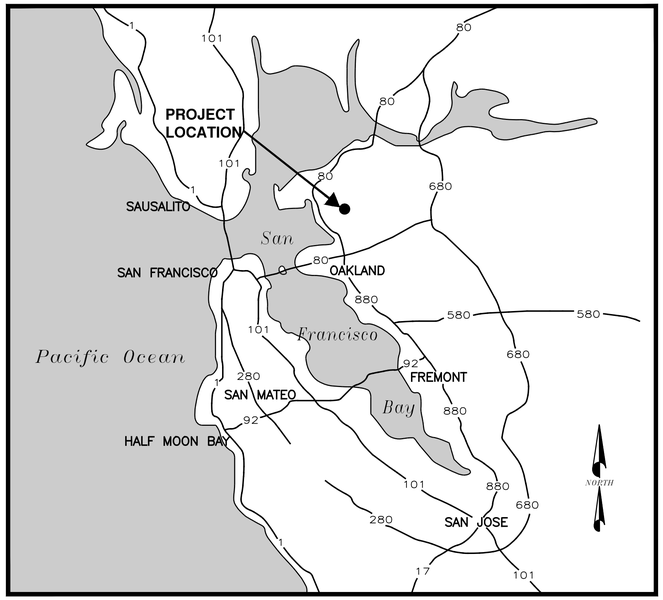
STEGE SANITARY DISTRICT
CANON SEWER PUMP STATION
IMPROVEMENTS PROJECT



VICINITY MAP
NTS

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4	D2	DEMOLITION SECTION
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20	PG&E	OH/UG CONSTRUCTION DRAWING

REV.	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			

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CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

TITLE SHEET

DRAWN BY: BFC
CHECKED BY: LDJ
DATE: 10/25/2023

SHEET
G-1
1 OF 20

GENERAL

1. STANDARD PROVISIONS AND STANDARD SPECIFICATIONS:
ALL WORK SHALL BE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS, 2006 STANDARD PROVISIONS OF THE STEGE SANITARY DISTRICT, AND THE LATEST EDITION OF THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND STANDARD PLANS UNLESS OTHERWISE SPECIFIED. ALL WORK ON SANITARY SEWERS SHALL CONFORM TO THE REQUIREMENTS OF THE STEGE SANITARY DISTRICT.

2. MAINTENANCE OF SITE DOCUMENTS:
THE CONTRACTOR SHALL KEEP AND MAKE AVAILABLE A COPY OF THE APPROVED PLANS, SPECIFICATIONS, AND DISTRICT STANDARD PROVISIONS AT THE JOB SITE AT ALL TIMES WHEN WORK IS IN PROGRESS.

CONTROL OF WORK

3. CHANGES TO PLANS:
THE FOLLOWING APPLIES TO PLANS APPROVED BY THE DISTRICT. MAJOR CHANGES IN THE APPROVED PLANS MUST BE APPROVED BY THE DISTRICT. EACH CHANGE IS TO BE DELINEATED BY MARKING THE CHANGED AREA OF THE PLAN WITH A NUMBERED TRIANGLE OR OTHER ACCEPTABLE METHOD. THE ENGINEER MUST DATE AND INITIAL EACH REVISION IN THE REVISION BLOCK. THE ENGINEER SHALL SUBMIT A COVER LETTER EXPLAINING THE REQUESTED CHANGE AND TWO COPIES OF THE REVISED SHEETS. AFTER THE DISTRICT APPROVES AND INITIALS THE REVISION BLOCK THREE BLACK LINE COPIES OF THE SIGNED REVISED SHEETS TO THE DISTRICT. FOR MINOR CHANGES, THE CONTRACTOR MAY "RED LINE" THE PROPOSED MINOR CHANGE ON THE PLAN AND SUBMIT THEM TO THE DISTRICT FOR REVIEW AND APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CHANGES WITH THE ENGINEER WHO PREPARED THE PLANS AND SHALL KEEP APPROVED CHANGES AT THE JOB SITE WHEN WORK IS IN PROGRESS. ALL CHANGES SHALL BE SHOWN ON THE AS-BUILT PLANS SUBMITTED TO THE DISTRICT AT THE END OF THE JOB. THE DISTRICT SHALL HAVE THE SOLE DISCRETION TO DETERMINE WHAT IS A MINOR CHANGE. RELOCATION OF A MANHOLE FROM THE SIDEWALK TO A LANDSCAPED AREA OR INTO THE STREET IS CONSIDERED A MINOR CHANGE THAT REQUIRES APPROVAL FROM THE PUBLIC WORKS OPERATIONS SECTION.

4. AS-BUILT PLANS:
THE FOLLOWING APPLIES TO PLANS APPROVED BY THE DISTRICT. THE CONTRACTOR SHALL KEEP COMPLETE AND ACCURATE AS-BUILT DRAWINGS OF ALL NEW WORK, UTILITY POTHOLE DATA AND EXISTING CONDITIONS THAT HAVE CHANGED OR ARE DIFFERENT THAN SHOWN ON THE ORIGINALLY APPROVED PLANS. UPON COMPLETION OF THE WORK, THE CONTRACTOR'S RECORD DRAWINGS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND COMMENT. THE ENGINEER SHALL MAKE THE NECESSARY REVISIONS TO THE ORIGINAL DRAWINGS TO SHOW ALL FIELD CHANGES. THE ENGINEER SHALL VERIFY FINAL GRADING AND SHALL SIGN THE GRADING CERTIFICATE, IF APPLICABLE, WHEN SATISFIED THAT THE GRADING IS PER APPROVED PLANS. EACH SHEET OF THE PLANS SHALL BE STAMPED "RECORD DRAWING" AND SIGNED BY THE ENGINEER. THE REVISED ORIGINALS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.

5. CONSTRUCTION SAFETY ORDERS FOR EXCAVATIONS:
THE CONTRACTOR SHALL CONFORM TO THE RULES AND REGULATIONS OF THE CONSTRUCTION SAFETY ORDERS OF THE STATE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH PERTAINING TO EXCAVATION AND TRENCHES. FOR EXCAVATIONS, THE CONTRACTOR SHALL SUBMIT TO THE DISTRICT A DETAILED PLAN SHOWING THE DESIGN OF SHORING, BRACING, SLOPING AND OTHER PROVISIONS TO BE MADE FOR WORKER PROTECTION. THE PLAN SHALL INCLUDE THE CONTRACTOR PERMIT FOR EXCAVATION.

6. NORMAL WORKING HOURS:
NORMAL WORKING HOURS IS DEFINED AS THE TIME FROM 7:30 A.M. TO 4:00 P.M., MONDAY THROUGH FRIDAY, EXCLUDING LEGAL HOLIDAYS. THE CONTRACTOR SHALL NOT WORK ON THE PROJECT OUTSIDE THE NORMAL WORKING HOURS, UNLESS PRIOR APPROVAL IS OBTAINED FROM THE DISTRICT OR WHEN SPECIFICALLY REQUIRED BY THE DISTRICT. WORK OUTSIDE NORMAL WORKING HOURS WILL ONLY BE ALLOWED IF A DISTRICT INSPECTOR IS AVAILABLE. THE CONTRACTOR SHALL PAY THE DISTRICT FOR THE COST OF OVERTIME FOR DISTRICT INSPECTION PERFORMED OUTSIDE OF NORMAL WORKING HOURS.

7. COORDINATION WITH OTHER AGENCIES AND PRIVATE PROPERTY OWNERS:
THE CONTRACTOR SHALL BE RESPONSIBLE COORDINATING INSPECTION PERFORMED BY OTHER GOVERNMENTAL AGENCIES, AS PRESCRIBED IN THEIR PERMITS AND APPROVALS.

8. AIRBORNE DUST:
AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION AND ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE IN SUCH A MANNER THAT IT WILL CONTAIN DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR SHALL PERFORM SUCH TREATMENT WITHIN 2 HOURS AFTER NOTIFICATION BY THE DISTRICT THAT AN AIRBORNE NUISANCE EXISTS.

9. MAINTENANCE OF EQUIPMENT:
ALL EQUIPMENT SHALL BE MAINTAINED IN GOOD ORDER. SUBSTANDARD OR UNSUITABLE PAVING EQUIPMENT WILL NOT BE ALLOWED.

10. FINAL INSPECTION:
THE DISTRICT WILL NOT PERFORM THE FINAL INSPECTION UNTIL THE CONTRACTOR COMPLETES ALL WORK AND FINAL CLEANUP OF THE SITE.

11. MAINTENANCE OF WORK SITE:
THE CONTRACTOR SHALL KEEP THE STREET, ADJACENT PROPERTIES, AND WORK SITE CLEAN AND FREE FROM RUBBISH AND DEBRIS PER REQUIREMENTS PREVENTING SPILLAGE ON HAUL ROUTES, CLEANING UP SPILLAGE, SWEEPING ALL STREETS AND PARKING LOTS OF MUD, DIRT AND DEBRIS THAT ARE A RESULT OF THE CONTRACTOR'S WORK, AND KEEPING THE WORK SITE IN A CLEAN AND NEAT APPEARANCE. ANY SPILLAGE ON HAUL ROUTES SHALL BE IMMEDIATELY REMOVED AND CLEANED UP.

12. CLEANING SITE UPON NOTICE FROM DISTRICT:
WHEN ORDERED BY THE DISTRICT, THE CONTRACTOR SHALL CLEAN UP THE WORK SITE WITHIN 24 HOURS AFTER RECEIVING NOTICE.

CONTROL OF MATERIAL

13. COMPACTION TESTS:
THE CONTRACTOR SHALL HIRE A TESTING LABORATORY, APPROVED BY THE DISTRICT, TO PERFORM COMPACTION TESTS OF AGGREGATE BASE, AGGREGATE SUB-BASE AND SUB-GRADE TO THE SATISFACTION OF THE DISTRICT. THE TEST RESULTS SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO ANY AC OR PCC PAVING. AC PAVING SHALL BE TESTED WITH A NUCLEAR GAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ALL TESTING.

14. CONCRETE MATERIAL TAGS:
PLANT MATERIAL TAGS FOR PORTLAND CONCRETE CEMENT SHALL BE SUBMITTED TO THE DISTRICT.

LEGAL RELATIONS AND RESPONSIBILITY

15. PERMITS AND LICENSES:
ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA.
THE CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES AND FEES, AND GIVE ALL NOTICES NECESSARY AND INCIDENT TO DUE AND LAWFUL PROSECUTION OF THE WORK.

16. COMPLIANCE WITH ENVIRONMENTAL DOCUMENTS:
THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS, LICENSES OR OTHER AUTHORIZATIONS APPLICABLE TO THE WORK WITH RESPECT TO THE ENVIRONMENTAL QUALITY ACT.

17. PUBLIC CONVENIENCE AND ACCESS:
ALL WORK SHALL BE PLANNED AND CARRIED OUT SO THAT THERE WILL BE THE LEAST POSSIBLE INCONVENIENCE TO THE TRAVELING PUBLIC, AND TRAFFIC SHALL NOT BE UNREASONABLY DELAYED. DRIVEWAY ACCESS SHALL BE MAINTAINED TO EACH PROPERTY AT ALL TIMES.

18. MAINTAIN TRAFFIC CONTROL DEVICES:
THE CONTRACTOR SHALL INSTALL AND MAINTAIN FENCES, BARRIERS, LIGHTS AND SIGNS THAT ARE NECESSARY TO GIVE ADEQUATE WARNING TO THE PUBLIC AT ALL TIMES IN ACCORDANCE WITH THE CALIFORNIA MANUAL ON UNITFORM TRAFFIC CONTROL DEVICES (CA MUTCD) OF TRANSPORTATION'S TRAFFIC CONTROL MANUAL.

19. HAZARDOUS MATERIALS AND WASTE:
ALL WORK SHALL BE CONDUCTED IN A MANNER WHICH PREVENTS THE RELEASE OF HAZARDOUS MATERIALS OR HAZARDOUS WASTE TO THE SOIL OR GROUNDWATER, AND MINIMIZES THE DISCHARGE OF HAZARDOUS MATERIALS, HAZARDOUS WASTES, POLLUTED WATER AND SEDIMENTS TO THE STORM DRAIN SYSTEM.

20. LAND OWNER AGREEMENT
CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS IN THE AGREEMENT WITH THE LAND OWNER

21. COORDINATION WITH OTHER CONTRACTORS:
WHERE TWO OR MORE CONTRACTORS ARE WORKING IN THE SAME AREA, EACH SHALL CONDUCT THEIR OPERATIONS IN SUCH A MANOR AS NOT TO CAUSE ANY UNNECESSARY DELAY OR HINDRANCE TO THE OTHER. WHERE CONFLICTS CANNOT BE AVOIDED, THE DISTRICT WILL DETERMINE WHICH CONTRACTORS HAVE CONSTRUCTION PRIORITY OVER THE OTHER CONTRACTORS AND THE TERMS OF SUCH CONSTRUCTION PRIORITY.

23. NOISE WORKING HOUR RESTRICTIONS:
IN ORDER TO LIMIT DISTURBING NOISES, CONSTRUCTION WORK SHALL OCCUR ONLY BETWEEN THE HOURS OF 7:30 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY, EXCLUDING HOLIDAYS. WORK OUTSIDE OF THESE HOURS IS PROHIBITED, UNLESS THE DISTRICT GRANTS AN EXCEPTION. EXCEPTIONS WILL BE CONSIDERED ONLY WHEN, IN THE OPINION OF THE DISTRICT, CONSTRUCTION DURING NORMAL CONSTRUCTION HOURS WOULD INCONVENIENCE THE PUBLIC AND NEIGHBORING RESIDENTS MORE THAN WORKING OUTSIDE OF THESE HOURS. EXCEPTIONS WILL NOT BE GRANTED MERELY TO EXPEDITE THE CONSTRUCTION WORK.

NOTIFICATION

24. DANGEROUS SITUATIONS, CALL 911:
IF ANY DAMAGE OCCURS TO AN UNDERGROUND FACILITY THAT RESULTS IN THE ESCAPE OF ANY FLAMMABLE, TOXIC OR CORROSIVE GAS OR LIQUID OR ENDANGERS LIFE, HEALTH, OR PROPERTY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY OWNER AND CALL THE 911 EMERGENCY TELEPHONE NUMBER TO NOTIFY LOCAL PUBLIC SAFETY OFFICIALS.

25. PROVIDE SUPERINTENDENT INFORMATION BEFORE START OF WORK:
THE CONTRACTOR SHALL PROVIDE THE NAME AND TELEPHONE NUMBER OF THE AUTHORIZED REPRESENTATIVE (SUPERINTENDENT) OF THE WORK TO THE DISTRICT IN WRITING PRIOR TO THE START OF WORK.

26. CALL DISTRICT INSPECTORS PRIOR TO START OF WORK:
CONTRACTOR SHALL NOTIFY THE DISTRICT AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING WORK, RESUMING SUSPENDED WORK, OR RESUMING WORK AFTER THREE DAYS OF NO WORK SO THAT INSPECTION CAN BE ARRANGED.

27. CONTACT USA:
CONTRACTOR SHALL CONTACT USA (UNDERGROUND SERVICE ALERT) AT (800) 642-2444 AT LEAST TWO WORKING DAYS BUT NOT MORE THAN 14 DAYS PRIOR TO COMMENCING EXCAVATION WORK TO VERIFY EXISTING UNDERGROUND UTILITIES

28. NOTIFY UTILITY OWNERS:
CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY OWNERS FORTY-EIGHT HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY.

29. NOTIFY ADJACENT PROPERTIES:
CONTRACTOR SHALL NOTIFY THE ADJACENT RESIDENCES AND BUSINESS IN WRITING DESCRIBING THE NATURE OF THE WORK, SCHEDULE OF THE WORK, WHEN PARKING WILL BE PROHIBITED (IF ANY), AND WHO TO CALL AT THE CONTRACTOR'S OFFICE IF THEY HAVE QUESTIONS ABOUT THE WORK. THE DISTRICT PRIOR TO ITS DISTRIBUTION MUST APPROVE THE NOTICE. THE CONTRACTOR MUST DISTRIBUTE THE NOTICE TO THE ADJACENT RESIDENCES AND BUSINESS AT LEAST 7 DAYS PRIOR TO THE START OF THE CONSTRUCTION WORK. FOR LARGE PROJECTS, THE WORK AREA, PARKING PROHIBITION REQUIREMENTS AND SCHEDULE SHALL BE DIVIDED UP INTO SMALLER, MORE MANAGEABLE AREAS. IN THE EVENT THE PARKING PROHIBITION SCHEDULE CHANGES AFTER THE NOTIFICATION, CONTRACTOR SHALL POST A NEW NOTICE OF THE REVISED SCHEDULE AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION. FOR WORK REQUESTED BY THE PROPERTY OWNER, A NOTICE TO THE PROPERTY OWNER IS NOT REQUIRED.

30. NO PARKING SIGN NOTIFICATION:
UPON POSTING TEMPORARY NO PARKING SIGNS ON A STREET, CONTRACTOR SHALL NOTIFY THE DISTRICT OF STREETS THAT HAVE BEEN POSTED WITH NO PARKING SIGNS. THE SIGNS SHALL BE POSTED AT LEAST 48 HOURS IN ADVANCE.

31. STREET CLOSURE NOTIFICATION:
IN THE EVENT OF A STREET CLOSURE AND DETOUR THAT IS THREE OR MORE CONSECUTIVE DAYS IN DURATION AND IS CAUSED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE U.S. POSTAL SERVICES CUSTOMER SERVICES MANAGER AT (650) 967-5721 TWENTY FOUR HOURS PRIOR TO THE STREET CLOSURE.

IMPROVEMENTS

32. PLACE UTILITIES BEFORE BASE ROCK:
ALL UNDERGROUND UTILITIES SHALL BE COMPLETED BEFORE PLACING OF PAVEMENT BASE ROCK, UNLESS THE DISTRICT GRANTS AN EXCEPTION.

33. INSPECTION OF CONCRETE FORMS:
THE DISTRICT MUST APPROVE CONCRETE FORMS, BEFORE THE POURING OF CONCRETE. CONCRETE POURED PRIOR TO INSPECTION IS SUBJECT TO REJECTION AND REMOVAL.

EXCAVATIONS

34. UTILITY INSPECTION REQUIREMENT:
ALL DISTRICT APPURTENANCES MUST BE INSPECTED BY THE DISTRICT PRIOR TO BACKFILLING ANY TRENCHES OR POURING ANY CONCRETE.

