

WEST VALLEY WATER DISTRICT 855 W. BASE LINE ROAD, RIALTO, CA 92376 PH: (909) 875-1804 WWW.WVWD.ORG

SPECIAL ENGINEERING, OPERATIONS AND PLANNING COMMITTEE MEETING AGENDA

Tuesday, October 21, 2025, 4:00 PM

NOTICE IS HEREBY GIVEN that West Valley Water District has called a meeting of the Engineering, Operations and Planning Committee to meet in the Administrative Conference Room, 855 W. Base Line Road, Rialto, CA 92376.

BOARD OF DIRECTORS

Director Gregory Young Director Estevan Bennett

Members of the public may attend the meeting in person at 855 W. Base Line Road, Rialto, CA 92376, or you may join the meeting using Zoom by clicking this link: https://us02web.zoom.us/j/8402937790. Public comment may be submitted via Zoom, by telephone by calling the following number and access code: Dial: (888) 475-4499, Access Code: 840-293-7790, or via email to administration@wvwd.org.

If you require additional assistance, please contact administration@wvwd.org.

CALL TO ORDER

PUBLIC PARTICIPATION

Any person wishing to speak to the Board of Directors on matters listed or not listed on the agenda, within its jurisdiction, is asked to complete a Speaker Card and submit it to the Board Secretary, if you are attending in person. For anyone joining on Zoom, please wait for the Board President's instruction to indicate that you would like to speak. Each speaker is limited to three (3) minutes. Under the State of California Brown Act, the Board of Directors is prohibited from discussing or taking action on any item not listed on the posted agenda. Comments related to noticed Public Hearing(s) and Business Matters will be heard during the occurrence of the item.

Public communication is the time for anyone to address the Board on any agenda item or anything under the jurisdiction of the District. Also, please remember that no disruptions from the crowd will be tolerated. If someone disrupts the meeting, they will be removed.

DISCUSSION ITEMS

- 1. Updates to the Engineering, Operations and Planning Committee
- 2. September 25, 2025 Meeting Minutes PG. 3
- 3. Consider the Agreement with Quinn Power Systems for the Emergency Generator for Pump Station 5-2 PG. 7
- 4. Oliver P. Roemer Water Filtration Facility Filter Media Replacement and Coating Project PG. 49

ADJOURN

Please Note:

Material related to an item on this Agenda submitted to the Committee after distribution of the agenda packet are available for public inspection in the District's office located at 855 W. Baseline, Rialto, during normal business hours. Also, such documents are available on the District's website at www.wvwd.org subject to staff's ability to post the documents before the meeting.

Pursuant to Government Code Section 54954.2(a), any request for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in the above-agendized public meeting should be directed to the Acting Board Secretary, Paola Lara, at least 72 hours in advance of the meeting to ensure availability of the requested service or accommodation. Ms. Lara may be contacted by telephone at (909) 875-1804 ext. 702, or in writing at the West Valley Water District, P.O. Box 920, Rialto, CA 92377-0920.

DECLARATION OF POSTING:

I declare under penalty of perjury, that I am employed by the West Valley Water District and posted the foregoing Agenda at the District Offices on October 16, 2025.

Paola Lara

Paola Lara, Acting Board Secretary

MINUTES

ENGINEERING, OPERATIONS AND PLANNING COMMITTEE MEETING

of the

WEST VALLEY WATER DISTRICT

September 25, 2025

I. CALL TO ORDER

Chair Young called the Engineering, Operations and Planning Committee meeting of the West Valley Water District to order at 6:00 p.m.

Attendee Name	Present	Absent	Late	Arrived
Gregory Young	$\overline{\mathbf{V}}$			
Estevan	$\overline{\checkmark}$			
Bennett				
John Thiel	$\overline{\mathbf{V}}$			
Linda Jadeski		Ø		
Rocky Welborn	$\overline{\checkmark}$			
Joanne Chan	$\overline{\checkmark}$			

II. PUBLIC PARTICIPATION

Chair Young inquired if anyone from the public would like to speak. No requests were received, therefore Chair Young closed the public comment period.

III. DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee.

Director of Engineering Welborn provided an update on the progress of efforts in recommending a project delivery method for the Headquarters Facilities Master Plan, and provided an update on the progress of the Reservoir 2-3 coating project.

Director of Operations Chan reported on the summer season's end indicating that our available water sources successfully met the season's demands; discussed the anticipated rehabilitation of one of the filters at the Roemer Treatment Plant; SCADA Masterplan continues to progress and a series of workshops are being held; staff toured the General Pump headquarters to inspect the Baseline Feeder North Well Pump that was pulled for repairs; and reported on the anticipated painting of equipment at Well 54 and expected reservoir cleaning and inspection activities.

2. July 24, 2025 Minutes

WVWD

Minutes: 9/25/25

The committee approved the minutes.

3. New Caterpillar Backhoe Loader

Director of Operations Chan presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting Consent Calendar.

RESULT: REFERRED TO BOARD

Next: 10/02/2025 6:00 PM

4. Amendment to the License Agreement with the San Bernardino County Flood Control District to Support Fluidized Bed Reactor Groundwater Treatment Plant

Director of Operations Chan presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting Consent Calendar.

RESULT: REFERRED TO BOARD

Next: 10/02/2025 6:00 PM

5. Amendment to the Reimbursement Agreement with the San Bernardino Valley Municipal Water District

Director of Operations Chan presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under Business Matters to highlight the partnership with San Bernardino Valley Municipal Water District.

RESULT: REFERRED TO BOARD

Next: 10/02/2025 6:00 PM

6. Task Order Amendment No. 1 with Engineering Resources of Southern California, Inc. for the Design of Reservoir R8-3

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to an upcoming Board of Director's meeting Consent Calendar.

RESULT: REFERRED TO BOARD

Next: 10/16/2025 6:00 PM

7. Professional Services Agreement with WSC for the Water Use Efficiency Master Plan Director of Engineering Welborn presented the staff report.

WVWD

Minutes: 9/25/25

The committee approved moving the item forward to an upcoming Board of Director's meeting Consent Calendar.

RESULT: REFERRED TO BOARD

Next: 10/16/2025 6:00 PM

IV. ADJOURN

Chair Young adjourned the meeting at 6:47 p.m.

ATTEST

Paola Lara, Acting Board Secretary

WVWD

Minutes: 9/25/25



STAFF REPORT

DATE: October 21, 2025

TO: Engineering, Operations and Planning Committee

FROM: Rocky Welborn, Director of Engineering

SUBJECT: Consider the Agreement with Quinn Power Systems for the Emergency Generator for Pump Station 5-

2

STRATEGIC GOAL:

Strategic Goal 1 - Manage and Deliver a Safe, Reliable, and Sustainable Water Supply

A. Increase System Capacity for Anticipated Growth

Strategic Goal 5 – Apply Sound Planning, Innovation, and Best Practices

A. Increase Operational Efficiency, Resiliency, and Reliability

MEETING HISTORY:

N/A

BACKGROUND:

The West Valley Water District ("District") service area is located in Southwestern San Bernardino County with a small part in Northern Riverside County. The District serves customers in the Cities of Rialto, Fontana, Colton, Jurupa Valley and unincorporated areas of San Bernardino County. The service area consists of eight (8) pressure zones: Zone 2, 3, 3A, 4, 5, 6, 7 and 8 and is divided into Northern and Southern systems by the central portion of the City of Rialto.

In recent years, the District's service areas have experienced increasingly frequent and prolonged power outages due to high wind events and wildfires. These events have direct impact to the pump station's operations, resulting in reduced water pressure and the risk of water service interruption to the residents and businesses. Such outages compromise public health, hinder emergency response capabilities, particular fire protection, and increase the community's vulnerability during disasters.

Pump Station 5-2 (PS5-2) is a critical component of the District's water distribution system, responsible for pumping treated potable water to Zone 5 El Verde Reservoir, which serves customers in Pressure Zone 5 and help supply higher-elevation service areas, including Pressure Zones 6, 7, and 8. The District has identified the need to install a 500 kW diesel-powered emergency generator at PS5-2 to ensure reliable backup power for critical potable water operations. Space for the diesel-powered emergency generator was provided when PS5-2 was constructed in 2005.

DISCUSSION:

The District currently owns and operates multiple standby generators, all of which are manufactured by Caterpillar, Inc. Caterpillar generators have been in service at District facilities for more than 35 years and have consistently proven reliable in providing emergency power during outages.

Staff recommends leveraging the cooperative procurement agreement of Sourcewell, a State local government unit and service cooperative based in Minnesota that facilitates a competitive public solicitation and contract award process for the benefit of its 50,000+ participating entities across the United States and Canada for the procurement and installation of a new emergency generator system at PS5-2.

Exceptions to Competitive Sourcing of the District's Purchasing/Procurement Policy, cooperative procurement arrangements with other agencies is permitted as an exception to competitive sourcing if it is determined to be in the District's best interest. Because Sourcewell's competitive bidding process is substantially similar to the District's process, participation through Sourcewell is consistent with District policy and permissible for this procurement.

On August 4, 2022, Sourcewell issued Request for Proposal (RFP) No. 092222 through its online Procurement Portal and various newspaper publications nationwide. The RFP invited interested parties to submit proposals for *Electrical Energy Power Generation Equipment with related parts, supplies, and services*. By the submission deadline of September 22, 2022, Sourcewell received ten proposals, all of which were carefully evaluated and rated across multiple categories, including Conformance to RFP Requirements, Pricing, Financial Viability and Marketplace Success, Ability to Sell and Deliver Service, Marketing Plan, Value Added Attributes, Warranty, and Depth and Breadth of Offered Equipment, Products, or Services. Caterpillar, Inc. scored the highest overall.

Sourcewell subsequently awarded Caterpillar, Inc. a competitively bid contract for electrical energy power generation equipment with related parts, supplies, and services, effective through November 22, 2026. By utilizing Sourcewell's agreement with Caterpillar, Inc., the District will realize significant cost savings – 37% (\$61,659.00) on the generator purchase.

Staff contacted Quinn Power Systems of Riverside, the authorized full-service dealership of Caterpillar, Inc. in the region, to obtain a quote for a new Caterpillar 500kW Diesel Emergency Generator System with installation at PS5-2, included as **Exhibit A**. Quinn Power Systems has successfully completed similar generator installation projects for the District, including the Emergency Generator at Pump Station 6-2, and is highly familiar with the District's project and services requirement.

FISCAL IMPACT:

This Project is included in the approved FY25/26 Capital Improvement Budget under Project No. W22010 Emergency Generator Zone 5 PS 5-2 Project. This project is partially funded by a California Office of Emergency Services grant for 75% of the project costs up to \$510,300.00 as part of the FY24 Legislative Pre-Disaster Mitigation Program.

REQUESTED ACTION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

- 1. Approve the Agreement with Quinn Power Systems in the amount of \$630,252.37 for the procurement and installation of the emergency generator system at Pump Station 5-2 and;
- 2. Authorize the General Manager to execute all necessary documents.

