

OFFSITE WATER AND SEWER IMPROVEMENTS FOR THE NEW KUNA HIGH SCHOOL SITE-KUNA, IDAHO MARCH, 2001

WATER

- THE WATER SYSTEM SHALL BE CONSTRUCTED TO CONFORM WITH THE STANDARDS SET FORTH IN THE "IDAHO REGULATIONS FOR PUBLIC DRINKING WATER SYSTEMS", THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION, 2000 EDITION, THE PROJECT SPECIFICATIONS, AND CITY OF KUNA REQUIREMENTS.
- WATER DISTRIBUTION MAINS SHALL BE CONSTRUCTED WITH CLASS 150 PVC (POLYVINYL-CHLORIDE) PIPE, CONFORMING TO AWWA C-900 SPECIFICATIONS. THE PIPE SHALL BE INSTALLED IN WORKMAN LIKE MANNER BY PERSONS QUALIFIED TO PERFORM SAID WORK AND SHALL BE IN CONFORMANCE WITH THE MANUFACTURE'S RECOMMENDATIONS AND AS APPROVED BY THE CITY OF KUNA WATER DEPARTMENT. ALL WORK AND MATERIALS MUST CONFORM TO THE PROJECT SPECIFICATIONS.
- ALL WATER MAINS SHALL HAVE FOUR (4) FEET OF COVER, UNLESS OTHERWISE NOTED. AFTER INSTALLATION OF THE WATER MAINS, THE TRENCHES SHALL BE COMPACTED TO SPECIFICATIONS. ALL MAINS SHALL BE PRESSURE TESTED, FLUSHED AND DISINFECTED IN ACCORDANCE WITH THE SPECIFICATIONS BEFORE ACTIVATION WITH THE MUNICIPAL SYSTEM.
- THE HORIZONTAL SEPARATION BETWEEN WATER LINES AND NON-POTABLE LINES (INCLUDING SEWER, STORM DRAINS, AND IRRIGATION) SHALL BE 10 FEET. WHERE IT IS NECESSARY FOR SEWER, STORM DRAIN, OR IRRIGATION LINES TO CROSS WATER LINES, REFER TO SEWER NOTE 10.
- ALL GATE VALVES SHALL BE FLANGED UNLESS OTHERWISE NOTED, AND SHALL CONFORM TO AWWA C-509 SPECIFICATIONS AND SHALL HAVE A 200 P.S.I. WORKING PRESSURE RATING. ALL VALVES SHALL BE ANCHORED IN CONFORMANCE TO I.S.P.W.C. 2000 EDITION STANDARD DRAWING SD-403.
- ALL TEES, PLUGS, CAPS, BENDS, AND OTHER LOCATIONS WHERE UNBALANCED FORCES EXIST SHALL BE SECURED AND ANCHORED BY SUITABLE THRUST BLOCKING AS SHOWN ON I.S.P.W.C. 2000 EDITION STANDARD DRAWING SD-403.
- NO. 12 DIRECT BURIAL WIRE SHALL BE PLACED ALONG THE CROWN OF THE WATER MAINS AND SERVICE LINES. WIRE SHALL BE INSTALLED IN THE GATE VALVE RISER SO IT IS ACCESSIBLE FROM ABOVE BUT DOES NOT INTERFERE WITH VALVE OPERATION.
- ALL WATER LINES SHALL BE DISINFECTED ACCORDING TO THE AWWA C601 SPECIFICATIONS, LATEST EDITION.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF KUNA WATER DEPARTMENT TWO (2) WORKING DAYS BEFORE INITIAL CONSTRUCTION BEGINS AND SHALL ALSO REQUEST INSPECTION OF WATER LINES AND APPURTENANCES TWENTY-FOUR (24) HOURS IN ADVANCE OF BACKFILLING.
- THE CONTRACTOR SHALL FIELD VERIFY ALL VALVE BOX LID ELEVATIONS TO ASSURE THE LID ELEVATIONS MATCH FINAL GRADES, AND THAT ALL METER LID ELEVATIONS MATCH FINISH GRADE. CONTRACTOR SHALL INSPECT ALL VALVE RISERS FOR FOREIGN DEBRIS AND TO ENSURE THAT THE LOCKING LIDS ARE FREE OF CONCRETE FROM THE COLLAR POURING OPERATION.
- UPON THE COMPLETION OF WORK, THE CONTRACTOR, IN CONJUNCTION WITH THE WATER DEPARTMENT, SHALL SUBMIT A SET OF RECORD DRAWINGS TO THE CITY OF KUNA PUBLIC WORKS DEPARTMENT AND TO THE ENGINEER PER THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR MUST PRESSURE TEST ALL WATER LINES AFTER DISINFECTION AND FLUSHING, FOR HIS OWN BENEFIT PRIOR TO INSTALLATION OF OTHER UTILITIES TO ENSURE THE INTEGRITY OF THE INSTALLED LINE. AFTER ALL UTILITIES ARE INSTALLED AND PRIOR TO PAVING, THE CONTRACTOR SHALL PERFORM A FINAL PRESSURE TEST, AND FINDER WIRE CONTINUITY TEST WITH KUNA WATER DEPARTMENT PERSONNEL IN ATTENDANCE. THE CONTRACTOR SHALL FURNISH ALL PERSONNEL AND EQUIPMENT NECESSARY TO CONDUCT THE TESTS. ONLY WATER FROM THE CITY OF KUNA'S WATER SYSTEM SHALL BE USED TO CONDUCT THE PRESSURE TEST.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONTINUOUS WATER SERVICE TO ALL EXISTING WATER USERS AFFECTED BY CONSTRUCTION.
- SUBSURFACE STORMWATER DISPOSAL FACILITIES (INCLUDING INFILTRATION BEDS AND DRYWELLS) SHALL BE LOCATED AT LEAST 25 FEET FROM MAIN WATER LINES. THIS REQUIREMENT DOES NOT APPLY TO CATCH BASINS OR SAND AND GREASE VAULTS.

