

PLACER COUNTY GENERAL NOTES

1. PLACER COUNTY GENERAL NOTES AND EXHIBIT B "ADDITIONAL GENERAL PROVISIONS" NOTES HAVE BEEN INCORPORATED IN THE ENCROACHMENT PERMIT. PLEASE REFER TO ENCROACHMENT PERMIT FOR MOST UP TO DATE COUNTY NOTES.

CONSTRUCTION GENERAL NOTES

1. ALL GRADING, EXCAVATION, STRUCTURAL FILL AND BACKFILL, AND COMPACTION AND TESTING OF SOILS SHALL CONFORM AND BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS.
2. ANY HAZARDOUS MATERIALS COLLECTED SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE HAZARDOUS MATERIALS LAWS AND REGULATIONS.
3. CONTRACTOR SHALL EXAMINE THE PROJECT WORK AREAS PRIOR TO BIDDING TO EVALUATE THE NATURE AND EXTENT OF EXISTING SITE CONDITIONS THAT WILL BE ENCOUNTERED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS AND SUBJECT TO THE SPECIAL PROVISIONS OF THE CONTRACT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING AND SHORING PROCEDURES AND CONFORM TO THE LATEST OSHA REQUIREMENTS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ANY NECESSARY PERMITS AND FEES REQUIRED PRIOR TO BEGINNING WORK.
7. IF AT ANY TIME DURING THE COURSE OF CONSTRUCTION OF THE PROPOSED PROJECT, EVIDENCE OF SOIL AND/OR GROUNDWATER CONTAMINATION WITH HAZARDOUS MATERIAL IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY STOP THE PROJECT AND CONTACT THE APPROPRIATE AUTHORITIES. WORK WITHIN THE CONTAMINATED AREA SHALL REMAIN STOPPED UNTIL THERE IS RESOLUTION OF THE CONTAMINATION PROBLEM TO THE SATISFACTION OF THE APPROPRIATE AGENCIES.
8. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL ELEVATIONS, FLOW LINES, AND POINTS OF CONNECTION TO EXISTING IMPROVEMENTS (PUBLIC OR PRIVATE). ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO PROCEEDING.
9. ALL EXCAVATED MATERIAL REMAINING ON-SITE SHALL BE PLACED UP-SLOPE OF EXCAVATION.
10. THE CONTRACTOR SHALL PURSUE THE WORK IN A CONTINUOUS AND DILIGENT MANNER, CONFORMING TO ALL PERTINENT SAFETY REGULATIONS, TO ENSURE A TIMELY COMPLETION OF THE WORK.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DAILY CLEAN-UP AND REMOVAL OF ALL CONSTRUCTION MATERIALS SPILLED ON PAVED STREETS, ON-SITE AND OFF-SITE.
12. UNLESS OTHERWISE SPECIFIED, ALL ROAD SHOULDERS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESHAPED TO THEIR ORIGINAL CONTOUR AND REVEGETATED TO THE SATISFACTION OF THE OWNER.
13. THE CONTRACTOR WILL CALL UNDERGROUND SERVICE ALERT "USA" (811) FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
14. ELEVATION NOT SHOWN ON PLANS WILL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER OF ANY CONFLICTS.
15. THE CONTRACTOR WILL GRADE ALL AREAS TO DRAIN AND SHALL BE RESPONSIBLE FOR ELIMINATING ALL LOW SPOTS OR PONDING AREAS.
16. NO FILL WILL BE PLACED OR COMPACTED IN UNFAVORABLE WEATHER CONDITIONS. OVERLY WET, DRY OR FROZEN FILL SHALL NOT BE PLACED.
17. THE DISTRICT WILL PROVIDE WATER FREE OF CHARGE DURING THE PROJECT. CONTRACTOR TO COORDINATE WITH DISTRICT FOR SOURCE AND LOCATION.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN TO BE REVIEWED BY THE ENGINEER.

UTILITY GENERAL NOTES

1. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND DEPTHS ARE UNKNOWN. CONTRACTOR IS RESPONSIBLE FOR EXACT FIELD LOCATIONS.
2. THE CONTRACTOR SHALL NOTIFY ALL ENTITIES INVOLVED (PUBLIC & PRIVATE) 48 HOURS PRIOR TO BEGINNING CONSTRUCTION, AND PROVIDE AT LEAST 48 HOURS NOTICE FOR ALL INSPECTIONS DURING CONSTRUCTION, UNLESS OTHERWISE NOTED.
3. PROVIDE 12 INCHES MINIMUM VERTICAL CLEARANCE BETWEEN EXISTING UTILITIES, UNLESS OTHERWISE NOTED OR APPROVED.
4. THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO, OR THAT ARE IN THE PATH OF OR WITHIN 7 FEET Laterally OF PROPOSED IMPROVEMENTS. UTILITY SERVICES TO INDIVIDUAL HOUSES OR STRUCTURES ARE NOT ALL SHOWN. CONTRACTOR SHALL FIELD LOCATE ALL SERVICES IN THE VICINITY OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DATA, SUCH AS THE HORIZONTAL LOCATION, VERTICAL ELEVATION, AND MATERIAL TYPE, OF ALL UNDERGROUND FACILITIES PRIOR TO PREPARATION OF SHOP DRAWINGS AND ORDERING OF ANY MATERIAL.
5. THE CONTRACTOR SHALL COORDINATE UNDERGROUND CONSTRUCTION IN SUCH A MANNER AS TO PREVENT ANY CONFLICT WHERE UTILITY LINES CROSS.
6. RELOCATION OF EXISTING UTILITIES SHALL BE PERFORMED UNDER THE DIRECTION OF THE UTILITY HAVING JURISDICTION OVER THE UTILITY IN QUESTION. RELOCATION OF EXISTING UTILITIES WILL NOT BE PERFORMED WITHOUT NOTIFICATION AND APPROVAL OF SAID UTILITY.
7. IF ANY UNKNOWN SUBSURFACE STRUCTURES ARE ENCOUNTERED DURING THE COURSE OF CONSTRUCTION, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO PROCEEDING.
8. WATER AND/OR SEWER SERVICE SHALL NOT BE INTERRUPTED DURING CONSTRUCTION WITHOUT PRIOR APPROVAL BY THE OWNING UTILITY. THE CONTRACTOR SHALL TAKE OWNER APPROVED MEASURES TO INSURE CONTINUOUS OPERATION OF THE SEWER AND WATER FACILITIES OUTSIDE OF PLANNED AND SCHEDULED SYSTEM SHUTDOWNS.

EROSION CONTROL NOTES

1. THE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN TEMPORARY BEST MANAGEMENT PRACTICES (BMPs) WITHIN AND AROUND THE PROJECT SITE AND ANY STAGING AREAS AS PART OF THIS PROJECT AT ALL TIMES. THE LOCATION AND TYPE OF BMPs WILL BE DETERMINED BY THE CONTRACTOR AND THE ENGINEER AS APPLICABLE FOR ANY GIVEN SCENARIO OR CONSTRUCTION RELATED SITUATION.
2. SURPLUS OR WASTE MATERIAL AND/OR FILL OF EARTHEN MATERIAL SHALL NOT BE PLACED IN DRAINAGE WAYS.
3. ALL LOOSE PILES OF SOIL, SILT, CLAY, SAND, DEBRIS OR OTHER EARTHEN MATERIALS MUST BE PROTECTED IN A REASONABLE MANNER TO PREVENT THE DISCHARGE OF THESE MATERIALS TO WATERS OF THE STATE.
4. EXISTING DRAINAGE PATTERNS MUST BE MAINTAINED.
5. WHERE REMOVAL OF ANY VEGETATION IS IN QUESTION THE CONTRACTOR SHALL PROTECT THE AREA UNTIL A DECISION BY THE OWNER CAN BE MADE. IF ANY TREES ARE SCARRED, THEY SHALL BE IMMEDIATELY REPAIRED USING AN APPROVED METHOD.
6. THIS CONSTRUCTION PLAN IS SUBJECT TO ALL CURRENT LAHONTAN REGIONAL WATER QUALITY CONTROL REQUIREMENTS.
7. IF NECESSARY, CONTRACTOR SHALL ENHANCE EROSION CONTROL MEASURES IN THE FIELD.
8. EQUIPMENT AND VEHICLES SHALL NOT TRAVEL BEYOND THE LIMITS OF GRADING TO PREVENT DISRUPTION OF NATIVE VEGETATION.
9. CONCENTRATED CONSTRUCTION FLOWS SHALL BE CHANNELIZED TO TEMPORARY OR PERMANENT SEDIMENT TREATMENT FACILITIES. SEDIMENT LADEN WATER SHALL NOT ENTER THE NATURAL DRAINAGE OR PUBLIC STORM DRAIN SYSTEM.

DISCHARGE OF WATER

1. DEWATERING: NO DEWATERING DISCHARGE TO SEWER ALLOWED. CONTRACTOR RESPONSIBLE FOR DISPOSAL OF DEWATERING WATER. CONTRACTOR TO SUBMIT DEWATERING DISCHARGE PROGRAM TO DISTRICT FOR REVIEW AND APPROVAL IF GROUNDWATER IS ENCOUNTERED. CONTRACTOR WILL BE RESPONSIBLE FOR SECURING A TEMPORARY DISCHARGE PERMIT AND PAYING ALL REQUIRED FEES.

STAGING AREAS

1. STAGING FOR PROJECT WORK IS AVAILABLE AT THE DISTRICTS LOWER YARD FOR MATERIALS & PARTS ONLY. SEE SHEET C1.1 FOR REFERENCE. VEHICLES AND EQUIPMENT MAY BE STAGED ON ROAD SHOULDERS NO LESS THAN FOUR (4) FEET FROM THE EDGE OF PAVEMENT OR TRAVELED WAY AND WITHIN THE RIGHT-OF-WAY. VEHICLES AND EQUIPMENT MUST COMPLY WITH THE PROVISIONS OF SECTION 25301 OF THE VEHICLE CODE.

ASBESTOS PIPE REMOVAL NOTES

1. REMOVAL ASBESTOS CEMENT PIPE (ACP), TRANSITE PIPE (TR) AND OF MATERIALS CONTAINING ASBESTOS SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, LOCAL, STATE, AND FEDERAL INCLUDING BUT NOT LIMITED TO HEALTH DEPARTMENT, OSHA, NDEP, AND EPA. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL PERMITS AND PAY ALL ASSOCIATED FEES AND COST RELATED TO THE LEGAL HANDLING, TRANSPORTATION AND DISPOSAL. PROPER SAFETY EQUIPMENT SHALL BE UTILIZED BY WORKERS AND BY TRANSPORT EQUIPMENT AND NO FUGITIVE DUST WILL BE ALLOWED DURING THIS WORK. MATERIAL SHALL BE WRAPPED IN PLASTIC AND LABELED AS REQUIRED. ALL WORK TO BE PERFORMED UNDER THE DIRECTION OF AN APPROVED CERTIFIED PROFESSIONAL. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER FOR CHAIN OF CUSTODY FOR SAID DISPOSAL. SEE SECTION 02530-SANITARY SEWERAGE IN SPECIFICATIONS.

TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL WITHIN PLACER COUNTY RIGHT-OF-WAY SHALL BE PER CALTRANS PLATE T-13.
2. FULL ROAD CLOSURES SHALL NOT BE IMPLEMENTED UNLESS OTHERWISE APPROVED.

