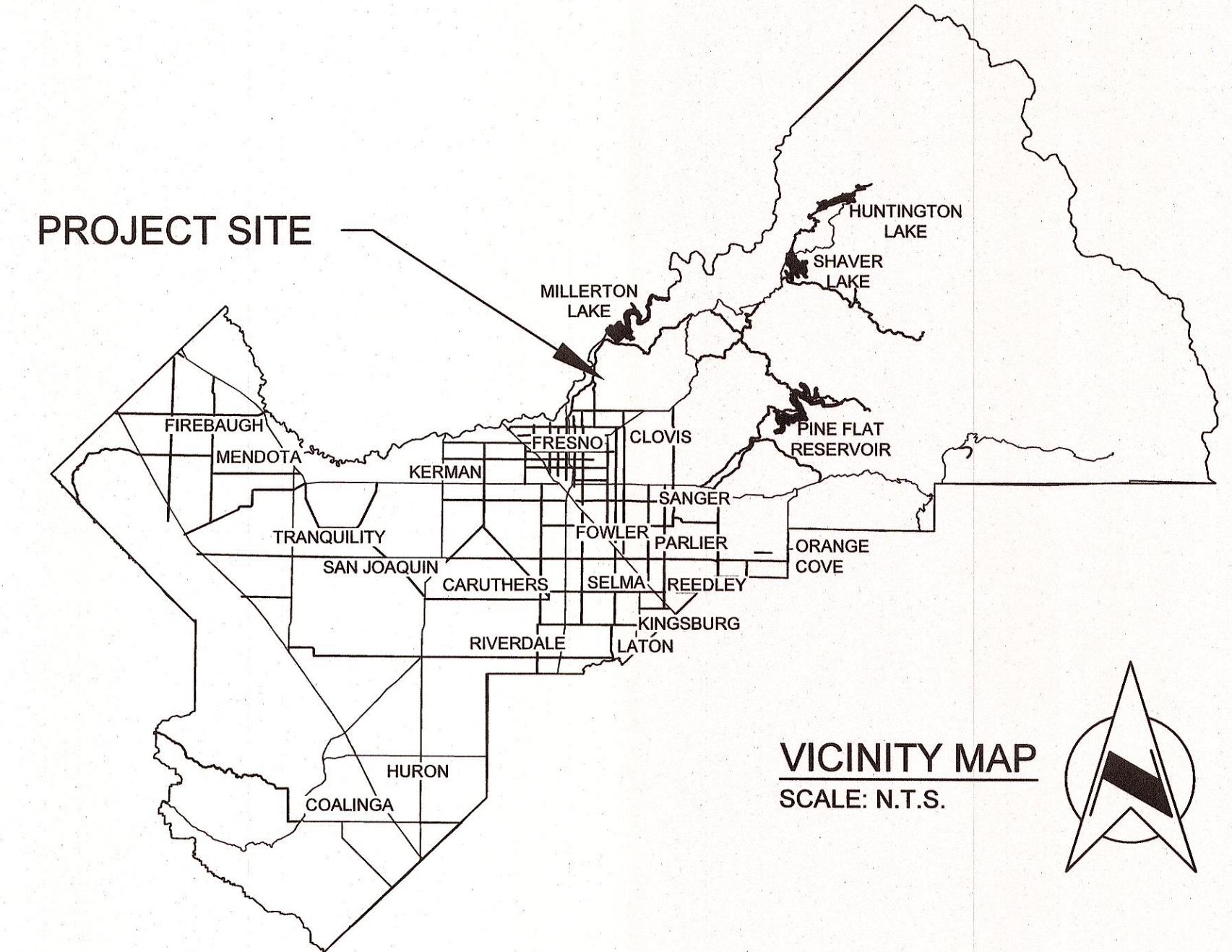
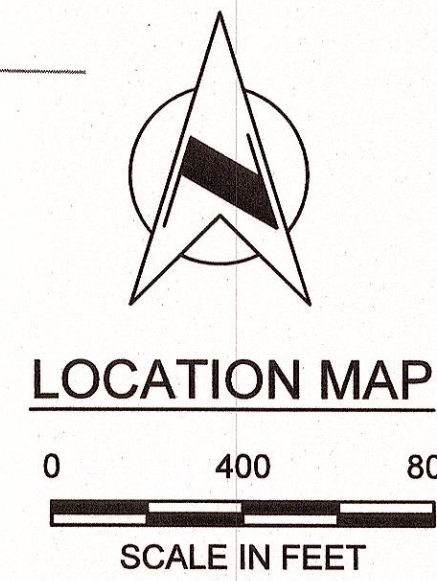
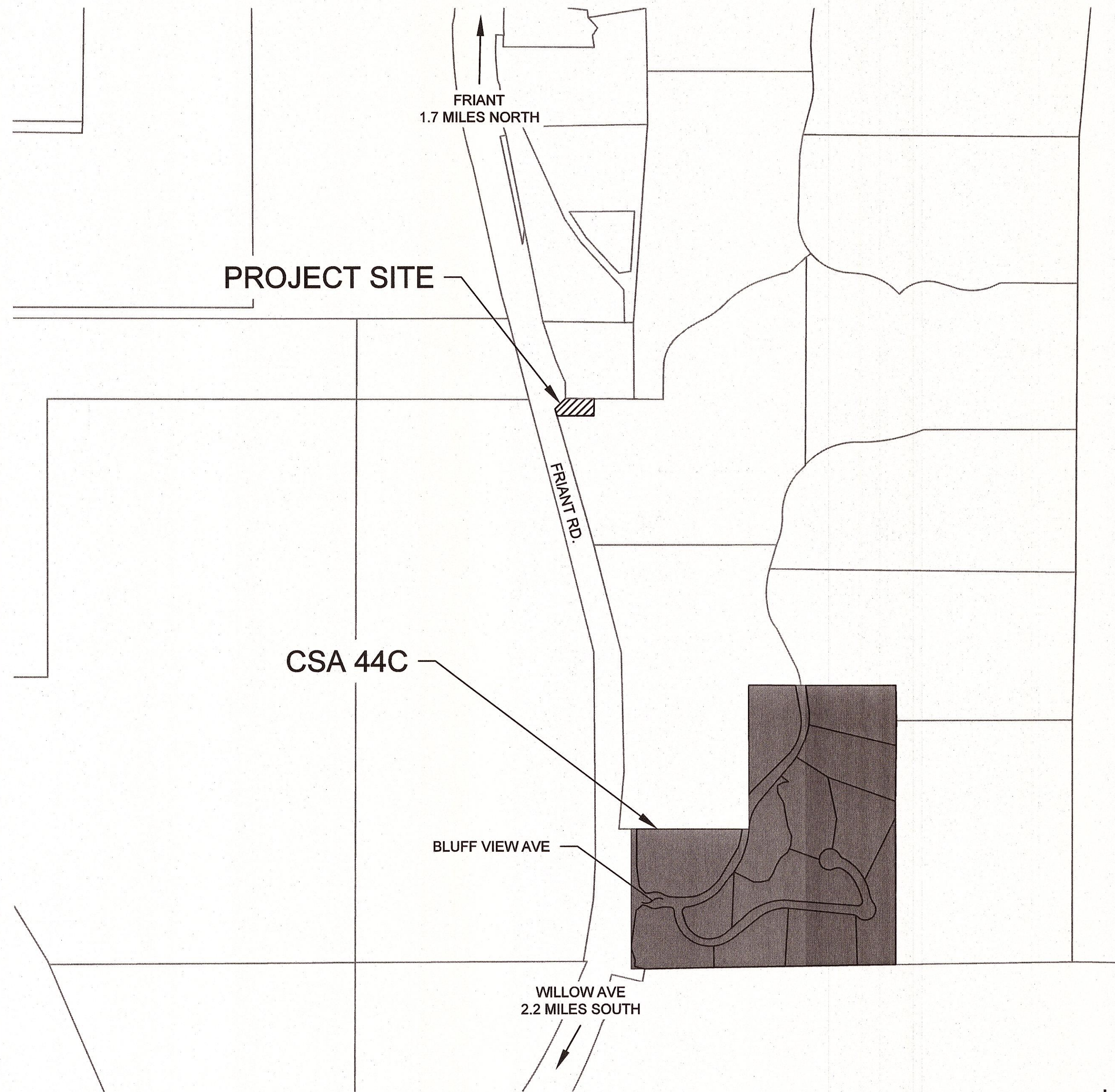


PLANS FOR CONSTRUCTION

COUNTY SERVICE AREA 44C

WATER FACILITY IMPROVEMENTS



INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE PAGE
2	LEGEND
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4	PROPOSED IMPROVEMENTS
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6	EXISTING HYDROPNEUMATIC TANK DETAILS
7	NEW HYDROPNEUMATIC TANK DETAILS
8	NEW STORAGE TANK DETAILS
9	CONSTRUCTION DETAILS - MISC
10	CONSTRUCTION DETAILS - FENCE
11	EXISTING WELL PUMP CONTROL PANEL
12	EXISTING BOOSTER PUMP CONTROL PANEL

- | | | |
|---------------|---------------|--------------|
| Nathan Magsig | Chairman | 5th District |
| Buddy Mendes | Vice-Chairman | 4th District |
| Brian Pacheco | | 1st District |
| Steve Brandau | | 2nd District |
| Sal Quintero | | 3rd District |

Paul Nerland
County Administrative Officer

APPROVED _____
Steven E. White, Director
Department of Public Works and Planning

CALIFORNIA CONTRACTOR'S LICENSES REQUIRED FOR THIS PROJECT					
CLASS A, GENERAL ENGINEERING					
DRAWING NO.	ROAD NO.	BRIDGE NO.	FISCAL YR.	SHEET NO.	TOTAL
11323	N/A	N/A	23 / 24	1	12

CONTRACT NO. 23-28-C

RECORD DRAWING					
DATE ADOPTED					
CONTRACTOR					
NAME					
ADDRESS					
CITY STATE ZIP					
PHONE					
DATE AWARDED					
DATE STARTED					
DATE COMPLETED					
RESIDENT ENGINEER					
NAME			SIGNATURE		
NAME			SIGNATURE		

DIVISION	DESIGN	CONST	RMO	RESC
SIGNATURE	MA	MSS		DA
DATE	2/29/2024	3-4-2024		3/4/2024



DEPARTMENT OF PUBLIC WORKS AND PLANNING

ABBREVIATIONS:

AB	AGGREGATE BASE	MH	MANHOLE
ABUT	ABUTMENT(S)	MP	MILE POST
AC	ASPHALTIC CONCRETE	MTL	MATERIAL
ACP	ASBESTOS CEMENT PIPE	NBL	NORTHBOUND LANE
ALIGN	ALIGNMENT	NS	NATIVE SOIL
AP	ANGLE POINT	OC	ON CENTER
AS	AGGREGATE SUBBASE	OG	ORIGINAL GROUND
BB	BEGINNING OF BRIDGE	PB	PULL BOX
BC	BEGIN HORIZONTAL CURVE	PBS	PULVERIZED BITUMINOUS SURFACE
BCM	BRASS CAP MONUMENT	PE	POLYETHYLENE
BCR	BEGIN CURB RETURN	PCC	PORTLAND CEMENT CONCRETE
BD	BEGIN DITCH	PERM	PERMEABLE
BIT	BITUMINOUS	PG	PROFILE GRADE
BKF	BACKFILL	PI	POINT OF INTERSECTION
BM	BENCH MARK	PL	PLATE
BR	BRIDGE	P/L	PROPERTY LINE
BVC	BEGIN VERTICAL CURVE	POC	POINT ON CONNECTION
BW	BARBED WIRE	POT	POINT ON TANGENT
CF	CUBIC FEET	PP	POWER POLE
CFS	CUBIC FEET PER SECOND	PPP	PERFORATED PLASTIC PIPE
C&G	CURB AND GUTTER	PRF	PAVEMENT REINFORCING FABRIC
CIP	CAST IRON PIPE	PT	PEDESTAL TELEPHONE
C/L	CENTER LINE	PNT	POINT
CL	CHAIN LINK	PULV	PULVERIZED
CLR	CLEAR	PVC	POLYVINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PVMT	PAVEMENT
COL	COLUMN	RCB	REINFORCED CONCRETE BOX
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
CS	COTTON SPINDLE	R&D	REMOVE AND DISPOSE
CSP	CONCRETE SLOPE PROTECTION	R&S	REMOVE AND SALVAGE
CATV	CABLE TELEVISION	REL	RELOCATE
CULV	CULVERT	RES	RESIDENTIAL
CV	CHECK VALVE	RET	RETAINING
CY	CUBIC YARD(S)	RG	RUBBER GASKET
DI	DRAINAGE INLET	RLG	ROCK LINED GUTTER
DO	DRAINAGE OUTLET	RMS	ROAD MIX SURFACE
DRWY	DRIVEWAY	RSP	ROCK SLOPE PROTECTION
EASE	EASEMENT	RTE	ROUTE
EB	END OF BRIDGE	R/W	RIGHT OF WAY
EBL	EAST BOUND LANE	RW	RETAINING WALL
EC	END HORIZONTAL CURVE	SL	SLOPE
ECR	END OF CURB RETURN	SBL	SOUTHBOUND LANE
ED	END DITCH	SEC	SECTION
ELEV	ELEVATION	SR	STATE ROUTE
ELL	ELBOW	SHR	SHOULDER
EMB	EMBANKMENT	S/L	SECTION LINE
EP	EDGE OF PAVEMENT	SP	STANDPIPE
EPS	EDGE OF PAVED SHOULDER	STA	STATION
ETL	EDGE OF TRAVELED LANE	STD	STANDARD
EVC	END VERTICAL CURVE	STR	STRUCTURE
EXIST	EXISTING	SURF	SURFACING
EXP	EXPANSION JOINT	SDWK	SIDEWALK
FCBCM	FRESNO COUNTY BCM	SWR	SEWER
FCBM	FRESNO COUNTY BM	TAN	TANGENT
FG	FINISHED GRADE	TAN OFF	TANGENT OFFSET
FH	FIRE HYDRANT	TBM	TEMPORARY BENCHMARK
FL	FLOW LINE	TBR	TO BE REMOVED
FLxFL	FLANGE BY FLANGE	TC	TOP OF CURVE
GALV	GALVANIZED	TD	TOP OF DIKE
GP	GRADING PLANE	TOB	TOP OF BANK
GR	GUARD RAILING	TCB	TRAFFIC CONTROL BOX
GV	GATE VALVE	TRANS	TRANSITION
GW	GUY WIRE	TS	TRAFFIC SIGNAL
HMA	HOT MIXED ASPHALT	TYP	TYPICAL
HP	HINGE POINT	UC	UNDERCROSSING
HW	HEAD WALL	UG	UNDERGROUND
HWM	HIGH WATER MARK	UD	UNDERDRAIN
IB	IMPORTED BORROW	UDR	UNDERDRAIN RISER
IP	IRON PIPE	UP	UNDERPASS
IRR	IRRIGATION	VC	VERTICAL CURVE
IV	IRRIGATION VALVE	VCP	VITRIFIED CLAY PIPE
JP	JOINT POLE	VG	VALLEY GUTTER
JT	JOINT	VP	VENTPIPE
LF	LINEAR FEET	WBL	WESTBOUND LANE
LOC	LOCATION	WP	WEAKENED PLANE
LOL	LAYOUT LINE	WV	WATER VALVE
LP	LIMIT OF PAYMENT	WW	WINGWALL
MB	METAL BEAM	XING	CROSSING
MBGR	METAL BEAM GUARD RAILING	X SEC	CROSS SECTION
MFR	MANUFACTURER		

LINETYPE LEGEND

LINETYPE EXAMPLE	LINETYPE DESCRIPTION
— x — x — x — x — x — x —	BARBED WIRE FENCE
— 0 — 0 — 0 — 0 —	CHAIN LINK FENCE
— [] — [] — [] — [] —	WOODEN FENCE
— [] — [] — [] — [] —	METAL FENCE
— / \ — / \ — / \ — / \ —	EDGE OF LANDSCAPED AREA
— — — — — — —	RAILROAD TRACKS
— — — — —	SECTION LINES
— — — — — ALIGN-E	EXISTING ALIGNMENT
— — — — —	AC CENTERLINE — EXISTING
— — — — —	AC CROWN — EXISTING
— YS — YS — YS — YS —	EXISTING YELLOW STRIPED LINES
— WS — WS — WS — WS —	EXISTING WHITE STRIPED LINE
— — — — —	AC GRADE BREAK — EXISTING
— — — — — EP-E	AC EDGE OF PAVEMENT — EXISTING
— TOE — TOE — TOE —	TOE OF THE SLOPE
—	CONCRETE — EDGE OF DRIVEWAY
— — — — —	AC — EDGE OF DRIVEWAY
—	DIRT — EDGE OF DRIVEWAY
— — — — —	GRAVEL — EDGE OF DRIVEWAY
— — — — — OIL DIRT — EDGE OF DRIVEWAY	
— CMP — CMP — CMP —	CORRUGATED METAL PIPE
— HDPE — HDPE — HDPE —	HIGH DENSITY POLYETHYLENE
— STP — STP — STP —	STEEL PIPE
— PVC — PVC — PVC —	POLYVINYL CHLORIDE
— P-R/W	PRESCRIPTIVE RIGHT OF WAY
— P/L	PROPERTY LINE
— R/W	RIGHT OF WAY
— R/W-P	RIGHT OF WAY — PROPOSED
— W	WATER LINES
— IRR	IRRIGATION LINE
— SD	STORM DRAIN
— S	SEWER LINE
— FL	MISC FLOW LINE
— GFL — GFL — GFL —	GUTTER FLOW LINE
— CONC — CONC — CONC —	EDGE OF CONCRETE STRUCTURES
— TFC — TFC — TFC —	TOP FACE OF CURB
— SDWK	EDGE OF CONCRETE SIDEWALK
— — — — —	SAW CUT LINES
— E —	UNDERGROUND ELECTRIC
— T —	UNDERGROUND TELEPHONE
— FO —	FIBER OPTIC
— G —	GAS LINE
— OHCATV —	OVERHEAD CABLE TELEVISION
— OHE —	OVERHEAD ELECTRIC
— OHT —	OVERHEAD TELEPHONE
— CATV —	UNDERGROUND CABLE TELEVISION
— — — — —	PROFILE STYLE — EXISTING GROUND
— — — — —	PROFILE STYLE — DESIGN
— — — — —	DESIGN ALIGNMENT
— ETL —	EDGE OF THE TRAVELED LANE
— EP-D —	EDGE OF PAVEMENT — DESIGN

ADDITIONAL LEGEND

	HYDROPNEUMATIC OR STORAGE TANK, SAND SEPARATOR, MISCELLANEOUS EQUIPMENT, AND APPURTENANCES TO BE REMOVED AND DISPOSED OR SALVAGED. SEE NOTES
	PIPE ABOVE GROUND
	UNDERGROUND PIPE
	PIPE/ SECTION OF PIPE TO BE REMOVED AND DISPOSED
	EXISTING GRAVEL DRIVEWAY

UTILITY NOTES:

LOCATIONS FOR EXISTING UNDERGROUND FACILITIES ARE APPROXIMATE. EXACT DEPTH AND LOCATIONS ARE UNKNOWN. FIELD LOCATE PRIOR TO THE START OF CONSTRUCTION.
 **CALL UNDERGROUND SERVICE ALERT (USA) 811

GENERAL NOTES:

- DIMENSIONS SHOWN ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- ALL PIPE JOINTS ARE TO BE POSITIVE JOINT SYSTEMS.
- STATE STANDARD SPECS — 2015 EDITION.