SANITARY SEWER

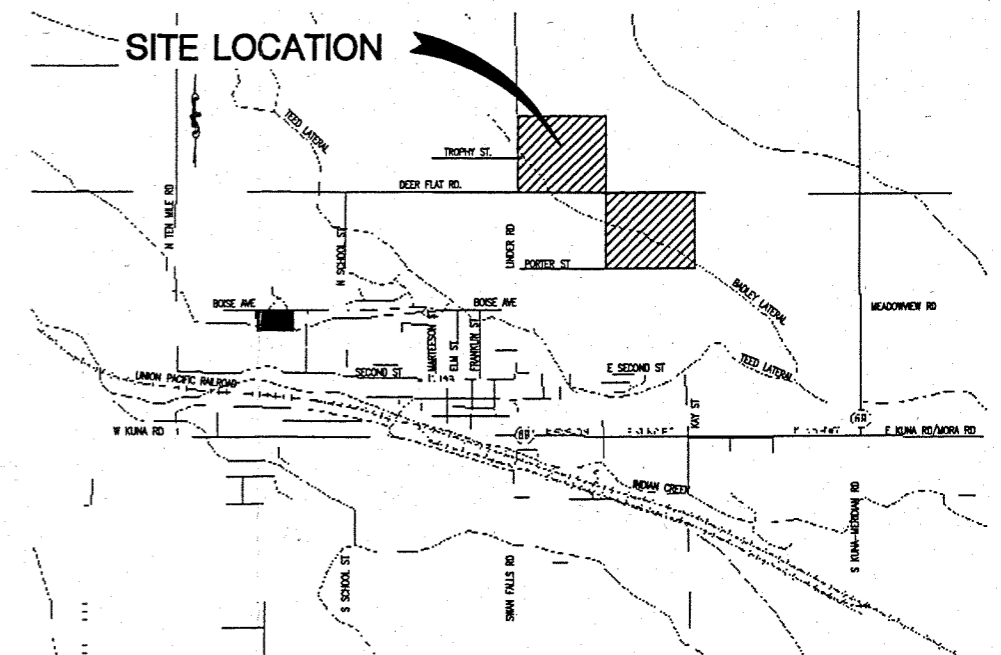
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION, 2000 EDITION, CITY OF KUNA REQUIREMENTS.
- FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE CITY OF KUNA PUBLIC WORKS DEPT.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY OF KUNA A MINIMUM OF 48 HOURS PRIOR TO COMMENCING CONSTRUCTION OF THE SANITARY SEWER. THE CITY OF KUNA SHALL HAVE THE RIGHT TO INSPECT AND REJECT ALL CONSTRUCTION ASSOCIATED WITH SAID SANITARY SEWER CONSTRUCTION.
- THE CONTRACTOR MAY AIR TEST ALL THE SEWER LINES AFTER BACKFILLING AND SETTLING OF THE TRENCHES FOR HIS OWN BENEFIT PRIOR TO THE INSTALLATION OF THE OTHER UTILITIES TO ENSURE THE INTEGRITY OF THE INSTALLED LINE. HE SHALL FURNISH ALL EQUIPMENT AND PERSONNEL REQUIRED TO PERFORM THE TEST. THE CONTRACTOR SHALL RE-TEST ALL SEWER LINES, IN THE PRESENCE OF THE CITY OF KUNA PUBLIC WORKS INSPECTOR, AFTER ALL UTILITIES HAVE BEEN INSTALLED AND PRIOR TO INSTALLATION OF FINAL SURFACING. THE CONTRACTOR SHALL SCHEDULE WITH CITY OF KUNA PUBLIC WORKS DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO THE RE-TEST.
- IN ADDITION TO THE AIR TEST, CONTRACTOR SHALL SUBMIT TO THE CITY OF KUNA, A CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION.
- CONNECTION TO THE EXISTING MAIN SHALL NOT BE UNDERTAKEN UNTIL THE CITY OF KUNA HAS INSPECTED AND PASSED ALL OTHER SEWER CONSTRUCTION.
- ALL MANHOLES SHALL BE CONSTRUCTED SO AS TO BE WATER TIGHT AND WITH THE TOP OF THE CONE LOCATED WITHIN ONE (1) FOOT OF THE FINISHED GRADE. THE CONTRACTOR SHALL SUPPLY ALL LID ASSEMBLIES AND THE REQUIRED NUMBER OF RISER AND GRADE RINGS. THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF THE TOP OF THE MANHOLE CONE TO ASSURE THAT ALL RING ELEVATIONS MATCH FINAL PAVEMENT GRADES. MANHOLES SHALL HAVE A MAXIMUM OF 12" OF GRADE RINGS. CONCRETE COLLARS TO BE USED IN PAVED AREAS.
- THOSE SEWER SERVICE STUBOUTS BEGINNING AT A MANHOLE WILL HAVE THE TOP OF SERVICE PIPE MATCH THE TOP OF THE MAIN PIPE.
- THE HORIZONTAL SEPARATION OF THE WATER AND SEWER MAINS SHALL BE A MINIMUM OF TEN (10) FEET.
- WHERE IT IS NECESSARY FOR SEWER AND WATER TO CROSS EACH OTHER AND THE SEWER LINE IS LESS THAN 18" BELOW OR THE SEWER LINE IS ABOVE THE WATER LINE, THE SEWER LINE CROSSING SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C-900 OR ASTM D2241, FOR A DISTANCE OF TEN (10) FEET ON BOTH SIDES OF THE WATER LINE. ONE FULL LENGTH OF BOTH WATER MAIN AND SEWER LINE SHALL BE CENTERED OVER THE CROSSING POINT SO THAT ALL JOINTS WILL BE AS FAR FROM THE CROSSING AS POSSIBLE. REFER TO DETAIL SHEETS.
- GROUNDWATER, IF ENCOUNTERED, SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING THE PIPE LAYING AND PIPE JOINING OPERATIONS.
- ALL SEWER TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THE I.S.P.W.C. 2000 EDITION AND THE SEWER PIPE BEDDING SHALL BE IN ACCORDANCE WITH THE I.S.P.W.C. 2000 EDITION.
- THE TRENCH BACKFILL ABOVE THE PIPE ZONE SHALL BE INSPECTED BY THE ENGINEER. COMPACTION TESTS FOR SAID BACKFILL SHALL BE CONDUCTED AND THE RESULTS SUBMITTED TO THE ENGINEER FOR FINAL ACCEPTANCE.
- THE OWNER WILL PERFORM COMPACTION TESTING AT THEIR OWN DISCRETION.
- SEWER PIPE SHALL BE BELL AND SPIGOT, SDR-35 PVC, ASTM D-3034. A RUBBER RING IS TO BE INSTALLED WHERE PIPE IS IN CONTACT WITH A CAST-IN-PLACE CONCRETE MANHOLE BASE AND/OR ITS CHANNEL, IN ORDER TO ENSURE A WATER-TIGHT SEAL.
- UPON COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT A SET OF "RECORD DRAWINGS" TO THE CITY OF KUNA PUBLIC WORKS DEPARTMENT AND TO THE ENGINEER PER THE PROJECT SPECIFICATIONS.

