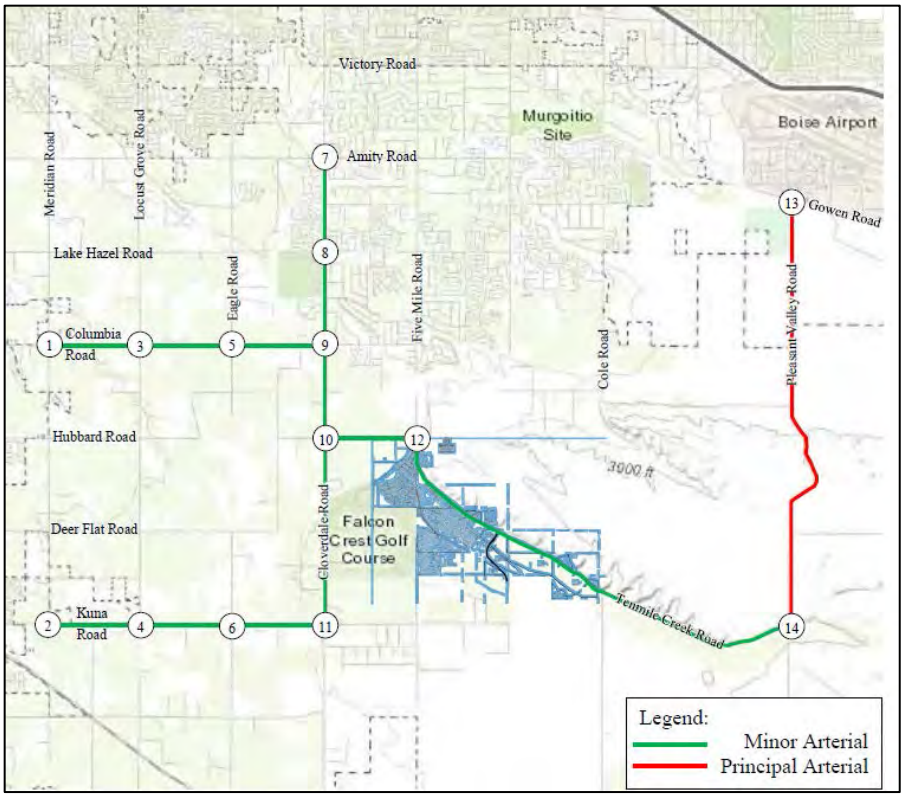
The purpose of the study was to provide a planning level roadway analysis for the full build out of the Spring Rock Master Plan and to highlight roadway improvements due to site generated traffic at full build out of the site.

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.

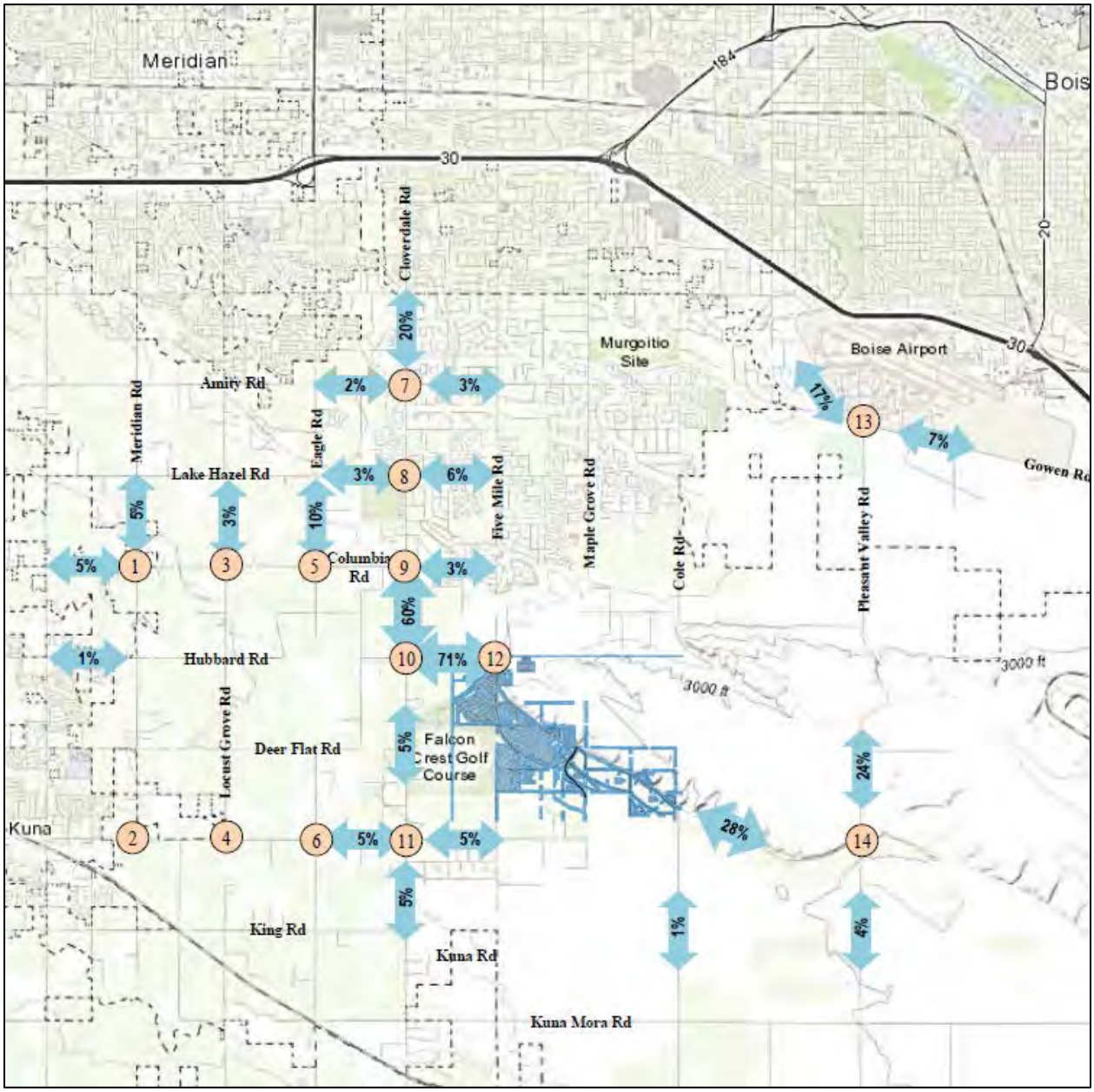
ii. No assumed trip capture or reductions will be allowed at this time, only actual verified trip capture may be utilized for the existing phases at the time of the future studies. Estimated trip capture will only be allowed for the proposed future phase based on ITE standards. The future evaluation 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.

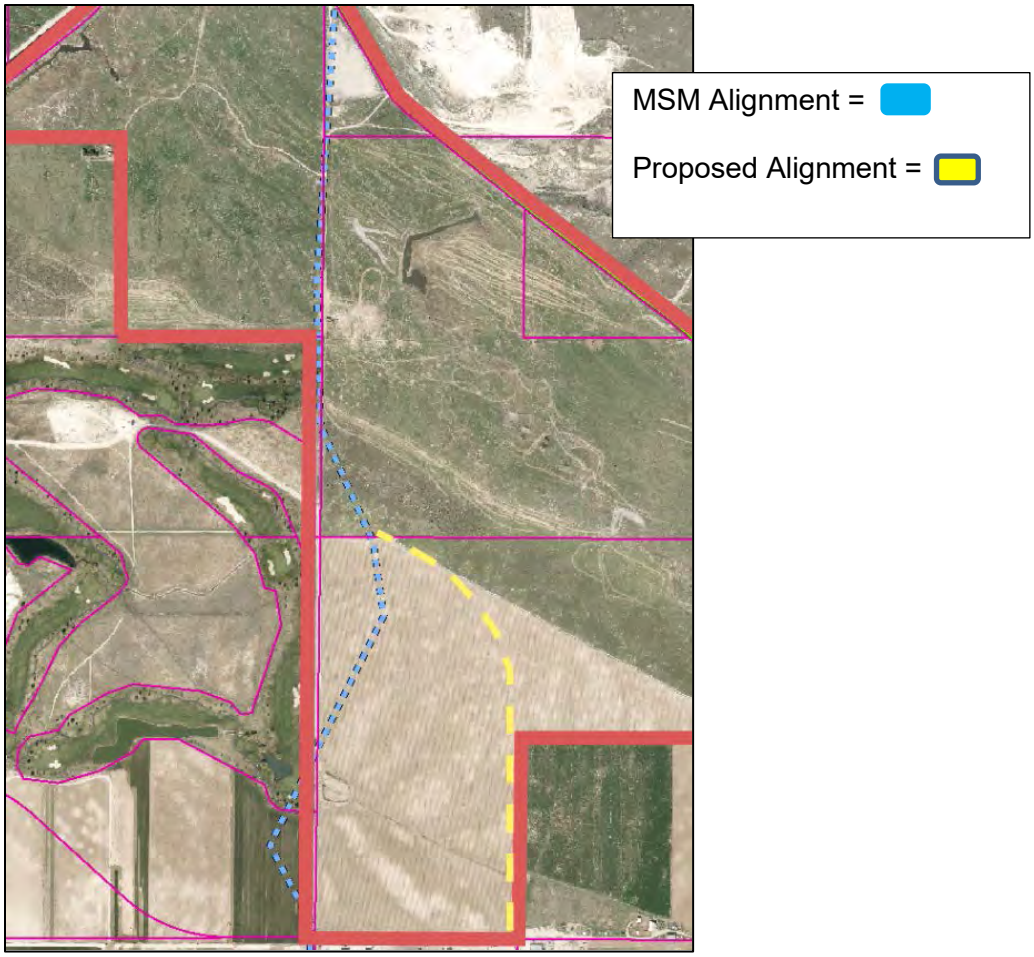
To accommodate the construction of future 5 lane roadway, the applicant will be required to dedicate 48-feet of right-of-way from centerline of Hubbard Road abutting the site with the first preliminary plat. Preserving right-of-way for future roadways will ensure the roadways will accommodate future 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.

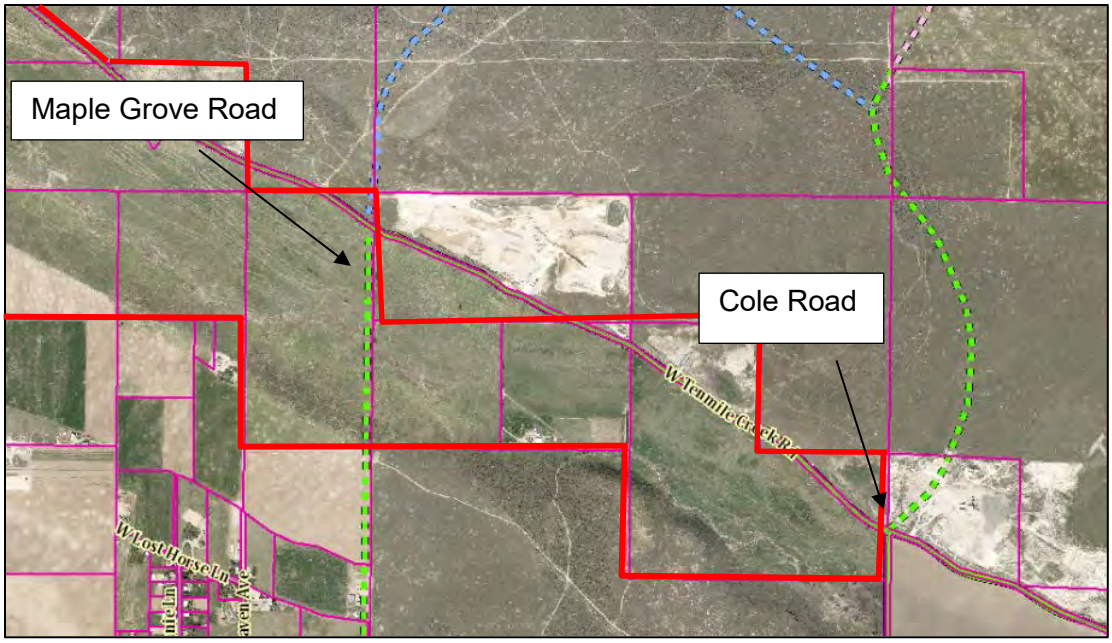
To accommodate the construction of future 5 lane roadway, the applicant will be required to dedicate 48-feet of right-of-way from centerline of Five Mile Road abutting the site between Ten Mile Creek Road and Hubbard Road and to accommodate the construction of a 3 lane roadway, dedicate 37-feet from 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.

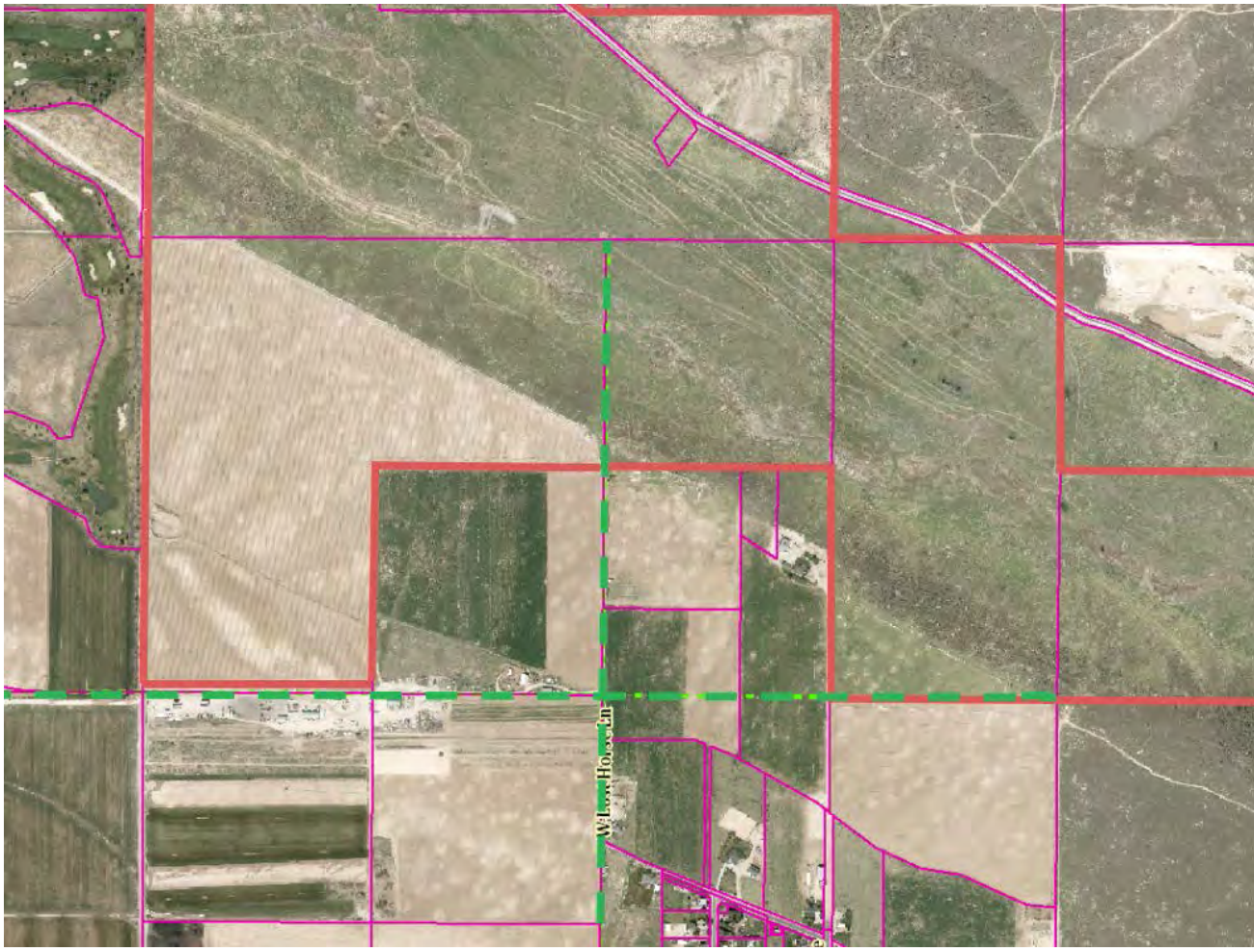
   To accommodate the future extension of Maple Grove Road, the applicant should be required to dedicate 74-feet of right-of-way and to construct roadway improvements necessary to serve the site; including, but not limited to 2-travel lanes, gravel shoulder, barrow ditch, and detached concrete sidewalks 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.

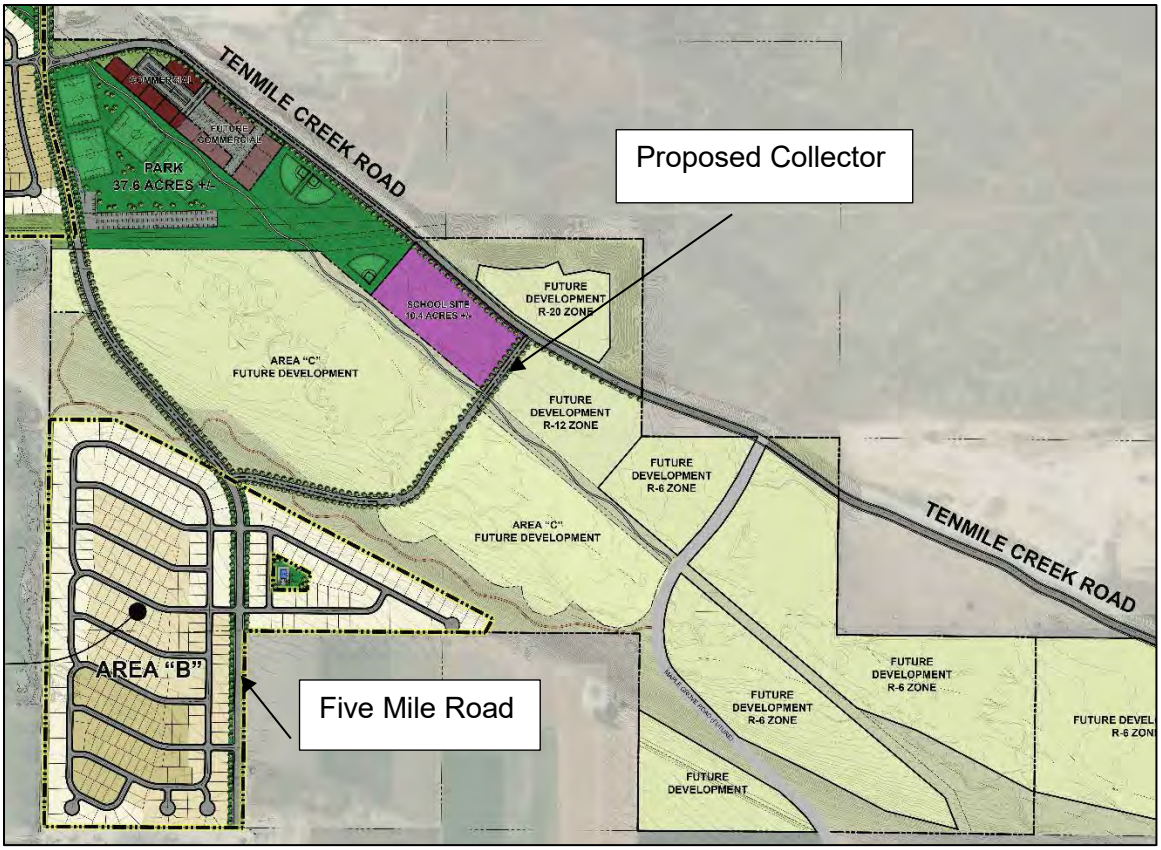
   To accommodate the future extension of Cole Road, the applicant should be required to dedicate 74-feet of right-of-way and to construct roadway improvements necessary to serve the site; including, but not limited to 2-travel lanes, gravel shoulder, barrow ditch, and detached concrete sidewalks as part 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.



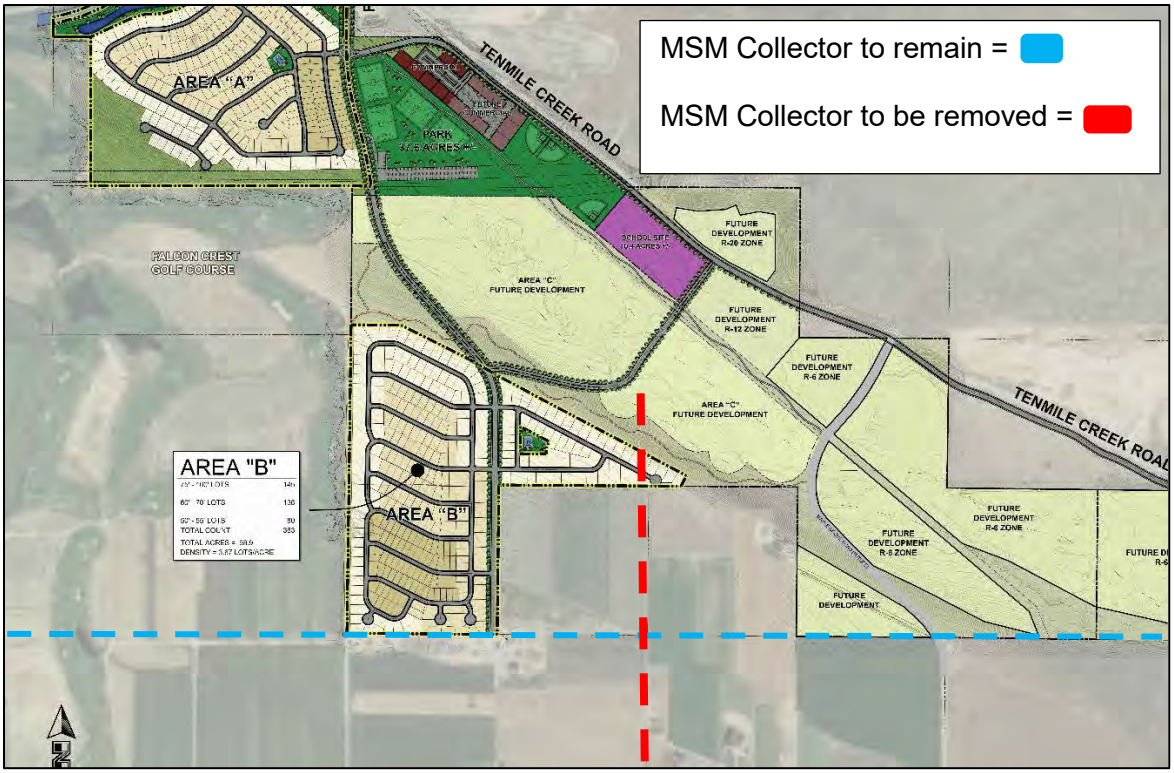
b. Applicant's Proposal: The applicant is proposing to construct one collector roadway, Gem Valley Road, with the first phase of the development. The collector is proposed to run north/south between Ten Mile Creek Road and Five Mile Road and be constructed as 3-lane collector roadway a 46-foot wide street 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

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 350th 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.

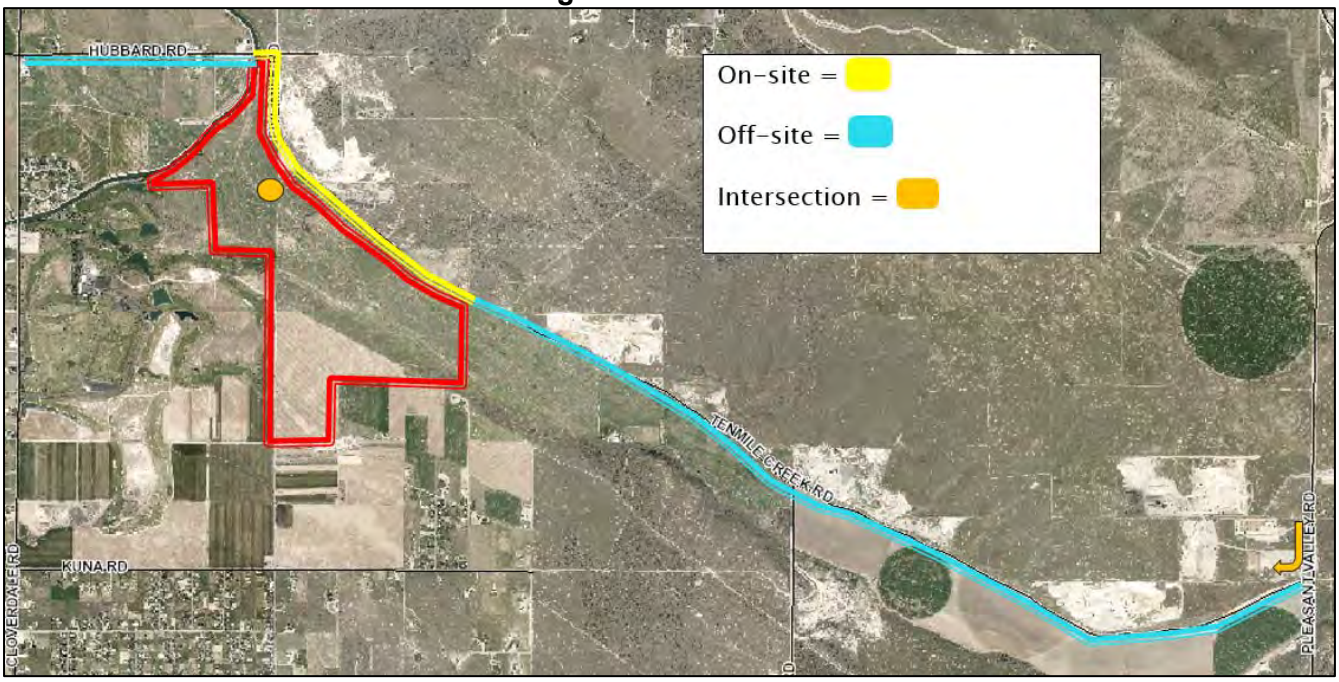
C. Findings for Consideration

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 350th 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 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/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.

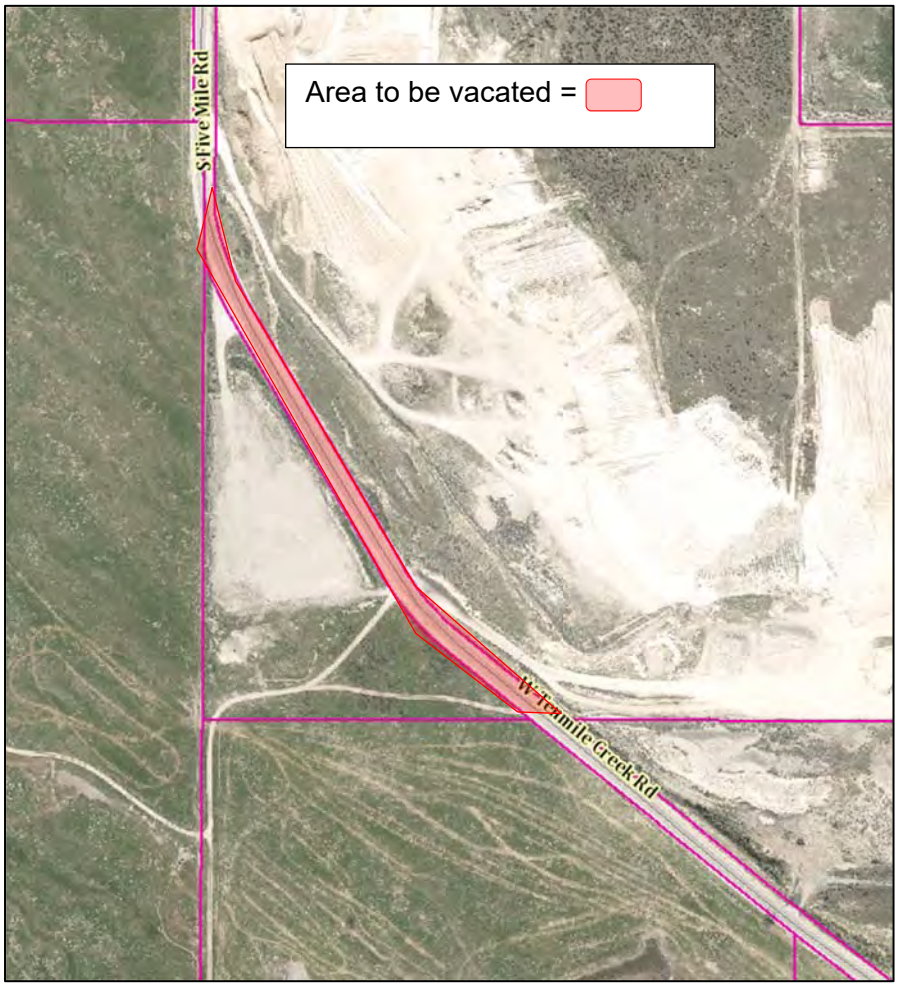
At a minimum the applicant should be required to dedicate an additional 24-feet of right-of-way to total 49-feet from the centerline of Ten Mile Creek Road, consistent with ACHD's action on the Spring Rock Master Plan, widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel 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.

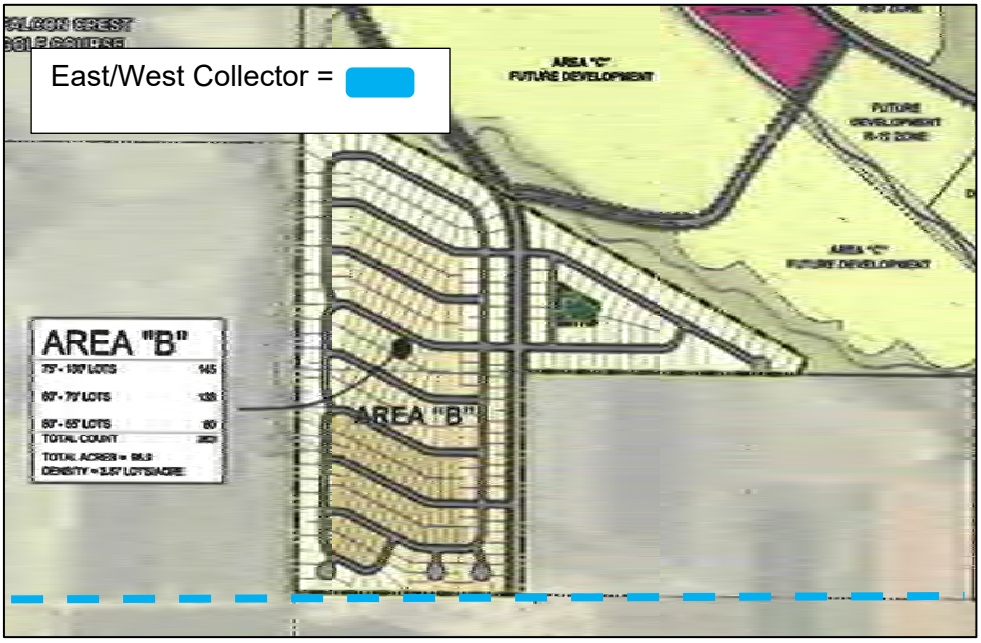
Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

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.

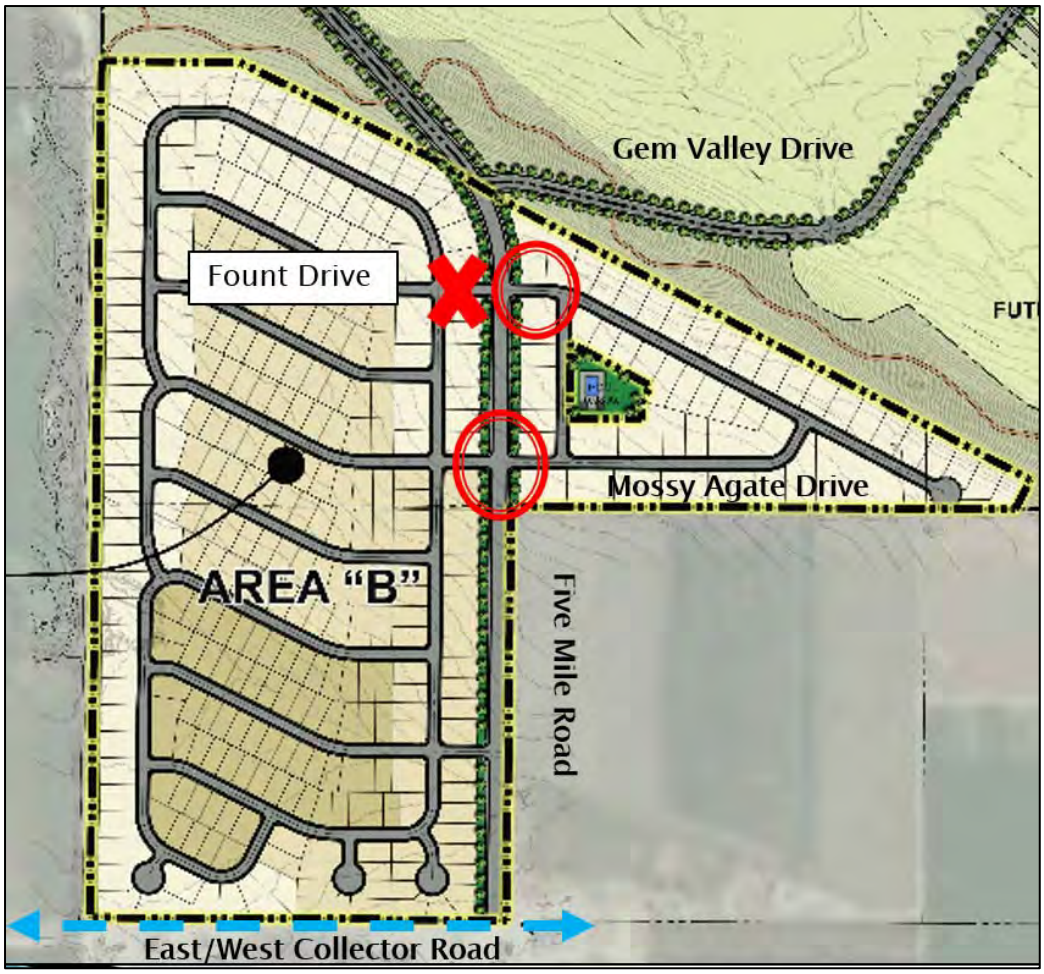
The applicant has proposed to construct several 33-foot foot wide curb-return approaches for future local streets onto Gem Valley Drive. The approaches are proposed to be located as follows:

- 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.

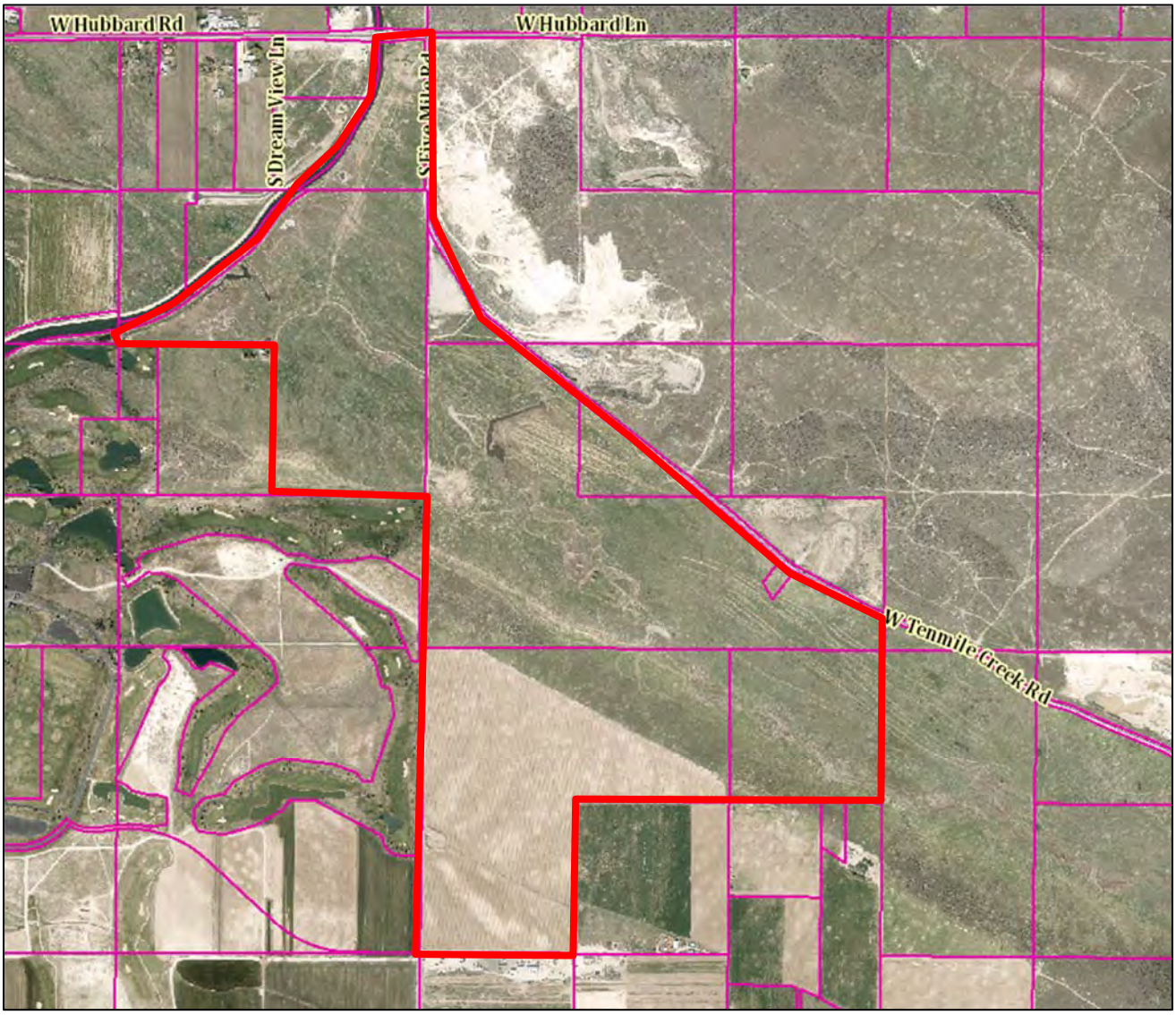
2. ACHD requirements are intended to assure that the proposed use/development will not place an undue burden on the existing vehicular transportation system within the vicinity impacted by the proposed development.

G. Attachments

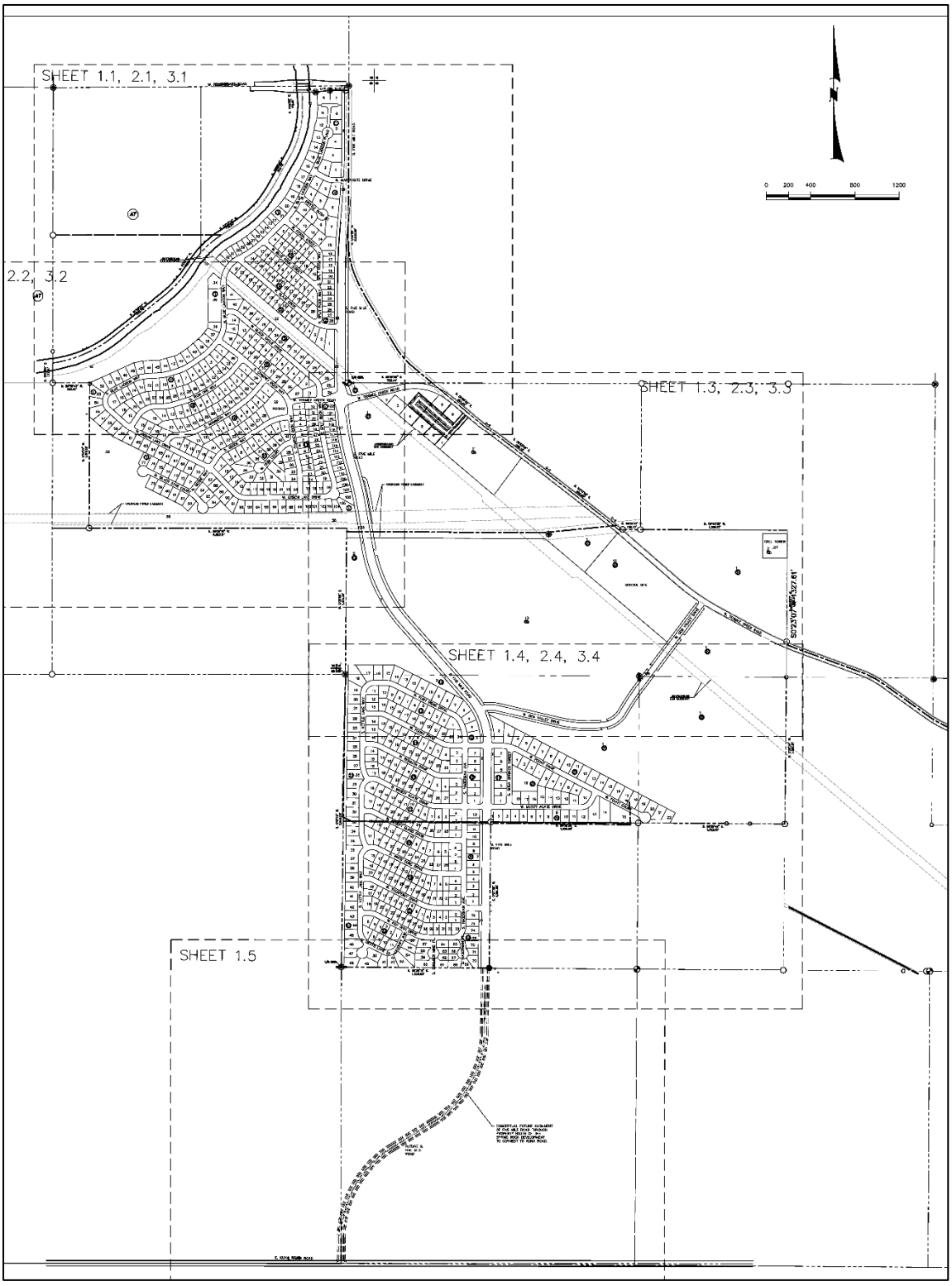
1. Vicinity Map
2. Site Plan
3. Traffic Impact Study Summary
4. Utility Coordinating Council
5. Development Process Checklist
6. Request for Reconsideration Guidelines

Exhibit B 3

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** Pedestrian level of stress: **R: Kuna Rd** 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** Jobs within 1 mile: **140** 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** 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** 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** Nearest public school: **>4 miles** Nearest public park: **>4 miles** 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.

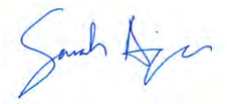
Your Safety • Your Mobility
Your Economic Opportunity

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

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 B 12

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

Exhibit B 16

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

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

EXHIBIT B 18

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

H & B CRUSHING

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

Neighborhood Meeting Cert. & Minutes

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
3 LYNDA	BOB LEARSCH	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	836 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 Calsow	11257 Silver Hawk	83634	208-941-2078
10	Bob Hall	10801 Hubbard	83634	208-866-3461
11				
12	Gregg Parker	11263 Hubbard		
13	Darren Cranney	3606 E Columbia M Meridian	83642	208-861-9814
14	Kelly Lee	11710 Hubbard	83634	208 870 8853
15	PAT/DWYNA LEEK	2896 North Mountain RD	BOISE 83702	208-890-2185
16				
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Neighborhood Meeting Cert. & Minutes

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.

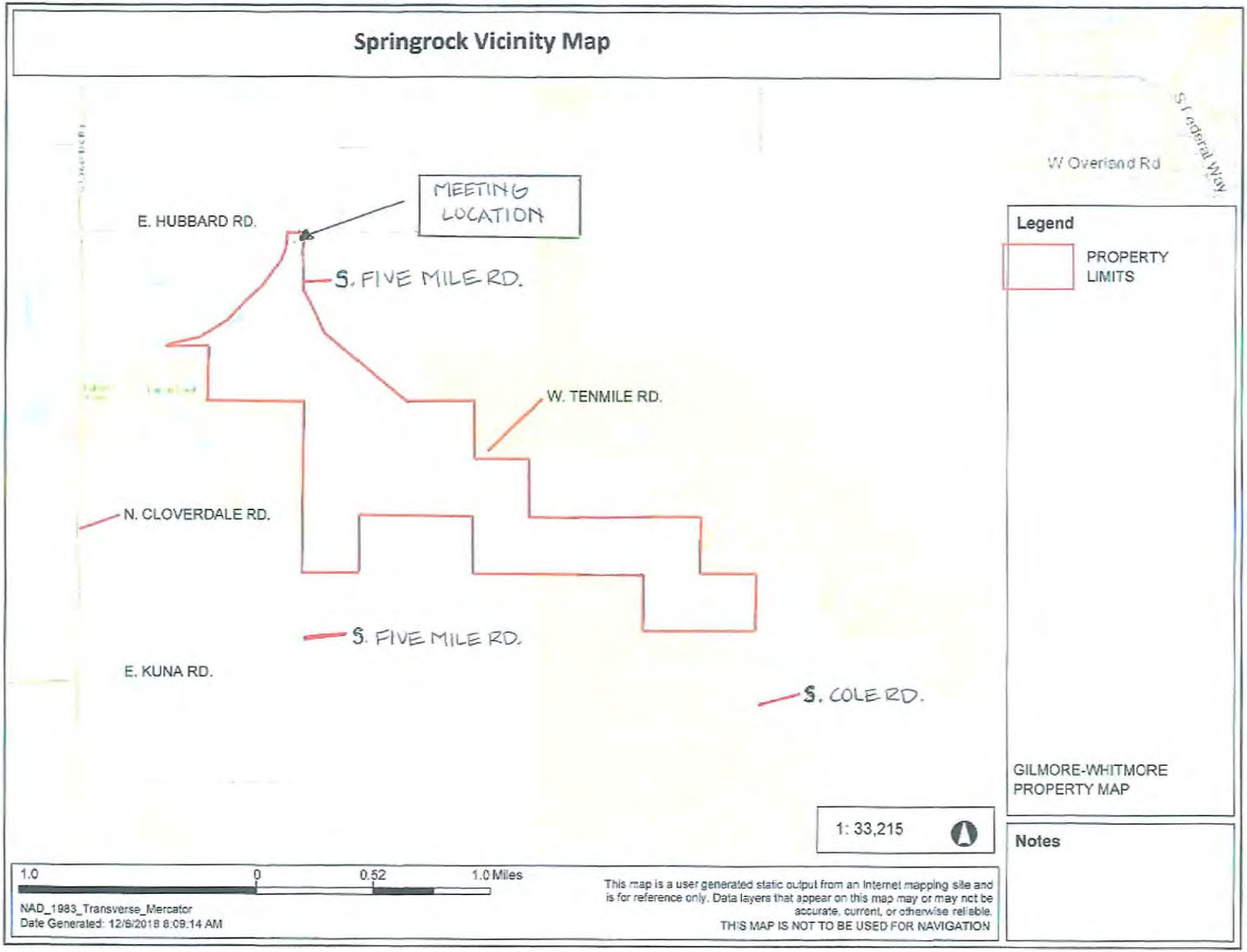
We hope you are able to attend.

Sincerely,

Dave Yorgason
Springrock, LLC

Neighborhood Meeting Cert. & Minutes

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

Neighborhood Meeting Cert. & Minutes

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

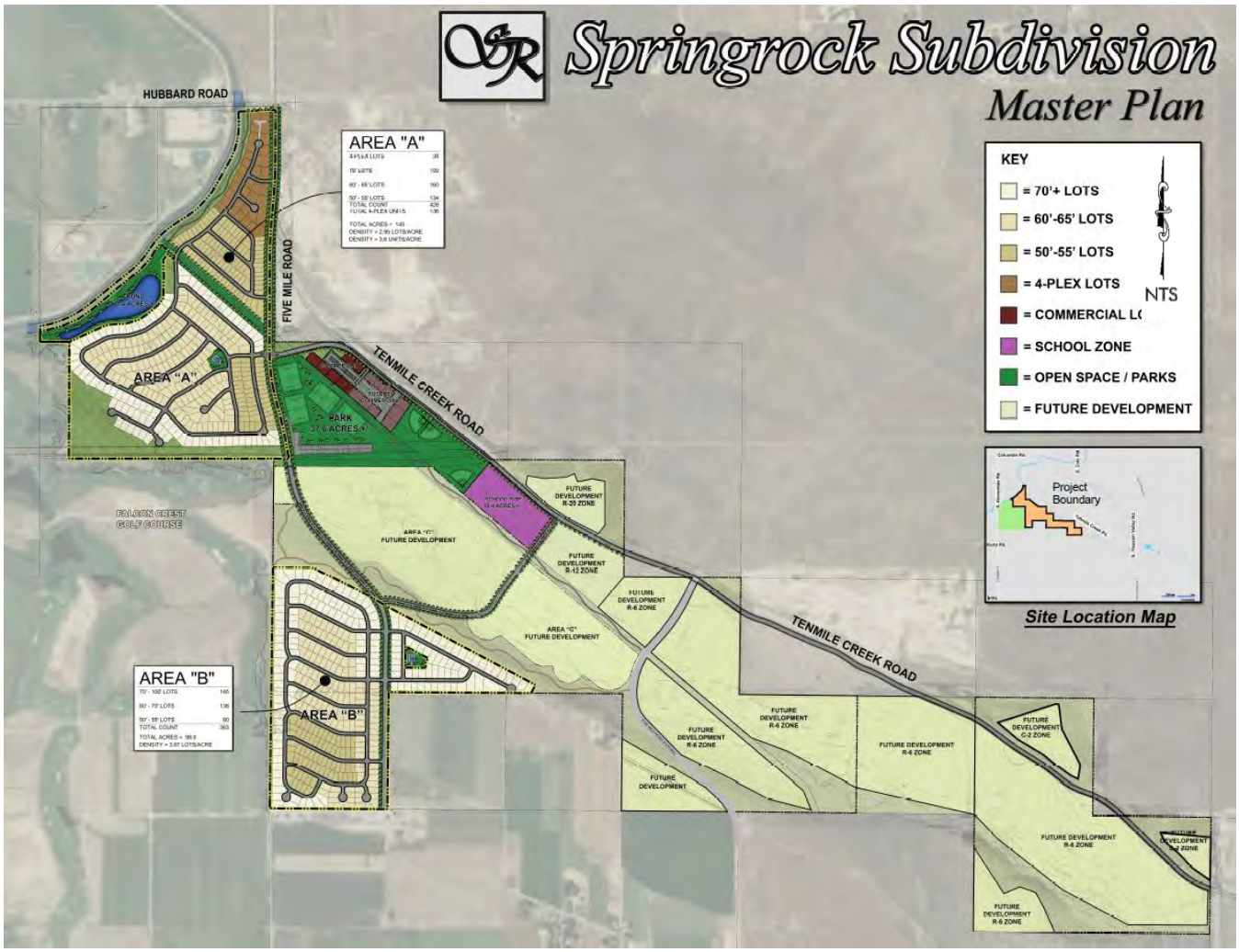
EXHIBIT A

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 Amity Rd to Lake Hazel Rd	2	**Widen to 5 lanes**	5
Cloverdale Rd Lake Hazel Rd to Columbia Rd	2/3	2/3	**Widen to 5 lanes**
Cloverdale Rd Columbia Rd to Hubbard Rd	2	2	2
Pleasant Valley Rd Gowen Rd to Hollilynn Dr	2	2	2
Pleasant Valley Rd Hollilynn Dr to Tenmile Creek Rd	2	2	2
Columbia Rd Meridian Rd to Locust Grove Rd	2	2	2
Columbia Rd Locust Grove Rd to Eagle Rd	2	2	2
Columbia Rd Eagle Rd to Cloverdale Rd	2	2	2
Hubbard Rd Cloverdale Rd to Five Mile Rd	2	2	2
Five Mile Rd Tenmile Creek Rd to Hubbard Rd	2	2	2
Tenmile Creek Rd Five Mile Rd to Pleasant Valley Rd	2	2	2
Kuna Rd Meridian Rd to Locust Grove Rd	2	2	2
Kuna Rd Locust Grove Rd to Eagle Rd	2	2	2
Kuna Rd 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 Amity Rd to Lake Hazel Rd	2	5	Yes	**No**
Cloverdale Rd Lake Hazel Rd to Columbia Rd	2	5	**No**	**No**
Cloverdale Rd Columbia Rd to Hubbard Rd	2	3	**No**	**No**
Pleasant Valley Rd Gowen Rd to Hollilynn Dr	2	2	Yes	**No**
Pleasant Valley Rd Hollilynn Dr to Tenmile Creek Rd	2	2	Yes	**No**
Columbia Rd Meridian Rd to Locust Grove Rd	2	2	**No**	**No**
Columbia Rd Locust Grove Rd to Eagle Rd	2	2	**No**	**No**
Columbia Rd Eagle Rd to Cloverdale Rd	2	2	**No**	**No**
Hubbard Rd Cloverdale Rd to Five Mile Rd	2	3	Yes	**No**
Five Mile Rd Tenmile Creek Rd to Hubbard Rd	2	3	Yes	Yes
Tenmile Creek Rd Five Mile Rd to Pleasant Valley Rd	2	3/2	Yes	Yes
Kuna Rd Meridian Rd to Locust Grove Rd	2	2	Yes	**No**
Kuna Rd Locust Grove Rd to Eagle Rd	2	2	**No**	**No**
Kuna Rd 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

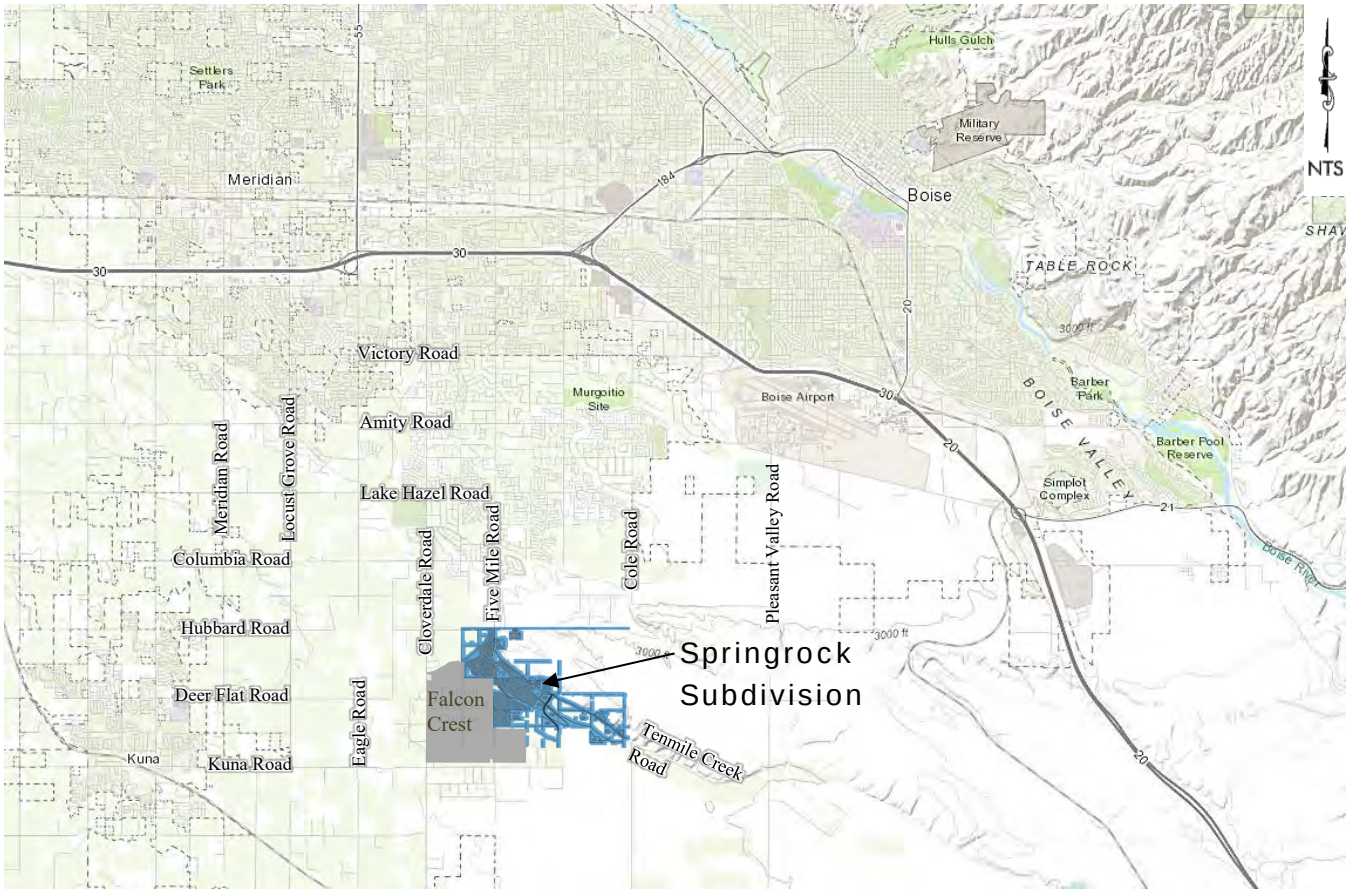
5.2 With 2040 total traffic, the following study area roadway segments are expected to exceed ACHD's LOS planning thresholds and need additional lanes beyond the number of lanes programmed in the 2016 CIP and lanes needed under 2040 background traffic:

- 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) 136 4-plex DU	394 single-family DU 136 4-plex DU
B	99	363 single-family DU	363 single-family DU
C	105	1 Elementary school (600 students) 10,000 square feet (sf) office 5,000 sf day care center 6,000 sf quality restaurant	347 single-family DU 1 Elementary school (600 students) 60,000 sf office 5,000 sf day care center 6,000 sf quality restaurant 116 single-family DU 120 multi-family DU 2,000 sf coffee shop 6,000 sf high-turnover restaurant
Remainder	221	None	821 single-family DU 4,000 sf convenience market 101,000 sf mini-storage

Figure 1.2 – Preliminary Master Site Plan

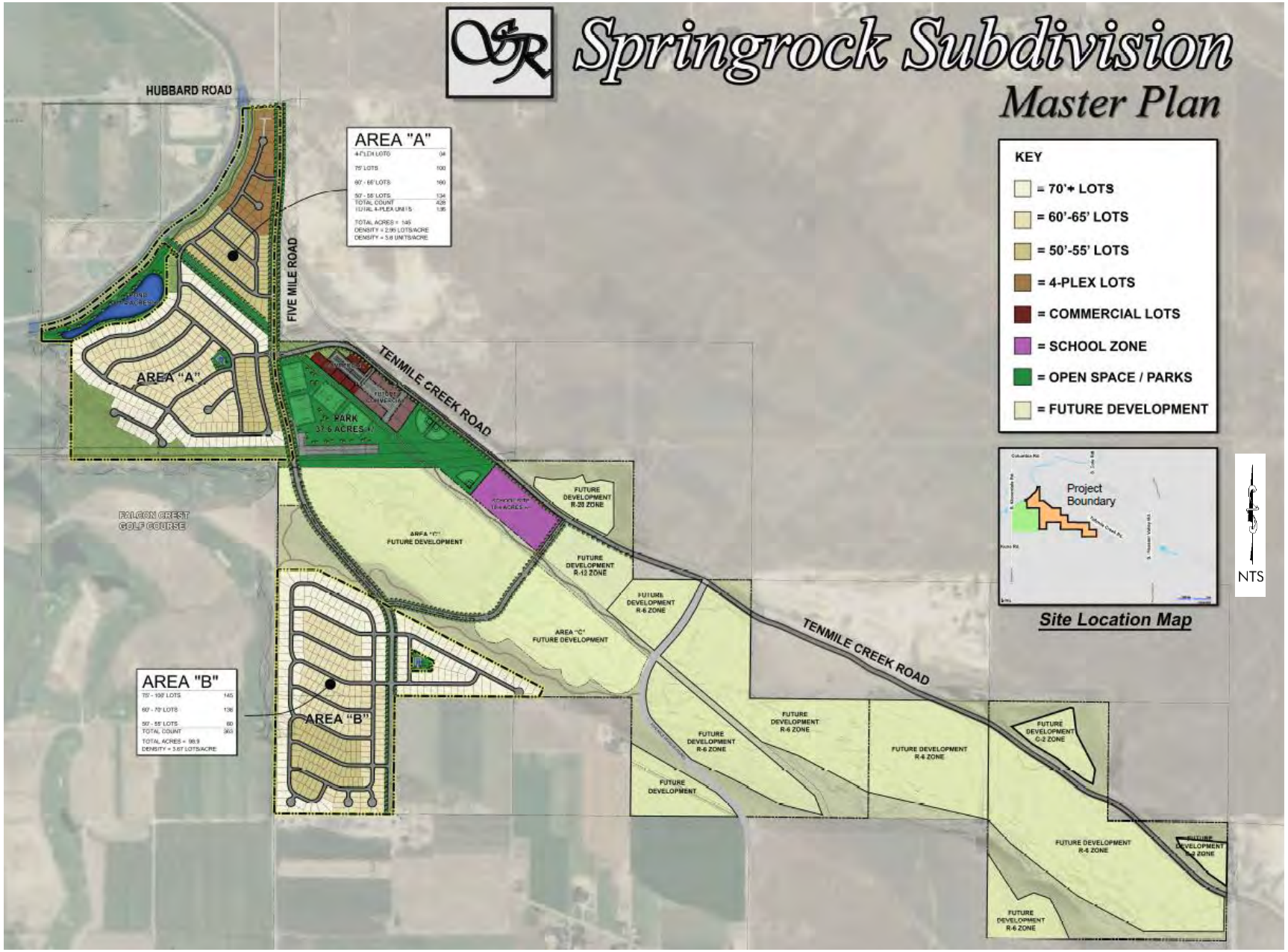
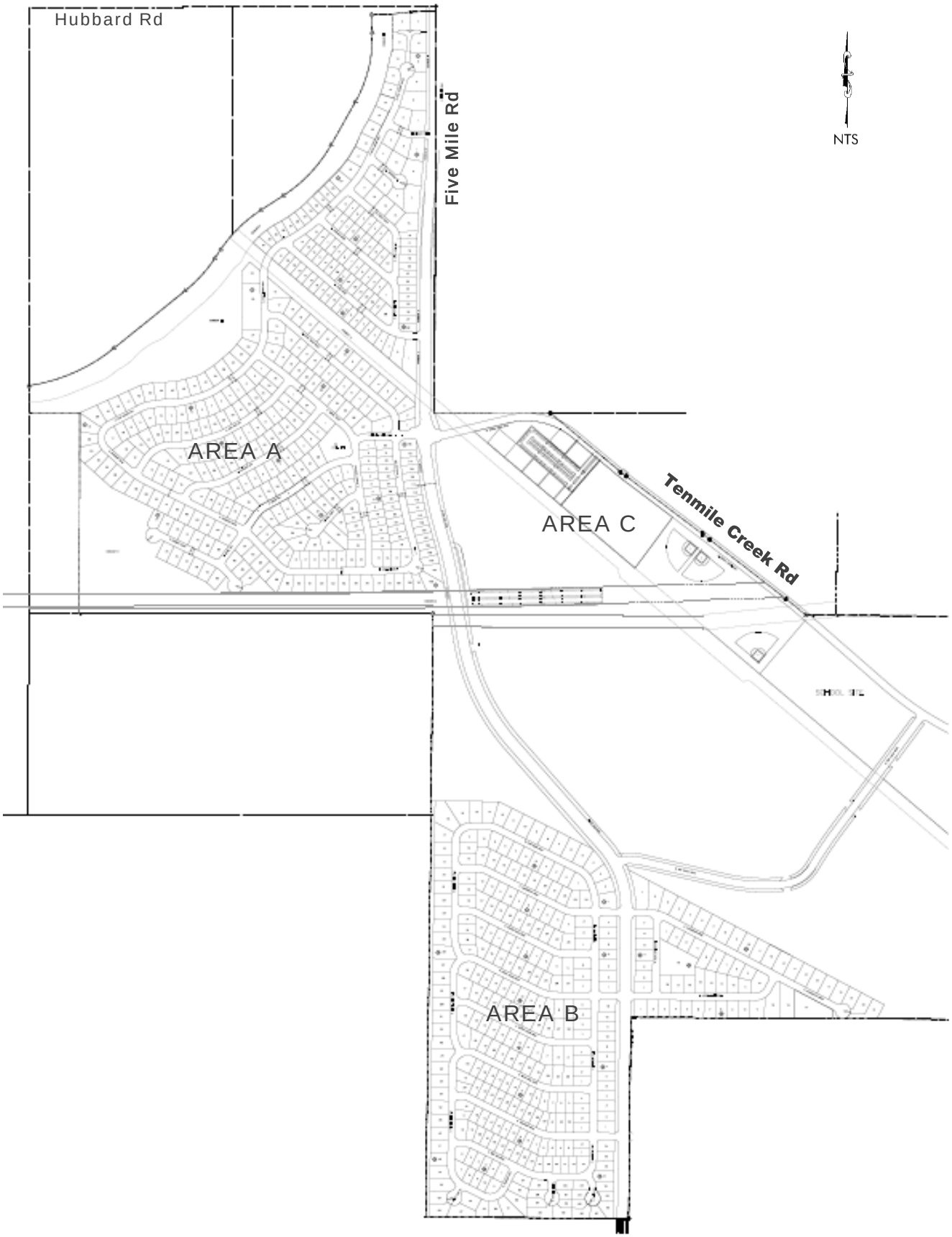


