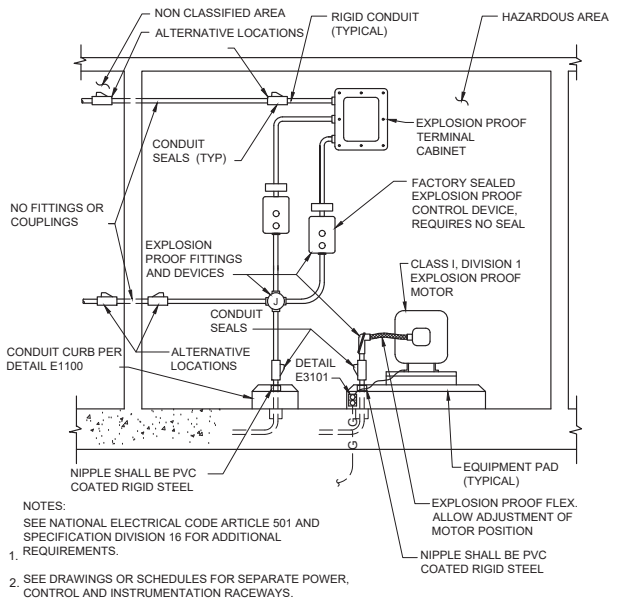
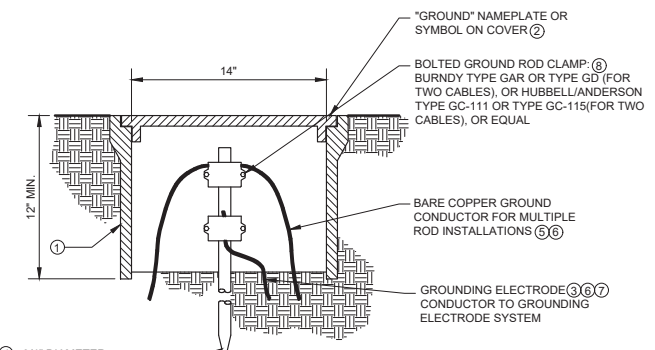


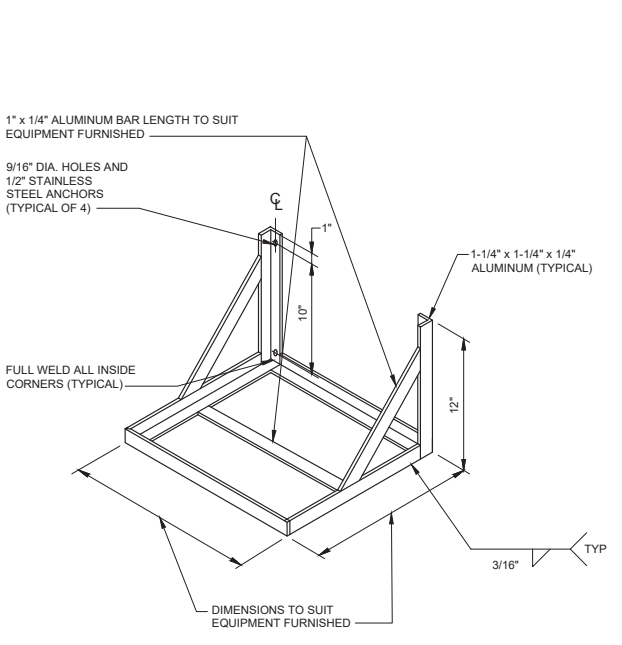
C:\BCP\W\0408745\01-5004 STANDARD DETAILS - 4.DWG 12/20/2021 4:36 PM



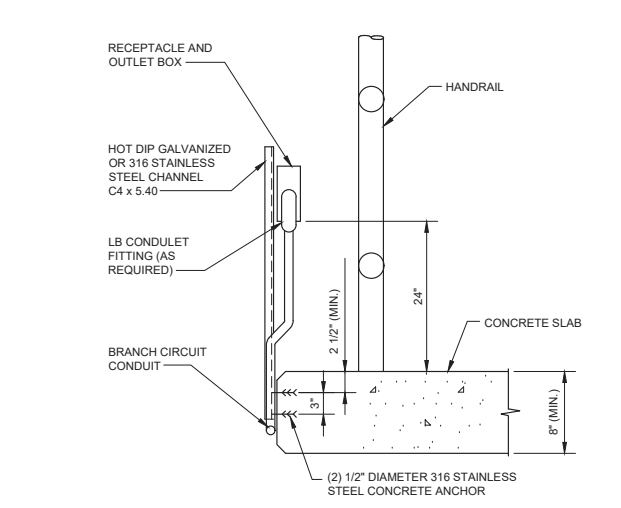
HAZARDOUS AREA RACEWAYS TYPICAL
DETAIL (E2901)
 SCALE: NONE



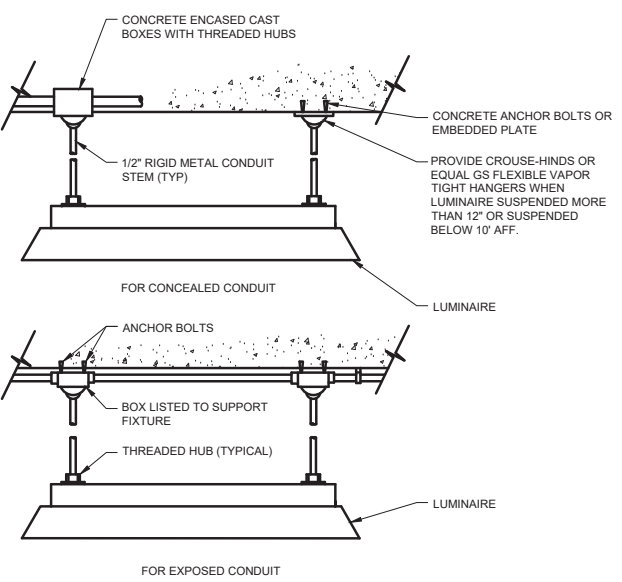
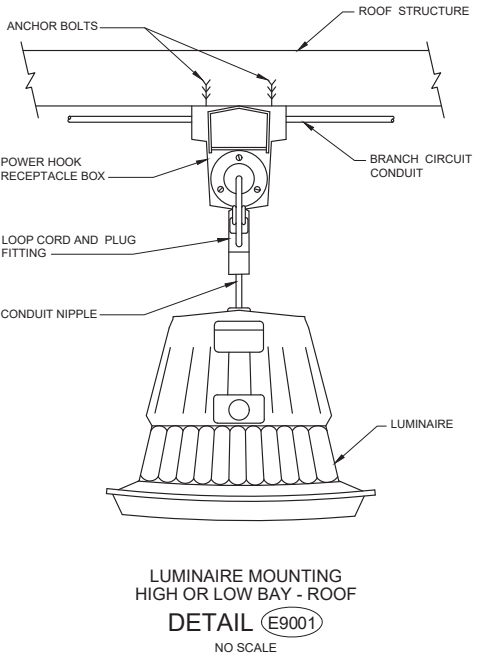
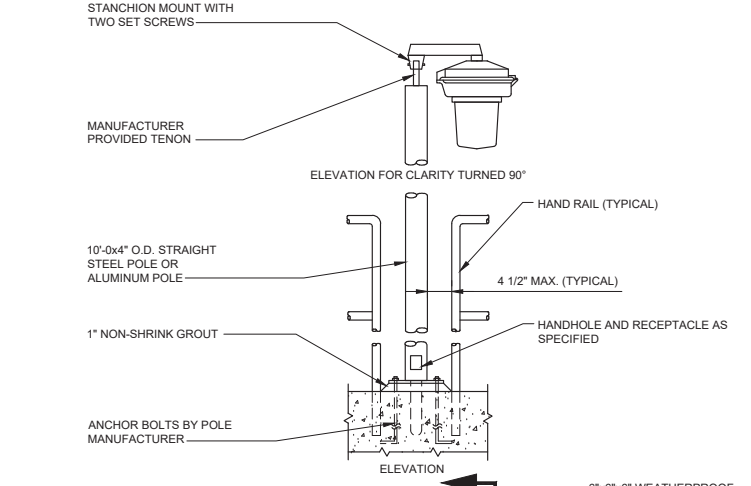
GROUND ELECTRODE TEST WELL
DETAIL (E3002)
 NO SCALE



EQUIPMENT SUPPORTS EQUIPMENT MOUNTING BRACKET
DETAIL (E4041)
 NO SCALE

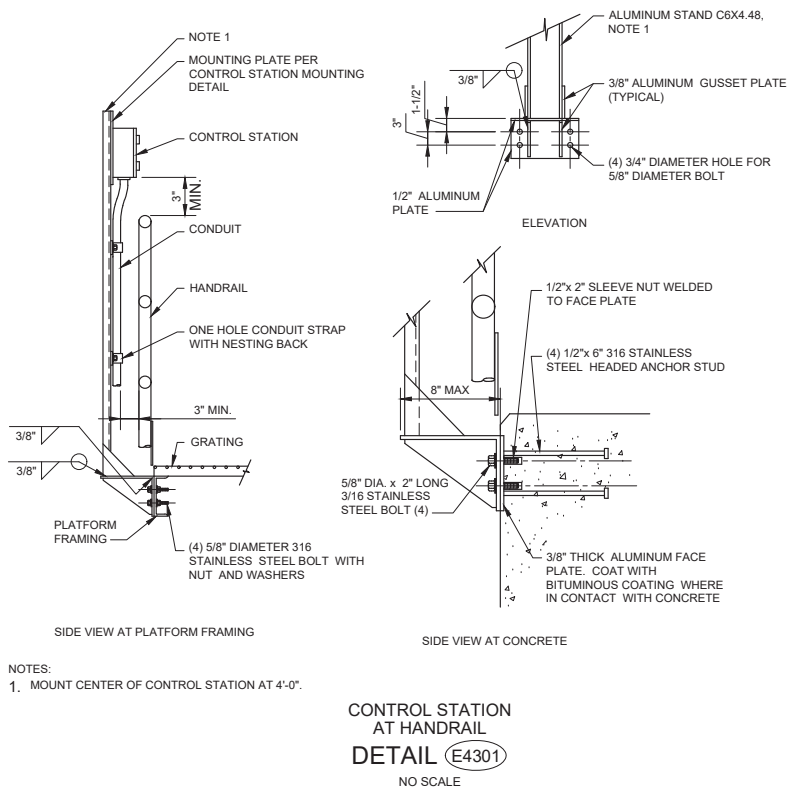


RECEPTACLE AT HANDRAIL - STAINLESS STEEL
DETAIL (E4102)
 NO SCALE



SECTION 1
 SCALE: NONE

LUMINAIRE MOUNTING POLE ON WALKWAY
DETAIL (E9013)
 NO SCALE



CONTROL STATION AT HANDRAIL
DETAIL (E4301)
 NO SCALE



NO.	DATE	BY	DESCRIPTION	APPROVED



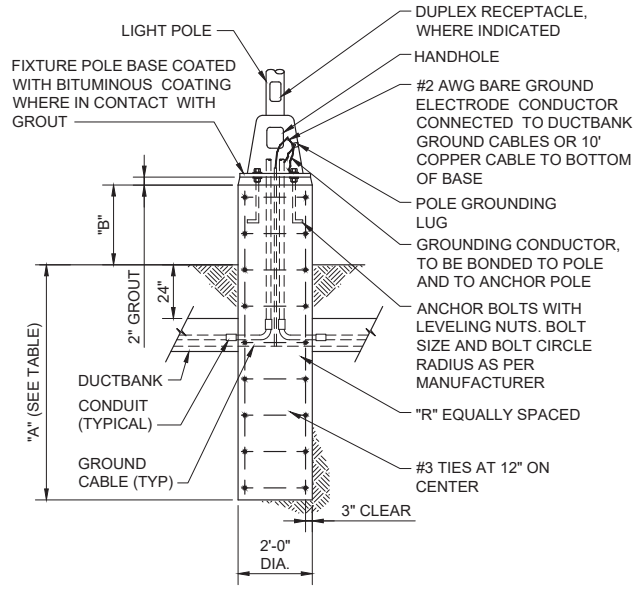
REVIEWED BY: _____	DATE: _____, 20__	REFERENCE: _____
REVIEWED BY: _____	DATE: _____, 20__	DATE: _____, 20XX
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.	COMPUTER FILE NAME: _____
REVIEWED BY: _____	DATE: _____, 20__	SP-FILE NO.: SP2602
OMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE: _____, 20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

STANDARD DETAILS - 4

DESIGNED BY: FRF
 DRAWN BY: FRF
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-01-5004
 SHEET 183 OF 303 SHEETS

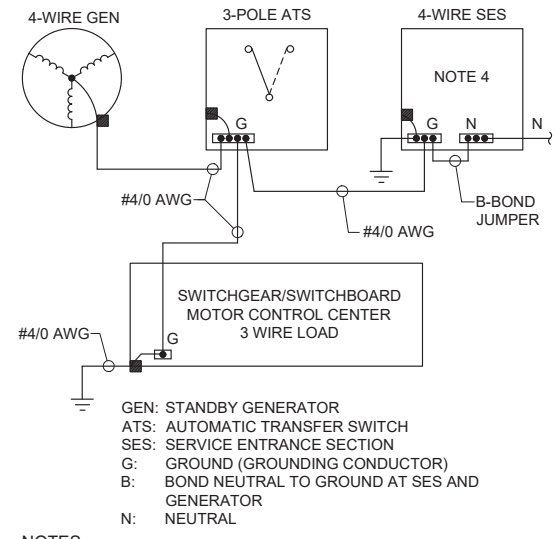
C:\BCP\W\0408745\E-01-5005 STANDARD DETAILS - 5.DWG 12/20/2021 4:37 PM



POLE HEIGHT	"A" MINIMUM	MAX BASE HEIGHT "B"	"R" LONGITUDINAL REINF.
17'-0"	4'-6"	3'-0"	(4) #4

NOTE:
1. FOUNDATION SHALL BEAR AGAINST ORIGINAL SOIL OR 90% COMPACTED BACKFILL OF APPROVED TYPE

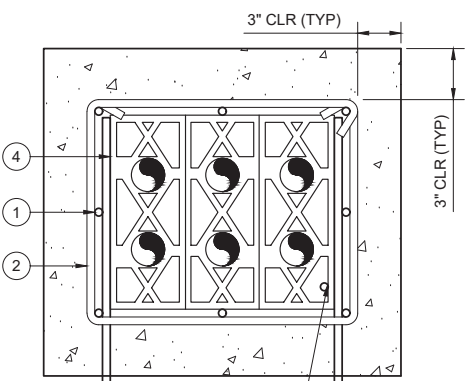
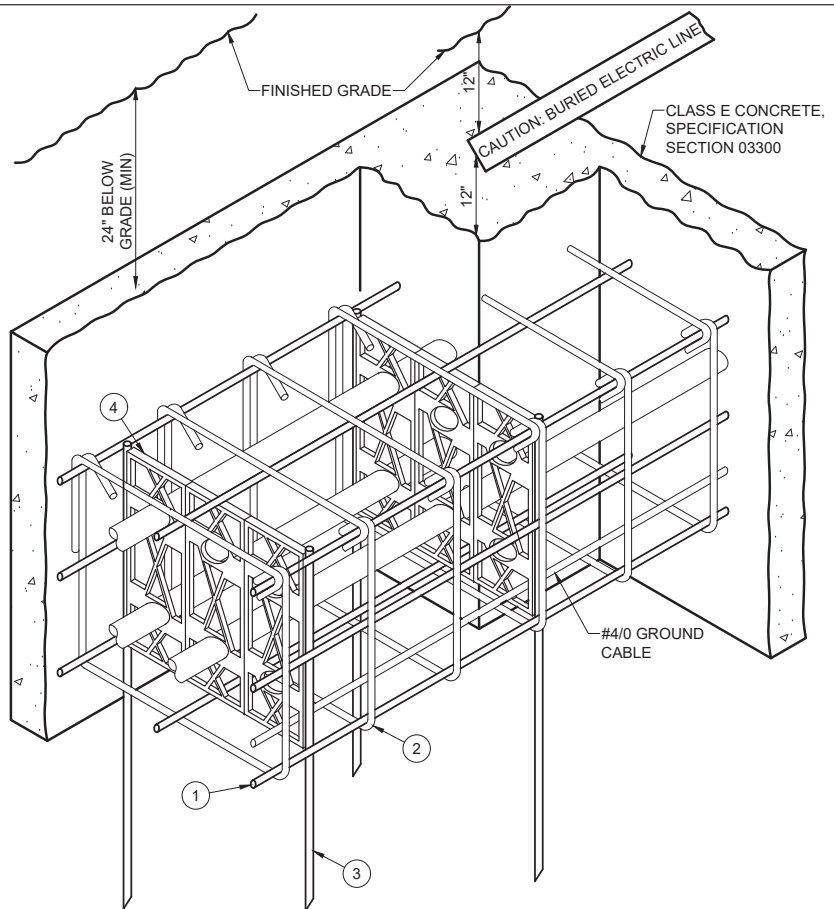
LUMINAIRE MOUNTING POLE - EXTENDED BASE
DETAIL E9012
NO SCALE



GEN: STANDBY GENERATOR
ATS: AUTOMATIC TRANSFER SWITCH
SES: SERVICE ENTRANCE SECTION
G: GROUND (GROUNDING CONDUCTOR)
B: BOND NEUTRAL TO GROUND AT SES AND GENERATOR
N: NEUTRAL

NOTES:
1. REFERENCE NEC EXHIBIT 250.11 HANDBOOK FIGURES
2. BOND NEUTRAL TO GROUND, DO NOT INSTALL NEUTRAL FROM SES TO ATS.
3. BOND NEUTRAL TO GROUND, DO NOT INSTALL NEUTRAL FROM GENERATOR TO ATS.
4. LABEL PER NEC 702.8 A - SIGNS

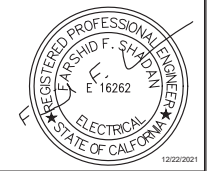
STANDBY GENERATOR GROUNDING 3-PHASE 4-WIRE, NEUTRAL NOT USED
DETAIL E3201
NO SCALE



SECTION SEE KEY NOTES
#4/0 AWG BARE COPPER GROUND CABLE, ANY LOCATION IN DUCTBANK

NOTES:
1. REFER TO SPECIFICATION DIVISION 16 FOR DUCTBANK CONSTRUCTION REQUIREMENTS.
2. INSTALL NUMBER AND SIZE OF ELECTRICAL DUCTS AS SHOWN ON DRAWINGS OR SCHEDULES.
3. PROVIDE OSHA APPROVED 6" WIDE RED WARNING TAPE (IDEAL DU-601 OR EQUAL).
4. DIMENSIONS ARE MINIMUM AND TYPICAL FOR OUTSIDE SURFACES.
5. BOND GROUNDING CONDUCTOR TO ALL GROUNDING ELECTRODES INCLUDING BUILDING GROUNDING ELECTRODE AT EACH END OF THE DUCTBANK.
6. SADDLE-TYPE CONDUIT SPACERS (CARLON SNAP-LOC, SNAP-N-STAC, PW EAGLE PIPE, UNDERGROUND DEVICES, OR EQUAL).
7. PROVIDE PLYWOOD FOR DUCTBANK CONCRETE FORMS.
8. CONDUIT PENETRATION OPENINGS PER 26 05 00-3.01-A-4.

KEY NOTES:
① PROVIDE #4 REINFORCING STEEL 12" MAXIMUM ON CENTER AROUND ENTIRE PERIMETER OF DUCTBANK.
② PROVIDE #4 REINFORCING STEEL TWO PIECE STIRRUPS 36" MAXIMUM ON CENTER ALONG LENGTH OF DUCTBANK.
③ INSTALL #4 REINFORCING STEEL 36" MINIMUM IN UNDISTURBED SOIL AT EVERY PVC CONDUIT SPACER LOCATION ALONG LENGTH OF DUCTBANK TO PREVENT DUCTBANK FROM FLOATING DURING CONCRETE POUR. PROVIDE TWO #4 REINFORCING STEEL UPRIGHTS PER PVC CONDUIT SPACER LOCATION.
④ INSTALL PVC CONDUIT SPACERS ON 5'-0" CENTERS LOCATED 12" FROM STIRRUPS.
⑤ PROVIDE 2" SEPARATION FOR CONDUITS LESS THAN 4". PROVIDE 3" SEPARATION FOR CONDUITS 4" AND LARGER.



City of Santa Monica
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__
SUNNY WANG, P.E. - WATER RESOURCES MANAGER

REVIEWED BY: _____ DATE: _____, 20__
OMED POUR, P.E. - PROJECT MANAGER

REFERENCE: _____ DATE: _____, 20__
COMPUTER FILE NAME: _____
SUBMITTED BY: _____
SP-FILE NO.: SP2602

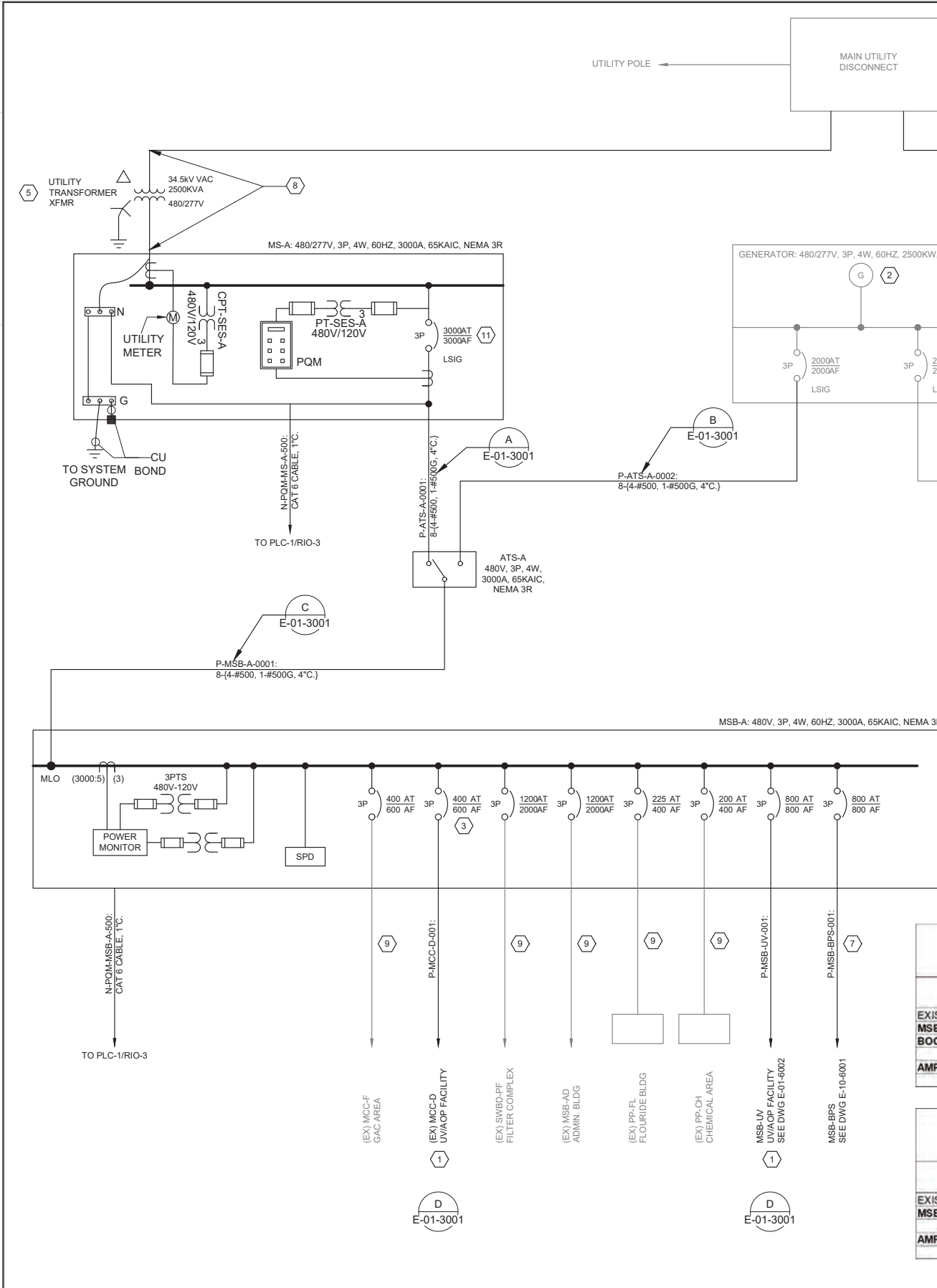
APPROVED BY: _____ DATE: _____, 20__
ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

STANDARD DETAILS - 5

DESIGNED BY: FRF
DRAWN BY: FRF
CHECKED BY: AZ
CONSULTANT JOB/SHEET NO.
DRAWING NO. 7078
E-01-5005
SHEET 184 OF 303 SH15

C:\BCP\W\04\08745\E-01-6001 SINGLE LINE DIAGRAM - 1.DWG 12/20/2021 4:37 PM



NOTES:
 1) RUNNING LOAD = CONNECTED LOAD - STANDBY LOAD
 2) RUNNING LOAD FOR EXISTING EQUIPMENT DETERMINED FROM LADWP PROVIDED PEAK DEMAND OF 1343A FOR MSB-A AND 1101A FOR MSB-RO FOR YEARS 2019 AND 2020. RUNNING LOAD FOR MSB-A INCLUDES FUTURE ESTIMATED BOOSTER PUMP STATION LOAD.

EXISTING MSB-A

LOAD SUMMARY AT 480 VAC

LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
EXISTING MAXIMUM DEMAND AT MSB-A SUPPLIED BY LAWDP FOR 2020	1116.3		1838.0	1343.0
MSB-LVJ			880.6	485.4
BOOSTER PUMP STATION			660.1	504.1
AMPERE TOTAL			3378.7	2332.5

EXISTING MSB-RO IN EXISTING RO BUILDING ELECTRICAL ROOM

LOAD SUMMARY AT 480 VAC

LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
EXISTING MAXIMUM DEMAND AT MSB-RO SUPPLIED BY LAWDP FOR 2020	915		2157	1101.0
MSB-RO2			1143	715
AMPERE TOTAL:			3300.1	1815.9

- GENERAL NOTES:**
- SITE ADDRESS: 1228 SOUTH BUNBY DRIVE, LOS ANGELES, CA 90025
 - DESIGN-BUILDER TO PROTECT EXISTING SYSTEMS IN PLACE DURING CONSTRUCTION.
 - COORDINATE ALL SHUTDOWN ACTIVITIES WITH PLANT OPERATIONS PRIOR TO SHUTDOWN.
- KEY NOTES:**
- EXISTING MAINTENANCE BUILDING SHALL BE DEMOLISHED AND BE REPLACED WITH NEW UV-AOP FACILITY. MCC-D, ELECTRICAL PULL BOX "A", AND AERATION LOCAL CONTROL PANEL TO BE RELOCATED. REFER TO DRAWINGS Z-03-1001 AND E-03-1001.
 - SHUNT TRIP DEVICES SHOWN ON DRAWINGS E-01-6002 AND E-01-6003 SHALL BE PROVIDED FOR LOAD SHEDDING WHILE ON GENERATOR POWER.
 - REPLACE TRIP UNIT IN MSB-A FOR MCC-D FEEDER BREAKER FROM 400A TO 300A.
 - PROVIDE NEW CIRCUIT BREAKER IN EXISTING SWITCHBOARD MSB-RO AS SHOWN. BREAKER TO MATCH EXISTING SWITCHBOARD MANUFACTURER APPROVED MODEL AND TYPE.
 - LADWP UTILITY TRANSFORMERS TO BE REPLACED WITH 1- 2000KVA (MS-RO) AND 1- 2500KVA (MS-A) TRANSFORMERS. PRIMARY AND SECONDARY CONDUCTORS AND CONDUIT TO BE SIZED BY LADWP. REPLACEMENT OF CONDUIT TO BE DETERMINED BY LADWP DESIGN.
 - NOT USED.
 - DESIGN-BUILDER TO PROVIDE CONDUIT DUCTBANK AND CONDUCTORS FROM MSB-A TO LOCATION SHOWN ON DRAWING E-10-1001.
 - PRIMARY AND SECONDARY UNDERGROUND SERVICE ENTRANCE CONDUIT SIZE AND QUANTITY PER LADWP. TO BE DETERMINED AS LADWP DESIGN PROGRESSES.
 - UTILIZE EXISTING CONDUITS AND CONDUCTORS. PROTECT CONDUCTORS IN PLACE DURING MSB-A REPLACEMENT.
 - SEE SPECIFICATION 26 21 16 FOR LIGHTNING AND SURGE ARRESTOR, AND TRANSIENT VOLTAGE SURGE SUPPRESSER REQUIREMENTS.
 - BREAKER SHALL BE RATED 100% BASED ON LOAD.

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

Brown and Caldwell
WALSH

REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

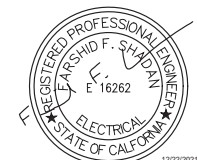
REFERENCE: _____
 DATE: _____, 20XX
 SUBMITTED BY: _____
 COMPUTER FILE NAME: _____
 SP-FILE NO.: SP2602

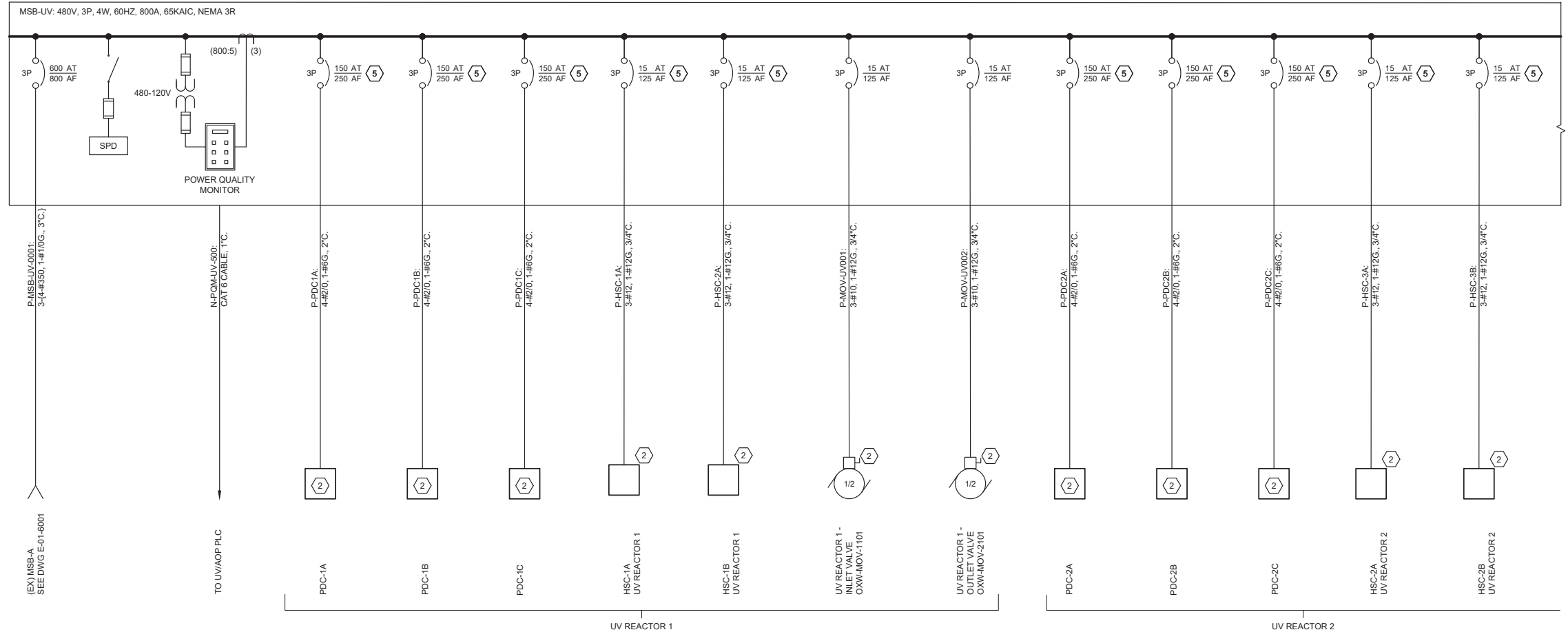
APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

SINGLE LINE DIAGRAM - 1

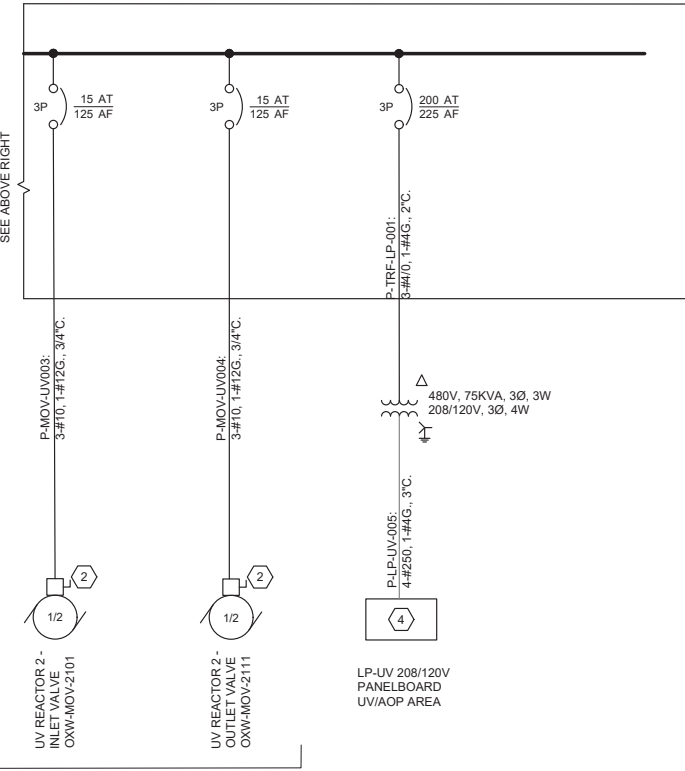
DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 CONSULTANT JOB/SHEET NO. _____
 DRAWING NO. 7078
E-01-6001
 SH 185 OF 303 SHS





SEE BELOW LEFT

- KEY NOTES:**
- STANDBY LOADS, GENERATOR POWER NOT REQUIRED, SHALL BE SHUNT TRIP WHEN ON GENERATOR POWER.
 - MOTOR CONTROL AND DISCONNECT PROVIDED BY EQUIPMENT MANUFACTURER, TYPICAL.
 - RUNNING LOAD BASED ON UV REACTOR TOTAL POWER LOAD OF 322KW. POWER FACTOR FOR UV SYSTEM 1.
 - PANELBOARD TO INCLUDE INTERNAL SURGE PROTECTIVE DEVICE AS SPECIFIED IN 26 24 16.
 - UV SYSTEM 1 AND UV SYSTEM 2 SHALL BE INTERLOCKED TO PREVENT SIMULTANEOUS OPERATION BY MEANS OF A UV1/UV2 SELECTOR SWITCH LOCATED IN THE VENDOR PROVIDED SCC CONTROL PANEL. OPERATING BOTH UV SYSTEMS AT ONE TIME WILL OVERLOAD THE PLANT ELECTRICAL SYSTEM CAPACITY. SEE SPECIFICATION 46 66 13.



MSB-UV NEAR NEW UV COMPLEX				
LOAD SUMMARY AT 480 VAC				
LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
UV REACTOR 1- PDC-1A			130	130
UV REACTOR 1- PDC-1B			130	130
UV REACTOR 1- PDC-1C			130	130
UV REACTOR 1- HSC-1A (HYDRAULIC PANEL)			3	3
UV REACTOR 1- HSC-1B (HYDRAULIC PANEL)			3	3
UV REACTOR 1 INLET VALVE		0.5	1.1	1.1
UV REACTOR 1 OUTLET VALVE		0.5	1.1	1.1
UV REACTOR 2- PDC-2A (STANDBY)			130	
UV REACTOR 2- PDC-2B (STANDBY)			130	
UV REACTOR 2- PDC-2C (STANDBY)			130	
UV REACTOR 2- HSC-2A (HYDRAULIC PANEL)			3	
UV REACTOR 2- HSC-2B (HYDRAULIC PANEL)			3	
UV REACTOR 2 INLET VALVE		0.5	1.1	
UV REACTOR 2 OUTLET VALVE		0.5	1.1	
PANELBOARD LP-UV VIA TRANSFORMER TRF-LP-001	75		90.2	90.2
AMPERE TOTAL:		2	886.6	488.4

City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



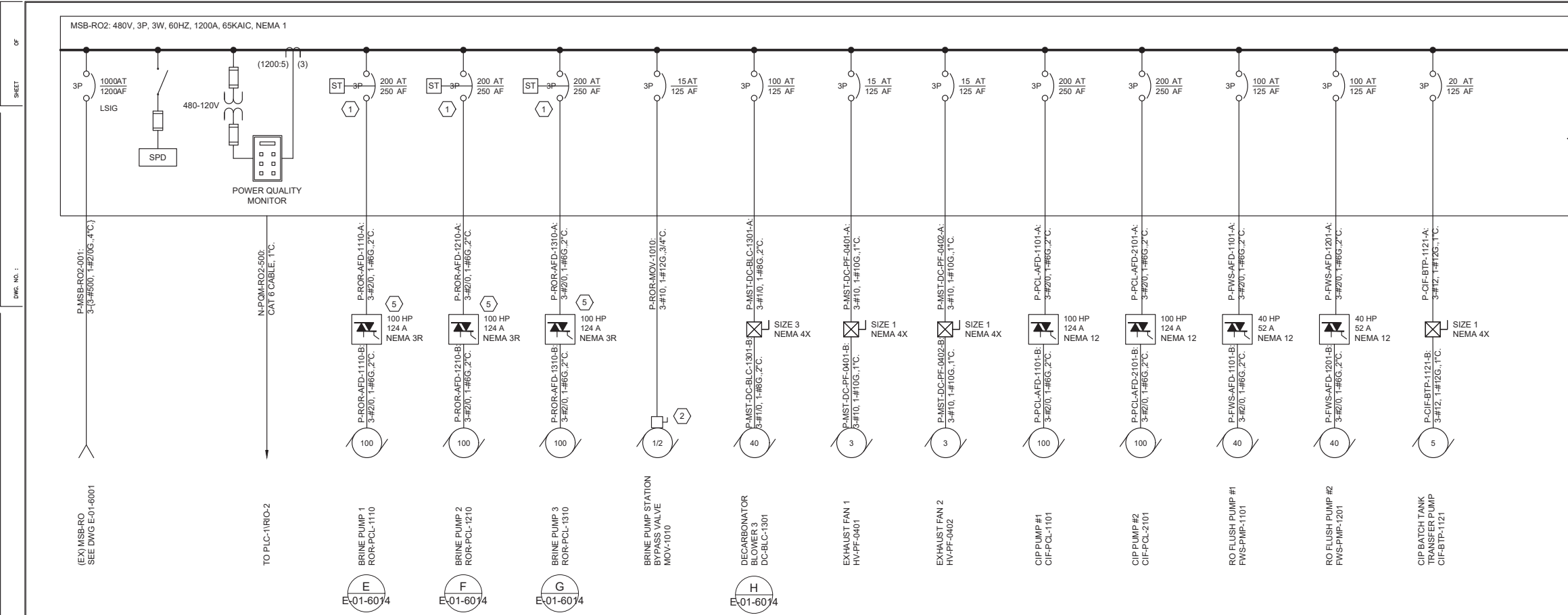
REVIEWED BY : _____ DATE : _____, 20__	REFERENCE : _____
REVIEWED BY : _____ DATE : _____, 20__	DATE : _____, 20__X COMPUTER FILE NAME : _____
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
REVIEWED BY : _____ DATE : _____, 20__	SP-FILE NO. : SP2602
OMED POUR, P.E. - PROJECT MANAGER	APPROVED BY : _____ DATE : _____, 20__X
CITY CLIENTS	ALEX NAZARCHUK, P.E. - CITY ENGINEER
ENGINEERING AND STREET SERVICES	

DESIGNED BY : _____
 DRAWN BY : _____
 CHECKED BY : _____
 CONSULTANT JOB/SHEET NO. _____
 DRAWING NO. 7078
E-01-6002
 SH1 186 OF 303 SH15

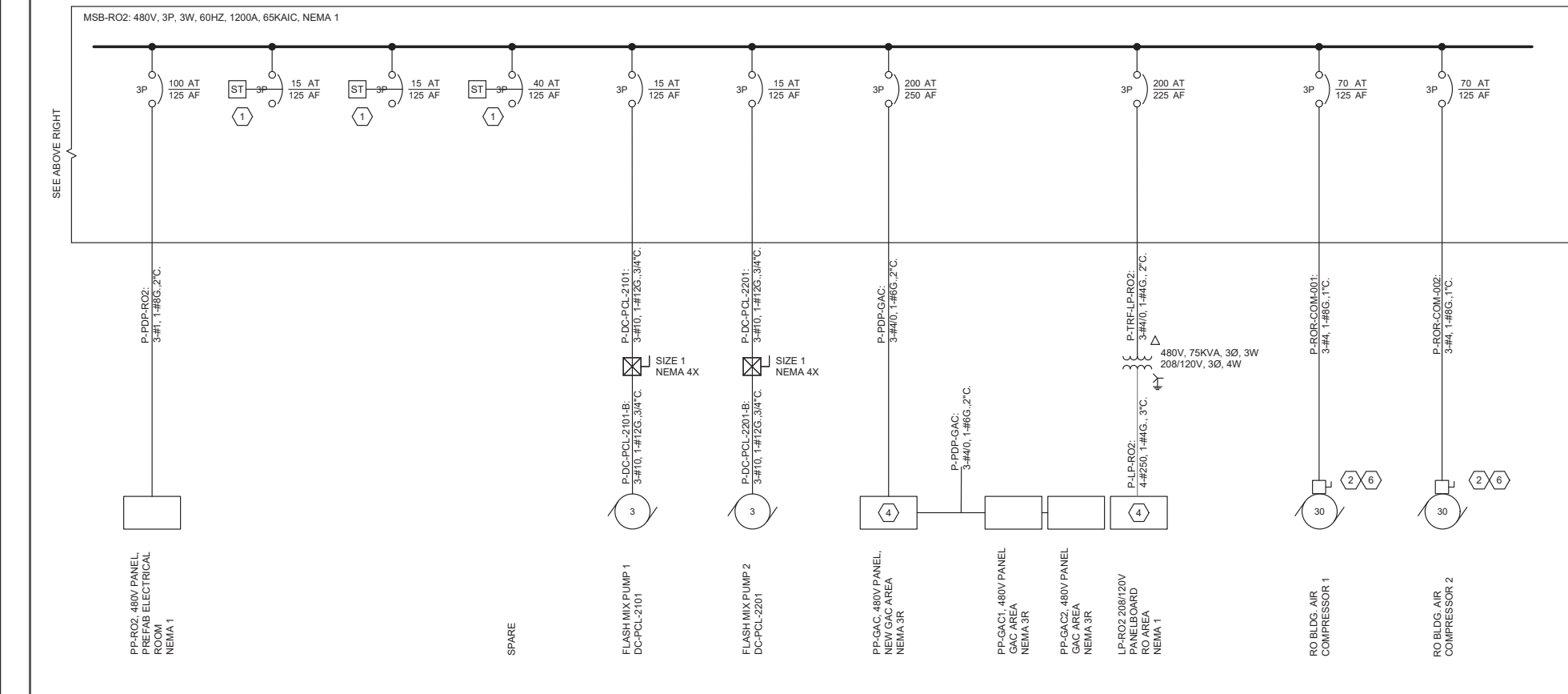
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
 SINGLE LINE DIAGRAM - 2

PROJECT AND SHEET TITLE

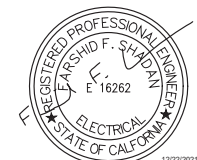




- KEY NOTES:**
- STANDBY LOADS, GENERATOR POWER NOT REQUIRED, SHALL BE SHUNT TRIP WHEN ON GENERATOR POWER.
 - MOTOR CONTROL AND DISCONNECT PROVIDED BY EQUIPMENT MANUFACTURER, TYPICAL.
 - NOT USED.
 - PANELBOARD TO INCLUDE INTERNAL SURGE PROTECTIVE DEVICE AS SPECIFIED IN 26 24 16.
 - BRINE PUMP STATION ADJUSTABLE FREQUENCY DRIVES LOCATED OUTDOORS AT BRINE PUMP STATION.
 - RO UNIT 5 AIR COMPRESSORS ARE PACKAGED SYSTEM. ALL CONTROLS AND STARTERS ARE LOCATED WITHIN THE VENDOR SUPPLIED CONTROL PANEL WITH EACH AIR COMPRESSOR. COMPRESSORS ARE DUTY STANDBY.