UTILITY COORDINATION INFORMATION

FIRE	TRUCKEE FIRE PROTECTION DISTRICT 53823 SHERRITT LANE SODA SPRINGS, CA 95728 PHONE: (530) 428-3000
ELECTRICITY/GAS	PACIFIC GAS AND ELECTRIC PHONE: (800) 743-5000

ONE INCH AT FULL SCALE:	DATE						
	APP						
REVISION	BY						
	DESCRIPTION						
JOB NO.:	###						
DATE:	4/5/2024						
SCALE:	AS SHOWN	PAS					
DESIGNED:		PAS					
DRAWN:		JM					
CHECKED:		PAS					



SIERRA LAKES COUNTY WATER DISTRICT
 2024 SODA SPRINGS ROAD WATERLINE
 REPLACEMENT PROJECT
GENERAL NOTES
 BID SET
 CALIFORNIA
 PLACER COUNTY

SHEET NUMBER
G1.2
 2 OF 8

BID SET

ABBREVIATIONS

AB	- AGGREGATE BASE	MH	- MANHOLE
ABND	- ABANDON	MAX	- MAXIMUM
AC	- ASPHALTIC CONCRETE	MIN	- MINIMUM
ACP	- ASBESTOS CEMENT PIPE	MUE	- MUNICIPAL UTILITY EASEMENT
AGG	- AGGREGATE	NO	- NUMBER
AIP	- ABANDONED IN PLACE	N/O	- NORTH OF
ALT	- ALTERNATE	NTS	- NOT TO SCALE
AVE	- AVENUE	OC	- ON CENTER
BC	- BACK OF CURB	OHP	- OVERHEAD POWER
BEG	- BEGIN	OD	- OUTSIDE DIAMETER
BVC	- BEGINNING OF VERTICAL CURVE	PE	- PLAIN END
BM	- BENCH MARK	PG	- PAD GRADE
BW	- BACK OF SIDEWALK	POB	- POINT OF BEGINNING
CATV	- CABLE TELEVISION	PHP	- PLASTIC HIGH PRESSURE
C-C	- CENTER TO CENTER	PVMT	- PAVEMENT
CL	- CENTER LINE	PI	- POINT OF INTERSECTION
CONC	- CONCRETE	PRC	- POINT OF REVERSE CURVE
CONST	- CONSTRUCTION, CONSTRUCT	PC	- POINT OF CURVE
CLR	- CLEARANCE	PT	- POINT OF TANGENCY
CMP	- CORRUGATED METAL PIPE	PCC	- PORTLAND CEMENT CONCRETE
CSAP	- CORRUGATED STEEL ARCH PIPE	PP	- POWER POLE
CSP	- CORRUGATED STEEL PIPE	P	- POWER
C&G	- CURB & GUTTER	PL	- PROPERTY LINE
CIP	- CAST IRON PIPE	PIP	- PROTECT IN PLACE
COL	- COLUMN	PROP	- PROPOSED
CU YD, CY	- CUBIC YARD	PRC	- POINT OF REVERSE CURVE
CU FT, CF	- CUBIC FOOT	PB	- PULL BOX
CULV	- CULVERT	PUE	- PUBLIC UTILITY EASEMENT
CF	- CURB FACE	PVI	- POINT OF VERTICAL INTERSECTION
DC	- DEPRESSED CURB	PVC	- POLYVINYL CHLORIDE PIPE
DEPT	- DEPARTMENT	RP	- RADIUS POINT
DI	- DROP INLET	R	- RADIUS
DIA	- DIAMETER	RR	- RAILROAD
DIP	- DUCTILE IRON PIPE	R&R	- REMOVE & REPLACE
DMH	- DROP MANHOLE	RC	- REINFORCED CONCRETE
DWY	- DRIVEWAY	RCB	- REINFORCED CONCRETE BOX
ESMT	- EASEMENT	RCP	- REINFORCED CONCRETE PIPE
E/O	- EAST OF	RJ	- RESTRAINED JOINT
EOP	- EDGE OF PAVEMENT	RT, R	- RIGHT
EO	- EDGE OF OIL	R/W, ROW	- RIGHT OF WAY
E, EL, ELEC	- ELECTRIC	SDMH	- STORM DRAIN MANOLE
EM	- ELECTRIC METER	SS	- SANITARY SEWER
ELEV	- ELEVATION	SSCO	- SANITARY SEWER CLEANOUT
EMBK	- EMBANKMENT	SSFM	- SANITARY SEWER FORCEMAIN
ECR	- END OF CURB RETURN	SSMH	- SANITARY SEWER MANHOLE
EC	- END OF CURVE	SHT	- SHEET
EBS	- CATHODE PROTECTION BOND STATION	S/O	- SOUTH OF
ETS	- CATHODE PROTECTION TEST STATION	SW	- SIDEWALK
ETW	- EDGE OF TRAVEL WAY	SQ FT, SF	- SQUARE FOOT
EXIST, EX	- EXISTING	SQ YD, SY	- SQUARE YARD
FA	- FIRE ALARM	STA	- STATION
FF	- FINISHED FLOOR	SHP	- STEEL HIGH-PRESSURE PIPE
FG	- FINISH GRADE	SD	- STORM DRAIN
FH	- FIRE HYDRANT	STRUCT	- STRUCTURAL, STRUCTURE
FIBER	- FIBER OPTIC LINE	T, TELE	- TELEPHONE
FL	- FLOW LINE	TEMP	- TEMPORARY
FM	- FORCEMAIN	TESC	- TEMPORARY EROSION & SEDIMENTATION CONTROL
FT	- FEET OR FOOT	TC	- TOP OF CURB
G	- GAS	TMH	- TOP OF MANHOLE
GALV	- GALVANIZED	TP	- TOP OF PIPE
GB	- GRADE BREAK	TS	- TRAFFIC SIGNAL
GM	- GAS METER	TSC	- TRAFFIC SIGNAL CONDUIT
GR	- GAS PRESSURE REGULATOR	TSI	- TRAFFIC SIGNAL INTERCONNECT
GUT	- GUTTER	TRANS	- TRANSITION
HDD	- HORIZONTAL DIRECTIONAL DRILL	TW	- TOP OF WALL
HDWL	- HEADWALL	TYP	- TYPICAL
HP	- HIGH POINT	UG	- UNDERGROUND
ID	- INSIDE DIAMETER	UGE	- UNDERGROUND ELECTRIC
IN	- INCH	UGU	- UNDERGROUND UTILITY
INT	- INTERSECTION	VAR	- VARIABLE
INV	- INVERT	VERT	- VERTICAL
ISL	- ISLAND	VC	- VERTICAL CURVE
JB	- JUNCTION BOX	VG	- VALLEY GUTTER
LAT	- LATERAL	VCP	- VITRIFIED CLAY PIPE
LOC	- LENGTH OF CURB	W, WTR	- WATER
LS	- LANDSCAPE	WM	- WATER METER
LT, L	- LEFT	WPCP	- WATER POLLUTION CONTROL PLAN
LF	- LINEAR FEET	W/O	- WEST OF
LP	- LOW POINT	YD	- YARD

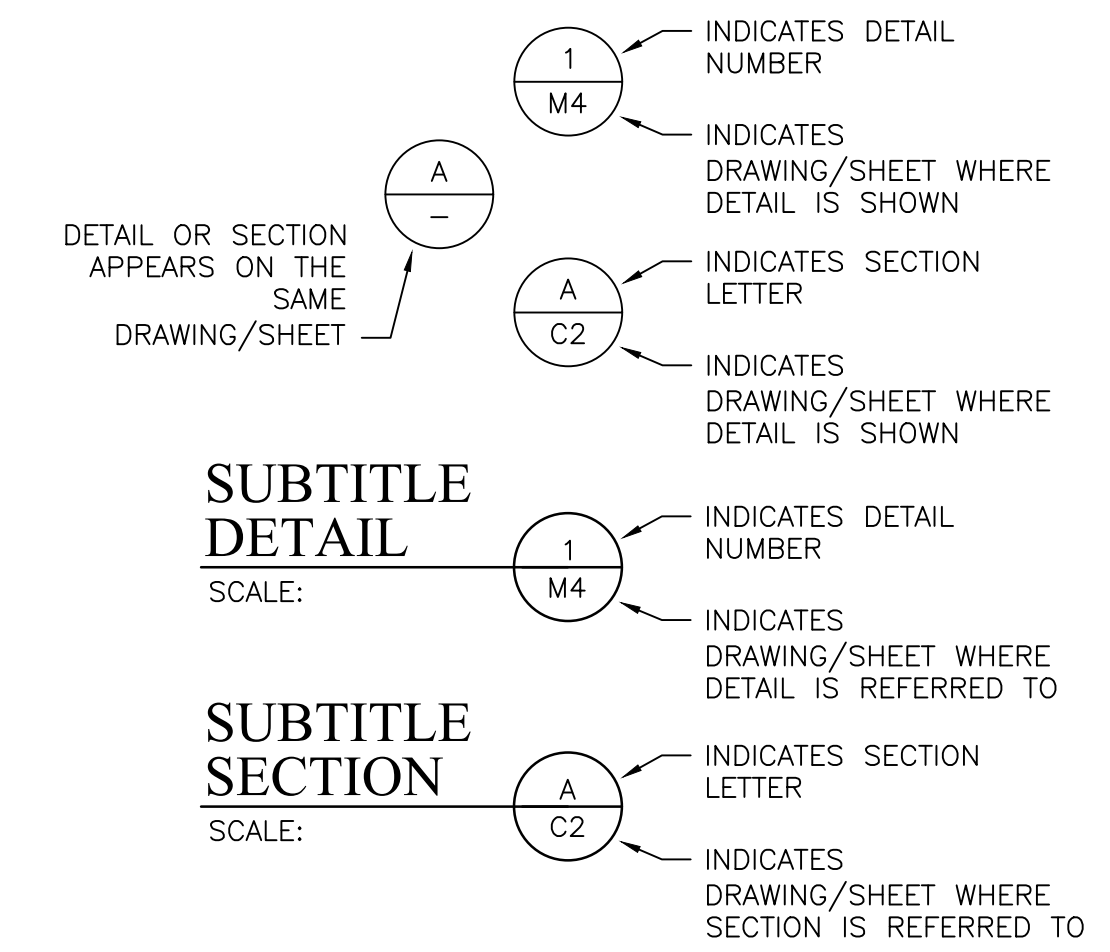
EXISTING LEGEND:

	EDGE OF PAVEMENT
	PROPERTY LINE / RIGHT OF WAY
	WATER MAIN
	WATER SERVICE
	SANITARY SEWER GRAVITY MAIN
	SANITARY SEWER FORCE MAIN
	SEWER LATERAL
	FLOWLINE
	UNDERGROUND ELECTRIC
	TELEPHONE/FIBER OPTICS LINE
	GAS MAIN/LATERAL
	STORM DRAIN
	OVER HEAD POWER
	FENCE
	TREE
	CONTOUR LINE
	EXISTING VALVE
	UTILITY VAULTS/BOXES (UG ELECTRIC, TELEPHONE, FIBER OPTICS AND CABLE TV)
	SANITARY SEWER CLEAN OUT
	WATER METER
	SURVEY CONTROL MONUMENT
	EX SSMH
	EX SDMH
	EX SIGN
	EX POWER POLE

PROPOSED LEGEND:

	CONSTRUCTION CONTROL LINE
	TREE PROTECTION FENCE
	EROSION CONTROL FENCE
	FIBER ROLL OR PINE NEEDLE WATTLES
	PIPE TO BE ABANDONED IN PLACE
	PIPE TO BE DEMOLISHED/REMOVED
	CONTOUR LINE
	WATER MAIN
	SANITARY SEWER GRAVITY MAIN
	SANITARY SEWER FORCE MAIN
	SANITARY SEWER VAULTS
	SSMH / SPS WET WELL
	PROPOSED STAGING AREA
	PROPOSED SEWER SECTION REPLACEMENT