Figure 1.3 – Phase 1 Preliminary Site Plan



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:

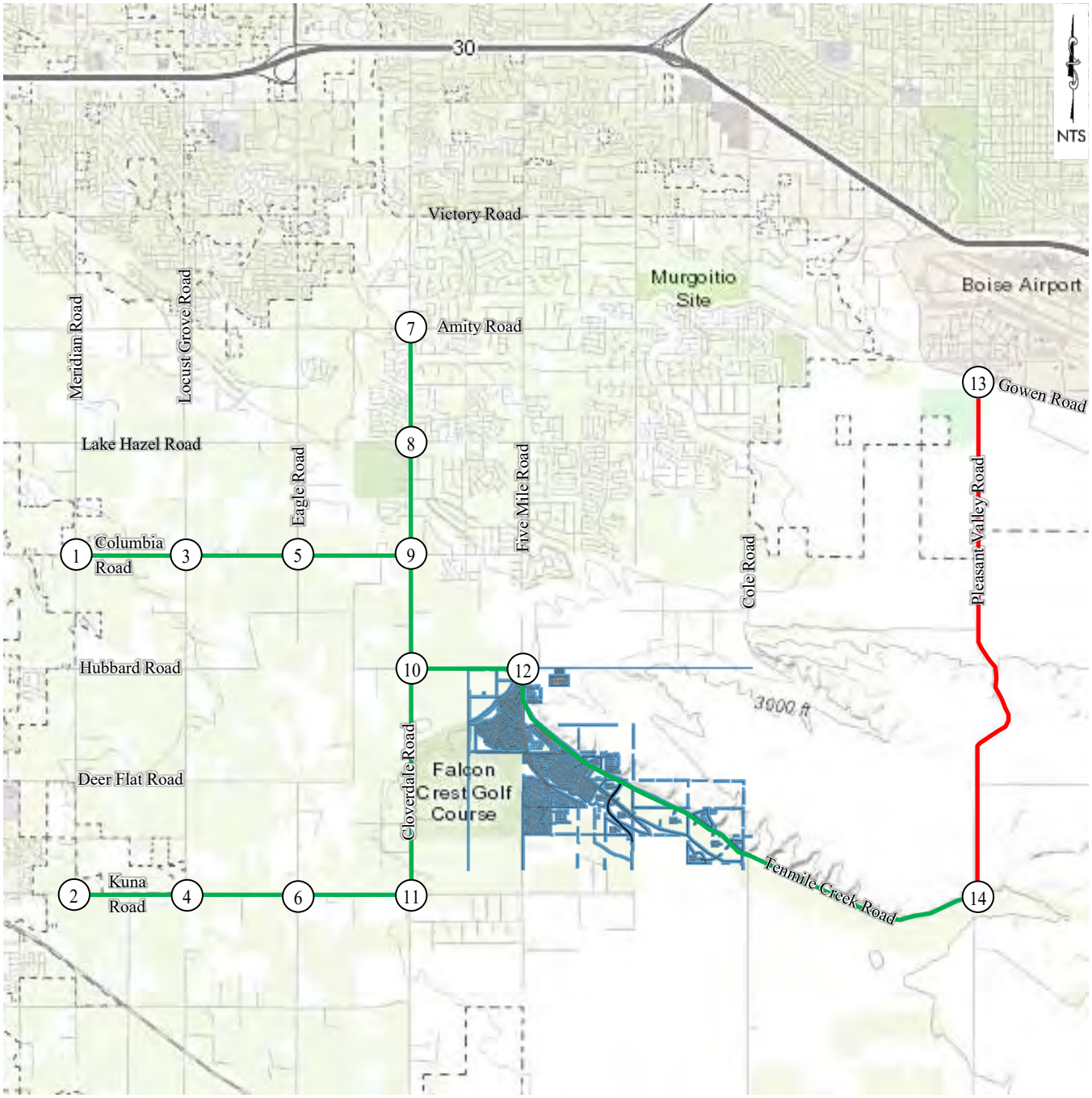
- Columbia Road and Meridian Road
- Kuna Road and Meridian Road
- Columbia Road and Locust Grove Road
- Kuna Road and Locust Grove Road
- Columbia Road and Eagle Road
- Kuna Road and Eagle Road
- Amity Road and Cloverdale Road
- Lake Hazel Road and Cloverdale Road
- Columbia Road and Cloverdale Road
- 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:

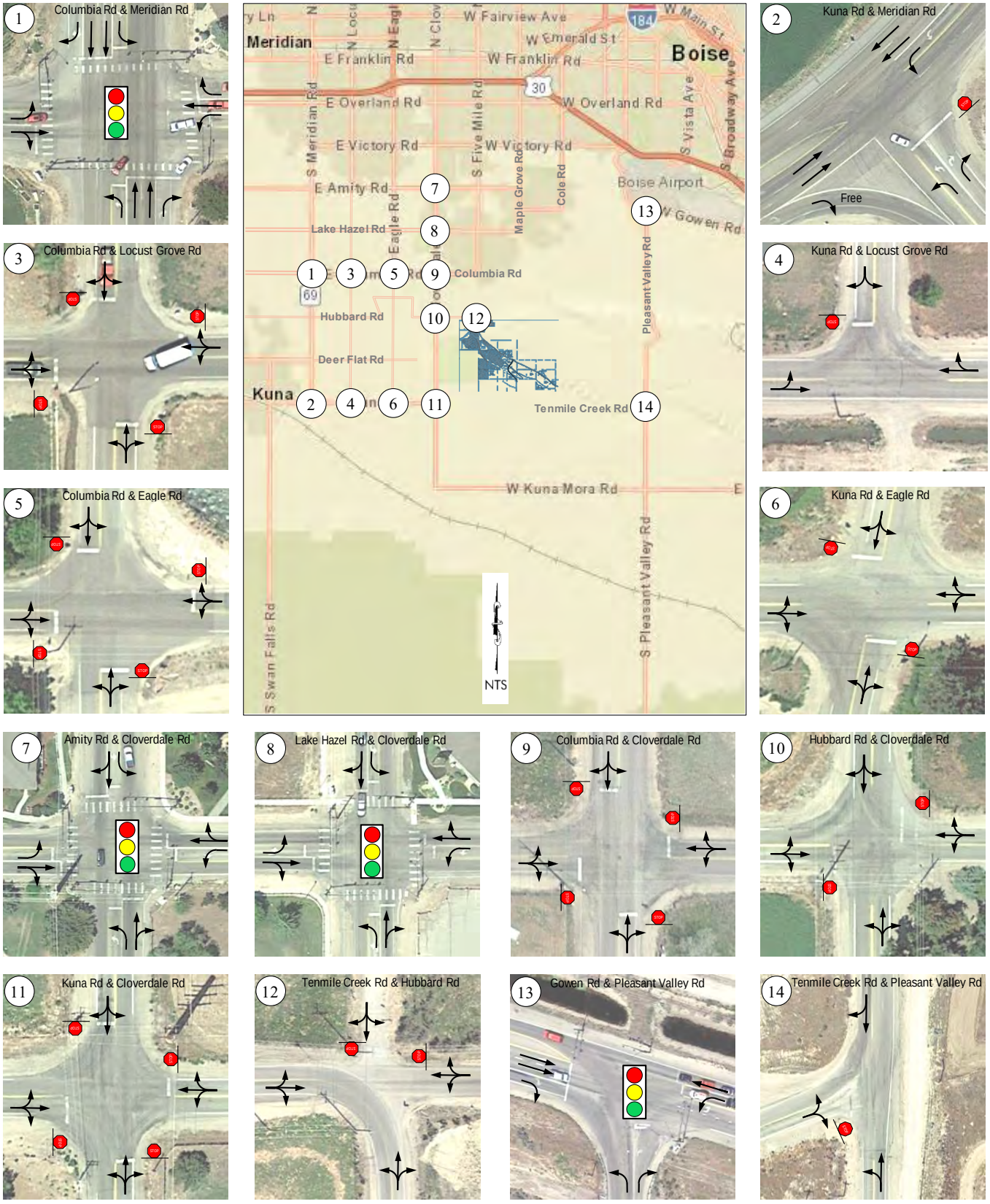
- Locust Grove Road and Kuna Road intersection – The south leg is a private approach providing access for one existing residential dwelling units and was excluded in the analysis.

- 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

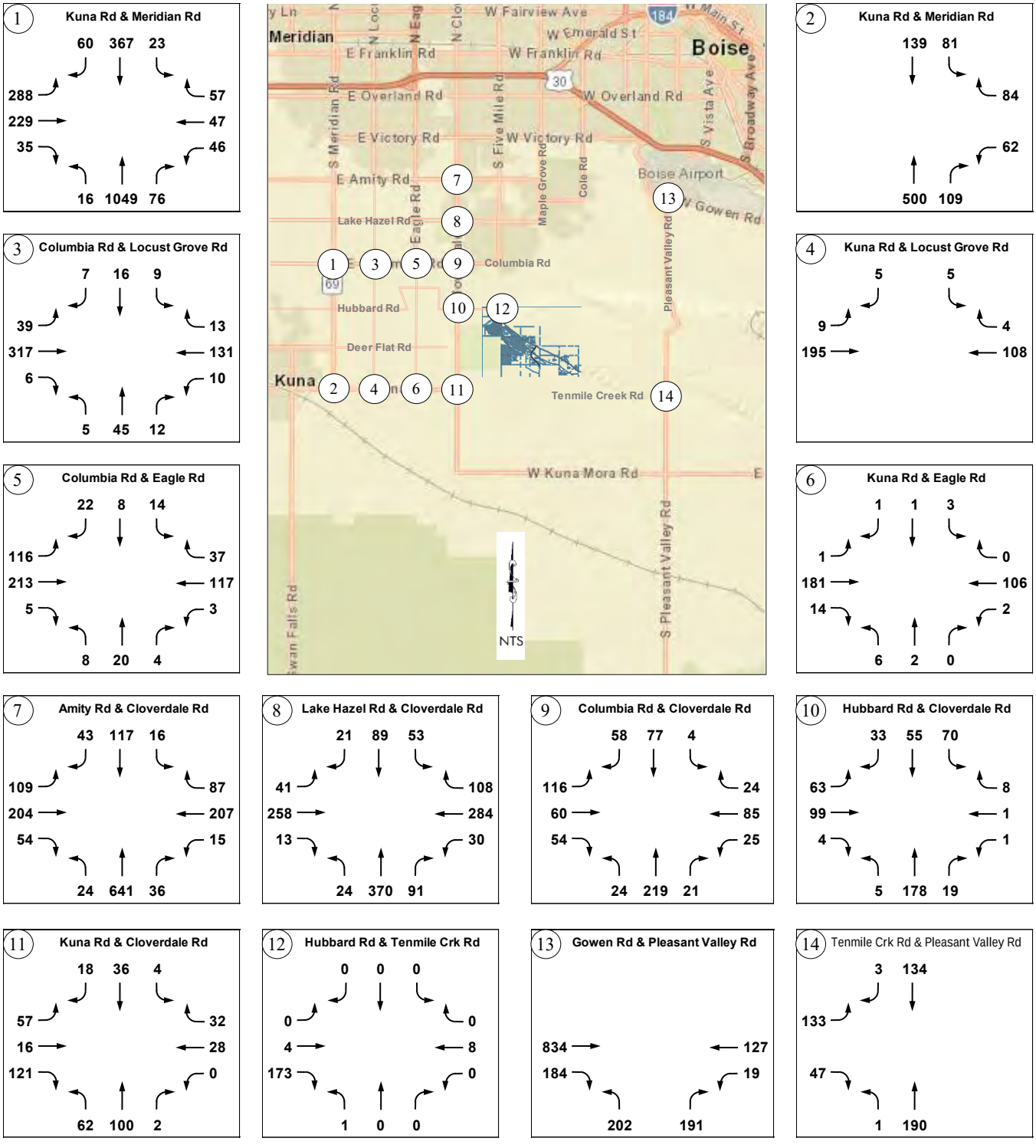
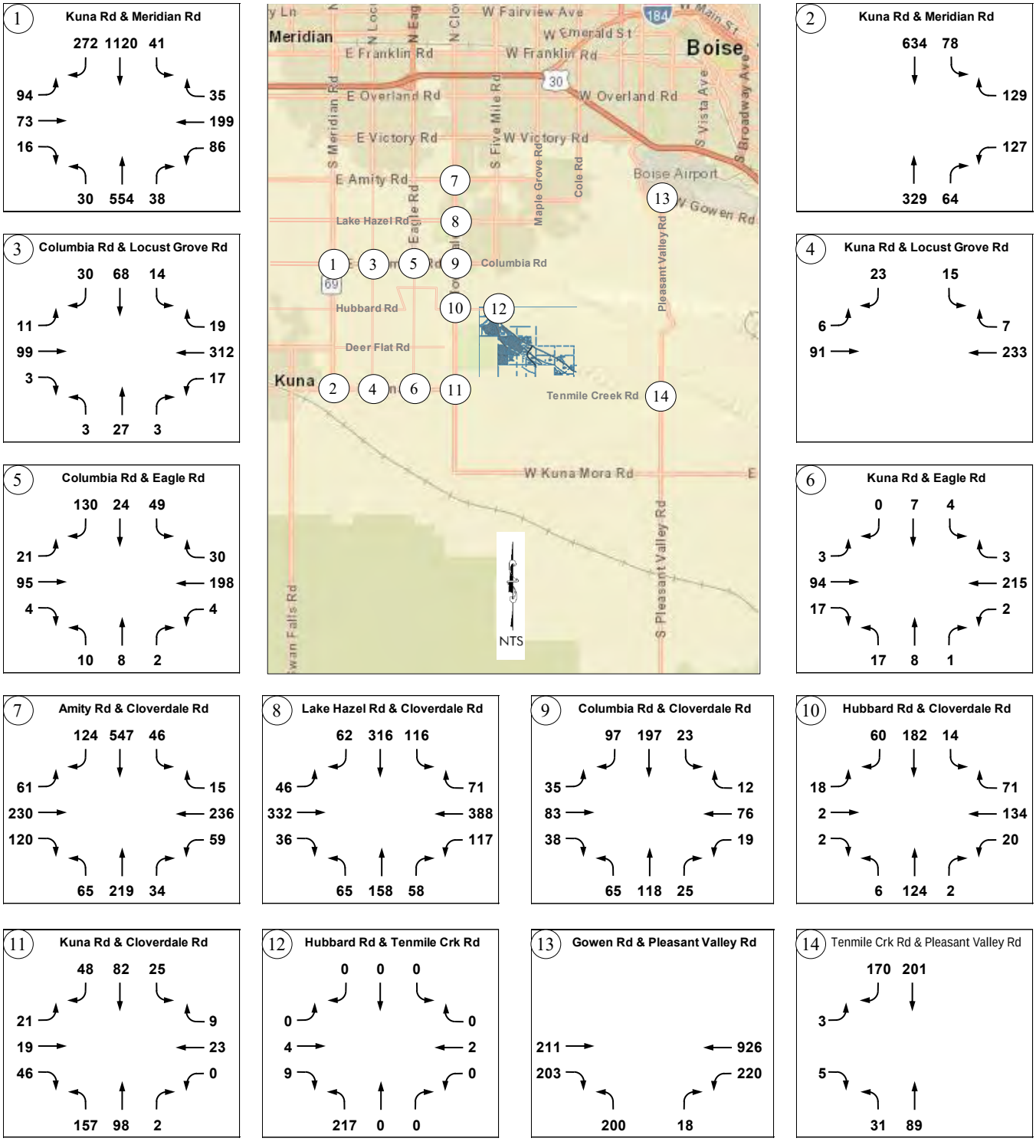


Figure 2.3 – 2019 Existing Weekday PM Peak Hour Traffic



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** Widen to 5 lanes with curb, gutter, multi-use paths from Victory Road to Lake Hazel Road	Unknown	Unfunded
	Lake Hazel Road 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** Reconstruct/widen - two to three lanes	2026-2030	Unfunded
	Cloverdale Road - Victory Road to Lake Hazel Road Reconstruct/widen - two to five lanes	2021-2025	Unfunded
	Cloverdale Road - Lake Hazel Road to Columbia Road Reconstruct/widen - two to five lanes	2026-2030	Unfunded
	Cloverdale Road - Columbia Road to Kuna Road Reconstruct/widen - two to three lanes	2031-2035	Unfunded
	Lake Hazel Road - Eagle Road to Cloverdale Road Reconstruct/widen - two to three lanes	2021-2025	Unfunded
	Lake Hazel Road - Cloverdale Road to Five Mile Road Reconstruct/widen - two to five lanes	2021-2025	Unfunded
	Pleasant Valley Extension – Orchard Ext. to Pleasant Valley Road 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

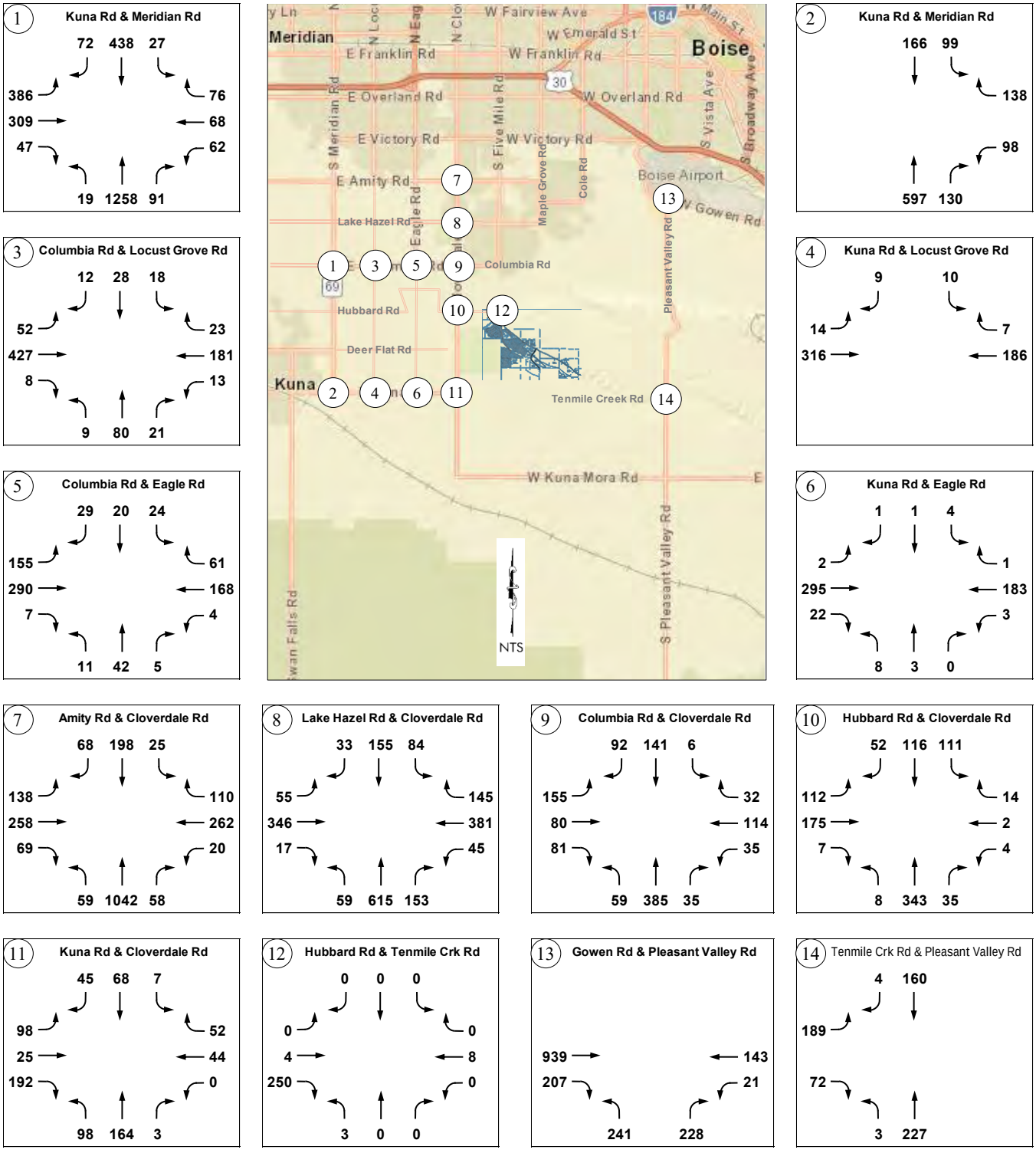
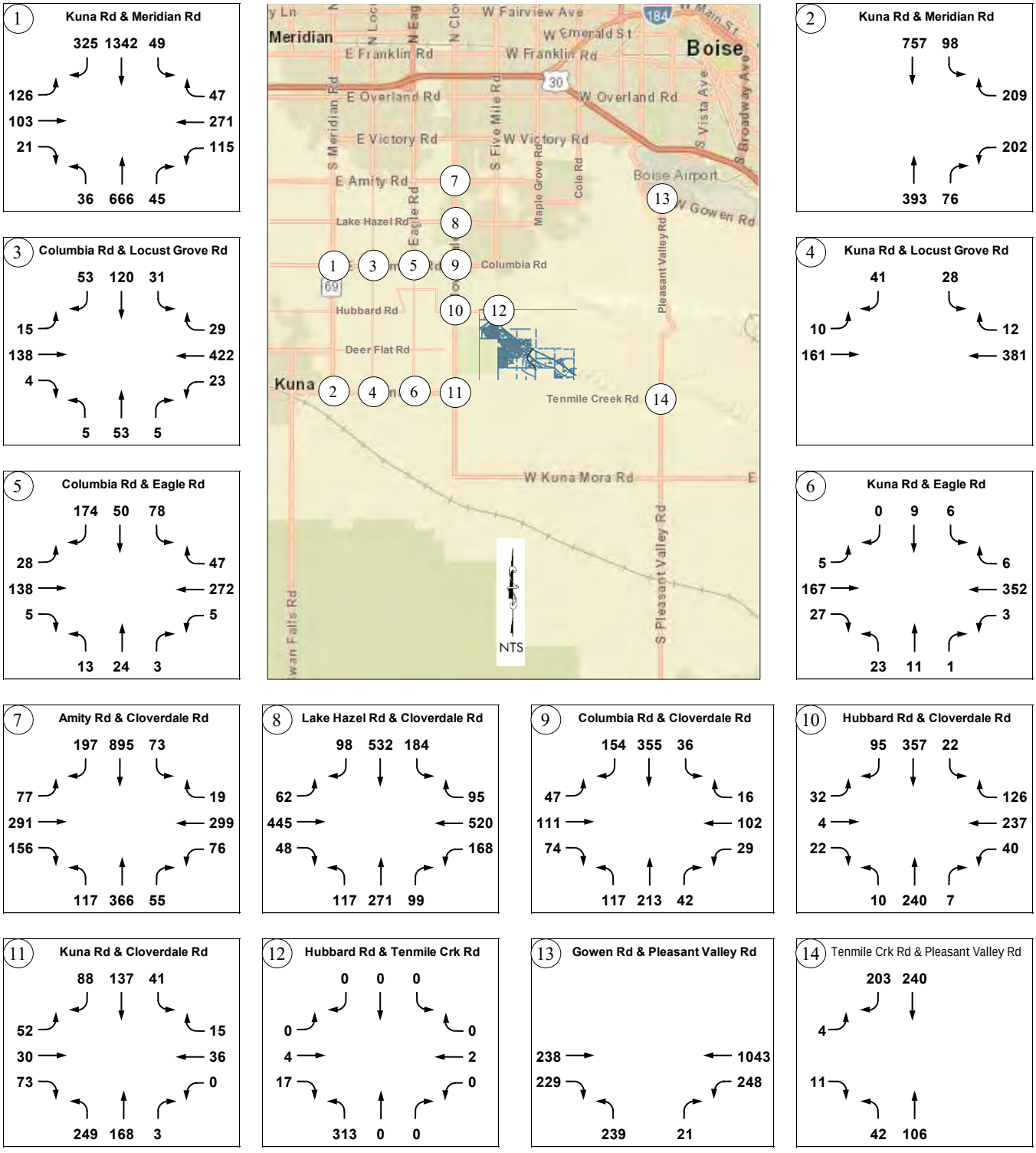


Figure 3.2 – 2025 Phase 1 PM Peak Hour Background Traffic



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

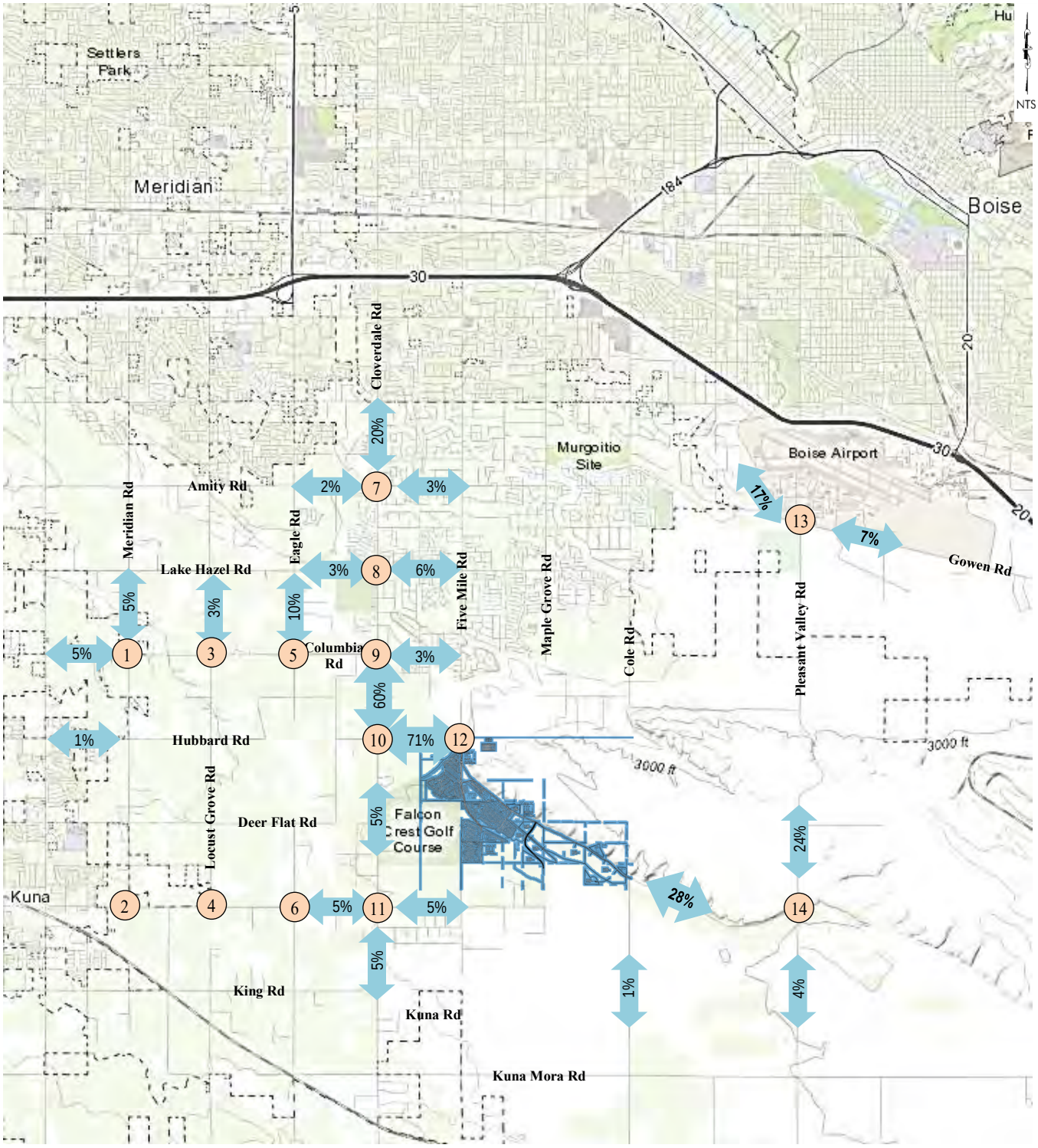


Figure 4.2 – 2025 Phase 1 AM Peak Hour Site Traffic

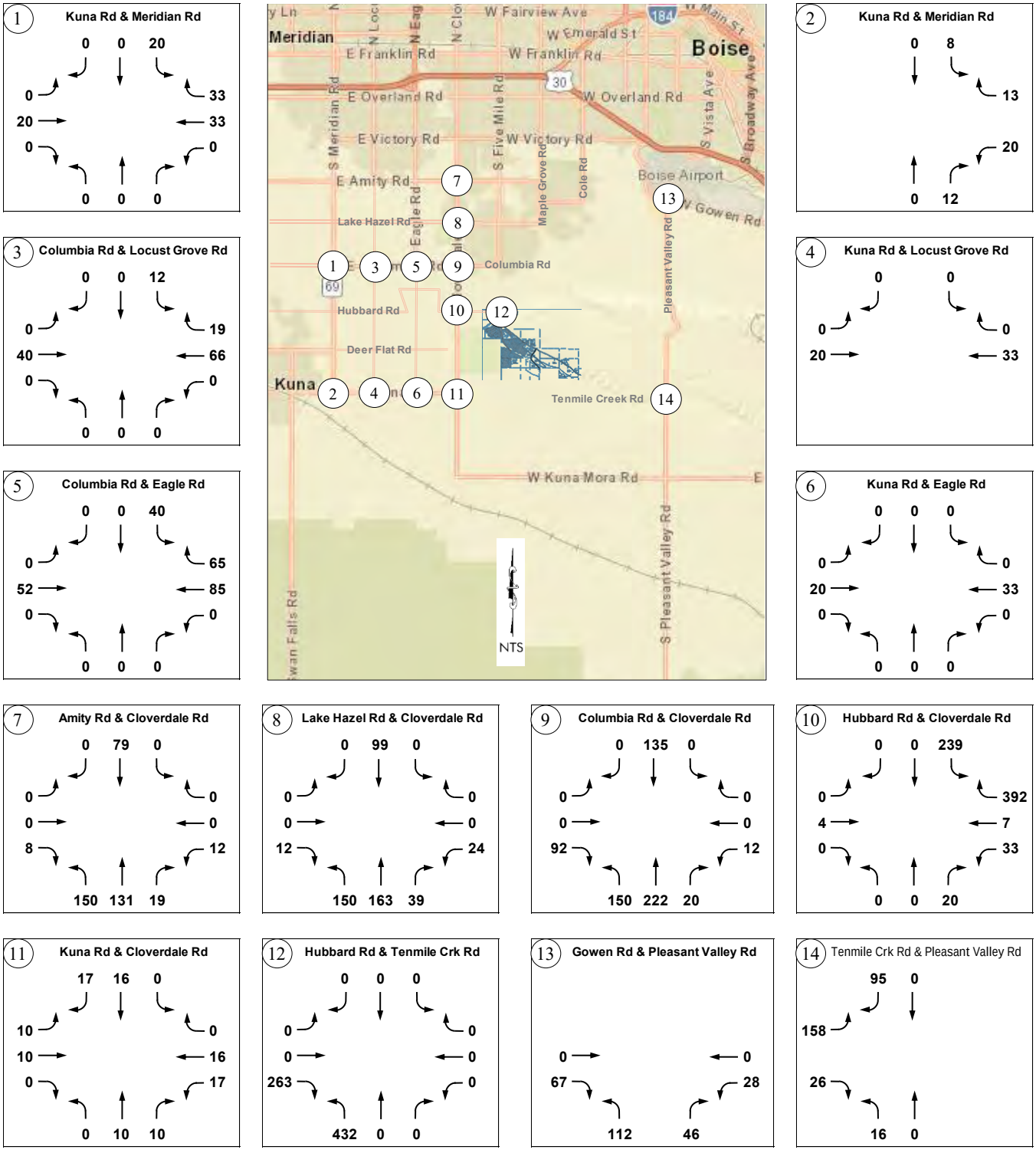


Figure 4.3 –2025 Phase 1 PM Peak Hour Site Traffic

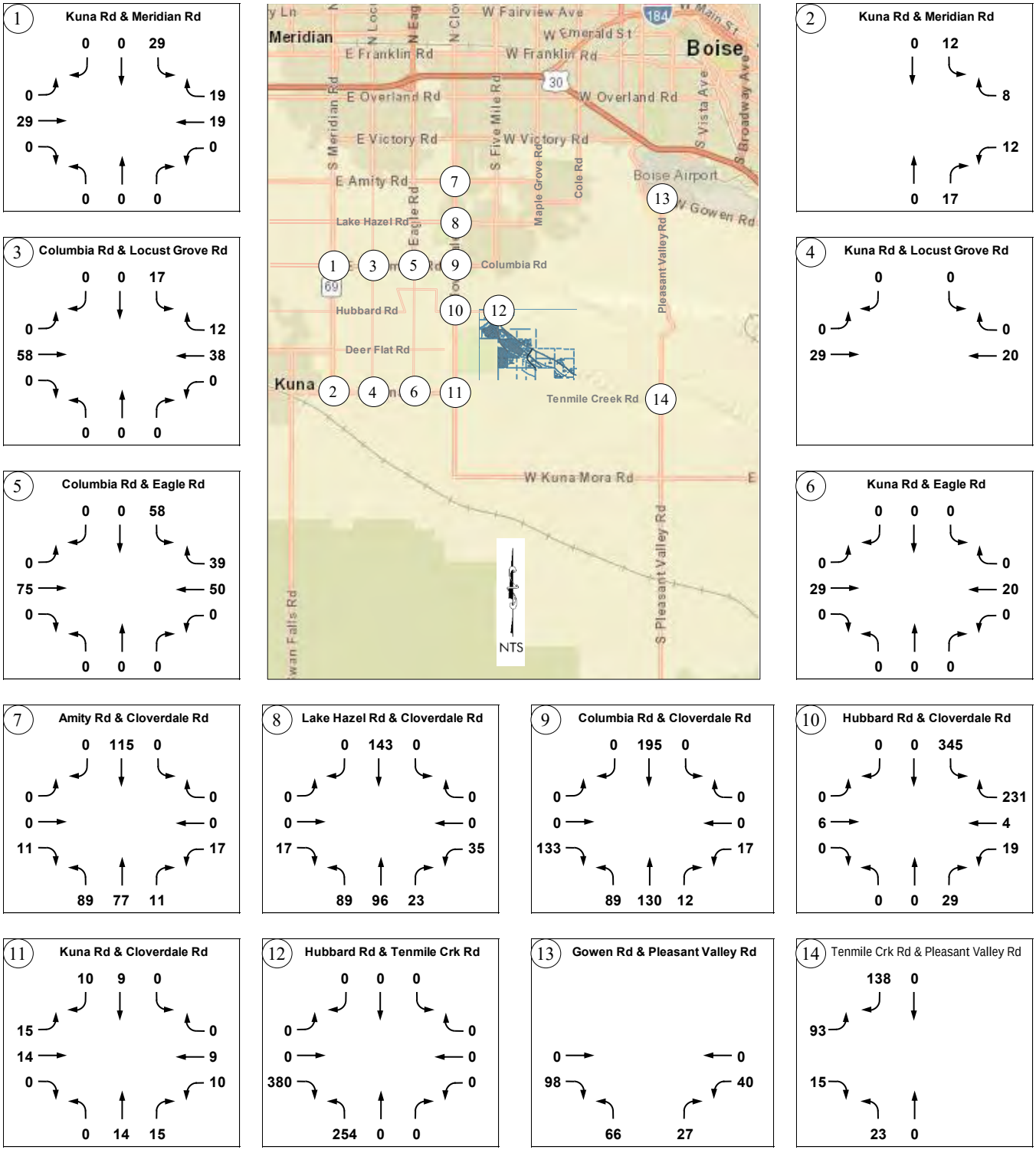


Figure 4.4 – 2025 Phase 1 AM Peak Hour Total Traffic

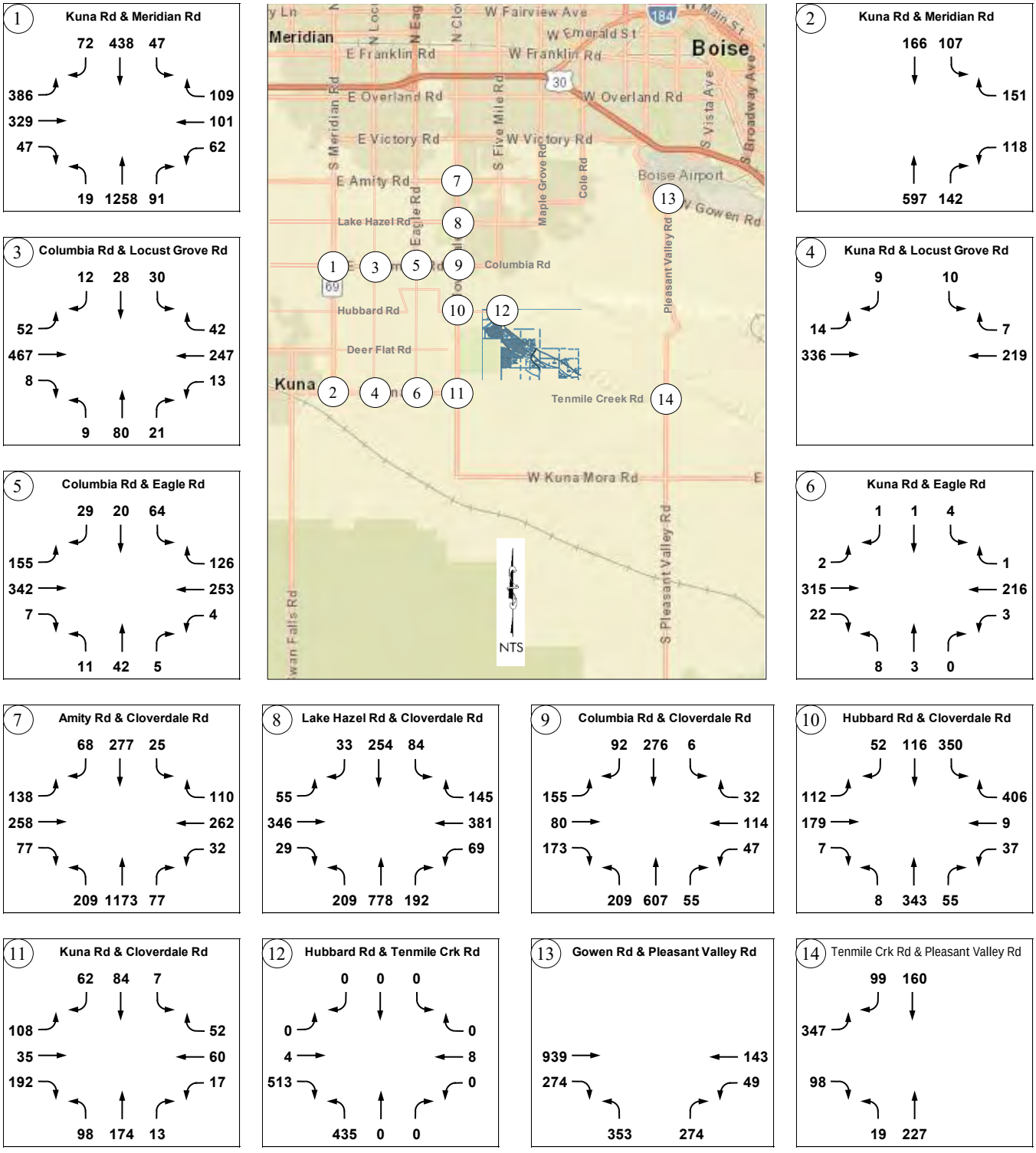
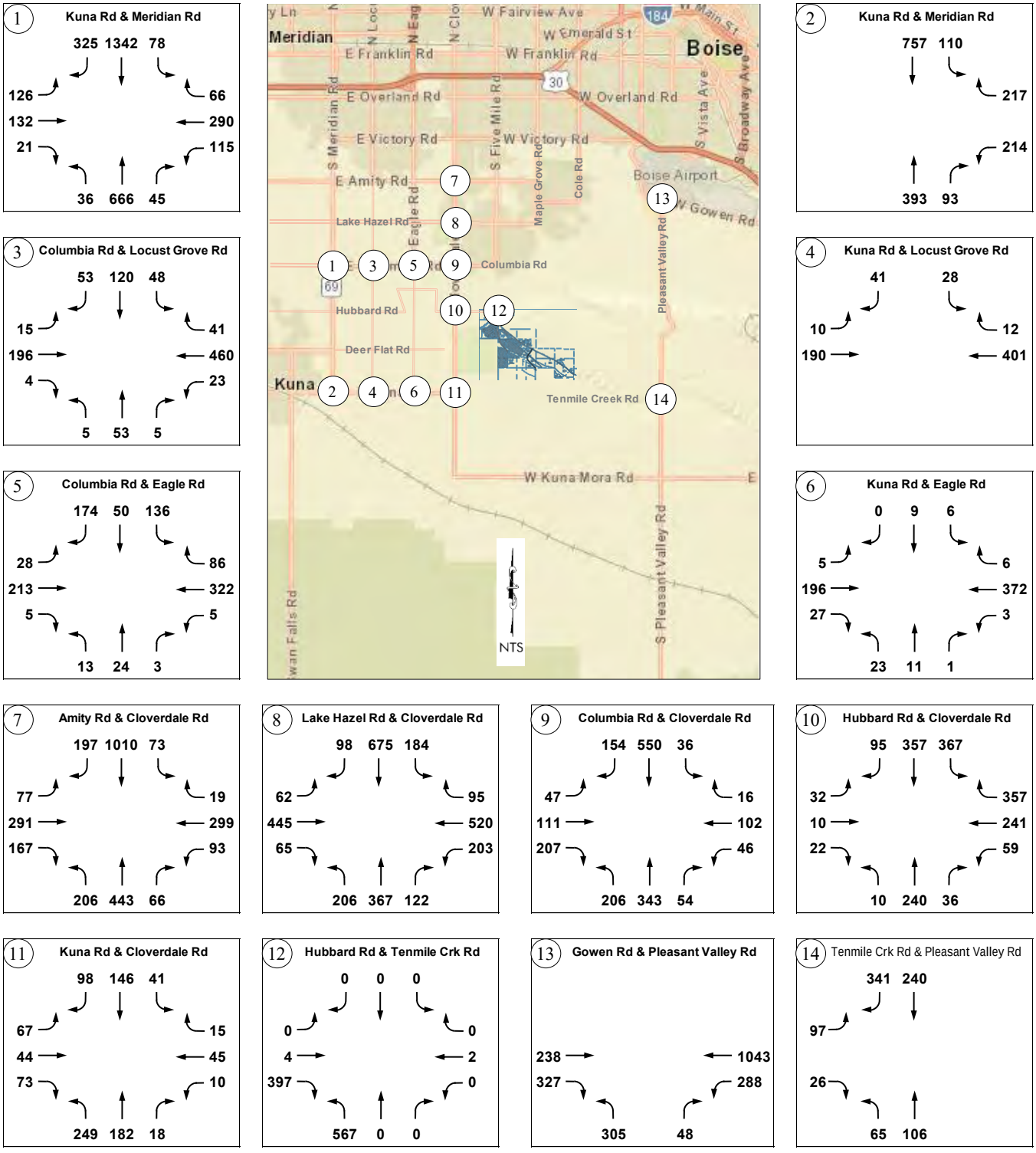


Figure 4.5 – 2025 Phase 1 PM Peak Hour Total Traffic



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 LOS	AM Peak Delay [s/v]	AM Peak v/c	PM Peak LOS	PM Peak Delay [s/v]	PM Peak 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.

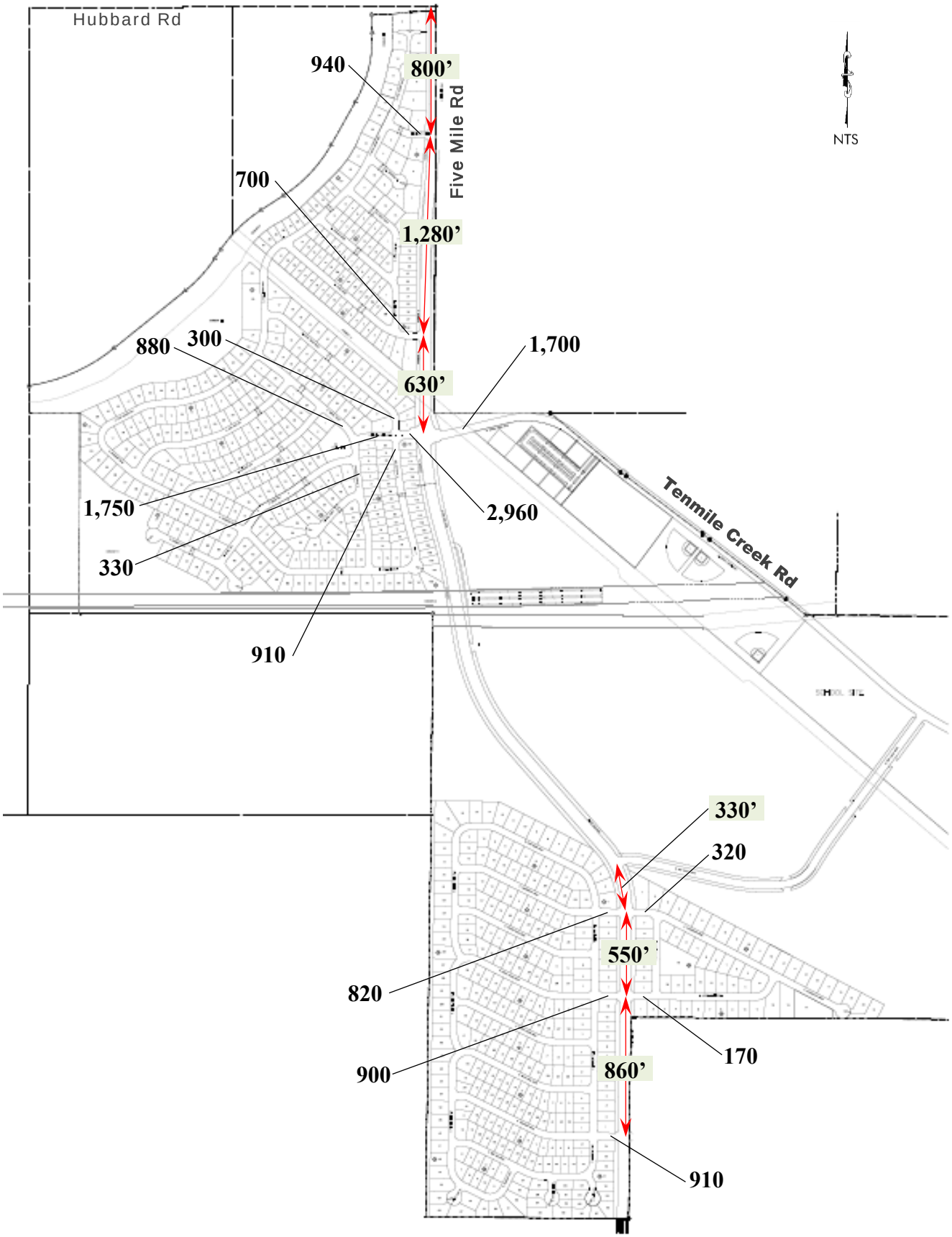
Multiple approaches are proposed on Tenmile Creek Road and the proposed Five Mile Road extension for Phase 1 site access as shown in **Figure 4.6**. We understand the design team has been working with ACHD to ensure the proposed access locations meet ACHD's spacing and requirements. Based on the Phase 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

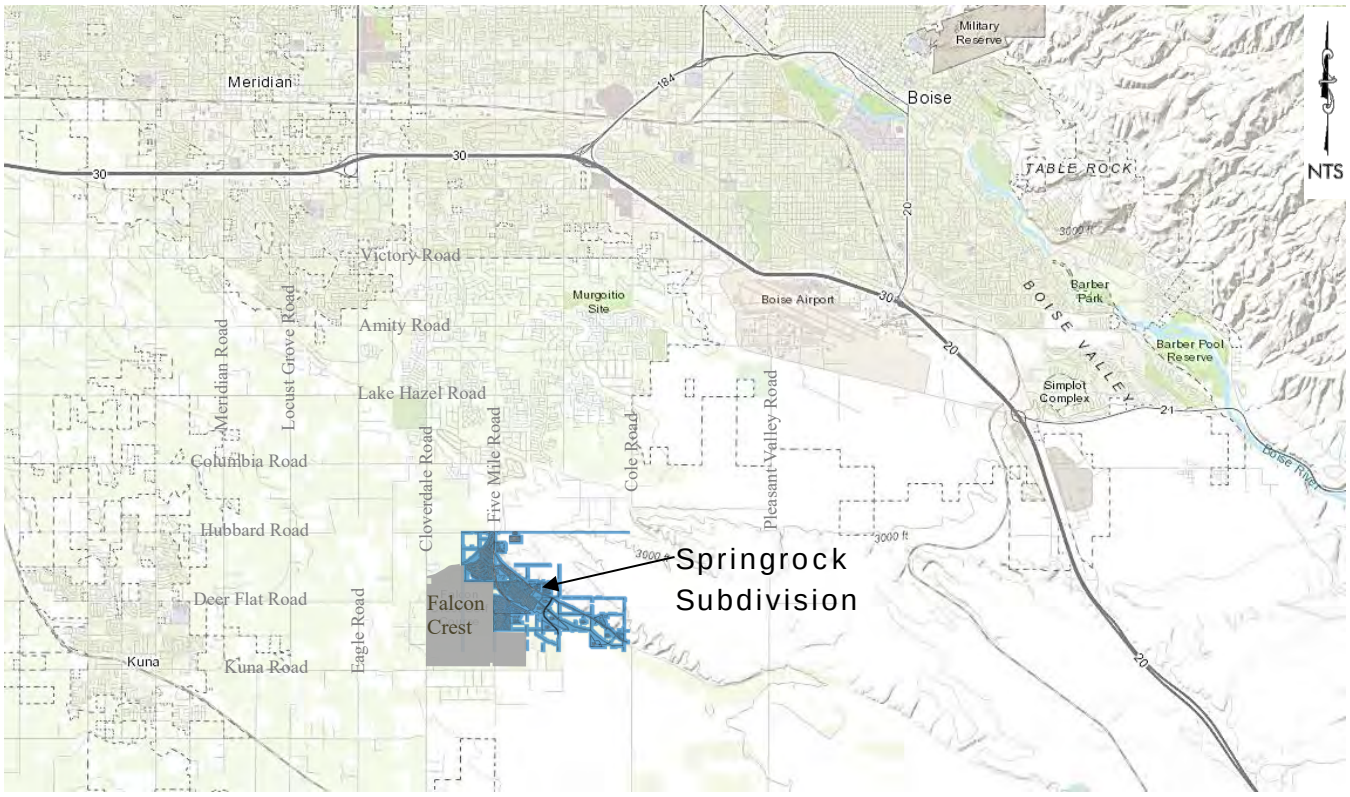
FROM: Chhang Ream
CR Engineering, Inc.

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

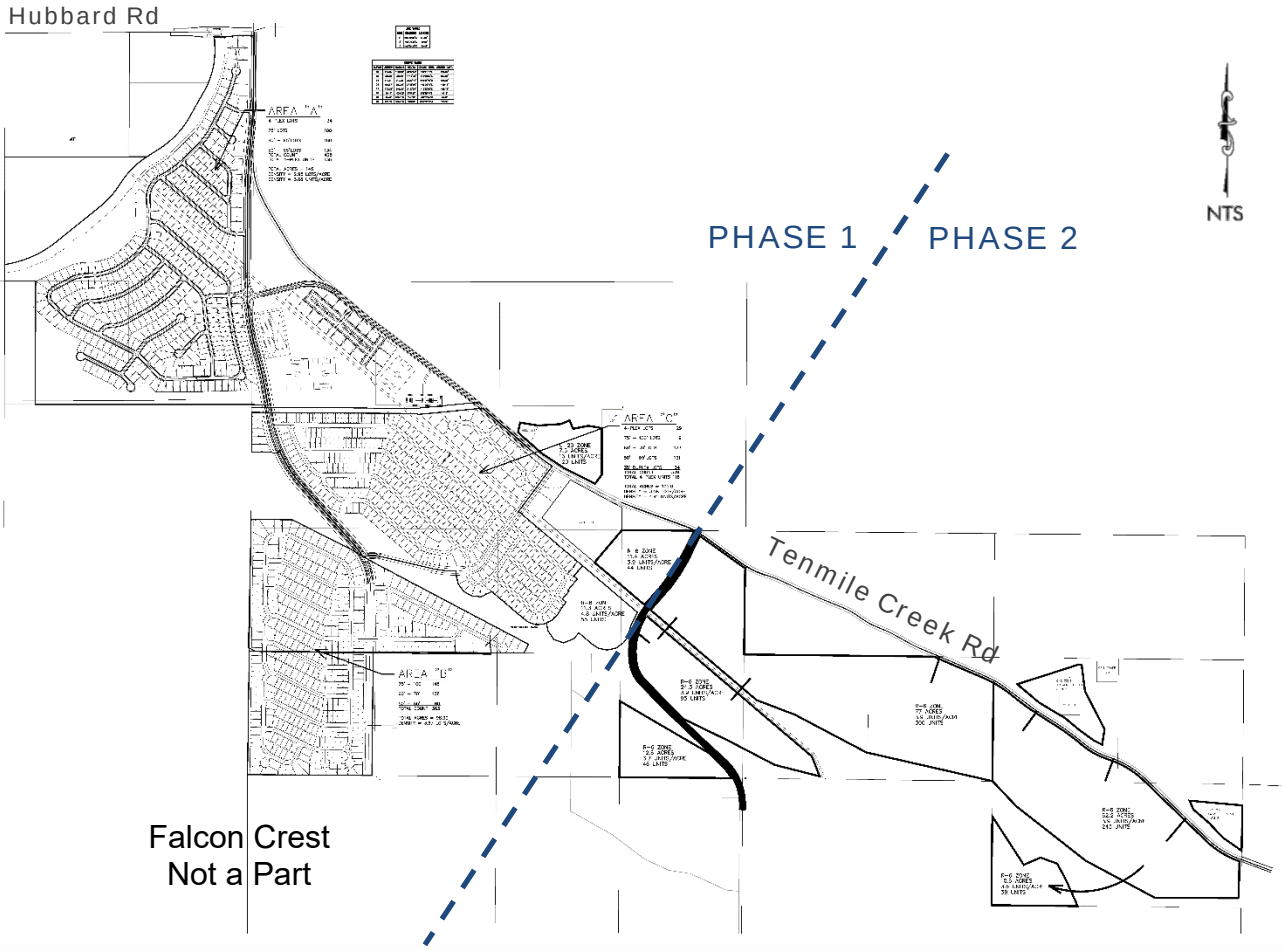


Table 1 – Proposed Land Use Summary

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

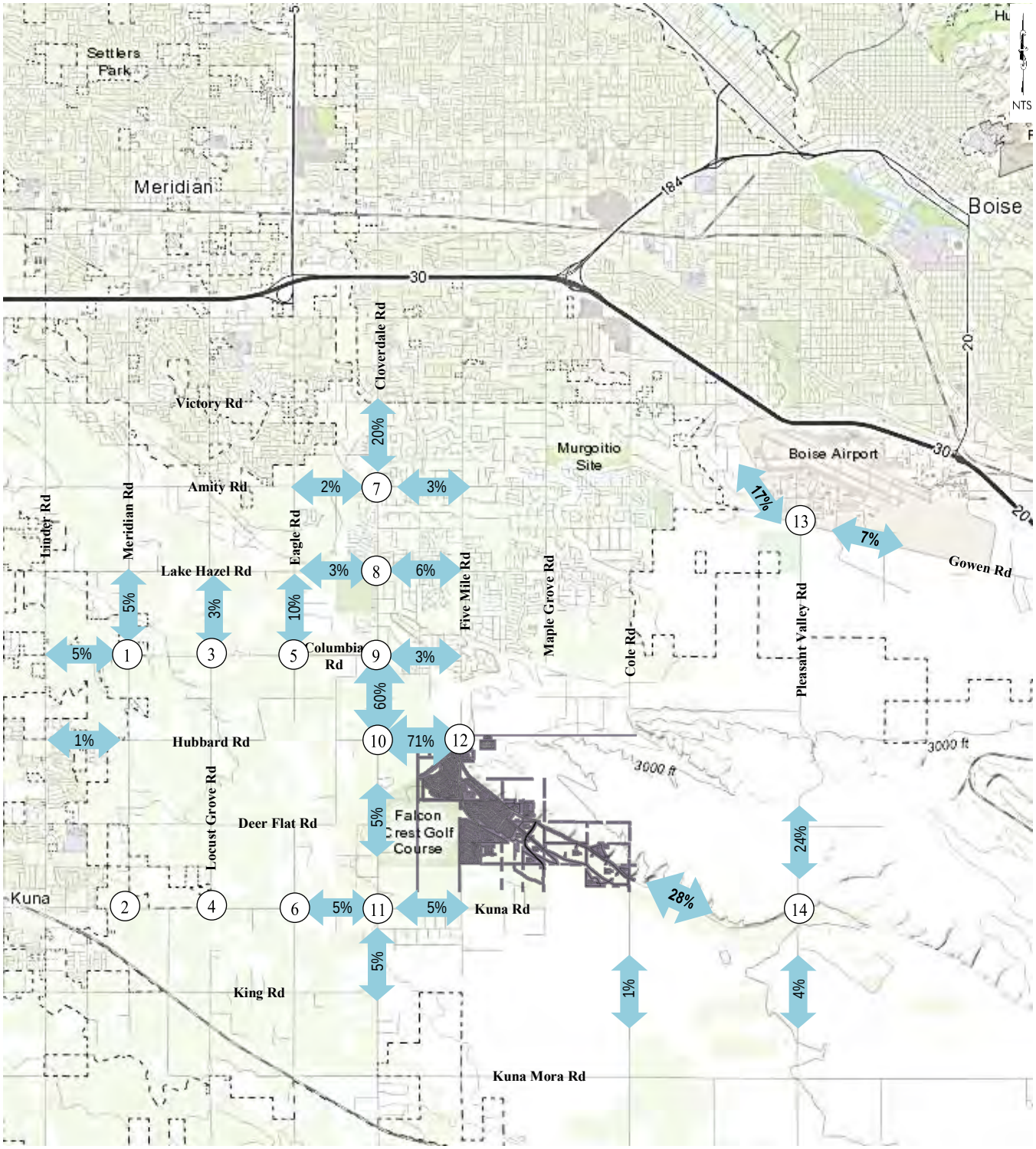
Table 2 – Phase 1 2030 Build-Out Trip Generation Summary

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** • Widen to 5 lanes with curb, gutter, multi-use paths from Victory Road to Lake Hazel Road	Unknown	Unfunded
	Lake Hazel Road • 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 • 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 - Eagle Road to Cloverdale Road** • Reconstruct/widen - two to three lanes	2026-2030	Unfunded
	Cloverdale Road - Victory Road to Lake Hazel Road • Reconstruct/widen - two to five lanes	2021-2025	Unfunded
	Cloverdale Road - Lake Hazel Road to Columbia Road • Reconstruct/widen - two to five lanes	2026-2030	Unfunded
	Cloverdale Road - Columbia Road to Kuna Road • Reconstruct/widen - two to three lanes	2031-2035	Unfunded
	Lake Hazel Road - Eagle Road to Cloverdale Road • Reconstruct/widen - two to three lanes	2021-2025	Unfunded
	Lake Hazel Road - Cloverdale Road to Five Mile Road • Reconstruct/widen - two to five lanes	2021-2025	Unfunded
	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 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** • Reservation for three lanes	Unknown	Unfunded
	Lake Hazel Road - Eagle Road to Five Mile Road • Reservation for five lanes	Unknown	Unfunded
	Columbia Road - Eagle Road to Five Mile Road • Reservation for three lanes	Unknown	Unfunded
	Hubbard Road - Linder Road to Locust Grove Road • Reservation for three lanes 3 2 5 3(Extend) 5	Unknown	Unfunded
	Hubbard Road - Locust Grove Road to Eagle Road • Reservation for two lanes	Unknown	Unfunded
	Hubbard Road - Eagle Road to Five Mile Road • Reservation for five lanes	Unknown	Unfunded
	Hubbard Road Extension • Reservation for three lanes	Unknown	Unfunded
	Kuna Road - Meridian Road to Eagle Road • Reservation for two lanes	Unknown	Unfunded
	Kuna Road - Eagle Road to Pleasant Valley Road • Reservation for three lanes	Unknown	Unfunded
	Ten Mile Creek Road - Five Mile Road to Pleasant Valley Road • Reservation for three lanes	Unknown	Unfunded
	Locust Grove Road - Lake Hazel Road to Kuna Road • Reservation for three lanes	Unknown	Unfunded
	Eagle Road - Lake Hazel Road to Hubbard Road • Reservation for three lanes	Unknown	Unfunded
	Cloverdale Road - Victory Road to Lake Hazel Road • Reservation for three lanes	Unknown	Unfunded
	Cloverdale Road - Victory Road to Lake Hazel Road • Reservation for five lanes	Unknown	Unfunded
	Five Mile Road - Columbia Road to 10 Mile Creek Road • Reservation for three lanes	Unknown	Unfunded
	Pleasant Valley Road south of Gowen Road • Reservation for five lanes	Unknown	Unfunded
	Pleasant Valley Road at 10 Mile Creek Road • Reservation for five lanes	Unknown	Unfunded
	Gowen Road at Pleasant Valley Road • 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.

