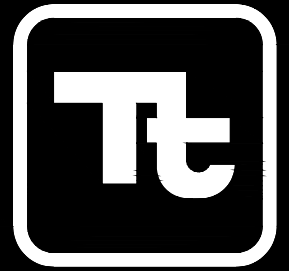


MONTEREY PENINSULA WATER MANAGEMENT DISTRICT SLEEPY HOLLOW STEELHEAD REARING FACILITY

15350 Sequoia Parkway, Suite 220
Portland, Oregon 97224
Tel 503.684.9097 Fax 503.598.2508



TETRA TECH

www.tetrattech.com

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PROJECT LOCATION:
SLEEPY HOLLOW
STEELHEAD REARING FACILITY

CLIENT INFORMATION:
MONTEREY PENINSULA
WATER MANAGEMENT DISTRICT
5 HARRIS COURT, BUILDING G
MONTEREY, CA 93940

Tt PROJECT No.:
135-124674-15001

CLIENT PROJECT No.:

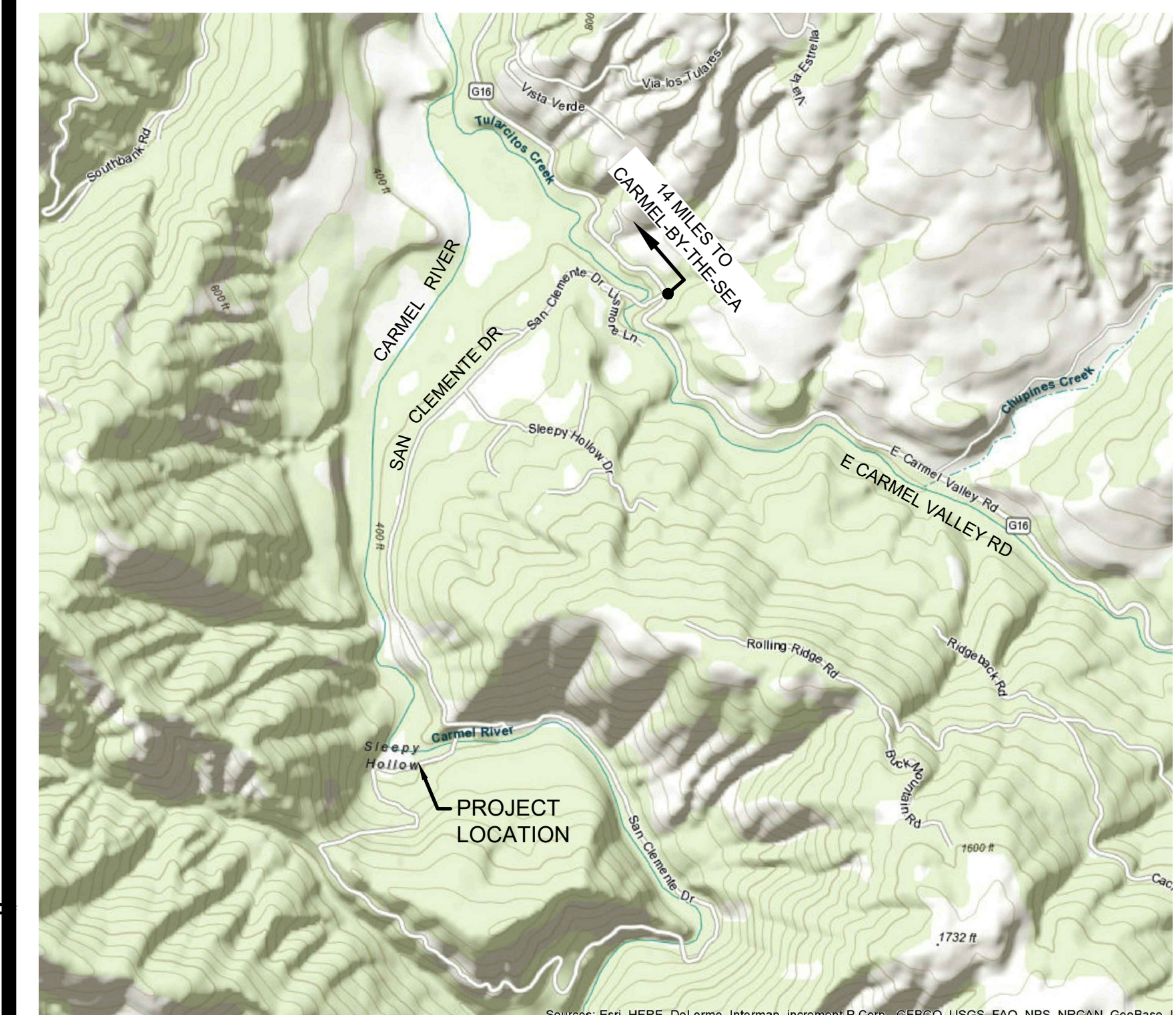
PROJECT DESCRIPTION / NOTES:

RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADES AT THE SLEEPY HOLLOW STEELHEAD REARING FACILITY (SHSRF).

ISSUED:

MAY 12, 2018 - ISSUED FOR BIDDING

VICINITY MAP:



GENERAL CONSTRUCTION NOTES

1. TETRA TECH IS NOT RESPONSIBLE FOR SAFETY, IN, ON, OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY OF ANY REGULATIONS THERETO. TETRA TECH EXERCISES NO CONTROL OF THE SAFETY OR ADEQUACY OF ANY EQUIPMENT, BUILDING COMPONENTS, SCAFFOLDING, FORMS, OR OTHER WORK AIDS USED IN OR ABOUT THE PROJECT, OR IN THE SUPERVISION OF THE SAME.

UTILITY LOCATION NOTES

- CALIFORNIA STATE LAW REQUIRES CONTRACTORS TO LOCATE UTILITIES PRIOR TO BEGINNING ANY EXCAVATION. CONTRACTOR IS EXPECTED TO ABIDE BY ALL APPLICABLE LAWS AND REGULATIONS GOVERNED BY THE STATE OF CALIFORNIA.
- EXCAVATORS MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, AND UP TO 14 BUSINESS DAYS IN REMOTE AREAS, BEFORE COMMENCING AN EXCAVATION. CALL 811.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO STARTING CONSTRUCTION. THE 811 DIGLINE MAY NOT INCLUDE ALL UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES HAVE BEEN LOCATED. THIS INCLUDES POTHOLING ALL UTILITY CROSSINGS. THE OWNER AND ENGINEER SHALL BE CONTACTED 72 HOURS PRIOR TO POTHOLING OF ANY UTILITY CROSSINGS.

SURVEY CONTROL DATA

SURVEY PERFORMED UNDER THE SUPERVISION OF DAN HELT LS 8925
SURVEY DATES: JUNE 22-25 2015

HORIZONTAL CONTROL

HORIZONTAL CONTROL FOR THIS PROJECT IS BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 4, NORTH AMERICAN DATUM OF 1983, DEFINED LOCALLY BY CORS STATION SANTA LUCIACN, 2004 P171. COORDINATES FOR LOCAL CONTROL WERE ESTABLISHED BY GPS AND ADJUSTED THROUGH POST PROCESSING.

BASIS OF BEARING

THE BEARING OF N54°45'15"W BETWEEN SET CONTROL MONUMENTS "3" AND "4" IS THE BASIS OF BEARING FOR THIS PROJECT

CONTROL POINT NUMBER "3"

N: 2055949.337 COMBINED FACTOR: 0.99993164
E: 5762949.718 CONVERGENCE ANGLE: -1°37'13"
ELEV: 403.17

CONTROL POINT NUMBER "4"

N: 2056061.227 COMBINED FACTOR: 0.99993167
E: 5762791.373 CONVERGENCE ANGLE: -1°37'14"
ELEV: 402.11

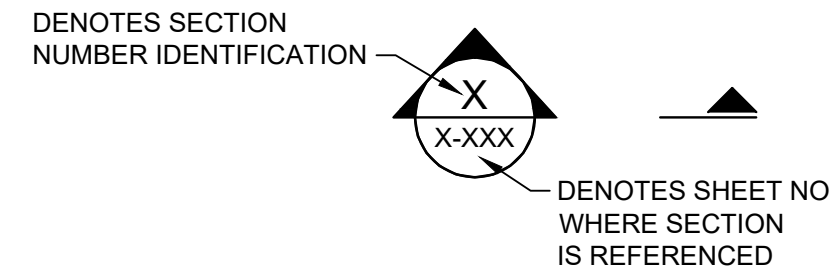
VERTICAL CONTROL

VERTICAL CONTROL FOR THIS PROJECT IS BASED ON THE NATIONAL GEODETIC VERITCAL DATUM OF 1929 (NGVD 29) AND IS DEFINED LOCALLY BY NGS SURVEY MONUMENT F 704 PID: GU2842 ELEV = 408.50.

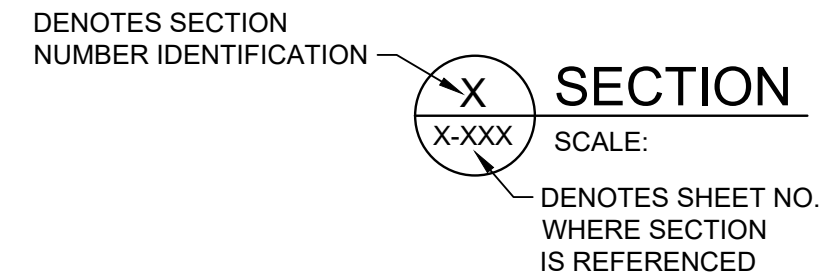
BENCHMARK

THE BENCHMARK FOR THIS PROJECT IS SET CONTROL POINT NUMBER "3". SEE DRAWING C010 FOR LOCATION. ELEVATION = 403.17 FEET (NGVD 29).

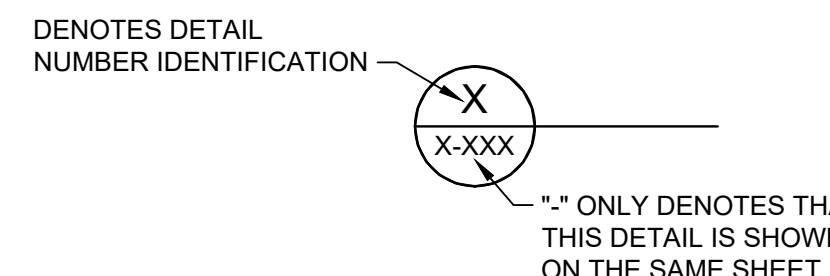
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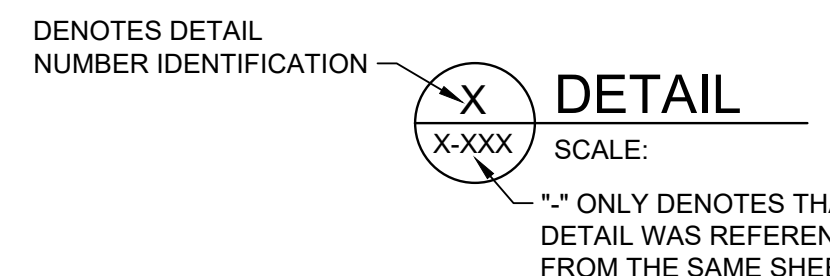
SECTION REFERENCE



SECTION TITLE

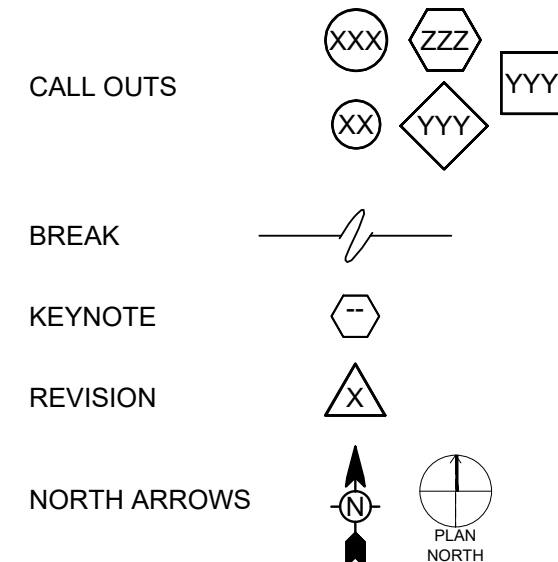


DETAIL REFERENCE



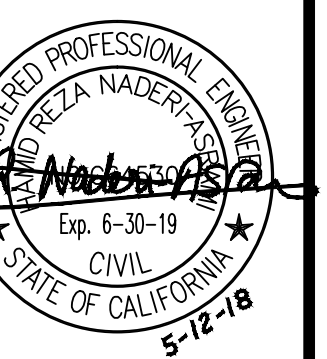
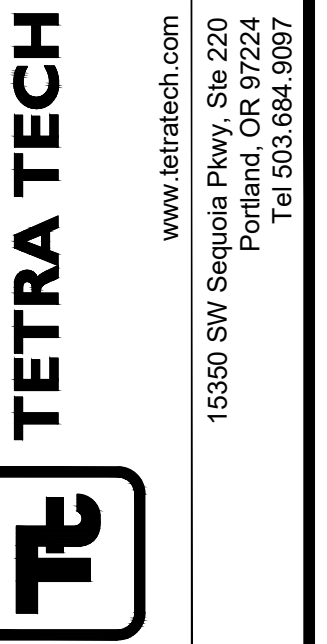
DETAIL TITLE

GENERAL



ABBREVIATIONS

A AIR	FG FINISHED GRADE	PD PERFORATED DRAIN
AFF ABOVE FINISHED FLOOR	FLG FLANGE	PE PLAIN END
AB ANCHOR BOLT	FM FORCE MAIN	PNT PAINT
ABV ABOVE	FOC FACE OF CONCRETE	PRV PRESSURE REDUCING VALVE
ADDL ADDITIONAL	FOF FACE OF FRAMING	PSIG POUNDS PER SQUARE INCH GAGE
AHU AIR HANDLING UNIT	FOS FACE OF STUD	PT PENSTOCK TAP
ALT ALTERNATE	FRP FIBER REINFORCED PLASTIC	PVC POLYVINYL CHLORIDE
ALUM ALUMINUM	FT FEET	R RADIUS
ARCH ARCHITECTURAL	GA GAUGE	RA RETURN AIR
B BYPASS	GAL GALLONS	RPBP REDUCED PRESSURE BACKFLOW PREVENTER
BD BOARD	GI GALVANIZED IRON	RECIRC RECIRCULATION
BLDG BUILDING	GPD GALLONS PER DAY	REINF REINFORCING
BLK BLOCK	GPM GALLONS PER MINUTE	REQD REQUIRED
BO BOTTOM OF	GS GRAVITY SEWER	RO ROUGH OPENING
BV BUTTERFLY VALVE	GV GATE VALVE	SCFM STD CUBIC FEET PER MINUTE
CD CHEMICAL DRAIN	GWB GYPSUM WALL BOARD	SD STORM DRAIN
CFM CUBIC FEET PER MINUTE	GYP GYPSUM	SHT SHEET
CI CAST IRON	HAS HEADED ANCHOR STUD	SF SQUARE FEET/SUPPLY FAN
CIP CAST IN PLACE	HDPE HIGH DENSITY POLYETHELENE	SIM SIMILAR
CL CENTER LINE	HDWR HARDWARE	SL SLOPE
CLR CLEAR	HGL HYDRAULIC GRADE LINE	SQ SQUARE
CMP CORRUGATED METAL PIPE	HM HOLLOW METAL	SS/SSST STAINLESS STEEL
CMU CONCRETE MASONRY UNIT	HORIZ HORIZONTAL	STE SEPTIC TANK EFFLUENT
CO CLEAN OUT, CLEAR OPENING	HR HOUR	STEP SEPTIC TANK EFFLUENT PUMP
CONC CONCRETE	HRT HYDRAULIC DETENTION TIME	TC TOP OF CURB
CONN CONNECTION	HP HORSEPOWER/HIGH POINT	TDC TOP DEAD CENTER
COORD COORDINATE	HW HEADWORKS/HIGH WATER	TO TOP OF
CPL COUPLING	ID INSIDE DIAMETER	TOC TOP OF CONCRETE
CU CUBIC	IE INVERT ELEVATION	TOW TOP OF WALL
D DRAIN	INF INFLUENT	TRT TAILRACE TAP
DG DIGESTER GAS	INV INVERT	TS TUBE STEEL
DI DUCTILE IRON	LBS POUNDS	TYP TYPICAL
DIA DIAMETER	LF LINEAR FOOT	UD UNDERDRAIN
DN DOWN	LL LIVE LOAD	UH UNIT HEATER
DR DRAIN	LHO LOW HEAD OXYGENATOR	UV ULTRA VIOLET RADIATION
DS DOWNSPOUT	LOC LOCATION	V VENT
DTL DETAIL	LP LOW POINT	VFD VARIABLE FREQUENCY DRIVE
DWG DRAWING	MAV MOTORIZED AIR VALVE	VA VACUUM
EA EACH	MAX MAXIMUM	VIN VINYL
EF EACH FACE/EXHAUST FAN	MECH MECHANICAL	VERT VERTICAL
EFF EFFLUENT	MFR MANUFACTURER	VTR VENT THROUGH ROOF
EG EXHAUST GRILL	MG MILLION GALLONS	W WITH
EL ELEVATION	MG/L MILLIGRAMS PER LITER	WH WATER HEATER
ELEC ELECTRIC	MGD MILLION GALLONS PER DAY	WN NON-POTABLE WATER
EOS EDGE OF SLAB	MH MANHOLE	WNH NON-POTABLE HOT WATER
EP EDGE OF PAVEMENT	MIN MINIMUM	WP POTABLE WATER
EQ EQUAL	MJ MECHANICAL JOINT	WPH POTABLE HOT WATER
EQUIP EQUIPMENT	MT MOUNTED	WS WATER SURFACE
EW EACH WAY	MTL METAL	WWF WELDED WIRE FABRIC
EXIST EXISTING	NIC NOT IN CONTRACT	YCO YARD CLEAN OUT
F FAHRENHEIT	OA OUTSIDE AIR	
FCO FLOOR CLEAN OUT	OC ON CENTER	
FD FLOOR DRAIN	OH OVERHANG	
FFE FINISHED FLOOR ELEV	OPP OPPOSITE	



BY	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT SLEEPY HOLLOW STEELHEAD REARING FACILITY RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE GENERAL NOTES AND ABBREVIATIONS

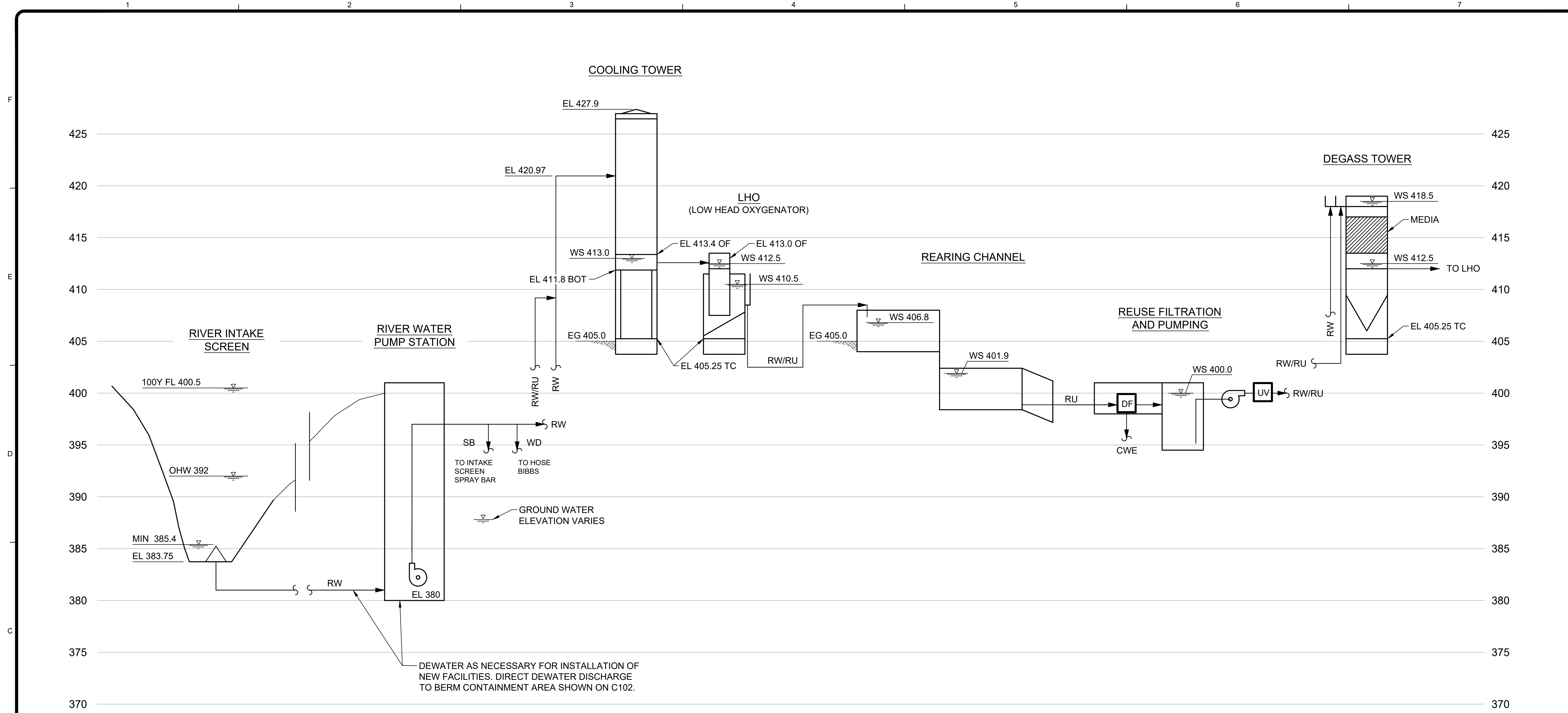
Project No.: 135-124674-15001	Designed By: EGN
Drawn By: EGN	Checked By: DJN

G-002

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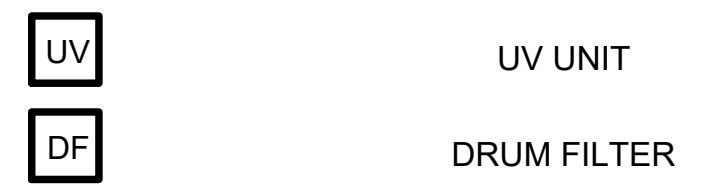
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5/12/2018 2:12:15 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\C-03 HYDRAULIC PROFILE.DWG - NORDHOLM, ERIK



DEWATER AS NECESSARY FOR INSTALLATION OF NEW FACILITIES. DIRECT DEWATER DISCHARGE TO BERM CONTAINMENT AREA SHOWN ON C102.

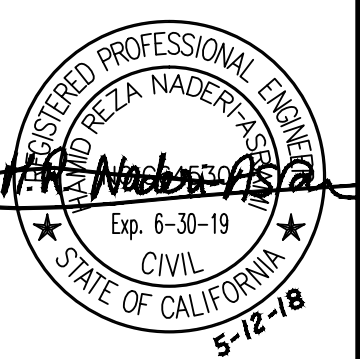
LEGEND



PIPE DESIGNATIONS

- CWE CLEANING WASTE EFFLUENT TO GRAVEL BAR
- D DRAIN
- OFD OVERFLOW DRAIN TO RIVER
- RU RE-USE (UV & FILTER)
- RW RIVER WATER SUPPLY
- RW/RU MULTI-USE RW OR RU
- SB SPRAY BAR SUPPLY
- WD WASH DOWN

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www.tetra.tech.com
15350 SW Sequoia Pkwy, Ste 220
Portland, OR 97224
Tel 503.684.9097



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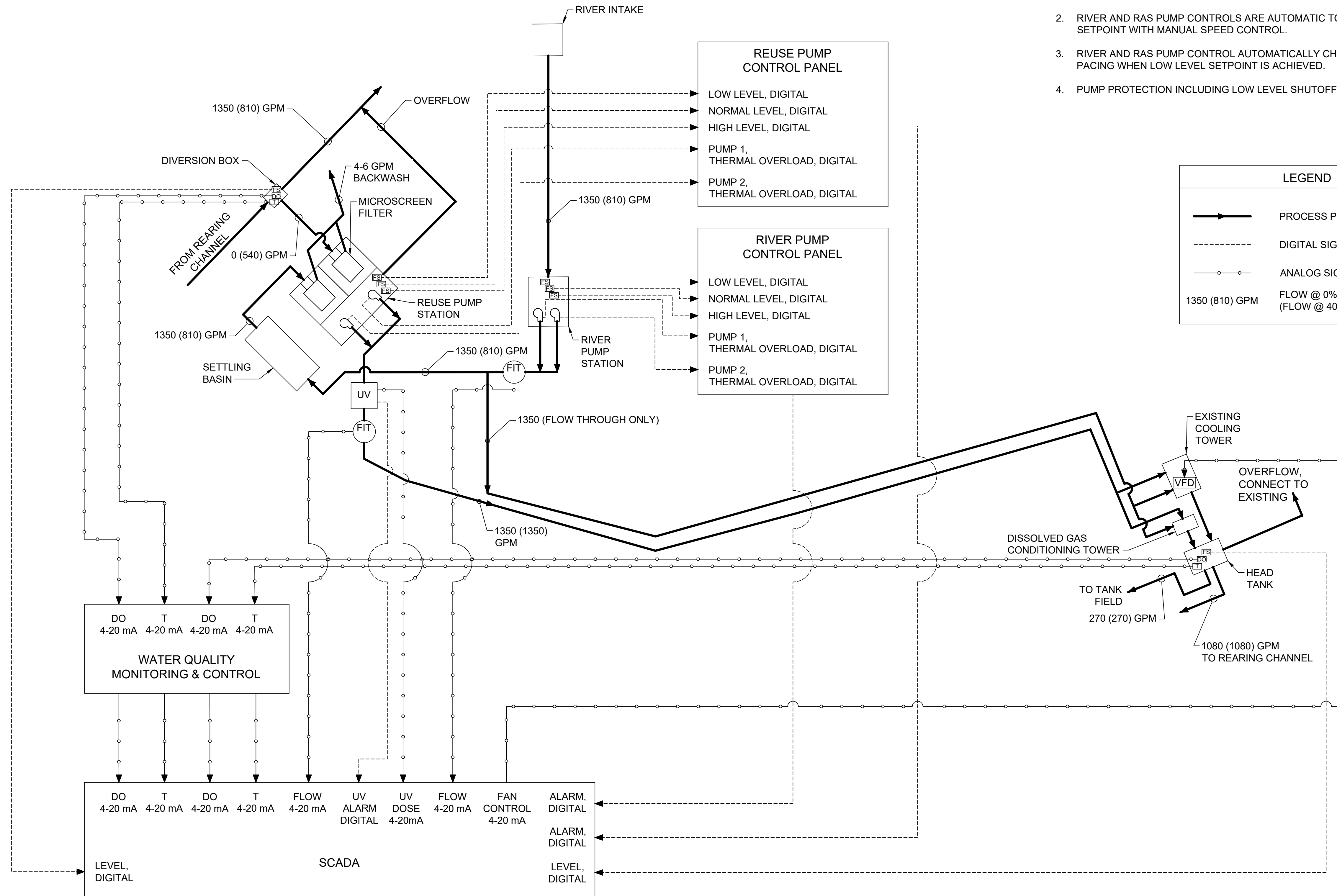
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT SLEEPY HOLLOW STEELHEAD REARING FACILITY	
RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE HYDRAULIC PROFILE	
Project No.:	135-124674-15001
Designed By:	EGN
Drawn By:	EGN
Checked By:	DJN

G-003

Bar Measures 1 inch

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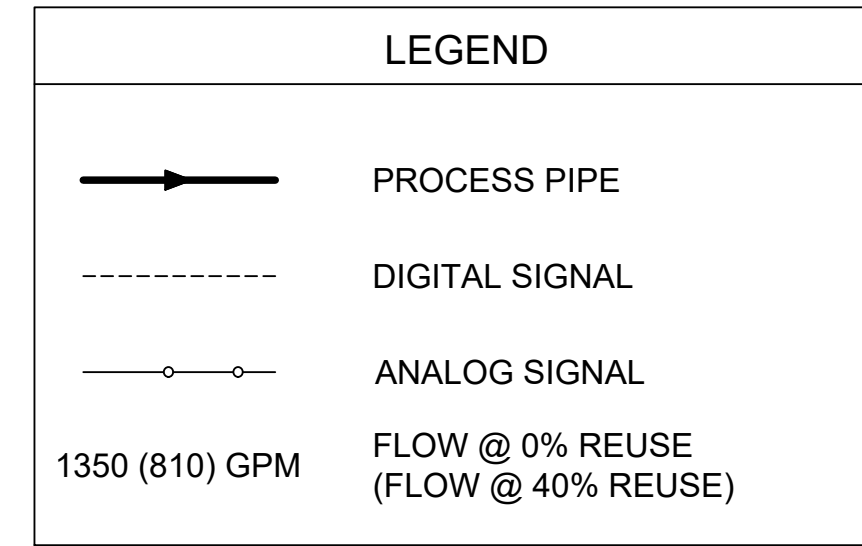
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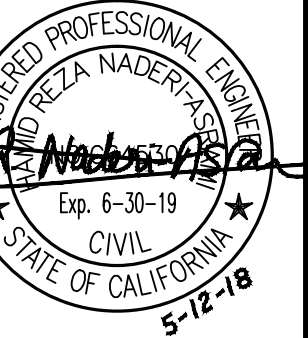
NOTES:

1. COOLING TOWER FAN CONTROL IS AUTOMATIC FROM TEMPERATURE SENSOR INPUT. MATCH EXISTING SYSTEM LOGIC.
2. RIVER AND RAS PUMP CONTROLS ARE AUTOMATIC TO MAINTAIN FLOW SETPOINT WITH MANUAL SPEED CONTROL.
3. RIVER AND RAS PUMP CONTROL AUTOMATICALLY CHANGES TO LEVEL PACING WHEN LOW LEVEL SETPOINT IS ACHIEVED.
4. PUMP PROTECTION INCLUDING LOW LEVEL SHUTOFF IS AUTOMATIC.

LEGEND



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Tel: 503.684.9097



MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**PROCESS FLOW
AND INSTRUMENTATION
DIAGRAM**

Project No.: 135-124674-15001
Designed By: BJV
Drawn By: EGN
Checked By: DJN

G-004

Copyright: Tetra Tech
Bar Measures 1 inch

GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ELEVATION AND O.D. OF ALL EXISTING LINES AT THE POINT OF CONNECTION TO THE NEW SYSTEM PRIOR TO ORDERING MATERIALS THAT DEPEND ON THIS INFORMATION.
2. ALL PIPE TO STRUCTURE CONNECTIONS AND PENETRATIONS (INCLUDING MANHOLES) SHALL HAVE A FLEXIBLE COUPLING OR FLEXIBLE JOINT NOT MORE THAN 18 INCHES OR ONE HALF OF THE PIPE DIAMETER (WHICHEVER IS GREATER) FROM THE OUTSIDE WALL OF THE STRUCTURE. ALL CONNECTIONS OF PRESSURIZED PIPING SHALL BE RESTRAINED.

GENERAL GEOTECHNICAL NOTES

SEE GEOTECHNICAL INVESTIGATION BY PACIFIC CREST ENGINEERING INC. DATED APRIL 2018 FOR INFORMATION REGARDING EXPECTED SUBSURFACE CONDITIONS INCLUDING BUT NOT LIMITED TO AREAS OF EXPECTED DIFFICULT EXCAVATION AND GROUNDWATER CONDITIONS AS WELL AS OTHER CRITERIA NOT IDENTIFIED ON THE DRAWINGS.

CLEARING AND STRIPPING

THE INITIAL PREPARATION OF THE SITE MAY CONSIST OF REMOVAL OF ANY DESIGNATED TREES AND DEBRIS. TREE REMOVAL, IF NEEDED, SHOULD INCLUDE THE ENTIRE STUMP AND ROOT BALL. ANY VOIDS CREATED BY THE REMOVAL OF TREE AND ROOT BALLS MUST BE BACKFILLED WITH PROPERLY COMPACTED ENGINEERED FILL. SURFACE VEGETATION, TREE ROOTS AND ORGANICALLY CONTAMINATED TOPSOIL SHOULD THEN BE REMOVED ("STRIPPED") FROM THE AREA TO BE GRADED. IN ADDITION, ANY REMAINING DEBRIS OR LARGE ROCKS MUST ALSO BE REMOVED (THIS INCLUDES CONCRETE OR ROCKS GREATER THAN 2 INCHES IN GREATEST DIMENSION). LARGE ROCKS MIXED WITH CLEAN SOIL CAN BE USED FOR FILL WHERE DESIGNATED.

GENERAL SUBGRADE PREPARATION

AREAS OF MAN-MADE FILL, IF ENCOUNTERED, ARE TO BE COMPLETELY EXCAVATED TO UNDISTURBED NATIVE MATERIAL. EXPOSED SOILS IN AREAS TO RECEIVE CONCRETE SLABS-ON-GRADE SHOULD BE SUBEXCAVATED TO A MINIMUM DEPTH SHOWN BELOW BOTTOM OF ALL FOUNDATIONS. SUBEXCAVATIONS SHOULD EXTEND AT LEAST 5 FEET HORIZONTALLY BEYOND FOUNDATIONS, UNLESS DIMENSIONED OTHERWISE ON THE DRAWINGS. FOLLOWING CLEARING, STRIPPING AND ANY NECESSARY SUBEXCAVATIONS, THE EXPOSED SUBGRADE SOIL THAT IS TO SUPPORT CONCRETE SLABS-ON-GRADE, AND FOUNDATIONS SHOULD THEN BE SCARIFIED 8 INCHES, AND THE SOIL MOISTURE CONDITIONED AND COMPACTED. FOLLOWING THE SUBEXCAVATION AND SUBGRADE PREPARATION, AREAS SHOULD BE BROUGHT UP TO DESIGN GRADES WITH ENGINEERED FILL THAT IS MOISTURE CONDITIONED AND COMPACTED.

ENGINEERED FILL

NATIVE OR IMPORTED SOIL PROPOSED FOR USE AS ENGINEERED FILL SHOULD MEET THE FOLLOWING REQUIREMENTS:

- A. FREE OF ORGANICS, DEBRIS, AND OTHER DELETERIOUS MATERIALS.
- B. FREE OF "RECYCLED" MATERIALS SUCH AS ASPHALTIC CONCRETE, CONCRETE, BRICK, ETC.
- C. GRANULAR IN NATURE, WELL GRADED, AND CONTAIN SUFFICIENT BINDER TO ALLOW UTILITY TRENCHES TO STAND OPEN.
- D. FREE OF ROCKS IN EXCESS OF 2 INCHES IN SIZE.
- E. A PLASTICITY INDEX BETWEEN 4 AND 12 AND A MINIMUM RESISTANCE "R" VALUE OF 30.
- F. NON-EXPANSIVE.

ENGINEERED FILL PLACEMENT, COMPACTION, AND MOISTURE CONDITIONING

ENGINEERED FILL SHOULD BE PLACED IN MAXIMUM 8 INCH LIFTS, BEFORE COMPACTION, AT A WATER CONTENT WHICH IS WITHIN 1 TO 3 PERCENT OF THE LABORATORY OPTIMUM VALUE. FILL SHALL BE COMPACTED TO A MINIMUM OF 90% OF ITS MAXIMUM DRY DENSITY. MAXIMUM DRY DENSITY WILL BE OBTAINED FROM A LABORATORY COMPACTION CURVE RUN IN ACCORDANCE WITH ASTM PROCEDURE D1557. THIS TEST WILL ALSO ESTABLISH THE OPTIMUM MOISTURE CONTENT OF THE MATERIAL. FIELD DENSITY TESTING WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST D6938 (NUCLEAR METHOD). PERFORM FIELD DENSITY TESTING IN ACCORDANCE WITH THE GEOTECHNICAL INVESTIGATION.

UTILITY TRENCH BACKFILL

ANY PIPES WITHIN THE TOP 24 INCHES OF A FINISHED SURFACE THAT WILL HAVE VEHICLE TRAFFIC SHALL BE CONCRETE ENCASED. PIPES SHALL BE BEDDED AND BACKFILLED AS SHOWN ON THE DRAWINGS AND DEFINED IN THE SPECIFICATIONS.

BACKFILL IS DEFINED AS MATERIAL PLACED IN A TRENCH STARTING ONE FOOT ABOVE THE PIPE, AND BEDDING IS ALL MATERIAL PLACED IN A TRENCH BELOW THE BACKFILL.

UNLESS SHOWN OTHERWISE, BEDDING AROUND UTILITY PIPES SHALL BE FREE-DRAINING CLEAN SAND FOR PIPES LESS THAN 6 INCHES DIAMETER. SAND BEDDING SHOULD BE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. CLEAN SAND IS DEFINED AS 100 PERCENT PASSING THE #4 SIEVE, AND LESS THAN 5 PERCENT PASSING THE #200 SIEVE. APPROVED IMPORTED CLEAN SAND OR APPROVED NATIVE SOIL SHOULD BE USED AS UTILITY TRENCH BEDDING AND BACKFILL. BACKFILL IN TRENCHES LOCATED UNDER AND ADJACENT TO STRUCTURAL FILL, FOUNDATIONS, CONCRETE SLABS AND PAVEMENTS SHOULD BE PLACED IN HORIZONTAL LAYERS NO MORE THAN 8 INCHES THICK. EACH LAYER OF TRENCH BACKFILL SHOULD BE WATER CONDITIONED AND COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. UTILITY TRENCHES WHICH CARRY "NESTED" CONDUITS (STACKED VERTICALLY) SHOULD BE BACKFILLED WITH A CONTROL DENSITY FILL (SUCH AS 2-SACK SAND/CEMENT SLURRY) TO AN ELEVATION ONE FOOT ABOVE THE NESTED CONDUIT STACK.

RAS/TREATMENT BUILDING

THE FOUNDATION FOR THE RAS/TREATMENT BUILDING SHALL BE UNDERLAIN BY A MINIMUM 6 INCH THICK CAPILLARY BREAK OF 3/4 INCH CLEAN CRUSHED ROCK (NO FINES). THE CAPILLARY BREAK SHALL BECOME THE TOP 6 INCHES OF THE 36 INCH DEPTH OF ENGINEERED FILL. A VAPOR RETARDER SHALL BE PLACED BETWEEN THE CAPILLARY BREAK LAYER AND THE FOUNDATION. VAPOR RETARDER SHALL BE A HIGH QUALITY VAPOR RETARDER AT LEAST 10 MIL THICK AND PUNCTURE RESISTANT (STEGO WRAP OR EQUIVALENT). THE VAPOR RETARDER MUST MEET THE MINIMUM SPECIFICATIONS FOR ASTM E1745. STANDARD SPECIFICATION FOR WATER VAPOR RETARDER. LAPS AND SEAMS SHOULD BE OVERLAPPED AT LEAST SIX INCHES AND PROPERLY SEALED TO PROVIDE A CONTINUOUS LAYER BENEATH THE ENTIRE FOUNDATION THAT IS FREE OF HOLES, TEARS OR GAPS. JOINTS AND PENETRATIONS SHOULD ALSO BE PROPERLY SEALED.

PROCESS WATER CONSTRUCTION NOTES

1. SEE PIPE SCHEDULE ON DWG D-001 FOR PIPE MATERIAL TYPE AND WALL THICKNESS.
2. CLEAN PIPE OF ALL DEBRIS DURING INSTALLATION. DO NOT RELY ONLY ON FLUSHING TO CLEAN THE PIPE. REMOVE GRINDINGS, FILINGS, SLAG, ETC. DURING INSTALLATION.
3. ELBOWS AND ANGLE POINTS ARE SHOWN ON THE DRAWINGS TO ACHIEVE THE DESIRED LOCATION AND ALIGNMENT FOR THE PIPE. CONTRACTOR SHALL USE ELBOWS THAT ARE FABRICATED AND MITERED IN COMPLIANCE WITH APPLICABLE PIPE STANDARDS. WHERE NECESSARY AND UPON REVIEW BY THE ENGINEER DEFLECTIONS OTHER THAN WHAT ARE SHOWN ON THE DRAWINGS MAY BE USED.
4. SOME PIPE TYPES MAY ALLOW FOR ANGLES TO BE MADE BY DEFLECTING OR BENDING THE PIPE. CONTRACTOR SHALL NOT EXCEED MANUFACTURES MAXIMUM DEFLECTION OR MINIMUM RADIUS.
5. PRESSURE TEST ALL PIPES. IF TEST PRESSURE IS NOT SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS, THEN TEST TO 1.5 TIMES THE RATED PRESSURE. DO NOT EXCEED MANUFACTURE MAXIMUM PRESSURE FOR PIPE, FITTINGS, VALVES OR EQUIPMENT. TEST PROCEDURE TO BE IN ACCORDANCE WITH APPLICABLE ASTM STANDARD AND AS APPROVED BY THE ENGINEER.
6. CONTRACTOR TO VERIFY FITTINGS AND CONNECTIONS BETWEEN DIFFERENT MATERIAL TYPES ARE COMPATIBLE AND PROVIDE ADAPTERS WHERE NECESSARY.
7. INSTALL STEEL PIPE IN ACCORDANCE WITH AWWA MANUAL M11 AND FIELD WELD IN ACCORDANCE WITH AWWA C206. INSTALL HDPE PIPE IN ACCORDANCE WITH THE PLASTIC PIPE INSTITUTE (PPI) POLYETHYLENE PIPE HANDBOOK, APPLICABLE PPI GUIDELINES, AWWA C906, AND ASTM D 2321.

LEGEND

EXISTING

—	TAILRACE TAP (TRT)
WWS	WARM WATER SUPPLY
PT	HIGH PRESSURE, PENSTOCK TAP
FCT	FALLS CREEK TAP
SS	SANITARY SEWER
UE	UNDERGROUND ELECTRIC
UT	UNDERGROUND TELEPHONE
FO	UNDERGROUND FIBER OPTIC
SS	SANITARY SEWER
SD	STORM SEWER
FM	FORCEMAIN
W	WATER
ABAN	ABANDONED PIPE
G	GAS
OE	ELECTRIC - OVERHEAD
UE	ELECTRIC - UNDERGROUND
FO	FIBER OPTIC
UT	COMM - UNDERGROUND
ASPHALT	ASPHALT
GRAVEL	GRAVEL
XX	STEEL FENCE
X	WOOD FENCE
WETLANDS BOUNDARY	WETLANDS BOUNDARY
-130-	CONTOUR MAJOR
-129-	CONTOUR MINOR
RIPRAP	RIPRAP
CONCRETE	CONCRETE
BUILDING OUTLINE	BUILDING OUTLINE

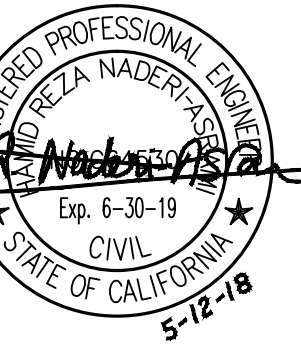
PROPOSED

○	STORM SEWER
○	SANITARY SEWER
○	SANITARY SEWER (FORCE MAIN)
△	WATER
△	ASPHALT
△	GRAVEL
—	ROAD CENTERLINE
XX	STEEL FENCE
X	WOOD FENCE
SF	SEDIMENT CONTROL FENCE
□	FLOOD HAZARD AREA
---	PROPERTY LINE
- - - -	RIGHT OF WAY LINE (R-O-W)
- · - · -	LIMITS OF CONTRUCTION
- - - -	EASEMENT
-	POND / LAKE EDGE
	RAIL ROAD TRACK
---	WETLANDS BOUNDARY
130	CONTOUR MAJOR
129	CONTOUR MINOR
□	CONTOUR DEPRESSION
ASPHALT PAVED SURFACE	ASPHALT PAVED SURFACE
RIPRAP	RIPRAP
CONCRETE	CONCRETE
GRAVEL SURFACING	GRAVEL SURFACING
∟	PIPE BEND
GV	GATE VALVE
WV	WATER VALVE
∞	BACK FLOW PREVENTER
H	HOSE BIB
[PIPE CAP
FH	HYDRANT
CO	SEWER CLEANOUT
SD	STORM BASIN
SD	STORM MANHOLE
(STORM CULVERT END
EM	ELECTRIC METER
TS	TRANSFORMER PAD
×000.00	SPOT ELEVATION
N	BUTTERFLY VALVE

🌳	TREES
WV	WATER VALVE
B-00	BORING
MW	MONITORING WELL
OW	OBSERVATION WELL
UT	UTILITY POLE
UT	UTILITY POLE ANCHOR

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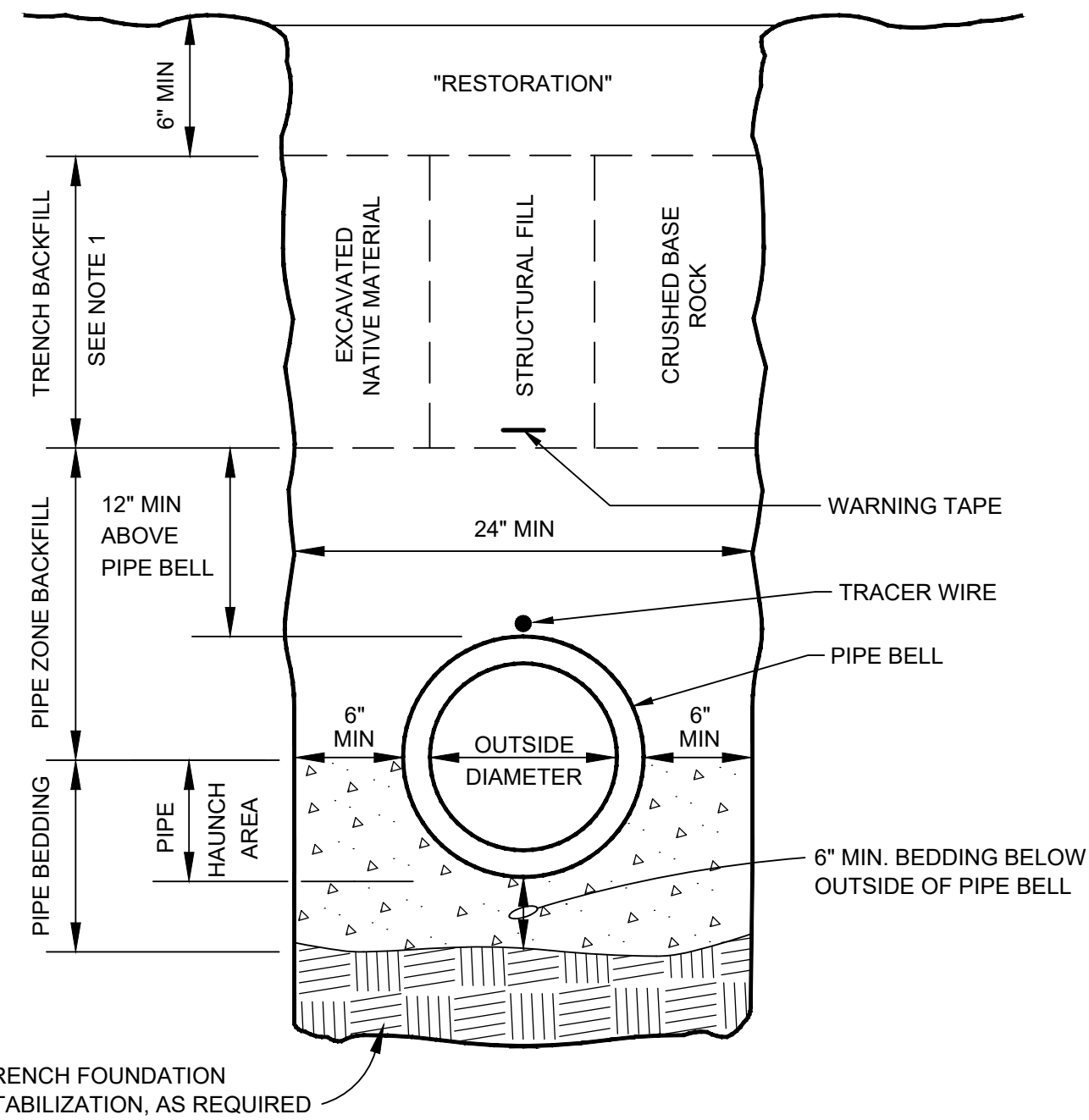
BY	DATE	DESCRIPTION

MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**CIVIL LEGEND AND
GENERAL NOTES**

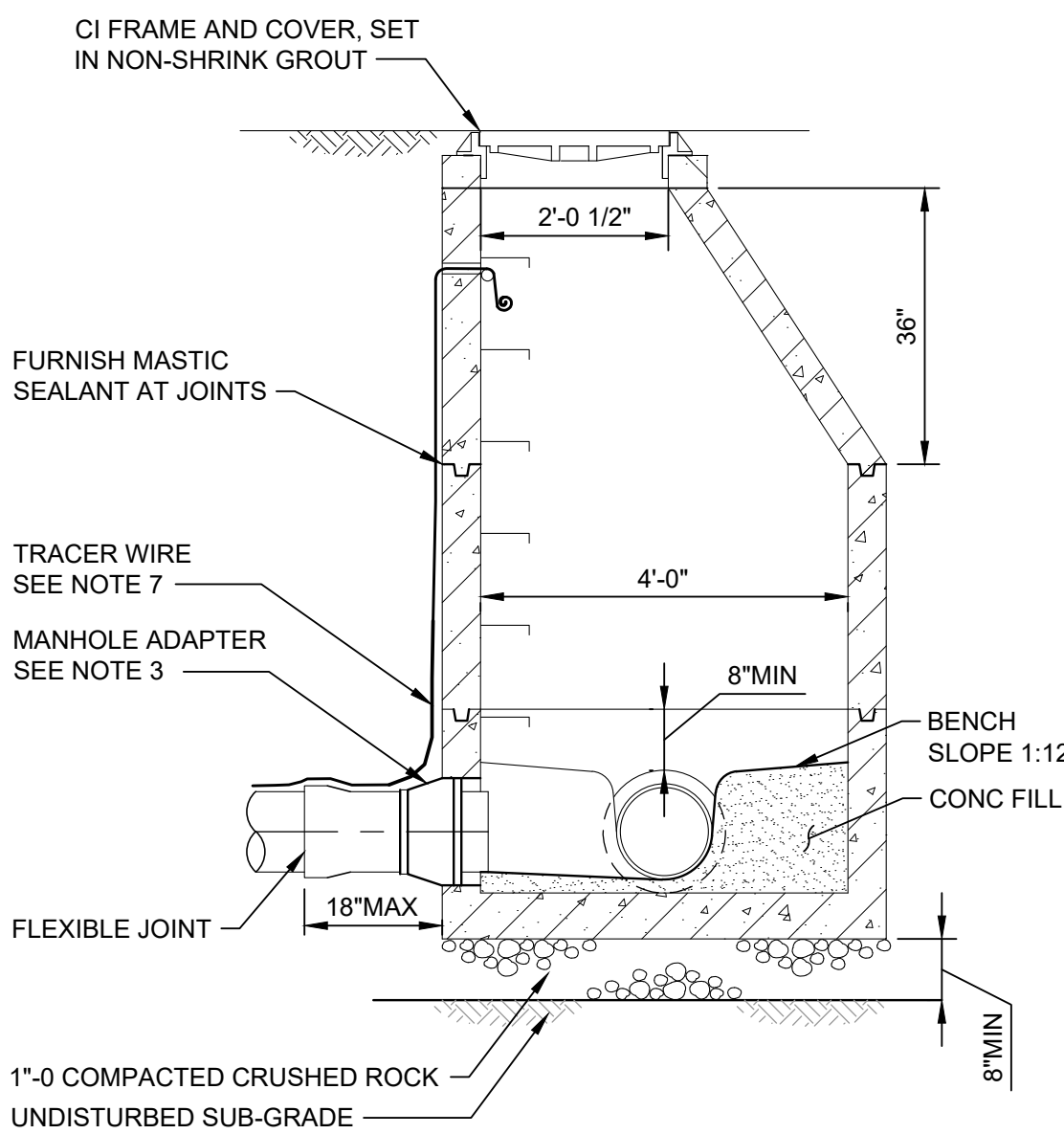
Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

C-001



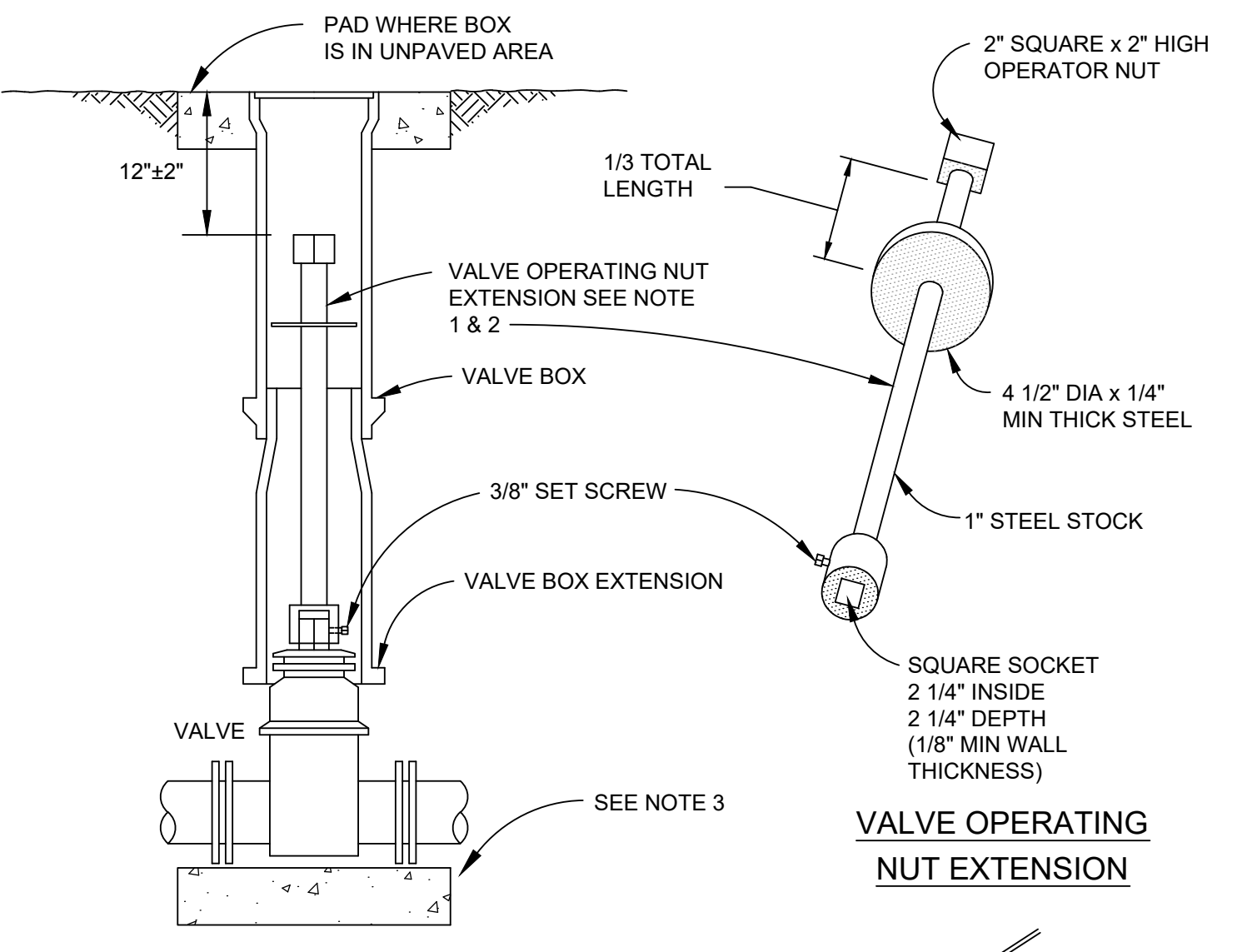
- NOTES:**
- TRENCH BACKFILL SHALL BE STRUCTURAL FILL OR CRUSHED ROCK BASE IN AREAS SUBJECT TO VEHICLE LOADING OR WITHIN 10 FEET OF STRUCTURES.
 - PROVIDE MINIMUM 6" CLEARANCE BETWEEN OUTSIDE OF PIPE BELLS WHEN MULTIPLE PIPES ARE INSTALLED IN A COMMON TRENCH.

1 TYPICAL TRENCH SECTION
NO SCALE



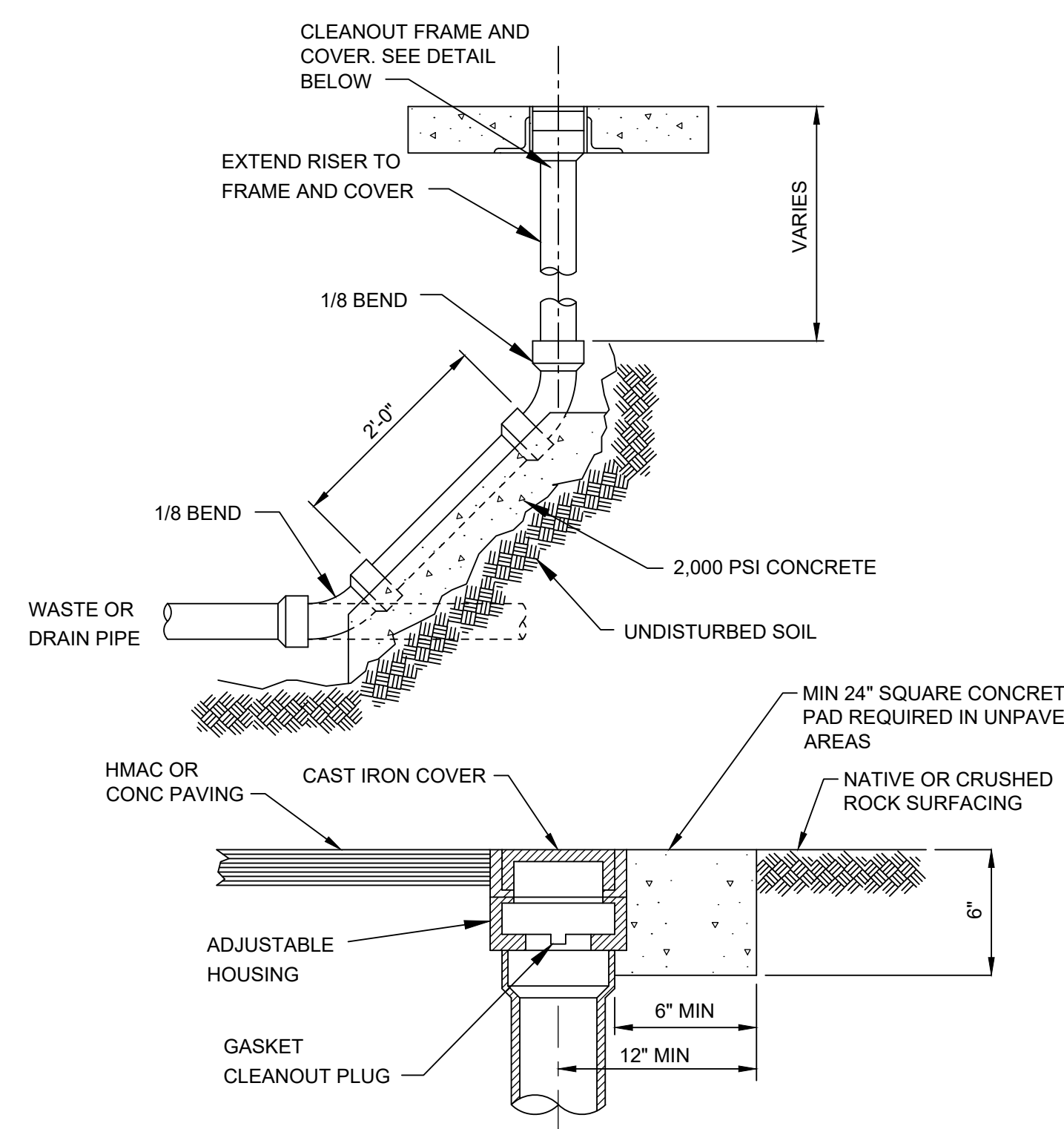
- NOTES:**
- ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C478.
 - ALL POURED CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI
 - PIPE TO MANHOLE ADAPTER SHALL PROVIDE A WATERTIGHT FLEXIBLE CONNECTION. KOR-N-SEAL OR EQUAL W/ STAINLESS STEEL ACCESSORIES.
 - PROVIDE A MINIMUM 8" CLEARANCE BETWEEN ADJACENT PIPE HOLES AND JOINTS IN MH BARREL.
 - MH STEPS ARE REQ'D WHEN DEPTH IS GREATER THAN 4'-0".
 - LOCATE MANHOLE COVER AND FRAME IN CENTER OF TOP SLAB WHEN DEPTH IS LESS THAN 4'-0".
 - SECURE TRACER WIRES TO INSIDE OF MANHOLE WITH NON-CORROSIVE FASTENERS. COIL ENDS OF WIRES, LEAVE ENOUGH FREE WIRE TO EXTEND 18" ABOVE TOP OF COVER.

2 MANHOLE DETAIL
NO SCALE

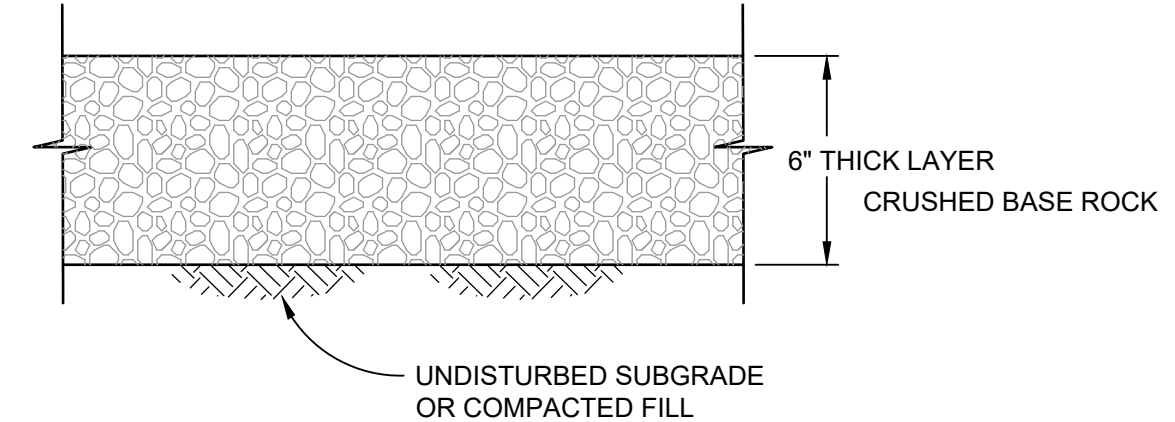


- NOTES:**
- VALVE OPERATING NUT EXTENSIONS ARE REQUIRED WHEN THE NUT IS MORE THAN TWO FEET BELOW FINISHED GRADE. EXTENSIONS ARE TO BE A MINIMUM OF ONE FOOT LONG. ONLY ONE EXTENSION WILL BE ALLOWED PER VALVE.
 - ALL VALVE OPERATING NUT EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH TWO COATS OF METAL PAINT.
 - VALVES 12" AND SMALLER SHALL BE PROVIDED WITH 3/4" MINUS COMPACTED BASE ON UNDISTURBED GROUND.
 - VALVES GREATER THAN 12" SHALL BE INSTALLED ON PRECAST CONCRETE PIER BLOCK.

3 BURIED VALVE/VALVE BOX
NO SCALE

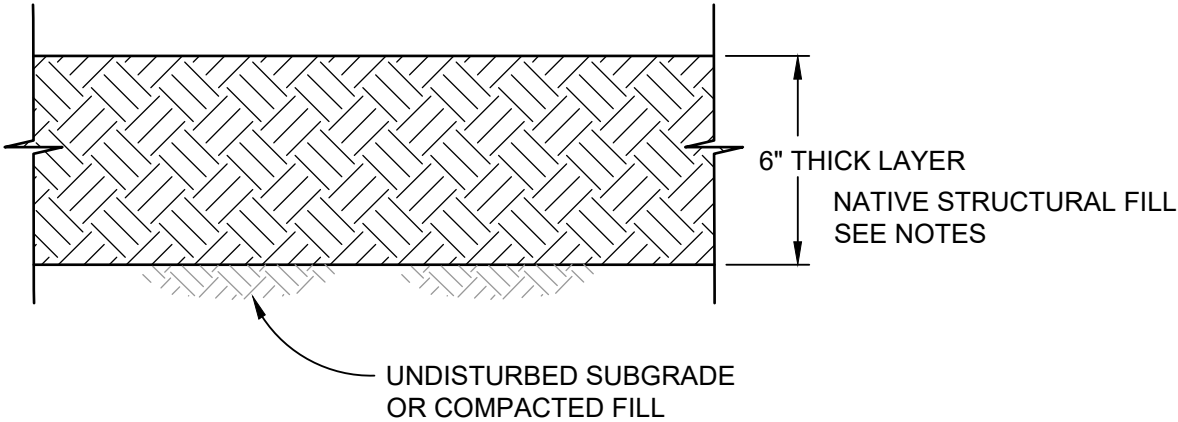


4 DETAIL - YARD CLEANOUT
NO SCALE



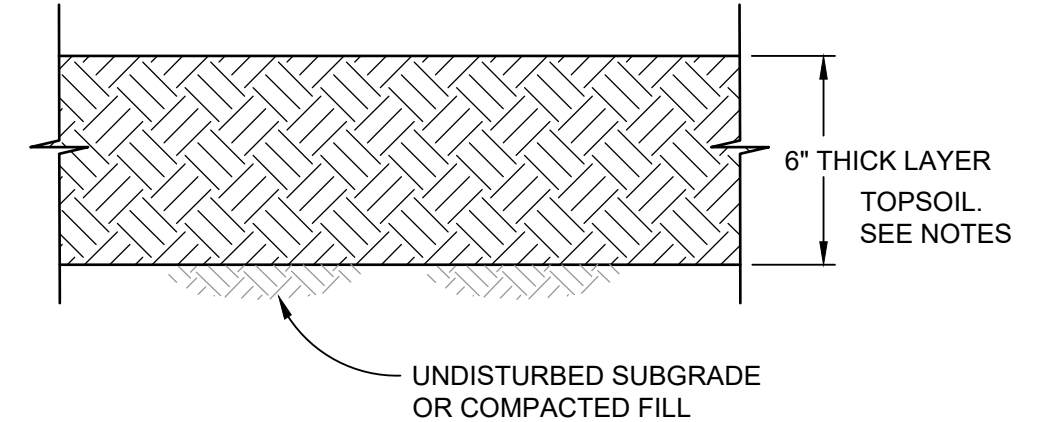
- NOTES:**
- STRIP TOPSOIL AND REMOVE ALL ORGANICS PRIOR TO PLACING FILL.
 - COMPACT TO 95% MAX DRY DENSITY.

5 GRAVEL SURFACING
NO SCALE



- NOTES:**
- NATIVE BACKFILL SHALL MEET REQUIREMENTS OF STRUCTURAL FILL. IF REQUIREMENTS CANNOT BE ACHIEVED THEN CONTRACTOR SHALL FURNISH IMPORTED FILL.
 - STRIP TOPSOIL AND REMOVE ALL ORGANICS PRIOR TO PLACING FILL.
 - COMPACT TO 95% MAX DRY DENSITY.

6 NATIVE ROADWAY SURFACING
NO SCALE

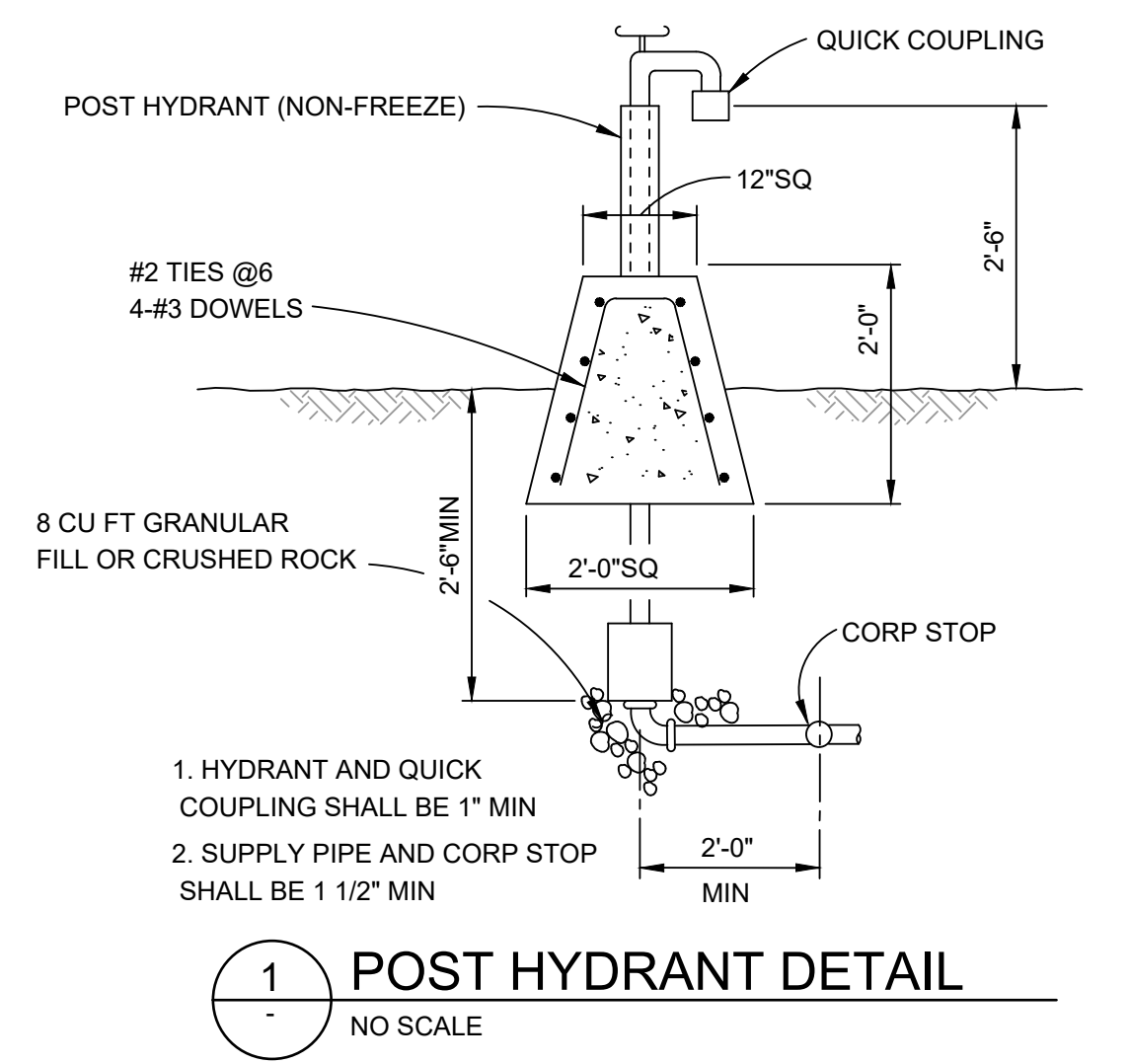


- NOTES:**
- PRIOR TO EXCAVATION, TOPSOIL SHALL BE STRIPPED AND STOCKPILED ONSITE.
 - UTILIZE STOCKPILED TOPSOIL FOR FINAL RESTORATION.
 - COMPACT WITH ROLLER EQUIPMENT
 - RESEED WITH NATIVE GRASS MIX WHEN INSTRUCTED BY THE OWNER.

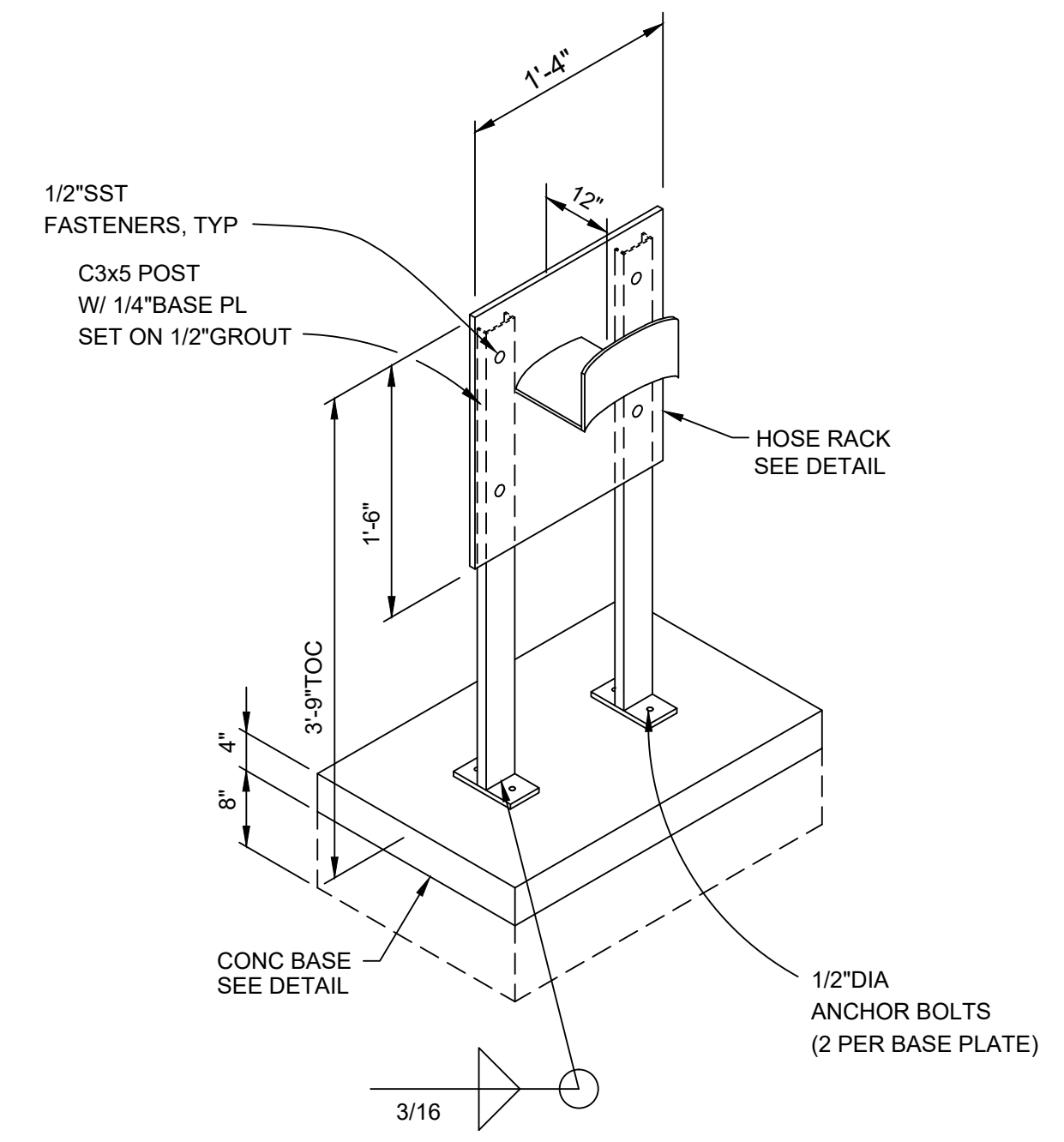
7 TOPSOIL SURFACING
NO SCALE

MARK	DATE	DESCRIPTION	BY

5/12/2018 2:19:34 PM - P:\124674\135-124674-15001\CADD\SHSHEETFILES\C-002 CIVILDETAILS.DWG - NORDHOLM, ERIK

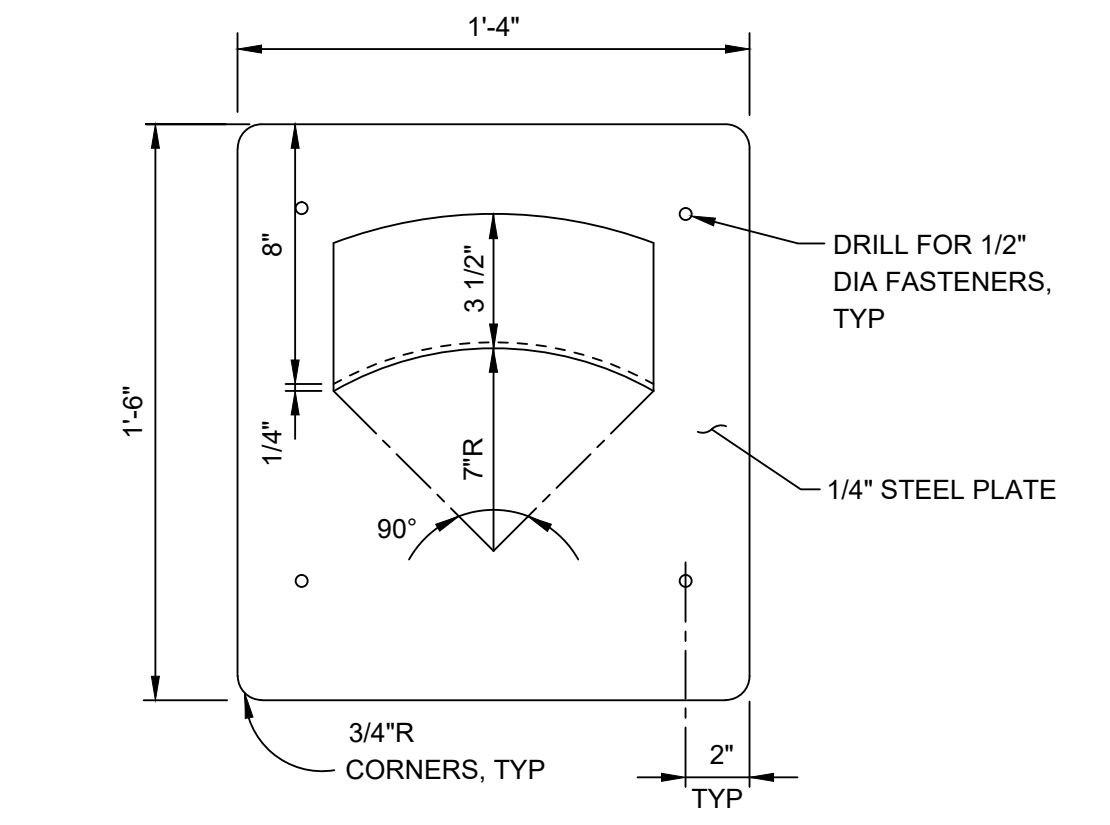


1 POST HYDRANT DETAIL
NO SCALE

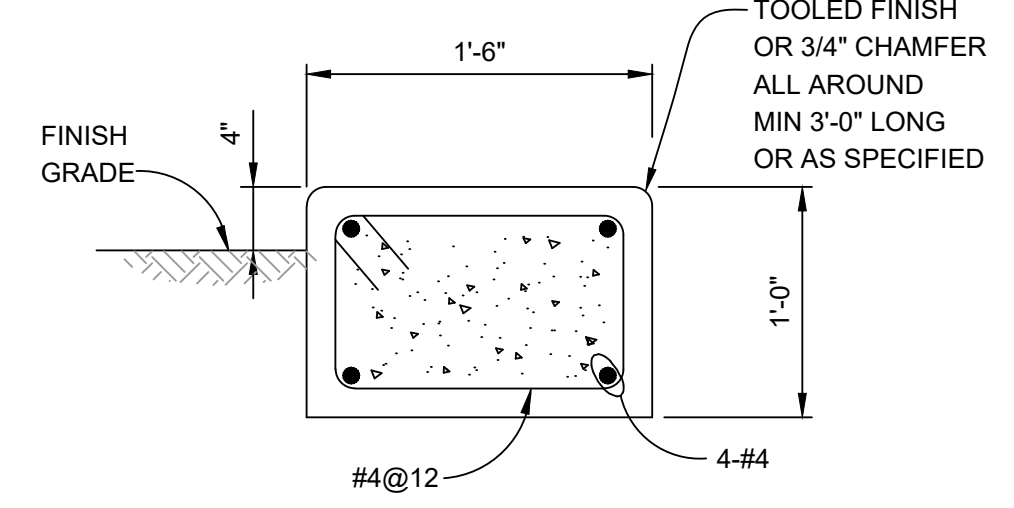


2 POST MOUNTED HOSE RACK
NO SCALE

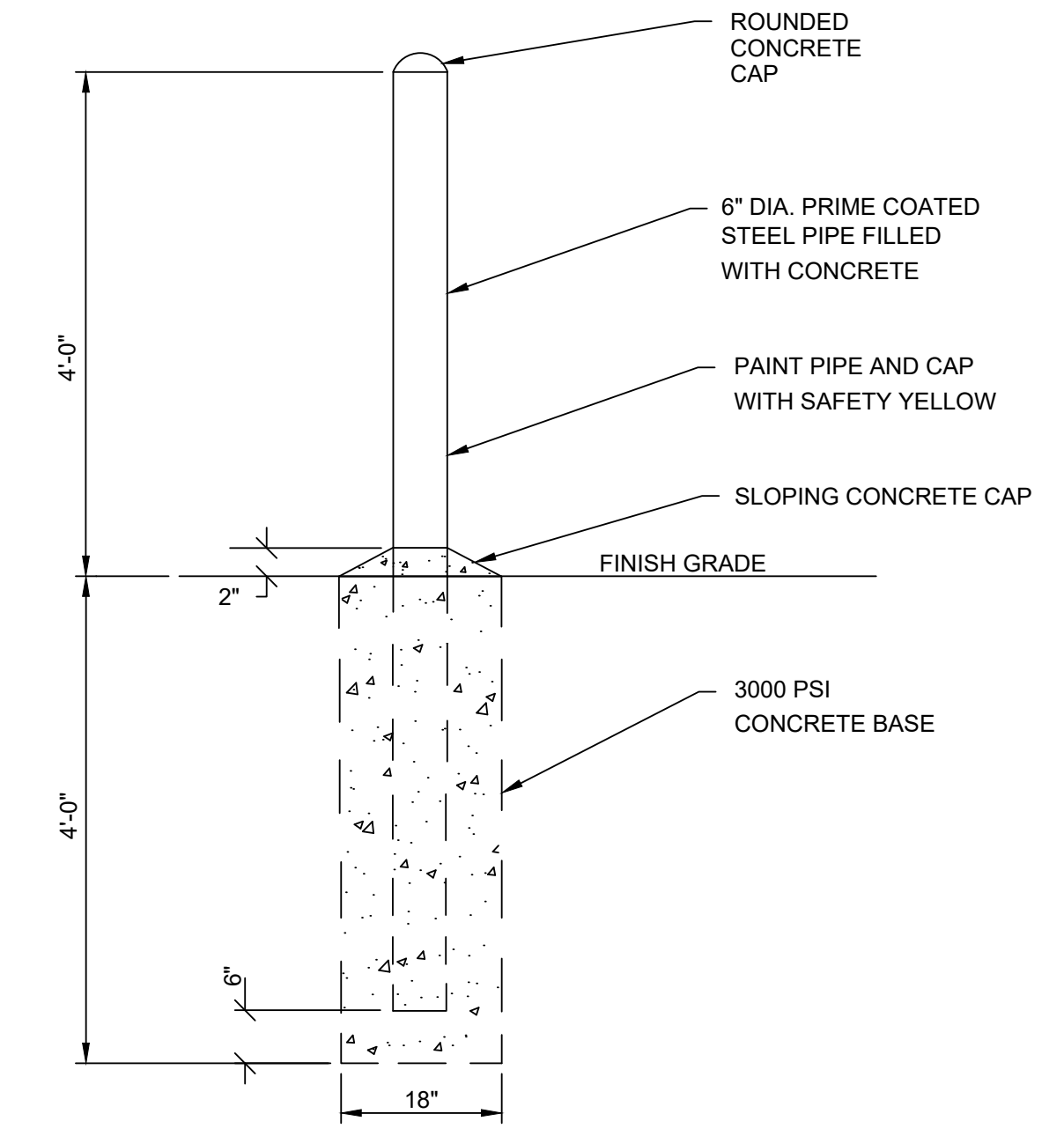
NOTE: ALL STEEL COMPONENTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.