MSB-RO2				
LOAD SUMMARY AT 480 VAC				
LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
BRINE PUMP #1		100	124.0	124.0
BRINE PUMP #2		100	124.0	124.0
BRINE PUMP #3		100	124.0	124.0
DECARBONATOR BLOWER #3		40	52.0	52.0
BRINE PUMP STATION BYPASS VALVE MOV-1010		0.5	1.1	1.1
EXHAUST FAN 1		3	4.8	4.8
EXHAUST FAN 2		3	4.8	4.8
FLASH MIX PUMP 1 DC-PLC-2101		3	4.8	4.8
FLASH MIX PUMP 2 DC-PLC-2201		3	4.8	4.8
PP-GAC 480V PANELBOARD IN GAC AREA			23	9.9
PP-GAC1 PANELBOARD IN GAC AREA			23	9.9
PP-GAC2 PANELBOARD IN GAC AREA			23	0
PANELBOARD LP-RO2 VIA TRANSFORMER TRF-LP-RO2	75		90.2	90.2
AIR COMPRESSOR 1		30	40	40
AIR COMPRESSOR 2		30	40	40
CIP PUMP 1 CIP-PCL-1101		100	124	124
CIP PUMP 2 CIP-PCL-2101		100	124	124
RO FLUSH PUMP 1 FWS-PMP-1101		40	52	52
RO FLUSH PUMP 2 FWS-PMP-1201		40	52	52
CIP BATCH TANK TRANSFER PUMP CIP-BTP-1121		5	7.6	7.6
PANELBOARD PP-R02			100	61
AMPERE TOTAL:			698	1143



NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____	DATE : _____ 20__	REFERENCE :
REVIEWED BY : _____	DATE : _____ 20__	DATE : _____, 20XX
REVIEWED BY : _____	DATE : _____ 20__	SUBMITTED BY : _____
COMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER	COMPUTER FILE NAME : _____
		SP-FILE NO. : SP2602
		APPROVED BY : _____
		DATE : _____, 20XX

DESIGNED BY : _____

DRAWN BY : _____

CHECKED BY : _____

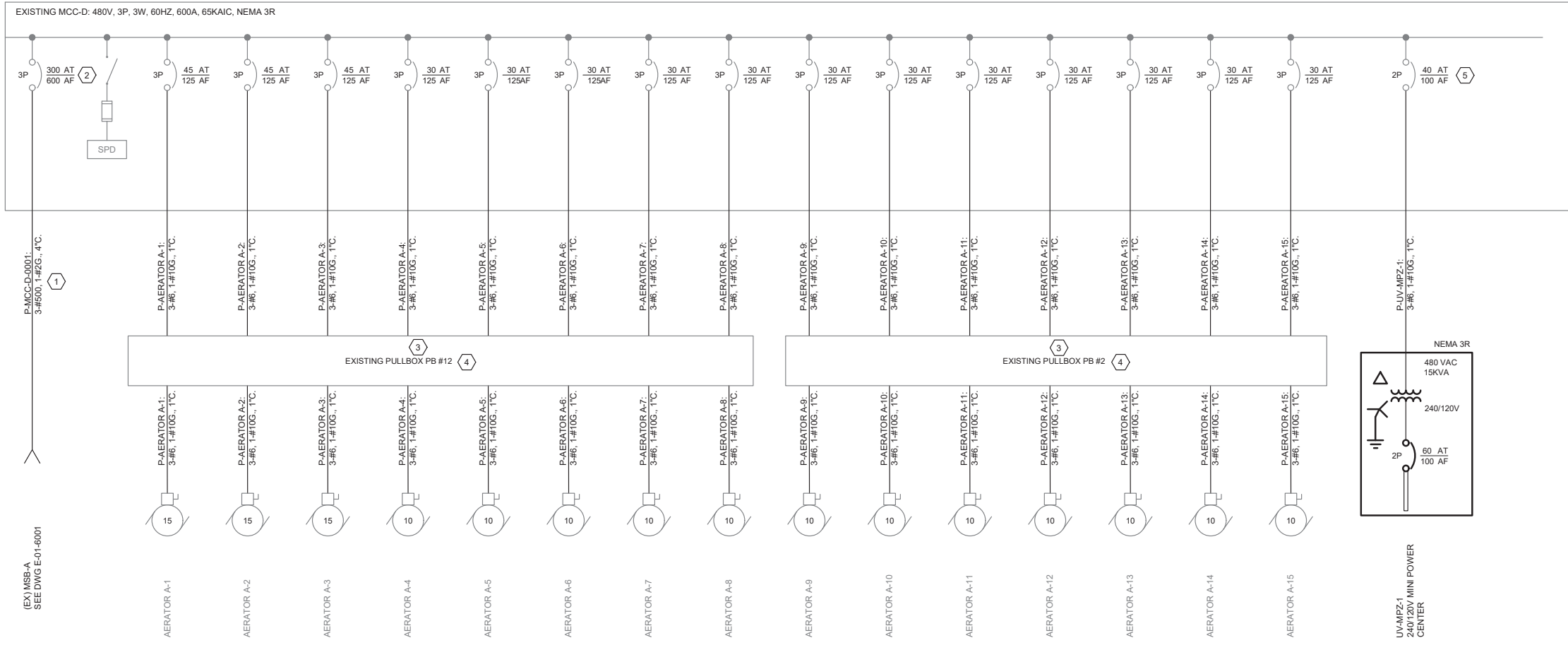
CONSULTANT JOB/SHEET NO. _____

DRAWING NO. 7078

E-01-6003

SH 187 OF 303 SHEETS

PROJECT AND SHEET TITLE



- KEY NOTES:**
- RELOCATE MCC-D AS SHOWN ON DRAWINGS E-01-4001 AND E-01-4002. PROVIDE NEW CONDUCTORS IN EXISTING CONDUIT FROM MSB-A.
 - CHANGE EXISTING MAIN BREAKER TRIP UNIT IN MCC-D TO 300A UNIT.
 - PROVIDE NEW CONDUIT TO PULL BOXES FROM NEW MCC-D LOCATION. SEE DRAWINGS E-01-4001 AND E-01-4002.
 - PULL CONDUCTORS THROUGH PULL BOX, NO SPLICES PERMITTED. PULL CONDUCTORS FROM MCC-D TO EXISTING AERATOR DISCONNECTS.
 - UTILIZE EXISTING MAINTENANCE BUILDING PANEL MCC-D BREAKER TO PROVIDE A NEW 15KVA MINI POWER CENTER ADJACENT TO RELOCATED MCC-D.

EXISTING MCC-D RELOCATED				
LOAD SUMMARY AT 480 VAC				
LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
AERATOR A-1		15	21	
AERATOR A-2		15	21	21
AERATOR A-3		15	21	21
AERATOR A-4		10	14	14
AERATOR A-5		10	14	14
AERATOR A-6		10	14	14
AERATOR A-7		10	14	14
AERATOR A-8		10	14	14
AERATOR A-9		10	14	14
AERATOR A-10		10	14	14
AERATOR A-11		10	14	14
AERATOR A-12		10	14	14
AERATOR A-13		10	14	14
AERATOR A-14		10	14	14
AERATOR A-15		10	14	14
RESERVOIR OVERFLOW BASIN SUMP PUMP LCP (OF-LCP-1001)			5.34	5
MINI POWER CENTER-UV-MPZ-1	15		31.3	31
AMPERE TOTAL			267.6	190.6



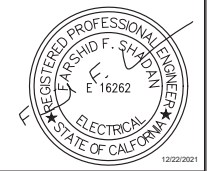
NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : _____, 20XX	REFERENCE :
REVIEWED BY : _____ DATE : _____, 20XX	DATE : _____, 20XX COMPUTER FILE NAME :
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
REVIEWED BY : _____ DATE : _____, 20XX	SP-FILE NO. : SP2602
OMED POUR, P.E. - PROJECT MANAGER	APPROVED BY : _____ DATE : _____, 20XX
ALEX NAZARCHUK, P.E. - CITY ENGINEER	ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

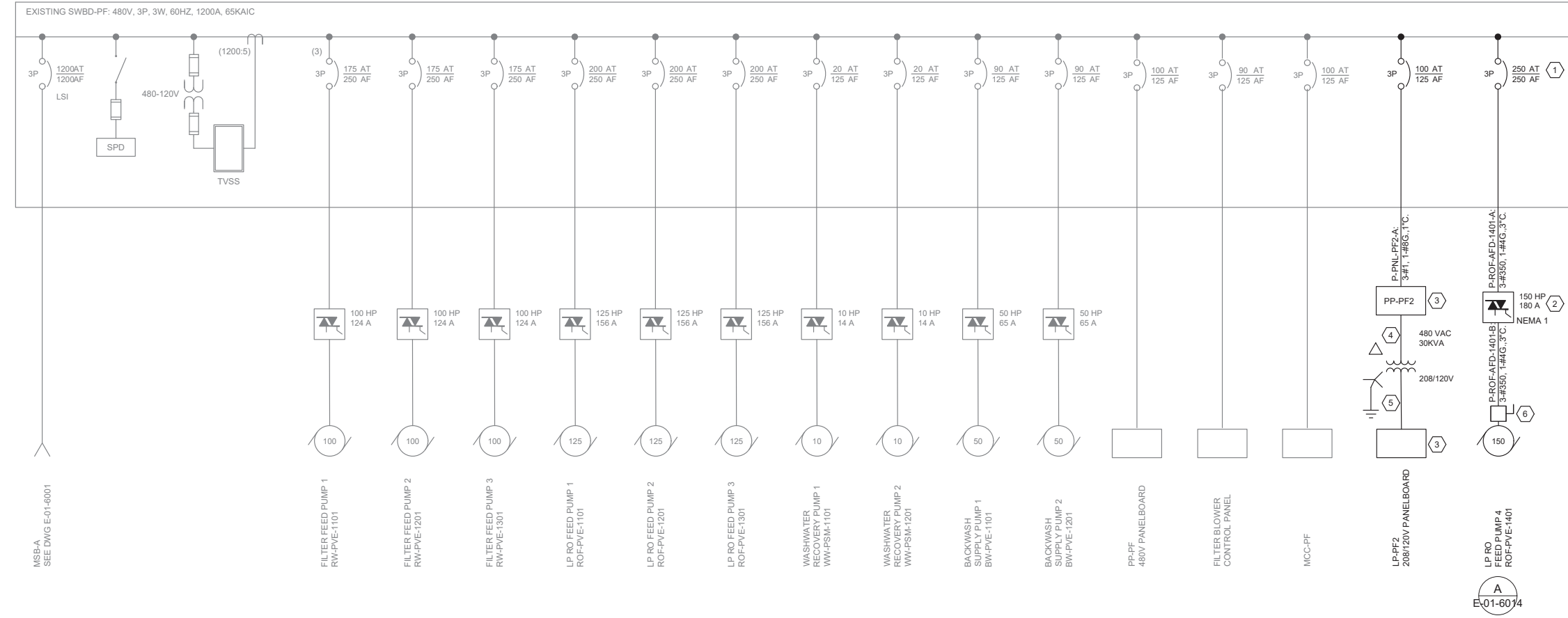
SINGLE LINE DIAGRAM - 4



DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB/SHEET NO.
DRAWING NO. 7078
E-01-6004
SHT 188 OF 303 SHS

C:\BCP\W\0408745\E-01-6005 SINGLE LINE DIAGRAM - 5.DWG 12/20/2021 4:37 PM

SHEET 05
DWG. NO. 1



- KEY NOTES:**
- UTILIZE EXISTING 5.0 UNIT SPACE IN SWBD-PF TO INSTALL NEW BREAKER TO PROVIDE POWER FOR ROF-AFD-1401.
 - ROF-AFD-1401: INSTALL ON NORTH WALL OF EXISTING ELECTRICAL ROOM. ROUTE EXPOSED CONDUIT FROM SWBD-PF TO AFD. ROUTE EXPOSED CONDUIT FROM AFD TO NEW LP RO FEED PUMP ROF-PVE-1401. SEE DRAWING E-02-1001.
 - PANELBOARD PNL-PF2 AND LOW VOLTAGE PANELBOARD LP-PF2 TO BE INSTALLED ON THE NORTH WALL OF THE PRESSURE FILTER ELECTRICAL ROOM. FOR PANEL SCHEDULES SEE DRAWING E-01-6019.
 - P-XFMR-PF2-A: 3-#6, 1-#10G., 1°C.
 - P-XFMR-PF2-B: 4-#1, 1-#8G., 2°C.
 - MOTOR CONTROL AND DISCONNECT PROVIDED BY EQUIPMENT MANUFACTURER.

SWBD - PF PRESSURE FILTER ELECTRICAL ROOM				
LOAD SUMMARY AT 480 VAC				
LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
FILTER FEED PUMP 1 RW-PVE-1101		100	124	124
FILTER FEED PUMP 2 RW-PVE-1201		100	124	124
FILTER FEED PUMP 3 RW-PVE-1301		100	124	
LP RO FEED PUMP 1 ROF-PVE-1101		125	156	156
LP RO FEED PUMP 2 ROF-PVE-1201		125.0	156.0	156.0
LP RO FEED PUMP 3 ROF-PVE-1301		125.0	156.0	
WASHWATER RECOVERY PUMP 1 WW-PSM-1101		10	14	14
WASHWATER RECOVERY PUMP 2 WW-PSM-1201		10	14	14
BACKWASH SUPPLY PUMP 1 BW-PVE-1101		50	65	65
BACKWASH SUPPLY PUMP 2 BW-PVE-1201		50	65	
PANELBOARD PP-PF			100.0	40.0
FILTER BLOWER CONTROL PANEL			90.0	60.0
MCC-PF			100.0	24.0
PANELBOARD PP-PF2		30.0	36.1	36.1
LP RO FEED PUMP 4 ROF-PVE-1401		150.0	180.0	180.0
AMPERE TOTAL:		370	1504.1	993.1

City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



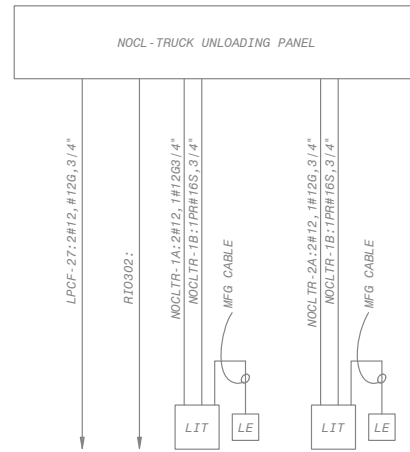
REVIEWED BY : _____ DATE : _____ 20__	REFERENCE :
REVIEWED BY : _____ DATE : _____ 20__	DATE : _____, 20XX COMPUTER FILE NAME :
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	SUBMITTED BY : _____ SP-FILE NO. : SP2602
REVIEWED BY : _____ DATE : _____ 20__	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
OMED POUR, P.E. - PROJECT MANAGER	APPROVED BY : _____ DATE : _____, 20XX
CITY CLIENTS	ALEX NAZARCHUK, P.E. - CITY ENGINEER
ENGINEERING AND STREET SERVICES	

OLYMPIC WELL FIELD RESTORATION
AND ARCADIA WTP EXPANSION

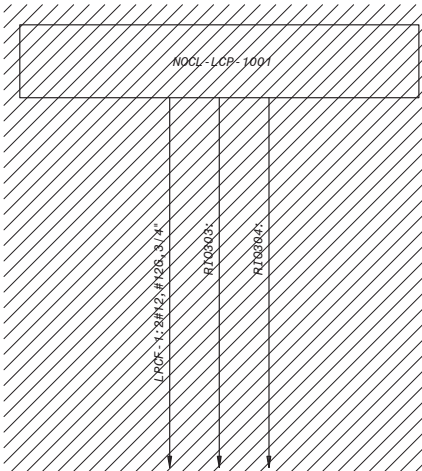
SINGLE LINE DIAGRAM - 5



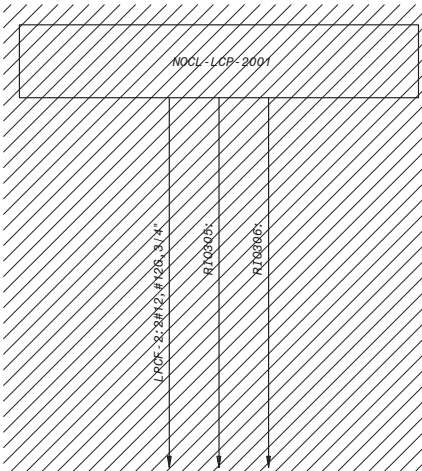
DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB SHEET NO.
DRAWING NO. 7078
E-01-6005
SHT 189 OF 303 SHS



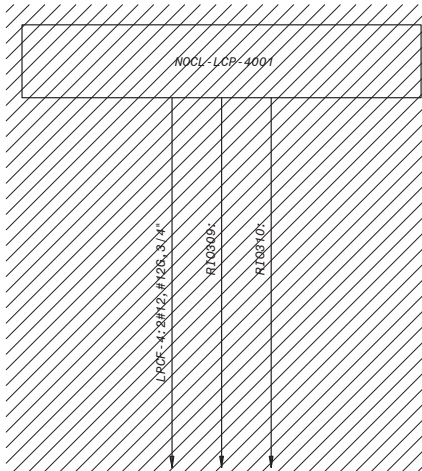
120VAC
PLC-1/R10-3
NOCL-LIT-1101
NOCL-LE-1101
NOCL-LIT-1201
NOCL-LE-1201
**NOCL-TRUCK UNLOADING PANEL
ONE-LINE DIAGRAM**



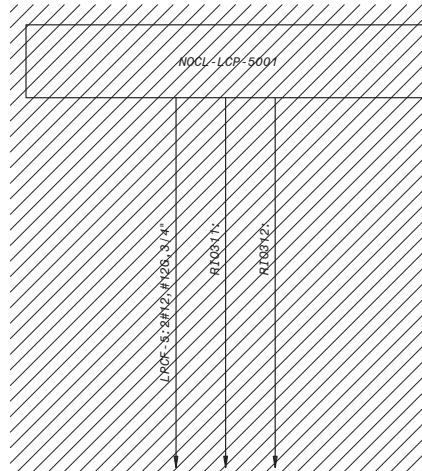
720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-1001
ONE-LINE DIAGRAM**



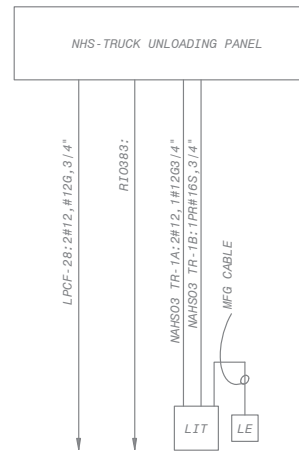
720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-2001
ONE-LINE DIAGRAM**



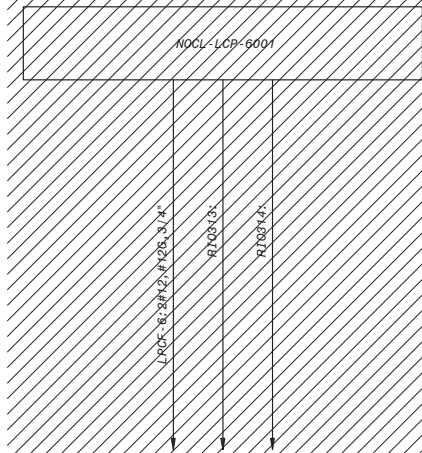
720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-4001
ONE-LINE DIAGRAM**



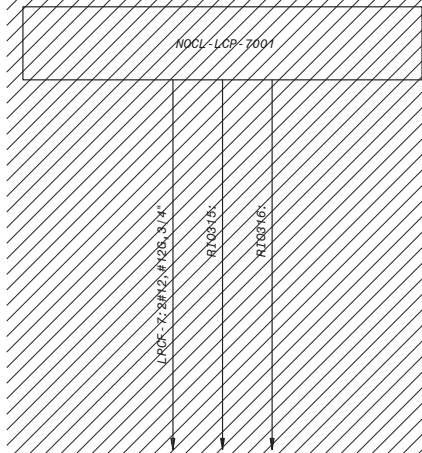
720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-5001
ONE-LINE DIAGRAM**



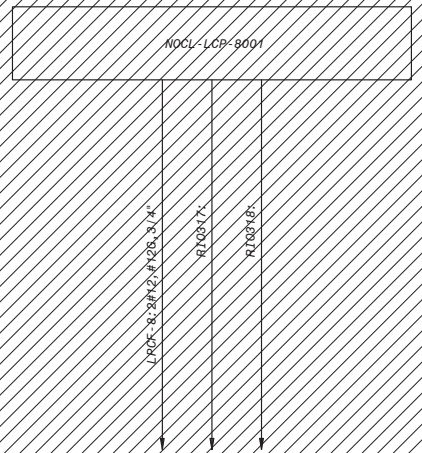
120VAC
PLC-1/R10-3
NHS-LIT-1001
NHS-LE-1001
**NHS-TRUCK UNLOADING PANEL
ONE-LINE DIAGRAM**



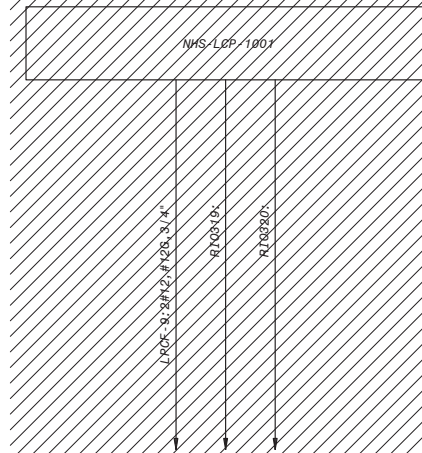
720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-6001
ONE-LINE DIAGRAM**



720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-7001
ONE-LINE DIAGRAM**



720VAC
PLC-1/R10-3
PLC-1/R10-3
**NOCL-LCP-8001
ONE-LINE DIAGRAM**



720VAC
PLC-1/R10-3
PLC-1/R10-3
**NHS-LCP-1001
ONE-LINE DIAGRAM**



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



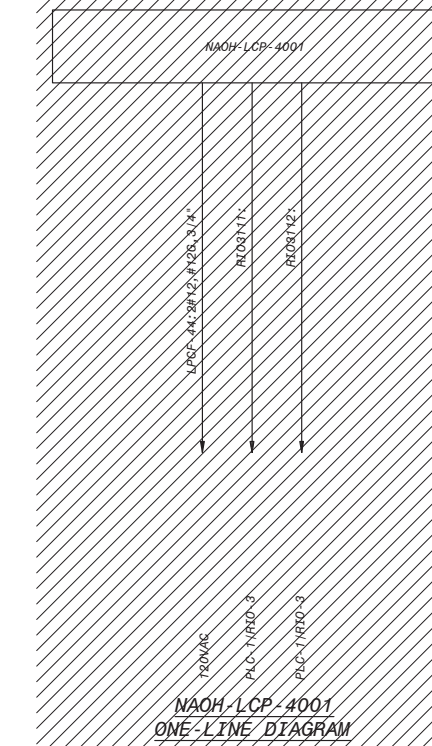
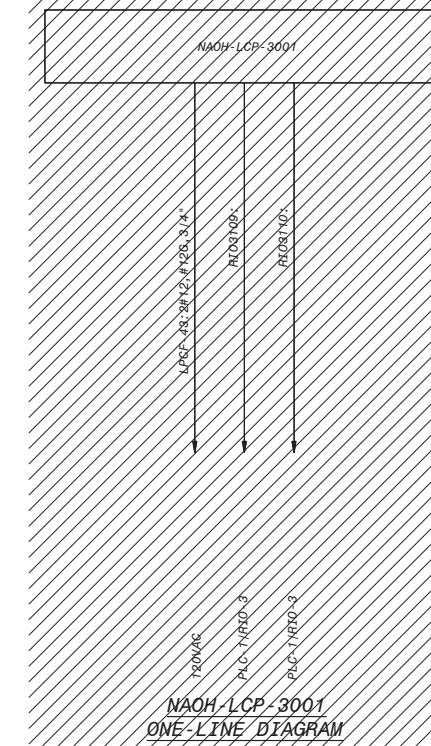
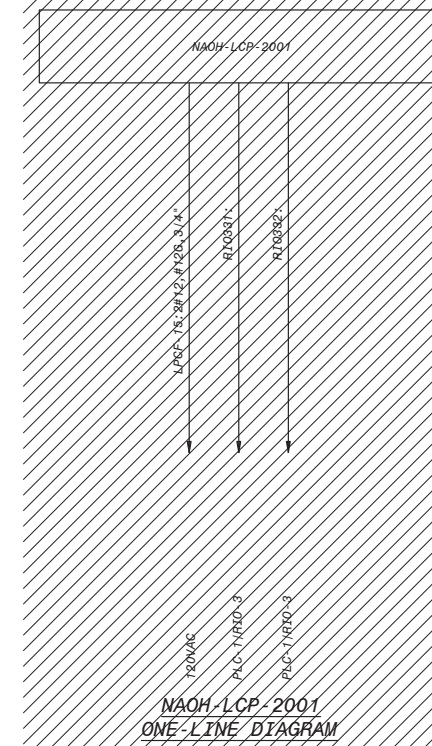
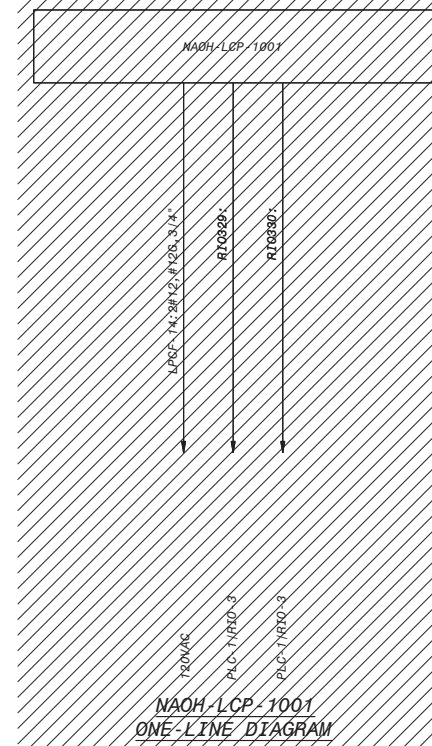
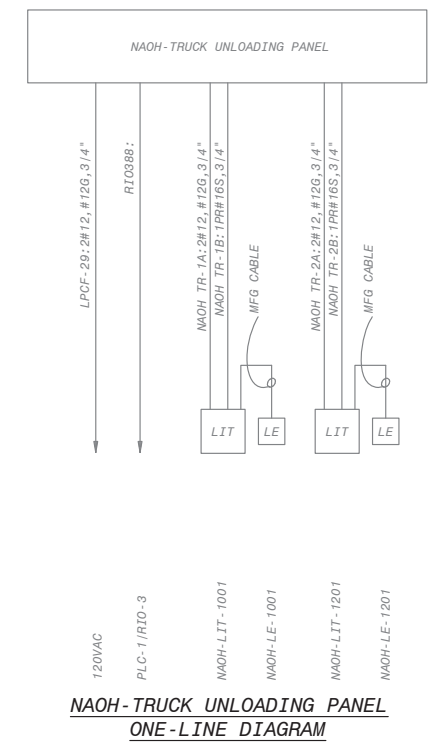
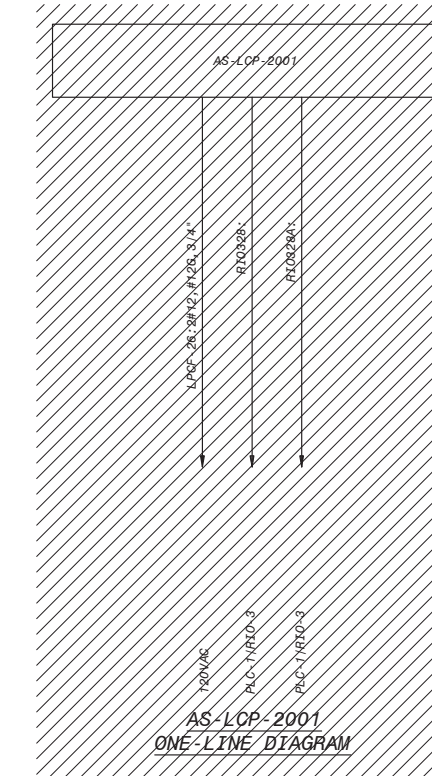
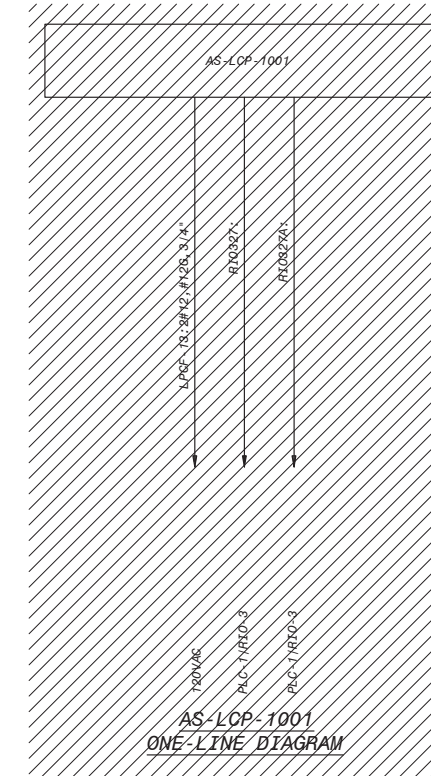
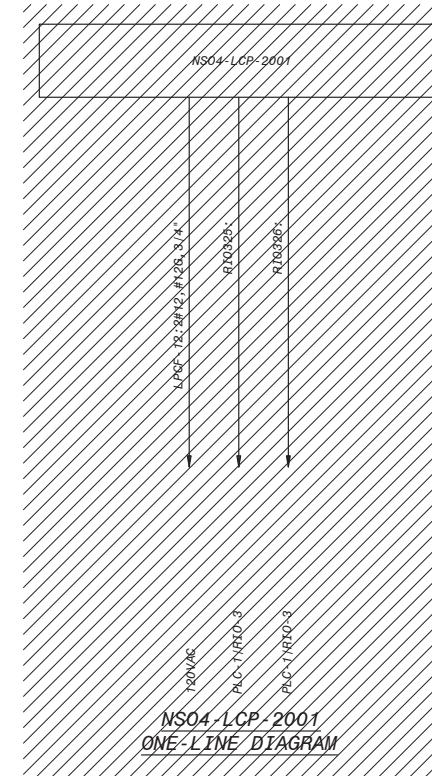
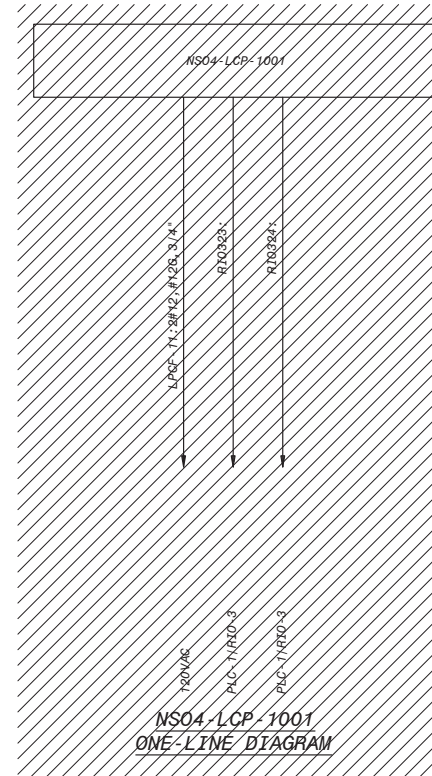
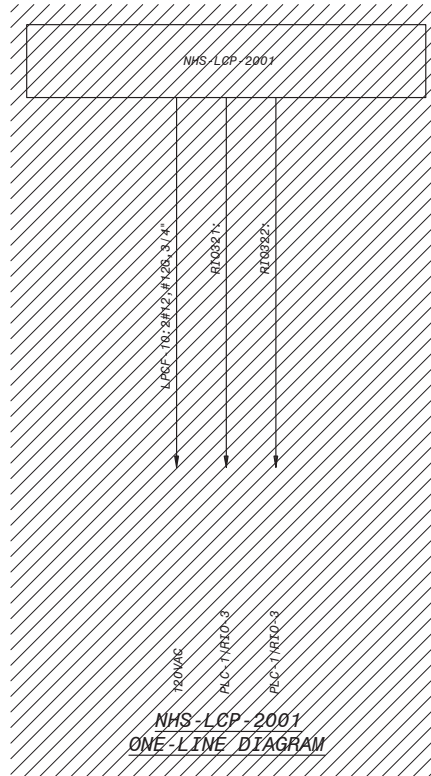
REVIEWED BY : _____ DATE : _____, 20XX
 REVIEWED BY : _____ DATE : _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY : _____ DATE : _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE :
 DATE : _____, 20XX
 SUBMITTED BY : _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO. : SP2602
 APPROVED BY : _____ DATE : _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
AND ARCADIA WTP EXPANSION

CONTROL SINGLE LINE DIAGRAM - 1

DESIGNED BY : FRF
 DRAWN BY : FRF
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-01-6006
 SH1 190 OF 303 SH15



City of Santa Monica
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

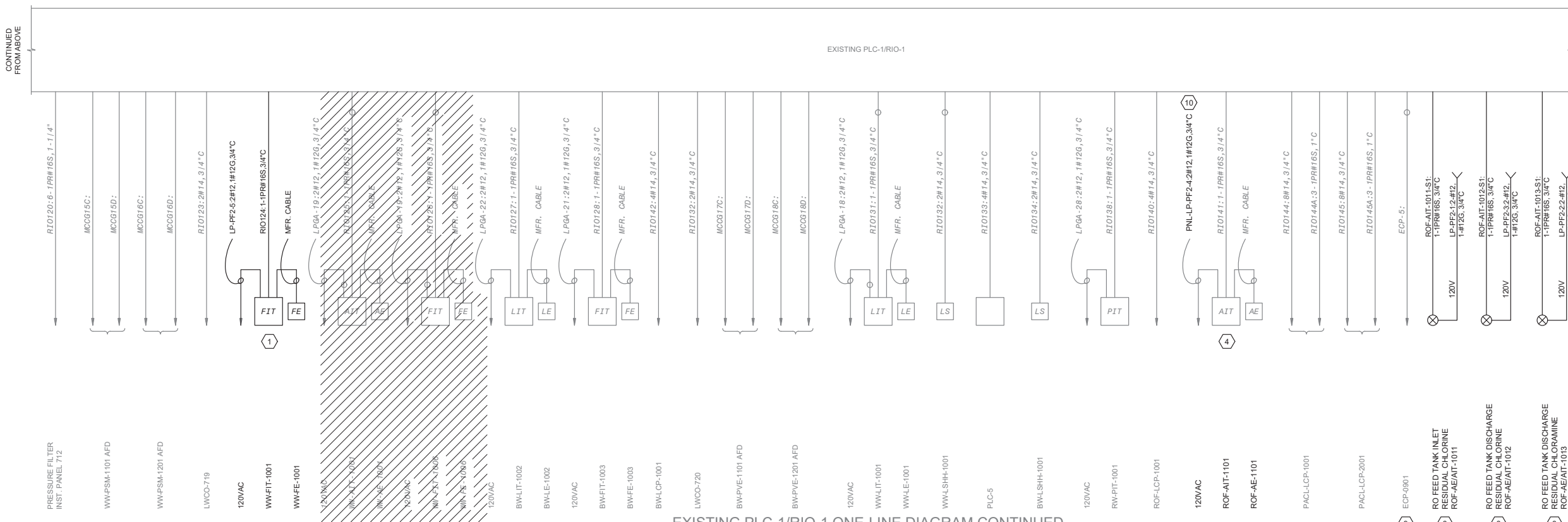


REVIEWED BY: _____ DATE: _____, 20__
SUNNY WANG, P.E. - WATER RESOURCES MANAGER
REVIEWED BY: _____ DATE: _____, 20__
OMED POUR, P.E. - PROJECT MANAGER

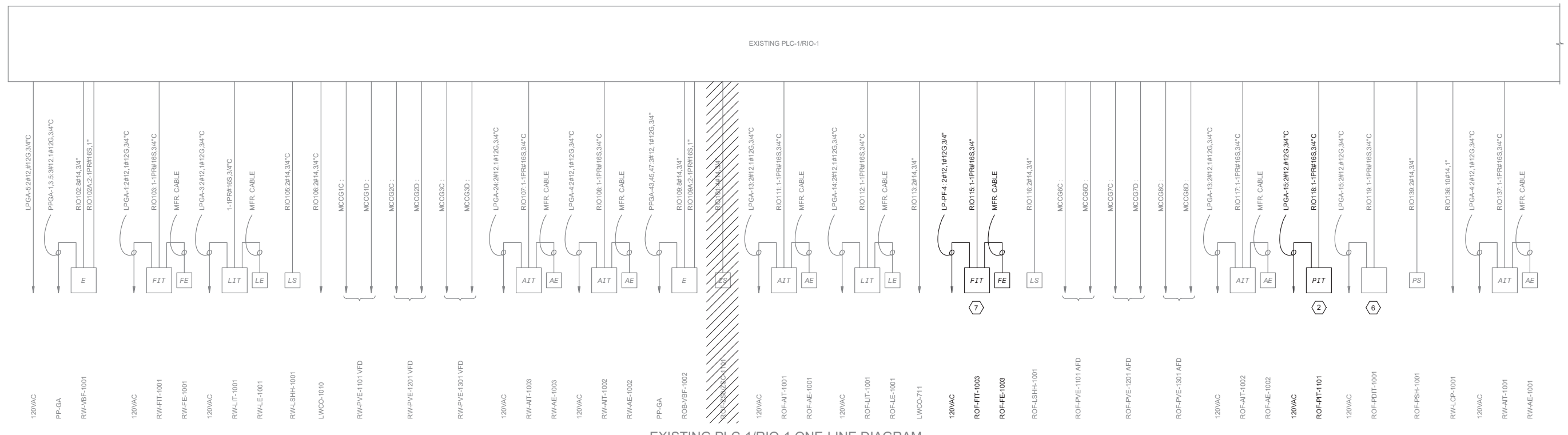
REFERENCE:
DATE: _____, 20__
COMPUTER FILE NAME: _____
SUBMITTED BY: _____
SP-FILE NO.: SP2602
APPROVED BY: _____ DATE: _____, 20__
ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
CONTROL SINGLE LINE DIAGRAM - 2

DESIGNED BY: FRF
DRAWN BY: FRF
CHECKED BY: AZ
CONSULTANT JOB SHEET NO.
DRAWING NO. 7078
E-01-6007
SHT 191 OF 303 SHS



EXISTING PLC-1/RIO-1 ONE-LINE DIAGRAM CONTINUED



EXISTING PLC-1/RIO-1 ONE-LINE DIAGRAM

- KEY NOTES:**
- EXISTING WW-FE/FIT-1001 TO BE RELOCATED. SEE P&ID PIA00719 AND D-09-1001.
 - EXISTING ROF-PIT-1101 TO BE RELOCATED. SEE P&ID PIA00712. SEE PHOTO 1 DETAIL ON DRAWING Z-02-1002.
 - NOT USED
 - ROF-AE/AIT-1101 TO REMAIN. PROTECT IN PLACE. DURING CONSTRUCTION AND PROCESS LINE REPLACEMENT DISCONNECT POWER AT SOURCE SHOWN. VERIFY ABSENCE OF VOLTAGE PRIOR TO ANY WORK.
 - DEMOLISH PACL-LCP-1001 AND PACL-LCP-2001. SEE DEMOLITION DRAWING Z-02-1002. REMOVE CONDUIT TO NEAREST JUNCTION BOX. REMOVE CONDUCTORS FROM POWER SOURCE. PANEL LP-PF CKTS. 16 AND 18 AND CONTROL AND SIGNAL CONDUCTORS TO PLC-1/RIO-1.
 - P01T-1001 INSTRUMENT MECHANICAL PIPING TO BE CHANGED. RELOCATION OF INSTRUMENTS TO BE DETERMINED IN THE FIELD AFTER PIPE SUPPORTS ARE PLANNED AND INSTALLED. PROTECT PRESSURE TRANSMITTERS IN PLACE.
 - ROF-FIT-1003 TO BE RELOCATED. SEE DRAWING D-02-3002 FOR EXACT LOCATION. EXTEND CONDUIT AND CONDUCTORS AS NECESSARY TO ACCOMMODATE RELOCATION.
 - ANALYZER MOUNTED TO RO TANK ANALYTICAL PANEL. SEE DRAWING E-02-1002. SEE DRAWING PIA00711 FOR ADDITIONAL INFORMATION.
 - PROTECT SYSTEMS IN PLACE DURING CONSTRUCTION.
 - ROF-AIT-1101 POWER TO BE SUPPLIED BY PANELBOARD PNL-PF2, CKT. 4

City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

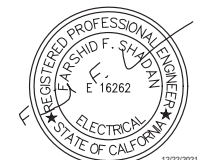
Brown and Caldwell
WALSH
CONSULTANT

REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____ 20__	REFERENCE : DATE : _____, 20XX	COMPUTER FILE NAME :
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____ 20__	SUBMITTED BY : CURTIS CASTLE, P.E. - PRINCIPAL C.E.	SP-FILE NO. : SP2602
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____ 20__	APPROVED BY : ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE : _____, 20XX

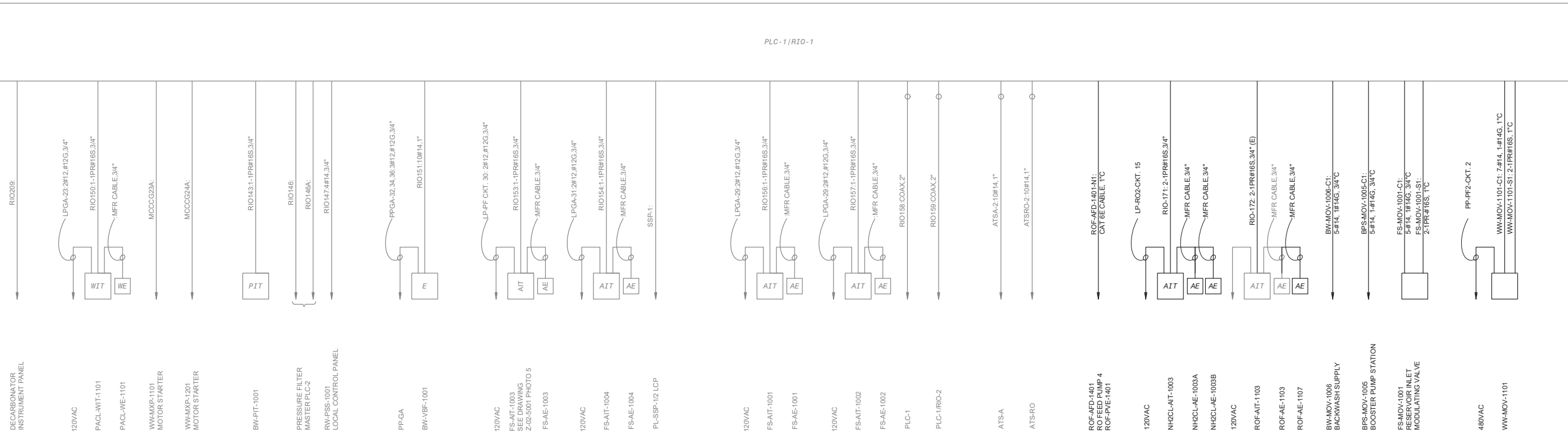
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SINGLE LINE DIAGRAM - 3

DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB/SHEET NO.
DRAWING NO. 7078
E-01-6008
SHT 192 OF 303 SHS



CONTINUED FROM PREVIOUS SHEET

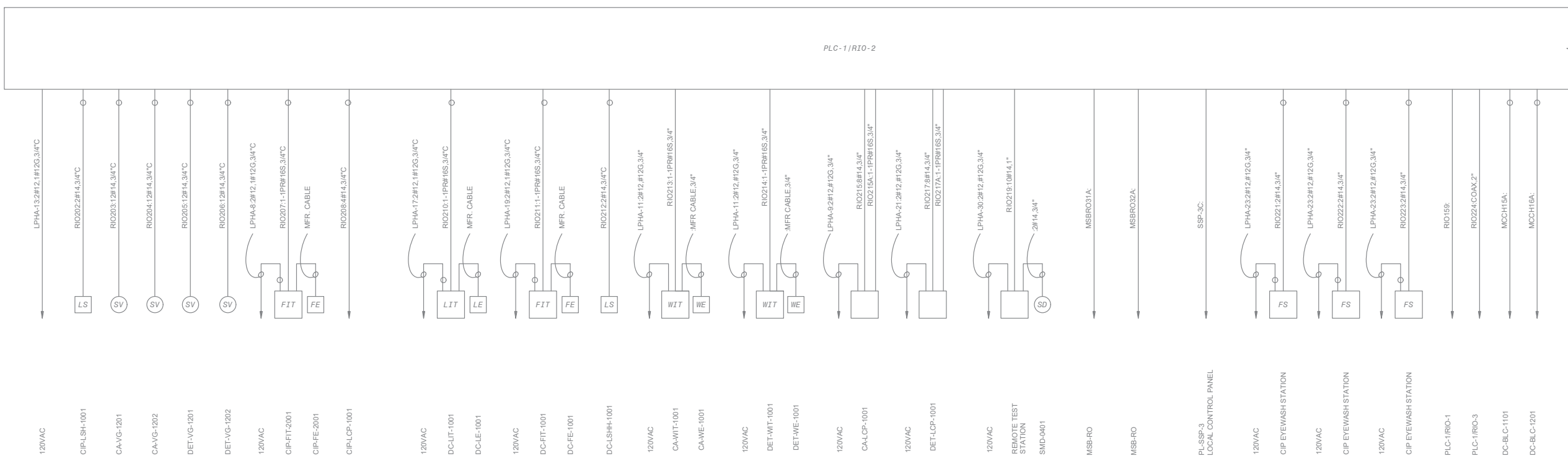


PLC-1/RIO-1 ONE-LINE DIAGRAM CONTINUED

C
E-01-6074

C
E-01-6074

PLC-1/RIO-2



PLC-1/RIO-2 ONE-LINE DIAGRAM

CONTINUED TO NEXT SHEET



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

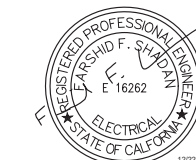
NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : _____, 20__
 REVIEWED BY : _____ DATE : _____, 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY : _____ DATE : _____, 20__
 OMEED POUR, P.E. - PROJECT MANAGER

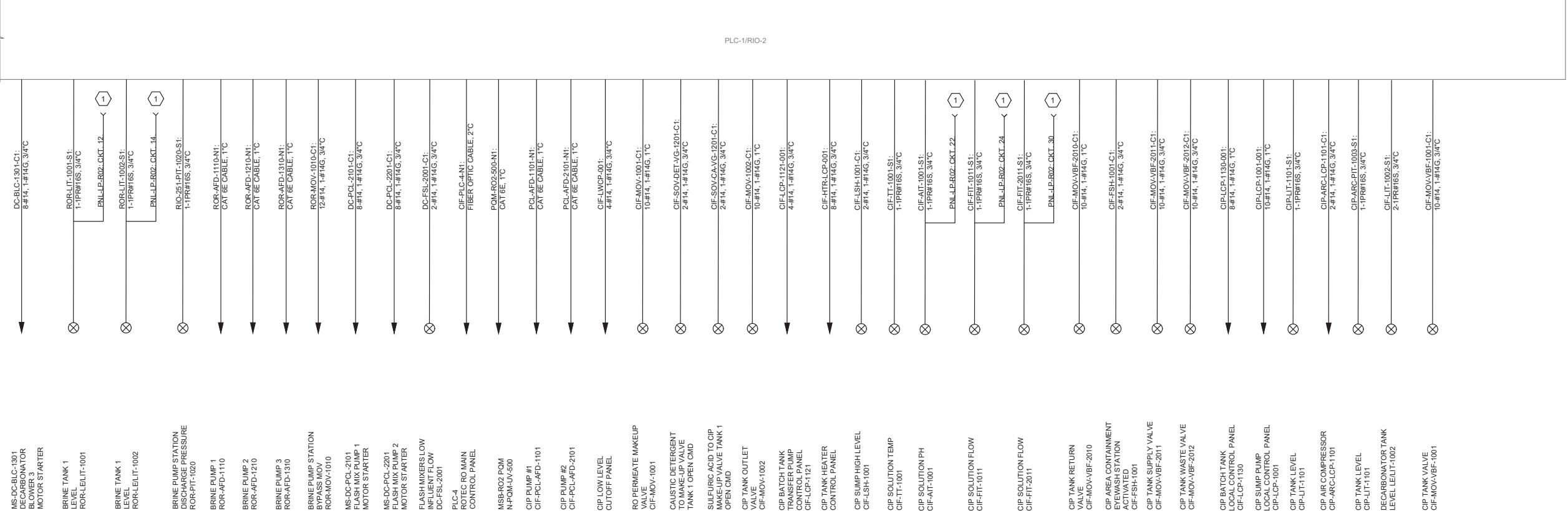
REFERENCE :
 DATE : _____, 20__
 SUBMITTED BY : _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO. : SP2602
 APPROVED BY : _____ DATE : _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
 CONTROL SINGLE LINE DIAGRAM - 4



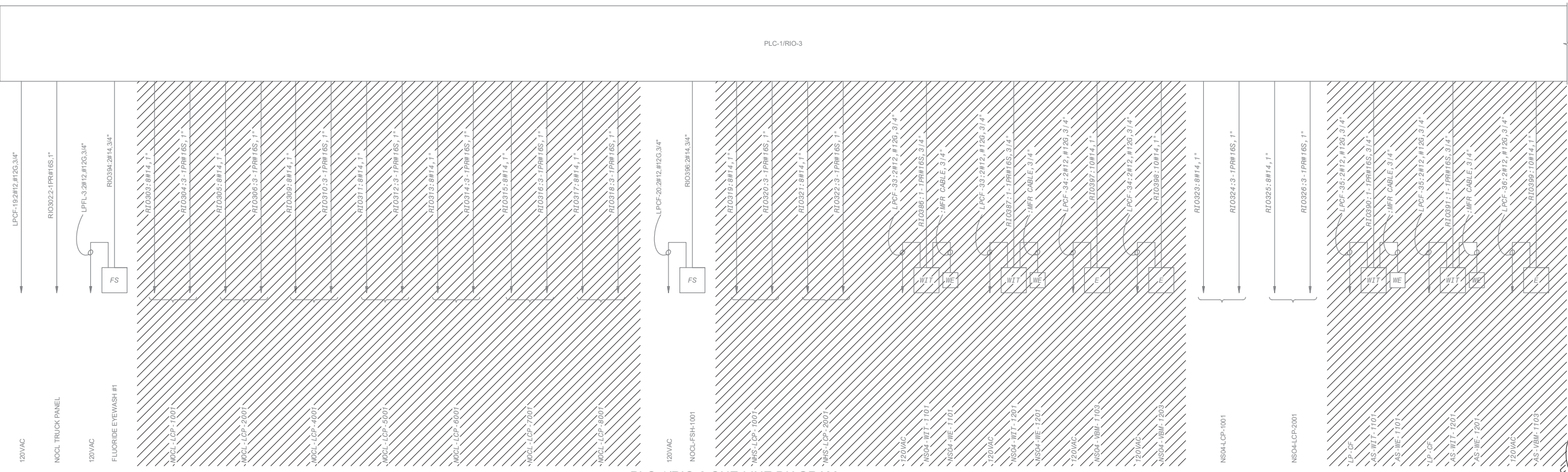
DESIGNED BY : FRF
 DRAWN BY : FRF
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-01-6009
 SH 193 OF 303 SHS

CONTINUED FROM PREVIOUS SHEET



KEY NOTES:
1. SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.