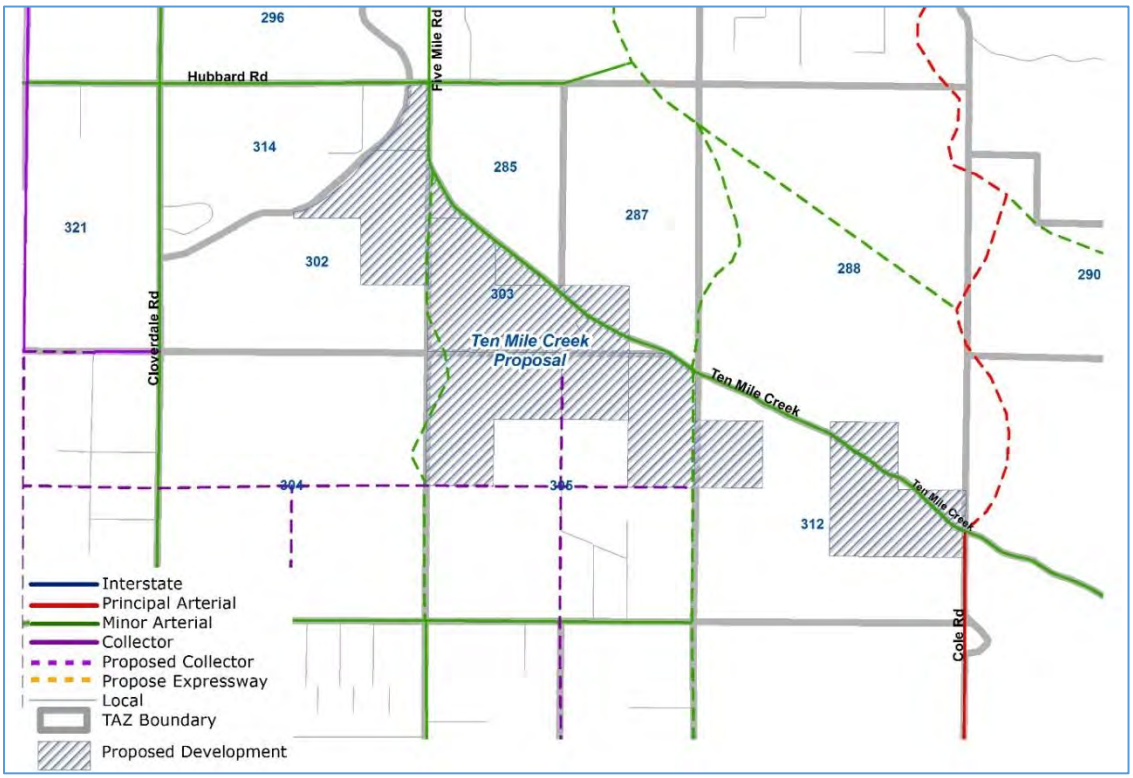


Figure 1: TAZs 302, 303,306, and 312

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

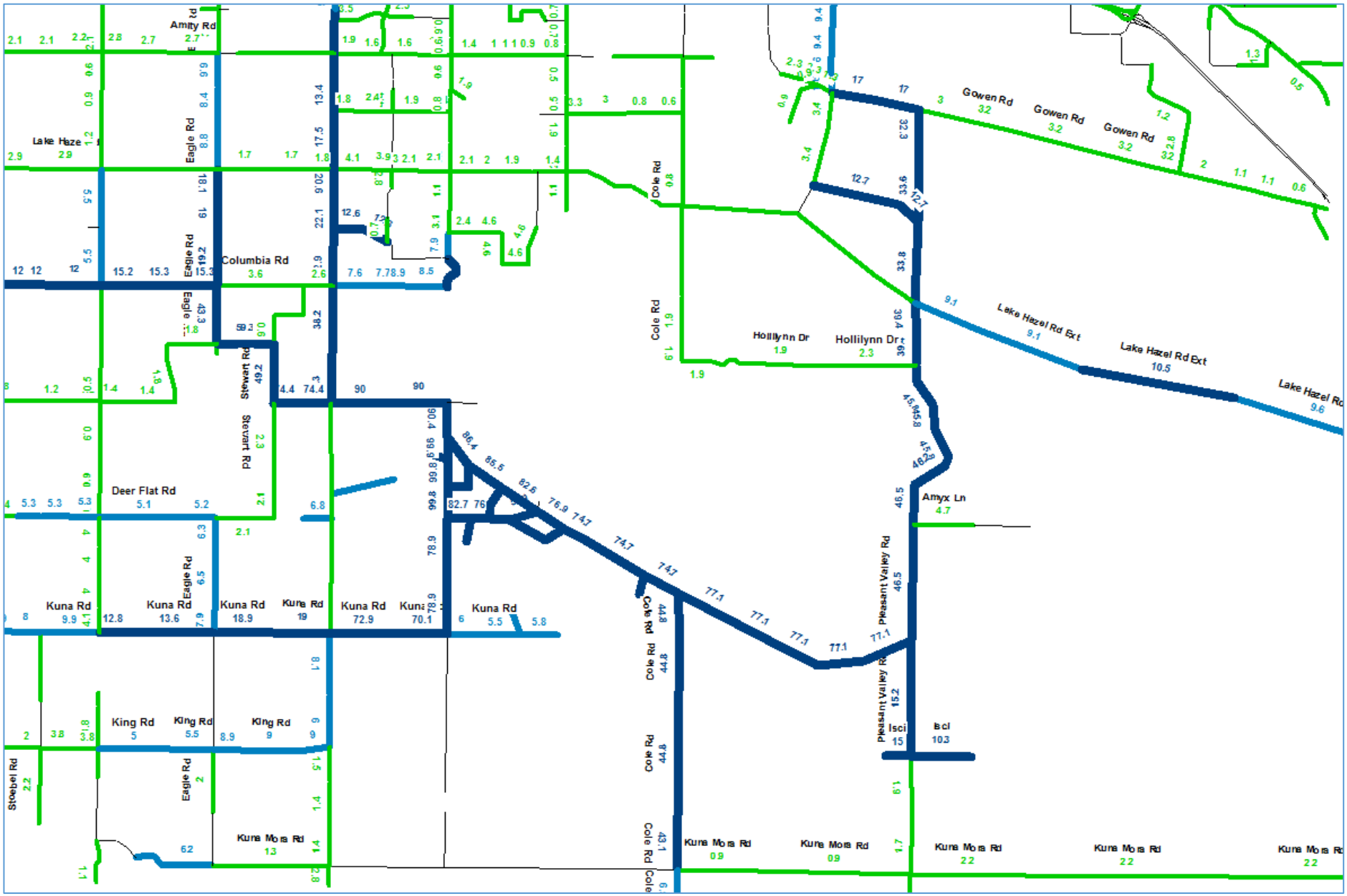


Figure 3: Peak Hour Demand with Proposed Development

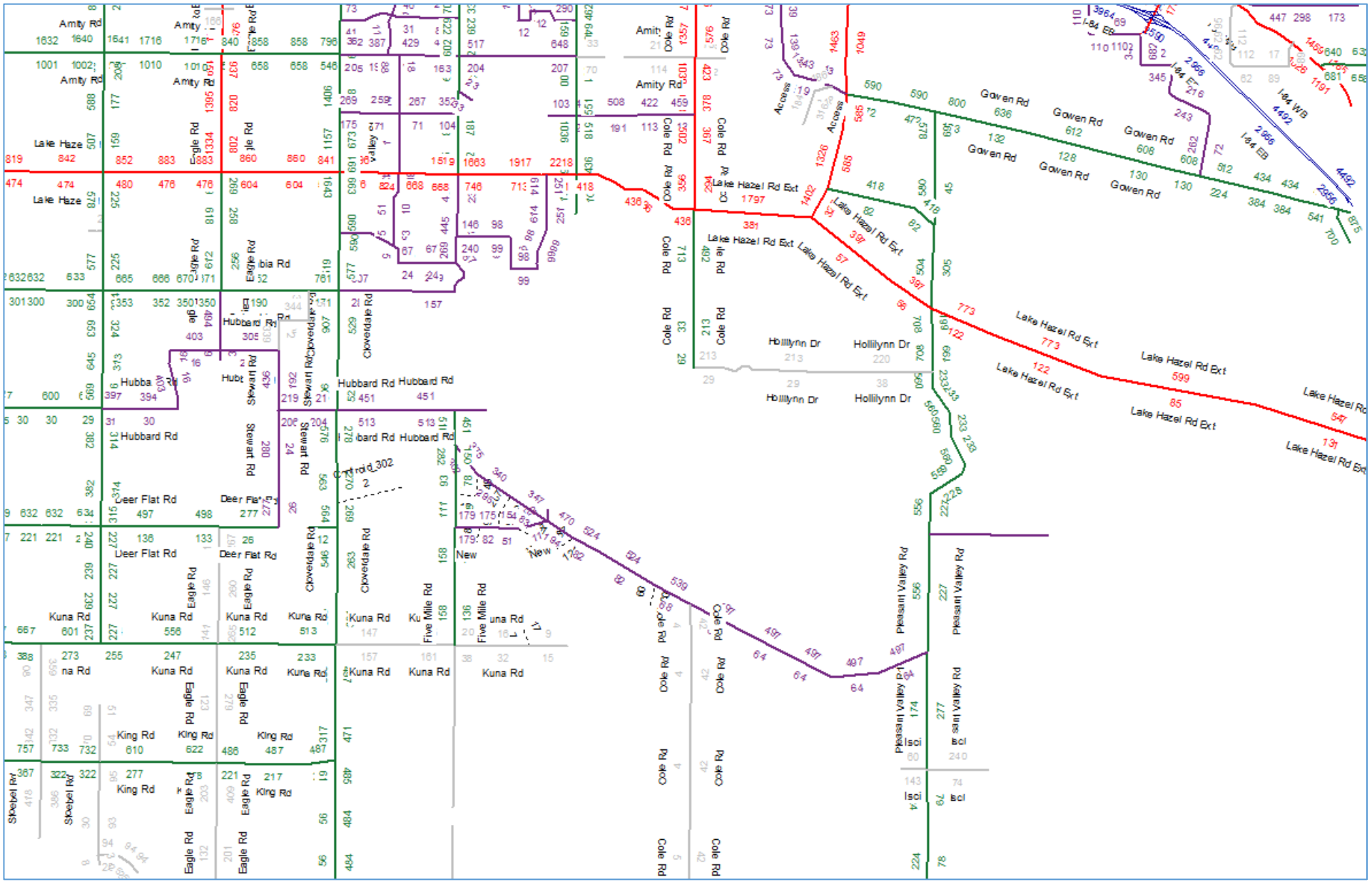


Figure 4a: Peak Hour Demand with Proposed Development – Detailed Area

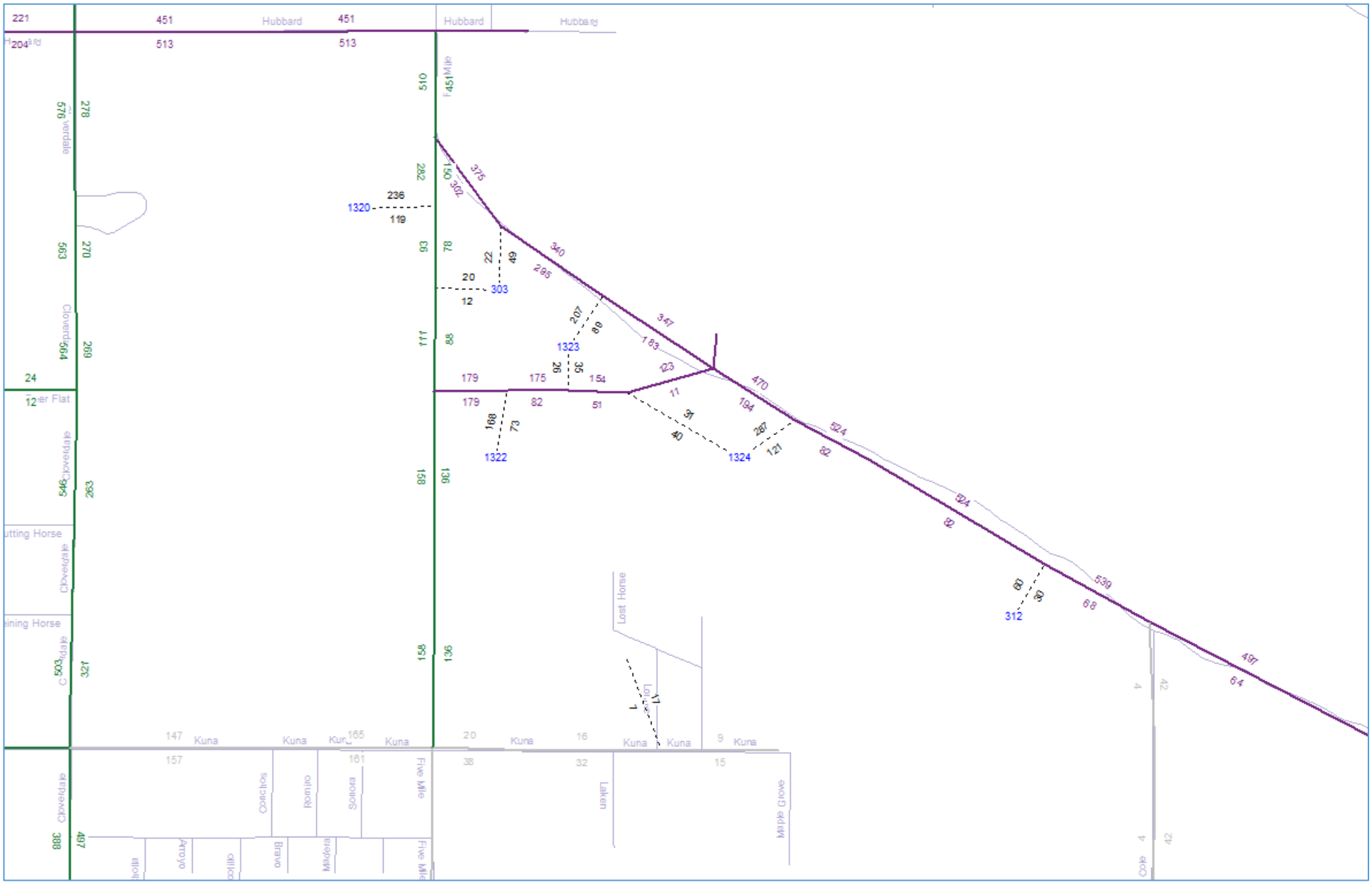


Figure 5: Peak Hour Demand without Proposed Development

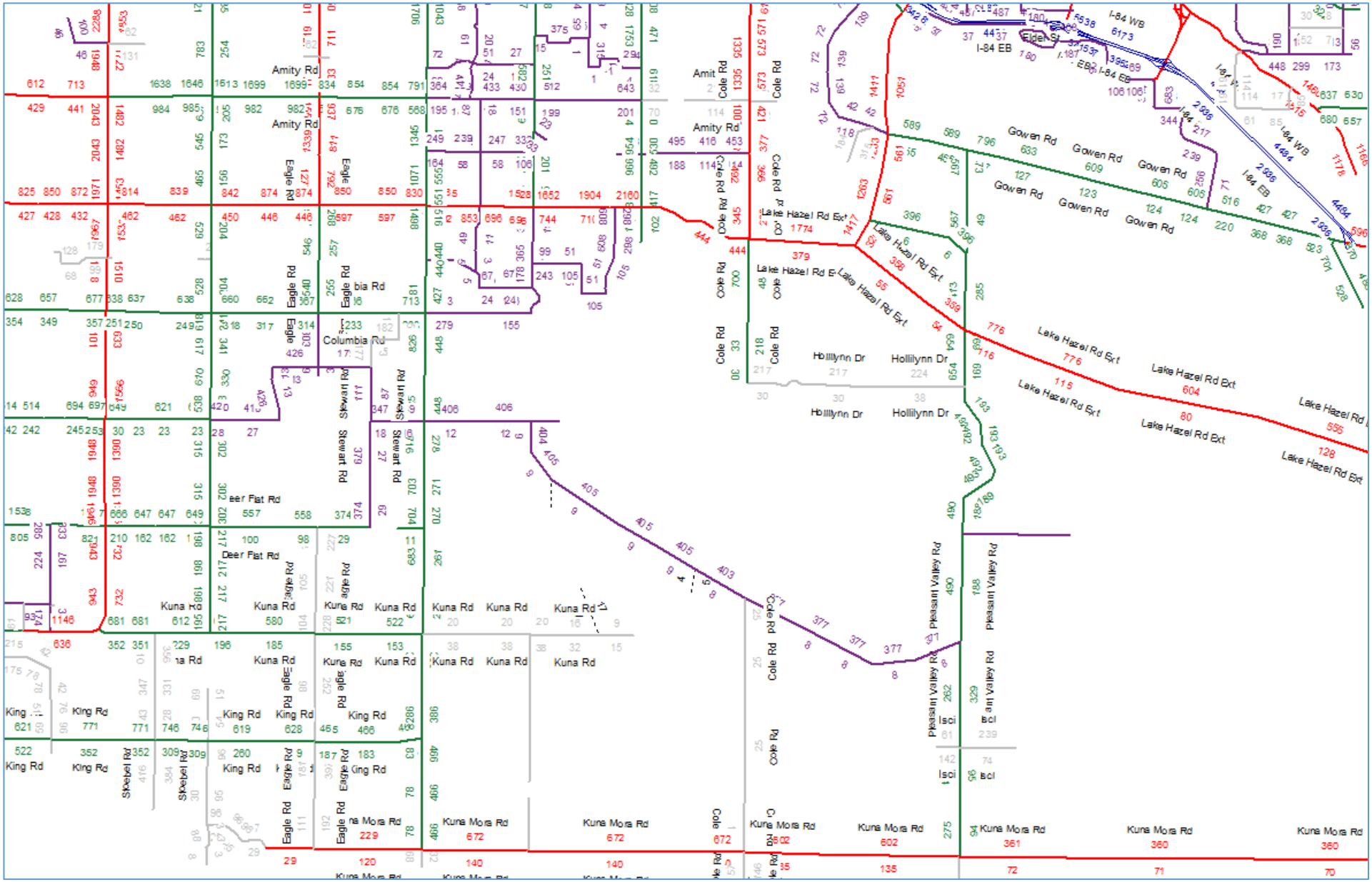
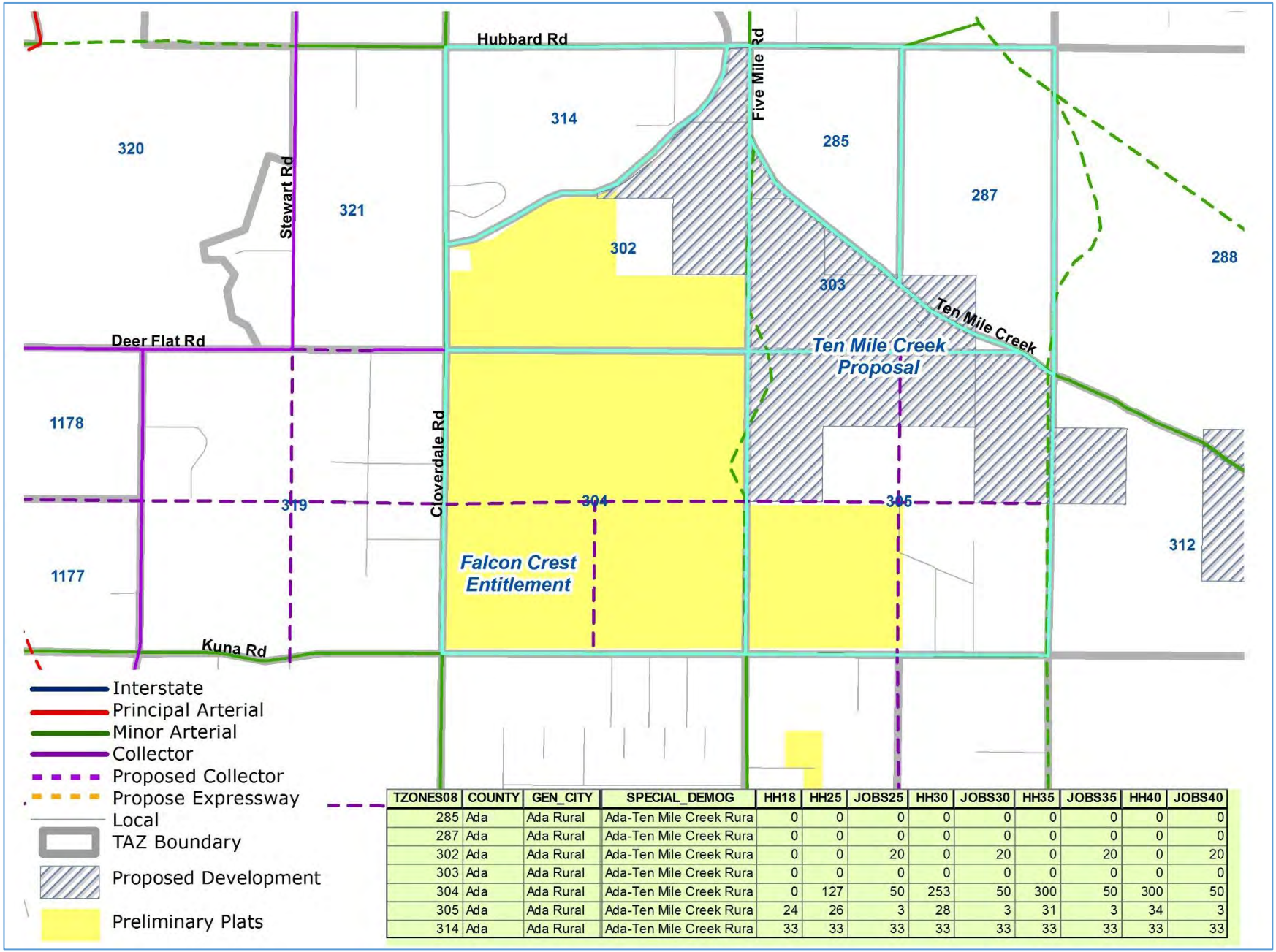


Figure 6: Surrounding Area TAZs



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

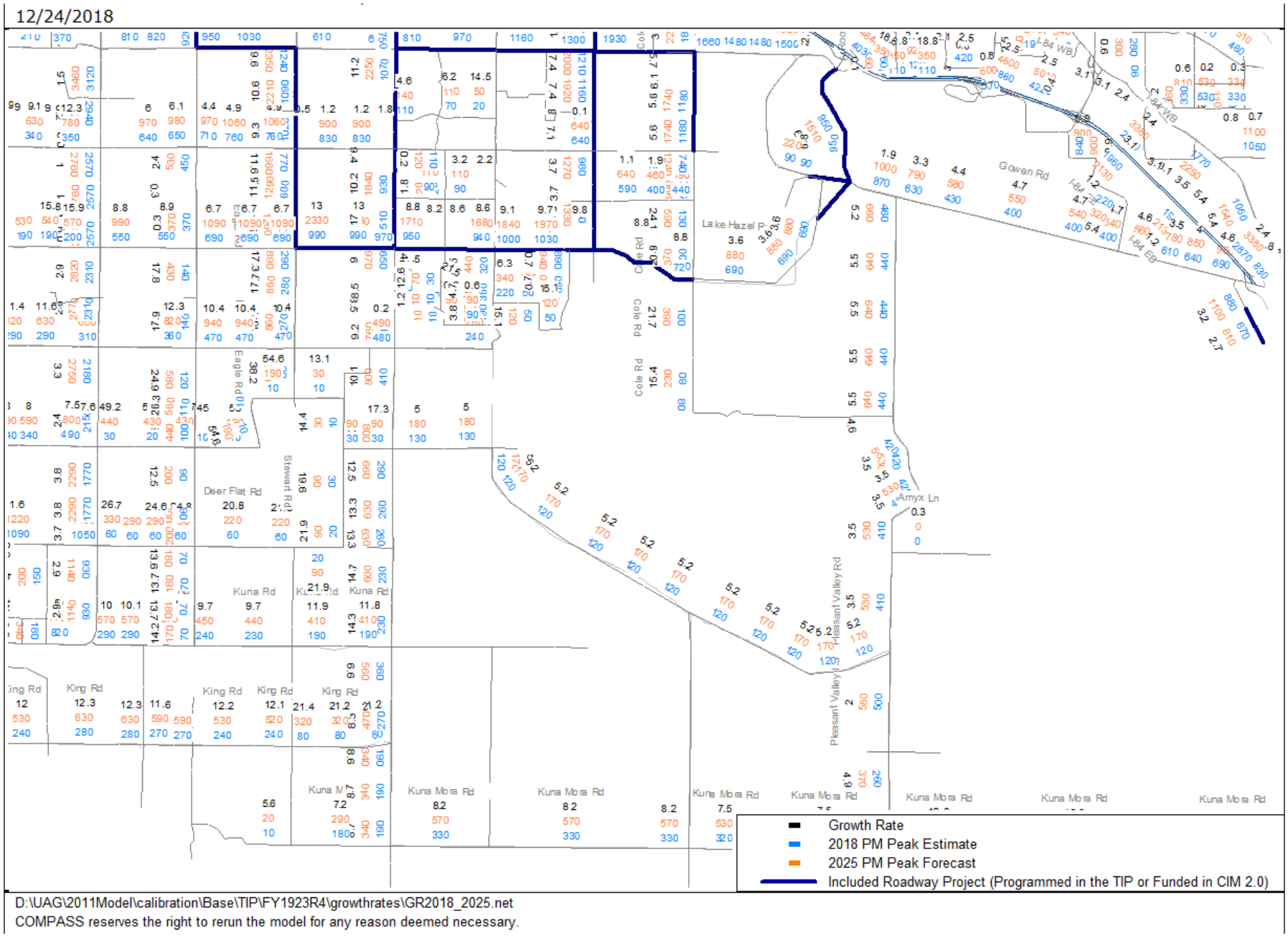


Figure 8: 2025 to 2030 Compounded Annual Growth Rate

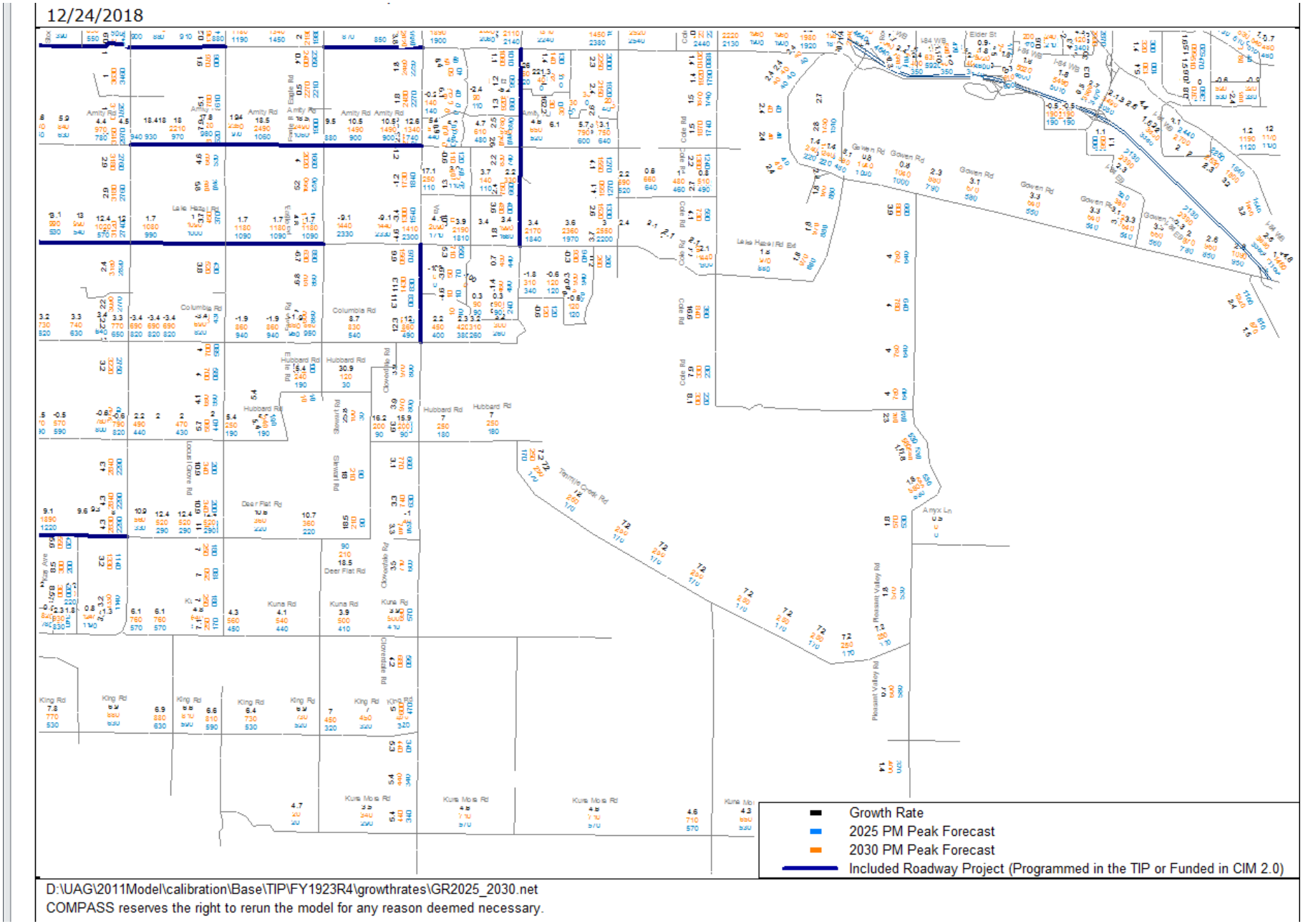
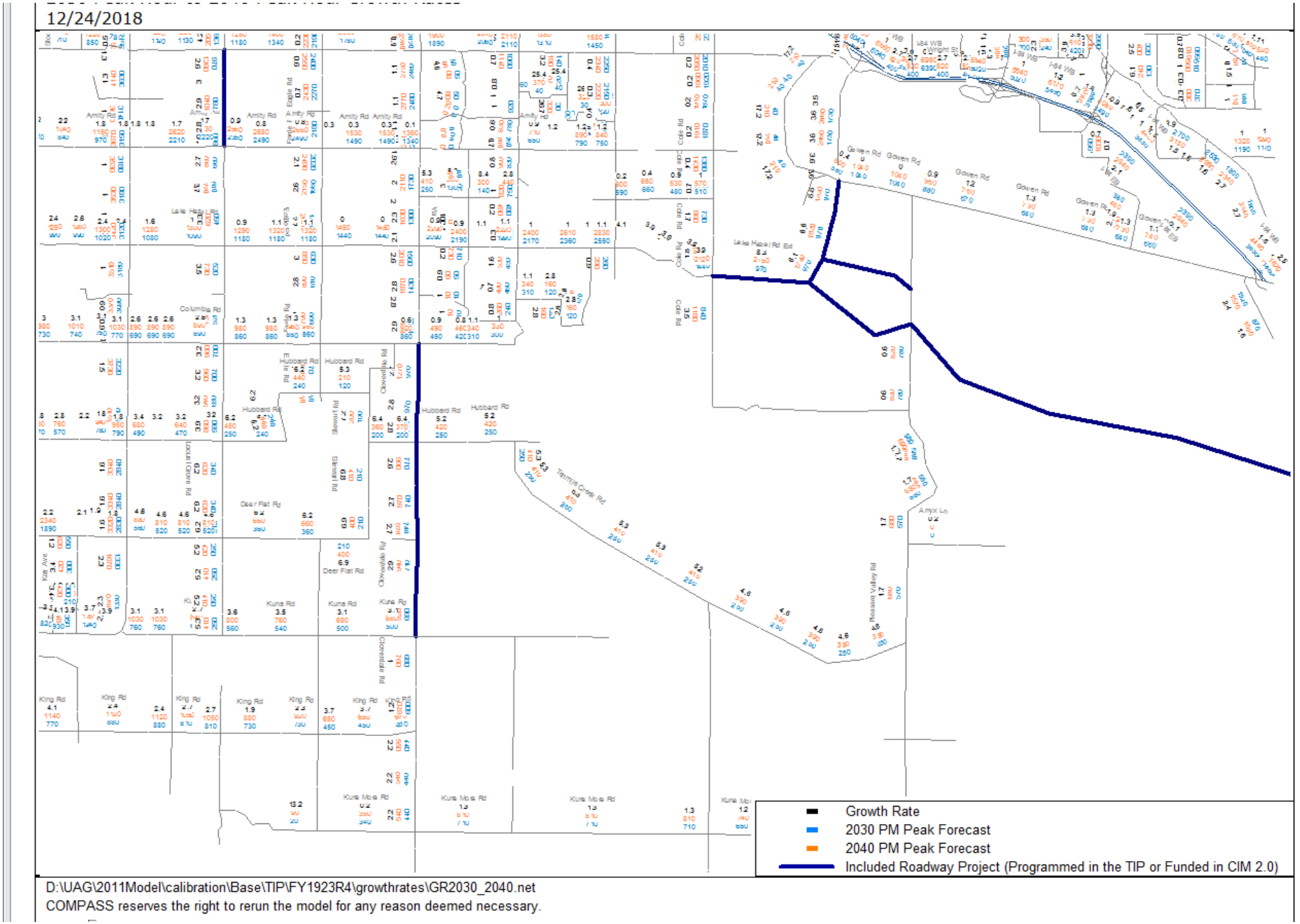


Figure 8: 2030 to 2040 Compounded Annual Growth Rate



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

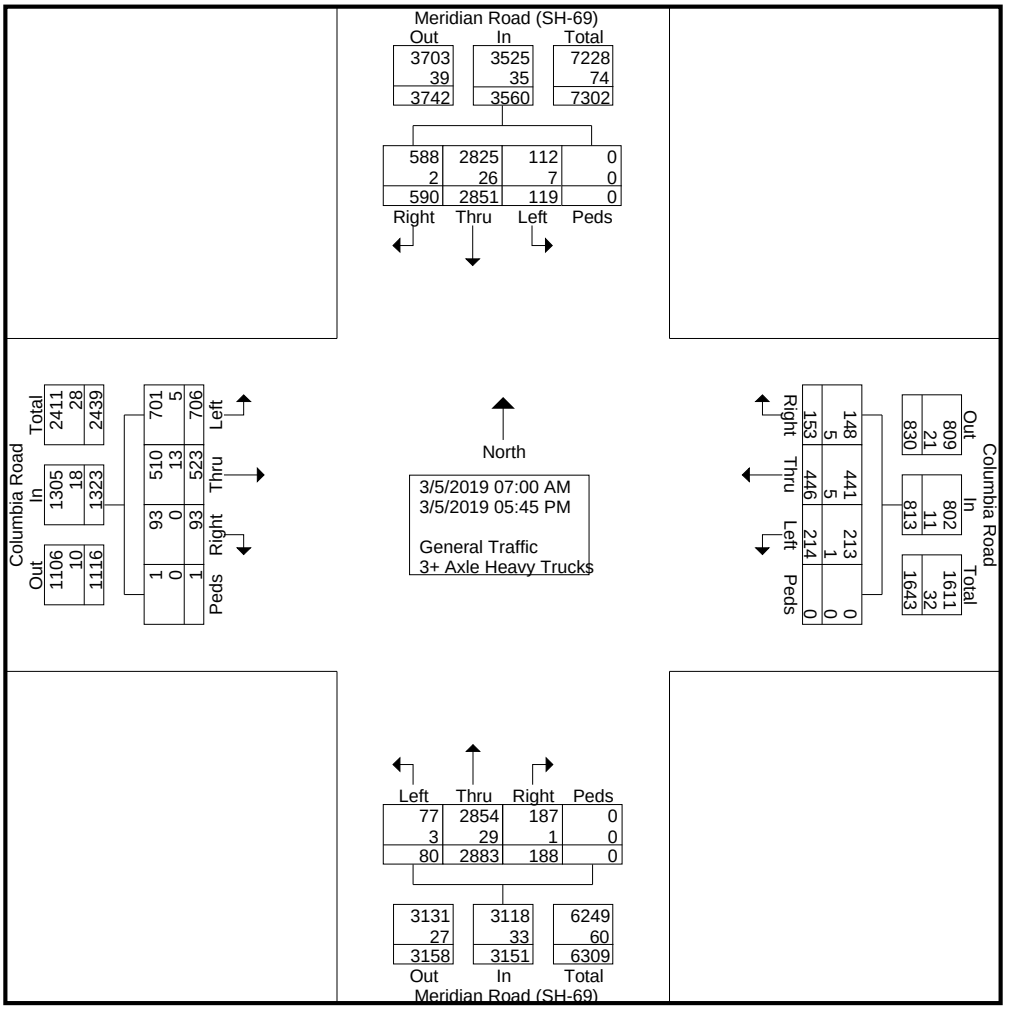
04:00 PM	50	211	6	0	267	11	32	13	0	56	6	133	6	0	145	6	18	24	0	48	516
04:15 PM	60	301	8	0	369	7	47	17	0	71	6	118	7	0	131	5	20	26	0	51	622
04:30 PM	48	260	4	0	312	6	39	15	0	60	4	164	3	0	171	4	16	25	0	45	588
04:45 PM	49	253	12	0	314	8	44	22	0	74	9	128	4	0	141	3	16	18	0	37	566
Total	207	1025	30	0	1262	32	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



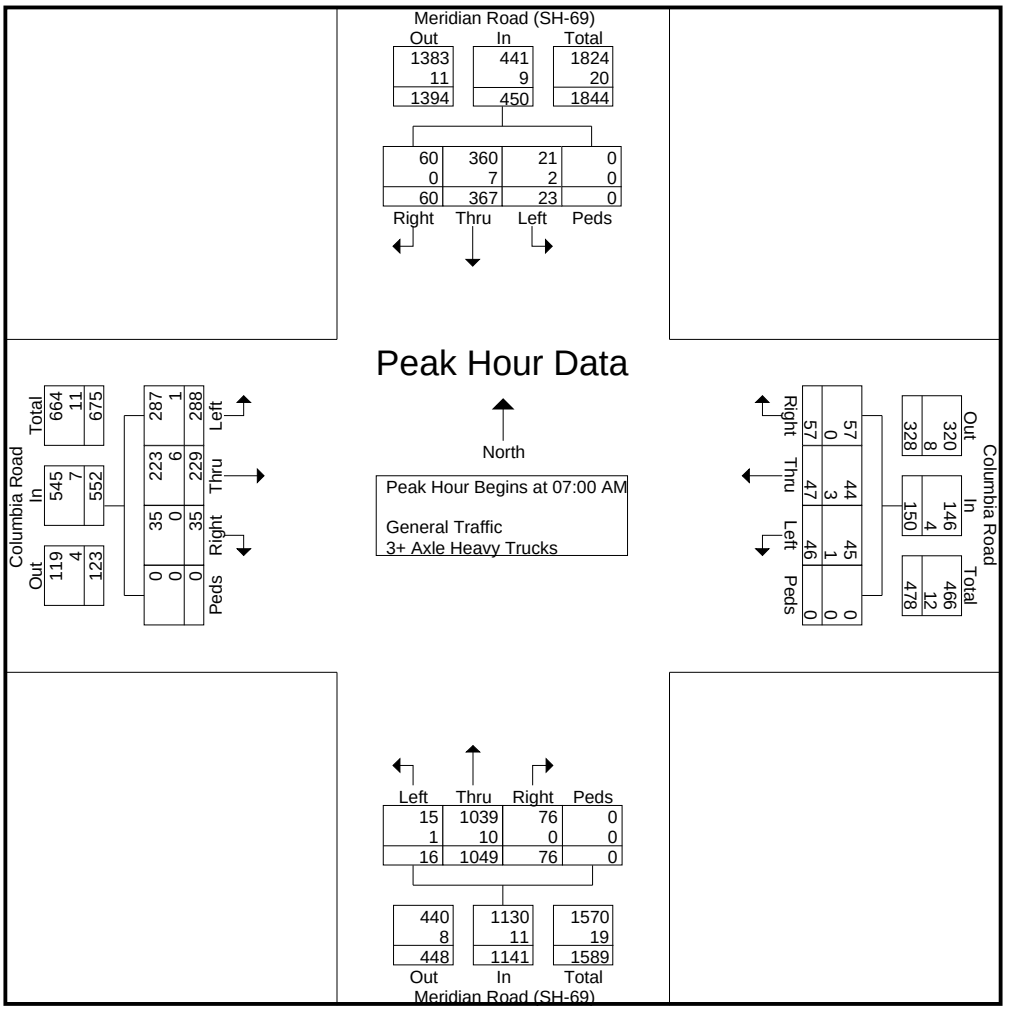
L2 Data Collection

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 : 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



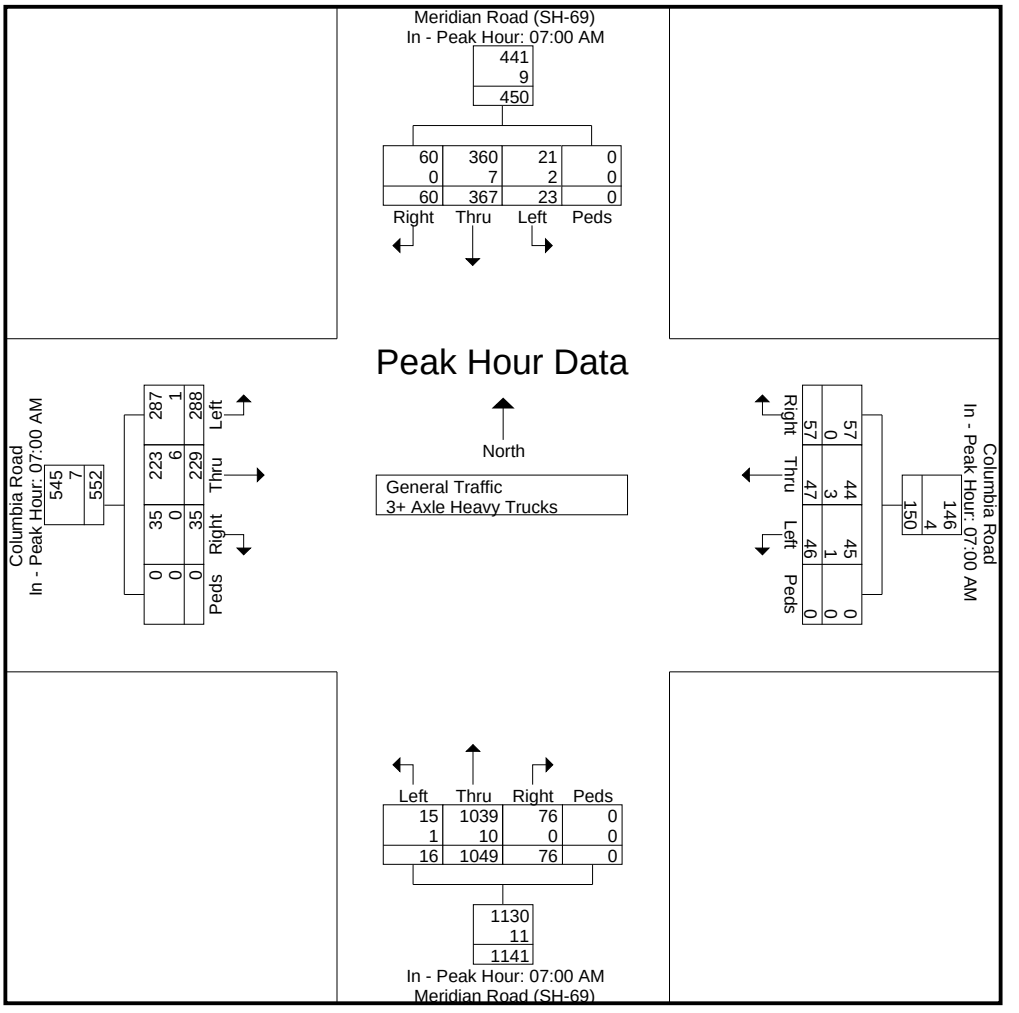
L2 Data Collection

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 : 4

	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	



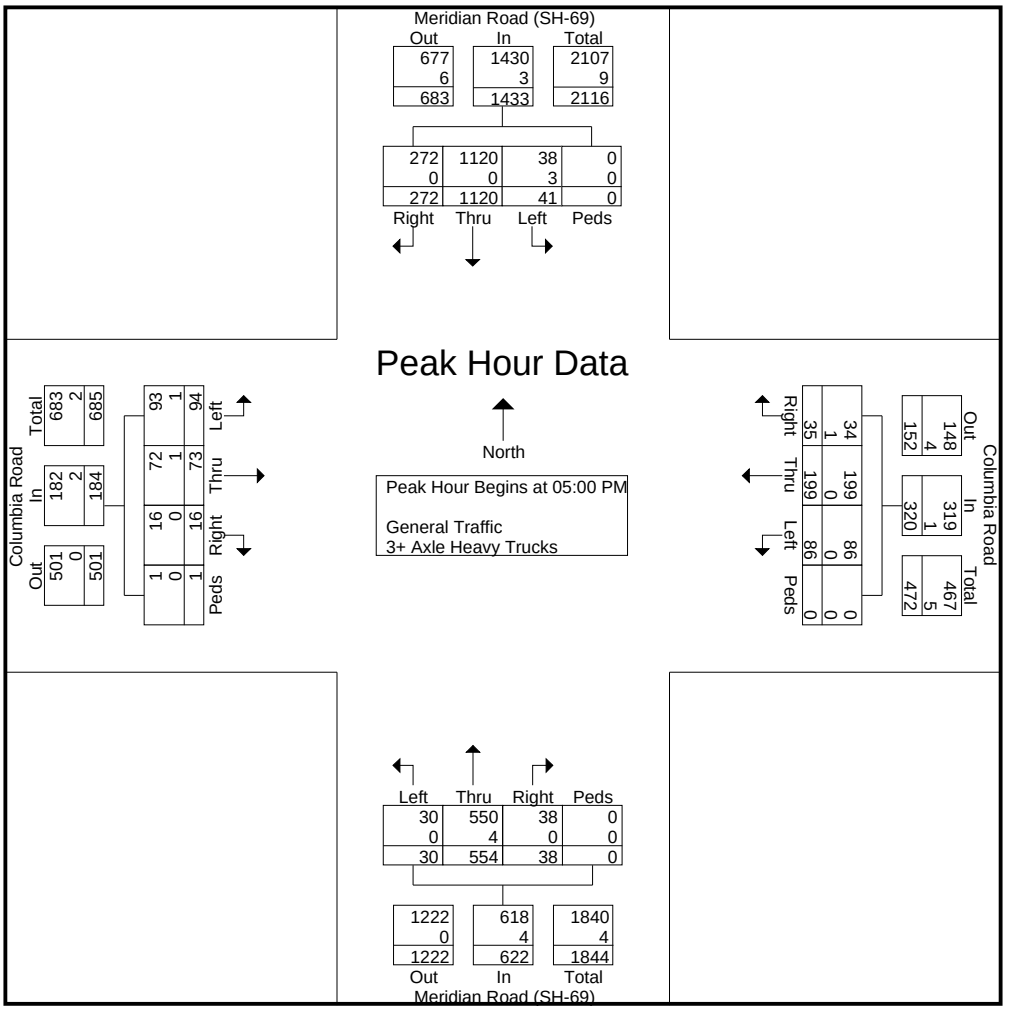
L2 Data Collection

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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



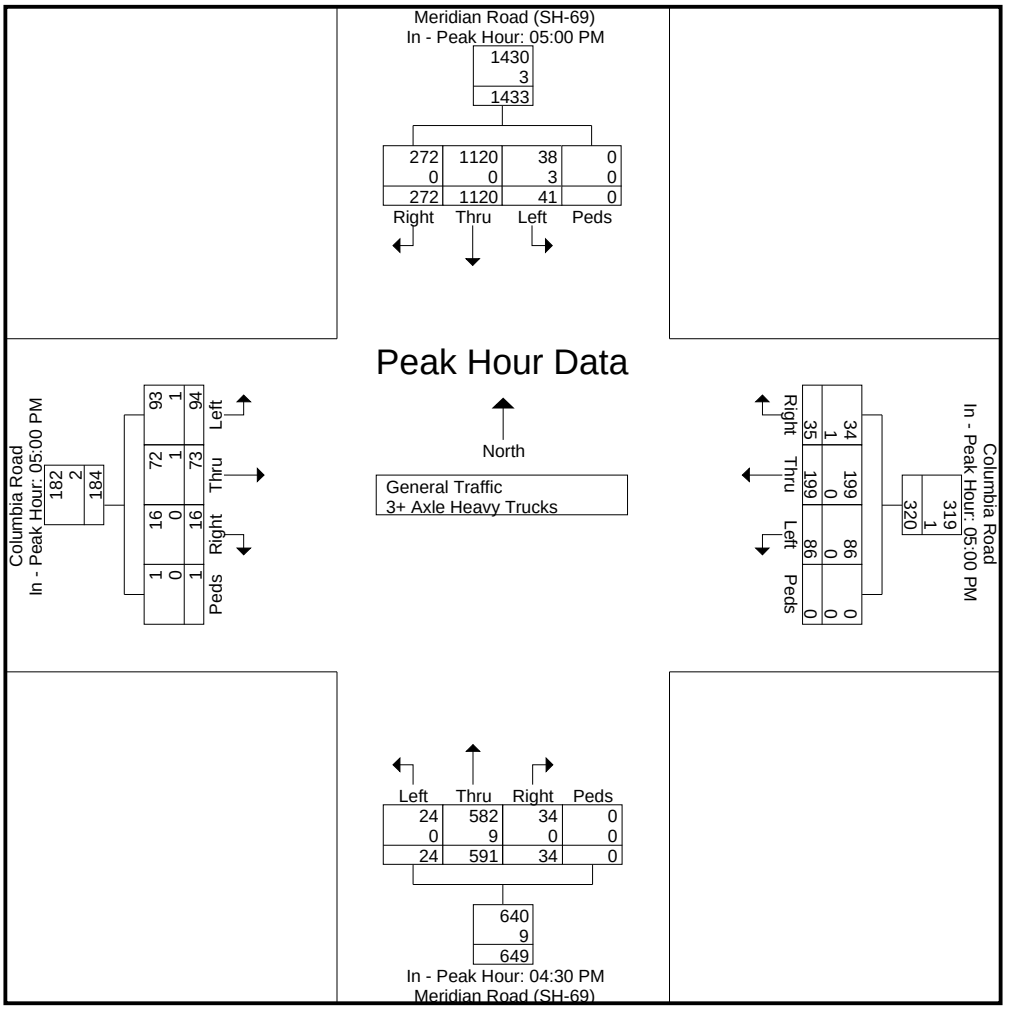
L2 Data Collection

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

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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

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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

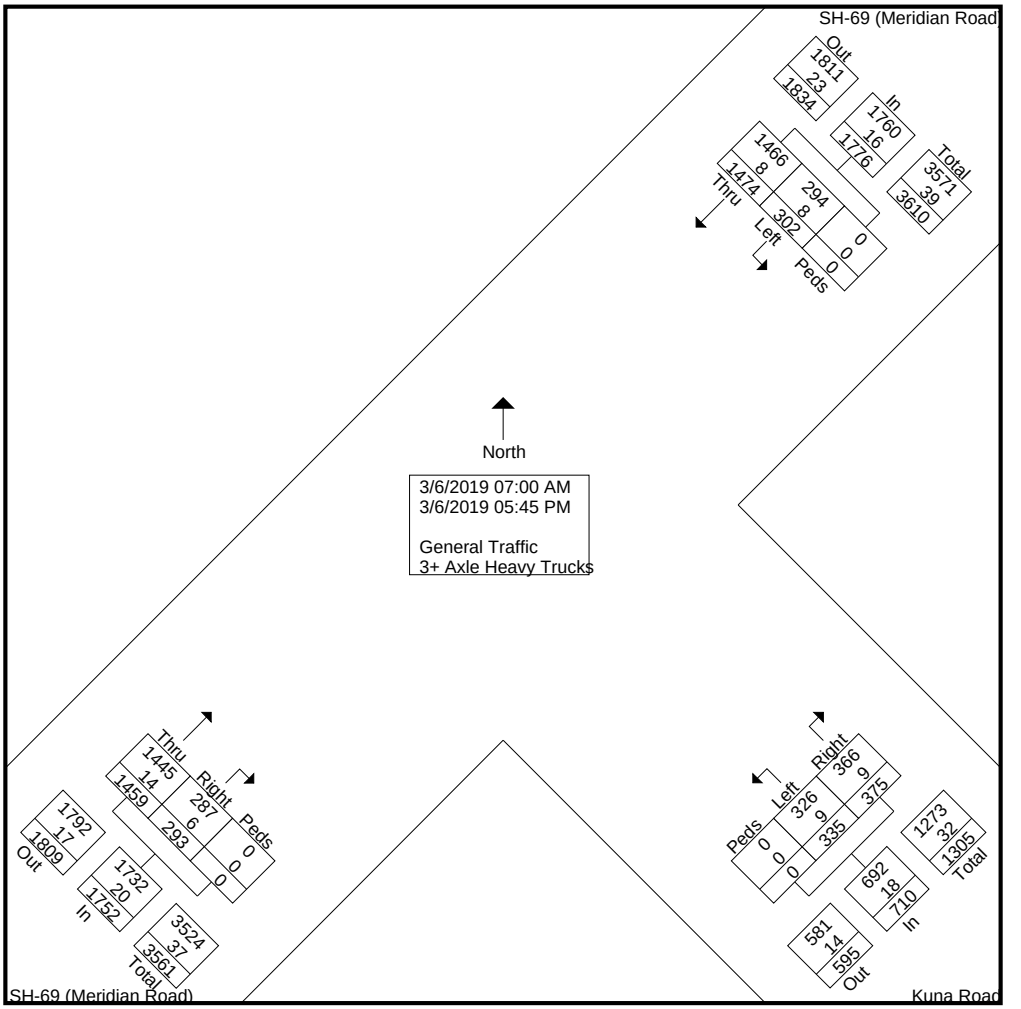
04:00 PM	117	20	0	137	20	24	0	44	15	81	0	96	277
04:15 PM	132	33	0	165	19	33	0	52	12	53	0	65	282
04:30 PM	135	19	0	154	25	26	0	51	15	79	0	94	299
04:45 PM	150	28	0	178	29	35	0	64	19	78	0	97	339
Total	534	100	0	634	93	118	0	211	61	291	0	352	1197
05:00 PM	156	14	0	170	32	30	0	62	24	103	0	127	359
05:15 PM	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
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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



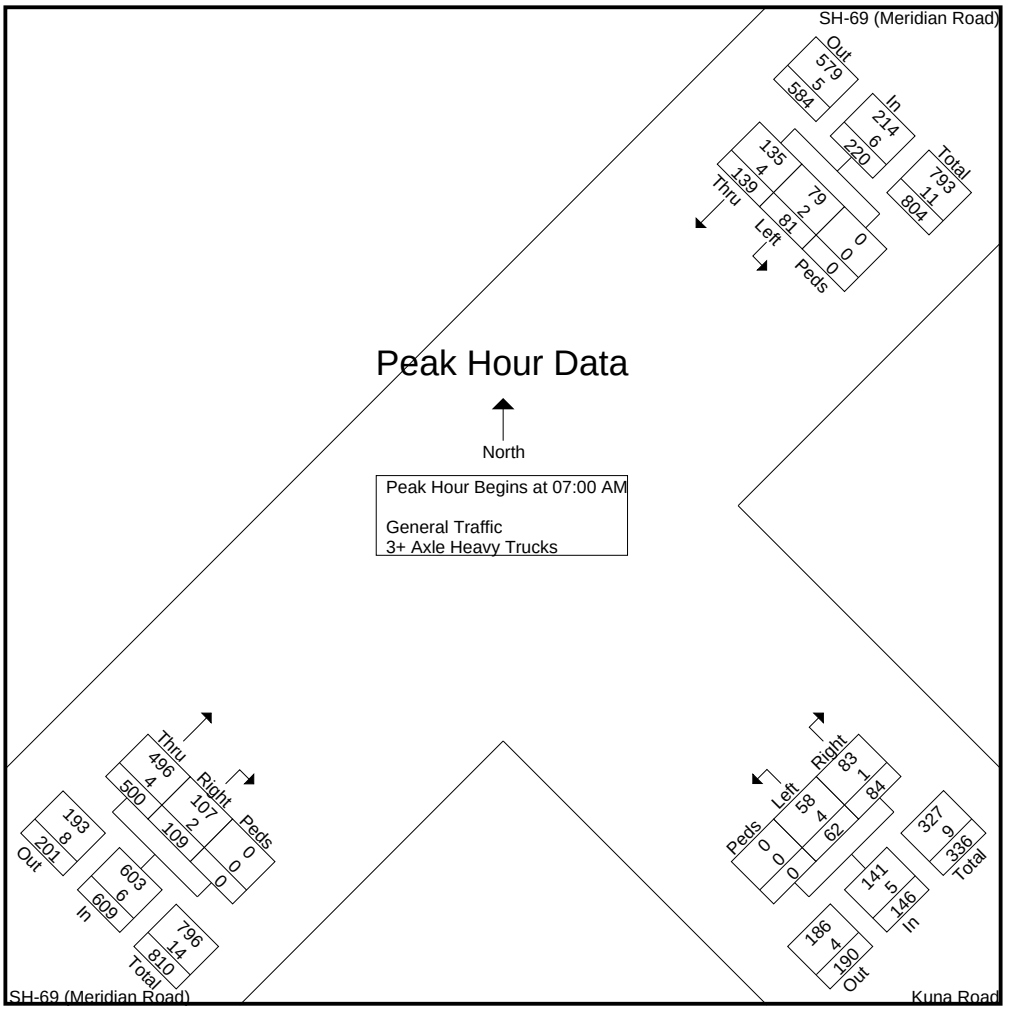
L2 Data Collection

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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



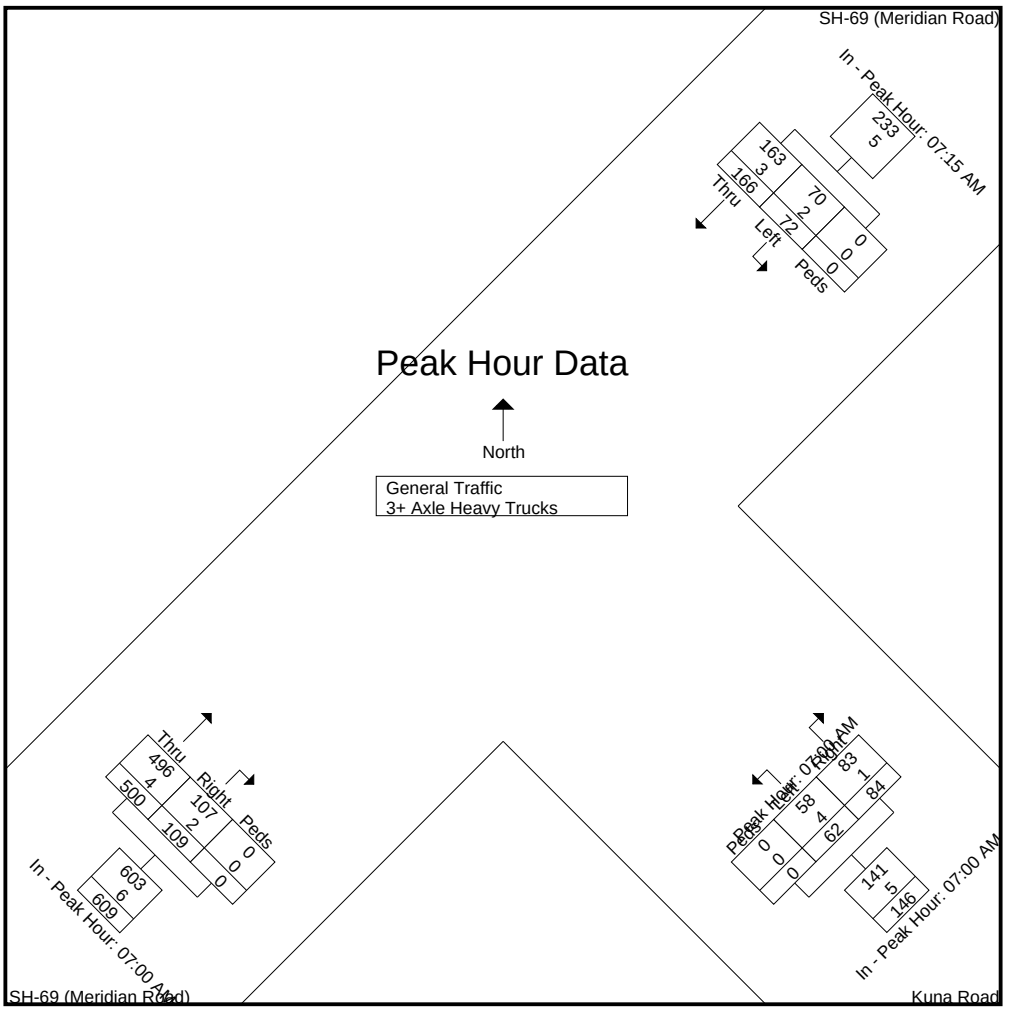
L2 Data Collection

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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	



