



ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA
TRABUCO CANYON WATER DISTRICT
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA
ADMINISTRATION FACILITY, BOARDROOM
MARCH 1, 2023 AT 7:00 AM

COMMITTEE MEMBERS

Michael Safranski, Committee Chair
Stephen Dopudja, Committee Member
Don Chadd, Committee Member Alternate

DISTRICT STAFF

Fernando Paludi, General Manager
Michael Perea, District Secretary
Lorrie Lausten, District Engineer
Gary Kessler, Water System Superintendent
Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent

AGENDA NOTE:

Trabuco Canyon Water District (District) will make this Engineering/Operational Committee Meeting available by telephone audio as follows:

Telephone Audio: 1 (669) 900-6833

Access Code: 973-7562-7682

Persons desiring to monitor the Committee meeting agenda items may download the agenda and documents on the internet at www.tcwd.ca.gov. You may submit public comments by email to the Committee at mperea@tcwd.ca.gov. In order to be part of the record, emailed comments on meeting agenda items must be received by the District at the referenced e-mail address not later than 7:00 a.m. (PDT) on the day of the meeting.

CALL MEETING TO ORDER

VISITOR PARTICIPATION

Members of the public wishing to address the Committee regarding a particular item on the agenda are requested to submit public comments by email to the Committee at mperea@tcwd.ca.gov. The Committee Chair will call on the visitor following the Committee's discussion about the matter. Committees do not constitute a quorum of the Board of Directors and Committee Members cannot make decisions on matters. The Committee makes recommendations only to the Board of Directors. Members of the public will be given the opportunity to speak to the Committee prior to making a recommendation on the matter. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

ORAL COMMUNICATION

Members of the public who wish to make comment on matters not appearing on the agenda are requested to submit oral communication by email to the Committee at mperea@tcwd.ca.gov. Under the requirements of State Law, Directors cannot take action on items not identified on the agenda and will not make decisions on such matters. The Board President may direct District Staff to follow up on issues as may be deemed appropriate. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

COMMITTEE MEMBER COMMENTS

REPORT FROM THE GENERAL MANAGER

TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | MARCH 1, 2023

ENGINEERING MATTERS

PRESENTER(S): FERNANDO PALUDI, GENERAL MANAGER
MICHAEL PEREA, ASSISTANT GENERAL MANAGER
LORRIE LAUSTEN, DISTRICT ENGINEER

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar).

1. February 1, 2023

ITEM 2: DIMENSION WATER TREATMENT PLANT OFFICE IMPROVEMENTS

RECOMMENDED ACTION:

Committee to receive information at the time of the Committee meeting.

ITEM 3: SADDLECREST DEVELOPMENT

RECOMMENDED ACTION:

Recommend the Board of Directors authorize the General Manager to execute Amendment No. 1 for the Saddlecrest Development Construction Management to JS Held in the not to exceed amount of \$15,000 (Action Calendar).

ITEM 4: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Rose and Lang Wells Groundwater Treatment Facility Property
2. Other Projects

RECOMMENDED ACTION:

Committee to receive project status updates at time of the Committee Meeting.

OPERATIONAL MATTERS

PRESENTER(S): GARY KESSLER, WATER SYSTEM SUPERINTENDENT
OSCAR ULLOA, WASTEWATER OPERATIONS SUPERINTENDENT
JASON STROUD, MAINTENANCE DEPARTMENT SUPERINTENDENT

ITEM 5: WATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 6: WASTEWATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | MARCH 1, 2023**

ITEM 7: MAINTENANCE DEPARTMENT UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

REGULATORY AND OTHER MATTERS

ITEM 8: OTHER MATTERS/REPORTS

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

ADJOURNMENT

AVAILABILITY OF AGENDA MATERIALS

Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Trabuco Canyon Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection at the Trabuco Canyon Water District Administrative Facility, 32003 Dove Canyon Drive, Trabuco Canyon, California (District Administrative Facility) or will be posted online on the District's website located at www.tcwd.ca.gov. If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available online at www.tcwd.ca.gov at the same time as they are distributed to the Board Members, except that, if such writings are distributed immediately prior to or during the meeting, they will be posted online on the District's website located at www.tcwd.ca.gov.

COMPLIANCE WITH THE REQUIREMENTS OF CALIFORNIA GOVERNMENT CODE SECTION 54954.2

In compliance with California law and the Americans with Disabilities Act, if you need special disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 858-0277, at least 48 hours in advance of the scheduled Board meeting. Notification at least 48 hours prior to the meeting will assist the District in making reasonable arrangements to accommodate your request. The Board Meeting Room is wheelchair accessible.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

ADMINISTRATIVE MATTERS

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar):

1. *February 1, 2023 Committee Meeting*

CONTACTS (staff responsible): PALUDI/PEREA/SANGI



TRABUCO CANYON WATER DISTRICT ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | FEBRUARY 1, 2023

DIRECTORS PRESENT

Mike Safranski, Committee Chair
Stephen Dopudja, Committee Member

STAFF PRESENT

Fernando Paludi, General Manager
Michael Perea, Assistant General Manager
Lorrie Lausten, District Engineer
Karen Warner, Principal Accountant
Gary Kessler, Water Superintendent
Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent
Lisa Sangi, Executive Assistant

PUBLIC PRESENT

None

CALL MEETING TO ORDER

Director Safranski called the February 1, 2023 Engineering/Operational Committee Meeting to order at 7:04 a.m.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

No comments were received.

COMMITTEE MEMBER COMMENTS

No comments were received.

REPORT FROM THE GENERAL MANAGER

No comments were received.

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

Mr. Paludi presented the Engineering/Operational Committee Meeting Recap for Committee review in accordance with the agenda.

- MOTION:** Approve the Engineering/Operational Committee Meeting Recap and recommended that the Board receive and file the same (Consent Calendar) – Director Safranski
- SECOND:** Director Dopudja
- AYES:** Directors Dopudja & Safranski
- NOES:** None
- ABSTAIN:** None
- MOTION PASSED/FAILED:** Passed 2 - 0

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | FEBRUARY 1, 2023**

ITEM 2: SCADA UPGRADE PROJECT ADDENDUM NO. 2 WITH TESCO CONTROLS

Mr. Paludi presented this matter for Committee consideration, and he mentioned this matter was discussed the prior month. Mr. Paludi reported that the original project scope of work excluded the Human Machine Interface (HMI) screens based on internal staff discussions in FY2018/19 due to budgetary constraints and belief that mobile devices would provide the necessary facility control. Discussion occurred concerning why staff has changed their minds concerning facility control via local control HMI screens as opposed to mobile devices; Operations staff shared their concerns related to the potential failures of electrical and internet systems which can impact operational control. Director Safranski requested that District staff evaluate additional alternatives to local HMI screens, including Bluetooth connectivity. Director Dopudja expressed concerns with staff internal communications related to this matter, and he requested that staff convey their needs to receive the support they need to provide services to customers. The Committee forwarded this matter to the Board of Directors for discussion without recommendation.

MOTION: None – The Committee forwarded this matter to the Board of Directors for discussion without recommendation (Action Calendar).

ITEM 3: GOLF CLUB SEWER LIFT STATION REPAIRS & IMPROVEMENTS

Mr. Paludi introduced this matter for Committee review, and he reported that the project is currently in the bid phase. Ms. Lausten provided a brief overview of the project, and she provided a handout of the DRAFT construction plans for discussion. Ms. Lausten mentioned that the engineer's estimate for this project was significantly higher than originally budgeted. Discussion occurred concerning including certain specific financial information, including engineer estimate, financial assumptions, and justifications, in future staff reports.

MOTION: None – Informational item only.

ITEM 4: QUARTERLY CAPITAL IMPROVEMENT PROGRAM (CIP) UPDATE

Mr. Paludi presented this matter for Committee review. Ms. Lausten presented a handout to the Committee which provided project status updates on each CIP project and respective budgets. Discussion occurred concerning CIP table layout and color coding.

MOTION: None – Informational item only.

ITEM 5: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. **Rose and Lang Wells Cleaning and Pump Installation** – Mr. Paludi mentioned that the drilling company was unable to assist the District due to schedule conflicts, and District staff were currently working to secure a contractor to install the pumps at this facility. Mr. Kessler commented that staff is prepared to start up this facility in mid-February provided the pumps and all testing is completed.
2. **Dove and Trabuco Dams Emergency Action Plan Approvals** – Ms. Lausten provided an update on this matter and mentioned that CAL OES has approved the District's Emergency Action Plan.
3. **Dove Dam Vent Pipe Repair** – Ms. Lausten provided a brief update and mentioned that the repair is complete. Mr. Ulloa provided a sample of the pipe wrap and bracket used for the repair.
4. **Dimension Water Treatment Plant Office Improvements** – Ms. Lausten provided a brief project update on the revised plans and project timeline.
5. **Dove Lake and Trabuco Reservoir Bathymetric Survey** – Ms. Lausten presented this matter for Committee review, and she provided brief highlights on the volumetric assessment of Dove Lake.
6. **Slope Failure Below Dove Reservoir** – Mr. Paludi commented on the current condition of the v-ditch failure and erosion condition.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | FEBRUARY 1, 2023**

7. **Other Projects** – Ms. Lausten provided a brief update on the Saddle Crest development, and she mentioned that a new homeowner in the lower section has signed up for service with the District. Discussion occurred concerning the ongoing coordination with the developers to warranty the onsite facilities.

MOTION: None – Informational item only.

ITEM 6: WATER SYSTEM UPDATES

Mr. Kessler reviewed the projects and repairs for the prior month, and he reported that Water Operations staff has completed the following tasks:

1. Repaired a 1” potable water service on Wood Spring Lane in the Portola Hills community.
2. Repaired a 10” water transmission main on the access road to T-Y Nursery.
3. Worked with TESCO Controls and Hydrotech Electric on SCADA system improvements at Topanga Booster Pump Station, District Field Office, and Cooks Reservoir.
4. Flushed sixty-three fire hydrants in upper portion of the Robinson Ranch community.
5. Worked with Delco Services to inspect, service, and repair 9 pressure reducing valves (PRVs).

Mr. Kessler mentioned that there was not an updated Monthly Water System Operations Summary as it was the first of the month.

MOTION: None – Informational item only.

ITEM 7: WASTEWATER SYSTEM UPDATES

Mr. Ulloa reviewed the projects and repairs for the prior month, and he reported that Wastewater Operations staff had completed the following tasks:

1. Installed a new turbidimeter and a chlorine level monitoring meter at the final effluent point of at the Robinson Ranch Wastewater Treatment Plant (WWTP).
2. Assisted Myers Marine on repairs to the Dove Dam vent pipe.
3. Assisted Ferreira Construction on the installation of the Heritage Sewer Lift Station bypass structure.
4. Cleaned the sanitary sewer line on Santiago Canyon Road which included the assistance of a third-party traffic control contractor.

Mr. Ulloa mentioned that there was not an updated Monthly Water System Operations Summary as it was the first of the month. Mr. Ulloa reported on The Oaks community pumping frequency due to the recent rain events; discussion occurred concerning the potential impacts of inflow and infiltration at the facility. Mr. Ulloa presented the Third Quarter 2022 SSMP Quarterly Report.