PLC-1/RIO-2 ONE-LINE DIAGRAM CONTINUED



PLC-1/RIO-3 ONE-LINE DIAGRAM

CONTINUED TO NEXT SHEET

City of Santa Monica
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

Brown and Caldwell
WALSH

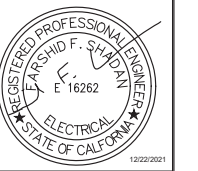
REVIEWED BY :	DATE :	20
REVIEWED BY :	DATE :	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY :	DATE :	20
OMED POUR, P.E. - PROJECT MANAGER		

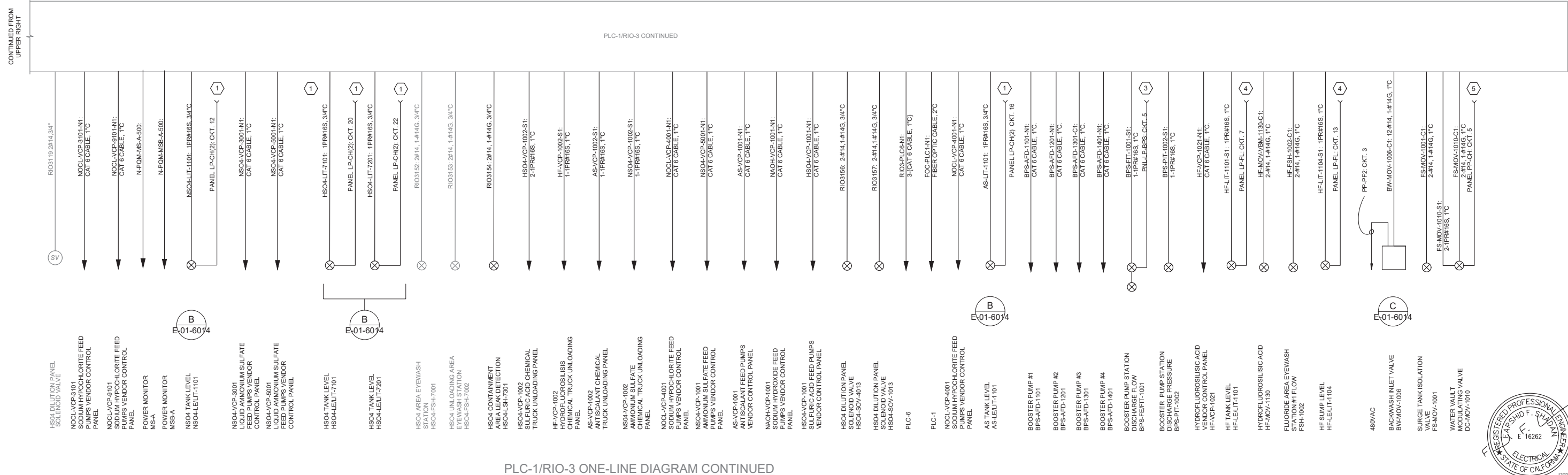
REFERENCE :	DATE :	20XX
SUBMITTED BY :	COMPUTER FILE NAME :	
	SP-FILE NO. :	SP2602
APPROVED BY :	DATE :	20XX
ALEX NAZARCHUK, P.E. - CITY ENGINEER		

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SINGLE LINE DIAGRAM - 5

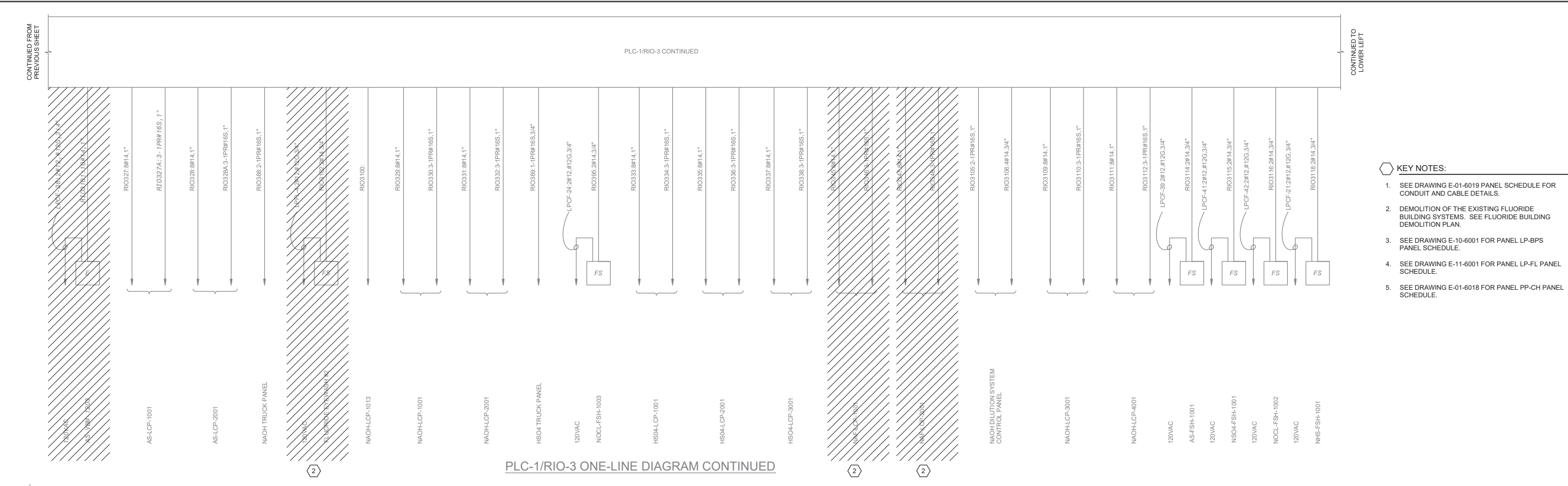
DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB/SHEET NO.
DRAWING NO. 7078
E-01-6010
SHT 194 OF 303 SHS





PLC-1/RIO-3 ONE-LINE DIAGRAM CONTINUED

PLC-1/RIO-3 ONE-LINE DIAGRAM CONTINUED



PLC-1/RIO-3 CONTINUED

PLC-1/RIO-3 CONTINUED

- KEY NOTES:**
- SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.
 - DEMOLITION OF THE EXISTING FLUORIDE BUILDING SYSTEMS. SEE FLUORIDE BUILDING DEMOLITION PLAN.
 - SEE DRAWING E-10-6001 FOR PANEL LP-BPS PANEL SCHEDULE.
 - SEE DRAWING E-11-6001 FOR PANEL LP-FL PANEL SCHEDULE.
 - SEE DRAWING E-01-6018 FOR PANEL PP-CH PANEL SCHEDULE.

City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

Brown and Caldwell
WALSH
CONSULTANT

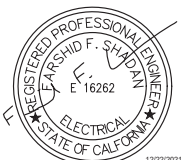
REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____ 20__
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____ 20__

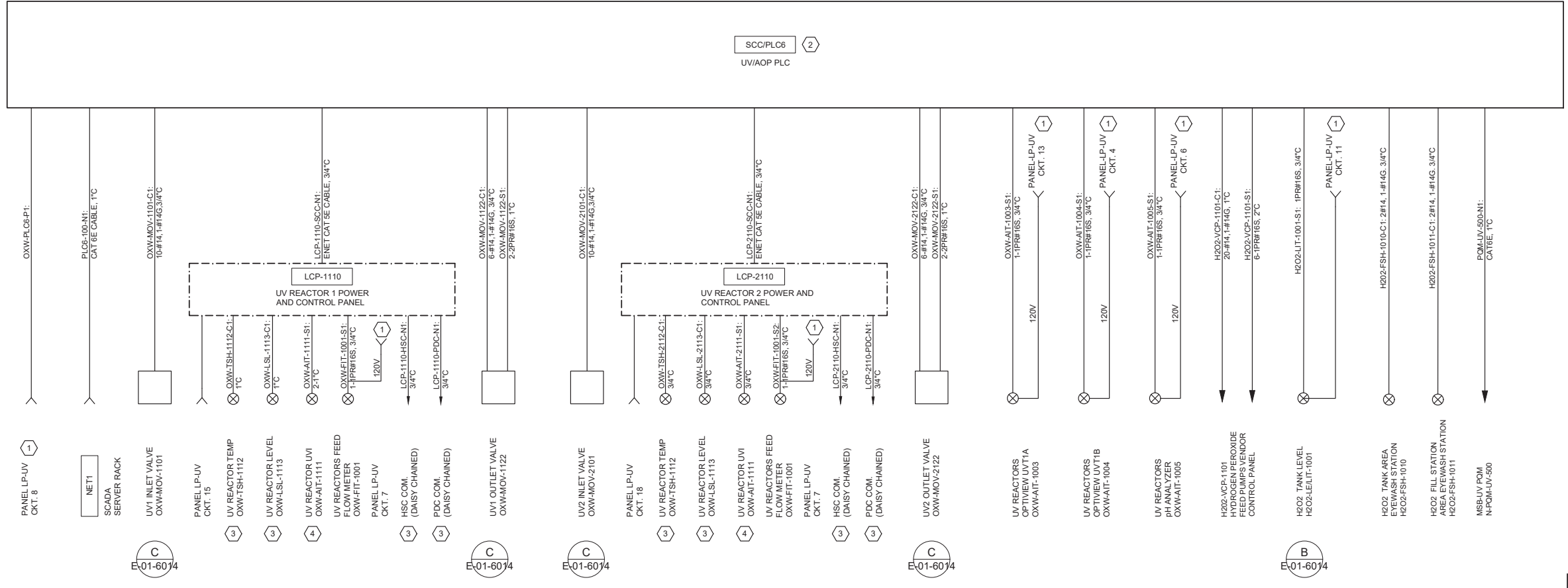
REFERENCE :	DATE : _____, 20XX
COMPUTER FILE NAME :	
SUBMITTED BY :	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
SP-FILE NO. :	SP2602
APPROVED BY :	ALEX NAZARCHUK, P.E. - CITY ENGINEER
DATE :	_____, 20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

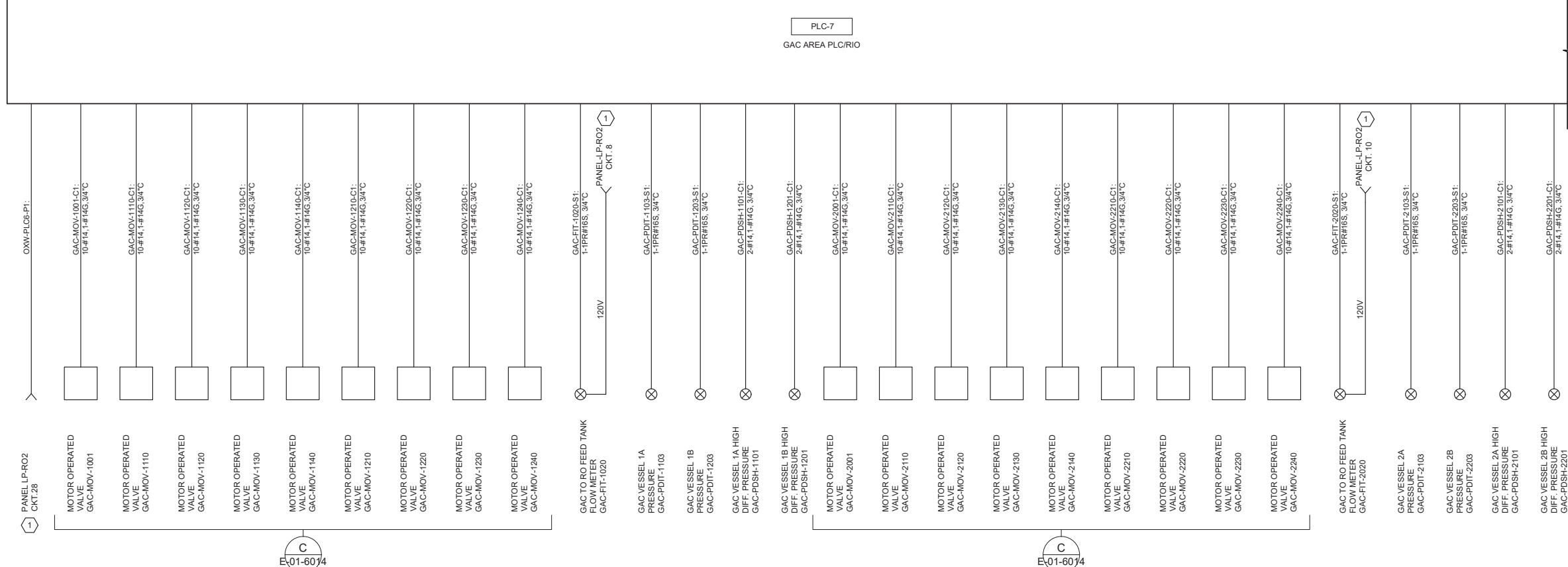
CONTROL SINGLE LINE DIAGRAM - 6

DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB SHEET NO.
DRAWING NO. 7078
E-01-6011
SHT 195 OF 303 SHS





- KEY NOTES:**
- SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.
 - SCC/PLC-6 TO BE PROVIDED BY UV/AOP VENDOR. DESIGN-BUILDER TO PROVIDE CONDUIT AND CABLE.
 - CABLE PROVIDED BY UV/AOP VENDOR.
 - TOTAL OF 12 UV INTENSITY SENSORS. CABLE PROVIDED BY UV/AOP VENDOR. PROVIDE CONDUIT AND INSTALLATION.



CONTINUED TO E-01-6013

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

Brown and Caldwell
WALSH

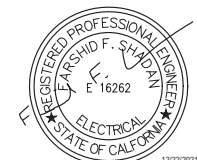
REVIEWED BY :	DATE :	20
REVIEWED BY :	DATE :	20
REVIEWED BY :	DATE :	20

REFERENCE :	DATE :	20XX
SUBMITTED BY :	COMPUTER FILE NAME :	
APPROVED BY :	DATE :	20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

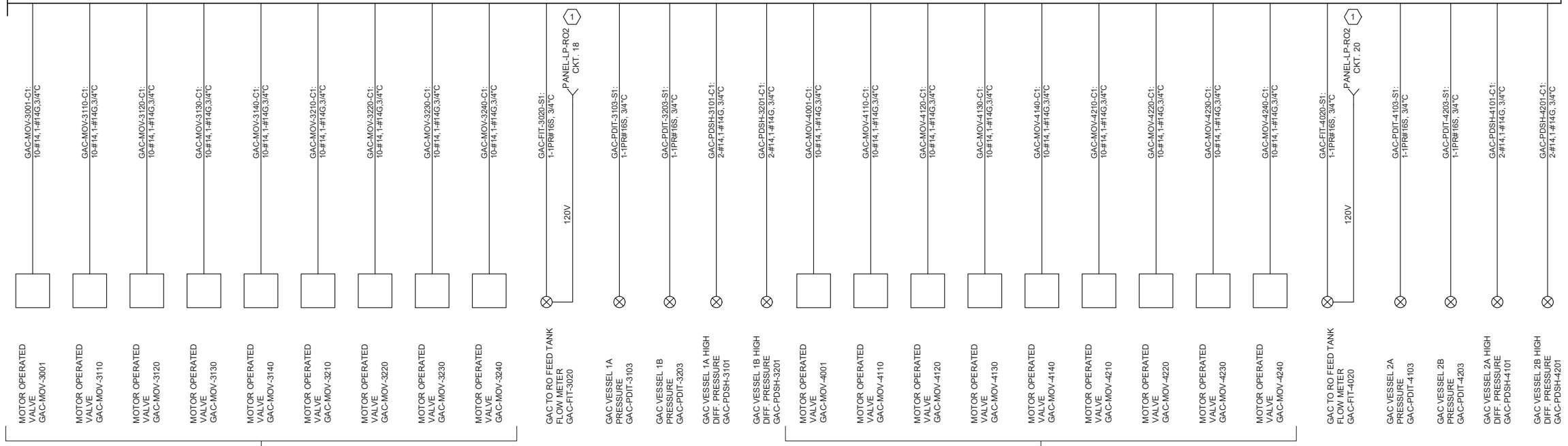
CONTROL SINGLE LINE DIAGRAM - 7

DESIGNED BY : FRF
 DRAWN BY : FRF
 CHECKED BY : AZ
 CONSULTANT JOB SHEET NO. :
 DRAWING NO. 7078
E-01-6012
 SH 196 OF 303 SHS

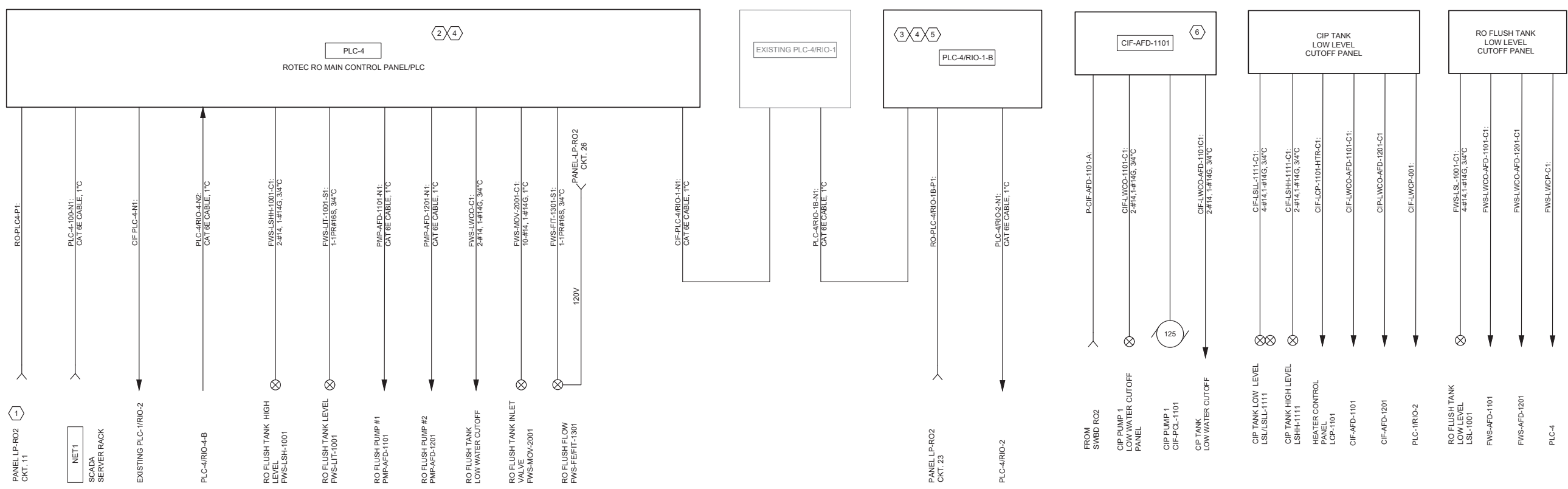


CONTINUED TO E-01-6012

PLC-7
GAC AREA PLC/RIO



- KEY NOTES:**
- SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.
 - SEE DRAWING E-01-2002 FOR EXISTING MSB-RO MODIFICATIONS REQUIRED FOR INTERSTAGE BOOSTER PUMP AFD.
 - PLC-4/RIO-1-B IS TYPICAL FOR PLC-4/RIO-2-B, PLC-4/RIO-3-B, AND PLC-4/RIO-4-B, UTILIZING A RING NETWORK FOR COMMUNICATION REDUNDANCY.
 - PROVIDED BY RO SYSTEM MANUFACTURER FOR EXISTING RO TRAIN MODIFICATIONS.
 - RO MANUFACTURER WILL PROVIDE POWER TO APPROXIMATELY 10 DISCRETE MOV'S AND 2-MOTULATING MOV'S FOR EACH NEW RIO ENCLOSURE.
 - TYPICAL FOR CIF-AFD-1201.



NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____ 20__

REVIEWED BY: _____ DATE: _____ 20__

SUNNY WANG, P.E. - WATER RESOURCES MANAGER

REVIEWED BY: _____ DATE: _____ 20__

OMED POUR, P.E. - PROJECT MANAGER

REFERENCE:

DATE: _____, 20XX

COMPUTER FILE NAME: _____

SUBMITTED BY: _____

SP-FILE NO.: SP2602

APPROVED BY: _____ DATE: _____, 20XX

ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SINGLE LINE DIAGRAM - 8



DESIGNED BY: FRF

DRAWN BY: FRF

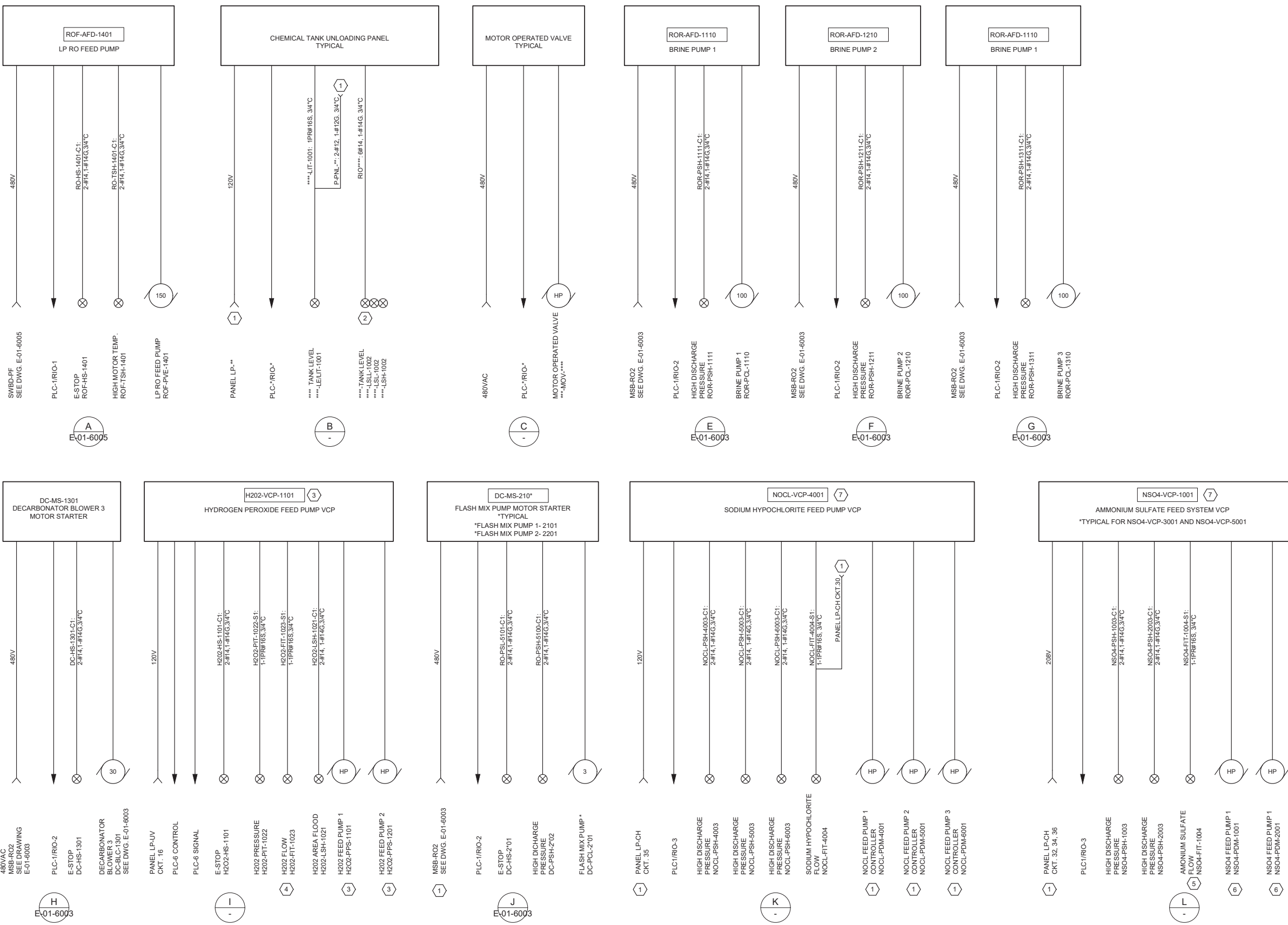
CHECKED BY: AZ

CONSULTANT JOB SHEET NO.

DRAWING NO. 7078

E-01-6013

SHT 197 OF 303 SHS



- KEY NOTES:**
- SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.
 - IF EQUIPPED. SEE P&ID DRAWINGS FOR CHEMICAL TRUCK UNLOADING PANEL REQUIREMENTS AND EYEWASH/SHOWER INCLUDED IN THE PROJECT.
 - HYDROGEN PEROXIDE FEED PUMPS AND VENDOR CONTROL PANEL: 120V POWER SUPPLIED BY PANEL LP-UV.
 - H202-FIT-1023: 120V POWER SUPPLIED BY VENDOR CONTROL PANEL H202-VCP-1101.
 - NSO4-FIT-1004: 120V POWER SUPPLIED BY VENDOR CONTROL PANEL NSO4-VCP-1001.
 - NSO4-PDM-1001 AND NSO4-PDM-2001: VFD DRIVEN BY PUMP SKID MANUFACTURE SUPPLIED VFD INSTALLED IN NSO4-VCP-1001.
 - EQUIPMENT NOT SHOWN ON LAYOUT, PROVIDED AS VENDOR SKID PACKAGE.

City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

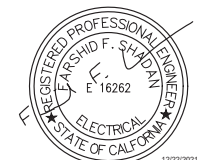
Brown and Caldwell
WALSH

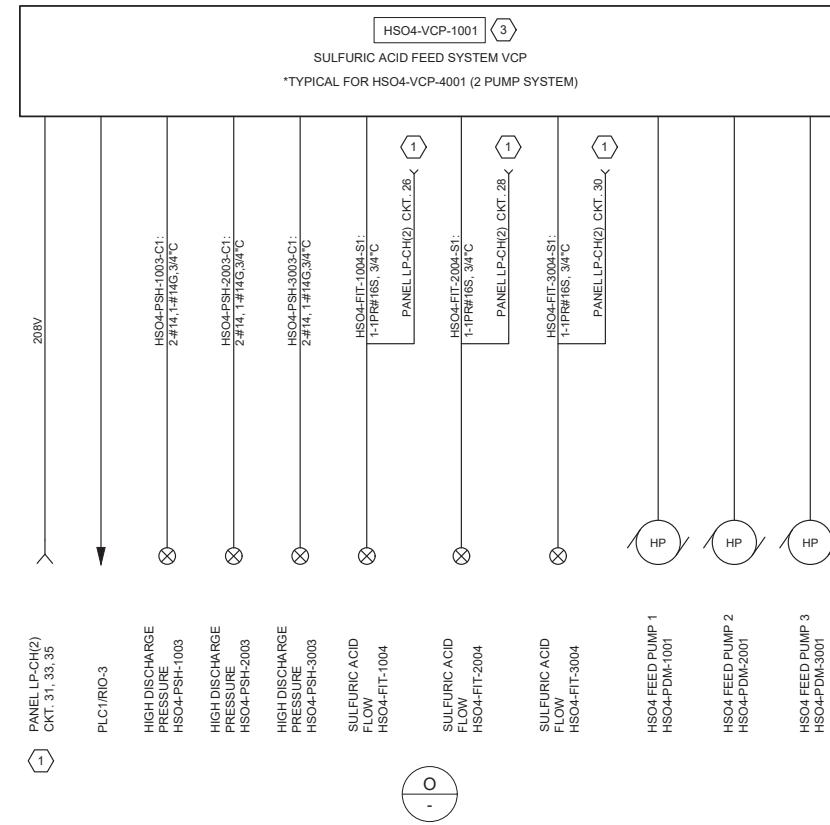
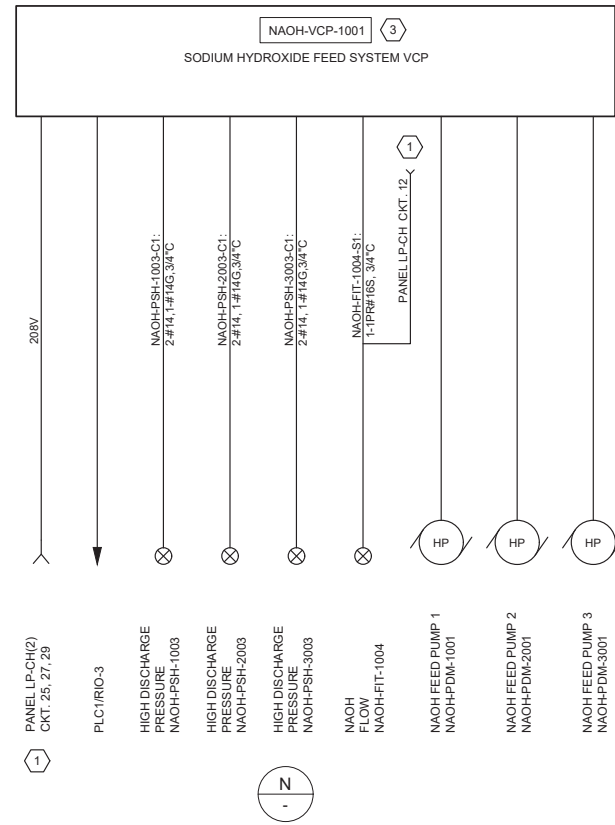
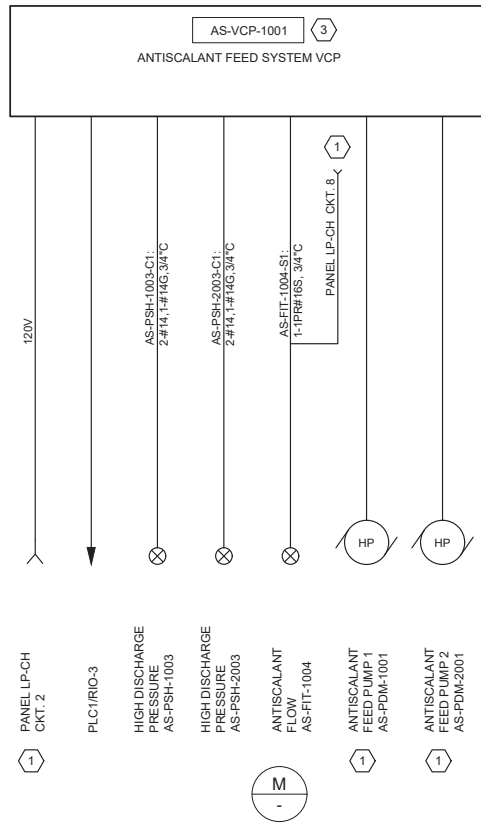
REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____ 20__	REFERENCE :
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____ 20__	DATE : _____, 20XX
APPROVED BY : ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE : _____ 20__	COMPUTER FILE NAME :
		SP-FILE NO. : SP2602
		APPROVED BY : ALEX NAZARCHUK, P.E. - CITY ENGINEER
		DATE : _____, 20XX

OLYMPIC WELL FIELD RESTORATION
AND ARCADIA WTP EXPANSION

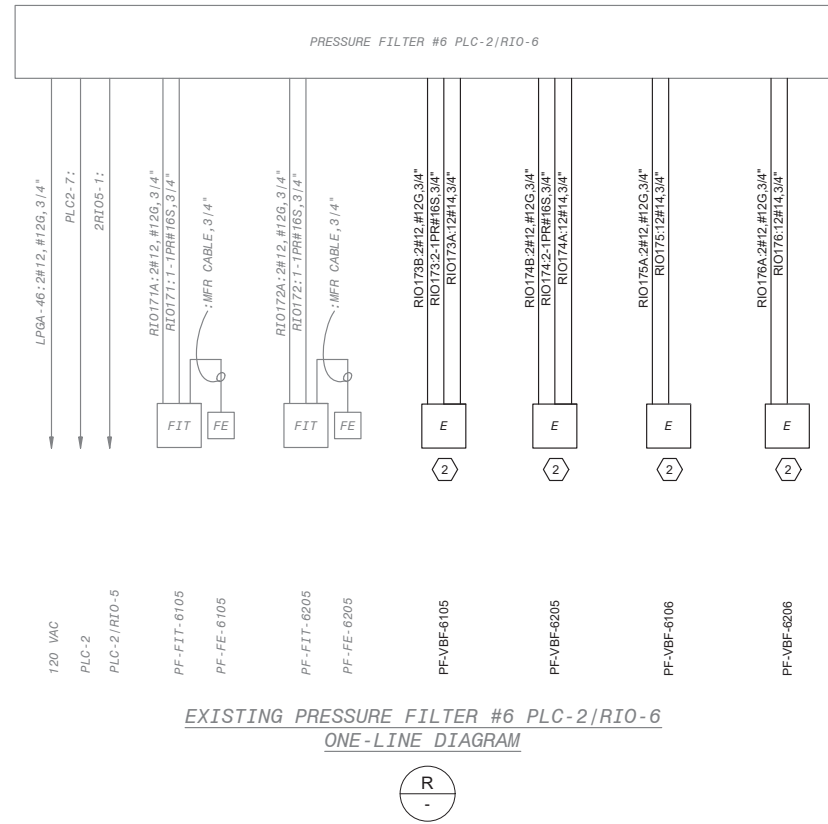
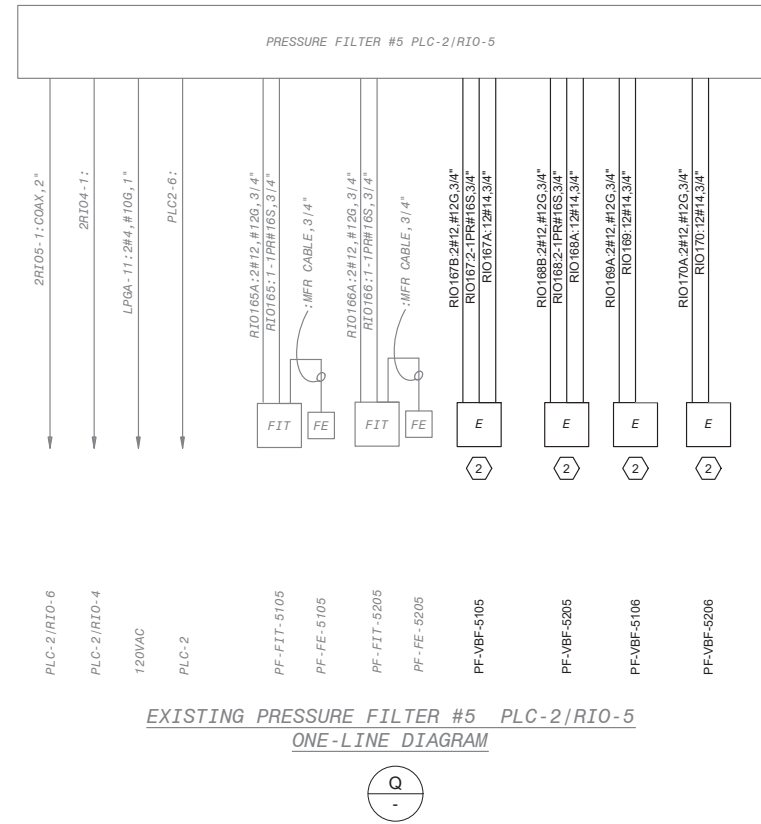
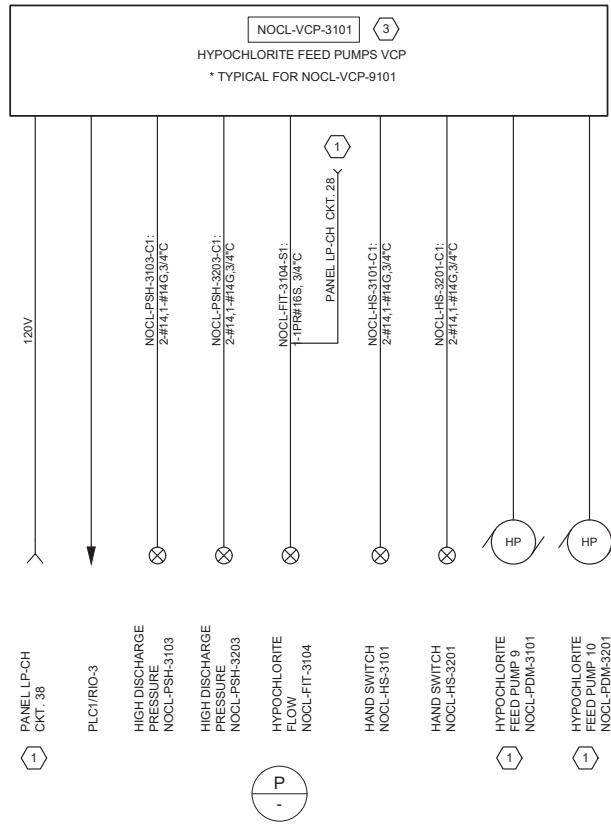
CONTROL SINGLE LINE DIAGRAM - 9

DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB SHEET NO.
DRAWING NO. 7078
E-01-6014
SHT 198 OF 303 SHS





- KEY NOTES:**
- SEE DRAWING E-01-6019 PANEL SCHEDULE FOR CONDUIT AND CABLE DETAILS.
 - MOTORIZED VALVES TO BE RELOCATED. DESIGN-BUILDER TO EXTEND EXISTING CONDUITS AS NECESSARY TO ACCOMMODATE RELOCATION. PROVIDE NEW CONDUCTORS FROM PLC/RIO TO MOTORIZED OPERATOR. SEE PROCESS MECHANICAL DRAWINGS FOR EXACT LOCATIONS.
 - EQUIPMENT NOT SHOWN ON LAYOUT, PROVIDED AS VENDOR SKID PACKAGE.



EXISTING PRESSURE FILTER #5 PLC-2/RIO-5 ONE-LINE DIAGRAM

EXISTING PRESSURE FILTER #6 PLC-2/RIO-6 ONE-LINE DIAGRAM

NO.	DATE	BY	DESCRIPTION	APPROVED

REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____ 20__	REFERENCE :	DATE : _____, 20XX
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____ 20__	SUBMITTED BY :	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
REVIEWED BY :	DATE : _____ 20__	APPROVED BY :	ALEX NAZARCHUK, P.E. - CITY ENGINEER
			DATE : _____, 20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SINGLE LINE DIAGRAM - 10

DESIGNED BY : FRF
DRAWN BY : FRF
CHECKED BY : AZ
CONSULTANT JOB/SHEET NO.
DRAWING NO. 7078
E-01-6015
SHT 199 OF 303 SHS

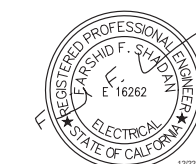


LIGHTING FIXTURE SCHEDULE 1

- KEY NOTES:**
1. PROVIDE PHOTOMETRIC STUDY AS PART OF LIGHTING SUBMITTAL.

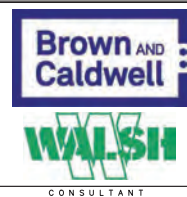
TYPE	DESCRIPTION	SPECS	MANUFACTURER CATALOG NUMBER
A 1/155	LITHONIA XIB LED - PENDANT MOUNT, RUGGED DIE-CAST ALUMINUM HOUSING, WET LOCATION HIGH BAY, FROSTED GLASS	120V, 24,000 LUMENS, 80CRI, 5000K	LITHONIA LIGHTING CATALOG: XIB L24 24000LM FRGL MVOLT GZ10 50K 80CRI DWHXD
B 1/11	LITHONIA LDN LED - SURFACE MOUNT, 6 INCH CYLINDER, HEAVY GAUGE ALUMINUM HOUSING, DIFFUSING OPTICAL LENS, CLEAR DOWNLIGHT, MATTE DIFFUSE FINISH	MULTIVOLT 120/277VAC, 1000 LUMENS, 80CRI, 4000K	LITHONIA LIGHTING CATALOG: LDN6YCL 40/10 L06AR LD MVOLT FCM
C 1/133	LITHONIA RSX1 LED - SQUARE POLE MOUNT, RSX AREA FIXTURE SIZE 1 P4 LUMEN PACKAGE, TYPE R5 DISTRIBUTION, NATURAL ALUMINUM FINISH, EXTERNAL GLARE FULL VISOR	MULTIVOLT 120V/277V, P4 LUMENS, 3000K	LITHONIA LIGHTING CATALOG: RSX1 LED P4 30K RS MVOLT SPA DNAXD EGFV/SSS 15.5" W/2.5" BASE
EM1 1/3	LITHONIA ELM2 LED - SURFACE MOUNT THERMOPLASTIC HOUSING, POLYCARBONATE LENS, LED SYSTEM, 90 MINUTE EMERGENCY LAMP CAPACITY, NICKEL-CADMIUM BATTERY	MULTIVOLT 120/277V, MEETS UL 924, NFPA 101, NEC, AND OSHA ILLUMINATION STANDARDS	LITHONIA LIGHTING CATALOG: ELM2 LED HO
EM2 1/1	LITHONIA LQM - SURFACE MOUNT, THERMOPLASTIC HOUSING, LED SYSTEM, 90 MINUTE EMERGENCY LAMP CAPACITY, NICKEL-CADMIUM BATTERY	MULTIVOLT 120/277V, MEETS UL 924, NFPA 101, NEC, AND OSHA ILLUMINATION STANDARDS	LITHONIA LIGHTING CATALOG: LQM S W 3 R 120/277 EL N

C:\BCP\W\0408745\E-01-6016 - LIGHTING FIXTURE AND CIRCUIT SCHEDULES.DWG 12/20/2021 4:39 PM



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : ____/____/20__

 REVIEWED BY : _____ DATE : ____/____/20__

 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY : _____ DATE : ____/____/20__

 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE : _____
 DATE : ____/____/20XX
 SUBMITTED BY : _____

 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 APPROVED BY : _____ DATE : ____/____/20XX

 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION

 LIGHTING FIXTURES SCHEDULE

DESIGNED BY : FRF
 DRAWN BY : FRF
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-01-6016
 SH1 200 OF 303 SH1S

EXISTING PANELBOARD PP-CH															
PANEL: PP-CH		LOCATION: CHEMICAL AREA		MOUNTING: STAND MOUNTED		SCCR: 65 KA		MAINS: 200A MCB		BUS: 250A		VOLTS: 480, 3Ø, 3W			
NOTE: EXISTING INTEGRAL SPD															
CKT	TRIP / POLE	LOAD DESCRIPTION	CONDUIT AND CABLE	LOAD KVA			LOAD KVA	CONDUIT AND CABLE	LOAD DESCRIPTION	TRIP / POLE	CKT	PHASE			
				A	B	C						A	B	C	
1	20/3	SPARE		0.00	0	0	0.00		SPARE	20/3	2				
3	60/3	WATER HEATER TWH-2	3#4, #10G, 1" C	13.30	38.3		25.00	3#1, #6G, 1-1/2" C	PANEL LP CH 75KVA XFMR	125/3	4				
5	20/3	WATER VAULT 24 INCH MODULATING VALVE	3#8, #10G, 1" C	0.50	0.5		0.00				6				
7				0.00	0		0.00				8				
9				0.00	0		0.00				10				
11				0.00	0		0.00				12				
13				0.00	0		0.00				14				
				TOTALS KVA	38.8	38.8	38.8					TOTALS AMPS	46.7	46.7	46.7
CONNECTED LOAD:				116.40 KVA				FED FROM: MSB-A				DEMAND LOAD:		93.12 KVA	

PP-GAC															
PANEL: PP-GAC		LOCATION: GAC AREA		MOUNTING: STAND MOUNTED		SCCR: 65 KA		MAINS: 60A MCB		BUS: 125A		VOLTS: 480, 3Ø, 3W			
NOTE: MANUFACTURER TO PROVIDE BREAKER FOR INTEGRAL SPD															
CKT	TRIP / POLE	LOAD DESCRIPTION	CONDUIT AND CABLE	LOAD KVA			LOAD KVA	CONDUIT AND CABLE	LOAD DESCRIPTION	TRIP / POLE	CKT	PHASE			
				A	B	C						A	B	C	
1	20/3	GAC 1A BACKWASH VALVE GAC-MOV-1130	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 1B BACKWASH VALVE GAC-MOV-1230	20/3	2				
3	20/3	GAC 1A INLET VALVE GAC-MOV-1001	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 1B UVE VALVE GAC-MOV-1210	20/3	4				
5	20/3	GAC 1A UVE VALVE GAC-MOV-1110	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 1B RO FEED VALVE GAC-MOV-1220	20/3	6				
7	20/3	GAC 1A RO FEED VALVE GAC-MOV-1120	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 1B OUTLET VALVE GAC-MOV-1240	20/3	8				
9	20/3	GAC 1A OUTLET VALVE GAC-MOV-1140	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 2A UVE VALVE GAC-MOV-2110	20/3	10				
11	20/3	GAC 2A INLET VALVE GAC-MOV-2001	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	GAC 2A RO FEED VALVE GAC-MOV-2120	20/3	12				
13	20/3	GAC 2A BACKWASH VALVE GAC-MOV-2130	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#8, #10G, 1" C	PP-GAC1	40/3	14				
				TOTALS KVA	21.6	21.6	21.6					TOTALS AMPS	26.0	26.0	26.0
CONNECTED LOAD:				64.80 KVA				FED FROM: MSB-RO2				DEMAND LOAD:		51.84 KVA	

- KEY NOTES:
1. PROVIDE CONDUITS FOR FUTURE LOADS UNDER THIS PROJECT. CONDUCTORS SHOWN SHALL BE PROVIDED BY OTHERS AT A LATER DATE.
 2. PROVIDE PANEL PP-GAC2 FOR FUTURE LOADS UNDER THIS PROJECT.