DETAIL AND SECTION DESIGNATION



DATE		DATE		DATE		DATE	
APP		APP		APP		APP	
BY		BY		BY		BY	
DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION	
REVISION		REVISION		REVISION		REVISION	
JOB NO. ###		JOB NO. ###		JOB NO. ###		JOB NO. ###	
DATE: 4/5/2024		DATE: 4/5/2024		DATE: 4/5/2024		DATE: 4/5/2024	
SCALE: AS SHOWN		SCALE: AS SHOWN		SCALE: AS SHOWN		SCALE: AS SHOWN	
DESIGNED: PAS		DESIGNED: PAS		DESIGNED: PAS		DESIGNED: PAS	
DRAWN: JN		DRAWN: JN		DRAWN: JN		DRAWN: JN	
CHECKED: PAS		CHECKED: PAS		CHECKED: PAS		CHECKED: PAS	

SIERRA LAKES COUNTY WATER DISTRICT
 2024 SODA SPRINGS ROAD WATERLINE
 REPLACEMENT PROJECT
LEGEND & ABBREVIATIONS

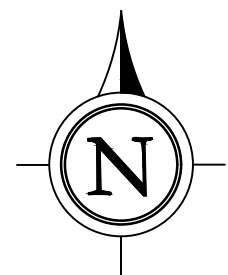
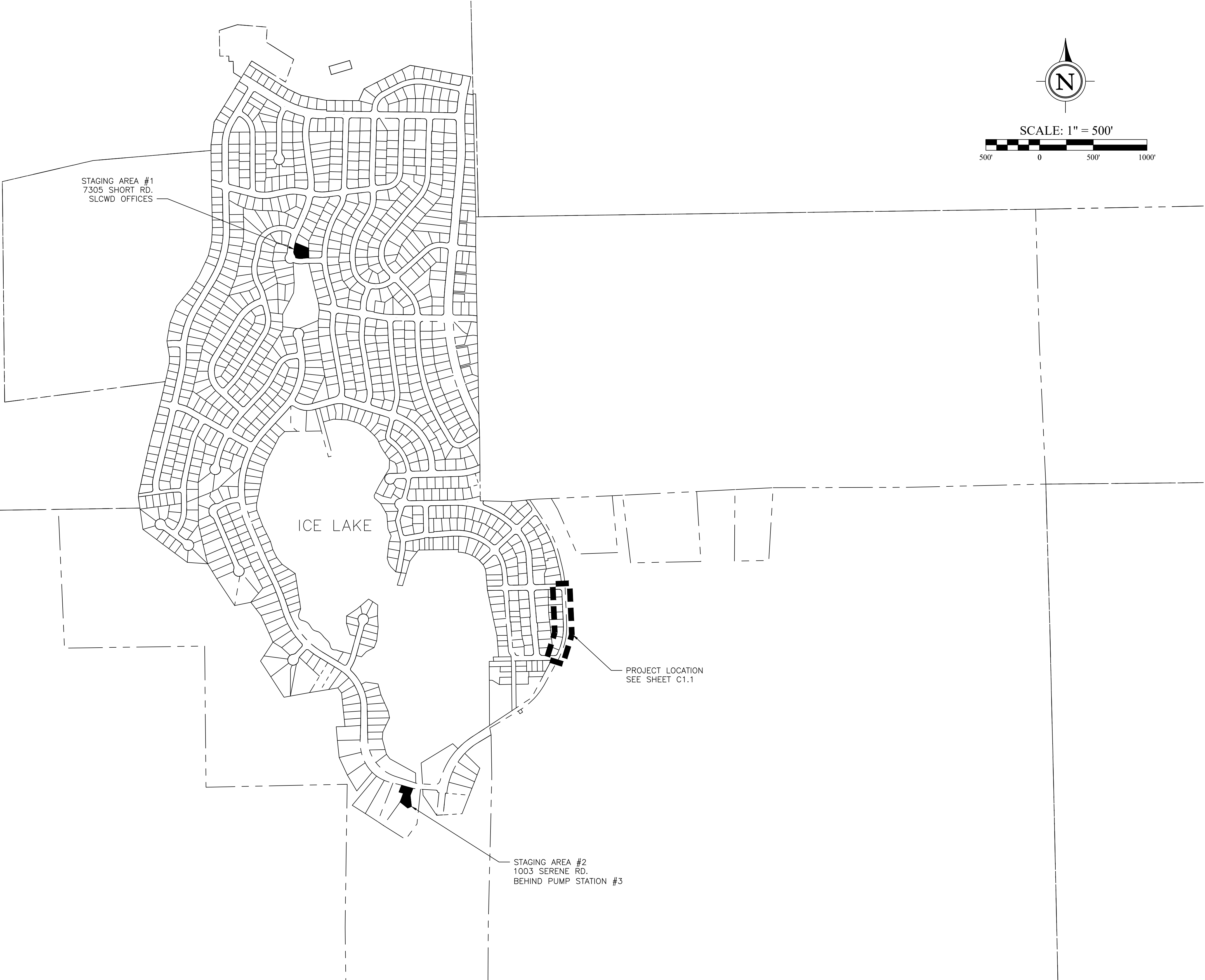
CALIFORNIA
 PLACER COUNTY
 BID SET

SHEET NUMBER
G1.3
 3 OF 8

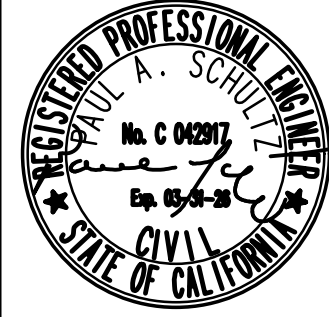
FILE SPEC: I:\S\3035-01\986104\01\01\1234_G1.3.dwg
 PLOT DATE: Apr 15, 2024 - 10:06am

FILE SPEC: I:\S\30303-01\286104\01\01\1234_G1.4-03.dwg
PLOT DATE: Apr 15, 2024 - 10:06am

A B C D E F G H



SCALE: 1" = 500'
500' 0 500' 1000'

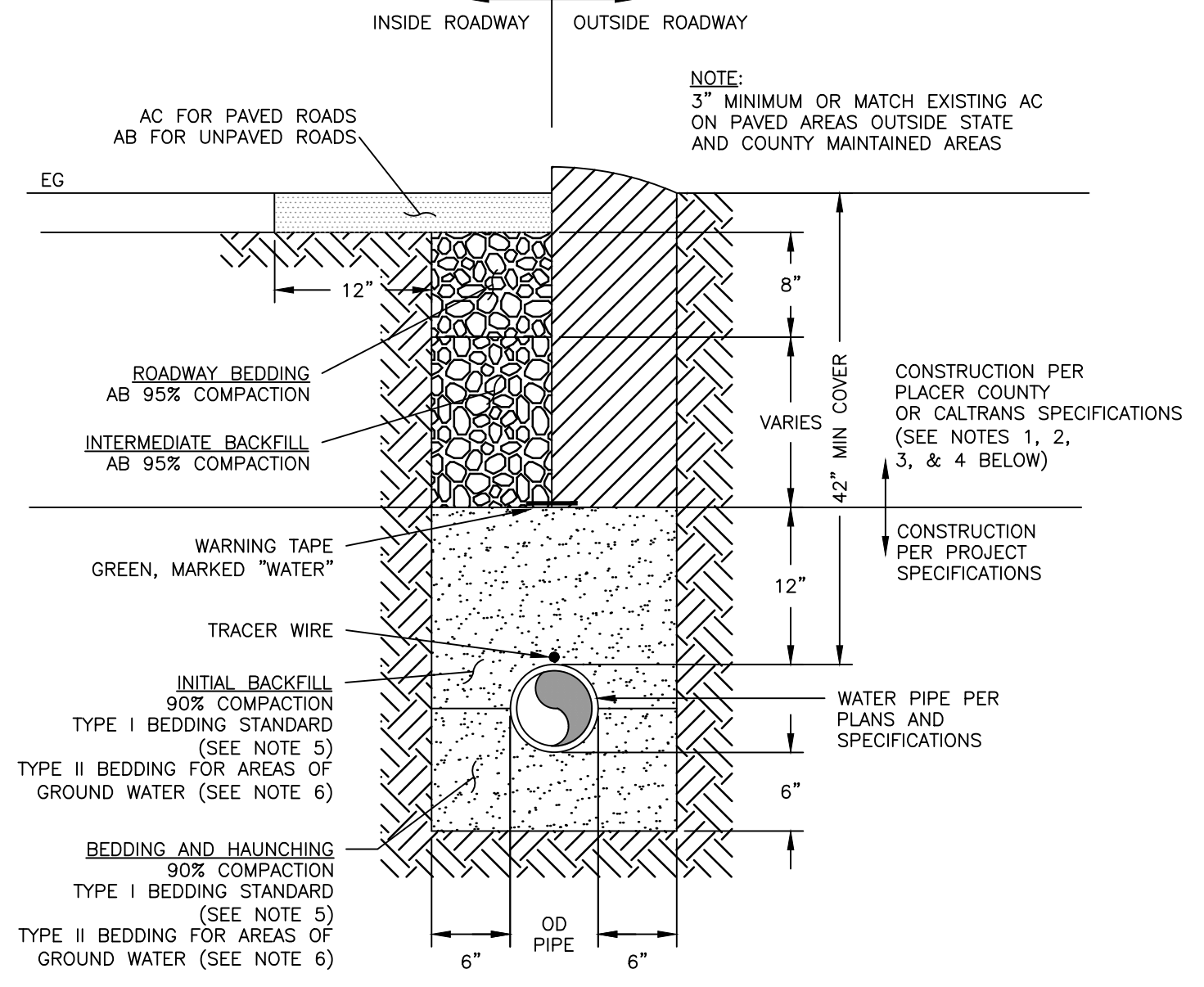


SIERRA LAKES COUNTY WATER DISTRICT
2024 SODA SPRINGS ROAD WATERLINE
REPLACEMENT PROJECT
KEY MAP
PLACER COUNTY BID SET CALIFORNIA