MOTION: None – Informational item only.

ITEM 8: MAINTENANCE DEPARTMENT UPDATES

Mr. Stroud reviewed the projects and repairs for the prior month, and he reported that Maintenance staff completed the following tasks:

Water Operations

1. Worked with TESCO Controls and Hydrotech Electric on SCADA system improvements at Topanga Booster Pump Station.
2. Assisted Water Operations on the repair of a 10” water transmission main on the access road to T-Y Nursery.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | FEBRUARY 1, 2023**

3. Assisted Water Operations, TESCO Controls, Caterpillar, and Hydrotech Electric to troubleshoot backup generator issues during the high wind weather events.

Wastewater Operations

1. Assisted Wastewater Operations and Myers Marine on repairs to the Dove Dam vent pipe.
2. Assisted Wastewater Operations in monitoring sewer lift stations during significant rain events to prevent SSOs.
3. Assisted Wastewater Operations and Ferreira Construction on the installation of the Heritage Sewer Lift Station bypass structure.
4. Removed downed trees on the access road to the Robinson Ranch Wastewater Treatment Plant.

MOTION: None – Informational item only.

ITEM 9: OTHER MATTERS/REPORTS

There were no other matters presented.

MOTION: None – Informational item only.

ADJOURNMENT

Director Safranski adjourned the February 1, 2023 Engineering/Operational Committee Meeting at 8:09 a.m.

DRAFT

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

ENGINEERING MATTERS

ITEM 2: DIMENSION WATER TREATMENT PLANT OFFICE IMPROVEMENTS

Trabuco Canyon Water District (District) owns, operates, and maintains the Dimension Water Treatment Plant (WTP) in the City of Lake Forest. Water Operations Staff has been working out of a 12'x30' office trailer since approximately 2006. The office is in poor condition, is not ADA compliant, and is too small to accommodate five operators, a bathroom and kitchen area. Staff worked with JIG Consultants to design a new office. The new office is a 12'x60' modular building and includes a supervisor office, two cubicles, a kitchen area and an improved bathroom which includes a shower and locker facilities. Staff has completed the bid documents, which maintains the office in the existing location and has coordinated with cox, electrical and SCADA subs to re-locate temporary facilities during construction. Staff will be soliciting bids from trailer manufacturing companies in March 2023. The Engineer's Estimate for the trailer only is \$310,000; there are additional costs including engineering, services during construction and miscellaneous on-site improvements.

FUNDING SOURCE:

General Fund

FISCAL IMPACT (PROJECT BUDGET)

YEAR	ORIGINAL	FINAL/PROJECTED	STATUS
FY 21/22	\$360,000	\$47,000	Completed; Engineering (Carry Over)
FY 22/23	\$300,000	\$21,000	Out to Bid; Engineering (Carry Over)
FY 23/24		\$330,000	Construction/On-Site Improvements
	TOTAL	\$398,000	

ENVIRONMENTAL COMPLIANCE:

Notice of Exemption was filed with the County of Orange on February 24, 2022

RECOMMENDED ACTION:

Committee to receive project status updates at time of the Committee Meeting.

EXHIBIT(S):

1. Construction plans

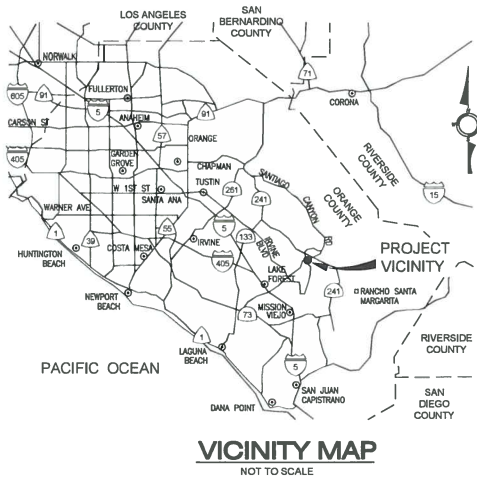
CONTACTS (staff responsible): LAUSTEN/KESSLER

TRABUCO CANYON WATER DISTRICT

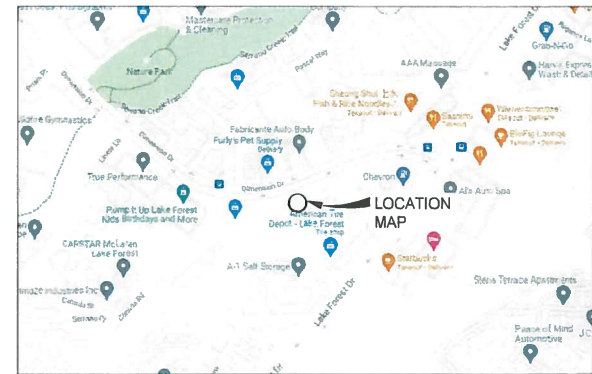
DIMENSION WATER TREATMENT PLANT

OPERATIONS TRAILER

PROJECT NO. 2122-011



MARCH 2023



SHEET INDEX

DWG. NO.	SHT. NO.	SHEET TITLE
0-01	1	TITLE SHEET, VICINITY AND LOCATION MAPS, AND SHEET INDEX
0-02	2	GENERAL NOTES, STANDARD SYMBOLS, AND ABBREVIATIONS
C-01	3	SITE PLAN
C-02	4	OFFICE TRAILER INTERIOR FURNISHINGS
E-01	5	ELECTRICAL SYMBOLS AND NOTES
E-02	6	ELECTRICAL SITE PLAN
E-03	7	OFFICE TRAILER ELECTRICAL PLAN
E-04	8	SINGLE LINE DIAGRAM

APPROVED:
TRABUCO CANYON WATER DISTRICT

LORRAINE S. LAUSTEN R.C.E. 67027 DATE
DISTRICT ENGINEER



GENERAL NOTES

- NOTIFY TRABUCO CANYON WATER DISTRICT (DISTRICT) 714-858-0277 AT LEAST 48 HOURS BUT NOT MORE THAN 72 HOURS BEFORE STARTING WORK OR AFTER ANY DELAY, BEFORE RESUMING WORK.
- THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) AT 811 AT LEAST 48 HOURS PRIOR TO STARTING WORK.
- ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) LATEST EDITION, AND THE DISTRICT'S STANDARD SPECIFICATIONS AND DRAWINGS. THE CONTRACTOR SHALL HAVE A COPY OF THESE PLANS AND THE SPECIFICATIONS AND THE STANDARD SPECIFICATIONS ON THE JOB AT ALL TIMES.
- CONCRETE WORK SHALL BE PER PLANS AND SPECIFICATIONS UNLESS OTHERWISE INDICATED.
- PIPELINES SHALL BE PRESSURE TESTED TO 200 PSI.
- CONTRACTOR SHALL MAINTAIN THE WORK AREA IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES. STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND NOISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CLEANUP OF ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. CONTRACTOR TO CLEAN STREET WITH SWEEPERS OR EQUAL PRIOR TO END OF EACH WORK DAY AS A MINIMUM.
- ALL SURPLUS MATERIAL REMOVED, INCLUDING EXCAVATED MATERIALS WHICH ARE NOT SUITABLE FOR USE IN THIS PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AWAY FROM THE JOB SITE IN A MANNER AND AT LOCATION ACCEPTABLE TO ALL AFFECTED AGENCIES.
- THE CONTRACTOR SHALL POTHOLE AND LOCATE EXISTING CROSSING UNDERGROUND UTILITIES AND POINTS OF CONNECTION TWO WEEKS, IN ADVANCE OF THE CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY ADDITIONAL COST REQUIRED IN THE EVENT THAT HE HAS NOT CORRECTLY LOCATED THE EXISTING UTILITIES.
- THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES INCLUDING SHORING AND BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS. NEITHER THE DISTRICT NOR THE DISTRICT'S ENGINEER SHALL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY.
- THE SURROUNDING AREA SHALL BE RETURNED TO THE CONDITION ENCOUNTERED AT THE START OF CONSTRUCTION.
- CONTRACTOR SHALL CONTACT THE DISTRICT A MINIMUM OF 48 HOURS IN ADVANCE FOR SCHEDULING OF ACCESS TO THE PROJECT SITE. CONTRACTOR SHALL MAINTAIN ALL DISTRICT REQUIREMENTS FOR SITE ACCESS AND MAINTAIN CONTINUAL COORDINATION WITH DISTRICT FOR THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT IN PLACE EXISTING SEWER, GAS, WATER LATERALS AND OTHER UTILITIES OR REPAIR IN KIND. LOCATIONS OF EXISTING UTILITIES AND SUBSTRUCTURES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY EXACT LOCATIONS, ELEVATIONS AND DIMENSIONS IN THE FIELD PRIOR TO CONSTRUCTION IN THE AREA OF THE SPECIFIC SUB-STRUCTURE.
- CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POINTS OF CONNECTION PRIOR TO COMMENCING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES, PAVEMENT, CURB, STRUCTURE, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS AS A RESULT OF HIS OPERATIONS, AND WILL BE REQUIRED TO REPAIR OR REPLACE SAME TO THE SATISFACTORY OF, AND AS DIRECTED BY, THE DISTRICT REPRESENTATIVE OR IMPACTED UTILITY COMPANY.
- CONSTRUCTION SURVEYS FOR THIS PROJECT SHALL BE PROVIDED BY THE DISTRICT. SURVEY POINTS DESTROYED AS A RESULT OF THE CONTRACTORS NEGLIGENCE OR FAILURE TO PROVIDE PROPER PROTECTION, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL MAINTAIN AND PROVIDE THE DISTRICT WITH A "RECORD" SET OF AS BUILT DRAWINGS AT THE COMPLETION OF ALL WORK PER THE PLANS AND SPECIFICATIONS.
- TRENCH COMPACTATION AND SUBGRADE COMPACTIONS TESTS SHALL BE PERFORMED BY A LABORATORY DESIGNATED BY THE DISTRICT, UTILIZING CALIFORNIA TEST METHOD NO. 216 AND 231. THE DISTRICT WILL FURNISH FIRST TESTS. WHEN REQUESTED, AT NO COST TO THE CONTRACTOR, ANY RE-TESTING REQUIRED DUE TO FIRST TEST FAILURES SHALL BE MADE AT LOCATIONS ORDERED BY THE ENGINEER, AND SHALL BE AT THE CONTRACTOR'S EXPENSE - COST OF WHICH WILL BE DEDUCTED FROM THE CONTRACTOR'S FINAL PAYMENT.
- LOOSE EXCAVATED MATERIAL SHALL NOT BE PLACED OR STORED IN WATERWAYS OR STORM DRAIN CHANNELS. ALL EXCESS EXCAVATED SOIL AND MATERIALS SHALL BE REMOVED AND DISPOSED OF IN A PROPER AND LEGAL MANNER BY THE CONTRACTOR. ALL DISTURBED SURFACE AREAS SHALL BE SHAVED TO FACILITATE DRAINAGE AND AVOID PONDING AND SHALL BE RESTORED TO NEAR NATURAL OR PRE-CONSTRUCTION CONDITIONS.
- THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT STORM OR OTHER WATERS MAY PROCEED UNINTERRUPTED ALONG THE STREET OR DRAINAGE COURSES.
- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A MANNER THAT AN UNWITTING STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.