PP-GAC2															
PANEL: PP-GAC2		LOCATION: GAC AREA (FUTURE)		MOUNTING: STAND MOUNTED		SCCR: 65 KA		MAINS: 40A MCB		BUS: 125A		VOLTS: 480V, 3Ø, 3W			
NOTE: MANUFACTURER TO PROVIDE BREAKER FOR INTEGRAL SPD															
CKT	TRIP / POLE	LOAD DESCRIPTION	CONDUIT AND CABLE	LOAD KVA			LOAD KVA	CONDUIT AND CABLE	LOAD DESCRIPTION	TRIP / POLE	CKT	PHASE			
				A	B	C						A	B	C	
1	20/3	FUTURE GAC 3B OUTLET VALVE GAC-MOV-3240	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 4A BACKWASH VALVE GAC-MOV-4130	20/3	2				
3	20/3	FUTURE GAC 4A INLET VALVE GAC-MOV-4001	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 4A UVE VALVE GAC-MOV-4110	20/3	4				
5	20/3	FUTURE GAC 4A RO FEED VALVE GAC-MOV-4120	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 4A OUTLET VALVE GAC-MOV-4140	20/3	6				
7	20/3	FUTURE GAC 4B BACKWASH VALVE GAC-MOV-4230	3#12, #12G, 3/4" C	0.60	0.6		0.00		SPARE	20/3	8				
9	20/3	FUTURE GAC 4B UVE VALVE GAC-MOV-4210	3#12, #12G, 3/4" C	0.60	0.6		0.00		SPARE	20/3	10				
11	20/3	FUTURE GAC 4B RO FEED VALVE GAC-MOV-4220	3#12, #12G, 3/4" C	0.60	0.6		0.00		SPARE	20/3	12				
13	20/3	FUTURE GAC 4B OUTLET VALVE GAC-MOV-4240	3#12, #12G, 3/4" C	0.60	0.6		0.00		SPARE	20/3	14				
				TOTALS KVA	6.0	6.0	6.0					TOTALS AMPS	7.2	7.2	7.2
CONNECTED LOAD:				18.00 KVA				FED FROM: PP-GAC1				DEMAND LOAD:		14.40 KVA	

PP-GAC1															
PANEL: PP-GAC1		LOCATION: GAC AREA (FUTURE)		MOUNTING: STAND MOUNTED		SCCR: 65 KA		MAINS: 40A MCB		BUS: 125A		VOLTS: 480V, 3Ø, 3W			
NOTE: MANUFACTURER TO PROVIDE BREAKER FOR INTEGRAL SPD															
CKT	TRIP / POLE	LOAD DESCRIPTION	CONDUIT AND CABLE	LOAD KVA			LOAD KVA	CONDUIT AND CABLE	LOAD DESCRIPTION	TRIP / POLE	CKT	PHASE			
				A	B	C						A	B	C	
1	20/3	GAC 2A OUTLET VALVE GAC-MOV-2140	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3A UVE VALVE GAC-MOV-3110	20/3	2				
3	20/3	GAC 2B BACKWASH VALVE GAC-MOV-2230	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3A RO FEED VALVE GAC-MOV-3120	20/3	4				
5	20/3	GAC 2B UVE VALVE GAC-MOV-2210	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3A OUTLET VALVE GAC-MOV-3140	20/3	6				
7	20/3	GAC 2B RO FEED VALVE GAC-MOV-2220	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3B BACKWASH VALVE GAC-MOV-3230	20/3	8				
9	20/3	GAC 2B OUTLET VALVE GAC-MOV-2240	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3B UVE VALVE GAC-MOV-3210	20/3	10				
11	20/3	FUTURE GAC 3A INLET VALVE GAC-MOV-3001	3#12, #12G, 3/4" C	0.60	1.2		0.60	3#12, #12G, 3/4" C	FUTURE GAC 3B RO FEED VALVE GAC-MOV-3220	20/3	12				
13	20/3	FUTURE GAC 3A BACKWASH VALVE GAC-MOV-3130	3#12, #12G, 3/4" C	0.60	0.6		0.00	3#8, #10G, 1" C	PP-GAC2	40/3	14				
				TOTALS KVA	13.8	13.8	13.8					TOTALS AMPS	16.6	16.6	16.6
CONNECTED LOAD:				41.40 KVA				FED FROM: PP-GAC				DEMAND LOAD:		33.12 KVA	

C:\BCP\W\0408745E-01-6018 PANELBOARD SCHEDULE - 1.DWG 12/20/2021 4:39 PM



NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__

REVIEWED BY: _____ DATE: _____, 20__

SUNNY WANG, P.E. - WATER RESOURCES MANAGER

REVIEWED BY: _____ DATE: _____, 20__

OMED POUR, P.E. - PROJECT MANAGER

REFERENCE: _____

DATE: _____, 20__

COMPUTER FILE NAME: _____

SP-FILE NO.: SP2602

APPROVED BY: _____ DATE: _____, 20__

ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

PANELBOARD SCHEDULE - 1



DESIGNED BY: FRF

DRAWN BY: FRF

CHECKED BY: AZ

CONSULTANT JOB SHEET NO.

DRAWING NO. 7078

E-01-6018

SHT 201 OF 303 SHS

SHEET NO. 1
DATE: 12/20/2021 4:39 PM
C:\BCP\W\0408745\01-6019 - PANELBOARD SCHEDULE - 2.DWG

THREE PHASE PANEL: EXISTING PANEL LP-CH

VOLTAGE, PHASE, & WIRE: 120 / 208 VAC 3-POLE 4-WIRE
 BUS SIZE: 225 AMPERE
 MAIN SIZE: MLO
 MAIN TYPE: NO

LOCATION: ENCLOSURE: MOUNTING: BUS BRACING: FED FROM:
 CHEMICAL AREA: NEMA-4X STAND 22KAIC PP-CH VIA XFMR CH

CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BREAKER CTKT NO.	LOAD, VA PHASE			LOAD, VA PHASE			BREAKER POLE/AMP	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C				
				NO.	NO.	NO.	NO.	NO.	NO.				
MERLIN DILUTION PACKAGE SKID	2#12, 1-#12G	3/4"	1	20	1	1200			1	20	2	HSO4-LCP-1001 ANTISCALANT PUMP VCP AS-VCP-1001	
NOCL-LCP-7001 SPARE	3	20	1						3	20	4	HSO4-LCP-2001 ANTISCALANT PUMP VCP AS-VCP-1001	
NOCL-LCP-8001 SPARE	5	20	1						5	20	1	HSO4-LCP-3001 ANTISCALANT PUMP VCP AS-VCP-1001	
NOCL-LCP-9001 SPARE	7	20	1						7	20	1	NAOH-LCP-1001 ANTISCALANT FLOW AS-FE/FIT-1004	
RIO 3	9	20	1			500			9	20	1	WEST NOCL RECEPTACLE	
CHEMICAL LIGHTING	11	20	1	1500					11	20	12	NAOH-LCP-1010 SODIUM HYDROXIDENAOH-FE/FIT-1004	
NORTH RECEPTACLE	15	20	1			360			15	20	14	NAOH-LCP-1014	
NSH SAFETY SHOWER 1001	17	20	1			100			17	20	18	NAOH SKID-1023 SPARE	
SOUTH RECEPTACLE/AS-FSH-1001	19	20	1	100					19	20	18	NAOH-LCP-1001 SPARE	
SOUTH NOCL RECEPTACLE	21	20	1			360			21	20	22	NSH-LCP-2001 SPARE	
NOCL-FSH-1003/HSO4 SAFETY SHOWER	23	20	1			100			23	20	24	NOCL-LCP-1004 SPARE	
HT-LCP-201	25	30	2	1200					25	30	2	NOCL-LCP-1005 SPARE	
SODIUM HYPOCHLORITE PUMP NOCL-PDM-4001	29	20	1			1200			29	20	28	NOCL-LCP-1006 NOCL-VCP-4001	
SODIUM HYPOCHLORITE PUMP NOCL-PDM-5001	31	20	1	1200					31	20	22	NOCL-LCP-5001 SPARE	
SODIUM HYPOCHLORITE PUMP NOCL-PDM-6001	33	20	1			1200			33	20	3	NSO4-VCP-1001	
SPARE	35	20	1						35	20	1		
NSO4-VCP-5001	37	20	3			1200			37	20	38	NOCL-VCP-3101	
	39	20	3			1200			39	20	40	SPARE	
	41					1200			41	20	42	SPARE	
COLUMN TOTALS													

PHASE A LOAD (VA) = 12800
 PHASE B LOAD (VA) = 7980
 PHASE C LOAD (VA) = 4800
 TOTAL LOAD (VA) = 25580
 I (amp) = 71.8

THREE PHASE PANEL: EXISTING PANEL LP-CH (2)

VOLTAGE, PHASE, & WIRE: 120 / 208 VAC 3-POLE 4-WIRE
 BUS SIZE: 225 AMPERE
 MAIN SIZE: MLO
 MAIN TYPE: NO

LOCATION: ENCLOSURE: MOUNTING: BUS BRACING: FED FROM:
 CHEMICAL AREA: NEMA-4X STAND 22KAIC PP-CH VIA XFMR CH

CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BREAKER CTKT NO.	LOAD, VA PHASE			LOAD, VA PHASE			BREAKER POLE/AMP	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C				
				NO.	NO.	NO.	NO.	NO.	NO.				
NAOH UNL OPS/LIT-1101, 1201	2#12, 1-#12G	3/4"	1	20	1	100			1	20	2	NSO4 CHEMICAL TRUCK UNLOADING PANEL	
NAOH UNL OPS/LIT-1101, 1201	2#12, 1-#12G	3/4"	3	20	1				3	20	4	NSO4-LCP-1008 SPARE	
NSH UNL OPS/LIT-1001 SPARE	5	20	1						5	20	6	AS-LCP-1009/AS-VBM-1003 SPARE	
HSO4 UNL OPS/LIT-1201 SPARE	7	20	1						7	20	8	AS-LCP-2001 SPARE	
NSO4-VBM-1203/WIT-1101, 1201 SPARE	9	20	1						9	20	19	2#12, 1-#12G 3/4"	
AS-VBM-1203/WIT-1101, 1201 SPARE	11	20	1						11	20	12	2#12, 1-#12G 3/4"	
NAOH SKID 1013	2#12, 1-#12G	3/4"	13	20	1	1200			13	20	14	2#12, 1-#12G 3/4"	
HT-LCP-1002	2#12, 1-#12G	3/4"	15	30	2				15	30	16	2#12, 1-#12G 3/4"	
HT-LCP-1003	2#12, 1-#12G	3/4"	17			1200			17		18	2#12, 1-#12G 3/4"	
SPARE	19	30	2			100			19	30	2	2#12, 1-#12G 3/4"	
NAOH-VCP-1001	2#12, 1-#12G	3/4"	21			1200			21		22	2#12, 1-#12G 3/4"	
	23	20	1						23	20	24	2#12, 1-#12G 3/4"	
	25					100			25		26	2#12, 1-#12G 3/4"	
	27					100			27		28	2#12, 1-#12G 3/4"	
	29					100			29		30	2#12, 1-#12G 3/4"	
	31								31		32	2#12, 1-#12G 3/4"	
	33	20	3			1200			33	20	3	SPACE	
	35					1200			35			SPACE	
	37					1200			37			SPACE	
	39	20	3			1200			39	20	3	NSO4-VCP-3001	
	41					1200			41			SPACE	
COLUMN TOTALS													

PHASE A LOAD (VA) = 8500
 PHASE B LOAD (VA) = 7700
 PHASE C LOAD (VA) = 6800
 TOTAL LOAD (VA) = 23000
 I (amp) = 63.8

THREE PHASE PANEL: PANEL LP-PF2

VOLTAGE, PHASE, & WIRE: 120 / 208 VAC 3-POLE 4-WIRE
 BUS SIZE: 125 AMPERE
 MAIN SIZE: MLO
 MAIN TYPE: NO

LOCATION: ENCLOSURE: MOUNTING: BUS BRACING: FED FROM:
 PRESSURE FILTER ELECTRICAL ROOM: NEMA-3R WALL MOUNTED 22KAIC PP-PF2 VIA XFMR-PF2

CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BREAKER CTKT NO.	LOAD, VA PHASE			LOAD, VA PHASE			BREAKER POLE/AMP	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C				
				NO.	NO.	NO.	NO.	NO.	NO.				
RO FEED TANK ANALYZER PANEL 1-AE/AIT-1011	2#12, 1-#12G	3/4"	1	20	1	100			1	20	2	2#12, 1-#12G 3/4"	RO FEED TANK ANALYZER PANEL 2-AE/AIT-1013
RO FEED TANK ANALYZER PANEL 1-AE/AIT-1012	2#12, 1-#12G	3/4"	3	20	1				3	20	4	2#12, 1-#12G 3/4"	RO FEED TANK ANALYZER PANEL 2-AE/AIT-1011
WW-FIT-1001	2#12, 1-#12G	1"	5	20	1	100			5	20	6	2#12, 1-#12G 3/4"	SPARE
SPARE	7	20	1						7	20	8	2#12, 1-#12G 3/4"	SPARE
SPARE	9	20	1						9	20	10	2#12, 1-#12G 3/4"	SPARE
SPARE	11	20	1						11	20	12	2#12, 1-#12G 3/4"	SPARE
	13								13		14	2#12, 1-#12G 3/4"	SPARE
	15								15		16	2#12, 1-#12G 3/4"	SPARE
	17								17		18	2#12, 1-#12G 3/4"	SPARE
	19								19		20	2#12, 1-#12G 3/4"	SPARE
	21								21		22	2#12, 1-#12G 3/4"	SPARE
	23								23		24	2#12, 1-#12G 3/4"	SPARE
	25								25		26	2#12, 1-#12G 3/4"	SPARE
	27								27		28	2#12, 1-#12G 3/4"	SPARE
	29								29		30	2#12, 1-#12G 3/4"	SPARE
	31								31		32	2#12, 1-#12G 3/4"	SPARE
	33								33		34	2#12, 1-#12G 3/4"	SPARE
	35								35		36	2#12, 1-#12G 3/4"	SPARE
	37								37		38	2#12, 1-#12G 3/4"	SPARE
	39								39		40	2#12, 1-#12G 3/4"	SPARE
	41								41		42	2#12, 1-#12G 3/4"	SPARE
COLUMN TOTALS													

PHASE A LOAD (VA) = 200
 PHASE B LOAD (VA) = 200
 PHASE C LOAD (VA) = 100
 TOTAL LOAD (VA) = 500
 I (amp) = 1.4

THREE PHASE PANEL: PANEL LP-UV

VOLTAGE, PHASE, & WIRE: 120 / 208 VAC 3-POLE 4-WIRE
 BUS SIZE: 250 AMPERE
 MAIN SIZE: MLO
 MAIN TYPE: YES

LOCATION: ENCLOSURE: MOUNTING: BUS BRACING: FED FROM:
 CHEMICAL AREA: NEMA-3R STAND 22KAIC MSB-UV VIA TRF-UV

CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BREAKER CTKT NO.	LOAD, VA PHASE			LOAD, VA PHASE			BREAKER POLE/AMP	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C				
				NO.	NO.	NO.	NO.	NO.	NO.				
UV-AOP AREA LIGHTING	2#12, #12G	3/4"	1	20	1	1550			1	20	2	2#12, #12G 1"	HYDROGEN PEROXIDE STORAGE POLE LIGHTING
UV-AOP AREA LIGHTING	2#12, #12G	3/4"	3	20	1				3	20	4	2#12, #12G 3/4"	UV REACTOR 1 OPTVIEW PANEL UV1-B AE/AIT-1004
UV-AOP AREA RECEPTACLES	2#12, #12G	3/4"	5	20	1				5	20	6	2#12, #12G 3/4"	UV REACTOR 1 pH PANEL AE/AIT-1005
UV REACTORS FEED FLOW METER FIT-1001	2#12, #12G	3/4"	7	20	1	100			7	20	8	2#12, #12G 3/4"	SCC/PLC-6 POWER
SPARE	9	20	1			100			9	20	10	2#12, #12G 3/4"	SPARE
HYDROGEN PEROXIDE TANK LEVEL H2O2-LE/LIT-1001	2#12, #12G	3/4"	11	20	1				11	20	12	2#12, #12G 3/4"	HYDROGEN PEROXIDE FEED PUMP H2O2-PPS-1101
UV REACTOR 1 OPTVIEW PANEL UV1-A AE/AIT-1003	2#12, #12G	3/4"	13	20	1	100			13	20	14	2#12, #12G 3/4"	HYDROGEN PEROXIDE FEED PUMP H2O2-PPS-1201
UV REACTOR 1 LOCAL CONTROL PANEL LCP-1110	2#12, #12G	3/4"	15	20	1				15	20	16	2#12, #12G 3/4"	HYDROGEN PEROXIDE CNTRL. PNL H2O2-VCP-1101
SPARE	17	20	1			1800			17	20	18	2#12, #12G 3/4"	UV-2 REACTOR LOCAL CONTROL PANEL LCP-2110 (F)
SPARE	19	20	1						19	20	20	2#12, #12G 3/4"	SPARE
SPARE	21	20	1						21	20	22	2#12, #12G 3/4"	SPARE
SPARE	23	20	1						23	20	24	2#12, #12G 3/4"	SPARE
SPARE	25	20	1						25	20	26	2#12, #12G 3/4"	SPARE
SPARE	27	20	1						27	20	28	2#12, #12G 3/4"	SPARE
SPARE	29	20	1						29	20	30	2#12, #12G 3/4"	SPARE
SPARE	31	20	1						31	20	32	2#12, #12G 3/4"	SPARE
SPARE	33	20	1						33	20	34	2#12, #12G 3/4"	SPARE
SPARE	35	20	1						35	20	36	2#12, #12G 3/4"	SPARE
SPARE	37	20	1						37	20	38	2#12, #12G 3/4"	SPARE
SPARE	39	20	1						39	20	40	2#12, #12G 3/4"	SPARE
SPARE	41	20	1						41	20	42	2#12, #12G 3/4"	SPARE
COLUMN TOTALS													

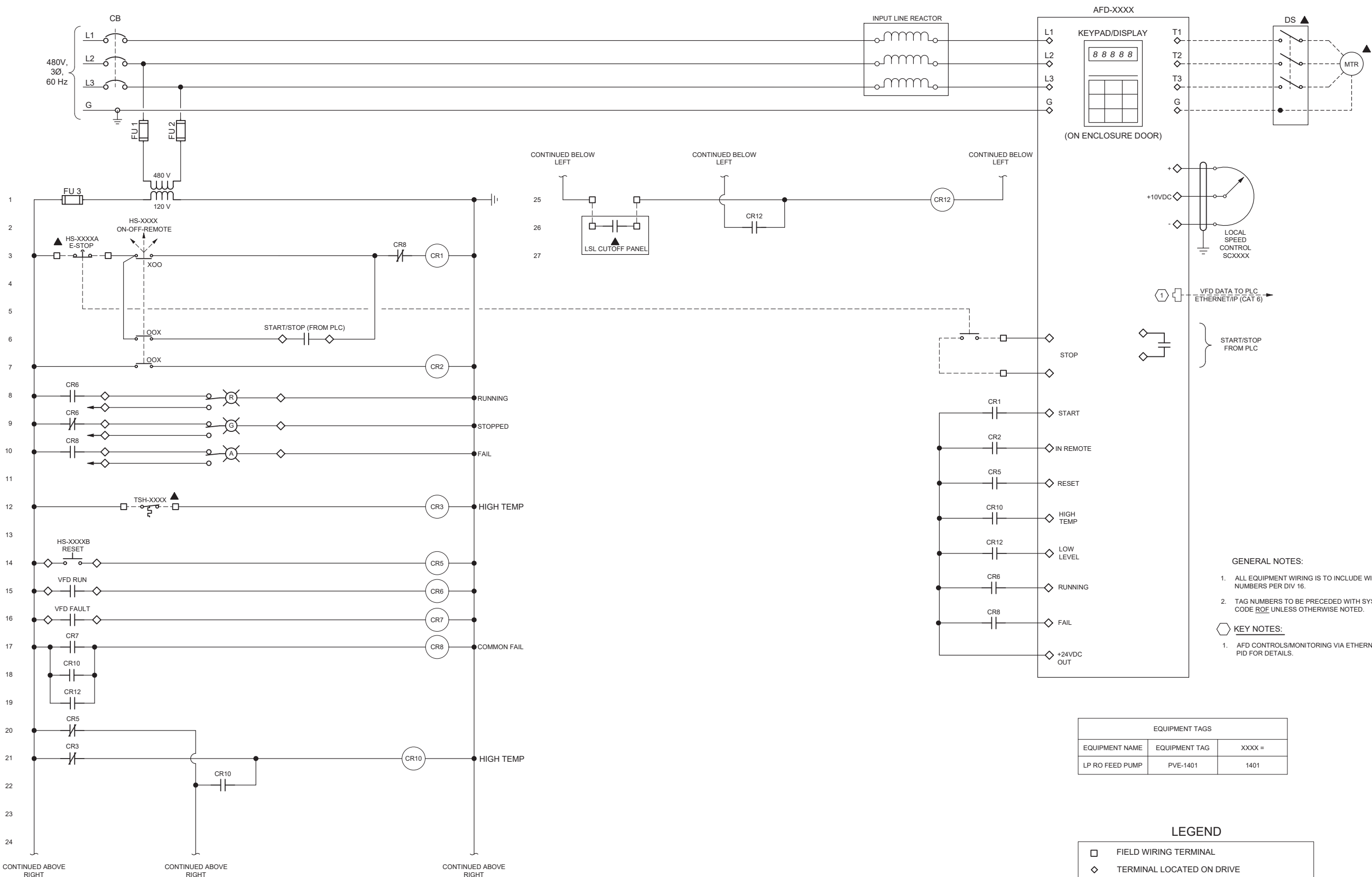
PHASE A LOAD (VA) = 4586
 PHASE B LOAD (VA) = 4305
 PHASE C LOAD (VA) = 4292
 TOTAL LOAD (VA) = 13183
 I (amp) = 36.5

THREE PHASE PANEL: PANEL LP-RO2

VOLTAGE, PHASE, & WIRE: 120 / 208 VAC 3-POLE 4-WIRE
 BUS SIZE: 250 AMPERE
 MAIN SIZE: MLO
 MAIN TYPE: NO

LOCATION: ENCLOSURE: MOUNTING: BUS BRACING: FED FROM:
 RO BLDG EXPANSION ELECTRICAL ROOM: NEMA-3R STAND 22KAIC MSB-RO2 VIA TRF-RO2

CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BREAKER CTKT NO.	LOAD, VA PHASE			LOAD, VA PHASE			BREAKER POLE/AMP	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C				
				NO.	NO.								



GENERAL NOTES:

- 1. ALL EQUIPMENT WIRING IS TO INCLUDE WIRE NUMBERS PER DIV 16.
- 2. TAG NUMBERS TO BE PRECEDED WITH SYSTEM CODE ROF UNLESS OTHERWISE NOTED.

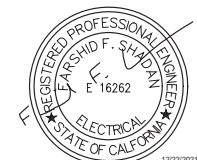
KEY NOTES:

- 1. AFD CONTROLS/MONITORING VIA ETHERNET. SEE PID FOR DETAILS.

EQUIPMENT TAGS		
EQUIPMENT NAME	EQUIPMENT TAG	XXXX =
LP RO FEED PUMP	PVE-1401	1401

LEGEND

- FIELD WIRING TERMINAL
- ◇ TERMINAL LOCATED ON DRIVE
- FIELD WIRING
- ▲ LOCATED IN FIELD



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

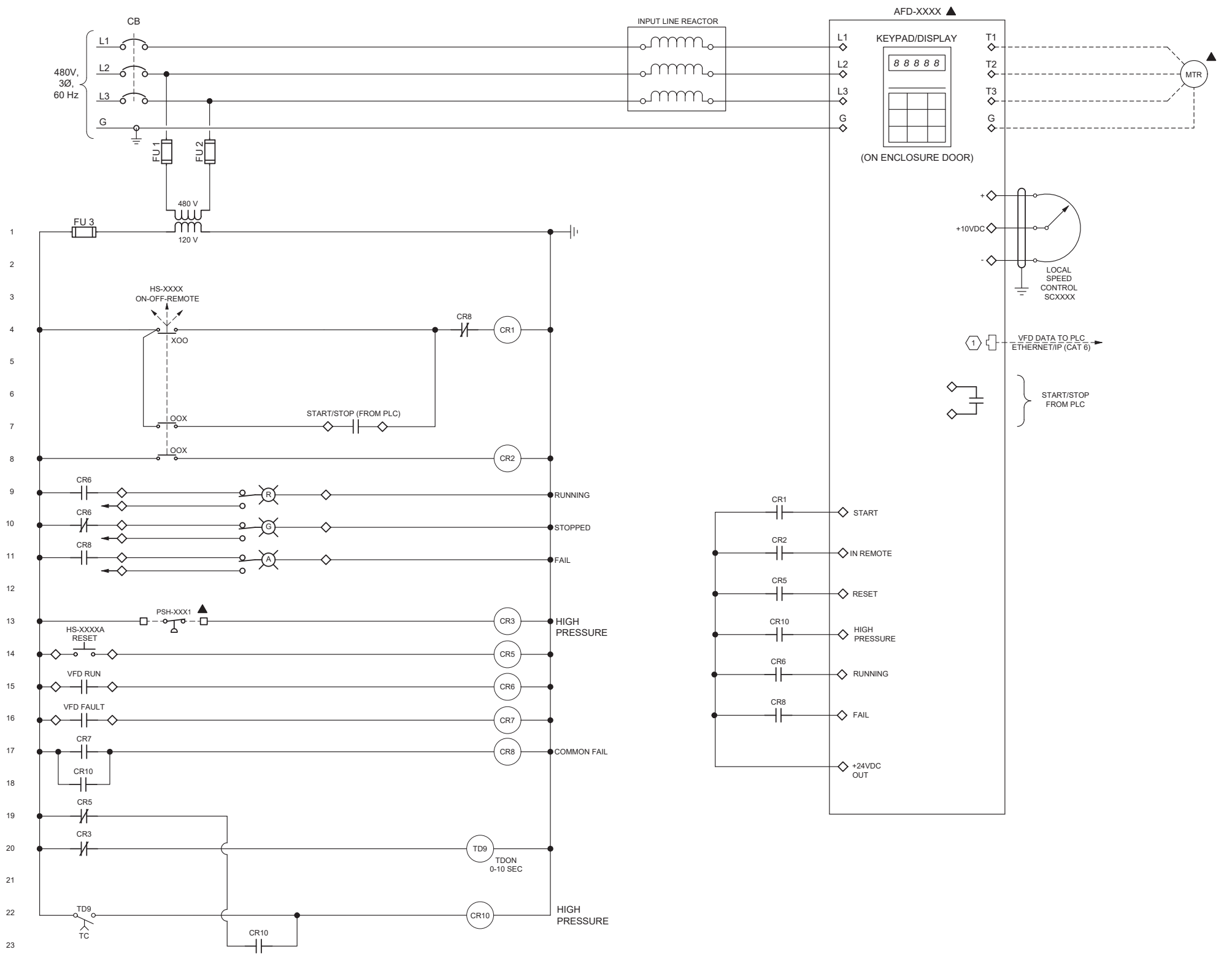


REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____, 20__	REFERENCE : DATE : _____, 20__	COMPUTER FILE NAME : SP-FILE NO. : SP2602
REVIEWED BY : OMED POUR, P.E. - PROJECT MANAGER	DATE : _____, 20__	APPROVED BY : ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE : _____, 20__

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION

CONTROL SCHEMATIC DIAGRAM - 1

DESIGNED BY : DEE
 DRAWN BY : DEE
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-01-6021
 SH 203 OF 303 SHS



- GENERAL NOTES:**
1. ALL EQUIPMENT WIRING IS TO INCLUDE WIRE NUMBERS PER DIV 16.
 2. TAG NUMBERS TO BE PRECEDED WITH SYSTEM CODE ROR UNLESS OTHERWISE NOTED.
- KEY NOTES:**
1. AFD CONTROLS/MONITORING VIA ETHERNET. SEE PID FOR DETAILS.

EQUIPMENT TAGS		
EQUIPMENT NAME	EQUIPMENT TAG	XXXX =
BRINE PUMP 1	PCL-1110	1110
BRINE PUMP 2	PCL-1210	1210
BRINE PUMP 3	PCL-1310	1310

LEGEND	
	FIELD WIRING TERMINAL
	TERMINAL LOCATED ON DRIVE
	FIELD WIRING
	LOCATED IN FIELD

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

Brown and Caldwell
WALSH

REVIEWED BY : _____ DATE : ____/____/20__	REFERENCE :
REVIEWED BY : _____ DATE : ____/____/20__	DATE : ____/____/20__ COMPUTER FILE NAME :
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.
REVIEWED BY : _____ DATE : ____/____/20__	SP-FILE NO. : SP2602
OMIED POUR, P.E. - PROJECT MANAGER	APPROVED BY : _____ DATE : ____/____/20__
	ALEX NAZARCHUK, P.E. - CITY ENGINEER

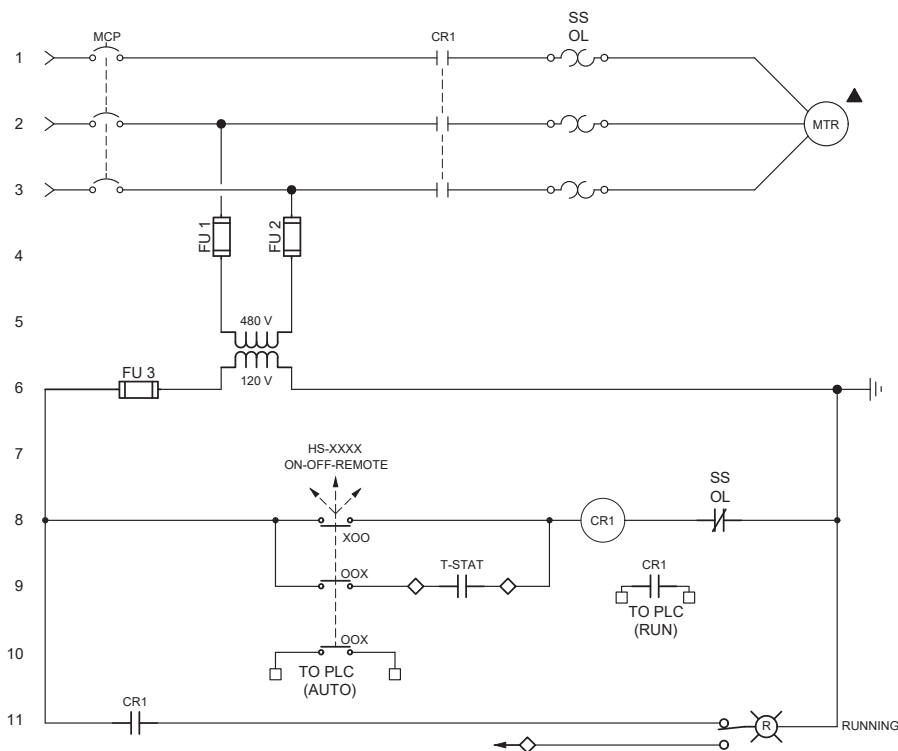
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SCHEMATIC DIAGRAM - 2

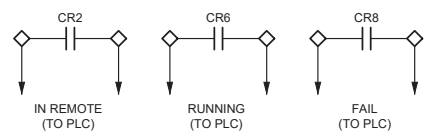
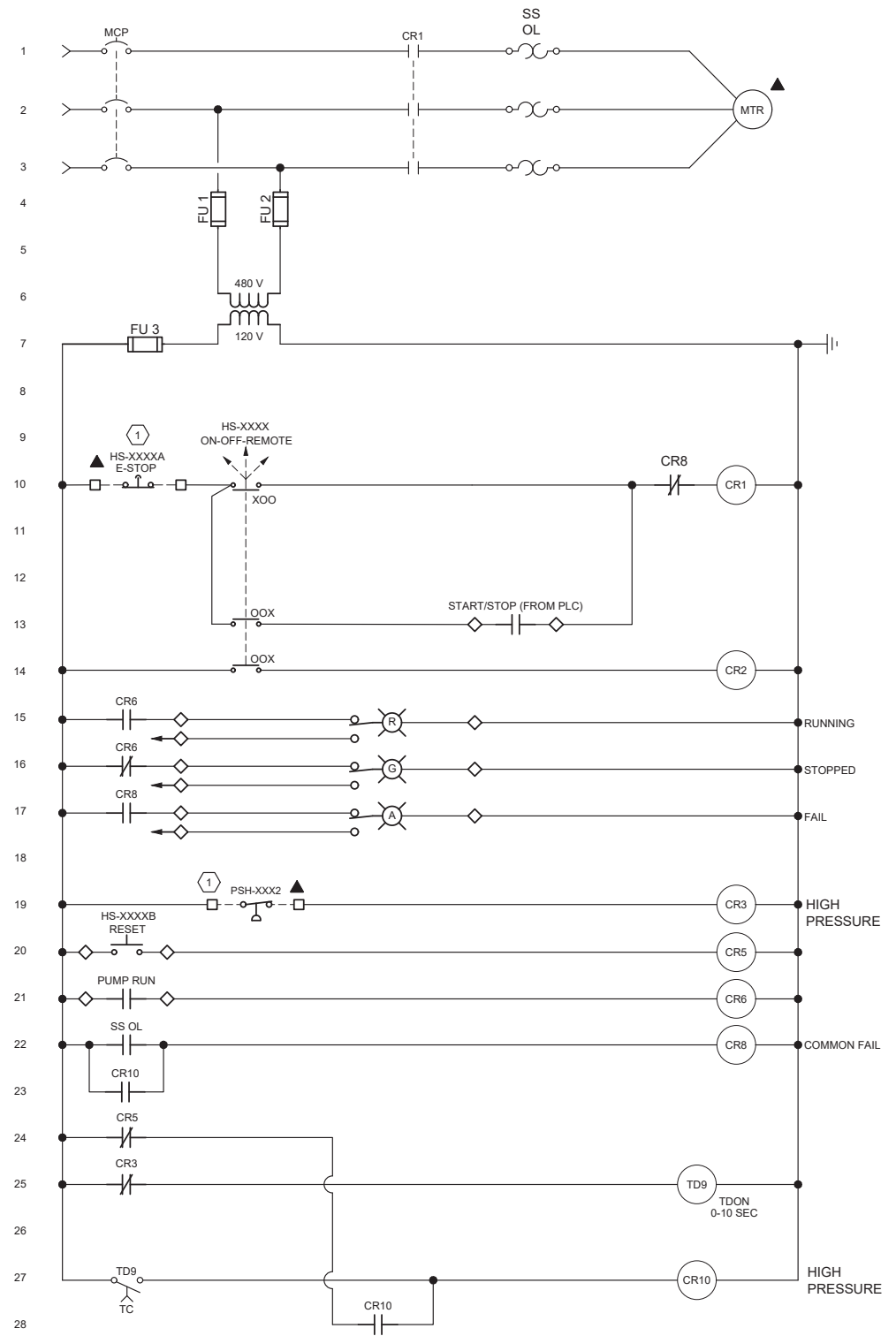
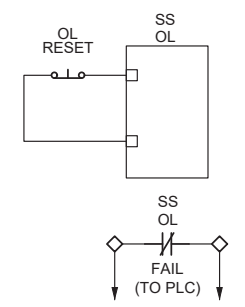
DESIGNED BY : DEE
 DRAWN BY : DEE
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO. _____
 DRAWING NO. 7078
E-01-6022
 SH1 204 OF 303 SH15



C:\BCP\W\0408745\01-6023 CONTROL SCHEMATIC DIAGRAM - 3.DWG 12/20/2021 4:39 PM



EQUIPMENT TAGS		
EQUIPMENT NAME	EQUIPMENT TAG	XXXX =
EXHAUST FAN 1	HV-PF-0401	0401
EXHAUST FAN 2	HV-PF-0402	0402



- GENERAL NOTES:**
- ALL EQUIPMENT WIRING IS TO INCLUDE WIRE NUMBERS PER DIV 16.
- KEY NOTES:**
- COORDINATE WITH EQUIPMENT MANUFACTURER TO VERIFY PROPER CONTROL AND EQUIPMENT SAFETY DEVICES ARE PROVIDED.

LEGEND

□	FIELD WIRING TERMINAL
◇	TERMINAL LOCATED ON STARTER
---	FIELD WIRING
▲	LOCATED IN FIELD

EQUIPMENT TAGS		
EQUIPMENT NAME	EQUIPMENT TAG	XXXX =
FLASH MIX PUMP 1	PCL-2101	2101
FLASH MIX PUMP 2	PCL-2201	2201

NO.	DATE	BY	DESCRIPTION	APPROVED

REVIEWED BY : _____ DATE : _____ 20__	REFERENCE :
REVIEWED BY : _____ DATE : _____ 20__	DATE : _____, 20XX COMPUTER FILE NAME :
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	SUBMITTED BY : _____ SP-FILE NO. : SP2602
REVIEWED BY : _____ DATE : _____ 20__	APPROVED BY : _____ DATE : _____, 20XX
OMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

CONTROL SCHEMATIC DIAGRAM - 3

DESIGNED BY : DEE
 DRAWN BY : DEE
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO. _____
 DRAWING NO. 7078
E-01-6023
 SH1 205 OF 303 SH15



12/23/2021 3:01:38 PM

E-02-1001

ENC. NO. 1

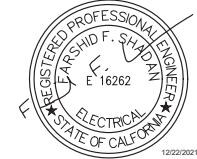
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION



TO SWBD-PF VIA ROF-AFD-1401. SEE DRAWING E-01-1001 AND E-01-4003.

1 PRESSURE FILTER POWER PLAN
SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
1. CIRCUITS: DRAWING E-01-6003.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
- KEY NOTES:**
1. RELOCATED TURBIDITY METER AE/AIT-1101 TO RO FEED TANK ANALYZER PANEL 1. EXTEND SIGNAL CONDUIT ONLY AS REQUIRED FROM EXISTING LOCATION. NEW POWER FEED PER KEYNOTE 2.
 2. FOR RO FEED TANK ANALYZER PANEL 1 (AE/AIT-1011 & AE/AIT-1012) AND RO FEED TANK ANALYZER PANEL 2 (AE/AIT-1101 & AE/AIT-1103): FOR NEW ANALYZER CIRCUITS SEE PANEL SCHEDULE LP-PF2 ON DRAWING E-01-6019.



BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-02V19.rvt



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX COMPUTER FILE NAME:
 SUBMITTED BY: _____ SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
 PRESSURE FILTER POWER PLAN
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-02-1001
 SHY 206 OF 303 SHS

12/23/2021 3:07:14 PM

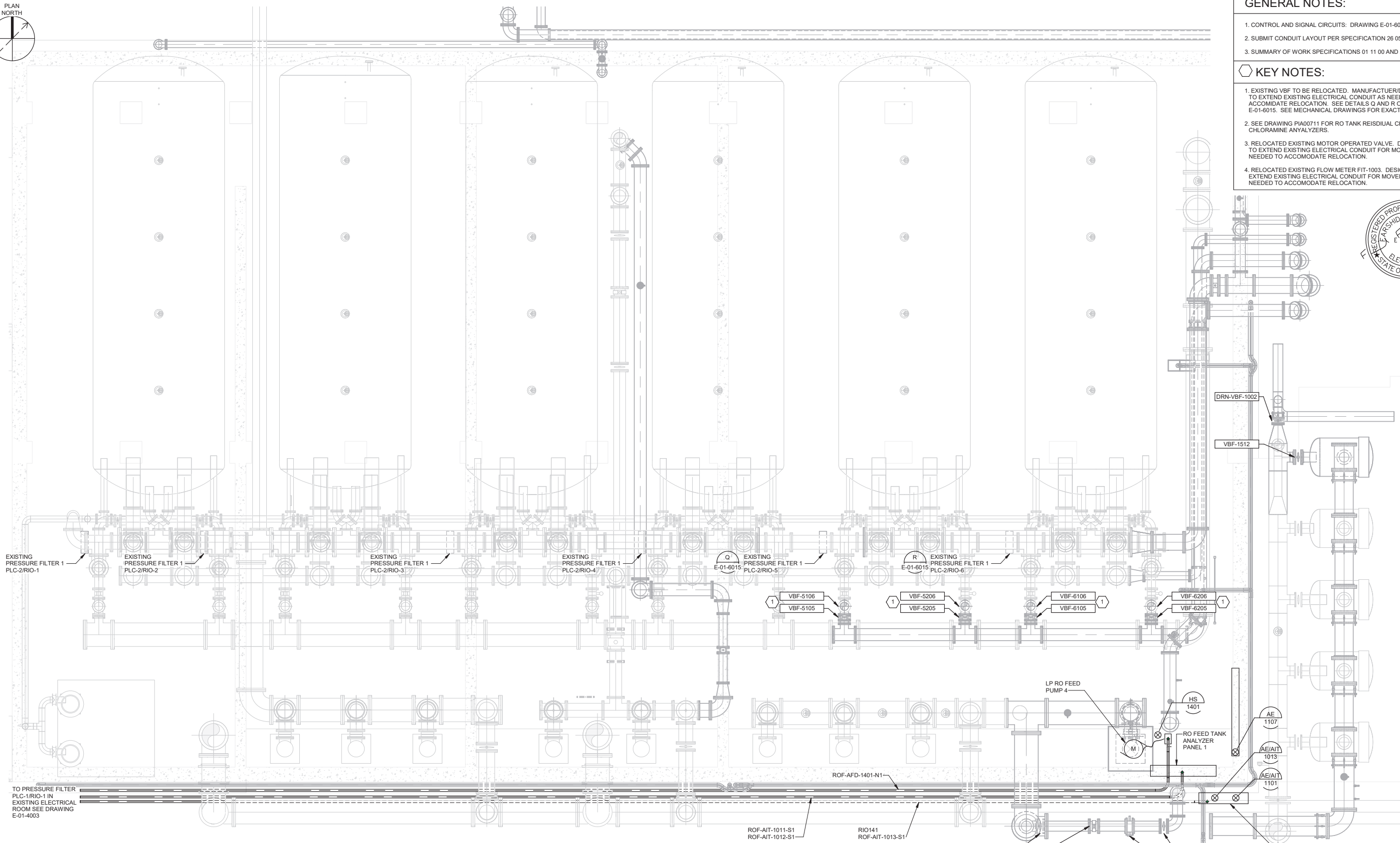
of

E-02-1002

FIG. NO. 1

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-02V19.rvt



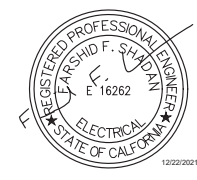
1 PRESSURE FILTER CONTROL AND SIGNAL PLAN
 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

- CONTROL AND SIGNAL CIRCUITS: DRAWING E-01-6009.
- SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
- SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.

KEY NOTES:

- EXISTING VBF TO BE RELOCATED. MANUFACTURER/DESIGN-BUILDER TO EXTEND EXISTING ELECTRICAL CONDUIT AS NEEDED TO ACCOMMODATE RELOCATION. SEE DETAILS Q AND R ON DRAWING E-01-6015. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS.
- SEE DRAWING PIA00711 FOR RO TANK RESIDUAL CHLORING AND CHLORAMINE ANALYZERS.
- RELOCATED EXISTING MOTOR OPERATED VALVE. DESIGN-BUILDER TO EXTEND EXISTING ELECTRICAL CONDUIT FOR MOV ACTUATOR AS NEEDED TO ACCOMMODATE RELOCATION.
- RELOCATED EXISTING FLOW METER FIT-1003. DESIGN-BUILDER TO EXTEND EXISTING ELECTRICAL CONDUIT FOR MOVED ACTUATOR AS NEEDED TO ACCOMMODATE RELOCATION.



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED

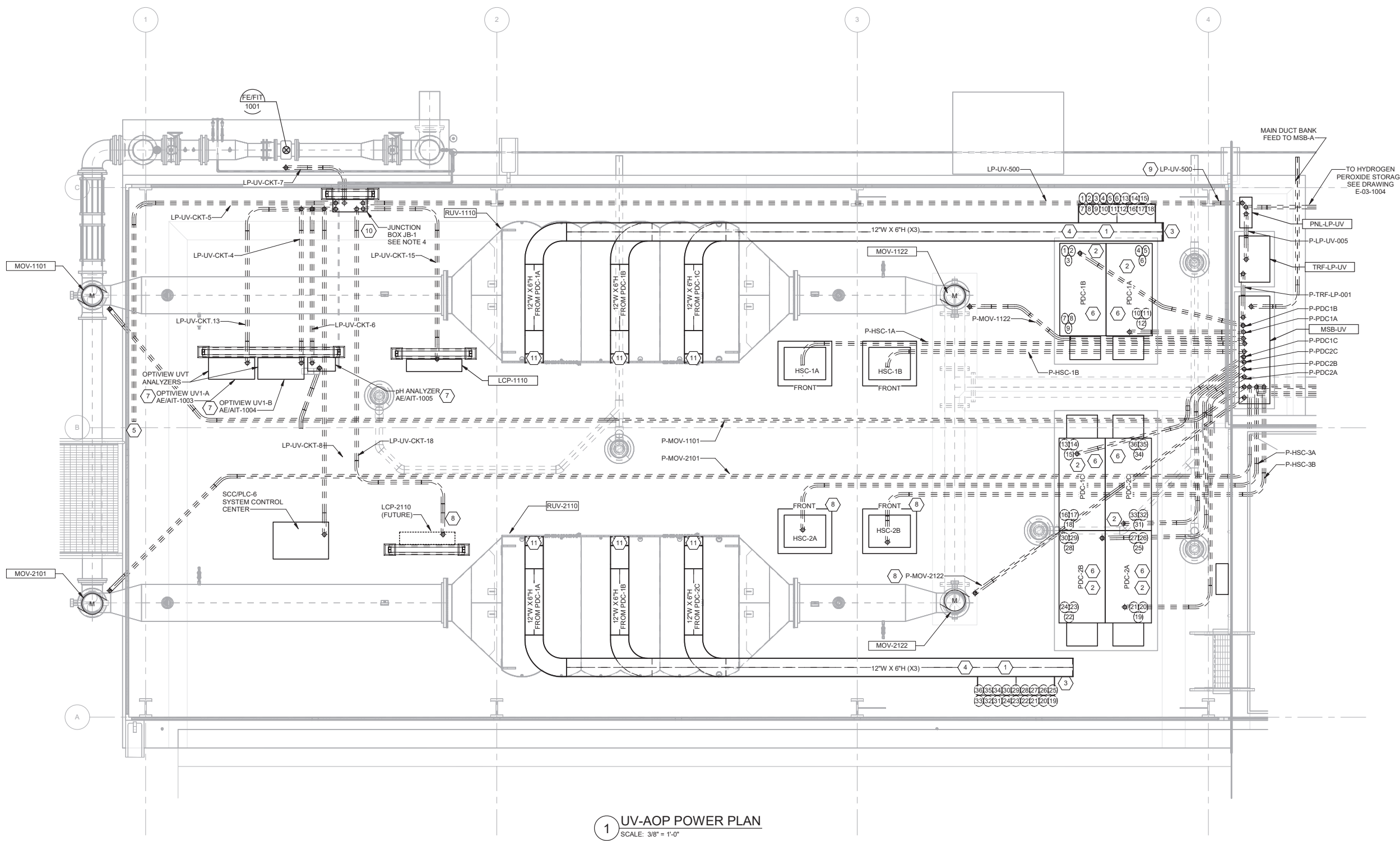


REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY:	DATE:	20
OMED POUR, P.E. - PROJECT MANAGER		

REFERENCE:	DATE:	20XX	COMPUTER FILE NAME:
SUBMITTED BY:			SP-FILE NO.: SP2602
APPROVED BY:	DATE:	20XX	
ALEX NAZARCHUK, P.E. - CITY ENGINEER			

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
PRESSURE FILTER CONTROL AND SIGNAL PLAN
 PROJECT AND SHEET TITLE

DESIGNED BY:	FRF
DRAWN BY:	WRS
CHECKED BY:	AZ
CONSULTANT JOB/SHEET NO.	154390
DRAWING NO.	7078
E-02-1002	
SHT	207 OF 303 SHTS



1 UV-AOP POWER PLAN
 SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. CIRCUITS: DRAWING E-01-6002.
2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
4. FOR 120V CIRCUITS SEE DRAWING E-01-6019 FOR PANEL SCHEDULE LP-UV.

