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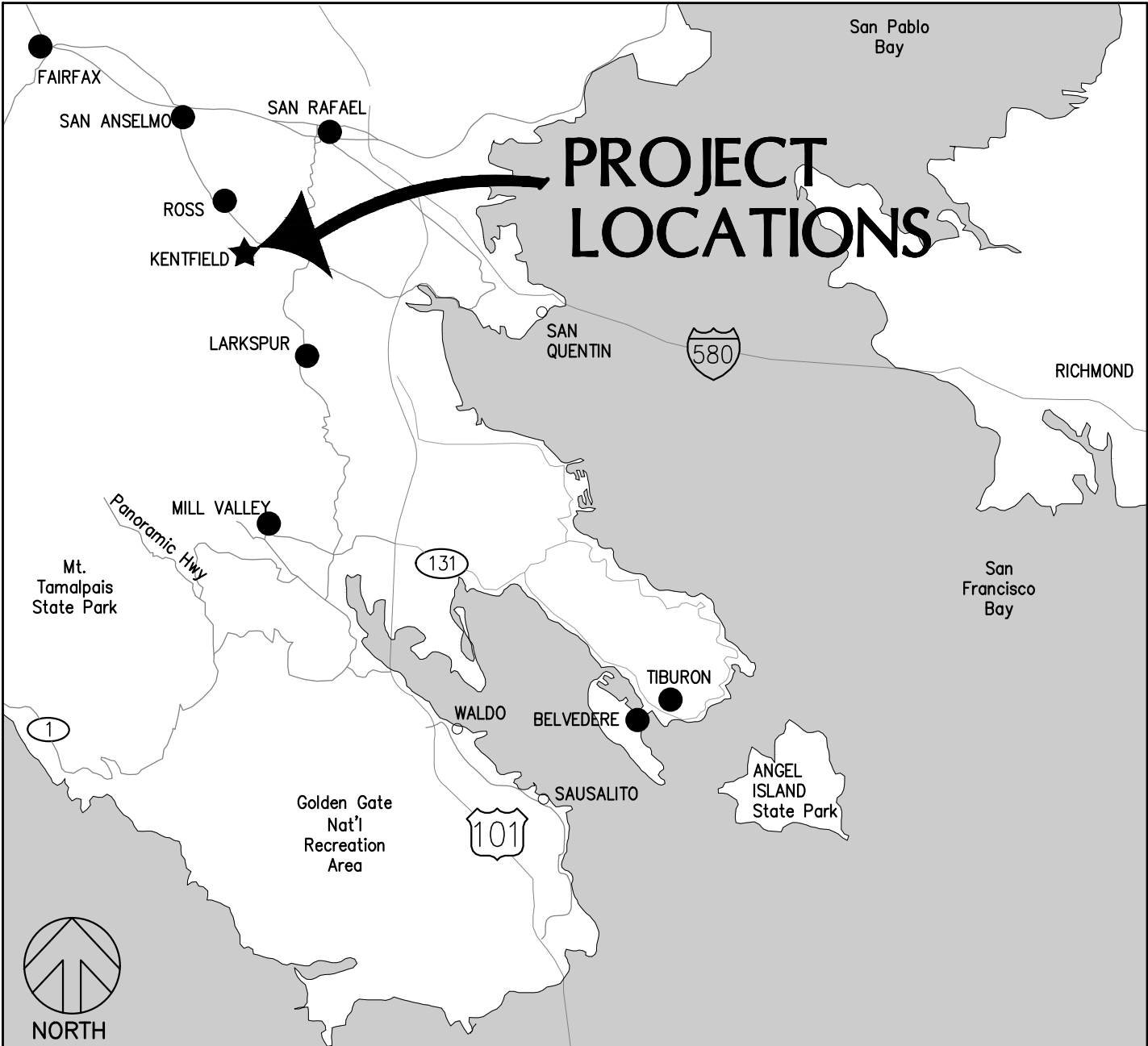
ROSS VALLEY SANITARY DISTRICT
MARIN COUNTY, CALIFORNIA

PLANS

FOR THE CONSTRUCTION OF
WOODLAND CAPACITY AND CREEK
CROSSINGS PROJECT (#956)

DATUM

HORIZONTAL DATUM IS NAD 83, CALIFORNIA COORDINATE SYSTEM ZONE 3, ITRF 2011
VERTICAL DATUM IS NAVD 88



VICINITY MAP

BOARD OF DIRECTORS
MARY SYLLA
MICHAEL BOORSTEIN
THOMAS GAFFNEY
PAMELA MEIGS
DOUG KELLY

GENERAL MANAGER
STEVE MOORE, P.E.

[Signature]

DESIGN ENGINEER
KOUROSH IRANPOUR, P.E.

DATE



Prepared By:
Harris & Associates
1401 Willow Pass Rd, Suite 500 Concord, CA 94520
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NO.

BY

DATE

REVISION

TITLE SHEET

ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



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DESIGNED BY
KLC/JR

DRAWN BY
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CHECKED BY
KI

DATE ISSUED
06/06/2023

JOB NO.
120-0743.005

DWG NO.
T-1

SHEET 1 OF 14

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GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR PREPARING & SUBMITTING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO THE ENGINEER FOR APPROVAL FOR ALL CONSTRUCTION ACTIVITIES PRIOR TO THE BEGINNING OF WORK. THE SWPPP SHALL BE REVISED TO REMAIN CURRENT THROUGHOUT THE PROJECT.
2. CONTRACTOR TO PROVIDE 7 DAY NOTICE AND 24 HOUR NOTICE TO PROPERTY OWNERS AND RESIDENTS PRIOR TO COMMENCING CONSTRUCTION WORK. NOTIFICATION TO BE BY LETTER AND SHALL BE APPROVED BY THE ENGINEER.
3. IF SAW CUTTING AND/OR TRENCH EXCAVATION ACTIVITIES RESULT IN A WIDTH OF LESS THAN 4 FEET OF EXISTING PAVEMENT REMAINING BETWEEN THE PROPOSED EDGE OF TRENCH AND EXISTING EDGE OF PAVEMENT OR GUTTER, THE CONTRACTOR SHALL REMOVE THIS REMNANT "SLIVER" OF PAVEMENT ENTIRELY AND RESTORE IT TO ITS ORIGINAL FULL WIDTH DURING SURFACE RESTORATION. THIS PAVING WORK SHALL BE CONSIDERED INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. CONTRACTOR SHALL PROTECT ALL UTILITY POLES DURING CONSTRUCTION. ANY SPECIAL BRACING AND/OR SHORING REQUIRED BY THE WORK AND/OR BY THE UTILITY OWNER(S) SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. CONTRACTOR SHALL PROTECT EXISTING WATER UTILITIES AND EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH DISTRICT AND MMWD REQUIREMENTS.
6. CONTRACTOR SHALL RESTORE ALL FACILITIES OUTSIDE LIMITS OF WORK DAMAGED BY CONSTRUCTION OPERATIONS TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST. NO MATERIAL MAY BE STORED IN PUBLIC RIGHT OF WAY.
7. EXISTING UTILITIES IN THE PROJECT AREA MAY BE IN FRAGILE CONDITION. THE CONTRACTOR SHALL EXERCISE NECESSARY CAUTION WHEN WORKING NEAR EXISTING UTILITIES. WORK IN THE VICINITY OF ALL UTILITIES SHALL BE PER CALIFORNIA GOVERNMENT CODE SECTION 4216.
8. THE PLANS DO NOT SHOW ALL OF THE UTILITIES. THE CONTRACTOR SHALL VERIFY ALIGNMENT AND ELEVATION OF EXISTING UTILITIES AFFECTING THE WORK PRIOR TO CONSTRUCTION BY POTHOLING. PRIOR TO ANY DIGGING, CALL U.S.A. AT 811 A MINIMUM OF 48 HOURS IN ADVANCE OF EXCAVATION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ANY ADDITIONAL UTILITY COMPANIES TO DETERMINE THE LOCATION OF EXISTING UTILITIES. CONTACT AND THE COORDINATION WITH U.S.A. AND U.S.A. MARKINGS SHALL NOT RELIEVE THE CONTRACTOR FROM THEIR RESPONSIBILITY FOR UTILITY VERIFICATION AND PROTECTION.
9. TYPICAL DETAILS REFERENCED ON THESE DRAWINGS ARE FROM THE RVSD STANDARD SPECIFICATIONS AND DRAWINGS, "UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN", OR STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS DATED 2018.
10. UNLESS OTHERWISE NOTED, EXISTING SANITARY SEWER LINES ARE TO BE REHABILITATED IN THE SAME LOCATION. EXISTING PIPES ARE ASSUMED TO HAVE UNIFORM GRADE BETWEEN MANHOLES. CONTRACTOR SHALL LOCATE LINES PRIOR TO BEGINNING WORK.
11. ALL STREET MARKINGS AFFECTED BY CONSTRUCTION SHALL BE REPLACED AT THEIR EXISTING LOCATIONS AT NO ADDITIONAL COST, THIS INCLUDES DAMAGE OF STREET MARKINGS ON ANY STREET WITHIN COUNTY, CITY AND TOWN LIMITS.
12. ALL PAVEMENT SHALL BE SAWCUT FULL DEPTH FOR PIPE TRENCH AND FOR PAVEMENT REMOVAL, PER RVSD STD DWG SD-14.
13. RECONNECT ALL ACTIVE SANITARY SEWER SERVICE LATERALS TO REHABILITATED SANITARY SEWER MAINS. DRAWINGS DO NOT SHOW ALL LATERALS AND WHERE SHOWN ARE APPROXIMATELY LOCATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL SERVICE CONNECTIONS AND DYE TESTING TO DETERMINING IF SERVICES ARE ACTIVE AS PART OF THE WORK.
14. EXISTING UTILITY CROSSINGS AS SHOWN ON THE PROFILES ARE APPROXIMATE. VERIFICATION OF HORIZONTAL AND VERTICAL EXISTING UTILITY ALIGNMENTS SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
15. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTORS RESPONSIBILITY AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE REQUIREMENT OF THE COUNTY AND THE CITY/TOWN WITH JURISDICTION AND ENCROACHMENT PERMITS. THE CONTRACTOR SHALL SUBMIT A WRITTEN TRAFFIC CONTROL & SIGNING PLAN (INCLUDING STREET CLOSURE DETAILS) TO THE ENGINEER WITHIN TEN (10) WORKING DAYS AFTER AWARD OF CONTRACT.
16. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS BARRICADES, FLAGMEN AND OTHER DEVICES TO PROVIDE VEHICULAR AND PEDESTRIAN SAFETY.
17. CONTRACTOR SHALL PROTECT ALL UTILITY STRUCTURES, AND SURVEY MONUMENTS WITHIN THE WORK AREAS. THE CONTRACTOR SHALL REVIEW THE WORK SITES PRIOR TO SUBMISSION OF BIDS.
18. THE FOLLOWING UTILITY COMPANIES AND AGENCIES, BUT NOT LIMITED TO, ARE KNOWN TO HAVE SUBSTRUCTURES OR OTHER FACILITIES WITHIN THE AREA OF PROPOSED WORK:

MARIN MUNICIPAL WATER DISTRICT

(415) 945-1481

PG&E (NORTH BAY DIVISION)

(415) 257-3405

COMCAST

(707) 207-1376

AT&T

(707) 575-2077

ALL UTILITIES, CONTACT U.S.A

811 / (800) 227-2600
19. THE CONTRACTOR SHALL BYPASS PUMP ALL MAIN-LINE SANITARY SEWER FLOW DURING REHABILITATION OR CCTV ACTIVITIES IF NECESSARY TO ASSESS PIPE CONDITION. ADDITIONAL LATERAL PUMPING (OR OTHER METHOD APPROVED BY THE ENGINEER) NECESSARY TO PREVENT SEWER SPILLAGE INTO SURROUNDING PROPERTIES FROM LATERAL SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK REQUIREMENTS.
20. DIMENSIONS SHOWN ON PLANS ARE HORIZONTAL MEASUREMENTS.
21. HORIZONTAL AND VERTICAL DIMENSIONS PROVIDED ON THE DRAWINGS ARE BASED ON DESIGN SURVEY METHODS. FIELD MEASUREMENTS MAY VARY FROM THOSE ON THE DRAWINGS. ADJUSTMENTS TO LINE AND GRADE MAY BE MADE BY THE ENGINEER DURING CONSTRUCTION. PAYMENT WILL BE BASED ON QUANTITIES INSTALLED.
22. RIGHT OF WAY LINES ARE SHOWN AT APPROXIMATE LOCATIONS.
23. FOR OPEN TRENCH INSTALLATIONS, IF A NEW SEWER MAIN CROSSES UNDER AN EXISTING WATER LINE WITH LESS THAN 1 FOOT OF CLEARANCE, THE CONTRACTOR SHALL INSTALL A CONTINUOUS SLEEVE AROUND THE SEWER MAIN FOR A DISTANCE OF 4 FEET CLEAR TO EACH SIDE OF THE EXISTING WATER LINE PER RVSD STD DWG SD-22. IF A NEW SEWER MAIN CROSSES ABOVE AN EXISTING WATER MAIN WITH LESS THAN 1 FOOT OF CLEARANCE, THE CONTRACTOR SHALL INSTALL A CONTINUOUS HDPE SLEEVE AROUND THE SEWER MAIN FOR A DISTANCE OF 10 FEET CLEAR TO EACH SIDE OF THE EXISTING WATER LINE, PER RVSD STD DWG SD-25.
24. NEW SEWER MAINS CROSSING UNDER OR ABOVE EXISTING WATER LINES WITH LESS THAN 4 INCHES OF CLEARANCE ARE PROHIBITED.
25. THE CONTRACTOR SHALL MAINTAIN ACCESS TO RESIDENCES AND BUSINESSES ALONG THE STREETS TO BE REPAIRED THROUGHOUT THE LIFE OF THE CONTRACT.
26. CONTRACTOR TO COORDINATE WITH ALL PROPERTY OWNERS FOR EASEMENT WORK A MINIMUM OF TWO WEEKS PRIOR TO START OF SAID WORK.
27. PEDESTRIAN, PUBLIC, AND WHEELCHAIR ACCESSSES SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE DISTRICT AND AGENCY HAVING JURISDICTION IN THE RIGHT-OF-WAY IN ACCORDANCE WITH THE ENCROACHMENT PERMITS.
28. CONTRACTOR SHALL RESTORE SITES TO EQUAL TO OR BETTER THAN EXISTING CONDITIONS.
29. ANY DAMAGE TO THE EXISTING FACILITIES INCLUDING, BUT NOT LIMITED TO, TREES, LANDSCAPING, IRRIGATION, FENCES, WALLS, SIDEWALK, AND OTHER PAVEMENT SURFACES SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE ANY AND ALL PAVEMENT AND OTHER FACILITIES OUTSIDE LIMITS OF WORK AFFECTED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST.