3 HOSE RACK DETAIL
NO SCALE



4 CONCRETE BASE DETAIL
NO SCALE



5 STANDARD BOLLARD DETAIL
NO SCALE

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REGISTERED PROFESSIONAL ENGINEER
ERAZA NADEEM
Exp. 6-30-19
CIVIL
STATE OF CALIFORNIA
5-12-18

MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE
CIVIL DETAILS

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

C-003
Copyright Tetra Tech
Bar Measures 1 inch

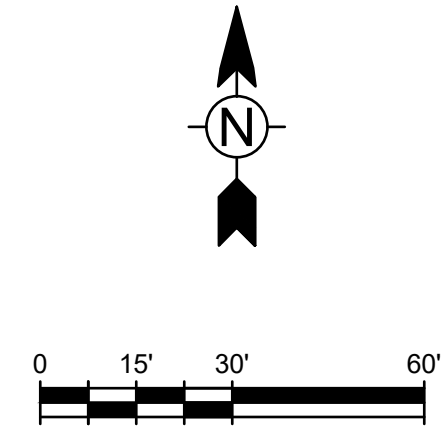
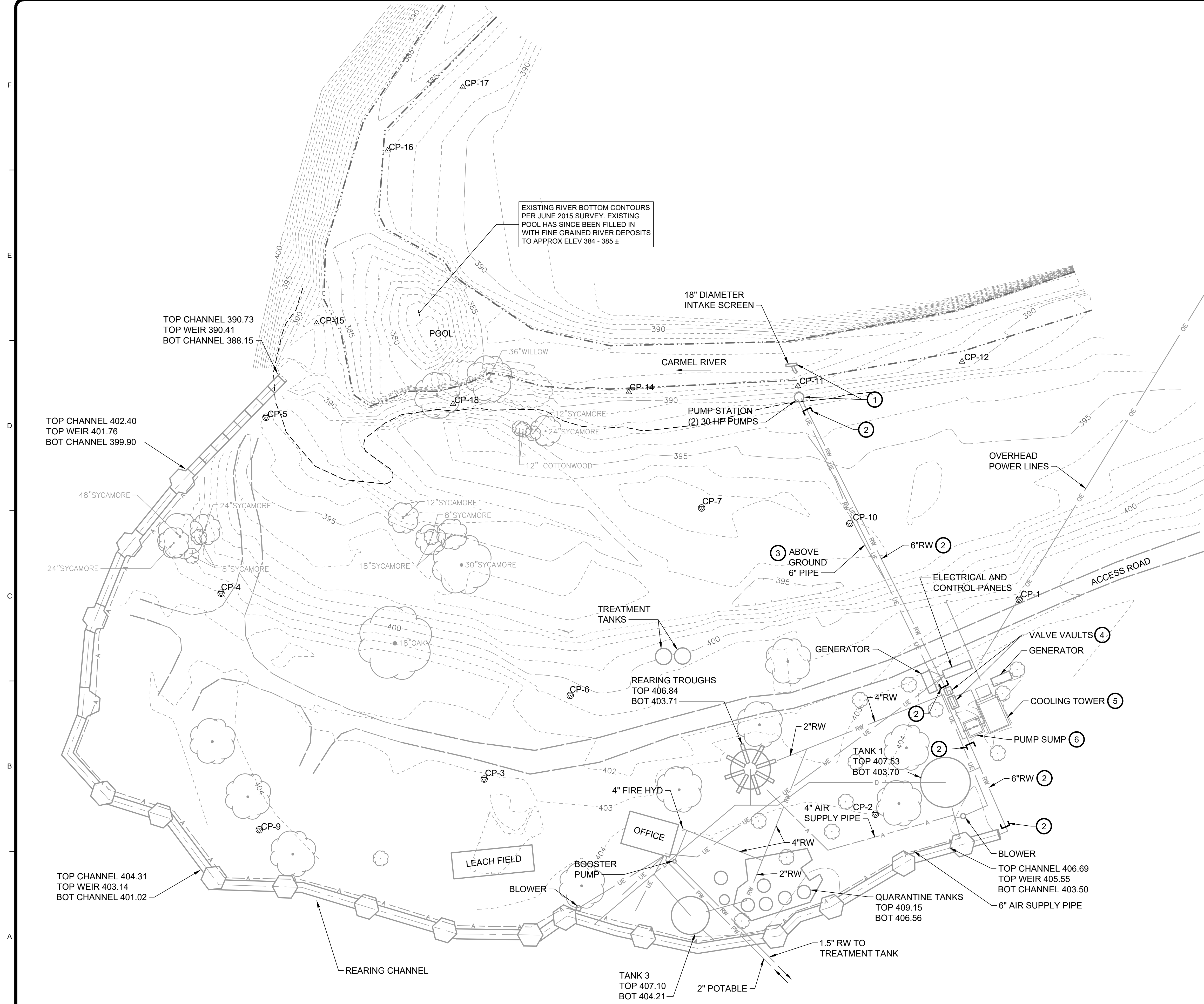
DEMOLITION GENERAL NOTES:

1. PRIOR TO STARTING DEMOLITION, MEET WITH THE OWNER TO DETERMINE ANY ITEMS THAT ARE TO BE SALVAGED.
2. ALL EQUIPMENT AND MATERIALS NOT DESIGNATED FOR SALVAGE SHALL BE HAULED OFF-SITE AND LEGALLY DISPOSED.

DEMOLITION KEYED NOTES:

- 1 DEMO INTAKE SCREEN AND WET WELL. REMOVE PUMPS, PIPES AND CONDUIT. REMOVE TOP 3- FEET OF THE CONCRETE WET WELL AND BACKFILL WITH NATIVE SAND OR GRANULAR MATERIAL.
- 2 ABANDON EXISTING BURIED PIPING IN PLACE. CUT AND PLUG ENDS OF PIPE WHERE SHOWN.
- 3 OWNER WILL SALVAGE EXISTING ABOVE GROUND 6" PIPE FOR USE WITH PORTABLE PUMP.
- 4 REMOVE VAULT PIPING, VALVES, AND FLOW METER. SALVAGE FLOW METER TO OWNER. REMOVE TOP 3- FEET OF VAULT STRUCTURE AND BACKFILL WITH NATIVE SAND OR GRANULAR MATERIAL.
- 5 TEMPORARILY RELOCATE AND STORE COOLING TOWER. DEMO EXISTING CONCRETE SLAB, WOOD STAIRS, AND DECK.
- 6 REMOVE EXISTING PUMPS, PIPING AND VALVES. REMOVE TOP 3- FEET OF VAULT STRUCTURE AND BACKFILL WITH NATIVE SAND OR GRANULAR MATERIAL.

EXISTING RIVER BOTTOM CONTOURS PER JUNE 2015 SURVEY. EXISTING POOL HAS SINCE BEEN FILLED IN WITH FINE GRAINED RIVER DEPOSITS TO APPROX ELEV 384 - 385 ±



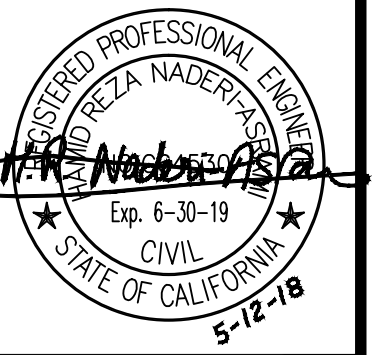
CONTROL POINT TABLE

Point #	Northing	Easting	Elevation	Description
1	2056057.47	5763271.68	402.55	CP
2	2055928.19	5763185.20	404.02	CP
3	2055949.34	5762949.72	403.17	CP
4	2056061.23	5762791.37	402.11	
5	2056167.13	5762818.43	393.67	CP
6	2055999.65	5763001.56	401.99	WSE BM
7	2056112.51	5763080.59	397.74	CP
9	2055918.82	5762814.39	404.20	
10	2056103.06	5763169.70	396.13	FND CP SH02
11	2056185.88	5763138.53	388.18	HUB
12	2056200.60	5763237.33	390.05	HUB
14	2056182.24	5763036.77	387.45	HUB
15	2056223.59	5762848.92	388.78	HUB
16	2056327.72	5762891.69	386.89	HUB
17	2056365.82	5762936.84	387.99	HUB
18	2056175.14	5762931.11	390.93	HUB

ELEVATIONS NGVD 29



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BY: _____
DATE: _____
MARK: _____
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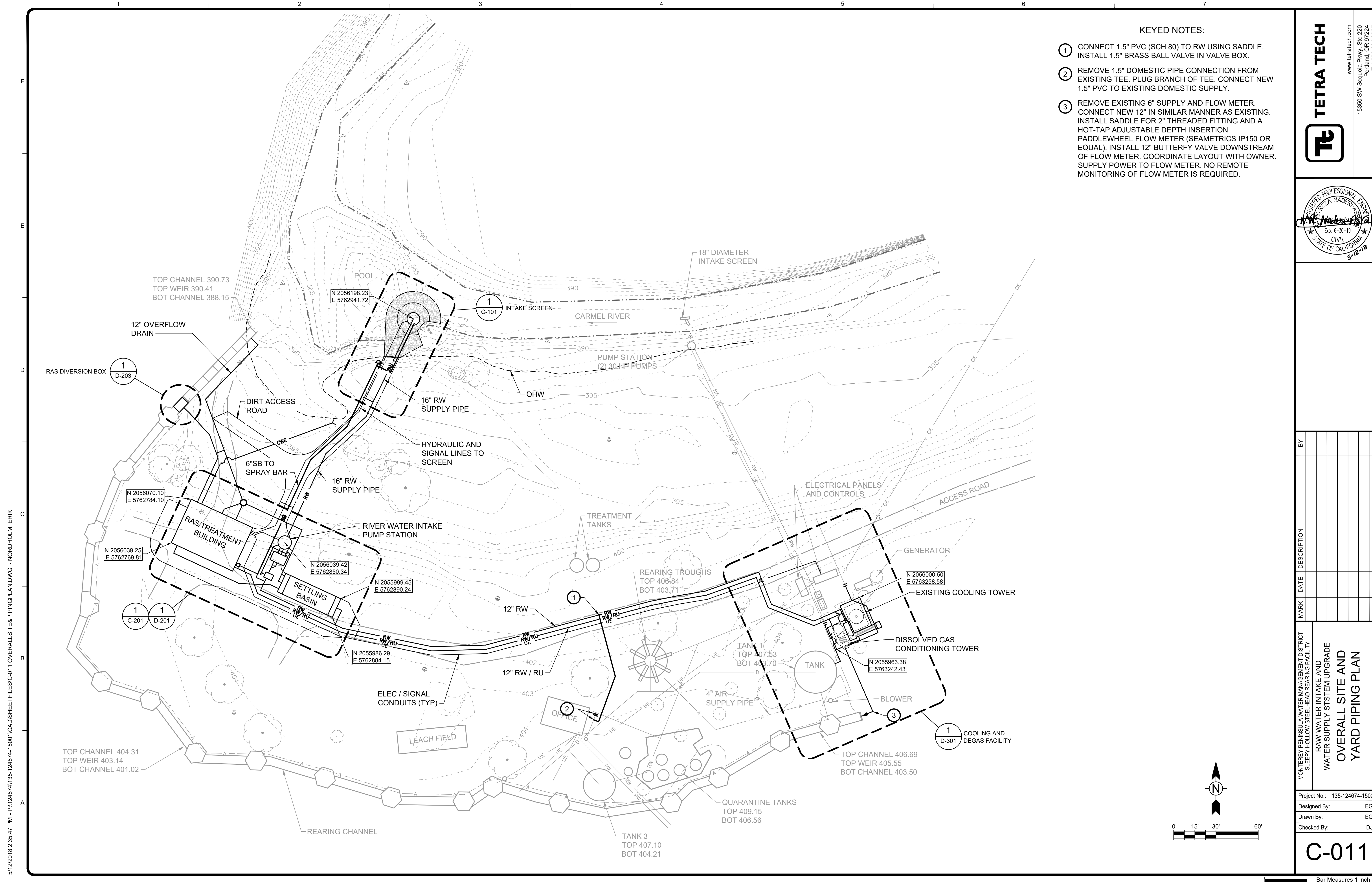
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EXISTING CONDITION
AND DEMOLITION PLAN

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

C010

Bar Measures 1 inch

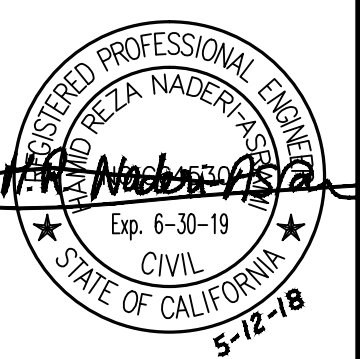
5/12/2018 2:33:30 PM - P:\124674\135-124674-15001\CADD\SHEETFILES\C-010 EXISTING SITE DEMO PLAN.DWG - NORDHOLM, ERIK



- KEYED NOTES:**
- CONNECT 1.5" PVC (SCH 80) TO RW USING SADDLE. INSTALL 1.5" BRASS BALL VALVE IN VALVE BOX.
 - REMOVE 1.5" DOMESTIC PIPE CONNECTION FROM EXISTING TEE. PLUG BRANCH OF TEE. CONNECT NEW 1.5" PVC TO EXISTING DOMESTIC SUPPLY.
 - REMOVE EXISTING 6" SUPPLY AND FLOW METER. CONNECT NEW 12" IN SIMILAR MANNER AS EXISTING. INSTALL SADDLE FOR 2" THREADED FITTING AND A HOT-TAP ADJUSTABLE DEPTH INSERTION PADDLEWHEEL FLOW METER (SEAMETRICS IP150 OR EQUAL). INSTALL 12" BUTTERFLY VALVE DOWNSTREAM OF FLOW METER. COORDINATE LAYOUT WITH OWNER. SUPPLY POWER TO FLOW METER. NO REMOTE MONITORING OF FLOW METER IS REQUIRED.

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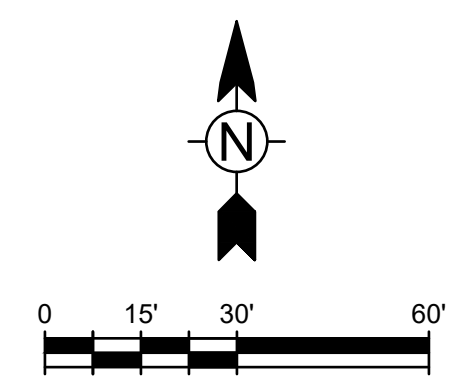
MARK	DATE	DESCRIPTION

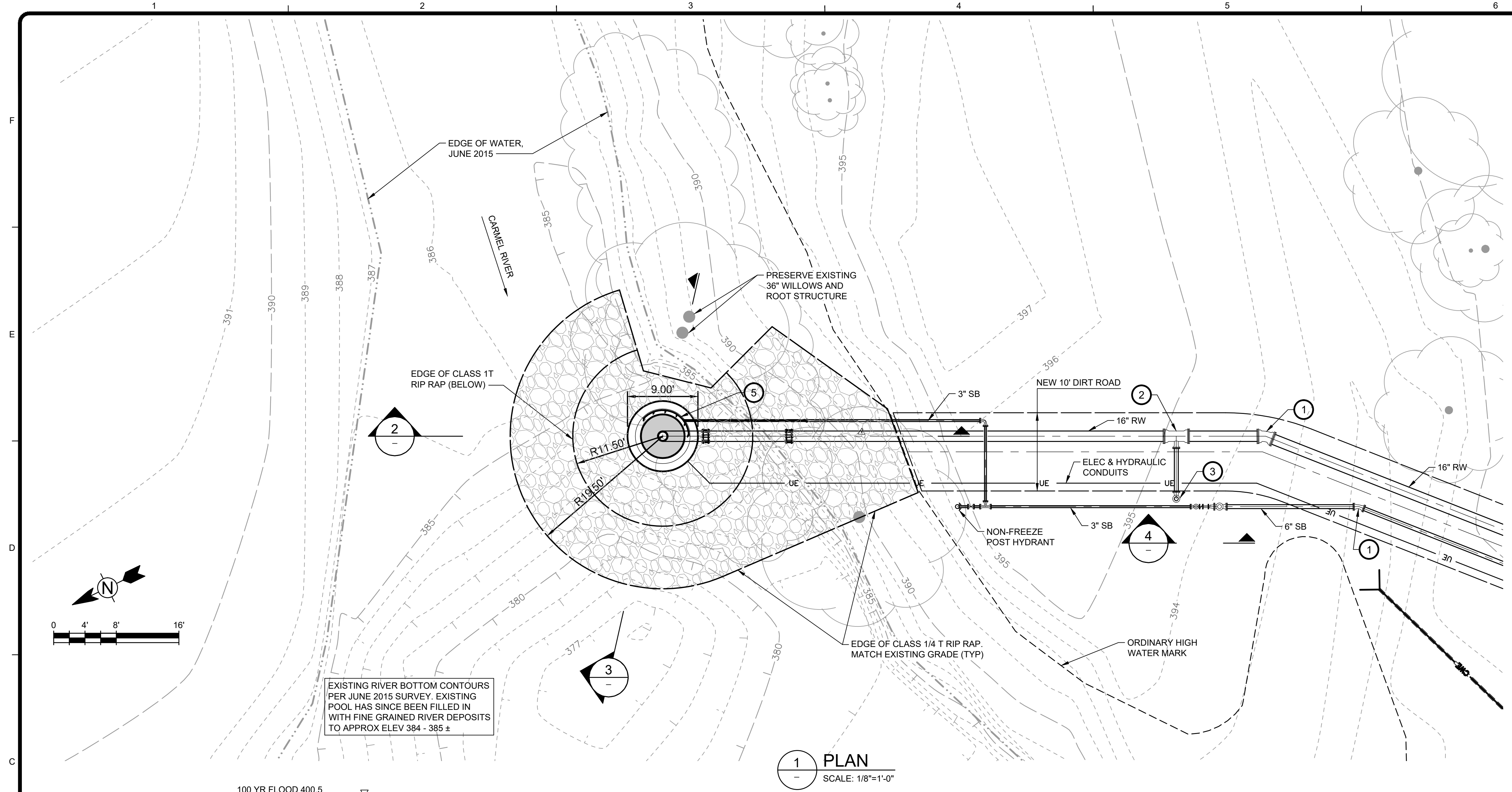
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 WATER SUPPLY SYSTEM UPGRADE
**OVERALL SITE AND
 YARD PIPING PLAN**

Project No.: 135-124674-15001
 Designed By: EGN
 Drawn By: EGN
 Checked By: DJN

C-011

Bar Measures 1 inch





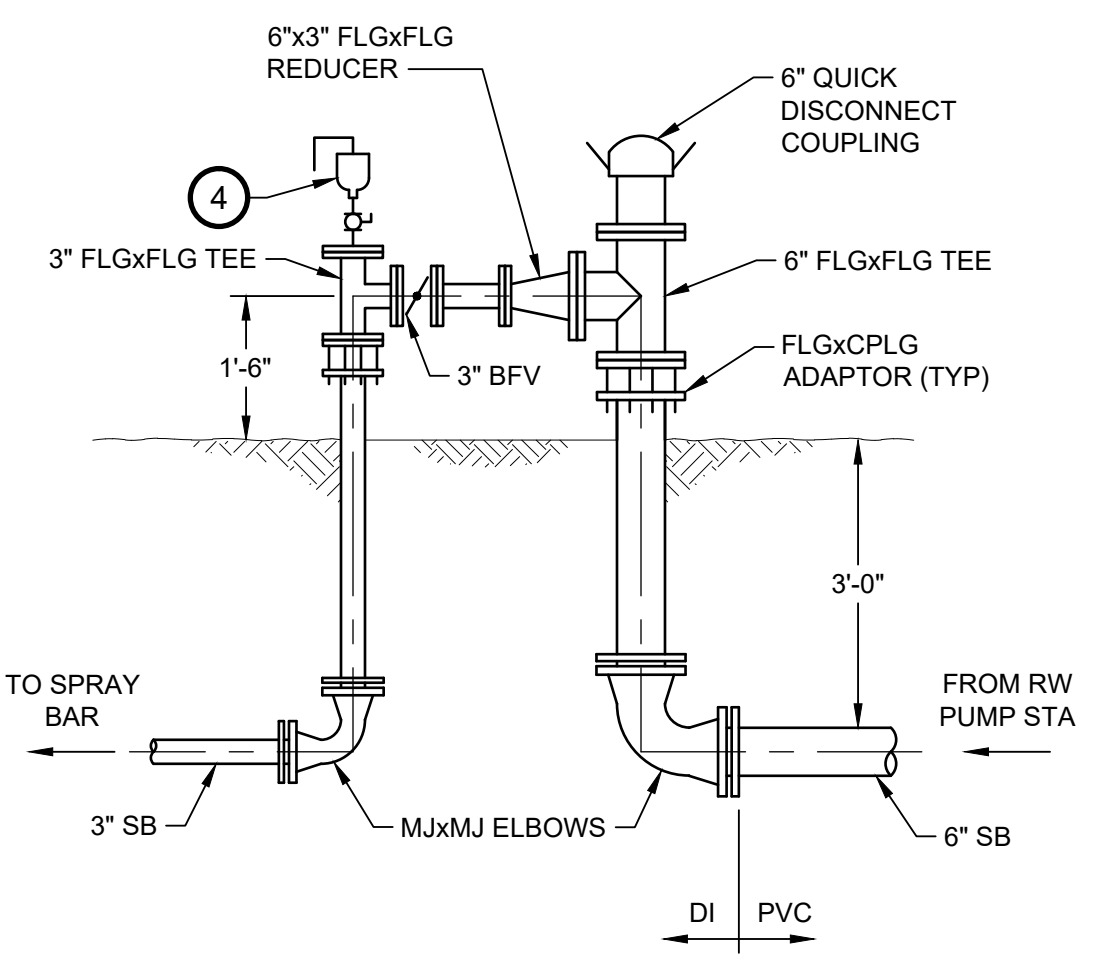
1 PLAN
SCALE: 1/8"=1'-0"

GENERAL NOTES

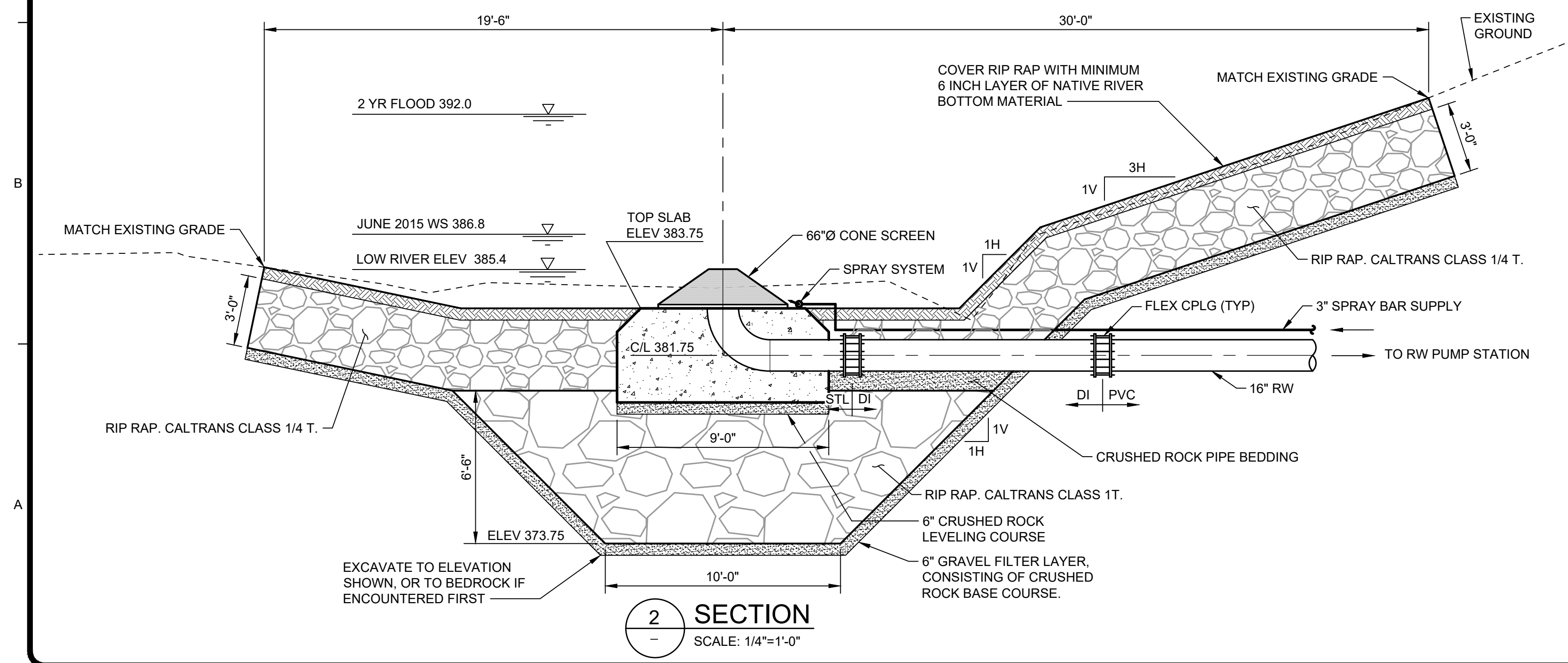
1. ONLY REMOVE TREES REQUIRED FOR INSTALLING IMPROVEMENTS, ADJUST LOCATIONS OF IMPROVEMENTS AS DIRECTED BY THE OWNER TO MAINTAIN PREFERRED TREES

KEYED NOTES:

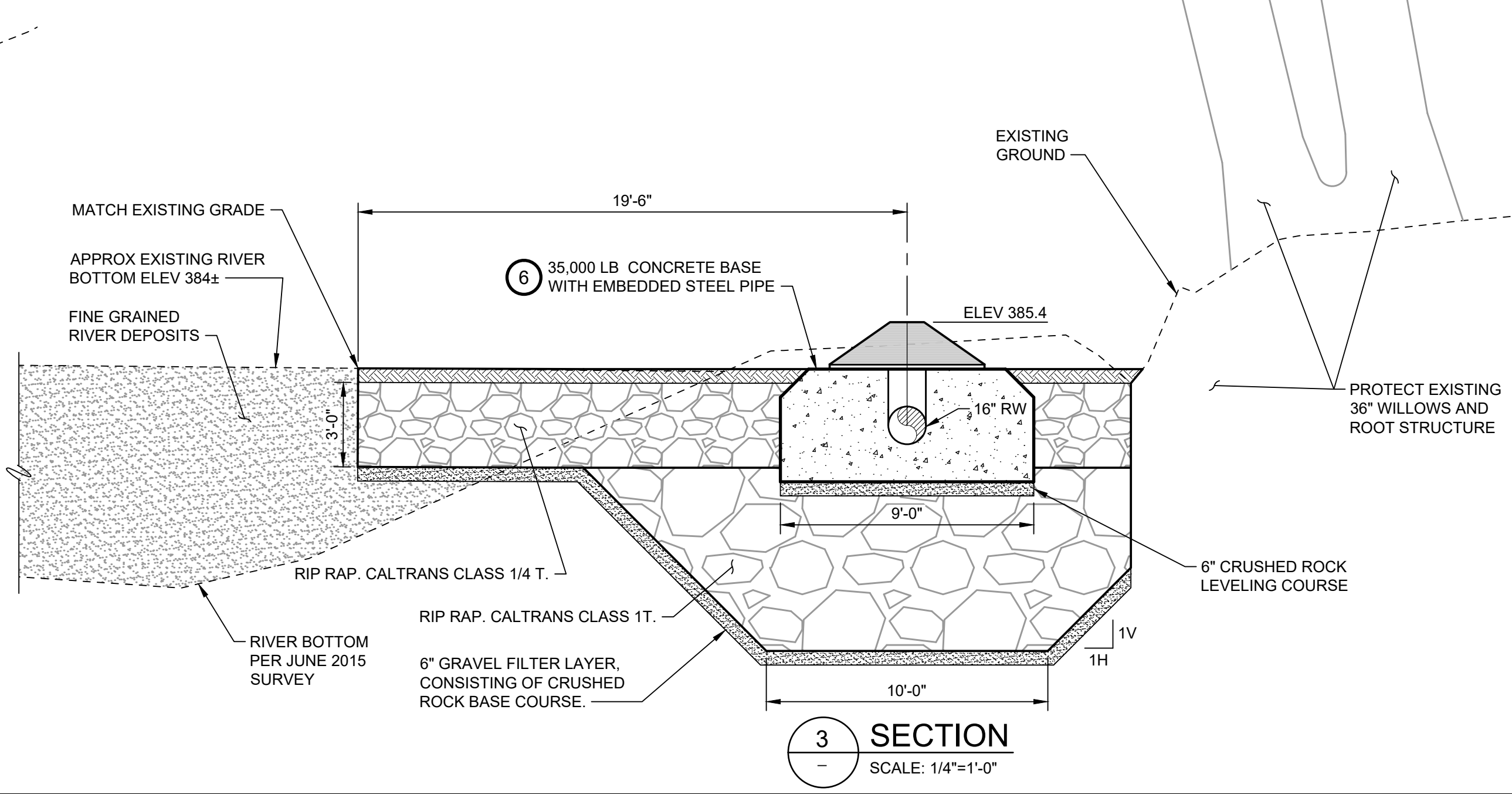
- 1 22 DEG MJ ELBOW
- 2 16"x6" MjxMjxMj REDUCING TEE
- 3 6" RISER PIPE WITH 6" QUICK-DISCONNECT FITTING, 30" ABOVE FINISH GRADE.
- 4 1" AIR RELEASE VALVE, 1" ISOLATION BALL VALVE, 3" BLIND FLANGE TAPPED FOR 1" PIPE.
- 5 INSTALL SPRAY BAR WITH 2" STAINLESS STEEL PIPE BENT TO RADIUS AS SHOWN. DRILL 8 HOLES, 1/2" DIAMETER AT 9" SPACING.
- 6 AT CONTRACTOR'S OPTION, CONCRETE BASE MAY BE PRECAST OR CAST-IN-PLACE. REINFORCE BASE WITH A MINIMUM OF #6@9 EACH WAY, EACH FACE WITH 3" COVER ON ALL SIDES. TERMINATE BARS IN STANDARD HOOKS WHEREVER POSSIBLE.



4 SECTION
SCALE: 1/2"=1'-0"



2 SECTION
SCALE: 1/4"=1'-0"



3 SECTION
SCALE: 1/4"=1'-0"

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BY	DATE	DESCRIPTION

MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY

RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE

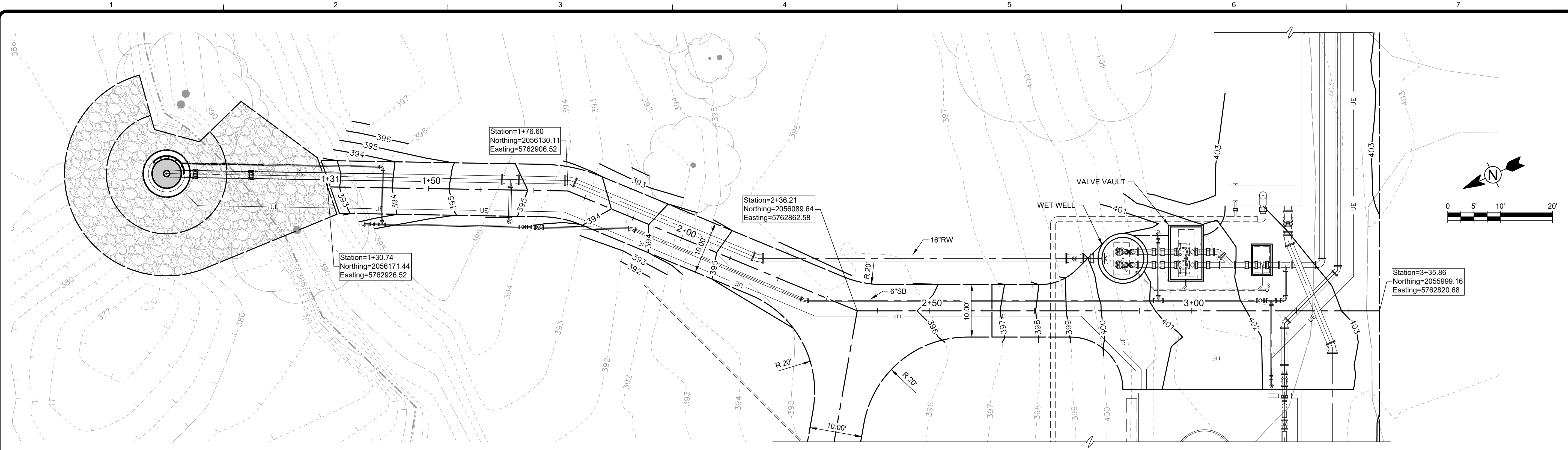
INTAKE SCREEN PLAN AND SECTION

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

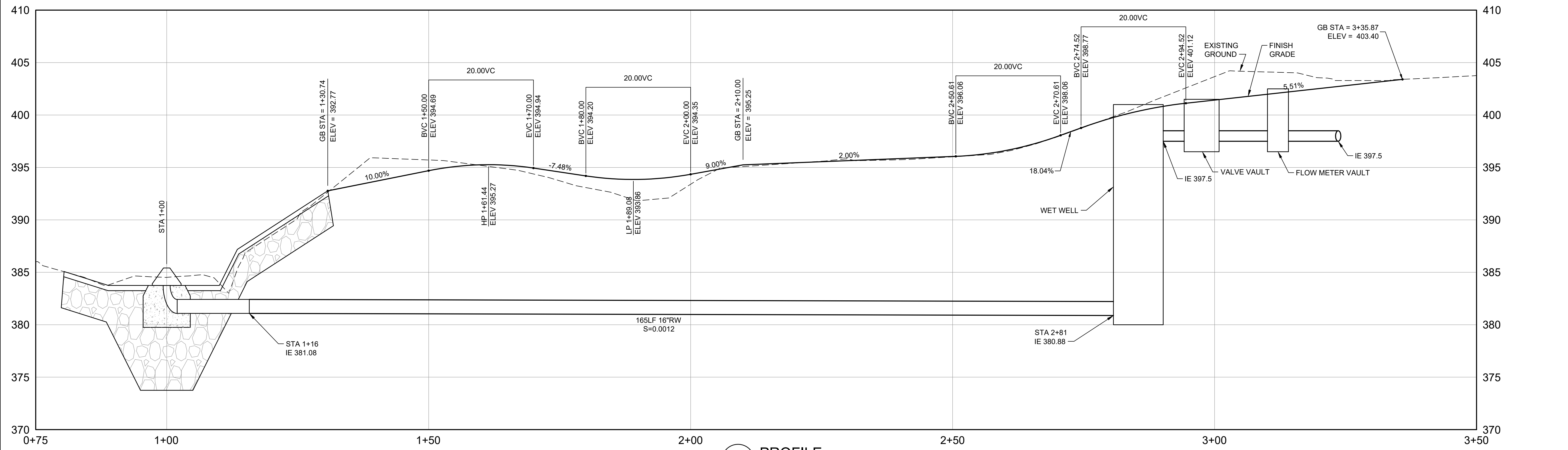
C-101

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Bar Measures 1 inch

5/12/2018 2:38:15 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\C-101 INTAKE PLAN & SECTION.DWG - NORDHOLM, ERIK

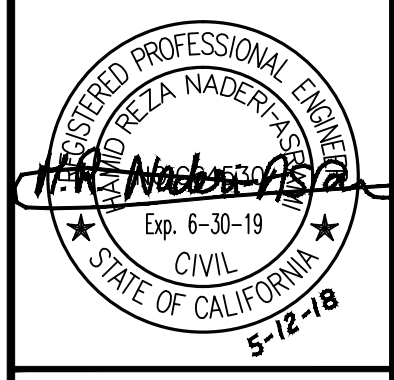


1 PLAN
SCALE: 1" = 10'



2 PROFILE
SCALE: 1"=10'H : 1"=5'V

5/12/2018 2:39:52 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\C-102 INTAKE PIPELINE PLAN PROFILE.DWG - NORDHOLM, ERIK



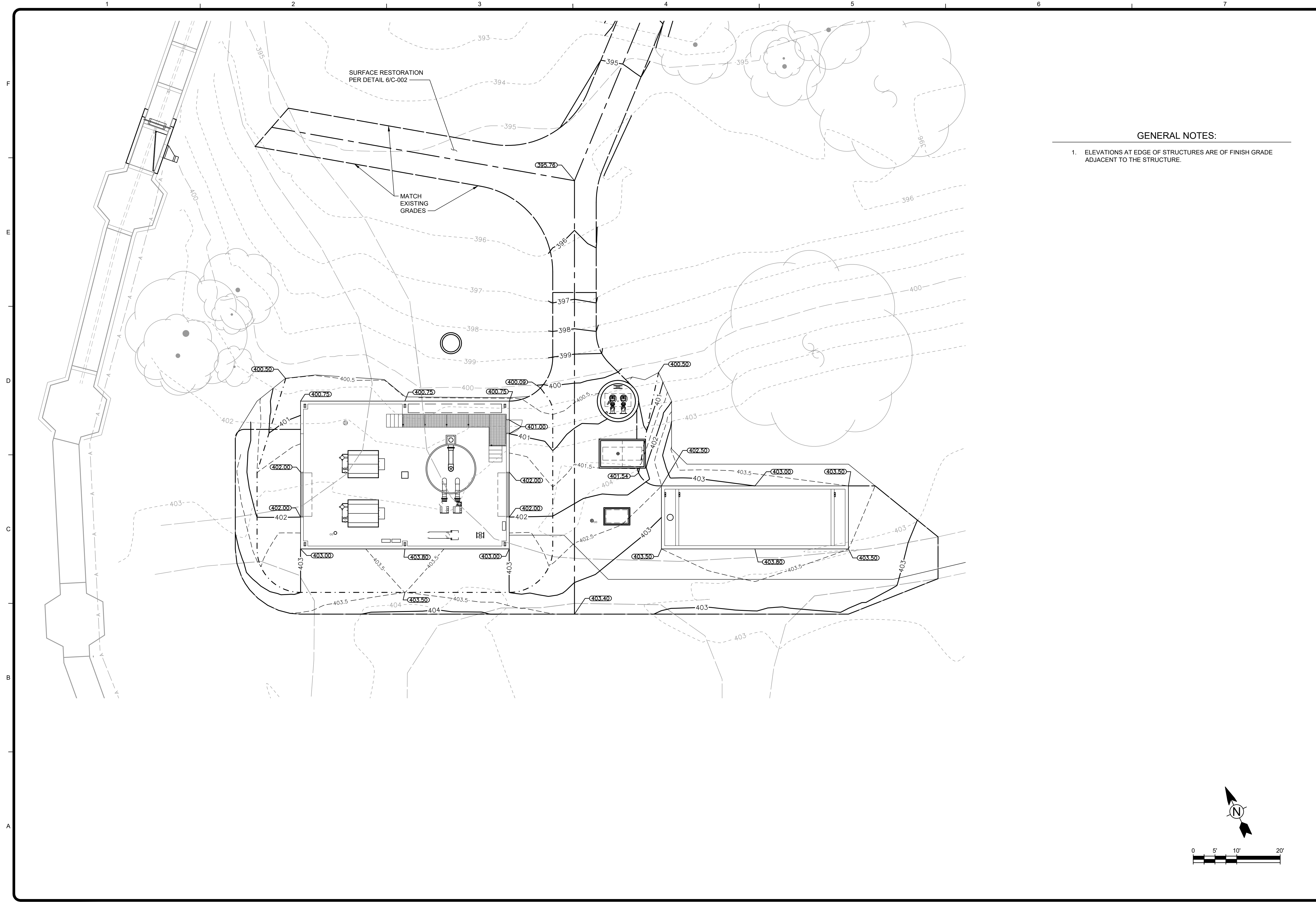
MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**INTAKE PIPELINE
AND ACCESS ROAD
PLAN AND PROFILE**

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

C-102

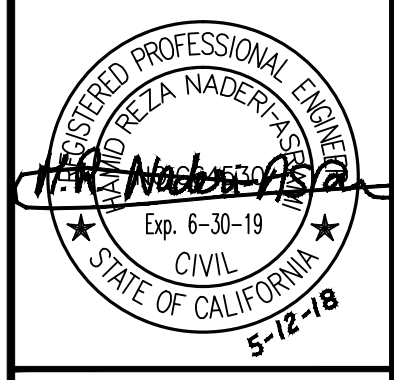
5/12/2018 2:42:14 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\C-201_BLDGGRADINGPLAN.DWG - NORDHOLM, ERIK



GENERAL NOTES:

- ELEVATIONS AT EDGE OF STRUCTURES ARE OF FINISH GRADE ADJACENT TO THE STRUCTURE.

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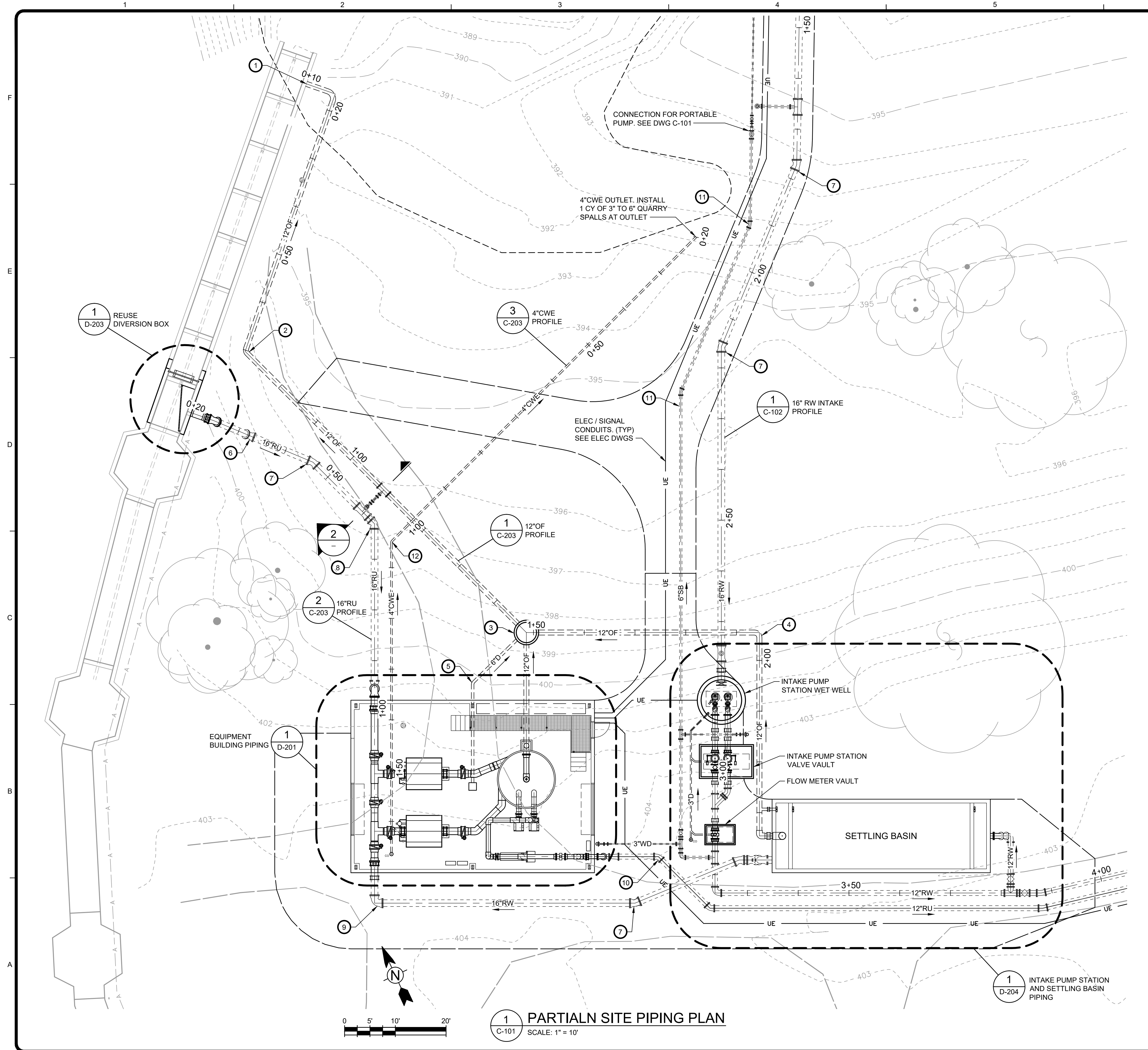
MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
 EQUIPMENT BUILDING
 SITE GRADING PLAN

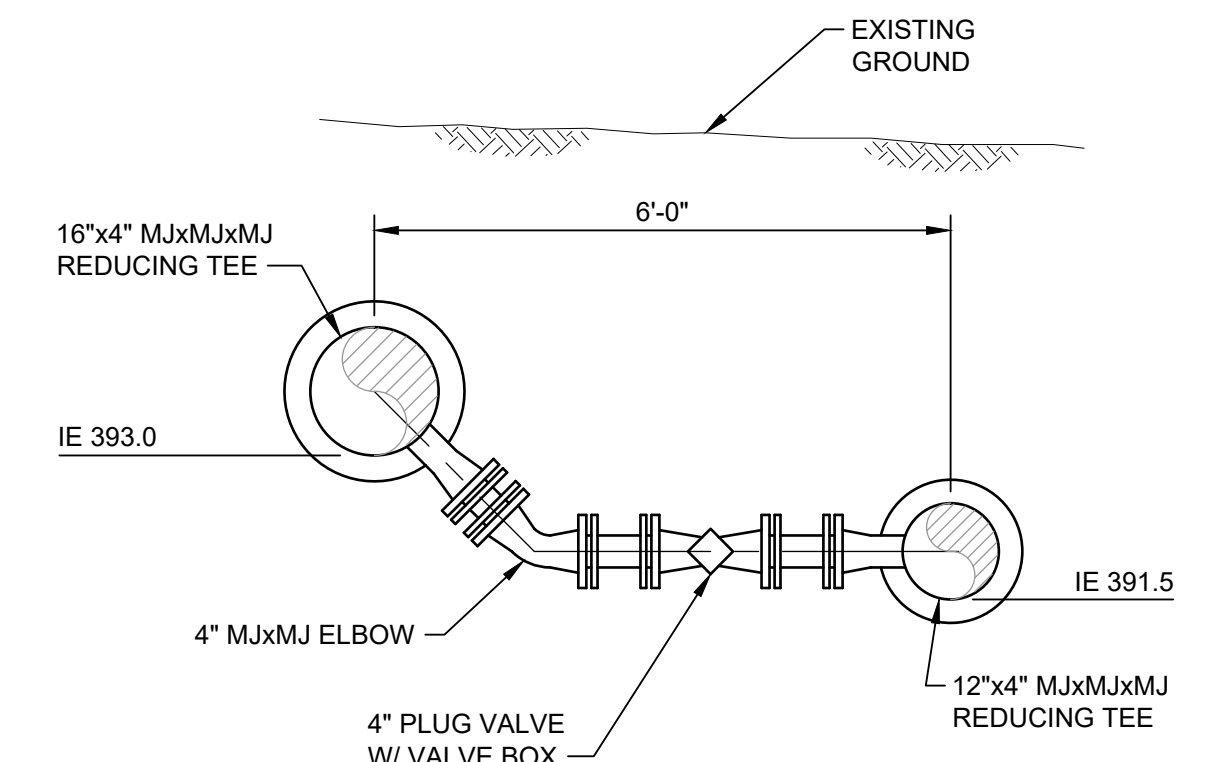
Project No.: 135-124674-15001
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 Checked By: DJN

C-201

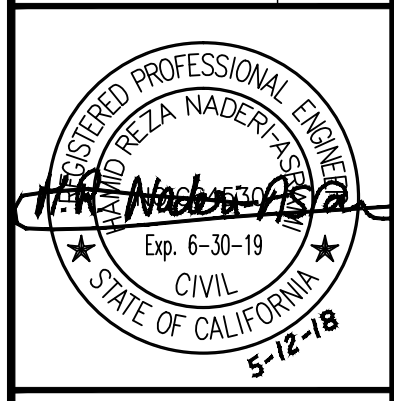
5/12/2018 2:44:07 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\C-202 BLDGPIPINGPLAN.DWG - NORDHOLM, ERIK



- KEYED NOTES:**
- 1 12" OF DISCHARGE IE 390.93. CORE DRILL EXIST CONC DRAIN CHANNEL WALL
 - 2 12" SDR 35 PVC GASKETED 45° AND 22.5° ELBOWS. ACTUAL DEFLECTION ANGLE = 64.5°
 - 3 48" CONCRETE MANHOLE
 - 4 12" PVC 90° ELBOW
 - 5 6" PVC 45° ELBOW
 - 6 16" DI MJxMJ 45° VERTICAL ELBOW
 - 7 16" DI MJxMJ 22.5° ELBOW
 - 8 16" DI MJxMJ 45° ELBOW
 - 9 16" DI MJxMJ 90° ELBOW
 - 10 12" DI MJxMJ 45° ELBOW
 - 11 6" DI MJxMJ 22.5° ELBOW
 - 12 4" PVC 45° ELBOW



2 RU DRAIN CONNECTION
SCALE: 1/2" = 1'-0"



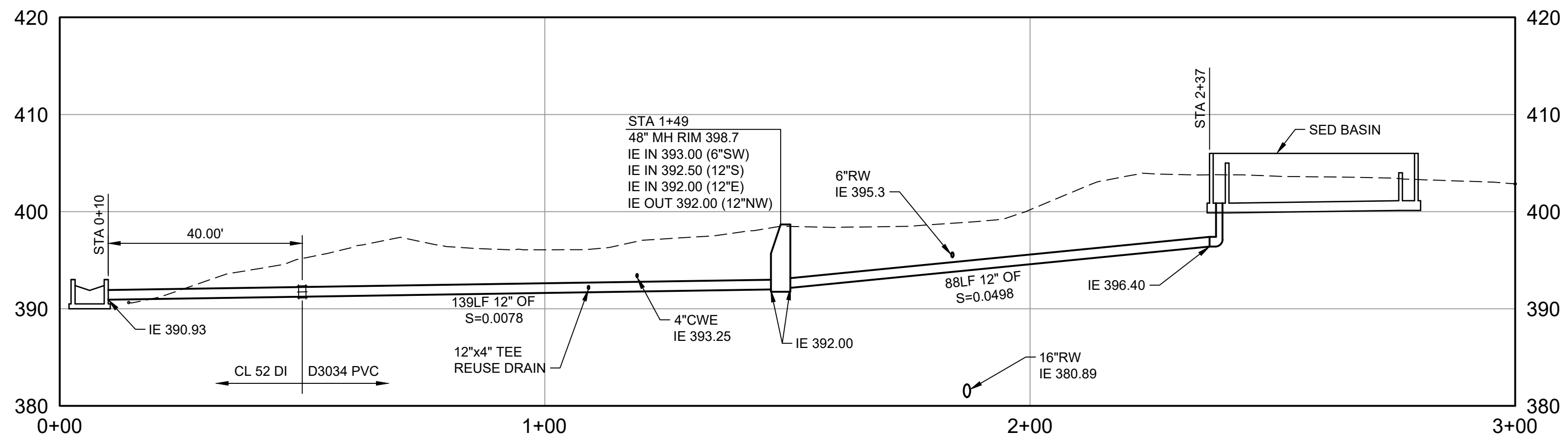
MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
SITE PIPING PLAN

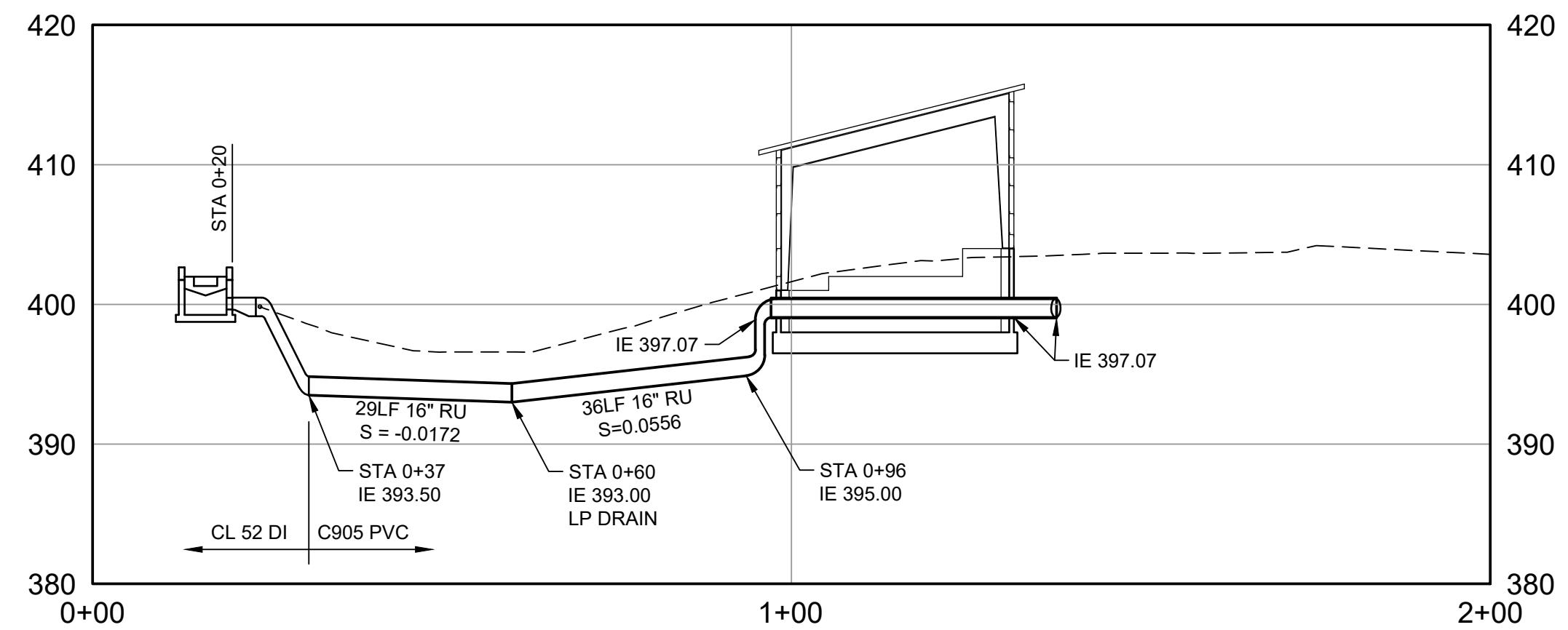
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C-202

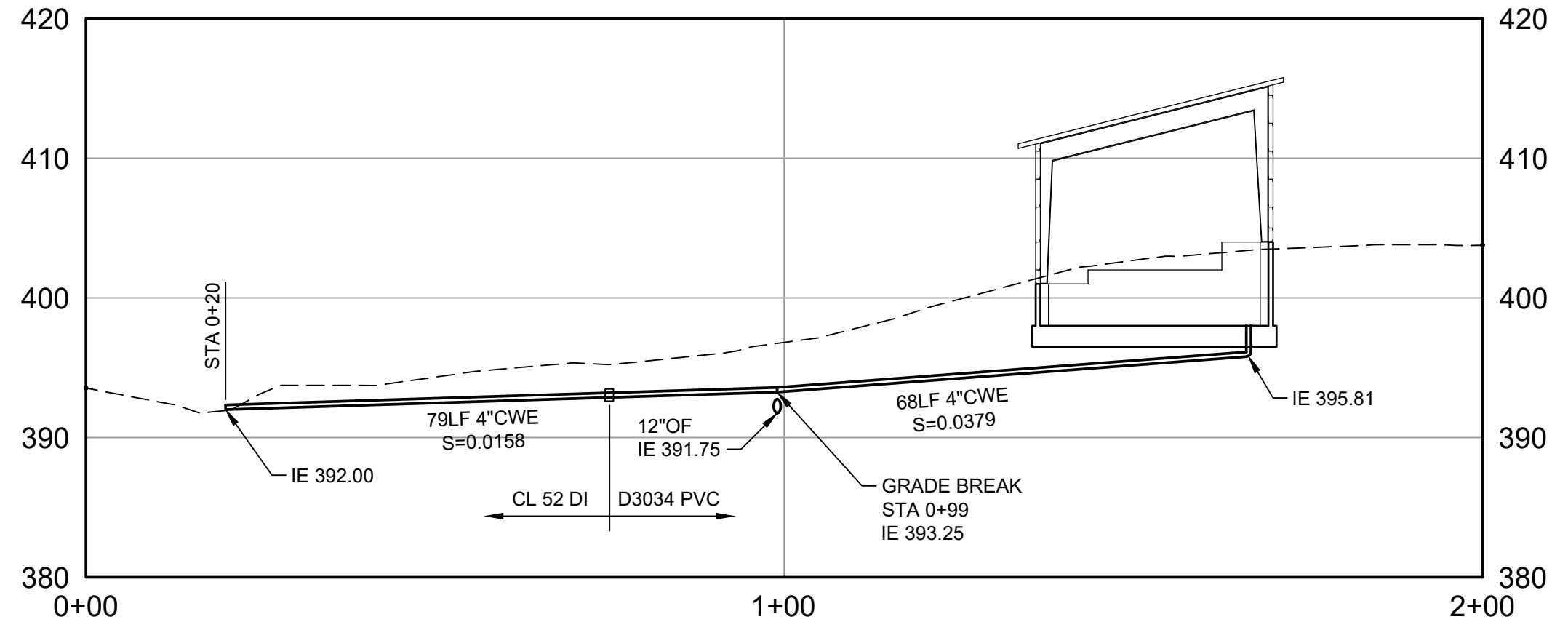
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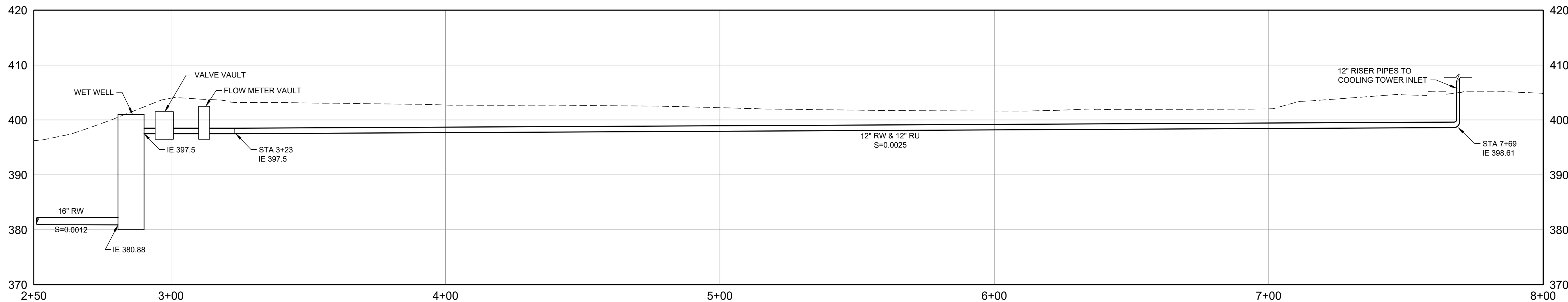
1 PROFILE: 12" OVERFLOW
SCALE: 1"=20' H, 1"=10' V



2 PROFILE: 16" REUSE
SCALE: 1"=20' H, 1"=10' V



3 PROFILE: 4" CWE
SCALE: 1"=20' H, 1"=10' V



4 PROFILE: 12" RIVER WATER / 12" REUSE
SCALE: 1"=20' H, 1"=10' V



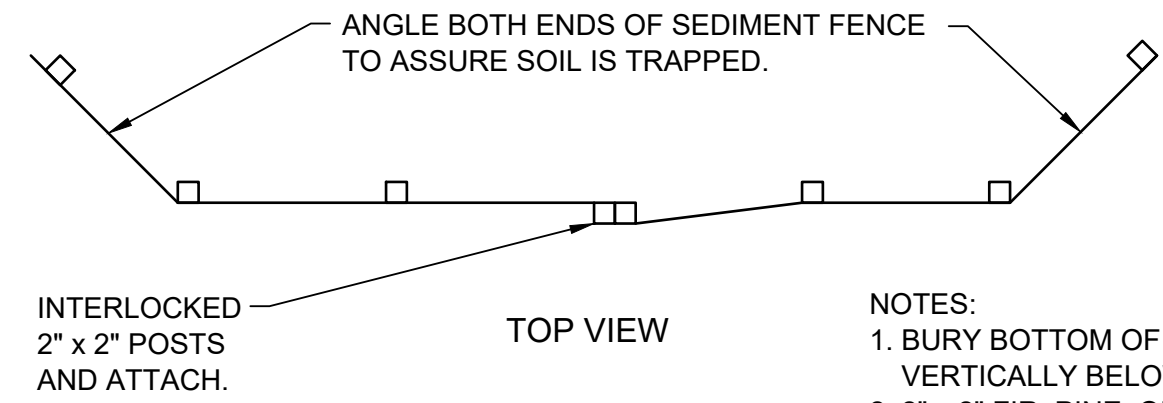
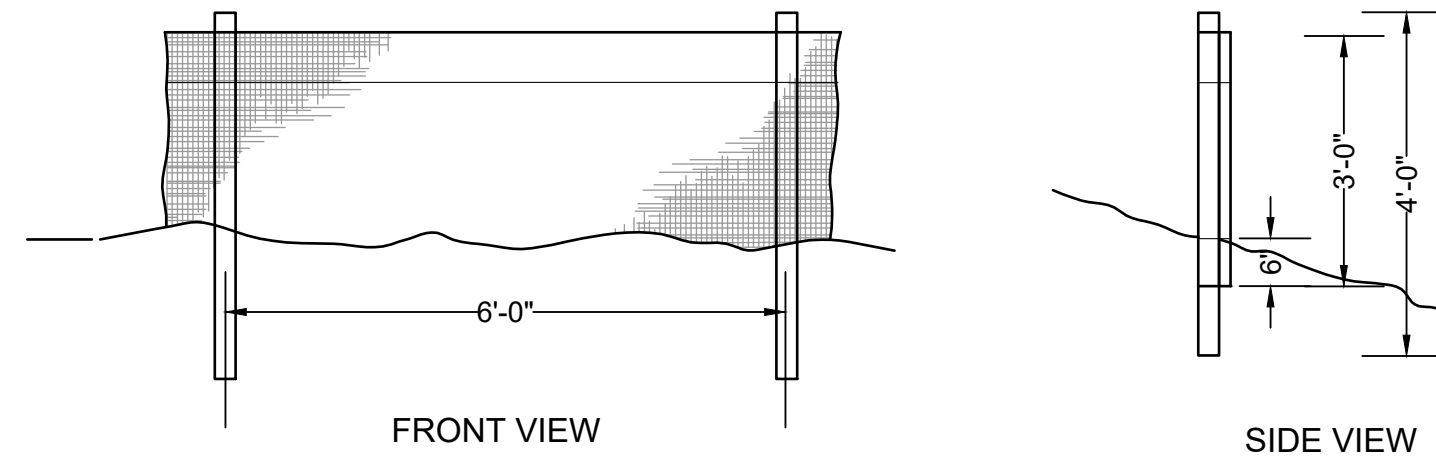
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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
PIPE PROFILES

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

EROSION CONTROL NOTES

1. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED.
2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE OR VIOLATE APPLICABLE WATER STANDARDS.
3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NECESSARY TO PREVENT EROSION FROM THE SITE.
4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
5. CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE CLEANED AS NECESSARY TO PREVENT TRACKING OF SEDIMENT OFF THE SITE. ADDITIONAL MEASURES SUCH AS STABILIZED CONSTRUCTION ENTRANCES OR WHEEL WASH STATIONS WILL BE REQUIRED IF VEHICLES ARE TRACKING SEDIMENT.
6. EROSION CONTROL MAINTENANCE PERIOD SHALL BE DEEMED OVER WHEN ALL CONSTRUCTION IS COMPLETED AND ACCEPTED AND ALL EXPOSED AREAS ARE PROTECTED BY PERMANENT COVER. AT THAT TIME TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED.
7. THE BOUNDARIES OF THE CLEARING LIMITS SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE FLAGGED CLEARING SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION.



- NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" MIN. VERTICALLY BELOW GRADE.
 2. 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.
 3. STITCHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE.
 4. COMPACT NATIVE FILL IN ALL AREAS OF FILTER FABRIC TRENCH.

1 SILT FENCE
NO SCALE

Sediment/Desilting Basin

SC-2

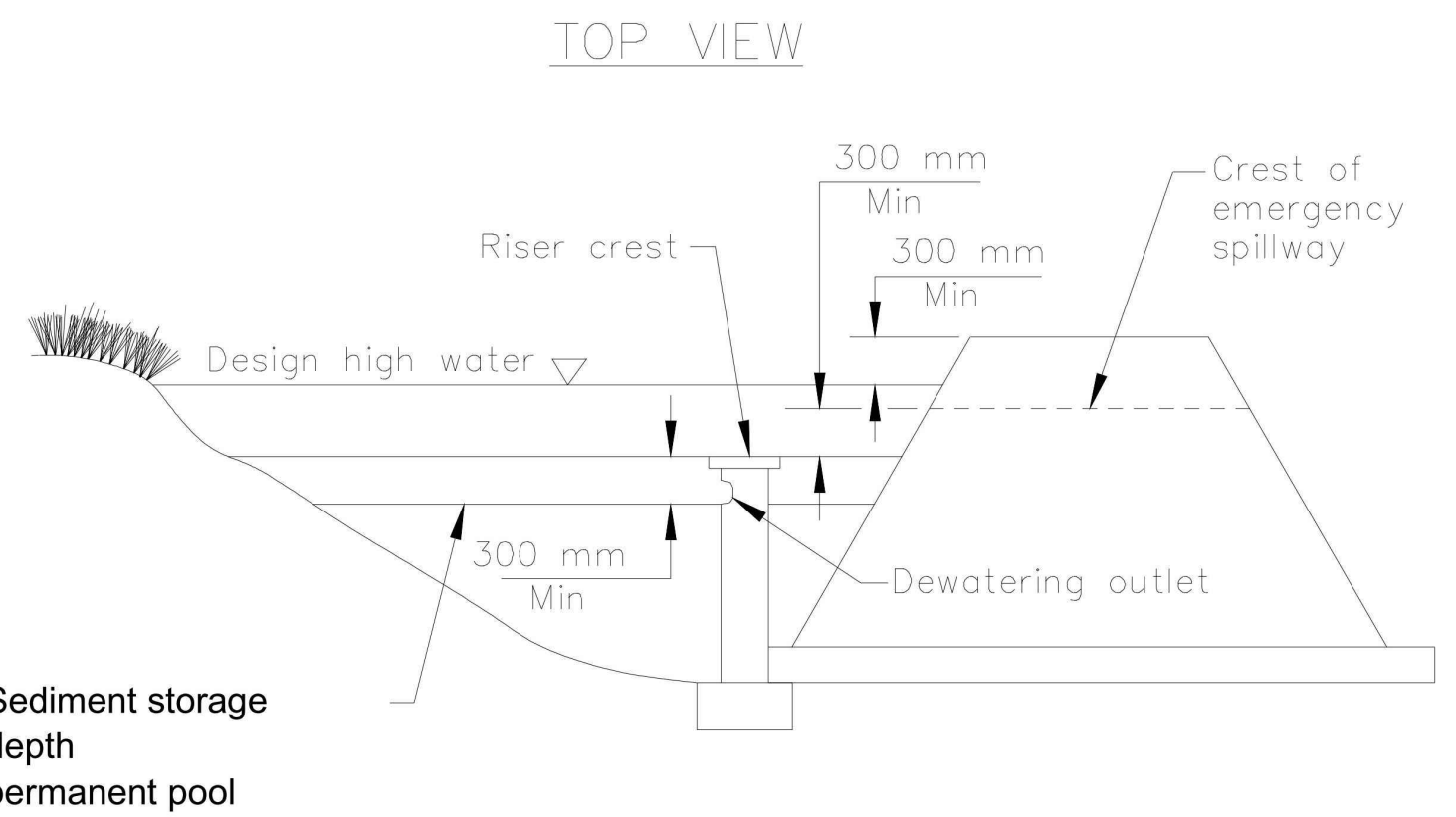
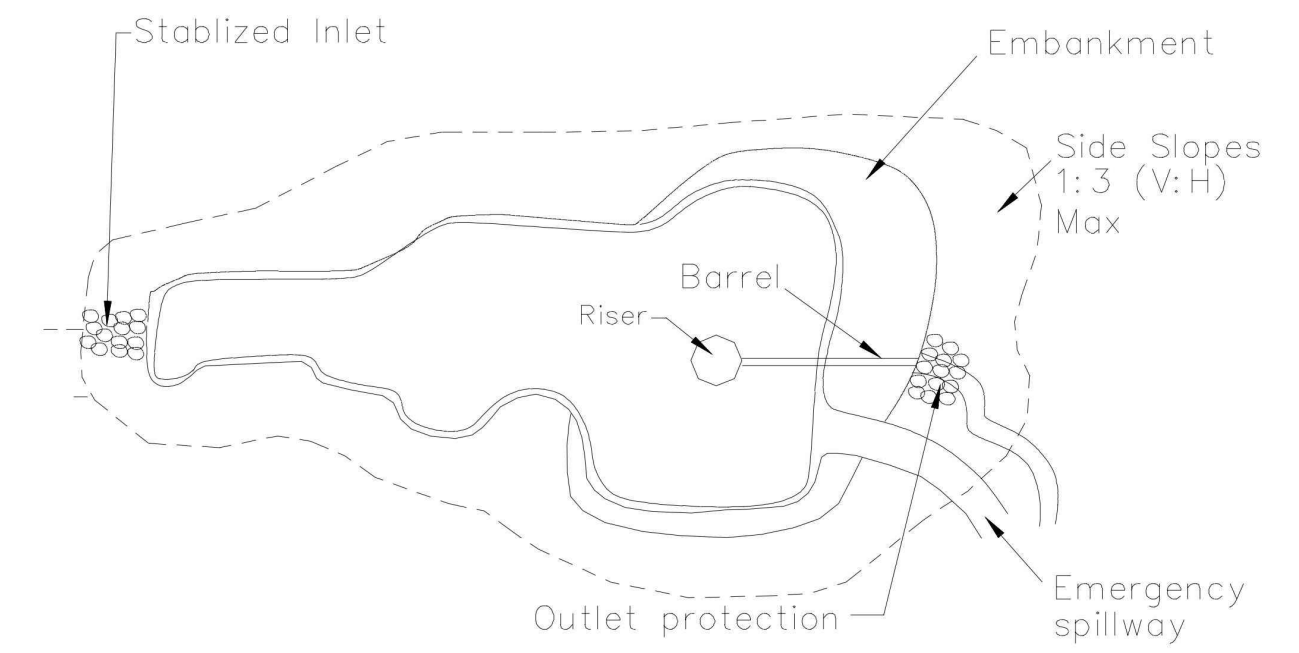
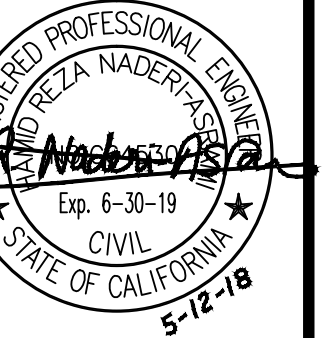


FIGURE 1: SINGLE ORIFICE DESIGN
NOT TO SCALE

2 SEDIMENT/DESILTING BASIN
NO SCALE

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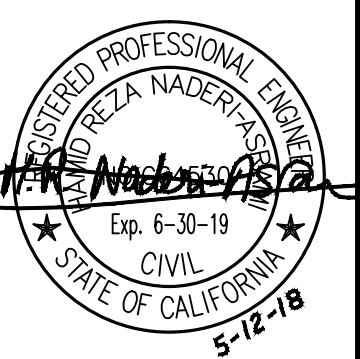
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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EROSION CONTROL
NOTES AND DETAILS

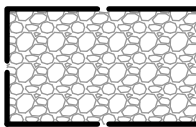
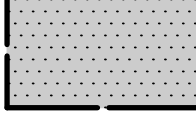


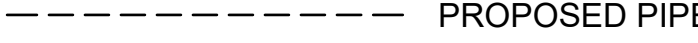
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EC-001

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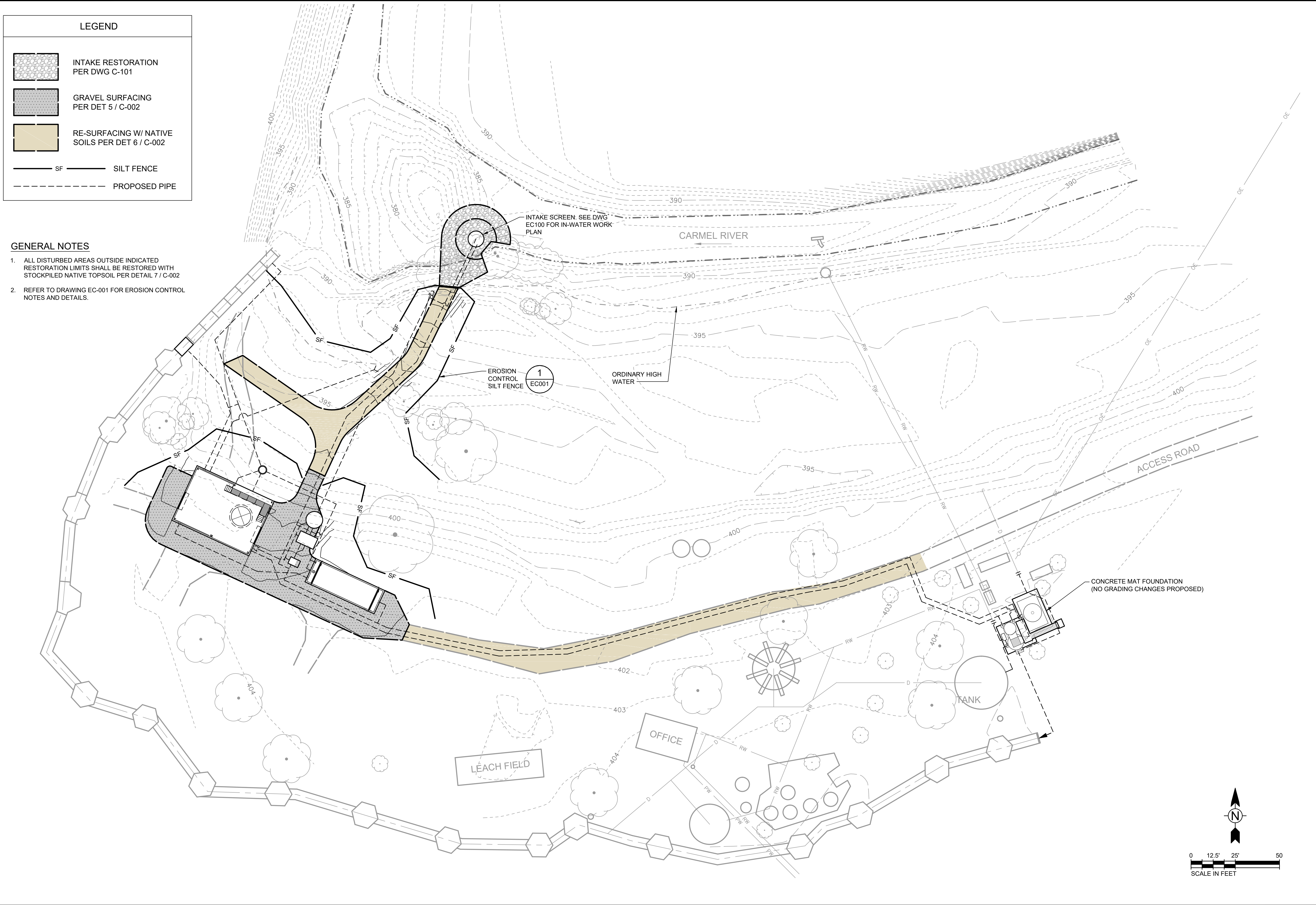


LEGEND

-  INTAKE RESTORATION PER DWG C-101
-  GRAVEL SURFACING PER DET 5 / C-002
-  RE-SURFACING W/ NATIVE SOILS PER DET 6 / C-002
-  SF SILT FENCE
-  PROPOSED PIPE

GENERAL NOTES

- ALL DISTURBED AREAS OUTSIDE INDICATED RESTORATION LIMITS SHALL BE RESTORED WITH STOCKPILED NATIVE TOPSOIL PER DETAIL 7 / C-002
- REFER TO DRAWING EC-001 FOR EROSION CONTROL NOTES AND DETAILS.