JOB NO.:	###
DATE:	4/5/2024
SCALE:	AS SHOWN
DESIGNED:	PAS
DRAWN:	JM
CHECKED:	PAS
REVISION	
DESCRIPTION	
BY	
APP	
DATE	

BID SET

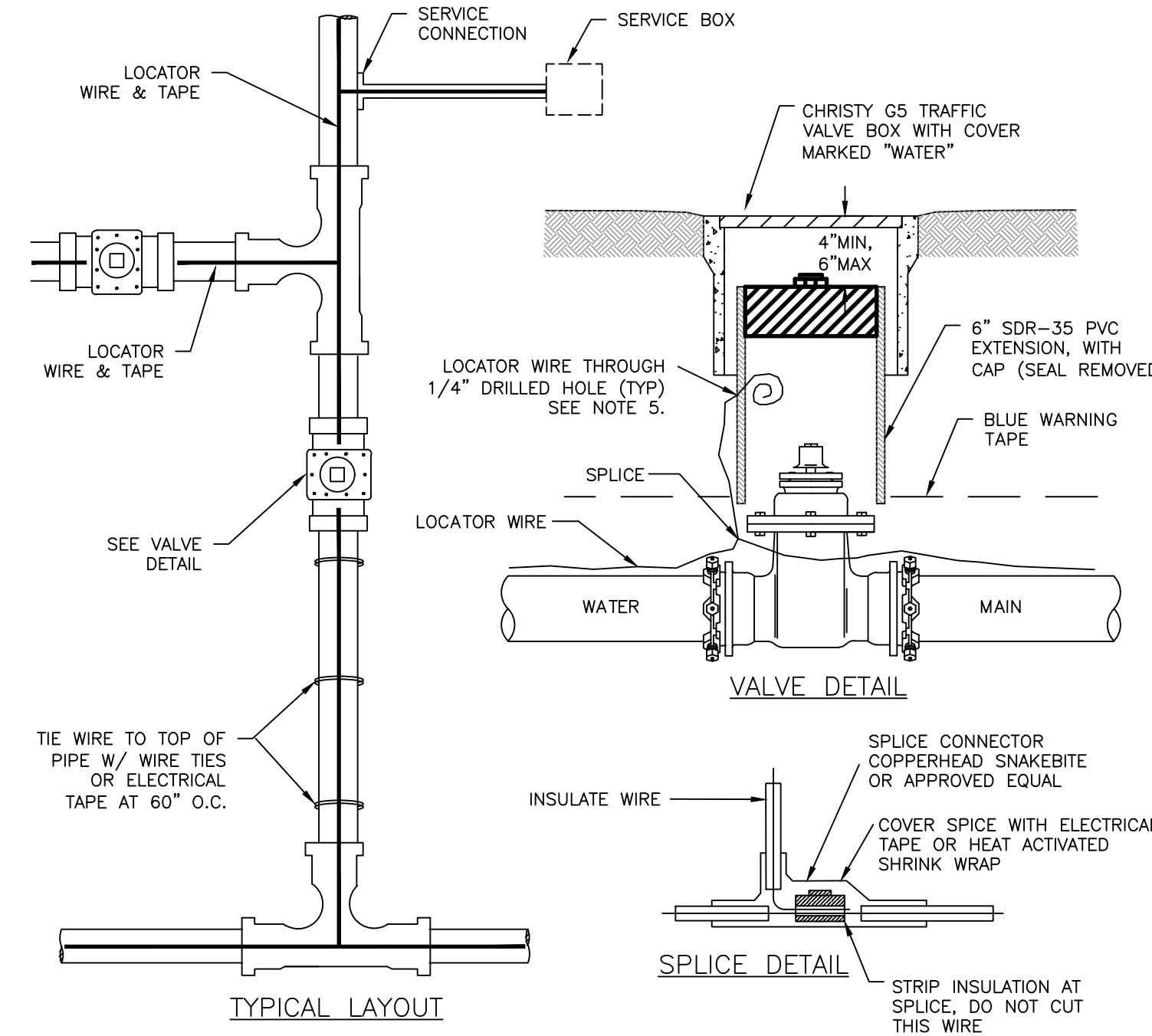
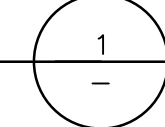
SHEET NUMBER
G1.4
4 OF 8



- NOTES:**
- BACKFILL, COMPACTION, PAVEMENT RESURFACING AND SLURRY SEAL SHALL COMPLY WITH PLACER COUNTY STANDARDS UNLESS SPECIFICALLY CALLED OUT IN THIS DETAIL.
 - FOR PLACER COUNTY RIGHT OF WAY, CONFORM TO PLACER COUNTY STANDARD DETAIL PLATES 430-435 AND GENERAL SPECIFICATIONS. REFER TO PLACER COUNTY PERMIT PROVIDED BY OWNER.
 - CURRENT PLACER COUNTY SPECIFICATIONS SHALL APPLY OUTSIDE STATE AND COUNTY RIGHT OF WAY UNLESS APPROVED BY DESIGN ENGINEER.
 - TYPE I BEDDING: USE CLEAN SAND PER SPECIFICATION 02315 - EXCAVATION AND BACKFILL.
 - FOR AREAS OF GROUND WATER USE TYPE II BEDDING, CRUSHED ROCK BURRITO WRAPPED, PER SPECIFICATION 02315 - EXCAVATION AND BACKFILL. TYPE II BEDDING IS NOT ALLOWED FOR PVC PRESSURE MAINS. C900 PVC MUST BE BACKFILLED WITH TYPE I BEDDING.
 - ALL DIMENSIONS SHOWN ARE MINIMUMS.

TYPICAL WATER TRENCH DETAIL

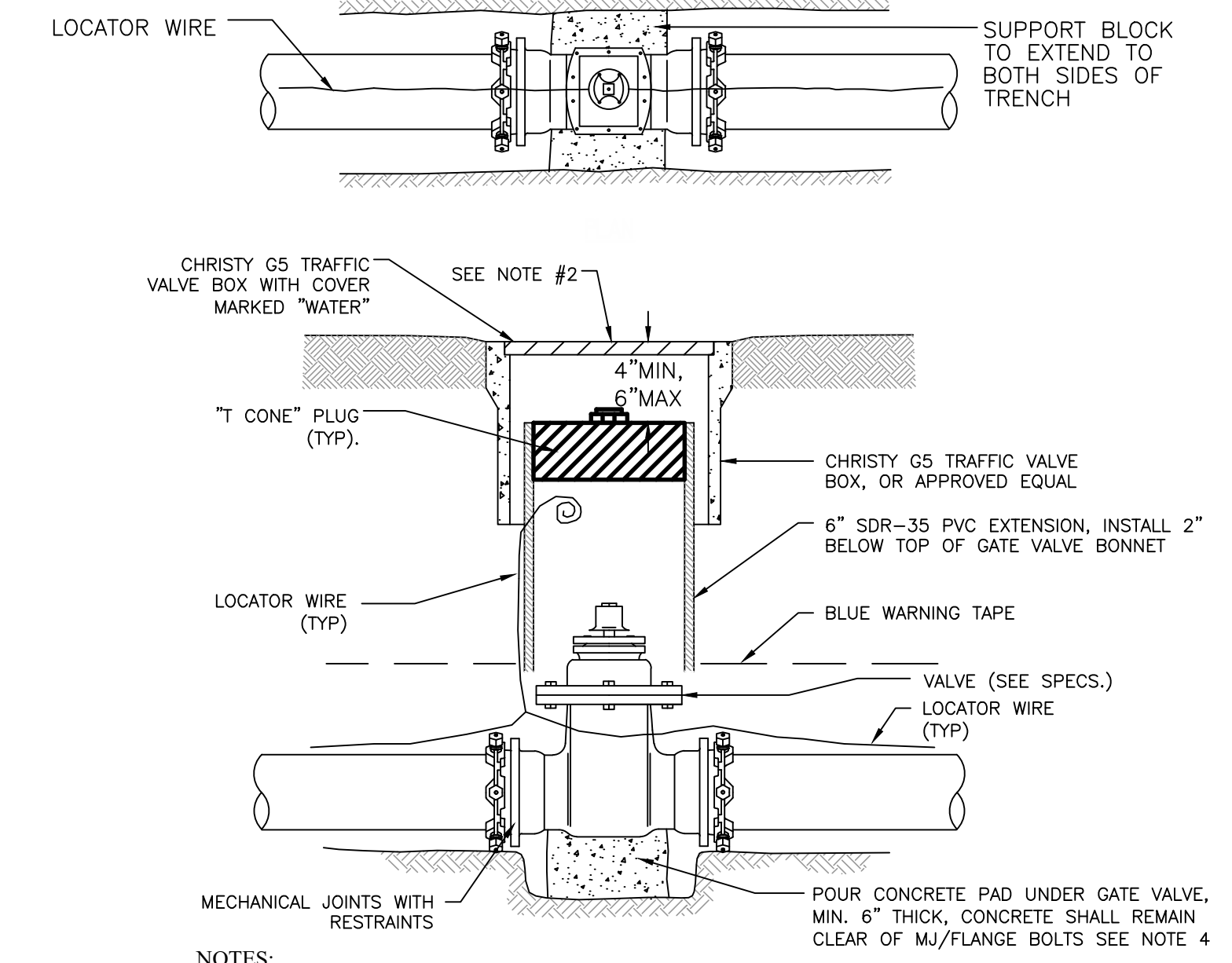
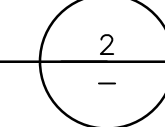
SCALE: NTS



- NOTES:**
- WIRE SHALL BE CONTINUOUS BETWEEN VALVE BOXES EXCEPT AS NOTED.
 - BARE LOCATOR WIRE SHALL NOT TOUCH VALVES, FITTINGS, OR PIPE.
 - CONTRACTOR SHALL DEMONSTRATE CONTINUITY OF LOCATOR WIRE INSTALLATION BETWEEN TEST POINTS.
 - LOCATOR WIRE SHALL BE INSULATED, #10 GAGE SOLID COPPER WIRE.
 - LOCATOR WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE FINISH GRADE (TYP).

LOCATOR WIRE DETAIL

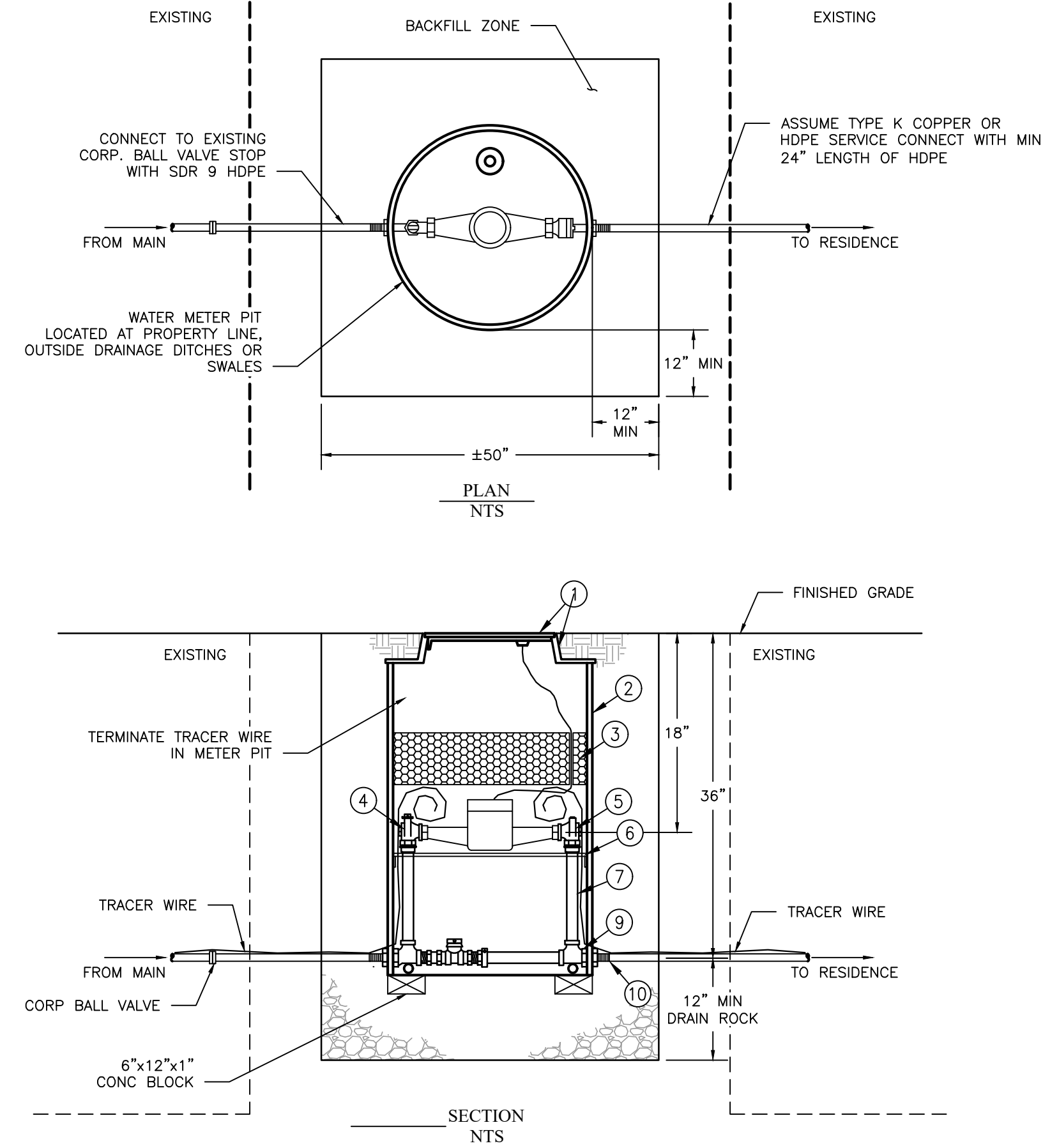
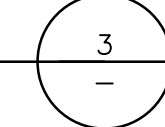
SCALE: NTS



- NOTES:**
- VALVE SUPPORT BLOCK TO BE POURED AGAINST UNDISTURBED SOIL. VALVE EXTENSION REQUIRED FOR VALVE STEMS LOWER THAN 18" BELOW GRADE.
 - RECESS BOX 1/2" BELOW FINISHED GRADE IN ALL AREAS UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
 - VALVE TYPE AS SHOWN ON PLANS AND PER OVPSD TECHNICAL SPECIFICATIONS.
 - CONCRETE FOR PAD SHALL HAVE A COMPRESSIVE STRENGTH OF NO LESS THAN 3,000 PSI AFTER 28 DAYS.