ABBREVIATIONS

AB, ASB	AGGREGATE BASE, SUBBASE	G	GAS	PROP	PROPOSED
ABD	ABANDONED	GA	GAUGE	PVC	POLYVINYL CHLORIDE
AC	ASPHALT CONCRETE	GB	GRADE BREAK	R	RADIUS
ADJ	ADJUSTABLE	GM	GAS METER	RD	ROAD
APPROX	APPROXIMATE	GRND	GROUND	R+C	REBAR & CAP
AVE	AVENUE	GTP	GALVANIZED THREADED PIPE	RCE#	REGISTERED CIVIL ENGINEER #
BC	BEGIN CURVE	GTR	GUTTER	REQ'D	REQUIRED
BM	BLUE MARKER	GV	GAS VALVE	RET	RETAINING
BOC	BACK OF CURB	>	GREATER THAN	R/R	REMOVE & REPLACE
BP	BOTTOM OF PIPE	H, HORIZ	HORIZONTAL	RS	ROADWAY STABILIZATION
BSW	BACK OF SIDEWALK	HDD	HORIZONTAL DIRECTIONAL DRILLING	R/W	RIGHT-OF-WAY
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	RVSD	ROSS VALLEY SANITARY DISTRICT
CATV	CABLE TV	HH	HANDHOLE	S	SLOPE
CB	CATCH BASIN	HMA	HOT MIX ASPHALT	SD	STORM DRAIN, STANDARD DRAWING
CCTV	CLOSED CIRCUIT TELEVISION	HV	HIGH VOLTAGE	SDCB	STORM DRAIN CATCH BASIN
CIP	CAST IRON PIPE	ID	INNER DIAMETER	SDMH	STORM DRAIN MANHOLE
CIPP	CURED-IN-PLACE PIPE	IN	INCH	SDR	STANDARD DIMENSION RATIO
CL, C	CENTERLINE	INV	INVERT	SDWK	SIDEWALK
CLR	CLEARANCE	IPB	IRRIGATION PULL BOX	SF	SQUARE FEET
CLSM	CONTROLLED LOW STRENGTH MATERIAL	JP	JOINT UTILITY POLE	SHT	SHEET
CMP	CORRUGATED METAL PIPE	LAT	LATERAL	SL	STREET LIGHT
CO	CLEANOUT	LDCC	LOW DENSITY CELLULAR CONCRETE	SS	SANITARY SEWER
CON'T	CONTINUED	LF	LINEAR FOOT	SSCO	SANITARY SEWER CLEANOUT
CP	CONTROL POINT	LH	LAMPHOLE	SSLH	SANITARY SEWER LAMPHOLE
D, DIA	DIAMETER	LIP	LIP OF GUTTER	SSMH	SANITARY SEWER MANHOLE
DI	DRAIN INLET	MAGN	"MAG" NAIL	STA	STATION
DL	DETECTOR LOOP	MAX	MAXIMUM	STD	STANDARD
DR	DIMENSION RATIO	MAGNW	"MAG" NAIL & WASHER	STL	STEEL
DWY	DRIVEWAY	MAGNS	"MAG" NAIL & SHINER	T	TELEPHONE, TOTAL
DWG	DRAWING	MB	MAILBOX	TC	TOP OF CURB
E	EASTING, ELECTRIC	MBGR	METAL BEAM GUARD RAIL	TEL	TELEPHONE
E (OH)	ELECTRIC OVERHEAD	MH	MANHOLE	TMH	TELEPHONE MANHOLE
EC	EDGE OF CONCRETE	MIN	MINIMUM	TOE	TOE OF SLOPE, TOE OF CURB, TOE OF WALL
EC	END OF CURVE	MMWD	MARIN MUNICIPAL WATER DISTRICT	TOP	TOP OF PIPE
EG	EXISTING GRADE	MNFR	MANUFACTURER	TYP	TYPICAL
EL OR ELEV	ELEVATION	MON	MONUMENT	TV	TELEVISION
ELEC	ELECTRIC	N	NORTHING	UNK	UNKNOWN
EP, EOP	EDGE OF PAVEMENT	N.I.C.	NOT IN CONTRACT	UT	UNKNOWN UTILITY
EOS	EDGE OF SHOULDER	NO	NUMBER	VCP	VITRIFIED CLAY PIPE
ETW	EDGE OF TRAVELED WAY	O.C.	OFF CENTER	VG	VALLEY GUTTER
EXIST, EX	EXISTING	OD	OUTSIDE DIAMETER	W, WAT	WATER
FC, FOC	FACE OF CURB	OH	OVERHEAD	W/	WITH
FD	FOUND	OG	ORIGINAL GRADE	WM	WATER METER
FG	FINISHED GRADE	PCC	PORTLAND CEMENT CONCRETE	WSP	WELDED STEEL PIPE
FI	FIRE HYDRANT	PCC	POINT OF COMPOUND CURVE	WV	WATER VALVE
FL, E	FLOWLINE	PK	"PK" NAIL	W.W.M.	WELDED WIRE MESH
FOB	FACE OF BERM	PL	PLASTIC	100D	100 PENNY
FY	FISCAL YEAR	PLS#	PROFESSIONAL LAND SURVEYOR #	2:1	2 HORIZONTAL TO 1 VERTICAL SLOPE
		PP	POWER POLE, PLAN AND PROFILE		

LEGEND

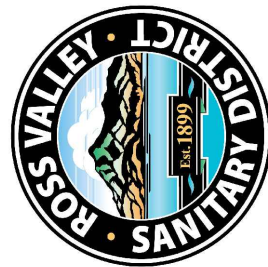
EXISTING	REHABILITATE OR NEW	DESCRIPTION	EXISTING	DESCRIPTION
		SANITARY SEWER OPEN TRENCH REPLACEMENT WITH SIZE, FLOW DIRECTION, CO, MH		MONUMENT
		STORM DRAIN WITH SIZE, FLOW DIRECTION, MH, DI		ELECTRIC
		HOUSE NUMBER		HIGH VOLTAGE ELECTRIC
		CATV		GUY WIRE
		WATER MAIN OR WATER VALVE		FIRE HYDRANT
		GAS LINE		JOINT/POWER POLE
		TELEPHONE LINE OR DUCT		EDGE OF PAVEMENT
		UNKNOWN UTILITY LINE		CURB AND GUTTER
		APPROXIMATE RIGHT OF WAY OR PROPERTY LINE		AC DIKE
				APPROX BORING LOCATIONS (SEE APPENDIX B FOR BORING LOGS)
				CONTROL POINT
				FENCE
				TREE
				SIGN
				PULL BOX
				WALL

GENERAL NOTES CON'T

30. BIDDERS SHOULD NOTE PRESENCE OF OVERHEAD UTILITIES IN THE WORK AREA. ALL OVERHEAD UTILITIES MAY NOT BE SHOWN AND IF SHOWN, MAY BE IN THEIR APPROXIMATE ALIGNMENT. AS PART OF THEIR PRE-BID INSPECTION, BIDDERS SHALL NOTE THE TYPE AND LOCATION OF OVERHEAD UTILITIES IN THE PROPOSED WORK AREA. BIDDER'S PRICE SHALL INCLUDE PROVISIONS FOR WORKING IN AREAS WHERE OVERHEAD UTILITIES EXIST AT THE TIME OF BIDDING, WHETHER SHOWN ON THE PLANS OR NOT, AND NO ADDITIONAL COMPENSATION IS ALLOWED.
31. REFER TO SPECIFICATIONS FOR WORK HOUR AND WORK SEQUENCE RESTRICTIONS.
32. WHEN AN ABANDONED GAS LINE IS EXPOSED, CONTRACTOR TO COORDINATE WITH PG&E TO VERIFY THAT IT IS DEACTIVATED.
33. UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS, ALL EXPOSED CONCRETE WORK (I.E. SIDEWALKS, CURB AND GUTTER, VALLEY GUTTERS, ETC) SHALL CONFORM TO THE LATEST EDITION OF THE MARIN COUNTY STANDARD DRAWINGS.
34. DURING NON WORKING HOURS, A TEMPORARY CONNECTION SHALL BE MADE FROM THE EXISTING SEWER TO THE NEW SEWER. LATERALS AND SEWERS CROSSING THE TRENCH SHALL BE TEMPORARILY RECONNECTED UNTIL THEY CAN BE PERMANENTLY CONNECTED TO THE NEW SEWER.
35. CDF BACKFILL IS NOT ALLOWED FOR SITES WITHIN COUNTY OF MARIN JURISDICTION.
36. CONTRACTOR TO NOTE THAT SOME SITES ARE WITHIN EASEMENTS WITH LIMITED OR NO ACCESS FOR VEHICLES AND EQUIPMENT. THESE SITES MAY REQUIRE PORTABLE EQUIPMENT AND/OR HAND EXCAVATION.
37. CONTRACTOR SHALL USE RECYCLED WATER FOR ANY CONSTRUCTION ACTIVITY. MMWD WILL NOT PROVIDE A WATER METER FOR CONTRACTOR'S USE DUE TO SEVERE DROUGHT CONDITIONS.

