



**ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA  
TRABUCO CANYON WATER DISTRICT  
ADMINISTRATION FACILITY  
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA  
SEPTEMBER 3, 2025 AT 8:00 AM**

---

**COMMITTEE MEMBERS**

Mark Anderson, Committee Chair  
Glenn Acosta, Committee Member  
John Horst, 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](http://www.tcwd.ca.gov). You may submit public comments by email to the Committee at [mperea@tcwd.ca.gov](mailto: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 at the time of the meeting or by email to the Committee at [mperea@tcwd.ca.gov](mailto: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 at the time of the meeting by email to the Committee at [mperea@tcwd.ca.gov](mailto: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**

**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. *August 6, 2025 Committee Meeting*

**ITEM 2: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER MODIFICATION PROJECT CONSTRUCTION MANAGEMENT CONTRACT AWARD**

**RECOMMENDED ACTION:**

*Recommend the Board of Directors award a Construction Management Services contract for the WWTP Blower Modification Project to [successful respondent to be recommended at the time of the meeting] for a fee not-to-exceed [fee to be recommended at the time of the meeting] with a 10% contingency, for a total to-to-exceed amount of [total amount to be recommended at the time of the meeting].*

**ITEM 3: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER STATION EQUIPMENT PURCHASE**

**RECOMMENDED ACTION:**

*Recommend that the Board of Directors ratify the purchase of two blower/motor assemblies and one blower only from Lone Star Blower in the amount of \$174,100.*

**ITEM 4: DOVE RESERVOIR MAINTENANCE ROAD ASPHALT RESURFACING PROJECT**

**RECOMMENDED ACTION:**

*Committee to receive information at the time of the Committee Meeting and take action(s) as appropriate.*

**ITEM 5: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES**

1. Dimension Water Treatment Plant Pipeline Rehabilitation and Filter 4 Seismic Retrofit
2. Saddle Crest Inlet Pipeline Improvement Project
3. Other Projects

**RECOMMENDED ACTION:**

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



**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | SEPTEMBER 3, 2025**

**OPERATIONAL MATTERS**

---

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

**ITEM 6: WATER SYSTEM UPDATES**

**RECOMMENDED ACTION:**

*Committee to receive system status updates. No action required.*

**ITEM 7: WASTEWATER SYSTEM UPDATES**

**RECOMMENDED ACTION:**

*Committee to receive system status updates. No action required.*

**ITEM 8: MAINTENANCE DEPARTMENT UPDATES**

**RECOMMENDED ACTION:**

*Committee to receive system status updates. No action required.*

**REGULATORY AND OTHER MATTERS**

---

**ITEM 9: 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](http://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](http://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](http://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 | SEPTEMBER 3, 2025**

**ENGINEERING 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. *August 6, 2025 Committee Meeting*

**CONTACTS (staff responsible): PALUDI/PEREA**



**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | AUGUST 6, 2025**

---

**DIRECTORS PRESENT**

Mark Anderson, Committee Chair  
Glenn Acosta, Committee Member

**STAFF PRESENT**

Fernando Paludi, General Manager  
Michael Perea, Assistant General Manager  
Lorrie Lausten, District Engineer  
Gary Kessler, Water Superintendent  
Oscar Ulloa, Wastewater Superintendent  
Jason Stroud, Maintenance Superintendent  
Roseann Lejsek, Executive Assistant  
Karen Warner, Principal Accountant  
Phil Serpas, CMMS/SCADA Administrator

**STAFF ABSENT**

None

**DISTRICT CONSULTANTS**

None

**PUBLIC PRESENT**

None

**CALL MEETING TO ORDER**

Director Anderson called the August 6, 2025 Engineering/Operational Committee Meeting to order at 8:00 a.m.

**VISITOR PARTICIPATION**

No comments were received.

**ORAL COMMUNICATION**

No comments were received.

**COMMITTEE MEMBER COMMENTS**

None

**REPORT FROM THE GENERAL MANAGER**

None

**ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP**

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

**RECOMMENDATION:** The Committee recommended forwarding this matter to the Board of Directors (Consent Calendar).

**ITEM 2: DIMENSION WATER TREATMENT PLANT TRANSMISSION MAIN & FILTER 4 REHABILITATION UPATE**

---

Mr. Paludi presented this matter for Committee consideration. Ms. Lausten provided an update on the material delivery schedules for phases 1A and 1B of the transmission main pipeline rehabilitation project. Ms. Lausten reported that an RFP has been issued for construction management, and she added that the results will be presented at the Regular Board meeting with staff's recommendation for award. A brief discussion occurred regarding the need to notify businesses located in close proximity to the work site.

Ms. Lausten provided a brief update on the Filter 4 rehabilitation project, and she stated that the project will take a few days to complete once construction begins.

**RECOMMENDATION:** None – Informational item only.

**ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES**

---

**1. Heritage SLS Improvements**

Ms. Lausten reported that this project is in the final design phase, and that the project is scheduled to go out to bid the following week.

**2. Saddle Crest Reservoir/Pump Station Piping Improvements**

Ms. Lausten reported that the pipe improvement plans are complete, and the bid package will be issued soon. Ms. Lausten added that the costs for the project are estimated at \$170k.

**3. RRWWTP Blower Equipment Station and Blower Relocation**

Ms. Lausten reported that SS Mechanical is on board for this project. Ms. Lausten added that the District has received the blowers and staff anticipates sending out a bid for construction management shortly.

**4. Other Projects**

V-Ditch Replacement Project – Ms. Lausten reported that the project has been completed, and a guardrail has been installed at the culvert crossing.

Hamilton Oaks Community Fire Hydrants – Mr. Perea reported that he and staff performed preliminary pressure tests on all of the fire hydrants on Hamilton Trail, and that the results have been provided to Hazen & Sawyer for further discussion and evaluation. Mr. Perea added that an update will be provided to the Committee and the community at a future meeting.

**RECOMMENDATION:** None – Informational item only.

**ITEM 4: WATER SYSTEM UPDATES**

---

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

1. Replaced another curb stop in Saddle Crest.
2. Raised 6 valve cans in the Trabuco Oaks area.
3. Mr. Brent Monson attended Cross Connection Control training at USC.
4. Worked with hazmat specialist to dispose of 1,700 gallons of old Clarion A7 at DWTP.
5. Rebuilt sump pump at the Bell Canyon PRV.
6. Serviced 59 valves.

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | AUGUST 6, 2025**

Mr. Kessler presented the Water System Summary for Committee review, and he noted that Irvine Ranch Water District (IRWD) had challenges in meeting the District’s potable water demands during two warm weather events in the month of July.

Mr. Perea reported that the District currently contracts with a cross-connection specialist to ensure compliance with the newly adopted Cross-Connection Control Plan. Mr. Perea added that Mr. Monson, Lead Water System Operator, has completed the USC cross-connection specialist certification, and that the District plans to have an additional employee obtain their certification in the future to meet the new requirements.

Director Anderson requested an update on the Santa Margarita Water District (SMWD) interconnection discussion. Mr. Kessler reported that the connection only functions to send water to SMWD. Ms. Lausten reported that Hazen and Sawyer are working with IRWD and SMWD to redesign the interconnection to flow water in both directions.

**RECOMMENDATION:** None – Informational item only.

**ITEM 5: 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. Assisted in the replacement of the East Hoffman Blower.
2. Replaced Dove Lake Pump.
3. Plano Lift Station wet well cleaning and inspection.
4. Quarterly cleaning of hot spots with vector truck.

Mr. Ulloa presented the Recycled Water System Summary for Committee review, and he reported that the reservoir was at 1,258 feet and Dove Lake had 4 feet of freeboard. Mr. Ulloa also reported that TY Nursery is approaching their annual maximum allocation of recycled water, and that Dove & Tick Creek Dry Season recovery has started production.

**RECOMMENDATION:** None – Informational item only.

**ITEM 6: MAINTENANCE DEPARTMENT UPDATES**

---

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

**Projects and Repairs**

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

**Water Operations**

1. Attended job walk at DWTP for Filter #4 seismic brackets.

**Wastewater Operations**

1. Emergency repairs needed for failed blower at WWTP. Vaughan Industrial called out for immediate repairs.
2. Dove Lake motor replacement.
3. Reclaim Water Filter tour at Tustin Golf Course, potential new filters for Dove Recycle booster station.

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | AUGUST 6, 2025**

**District Fleet Upgrades & Other Projects**

1. Repairs on truck #8, AC service new steering wheel, LOF and all new shocks with Elite Services.
2. Repairs on truck #7, AC service and LOF and recall checks with Ford Fleet Center.
3. LOF on truck #16 and #29.
4. Complete BIT inspections.
5. Began fire extinguisher inspections/repair.
6. OBD smog check on Crane truck.
7. OVI smog check on Slide Rail, and inspection.
8. Emergency gen and ATS testing.

**RECOMMENDATION:** None – Informational item only.

**ITEM 7: OTHER MATTERS/REPORTS**

---

No other matters were reported.

**RECOMMENDATION:** None

**ADJOURNMENT**

Director Anderson adjourned the August 6, 2025 Engineering/Operational Committee Meeting at 8:20 a.m.

DRAFT

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**ENGINEERING MATTERS**

**ITEM 2: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER MODIFICATION PROJECT CONSTRUCTION MANAGEMENT CONTRACT AWARD**

The District’s Robinson Ranch Wastewater Treatment Plant (RRWWTP) operates a blower-aeration system consisting of four (4) blower-motor configurations. The existing Sutorbilt positive displacement blowers lack the needed capacity to effectively overcome pressure changes as a result of varying elevation within the sequencing batch reactors (SBR). Staff will be transitioning to multistage centrifugal air blowers, matching the existing Hoffman configuration, which will provide increased efficiency and redundancy. The four blowers are to be relocated outside of the existing Blower Building at the RRWWTP due to issues with heat from the blowers damaging the Motor Control Center (MCC), along with easier maintenance of the blowers. The remaining building space will be dedicated to an electrical room with the upgraded MCC currently in the design phase. Due to the long procurement time of equipment, Staff pre-purchased the two Hoffman blowers. At the June 18, 2025 Regular Board of Directors meeting, the construction project was awarded to SS Mechanical for an amount of \$919,022.

To support the construction, the District solicited proposals from the following five (5) firms for Construction Management and Inspection Services:

<b>WWTP Blower Modification Project</b>
Ardurra
Dudek
MKN
Butier
MCM Consulting

The proposals are due on September 2, 2025, and the recommendations will be provided at the time of the Committee meeting.

**FUNDING SOURCE:**

Capital Improvement Program

**FISCAL IMPACT (PROJECT BUDGET):**

\$1,995,000 for the WWTP Blower Modification Rehabilitation (FY26 and FY27) which includes the Blower Modification award and the future MCC Replacement.

**ENVIRONMENTAL COMPLIANCE:**

Notice of Exemption was filed on July 21, 2025

**RECOMMENDED ACTION:**

*Recommend the Board of Directors award a Construction Management Services contract for the WWTP Blower Modification Project to [successful respondent to be recommended at the time of the meeting] for a fee not-to-exceed [fee to be recommended at the time of the meeting] with a 10% contingency, for a total to-to-exceed amount of [total amount to be recommended at the time of the meeting].*

**EXHIBIT(S):**

None

**CONTACTS (staff responsible): PALUDI/LAUSTEN**

**ENGINEERING MATTERS**

**ITEM 3: ROBINSON RANCH WASTEWATER TREATMENT PLANT BLOWER STATION EQUIPMENT PURCHASE**

---

The District operates the Robinson Ranch Wastewater Treatment Plant (RRWWTP) which treats up to 0.85 million gallons (MG) of sewage per day. The blower-aeration system (System) is a critical stage of treatment and the update to this System is a current construction project. The existing Hoffman centrifugal air blowers, which are slated to be re-used in the current project, have been re-built three times in the past 30 years.

After rebuilding the equipment three times, it has reached the end of its useful life. Years of use have caused rust to form, which has compromised the tolerances of this blower and reduced its efficiency for SBR treatment. While the blower could still be used for less critical processes, it is no longer reliable for essential plant operations and must be replaced immediately. In addition, purchasing this new equipment will support the current blower project by easing the transition, minimizing downtime, and potentially expediting completion of the current construction project.

Staff proposes to purchase two (2) additional Lone Star blower/motor configurations and one (1) additional blower only to provide backup equipment to this critical treatment System.

**FUNDING SOURCE:**

This recommended equipment purchase is considered part of the Operating Budget (General Fund) and not the Capital Improvement Program.

**FISCAL IMPACT (PROJECT BUDGET):**

The total recommended expenditure is \$174,100.