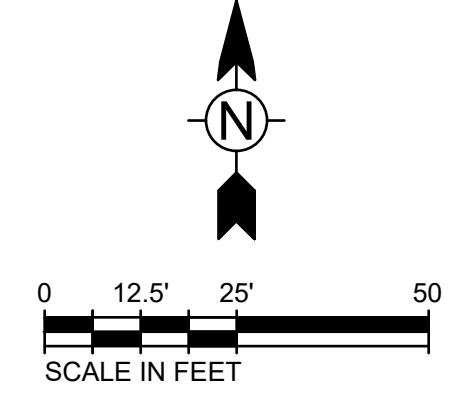


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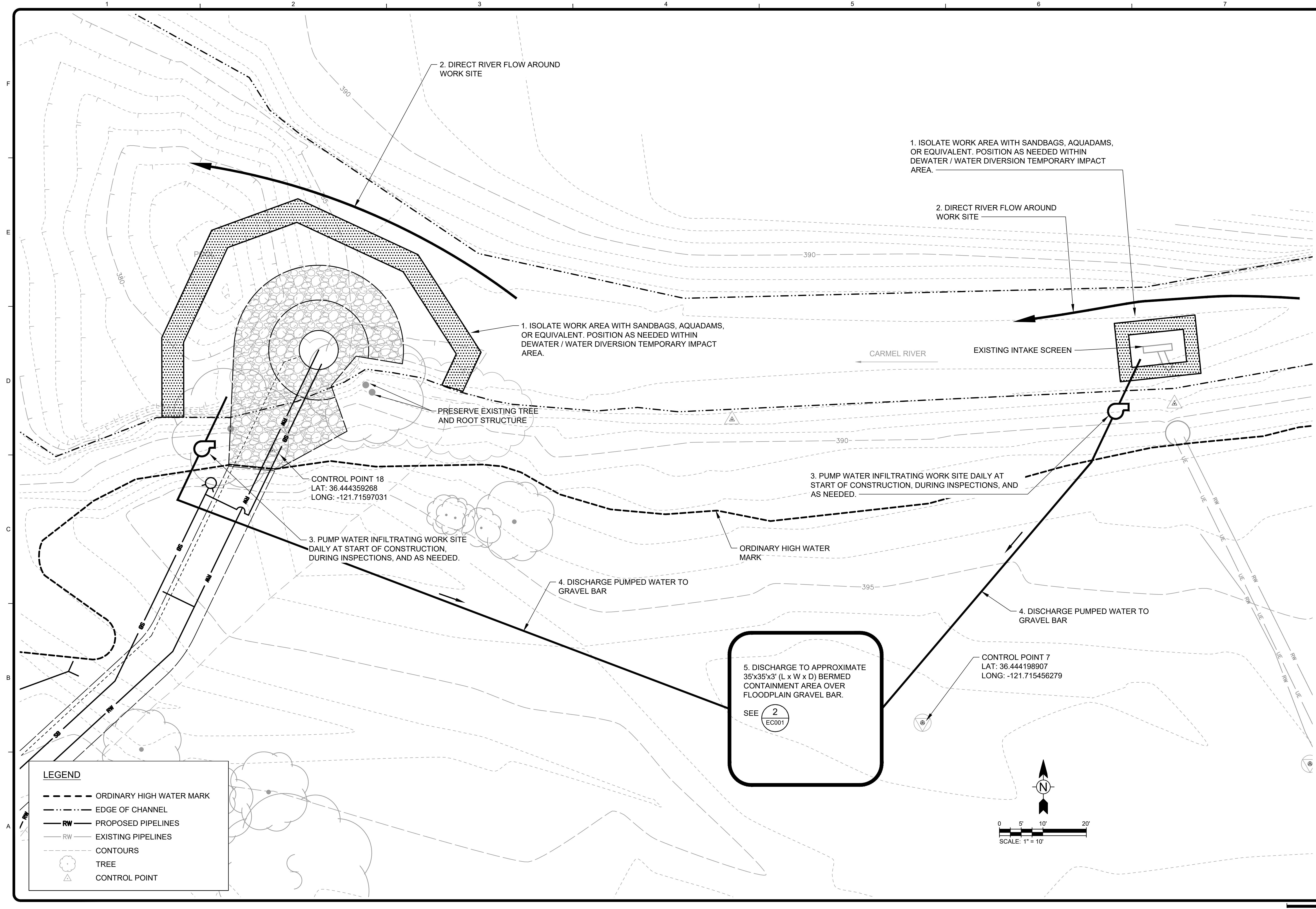
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SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**EROSION CONTROL
AND RESTORATION PLAN**

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
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EC-010
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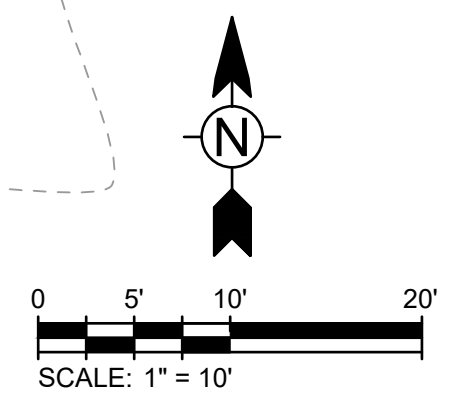


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LEGEND

- ORDINARY HIGH WATER MARK
- EDGE OF CHANNEL
- RW** PROPOSED PIPELINES
- RW** EXISTING PIPELINES
- CONTOURS
- TREE
- CONTROL POINT



5. DISCHARGE TO APPROXIMATE 35'x35'x3' (L x W x D) BERMED CONTAINMENT AREA OVER FLOODPLAIN GRAVEL BAR.

SEE 2
EC001

CONTROL POINT 18
LAT: 36.444359268
LONG: -121.71597031

CONTROL POINT 7
LAT: 36.444198907
LONG: -121.715456279

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SLEEPY HOLLOW STEELHEAD REARING FACILITY

**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE**

IN-WATER WORK PLAN

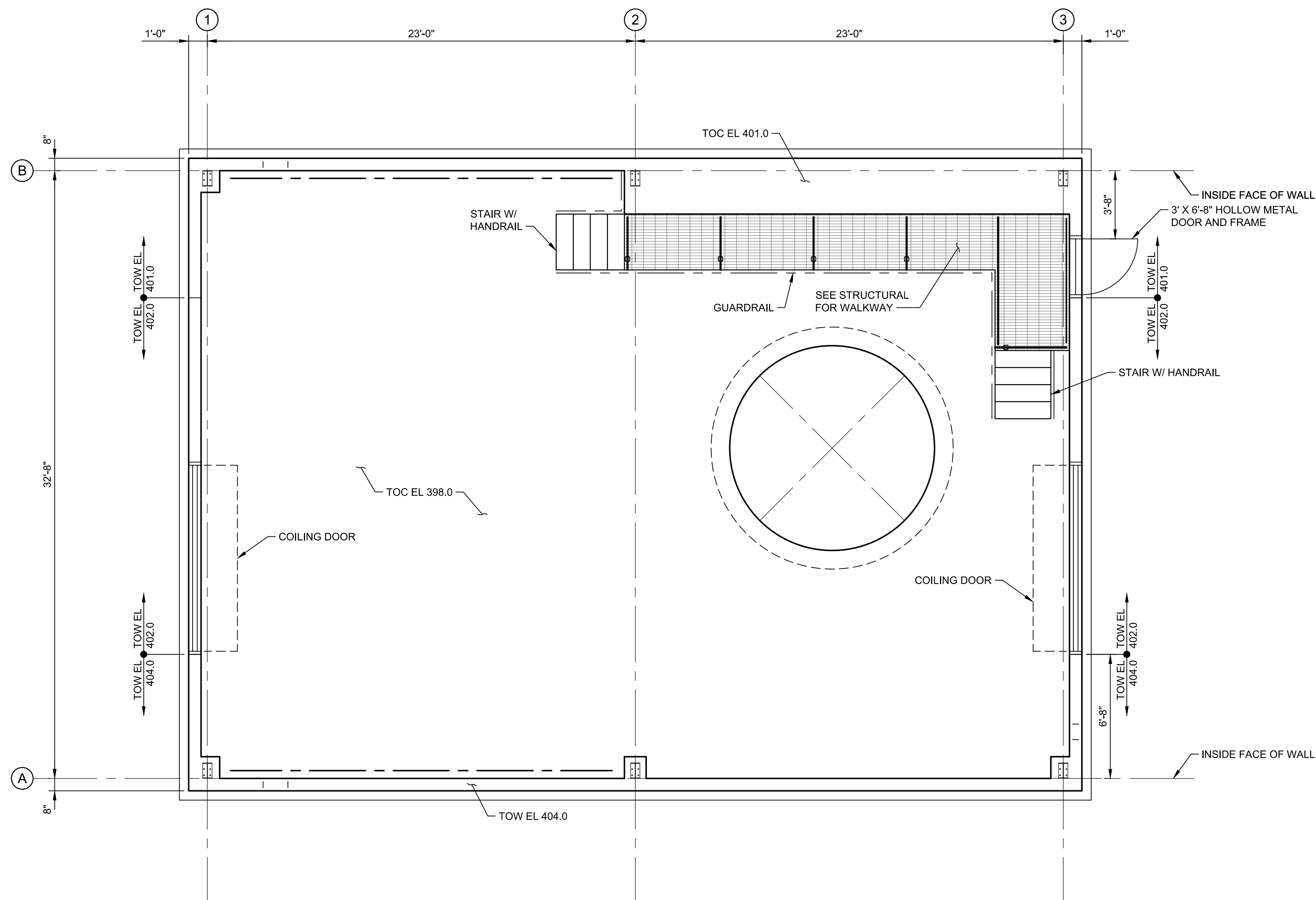
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EC-100

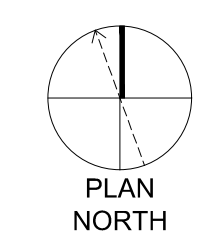
Bar Measures 1 inch

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FLOOR PLAN
SCALE: 1/4" = 1'-0"



CODE DATA

BUILDING CODE: CBC 2016
 CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION SECT 302.1
 F-1 HATCHERY WATER PUMPING FACILITY
 EXIT ACCESS TRAVEL DISTANCE < THAN STATED IN TABLE 1016.1
 F-1 MAX DISTANCE = 250'
 PROPOSED MAX DISTANCE = 62'

CHAPTER 5 - BUILDING HEIGHT AND AREA
 TABLE 503

FACTORY USAGE	F-1
TYPE OF CONSTRUCTION	TYPE - V-N
MAX AREA ALLOWED	13000 GSF
AREA PROPOSED	2670 GSF
MAX BUILDING HEIGHT ALLOWED	2 STORY
MAX BUILDING HEIGHT PROPOSED	15'-0", 1 STORY

CHAPTER 6 - TYPE OF CONSTRUCTION	TYPE V-N
TABLE 601 PRIMARY STRUCTURAL FRAME	0 HOURS
EXTERIOR BEARING WALLS	0 HOURS
INTERIOR BEARING WALLS	0 HOURS
INTERIOR NONBEARING WALLS	0 HOURS
FLOOR CONSTRUCTION	0 HOURS
ROOF CONSTRUCTION	0 HOURS

CHAPTER 9 - FIRE PROTECTION
 NO SPRINKLERS
 BUILDING IS UNHEATED

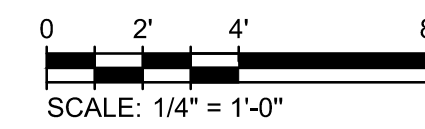
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LICENSED ARCHITECT
 M. MARCEL BOOSKY
 C-35520
 REN. 12/31/2019
 STATE OF CALIFORNIA

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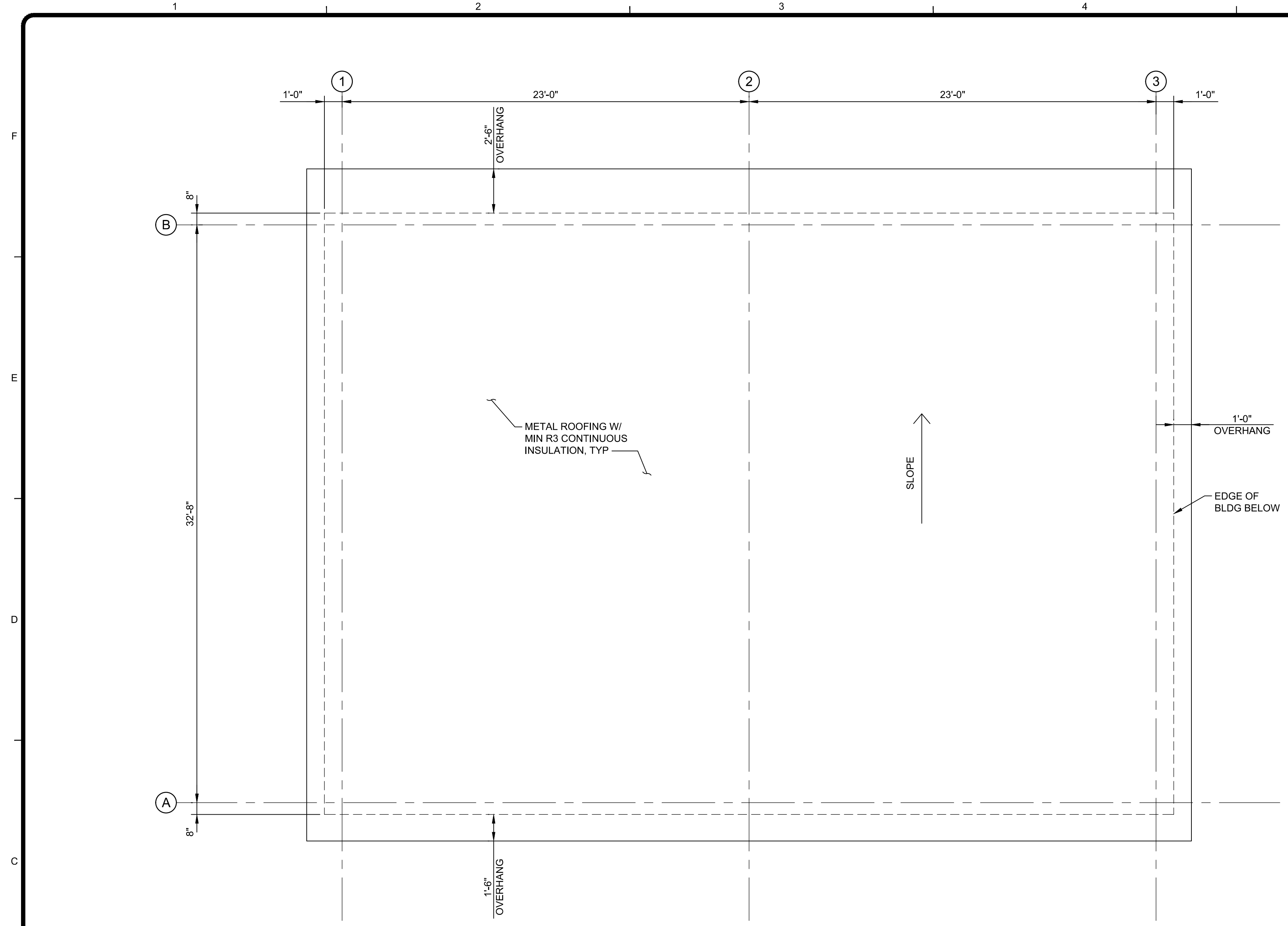
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 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
 EQUIPMENT BUILDING
 PLAN / CODE DATA

Project No.: 135-124674-15001
 Designed By: MMB
 Drawn By: MMB
 Checked By: DJN

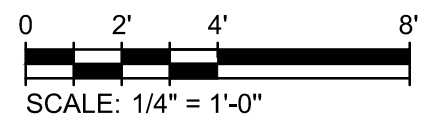


A-200
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ROOF PLAN
SCALE: 1/4"=1'-0"



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**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
ROOF PLAN**

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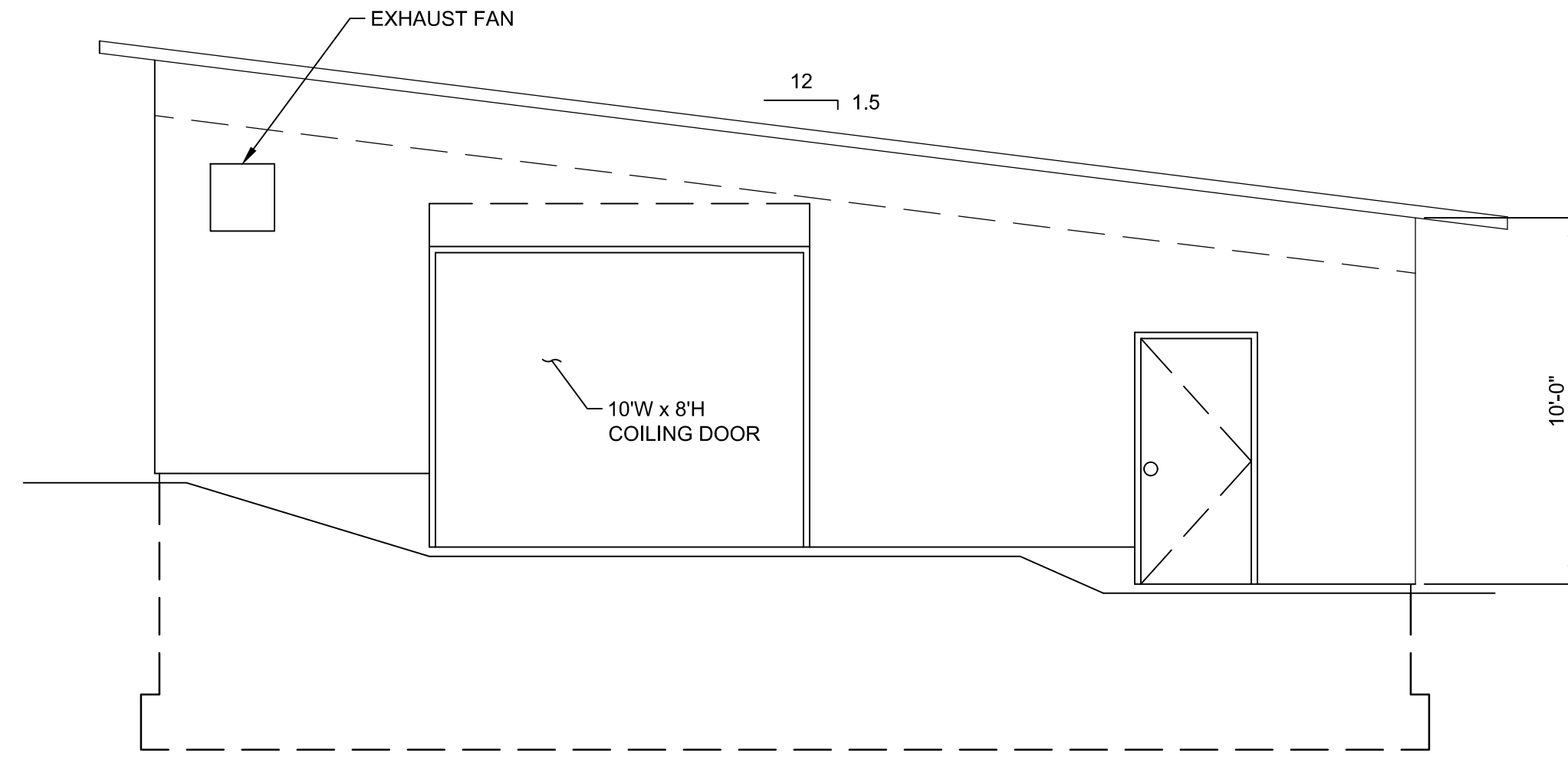
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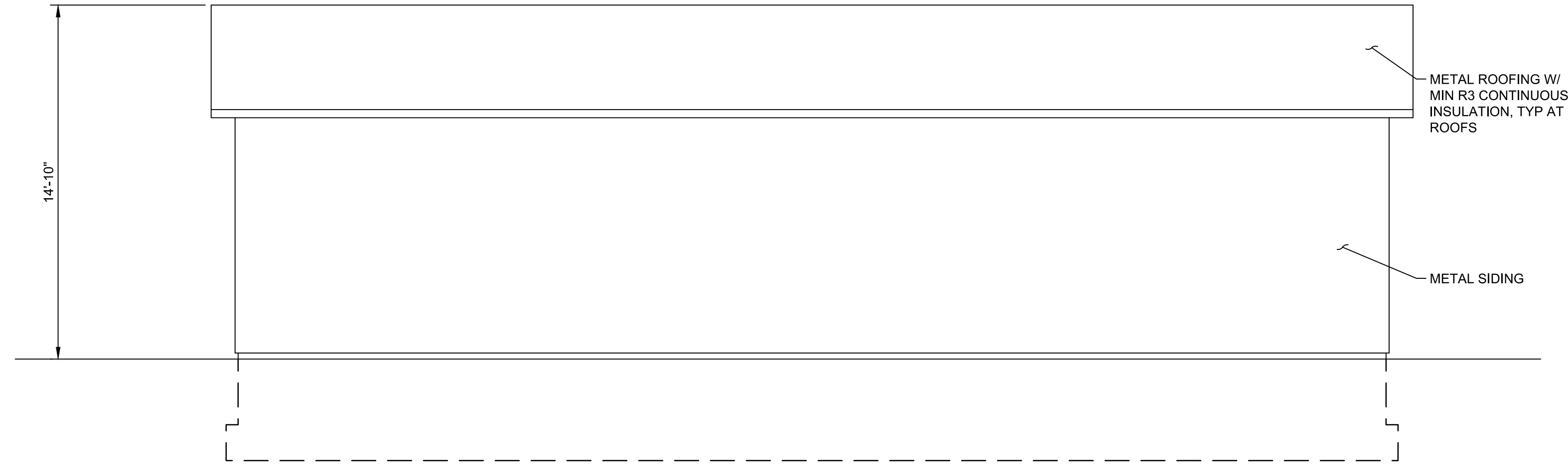
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F
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D
C
B
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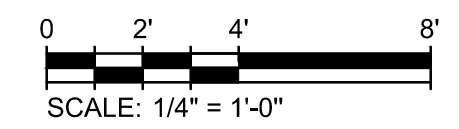
1 2 3 4 5 6 7



EAST ELEVATION
SCALE: 1/4"=1'-0"



NORTH ELEVATION
SCALE: 1/4"=1'-0"



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SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE**
ELEVATIONS

Project No.: 135-124674-15001
Designed By: MMB
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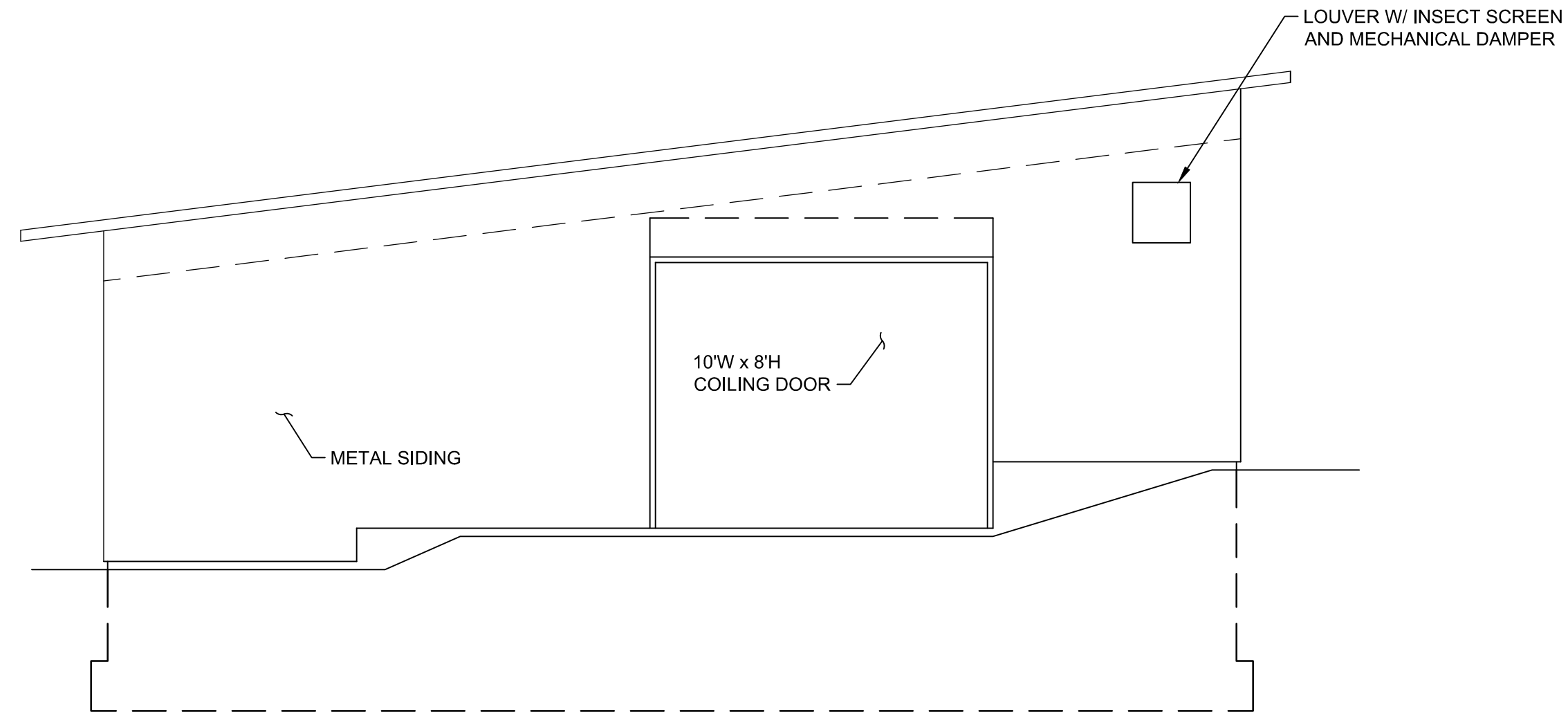
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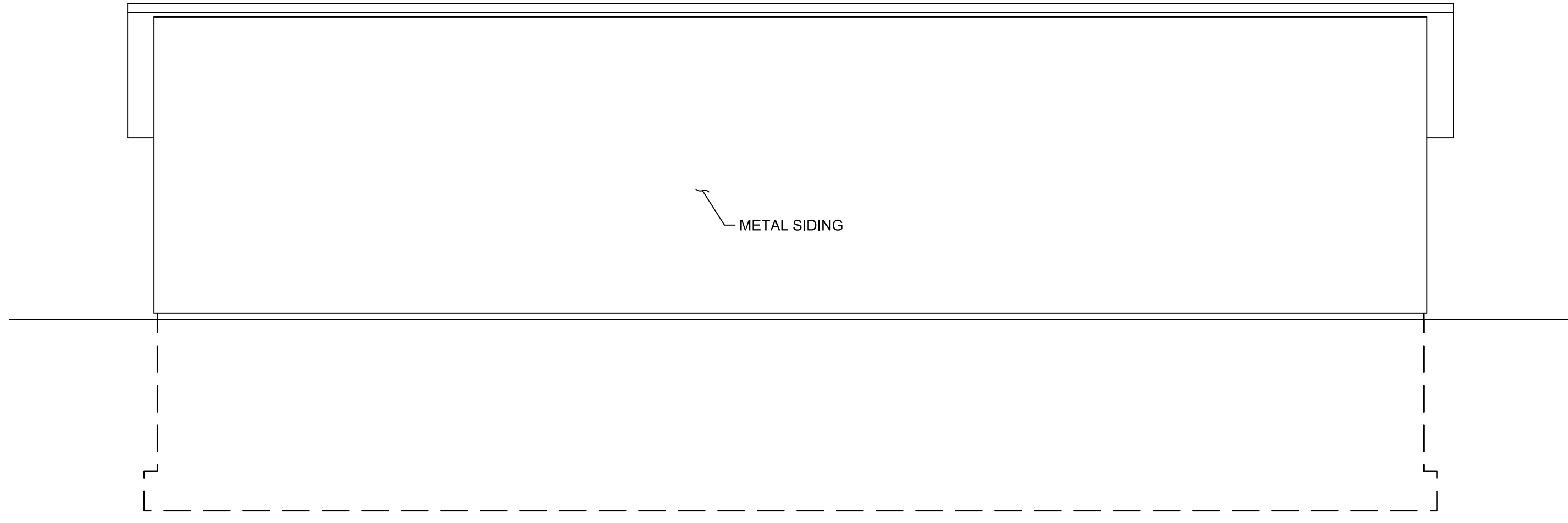
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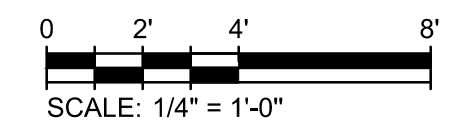
1 2 3 4 5 6 7



WEST ELEVATION
SCALE: 1/4"=1'-0"



SOUTH ELEVATION
SCALE: 1/4"=1'-0"



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**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE**
ELEVATIONS

Project No.: 135-124674-15001
Designed By: MMB
Drawn By: MMB
Checked By: DJN

A-203

G. STRUCTURAL - GENERAL

- G1 SCOPE
THE NOTES AND DETAILS ON THIS SHEET ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.
G2 APPLICABLE SPECIFICATIONS AND CODES
CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
G3 ALTERNATIVE DESIGNS
THE STRUCTURAL SYSTEMS AND DETAILS ON THESE PLANS ARE THE PRIORITY DESIGN; HOWEVER, ALTERNATIVE SYSTEMS AND DETAILS MAY BE CONSIDERED IF THE CONTRACTOR SUBMITS PLANS WITH SUBSTANTIATING CALCULATIONS AND TEST DATA WHICH BEAR A CALIFORNIA STATE LICENSED ENGINEER'S SEAL AND SIGNATURE FOR APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHOSE EFFORTS FOR REVIEW OF SUCH ALTERNATIVE DESIGNS SHALL BE PAID FOR BY THE CONTRACTOR.
G4 DIMENSIONS
STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO FIELD CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. DEVIATIONS FROM THAT WHICH IS SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE DRAWINGS.
G5 CONSTRUCTION LOADS
STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND SUPPORTS AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND MAINTENANCE OF TEMPORARY SUPPORTS. THE DESIGN OF THE TEMPORARY SUPPORTS SHALL BE PERFORMED BY A LICENSED ENGINEER HIRED BY THE CONTRACTOR.

F. STRUCTURAL DESIGN

- F1 DESIGN CODE
DESIGN IS IN ACCORDANCE WITH THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
F2 DESIGN SOIL PRESSURE FOR FOUNDATIONS
DESIGN BASED ON GEOTECHNICAL INVESTIGATION PREPARED BY PACIFIC CREST ENGINEERING INC DATED APRIL 2018.
(1) ALLOWABLE BEARING PRESSURE = 1000 PSF W/ 1/3 INCREASE FOR WIND AND SEISMIC
(2) LATERAL BEARING = 300 PCF
(3) COEFFICIENT OF FRICTION = 0.35
(4) FROST DEPTH = 12"

L. DESIGN LOADS

- A. LIVE
(1) SLAB ON GRADE = 125 PSF
(2) ELEVATED WALKWAYS AND PLATFORMS = 60 PSF
B. SNOW
(1) GROUND SNOW LOAD Pg = 0 PSF
(2) MINIMUM FLAT ROOF SNOW LOAD Pf = N/A
(3) OCCUPANCY CATEGORY II
(4) IMPORTANCE FACTOR = N/A
(5) EXPOSURE FACTOR Ce = N/A
(6) THERMAL FACTOR Ct = N/A
C. WIND
(1) NOMINAL DESIGN WIND SPEED = 85 MPH
(2) ULTIMATE DESIGN WIND SPEED = 110 MPH
(3) OCCUPANCY CATEGORY II
(4) IMPORTANCE FACTOR = 1.0
(5) WIND EXPOSURE B
(6) INTERNAL PRESSURE COEFFICIENTS
ENCLOSED BUILDINGS - Gcpi = +/-0.18
PARTIALLY ENCLOSED BUILDINGS - Gcpi = +/-0.55
D. SEISMIC
(1) OCCUPANCY CATEGORY II
(2) IMPORTANCE FACTOR = 1.0
(3) SITE CLASS = D
(4) Ss = 1.34 S1 = 0.49
(5) Sds = 0.89 Sd1 = 0.49
(6) SEISMIC DESIGN CATEGORY = D
(7) ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE
(8) LATERAL FORCE RESISTING SYSTEM (COOLING TOWER) = STEEL ORDINARY MOMENT FRAME WITH UNLIMITED HEIGHT / R = 1

M. ENGINEERED BUILDING

- M1 DESIGN
THE ENGINEERED BUILDING SHALL BE DESIGNED BY THE BUILDING SUPPLIER. THIS INCLUDES THE LATERAL LOAD RESISTING SYSTEM AND ALL PERTINENT COMPONENTS AND CLADDING. SEE ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
ENGINEERED BUILDINGS SHALL BE DESIGNED ACCORDING TO THE LOADS AS REQUIRED BY THE CALIFORNIA BUILDING CODE. DESIGN LOADS SHALL NOT BE LESS THAN THOSE SHOWN ON THE DRAWING. DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE STAMPED AND SIGNED BY AN ENGINEER IN THE STATE OF PROJECT LOCATION.
M2 FABRICATION
THE ENGINEERED BUILDING MANUFACTURERS SHALL BE REGULARLY ENGAGED IN THE DESIGN AND FABRICATION OF ENGINEERED BUILDING SYSTEMS. PRODUCT DATA AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND SHALL BE APPROVED PRIOR TO FABRICATION.
M3 RESPONSIBILITY
TETRA TECH IS NOT RESPONSIBLE FOR THE DESIGN OF ANY ASPECTS OF THESE BUILDINGS OTHER THAN THEIR FOUNDATION SYSTEMS. THE ENGINEERED BUILDING REGISTERED DESIGN PROFESSIONAL SHALL SUBMIT AN ANCHOR BOLT PLAN TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. THE ANCHOR BOLT PLAN SHALL INDICATE ANCHOR BOLT TYPE, LOCATION, DIAMETER, AND PROJECTION REQUIRED, ALONG WITH REACTION AT EACH LOCATION FOR LOAD COMBINATIONS IN THE CBC.

C. CONCRETE

- C1 APPLICABLE CODE
CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2014 EDITION OF THE ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318.
C2 REINFORCING STEEL DETAILS
DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH DETAILS AND DETAILING OF CONCRETE REINFORCEMENT ACI 315.
C3 DESIGN STRENGTHS
A. CAST-IN-PLACE CONCRETE
(1) GENERAL USE - fc = 4500 psi @ 28 DAYS
B. MAX WATER TO CEMENTITIOUS MATERIAL RATIO = 0.45
C. MINIMUM CEMENTITIOUS MATERIAL FOR MAXIMUM AGGREGATE SIZE OF 3/4" = 560 LBS/CY
MINIMUM CEMENTITIOUS MATERIAL FOR MAXIMUM AGGREGATE SIZE OF 1" = 535 LBS/CY
MINIMUM CEMENTITIOUS MATERIAL FOR MAXIMUM AGGREGATE SIZE OF 1 1/2" = 515 LBS/CY
D. FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 3/4" OR 1", AIR CONTENT = 5%
FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 1 1/2", AIR CONTENT = 4.5%
E. REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60.
F. GROUT SHALL BE ASTM C 1107 WITH fc = 7000 psi @ 28 DAYS
G. CONCRETE SHALL BE PROPORTIONED TO MEET THE AVERAGE COMPRESSIVE STRENGTH REQUIREMENTS IN ACI 301.
C4 CONCRETE COVER
CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:
A. FOOTINGS AND FOUNDATION MATS CAST ON GROUND - 3"
B. FORMED OR FINISHED SURFACES - 2"
C5 DOWELS
DOWELS SHALL BE AT LEAST THE SAME SIZE AND SPACING AS BARS WITH WHICH THEY ARE LAPPED. THE LAP EMBEDMENT SHALL BE AS RECOMMENDED BY ACI 318 OR AS NOTED.
C6 BAR SPLICES
SPLICES OF REINFORCING STEEL BAR SHALL BE IN ACCORDANCE WITH SCHEDULE SHOWN ON CONCRETE DETAILS AND ACI 318 AND SHALL BE CLASS B UNLESS OTHERWISE NOTED. THE LENGTH OF LAP SPLICE OF BARS OF DIFFERENT DIAMETER SHALL BE BASED ON THE SMALLER DIAMETER. BAR SPLICES MAY ALSO BE MADE BY WELDING IN ACCORDANCE WITH AWS SPEC D 1.4 IF APPROVED BY THE ENGINEER.
C7 RESTRICTED BAR ANCHORAGE
IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.
C8 STANDARD HOOKS
BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
C9 CHAMFERS
EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS. RE-ENTRANT CORNERS SHALL NOT HAVE FILLETS.

- C10 CAST-IN-PLACE CONCRETE ANCHORS
ANCHORS SHALL BE HEADED BOLTS OF ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1) WITH ASTM A563 HEAVY HEXAGONAL NUTS AND ASTM A36 PLATE WASHERS WITH MINIMUM SIZE CONFORMING TO TABLE 14-2 OF THE CURRENT AISC STEEL CONSTRUCTION MANUAL, UNLESS NOTED OTHERWISE. ALTERNATELY, ANCHORS SHALL BE THREADED AND NUTTED ROD CONFORMING TO ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1). ALL MATERIALS SHALL BE HOT DIP GALVANIZED.
C11 POST-INSTALLED ADHESIVE ANCHORS
ADHESIVE ANCHORS AND THEIR PROPERTIES SUCH AS DIAMETER, SPACING, EDGE DISTANCE, EMBEDMENT AND MATERIAL/FINISH SHALL CONFORM TO THE DETAILS IN THESE DRAWINGS. ADHESIVE SHALL BE HILTI HIT-HY 200 OR APPROVED EQUAL. THREADED ROD SHALL BE F1554 GRADE 55 (WITH SUPPLEMENT S1) HOT DIP GALVANIZED.
C12 INSTALLATION OF POST-INSTALLED ANCHORS
ALL ADHESIVE ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER'S DIRECTIONS. ALL HOLES SHALL BE HAMMER DRILLED WITH A CARBIDE BIT.
C13 SPECIAL WEATHER CONCRETING
FOR SPECIAL WEATHER CONCRETING (HOT & COLD CONCRETING) ADHERE TO REPORTS OF ACI COMMITTEE 305, "HOT WEATHER CONCRETING", AND ACI 306, "COLD WEATHER CONCRETING."
C14 CURING
CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 308.1.
C15 CONSTRUCTION JOINTS
LOCATION OF CONSTRUCTION JOINTS SHALL HAVE THE APPROVAL OF THE ENGINEER. CONSTRUCTION JOINTS SHALL BE DETAILED AS SHOWN ON THE DRAWINGS. UNLESS A METAL KEYED FORM IS USED, ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED TO A MINIMUM 1/4" AMPLITUDE. ALL JOINT SURFACES SHALL BE THOROUGHLY CLEANED TO REMOVE GREASE, LOOSE CONCRETE, AND LAITANCE OR OTHER BOND REDUCING MATERIAL. SURFACES SHALL BE SATURATED SURFACE DRY PRIOR TO PLACING FRESH CONCRETE.
C16 CRACK CONTROL JOINTS
CCJ INDICATES A 1/8" WIDE CONTINUOUS SAW CUT CRACK CONTROL JOINT FILLED WITH ELASTOMERIC JOINT SEALANT. VERTICAL CONTROL JOINTS SHALL BE FORMED WITH 3/4 INCH CHAMFER STRIP AND FILLED WITH ELASTOMERIC JOINT SEALANT. THE ELASTOMERIC JOINT SEALANT SHALL CONFORM TO ASTM C920, TYPE S OR M, GRADE NS, CLASS 50.

S. STEEL

- S1 CODES AND SPECIFICATIONS
STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE 14TH EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION.
S2 MATERIAL
STRUCTURAL BARS, PLATES, ANGLES, AND CHANNELS INDICATED ON THE DRAWINGS SHALL BE STEEL MEETING ASTM A36 SPECIFICATIONS. ROLLED W SECTIONS SHALL BE STEEL MEETING ASTM A572 GR50 OR ASTM A992. HOLLOW STRUCTURAL SECTIONS SHALL BE STEEL MEETING ASTM A500 GRADE B. BOLTS SHALL BE STEEL MEETING ASTM A325. HEAVY HEXAGONAL NUTS SHALL BE STEEL MEETING ASTM A563. WASHERS SHALL BE STEEL MEETING ASTM F436 UNLESS OTHERWISE NOTED.
S3 WELDING
WELDING SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE - STEEL". ELECTRODE SHALL BE E70XX GROUP, LOW HYDROGEN. LIGHT GAUGE STEEL WELDING SHALL CONFORM TO AWS D1.3. WELDING SHALL BE CONDUCTED BY WELDERS CERTIFIED BY THE AWS.
S4 HOT-DIP GALVANIZING
UNLESS OTHERWISE NOTED, ALL STEEL FABRICATIONS SHALL BE HOT-DIPPED GALVANIZED. STEEL SHALL BE GALVANIZED AFTER FABRICATION.

H. FOUNDATIONS

- H1 SUBGRADE AND STRUCTURAL FILL
SEE CIVIL DRAWINGS AND GEOTECHNICAL INVESTIGATION FOR SUBGRADE PREPARATION.

K. SUBMITTALS

- K1 STRUCTURAL STEEL AND METAL FABRICATIONS
SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL STEEL AND METAL FABRICATIONS.
K2 REINFORCING STEEL
SUBMIT SHOP DRAWINGS FOR REINFORCING STEEL FABRICATION.
K3 CONCRETE
SUBMIT CONCRETE MIX DESIGN AND CONCRETE CYLINDER TEST RESULTS IN ACCORDANCE WITH ACI 318 CHAPTER 5.
K4 ENGINEERED BUILDINGS
SUBMIT SHOP DRAWINGS THAT ARE SIGNED AND STAMPED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT LOCATION. SHOP DRAWINGS SHALL INCLUDE ANCHOR BOLT PLAN AND REACTIONS AT EACH LOCATION FOR THE LOAD COMBINATIONS IN THE CBC. SEE NOTES M ABOVE AND ARCHITECTURAL DRAWINGS FOR MORE DETAILS.

I. STRUCTURAL TESTS AND SPECIAL INSPECTIONS

- I1 STRUCTURAL TESTS AND SPECIAL INSPECTIONS
SPECIAL INSPECTION SHALL CONFORM TO SECTION 1705 OF THE 2016 CALIFORNIA BUILDING CODE. LABORATORIES FOR MATERIAL TESTING AND/OR AGENCIES FOR TESTING SERVICES SHALL BE SELECTED BY, ENGAGED BY, AND RESPONSIBLE TO THE OWNER / OWNERS REPRESENTATIVE.

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER CBC CHAPTER 17. THESE INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR.

Table with 2 columns: ITEM, DESCRIPTION. Contains inspection items such as 'INSPECTION OF REINFORCING STEEL, INCLUDING PLACEMENT', 'INSPECTION OF ANCHORS CAST IN CONCRETE', 'INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS', etc.

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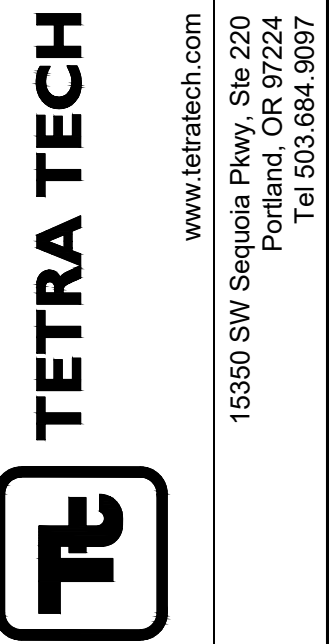


Table with columns: BY, DATE, DESCRIPTION, MARK

Table with columns: BY, DATE, DESCRIPTION, MARK

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT SLEEPY HOLLOW STEELHEAD REARING FACILITY RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE STRUCTURAL GENERAL NOTES

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-001

Bar Measures 1 inch

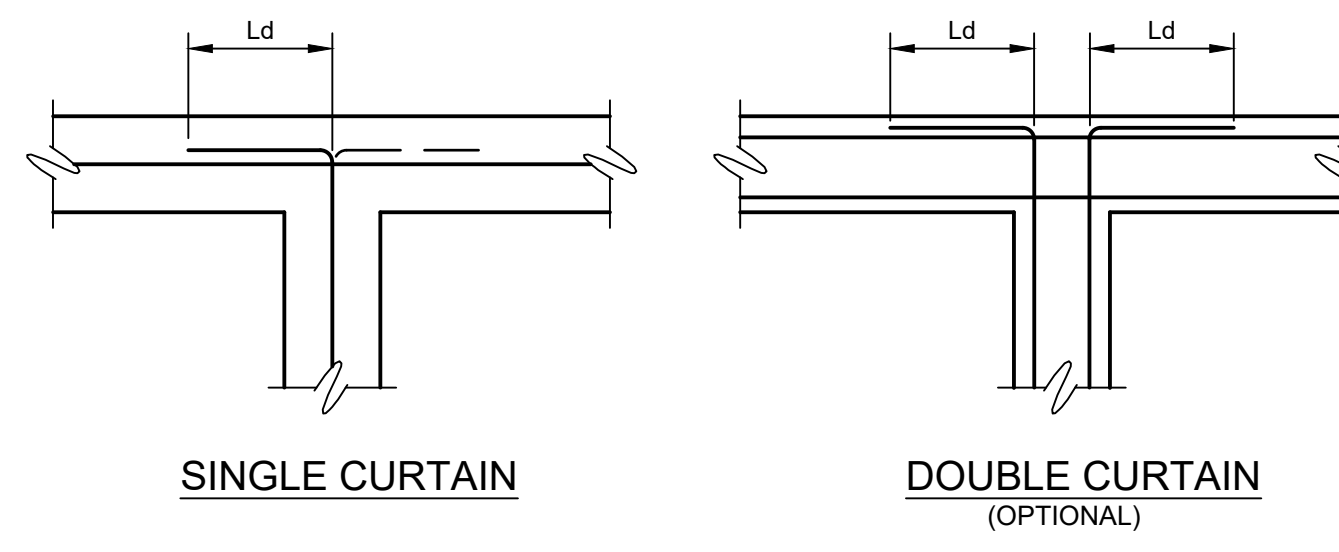
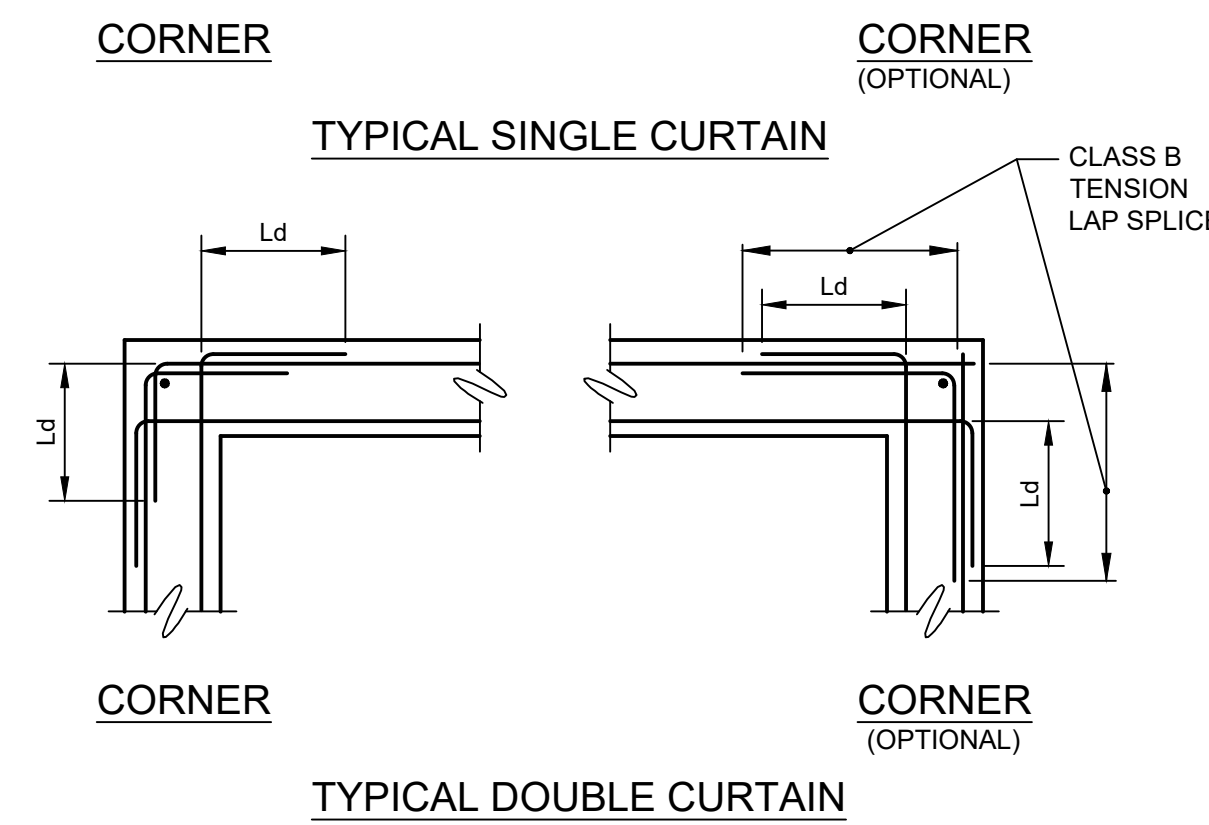
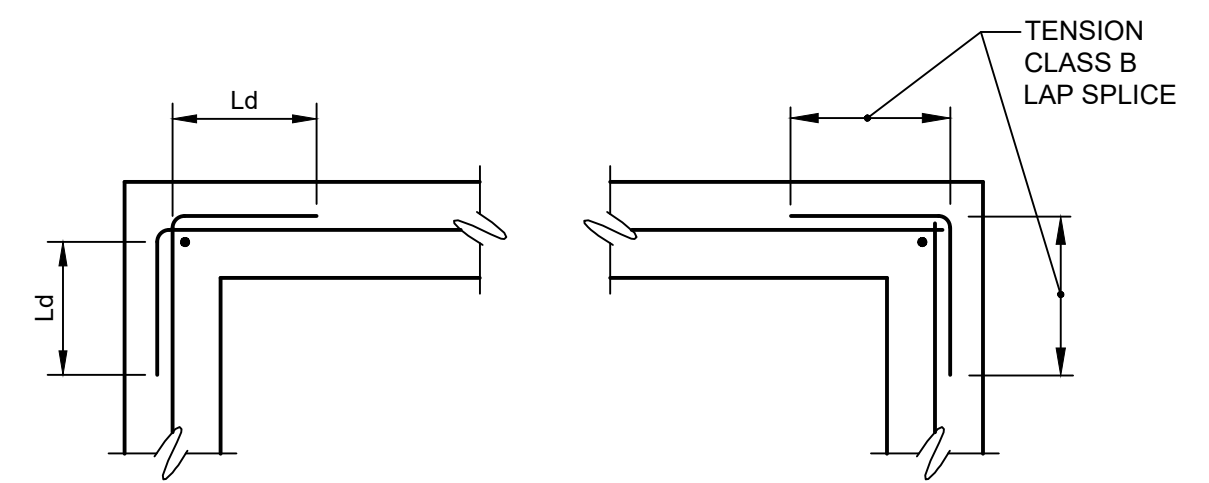
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TENSION DEVELOPMENT AND SPLICE LENGTHS							
BAR SIZE	Ld		CLASS B TENSION LAP		STD 90° HOOK		
	TOP BARS (NOTE 2)	OTHER BARS	TOP BARS (NOTE 2)	OTHER BARS	Ldh	HOOK LENGTH	BEND DIA
#3	18	14	23	19	7	5	3
#4	24	18	31	25	9	6	3
#5	30	23	38	31	12	8	4
#6	35	27	46	37	14	9	5
#7	51	40	67	54	16	11	6
#8	59	45	76	62	18	12	6
#9	66	51	86	70	21	14	10
#10	74	57	96	79	23	16	11
#11	82	64	107	87	26	17	12

- NOTES**
- FOR GRADE 60 UNCOATED BARS AND NORMAL WEIGHT CONCRETE, $f'c = 4500$ PSI.
 - "TOP BARS" ARE HORIZONTAL REINFORCING BARS WHERE 12" OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.

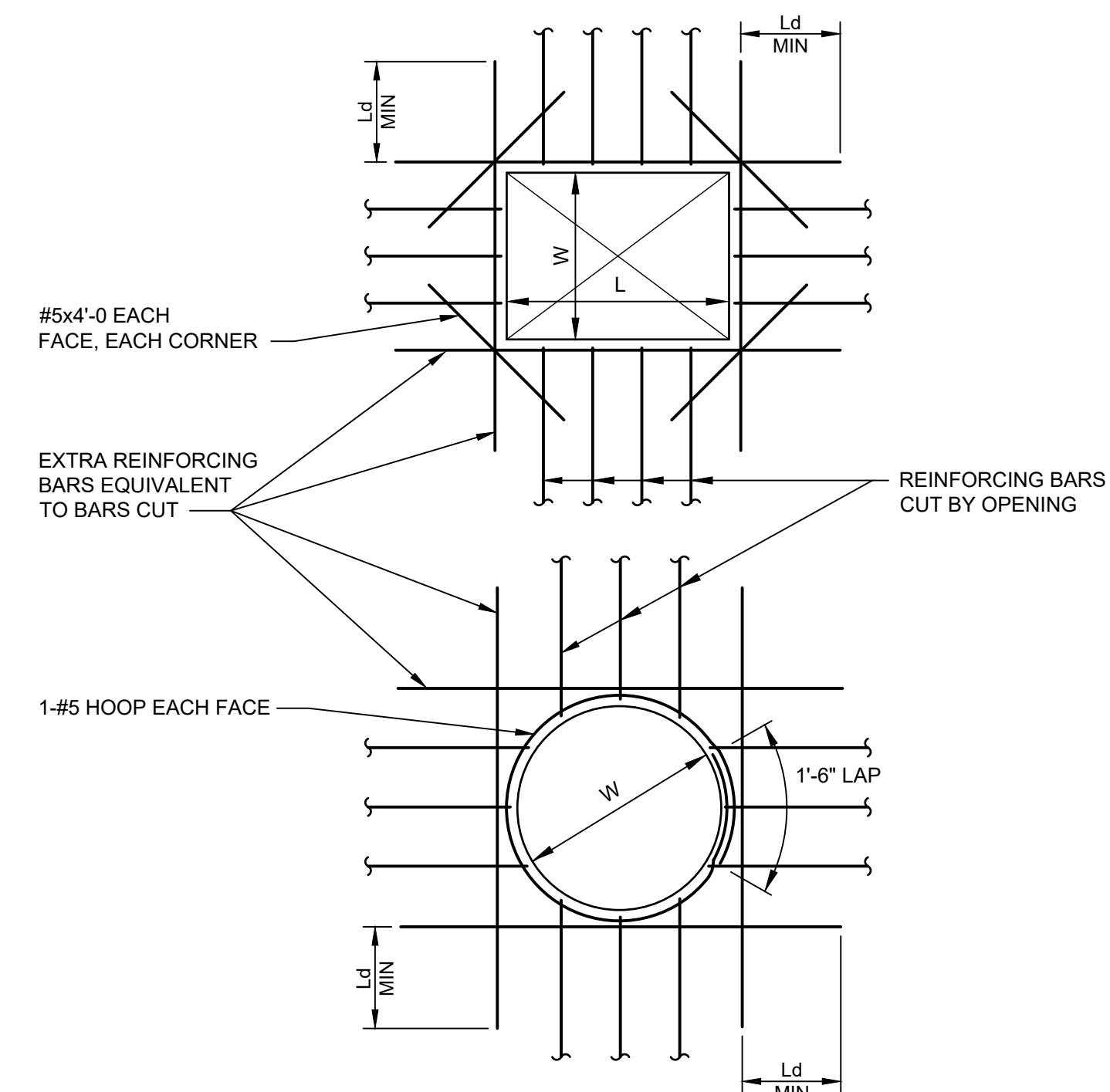
REINFORCING DEVELOPMENT AND LAP SPLICE LENGTHS

1 DETAIL



REINFORCING AT WALL INTERSECTIONS

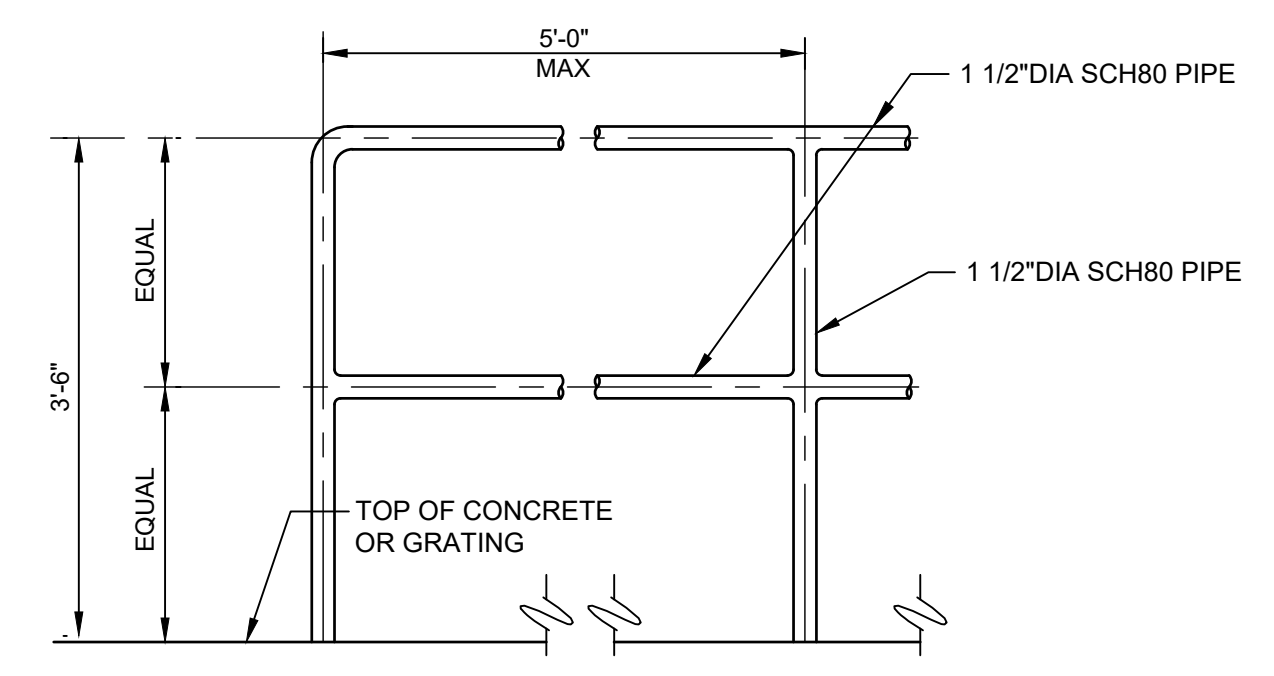
2 DETAIL



- NOTES:**
- REINFORCEMENT IN OTHER DIRECTION SHALL BE TREATED IN A SIMILAR MANNER.
 - "W" AND "L" = DIMENSION OF OPENING. FOR CIRCULAR OPENINGS, "W" = DIAMETER.
 - ALL OPENINGS IN WALLS AND SLABS LARGER THAN OR EQUAL TO 10" IN ANY ONE DIRECTION SHALL CONFORM TO DETAILS.
 - OPENING DETAILS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE.
 - THE NUMBER OF ADDITIONAL BARS AT EACH SIDE OF THE OPENING EQUALS HALF THE NUMBER OF TYPICAL REINFORCING BARS THAT ARE INTERRUPTED BY THE OPENING.

REINFORCING AT WALL AND SLAB OPENINGS

3 DETAIL



4 TYPICAL GUARDRAIL

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REGISTERED PROFESSIONAL ENGINEER
RYAN W. L. TAM, M.A.S.
Exp. 3-31-20
CIVIL
STATE OF CALIFORNIA
5-17-18

MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
TYPICAL DETAILS

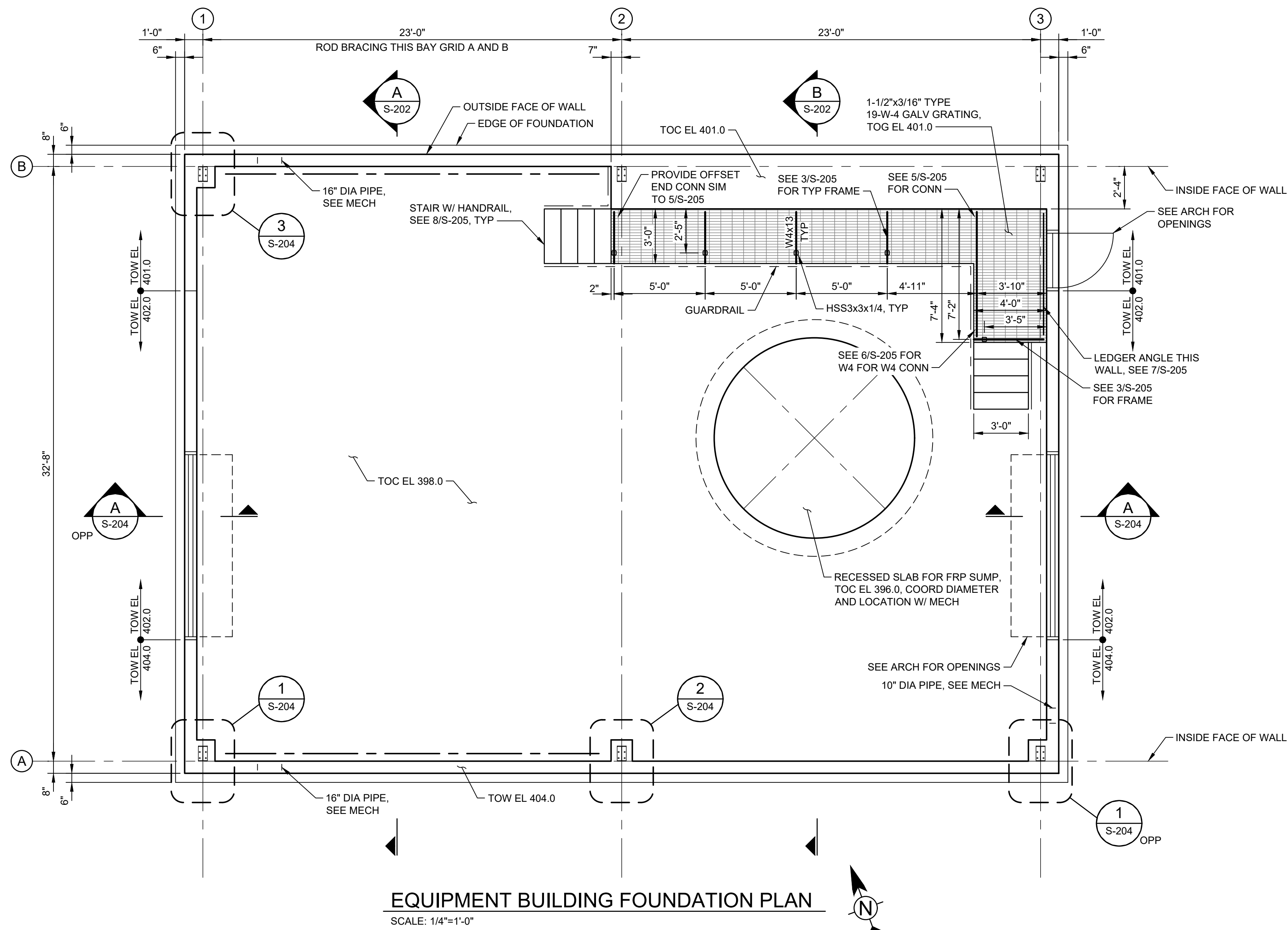
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S-002

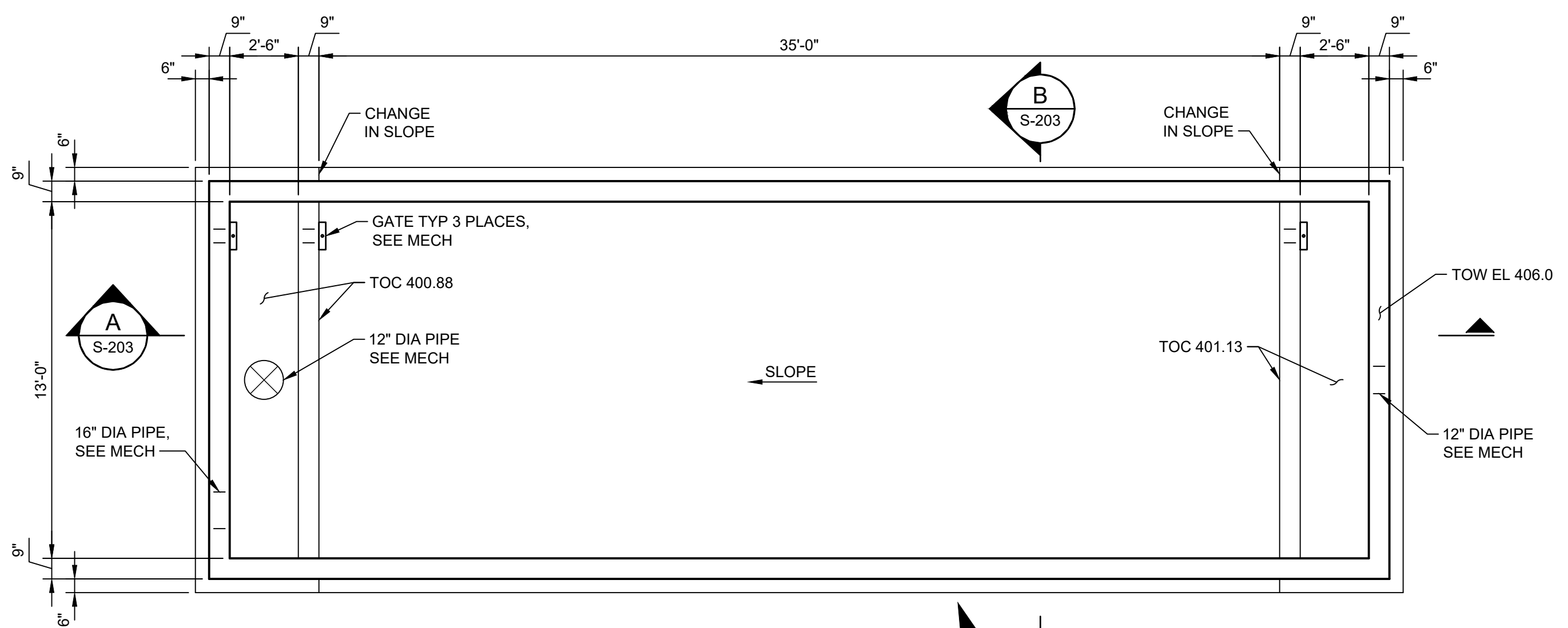
Bar Measures 1 inch

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EQUIPMENT BUILDING FOUNDATION PLAN
SCALE: 1/4"=1'-0"



SETTLING BASIN PLAN
SCALE: 1/4"=1'-0"

EQUIPMENT BUILDING NOTES

1. FRAME AND COLUMN SPACING TO BE DETERMINED BY BUILDING SUPPLIER. FOUNDATION SIZE AND REINFORCING TO BE FINALIZED UPON RECEIPT OF FINAL APPROVED METAL BUILDING DRAWINGS AND CALCULATIONS.
2. ANCHOR BOLT DIAMETER, LOCATION, SPACING, AND GRADE PER BUILDING SUPPLIER. ANCHOR BOLT EMBEDMENT TO BE DETERMINED BY THE ENGINEER OF RECORD ON UPON RECEIPT OF FINAL APPROVED METAL BUILDING DRAWINGS AND CALCULATIONS. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.

