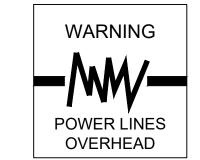
## CITY OF TURLOCK

CITY PROJECT NO. 23-046

# WELL 29 CHLORINATION



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12/16/2024

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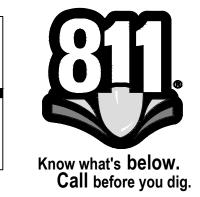
SITE PLAN

DESCRIPTION

LEGENDS AND ABBREVIATIONS

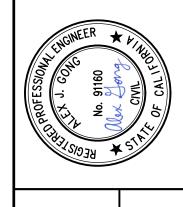
CHLORINATION ENCLOSURE DETAILS

SEQ. SHEET NO.





OED FOR BIDDING PORPOSES DECEMBER 2024	
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URLOCK T NO. 23-046 FRAL
RAL
T NO. 23-046
URLOCK

DESIGN ENGINEER:	
AJG	
LICENSE NO:	
91160	

DRAFTED BY: CHECKED BY:

DATE: DECEMBER 2024 JOB NO: 229223003

PROJECT NO: PHASE: CD

ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS. SHEET G-1

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VICINITY MAP

NOT TO SCALE

ATIONS				_	LINETYPES			SYMBO	LS	
	GREGATE BASE	HDW	HEADWALL T&B		LINET		DESCRIPTION			DESCRIPTION
	HALT CONCRETE ESTOS-CEMENT PIPE	HGL HORIZ	HYDRAULIC GRADE LINE TB HORIZONTAL TBM	TOP OF BANK TEMPORARY BENCHMARK	EXISTING	NEW	WATER LEVEL	EXISTING	SYMBOL NEW	DESCRIPTION
ALU	MINUM DISK	HP	HINGE POINT, HIGH POINT, HORSEPOWER TC	TOP OF CURB			BARRICADE	*	*	ELECTRIC METER
AHE		HP GAS HPS	HIGH PRESSURE GAS TCE HIGH PRESSURE SWITCH TDI	TEMPORARY CONSTRUCTION EASEMENT TENSILE DUCTILE IRON			CONTOUR (DEPRESSION)			PAD MOUNTED TRANSFORMER
	ERNATE SLE POINT	HR H/T	HANDRAIL TELI HUB & TACK TF	TELEPHONE TOP OF FOOTING	123	123	CONTOUR (MAJOR)	E	E	ELECTRIC VAULT
APP	ROXIMATE	HWL HYDRO	HIGH WATER LEVEL TFC	TOP FACE OF CURB			CONTOUR (MINOR)	E	<u></u>	
AIR	ESSOR'S PARCEL NUMBER RELIEF VALVE	HYDRO ID	HYDROPNEUMATIC TG INSIDE DIAMETER TH	TOP OF GRATE THREAD			EMBANKMENT TOE	D	T.	UTILITY POLE
	RICAN SOCIETY FOR TESTING AND MATERIALS VENT	IN INV	INCH TL INVERT TOE	TOP OF LINING TOE OF SLOPE		-	EMBANKMENT TOP	$\downarrow$	<b>\( \rightarrow</b>	UTILITY POLE ANCHOR
AVE	NUE	IP	IRON PIPE TOP	TOP OF SLOPE			FENCE (BLOCK WALL)	<b>E</b> )	(E)	ELECTRIC MANHOLE
	RICAN WATER WORKS ASSOCIATION RIER	IRR JP	IRRIGATION TP JUNCTION POLE TR	TELEPHONE POLE TELEPHONE RISER		<del></del> 0	FENCE (CHAIN LINK)		<b>~</b>	GAS METER
	IN CURVE SS DISK	LBS	POUNDS TRA	NS TRANSFORMER			FENCE (WOOD)		<u>.</u>	
BAC	KFLOW PREVENTER	LCW	LONG CRESTED WEIR TS	C TRAFFIC TOP OF STRUCTURE	××	xx	FENCE (WIRE)	$\square$	<b>(3)</b>	GAS VALVE
BAC	K .DING	LF LG	LINEAR FEET TSB LONG TYP	TELEPHONE SPLICE BOX TYPICAL		SF	FENCE (SILT)	°sco	•sco	SANITARY SEWER CLEAN OUT
BEN	CHMARK	LT	LEFT TWL	TOP OF WALL			GATE SWING GRADE BREAK	$\widehat{S}$	(S)	SANITARY SEWER MANHOLE
	LARD ING SITE	LPG MAX	LIQUEFIED PETROLEUM GAS UG MAXIMUM UNC	UNDERGROUND UNLESS NOTED OTHERWISE	<del></del>		GUARDRAIL			SSMH (ECCENTRIC CONE)
	TOM IN VERTICAL CURVATURE	MB MCC	MAILBOX UP MOTOR CONTROL CENTER UT	UTILITY POLE UTILITY		0 0 0 0 0	RAILROAD			,
BAC	K OF WALK	MFR	MANUFACTURER U/S	UPSTREAM			RETAINING WALL	СВ	СВ	STORM DRAIN CATCH BASIN
	K OF WALL B WIRE	MH MIN	MANHOLE VCP MINIMUM VER		——————————————————————————————————————	——————————————————————————————————————	SWALE CENTERLINE			STORM DRAIN INLET
CON	ICRETE	MISC	MISCELLANEOUS VG	VALLEY GUTTER	····	····	SWALE W/FLOW ARROWS	<b>&gt;</b>	<b></b>	STORM DRAIN CULVERT
CAB	IFORNIA INET	IVIJ MN	MECHANICAL JOINT VLT MAG NAIL VLV	VAULT VALVE			WATER (LAKE/POND)	$\widehat{D}$	$\bigcirc$	STORM DRAIN MANHOLE
CAB		MP MPT	MEDIUM PRESSURE GAS LINE (W) MALE PIPE THREAD W	WEST WATER		NA/II 2/2	WATER (MARSH/SWAMP)	$\mathcal{D}$	ש	
CUR	B & GUTTER	MRKR	MARKER WL	WATER LINE		XX" C/C UCO ——————————————————————————————————	COMPUTER/COMM. (BURIED)		-	MAIL BOX
CHE CHA	CK IN LINK	MS (N)	MILD STEEL WM NORTH WS	WATER METER WATER SERVICE	OE	XX" ELEC (AERIAL) OE XX" FLEC (BURIED)	ELECTRIC (AERIAL)			SIGN
CAS	T IRON	NAVD	NORTH AMERICAN VERTICAL DATUM WV	WATER VALVE	UE	XX" ELEC (BURIED) XX" FO	ELECTRIC (BURIED)	×	×	YARD LIGHT
CAS	T IRON PIPE T-IN-PLACE CONCRETE PIPE	NC NGVD	NORMALLY CONSOLIDATED WW NATIONAL GEODETIC VERTICAL DATUM W/	WASTE WATER WITH	FO	XX" GAS	FIBER-OPTIC	$\cap$	•	GUARD POST
CLA		NIC NPT	NOT IN CONTRACT W/O NATIONAL PIPE THREAD	WITHOUT		XX" IRR	GAS	^	^	CONTROL POINT
	TERLINE	NTS	NOT TO SCALE		——————————————————————————————————————		IRRIGATION	<u>∠</u> \	<i>∠</i> ∆ 1	
CHA	IN LINK FENCE AR, CLEARANCE	OC OD	ON CENTER OUTSIDE DIAMETER		ss	XX" SS	OIL SANITARY SEWER	<del>-</del>	•	BENCH MARK
CEM	IENT MORTAR LINED & COATED	OH OP	OVERHEAD OPERATING		FM	XX" FM	SANITARY SEWER FORCE MAIN	0	•	IRON PIPE
	RRUGATED METAL PIPE ICRETE NAIL	OSHA	OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION			XX"	SANITARY SEWER LATERAL	•	0	MONUMENT
CON	IPACTED NATIVE SOIL	O&M (P)	OPERATIONS & MAINTENANCE PROPOSED		S <i>I</i>	XX" SI	SIGNAL INTERCONNECT (BURIED)	<u> </u>	<u> </u>	MONUMENT (OPTIONAL)
	/ER CLEAN OUT ITINUOUS	PB	PULL BOX				STEAM	•	<u> </u>	,
	ISTRUCT/CONSTRUCTION NER	PC PCC	POINT OF CURVATURE POINT OF COMPOUND CURVATURE		SD	XX" SD SD	STORM DRAINAGE	$\sim$	$\mathcal{L}$	OWNERSHIP TIE
COF	RPORATION	PCC	PORTLAND CEMENT CONCRETE PERMANENT EASEMENT		т	XX" TELE (AERIAL)	TELEPHONE (AERIAL)	NO.	NO.	LOT NUMBER
	UMN IPLING	PER	PERIMETER		UT	XX" TELE (BURIED)	TELEPHONE (BURIED)		•	TELEPHONE RISER
CON	ITROL POINT	PI PIP	POINT OF INTERSECTION PLASTIC IRRIGATION PIPE		OTV	XX" <u>TV (</u> AERIAL)OTV XX" TV (BUR <u>IE</u> D)	TELEVISION (AERIAL LINE)		_ 	TELEPHONE VAULT
CRC CUB		PLC	PROGRAMMABLE LOGIC CONTROLLER		UTV	XX" W	TELEVISION (BURIED LINE)	, ,		
CUB	IC YARDS /E APPROACH	<b>የ</b> PNL	PROPERTY LINE PANEL			W	WATER	A	•	2-NOZZLE HYDRANT
DEC	IDUOUS	POC	POINT ON CURVE				CENTERLINE		•	3-NOZZLE HYDRANT
	IOLISH/DEMOLITION P INLET	POL POT	POINT ON LINE POINT ON TANGENT				EASEMENT MEANDER LINE	FD	FD	FIRE DEPT. CONNECTION
DIAN	METER	PP	POWER POLE				PROPERTY LINE	F	F	FIRE VAULT
	ENSION TILE IRON PIPE	PRV	POINT OF REVERSE CURVATURE PRESSURE REDUCING VALVE				RESERVATION/PARK/FOREST		_	
	VNSTREAM /EWAY	PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH				RIGHT-OF-WAY	⊞ -	•	WATER METER
DRA	WING	PT	POINT OF TANGENCY				RELINQUISH ACCESS LINE	W	<b>(</b>	WELL
EXIS EAC	STING, EAST H	PVC PVCC	POLYVINYL CHLORIDE POINT OF VERTICAL COMPOUND CURVATURE				SECTION LINE	$\otimes$	•	WATER VALVE
END	CURVE ENTRIC	PVMT PVRC	PAVEMENT POINT OF VERTICAL REVERSE CURVATURE				STATE/COUNTY/CORPORATE LIMIT		ì	BLOW-OFF
	H FACE	PVRC	POINT OF VERTICAL INTERSECTION			~~~~~~	REVISION CLOUD	· · · · · · · · · · · · · · · · · · ·	•	
	STING GRADE VATION	R RBR	RADIUS REBAR				SAWCUT LINE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	7	AIR RELIEF VALVE
EPO	XY LINED & COATED	RC	RADIUS OF CURVE			<del></del>	DEMO LINE WORK LIMITS	BFP	BFP	BACK FLOW PREVENTOR
ELE:	CTRIC OW	RCP RD	REINFORCED CONCRETE PIPE RELATIVE DENSITY				<u></u>		$\otimes$	GATE VALVE HANDLE
ELE	CTRIC METER OF LINE	RD RE	ROAD REFERENCE		HATCH	ГҮРЕ	DESCRIPTION			STILLING WELL
EDG	E OF PAVEMENT	REQD	REQUIRED		EXISTING	NEW	DECOMI HON	<b>∑</b>	<u></u>	FENCE POST
	IVALENT EMENT	RET REV	RETURN REVISION					<b>▽</b>	<b>⋄</b>	
EUC	ALYPTUS	RGRCP	RUBBER GASKETED REINFORCED CONCRETE PIPE				AGGREGATE		/\	FENCE GATE
EAC	VERTICAL CURVE H WAY	RGS RP	RIGID GALVANIZED STEEL RADIUS POINT						^	
EXP	OSED URE	RR RT	RAILROAD RIGHT				AC PAVEMENT		$\stackrel{\frown}{\mathbb{A}}$	REVISION
FUR	NISH & INSTALL	RTU	REMOTE TERMINAL UNIT						(X)	CONSTRUCTION CALLOUT
FOU FIRE	ND EDEPARTMENT CONNECTION	R/W (S)	RIGHT OF WAY SOUTH, SOLVENT WELD				CONCRETE		$\bigcirc$	
FINI	SHED FLOOR	S -	SLIP	PIPE FITTINGS	4. 'A . '	4 4.	CONCRETE	XX XXXX	DETAIL NUMBER	DETAIL CALLOUT
	SHED GRADE E HYDRANT	S= SCH	SLOPE SCHEDULE	- 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				(XXXX)	SHEET NUMBER	-
FLO	W LINE	SCP	STANDARD CONCRETE PIPE				CONCRETE LINING (PLAN VIEW)			LINE BREAK
	NGE NGED	SD SDMH	STORM DRAIN STORM DRAIN MANHOLE	FLANGED JOINT	······				(	PIPE END (SCHEMATIC)
FOR	CE MAIN	SEC SERV	SECTION SERVICE				EARTH		0	,
	R REINFORCED POLYESTER PIPE	SF	SQUARE FEET	MECHANICAL JOINT					(	PIPE END
	T/FEET NT OF WALK	SP SPEC	SERVICE POLE SPECIFICATION	₩				$\bigvee$	<b>Y</b>	
FAC	E OF WALL	SPNDL SO	SPINDLE	ABOVE GRADE PIPE			RIP RAP			EMBANKMENT ARROW
GAL GAL	IGE LON	SS	SQUARE SANITARY SEWER	ABOVE GRADE FIFE	10 A 10 A					
GAL	VANIZED	SS OR STS	STAINLESS STEEL	— — — BELOW GRADE PIPE	RAP - 17 (2) NA 19 (2) NA 19 (2)	Rowall and Table Conductive Conductive Condu	SAND	ı	1	
GAS	DE BREAK METER	SSMH STA	SANITARY SEWER MANHOLE STATION	BELOW GRADE PIPE				H	IWL= XXX.XX	HIGH WATER LINE
GAL	LONS PER MINUTE	STD STL	STANDARD STEEL				GRATING	=	<u> </u>	J
GRA GAS		STP	STAND PIPE				<u>.</u>	<u></u>	_	
	VALVE WIRE	STRC STRP	STRUCTURE STRIPING					(E) XX XXX.X	X XX XXX.XX	SPOT ELEVATION
GAT	E VALVE	SWL	SWALE				EXPANDED METAL	•		
HEA HIGI	D H DENSITY POLYETHYLENE	STWL (T)	STILLING WELL THREADED			LAAAAA <b>J</b>			<b>A</b>	SECTION VIEW
	DER	Ť ´	THREAD							SESTION VIEW

#### **GENERAL CITY NOTES**

- 1. DISTANCES AND MEASUREMENTS ARE GIVEN AND WILL BE MADE IN HORIZONTAL PLANE. GRADES ARE GIVEN FROM THE TOP OF STAKES OR NAILS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PRESERVE ALL STAKES AND POINTS SET FOR LINES, GRADES OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES. ALL EXPENSES INCURRED IN REPLACING STAKES THAT HAVE BEEN REMOVED WITHOUT PROPER AUTHORITY SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.
- 2. ALL WORK TO BE DONE IN ACCORDANCE WITH CITY OF TURLOCK STANDARDS.
- 3. CONTRACTOR SHALL COMPLY WITH ALLAPPLICABLE STATE AND FEDERAL SAFETY AND LABOR CODES.
- 4. CONTRACTOR SHALL OBTAIN ENCROACHMENT PERMIT FROM THE CITY OF TURLOCK PRIOR TO BEGINNING WORK (NO FEE).
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION AND PROTECTION OF ALL UNDERGROUND PIPES, CONDUITS AND OTHER IMPROVEMENTS WHETHER SHOWN ON THE PLANS OR NOT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL NOTIFY:
  - A. UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 TO LOCATE EXACT POSITION OF UNDERGROUND TELEPHONE CABLE, GAS LINES, SEWER LINES AND WATER LINES.
  - B. TURLOCK IRRIGATION DISTRICT AT (209) 883-8464 TO LOCATE UNDERGROUND ELECTRICAL CONDUIT.
  - C. CHARTER CABLE AT (209) 656—2124 TO LOCATE UNDERGROUND CABLE T.V.
  - D. FIRE DEPARTMENT AT (209) 668-5580, POLICE DEPT. AT (209) 668-5550 AND AMBULANCE AT (209) 632-2271
- 6. ANY UTILITY TO BE RELOCATED OR REMOVED SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
- 7. WHERE EXISTING PAVEMENT IS SCHEDULED TO BE REMOVED ADJACENT TO EXISTING PAVEMENT TO REMAIN IN PLACE, THE
- CONTRACTOR SHALL SAWCUT THE EXISTING PAVEMENT TO INSURE CLEAN VERTICAL EDGE TO PAVE AGAINST.

  8. LOCATION AND DEPTH OF EXISTING SUB—SURFACE STRUCTURE ARE NOT GUARANTEED. CONTRACTOR SHALL VERIFY THE
- 9. ALL REFERENCES AND WRITTEN DIMENSIONS SHALL TAKE PREFERENCE OVER SCALED DIMENSIONS AND SHALL BE VERIFIED ON THE SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF ANY WORK.

HORIZONTAL AND VERTICAL LOCATION OF EXISTING BURIED UTILITIES SHOWN ON THE PLANS PRIOR TO DIGGING NEAR EXISTING

#### **DEMOLITION**

BURIED UTILITIES.

- 1. UNLESS NOTED OTHERWISE ON THE PLANS, ALL DEMOLISHED MATERIALS AND DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR.
- 2. DEMOLISH CONCRETE & ASPHALT SURFACING REQUIRED FOR UNDERGROUND PIPING, REPAIR TO EXISTING CONDITION.

#### LANDSCAPING

- 1. THE CONTRACTOR SHALL REPLACE ALL LANDSCAPE IRRIGATION COMPONENTS (E.G. IRRIGATION PIPE, VALVES, CONTROLS, CONTROL WIRING, SPRAY HEADS, ETC.) DISTURBED DURING CONSTRUCTION.
- 2. REPLACEMENT SPRAY HEADS SHALL BE OF A TYPE SUITABLE FOR PROVIDING FULL COVERAGE OF LANDSCAPING ACCOUNTING FOR CHANGES IN SPRAY HEAD AND PLANT LOCATIONS IF REQUIRED.

#### **GENERAL**

- 1. BEFORE COMMENCING EXCAVATION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH, AND SIZE OF ALL UTILITIES IN THE WORK AREA. THE WORK SHALL NOT BE COMMENCED UNTIL THE CONTRACTOR HAS FIRST BEEN PROVIDED AN INQUIRY IDNTIFICATION NUMBER FOR SUB-SURFACE INSTALLATIONS AS SPECIFIED IN SECTION 4216 OF THE GOVERNMENT CODE.
- 2. CONTRACTOR SHALL NOTIFY AND COORDINATE ALL RELATED WORK WITH THE FOLLOWING AGENCIES:
  - CITY OF TURLOCK
  - 2. CITY OF TURLOCK PUBLIC WORKS DEPARTMENT
  - 3. CITY OF TURLOCK PARKS DEPARTMENT4. PACIFIC GAS AND ELECTRIC COMPANY
  - 5. AT&T6. TURLOCK IRRIGATION DISTRICT
- 3. ALL WATER DISTRIBUTION SYSTEM MAINS AND SERVICE CONNECTIONS SHALL BE KEPT IN CONSTANT SERVICE DURING THE WORK.
- 4. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS FOR ALL PROJECT IMPROVEMENTS.
- 5. DETAILS AND NOTES ON TYPICAL SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE. DETAILS OF CONSTRUCTION NOT FULLY SHOWN SHALL BE OF THE SAME NATURE AS SHOWN FOR SIMILAR CONDITIONS.
- ALL DIMENSIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY CONDITION EXISTS THAT IS NOT AS SHOWN ON THE DRAWINGS THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- 7. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS SHALL HAVE PRECEDENCE OVER SCALED DRAWINGS.
- 3. ALL WORK SHALL BE PERFORMED BY LICENSED CONTRACTOR(S) USING MATERIALS AND METHODS IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE 2023 CALIFORNIA BUILDING CODE (CBC), LOCAL CODES AND ORDINANCES.
- 9. ANY CHANGES TO THE APPROVED SET OF PLANS WITHOUT NOTIFYING THE ENGINEER PRIOR TO SUCH CHANGES ABSOLVES SAID ENGINEER FROM ANY AND ALL RESPONSIBILITY WITH RESPECT TO THE LIABILITY, DAMAGE OR EXTRA WORK RESULTING FROM SAID
- 10. ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE CONSTRUCTION SAFETY REQUIREMENTS OF OSHA AND ANY OTHER GOVERNMENTAL ENTITY HAVING JURISDICTION.
- 11. THE DUTY OF THE ENGINEER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.
- 12. ANY SUPPORT SERVICES PERFORMED BY THE ENGINEER OR FIELD REPRESENTATIVES DURING CONSTRUCTION SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ENGINEER WHETHER PERFORMED PRIOR TO, DURING, OR AFTER COMPLETION OF CONSTRUCTION ARE PERFORMED SOLELY FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DRAWINGS AND SPECIFICATIONS, BUT THEY DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF CONSTRUCTION.

#### PIPING

- 1. PIPE MATERIALS
  - a) ALL BURIED PRESSURE PIPING WITHIN THE SITE PROPERTY LINES SHALL BE DUCTILE IRON PIPE CONFORMING TO SPECIFICATION 40 05 00 UNLESS OTHERWISE NOTED.
  - b) ALL ABOVE GRADE PIPING 4 INCHES AND LARGER SHALL BE FBELC WELDED STEEL PIPE WITH FLANGED OR GROOVED CONNECTIONS CONFORMING TO SPECIFICATION 40 05 00 UNLESS OTHERWISE NOTED
  - c) ALL CHEMICAL PIPING SHALL BE 1/2-INCH POLYETHYLENE TUBING INSIDE OF EPVC CONDUIT CONFORMING TO SPECIFICATION 40 20 90 OR DOUBLE CONTAINED PIPING UNLESS OTHERWISE NOTED.
  - d) DRAIN PIPING 4 INCHES AND SMALLER SHALL BE ASTM D 3034, SDR 35, UNLESS NOTED OTHERWISE.
- RESTRAIN ALL ON-SITE PRESSURE PIPING IN ACCORDANCE WITH SPECIFICATION 40 05 00. THRUST BLOCKS WILL NOT BE ACCEPTABLE.
- 3. THE WORK CONTAINED HEREIN SHALL COMPLY WITH TITLE 22 SECTION 64572 OF THE CALIFORNIA CODE OF REGULATIONS. REFER TO WATER MAIN SEPARATION REQUIREMENTS DETAIL.
- 4. ALL HARDWARE FOR BURIED PIPE CONNECTIONS SHALL BE STAINLESS STEEL REGARDLESS OF TYPE (RESTRAINED MJ, FLANGE, ETC.).
- 5. NEW WATER MAINS, TANKS, AND TREATMENT EQUIPMENT SHALL BE DISINFECTED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO BEING PLACED INTO SERVICE.

#### GRADING

- THE WORK EMBRACED HEREIN SHALL BE DONE IN ACCORDANCE WITH THE APPROPRIATE PROVISIONS OF CHAPTER 33 OF 2023 CALIFORNIA BUILDING CODE AS ADOPTED.
- 2. THE CONTRACTOR SHALL OBTAIN WRITTEN AUTHORIZATION FROM ANY PROPERTY OWNER GIVING HIM PERMISSION TO ENTER HIS PROPERTY FOR THE PURPOSES OF CONSTRUCTING THE IMPROVEMENTS DELINEATED ON THE PLANS AND TRANSITIONS THERETO OR STAGING MATERIALS AND EQUIPMENT TO SUPPORT CONSTRUCTION. CONTRACTOR SHALL SUBMIT A LETTER SIGNED BY THE PROPERTY OWNER THAT THE PROPERTY HAS BEEN PROPERLY RESTORED TO ITS PRE-CONSTRUCTION CONDITION.
- 3. ANY DIRT OR DEBRIS TRACKED ONTO ANY EXISTING ROAD FROM THIS PROJECT SHALL BE CLEANED OFF AT THE END OF EACH WORKING DAY TO THE SATISFACTION OF THE CITY.
- 4. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES IN THE WORK AREA. THE CONTRACTOR SHALL NOTIFY U.S.A. TWO (2) DAYS PRIOR TO BEGINNING ANY EXCAVATION.
- 5. PROVIDE THE CITY OF TURLOCK WITH "AS BUILT" PLANS UPON COMPLETION OF GRADING
- 6. ANY VERTICAL CUT 0R FILL DIFFERENTIAL EQUAL TO OR GREATER THAN TWELVE (12) INCHES BETWEEN ADJACENT PROPERTIES SHALL BE SUPPORTED BY AN APPROVED RETAINING WALL.
- 7. DIFFERENTIALS LESS THAN TWELVE (12) INCHES ARE TO HAVE A MAXIMUM SLOPE OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL.
- 8. GRADING CONTRACTOR SHALL REMOVE ALL ORGANIC MATTER, DEBRIS, AND OTHER DELETERIOUS OR EXCESS MATERIAL FROM THE SITE AND DISPOSE OF AT AN APPROVED LOCATION. SUBSURFACE DEBRIS NOT VISIBLE FROM THE SURFACE THAT IS NOT SUITABLE TO REMAIN ONSITE OR USED AS BACKFILL MATERIAL SHALL BE REMOVED AT ENGINEER'S DIRECTION AS EXTRA WORK.
- 9. CONTRACTOR SHALL PRESERVE SURVEY MONUMENTS TO THE EXTENT POSSIBLE. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY SURVEY MONUMENTS THAT WILL BE DISTURBED AS A RESULT OF CONSTRUCTION. MONUMENTS THAT MAY BE DISTURBED BY CONSTRUCTION WILL BE RESET BY A LICENSED LAND SURVEYOR RETAINED BY THE OWNER OR ENGINEER.
- 10. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR DUST CONTROL FOR THE DURATION OF THE WORK. DUST CONTROL MEASURES SHALL BE FULLY AND ADEQUATELY CARRIED OUT ON WEEKDAYS, WEEKENDS AND HOLIDAYS, AND WHEN NECESSARY, BEFORE OR AFTER NORMAL WORKING HOURS.
- 11. PRIOR TO THE LAYING OF THE SUB BASE OR BASE ON THE ROADWAY, THE CITY'S ENGINEER SHALL CERTIFY THAT THE SUB GRADE ELEVATIONS ARE IN CONFORMANCE WITH THE APPROVED PLANS.
- 12. ALL SEWER, STORM DRAIN AND UTILITY MANHOLES AFFECTED BY THIS PROJECT SHALL BE ADJUSTED TO GRADE AS NECESSARY BY THE CONTRACTOR AND INCLUDED IN THIS WORK. ALL WATER MAIN VALVES (CAP AND LID) SHALL BE ADJUSTED TO GRADE AS NECESSARY BY THE CONTRACTOR AND INCLUDED IN THIS WORK.
- 13. THE COSTS OF ALL REPEAT TESTING REQUIRED FOR ACCEPTANCE OF WORK SHALL BE FULLY BORNE BY THE CONTRACTOR.
- 14. PERMANENT TRENCH RESURFACING TO BE PER CITY STANDARD, OR AS DETAILED.
- 15. TEMPORARY TRENCH RESURFACING TO BE A MINIMUM 4" THICK COLD MIX.
- 16. TRENCH CUTS IN EXISTING STREETS THAT ARE NOT TO BE RECONSTRUCTED OR OVERLAID SHALL HAVE PERMANENT TRENCH RESURFACING INSTALLED WITHIN SEVEN (7) DAYS AFTER INITIAL STREET CUT.
- 17. OVER EXCAVATE 1 FOOT BELOW BOTTOM OF FOUNDATIONS (NOT INCLUDING ANY PIER TYPE FOOTING) AND EXTEND OUT TO 5 FEET MAX BEYOND THE STRUCTURE, BUT NOT BEYOND ANY ADJACENT SITE WORK, AND NOT WITHIN 2 FEET OF ANY ADJACENT STRUCTURE.