35. EXCAVATIONS:
AT THE END OF EACH WORK DAY, ALL EXCAVATIONS WITHIN THE STREET AND TRAVEL WAY SHALL BE: (1) BACKFILLED AND PAVED WITH TEMPORARY PAVING SUCH THAT THE FINISHED SURFACE IS FLUSH WITH THE EXISTING PAVEMENT, (2) ADEQUATELY COVERED WITH STEEL PLATE BRIDGING, OR (3) BACKFILLED AND PAVED WITH PERMANENT PAVING. IF STEEL PLATE BRIDGING IS USED, THE STEEL PLATE BRIDGING MUST BE REMOVED WITHIN 48 HOURS AFTER ITS INSTALLATION. CONTROL DENSITY FILL SHALL NOT BE USE AS TEMPORARY AC PAVING.

PROJECT SPECIFIC NOTES

36. SURVEY BENCHMARK:
SURVEY VERTICAL DATUM BASED ON NAV88 BASED ON GPS OBSERVATIONS PERFORMED BY ANDREG PSMOAS 10/03/2018. HORIZONTAL DATUM: CALIFORNIA STATE PLANE COORDINATION SYSTEM ZONE III NAD83(2010) CA HPGN.

37. SPARE PARTS:
THE CONTRACTOR SHALL PROVIDE A THIRD SPARE PUMP. THE CONTRACTOR SHALL DELIVER THE SPARE PUMP TO DISTRICT HEADQUARTERS. THE CONTRACTOR DOES NOT NEED TO PROVIDE A SPARE DISCHARGE ELBOW, GUIDE RAILS, OR OTHER ACCESSORIES.

38. PG&E COORDINATION AND CONTRACTOR SCOPE OF WORK FOR PG&E SERVICE:
THE CONTRACTOR SHALL COORDINATE WITH PG&E FOR LANDING WIRES AND ENERGIZING THE STATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOR INSTALLATION OF THE SECONDARY CONDUIT AND SECONDARY PULL BOX IN ACCORDANCE WITH PG&E STANDARDS AND DESIGN.

39. JOINT REQUIREMENTS
ALL PIPE AND FITTINGS SHALL BE MECHANICALLY RESTRAINED THROUGH USE OF FLANGES, MEGALUGS, HDPE FLANGE ADAPTORS, OR OTHER APPROVED RESTRAINT.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
BENCHMARK / SOIL BORING	⌖	
MANHOLE	◎	●
VALVE	⊗	⊗
CATCH BASIN / DRAIN INLET / AREA DRAIN	▭ ◍	
WATER METER	□	
SIGN	▪	
UTILITY BOX (SIZE VARIES)	□	
BOLLARD	•	
BUILDING LINE		
CONCRETE		
FENCE	-x-x-x-	-x-x-x-
EXISTING GROUND		
SURFACING HATCH		
AGGREGATE BASE		
ASPHALT CONCRETE		
GROUT		
CENTERLINE		
EDGE OF PAVEMENT		
EXISTING SANITARY SEWER	SS	SS
STORM DRAIN	SD	
WATER	W	W
UNDERGROUND GAS	G	
UNDERGROUND JOINT TRENCH	JT	JT
UNDERGROUND FORCEMAIN	FM	FM
UNDEGROUND TELEPHONE	T	
ABANDONED PIPE		
DEMOLITION		

ABBREVIATIONS

ABAND	ABANDON
AC	ASPHALTIC CONCRETE, AIR COMPRESSOR
APPROX	APPROXIMATE
ATS	AUTOMATIC TRANSFER SWITCH
CI, CIP	CAST IRON PIPE
CONC	CONCRETE
(D), DEMO	DEMOLITION
DI, DIP	DUCTILE IRON PIPE
Ø, DIA	DIAMETER
(E), EXIST	EXISTING
EB	ELECTRIC BOX
E, ELEC	ELECTRIC
EL, ELEV	ELEVATION
ELL	ELBOW
ESMT	EASEMENT
EV	ELECTRIC VAULT
FCA	FLANGED COUPLING ADAPTER
FH	FIRE HYDRANT
FL	FLANGE
FM	FORCE MAIN
FO	FIBER OPTICS
FT	FEET
G	GAS
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HP	HORSE POWER
IMP	IMPELLER
IN	INCHES
INV, IE	INVERT ELEVATION
JT	JOINT TRENCH
LF	LINEAR FOOT
L/S	LANDSCAPE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MON	MONUMENT
MTS	MANUAL TRANSFER SWITCH
NAVD	NORTH AMERICAN VERTICAL DATUM
NIC	NOT IN CONTRACT
OH	OVER HEAD WIRES
PCC	PRECAST CONCRETE
PE	PLAIN END
PG&E	PACIFIC GAS AND ELECTRIC
PVC	POLYVINYL CHLORIDE
RC	RELATIVE COMPACTION
RE, RIM	RIM ELEVATION
ROW, R/W	RIGHT OF WAY
S	SLOPE
SD	STORM DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDMH	STORM DRAIN MANHOLE
SS	SANITARY SEWER, STAINLESS STEEL
SSCO	SANITARY SEWER CLEAN OUT
STL	STEEL
SSMH	SANITARY SEWER MANHOLE
STA	STATION
TB	TELEPHONE BOX
TC	TOP OF CURB
TDH	TOTAL DYNAMIC HEAD
T, TELE	TELEPHONE
THD	THREADED
TV	TELEVISION CABLE
TYP	TYPICAL
UB	UTILITY BOX
VER	VERTICAL
W	WATER
W/	WITH
WB	WATER BOX
XFMR	TRANSFORMER

REV	DESCRIPTION	BY	DATE

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PREPARED AT THE REQUEST OF
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NOTES, LEGEND & ABBREVIATIONS

DRAWN BY: BFC
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DATE: 10/25/2023

SHEET
G-2
2 OF 20

606 CANON DR

610 CANON DR

CANON DR

REMOVE (E) OVERHEAD ELECTRICAL SERVICE, SEE ELECTRICAL SHEETS AND PG&E DWGS

(E) TREES (TYP)

1" BRASS DISC "RCE 9622"

(E) 4" HDPE FORCEMAIN TO REMAIN (TYP OF 2)

(E) 6" SS PIPE, TO REMAIN

REMOVE (E) 4" FORCEMAIN TO RESTRAINED COUPLING. CONTRACTOR TO LOCATE IN FIELD.

(E) ELECTRICAL SERVICE TO BE REMOVED AND REPLACED, SEE ELECTRICAL SHEETS AND PG&E DRAWINGS FOR CONTRACTOR INSTALLATION REQUIREMENTS

(E) ELECTRICAL PANELS TO BE REMOVED, SEE ELECTRICAL SHEETS

REMOVE (E) WATER SERVICE AND APPURTENANCES

REMOVE (E) CHAIN LINK FENCE

REMOVE (E) 32" Ø REDWOOD TREES, H=±50', TYP OF 2

(E) SSMH, RE 759.44
IN 6" PIPE IE 753.89' (SW)
IN 6" PIPE IE 753.59' (SE)
OUT 8" PIPE IE 753.44' (S)

(E) 8" SS PIPE, TO REMAIN

REMOVE (E) PULLBOXES

REMOVE (E) DRY WELL, SEE SECTION A/D-2

(E) 8" SS PIPE, TO REMAIN

(E) 6" SS PIPE, TO REMAIN

(E) SSMH UPSTREAM, OFF PAGE, RE 781.29
IN 4" PIPE IE 774.19' (SE)
IN 8" PIPE IE 773.74' (SW)
IN 8" PIPE IE 773.64' (W)
OUT 8" PIPE IE 773.49' (N)

MODIFY (E) WET WELL SEE SECTION A/D-2

(E) DISTRICT RESOLUTION DEED BOUNDARY

(E) 6" SS PIPE, TO REMAIN

PROPERTY LINE (TYP)

CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE RESIDENCES AT ALL TIMES

14.85'

20'-2" ±

12'-5" ±

R=115.00' Δ=36°57'57"

DEMOLITION SITE PLAN
SCALE: 1" = 3'

3' 0 1.5' 3' 6'
1" = 3'

REV.	DESCRIPTION	BY	DATE
1			
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DEMOLITION SITE PLAN

DRAWN BY: BFC
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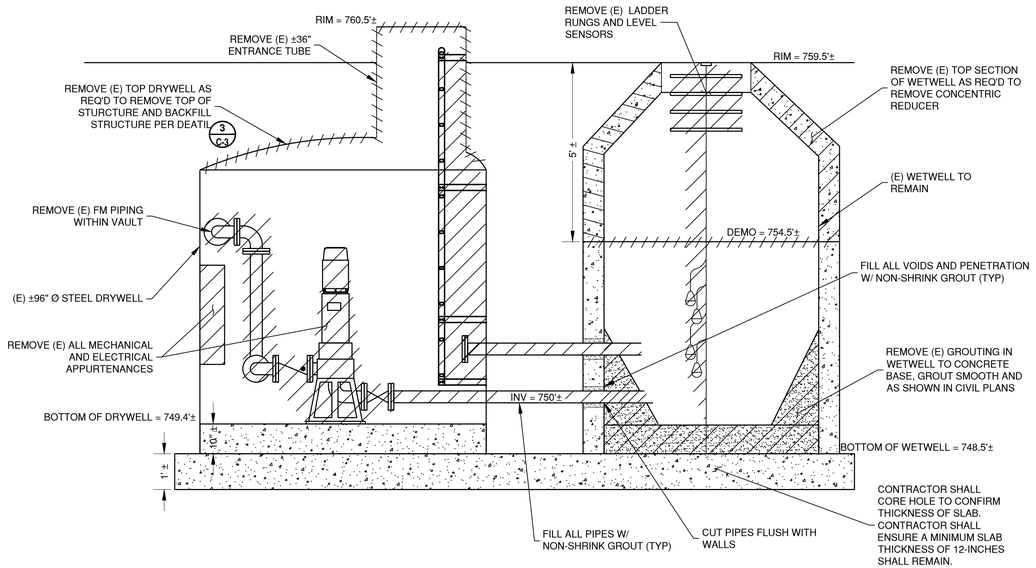
SHEET
D-1
3 OF 20



DEMO SECTION A/-

SCALE: 1/2" = 1'

DEMOLITION NOTES

1. ALL ELEVATIONS AND DIMENSIONS ARE BASED ON ASBUILTS DATED FROM 1962. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS AND NOTIFY THE ENGINEER WHERE CONFLICTS OCCUR.

REV.	DESCRIPTION	BY	DATE
1			
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DEMOLITION SECTION

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SHEET

D-2

4 OF 20

606 CANON DR

(E) TREES (TYP)

INSTALL, SERVICE PEDESTAL, MTS & GENERATOR RECEPTACLE, SEE ELECTRICAL SHEETS

1" BRASS DISC "RCE 9622"

DUAL 4" HDPE FORCEMAIN TO BE CONSTRUCTED BY OTHERS PRIOR TO PUMP STATION CONSTRUCTION, LOCATION TO BE FIELD VERIFIED

(E) 6" SS PIPE, TO REMAIN

N: 2156883.81
E: 6051491.07

N: 2156887.30
E: 6051492.47

VALVE CANS BY FM CONTRACTOR

ABANDONED (E) WATER METER

CONNECT AT (E) RESTRAINED COUPLING, CONTRACTOR TO FIELD LOCATE

EDGE OF PAVEMENT

N: 2156881.15
E: 6051492.94

N: 2156885.59
E: 6051493.51

TERMINATE FUTURE CONDUIT STUB UPS IN 5T BULL BOX, SEE ELECTRICAL SHEETS

INSTALL ELECTRICAL PANELS, SEE ELECTRICAL SHEETS

ELECTRICAL EQUIPMENT PAD, SEE DETAIL 7/C-4

(E) SSMH, RE 759.44
IN 6" PIPE IE 753.89' (SW)
IN 6" PIPE IE 753.59' (SE)
OUT 8" PIPE IE 753.44' (S)

INSTALL REDWOOD FENCE, SEE DETAIL 3/C-5

N: 2156872.92
E: 6051497.70

INSTALL SHADE STRUCTURE, SEE DETAIL 6/C-4

(E) 8" SS PIPE, TO REMAIN

SURFACE STATION WITH CONCRETE AND 8" CLASS II AG BASE, SEE DETAIL 5/C-5

SITE LIGHTING MOUNTED ON THE SHADE STRUCTURE, SEE ELECTRICAL SHEETS

4" HDPE DR 17, ROUTE TO FM RESTRAINED COUPLING

N: 2156886.51
E: 6051501.77

INSTALL VALVE CAN (TYP OF 3)

(E) 6" SS PIPE, TO REMAIN

CONTRACTOR SHALL PROTECT (E) VEGETATION IN PLACE. MAINTAIN SOIL INTEGRITY

(E) 8" SS PIPE, TO REMAIN

PULL BOX, SEE ELECTRICAL SHEETS

INSTALL 10' REDWOOD GATE, SEE DETAIL 4/C-5

CANON DR

(E) SSMH UPSTREAM, OFF PAGE, RE 781.29
IN 4" PIPE IE 774.19' (SE)
IN 8" PIPE IE 773.74' (SW)
IN 8" PIPE IE 773.64' (W)
OUT 8" PIPE IE 773.49' (N)

N: 6051509.61
E: 2156886.57

N: 2156893.19
E: 6051510.53

(E) ESMT

4" DIP

MODIFY (E) WETWELL, SEE SHEET C-3

PROPERTY LINE (TYP)

N: 2156884.08
E: 6051516.06

CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE RESIDENCES AT ALL TIMES

4" BYPASS CONNECTION, LOCATE ABOVE GRADE, SEE DETAIL 5/C-4

PROTECT (E) COBBLESTONE DRIVEWAY IN PLACE

610 CANON DR

NEW ELECTRICAL SERVICE, SEE ELECTRICAL PLANS AND PG&E DRAWINGS, SEE SHEET NOTES

IMPROVEMENT SITE PLAN - BASE BID

SCALE: 1" = 3'

3' 0 1.5' 3' 6'

1" = 3'

GENERAL NOTES

1. THE STATION FENCING SHALL MATCH THE EXISTING PROPERTY FENCE ON THE SOUTHWEST CORNER OF THE STATION. CONTRACTOR SHALL FIELD VERIFY FENCE STYLE AND MATERIALS.
2. THE CONTRACTOR SHALL PROVIDE A THIRD, IDENTICAL SPARE PUMP TO THE DISTRICT AT DISTRICT HEADQUARTERS.
   - 2.1. NO SPARE DISCHARGE ELBOW, GUIDERAILS, NOR OTHER ACCESSORIES ARE REQUIRED FOR THE SPARE PUMP
   - 2.2. SEE SECTION 22 13 29 OF CONTRACT SPECIFICATIONS FOR ADDITIONAL DETAILS

PG&E NOTES

1. CONTRACTOR SHALL COORDINATE WITH PG&E FOR ELECTRICAL SERVICE CONSTRUCTION. SEE ELECTRICAL DRAWINGS AND PG&E DRAWINGS FOR ADDITIONAL DETAILS.
2. AN (E) WOOD RETAINING WALL IS LOCATED ADJACENT TO PG&E POLE. IF DEMOLITION OF WALL IS REQ'D, CONTRACTOR SHALL REPLACE IN KIND.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR POTHOLING (E) WATER SERVICE AND GAS LINE. FIELD ROUTE CONDUIT AS REQ'D TO MAINTAIN MINIMUM CLEARANCES.

REV.	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS
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SANTA CLARA, CA 95054
(408) 246-4848

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE D. JOHNSON
No. 84183
CIVIL
STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

IMPROVEMENT SITE PLAN - BASE BID

DRAWN BY: BFC

CHECKED BY: LDJ

DATE: 10/25/2023

SHEET

C-1

5 OF 20

606 CANON DR

(E) TREES (TYP)

INSTALL, SERVICE PEDESTAL, MTS & GENERATOR RECEPTACLE, SEE ELECTRICAL SHEETS

N: 2156883.81
E: 6051491.07

INSTALL ATS (ALTERNATE), SEE ELECTRICAL SHEETS

N: 2156881.15
E: 6051492.94

INSTALL REDWOOD FENCE, SEE DETAIL 3/C-5

N: 2156872.92
E: 6051497.70

SURFACE STATION WITH CONCRETE AND 8" CLASS II AG BASE, SEE DETAIL 5/C-5

DIESEL GENSET (ALTERNATE), SEE ELECTRICAL SHEETS

CONTRACTOR SHALL PROTECT (E) VEGETATION IN PLACE. MAINTAIN SOIL INTEGRITY

(E) 8" SS PIPE, TO REMAIN

PULL BOX, SEE ELECTRICAL SHEETS

N: 6051509.61
E: 2156886.57

(E) ESMT

(E) SSMH UPSTREAM, OFF PAGE, RE 781.29
IN 4" PIPE IE 774.19' (SE)
IN 8" PIPE IE 773.74' (SW)
IN 8" PIPE IE 773.64' (W)
OUT 8" PIPE IE 773.49' (N)

MODIFY (E) WETWELL, SEE SHEET C-3

N: 2156884.08
E: 6051516.06

PROTECT (E) COBBLESTONE DRIVEWAY IN PLACE

4" BYPASS CONNECTION, LOCATE ABOVE GRADE, SEE DETAIL 5/C-4

N: 2156887.30
E: 6051492.47

VALVE CANS BY FM CONTRACTOR

ABANDONED (E) WATER METER

CONNECT AT (E) RESTRAINED COUPLING, CONTRACTOR TO FIELD LOCATE

EDGE OF PAVEMENT

N: 2156885.59
E: 6051493.51

INSTALL ELECTRICAL PANELS, SEE ELECTRICAL SHEETS

ELECTRICAL EQUIPMENT PAD, SEE DETAIL 7/C-4

INSTALL SHADE STRUCTURE, SEE DETAIL 6/C-4

SITE LIGHTING MOUNTED ON THE SHADE STRUCTURE, SEE ELECTRICAL SHEETS

4" HDPE DR 17, ROUTE TO FM RESTRAINED COUPLING

INSTALL VALVE CAN (TYP OF 3)

N: 2156886.51
E: 6051501.77

21'-6" ±

10'-8" ±

INSTALL 10' REDWOOD GATE, SEE DETAIL 4/C-5

N: 2156893.19
E: 6051510.53

4" DIP

PROPERTY LINE (TYP)

610 CANON DR

1" BRASS DISC "RCE 9622"

DUAL 4" HDPE FORCEMAIN TO BE CONSTRUCTED BY OTHERS PRIOR TO PUMP STATION CONSTRUCTION, LOCATION TO BE FIELD VERIFIED

(E) 6" SS PIPE, TO REMAIN

(E) SSMH, RE 759.44
IN 6" PIPE IE 753.89' (SW)
IN 6" PIPE IE 753.59' (SE)
OUT 8" PIPE IE 753.44' (S)