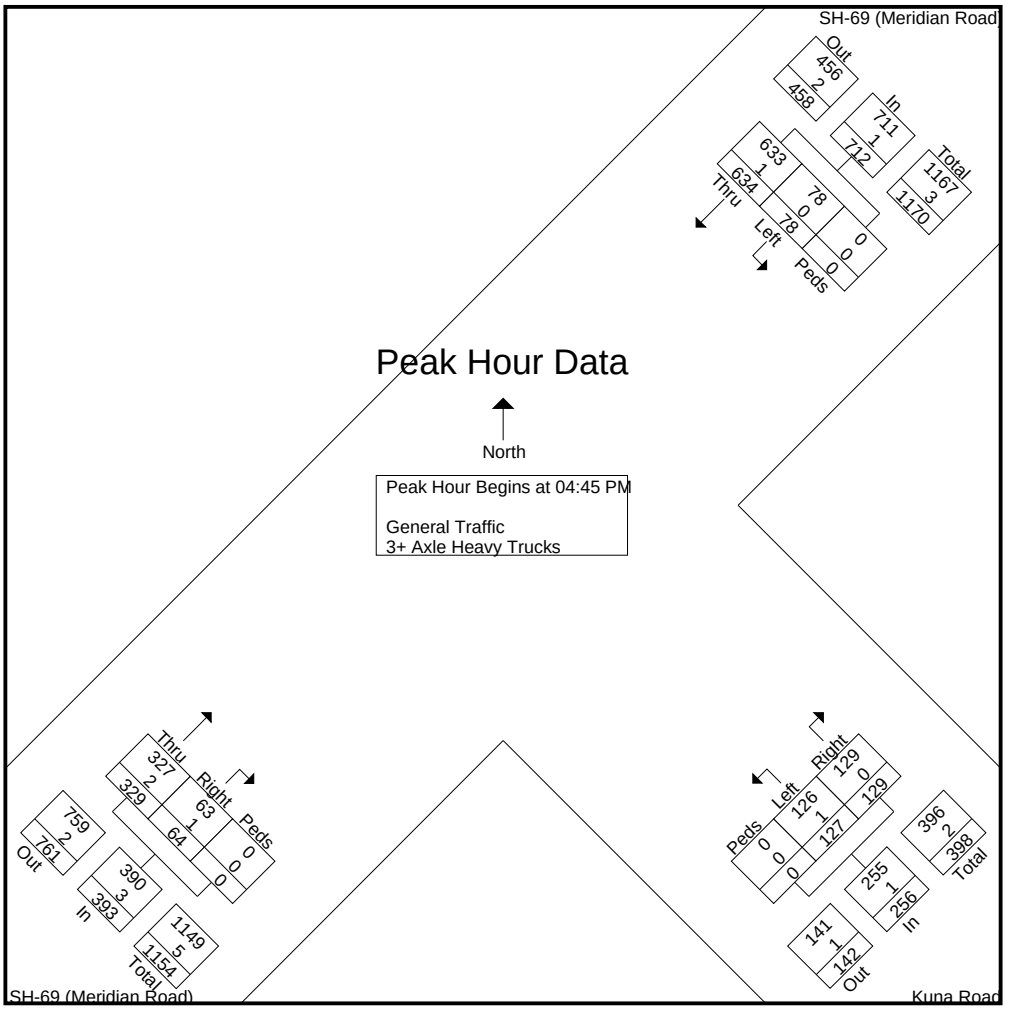
L2 Data Collection

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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



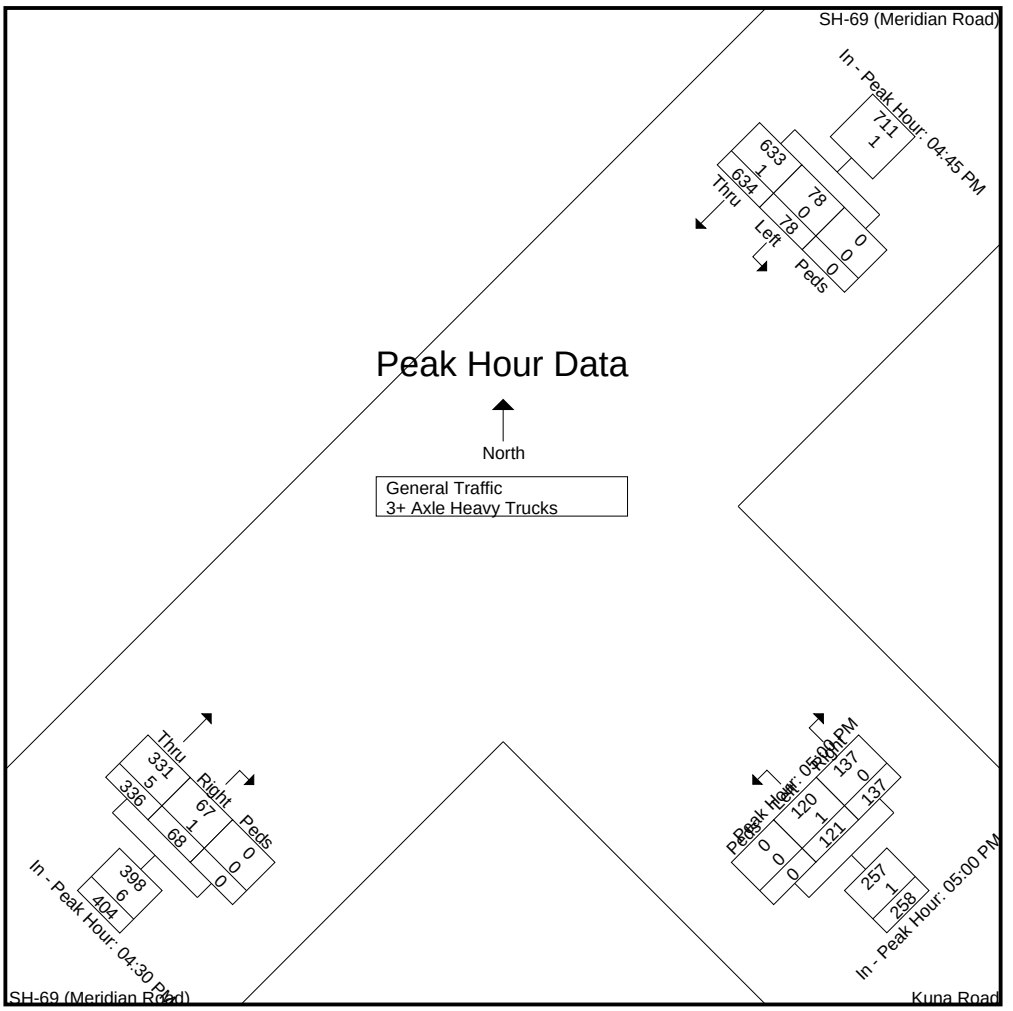
L2 Data Collection

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

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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

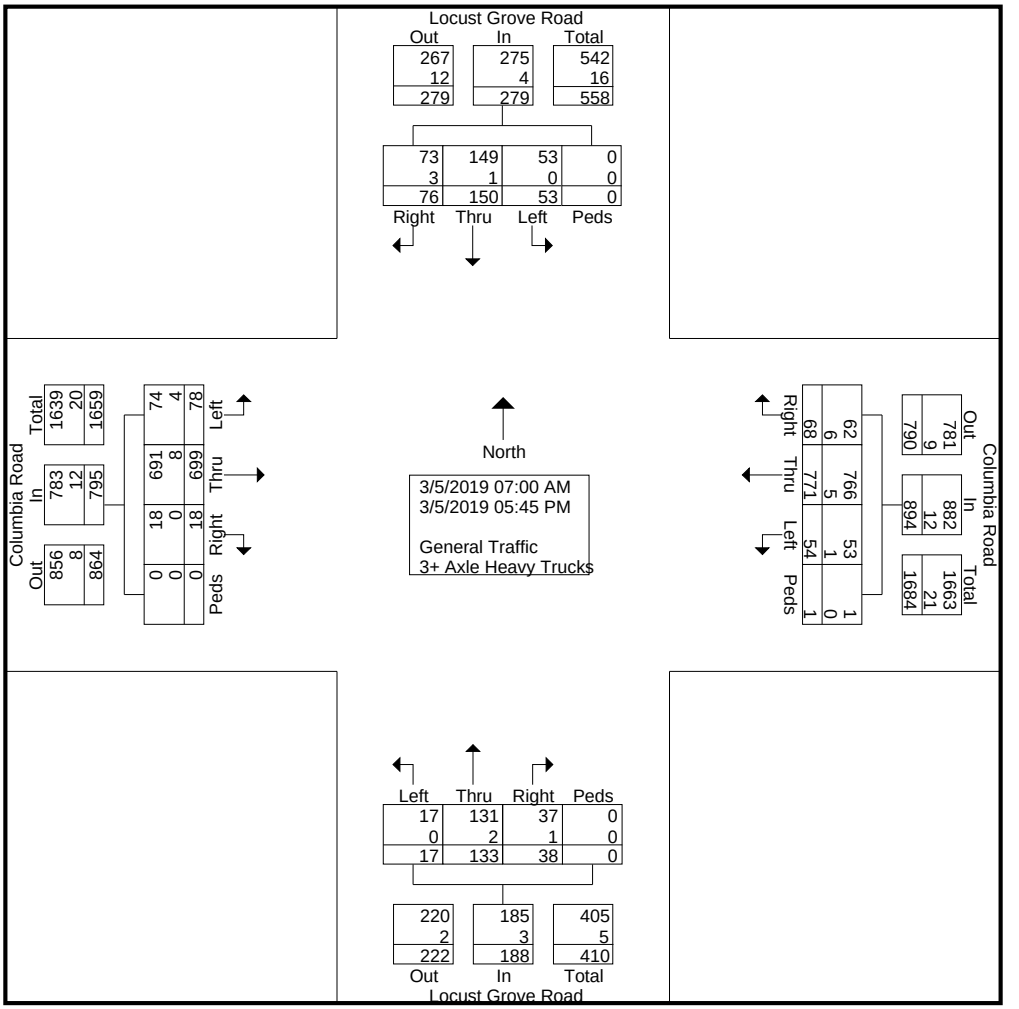
04:00 PM	6	9	5	0	20	8	51	2	1	62	1	4	1	0	6	4	25	2	0	31	119
04:15 PM	6	19	2	0	27	5	59	6	0	70	6	9	1	0	16	0	26	4	0	30	143
04:30 PM	11	15	6	0	32	5	63	8	0	76	1	4	1	0	6	2	26	2	0	30	144
04:45 PM	4	22	7	0	33	1	71	5	0	77	1	5	1	0	7	1	24	3	0	28	145
Total	27	65	20	0	112	19	244	21	1	285	9	22	4	0	35	7	101	11	0	119	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



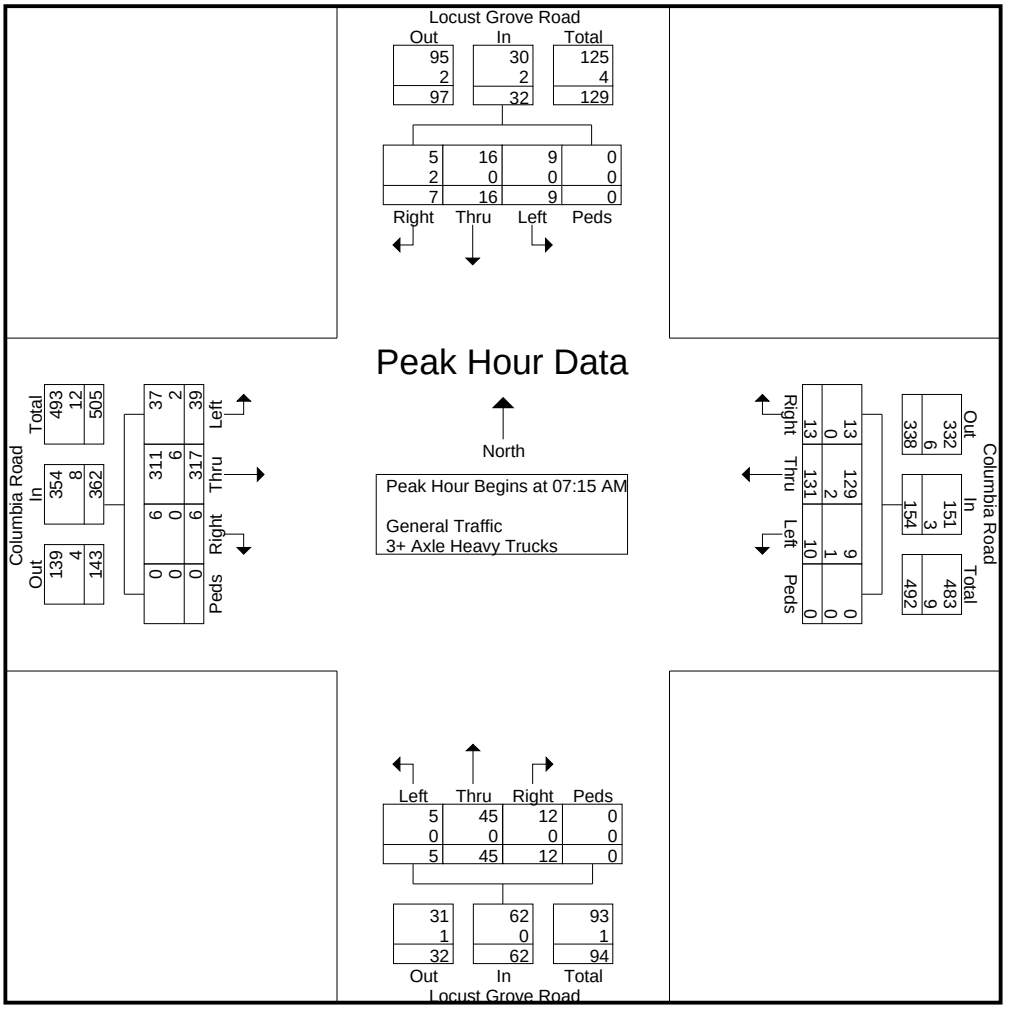
L2 Data Collection

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



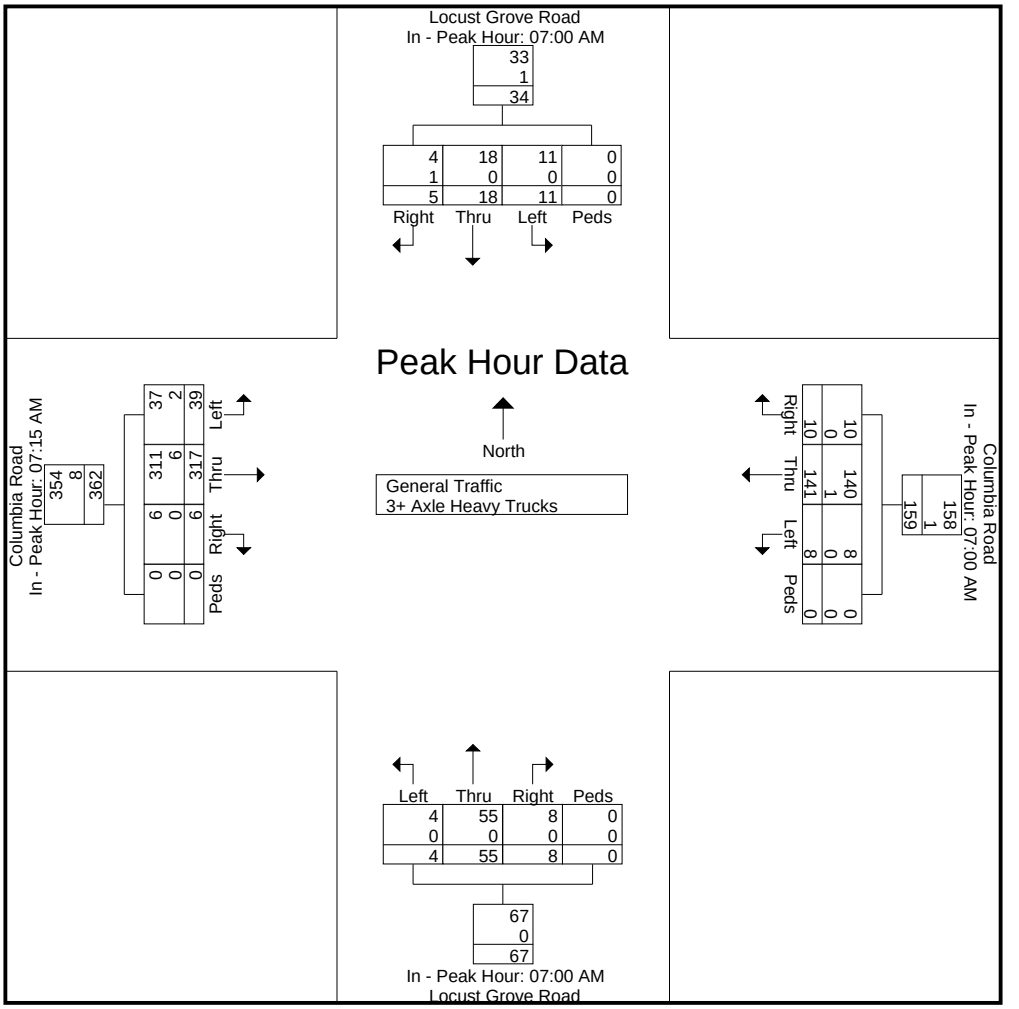
L2 Data Collection

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	



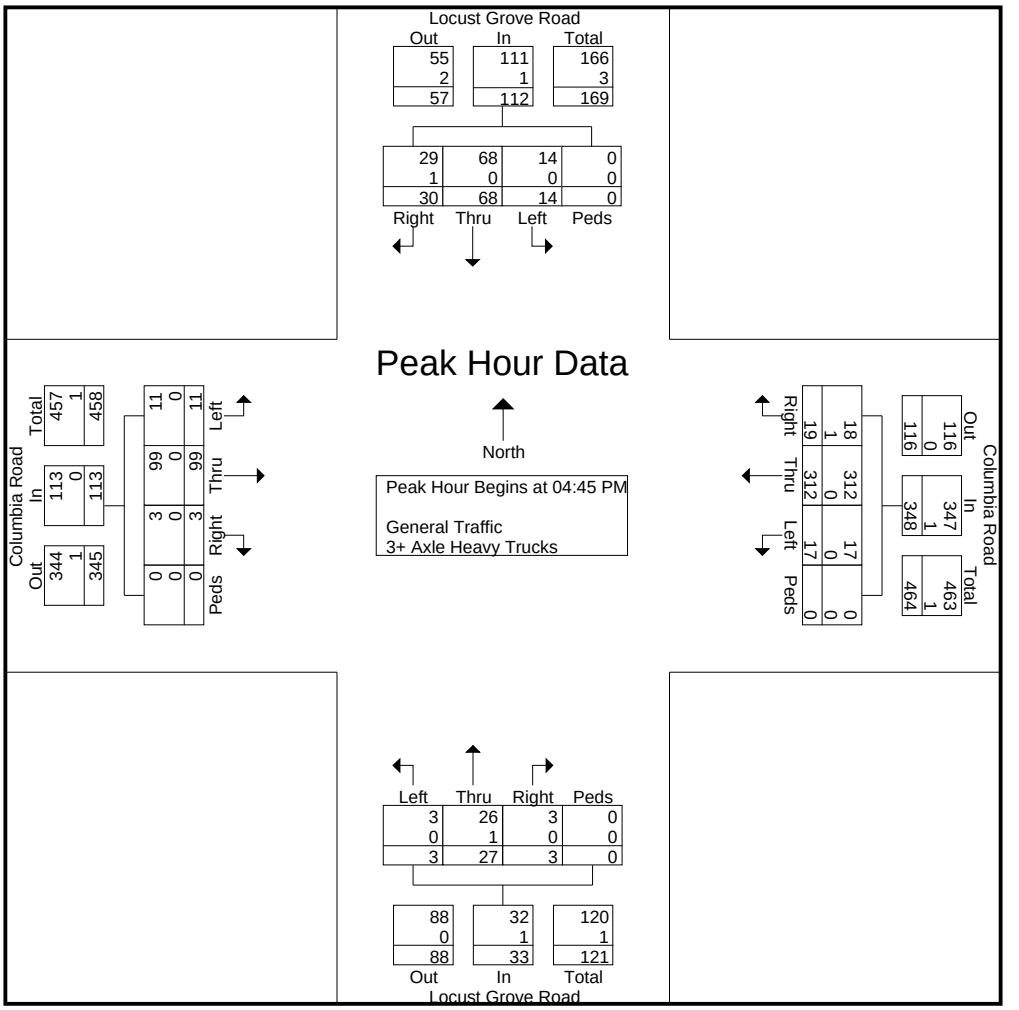
L2 Data Collection

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



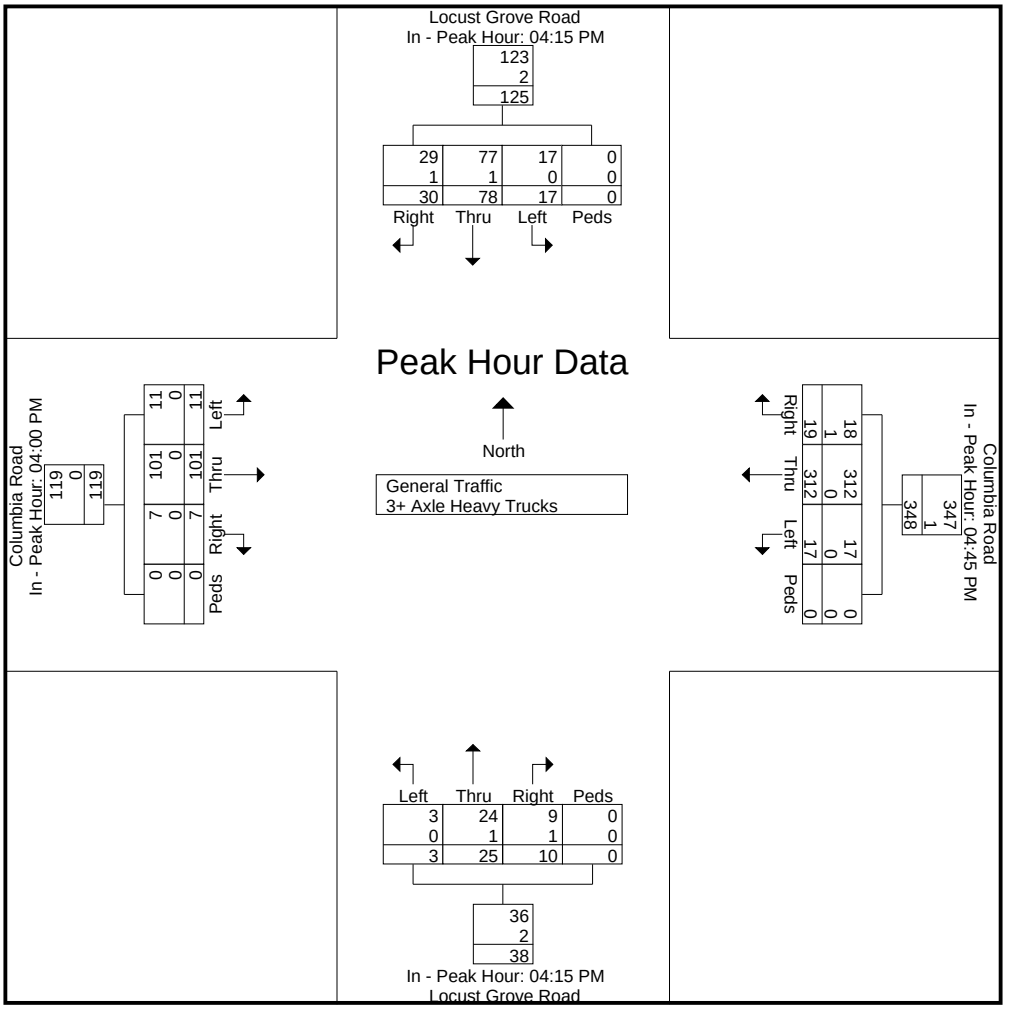
L2 Data Collection

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

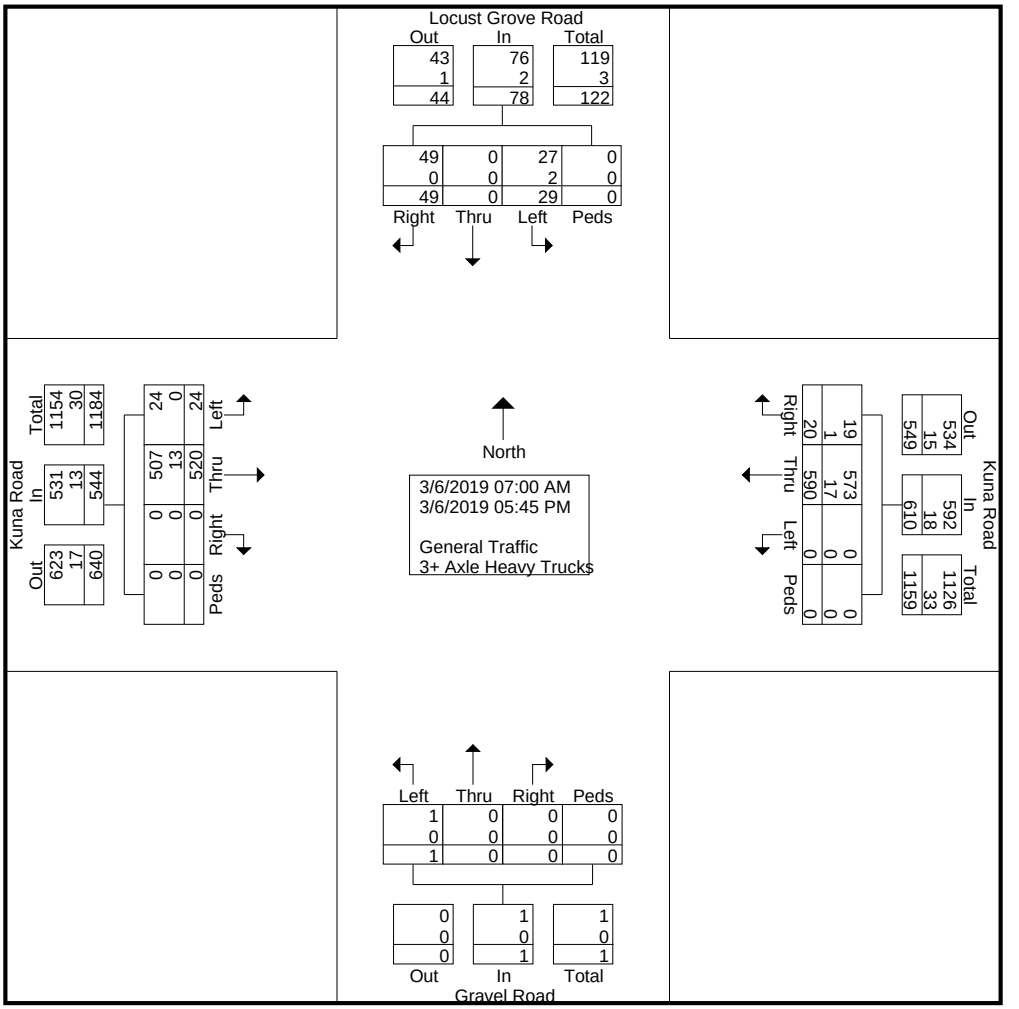
04:00 PM	3	0	3	0	6	4	40	0	0	44	0	0	0	0	0	0	24	2	0	26	76
04:15 PM	7	0	2	0	9	3	45	0	0	48	0	0	0	0	0	0	31	2	0	33	90
04:30 PM	6	0	1	0	7	0	39	0	0	39	0	0	0	0	0	0	30	0	0	30	76
04:45 PM	3	0	0	0	3	1	55	0	0	56	0	0	0	0	0	0	29	1	0	30	89
Total	19	0	6	0	25	8	179	0	0	187	0	0	0	0	0	0	114	5	0	119	331
05:00 PM	7	0	3	0	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



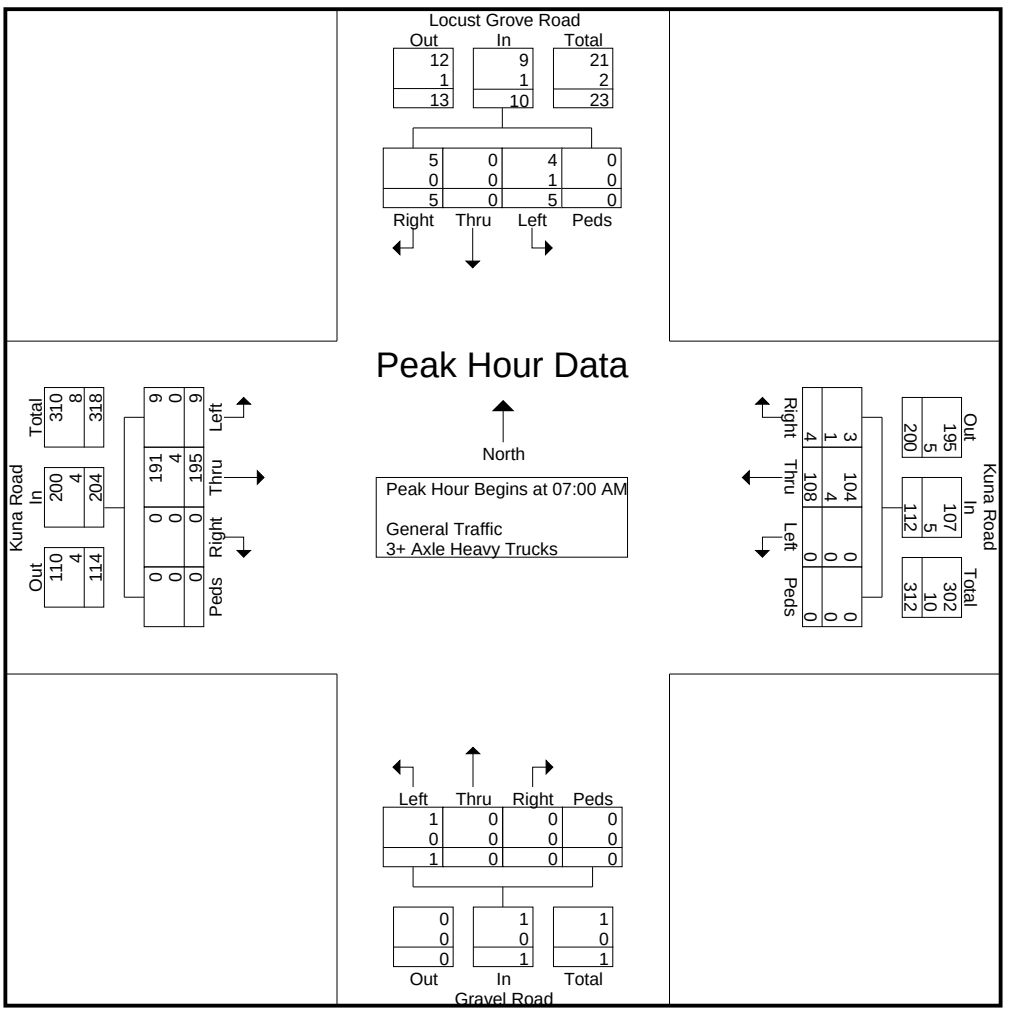
L2 Data Collection

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



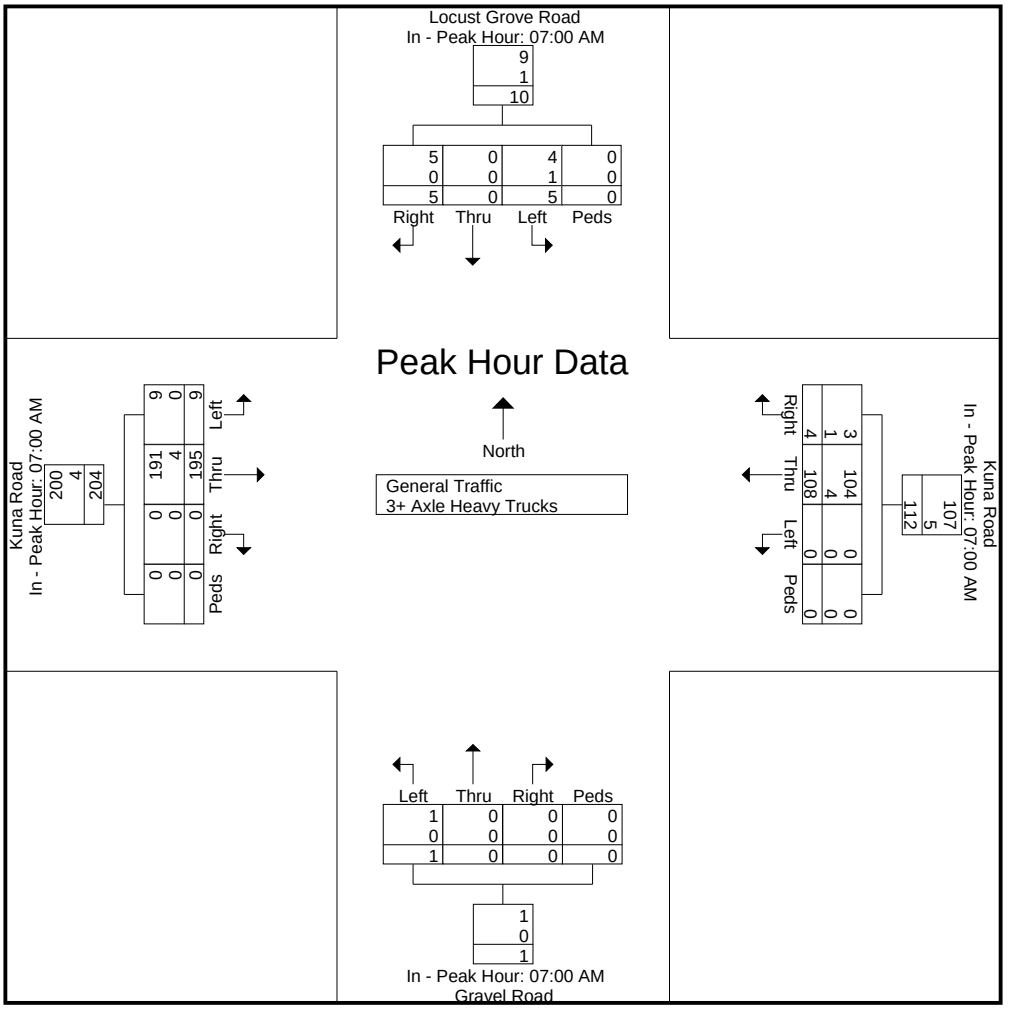
L2 Data Collection

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	



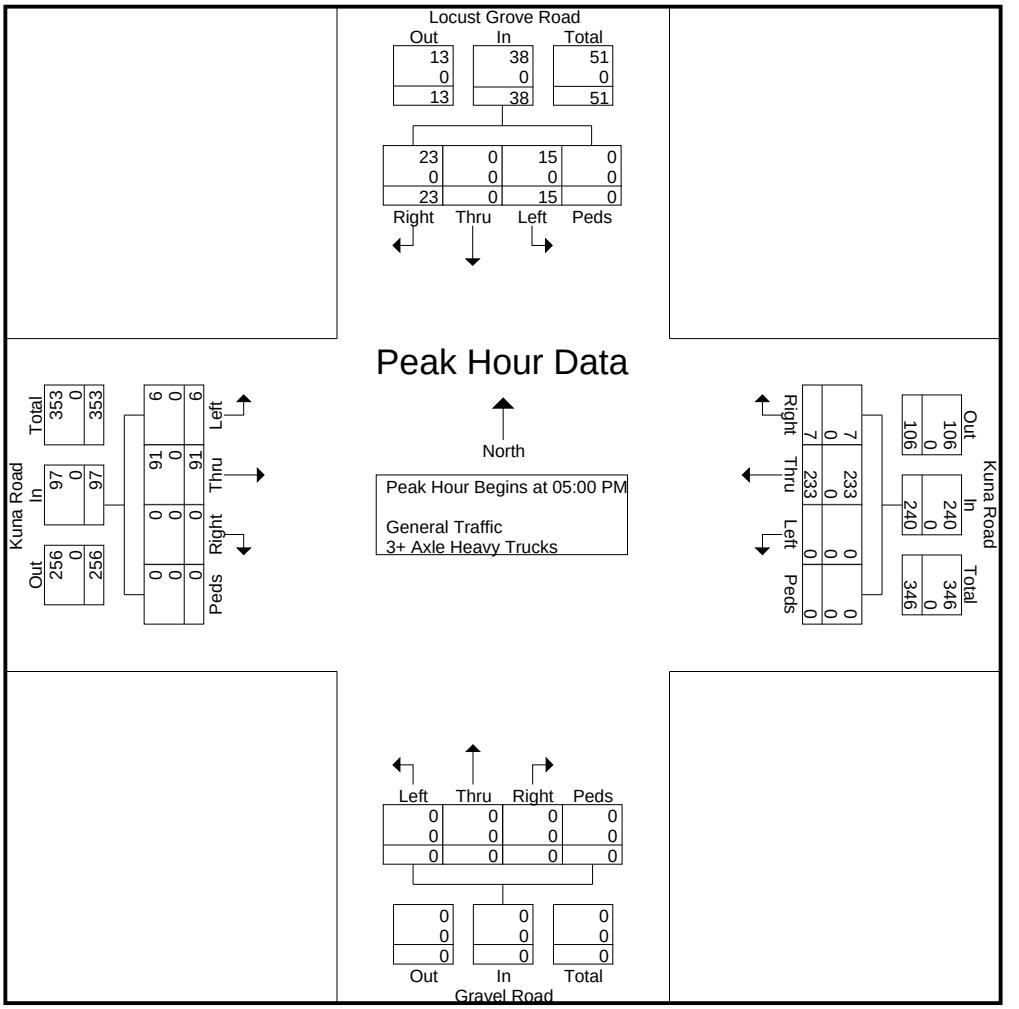
L2 Data Collection

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



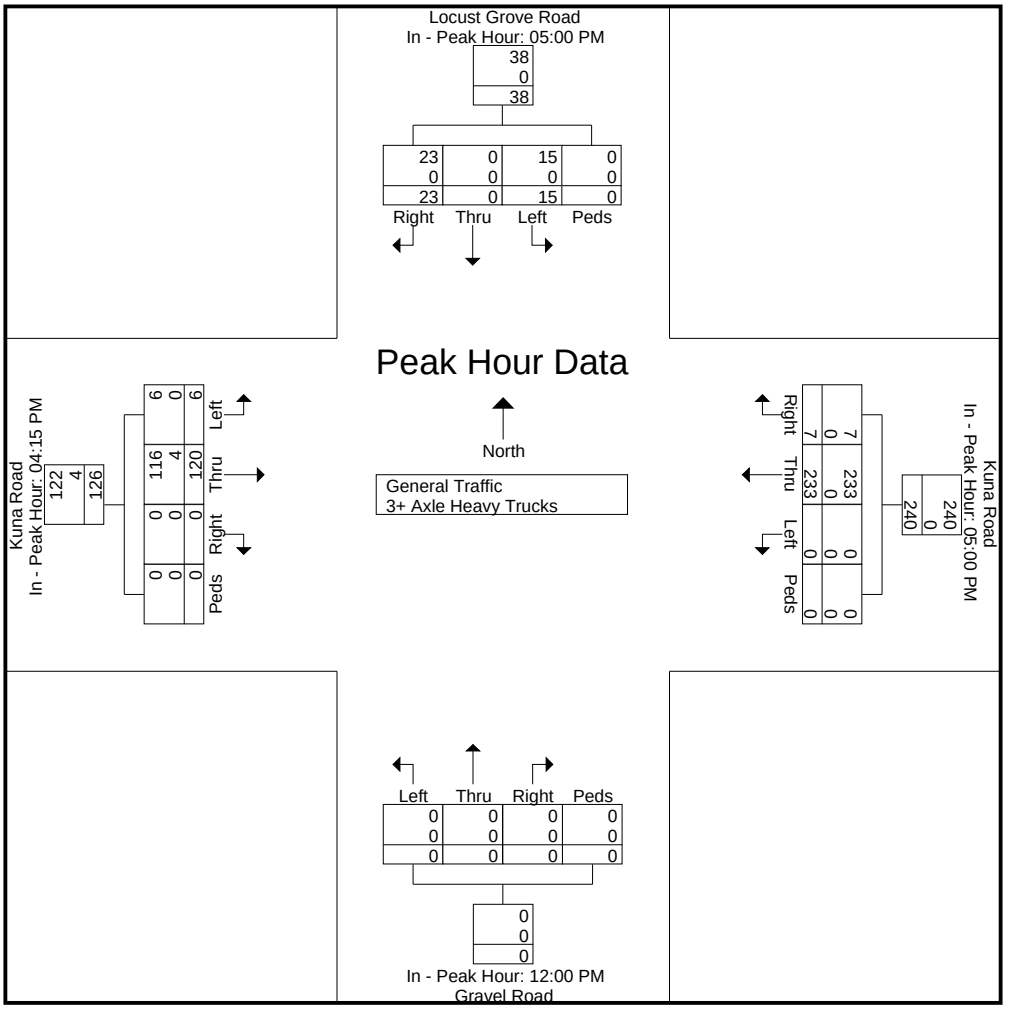
L2 Data Collection

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

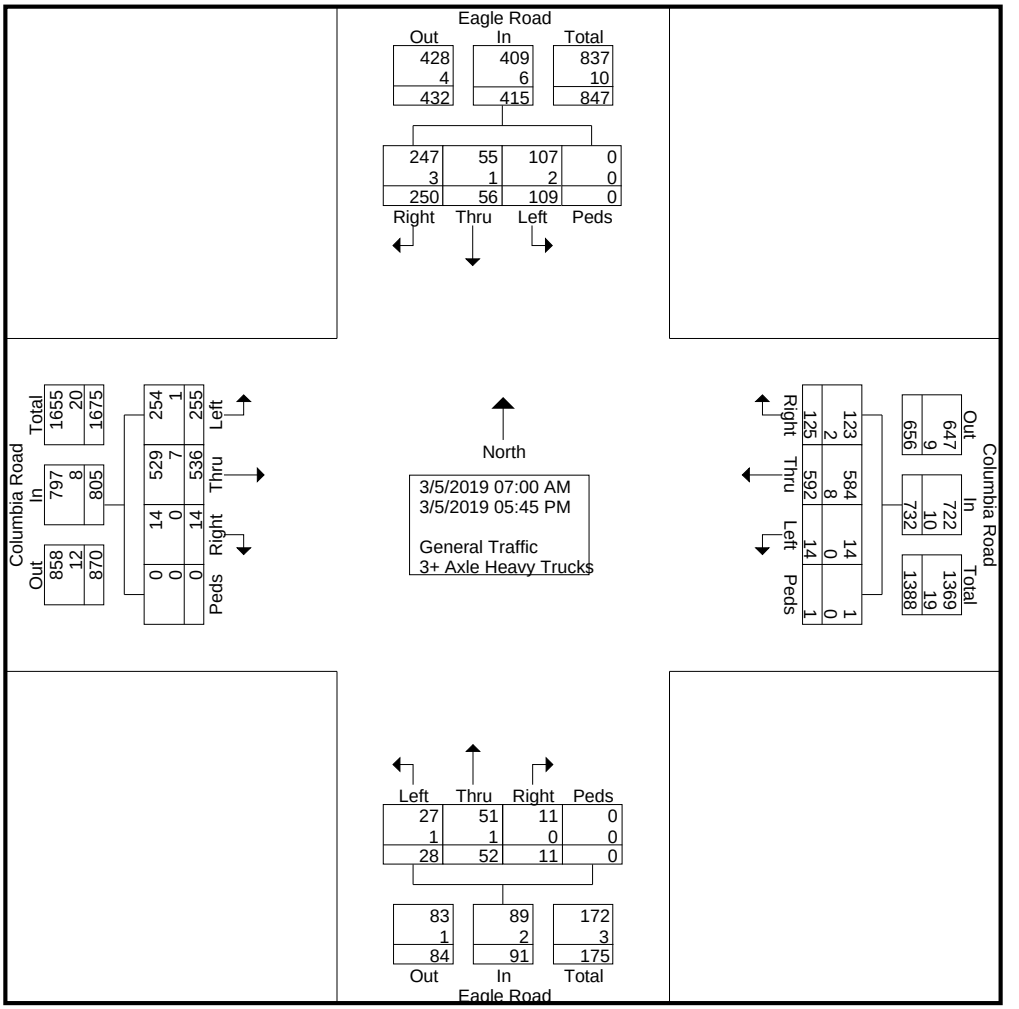
04:00 PM	20	7	9	0	36	9	45	1	0	55	0	2	1	0	3	0	29	4	0	33	127
04:15 PM	21	6	7	0	34	10	41	2	0	53	0	3	1	0	4	1	28	5	0	34	125
04:30 PM	25	3	13	0	41	6	45	3	0	54	0	1	5	0	6	3	25	8	0	36	137
04:45 PM	23	4	15	0	42	8	49	1	1	59	1	1	2	0	4	0	23	8	0	31	136
Total	89	20	44	0	153	33	180	7	1	221	1	7	9	0	17	4	105	25	0	134	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



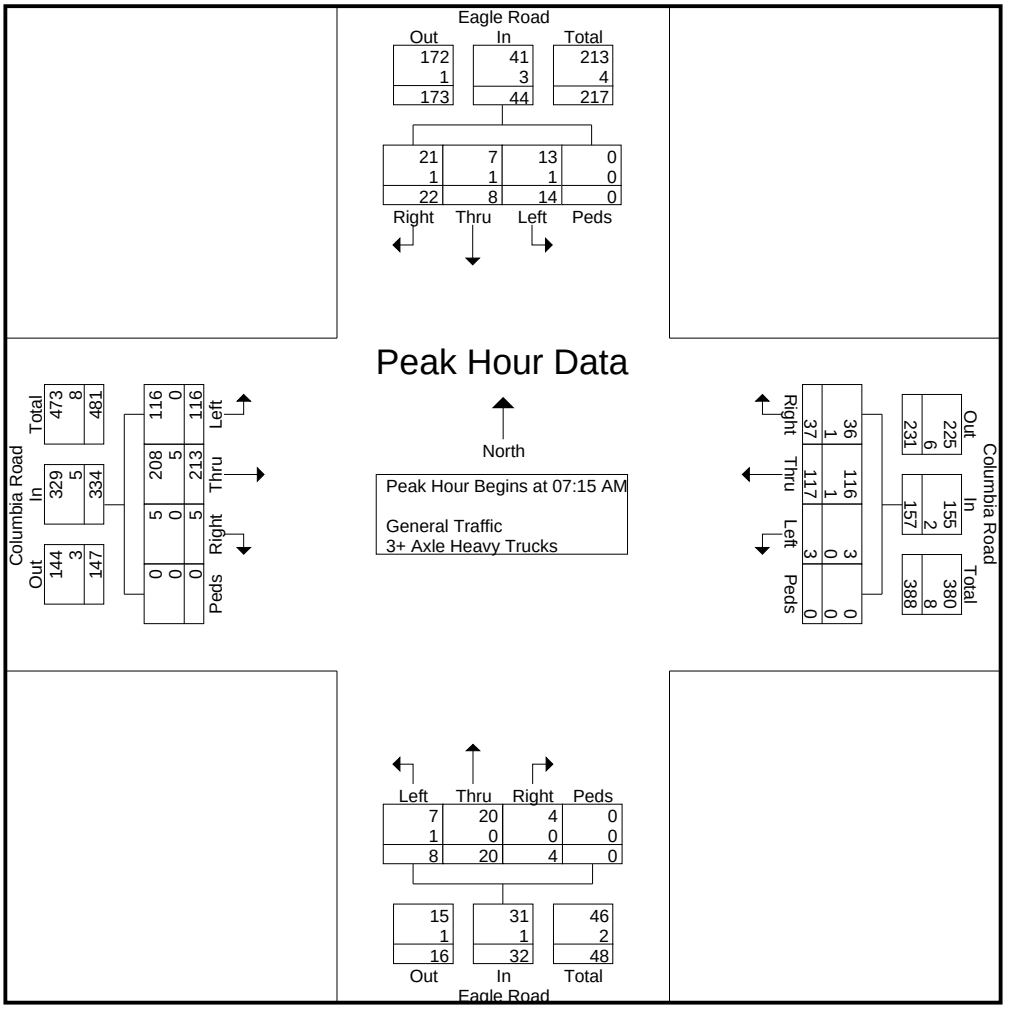
L2 Data Collection

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



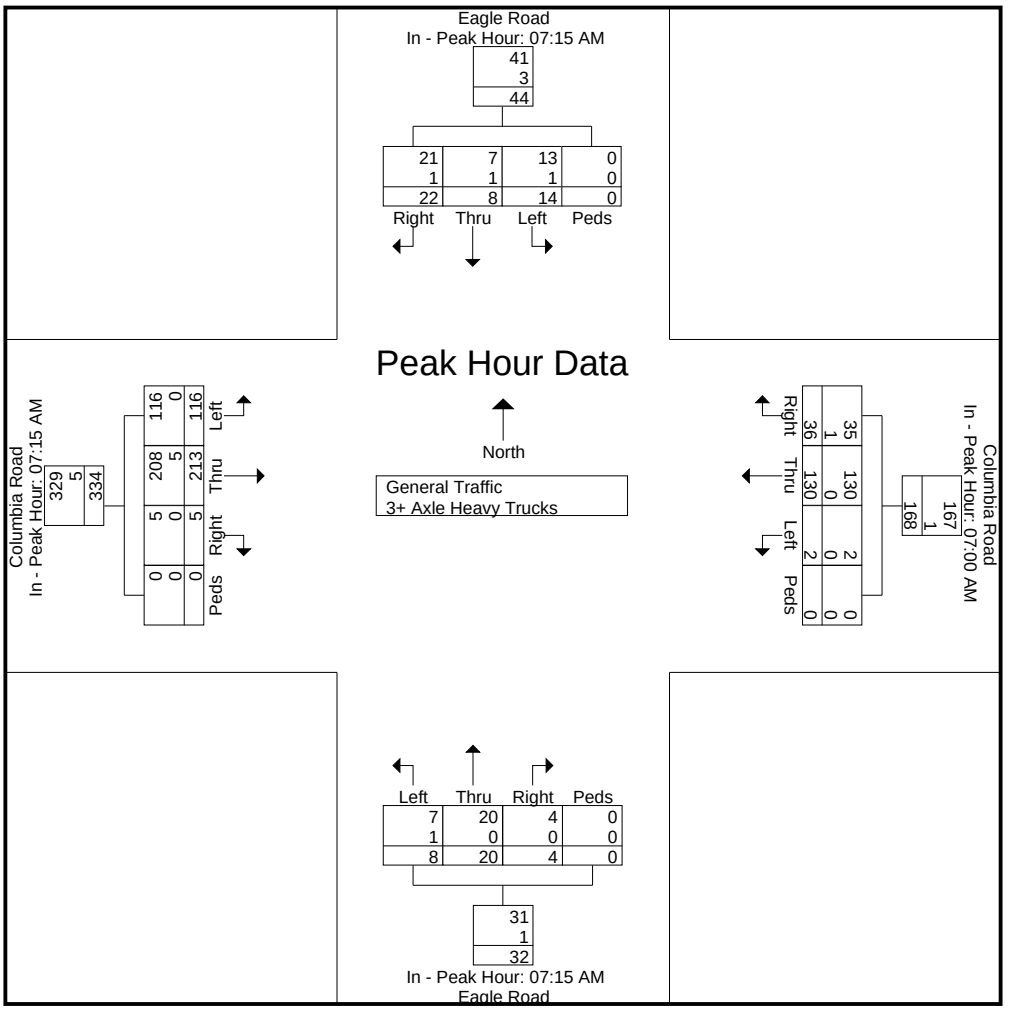
L2 Data Collection

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	



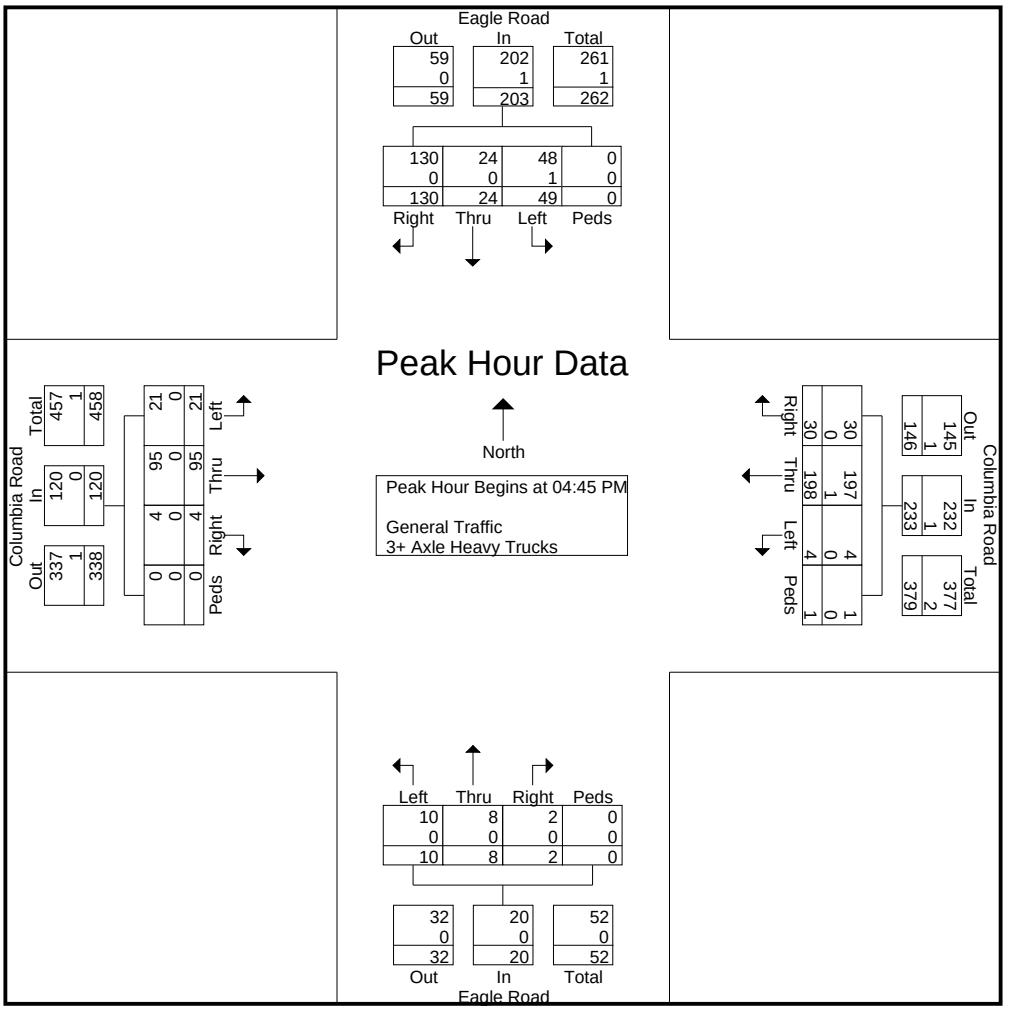
L2 Data Collection

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



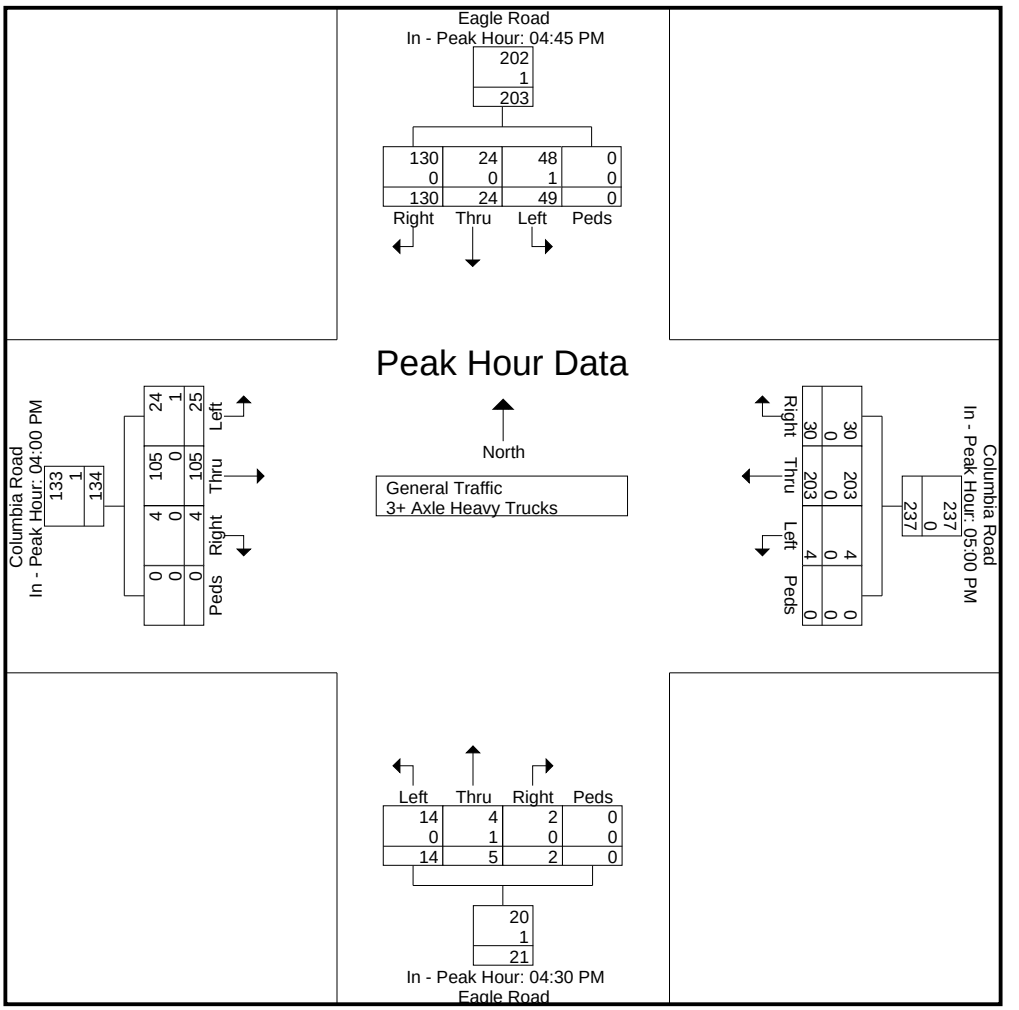
L2 Data Collection

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

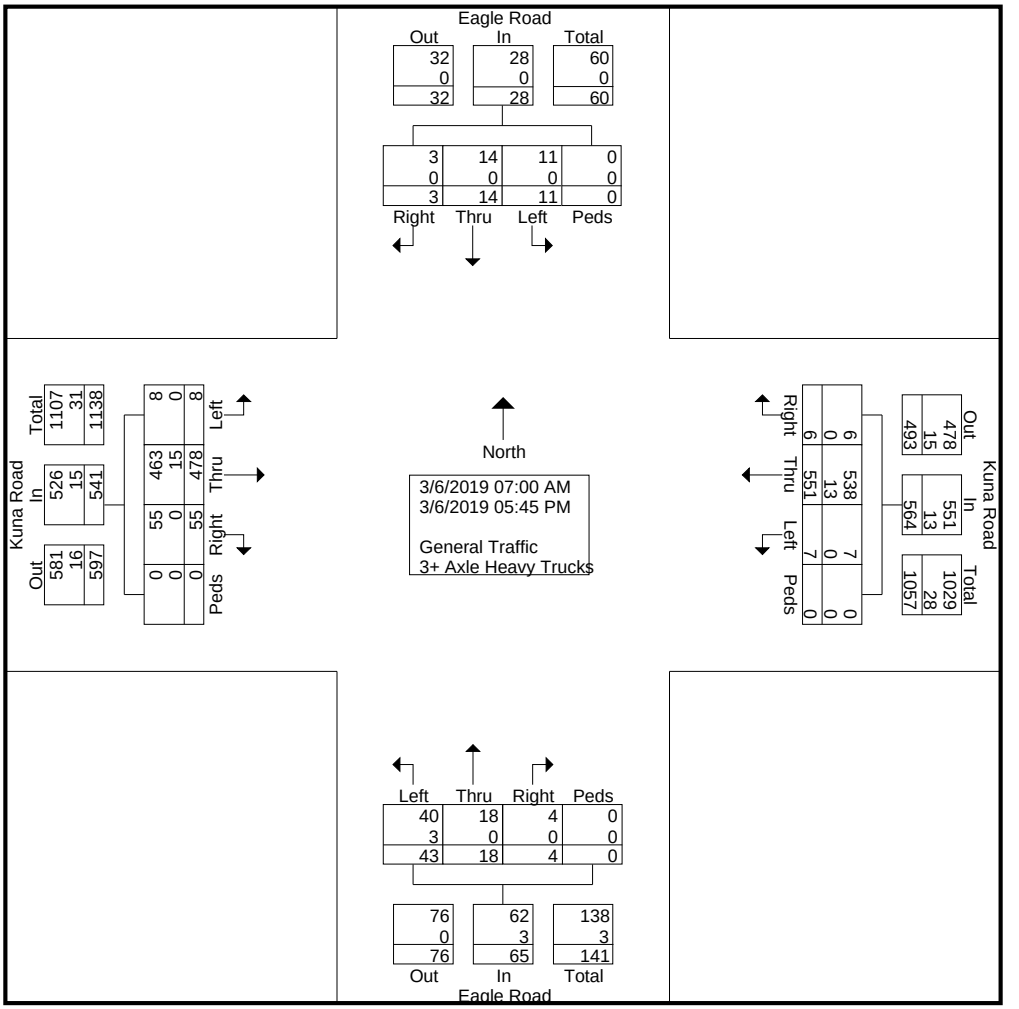
04:00 PM	1	1	0	0	2	0	33	1	0	34	0	0	3	0	3	1	24	1	0	26	65
04:15 PM	1	2	3	0	6	2	39	0	0	41	1	1	7	0	9	4	27	2	0	33	89
04:30 PM	0	0	0	0	0	0	37	0	0	37	0	1	3	0	4	2	25	0	0	27	68
04:45 PM	0	3	1	0	4	1	50	0	0	51	0	1	6	0	7	4	27	0	0	31	93
Total	2	6	4	0	12	3	159	1	0	163	1	3	19	0	23	11	103	3	0	117	315
05:00 PM	0	2	1	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