NOTES, LEGENDS
AND ABBREVIATIONS

ROSS VALLEY
DISTRICT
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



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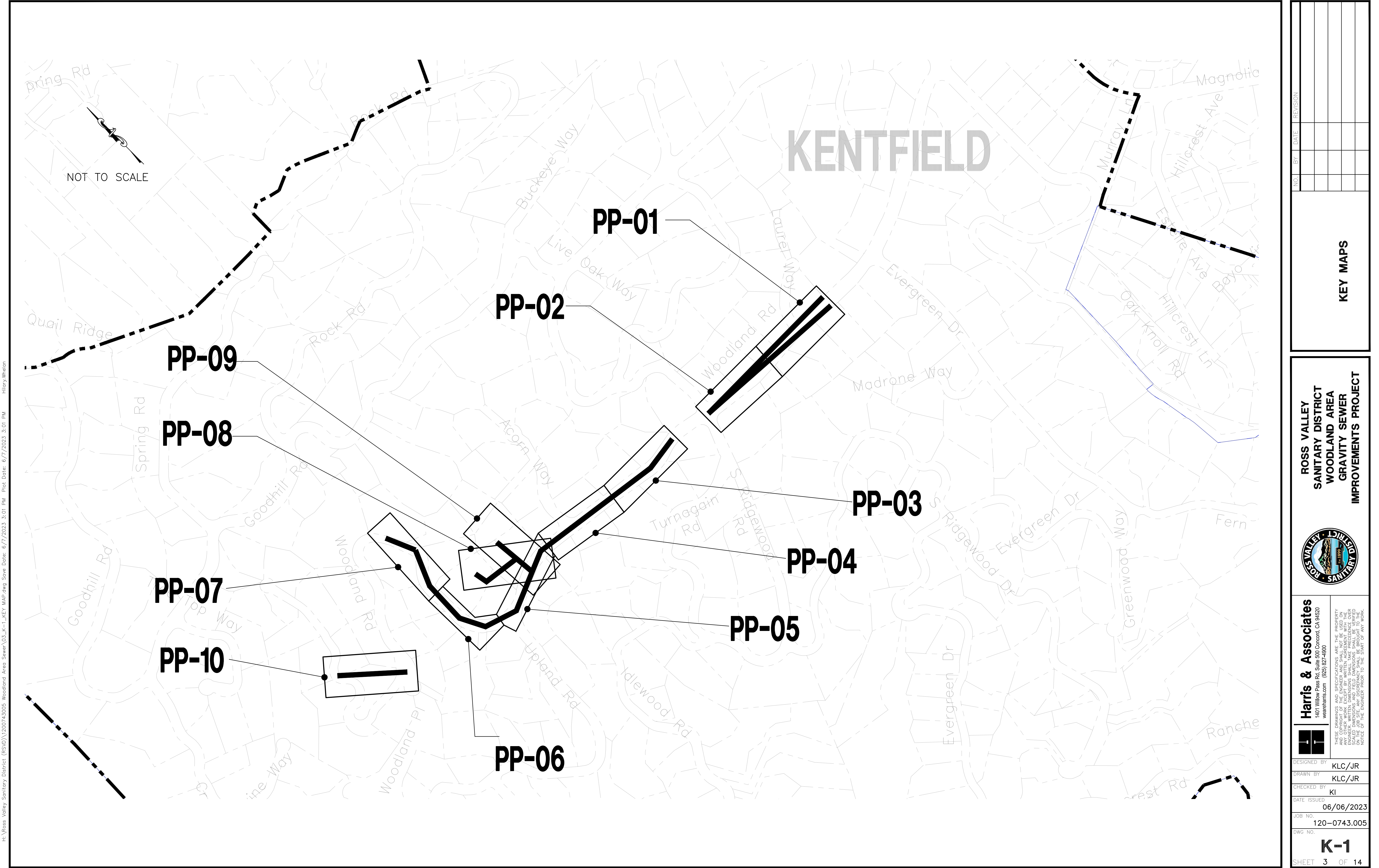
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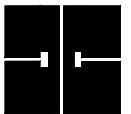
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N-01

SHEET 2 OF 14



H:\Ross Valley Sanitary District (RSD)\1200743005 Woodland Area Sewer\03_K-1_KEY MAP.dwg Save Date: 6/7/2023 3:01 PM Plot Date: 6/7/2023 3:01 PM Hilary.Wheeler



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ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
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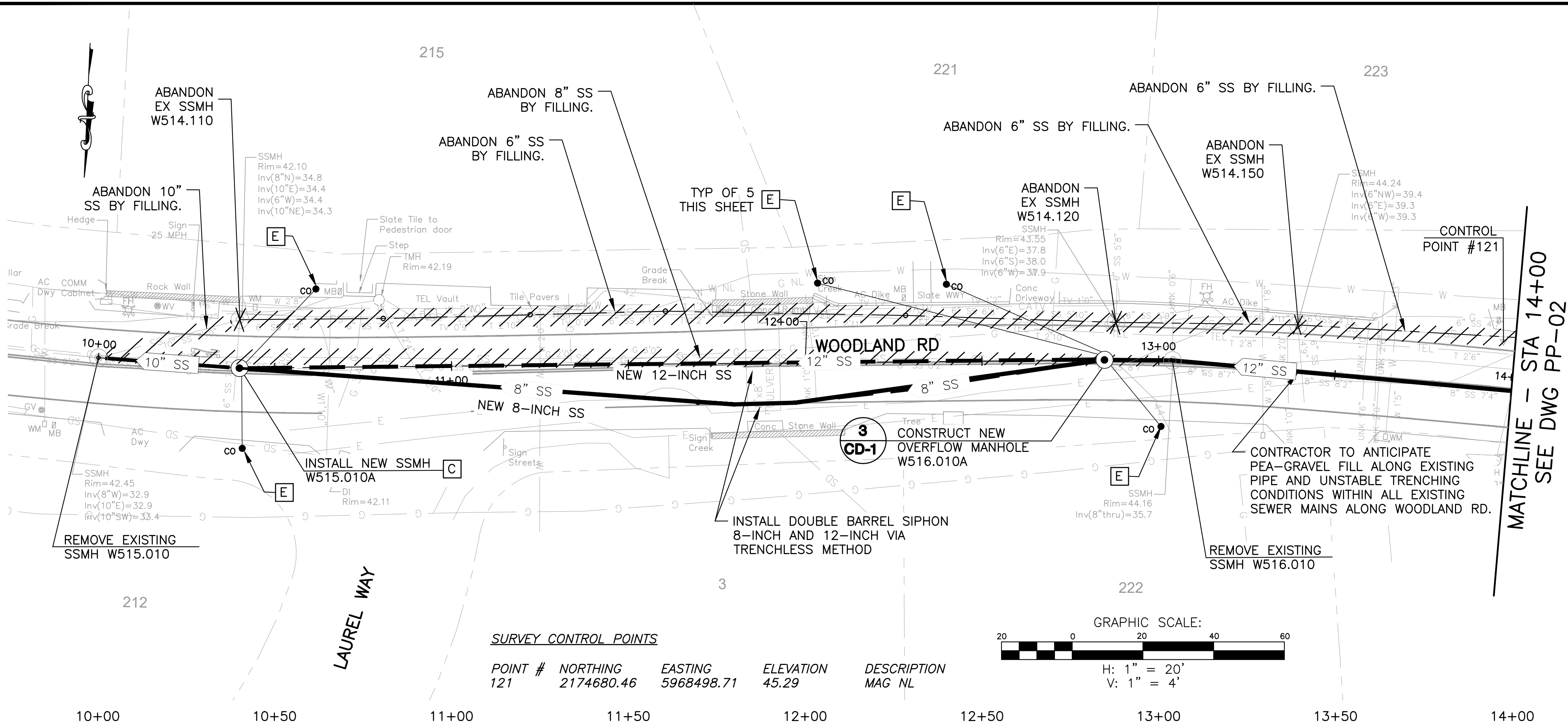


NOT TO SCALE

KEY MAPS

NO.	BY	DATE	REVISION

SHEET 3 OF 14



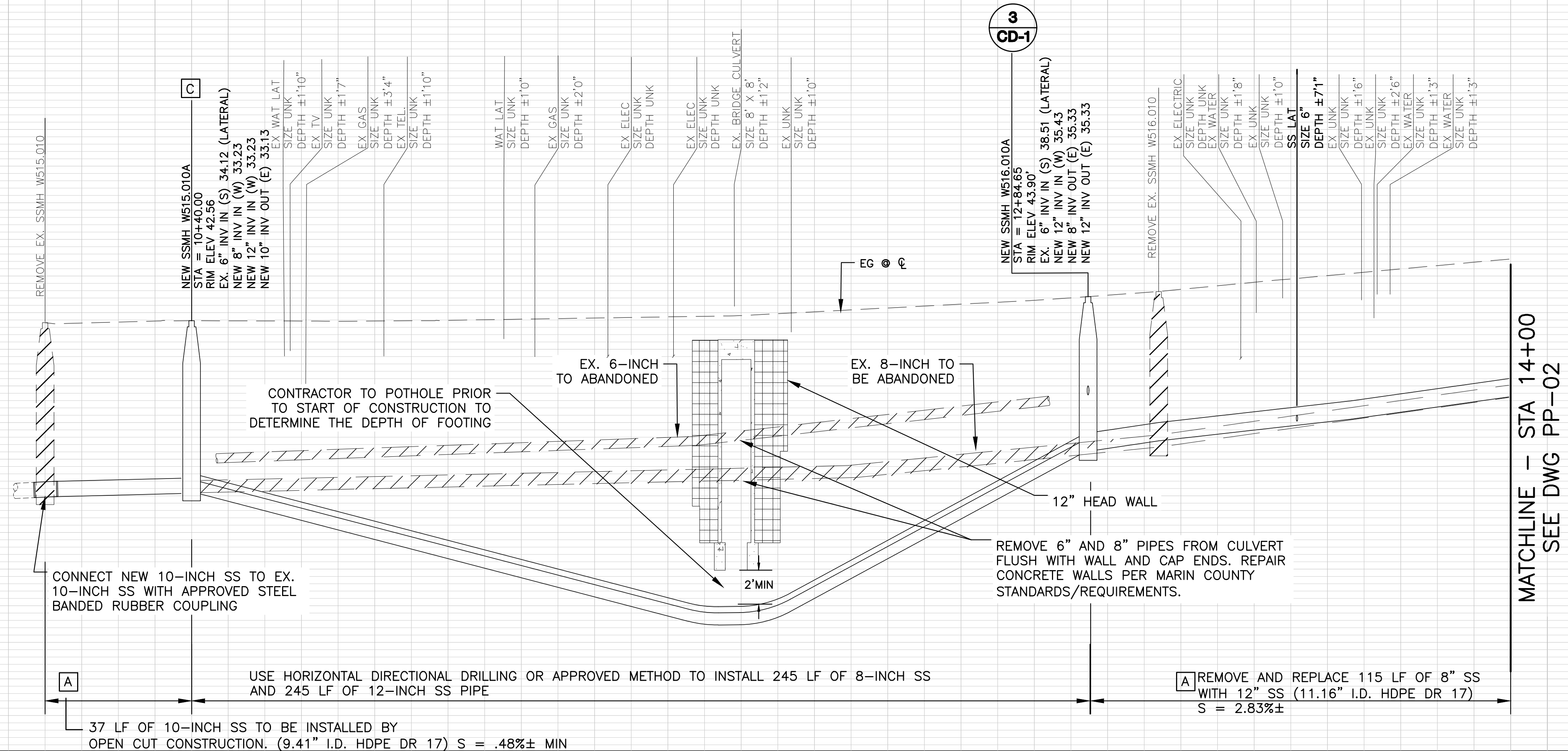
SURVEY CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
121	2174680.46	5968498.71	45.29	MAG NL

LEGEND OF REHABILITATION METHODS

- A** REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSJ STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSJ STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSJ STD DWG SD-17.
- B** REPLACE EXISTING PIPE USING THE PIPE BURSTING METHOD. CONNECT TO EX SSMH PER RVSJ STD DWG SD-14. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSJ STD DWG SD-09. NO BURSTING FROM INSIDE EXISTING SSMH WILL BE ALLOWED UNLESS APPROVED BY THE DISTRICT. FINAL PAVING SHALL BE PER DETAIL 2/D-01 FOR ALL OPEN TRENCHES.
- REPAIR SURFACE UPHEAVAL AND SAG REPAIR PER RVSJ STD DWG SD-22 AND SD-20 AFTER PIPE BURSTING IF DIRECTED BY THE DISTRICT.
- DISCONNECT AND RECONNECT SEWER LATERALS PER RVSJ STD DWG SD-29 AND SD-30.
- C** REMOVE AND REPLACE EX SSMH, SSLH, SSCO WITH NEW SSMH OR CONSTRUCT NEW SSMH PER RVSJ STD DWG SD-01, SD-02, SD-03, SD-04, SD-05 AND SD-06. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- D** REHABILITATE MANHOLE BY LINING WITH CALCIUM ALUMINATE MORTAR SYSTEM AFTER MANHOLE MODIFICATIONS ARE PERFORMED AND IN ACCORDANCE WITH THE SPECIFICATIONS. REMOVE EXISTING MANHOLE STEPS PRIOR TO REHABILITATION.
- E** PIPE BURST, REMOVE AND REPLACE, OR CONSTRUCT NEW SEWER LATERAL AND SSCO NEAR PROPERTY LINE PER RVSJ STD DWG SD-29 AND SD-30. PIPE BURSTING IS THE PREFERRED METHOD FOR REPLACEMENT OF LATERALS. OPEN CUT SHALL BE USED WHERE APPROVED BY THE DISTRICT OR AS SHOWN ON THE PLANS. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- CONTRACTOR SHALL VERIFY LATERAL ALIGNMENTS IN THE FIELD. CONTRACTOR SHALL EXTEND/SHORTEN EXISTING LATERALS AS REQUIRED TO BRING NEW CLEANOUT TO EDGE OF R/W. CLEANOUTS SHALL BE TWO-WAY WITH SEWER POPPER TYPE 2 BACKWATER PREVENTION DEVICE. CLEANOUTS SHALL MATCH EXISTING LOWER LATERAL MATERIAL. REFER TO SD-29: C-900 IS TWO-WAY AND HDPE IS WYE FACING MAIN. CLEANOUT MATERIALS AND UTILITY BOX SHALL BE PER RVSJ APPROVED MATERIALS LIST. CHRISTY B09 BOXES SHALL BE USED FOR NON-TRAFFIC LOCATIONS. CHRISTY B1017 BOXES SHALL BE USED FOR ALL LOCATIONS SUBJECT TO TRAFFIC LOADS. LOCATION AND BOX TYPE SHALL BE CONFIRMED IN THE FIELD BY THE DISTRICT. CONNECTION OF SEWER LATERAL TO SEWER MAIN, INCLUDING DROP OFF ANGLE (TYPE A OR TYPE B CONNECTION) OF SERVICE LATERAL, SHALL BE AS SHOWN ON RVSJ DWG SD-29. NO VERTICAL DROP OFF IS ALLOWED.