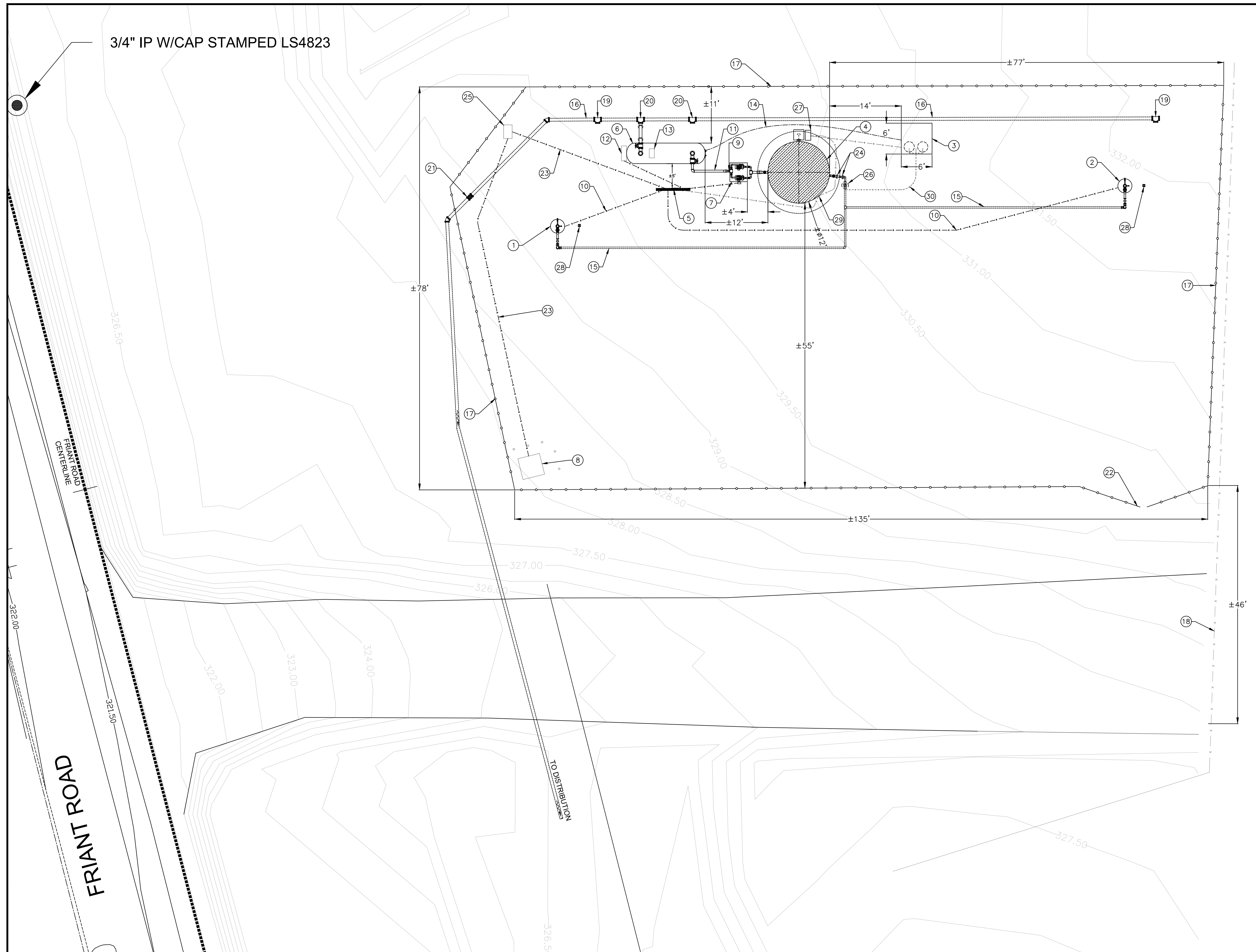
SYMBOL LEGEND

SYMBOL	BLOCK DESCRIPTION	SYMBOL	BLOCK DESCRIPTION (EXISTING)	SYMBOL	BLOCK DESCRIPTION (INSTALL NEW)
	PROPERTY CORNER		WATER MANHOLE		WATER MANHOLE
	SECTION CORNER		FIRE HYDRANT		FIRE HYDRANT
	BENCHMARK		WATER METER		WATER METER
	SURVEY CONTROL POINT		WATER VALVE		WATER VALVE
	PROPERTY CORNER OR RW MONUMENT		WATER VAULT		WATER VAULT
	FLIGHT TARGET AT SECTION CORNER		WATER WELL PAD		WATER WELL PAD
	FLIGHT TARGET AT P LINE STATION		BUTTERFLY OR GATE VALVE		BUTTERFLY OR GATE VALVE
	FLIGHT TARGET AT P LINE ANGLE POINT		ELECTRIC MOTOR WATER WELL PAD		ELECTRIC MOTOR WATER WELL PAD
	MISCELLANEOUS PALM TREE		DEISEL MOTOR WATER WELL PAD		DEISEL MOTOR WATER WELL PAD
	MISCELLANEOUS TREE		CONCRETE IRRIGATION TURNOUT BOX		CONCRETE IRRIGATION TURNOUT BOX
	MISCELLANEOUS BUSH		CONCRETE IRRIGATION STANDPIPE		CONCRETE IRRIGATION STANDPIPE
	MISCELLANEOUS VINE		STEEL OR PVC IRRIGATION VENTPIPE		STEEL OR PVC IRRIGATION VENTPIPE
	MISCELLANEOUS STUMP		SPRINKLER VALVES / CONTROL BOXES		SPRINKLER VALVES / CONTROL BOXES
	STEEL IRRIGATION SCREW GATE		STORM DRAIN MANHOLE		STORM DRAIN MANHOLE
	STEEL IRRIGATION INLET SCREEN		STORM DRAIN INLET		STORM DRAIN INLET
	ELECTRIC TRANSMISSION TOWER		SEWER MANHOLE		SEWER MANHOLE
	STEEL OR CONC GUARD POST		SEWER VAULT		SEWER VAULT
HATCHING LEGEND					
HATCH	HATCH DESCRIPTION				
	PCC CONCRETE				
	AGGREGATE BASE				
	AGGREGATE SUB-BASE				
	COLD PLANE				
	NATIVE SOIL — COMPACTED 95%				
	BEDDING MATERIAL — COMPACTED 95%				
CALLOUTS AND MISC SYMBOLS					
	DETAIL NUMBER SHEET NUMBER (STATE STANDARD PLANS)		TELEPHONE VAULT		TELEPHONE VAULT
	DETAIL NUMBER SHEET NUMBER (AUTOCAD SECTION STANDARD)		TELEPHONE MANHOLE		TELEPHONE MANHOLE
	DETAIL NUMBER DWG SHEET NUMBER (PLAN SET CALLOUT)		UNDERGROUND TELEPHONE WARNING POST		UNDERGROUND TELEPHONE WARNING POST
			TELEPHONE POLE		TELEPHONE POLE
			VARIOUS PULL BOXES		VARIOUS PULL BOXES
			STREET LIGHT POLE		STREET LIGHT POLE
			TRAFFIC LIGHT POLE		TRAFFIC LIGHT POLE
			MISC TRAFFIC SIGNS		MISC TRAFFIC SIGNS
			STOP SIGN		STOP SIGN
			RAILROAD CROSSING AHEAD SIGN		RAILROAD CROSSING AHEAD SIGN
			TURN SIGNAL LOOP DETECTOR		TURN SIGNAL LOOP DETECTOR
			RAILROAD CROSSING ARM		RAILROAD CROSSING ARM
			SIGNAL CONTROL BOX PAD		SIGNAL CONTROL BOX PAD

CALLOUTS - USE ON PLANS AS NEEDED

	AC OR CONC CALLOUT — EXISTING		CURVE TABLE OR RADIUS CALLOUT — EXISTING
	AC OR CONC CALLOUT — NEW		CURVE TABLE OR RADIUS CALLOUT — NEW
	DIRT OR GRAVEL CALLOUT — EXISTING		LANDSCAPING CALLOUT — EXISTING
	DIRT OR GRAVEL CALLOUT — NEW		LANDSCAPING CALLOUT — NEW
	IRRIG OR FL OR DIKE OR DI CALLOUT — EXISTING		
	IRRIG OR FL OR DIKE OR DI CALLOUT — NEW		

DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet		2/29/24	DATE		PROJECT			DEPARTMENT OF PUBLIC WORKS AND PLANNING		
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	DATE	NO SCALE					CSA 44C			LEGEND		
CHECKED: SA	DATE: 03/23				WATER FACILITY IMPROVEMENTS				ROAD NO. N/A	BRIDGE NO. N/A	DRAWING NO. 11323	SHEET NO. 2	TOTAL 12	



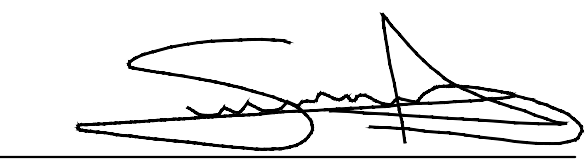
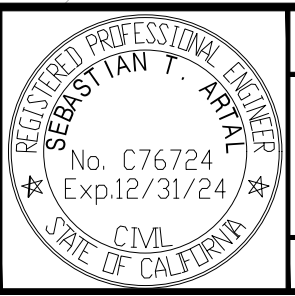

NOTES

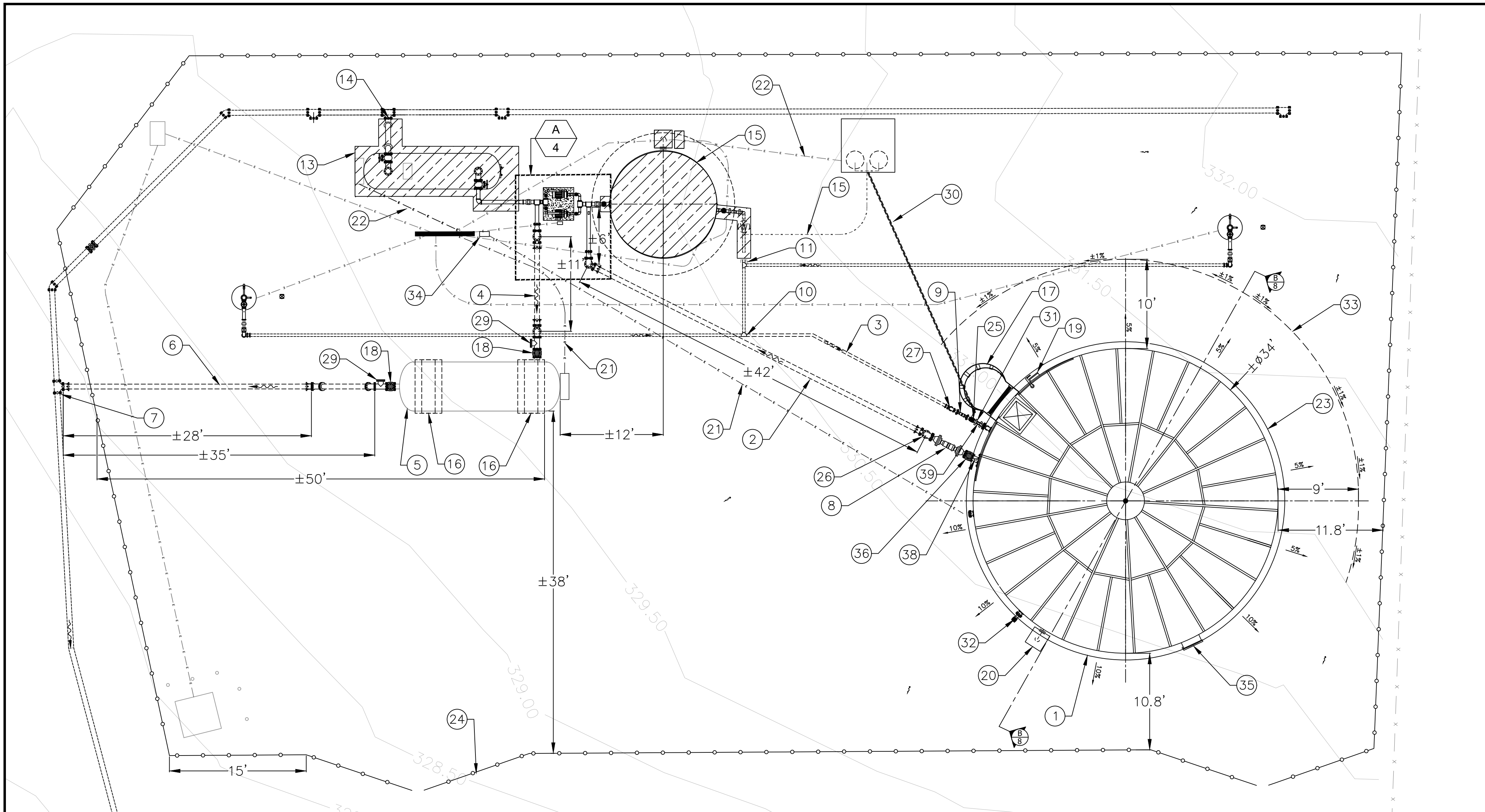
- 1 EXISTING WELL #3 TO REMAIN. PROTECT IN PLACE.
- 2 EXISTING WELL #2 TO REMAIN. PROTECT IN PLACE.
- 3 EXISTING CHEMICAL STORAGE/OPERATOR SHED TO REMAIN.. HOUSES ADDITIONAL AIR COMPRESSOR AND CHLORINE DRUMS.
- 4 R&D EXIST 18,000 GALLON STORAGE TANK.
- 5 EXISTING DISTRIBUTION SITE PUMP AND WELL CONTROL PANEL, PG&E METER AND SHADE STRUCTURE. ALL ITEMS TO REMAIN.
- 6 R&D EXIST +/- 1,000 GALLON HYDROPNEUMATIC TANK AND ALL TANK COMPONENTS INCLUDING FOUNDATION, VALVES, COMPRESSOR, SIGHT GLASS/PRESSURE SWITCH ENCLOSURE.
- 7 EXISTING BOOSTER PUMPS AND PAD TO REMAIN: QTY (2) PEERLESS 15 HP 208-230/460V, C820 PUMPS
- 8 EXISTING SITE TRANSFORMER.
- 9 EXISTING BOOSTER PUMP PRESSURE GAUGE AND SAMPLE TAP.
- 10 APPROXIMATE LOCATION OF EXIST UG CONDUIT & CONDUCTORS FROM PUMP CONTROLLER TO WELL. CONTRACTOR TO FIELD VERIFY BEFORE TRENCHING.
- 11 EXISTING ABOVE GRADE 4" GALV PIPE. CONTRACTOR TO FIELD VERIFY.
- 12 EXISTING HYDROPNEUMATIC TANK SIGHT GAUGE AND PRESSURE SWITCH PANEL.
- 13 EXISTING HYDROPNEUMATIC AIR COMPRESSOR.
- 14 (E) PNEUMATIC HOSE FROM (E) COMPRESSOR. HOSE RUNS ALONG SURFACE. PROTECT IN PLACE.
- 15 APPROXIMATE LOCATION OF EXISTING UG 4" C900 PVC WATER MAIN. CONTRACTOR TO FIELD VERIFY LOCATION. (E) TRACER WIRE AT WELLS.
- 16 APPROXIMATE LOCATION OF EXISTING UG 6" C900 PVC WATER MAIN. CONTRACTOR TO FIELD VERIFY LOCATION. (E) TRACER WIRE AT HYDROPNEUMATIC TANK.
- 17 EXISTING CHAIN LINK FENCE, TO REMAIN.
- 18 EXISTING PRIVATE BARBED WIRE FENCE WITH TUBE STEEL GATE. PROTECT IN PLACE.
- 19 EXISTING UG 6X4X6" TEE WITH 4" BLIND FLANGE. CONTRACTOR TO FIELD VERIFY.
- 20 EXISTING UG 6" TEE. CONTRACTOR TO FIELD VERIFY.
- 21 EXISTING UG 6" ISOLATION VALVE. CONTRACTOR TO FIELD VERIFY.
- 22 EXISTING 24' DOUBLE ACCESS GATE TO REMAIN.
- 23 APPROXIMATE LOCATION OF EXIST UG CONDUIT AND CONDUCTORS FROM TRANSFORMER TO METER. FIELD VERIFY LOCATION AND PROTECT IN PLACE BEFORE COMMENCING ANY TRENCH WORK. LOCATION ASSUMED.
- 24 EXISTING CHLORINE INJECTION POINTS.
- 25 EXISTING PG&E PULL BOX.
- 26 EXISTING CHLORINATION LINE PVC BALL VALVE, VALVE BOX AND PVC RISER. CONTRACTOR TO FIELD VERIFY.
- 27 R&D EXISTING STORAGE TANK PRESSURE SWITCH CONTROL ENCLOSURE. HOUSES (2) PRESSURE SWITCHES, RELAYS, TIMER AND TRANSFORMER.
- 28 EXISTING ISOLATION VALVES FLUSH WITH GRADE. PROTECT IN PLACE. CONTRACTOR TO FIELD VERIFY CONNECTIONS.
- 29 R&D EXISTING PULL BOX FOR POWER/CONTROL WIRING TO (E) PRESSURE SWITCH CONTROL ENCLOSURE.
- 30 ABANDON IN PLACE EXISTING UG PVC CHLORINATION LINE AS NEEDED, OR R&D IF IT CONFLICTS WITH NEW CARRIER PIPE. LOCATION ASSUMED. CONTRACTOR TO FIELD VERIFY.