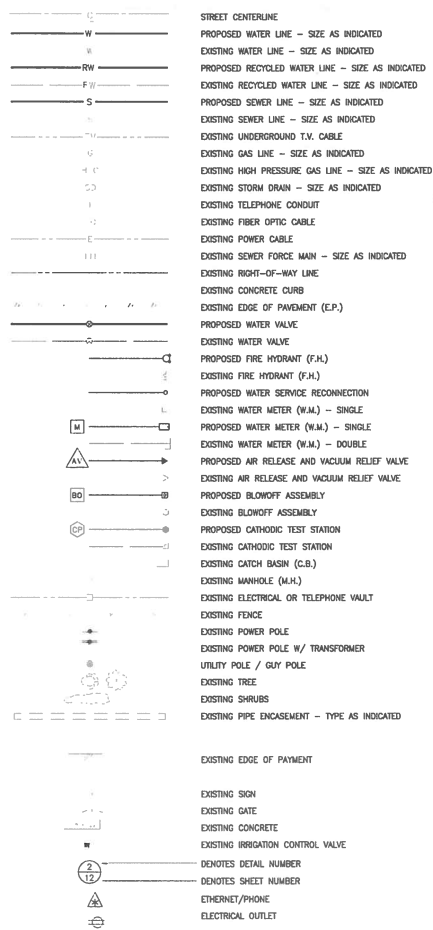
SUCH "DISCHARGES" OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD, CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NOISANCE, OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.

MATERIALS WHICH MAY HAVE EFFECTS OF POLLUTION INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS, WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, FESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC FLUIDS OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPER CHLORINATED WATER LINE FLUSHING.

DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON SITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

- CONTRACTOR SHALL DEMONSTRATE EXTREME CAUTION WHEN TRENCHING IN CLOSE PROXIMITY TO OTHER UTILITIES. ANY SIGN OF DEGRADATION OF THE TRENCH WALL OR STRUCTURE INTEGRITY WILL NOT BE TOLERATED AND WILL FORCE THE STOPPAGE OF WORK UNTIL THE TRENCH OR STRUCTURE INTEGRITY IS ADEQUATELY RESTORED.
- CONSTRUCTION WORK HOURS SHALL BE 8:00 AM TO 4:30 PM EXCLUSIVE OF SATURDAYS, SUNDAYS, OR HOLIDAYS, UNLESS OTHERWISE NOTED.
- BY ACCEPTING THIS CONTRACT, CONTRACTOR HEREBY RELEASES AND AGREES TO INDEMNIFY, DEFEND, HOLD HARMLESS THE OWNER, TRABUCO CANYON WATER DISTRICT AND IT'S REPRESENTATIVES, AND CONSULTANTS (HEREINAFTER REFERRED TO AS ENGINEER) THEIR PARENT AND SUBSIDIARY COMPANIES, AGENTS, EMPLOYEES, CONSULTANTS AND REPRESENTATIVES FOR ANY AND ALL DAMAGE TO PERSONS OR PROPERTY OR WRONGFUL DEATH REGARDLESS OF WHETHER OR NOT SUCH CLAIM, DAMAGE LOSS OR EXPENSE IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE, ACTIVE OR PASSIVE, OF OWNER, ENGINEER, THEIR PARENT AND SUBSIDIARY COMPANIES, AS WELL AS THEIR AGENTS AND EMPLOYEES, EXCEPTING ONLY THE SOLE NEGLIGENCE OF OWNER, ENGINEER, THEIR PARENT OR SUBSIDIARY COMPANIES AND THEIR AGENTS AND EMPLOYEES TO THE FULLEST EXTENT PERMITTED BY LAW. SUCH INDEMNIFICATION SHALL EXTEND TO ALL CLAIMS, DEMANDS, ACTIONS, OR LIABILITY FOR INJURIES, DEATH OR DAMAGES OCCURRING AFTER COMPLETION OF THE PROJECT, AS WELL AS DURING THE WORK'S PROGRESS. CONTRACTOR FURTHER AGREES THAT IT SHALL ACCOMPLISH THE ABOVE AT ITS OWN COST, EXPENSE AND RISK EXCLUSIVE OF AND REGARDLESS OF ANY APPLICABLE INSURANCE COMPANY REGARDING COVERAGE.

STANDARD SYMBOLS



ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE OR ASBESTOS CEMENT
AISI	AMERICAN NATIONAL STANDARDS INSTITUTE
AV	AIR RELEASE & VACUUM RELIEF VALVE
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
BC	BEGIN CURVE
BFV	BUTTERFLY VALVE
BM	BENCHMARK
BD	MANUAL DRAIN AND BLOWOFF ASSEMBLY
CB	CATCH BASIN
CF	CURB FACE
CL	CLASS
CMB	CRUSHED MISCELLANEOUS BASE
CMLC	CEMENT-MORTAR LINED & COATED
CMP	CORRUGATED METAL PIPE
CMS	CHANGABLE MESSAGE SIGNS
CMU	CONCRETE MASONRY UNIT
CP	CATHODIC PROTECTION
CSS	COASTAL SAGE SCRUB
∅(CL)	CENTERLINE
DA	DIAMETER
DI	DUCTILE IRON
DI OR SDR	RATIO OF PIPE DIAMETER
DWG	DRAWING
E	EAST
EC	END CURVE
EL	ELEVATION
EP	EDGE OF PAVEMENTS
EXIST (EX)	EXISTING
FL	FLOWLINE
F (FLG)	FLANGE
FG	FINISHED GRADE
FE	FLANGED END
FH	FIRE HYDRANT
FP	FEMALE IRON PIPE THREAD
FM	FORCE MAIN
FS	FINISHED SURFACE
FT	FEET
FWY	FREEWAY
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BREAK
GV	GATE VALVE
HP	HIGH POINT
HZ	HORIZONTAL
ID	INSIDE DIAMETER
INLET	INLET
IRWD	IRVINE RANCH WATER DISTRICT
LF	LINEAR FEET
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MNM	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH
NE	NORTHEAST
NO	NUMBER
NW	NORTHWEST
NS	NATURAL SOIL
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
PE	PLAIN END
PI	POINT OF INTERSECTION
P (PL)	PROPERTY LINE
PO	PUSH-ON
PH	POT HOLE
PSI	PRESSURE (POUNDS PER SQUARE INCH)
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
R (RAD)	RADIUS
REQD	REQUIRED
RT	RIGHT
RW	RECYCLED WATER
R/W	RIGHT-OF-WAY
RWS	RESILIENT WEDGE VALVE
S	SOUTH, SLOPE OR SEWER
SCE	SOUTHERN CALIFORNIA Edison
SCH	SCHEDULE
SD	STORM DRAIN
SE	SEALED EQUIVALENT OR SOUTH EAST
SPEC	SPECIFICATION
SS	STAINLESS STEEL
STA	STATION
STL	STEEL
SW	SOUTHWEST
THK	THICK
TC	TOP OF CURB
TS	TRAFFIC SIGNAL (CONDUIT/CABLE)
TYP	TYPICAL
VERT	VERTICAL
W	WEST OR DOMESTIC WATER
WM	WATER METER
XING	CROSSING
∠	ANGLE



CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.



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			DRAWN:	KN		
			CHECKED:	JG		

 JIG CONSULTANTS J. G. LAVISTON REC 5504 ENGINEER	 CORRIE LAVISTON REC 6707 DISTRICT ENGINEER
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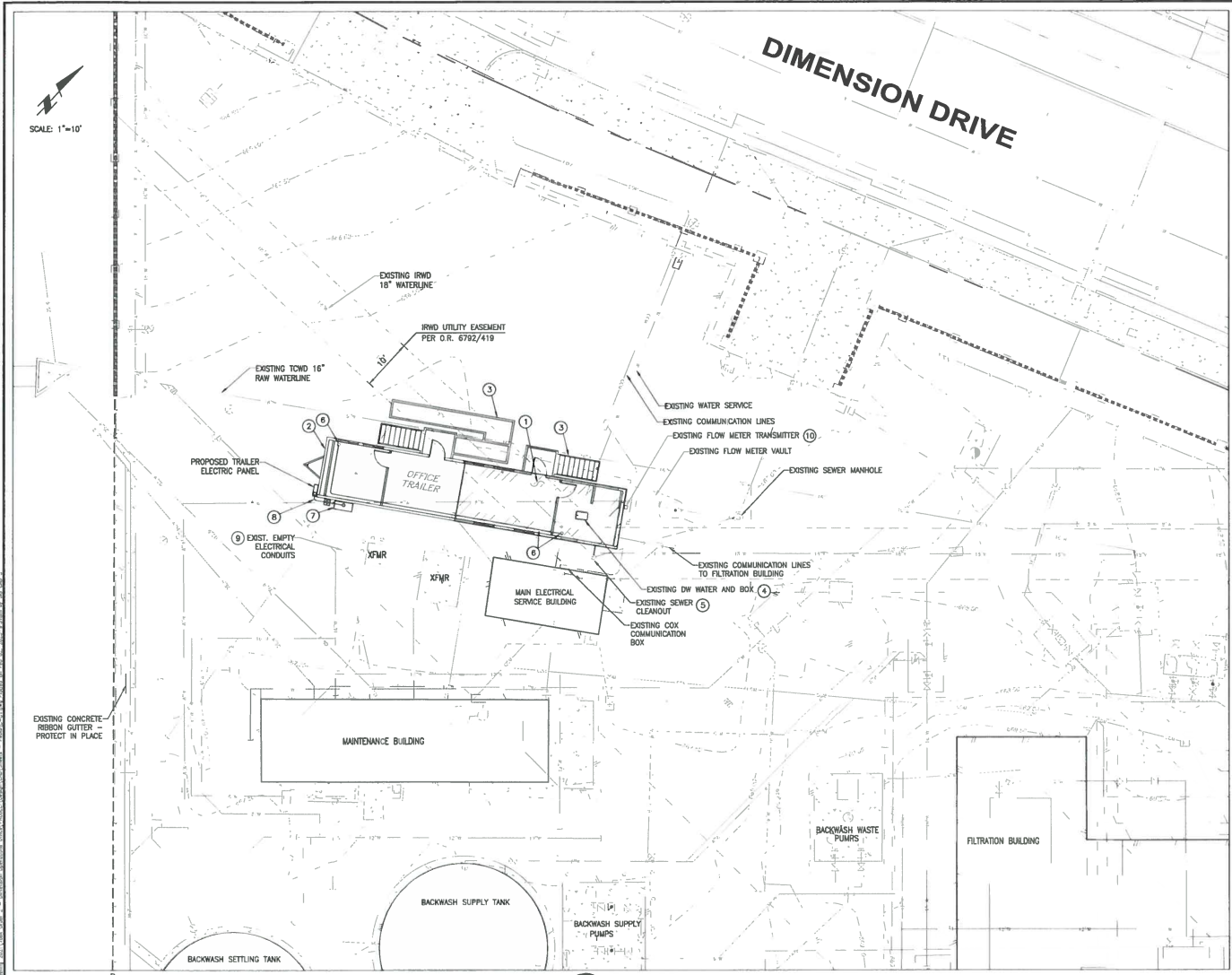
TRABUCO CANYON WATER DISTRICT
 DIMENSION WATER TREATMENT PLANT OPERATIONS TRAILER
 PROJECT NO. 2122-011