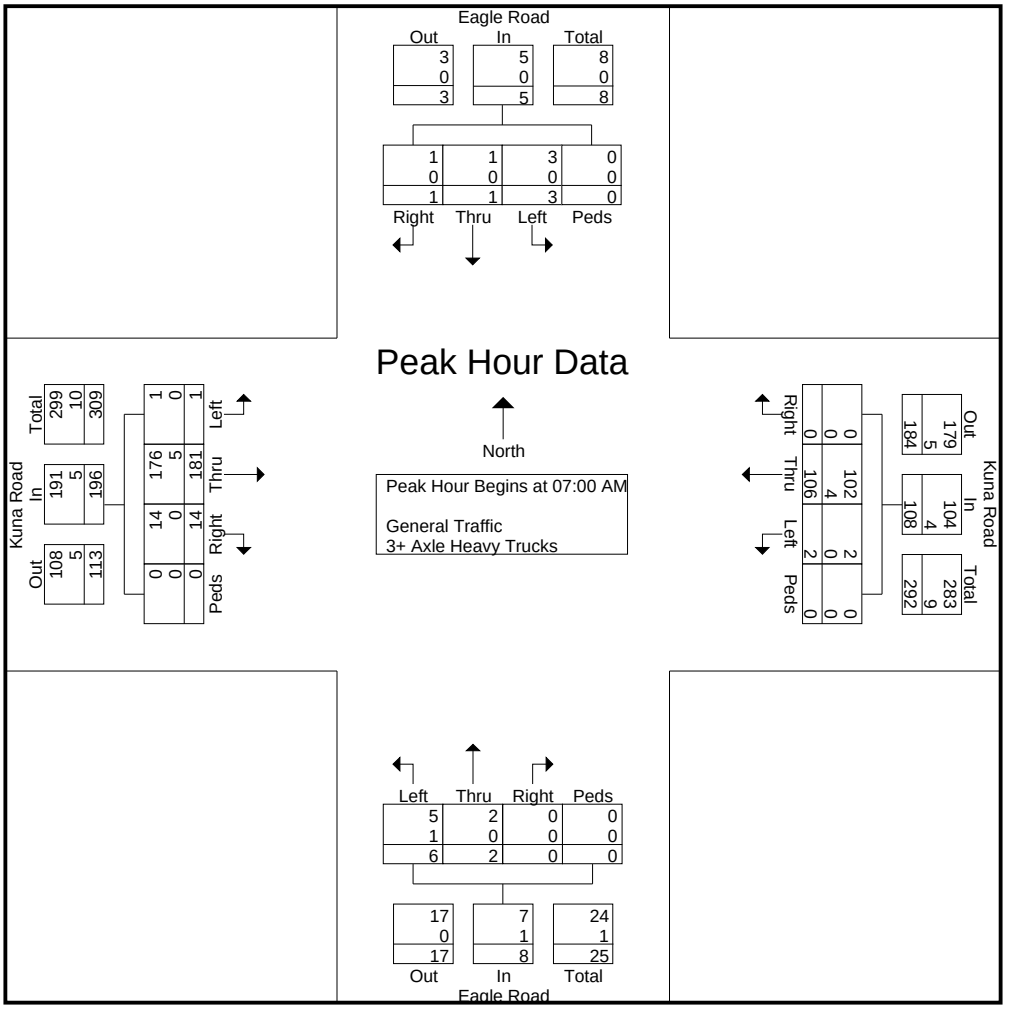
L2 Data Collection

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



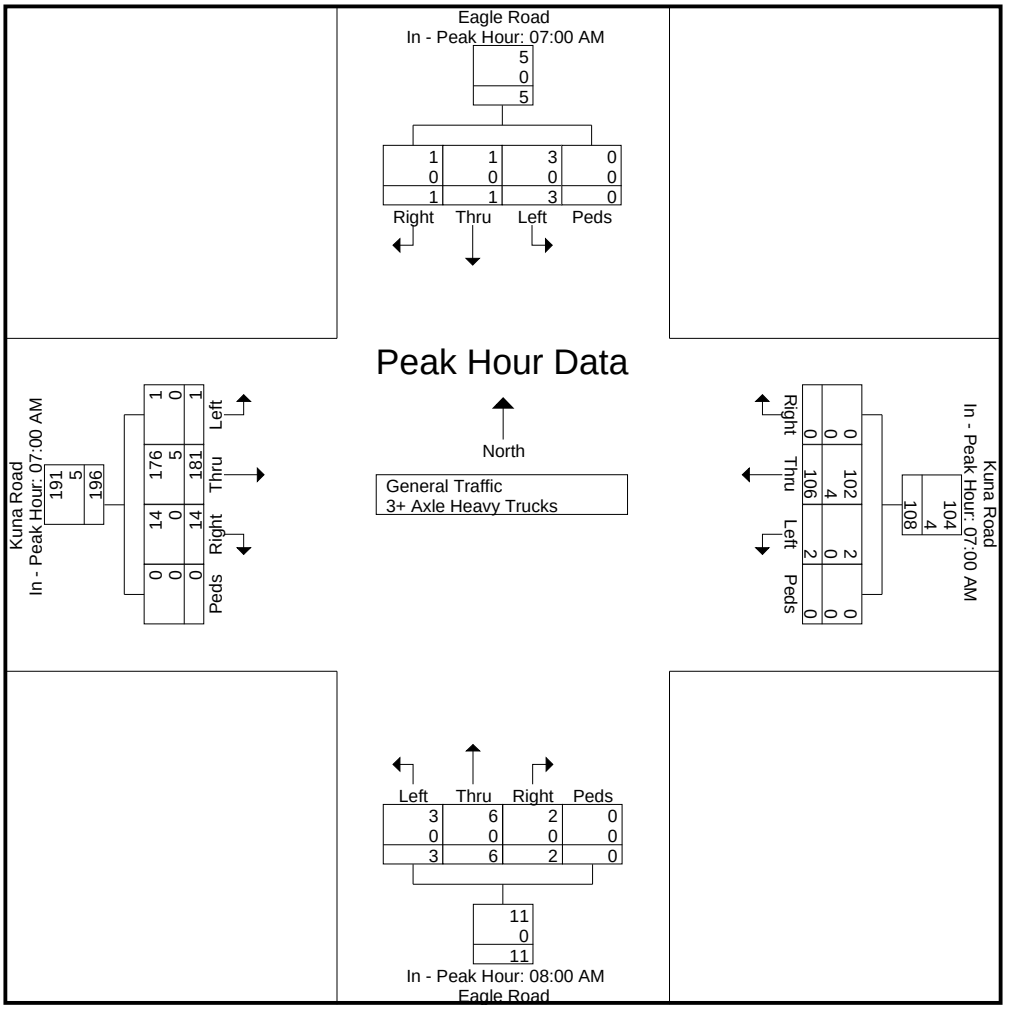
L2 Data Collection

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	



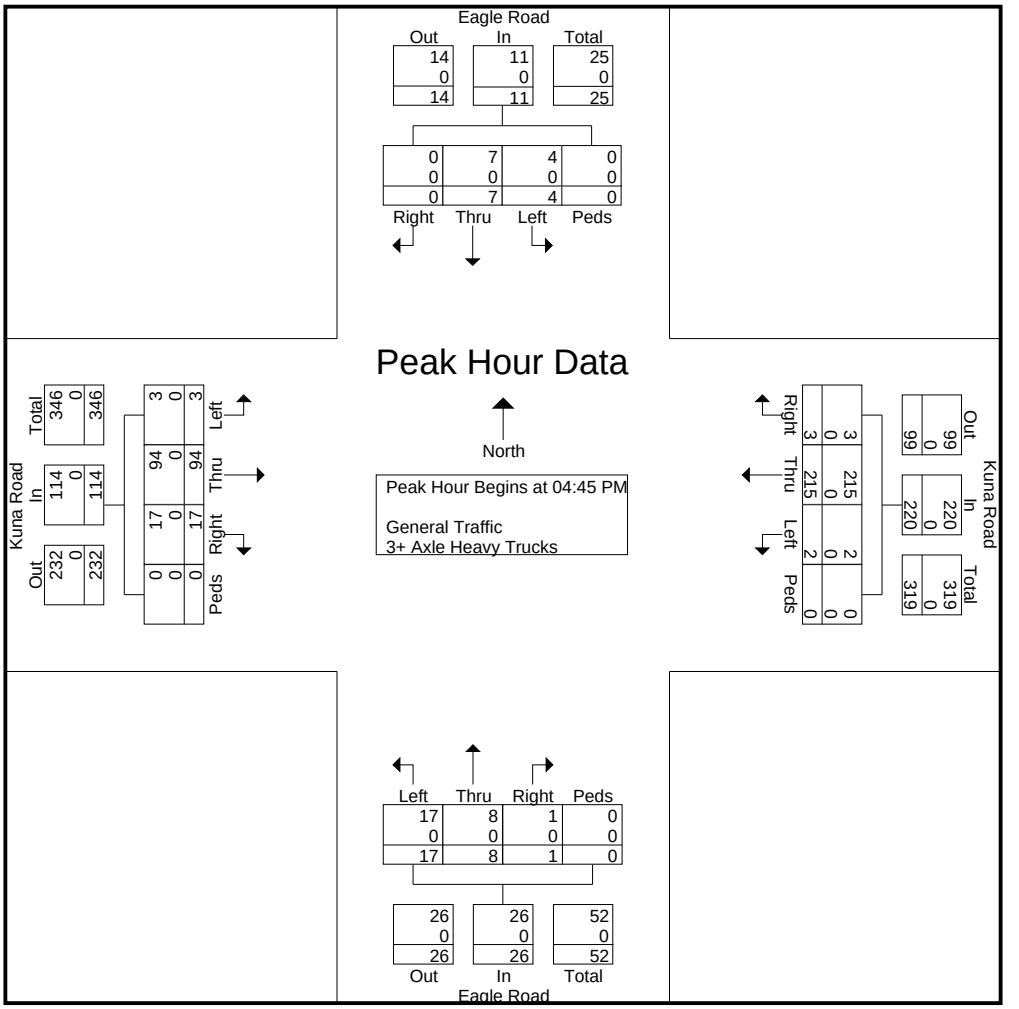
L2 Data Collection

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



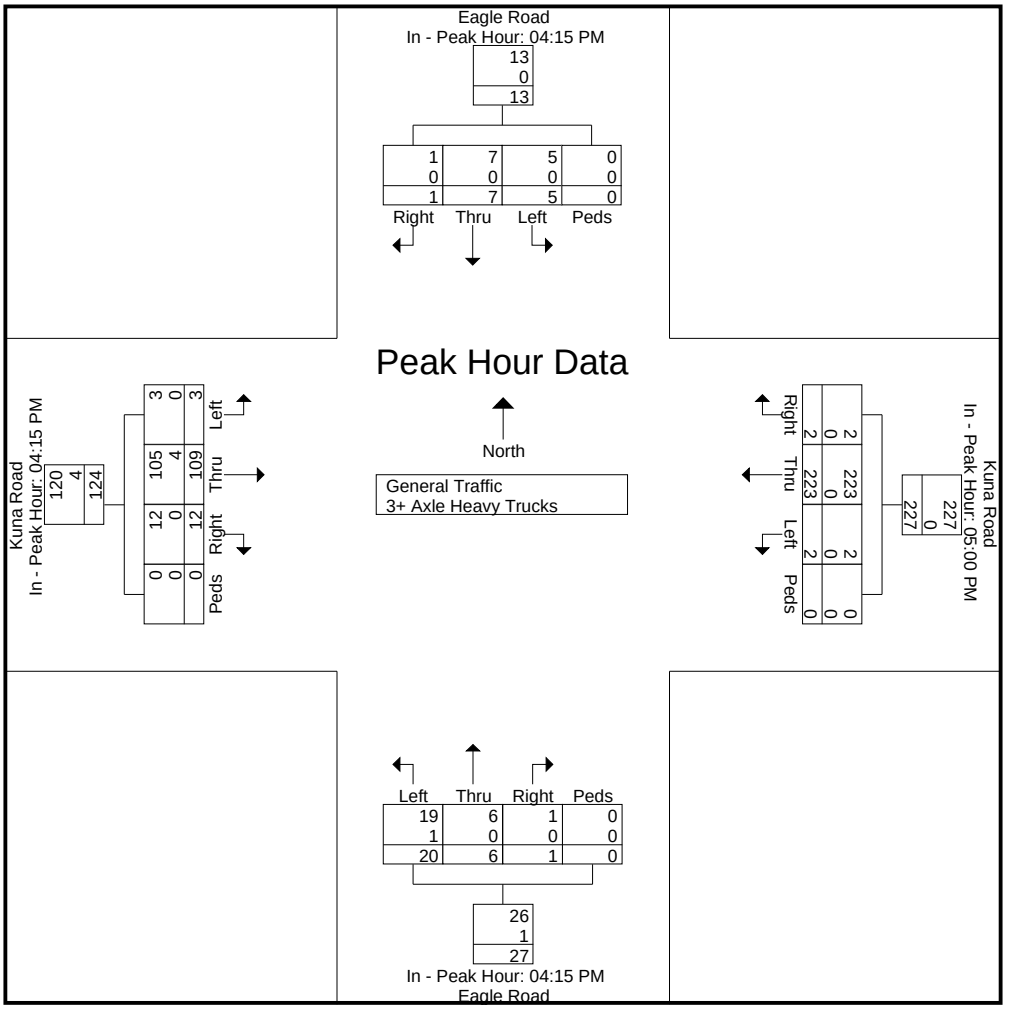
L2 Data Collection

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

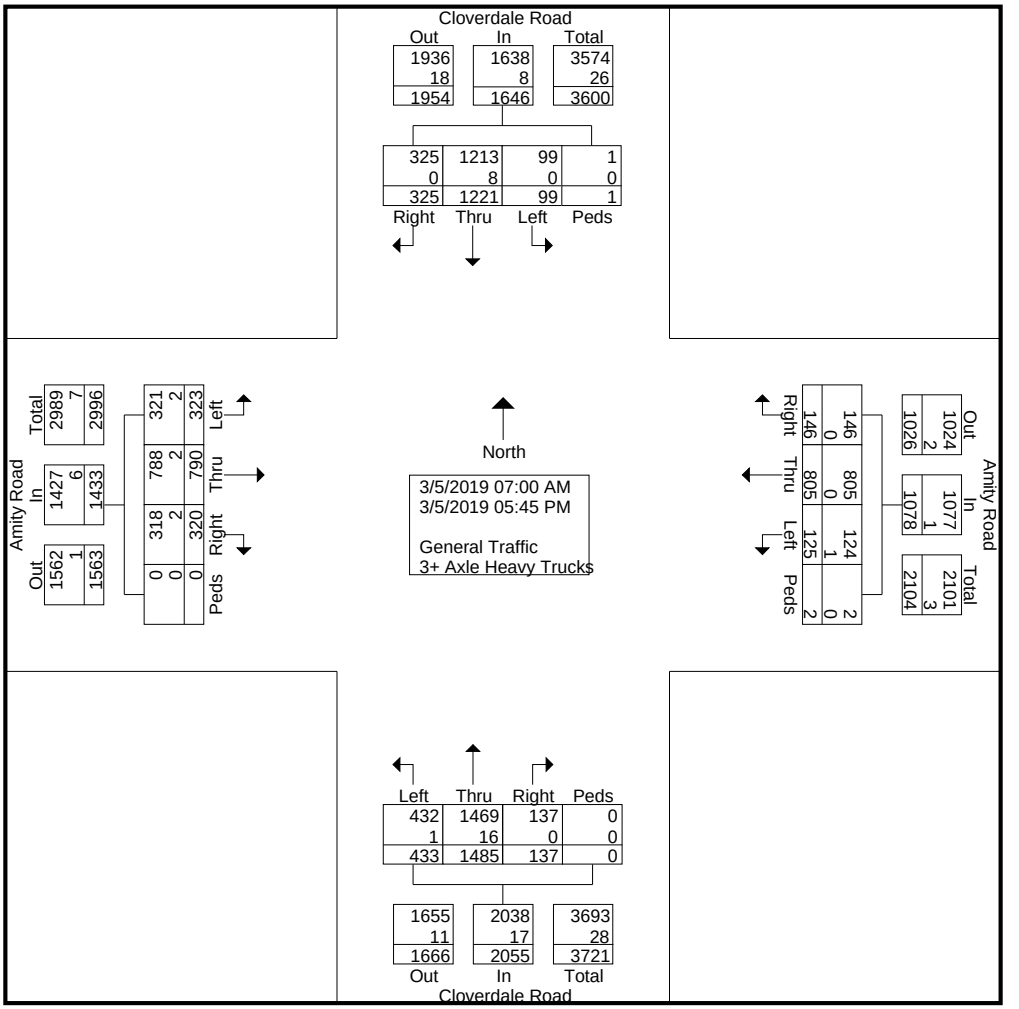
04:00 PM	13	88	8	0	109	5	52	9	0	66	7	68	27	0	102	17	55	28	0	100	377
04:15 PM	33	99	6	0	138	3	56	4	2	65	12	42	20	0	74	25	54	16	0	95	372
04:30 PM	19	119	8	0	146	2	51	12	0	65	6	55	33	0	94	25	37	11	0	73	378
04:45 PM	32	138	11	0	181	6	58	13	0	77	5	62	23	0	90	27	56	12	0	95	443
Total	97	444	33	0	574	16	217	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



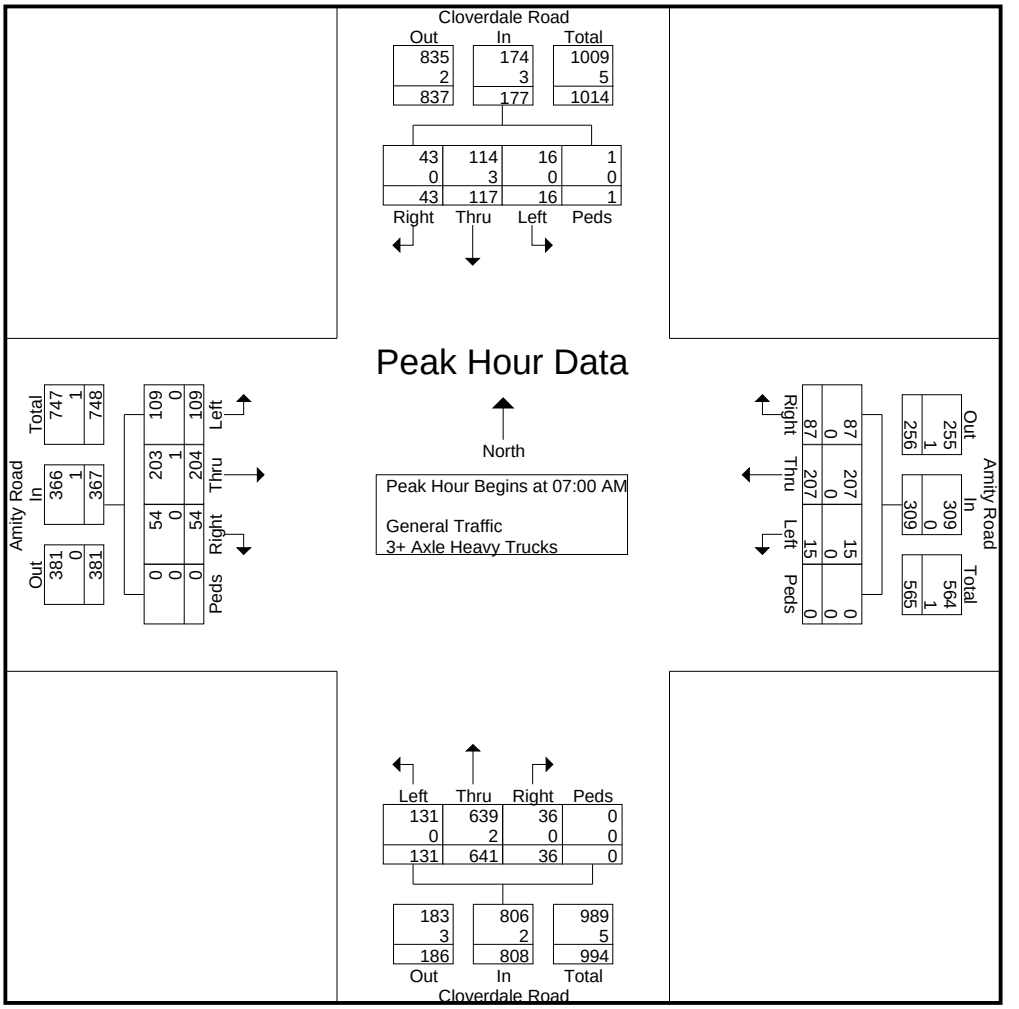
L2 Data Collection

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



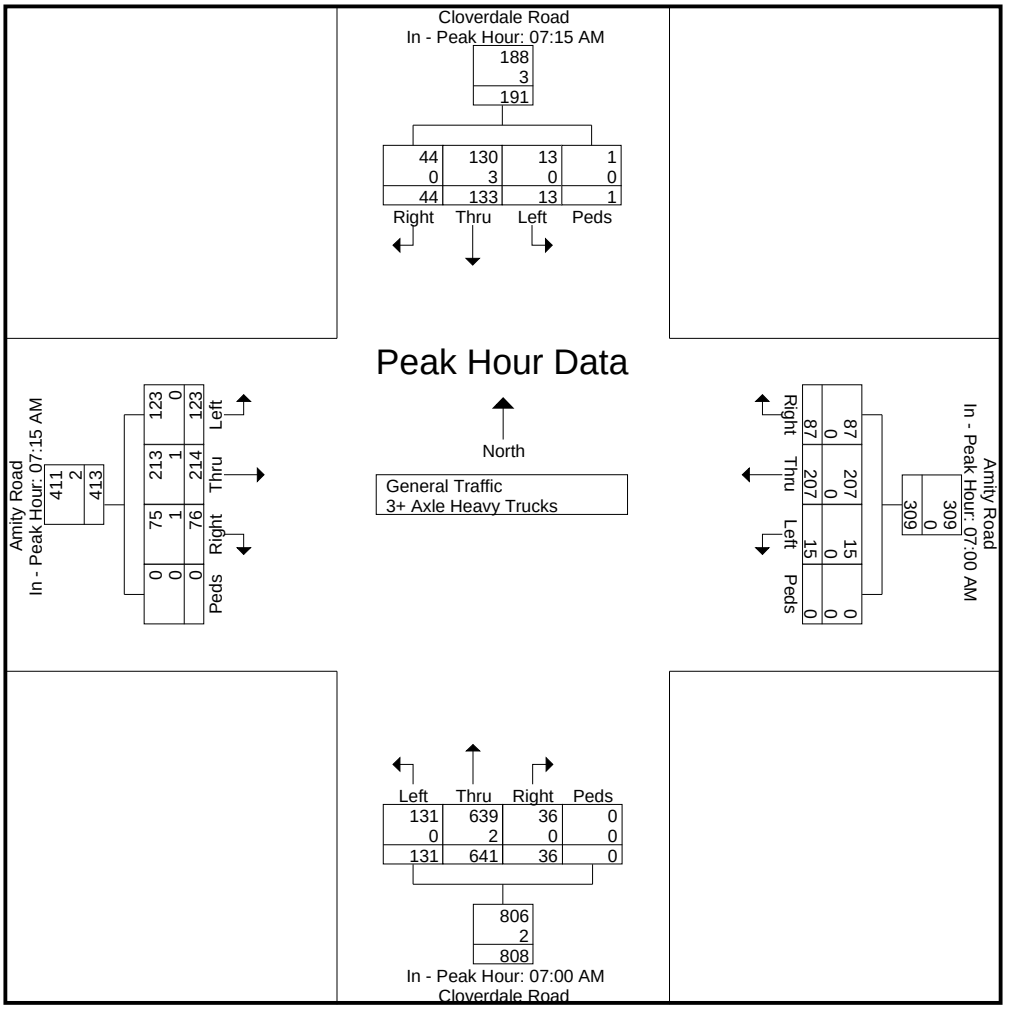
L2 Data Collection

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	



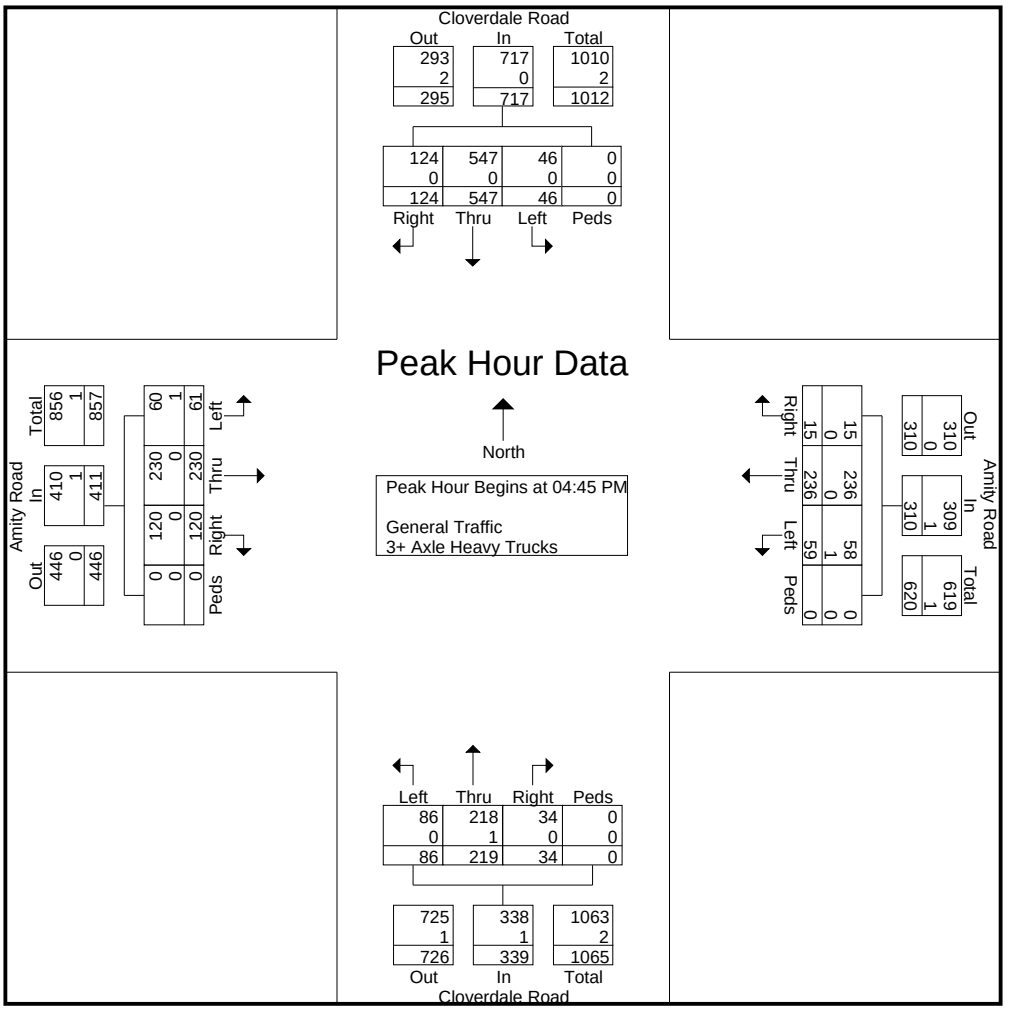
L2 Data Collection

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



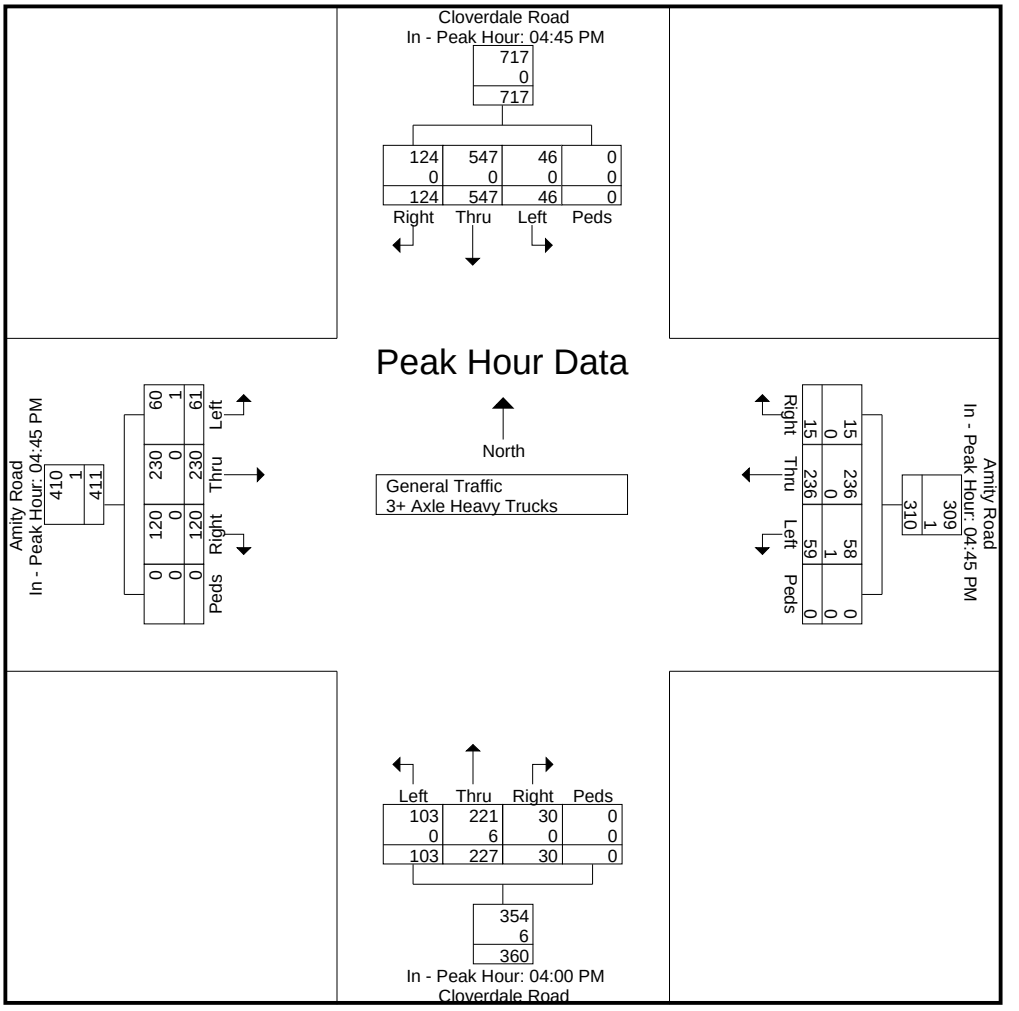
L2 Data Collection

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

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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

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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

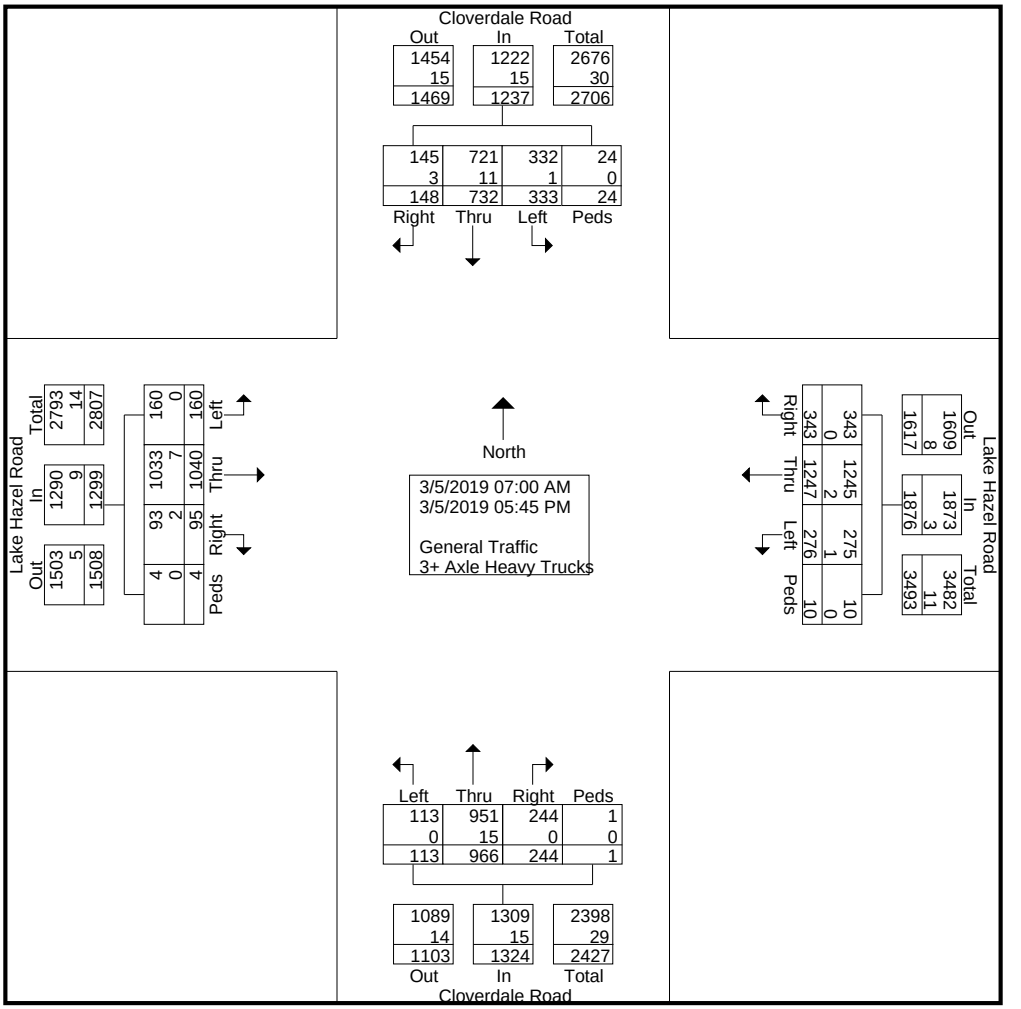
04:00 PM	7	52	23	8	90	30	76	31	2	139	11	43	8	0	62	6	61	10	0	77	368
04:15 PM	7	68	18	0	93	18	84	24	0	126	9	31	12	0	52	5	64	9	0	78	349
04:30 PM	19	60	35	3	117	14	91	26	0	131	14	41	3	0	58	12	76	7	0	95	401
04:45 PM	21	75	17	3	116	23	90	15	0	128	8	39	4	0	51	6	87	26	1	120	415
Total	54	255	93	14	416	85	341	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



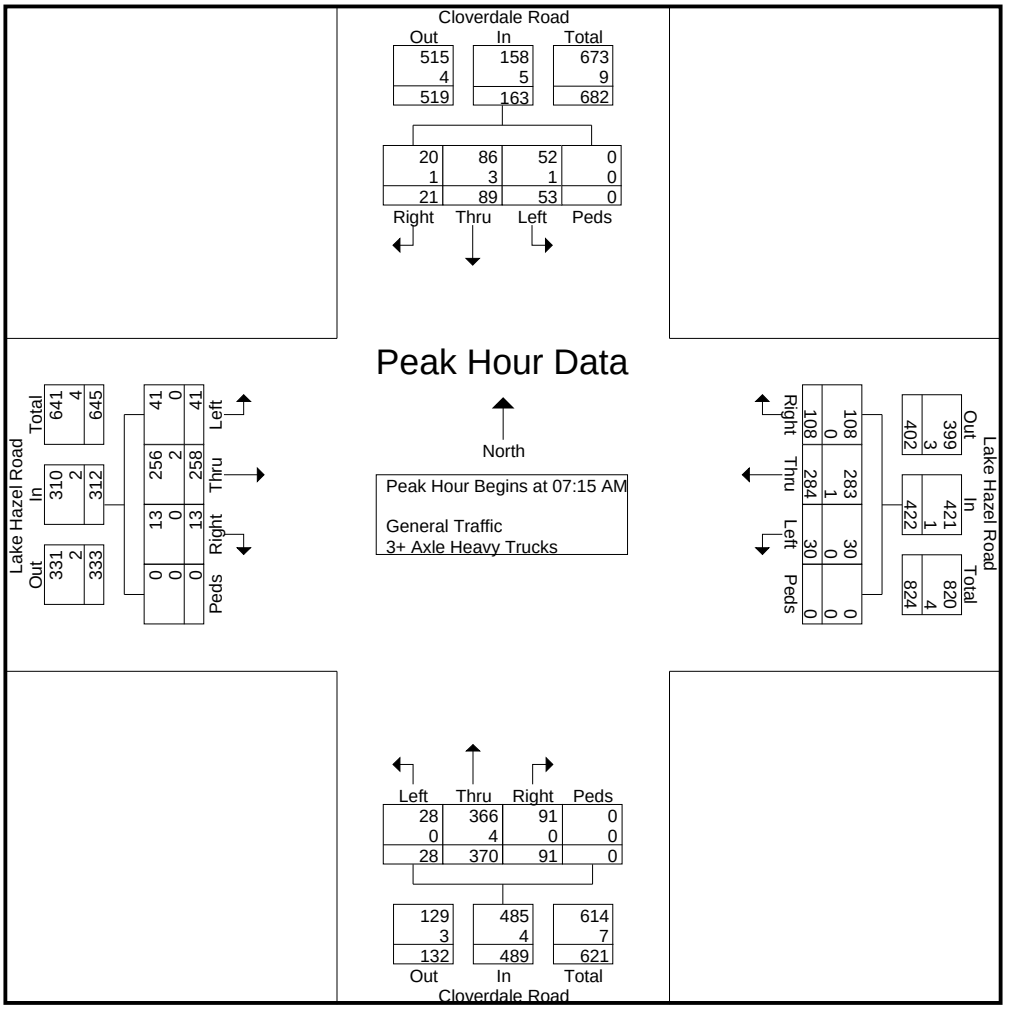
L2 Data Collection

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



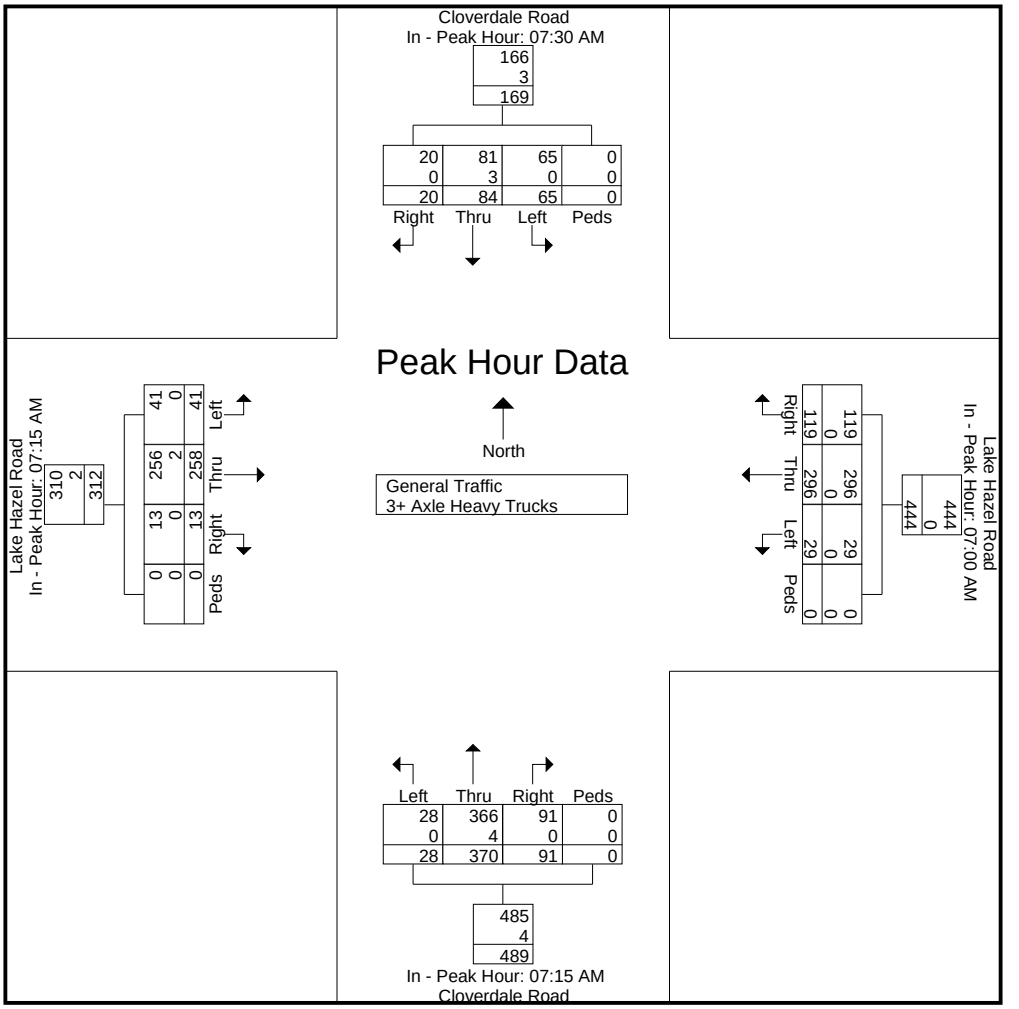
L2 Data Collection

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	



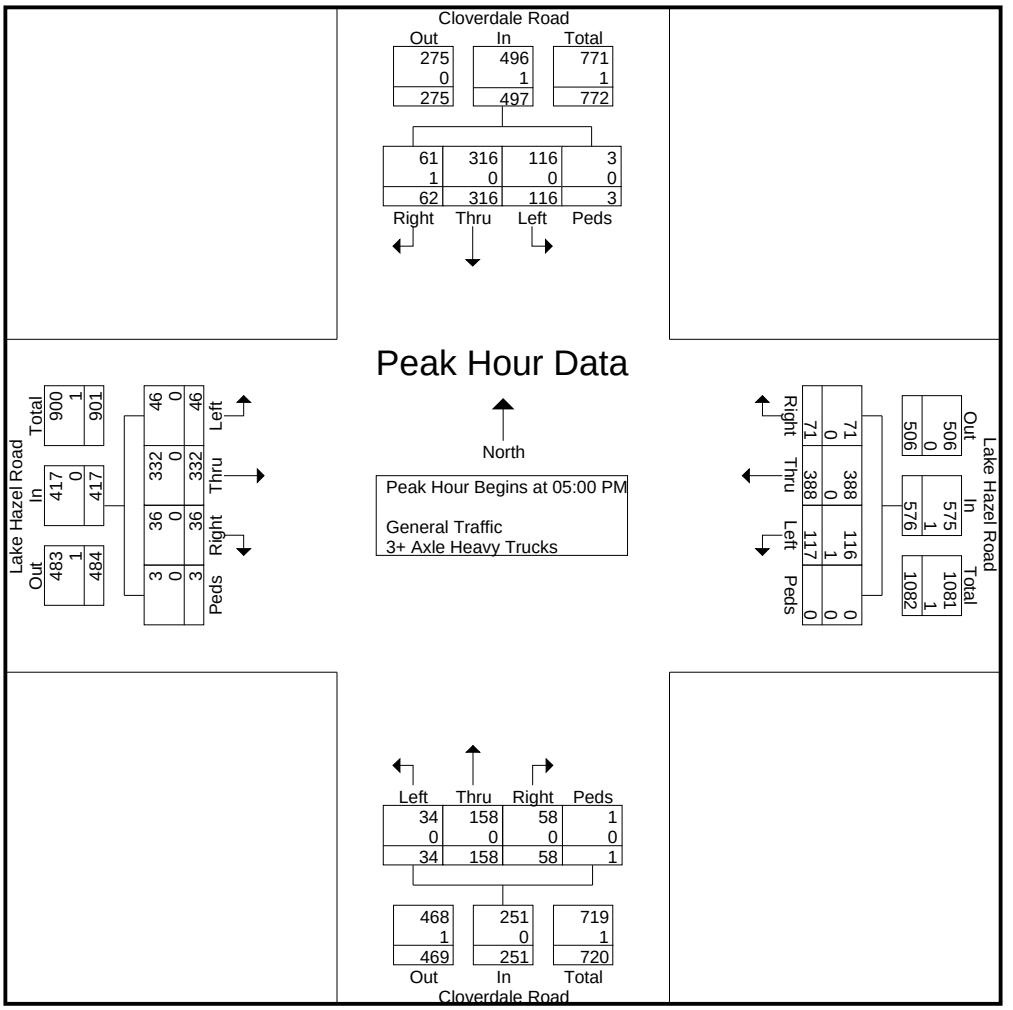
L2 Data Collection

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



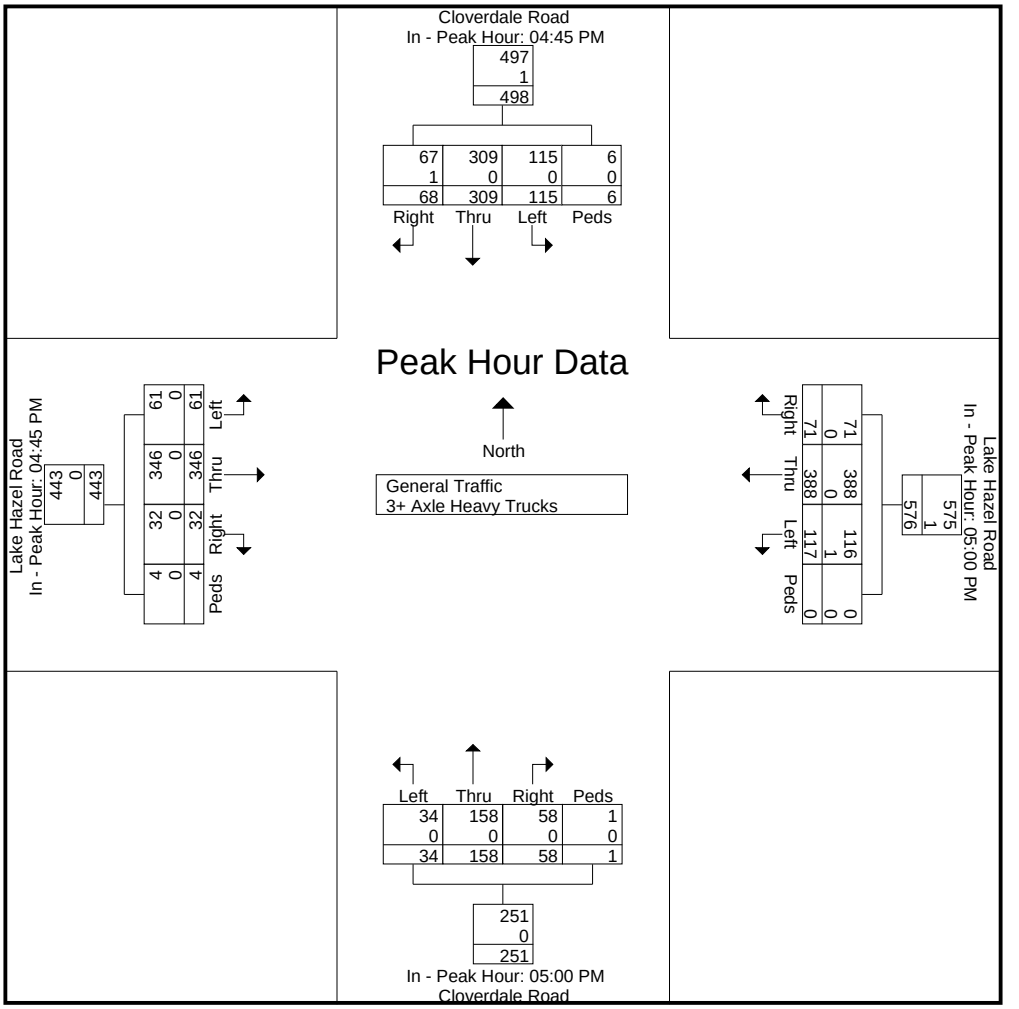
L2 Data Collection

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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

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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

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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

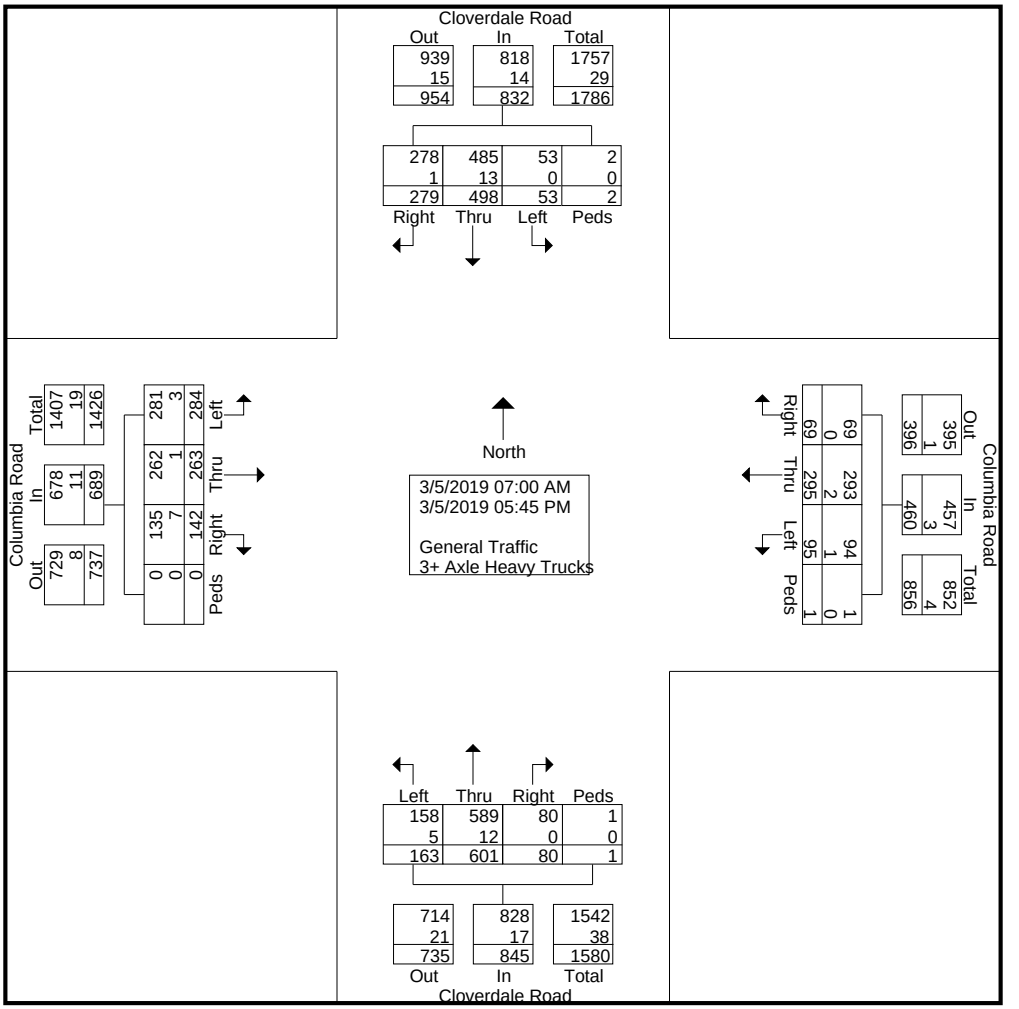
04:00 PM	19	37	4	0	60	2	22	12	0	36	7	32	14	0	53	11	14	9	0	34	183
04:15 PM	25	47	2	1	75	4	15	10	0	29	2	24	15	0	41	6	14	19	0	39	184
04:30 PM	23	51	3	0	77	4	22	8	0	34	5	32	13	1	51	7	15	13	0	35	197
04:45 PM	26	46	2	0	74	3	15	6	0	24	6	26	15	0	47	15	19	8	0	42	187
Total	93	181	11	1	286	13	74	36	0	123	20	114	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



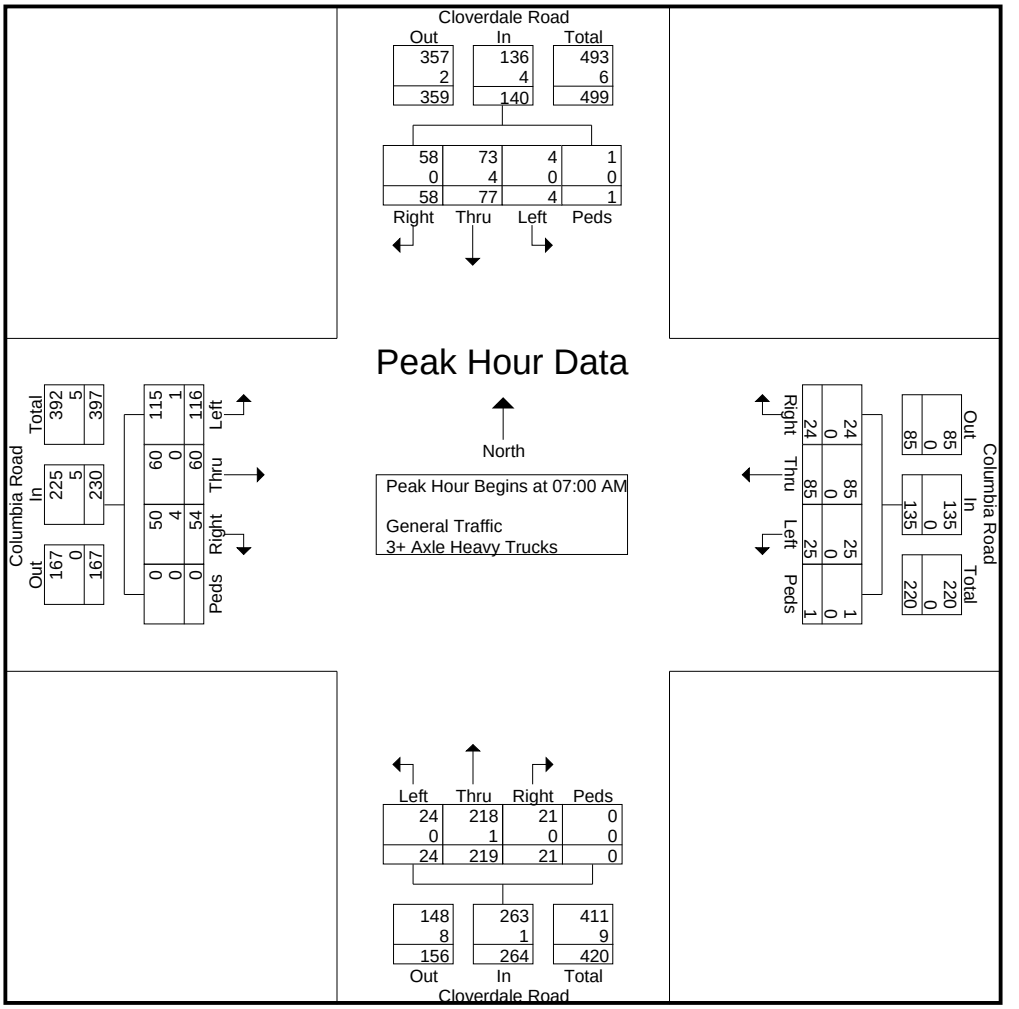
L2 Data Collection

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



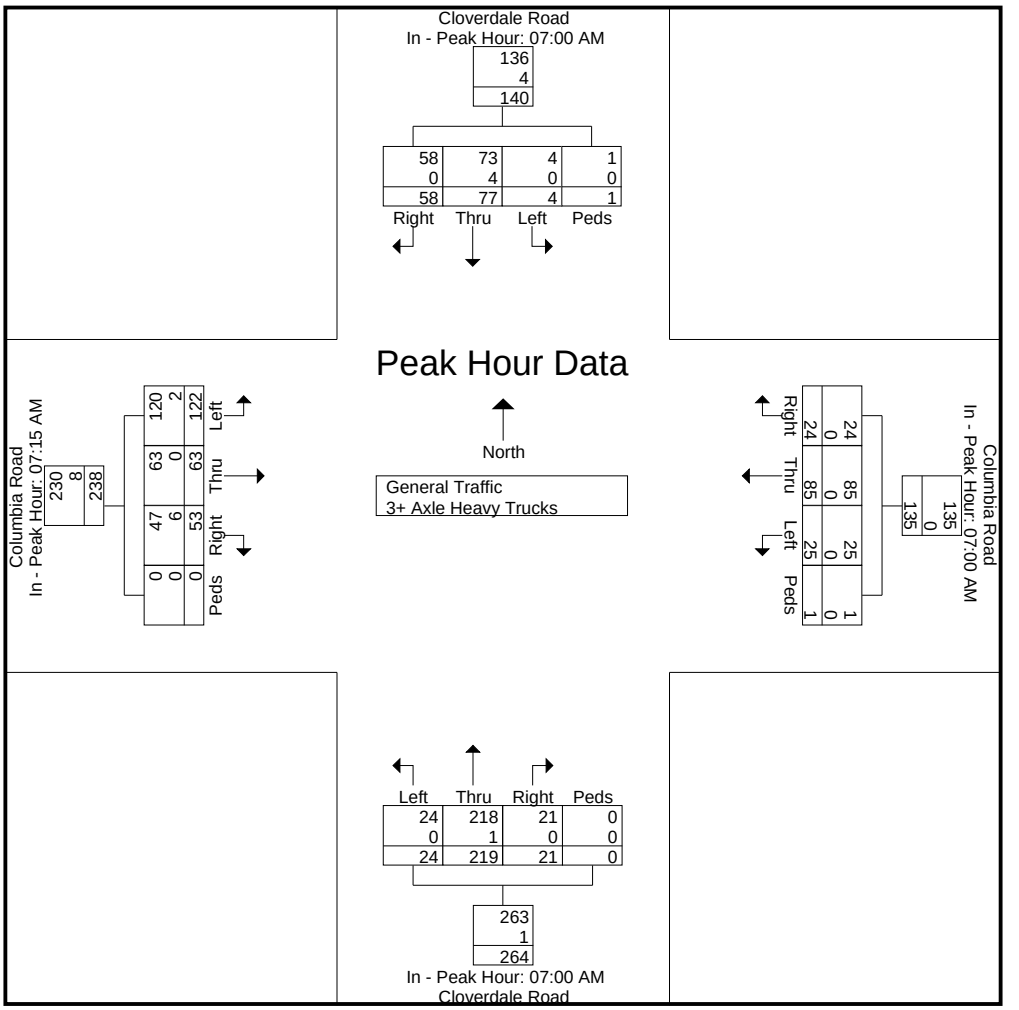
L2 Data Collection

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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	



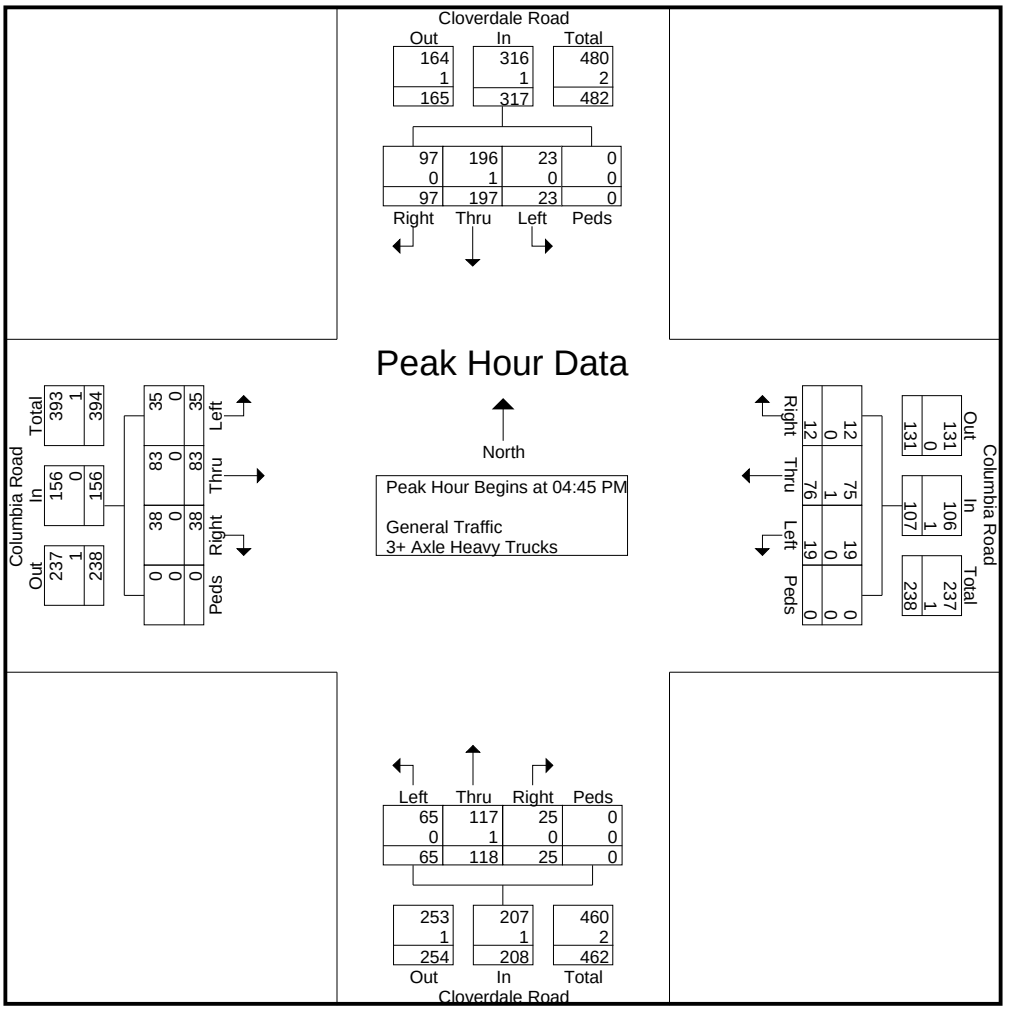
L2 Data Collection

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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