KEY NOTES:

1. OVERHEAD ALUMINUM LADDER TYPE CABLE TRAY TO BE SUPPORTED AT A DISTANCE NO LONGER THAN EVERY 8 FEET, ON HORIZONTAL TRAY AND NO LONGER THAN EVERY 5 FEET ON VERTICAL TRAY SECTIONS. CABLE TRAY SUPPORTS BY PREFAB BUILDING MANUFACTURER. MAXIMUM NUMBER OF LAMP CABLES PER TROUGH/CABLE TRAY IS 98 CABLES.
2. INSTALL UNDERGROUND CONDUITS MINIMUM SIZE OF 3-1/2" FOR CABLE ROUTING TO THE UV UNIT VIA CABLE TRAY. MAXIMUM NUMBER OF CABLES PER CONDUIT IS 16. EACH PDC CABINET TO ALLOW FOR LAMP CABLE ROUTING TO LEFT AND RIGHT SIDE OF EACH PDC.
3. CABLE FROM CONDUIT SHALL TRANSITION DIRECTLY TO THE CABLE TRAY. CONDUIT END AT CABLE TRAY SHALL BE INSTALLED WITH THREADED GROUND BUSHINGS WITH LUGS TO MINIMIZE SHARP EDGES FOR THE OPEN CABLE TRANSITION TO THE CABLE TRAY. EXTEND CONDUITS VERTICALLY TO ALLOW FOR A MINIMUM OF 4" BEND RADIUS TO TRANSITION TO OPEN CABLE TRAY AT THE UV UNIT.
4. TOP CABLE TRAY SHALL BE INSTALLED AT A HEIGHT OF 14 FEET ABOVE THE FINISHED FLOOR AND EACH CABLE TRAY SHALL BE INSTALLED WITH A MINIMUM OF 12" INCH SPACING. SEE DRAWING E-03-1002 FOR ISOMETRIC VIEW.
5. 120V POWER CONTINUED TO UV AREA RECEPTACLES. SEE DRAWING E-03-1004.
6. VENDOR PROVIDED UV LAMP CABLES SHALL BE CABLE TRAY, TYPE "TC" RATED, SHALL BE INSTALLED IN SINGLE LAYER IN CABLE TRAY, AND ALL SLACK CABLE TO BE PULLED BACK TO THE PDC CABINET AND EXCESS TRIMMED AT THE PDC CABLE END.
7. OPTVIEW SYSTEM CABINETS ARE ONE DUTY AND ONE STANDBY UNIT. FOR PANEL LAYOUT SEE MECHANICAL DRAWING D-03-5001 DETAIL B.
8. FOR EQUIPMENT ASSOCIATED WITH UV REACTOR 2, UNDERGROUND CONDUITS SHALL BE INSTALLED, NO CONDUCTORS INSTALLED, AND CONDUIT SHALL BE CAPPED FOR FUTURE USE.
9. LP-UV-500 IS HOMERUN FROM JUNCTION BOX JB-1 TO PANEL LP-UV.
10. JB-1 SHALL BE NEMA 3R MINIMUM SIZE OF 16"W X 16"H X 8"D.
11. INSTALL VERTICAL CABLE TRAY TO SUPPORT CABLES FROM CABLE TRAY TO A MAXIMUM DISTANCE OF 6' ABOVE THE TOP OF THE UV CHAMBER. SECURE CABLES IN A SINGLE LAYER.

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



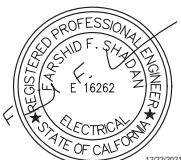
REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20

SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:	DATE:	20XX	COMPUTER FILE NAME:
SUBMITTED BY:	DATE:	20XX	SP-FILE NO.:
APPROVED BY:	DATE:	20XX	

ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
UV/AOP POWER PLAN

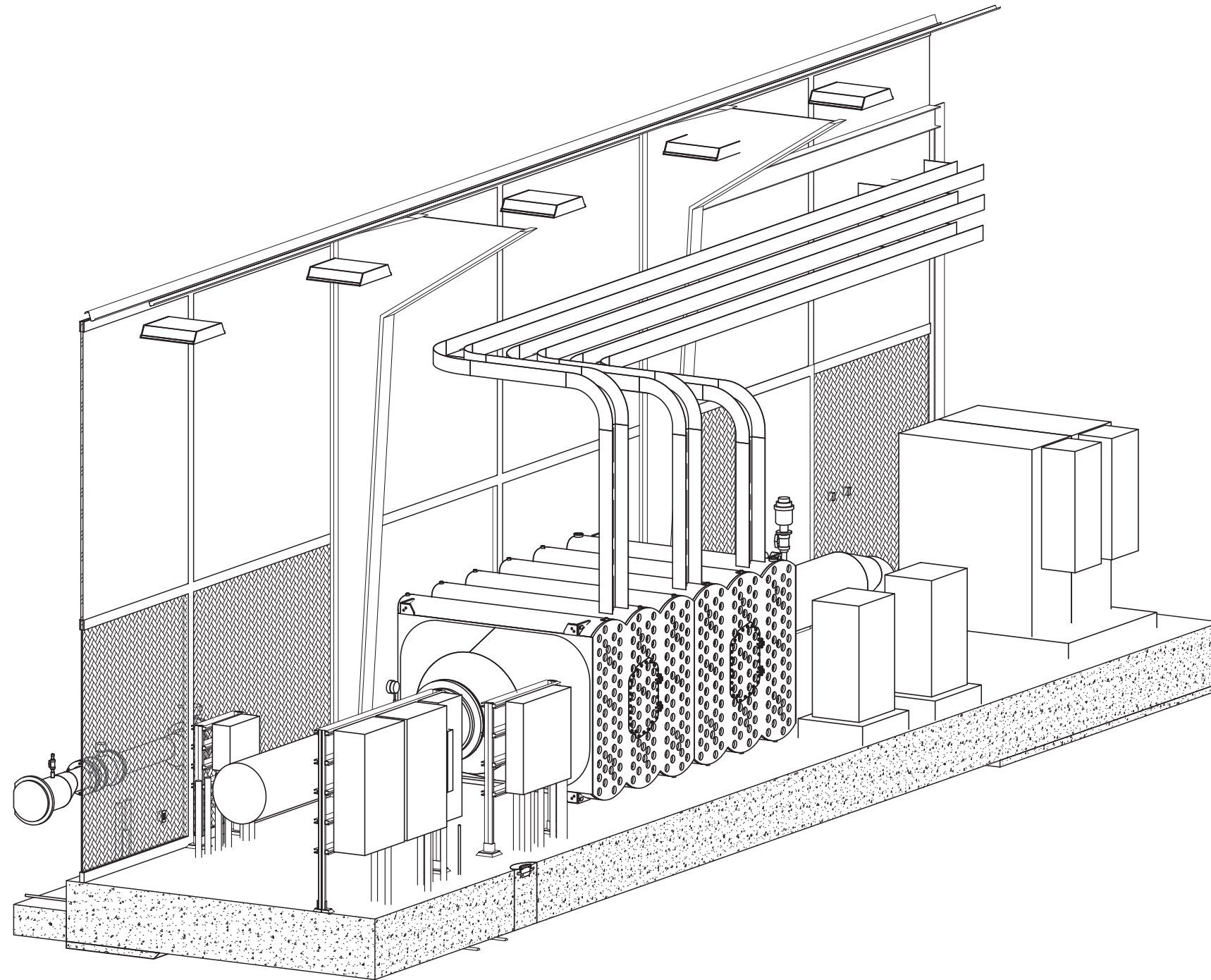


DESIGNED BY:	FRF
DRAWN BY:	WRS
CHECKED BY:	AZ
CONSULTANT JOB/SHEET NO.	154390
DRAWING NO.	E-03-1001
SHT	208 OF 303 SHTS

12/20/2021 7:05:21 PM

E-03-1002

BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-03V19.rvt
TITLE OF PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

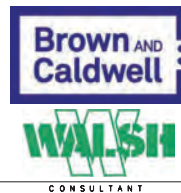


1 UV/AOP POWER ISOMETRIC
SCALE:



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: ____/____/20__
 REVIEWED BY: _____ DATE: ____/____/20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: ____/____/20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: ____/____/20__ COMPUTER FILE NAME: _____
 SUBMITTED BY: _____
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: ____/____/20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

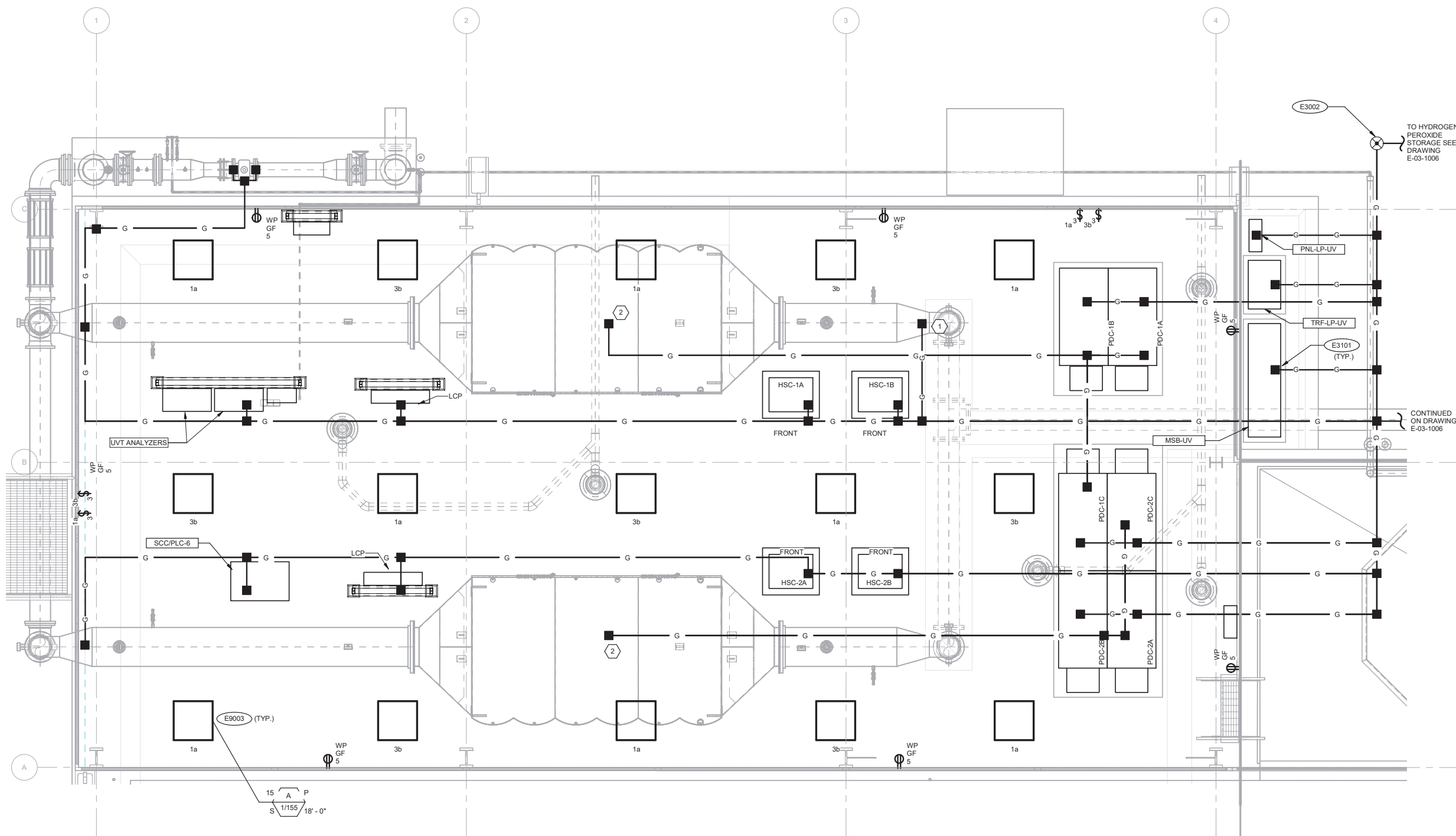
OLYMPIC WELL FIELD RESTORATION
AND ARCADIA WTP EXPANSION
UV/AOP POWER PLAN ISOMETRIC
PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-03-1002
 SHEET 209 OF 303 SHEETS

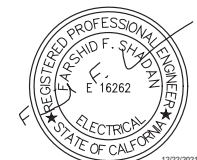
12/20/2021 5:48:02 PM
 E-03-1004
 12/20/2021 5:48:02 PM
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-03V19.rvt
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION



- GENERAL NOTES:**
1. LIGHTING FIXTURE SCHEDULE: DRAWING E-01-6016.
 2. PANELBOARD SCHEDULES: DRAWING E-01-6019.
- KEY NOTES:**
1. BOND TO PIPING.
 2. UV UNIT TO THE UNDERSIDE OF EACH PDC BONDING #10 AWG, TYPE TEW STRANDED CONDUCTOR PROVIDE BY TROJAN.



1 UV-AOP LIGHTING, RECEPT AND GROUNDING PLAN
 SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED
REVISIONS				



REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
UV/AOP LIGHTING, RECEPT AND GROUNDING PLAN

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-03-1004
 SHY 211 OF 303 SHS

12/20/2021 5:48:04 PM

SHEET

E-03-1005

FIG. NO. 1

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

B:\360\154390 - Arcadia Water Treatment Plant Expansion\154390-E-03V19.rvt

FILE OF PROJECT:

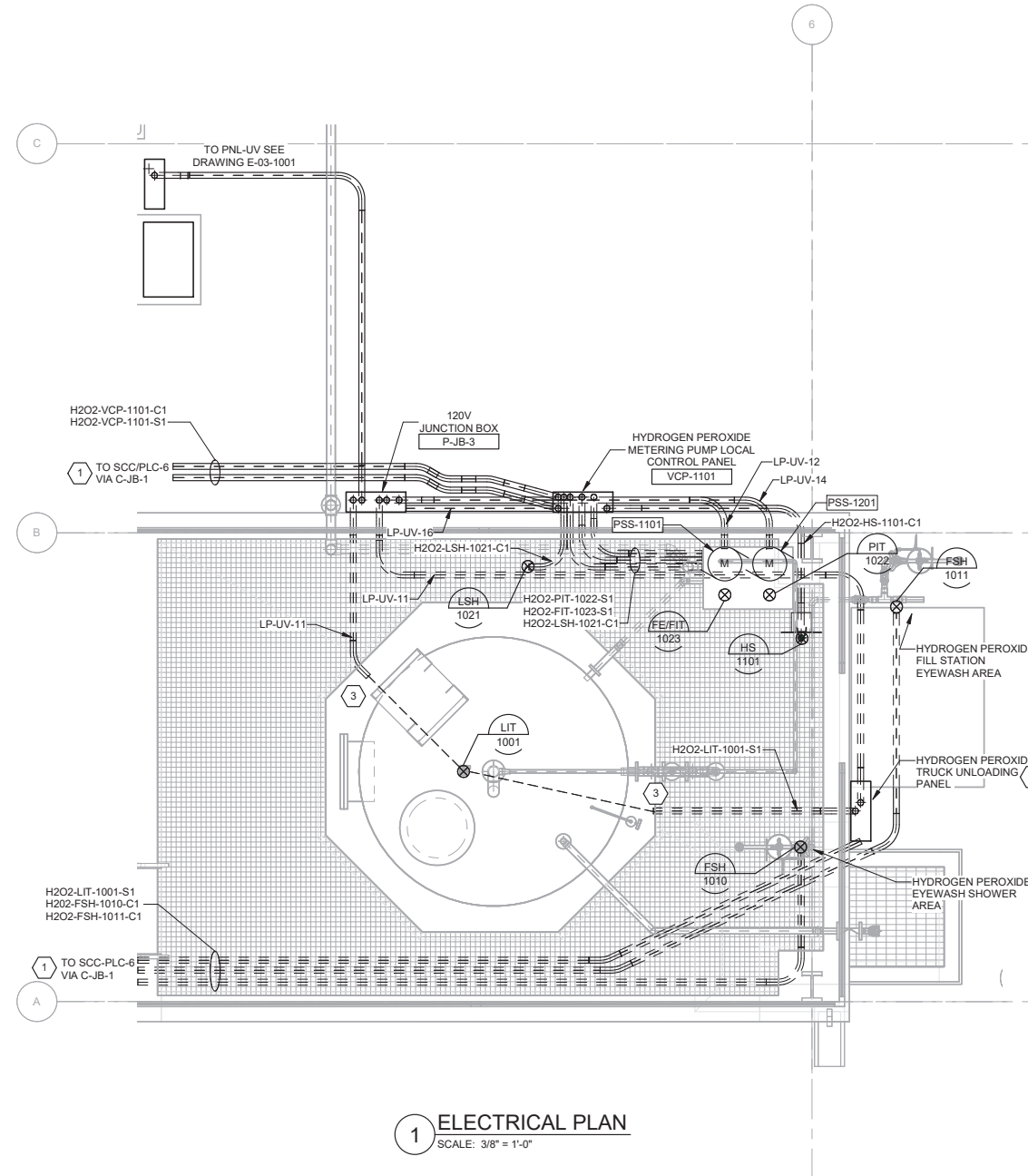


GENERAL NOTES:

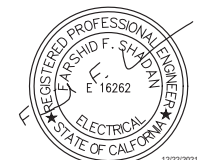
- 1. CIRCUITS: DRAWING E-01-6002.
- 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
- 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.

KEY NOTES:

- 1. UNDERGROUND CONDUIT CONTINUED TO SCC/PLC-6. SEE DRAWING E-03-1002
- 2. EXACT LOCATION OF HYDROGEN PEROXIDE TRUCK UNLOADING PANEL TO BE COORDINATED IN THE FIELD.
- 3. FIELD ROUTE CONDUIT TO LEVEL TRANSMITTER ON TOP OF TANK.



1 ELECTRICAL PLAN
SCALE: 3/8" = 1'-0"



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY:	DATE:	20
OMEED POUR, P.E. - PROJECT MANAGER		

REFERENCE:	DATE:	20XX	COMPUTER FILE NAME:
SUBMITTED BY:			SP-FILE NO.: SP2602
APPROVED BY:	DATE:	20XX	
ALEX NAZARCHUK, P.E. - CITY ENGINEER			

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
HYDROGEN PEROXIDE STORAGE POWER AND CONTROL PLAN
PROJECT AND SHEET TITLE

DESIGNED BY:	FRF
DRAWN BY:	WRS
CHECKED BY:	AZ
CONSULTANT JOB/SHEET NO.	154390
DRAWING NO.	7078
E-03-1005	
SHT	212 OF 303 SHS

12/20/2021 5:48:05 PM

BIM_360/154390 - Arcadia Water Treatment Plant Expansion/154390-E-03V19.rvt
TITLE OF PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

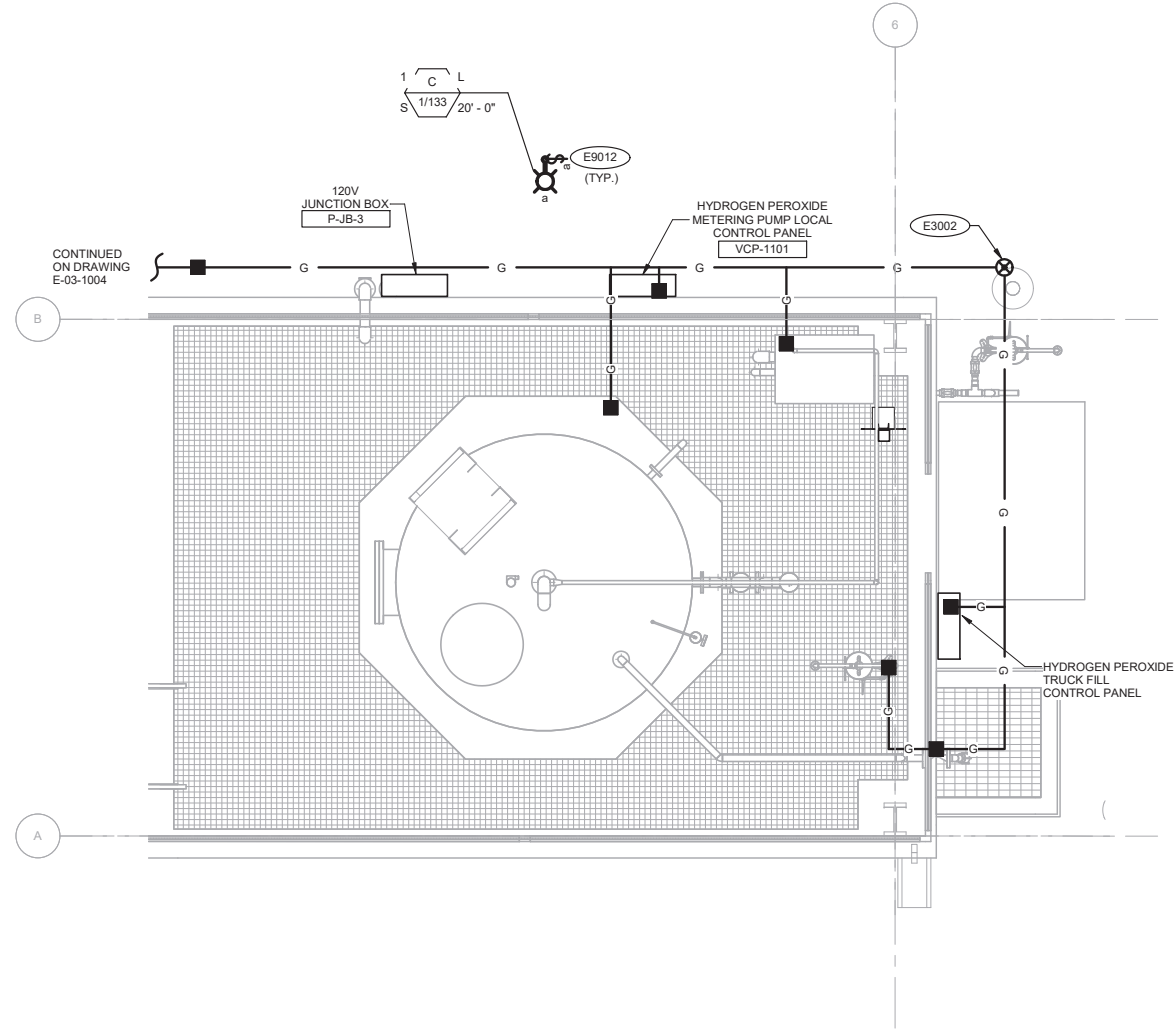
ENC. NO. 1
E-03-1006

SHEET



GENERAL NOTES:

1. LUMINAIRE SCHEDULE: DRAWING E-01-6016.



1 HYDROGEN PEROXIDE STORAGE LIGHTING, AND GROUNDING PLAN
SCALE: 3/8" = 1'-0"



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



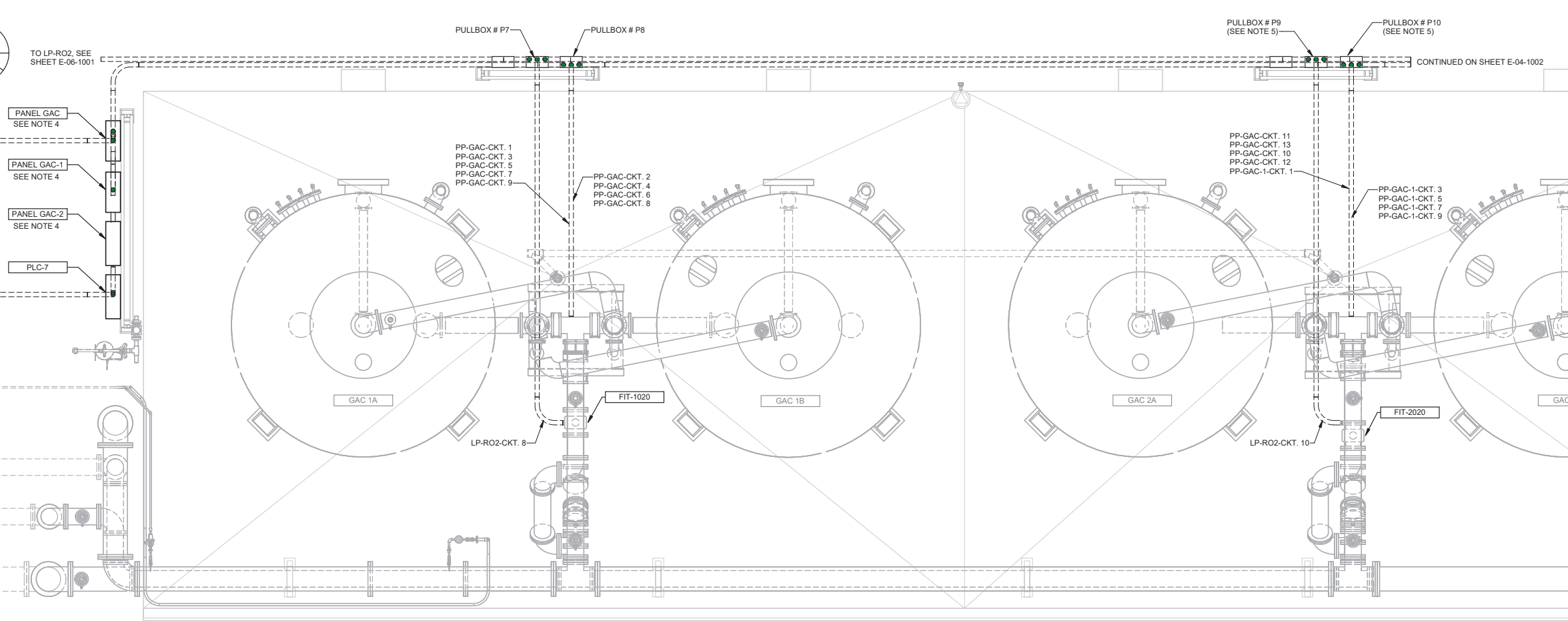
REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
 HYDROGEN PEROXIDE STORAGE LIGHTING, RECEPT AND GROUNDING PLAN
 PROJECT AND SHEET TITLE

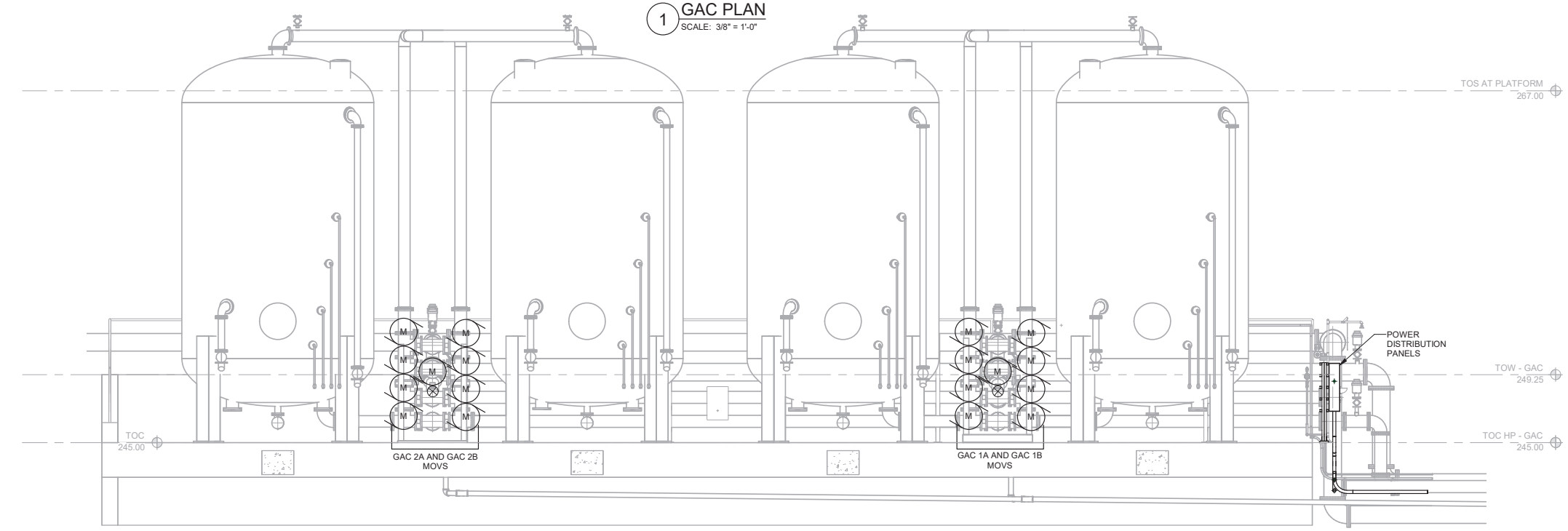
DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-03-1006
 SHY 213 OF 303 SHS

12/23/2021 6:22:33 PM
 E-04-1001
 12/23/2021 6:22:33 PM
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-04V19.rvt
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

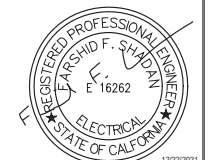


- GENERAL NOTES:**
1. CIRCUITS: DRAWING E-01-6003.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
 4. FOR PANELS GAC, GAC-1 AND GAC-2 CIRCUITS SEE DRAWING E-01-6016.
 5. CONDUITS SHOWN FOR GAC 3A, 3B, 4A, AND 4B SHALL TERMINATE IN PULLBOX #P9 AND PULLBOX #P10. CONDUIT SHOWN TO THESE VESSELS PAST THESE PULLBOXES TO BE INSTALLED AT A FUTURE DATE.

1 GAC PLAN
SCALE: 3/8" = 1'-0"



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



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED
REVISIONS				

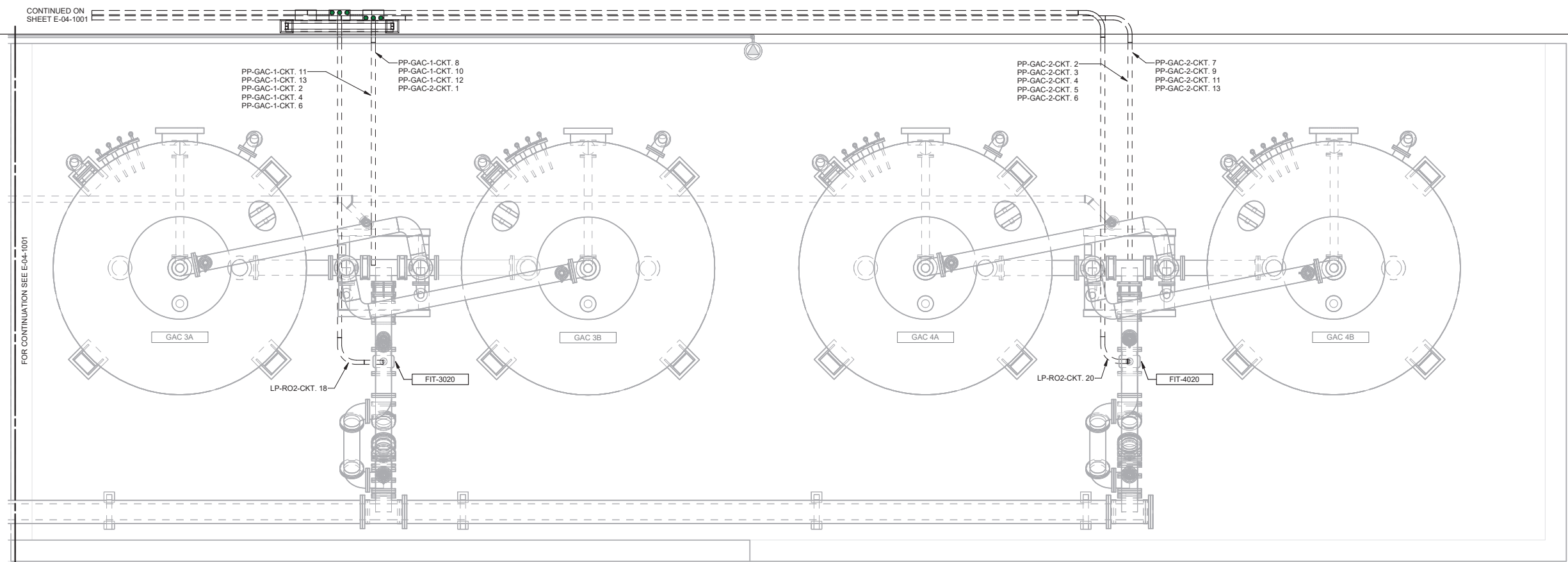


REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY:	DATE:	20
OMIED POUR, P.E. - PROJECT MANAGER		

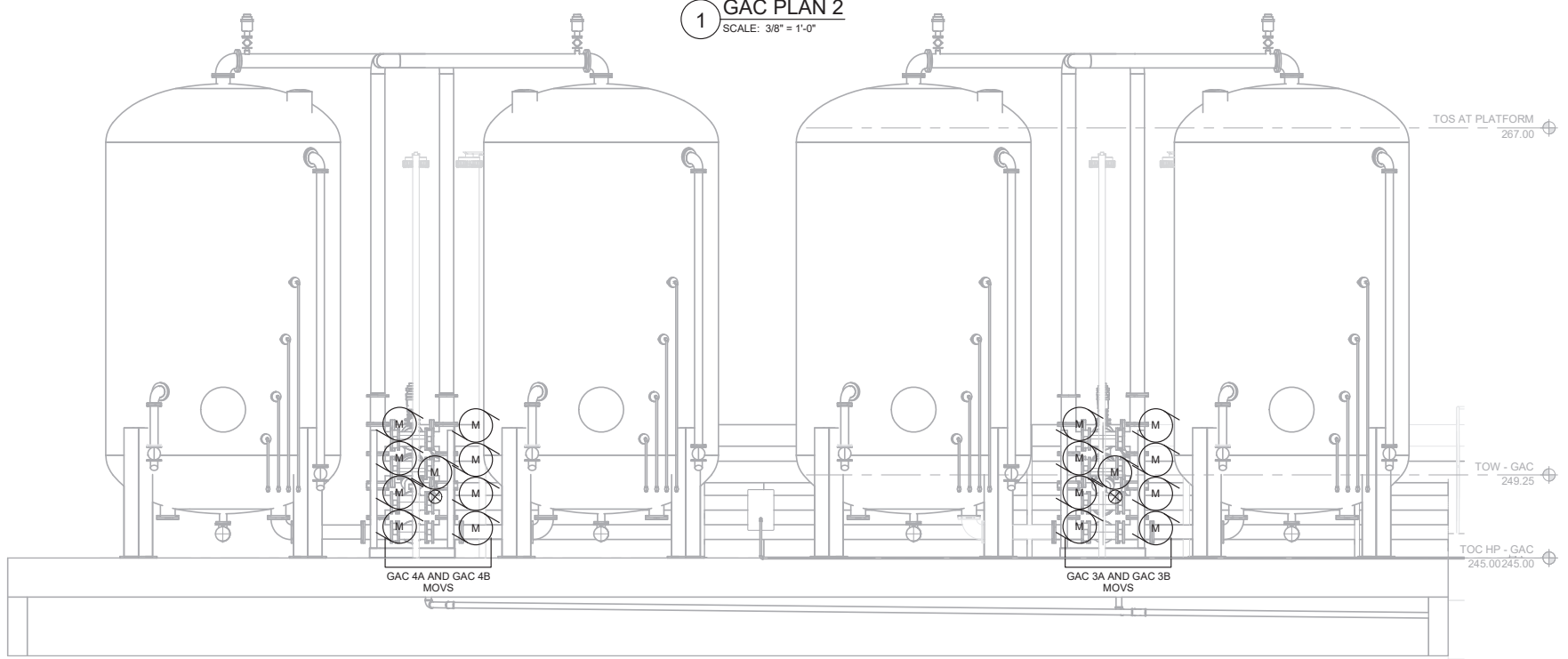
REFERENCE:	DATE:	20XX	COMPUTER FILE NAME:
SUBMITTED BY:			SP-FILE NO.: SP2602
CURTIS CASTLE, P.E. - PRINCIPAL C.E.			
APPROVED BY:	DATE:	20XX	
ALEX NAZARCHUK, P.E. - CITY ENGINEER			

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
GAC POWER PLAN - 1
 PROJECT AND SHEET TITLE
 DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-04-1001
 SHY 214 OF 303 SHYS

12/20/2021 8:09:00 PM
 E-04-1002
 12/20/2021
 BIM_360/154390 - Arcadia Water Treatment Plant Expansion/154390-E-04V19.rvt
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

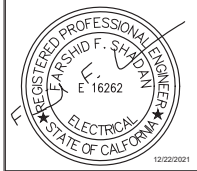


1 GAC PLAN 2
SCALE: 3/8" = 1'-0"



2 GAC POWER SECTION 2
E-04-1002 SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
1. CIRCUITS: DRAWING E-01-6003.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
 4. FOR PANELS GAC, GAC-1 AND GAC-2 CIRCUITS SEE DRAWING E-01-6018.
 5. ALL EQUIPMENT SHOWN IS FUTURE, UNLESS OTHERWISE NOTED.



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



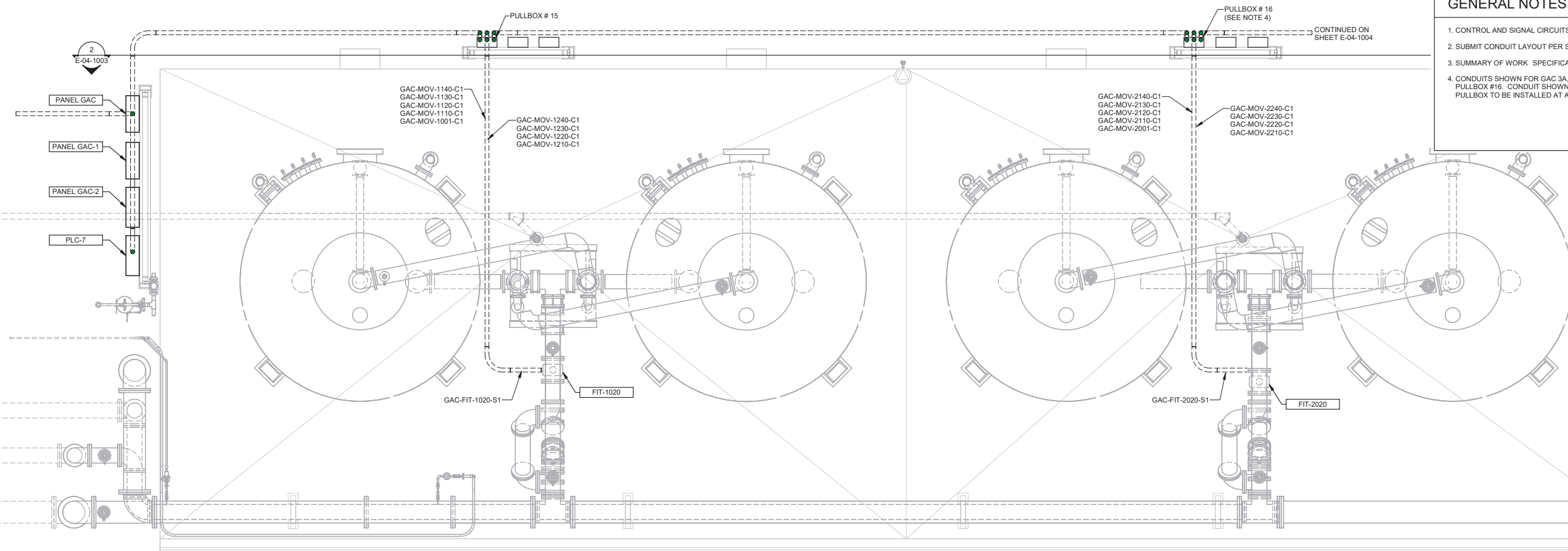
REVIEWED BY: _____ DATE: _____ 20__	REFERENCE:
REVIEWED BY: _____ DATE: _____ 20__	DATE: _____, 20XX
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	COMPUTER FILE NAME: _____
REVIEWED BY: _____ DATE: _____ 20__	SUBMITTED BY: _____
OMIED POUR, P.E. - PROJECT MANAGER	SP-FILE NO.: SP2602
	APPROVED BY: _____ DATE: _____, 20XX
	ALEX NAZARCHUK, P.E. - CITY ENGINEER
	ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
GAC POWER PLAN - 2

DESIGNED BY: FRF	DRAWING NO. 7078 E-04-1002
DRAWN BY: WRS	
CHECKED BY: AZ	SHT 215 OF 303 SHTS
CONSULTANT JOB/SHEET NO. 154390	

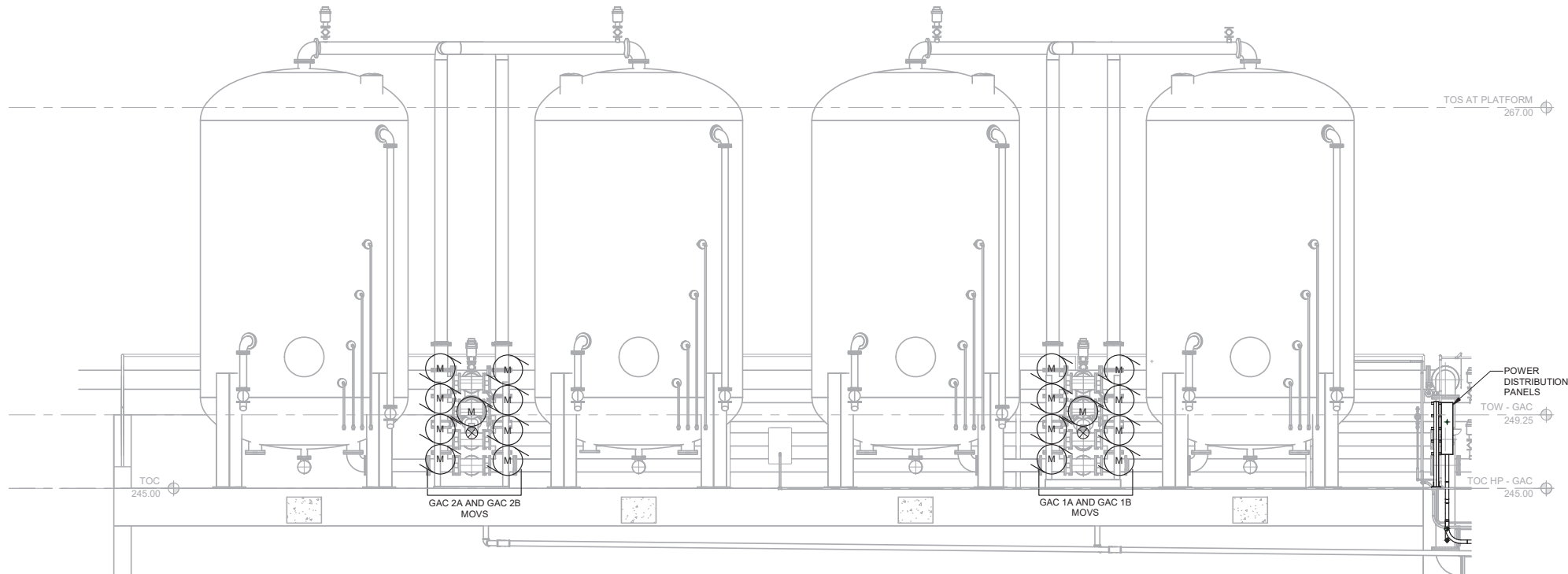
PROJECT AND SHEET TITLE

12/23/2021 6:22:38 PM
 E-04-1003
 12/23/2021 6:22:38 PM
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

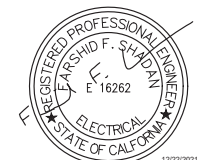


- GENERAL NOTES:**
- CONTROL AND SIGNAL CIRCUITS: DRAWING E-01-6014.
 - SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 - SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
 - CONDUITS SHOWN FOR GAC 3A, 3B, 4A AND 4B SHALL TERMINATE IN PULLBOX #16. CONDUIT SHOWN TO THESE VESSELS PAST THIS PULLBOX TO BE INSTALLED AT A FUTURE DATE.