(E) 8" SS PIPE, TO REMAIN

(E) 6" SS PIPE, TO REMAIN

CANON DR

CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE RESIDENCES AT ALL TIMES

NEW ELECTRICAL SERVICE, SEE ELECTRICAL PLANS AND PG&E DRAWINGS, SEE SHEET NOTES

IMPROVEMENT SITE - BID ALTERNATE

SCALE: 1" = 3'

3' 0 1.5' 3' 6'

1" = 3'

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2. THE CONTRACTOR SHALL PROVIDE A THIRD, IDENTICAL SPARE PUMP TO THE DISTRICT AT DISTRICT HEADQUARTERS.
   - 2.1. NO SPARE DISCHARGE ELBOW, GUIDERAILS, NOR OTHER ACCESSORIES ARE REQUIRED FOR THE SPARE PUMP
   - 2.2. SEE SECTION 22 13 29 OF CONTRACT SPECIFICATIONS FOR ADDITIONAL DETAILS

PG&E NOTES

1. CONTRACTOR SHALL COORDINATE WITH PG&E FOR ELECTRICAL SERVICE CONSTRUCTION. SEE ELECTRICAL DRAWINGS AND PG&E DRAWINGS FOR ADDITIONAL DETAILS.
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1			
2			
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4			
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STATE OF CALIFORNIA

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PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

IMPROVEMENT SITE PLAN BID ALTERNATE

DRAWN BY: BFC

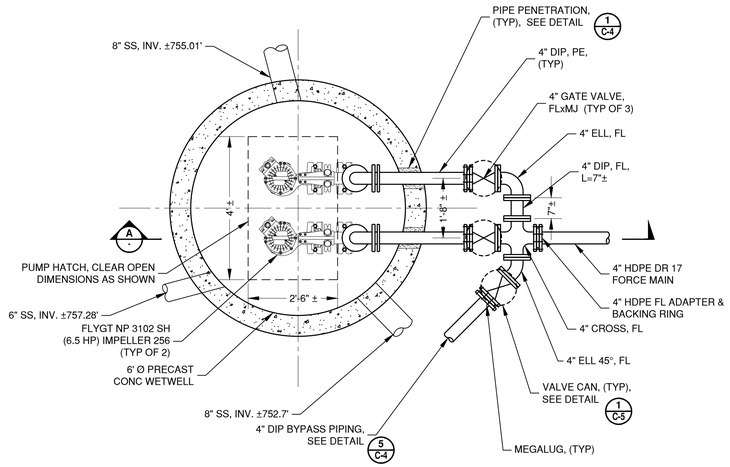
CHECKED BY: LDJ

DATE: 10/25/2023

SHEET

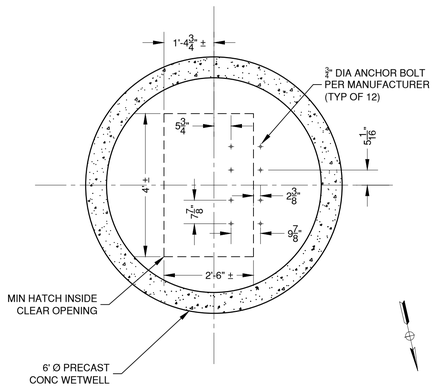
C-2

6 OF 20



PUMP PLAN DETAIL 1 -

SCALE: 1/2" = 1'

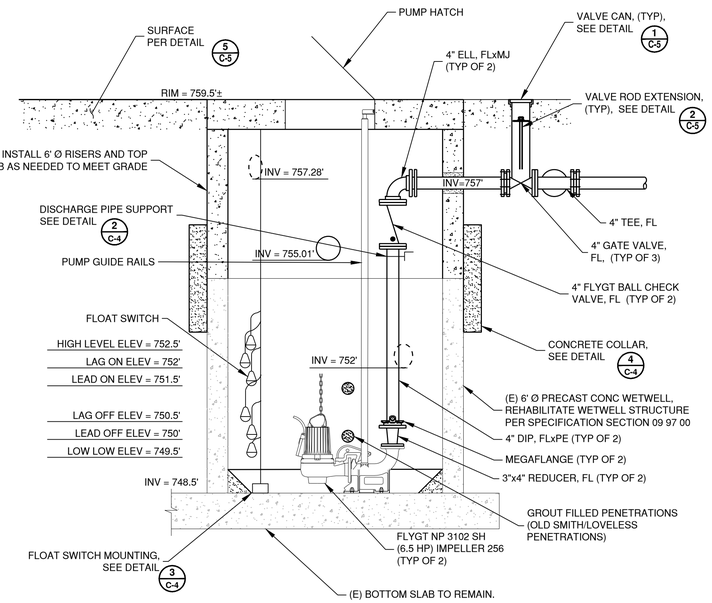


PUMP MOUNTING DIAGRAM 2 -

SCALE: 1/2" = 1'

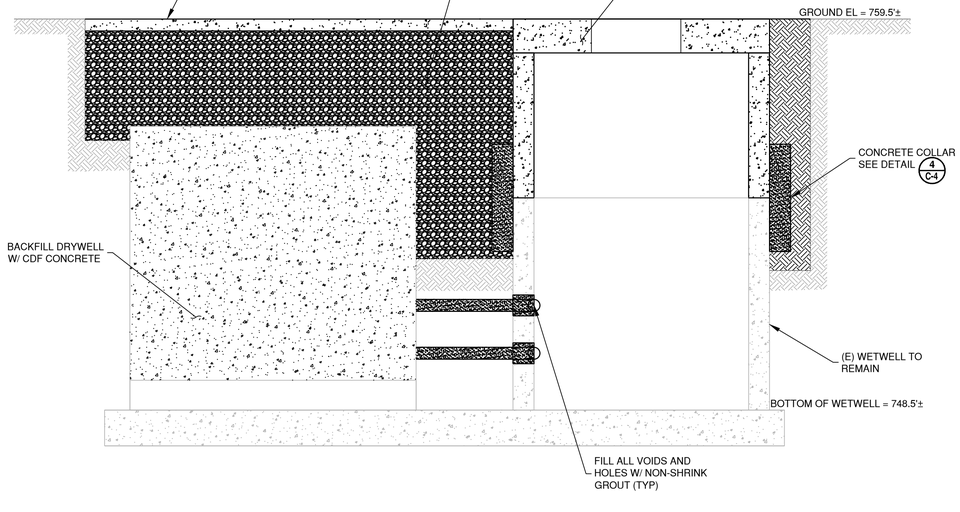
NOTES

1. REFER TO CIVIL SHEET C-1 FOR PUMP STATION PLAN LOCATION AND ADDITIONAL SITE IMPROVEMENTS.
2. CONTRACTOR SHALL PROVIDE 2 SETS OF ALL OPERATING TOOLS REQUIRED TO OPERATE THE BURIED VALVES AND ALL SPECIALITY EQUIPMENT.
2. THE CONTRACTOR SHALL PROVIDE A THIRD, IDENTICAL SPARE PUMP TO THE DISTRICT AT DISTRICT HEADQUARTERS.
   - 2.1. NO SPARE DISCHARGE ELBOW, GUIDERAILS, NOR OTHER ACCESSORIES ARE REQUIRED FOR THE SPARE PUMP
   - 2.2. SEE SECTION 22 13 29 OF CONTRACT SPECIFICATIONS FOR ADDITIONAL DETAILS



SECTION A -

SCALE: 1/2" = 1'



DRYWELL BACKFILL DETAIL 3 -

SCALE: 1/2" = 1'

REV.	DESCRIPTION	BY	DATE
1			
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PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

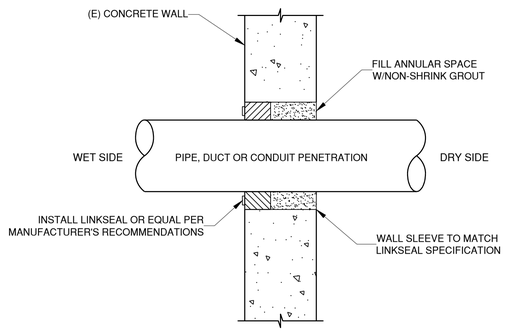
PUMP STATION PLAN AND SECTION

DRAWN BY: BFC
CHECKED BY: LDJ
DATE: 10/25/2023

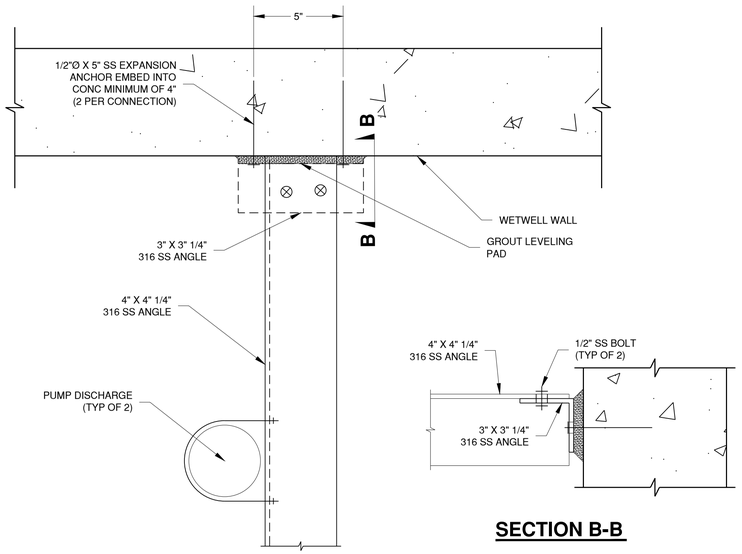
SHEET

C-3

7 OF 20

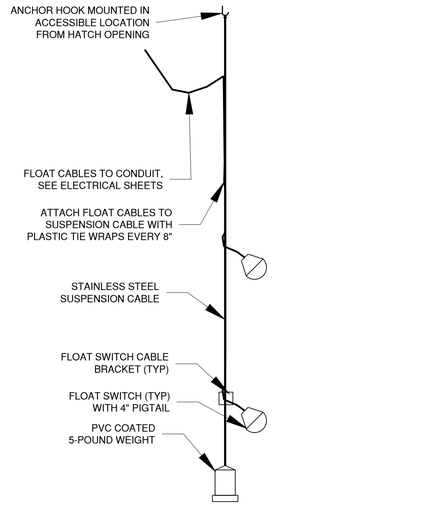


PIPE PENETRATION DETAIL 1 C-4
SCALE: NTS



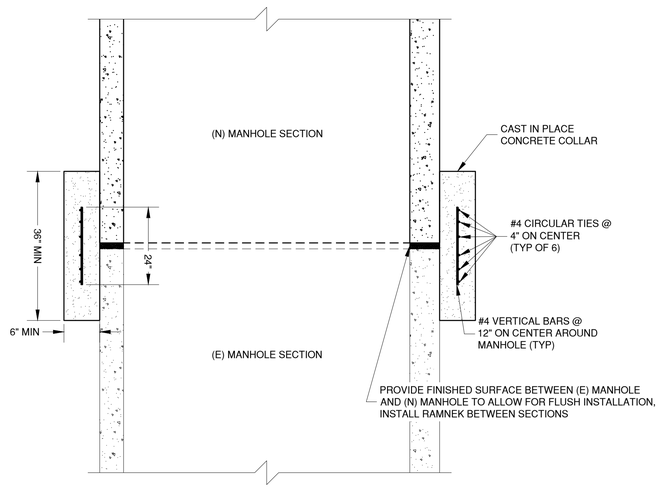
SECTION B-B

PUMP DISCHARGE PIPE SUPPORT 2 C-4
SCALE: NTS

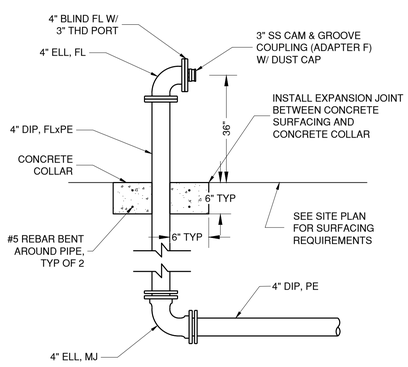


NOTES:
1. ALL MOUNTING HARDWARE SHALL BE TYPE 316 STAINLESS STEEL.
2. SEE ELECTRICAL SHEETS AND SPECIFICATIONS FOR FLOAT SWITCH REQUIREMENTS AND CABLE ROUTING

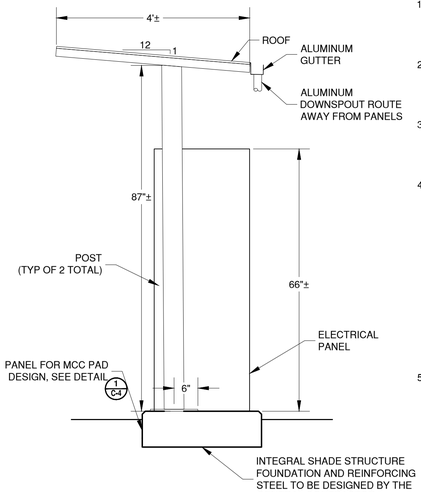
FLOAT SWITCH MOUNTING DETAIL 3 C-4
SCALE: NTS



CONCRETE COLLAR DETAIL 4 C-4
SCALE: NTS

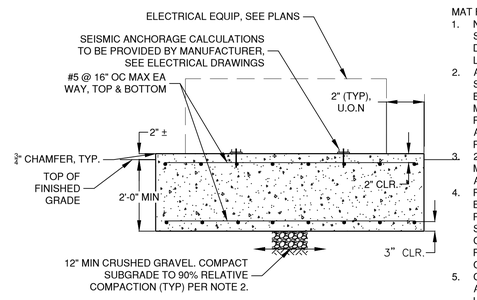


BYPASS DETAIL 5 C-4
SCALE: NTS



SHADE STRUCTURE SPECIFICATIONS:
1. SHADE STRUCTURE SHALL BE DESIGN-BUILD BY GENERAL CONTRACTOR. CONTRACTOR SHALL SUBMIT STRUCTURAL DETAILS AND CALCULATION FOR THE CANOPY, FRAME, SUPPORTS, ANCHORAGE, AND FOUNDATION STAMPED AND SIGNED BY REGISTERED CALIFORNIA PROFESSIONAL ENGINEER.
2. THE INSTALLATION OF FABRICATED METAL WORK WORK SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE (CBC). ALL LOADS AND LOAD COMBINATIONS SHALL BE IN ACCORDANCE WITH THE CBC. DESIGN SHALL INCLUDE WIND AND SEISMIC LOADS.
3. ANCHORAGE
   - 3.1. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 WITH GRADES AS SPECIFIED BY THE CANOPY MANUFACTURER. HEX NUTS SHALL CONFORM TO ASTM A563. WASHERS SHALL CONFORM TO AST F436.
4. ROOF COVERING AND SUPPORTS
   - 4.1. EXPOSED METAL ROOF COVERING SHALL BE EITHER 24-GAUGE (MINIMUM) ALUMINUM ZINC COATED STEEL PANELS OR 24-GAUGE (MINIMUM) ALUMINUM PANELS. ROOF PANELS SHALL BE OF A RIBBED DESIGN. ROOF PANELS SHALL BE FASTENED TO THE PURLINS WITH STAINLESS STEEL OR ALUMINUM WEATHER-SEALED TYPE SCREWS, BOLTS, RIVETS, OR CLIPS. FASTENERS SHALL BE ADEQUATELY SPACED TO DEVELOP CODE UPLIFT RESISTANCE.
   - 4.2. ROOF PANELS SHALL BE COATED WITH A MANUFACTURER'S STANDARD COATING SYSTEM. CONTRACTOR SHALL SUBMIT A COLOR CHIP TO THE DISTRICT FOR APPROVAL.
   - 4.3. GUTTERS AND DOWNSPOUT SHALL BE ALUMINUM, COATED TO MATCH ROOFING COLOR. ROUTE DOWNSPOUT AWAY FROM ALL EQUIPMENT.
5. FRAMING
   - 5.1. THE PRE-FABRICATED METAL CANOPY SHALL BE A STEEL CLEAR SPAN RIGID FRAME AND BRACED STRUCTURE WITH STEEL SUB-FRAMING AND ROOF SHEETS. CANOPY SHALL BE SUPPORTED ON TWO COLUMNS AS SHOWN IN THE DRAWINGS. ROOF SLOPE SHALL NOT BE LESS THAN ¼" PER FOOT.
   - 5.2. FRAMING, INCLUDING COLUMNS, SHALL BE COMPOSED OF STRUCTURAL STEEL TUBING. TUBING SHALL BE STRUCTURAL STEEL HOLLOW STRUCTURAL SECTIONS (HSS) OF RECTANGULAR OR SQUARE CROSS-SECTIONS CONFORMING TO EITHER ASTM A500 RO A1085
6. GROUNDING
   - 6.1. GROUND STRUCTURAL IN ACCORDANCE WITH THE ELECTRICAL PLANS.

SHADE STRUCTURE DETAIL 6 C-4
SCALE: NTS



MAT FOUNDATION SPECIFICATIONS:
1. NET ALLOWABLE BEARING PRESSURE OF MAT SLAB AND EQUIPMENT SHALL BE 3,000 PSF DUE TO DEAD LOAD AND 4,500 PSF DUE TO DEAD AND LIVE LOAD.
2. AREAS REQUIRING PLACEMENT OF FILL SHALL BE SCARIFIED AN ADDITIONAL DEPTH OF 8-INCHES BEYOND THE DEPTH OF FILL, UNIFORMLY MOISTURE CONDITIONED BETWEEN 5 AND 0 PERCENT BELOW OPTIMUM MOISTURE CONTENT AND BE COMAPCTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION PER ASTM D1557.
3. 28-DAY CONCRETE STRENGTH SHALL BE 4,000 PSI MINIMUM; REINFORCING BARS SHALL BE ASTM A615 GR. 60.
4. REINFORCEMENT DESIGN FOR CONCRETE EQUIPMENT PADS AND MAT SLABS SHALL BE PROVIDED BY THE CONTRACTOR. CALCULATIONS SHALL BE SIGNED/STAMPED BY A REGISTERED CALIFORNIA ENGINEER AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE CBC, ASCE-7-16 AND ACI.
5. CONTRACTOR SHALL INSTALL EXPANSION JOINTS AS NEEDED WHERE CONCRETE SURFACING IS LOCATED ADJACENT TO THE CONCRETE PAD.