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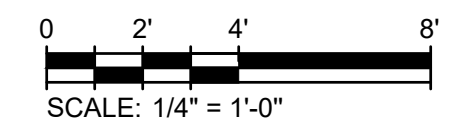
REGISTERED PROFESSIONAL ENGINEER
RYAN W. LILL T.A.M. No. 8262
Exp. 3-31-20
CIVIL
STATE OF CALIFORNIA
5-17-18

BY	DATE	DESCRIPTION

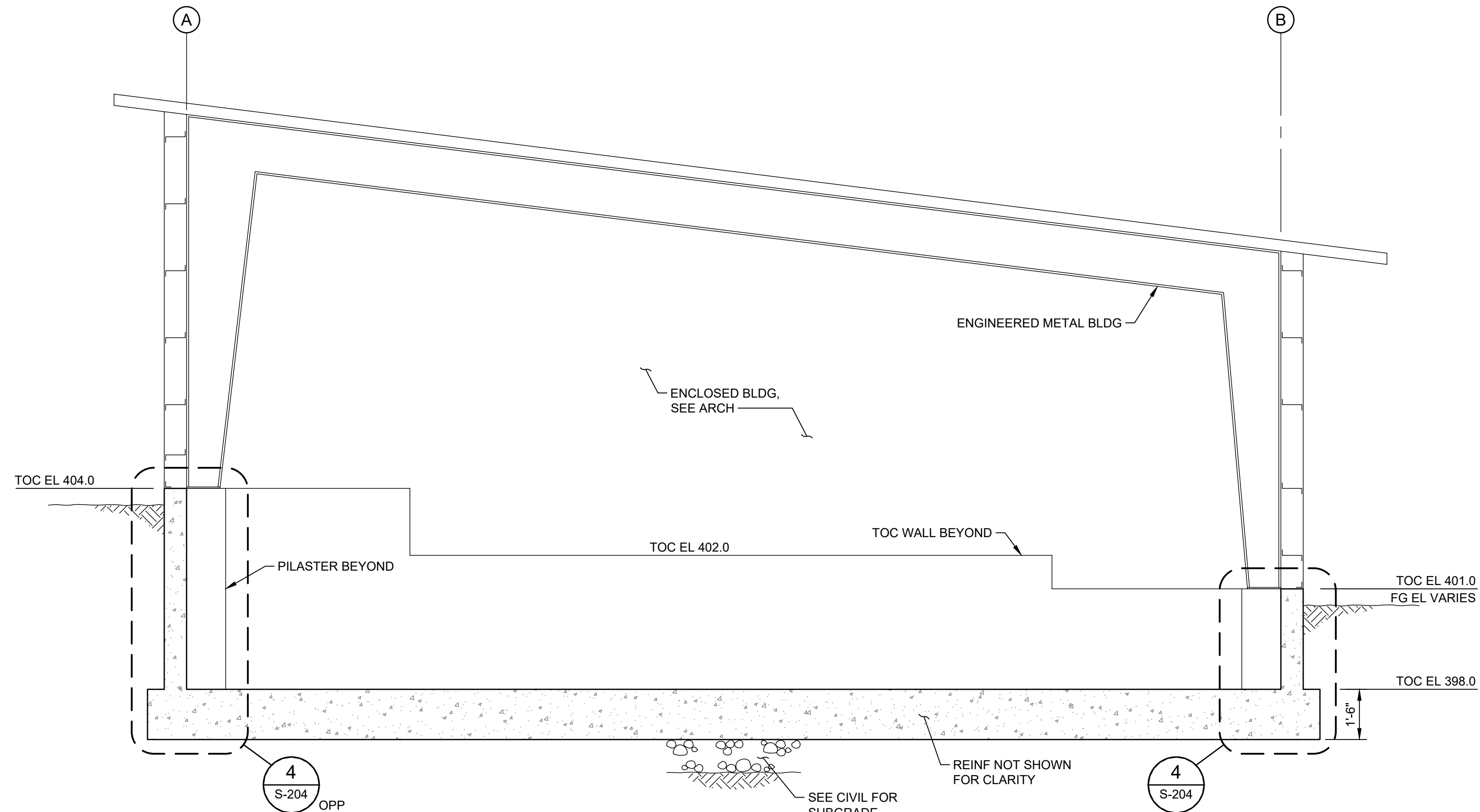
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**EQUIPMENT BUILDING &
SETTLING BASIN PLAN**

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

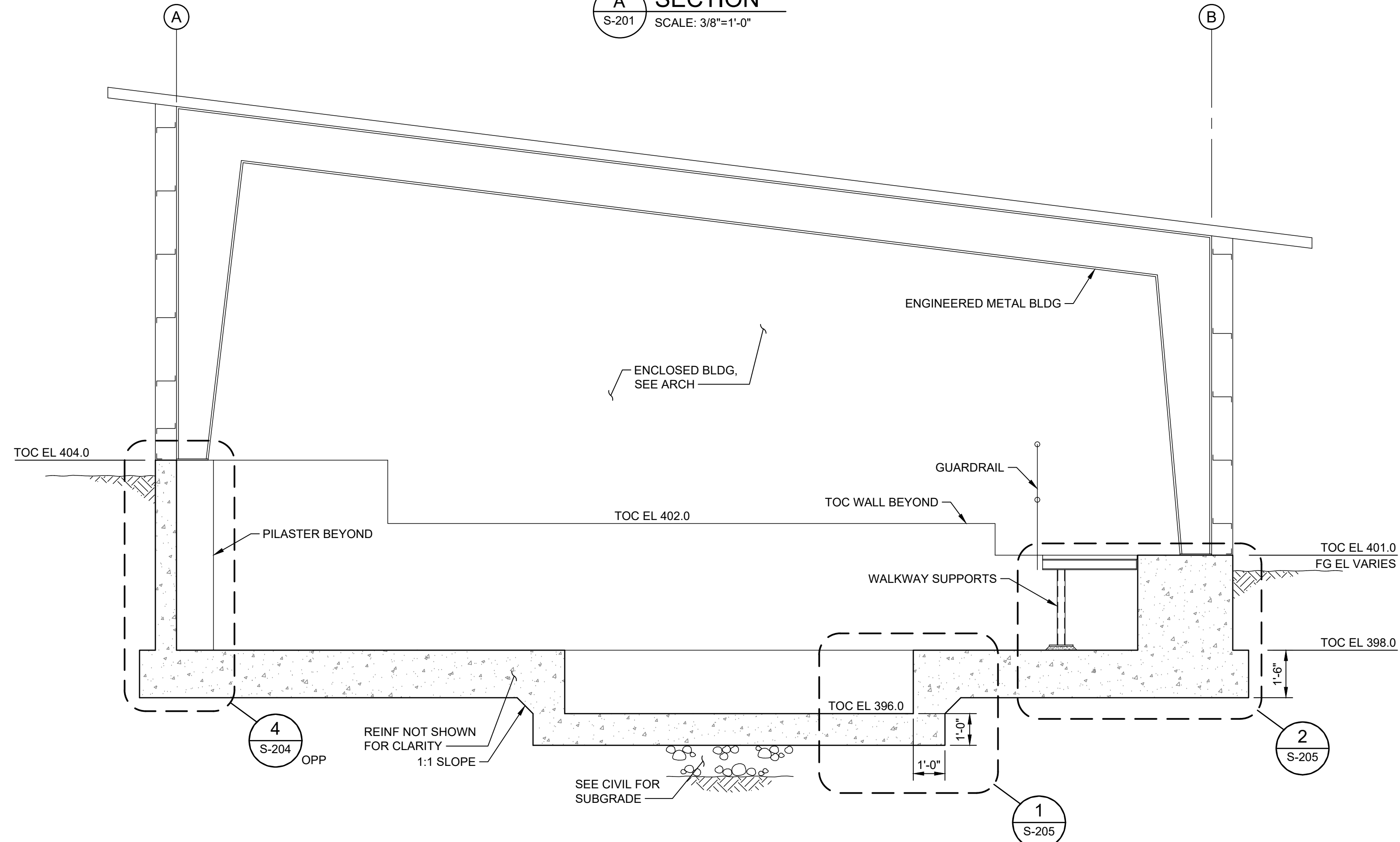
S-201



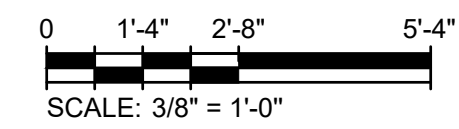
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A SECTION
S-201 SCALE: 3/8"=1'-0"



B SECTION
S-201 SCALE: 3/8"=1'-0"



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MARK	DATE	DESCRIPTION

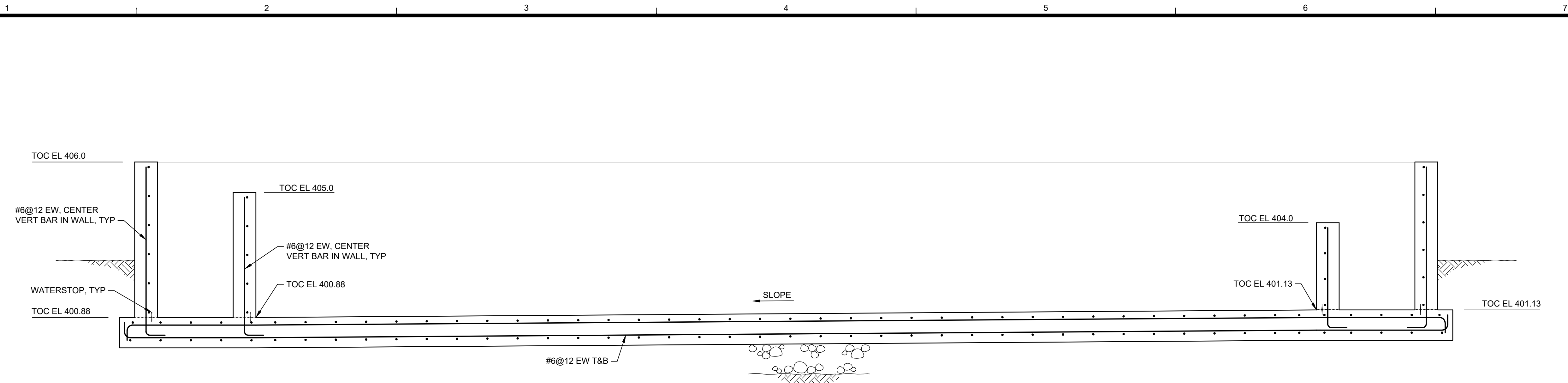
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
SECTIONS**

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

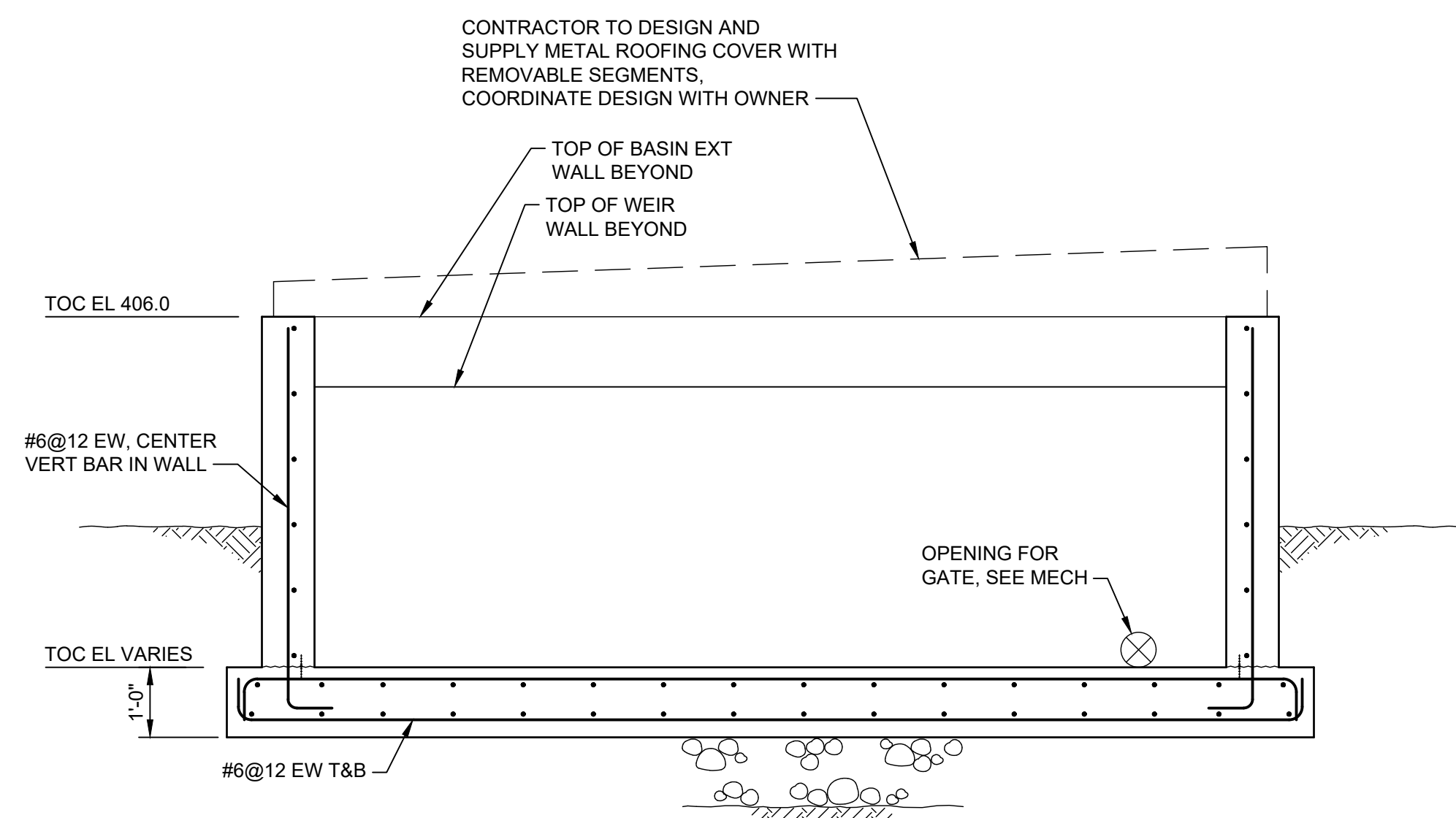
S-202

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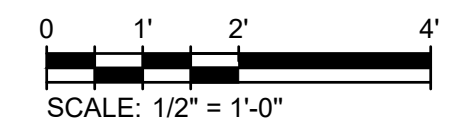
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A SECTION
S-201 SCALE: 1/2"=1'-0"



B SECTION
S-201 SCALE: 1/2"=1'-0"



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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**SETTLING BASIN
SECTIONS**

Project No.: 135-124674-15001
Designed By: RWM
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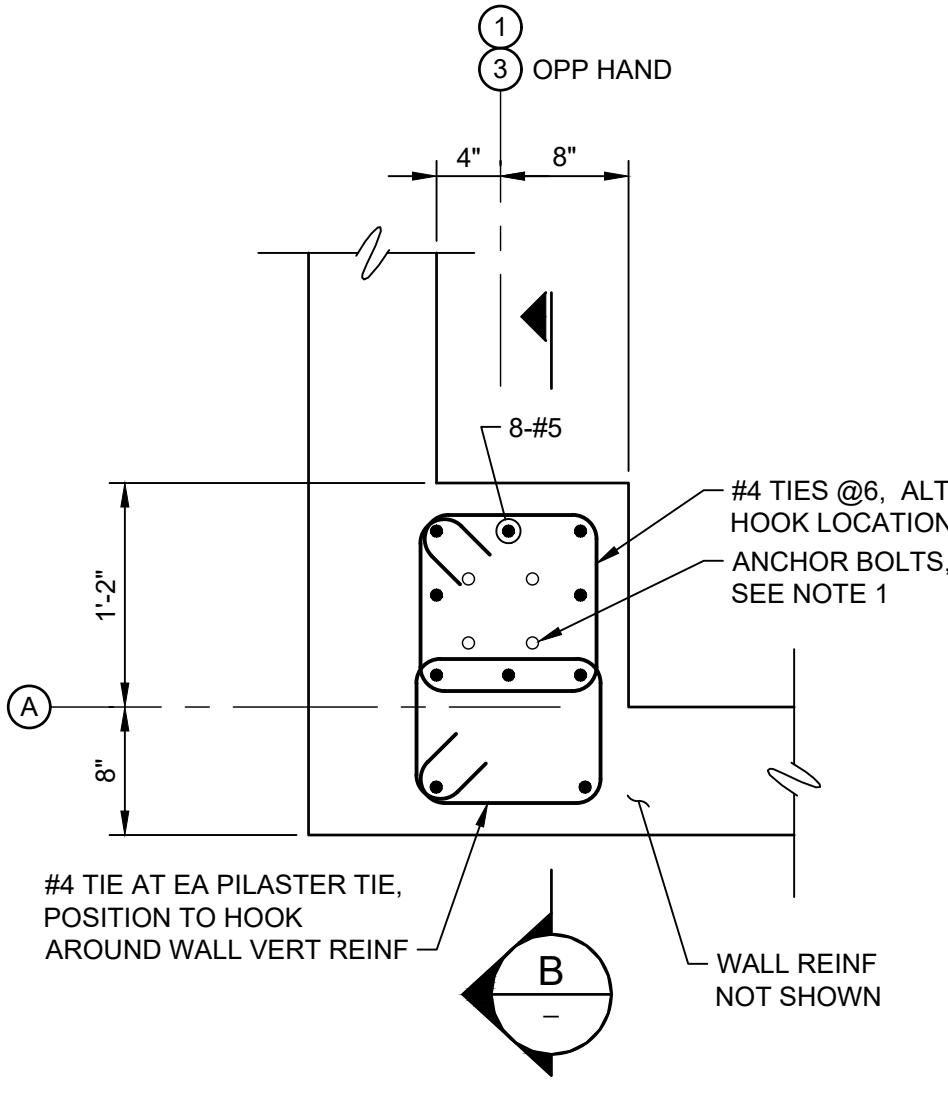
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Bar Measures 1 inch

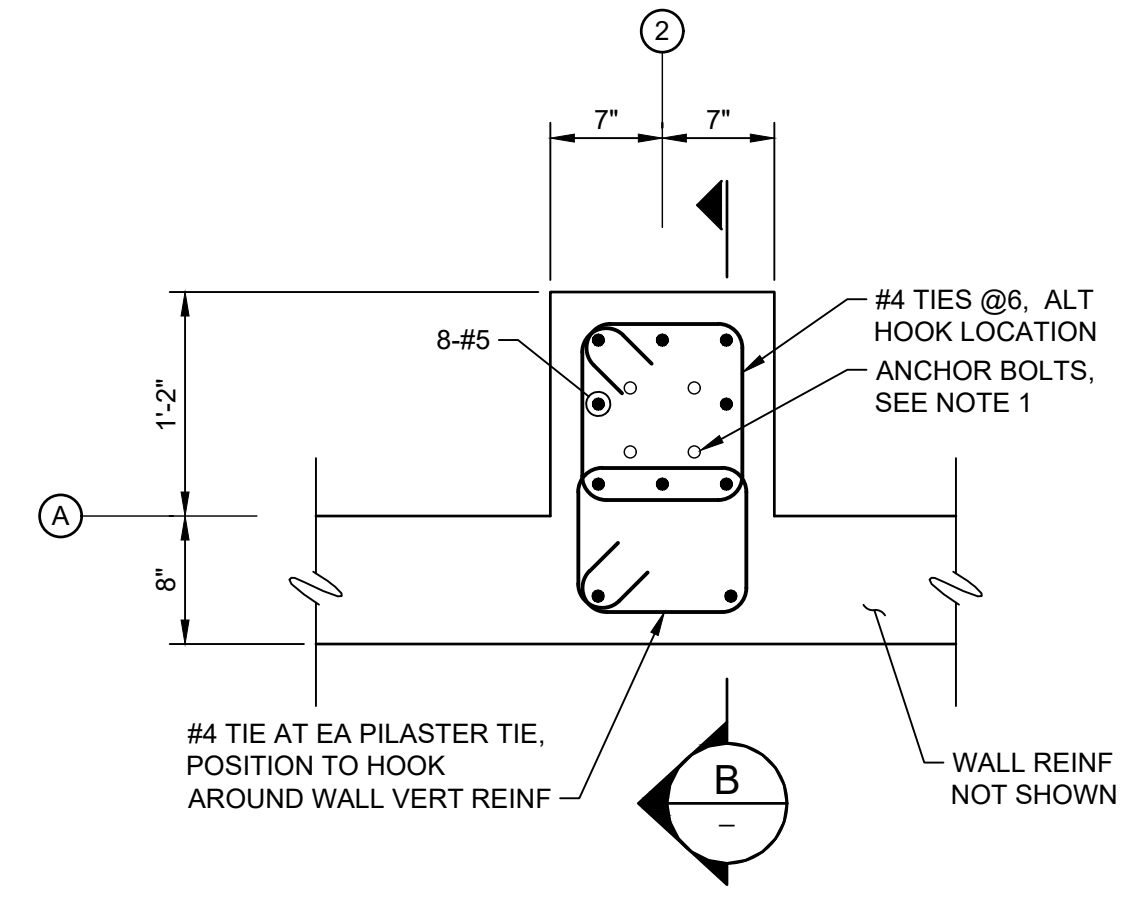
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NOTES

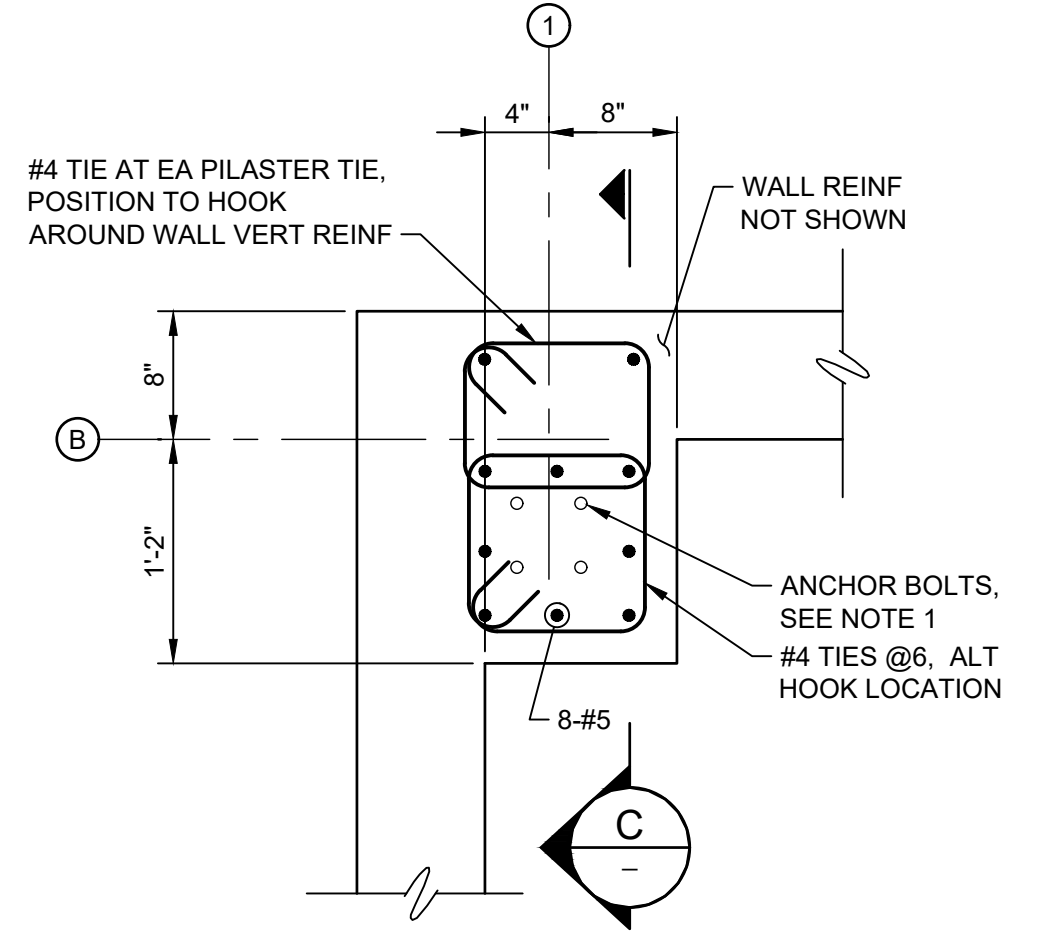
1. SEE NOTE 2 ON S-201 FOR ANCHOR BOLT DETAILS.



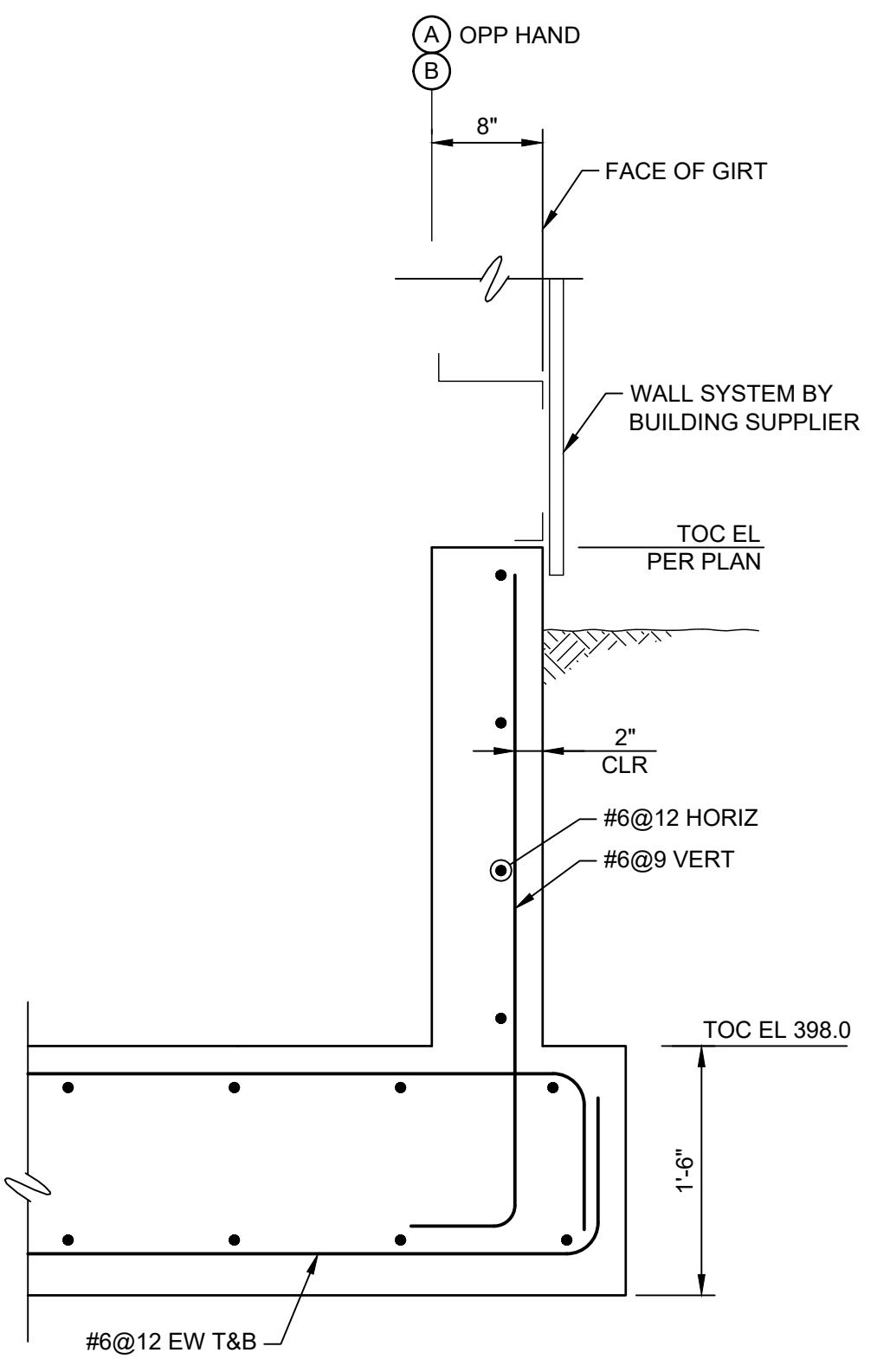
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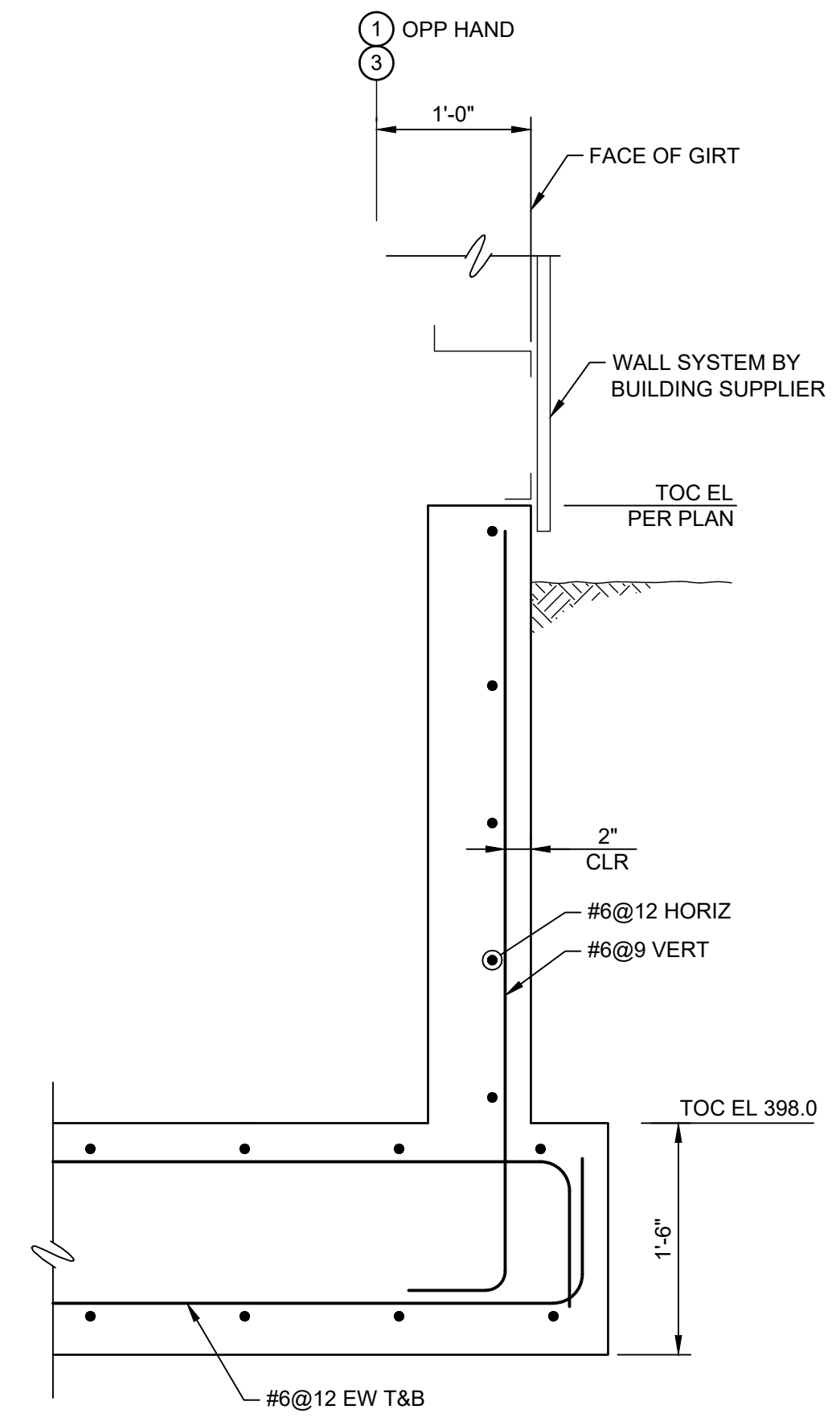
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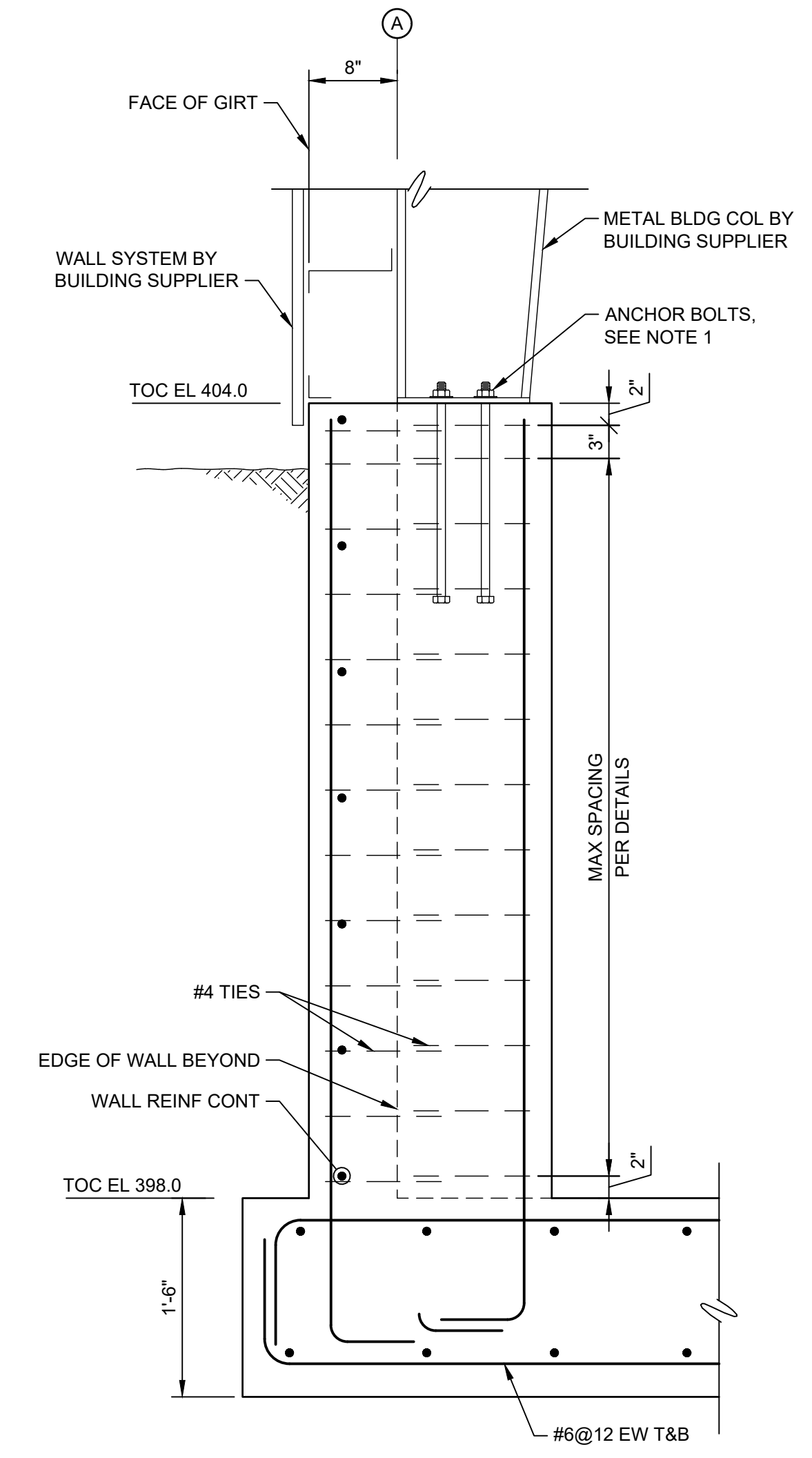
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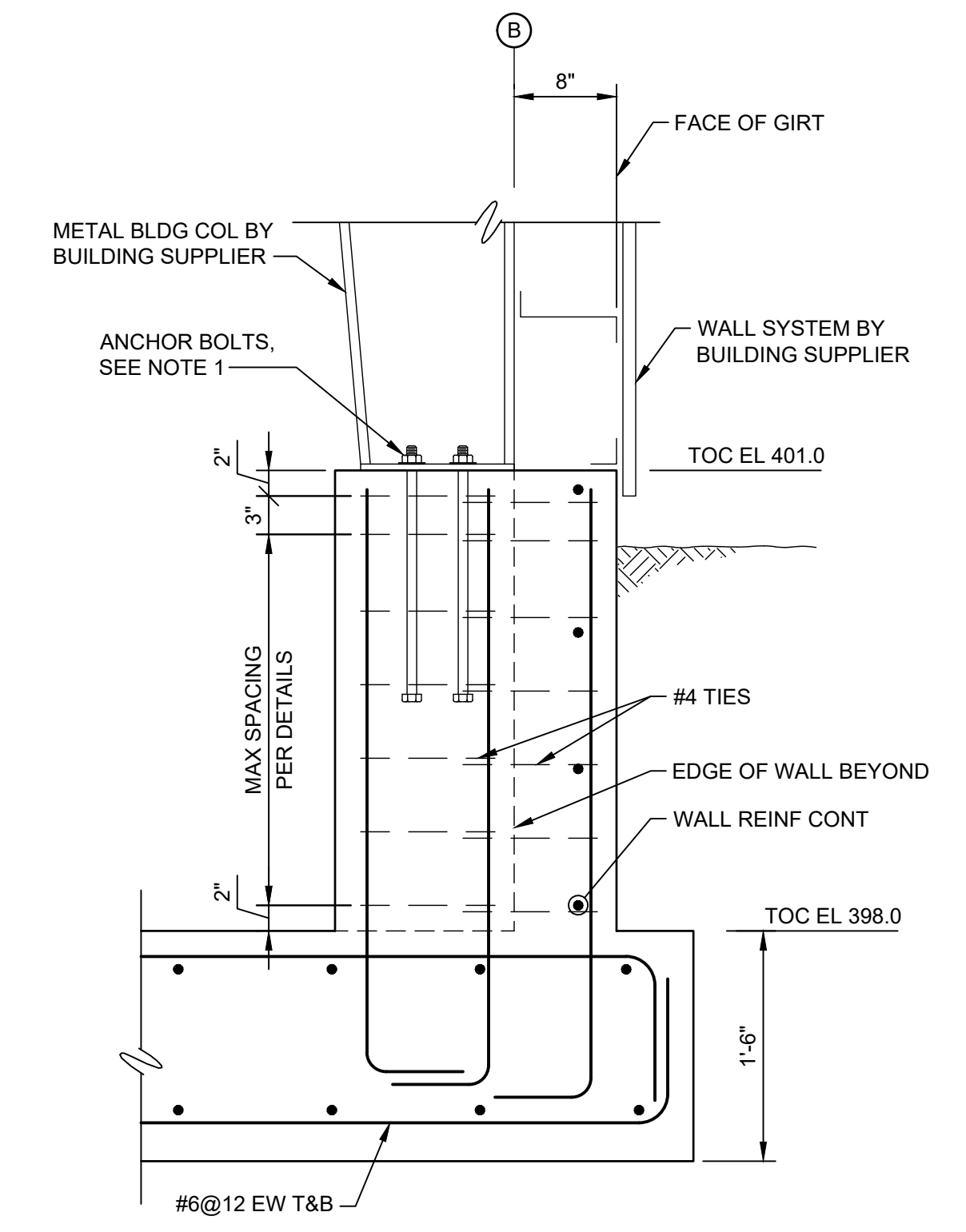
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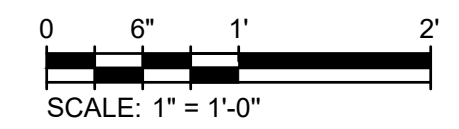
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S-201 SCALE: 1"=1'-0"



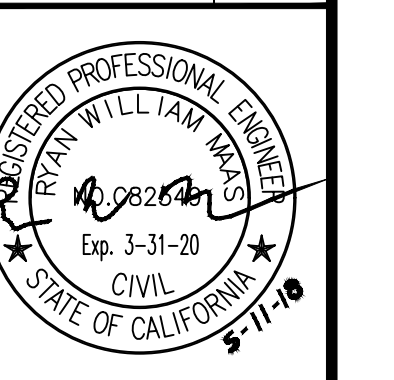
B SECTION
SCALE: 1"=1'-0"



C SECTION
SCALE: 1"=1'-0"



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MONTEREY PENNSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING SECTIONS AND DETAILS

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
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S-204

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F
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A

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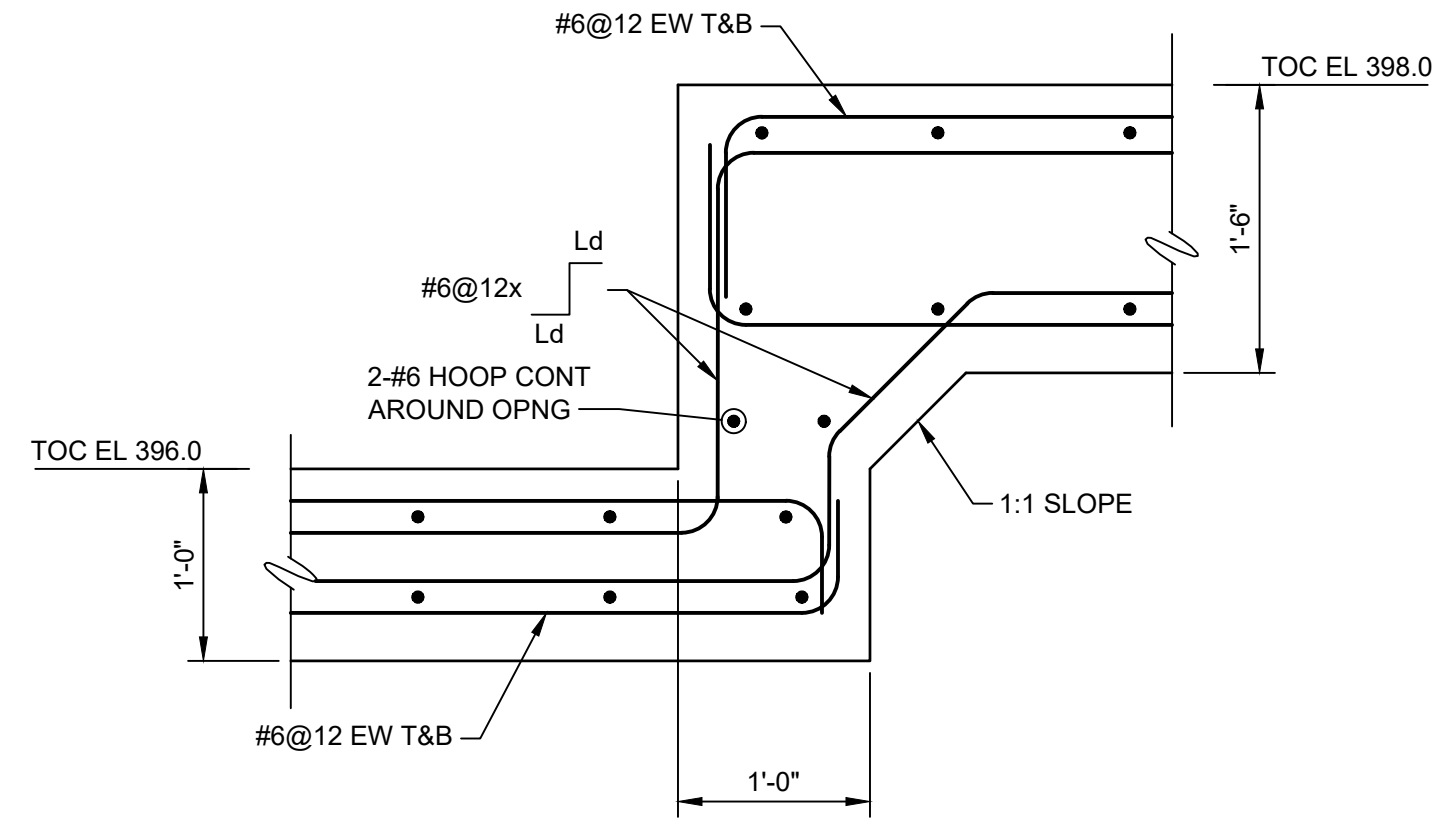
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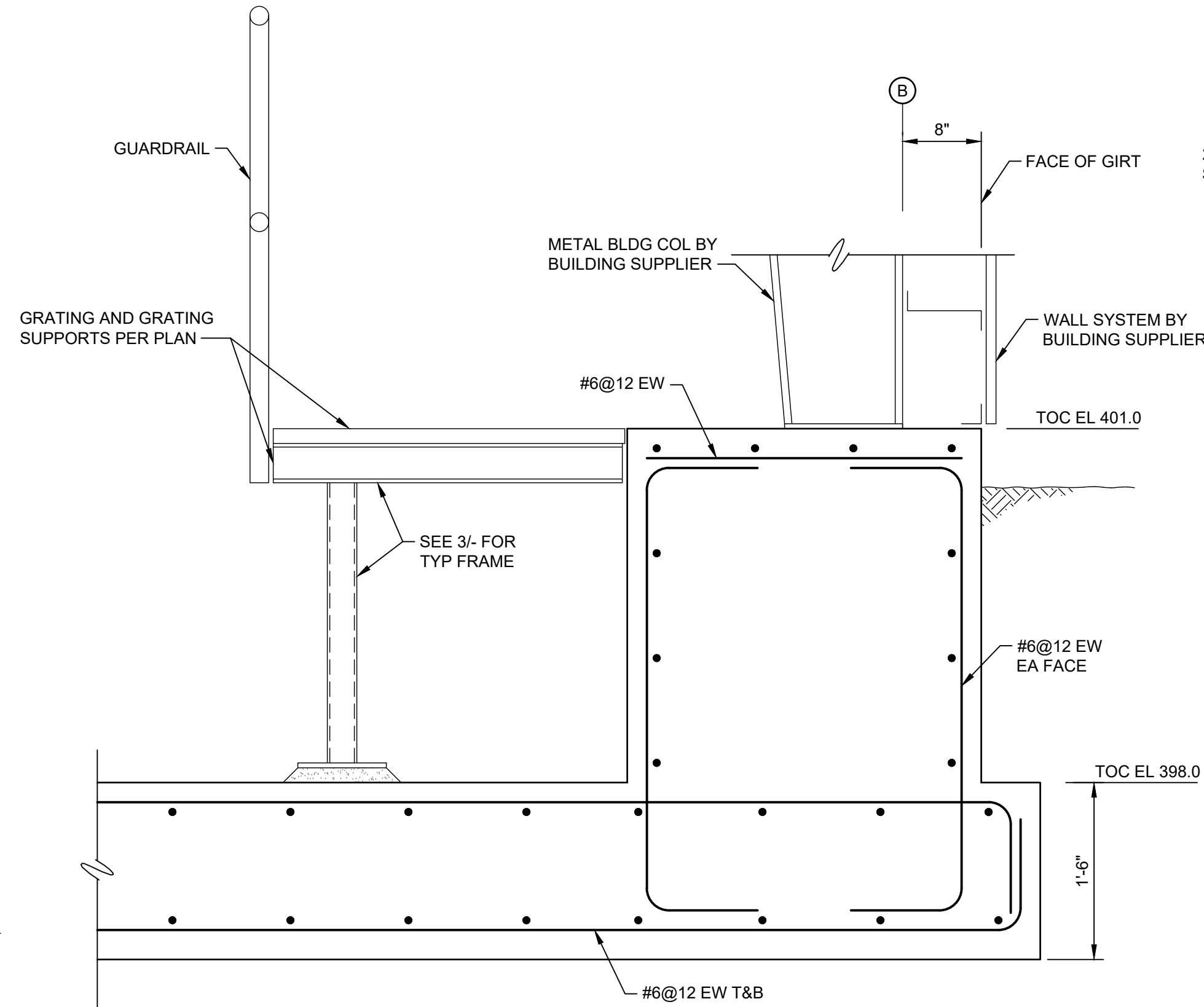
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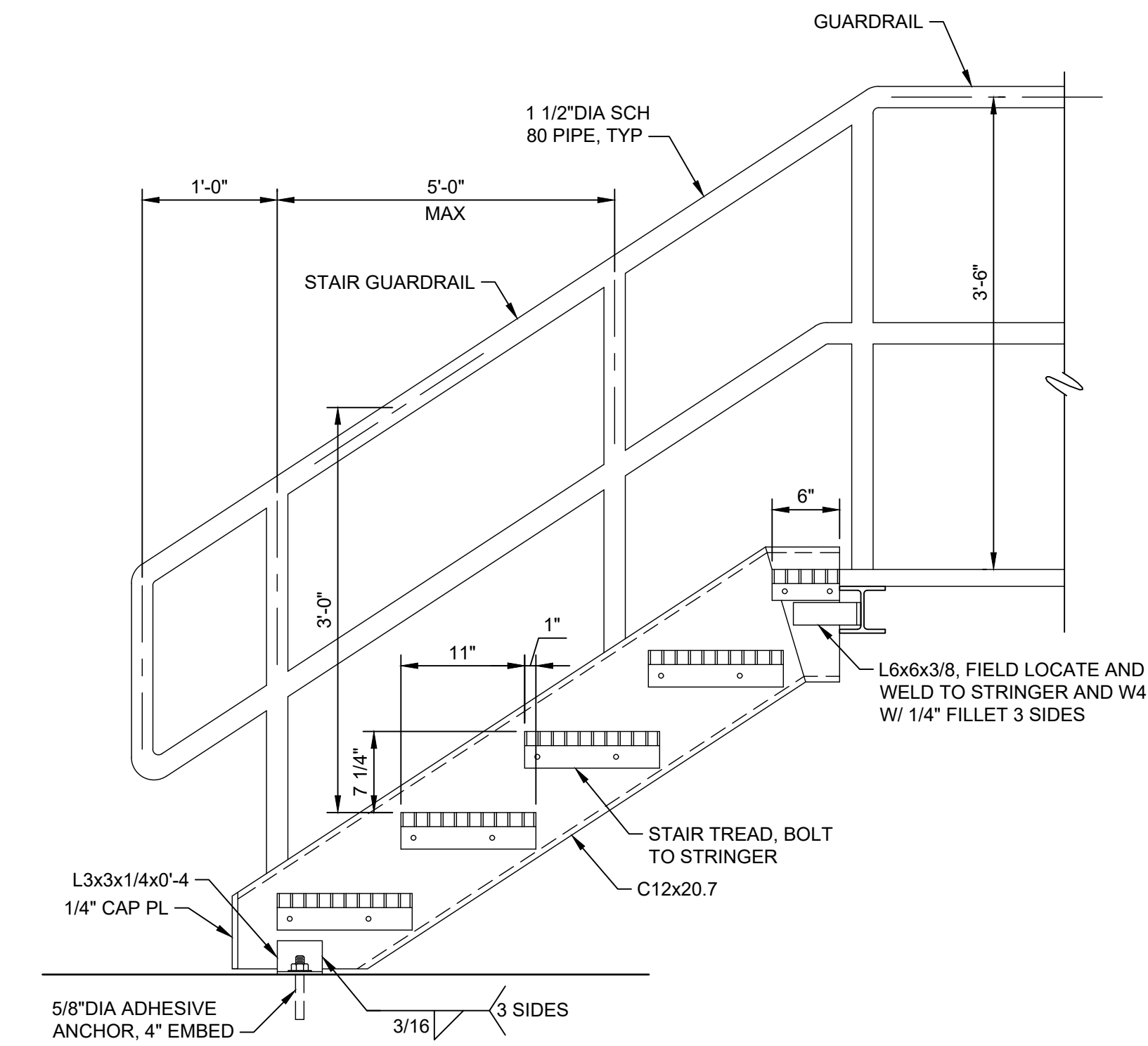
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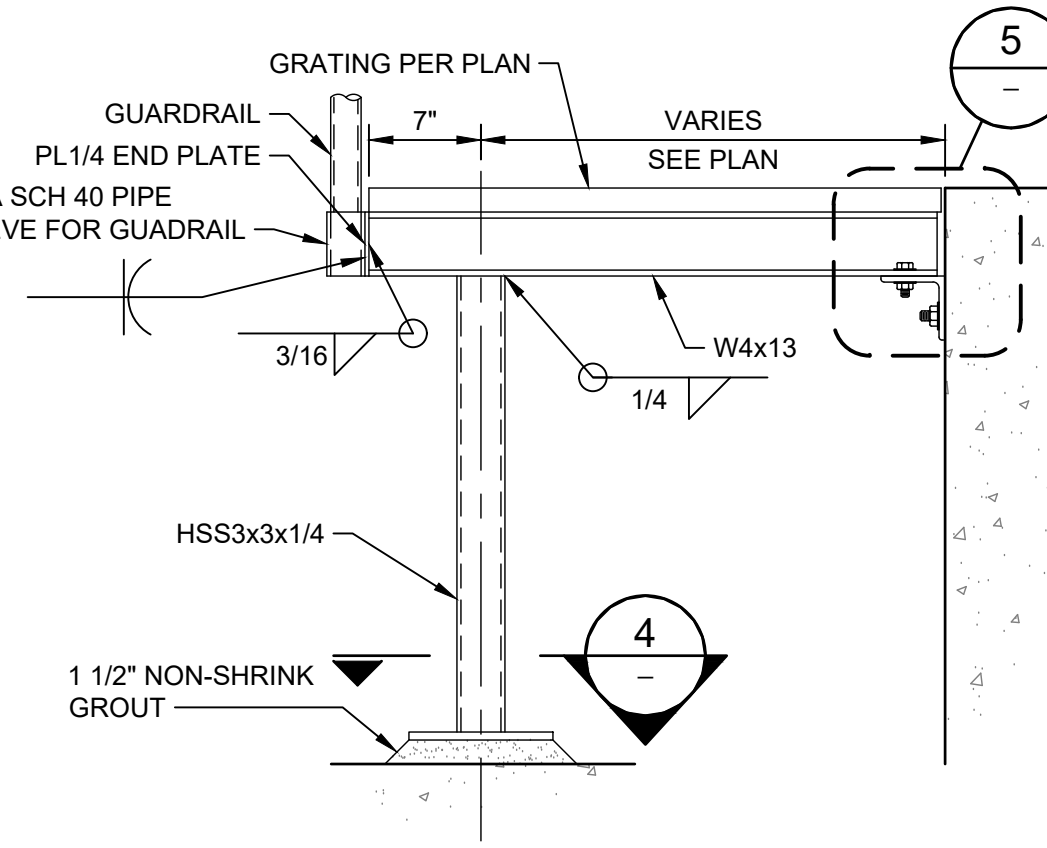
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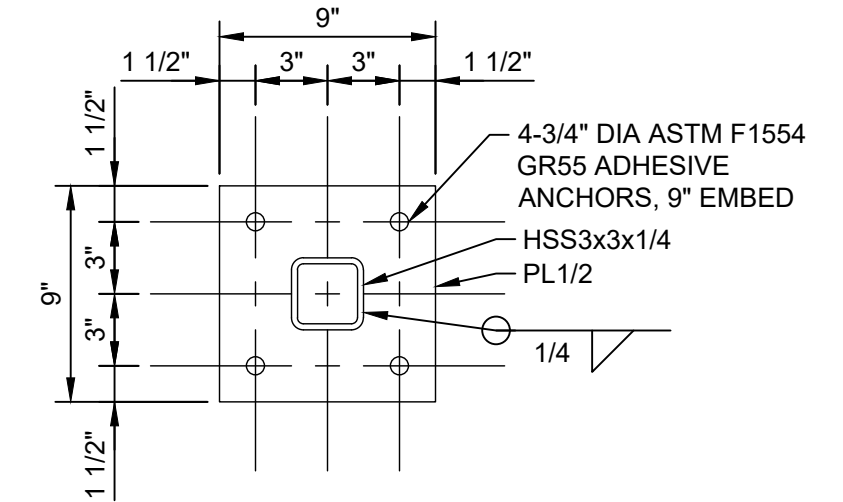
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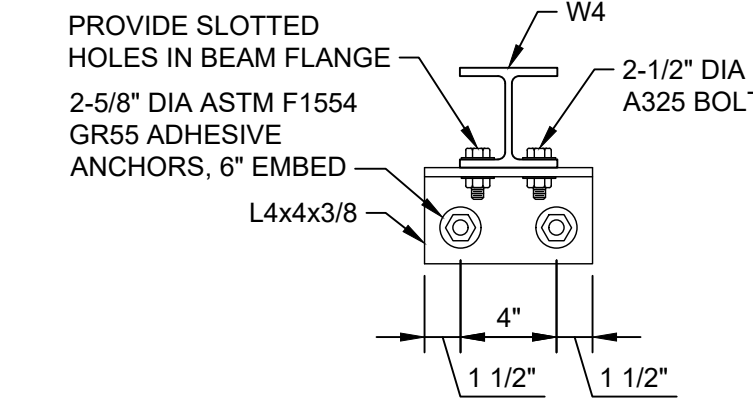
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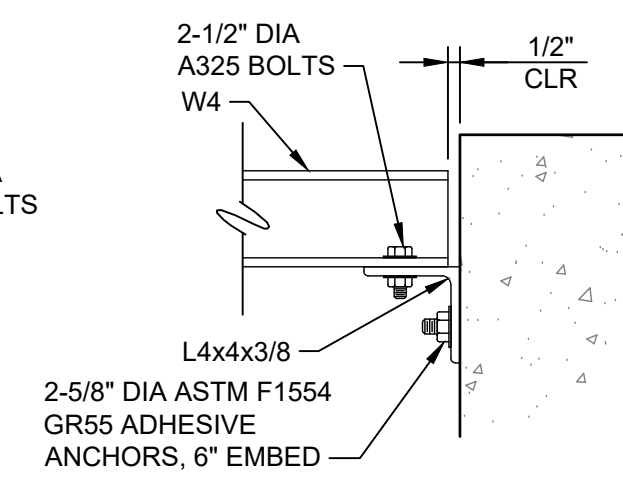
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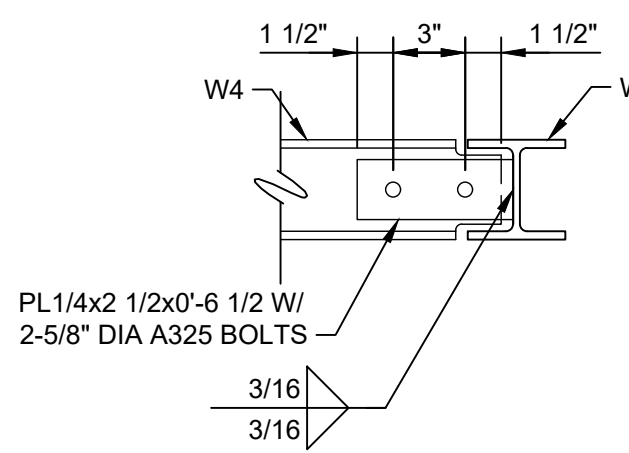
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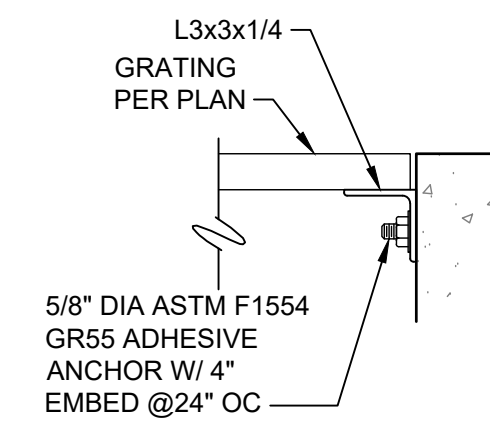
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ELEVATION

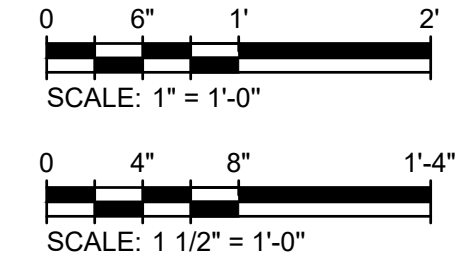


6 DETAIL
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7 DETAIL
S-201 SCALE: 1 1/2"=1'-0"

5 DETAIL
SCALE: 1 1/2"=1'-0"



BY	DATE	DESCRIPTION

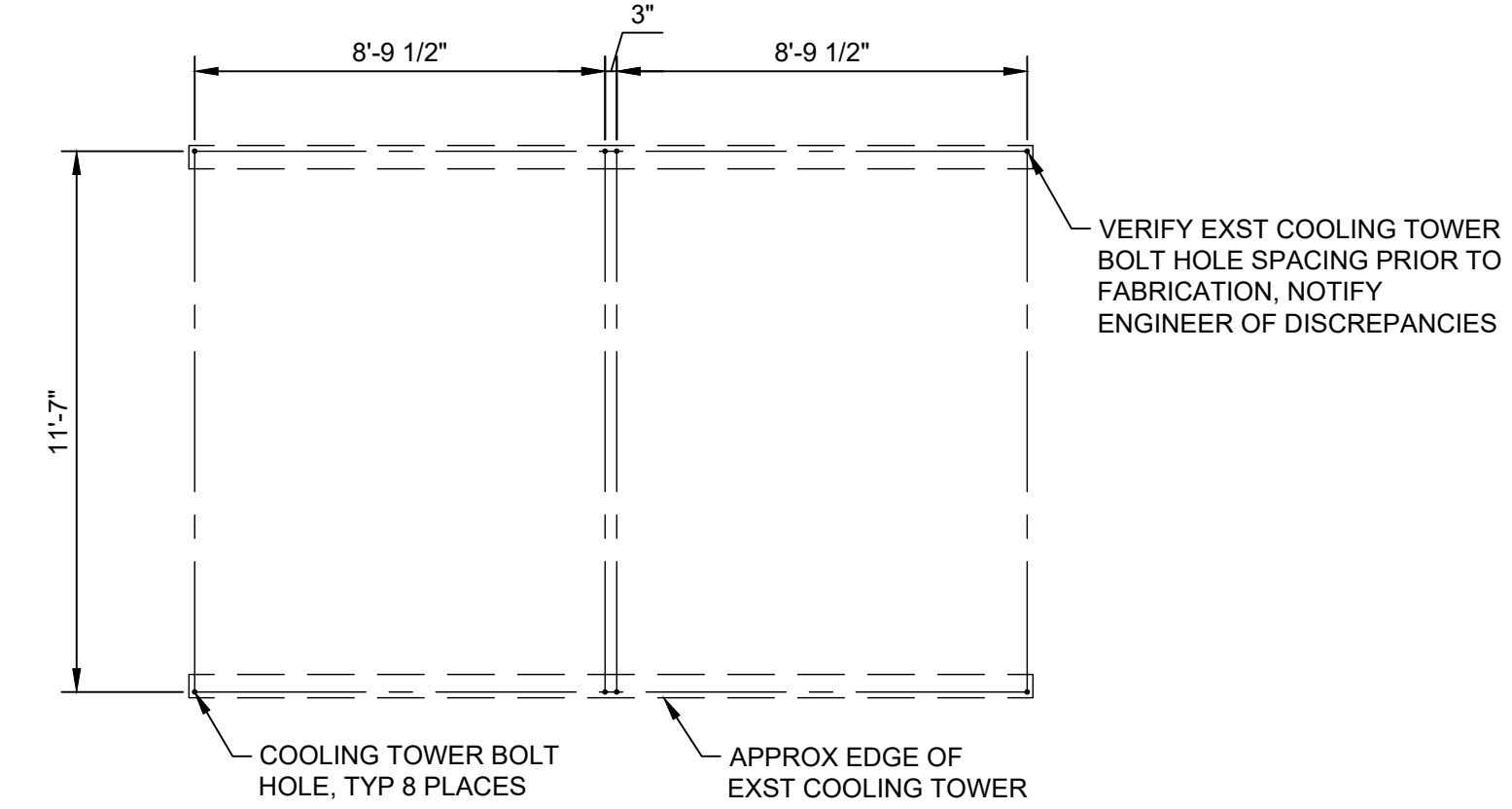
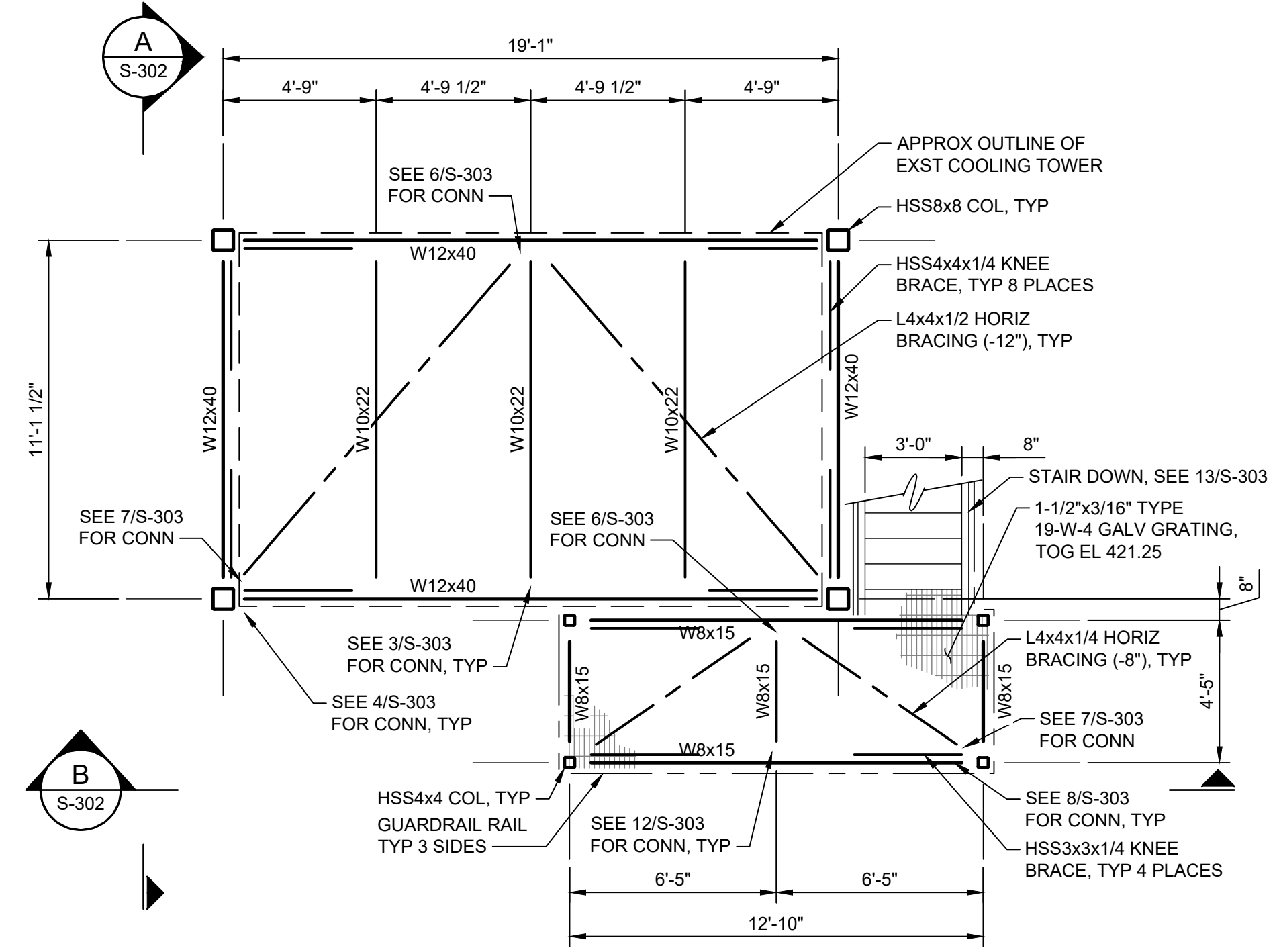
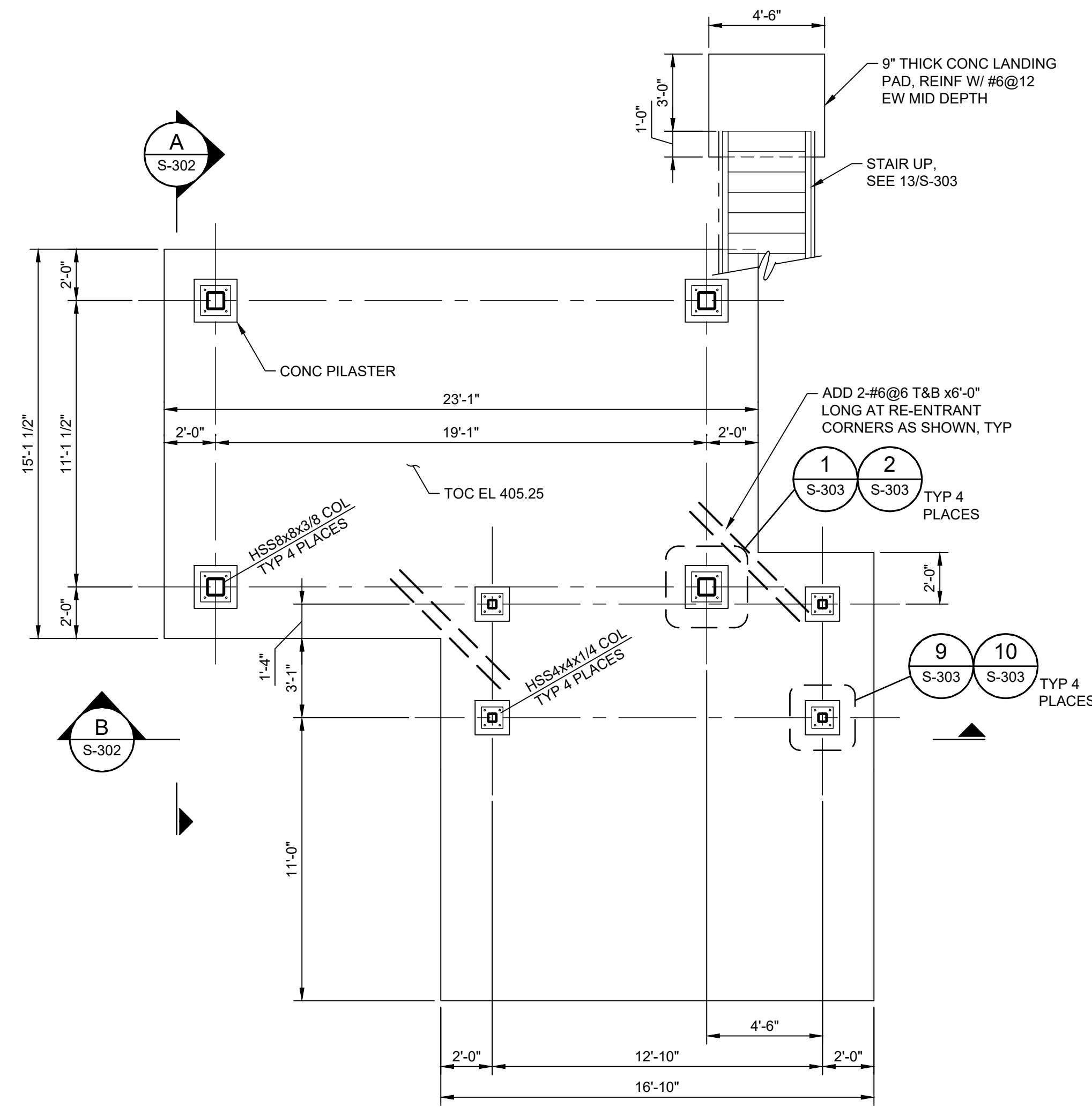
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY

RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
SECTIONS AND DETAILS

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-205

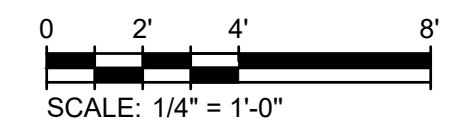
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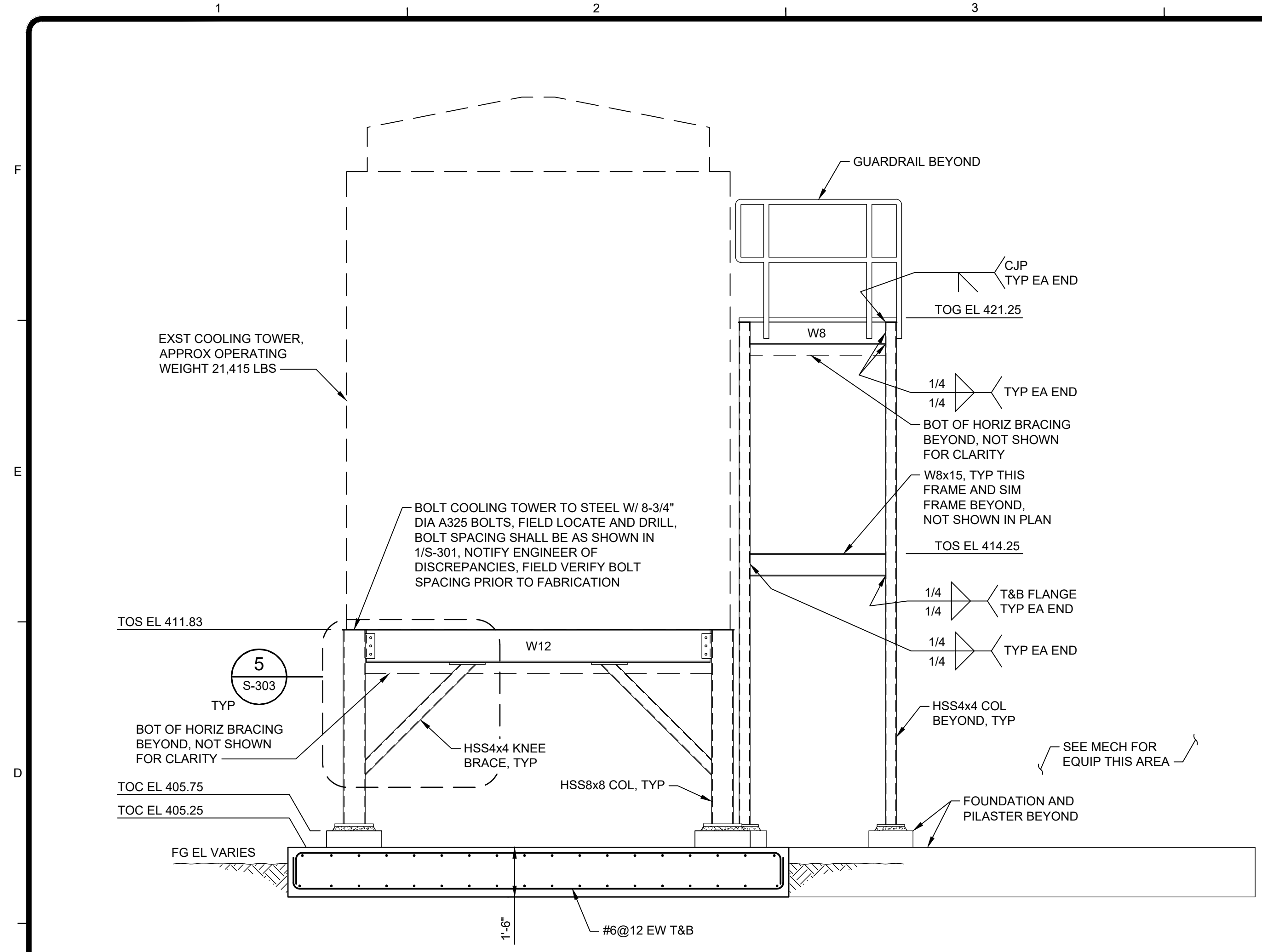
BY	DATE	DESCRIPTION

MONTEREY PENNSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
COOLING TOWER PLANS

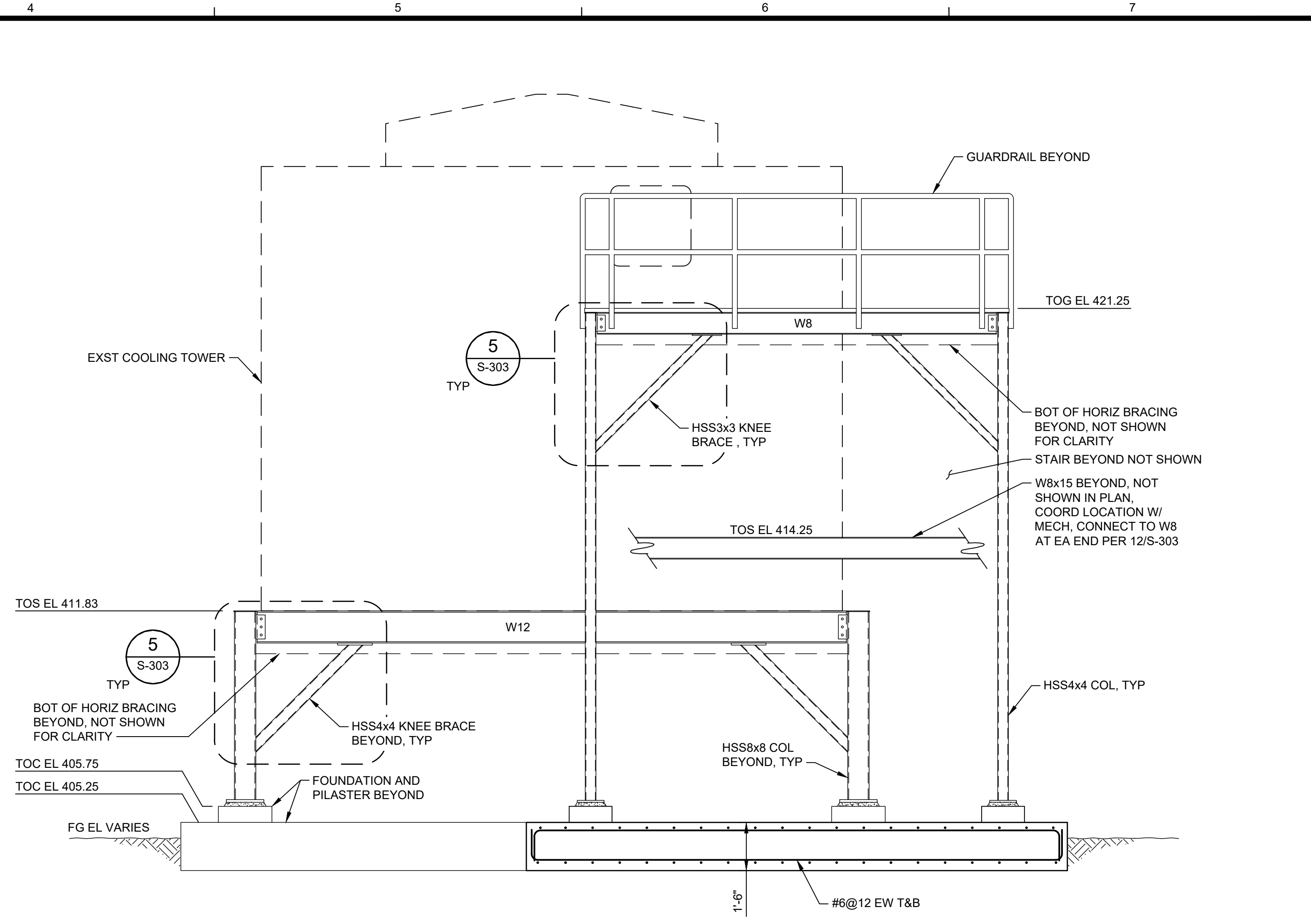
Project No.:	135-124674-15001
Designed By:	RWM
Drawn By:	RWM
Checked By:	HRN



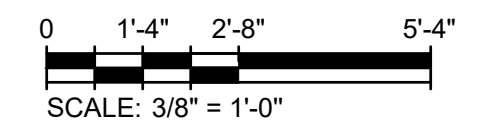
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A SECTION
S-301 SCALE: 3/8"=1'-0"



B SECTION
S-301 SCALE: 3/8"=1'-0"



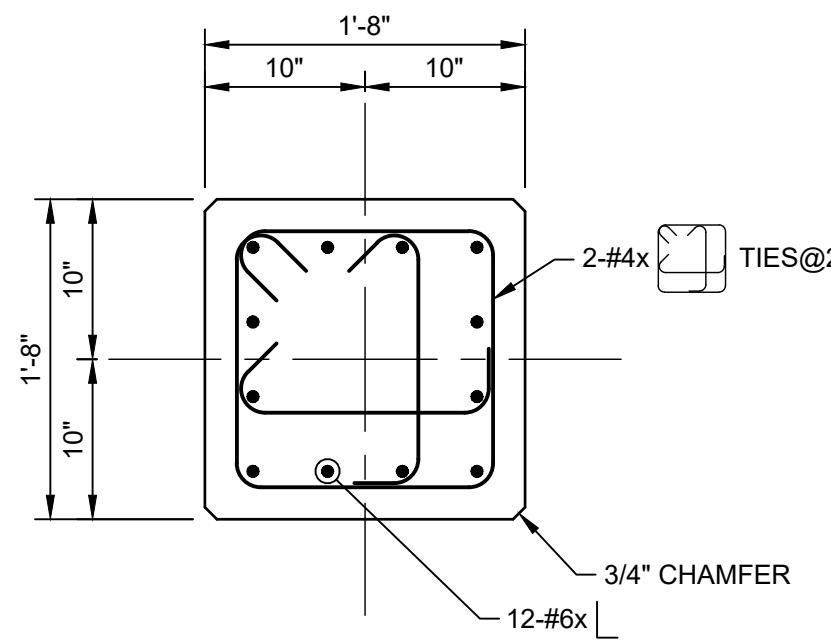
MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
COOLING TOWER
SECTIONS**

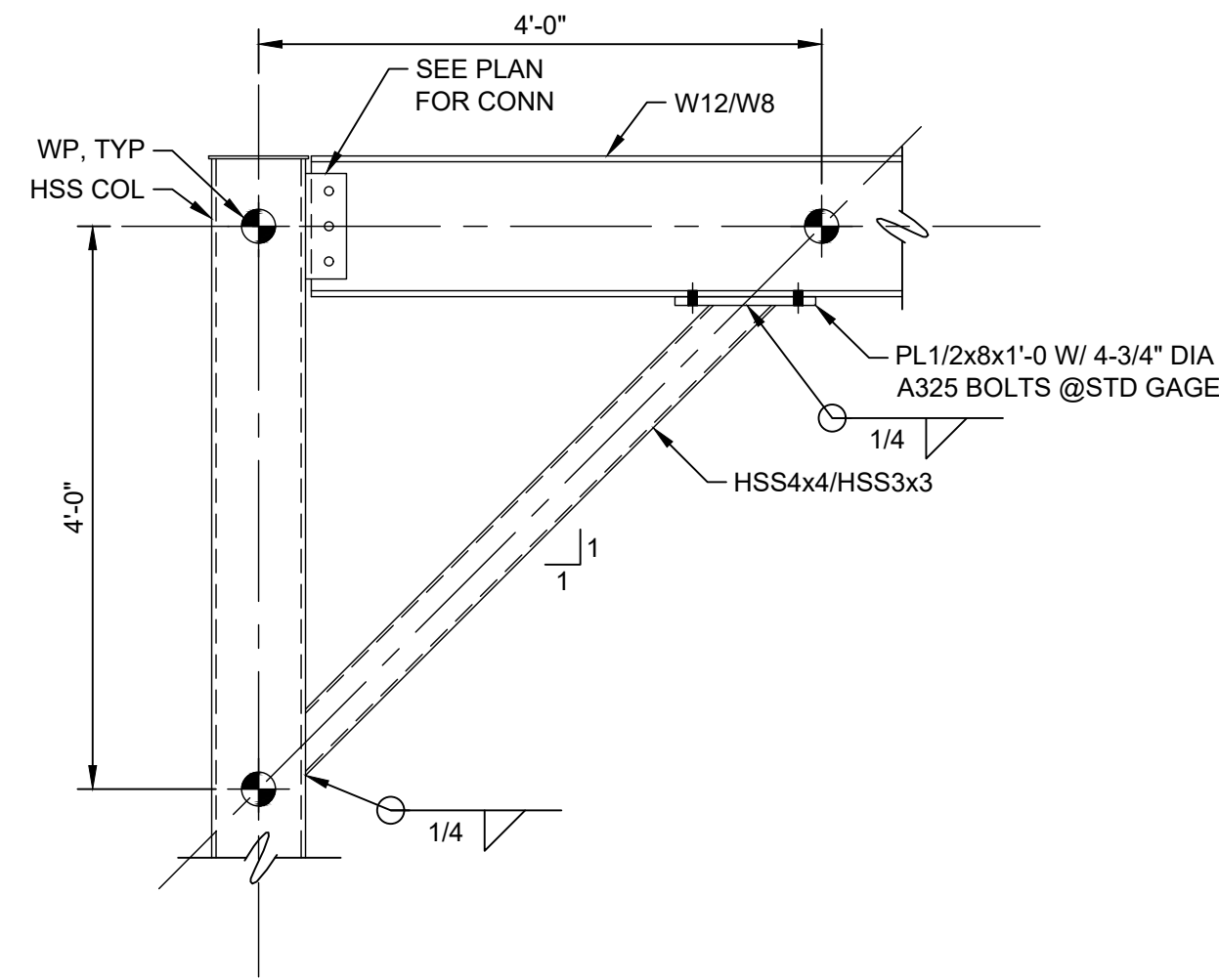
Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-302