GENERAL NOTES, STANDARD SYMBOLS,
 AND ABBREVIATIONS

G-02
 SHEET
 2
 OF
 8

DIMENSION DRIVE

SCALE: 1"=10'



SITE PLAN
 SCALE: 1"=10'-0"
 1

NOTES TO CONTRACTOR:

1. POTHOLE AND FIELD VERIFY ALL POINTS OF CONNECTION AND UTILITY CROSSINGS BEFORE GRADING MATERIALS. REALIGN PROPOSED IMPROVEMENTS AS NEEDED TO MINIMIZE ALIGNMENT CONFLICTS.
2. RESTORE EXISTING SITE IMPROVEMENTS DAMAGED DURING CONSTRUCTION TO ORIGINAL CONDITION TO THE SATISFACTION OF THE DISTRICT.
3. PROTECT IN-PLACE EXISTING SIDEWALK, CURB, GUTTER, DRAIN PIPES, LANDSCAPING AND ALL EXISTING IMPROVEMENTS NOT SPECIFICALLY CALLED FOR REMOVAL. IF DAMAGED, CONTRACTOR SHALL RESTORE IN KIND TO THE OWNER'S SATISFACTION.
4. ALL BURIED PIPE AND CONDUIT SHALL HAVE 24" MIN. COVER, UNLESS OTHERWISE SPECIFIED ON PLANS.
5. CONTRACTOR TO COORDINATE WITH THE DISTRICT FOR TRANSITION SCHEDULE FROM EXISTING TO NEW TRAILER.

CONSTRUCTION NOTES

- 1 REMOVE AND DISPOSE OF EXISTING TRAILER OFFICE
- 2 DESIGN, MANUFACTURE, DELIVER, AND INSTALL PREPACKAGED OPERATIONS TRAILER WITH STRUCTURAL PIERS AND MISCELLANEOUS IMPROVEMENTS
- 3 CONSTRUCT ADA RAMP, LANDING, STAIRS, AND SKirting TO ENTRANCE DOOR PER UBC CODE REQUIREMENTS. WALKING SURFACE SHALL BE STAMPED GALVANIZED
- 4 CONNECT TRAILER POTABLE WATER PIPING TO EXISTING 3/4" COPPER INSIDE METER BOX - SEE PHOTO 1
- 5 CONNECT TRAILER SEWER PIPING TO EXISTING 4" CLEANOUT - SEE PHOTO 2
- 6 CONSTRUCT COMMUNICATION CONDUIT AND SECURE UNDER THE TRAILER - PULL NEW ETHERNET CABLE THROUGH NEW CONDUIT TO LOCATION OF PROPOSED SWITCH
- 7 CONSTRUCT NEMA 3R PANEL H FOR OPERATIONS TRAILER POWER PER ELECTRICAL DRAWINGS
- 8 CONSTRUCT ELECTRICAL CONDUITS AND WIRING BETWEEN PANEL H, TRANSFORMER, AND PANEL A PER ELECTRICAL DRAWINGS
- 9 PULL NEW WIRING THROUGH EMPTY CONDUITS FROM MAINTENANCE BUILDING TO NEW PANEL H
- 10 REMOVE AND RELOCATE EXISTING FLOW METER TRANSMITTER TO NEW TRAILER WALL - SEE PHOTO 3



METER BOX CONNECTION
PHOTO 1
 NTS



SEWER CLEANOUT
PHOTO 2
 NTS



FLOW METER TRANSMITTER
PHOTO 3
 NTS

DIGALERT CALL TOLL FREE 811
 CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.

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			DRAWN:	KN	2/02/23
			CHECKED:	JG	

TRABUCO CANYON WATER DISTRICT
DIMENSION WATER TREATMENT PLANT OPERATIONS TRAILER
PROJECT NO. 2122-011

SITE PLAN

C-01
 SHEET
3
 OF
8

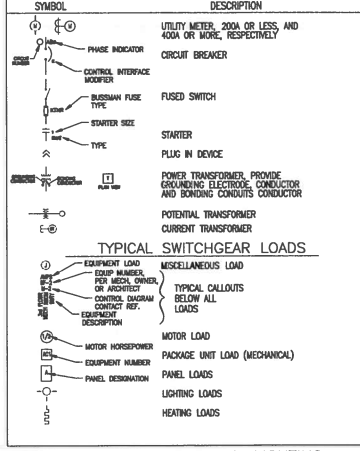
GENERAL ELECTRICAL NOTES

- THE intent of these drawings is to describe a complete and operable system. Bring any questions to the engineer's attention prior to bidding.
- PROVIDE GROUND WIRE IN ALL CONDUITS.
- ALL INSTALLATIONS SHALL MEET FULLY WITH ALL THE REQUIREMENTS OF THE 2011 EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.) UNLESS OTHERWISE NOTED OR LATER.
- UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL CONDUIT SHALL BE PVC COATED RIG.
- ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. PERMISS SHALL BE CLEARED OF OIL AND RESINS.
- SUBCONTRACTOR SHALL FURNISH FOR APPROVAL SHOP DRAWINGS OF ELECTRICAL EQUIPMENT, MOTOR SWITCHES, LIGHTING FIXTURES, AND DEVICES PRIOR TO PURCHASE. ALL DIMENSIONS SHOWN ON ELECTRICAL DRAWINGS ARE PRELIMINARY BASED ON AVAILABLE INFORMATION AT BID TIME. FINAL DIMENSIONS MUST BE VERIFIED WITH ACTUAL EQUIPMENT SIZE AND FIELD VERIFIED DIMENSIONS OF EXISTING STRUCTURE/CONDITIONS AND EQUIPMENT SIZES.
- ALL CONDUITS SHALL BE CONDUIT TYPE "THIN" BELOW GRADE AND TYPE "THIN/THICK" FOR ABOVE AND ABOVE GRADE WORK.
- FURNISH AND PAY FOR ALL PERMITS, INCLUDING ELECTRICAL UTILITY CHARGES AND BUILDING DEPARTMENT PERMIT CHARGES.
- COORDINATE ELECTRICAL WORK WITH REQUIREMENTS OF OTHER TRADES.
- PROVIDE CONDUIT EXTERIOR THERMOSEAL, AIR CONDITIONING CONTROL PANELS, MOTOR STATORS, SOLID-STATE VALVES, AND AIR CONDITIONING UNITS. SEE MECHANICAL DRAWINGS FOR CONTROL WIRE SIZES OR SIZE PER N.E.C.
- IN ADDITION TO WHAT IS INDICATED, CONTRACTOR SHALL REMOVE MECHANICAL AND OTHER DRAWINGS PRIOR TO BID AND INCLUDE ALL WORK INFORMATION (INCLUDING RELAYS AND CONTROL DEVICES) INDICATED THEREIN AS PART OF ELECTRICAL WORK.
- EACH SWITCH TO BE SEPARATE "J" BOX OR "J" BOX IN GANG BOX.
- THE ELECTRICAL SUBCONTRACTOR MUST BE LICENSED BY THE STATE (C-10) AND MUST NOT USE THE JOB SITE PRIOR TO BEING CHARGED EXISTING CONDITIONS AND INCLUDE A HIS BY ALL LABOR AND MATERIAL TO INTERFERE WITH OTHER SYSTEMS.
- ALL EXTERIOR LIGHTING CIRCUITS SHALL BE PROVIDED WITH A PHOTOCELL AND 7-000 24 HOUR BATTERY BACKUP LOCATED NEAR PANEL. SWITCHES INDICATED ON PANEL OR REL. CONTROL PANEL SHALL BE EQUIPPED WITH NUMBER OF THE SWITCHES REQUIRED. CONTROL PANEL SHALL HAVE SPACE FOR TWO ADDITIONAL TIME SWITCHES. THE SWITCHES SHALL HAVE SLUR CONTACTS 24 AMP MINIMUM RATING. FURNISH EQUAL NUMBER OF CONTACTS AS CIRCUITS CONTROLLED PLUS ONE SPARE FUSE, TONG, INTERMATIC, AAF OR EQUAL.
- THE CONTRACTOR SHALL CONDUCT THE ELECTRIC, TELEPHONE, AND CABLE TV COMPANIES AND OBTAIN FROM THEM THEIR REQUIREMENTS FOR CONDUITS, SUBCIRCUITS, PULL BOXES, PHOTOCELLS, PULL BOXES, ETC., AND INCLUDE COST OF FURNISHING AND INSTALLING THIS REQUIRED EQUIPMENT IN BID.
- OBTAIN MINIMUM AVAILABLE FAULT CURRENT FROM THE POWER COMPANY PRIOR TO BID. EQUIPMENT, BUSES, AND OTHER PROTECTIVE DEVICES SHALL HAVE INTERRUPTING RATING TO PROTECT THE ELECTRICAL SYSTEM AGAINST THE MAXIMUM AVAILABLE FAULT CURRENT.
- ALL UNDERGROUND RISERS AND SHEETS TO BE PVC COATED ROAD STEEL GALVANIZED CONDUIT.
- CONTRACTOR IS TO SLEEVES BUILDING FOUNDATION FOR ALL UTILITY CONDUITS PER STRUCTURAL/ARCHITECTURAL DETAIL.
- TEMPORARY POWER FOR CONSTRUCTION, DEMOLITION, OR SYSTEM CHECKOUT IS TO BE PROVIDED BY THE CONTRACTOR AND SHALL BE PER N.E.C. AND CAL OSHA REQUIREMENTS.
- PULL BOXES NOT SPECIFICALLY SIZED ON THE DRAWINGS SHALL BE SIZED PER N.E.C. ARTICLE 370 AND FURNISHED WITH BOLT DOWN THREATS BATED COVER. SET ON 1/2" PEA GRADE W/ICE.