1 GAC CONTROL AND SIGNAL PLAN
 SCALE: 3/8" = 1'-0"



2 GAC CONTROL AND SIGNAL SECTION
 E-04-1003 SCALE: 1/4" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED
REVISIONS				

REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
GAC CONTROL AND SIGNAL PLAN - 1
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-04-1003
 SH 216 OF 303 SHS

12/20/2021 8:09:10 PM

E-04-1004

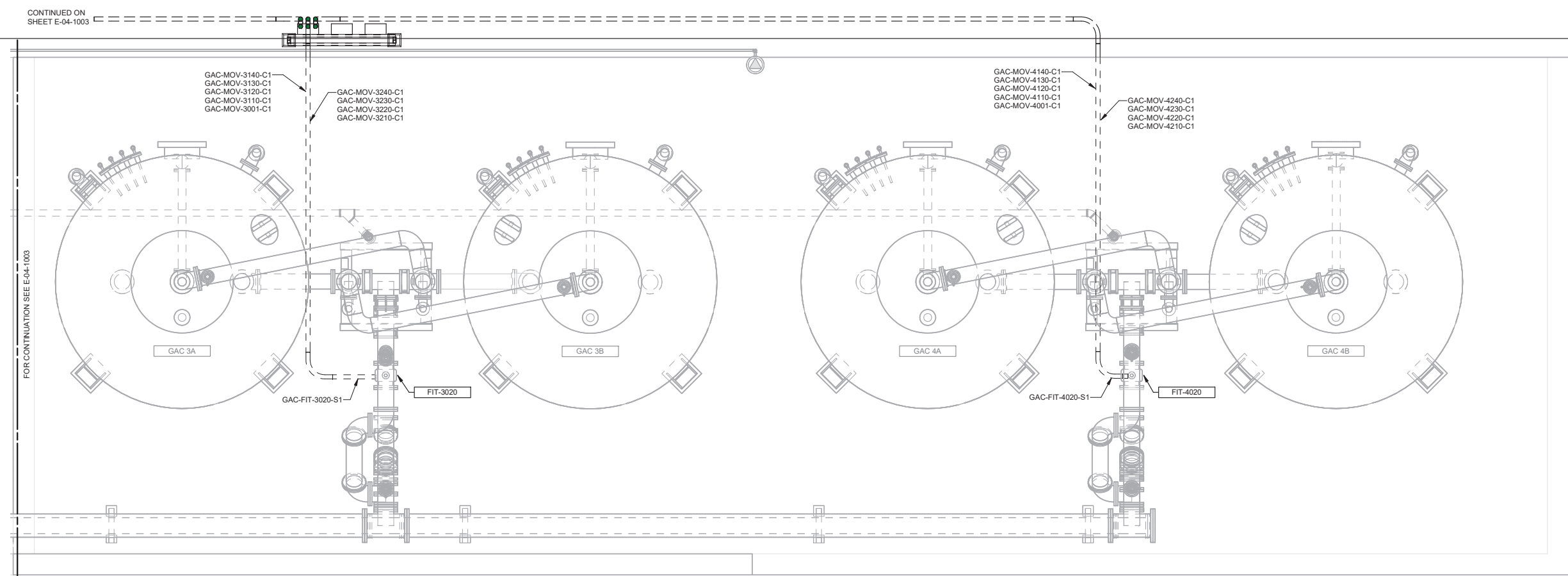
ENC. NO. 1

SHEET

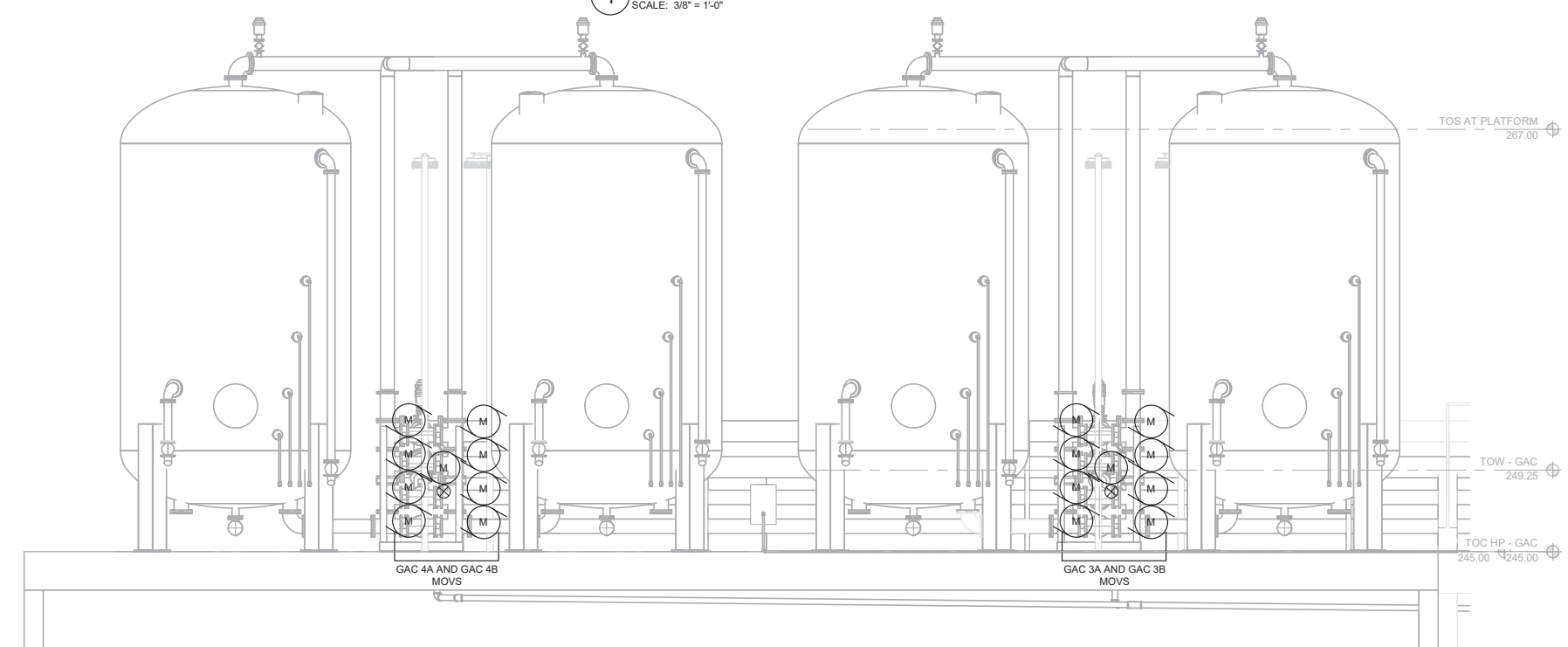


CONTINUED ON SHEET E-04-1003

2
E-04-1004

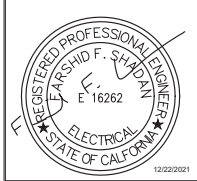


1 GAC CONTROL AND SIGNAL PLAN 2
SCALE: 3/8" = 1'-0"



2 GAC CONTROL AND SIGNAL SECTION 2
E-04-1004 SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
- CONTROL AND SIGNAL CIRCUITS: DRAWING E-01-6014.
 - SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 - SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
 - ALL EQUIPMENT SHOWN IS FUTURE, UNLESS OTHERWISE NOTED.



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____	DATE: _____, 20__	REFERENCE:
REVIEWED BY: _____	DATE: _____, 20__	DATE: _____, 20XX
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.	COMPUTER FILE NAME:
REVIEWED BY: _____	DATE: _____, 20__	SP-FILE NO.: SP2602
OMIED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE: _____, 20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
GAC CONTROL AND SIGNAL PLAN - 2

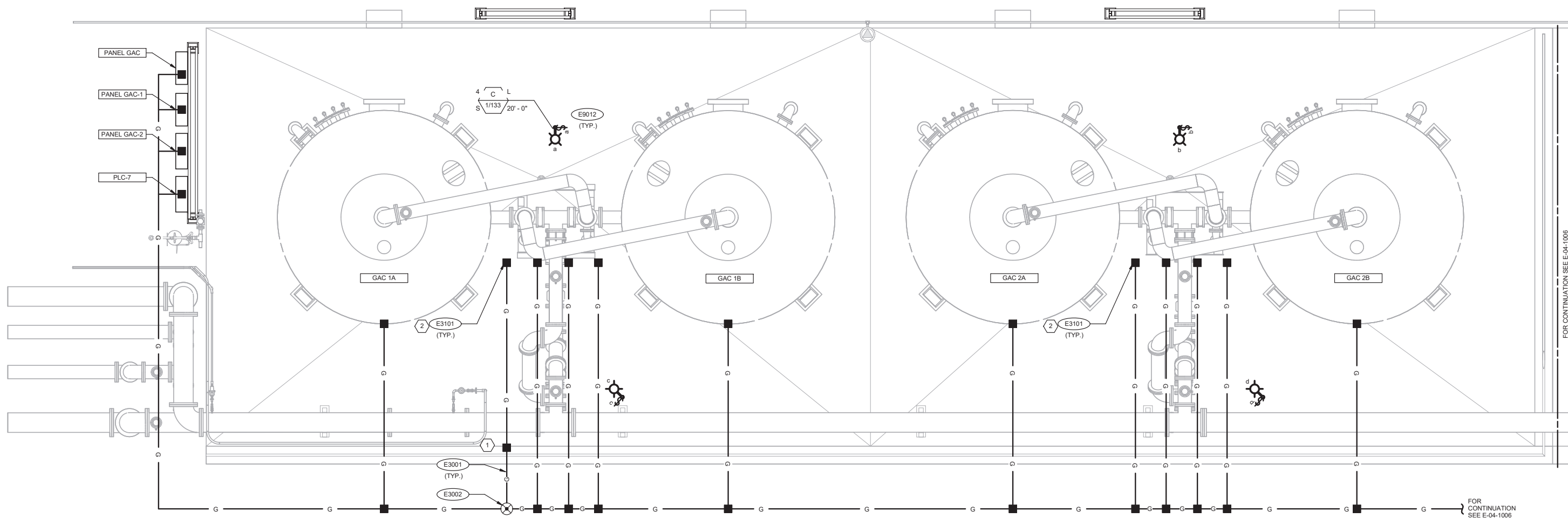
DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-04-1004
 SH 217 OF 303 SHS

BIM 360/154390 - Arcadia Water Treatment Plant Expansion/154390-E-04V19.rvt

PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION




- GENERAL NOTES:**
- LUMINAIRE SCHEDULE: DRAWING E-01-6016.
 - PANEL SCHEDULE: DRAWING E-01-6019.
- KEY NOTES:**
- BOND TO PIPING.
 - GROUND ALL MOTOR ACTUATED VALVES.



1 GAC LIGHTING, RECEPT AND GROUNDING PLAN
 SCALE: 3/8" = 1'-0"

FOR CONTINUATION SEE E-04-1006

FOR CONTINUATION SEE E-04-1006



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__ SUNNY WANG, P.E. - WATER RESOURCES MANAGER REVIEWED BY: _____ DATE: _____, 20__ OMEED POUR, P.E. - PROJECT MANAGER	REFERENCE: DATE: _____, 20__ SUBMITTED BY: _____ CURTIS CASTLE, P.E. - PRINCIPAL C.E. APPROVED BY: _____ DATE: _____, 20__ ALEX NAZARCHUK, P.E. - CITY ENGINEER	COMPUTER FILE NAME: _____ SP-FILE NO.: SP2602
--	--	--

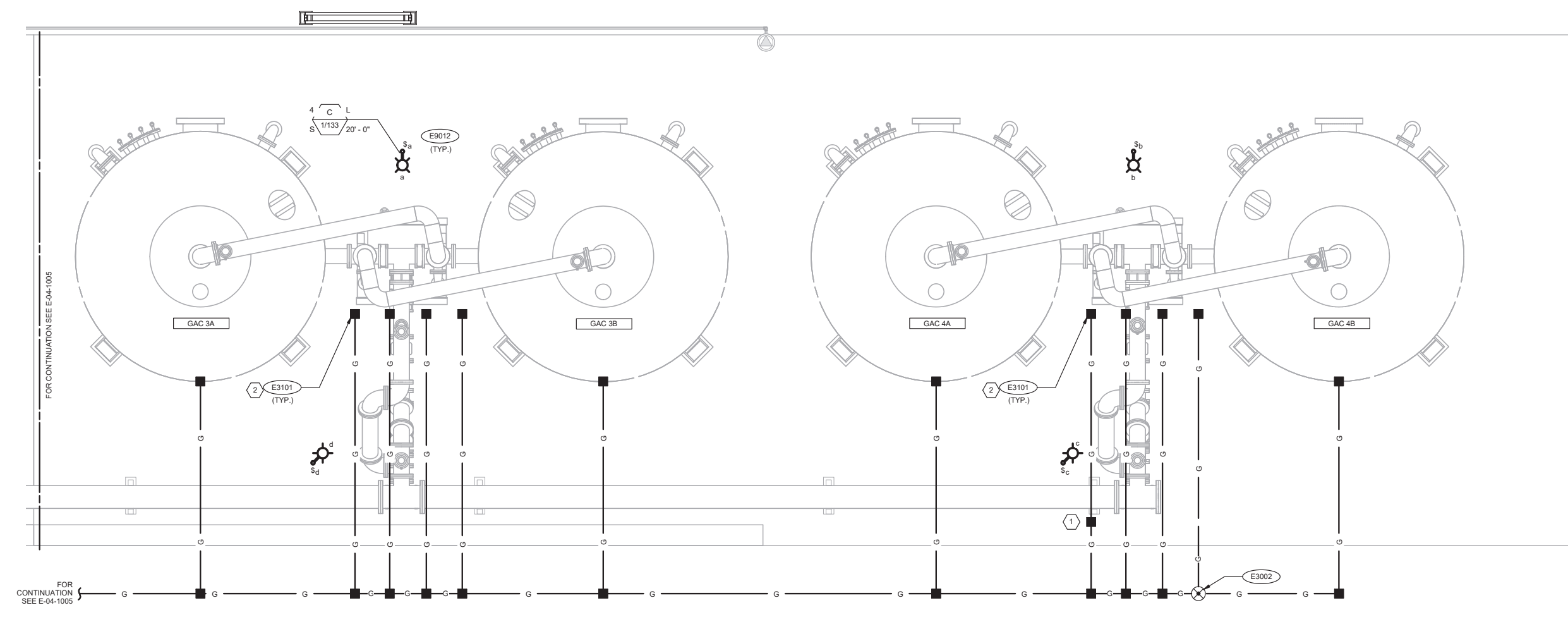
OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
**GAC LIGHTING, RECEPT AND GROUNDING
 PLAN - 1**
 PROJECT AND SHEET TITLE



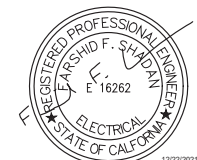
DESIGNED BY: FRF
DRAWN BY: WRS
CHECKED BY: AZ
CONSULTANT JOB/SHEET NO. 154390
DRAWING NO. 7078
E-04-1005
SHT 218 OF 303 SHS



- GENERAL NOTES:**
- LUMINAIRE SCHEDULE: DRAWING E-01-6016.
 - PANEL SCHEDULE: DRAWING E-01-6019.
 - ALL EQUIPMENT SHOWN IS FUTURE, UNLESS OTHERWISE NOTED.
- KEY NOTES:**
- BOND TO PIPING.
 - GROUND ALL MOTOR ACTUATED VALVES.



1 GAC LIGHTING, RECEPT AND GROUNDING PLAN 2
 SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



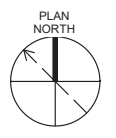
REVIEWED BY: _____ DATE: _____ 20__
 REVIEWED BY: _____ DATE: _____ 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____ 20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
**GAC LIGHTING, RECEPT AND GROUNDING
 PLAN - 2**

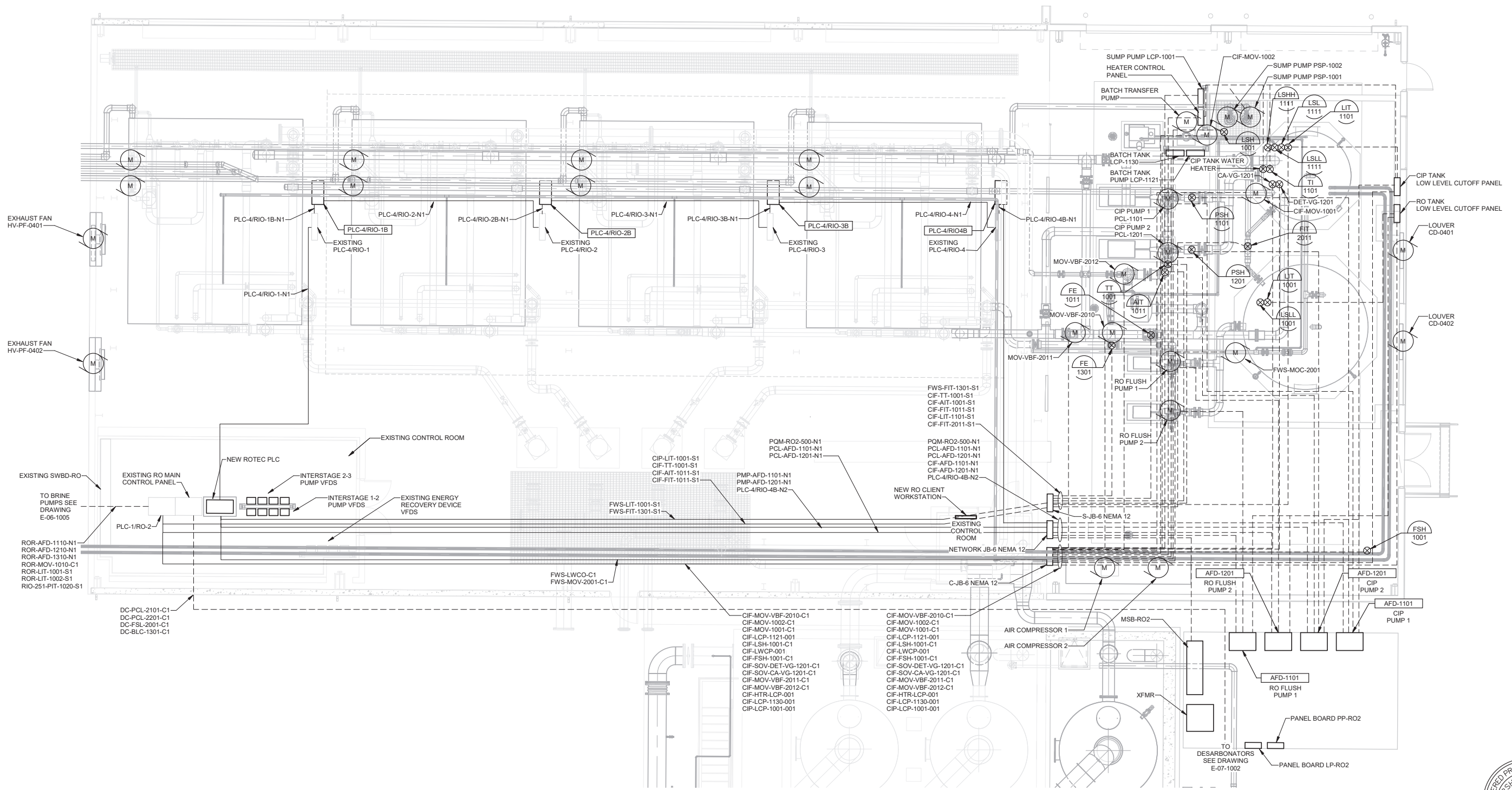
DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-04-1006
 SH 219 OF 303 SHS

12/20/2021 7:09:21 PM
 E-06-1002
 154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.mxd
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

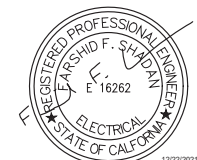


GENERAL NOTES:

- CONTROL AND SIGNAL CURCUIITS: DRAWING E-01-6013 AND E-01-6014.
- SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
- SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.



1 RO BUILDING CONTROL AND SIGNAL PLAN
 SCALE: 3/16" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY:	DATE:	20
OMED POUR, P.E. - PROJECT MANAGER		

REFERENCE:	DATE:	20XX
SUBMITTED BY:	COMPUTER FILE NAME:	
CURTIS CASTLE, P.E. - PRINCIPAL C.E.	SP-FILE NO.:	SP2602
APPROVED BY:	DATE:	20XX
ALEX NAZARCHUK, P.E. - CITY ENGINEER		

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
RO BUILDING CONTROL AND SIGNAL PLAN
 PROJECT AND SHEET TITLE

DESIGNED BY:	FRF
DRAWN BY:	WRS
CHECKED BY:	AZ
CONSULTANT JOB/SHEET NO.	154390
DRAWING NO.	E-06-1002
SHT	221 OF 303 SHTS

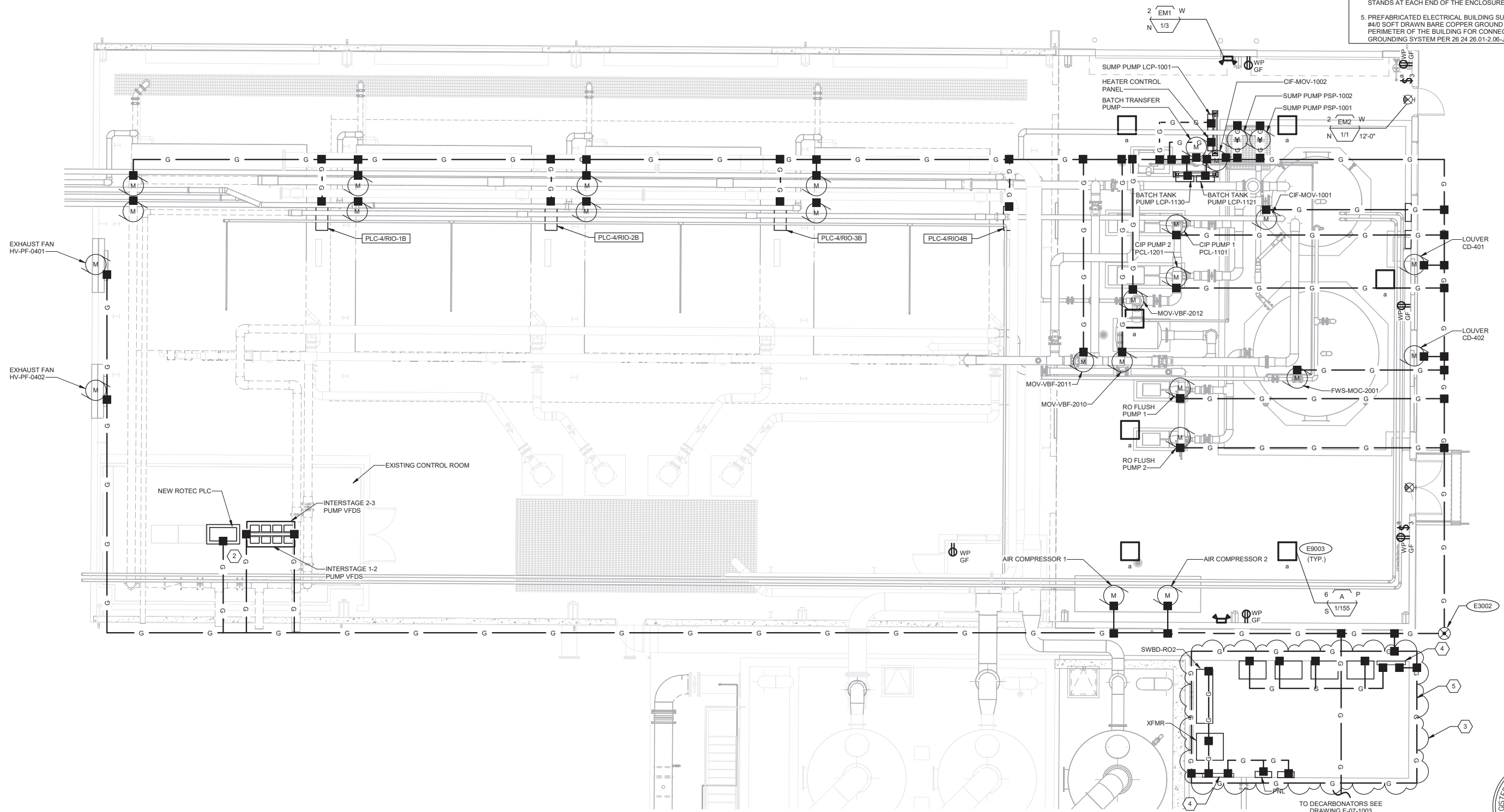


GENERAL NOTES:

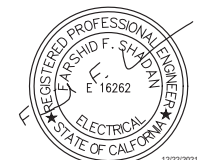
- LUMINAIRE SCHEDULE: DRAWING E-01-6016.
- FOR CIRCUITS AND CONDUCTORS REFER TO DRAWING E-01-6019.

KEY NOTES:

- MOUNT RECEPTACLE UNDERNEATH LIGHT SWITCHES AT AN ELEVATION OF 18" AFF.
- EXTEND EXISTING GROUNDING RING TO GROUND AFDS AND NEW RO MAIN CONTROL PANEL PLC-4.
- PREFABRICATED ELECTRICAL ROOM SUPPLIER SHALL PROVIDE AND INSTALL ALL CONDUIT, CONDUCTORS, LIGHTING (GENERAL, EMERGENCY, AND EXIT), RECEPTACLES, SWITCHES, AND POWER DISTRIBUTION EQUIPMENT IN ACCORDANCE WITH 26 24 26.01. SEE DRAWING E-01-6016 FOR LIGHTING FIXTURES SCHEDULE.
- PREFABRICATED ELECTRICAL BUILDING SUPPLIER SHALL PROVIDE TIN PLATED COPPER GROUNDING BUS ON INSULATED STANDS AT EACH END OF THE ENCLOSURE PER 26 24 26.01-2.06-J.
- PREFABRICATED ELECTRICAL BUILDING SUPPLIER TO PROVIDE A #4/0 SOFT DRAWN BARE COPPER GROUND AROUND THE PERIMETER OF THE BUILDING FOR CONNECTION TO THE PLANT GROUNDING SYSTEM PER 26 24 26.01-2.06-J.



1 RO BUILDING LIGHTING, RECEPT AND GROUNDING PLAN
 SCALE: 3/16" = 1'-0"




City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: ____/____/20__
 REVIEWED BY: _____ DATE: ____/____/20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: ____/____/20__
 OMVED POUR, P.E. - PROJECT MANAGER

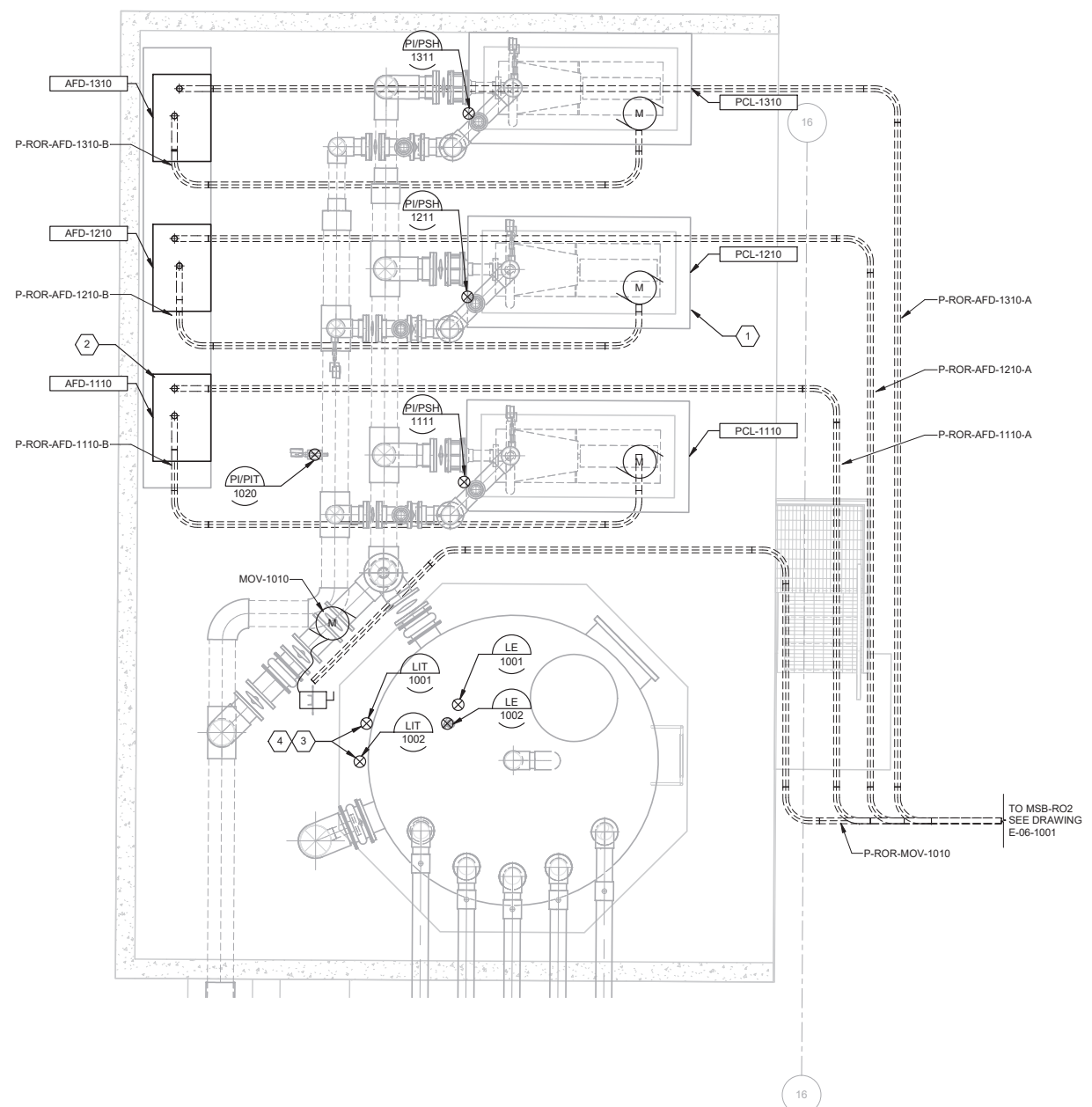
REFERENCE:
 DATE: ____/____/20__ COMPUTER FILE NAME: _____
 SUBMITTED BY: _____ SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: ____/____/20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
**RO BUILDING LIGHTING, RECEPT AND
 GROUNDING PLAN**
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-06-1003
 SH 222 OF 303 SH15

12/20/2021 7:09:27 PM
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.rvt
 TITLE OF PROJECT : OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

SHEET
 E-06-1004



1 BRINE PUMP POWER PLAN
 SCALE: 3/8" = 1'-0"

- GENERAL NOTES:**
- CURCITS: DRAWING E-01-6003.
 - SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 - SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
- KEY NOTES:**
- MOTOR NOISE ENCLOSURE, TYPICAL.
 - REFER TO DETAIL E, F, G ON DRAWING E-01-6014.
 - LEVEL TRANSMITTER LE/LIT 120V POWER FROM PANEL LP-RO2. SEE DRAWING E-01-6019.
 - FIELD ROUTE CONDUITS ON TANK FOR LEVEL ELEMENTS TO LEVEL TRANSMITTERS.

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

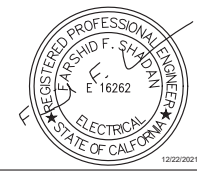
NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : _____ 20__
 REVIEWED BY : _____ DATE : _____ 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY : _____ DATE : _____ 20__
 OMIED POUR, P.E. - PROJECT MANAGER

REFERENCE : _____
 DATE : _____, 20__
 SUBMITTED BY : _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO. : SP2602
 APPROVED BY : _____ DATE : _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
BRINE PUMP STATION POWER PLAN
 PROJECT AND SHEET TITLE



DESIGNED BY : FRF
 DRAWN BY : WRS
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-06-1004
 SH 223 OF 303 SH15

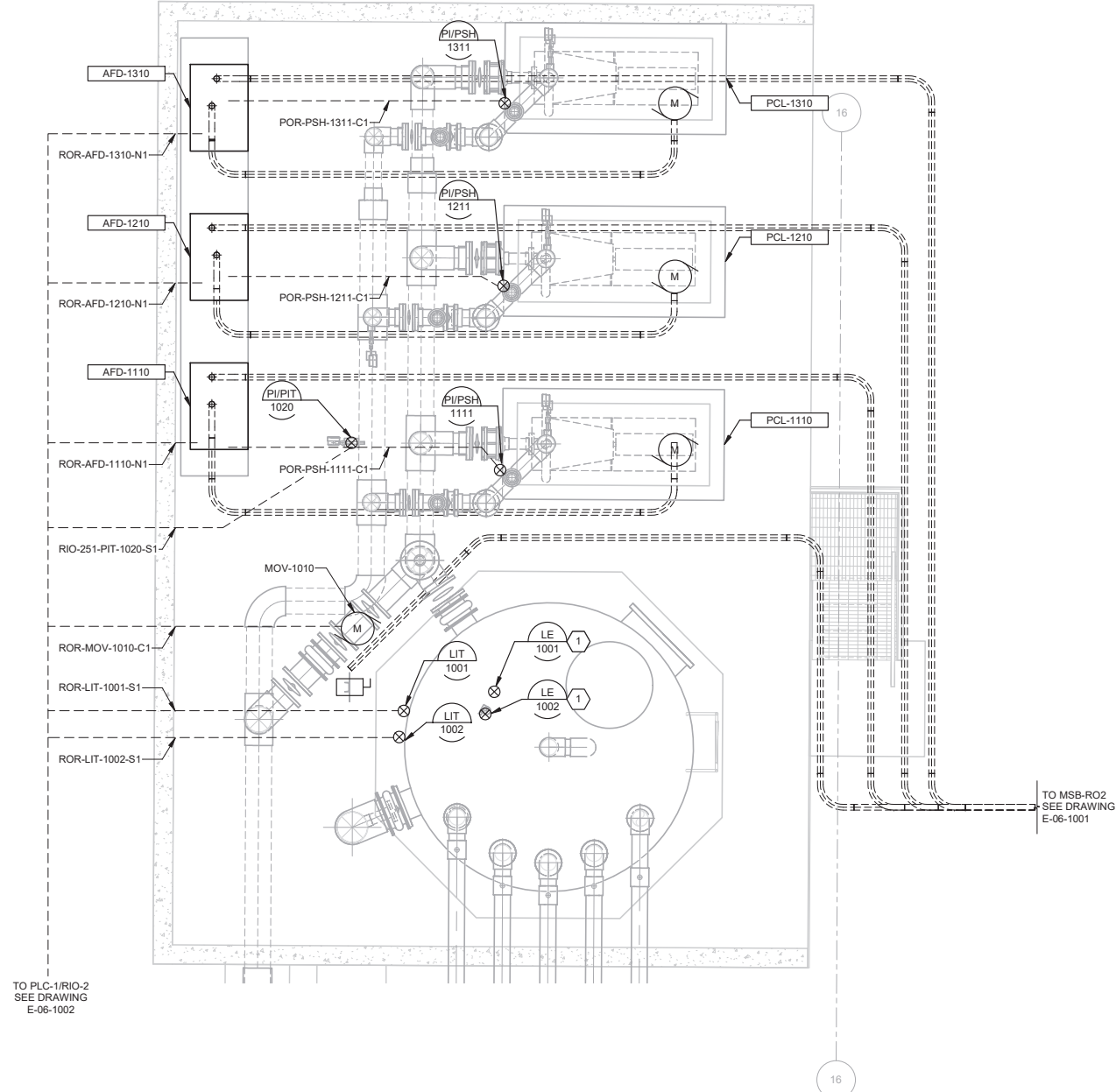
12/20/2021 7:09:29 PM

DRG. NO. : E-06-1005

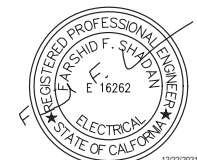
FILE OF PRODUCT : OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION



- GENERAL NOTES:**
1. CONTROL AND SIGNAL CURCUICTS: DRAWING E-01-6010 AND E-01-6014.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
- KEY NOTES:**
1. FIELD ROUTE CONDUITS ON TANK FOR LEVEL ELEMENTS TO LEVEL TRANSMITTERS.



1 BRINE PUMP CONTROL AND SIGNAL PLAN
SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : _____, 20XX
 REVIEWED BY : _____ DATE : _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY : _____ DATE : _____, 20XX
 OMIED POUR, P.E. - PROJECT MANAGER

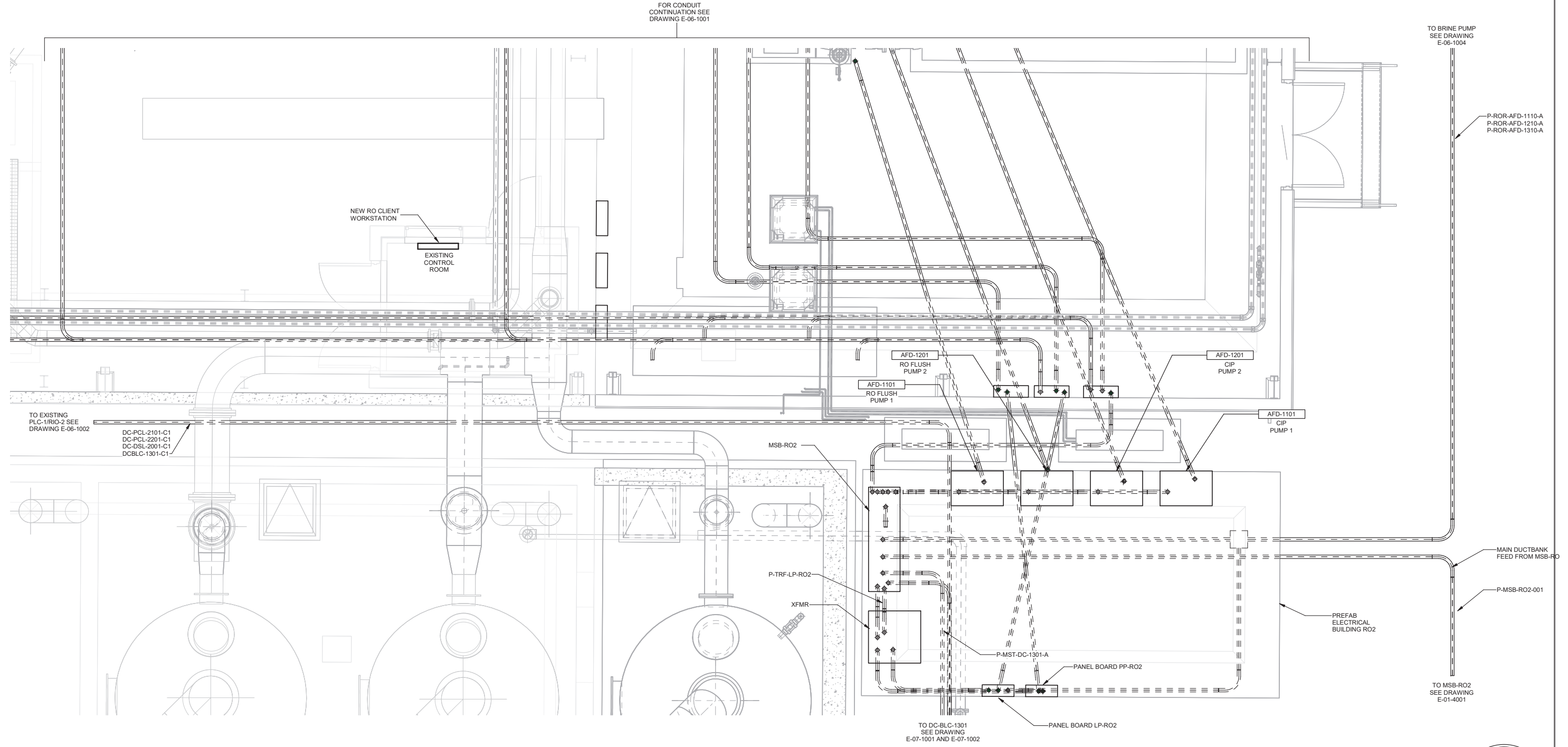
REFERENCE : _____
 DATE : _____, 20XX
 SUBMITTED BY : _____
 SP-FILE NO. : SP2602
 APPROVED BY : _____ DATE : _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
BRINE PUMP STATION CONTROL AND SIGNAL PLAN
 PROJECT AND SHEET TITLE

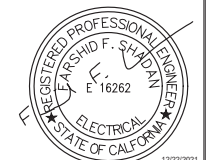
DESIGNED BY : FRF
 DRAWN BY : WRS
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-06-1005
 SHEET 224 OF 303 SHEETS

12/20/2021 7:09:34 PM
 E-06-4001
 154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.dwg
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

- GENERAL NOTES:**
1. CIRCUITS: DRAWING E-01-6003, E-01-6010, E-011-6013 AND E-01-6014.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.



1 EXISTING RO ENLARGED PLAN - 1
 E-06-1001 SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__
 REVIEWED BY: _____ DATE: _____, 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20__
 OMIED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20__ COMPUTER FILE NAME:
 SUBMITTED BY: _____ SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

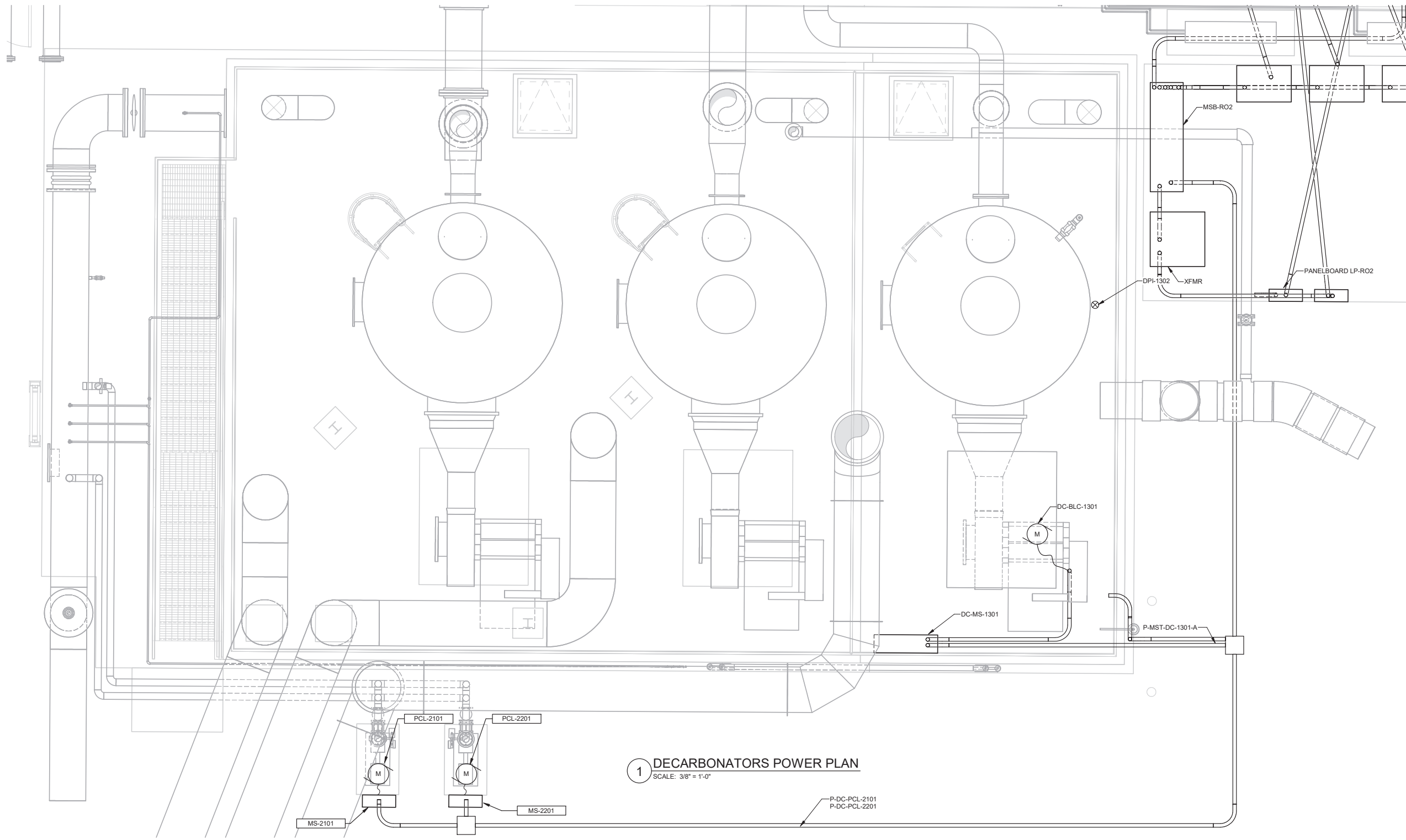
OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
 EXISTING RO ENLARGED PLAN - 1
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-06-4001
 SH 226 OF 303 SH15

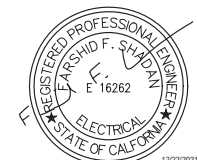
12/23/2021 3:15:37 PM
 E-07-1001
 12/23/2021 3:15:37 PM
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.rvt
 TITLE OF PROJECT : OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

GENERAL NOTES:

1. CURCUIITS: DRAWING E-01-6003.
2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.



1 DECARBONATORS POWER PLAN
 SCALE: 3/8" = 1'-0"




City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__
 REVIEWED BY: _____ DATE: _____, 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20__
 OMIED POUR, P.E. - PROJECT MANAGER

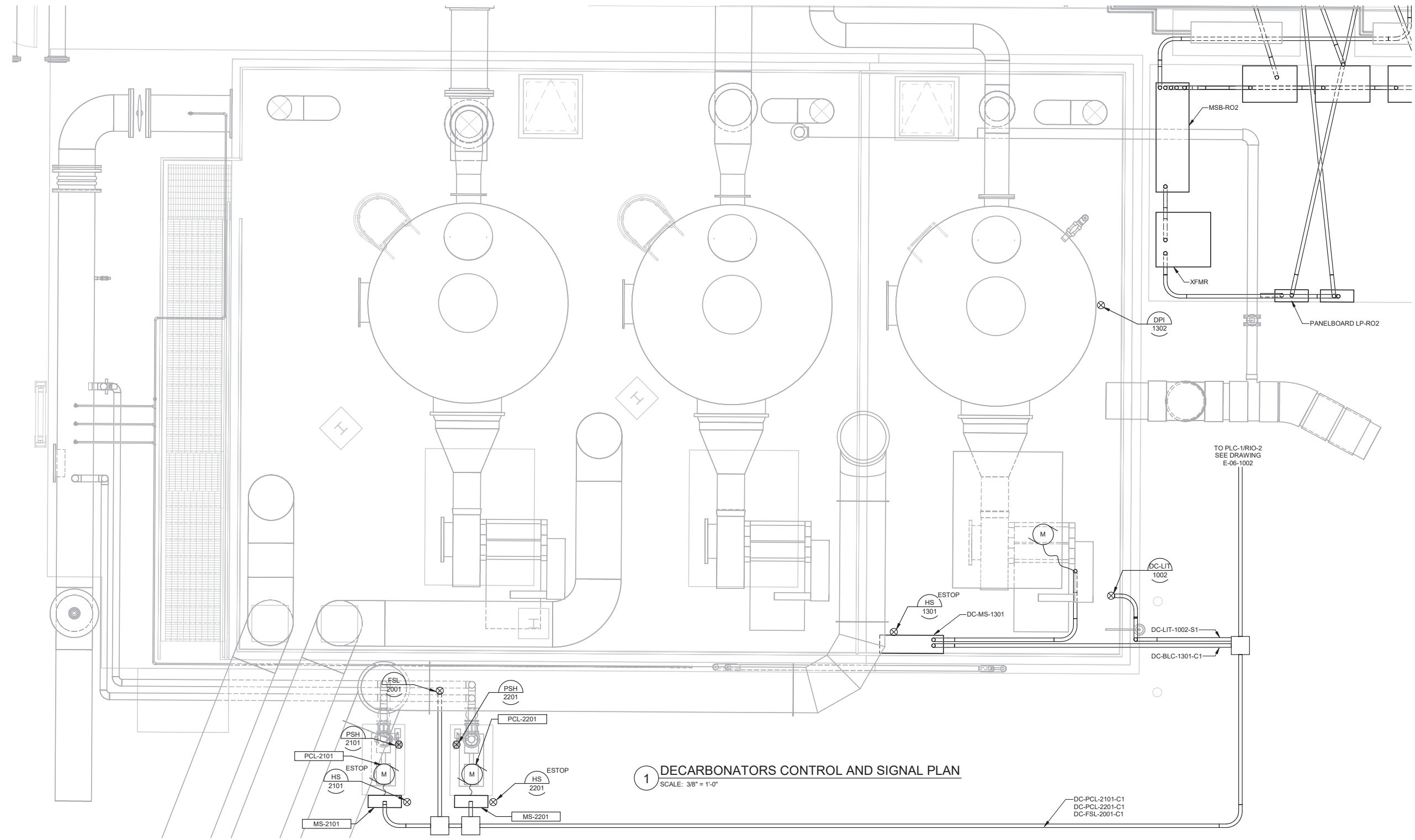
REFERENCE : _____
 DATE: _____, 20__
 SUBMITTED BY: _____
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
DECARBONATORS POWER PLAN
 PROJECT AND SHEET TITLE

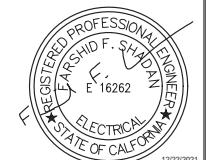
DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-07-1001
 SH 227 OF 303 SHS

12/23/2021 3:15:40 PM
 E-07-1002
 12/23/2021 3:15:40 PM
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.rvt
 TITLE OF PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

- GENERAL NOTES:**
1. CONTROL AND SIGNAL CURCUIITS: DRAWING E-01-6010 AND E-01-6014.
 2. SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
 3. SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.
 4. VERIFY LOCATION OF NH2CL-AIT-1003, REFER TO DRAWING PIA00721.