**ENVIRONMENTAL COMPLIANCE:**

Not Applicable

**RECOMMENDED ACTION:**

*Recommend that the Board of Directors ratify the purchase of two blower/motor assemblies and one blower only from Lone Star Blower in the amount of \$174,100.*

**EXHIBIT(S):**

1. Photos of Existing Equipment
2. Detailed Quote from Lone Star Blower

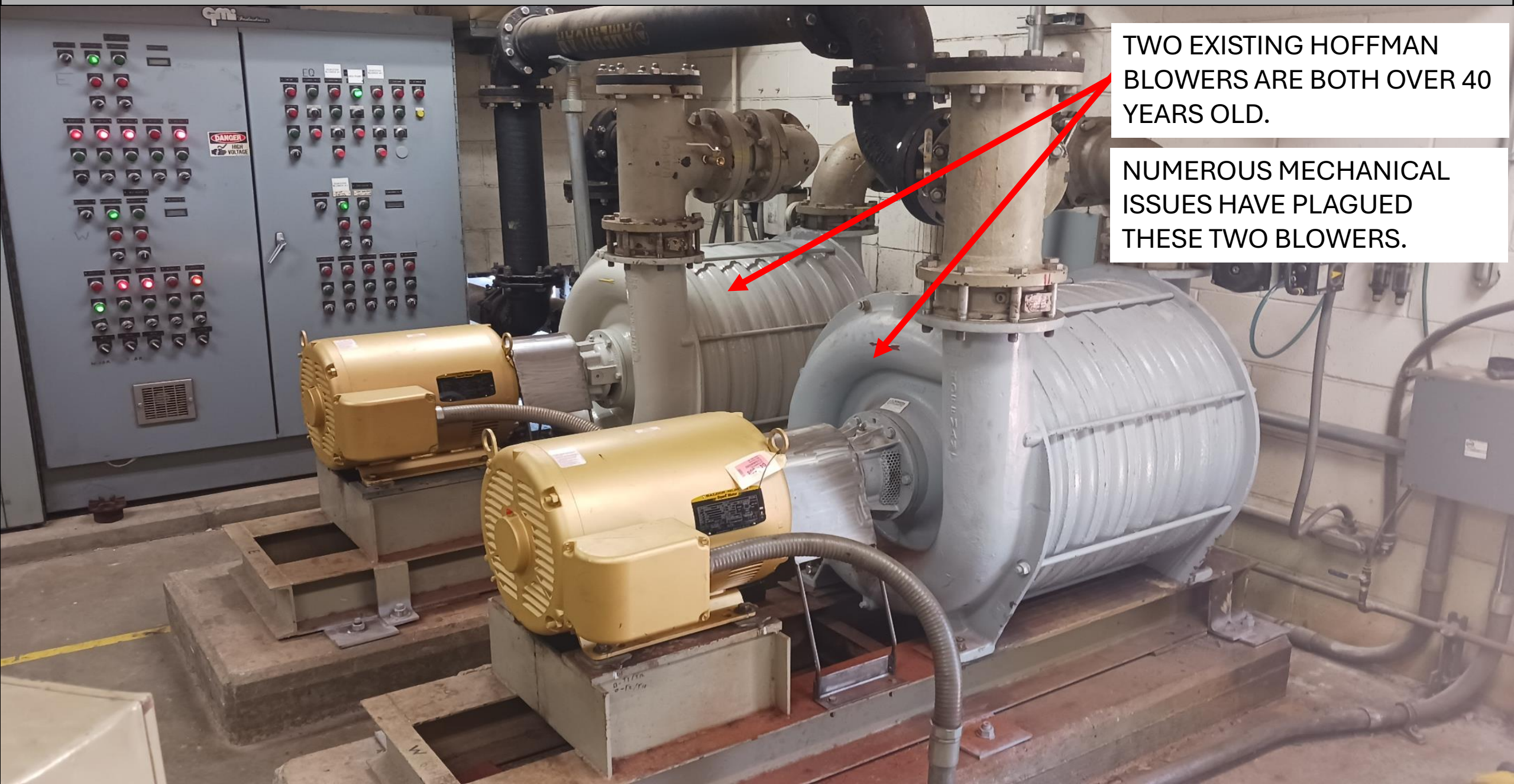
**CONTACTS (staff responsible): LAUSTEN/ULLOA**

# Robinson Ranch Wastewater Treatment Plant Replacement Blowers Project

Trabuco Canyon Water District  
September 2, 2025 Engineering/Operations Committee Meeting



# Existing Hoffman Blowers Inside of Blower Building

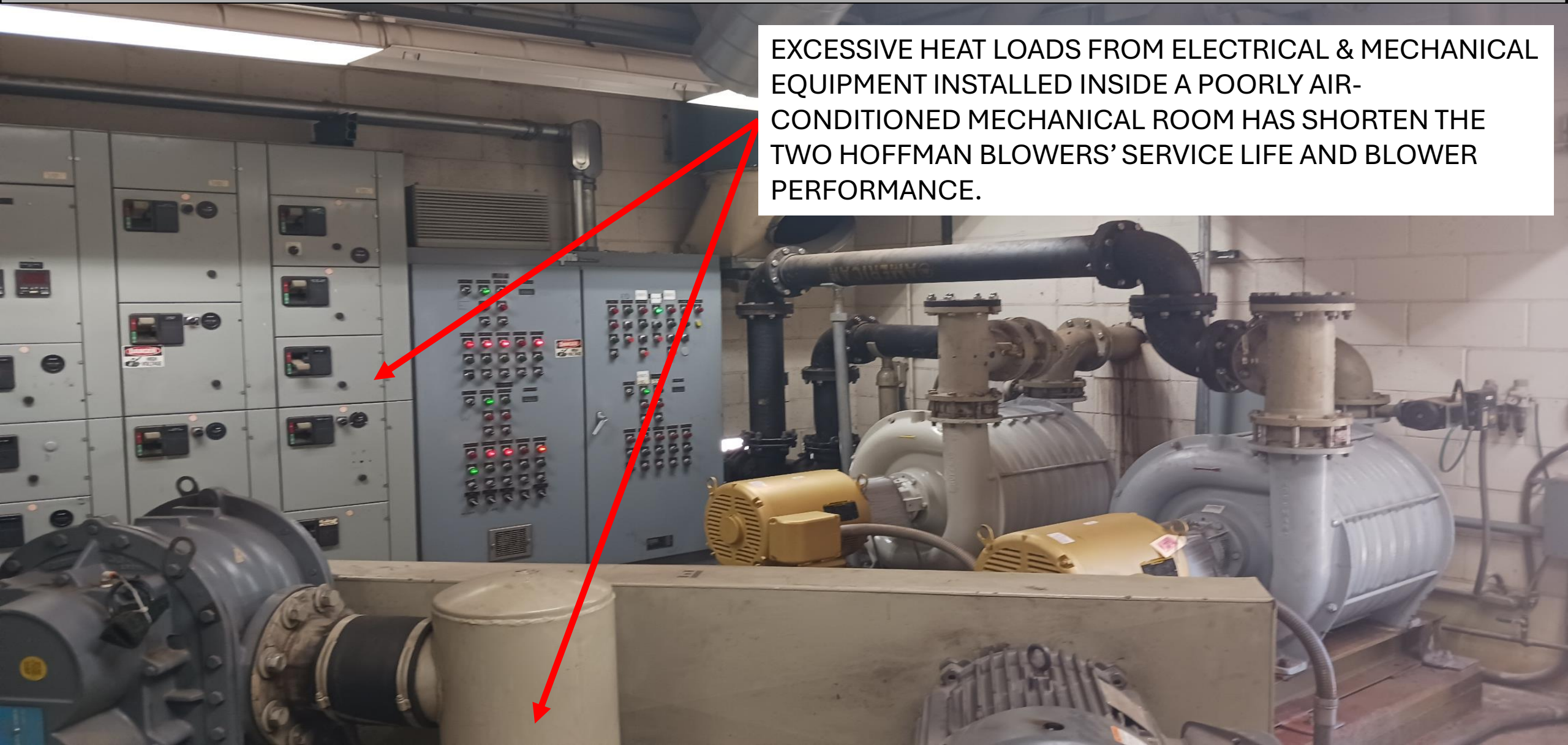


TWO EXISTING HOFFMAN BLOWERS ARE BOTH OVER 40 YEARS OLD.

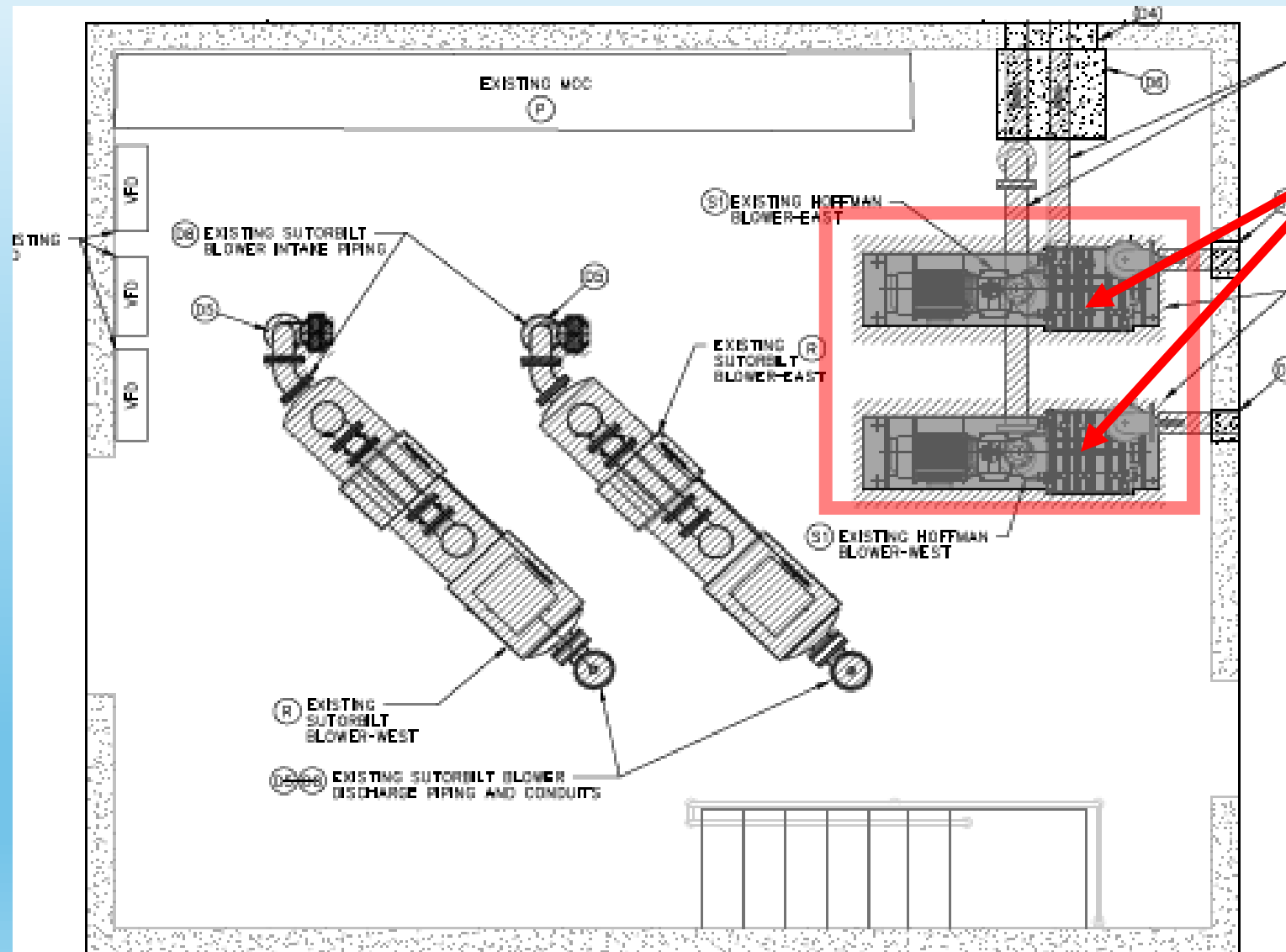
NUMEROUS MECHANICAL ISSUES HAVE PLAGUED THESE TWO BLOWERS.

# Existing Environmental Conditions Inside of the Blower Building

EXCESSIVE HEAT LOADS FROM ELECTRICAL & MECHANICAL EQUIPMENT INSTALLED INSIDE A POORLY AIR-CONDITIONED MECHANICAL ROOM HAS SHORTEN THE TWO HOFFMAN BLOWERS' SERVICE LIFE AND BLOWER PERFORMANCE.