SHEET INDEX

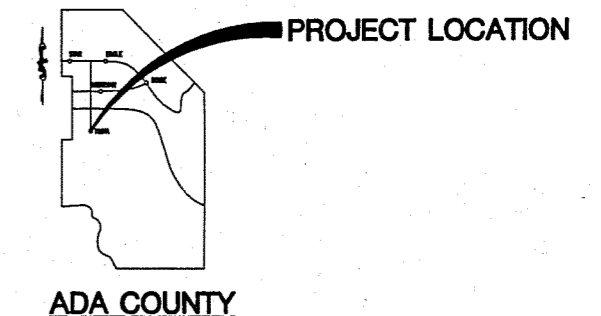
- GENERAL NOTES AND VICINITY MAPS
- SEWER EXTENSION PLAN AND PROFILE
- SEWER EXTENSION PLAN AND PROFILE
- SEWER EXTENSION PLAN AND PROFILE
- WATER LINE PLAN
- DETAIL SHEET

GENERAL

- CONTRACTOR SHALL HAVE PLANS AT WORKSITE STAMPED "APPROVED FOR CONSTRUCTION."
- ANY CHANGE FROM THE PLANS SHALL BE APPROVED BY THE DESIGN ENGINEER.
- ALL EXISTING UNDERGROUND UTILITY LINES ARE TO BE RETAINED AND PROTECTED UNLESS SO NOTED ON THE PLANS. EXISTING UTILITIES WERE NOT SURVEYED AND ARE NOT LIMITED TO THE LOCATIONS SHOWN ON THE PLANS. UNLESS SO NOTED ON THE PLANS, CONTRACTOR SHALL REQUEST FIELD LOCATION BY ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION. DIG LINE IS TO BE NOTIFIED 48 HOURS IN ADVANCE OF ANY WORK AT (208) 342-1585.
- ELEVATIONS SHOWN ARE TO FINISH SURFACE OR PIPE INVERT UNLESS OTHERWISE SHOWN.
- IT IS ANTICIPATED THAT GROUNDWATER COULD BE ENCOUNTERED DURING EXCAVATION. IF ENCOUNTERED, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY.
- SEPARATION DISTANCE SHOWN ON SEWER AND WATER LINES IS GENERALLY CONCEPTUAL ONLY. A TEN (10) FOOT SEPARATION SHOULD BE MAINTAINED BETWEEN THE WATER AND SEWER TRENCHES.
- CONTRACTOR TO PROVIDE TRAFFIC CONTROL PLAN TO THE ADA COUNTY HIGHWAY DISTRICT FROM THE BUILDINGS. AND ENGINEER FOR APPROVAL PRIOR TO COMMENCING WORK WITHIN THE RIGHT OF WAY.