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FOR BIDDING PURPOSE DECEMBER 2024

SSOOM TO STATE THE STATE OF THE

PEGSILERY PROFESSION No. 91160

No. 91160

ATTENDED PROFESSION NO. 91160

COMMENTAL CO

TY OF TURLOCK
PROJECT NO. 23-046
GENERAL

PROVOST&
PRITCHARD
455 W FIR AVENUE
CLOVIS, CA 93611-9166
PHONE (559) 449-2700
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DESIGN ENGINEER:
AJG
LICENSE NO:
91160

DRAFTED BY: CHECKED BY
ENA KMM

DATE: DECEMBER 202
JOB NO: 229223003

PROJECT NO:
PHASE: CD

ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET G-3

OF 35

	PIPING SCHEDULE										
PROCESS ABBREVIATIONS	SERVICE	LOCATION	CLASSIFICATION	PIPE MATERIAL	THICKNESS/ PRESSURE CLASS	RESTRAINED JOINTS	JOINTS/ FITTINGS	TEST PRESSURE	TEST METHOD	LINING	COATING
SD	STORM DRAIN	BURIED	GRAVITY	PVCG	PER §40 05 00	UNRESTRAINED	PO or MJ	3 PSI	PER §40 05 2O	-	-
PW	POTABLE WATER	BURIED	PRESSURE	DIP	PER §40 05 00	RESTRAINED	PO or MJ	100 PSI	PER §40 05 20	CM	BSC, PEE
		BURIED	PRESSURE	C900	PER §40 05 00	RESTRAINED	PO or MJ	100 PSI	PER §40 05 20	-	-

C900	AWWA C900 STANDARD	FLG	FLANGE	BSC	BITUMINOUS SEAL COATED PER AWWA C105	FBE	FUSION BONDED EPOXY 40 05 00
DIP	DUCTILE IRON PIPE	GE	GROOVED END	014		DEE	
PVCG	POLYVINYL CHLORIDE GRAVITY	MJ	MECHANICAL JOINT	СМ	CEMENT MORTAR PER AWWA C104	PEE	POLYETHYLENE ENCASEMENT 40 05 00 PER AWWA
WSP	WELDED STEEL PIPE	РО	PUSH ON JOINT	EP	EPOXY POLYURETHANE 40 05 00 SYSTEM 2		

#### LOADING CRITERIA

SITE CLASS

#### RISK CATEGORY OF BUILDING:

- WIND LOAD: ULTIMATE DESIGN WIND SPEED **EXPOSURE**
- 100 MPH

D (DEFAULT)

- SEISMIC LOAD: SPECTRAL RESPONSE ACCELERATION S<sub>s</sub> SPECTRAL RESPONSE ACCELERATION S<sub>1</sub> SPECTRAL RESPONSE COEFFICIENTS S<sub>DS</sub> SPECTRAL RESPONSE COEFFICIENT S<sub>D1</sub>

SEISMIC DESIGN CATEGORY

0.264g 0.562g 0.365g SEISMIC IMPORTANCE FACTOR Is 1.25

#### SOIL AND FOUNDATION NOTES

- ALL CONCRETE FOOTINGS AND SLABS SHALL BEAR UPON AND/OR PENETRATE INTO PROPERLY COMPACTED FILL WHICH SHALL HAVE A MINIMUM IN-PLACE DENSITY OF 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AT THE PROJECT SITE. IN CASE OF EXPANSIVE CLAY SOIL CONDITIONS, THE OWNER MUST CONSULT WITH A GEOTECHNICAL ENGINEER AND THE FOUNDATION PLAN MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER.
- 2. FOUNDATION WORK TO BE DONE PER 2023 CBC, CHAPTER 18.
- 3. ENGINEERING DESIGN OF FOUNDATION IS AS FOLLOWS: a) ASSUMED ALLOWABLE SOIL BEARING CAPACITY CONTINUOUS FOOTING 1500 PSF INCLUDING WIND OR SEISMIC 1500 PSF

SHOULD THE ACTUAL SOIL CONDITIONS NOT BE EQUAL TO OR BETTER THAN THE MINIMUM REQUIREMENTS SHOWN ABOVE. NOTIFY THE ENGINEER OF RECORD IMMEDIATELY.

- 4. SOIL SHALL BE EXCAVATED TO THE ELEVATIONS INDICATED ON THE DRAWINGS FOR STRUCTURE FOUNDATIONS.
- 5. ALL FOUNDATION EXCAVATIONS MUST BE REVIEWED AND APPROVED PRIOR TO PLACEMENT
- CONCRETE SLABS-ON-GRADE IN THE MAINTENANCE AND CHEMICAL STORAGE BUILDINGS SHALL HAVE A 6" THICK AGGREGATE BASE LAYER ON TOP OF THE PREPARED SUBGRADE. SEE THE FOUNDATION PLANS AND DETAILS FOR THE SAND AND VAPOR BARRIER LAYERS OVER THE

#### SPECIAL INSPECTION NOTES

- THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE 48 HOURS BEFORE PLACEMENT OF REINFORCING STEEL AND CONCRETE SO THAT THE SUBGRADE OF EXCAVATIONS MAY BE INSPECTED BY THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL VERIFY BACKFILL MATERIAL, BACKFILLING PROCEDURES AND SOIL COMPACTION TESTS.
- 2. STRUCTURAL OBSERVATION SHALL BE PROVIDED BY THE DESIGN ENGINEER(S) OF RECORD OR THEIR AUTHORIZED REPRESENTATIVES IN ACCORDANCE WITH CBC 2023, SECTION 1704. STRUCTURAL OBSERVATION SHALL CONSIST OF SITE VISITS AT INTERVALS APPROPRIATE TO THE STAGE OF CONSTRUCTION TO OBSERVE CONSTRUCTION IN PROGRESS AND REVIEW OF TESTING AND INSPECTION REPORTS FOR GENERAL COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS RELATING TO THE STRUCTURAL WORK AND THE NONSTRUCTURAL COMPONENTS AND EQUIPMENT ANCHORAGE.
- SPECIAL INSPECTION IN ACCORDANCE WITH CBC 2023 SECTIONS 1704 & 1705, SHALL BE REQUIRED AS INDICATED IN THE SPECIAL INSPECTION AND TESTING SCHEDULE ON THIS SHEET.
- 4. ALL SPECIAL INSPECTIONS REQUIRED MUST BE BY APPROVED INDEPENDENT INSPECTORS WHO SHALL BE RETAINED BY THE OWNER. INSPECTORS SHALL SUBMIT THEIR REPORTS DIRECTLY TO THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. THESE INSPECTORS ARE IN ADDITION TO ANY REQUIRED OWNER INSPECTIONS. CONTRACTOR SHALL COORDINATE INSPECTIONS AND ALLOW ACCESS FOR THE SPECIAL INSPECTOR TO PERFORM REQUIRED INSPECTIONS.
- 5. SPECIAL INSPECTION FOR STUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AISC
- 6. MASONRY SHALL REQUIRE LEVEL B FREQUENCY INSPECTIONS.

REQUIRED VERIFICAT CONSTRU	TION AND INSP CTION (CBC TA			
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	REFERENCES
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS AND PLACEMENT		х		ACI 318, 5.5, 7.1-7.7 CBC 1910.4
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED		X		ACI 318, 8.1.3, 21.2.8 CBC 1908.5, 1909.1
5. VERIFYING USE OF REQUIRED DESIGN MIX		х		ACI 318, CH.4, 3.2-5.4 CBC 1904.2, 1910.2, 19103
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	х			ASTM C172 ASTM C81 ASI 318, 5.6, 5.8 CBC 1910.10
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	x			ACI 318, 5.9, 5.10 CBC 1705.3.4, 1705.5.5, 1705.5.6, 1910.6, 1910.7, 1910.8
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		х		ACI 318, 5.11-5.13 CBC 1910.9
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X		ACI 318, 6.11
13. MATERIAL VERIFICATION OF REINFORCEMENT STEEL			MANUFACTURER SHALL PROVIDE MILL TEST REPORTS-SEE CBC FOR EXCEPTIONS	CBC 1705.12.1

REQUIRED VERIFICA	TION AND INSI	PECTION C	F ANCHORS	
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	REFERENCES
1. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS		Х		ACI 318, 3.8.6, 8.1.5, 21.2.8 CBC 1909.1

#### REQUIRED VERIFICATION AND INSPECTION OF SOILS (CBC TABLE 1705.6)

	T			1
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	REFERENCES
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		х		CBC 1705.6 CBC 1804
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		Х		
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		Х		
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	х			
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		x		

#### STEEL NOTES

- 1. ALL EXPOSED STEEL SHALL BE HOT DIP GALVANIZED.
- 2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING, UNLESS SPECIFIED OTHERWISE:
- a. STRUCTURAL SHAPES M, S, HP, C, MC, L, AS PER AISC MANUAL 15th EDITION, TO COMPLY WITH ASTM A36 (Fy=36 ksi) UNLESS NOTED OTHERWISE.
- b. STRUCTURAL SHAPES W, AISC MANUAL 15th EDITION, TO COMPLY WITH ASTM A992 (Fy=50 ksi) UNLESS NOTED OTHERWISE. c. STRUCTURAL STEEL TUBING, AS PER AISC MANUAL 15th EDITION, TO
- COMPLY WITH ASTM A500 GRADE B (Fy=46 ksi) UNLESS NOTED OTHERWISE. d. STRUCTURAL STEEL PIPE, AS PER AISC MANUAL 15th EDITION, TO COMPLY WITH ASTM A53 GRADE B (Fy=35 ksi) UNLESS NOTED OTHERWISE.
- ANY MATERIAL REQUEST WITH DIFFERENT SPECIFICATIONS THAN NOTED ABOVE ARE TO BE DIRECTED TO THE DESIGNER, IN A TIMELY MANNER, PRIOR TO CONSTRUCTION AND/OR INSTALLATION. ANY ITEM OF A DIFFERENT SPECIFICATION INSTALLED, WITHOUT SPECIFIC PRIOR WRITTEN APPROVAL MAY NOT MEET THE PROJECT ENGINEERING REQUIREMENTS NECESSITATING A REMOVAL AND/OR SIGNIFICANT REVISION TO ITEMS INSTALLED.
- 4. STRUCTURAL STEEL DETAILING, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AISC MANUAL AND THE LATEST EDITION OF STRUCTURAL STEEL DETAILING BY THE AISC.
- 5. A STEEL BUILDING IS STRUCTURALLY STABLE WHEN ALL ASPECTS OF THE DESIGN SHOWN ON THESE DRAWINGS ARE COMPLETED. THE CONTRACTOR SHALL DETERMINE WHEN AND WHERE TEMPORARY BRACING IS NEEDED.
- WELDS SHALL BE MADE WITH WIRE OR ELECTRODE HAVING A MINIMUM TENSILE STRENGTH OF 70,000 PSI, UNLESS NOTED OTHERWISE.

### **CONCRETE MASONRY**

- FURNISH AND INSTALL MASONRY MATERIALS IN CONFORMANCE WITH TMS 602.
- SPECIFICATION FOR MASONRY STRUCTURES.
- CMU: ASTM C90 LIGHTWEIGHT.
- 3. MORTAR: ASTM C270, TYPE S BY PROPORTION
- 4. COARSE GROUT: ASTM C476, MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI OR MASONRY DESIGN STRENGTH, F'M, WHICHEVER IS GREATER.
- 5. IF PLACEMENT OF GROUT IS STOPPED FOR ONE HOUR OR LONGER, PROVIDE HORIZONTAL CONSTRUCTION JOINTS BY STOPPING THE GROUP A MINIMUM OF 1 1/2 INCHES BELOW THE TOP OF THE BLOCK.
- HORIZONTAL CONTRACTION JOINTS: AS INDICATED ON DRAWINGS WITH MAXIMUM SPACING OF 25 FT OR 1.5 TIMES MASONRY PANEL HEIGHT.
- 7. SUBMIT WRITTEN PROCEDURES FOR GROUTING PRIOR TO THE START OF CONSTRUCTION.

REQUIRED VERIFICATION AND INSPECTION OF MASONRY CONSTRUCTION (LEVEL B)						
VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC				
MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		Х				
PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION		Х				
SIZE AND LOCATION OF STRUCTURAL MEMBERS		Х				
TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		Х				
WELDING OF REINFORCEMENT	X					

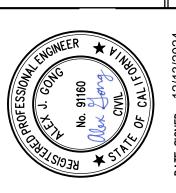
#### CONCRETE NOTES

ALL CONCRETE SHALL BE NORMAL WEIGHT CONSISTING OF TYPE II/V PORTLAND CEMENT, FINE AGGREGATE, COARSE AGGREGATE, AND WATER (WATER:CEMENT RATIO SHALL NOT EXCEED 0.45 ABSOLUTE BY WEIGHT, AND SLUMP SHALL NOT EXCEED 4 INCHES ±1 INCH). THE CONCRETE SHALL BE PLACED WITHIN ONE AND ONE-HALF HOURS FROM THE TIME WATER IS INTRODUCED. TO YIELD AT 28 DAYS A MINIMUM COMPRESSIVE STRENGTH AS FOLLOWS:

PAVING, SLABS, AND SIDEWALKS 3,000 PSI STRUCTURAL FOOTINGS 4,000 PSI ALL OTHER STRUCTURAL CONCRETE 4,000 PSI

- 2. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318 (LATEST EDITION).
- 3. CONCRETE MIXING SHALL COMPLY WITH ASTM C94.
- 4. SUBMIT CONCRETE LIFT DRAWINGS SHOWING THE LOCATION OF CONSTRUCTION JOINTS AND OTHER TYPES OF JOINTS OTHER THAN SPECIFIED OR SHOWN ON THE DRAWINGS FOR FAVORABLE REVIEW BY THE ENGINEER BEFORE START OF WORK ON FORMS, REINFORCING STEEL OR PLACING CONCRETE. ANY ADDITIONAL VERTICAL OR HORIZONTAL CONSTRUCTION JOINTS SHALL HAVE A STANDARD KEYWAY AND SHALL BE REVIEWED BY THE ENGINEER. REFER TO SPECIFICATIONS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION. CONSTRUCTION JOINTS SHALL BE ROUGHENED TO 1/4" AMPLITUDE.
- OPENINGS, PIPE SLEEVES, CONDUITS, INSERTS, AND OTHER EMBEDDED ITEMS SHALL BE IN PLACE BEFORE CONCRETE IS PLACED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, LANDSCAPING, HVAC, PLUMBING, INSTRUMENTATION, AND OTHER PLANS FOR ITEMS REQUIRING SLEEVES AND EMBEDMENTS IN CONCRETE WHICH ARE NOT INDICATED OR SHOWN ON STRUCTURAL DRAWINGS. NO PIPES OR SLEEVES SHALL PASS THROUGH STRUCTURAL MEMBERS UNLESS SHOWN ON STRUCTURAL DRAWINGS. COORDINATE WITH EQUIPMENT MANUFACTURER'S DRAWNIGS FOR ANCHORING DEVICES.
- CONCRETE SHALL BE PREVENTED FROM PREMATURE DRYING FOR A CURING PERIOD OF AT LEAST SEVEN DAYS AFTER IT IS PLACED. EXPOSED SURFACES SHALL BE KEPT CONTINUOUSLY MOIST FOR THE ENTIRE PERIOD. IN LIEU OF WATER CURING, THE CONCRETE SHALL BE PROTECTED BY SPRAYING WITH AN APPROVED CURING COMPOUND. ALL SURFACES SHALL BE KEPT MOIST UNTIL THE COMPOUND IS APPLIED.
- CONTROL JOINTS SHALL BE PLACED NO GREATER THAN 20 FEET APART IN BOTH DIRECTIONS WITHIN 8 HOURS OF THE CONCRETE PLACEMENT ON ALL CONCRETE SLABS. PROVIDE CONTROL JOINTS IN UNREINFORCED SLABS PER PCA GUIDELINES. NO CONTROL JOINTS REQUIRED IN VESSEL PADS.
- ALL EXTERIOR SLABS SHALL BE SLOPED TO ALLOW DRAINAGE OF RUNOFF WATER TO PREVENT PONDING.
- UNLESS NOTED OTHERWISE, ALL EXPOSED EDGES AND CORNERS SHALL BE CHAMFERED 3/4 INCH. INTERIOR FLOORS AND EXTERIOR SIDEWALKS SHALL HAVE TOOLED 3/8 INCH RADIUS CONSTRUCTION JOINTS.

CONCRETE	REINFORCEMENT COVER				
SIZE	COVER (IN)				
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTI					
ALL SIZES	3				
CONCDETE EV	POSED TO EARTH OR WEATHER				
CONCRETE EX	POSED TO EARTH OR WEATHER				
#6 - #18 BAR	2				
#5 BAR, W31 OR D31 WIRE, AND SMALLER	1 1/2				
CONCRETE NOT EXPOSED	TO WEATHER OR IN CONTACT WITH GROUND				
#14 & #18 BARS	1 1/2				
#11 BAR & SMALLER	3/4				

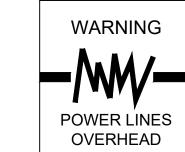


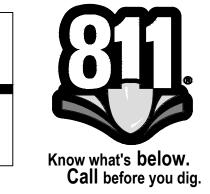
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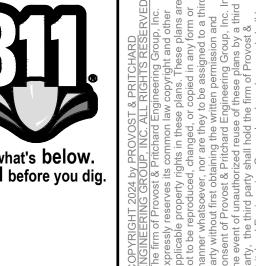
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JOB NO: 229223003 ROJECT NO: PHASE: CD

ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS. SHEET G-4







WELL 29 CHLORINATION CITY OF TURLOCK
CITY PROJECT NO. 23-046
GENERAL

PROVOST&
PRITCHARD
455 W FIR AVENUE
CLOVIS, CA 93611-9166
PHONE (559) 449-2700

DESIGN ENGINEER: AJG LICENSE NO:

91160 DRAFTED BY: CHECKED BY: ENA KMM

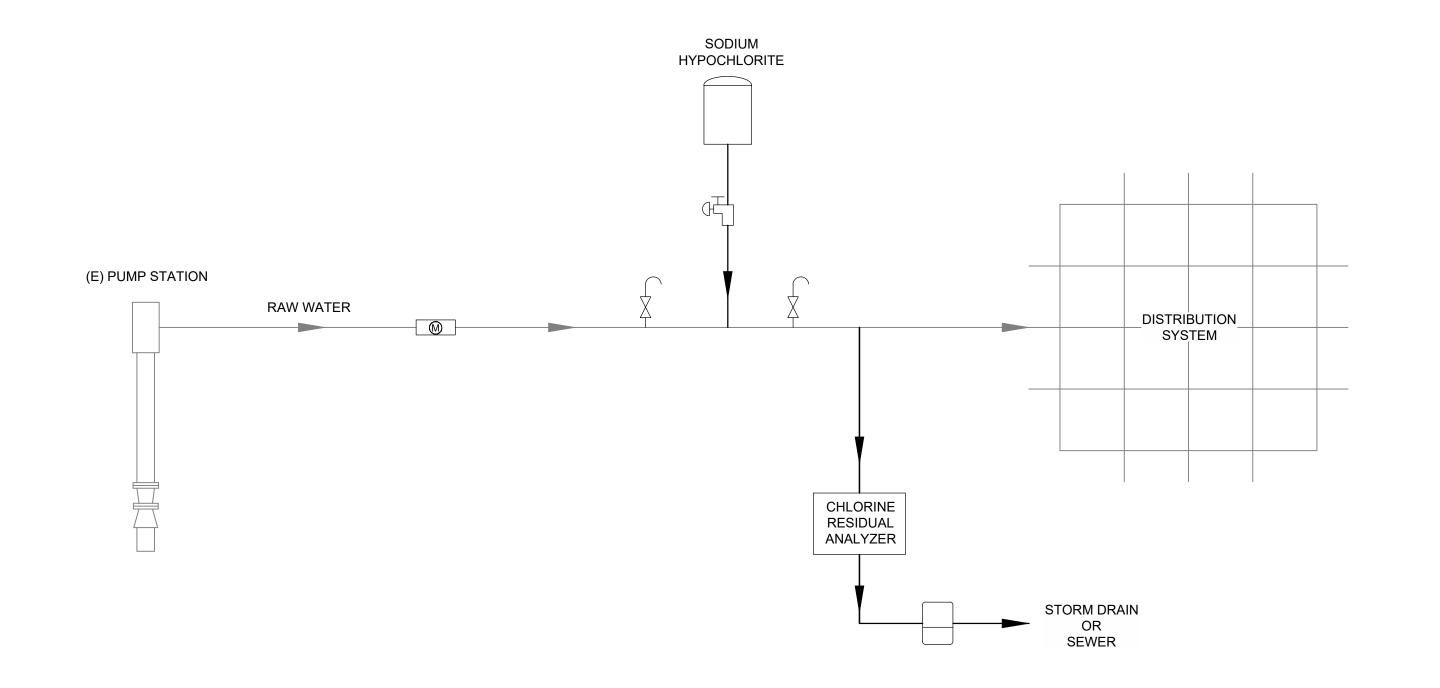
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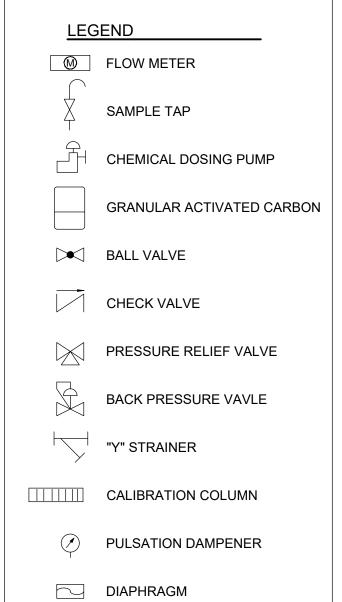
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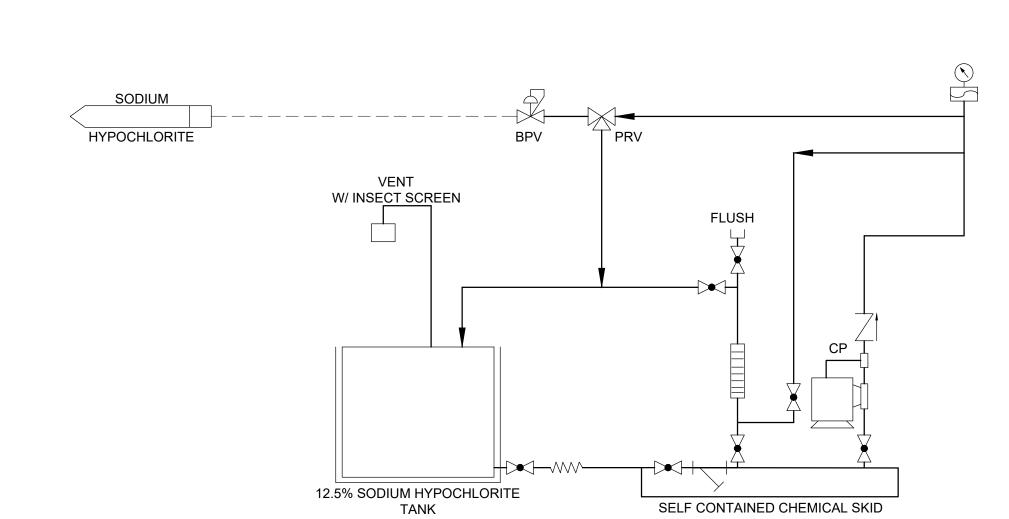
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SHEET G-5 5 of 35

DISINFECTANT DESIGN CRITERIA DESCRIPTION WELL 29 WELL PUMP CAPACITY, GPM 1100 DRIVE TYPE SS DISCHARGE PRESSURE, PSI 60 SODIUM HYPOCHLORITE CHEMICAL CONCENTRATION 12.50% MAXIMUM DOSE, MG/L 1.00 CHEMICAL STORAGE VOLUME, GAL 250 CHEMICAL PUMPS QUANTITY PUMP TYPE DDA MAXIMUM CAPACITY, GPH 0.55

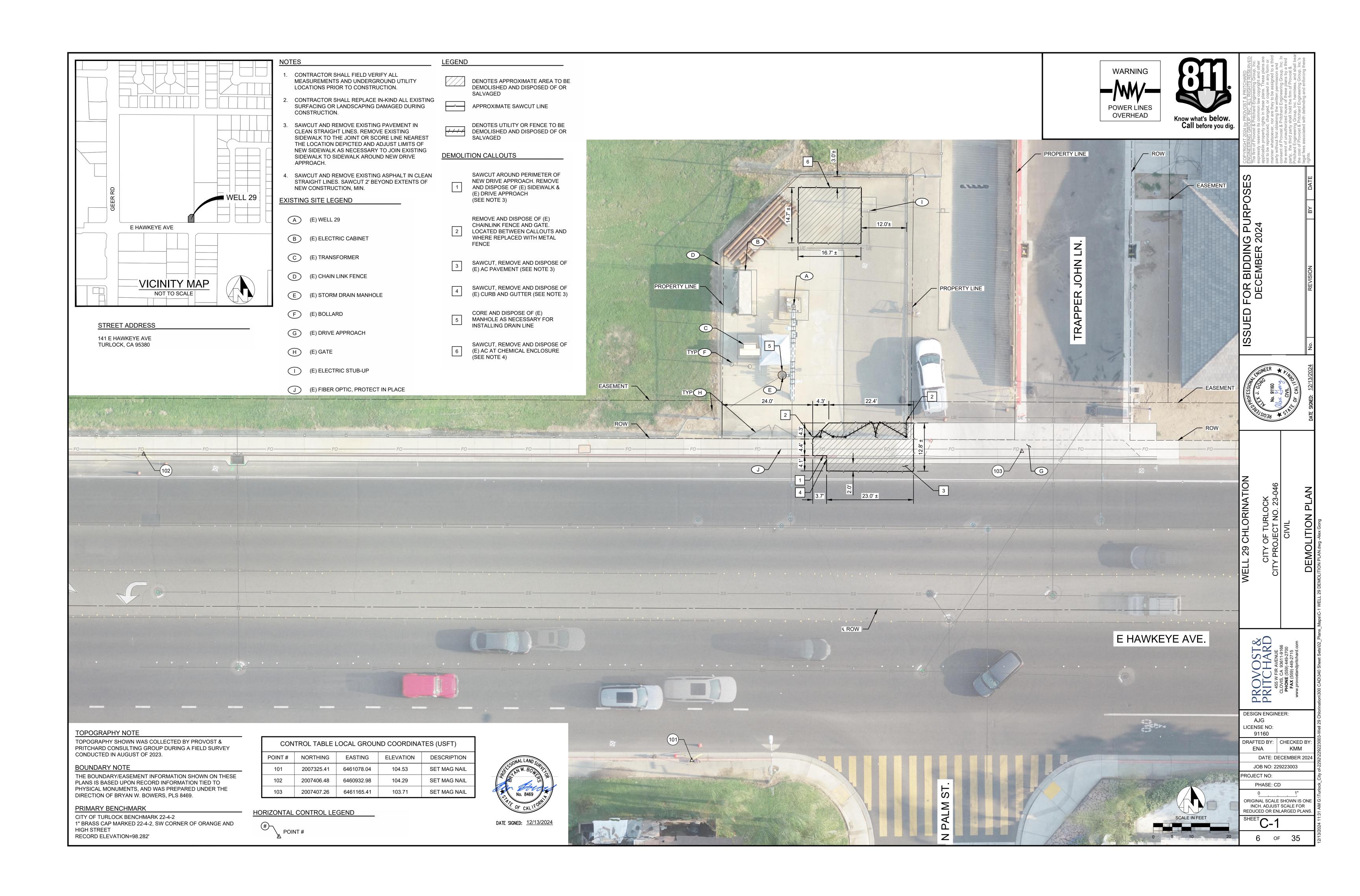


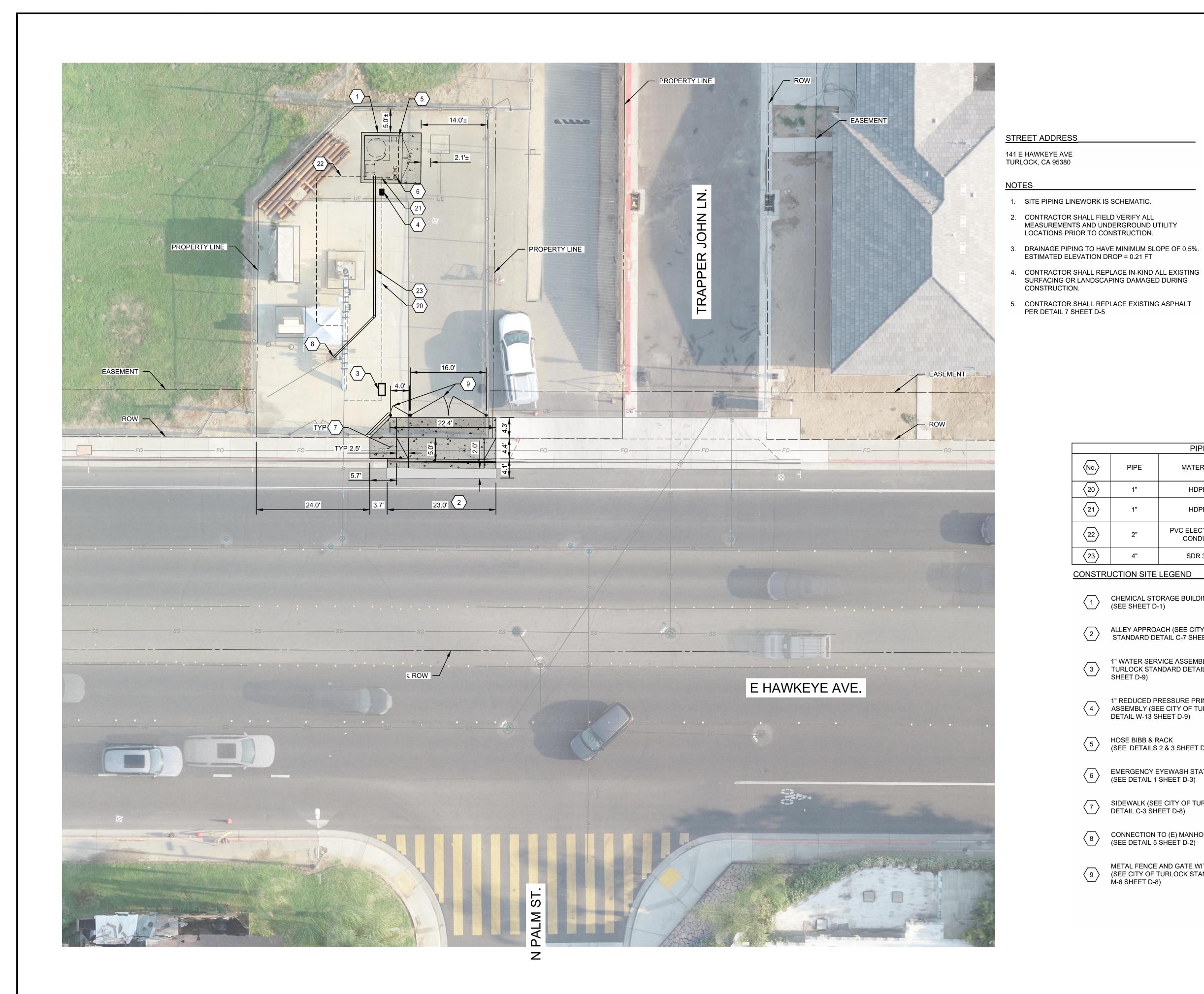


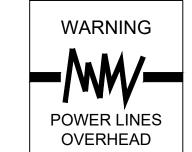


PROCESS FLOW DIAGRAM

CHEMICAL INJECTION PROCESS FLOW DIAGRAM



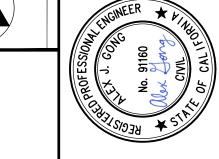






Know what's below.
Call before you dig.