# Currently Layout of the Blower Building

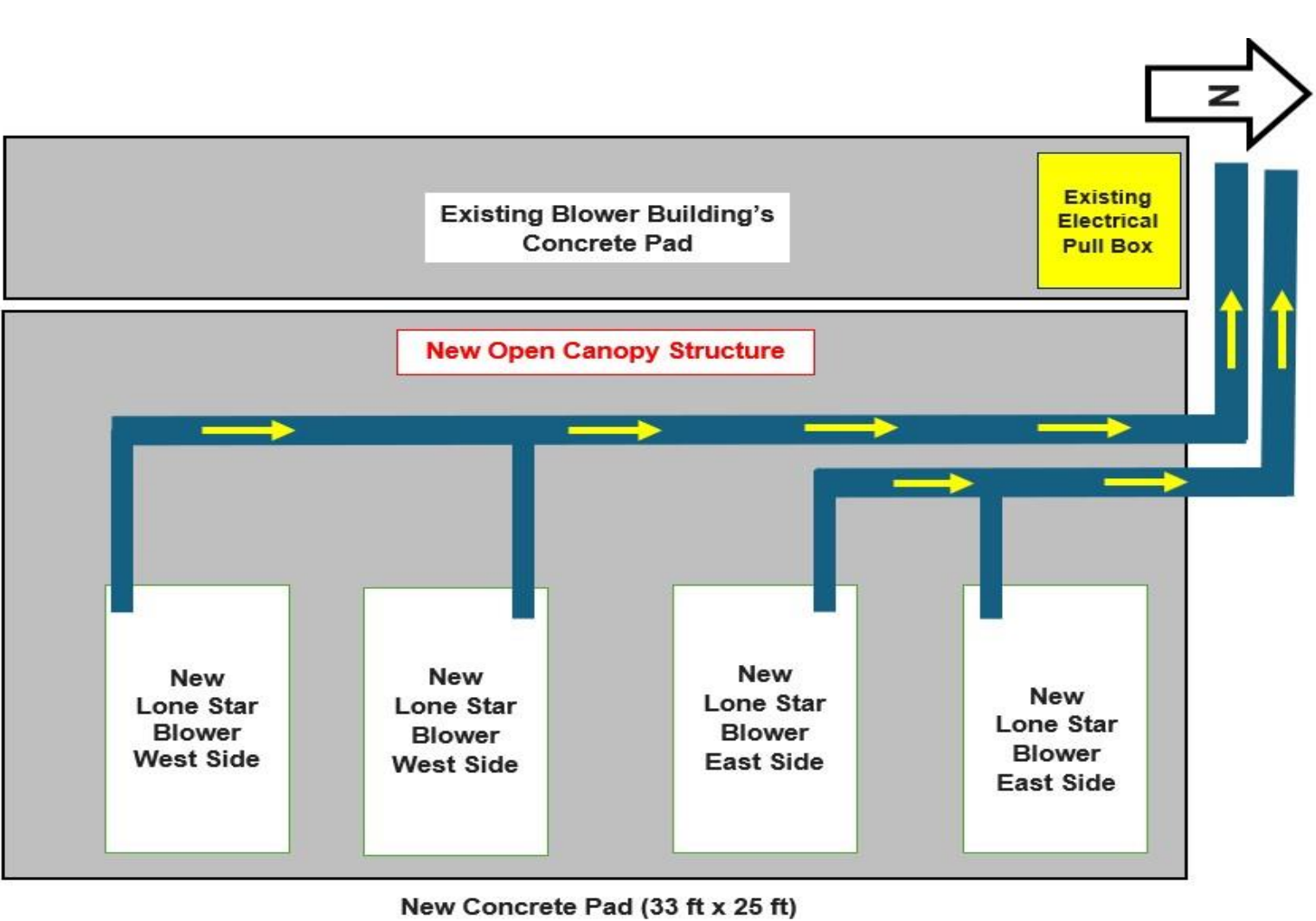


**GROUND FLOOR MECHANICAL DEMOLITION PLAN**

TWO EXISTING HOFFMAN BLOWERS TO BE REPLACED WITH TWO NEW LONE STAR BLOWERS.

THE CURRENT MECHANICAL LAYOUT OF THE BLOWER BUILDING HAS CONTRIBUTED TO EXCESSIVELY HIGH MECHANICAL VIBRATIONS WHICH HAS LED TO THE DETERIORATION AND CRACKING OF THE EAST HOFFMAN BLOWER'S CONCRETE EQUIPMENT PAD.

# Proposed Layout Lone Star - Four Blowers



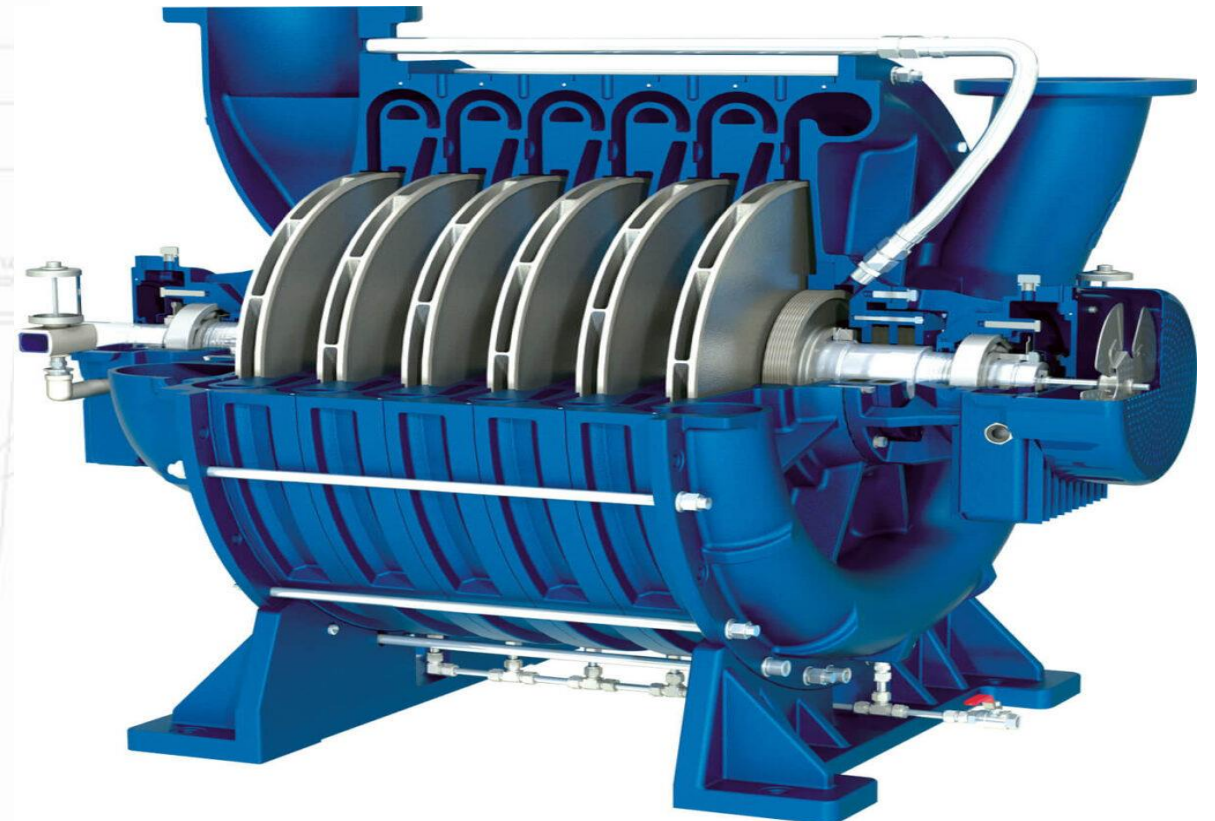
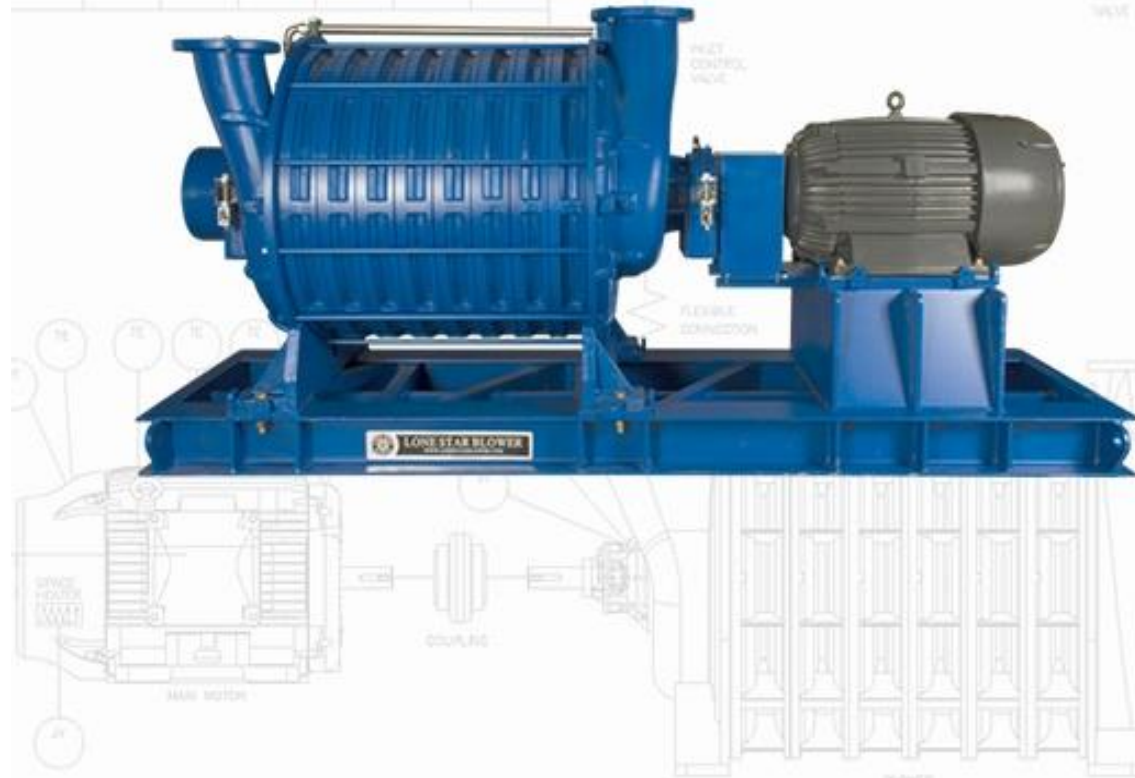
**Proposed  
Outdoor  
Layout**

**Layout – Four New Lone Star Blowers**

# New Lone Star Blower Technology

THE LONE STAR BLOWERS ARE ENERGY EFFICIENT DUE TO THEIR VFD CONTROL, AND OPTIMIZATION OF THE DO PLANT PROCESS UNDER THE NEW SCADA INTEGRATED SYSTEM.

THE LONE STAR BLOWERS ARE STATE-OF-THE-ART BLOWER TECHNOLOGY AND WILL PROVIDE THE DISTRICT WITH YEARS OF SERVICE AND PLANT PROCESS BLOWER PERFORMANCE.



# New Lone Star Blowers Cost & Design Criteria

Lone Star Blower Cost (includes shipping & tax)	Number of Blowers Required	Total Cost
\$72,400/blower unit \$29,300 blower only	Two Complete Blower Units Plus One Blower Assembly Unit	\$174,100



## **BLOWER DESIGN CRITERIA**

APPLICATION	Aeration
DESIGN FLOW	800 SCFM
DESIGN PRESSURE	10 PSIG
DESIGN TEMPERATURE	89°F
DESIGN RH%	70%
BLOWER HP	60 HP

Questions?





**LONE STAR**  
**TURBO**

## ***MC MULTISTAGE CENTRIFUGAL AIR BLOWER PROPOSAL***

---

CUSTOMER: Robinson Ranch WWTP, CA                      REPRESENTATIVE: MISCOwater  
DATE: August 25, 2025    QUOTE NO.: ALR0122  
EQUIPMENT: MC Multistage    REVISION: 2  
PROPOSED BY: Amber Roberts ([aroberts@lonestarturbo.com](mailto:aroberts@lonestarturbo.com), 832-982-8877)

---

SUPPLIER: LONE STAR BLOWER  
SPECIFICATION: Blowers quoted to match design of blowers provided for Lone Star project # S14943 and proposal dated June 4, 2024. VFD's not included.  
REVISION 1: Changed quantity of complete skid packages from three (3) to two (2). Revised spares to include a spare blower core.  
REVISION 2: Removed inlet and discharge accessories.

LONE STAR BLOWER  
8883 West Monroe Road  
Houston, Texas 77061

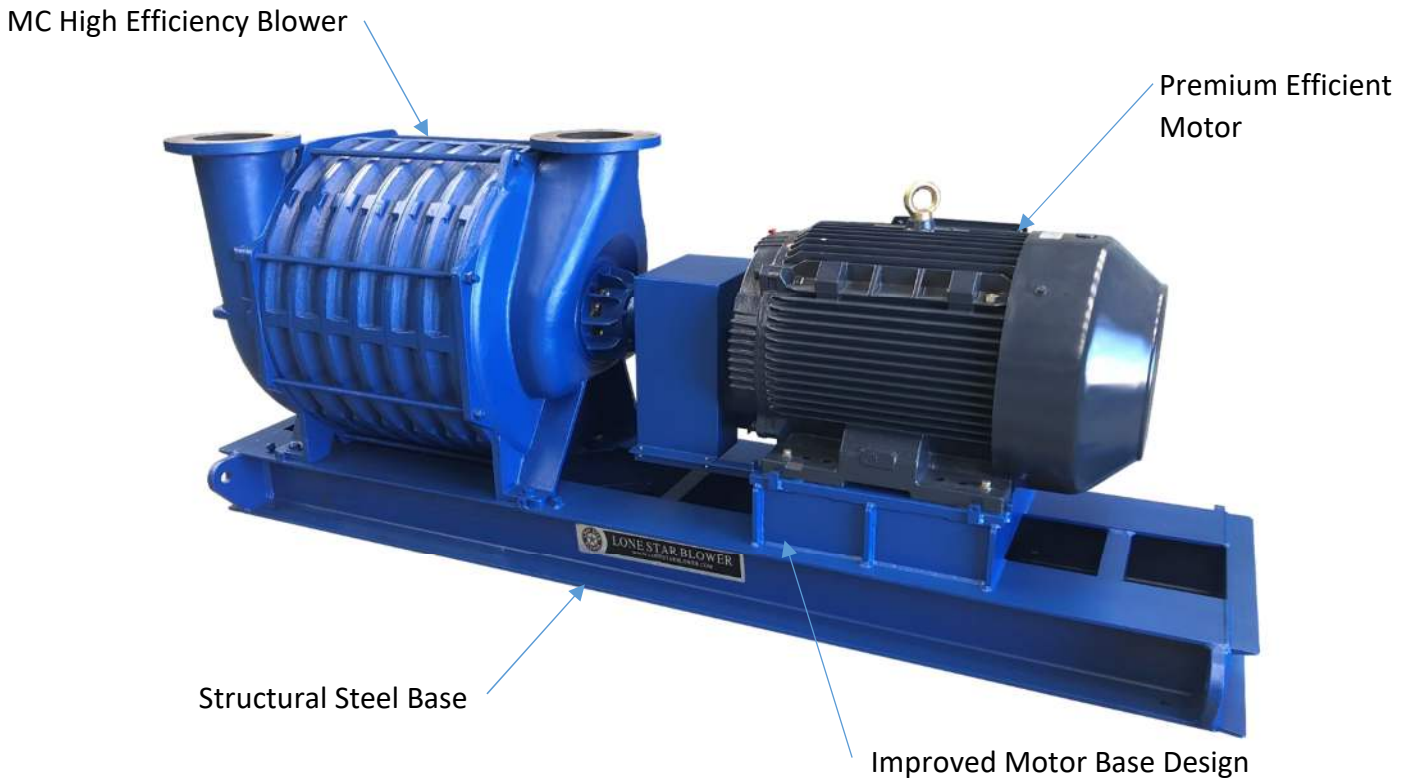
## 1.1 APPLICATION

APPLICATION	Aeration
DESIGN FLOW	800 SCFM
DESIGN PRESSURE	10 PSIG
DESIGN TEMPERATURE	89°F
DESIGN RH%	70%
BLOWER HP	60 HP

## 1.2 BLOWER DESIGN

The MC Series Multistage Centrifugal Blower is a proven & reliable technology has been the industry workhorse for compressed air & gas applications throughout all industries. Lone Star Blower has enhanced its design to operate more efficiently, reliable and cooler than other competitor's products. Lone Star's full product line of LS & MC Multistage Blowers includes units from 5HP to 3,500HP with flows up to 45,000 CFM and pressure reaching up to 25 PSIG. The MC series blower offers:

- Longer Bearing Life
- Oil Free Compression
- Low Maintenance
- High Reliability



# PROPOSAL

To: Robinson Ranch WWTP, CA

Quotation No.: ALR0122

The following is a price summary for this quotation.