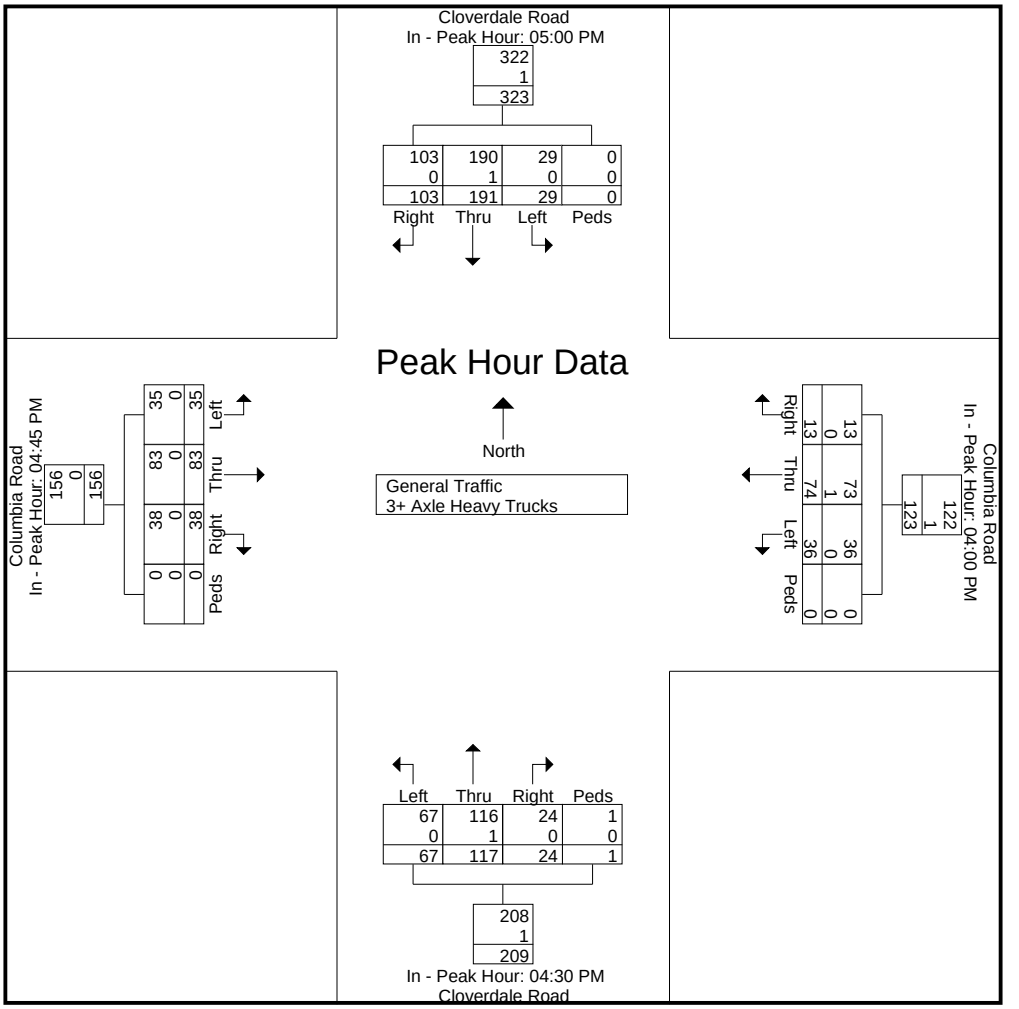
L2 Data Collection

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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	



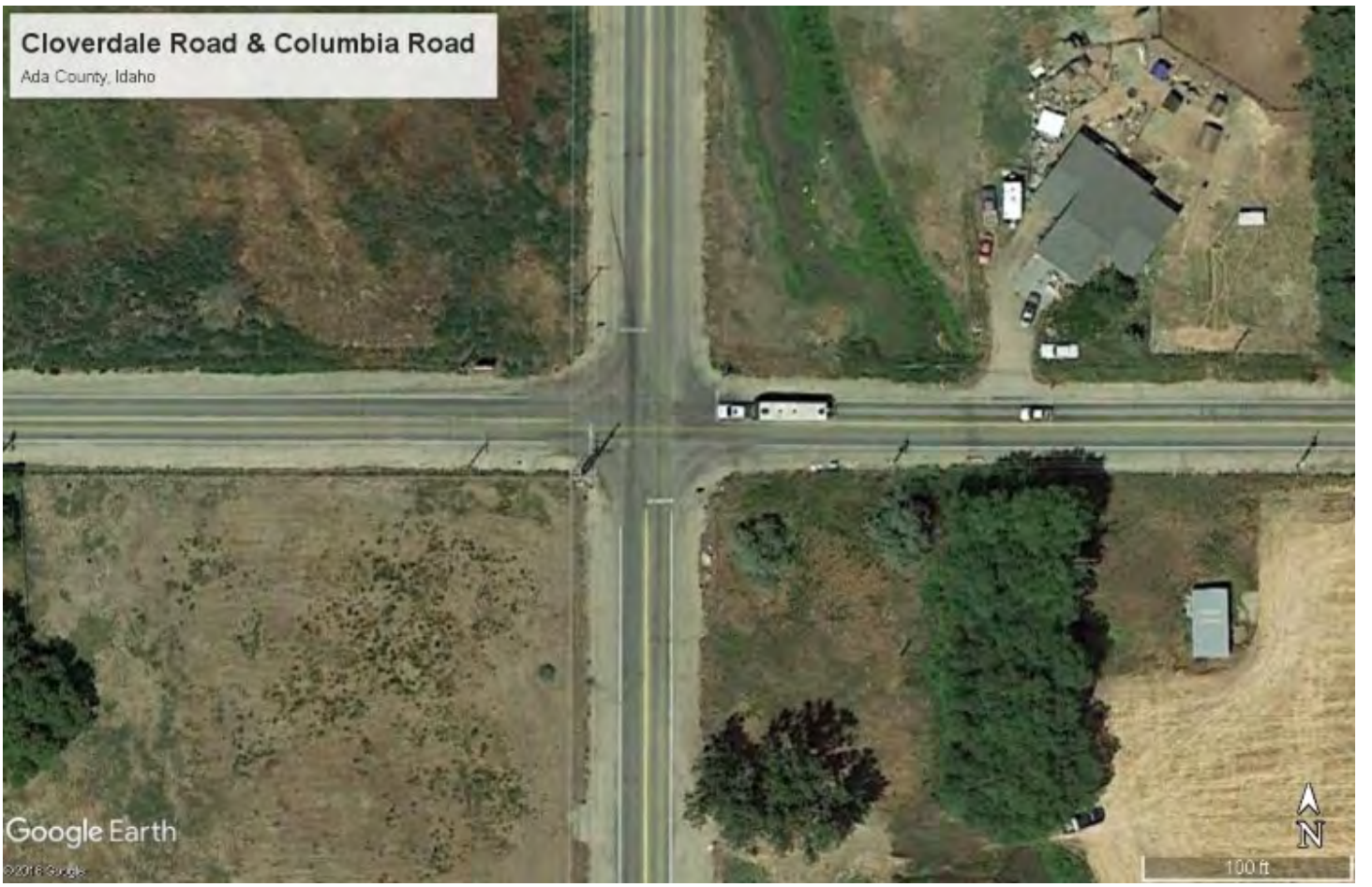
L2 Data Collection

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

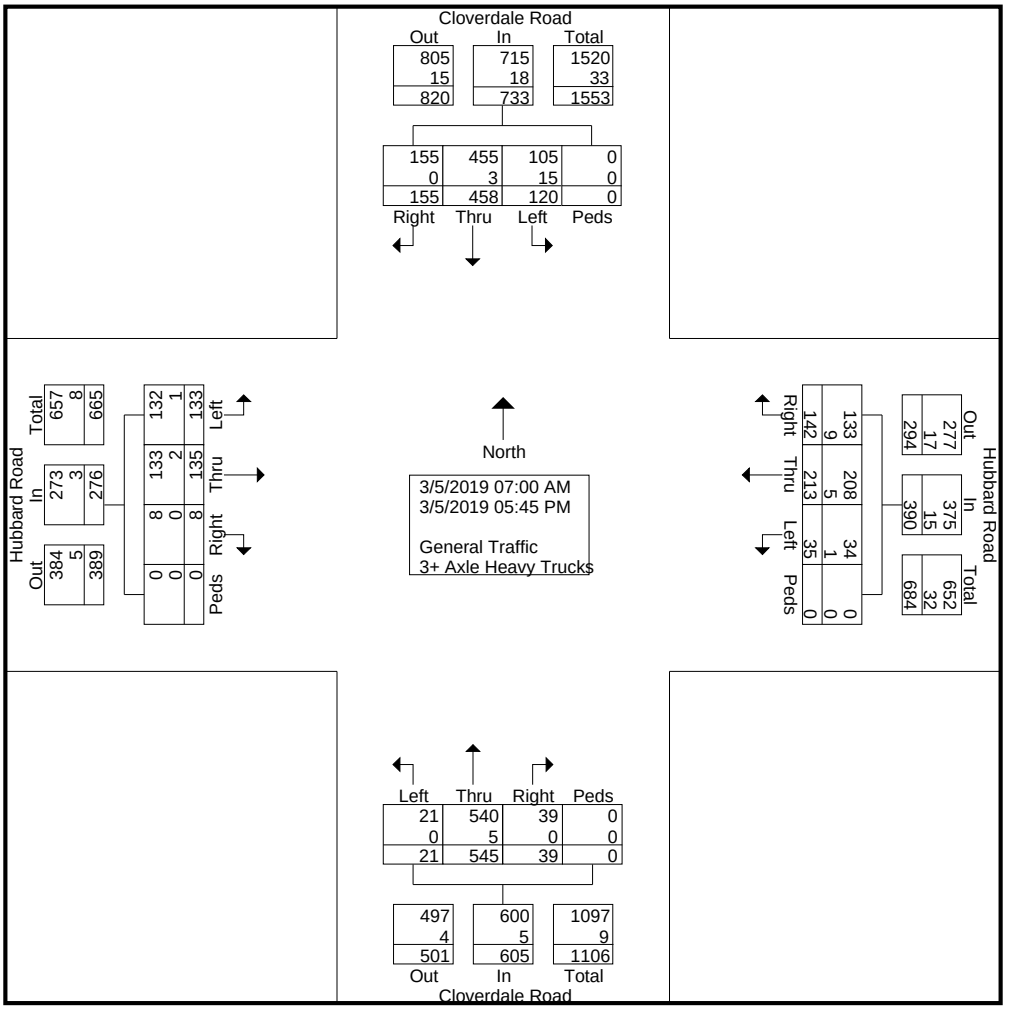
04:00 PM	13	44	2	0	59	17	20	4	0	41	0	35	2	0	37	1	0	2	0	3	140
04:15 PM	17	41	4	0	62	17	17	3	0	37	0	15	1	0	16	0	0	8	0	8	123
04:30 PM	14	45	3	0	62	10	21	4	0	35	1	30	2	0	33	0	0	7	0	7	137
04:45 PM	18	53	2	0	73	19	22	2	0	43	2	27	2	0	31	2	0	6	0	8	155
Total	62	183	11	0	256	63	80	13	0	156	3	107	7	0	117	3	0	23	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



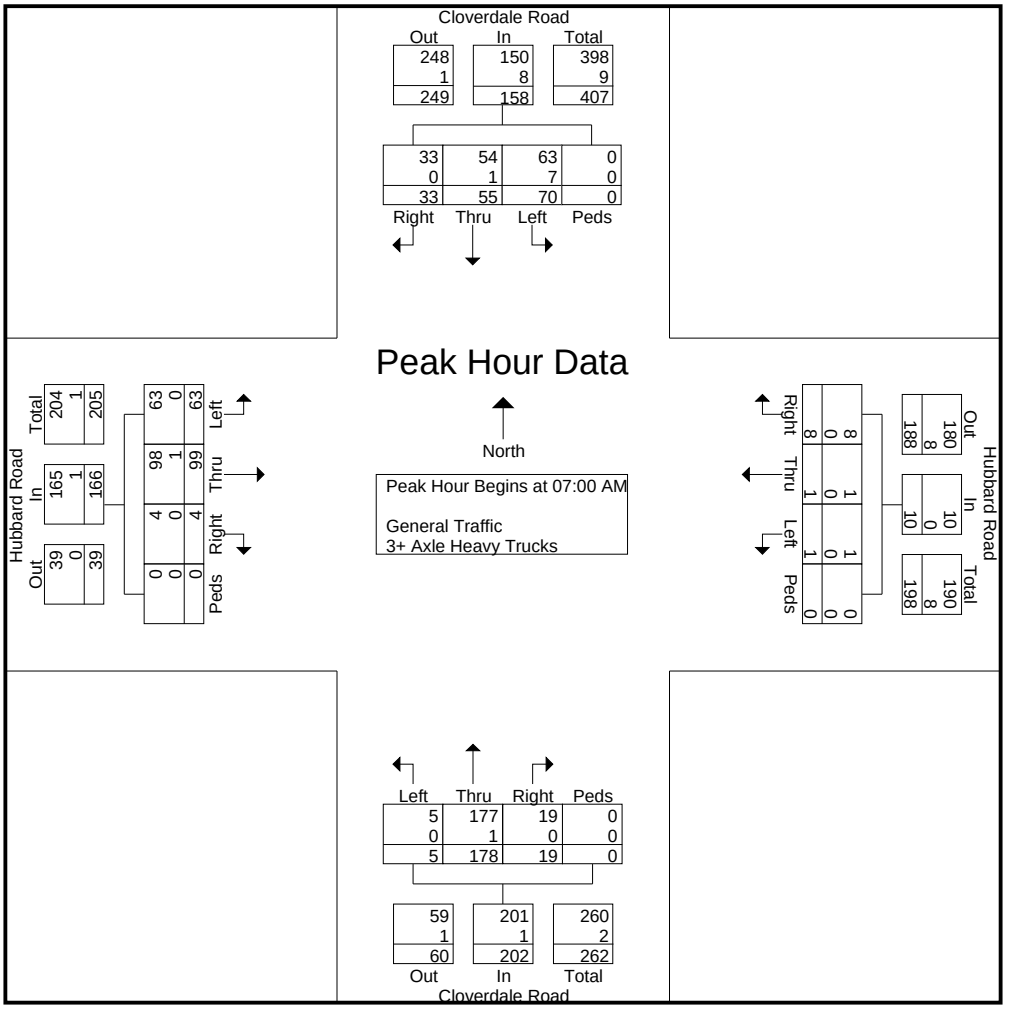
L2 Data Collection

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 : 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



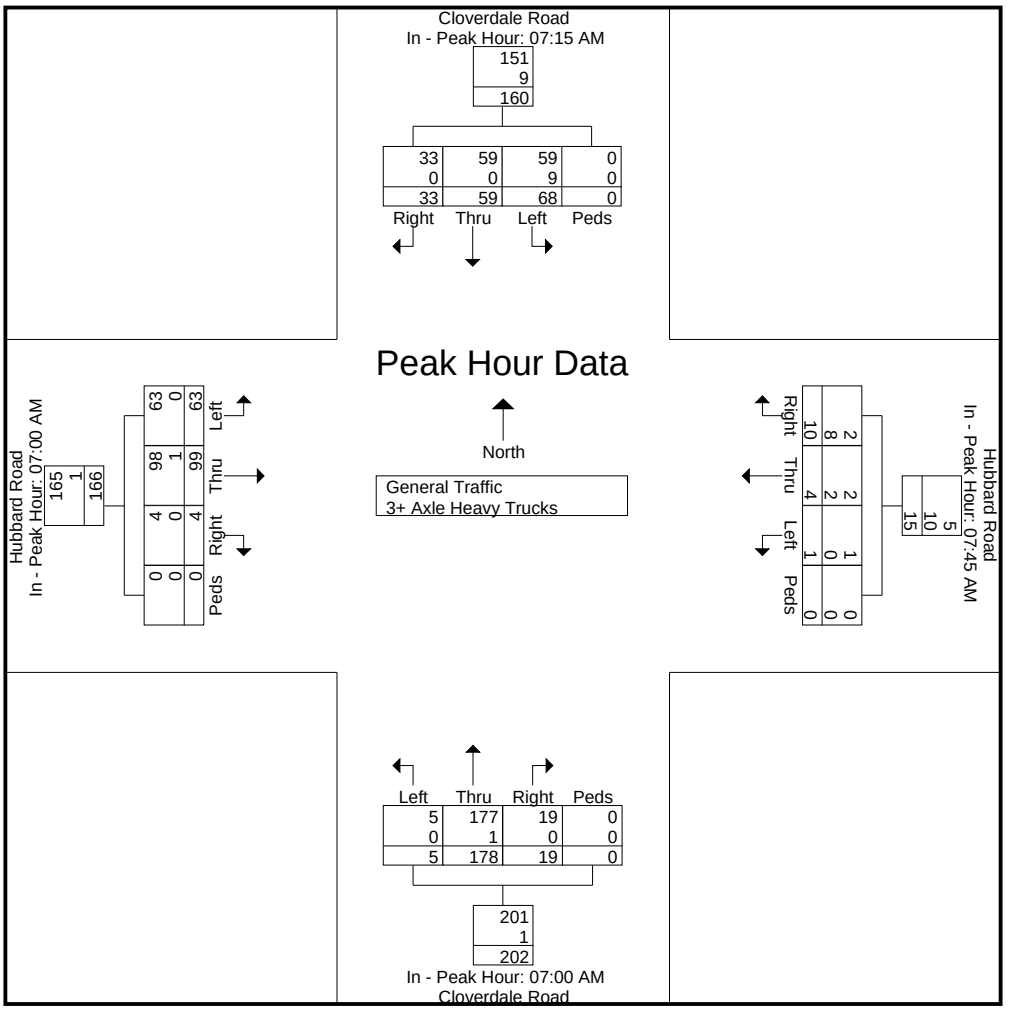
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

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	



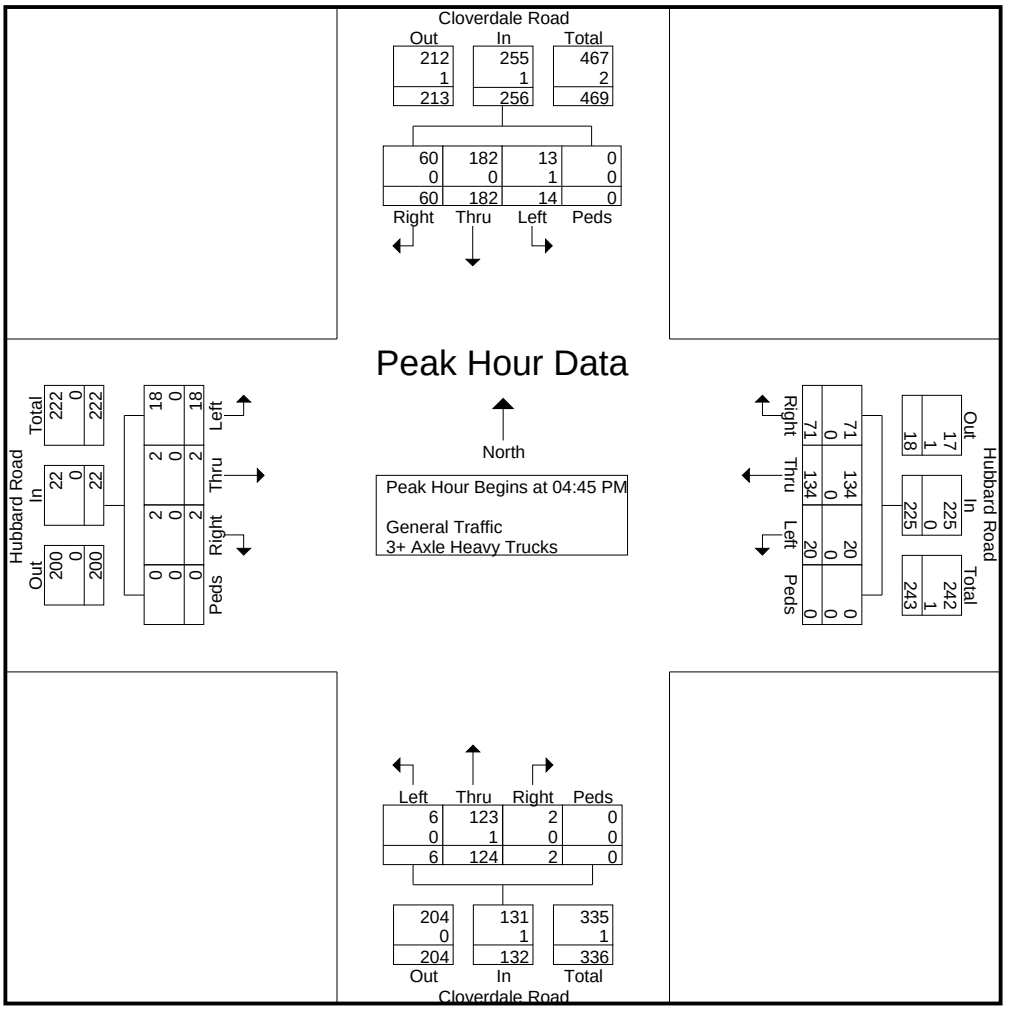
L2 Data Collection

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



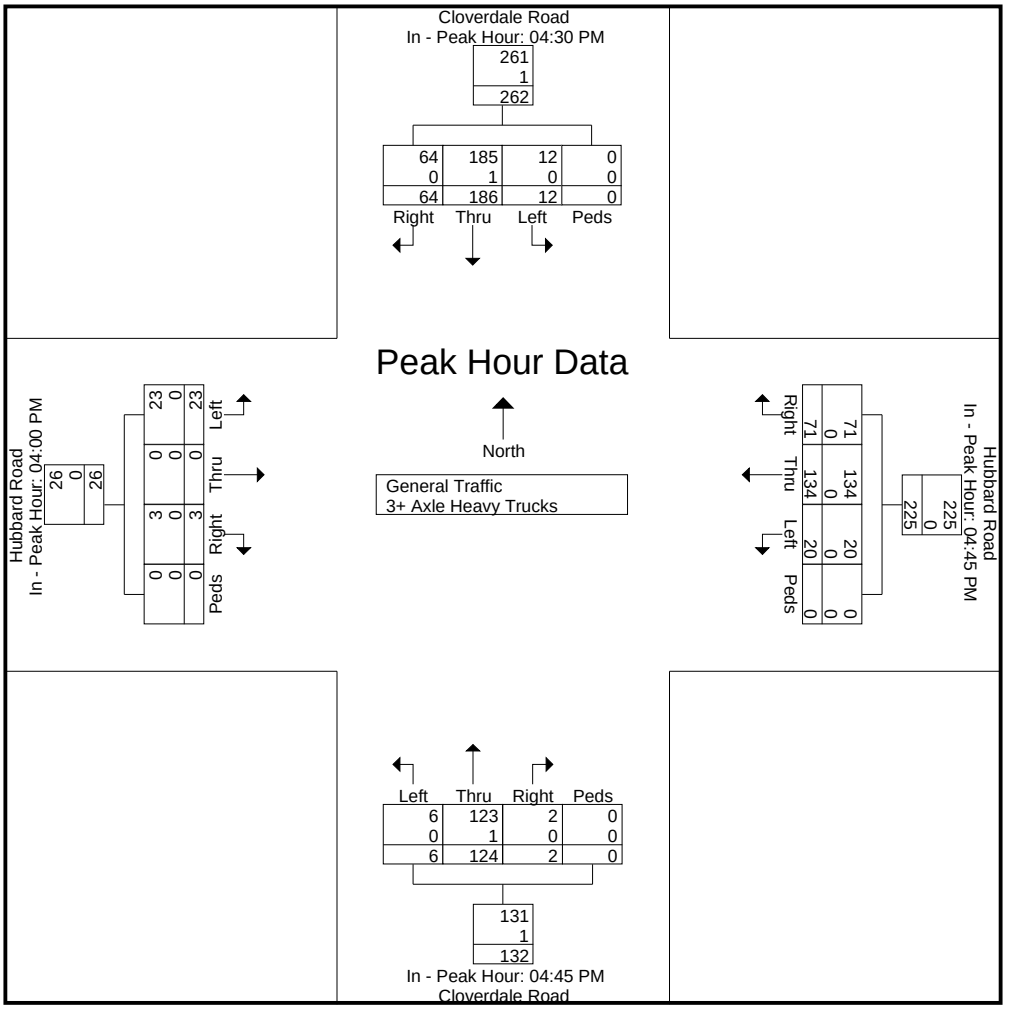
L2 Data Collection

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

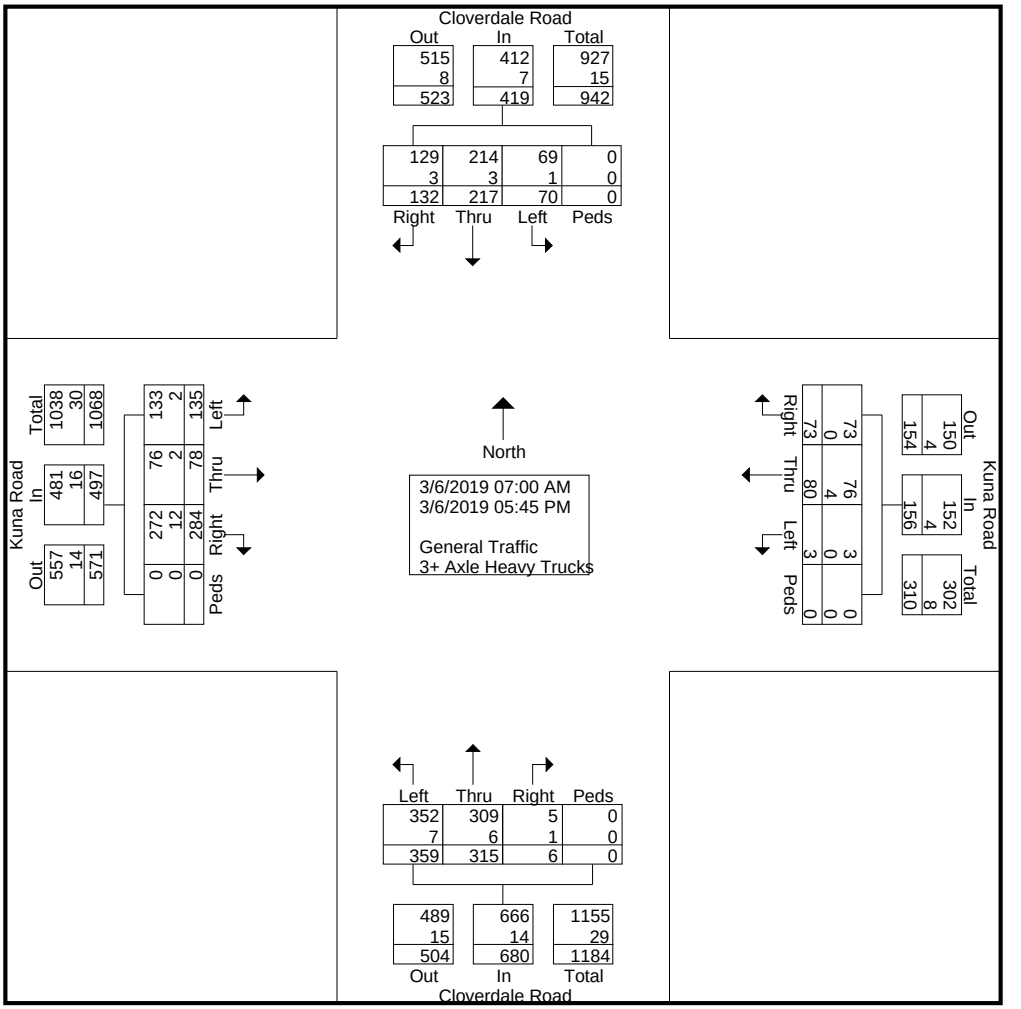
04:00 PM	17	19	10	0	46	0	4	0	0	4	1	14	17	0	32	12	5	4	0	21	103
04:15 PM	9	21	6	0	36	1	7	0	0	8	0	8	27	0	35	14	9	8	0	31	110
04:30 PM	8	20	9	0	37	0	3	0	0	3	0	19	26	0	45	20	9	3	0	32	117
04:45 PM	17	17	8	0	42	2	3	1	0	6	0	16	34	0	50	13	3	6	0	22	120
Total	51	77	33	0	161	3	17	1	0	21	1	57	104	0	162	59	26	21	0	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



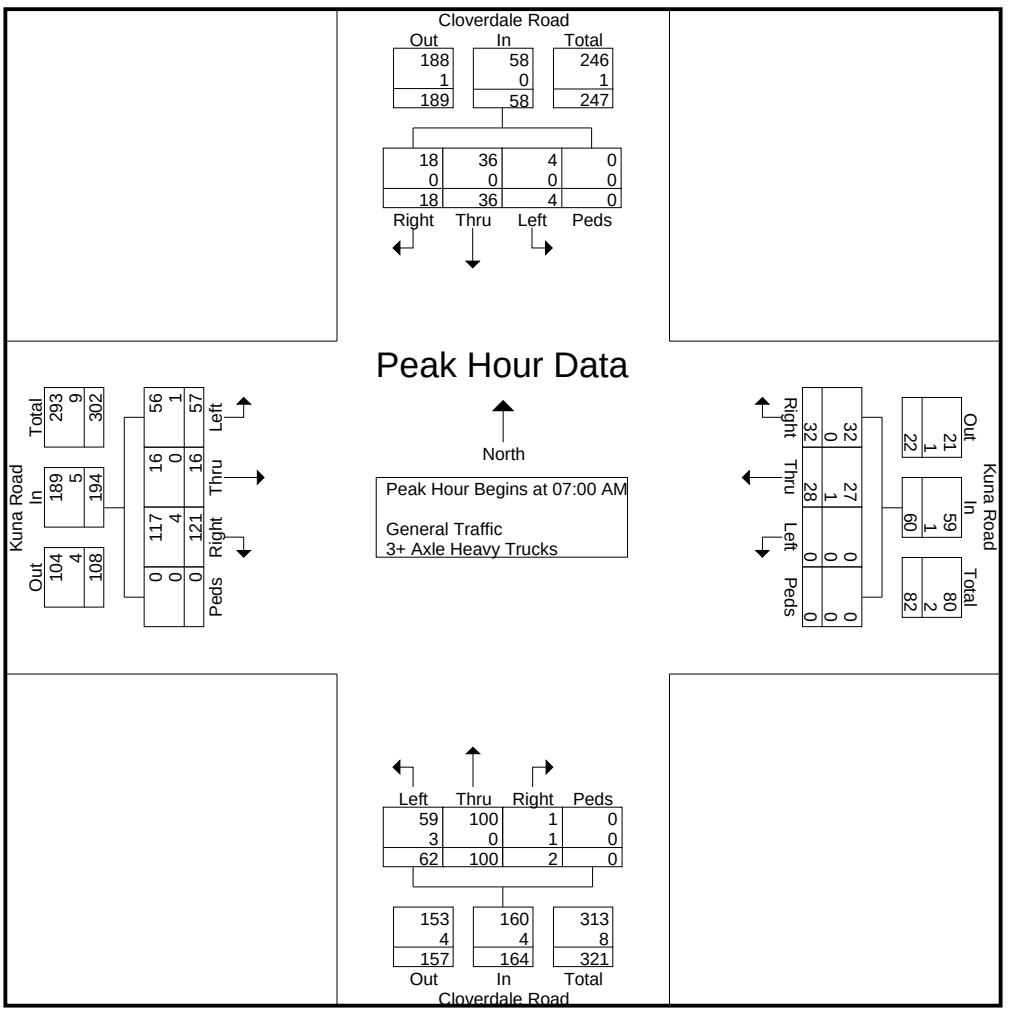
L2 Data Collection

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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



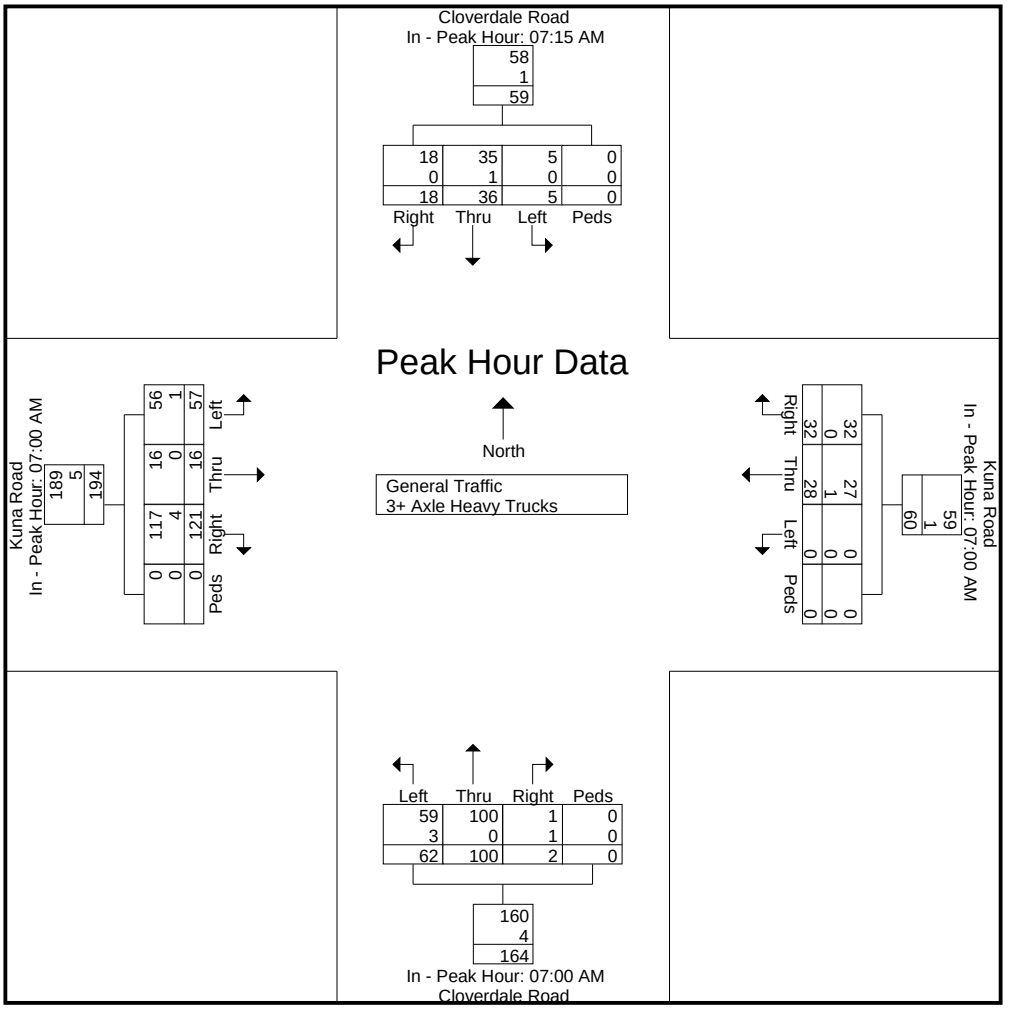
L2 Data Collection

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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	



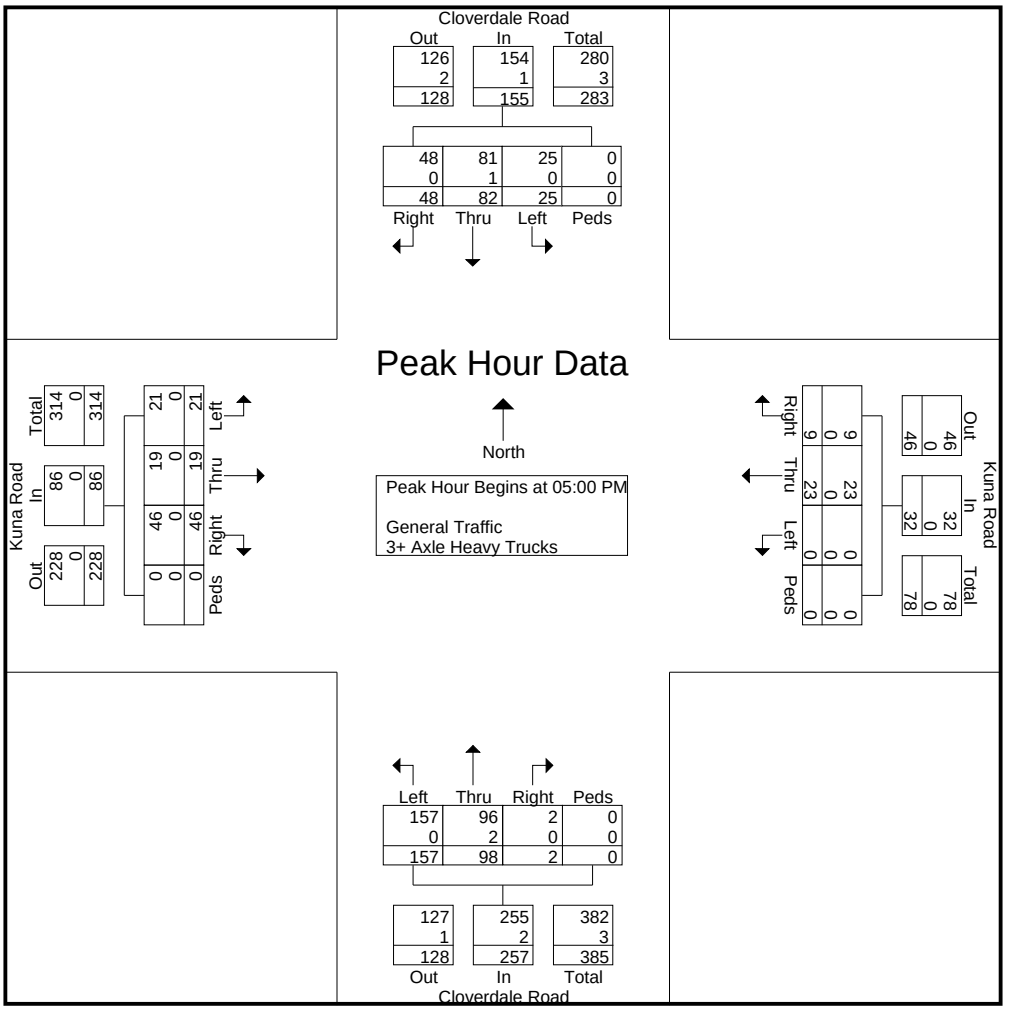
L2 Data Collection

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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



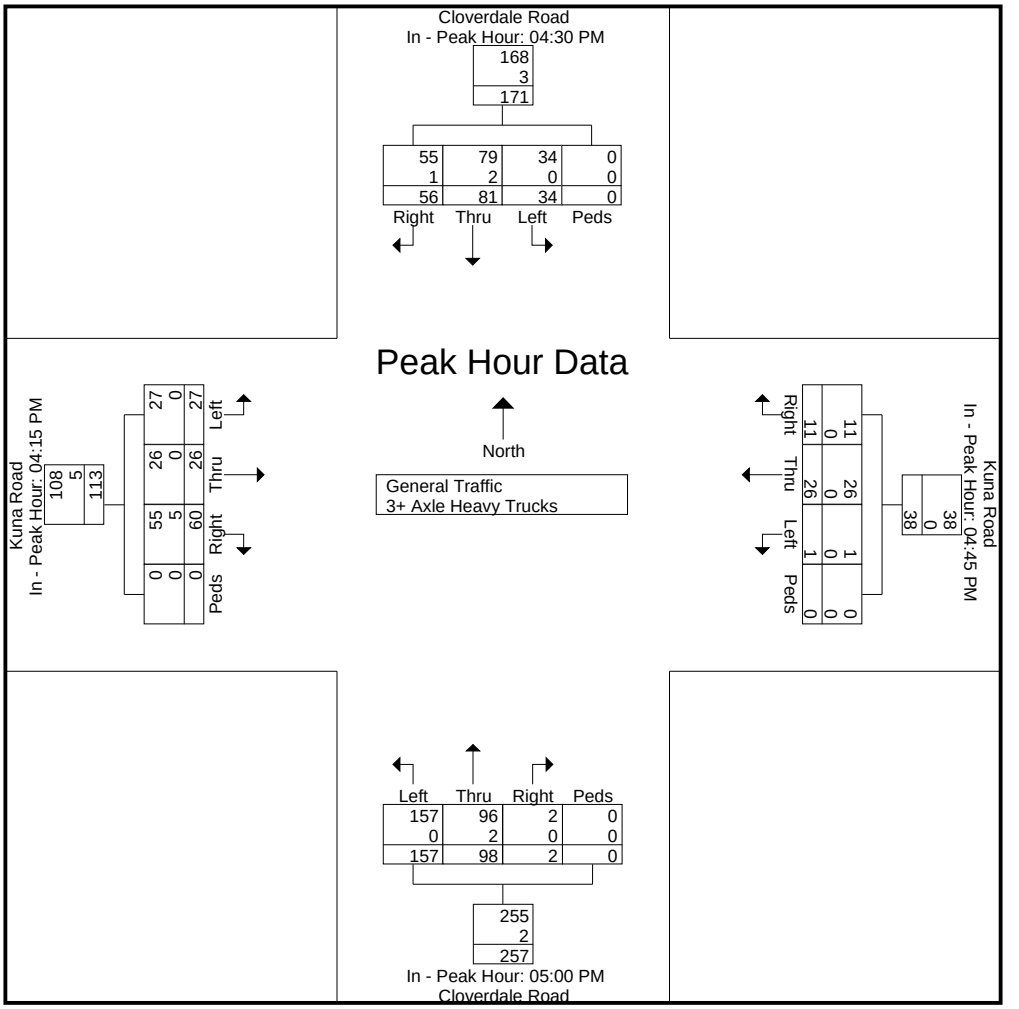
L2 Data Collection

L2DataCollection.com
Idaho (208) 860-7554 Utah (801) 431-2993

Study: CR0010
Intersection: Cloverdale Rd / Kuna Rd
City, State: Ada County, Idaho
Control: All Stop

File Name : Cloverdale Rd & Kuna Rd
Site Code : 00000000
Start Date : 3/6/2019
Page No : 6

	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	



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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

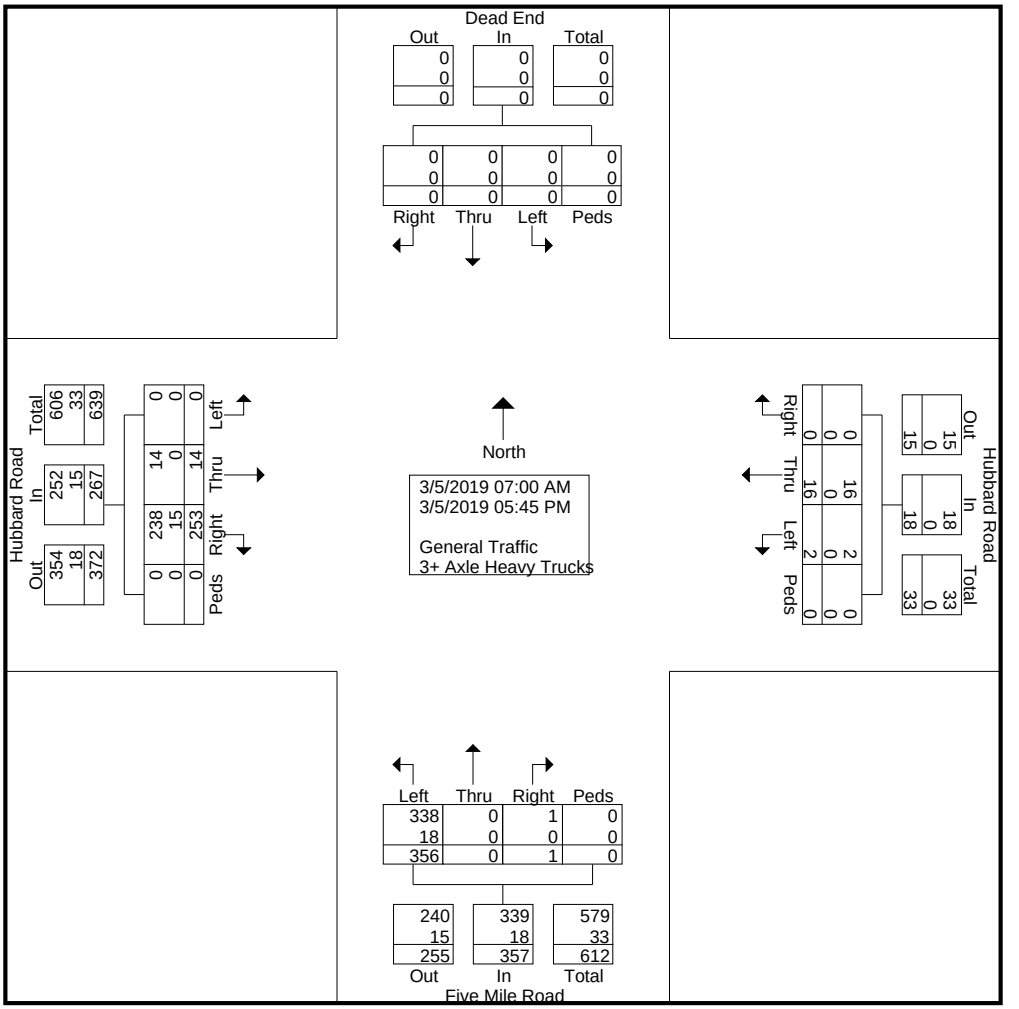
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	33	0	34	1	1	0	0	2	36
04:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	39	0	39	1	2	0	0	3	45
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	34	0	34	1	1	0	0	2	37
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	43	0	43	4	2	0	0	6	49
Total	0	0	0	0	0	0	4	0	0	4	1	0	149	0	150	7	6	0	0	13	167
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	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

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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



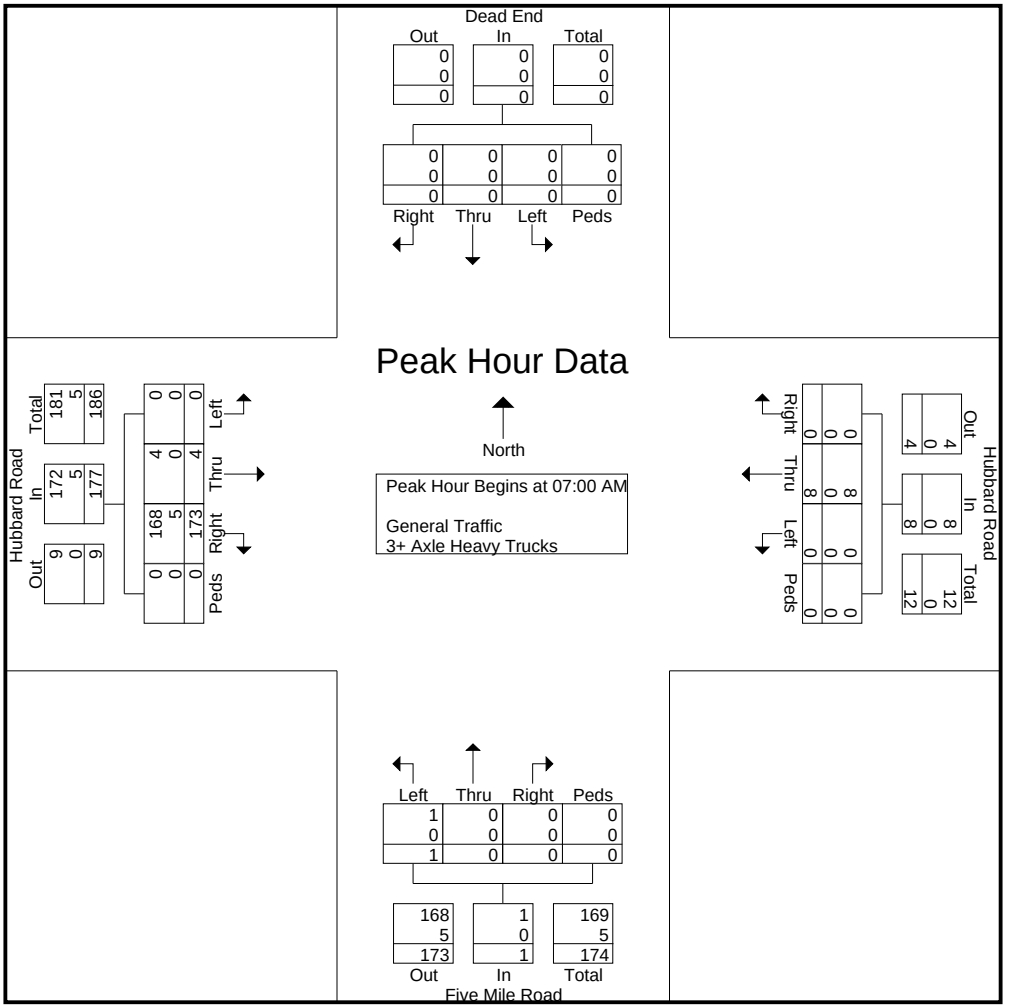
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Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

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



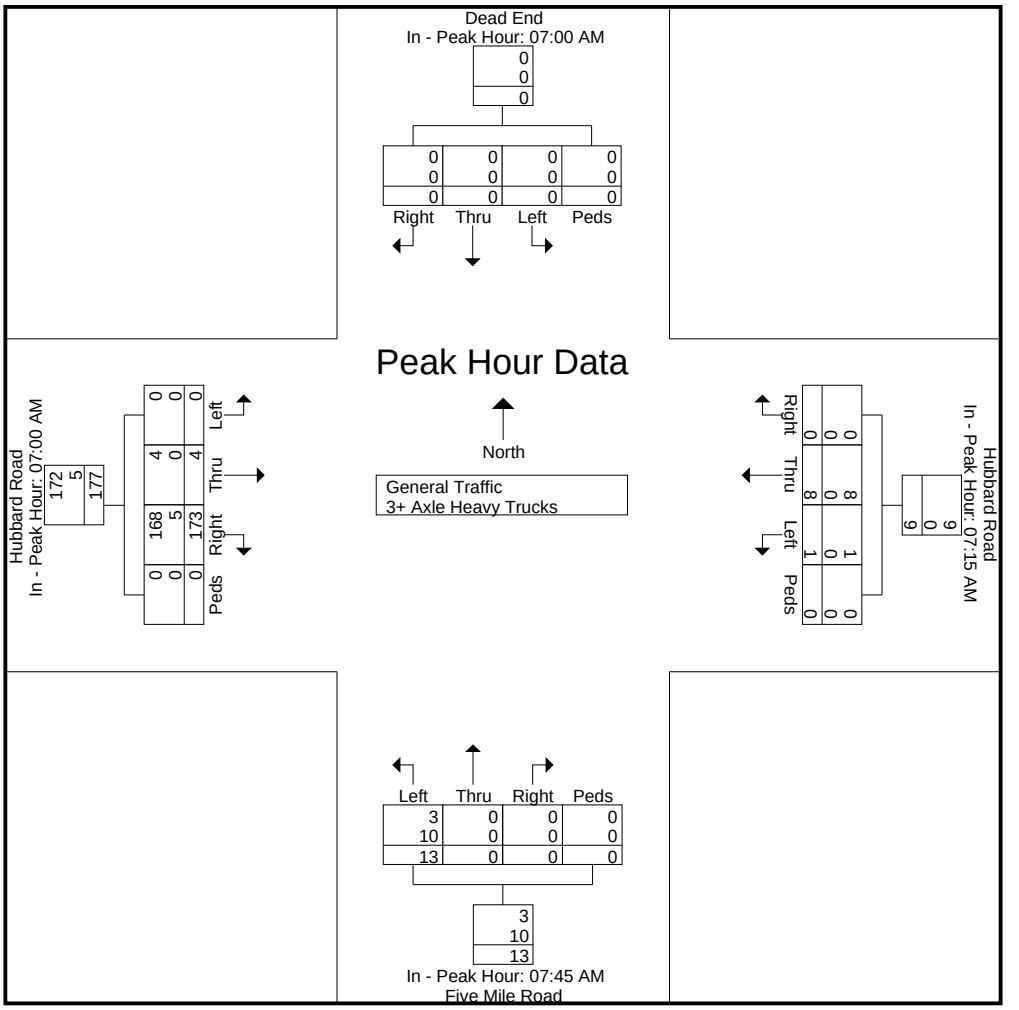
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Study: CR0010
Intersection: Five Mile Rd / Hubbard Rd
City, State: Ada County, Idaho
Control: Stop Sign

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	



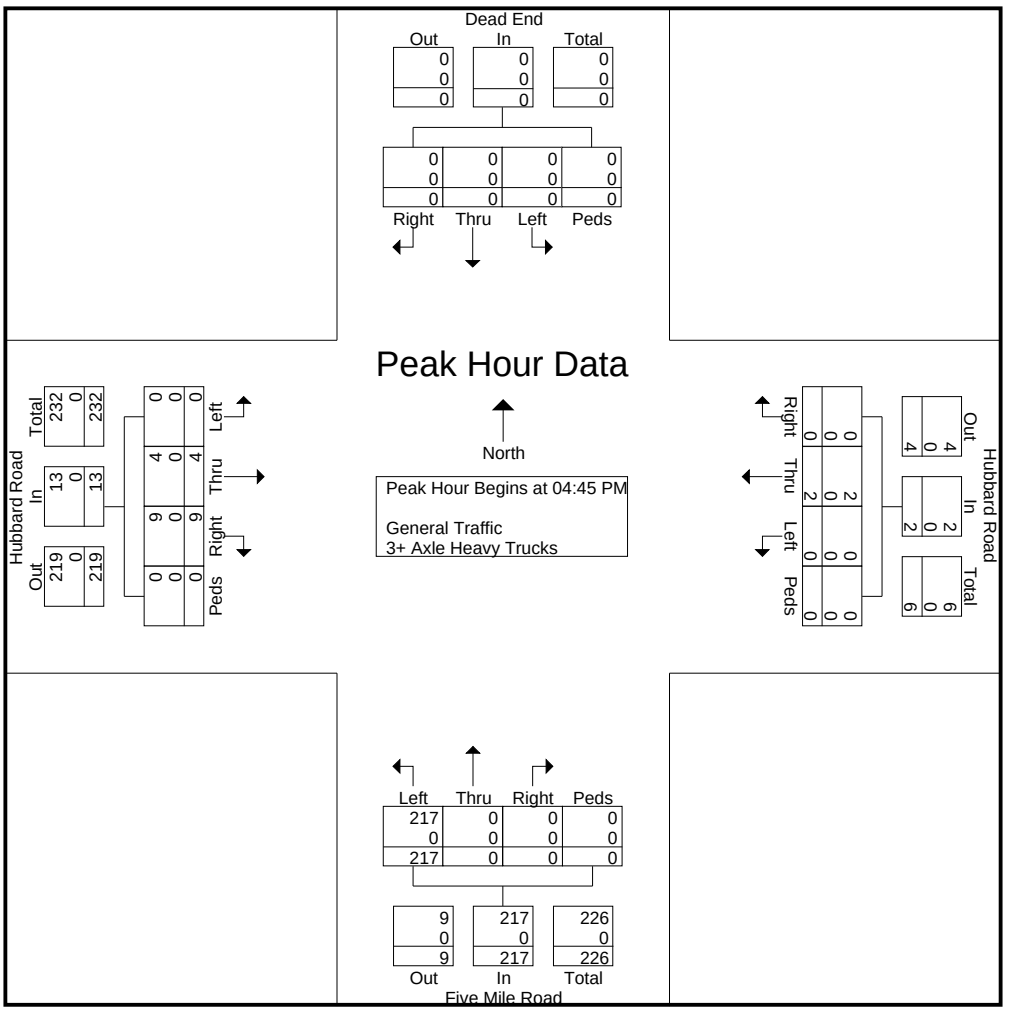
L2 Data Collection

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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



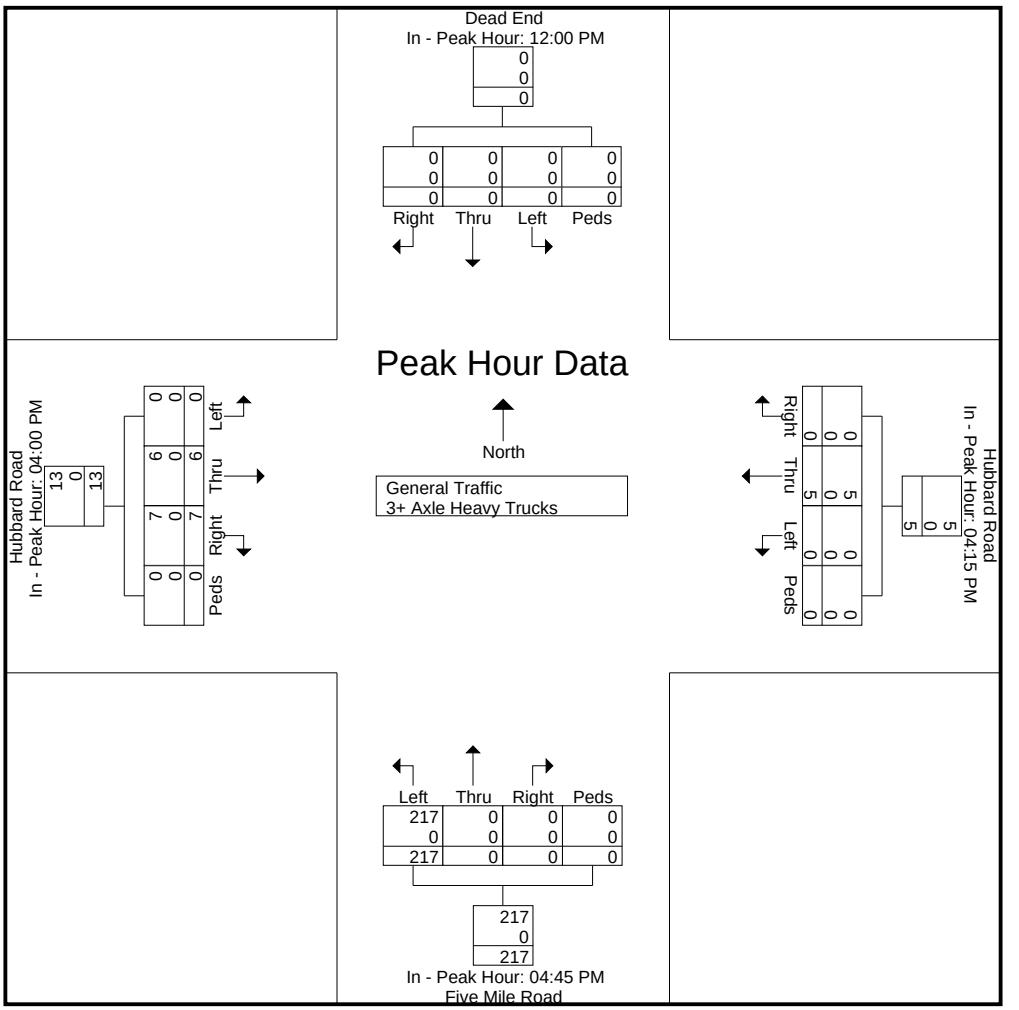
L2 Data Collection

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

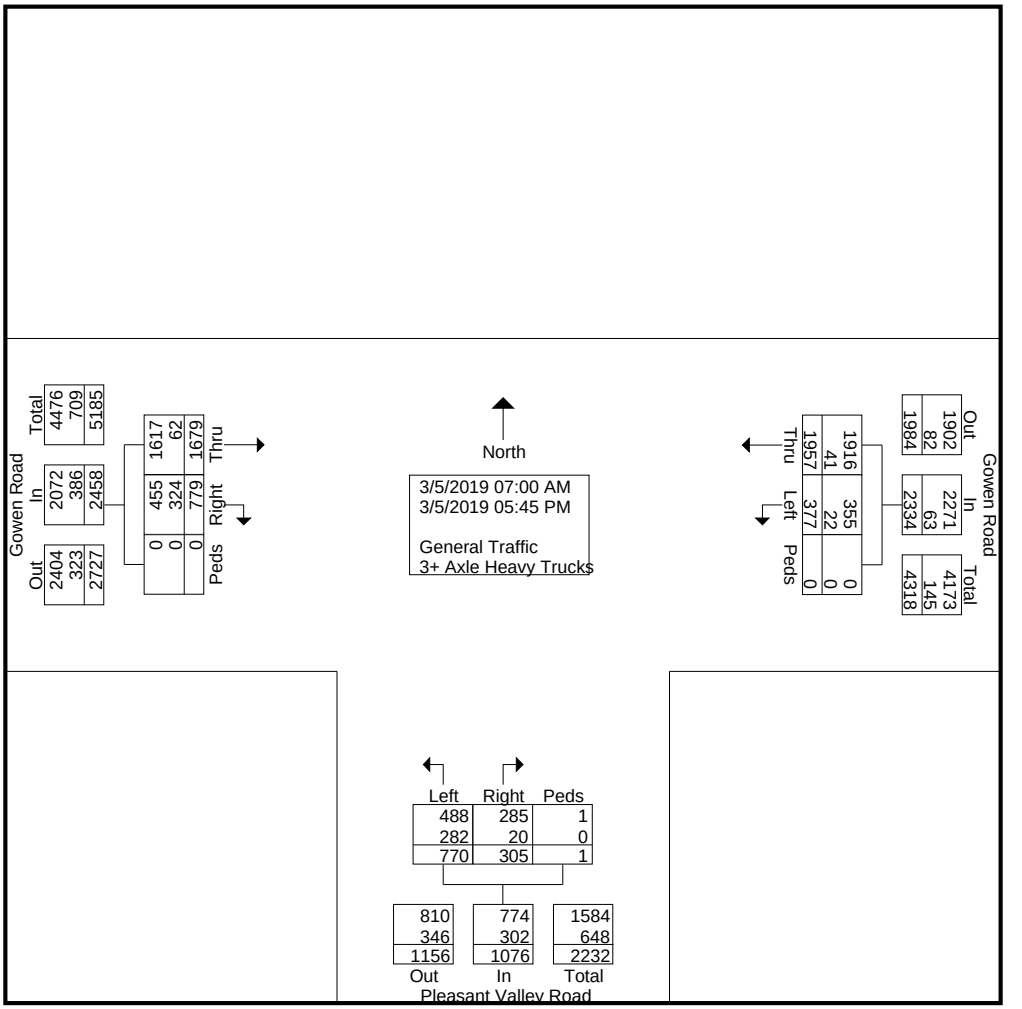
04:00 PM	190	26	0	216	12	35	0	47	24	33	0	57	320
04:15 PM	250	35	0	285	5	42	0	47	52	51	0	103	435
04:30 PM	245	43	0	288	3	59	0	62	35	55	0	90	440
04:45 PM	229	40	0	269	6	48	0	54	49	49	0	98	421
Total	914	144	0	1058	26	184	0	210	160	188	0	348	1616
05:00 PM	220	58	0	278	5	50	0	55	54	58	0	112	445
05:15 PM	232	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