E HAWKEYE AVE VICINITY MAP NOT TO SCALE



WELL 29 CHLORINATION

CITY OF TURLOCK
CITY PROJECT NO. 23-046

	PIPING LEGEND										
PIPE	MATERIAL	COMMENT									
1"	HDPE	SITE UTILITY WATER									
1"	HDPE	ANALYZER SAMPLE LINE									
2"	PVC ELECTRICAL CONDUIT	SODIUM HYPOCHLORITE FEED WITH 1/2" OD TUBING (SEE DETAIL 1 SHEET D-2)									
4"	SDR 35	ANALYZER DRAIN LINE (SEE NOTE 3)									

### CONSTRUCTION SITE LEGEND

CHEMICAL STORAGE BUILDING PAD (SEE SHEET D-1)

ALLEY APPROACH (SEE CITY OF TURLOCK STANDARD DETAIL C-7 SHEET D-8)

1" WATER SERVICE ASSEMBLY (SEE CITY OF TURLOCK STANDARD DETAILS W-10 & W-11 SHEET D-9)

1" REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY (SEE CITY OF TURLOCK STANDARD DETAIL W-13 SHEET D-9)

HOSE BIBB & RACK (SEE DETAILS 2 & 3 SHEET D-3)

EMERGENCY EYEWASH STATION (SEE DETAIL 1 SHEET D-3)

SIDEWALK (SEE CITY OF TURLOCK STANDARD DETAIL C-3 SHEET D-8)

CONNECTION TO (E) MANHOLE (SEE DETAIL 5 SHEET D-2)

METAL FENCE AND GATE WITH MOWSTRIP (SEE CITY OF TURLOCK STANDARD DETAIL M-6 SHEET D-8)

CONCRETE IMPROVEMENTS

CONSTRUCT AC PAVEMENT (SEE DETAIL 7 SHEET D-5)

PROVOST& PRITCHARD

DESIGN ENGINEER: AJG LICENSE NO: 91160

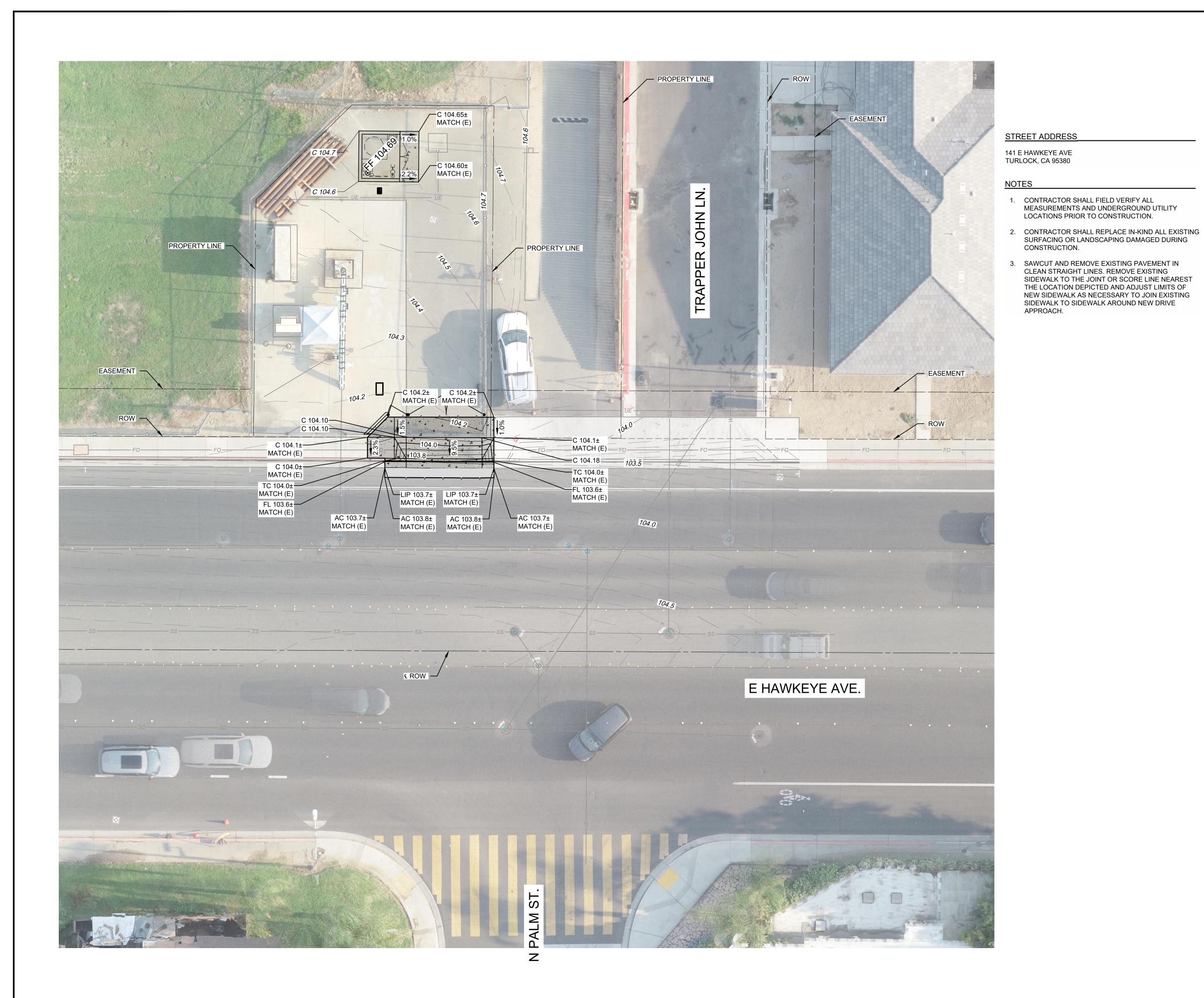
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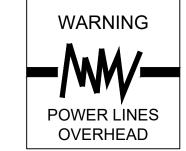
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ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

7 OF 35







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#### GRADING SITE LEGEND

ASPHALT CONCRETE

CONCRETE

TOP OF CURB

CONCRETE IMPROVEMENTS

CONSTRUCT AC PAVEMENT (SEE DETAIL 7 SHEET D-5)

**EXISTING** 

FLOW LINE

CITY OF TURLOCK
CITY PROJECT NO. 23-046

DESIGN ENGINEER: AJG LICENSE NO:

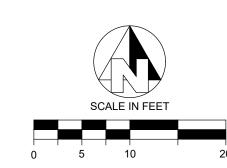
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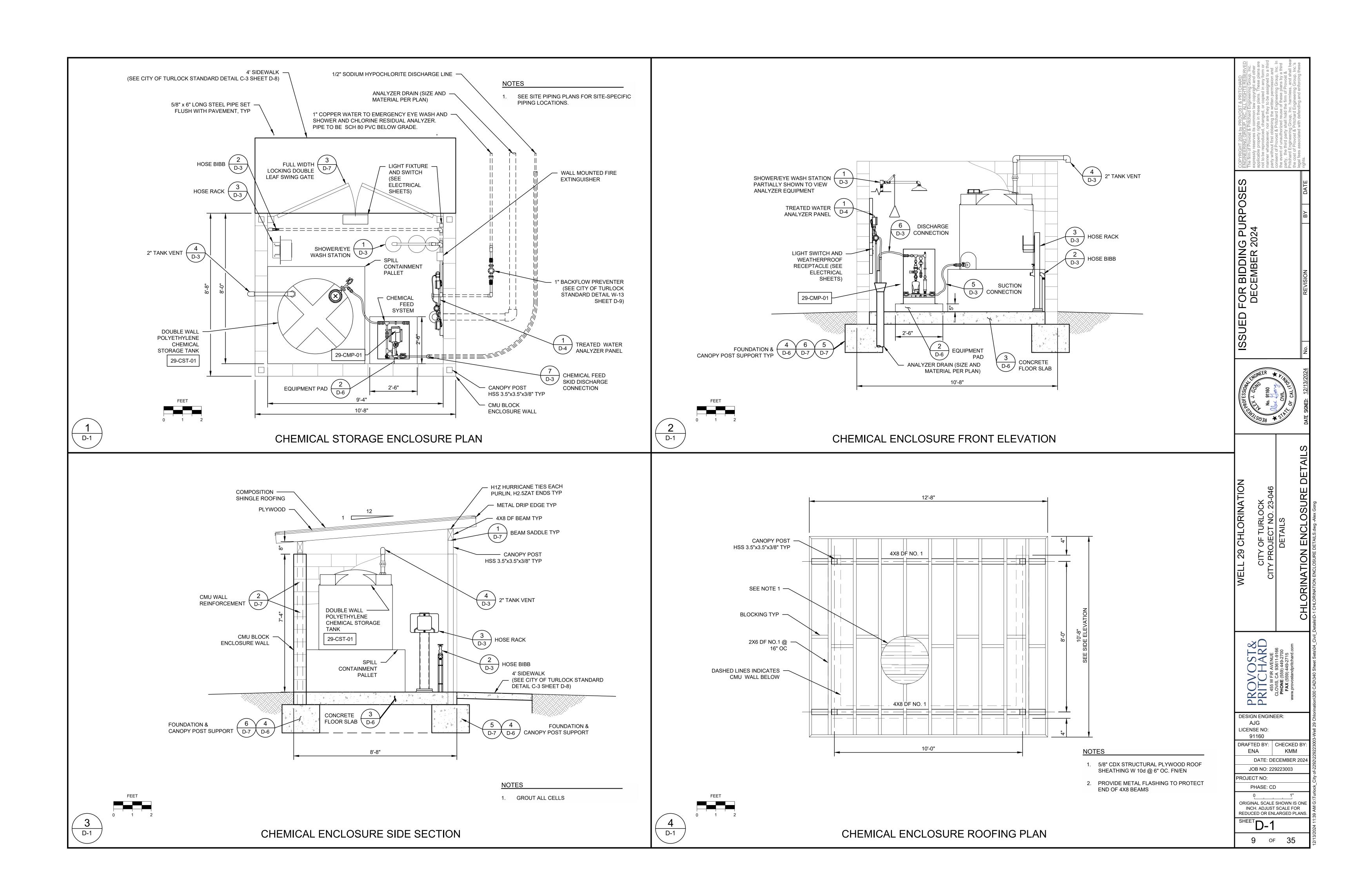
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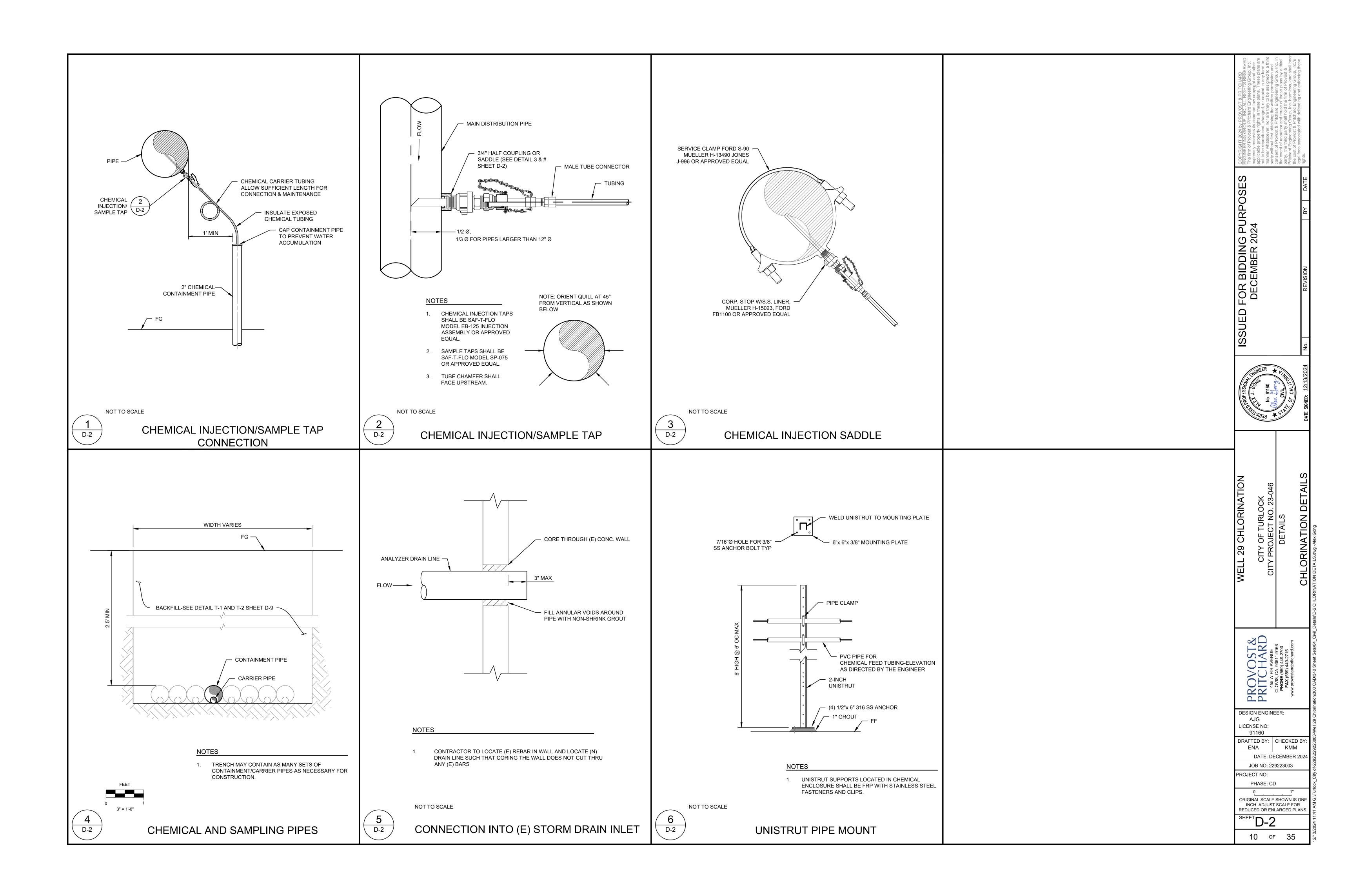
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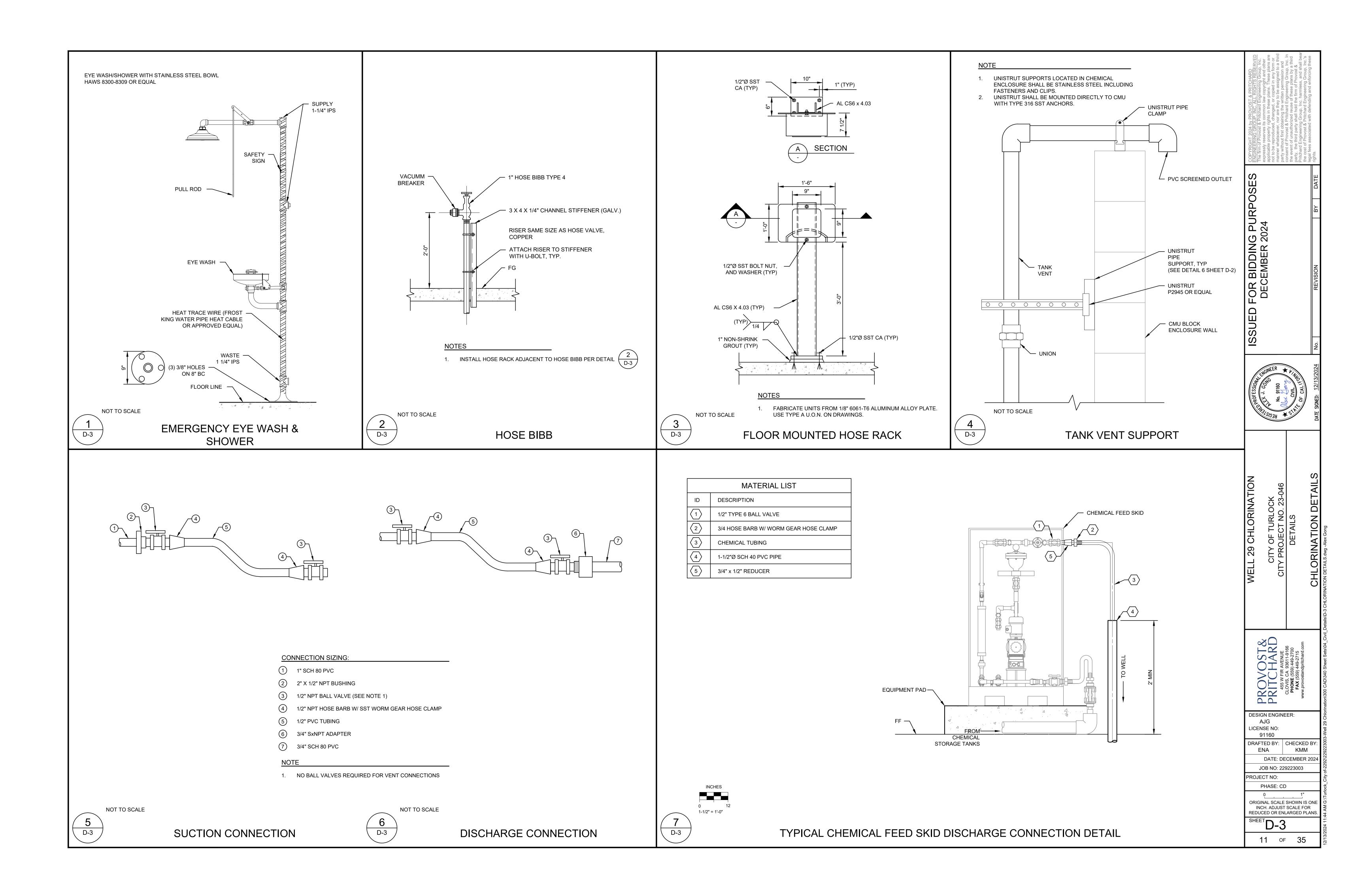
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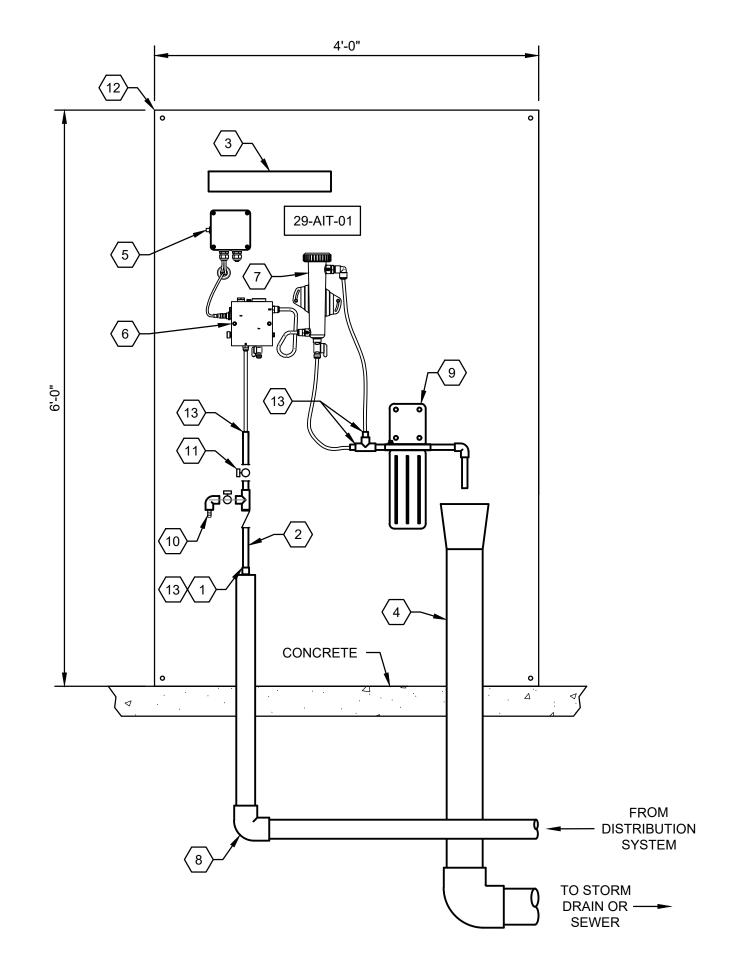












	MATERIAL LIST
ID	DESCRIPTION
1	1" x 1/2" REDUCER
2	ANALYZER FEED WATER PIPE
3	ANALYZER NAMEPLATE (TYP)
4	DRAIN LINE (SIZE & MATERIAL PER PLAN)
5	CHLORINE ANALYZER CONTROLLER
6	CHLORINE FLOW CELL
7	pH FLOW CELL
8	1" SITE WATER
9	WATTS 70,000 GALLON ACTIVATED BLOCK CARTRIDGE WITH HEAVY DUTY FILTER HOUSING OR APPROVED EQUAL
(10)	SAMPLE TAP (TYP)
(11)	BALL VALVE (TYP)
(12)	1/2" BACKBOARD, SEE NOTE 2
\(\frac{13}{}\)	TUBING ADAPTER

- ALL ANALYZERS TO BE EQUIPPED WITH MANUFACTURER'S RECOMMENDED SAMPLE CONDITIONING ACCESSORIES.
- 2. ANALYZER BACKBOARD TO BE COVERED WITH WATERPROOF POLYMER, OR EXTERIOR GRADE PLYWOOD WITH 12 GAUGE STAINLESS STEEL SHEET FROM THE FLOOR TO THE HIGHEST PIECE OF EQUIPMENT. RIGIDLY MOUNT EQUIPMENT, ACCESSORIES, CABLES, AND TUBING/PIPES TO BACKBOARD USING STAINLESS STEEL CLIPS AND FASTENERS. MOUNTING USING ADHESIVES IS NOT ACCEPTABLE. MOUNT BACKBOARD TO CMU WALL OR TO TWO UNISTRUT SUPPORTS.
- 3. ELECTRICAL JUNCTION BOXES FOR POWER AND SIGNAL TO/FROM THE ANALYZERS SHALL BE MOUNTED TO THE BACKBOARD NEAR THE ANALYZERS WITH CONDUIT/CABLE ROUTED NEATLY BETWEEN THE JUNCTION BOXES AND ANALYZERS.