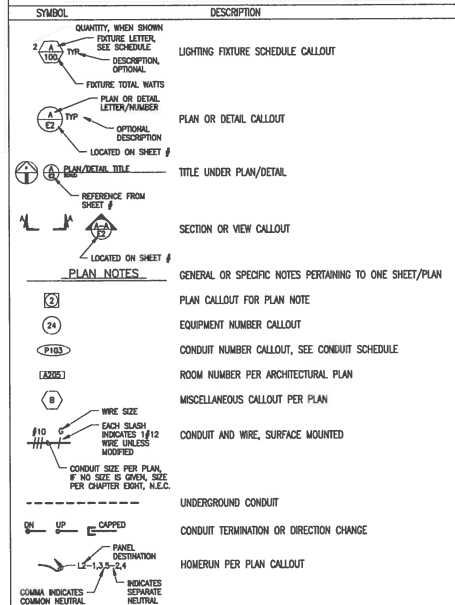
STANDARD SYMBOLS LIST -- ABBREVIATIONS

A	AMPS	J	J BOX	RM	ROOM
AVC	AVAILABLE INTERRUPTING CURRENT	LS	LIMIT SWITCH	RSC	ROAD STEEL GALVANIZED
ASC	AMPS SHORT CIRCUIT	LT	LIGHT	R/W	RIGHT OF WAY
BKGD	BACKGROUND	MAX	MAXIMUM	SCE	SOUTHERN CALIFORNIA Edison
BKR	BREAKER	MCP	MASTER CONTROL PANEL	SGAGE	SGW (SGAS & ELECTRIC)
BLDG	BUILDING	MFR	MANUFACTURER	SEC	SECONDARY
CB	CABINET	MH	MANUFACTURING HEIGHT	SM	SIMILAR
CS	CIRCUIT BREAKER	MIN	MINIMUM	SM	SURFACE MOUNTED
CKT	CIRCUIT	MISC	MISCELLANEOUS	SO	SQUARE
CLF	CURRENT LIMITING FUSE	MSB	MAIN SWITCHBOARD	SQ FT	SQUARE FEET
CONN	CONNECTION	N	NEUTRAL	SS	STAINLESS STEEL
CPI	CONTROL PANEL #	N.C.	NORMALLY CLOSED	SWGR	SWITCHGEAR
DA	DIAMETER	N.E.C.	NATIONAL ELECTRICAL CODE	TE	TIMELOCK
DN	DOWN	NEMA	NATIONAL ELECTRICAL METER'S ASSOC.	TEL	TELEPHONE
DWG	DRAWING	N.C.	NOT IN CONTRACT	TYP	TYPICAL
ELECT	ELECTRICAL ENGINEER	N.O.	NORMALLY OPEN	UC	UNDERGROUND FULL SECTION
ENGR	ENGINEER	NTS	NOT TO SCALE	UCPS	UNDERWRITERS LABORATORY
EQUIP	EQUIPMENT	OH	OVERHEAD	UL	UNDERWRITERS LABORATORY
F	FUSE	OL	OVERLOAD	UNO	UNLESS NOTED OTHERWISE
FBO	FURNISHED BY OTHERS	P	POLE	WP	WEATHERPROOF WRAPPED
FTM	FOUNDATION	PB	PULL BOX	WR	WIRE
FUT	FUTURE	PC	PHOTOCELL PANEL	XFR	TRANSFORMER
G	GROUND	PP	PAY PHONE	1P, 2P...	1 POLE, 2 POLE, ETC
GI	GROUND FAULT INTERRUPTER	PP#	POWER POLE #		
GRD	GRADE	PR	PRIORITY		
GRD	GRADE	PS	PRESSURE SWITCH		
HQD	HAND-OFF-AUTO	PT	PRESSURE TRANSDUCER		
HP	HORSEPOWER	QTY	QUANTITY		
HS	HOUSE SIDE SHEILD	R	RELAY		
ICC	INSTALLED BY CONTRACTOR	REL	RELAY		
IRR CONT	IRRADIATION CONTROLLER	RSC	ROAD GALVANIZED STEEL		

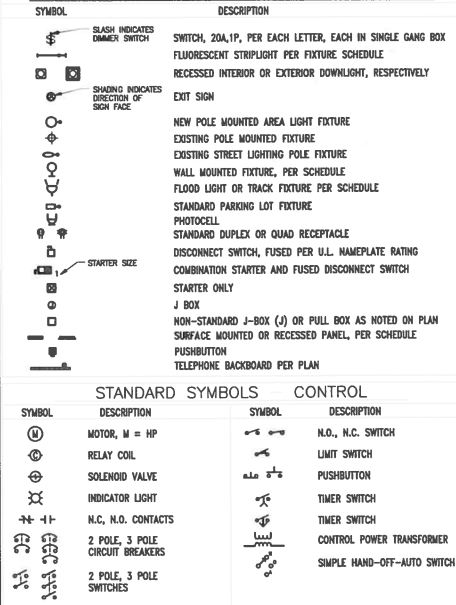
STANDARD SYMBOLS LIST -- SINGLE LINE DIAGRAMS



STANDARD SYMBOLS - GENERAL



STANDARD SYMBOLS -- POWER & LIGHTING



DIGALERT
CALL TOLL FREE 811
CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.

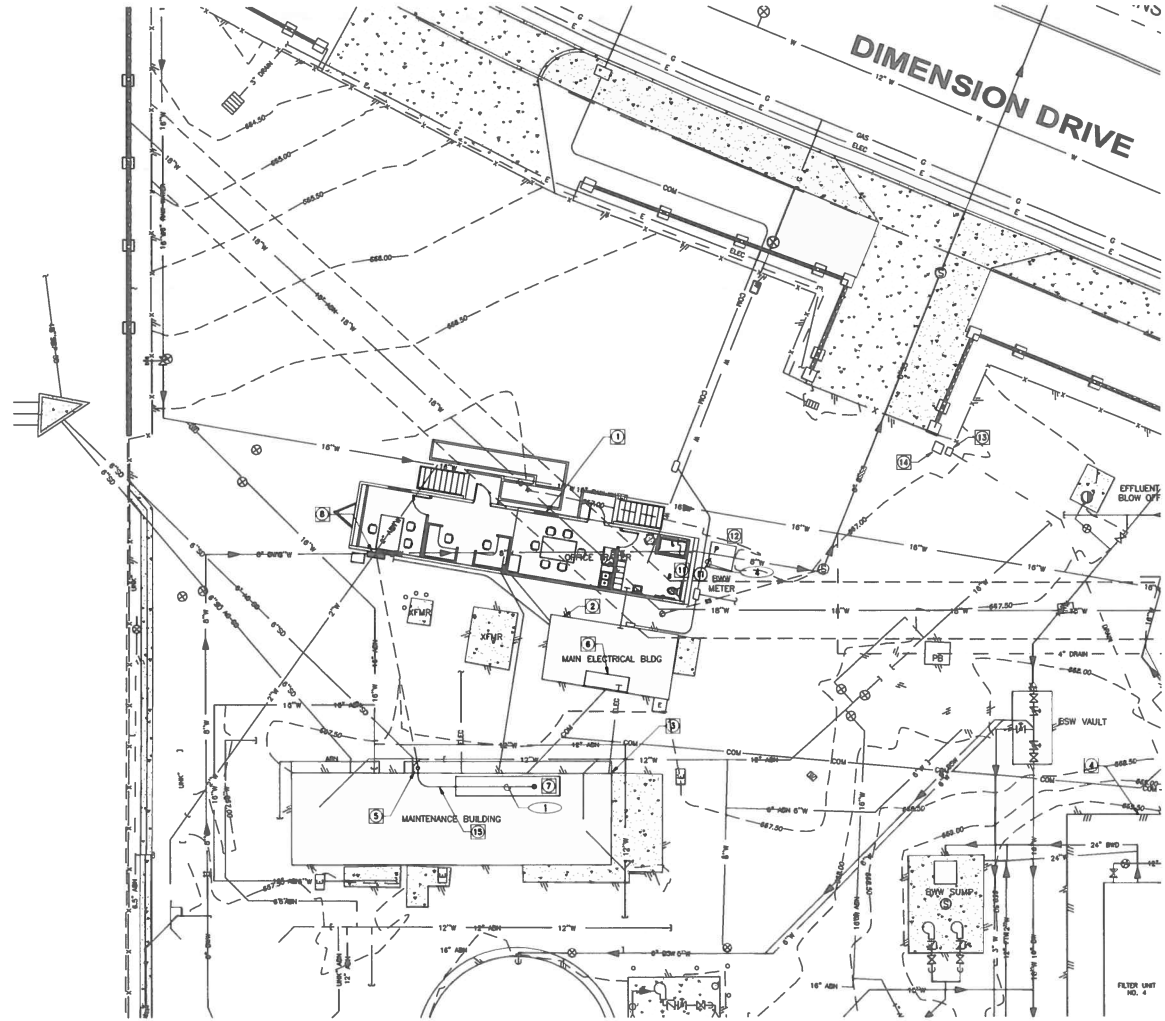
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MULLEN & ASSOCIATES INCORPORATED
ELECTRICAL ENGINEER
Project Number 2021014
2021014

NO.	DATE	REVISIONS	DESIGN: CHC	DATE: 2/02/23
			DRAWN: CHC	ENGINEER
			CHECKED: LDM	DISTRICT ENGINEER

TRABUCO CANYON WATER DISTRICT
DIMENSION WATER TREATMENT PLANT OFFICE TRAILER
PROJECT NO. 2122-011

ELECTRICAL SYMBOLS AND NOTES



ELECTRICAL SITE PLAN
1"=10'

SHEET NOTES

- ① NEW TRAILER, SEE SHEET E-03
- ② EXISTING MAIN ELECTRICAL SERVICE BUILDING
- ③ EXISTING MAINTENANCE BUILDING
- ④ EXISTING FILTER BUILDING
- ⑤ CORE DRILL THRU EXISTING BUILDING, PROVIDE "LB" FITTING, EXTEND PER CONDUIT SCHEDULE
- ⑥ EXISTING MAIN SERVICE BOARD
- ⑦ EXISTING MOTOR CONTROL CENTER
- ⑧ NEW NEMA 3R PANEL H
- ⑨ NOT USED
- ⑩ NOT USED
- ⑪ RELOCATED FLOW INDICATOR, MOUNT ON EXTERIOR WALL OF NEW TRAILER, +5' AFG.
- ⑫ EXISTING FLOWMETER VAULT
- ⑬ EXISTING SUMP PUMP, RECONNECT AT (H) TRAILER
- ⑭ EXISTING GATE CONTROL BOX, RECONNECT AT (H) TRAILER
- ⑮ ROUTE CONDUIT OVERHEAD, SUPPORT FROM CEILING



CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.