ELECTRICAL EQUIPMENT PAD DETAIL 7 C-4
SCALE: NTS

REV	DESCRIPTION	BY	DATE
1			
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CANON SEWER PUMP STATION IMPROVEMENTS

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DETAILS

DRAWN BY: BFC

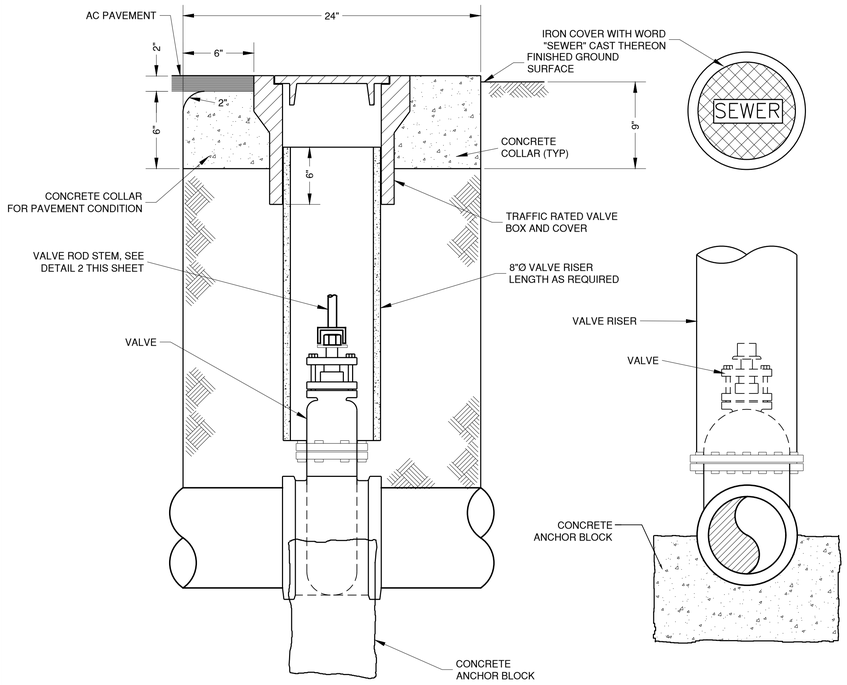
CHECKED BY: LDJ

DATE: 10/25/2023

SHEET

C-4

8 OF 20

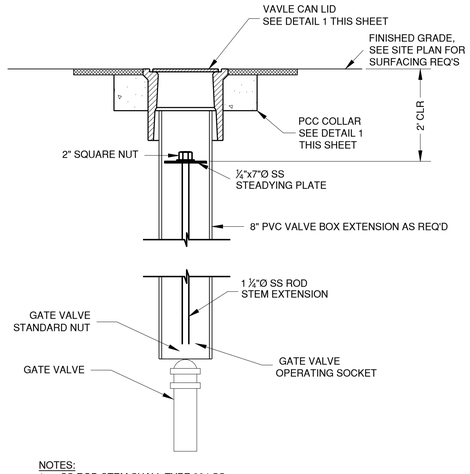


NOTES:

1. PROVIDE VALVE STEM EXTENSION IF DEPTH TO VALVE EXCEEDS FOUR (4) FEET.
2. SECURE CONCRETE ANCHOR BLOCKS TO VALVE BODY USING TWO (2) #4 REBAR SADDLES.
3. VALVES BOLTED TO FITTINGS WILL NOT REQUIRE ANCHOR BLOCKS.

VALVE CAN DETAIL 1 C-5

SCALE: NTS

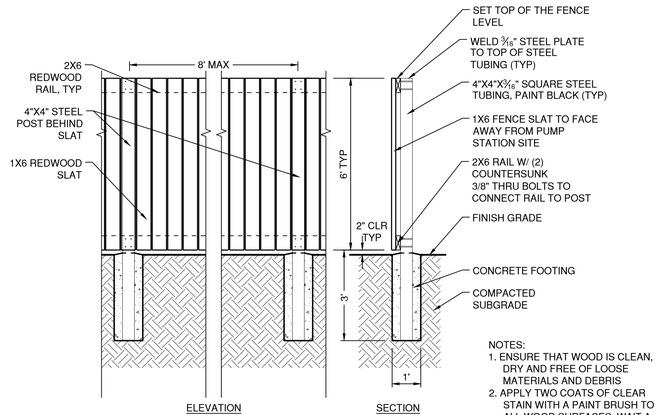


NOTES:

1. SS ROD STEM SHALL TYPE 304 SS.

VALVE ROD STEM 2 C-5

SCALE: NTS

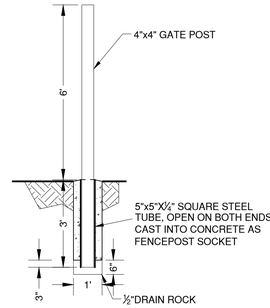


NOTES:

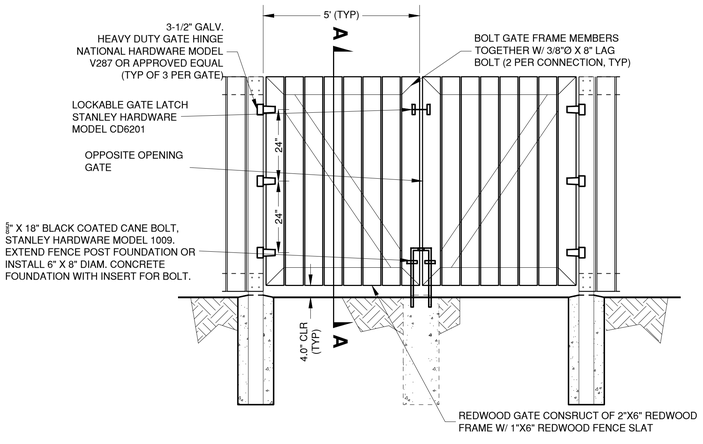
1. ENSURE THAT WOOD IS CLEAN, DRY AND FREE OF LOOSE MATERIALS AND DEBRIS
2. APPLY TWO COATS OF CLEAR STAIN WITH A PAINT BRUSH TO ALL WOOD SURFACES. WAIT A MINIMUM OF 8 HOURS BEFORE APPLYING SECOND COAT.

REDWOOD FENCE DETAIL 3 C-5

SCALE: NTS

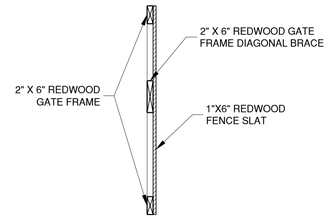


REMOVABLE FENCE POST BASE (WHERE NOTED ON PLANS)



REDWOOD GATE DETAIL 4 C-5

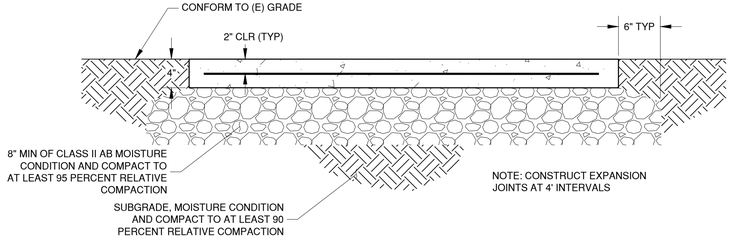
SCALE: NTS



SECTION A-A

NOTES:

1. ENSURE THAT WOOD IS CLEAN, DRY AND FREE OF LOOSE MATERIALS AND DEBRIS
2. APPLY TWO COATS OF CLEAR STAIN WITH A PAINT BRUSH TO ALL WOOD SURFACES. WAIT A MINIMUM OF 8 HOURS BEFORE APPLYING SECOND COAT.



CONCRETE SURFACING DETAIL 5 C-5

SCALE: NTS

REV	DATE	BY	DESCRIPTION
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DETAILS

DRAWN BY: BFC
CHECKED BY: LDJ
DATE: 10/25/2023

SHEET

C-5

9 OF 20

GENERAL SYMBOLS AND LEGEND

(E)	EXISTING
(N)	NEW
(R)	RELOCATED
	DELTA CONNECTIONS OR DELTA CONNECTED WINDINGS
	OPEN DELTA CONNECTIONS
	WYE CONNECTIONS OR WYE CONNECTED WINDINGS
	GROUND, GROUND CONNECTION
(2)	SHEET NOTE IDENTIFICATION, REFER TO SHEET NOTE NUMBER 2
(K)	KEY INTERLOCK
(MI)	MECHANICAL INTERLOCK
	DISCONNECTING MEANS
-X-X-X-	FENCE
±	APPROXIMATE DIMENSION
	POLE MOUNTED ANTENNA

ELECTRICAL SYMBOLS

	POWER TRANSFORMER, TWO WINDING
	SWITCH
	SWITCH, FUSED
	TEMPERATURE SWITCH, CLOSED AT LOW TEMPERATURE
	TEMPERATURE SWITCH, OPEN AT LOW TEMPERATURE
	FLOAT SWITCH, CLOSED AT LOW WATER LEVEL
	FLOAT SWITCH, OPEN AT LOW WATER LEVEL
	OVERLOAD ELEMENT
	LOW VOLTAGE MOLDED CASE CIRCUIT BREAKER
S	CAPACITOR, STARTING
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	FUSE
RES	RESISTOR, IN CONTROL CIRCUIT
	SOLENOID VALVE OPERATING COIL
G	INDICATING LIGHT, G-GREEN, R-RED, W-WHITE, A-AMBER
CR	CONTROL RELAY
SR	STARTING RELAY
	BATTERY BANK
27AC	UNDERVOLTAGE RELAY
M	AMP REVENUE METER
	GENERATOR RECEPTACLE
	POLE MOUNTED LIGHT FIXTURE
	4 FOOT FLUORESCENT LIGHT FIXTURE
$	SINGLE POLE LIGHT SWITCH, 20A, 120V
	DUPLEX RECEPTACLE, SURFACE MOUNTED, NEMA 5-20R, 20 AMP, 125 VOLT, +15° MIN. UON. SUBSCRIPT "GFI" DENOTES WITH GROUND FAULT INTERRUPTER WHERE INDICATED ON PLAN. ALL OUTDOOR RECEPTACLES SHALL BE WEATHERPROOF (WP) WITH LOCKABLE COVER.
E-S	EMERGENCY STOP SWITCH
	CENTERLINE, STRUCTURE OR EQUIPMENT
LV	LOW VOLTAGE WIRING SYSTEM
	CONDUIT STUB-DOWN
	FLEXIBLE WIRING AND EQUIPMENT CONNECTION.
	EXISTING EQUIPMENT TO BE REMOVED

UNDERGROUND DISTRIBUTION AND GROUNDING

	UNDERGROUND CONDUITS
G G	GROUND GRID, BURIED OR IN MH/VAULT
	UNDERGROUND CONDUIT, CAPPED
	GROUNDING PIGTAILS
	UNDERGROUND THERMO-WELD CONNECTIONS
	3/4" DIA X 10' LONG COPPERCLAD GROUND ROD
	3/4" DIA X 10' LONG COPPERCLAD GROUND ROD IN ACCESSIBLE CONCRETE GROUND ROD BOX
	CONDUIT STUB-UPS

ABBREVIATIONS

A	A	AMPERE
	A.C.	ALTERNATING CURRENT
	AI	ANALOG INPUT
	AIC	AMPS INTERRUPTING CURRENT
	AMP	ALAMEDA MUNICIPAL POWER
	ANN	ANNUNCIATOR
	AO	ANALOG OUTPUT
	AS	AMMETER SWITCH
	ATS	AUTOMATIC TRANSFER SWITCH
	AUX.	AUXILIARY
	AWG	AMERICAN WIRE GAUGE
B	BAL	BALANCE
	BATT.	BATTERY
	BCW	BARE COPPER WIRE
	BKR	BREAKER
	BLDG.	BUILDING
	BOT	BOTTOM
C	C	CONDUIT
	CB	CIRCUIT BREAKER
	CAB	CABINET
	CAP	CAPACITOR
	CHGR.	CHARGER
	CKT	CIRCUIT
	CL,CLE	CURRENT LIMITING, CURRENT LIMITING "E" FUSE
	COL	COLUMN
	COMP	COMPARTMENT
	CONT.	CONTROL
	CNTLR	CONTROLLER
	CO	CONDUIT ONLY
	CONC	CONCRETE
	COND.	CONDUCTOR
	CP	CONTROL PANEL
	CPT	CONTROL POWER TRANSFORMER
	C.S.	CONTROL SWITCH
	CT	CURRENT TRANSFORMER
	CU	COPPER
	CUB	CUBICLE
D	D	DEEP
	DB	DUCT BANK
	DC	DIRECT CURRENT
	D.E.	DEAD END
	DI	DIGITAL INPUT
	DIA	DIAMETER
	DIM	DIMENSION
	DISC	DISCONNECT
	DIST.	DISTRIBUTION
	DN	DOWN
	DO	DIGITAL OUTPUT
	DP	DISTRIBUTION PANEL
	DW	DRY WEATHER
	DWG	DRAWING
E	EA	EACH
	EF	EXHAUST FAN
	EO	ELECTRICALLY OPERATED
	ELEC	ELECTRICAL
	ELEV	ELEVATION
	EPR	ETHYLENE PROPYLENE RUBBER
	EQPMNT	EQUIPMENT
	ETM	ELAPSED TIME METER

ABBREVIATIONS (CONTINUED)

F	FDR	FEEDER
	F, FU	FUSE
	FLD	FIELD
	FLC	FULL LOAD CURRENT
	FLS	FLOAT SWITCH
	FT	FOOT, FEET
	FUT.	FUTURE
	FVR	FULL VOLTAGE REVERSING
	FVNR	FULL VOLTAGE NON-REVERSING
G	GAL	GALLONS
	GALV	GALVANIZED
	GC	GROUND CHECK
	GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	G.L.	GRADE LEVEL
	GND	GROUND
H	HI	HIGH
	HT	HEIGHT
	HH	HANDHOLE
	HTR	HEATER
	HOA	HAND-OFF-AUTO
	HV	HIGH VOLTAGE
I	IC	INTERRUPTING CAPACITY
	INC	INCOMING
	IND	INDICATION
	INS	INSULATOR
	IRR	IRRIGATION
	ISR	INTRINSICALLY SAFE RELAY
J	JB	JUNCTION BOX
K	KCM	THOUSAND CIRCULAR MILS
	KV	KILOVOLT
	KVA	KILOVOLT AMPERE
	KVAR	KILOVOLT AMPERE REACTIVE
	KW	KILOWATT
L	L	LONG, LENGTH
	L.A.	LIGHTNING ARRESTER
	LBS	POUNDS
	LCP	LIGHTING CONTROL PANEL
	L-L	LINE TO LINE
	L-N	LINE TO NEUTRAL
	LTG	LIGHTING
	LO	LOW
	LVL	LEVEL
	LxWxH	LENGTH, WIDTH AND HEIGHT
	LPS	LOW PRESSURE SODIUM
	LV	LOW VOLTAGE
M	MAX	MAXIMUM
	MCC	MOTOR CONTROL CENTER
	MCCB	MOLDED CASE CIRCUIT BREAKER
	MCP	MOTOR CIRCUIT PROTECTOR
	MCS	MOLDED CASE SWITCH
	MED	MEDIUM
	MFR.	MANUFACTURER
	MH	MANHOLE
	MI	MECHANICAL INTERLOCK
	MIN	MINIMUM
	MISC	MISCELLANEOUS
	MO	MANUALLY OPERATED
	MR	MULTI-RATIO
	MTD	MOUNTED
	MV	MEDIUM VOLTAGE
N	N.C.	NORMALLY CLOSED
	N.I.C.	NOT IN CONTRACT
	N.O.	NORMALLY OPEN
	NTS	NOT TO SCALE
	NP	NAMEPLATE
O	OC	ON CENTER
	O/C	OVERCURRENT
	O.H.	OVERHEAD
	OL	OVERLOAD
	OPER.	OPERATING

ABBREVIATIONS (CONTINUED)

P	PB	PULL BOX
	PCB	POLYCHLORINATED BIPHENYLS
	PCC	PORTLAND CEMENT CONCRETE
	PF	POWER FACTOR
	PFR	POWER FAIL RELAY
	PH	PHASE
	PLC	PROGRAMMABLE LOGIC CONTROLLER
	PMP	PUMP
	PNL.	PANEL
	PT	POTENTIAL TRANSFORMER
	PTT	PUSH-TO-TEST
	PVC	POLYVINYL CHLORIDE
	PWR	POWER
R	R	RADIUS
	(R)	RELOCATE
	REM	REMOTE
	RSC, RSG	RIGID STEEL CONDUIT, GALVANIZED
	REQ'D	REQUIRED
	RTU	REMOTE TERMINAL UNIT
S	S.A.	SURGE ARRESTERS
	SB	SHORTING BLOCK
	SBC	SBC COMMUNICATIONS, INC.
	SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
	SCH	SCHEDULE
	SCTB	SHORT CIRCUITING TERMINAL BLOCK
	SEC	SECONDARY
	SHLD.	SHIELDED
	SHT	SHEET
	SPR	SPARE
	SPD	SURGE PROTECTION DEVICE
	SS	STAINLESS STEEL
	SSRVS	SOLID STATE REDUCED VOLTAGE STARTER
	STA.	STATION
	STD	STANDARD
	SUB	SUBSTATION
	SVCE	SERVICE
	SV	SOLENOID VALVE
	SW	SWITCH
	SWBD	SWITCHBOARD
	SWGR	SWITCHGEAR
	SYM	SYMMETRICAL
T	TEL	TELEPHONE
	TELEM	TELEMETERING
	TEMP	TEMPORARY
	TERM	TERMINAL
	TOC	TOP OF CONCRETE
	TS	TEST SWITCH
	TSP	TWISTED SHIELDED PAIR
	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
	TYP.	TYPICAL
U	UG	UNDERGROUND
	UON	UNLESS OTHERWISE NOTED
	UL	UNDERWRITER LABORATORIES
	UPS	UNINTERRUPTIBLE POWER SUPPLY
	UV	UNDERVOLTAGE
V	V	VOLT
	V.C.B.	VACUUM CIRCUIT BREAKER
	VF	VENTILATING FAN
	VFD	VARIABLE FREQUENCY DRIVE
	VS	VOLTMETER SWITCH
	V.T.	VOLTAGE TRANSFORMER
W	W/	WITH
	WT	WEIGHT
	WP	WEATHERPROOF
X	XDCR	TRANSDUCER
	XFMR	TRANSFORMER
	XFR	TRANSFER
	XMTR	TRANSMITTER

SYMBOLS AND ABBREVIATIONS ARE FOR GENERAL USE.
DISREGARD THOSE WHICH ARE NOT USED ON THE DRAWINGS.