3/4" IP W/CAP STAMPED LS4823

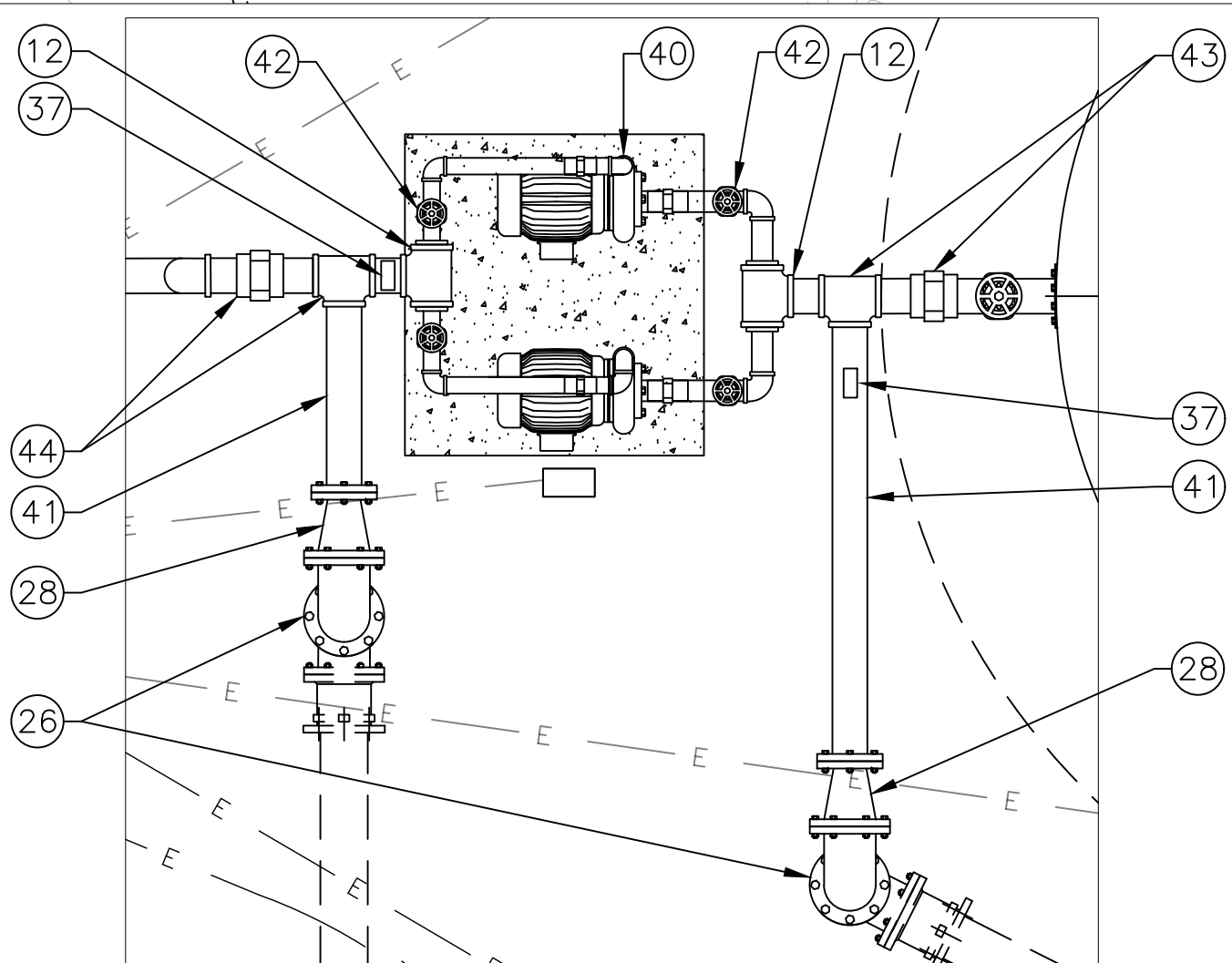
FRIANT ROAD

TO DISTRIBUTION

DESIGNED: RS		DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 No. C76724 Exp 12/31/24 CIVIL STATE OF CALIFORNIA	PROJECT			DEPARTMENT OF PUBLIC WORKS AND PLANNING			
DRAWN: RS		DATE: 01/23	RESIDENT ENGINEER		NO SCALE			CSA 44C			WATER FACILITY IMPROVEMENTS		EXISTING DISTRIBUTION SITE	
CHECKED: SA		DATE: 03/23						ROAD NO. N/A			BRIDGE NO. N/A		DRAWING NO. 11323	
													SHEET NO. 3	
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.												TOTAL 12		



- 10 POINT OF CONNECTION FOR (N) STORAGE TANK SUPPLY FROM WELLS. CONTRACTOR TO POTHOLE FOR LOCATION. TRACER WIRE INSTALLED AT WELLS. COMPLETE CONNECTION ONCE NEW STORAGE TANK IS DISINFECTED, APPROVED BY DDW AND OPERATIONAL.
- 11 CUT AND CAP WELL SUPPLY TO (E) TANK FOR (N) STORAGE TANK, ENSURING BOTH WELLS CAN STILL SUPPLY NEW TANK, ONCE NEW TANK IS DISINFECTED, APPROVED BY DDW AND OPERATIONAL.
- 12 POINTS OF CONNECTION FOR BOOSTER PUMPS BETWEEN (N) STORAGE TANK AND (N) HYDROPNEUMATIC TANK. CONTRACTOR TO MODIFY INLET AND OUTLET CONFIGURATIONS TO ALLOW CONTINUOUS OPERATION OF WATER FACILITY.
- 13 R&D EXISTING HYDROPNEUMATIC TANK, INCLUDING FOUNDATION, ISOLATION VALVES, UP TO 6X6" TEE, AND BOOSTER PUMP TEE'D OUTLET.
- 14 POINT OF DISCONNECTION FOR (E) HYDROPNEUMATIC TANK. INSTALL BLIND FLANGE ON REMAINING 6X6" TEE ONCE (N) HYDROPNEUMATIC TANK IS OPERATIONAL.
- 15 R&D (E) 18K GALLON WATER STORAGE TANK, INCLUDING FOUNDATION, VALVES, PRESSURE SWITCH PANEL, AND PIPE UP TO BOOSTER PUMPS AND WELL SUPPLY LINE. SEE NOTE 11, THIS PAGE. R&D CHLORINATION ISOLATION VALVE, VAULT AND RISER. ABANDON (E) CHLORINATION LINE IN PLACE UNLESS IT INTERFERES WITH (N) CARRIER PIPE.
- 16 (N) CONCRETE FOOTINGS FOR (N) HYDROPNEUMATIC TANK.
- 17 (N) STORAGE TANK ACCESS LADDER.
- 18 (N) 6" DI RESILIENT WEDGE GATE VALVES WITH HANDWHEEL.
- 19 (N) STORAGE TANK WATER LEVEL INDICATOR.
- 20 (N) STORAGE TANK OVERFLOW PIPE WITH 2'X2'X6" CONCRETE PAD.
- 21 (N) ±80LF UG 2" SCH 80 PVC CONDUIT TO STORAGE TANK WATER LEVEL CONTROL PANEL.
- 22 ABANDON IN PLACE EXISTING ELECTRICAL CONDUIT. LOCATION ASSUMED. R&D WIRING INSIDE ELECTRICAL CONDUIT. CONTRACTOR TO UTILIZE EXISTING PUMP/COMPRESSOR CONTROL LOGIC FOR NEW HYDROPNEUMATIC PRESSURE AND STORAGE TANK LEVEL CONTROL PANELS.
- 23 (N) TANK CONCRETE FOUNDATION
- 24 (N) 24' DOUBLE ACCESS GATE. SEE DETAILS AND SPECS. MODIFY EXISTING FENCE AS NEEDED
- 25 (N) 4" DI RESILIENT WEDGE GATE VALVES WITH OPERATOR WHEEL.
- 26 (N) 6" DI 90 DEG FLANGED ELBOWS.
- 27 (N) 4" DI 90 DEG FLANGED ELBOW.
- 28 (N) 4X6" DI FLANGED REDUCER.
- 29 (N) 6" DI FLANGED TEE WITH BLIND FLANGE. ORIENT BRANCH OF OUTLET TEE NORTH, AND INLET TEE WEST.
- 30 INSTALL NEW ±40 LF OF 2" SCHEDULE 80 CPVC CARRIER PIPE FOR (N) 1/2" PTFE CHLORINATION LINE. PROVIDE STUBOUT PER DETAIL AND CONNECT CHLORINATION TUBING TO EXISTING CHLORINATION LINE WITHIN SHED.
- 31 PIPE SADDLE FOR CHLORINATION CONNECTION, 1" OUTLET. SEE DETAIL
- 32 3" DRAIN OUTLET, FLANGED GATE VALVE WITH BLIND CAP
- 33 (N) DRAINAGE SWALE, DIAMETER TRANSITIONS FROM 9' ADJACENT TO FENCE TO 10'
- 34 STORAGE TANK PRESSURE SWITCH CONTROL ENCLOSURE, SUPPLIED BY COUNTY. COUNTY TO MOUNT ENCLOSURE, WIRE BETWEEN (E) PUMP PANELS AND (N) PANEL. CONTRACTOR TO INSTALL CONDUIT B/W (N) PANEL & (N) PRESSURE SWITCHES.
- 35 (N) STORAGE TANK 24" DIAMETER HINGED ACCESS
- 36 (N) 6" DI RESILIENT WEDGE GATE VALVES WITH OPERATOR WHEEL.
- 37 (N) PRESSURE GAUGE WITH ISOLATION VALVES; PUMP OUTLET TYPE 5; PUMP INLETS TYPE 1
- 38 (N) 4-1/2" TYPE 1 PRESSURE GAUGE WITH GAUGE ISOLATION VALVE.
- 39 (N) 4-1/2" TYPE 2 PRESSURE GAUGE WITH GAUGE ISOLATION VALVE
- 40 (E) PEERLESS MODEL C820A PUMPS TO REMAIN
- 41 (N) 4" DUCTILE IRON PIPE, FLANGED ADAPTED TO NPT
- 42 (E) PUMP ISOLATION VALVES TO REMAIN
- 43 INSTALL (N) TEE AND UNION AS NEEDED TO ALLOW CONTINUOUS SUPPLY OF WATER UNTIL NEW STORAGE TANK IS READY TO USE. DO NOT CONNECT PIPE TO NEW TANK UNTIL TANK HAS BEEN DISINFECTED AND BACTERIAL TESTS HAVE BEEN REVIEWED AND APPROVED BY THE DIVISION OF DRINKING WATER. ONCE APPROVED, DISCONNECT (E) STORAGE TANK AT TEE AND PLUG LEAVING (N) TEE IN PLACE. REFER TO BID ITEM CLARIFICATION SHEET FOR ADDITIVE BID ITEMS.
- 44 INSTALL (N) TEE AND UNION AS NEEDED TO ALLOW CONTINUOUS SUPPLY OF WATER UNTIL NEW HYDROPNEUMATIC TANK IS READY TO USE. DO NOT CONNECT PIPE TO NEW TANK UNTIL TANK HAS BEEN DISINFECTED AND BACTERIAL TESTS HAVE BEEN REVIEWED AND APPROVED BY THE DIVISION OF DRINKING WATER. ONCE APPROVED, DISCONNECT (E) HYDROPNEUMATIC TANK AT TEE AND PLUG LEAVING (N) TEE IN PLACE. REFER TO BID ITEM CLARIFICATION SHEET FOR ADDITIVE BID ITEMS.



A
4 EXISTING BOOSTER PUMP
POINTS OF CONNECTION

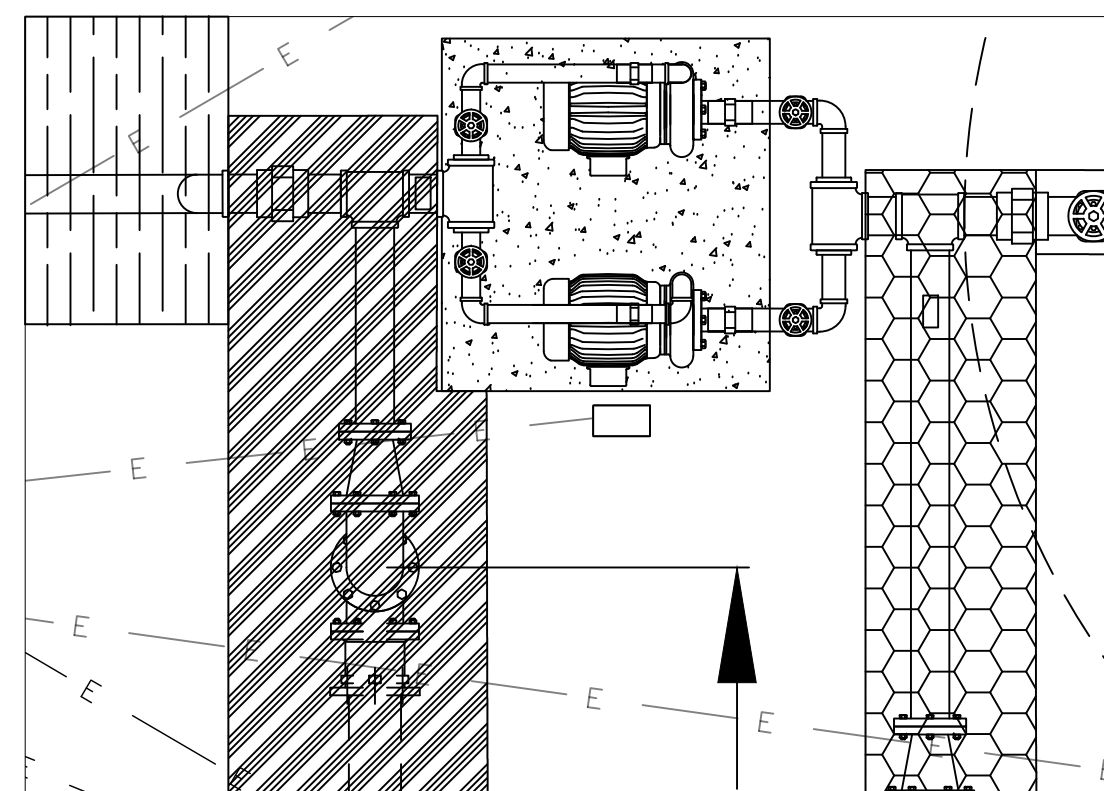
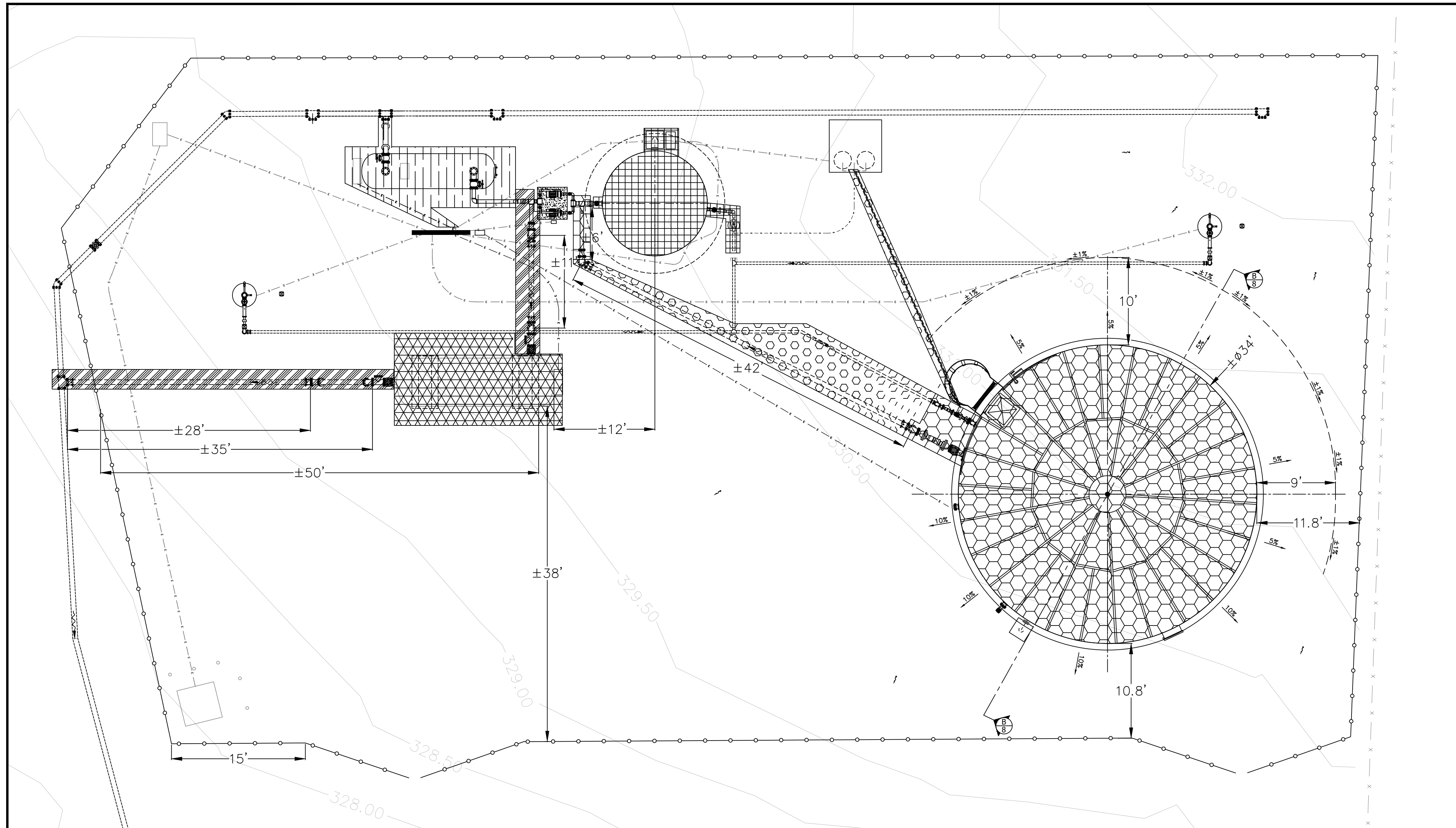
GENERAL NOTES

1. PROVIDE 12" CLEARANCE BETWEEN WATER PIPE CROSSINGS.
2. REFER TO ADDITIVE BID ITEMS PAGE FOR EXTENT OF BID ITEM.
3. COAT ABOVE GROUND PIPING PER SPECIFICATIONS.
4. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS OF PIPING AND EQUIPMENT AND ADJUST PIPING AND EQUIPMENT LAYOUT DIMENSIONS AS NECESSARY. ADJUSTMENTS TO LAYOUT DIMENSIONS SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
5. CONTRACTOR SHALL FOLLOW ALL SITE PREPARATION RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.
6. CONTRACTOR SHALL FILL AND PRELOAD THE WATER STORAGE AND HYDROPNEUMATIC TANKS FOR THREE (3) WEEKS TO ALLOW SETTLING PER GEOTECHNICAL RECOMMENDATIONS. REFER TO SPECIFICATIONS FOR SUPPLY WATER SOURCE.
7. CONTRACTOR SHALL TEST THE INSTALLED SYSTEM FOR THE FOLLOWING:
 - 7.1. CONFIRM PROPER OPERATION OF BOTH BOOSTER PUMPS AT LOW AND HIGH HYDROPNEUMATIC TANK PRESSURES
 - 7.2. CONFIRM PROPER OPERATION OF GROUNDWATER WELLS AT HIGH, LOW AND LOW-LOW WATER CONDITIONS IN THE WATER STORAGE TANK

NOTES

1. INSTALL NEW 80,000 GAL BOLTED WATER STORAGE TANK.
2. INSTALL NEW UG ±42LF, 6", DR18, CL235, C900 PVC PIPE.
3. INSTALL NEW UG ±25LF, 4", DR18, CL235, C900 PVC PIPE.
4. INSTALL NEW UG ±11LF, 6", DR18, CL235, C900 PVC PIPE.
5. INSTALL NEW 3,000 GAL HYDROPNEUMATIC TANK, COMPLETE WITH SIGHT GLASS, CONTROLS, COMPRESSOR, PRESSURE SWITCHES AND APPROPRIATE RELIEF, ISOLATION, AND VENT VALVES. CONTRACTOR TO ADJUST INLET AND OUTLET PIPING AS NEEDED BASED ON TANK MFR CONFIGURATION.
6. INSTALL NEW UG ±35LF, 6", DR18, CL235, C900 PVC PIPE.
7. INSTALL NEW 6X6" DI TEE WITH MJ ADAPTER. CONTRACTOR TO POTHOLE TO CONFIRM WATER MAIN LOCATION IF TRACER WIRE NOT INSTALLED.
8. NEW 6" FLEXIBLE EXPANSION JOINT.
9. NEW 4" FLEXIBLE EXPANSION JOINT.

DESIGNED: RS	DATE 01/23	RECORD DRAWING	Scale in Feet		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING			
DRAWN: RS	01/23	RESIDENT ENGINEER	NO SCALE	 SUPERVISING ENGINEER	CSA 44C WATER FACILITY IMPROVEMENTS		PROPOSED IMPROVEMENTS			
CHECKED: SA	03/23							2/29/24 DATE	ROAD NO. N/A	BRIDGE NO. N/A
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.								 No. C76724 Exp 12/31/24 CIVIL STATE OF CALIFORNIA	DRAWING NO. 11323	SHEET NO. 4



**BOOSTER PUMP
BID ITEM SCOPE CLARIFICATION**

GENERAL NOTES

1. THIS SHEET IS A GENERAL ILLUSTRATION OF THE BID ITEM DESCRIPTIONS ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INCLUDE THE COST FOR FURNISHING ALL LABOR, TOOLS, EQUIPMENT & MATERIALS, SHOP DRAWINGS, ALONG WITH ALL ASSOCIATED APPURTENANCES REQUIRED TO COMPLETE THE WORK AS SHOWN IN THE ENTIRE SET OF PLANS AND SPECIFICATIONS TO PROVIDE A FULLY FUNCTIONAL WATER SYSTEM, & NO FURTHER COMPENSATION SHALL BE PAID THEREFOR.