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M M M MULLEN & ASSOCIATES INCORPORATED
ELECTRICAL ENGINEERS
Project Number 2021014

NO.	DATE	REVISIONS

DESIGN: CHC
DRAWN: CHC
CHECKED: LDM

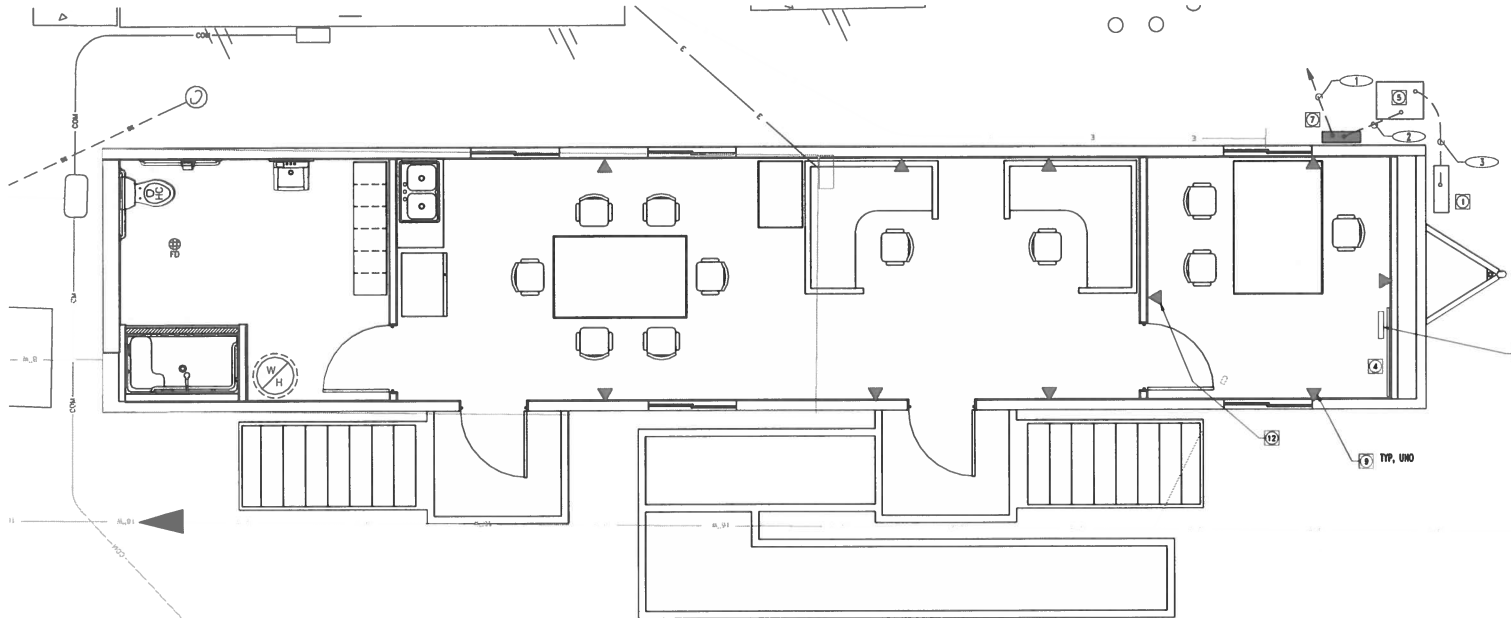


DATE: 2/02/23
ENGINEER: RCE 5504
DISTRICT ENGINEER: CORRE LAUSTEN RCE 6702

TRABUCO CANYON WATER DISTRICT
DIMENSION WATER TREATMENT PLANT OFFICE TRAILER
PROJECT NO. 2122-011

ELECTRICAL SITE PLAN

E-02
SHEET 6 OF 8



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

SHEET NOTES

- ① NEW PANEL "A"
- ② NOT USED
- ③ NOT USED
- ④ 4' X 8' PLYWOOD TELEPHONE BACKBOARD
- ⑤ NEMA 3R TRANSFORMER TA WITH 4" RAISED CONCRETE PAD
- ⑥ NOT USED
- ⑦ NEMA 3R PANEL H MOUNT ON TRAILER, +66" TO TOP
- ⑧ NOT USED
- ⑨ INSTALL 2 - RJ45 JACKS ON TRAILER MFG. PROVIDED MUD RING, +18" AFF UNLESS NOTED OTHERWISE.
RUN 1 - CAT 6 CABLE TO TELEPHONE BACKBOARD WITH 10' WHIP FOR TELEPHONE
RUN 1 - CAT 6 CABLE TO ETHERNET SWITCH AND CONNECT
- ⑩ 16 PORT MANAGED GIGABIT ETHERNET SWITCH
D-LINK #DGS-1100-16 OR EQUAL MOUNT ON PLYWOOD BACKBOARD.
- ⑪ NOT USED
- ⑫ INSTALL 2 - RJ45 JACKS ON TRAILER MFG. PROVIDED MUD RING, +18" AFF UNLESS NOTED OTHERWISE.
RUN 1 - CAT 6 CABLE TO TELEPHONE BACKBOARD WITH 10' WHIP FOR TELEPHONE
RUN 2 - CAT 6 CABLE TO ETHERNET SWITCH AND CONNECT



CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.



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MULLER & ASSOCIATES INCORPORATED
ELECTRICAL ENGINEERS
2021014
1000 N. JARDINE BL. SUITE D, BAKERSFIELD, CALIF 93307 (805) 833-1122
THESE ENGINEERS ARE NOT TO BE USED WITHOUT THE SIGNATURE OF THE REGISTERED ENGINEER.

NO.	DATE	REVISIONS

DESIGN: CHC
DRAWN: CHC
CHECKED: LDM



ROSE 15604 ENGINEER
LOUISE LASTEN ROE 67027 DISTRICT ENGINEER
DATE: 2/02/23

TRABUCO CANYON WATER DISTRICT
DIMENSION WATER TREATMENT PLANT OFFICE TRAILER
PROJECT NO. 2122-011

OFFICE TRAILER ELECTRICAL PLAN

E-03
SHEET 7 OF 8

CONDUIT SCHEDULE

PLAN SYMBOL	CONDUIT	WIRE	DESCRIPTION	LOCATION		REMARKS
				From	To	
1	1 1/2"	3#1,1#66	POWER	MOTOR CONTROL CENTER	PANEL H	U/G CONDUIT BY OTHERS
2	1 1"	3#6,1#106	POWER	PANEL H	TRANSFORMER TA	
3	1 1/2"	4#1,1#66	POWER	TRANSFORMER TA	PANEL A	
4	1"	FLOWMETER CABLE	CONTROL	FLOWMETER VAULT	FLOW INDICATOR	VERIFY CABLE TYPE

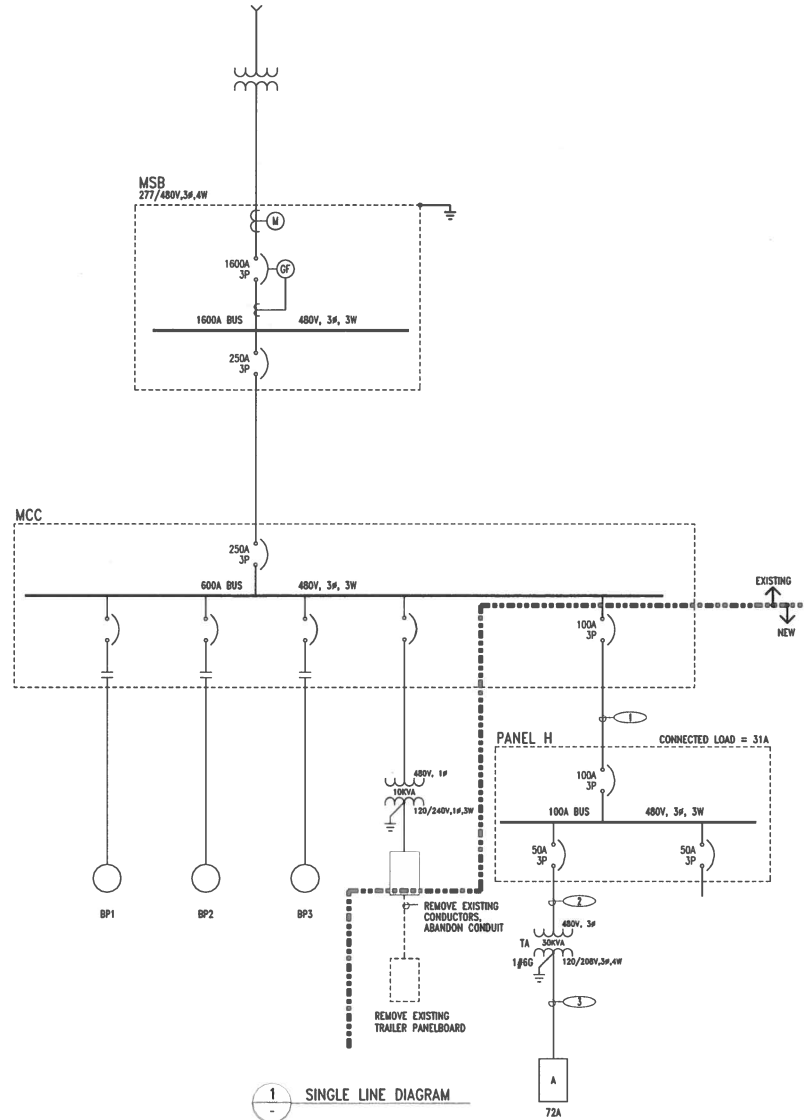
WITH 100A MCC

SURFACE		100A BUS	
CONDUIT	WIRE	CONDUIT	WIRE
1	1 1/2"	1	1 1/2"
2	1"	1	1"
3	1 1/2"	1	1 1/2"
4	1"	1	1"

PANEL A SCHEDULE

NO.	WIRE	NO. OF OUTLETS	WIRE
1	1 1/2"	1	1 1/2"
2	1"	1	1"
3	1 1/2"	1	1 1/2"
4	1"	1	1"

Notes:
 1" PROMISE TO BUY? SEE SOLO SITE PROGRAMABLE INDUCTOR, TYPE OR EQUAL.
 1" PROMISE TO BUY?
 1" PROMISE TO BUY?



CALL TOLL FREE 811 TWO WORKING DAYS BEFORE YOU DIG Underground Service Alert



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MULLEN & ASSOCIATES INCORPORATED ELECTRICAL ENGINEERS Project Number 2021014

NO.	DATE	REVISIONS

DESIGN: CHC	DATE: 2/02/23
DRAWN: CHC	ENGINEER: RDE 55804
CHECKED: LDM	DISTRICT ENGINEER: CORRIE LAUSTEN RDE 67027

TRABUCO CANYON WATER DISTRICT
 DIMENSION WATER TREATMENT PLANT OFFICE TRAILER
 PROJECT NO. 2122-011

SINGLE LINE DIAGRAM

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

ENGINEERING MATTERS

ITEM 3: SADDLECREST DEVELOPMENT

The Saddle Crest project is located on the north side of Santiago Canyon Road just west of the existing Santiago Canyon Estates development. The land use plan for the project calls for the development of 65 single family residences on approximately 35 acres, including private streets with the remainder of the total 113.6 acres of the project in slopes, open space, or utility sites/easements.

At the April 19, 2017, Regular Board of Directors meeting, the Board approved an Agreement which included a 1.5 MG on-site reservoir, sewer and water connections on Santiago Canyon Road, and an on-site booster pump station.

In June and October 2018, the Construction Management and Inspection contracts were awarded to MWH Constructors. MWH completed the inspection of the on and off-site facilities for several years until the project was put on hold by the Developer. In June 2022, the District sought out a new firm for the miscellaneous construction items which remained, including the start-up of the pump station and reservoir. At this time, the original contract with JS Held requires an addendum and is over the General Managers signing authority (Exhibit 1).

FUNDING SOURCE:

Developer Funded

FISCAL IMPACT (PROJECT BUDGET)

By Developer

ENVIRONMENTAL COMPLIANCE:

All Environmental Compliance will be met by the Developer.