- NOTES:**
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING LIVE SANITARY SEWER LATERALS ALONG SEWER MAINS BY DYE TESTING AND SONDE AND REINSTATE LIVE LATERALS TO NEW SEWER MAIN.
 - FOR PIPE BURSTING SITES, PROVIDE AIR GAP FOR (1) LOCATIONS WHERE EXISTING UTILITY CROSSES NEW PIPE WITH LESS THAN TWO FEET CLEARANCE PER RVSJ STD DWG SD-21 AND (2) WHERE PIPE MATERIAL CHANGES AND REQUIRES REMOVAL PRIOR TO PIPE BURSTING, IF NEEDED. NOT ALL PIPE MATERIAL CHANGES ARE SHOWN ON THE PROFILE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. AIR GAP LOCATIONS ARE NOT IDENTIFIED ON THE PLANS.
 - WHERE PIPING IS REMOVED AND REPLACED BY OPEN TRENCH, NEW PIPE INVERT ELEVATIONS SHALL MATCH EX PIPE INVERT ELEVATIONS (UPSIZED 8" SS INVERTS SHALL MATCH EXISTING 6" SS INVERTS), UNLESS OTHERWISE NOTED.
 - FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HDPE SLEEVE REQUIREMENTS.
 - BENDING OF NEW PIPING AND/OR JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA AND PIPE MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. SEE GENERAL NOTE 8 ON DWG N-01. USE CLSM BACKFILL WHERE 6" CLEARANCE CANNOT BE OBTAINED BETWEEN NEW AND EXISTING UTILITIES. IF CONFLICTS REQUIRE THE RELOCATION OF EXISTING UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING UTILITY OWNER(S) FOR RELOCATION(S).



**SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD**

**ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT**

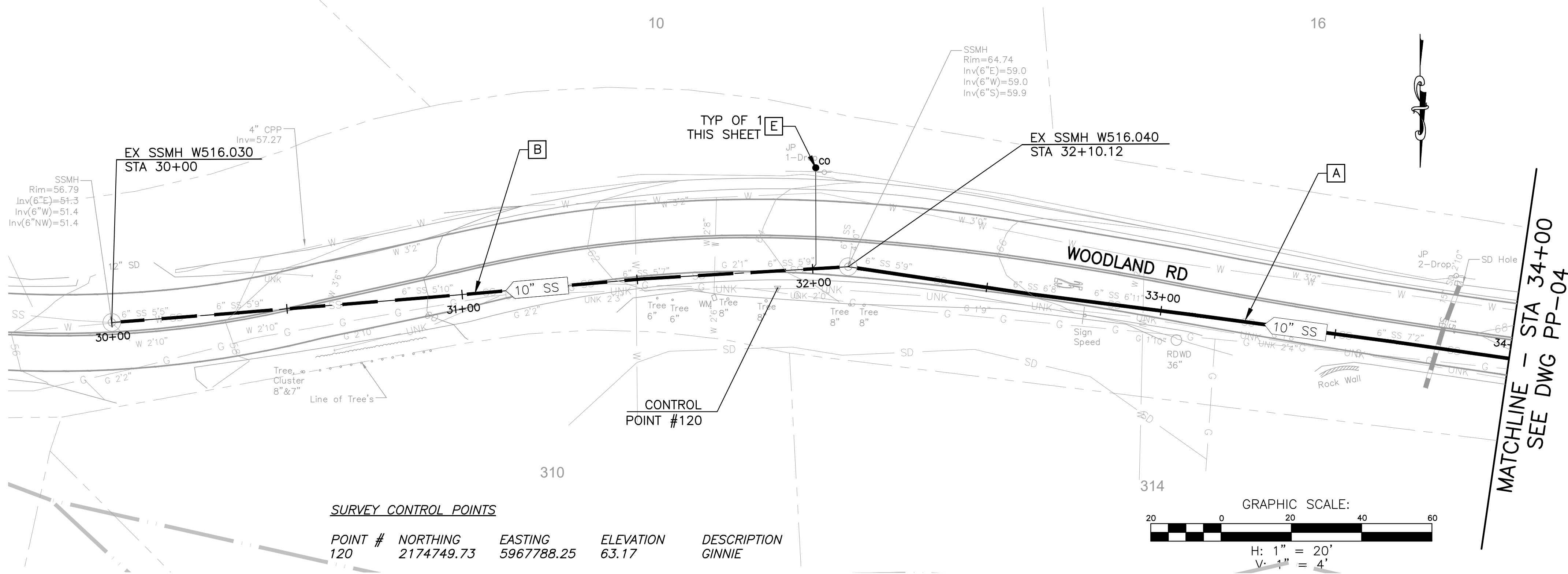


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1401 Willow Pass Rd, Suite 500 Concord, CA 94520
weareharris.com (925) 827-4900



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DATE ISSUED 06/06/2023
JOB NO. 120-0743.005
DWG NO. PP-01
SHEET 4 OF 14

H:\Ross Valley Sanitary District (RVS)\1200743003 Woodland Area Sewer\08_12_PP-05_PP-09_WOODLAND.dwg Save Date: 6/7/2023 3:27 PM Plot Date: 6/7/2023 3:27 PM Hilary Whelan



SURVEY CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
120	2174749.73	5967788.25	63.17	GINNIE

LEGEND OF REHABILITATION METHODS

- [A] REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSD STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSD STD DWG SD-17.
- [B] REPLACE EXISTING PIPE USING THE PIPE BURSTING METHOD. CONNECT TO EX SSMH PER RVSD STD DWG SD-14. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. NO BURSTING FROM INSIDE EXISTING SSMH WILL BE ALLOWED UNLESS APPROVED BY THE DISTRICT. FINAL PAVING SHALL BE PER DETAIL 2/D-01 FOR ALL OPEN TRENCHES.
- REPAIR SURFACE UPHEAVAL AND SAG REPAIR PER RVSD STD DWG SD-22 AND SD-20 AFTER PIPE BURSTING IF DIRECTED BY THE DISTRICT.
- DISCONNECT AND RECONNECT SEWER LATERALS PER RVSD STD DWG SD-29 AND SD-30.
- [C] REMOVE AND REPLACE EX SSMH, SSLH, SSCO WITH NEW SSMH OR CONSTRUCT NEW SSMH PER RVSD STD DWG SD-01, SD-02, SD-03, SD-04, SD-05 AND SD-06. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- [D] REHABILITATE MANHOLE BY LINING WITH CALCIUM ALUMINATE MORTAR SYSTEM AFTER MANHOLE MODIFICATIONS ARE PERFORMED AND IN ACCORDANCE WITH THE SPECIFICATIONS. REMOVE EXISTING MANHOLE STEPS PRIOR TO REHABILITATION.
- [E] PIPE BURST, REMOVE AND REPLACE, OR CONSTRUCT NEW SEWER LATERAL AND SSCO NEAR PROPERTY LINE PER RVSD STD DWG SD-29 AND SD-30. PIPE BURSTING IS THE PREFERRED METHOD FOR REPLACEMENT OF LATERALS. OPEN CUT SHALL BE USED WHERE APPROVED BY THE DISTRICT OR AS SHOWN ON THE PLANS. FINAL PAVING SHALL BE PER DETAIL 2/D-01.

CONTRACTOR SHALL VERIFY LATERAL ALIGNMENTS IN THE FIELD. CONTRACTOR SHALL EXTEND/SHORTEN EXISTING LATERALS AS REQUIRED TO BRING NEW CLEANOUT TO EDGE OF R/W. CLEANOUTS SHALL BE TWO-WAY WITH SEWER POPPER TYPE 2 BACKWATER PREVENTION DEVICE. CLEANOUTS SHALL MATCH EXISTING LOWER LATERAL MATERIAL. REFER TO SD-29. C-900 IS TWO-WAY AND HDPE IS WYE FACING MAIN. CLEANOUT MATERIALS AND UTILITY BOX SHALL BE PER RVSD APPROVED MATERIALS LIST. CHRISTY 809 BOXES SHALL BE USED FOR NON-TRAFFIC LOCATIONS. CHRISTY B1017 BOXES SHALL BE USED FOR ALL LOCATIONS SUBJECT TO TRAFFIC LOADS. LOCATION AND BOX TYPE SHALL BE CONFIRMED IN THE FIELD BY THE DISTRICT. CONNECTION OF SEWER LATERAL TO SEWER MAIN, INCLUDING DROP OFF ANGLE (TYPE A OR TYPE B CONNECTION) OF SERVICE LATERAL, SHALL BE AS SHOWN ON RVSD DWG SD-29. NO VERTICAL DROP OFF IS ALLOWED.

- NOTES:
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING LIVE SANITARY SEWER LATERALS ALONG SEWER MAINS BY DYE TESTING AND SONDE AND REINSTATE LIVE LATERALS TO NEW SEWER MAIN.
 - FOR PIPE BURSTING SITES, PROVIDE AIR GAP FOR (1) LOCATIONS WHERE EXISTING UTILITY CROSSES NEW PIPE WITH LESS THAN TWO FEET CLEARANCE PER RVSD STD DWG SD-21 AND (2) WHERE PIPE MATERIAL CHANGES AND REQUIRES REMOVAL PRIOR TO PIPE BURSTING, IF NEEDED. NOT ALL PIPE MATERIAL CHANGES ARE SHOWN ON THE PROFILE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. AIR GAP LOCATIONS ARE NOT IDENTIFIED ON THE PLANS.
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 - FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HDPE SLEEVE REQUIREMENTS.
 - BENDING OF NEW PIPING AND/OR JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA AND PIPE MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. SEE GENERAL NOTE 8 ON DWG N-01. USE CLSM BACKFILL WHERE 6" CLEARANCE CANNOT BE OBTAINED BETWEEN NEW AND EXISTING UTILITIES. IF CONFLICTS REQUIRE THE RELOCATION OF EXISTING UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING UTILITY OWNER(S) FOR RELOCATION(S).

30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00

82

78

74

70

66

62

58

54

50

EX SSMH W516.030
STA = 30+00.00
RIM ELEV 56.79
NEW 10" INV IN (W) 51.40

PIPE BURST 210 LF
OF EX 6" SS WITH 10" SS
(9.41" I.D. HDPE DR 17)
S = MATCH EXISTING

WAT LAT
SIZE UNK
DEPTH ±3.2"

WAT LAT
SIZE UNK
DEPTH ±2.6"

EX 4" SS LAT

EX SSMH W516.040
STA = 32+10.12
RIM ELEV 64.74
NEW 10" INV IN (W) 59.00
NEW 10" INV OUT (E) 59.00

WAT LAT
SIZE UNK
DEPTH ±2.5"

STORM DRAIN
SIZE 15"
DEPTH ±2'10"

MATCHLINE - STA 34+00
SEE DWG PP-04

REMOVE AND REPLACE 190 LF
OF EX 6" SS WITH 10" SS
(9.41" I.D. HDPE DR 17)
S = .97%±



SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD

ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT

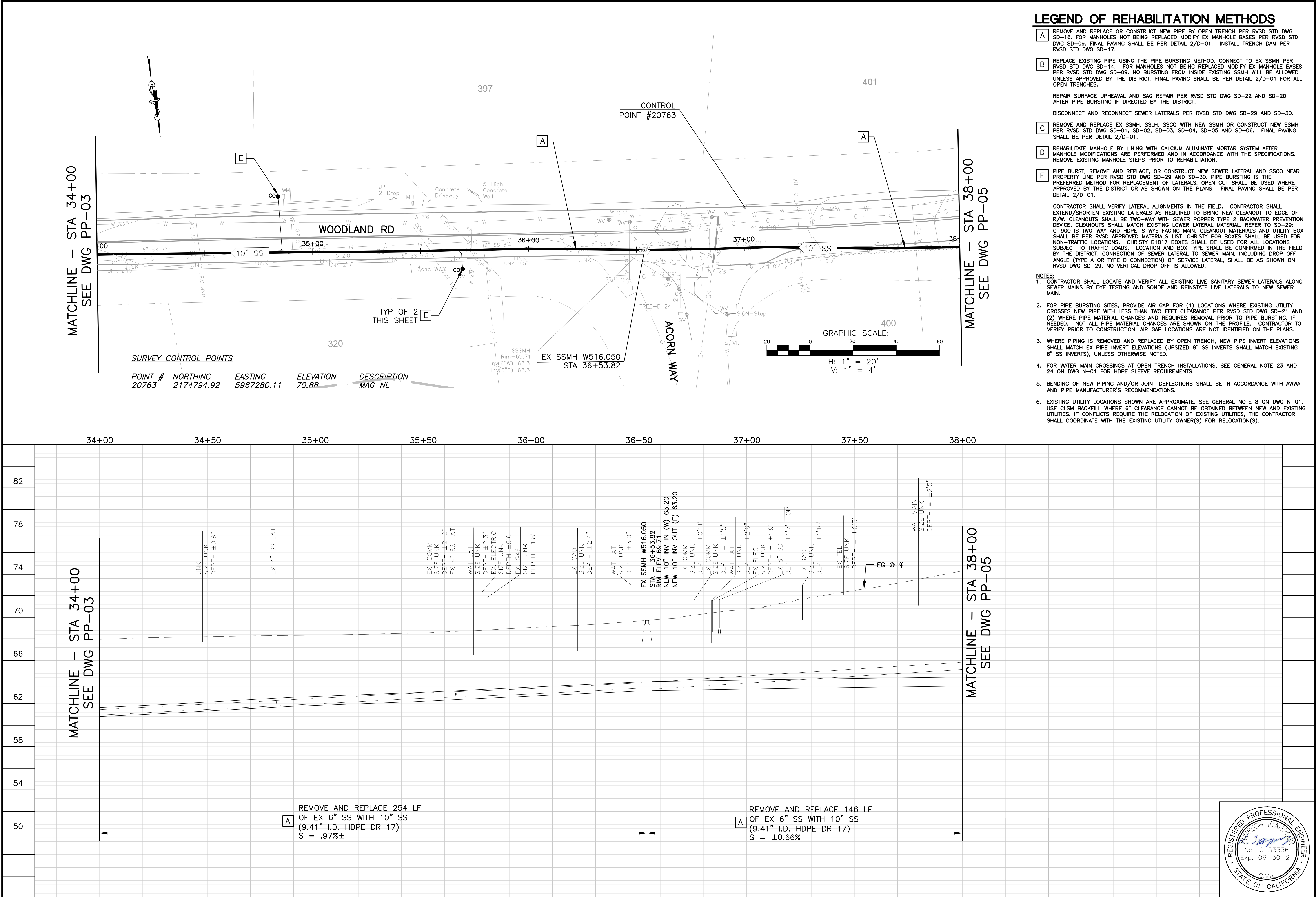


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DWG NO.