DESCRIPTION	QTY	EXTENDED
MC Series Blower, MC5-10	2	Included
Factory Testing	Lot	Included
Packaging & Freight	Lot	Included
Recommended Spare Parts	Lot	Included
Field Start-up Services	Lot	Included
	<b>TOTAL</b>	<b>\$144,800</b>

Options	QTY	EXTENDED
One (1) Spare Blower Core	1	\$29,300

**\*Sales Tax of 7.75% is include. If Sales Tax not applicable, please advise and quote will be updated.**

**SCOPE OF SUPPLY:** Any work or equipment beyond the scope of this proposal will be performed or provided only after customer approval and acceptance by Lone Star Blower. No assumption should be made that anything not specifically defined is included.

**PRICE:** The price quoted is for all items purchased at one time. Partial orders may be subject to a price adjustment.

**PAYMENT TERMS:** 20% upon Purchase Order Acceptance, 25% upon Approval of Submittals; 50% upon delivery or readiness for shipping; 5% upon successful startup or latest 8 weeks after delivery. Terms subject to credit approval.

**FREIGHT:** Packaging, Handling & Shipping Cost DAP Jobsite (INCOTERMS® 2010) are included.

**APPROVAL DRAWINGS:** 2-4 Weeks after acceptance of order.

**ESTIMATED SHIPMENT:** 20-22 Weeks after receipt of release for production. Schedule will be confirmed upon approval of submittals and release to manufacturer.

**WARRANTY:** A 12-month warranty will begin upon successful completion of startup and certification for full-scale operation by Lone Star Blower, or 18 months from shipment, whichever occurs first. Under no circumstances will the warranty begin upon "beneficial use", completion of the project, or acceptance of the equipment as determined by the engineer or end user. Any and all warranty terms and conditions detailed in the proposal herein shall supersede and/or supplement the warranty language denoted in the Lone Star Blower terms and conditions.

**TERMS & CONDITIONS:** Attached is a copy of our standard terms & conditions.

## Technical Offer – MC Series Blower

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

Lone Star Multistage Centrifugal Blower, accessories and controls for efficiency optimization and minimized power consumption.

### **Standard Major Skid Components:**

(2) Lone Star MC5-10 Series Blower Package consisting of:

- Cast Iron Body
- Stainless Steel Shaft
- Aluminum Alloy Impellers (shrouded design)
- Grease Lubricated

(2) Lone Star Premium Structural Steel Skid/Base consisting of:

- Heavy Duty I-Beam Construction
- Powder Coated
- Motor Mounting Pads
- Motor Jack Bolts
- Lifting Eyes on Corners
- Premium Coupling
- OSHA Coupling Guard

(2) 60 HP Premium Efficient Motor; TEFC, 460/3/60, 1.15 S.F., 3,600RPM

- Grounding Rings
- Insulated Non-Drive End Bearing
- 120V Space Heater
- Motor Winding Protection

### **Blower Instrumentation Protection: (Shipped loose for Customer mounting & wiring):**

Blower Bearing Temperature Sensors (mounted on inlet and outlet bearing housing)

- 100 ohm Platinum RTD w/4-20 mA Transmitter for precise monitoring/protection

## Technical Offer – Factory Testing

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

The following unwitnessed Factory Test are included:

- Blower Mechanical test under full load for each blower (includes vibration analysis, dynamic balancing, and hydrostatic testing).
- Motor Factory Short Commercial Test

### Technical Offer – Packaging & Freight

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

Lone Star Blower ships from our Houston, Texas, USA factory. Packaging, Handling & Freight DAP jobsite (INCOTERM® 2010) is included. Equipment will be shrink wrapped & labeled.

### Technical Offer – Field/Startup Services

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

Lone Star Blower has a fully trained & experienced service group which can perform field service, equipment commissioning & onsite repairs. The following services are included and will be performed in one trip.

- Two (2) days of onsite field services for startup of blowers
- Four (4) hours of onsite services for training

Additional service available in accordance with LSB current rate sheet,

### Technical Offer – Recommended Spare Parts

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

Lone Star Blower stocks parts locally in Houston, TX. The following spare parts are included:

- (1) Lot Lubrication for the Blower Bearings

### Technical Offer – Comments & Clarifications

Customer	Robinson Ranch WWTP, CA
Date	August 25, 2025

- 1. ITEMS NOT INCLUDED:** Inlet Air Filters, Anchors Bolts, Fittings, Piping Hardware, Elbows, Existing Equipment Removal and Loading, Equipment Installation, Programming of Existing Equipment, Equipment Wiring and anything not listed in the above scope of supply shall be provided by others.
- 2.** Anchoring Calculations, stamped by CA registered Engineer are included; however, anchors (if required) are to be provided by others and are not included.
- 3.** Internal coating and lining is not applicable to the proposed equipment and is not included.
- 4.** VFD's and main motor starters are not included with this offer, however, it can be provided for an added cost if required.



Office: + 832 532 3112  
 Fax: + 832 532 3115  
 www.lonestarblower.com

**Lone Star Blower, Inc**

**TERMS & CONDITIONS OF SALE**  
 OF MACHINERY OR SERVICE

**1. GENERAL:** As used herein "Seller" means Lone Star Blower "Purchaser" means the entity to which Seller's order is made or the entity that purchases the equipment or service from Seller. Seller's "Equipment" as used herein includes any and all products, tools, accessories, and parts sold by Seller to our purchaser. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**2. DELIVERY:** Seller's delivery period is the only period in which Seller's representative shall be responsible for the delivery of the equipment or service. Seller reserves the right to deliver the equipment or service at a later date if necessary. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**3. TITLE and RISK OF LOSS:** Unless otherwise specified in Seller's order, the title and risk of loss for the equipment or service shall pass to our purchaser upon delivery. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**4. TAXES:** Our purchaser shall be responsible for all taxes and duties on the equipment or service. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**5. PAYMENT:** Unless otherwise specified in Seller's order, payment is due within 30 days of invoice. Seller reserves the right to charge interest on overdue payments. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**6. INSTALLATION:** Unless Seller's order specifies otherwise, Seller will be responsible for the installation of the equipment or service. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**7. START-UP, OTHER SERVICE:** Any service or training provided by Seller is subject to Seller's start-up service schedule. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.

**8. INSURANCE:** Purchaser shall be responsible for the insurance of the equipment or service. Seller's order is made by Seller or the purchaser. Our purchaser's purchase order is the only document that shall govern the sale of the equipment or service.







Office: + 832 532 3112  
 Fax: + 832 532 3115  
 www.lonestarblower.com

Buyer or distributor using this invoice is deemed to have accepted the Seller's standard terms and conditions of sale, including but not limited to the resolution of disputes, arbitration, and the limitation of remedies. Buyer's use of this invoice is deemed to constitute an agreement to the Seller's standard terms and conditions of sale, including but not limited to the resolution of disputes, arbitration, and the limitation of remedies.

**17. FORCE MAJEURE:** In the event of a force majeure event, the Seller's obligation to deliver the goods shall be suspended for the duration of the force majeure event. The Seller shall not be liable for any delay or non-delivery of goods caused by a force majeure event. The Seller's obligation to deliver the goods shall resume upon the termination of the force majeure event.

**18. LIMITATION OF LIABILITY:** The Seller's liability for any loss or damage to the goods shall be limited to the purchase price of the goods. The Seller shall not be liable for any consequential, special, or punitive damages, including but not limited to lost profits, lost business, or lost data. The Seller's liability shall be limited to the extent permitted by applicable law.

The Seller's liability shall be limited to the extent permitted by applicable law. The Seller shall not be liable for any loss or damage to the goods caused by the negligence or willful misconduct of the Seller's employees, agents, or subcontractors. The Seller's liability shall be limited to the extent permitted by applicable law.

**19. MISCELLANEOUS:**

**19.1** The Seller's terms and conditions of sale shall prevail over any other terms and conditions of sale. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.2** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.3** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.4** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.5** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.6** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.7** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.8** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**19.9** The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice. The Seller's terms and conditions of sale shall be deemed to have been accepted by the Buyer's use of this invoice.

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**ENGINEERING MATTERS**

**ITEM 4: DOVE RESERVOIR MAINTENANCE ROAD ASPHALT RESURFACING PROJECT**

Trabuco Canyon Water District owns and operates Dove Reservoir to provide potable water services to the Dove Canyon community and owns open property adjacent to the reservoir. Dove Canyon Master Association (DCMA) has contacted the District concerning a planned road maintenance project in the community that provides access to the District's Dove Reservoir and adjacent property.

The DCMA Board bid the project out and approved a contract with Champion Paving in the amount of \$27,278 for asphalt and fabric (14,848 sq. ft. of 1.5" hot mix asphalt). DCMA has requested the District split the costs 50/50 as (1) this road is the primary access point for the District's Dove Reservoir and (2) the District has easement access on this road. If approved by the Board, the District's cost share would be **\$13,639**. Attached is the Champion Paving proposal approved by the DCMA Board of Directors and a project map (project area is indicated in **Red**).



**FUNDING SOURCE:**

None - This is not a budgeted expenditure for TCWD

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**FISCAL IMPACT:**

\$13,639

**ENVIRONMENTAL COMPLIANCE:**

All environmental compliance will be met by Dove Canyon Master Association

**RECOMMENDED ACTION:**

*Committee to receive information at the time of the Committee Meeting and take action(s) as appropriate.*

**EXHIBIT(S):**

1. Champion Paving Bid Proposal & Contract with DCMA, Estimate No. 8671

**CONTACTS (staff responsible): PALUDI/PEREA**



**Champion Paving**  
Anaheim, CA 92806

Ph (714) 284-1100  
Contractors License #595611  
www.championpaving.com

## Bid Proposal & Contract

Date: 5/23/2025

Project Manager:

Estimate #: 8671

To: Dove Canyon Master Association  
c/o Seabreeze Management  
26840 Aliso Viejo Pkwy # 100  
Aliso Viejo, CA 92656

Contact: Debi Cole

Phone #: 949-672-9067

Cell #:

Fax #: 949-672-9167

Email: debi.cole@seabreezemgmt.c...

Job Location: NO NAME STREET  
Grind and Pave  
2 Options  
Dove Canyon, CA

Scope of Work	Total
<div style="background-color: black; width: 100%; height: 100%;"></div>	<div style="background-color: black; width: 100%; height: 100%;"></div>
<p>ASPHALT RESURFACE - LANDSCAPE ROAD: 1. Clean, tack and resurface 14,848 square feet with 1.5" of new hot mix asphalt COST:</p>	<p style="text-align: right;">27,278.00</p> <hr style="width: 50%; margin-left: auto; margin-right: 0;"/> <p style="text-align: right; font-size: 1.5em;"><i>Total # 49,558.<sup>00</sup></i></p>

### TERMS AND CONDITIONS & ACCEPTANCE AND AUTHORIZATION

1. Prices subject to change if not accepted within 30 days.
2. Terms: 100% due upon presentation of invoice.
3. Buyer agrees to pay court costs and reasonable attorney fees in the event of default or if this contract is sent to an attorney for enforcement of collection.
4. Any invoice not paid in 30 days is subject to 1½% service charge per month.
5. Champion Paving, Inc. is not responsible for underground utilities.

I/We accept this proposal and agree to pay the said amount in accordance with the terms set forth. All of the Terms and Conditions are incorporated herein and made a part hereof.