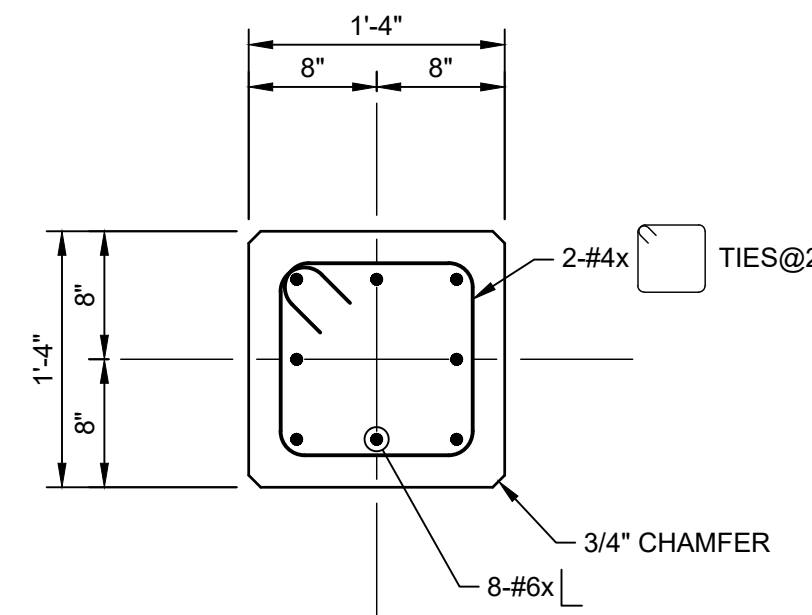
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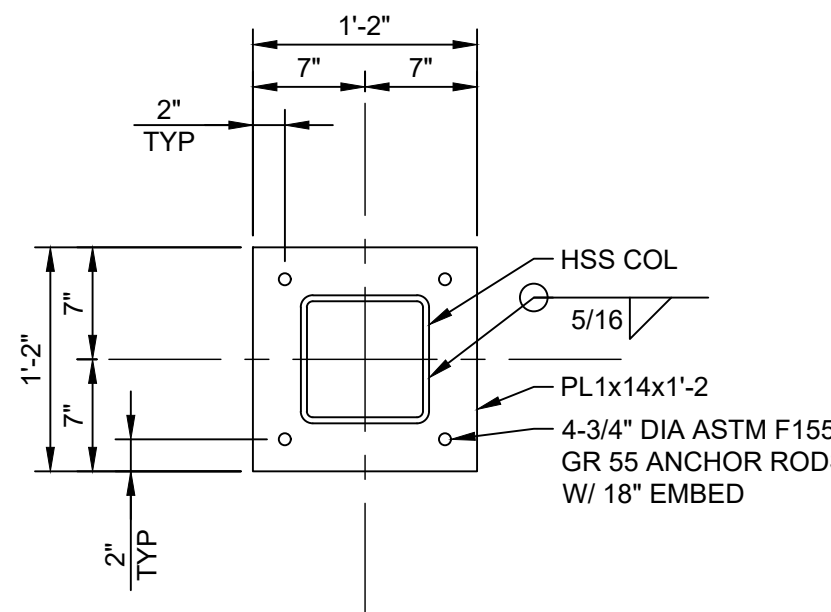
1 DETAIL
S-301 SCALE: 1"=1'-0"



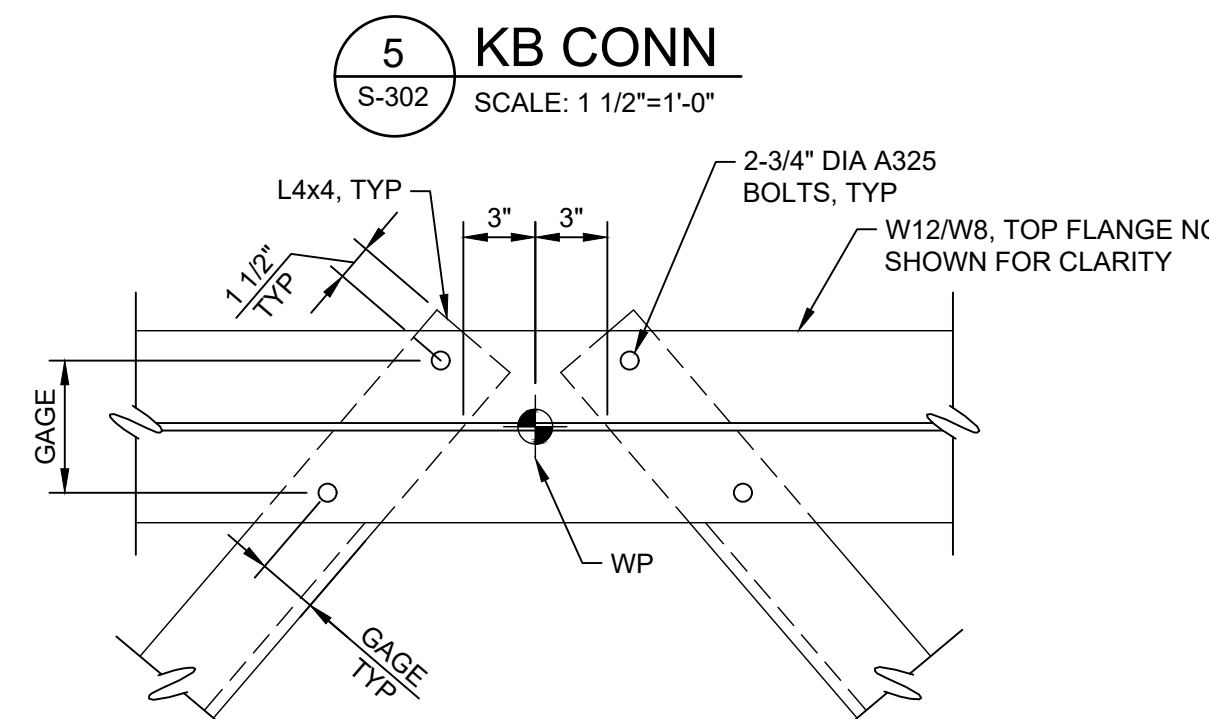
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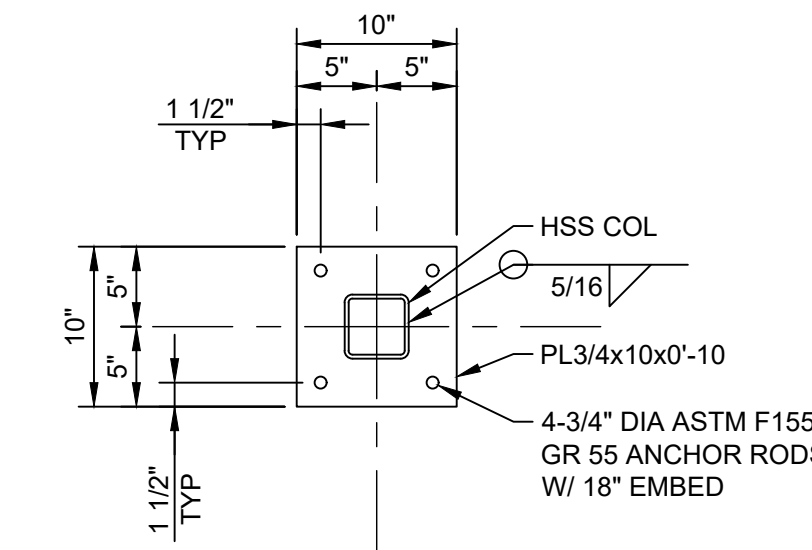
9 DETAIL
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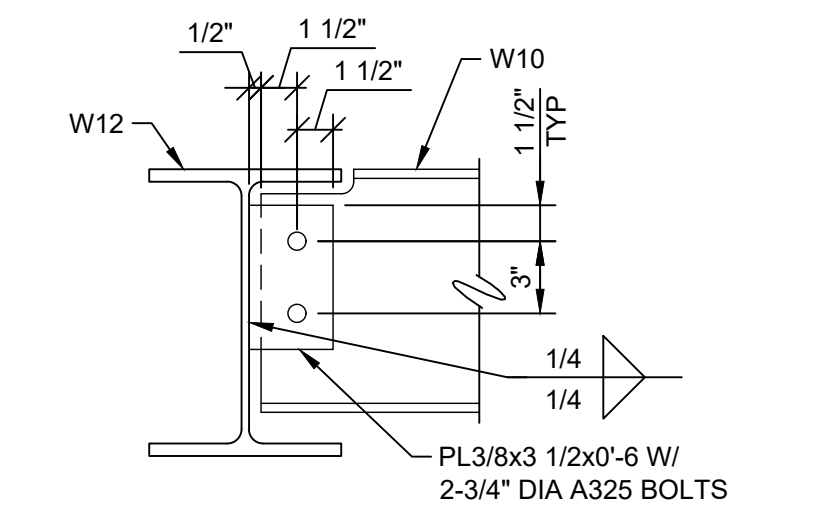
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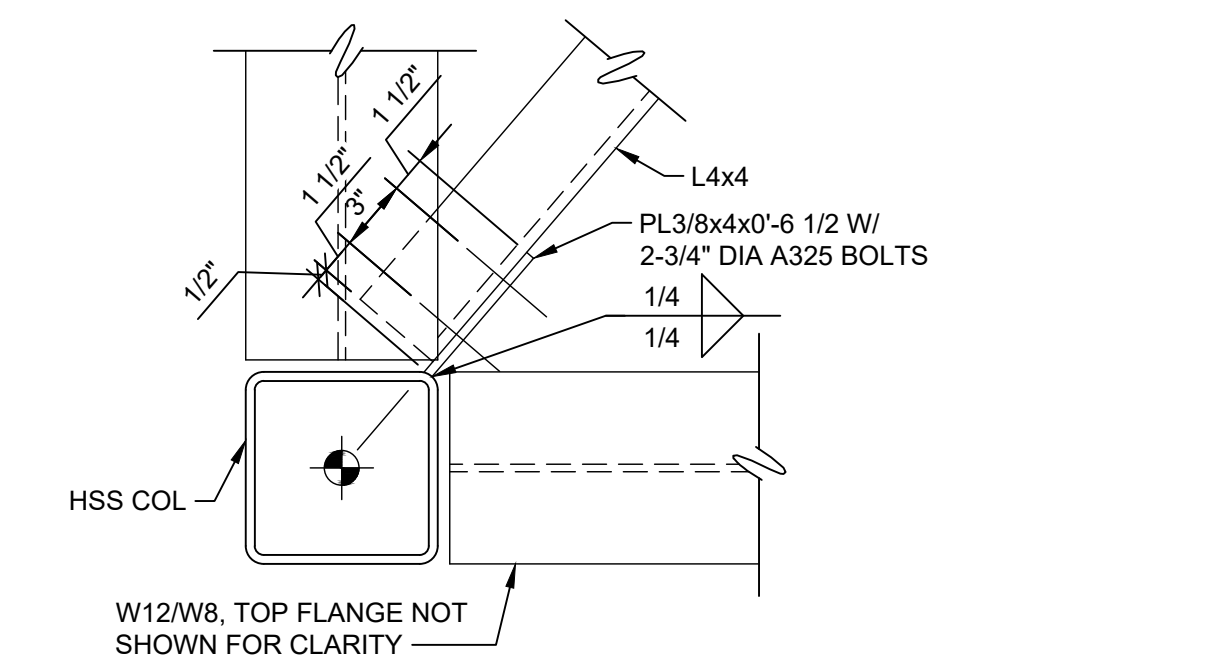
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S-301 SCALE: 1 1/2"=1'-0"



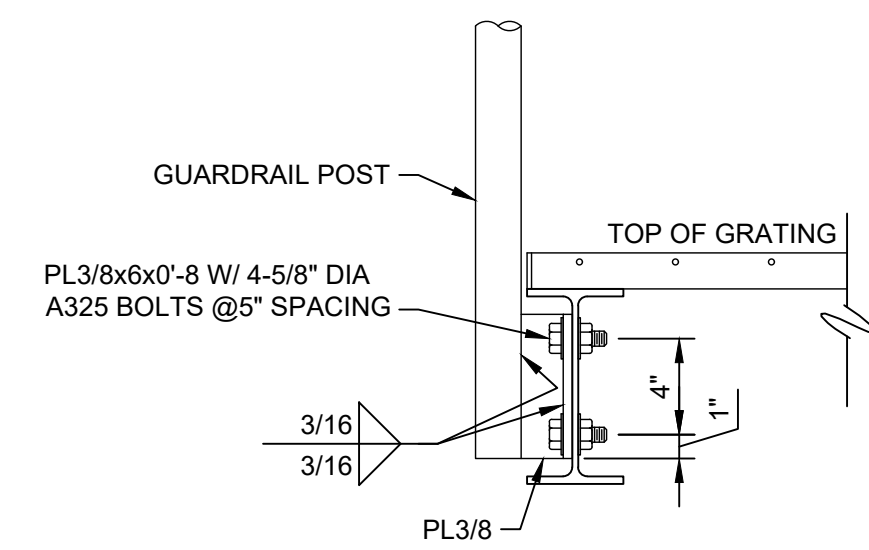
10 DETAIL
S-301 SCALE: 1"=1'-0"



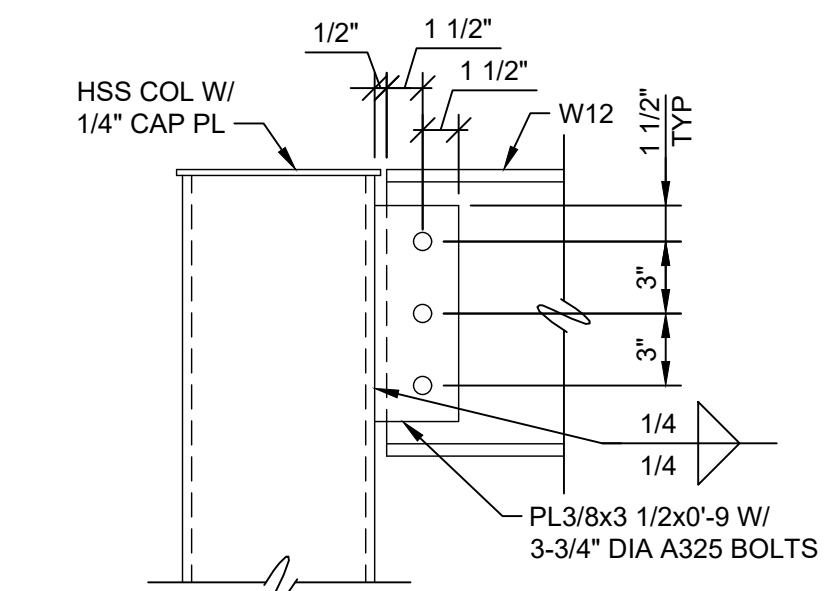
3 W10 to W12
S-301 SCALE: 1 1/2"=1'-0"



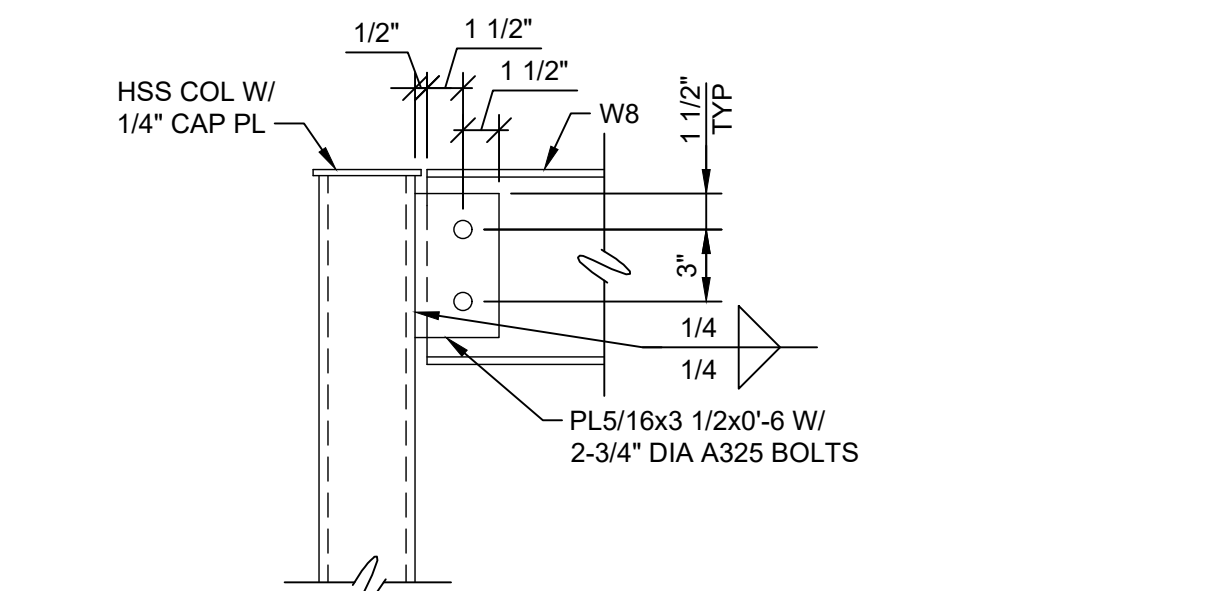
7 HORIZ BRACE
S-301 SCALE: 1 1/2"=1'-0"



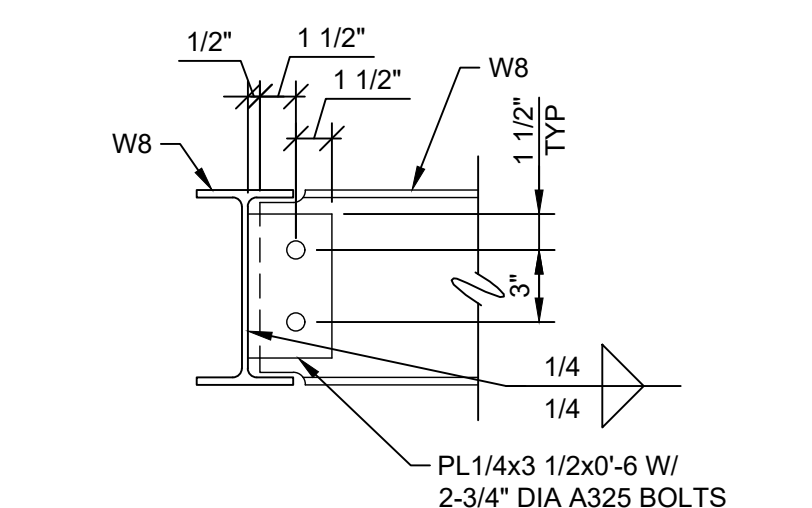
11 TYP GUARDRAIL CONN
SCALE: 1 1/2"=1'-0"



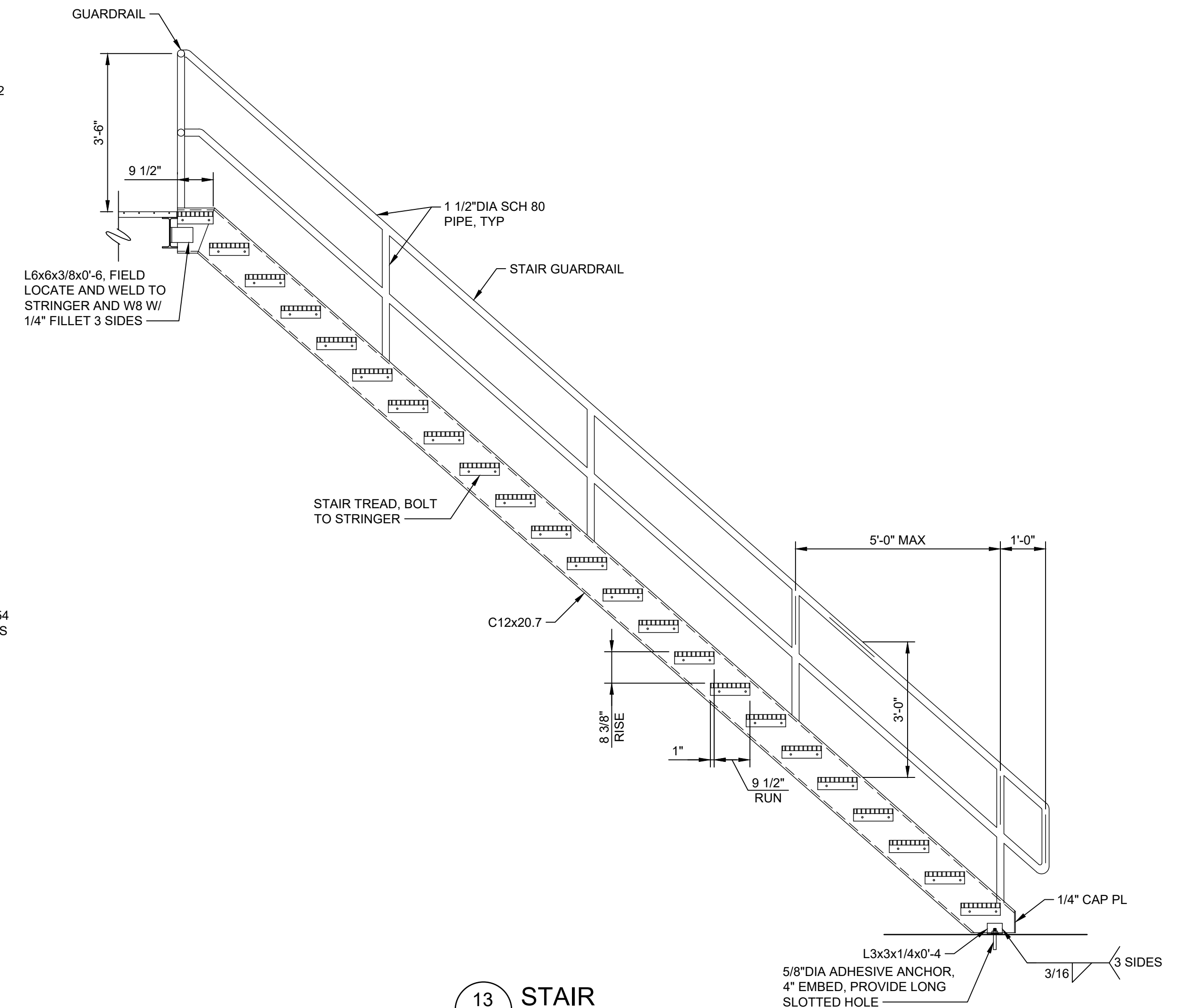
4 W12 TO HSS COL
S-301 SCALE: 1 1/2"=1'-0"



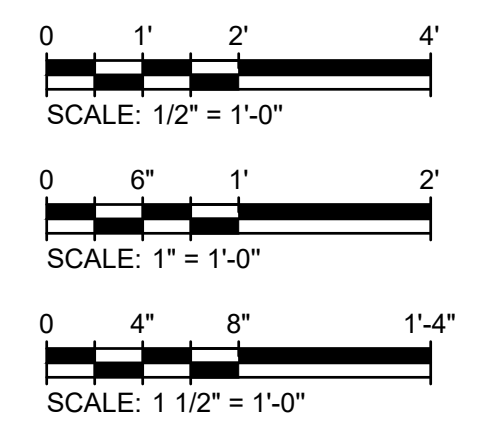
8 W8 TO HSS COL
S-301 SCALE: 1 1/2"=1'-0"



12 W8 to W8
S-301 SCALE: 1 1/2"=1'-0"



13 STAIR
S-301 SCALE: 1/2"=1'-0"



TETRA TECH
www.tetratech.com
15350 SW Sequoia Pkwy, Ste 220
Portland, OR 97224
Tel: 503.684.9007

REGISTERED PROFESSIONAL ENGINEER
RYAN W. L. TAM, M.A.S.
No. 08267
Exp. 3-31-20
CIVIL
STATE OF CALIFORNIA
5-17-18

MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
COOLING TOWER PLANS
SECTIONS AND DETAILS

Project No.: 135-124674-15001
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-303

Bar Measures 1 inch

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5/12/2018 6:24:52 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\D-001 PIPEDETAILS.DWG - NORDHOLM, ERIK

PIPE SCHEDULE				
PIPE ID	FUNCTION	SERVICE	SIZE	PIPE SYSTEM (UNLESS NOTED OTHERWISE)
CWE	CLEANING WASTEWATER	BURIED - (<30" COVER)	ALL	DI-1
		BURIED - (>=30" COVER)		PVC-3
		EXPOSED		PVC-1
D	DRAIN	BURIED	3" AND SMALLER	PVC-1
			4" AND LARGER	PVC-3
OFD	OVERFLOW	CONC ENCASED	ALL	STL-1
		BURIED - (<30" COVER)		DI-1
		BURIED - (>= 30" COVER)		PVC-3
		EXPOSED		PVC-1
RU	RE-USE	BURIED - (<30" COVER)	ALL	DI-1
		BURIED - (>= 30" COVER)		PVC-2
		EXPOSED		PVC-1
RW	RIVER WATER	CONC ENCASED	ALL	STL-1
		BURIED - (<30" COVER)		DI-1
		BURIED - (>= 30" COVER)		PVC-2
		EXPOSED - PUMP STATION		DI-1
		EXPOSED - OTHER		PVC-1
SB	SPRAY BAR SUPPLY	BURIED - (<30" COVER)	ALL	DI-1
		BURIED - (>= 30" COVER)		DI-1
		BURIED - (>= 30" COVER)	3" AND SMALLER	DI-1
		EXPOSED - IN WATER	4" AND LARGER	PVC-2
WD	WASHDOWN	ALL	2.5" AND SMALLER	STL-2
			3" AND LARGER	DI-1

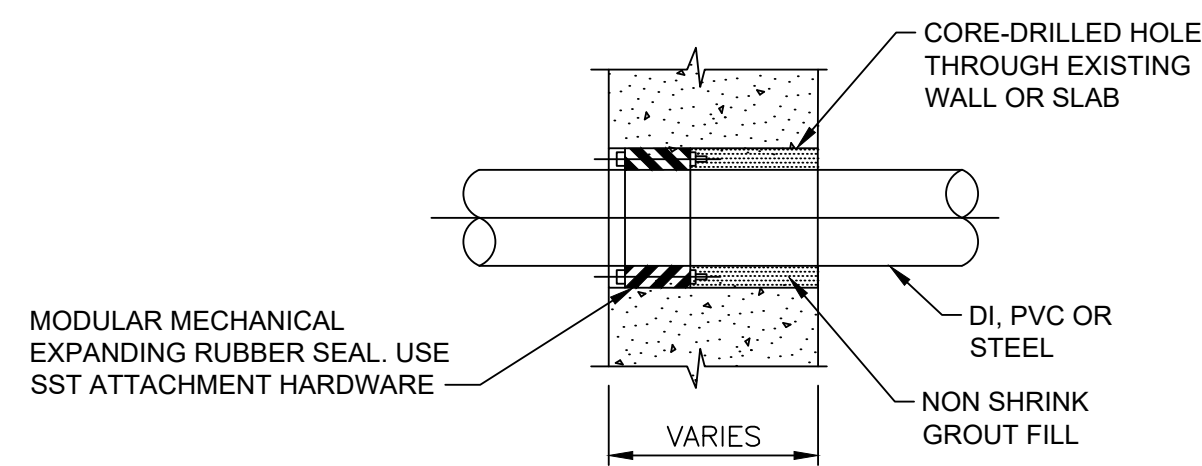
PIPING SYSTEMS				
SYSTEM	PIPE MATERIAL - CLASS	PIPE JOINTS	FITTINGS	LINING / COATINGS
DI-1	DUCTILE IRON - CL 52	BURIED - GASKETED BELL & SPIGOT EXPOSED - FLANGED	BURIED - DI MJ RESTRAINED EXPOSED - DI FLANGED	LINING - CEMENT MORTAR COATING (BURIED) - MFR STD ASPHALTIC COATING (EXPOSED) - EPOXY
PVC-1	PVC - SCH 80	SOLVENT WELD OR FLANGED	SCH 80 PVC SOLVENT WELD OR FLANGED	LINING - NONE COATING (BURIED) - NONE COATING (EXPOSED) - FIELD PAINTED
PVC-2	C900/C905 PVC - DR 25	GASKETED BELL AND SPIGOT	DI MJ RESTRAINED	NONE
PVC-3	ASTM D3034 PVC - DR 35	GASKETED BELL AND SPIGOT	PUSH ON PVC - GASKETED	NONE
STL-1	ASTM A53 STEEL - STD WALL	SHOP WELDED OR FIELD FLANGED	ASME B16.9, SHOP WELDED OR FIELD FLANGED	EPOXY LINING AND COATING
STL-2	ASTM A53 STEEL - STD WALL	THREADED OR FLANGED	THREADED OR FLANGED STEEL	GALVANIZED
STL-3	316 STAINLESS STEEL - SCH 10	SHOP WELDED, THREADED, OR FIELD FLANGED	SHOP WELDED, THREADED, OR FLANGED 316 STAINLESS STEEL	NONE

EXHAUST FAN SCHEDULE									
TAG	MANUFACTURER	MODEL	DRIVE TYPE	DIMENSIONS (L"xW"xD")	VOLUME (CFM)	STATIC PRESSURE (IN. WG)	MOTOR (HP)	ELEC DATA (V / HZ / PH)	NOTES
EF-1	Greenheck	AER-E30C-615-C	DIRECT	38x38x20	5570	0.307	0.75	208 / 60 / 3	1, 2, 3

NOTES:
 1. GRAVITY BACKDRAFT DAMPER
 2. DISCONNECT SWITCH, FACTORY MOUNTED
 3. FURNISH W/ WALL HOUSING

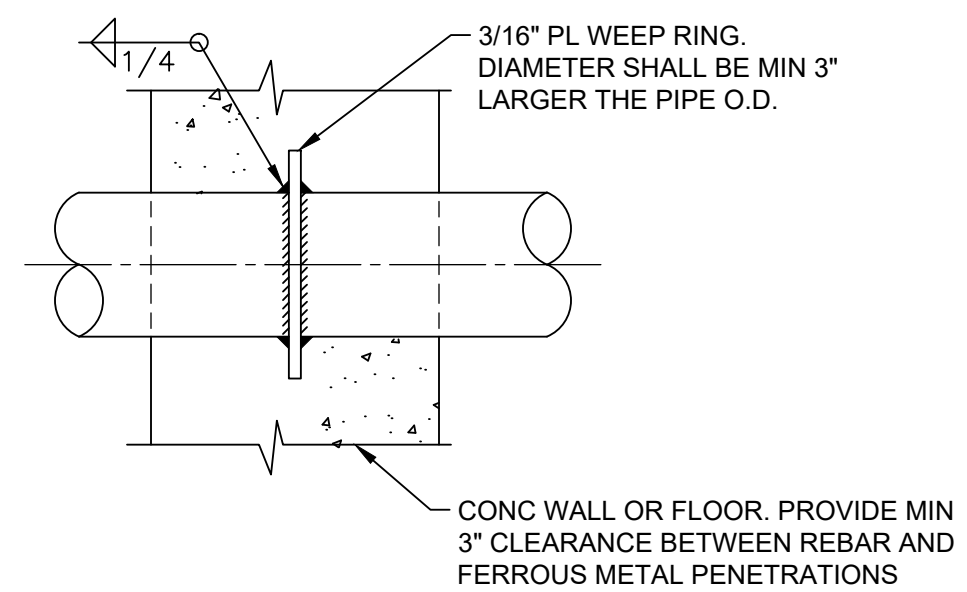
LOUVER SCHEDULE									
TAG	MANUFACTURER	MODEL	APPLICATION	DIMENSIONS (L"xW"xD")	VOLUME (CFM)	PRESSURE DROP (IN. WG)	ELEC DATA (V / HZ / PH)	NOTES	
LV-1	Greenheck	ESD-635	EXHAUST	36x36x6	6000	0.195	-	1, 2	
LV-2	Greenheck	EACA-601	INTAKE	48x48x6	6000	0.070	120 / 60 / 1	1, 2, 3	

NOTES:
 1. INSECT SCREEN, ALUMINUM, INTERNALLY MOUNTED
 2. BAKED ENAMEL PAINT, OWNER SELECTED COLOR
 3. ACTUATOR, 2 POSITION SPRING RETURN W/ AUX. END SWITCH



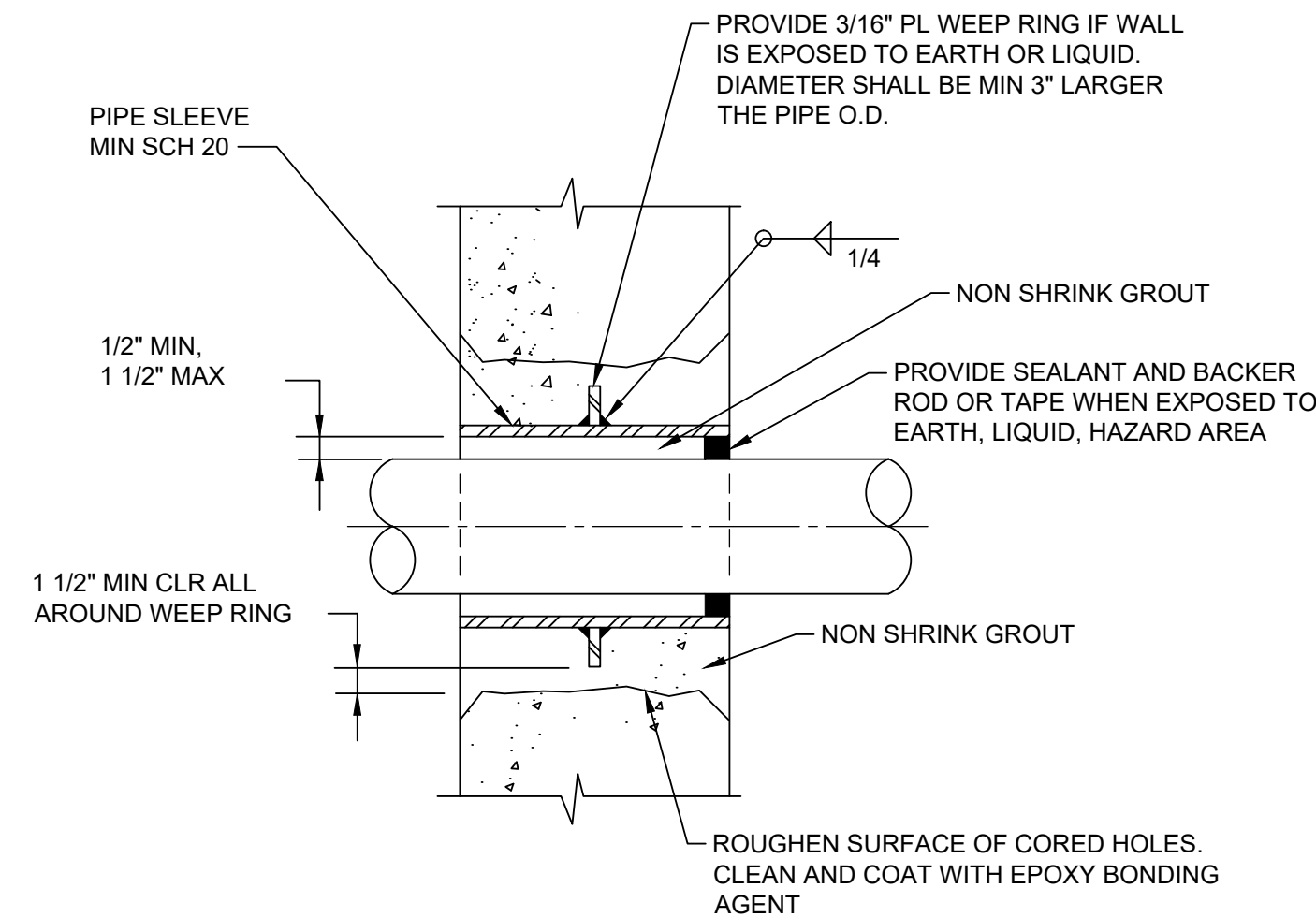
TYPE X1
FOR EXISTING FLOORS, WALLS AND CEILINGS

1 PIPE PENETRATION
NO SCALE



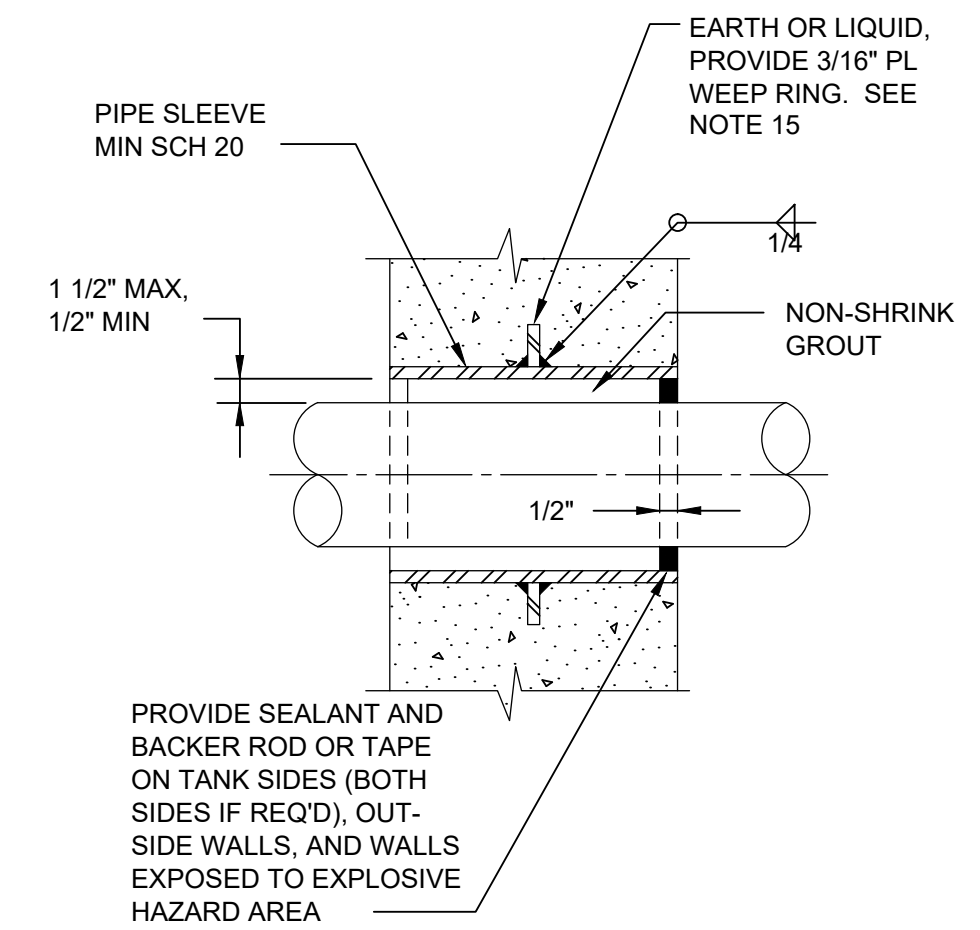
TYPE K
FOR FLOORS, WALLS AND CEILINGS

3 PIPE PENETRATION
NO SCALE



TYPE X2
FOR EXISTING FLOORS, WALLS AND CEILINGS

2 PIPE PENETRATION
NO SCALE



TYPE E
PIPE PENETRATION FOR WALLS

4 PIPE PENETRATION
NO SCALE

TETRA TECH
www.tetra.tech.com
15350 SW Sequoia Pkwy, Ste 220
Portland, OR 97224
Tel: 503.684.9097

REGISTERED PROFESSIONAL ENGINEER
 PREZA NADEPRATE
 Exp. 6-30-19
 CIVIL
 STATE OF CALIFORNIA
 5-12-18

MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
**PROCESS PIPING
 SCHEDULE AND DETAILS**

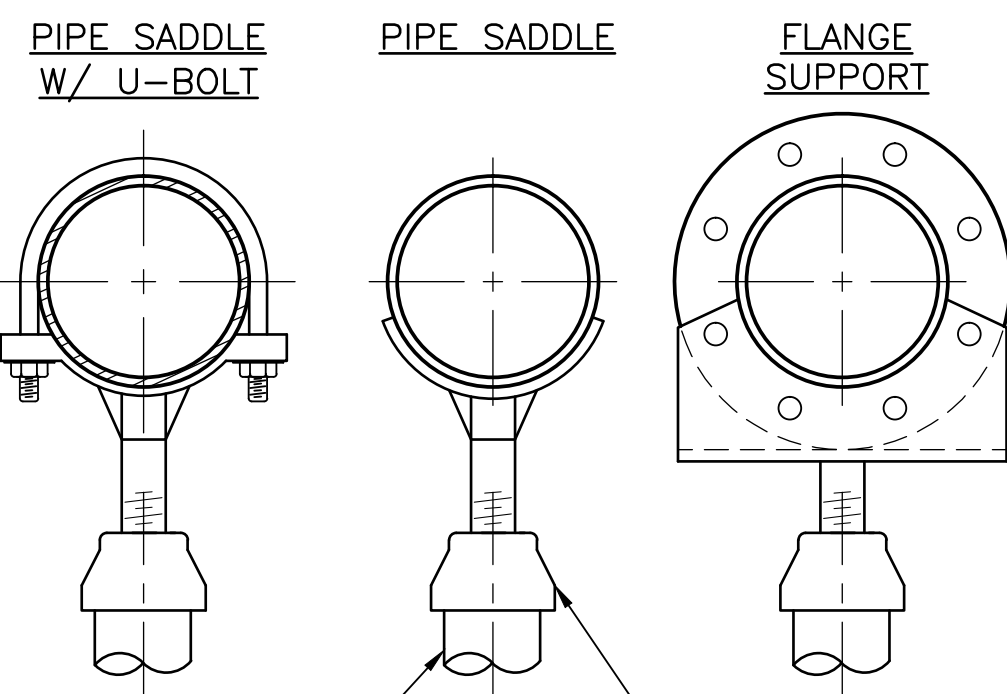
Project No.: 135-124674-15001
 Designed By: EGN
 Drawn By: EGN
 Checked By: DJN

D-001

Copyright: Tetra Tech
 Bar Measures 1 inch

PIPE SUPPORT SYSTEMS GENERAL NOTES

- MSS REFERS TO MANUFACTURER'S STANDARDIZATION SOCIETY OF THE VALVE AND FITTING INDUSTRY. STANDARD PRACTICE SP 58 AND SP 69. FITTINGS SHALL NOT BE LESS THAN MSS CL. B.
- WHERE NO REFERENCE TO PIPE SUPPORT SYSTEMS IS GIVEN ON THE DRAWINGS, THE CONTRACTOR SHALL SUBMIT A PIPE SUPPORT PLAN FOR REVIEW BY THE OWNER AND ENGINEER.
- THE CONTRACTOR SHALL USE TYPICAL PIPE SUPPORT DETAILS SHOWN IN THESE DRAWINGS. WHERE THESE TYPICAL DETAILS ARE NOT APPROPRIATE OR SUITABLE FOR CONDITIONS, OTHER STANDARD MANUFACTURED COMPONENTS OR ENGINEERED, FABRICATED COMPONENTS MAY BE SUBMITTED FOR REVIEW BY OWNER & ENGINEER.
- ALL PIPING SUPPORTED BY HANGERS OR VERTICAL ATTACHMENTS SHALL BE BRACED AGAINST HORIZONTAL, VERTICAL AXIAL, AND LONGITUDINAL SWAY. BRACING SHALL BE SELECTED TO RESIST SEISMIC LOADINGS AS SPECIFIED BY SMACNA AND AS INDICATED IN THE SPECIFICATIONS.
- ALL STRUCTURAL AND PIPE ATTACHMENTS, PIPE SUPPORT RACKS AND TRAPEZE PIPE HANGER COMPONENTS SHALL BE STAINLESS STEEL OR HOT DIP GALVANIZED UNLESS NOTED OTHERWISE.
- ALL SUPPORTS FOR STAINLESS STEEL PIPE SHALL ALSO BE STAINLESS STEEL.
- PROVIDE MINIMUM EDGE DISTANCE COVER AND SPACING AND EMBEDMENT DEPTH IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR ALL EXPANSION AND EPOXY ANCHORS. NOTIFY ENGINEER IF THESE REQUIREMENTS CANNOT BE ACHIEVED.
- AT LEAST ONE PIPE HANGER OR SUPPORT SHALL BE LOCATED IMMEDIATELY ADJACENT TO THE JOINT OF ANY CONCENTRATED LOAD OR BEND IN THE PIPE SUCH AS VALVES, FITTINGS, ETC., IN ADDITION TO THE MAXIMUM SPANS LISTED IN TABLE A.



PIPE SIZE (INCHES)	STANCHION DIAMETER D (INCHES)
3	2
4 - 12	3
14 - 16	4
18 - 24	6

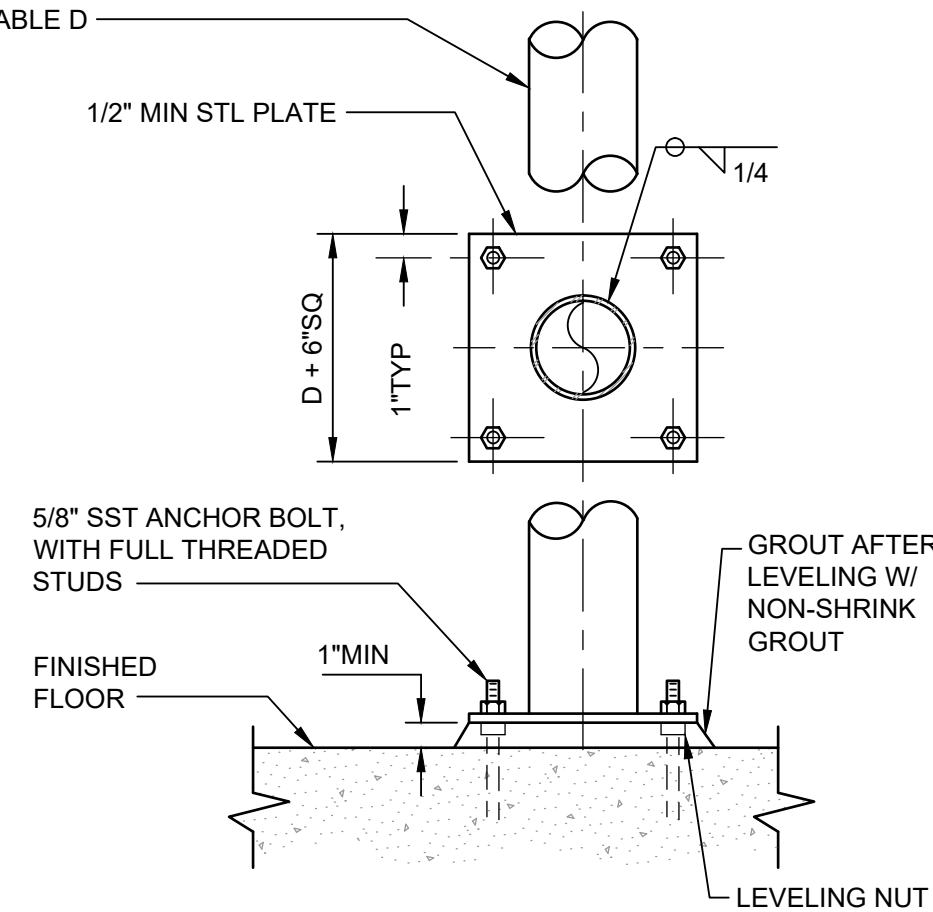
SCH 40 PIPE STANCHION, SIZE AS SPECIFIED IN TABLE D

ADJUSTABLE PIPE SADDLE SUPPORT, MSS TYPE 38

NOTE: FURNISH PIPE SADDLE WITH U-BOLT UNLESS CALLED OUT OTHERWISE.

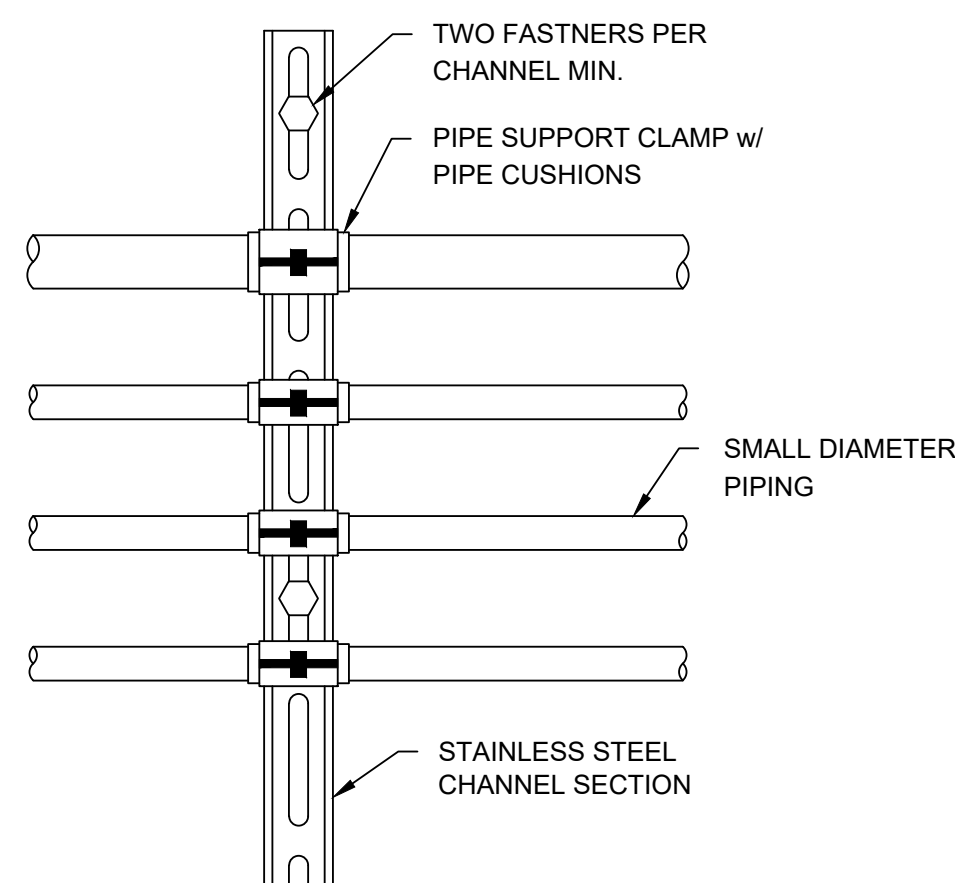
1 ADJUSTABLE PIPE SUPPORT
NO SCALE

SCH 40 PIPE STANCHION, SIZE AS SPECIFIED IN TABLE D



TYPE N

2 STRUCTURAL ATTACHMENT
NO SCALE

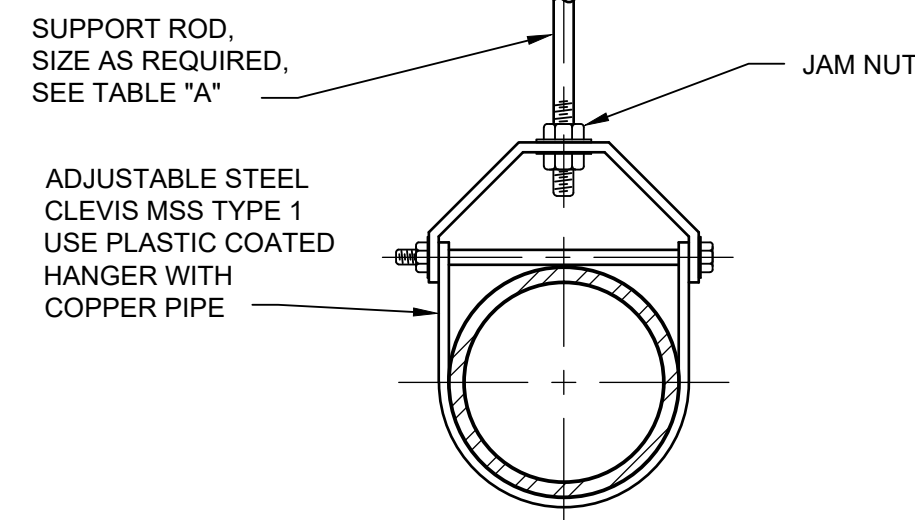


1/2" THROUGH 2" PIPE

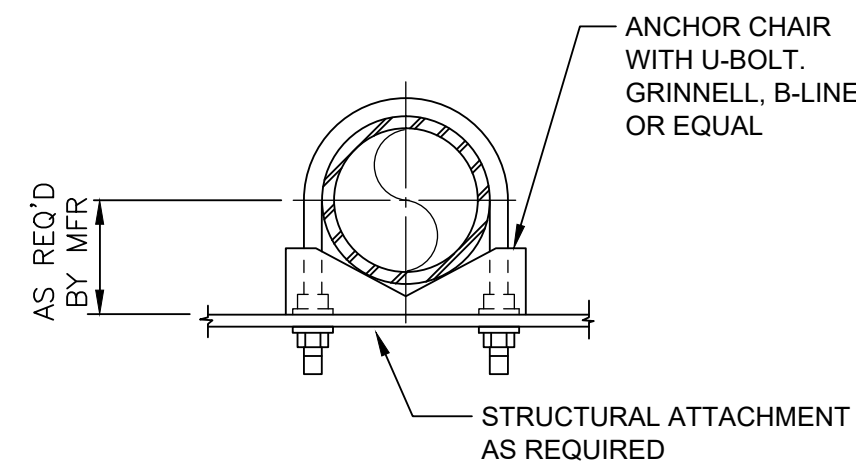
NOTES:

- SECURE CHANNEL SECTION TO WALL STUD OR CONCRETE WALL WITH WOOD FASTENERS OR EPOXY ANCHORS AS APPLICABLE.

3 PIPE HANGER
NO SCALE



4 CLEVIS PIPE HANGER
NO SCALE



4" THROUGH 24" PIPE

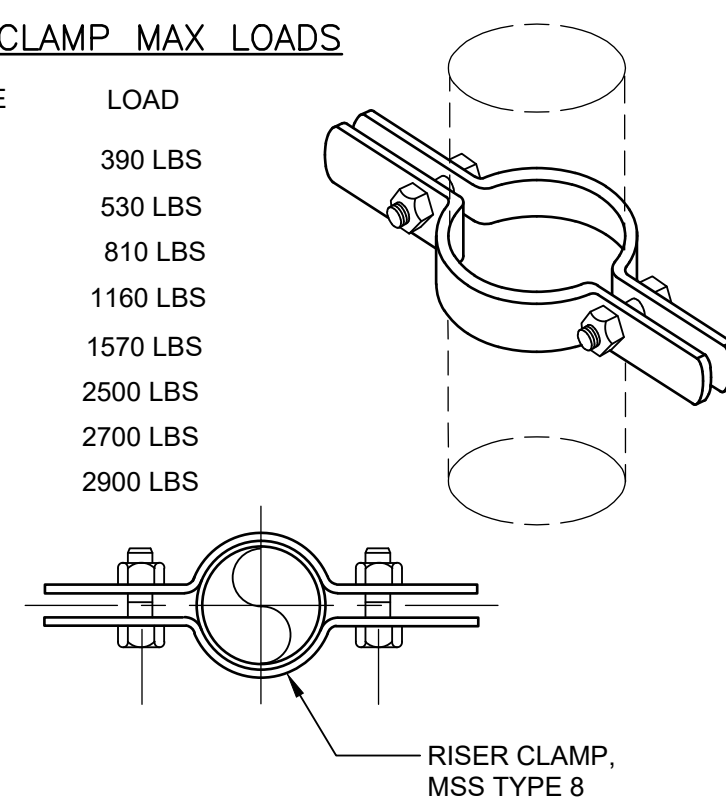
NOTES:

- ALL INSTALLATIONS OF THIS ANCHOR MUST HAVE CALCULATIONS TO CONFIRM THE ADEQUACY OF THE COMPONENT SIZES. THESE CALCULATIONS SHALL BE SUBMITTED FOR APPROVAL.

5 PIPE HANGER
NO SCALE

RISER CLAMP MAX LOADS

PIPE SIZE	LOAD
2 1/2"	390 LBS
3"	530 LBS
4"	810 LBS
5"	1160 LBS
6"	1570 LBS
8"-10"	2500 LBS
12"-14"	2700 LBS
16"-30"	2900 LBS



2 1/2" THROUGH 30" PIPE FOR VERTICAL PIPE ONLY

NOTES:

- LOCATE ADJACENT HANGERS TO ASSURE THAT RISER CLAMP DOES NOT EXCEED THE DESIGN LOAD CAPACITY.

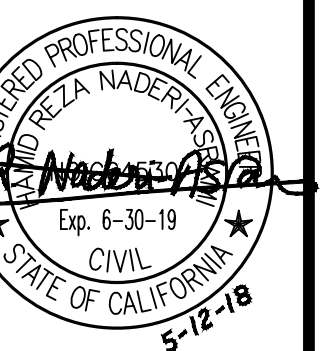
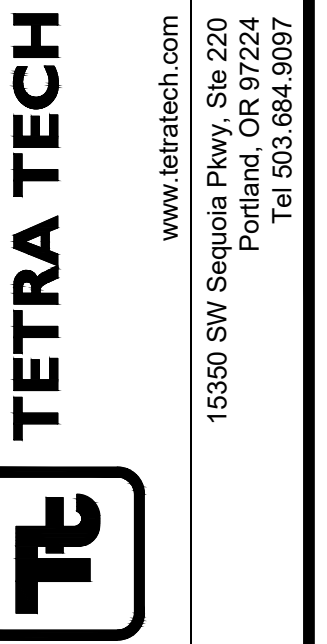
6 VERTICAL PIPE HANGER
NO SCALE

TABLE A

PIPE SIZE	SUPPORT ROD SIZE & MAX LOAD. SEE NOTE 1		MAXIMUM SPAN, IN FEET, FOR PIPES NOT IN RACKS SEE NOTE 2			
	MAX LOAD (LBS)	ROD SIZE (INCHES)	STEEL	COPPER	PLASTIC SEE NOTE 3	CAST IRON
< 1"	275	3/8"	5	4	CONTINUOUS	-
1"	275	3/8"	5	4	5	-
1 1/4"	300	3/8"	5	5	5	-
1 1/2"	300	3/8"	5	5	5	-
2"	325	3/8"	10	5	5	-
2 1/2"	375	1/2"	10	10	5	-
3"	575	1/2"	10	10	5	-
4"	600	5/8"	10	10	7	-
6"	750	3/4"	10	10	7	-
8"	950	7/8"	10	10	7	-
10"	1,200	7/8"	10	-	10	-
12"	1,450	7/8"	10	-	10	-
14"	2,500	1"	15	-	-	-
16"	2,500	1"	15	-	-	-
18"	2,500	1"	15	-	-	-
20"	4,000	1 1/4"	18	-	-	-
24"	4,000	1 1/4"	18	-	-	-

TABLE A NOTES

- DESIGN WEIGHT SHALL NOT EXCEED MAX LOAD FOR GIVEN ROD SIZE. DESIGN WEIGHT SHALL ACCOUNT FOR ALL LOADS, INCLUDING THE WEIGHT OF THE PIPE FULL OF WATER PLUS THE WEIGHTS OF VALVES, FITTINGS, INSULATING MATERIALS AND SUSPENDED HANGER COMPONENTS.
- MAXIMUM SPANS ARE BASED ON A SINGLE ROD SUPPORTING A SINGLE PIPE. SHORTER SPANS OR LARGER RODS ARE REQUIRED WHEN SUPPORTING MULTIPLE PIPES, OR CONCENTRATED LOADS FROM EQUIPMENT, VALVES OR FITTINGS.
- SPAN SHOWN IS FOR SCHEDULE 80 PVC PIPE AT 100° F. SPANS FOR OTHER PLASTICS, OTHER PVC PIPE SCHEDULES AND PIPES AT HIGHER TEMPERATURES SHALL BE SHORTENED IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS. "CONTINUOUS" MEANS PIPE SHALL BE IN UNISTRUT OR SIMILAR CHANNEL.
- 12 FT FOR PRESSURE PIPE AND 10 FT FOR SOIL PIPE. OTHERWISE, INSTALL AT LEAST ONE HANGER PER PIPE LENGTH AS NEAR THE BELL AS POSSIBLE.
- UNDER NO CIRCUMSTANCES SHALL IMPOSED LOAD EXCEED THE PIPE SUPPORT MANUFACTURERS STATED LOAD CAPACITY.



MARK	DATE	DESCRIPTION

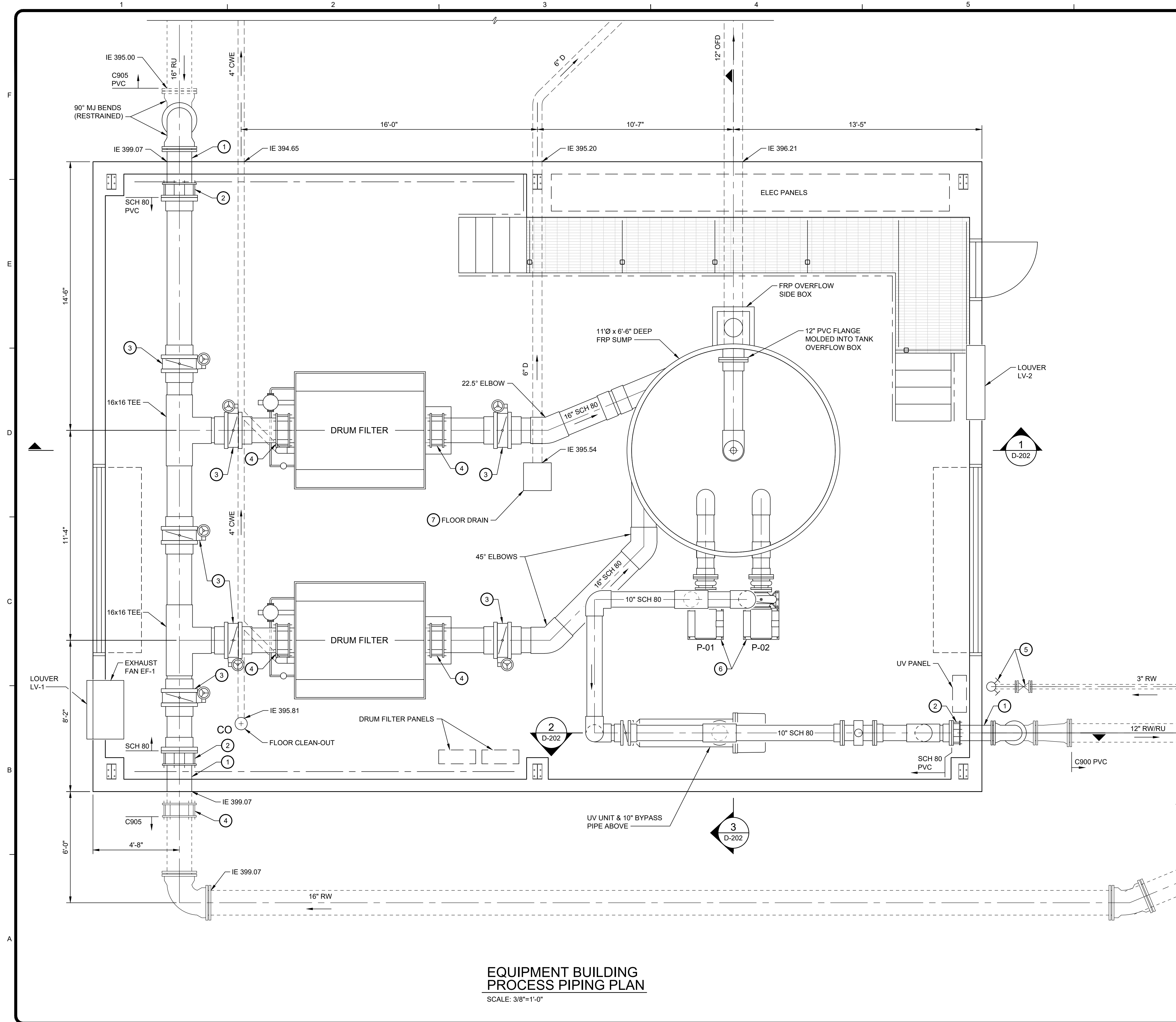
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
PIPE SUPPORTS

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

D-002

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**EQUIPMENT BUILDING
PROCESS PIPING PLAN**
SCALE: 3/8"=1'-0"

GENERAL NOTES:

- CONTRACTOR SHALL SUBMIT PIPE SUPPORT PLAN FOR REVIEW BY ENGINEER. REFER TO DRAWING D-002 FOR SUPPORT LOCATION AND SPACING REQUIREMENTS.

KEYED NOTES:

- STEEL WALL PIPE. EPOXY LINED AND COATED W/ WEEP RING
- FLANGE X COUPLING ADAPTOR. ROMAC FGA-501 OR EQUAL
- PVC BUTTERFLY VALVE. LUG INSERT STYLE. BUNA-N SEATS W/ HANDWHEEL ACTUATOR. SPEARS OR EQUAL.
- SOLID SLEEVE FLEX COUPLING. ROMAC 501 OR EQUAL.
- NON-FREEZE POST HYDRANT PER DETAIL 1 / C-003
- REUSE PUMPS. END SUCTION. CLOSE COUPLED STYLE. DESIGN POINT 1350 GPM @ 42' TDH, 78% EFFICIENCY. 20 HP, 1200 RPM, 60 HZ MOTOR. BASIS OF DESIGN: BELL AND GOSSETT SERIES E-1532 MODEL 6G, OR EQUAL.
- 12" SQUARE, CAST IRON FLOOR DRAIN. ZURN MODEL Z610 OR EQUAL.

TETRA TECH
www.tetratech.com
15350 SW Sequoia Pkwy, Ste 220
Portland, OR 97224
Tel 503.684.9097

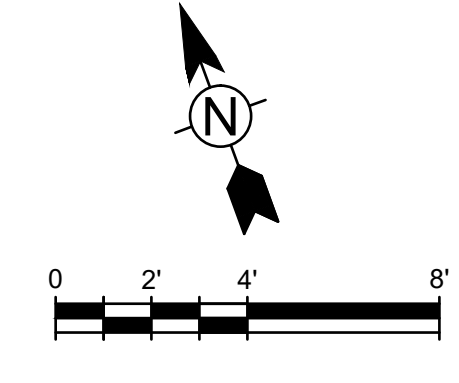


MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
PROCESS PIPING PLAN**

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

D-201

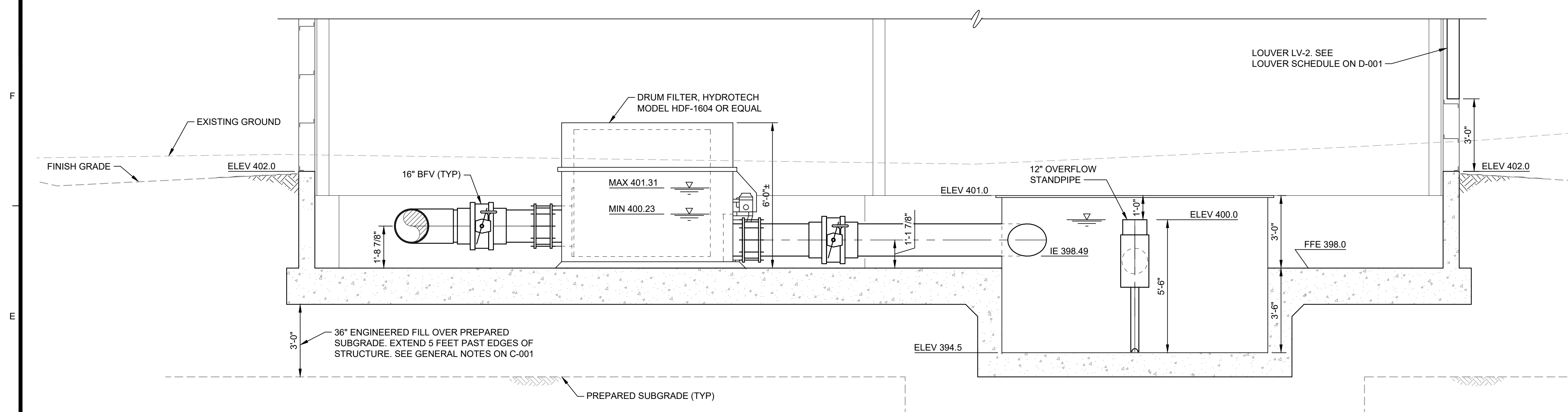


GENERAL NOTES:

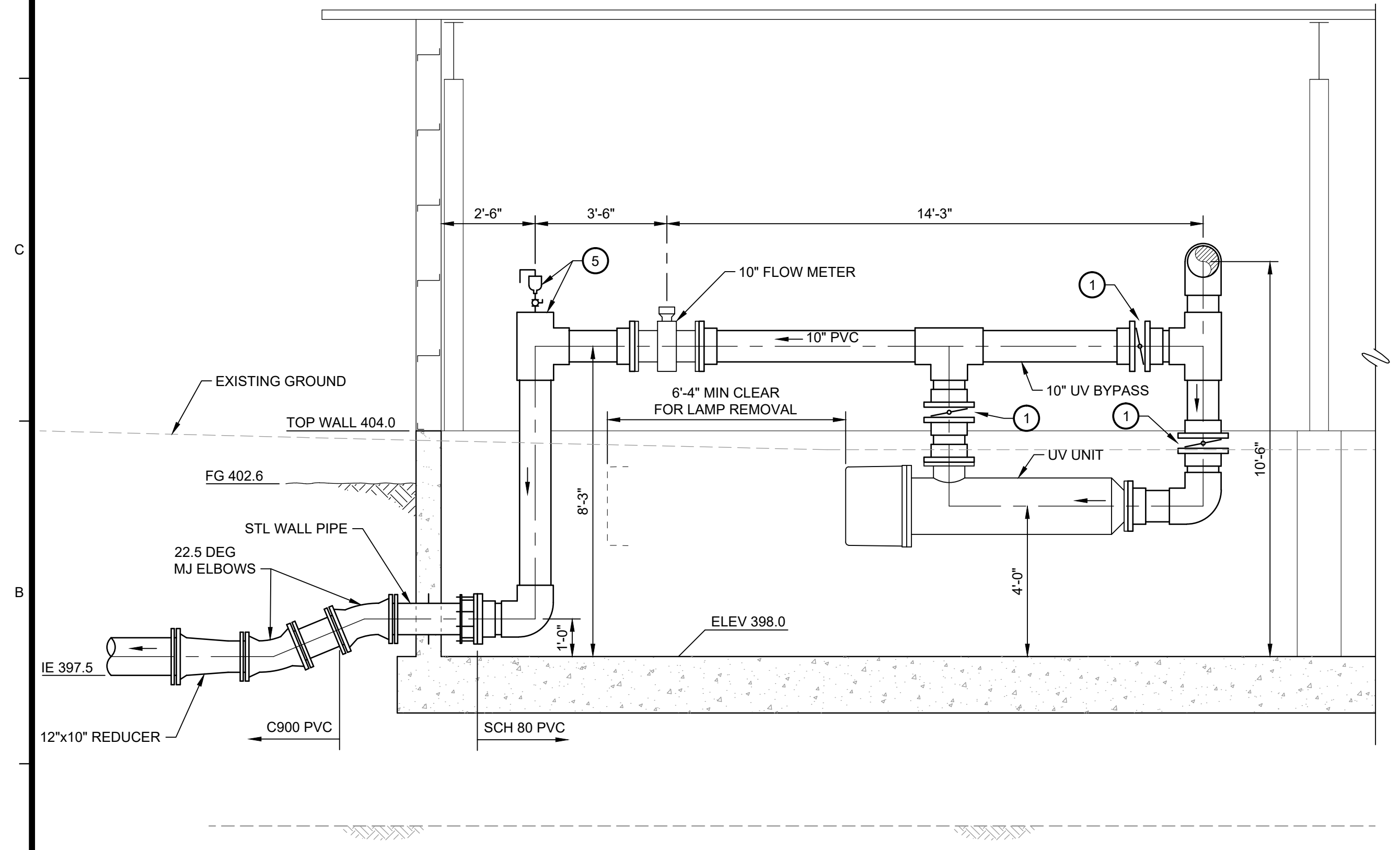
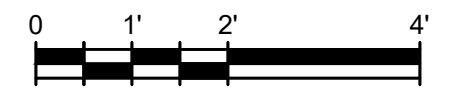
1. CONTRACTOR SHALL SUBMIT PIPE SUPPORT PLAN FOR REVIEW BY ENGINEER. REFER TO DRAWING D-002 FOR SUPPORT LOCATION AND SPACING REQUIREMENTS.

KEYED NOTES:

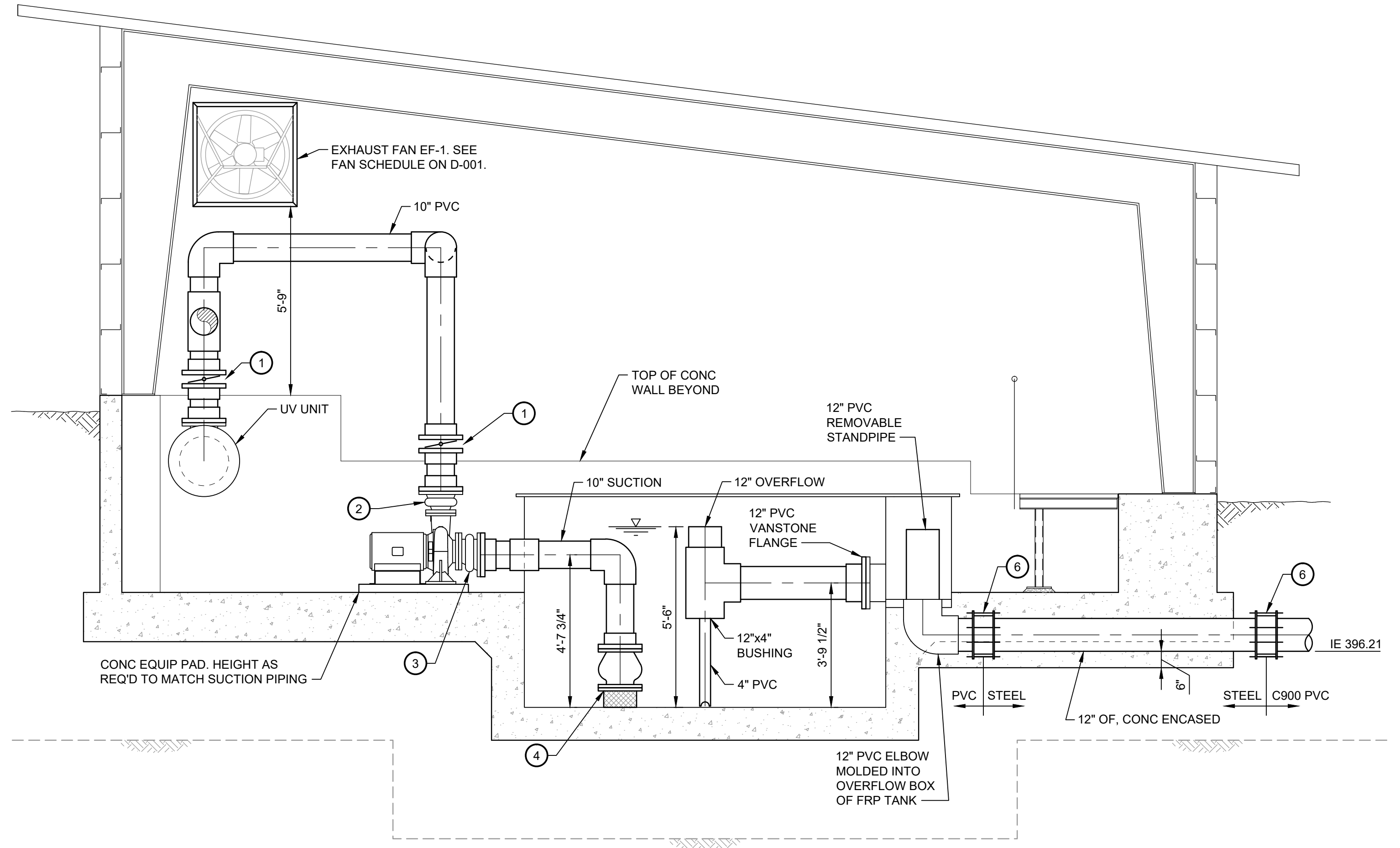
- ① PVC BUTTERFLY VALVE, LUG INSERT STYLE, BUNA-N SEATS W/ HANDWHEEL ACTUATOR, SPEARS OR EQUAL.
- ② ELASTOMERIC EXPANSION JOINT WITH STEEL RETAINING RINGS, 10"x6" CONCENTRIC REDUCER, WITH CONTROL RODS TO PREVENT EXCESSIVE MOVEMENT. GARLOCK STYLE 204 OR EQUAL.
- ③ ELASTOMERIC EXPANSION JOINT WITH STEEL RETAINING RINGS, 10"x8" ECCENTRIC REDUCER, WITH CONTROL RODS TO PREVENT EXCESSIVE MOVEMENT. GARLOCK STYLE 204 OR EQUAL.
- ④ 10" FOOT VALVE WITH STAINLESS STEEL STRAINER. APCO SERIES 1400 OR EQUAL
- ⑤ 10" TEE WITH 1" BUSHING, 1" AIR RELEASE VALVE, AND 1" BRASS BALL VALVE.
- ⑥ SOLID SLEEVE FLEX COUPLING, ROMAC 501 OR EQUAL.