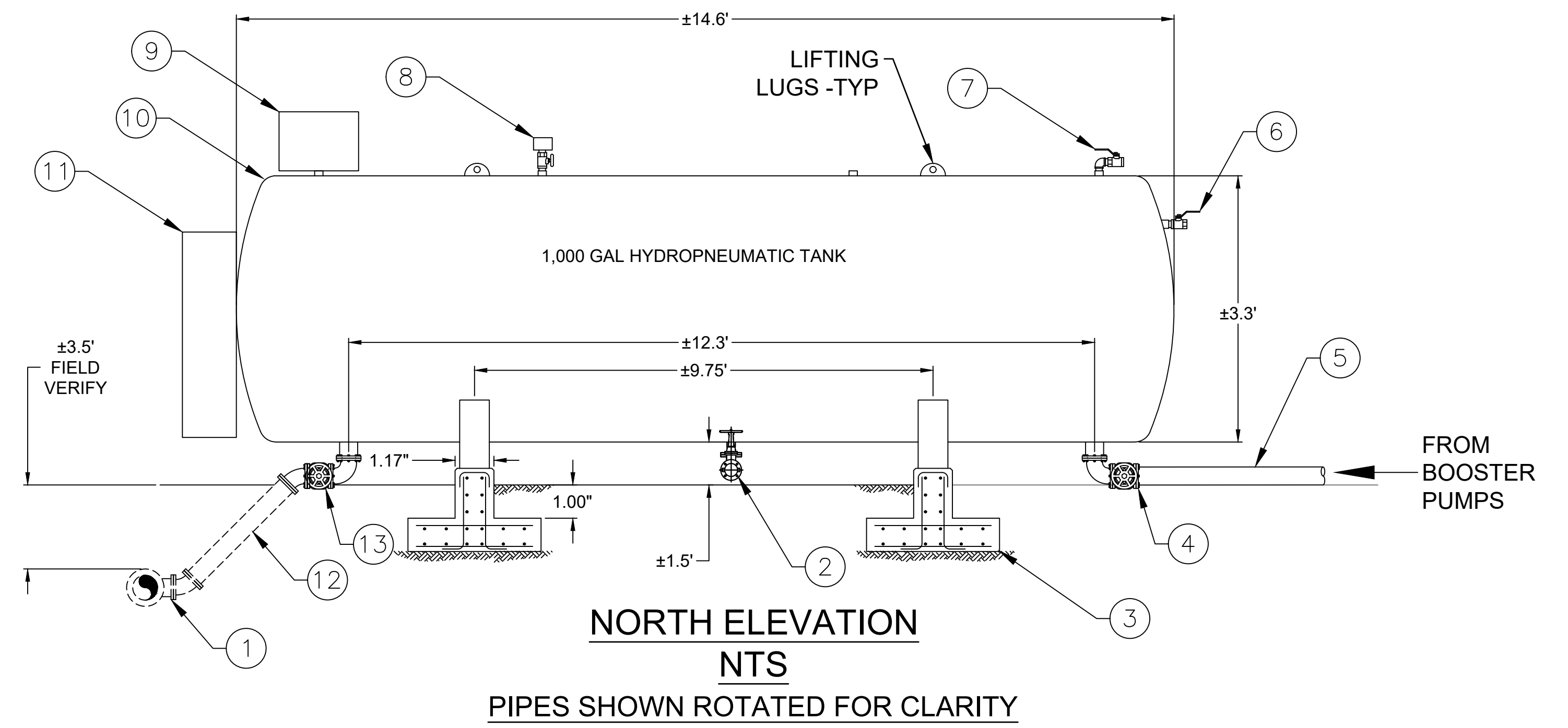
HATCH LEGEND

	BID ITEM 7 - SITE PIPING, VALVES & APPURTENANCES (STORAGE TANK)
	BID ITEM 8 - STORAGE TANK
	ADDITIVE BID ITEM 12 & 13 - HYDROPNEUMATIC TANK & APPURTENANCES
	ADDITIVE BID ITEM 14 - SITE PIPING, VALVES & APPURTENANCES (HYDROPNEUMATIC TANK)
	ADDITIVE BID ITEM 15 - R&D EXISTING HYDROPNEUMATIC TANK
	ADDITIVE BID ITEM 16 - R&D EXISTING 18,000 GALLON STORAGE TANK

DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE		PROJECT		DEPARTMENT OF PUBLIC WORKS AND PLANNING	
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	NO SCALE	CSA 44C			WATER FACILITY IMPROVEMENTS		PROPOSED IMPROVEMENTS	
CHECKED: SA	DATE: 03/23								BID ITEM SCOPES	
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.										
						ROAD NO. N/A	BRIDGE NO. N/A	DRAWING NO. 11323	SHEET NO. 5	TOTAL 12

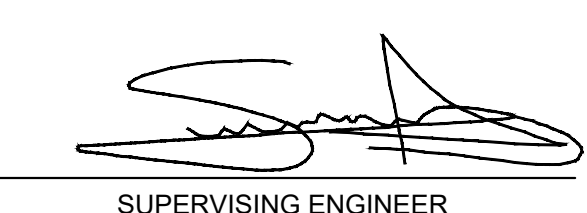
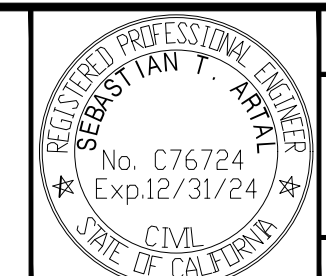

NOTES

- 1 EXISTING 6X6" DI TEE TO REMAIN. BLIND FLANGE TEE CONNECTION ONCE NEW TANK IS IN SERVICE..
- 2 R&D EXISTING TANK DRAIN VALVE.
- 3 R&D EXISTING CONCRETE FOOTINGS. FILL WITH NATIVE SOIL AND COMPACT TO ADJACENT GRADE.
- 4 R&D EXISTING TANK INLET ISOLATION VALVE.
- 5 R&D EXISTING 6" GALV PIPE. PIPE IS EXPOSED AND AT GRADE.
- 6 R&D TANK VENT
- 7 SECONDARY COMPRESSOR SUPPLY. SECONDARY COMPRESSOR HOUSED IN OPERATOR SHED.
- 8 R&D TANK RELIEF VALVE.
- 9 R&D EXISTING TANK MOUNTED AIR COMPRESSOR.
- 10 R&D EXISTING 1,000 GALLON HYDROPNEUMATIC TANK.
- 11 R&D NEMA CABINET FOR SIGHT GLASS AND PRESSURE SWITCHES.
- 12 R&D 6" DI PIPE UP TO 6X6" TEE. SEE ITEM 1 ABOVE.
- 13 R&D TANK OUTLET VALVE.

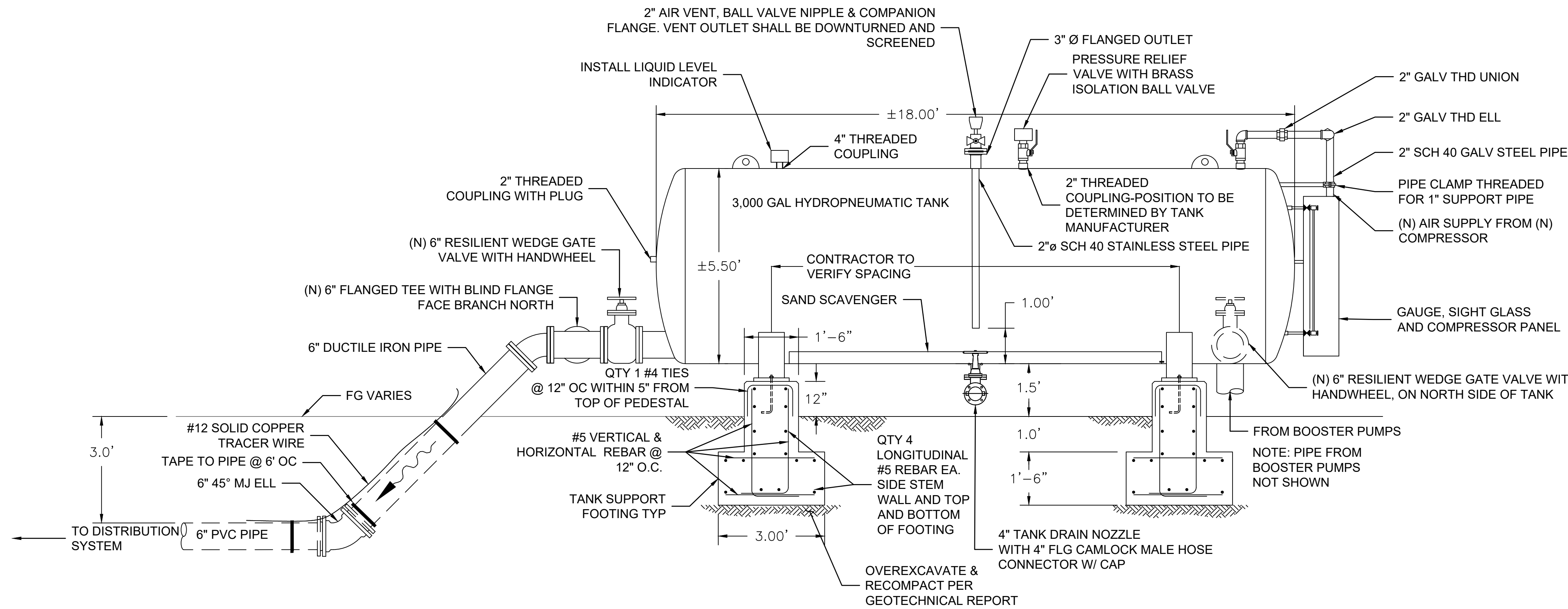


NOTES

- 1. ALL ITEMS NOT DESIGNATED TO BE REMOVED ARE TO BE PROTECTED IN PLACE.
- 2. LOCATION OF UG FACILITIES SHOWN ARE APPROXIMATE. EXACT DEPTH AND LOCATION ARE UNKNOWN. FIELD LOCATE PRIOR TO START OF CONSTRUCTION.
- 3. CONTRACTOR TO 1) INSTALL, DISINFECT AND COMMISSION NEW TANK & 2) ONCE NEW TANK IS COMMISSIONED, REMOVE & DISPOSE OF EXISTING HYDROPNEUMATIC TANK. CONTRACTOR SHALL PROVIDE MEANS & METHOD TO PROVIDE PRESSURIZED POTABLE WATER TO DISTRIBUTION SYSTEM UNTIL NEW TANK CAN BE DISINFECTED & COMMISSIONED.
- 4. CONTRACTOR TO VERIFY ALL TANK CONTROLS WITH EXISTING WELL AND BOOSTER PUMP CONTROL PANEL OPERATION. INSTALL NEW SWITCHES, CONTROLS, ETC. AS MENTIONED ABOVE CONSISTENT WITH CURRENT OPERATIONS AND SYSTEM PRESSURES.

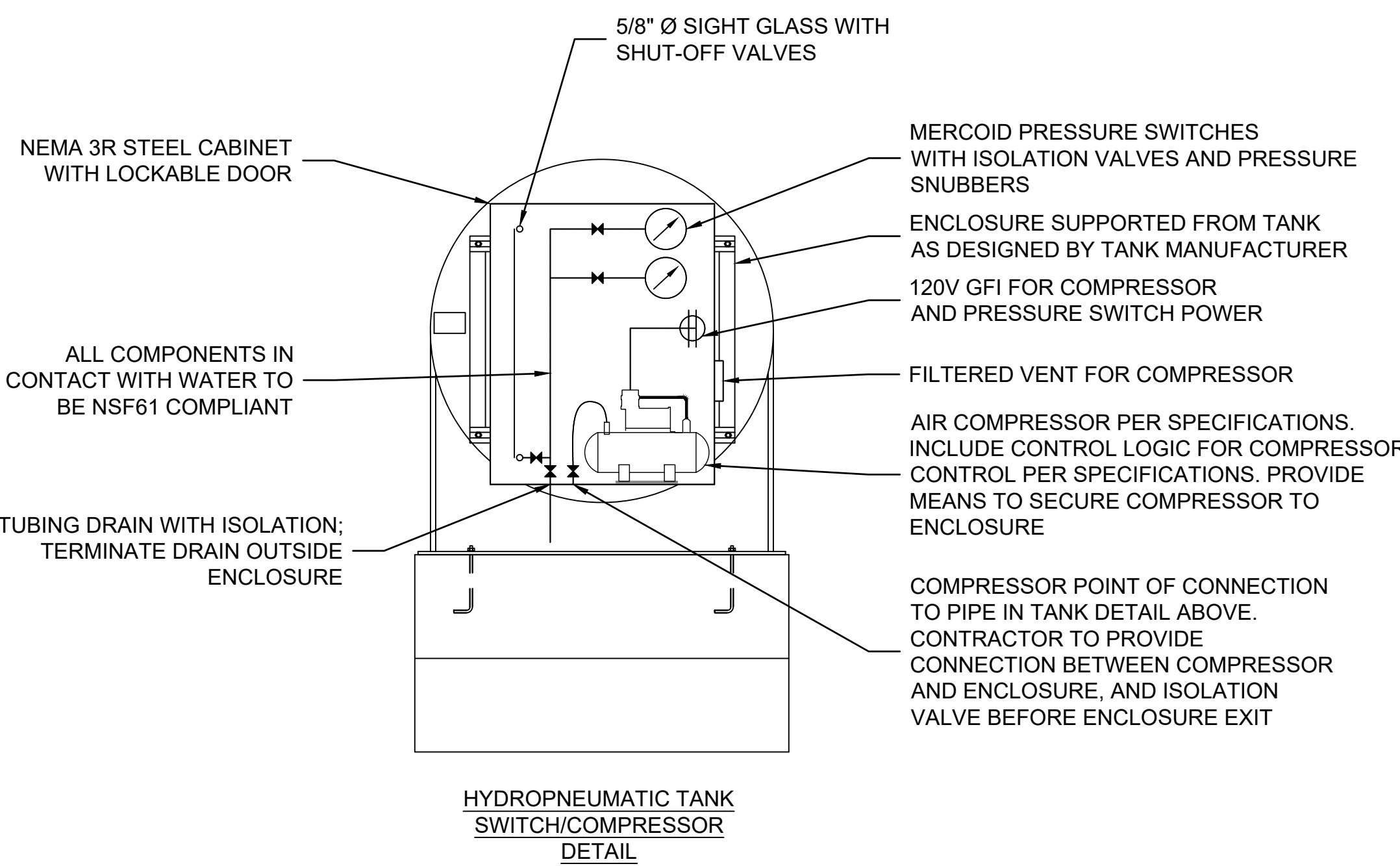
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DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	NO SCALE	CSA 44C			WATER FACILITY IMPROVEMENTS		EXISTING HYDROPNEUMATIC TANK DETAILS
CHECKED: SA	DATE: 03/23			ROAD NO. N/A			BRIDGE NO. N/A		DRAWING NO. 11323 SHEET NO. 6 TOTAL 12

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.