Date of Acceptance: 7-15-25

Signature: *Kim French*

6. Prices do not include testing, permits, inspections, soils or engineering.
7. Champion Paving, Inc. is not responsible for reflective cracking on resurfaced areas.
8. Champion Paving, Inc. is not responsible for drainage in asphalt areas with less than 1% slope.
9. Champion Paving, Inc. is not responsible for growth of vegetation.
10. Champion Paving Inc., is not liable for damage (caused by others) to new concrete, asphalt, seal coat, striping and surrounding areas.

I/We agree to furnish all labor materials and equipment for the completion, in a good and workmanlike manner, of the work described above.

Respectfully submitted

By: \_\_\_\_\_, Senior Project Manager

*Kim French, Board Secretary*

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**ENGINEERING MATTERS**

**ITEM 5: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES**

---

1. Dimension Water Treatment Plant Pipeline Rehabilitation and Filter 4 Seismic Retrofit
2. Saddle Crest Inlet Pipeline Improvement Project
3. Other Projects

**RECOMMENDED ACTION:**

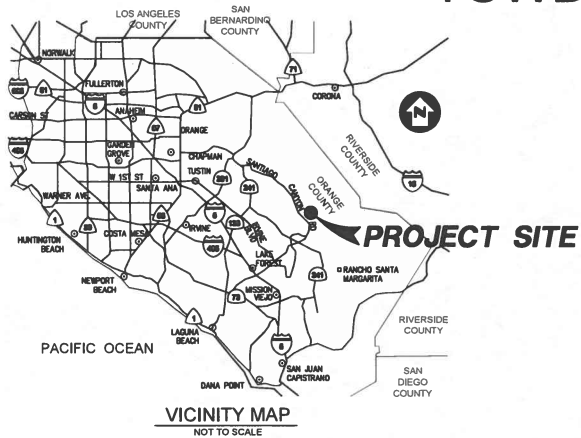
*Committee to receive project status updates at the time of the Committee Meeting.*

**EXHIBIT(S):**

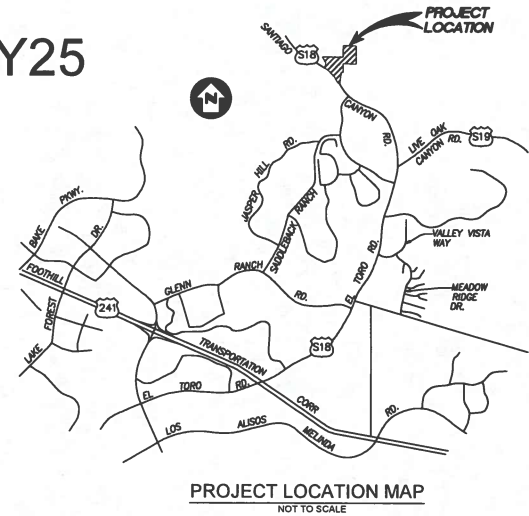
- 1.Saddlecrest Inlet Pipe Plans

**CONTACTS (staff responsible): PALUDI/LAUSTEN**

# SADDLECREST RESERVOIR INLET PIPELINE IMPROVEMENT PLANS FOR TRACT 17388 TCWD PROJECT NO. PW-38-FY25



JULY 2025



**SHEET INDEX**

SHEET	DESCRIPTION
SHEET 1	T-1 TITLE SHEET / VICINITY MAP / LOCATION MAP / LIST OF DRAWINGS
SHEET 2	G-1 GENERAL NOTES / ABBREVIATIONS
SHEET 3	C-4 APPURTENANCES LAYOUT
SHEET 4	M-1 INLET & OUTLET PIPING PLAN AND SECTIONS
SHEET 5	M-2 OUTLET PIPING PLAN SECTION & DETAILS



**PREPARED BY:**  
MKN & ASSOCIATES



**PROJECT MANAGER:**

*Kathleen Hong*  
**KATHLEEN HONG P.E.**  
(EXPIRES: 06/30/2026)

**7/23/2025**

**R.O.E. 90366 DATE**

**APPROVED:**  
TRABUCO CANYON WATER DISTRICT

*Lorraine S. Lausten* 7/28/25

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

ENGINEER

NO.	DATE	REVISIONS	APPROVED

**GENERAL NOTES:**

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO BID.
2. ADHERING SIGNS ARE NOT ALLOWED IN THE STREET FRONT OF WAY.
3. WORK SHOWS OR INDICATED ON THESE PLANS, OR CALLED FOR IN THE SPECIFICATIONS, BUT NOT INCLUDED AS PAY QUANTITY ITEMS, SHALL BE CONSIDERED INCIDENTAL WORK-COST OF WHICH SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR PAY QUANTITY ITEMS. NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING UTILITIES, PAVEMENT, CURBS, TRAFFIC STRIPPING AND MARKINGS, TRAFFIC DETECTOR LOOPS, STRUCTURES, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS, AS A RESULT OF HIS OPERATIONS, AND WILL BE REQUIRED TO REPAIR OR REPLACE SAME TO THE SATISFACTION OF, AND AS DIRECTED BY, THE DISTRICT OR UTILITY COMPANY.
5. REFER TO SPECIFICATIONS FOR TRAFFIC CONTROL, LENGTH OF OPEN TRENCH, BACKFILL, AND REPAIRING REQUIREMENTS.
6. TRENCH COMPACTON AND SUBGRADE COMPACTON TEST SHALL BE PERFORMED BY A LABORATORY RETAINED BY THE CONTRACTOR. THE RESULTS OF ALL TESTING SHALL BE SUBMITTED TO THE TRABUCO CANYON WATER DISTRICT FOR REVIEW. COMPACTON TEST SHALL CONFORM TO SECTION 211-21 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
7. THE WORK SITE AND EXTERIOR STREETS SHALL BE MAINTAINED IN A NEAT, CLEAN, HAZARD FREE, ORDERLY STATE, THROUGHOUT CONSTRUCTION. THE SITE SHALL BE CLEANED DAILY UPON REQUEST OF THE DISTRICT. THE CONTRACTOR SHALL IMMEDIATELY Haul AWAY AND DISPOSE OF, OFF THE PROJECT SITE, ALL EXCESS EXCAVATED MATERIAL AND CONSTRUCTION DEBRIS. ALL DISPOSALS SHALL BE AT THE CONTRACTORS EXPENSE.
8. ALL CONSTRUCTION SURVEYS FOR THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE. SURVEY POINTS DESTROYED AS A RESULT OF THE CONTRACTORS NEGLIGENCE OR FAILURE TO PROVIDE PROPER PROTECTION, SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
9. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES AND UTILITY OWNERS PRIOR TO ANTICIPATED CONSTRUCTION IN AREAS WHERE THEIR FACILITIES MAY BE AFFECTED.
10. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS OBTAINED FROM A SEARCH OF EXISTING RECORDS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY RESPECTIVE UTILITY AND UNDERGROUND SERVICE AGENCY OF SOUTHERN CALIFORNIA (800) 422-4113 TO DETERMINE THE EXACT FIELD LOCATION OF UTILITIES WHICH MAY CONFLICT WITH HIS WORK. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES FAR ENOUGH IN ADVANCE OF PIPE LAYING OPERATIONS TO MAKE NECESSARY ADJUSTMENTS IN GRADE TO CLEAR THESE UTILITIES.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES AND TAKE ALL STEPS NECESSARY TO AVOID CONTACT WITH SUCH WHICH MAY RESULT IN INJURY TO PERSONNEL OR DAMAGE TO FACILITIES. THE FINAL DETERMINATION OF EXACT LOCATIONS, AND THE COST OF REPAIR TO DAMAGED FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
12. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES INCLUDING SHORING, AND BE RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY HEALTH STANDARDS, LAWS, AND REGULATIONS.
13. NO CONNECTION SHALL BE MADE TO ANY EXISTING WATER FACILITY WITHOUT SCHEDULING THROUGH TRABUCO CANYON WATER DISTRICT.
14. CONTRACTOR SHALL COORDINATE ACCESS TO ALL PAVED AND UNPAVED ROADS.
15. AFTER THE PRESSURE-STRENGTH TEST IS SUCCESSFULLY PASSED, ALL THE WATERMANS SHALL BE OILWASHED (50 PPM MINIMUM) AND FLUSHED BY THE CONTRACTOR AND SHALL PASS A BACTERIA TEST CONDUCTED BY AND TO THE SATISFACTION OF THE DISTRICT. THE DISTRICT SHALL BE NOTIFIED A MINIMUM OF 24 HOURS PRIOR TO NEED FOR BACTERIA TEST. COST FOR THIS TESTING SHALL BE BORNE BY THE CONTRACTOR.
16. SUPERVISION FOR INSTALLATION, START-UP, AND TESTING SHALL BE PROVIDED BY MANUFACTURERS REPRESENTATIVES AS PART OF THE EQUIPMENT PURCHASE CONTRACT.
17. CONTRACTOR SHALL CONTACT THE TRABUCO CANYON WATER DISTRICT A MINIMUM OF TWO WEEKS PRIOR TO WORK FOR ASSISTANCE IN THE SHUT DOWN OF EXISTING WATER MAINS.
18. CONNECTION TO EXISTING PIPELINES SHALL BE COMPLETED ONLY AFTER DISINFECTION, TESTING OF NEW PIPING FACILITIES IS COMPLETE.
19. SURPLUS MATERIAL WHICH IS NOT DATABLE FOR USE ON THIS PROJECT SHALL BECOME PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF AT A LEGAL DISPOSAL SITE, AT THE CONTRACTORS EXPENSE.
20. THE CONTRACTOR IS TO MAINTAIN AND PROVIDE THE DISTRICT WITH A SET OF AS-BUILT DRAWINGS AT THE COMPLETION OF ALL WORK.

**WATER SYSTEM NOTES:**

1. THE WATER SYSTEM AS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TRABUCO CANYON WATER DISTRICT'S STANDARD SPECIFICATIONS ("STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREEN BOOK), AS LAST REVISED), AND "STANDARD SPECIAL PROVISIONS AND STANDARD DRAWINGS FOR WATER AND SEWER CONSTRUCTION." THE CONTRACTOR SHALL HAVE A COPY OF EACH OF THESE STANDARDS, AS WELL AS A COPY OF THE PROJECT PLANS AND SPECIFICATIONS, ON THE JOB AT ALL TIMES.
2. THE DISTRICT SHALL BE FURNISHED WITH SIX COPIES OF APPROVED CONSTRUCTION PLANS PRIOR TO THE START OF CONSTRUCTION.
3. THE DISTRICT INSPECTOR SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION AND ANY SUBSEQUENT REQUIRED INSPECTION. PHONE (949) 858-0277 TO ARRANGE FOR INSPECTION.
4. A PRECONSTRUCTION CONFERENCE WITH REPRESENTATIVES FROM ALL AFFECTED AGENCIES AND THE CONTRACTOR SHALL BE HELD ON THE JOB SITE AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN ALL CITY AND/OR COUNTY PERMITS PRIOR TO THE START OF CONSTRUCTION.
6. WATER MAINS SHALL BE STAKED FOR LINE AND GRADE OR SHALL BE INSTALLED SUBSEQUENT TO THE INSTALLATION OF THE CURBS BUT PRIOR TO PAVING OF THE STREETS. THE MINIMUM COVER OVER DOMESTIC WATER MAINS SHALL BE 42 INCHES BELOW PAVEMENT FINISHED GRADE.
7. NO VALVE SHALL BE LOCATED WITHIN A CUTTER OR OTHER CONCRETE DRAINAGE DECK.
8. ALL FIRE HYDRANTS SHALL BE INSTALLED PER THE DISTRICT'S STANDARD DRAWINGS.
9. ALL EXPOSED BURIED METAL APPURTENANCES IN CONTACT WITH THE SOIL OR WATER, INCLUDING PIPE, FLANGES, NUTS, BOLTS, VALVES, COUPLINGS, ETC., SHALL BE GIVEN TWO (2) COATS OF DEVBRAP 1425 PROTECTIVE COATING, OR EQUAL.
10. NO FACILITY IS TO BE BACKFILLED UNTIL INSPECTED BY THE DISTRICT.
11. SHUT DOWN OF EXISTING WATERLINES TO FACILITATE CONNECTION TO EXISTING FACILITIES SHALL BE COORDINATED WITH THE DISTRICT INSPECTOR. NO CONNECTIONS TO THE DISTRICT'S EXISTING WATER SYSTEM SHALL BE MADE UNTIL THE NEW FACILITIES HAVE BEEN SUCCESSFULLY TESTED AND DISINFECTED. ALL CONNECTIONS TO THE DISTRICT'S WATER SYSTEM SHALL BE MADE IN THE PRESENCE OF THE DISTRICT INSPECTOR.
12. ALL BURIED BOLTS, ANCHOR BOLTS AND NUTS SHALL BE TYPE 316 STAINLESS STEEL AND SHALL BE COATED WITH DEVBRAP 1425 OR APPROVED EQUAL.