GENERAL NOTES:

1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE, THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL FIRE PROTECTION ASSOCIATION AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.
2. LOCATION(S) OF CONTROLLERS, CONDUIT, PULL BOXES AND OTHER EQUIPMENT AS SHOWN ON THE PLAN IS APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
3. PULL ROPE SHALL BE PROVIDED IN ALL EMPTY CONDUITS.
4. ELECTRICAL EQUIPMENT AND FEEDER SHALL BE SUPPORTED AND/OR ANCHORED IN ACCORDANCE WITH 2019 CBC SEISMIC REQUIREMENTS.
5. ALL CONDUCTORS SHALL BE 600 VOLT, STRANDED COPPER, WITH TYPE XHHW-2 INSULATION, UNLESS OTHERWISE NOTED. THE MINIMUM SIZE CONDUCTORS SHALL BE #12 AWG UNLESS OTHERWISE NOTED.

DATE	BY	DESCRIPTION	REV.

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consulting civil engineers, inc.
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santa clara, ca 95054
(408) 986-8558
FAX (408) 986-9627

PROJECT NO. 20697-01

REGISTERED PROFESSIONAL ENGINEER
JULIO C. HERDOCIA
No. 9580
Exp. 9/30/24
ELECTRICAL
STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

SYMBOLS, ABBREVIATIONS AND GENERAL NOTES

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E1

10 OF 20

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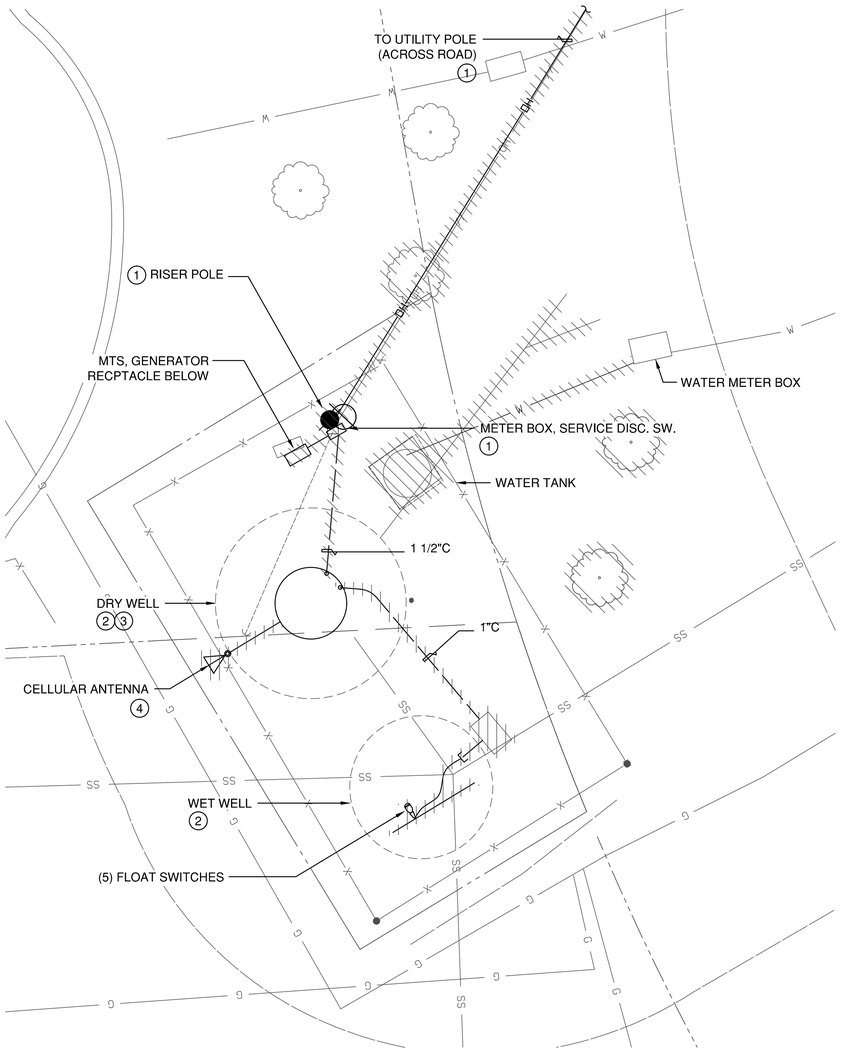
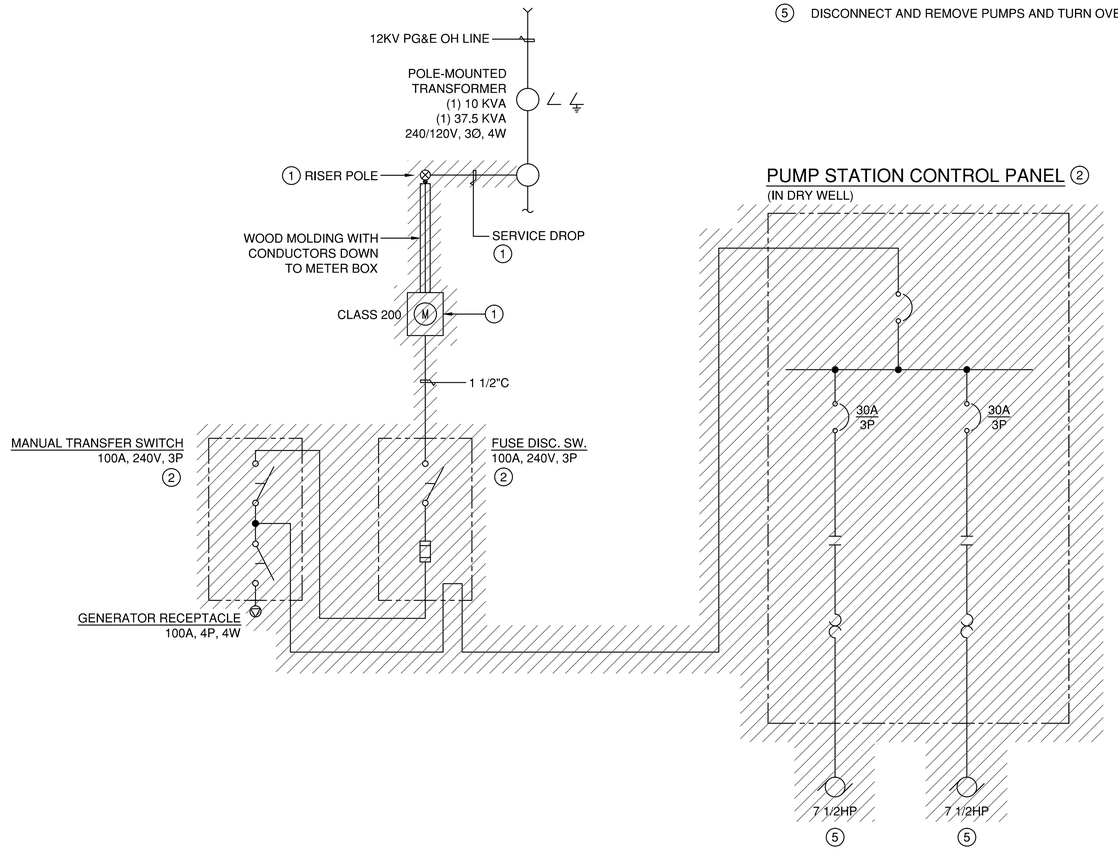


2 - ELECTRICAL SITE PLAN - REMOVAL WORK

SCALE: 1" = 3'-0"

3' 0 1.5' 3' 6'

1" = 3'



1 - ONE-LINE DIAGRAM - REMOVAL WORK

SCHEMATIC

GENERAL NOTES:

1. DISTRICT RESERVES THE RIGHT OF REFUSAL ON ANY OF THE EXISTING EQUIPMENT AND DEVICES BEING REMOVED IN THIS PROJECT. ANY EQUIPMENT OR DEVICES NOT WANTED BY THE DISTRICT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE.
2. IT IS THE INTENTION OF THIS PROJECT TO LEAVE EXISTING DRY WELL AND WET WELL COMPLETELY CLEAR AND FREE OF ANY AND ALL EXISTING ELECTRICAL APPARATUS THAT IS NOT IN USE OR THAT IS BEING REPLACED BY THIS PROJECT. THIS INCLUDES DEVICES, CONDUIT, BOXES, IN GROUND BOXES SERVING THE WELL BUT LOCATED OUTSIDE THE WELL, AND ANY OTHER SYSTEMS THAT EXIST BUT WILL NOT BE USED OR REPLACED AT THE COMPLETION OF THIS PROJECT WHETHER SHOWN SPECIFICALLY ON THESE PLANS FOR REMOVAL OR NOT.

SHEET NOTES:

1. COORDINATE WITH PG&E FOR REMOVAL OF OVERHEAD SERVICE DROP, REMOVAL OF RISER POLE, AND REMOVAL OF PUMP STATION METER.
2. REMOVE ELECTRICAL EQUIPMENT INCLUDING ALL ENCLOSED EQUIPMENT AND DEVICES. VERIFY CONNECTIONS AND EXISTING CONDITIONS TO THE EXTENT REQUIRED TO SAFELY REMOVE EQUIPMENT.
3. REMOVE SCADA RTU EQUIPMENT INSIDE DRYWELL AND TURN OVER TO THE DISTRICT.
4. REMOVE CELLULAR ANTENNA.
5. DISCONNECT AND REMOVE PUMPS AND TURN OVER TO THE DISTRICT.

REV.	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			

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PROJECT NO. 20697-01

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No. 9580
Exp. 9/30/24
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STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

SITE PLAN & ONE-LINE DIAGRAM - REMOVAL WORK

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E2

11 OF 20

File: M:\20697-01_Canon Pump Station\01E2.dwg, 2/9/2023 6:49 PM, Last saved: rcatris, PlotDate: 4/3/2023 1:53 PM By: Robbie Catris, Plot scale: 1:2.5849, Plot Size: ANSI A (8.50 x 11.00 Inches)
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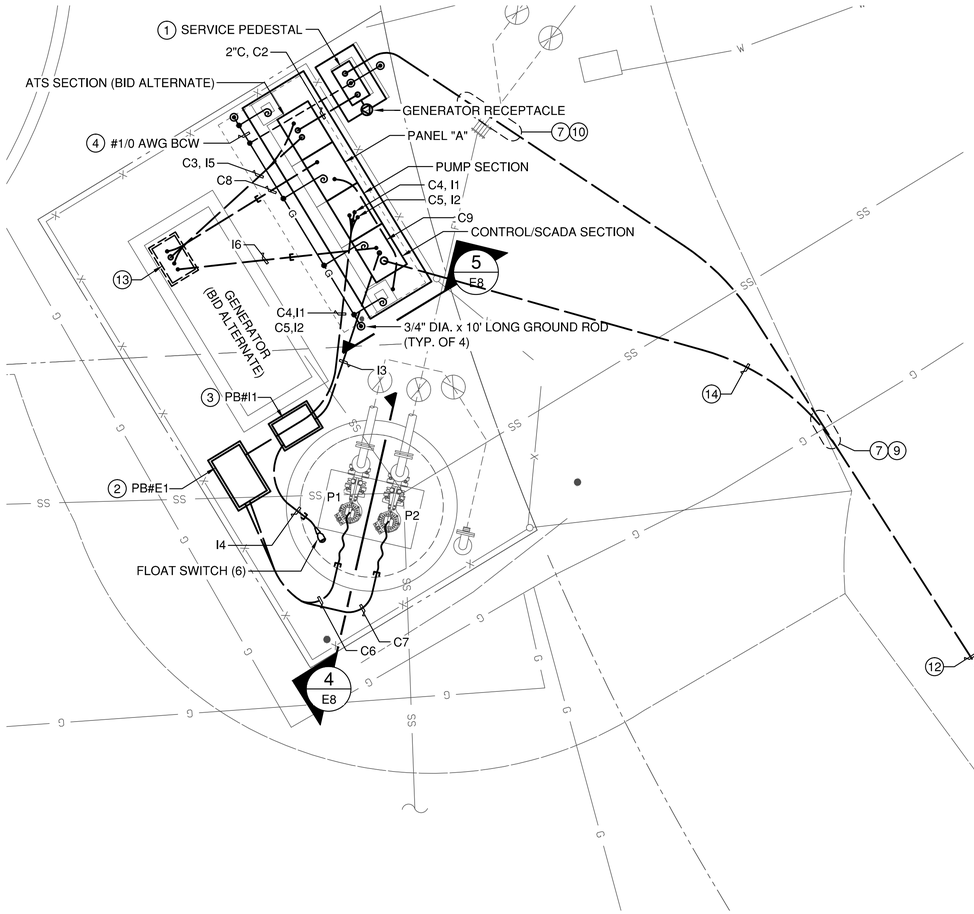
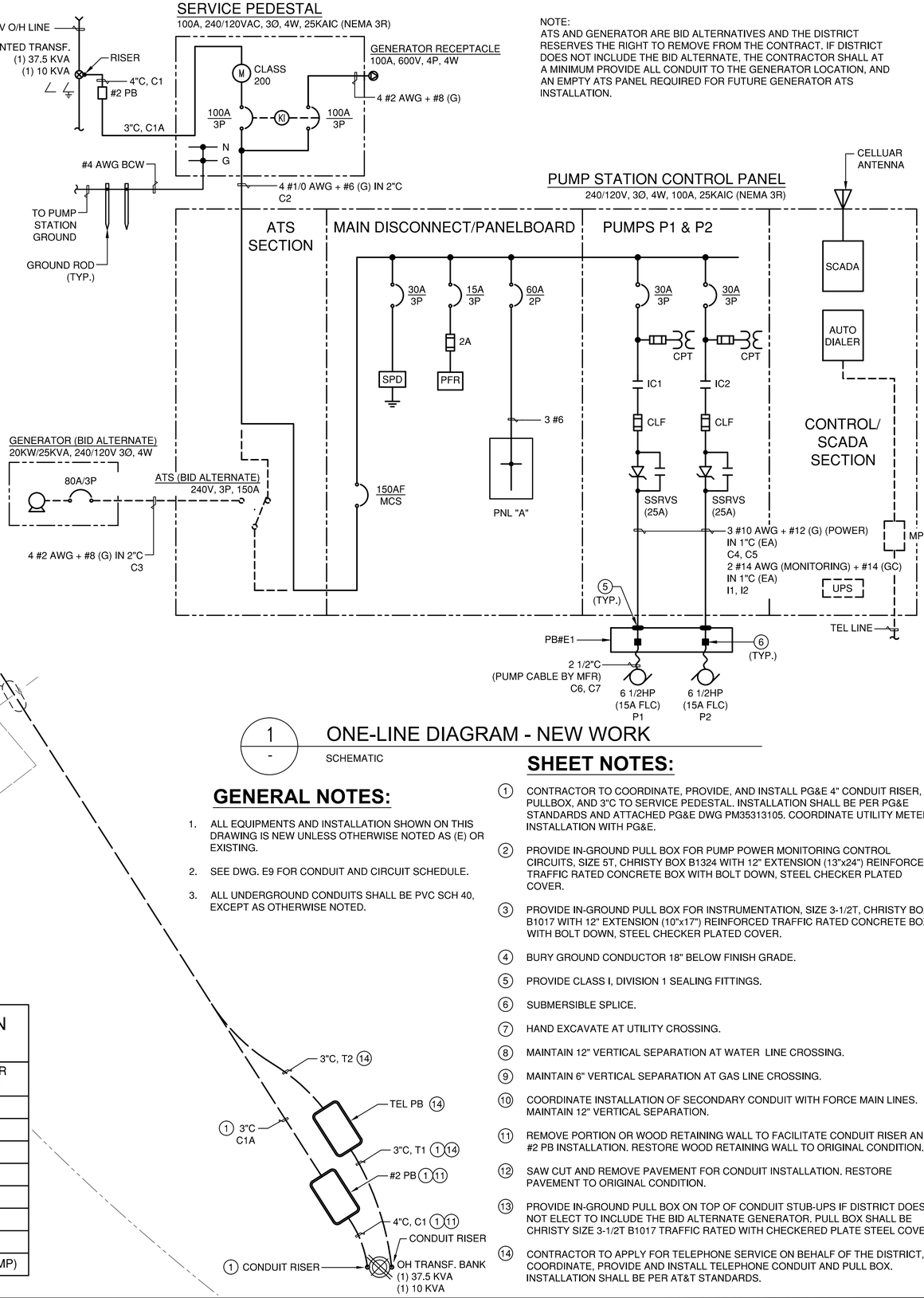


2 - ELECTRICAL SITE PLAN - NEW WORK

SCALE: 1" = 3'-0"

3' 0 1.5' 3' 6'

1" = 3'



NOTE:
ATS AND GENERATOR ARE BID ALTERNATIVES AND THE DISTRICT RESERVES THE RIGHT TO REMOVE FROM THE CONTRACT. IF DISTRICT DOES NOT INCLUDE THE BID ALTERNATE, THE CONTRACTOR SHALL AT A MINIMUM PROVIDE ALL CONDUIT TO THE GENERATOR LOCATION, AND AN EMPTY ATS PANEL REQUIRED FOR FUTURE GENERATOR ATS INSTALLATION.

1 - ONE-LINE DIAGRAM - NEW WORK

SCHEMATIC

ENCLOSURE NEMA 1 IN CONTROL PANEL, INTERRUPTING DUTY MOUNTING BREAKER 22KAIC, 240/120V VOLT, 1 PHASE, 3 WIRE, MLO A. MAIN BREAKER, 100 A. BUS

DESCRIPTION	LOADS/VA A	LOADS/VA B	BKR./POLE	CKT. NO.	PHASE A B	CKT. NO.	BKR./POLE	LOADS/VA A	LOADS/VA B	DESCRIPTION
UPS EQUIPMENT	1500		20/1	1		2	20/1			SPARE (FUT GEN JWH)
MCC CONV. GFCI		1100	20/1	3		4				(FUT BATT CHGR)
MCC HEATERS	750		20/1	5		6		-		
MCC LIGHTS		200	20/1	7		8			-	
MCC FAN	100		20/1	9		10		-		
SPARE				11		12				
				13		14				
		-		15		16				
	-			17		18				SITE LIGHTING
		-		19		20			-	
	-			21		22		-		
		-		23		24			-	
	-			25		26		-		
		-		27		28			-	
	-			29		30		-		
				31		32				
				33		34				
				35		36				
				37		38				
				39		40				
				41		42				
	2350	1300						-	-	

TOTAL: 3.65 KVA PANEL # "A" FEEDER SIZE SEE ONE-LINE DIAGRAM

CANON PUMP STATION LOAD ANALYSIS	
LOAD DESCRIPTION	POWER (KVA)
PUMP P-1 (6 1/2 HP)	6.24
PUMP P-2 (6 1/2 HP)	6.24
CONTROL PANEL "A"	3.65
SUBTOTAL	16.13
25% LARGEST MOTOR	1.56
25% CONTINUOUS	0.91
TOTAL	18.6
240V, 3 PHASE	44.74 (AMP)

GENERAL NOTES:

1. ALL EQUIPMENTS AND INSTALLATION SHOWN ON THIS DRAWING IS NEW UNLESS OTHERWISE NOTED AS (E) OR EXISTING.
2. SEE DWG. E9 FOR CONDUIT AND CIRCUIT SCHEDULE.
3. ALL UNDERGROUND CONDUITS SHALL BE PVC SCH 40, EXCEPT AS OTHERWISE NOTED.