1 DECARBONATORS CONTROL AND SIGNAL PLAN
 SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__
 REVIEWED BY: _____ DATE: _____, 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE: _____ DATE: _____, 20__
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB SHEET NO. 154390
E-07-1002
 SHEET 228 OF 303 SHEETS

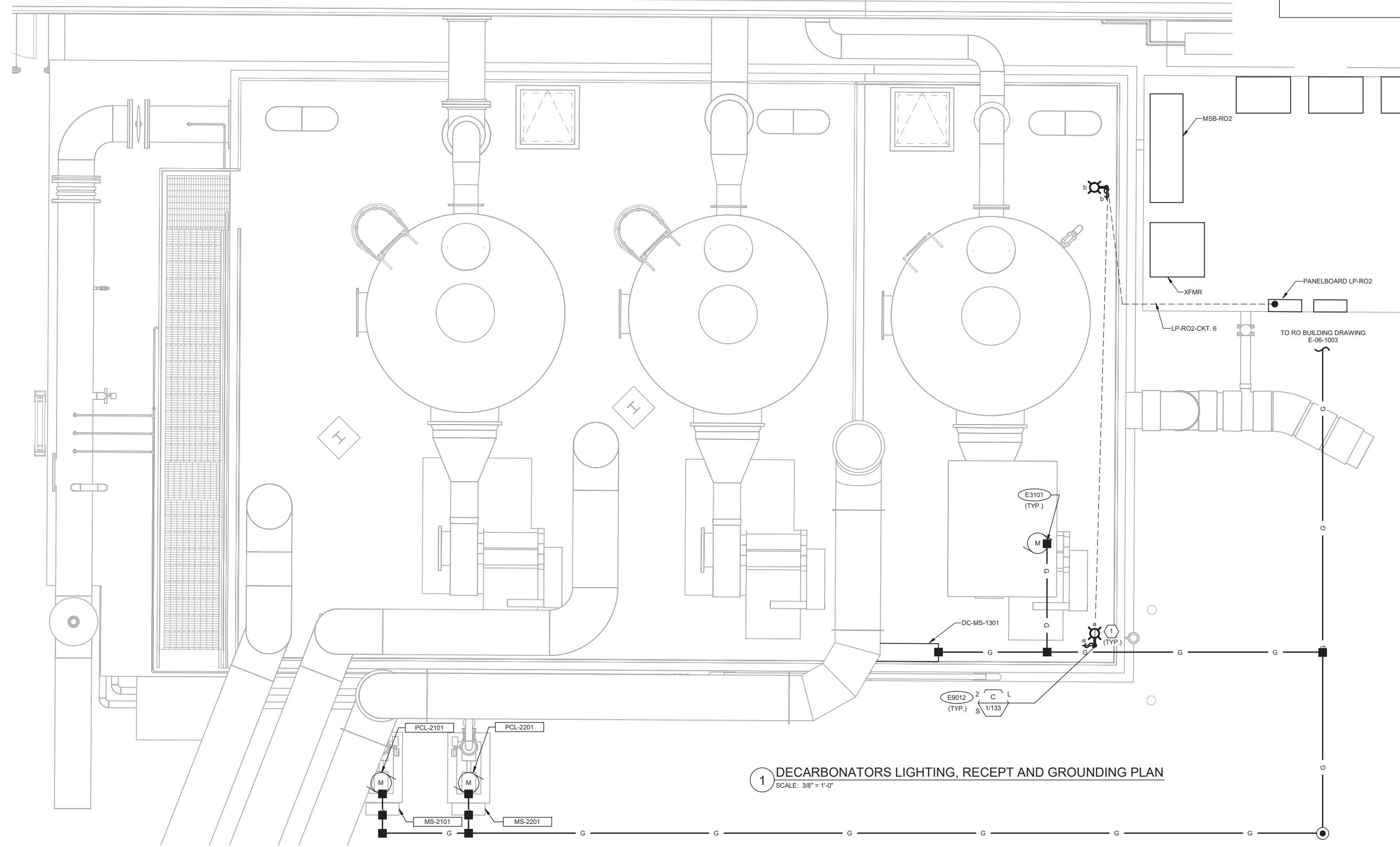
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
DECARBONATORS CONTROL AND SIGNAL PLAN
 PROJECT AND SHEET TITLE

BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-06V19.dwg
 TITLE OF PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
 12/23/2021 3:15:43 PM
 SHEET NO.: E-07-1003

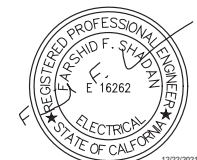


GENERAL NOTES:
 1. LUMINAIRE SCHEDULE: DRAWING E-01-6016.
 2. PANELBOARD SCHEDULE: DRAWING E-01-6029.

KEY NOTES:
 1. MATCH HEIGHT OF EXISTING POLE LIGHT FIXTURES.



1 DECARBONATORS LIGHTING, RECEPT AND GROUNDING PLAN
 SCALE: 3/8" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20__
 REVIEWED BY: _____ DATE: _____, 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20__
 OMIED POUR, P.E. - PROJECT MANAGER

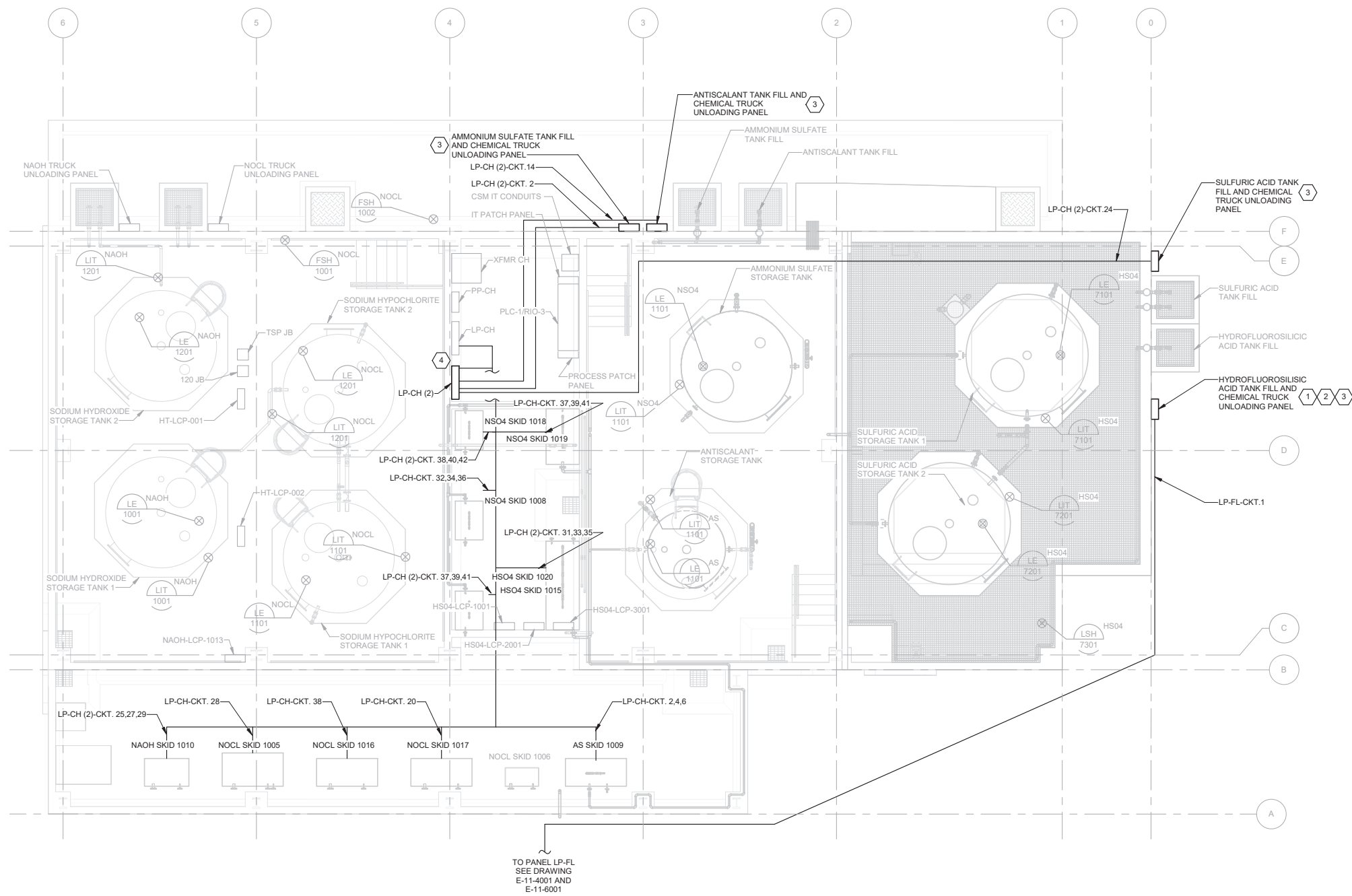
REFERENCE:
 DATE: _____, 20__ COMPUTER FILE NAME:
 SUBMITTED BY: _____ SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20__
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
**DECARBONATORS LIGHTING, RECEPT AND
 GROUNDING PLAN**
 PROJECT AND SHEET TITLE

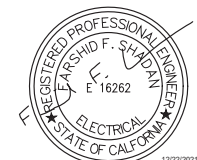
DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO.: 7078
E-07-1003
 SHEET 229 OF 303 SHEETS



- GENERAL NOTES:**
- SEE DRAWING E-11-6001 FOR LP-FL PANELBOARD SCHEDULE.
- KEY NOTES:**
- HF CHEMICAL TRUCK UNLOADING PANEL IS PROVIDED 120V POWER FROM EXISTING PANELBOARD LP-FL LOCATED IN THE EXISTING FLUORIDE BUILDING. SEE DRAWINGS E-11-4001 AND E-11-6001.
 - HF CHEMICAL TRUCK UNLOADING PANEL PROVIDES 120V POWER TO LE/LIT-1001 LOCATED ON THE HYDROFLUOROSILICIC ACID TANK, TNK-11101. SEE DRAWING E-11-4001 FOR TRANSMITTER LOCATION.
 - SEE DETAIL B ON DRAWING E-01-6014 FOR CHEMICAL TRUCK UNLOADING PANEL CONTROL SINGLE LINE DIAGRAM.
 - SEE DRAWING E-01-6019 FOR LP-CH AND LP-CH (2) PANELBOARD SCHEDULES.



1 CHEMICAL FACILITY OVERALL PLAN
 SCALE: 3/16" = 1'-0"



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY:	DATE:	20
REVIEWED BY:	DATE:	20
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
REVIEWED BY:	DATE:	20
OMED POUR, P.E. - PROJECT MANAGER		

REFERENCE:	DATE:	20XX	COMPUTER FILE NAME:
SUBMITTED BY:			SP-FILE NO.: SP2602
APPROVED BY:	DATE:	20XX	
ALEX NAZARCHUK, P.E. - CITY ENGINEER			

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
CHEMICAL STORAGE AREA POWER PLAN

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-08-1004
 SHEET 230 OF 303 SHEETS

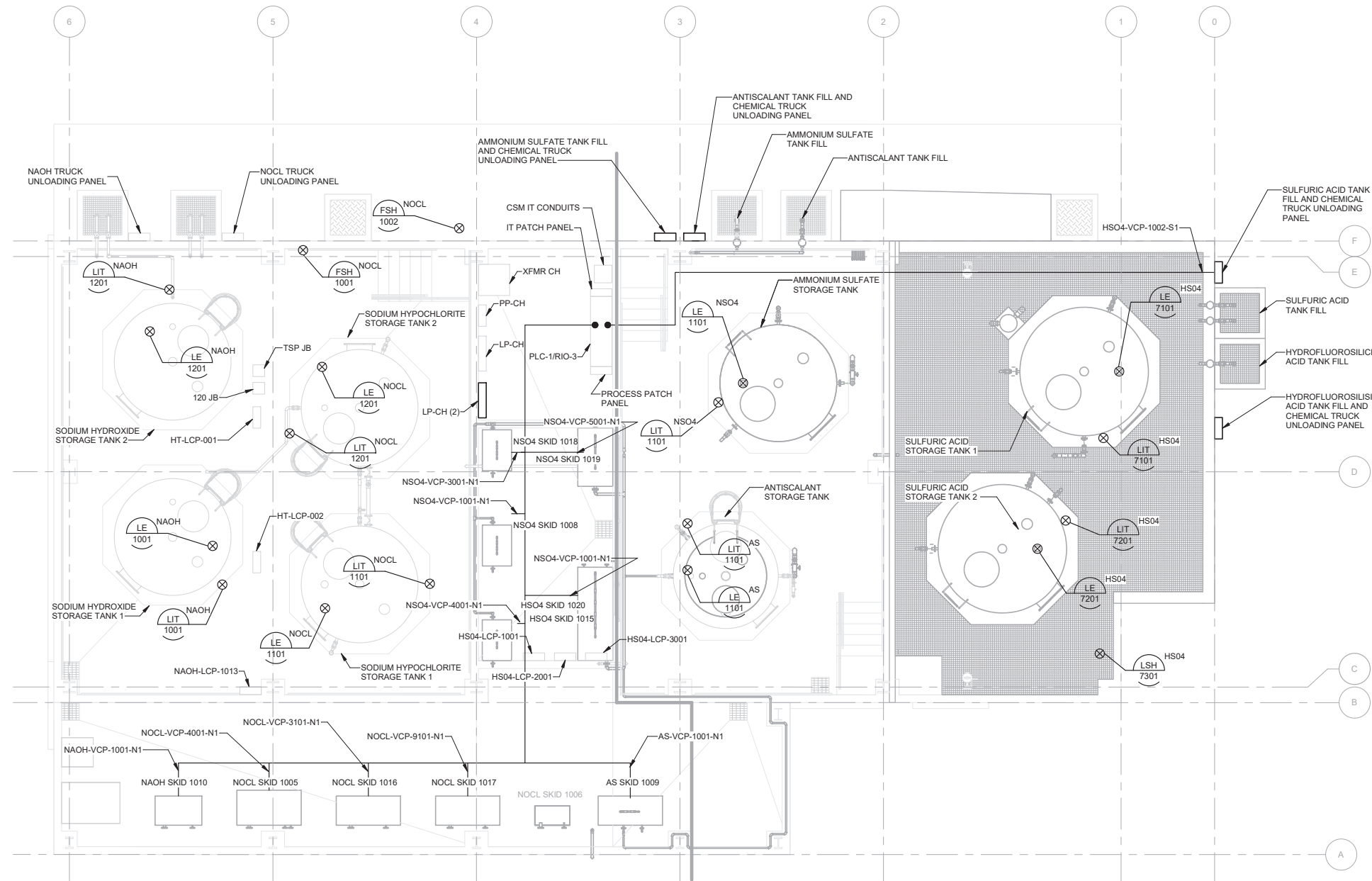
DESIGNED BY:	FRF
DRAWN BY:	WRS
CHECKED BY:	AZ
CONSULTANT JOB/SHEET NO.:	154390
DRAWING NO.:	7078
DRAWING NO.:	E-08-1004
SHEET NO.:	230 OF 303 SHEETS

12/20/2021 7:18:46 PM
 E-08-1005
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-08V19.rvt
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

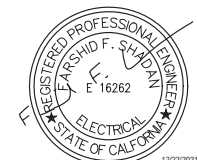


GENERAL NOTES:

- CONTROL AND SIGNAL CIRCUITS: DRAWING E-01-6011.
- SUBMIT CONDUIT LAYOUT PER SPECIFICATION 26 05 00.
- SUMMARY OF WORK SPECIFICATIONS 01 11 00 AND 26 05 00.



1 CHEMICAL FACILITY CONTROL AND SIGNAL PLAN
 SCALE: 3/16" = 1'-0"




City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____ 20____
 REVIEWED BY: _____ DATE: _____ 20____
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____ 20____
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 COMPUTER FILE NAME: _____
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

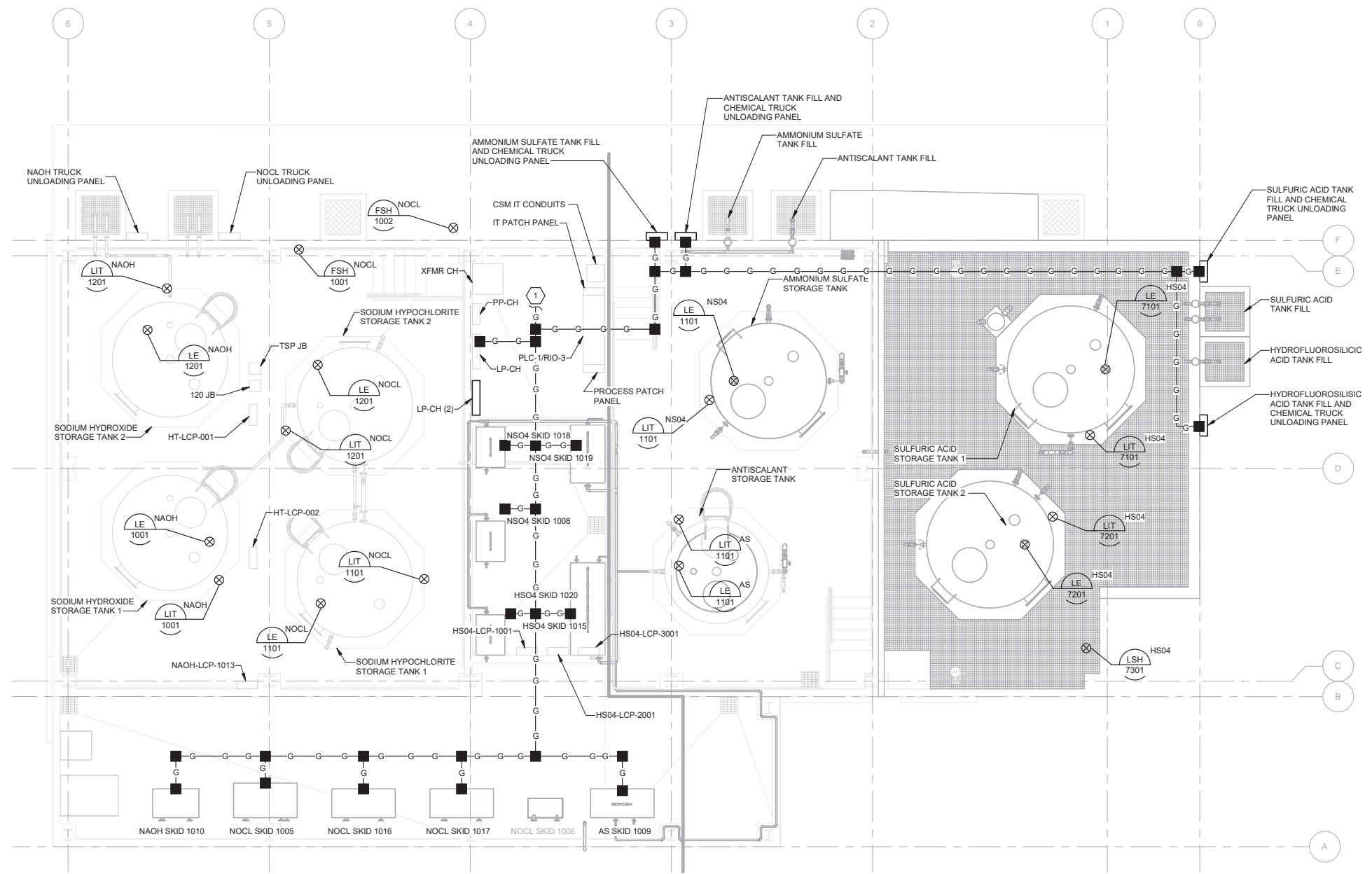
OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
CHEMICAL STORAGE AREA CONTROL AND SIGNAL PLAN
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-08-1005
 SH 231 OF 303 SHS

12/20/2021 7:18:48 PM
 E-08-1006
 12/20/2021 7:18:48 PM
 BIM_360/154390 - Arcadia Water Treatment Plant Expansion/154390-E-08V19.rvt
 OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION



KEY NOTES:
 1. CONNECT TO EXISTING GROUND SYSTEM.



1 CHEMICAL FACILITY LIGHTING, RECEPT AND GROUNDING PLAN
 SCALE: 3/16" = 1'-0"


City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 COMPUTER FILE NAME: _____
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
CHEMICAL STORAGE AREA LIGHTING, RECEPT AND GROUNDING PLAN
 PROJECT AND SHEET TITLE

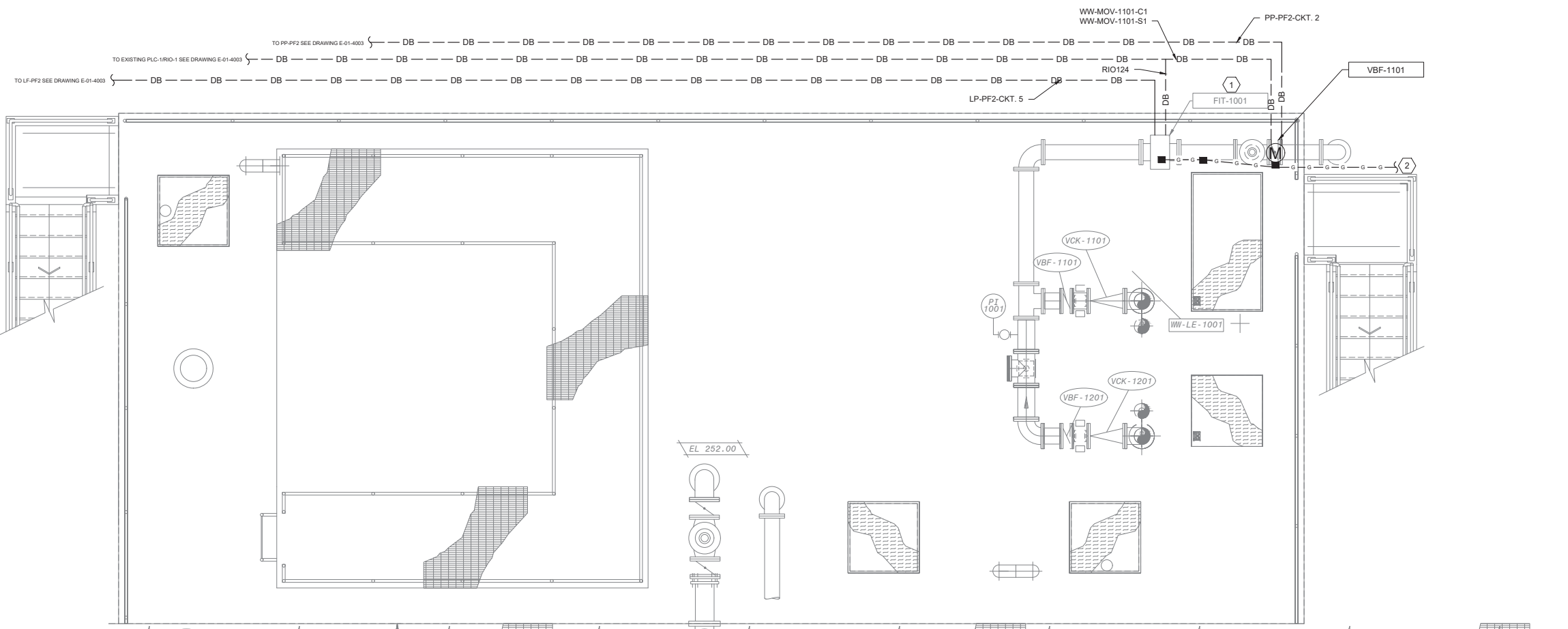


DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-08-1006
 SHY 232 OF 303 SHYS



KEY NOTES:

- 1. REPURPOSED 8" FLOW METER. SEE DWG Z-09-1001 FOR CURRENT LOCATION OF THE METER
- 2. CONNECT TO EXISTING GROUNDING SYSTEM.



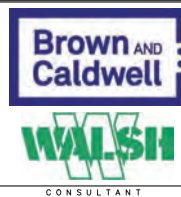
OPERATING LEVEL PLAN - EL 252.00
SCALE: 3/8" = 1'-0"

C:\BCP\W\0408745E-09-1001-EQUALIZATION TANK POWER AND CONTROL PLAN.DWG 12/23/2021 4:42 PM



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY : _____ DATE : _____ 20__
 REVIEWED BY : _____ DATE : _____ 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 REVIEWED BY : _____ DATE : _____ 20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE :
 DATE : _____, 20XX
 SUBMITTED BY : _____
 COMPUTER FILE NAME : _____
 SP-FILE NO. : SP2602
 APPROVED BY : _____ DATE : _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
**EQUALIZATION TANK
 POWER AND CONTROL PLAN**



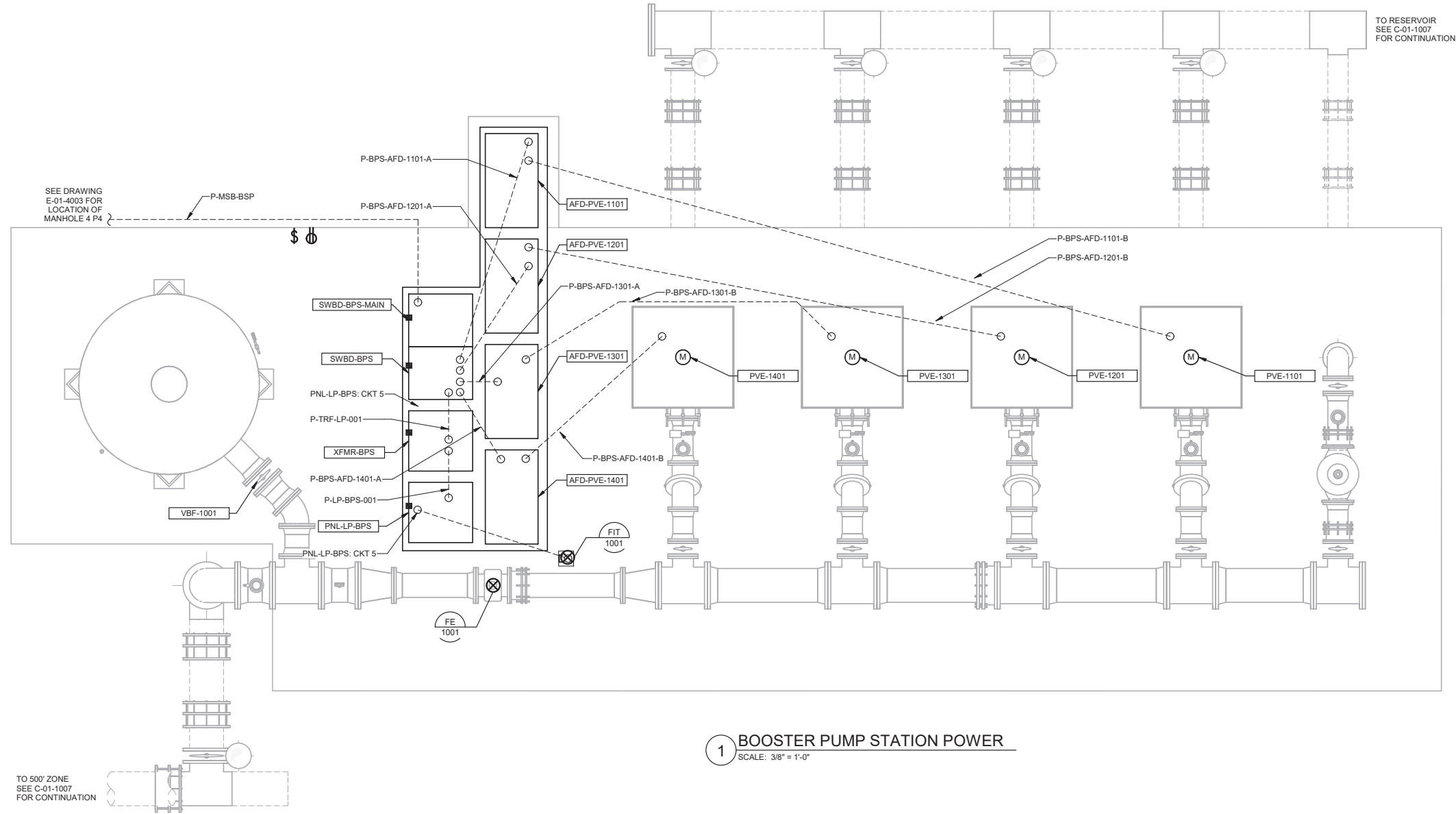
DESIGNED BY : _____
 DRAWN BY : _____
 CHECKED BY : _____
 CONSULTANT JOB SHEET NO. _____
 DRAWING NO. 7078
E-09-1001
 SH 233 OF 303 SH15

12/23/2021 6:10:25 PM

BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-10V19.rvt
TITLE OF PROJECT: OLYMPIC FIELD WELL RESTORATION AND ARCADIA WTP EXPANSION

SHEET
E-10-1001

FIG. NO. 1



1 BOOSTER PUMP STATION POWER
SCALE: 3/8" = 1'-0"



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER
 CITY CLIENTS

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

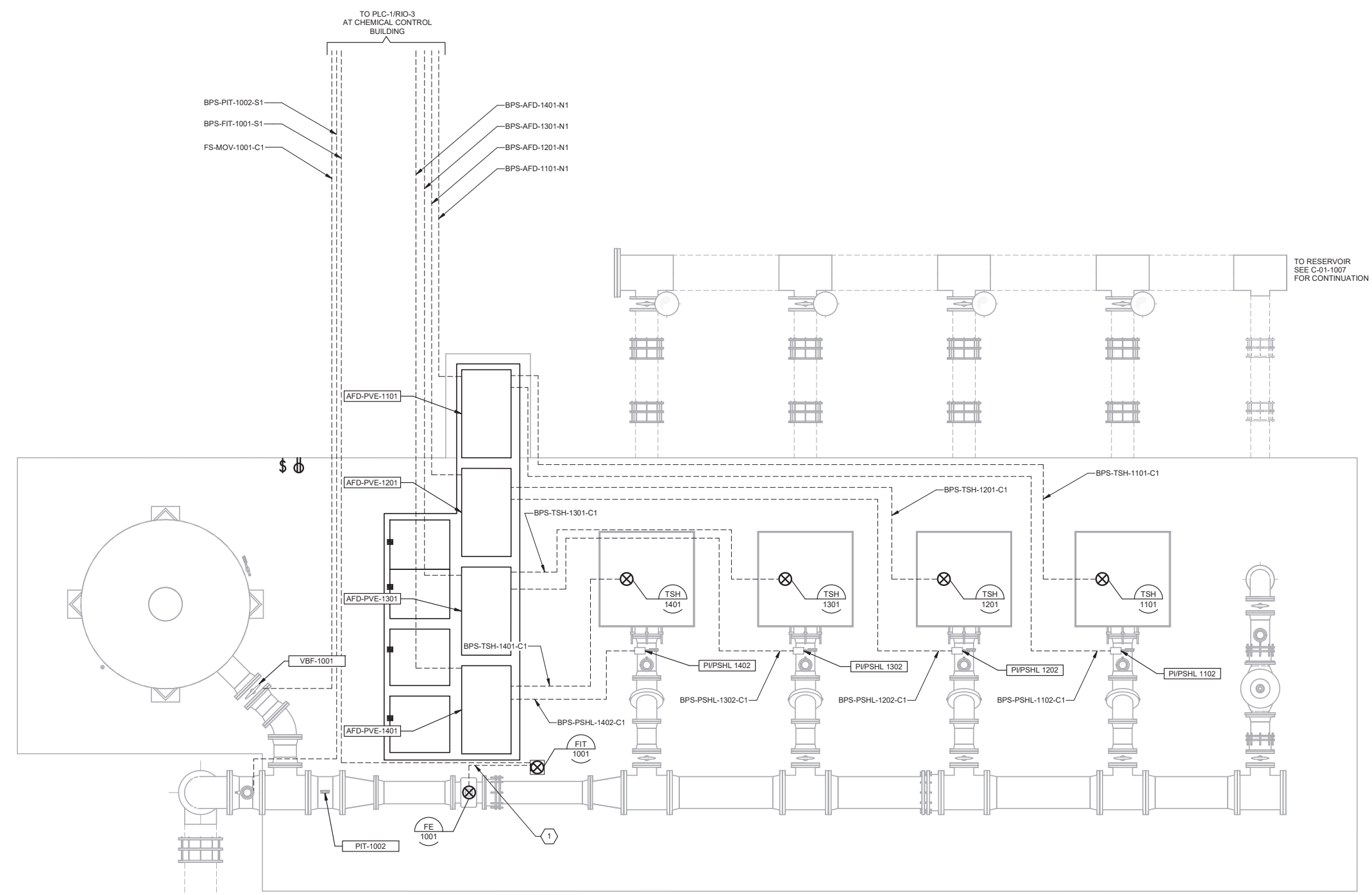
OLYMPIC FIELD WELL RESTORATION
 AND ARCADIA WTP EXPANSION
BOOSTER PUMP STATION POWER PLAN
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-10-1001
 SHY 234 OF 303 SHY

12/23/2021 6:10:26 PM
 E-10-1002
 12/23/2021 6:10:26 PM
 BIM_360/154390 - Arcadia Water Treatment Plant Expansion/154390-E-10V19.rvt
 OLYMPIC FIELD WELL RESTORATION AND ARCADIA WTP EXPANSION



KEY NOTES:
 1. PROVIDE 3/4" CONDUIT FOR MANUFACTURE CABLE FROM FLOW ELEMENT TO FLOW TRANSMITTER.



1 BOOSTER PUMP STATION CONTROL AND SIGNAL
 SCALE: 3/8" = 1'-0"

TO 500' ZONE
 SEE C-01-1007
 FOR CONTINUATION

City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

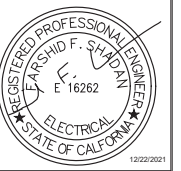
NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____, 20XX
 REVIEWED BY: _____ DATE: _____, 20XX
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____, 20XX
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC FIELD WELL RESTORATION
 AND ARCADIA WTP EXPANSION
**BOOSTER PUMP STATION CONTROL AND
 SIGNAL PLAN**
 PROJECT AND SHEET TITLE

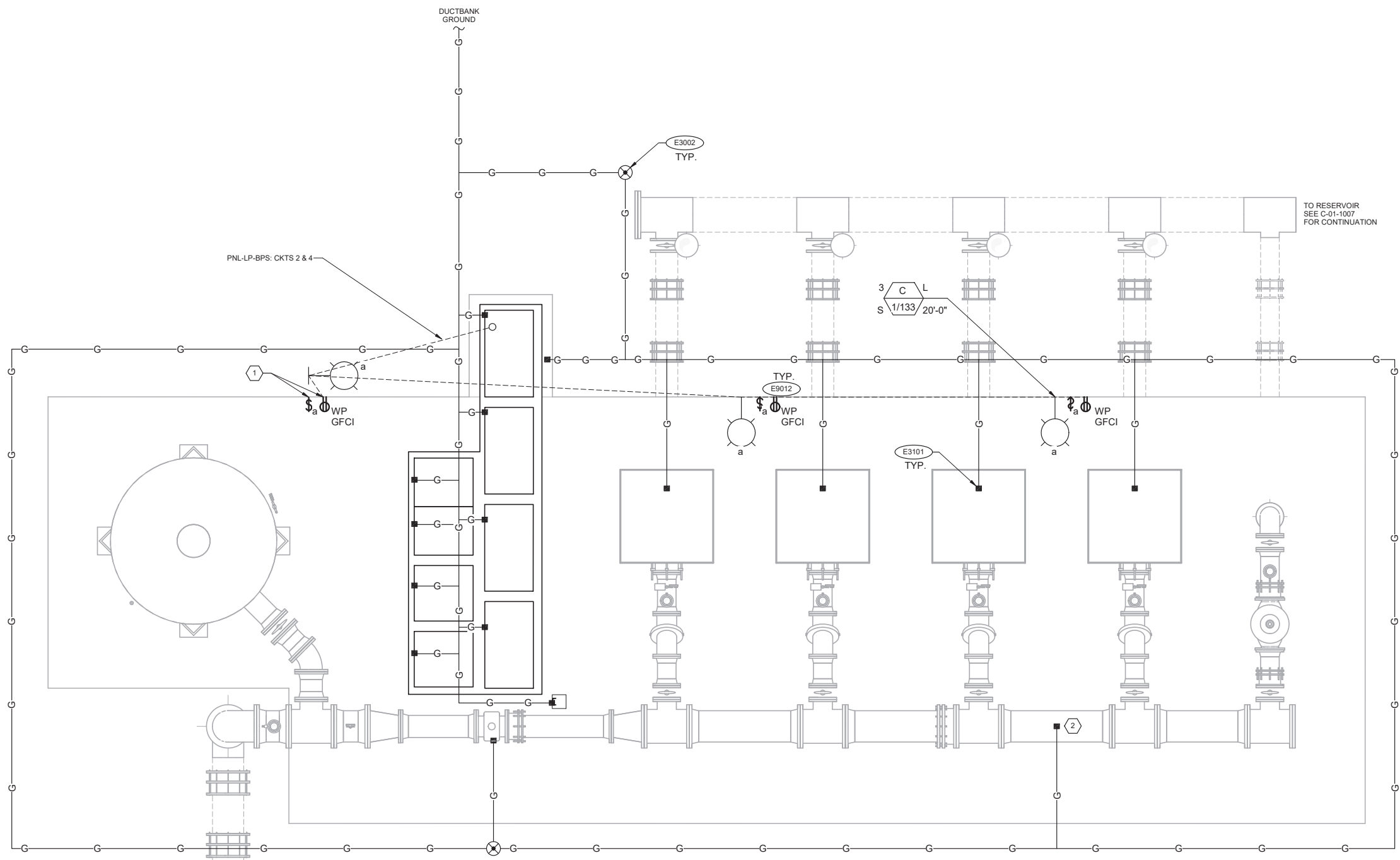


DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-10-1002
 SHY 235 OF 303 SHS

12/23/2021 6:10:26 PM
 E-10-1003
 BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-10V19.rvt
 OLYMPIC FIELD WELL RESTORATION AND ARCADIA WTP EXPANSION

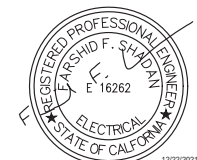


- GENERAL NOTES:**
- FOR LUMINAIRE SCHEDULE SEE DRAWING E-01-6016.
 - FOR PANEL SCHEDULES THAT FEED LIGHTING AND RECEPTACLE LOADS SEE DRAWING E-10-6001.
- KEY NOTES:**
- LIGHTING POLE TO CONTAIN LIGHTPOLE SWITCH AND RECEPTACLE. TYPICAL.
 - BOND TO PIPING



1 BOOSTER PUMP STATION LIGHTING PLAN
 SCALE: 3/8" = 1'-0"

TO 500' ZONE
 SEE C-01-1007
 FOR CONTINUATION



City of Santa Monica
PUBLIC WORKS DEPARTMENT
 1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
 TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED



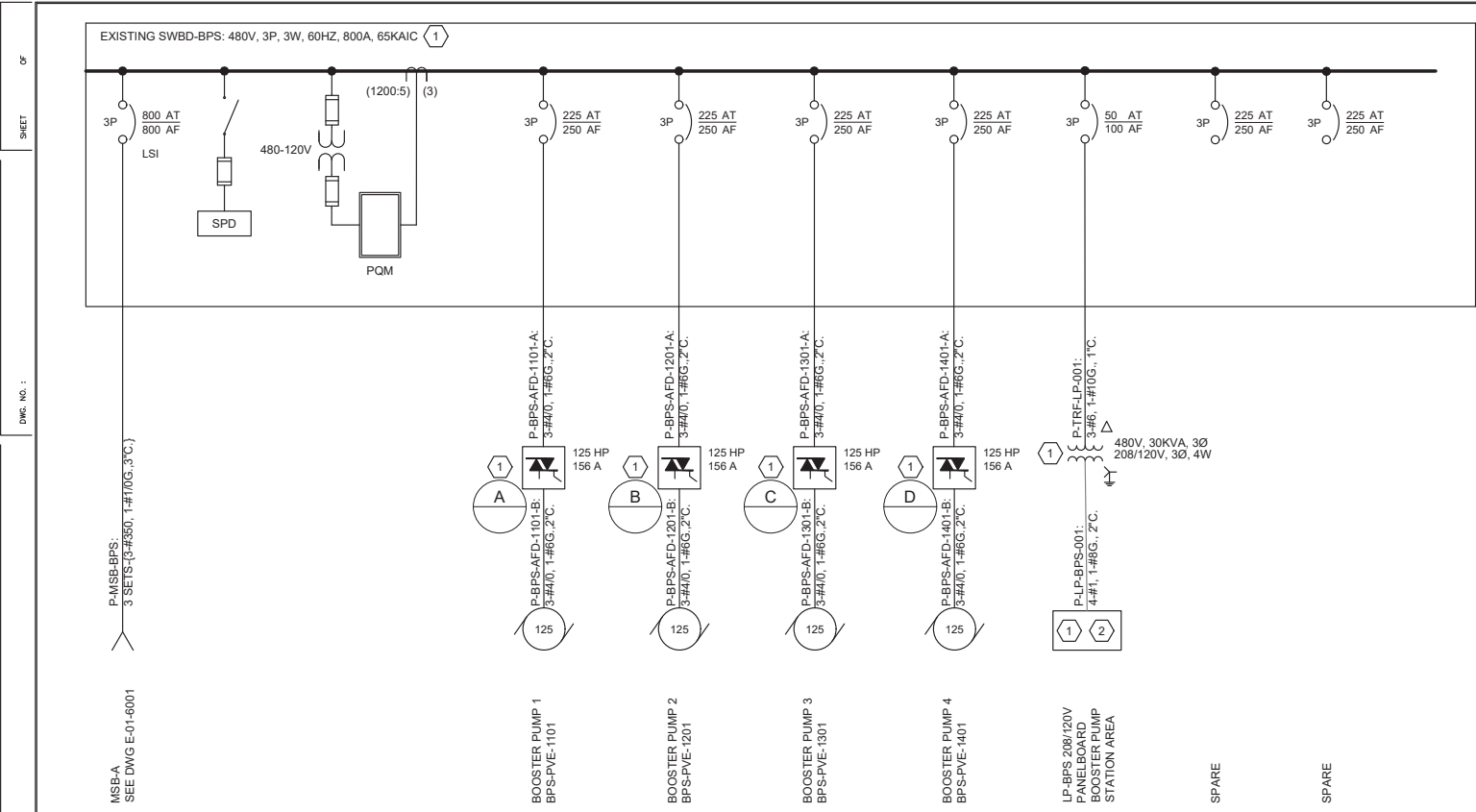
REVIEWED BY: _____ DATE: _____ 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____ 20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER
 ENGINEERING AND STREET SERVICES

OLYMPIC FIELD WELL RESTORATION
 AND ARCADIA WTP EXPANSION
**BOOSTER PUMP STATION LIGHTING, RECEPT
 AND GROUNDING**
 PROJECT AND SHEET TITLE

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-10-1003
 SHY 236 OF 303 SHS

C:\BCP\W0408745\E-10-6001 BPS SINGLE LINE DIAGRAM.DWG 12/20/2021 4:40 PM



BOOSTER PUMP STATION

LOAD SUMMARY AT 480 VAC

LOAD DESCRIPTION	KVA	HP	CONNECTED FLA	RUNNING FLA
BOOSTER PUMP #1		125	156.0	156.0
BOOSTER PUMP #2		125	156.0	156.0
BOOSTER PUMP #3		125	156.0	156.0
BOOSTER PUMP #4		125	156.0	156.0
480V PANELBOARD TO LOW VOLTAGE PANEL VIA ESTIMATED 30KVA XFM	30		36.1	36.1
AMPERE TOTAL:		500	660.1	504.1

- KEY NOTES:**
- SWITCHBOARD, TRANSFORMER, PANELBOARD, AND VFD'S LOCATED OUTDOORS. PROVIDE NEMA 3R RATED TYPE ENCLOSURES.
 - PANELBOARD TO INCLUDE INTERNAL SURGE PROTECTIVE DEVICE AS SPECIFIED IN 26 24 16.