GATE VALVE DETAIL

SCALE: NTS

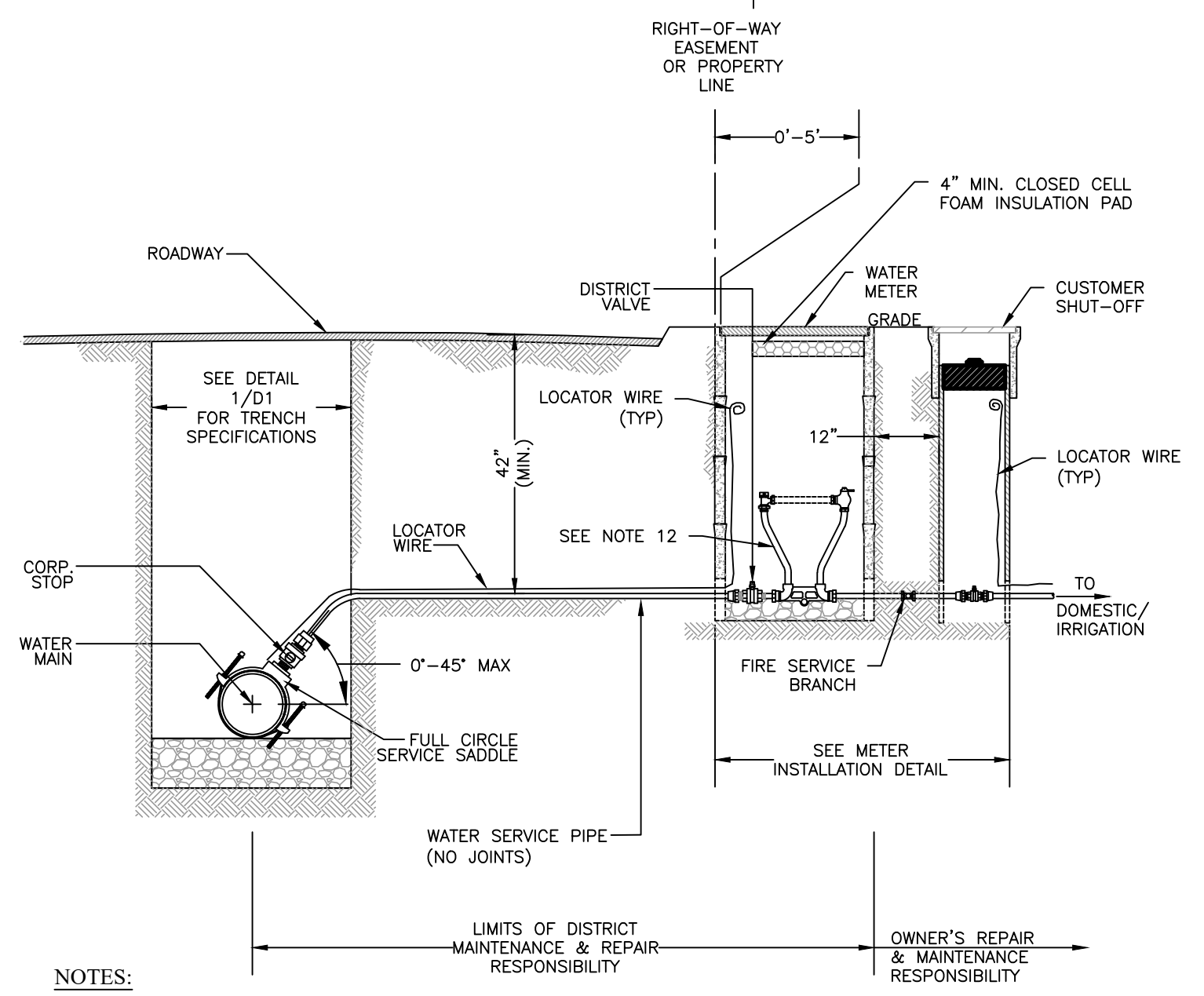


WATER METER ASSEMBLY DETAIL

SCALE: NTS

- METER PIT SHALL BE:**
- MUELLER RISER EZ-VAULT METER BOX WITH BOX EXTENSIONS AS NECESSARY TO ACHIEVE THE DESIRED DEPTH. MUELLER# 500VS2436FBBN
- NOTES:**
- MAINTAIN 36" MIN. COVER OVER WATER SERVICE LATERAL.
 - WITHIN 36" OF PAVEMENT PLACE PIT IN CHRISTY B2436 TRAFFIC RATED BOX WITH B2636 TRAFFIC RATED COMPOSITE LIDSET 1/2" BELOW GRADE. PROVIDE 1" CLEARANCE BETWEEN CHRISTY BOX LID AND METER PIT LID.
 - TERMINATE TRACER WIRE IN METER PIT WHERE TRACER WIRE EXISTS. DRILL 1/4" HOLE IN METER PIT AND RUN TRACER WIRE THROUGH WITH TAIL WRAPPED AROUND VALVE OR SECURE TO SUPPORT BRACKET.
 - COMPOSITE LID SHALL HAVE A 3-1/2" DIAMETER COUNTER SINK 3/8" DEEP WITH CONCENTRIC 1-3/4" THRU HOLE TO ACCOMMODATE ORION METER ENDPOINT.

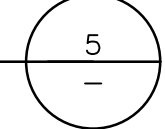
COMPONENTS KEY	
NUMBER	DESCRIPTION
①	NON-LOCKING COMPOSITE LID (COLORED BLUE) w/ CAST IRON FRAME
②	SHELL SUB-ASSEMBLY
③	INSULATION PAD
④	LOCKING FULL-PORT BALL VALVE
⑤	DUAL CHECK VALVE
⑥	SUPPORT BRACKET
⑦	LEAD-FREE BRASS PIPE
⑧	FNPT TEE
⑨	HEX NUT
⑩	NIPPLE



- NOTES:**
- WATER METER SHALL METER ALL FLOW TO THE PROPERTY, INCLUDING DOMESTIC, IRRIGATION, AND FIRE SYSTEM.
 - WATER SERVICE PIPE SHALL BE 2" SIDR 7 IPE PE OR TYPE K COPPER FROM MAIN TO METER BOX. DOMESTIC/IRRIGATION SERVICE LINE SHALL BE MINIMUM 1" SIDR 7 IPS HDPE OR TYPE K COPPER FROM METER BOX TO BUILDING FOUNDATION.
 - FIRE SYSTEM SERVICE PIPE SHALL BE 2" SIDR 7 IPS HDPE OR TYPE K COPPER FROM METER BOX TO MECHANICAL ROOM.
 - STAINLESS STEEL STIFFENERS SHALL BE USED FOR ALL ENDS OF PE PIPE.
 - WATER METER SETTER AND WATER METER SHALL BE 1".
 - PRESSURE REDUCING VALVES ARE REQUIRED ON ALL DOMESTIC AND IRRIGATION SERVICES TO MAINTAIN 60 PSI OR LESS WITHIN THE SYSTEM.
 - SEE TECHNICAL SPECIFICATIONS FOR ALL MATERIAL REQUIREMENTS.
 - CONTRACTOR/OWNER SHALL SUBMIT MATERIALS LIST TO DISTRICT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - SEE DETAILS W-19 AND W-21.
 - INSPECTION BY DISTRICT REQUIRED PRIOR TO BURIAL.
 - FORD METER SETTER VBH74-18W-88-44-NL.

WATER SERVICE DETAIL

SCALE: NTS

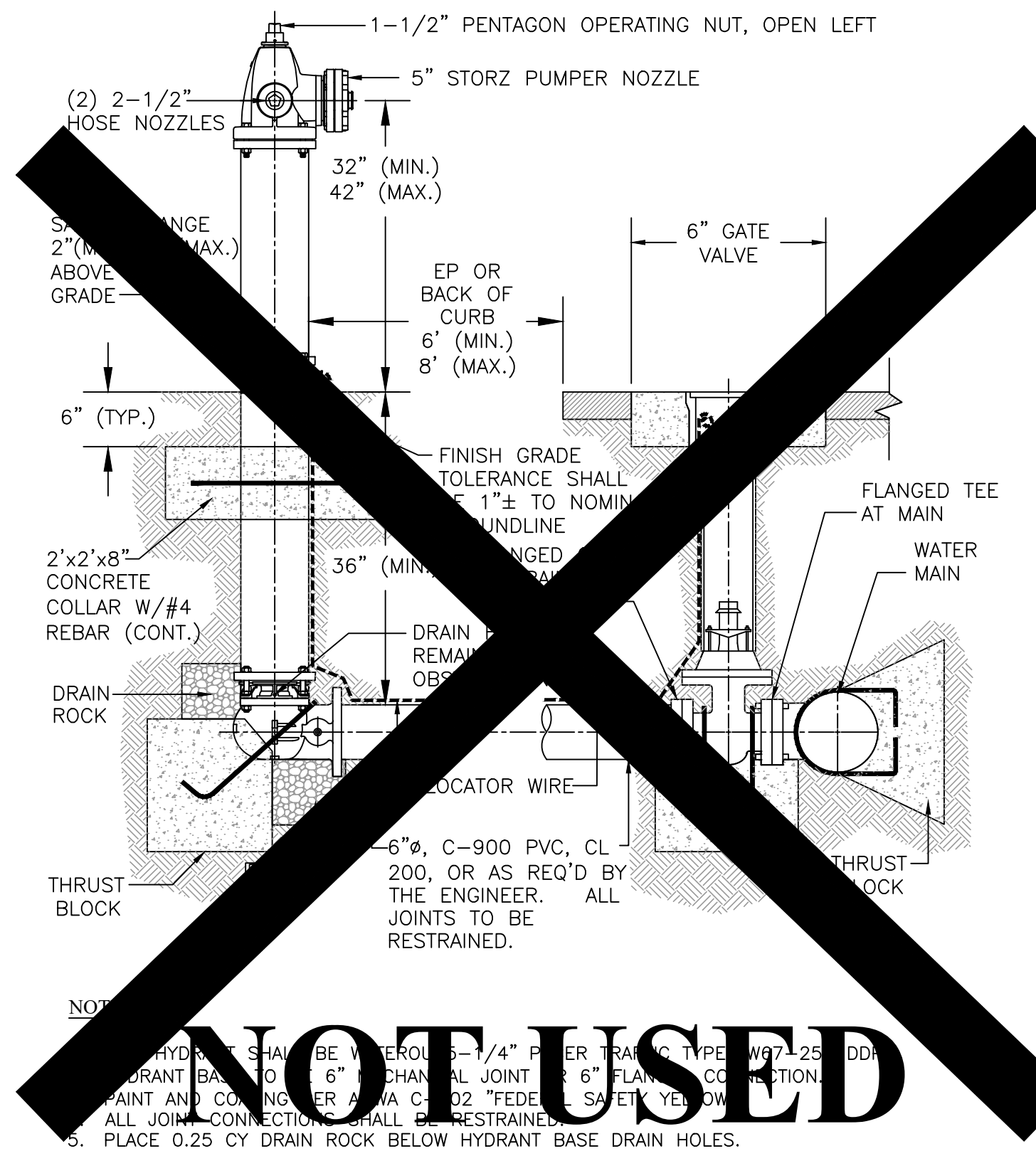


DATE	
APP	
BY	
DESCRIPTION	
REVISION	
###	
DATE	4/5/2024
SCALE	AS SHOWN
DESIGNED	PAS
DRAWN	JM
CHECKED	PAS



SIERRA LAKES COUNTY WATER DISTRICT
 2024 SODA SPRINGS ROAD WATERLINE
 REPLACEMENT PROJECT
DETAILS
 BID SET
 CALIFORNIA
 PLACER COUNTY
 SHEET NUMBER
C2.1
 6 OF 8