SHEET NOTES:

1. CONTRACTOR TO COORDINATE, PROVIDE, AND INSTALL PG&E 4" CONDUIT RISER, #2 PULLBOX, AND 3"C TO SERVICE PEDESTAL. INSTALLATION SHALL BE PER PG&E STANDARDS AND ATTACHED PG&E DWG PM35313105. COORDINATE UTILITY METER INSTALLATION WITH PG&E.
2. PROVIDE IN-GROUND PULL BOX FOR PUMP POWER MONITORING CONTROL CIRCUITS, SIZE 5T, CHRISTY BOX B1324 WITH 12" EXTENSION (13"x24") REINFORCED TRAFFIC RATED CONCRETE BOX WITH BOLT DOWN, STEEL CHECKER PLATED COVER.
3. PROVIDE IN-GROUND PULL BOX FOR INSTRUMENTATION, SIZE 3-1/2T, CHRISTY BOX B1017 WITH 12" EXTENSION (10"x17") REINFORCED TRAFFIC RATED CONCRETE BOX WITH BOLT DOWN, STEEL CHECKER PLATED COVER.
4. BURY GROUND CONDUCTOR 18" BELOW FINISH GRADE.
5. PROVIDE CLASS I, DIVISION 1 SEALING FITTINGS.
6. SUBMERSIBLE SPLICE.
7. HAND EXCAVATE AT UTILITY CROSSING.
8. MAINTAIN 12" VERTICAL SEPARATION AT WATER LINE CROSSING.
9. MAINTAIN 6" VERTICAL SEPARATION AT GAS LINE CROSSING.
10. COORDINATE INSTALLATION OF SECONDARY CONDUIT WITH FORCE MAIN LINES. MAINTAIN 12" VERTICAL SEPARATION.
11. REMOVE PORTION OR WOOD RETAINING WALL TO FACILITATE CONDUIT RISER AND #2 PB INSTALLATION. RESTORE WOOD RETAINING WALL TO ORIGINAL CONDITION.
12. SAW CUT AND REMOVE PAVEMENT FOR CONDUIT INSTALLATION. RESTORE PAVEMENT TO ORIGINAL CONDITION.
13. PROVIDE IN-GROUND PULL BOX ON TOP OF CONDUIT STUB-UPS IF DISTRICT DOES NOT ELECT TO INCLUDE THE BID ALTERNATE GENERATOR. PULL BOX SHALL BE CHRISTY SIZE 3-1/2T B1017 TRAFFIC RATED WITH CHECKERED PLATE STEEL COVER.
14. CONTRACTOR TO APPLY FOR TELEPHONE SERVICE ON BEHALF OF THE DISTRICT, COORDINATE, PROVIDE AND INSTALL TELEPHONE CONDUIT AND PULL BOX. INSTALLATION SHALL BE PER AT&T STANDARDS.

REV.	DESCRIPTION	BY	DATE

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(408) 986-8558
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PROJECT NO. 20697-01

REGISTERED PROFESSIONAL ENGINEER JULIO C. HERDOCIA No. 9580 Exp. 9/30/24 ELECTRICAL STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF STEGE SANITARY DISTRICT

SITE PLAN & ONE-LINE DIAGRAM - NEW WORK

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E3

12 OF 20

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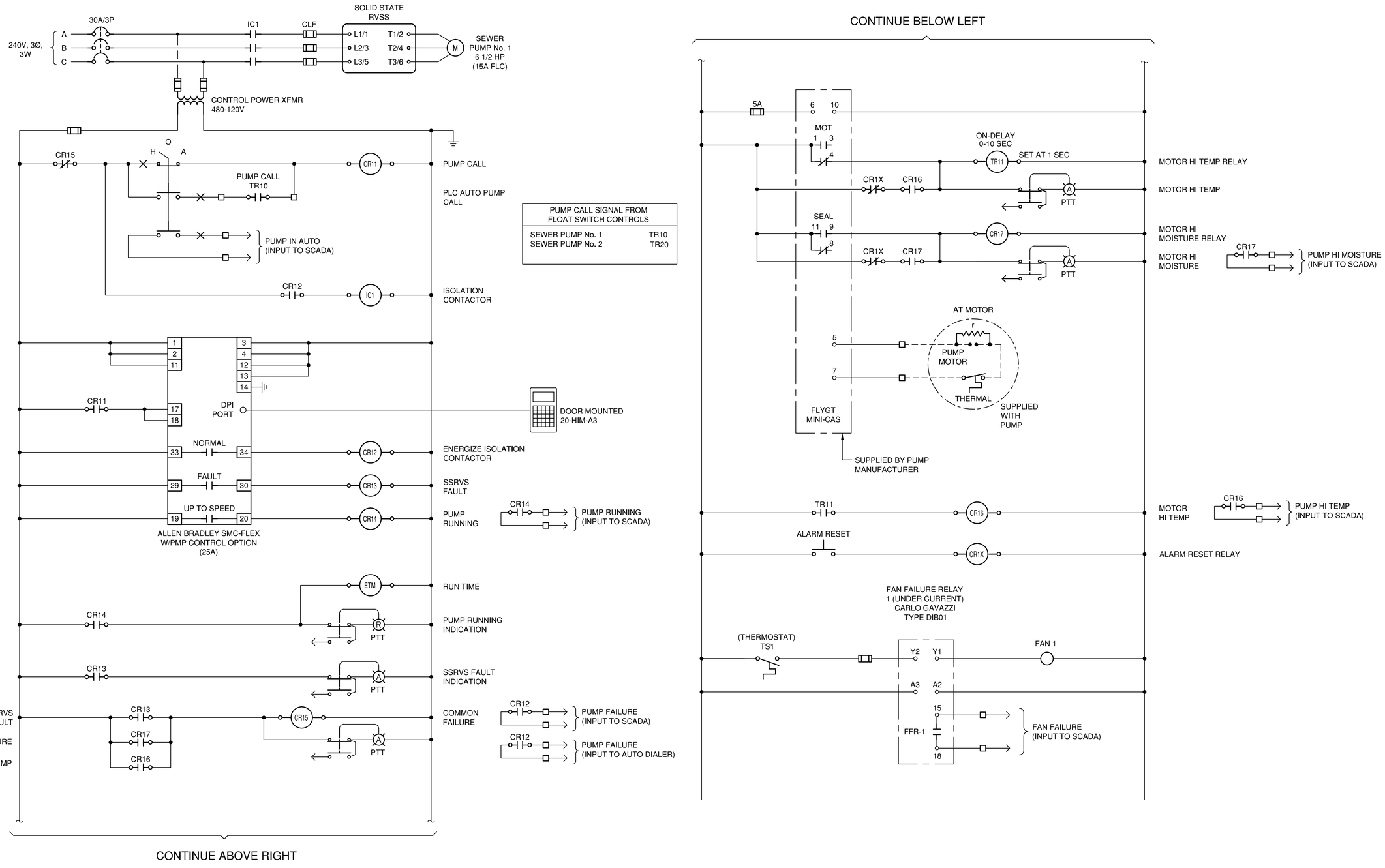

PUMP CALL SIGNAL FROM FLOAT SWITCH CONTROLS	
SEWER PUMP No. 1	TR10
SEWER PUMP No. 2	TR20

SEWER PUMP No. 1 CONTROL SCHEMATIC DIAGRAM
(SIMILAR FOR SEWER PUMP No. 2)

DATE	BY	DESCRIPTION	REV.

engineers, inc.
3350 scott blvd., bldg. 11
santa clara, ca 95054
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PROJECT NO. 20697-01

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STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF STEGE SANITARY DISTRICT

PUMP No. 1 CONTROL SCHEM. DIAGRAM

DRAWN BY: BFC

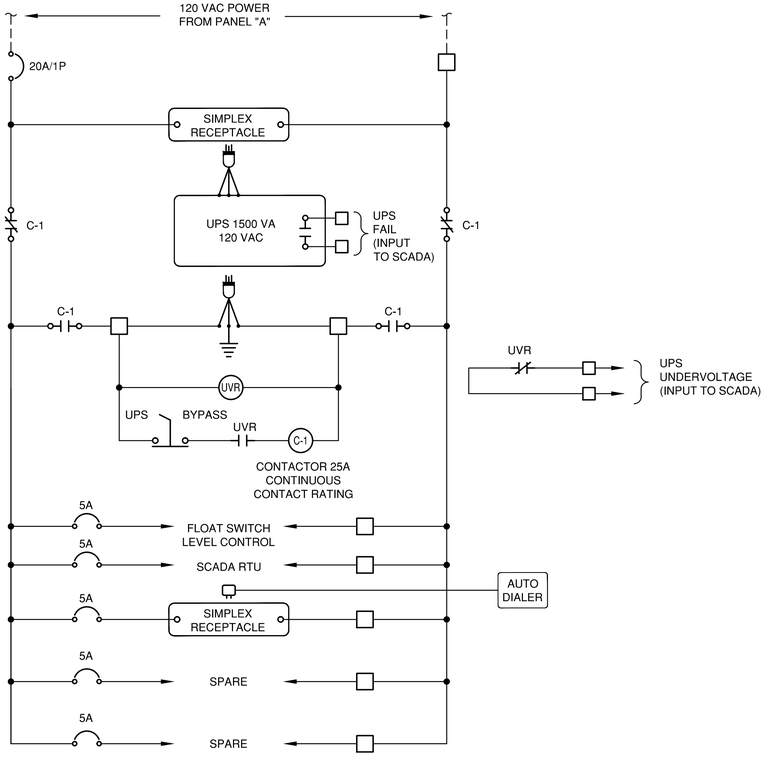
CHECKED BY: LDJ

JOB NUMBER:

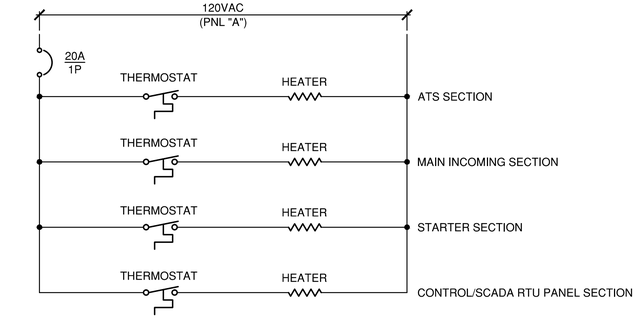
SHEET

E4

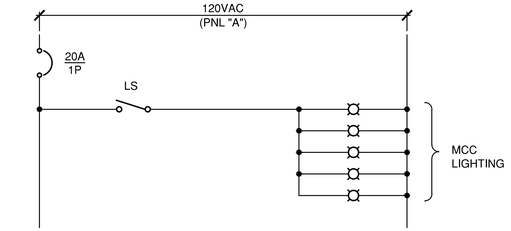
13 **OF** 20



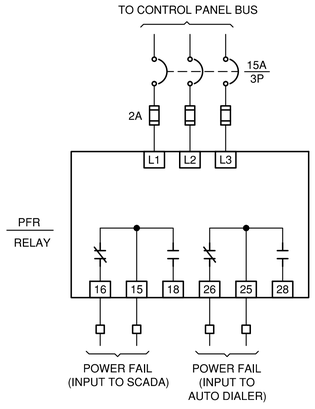
UPS POWER SUPPLY SCHEMATIC



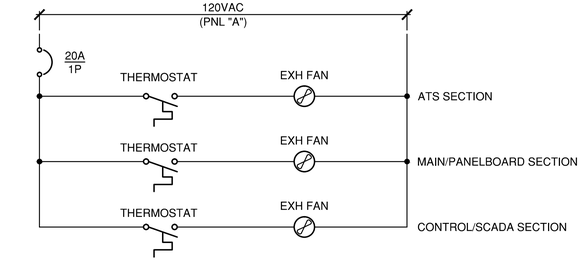
CONTROL PANEL HEATERS CONTROL SCHEMATIC



CONTROL PANEL LIGHTS CONTROL SCHEMATIC



POWER FAILURE RELAY SCHEMATIC



CONTROL PANEL EXHAUST FAN CONTROL SCHEMATIC

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FAX (408) 986-9627

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No. 9580
Exp. 9/30/24
ELECTRICAL
STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

MISC. CONTROL SCHEMATIC DIAGRAMS - SHT 1

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E5

14 OF 20

REV.	DESCRIPTION	BY	DATE

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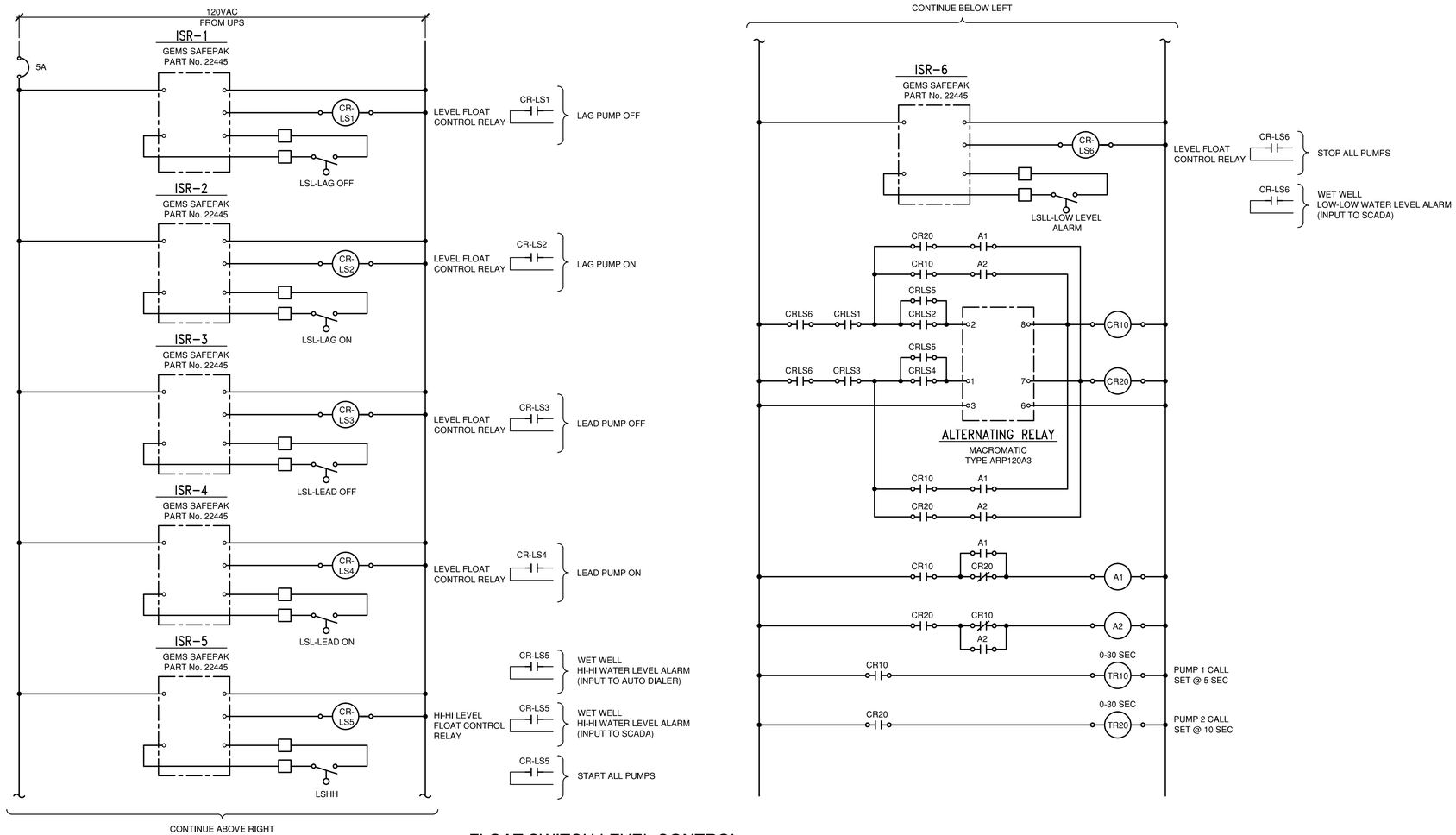
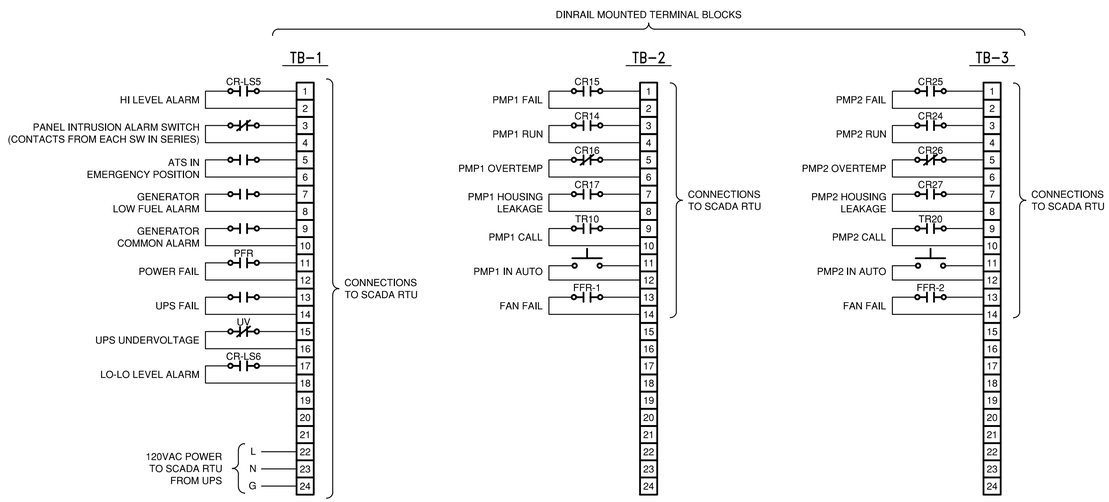


FLOAT SWITCH LEVEL CONTROL



SCADA RTU TERMINATION POINTS

DATE	BY	DESCRIPTION	REV.

schaaf & wheeler
engineers, inc.
3350 scott blvd., bldg. 11
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(408) 986-8558
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CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