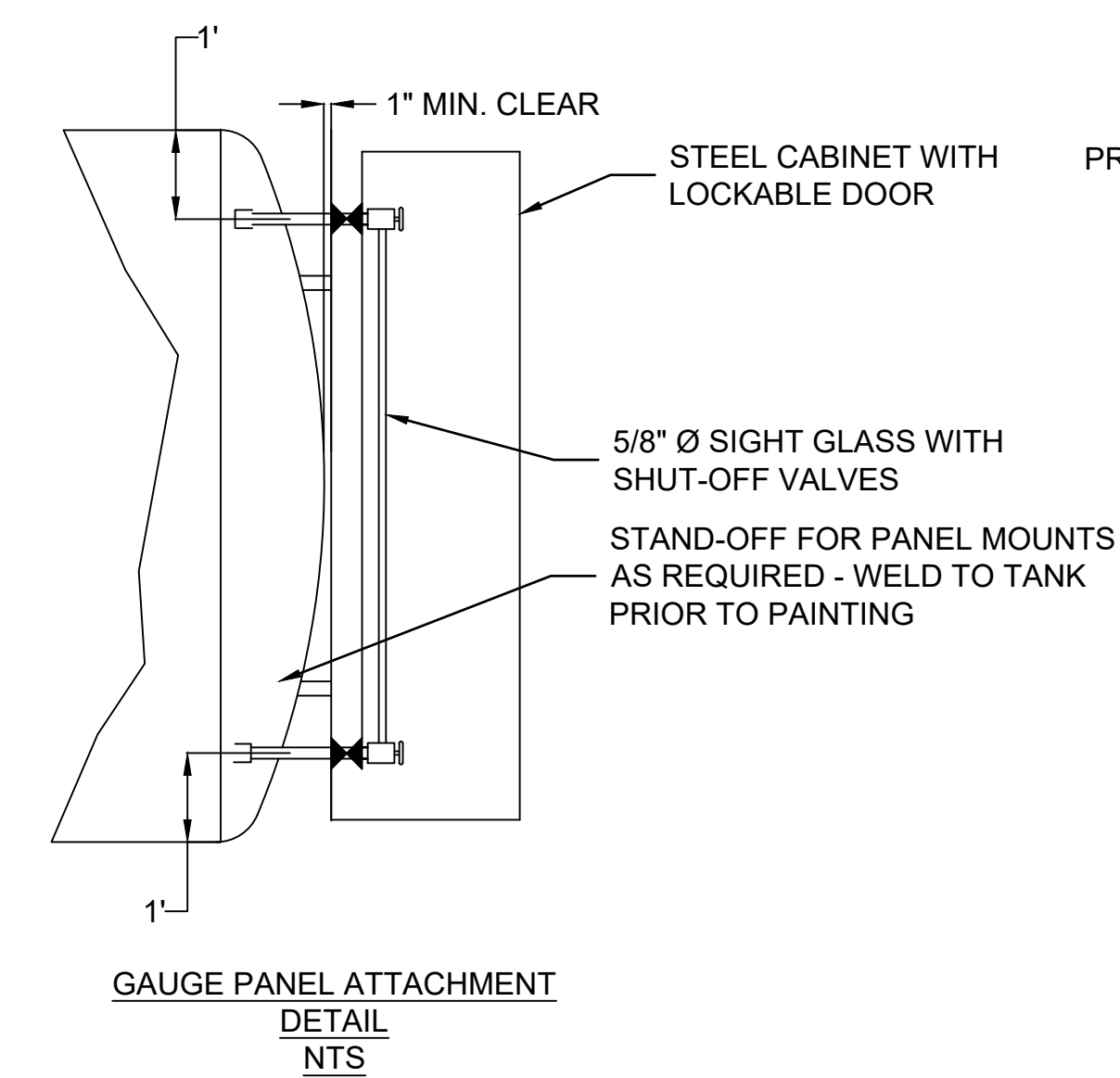


NORTH ELEVATION
NTS

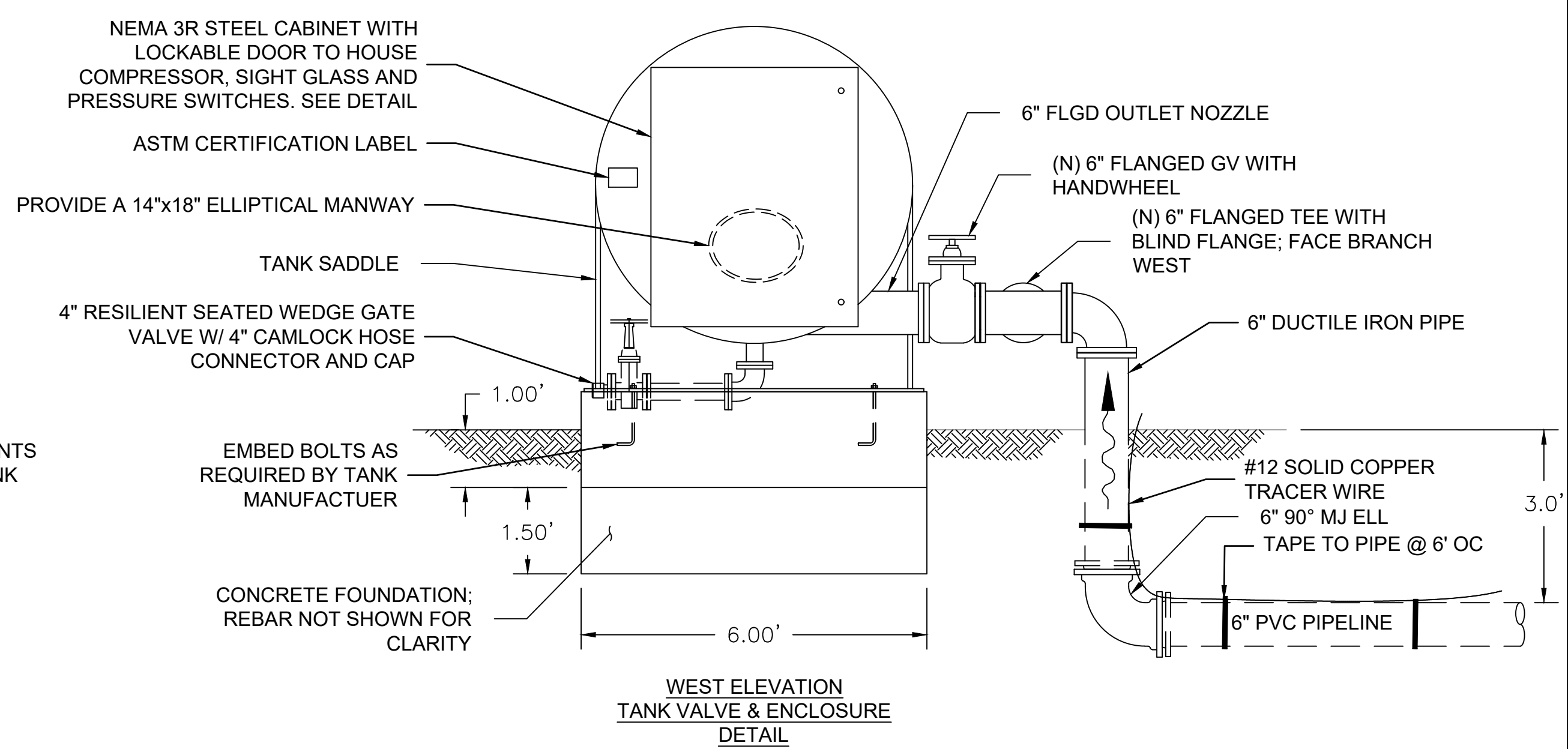
- NOTES**
1. VERIFY DIMENSIONS W/ TANK SUPPLIER PRIOR TO ORDERING TANK.
 2. THE HYDROPNEUMATIC TANK MANUFACTURER IS RESPONSIBLE FOR THE DESIGN OF THE ANCHOR BOLT PATTERN AND THE TANK SADDLE BASEPLATES, ANCHOR BOLT SIZE, TYPE, AND EMBEDMENT PER TANK MANUFACTURER'S REQUIREMENTS AND SHALL BE DESIGNED TO MEET SEISMIC REQUIREMENTS.
 3. USE MEGALUG RESTRAINED JOINTS AT ALL MJ FITTINGS.
 4. WRAP ALL EXPOSED PIPING & CONDUIT PIPE WITH CHRISTY PIPE TAPE OR EQUIVALENT METHOD.
 5. CONTROL PANEL LOCATION TO BE DETERMINED DURING SHOP DRAWING SUBMITTAL.
 6. INSULATING FLANGE GASKET KIT REQUIRED BETWEEN DISSIMILAR MATERIAL FOR CORROSION PROTECTION.
 7. AIR COMPRESSOR CONNECTIONS SHALL BE COORDINATED WITH AIR COMPRESSOR MANUFACTURER.
 5. VALVES, SOLENOIDS, TANK CONTROLS, ETC. TO BE RATED FOR EXPOSURE TO RAIN, AND DUST.
 6. DISINFECT TANK PER AWWA STANDARD C652, INCLUDING DECHLORINATION AND BACTERIOLOGICAL TESTING BEFORE COMMISSIONING THE TANK.
 7. CONTRACTOR TO COORDINATE NEW TANK LEVEL AND PRESSURE SETTINGS WITH OPERATOR.
 8. CONTRACTOR TO FOLLOW ALL SITE PREPARATION, ENGINEERING FILL AND COMPACTION RECOMMENDATIONS OUTLINED IN GEOTECHNICAL REPORT.



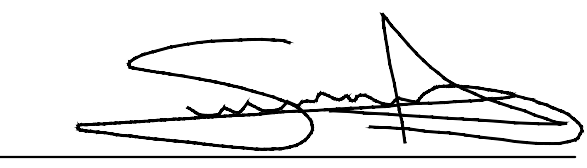


HYDROPNEUMATIC TANK
SWITCH/COMPRESSOR
DETAIL



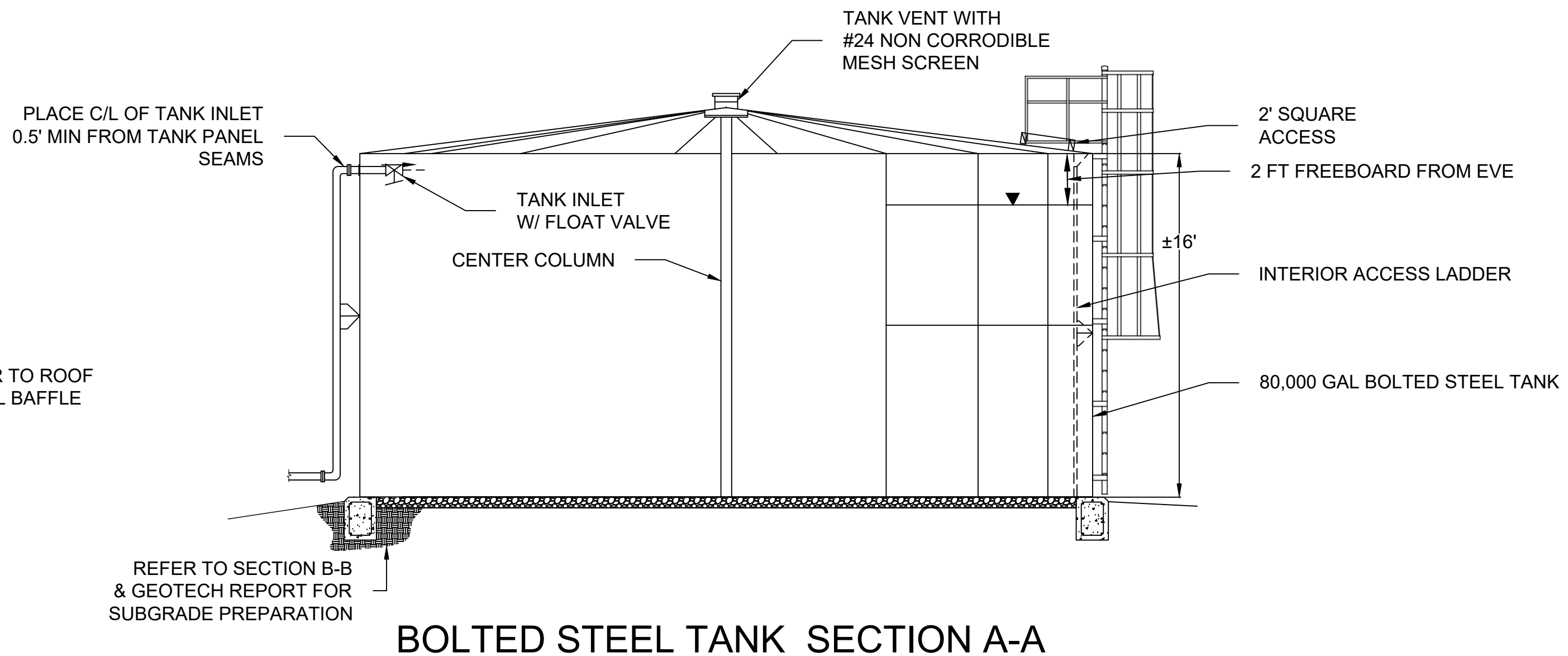
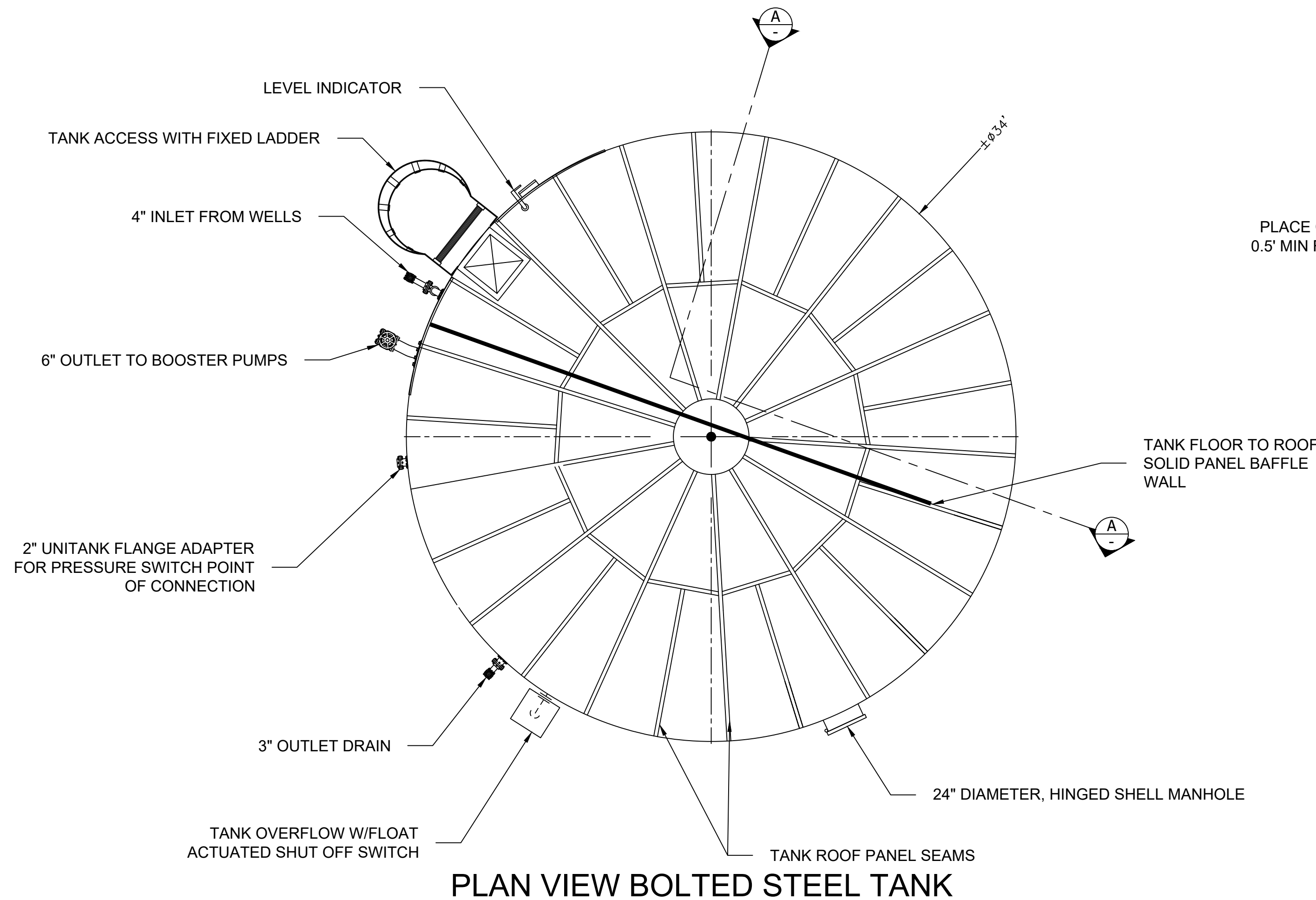
GAUGE PANEL ATTACHMENT
DETAIL
NTS



WEST ELEVATION
TANK VALVE & ENCLOSURE
DETAIL

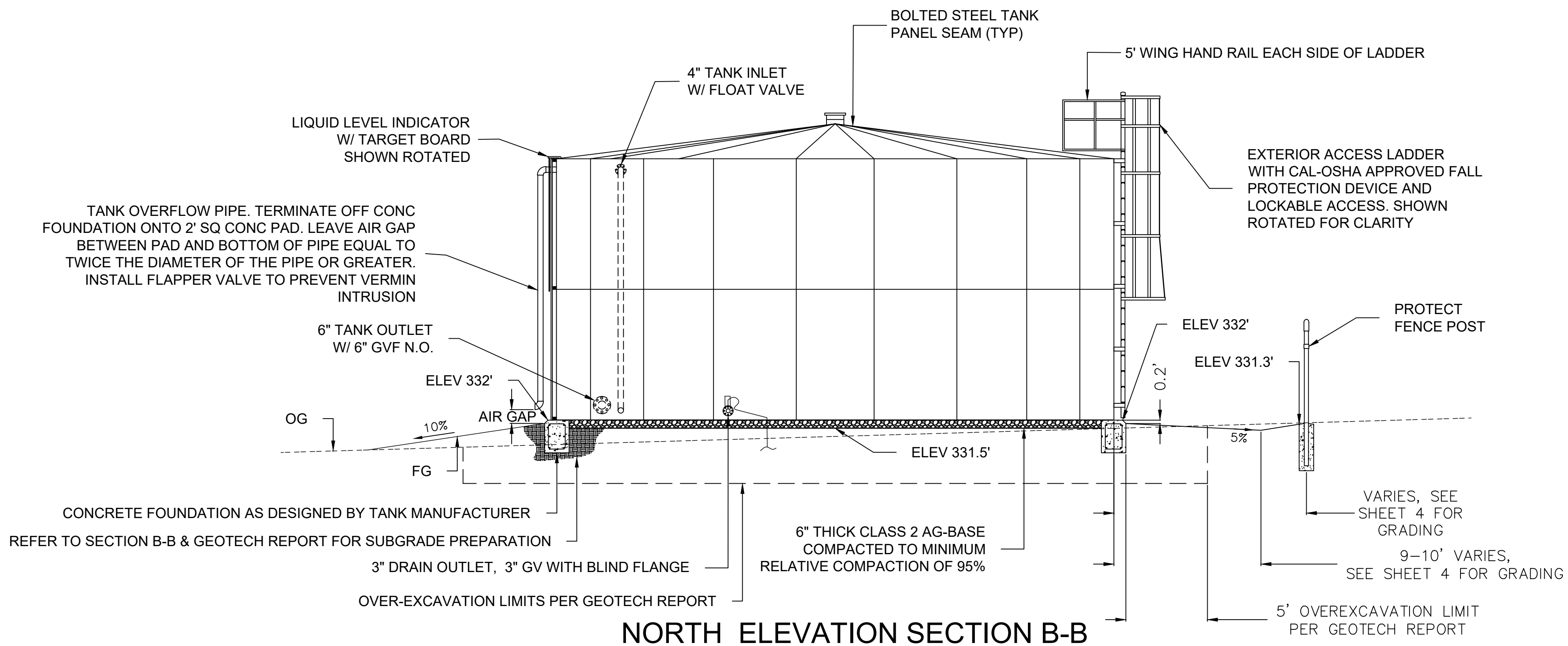
DESIGNED: RS		DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 PROJECT CSA 44C WATER FACILITY IMPROVEMENTS	 DEPARTMENT OF PUBLIC WORKS AND PLANNING NEW HYDROPNEUMATIC TANK DETAILS					
DRAWN: RS		DATE: 01/23			NO SCALE				ROAD NO. N/A	BRIDGE NO. N/A			
CHECKED: SA		DATE: 03/23									DRAWING NO. 11323	SHEET NO. 7	TOTAL 12

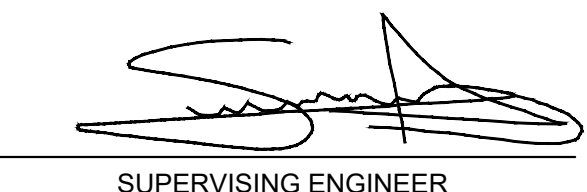


FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.

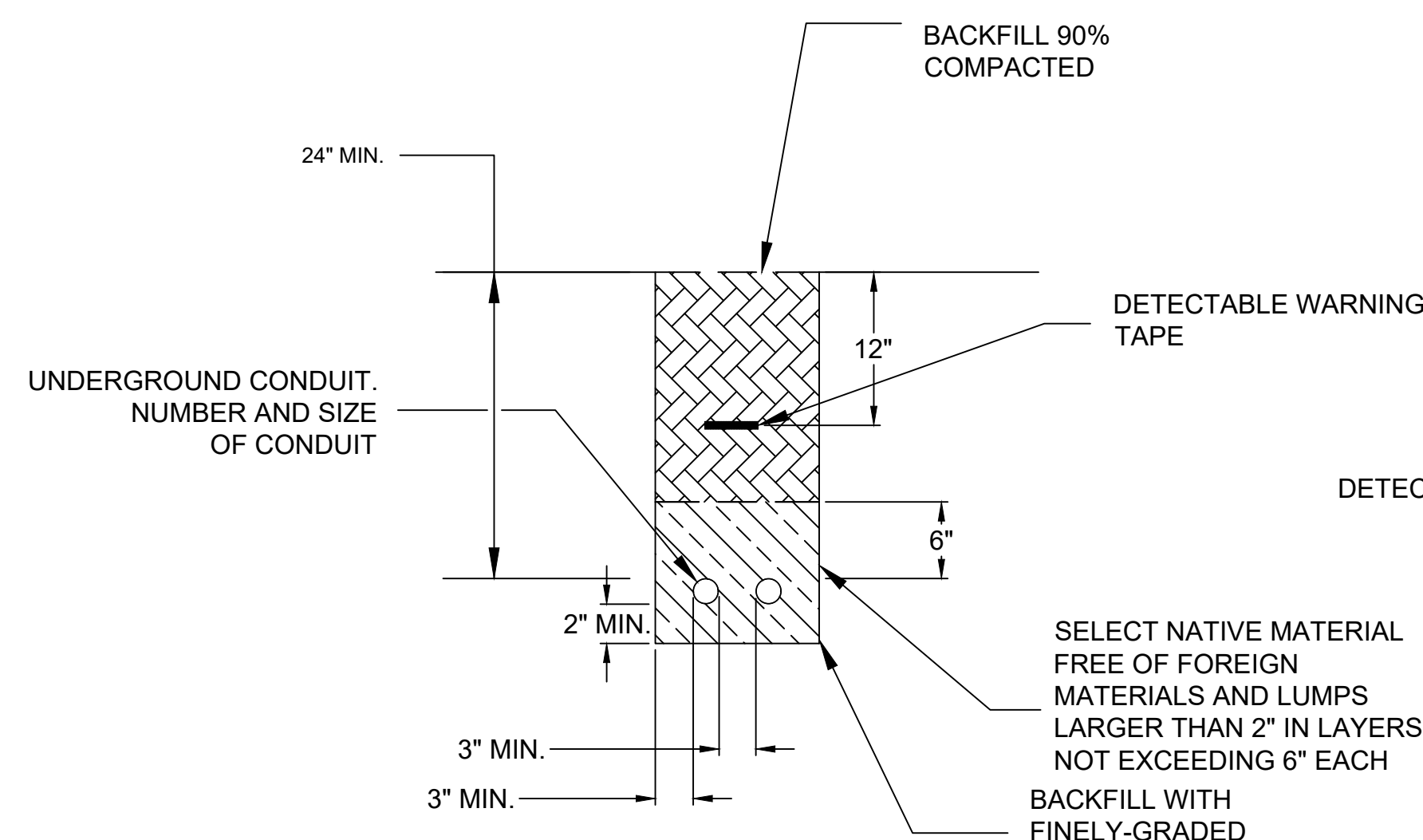


NOTES:

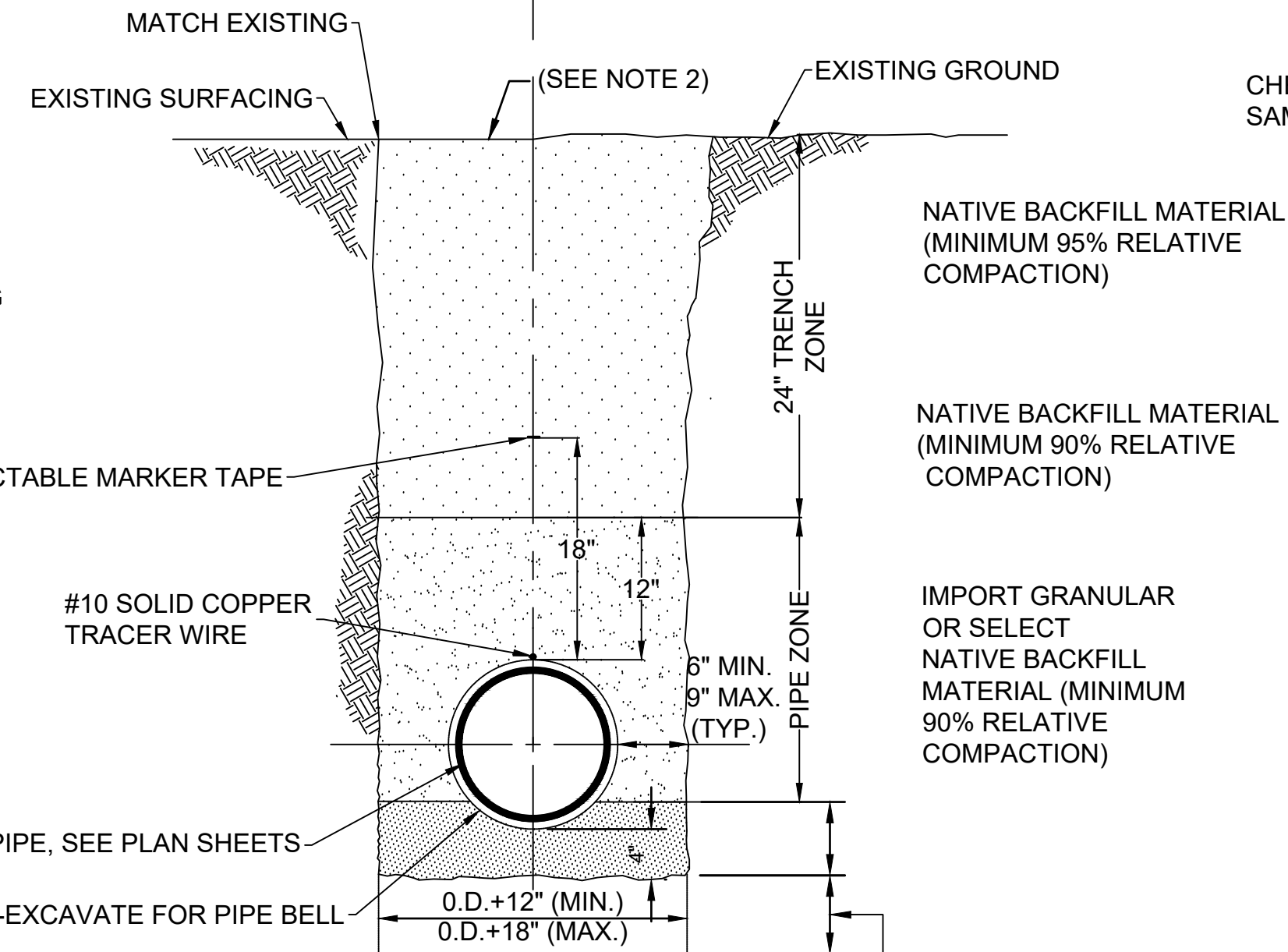
1. ORIENTATION OF TANK ACCESSORIES, INLETS, DRAINS AND OUTLETS ARE DIAGRAMMATIC ONLY. PREFERRED ORIENTATION IS DEPICTED ON THE PROPOSED IMPROVEMENTS PAGE.
2. CONNECT BAFFLE WALL TO THE TANK WALL BETWEEN THE TANK INLET AND OUTLET, AND EXTEND A MIN DISTANCE OF 3/4 OF THE TANK DIA.
3. EXTEND BAFFLE WALL HEIGHT A MIN OF 0.5' FOOT ABOVE TANK INLET.
4. LOCATE INLET FLOAT VALVE IMMEDIATELY ADJACENT TO THE ACCESS OPENING.
5. SLOPE FG AWAY FROM EQUIPMENT SLAB AT 5% FOR A MIN DISTANCE OF 10' OR TO CATCH POINT OF THE FG AROUND THE TANK.
6. TANK VENT TO BE EQUIPPED WITH #24 MESH, NON-CORRODIBLE SCREEN, PER EPA.
7. ALL CHEMICALS USED IN THE WATER SYSTEM, INCLUDING CHLORINE SHALL BE CERTIFIED UNDER NSF/ANSI STANDARDS 60.
8. PROVIDE INTERNAL GALVANIC/PASSIVE SACRIFICIAL ANODE, CATHODIC PROTECTION PER SPECIFICATIONS.
9. SOILS CLASSIFIED AS "HIGHLY CORROSIVE" PER GEOTECHNICAL REPORT.
10. TANK BOTTOM TO BE VACUUM TESTED PRIOR TO WATER TEST.
11. ALL MATERIALS THAT COME INTO CONTACT WITH WATER SHALL BE LEAD FREE AND NSF/ANSI STANDARD 61 CERTIFIED TO DEMONSTRATE MATERIAL DOES NOT LEACH ANY CONTAMINANTS INTO THE DRINKING WATER.
12. CONTRACTOR SHALL FILL AND PRELOAD THE WATER STORAGE TANK FOR THREE (3) WEEKS TO ALLOW SETTLING PER GEOTECHNICAL RECOMMENDATIONS. REFER TO SPECIAL PROVISIONS SECTION 102-1.03A WATER SUPPLY FOR TANK PRELOADING.



DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 PROJECT CSA 44C WATER FACILITY IMPROVEMENTS ROAD NO. N/A BRIDGE NO. N/A	 DEPARTMENT OF PUBLIC WORKS AND PLANNING NEW STORAGE TANK DETAILS DRAWING NO. 11323 SHEET NO. 8 TOTAL 12
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	NO SCALE				
CHECKED: SA	DATE: 03/23						
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							



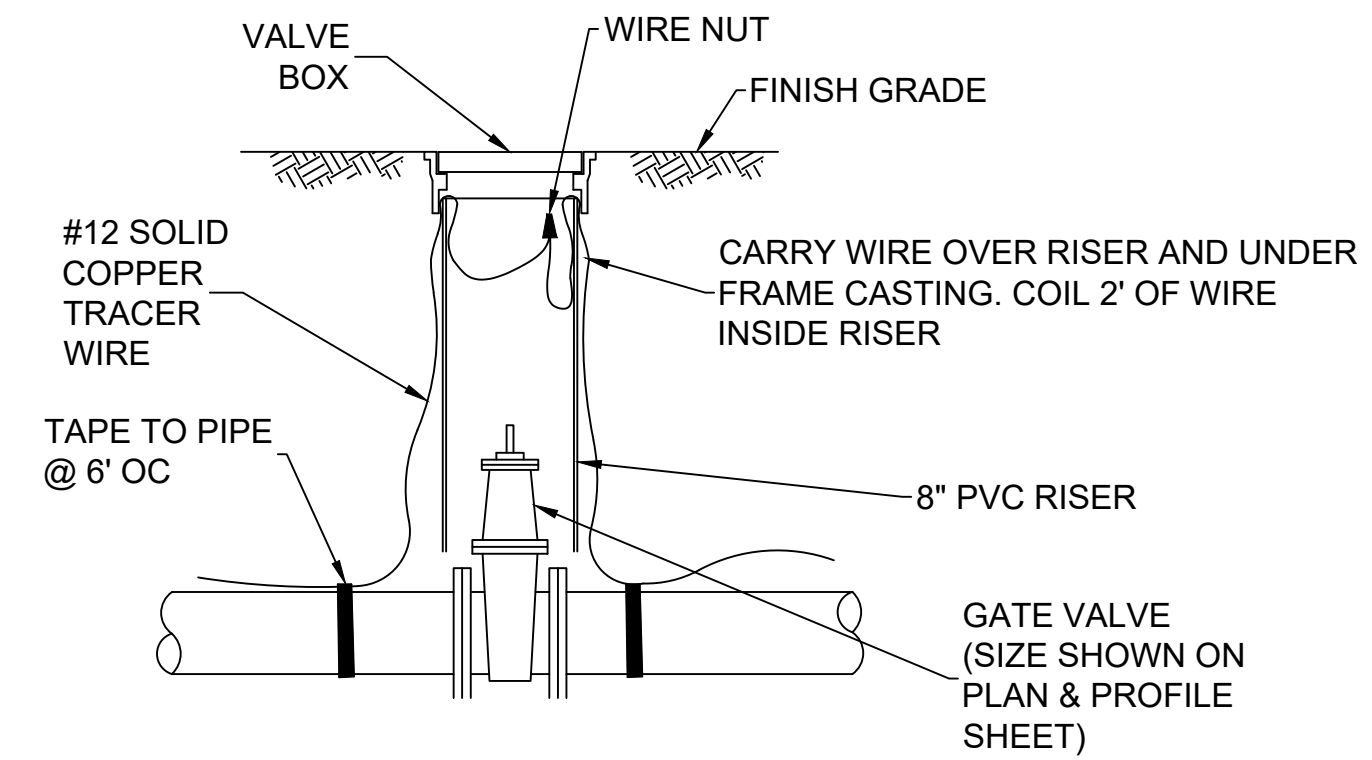
CONDUIT TRENCH BACKFILL



6" MINIMUM OVER EXCAVATION IN UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER, AND REPLACE WITH IMPORT MATERIAL

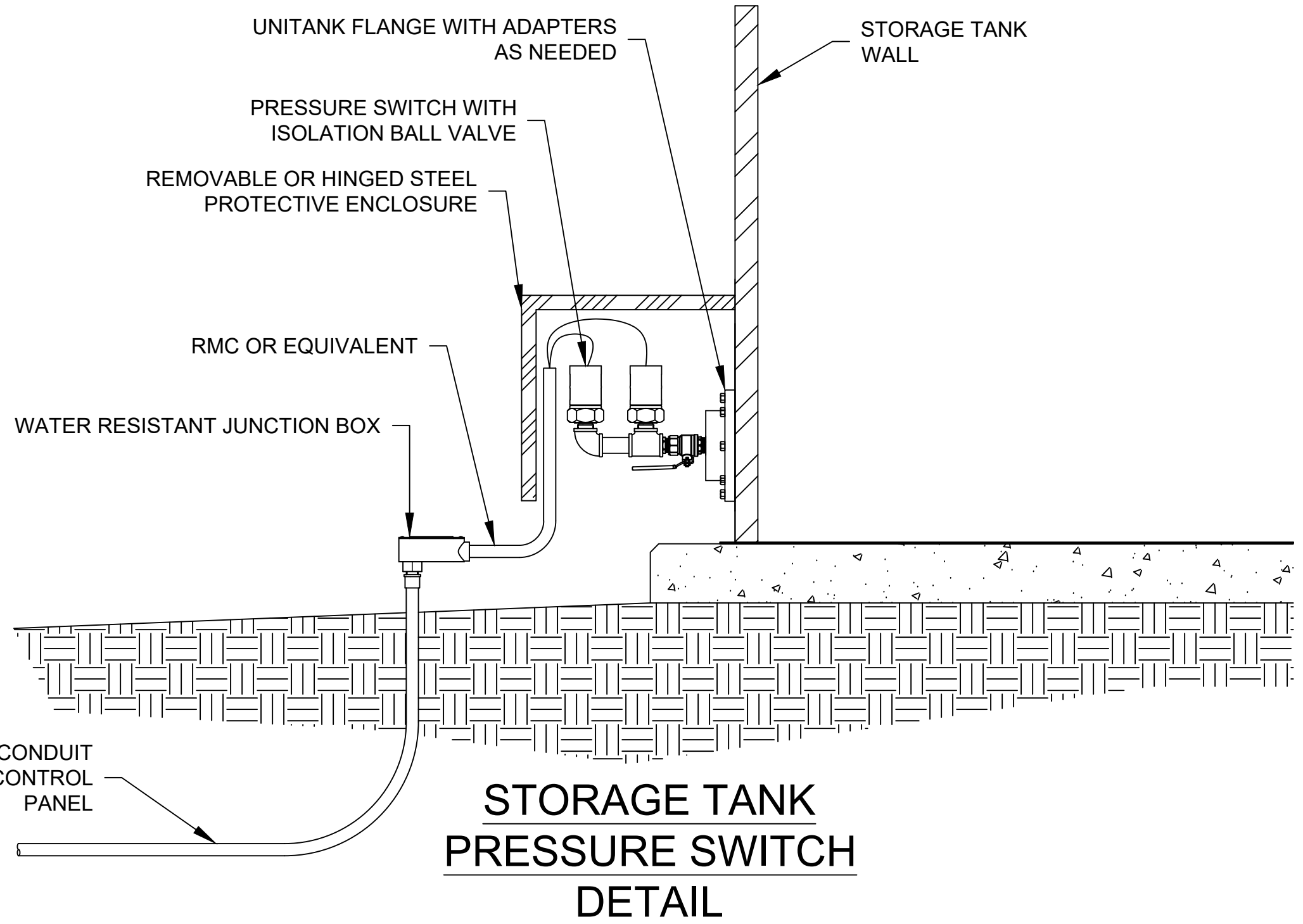
- NOTES**
1. NO JETTING IS ALLOWED.
 2. REPLACE EXISTING BASE ROCK SURFACING "IN-KIND".

PIPE BEDDING AND TRENCH BACKFILL

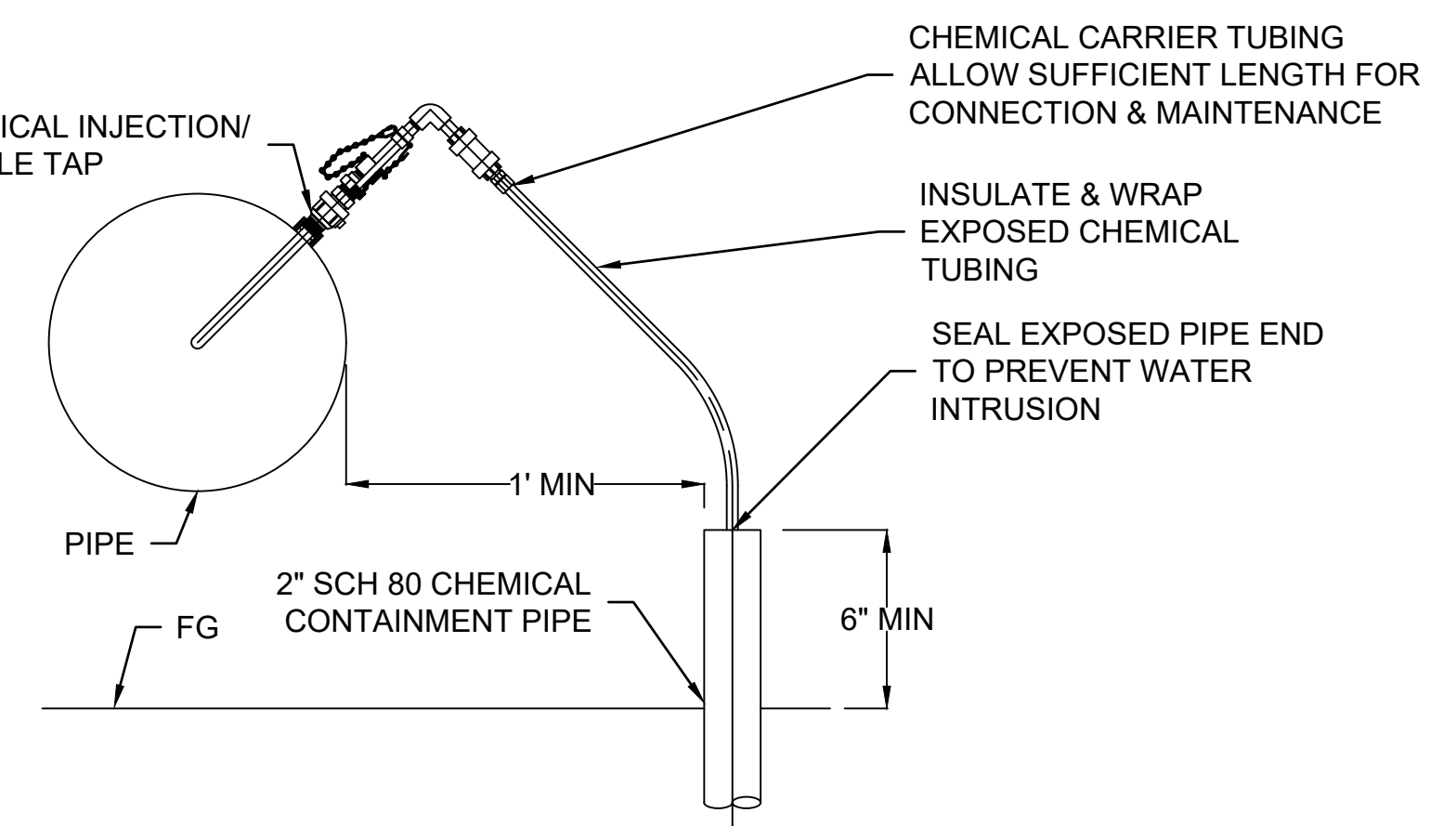


- NOTES**
1. EXTENSION ROD REQUIRED WHEN DISTANCE FROM FINISHED GRADE IS GREATER THAN 36" CONSTRUCT CONCRETE COLLAR.
 2. PROVIDE AT LEAST 6" OF OVERLAP BETWEEN RISER PIPES.
 3. THRUST BLOCK ANCHORAGE REQUIRED FOR NON-FLANGED FITTINGS. ASSUME DEAD END CONDITION WITH #4 REBAR.
 4. THRUST BLOCK SHALL EXTEND A MINIMUM OF 6" BEYOND THE EDGE OF THE VALVE BODY ON EACH SIDE.