Attachments

Exhibit A - Quinn Power Systems of Riverside Contract Pricing.pdf

Exhibit B - Quinn Power Systems Agreement.pdf

EXHIBIT A

NO. 250570-WELL REV3

3500 Shepherd Street, City of Industry, California 90601 Box 226789, Los Angeles, California 90022-0744 (562) 463-6000 Fax: (562) 463-7156

562) 463-6000 Fax: (562) 463-7156	Date: September 4, 2025	Page: <u>1 of 5</u>
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Rosa Gutierrez To: Contact: Terms: Net 30, see T&C's **West Valley Water District** Jobsite, unloading by others Company: F.O.B. Address: 855 W Base Line Rd Sales Rep.: **Art Jimenez** 951-250-5104 Rialto CA 92376 Contact #: City, Zip: Phone: 909-875-1322 Email: rgutierrez@wvwd.org Email: Art.Jimenez@quinnpower.com

Project Name: Emergency Generator Set for Booster Station 5-2

ty:	Description	List Price	Discount Price
1	New Caterpillar, Model C15, EPA Tier 3, Stationary Emergency Generator Set. Rated 500kW Standby Power, with fan, 60Hz, 3 Phase 277/480V Configuration at 1800 RPM.		
	Sourcewell Product Discount is 37% (- \$61,659.00) off Generator List Price.	\$ 166,645.00	\$ 104,986.00
	NON CAT ITEMS: UL2200 Certification IBC Seismic Certification Standard Genset Factory Test @ 0.8 PF Shrink Wrap Protection (Shipping) Radiator Mounted Load Bank (50% of the KW Rating/ Integrated) Convault 1000 Gal Tank (Installed on site) E&CA 150Gal Day Tank (Installed on site) Caldyne Spring Isolators Inbound/ Outbound Freight (Freight to Jobsite) Technician Startup – Level 1/ Using Site Loads (1 Day)		
	SCAQMD Permit to Construct/ <u>No</u> DPF / No Public Notification/ Non-expedited		\$ 145,220.00
	TOTAL PRICE FOR THE ABOVE LISTED NON CAT ITEMS		
	Installation of 500KW Diesel Standby Generator and Ancillary Equipment at WWWD Booster Station 5-2. Existing Automatic Transfer Switch will be used for this project. Generator Installation Scope of Work: - Crane and forklift rental for installation. - Building louver removal and install. - Install conductors from generator to existing transfer switch using existing electrical conduits. - Pull control wires and terminate. - Set, place and anchor generator in designated area using spring isolators. - Installation of muffler (ceiling mounted/suspended) - Core holes through wall as necessary. - Fabricate and install radiator air discharge duct between genset and wall louver. - Modify existing motorized room lovers to fixed open position.		
	 1000 Gallon Outdoor Fuel Tank Installation Scope of Work: Asphalt cut and patch as per plan. Construct concrete pad catch basin as per plan. Set, place and anchor 1000-gallon outdoor fuel tank with seismic restraints. Install two bollards around outdoor fuel tank. Install above ground fuel line between main tank and day tank. Route along building exterior wall. Core holes through wall and terminate fuel connection to day tank. 		\$ 334,715.00
	150 Gallon Day Tank Installation Scope of Work: - Install/ anchor day tank as per plan Install fuel supply and return lines as per plan Install conduits/ conductors for day tank power.		
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that duration.

QUOTATION

Date: September 4, 2025

(SALES TAX

INCLUDED):

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\$ 630,252.37

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otation provided herein is for information only, and is not a valid offer to sell unless signed by an officer of Quinn Systems in the space provided below. Any offer to sell or any offer accepted shall be subject to the Terms and	Total Price	
"Buyer has to put "Sourcewell Contract # 092222-CAT" on the Purchase Order"		
Total Price Including Estimated Sales Tax (7.75%)		\$ 45,331.38
5. Pump station security6. Unforeseen jobsite or city requirements that may add additional cost to this project.		

PRODUCT DESCRIPTION

Generator & Accessories:

Conditions page. Unless expressly stated on the face of this quotation, all prices, delivery schedules and product specifications are subject to change without notice. Quotation is good for <u>30 days</u> from quote date above, expires after

500KW Caterpillar Diesel Standby Generator (Model C15) **EPA Stationary Emergency** NFPA 110 Bundle 500 kW 625 kVA @ 0.80 PF 277/480 Vac, 3 Phase, 60 Hz Open Genset Mounted on Skid Base (No Enclosure) Narrow Skid Base (No Subbase Fuel Tank) Silencer (25 dBA Attn/ Ship Loose) GCCP 1.2 Control Panel **Local Annunciator** Gen Running & Fault Relay Power Center 20 Amp GFCI 125 Amp Load Center Circuit Breaker - 800A with Auxiliary Contacts Circuit Breaker – 600A (for Load Bank) Permanent Magnet Excitation System Integrated Voltage Regulator Standard Radiator Radiator Guard & Duct Flange Flexible Exhaust Connection Jacket Water Heater, 240 Vac, Battery with Rack and Cables Air Cleaner - Dual Element Battery Charger-10 Amp, Dual Operations & Maintenance Manual (1 Copy) 5Yr Standby Warranty

Specifications

This quote is based on our understanding of your site requirements.

1Yr CVA

This quote is based on our understanding of your Booster Station 5-2 jobsite requirements, and WVWD personnel's verbal communication, which took place during a site visit on March 22, 2018. Site address is 19523 Country Club Dr., Rialto CA 92377.

Clarifications

All materials is guaranteed to be as specified, and the above work to be performed in accordance with the site drawings and WVWD personnel's verbal instructions, submitted/ communicated for above work, and shall be completed in a substantial workman like manner. However, in the event of any unforeseen building, building code and or site constraints, that may force a



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change in plans, design, components or materials, Quinn Power Systems reserves the right to revise and or deviate from the above mentioned offerings and scope of work, which may result in additional costs to WVWD.

Assumptions are made regarding the functional condition of the existing transfer switch (installed by others) and its ability to be integrated with the proposed generator as a working "standby power system". Transfer switch technical related issues, resulting from prior mis installation or electrical /mechanical failure is the responsibility of WVWD, and may result in additional costs.

Quinn Power Systems and Caterpillar will make every effort to meet the project delivery schedule requirements. However, do to the ongoing global supply chain disruptions, Quinn Power Systems will not be liable or accept any liquidated damage clause on a purchase order.

Accessories and/or modifications

Initial fill of coolant and lube oil (1 set) Operation & Maintenance manuals (electronic copy) * (additional sets, at additional cost)

QPS field work

Delivery to jobsite (offload/crane service and Installation by AG Engineering)
Basic Demonstration – [included at no charge if training can be accomplished at time of startup].

Not included (unless mentioned in the bill of materials)

Sales tax

Air, building or construct permits Diesel fuel, initial fill or for testing

Availability:

Submittals:

Estimated (8 – 10 Weeks) on receipt and approval of purchase order. (1 electronic copy). Submittal approval is expected not to exceed 60 days, additional time beyond 60 days will impact equipment delivery schedule, and may result in equipment price increases. In such event, a revised purchase order will be required prior to factory order production release.

Equipment: Estimated (30+ Weeks) for factory build time after submittal approval (without DPF).

Modifications: Estimated (Additional time TBD) additional time will vary depending on 3rd party or Quinn shop schedule and scope of work.

Not included: Unforeseen factory delays, transit time from factory or vendor and/or delays due to project site readiness.

** Equipment prices and lead times are subject to change without notice.**

EMISSIONS NOTE

- ➤ "California Air Resources Board (CARB) has approved alignment with the federal New Source Performance Standards (NSPS). Such alignment allows for emergency standby engines to be exempt from Tier 4 emissions standards; however, local air districts can require more stringent emissions control. The prospective buyer of the equipment quoted above is hereby notified the NSPS exemption does not apply to non-emergency standby engines (e.g. prime power applications such as peak shaving, parallel operation with the grid, or storm avoidance), or portable engines, even if used for emergency standby. Consult the local air district for permitting requirements and required emissions controls. Presently, South Coast Air Quality Management District (SCAQMD) Rule 1470 requires the use of a particulate filter if an engine is located within 100 meters of a school, and may require either a diesel particulate filter or an oxidation catalyst, depending upon engine size, if the installation is within 50 meters of a sensitive receptor. Particulate filters may also be required for Title V and major polluting facilities. For emissions requirements specific to the project for which this engine is being quoted, please contact SCAQMD at 909-396-2000. Unless otherwise listed above a DPF is not included in this proposal, please call for quotation if a DPF is required for this project."
- > Caterpillar engines require a minimum of 30% load to prevent engine damage due to wet-stacking. Depending upon the permit and site specific conditions, SCAQMD emergency engine permits will only allow between 20 and 50 hours of runtime per year for non-emergency applications such as testing and exercising. Passive Diesel Particulate Filter systems depend on generator loading of a minimum of 50-60% to achieve minimum exhaust temperature threshold to keep soot regeneration and the filter backpressure within acceptable levels. If the engine will be operated consistently at low loads/low exhaust temperatures, the customer should make provisions to add load via facility operations or a load bank. Active Diesel Particulate Filter systems require no external load in order to regenerate. If listed above, Passive DPF option pricing, does not include a load bank or a load bank circuit breaker. If a load bank is needed for this project, please call for quotation.

TERMS AND CONDITIONS

1. Acceptance of Order.

This Quotation is for Buyer's information only and is not a valid offer to sell unless signed by an authorized representative of Seller in the place provided on the face of this Quotation. Prices, terms and conditions in an order from Buyer, which are inconsistent with the prices, terms and conditions of this Quotation, will be rejected by Seller, and are of no force and effect unless accepted in writing by Seller. Prices, delivery schedules and the scope of work on this Quotation are subject to change at Seller's discretion.

2. Liability.

Seller's liability on any claim of any kind, including claims for negligence, or for any loss or damage arising out of or connected with the manufacture, sale, delivery, installation, resale or use of any products covered by or furnished under any order connected with this Quotation shall be limited to those claims arising solely from the acts of Seller and Seller shall in no way be liable for any special, indirect, incidental or consequential damages. The term "consequential damages" shall include, but not be limited to, loss of anticipated profits, business interruption, loss of use, revenue, reputation and data, costs incurred, including without limitation, for capital, fuel, power and loss or damage to property or equipment. Buyer expressly acknowledges and agrees that Seller has set its prices in reliance upon the limitations of liability and other terms and conditions specified herein, which allocate the risk between Seller and Buyer and form a basis of this bargain between the parties. Any claims against Seller for shortages in shipments shall be made in writing to Seller within fifteen (15) days of receipt of shipment by Buyer. Unless otherwise provided for in writing, Seller's responsibility for shipment ceases upon delivery to carrier, and any claims for shortage, delays or damage occurring thereafter shall be made direct to carrier by Buyer. Seller shall not be liable for any delays in delivery attributable to strikes, labor disputes, lockouts, accidents, fires, delays in manufacture or in transportation, delays in delivery of component materials, floods, severe weather, or Acts of God, embargoes, governmental actions, or any other cause beyond the reasonable control of Seller. Seller shall not indemnify nor be liable



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to Buyer, Buyer's assigns, successors, purchasers, lessees or licensees, or to any person or entity for any claims, losses, expenses or judgments arising out of or resulting in any way from the product or integration of compatibility of the product with any other components, processes, facilities or equipment that does not comply with the equipment manufacturer(s)'s recommendations.