PP-03
SHEET 06 OF 14

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NO.

BY

DATE

REVISION

SANITARY SEWER IMPROVEMENTS
PLAN AND PROFILE
WOODLAND RD

ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT



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KI

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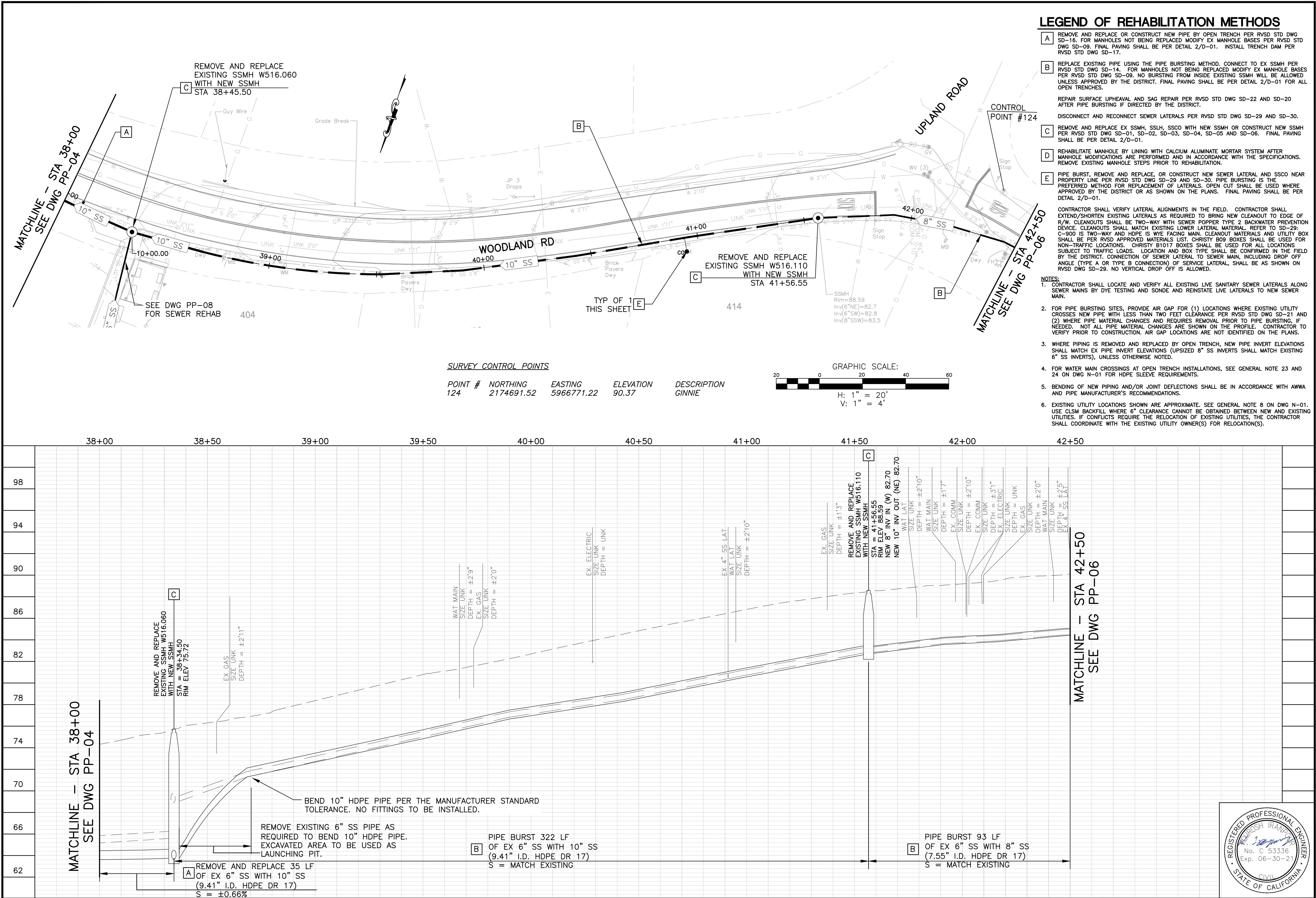
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SHEET 07 OF 14

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NO. BY DATE REVISION

SANITARY SEWER IMPROVEMENTS

PLAN AND PROFILE

WOODLAND RD

ROSS VALLEY

SANITARY DISTRICT

WOODLAND AREA

GRAVITY SEWER

IMPROVEMENTS PROJECT

Harris & Associates

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DATE ISSUED

06/06/2023

JOB NO.

120-0743.005

DWG NO.

PP-05

SHEET 08 OF 14

REGISTERED PROFESSIONAL ENGINEER

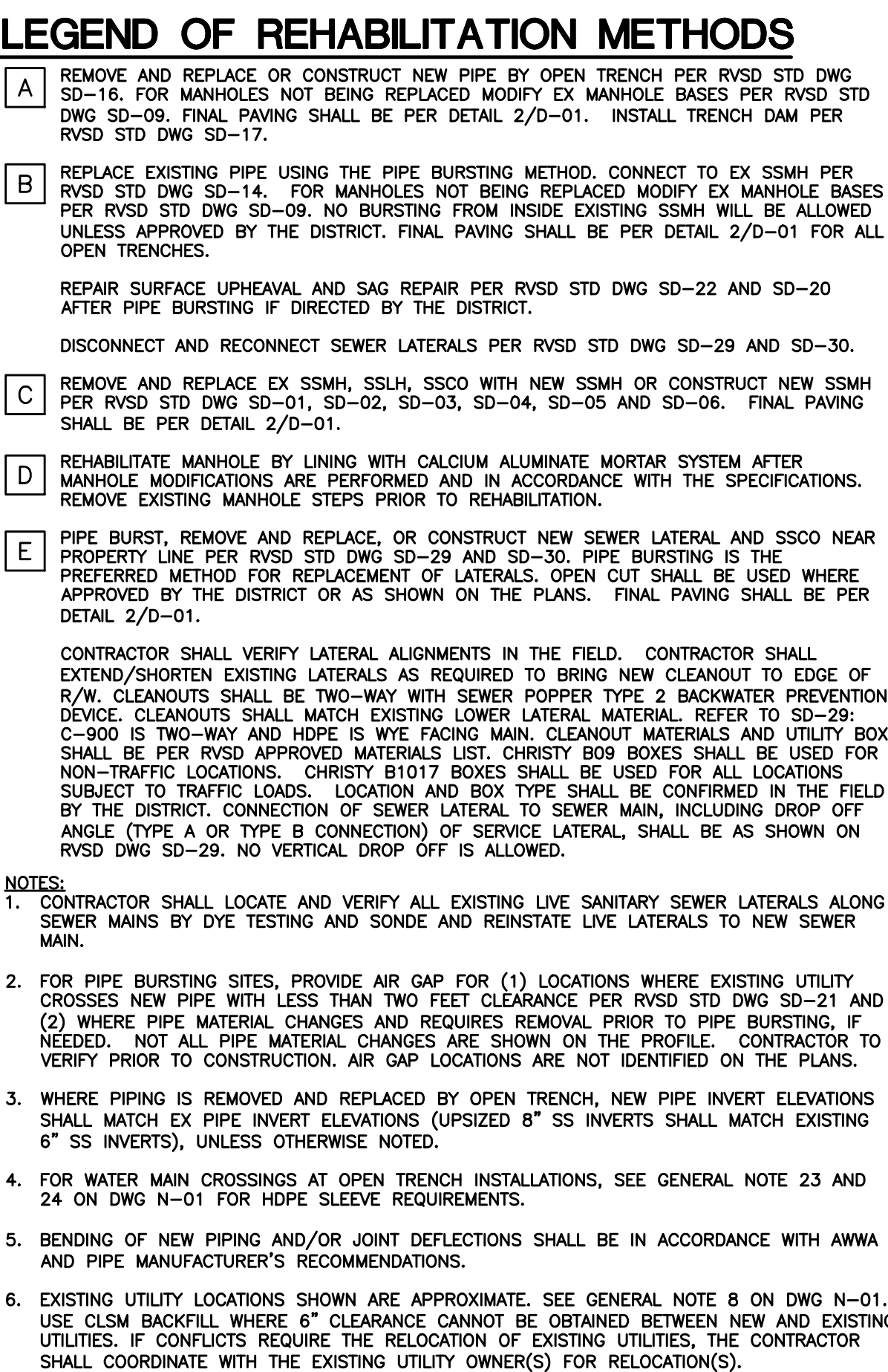
SEWER

No. C 53336

Exp. 06-30-21

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STATE OF CALIFORNIA

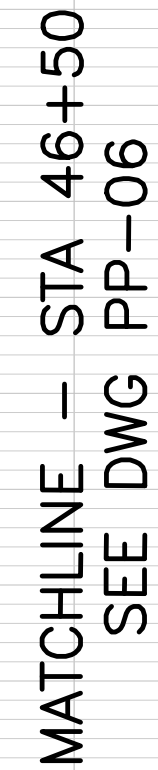
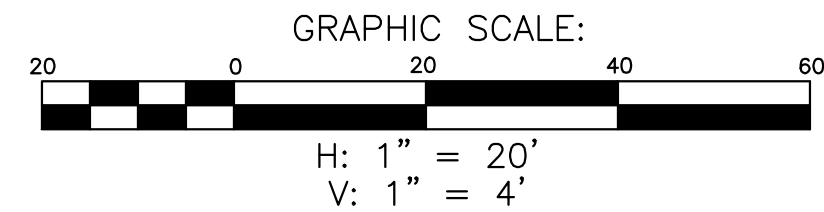


					
Harris & Associates 1401 Willow Pass Rd, Suite 500 Concord, CA 94520 wes@harris.com (925) 827-4900		ROSS VALLEY SANITARY DISTRICT WOODLAND AREA GRAVITY SEWER IMPROVEMENTS PROJECT		SANITARY SEWER IMPROVEMENTS PLAN AND PROFILE WOODLAND RD	
DESIGNED BY		KLC/JR			
DRAWN BY		KLC/JR			
CHECKED BY		KI			
DATE ISSUED		06/06/2023			
JOB NO.		120-0743.005			
DWG NO.		PP-06			
SHEET		09		OF 14	

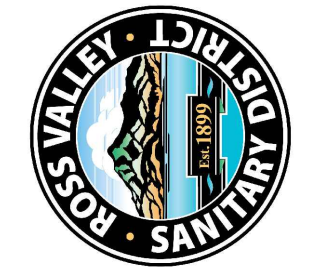


- NOTES:**
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 4. FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HOPE SLEEVE REQUIREMENTS.
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POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
126	2175072.43	5966605.55	120.02	MAG NL
127	2175265.58	5966714.04	140.59	CULT CONC
128	2175439.14	5966637.79	157.30	CUT +