1 SECTION
D-201 SCALE: 3/8"=1'-0"



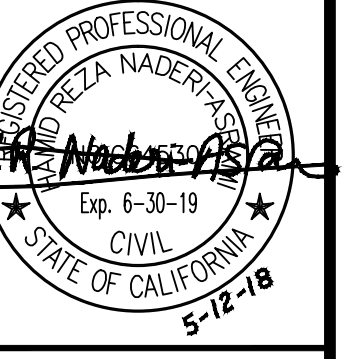
2 SECTION
D-201 SCALE: 3/8"=1'-0"



3 SECTION
D-201 SCALE: 3/8"=1'-0"

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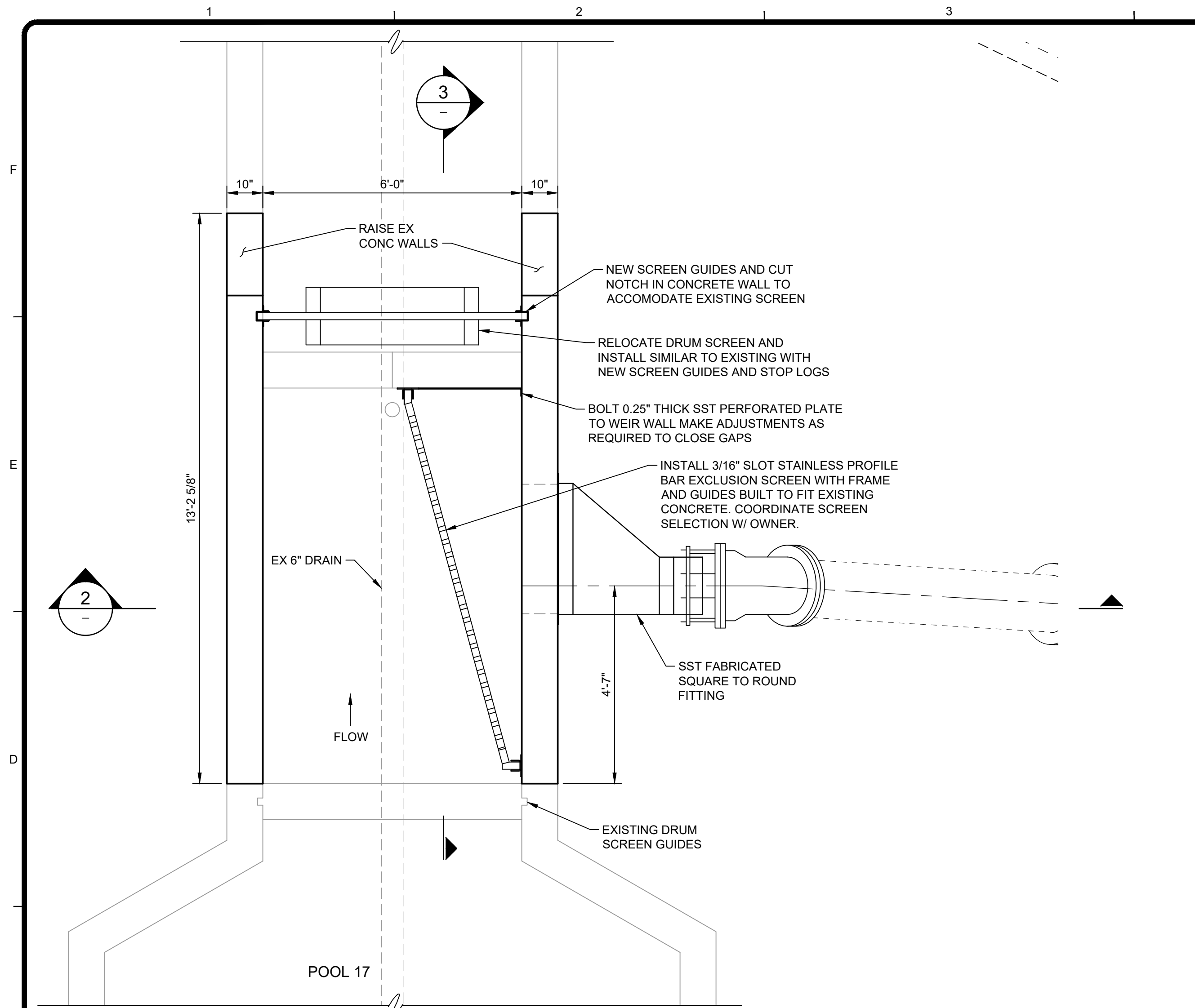


MARK	DATE	DESCRIPTION	BY

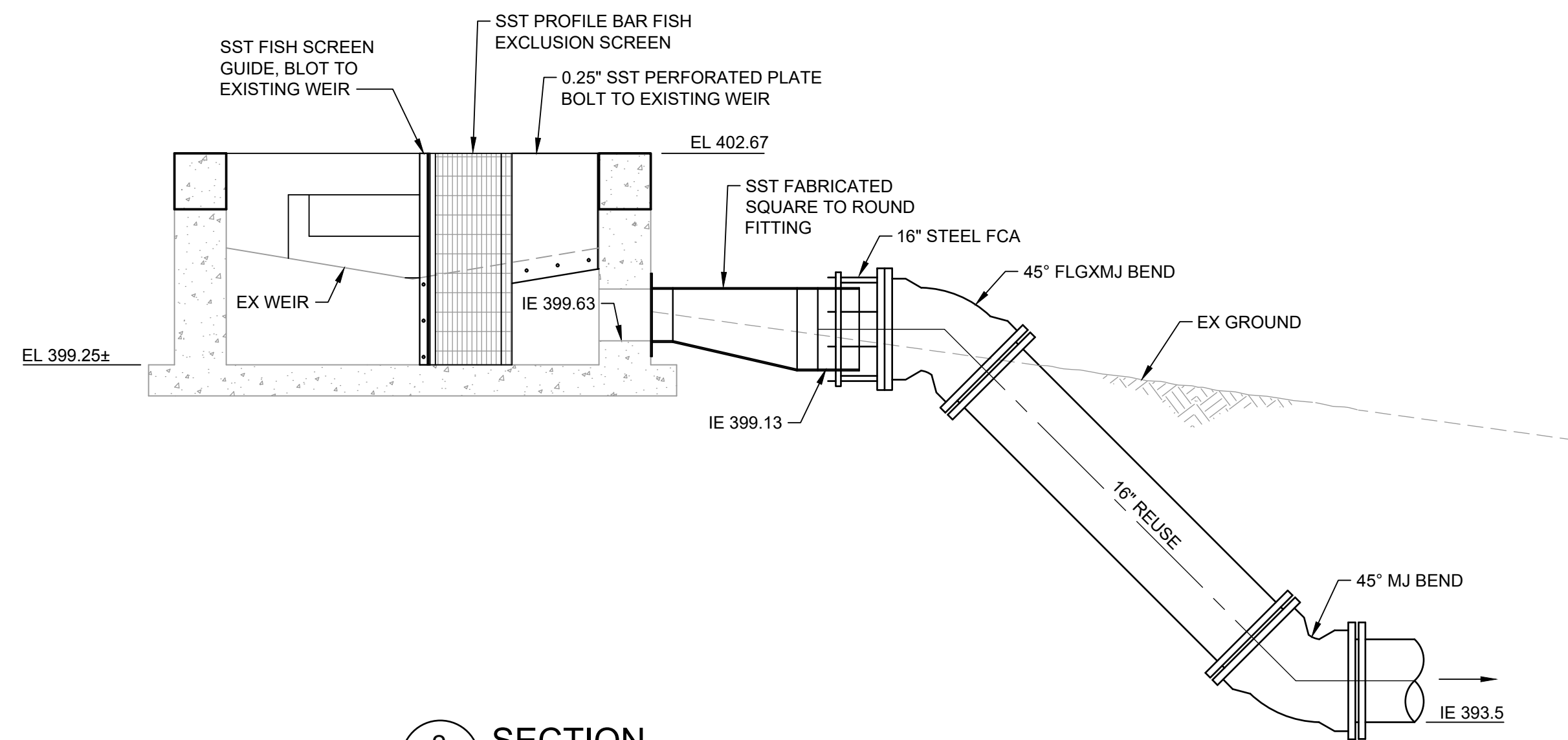
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SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
EQUIPMENT BUILDING
SECTIONS

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

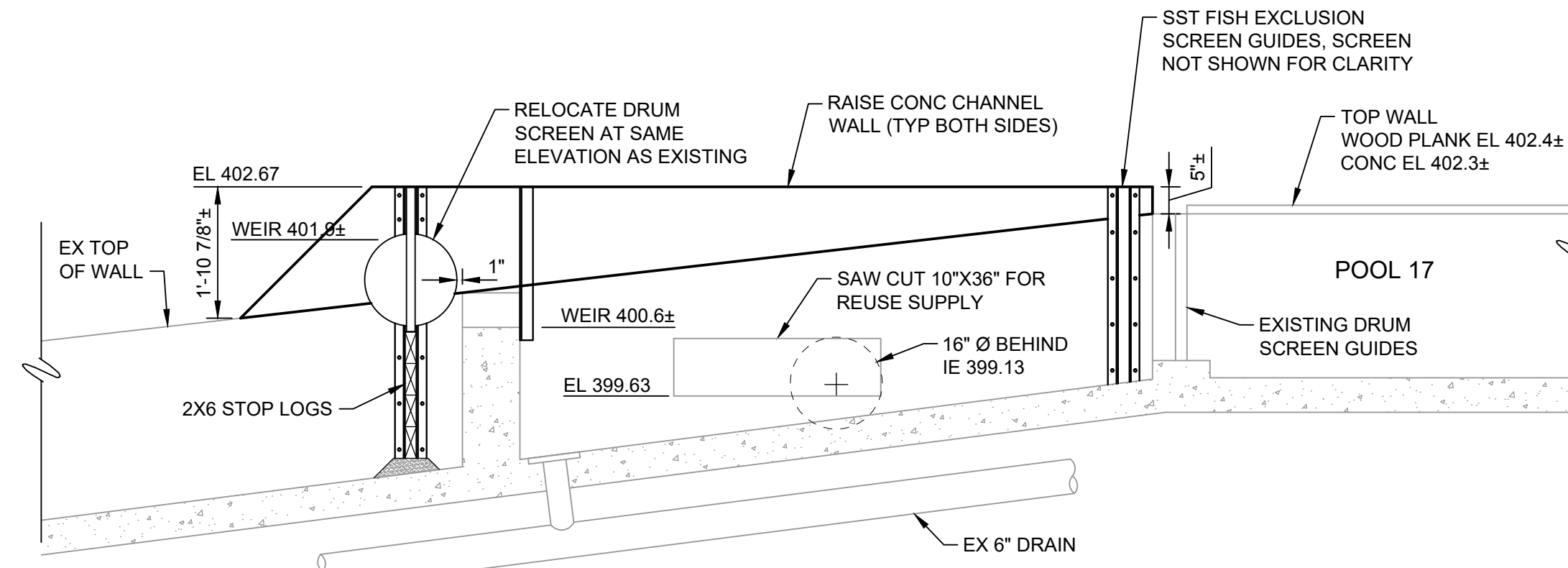
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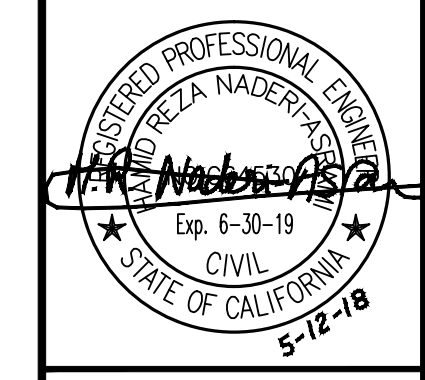
1 PLAN REUSE DIVERSION BOX
SCALE: 1/2"=1'-0"



2 SECTION
SCALE: 1/2"=1'-0"



3 SECTION
SCALE: 1/2"=1'-0"



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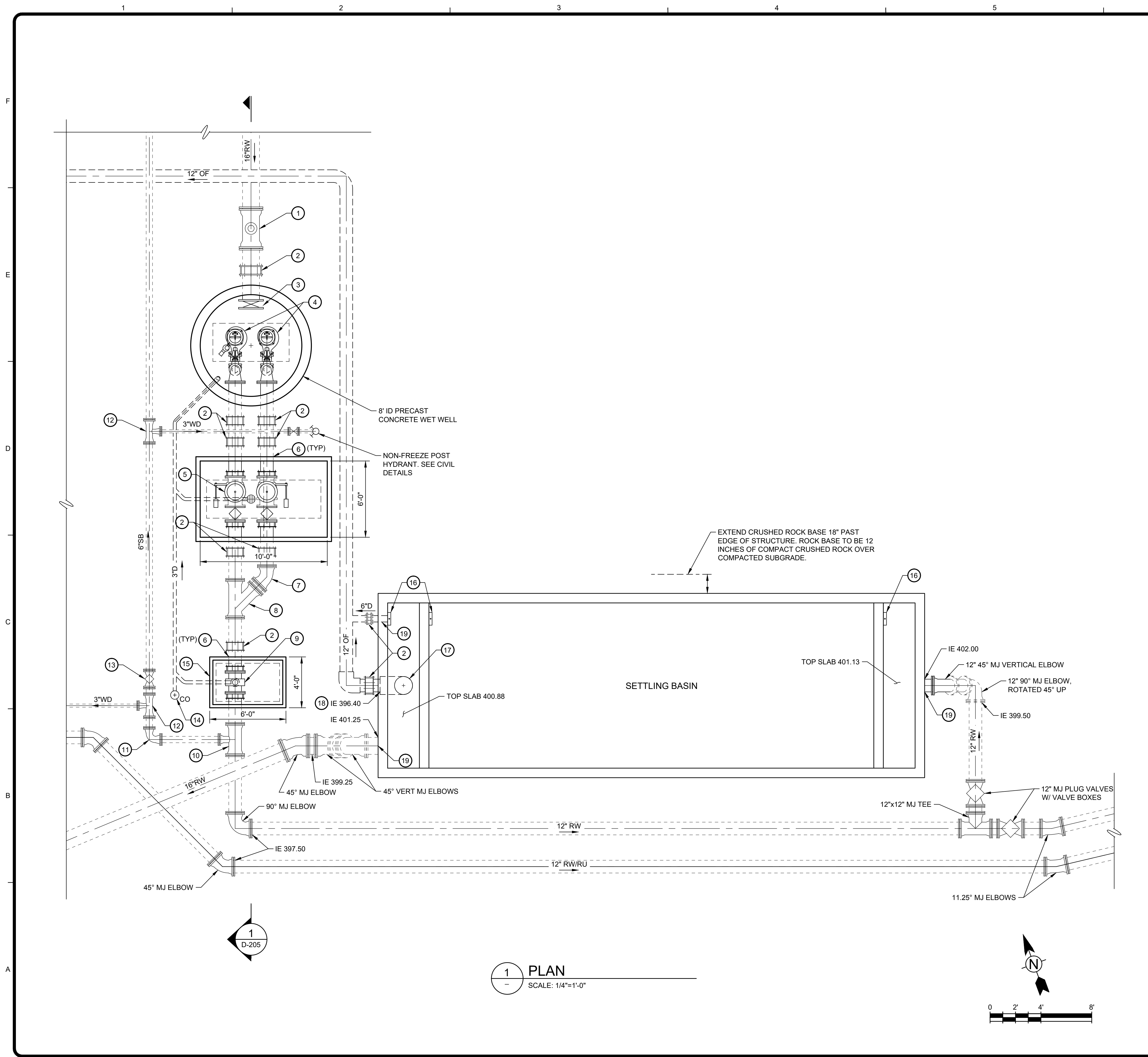
MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE**
**MECHANICAL
SECTIONS & DETAILS**

Project No.: 135-124674-15001
Designed By: DJN
Drawn By: EGN
Checked By: DJN

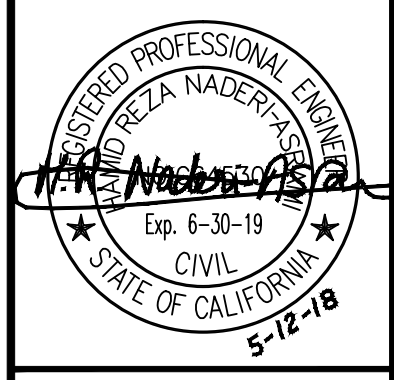
D-203

5/12/2018 7:13:46 PM - P:\124674\135-124674-15001\CAD\SH\FILES\D-204-PUMPSTAPLAN.DWG - NORDHOLM, ERIK



- KEYED NOTES:**
- 1 16"x6" MJ TEE WITH 6" RISER PIPE AND QUICK DISCONNECT COUPLING, LOCATED 30" ABOVE GRADE. CONSTRUCT 18"x18"x6" (LxWxD) CONCRETE PAD AROUND RISER PIPE.
 - 2 SOLID SLEEVE FLEXIBLE COUPLING. ROMAC 501 OR EQUAL.
 - 3 16" SST KNIFE GATE VALVE, WITH SQUARE NUT ACTUATOR IN A VALVE BOX CAST INTO TOP SLAB
 - 4 RW PUMPS. SUBMERSIBLE NON-CLOG. DESIGN POINT 1350 GPM @ 54.5' TDH, 78% EFFICIENCY. 30 HP, 1770 RPM, 60 HZ MOTOR. BASIS OF DESIGN: FLYGT MODEL NP-3171 MT3-435, OR EQUAL.
 - 5 12" LEVER AND WEIGHT CHECK VALVE. LOCATE LEVERS ON OPPOSITE SIDES AS SHOWN IN PLAN.
 - 6 LINK SEAL PIPE PENETRATION
 - 7 45° MJ ELBOW
 - 8 12"x12" MJ WYE
 - 9 12" ELECTROMAGNETIC FLOW METER
 - 10 12"x6" MJ x MJ REDUCING TEE
 - 11 90° MJ ELBOW
 - 12 6"x3" MJxMJ REDUCING TEE
 - 13 6" MJ PLUG VALVE WITH BURIED SQUARE NUT ACTUATOR AND VALVE BOX.
 - 14 YARD CLEAN-OUT. SEE CIVIL DETAILS.
 - 15 6FT x 4FT PRECAST VAULT WITH TRAFFIC RATED DOUBLE LEAF ALUMINUM HATCH
 - 16 6" SST FLUSH BOTTOM SLIDE GATE. PROVIDE HANDWHEEL, RISING STEM ACTUATOR. SEATING / UNSEATING HEAD = 10 FT.
 - 17 16" SCH 80 PVC REMOVABLE STANDPIPE, TOP ELEV = 404.50. 16" PVC ELBOW PENETRATING SETTLING BASIN BOTTOM SLAB (PROVIDE HYDROPHILIC, ADHESIVE WATER STOP AROUND PVC PENETRATION).
 - 18 16"x12" PVC BUSHING.
 - 19 STEEL WALL PIPE WITH WEEP RING. EPOXY LINED AND COATED.

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MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**RW PUMP STATION
& SETTLING BASIN PLAN**

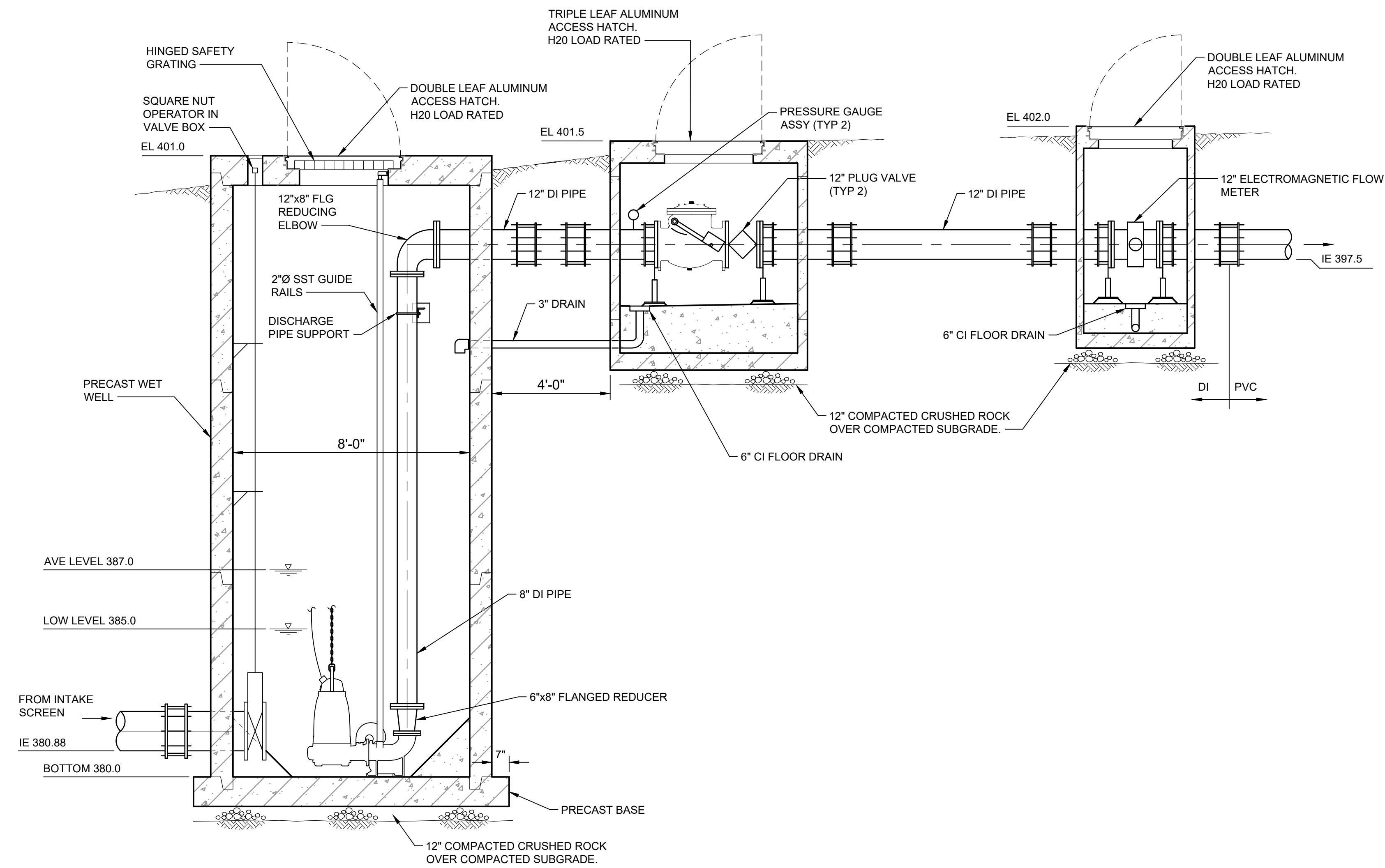
Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

D-204

Bar Measures 1 inch

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5/12/2018 7:15:32 PM - P:\124674\135-124674-15001\CAD\SHEETFILES\D-205-PUMPSTASECTIONS.DWG - NORDHOLM, ERIK



1 SECTION
D-204 SCALE: 3/8"=1'-0"

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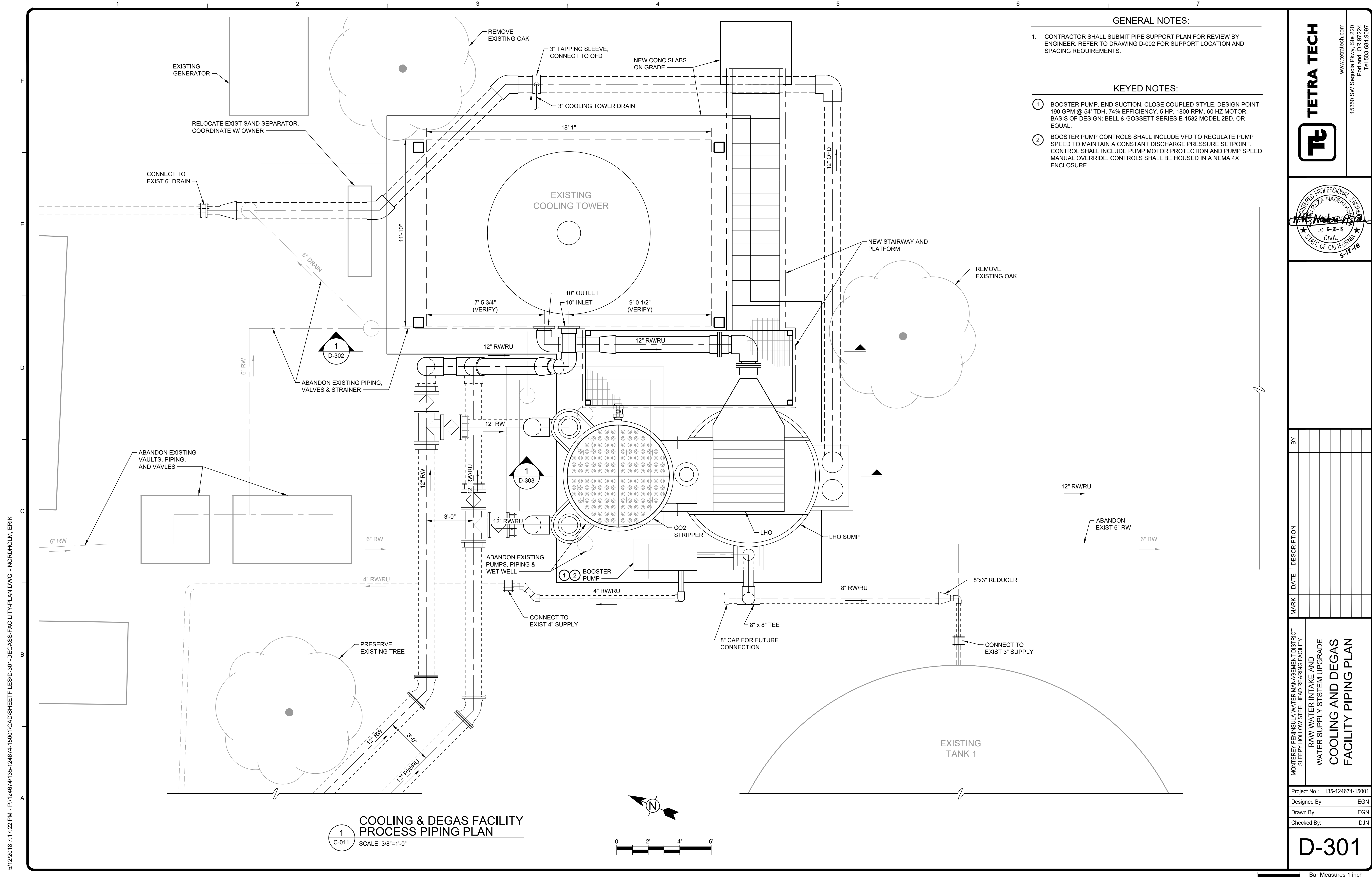
REGISTERED PROFESSIONAL ENGINEER
PREZA NADEPRATE
Exp. 6-30-19
CIVIL
STATE OF CALIFORNIA
5-12-18

MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**RW PUMP STATION
SECTIONS**

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By: DJN

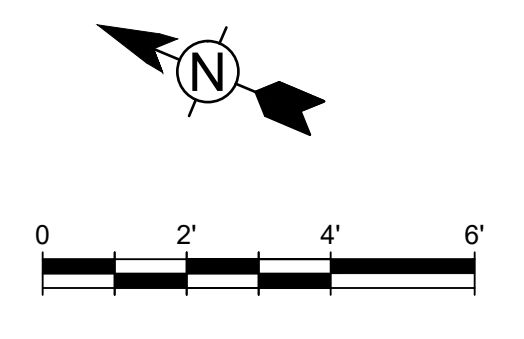
D-205
Copyright: Tetra Tech
Bar Measures 1 inch



- GENERAL NOTES:**
- CONTRACTOR SHALL SUBMIT PIPE SUPPORT PLAN FOR REVIEW BY ENGINEER. REFER TO DRAWING D-002 FOR SUPPORT LOCATION AND SPACING REQUIREMENTS.
- KEYED NOTES:**
- BOOSTER PUMP, END SUCTION, CLOSE COUPLED STYLE. DESIGN POINT 190 GPM @ 54' TDH, 74% EFFICIENCY, 5 HP, 1800 RPM, 60 HZ MOTOR. BASIS OF DESIGN: BELL & GOSSETT SERIES E-1532 MODEL 2BD, OR EQUAL.
 - BOOSTER PUMP CONTROLS SHALL INCLUDE VFD TO REGULATE PUMP SPEED TO MAINTAIN A CONSTANT DISCHARGE PRESSURE SETPOINT. CONTROL SHALL INCLUDE PUMP MOTOR PROTECTION AND PUMP SPEED MANUAL OVERRIDE. CONTROLS SHALL BE HOUSED IN A NEMA 4X ENCLOSURE.

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1
C-011
**COOLING & DEGAS FACILITY
PROCESS PIPING PLAN**
SCALE: 3/8"=1'-0"



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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY

**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
COOLING AND DEGAS
FACILITY PIPING PLAN**

Project No.: 135-124674-15001
 Designed By: EGN
 Drawn By: EGN
 Checked By: DJN

D-301

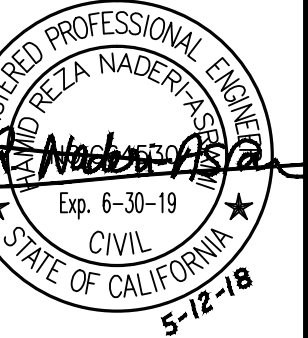
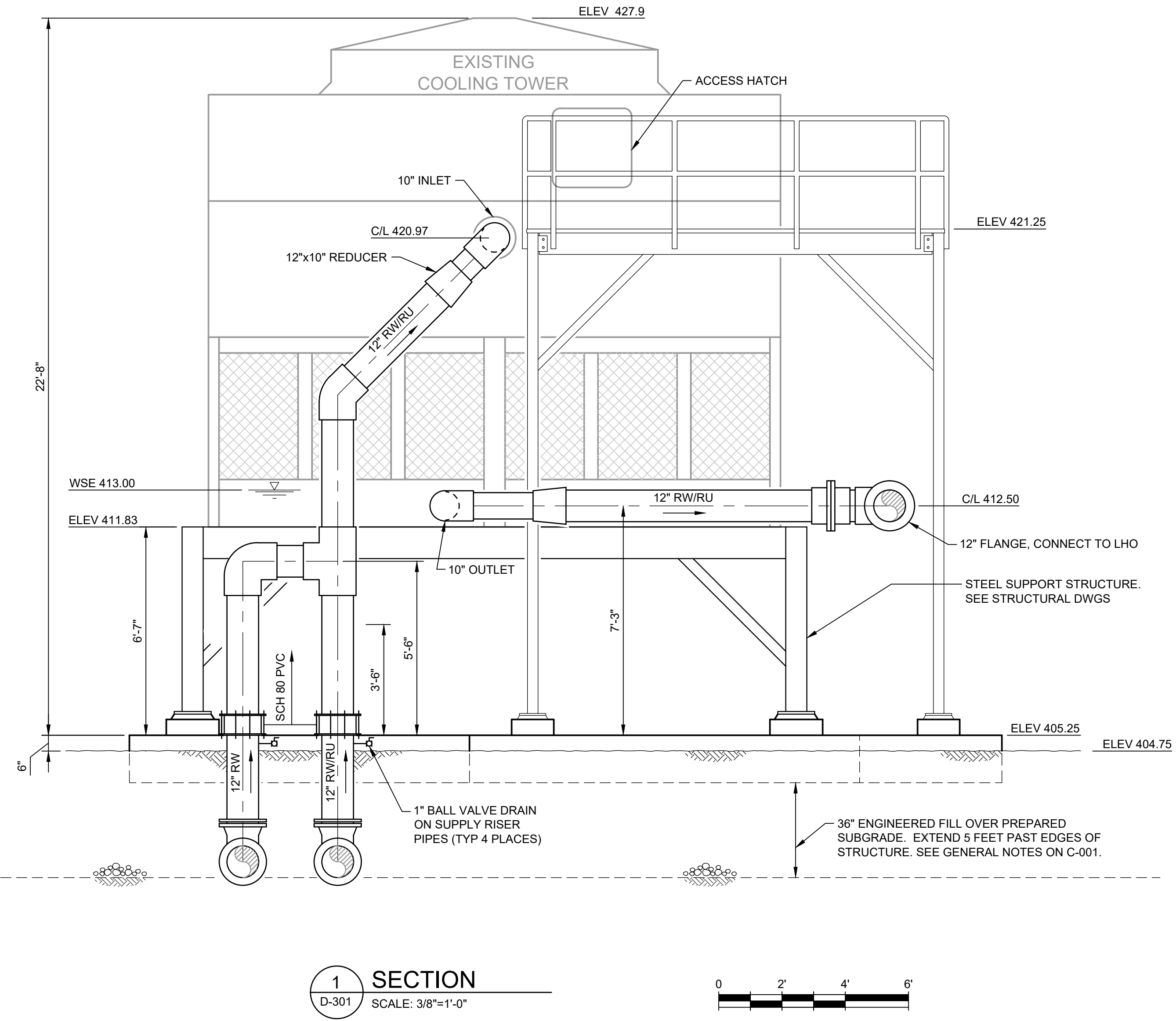
Copyright: Tetra Tech

Bar Measures 1 inch

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GENERAL NOTES:

- CONTRACTOR SHALL SUBMIT PIPE SUPPORT PLAN FOR REVIEW BY ENGINEER. REFER TO DRAWING D-002 FOR SUPPORT LOCATION AND SPACING REQUIREMENTS.



MARK	DATE	DESCRIPTION	BY

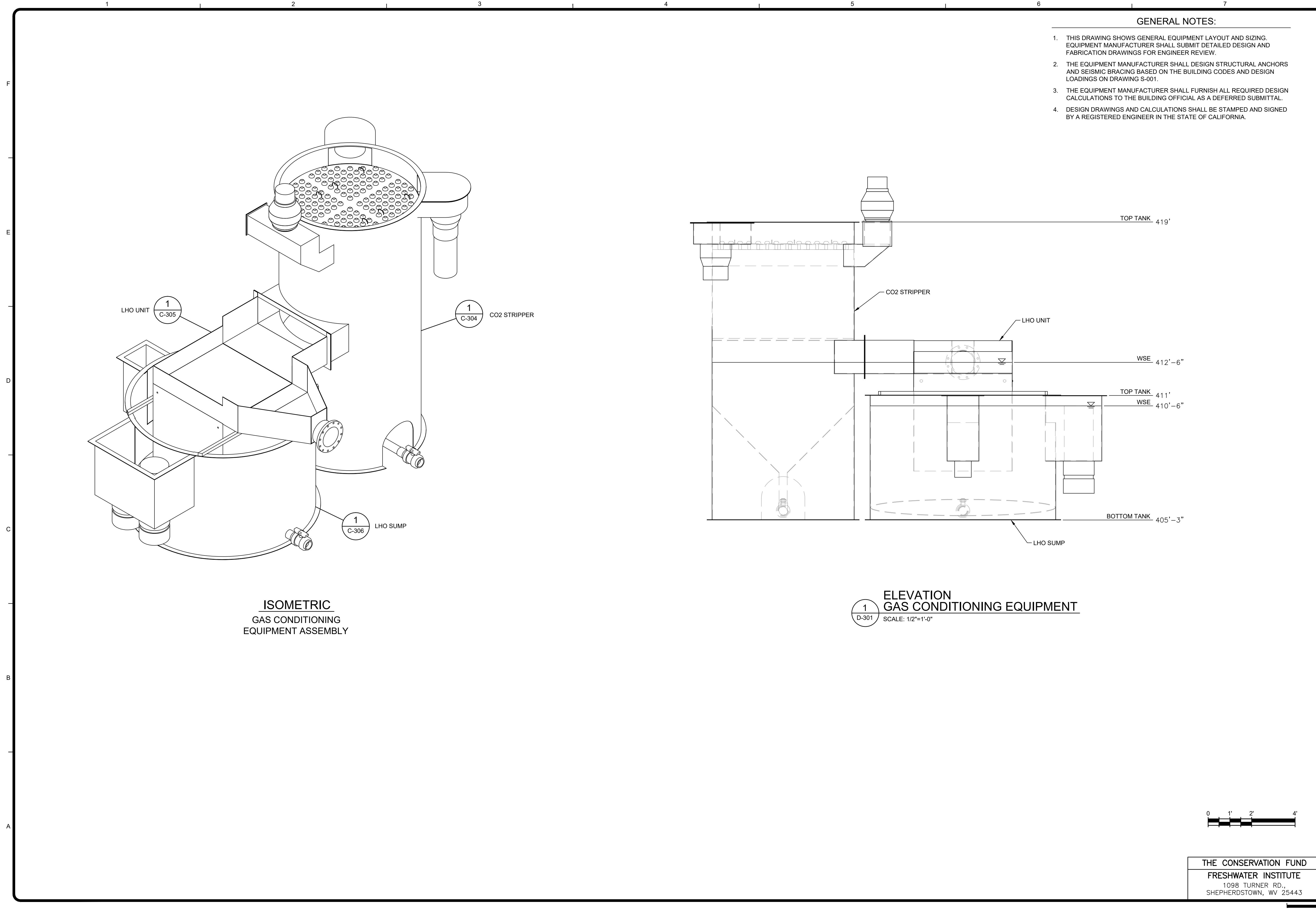
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
 COOLING AND DEGASS
 FACILITY SECTIONS

Project No.: 135-124674-15001
 Designed By: EGN
 Drawn By: EGN
 Checked By: DJN

D-302

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Bar Measures 1 inch

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ISOMETRIC
GAS CONDITIONING
EQUIPMENT ASSEMBLY

ELEVATION
GAS CONDITIONING EQUIPMENT
1 D-301 SCALE: 1/2"=1'-0"

GENERAL NOTES:

1. THIS DRAWING SHOWS GENERAL EQUIPMENT LAYOUT AND SIZING. EQUIPMENT MANUFACTURER SHALL SUBMIT DETAILED DESIGN AND FABRICATION DRAWINGS FOR ENGINEER REVIEW.
2. THE EQUIPMENT MANUFACTURER SHALL DESIGN STRUCTURAL ANCHORS AND SEISMIC BRACING BASED ON THE BUILDING CODES AND DESIGN LOADINGS ON DRAWING S-001.
3. THE EQUIPMENT MANUFACTURER SHALL FURNISH ALL REQUIRED DESIGN CALCULATIONS TO THE BUILDING OFFICIAL AS A DEFERRED SUBMITTAL.
4. DESIGN DRAWINGS AND CALCULATIONS SHALL BE STAMPED AND SIGNED BY A REGISTERED ENGINEER IN THE STATE OF CALIFORNIA.

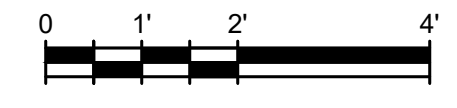
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5-12-18

MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
GAS CONDITIONING
EQUIPMENT

Project No.: 135-124674-15001
Designed By: BJV
Drawn By: KLS
Checked By: DJN



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D-303

Bar Measures 1 inch

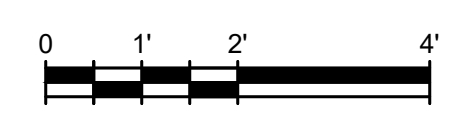
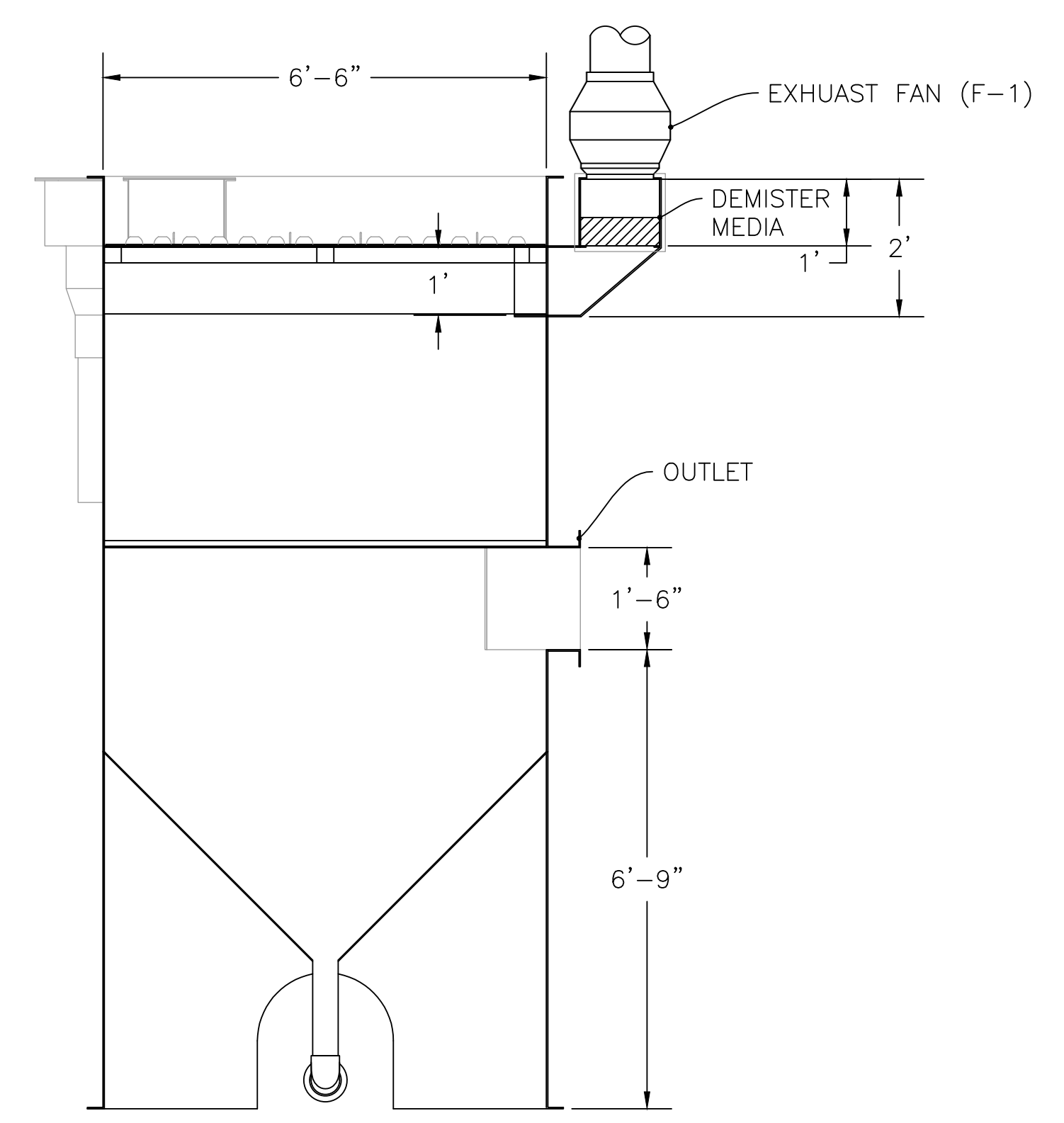
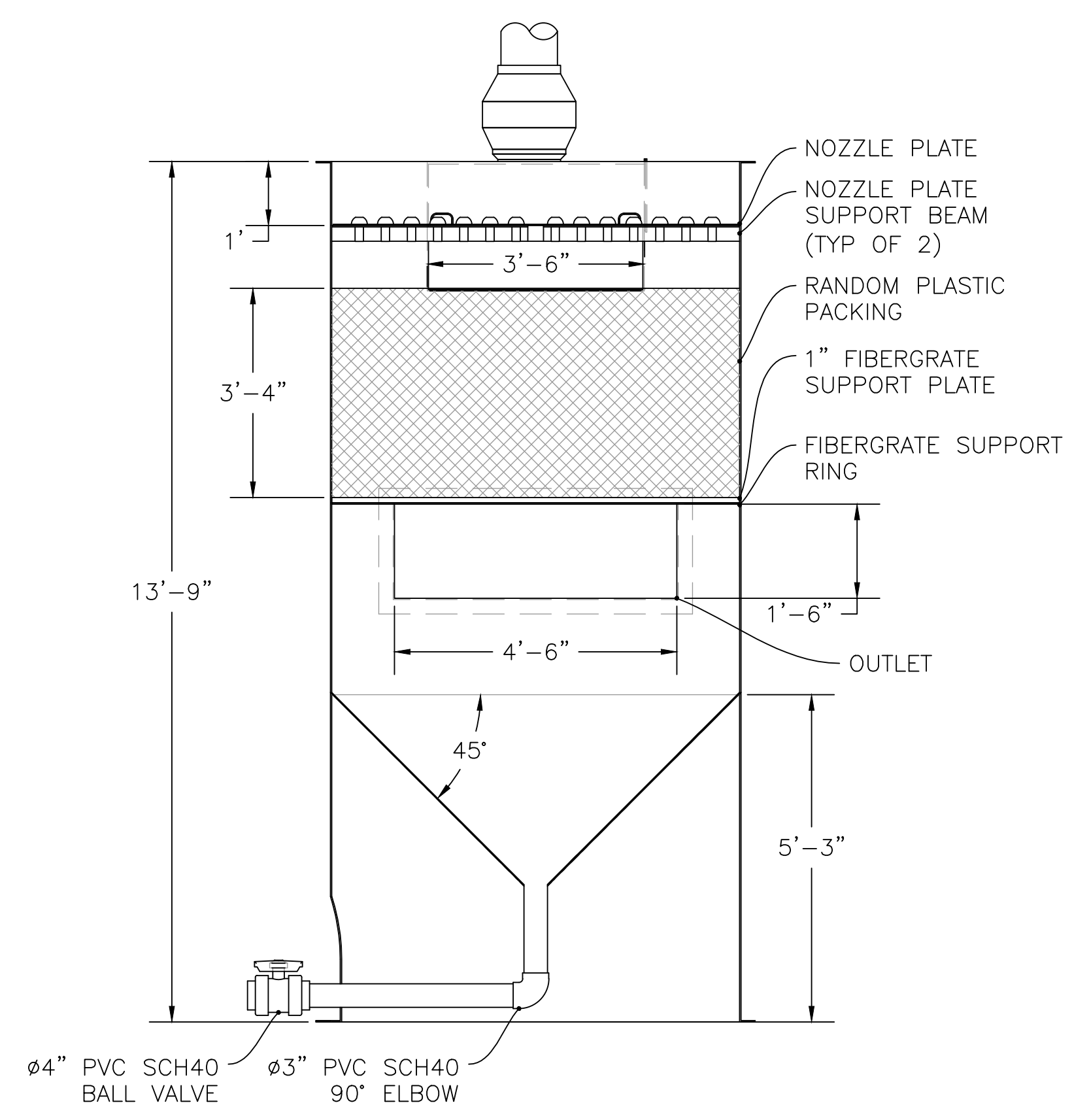
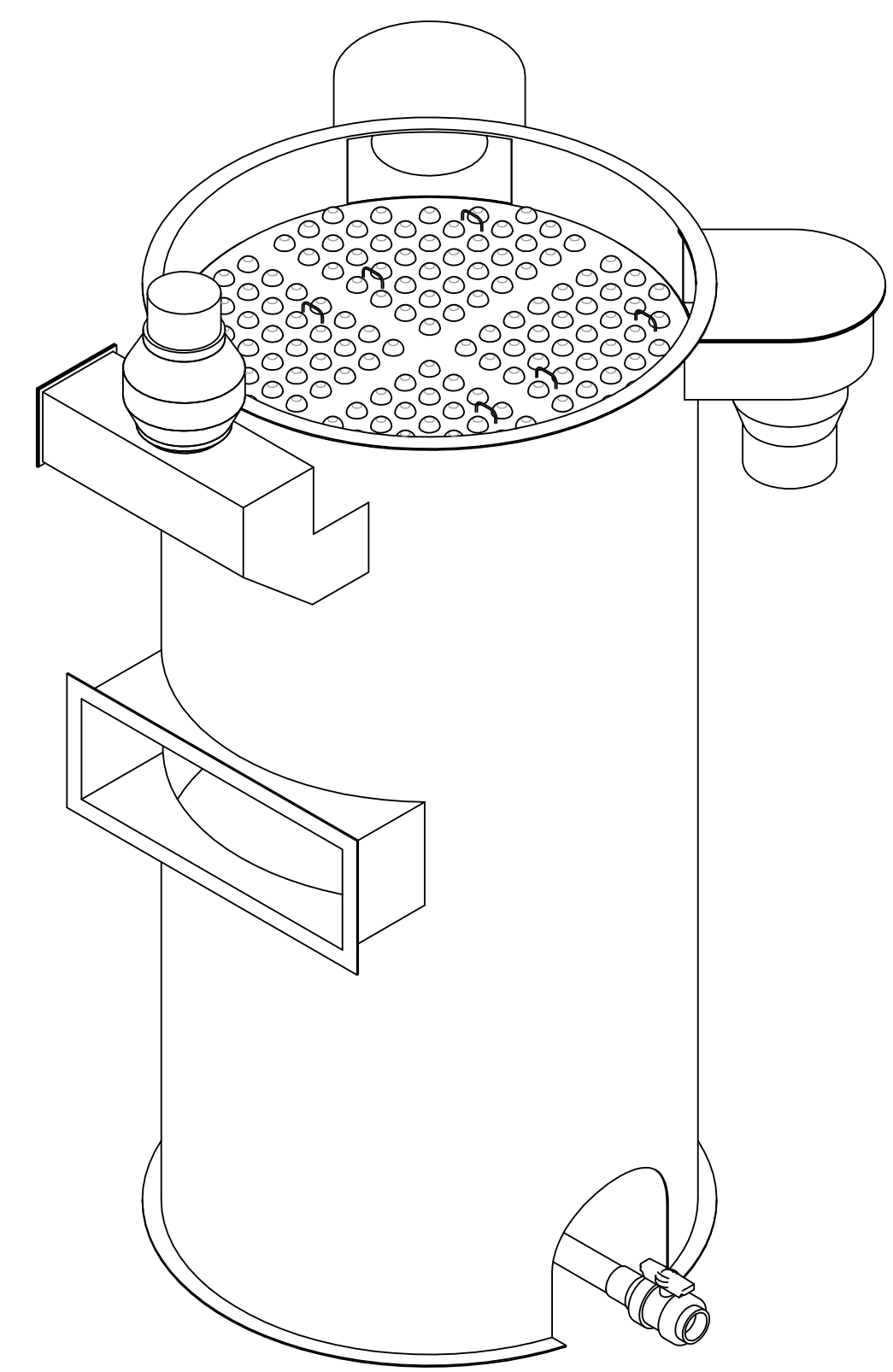
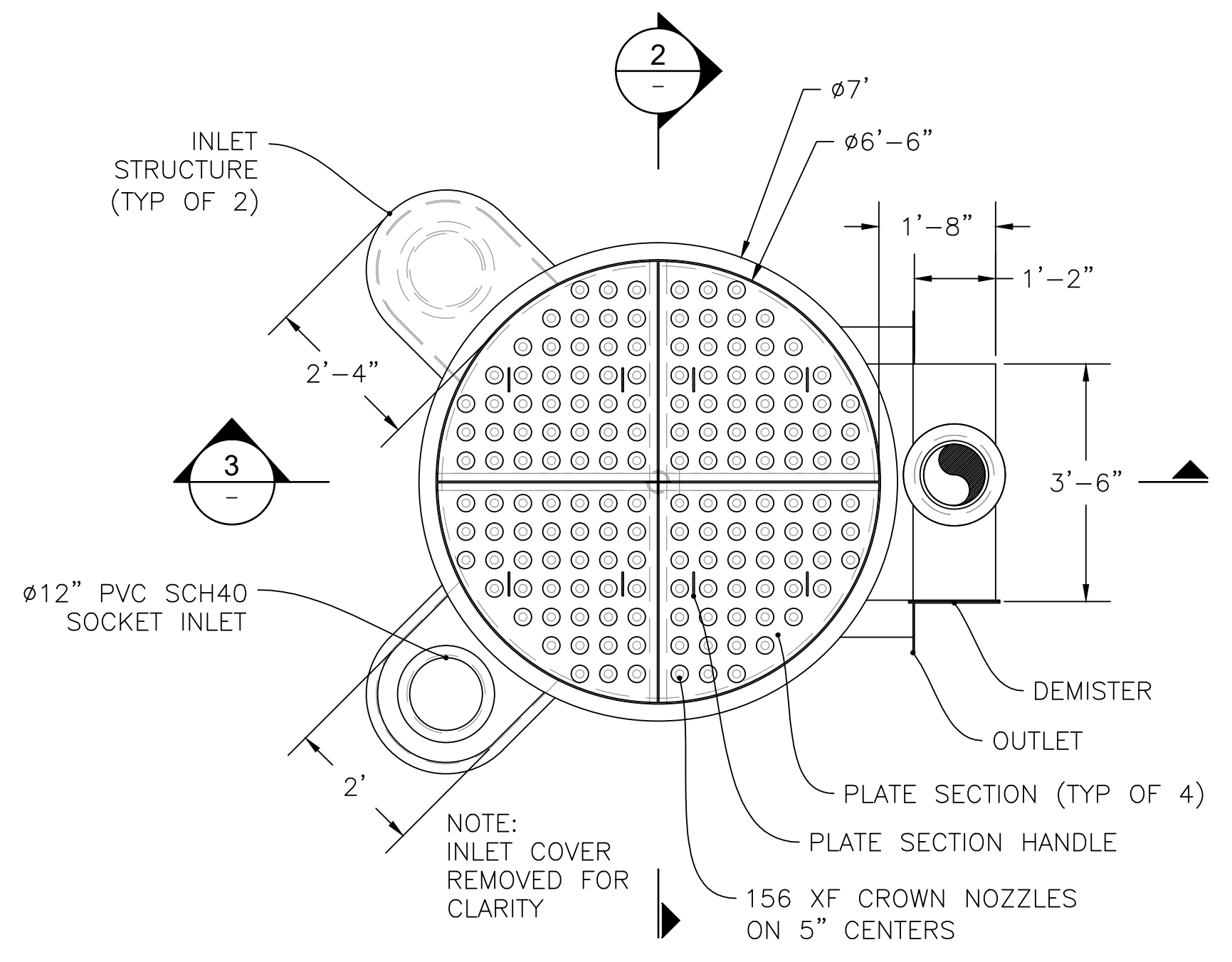
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2. THE EQUIPMENT MANUFACTURER SHALL DESIGN STRUCTURAL ANCHORS AND SEISMIC BRACING BASED ON THE BUILDING CODES AND DESIGN LOADINGS ON DRAWING S-001.
3. THE EQUIPMENT MANUFACTURER SHALL FURNISH ALL REQUIRED DESIGN CALCULATIONS TO THE BUILDING OFFICIAL AS A DEFERRED SUBMITTAL.
4. DESIGN DRAWINGS AND CALCULATIONS SHALL BE STAMPED AND SIGNED BY A REGISTERED ENGINEER IN THE STATE OF CALIFORNIA.

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MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
 GAS CONDITIONING
 EQUIPMENT -
 CO2 STRIPPER

Project No.: 135-124674-15001
 Designed By: BJV
 Drawn By: KLS
 Checked By: BJV

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 FRESHWATER INSTITUTE
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D-304

Bar Measures 1 inch

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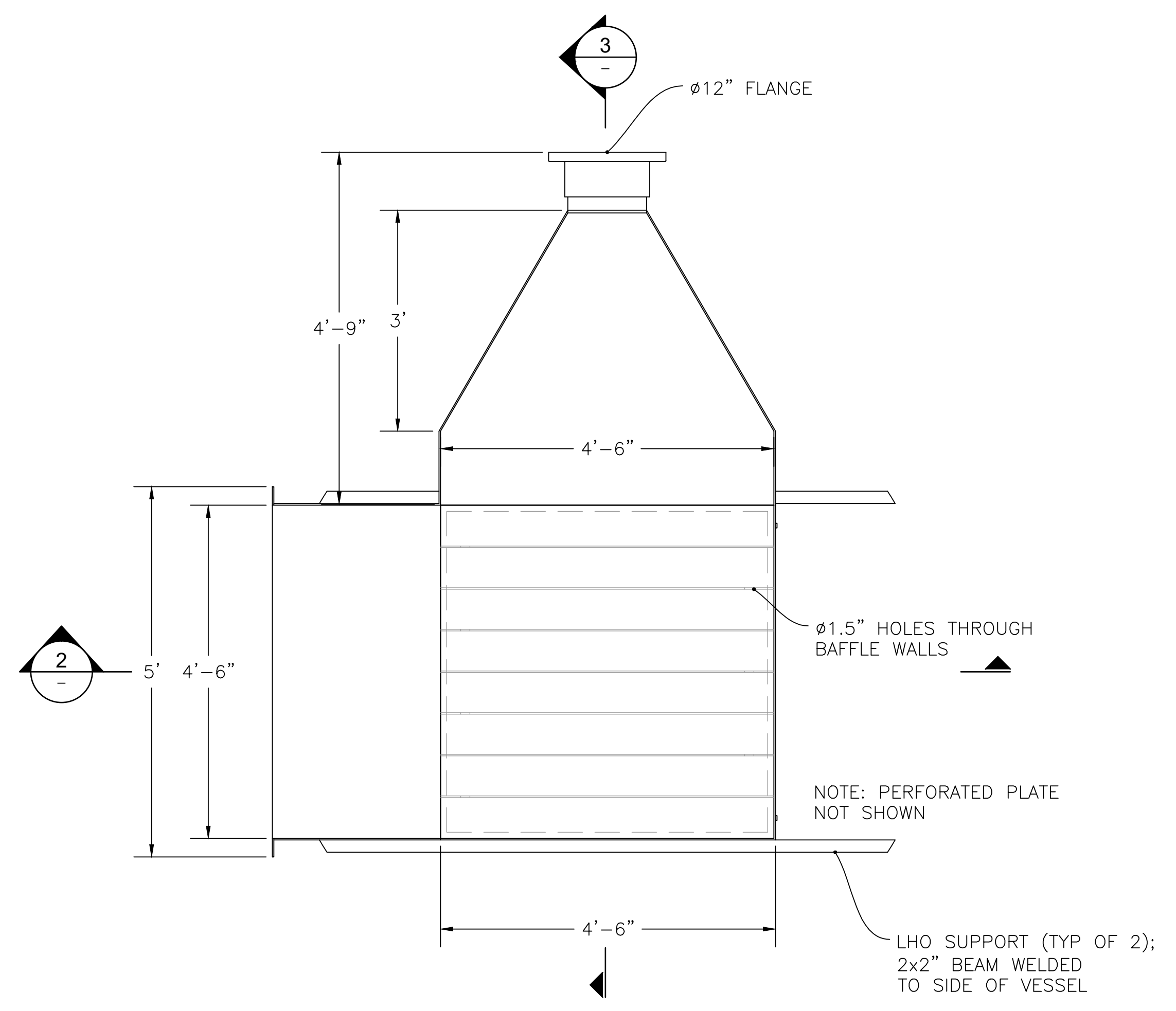
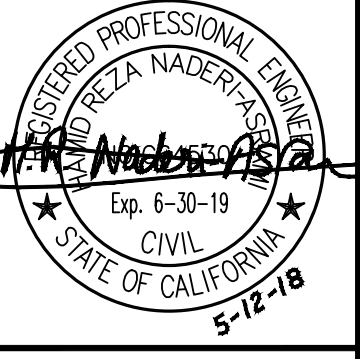
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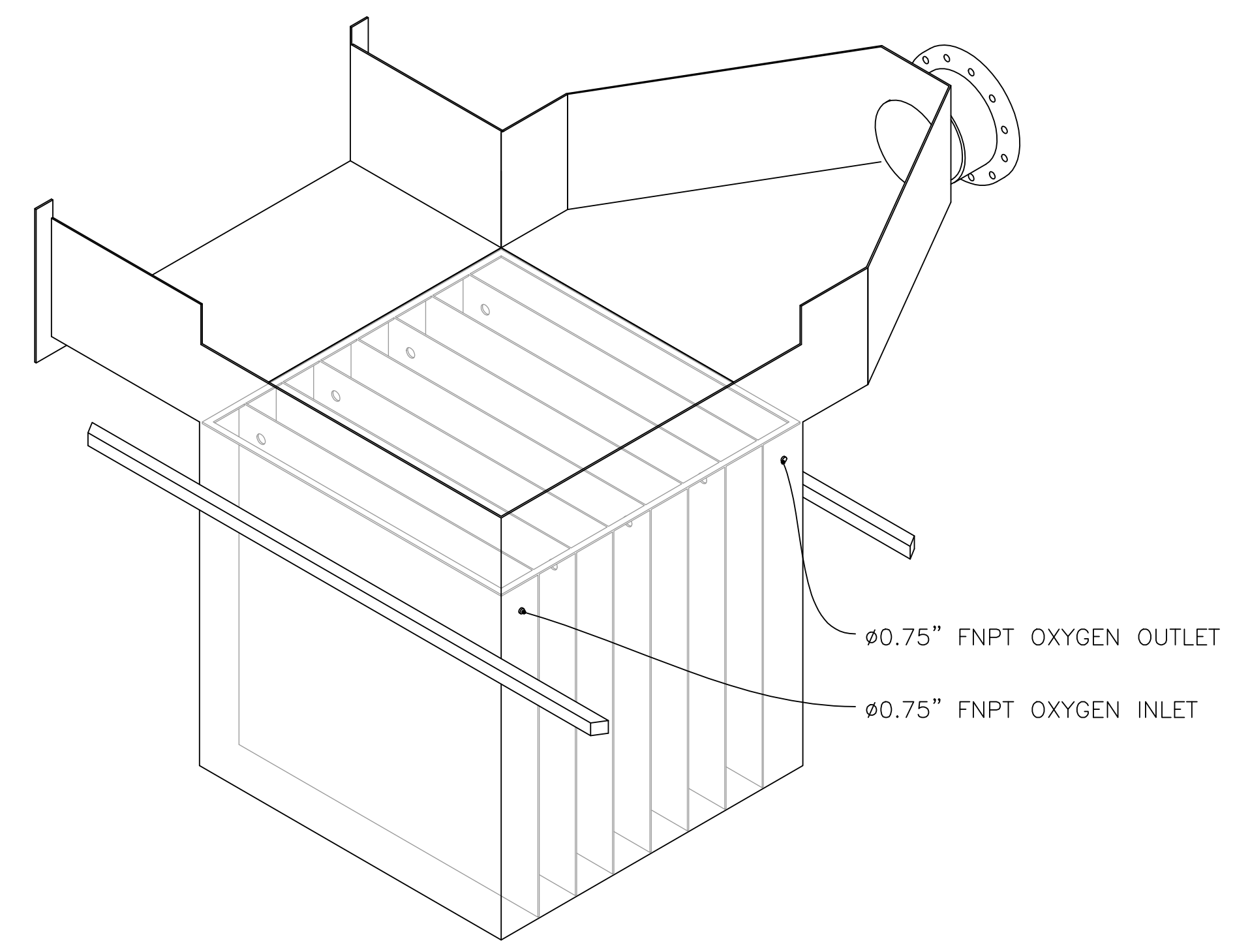
1. THIS DRAWING SHOWS GENERAL EQUIPMENT LAYOUT AND SIZING. EQUIPMENT MANUFACTURER SHALL SUBMIT DETAILED DESIGN AND FABRICATION DRAWINGS FOR ENGINEER REVIEW.
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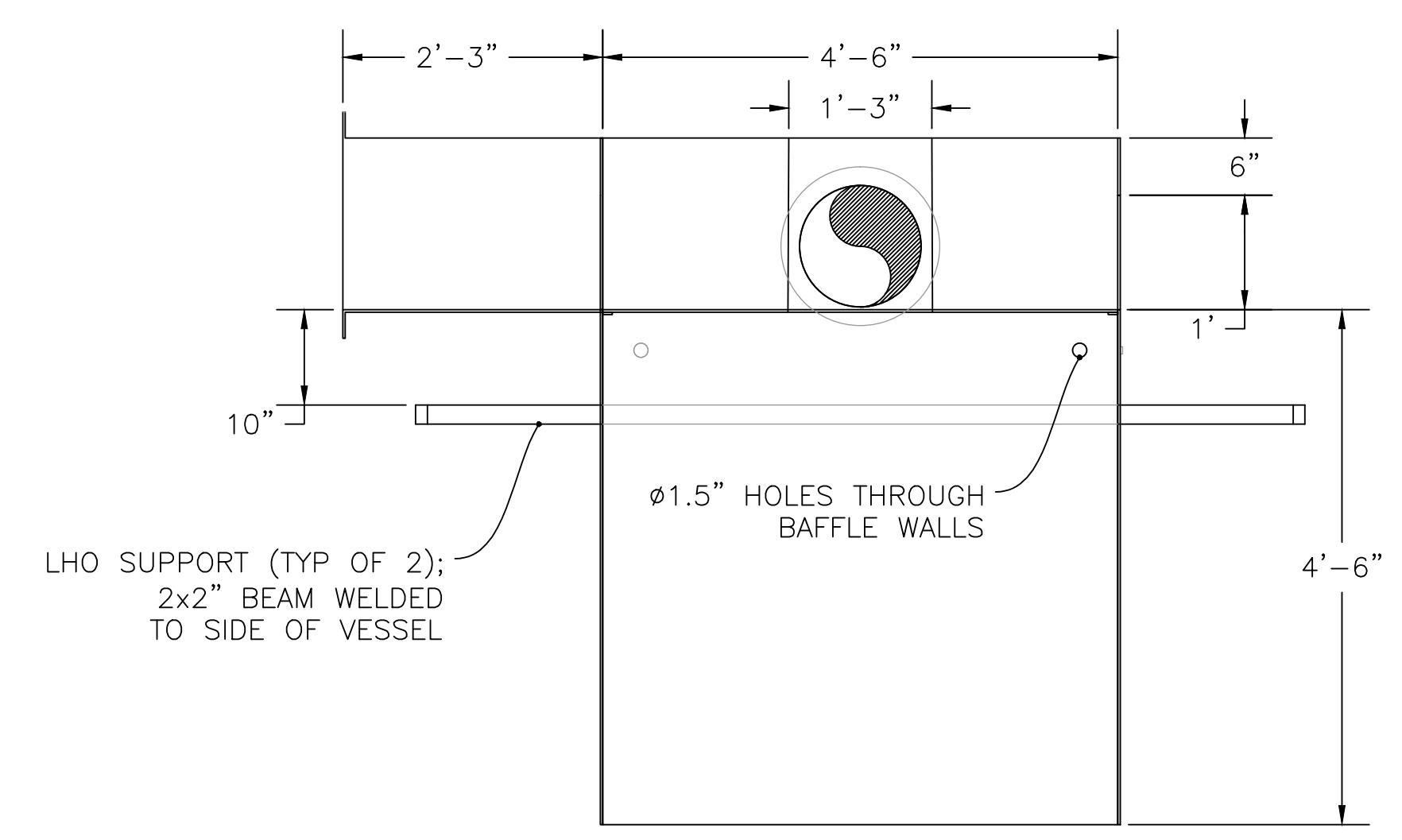
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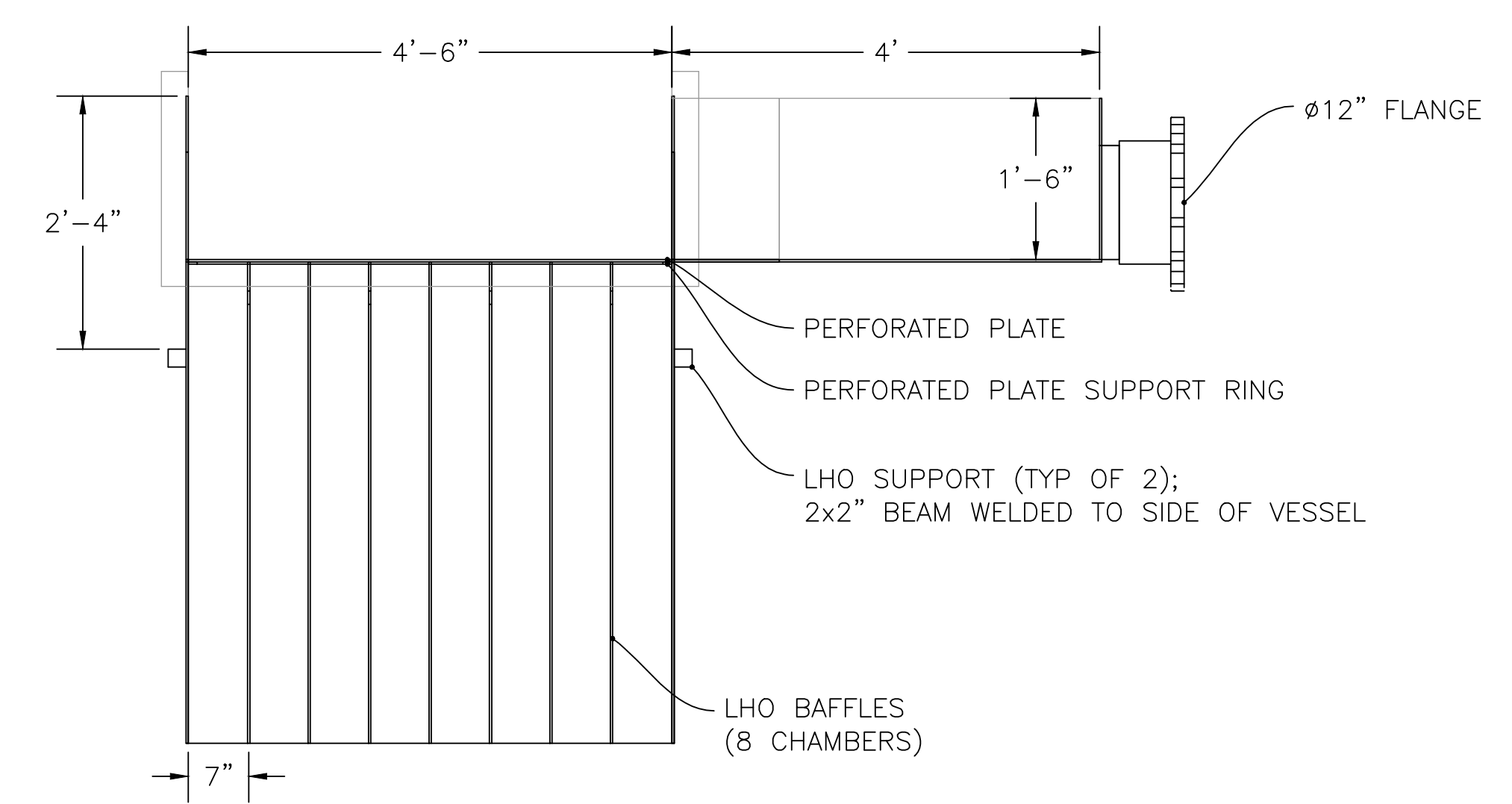
1 PLAN - LHO UNIT
D-303 SCALE: 3/4"=1'-0"



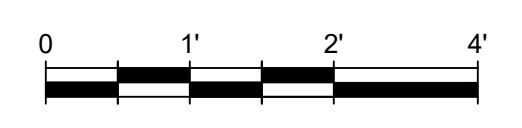
ISOMETRIC
LHO UNIT



2 SECTION
SCALE: 3/4"=1'-0"



3 SECTION
SCALE: 3/4"=1'-0"



MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**GAS CONDITIONING
EQUIPMENT -
LHO UNIT**

Project No.: 135-124674-15001
Designed By: BJV
Drawn By: KLS
Checked By: BJV

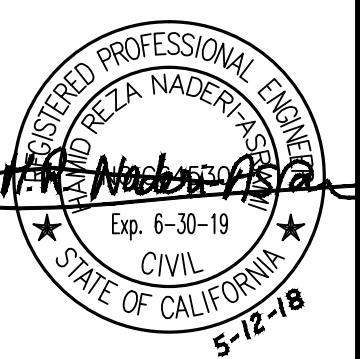
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D-305

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MARK	DATE	DESCRIPTION	BY

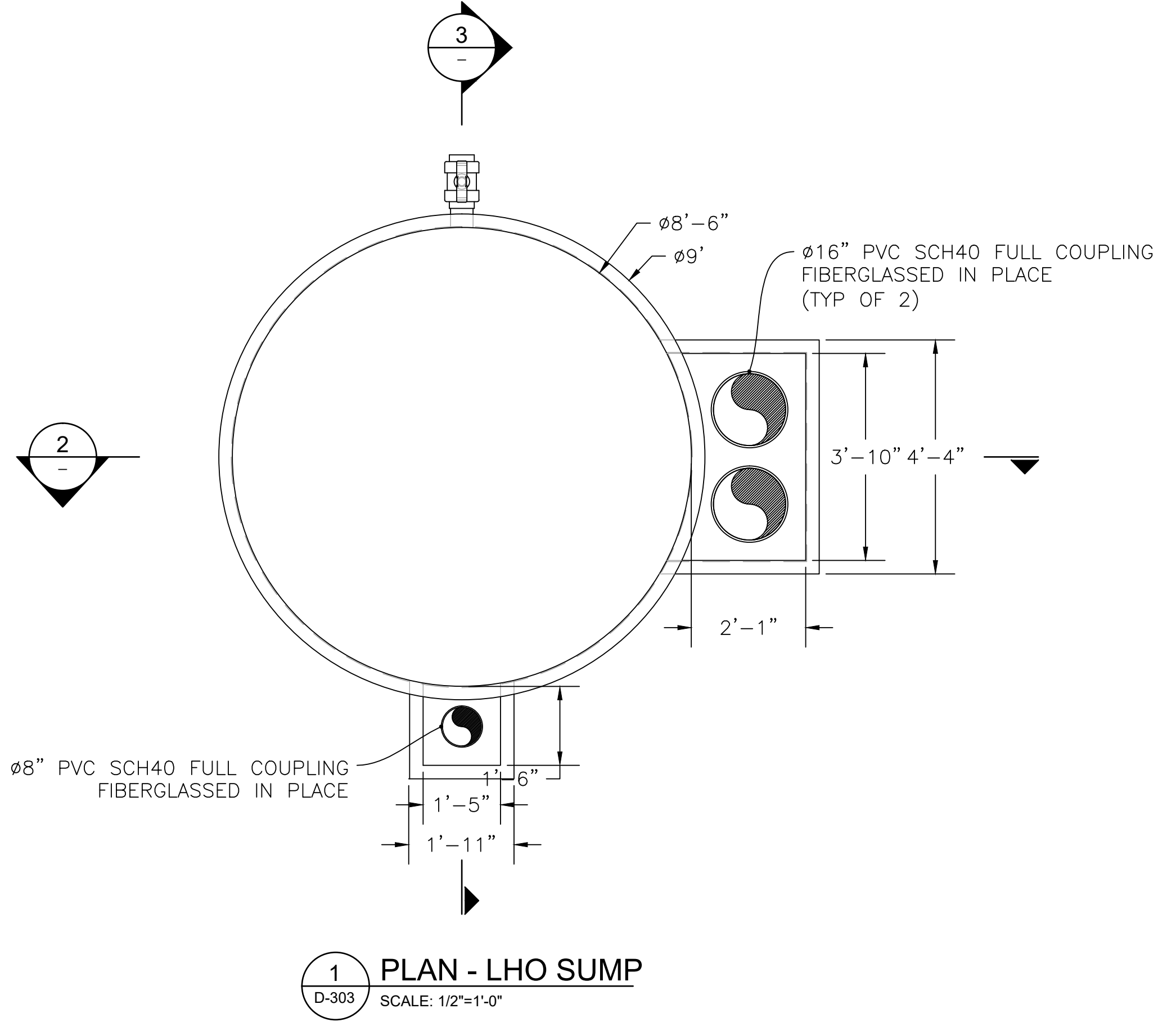
MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
**GAS CONDITIONING
 EQUIPMENT -
 LHO SUMP**