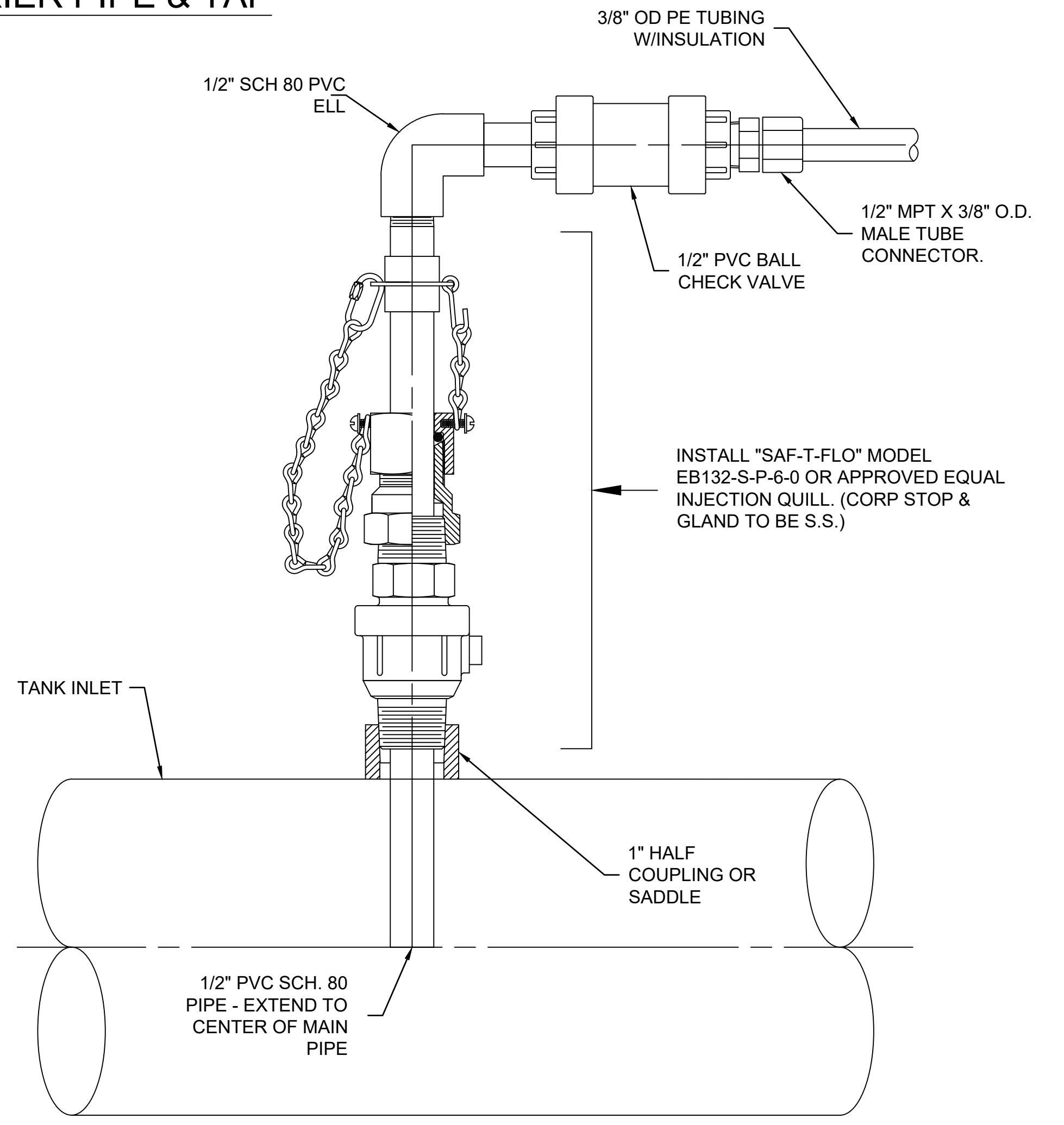
VALVE INSTALLATION



STORAGE TANK PRESSURE SWITCH DETAIL

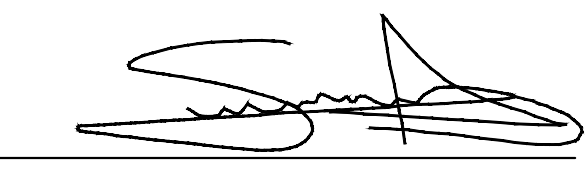




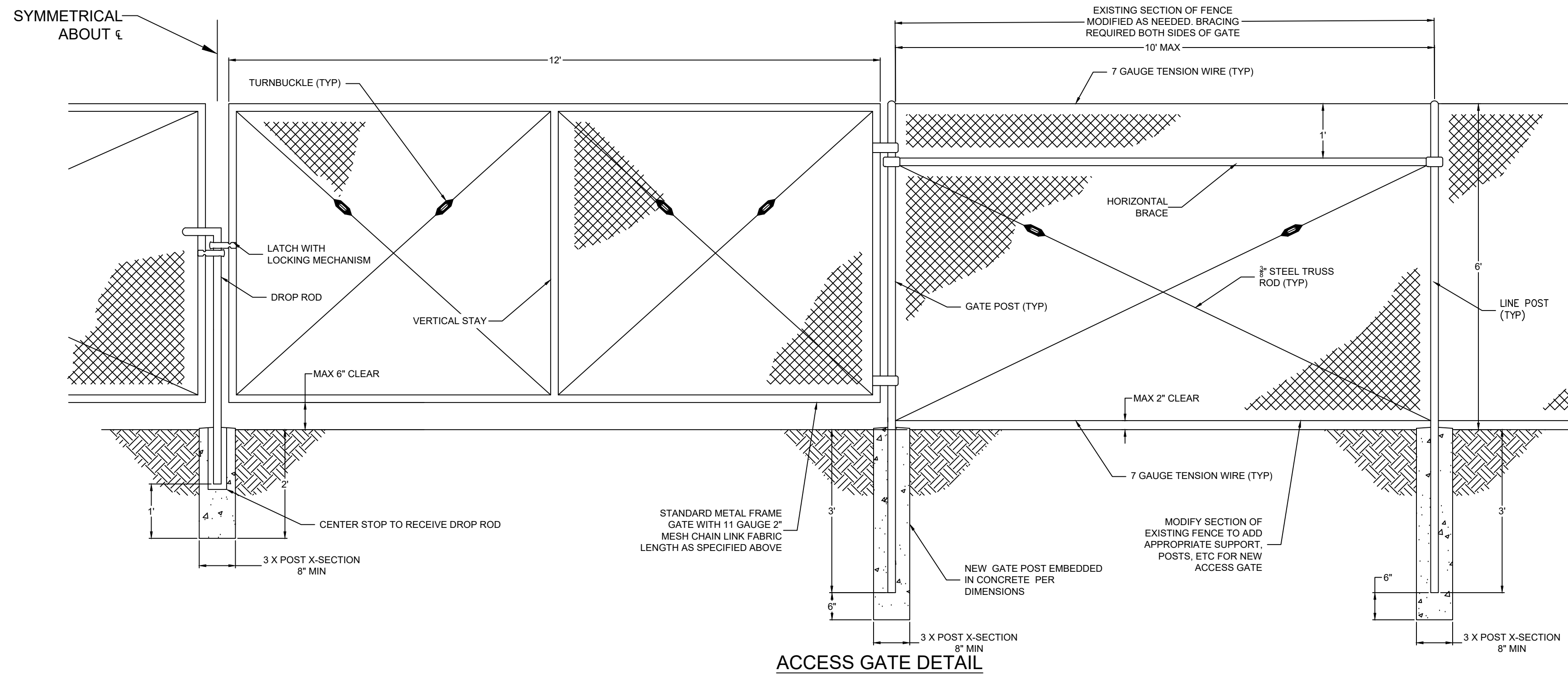
CARRIER PIPE & TAP



NOTE: INJECTION QUILL MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.

CHEMICAL INJECTION TAP

DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 PROJECT CSA 44C WATER FACILITY IMPROVEMENTS ROAD NO. N/A BRIDGE NO. N/A	 DEPARTMENT OF PUBLIC WORKS AND PLANNING MISC CONSTRUCTION DETAILS DRAWING NO. 11323 SHEET NO. 9 TOTAL 12
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	NO SCALE				
CHECKED: SA	DATE: 03/23						
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							

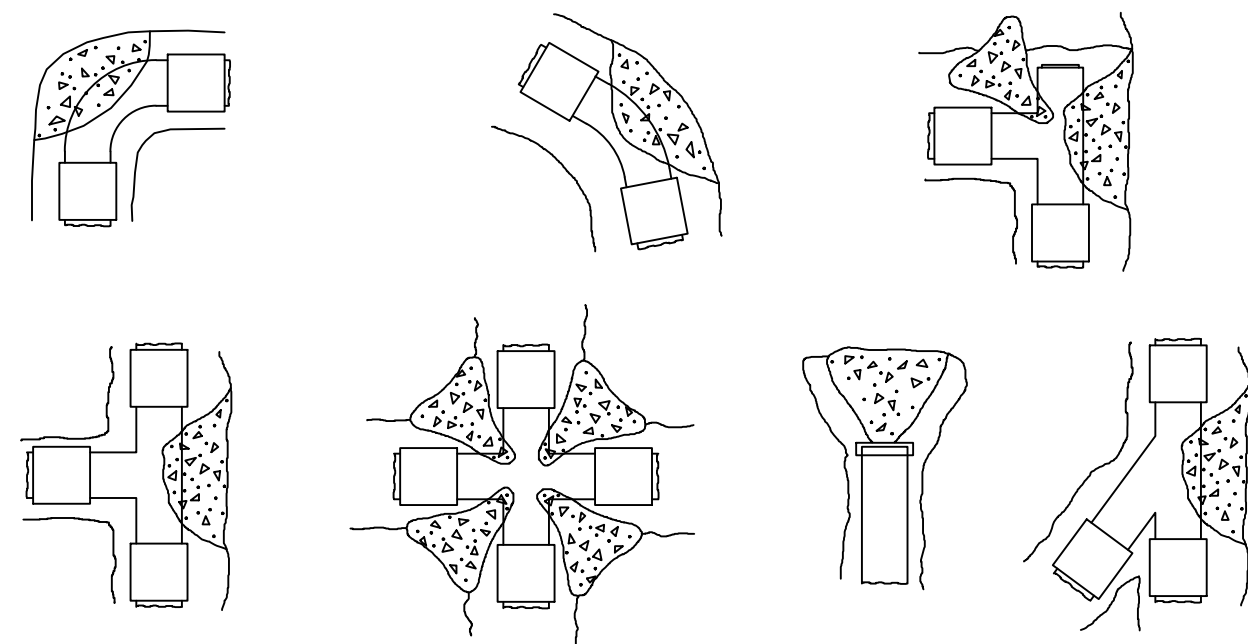


ACCESS GATE DETAIL

FENCE AND POST SCHEDULE			
HEIGHT	LOCATION	NOMINAL ID	WEIGHT LB/FT
6'-0" AND LESS	LINE POST	1-1/2"	2.71
	END, LATCH & CORNER POST	2"	3.65
	BRACES	1-1/4"	2.27
	FABRIC	11 GAUGE	
OVER 6'-0"	LINE POST	2"	3.65
	END, LATCH & CORNER POST	2-1/2"	5.79
	BRACES	1-1/4"	2.27
	FABRIC	9 GAUGE	

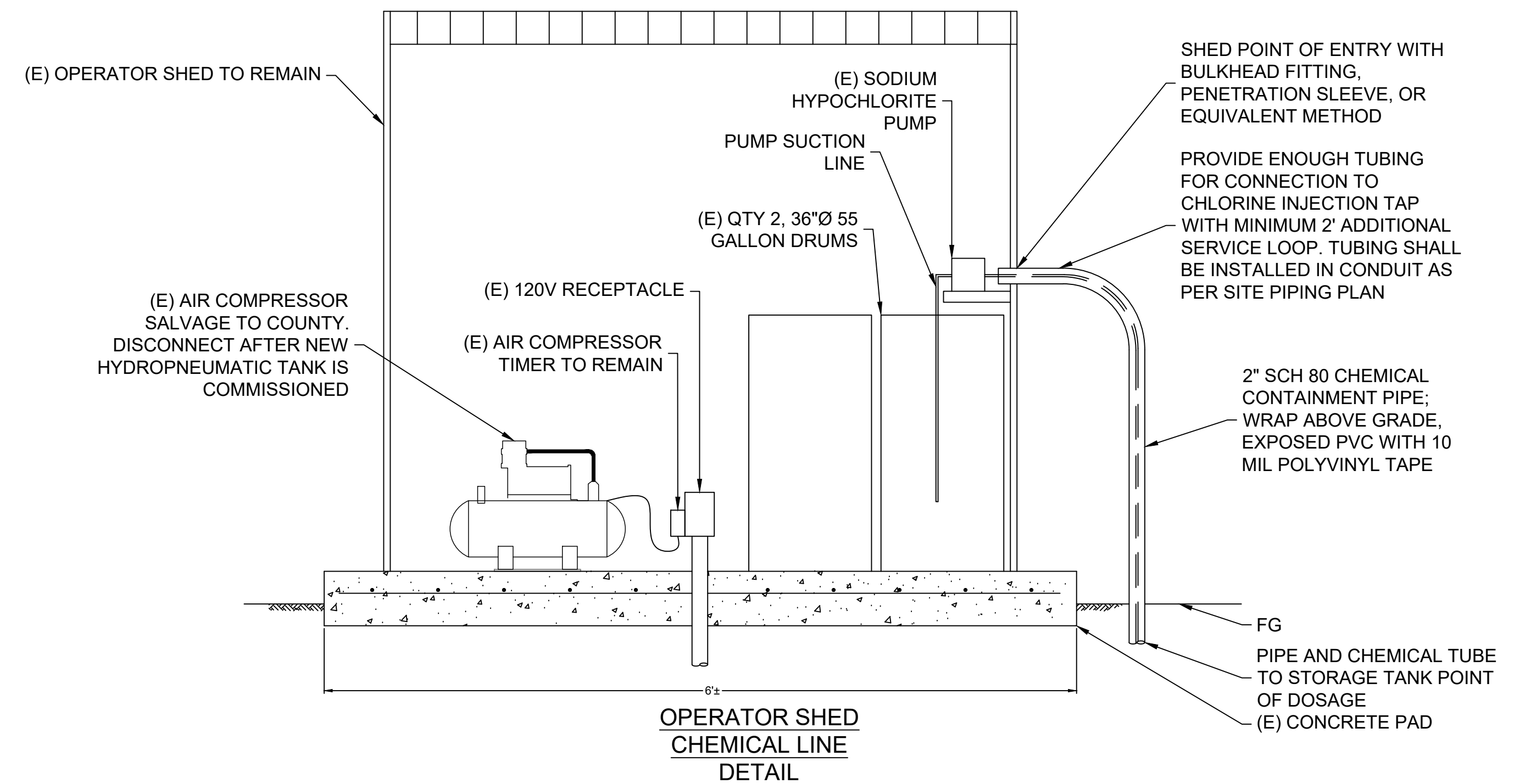
GATE POST SCHEDULE			
HEIGHT	GATE WIDTH	NOMINAL ID	WEIGHT LB/FT
6'-0" AND LESS	UP TO 6'	2-1/2"	5.79
	6' TO 12'	4"	10.79
	12' TO 18'	5"	14.62
OVER 6'-0"	18' TO 24'	6"	18.97
	UP TO 6'	3"	7.58
	6' TO 12'	5"	14.62
	12' TO 18'	6"	18.97
18' TO 24'	8"	28.55	

- NOTES
1. LINE POST SPACING SHALL BE 10' MAX.
 2. ALL FENCE AND GATE HARDWARE TO BE GALVANIZED.
 3. VERTICAL STAYS REQUIRED FOR GATES WIDER THAN 6'.





MAX INTERNAL PRESSURE (PSI)		50			
SOIL BEARING PRESSURE (PSF)		1500			
SAFETY FACTOR		1			
MINIMUM BEARING AREA (SF)					
PIPE SIZE	DEAD END OR TEE	90° BEND	45° BEND	22.5° BEND	11.25° BEND
3	0.2	0.3	0.2	0.1	0.0
4	0.4	0.6	0.3	0.2	0.1
6	0.9	1.3	0.7	0.4	0.2
8	1.7	2.4	1.3	0.7	0.3
10	2.6	3.7	2.0	1.0	0.5
12	3.8	5.3	2.9	1.5	0.7
16	6.7	9.5	5.1	2.6	1.3
18	8.5	12.0	6.5	3.3	1.7
20	10.5	14.8	8.0	4.1	2.1
24	15.1	21.3	11.5	5.9	3.0
30	23.6	33.3	18.0	9.2	4.6
36	33.9	48.0	26.0	13.2	6.7
42	46.2	65.3	35.3	18.0	9.1
48	60.3	85.3	46.2	23.5	11.8

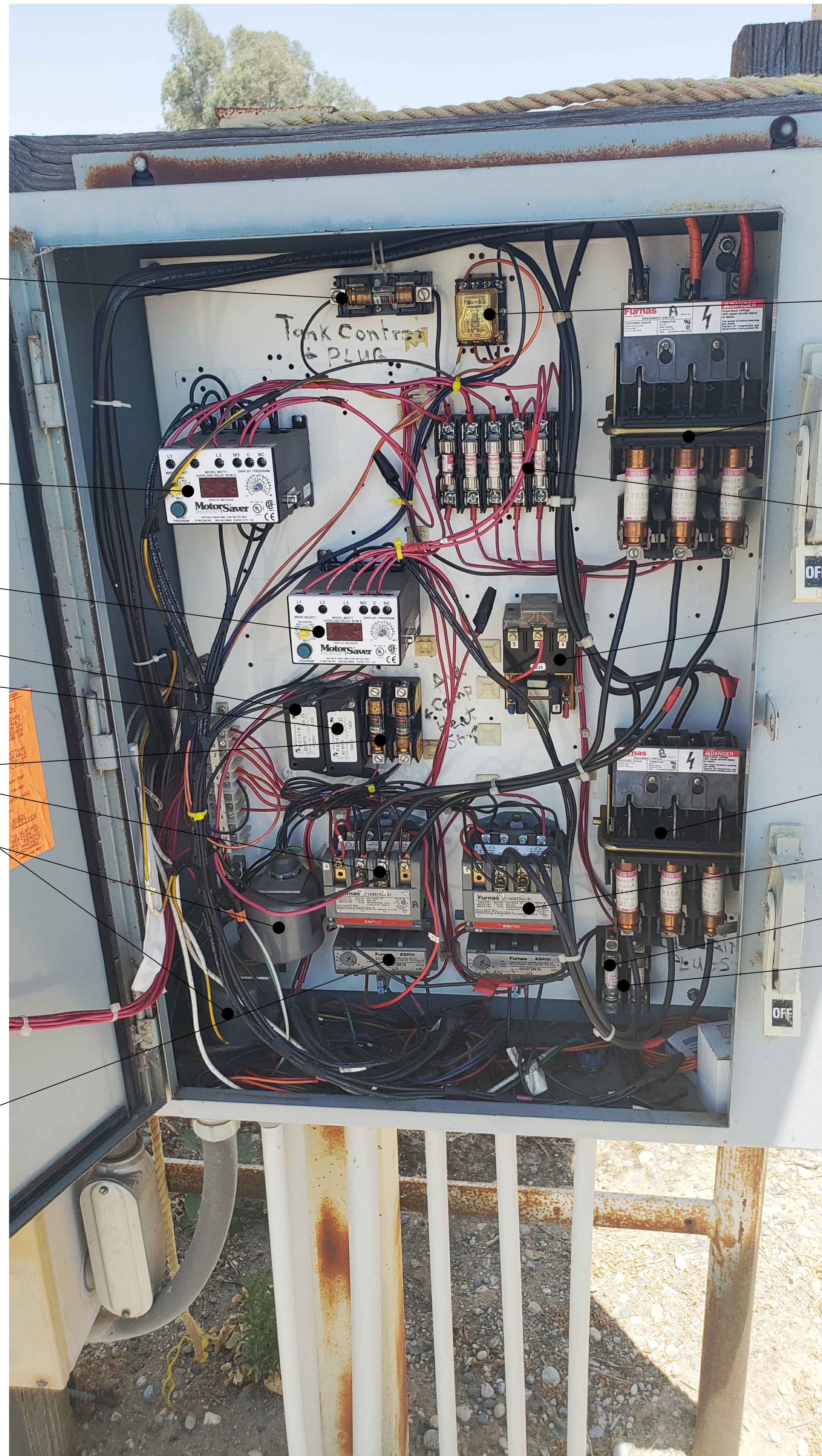
- NOTES
1. ALL FITTINGS TO BE WRAPPED IN 4 MIL VISQUEEN.
 2. CONCRETE SHALL NOT ENCR OACH ON END FITTINGS.
 3. CONCRETE SHALL BEAR AGAINST UNDISTURBED SOIL.
 4. CONCRETE TO HAVE ULTIMATE STRENGTH OF 3000 PSI @ 28 DAYS.
- THRUST BLOCKS



OPERATOR SHED CHEMICAL LINE DETAIL

DESIGNED: RS	DATE: 01/23	RECORD DRAWING	Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	PROJECT CSA 44C WATER FACILITY IMPROVEMENTS	 DEPARTMENT OF PUBLIC WORKS AND PLANNING MISC CONSTRUCTION DETAILS	
DRAWN: RS	DATE: 01/23	NO SCALE	ROAD NO. N/A				BRIDGE NO. N/A
CHECKED: SA	DATE: 03/23		DRAWING NO. 11323				SHEET NO. 10

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.