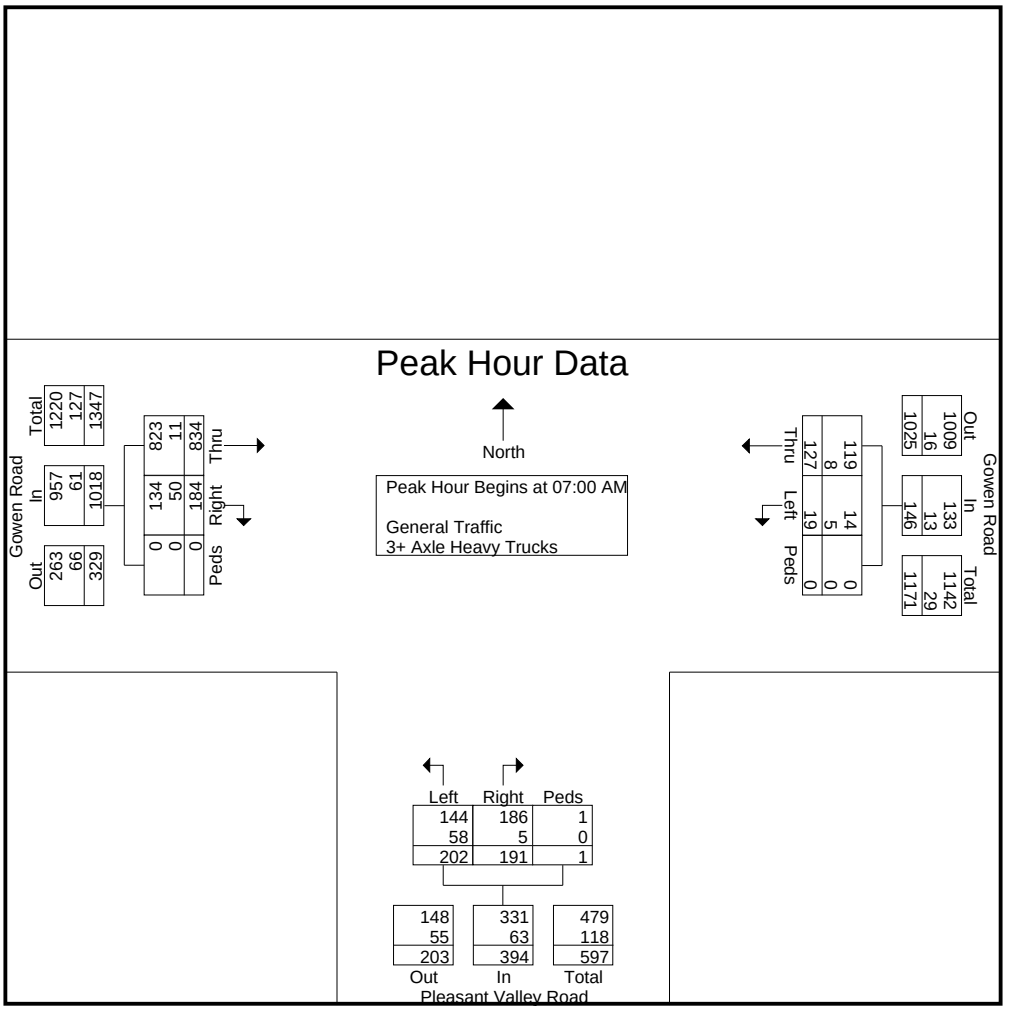
L2 Data Collection

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



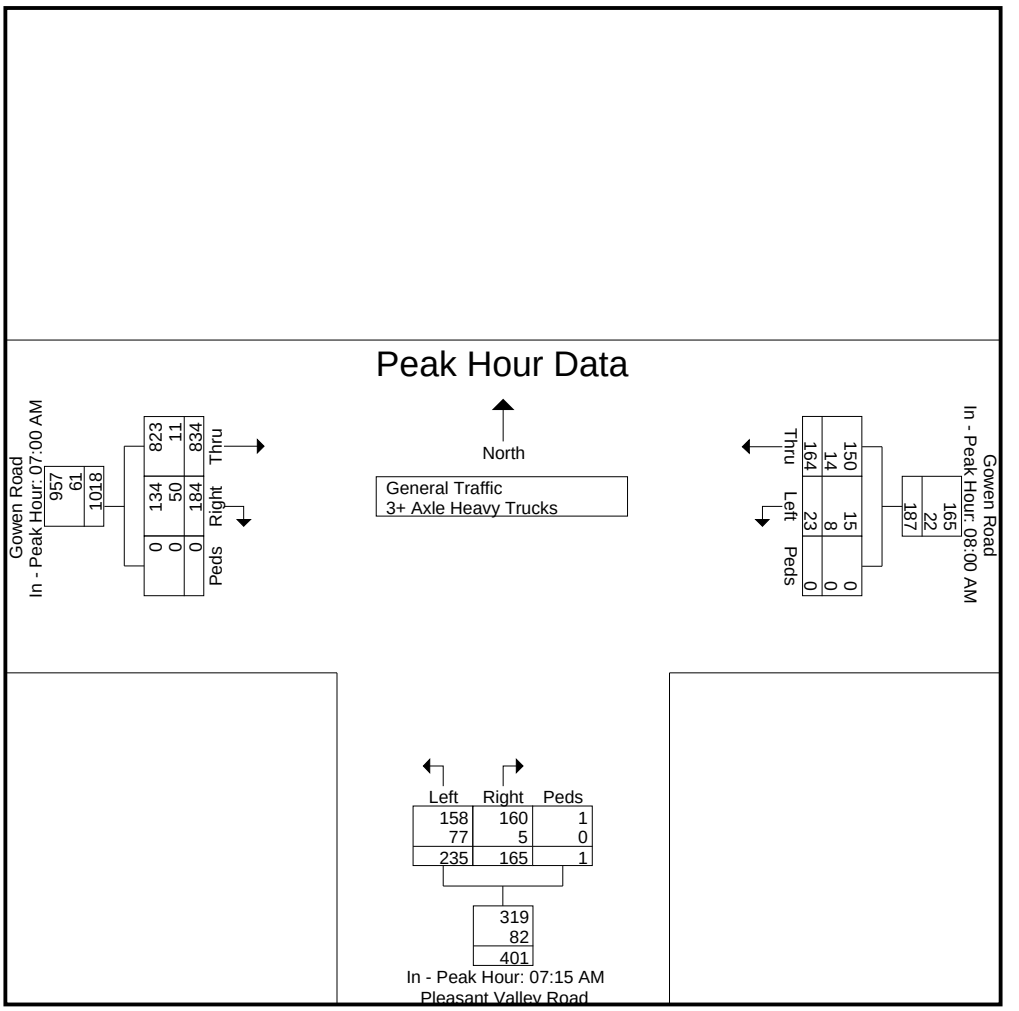
L2 Data Collection

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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	



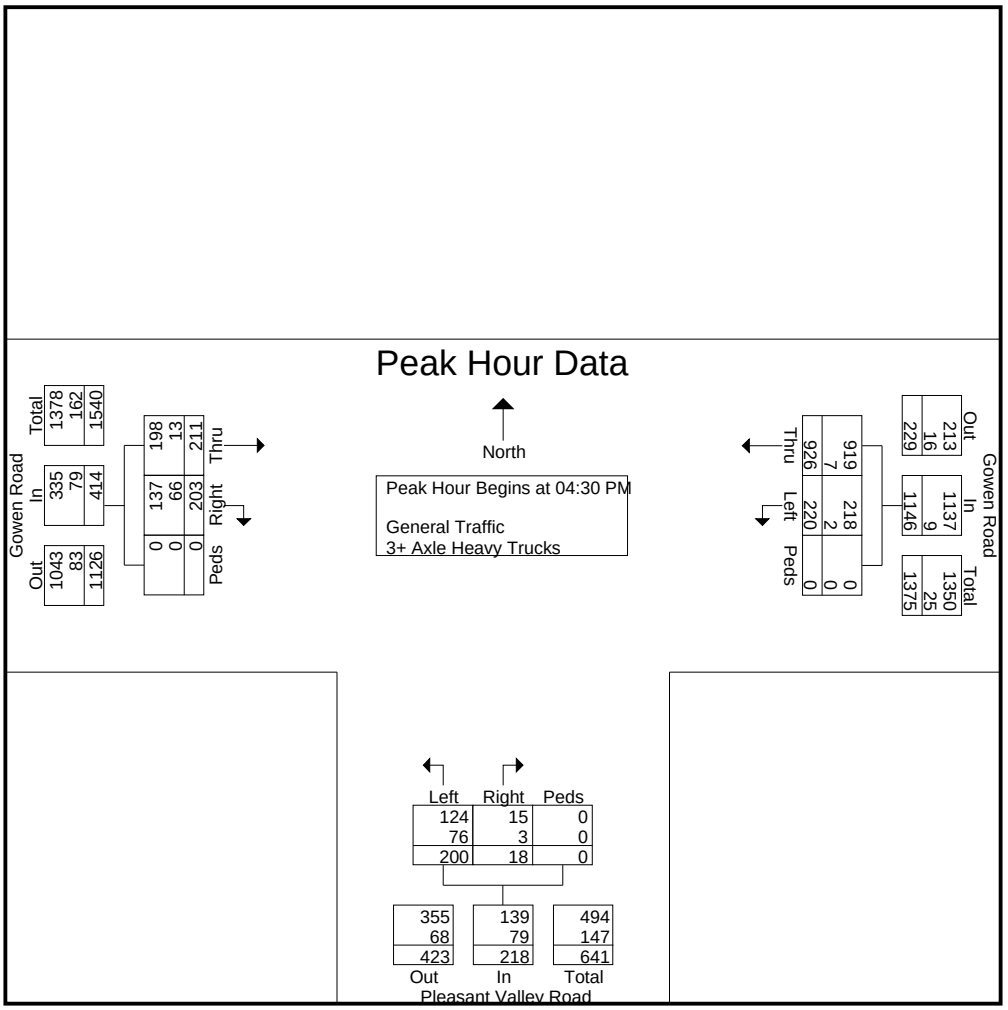
L2 Data Collection

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



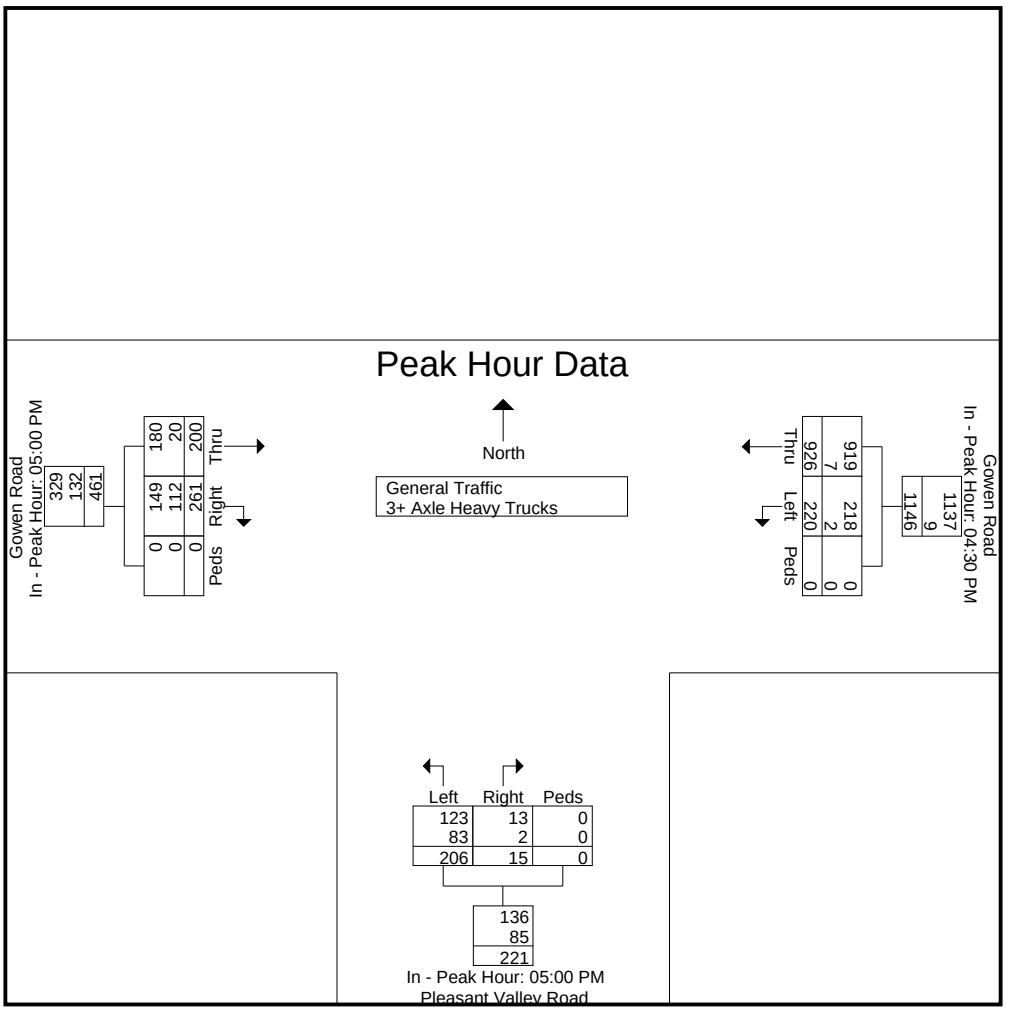
L2 Data Collection

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

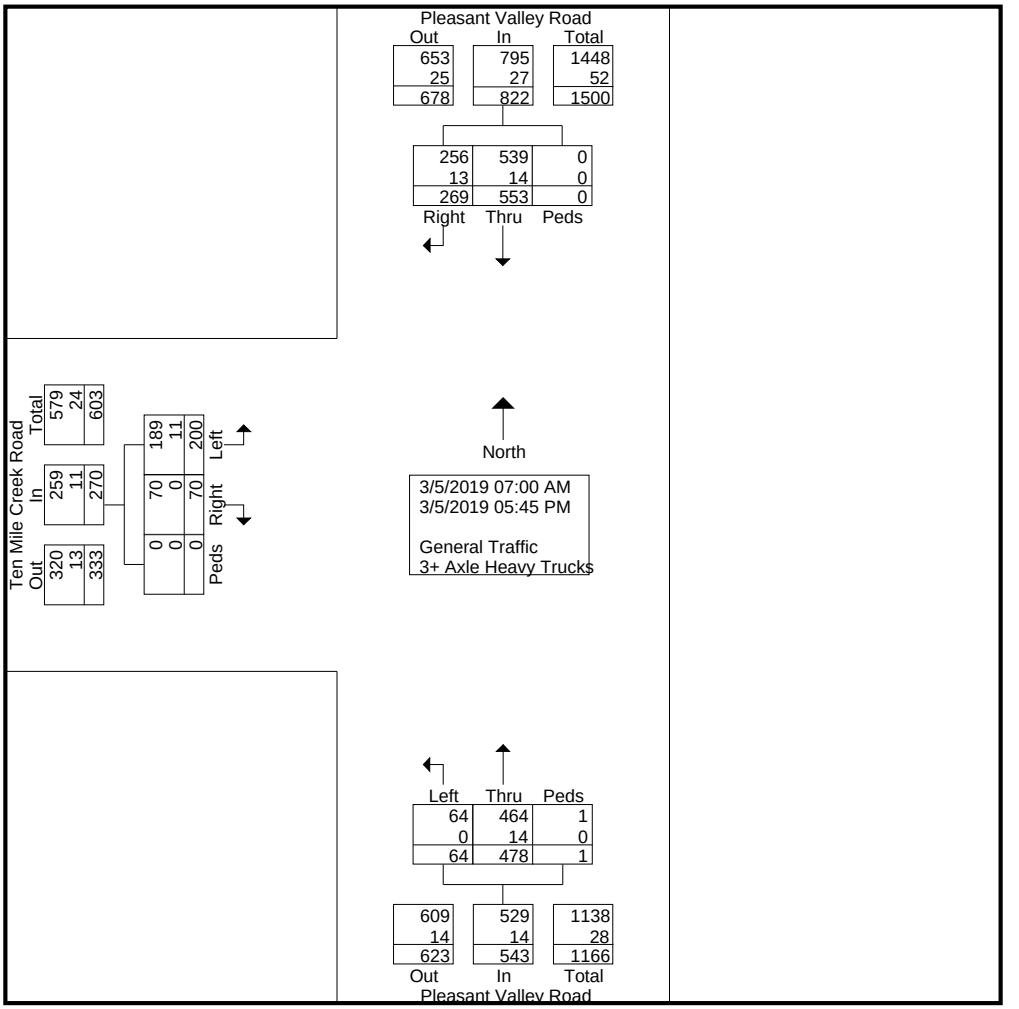
04:00 PM	15	27	0	42	30	14	0	44	0	2	0	2	88
04:15 PM	27	34	0	61	29	8	1	38	0	0	0	0	99
04:30 PM	24	33	0	57	33	8	0	41	0	1	0	1	99
04:45 PM	34	48	0	82	10	11	0	21	1	2	0	3	106
Total	100	142	0	242	102	41	1	144	1	5	0	6	392
05:00 PM	37	33	0	70	29	10	0	39	0	1	0	1	110
05:15 PM	64	68	0	132	23	7	0	30	1	0	0	1	163
05:30 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



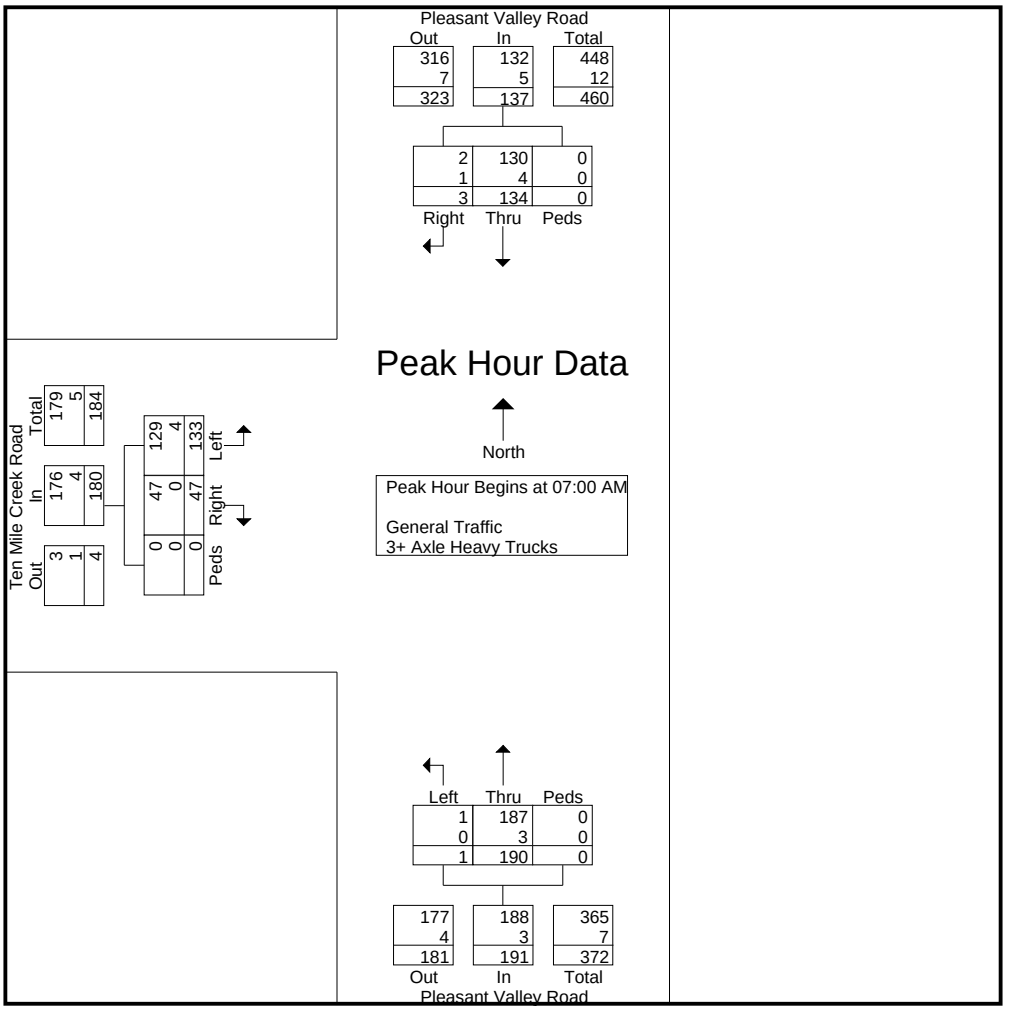
L2 Data Collection

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



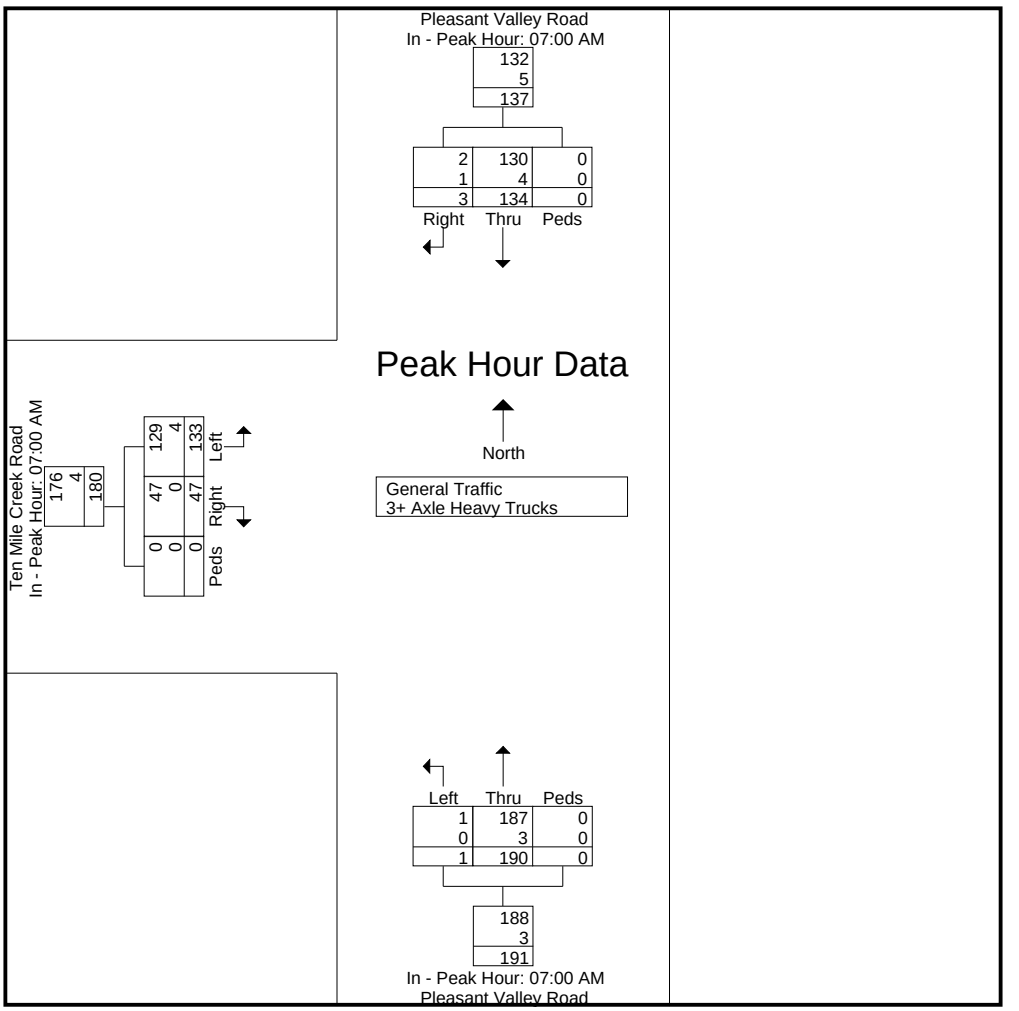
L2 Data Collection

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	



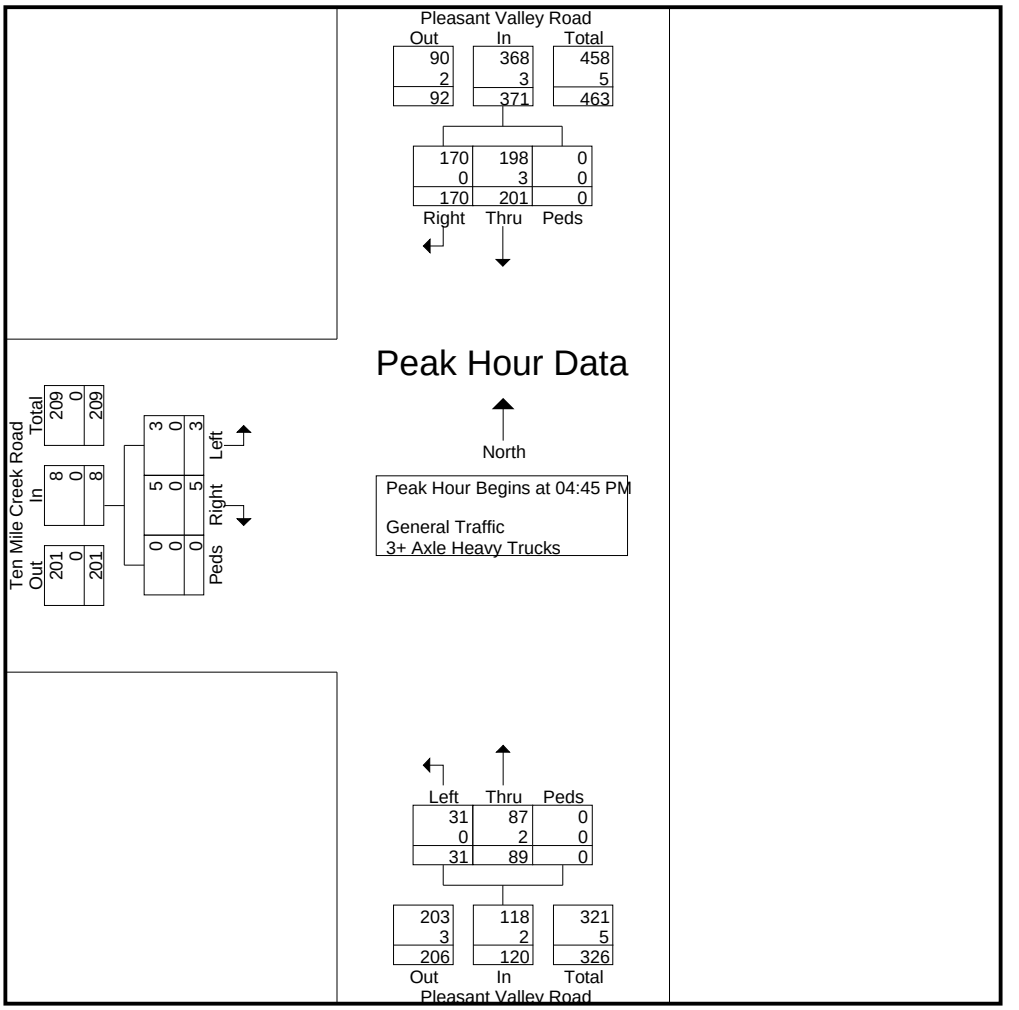
L2 Data Collection

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



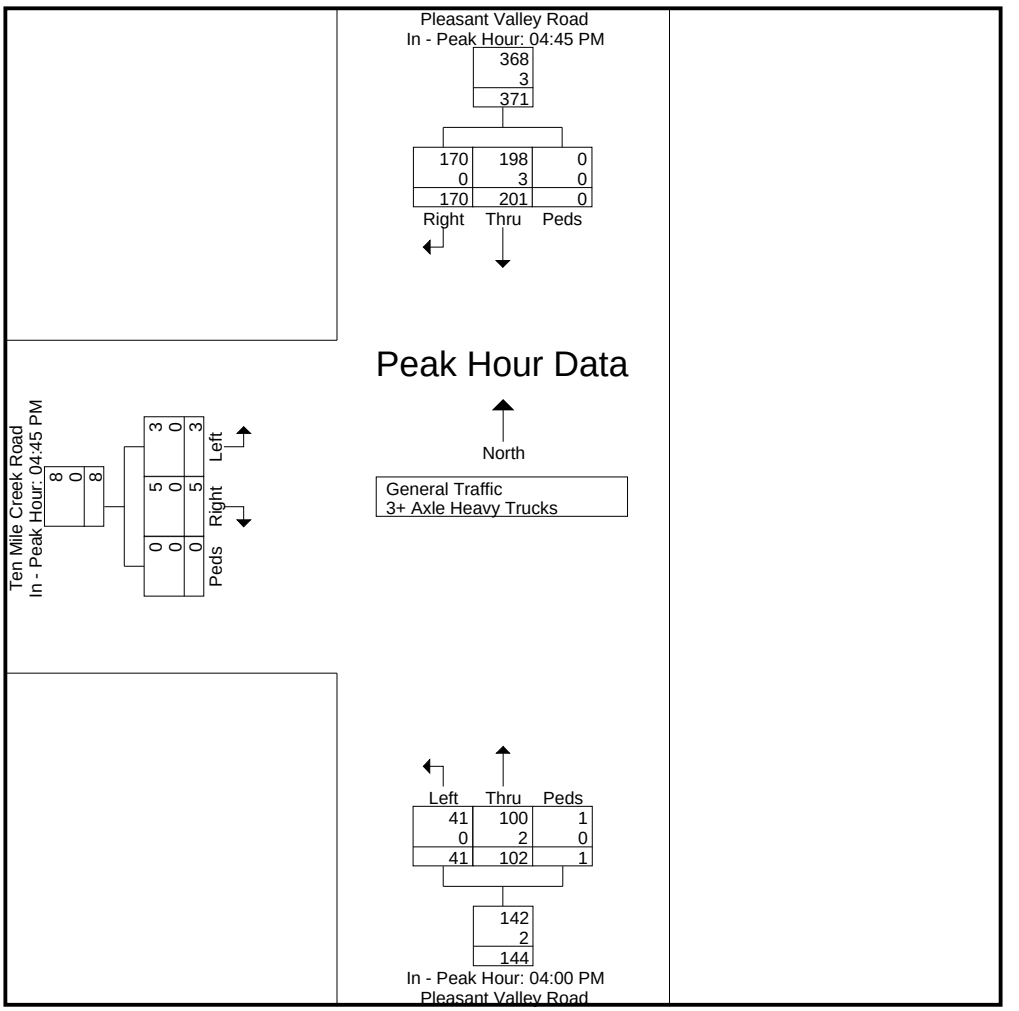
L2 Data Collection

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

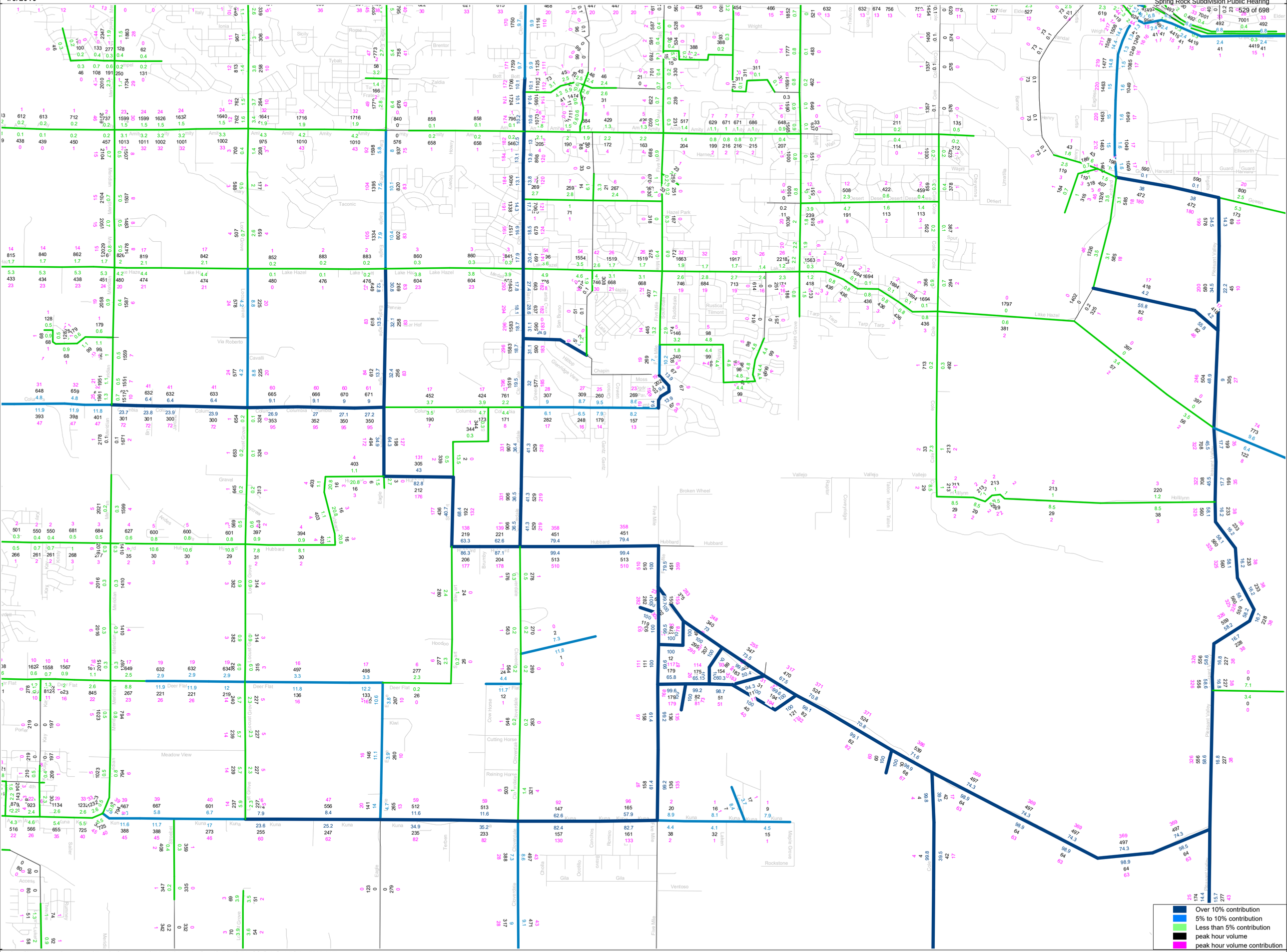
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	5	31	89	201	170
Future Vol, veh/h	3	5	31	89	201	170
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	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		

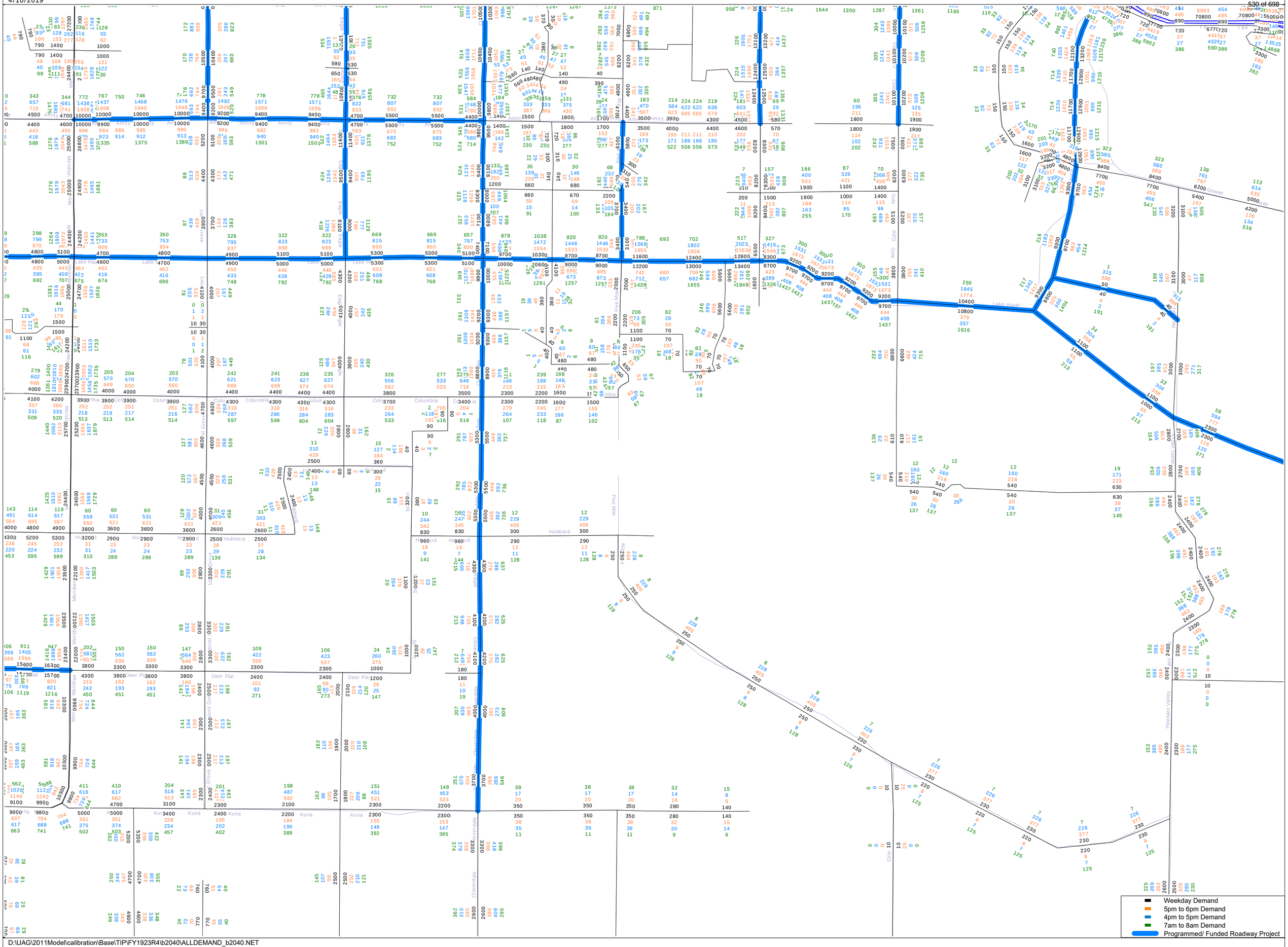
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1081	-	577	-	-
HCM Lane V/C Ratio	0.037	-	0.018	-	-
HCM Control Delay (s)	8.5	0	11.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

APPENDIX D: COMPASS FORECASTS


Over 10% contribution
5% to 10% contribution
Less than 5% contribution
peak hour volume
peak hour volume contribution

2040 Build: Daily, 5pm to 6pm Peak, 4pm to 5pm Peak and 7am to 8am Peak Demand
4/10/2019

Spring Rock Subdivision Public Hearing
530 of 698



D:\UAG\2011Model\calibration\Base\TIP\FY1923R4\b2040\ALLDEMAND_b2040.NET
New Regional Model calibrated to 2011/12 conditions - completed in January 2015

cube

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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	-	-

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	-	-

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

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

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

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

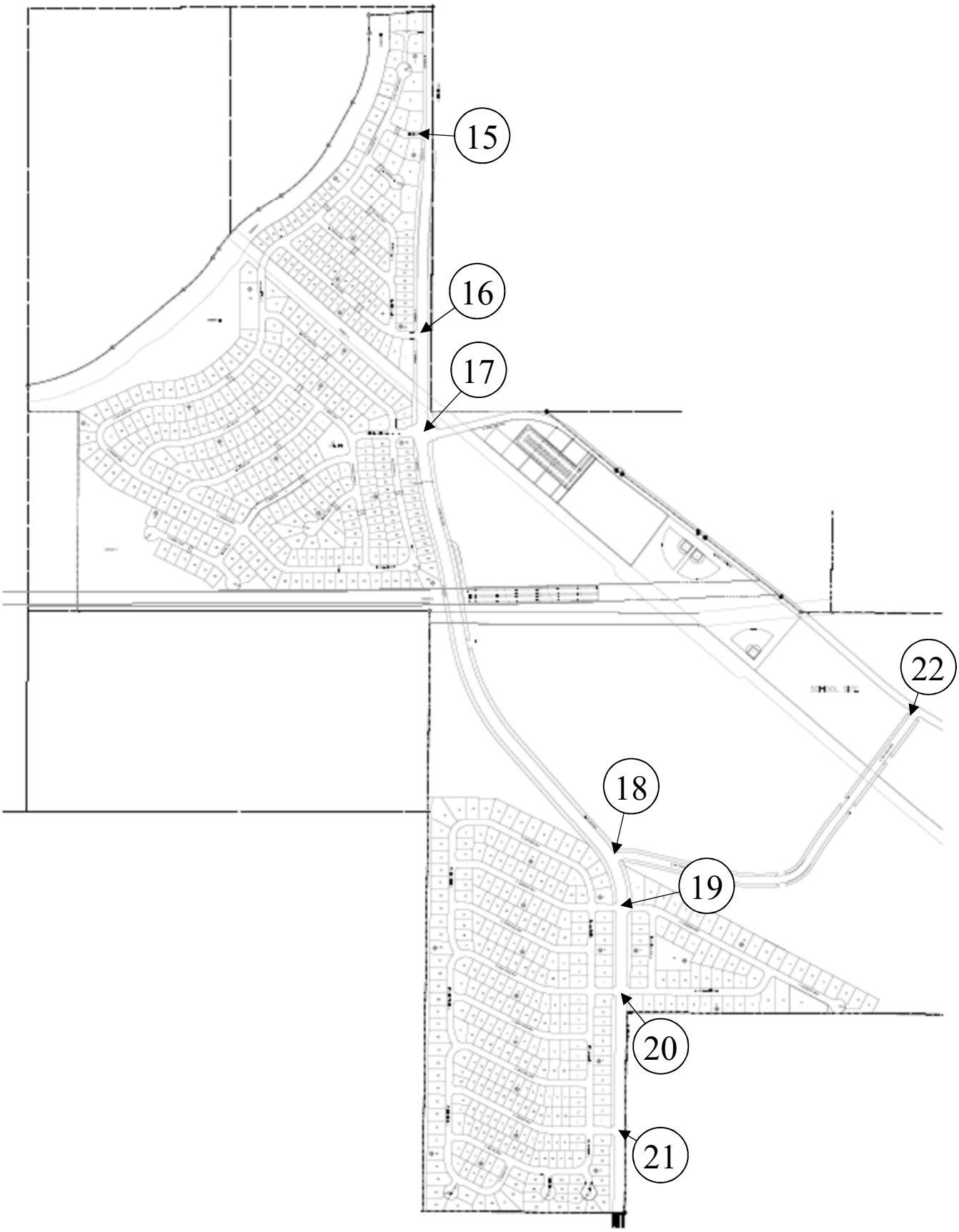
2025 Total - Mitigation
PM Peak Hour

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

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	-	-

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	-

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	-	-

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

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	-	-

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

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	-

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	-	-

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

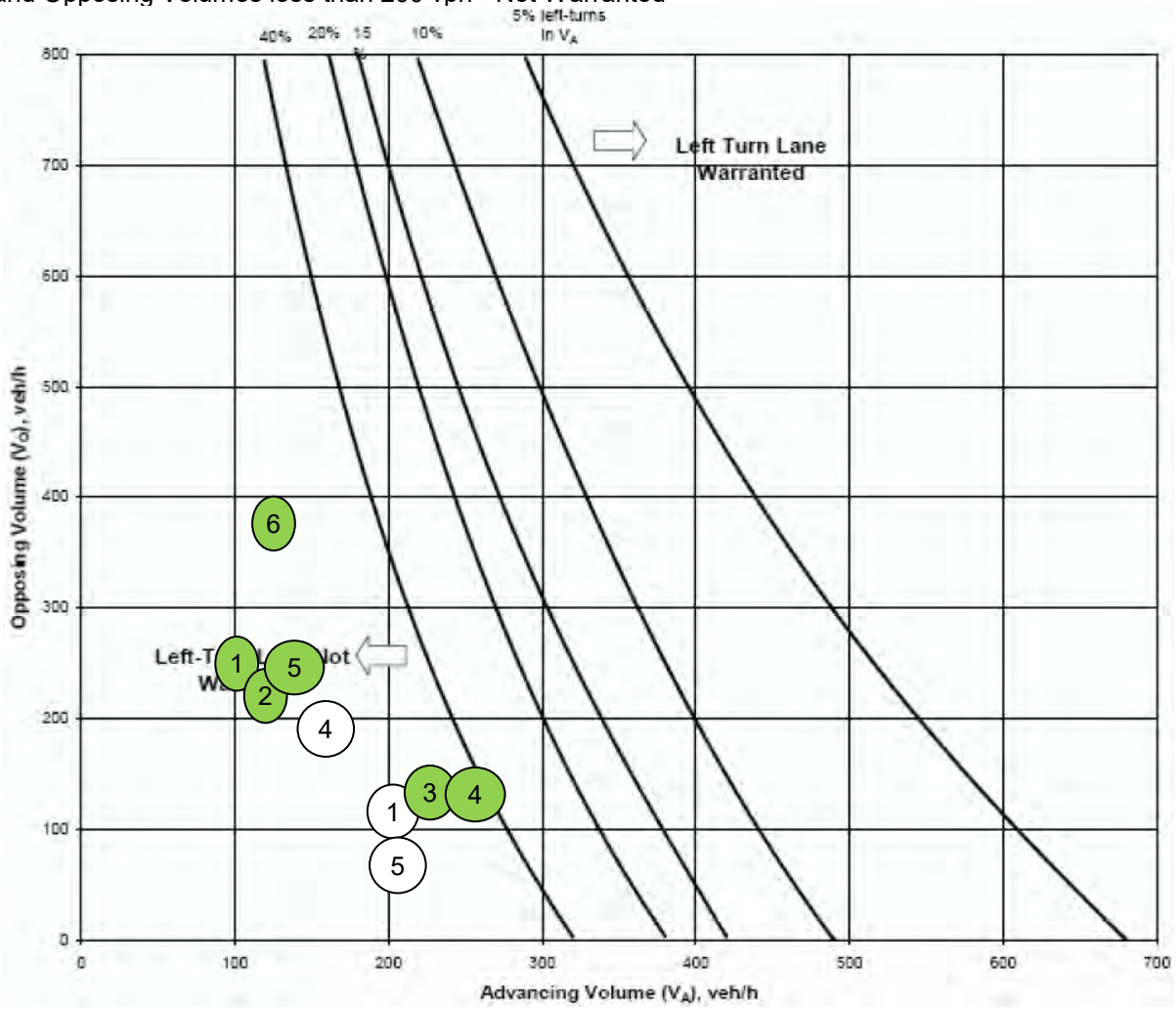
APPENDIX G: TURN LANE WARRANT WORKSHEETS

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

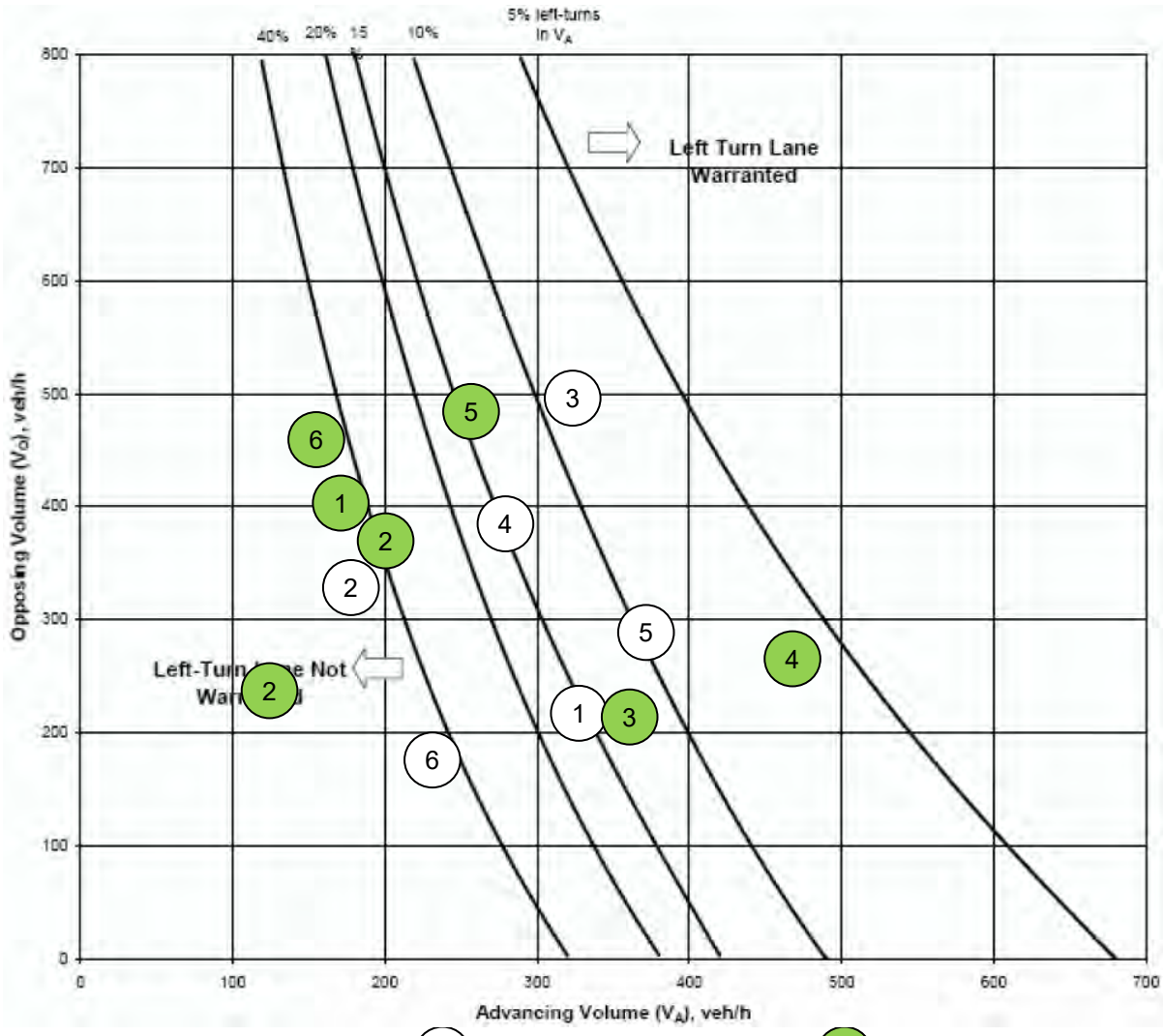


Weekday AM (1) Weekday PM (1)

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

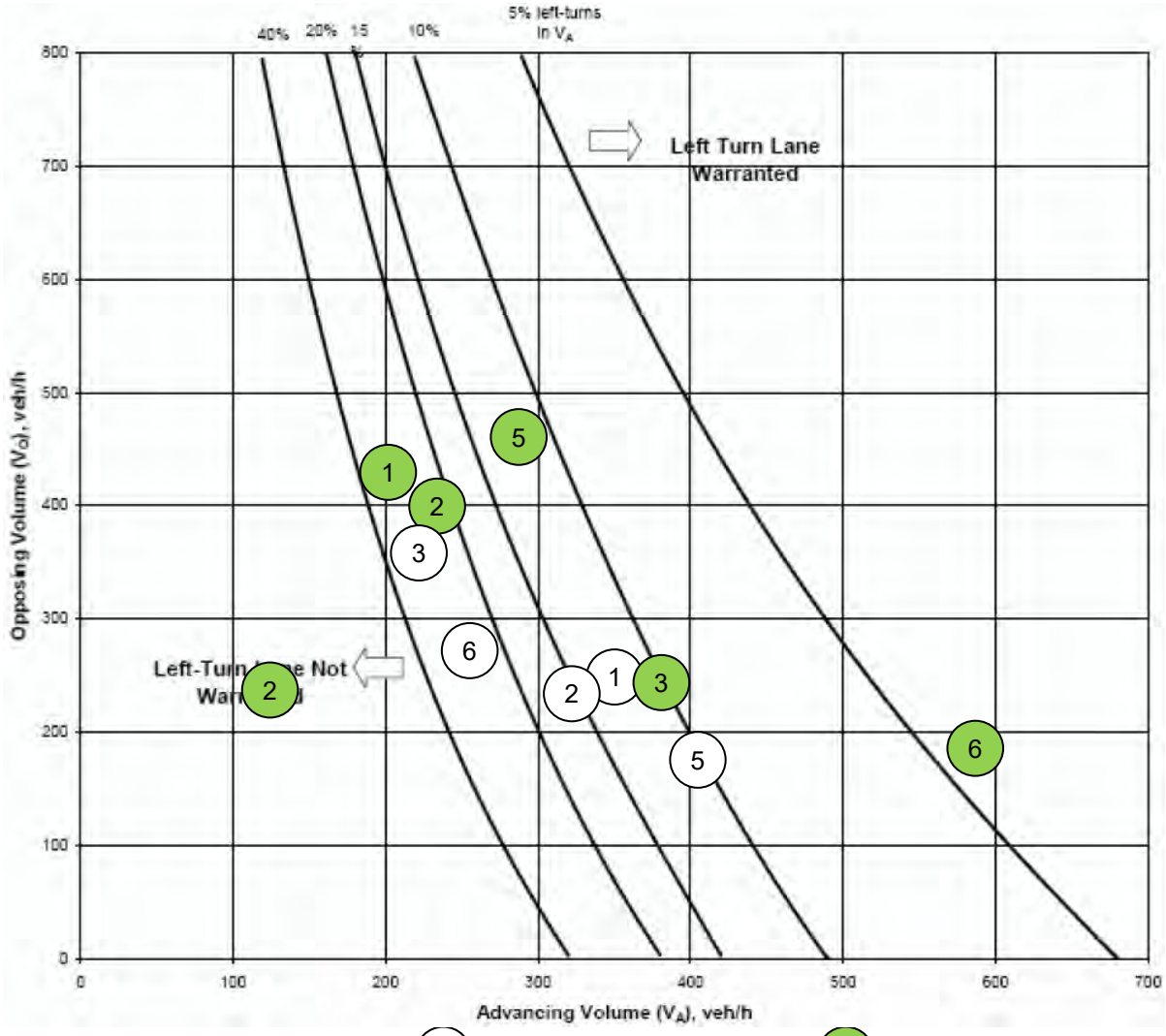


Weekday AM (1) Weekday PM (1)