MISC. CONTROL SCHEMATIC DIAGRAMS - SHT 2

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

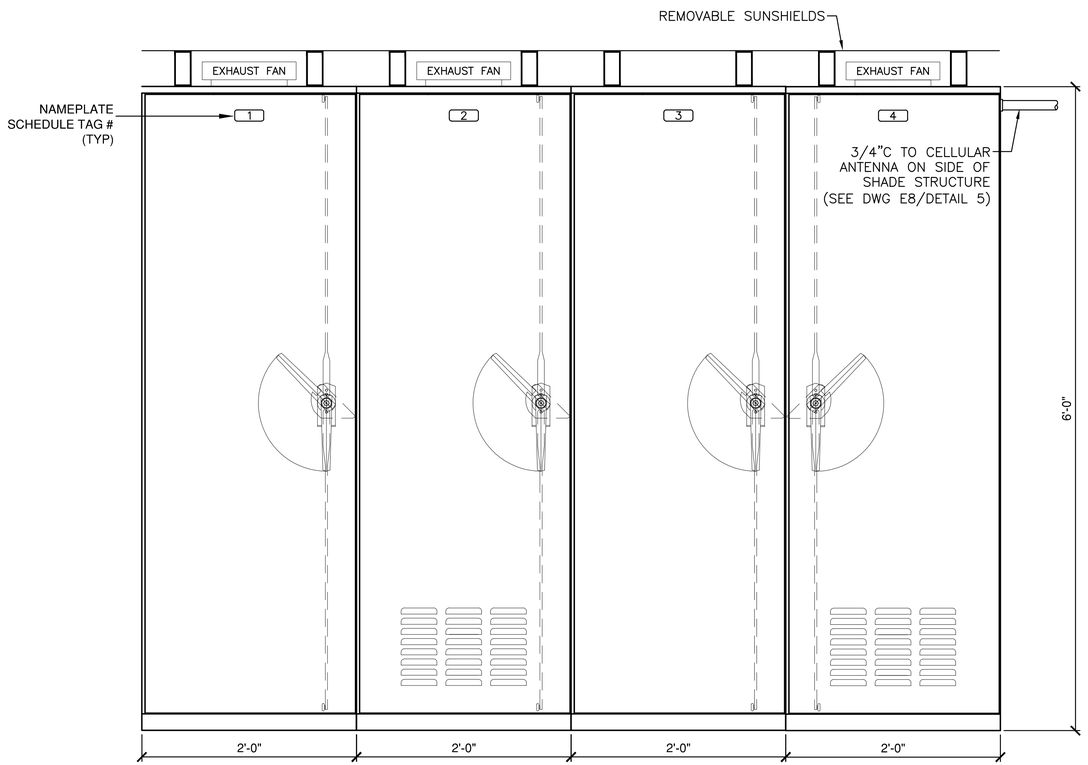
SHEET

E6

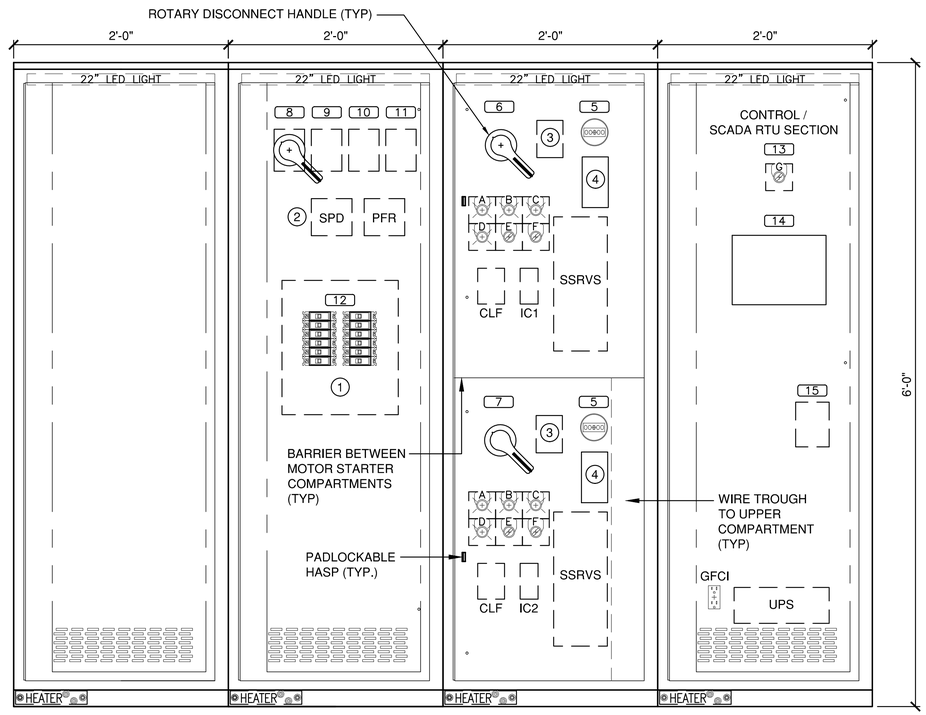
15 OF 20

File: M:\20697-01_Canon Pump Station\01E6.dwg, 4/3/2023 1:50 PM, Last saved: rcatris, PlotDate: 4/3/2023 1:54 PM By: Robbie Catris, Plot scale: 1:2.5849, Plot Size: ANSI A (8.50 x 11.00 Inches)
Xrefs: XR-TITLE

plotted by robbie catris on 4/3/2023 1:54 PM, last saved by rcatris on 4/3/2023 1:50 PM - filepath: m:\20697-01_canon pump station\01e6.dwg



PANEL ELEVATION



INNER DEADFRONT DOOR

(SHOWN WITH OUTER DOORS, SUNSHIELDS AND FANS REMOVED)

NAMEPLATE SCHEDULE				
	TAG#	QTY	TYPE	INSCRIPTION
	1	1	PLATE	FUTURE ATS
	2	1	PLATE	MAIN BKR PANELBOARD
	3	1	PLATE	PUMP STARTERS SECTION
(1)	4	1	PLATE	CONTROLS AND SCADA EQUIPMENT
	5	2	PLATE	PUMP ELAPSED TIME METER
	6	1	PLATE	PUMP NO. 1 DISCONNECT
	7	1	PLATE	PUMP NO. 2 DISCONNECT
(2)	8	1	PLATE	MAIN BREAKER
(2)	9	1	PLATE	BKR / SPD
(2)	10	1	PLATE	BKR / PFR
	11	1	PLATE	BKR / PANEL "A"
	12	1	PLATE	PANEL "A"
	13	1	PLATE	CONTROL POWER SELECTOR SWITCH
	14	1	PLATE	SCADA RTU
	15	1	PLATE	AUTO DIALER
	A	1	PLATE	PUMP RUNNING
	B	1	RING	PUMP FAILURE
	C	1	RING	MOTOR HI MOISTURE
	D	1	RING	MOTOR HI TEMP
	E	1	RING	HAND - OFF - AUTO
	F	1	RING	SEAL LEAK RESET
	G	1	RING	UTILITY UPS

(1) RED W/WHITE LETTERS

SHEET NOTES:

1. REFER TO PANEL SCHEDULE FOR DEVICE CIRCUIT NUMBERS (FANS, RECEPTACLES, METERS AND LIGHTS)
2. DEVICES INSTALLED BEHIND INNER DEADFRONT.
3. MINICAS (FURNISHED BY PUMP MFR) INSTALLED BEHIND INNER DOOR
4. SSRVS HIM INTERFACE REMOTE MOUNT ON DOOR.

POLY-PORC COATING SYSTEM

SHALL INCLUDE A FIVE STAGE DIP TANK METAL PREPARATION PROCESS:

1. ALKALINE CLEANER 160°F.
2. CLEAR WATER RINSE.
3. IRON PHOSPHATE APPLICATION 150°F.
4. CLEAR WATER RINSE.
5. INHIBITIVE RINSE TO SEAL PHOSPHATED SURFACES 120°F FINISHED WITH AN ELECTROSTATICALLY APPLIED DRY POLYESTER POWDER COATING THEN BAKED 380°F TO CURE.

ENCLOSURE CONSTRUCTION NOTES

1. EXTERIOR 12 GA. H.D. GALV. STEEL AND INTERIOR 14 GA. COLD ROLLED STEEL ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
2. NEMA 3R CONSTRUCTION.
3. ALL NUTS, BOLTS, SCREWS AND HINGES SHALL BE STAINLESS STEEL.
4. NUTS, BOLTS & SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF ENCLOSURE.
5. PLASTIC NAMEPLATES SHALL BE PROVIDED AS REQUIRED.
6. CONTROL WIRING SHALL BE MARKED AT BOTH ENDS BY PERMANENT WIRE MARKERS.
7. A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
8. ENCLOSURE SHALL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA STANDARDS.
9. COLOR SHALL BE AS SELECTED BY DISTRICT.
10. ENCLOSURE SHALL BE 20" DEEP.

DATE	BY	DESCRIPTION	REV.

engineers, inc.
3350 scott blvd., bldg. 11
santa clara, ca 95054
(408) 986-8558
FAX (408) 986-9627
PROJECT NO. 20697-01

REGISTERED PROFESSIONAL ENGINEER
JULIO C. HERDOIZA
No. 9580
Exp. 9/30/24
ELECTRICAL
STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF STEGE SANITARY DISTRICT

CONTROL PANEL ELEVATION

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

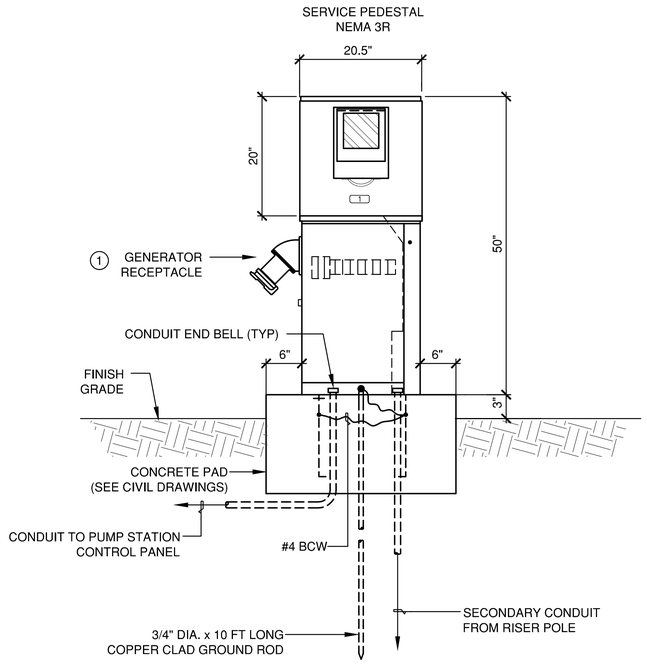
SHEET

E7

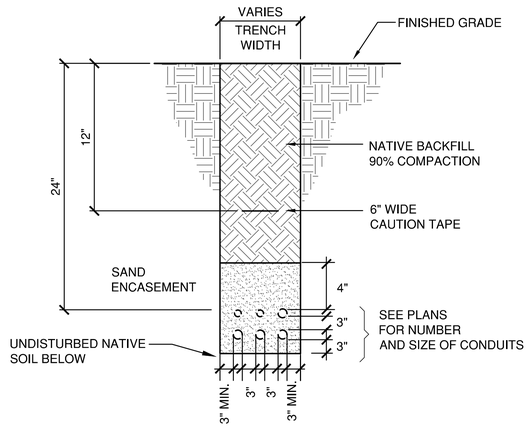
16 **OF 20**

SHEET NOTES:

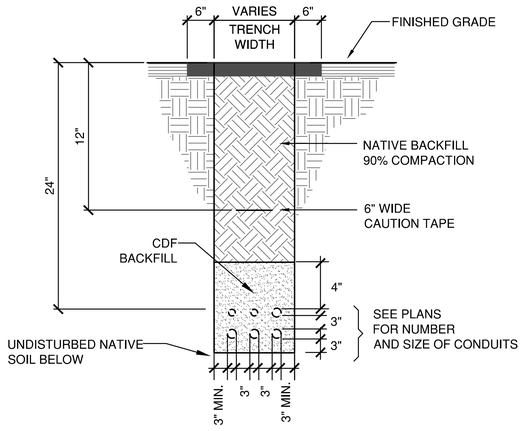
1. GENERATOR RECEPTACLE, 600 VAC, 100A, PIN AND SLEEVE, REVERSE FEED 4W, 4P, STYLE 1 "APPLETON" CAT. #ADR1044RS. WITH ANGLE ADAPTER CAT. #AJA100 AND PLUG CAT. #ACP1044CD.
2. STAINLESS STEEL HOOK, STAINLESS STEEL CHANNEL, STAINLESS STEEL ANCHOR BOLTS, AND STAINLESS STEEL CABLE GRIP.
3. STAINLESS STEEL HOOK, STAINLESS STEEL CHANNEL, STAINLESS STEEL ANCHOR BOLTS, AND STAINLESS STEEL CABLE GRIP, STAINLESS STEEL THIMBLE, STAINLESS STEEL CABLE CLAMPS, AND PVC COATED 15-POUND WEIGHT.
4. 1/4" DIA. STAINLESS STEEL CABLE WITH FLOAT SWITCH CABLES TIE-WRAPPED WITH HEAVY PLASTIC TIE AT EVERY 2 FT.



3 — SERVICE PEDESTAL DETAIL



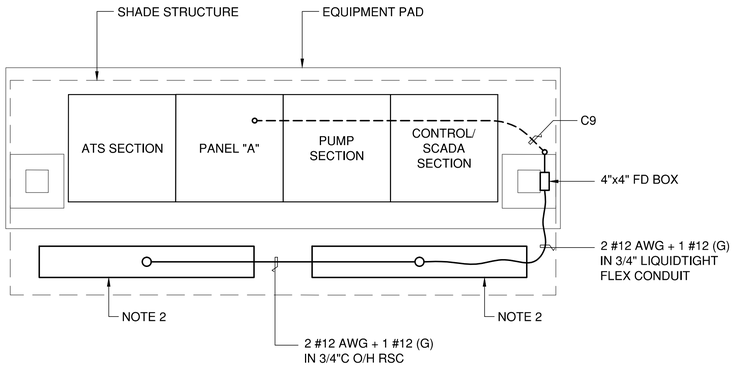
2 — TYPICAL UNDERGROUND CONDUIT DETAIL (UNPAVED AREAS)
SCALE: NTS



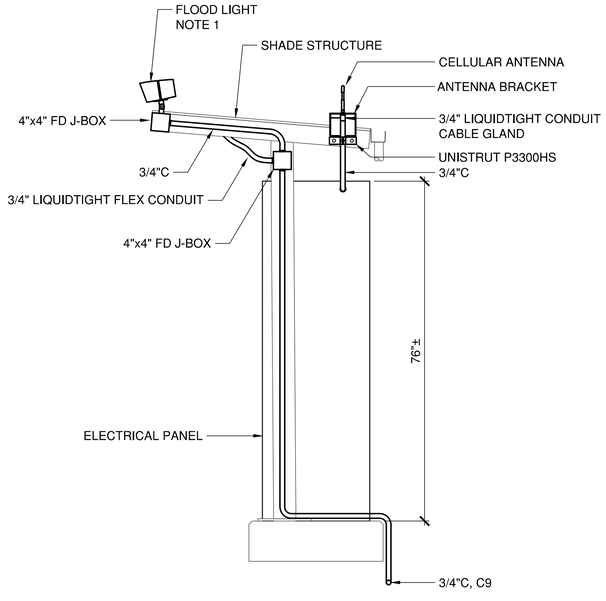
1 — TYPICAL UNDERGROUND CONDUIT DETAIL (PAVED AREAS)
SCALE: NTS

NOTE 1: RAB FLOOD LIGHT, 120V, 39W, OUTDOOR RATED, BRONZE COLOR, 4000K COLOR TEMPERATURE, DLIPFITTER MOUNTING, CAT. NO. FFLED-39-SF-N. PROVIDE WITH 90 DEGREE, BRONZE COLOR BRACKET TO BE BOLTED TO CANOPY ROOF FRAME.