13. THE CONTRACTOR SHALL RAISE ALL VALVE BOXES TO THE FINISHED PAVEMENT GRADE UPON COMPLETION OF THE PAVEMENT.
  14. AFTER THE BASE COURSE OF PAVEMENT IS COMPLETED, THE CONTRACTOR SHALL RAISE THE VALVE BOXES TO THE FINISHED GRADE OF THE BASE COURSE SO THAT THE DISTRICT MAY OPERATE THE VALVES. THE DEVELOPER SHALL THEN RAISE ALL VALVE BOXES TO FINAL FINISHED GRADE OF THE PAVEMENT UPON COMPLETION OF THE SURFACE COURSE OF PAVEMENT. THE REQUIRED RAISING OF VALVE BOXES TO THE FINISHED GRADE OF THE BASE COURSE OF PAVEMENT WILL BE DETERMINED AND SPECIFIED BY THE DISTRICT.
  15. BACKFLOW PREVENTERS APPROVED BY THE USC FOUNDATION FOR CROSS CONNECTION CONTROL ARE THE ONLY BACKFLOW PREVENTION DEVICES ACCEPTABLE FOR USE IN THE DISTRICT. THE DISTRICT'S CROSS CONNECTION INSPECTOR SHALL BE NOTIFIED PRIOR TO INSTALLATION OF BACKFLOW DEVICE AT (949) 858-0277.
  16. IRRIGATION SYSTEMS MUST COMPLY WITH THE DISTRICT'S RULES AND REGULATIONS FOR NONDOMESTIC WATER SERVICE.
- PRIVATE ENGINEER NOTE TO CONTRACTOR:**
1. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USE OF THESE PLANS. ALL CHANGES TO THE PLAN MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
  2. HOLD HARMLESS, INDEMNIFICATION CLAUSE: THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT, THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE TRABUCO CANYON WATER DISTRICT, THE OWNER, AND THE PRIVATE ENGINEER HARMLESS FOR ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
  3. EXISTING UNDERGROUND STRUCTURES: ALL UNDERGROUND UTILITIES OR STRUCTURES, REPORTED OR FOUND ON PUBLIC RECORDS, ARE INDICATED WITH THEIR APPROPRIATE LOCATION AND EXTENT. THE OWNER BY ACCEPTING THESE PLANS OR PROCEEDING WITH THE IMPROVEMENTS HEREON, AGREES TO ASSUME LIABILITY AND TO HOLD THE ENGINEER HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED OR INDICATED ON PUBLIC RECORDS, OR THOSE CONSTRUCTED AT VARIANCE WITH REPORTED OR RECORD LOCATION. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES SHOWN AND ANY OTHERS FOUND AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF ALL UTILITIES STRUCTURES CONCERNED BEFORE STARTING WORK.
  4. **NOTE TO CONTRACTOR:** CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.

**LEGEND OF ABBREVIATIONS**

- AC ASPHALT CONCRETE
- BC BECON CURVE
- CL CLASS
- CM/BC CEMENT MORTAR LINED AND COATED
- CM/EC CEMENT MORTAR LINED AND EPOXY COATED
- CM/ CEMENT MORTAR LINED
- CONC CONCRETE
- DI DIAMETER
- DR DUCTILE IRON PIPE
- DOM DOMESTIC
- DPT DRYWELL
- E EXISTING
- EC END CURVE
- FL FLOWLINE
- FLG FLANGING
- FSD FINISHED SURFACE
- GB GRADE BREAK
- GC GROVED END
- HP HIGH POINT
- HWL HIGH WATER LINE
- HW HIGH POINT
- LF LINEAR FEET
- ME MILLION GALLON
- MH MANHOLE
- MH MANHOLE
- MJ MECHANICAL JOINT
- NW NORTH/WESTING
- NO NUMBER
- P.S. PUMP STATION
- PLAN PLAN END
- R/W RIGHT OF WAY
- REF REINFORCED CONCRETE PIPE
- RD ROAD
- SPEC SPECIFICATION
- STA STATION
- STD STANDARD
- TYP TYPICAL
- W WEST

**LEGEND OF SYMBOLS**

- CENTERLINE
- CLASS
- FIRE HYDRANT PROPOSED/EXISTING
- GATE VALVE PROPOSED/EXISTING
- PROPOSED WATERLINE
- SEWER MANHOLE
- DUCTILE IRON
- DARTLINE LINE
- XXX (circled) TITLE OF DETAIL OR SECTION
- XX (circled) SHEET THAT REFERENCES DETAIL OR SECTION

**CONSTRUCTION NOTES:**

1. 12" ELABRIC STEEL SPOOL, FE x FE, TRENCH & BEDDING PER TCWD STD. DWG. #=20
2. REPLACE EXISTING CHECK VALVE WITH 12" ELAC STEEL SPOOL, FE X FE
3. 12" ELAC STEEL BOND FLANGE
4. 12" RESTRAINED FLANGE ADAPTER, EBAA IRON SERIES 2112, OR EQUAL
5. 8" SWING CHECK VALVE LEVER AND MOUNT TYPE, DEARBUR APCO CYS 6000 OR EQUAL
6. 8" WELD ON STEEL CLASS D FLANGE
7. 12" EL & CM/ STEEL 90° BEND, FE x FE
8. 12" DI, 22.5° BEND, MJ x MJ, W/ RESTRAINED JOINTS EBAA IRON MEGALUG, SERIES 2020P
9. 12" DI, 45° BEND, MJ x MJ, W/ RESTRAINED JOINTS EBAA IRON MEGALUG, SERIES 2020P
10. 12" PVC C900, DR 14, WITH RESTRAINED JOINTS, TRENCH & BEDDING PER TCWD STD. DWG. #=20
11. 12" DI, 11.25° BEND, MJ x MJ, W/ RESTRAINED JOINTS EBAA IRON MEGALUG, SERIES 2020P
12. 12" DI, 11.25° BEND, FE x FE
13. 12" BUTTERFLY VALVE (TESTS) WITH VALVE STEM AND BOX ASSEMBLY PER TCWD STD. DWG. #=25
14. 12" DI, TEE (CUT-IN), FE
15. 12" DI, 11.25° BEND, FE x MJ
16. INSTALL ADJUSTABLE PIPE SUPPORT PER TCWD DWG. #=18
17. 8" ELAC STEEL SPOOL, FE X FE
18. 12" MJ x PLG ADAPTER, EBAA IRON SERIES 7100 OR EQUAL

**BASIS OF BEARINGS:**

THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 2560 AND STATION GPS NO. 2568 BEING SOUTH 47° 12' 00" EAST FOR RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

**BENCHMARK:**

ORANGE COUNTY SURVEYOR BENCHMARK NO. 730-162-04  
 ELEVATION = 1,150.921 DATUM: NGVD 29 YEAR: 2004  
 DESCRIPTION:  
 3 3/4" O.C.S. ALUMINUM BENCHMARK BSK STAMPED "730-162-04", SET IN THE SOUTHWESTERLY CORNER OF A 4 FT. BY 22 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE NORTHWESTERLY CORNER OF THE INTERSECTION OF SANTRABO CANYON ROAD AND CRYSTAL CANYON ROAD, 118 FT. NORTHERLY OF THE CENTERLINE OF SANTRABO CANYON ROAD AND 21 FT. EASTERLY OF THE CENTERLINE OF CRYSTAL CANYON ROAD. MONUMENT IS SET LEVEL WITH THE TOP OF THE CATCH BASIN.

CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE AGENCY A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION WORK. SEE GENERAL NOTES FOR FURTHER INFORMATION.  
 Know what's below. Call 811 before you dig.

NO.	DATE	REVISIONS	APPROVED	DISTRICT ENGINEER	DATE
			DES: CM	LORRAINE S. LAUSTEN	RCE 67027
			KL		
			DRAWN: CM		
			CM		
			CHECKED: AS	KATHLEEN LAROCHE	RCE 00805
			AS		7/23/2025



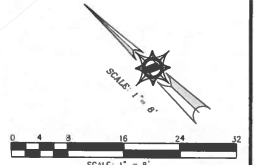
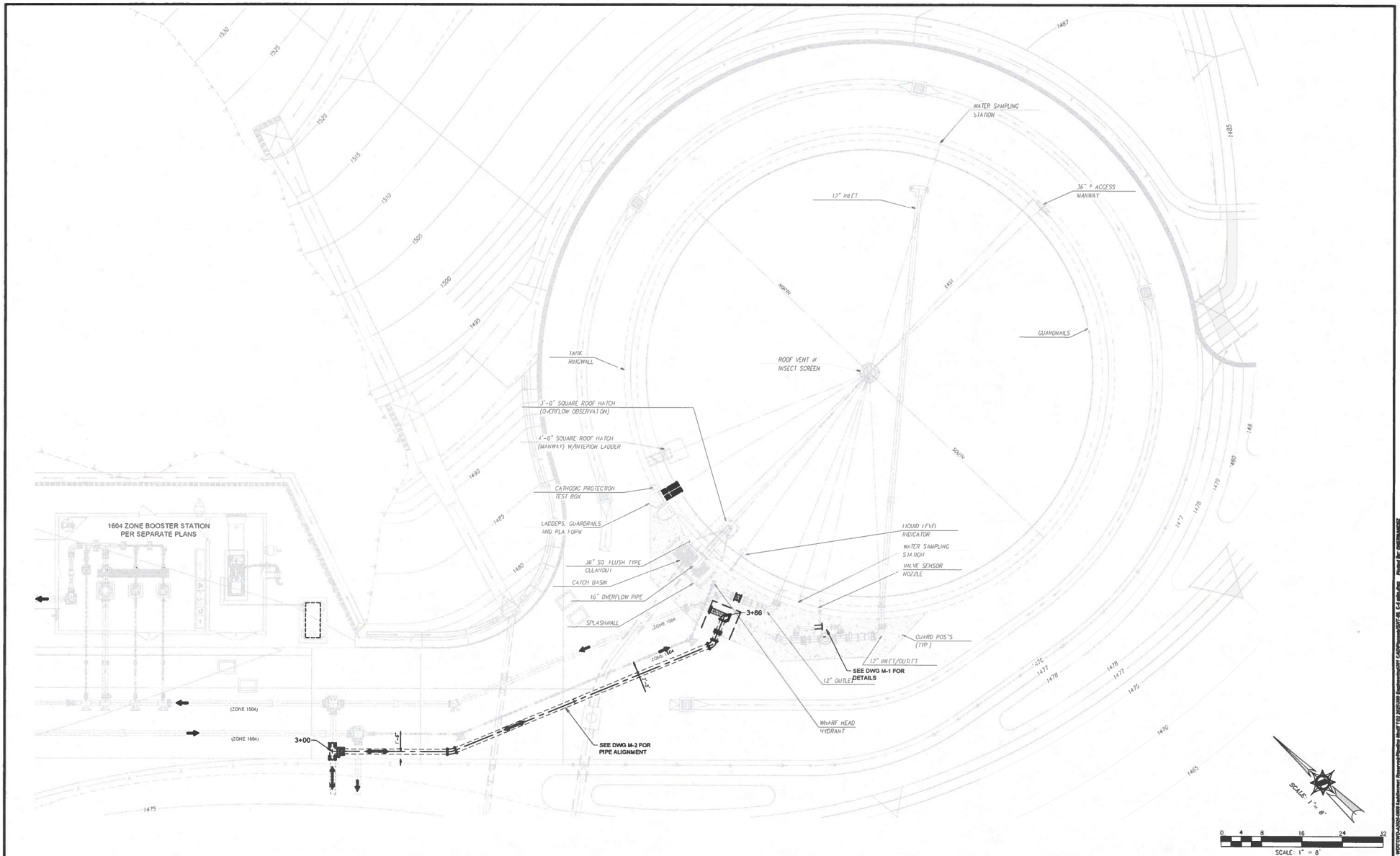
**SADDELCREST RESERVOIR INLET PIPELINE IMPROVEMENT PLANS**  
 FOR TRACT 17388  
 TCWD PROJECT NO. PW-38-FY25