Date: September 4, 2025

3. Shipments.

Unless otherwise specified, all risk of loss from the goods shall shift to Buyer at such time as the goods are delivered to a carrier for shipment to Buyer. Unless otherwise specified, shipment dates are approximate and all quoted prices exclude shipping costs. Shipment of goods under any order accepted by Seller shall be subject to the approval by Seller of Buyer's financial condition at the time of shipment. Whether or not terms of payment are specified elsewhere, Seller may, at its option, condition shipments under any order accepted by Seller upon receipt of satisfactory security or of cash prior to shipment. If, at Buyer's request, shipment of goods under any order accepted by Seller is delayed more than thirty (30) days after the shipment date specified in the order, or the date the goods are ready for shipment, whichever is later, Seller will require immediate payment in full and/or assess additional charges for the expenses incident to such delay.

4. Termination.

In the absence of a written agreement between Buyer and Seller expressing different terms and conditions as to termination, any order accepted by Seller may be terminated prior to completion by Buyer only upon written notice to Seller and payment of Seller's termination charges. If notice of termination is received by Seller after Seller has committed to buy the principal components for any order, termination charges shall include all direct and indirect costs incurred by Seller and the total profit anticipated by Seller. Additionally, Buyer's instruction to Seller to stop work for thirty (30) days during the time specified for performance in any order may be construed by Seller as the equivalent of written notice of termination from Buyer and previous stipulations will be in effect.

5. Taxes

Unless expressly stated, Seller's prices do not include sales, use, excise or similar taxes, which Seller may be required to pay in filling Buyer's order. The amount of any applicable tax shall be paid by Buyer as an additional charge unless specifically included in any order accepted by Seller, or in lieu thereof, Buyer shall provide Seller with a tax exemption certificate acceptable to the taxing authorities.

6. Patents

Seller shall, at its own expense, defend and save Buyer harmless from the expenses and consequences of any suit or procedure brought against Buyer, based on a claim that the use or sale of goods specified in any order accepted by Seller constitutes an infringement of any United States letters of patent in existence on the date of any such order; provided Buyer promptly notifies Seller in writing of such claim and gives the necessary authorization, information and assistance for the defense of such a claim.

7. Changes.

Seller, and Seller's suppliers, may, at any time, without notice to Buyer, make changes (whether in design, materials, the addition of improvements, or otherwise) in any goods specified in any order accepted by Seller without incurring any obligation of any kind as a result thereof, but only to the extent that such change does not cause the goods specified to fail to meet Buyer's requirements. Buyer may, in its order, provide for changes in its requirements with provision for a corresponding equitable change in the price, if any; but in no instance shall Buyer make changes, which are substantially different from the scope of the original order accepted by Seller.

8. Export Sales.

In the event the goods and services specified in any order accepted by Seller are for export, the Buyer shall be responsible for securing export, import and other licenses or authorizations as may be required. The conditions specified in this Section apply to all export transactions. This transaction is only for the sale of the equipment requested and detailed in this Quotation. Not included is any startup assistance, field-testing, training or any other services that might be required on site. Also not included is any installation, installation audits, sea trials (if applicable), or installation materials. To ensure proper application, installation, and warranty integrity, Buyer is encouraged to contact the applicable Caterpillar Dealer for these services. The costs of these services are not included in the sale price nor will Seller be responsible for any such related costs.

9. Permits for Equipment Design, Installation and Operation.

As a supplier of equipment, disclaims responsibility for any and all permits or licenses necessary to design, install and operate the equipment due to zoning, air quality, environmental, safety, building or construction codes or use permits pertaining to Buyer's particular application of such equipment or any similar type of permit. Special attention should be given to the requirements of local air district rules and California Air Resources Board (CARB) regulations pertaining to permit requirements. Seller is quoting on equipment based on the specifications set forth in this Quotation. If additional equipment or engine modifications are required beyond the specifications, such as additional equipment required for compliance by a local air district or CARB, those items are not included and are the responsibility of Buyer. For example, South Coast AQMD (SCAQMD) Rule 1470 may require controls and limits on particulate matter, especially when the engine installation is within 100-meters from a school, or within 50 meters of a sensitive receptor (defined in Rule 1470). Ultra low sulfur fuel is required for particulate filters. CARB Diesel Fuel, or other CARB-approved alternative fuel, is also required for compression ignition (CI) engines operated in California. When indicated in the bill of materials, the proposed equipment may be SCAQMD pre-approved as Certified Equipment. This certification does not eliminate the permit processor responsibility, reduces the time necessary to obtain the permit through SCAQMD.

10. Start-up, Commissioning and Operating Requirements.

Equipment provided in this Quotation may require start-up and commissioning, including inspection(s), to ensure the equipment is installed in accordance with manufacturer(s)'s recommendations and specifications. If Seller has commissioned the equipment, Buyer agrees not to modify the design or components of the installation such that the modifications would violate any legal requirements of the installation, or would cause the installation to deviate from manufacturer(s)'s recommendations and specifications. Buyer asknowledges and agrees that, with respect to products sold buyer in connection with this Quotation, Buyer shall have the sole responsibility to ensure the products are properly installed, operated and maintained in accordance with the manufacturer(s)'s recommendations and specifications, and to determine and comply with all applicable Federal, state, local and regulated use restrictions and requirements, including, without limitation, the continuing responsibility to ensure that the use of product is in full compliance with all applicable environmental laws and regulations. Failure to install, operate and maintain the products in accordance with the manufacturer(s)'s recommendations and specifications will invalidate any applicable manufacturer's warranty.

11. Additional material.

Only those items listed in this Quotation are included with any order. For example, unless specifically identified in this Quotation, the following items are not included with any purchased equipment: any exhaust or fuel piping, main fuel tank, fuel, duct work, special tools, insulation, wiring, cable, bus duct, concrete, anchor bolts, rigging or any material or labor incidental to the installation itself. Buyer specifically assumes responsibility for the provision of any such items if not specifically identified in the Quotation.

12. Hours of services.

When included, delivery, startup assistance, field testing, training or any other services required on site will be provided during the normal weekday working hours of 7:00 am to 4:30 pm. Delivery or services occurring at any other time, weekends or holidays is subject to premium charges.

13. Warranty

The equipment manufacturer's warranty is the only warranty provided in connection with the equipment described in this Quotation. Buyer is responsible for operating and maintaining the equipment as specified by the manufacturer. The manufacturer's warranties are exclusive and in lieu of all other warranties either oral or written, express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Seller is not a manufacturer and makes no warranty and shall not, under any circumstances, be liable for any indirect or special, incidental or consequential damages including but not limited to loss of production, loss of production, loss of use or business interruption, or any other economic loss, whether arising from contract, tort, strict liability or any other theory of law. Buyer, Buyer's assigns, successors, purchasers or any other person designated to operate the equipment as the end user, is responsible for operating the equipment in accordance with manufacturer(s)'s recommendations and specifications. Failure to perform all scheduled maintenance may result in damage to the equipment, and may be grounds to deny warranty coverage.

14. Terms.

Terms of payment are due upon receipt of invoice with no deductions of any kind for retentions, setoffs, discounts or other similar items. A finance charge of 1.5% per month (not to exceed the maximum allowed by law) will be charged on all past due invoices. When necessary Seller will file a California "Preliminary 20-day notice" pursuant to Section 3097 of the California Civil Code.

15. Cost additives.

A: Unit Cost.

Quotation prices are valid for 30 days only and are based on current market prices as of date of quotation. The Seller reserves the right to adjust the final invoice with a price escalation up to 6% due to 1) purchase orders being received after expiration of quotation, 2) fluctuations in raw materials market prices at time of order, 3) labor rate increases at time of scheduled field services, 4) delays in submittal approvals and/or releases of equipment or 5) additional items or services provided that were not included as part of the original quotation. Since final invoicing can and may take place up to a year or more from original quotation date.

B: Delays.

If delivery is delayed by customer Buyer beyond original shipment date, purchase price is due 30 days after original shipment date and a storage and handling charge will be applied and is due each month until delivery. Finance charge of 1.5% per month (not to exceed the maximum allowed by law) is applicable on any amounts arising hereunder or in connection herewith that are not paid when due.

C: Start up.

If construction of the facility or other delays are experienced or expected, which prohibit the initial startup of the equipment beyond one year from delivery additional costs may be imposed including, but not be limited to, long term storage preparation, inspection charges, parts, service, etc.

16. Lead Times.

Lead times are based on manufactures estimated timetables. Project completion time may vary due to delays in receipt of purchase orders, submittal approval, release of equipment, manufactures unforeseen delays in production or holiday schedules. Project completion time frame cannot be guaranteed. Back orders will be processed as soon as available. Part number changes may be made to provide latest improved interchangeable items of equipment.

17. Governing Law and Venue



NO. 250570-WELL REV3

3500 Shepherd Street, City of Industry, California 90601 Box 226789, Los Angeles, California 90022-0744 (562) 463-6000 Fax: (562) 463-7156

562) 463-6000 Fax: (562) 463-7156 Date: <u>September 4, 2025</u> Page: <u>5 of 5</u>

The rights and obligations of the parties with respect to the transactions contemplated by this Quotation shall be governed in all respects by the laws of the State of California. The parties hereto irrevocably agree that the exclusive venue for any litigation arising in connection with the transactions specified in this Quotation shall be in the courts located in the County of Los Angeles, California.

18. Attorneys' Fees and Costs

In the event of any legal action, controversy, claim, or dispute between the parties involving the transactions contemplated by this Quotation, the prevailing party shall be entitled to recover from the other party reasonable expenses, attorneys' fees, and costs.

19. Additional Conditions

Buyer shall furnish to Seller, at no cost, suitable working space, storage space, adequate heat, telephone, light, ventilation, regulated electric power and outlets for testing purposes (if applicable). The facilities shall be within a reasonable distance from where any applicable services are to be provided. Seller and its representatives shall have full and free access to the equipment in order to provide any applicable services. Buyer shall provide the means to shut-off and secure electric power to the eneman to shut-off and secure electric power to the eneman to shut-off and secure electric power to the eneman to shut-off and secure electric power to the eneman to shut-off and secure electric power to the eneman to shut-off and secure electric power or dispose of parts or equipment unless specifically agreed upon in Seller's expands any rights or obligation whatsoever. Any such agreements shall be null and void. Seller is under no obligation to remove or dispose of parts or equipment unless specifically agreed upon in Seller's scope of work. Seller-removed parts become the property of Seller. Seller must not perform any electrical power switching unless specifically requested by Buyer, under the supervision of Buyer, and subject to procedures jointly agreed to in advance. Notwithstanding Buyer's request, Seller may refuse to perform power switching, if in the opinion of Seller, such action would be unsafe. In THE EVENT THAT SELLER PERFORMS POWER SWITCHING, TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER SHALL INDEMNIFY, DEFEND, AND HOLD SELLER HARMLESS FROM ANY AND ALL LIABILITY, ACTIONS, SUITS, CLAIMS, DEMANDS, DAMAGES, COSTS, AND EXPENSES ("LOSSES") ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR RESULTING FROM SELLER'S PERFORMANCE OF POWER SWITCHING, REGARDLESS OF WHETHER THE LOSSES RESULT FROM SELLER'S NEGLIGENCE (WHETHER ACTION OR PASSIVE, AND WHETHER SOLE, JOINT, OR CONCURRENT), AND EVEN THOUGH CAUSED IN WHOLE OR IN PART BY A PRE-EXISTING DEFECT, STRICT LIABILITY, OR OTHER LEGAL FAULT OF SELLER. THIS IND

ACCEPTED BY:	SUBMITTED BY:
Ву:	By: Art Jimenez
Company:	Quinn Power Systems
Date:	Phone: 951-250-5104
P.O. #:	

EXHIBIT B

WEST VALLEY WATER DISTRICT

AGREEMENT

PUMP STATION 5-2 EMERGENCY GENERATOR

This Contract is made this <u>20th</u> day of <u>November 2025</u> between the West Valley Water District ("WVWD") and <u>QUINN POWER SYSTEMS</u> ("Contractor"). WVWD and Contractor may be collectively referred to as "Parties" and individually as a "Party."