VICINITY MAP



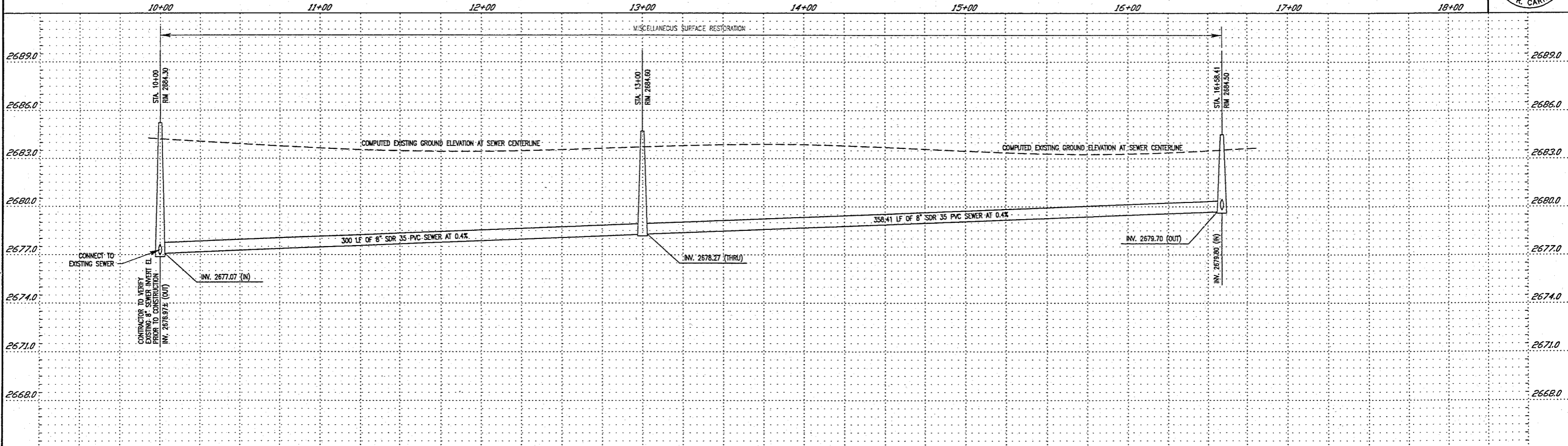
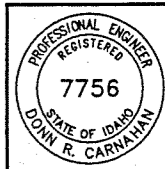
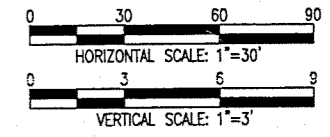
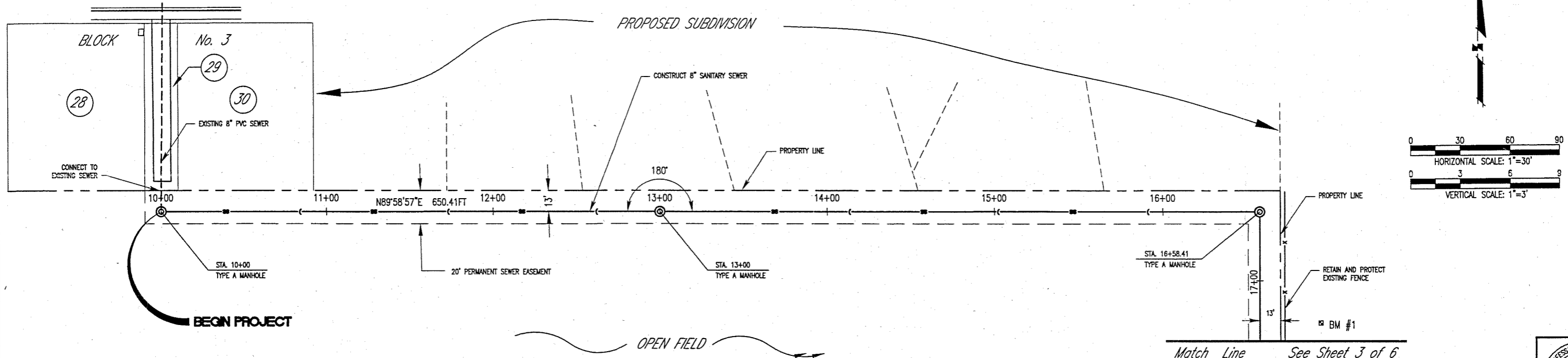
LEGEND

— PL — PL —	PROPERTY LINE
— RW — RW —	RIGHT OF WAY LINE
— W — W —	PROPOSED WATER LINE
— SS — SS —	PROPOSED SANITARY SEWER LINE
— W — W —	EXISTING WATER LINE
— EP — EP —	EXISTING EDGE OF PAVEMENT
— W — W —	CONCRETE ENCASE OF WATER CLASS PIPE
— 97 —	EXISTING CONTOUR LINE