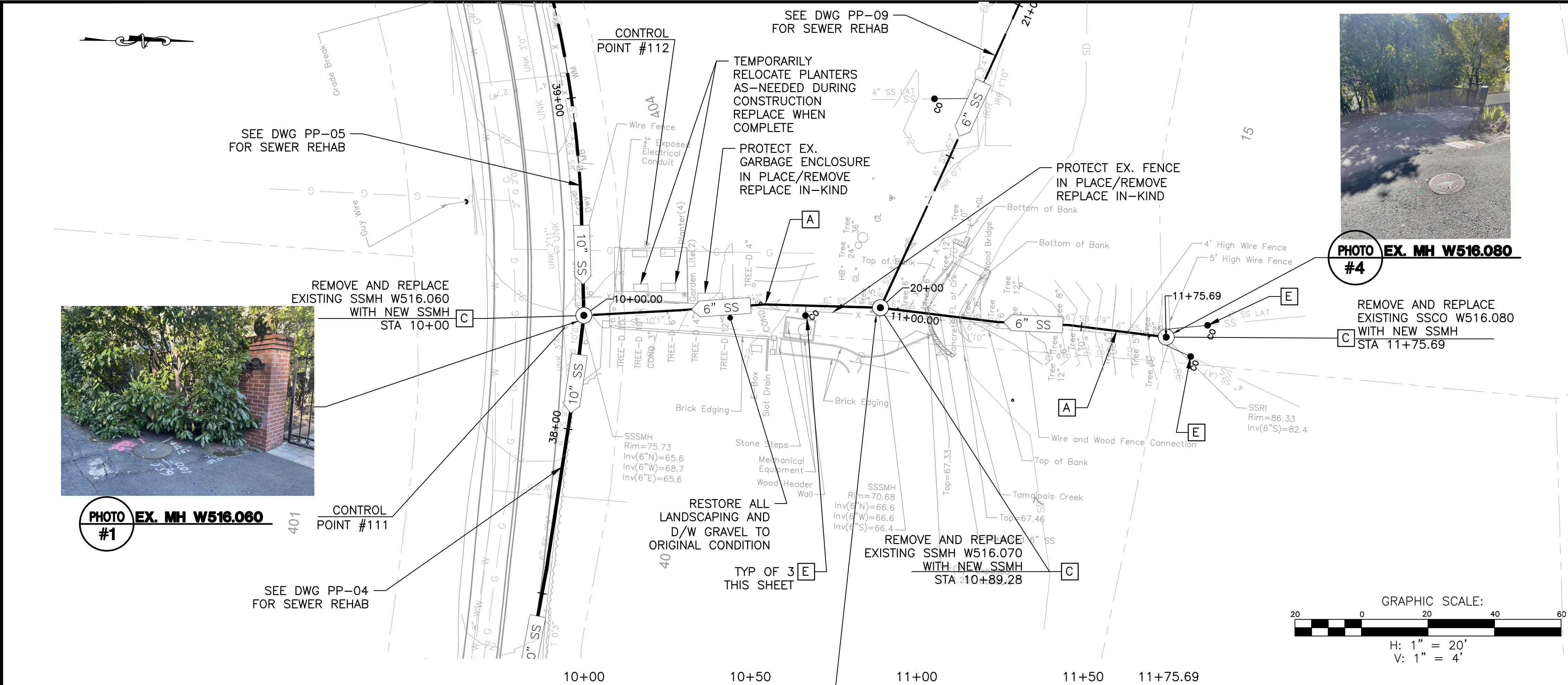
**ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT**



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PP-07

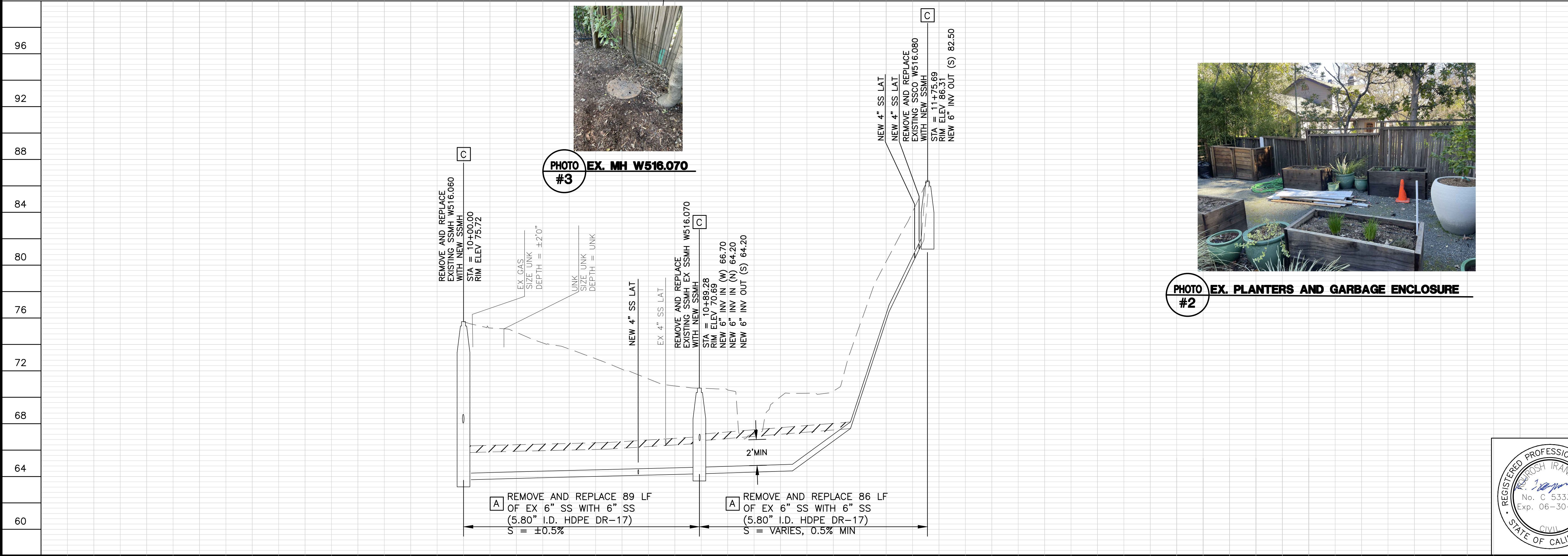
SHEET 10 OF 14



LEGEND OF REHABILITATION METHODS

- A** REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSD STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSD STD DWG SD-17.
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NO.	BY	DATE	REVISION

SANITARY SEWER IMPROVEMENTS PLAN AND PROFILE WOODLAND RD

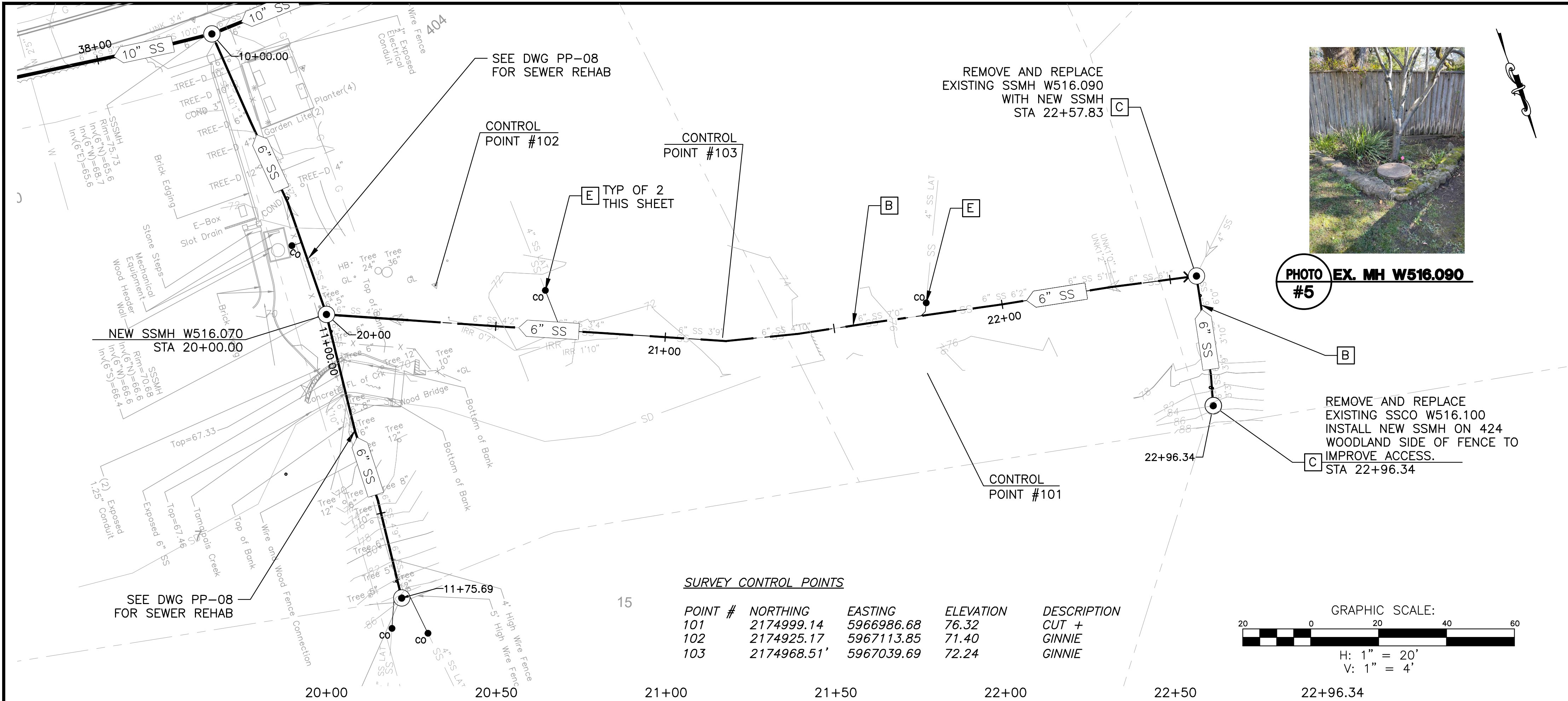
ROSS VALLEY SANITARY DISTRICT WOODLAND AREA GRAVITY SEWER IMPROVEMENTS PROJECT



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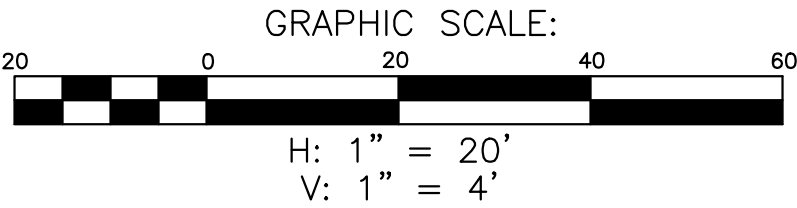


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DRAWN BY: KLC/JR
CHECKED BY: KI
DATE ISSUED: 06/06/2023
JOB NO.: 120-0743.005
DWG NO.: PP-08



SURVEY CONTROL POINTS

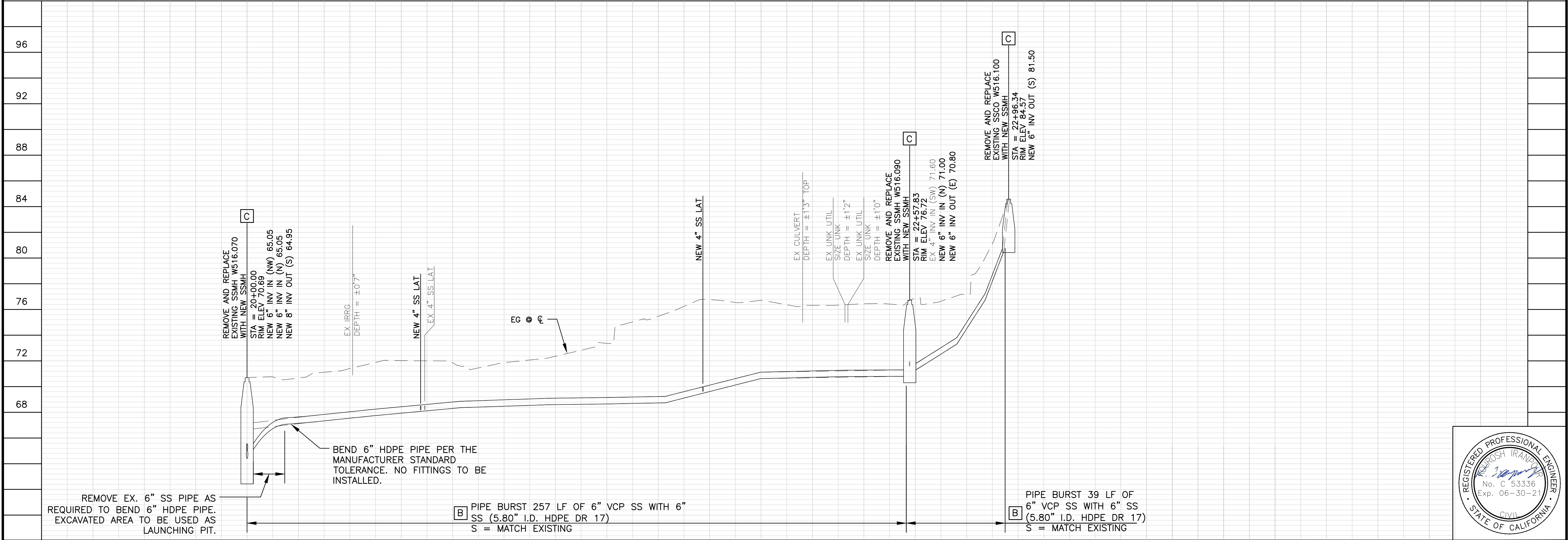
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	2174999.14	5966986.68	76.32	CUT +
102	2174925.17	5967113.85	71.40	GINNIE
103	2174968.51	5967039.69	72.24	GINNIE



LEGEND OF REHABILITATION METHODS

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NO.