PANEL: LP-BPS

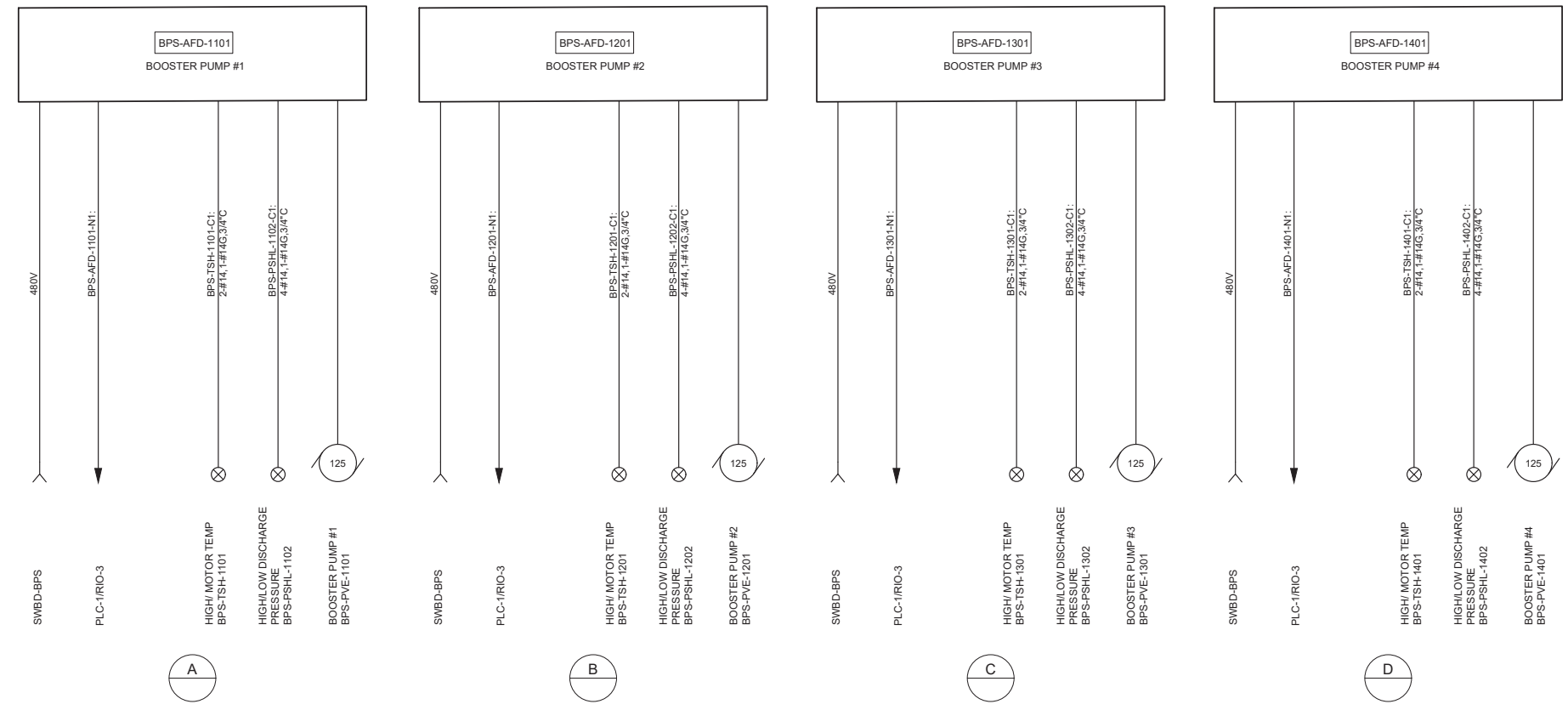
VOLTAGE: 120/208 VAC
 BUS SIZE: 100 AMPERE
 MAIN SIZE: 60 AMPERE
 MAIN TYPE: YES (CIRCUIT BREAKER), NO (MAIN LUGS ONLY)

LOCATION: BOOSTER PUMP STATION
 ENCLOSURE: NEMA 3R
 MOUNTING: STAND-MOUNTED
 BUS BRACING: 42 KAIC
 FED FROM: SWBD-BPS VIA XFMR BPS

CIRCUIT TITLE / LOAD DESCRIPTION	WIRE SIZE	COND. SIZE	BREAKER	LOAD, VA			LOAD, VA			BREAKER	CIRCUIT	WIRE SIZE	COND. SIZE	CIRCUIT TITLE / LOAD DESCRIPTION
				A	B	C	A	B	C					
SPARE			1 20 1				1500			1 20 2	2#12, 1#12G	1"	BOOSTER PUMP STATION LIGHTING	
BOOSTER PUMP STATION FLOW METER FEET-1001	2#12, 1#12G	1"	5 20 1				100			1 20 6	2#12, 1#12G	1"	SPARE	
SPARE			7 20 1							1 20 8			SPARE	
SPARE			9							1 20 9			SPARE	
SPARE			11							1 20 12			SPARE	
SPARE			13							1 20 14			SPARE	
SPARE			15							1 20 16			SPARE	
COLUMN TOTALS:				0	0	100	1500	720	0					

PHASE A LOAD (VA) = 1500
 PHASE B LOAD (VA) = 720
 PHASE C LOAD (VA) = 100
 TOTAL LOAD (VA) = 2320

I (amp) 6.4



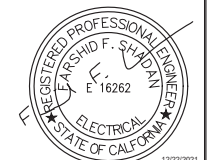
NO.	DATE	BY	DESCRIPTION	APPROVED

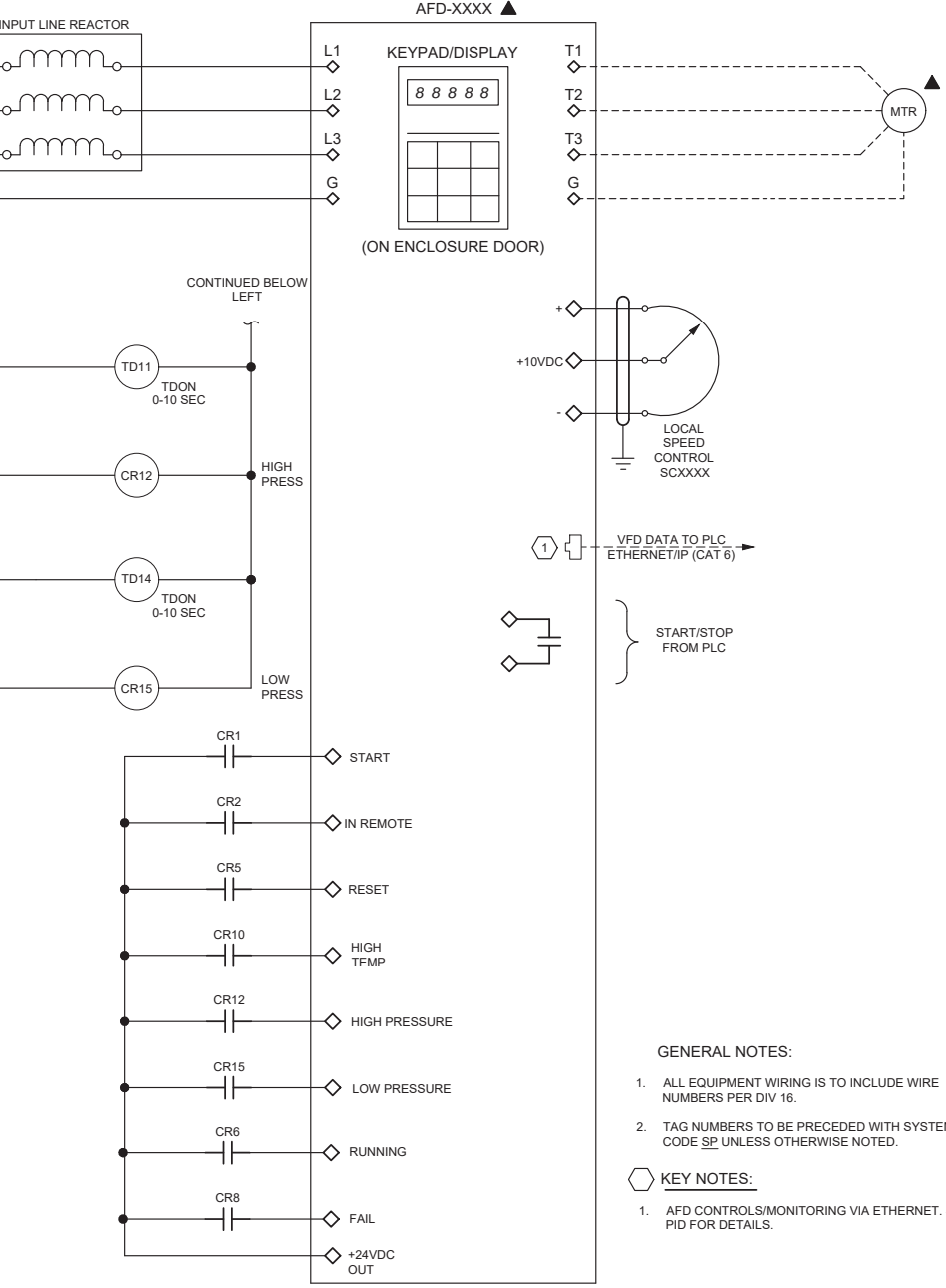
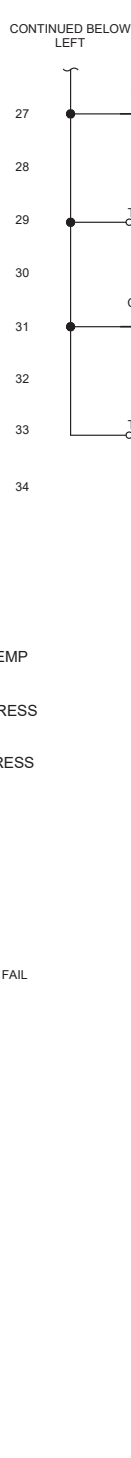
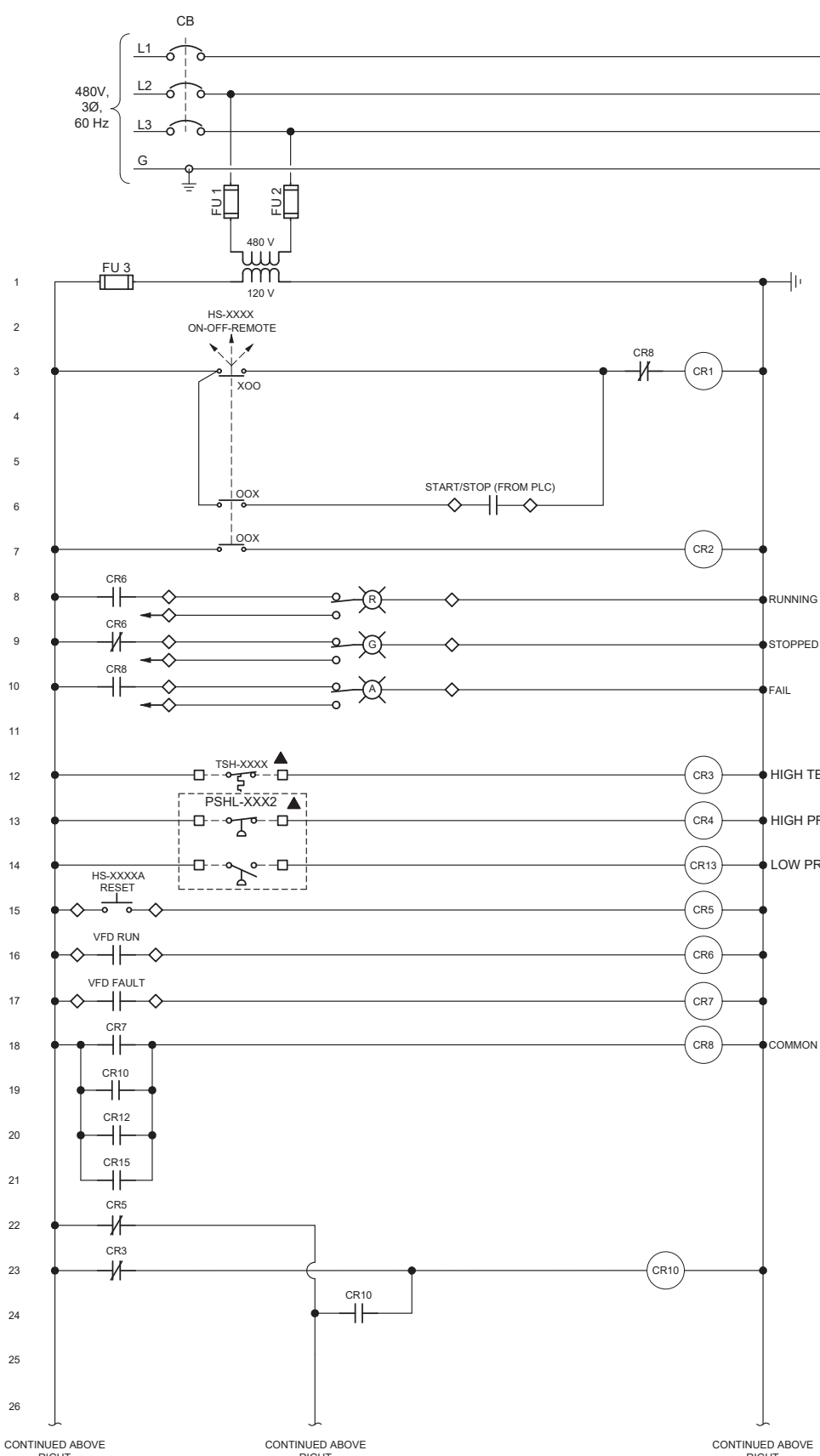
REVIEWED BY: _____ DATE: _____, 20__	REFERENCE: _____
REVIEWED BY: _____ DATE: _____, 20__	DATE: _____, 20__ COMPUTER FILE NAME: _____
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	SUBMITTED BY: _____ SP-FILE NO.: SP2602
REVIEWED BY: _____ DATE: _____, 20__	APPROVED BY: _____ DATE: _____, 20__
OMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

BOOSTER PUMP STATION SINGLE LINE DIAGRAM

DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB SHEET NO. _____
 DRAWING NO. 7078
E-10-6001
 SHEET 237 OF 303 SHS

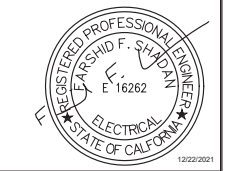




- GENERAL NOTES:**
- ALL EQUIPMENT WIRING IS TO INCLUDE WIRE NUMBERS PER DIV 16.
 - TAG NUMBERS TO BE PRECEDED WITH SYSTEM CODE SP UNLESS OTHERWISE NOTED.
- KEY NOTES:**
- AFD CONTROLS/MONITORING VIA ETHERNET. SEE PID FOR DETAILS.

EQUIPMENT TAGS		
EQUIPMENT NAME	EQUIPMENT TAG	XXXX =
BOOSTER PUMP #1	PVE-1101	1101
BOOSTER PUMP #2	PVE-1201	1201
BOOSTER PUMP #3	PVE-1301	1301
BOOSTER PUMP #4	PVE-1401	1401

- LEGEND**
- FIELD WIRING TERMINAL
 - ◇ TERMINAL LOCATED ON DRIVE
 - FIELD WIRING
 - ▲ LOCATED IN FIELD



NO.	DATE	BY	DESCRIPTION	APPROVED

REVIEWED BY : SUNNY WANG, P.E. - WATER RESOURCES MANAGER	DATE : _____, 20__	REFERENCE : DATE : _____, 20__	COMPUTER FILE NAME : SP-FILE NO. : SP2602
REVIEWED BY : OMIED POUR, P.E. - PROJECT MANAGER	DATE : _____, 20__	APPROVED BY : ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE : _____, 20__

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

BOOSTER PUMP STATION CONTROL SCHEMATIC DIAGRAM

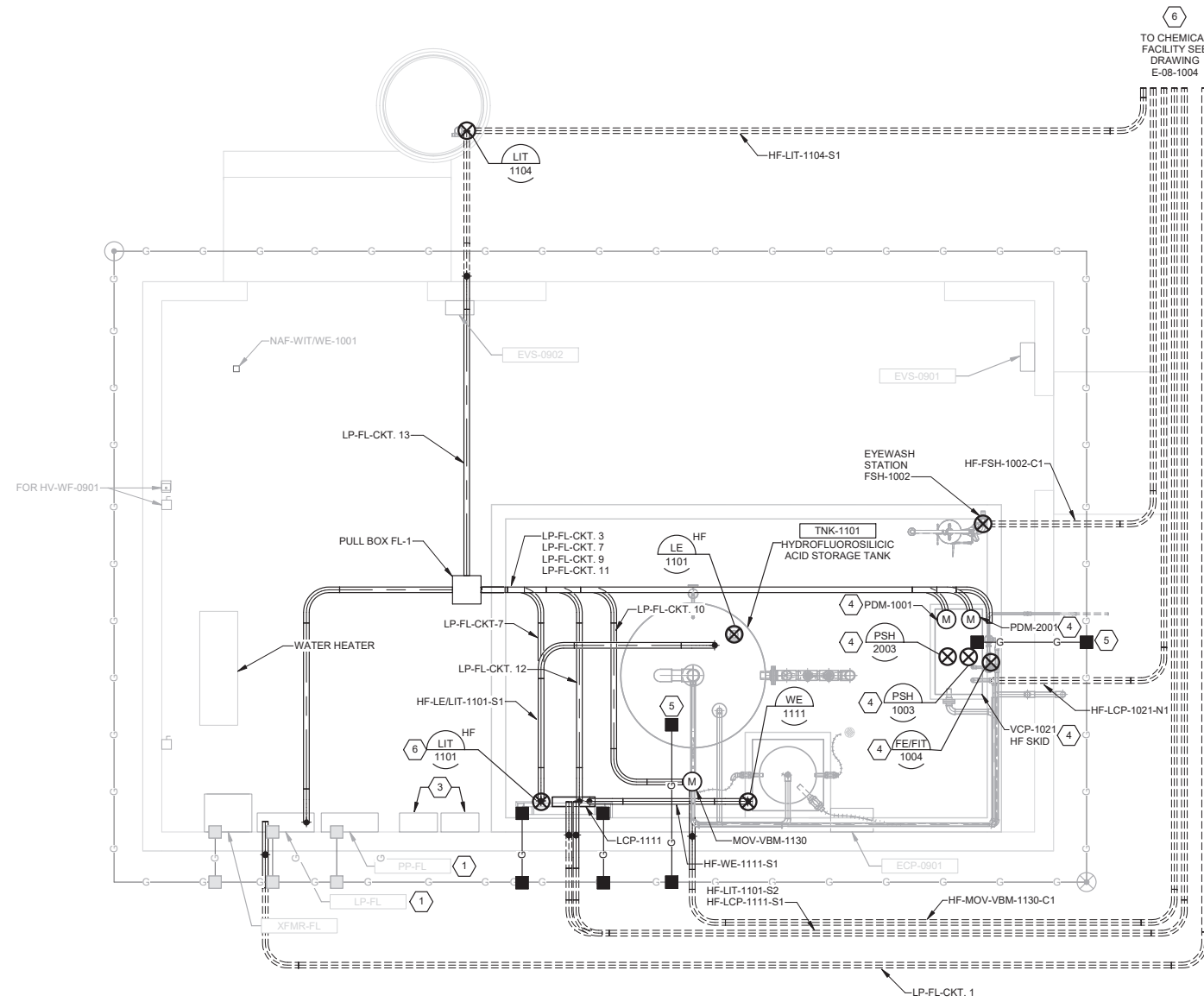
DESIGNED BY : DEE
 DRAWN BY : DEE
 CHECKED BY : AZ
 CONSULTANT JOB/SHEET NO.
 DRAWING NO. 7078
E-10-6002
 SH 238 OF 303 SHS

12/21/2021 12:10:08 PM

BIM 360://154390 - Arcadia Water Treatment Plant Expansion/154390-E-11V19.rvt
TITLE OF PROJECT: OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION

E-11-4001

SHEET



1 FLUORIDE BUILDING ELECTRICAL PLAN
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

1. DESIGN-BUILDER TO PROTECT EXISTING SYSTEMS IN PLACE DURING CONSTRUCTION.
2. COORDINATE ALL SHUTDOWN ACTIVITIES WITH PLANT OPERATIONS PRIOR TO SHUTDOWN.
3. FOR ELECTRICAL DEMOLITION REFER TO DRAWINGZ-11-1001 AND Z-11-5001.
4. FOR CIRCUITS, CONDUIT, AND WIRING REQUIREMENTS SEE DRAWING E-11-6001.
5. FOR CONTROL ONE LINE DIAGRAM SEE DRAWING E-01-6011.

KEY NOTES:

1. FOR MODIFICATIONS TO EXISTING PANELBOARDS PP-FL AND LP-FL SEE DRAWING E-11-6001.
2. NOT USED.
3. DEMOLISH DUST COLLECTOR PANELS NO. 1 AND NO. 2. SEE DRAWING Z-11-1001.
4. VENDOR PROVIDED. PROVIDE POWER, CONTROL, AND SIGNAL CONDUIT AND WIRE. SEE DRAWING E-11-6001.
5. PROVIDE GROUNDING CONNECTION TO EXISTING GROUND GRID.
6. LEVEL TRANSMITTER LE.LIT-1101 IS PROVIDED 120V POWER FROM CHEMICAL TRUCK UNLOADING PANEL LOCATED ON THE EAST SIDE OF THE CHEMICAL FEED BUILDING. SEE DRAWING E-08-1004.

City of Santa Monica
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

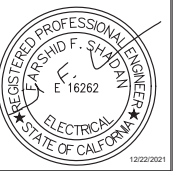
NO.	DATE	BY	DESCRIPTION	APPROVED



REVIEWED BY: _____ DATE: _____ 20__
 REVIEWED BY: _____ DATE: _____ 20__
 SUNNY WANG, P.E. - WATER RESOURCES MANAGER
 REVIEWED BY: _____ DATE: _____ 20__
 OMEED POUR, P.E. - PROJECT MANAGER

REFERENCE:
 DATE: _____, 20XX
 SUBMITTED BY: _____
 CURTIS CASTLE, P.E. - PRINCIPAL C.E.
 SP-FILE NO.: SP2602
 APPROVED BY: _____ DATE: _____, 20XX
 ALEX NAZARCHUK, P.E. - CITY ENGINEER

OLYMPIC WELL FIELD RESTORATION
 AND ARCADIA WTP EXPANSION
FLUORIDE BUILDING ELECTRICAL PLAN
 PROJECT AND SHEET TITLE



DESIGNED BY: FRF
 DRAWN BY: WRS
 CHECKED BY: AZ
 CONSULTANT JOB/SHEET NO. 154390
 DRAWING NO. 7078
E-11-4001
 SHY 239 OF 303 SHS

EXISTING PANELBOARD PP-FL													
PANEL: PP-FL		LOCATION: FLOURIDE BLDG.		SCCR: 65 KA		BUS: 250A		MAINS: 225A MLO					
MOUNTING: STAND MOUNTED		NOTE: EXISTING INTEGRAL SPD		VOLTS: 480V, 3Ø, 3W									
CKT	TRIP / POLE	LOAD DESCRIPTION	CONDUIT AND CABLE	LOAD KVA			LOAD KVA			CONDUIT AND CABLE	LOAD DESCRIPTION	TRIP / POLE	CKT
				A	B	C	A	B	C				
1	-	SPACE		0.00	10		0.00				GENERATOR MPZ	50/3	2
				0.00			10						
				0.00				10					
3	-	SPACE		0.00	0		0.00				SPACE	40/2	4
				0.00			0						
				0.00				0					
5	20/3	LOCKER ROOM STRIP HEATER		4.50	9		4.50				MONORAIL	20/3	6
				4.50			9						
				4.50				9					
7	20/3	DUST COLLECTOR 1101		4.50	9		4.50				HV-MAU-0901	20/3	8
				4.50			9						
				4.50				9					
9	20/3	DUST COLLECTOR 1201		4.50	9.5		5.00				MPZ-LR	30/3	10
				4.50			9.5						
				4.50				9.5					
11	60/3	WATER HEATER		13.30	28.3		15.00				TRANSFORMER FL	70/3	12
				13.30			28.3						
				13.30				28.3					
13	-	SPACE		0.00	0		0.00				SPACE		14
				0.00			0						
				0.00				0					
TOTALS				65.8	65.8	65.8							
TOTALS				79.2	79.2	79.2							
CONNECTED LOAD:		197.40 KVA		AMPS		79.2		79.2		FED FROM: MSB-A			
DEMAND LOAD:		157.92 KVA											

- GENERAL NOTES:**
- DESIGN-BUILDER TO PROTECT EXISTING SYSTEMS IN PLACE DURING CONSTRUCTION.
 - COORDINATE ALL SHUTDOWN ACTIVITIES WITH PLANT OPERATIONS PRIOR TO SHUTDOWN.
 - FOR ELECTRICAL DEMOLITION FOR THE FLUORIDE BUILDING SEE DRAWING Z-11-5001.

- KEY NOTES:**
- DEMO CONDUITS AND CONDUCTORS FROM PANELBOARDS TO THE LOAD. SEE DRAWINGS Z-11-1001 AND Z-11-5001.
 - NEW LOADS SHOWN IN BOLD TEXT ON PANEL SCHEDULE.

THREE PHASE PANEL: EXISTING PANEL LP-FL																			
VOLTAGE, PHASE, & WIRE:		120 / 208		VAC 3-POLE 4-WIRE		LOCATION:		FLOURIDE BLDG.											
BUS SIZE:		125		AMPERE		ENCLOSURE:		NEMA-4X											
MAIN SIZE:		MLO		AMPERE		MOUNTING:		STAND											
MAIN TYPE:		NO		CIRCUIT BREAKER		BUS BRACING:		22KAIC											
		YES		MAIN LUGS ONLY		FED FROM:		PP-FL VIA XFMR FL											
CIRCUIT TITLE / LOAD DESCRIPTION	AWG WIRE SIZE	COND SIZE	BKR	CKT NO.	AMP	POLE	LOAD, VA PHASE			LOAD, VA PHASE			BKR	AWG WIRE SIZE	COND SIZE	CIRCUIT TITLE / LOAD DESCRIPTION			
							A	B	C	A	B	C					POLE	AMPH	
NAF-PDM-1101 HF CHEMICAL TRUCK UNLOADING PANEL	2-#12, 1-#12G	3/4"	1	20	1		100			500			1	20	2	2-#12, 1-#12G	3/4"	EMERGENCY & OUTSIDE LIGHTS	
NAF-PDM-2101 HF SKID CONTROL PANEL VCP-1021	2-#12, 1-#12G	3/4"	3	20	1		100			180			1	20	4	2-#12, 1-#12G	3/4"	S RECEPTACLE	
HE RECEPTACLE			5	20	1					180			1	20	6	2-#12, 1-#12G	3/4"	PENDANT LIGHTS	
COMPRESSOR HF SKID FLOW TRANSMITTER FE/FIT-1004	2-#12, 1-#12G	3/4"	7	20	1		25			180			1	20	8	2-#12, 1-#12G	3/4"	SAFETY SHOWERS	
NAF-TRANSFER PUMP HF METERING PUMP 2 PDM-2001	2-#12, 1-#12G	3/4"	9	20	1		240			2400			1	20	10	2-#12, 1-#12G	3/4"	MOV-1130	
NAF LEVEL LCP-1 & 2 HF METERING PUMP 1 PDM-1001	2-#12, 1-#12G	3/4"	11	20	1			240		1040			1	20	12			HF DAY TANK LCP-1111	
HF SUMP LEVEL HF-LIT-1104	2-#12, 1-#12G	3/4"	13	20	1		100			500			1	20	14	2-#12, 1-#12G	3/4"	HV-WF-0901	
			15										3	20	16			SPARE	
			17												18				
			19												20				
			21												22				
			23												24				
			25												26				
			27												28				
			29												30				
			31												32				
			33												34				
			35												36				
			37												38				
			39												40				
			41												42				
COLUMN TOTALS							225	340	420	1180	2580	2540							
							PHASE A LOAD (VA) =		1405										
							PHASE B LOAD (VA) =		2920										
							PHASE C LOAD (VA) =		2960										
							TOTAL LOAD (VA) =		7285		1 (amp)		20.2						

C:\BCP\W\0408745E-11-6001 - FLUORIDE BLDG PANEL SCHEDULES.DWG 12/20/2021 4:40 PM

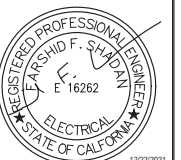


NO.	DATE	BY	DESCRIPTION	APPROVED



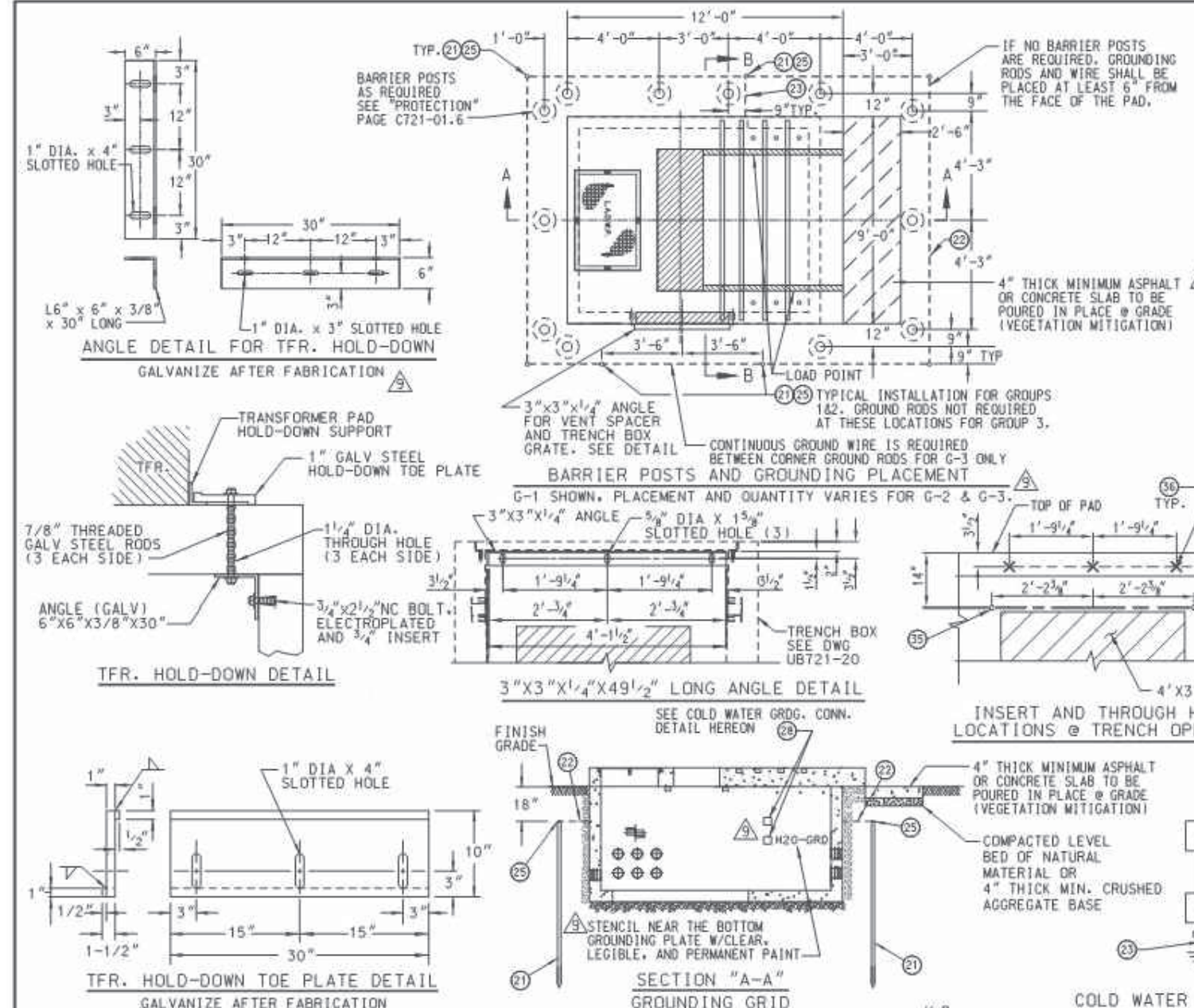
REVIEWED BY: _____	DATE: _____, 20__	REFERENCE: _____
REVIEWED BY: _____	DATE: _____, 20__	DATE: _____, 20__
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.	COMPUTER FILE NAME: _____
REVIEWED BY: _____	DATE: _____, 20__	SP-FILE NO.: SP2602
OMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE: _____, 20__

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
FLUORIDE BUILDING PANEL SCHEDULES



DESIGNED BY: FRF
DRAWN BY: WRS
CHECKED BY: AZ
CONSULTANT JOB/SHEET NO. _____
DRAWING NO. 7078
E-11-6001
SH 240 OF 303 SHS

C:\BCP\W\04087451R-01-5001 ELECTRICAL DRAWING REFERENCE - 1.DWG 12/20/2021 4:40 PM

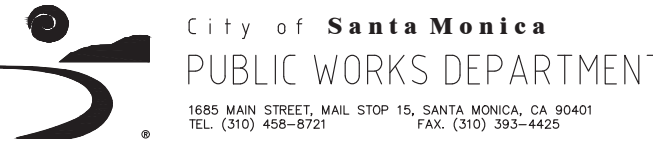


PARTS LIST			
NO.	QTY	DESCRIPTION	DRAWING OR CATALOG NO.
1	1	PRECAST PAD TOP SECTION WT 10,000 LBS	
2	2	PRECAST HANDHOLE BOTTOM SECTION WT 16,500 LBS	
21	5-7	GROUND ROD, 5/8" DIA. X 8' LONG, 304 SST CLAD	
22	*	BARE STRANDED COPPER WIRE 4/0, SEE NOTE NO. 8	
23	*	500 KCMIL INSULATED CU CABLE, SEE NOTE NO. 8	
24	1	3/16" GALV. DIAMOND PLATE COVER, SEE NOTE 3	
25	*	EXOTHERMIC WELD, SEE NOTE 8	
26	26	5" DOUBLE MEMBRANE TERMINATION	
27	2	1-5/8" X 1-5/8" X 72" LONG 12 GAUGE GALV STRUT	UNISTRUT P1000 SERIES
28	*	GROUNDING PLATE CAST-IN CONCRETE, SEE NOTE 8	B-164-30
29	6	3/4" DIA. NC THREADED INSERT P-56T	1-825
30	6	PULL IRON ASSEMBLY	
31	2	3/4" X 5" GALV. THREADED COIL INSERT	UNISTRUT P3200 SERIES
32	4	1-5/8" X 1-5/8" X 8' - 8" LONG 12 GAUGE GALV STRUT	
35	2	2" DIA. PVC TUBE X 6" LONG (THROUGH HOLE)	
36	3	1/2" DIA INSERT FOR 3"X3"X1/4" ANGLE SUPPORT	

REV. NO.	REV. DATE	INTL.	REVISION DESCRIPTION	APPV.	PE NO.
	03/06/13	EHP	REVISED TFR. HOLD-DOWN PLT. DETAIL	J.M.A	
	08/18/11	EHP	ADDED STENCIL "H2O-GRD" TO BOTTOM 4" DIA. HOLE FOR GROUNDING PLATE	J.M.A	
	06/27/11	JHG	REVISED LOCATION OF 4" DIA. HOLES FOR GROUND PLATE INSTALLATION.	J.M.A	
	05/19/11	JD/EHP	REVISED PART 33	J.M.A	
	04/20/11	JD	REVISED PARTS 21, 22, 23, 27 & 32-ADDED NOTE FOR COLD WATER GRD. CONN.	J.M.A	
	03/04/11	EHP	REMOVED TRENCH BOX-ADDED 1/2" THREADED COIL INSERTS, 3"X3" ANGLE DETAIL, INSERT & THRU HOLE DETAIL.	J.A.	
	07/19/10	EHP	ADDED ADAPTER PLATE, ORDERING DIAGRAM & UNISTRUTS	J.A.	
9	07/16/18	EHP/EJP	REVISED NOTES 9 & 10, REM. NOTE 11. REPLACED 4" HOLES W/GROUNDING PLATES CAST-IN CONCRETE, REV. BARRIER POST LOCATIONS.	KP	E21857
8	10/28/14	EHP	REV. CABLE ACCESS WIDTH OPENING FROM 36" TO 24". REV. UNISTRUT QUANTITIES AND LOCATIONS	J.M.A	

REV. NO.	REV. DATE	INTL.	REVISION DESCRIPTION	APPV.	PE NO.
	03/06/13	EHP	REVISED TFR. HOLD-DOWN PLT. DETAIL	J.M.A	
	08/18/11	EHP	ADDED STENCIL "H2O-GRD" TO BOTTOM 4" DIA. HOLE FOR GROUNDING PLATE	J.M.A	
	06/27/11	JHG	REVISED LOCATION OF 4" DIA. HOLES FOR GROUND PLATE INSTALLATION.	J.M.A	
	05/19/11	JD/EHP	REVISED PART 33	J.M.A	
	04/20/11	JD	REVISED PARTS 21, 22, 23, 27 & 32-ADDED NOTE FOR COLD WATER GRD. CONN.	J.M.A	
	03/04/11	EHP	REMOVED TRENCH BOX-ADDED 1/2" THREADED COIL INSERTS, 3"X3" ANGLE DETAIL, INSERT & THRU HOLE DETAIL.	J.A.	
	07/19/10	EHP	ADDED ADAPTER PLATE, ORDERING DIAGRAM & UNISTRUTS	J.A.	

DISTRICT	CONTRACT NO.	DWP W.D.
CITY OF LOS ANGELES		
DEPARTMENT OF WATER AND POWER		
DISTRIBUTION ENGINEERING & SERVICES SECTION		
DESIGN SA'ID POOSTI	DRAFTING E. PERDOMO	
DATE 6-23-10	CHECKER W. YCEDO	
APPROVED JAMES MAGUIA	DATE 04/15/09	



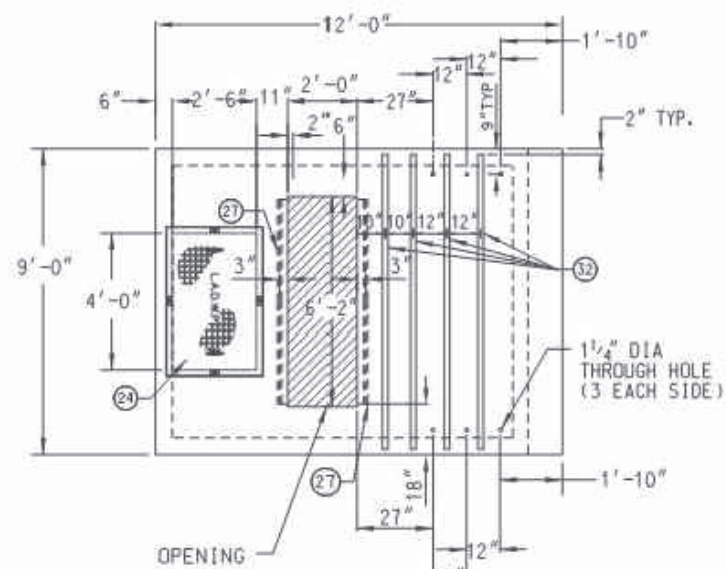
NO.	DATE	BY	DESCRIPTION	APPROVED



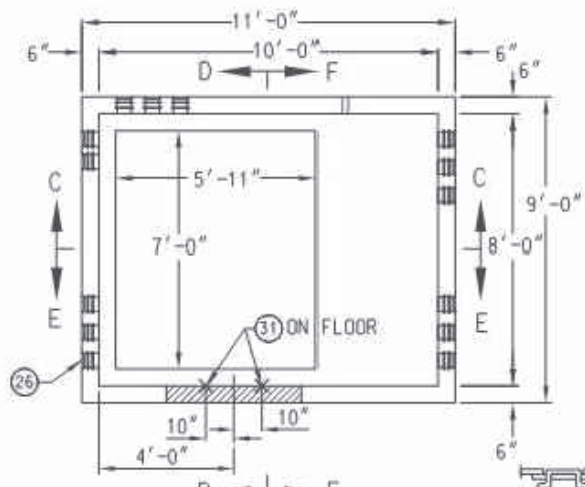
REVIEWED BY:	DATE:	REFERENCE:
SUNNY WANG, P.E. - WATER RESOURCES MANAGER		
OMED POUR, P.E. - PROJECT MANAGER		
CURTIS CASTLE, P.E. - PRINCIPAL C.E.		
ALEX NAZARCHUK, P.E. - CITY ENGINEER		

DESIGNED BY: FRF	OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
DRAWN BY: FRF	
CHECKED BY: HWP	
CONSULTANT JOB/SHEET NO.	
DRAWING NO. 7078	
R-01-5001	
SP-241-OF 303 SHS	

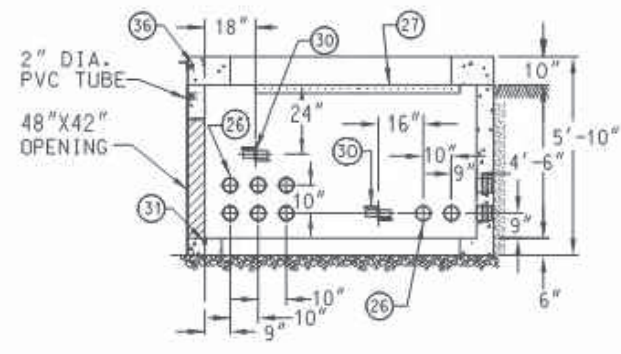
FOR REFERENCE ONLY



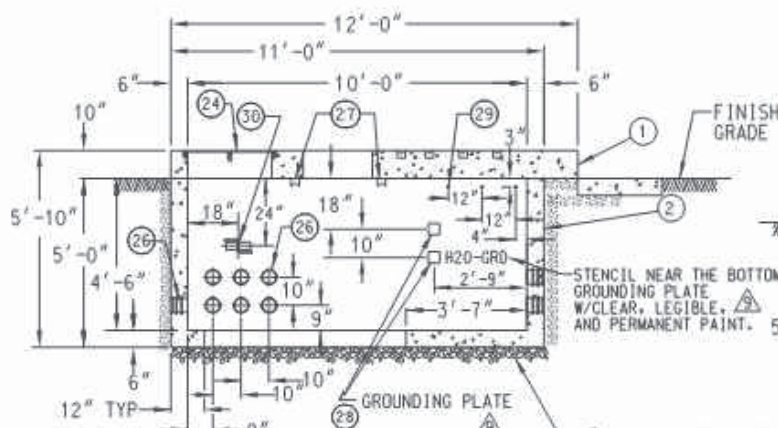
PLAN VIEW OF TRANSFORMER PAD



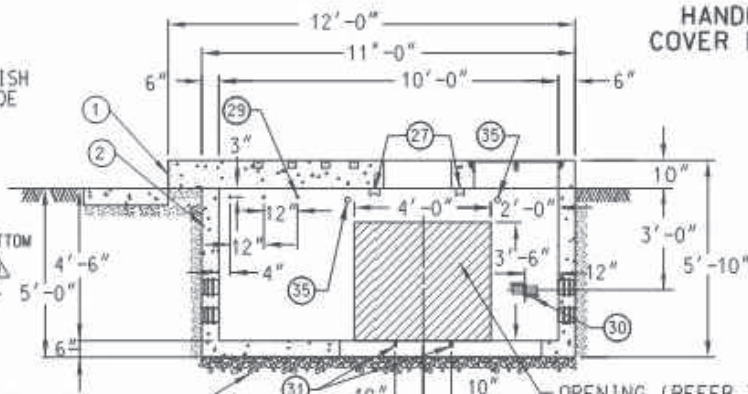
PLAN VIEW (HH FOR G-1)



SECTION "D-D" HH W/PAD



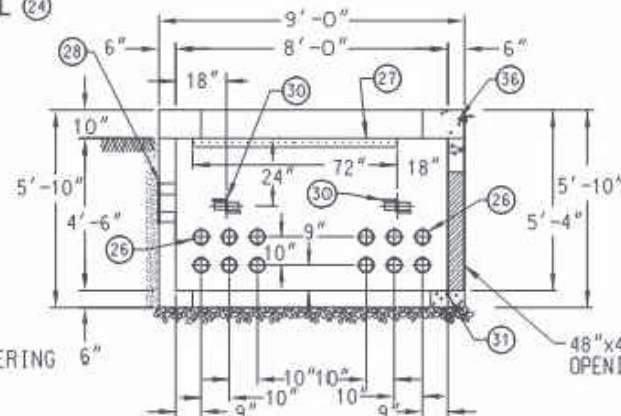
SECTION "C-C" HH W/PAD



SECTION "E-E" HH W/PAD



HANDHOLE COVER DETAIL 24



SECTION "F-F" HH W/PAD

REV. NO.	REV. DATE	INTL.	REVISION DESCRIPTION	APPV.	PE NO.	REV. NO.	REV. DATE	INTL.	REVISION DESCRIPTION	APPV.	PE NO.
						03/06/13	EHP		SEE SHEET 1 & 3 FOR REVISIONS.	J.M.A.	
						08/18/11	EHP		ADDED STENCIL "H20-GRD" TO BOTTOM 4" DIA. HOLE FOR GROUNDING PLATE	J.M.A.	
						06/27/11	JHG		REVISED LOCATION OF 4" DIA. HOLES FOR GROUND PLATE INSTALLATION.	J.M.A.	
						05/19/11	JD/EHP		ADDED COVER DIMENSION, REVISED ADAPTER PLATE & BOLT DETAIL.	J.M.A.	
						04/20/11	JD		REVISED UNISTRUT LENGTH (PT. 32)	J.M.A.	
						03/04/11	EHP		ADDED 3/4" THREADED COIL INSERTS & 2" DIA PVC TUBES, REV. ADAPTER PLATE DETAIL.	J.M.A.	
						07/19/10	EHP		ADDED ADAPTER PLATE, 1/2" INSERT & UNISTRUT	J.M.A.	

DISTRICT	CONTRACT NO.	DWP W.G.
CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER		
DISTRIBUTION ENGINEERING & SERVICES SECTION		
DESIGN SA'ID PODSTI	DRAFTING E. PERDOMO	
DATE 6-23-10	CHECKER W. YCEDO	
APPROVED JAMES MAGULA	DATE 04/15/09	

9'-0" X 12'-0" PRECAST TRANSFORMER PAD WITH 4'-0" X 3'-6" WALL OPENING FOR CORRESPONDING PRECAST CABLE TRENCH

UB721-19 SHEET 2 OF 3

FOR REFERENCE ONLY



City of **Santa Monica**
PUBLIC WORKS DEPARTMENT
1685 MAIN STREET, MAIL STOP 15, SANTA MONICA, CA 90401
TEL. (310) 458-8721 FAX. (310) 393-4425

NO.	DATE	BY	DESCRIPTION	APPROVED
REVISIONS				



REVIEWED BY:	DATE:	20__	REFERENCE:
REVIEWED BY:	DATE:	20__	DATE:
SUNNY WANG, P.E. - WATER RESOURCES MANAGER	CURTIS CASTLE, P.E. - PRINCIPAL C.E.	COMPUTER FILE NAME:	SP-FILE NO.:
REVIEWED BY:	DATE:	20__	SP-FILE NO.:
OMED POUR, P.E. - PROJECT MANAGER	ALEX NAZARCHUK, P.E. - CITY ENGINEER	DATE:	20XX

OLYMPIC WELL FIELD RESTORATION AND ARCADIA WTP EXPANSION
ELECTRICAL DRAWING REFERENCE - 2

DESIGNED BY:	FRF
DRAWN BY:	FRF
CHECKED BY:	HWP
CONSULTANT JOB/SHEET NO.	
DRAWING NO.	7078
R-01-5002	
SH-242-OF 303 SHS	