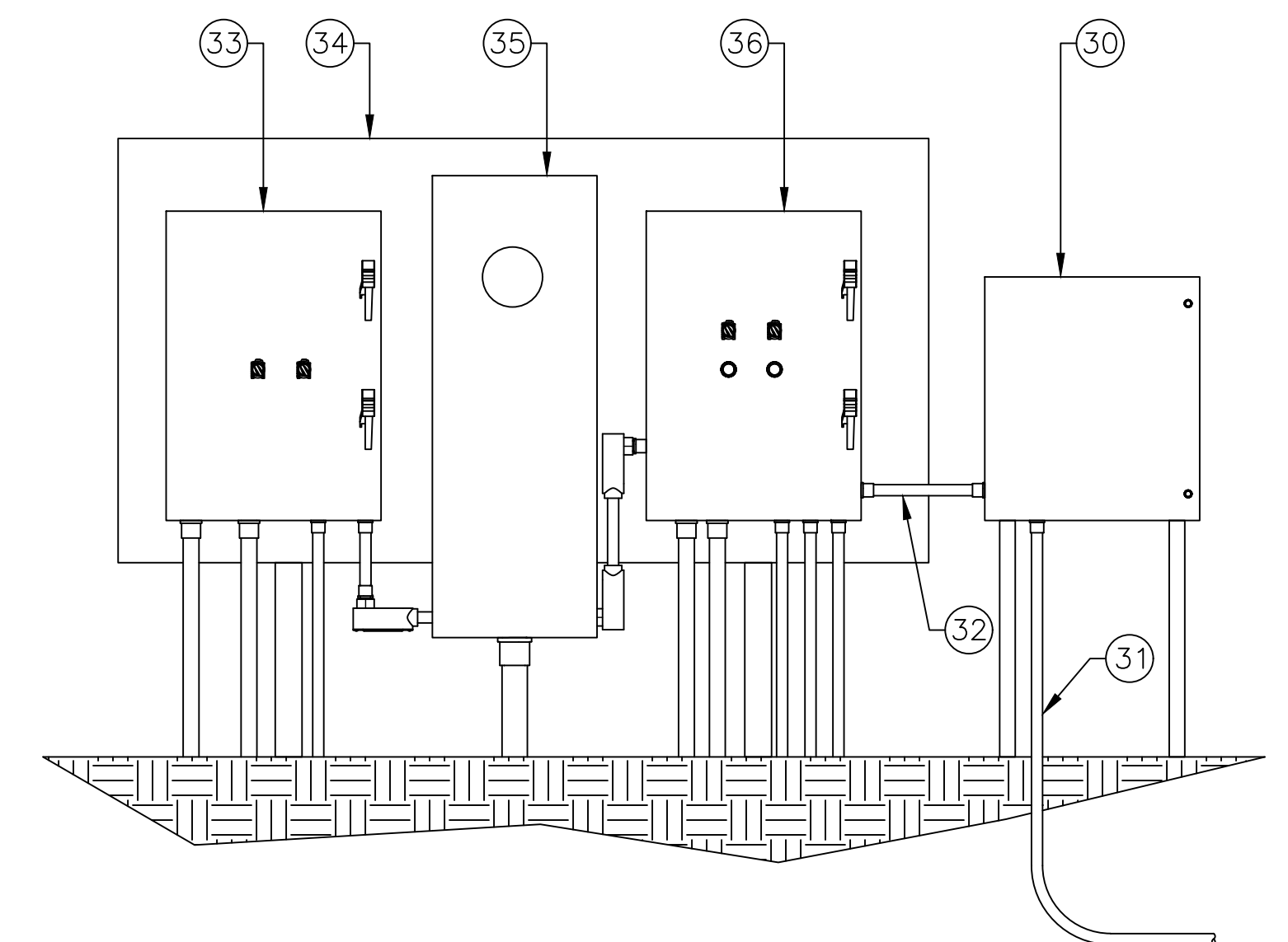
NOTES

- ① WELL PUMP DISCONNECT
- ② WELL PUMP STARTER & OVERLOAD RELAY
- ③ FUSE FOR CHLORINE PUMP OUTLET IN OPERATOR SHED
- ④ FUSE FOR CHLORINE PUMP OUTLET IN OPERATOR SHED
- ⑤ OVERLOAD RELAY
- ⑥ FUSE BANK FOR OVERLOAD RELAYS
- ⑦ WELL PUMP # DISCONNECT
- ⑧ RELAY
- ⑨ FUSE FOR 120VAC SUPPLY TO STORAGE TANK PRESSURE SWITCH PANEL
- ⑩ WELL PUMP OVERLOAD RELAY
- ⑪ WELL PUMP OVERLOAD RELAY
- ⑫ SURGE SUPPRESSOR
- ⑬ SURGE SUPPRESSOR
- ⑭ FUSE FOR EXISTING HEATER IN HYDROPNEUMATIC TANK LEVEL ENCLOSURE
- ⑮ WELL PUMP STARTER & OVERLOAD RELAY
- ⑯ 120VAC TRANSFORMERS

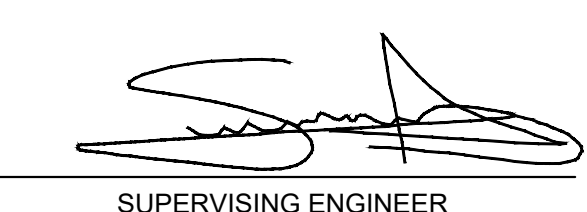
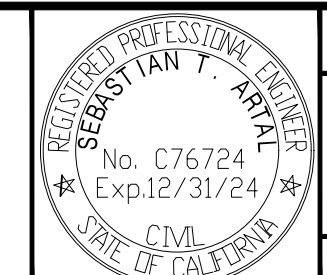

GENERAL NOTES

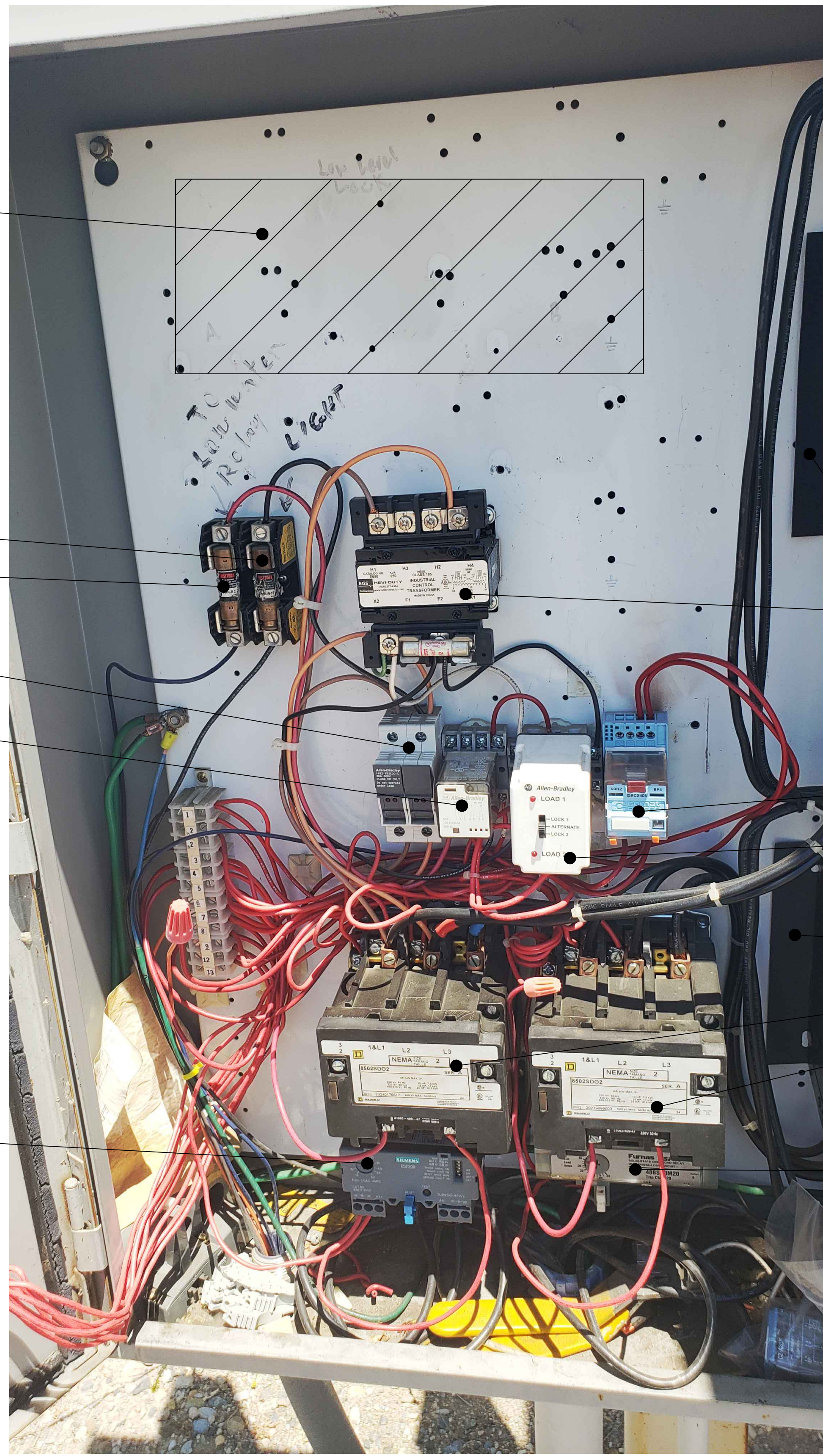
- 1. (E) WELL PUMP CONTROL PANEL TO REMAIN.
- 3. WELL 2: 35 GPM
- 4. WELL 3: 55 GPM

- ⑳ COUNTY SUPPLIED PRESSURE SWITCH CONTROL PANEL FOR STORAGE TANK AND WELL CONTROL. COUNTY WILL MOUNT PANEL IN VICINITY OF PUMP PANELS, AND SUPPLY POWER AND CONTROL LOGIC FROM WELL PUMP CONTROL PANEL.
CONTRACTOR TO TRENCH, INSTALL CONDUIT AND PULL WIRES BETWEEN (N) PANEL AND (N) STORAGE TANK PRESSURE SWITCHES.
- ㉑ MOUNTING STYLE AND CONFIGURATION SHOWN IS DIAGRAMMATIC ONLY.
- ㉒ CONTRACTOR SUPPLIED CONDUIT TO (N) STORAGE TANK PRESSURE SWITCHES. CONTRACTOR TO PULL POWER AND SIGNAL WIRES FROM (N) COUNTY SUPPLIED AND MOUNTED PANEL.
- ㉓ COUNTY SUPPLIED CONDUIT BETWEEN (E) CONTROL PANELS AND (N) PRESSURE SWITCH PANEL.
- ㉔ (E) BOOSTER PUMP CONTROL PANEL TO REMAIN.
- ㉕ (E) WOODEN SUPPORT BACK PANEL TO REMAIN. (E) SHADE STRUCTURE NOT SHOWN.
- ㉖ (E) PG&E METER TO REMAIN.
- ㉗ (E) WELL PUMP CONTROL PANEL TO REMAIN.



COUNTY SUPPLIED STORAGE TANK PRESSURE SWITCH PANEL DETAIL
NTS

DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 PROJECT CSA 44C WATER FACILITY IMPROVEMENTS ROAD NO. N/A BRIDGE NO. N/A	 DEPARTMENT OF PUBLIC WORKS AND PLANNING EXISTING WELL PUMP CONTROL PANEL DRAWING NO. 11323 SHEET NO. 11 TOTAL 12
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	DATE	NO SCALE			
CHECKED: SA	DATE: 03/23						
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							

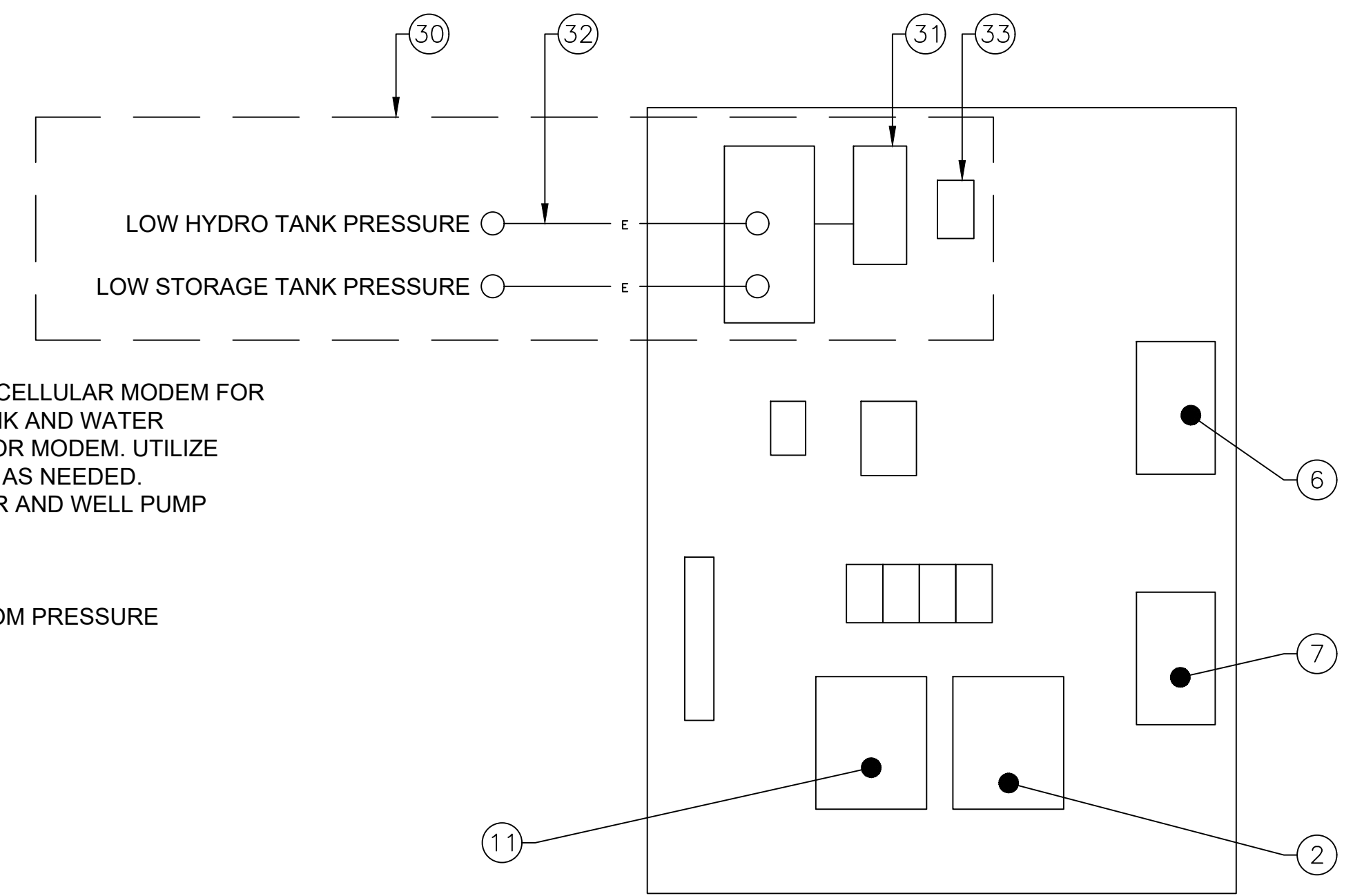


NOTES

- ① WELL PUMP 1 MOTOR STARTER
- ② WELL PUMP 2 MOTOR STARTER
- ③ RELAY 2, 240VAC FEEDS FLOAT SWITCH
- ④ ALTERNATING RELAY
- ⑤ 120V TRANSFORMER FEEDS RELAY 1 AND ALTERNATING RELAY
- ⑥ MOTOR 1 DISCONNECT
- ⑦ MOTOR 2 DISCONNECT
- ⑧ RELAY 1, 240VAC FEEDS ALTERNATE RELAY CONTACT
- ⑨ CIRCUIT BREAKERS
- ⑩ FUSE 1 FEEDS RELAY 1
- ⑪ MOTOR 1 OVERLOAD RELAY
- ⑫ MOTOR 2 OVERLOAD RELAY
- ⑬ FUSE 2 FEEDS CIRCUIT BREAKER

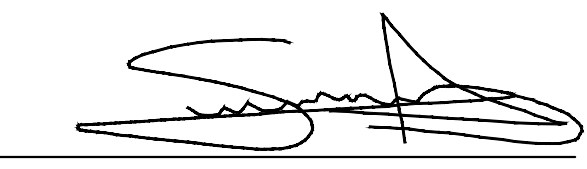
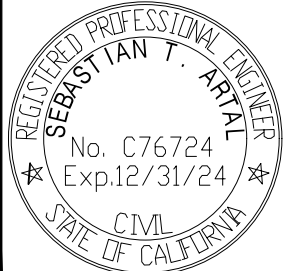

GENERAL NOTES

- 1. (E) BOOSTER PUMP CONTROL PANEL TO REMAIN.
- 2. CONTRACTOR TO COORDINATE WITH COUNTY OPERATOR TO INTERCEPT ALL HYDROPNEUMATIC PRESSURE SWITCH WIRING AT PANEL AND REROUTE TO NEW HYDROPNEUMATIC TANK PANEL.
- 3. MOTOR 1 TO REMAIN: 15HP, 3PH, 3475 RPM, BALDOR RELIANCE MODEL JMM3713T
- 4. MOTOR 2 TO REMAIN: 15HP, 3PH, 3475 RPM, US ELECTRIC MODEL R433A
- 5. SEE NEW HYDROPNEUMATIC TANK PAGE FOR PRESSURE SWITCH ENCLOSURE DETAILS



- ⑩ ADDITIVE BID ITEM #17: INSTALL (N) EWON FLEXY 205 CELLULAR MODEM FOR LOW PRESSURE CALLOUTS IN HYDROPNEUMATIC TANK AND WATER STORAGE TANK. 24VDC POWER SUPPLY REQUIRED FOR MODEM. UTILIZE OPEN SPACE IN EXISTING BOOSTER CONTROL PANEL AS NEEDED. CONTRACTOR MAY RUN CONDUIT BETWEEN BOOSTER AND WELL PUMP CONTROL PANELS AS NEEDED.
- ⑪ (N) POWER SUPPLY FOR CELLULAR MODEM
- ⑫ (N) CONDUIT AS NEEDED BETWEEN ENCLOSURES FROM PRESSURE SWITCHES
- ⑬ (N) CIRCUIT BREAKERS

**BOOSTER PUMP CONTROL PANEL
ADDITIVE BID ITEM #15
NTS**

DESIGNED: RS	DATE: 01/23	RECORD DRAWING		Scale in Feet	 SUPERVISING ENGINEER 2/29/24 DATE	 PROJECT CSA 44C WATER FACILITY IMPROVEMENTS ROAD NO. N/A BRIDGE NO. N/A	 DEPARTMENT OF PUBLIC WORKS AND PLANNING EXISTING BOOSTER PUMP CONTROL PANEL DRAWING NO. 11323 SHEET NO. 12 TOTAL 12
DRAWN: RS	DATE: 01/23	RESIDENT ENGINEER	DATE	NO SCALE			
CHECKED: SA	DATE: 03/23						
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.							