RECITALS

- A. WVWD is a public agency organized under the laws of the State of California, with power to contract for services necessary to achieve its purpose.
- B. WVWD desires to engage Contractor for performance of the following public work of improvement of the **PUMP STATION 5-2 EMERGENCY GENERATOR** (the "Project or the Work").
- C. Contractor represents that it is a licensed contractor pursuant to Section 7000 et seq. of the Business and Professions Code in the classification 724233 which it shall maintain for the duration of the Contract.
- D. Contractor further represents that it has examined and is fully familiar with all of the provisions of the Contract Documents; that it has satisfied itself as to the nature and location of all Work, the general and local conditions to be encountered in the performance of any Work, and all other matters which can in any way affect the Work or the cost thereof.
- E. Contractor has submitted a proposal to WVWD, incorporated herein by this reference, to perform all work and furnish the labor, supervision, materials and equipment, and operations necessary and required to complete the Project in strict accordance with the provisions of the Contract Documents, and at the prices stated.
- F. The Parties desire to enter into this Agreement for the purpose of setting forth the terms and conditions upon which the Contractor shall complete the Project.

SECTION 1 - SCOPE

A. Contractor shall furnish all necessary management, supervision, labor, materials, tools, supplies, equipment, plant, services, engineering, testing and/or any other act or thing required to diligently and fully perform and complete the Project in accordance with the Contract Documents, which is generally described as follows:

INSTALLATION OF A STANDBY EMERGENCY GENERATOR FOR PUMP STATION 5-2 BY QUINN POWER SYSTEMS as specified on the Proposal of Attachment D.

Without limiting the foregoing description, Contractor's scope of work includes, but is not limited to, the following:

- 1. Submit any required samples, product data, certificates, operations and maintenance instructions, guarantees, and other submittals no later than 60 working days after the date WVWD issues a Notice to Proceed and before the preconstruction meeting.
- 2. Submit a list of any permits and licenses the Contractor shall obtain indicating the agency granting the permit, the expected date to submit the application, and the required date for the receipt of the permit.

- 3. Protect all materials to be used in the Work in accordance with the specifications.
- 4. Protect existing facilities and personal property.
- 5. Attend a preconstruction conference with WVWD to discuss schedule, access, sequence of work, and other issues.
- 6. If requested by WVWD, prepare and submit a written daily activity report to WVWD for each day on which work is performed, including weekends and holidays when worked, and submit reports to WVWD no later than the next business day. The daily reports shall, at a minimum, include the following information: construction activities and locations, construction crew sizes of general and subcontractors, start or completion of activities, progress on construction activities (including units or portions of work completed), tests or inspections performed, deliveries of material or equipment, delays or potential delays, visitors to the site, weather conditions, construction equipment used, and personal injuries or damage to property.
- 7. The Contractor shall be responsible for unloading, hoisting and otherwise handling its own materials, supplies and equipment.
- 8. Coordinate with owner-scheduled events.
- 9. The Contractor is responsible for researching and complying with all local codes, agencies and jurisdictions that regulate and govern the Work.
- 10. Contractor shall set up, identify, coordinate, provide safe access, and obtain all inspections for its work, as required by any authorized agency or applicable code, prior to covering up work.
- B. The following documents are incorporated into and made part of this Contract by this reference:
 - 1. Insurance Requirements (Attachment A)
 - 2. Designation of Subcontractors Form (Attachment B)
 - 3. Public Works Contractor Registration Certification Payment and Performance Bonds (Attachment C)
 - 4. Scope of Work (Attachment D)
 - 5. Change orders issued in accordance with the Contract Documents
- C. These documents shall be referred to collectively as the "Contract Documents." The Contract Documents are intended to be complementary, and a requirement in one document is as effective as if it appeared in all of the Contract Documents. In the event of a conflict between any of the Contract Documents, the documents shall be given effect in the following order: Change Orders (most recent first), Addenda (most recent first), Contract, Insurance Requirements, and Contractor's Proposal/Schedule of Pay Items.
- D. Contractor shall comply with all requirements of the Contract Documents. Where there is a conflict between the requirements of the Contract Documents, the more stringent requirements shall govern.

SECTION 2 - PRICE

- A. WVWD agrees to pay, and Contractor agrees to accept, the sum of <u>Six Hundred Thirty Thousand, Two Hundred Fifty-Two Dollars and Thirty-Seven Cents (\$630,252.37)</u> (the "Contract Price") subject to adjustments for changes in the work as may be directed in writing by WVWD, as payment in full for the Work. Work to be done at unit prices will be paid based on actual quantities of work performed and accepted.
- B. Contractor shall submit a payment application for the total work completed once each month and upon completion of the Project and satisfaction of all conditions of the Contract Documents. WVWD shall make payment within thirty (30) days of receipt of an undisputed payment application, less five percent retention. WVWD shall release the retained funds (less any amounts in dispute, deducted for liquidated damages or as required by law, or other offsets) no less than thirty-five (35) days after the date WVWD accepts the Work. Pursuant to Public Contract Code section 22300, for monies earned by the Contractor and withheld by WVWD to ensure the performance of the Contract, the Contractor may, at its option, choose to substitute securities meeting the requirements of Public Contract Code section 22300.

If any of the Work is to be paid based on unit prices, Contractor shall submit a monthly itemized estimate of Work done for the purpose of making progress payments. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by WVWD, for unit price items listed, if any, in the Schedule of Pay Items. Following WVWD's acceptance of the Work, the Contractor shall submit to WVWD a written statement of the final quantities of unit price items for inclusion in the final payment request. WVWD shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment. WVWD makes no representation that the actual quantities of work performed will not vary from the estimates.

- C. Contractor agrees to furnish, as a condition of payment, payroll affidavits, receipts, vouchers, certified payroll reports, and other documents, in form satisfactory to WVWD, prior to receipt of any payment. Contractor shall submit Conditional and Unconditional waivers and release of lien upon (as provided in Civil Code sections 8132, 8134, 8136, and 8138) on behalf of itself, subcontractors and suppliers that furnished labor, material, equipment or services to the Project.
- D. In accordance with California Public Contract Code Section 22300, WVWD will permit the substitution of securities for any monies withheld by WVWD to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with WVWD, or with a state or federally chartered bank in California as the escrow agent, and thereafter WVWD shall then pay such monies to the Contractor as they come due. Upon satisfactory completion of the Contract, the securities shall be returned to the Contractor. For purposes of this Section and Section 22300 of the Public Contract Code, the term "satisfactory completion of the contract" shall mean the time WVWD has issued written final acceptance of the Work and filed a Notice of Completion as required by law and provisions of this Contract. The escrow agreement used for the purposes of this Section shall be in the form provided by WVWD.

SECTION 3 - ENTIRE AGREEMENT

This Contract represents the entire agreement between WVWD and Contractor and supersedes any prior written or oral representations. No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.

SECTION 4 - TIME

- A. Contractor shall complete the Project no later than <u>Three Hundred Sixty-Five (365)</u> <u>Calendar Days</u> following WVWD's issuance of the Notice to Proceed (the "Contract Time").
- B. Contractor shall provide WVWD with scheduling information in a form acceptable to WVWD, including any changes made by WVWD in the scheduling of work. Contractor shall coordinate its work with that of all other contractors, subcontractors and suppliers so as not to delay or damage their performance.
- C. If Contractor fails to complete the Project within the Contract Time, WVWD will sustain damage. It is and will be impracticable to determine the actual damage which WVWD will sustain in the event of and by reason of such delay; therefore, Contractor will pay to WVWD the sum of \$1,000 for each and every calendar day beyond expiration of the Contract Time. Contractor agrees to pay such liquidated damages as herein provided, and in case the same are not paid, agrees that WVWD may deduct the amount thereof from any monies due or that may become due to the Contractor under the Contract.
- D. It is further agreed that in case Contractor fails to complete the Project in all parts and requirements within the Contract Time, WVWD shall have the right to extend the Contract Time or not, as may seem best to serve the interest of WVWD; and if it decides to extend Contract Time, WVWD shall further have the right to charge to the Contractor, his heirs, assigns or sureties, and to deduct from the final payment for the work, all or any part, as it may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses directly chargeable to the Contract that accrue during the period of such extension.
- E. The Contractor will not be assessed with liquidated damages or the cost of engineering and inspection during the delay in the completion of the Project caused solely by acts of God or of the public enemy, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather or delays of subcontractors due to such causes, provided that the Contractor shall within three (3) days from the beginning of any such delay, notify WVWD, in writing of the causes of delay. WVWD shall ascertain the facts and the extent of delay, and his findings thereon shall be final and conclusive.
- F. As an express condition of any adjustment of the Contract Time or Contract Price on account of delay, including delay caused by acts of WVWD, Contractor must give WVWD written notice of the commencement of delay within three (3) days of its occurrence.

SECTION 5 - LABOR

A. Prevailing Wages. The Contract is subject to California Labor Code Sections 1720 et seq., and Contractor and any subcontractor shall pay not less than the specified prevailing rates of wage to all workers employed in performance of the Work. Pursuant to the provisions of Section 1770 of the California Labor Code, WVWD has obtained the general prevailing rate of wages and employer payments for health and welfare, vacation, pension and similar purposes, as determined by the Director of the Department of Industrial Relations, a copy of which is on file in the office of WVWD, and shall be made available for viewing to any interested party upon request. The Contractor and each subcontractor shall forfeit as a penalty to WVWD not more than Two Hundred Dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate in violation of the Labor Code. In addition, the difference between the prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

- B. <u>Employment of Apprentices</u>. Contractor's attention is directed to the provisions in Section 1777.5 and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under the Contractor. It shall be the responsibility of the Contractor to effectuate compliance on the part of itself and any subcontractors with the requirements for employment of apprentices. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex-officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.
- C. Payroll Records. Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the work. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury. In the event of noncompliance with the requirements of this Section, the Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to achieve compliance with this section. If Contractor or subcontractor does not comply after such ten (10)-day period, the Contractor shall, as a penalty to WVWD, forfeit One Hundred Dollars (\$100) for each day, or portion thereof, for each worker until strict compliance is effectuated.

In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations on a weekly basis and in the format prescribed by the Department of Industrial Relations, which may include electronic submission. Contractor shall comply with all requirements and regulations from the Department of Industrial Relations relating to labor compliance monitoring and enforcement.

D. <u>Public Works Contractor Registration</u>

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. Contractor and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Contractor shall execute the Public Works Contractor Registration Certification attached hereto as Attachment C, attesting to the facts contained therein. In addition, Contractor shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors Form attached hereto as Attachment B.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In executing this contract, Contractor acknowledges that it has reviewed all applicable labor compliance requirements and included the cost of complying with such requirements in its bid.