CALL DIGLINE
48 HOURS PRIOR TO EXCAVATION
PHONE 1-800-342-1585
TO REQUEST U.C. LOCATIONS

NO.	REVISIONS	BY	DATE	DRAWN: RG	CHECKED: DRC	DESIGNED: RG	APPROVED: DRC	Original Signed By: DONN CARNAHAN Date Original Signed: March 8, 2001 On File At: KELLER ASSOCIATES INC.			City of Kuna ADA COUNTY, ID.	SEWER AND WATER EXTENSION FOR THE KUNA HIGH SCHOOL-KUNA, IDAHO GENERAL NOTES & VICINITY MAPS	PROJECT NO. 100057
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DECEMBER SUBDIVISION NO. 2
(BIRDS OF PREY)
SCOPS OWL DRIVE



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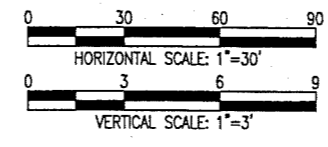
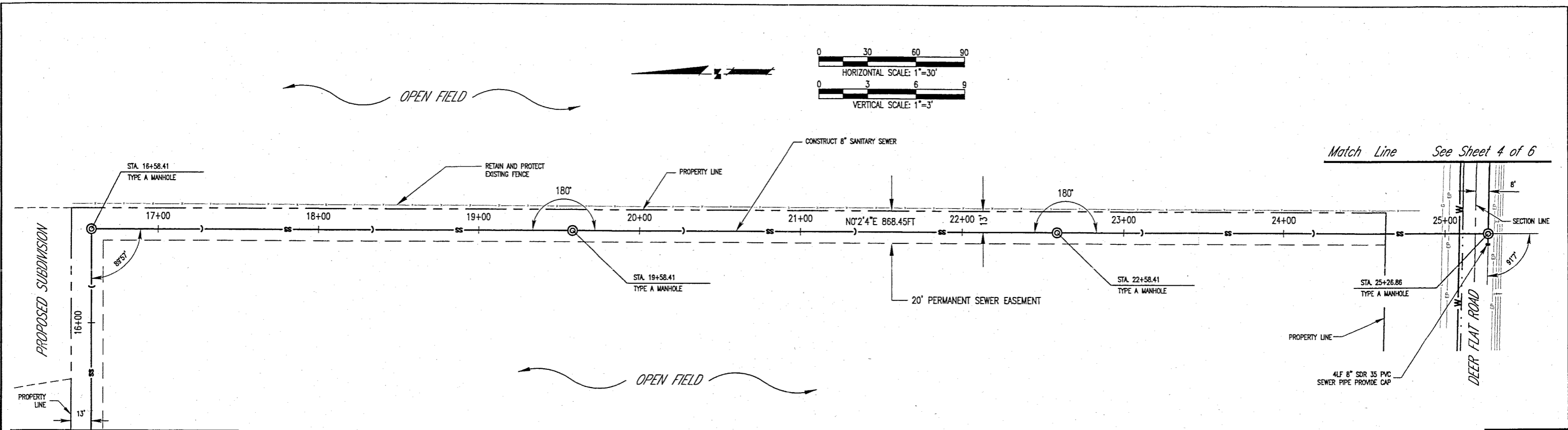
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City of Kuna
ADA COUNTY, ID.