CIVIL ENGINEERING FIRM

16310 BAKE PARKWAY  
 IRVINE, CA 92618  
 (949) 637-3999

**GENERAL NOTES / ABBREVIATIONS**

SHEET NO. **2**  
 OF **5** SHEETS  
 DRAWING NO. **G-1**

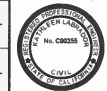


NO.	DATE	REVISIONS	APPROVED

DESIGN: KL  
 DRAWN: OH  
 CHECKED: KS



LORRAINE S. LAUSTEN RCE 67027 DISTRICT ENGINEER  
 KATHLEEN GUADARDO RCE 90355 ENGINEER  
 DATE: 7/23/2025

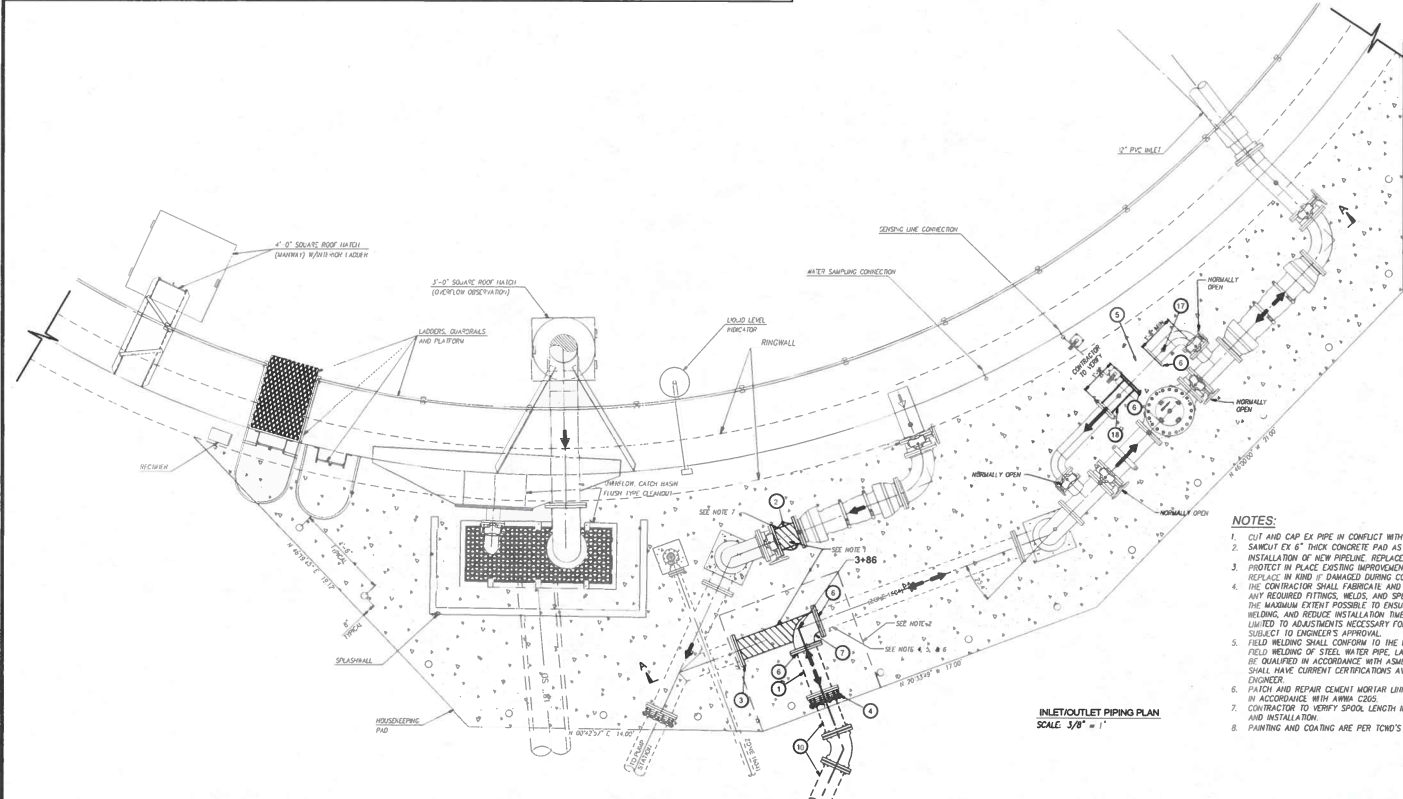
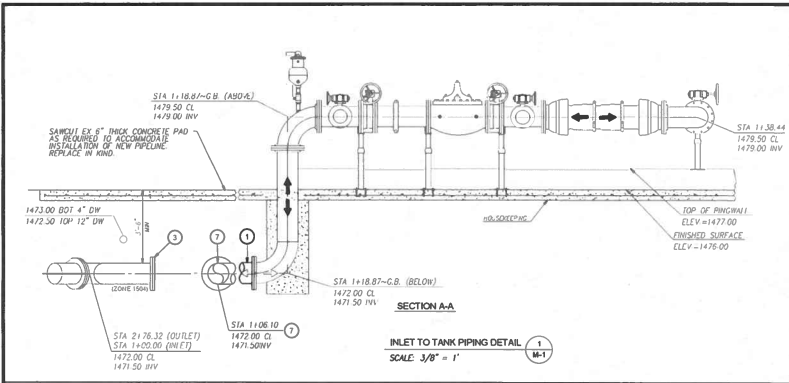


**SADDLECREST RESERVOIR INLET PIPELINE IMPROVEMENT PLANS FOR TRACT 17388**  
 TCWD PROJECT NO. PW-38-FY25

CIVIL ENGINEERING FIRM  
**mkn**  
 16310 BAKE PARKWAY  
 IRVINE, CA 92618  
 (949) 637-8899

APPURTENANCES LAYOUT

SHEET NO. **3**  
 OF 5 SHEETS  
 DRAWING NO. C-1

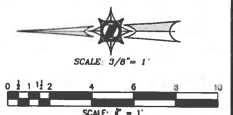


**CONSTRUCTION NOTES:**


- ① 12" ELBAC STEEL SPOOL, FE x FE TRENCH & BEDDING PER TCWD STD. DWG. W-1
- ② REPLACE EXISTING CHECK VALVE WITH 12" ELBAC STEEL SPOOL, FE x FE
- ③ 12" ELBAC STEEL BLIND FLANGE
- ④ 12" RESTRAINED FLANGE ADAPTER, EBAA IRON SERIES 2112, OR EQUAL
- ⑤ 8" SHIM CHECK VALVE LEVER AND WEIGHT TYPE, DEZURK APOD CVS-6000 OR EQUAL
- ⑥ 8" WELD ON STEEL CLASS D FLANGE
- ⑦ 12" ELBAC STEEL 90° BEND, FE x FE
- ⑧ 12" PVC CS90, DR 14, WITH RESTRAINED JOINTS, TRENCH & BEDDING PER TCWD STD. DWG. W-20
- ⑨ INSTALL ADJUSTABLE PIPE SUPPORT PER TCWD STD. DWG. W-18
- ⑩ 8" ELBAC STEEL SPOOL, FE x FE

**NOTES:**

1. CUT AND CAP EX PIPE IN CONFLICT WITH PROPOSED IMPROVEMENT
2. SAWCUT EX 6" THICK CONCRETE PAD AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW PIPELINE. REPLACE IN KIND (AREA = 36 S.F. +/-)
3. PROTECT IN PLACE COATING IMPROVEMENTS, UNLESS SHOWN OTHERWISE. REPLACE IN KIND IF DAMAGED DURING CONSTRUCTION
4. THE CONTRACTOR SHALL FABRICATE AND PREPARE PIPE SEGMENTS, INCLUDING ANY REQUIRED FITTINGS, WELDS, AND SPECIAL ASSEMBLIES, IN THE SHOP TO THE MAXIMUM EXTENT POSSIBLE TO ENSURE QUALITY CONTROL. MINIMIZE FIELD WELDING, AND REDUCE INSTALLATION TIME. FIELD FABRICATION SHALL BE LIMITED TO ADJUSTMENTS NECESSARY FOR FINAL FIT-UP AND CONNECTION, SUBJECT TO ENGINEER'S APPROVAL
5. FIELD WELDING SHALL CONFORM TO THE REQUIREMENTS OF AWWA C208 - FIELD WELDING OF STEEL W/EP PIPE, LATEST EDITION. ALL WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH ASME SECTION IX OR AWS D1.1, AND SHALL HAVE CURRENT CERTIFICATIONS AVAILABLE FOR REVIEW BY THE ENGINEER
6. PATCH AND REPAIR CEMENT MORTAR LINING AND COATING OF EXISTING PIPE IN ACCORDANCE WITH AWWA C208
7. CONTRACTOR TO VERIFY SPOOL LENGTH IN THE FIELD PRIOR TO FABRICATION AND INSTALLATION
8. PAINTING AND COATING ARE PER TCWD'S SPECIFICATION SECTION 09800



NO.	DATE	REVISIONS	APPROVED	DESIGN
				KL
				OH
				KS

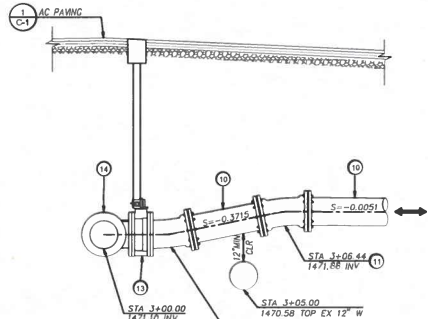

**LORRANE S. LAUSTEN** RCE #7627 DISTRICT ENGINEER DATE  
**KATHLEEN LEMADER** RCE #0358 ENGINEER 7/23/2025



**SADDELCREST RESERVOIR INLET PIPELINE IMPROVEMENT PLANS**  
 FOR TRACT 17388  
 TCWD PROJECT NO. PW-38-FY25

CIVIL ENGINEERING FIRM  
  
 1631 BANE PARKWAY  
 IRVINE, CA 92618  
 (949) 637-9999

**INLET & OUTLET PIPING PLAN AND SECTIONS**  
 SHEET NO. **4**  
 OF 5 SHEETS  
 DRAWING NO. **M-1**

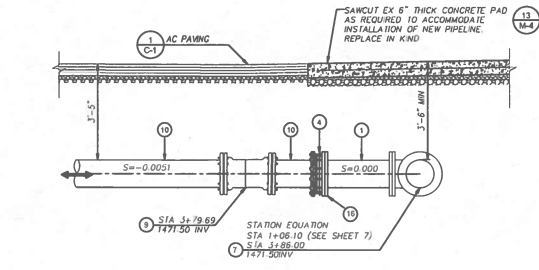


**NOTES:**  
 1. USE CAUTION WHEN TRENCHING FOR WATER LINE. SEE SHEET 18 FOR APPROXIMATE LOCATION OF ELECTRICAL CONDUITS.

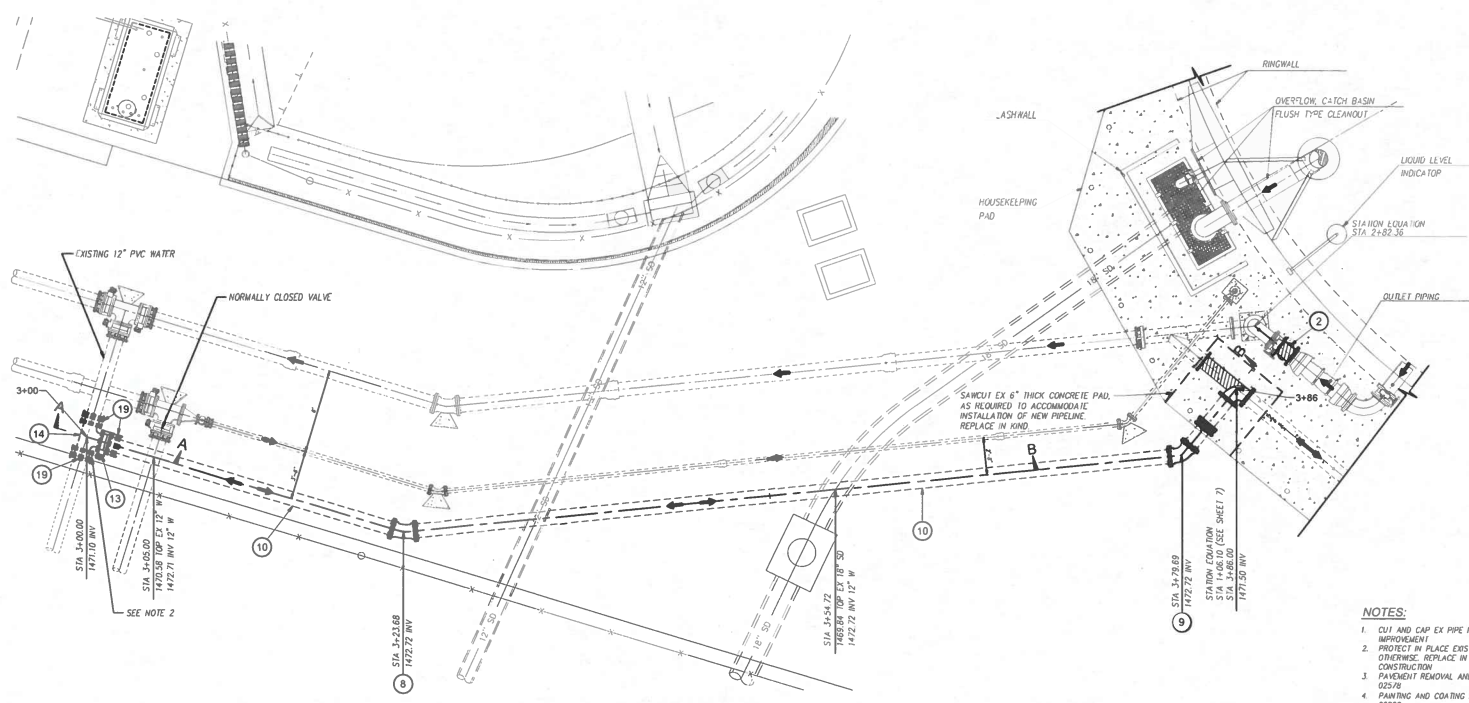
SECTION A-A

INLET PIPING DETAIL

SCALE: 1/2" = 1'



SECTION B-B

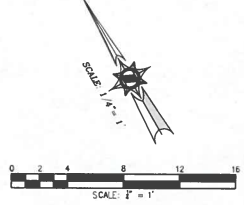


**CONSTRUCTION NOTES:**


- 1 12" ELBAC STEEL SPOOL, FE + FE, TRENCH & BEDDING PER TCWD STD. DWG. W-20
- 2 REPLACE EXISTING CHECK VALVE WITH 12" ELBAC STEEL SPOOL, FE X FE
- 3 12" RESTRAINED FLANGE ADAPTER, EBAA IRON SERIES 2112, OR EQUAL
- 4 12" EL & CMC STEEL 90° BEND, FE x FE
- 5 12" D.I. 22.5° BEND, M.J. x M.J. W/ RESTRAINED JOINTS EBAA IRON METALLOG. SERIES 2012PV
- 6 12" D.I. 45° BEND, M.J. x M.J. W/ RESTRAINED JOINTS EBAA IRON METALLOG. SERIES 2012PV
- 7 12" PVC CSIO, OR 14" WITH RESTRAINED JOINTS, TRENCH & BEDDING PER TCWD STD. DWG. W-20
- 8 12" D.I. 11.25° BEND, M.J. x M.J. W/ RESTRAINED JOINTS EBAA IRON METALLOG. SERIES 2012PV
- 9 12" D.I. 11.25° BEND, FE x FE
- 10 12" BUTTERFLY VALVE (FE/FE) WITH VALVE STEW AND BOX ASSEMBLY PER TCWD STD. DWG. W-24
- 11 12" D.I. TEE (CUT-IN), FE
- 12 12" D.I. 11.25° BEND, FE X M.J.
- 13 INSULATING FLANGE FIT PER DETAIL 3 ON DWG. M-4
- 14 12" M.J. x FLG ADAPTER, EBAA IRON SERIES 2100 OR EQUAL