RECOMMENDED ACTION:

Recommend the Board of Directors authorize the General Manager to execute Amendment No. 1 for the Saddlecrest Development Construction Management to JS Held in the not to exceed amount of \$15,000 (Action Calendar).

EXHIBIT(S):

1. Addendum No. 1- Saddlecrest Reservoir & Pump Station Inspection Services

CONTACTS (staff responsible): PALUDI/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
PROFESSIONAL SERVICES CONTRACT
CHANGE IN SCOPE OF WORK**

AMENDMENT No. 1

Date: February 16, 2023

Project Title: Saddle Crest Reservoir & Pump Station Inspection – Engineering Services
Project No.: 2400
Consultant: JS Held

Change in Scope of Services:

The following change to the professional services contract dated July 10, 2022 is proposed:

Consultant shall provide additional construction management and inspection services for delayed development completion and increased project management. Detailed scope of work shall be coordinated with TCWD and be performed on time and materials and based on the attached fee schedule.

Attachment(s):

JS Held’s “Saddlecrest Reservoir Project-Addendum No. 1” dated February 13, 2023.

Payment Terms:

In accordance with the attached proposal and fee schedule effective through December 31, 2023


Schedule Impact: None

Summary

Contract Amendment Amount	= \$15,000.00
Total of Previous Change Orders	= \$ 0.00
<u>Original Contract Amount</u>	<u>= \$25,000.00</u>
New Contract Amount	= \$40,000.00

CHANGE ORDER REQUESTED BY:

- Trabuco Canyon Water District
 Contractor
 Other: _____

Approved By:  _____

Title: District Engineer

Approved By:  _____

Title: General Manager

February 13, 2023

Lorrie Lausten, P.E.
District Engineer
Trabuco Canyon Water District
32003 Dove Canyon Drive
Trabuco Canyon, CA 92679

Re: Saddlecrest Reservoir Project – Addendum No. 1

Dear Lorrie,

Please allow this letter to serve as our request to increase the Not to Exceed amount provided for in our Professional Services Contract for the referenced project. Based upon the work being performed and billings to date, we would recommend an increase of \$15,000.00. Should you agree with this recommendation, please confirm the increase as Addendum No. 1 to our Professional Services Contract.

Thank you for your attention to this matter and we look forward to our continuing relationship with TCWD.

Sincerely,



Richard Tropp
Senior Vice President



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

ENGINEERING MATTERS

ITEM 4: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Rose and Lang Wells Groundwater Treatment Facility Property
2. Other Projects

RECOMMENDED ACTION:

Committee to receive project status updates at time of the Committee Meeting.

EXHIBIT(S):

1. Property Survey and Easement Map

CONTACTS (staff responsible): PALUDI/PEREA/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

OPERATIONAL MATTERS

ITEM 5: WATER SYSTEM UPDATES

The following is a brief report of the water system for **February 2023**.

Projects and Repairs

Water Operations staff performed and/or completed the following tasks and projects:

1. Flushed seventy-two fire (72) hydrants and replaced two (2) fire hydrants in the Unincorporated Canyon areas.
2. Completed the Pressure Regulating Valve (PRV) Maintenance Program for FY 2022-23.
3. Repositioned the Filter Flow Meter Manifolds for Filters 1 – 3 at the Dimension Water Treatment Plant per TESCO Controls recommendation.
4. Worked Maintenance Department to install new well pump motors at the Trabuco Creek Groundwater Treatment Facility.
5. Continued to work with TESCO Controls and Hydrotech Electric on SCADA System upgrades.

Monthly Water System Operations Summary

The Monthly Water System Operations Summary is attached for the Committee's review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Water System Operations Summary

CONTACTS (staff responsible): PEREA/KESSLER

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2022

System Demands**													
AF/Day	3.0												
Daily Average, CFS	1.5												
Other Water Deliveries/Purchases													
Ridgeline (DWTP Delivery)	85.2												
El Toro (Interconnection Purchase)	0.0												
Baker WTP (CSC Delivery)													
Portola Hills (Wholesale Purchase)	8.0												
Skyridge (Wholesale Purchase)													
* Usage estimated		** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)											

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

OPERATIONAL MATTERS

ITEM 6: WASTEWATER SYSTEM UPDATES

The following is a brief report of the wastewater system for **February 2023**.

Projects and Repairs

Wastewater Operations staff performed and/or completed the following tasks and projects:

1. Replaced all old lighting at the Robinson Ranch Wastewater Treatment Plant (WWTP) with LED lighting.
2. Cleaned and installed sump pumps in the dry pits of Via Allegre and Barneburg Sewer Lift Stations.
3. Worked with Maintenance Department staff to bypass Golf Club Sewer Lift Station for Harper Engineering to perform a condition inspection of the onsite wet well for planned improvements.
4. Continued to work with TESCO Controls on site inspections for PLC panel improvements related to the SCADA System upgrades.

Sewer System Management Plan (SSMP) Report

The purpose of the program is to communicate on a regular basis with the public on the development, implementation, and performance of TCWD’s SSMP. Status updates on the work and type of work performed on the sewer system will be provided, including sewer line and manhole cleaning, system repairs, lift station cleaning, and updates from satellite facilities:

Sewer System Management Plan (SSMP) Monthly Update	
Total Sewer Line, Feet*	212,045
Total Sewer Line Cleaned (Ft) – Month	12,835
Total Sewer Line Cleaned (Ft) – Cleaning Cycle	49,020
Cleaning Cycle Period (Mos.) [Start date: 9/1/22]	5
Total Sewer Line Cleaned, %	23%
The Oaks at Trabuco – Pumping Frequency for the Month	12
O’Neill Park Sewer System Status	Ok
O’Neill Park Sewer System Repairs	None
SSMP Quarterly Report – <i>Next Quarterly Report</i>	1Q 2023
SSMP Program Audit – <i>Next Audit Report**</i>	March 2024

**This amount includes the OC Parks-owned O’Neill Park sewer system the District is contracted to clean.*

***Periodic internal audits shall be conducted, at a minimum every two years, with reports kept on file. The audit shall focus on evaluating the effectiveness of the SSMP and TCWD’s compliance with the mandatory elements of TCWD’s SSMP:*

Monthly Recycled Water System Operations Summary

The Monthly Recycled Water System Operations Summary is attached for the Committee’s review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Recycled Water System Operations Summary
2. SSMP Annual Program Audit Report - 2022

CONTACTS (staff responsible): PEREA/ULLOA

TRABUCO CANYON WATER DISTRICT | NON-DOMESTIC WATER SYSTEM SUMMARY - 2023

RECYCLED WATER SUPPLY															
	MAX	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
WWTP Reclaimed Water Production, AF	78.3	58.6												58.6	529.1
Reclaimed Reservoir Level, FT	1274.5	1,273.0												-	-
Reclaimed Reservoir Free Board, FT	25.5	1.5												-	-
Reclaimed Reservoir Storage, AF	145.5	135.7												-	-
Supplemental Domestic Water Added, AF	N/A	0.0												0.0	35.5

RECYCLED WATER SYSTEM DEMAND															
NON DOMESTIC WATER USER	ALLOC. AF	8% JAN	17% FEB	25% MAR	33% APR	42% MAY	50% JUN	58% JUL	67% AUG	75% SEP	83% OCT	92% NOV	100% DEC	TOTAL	ALLOC. %
Dahlia Court	8.2	0.07												0.1	0.8%
Dove Canyon Golf Course	106.7	0.29												0.3	0.3%
Dove Canyon Master Association	279.3	0.28												0.3	0.1%
Robinson Ranch	80.2	0.25												0.3	0.3%
Trabuco Highlands	159.7	2.25												2.3	1.4%
City of RSM	0.1	0.00												0.00	0.0%
Construction Water	N/A	0.00												0.0	N/A
Sakaida Nursery	1.1	0.00												0.0	0.0%
SMWD	N/A	41.74												41.7	N/A
TY Nursery	17.9	0.00												0.0	0.0%
TOTAL, AF	653.2	44.88												44.9	6.9%
PERCENTAGE OF NDW ALLOCATION/YEAR		6.9%													
TOTAL ANNUAL AVG. NDW AVAILABLE**	774.36														

URBAN RUNOFF CAPTURE AND REUSE															
DISTRICT FACILITY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
Shadow Rock Detention Basin Production		0.15												0.15	14.2
Dove Tick Creek Production*	<i>Dry Season</i>	0.0												0.0	58.8
	TCWD Portion	0.0												0.0	-
	SMWD Portion	0.0												0.0	-
Dove Lake Water Pumped		0.0												0.0	185.8
Dove Lake Free Board, Ft		0.0												-	-
Dove Lake Storage, AF		180.0												-	-
Total Rainfall, In.		8.05												8.1	14.7

* SMWD share of Dove/Tick Pump Station Dry Season Water is 50% of production. Offline during the month of October 2022.

** Based on 5-Year Average Reclaimed Water Reservoir Base Supply & Recycled Water Production



SEWER SYSTEM MONITORING PLAN (SSMP) PROGRAM ANNUAL AUDIT REPORT for 2022

Prepared by:

Oscar Ulloa, Wastewater Superintendent

&

Michael Perea, Assistant General Manager

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TRABUCO CANYON WATER DISTRICT

Sewer System Management Plan Annual Audit Report

Date of Audit: February 2023
Name(s) of Auditor(s):

Michael Perea, Assistant General Manager
Oscar Ulloa, Wastewater Chief Plant
Operator

SYSTEM OVERVIEW

Miles of gravity sewer mains:	36.8
Miles of force main:	9
Total miles of all sewer lines:	45.8
Number of pump stations:	8
Population served:	12,921 (2020 Urban Water Management Plan)

Report Organization

The following sections are organized as the SSMP elements appear in Statewide Order 2006-003-DWQ, in this SSMP, and in the SSMP Comprehensive Audit Form. The responses provided on the Comprehensive Audit Form will help to complete this audit report. Reference materials are also listed with each element.

Element 1: Goal

1. Are the goals stated in the SSMP still appropriate and accurate? (circle one) Y N
2. If the answer to Question 1 is NO, please identify which goals require revision or replacement, the reason for such action, the content of the revised or new goal, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

Element 2: Organization

Reference Material

- Trabuco Canyon Water District Organization Chart
- Telephone/E-mail Contact List

1. Is the SSMP current with agency organization and staffing contact information? (circle one) Y N
2. If the answer to Question 1 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

Section 3.2.3.1 Contact Information -
Wastewater Operations Superintendent - Oscar Ulloa
Wastewater Operations Chief Plant Operator – Blake Smith

Element 3: Legal Authority

Reference Material

- TCWD Rules and Regulations
- State of California Water Codes

1. Does the SSMP contain current information about the District’s legal authority?
(circle one)

Y N

2. Does the District have sufficient legal authority to control sewer use and maintenance?
(circle one)

Y N

3. If the answer to Questions 1, 2, is NO, please describe the content and schedule for necessary changes. Comments for a YES response may also be provided here.

Element 4: Operation and Maintenance

4.a. Collection System Maps

Reference Material

Summary of information included in the Districts mapping and GIS systems for the collection system.