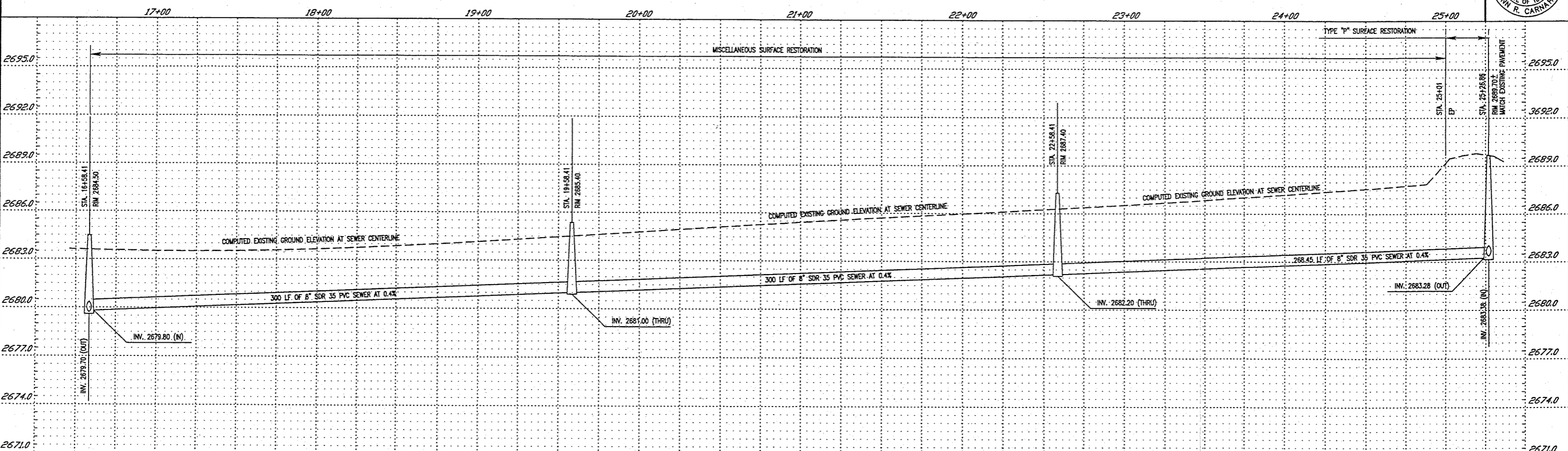
SEWER EXTENSION FOR KUNA HIGH SCHOOL
SEWER EXTENSION

PROJECT NO.
100057
SHEET NO.
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Match Line See Sheet 2 of 6

Match Line See Sheet 4 of 6



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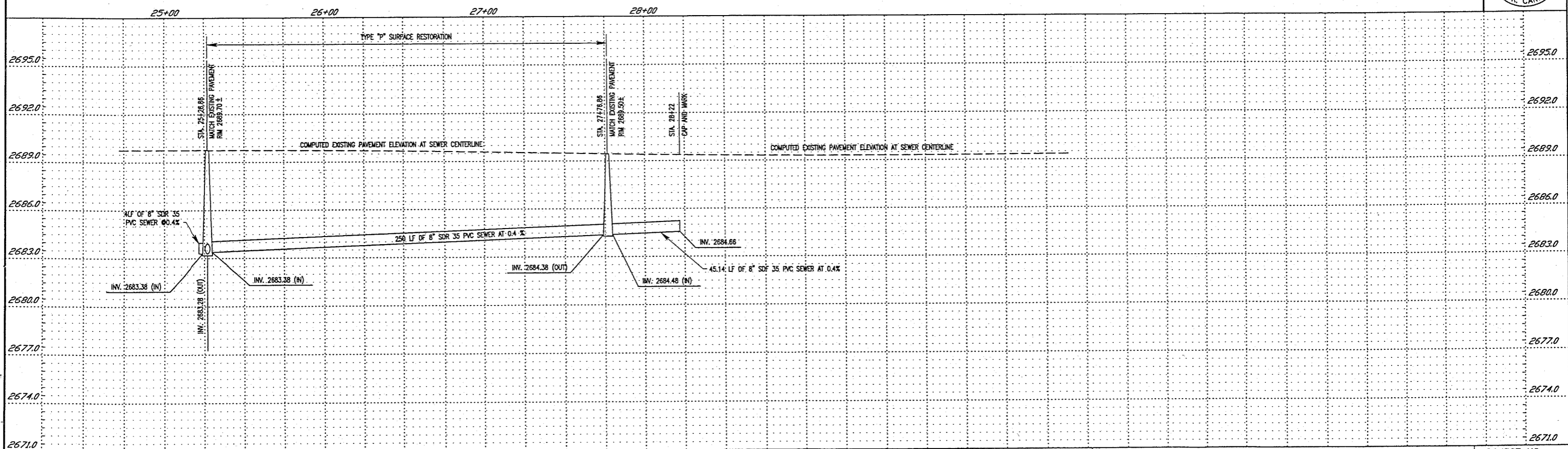
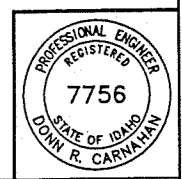
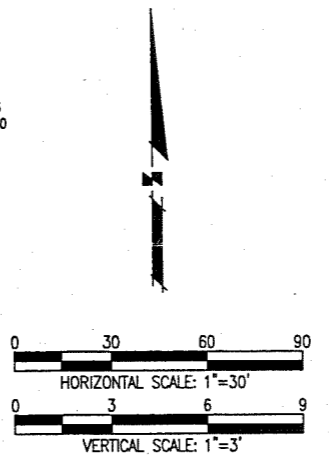
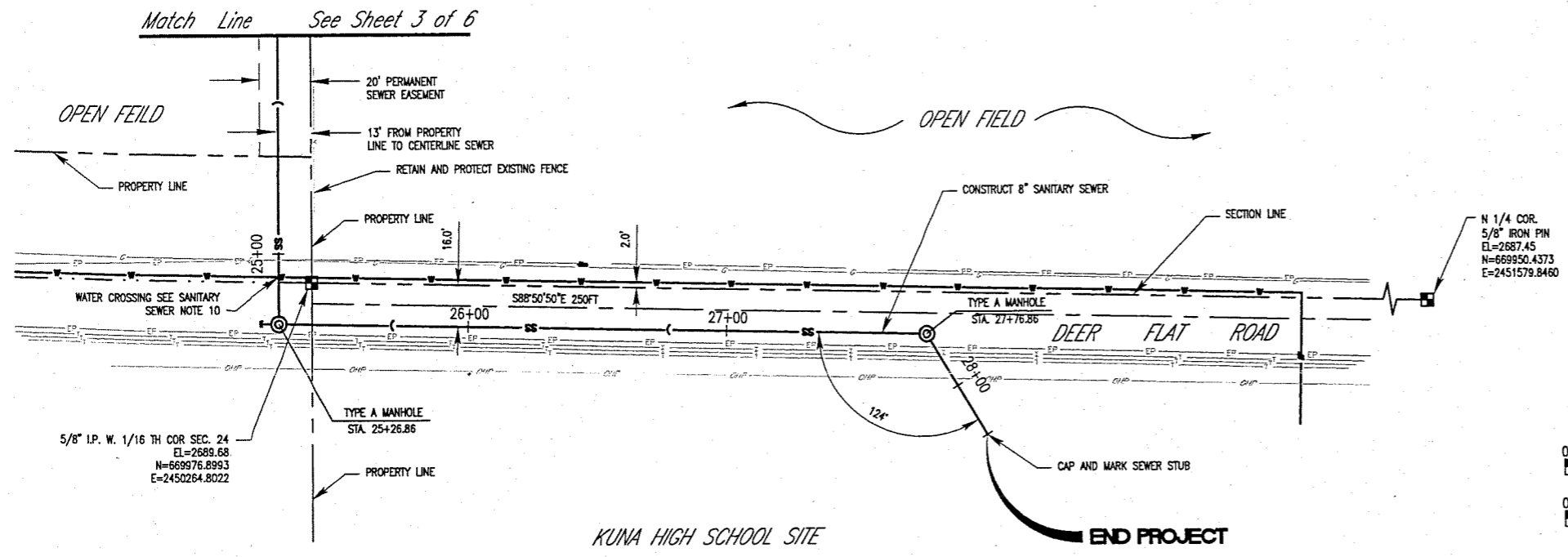
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 DONN CARNAHAN
 Date Original Signed:
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City of Kuna
ADA COUNTY, ID.