CITY OF TURLOCK
CITY PROJECT NO. 23-046
DETAILS

DESIGN ENGINEER: LICENSE NO:

91160 DRAFTED BY: CHECKED BY: ENA KMM

> DATE: DECEMBER 2024 JOB NO: 229223003

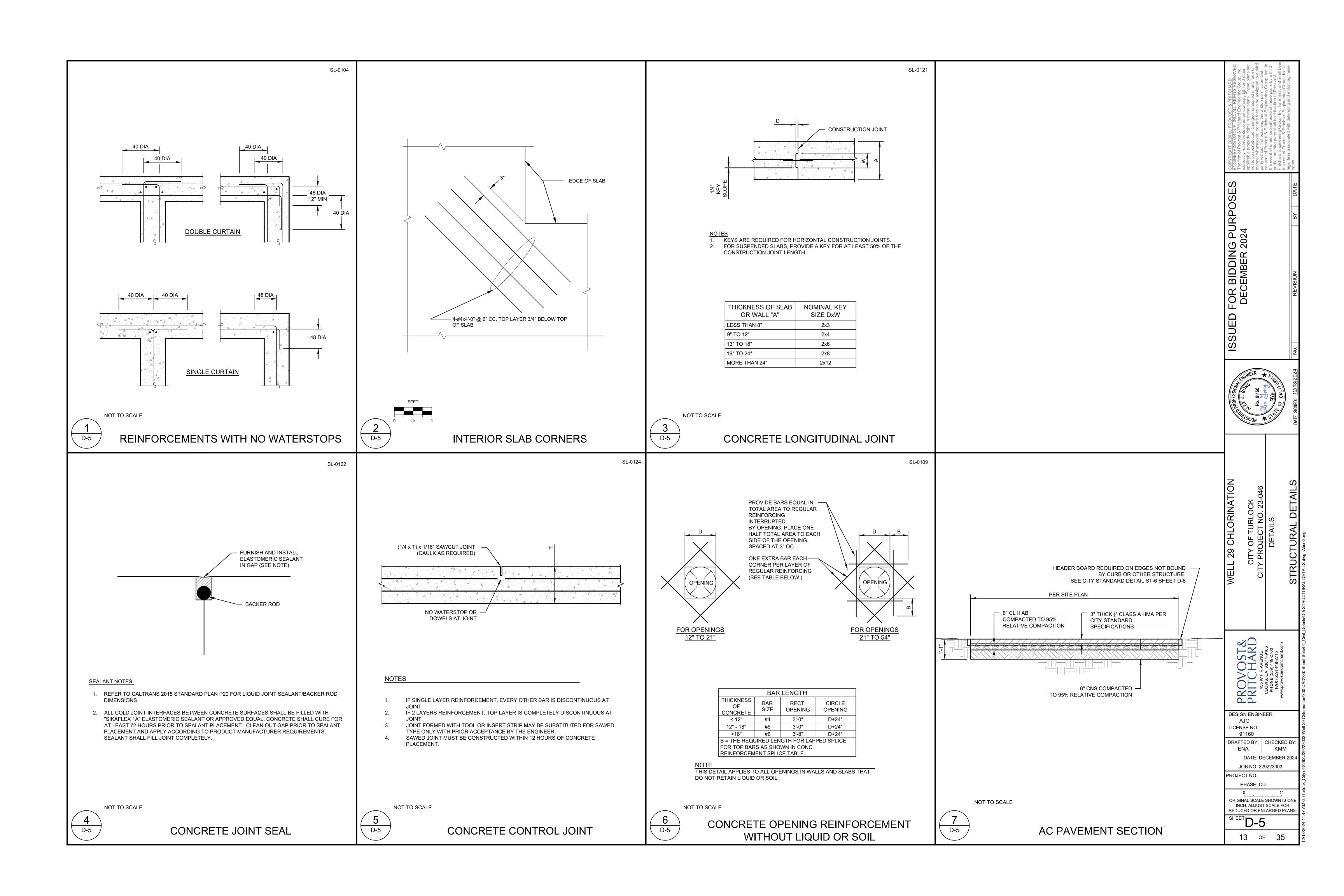
PROJECT NO: PHASE: CD

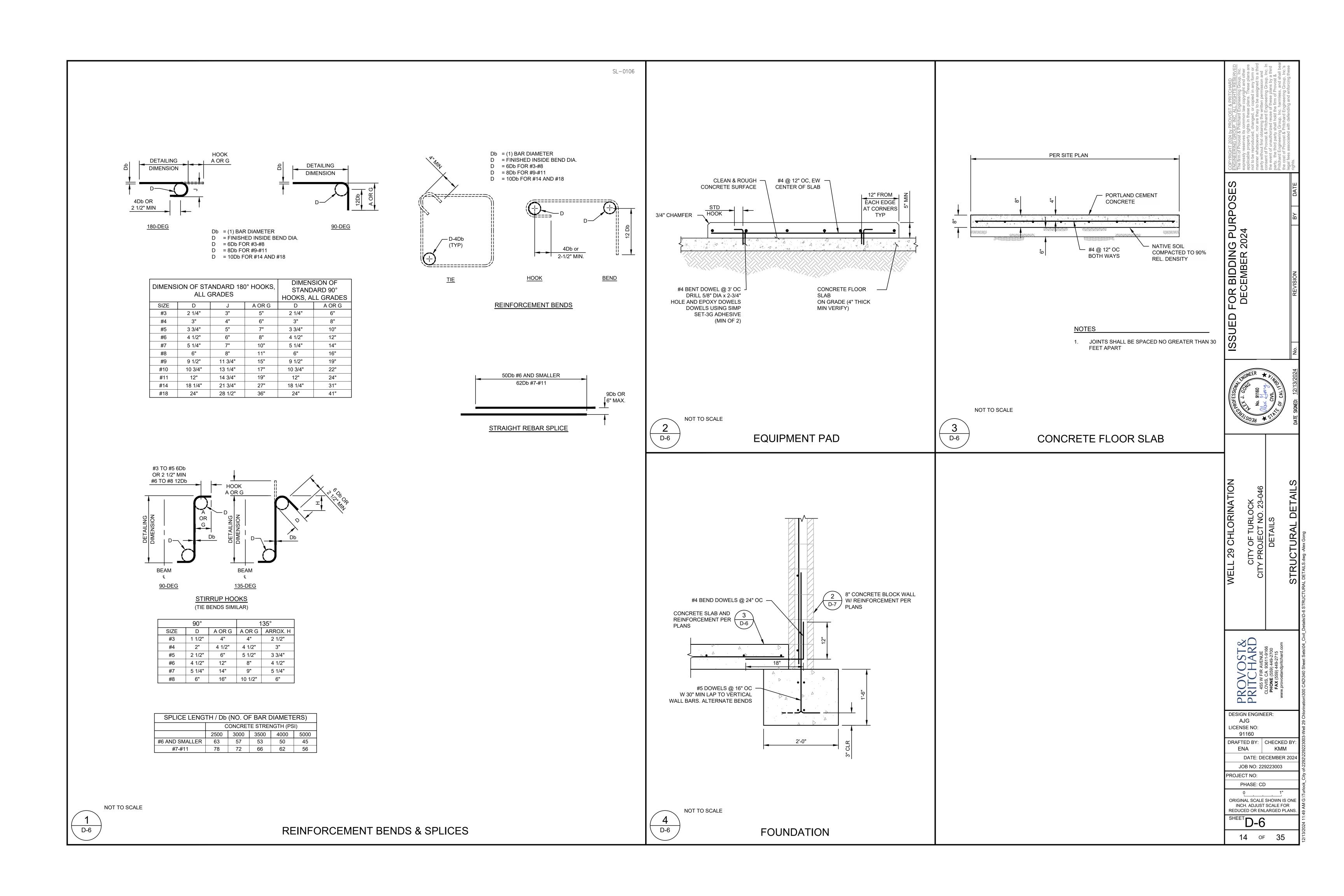
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

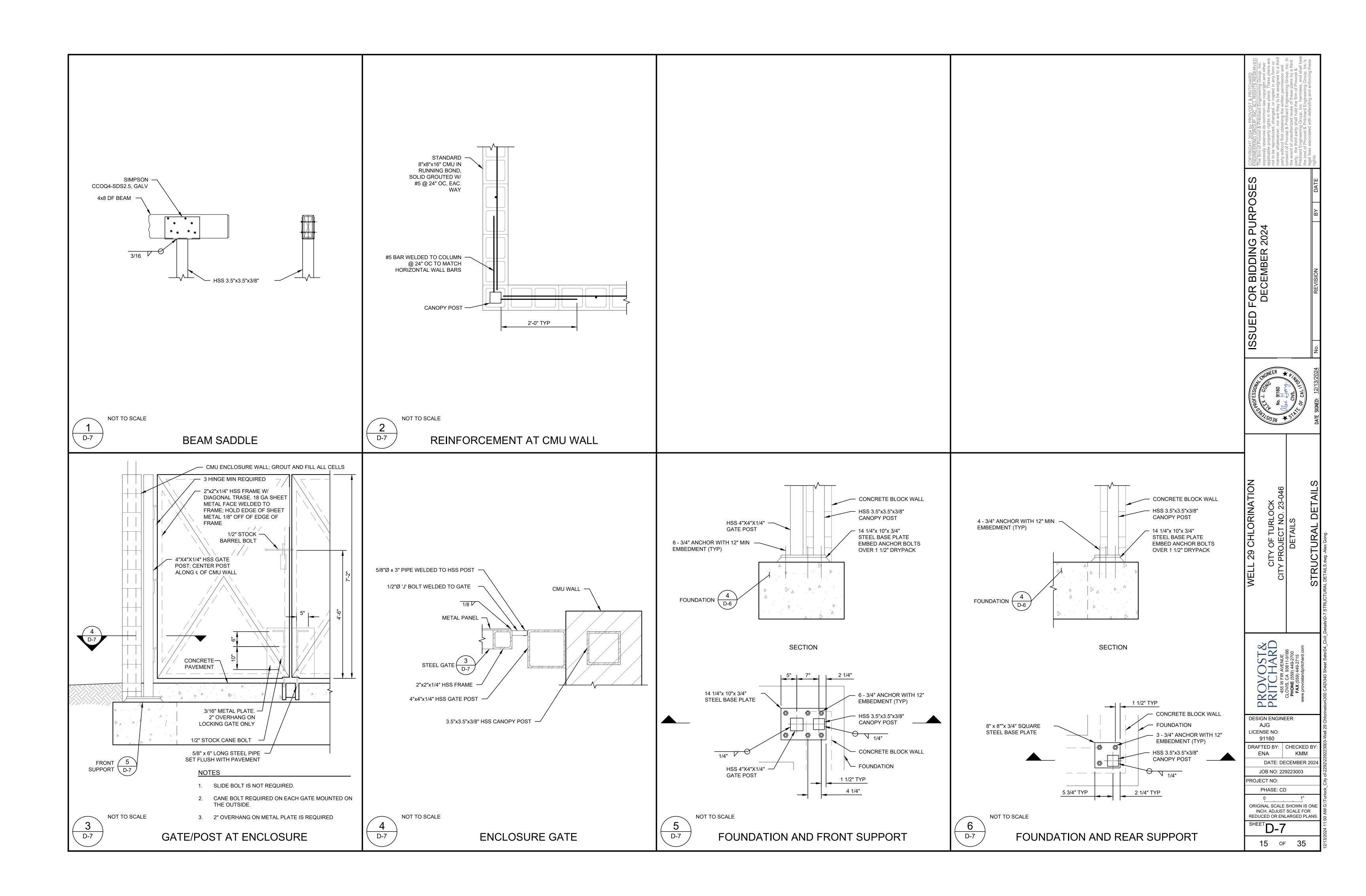
12 of 35

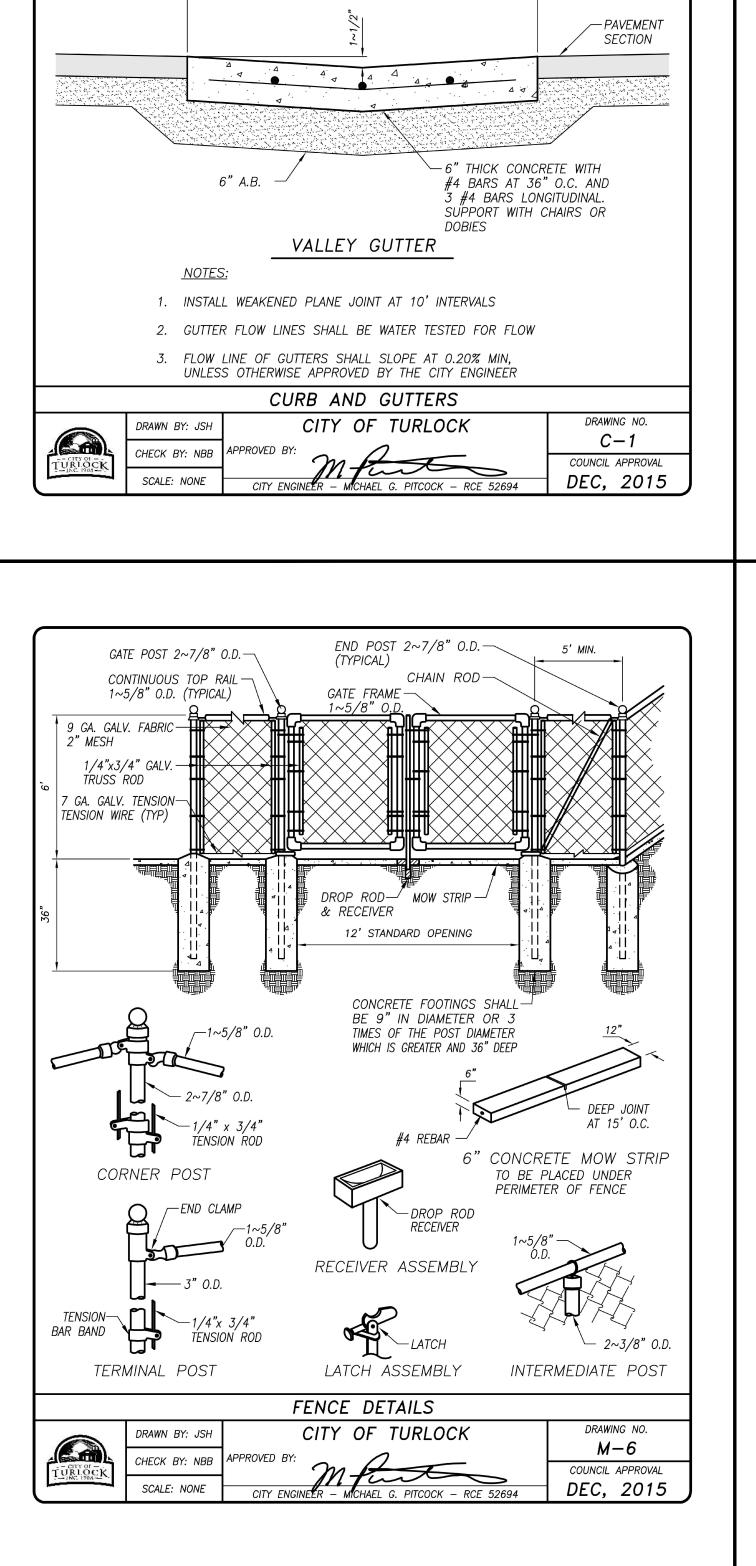
NOT TO SCALE

WATER SAMPLING STATION









PAVEMENT

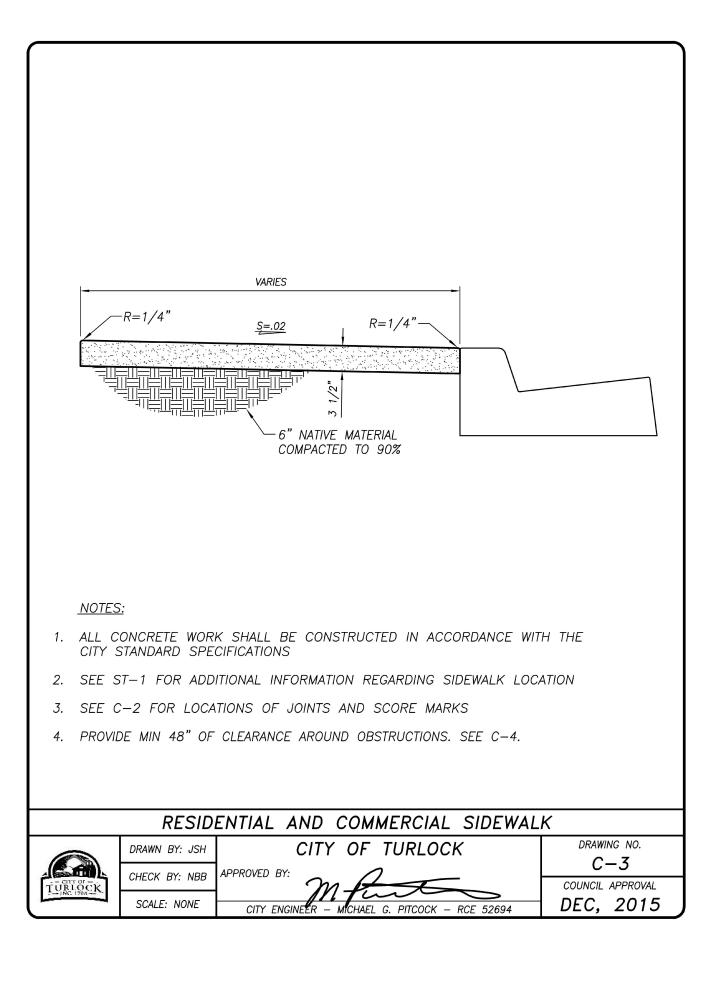
48" MIN FOR STREETS

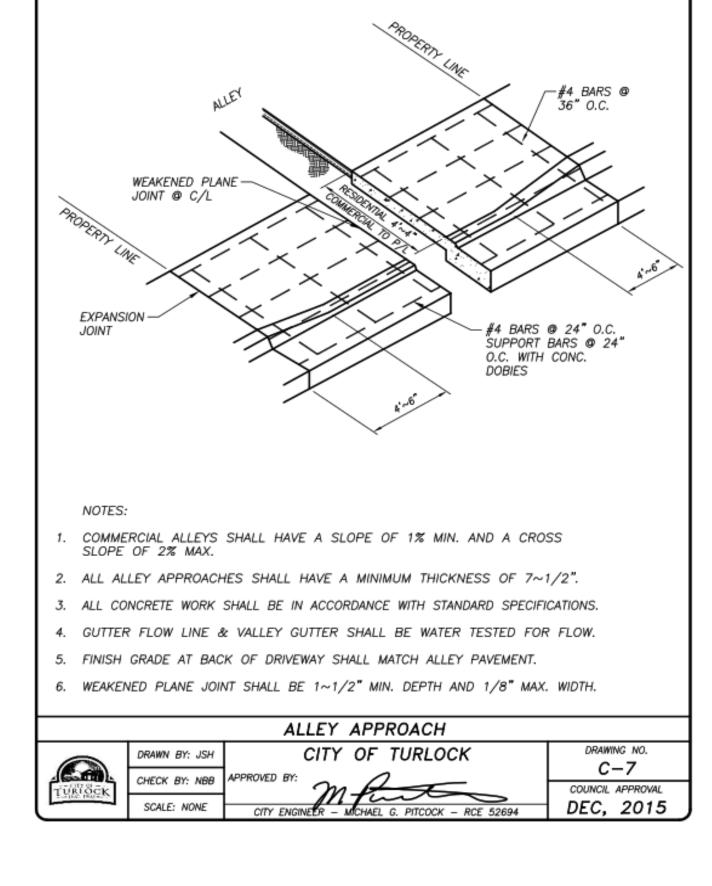
36" MIN FOR ALLEYS AND PARKING LOTS

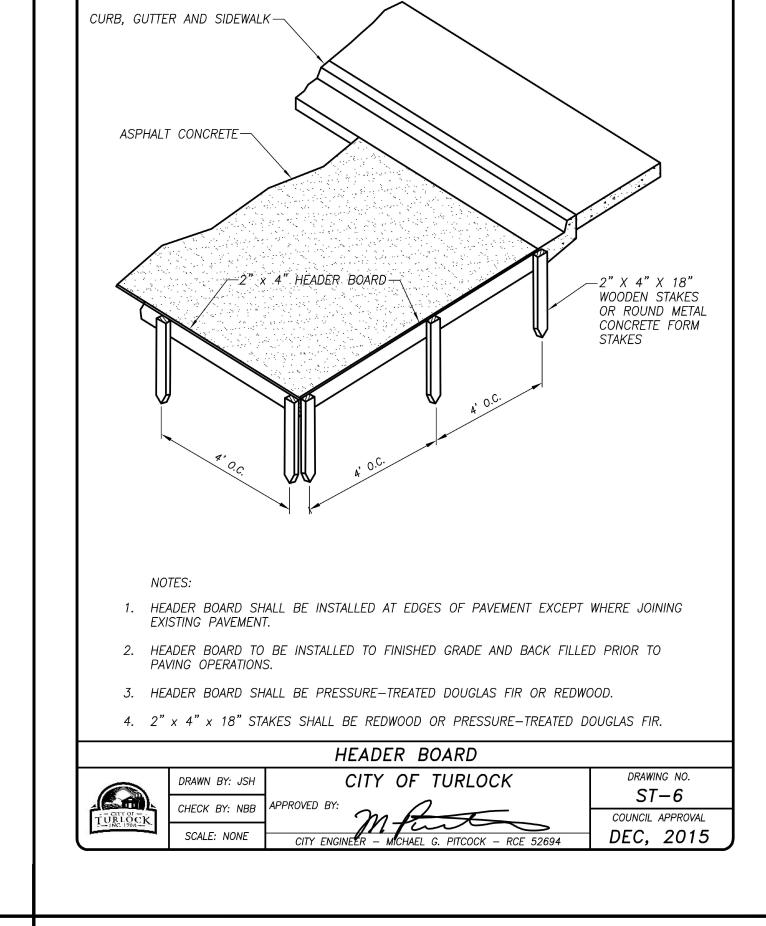
CURB AND GUTTER

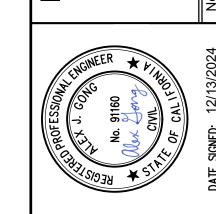
SECTION

**VERTICAL CURB** 









DESIGN ENGINEER:

DRAFTED BY: CHECKED BY

JOB NO: 229223003

ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR

REDUCED OR ENLARGED PLANS

16 of 35

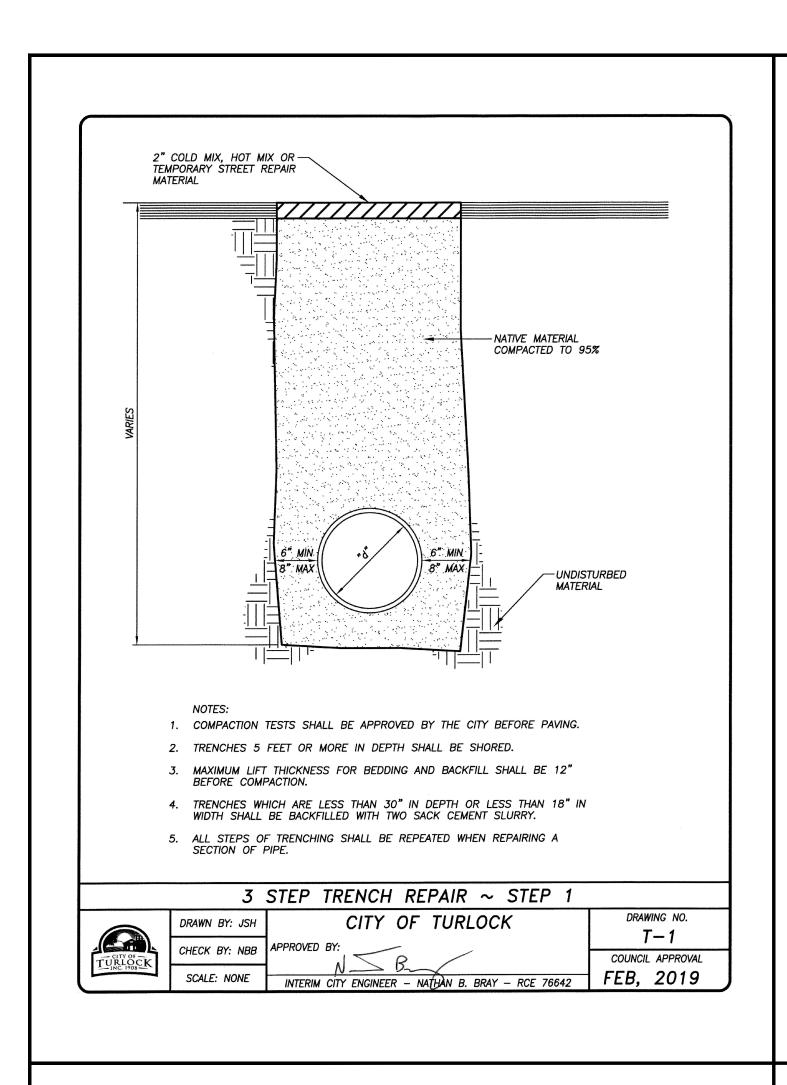
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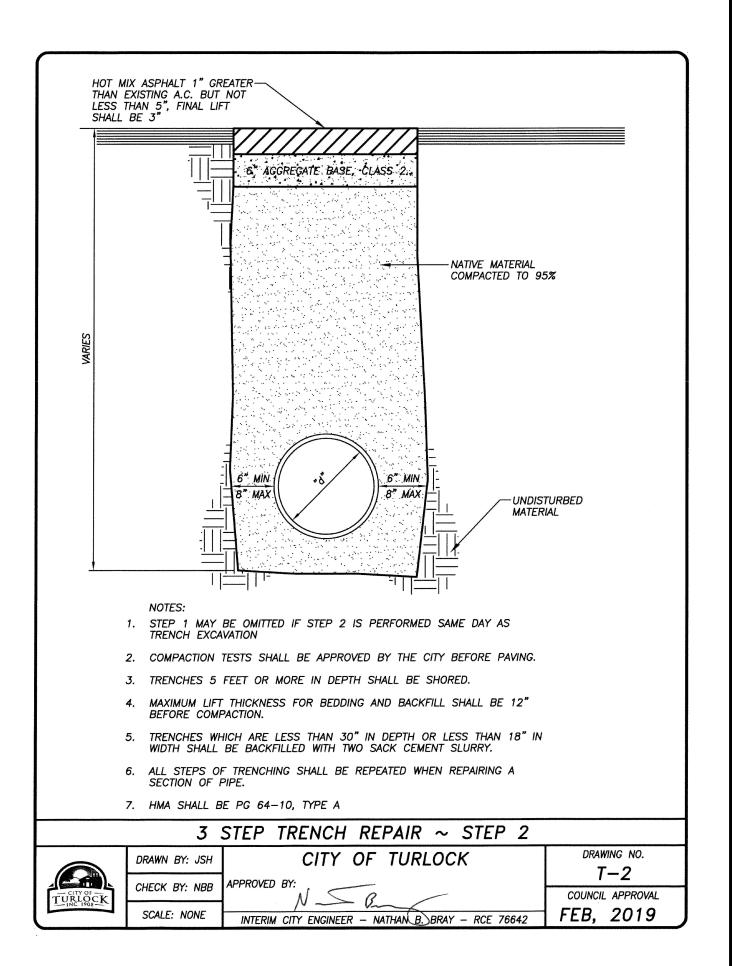
DATE: DECEMBER 2024

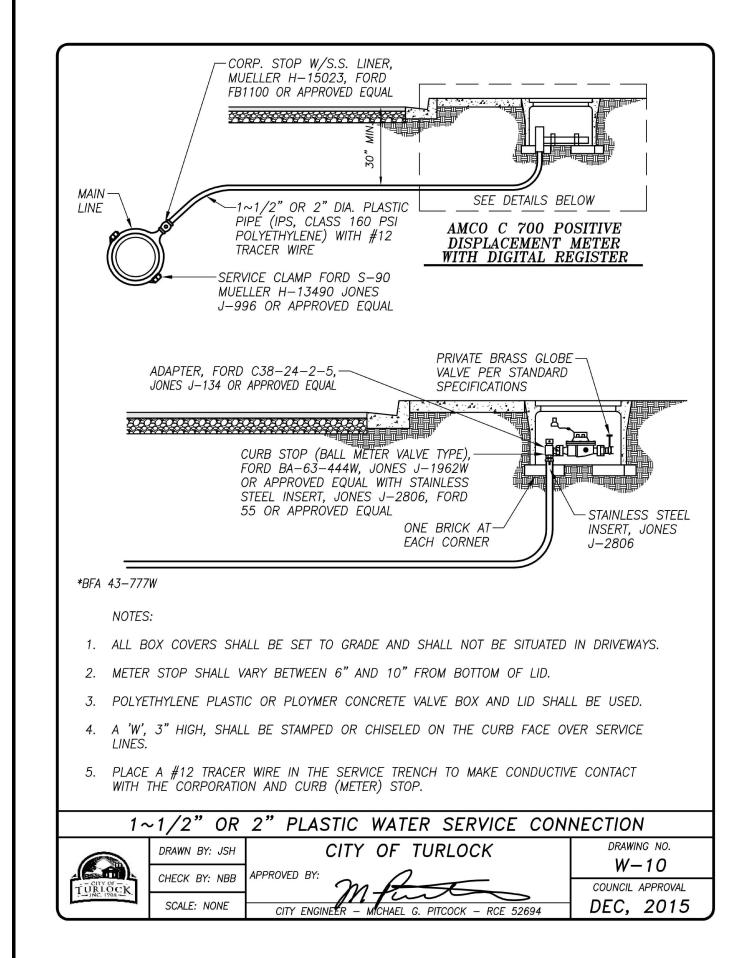
KMM

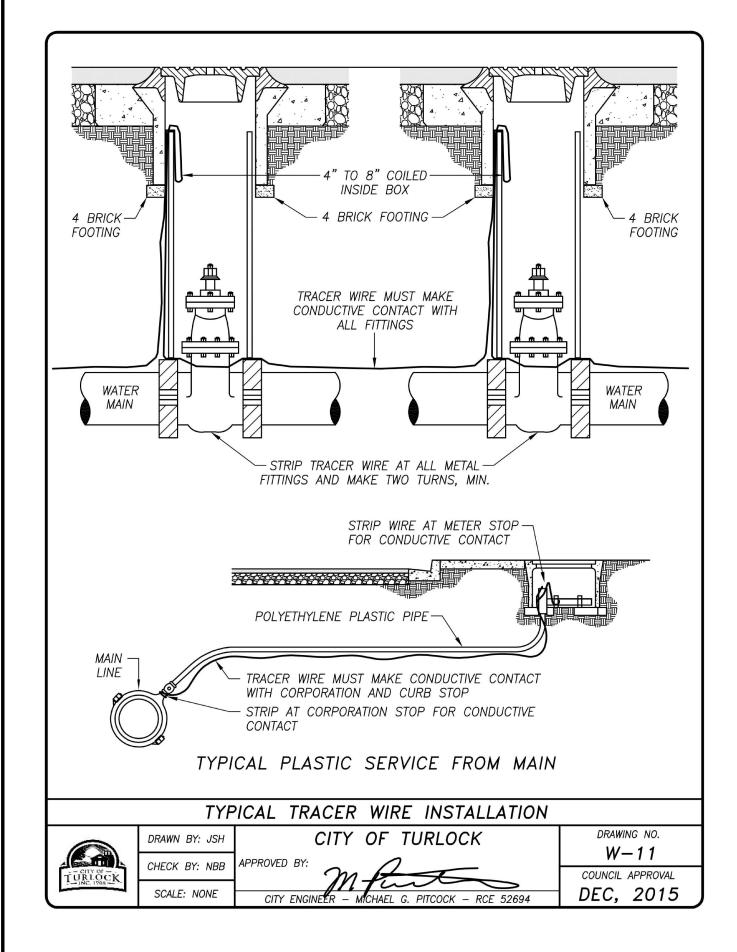
LICENSE NO: 91160

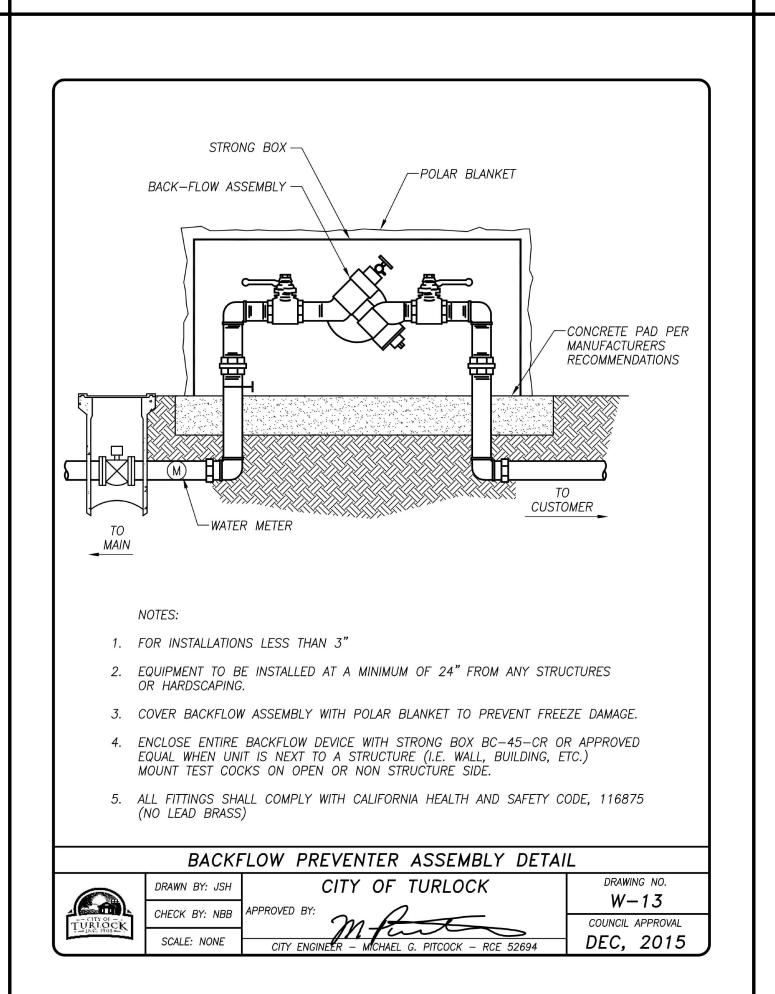
ROJECT NO:











CITY OF TURLOCK
/ PROJECT NO. 23-C
DETAILS OST& HARD IR AVENUE PROV(PRITCI DESIGN ENGINEER: LICENSE NO: 91160 DRAFTED BY: CHECKED BY: ENA KMM DATE: DECEMBER 2024 JOB NO: 229223003 ROJECT NO: PHASE: CD ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

COMPRESSION FITTING UNLESS NOTED ON PLANS ---- CONDUIT -CONCEALED BELOW FLOOR IN EMT OR UNDERGROUND IN PVC

SCH 40 WITH IMC ELBOWS

HOMERUN TO PERSPECTIVE PANEL OR CABINET -BRANCH CIRCUIT WITH OUT FURTHER DESIGNATION IS A #12 WIRE CIRCUIT

TLEX

TERMINAL CABINET

PANEL BOARD -SEE SCHEDULE

MOTOR/EXHAUST FAN -N.I.E.S. -CONNECT AS REQUIRED

DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N. HALF SWITCHED DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX

HALF SWITCHED QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

FLOOR POWER RECEPTACLE -WALKER OR EQUAL

30A. -4 WIRE GROUND RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

WIRE SIZE -

GFCI DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

GFCI QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

EQUIPMENT AND/OR CONTROL CONNECTION POINT. MAKE CONNECTION TO EQUIPMENT AS REQUIRED.

(J) JUNCTION BOX - SINGLE GANG.

SHP MOTOR RATED DISCONNECT SWITCH

# FUSED DISCONNECT SWITCH -SIZE AS NOTED -30A. SHOWN

FULL VOLTAGE STARTER -SIZE AS NOTED -SIZE 3 SHOWN

PLUG LOAD ROOM CONTROLLER. WATTSTOPPER #LMPL-101 OR EQUAL

### ELECTRICAL COMPLIANCE NOTES

THE INTENT OF THE DRAWINGS AND SPECIFICATION IS TO CONSTRUCT THE PROPOSED BUILDING IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE FOLLOWING CODES AND REGULATIONS AS APPLICABLE:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)

PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2022 CALIFORNIA BUILDING CODE (CBC) PART 2, TITLE 24, CCR

BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC) 2022 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24, CCR

BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC)

2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, CCR BASED ON THE 2021 UNIFORM MECHANICAL CODE (UMC)

2022 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, CCR

BASED ON THE 2021 UNIFORM PLUMBING CODE (UPC)

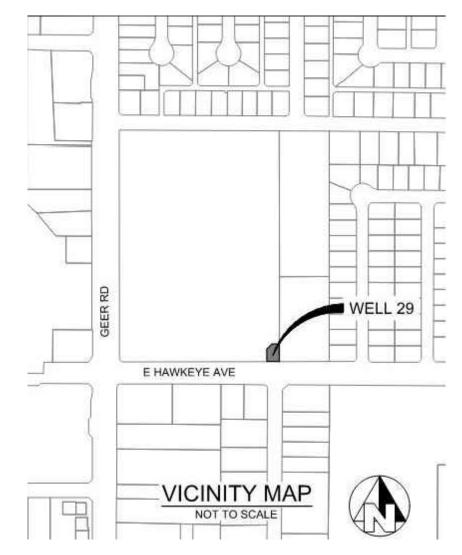
2022 CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24, CCR

BASED ON THE 2021 INTERNATIONAL FIRE CODE (IFC) 2022 NFPA 72, NATIONAL FIRE ALARM & SIGNALING CÒDE w/ CALIFORNIA AMENDMENTS.

UNLESS OTHERWISE STATED, IT IS INTENDED THAT THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN EFFECT ON THE DATE OF THE CONTRACT. NOTHING ON THE DRAWING IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE ABOVE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

### GENERAL ELECTRICAL NOTES

- PROVIDE ALL LABOR, MATERIALS, TOOLS, PLANT EQUIPMENT, TRANSPORTATION AND ALL PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF ALL ELECTRICAL WORK REQUIRED FOR THE COMPLETE AND OPERATING SYSTEMS AS OUTLINED WITHIN THE SCOPE OF WORK.
- 2. UNDERWRITERS LABORATORIES, INC., SHALL MEET THEIR REQUIREMENTS AND SHALL BEAR THEIR LABEL WHEREVER STANDARDS HAVE BEEN ESTABLISHED AND LABEL SERVICE IS REGULARLY FURNISHED BY THAT
- 3. THE SIZE AND LOCATIONS OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION AT THE SITE. 4. CONDUCTORS SHALL BE COPPER CONDUCTORS TYPE AS NOTED ON CONSTRUCTION DOCUMENTS.
- 5. ALL CONDUITS SHALL BE SUPPORTED AND BRACED PER OPM #OPM-0052-13, THE "B-LINE/TOLCO SEISMIC RESTRAINT COMPONENTS FOR SUSPENDED UTILITIES" FOR PIPES AND CONDUITS ONLY. LAYOUT DRAWINGS, SHOWING THE BRACING/SUPPORT LOCATIONS AND REFERENCES TO DETAILS FROM THE RELEVANT OSHPD PRE-APPROVALS FOR PIPING/DUCTS/CONDUITS EXCEPT FIRE SPRINKLERS, NEED TO BE SUBMITTED FOR USE BY THE IOR AND OSHPD STAFF. THE LAYOUT DRAWINGS NEED TO BE REVIEWED AND ACCEPTED BY THE AOR AND SEOR PRIOR TO STARTING INSTALLATION OF THE BRACING/SUPPORT. IOR SHALL ENSURE THE ABOVE REQUIREMENTS ARE SATISFIED.
- 6. DO NOT PENETRATE STRUCTURAL MEMBERS, INCLUDING BEAMS, COLUMNS, OR FOOTINGS, WITHOUT PRIOR WRITTEN CONSENT OF THE DISTRICT'S STRUCTURAL ENGINEER. SHOULD IT BECOME NECESSARY TO PENETRATE SUCH MEMBERS, NOTIFY THE DISTRICT IN WRITING WITHOUT DELAY, PRIOR TO PROCEEDING WITH CONSTRUCTION AROUND SUCH MEMBERS.
- 7. ALL ELECTRICAL WORK SHALL CONFORM WITH THE 2022 CALIF. ELECTRICAL CODE CALIFORNIA TITLE 17, 19 & 24 ALONG WITH N.F.P.A. STANDARDS AND THE STATE FIRE MARSHAL'S REQUIREMENTS.
- 8. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF STATE & GOVERNING LOCAL FIRE CODES AND BUILDING CODES.
- 9. WHERE EXISTING CONSTRUCTION IS CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, AND PERFORMANCE.
- 10. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
- 11. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. GUARD ALL HAZARDS IN ACCORDANCE WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
- 12. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.
- 13. OPERATED DEVICES SUCH AS, BUT NOT LIMITED TO, TELE/DATA OUTLETS, RECEPTACLE OUTLETS AND LIGHT SWITCHES INSTALLED IN AREAS NOT RESTRICTED TO AUTHORIZED MAINTENANCE PERSONAL SHALL BE MOUNTED AT A MINIMUM OF +15" AFF., AS MEASURED FROM THE BOTTOM OF THE DEVICE OUTLET BOX, AND MAXIMUM OF +48" AFF., AS MEASURED FROM THE TOP OF THE DEVICE OUTLET BOX.
- 14. ALL CHANGE ORDER PROPOSALS AND CHANGE ORDERS, BOTH ADDITIVE AND DEDUCTIVE, SHALL BE BASED UPON AND BE ACCOMPANIED BY A DETAILED MATERIALS AND LABOR BREAKDOWN FOR EACH SPECIFIC TASK AND/OR ITEM. THE BREAKDOWN SHALL INCLUDE ACTUAL MATERIALS COSTS PLUS OVERHEAD AND PROFIT, AS WELL AS LABOR UNITS BASE UPON THE MOST RECENT NECA MANUAL OF LABOR UNITS (NECA INDEX #4090) OR EQUIVALENT PUBLICATION FOR EACH SPECIFIC TASK AND ITEM. LABOR COSTS SHALL BE COMPUTED AS OUTLINED WITHIN THE GENERAL CONDITIONS, BASED UPON THE NECA LABOR TABLES FOR EACH TASK REQUIRED. MATERIALS COSTS SHALL INCLUDE ACTUAL CONTRACTOR INVOICE PLUS NO MORE THAN 15% MARKUP. THE OWNER AND CONTRACTOR AGREE TO THE ABOVE CHANGE ORDER COST PROCEDURE, FOR BOTH ADDITIVE AND DEDUCTIVE CHANGE ORDERS.
- 15. ALL PERSONNEL WORKING WITH ENERGIZED EQUIPMENT WITHIN THE RESTRICTED ZONE PER NFPA-70E SHALL COMPLY WITH ALL NFPA-70E AND OSHA REQUIREMENTS AND BE ARC FLASH SAFETY CERTIFIED.



G 20 BIDDING EMBER

CITY OF TURLOCK
CITY PROJECT NO. 23-0
ELECTRICAL
FRAL NOTES AND ABBRE

WELL 29 CHLORINATION

PROVOST& PRITCHARD **DESIGN ENGINEER:** K. PEZZONI LICENSE NO:

DRAFTED BY: CHECKED B' CCM K. PEZZONI DATE: DEC. 2024

JOB NO: 229223003 PROJECT NO:

PHASE: CD ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS

[ EG-1 of **35** 

**CONSULTING ELECTRICAL ENGINEERS** 

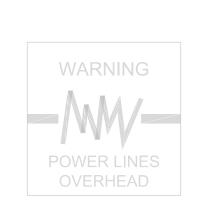
1150 9<sup>TH</sup> Street Suite #1415 Modesto, CA 95354

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PHONE: 209 . 554 . 4602 HTTP://WWW.PEZENGR.COM

**ELECTRICAL ABBREVIATIONS** 

Δ Y O & @, " A AC T AFF AL APPROX ARCH AUTO AUTO AUTO AUTO B BC BKBD BRKR BLDG C CAB	DELTA CONNECTED WYE CONNECTED PHASE AND AT FEET INCHES AMPERES ALTERNATING CURRENT ABOVE COUNTERTOP/BACKSPLASH ADJACENT, ADJOINING ADJUSTABLE FREQUENCY DRIVE ABOVE FINISHED FLOOR ALUMINUM APPROXIMATE ARCHITECT AUTOMATIC AUXILIARY ALTERNATE AMERICAN WIRE GAUGE BARE BARE BARE COPPER GROUND BACKBOARD BREAKER BUILDING CONDUIT OR CONTRACTOR CABINET	CKT CIRCU CLG CEILIN CO COND COMM COMM CONC COND CONT CONT CONT CONT COORD COOR CR CONT CT CURR COMP COMP CU COPP  DC DIRECT DETA DISC DISCO DIST DISTR DSA DIVISI DWG DRAW  (E), EXIST EXIS EC ELECT EL, ELEV ELEV EL EMER ELECT ELECTRIC	CUIT LING IDUIT ONLY IMUNICATION ICRETE INECT ITINUATION OR CONTINUED IRROL RELAY IRENT TRANSFORMER IPRESSOR IPER ICT CURRENT ALL CONNECT IRIBUTION ISION OF THE STATE ARCHITECT WING STING CTRICAL CONTRACTOR IVATION RGENCY LIGHT RICAL MANAGEMENT SYSTEM ICAL MANAGEMENT SYSTEM ICAL METALLIC TUBING	EP EQUIP ETC EVAP  (F) FA FACP FAT FIXT FLEX FLUOR FS FOR FT GALV GND GC HI HOA HOS HV	ENCLOSURE EXPLOSION PROOF EQUIPMENT ET CETERA EVAPORATOR  FUTURE FIRE ALARM FIRE ALARM CONTROL PANEL FIRE ALARM TERMINAL CABINET FIXTURE FULL LOAD AMPS FLEXIBLE FLUORESCENT FLOW SWITCH FORWARD-OFF-REVERSE FEET  GALVANIZED GROUND GENERAL CONTRACTOR HIGH HAND-OFF-AUTO  HAND-OFF-STANDBY HIGH VOLTAGE HEATING, VENTILATION, AIR CONDITIONING	IDF INCAN IDC IN INST  J KV KVA KW  L B LF LOS LOH LV  M MAX MCA MCC MCM MCP MDF MECH MFG	INTERMEDIATE DISTRIBUTION FRAME INCANDESCENT INITIATING DEVICE CIRCUIT INCHES INSTANTANEOUS  JUNCTION BOX KILOVOLTS KILOVOLT AMPERES KILOWATTS  LINE ELBOW LINEAR FEET LOCKOUT—STOP LOCK—OFF—HALT LOW VOLTAGE  MOTOR MAXIMUM MINIMUM CIRCUIT AMPS MOTOR CONTROL CENTER THOUSAND CIRCULAR MILLS MOTOR CIRCUIT PROTECTOR MAIN DISTRIBUTION FRAME MECHANICAL MANUFACTURER	MIN MPOE MSB N (NA NAC NIES NIC NO., # NO NL OC OH OL OT OSHPD PA PBL PH PRI PRI PRI	MINIMUM MAIN POINT OF ENTRY MAIN SWITCHBOARD  NEUTRAL NEW NON—AUTOMATIC NOTIFICATION APPLIANCE CIRCUIT NORMALLY CLOSED NOT IN ELECTRICAL SECTION NOT IN ELECTRICAL CODE NUMBER NORMALLY OPEN NIGHT LIGHT  ON CENTER OVERHEAD THERMAL OVERLOAD RELAY OVER TEMPERATURE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  PUBLIC ADDRESS PULL BOX PANEL PHASE PAIR PRIMARY	PS PWR  (R) RA RD REQD REQMTS RGP RM RECP RT  SCH SEC SHT SIG SPECS SW SWD SP STD STR SWBD  TELE TEMP TOA	PRESSURE SWITCH POWER  REMOVE(D) REMOTE ANNUNCIATOR ROAD REQUIRED REQUIRED REQUIREMENTS REDUNDANT GROUND PATH ROOM RECEPTACLE RAIN TIGHT  SCHEDULE SECONDS, SECONDARY SHEET SIGNAL SPECIFICATIONS SWITCH SWITCHED SPARE STANDARD STRANDED SWITCHBOARD  TELEPHONE TEMPERATURE TEST OFF AUTOMATIC	TH TRANSF TYP TSP THRU UG UNO V VA VFD VM W W/O WP WHD WM WH XFMER (XR)	THERMOSTAT TRANSFORMER TYPICAL TWISTED SHIELDED PAIR THROUGH  UNDERGROUND UNLESS NOTED OTHERWISE  VOLTS VOLT AMPS VARIABLE FREQUENCY DRIVE VOLT METER  WIRE WITH WITHOUT WEATHERPROOF WATT HOUR DEMAND METER WATER HEATER TRANSFORMER REMOVE AND RELOCATE(D)
--	---	--	---	--	--	---	--	--	--	---	---	---	--





			CONDUIT	CONDUIT		CONDUCTOR				
CONDUIT ID#	FROM	ТО	QNTY	SIZE TYPE	QNTY	SIZE	GND	QNTY	TYPE	NOTES
L 101 A	(E) PANEL	(N) PULLBOX	1	1 1/4" RMC	4	#10	#10			[2]
				,						
C 101 A	(E) PANEL	(N) PULLBOX	1	1 1/2" RMC	10	#14	#14	3	2C/16AWG STP	[2]

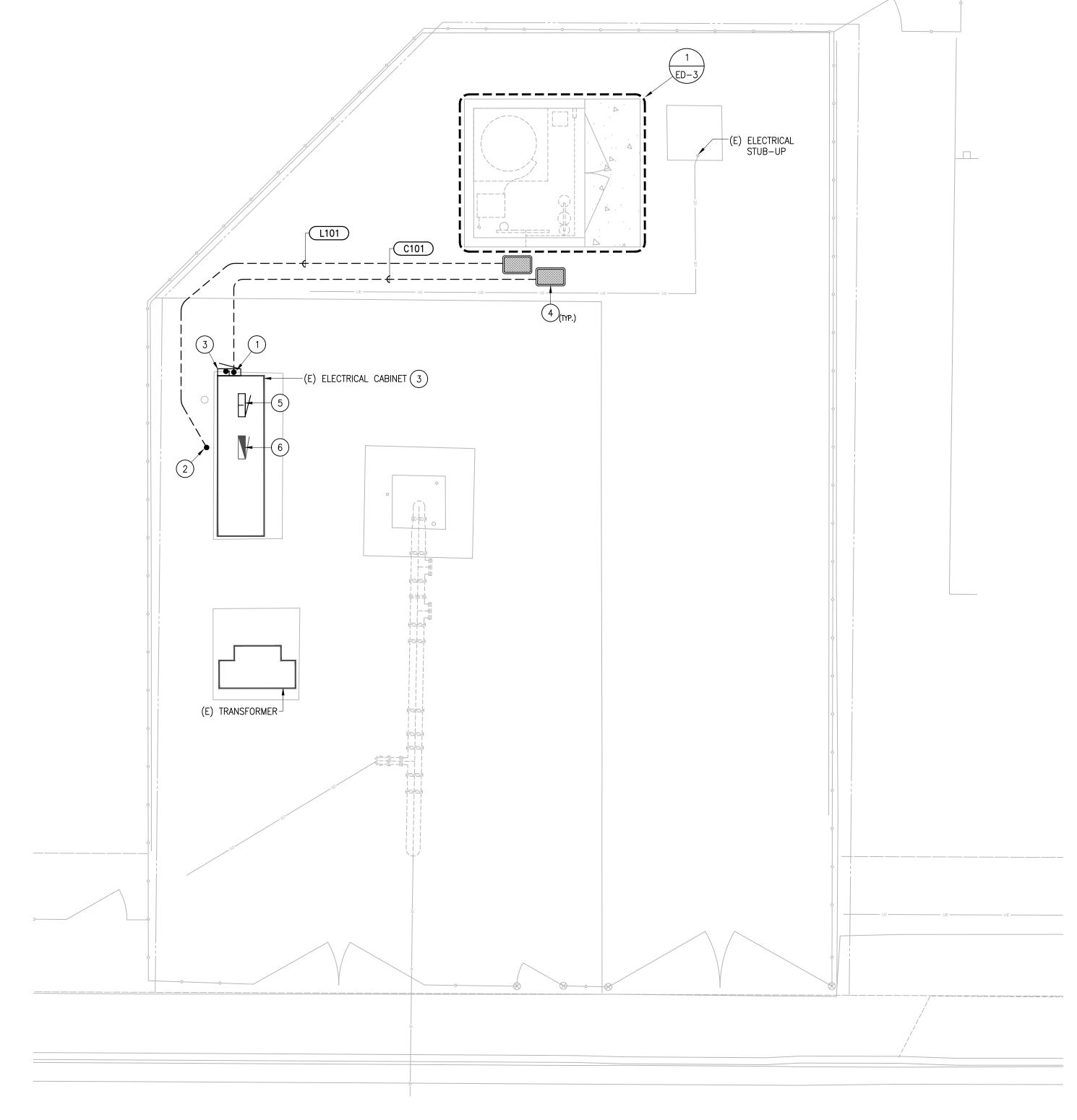
NOTES:

[1] = PROVIDE CONDUCTOR/CABLES IN ALL CONDUITS

[2] = CONDUIT BELOW GRADE MAYBE PVC SCH40

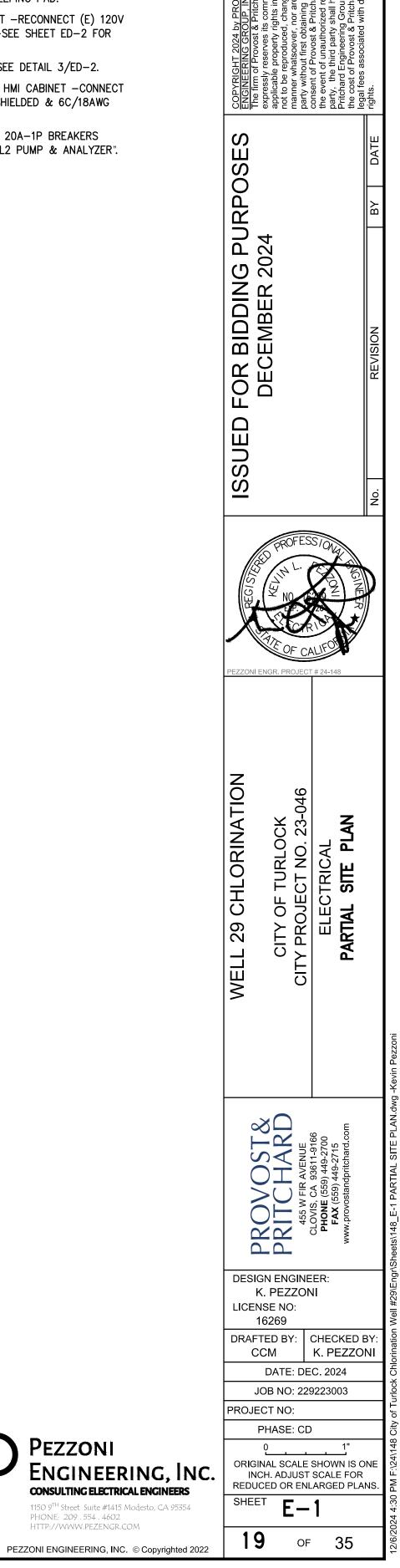
[3] = ROUTE (N) CABLE/CONDUCTOR(S) THROUGH (E) RACEWAYS WHERE POSSIBLE

[4] = PROVIDE SS CONNECTORS & TYPE LFMC FLEX TO EQUIPMENT





- 1. (N) RMC RISER INTO (N) PLC CABINET.
- 2. LB INTO MCC +8"AFG NEAR EDGE OF HOUSEKEEPING PAD.
- REPLACE (E) PLC CABINET W/(N) PLC CABINET -RECONNECT (E) 120V POWER CKT & ALL (E) & (N) I/O ON SITE -SEE SHEET ED-2 FOR PANEL REQUIREMENTS.
- 4. (N) N16 PULLBOXES FOR POWER & SIGNAL -SEE DETAIL 3/ED-2.
- REMOVE (E) CHART RECORDER & INSTALL (N) HMI CABINET —CONNECT ONTO (E) 120V CKT. & PROVIDE (N) CAT—6 SHIELDED & 6C/18AWG CABLE FOR PUMP CONTROL
- 6. CONNECT (N) 120V CIRCUITS ONTO (E) SPARE 20A-1P BREAKERS
  -LABEL AS 'RECP/LT -CL2 ENCLOSURE" & "CL2 PUMP & ANALYZER".