BY

DATE

REVISION

ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT

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KLC/JR

DRAWN BY
KLC/JR

CHECKED BY
KI

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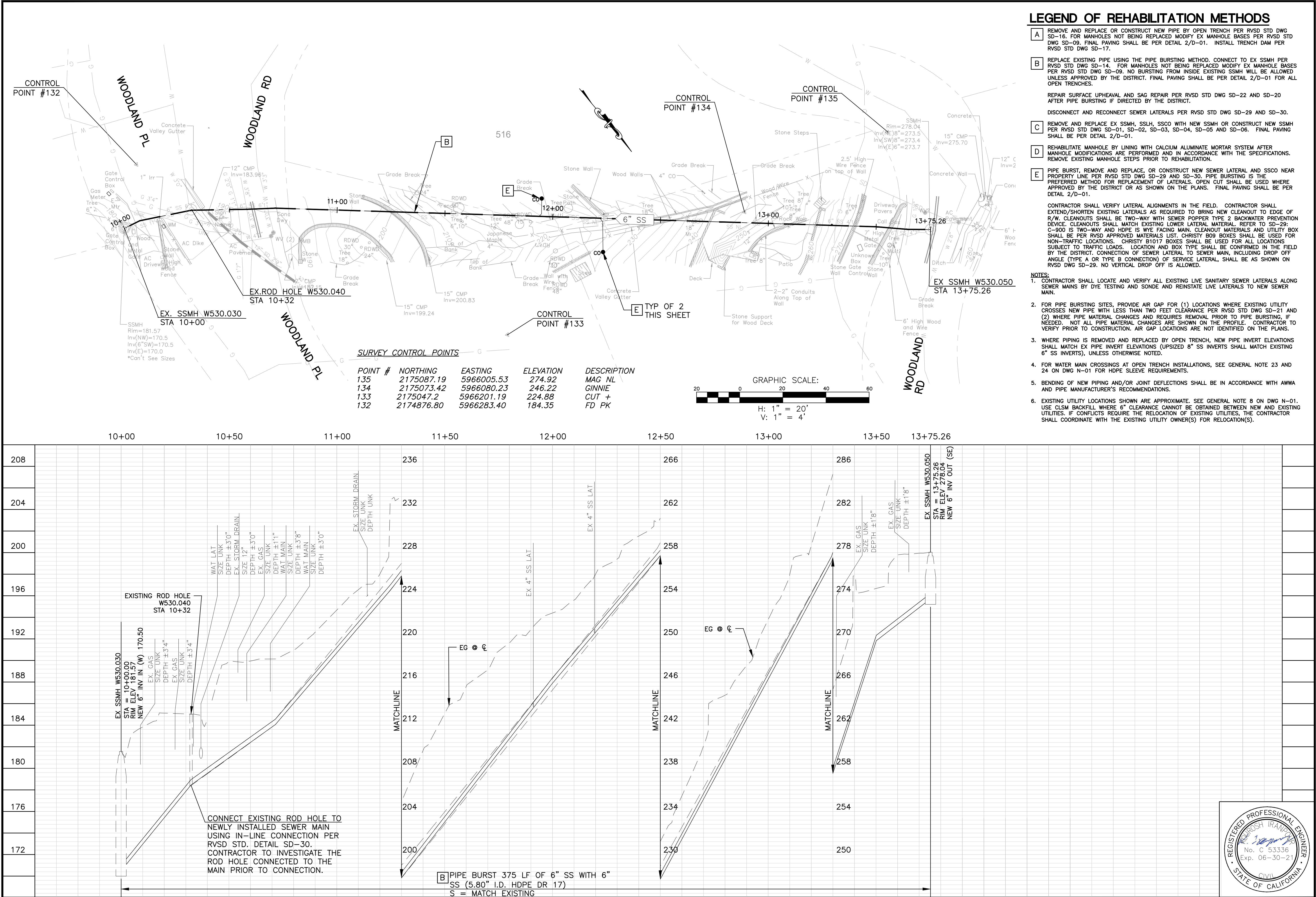
JOB NO.
120-0743.005

DWG NO.

PP-09

SHEET 12 OF 14

REGISTERED PROFESSIONAL ENGINEER
KARROSH IRANPOOR
No. C 53336
Exp. 06-30-21
CIVIL
STATE OF CALIFORNIA



LEGEND OF REHABILITATION METHODS

- [A] REMOVE AND REPLACE OR CONSTRUCT NEW PIPE BY OPEN TRENCH PER RVSD STD DWG SD-16. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. FINAL PAVING SHALL BE PER DETAIL 2/D-01. INSTALL TRENCH DAM PER RVSD STD DWG SD-17.
- [B] REPLACE EXISTING PIPE USING THE PIPE BURSTING METHOD. CONNECT TO EX SSMH PER RVSD STD DWG SD-14. FOR MANHOLES NOT BEING REPLACED MODIFY EX MANHOLE BASES PER RVSD STD DWG SD-09. NO BURSTING FROM INSIDE EXISTING SSMH WILL BE ALLOWED UNLESS APPROVED BY THE DISTRICT. FINAL PAVING SHALL BE PER DETAIL 2/D-01 FOR ALL OPEN TRENCHES.
- REPAIR SURFACE UPHEAVAL AND SAG REPAIR PER RVSD STD DWG SD-22 AND SD-20 AFTER PIPE BURSTING IF DIRECTED BY THE DISTRICT.
- DISCONNECT AND RECONNECT SEWER LATERALS PER RVSD STD DWG SD-29 AND SD-30.
- [C] REMOVE AND REPLACE EX SSMH, SSLH, SSCO WITH NEW SSMH OR CONSTRUCT NEW SSMH PER RVSD STD DWG SD-01, SD-02, SD-03, SD-04, SD-05 AND SD-06. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- [D] REHABILITATE MANHOLE BY LINING WITH CALCIUM ALUMINATE MORTAR SYSTEM AFTER MANHOLE MODIFICATIONS ARE PERFORMED AND IN ACCORDANCE WITH THE SPECIFICATIONS. REMOVE EXISTING MANHOLE STEPS PRIOR TO REHABILITATION.
- [E] PIPE BURST, REMOVE AND REPLACE, OR CONSTRUCT NEW SEWER LATERAL AND SSCO NEAR PROPERTY LINE PER RVSD STD DWG SD-29 AND SD-30. PIPE BURSTING IS THE PREFERRED METHOD FOR REPLACEMENT OF LATERALS. OPEN CUT SHALL BE USED WHERE APPROVED BY THE DISTRICT OR AS SHOWN ON THE PLANS. FINAL PAVING SHALL BE PER DETAIL 2/D-01.
- CONTRACTOR SHALL VERIFY LATERAL ALIGNMENTS IN THE FIELD. CONTRACTOR SHALL EXTEND/SHORTEN EXISTING LATERALS AS REQUIRED TO BRING NEW CLEANOUT TO EDGE OF R/W. CLEANOUTS SHALL BE TWO-WAY WITH SEWER POPPER TYPE 2 BACKWATER PREVENTION DEVICE. CLEANOUTS SHALL MATCH EXISTING LOWER LATERAL MATERIAL. REFER TO SD-29: C-900 IS TWO-WAY AND HDPE IS WYE FACING MAIN. CLEANOUT MATERIALS AND UTILITY BOX SHALL BE PER RVSD APPROVED MATERIALS LIST. CHRISTY B09 BOXES SHALL BE USED FOR NON-TRAFFIC LOCATIONS. CHRISTY B1017 BOXES SHALL BE USED FOR ALL LOCATIONS SUBJECT TO TRAFFIC LOADS. LOCATION AND BOX TYPE SHALL BE CONFIRMED IN THE FIELD BY THE DISTRICT. CONNECTION OF SEWER LATERAL TO SEWER MAIN, INCLUDING DROP OFF ANGLE (TYPE A OR TYPE B CONNECTION) OF SERVICE LATERAL, SHALL BE AS SHOWN ON RVSD DWG SD-29. NO VERTICAL DROP OFF IS ALLOWED.
- NOTES:
- CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING LIVE SANITARY SEWER LATERALS ALONG SEWER MAINS BY DYE TESTING AND SONDE AND REINSTATE LIVE LATERALS TO NEW SEWER MAIN.
 - FOR PIPE BURSTING SITES, PROVIDE AIR GAP FOR (1) LOCATIONS WHERE EXISTING UTILITY CROSSES NEW PIPE WITH LESS THAN TWO FEET CLEARANCE PER RVSD STD DWG SD-21 AND (2) WHERE PIPE MATERIAL CHANGES AND REQUIRES REMOVAL PRIOR TO PIPE BURSTING, IF NEEDED. NOT ALL PIPE MATERIAL CHANGES ARE SHOWN ON THE PROFILE. CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION. AIR GAP LOCATIONS ARE NOT IDENTIFIED ON THE PLANS.
 - WHERE PIPING IS REMOVED AND REPLACED BY OPEN TRENCH, NEW PIPE INVERT ELEVATIONS SHALL MATCH EX PIPE INVERT ELEVATIONS (UPSIZED 8" SS INVERTS SHALL MATCH EXISTING 6" SS INVERTS), UNLESS OTHERWISE NOTED.
 - FOR WATER MAIN CROSSINGS AT OPEN TRENCH INSTALLATIONS, SEE GENERAL NOTE 23 AND 24 ON DWG N-01 FOR HDPE SLEEVE REQUIREMENTS.
 - BENDING OF NEW PIPING AND/OR JOINT DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA AND PIPE MANUFACTURER'S RECOMMENDATIONS.
 - EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. SEE GENERAL NOTE 8 ON DWG N-01. USE CLSM BACKFILL WHERE 6" CLEARANCE CANNOT BE OBTAINED BETWEEN NEW AND EXISTING UTILITIES. IF CONFLICTS REQUIRE THE RELOCATION OF EXISTING UTILITIES, THE CONTRACTOR SHALL COORDINATE WITH THE EXISTING UTILITY OWNER(S) FOR RELOCATION(S).