SEWER EXTENSION FOR KUNA HIGH SCHOOL
SEWER EXTENSION

PROJECT NO.
 100057
 SHEET NO.
 3 OF 6



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 DOWN R. CARNAHAN
 Date Original Signed:
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 On File At:
 KELLER ASSOCIATES INC.

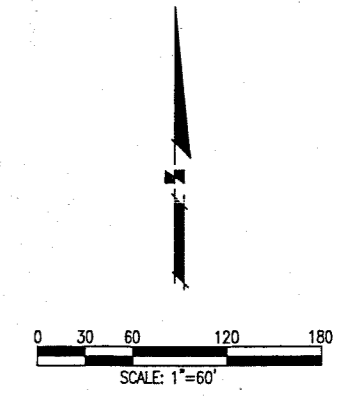
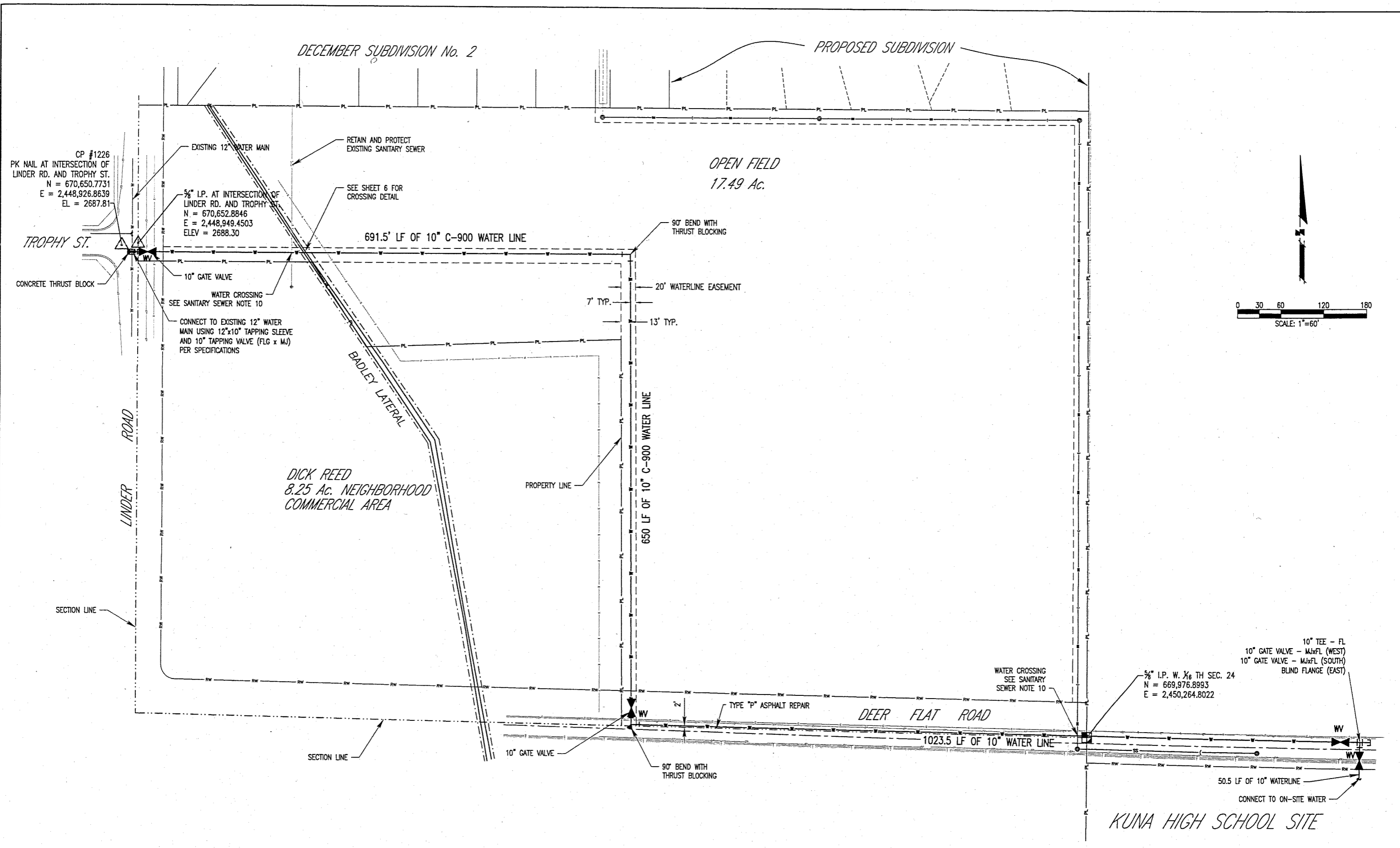