WARNING

POWER LINES
OVERHEAD





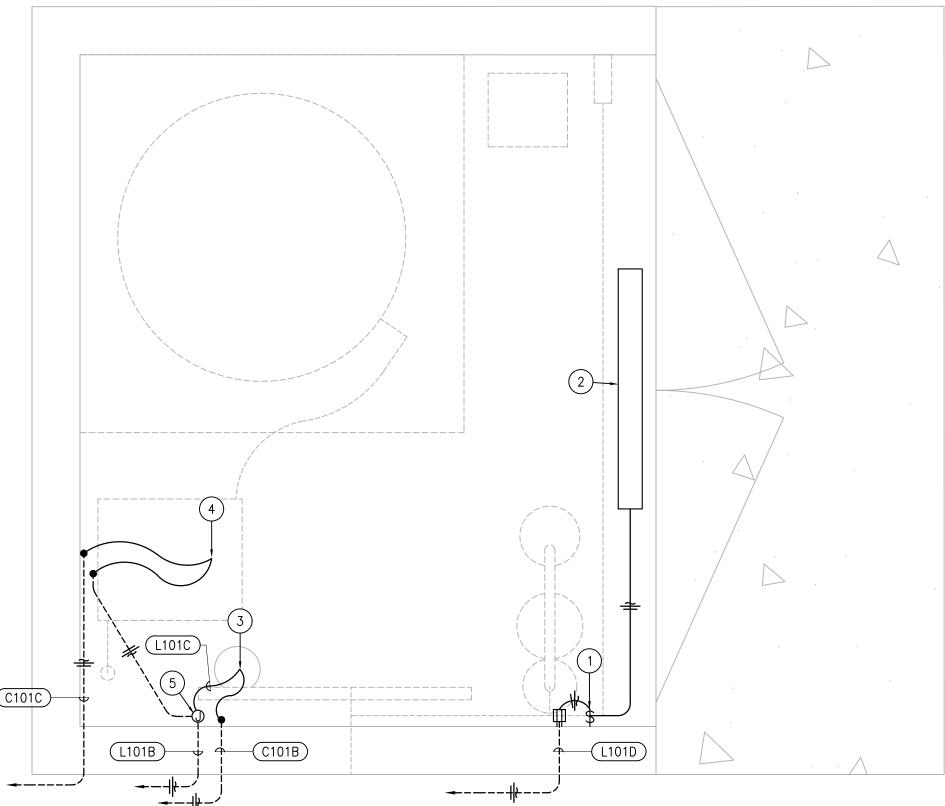
- [1] = PROVIDE CONDUCTOR/CABLES IN ALL CONDUITS [2] = CONDUIT BELOW GRADE MAYBE PVC SCH40
- [3] = ROUTE (N) CABLE/CONDUCTOR(S) THROUGH (E) RACEWAYS WHERE POSSIBLE
- [4] = PROVIDE SS CONNECTORS & TYPE LFMC FLEX TO EQUIPMENT

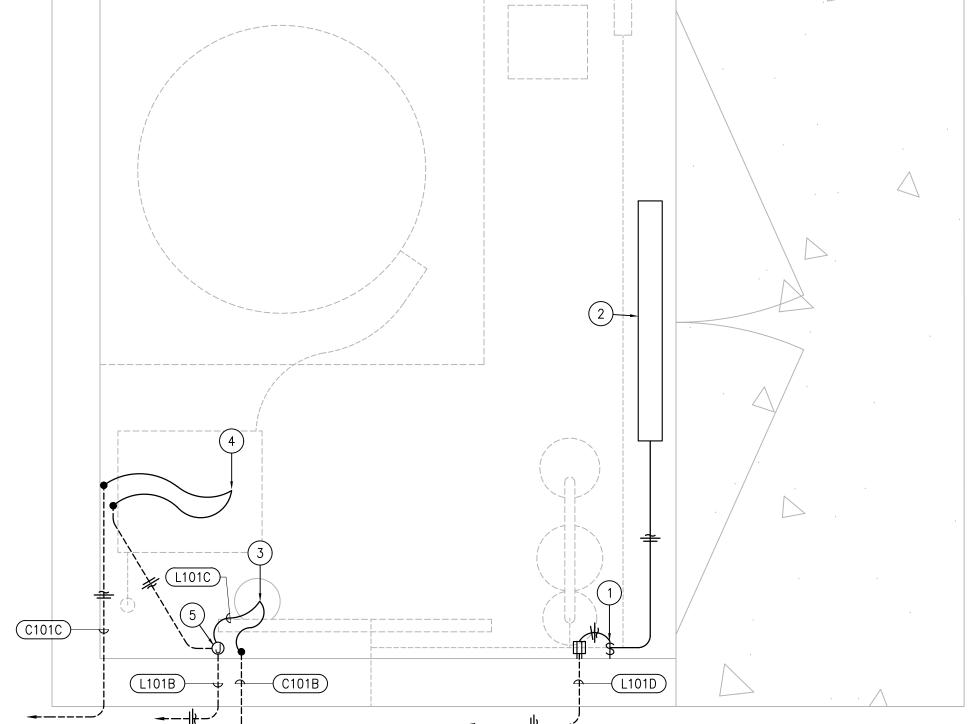
## ## NOTES:

- 1. LOCATE COATED WP LT SWITCH & GFCI RECEPTACLE W/COVER AT +42"AFF.
- 2. (N) HEW #96-4-L40/840-HIAFR-WET/1-DIM-120 OR EQUAL (4000lm, 4000K, 30W) GASKETEED WET FIBERGLASS LED FIXTURE.
- 3. CONNECT (N) ANALYZER DT-AE/AIT-001 -COORDINATE W/SHEET D-4.
- 4. CONNECT (N) CHEMICAL FEED -COORDINATE W/SHEET D-1. 5. MOUNT 4 SQ CRMC BOX BELOW ANALYZER BACKBOARD.

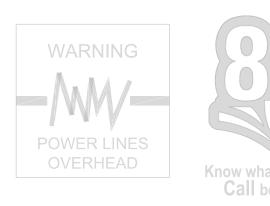
## GENERAL NOTES

1. NO SPLICING OF 120V CIRCUITS WITHIN PULLBOX/BELOW GRADE. 2. COORDINATE HOMERUN ORIENTATION W/SITE SPECIFIC PLAN FOR J-BOX/PULLBOX LOCATION.

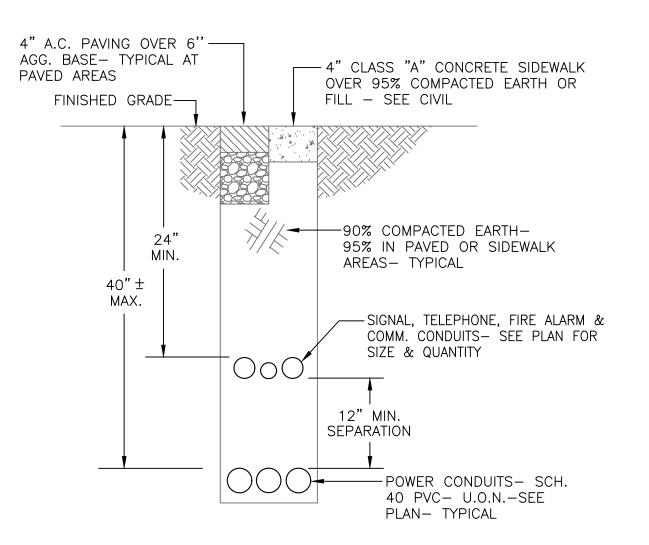




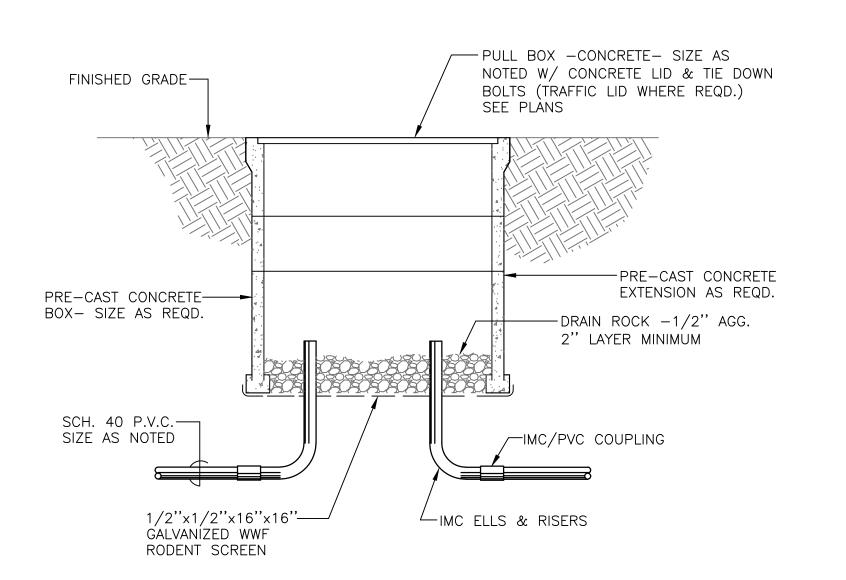
## WELL 29 PUMP EQUIPMENT LAYOUT SCALE: 3/4"=1'-0"







## ELECTRICAL TRENCH SECTION (TYP.) SCALE: NTS







FOR BIDDING PURPOSE DECEMBER 2024

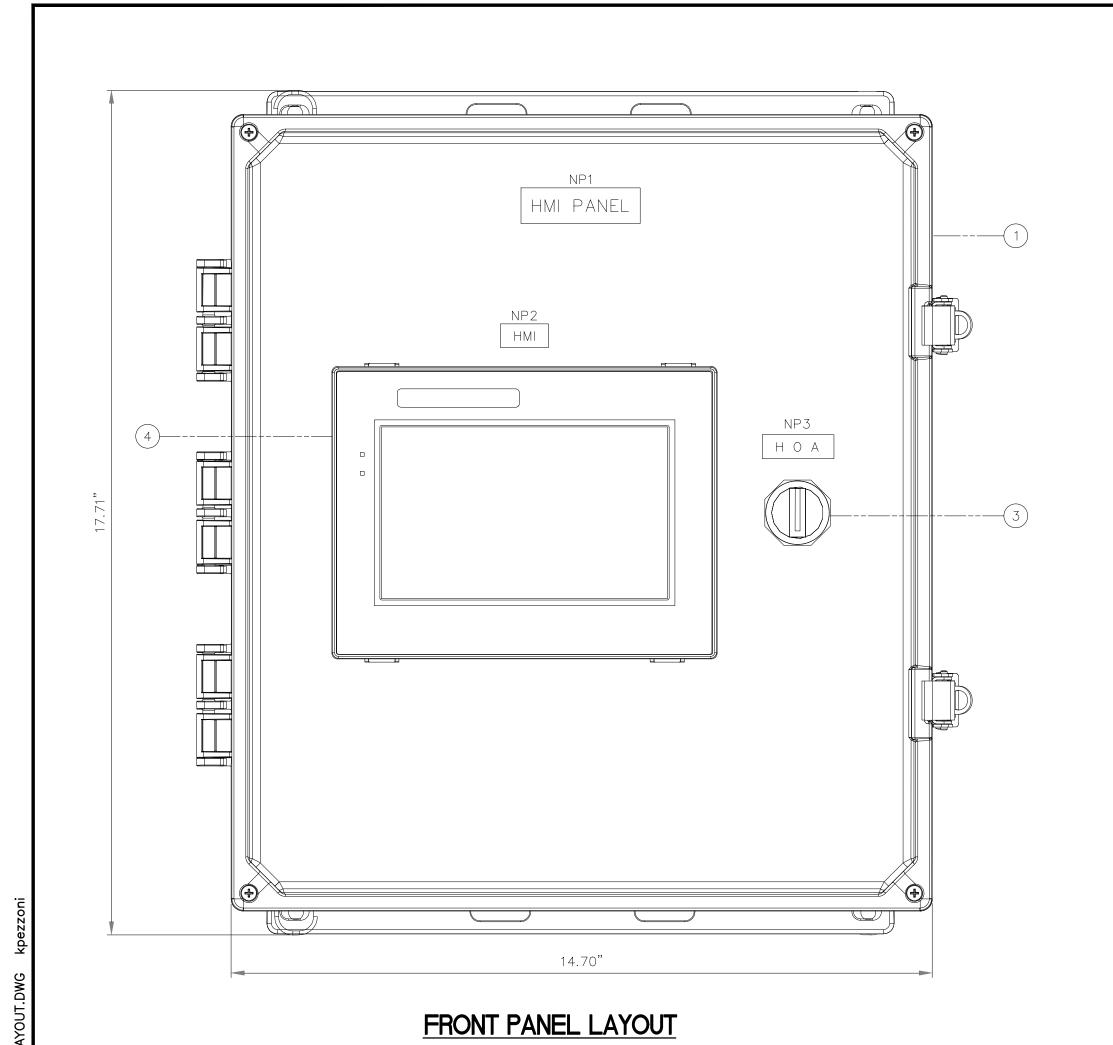
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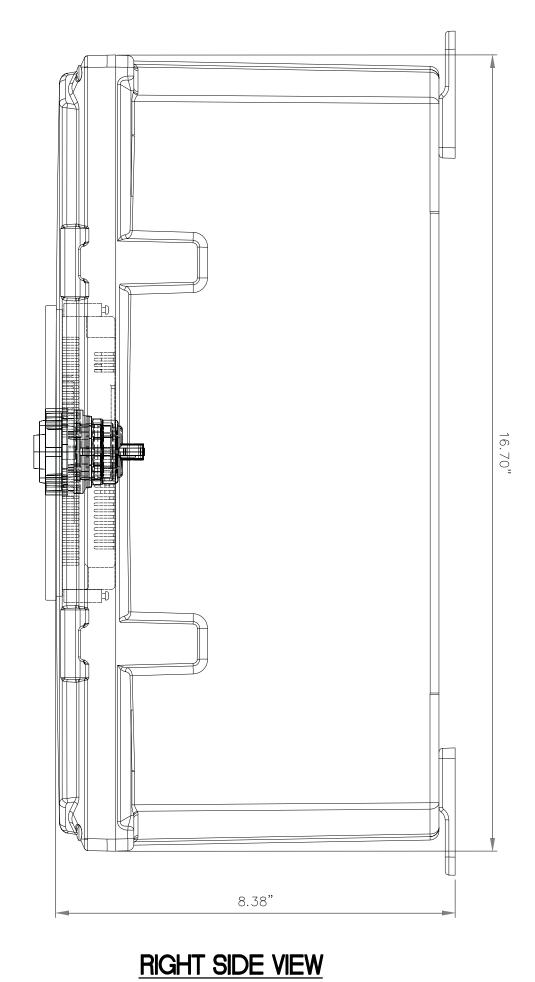
PROVOST& PRITCHARD DESIGN ENGINEER:

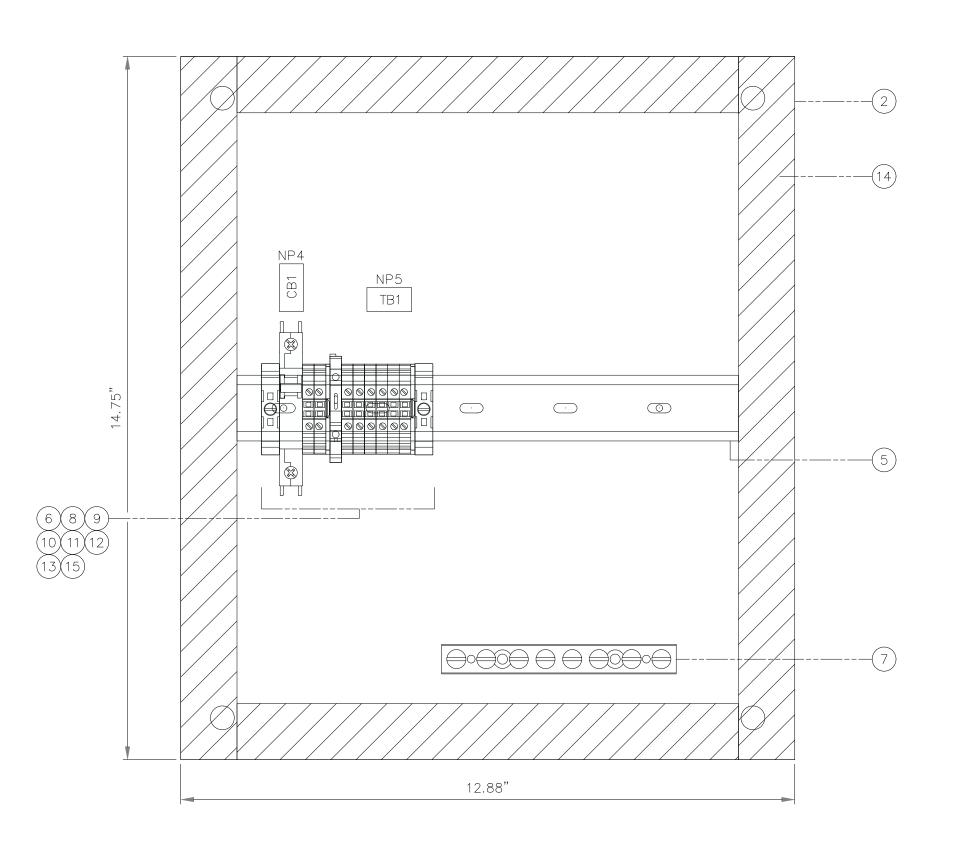
K. PEZZONI LICENSE NO: 16269 DRAFTED BY: CHECKED BY CCM K. PEZZONI DATE: DEC. 2024 JOB NO: 229223003 PROJECT NO: PHASE: CD 0 \_\_\_\_\_\_\_\_1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR

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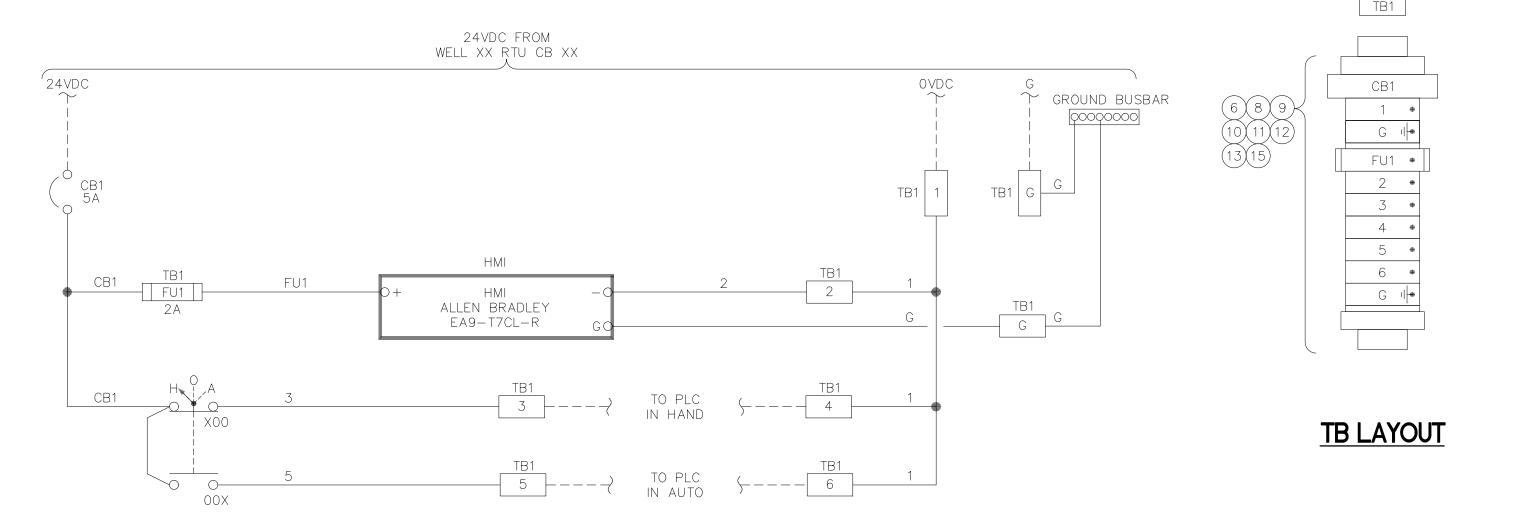


**BLACKPLATE LAYOUT** 

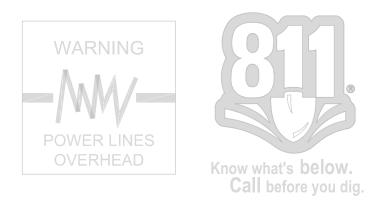
# HMI CABINET LAYOUT

		BILL OF MATERIAL							
ITEM	QTY.	DESCRIPTION	MANUFACTURER	PART NUMBER					
1	1	ENCLOSURE, 16.71" (H) X 14.70" (W) X 8.38" (D)	INTEGRA	H161407H					
2	1	BACKPLATE, 14.75"(H) X 12.88" (W)	INTEGRA	PVCBP1614					
3	1	SECTOR SWITCH, 3-POSITION, MAINTAINED, 2NO+2NC	SECTOR SWITCH, 3-POSITION, MAINTAINED, 2NO+2NC ALLEN BRADLEY						
4	1	TOUCH SCREEN HMI, 7" COLOR TFT LCD	AUTOMATION DIRECT	EA9-T7CL-R					
5	A/R	DIN RAIL	AUTOMATION DIRECT	DN-R35S1					
6	1	CIRCUIT BREAKER, 24VDC, 5A, 1 POLE	WEIDMULLER	9926251905					
7	1	GROUND BAR	PANDUIT	UGB2/0-414-6					
8	6	FEED THROUGH TERMINAL BLOCK, UT 4	PHOENIX CONTACT	3044102					
9	2	GROUND TERMINAL BLOCK, UT4-PE	PHOENIX CONTACT	3044128					
10	2	END COVER - D-UT 2,5/10	PHOENIX CONTACT	3047028					
11	2	END CLAMP - E/NS 35 N	PHOENIX CONTACT	0800886					
12	A/R	JUMPER FOR TERMINAL BLOCKS	PHOENIX CONTACT	3030271					
13	A/R	MARKER FOR TERMINAL BLOCKS	PHOENIX CONTACT	0828736					
14	A/R	WIRE DUCT 1" (W) X 2" (H) WITH COVER	PHOENIX CONTACT	3240280					
15	1	FUSE 2A	BUSSMANN	GMC-2-R					

	NAMEPLATE SCHEDULE												
NP NO.	SIZE	QTY	TEXT		ENGRAVING								
NP NO.	SIZE	QIT	HIGHT	1st LINE	2nd LINE	3rd LINE							
1	2.5" X 0.75"	1	1/4"	HMI PANEL	~~~~	~~~~							
2	1" X 0.5"	1	3/16"	HMI	~~~~	~~~~							
3	1.5" X 0.5"	1	3/16"	HOA	~~~~	~~~~							
4	1" X 0.5"	1	3/16"	CB1	~~~~	~~~~							
5	1" X 0.5"	1	3/16"	TB1	~~~~	~~~~							



**DIAGRAM** 



POWER DISTRIBUTION WIRING DIAGRAM & TB LAYOUT



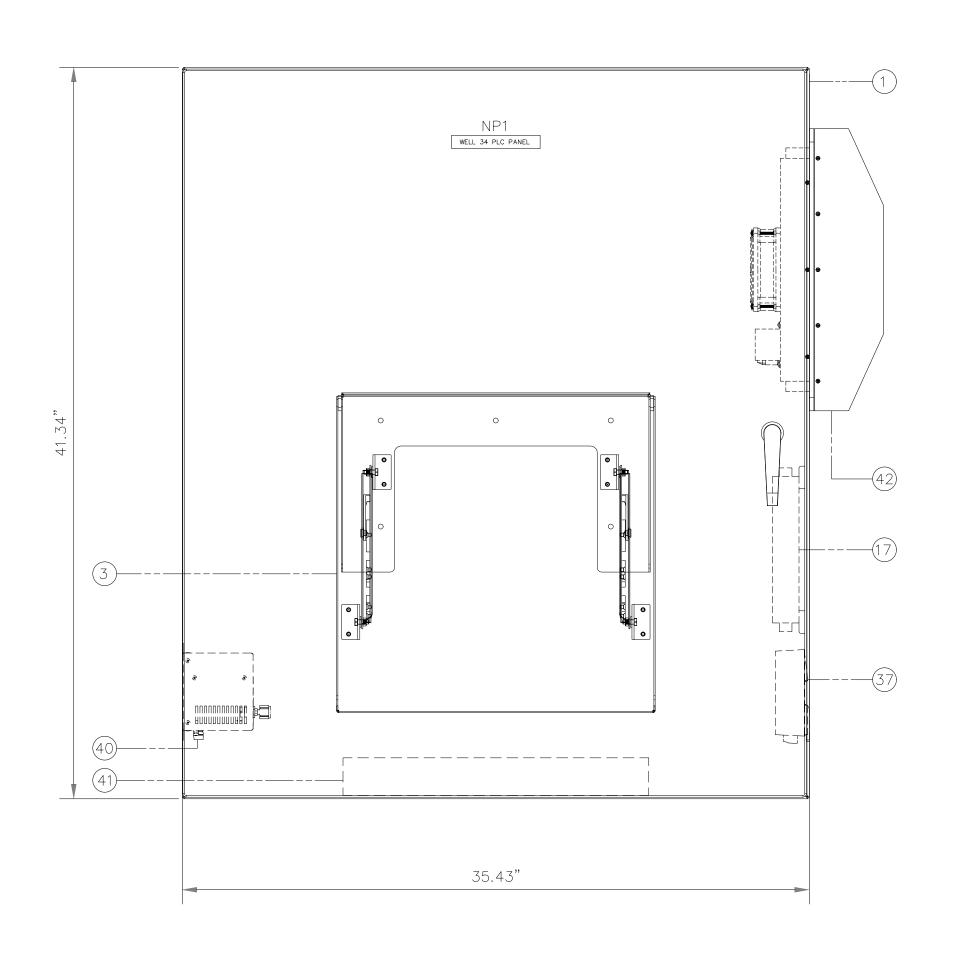
ISSUED FOR BIDDING PURPOSES
DECEMBER 2024

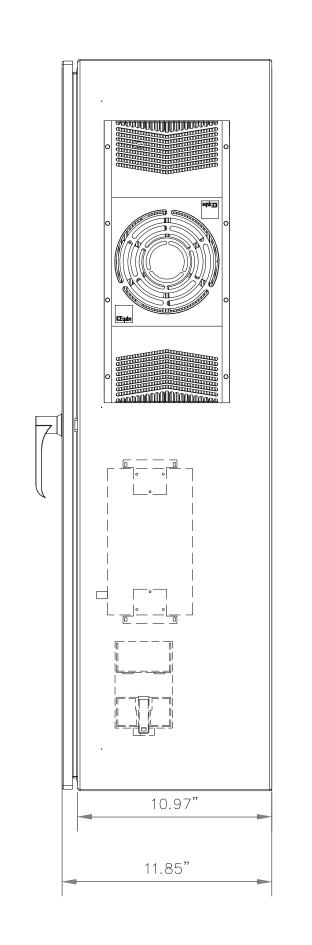
WELL 29 CHLORINATION

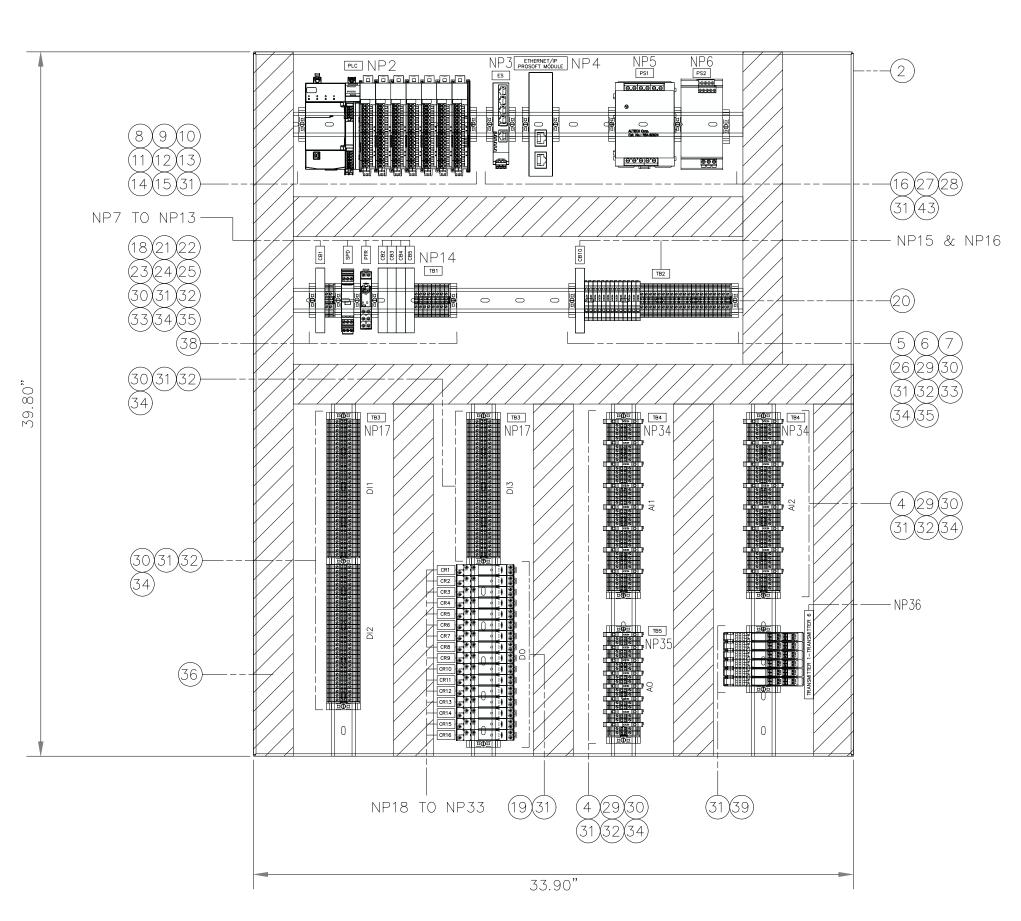
PROVOST&
PRITCHARD
455 W FIR AVENUE
CLOVIS, CA 93611-9166
PHONE (559) 449-2700
FAX (559) 449-2715

DESIGN ENGINEER: K. PEZZONI LICENSE NO: 16269 DRAFTED BY: CHECKED BY: CCM K. PEZZONI DATE: DEC. 2024 JOB NO: 229223003 PROJECT NO:

PHASE: CD







FRONT PANEL LAYOUT

SIDE VIEW

BLACKPLATE LAYOUT

# 1 PLC PANEL LAYOUT SCALE: NTS

	BILL OF MATERIAL											
ITEM	QTY.	DESCRIPTION	MANUFACTURER	PART NUMBER								
1	1	ENCLOSURE, 41.34" H X 35.43" W X 11.90" D	RITTAL	WM423612N6								
2	1	SUB PANEL, 39.80" H X 33.90" W	RITTAL	WWH23012140								
3	1	FOLDING SHELF	HOFFMAN	AASHLF1818								
4	24	FUSE ACTING FUSE 63mA	BUSSMANN	GMC-63mA								
5	2	FAST ACTING FUSE 0.5A	BUSSMANN	GMC-500mA								
6	4	FAST ACTING FUSE 1A	BUSSMANN	GMC-1A								
7	7	FAST ACTING FUSE 2A	BUSSMANN	GMC-2A								
8	1	CONTROLLER, COMPACTLOGIX 5380, 1 MB USER MEMORY, 8 I/OS, 24 ETHERNET/IP DEVICES	ALLEN BRADLEY	5069-L310ER								
9	3	16 CHANNEL, DIGITAL INPUT MODULE, 24VDC	ALLEN BRADLEY	5069-1816								
10	1	16 CHANNEL, DIGITAL OUTPUT MODULE, 24VDC	ALLEN BRADLEY	5069-OB16								
11	2	8 CHANNEL ANALOG INPUT MODULE	ALLEN BRADLEY	5059-IF8								
12	1	8 CHANNEL ANALOG OUTPUT MODULE	ALLEN BRADLEY	5069-OF8								
13	1	RIGHT END CAP	ALLEN BRADLEY	5069-ECR								
14	1	POWER RTB	ALLEN BRADLEY	5069-RTB64-SCREW								
15	7	18 PIN RTB	ALLEN BRADLEY	5069-RTB18-SCREW								
16	1	DISTRIBUTED NETWORK PROTOCOL (DNP3) GATEWAY	PROSOFT	PLX51-DNPS								
17	1	ORBIT SERIES MCR RADIO WITH BRACKET	GE	MXNCL9CN4GYNNS1FIDUNN								
18	1	CONTROL RELAY, 120VAC SPDT	FINDER	4C.01.8.120.0060								
19	16	CONTROL RELAY, SPDT, 24VDC WITH BASE	FINDER	4C.01.9.024.0050								
20	A/R	DIN RAIL	AUTOMATION DIRECT	DN-R35S1								
21	1	CIRCUIT BREAKER, 1P, 20A, 120VAC	WEIDMULLER	9926251020								
22	1	CIRCUIT BREAKER, 1P, 15A, 120VAC	WEIDMULLER	9926251015								
23	1	CIRCUIT BREAKER, 1P, 8A, 120VAC	WEIDMULLER	9926251008								
24	1	CIRCUIT BREAKER, 1P, 3A, 120VAC	WEIDMULLER	9926251003								
25	1	CIRCUIT BREAKER, 1P, 1A, 120VAC	WEIDMULLER	9926251001								
26	1	CIRCUIT BREAKER, 1P, 25A, 24VDC	WEIDMULLER	9926251925								
27	210	ETHERNET SWITCH, 5 PORT	PHOENIX CONTACT	1085039								
28	1	POWER SUPPLY 24VDC, 10A	PHOENIX CONTACT	2866763								
29	37	FUSE TERMINAL WITH INDICATOR 24VDC	PHOENIX CONTACT	3046090								
30	195	FEED THROUGH TERMINAL BLOCK, UT4	PHOENIX CONTACT	3044102								
31	30	TERMINAL BLOCK END BRACKET E/NS 35 N	PHOENIX CONTACT	0800886								
32	9	TERMINAL BLOCK END COVER, D-UT 2.5/10	PHOENIX CONTACT	3047028								
33	A/R	JUMPER FOR TERMINAL BLOCK	PHOENIX CONTACT	3030271								
34	A/R	MARKER FOR TERMINAL BLOCK	PHOENIX CONTACT	0828736								
35	13	GROUND TERMINAL BLOCK, UT4	PHOENIX CONTACT	3044128								
36	A/R	WIREWAY 2"W X 3"H WITH COVER	PHOENIX CONTACT	3240263								
37	1	RECEPTACLE, 15A	PHOENIX CONTACT	5600461								
38	1	AC LINE SURGE PROTECTOR	PHOENIX CONTACT	2907918								
39	6	CURRENT/MILLIVOLT INPUT TWO-WIRE/THREE-WIRE TRANSMITTER	ACROMAG	TT236								
40	1	PANEL HEATER, 100 WATT	HOFFMAN	DAH1001A								
41	1	FLEX PDU AND MAINTENANCE BYPASS SWITCH	EATON	EHBPL1500R-PDU1U								
42	1	AC UNIT, 24VDC	ICEQUBE	IQ300TE								
43	1	AC UNIT POWER SUPPLY, 25A	ALTECH CORP	PSA-60024								

NP NO. SIZE		SIZE QTY. TEXT			NGRAVING	AVING				
MF NO.	SIZE	uit.	HIGHT	1st LINE	2nd LINE	3rd LINE				
1	5" X 0.75"	1	1/4"	WELL 34 PLC PANEL						
2	1" X 0.5"	1	3/16*	PLC .						
3	1" X 0.5"	1	3/16*	ES						
4	3" X 0.75"	1	3/16*	ETHERNET/IP	PROSOFT MODULE	2000				
5	1" X 0.5"	1	3/16*	PS1		222				
6	1" X 0.5"	1	3/16*	PS2						
7	1" X 0.5"	1	3/16*	CB1	C81					
8	1" X 0.5"	1	3/16*	SPD		2.5.2.2				
9	1" X 0.5"	1	3/16*	PFR	PFR					
10	1" X 0 5"	1	3/16*	CB2						
11	1" X 0.5"	1	3/16*	CB3	CB3					
12	1" X 0.5"	1	3/16*	CB4	CB4					
13	1" X 0 5"	1	3/16*	CB5		Section				
14	1" X 0.5"	1	3/16*	TB1	5200E	2000				
15	1" X 0.5"	1	3/16*	CB10		anale.				
16	1" X 0.5"	1	3/16*	TB2	****	Name of the last o				
17	1" X 0.5"	2	3/16*	TB3	www.	2000				
18	1" X 0.5"	1	3/16*	CR1	Table .	ALC: NO.				
19	1" X 0.5"	1	3/16*	CR2	- Inches	- Contract				
20	1" X 0.5"	- 1	3/16*	CR3	- Annana	~~~				
21	1" X 0.5"	1	3/16*	CR4	****	****				
22	1" X 0.5"	1	3/16*	CR5		- Common				
23	1" X 0.5"	1	3/16*	CRE	*****	~~~~				
24	1" X 0.5"	1	3/16*	CR7		*****				
25	1" X 0.5"	1	3/16*	CR8	analist.	Salara				
26	1" X 0.5"	9	3/16*	CR9	2202					
27	1" X 0.5"	1	3/16*	CR10		*****				
28	1" X 0.5"	1	3/16*	CR11	****	****				
29	1" X 0.5"	1	3/16*	CR12						
30	1" X 0 5"	1	3/16*	CR13		~~~				
31	1" X 0.5"	1	3/16*	CR14	****	****				
32	1" X 0.5"	1	3/16*	CR15	0000	Series .				
33	1" X 0.5"	9	3/16*	CR16	VEC25					
34	1" X 0.5"	2	3/16*	184	****	****				
35	1" X 0.5"	1	3/16*	TB5						
36	5" X 0.5"	1	3/16*	TRANSMITTER 1-TRANSMITTER 6	22.2	50000				
37	3" X 1"	1	3/16*	RECEPTACLE	FLA 15A	CONVENIENCE USE				
38	1,5" X 0.5"	1	3/16*	HEATER	*****	****				
39	1" X 0.5"	1	3/16*	RADIO	-	-				

NAMEPLATE SCHEDULE

WARNING

POWER LINES

OVERHEAD





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PEZZONI ENGR. PROJECT # 24-148

WELL 29 CHLORINATION

CITY OF TURLOCK

CITY PROJECT NO. 23-046

ELECTRICAL

PANEL LAYOUT AND BACKPLATE

PROVOST&
PRITCHARD
455 W FIR AVENUE
CLOVIS, CA 93611-9166
PHONE (559) 449-2700
FAX (559) 449-2700
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DESIGN ENGINEER:
K. PEZZONI
LICENSE NO:
16269

DRAFTED BY: CHECKED BY:
CCM K. PEZZONI

DATE: DEC. 2024

JOB NO: 229223003

DATE: DEC. 202

JOB NO: 22922300

PROJECT NO:

PHASE: CD

0

ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.

SHEET ED-2

22 OF 35

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1 PLC CABINET TERMINAL LAYOUT
SCALE: NTS

WARNING

POWER LINES
OVERHEAD





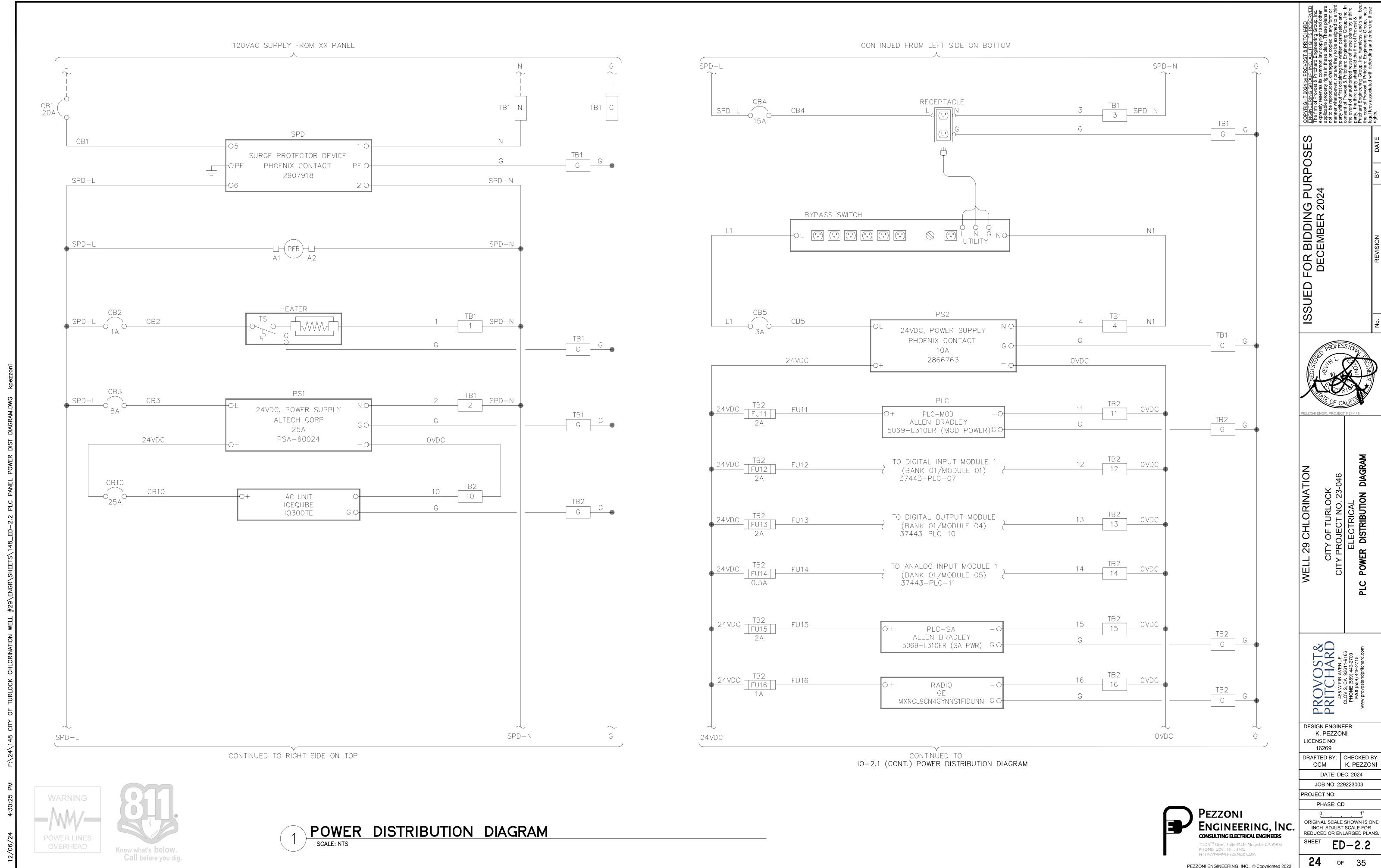
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ORIGINAL SCALE SHOWN IS ONE
INCH. ADJUST SCALE FOR

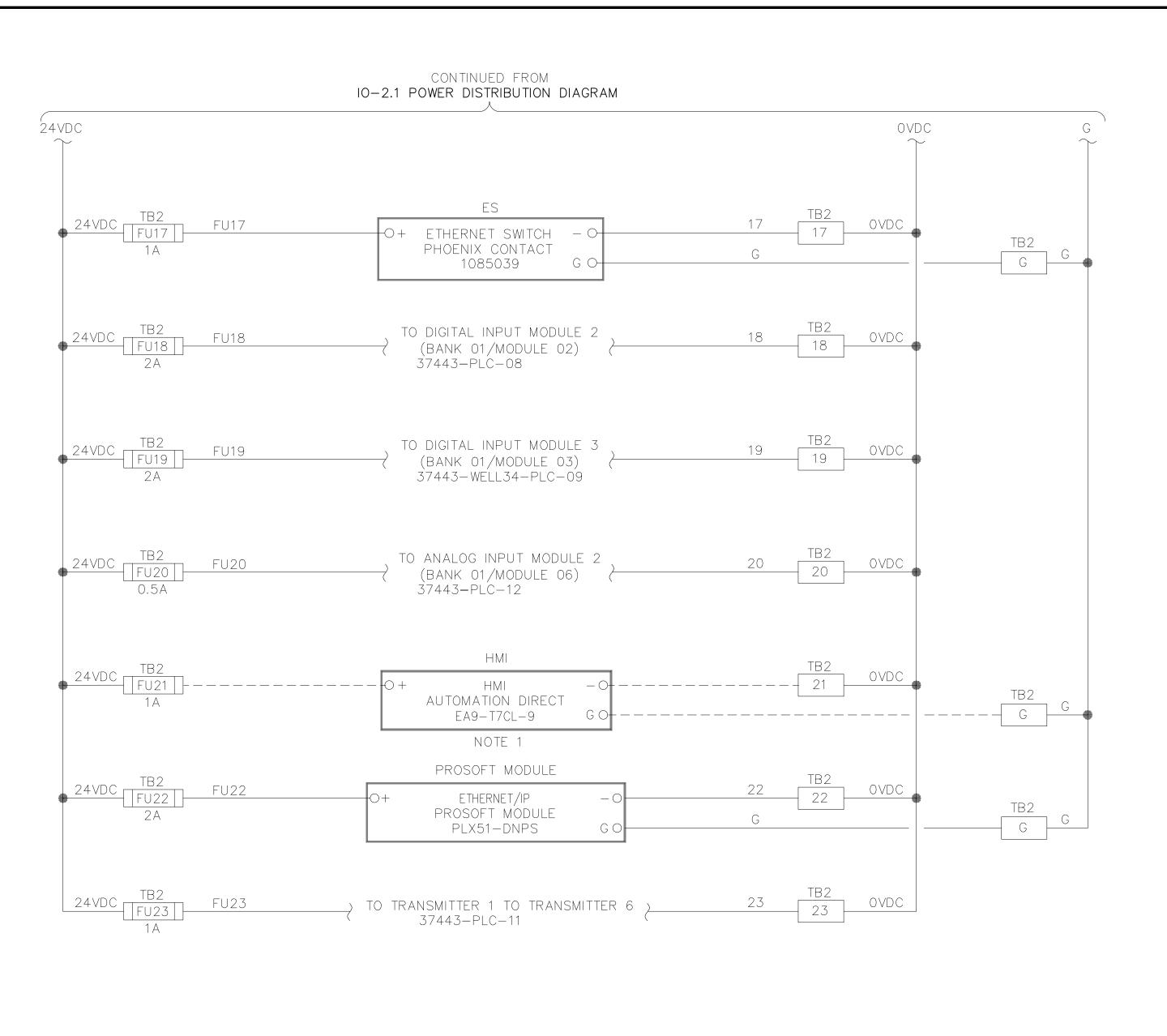
REDUCED OR ENLARGED PLANS

23

ED-2.1



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POWER LINES OVERHEAD

POWER DISTRIBUTION DIAGRAM (CONT.)
SCALE: NTS



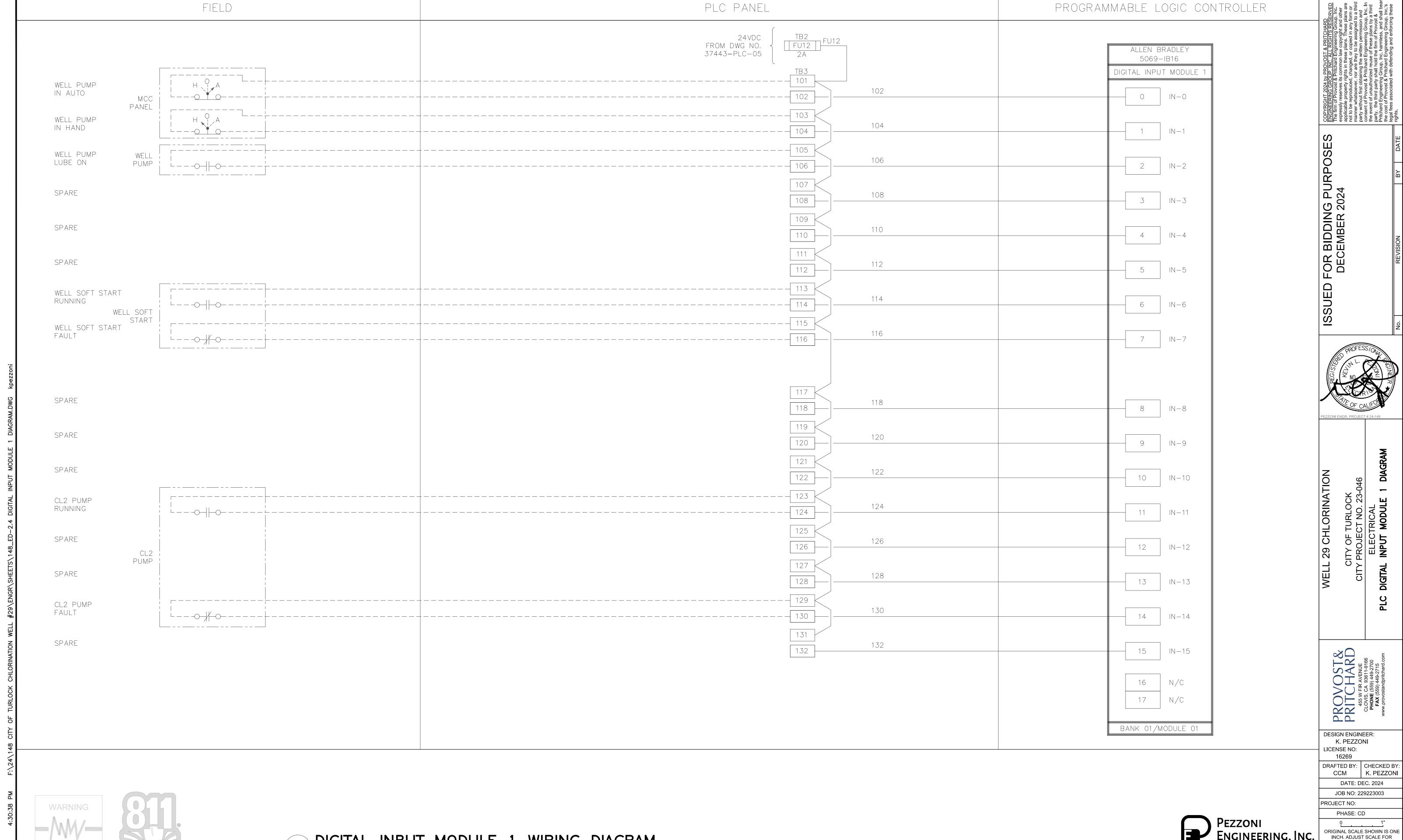
ISSUED FOR BIDDING PURPOSES
DECEMBER 2024 PROVOST& PRITCHARD 455 W FIR AVENUE CLOVIS, CA 93611-9166 PHONE (559) 449-2700 FAX (559) 449-2715 DESIGN ENGINEER:
K. PEZZONI
LICENSE NO:
16269

DRAFTED BY: CHECKED BY:
CCM K. PEZZONI DATE: DEC. 2024 JOB NO: 229223003 PROJECT NO:

PHASE: CD

ED-2.3

Know what's below.
Call before you dig.



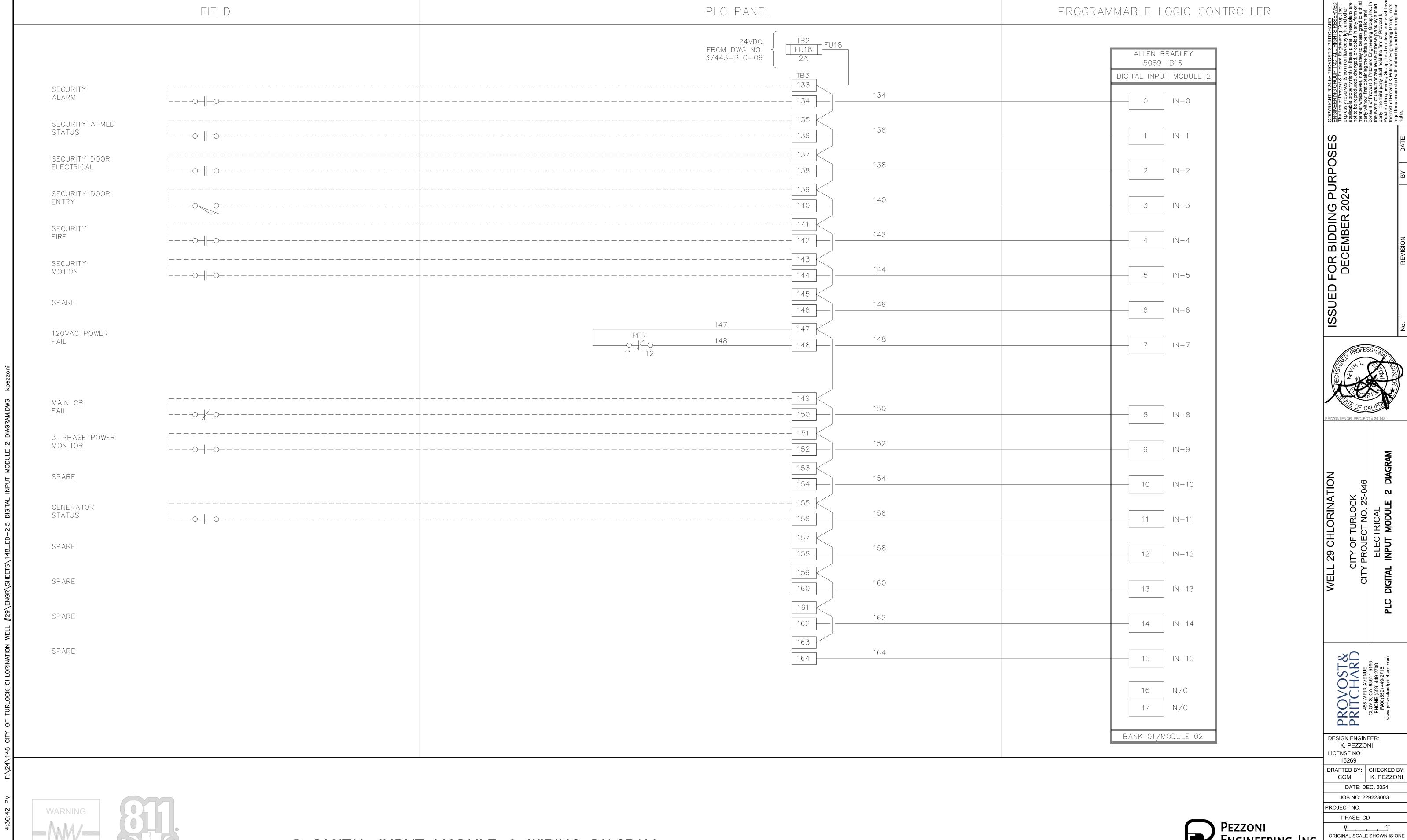






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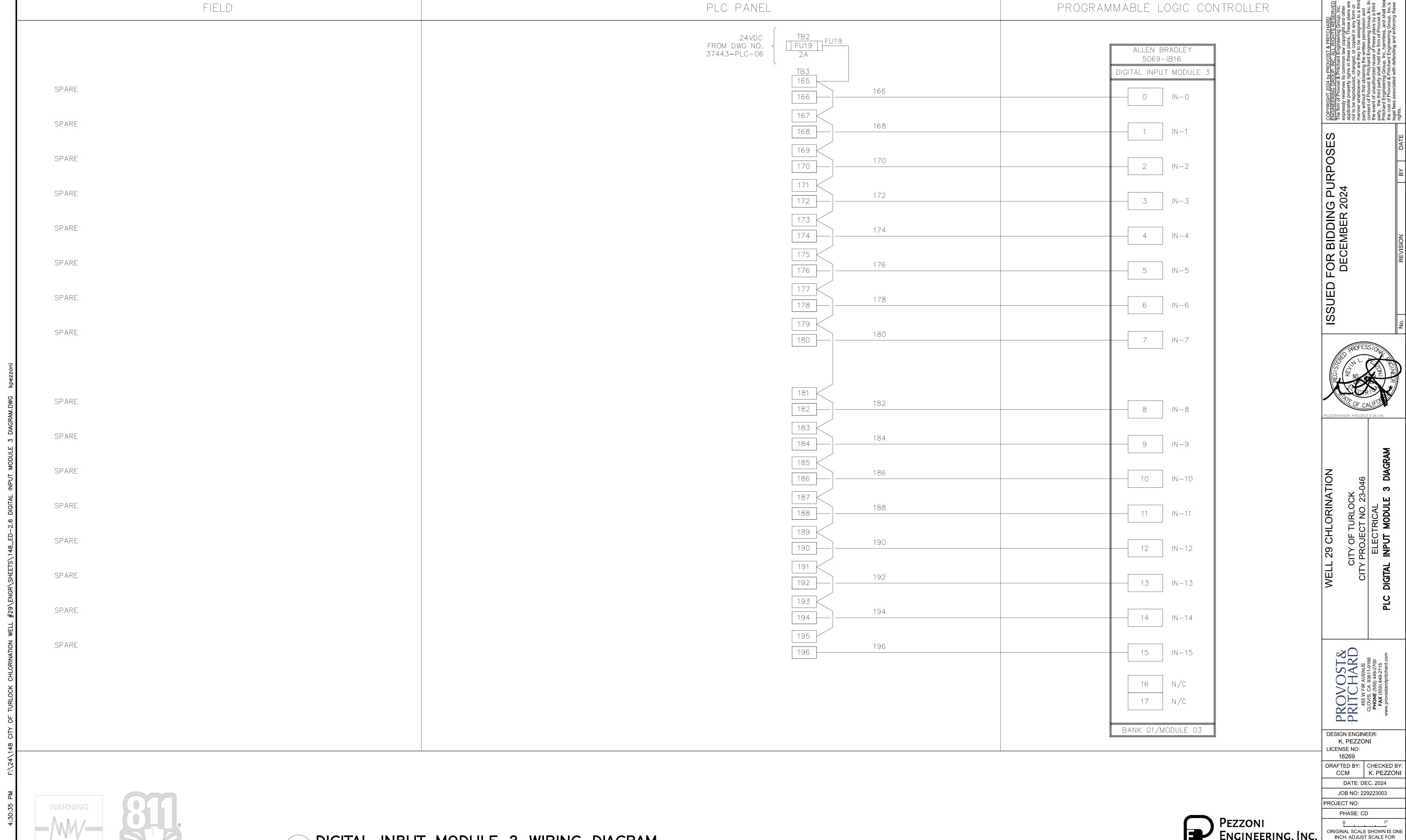