ROSS VALLEY
SANTARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT

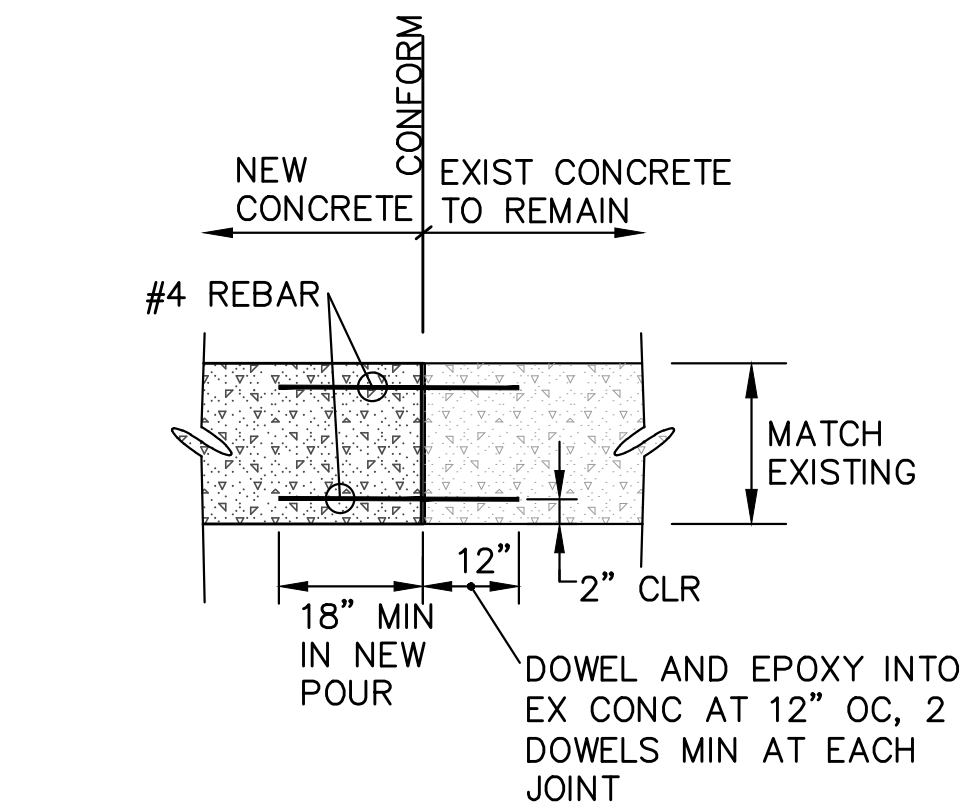


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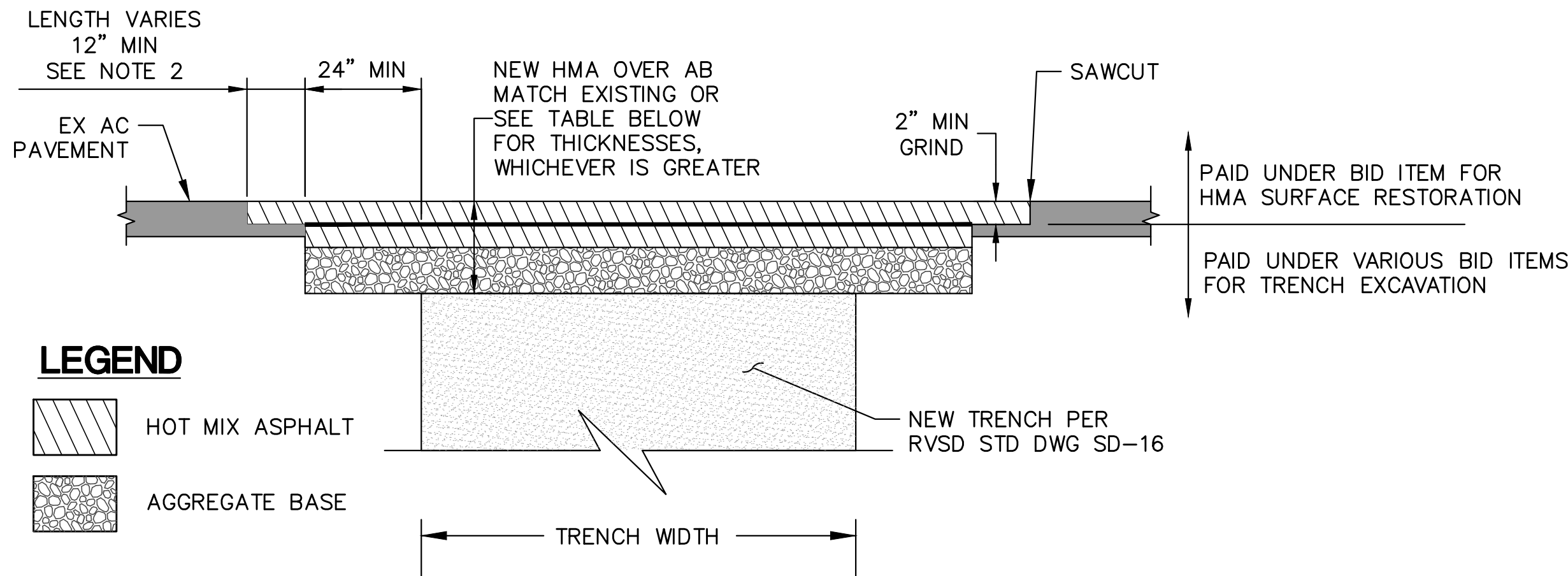
DESIGNED BY
KLC/JR
DRAWN BY
KLC/JR
CHECKED BY
KI
DATE ISSUED
06/06/2023
JOB NO.
120-0743.005
DWG NO.
PP-10
SHEET 13 OF 14



H:\Ross Valley Sanitary District (RVS\1200743005 Woodland Area Sewer)\16- D-01 CONSTRUCTION DETAILS.dwg Save Date: 6/7/2023 3:47 PM Plot Date: 6/7/2023 3:47 PM Hilary Whelan



1 PCC CONFORM SECTION
- NOT TO SCALE

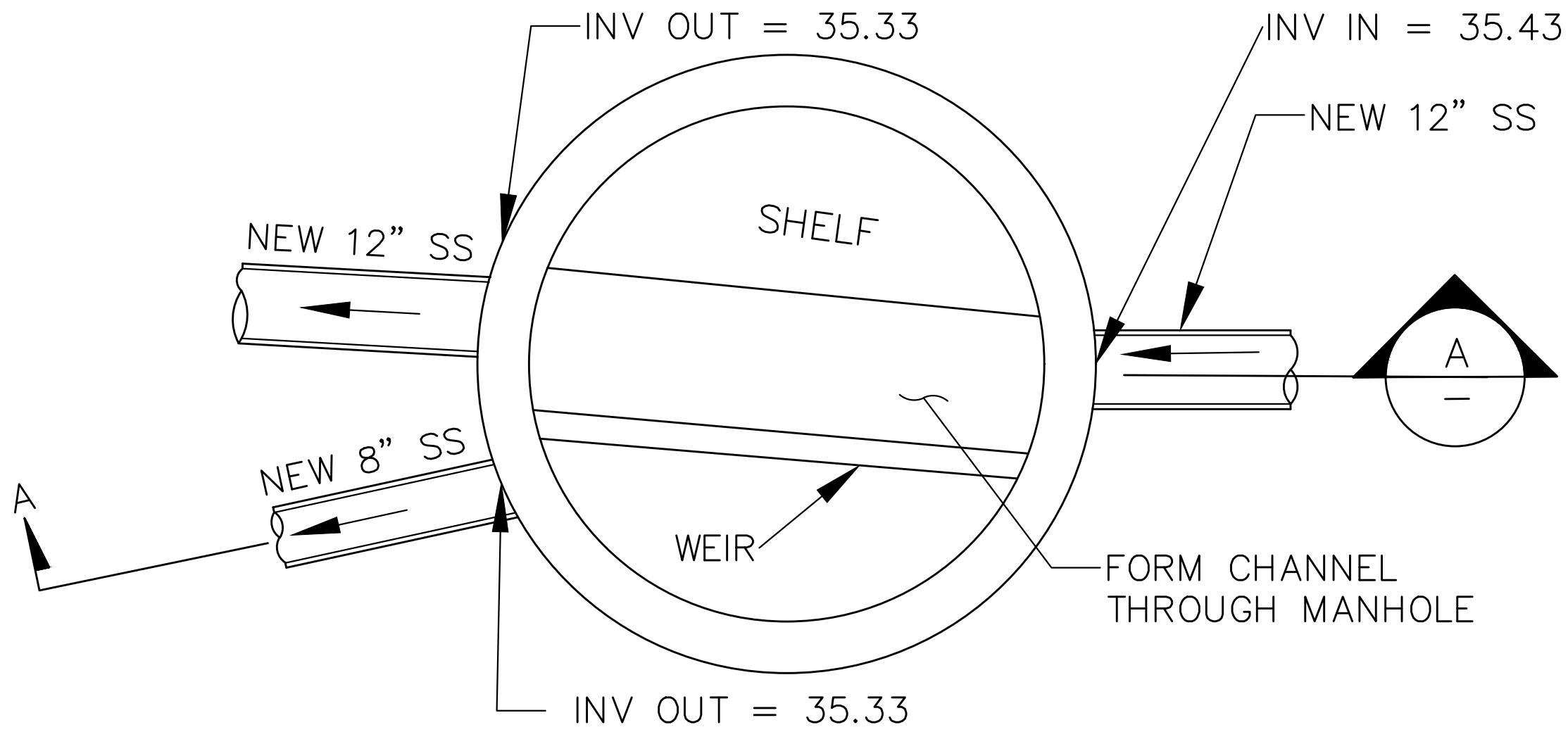


FINAL PAVING		
ROAD CLASSIFICATION (SEE NOTE 1)	PAVING REQUIREMENTS	ALTERNATE FULL DEPTH AC
LOCAL	MIN HMA: 4" MIN AB: 7"	7"
COLLECTOR	MIN HMA: 5" MIN AB: 11"	11"
ARTERIAL	MIN HMA: 6" MIN AB: 14"	14"

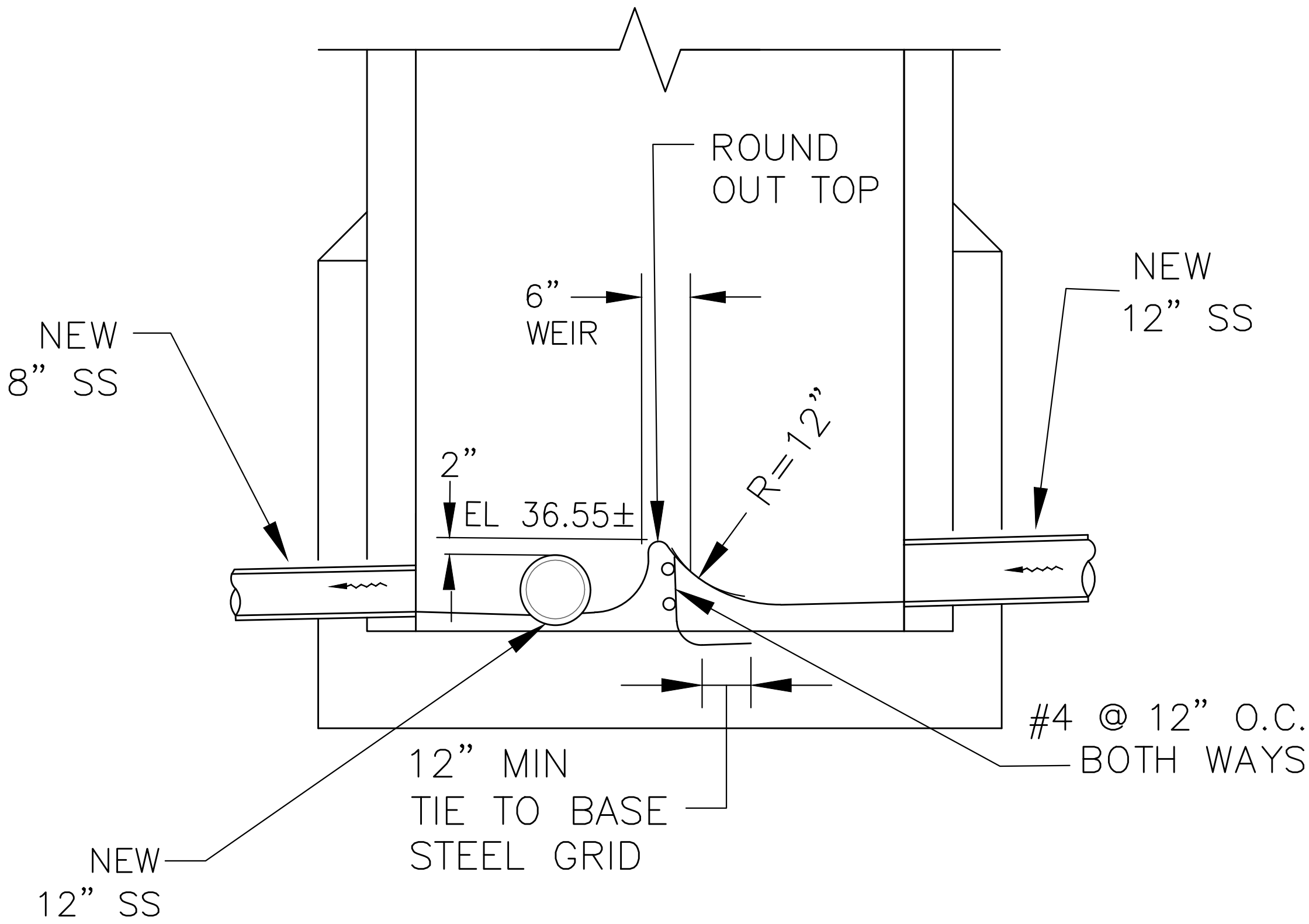
NOTES

- ROAD CLASSIFICATIONS ARE AS DETERMINED BY THE LOCAL JURISDICTION.
- SEE APPENDIX D FOR MARIN COUNTY STANDARDS 330 TO 380 FOR ADDITIONAL PAVING REQUIREMENTS. NOTE THAT EACH JURISDICTION MAY HAVE THEIR OWN ADDITIONAL PAVING REQUIREMENTS ASIDE FROM THOSE SHOWN IN APPENDIX D.

2 FINAL PAVING
- NOT TO SCALE



PLAN

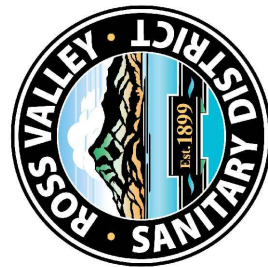


SECTION A-A

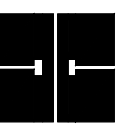
1 OVERFLOW MANHOLE
- NOT TO SCALE

CONSTRUCTION DETAILS

**ROSS VALLEY
SANITARY DISTRICT
WOODLAND AREA
GRAVITY SEWER
IMPROVEMENTS PROJECT**



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DESIGNED BY: **KLC/JR**
DRAWN BY: **KLC/JR**
CHECKED BY: **KI**
DATE ISSUED: **06/06/2023**
JOB NO.: **120-0743.005**
DWG NO.:

D-01

SHEET 14 OF 14

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