E. Hours of Work.

1. Eight (8) hours of work shall constitute a legal day's work. The Contractor and each subcontractor shall forfeit, as penalty to WVWD, twenty-five dollars (\$25) for each worker employed in the execution of Work by the Contractor or any subcontractor for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any week in violation of the

- provisions of the Labor Code, and in particular, section 1810 to section 1815, except as provided in Labor Code section 1815.
- 2. The Contractor shall perform all work during the hours of 7:00 a.m. to 3:30 p.m., Monday through Friday unless otherwise authorized by WVWD in writing. If the Contractor wishes to work during any other hours or on weekends, written permission must be received from WVWD. The request must be received at least two (2) working days in advance of any work. No work will be allowed on WVWD Holidays except in the case of an emergency. A listing of WVWD holidays is on file in the office of WVWD. If Contractor requests overtime work in which WVWD will incurs costs, Contractor shall be responsible for payment of WVWD's costs incurred in connection with the overtime work. WVWD will invoice the Contractor at time and one half to cover the costs incurred. If Contractor does not pay the invoice within ten (10) days, WVWD may deduct the amount billed from other payments due or to become due to Contractor under the Contract.
- F. <u>Labor Compliance</u>. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.
- G. <u>Labor Certification</u>. Pursuant to the requirements of Division 4 of the Labor Code, the <u>Contractor</u> will be required to secure the payment of worker's compensation to its employees in accordance with the provisions of section 3700 of the Labor Code. Prior to commencement of work, the Contractor shall sign and file with the Engineer a certification in the following form:
 - "I am aware of the provisions of section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions before commencing the performance of the work of this contract."
- H. <u>Full</u> compensation for conforming to the requirements of this section shall be considered as included in the Contract Price, and no additional compensation will be allowed therefore.

SECTION 6 - CHANGES IN WORK

- A. Contractor shall make no changes in the Work without written direction from WVWD. Contractor shall not be compensated for any change made without WVWD's written direction. No changes in the work covered by this Contract shall exonerate any surety or any bond given in connection with this Agreement.
- B. If WVWD directs the Contractor in writing to make changes in the work that materially affect the cost of performing the work, the Contract Price will be adjusted based on one of the following:
 - 1. Where the work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities involved in the changed Work;
 - 2. By a combination of existing and new unit prices and related quantities for the changed work;
 - 3. Time and Materials, calculated as set forth in Section 6(C), below; or
 - 4. By mutual acceptance of a lump sum.
- C. The cost for extra or changed work performed on a Time and Materials basis shall be determined as follows:

- 1. <u>Labor</u>: Contractor will be paid cost of labor for workers used in actual and direct performance of extra work, including only actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
- 2. <u>Material</u>: Only materials furnished by Contractor and necessarily used in performance of extra Work will be paid for. Cost of such materials will be cost, including sales tax and delivery charges, to purchaser (Contractor, Subcontractor or other forces) from supplier thereof.
- 3. Equipment: For Contractor-owned equipment, payment will be made at rental rates listed for equipment in the California Department of Transportation official equipment rental rate schedule which is in effect on the date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein. If there is no applicable rate for an item of equipment, then payment shall be made for Contractor-owned equipment at rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book.
 - (a) For rented equipment, payment will be made based on actual rental invoices. Equipment used on extra Work shall be of proper size and type.
 - (b) Rental rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Unless otherwise specified, manufacturer's ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rental rates. Rental time will not be allowed while equipment is inoperative due to breakdowns.
 - (c) Individual pieces of equipment or tools having a replacement value of \$100 or less, whether or not consumed by use, shall be considered to be small tools.
- 4. Work Performed by Special Forces or Other Special Services: When WVWD and Contractor, by agreement, determine that special service or item of extra Work cannot be performed by forces of Contractor or those of any Subcontractors, service or extra Work item may be performed by specialist. Invoices for service or item of extra Work on basis of current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with established practice of special service industry to provide complete itemization. In those instances, wherein Contractor is required to perform extra Work necessitating a fabrication or machining process in a fabrication or machine shop facility away from Site, charges for that portion of extra Work performed in such facility may, by agreement, be accepted as a specialist billing. In lieu of overhead and profit provided in paragraph 5(a), below, fifteen percent (15%) will be added to specialist invoice price, after deduction of any cash or trade discount offered or available, whether or not such discount may have been taken.
- 5. Overhead Defined. The following constitutes charges that are deemed included in overhead for all Contract Modifications, including work performed on a Time and Materials basis. Contractor shall not invoice or receive payment for these costs separately: Drawings: field drawings, Shop Drawings, etc., including submissions of drawings; Routine field inspection; General Superintendence; General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation; Computer services; Reproduction

services; Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; Janitorial services; Small tools, incidentals and consumables; Temporary on-Site facilities (Offices, Telephones, Plumbing, Electrical Power, Lighting; Platforms, Fencing, Water, Home office expenses; vehicles and fuel used for work otherwise included in the Contract Documents; Surveying; Estimating; Protection of Work; Handling and disposal fees; Final cleanup; Other incidental Work; Related warranties.

- 6. Overhead and Profit for Time and Materials. For work Contractor performs on Time and Materials at WVWD's direction, the following markups will be added to the cost of labor, materials and equipment, calculated as described above.
 - (a) Overhead and profit on labor shall be fifteen percent (15%).
 - (b) Overhead and profit on materials shall be fifteen percent (10%).
 - (c) Overhead and profit on equipment rental shall be ten percent (10%).
 - (d) On proposals covering both increases and decreases in Contract Price, overhead and profit shall be allowed on the net increase only as determined in this paragraph. When the net difference is a deletion, no percentage for overhead or profit will be allowed, but rather a deduction shall apply.
 - (e) The markup shall include profit, small tools, cleanup, supervision, warranties, cost of preparing the cost proposal, jobsite overhead, and home office overhead. No markup will be allowed on taxes, insurance, and bonds.
- D. If WVWD directs the Contractor in writing to make changes in the Work that materially affect the time required to perform the Work, WVWD will make a reasonable adjustment to the Contract Time.

SECTION 7 - CLAIMS AND DISPUTES

- A. If any dispute shall arise between WVWD and Contractor regarding performance of the work, or any alleged change in the work, Contractor shall timely perform the disputed work and shall give written notice of a claim for additional compensation for the work to WVWD within three (3) days after commencement of the disputed work. Contractor's failure to give written notice within the three (3)-day period constitutes an agreement by Contractor that it will receive no extra compensation for the disputed work.
- B. If a claim cannot be resolved through direct discussions between WVWD and Contractor, disputes for \$375,000 or less shall be handled in accordance with Public Contract Code Sections 20104 et seq. WVWD shall respond in writing within the statutory time period(s), or, may request in writing within 30 Days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims WVWD may have against the claimant. If additional information is needed thereafter, it shall be provided upon request. WVWD's response shall be submitted within the statutory timeframe after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater. The Contractor shall make these records and documents available at all reasonable times, without any direct charge.
- C. If a claim is more than \$375,000, WVWD shall respond in writing within a reasonable period of time to review and analyze the claim. The parties also agree to participate in mediation with a mutually agreeable mediator following an exchange of documents reasonably necessary for resolution of the issues in dispute.
- D. If the claimant disputes WVWD's response, or if WVWD fails to respond within the statutory time period(s), the claimant may so notify WVWD within 15 Days of the receipt of the

response or the failure to respond, and demand an informal conference to meet and confer for settlement. Upon such demand, WVWD shall schedule a meet and confer conference within 30 Days.

- E. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code sections 900 et seq. and Government Code sections 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied, including any time utilized for the meet and confer conference.
- F. Submission of a claim, properly certified, with all required supporting documentation, and written rejection or denial of all or part of the claim by WVWD, is a condition precedent to any action, proceeding, litigation, suit, or demand for arbitration by Contractor.
- G. Venue for any litigation arising out of or relating to this Contract shall be Riverside County, California.
- H. Pursuant to Public Contract Code section 9201, WVWD shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract.

SECTION 8 - INSPECTION AND PROTECTION OF WORK

- A. Responsibility for, and security of, all work and materials is the responsibility of the Contractor until final acceptance of the Project by WVWD.
- B. All Work shall be inspected by WVWD. The charges for inspection shall be in accordance with WVWD's regulations. If WVWD is unable to provide an inspector or inspectors, Contractor shall reschedule the Work for another time at no cost to WVWD. Work performed without inspection shall be rejected.
- C. Contractor shall make the work accessible at all reasonable times for inspection by WVWD. Contractor shall, at the first opportunity, inspect all material and equipment delivered to the jobsite by others to be used or incorporated in the Contractor's work and give prompt notice of any defect therein. Contractor assumes full responsibility to protect the work done hereunder until final acceptance by WVWD.
- D. When the Work is completed, Contractor shall request, in writing, a final inspection. Within ten (10) days of the receipt of such request, WVWD shall make a final inspection. The Contractor or its representatives may be present at the final inspection. The purpose of such final inspection shall be to determine whether the Work has been completed in accordance with the Contract Documents, including all change orders and all interpretations and instructions previously issued.
- E. WVWD may reject materials or Work that does not meet the requirements of the Contract Documents. If WVWD does so, Contractor shall promptly remove the rejected materials or work and replace it with materials or work that meet the requirements of the Contract Documents, at no additional cost to WVWD.

SECTION 9 - ASSIGNMENT AND SUBCONTRACTING

- A. Contractor shall give personal attention to the performance of the Contract and shall keep the Work under its control.
- B. No subcontractors will be recognized as such, and all persons engaged in the work of construction will be considered as employees of the Contractor, who will be held responsible for their work which shall be subject to the provisions of the Contract and

- specifications.
- C. No subcontractor who is ineligible to bid work on, or be awarded, a public works project under Labor Code sections 1771.1 or 1777.7 can bid on, be awarded or perform work as a subcontractor on the Project. The Contractor is prohibited from performing work on the Project with a subcontractor who is ineligible to perform work on a public works project under these sections of the Labor Code.
- D. When a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to WVWD, the subcontractor shall be removed immediately on the request of WVWD in the manner required by law and shall not again be employed on the work.
- E. Contractor shall not assign any portion of the work to be performed under this Agreement or any of the rights or obligations under this Agreement, without the prior written consent of WVWD, which consent may be withheld in WVWD's sole and absolute discretion.

SECTION 10 - TERMINATION

- A. Should Contractor fail within seven (7) calendar days from receipt of WVWD's written notice to correct any default, including but not limited to failure to perform the Work in accordance with the Contract Documents, failure to comply with the directions of WVWD, or failure to pay its creditors, WVWD may terminate this Contract and/or, in its sole discretion, make a demand on Contractor's performance bond surety. Following a termination for default, WVWD shall have the right to take whatever steps it deems necessary to complete the Project and correct Contractor's deficiencies and charge the cost thereof to Contractor, who shall be liable for the full cost of WVWD's corrective action, including reasonable overhead, profit and attorneys' fees.
- B. WVWD may at any time terminate the Contract at WVWD's convenience upon five (5) days written notice to Contractor. In the event of termination for convenience, Contractor shall recover only the actual cost of work completed to the date of termination, which costs are documented to WVWD's satisfaction, calculated in accordance with Section 6, above. Contractor shall not be entitled to any claim or lien against WVWD for any additional compensation or damages in the event of such termination.
- C. If WVWD terminates Contractor for cause, and if it is later determined that the termination was wrongful, such default termination shall automatically be converted to and treated as a termination for convenience. In such event, Contractor shall be entitled to receive only the amounts payable under this section, and Contractor specifically waives any claim for any other amounts or damages, including, but not limited to, any claim for consequential damages or lost profits.