1. Does the SSMP contain current information about the District’s sanitary sewer maps?
(circle one)

Y N

2. Are the District’s sewer collection system maps complete, current, and sufficiently detailed?
(circle one)

Y N

3. If the answer to Questions 1 and/or 2 is NO, please identify what information or maps require revision or replacement, the reason for such action, the content of the revised or new information and/or maps, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

Collection System maps are always being updated with system redlines completed in the field. The District is currently upgrading its Computerized Maintenance Management System (CMMS) software solution and will complete the project in FY 2022-23.

4.b. Resources and Budget

Reference Material

- Current Capital Improvement Plan (CIP)
- Current TCWD Operating Budget

1. Does the SSMP contain current information about the District’s resources and budget?
(circle one)

Y N

2. Are the District’s resources and budget sufficient to support effective sewer system management? (circle one)

Y N

3. Does the District’s planning efforts support long-term goals? (circle one) Y N
4. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

4.c. Prioritized Preventative Maintenance

Reference Material

- Cleaning Schedules
- List or Map of Hotspots
- Work Orders
- Service Call Data
- Customer Feedback

1. Does the SSMP contain current information about the preventative maintenance activities for the District collection system? (circle one) Y N
2. Considering the information in Tables 1, are the Districts preventative maintenance activities sufficient and effective in reducing and preventing SSOs and blockages? (circle one) Y N
3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

Known problem/trouble areas are cleaned on a quarterly basis to prevent SSO’s.

4.d. Scheduled Inspections and Condition Assessment

Reference Material

- Inspection Reports
- Pipe and Manhole Condition Data

1. Does the SSMP contain current information about the inspections and condition assessment for District systems? (circle one) Y N
2. Are the District’s scheduled inspections and condition assessment system effective in locating, identifying, and addressing deficiencies? (circle one) Y N
3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

All pipeline and manhole inspections are completed during sewer line cleaning.
Damaged pipes and manholes are promptly repaired. Video inspections are performed as needed.

4.e. Contingency Equipment and Replacement Inventories

Reference Material

- Funds Spent on Equipment and Materials
- Equipment and Parts Inventory

1. Does the SSMP contain current information about the District’s equipment and replacement inventories? (circle one) Y N
2. Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance? (circle one) Y N
3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, what equipment or parts need to be obtained, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

District Maintenance Superintendent and/or designee maintains and updates equipment/asset inventory and parts for the District’s Sanitary Sewer System. Basic Inspection of Terminals (BIT) are performed quarterly on commercial/ heavy equipment vehicles. Critical parts with long lead times are on shelf for repairs.

4.f. Training

Reference Material

- Employee Training Records

1. Does the SSMP contain current information about the training expectations and programs for the staff that operates the District systems? (circle one) Y N
2. Do supervisors believe that their staff is sufficiently trained? (circle one) Y N
3. Are staff satisfied with the training opportunities and support offered to them? (circle one) Y N
4. If the answer to Questions 1, 2, and/or 3 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

Safety Training is completed on a weekly basis (tailgate meetings) and training records are kept by respective department Superintendent or designee. Educational Training is provided through Seminars, Conferences, and other approved online training sources throughout the year.

Element 5: Design and Performance Provisions

Reference Material

- Design and Construction Standards
- Ordinances

1. Does the SSMP contain up-to-date information about the District’s design and construction standards? (circle one) Y N
2. Are the design and construction standards, as well as inspection and testing standards for new and rehabilitated facilities, sufficiently comprehensive and up-to-date? (circle one) Y N
3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

SSMP references all design criteria and Standard Drawings as well as inspection and testing criteria documents which are on file with the District and maintained by the District Engineer.

Element 6: Overflow Emergency Response Plan

Reference Material

- Data Submitted to CIWQS – *See Table 1 – Annual SSO Statistics*
- Customer Service Call Data

1. Does the SSMP contain up-to-date information about the overflow emergency response plan used for the District systems? (circle one) Y N
2. Considering the information in Table 1, is the overflow emergency response plan (OERP) effective in handling SSOs? (circle one) Y N
3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates. Comments for a YES response may also be provided here.

SSMP references the SSOP document which contains TCWD Emergency Response Plan.

Element 7: Fats, Oils, and Grease (FOG) Control Plan

Reference Material

- Cleaning Schedules
- Food Service Establishment Inspection Reports or Summaries
- Data Submitted to CIWQS *See Table 2 – FOG Control Statistics*
- Service Call Data

1. Does the SSMP contain current information about the FOG plan? (circle one) Y N
2. Considering the information in Table 2, is the current FOG program effective in documenting and controlling FOG sources? (circle one) Y N

3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates.

Comments for a YES response may also be provided here.

TCWD monitors and inspects sixteen (16) businesses in its service area. These inspections are completed quarterly, and customers are notified of inspections or any potential violations.

Element 8: System Evaluation and Capacity Assurance Plan (SECAP)

Reference Material

- TCWD Master Plan
- Sub-Area Master Plans
- SSO Data – See Table 3 – SSOs Caused by Hydraulic Limitations

1. Does the SSMP contain current information about the capacity assessment for the District systems? (circle one) Y N

2. Has a capacity assessment identifying and addressing any hydraulic deficiencies been completed for the District systems? (circle one) Y N

3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates.

Comments for a YES response may also be provided here.

The District is currently updating its Master Plan and performing a condition assessment of its facilities with the assistance of an independent third-party consultant which will be completed by the end of CY 2022.

Element 9: Monitoring, Measurement, and Program Modifications

1. Does the SSMP contain up-to-date information about the District’s data collection and organization procedures? (circle one) Y N

2. Are the data collection and organization procedures sufficient to evaluate the effectiveness of its SSMP for the District’s systems? (circle one) Y N

3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates.

Comments for a YES response may also be provided here.

District staff maintains sewer cleaning records through a GIS-based software program. The goal is to clean the entire sanitary sewer system on an annual basis.

Element 10: SSMP Program Audits

1. Has this SSMP Audit been completed and kept on file for the San Diego Regional Water Quality Control Board to review if needed? (circle one) **Y**N

SSMP Audit will be kept on file at the Administration office and the Robinson Ranch Wastewater Treatment Plant (WWTP).
SSMP is scheduled to be updated and re-certified by the Board of Directors every five years. The most recent update and re-certification was completed in 2019. The next update and re-certification will be completed in CY 2024.

Element 11: Communication Program

Reference Material

- Project Specific Mailings
- Website
- Meeting with Neighboring Agencies
- Monthly Operational and Engineering Committee meetings

1. Does the SSMP contain up-to-date information about the District’s public outreach activities? (circle one) **Y**N

2. Has the District’s effectively communicated with the public, other agencies, about the SSMP and addressed any feedback? (circle one) **Y**N

3. If the answer to Questions 1 and/or 2 is NO, please identify what information requires revision or replacement, the reason for such action, the content of the revised or new information, and the schedule for implementation or updates.

Comments for a YES response may also be provided here.

District staff (Engineering, Operations, & Maintenance) meet bi-monthly to review ongoing District projects and improvements.
Operational/Engineering Committee Meetings are held once a month with Board Members, at this time the SSMP is discussed and put on record for public participation and information purposes.

TABLE 1 – ANNUAL SSO STATISTICS

INDICATOR	2019	2020	2021	2022
Number of SSOs (total)	2	0	2	0
• Wet season SSOs (1)	0	0	0	0
• Dry season SSOs	2	0	2	0
Number of SSOs (by volume range)				
• < 10 gallons	0	0		
• 10 – 99 gallons	1	0	1	0
• 100 – 999 gallons	1	0	1	0
• 1,000 – 9,999 gallons	0	0	0	0
• H 10,000 gallons	0	0	0	0
Total SSO Volume (Gallons)	300	0	400	0
• Volume reaching waters of the State	0	0	0	0
• Volume not contained, but also not reaching the waters of the state	300	0	400	0
○ Volume recovered	100	0	150	0
○ Net volume (total minus recovered)	200	0	250	0
• Number of SSOs per 10 miles of sewer per year	0	0	0	0
• Volume of SSOs per 10 miles of sewer per year	0	0	0	0
• Total volume conveyed to the WWTP (million gallons)	148	0	185	0
• Total Volume SSO/Total Volume conveyed, gallons	0	0	0	0
• Number of SSOs (by cause)				
○ Blockages	2	0	2	0
○ Roots	0	0	0	0
○ Grease	0	0	0	0
○ Debris	0	0	0	0
○ Debris from Laterals	0	0	0	0
○ Animal Carcass	0	0	0	0
○ Construction Debris	0	0	0	0
○ Multiple Causes	0	0	0	0
• Infrastructure Failure	0	0	0	0
• Inflow & Infiltration (I&I)	0	0	0	0
• Power Failure	0	0	0	0
• Flow Capacity Deficiency	0	0	0	0
• Natural Disaster	0	0	0	0
• Bypass	0	0	0	0
• Cause Unknown	0	0	0	0
• Average Emergency Response Time (minutes)	15-30	15-30	15-30	15-30
○ Business Hours	15	15	15	15
○ Non-business Hours	30	30	30	30
• Number of locations with multiple SSOs	1	0	0	0

(1) Wet season is defined as November through April, with the dry season being May through October. This seasonal categorization does not reflect actual conditions at the time of an SSO even

TABLE 2 - FOG CONTROL STATISTICS

	2019	2020	2021	2022
Number of SSOs caused by FOG	0	0	0	0
Planned cleaning (linear foot)	194,369	194,369	194,369	194,369
Unplanned cleaning (linear foot)	0	0	0	0
Number of FOG inspections completed	64	64	64	64

TABLE 3 - SSOS CAUSED BY HYDRAULIC LIMITATIONS

	2019	2020	2021	2022
Number of SSOs caused by capacity limitations	0	0	0	0

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

OPERATIONAL MATTERS

ITEM 7: MAINTENANCE DEPARTMENT UPDATES

The following is a brief report of work completed by Maintenance staff for **February 2023**.

Projects and Repairs

Maintenance staff performed and/or completed the following tasks and projects:

Water Operations

1. Coordinated the repair of the roof at Canyon Creek Booster Pump Station with JRT Roofing (Contractor).
2. Continued work with TESCO Controls and Hydrotech Electrical on SCADA System upgrades.

Wastewater Operations

1. Worked with operations staff to clean up Coyote Flats and locate/clean onsite v-ditch system.
2. Coordinated with SS Mechanical for the surge tank concrete base pour at El Toro Sewer Lift Station.
3. Assisted Wastewater Operations staff to bypass Golf Club Sewer Lift Station for Harper Engineering to perform a condition inspection of the onsite wet well for planned improvements.
4. Continued work with TESCO Controls and Hydrotech Electrical on SCADA System upgrades.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

None

CONTACTS (staff responsible): PEREA/STROUD

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | MARCH 1, 2023**

**REGULATORY AND OTHER MATTERS
ITEM 8: OTHER MATTERS/REPORTS**

Other Matters/Reports from the General Manager and/or District staff may be provided at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

EXHIBITS

None

CONTACTS (staff responsible): PALUDI/PEREA