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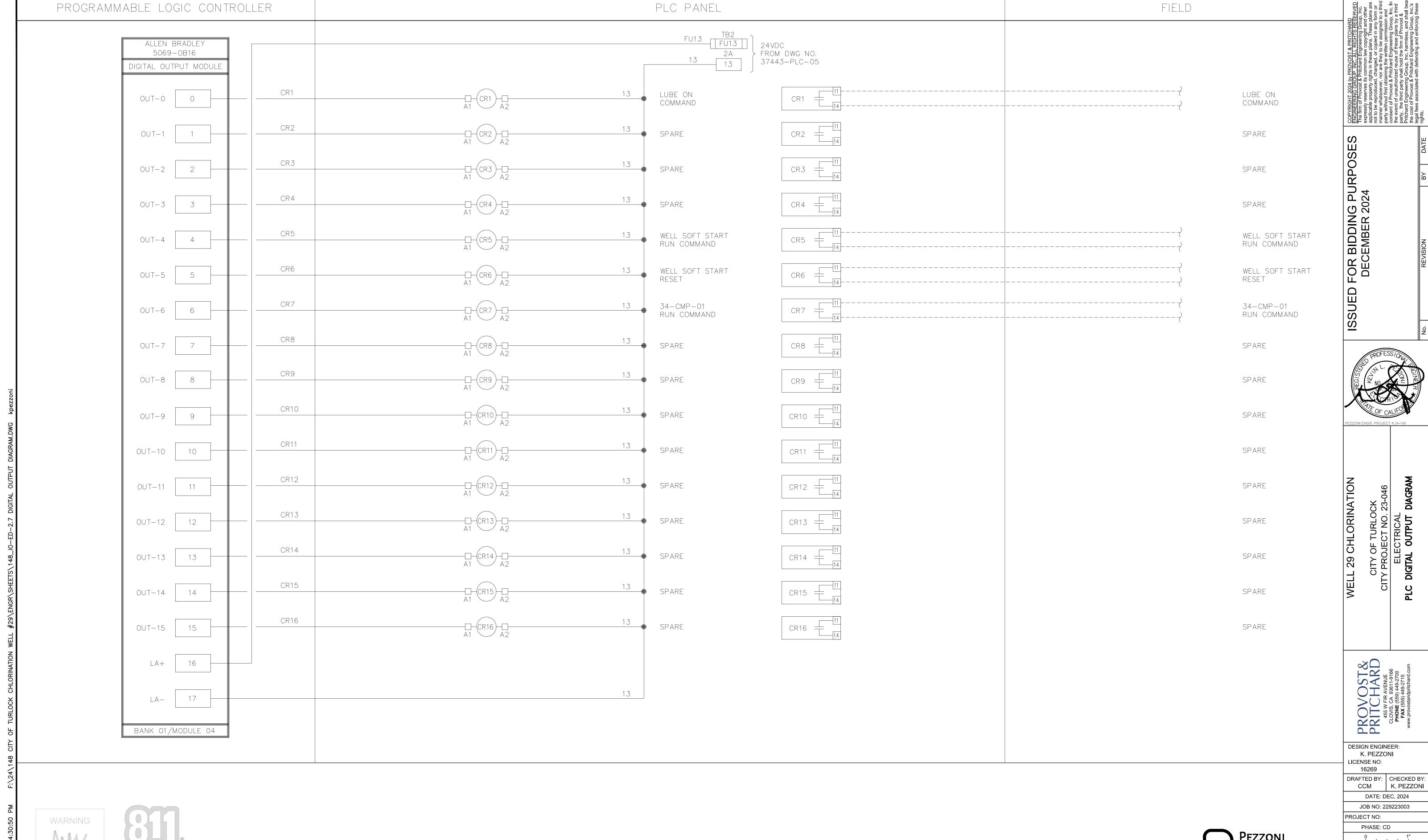








ED - 2.6**28** of 35



WARNING

POWER LINES
OVERHEAD







JOB NO: 229223003

PROJECT NO:

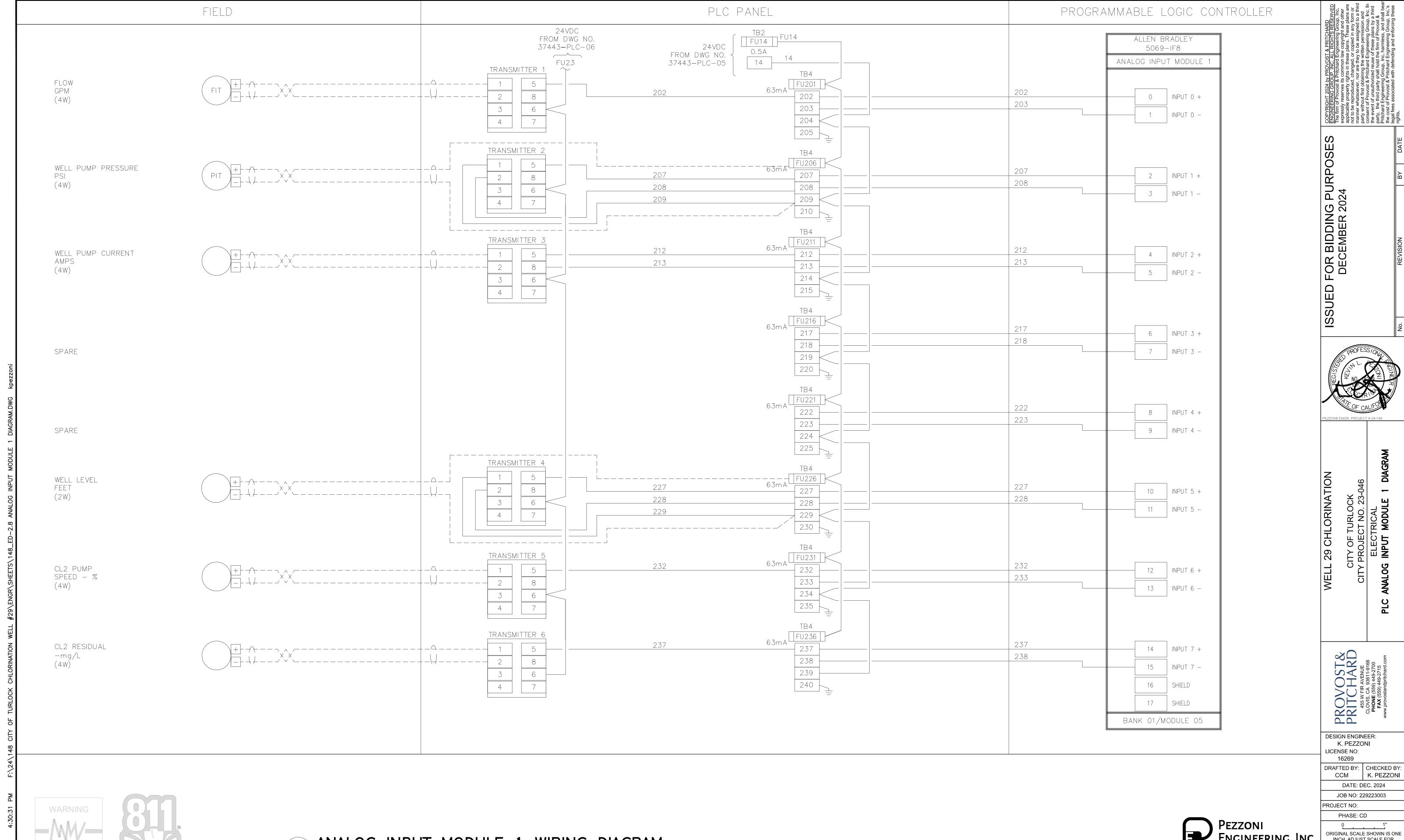
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SHEET ED—2.7

29 OF 35



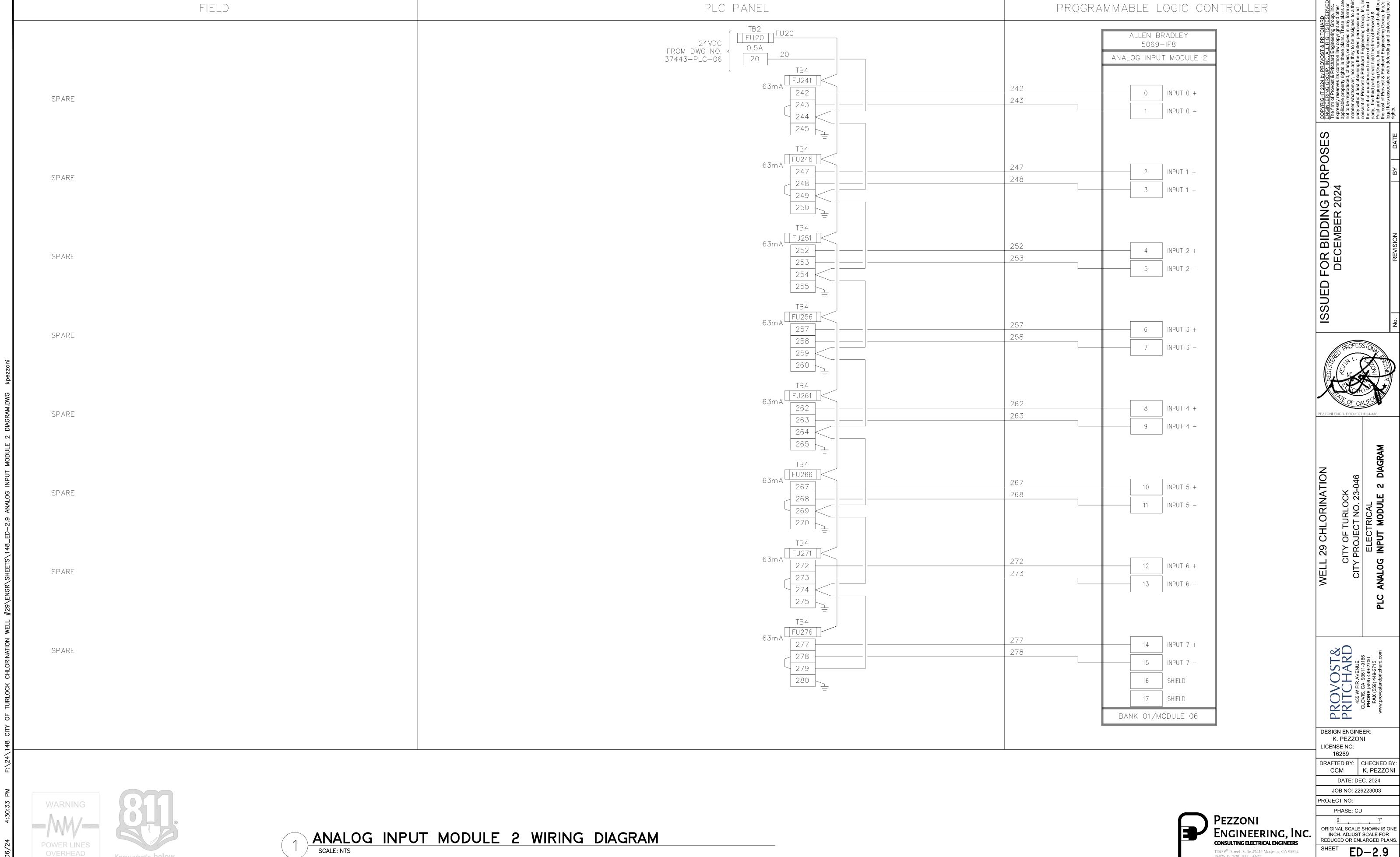






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1150 9<sup>TH</sup> Street Suite #1415 Modesto, CA 95354 PHONE: 209 . 554 . 4602 HTTP://WWW.PEZENGR.COM

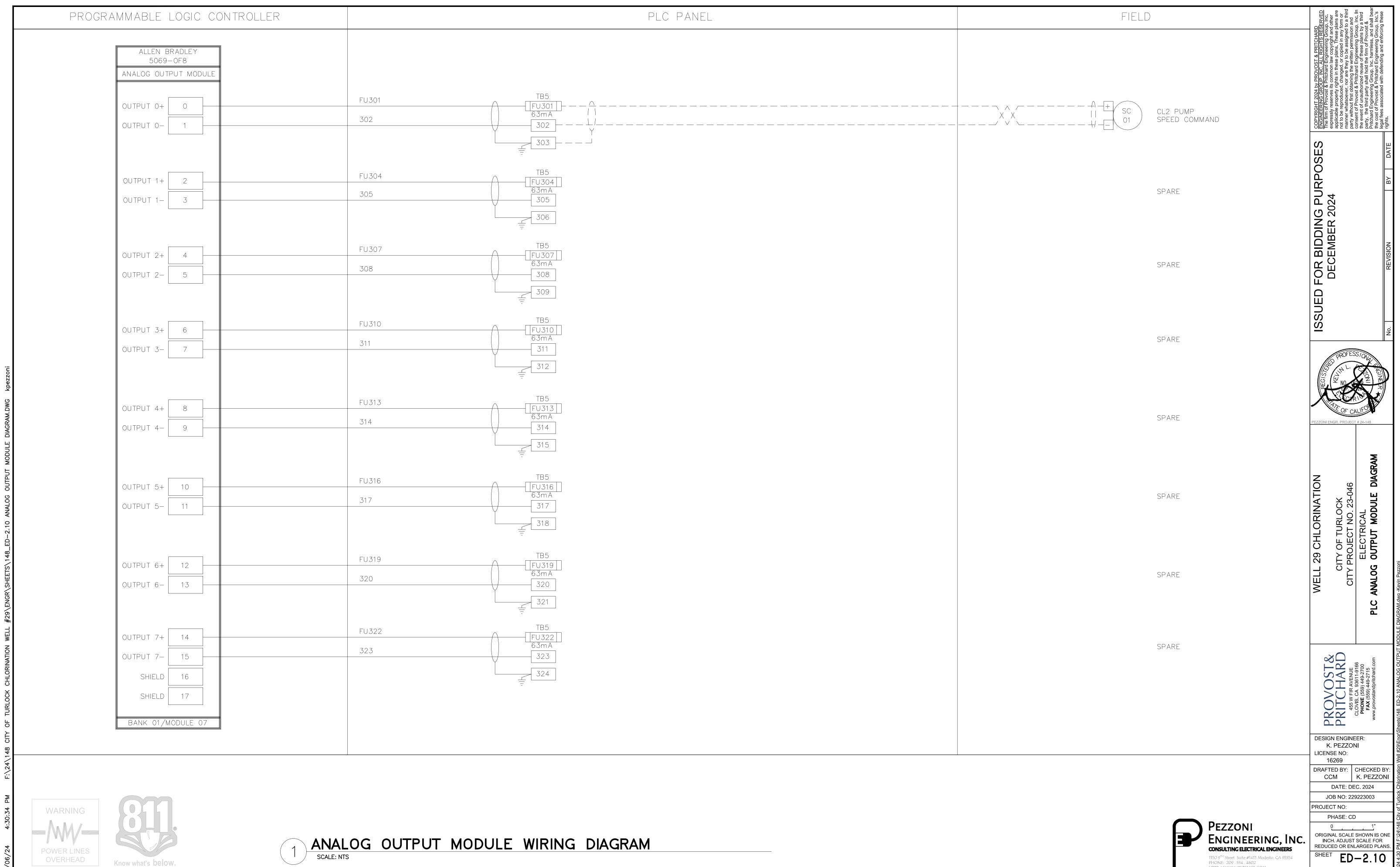
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ED-2.9

of **35** 

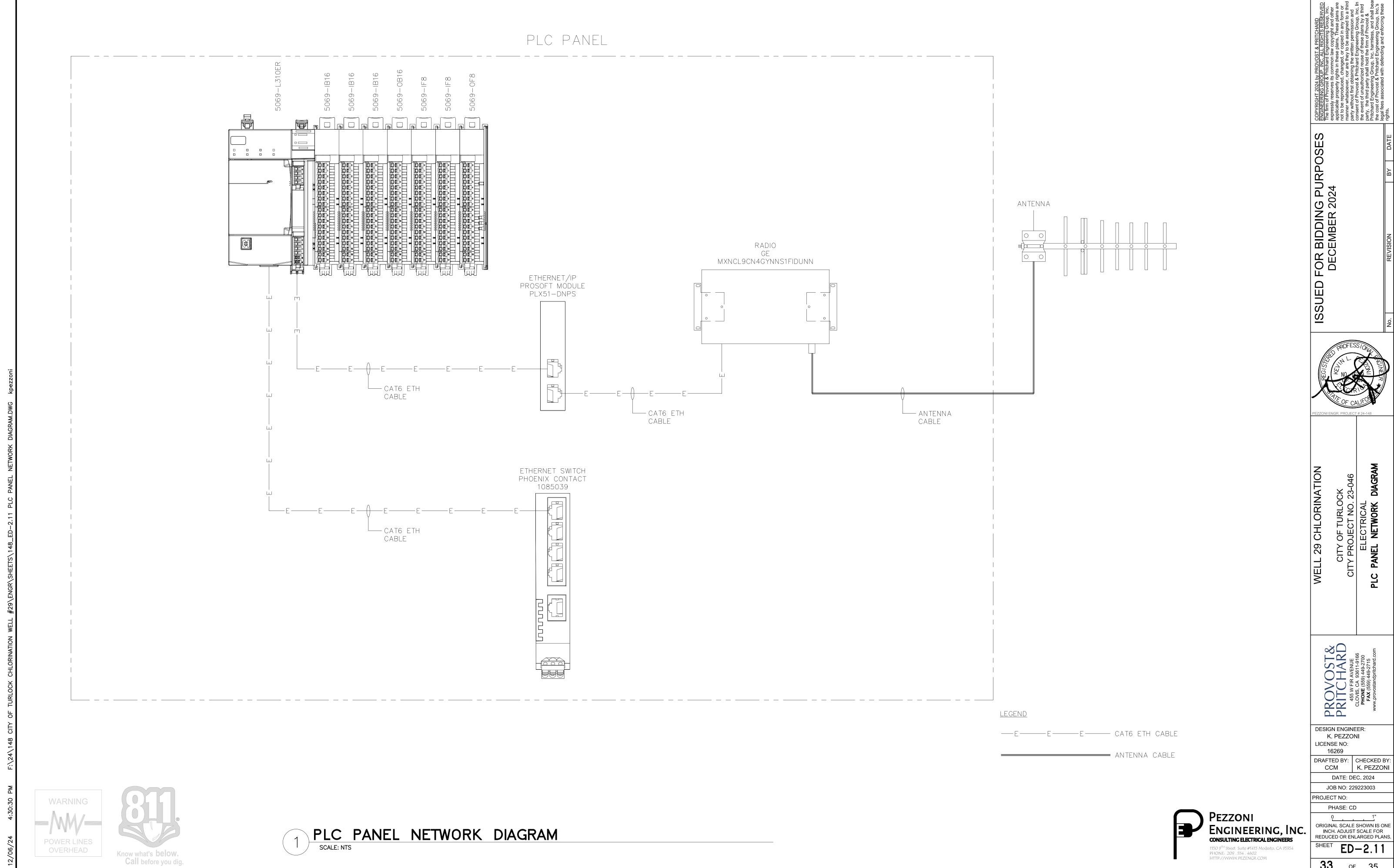
31

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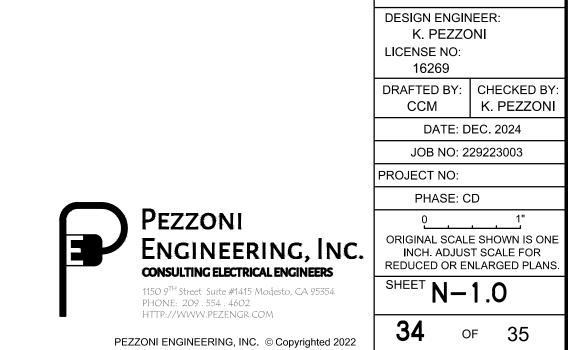
**33** of 35

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							INSTRI	JMFNT	IDFNT	TFICΔT	ION LE	TTFRS	SCHE	DULF								
		ELEMENT	TRANSMITTER	TRANSMITTER INDICATING	INDICATOR	RECORDER	CONTROLLER	CONTROLLER INDICATING	CONTROLLER RECORDING	SWITCH	SWITCH LOW-LOW	SWITCH LOW	SWITCH HIGH	SWITCH HIGH-HIGH	SWITCH HIGH-LOW	ALARM LOW-LOW	ALARM LOW	ALARM HIGH	ALARM HIGH—HIGH	VALVE	GAUGE	LIGHT
Α	ANALYSIS	AE	AT	AIT	Al	AR	AC	AIC	ARC	AS	ASLL	ASL	ASH	ASHH	ASHL	AALL	AAL	AAH	AAHH			AL
В	BURNER, COMBUST.	BE	BT	BIT	BI	BR	BC	BIC	BRC	BS	BSLL	BSL	BSH	BSHH		BALL	BAL	BAH	ВАНН			BL
С	CONDUCTIVITY	CE	СТ	CIT	CI	CR	CC	CIC	CRC	CS	CSLL	CSL	CSH	CSHH	CSHL	CALL	CAL	CAH	CAHH			CL
D	DENSITY	DE	DT	DIT	DI	DR	DC	DIC	DRC	DS	DSLL	DSL	DSH	DSHH	DSHL	DALL	DAL	DAH	DAHH			DL
F	FLOW	FE	FT	FIT	FI	FR	FC	FIC	FRC	FS	FSLL	FSL	FSH	FSHH	FSHL	FALL	FAL	FAH	FAHH	FCV	FG	FL
FF	FLOW RATIO				FFI			FFC	FFIC		FFS											FFL
G	GAUGE, DIMENSION																					
1	CURRENT		IT	IIT	П	IR	IC	IIC	IRC	IS	ISLL	ISL	ISH	ISHH		IALL	IAL	IAH	IAHH			IL
Р	POWER																					
K	TIME				KI	KR	KC	KIC	KRC	KS	KSLL	KSL	KSH	KSHH		KALL	KAL	KAH	KAHH	KCV		KL
L	LEVEL	LE	LT	LIT	LI	LR	LC	LIC	LRC	LS	LSLL	LSL	LSH	LSHH		LALL	LAL	LAH	LAHH	LCV	LG	LL
М	MOISTURE, HUMIDITY	ME	MT	MIT	MI	MR	MC	MIC	MRC	MS	MSLL	MSL	MSH	MSHH		MALL	MAL	MAH	MAHH			ML
N	EMERG. SHUTDOWN																					
Р	PRESSURE	PE	PT	PIT	PI	PR	PC	PIC	PRC	PS	PSLL	PSL	PSH	PSHH	PSHL	PALL	PAL	PAH	PAHH	PCV		PL
PD	PRESSURE DIFFERENTIAL				PDI	PDR	PDC	PDIC	PDRC	PDS	PDSLL	PDSL	PDSH	PDSHH		PDALL	PDAL	PDAH	PDAHH	PDCV		PDL
Q	QUANTITY	QE	QT	QIT	QI	QR				QS	QSLL	QSL	QSH	QSHH		QALL	QAL	QAH	QAHH			
R	RADIATION																					
S	SPEED	SE	ST	SIT	SI	SR	SC	SIC	SRC	SS	SSLL	SSL	SSH	SSHH		SALL	SAL	SAH	SAHH			
Т	TEMPERATURE	TE	TT	TIT	TI	TR	TC	TIC	TRC	TS	TSLL	TSL	TSH	TSHH	TSHL	TALL	TAL	TAH	TAHH	TCV		TL
TD	TEMPERATURE DIFFERENTIAL		TDT	TDIT	TDI	TDR	TDC	TDIC	TDRC	TDS	TDSLL	TDSL	TDSH	TDSHH		TDALL	TDAL	TDAH	TDAHH	TDCV		TDL
U	MULTI-VARIABLE				UI	UR	UC	UIC	URC	US												UL
V	VISCOSITY	VE	VT	VIT	VI	VR	VC	VIC	VRC	VS	VSLL	VSL	VSH	VSHH		VALL	VAL	VAH	VAHH			VL
W	WEIGHT	WE	WT	WIT	WI	WR				WS	WSLL	WSL	WSH	WSHH		WALL	WAL	WAH	WAHH			WL
U	UNCLASSIFIED	ΧE	XT	XIT	ΧI	XR	XC	XIC	XRC	XS	XSLL	XSL	XSH	XSHH		XALL	XAL	XAH	XAHH	XCV	XG	XL
XV	VIBRATION	XVE	XVT		XVI	XVR				XVS			XVSH	XVSHH				XVAH	XVAHH			XVL
Υ	STATUS				YI																	YL
Z	POSITION	ZE	ZT	ZIT	ZI					ZS												ZL

	GENERAL PROC	ESS INS	STRUMENT DIAGRAM	SYMBOLS
MAIN PROCESS FLOW			HMI (HUMAN MACHINE INTERFAC	CE) HMI
SECONDARY PROCESS FLOW		•		1 11011
INSTRUMENT OR CONNECTION TO PROCESS		-	PILOT LIGHT R =RED, A =AMBER, G =GRE	EN
PNEUMATIC SYMBOL		-		
ELECTRICAL SIGNAL		-	FLOWMETER	<u>□</u>
GUIDE ELECTROMAGNETIC OR SONIC SIGNAL		-	BLOWER/FAN	
NON-GUIDE ELECTROMAGNETIC OR SONIC SIGNAL			520112191711	<u> </u>
FIBER OPTIC ETHERNET		-		$\bigcap$
COPPER ETHERNET		-	VERTICAL PUMP	$\Box$
REMOTE I/O COMM BUS INTERNAL SYSTEM/PROGRAM LINK		-		<u>/O\</u>
ELECTRICAL FEED/CONNECTION	E >		CENTRIFUGAL PUMP	
CONTINUATION TAG (1) UNIQUE I.D. (2) CONTINUATION FROM SHEET # (3) CONTINUATION TO SHEET #	(1) (2) (3)		SUBMERSIBLE PUMP	
CONTINUATION TAG (1) CONTINUATION TO SHEET #	(1)		CHEMICAL FEED/DOSING PUMP	
EQUIPMENT TAG	####			
VALVE (GENERAL)	$\bowtie$			
VALVE (GATE)				
CHECK VALVE (GENERAL)				
SOLENOID VALVE				

		INS	TRUMENT DE	VICE & FUNC	CTION SYMBO	LS	
DESCRIPTION	SYMBOL	DESCRIPTION FIELDS	DESCRIPTION FIELD (1)	DESCRIPTION FIELD (2)	DESCRIPTION FIELD (3)	DESCRIPTION FIELD (4)	DESCRIPTION FIELD (5)
SCADA/HMI	(1) $(3)$ $(4)$ $(5)$	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	ACTION ALARM NUM = NUMBER SET = SET POINT STATUS TREND	DESCRIPTION	DESCRIPTION
MCC/PLC HM	(3) (4) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) LOCATION	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	ACTION ALARM NUM =NUMBER SET =SET POINT STATUS	DESCRIPTION	DESCRIPTION
CONTROL ELEMENT OPERATOR ACCESSIBLE	(1) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	LCP =LOCAL CONTROL PANEL MCC =MOTOR CONTROL CENTER VCP =VENDOR/3RD PARTY PANEL	DESCRIPTION	DESCRIPTION
INSTRUMENT PRIMARY ELEMENT	(1) (3) (4) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	INSTRUMENT READING VALUE/TYPE	DESCRIPTION	DESCRIPTION
INSTRUMENT PRIMARY ELEMENT OPERATOR ACCESSIBLE	(1) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	INSTRUMENT READING VALUE/TYPE	DESCRIPTION	DESCRIPTION
INSTRUMENT AUXILARY ELEMENT OPERATOR ACCESSIBLE	(1) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	INSTRUMENT READING VALUE/TYPE	DESCRIPTION	DESCRIPTION
INSTRUMENT PRIMARY ELEMENT OPERATOR INACCESSIBLE	(1) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	INSTRUMENT READING VALUE/TYPE	DESCRIPTION	DESCRIPTION
INSTRUMENT AUXILARY ELEMENT OPERATOR INACCESSIBLE	(3) (4) (2) (5)	(1) TAG (2) LOOP # (3) FUNCTION (4) DESCRIPTION 1 (5) DESCRIPTION 2	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	INSTRUMENT READING VALUE/TYPE	DESCRIPTION	DESCRIPTION
PLC I/O	(4) (1)(2) (3)	(1) TAG (2) LOOP # (3) I/O FUNCTION (4) DESCRIPTION 1	SEE INSTRUMENT & OPERATOR IDENTIFICATION LETTERS SCHEDULE	IDENTIFICATION NUMBER PER PLANS	SYMBOL TYPE  DISCRETE INPUT  DISCRETE OUTPUT  ANALOG INPUT  ANALOG OUTPUT	DESCRIPTION	N.A.



ISSUED FOR BIDDING PURPOSES
DECEMBER 2024

WELL 29 CHLORINATION

PROVOST& PRITCHARD

DATE: DEC. 2024 JOB NO: 229223003

PHASE: CD

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