SECTION 11 - HOLD HARMLESS AND INDEMNIFICATION

- A. WVWD and all officers and employees thereof connected with the Work, shall not be answerable or accountable in any manner: for any loss or damage that may happen to the Work or any part thereof; for any loss or damage to any of the materials or other things used or employed in performing the Work; for injury to or death of any person; or for damage to property from any cause except losses due to sole or active negligence of WVWD's officers or employees.
- B. Contractor shall indemnify, defend with legal counsel approved by WVWD, and hold harmless WVWD, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable legal counsel fees, expert fees and all other costs and fees of litigation) of every nature arising out of or

related to the Work or the Project, except such loss or damage which is caused by the sole or active negligence or willful misconduct of WVWD. Should conflict of interest principles preclude a single attorney from representing both WVWD and Contractor, or should WVWD otherwise find Contractor's legal counsel unacceptable, then Contractor shall reimburse WVWD its costs of defense, including without limitation reasonable attorney's fees, expert fees and all other cost and fees of litigation. The Contractor shall promptly pay any final judgment rendered against WVWD (and its officers, officials, employees and volunteers) except for claims determined by a trier of fact to have been the result of WVWD's sole or active negligence or willful misconduct. The foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this Agreement.

- C. Contractor's obligations under this section apply regardless of whether or not such claim, charge, damage, demand, action, proceeding, loss, stop notice, cost, expense, judgment, civil fine or penalty, or liability was caused in part or contributed to by an indemnified party. However, without affecting the rights of WVWD under any provision of this agreement, Contractor shall not be required to indemnify and hold harmless WVWD for liability attributable to the active negligence of WVWD, provided such active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction. In instances where WVWD is shown to have been actively negligent and where WVWD's active negligence accounts for only a percentage of the liability involved, the obligation of Contractor will be for that entire portion or percentage of liability not attributable to the active negligence of WVWD.
- D. In addition to any remedy authorized by law, contract funds sufficient to pay for any claim may be retained by WVWD until disposition has been made of such suits or claims for damage.

SECTION 12 - BONDS AND INSURANCE

A. <u>Bonds.</u>

- 1. Within fifteen (15) working days after being notified of the award of the contract, and before WVWD will execute this Agreement, the Contractor shall furnish and file with WVWD Performance and Payment Surety bonds as set forth below.
- 2. Contractor shall submit the bonds on the forms provided Attachment E, attached hereto, duly executed by a responsible corporate surety listed in the United States Department of the Treasury circular entitled "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," authorized to do business in the State of California and acceptable to WVWD conditioned upon the faithful performance by the Contractor of all requirements of the Contract Documents. Each of the bonds shall be in a sum no less than one hundred percent (100%) of the Contract Price.

B. Insurance.

 Contractor shall obtain, at its sole cost and expense, all insurance required by Attachment A. Certificates of such insurance and copies of the insurance policies and endorsements shall be delivered to WVWD within fifteen (15) working days after being notified of the award of the contract, and before execution of this Agreement by WVWD.

SECTION 13 - WARRANTY

Contractor warrants to WVWD that all materials and equipment furnished shall be new, free from faults and defects and of good quality and conform to the requirements of the Contract Documents.

Contractor hereby warrants its work against all deficiencies and defects for the period required by the Contract Documents or the longest period permitted by California law, whichever is greater. Unless otherwise stated in the Contract Documents, warranty periods shall begin upon the filing of the Notice of Completion and shall be for one year.

This Article shall not limit WVWD's rights under this Contract or with respect to latent defects, gross mistakes, or fraud. WVWD specifically reserves all rights related to defective work, including but not limited to defect claims pursuant to California Code of Civil Procedure section 337.15.

SECTION 14 - LAWS TO BE OBSERVED

- A. Contractor shall keep itself fully informed of all existing and future state and federal laws and county and municipal ordinances and regulations that in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.
- B. Contractor shall at all times observe and comply with, and shall cause all of its agents and employees to observe and comply with all such existing and future Federal, State and local laws, ordinances, regulations, orders, and decrees of bodies or tribunals having any jurisdiction or authority over the Project; and shall protect and indemnify WVWD, and all officers and employees thereof connected with the Project, against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by WVWD's representative or their employees. If any discrepancy or inconsistency is discovered in the plans, drawings, specifications, or contract for the work in relation to any such law, ordinance, regulation, order or decree, Contractor shall promptly report the same to WVWD in writing.
- C. This Contract shall be governed by and construed in accordance with the laws of the State of California.

SECTION 15 - CLEAN-UP

Contractor will remove from the project site all debris resulting from performance of the Work no less often than daily. If Contractor fails to do so, WVWD may, after twenty-four (24) hours' notice to Contractor, clean up the site and deduct the cost from the Contract Price.

SECTION 16 - STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

SECTION 17 - COMPLIANCE WITH STATE STORM WATER PERMIT

Contractor shall be required to comply with all aspects of the State Water Resources Control Board (State Water Board) Water Quality Order No. 2009-0009-DWQ, including any and all subsequent amendments and National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity (Permit) for all projects that involve construction on or disturbance of one acre or more of land or which are part of a larger common area of development.

SECTION 18 - MISCELLANEOUS

A. Existing Utilities.

The location of known existing utilities and pipelines are shown on the Plans in their approximate locations. However, nothing herein shall be deemed to require WVWD to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the site of the Project can be inferred from the presence of other visible facilities, such as buildings, cleanouts, meter and junction boxes, on or adjacent to the site of the Project. Underground facilities not known to WVWD may exist, or be in a location different from that which is shown in the Contract Documents.

Contractor shall take all steps reasonably necessary to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service, including but not limited to calling Underground Service Alert to locate utilities in accordance with the procedures described in Government Code section 4215 et seq. Contractor shall protect from damage any utility facilities that are to remain in place, be installed, relocated or otherwise rearranged. The Contractor shall not be entitled to additional compensation nor time extensions for work necessary to avoid interferences nor for repair to damaged utilities if the Contractor does not expose all such existing utilities as required by this section.

After the utility survey is complete, the Contractor shall commence "potholing" or hand digging to determine the actual location of the pipe, duct, or conduit. Contractor shall notify WVWD before starting potholing operations. The Contractor shall uncover all piping and conduits to a point one (1) foot below the pipe, where crossings, interferences, or connections are shown on the Drawings, prior to trenching or excavating for any pipe or structures, to determine actual elevations. New pipelines shall be laid to such grade as to clear all existing facilities which are to remain in service for any period subsequent to the construction of the run of pipe involved.

The Contractor's attention is directed to the requirements of Government Code section 4216.2 (a)(2) which provides: "When the excavation is proposed within 10 feet of a high priority subsurface installation, the operator of the high priority subsurface installation shall notify the excavator of the existence of the high priority subsurface installation prior to the legal excavation start date and time, as such date and time are authorized pursuant to paragraph (1) of subdivision (a) of section 4216.2. The excavator and the operator or its representative shall conduct an onsite meeting at a mutually-agreed-upon time to determine actions or activities required to verify the location of the high priority subsurface installation prior to start time." The Contractor shall notify WVWD in advance of this meeting.

If the Contractor is required to locate, repair damage not due to the Contractor's failure to exercise reasonable care and remove or relocate existing main or trunk line utility facilities, it shall be compensated under Section 6 of this Contract – Changes in the Work – including payment for equipment on the Project necessarily idled during such work.

The right is reserved by WVWD and the owners of underground facilities or their authorized

agents, to enter the job for the purpose of making such changes as are necessary for the rearrangement of their facilities or for making necessary connection or repairs to their properties. The Contractor shall cooperate with forces engaged in such work and shall conduct its operations in such a manner as to avoid any delay or hindrance to the work being performed by such other forces.

B. Differing Site Conditions.

- 1. The Contractor shall promptly, and before the following conditions are disturbed, notify WVWD in writing of any:
 - (a) Material that the Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law,
 - (b) Subsurface or latent physical conditions at the site differing materially from those indicated by information about the site made available to bidders before the deadline for submitting bids, or
 - (c) Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.
- 2. Contractor shall give Notice in accordance with the Change Order provisions above.
- 3. WVWD shall promptly investigate the conditions, and if it finds that such conditions do materially so differ, or do involve hazardous waste, and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work, it shall issue a change order under the provisions described in the Contract Documents.
- 4. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in the Contract Documents.
- 5. In the event a dispute arises between WVWD and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, Contractor shall not be excused from completing the Work as provided in the Contract Documents. The Contractor shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by this Contract or by law, which pertain to the resolution of disputes and protests.

C. Records and Audits.

- Contractor and its subcontractors shall establish and maintain records pertaining to this Contract. Contractor's and subcontractors' accounting systems shall conform to generally accepted accounting principles and all records shall provide a breakdown of all costs charged under this contract, including properly executed payrolls, time records, invoices and vouchers.
- 2. Contractor shall permit WVWD and its authorized representatives to inspect, examine and make copies of Contractor's books, records, accounts, and any and all data relevant to this Contract at any reasonable time for the purpose of auditing and verifying statements, invoices, or bills submitted by Contractor pursuant to this contract and shall provide such assistance as may be reasonably required in the course of such inspection. WVWD further reserves the right to examine and reexamine said books, records, accounts, and data during the four (4)-year period following the termination of this Contract; and Contractor shall in no event dispose

- of, destroy, alter, or mutilate said books, records, accounts, and data in any manner whatever for four (4) years after the termination of this Contract.
- 3. Pursuant to California Government Code section 8546.7, the parties to this Contract shall be subject to the examination and audit of representative of the Auditor General of the State of California for a period of three (3) years after final payment under the contract. The examination and audit shall be confined to those matters connected with the performance of this contract including, but not limited to, the cost of administering the contract.

D. Clayton Act and Cartwright Act.

Section 7103.5 of the Public Contract Code specifies that in entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Sec. 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchase of goods, services or materials pursuant to the contract or subcontract. Pursuant to Public Contract Code section 7103.5, the Contractor and all of its subcontractors hereby offer and agree to assign to WVWD all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 commencing with Sec. 16700) of Part 2 of Division 7 of the Business and Professions Code, arising from purchase of goods, services or materials pursuant to this Agreement. This assignment shall become effective when WVWD tenders final payment to the Contractor without further acknowledgement by the parties.

E. <u>Contractor Supervision</u>.

The Contractor shall provide competent supervision and staffing of the Work as approved by WVWD. As necessary, the Contractor or designated representative shall be present at all times while work is actually in progress. Supervisor(s) must be able to proficiently speak, read and write in English.

F. Character of Workers.

If persons employed by the Contractor, including any subcontractors, shall appear to WVWD to be incompetent or to act in a disorderly or improper manner, he or she shall be discharged immediately on the request of WVWD, and such person shall not again be employed on the Work.

G. Cooperation.

Should construction be under way by WVWD, other agencies or other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to said limits, the Contractor shall cooperate with all such other contractors or other forces to the end that any delay or hindrance to their work will be avoided. WVWD reserves the right to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

H. Notices.

All notices permitted or required under this Contract shall be given at the following address, or at such other address as the parties may provide in writing for this purpose:

West Valley Water District:

QUINN POWER SYSTEMS:

855 W. Baseline Rd. Rialto, CA 92377

Attn: John Thiel, General Manager

P.O. Box 849665 Los Angeles, CA 90084-9665

The parties may designate, in writing, other individuals to whom notice is to be given. Notices shall be deemed to be received upon personal delivery to the addresses above; if sent by overnight delivery, upon delivery as shown by delivery service records; if sent by facsimile, upon receipt as confirmed by the sending facsimile equipment; if by United States Postal Service, five days after deposit in the mail.