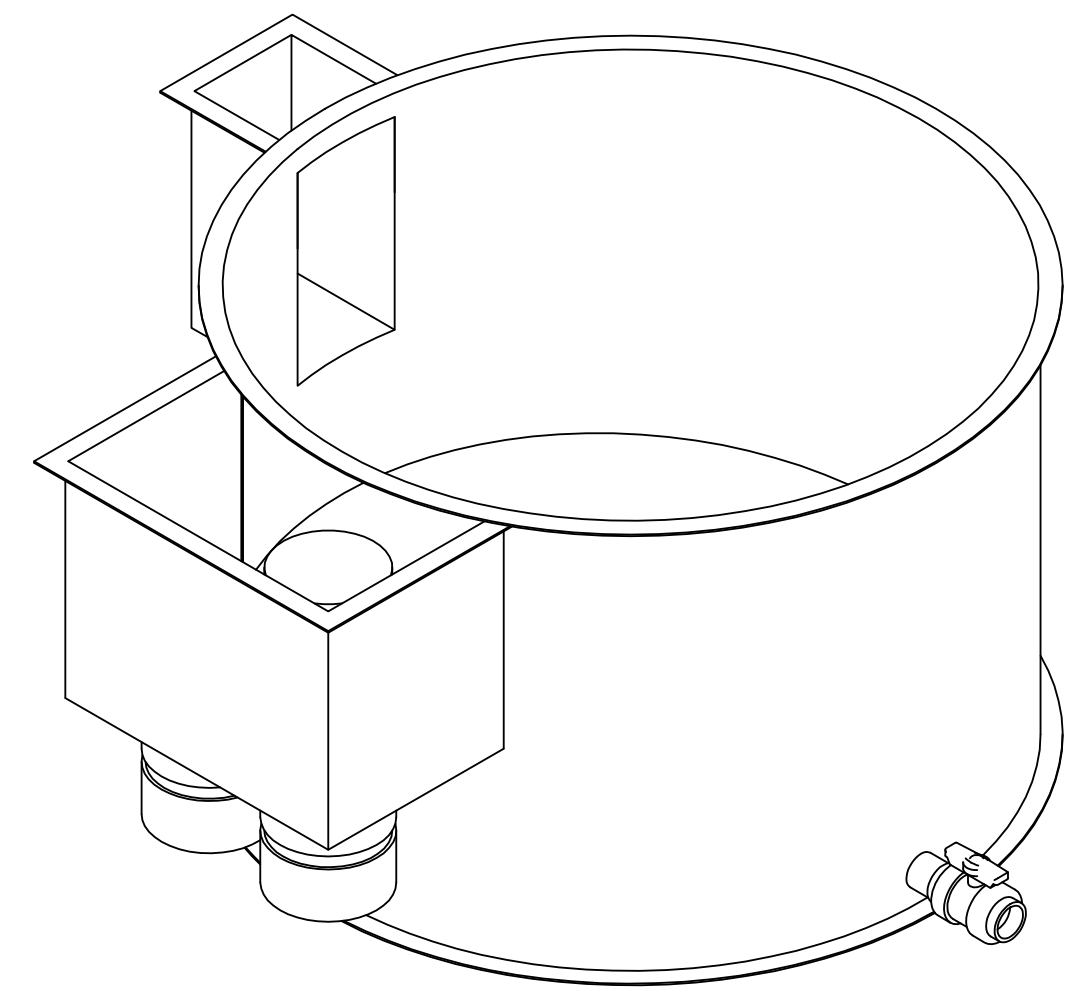
Project No.: 135-124674-15001
 Designed By: BJV
 Drawn By: KLS
 Checked By: BJV

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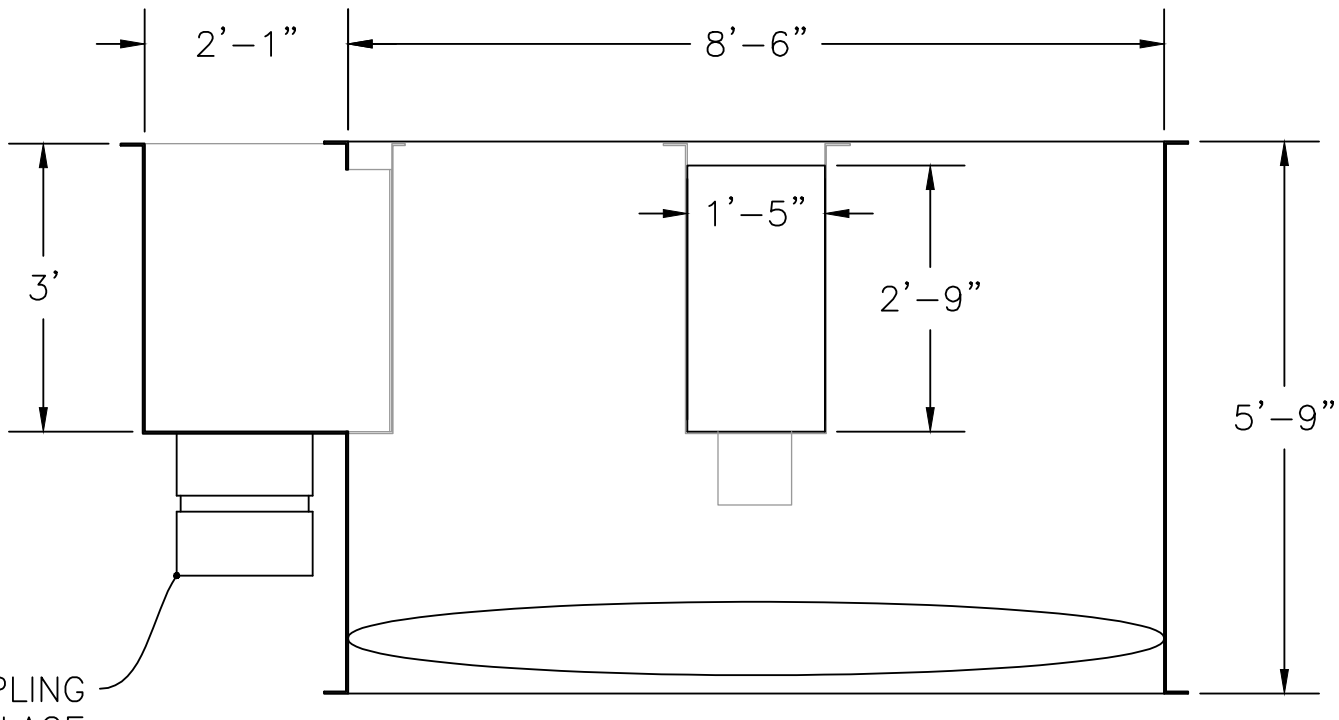
D-306



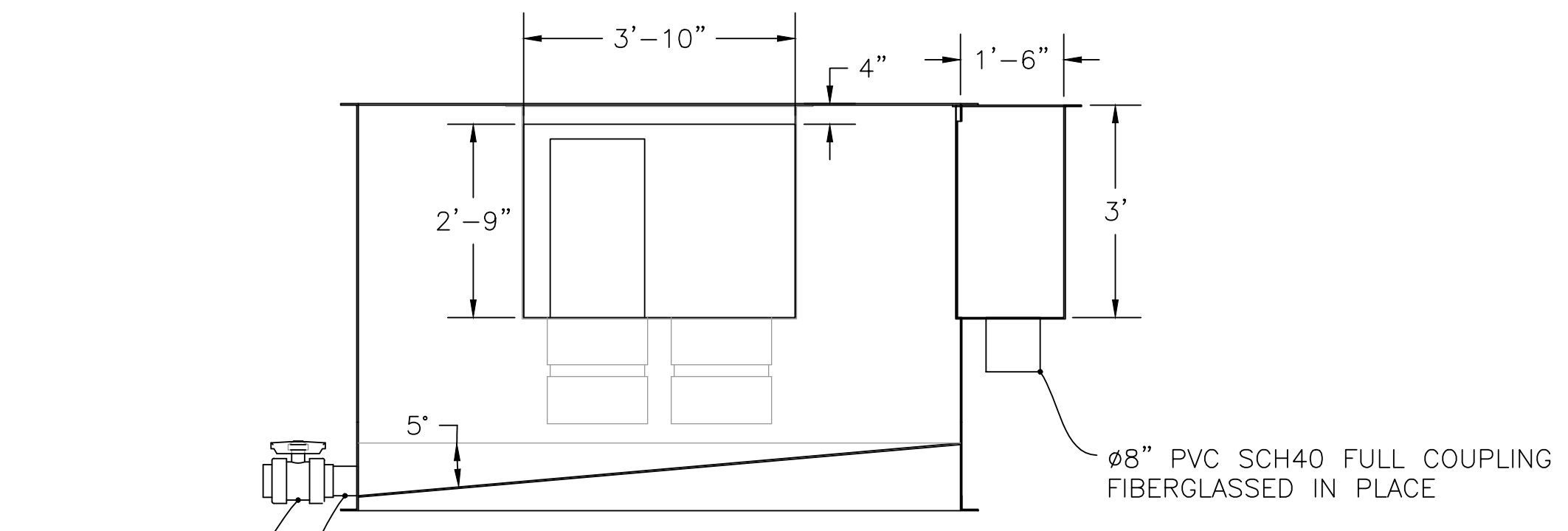
1 PLAN - LHO SUMP
 D-303 SCALE: 1/2"=1'-0"



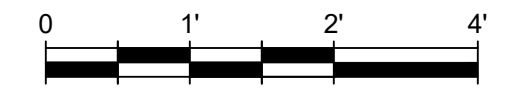
**ISOMETRIC
 LHO SUMP**



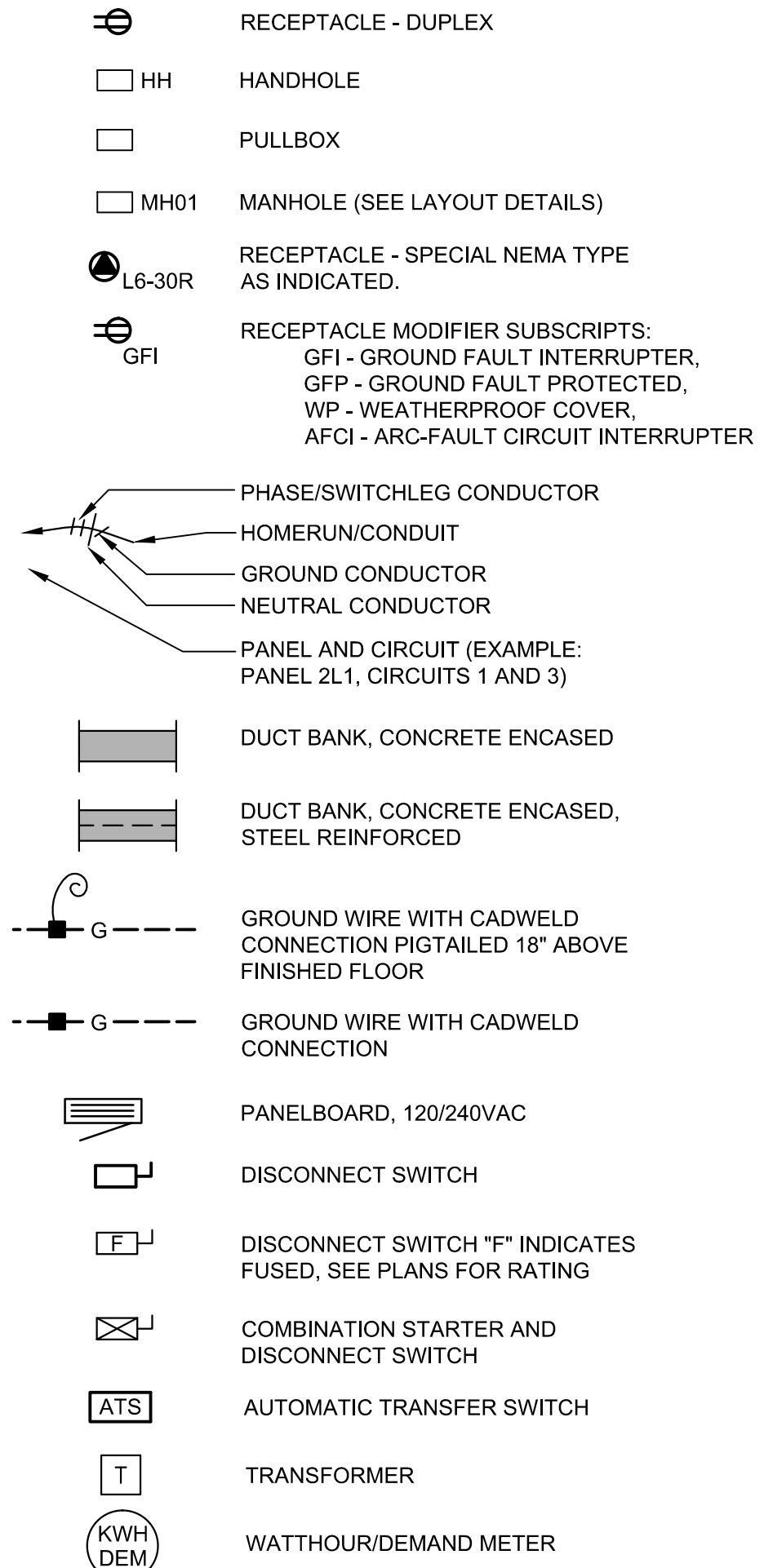
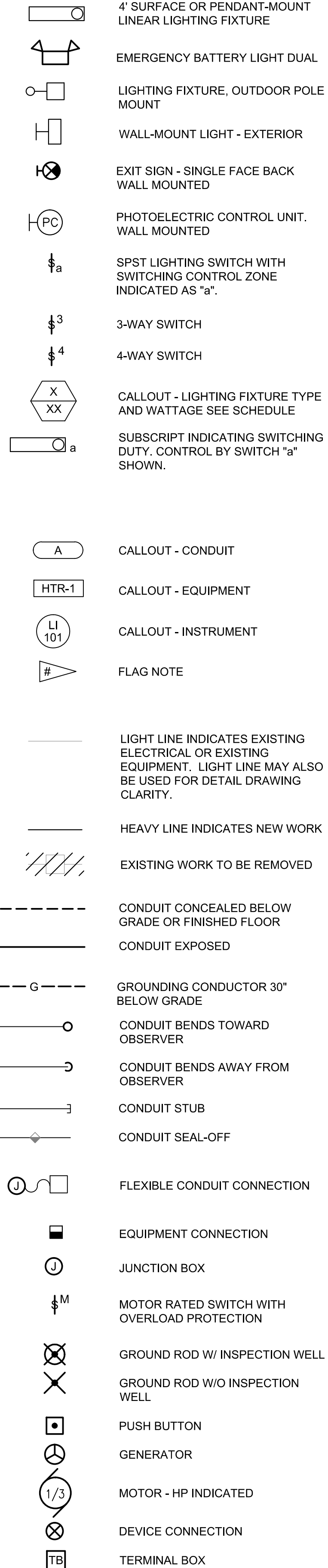
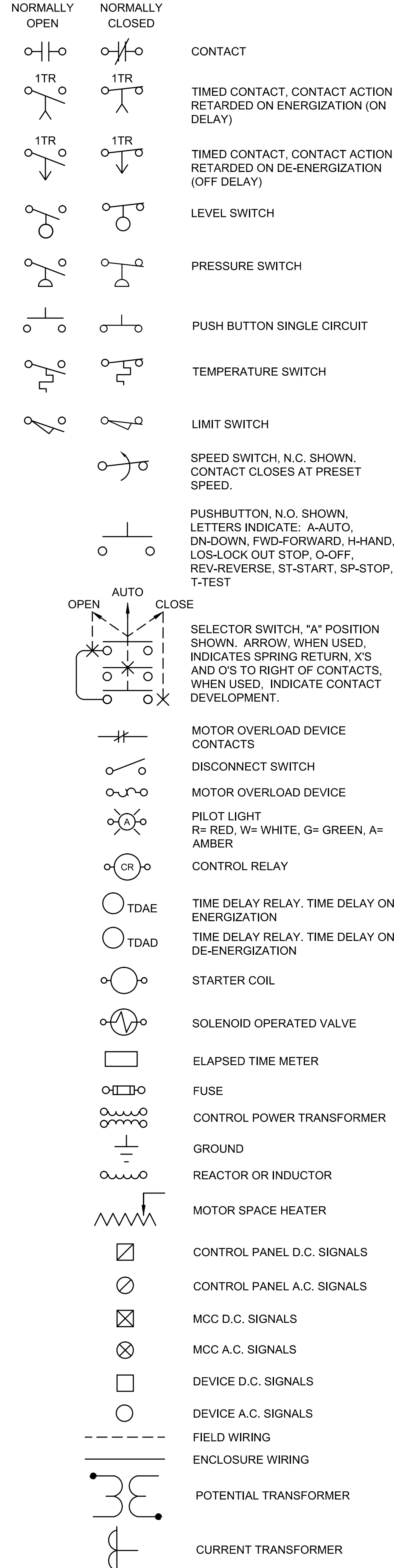
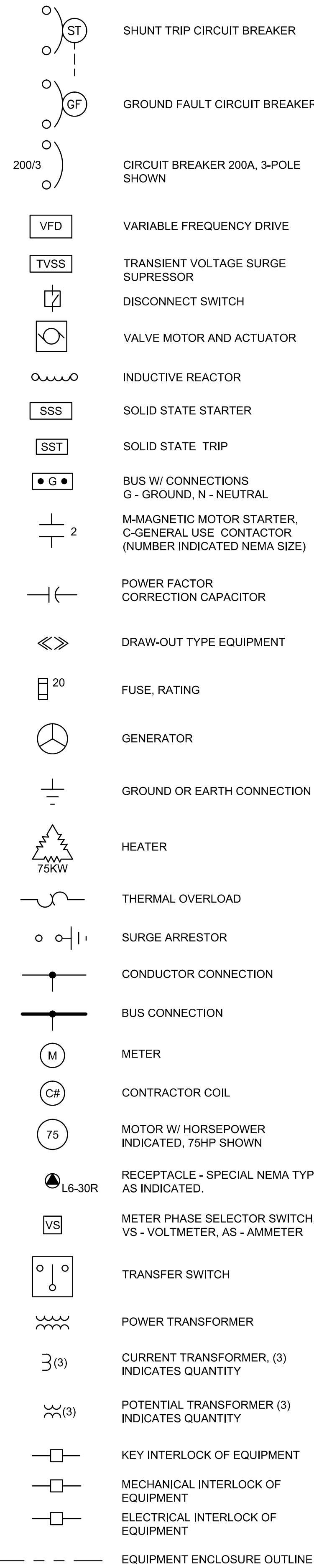
2 SECTION
 SCALE: 1/2"=1'-0"



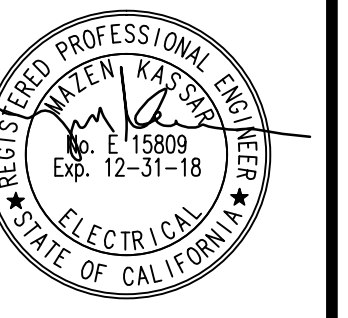
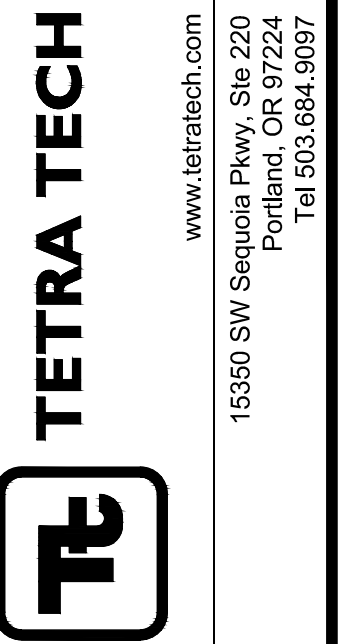
3 SECTION
 SCALE: 1/2"=1'-0"



5/11/2018 11:53:32 AM - O:\PROJECTS\BEATLE\124674\135-124674-15001\CAD\SHHEFILES\E-001 ELECTRICAL LEGEND.DWG - NGUYEN, TRANG



EQUIPMENT TAGS	
TAG	DESCRIPTION
CT-1	COOLING TOWER
CP-100	RIVER INTAKE SCREEN PANEL
CP-200	PROCESS CONTROL PANEL
DF-203	DRUM FILTER #1
DF-204	DRUM FILTER #2
EF-200	EXHAUST FAN - RAS BUILDING
GEN-1	EXISTING 250KW ENGINE-GENERATOR
GEN-2	EXISTING 75KW GENERATOR - DEMO
MCC-1	MOTOR CONTROL CENTER - MAIN DIST
MCC-2A	MOTOR CONTROL CENTER - RIVER PUMPS
MCC-2B	MOTOR CONTROL CENTER - REUSE PUMPS
PMP-101	RIVER WATER PUMP #1
PMP-102	RIVER WATER PUMP #2
PMP-201	REUSE WATER PUMP #1
PMP-202	REUSE WATER PUMP #2
PMP-400	BOOSTER PUMP - HEAD TANK
SWBD	MAIN SERVICE SWITCHBOARD
UV-205	ULTRA-VIOLET SANITATION UNIT
VCP-203	VENDOR CONTROL PANEL DF-203
VCP-204	VENDOR CONTROL PANEL DF-204
VCP-205	VENDOR CONTROL PANEL UV-205



MARK	DATE	DESCRIPTION

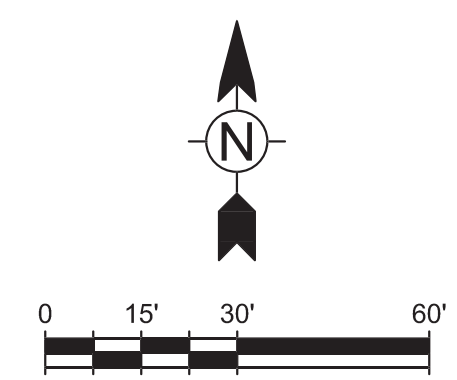
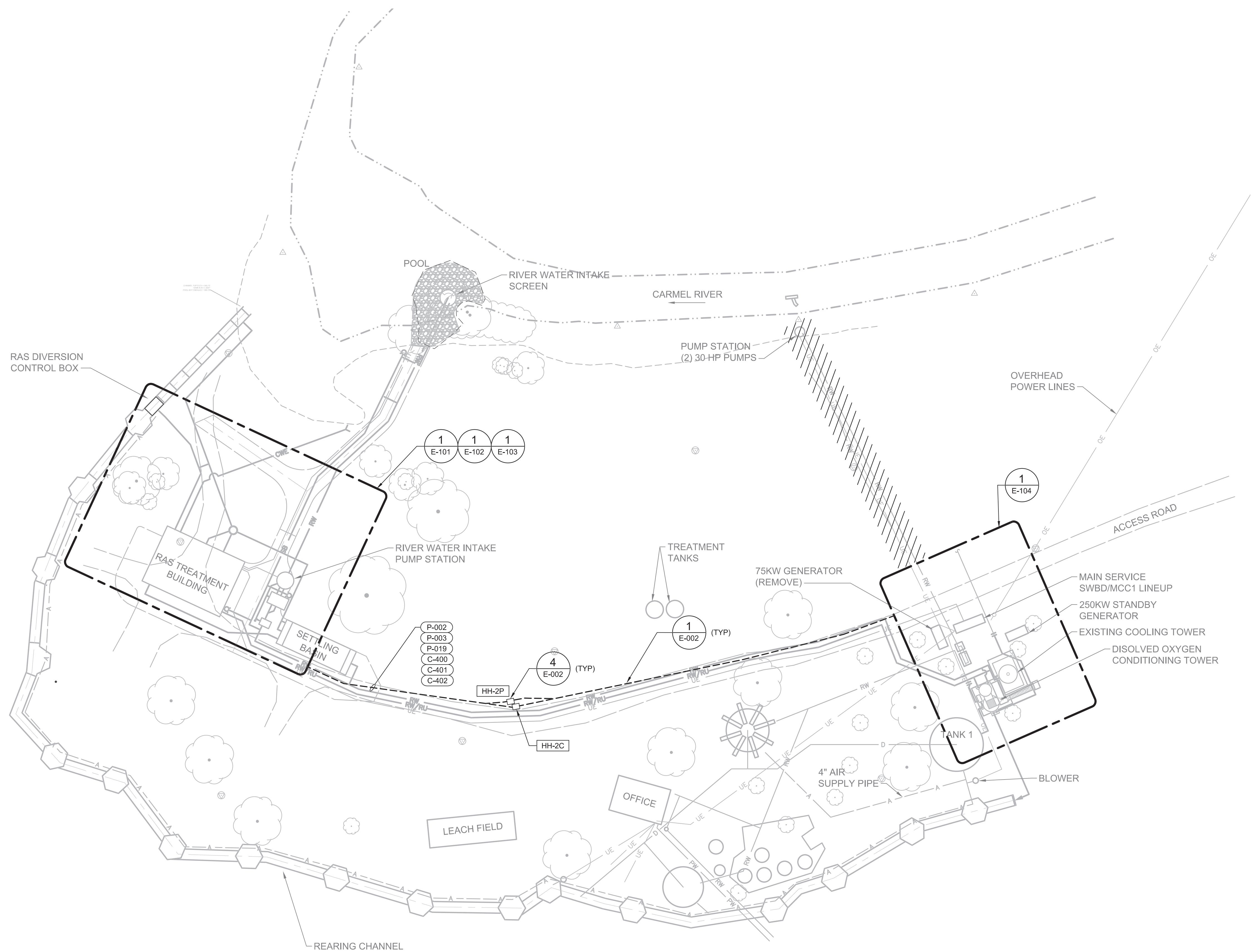
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
ELECTRICAL LEGEND

Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By:

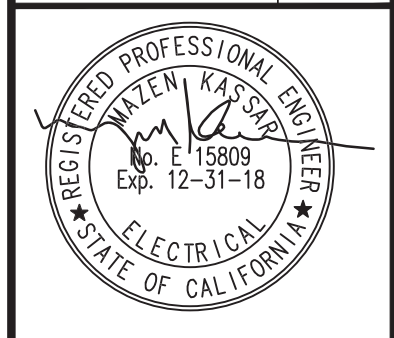
E-001

5/11/2018 11:54:05 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHETS\E-100 ELECTRICAL SITE PLANDWG - NGUYEN, TRANG

KEYED NOTES
 REMOVE EXISTING RIVER PUMP, CABLE AND MCC CONNECTION. LEAVE CONDUIT IN PLACE.



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MARK	DATE	DESCRIPTION	BY

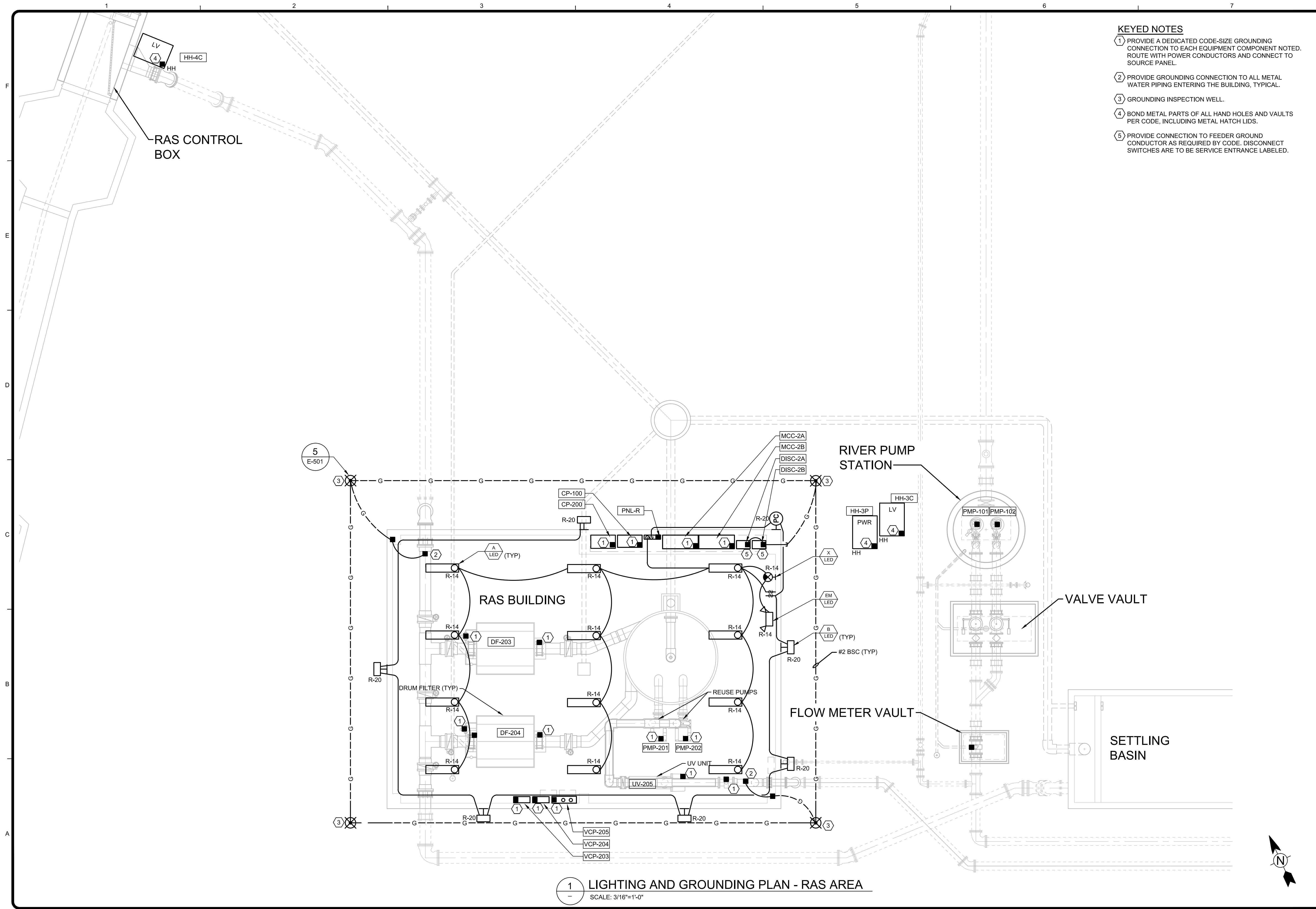
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
ELECTRICAL SITE PLAN

Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-100

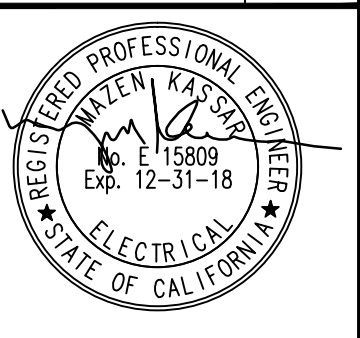
Copyright: Tetra Tech

5/11/2018 11:54:26 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHEETFILES\E-101 LIGHTING AND GROUNDING RAS AREA.DWG - NGUYEN, TRANG



- KEYED NOTES**
- 1 PROVIDE A DEDICATED CODE-SIZE GROUNDING CONNECTION TO EACH EQUIPMENT COMPONENT NOTED. ROUTE WITH POWER CONDUCTORS AND CONNECT TO SOURCE PANEL.
 - 2 PROVIDE GROUNDING CONNECTION TO ALL METAL WATER PIPING ENTERING THE BUILDING, TYPICAL.
 - 3 GROUNDING INSPECTION WELL.
 - 4 BOND METAL PARTS OF ALL HAND HOLES AND VAULTS PER CODE, INCLUDING METAL HATCH LIDS.
 - 5 PROVIDE CONNECTION TO FEEDER GROUND CONDUCTOR AS REQUIRED BY CODE. DISCONNECT SWITCHES ARE TO BE SERVICE ENTRANCE LABELED.

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MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**LIGHTING AND GROUNDING
PLAN - RAS AREA**

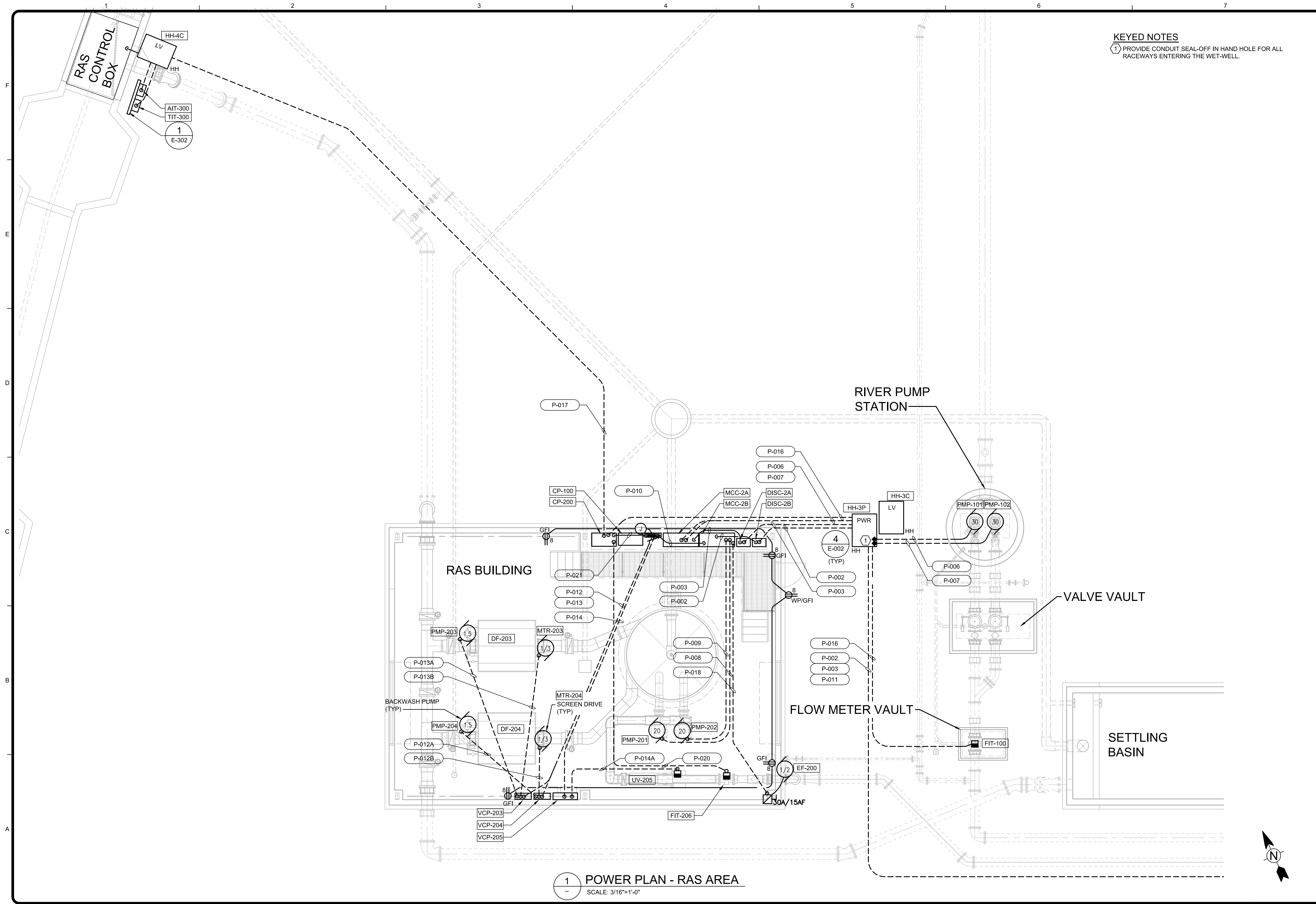
Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

E-101

Bar Measures 1 inch

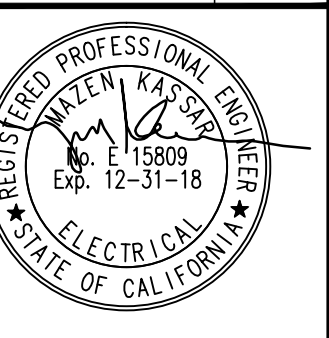
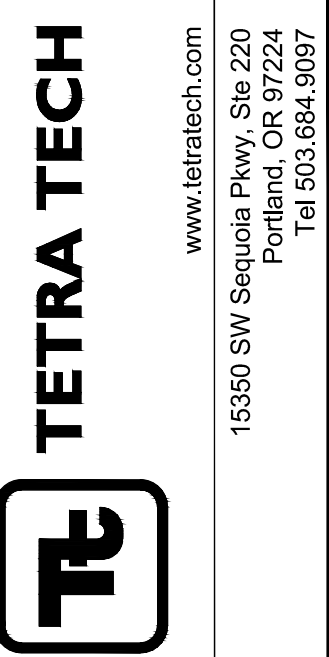
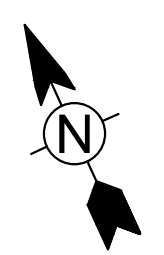
1 LIGHTING AND GROUNDING PLAN - RAS AREA
SCALE: 3/16"=1'-0"

5/11/2018 11:54:44 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHEETFILES\E-102 POWER PLAN RAS AREA.DWG - NGUYEN, TRANG



KEYED NOTES
 ① PROVIDE CONDUIT SEAL-OFF IN HAND HOLE FOR ALL RACEWAYS ENTERING THE WET-CELL.

1 POWER PLAN - RAS AREA
 SCALE: 3/16"=1'-0"



MARK	DATE	DESCRIPTION	BY

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 WATER SUPPLY SYSTEM UPGRADE
POWER PLAN - RAS AREA

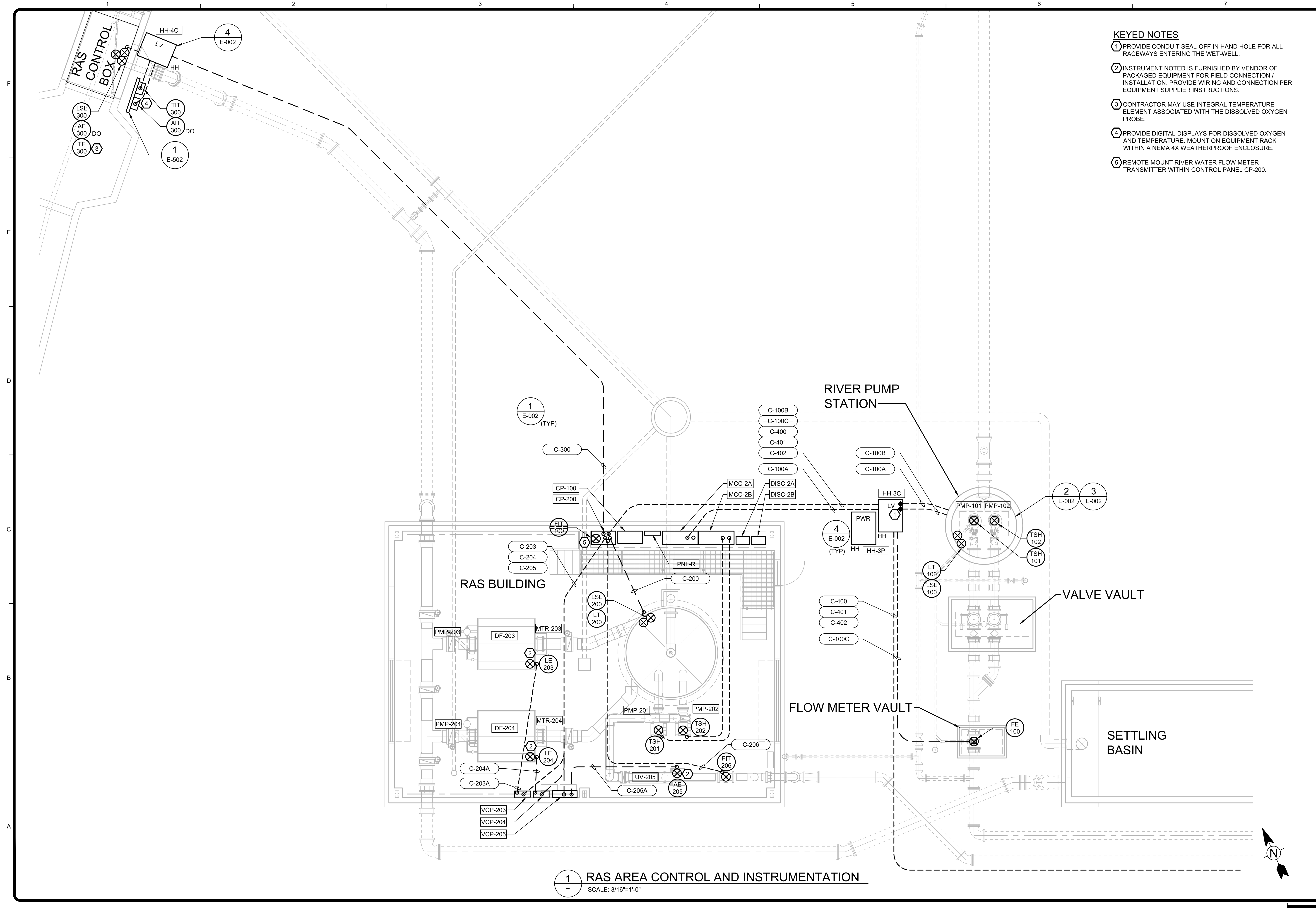
Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-102

Bar Measures 1 inch

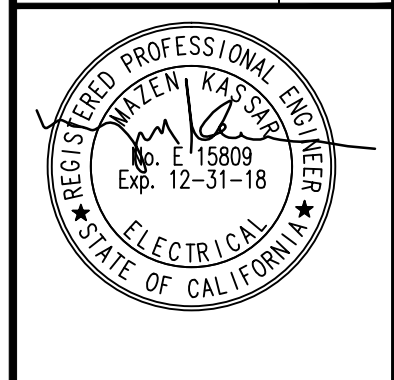
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5/11/2018 11:55:14 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHHEFILES\E-103 CONTROL RAS AREA.DWG - NGUYEN, TRANG



- KEYED NOTES**
- 1 PROVIDE CONDUIT SEAL-OFF IN HAND HOLE FOR ALL RACEWAYS ENTERING THE WET-WELL.
 - 2 INSTRUMENT NOTED IS FURNISHED BY VENDOR OF PACKAGED EQUIPMENT FOR FIELD CONNECTION / INSTALLATION. PROVIDE WIRING AND CONNECTION PER EQUIPMENT SUPPLIER INSTRUCTIONS.
 - 3 CONTRACTOR MAY USE INTEGRAL TEMPERATURE ELEMENT ASSOCIATED WITH THE DISSOLVED OXYGEN PROBE.
 - 4 PROVIDE DIGITAL DISPLAYS FOR DISSOLVED OXYGEN AND TEMPERATURE. MOUNT ON EQUIPMENT RACK WITHIN A NEMA 4X WEATHERPROOF ENCLOSURE.
 - 5 REMOTE MOUNT RIVER WATER FLOW METER TRANSMITTER WITHIN CONTROL PANEL CP-200.

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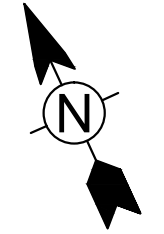
MARK	DATE	DESCRIPTION
BY		

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
**CONTROL PLAN -
 RAS AREA**

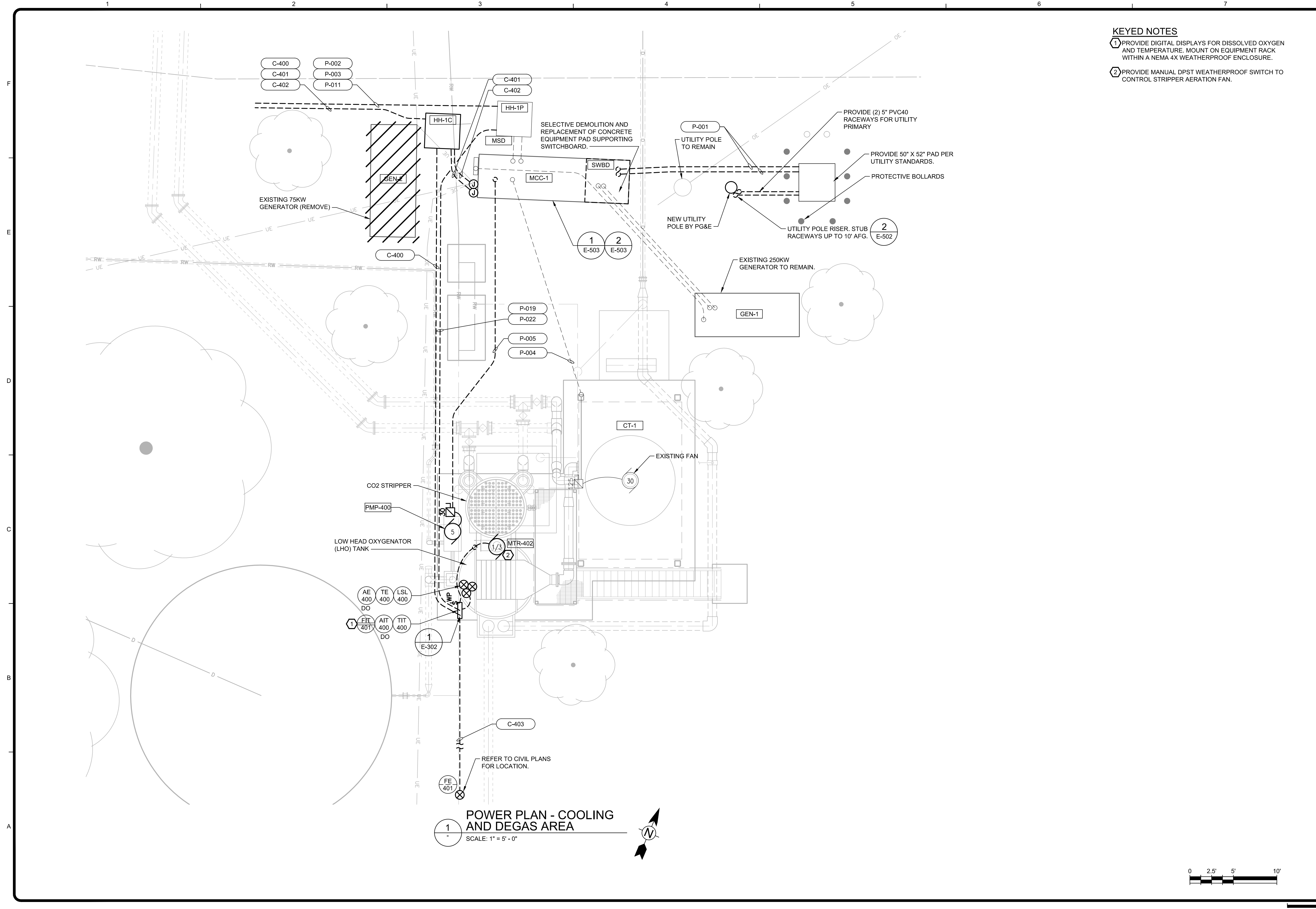
Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-103

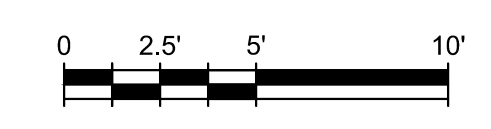
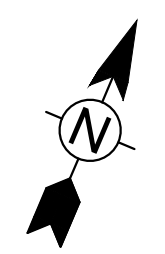
1 RAS AREA CONTROL AND INSTRUMENTATION
 SCALE: 3/16"=1'-0"



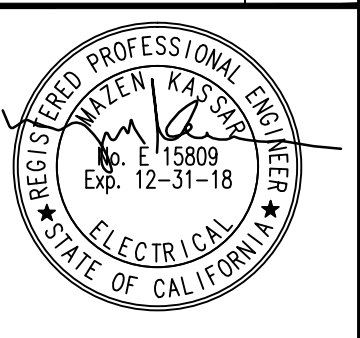
5/11/2018 11:55:35 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHHEETFILES\E-104 ELECTRICAL COOLING AND DEGAS AREA.DWG - NGUYEN, TRANG



1
POWER PLAN - COOLING AND DEGAS AREA
 SCALE: 1" = 5' - 0"



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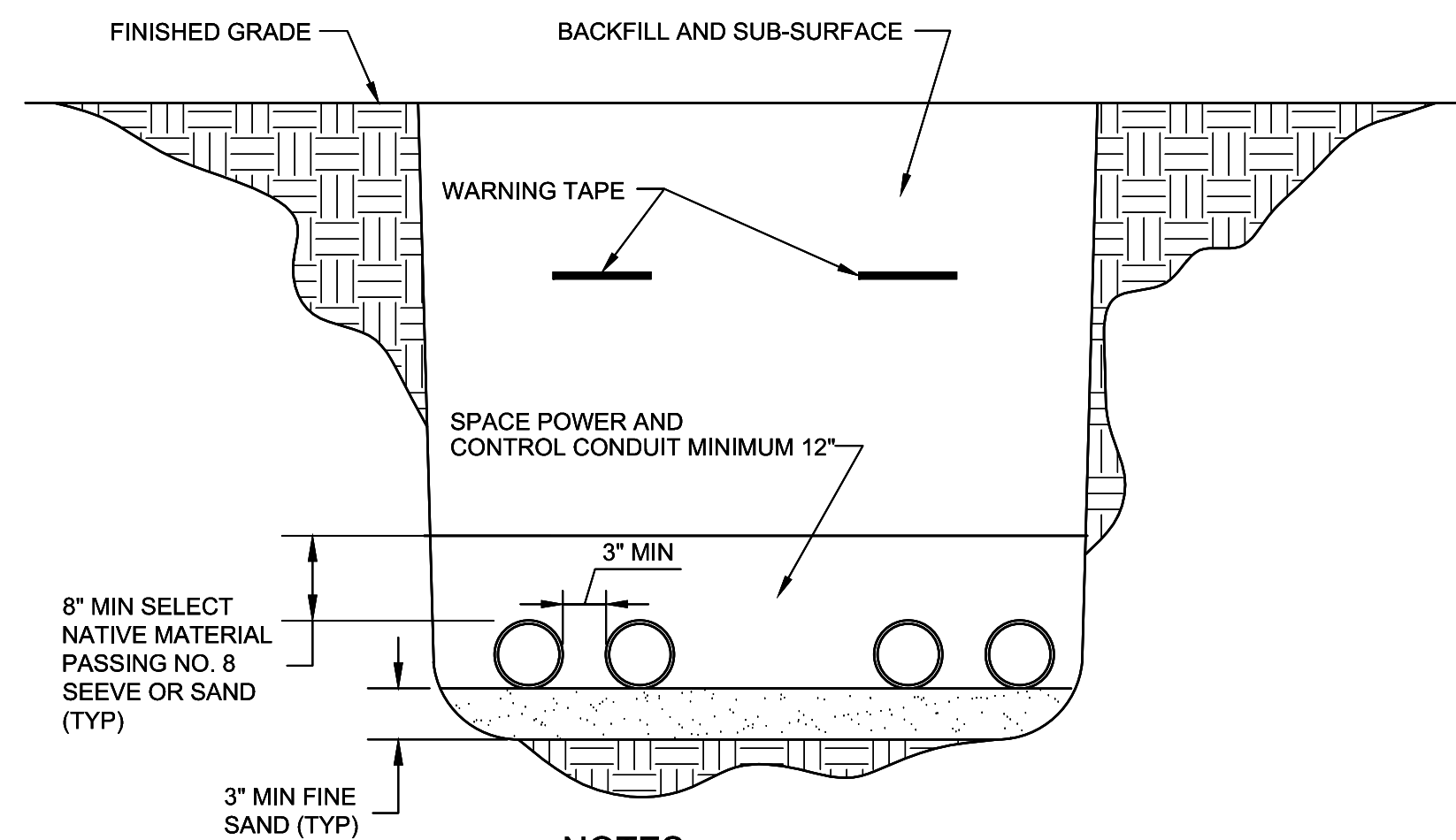
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY

RAW WATER INTAKE AND WATER SUPPLY SYSTEM UPGRADE POWER PLAN - COOLING AND DEGAS AREA

Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-104

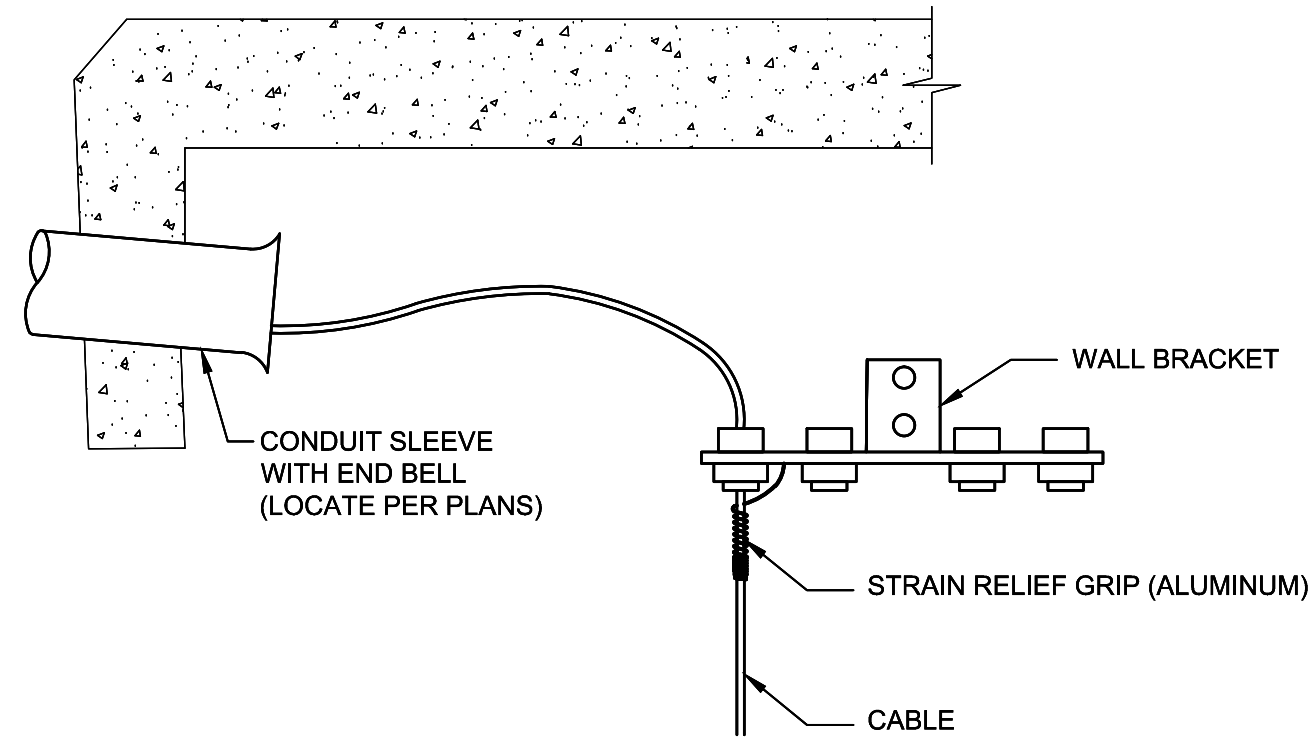
Copyright: Tetra Tech
 Bar Measures 1 inch



NOTES:

1. PROVIDE 36" MINIMUM COVER FOR UTILITY, POWER AND TELE/COM DUCTS. PROVIDE 24" MINIMUM COVER FOR BRANCH CIRCUITS AND INSTRUMENTATION.
2. PROVIDE SCHED-80 PVC FOR DUCTS BENEATH TRAFFIC AREAS, SCHED-40 PVC FOR OTHER AREAS.
3. RISER SWEEPS SHALL BE GRS 36" LONG RADIUS ELBOWS FOR 2" OR LARGER, AND GRS 24" LONG RADIUS ELBOWS FOR DUCTS LESS THAN 2" TRADE SIZE.

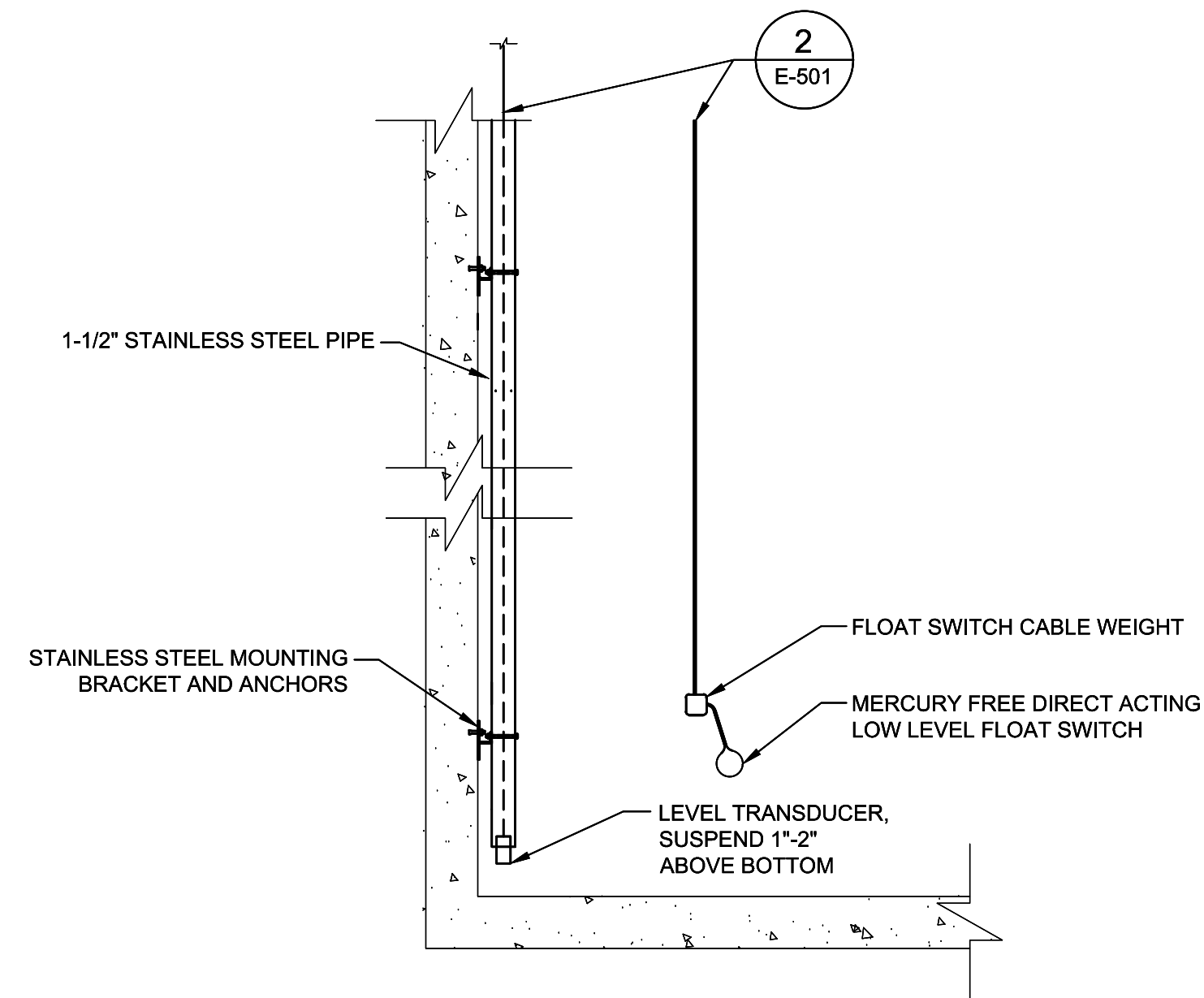
1 TYPICAL DUCT-BANK FEATURES
SCALE: NONE



NOTES:

1. INSTALL CORD FITTINGS IN A LOCATION NEAR WET WELL HATCH THAT ALLOWS DISSASSEMBLY AND REASSEMBLY WITHOUT ENTERING THE WET WELL. SPLICE INTEGRAL DEVICE AND EQUIPMENT CORDS IN HAND HOLE.
2. SLOPE CONDUIT SLEEVES DOWN TOWARD WET WELL.
3. PROVIDE FLEXIBLE WATER STOP COMPOUND IN OPEN CONDUIT SLEEVES TO INHIBIT AIR EXCHANGE.
4. PROVIDE A GRIP FOR EACH CABLE.
5. PROVIDE CONDUIT SEAL-OFF IN ADJACENT HAND HOLE (NOT SHOWN ON THIS DETAIL) FOR RACEWAYS ENTERING WET-WELL.

2 WET WELL CABLE GRIP DETAIL
SCALE: NONE



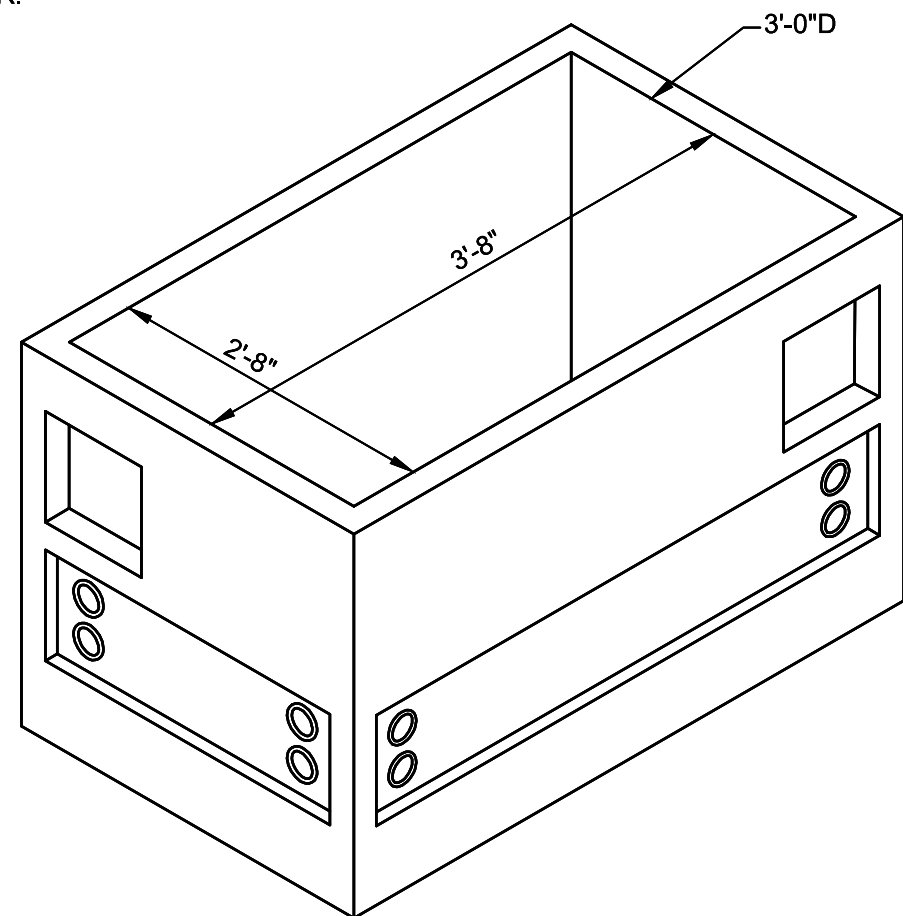
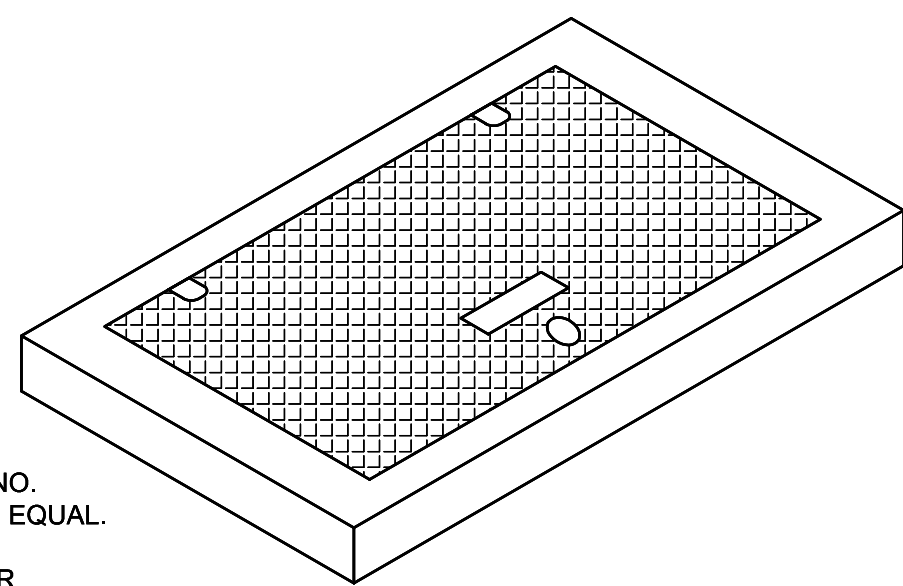
NOTES

1. MOUNT FLOAT SWITCH 6" ABOVE INTAKE OF PUMP.

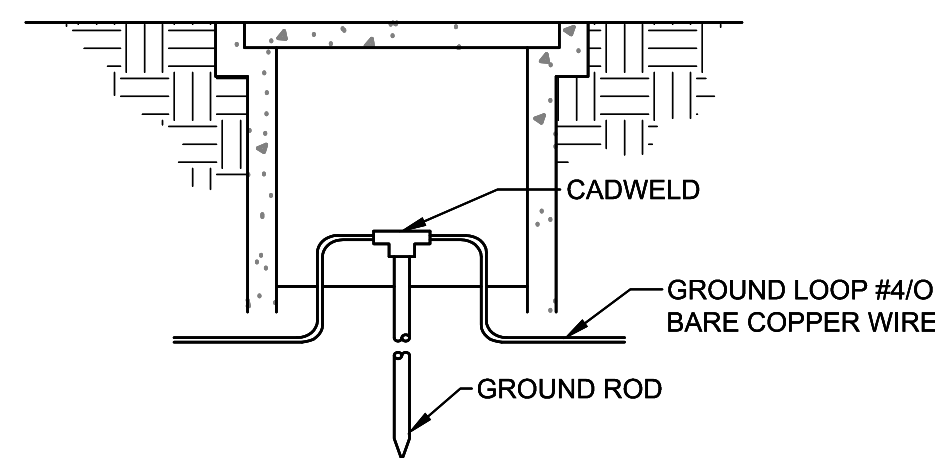
3 FLOAT AND LEVEL SWITCH MOUNTING DETAIL
SCALE: NONE

NOTES

1. UTILITY VAULT BASE NO. 233-LA OR APPROVED EQUAL.
2. AASHTO - HS20 COVER.



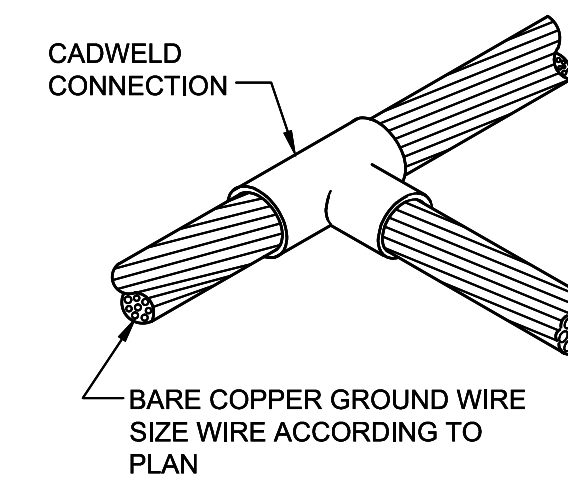
4 HAND HOLE DETAIL
SCALE: NONE



NOTES

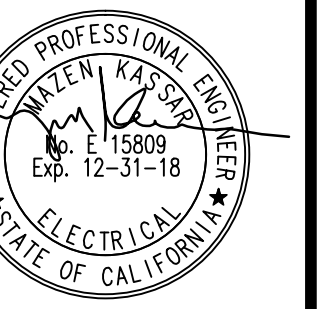
1. FOR INSPECTION WELLS PROVIDE CLAMP CONNECTION IN LIEU OF CADWELD.

5 GROUND ROD WELL DETAIL
SCALE: NONE



6 GROUNDING CONNECTION DETAIL
SCALE: NONE

5/1/2018 11:55:53 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHEETFILES\E-501 ELECTRICAL DETAILS.DWG - NGUYEN, TRANG

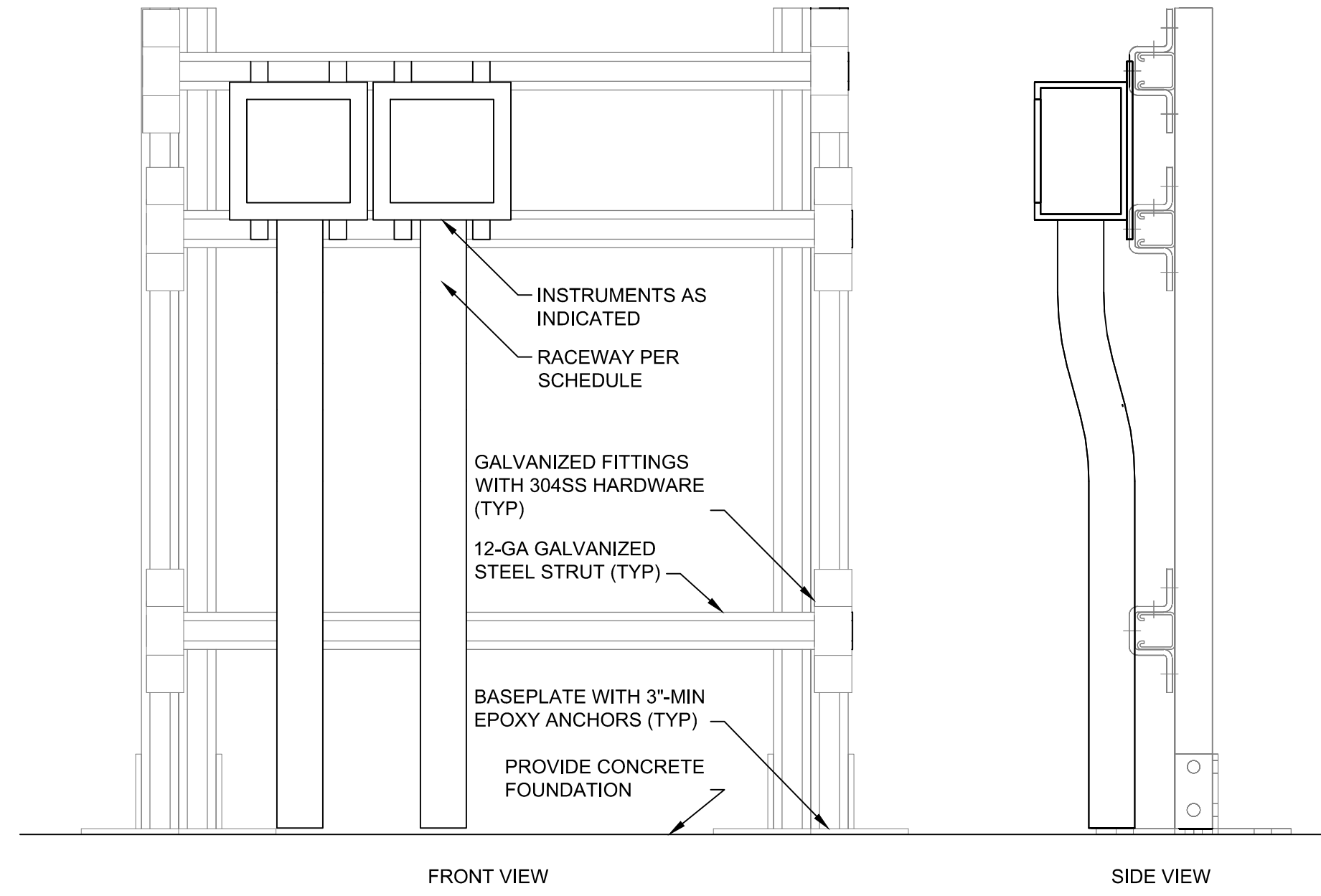


MARK	DATE	DESCRIPTION	BY

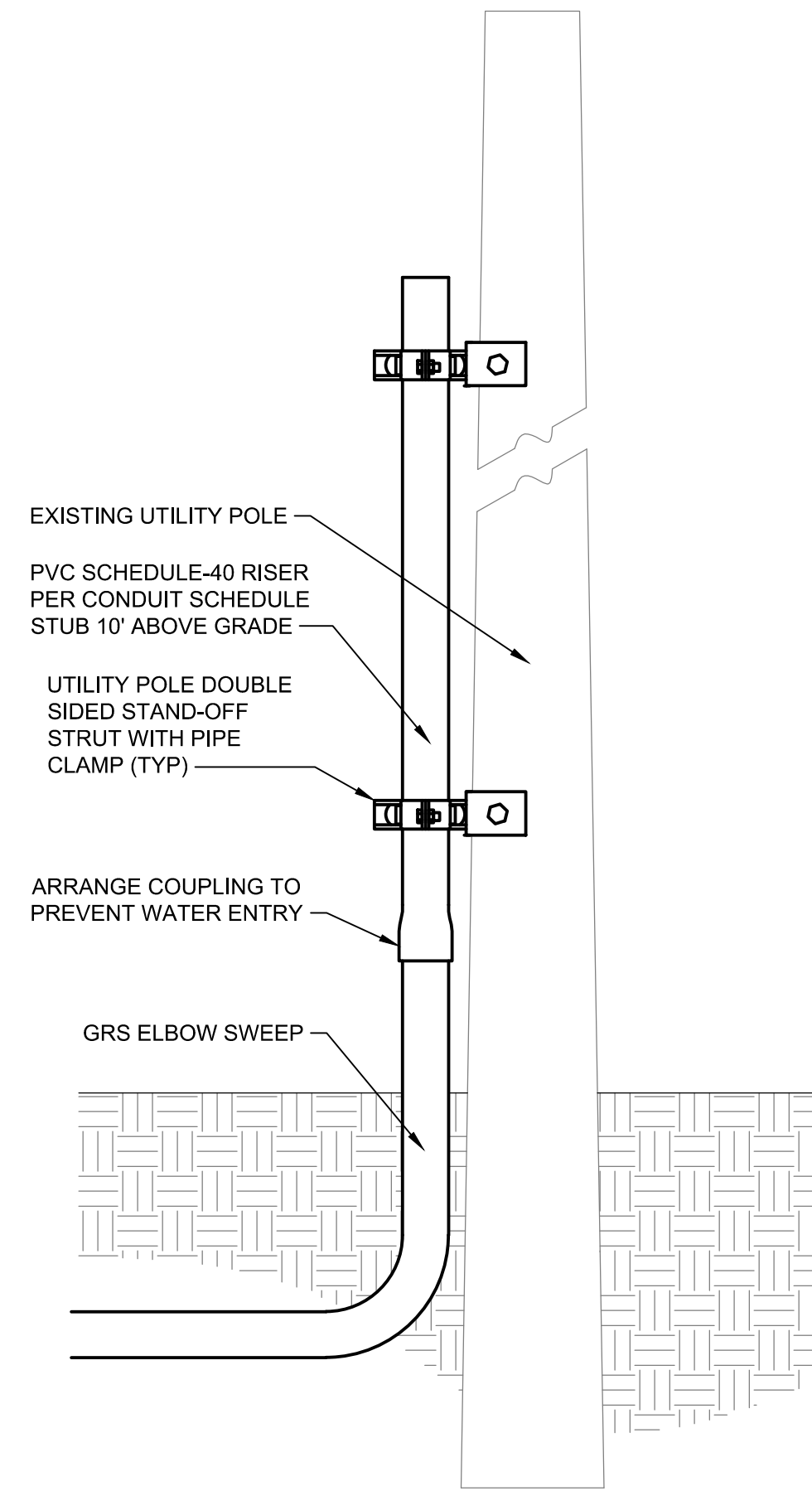
MONTEREY PENNSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE**
ELECTRICAL DETAILS

Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

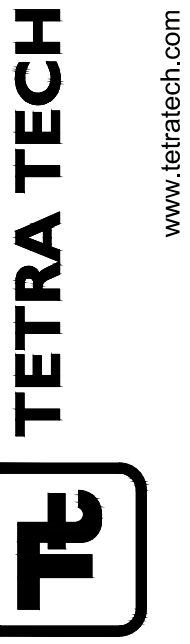
5/11/2018 11:56:45 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHHEETFILES\E-502 ELECTRICAL DETAILS 2.DWG - NGUYEN, TRANG



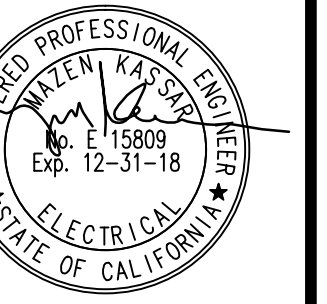
1 TYPICAL STRUT RACK FOR TRANSMITTER MOUNTING
SCALE: NONE



2 UTILITY POLE RISER DETAIL
SCALE: NONE



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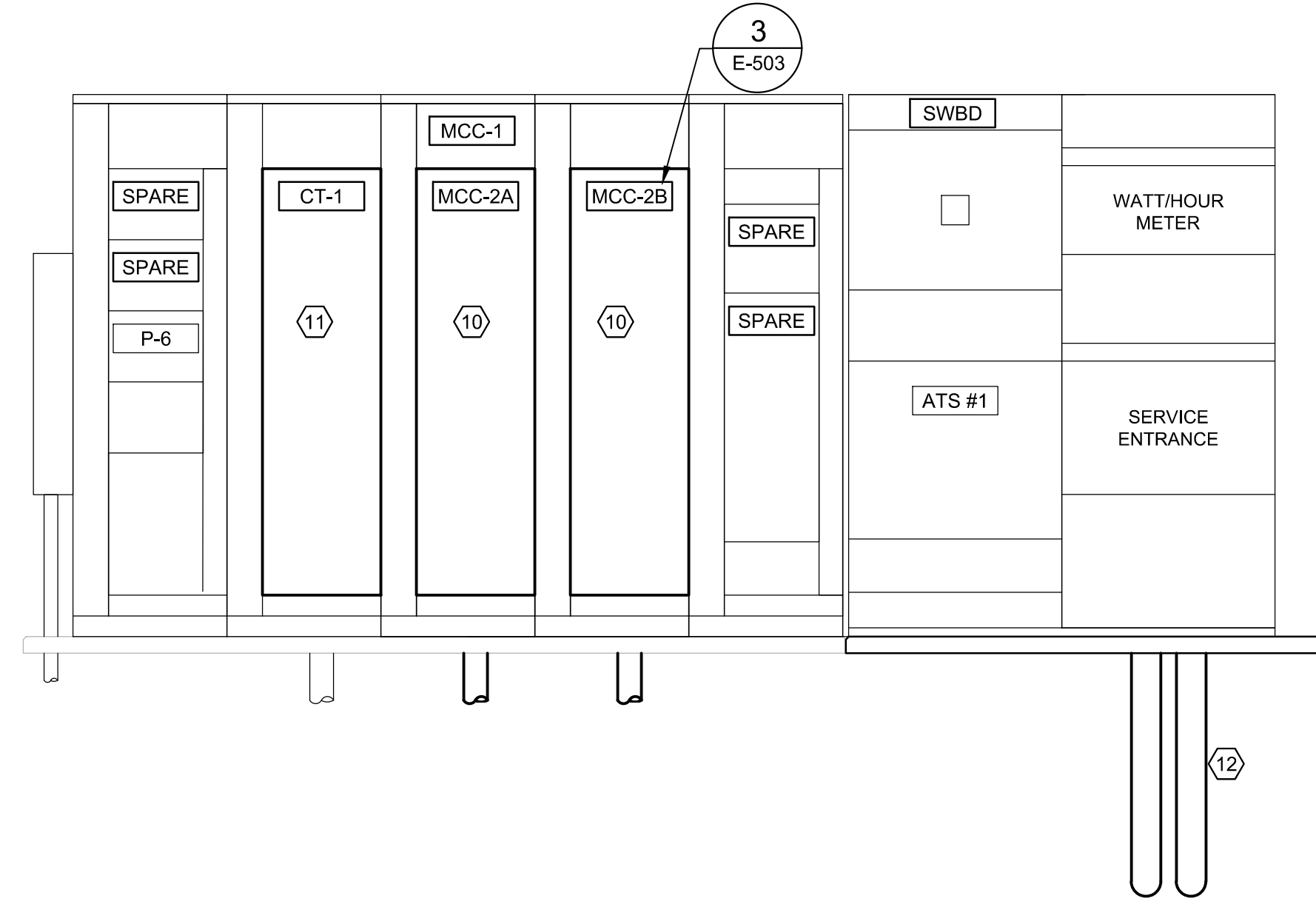
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
ELECTRICAL DETAILS 2

Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

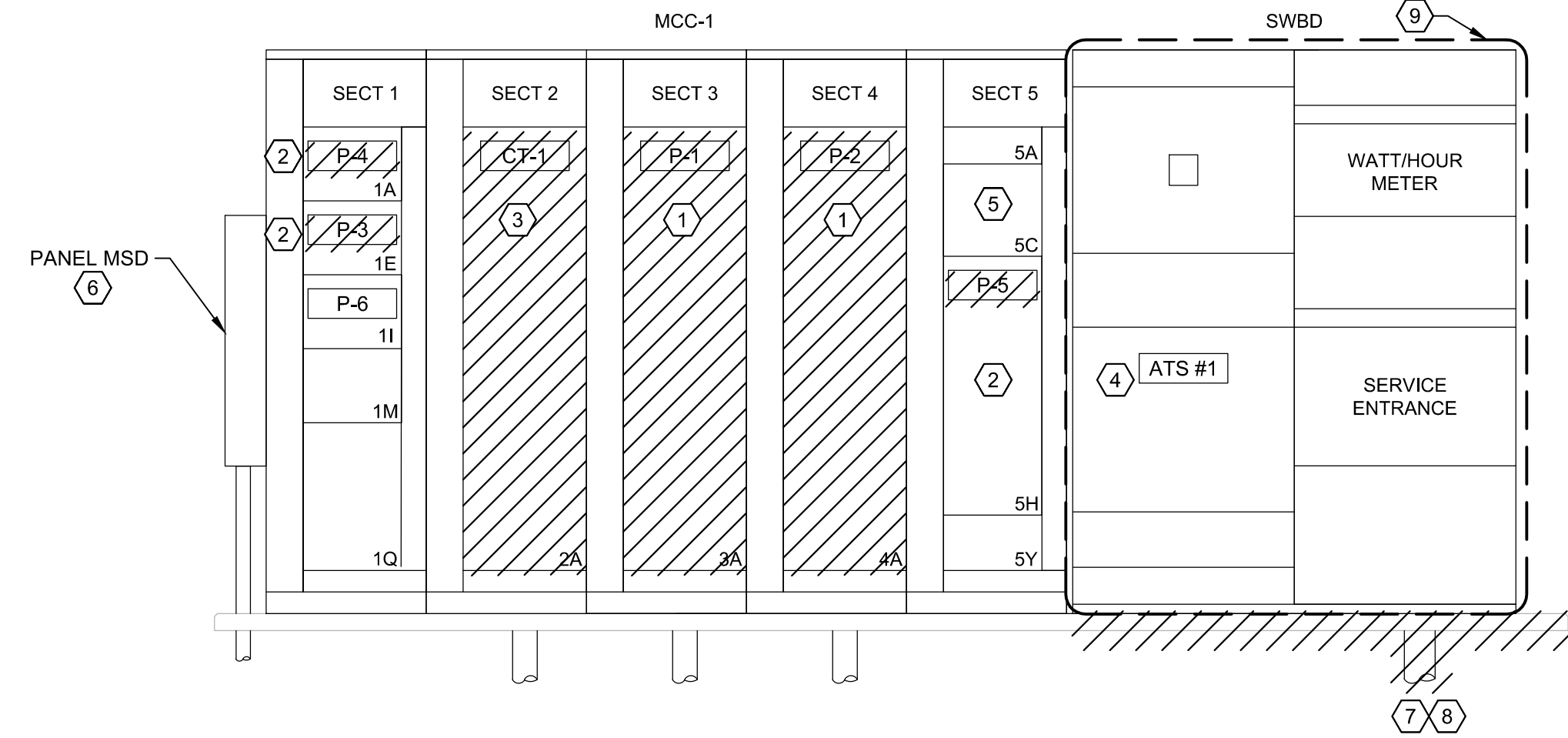
E-502

Bar Measures 1 inch

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1 SWBD/MCC-1 ELEVATION MODIFIED
SCALE: NONE



2 SWBD/MCC-1 ELEVATION DEMOLITION
SCALE: NONE

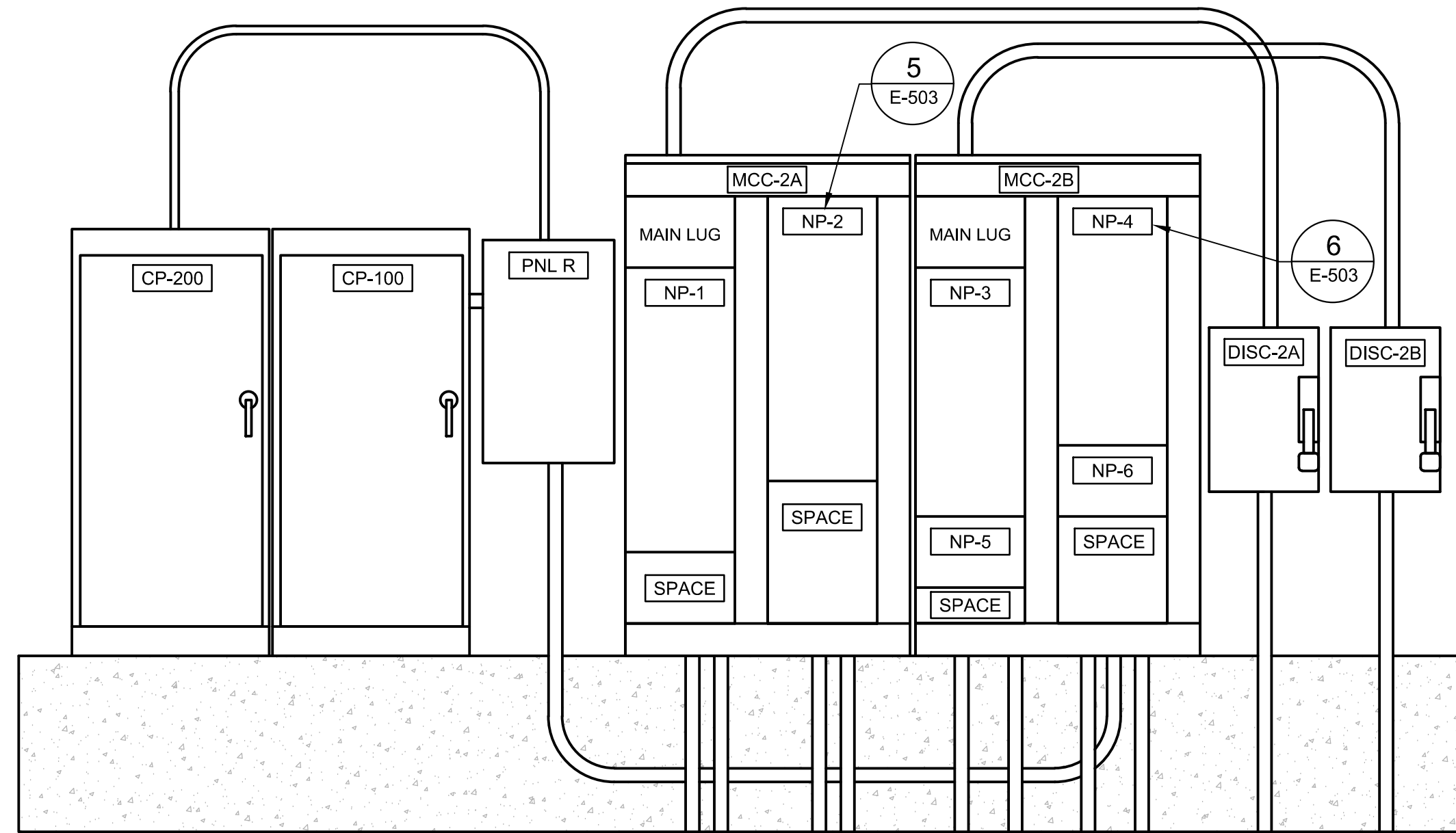
KEYED NOTES

- 1 REMOVE EXISTING RIVER SUMP PUMPS CONDUCTORS ASSOCIATED MCC COMPONENTS. LEAVE CONDUIT IN-PLACE TO BE INTERCEPTED AND ROUTED TO RAS BUILDING.
- 2 REMOVE EXISTING COLD WELL PUMPS, CABLES AND EXPOSED PORTIONS OF RACEWAY WHERE ACCESSIBLE. REMOVE LABEL FROM MCC AND LABEL AS SPARE.
- 3 REMOVE COOLING TOWER STARTER AND COMPONENTS.
- 4 BREAKER FOUND AT 250W GENERATOR
- 5 ABANDON IN PLACE FOR FUTURE USE WITH PORTABLE GENERATOR. PROVIDE NAMEPLATE
- 6 VERIFY POWER ROUTING FOR PANEL MSD.
- 7 COORDINATE REMOVAL AND INSTALLATION OF UTILITY CONDUCTORS. PROVIDE RACEWAYS, HAND-HOLE AND PULL CORD TO FACILITATE THIS WORK. STUB RACEWAY UP POLE TO 10' ABOVE FINISHED GRADE.
- 8 REMOVE CONDUIT ROUTED TO POLE MOUNTED UTILITY TRANSFORMERS.
- 9 TEMPORARILY REMOVE SWBD TO ALLOW FOR PAD AND RACEWAY MODIFICATIONS. REMOVE SECTION OF PAD AS REQUIRED FOR THE INSTALLATION OF UTILITY RACEWAYS.
- 10 PROVIDE DISCONNECT AND FEED FOR MCC-2. CONDUIT TO BE INTERCEPTED AND ROUTED TO NEW RE-USE BUILDING.
- 11 PROVIDE COOLING TOWER VFD BUCKET. PROVIDE VFD CABLE ROUTED FROM VFD TO COOLING TOWER MOTOR.
- 12 PROVIDE HAND-HOLE AND TWO 5" CONDUIT FOR SWBD SERVICE. ROUTE TWO 5" CONDUIT TO POLE. PROVIDE HOUSEKEEPING PAD. TIE INTO EXISTING MCC PAD WITH EPOXY DOWELS.