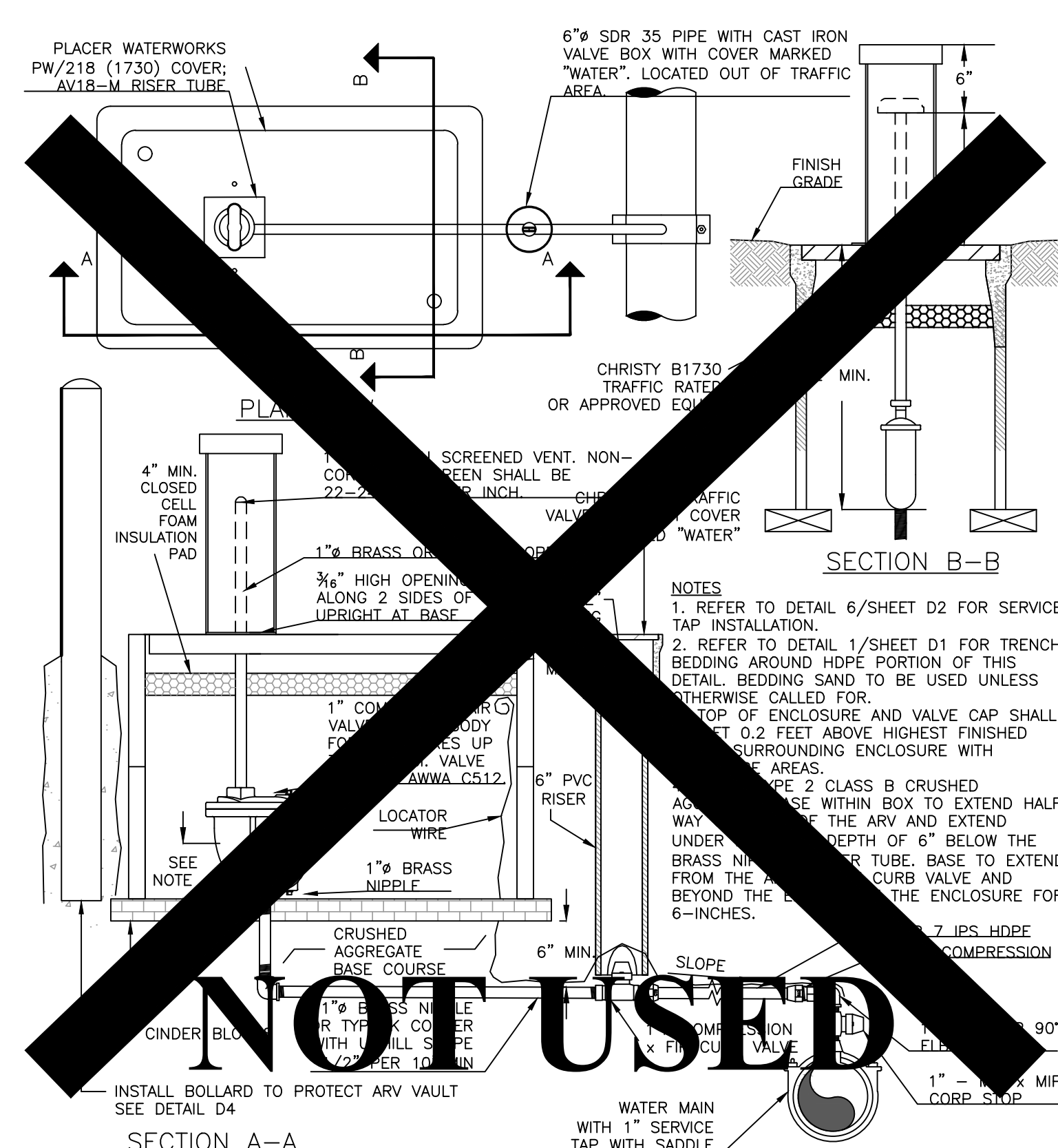
FILE SPEC: I:\S\30303-01\Ysp\pda\Dimension Project temp file\1234.Dwg - 03.X.dwg
 PLOT DATE: Apr 15, 2024 - 10:06am



FIRE HYDRANT ASSEMBLY

SCALE: NTS

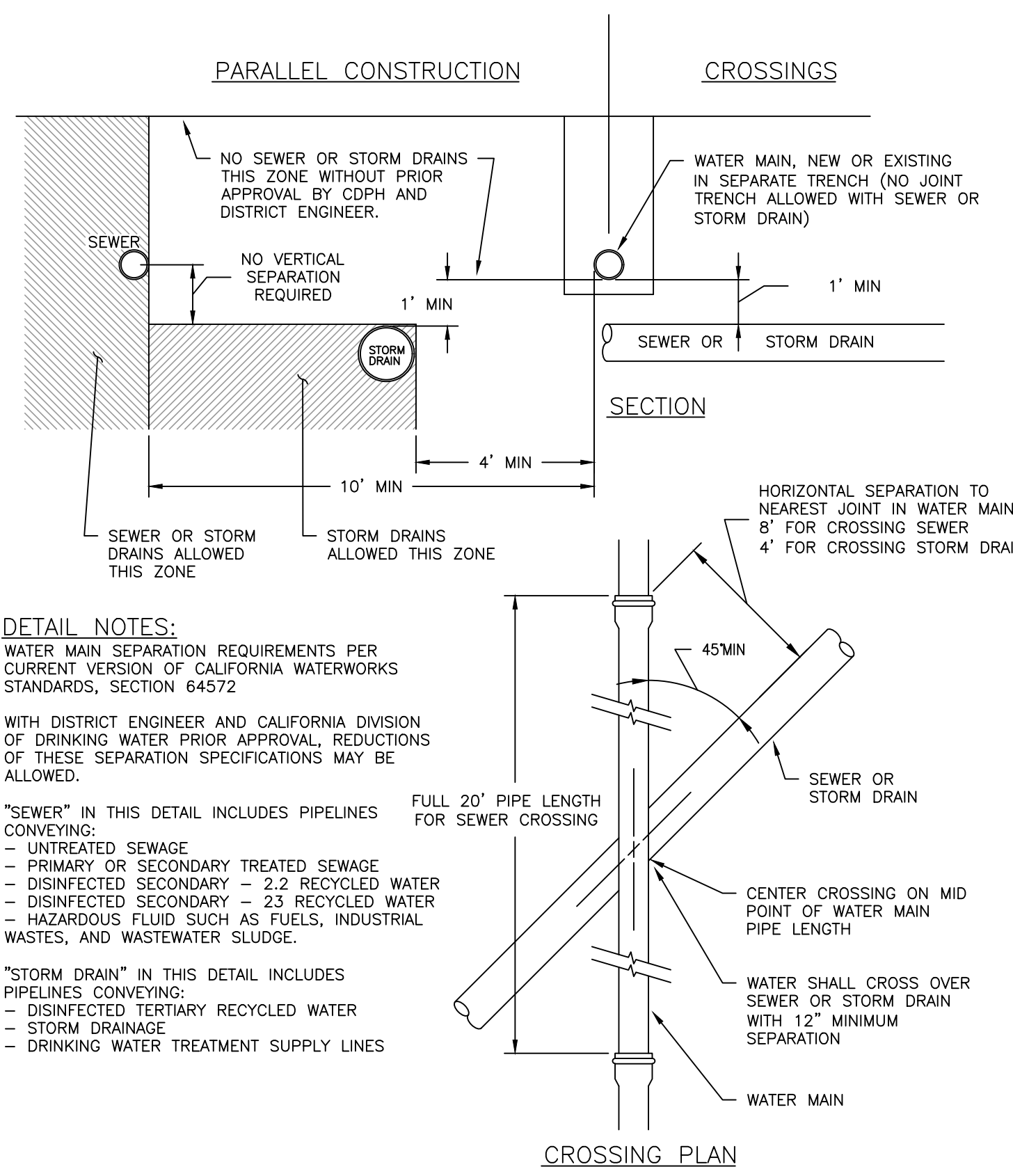
1



COMBINATION AIR/VACUUM VALVE DETAIL

SCALE: NTS

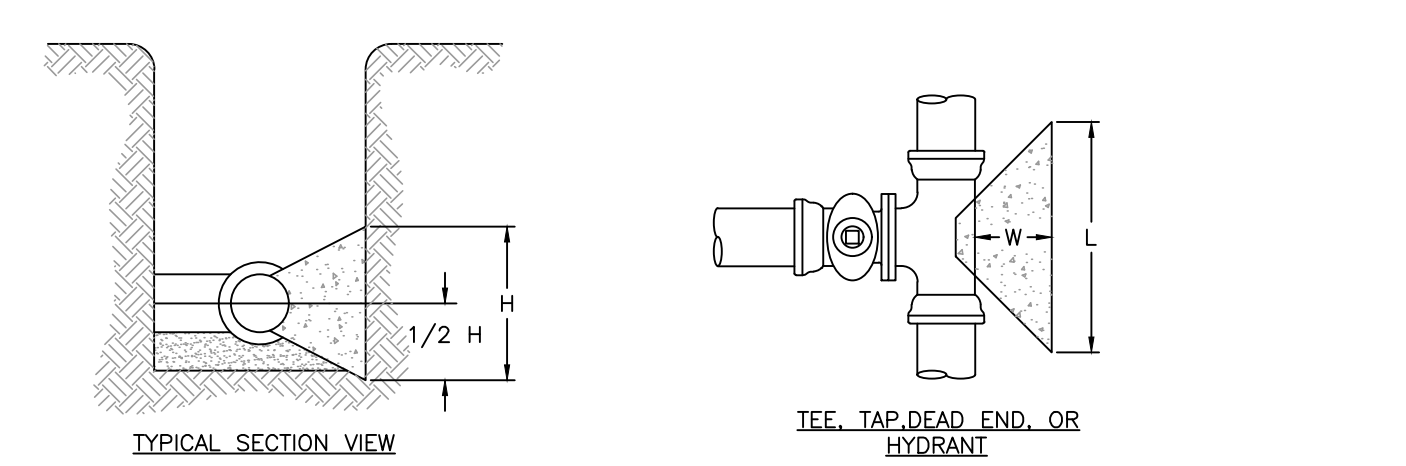
2



WATER MAIN SEPARATION CRITERIA DETAIL

SCALE: NTS

4



THRUST BLOCK DIMENSIONS			
BRANCH SIZE (INCHES)	L (FEET)	H (FEET)	W MIN. (FEET)
4	1.5	1	1
6	2	2	1
8	3	2	1
10	3.5	2.5	1
12	4.5	3	1