WEST VALLEY WATER DISTRICT	NAME
Ву:	By:(Authorized Representative of Contractor)
Printed Name: John Thiel	Printed Name: Kris Paluzzi
Title: <u>General Manager</u>	
Dated:	(Attach Acknowledgment for Authorized Representative of Contractor)
By:	Dated:
Printed Name: <u>Elvia Dominguez</u>	License No
Title: Board Secretary	
Dated:	

ATTACHMENT A INSURANCE REQUIREMENTS FOR MINOR PUBLIC WORKS PROJECTS

- 1. <u>Time for Compliance</u>. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to WVWD that it has secured all insurance required under this Section. Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein. Contractor shall not allow any subcontractor to commence work on any subcontract until it has provided evidence to WVWD that the subcontractor has secured all insurance required under this Section.
- 2. Minimum Requirements. Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Contract by the Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract and shall verify subcontractors' compliance. Contractor's and subcontractors' insurance shall meet at least the following minimum levels of coverage:
 - (A) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) General Liability: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001); (2) Automobile Liability: Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto) or if Contractor has no owned autos, Code 8 (hired) and 9 (non-owned); and (3) Workers' Compensation and Employer's Liability: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance, with statutory limits. The policy shall not contain any exclusion contrary to the Agreement, including but not limited to endorsements or provisions limiting coverage for (1) contractual liability or (2) cross liability for claims or suits by one insured against another.
 - (B) Minimum Limits of Insurance. Contractor shall maintain limits no less than: (1) General Liability: \$1 Million per occurrence, \$2 Million aggregate for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used including, but not limited to, form CG 2503, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit; (2) Automobile Liability: \$1 million per accident for bodily injury and property damage; and (3) Workers' Compensation and Employer's Liability: Workers' Compensation: statutory limits. Employer's Liability limits of \$1 million per accident for bodily injury or disease. Defense costs shall be paid in addition to the limits. Notwithstanding the minimum limits set forth above, any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds.
 - (C) Notices; Cancellation or Reduction of Coverage. At least fifteen (15) days prior to the expiration of any such policy, evidence showing that such insurance coverage has been renewed or extended shall be filed with WVWD. If such coverage is cancelled or materially reduced, Contractor shall, within ten (10) days after receipt of written notice of such cancellation or reduction of coverage, file with WVWD evidence of insurance showing that the required insurance has been reinstated or has been provided through another insurance company or companies. In the event any policy of insurance required under this Contract does not comply with these specifications or is canceled and not replaced, WVWD has the right but not the duty to obtain the insurance it deems necessary

- and any premium paid by WVWD will be promptly reimbursed by Contractor or WVWD may withhold amounts sufficient to pay premium from Contractor payments. In the alternative, WVWD may suspend or terminate this Agreement.
- 3. <u>Insurance Endorsements</u>. The insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms approved by WVWD, to add the following provisions to the insurance policies:
 - General Liability. The general liability policy shall include or be endorsed (A) (amended) to state that: (1) using ISO CG forms 20 10 and 20 37 (including completed operations), or endorsements providing the exact same coverage, WVWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the Work or ongoing and completed operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) using ISO form 20 01, or endorsements providing the exact same coverage, the insurance coverage shall be primary insurance as respects WVWD, its directors, officials, officers, employees, agents, and volunteers and any other Additional Insured named in the Special Conditions, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any excess insurance shall contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of WVWD, before WVWD's own primary insurance or self-insurance shall be called upon to protect it as a named insured. Any insurance or self-insurance maintained by WVWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way.
 - (B) Automobile Liability. The automobile liability policy shall include or be endorsed (amended) to state that: (1) WVWD, its directors, officials, officers, employees, agents, and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects WVWD, its directors, officials, officers, employees, agents, and volunteers and any other Additional Insured named in the Special Conditions, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self- insurance maintained by WVWD, its directors, officials, officers, employees, agents, and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way. Notwithstanding the minimum limits set forth above, any available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as additional insureds.
 - (C) <u>Workers' Compensation and Employer's Liability Coverage</u>. The insurer shall agree, using form WC 00 03 13 or the exact equivalent to waive all rights of subrogation against WVWD, its directors, officials, officers, employees, agents, and volunteers for losses paid under the terms of the insurance policy.
 - (D) <u>All Coverages</u>. Each insurance policy required by this Contract shall be endorsed to include the following provisions:

- (i) coverage shall not be suspended, voided, reduced or canceled except after thirty (30) days (10 days for nonpayment of premium) prior written notice by certified mail, return receipt requested, has been given to WVWD and all additional insureds,
- (ii) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to WVWD and any other additional insureds,
- (iii) standard separation of insureds provisions,
- (iv) no special limitations on the scope of protection afforded to WVWD, and all additional insureds,
- (v) waiver of any right of subrogation of the insurer against WVWD, its officials, officers, employees, agents, and volunteers, or any other additional insureds, or shall specifically allow Contractor or others required to provide insurance in compliance with these specifications to waive their right of recovery prior to a loss. By signing this agreement, Contractor hereby waives its own right of recovery against WVWD or any other additional insureds, and shall require similar written express waivers and insurance clauses from each of its subcontractors.
- 4. <u>Deductibles and Self-Insurance Retentions</u>. Any deductibles or self-insured retentions must be declared to and approved by WVWD. Contractor shall guarantee that, at the option of WVWD, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects WVWD, its directors, officials, officers, employees, agents, and volunteers and any other Additional Insured named in the Special Conditions; or (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims, and administrative and defense expenses.
- 5. <u>Claims Made Policies</u>. Claims made policies are not acceptable.
- 6. <u>Subcontractor Insurance Requirements</u>. Contractor shall not allow any subcontractors to commence work on any subcontract relating to the work under the Contract until Contractor has verified that the subcontractor has provided evidence to WVWD that they have secured all insurance required under this Section. If requested by Contractor, WVWD may approve different scopes or minimum limits of insurance for particular subcontractors. The Contractor and WVWD shall be named as additional insureds on all subcontractors' policies of Commercial General Liability Insurance.
- 7. <u>Acceptability of Insurers</u>. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VII, licensed to do business in California, and satisfactory to WVWD.
- 8. <u>Verification of Coverage</u>. Contractor shall furnish WVWD with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to WVWD. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by WVWD before work commences. WVWD reserves the right to require complete, certified copies of all required insurance policies, at

any time.

9. <u>Reservation of Rights</u>. WVWD reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

END OF INSURANCE REQUIREMENTS

ATTACHMENT B DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California, sections 4100 et seq., Contractor shall set forth below: (a) the name and the location of the place of business and (b) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If no subcontractor is specified, for a portion of the work, or if more than one subcontractor is specified for the same portion of Work, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that Work, and that it shall perform that portion itself.

Portion of Work	Subcontractor Name	Location of Business	CSLB License Number	DIR Registration Number

Portion of Work	Subcontractor Name	Location of Business	CSLB License Number	DIR Registration Number
me of Contractor		_		l

Name of Contractor
Signature
Signaturo
Name and Title
Name and Title
Dated

ATTACHMENT C PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See https://www.dir.ca.gov/Public-Works.html for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Contractor hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.

	Name of Contractor:
	DIR Registration Number:
Contractor fur	ther acknowledges:
1.	Contractor shall maintain a current DIR registration for the duration of the project.
2.	Contractor shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3.	Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.
Name of Cont	ractor
Signature	
Name and Titl	le
Dated	

ATTACHMENT D COST PROPOSAL

ATTACHMENT E BOND FORMS

Procurement Division CERTIFICATION

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the work to be performed by the Contractor is more particularly set forth in to Contract Documents for the Project dated, (hereinafter referred to "Contract Documents"), the terms and conditions of which are expressly incorporated herein reference; and
WHEREAS, the Contractor is required by the Contract Documents to perform the terms there and to furnish a bond for the faithful performance of the Contract Documents.
NOW, THEREFORE, we,, the undersigned Contractor and as Surety, a corporation organized at
duly authorized to transact business under the laws of the State of California, are held and firm bound unto the WVWD in the sum of

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the WVWD, its officers and agents, as stipulated in the Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Project, unless otherwise provided for in the Contract Documents, the guarantee obligation shall hold good for a period of one (1) year after the acceptance of the work by WVWD, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect WVWD from loss or damage resulting from or caused by defective materials or faulty workmanship the above obligation in penal sum thereof shall remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit WVWD 's rights or the Contractor or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees including reasonable attorneys' fees, incurred by WVWD in enforcing such obligation.

Whenever Contractor shall be, and is declared by WVWD to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at WVWD 's option:

- 1. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- 2. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and WVWD, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by WVWD under the Contract and any modification thereto, less any amount previously paid by WVWD to the Contractor and any other set offs pursuant to the Contract Documents.
- 3. Permit WVWD to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by WVWD under the Contract and any modification thereto, less any amount previously paid by WVWD to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that WVWD may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if WVWD, when declaring the Contractor in default, notifies Surety of WVWD 's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract to be performed thereunder, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of Contract. including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

[Remainder of Page Left Intentionally Blank.]

IN WITNESS WHEREOF, we have here, 20	eunto set our hands and seals this day of
	CONTRACTOR/PRINCIPAL
	Name
	Ву
	SURETY:
	By:_ Attorney-In-Fact
The rate of premium on this bond ischarges, \$(The above must be filled in by Attorney	per thousand. The total amount of premium /-In-Fact.)
THE FOLLOWING INFORMATION IS N	MANDATORY:
Any claims under this bond may be add	ressed to:
(Name and Address of Surety)	
(Name and Address of Agent or Representative for service of process in California, if different from above)	
(Telephone number of Surety and Agent or Representative for service of process in California)	

	Notary A	Acknowledgment
A notary public or o verifies only the ider document to which the truthfulness, accuracy	ther officer completing this ntity of the individual who s nis certificate is attached, ar y, or validity of that documen	certificate signed the not the t.
STATE OF CALIFORNI		
On	, 20, before me,	, Notary Public, personally
appeared	Nam	, Notary Public, personally ne And Title Of Officer (e.g. "Jane Doe, Notary Public"), who proved to me on the basis of satisfactory
evidence to be the per me that he/she/they	son(s) whose name(s) is/ executed the same in his	are subscribed to the within instrument and acknowledged to s/her/their authorized capacity(ies), and that by his/her/their the entity upon behalf of which the person(s) acted, executed
I certify under PENALT is true and correct.	Y OF PERJURY under th	ne laws of the State of California that the foregoing paragraph
		WITNESS my hand and official seal.
Place Notary Sea	I Above	Signature of Notary Public OPTIONAL
Though the info and c	mation below is not required by ould prevent fraudulent remova	r law, it may prove valuable to persons relying on the document I and reattachment of this form to another document.
	AIMED BY SIGNER	DESCRIPTION OF ATTACHED DOCUMENT
□ Individual □ Corporate Officer		
	Title(s)	Title or Type of Document
☐ Partner(s)	☐ Limited ☐ General	Number of Pages
☐ Attorney-In-Fact ☐ Trustee(s)	☐ General	
☐ Guardian/Conservator ☐ Other: Signer is representing: Name Of Person(s) Or Entity(ie	s)	Date of Document
		Signer(s) Other Than Named Above