UNIT	NAMEPLATE	DISCIPTION
1A	SPARE	SPACE
1E	SPARE	SPACE
1I	PORTABLE PUMP P-6	PORTABLE PUMP DISCONNECT
1M		SPACE
1Q		SPACE
2A	CT-1	COOLING TOWER VFD, 125 AMP DISCONNECT
3A	MCC-2A	FEEDER FOR MCC-2A, 200 A DISCONNECT
4A	MCC-2B	FEEDER FOR MCC-2B, 200 A DISCONNECT
5A	ATS LOAD-SIDE LUGS	250W GEN MAIN LUG TIE, 600A
5C	SPARE	SPARE - FUTURE USE
5H	SPARE	SPACE
5V		SPACE

UNIT	NAMEPLATE	DISCIPTION
1A	P-4	COLD WELL FVNR STARTER, 60A DISCONNECT
1E	P-3	COLD WELL FVNR STARTER, 60 A DISCONNECT
1I	PORTABLE PUMP P-6	PORTABLE PUMP DISCONNECT
1M		SPACE
1Q		SPACE
2A	CT-1	COOLING TOWER SOFT STARTER, 125 A DISCONNECT
3A	P-1	RIVER PUMP SOFT STARTER, 125 A DISCONNECT
4A	P-2	RIVER PUMP SOFT STARTER, 125 A DISCONNECT
5A	ATS LOAD-SIDE LUGS	250W GEN MAIN LUG TIE, 600A
5C	75W GENERATOR GEN-SET TIE	75W KERKEY BREAKER, 225A DISCONNECT
5H	P-5	COLD WELL VFD, 60 DISSCONNECT,
5V		SPACE

3 MCC-1 NAMEPLATE SCHEDULES
SCALE: NONE



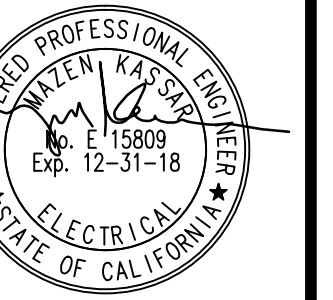
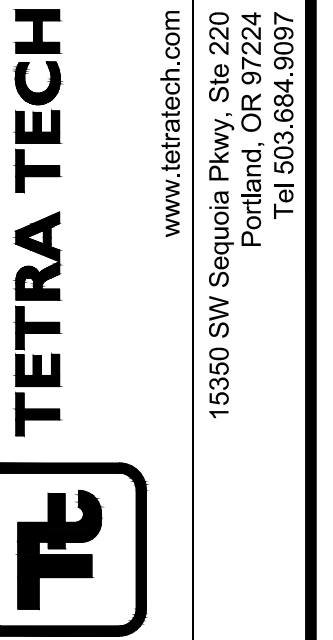
4 RAS BUILDING ELECTRICAL EQUIPMENT ELEVATION
SCALE: NONE

UNIT	NAMEPLATE	DISCIPTION
1A		MAIN LUG
1E	NP-1	PMP-101 - RIVER PUMP #1
1U		SPACE
2A	NP-2	PMP-102 - RIVER PUMP #2
2Q		SPACE

5 MCC-2A NAMEPLATE SCHEDULE
SCALE: NONE

UNIT	NAMEPLATE	DISCIPTION
1A		MAIN LUG
1E	NP-3	PMP-201 - REUSE PUMP #1
1S	NP-5	PANEL R SUBFEED
1W		SPACE
2A	NP-4	PMP-202 - REUSE PUMP #2
2M	NP-6	EF-200 - EXHAUST FAN

6 MCC-2B NAMEPLATE SCHEDULE
SCALE: NONE



BY	DATE	DESCRIPTION

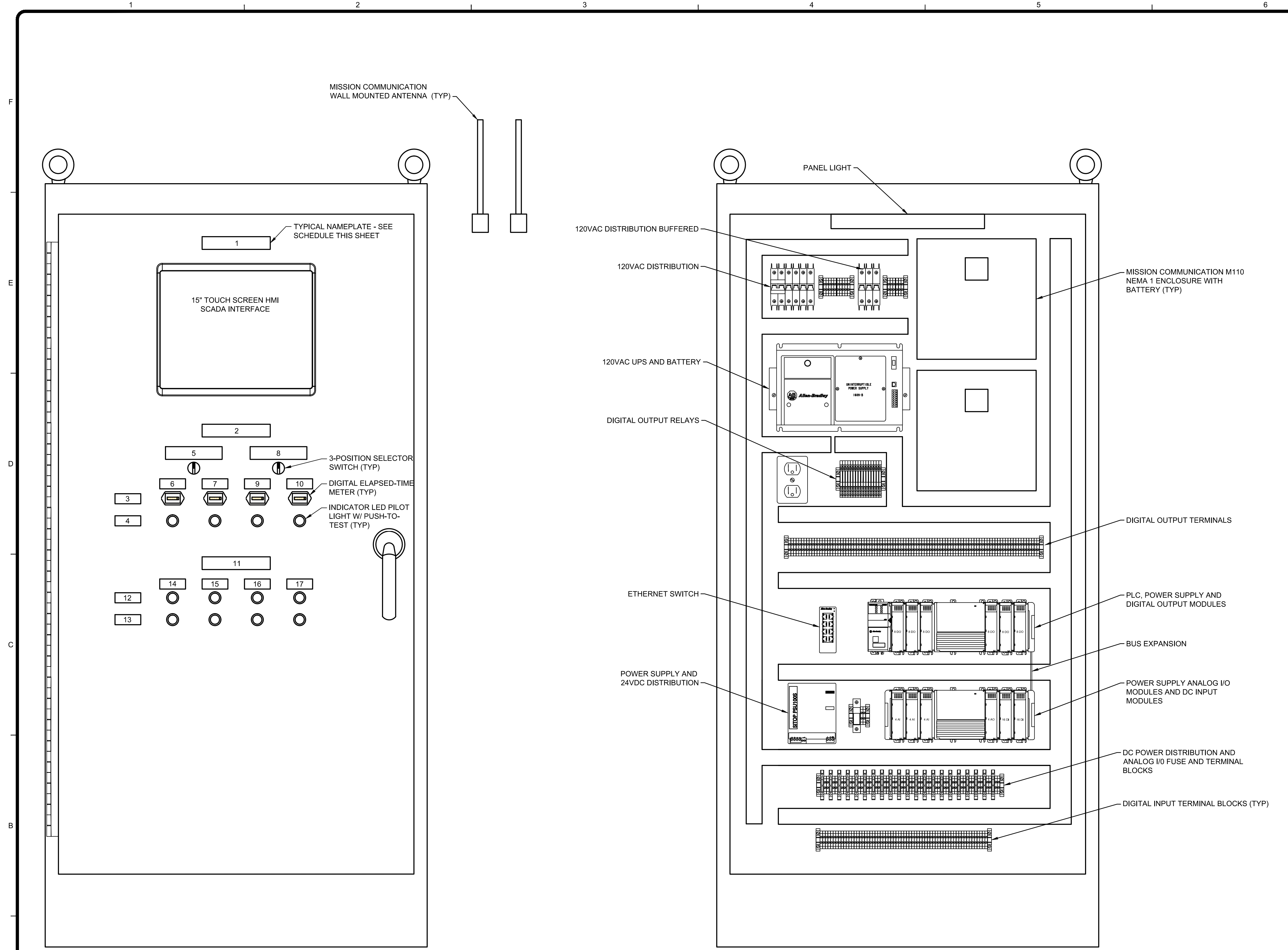
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
ELECTRICAL EQUIPMENT
DETAILS

Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

E-503

S:\1\2018 11:57:48 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHEETFILES\E-503 ELECTRICAL EQUIPMENT DETAILS.DWG - NGUYEN, TRANG

5/11/2018 11:56:27 AM - O:\PROJECTS\SEATTLE\124674\15001\CAD\SHEETFILES\E-504 CONTROL PANEL CP-200 ELEVATIONS.DWG - NGUYEN, TRANG



1 CONTROL PANEL CP-200
FRONT ELEVATION
SCALE: NONE

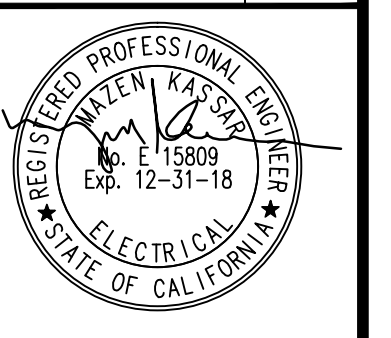
2 CONTROL PANEL CP-200
INTERIOR ELEVATION
SCALE: NONE

PUMP CONTROL PANEL NAME PLATE SCHEDULE

TAG	NAME PLATE TOP LINE	NAMEPLATE BOTTOM LINE
1	CONTROL PANEL	CP-200
2	WATER PUMPING	(N/A)
3	RUN TIME	(N/A)
4	FAULT	(N/A)
5	RIVER PUMP SELECTOR	PMP-101 - ALT - PMP-102
6	PUMP PMP-101	(N/A)
7	PUMP PMP-102	(N/A)
8	REUSE PUMP SELECTOR	PMP-201 - ALT - PMP-202
9	PUMP PMP-201	(N/A)
10	PUMP PMP-202	(N/A)
11	WATER QUALITY ALARMS	(N/A)
12	CONTROL BOX	(N/A)
13	HEAD TANK	(N/A)
14	LOW	OXYGEN
15	HIGH	TEMP
16	LOW	LEVEL
17	UV	DOSE

3 CONTROL PANEL CP-200
NAMEPLATE SCHEDULE
SCALE: NONE

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15350 SW Sequoia Pkwy, Ste 220
Portland, OR 97224
Tel 503.684.9097



BY	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
CONTROL PANEL CP-200
PANEL ELEVATIONS

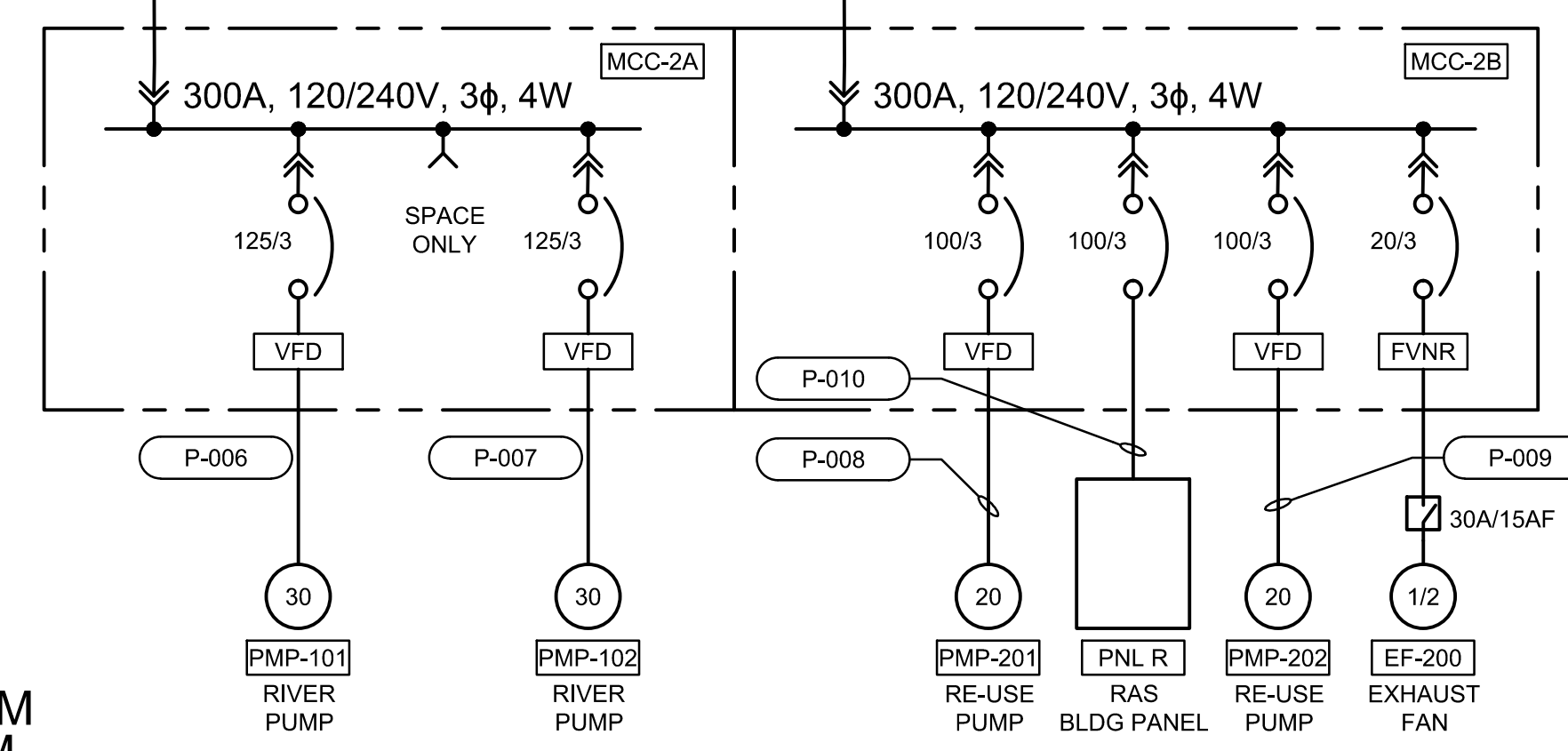
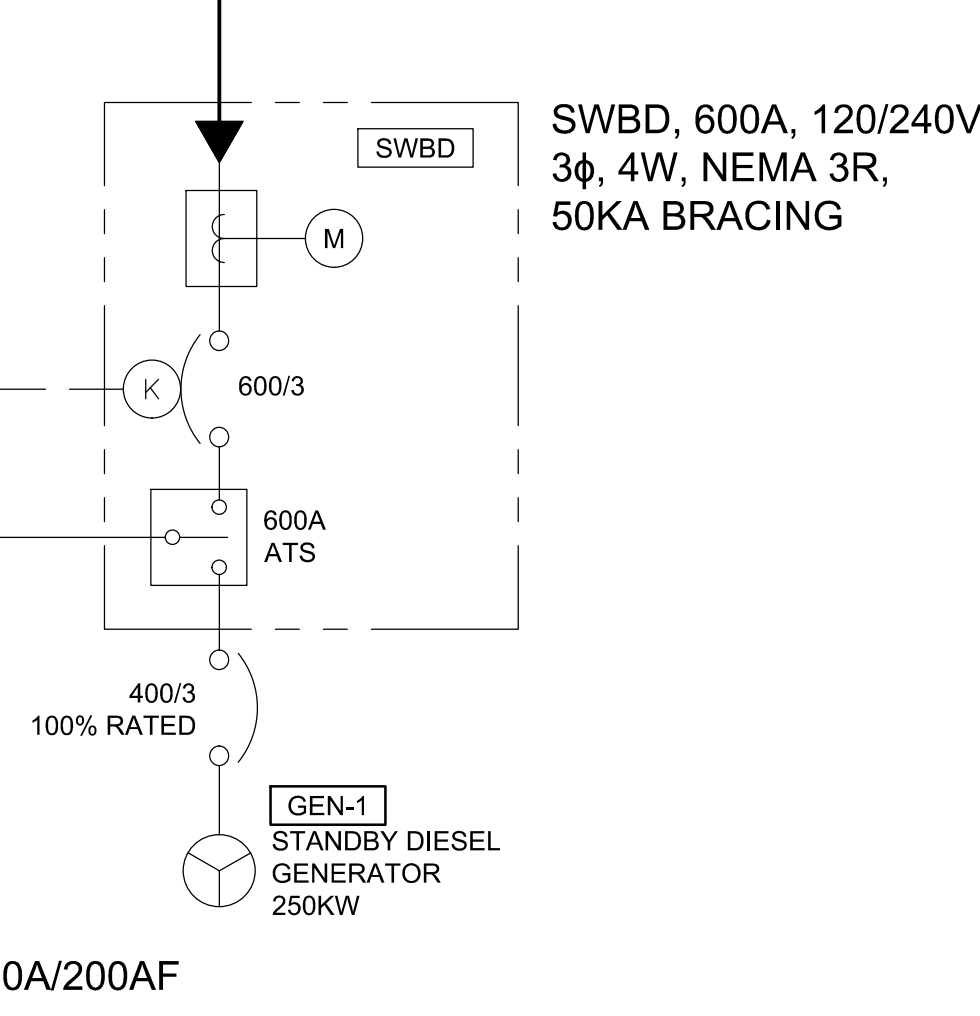
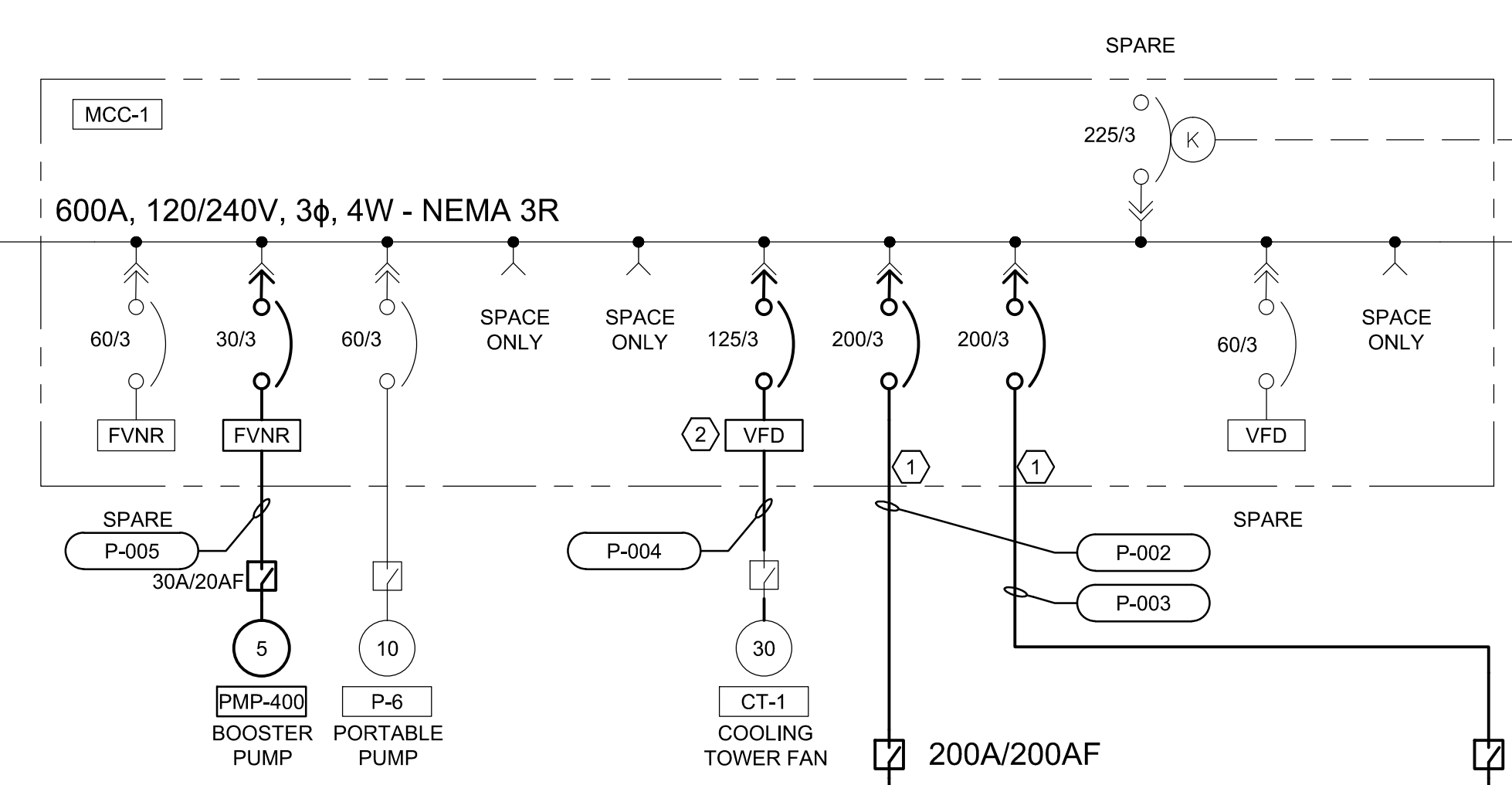
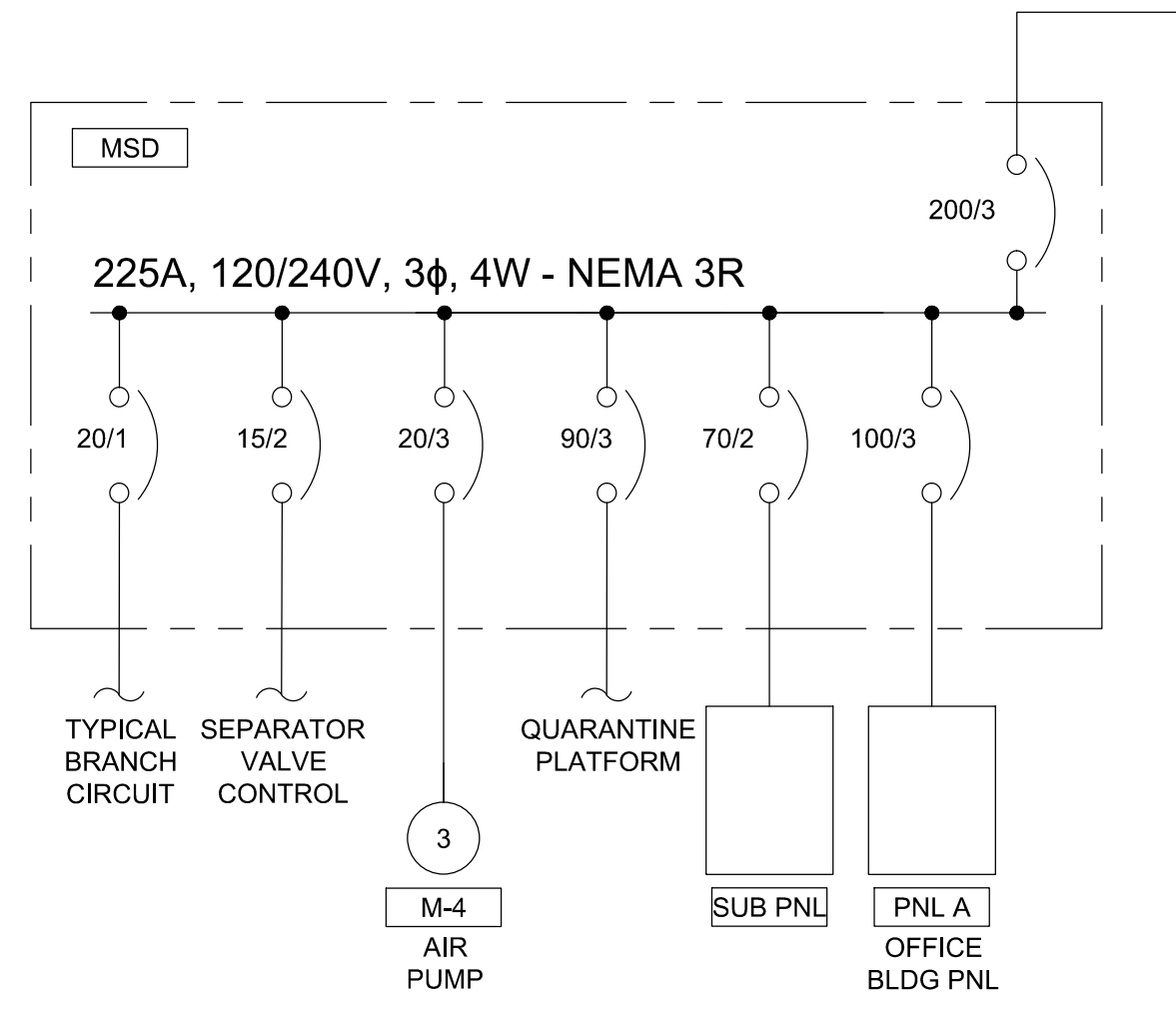
Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

E-504
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Bar Measures 1 inch

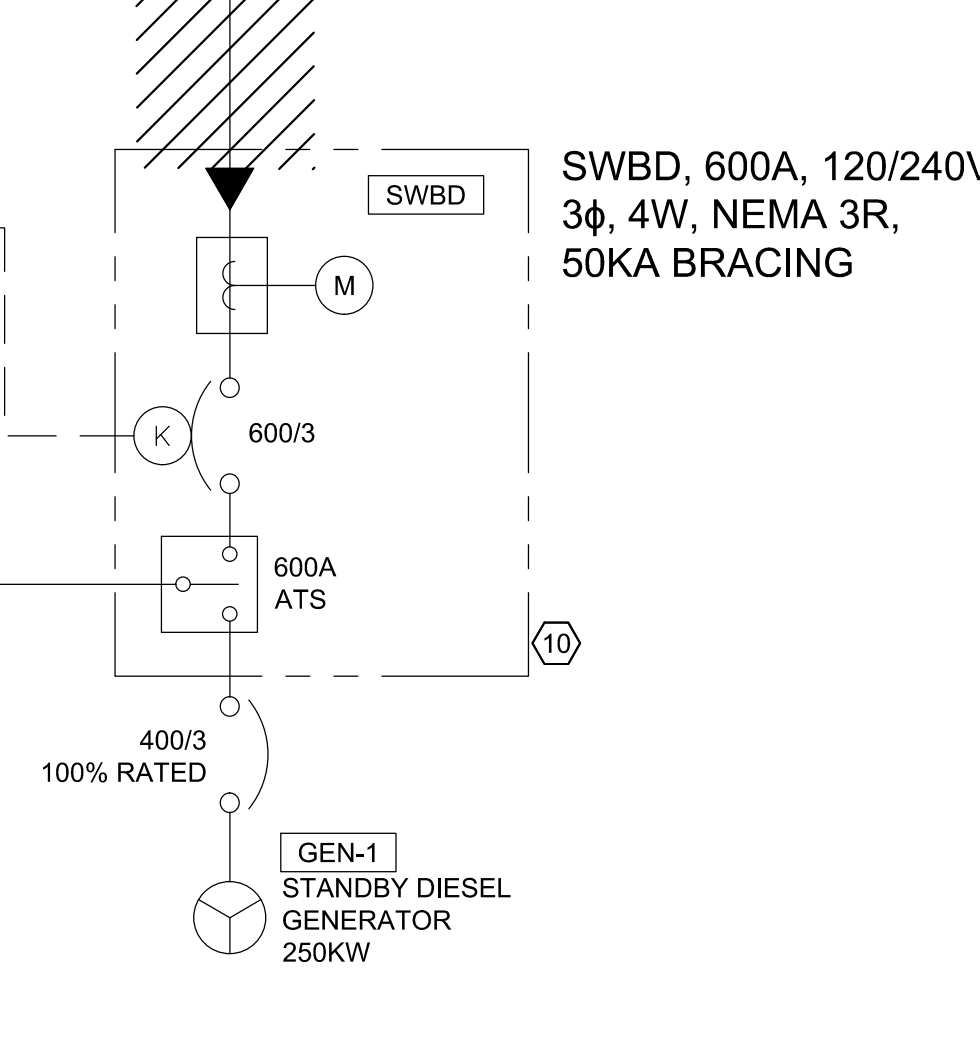
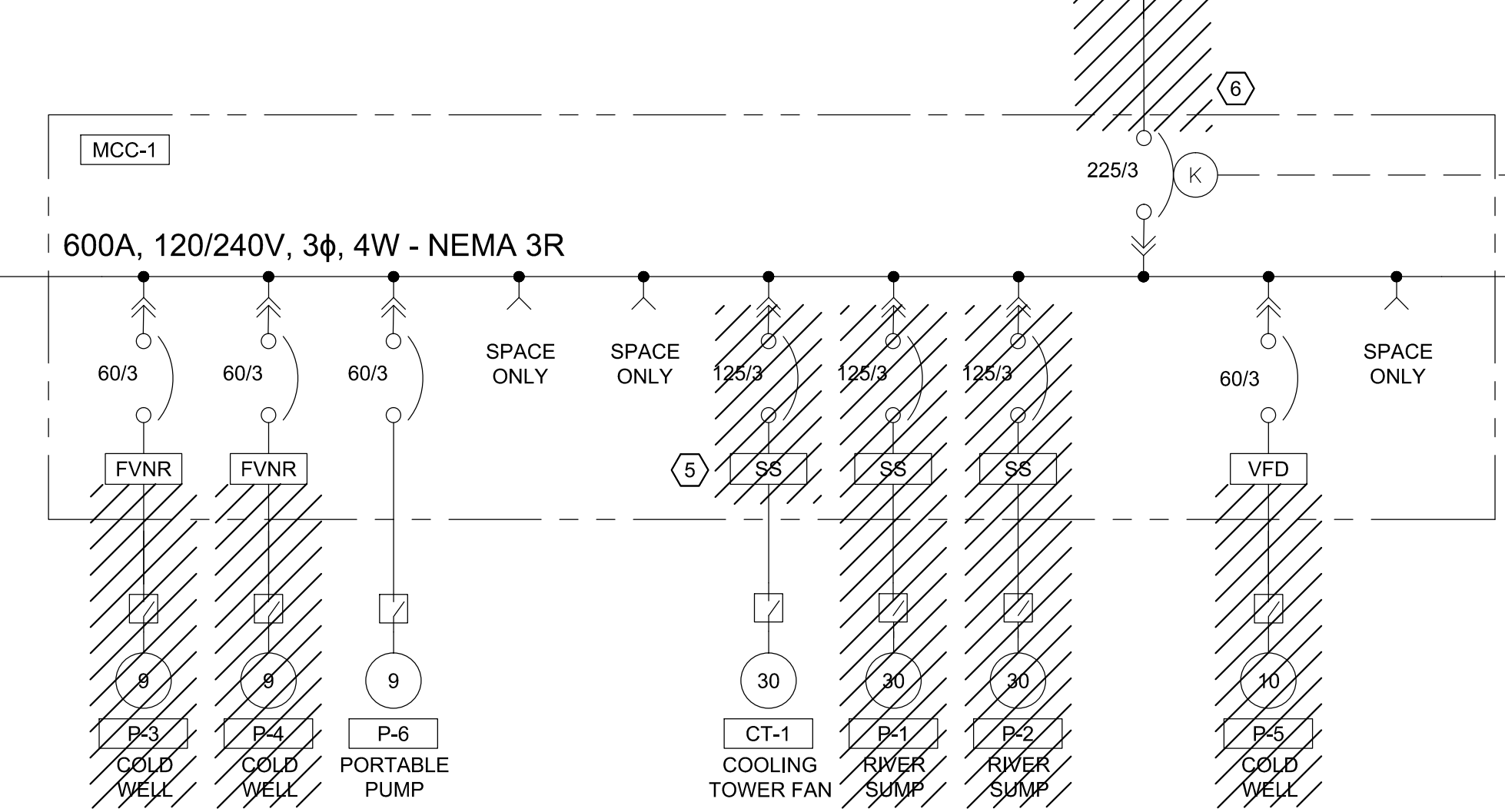
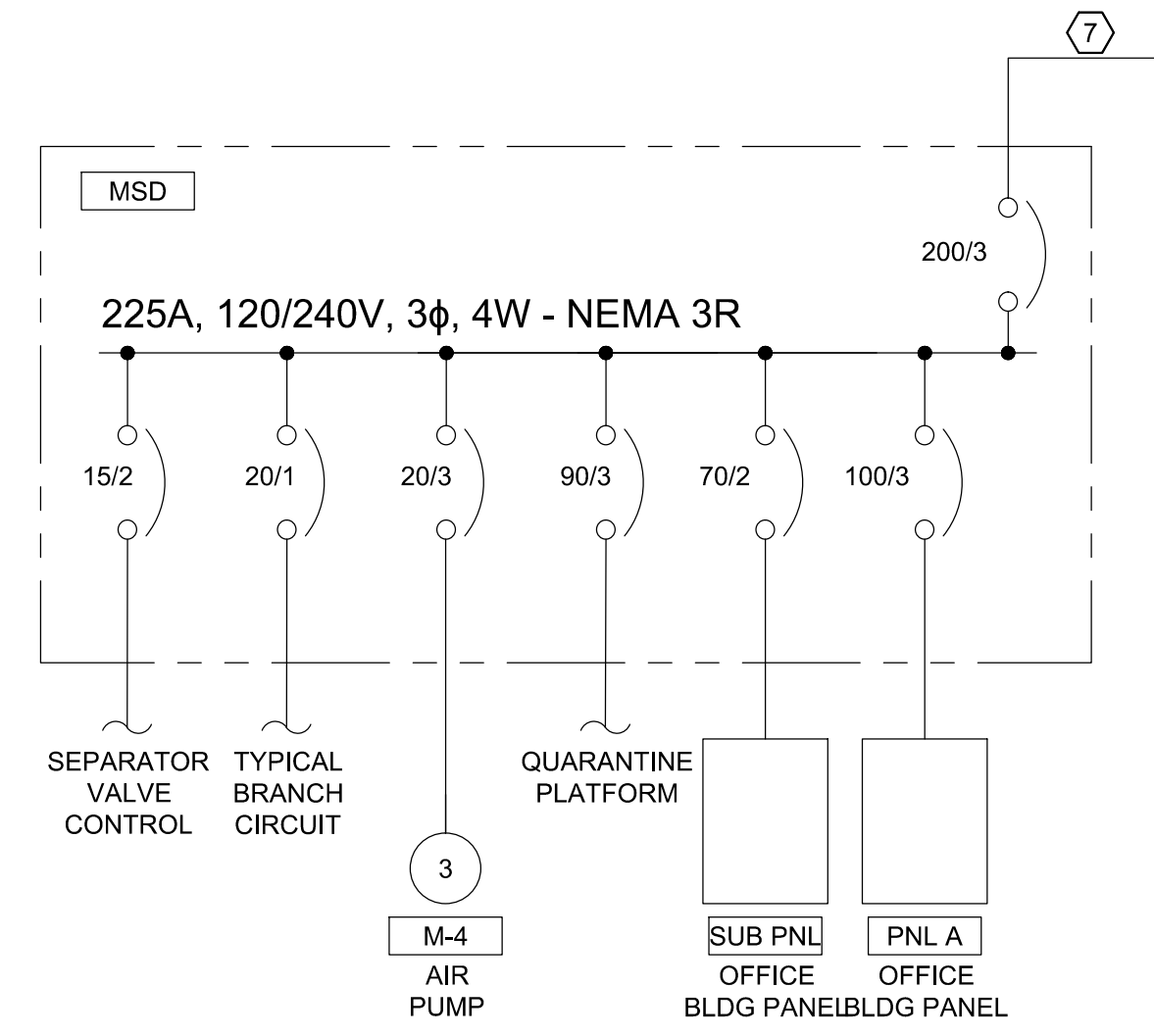
5/11/2018 11:58:04 AM ... CADISHEETFILES\E-601 ONELINE DIAGRAMS.DWG - NGUYEN, TRANG

F
E
D
C
B
A



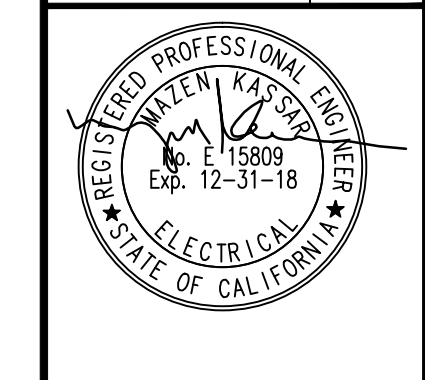
- KEYED NOTES**
- PROVIDE OVERCURRENT DEVICE AND FEEDER. CONDUIT TO BE INTERCEPTED AND ROUTED TO NEW RAS TREATMENT BUILDING.
 - PROVIDE COOLING TOWER VFD BUCKET. PROVIDE CABLE ROUTED FROM VFD TO COOLING TOWER MOTOR.
 - REMOVE EXISTING RIVER SUMP PUMPS CONDUCTORS AND ASSOCIATED MCC COMPONENTS. INTERCEPT RACEWAY AND ROUTE TO RAS TREATMENT BUILDING.
 - REMOVE COLD WELL PUMPS, CABLES AND EXPOSED PORTIONS OF RACEWAY WHERE ACCESSIBLE. REMOVE LABEL FROM MCC AND LABEL AS SPARE.
 - REMOVE COOLING TOWER STARTER AND COMPONENTS.
 - REMOVE 75W GENERATOR, AND CONDUCTORS. RE-LABEL BUCKET AS SPARE.
 - VERIFY POWER ROUTING FOR PANEL MSD.
 - COORDINATE REMOVAL AND INSTALLATION OF UTILITY CONDUCTORS. PROVIDE RACEWAYS, HAND-HOLE AND PULL CORD TO FACILITATE THIS WORK. STUB RACEWAY UP POLE TO 10' ABOVE FINISHED GRADE.
 - REMOVE CONDUIT ROUTED TO POLE MOUNTED UTILITY TRANSFORMERS.
 - TEMPORARILY REMOVE SWBD TO ALLOW FOR PAD AND RACEWAY MODIFICATIONS. REMOVE SECTION OF PAD AS REQUIRED FOR THE INSTALLATION OF UTILITY RACEWAYS.

**ONE-LINE DIAGRAM
MODIFIED SYSTEM**
SCALE: NONE



**ONE-LINE DIAGRAM
DEMOLITION**
SCALE: NONE

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Tel 503.684.9007



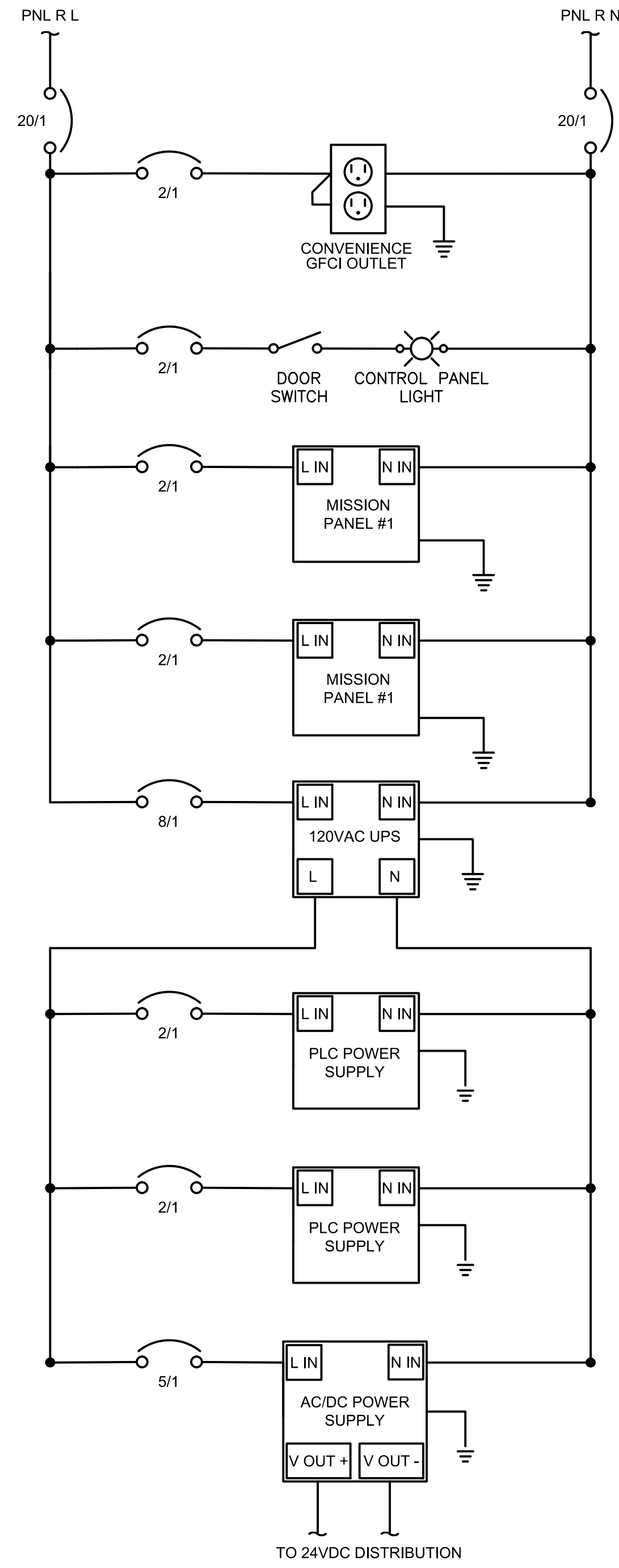
MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
**ONE-LINE DISTRIBUTION
DIAGRAMS**

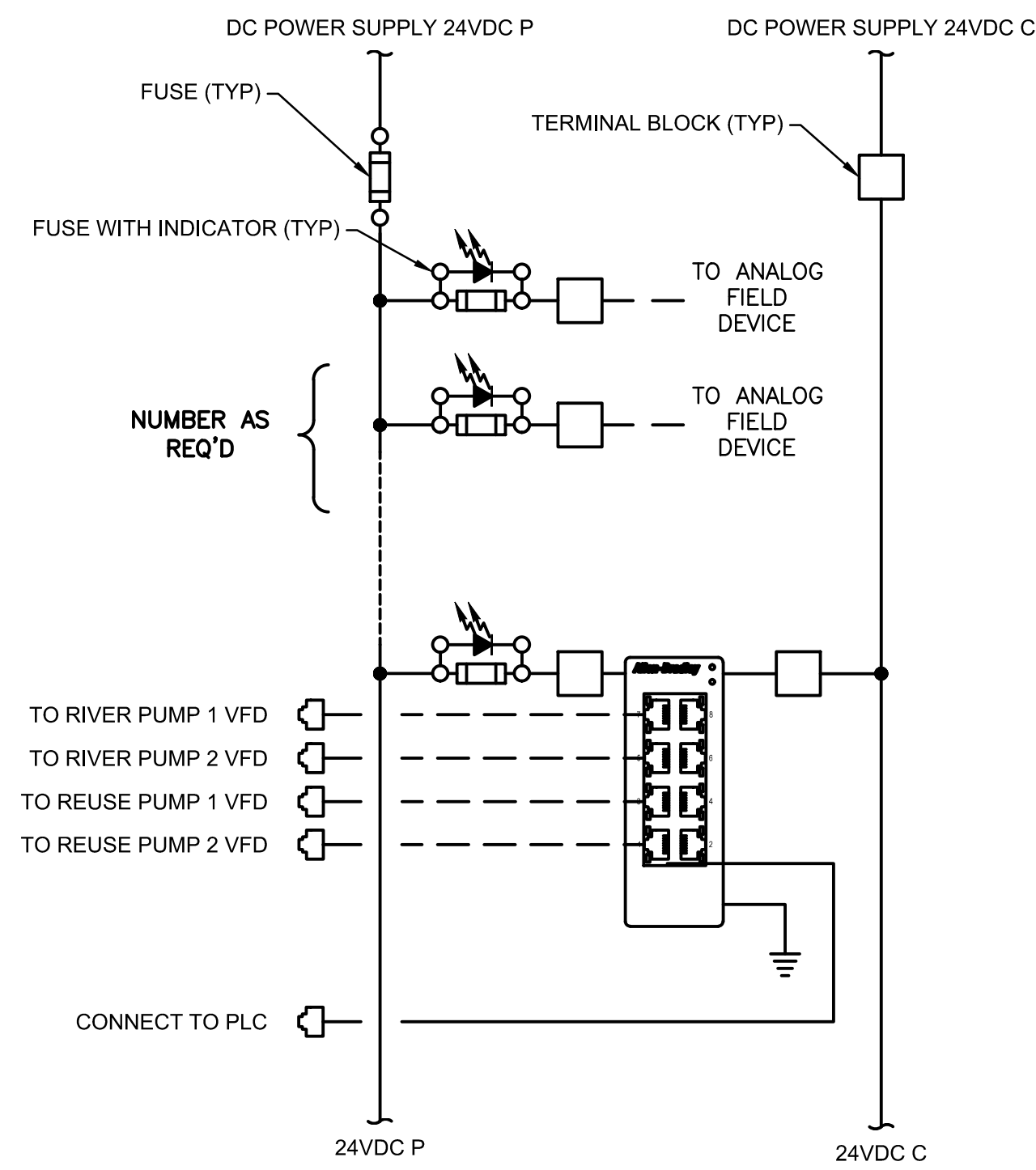
Project No.: 135-124674-15001
Designed By: EGN
Drawn By: EGN
Checked By:

E-601

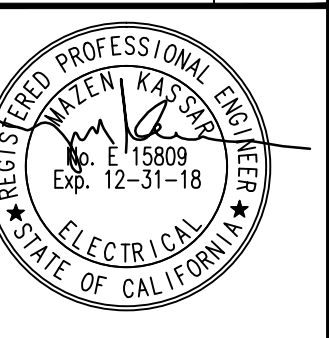
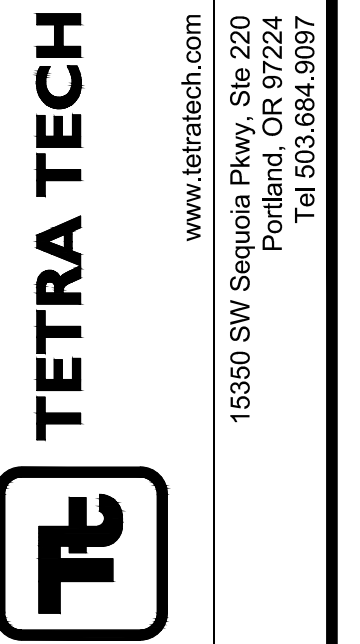
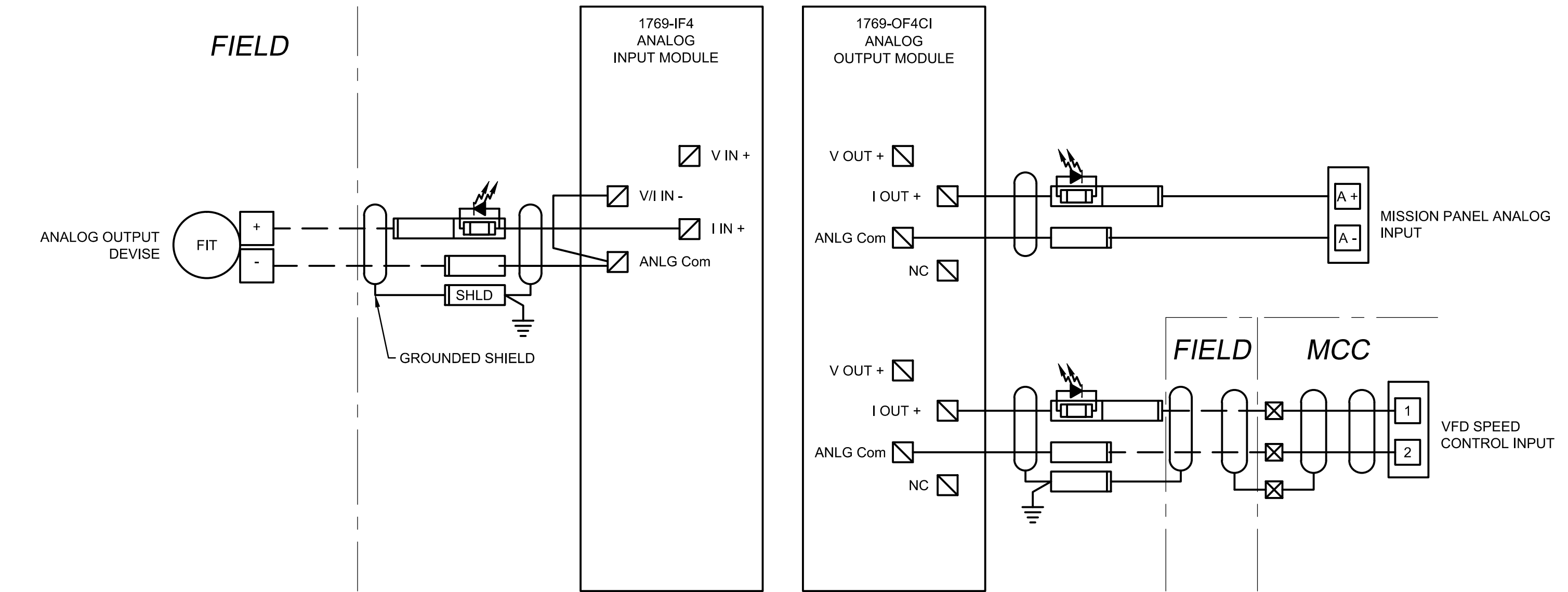
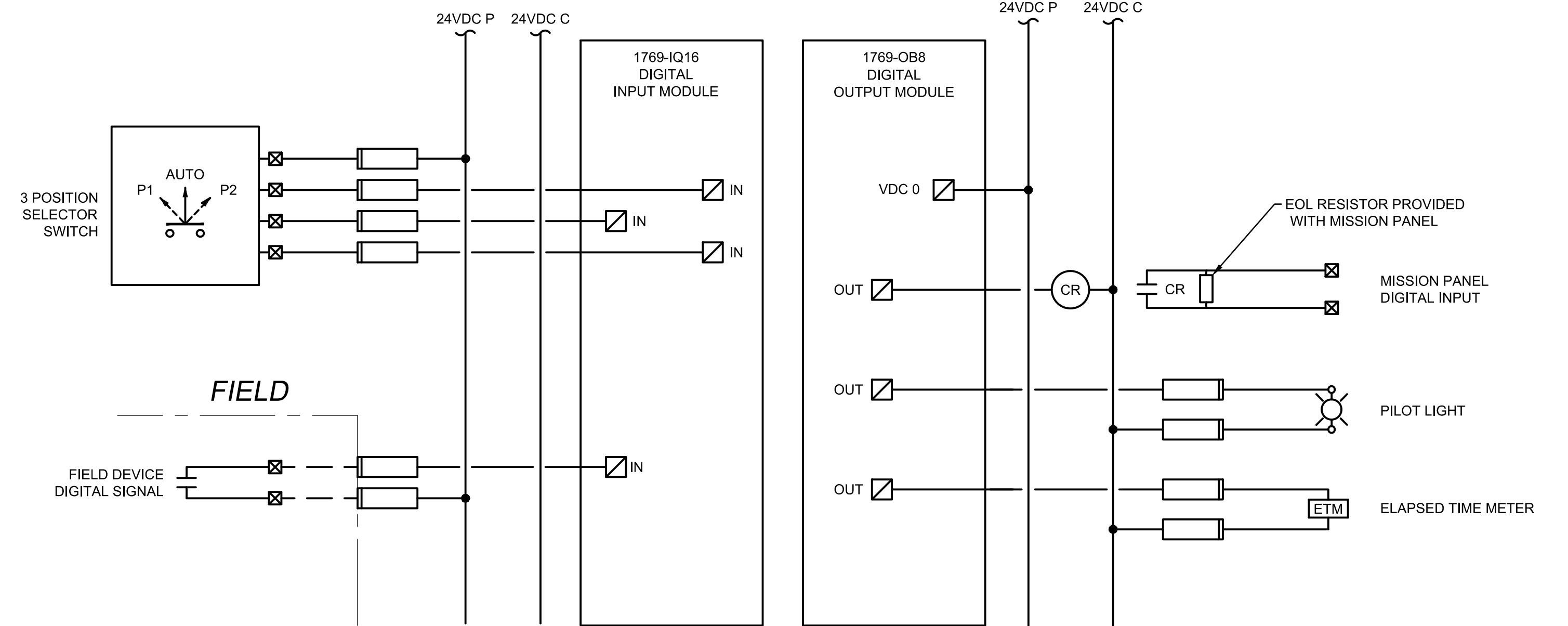
5/11/2018 11:58:40 AM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHETS\FILES\E-602 CONTROL PANEL CP-200 SCHEMATICS.DWG - NGUYEN, TRANG



1 CONTROL PANEL CP-200 POWER DISTRIBUTION
SCALE: NONE



2 CONTROL PANEL CP-200 TYPICAL I/O CONNECTIONS
SCALE: NONE



MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
CONTROL PANEL CP-200
SCHEMATICS

Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

E-602

Bar Measures 1 inch

5/11/2018 12:00:42 PM - O:\PROJECTS\SEATTLE\124674\135-124674-15001\CAD\SHETSHEETFILES\E-603 PANEL AND LUMINAIRE SCHEDULES.DWG - NGUYEN, TRANG

A B C D E F

LUMINAIRE SCHEDULE								
ID	DESCRIPTION	MOUNTING	LAMPS	LUMENS	CCT	INPUT WATTS	VOLTAGE	FIXTURE TYPE
A	4 FOOT, Enclosed & Gasketed Industrial LUMINAIRE, STAINLESS STEEL, IP67 CERTIFIED, ORDERED WITH STAINLESS STEEL CHAIN MIN 82 CRI, 3500K CCT	SUSPENDED	LED	5200	4000	46	120VAC	H.E. WILLIAMS, L97 SERIES
B	MEDIUM SHALLOW WALL PACK, FULLY GASKETED SIDE DOOR, WET LOCATION RATED, BRONZE POWDER COATED FINISH, HEAVY DUTY DIE-CAST HOUSING.	WALL MOUNT	LED	4400	5000	48	120VAC	H.E WILLIAMS, WP1 SERIES
EM	SURFACE WALL-MOUNT EMERGENCY EGRESS BATTERY LIGHT, INDUSTRIAL STYLE WITH DUAL LED LAMP CLUSTERS AND INTEGRAL BATTERY WITH SELF-DIAGNOSTICS AND PUSH-TO-TEST FEATURE. WHITE THERMOPLASTIC HOUSING.	WALL MOUNT	LED	-	-	1.8	120VAC	H.E. WILLIAMS EMER/LED-WHT-SDT SERIES
X	ILLUMINATED EXT SIGN WITH WHITE THERMOPLASTIC HOUSING, GREEN STENCIL FACE AND INTEGRAL BATTERY. UNIT TO HAVE PUSH-TO-TEST FEATURE. BATTERY SHALL OPERATE LAMPS FOR 90-MINUTES, MINIMUM.	WALL MOUNT	LED	-	-	3.8	120VAC	H.E. WILLIAMS EXT-G-EM-WHT-SDT SERIES

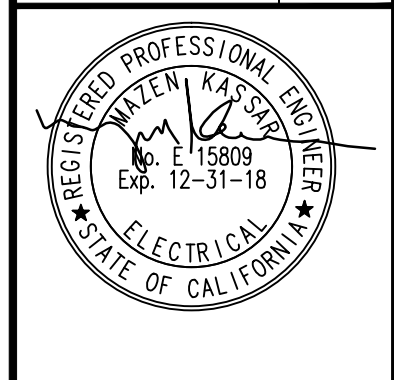
LOAD CALCULATION, MCC-1					
EQUIPMENT NO.	DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR	DEMAND LOAD AMPS
		HP/KVA	AMPS @ 240V		
CT-1	COOLING TOWER	30HP	80.0	1.25	100.0
MCC-2A	RIVER PUMPS	60HP	160.0	0.50	80.0
MCC-2B	REUSE PUMPS	65.3KVA	157.0	0.70	110.0
MSD	EXISTING SITE DIST PANEL	77.0KVA	214.0	0.84	180.0
P-6	EXISTING PORTABLE PUMP	10HP	28.0	1.00	28.0
PMP-400	BOOSTER PUMP	5HP	15.2	1.00	15.2
TOTAL			654.2		513.2

LOAD CALCULATION, MCC-2A					
EQUIPMENT NO.	DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR	DEMAND LOAD AMPS
		HP/KVA	AMPS @ 240V		
PMP-101	RIVER PUMP #1	30HP	80.0	1.25	100.0
PMP-102	RIVER PUMP #2 (NON-COINCIDENT)	30HP	80.0	0.00	80.0
TOTAL			160.0		100.0

LOAD CALCULATION, MCC-2B					
EQUIPMENT NO.	DESCRIPTION	CONNECTED LOAD		DEMAND FACTOR	DEMAND LOAD AMPS
		HP/KVA	AMPS @ 240V		
EF-200	RAS BLDG EXHAUST FAN	0.5HP	2.2	1.00	2.2
PMP-201	REUSE PUMP #1	20HP	54.0	1.25	68.0
PMP-202	REUSE PUMP #2 (NONCOINCIDENT)	20HP	54.0	0.00	0.0
PNL R	PANEL R	16.8KVA	46.8	0.85	39.4
TOTAL			157.0		109.6

TETRA TECH

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BY	DATE	DESCRIPTION

MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
**PANEL SCHEDULES, CALCS
 AND LUMINAIRE SCHEDULE**

Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-603

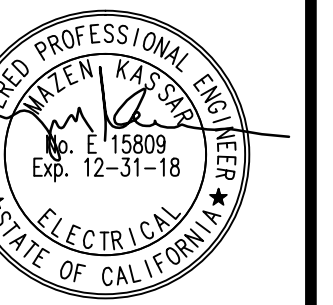
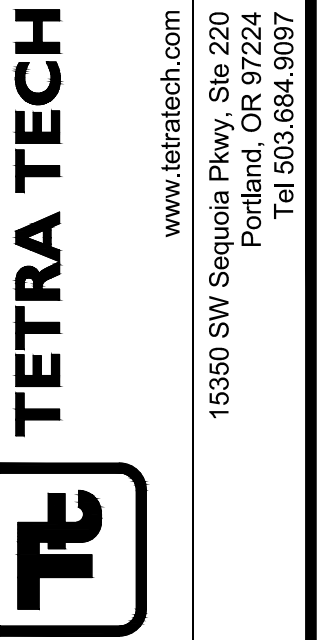
5/1/2018 12:01:30 PM - O:\PROJECTS\SEATTLE\124674-15001\CAD\SHEETFILES\E-604 CONDUIT AND CABLE SCHEDULES.DWG - NGUYEN, TRANG

CONDUIT SCHEDULE - POWER

ID	FROM	TO	VOLTS/ SIGNAL	QTY	COND SIZE	WIRE		
						NO	SIZE	GND
P-001	UTILITY POLE TRANSFORMER	SWBD	120/240V	2	5"	PROVIDED BY UTILITY		
P-002	MCC-1	MCC-2A DISCONNECT	120/240V	1	3"	4	3/0	4
P-003	MCC-1	MCC-2B DISCONNECT	120/240V	1	3"	4	3/0	4
P-004	MCC-1	CT-1	120/240V	1	2"	3	1/0	6
P-005	MCC-1	PMP-400	120/240V	1	1"	3	10	10
P-006	MCC-2A	PMP-101	120/240V	1	2"	3	1/0	6
P-007	MCC-2A	PMP-102	120/240V	1	2"	3	1/0	6
P-008	MCC-2B	PMP-201	120/240V	1	1-1/2"	3	3	8
P-009	MCC-2B	PMP-202	120/240V	1	1-1/2"	3	3	8
P-010	MCC-2B	PNL R FEEDER	120/240V	1	2"	4	3/0	6
P-011	MCC-1	RAS TREATMENT BLDG (SPARE RACEWAY)	N/A	1	N/A	N/A	N/A	N/A
P-012	PNL R	VCP-204	120/240V	1	1"	4	10	10
P-012A	VCP-204	PMP-204	120/240V	1	1"	3	12	12
P-012B	VCP-204	MTR-204	120/240V	1	1"	3	12	12
P-013	PNL R	VCP-203	120/240V	1	1"	4	10	10
P-013A	VCP-203	PMP-203	120/240V	1	1"	3	12	12
P-013B	VCP-203	MTR-203	120/240V	1	1"	3	12	12
P-014	PNL R	VCP-205	120/240V	1	1"	4	10	10
P-014A	VCP-205	UV UNIT	120/240V	1	1"	3	10	10
P-015	PNL R	CP-100	120/240V	1	1"	3	10	10
P-016	CP-200	FIT-100 IN VAULT	120VAC	1	1"	2	12	12
P-017	CP-200	RAS CONTROL BOX TRANSMITTERS	120VAC	1	1"	2	12	12
P-018	MCC-2B	EXHAUST FAN EF-200	120/240V	1	1"	3	12	12
P-019	CP-200	HEAD TANK TRANSMITTERS	120VAC	1	1"	2	10	10
P-020	CP-200	REUSE FLOW TRANSMITTER FIT-206	120VAC	1	1"	2	12	12
P-021	PNL R	CP-200 CONTROL PANEL POWER	120VAC	1	3/4"	2	12	12
P-022	MCC-1	MTR-402	240VAC	1	1"	2	12	12

CONDUIT SCHEDULE - CONTROL AND SIGNAL

ID	FROM	TO	QTY	SIZE	CONTENTS	NOTES
C-100B	RIVER PUMP STATION	CP-200	1	2"	(1) TSP, (2)#16AWG	
C-100C	FLOW METER VAULT	CP-200	1	1"	(1) TSP	4-20MA ANALOG
C-200	REUSE SUMP	CP-200	1	1"	(1) TSP, (2)#16AWG	4-20MA ANALOG AND DISCRETE
C-201	PMP-201	MCC-2B	1	1"	(2) #16AWG	
C-202	PMP-202	MCC-2B	1	1"	(2) #16AWG	
C-203	VCP-203	CP-200	1	1"	(4) #16AWG	VERIFY WITH VENDOR
C-203A	DF-203	VCP-203	1	1"	(4) #16AWG	VERIFY WITH VENDOR
C-204	VCP-204	CP-200	1	1"	(4) #16AWG	VERIFY WITH VENDOR
C-204A	DF-204	VCP-204	1	1"	(4) #16AWG	VERIFY WITH VENDOR
C-205	VCP-205	CP-200	1	1"	(4) #16AWG	VERIFY WITH VENDOR
C-205A	UV-205	VCP-205	1	1"	(1) TSP, (2)#16AWG	VERIFY WITH VENDOR
C-300	RAS CONTROL BOX	CP-200	1	2"	(2) TSP, (2) #16AWG	4-20MA ANALOG AND DISCRETE
C-400	HEAD TANK	CP-200	1	2"	(2)TSP, (2)#16AWG	HEAD TANK INSTRUMENTS
C-401	MCC-1	CP-200	1	2"	N/A	SPARE RACEWAY
C-402	MCC-1	CP-200	1	1"	(2) CAT-6 UTP	FOR CT-1 FAN VFD INTERFACE
C-403	FIT-401	FE-401	1	3/4"	VENDOR CABLE	REMOTE TRANSMITTER



MARK	DATE	DESCRIPTION

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
SLEEPY HOLLOW STEELHEAD REARING FACILITY
**RAW WATER INTAKE AND
WATER SUPPLY SYSTEM UPGRADE
CONDUIT AND CABLE
SCHEDULES**

Project No.: 135-124674-15001
Designed By: JAR
Drawn By: JAR
Checked By:

E-604

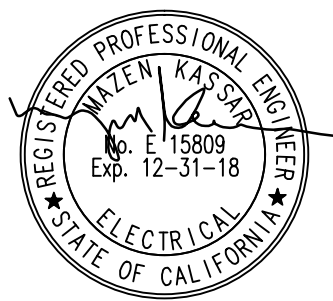
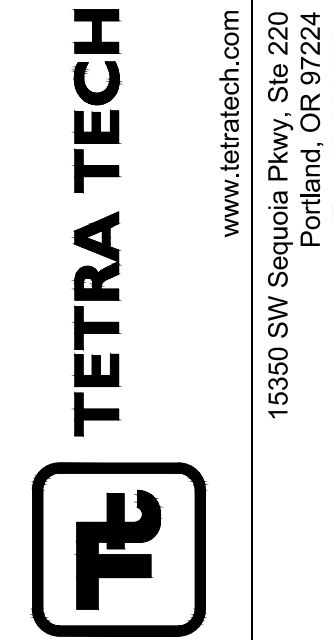
Bar Measures 1 inch

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CONTROL PANEL CP-200 OUTPUTS		
From	Description	Type
Cooling Tower Fan VFD	Fan Control	Ethernet
Mission Controller 1	River Pump 1 Run	Digital
Mission Controller 1	River Pump 1 Stand By	Digital
Mission Controller 1	River Pump 1 Fault	Digital
Mission Controller 1	River Pump 2 Run	Digital
Mission Controller 1	River Pump 2 Stand By	Digital
Mission Controller 1	River Pump 2 Fault	Digital
Mission Controller 1	Wetwell Low Level	Digital
Mission Controller 1	Control Box Low level	Digital
Mission Controller 1	Control Box DO Alarm	Digital
Mission Controller 1	Control Box Temp Alarm	Digital
Mission Controller 2	Reuse Pump 1 Run	Digital
Mission Controller 2	Reuse Pump 1 Stand By	Digital
Mission Controller 2	Reuse Pump 1 Fault	Digital
Mission Controller 2	Reuse Pump 2 Run	Digital
Mission Controller 2	Reuse Pump 2 Stand By	Digital
Mission Controller 2	Reuse Pump 2 Fault	Digital
Mission Controller 2	Reuse Sump Level Low	Digital
Mission Controller 2	Head Tank Low level	Digital
Mission Controller 2	Head Tank DO Alarm	Digital
Mission Controller 2	Head Tank Temp Alarm	Digital
Elapsed Time Meter	River Pump 1 Run Time	Digital
Pilot light	River Pump 1 Fault	Digital
Elapsed Time Meter	River Pump 2 Run Time	Digital
Pilot light	River Pump 2 Fault	Digital
Pilot light	Wetwell Low Level	Digital
Elapsed Time Meter	Reuse Pump 1 Run Time	Digital
Pilot light	Reuse Pump 1 Fault	Digital
Elapsed Time Meter	Reuse Pump 1 Run Time	Digital
Pilot light	Reuse Pump 2 Fault	Digital
Pilot light	Control Box Low O2	Digital
Pilot light	Control Box High Temp	Digital
Pilot light	Control Box Low level	Digital
Pilot light	Head Tank Low O2	Digital
Pilot light	Head Tank High Temp	Digital
Pilot light	Head Tank Low Level	Digital
Pilot light	UV Dose Low	Digital

CONTROL PANEL CP-200 INPUTS		
From	Description	Type
River Pump 1	High Temp	Digital
River Pump 2	High Temp	Digital
River Pump Station Wet well	Low Level switch	Digital
River Pump Station Wet well	Level Sensor	Analog
Reuse Pump Sump	Low Level switch	Digital
Reuse Pump Sump	Level Sensor	Analog
River Pump Selector Switch	Pump 1	Digital
River Pump Selector Switch	Pump 2	Digital
River Pump Selector Switch	Alternate	Digital
ReUse Pump Selector Switch	Pump 1	Digital
ReUse Pump Selector Switch	Pump 2	Digital
ReUse Pump Selector Switch	Alternate	Digital
River Intake Meter Vault	FIT-100	Analog
Reuse building output	FIT-206	Analog
UV Panel	UV Dose	Analog
Head Tank	Dissolved Oxygen	Analog
Head Tank	Tempeture	Analog
Head Tank	Low level	Digital
Control Box	Dissolved Oxygen	Analog
Control Box	Tempeture	Analog
Control Box	Low level	Digital
Drum filter panel 1	Drum Filter Alarm	Digital
Drum filter panel 2	Drum Filter Alarm	Digital
Intake screen Panel	High Oil Pressure	Digital
Intake screen Panel	Low Oil	Digital
Intake screen Panel	No Power	Digital
UV System	fault	Digital



MARK	DATE	DESCRIPTION	BY

MONTEREY PENNSULA WATER MANAGEMENT DISTRICT
 SLEEPY HOLLOW STEELHEAD REARING FACILITY
 RAW WATER INTAKE AND
 WATER SUPPLY SYSTEM UPGRADE
**CONTROL PANEL CP-200
 I/O SCHEDULES**

Project No.: 135-124674-15001
 Designed By: JAR
 Drawn By: JAR
 Checked By:

E-605