**NOTES:**

- 1 CUT AND CAP EX PIPE IN CONFLICT WITH PROPOSED IMPROVEMENT
- 2 PROTECT IN PLACE EXISTING IMPROVEMENTS, UNLESS SHOWN OTHERWISE. REPLACE IN KIND IF DAMAGED DURING CONSTRUCTION
- 3 PAVEMENT REMOVAL AND REPLACEMENT PER SPECS. SECTION 025/18
- 4 PAINTING AND COATING ARE PER TCWD'S SPECIFICATION SECTION 09300



NO.	DATE	REVISIONS	APPROVED	DESIGNER	DATE


 LORRAINE S. LAUSTEN RCE 67027 DISTRICT ENGINEER  
 KATHLEEN GRADNER RCE 90355 ENGINEER  
 DATE: 7/23/2025


**SADDELCREST RESERVOIR INLET PIPELINE IMPROVEMENT PLANS FOR TRACT 17388**  
 TCWD PROJECT NO. PW-38-FY25

CIVIL ENGINEERING FIRM  
  
 16310 BAKE PARKWAY  
 IRVINE, CA 92618  
 (949) 437-3899

**INLET PIPING PLAN, SECTION & DETAILS**

SHEET NO. **5**  
 OF 5 SHEETS  
 DRAWING NO. **M-2**

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**OPERATIONAL MATTERS**

**ITEM 6: WATER SYSTEM UPDATES**

---

The following is a brief report of the water system through **August 2025**.

**Projects and Repairs**

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

1. Worked with Meter Tech to replace 1" curb stop on Cimmaron in Robinson Ranch.
2. Repaired 10" line break on Bell Canyon in Dove Canyon.
3. Installed sump pump in vault at the Saddle Crest PS.
4. Finished putting Filter #4 together at DWTP.
5. Installed effluent valve on Filter #1 at DWTP.
6. Repaired struck hydrant in the Trabuco Market Place parking lot.

**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 - 2025**

<b>SYSTEM PRODUCTION/SUPPLIES</b>	<b>JAN</b>	<b>FEB</b>	<b>MARCH</b>	<b>APRIL</b>	<b>MAY</b>	<b>JUNE</b>	<b>JULY</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>	<b>TOTAL</b>
Number of Days	31	28	31	30	31	30	31	31	30	31	30	31	365
<i>Dimension WTP</i>	8%	17%	25%	33%	42%	50%	58%	67%	75%	83%	92%	100%	
SAC Pipeline Meter	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
Backwash, AF	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
Flushwater, AF	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
DWTP Effluent (1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
<b>Groundwater, AF</b>													
Trabuco Creek GWTF	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
U.S. Well AF	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
Total Groundwater (2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
<b>Water Purchases, AF</b>													
SMWD Treated Interconnection	21.0	8.9	7.0	31.0	28.4	39.4	35.1						170.8
IRWD Treated Interconnections	119.4	90.3	104.7	106.5	126.0	126.8	165.3						839.0
IRWD Irvine Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0
Total Purchases (3)	140.4	99.2	111.7	137.5	154.4	166.2	200.5						1,009.9
<b>Total Supply</b>													
Total Supply AF (1,2,3)	140.4	99.2	111.7	137.5	154.4	166.2	200.5						1,009.9
% Year - Peak Prod. - 2,449 AF (2018)	6%	10%	14%	20%	26%	33%	41%						41%
AF/Day	3.9	3.3	3.4	3.7	5.0	5.5	6.5						4.5
CFS/Day, Avg.	2.0	1.6	1.7	1.9	2.5	2.8	3.2						2.2
<b>Reservoir Storage</b>													
Monthly Average, MG	9.1	9.1	9.0	9.0	9.1	9.1	9.1						9.1
Monthly Average, AF	27.9	27.9	27.0	27.0	27.9	27.9	27.9						27.6
Days of Storage	4.0	4.0	3.0	3.0	4.0	4.0	4.0						3.7
<b>SYSTEM DEMANDS</b>													
<b>District Operations, AF (1)</b>													
Dimension WTP	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00
Robinson Ranch WWTP	0.040	0.040	0.040	0.080	0.040	0.080	0.040						0.360
Supplemental Domestic to RW Res.	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.00
Subtotal	0.040	0.040	0.040	0.080	0.040	0.080	0.040						0.36
<b>System Losses, AF (2)</b>													
Flushing	2.30	3.00	2.30	2.30	2.30	2.30	2.30						16.80
Sewer Cleaning	0.02	0.02	0.02	0.02	0.02	0.02	0.02						0.14
Line Breaks	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00
Subtotal	2.32	3.02	2.32	2.32	2.32	2.32	2.32						16.94
<b>Zone Demands, AF (3)</b>													
Topanga Canyon	2.9	Inop.	Inop.	3.0	3.0	3.0	3.1						15.00
Falcon Estates	0.40	0.2	0.4	0.7	0.7	0.8	0.9						4.08
Rose PRV/The Oaks	0.7	0.7	0.8	0.90	1.2	1.3	1.5						7.10
Canyon Creek	0.2	0.2	0.2	0.2	0.2	0.2	0.3						1.50
Rose Pump Station	0.2	0.3	0.3	0.4	0.4	0.5	0.4						2.48
Robinson Ranch	34.5	19.4	20.0	35.7	42.9	54.0	64.8						271.3
Dove Canyon	61.7	45.4	49.1	55.4	64.2	64.9	76.6						417.3
Subtotal	100.6	66.2	70.8	96.3	112.6	124.2	147.6						718.3
<b>Total System Demand (1,2,3)</b>	<b>103.0</b>	<b>69.3</b>	<b>73.2</b>	<b>98.7</b>	<b>115.0</b>	<b>126.6</b>	<b>150.0</b>						735.6

**TRABUCO CANYON WATER DISTRICT**  
**MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2025**

<b>System Demands**</b>														
AF/Day	3.9	3.3	3.4	3.7	4.2	5.5	6.5							4.4
Daily Average, CFS	2.0	1.6	1.7	1.9	2.1	2.8	3.2							2.2
<b>Other Water Deliveries/Purchases</b>														
Ridgeline (DWTP Delivery)	0.0	0.0	0.0	0.0	0.0	0.0	0.0							0.0
El Toro (Interconnection Purchase)	0.0	0.0	0.0	0.0	0.0	0.0	0.0							0.0
Baker WTP (CSC Delivery)	98.6	89.7	90.2	103.7	68.0	88.9	77.6							616.7
Portola Hills (Wholesale Purchase)	10.0	7.5	8.2	7.8	9.1	10.6	10.5							63.7
Skyridge (Wholesale Purchase)	1.8	1.6	1.6	1.4	1.6	2.0	2.0							12.0
* Usage estimated <span style="float: right;">** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)</span>														

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**OPERATIONAL MATTERS**

**ITEM 7: WASTEWATER SYSTEM UPDATES**

---

The following is a brief report of the wastewater system through **August 2025**.

**Projects and Repairs**

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

1. Performed weed abatement at Dove Creek Dry Season Recovery Pump Station.
2. Performed manhole inspections after paving on Robinson Ranch Rd.
3. Maintenance was completed on 2" recycled water Cla-Val on Plano.
4. Maintenance was completed on 8" recycled water Cla-Val on Robinson Ranch Rd.
5. The backwash tank was cleaned at the WWTP.
6. New level indicators installed at Heritage and Plano Lift Stations.

**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:*

<b>Sewer System Management Plan (SSMP) Monthly Update</b>	
Total Sewer Line, Feet*	212,045
<b>Total Sewer Line Cleaned (Ft) – Month</b>	<b>6,000</b>
Total Sewer Line Cleaned (Ft) – Cleaning Cycle	143,840
Cleaning Cycle Period (Mos.) [Start date: 1/1/25]	8
<b>Total Sewer Line Cleaned, %</b>	<b>67%</b>
The Oaks at Trabuco – Pumping Frequency for the Month	13
O’Neill Park Sewer System Status	Ok
O’Neill Park Sewer System Repairs	None
SSMP Quarterly Report – <i>Next Quarterly Report</i>	3Q 2025
SSMP Program Audit – <i>Next Audit Report**</i>	October 2025

*\*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

**CONTACTS (staff responsible): PEREA/ULLOA**

**TRABUCO CANYON WATER DISTRICT | RECYCLED WATER SYSTEM SUMMARY - 2025**

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	37.1	35.6	41.5	39.4	39.6	37.8	25.2						256.1	520.1
Reclaimed Reservoir Level, FT	1274.5	1,265.5	1,270.0	1,271.5	1,271.5	1,270.0	1,264.0	1,258.0						-	-
Reclaimed Reservoir Free Board, FT	25.5	9.0	4.5	3.0	3.0	4.5	10.5	16.5						-	-
Reclaimed Reservoir Storage, AF	145.5	94.6	118.8	127.7	127.7	118.8	87.5	61.6						-	-
Supplemental Domestic Water Added, AF	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0						0.0	5.2

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	0.04	0.02	0.0	0.0	0.2	0.3	0.0						0.5	6.1%
Dove Canyon Golf Course	106.7	12.49	5.1	4.8	25.1	28.9	31.6	48.0						156.0	146.2%
Dove Canyon Master Association	279.3	10.92	3.6	3.6	11.2	16.4	17.2	25.9						88.8	31.8%
Robinson Ranch	80.2	1.41	0.4	0.8	2.8	2.7	2.9	3.2						14.2	17.7%
Trabuco Highlands	159.7	3.26	27.4	0.2	5.3	6.6	6.0	10.1						58.8	36.8%
City of RSM	0.1	0.00	0.02	0.00	0.02	0.02	0.02	0.02						0.10	75.4%
Construction Water	N/A	0.00	0.0	0.0	0.0	0.0	0.0	0.0						0.00	N/A
Sakaida Nursery	1.1	0.00	0.0	0.0	0.0	0.0	0.0	0.0						0.00	0.0%
SMWD	N/A	0.00	0.0	0.0	0.0	4.4	8.1	5.4						17.9	N/A
TY Nursery	17.9	0.00	0.00	0.0	0.01	2.6	3.7	6.8						13.2	74.0%
<b>TOTAL, AF</b>	<b>653.2</b>	<b>28.1</b>	<b>36.5</b>	<b>9.4</b>	<b>44.3</b>	<b>61.9</b>	<b>69.8</b>	<b>99.5</b>						<b>349.5</b>	<b>53.5%</b>
<b>PERCENTAGE OF NDW ALLOCATION/YEAR</b>		<b>4.3%</b>	<b>9.9%</b>	<b>11.3%</b>	<b>18.1%</b>	<b>27.6%</b>	<b>38.3%</b>	<b>53.5%</b>							
<b>TOTAL ANNUAL AVG. NDW AVAILABLE**</b>	<b>774.36</b>														

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		0.00	10.19	8.18	0.00	0.00	0.00	0.60						18.97	1.6
Dove   Tick Creek Production*	Dry Season	5.5	5.3	5.8	0.0	0.0	0.0	3.4						20.0	45.0
	TCWD Portion	5.5	5.3	5.8	0.0	0.0	0.0	1.7						18.3	-
	SMWD Portion	0.0	0.0	0.0	0.0	0.0	0.0	1.7						1.7	-
Dove Lake Water Pumped		0.0	0.0	0.0	0.0	0.0	0.0	45.1						45.1	190.1
Dove Lake Free Board, Ft		10.3	3.2	0.0	0.0	0.0	0.0	4.0						-	-
Dove Lake Storage, AF		131.2	309.0	331.0	331.0	331.0	331.0	294.2						-	-
Total Rainfall, In.		0.9	2.4	5.2	0.2	0.5	0.3	0.0						9.5	16.2

\* SMWD share of Dove/Tick Pump Station Dry Season Water is 50% of production.

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

**TRABUCO CANYON WATER DISTRICT  
ENGINEERING/OPERATIONAL COMMITTEE MEETING | SEPTEMBER 3, 2025**

**OPERATIONAL MATTERS**

**ITEM 8: MAINTENANCE DEPARTMENT UPDATES**

---

The following is a brief report of work completed by Maintenance staff through **July 2025**.

**Projects and Repairs**

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

**Water Operations**

1. Remove mobile generator from Canyon Creek BPS used for emergency operations during heat wave.

**Wastewater Operations**

1. Assist Wastewater Dept. with Dove Creek bypass to prep for major landscape work.
2. Assist with the removal and replacement of Dove Lake pump.

**District Fleet Upgrades & Other Projects**

1. Met with Verizon Mobile representatives on cell sites, Push to Talk (PTT) phones, and emergency mobile cell/wifi trailer.
2. Start EMASS with Hydrotech Electric.
3. Complete emergency backup generator test and inspections.
4. HAZMAT inspection with OC Health on hazardous chemical storage.

**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 | SEPTEMBER 3, 2025**

**REGULATORY AND OTHER MATTERS**

**ITEM 9: 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**