THRUST BLOCK DESIGN CRITERIA:

THRUST BLOCK SIZES HAVE BEEN CALCULATED USING THE METHOD AND EQUATIONS PUBLISHED IN *THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE, SEVENTH EDITION 2016* BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) UTILIZING THE FOLLOWING DESIGN PARAMETERS: DESIGN PRESSURE = 150 PSI (SEE NOTE #4 BELOW), SOIL BEARING CAPACITY = 2,000 PSF (SEE NOTE #4 BELOW), SAFETY FACTOR = 1.5, AND NOMINAL PIPE DIAMETER

THRUST BLOCK NOTES:

- CONCRETE FOR THRUST BLOCKS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI. REFERENCE OVPSD SPECIFICATION 3300 - CAST-IN-PLACE CONCRETE FOR ADDITIONAL REQUIREMENTS.
- ALL FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE WRAP PER AWWA C105. MASTIC SPRAY, OR BRUSH-ON SHALL BE APPLIED TO ALL BOLTS, ETC.
- THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL. IN CASES WHERE THIS IS NOT PRACTICAL, BACKFILL AREA BEHIND WHERE THRUST BLOCK WILL BE POURED WITH TYPE 2, CLASS B AGGREGATE BASE (PER OVPSD SPECIFICATION 2320 - AGGREGATE BASE COURSE) COMPACTED TO 95% MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY PROCEDURES SET FORTH IN ASTM D 1557, CUT-BACK COMPACTED AGGREGATE BASE TO EXPOSE A FIRM SURFACE, THEN POUR THRUST BLOCK.
- FOR SOIL BEARING CAPACITY LESS THAN 2,000 PSF AND/OR DESIGN PRESSURE IN EXCESS OF 150 PSI, INCREASE THRUST BLOCK BEARING AREAS ACCORDINGLY. REVISED THRUST BLOCK SCHEDULE FOR SPECIFIC CONDITIONS SHALL BE SUBMITTED BY THE DESIGN ENGINEER.
- THRUST BLOCKS ARE REQUIRED ON TEES, TAPS, DEAD ENDS, AND FIRE HYDRANTS. ALL OTHER CHANGES IN DIRECTION AND TRANSITIONS REQUIRE MECHANICAL RESTRAINTS ONLY.
- RESTRAINED LENGTH TO BE SPECIFIED BY DESIGN ENGINEER ON IMPROVEMENT PLANS WITH A MINIMUM DESIGN CRITERIA SAFETY FACTOR OF 2.

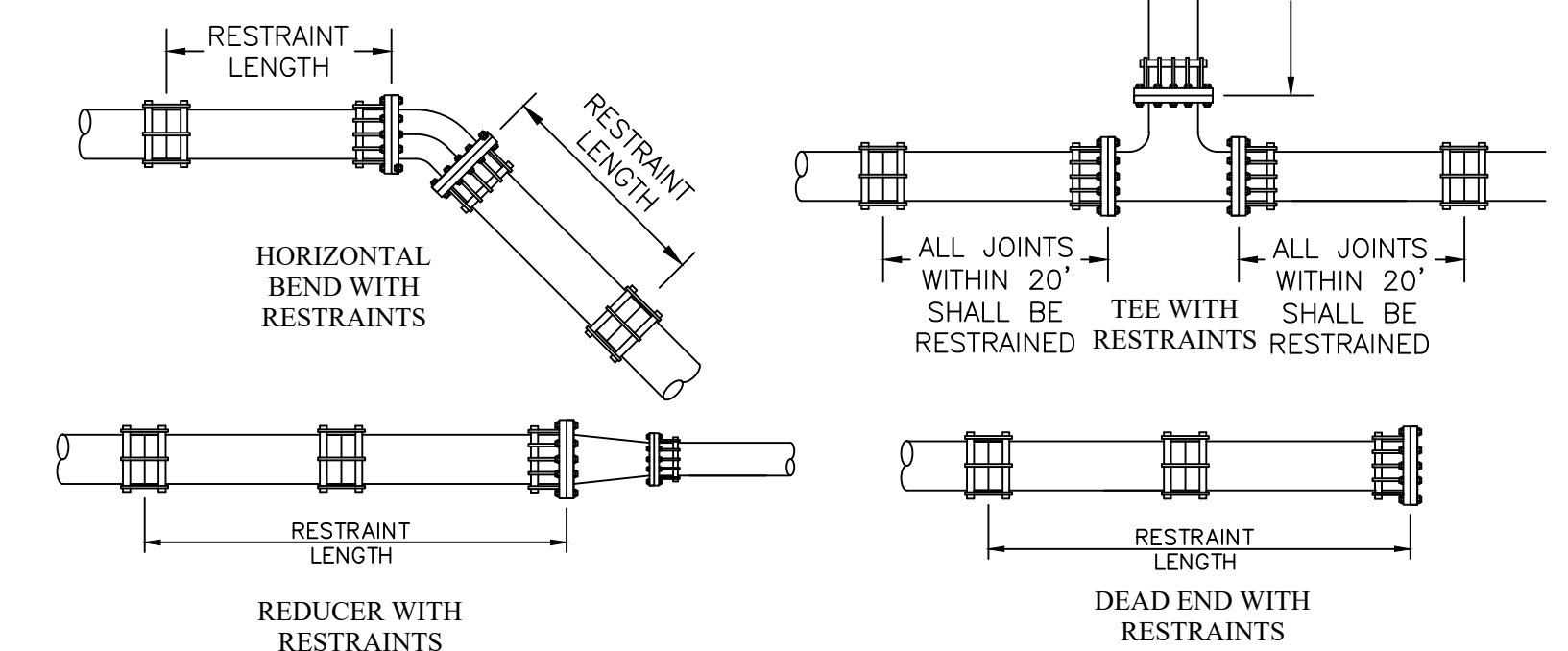
THRUST BLOCK DETAIL

SCALE: NTS

5

PVC PIPE - RESTRAINT LENGTH CHART (FT)												
PIPE Ø (IN)	TEES (SEE NOTE 3)		BENDS				REDUCERS (SEE NOTE 4)					
	BRANCH/RUN (IF LENGTH TO FIRST JOINT ALONG RUN < 20')	BRANCH/RUN (IF LENGTH TO FIRST JOINT ALONG RUN < 20')	90°	45°	22.5°	11.25°	DEAD END	12" x PIPE Ø	10" x PIPE Ø	8" x PIPE Ø	6" x PIPE Ø	4" x PIPE Ø
4"	1/20	24/20	20	9	4	2	36	232	154	90	37	N/A
6"	2/20	38/20	28	12	6	3	50	132	79	35	N/A	26
8"	17/20	54/20	36	15	8	4	66	73	33	N/A	28	48
10"	29/20	67/20	43	18	9	5	79	32	N/A	27	49	64
12"	43/20	81/20	51	21	11	5	93	N/A	28	50	68	81
14"	58/20	96/20	59	25	12	6	109	28	52	71	87	98

- RESTRAINT LENGTH CALCULATION ASSUMPTIONS:
- SOIL TYPE="CH" INORGANIC CLAYS, ETC.
 - SOIL COVER=3.5'
 - FACTOR OF SAFETY=1.5
 - TRENCH=90% COMPACTION
 - TEST PRESSURE=150 PSI



NOTES:

- IF BELL RESTRAINTS ARE USED ACCORDING TO THIS CHART, THRUST BLOCKS ARE NOT REQUIRED ON BENDS, TEES, HYDRANTS, VALVES OR OTHER AREAS. CITY MAY REQUIRE USE THRUST BLOCKS DEPENDING ON SOIL CONDITIONS.
- CONTRACTOR SHALL SUBMIT RESTRAINT CAPABILITY OF THE BELL RESTRAINT SUPPLIED FOR APPROVAL BY ENGINEER PRIOR TO USE.
- IF FULL 20' STICK OF PIPE IS NOT INSTALLED IN 'RUN' DIRECTION OF TEE, THEN 'BRANCH' DIRECTION WILL BE RESTRAINED TO A LENGTH INDICATED IN COLUMN 'BRANCH/RUN (IF LENGTH TO FIRST JOINT ALONG RUN < 20')', MIN LENGTH TO FIRST JOINT ALONG RUN IS 5 FEET.
- ALL RESTRAINTS TO BE PLACED ON LARGE SIDE OF THE REDUCER.
- RESTRAINED LENGTHS APPLICABLE FOR HORIZONTAL AND VERTICAL BENDS
- ALL JOINTS WITHIN THE CALCULATED LENGTH MUST BE RESTRAINED.
- IF DISTANCE BETWEEN FITTINGS IS LESS THAN OR EQUAL TO THE CALCULATED RESTRAINT LENGTH, RESTRAIN ALL JOINTS BETWEEN FITTINGS.

JOINT RESTRAINT CHART DETAIL - PVC PIPE

SCALE: NTS

3

FILE SPEC: I:\S\30303-01\08p04\Dimension Project temp file\1234.DWG-03.X.dwg PLOT DATE: Apr 15, 2024 - 10:06am

SIERRA LAKES COUNTY WATER DISTRICT
2024 SODA SPRINGS ROAD WATERLINE REPLACEMENT PROJECT
DETAILS
BID SET
PLACER COUNTY
CALIFORNIA

ONE INCH AT FULL SCALE:

REVISION

JOB NO.: ###
DATE: 4/5/2024
SCALE: AS SHOWN
DESIGNED: PAS
DRAWN: JMN
CHECKED: PAS

DATE

APP

BY

DESCRIPTION

5

4

3

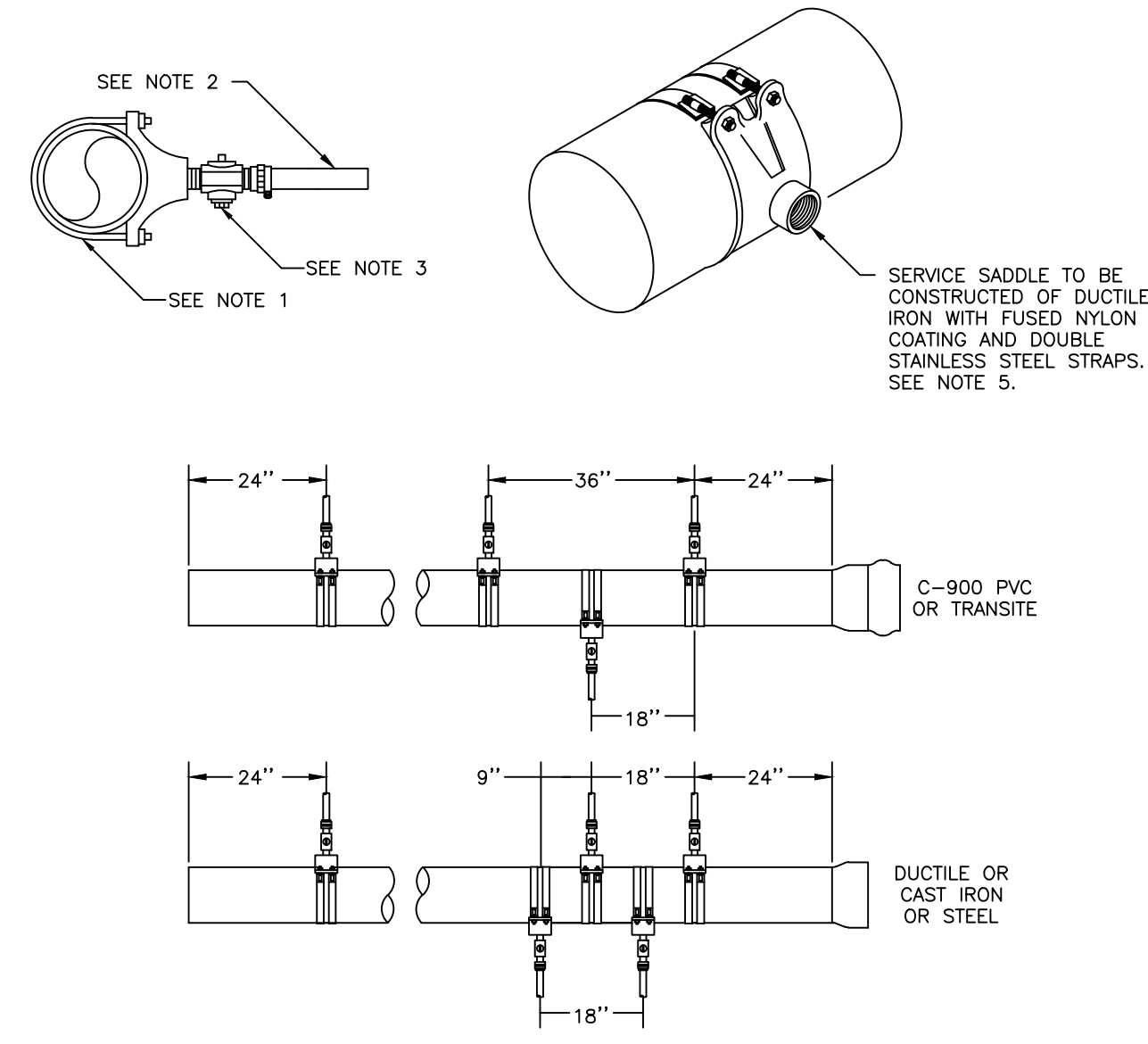
2

1

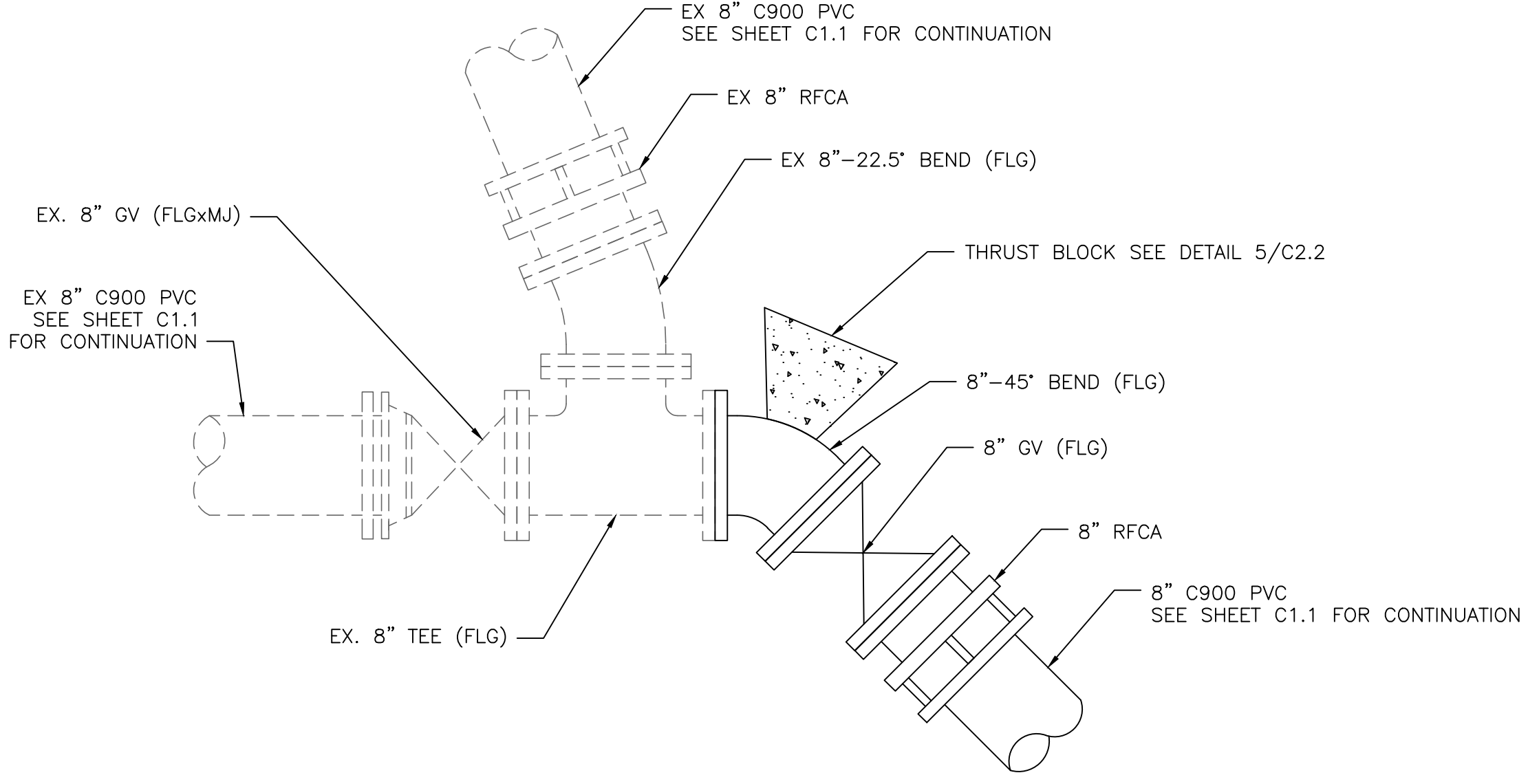
SHEET NUMBER

C2.2

7 OF 8

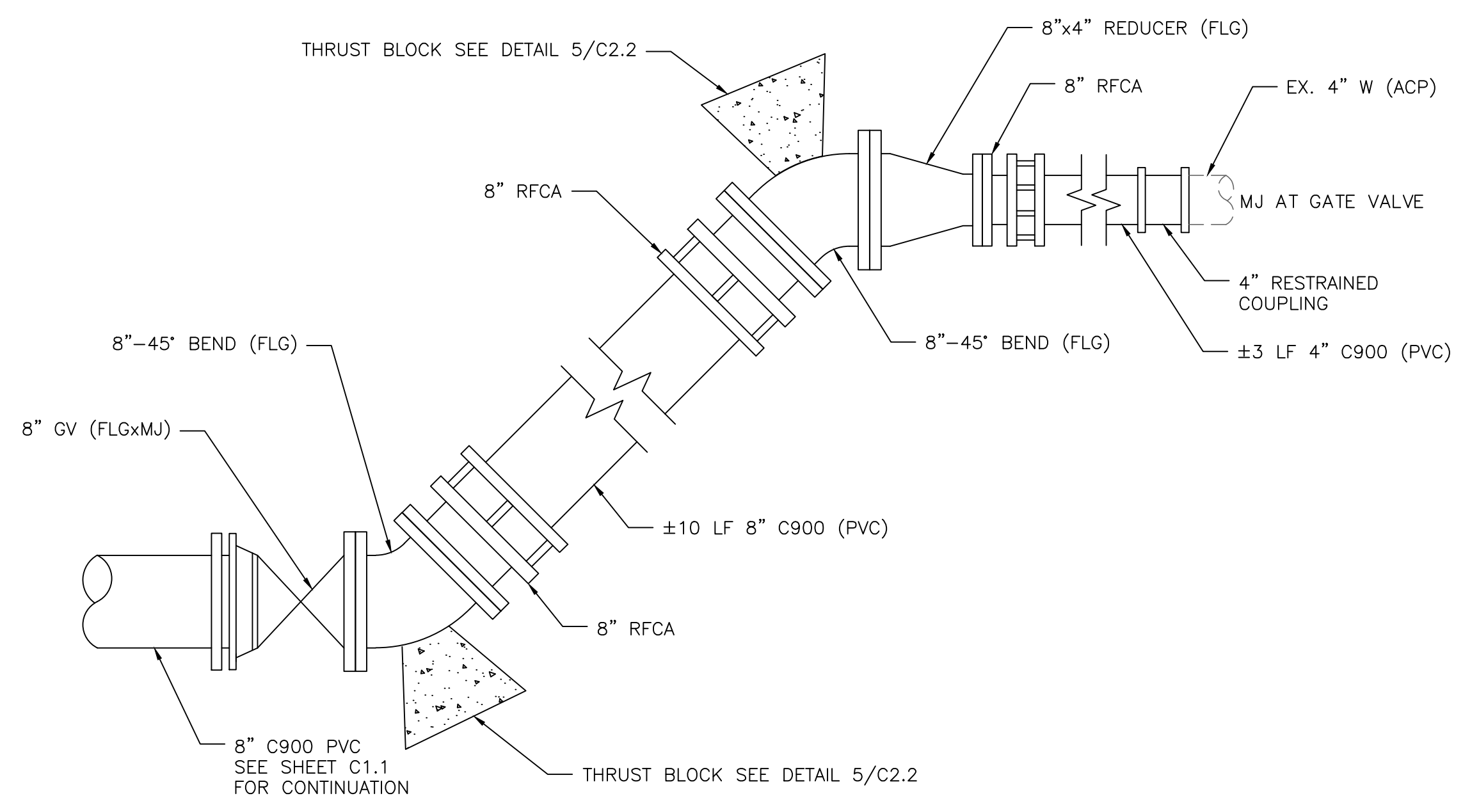


- NOTES:**
- SERVICE SADDLE SIZE IS DEPENDENT UPON THE SIZE AND TYPE OF MAIN.
 - SIDR-7 IPS PE PIPE OR TYPE K COPPER.
 - CORP STOP VALVE SHALL BE M.I.P. x M.I.P. WITH 2" F.I.P. COMPRESSION ADAPTOR COUPLING M.I.P. x COMPRESSION BASED ON SERVICE LINE MATERIAL.
 - STAINLESS STEEL PIPE STIFFENERS SHALL BE USED FOR ALL ENDS OF PE PIPE.
 - CONTRACTOR/OWNER SHALL SUBMIT MATERIALS LIST TO DISTRICT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 - SEE DETAIL 5/C2.1.
 - INSPECTION BY DISTRICT REQUIRED PRIOR TO BURIAL.



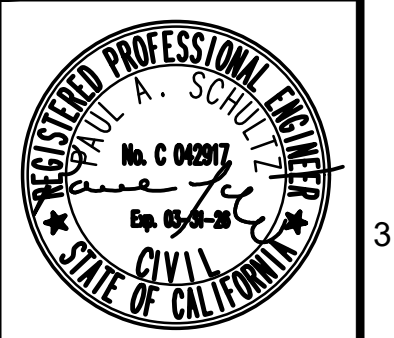
SERVICE TAP (2" OR SMALLER) DETAIL 1
SCALE: NTS

CONNECTION TO EXISTING WATERMAIN (DULZURA RD) 2
SCALE: NTS



CONNECTION TO EXISTING WATERMAIN (SIERRA RD) 3
SCALE: NTS

DATE:	4/5/2024	DESIGNED:	PAS	DRAWN:	JM	CHECKED:	PAS
SCALE:	AS SHOWN	DESIGNED:	PAS	DRAWN:	JM	CHECKED:	PAS
JOB NO.:	###	DESIGNED:	PAS	DRAWN:	JM	CHECKED:	PAS
REVISION	DESCRIPTION	BY	DATE	APP	DATE	APP	DATE



SIERRA LAKES COUNTY WATER DISTRICT
2024 SODA SPRINGS ROAD WATERLINE REPLACEMENT PROJECT
DETAILS
PLACER COUNTY
CALIFORNIA
BID SET

BID SET

SHEET NUMBER
C2.3
8 OF 8

FILE SPEC: I:\S\30305-01\Specs\Diagram Project temp file\234.D1x-03.x.dwg
PLOT DATE: Apr 15, 2024 - 10:06am