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**

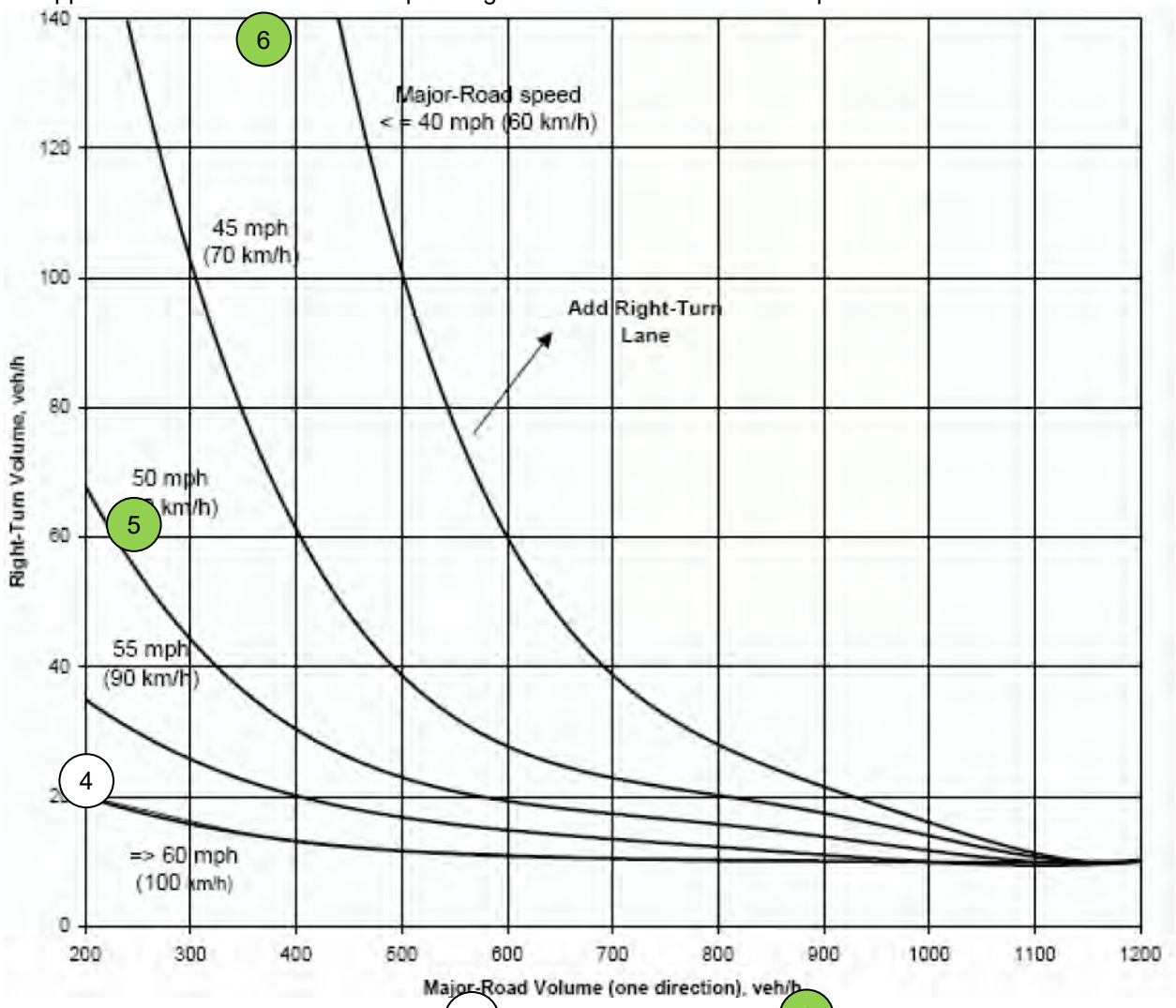


Springrock Subdivision
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

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



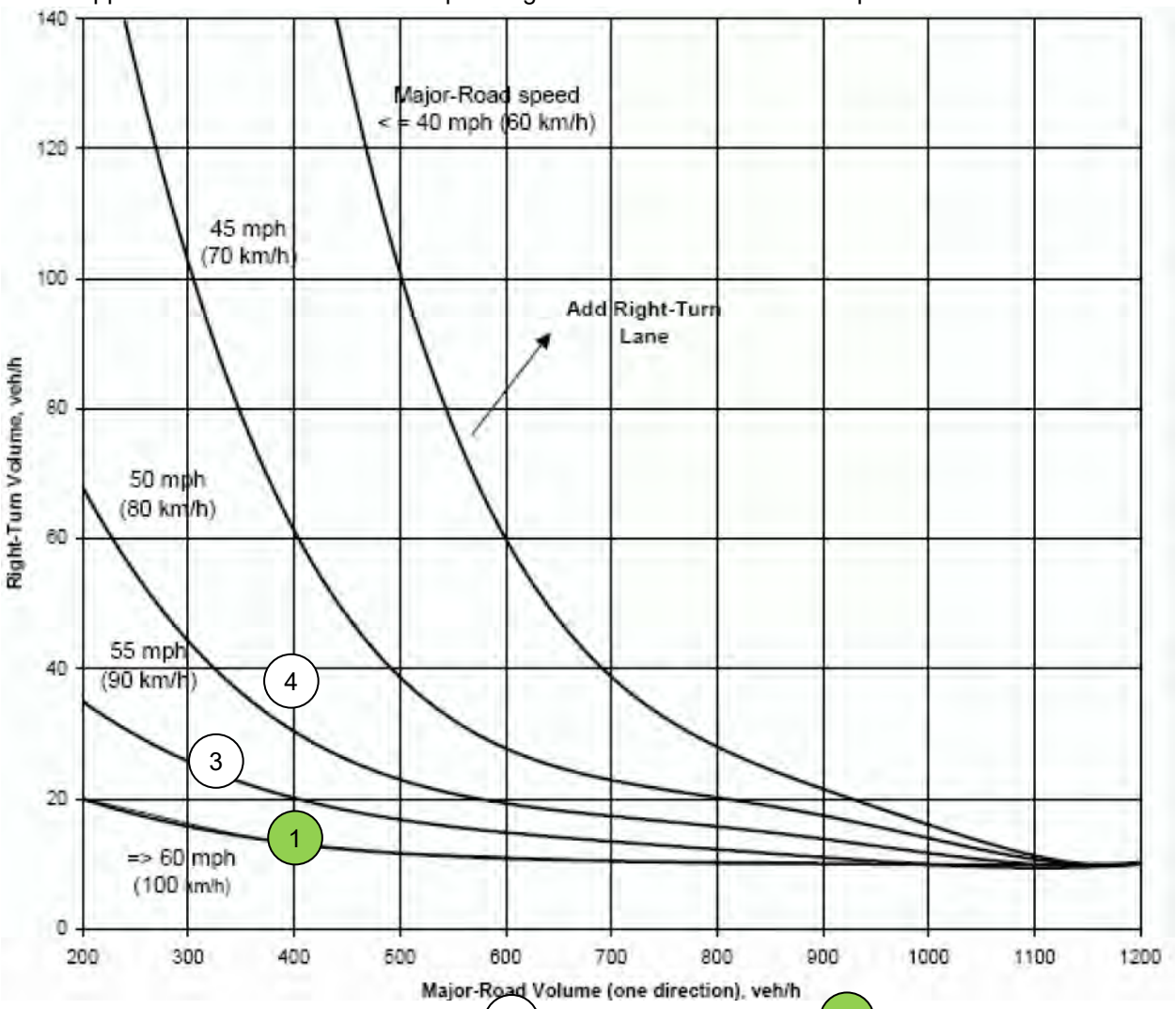
AM Peak 1 PM Peak 1

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



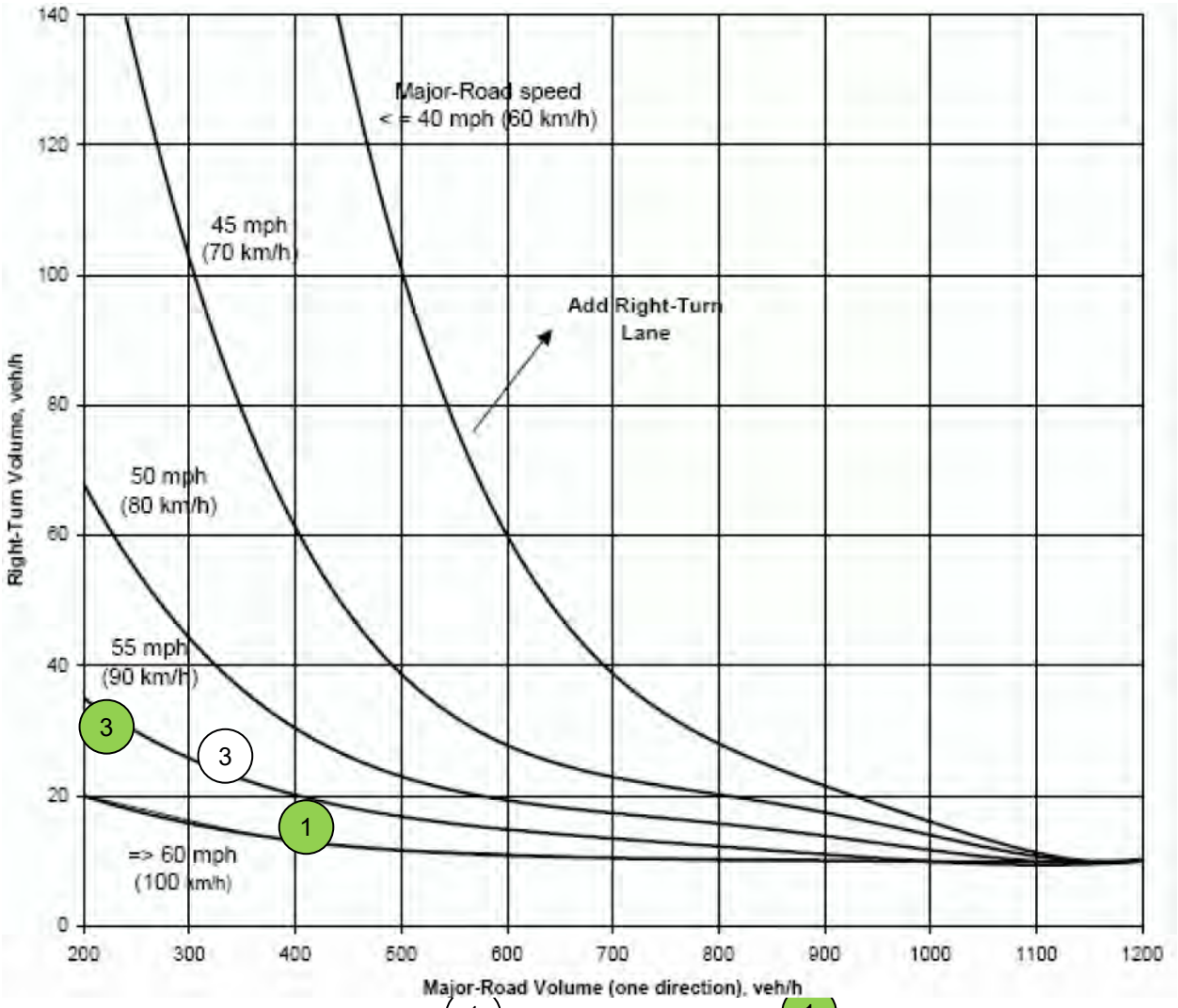
AM Peak 1 PM Peak 1

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

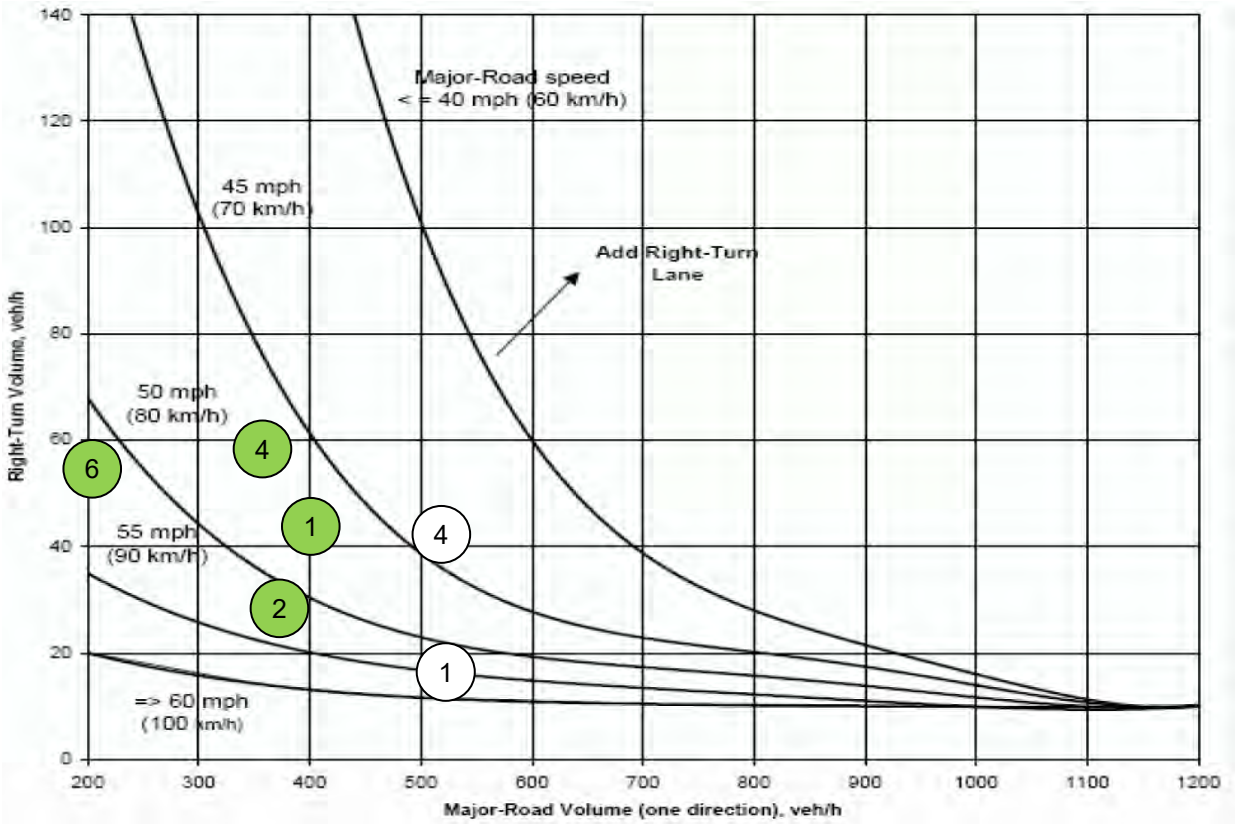


Springrock Subdivision
ACHD Right-turn Lane Guidelines for Two-Lane Roadways

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

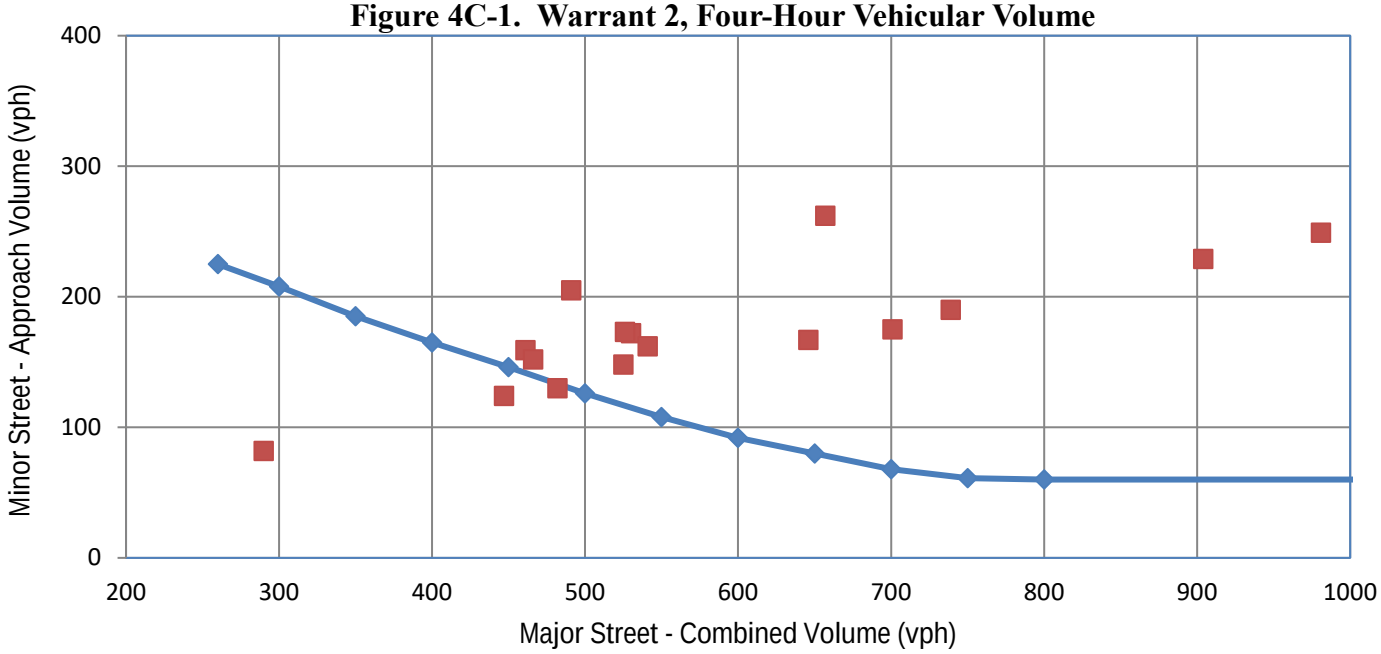
Warrant 1, Eight-Hour Vehicular Volume

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

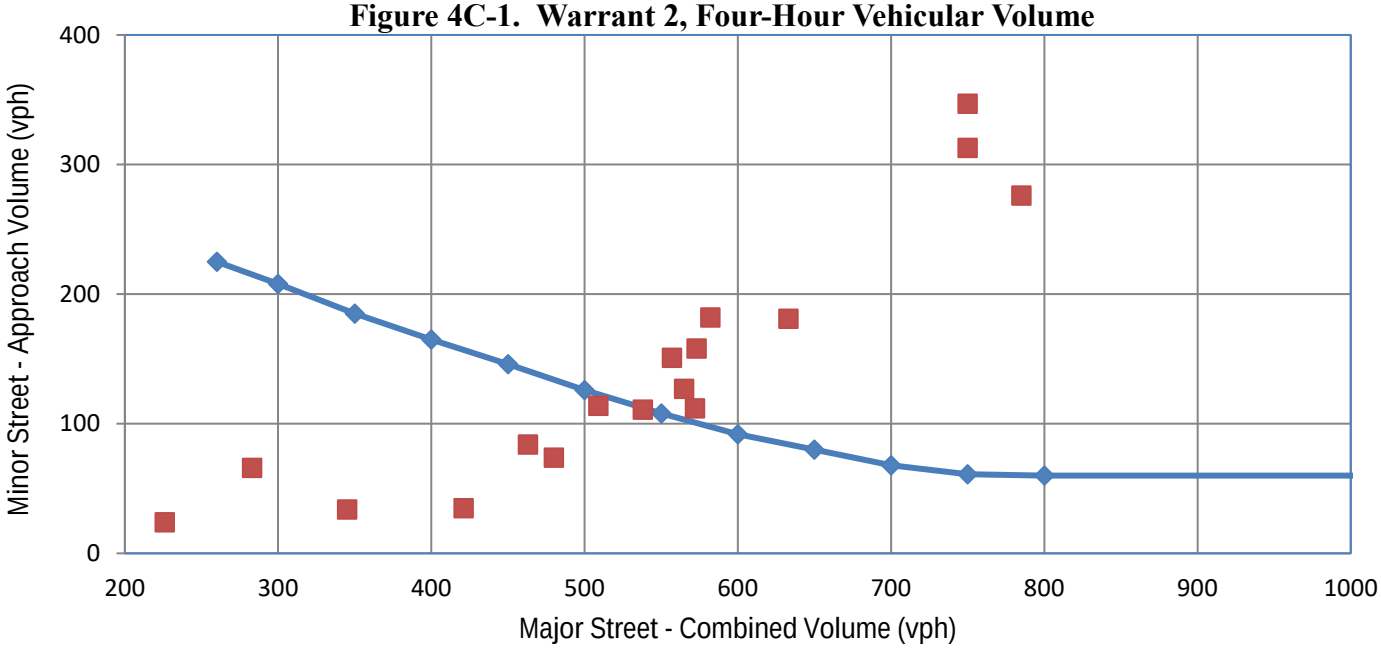
Warrant 1, Eight-Hour Vehicular Volume

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

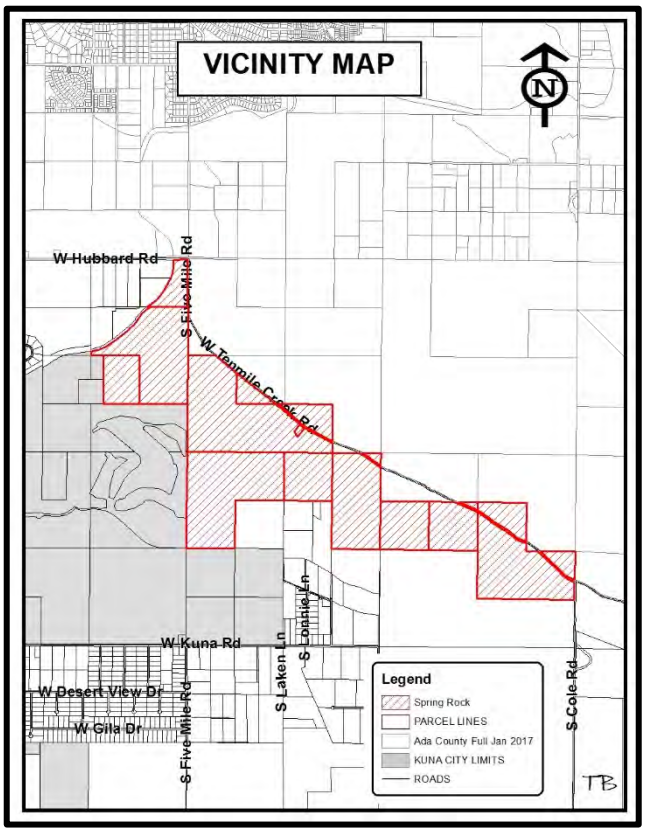
Case Numbers: 19-10-AN (Annex), 19-01-PUD (Planned Unit Development), 19-06-S (Subdivision), 19-23-DR (Design Review) & a Development Agreement for the: *Spring Rock Subdivision*

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
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D. General Project Facts
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G. Comprehensive Plan Analysis
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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

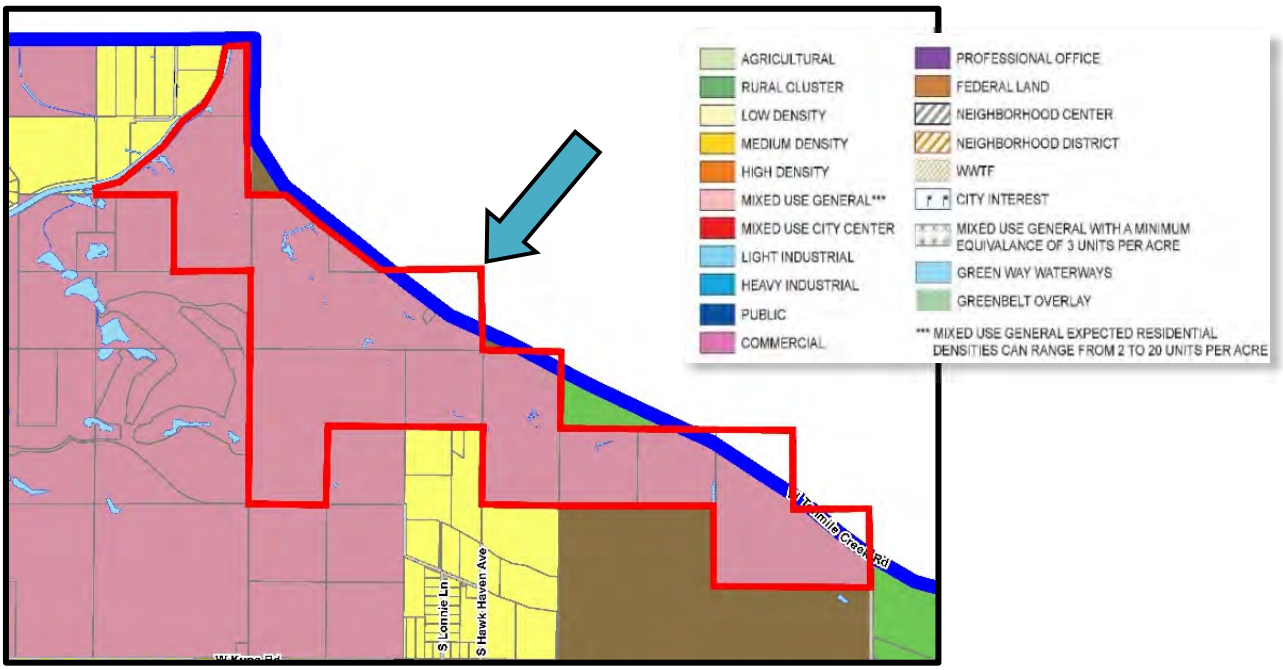
B. Applicant Request:

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
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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

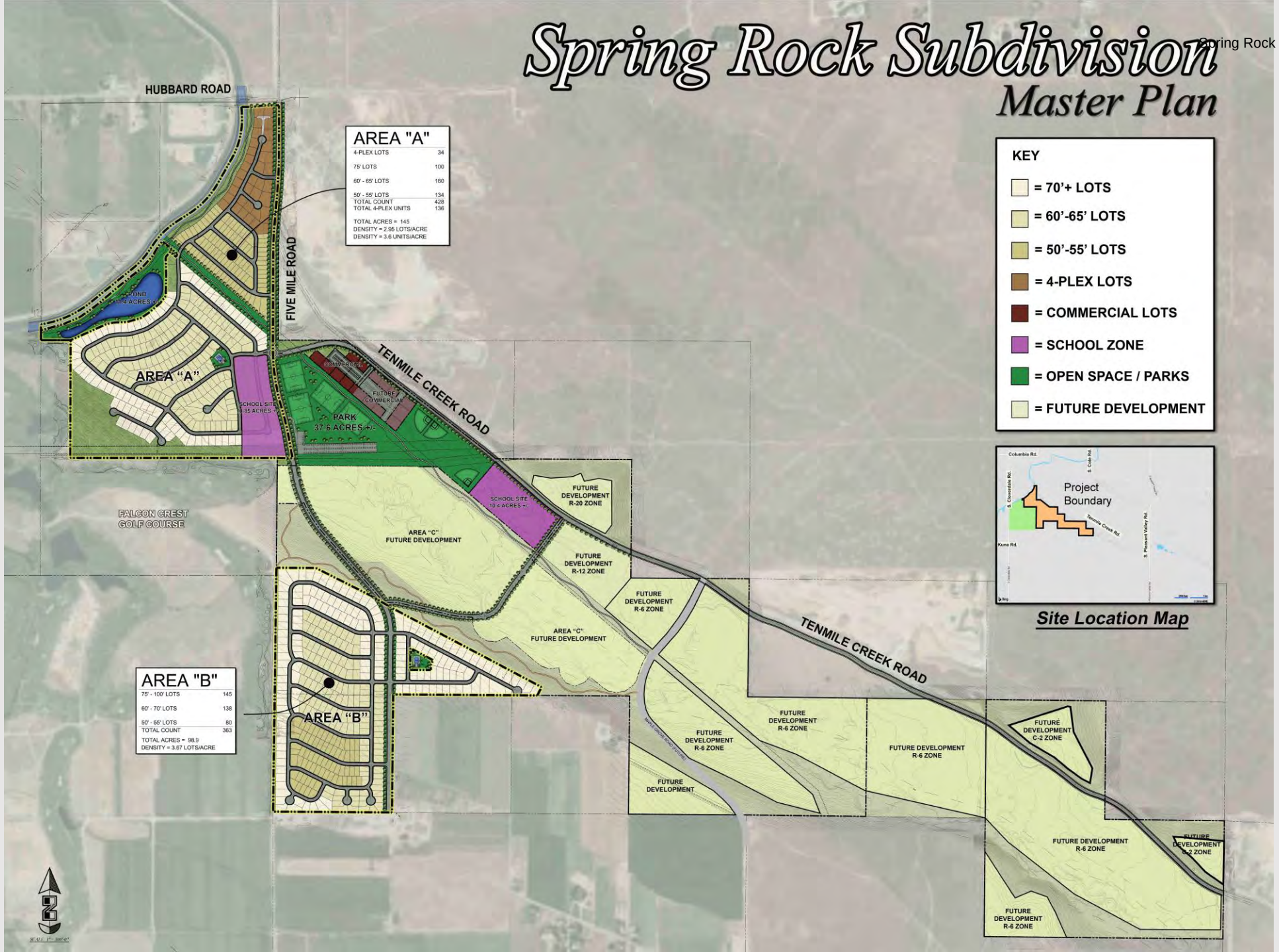
SPRING ROCK

a Master Planned Community

Kuna City Council

June 16, 2020

Spring Rock Subdivision
Master Plan



Site Location Map

SPRING ROCK: Annexation & Zoning

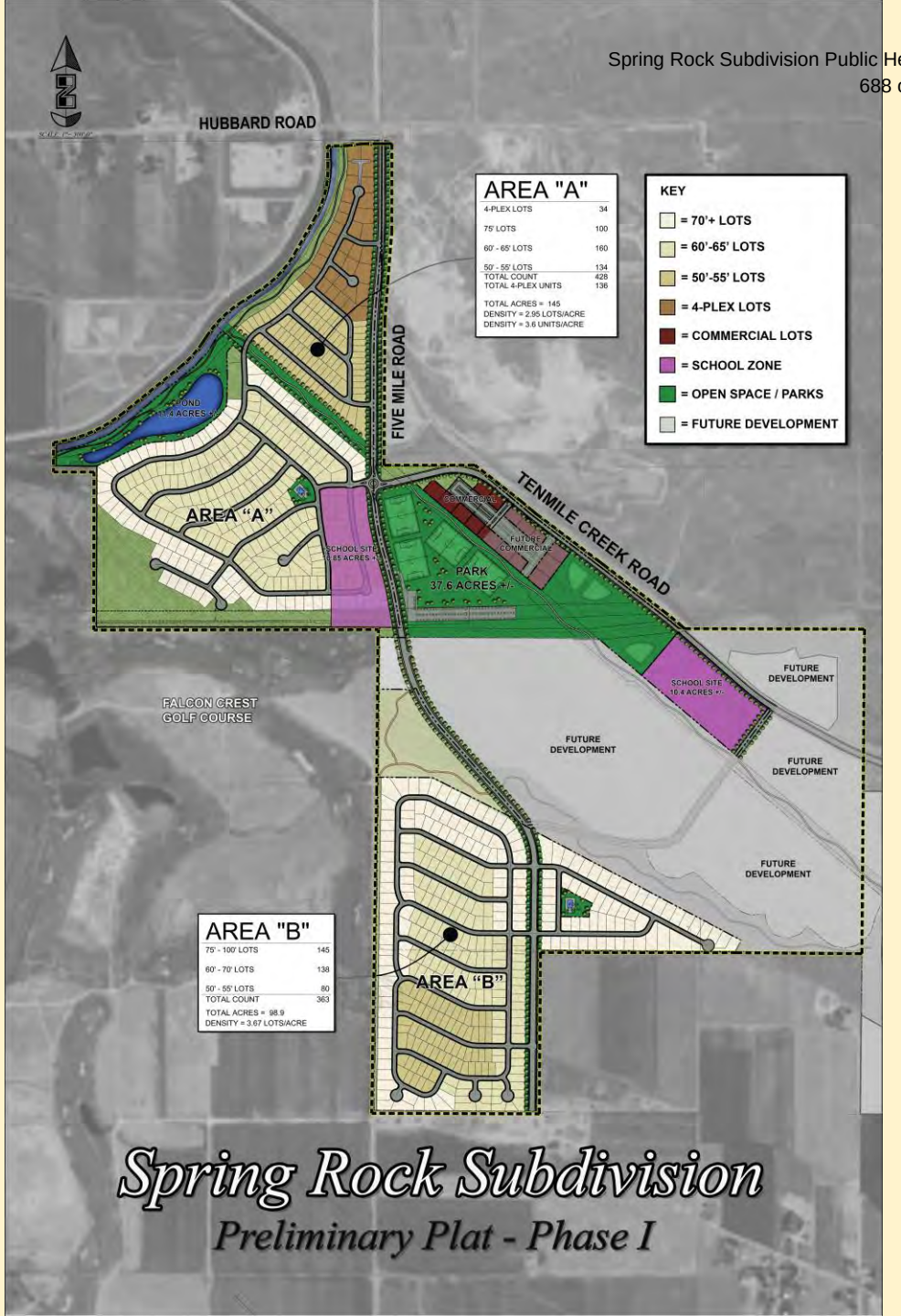
- *Contiguous to City Limits*
- Complies with new *Envision Kuna Comprehensive Plan (adopted 2019)*
- *Waited until Comp Plan & Falcon Crest approved*

SPRING ROCK: Master Plan

- *Is a Planned Unit Development with a variety of Uses and Zones*
  - *SF & MF Residential and Neighborhood Commercial*
- *761 Acres and Overall Density is 2.99 du/A*
- *Site challenges:*
  - *Topography, Williams Gas Pipeline, Idaho Power transmission lines*
- *Significant Onsite and Offsite Improvements paid by Developer*
  - *Sewer, water, pressure irrigation, utilities, parks and other amenities, etc.*
- *Developed with many phases*

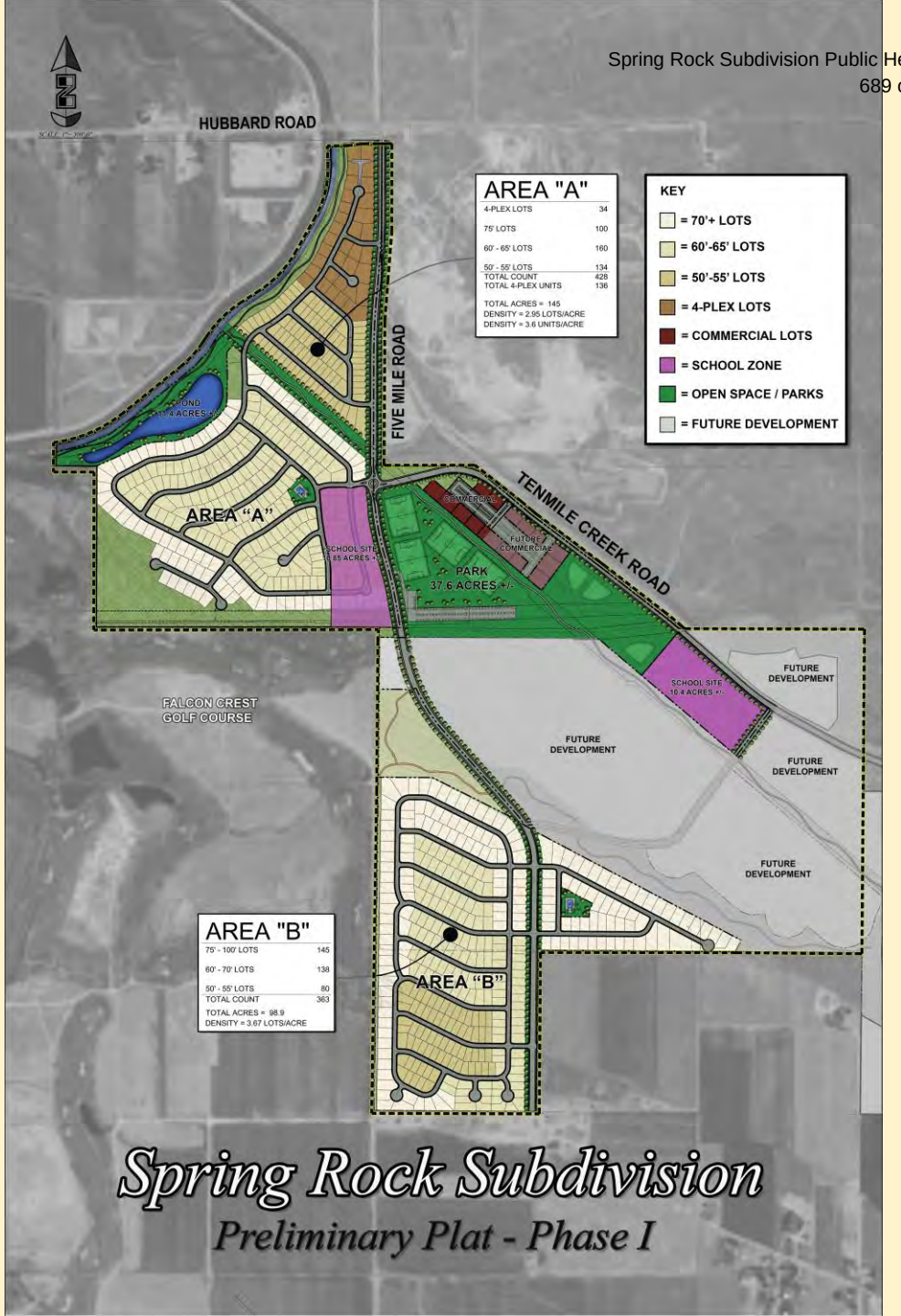
SPRING ROCK: Preliminary Plat #1

- Includes a higher portion of open space
  - Front load more amenities and more open space in initial phases



SPRING ROCK: Amenities

- Open Space:
  - 150+ acres Open Space overall
  - Minimum 16% of the total site
  - More than new Open Space code requires
  - Approx. Half in the first Pre Plat
- *Fishing Pond (approx. 6-7 acres)*
- Public Park (35+ acres)
- *Pathways and Trails (over 3 miles)*
  - *Interconnect within the development and the adjacent Falcon Crest*
- *Private Swimming Pools for Spring Rock HOA*
- *2 School sites (within 2 school districts)*




Spring Rock
Spring Rock
Spring Rock









SPRING ROCK: Community Infrastructure District (CID)

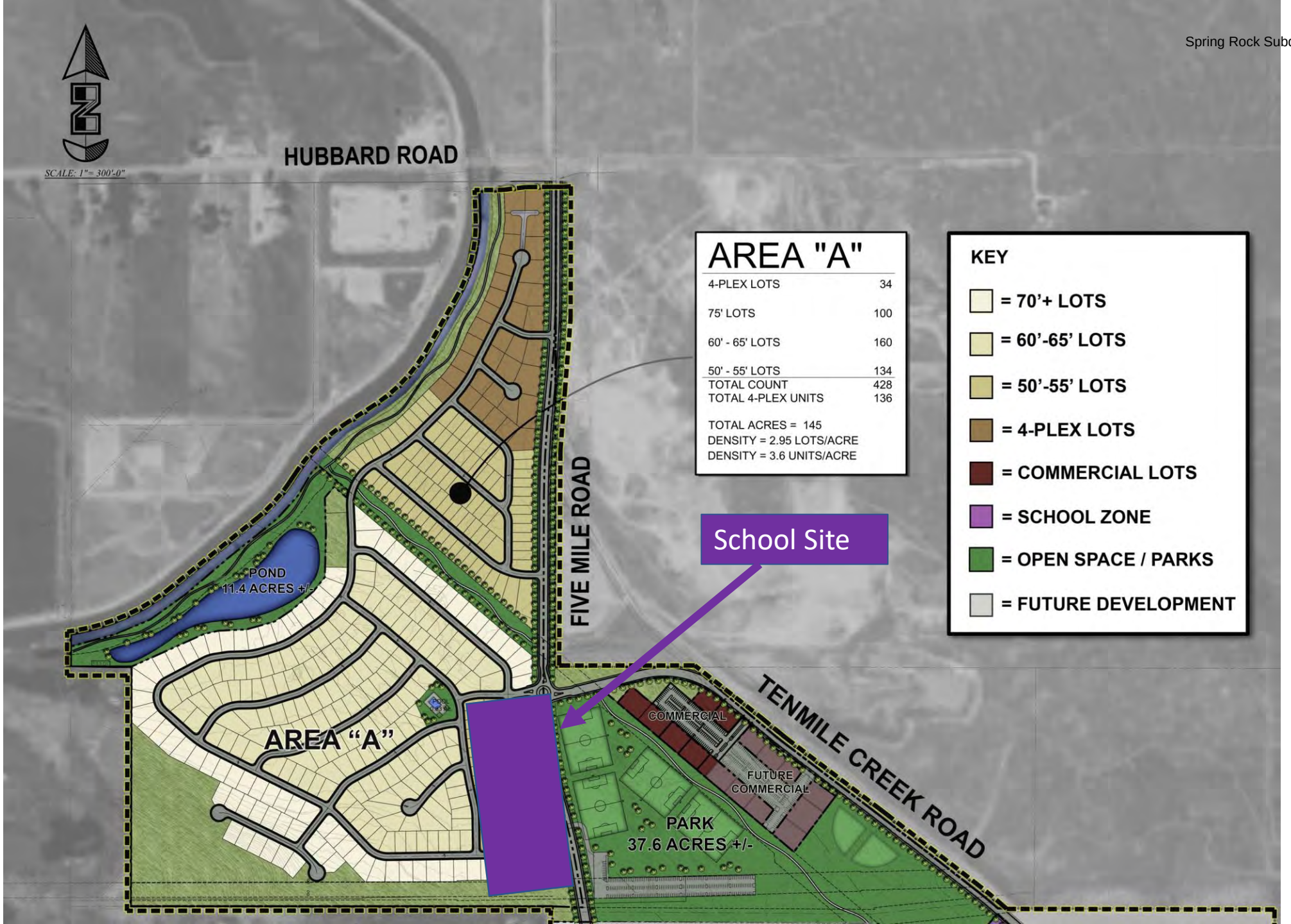
- *Referenced in the Development Agreement*
- *Not an LID*
- *Can be used to install large improvements earlier in the development*
- *Apply for CID later after initial approvals*
  - *Based on CID Guidelines already submitted to City*

SPRING ROCK: Sewer

- In the Development Agreement (section 5.4), two options for Sewer
- Preferred option is Regional onsite Waste Water Treatment facility
- We will submit an application to the City and will address sewer fees
  - With onsite sewer treatment, not using sewer trunk line or interceptor lines
  - Net result will be a net positive to the City

SPRING ROCK: Schools

- Site is within 2 school districts (West Ada and Kuna School District)
- Several discussions with Kuna School District
- Decided to add a school site


SCALE: 1"= 300'-0"
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
KEY
= 70'+ LOTS
= 60'-65' LOTS
= 50'-55' LOTS
= 4-PLEX LOTS
= COMMERCIAL LOTS
= SCHOOL ZONE
= OPEN SPACE / PARKS
= FUTURE DEVELOPMENT
School Site
POND
11.4 ACRES +/-
AREA "A"
COMMERCIAL
FUTURE
COMMERCIAL
PARK
37.6 ACRES +/-

SPRING ROCK

- *Worked closely with staff*
- *Neighborhood meeting*
  - *Including some written comments support in your packet*
- *ACHD:*
  - *Completed 2 Traffic Studies (Master Plan and Pre Plat #1) = Thorough review of TIS*
  - *ACHD Commission approved Master Plan December 2019*
  - *ACHD Commission approved Preliminary Plat January 2020*
- *P&Z Commission:*
  - *Recommended approval with a few conditions*
- *We worked with staff and agreed to some additional changes*
- *Development Agreement represents reconciliation of all items*

SPRING ROCK: Conclusion

- *Excited to bring this quality development to Kuna*
- *Contiguous to City limits & Complies with City Comp Plan*
- *Added a school site for Kuna School District*
- *Agree with staff report conditions of approval*
- *Request approval of Spring Rock applications (annexation, zoning, PUD, preliminary plat, DA, etc.)*

Thank You

CITY OF KUNA
P.O. BOX 13
KUNA, ID 83634
www.kunacity.id.gov

MEMO

Date: June 16, 2020

From: Lisa Holland (Economic Development Director)

To: Mayor and Council

RE: Urban Renewal District Plan – JUB Contract

Mayor and Council Members,

I wanted to provide a couple of updates on the Urban Renewal planning process. At this point, the City Council and the Urban Renewal Agency have both voted to adopt the eligibility study that we brought before you in May. We had also made a request to the Ada County Commissioners to enter into an inter-governmental agreement with the City of Kuna to include a few parcels that are not currently in City limits within the proposed Urban Renewal boundaries. The Ada County Board of Commissioners decided to opt out of participating at this point in time, and I've provided a copy of their letter as a reference for you.

As part of our next steps, we will remove any parcel from the Urban Renewal boundaries that has not annexed in to the City of Kuna prior to formation of the proposed Kuna West Urban Renewal District (URD). We have mailed a letter to property owners that are within the boundary that have not annexed in to offer a one-time waiver of annexation fees if they would like to have their property in the URD. If they choose not to participate, we will remove those parcels from the planning efforts. A copy of this letter is also attached for your reference.

The next step in forming a District is to create a detailed plan and feasibility study that outlines what the Urban Renewal Agency and City would like to accomplish. Attached is a contract and scope of work from JUB Engineers that will also be presented to the Urban Renewal Agency for consideration at their July 1 meeting. The scope of work includes a subcontractor (Alivia Metz) to assist with the economic analysis and future valuation of properties within the district. The District Plan cost from JUB and their contractor will not exceed $63,013. We had planned $85,000 in the 2019-2020 fiscal budget for Urban Renewal work, and have enough left in the budget to cover legal and contractor expenses through this fiscal year. We will be making a budget request for an additional $30,000 in the 2020-2021 fiscal budget to cover the remaining legal and contractor fees. Once a district is formed and increment starts being collected, the Urban Renewal Agency will be able to pay their own legal and contractor expenses moving forward, and could also reimburse the City for some of the up front costs in forming the District if needed.

There will be multiple opportunities for additional public and agency involvement during the District planning process, and before the plan could be adopted it would need to be approved by the Kuna Urban Renewal Agency, the Kuna Planning & Zoning Commission as well as City Council. The plan itself will be a detailed document that will include plans and scope for several roadway, sewer, water, and other infrastructure related projects.

If you have any questions, I'm more than happy to meet with you one-on-one or discuss with you during the Council meeting.

Thank you for your consideration,

Lisa Holland
Economic Development Director
lholland@kunaid.gov
208-559-5926

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

May 29, 2020

Via Email

Mayor Joe Stear
City Council Members
City of Kuna
715 W 4th St.
Kuna, ID 83634

RE: Request for Resolution to adopt the findings of Kuna's Urban Renewal Agency

Dear Mayor Stear and City Council:

Ada County appreciates the invitation to adopt a resolution adopting the findings of your Urban Renewal Agency, relating to the West Kuna Urban Renewal Area (URA). Ada County is very supportive of Kuna and the efforts you are making to diversify your economic base by creating more opportunity for industrial and commercial uses. We recognize the benefits that will come to you as a city, us as the county and ultimately the region with your efforts.

However, after reviewing the study provided and the Ada County Future Land Use map, we feel that expanding the URA outside city limits and including agricultural land would not be in conformance with our vision and adopted policies. The unincorporated property you are seeking to include is located within Kuna's Area of City Impact A and B. These designations were approved by Ada County in 2017 as part of an agreement with the City of Kuna. The Area of Impact B is subject to Ada County's Future Land Use map and Comprehensive Plan, and this area is designated as Agriculture (Irrigated). The Comprehensive Plan discourages development within this designation and lists farmland, cropland, vineyards, pastures, orchards and other low intensity agricultural uses as primary uses.

Additionally, portions of this study area are designated as Prime Farmland by the U.S. Department of Agriculture, which are lands that have been identified as having the best combination of physical and chemical characteristics for the production of crops that are still available for farming. As Goal 2.5b of the Ada County Comprehensive Plan supports the conservation of prime agricultural land and irrigated farmland. The preservation of existing agricultural land is especially important at this time due to the significant loss of farmland the region has experienced due to growth, and the development pressures that continue to affect agricultural lands in the County.

Ada County would encourage Kuna to look at other tools for funding development inside city limits. With the strength of our economy and pace of growth, developer funded improvements would seem to be a viable option for this area.

Ada County does look forward to continuing to work with Kuna to best develop a workable land use vision within the region that balances the need for economic development with an interest in providing efficient public facilities and preserving public and agricultural lands.

Sincerely,

ADA COUNTY BOARD OF COMMISSIONERS

Kendra Kenyon, Commissioner

Diana Lachiondo, Commissioner

Patrick Malloy, Commissioner

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

June 8, 2020

Re: Urban Renewal District for Kuna, Annexation Opportunity

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 in creating an Urban Renewal District (URD). 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 development 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.

We've included a Frequently Asked Questions (FAQ) document that explains more about how Urban Renewal works, and I would be more than happy to answer any questions or set up a meeting with you to explain further.

Any property within an Urban Renewal District would need to be in Kuna City Limits. 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 at __ADDRESS_ was identified in the eligibility study as a potential parcel to be considered, though this property is currently not in City limits.***

We wanted to offer a one-time no cost annexation into the City of Kuna if you want your property to be a part of the Urban Renewal District. Normally an annexation fee would cost $1,300 plus $30 per acre (up to 40 acres), but if you choose to participate in the Urban Renewal District Planning, we will waive that fee and also help facilitate the process for you. If you annex, you would be able to keep your existing use until you choose to develop your property. You would have the opportunity to work with the City on prioritizing which infrastructure projects should be included in the District Plan. If you choose not to participate, your parcel will remain in the county and not be included in the proposed Urban Renewal District.

At your earliest convenience, please reach out to Lisa Holland (208) 559-5926 or email lholland@kunaid.gov and indicate your interest in either participating, getting more information, or remaining within the unincorporated County. We would like to hear from you by Friday, June 26th if possible.

Thank you for your consideration, and we look forward to talking with you soon.

Sincerely,

Joe Stear
Mayor of Kuna

Lisa Holland
Economic Development Director

RESOLUTION NO. R36-2020
CITY OF KUNA, IDAHO

A RESOLUTION OF THE CITY COUNCIL OF KUNA, IDAHO APPROVING THE "*PROFESSIONAL SERVICES AGREEMENT*" WITH JUB ENGINEERING, INC. FACILITATING AN URBAN RENEWAL DISTRICT PLAN FOR THE KUNA URBAN RENEWAL AGENCY; 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 "*Professional Services Agreement*" with JUB Engineering, Inc. facilitating a City of Kuna Urban Renewal District Plan for the Kuna Urban Renewal Agency, 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 16th day of June, 2020.

APPROVED BY THE MAYOR of Kuna, Idaho this 16th day of June, 2020.

_____
Joe L. Stear, Mayor

ATTEST:

_____
Chris Engels, City Clerk

CITY OF KUNA, IDAHO
PROFESSIONAL SERVICES AGREEMENT

This AGREEMENT is made between the City of Kuna, Idaho, a political subdivision of the state of Idaho, herein "*KUNA*" and J-U-B ENGINEERS, Inc., herein "*CONTRACTOR*").

THE PARTIES AGREE AS FOLLOWS:

1. SCOPE OF WORK:

KUNA engages *CONTRACTOR* to assist the City of Kuna with developing the West Kuna Urban Renewal District Plan as detailed in "**Exhibit A**" attached hereto.

2. KUNA'S RESPONSIBILITIES:

1. *KUNA* agrees to provide *CONTRACTOR* with information as to *KUNA's* requirements for the *Project*, including design objectives, capacity and performance requirements, and other documents in its possession, or reasonably obtainable.

2. *KUNA* agrees to obtain, arrange and pay for all advertisements for bids, permits and licenses, and similar fees and charges required, and provide all land, easements, rights-of-ways and access necessary for *CONTRACTOR's* services and the *Project*.

3. *KUNA* agrees to provide right of access to all properties as required during the execution of the work.

3. CONTRACTOR'S RESPONSIBILITIES:

1. *CONTRACTOR* agrees to provide the services of all professional and technical personnel required by this Agreement and detailed in **Exhibit A**.

4. RISK ALLOCATION:

KUNA agrees that *CONTRACTOR* is not responsible for damages arising directly or indirectly from any delays for causes beyond *CONTRACTOR's* control. For purposes of this Agreement, such causes include, but are not limited to, strikes or labor disputes; severe weather disruptions or other natural disasters; fire, riots, war or other emergencies or acts of God; failure of any government agency or other third party to act in a timely manner; failure of performance by *KUNA* or KUNA's contractors or consultants; or discovery of any hazardous substance or differing site conditions. In addition, if said delays directly result in the increase in cost or time required by *CONTRACTOR* to perform its services in an orderly and efficient manner, *CONTRACTOR* shall be entitled to request an equitable adjustment in the schedule and payment.

5. PAYMENT:

KUNA agrees to pay *CONTRACTOR* for its services rendered under this Agreement an amount

not to exceed the total sum of **$63,016** for said services rendered from for the Project. The parties agree that *CONTRACTOR* will invoice *KUNA* for payment under this Agreement for services rendered herein.

6. RIGHT OF CONTROL:

KUNA agrees that it will have no right to control or direct the details, manner, or means by which *CONTRACTOR* accomplishes the results of the services performed hereunder. *CONTRACTOR* has no obligation to work any particular hours or days or any particular number of hours or days. *CONTRACTOR* agrees, however, that his other contracts or services shall not interfere with the performance of his services under this Agreement.

7. INDEPENDENT CONTRACTOR RELATIONSHIP:

CONTRACTOR is an independent contractor and is not an employee, servant, agent, partner, or joint venturer of *KUNA*. *KUNA* shall determine the work to be done by *CONTRACTOR*, but *CONTRACTOR* shall determine the legal means by which it accomplishes the work specified by *KUNA*.

8. FEDERAL, STATE, AND LOCAL PAYROLL TAXES:

Neither federal, state or local income taxes, nor payroll taxes of any kind shall be withheld and paid by KUNA on behalf of *CONTRACTOR* or the employees of *CONTRACTOR*. *CONTRACTOR* shall not be treated as an employee with respect to the services performed hereunder for federal or state tax purposes. *CONTRACTOR* understands that *CONTRACTOR* is responsible to pay, according to law, *CONTRACTOR's* income tax. *CONTRACTOR* further understands that *CONTRACTOR* may be liable for self-employment (Social Security) tax to be paid by *CONTRACTOR* according to law.

9. LICENSES AND LAW:

CONTRACTOR represents that he possess the skill and experience necessary and all licenses required to perform the services under this agreement. *CONTRACTOR* further agrees to comply with all applicable laws in the performance of the services hereunder.

10. FRINGE BENEFITS:

Because *CONTRACTOR* is engaged in its own independently established business, *CONTRACTOR* is not eligible for, and shall not participate in, any employee pension, health, or other fringe benefit plans of *KUNA*.

11. WORKER'S COMPENSATION:

CONTRACTOR shall maintain in full force and effect worker's compensation for *CONTRACTOR* and any agents, employees, and staff that the *CONTRACTOR* may employ, and provide proof to *KUNA* of such coverage or that such worker's compensation insurance is not required under the circumstances.

12. EQUIPMENT, TOOLS, MATERIALS OR SUPPLIES:

CONTRACTOR shall supply, at *CONTRACTOR's* sole expense, all equipment, tools, materials and/or supplies to accomplish the services to be provided herein.

13. DATE OF COMPLETION:

This contract shall be completed on or before December 31, 2021.

14. WARRANTY:

CONTRACTOR warrants that work performed in this agreement shall be in accordance with and limited to the applicable standard of care for like professional services. *CONTRACTOR* acknowledges that it will be liable for any breach of this warranty.

15. INDEMNIFICATION AND INSURANCE PROVISIONS:

CONTRACTOR agrees to the following:

1. As respects acts, errors or omissions in the performance of professional services, *CONTRACTOR* agrees to indemnify and hold harmless KUNA, its officers, employees, and KUNA-designated volunteers from and against any and all claims, demands, defense costs, or liability of any kind or nature to the extent arising directly out of *CONTRACTOR*'s negligent acts, errors or omissions in the performance of its professional services under the terms of this contract.

2. As respects all acts or omissions which do not arise directly out of the performance of professional services, but limited to those acts or omissions ~~ally~~ covered by CONTRACTOR's general and automobile liability insurance, *CONTRACTOR* agrees to indemnify, defend (at *KUNA*'s option), and hold harmless *KUNA*, its officers, agents, employees, representatives, and volunteers from and against any and all claims, demands, defense costs, liability, or consequential damages of any kind or nature arising out of or in connection with *CONTRACTOR*'s (or *CONTRACTOR*'s subcontractors, if any) performance or failure to perform, under the terms of this contract; excepting those which CONTRACTOR is not legally liable.

Without limiting *KUNA*'s right to indemnification, it is agreed that *CONTRACTOR* shall secure prior to commencing any activities under this Agreement, and maintain during the term of this Agreement, insurance coverage as follows:

1. Worker's compensation insurance as required by Idaho statutes.

2. Comprehensive general liability insurance or commercial general liability insurance, including coverage for premises and operations, contractual liability, personal injury liability, products/completed operations liability, broad-form property damage (if applicable) and independent contractor's liability (if applicable), in an amount of not less than One Million Dollars ($1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

3. Comprehensive automobile liability coverage including, as applicable, owned, non-owned and hired autos, in an amount of not less than One Million Dollars ($1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

4. Professional liability insurance coverage, in an amount not less than One Million Dollars ($1,000,000.00), and *CONTRACTOR* shall maintain such coverage for at least four (4) years from the termination of this Agreement; and during this four-

year period, *CONTRACTOR* shall use *CONTRACTOR*'s best efforts to ensure that there is no change of the retroactive date on this insurance coverage.

The policy or policies shall provide CONTRACTOR thirty (30) days prior notice in case of cancellation, non-renewal, or significant coverage changes. CONTRACTOR shall immediately provide notice to KUNA in such an event.

KUNA is hereby authorized to reduce the requirements set forth above in the event he/she determines that such reduction is in *KUNA*'s best interest.

It is agreed that any insurance maintained by *KUNA* shall apply in excess of and not contribute with insurance provided by this policy.

Each insurance policy required by this Agreement, excepting policies for worker's compensation and professional liability shall provide that:

KUNA, its officers, agents, employees, representatives and volunteers are added as additional insureds as respects operations and activities of, or on behalf of, the named insured, performed under contract with KUNA. Prior to commencing any work under this Agreement, *CONTRACTOR* shall deliver to *KUNA* insurance certificates confirming the existence of the insurance required by this Agreement, and including the applicable clauses referenced above. Also, within thirty (30) days of the execution date of this Agreement, *CONTRACTOR* shall provide to *KUNA* endorsements to the above-required policies, which add to these policies the applicable clauses referenced above. Said endorsements shall be signed by an authorized representative of the insurance company and shall include the signature's company affiliation and title. Should it be deemed necessary by *KUNA*, it shall be *CONTRACTOR's* responsibility to see that *KUNA* receives documentation acceptable to *KUNA* which sustains that the individual signing said endorsements is indeed authorized to do so by the insurance company. Also, *KUNA* has the right to demand, and to receive within a reasonable time period, copies of any insurance policies required under this Agreement.

In addition to any other remedies *KUNA* may have if *CONTRACTOR* fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, KUNA may, at its sole option:

1. Obtain such insurance and deduct and retain the amount of the premiums for such insurance from any sums due under the Agreement;

   A. Order *CONTRACTOR* to stop work under this Agreement and/or withhold any payment(s) which become due to *CONTRACTOR* hereunder until *CONTRACTOR* demonstrates compliance with the requirements hereof.
   B. Terminate this Agreement.

Exercise of any of the above remedies, however, is an alternative to other remedies *KUNA* may have and is not the exclusive remedy for *CONTRACTOR's* failure to maintain insurance or secure appropriate endorsements.

Nothing herein contained shall be construed as limiting in any way the extent to which *CONTRACTOR* may be held responsible for payments of damages to persons or property resulting from *CONTRACTOR's*, or its subcontractor's, negligent performance of the work covered under this Agreement.

16. NON-WAIVER:

Failure of either party to exercise any of the rights under this Agreement, or breach thereof, shall not be deemed to be a waiver of such right or a waiver of any subsequent breach.

17. CHOICE OF LAW:

Any dispute under this Agreement, or related to this Agreement, shall be decided in accordance with the laws of the state of Idaho.

18. ENTIRE AGREEMENT:

This is the entire Agreement of the parties and can only be modified or amended in writing by the parties.

19. SEVERABILITY:

If any part of this Agreement is held unenforceable, the remaining portions of the Agreement will nevertheless remain in full force and effect.

20. ATTORNEY FEES:

Determination of how reasonable attorney fees shall be awarded in any action to enforce this Agreement or to declare or termination of this Agreement shall be in accordance with Idaho Code Section 12-117 (1) or recodification or amendment of said statute.

DATED this 10th day of June, 2020

KUNA:

_____
KUNA

Joe Stear
Mayor

CONTRACTOR:

By _____
Lisa M. Bachman, AICP
J-U-B ENGINEERS, Inc.
250 S. Beechwood Ave., Suite No. 201
Boise, Idaho 83709
Its *Area Manager*

ATTEST:

_____
Chris Engels
City Clerk

WITNESS:
Allecia K Moss
(Signature of Witness or Notary Public)

Form and content approved by_____, as attorney *KUNA*.

J-U-B ENGINEERS, Inc.

J-U-B ENGINEERS, Inc.
AGREEMENT FOR PROFESSIONAL SERVICES

City of Kuna
West District Urban Renewal Plan
June 2020
Exhibit A – Scope of Services, Schedule, and Basis of Fee

The Agreement for Professional Services is amended and supplemented to include the following provisions regarding the Scope of Services, Schedule of Services, and the Basis of Fee:

For the purposes of this exhibit, 'Agreement for Professional Services' and 'the Agreement' shall refer to the document entitled 'Agreement for Professional Services,' executed between J-U-B and the CITY OF KUNA (CITY) to which this exhibit and any other exhibits have been attached.

Project Understanding

The City of Kuna Urban Renewal Agency (URA) is in the process of creating the Kuna West Urban Renewal District (URD) to facilitate the redevelopment of downtown and surrounding areas.

PART 1 - SCOPE OF SERVICES

A. Basic Services - J-U-B's Basic Services under this Agreement are limited to the following tasks. CITY reserves the right to add subsequent phases or related work to the scope of services upon mutual agreement of scope, additional fees, and schedule.

Task 010 - Planning

1. Prepare for and attend kick-off meeting with URA, City, Agency Staff, Agencies, and the Public.
2. Prepare an overall URD Map indicating the District boundary and related plan elements.
3. Coordinate the preparation of preliminary roadway and concept utility plans and the infrastructure cost estimates for use in the Feasibility Study.
4. Prepare Conceptual Future Land Use Plan Map and data for use in Feasibility Study showing future streets, future building footprints and future building types and submit to Client or review and edit up to two (2) times.
5. Prepare Project Priority list and submit to Client for review and edit up to three (3) times.
6. Prepare and submit to Client, URA Attorney supporting Plan documents including Plan maps, legal description, concept infrastructure plans, cost estimates and economic feasibility study.
7. Coordinate the revision of boundary maps, legal description, concept infrastructure plans, cost estimates and economic feasibility study.
8. Coordinate with the Client, City Staff, Economist, URA Attorney as required throughout the URD creation process.
9. Prepare for and attend bi-weekly City/URA staff coordination meetings for up to five (5) months on the formation of a new URD, boundaries, phases, etc. The meetings are anticipated to occur via Zoom, by phone, or in person.
10. Coordinate the preparation of the required Economic Feasibility Study.

Task 020 - Public Involvement

1. Public Outreach
    a. Update stakeholder questionnaire from the URD Eligibility Study and assist Client with summarizing input received.
    b. Prepare for and attend one (1) Public Workshop regarding the creation of the URD, including preparation of up to four (4) presentation boards, one (1) media release, one (1) comment form and one (1) flyer. Input received will be summarized and utilized to inform the URD planning effort.
2. Public Hearings - Prepare for and present plan information at up to three (3) public hearings: URA Board, City of Kuna Planning and Zoning Commission and City Council for the creation of the Urban Renewal District.

Task 030 - Survey

1. Research existing records pertaining to the proposed URD boundary and develop a schematic base map with parcels, rights-of-way and section lines for use in describing the URD boundary.
2. Prepare a Legal Description and Exhibit Map indicating boundary of the revenue allocation area and/or urban renewal district and revise one (1) time as needed.
3. Submit the Legal Description and Exhibit Map indicating boundary of the revenue allocation area and/or URD to the Ada County Surveyor and Idaho State Tax Commission and revise one (1) time as needed.

Task 040 - Engineering

1. Review City's Capital Improvement plan (CIP) and coordinate with City Engineer on major capital projects (i.e. streets, wells, sewage lift stations, etc.) within the URD.
2. Prepare preliminary roadway and concept utility plans for use in preparing planning level infrastructure cost estimates for use in the Feasibility Study.
3. Prepare planning level infrastructure cost estimates for the Feasibility Study and revise two (2) times as requested.
4. Prepare Project Priority List for use in URD Plan and Feasibility Study and revise two (2) times as requested.
5. Coordinate with Agency, City Staff, Taxing Districts, Ada County Highway District, J-U-B Team and Economist in preparation of the plan, estimates and priority lists.

Task 050 - Economics

1. Prepare Economic Feasibility Study (see attached Scope of Work from Metts Group).

Assumptions:

1. The URD boundary size is approximately 600 acres in size.
2. The Urban Renewal "Plan" will be assembled by Agency's Legal Counsel with supporting documents from J-U-B and the Metts Group including boundary maps, legal description, concept infrastructure plans, cost estimates and economic feasibility study.
3. Client to conduct all correspondence and coordination with taxing districts and agencies.
4. Client is responsible for all meeting notifications.

PART 2 - SCHEDULE OF SERVICES

A. The scope of services is anticipated to be complete by December 31, 2021. The identified Basic Services predicated upon timely receipt of CITY-provided information, typical review periods, and

active direction during work. CITY acknowledges that the J-U-B will not be responsible for impacts to the schedule by events or actions of others over which J-U-B has no control.

PART 3 - BASIS OF FEE

A. CITY shall pay J-U-B for the identified Basic Services as follows:

1. For Lump Sum fees:

a. The portion of the Lump Sum amount billed for J-U-B's services will be based upon J-U-B's estimate of the percentage of the total services actually completed during the billing period.

Fees:

Task Number	Task Name	Fee Type	Amount
010	Planning	Lump Sum	$15,550
020	Public Involvement	Lump Sum	$6,768
030	Survey	Lump Sum	$5,040
040	Engineering	Lump Sum	$14,208
050	Economics	Lump Sum	$21,450
			Total: $63,016

B. Period of Service: If the period of service for the task identified above is extended beyond 18 months, the compensation amount for J-U-B's services shall be appropriately adjusted to account for inflation and salary adjustments.

June 10, 2020

SCOPE OF WORK

Economic Feasibility Study

Kuna Urban Renewal District

THE ASSIGNMENT

This scope of work is to clearly define the services The Metts Group will provide the Kuna Urban Renewal Agency (URA) for the roughly 600-acre proposed urban renewal district boundary. The Metts Group will perform an assessment of the *feasibility of tax allocation* for the proposed urban renewal district boundary.

The Metts Group will build a tax allocation projection model that identifies the impacts of anticipated development as planned as a result of the URA and City's vision for this district. This task will assess the current assessed values of the parcels contained within the proposed district boundary area. It is important that the urban renewal district is economically feasible and will facilitate the vision of the City and, ultimately, the Urban Renewal District Plan. This feasibility study will provide you with realistic and a highly documented assessment with potential determinations. The findings from this study will serve as a key determinant whether the boundaries of the proposed urban renewal district will generate enough tax allocation and revenue for positive economic expansion and job growth.

SCOPE OF WORK

Our proposed scope of work will include the following work elements:

1. **Meet** with the Kuna URA and JUB team, in-person and in the field, to review all pertinent project background data which bear on the proposed project.
2. **Review** carefully existing background materials and data available on the proposed project, including parcels information contained within the proposed boundaries and current and future land uses provided by the City of Kuna or Kuna URA staff.
3. **Curate** current assessed values by parcel to include in model and associated levy rates, provided by JUB.
4. **Project** baseline economic projections for assessed values based on buildout assumptions and infrastructure needs provided by JUB, current trends and rates of growth from levy rates for proposed boundaries. It is assumed that JUB will provide each buildout scenario, by block, based on the vision of the City's Downtown Revitalization and Comprehensive plans.

5. **Analyze** two (2) different growth scenarios (based on proposed development) based on current baseline projections—scenarios to be determined by the Kuna URA and project team.

6. **Summarize** the potential tax increment financing revenue generated provided by each scenario for the proposed boundary.

7. **Prepare** a fully documented report which clearly communicates our findings and the projected tax increment revenue potentially generated for the proposed boundaries. A draft report will be submitted to the project team and URA for additional edits and comments. Once approved, a final report will be submitted in pdf format to project team and URA.

8. **Attend** scheduled meetings that pertain to the discussion of this feasibility report. One (1) in-person meetings (onsite included) and three (3) additional meetings, via zoom, are anticipated and are contained within the scope of the budget outlined below (includes onsite and attending city council meeting(s) and URA meetings).

At any point, if the client wants further analysis, this contract may be amended to satisfy such requests.

TIME AND COST

The Metts Group will perform the items as set forth in the above work scope for an amount of **$19,500**, not to exceed without client authorization. Our fees are based entirely on professional time devoted to the assignment.

In the event there are significant changes to the project beyond the control of The Metts Group that may cause *additional* work scope and fees, The Metts Group will notify JUB to negotiate a written contract amendment prior to proceeding with the additional scope.

We look forward to working closely with the Kuna Urban Renewal Agency and JUB team on this most important strategic assignment.

Kindest regards,

Alivia Metts

TheMettsGroup
809 E. Foster Ave
Coeur d'Alene, ID 83814
(208) 277-6940
Email: ametts@themettsgroup.com

EIN: 47-3775481
ACCEPTED:

BY _____

TITLE Boise Area Manager

DATE 06/10/20

Budget Workshop Fiscal 2021 Snapshot

	Budgeted	Projected	Actual
	2021	2020	2019
Property Tax Revenue	3,576,404	3,289,684	2,764,015
Building Permit Revenue	1,575,681	1,507,781	1,579,868
Other Revenue	2,199,337	2,213,430	2,576,538
Total Revenue	7,351,422	7,010,895	6,920,421
Public Safety	2,786,658	2,666,776	2,331,997
Capital Expenditures	1,077,269	1,582,259	636,500
Contingency		98,532	165,966
Other	3,392,750	2,949,238	2,659,710
Total Expenditures	7,256,677	7,296,805	5,794,173
Change in Fund Balance	94,745	(285,910)	1,126,248

2021 Includes	Cost
COLA 1.26%	23,628.00
3% Not Taken	95,794.00
No Projects Transferred back from Capital Projects Fund	250,000.00
Total	369,422.00