City of Kuna
ADA COUNTY, ID.

SEWER EXTENSION FOR KUNA HIGH SCHOOL

SEWER EXTENSION

PROJECT NO.	100057
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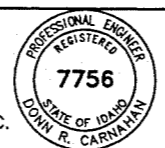


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Original Signed By:
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Date Original Signed:
May 11, 2001
On File At:
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KELLER ASSOCIATES
131 SW 3th Avenue, Suite A
Meridian, Idaho 83642
(208) 288-1992

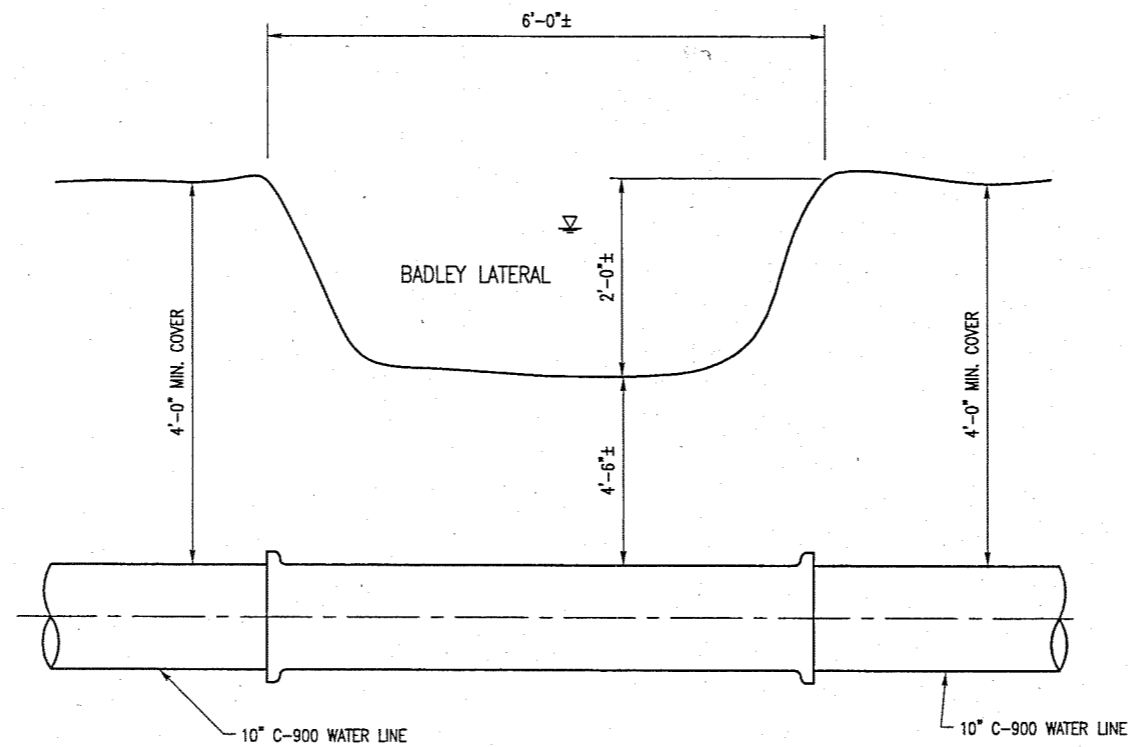
City of Kuna
ADA COUNTY, ID.

SEWER AND WATER EXTENSION FOR THE
KUNA HIGH SCHOOL-KUNA, IDAHO

WATER LINE PLAN

PROJECT NO.
100057

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LATERAL CROSSING DETAIL

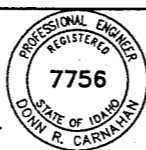
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CAD NAME:	0570D04A	SCALE:	AS SHOWN

Original Signed By:
DONN CARNAHAN
Date Original Signed:
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On File At:
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**City of Kuna
ADA COUNTY, ID.**

*SEWER AND WATER EXTENSION FOR THE
KUNA HIGH SCHOOL-KUNA, IDAHO*

CROSSING DETAIL

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