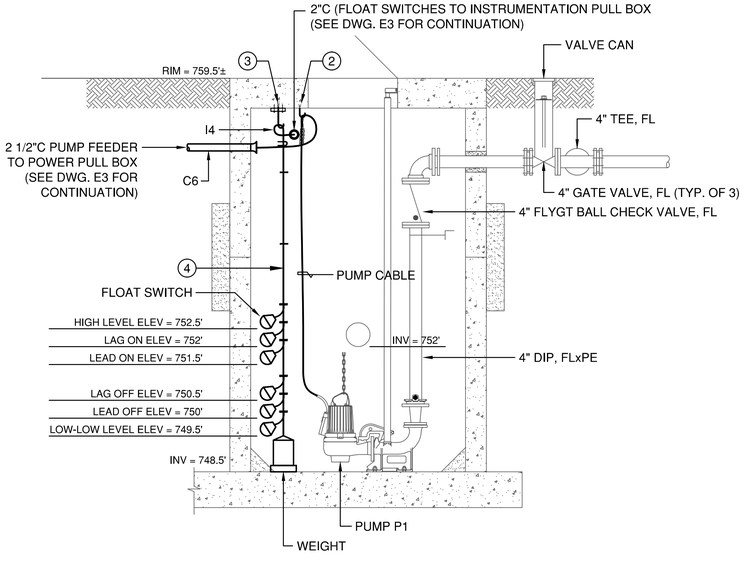
NOTE 2: METALUX VAPORTITE LED, CAT. #4VT3-LD5-4-W-UNV-L835-SSLTP-U



6 — SHADE STRUCTURE LIGHTING
SCALE: 3/4" = 1'-0"



5 — SITE LIGHTING AT SHADE STRUCTURE
SCALE: 3/4" = 1'-0"



4 — WET WELL ELEVATION
SCALE: 1/2" = 1'-0"

DATE | BY | DESCRIPTION | REV.

engineers, inc.
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santa clara, ca 95054
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REGISTERED PROFESSIONAL ENGINEER
JULIO C. HERDOCIA
No. 9580
Exp. 9/30/24
ELECTRICAL
STATE OF CALIFORNIA

CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

ELECTRICAL DETAILS - SHEET 1

DRAWN BY: BFC
CHECKED BY: LDJ
JOB NUMBER:
SHEET
E8
17 OF 20

File: M:\20697-01_Canon Pump Station\01E8.dwg, 12/5/2022 12:23 PM, Last saved: rcatris, PlotDate: 4/3/2023 1:55 PM By: Robbie Catris, Plot scale: 1:2.5849, Plot Size: ANSI A (8.50 x 11.00 Inches)
Xrefs: XR-TITLE CANON_90PER 6STA100102-Canon TS-A21016 A21016-BS
plotted by robbie catris on 4/3/2023 1:55 PM, last saved by rcatris on 12/5/2022 12:23 PM - filepath: m:\20697-01_canon pump station\01e8.dwg

CONDUIT AND CIRCUIT SCHEDULE

RACEWAY DATA					CABLE DATA					
DESIGNATION	FROM	TO	TYPE	SIZE	TYPE	QTY	SIZE	GND	VOLTS	NOTES
C1	PG&E RISER POLE	PULLBOX	PVC	4"	-	-	-	-	-	SERVICE CONDUCTORS BY PG&E
C1A	PULLBOX	SERVICE PEDESTAL	PVC	3"	-	-	-	-	-	SERVICE CONDUCTORS BY PG&E
C2	SERVICE PEDESTAL	CONTROL PANEL / ATS SECTION	PVC	2"	XHHW-2	4	#1/0	#6	600	UTILITY POWER
C3	GENERATOR	CONTROL PANEL / ATS SECTION	PVC/ RSC	2"	XHHW-2	4	#2	#8	600	EMERGENCY POWER (BID ALTERNATE)
C4	CNTL PNL / PUMP P-1 STARTER	PB #E1	PVC/ RSC	1"	XHHW-2	3	#10	#12	600	PUMP P-1 POWER
C5	CNTL PNL / PUMP P-2 STARTER	PB #E1	PVC/ RSC	1"	XHHW-2	3	#10	#12	600	PUMP P-2 POWER
C6	PB #E1	PUMP P-1	PVC	2 1/2"		1	MFR SUPPLIED CABLE			PUMP P-1 POWER AND MONITORING
C7	PB #E1	PUMP P-2	PVC	2 1/2"		1	MFR SUPPLIED CABLE			PUMP P-2 POWER AND MONITORING
C8	CONTROL PANEL / PANEL "A"	GENERATOR	PVC/ RSC	1"	XHHW-2	2	#10	#10	600	JACKET WATER HEATER
						2	#10		600	BATTERY CHARGER
C9	CONTROL PANEL / PANEL "A"	CANOPY COLUMN	PVC/ RSC	3/4"	XHHW-2	2	#10	#12	600	OUTDOOR LIGHT

CONDUIT AND CIRCUIT SCHEDULE

RACEWAY DATA					CABLE DATA					
DESIGNATION	FROM	TO	TYPE	SIZE	TYPE	QTY	SIZE	GND	VOLTS	NOTES
I1	CNTL PNL / PUMP P-1 STARTER	PB #E1	PVC/ RSC	1"	XHHW-2	2	#14	#14	600	PUMP P-1 MONITORING
I2	CNTL PNL / PUMP P-2 STARTER	PB #E1	PVC/ RSC	1"	XHHW-2	2	#14	#14	600	PUMP P-2 MONITORING
I3	CNTL PNL / SCADA SECTION	PB #I1	PVC/ RSC	2"	-	6	MFR SUPPLIED CABLE			FLOAT LEVEL SWITCHES
I4	PB #I1	FLOAT SWITCHES	PVC	2"	-	6	MFR SUPPLIED CABLE			FLOAT LEVEL SWITCHES
I5	CONTROL PANEL / ATS SECTION	GENERATOR	PVC/ RSC	1"	XHHW-2	2	#14	#14	600	GENERATOR START SIGNAL
I6	CONTROL PANEL / ATS SECTION	GENERATOR	PVC/ RSC	1"	XHHW-2	16	#14	#14	600	GENERATOR ALARM
T1	PG&E RISER POLE	TEL PULL BOX	PVC	3"						TEL CABLE BY AT&T
T2	TEL PULL BOX	CONTROL PANEL/ CONTROL SECTION	PVC	3"						TEL CABLE BY AT&T

REV.	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			

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STEGE SANITARY DISTRICT

CONDUIT AND CIRCUIT SCHEDULE

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E9

18 OF 20

File: M:\20697-01_Canon Pump Station\01E9.dwg, 4/3/2023 1:50 PM, Last saved: Rcatris, PlotDate: 4/3/2023 1:55 PM By: Robbie Catris, Plot scale: 1:2.5849, Plot Size: ANSI A (8.50 x 11.00 Inches)
Xrefs: XR-TITLE

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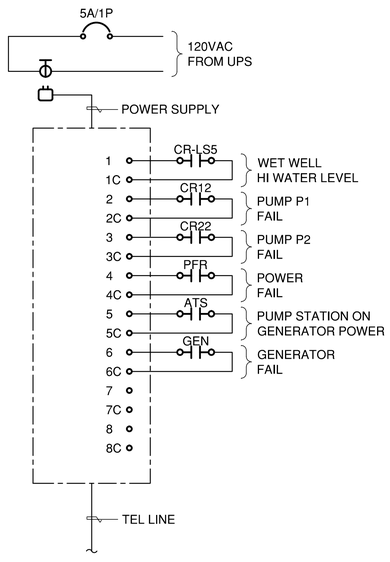
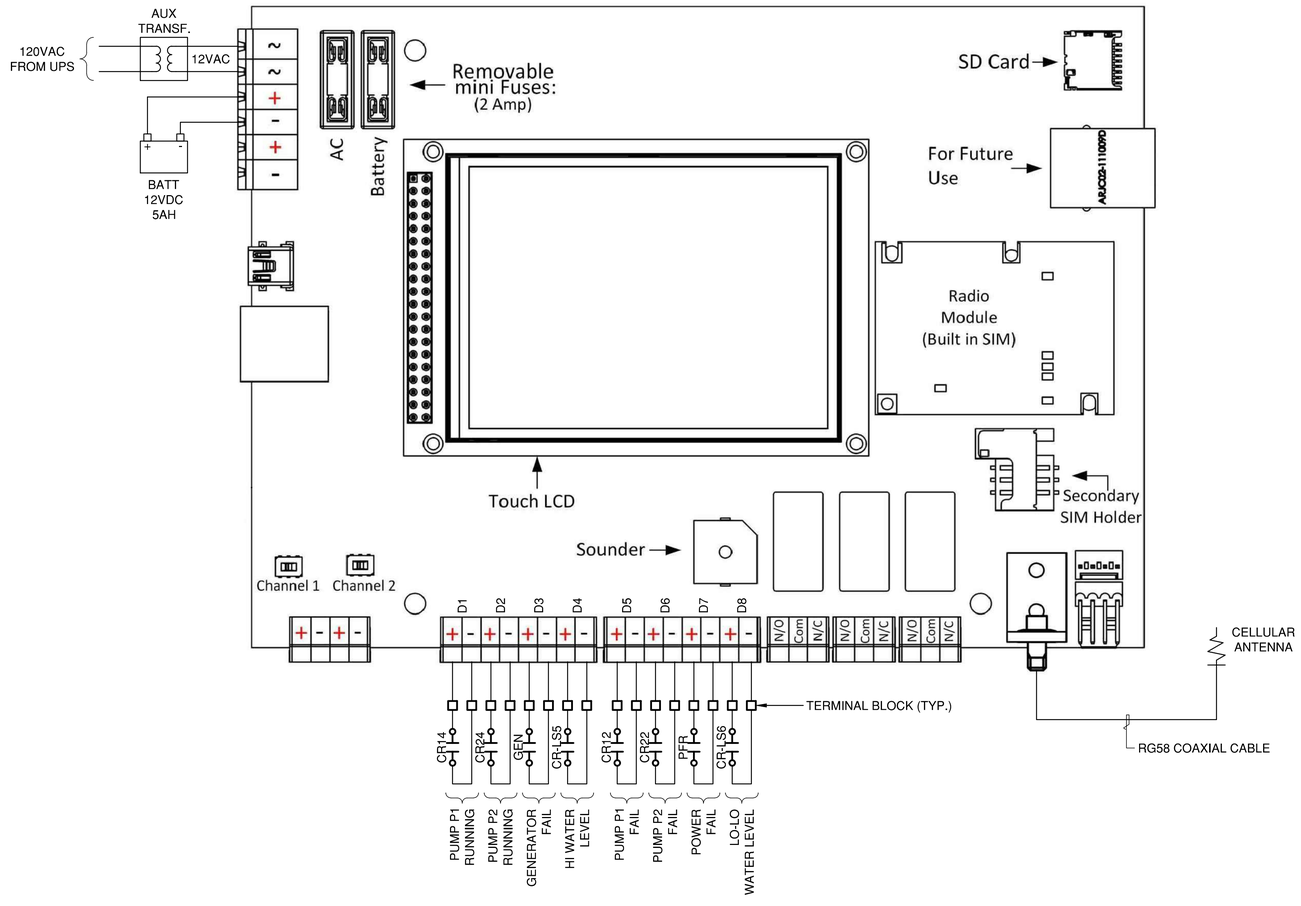


AUTO DIALER

SENSAPHONE 800



MISSION COMMUNICATIONS

MyDro M150

REV.	DESCRIPTION	BY	DATE

engineers, inc.
3350 scott blvd., bldg. 11
santa clara, ca 95054
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CANON SEWER PUMP STATION IMPROVEMENTS

PREPARED AT THE REQUEST OF
STEGE SANITARY DISTRICT

SCADA RTU INTERCONNECTION DIAGRAM

DRAWN BY: BFC

CHECKED BY: LDJ

JOB NUMBER:

SHEET

E10

19 **OF 20**

File: M:\20697-01_Canon Pump Station\01E10.dwg, 4/3/2023 1:50 PM, Last saved: Rcatris, PlotDate: 4/3/2023 1:55 PM By: Robbie Catris, Plot scale: 1:2.5849, Plot Size: ANSI A (8.50 x 11.00 Inches)
Xrefs: XR-TITLE
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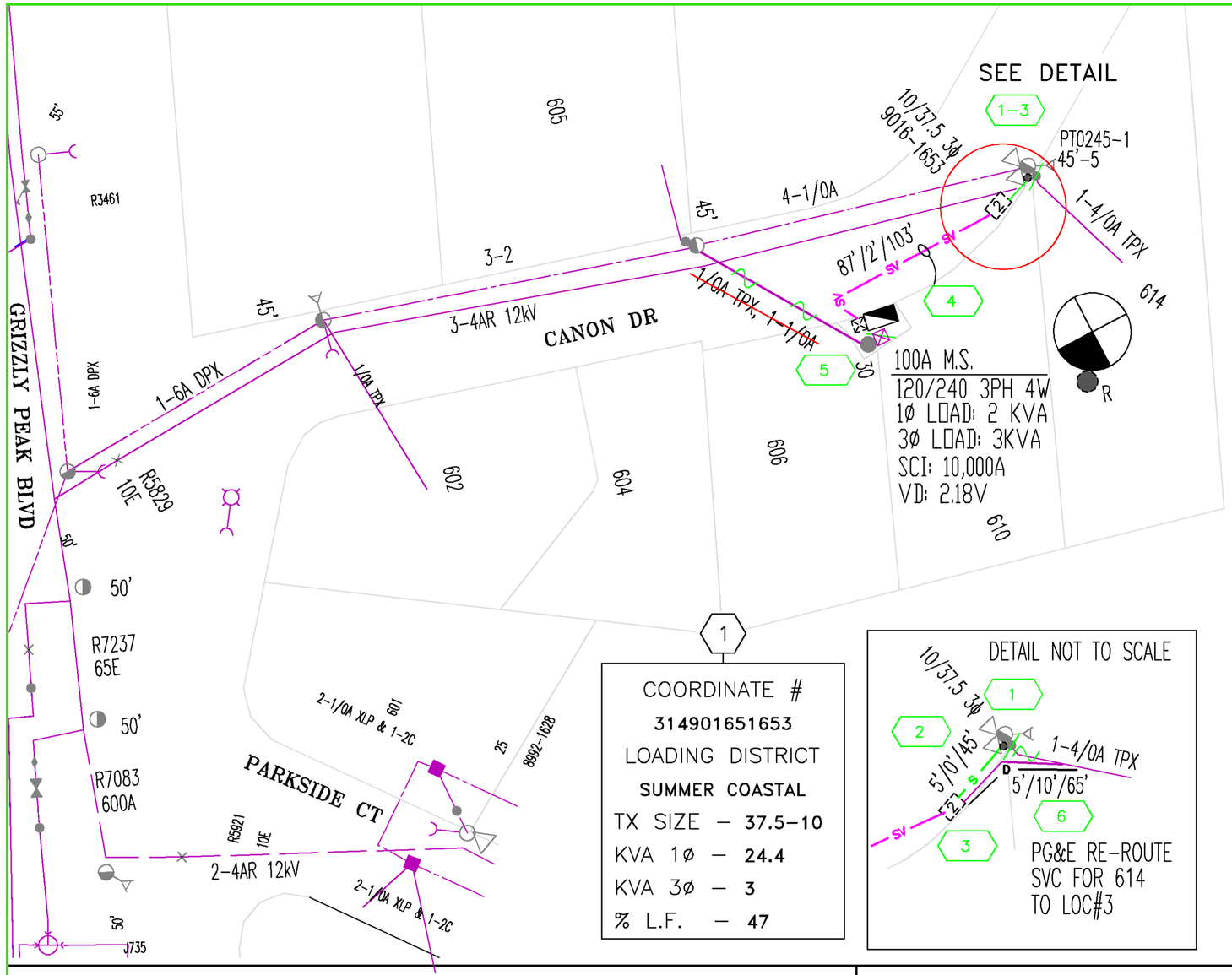

COORDINATE #
314901651653
LOADING DISTRICT
SUMMER COASTAL
TX SIZE – 37.5–10
KVA 1Ø – 24.4
KVA 3Ø – 3
% L.F. – 47

LEGEND

INSTALL	DESCRIPTION
SV	PG&E INSTALL 1/0A QPX SERVICE CABLE IN 1–3" APPLICANT INSTALLED CONDUIT
S	PG&E INSTALL 350A QPX CABLE IN 1–4" APPLICANT INSTALLED CONDUIT
D	PG&E INSTALL 1–3" CONDUIT
[2]	APPLICANT INSTALL 17" X 30" X 26"D ENCLOSURE
	PG&E INSTALL RISER
	PG&E INSTALL METER ON 100A PANEL
XX'/XX'/XX'	FRANCHISE'/PRIVATE'/CABLE'
	APPLICANT INSTALLED PEDESTAL

REMOVE	DESCRIPTION
	PG&E REMOVE METER
	PG&E REMOVE SERVICE CABLE
	PG&E REMOVE RISER

REPAIR RETAINING WALL AS NEEDED TO RE-ROUTE SERVICE TO 614 CANON DR.

APPLICANT TO TRENCH AND INSTALL SUBSTRUCTURES.

PG&E TO COMPLETE EXTENSION

UNDERGROUND SERVICE ALERT

TO AVOID CONTACT AND LIABILITY WITH UNKNOWN UNDERGROUND UTILITIES CONTACT USA @ (800) 227-2600 48 HR IN ADVANCE OF TRENCHING.
WHEN TRENCHING WITHIN 5' OF KNOWN ENERGIZED ELECTRIC FACILITIES CONTACT PG&E INSPECTOR 48HRS. IN ADVANCE TO MAKE STANDBY ARRANGEMENTS.

DEVELOPERS/CONTRACTORS PLEASE NOTE:

CONTACT THE UNDERGROUND INSPECTOR DEPARTMENT (510-437-2100) A MINIMUM OF 48HRS. PRIOR TO BEGINNING SUBSTRUCTURE WORK. WORK NOT PROPERLY INSPECTED WILL BE REJECTED.

FOR PG&E GREENBOOK INFORMATION ONLINE GO TO WWW.PGE.COM/GREENBOOK

SUBSTRUCTURE NOTES

A) TRANSFORMERS PAD(S) TO BE INSTALLED PER PG&E DRAWING(S) 045292 FOR 3 PHASE PADS OR 064309 FOR 1 PHASE DEAD FRONT PADS, INSTALLATION TO INCLUDE GROUNDS. INSTALL PAD ON A FLAT LEVEL SURFACE MAINTAIN 8' IN FRONT OF PAD. LEVEL AND CLEAR OF OBSTRUCTIONS MAINTAIN OTHER CLEARANCES AS REQUIRED PER PG&E DRAWING 051122

B) BARRIER POSTS TO BE INSTALLED PER PG&E DRAWING 051122 & PG&E UG INSPECTOR'S INSTRUCTIONS, IF NECESSARY

C) PRIMARY SPLICE BOXES, PRIMARY EQUIPMENT ENCLOSURES AND TX ENCLOSURES TO BE INSTALLED PER PG&E DRAWING 062000. MAINTAIN OTHER CLEARANCE AS REQUIRED PER PG&E DRAWING 051122

D) SECONDARY SPLICE BOXES AND PEDESTALS TO BE INSTALLED PER PG&E DRAWING 028028

E) CONDUIT TO BE INSTALLED PER PG&E DRAWING 062288. USE A MINIMUN 3' RADIUS HORIZONTAL & 2' RADIUS VERTICAL BENDS ON 3" CONDUITS. USE A MINIMUM 5' RADIUS HORIZONTAL & 3' RADIUS VERTICAL BENDS ON 4"& 5" CONDUITS. BELL ENDS OR DUCT TERMINATORS ARE TO BE UTILIZED ON ALL CONDUIT THAT TERMINATED IN A PRIMARY ENCLOSURE. TEMPORARY END CAPS ARE TO BE INSTALLED ON ALL CONDUITS.

N

EST: JOHN HOGLUND 925-270-2214
ADE: STANLEY HUI 510-277-5456
SUPV: PAUL LUCAS 925-270-2275
REP: DEANNA WILLIAMS 510-385-6288
PLNR:

JPA#:
NOTIF: 121881601
SCALE: 1"=50'
DATE: 6/28/2022
PM: 35313105
SHEET: 1 OF 1 REV. 0

OH/UG CONSTRUCTION DRAWING
SVC UPGRADE
BTWN 606 & 610 CANON DR., BERKELEY

NO ENVIRONMENTAL ISSUES

Know what's below. Call before you dig. 811

GAS CONFLICT:IN PROXIMITY

PRIMARY VOLTAGE: 12 kV
LATITUDE: 37.90519
SOURCE SIDE DEVICE: R5829
SUB & CIRCUIT: EL CERRITO G 250-1105
DSGN SAG: SSU
LOADING AREA: LIGHT
CORROSION AREA: MODERATE
EXEMPT EQUIP.INST.: N/A

VOLTAGE AREA: 3
LONGITUDE: -122.26834
RAPTOR ZONE: N
ARRESTER DIST: 3
INSULATION DIST: AA
FIRE AREA: LRA

NEAR LOC: 4