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

END OF PERFORMANCE BOND

PAYMENT BOND (LABOR AND MATERIALS)

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the West Valley Water District (hereinafter referred to as "WVWD") has awarded to, (hereinafter referred to as the "Contractor") an agreement for
(hereinafter referred to as the "Project").
WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated, (hereinafter referred to as "Contract Documents"), the terms and conditions of which are expressly incorporated herein by reference; and
WHEREAS, Principal is required to furnish a bond in connection with the contract described above; providing that if Principal or any of its Subcontractors shall fail to pay for any materials provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted withheld, and paid over to the Employment Development Department from the wages of employees of Principal and its Subcontractors with respect to such work or labor the Surety or this bond will pay for the same to the extent hereinafter set forth.
NOW THEREFORE, we, the Principal andas Surety, are held and firmly bound unto WVWD in the penal sum ofDollars (\$) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in section 9100 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by WVWD in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement

pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between WVWD and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in section 9100 of the Civil Code, and has not been paid the full amount of his claim.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract to be performed thereunder, shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of Contract. including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

all purposes be deemed an original then	cal counterparts of this instrument, each of which shall for reof, have been duly executed by the Principal and Surety
above named, on the day of	the name and
	being hereto affixed and these presents duly signed by its
undersigned representative pursuant to	authority of its governing body.
(0	
(Corporate Seal of Principal,	D: : 1/D N (0 ())
if corporation)	Principal (Proper Name of Contractor)
	By
	(Signature of Contractor)
	,
(Seel of Surety)	
(Seal of Surety)	Curaty
	Surety
	Ву
	Attorney in Fact

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached. A Power-of-Attorney authorizing the person signing on behalf of the Surety to do so must be attached hereto.

		Notary Ackno	wledgment
A notary public or overifies only the ide document to which truthfulness, accurac	his certifica	er completing this certificate e individual who signed the ate is attached, and not the by of that document.	
STATE OF CALIFORN COUNTY OF			
On	, 20	_, before me,	, Notary Public, personally
appeared		Name And Title Of	, Notary Public, personally Officer (e.g. "Jane Doe, Notary Public") _, who proved to me on the basis of satisfactory
me that he/she/they	rson(s) wh executed	nose name(s) is/are subs the same in his/her/the	scribed to the within instrument and acknowledged to r authorized capacity(ies), and that by his/her/their upon behalf of which the person(s) acted, executed
I certify under PENAL is true and correct.	TY OF PE	RJURY under the laws o	of the State of California that the foregoing paragraph
		WITI	NESS my hand and official seal.
Place Notary Se	al Above	Signa	ure of Notary Public
		OPTIO	NAL
			ay prove valuable to persons relying on the document achment of this form to another document.
CAPACITY CL	AIMED BY	SIGNER	DESCRIPTION OF ATTACHED DOCUMENT
□ Individual □ Corporate Officer			
	Title(s)		Title or Type of Document
□ Partner(s)	_	nited neral	Number of Pages
☐ Attorney-In-Fact ☐ Trustee(s)	L 05.	norai	
☐ Guardian/Conservator ☐ Other: Signer is representing: Name Of Person(s) Or Entity(ie			Date of Document
			Signar(s) Other Than Named Above

Signatures of those signing for the Contractor and Surety must be notarized and evidence of corporate authority attached.

END OF PAYMENT (LABOR AND MATERIALS) BONDS



STAFF REPORT

DATE: October 21, 2025

TO: Engineering, Operations and Planning Committee

FROM: Joanne Chan, Director of Operations

SUBJECT: Oliver P. Roemer Water Filtration Facility Filter Media Replacement and Coating Project

STRATEGIC GOAL:

Strategic Goal 1 - Manage and Deliver a Safe, Reliable, and Sustainable Water Supply B. Assess, Repair, Replace, Upgrade Aging Infrastructure

MEETING HISTORY:

N/A

BACKGROUND:

The Oliver P. Roemer Water Treatment (Roemer) Plant has nine identical package treatment units called Trident Filters. Each Trident Filter has a design flow of 2.4 million gallons per day and consists of an upflow contact-clarifier followed by a multi-media gravity filter. The adsorption clarification process has been rated as equivalent to the flocculation-sedimentation process. Water flows up through about four feet of proprietary plastic beads, producing flocculation, settling, and removal of some suspended solids. From there, the water overflows into the multi-media filters. Beneath each filter is an underdrain system that takes the filtered water to the contact basin for disinfection and then to the distribution system.

On top of the underdrain is a multi-media filter bed. The bed contains three layers of media consisting of anthracite coal, sand, and garnet, with a supporting layer of gravel at the bottom. These are the media of choice because of the differences in size and density. The larger, lighter anthracite coal is on top and the heavier, smaller garnet remains on the bottom. The filter media arrangement allows the largest dirt particles to be removed near the top of the media bed with the smaller dirt particles being retained deeper and deeper into the media. This allows the entire bed to act as a filter allowing much longer filter run times between backwash and more efficient particulate removal.

The interior coating, clarifier plastic media, and multi-media filter bed in Filter No. 4 are over 10 years old and have met their life expectancy. The filter is not equipped with an air scour system like the new filters being constructed as part of the plant expansion project. A new air scour system will also be installed in the filter to work above the filter gravel pack which would give the media a thorough wash during backwashes.

The goal is to have the filter rehabilitated during winter when the water demand is at its lowest since the filter needs to be taken out of service. A large vacuum truck is used to take out all the old materials and expose the underdrain system for inspection and any repairs. The entire filter is then power washed, sandblasted and coated in preparation for installation of a new air scour system and new media. The coating material is NSF 600 approved for potable water.

DISCUSSION:

On September 19, 2025, a Request for Bids (RFB) was issued and publicly advertised on PlanetBids. The RFB included removal, packaging and disposal of existing media, removal of existing interior coating with abrasive blast methods, recoat with approved epoxy coating, and supply and installation of a new air scour system and new media. Attached as **Exhibit A** is the project information and scope of work. Two (2) firms – ERS Industrial Services Inc. and GSE Construction Company Inc. – submitted a bids to provide the specified services.

The two bids were as follows:

ERS Industrial Services Inc.	GSE Construction Company Inc.	
\$563,470.00	\$788,600.00	

Based on information received from ERS, ERS is a responsible responsive bidder for this project. ERS had completed multiple filter rehabilitation projects successfully at the Roemer plant in the past.

FISCAL IMPACT:

This item is included in the Fiscal Year 2025/26 Capital Budget and will be funded from project no. W26016 titled "Roemer Filter No. 4 Rehabilitation" with a budget of \$710,000.00.

REQUESTED ACTION:

Forward a recommendation to the Board of Directors to approve an agreement with ERS Industrial Services Inc. in the amount of \$563,470.00 for the Oliver P. Roemer Filter Media Replacement and Coating project.

Attachments

Exhibit A - Project Information and Scope of Work.pdf

EXHIBIT A



Water Treatment Facility Filter Media Replacement and Coating Project

PROJECT INFORMATION:

The West Valley Water District ("District") is seeking the services of a qualified, experienced contractor to furnish all labor, material and equipment, perform and complete all work required for the Water Treatment Facility Filter Media Replacement and Coating Project.

PROJECT DESCRIPTION

The work to be performed shall consist of furnishing all tools, equipment, materials, labor, transportation services, fuel, communications, and performing all work and related operations required for the fulfillment of this project in strict accordance with these specifications. The work shall be completed, and all work, materials, and services not expressly outlined or shown in these specifications which may be necessary for the complete and proper installation and/or operation of the work shall be provided by the contractor as indicated and at no increase in cost to the District. The contractor is expected to provide all materials and services that will fulfill or exceed the requirements and conditions as set forth in these specifications.

This is a turn-key project. One (1) Trident Filter, No. 4, needs recoating and new filter and clarifier media.

The service includes removal, packaging and disposal of existing filter and clarifier media and installation of new media for one (1) Trident Filter, per design. Contractor is expected to repair or replace existing underdrains as needed.

The service includes the following recommended Sherwin Williams Steel preparation and coating system: SSPC-SP10 Near-White Blast Cleaning, apply finish coat – Sherwin Williams Sherplate PW Epoxy @ 30-45 mils DFT for one (1) Trident Filter. The coating material must be NSF 600 approved for potable water and meet new AWWA D102 standards.

SCOPE OF WORK

Although the District is attempting to identify the limits and services required, this should not unnecessarily limit the firm in the development of a scope it believes is necessary to meet the District's goals and objectives.

This section covers removing and disposing existing media and furnishing and installing support gravel and multimedia filter media for the 1 filter at the Oliver P. Roemer Water Treatment Plant. Filter media shall be furnished and installed in the filter as indicated on the drawings, as specified, and as required to provide a properly operating filer installation acceptable to the District.

If a vacuum truck is used to remove filter media, it must be parked outside the filter plant and the vacuum hose or pipe must be able to go up the stairs and down to the floor of the filter bed—100 feet from the filter to the access door.

Removal of existing interior coating and recoat work on the Oliver P. Roemer Trident Filter No. 5. The coating material must be NSF 600 approved for potable water and meet new AWWA D102 and AWWA C210 standards. The District recommends SherPlate PW Epoxy. Full containment, environmental control, and protection of underdrains throughout the coatings process.

Fabricate and install 304 or 316 stainless-steel 8-inch diameter air scour grid system with diffusers by WESTECH or approved equivalent in (1) Filter Bay for future use. Air scour should deliver 2-3.4 scfm per square foot @ 5-7 psi max uniformly throughout the filter including the spool piece must be stainless steel and welded thru tanks prior to coating and install the air grid to the existing air distribution system. The system shall be installed and tested by the firm and approved by the District.

Filter media shall not be installed until testing, by others or District staff, of the filter box for water tightness, repair of leaks, and concrete damp proofing inside the filter box has been completed.

The installation of media shall be under the direct supervision and control of a competent and experienced field representative employed by the media supplier and acceptable to the District.

The filter is a tri-media gravity filter. It is 28 by 10 by 10 feet steel structures. The launder is 40 inches above the media. The filter includes an underdrain system, filter media, and the following piping: inlet and outlet pipes, backwash, surface wash, and wash water disposal piping. Filter media consists of anthracite coal, sand, and garnet over a layer of support gravel. The following table summarizes the design parameters of the filter:

Filtration Rate: 6 gpm/Sq. Ft. Maximum Filter Underdrain – Pipe: Schedule 80 PVC

Material	Size Range	Specific	Hardness	Specified
	(mm)	Gravity	(Mohs scale)	(Inches)
Filter Profile Dual	1.0-3.0	1.5-1.8	3	18
Media Anthracite				
Silica Sand	0.45-0.50	2.6	7	9
Garnet	0.20-0.40	3.1-4.4	6.5-7.5	6
Media Support	1.0-50	2.6	7	12
Gravel				

Supply and install new Clarifier plastic media 50/50 Mix, new air nozzles and new gaskets.

Reinstall Filter internal piping.

Placement shall comply with AWWA B100, except as modified herein. Support gravel or media which becomes dirty or contaminated shall be removed and replaced with clean material.

The bottom layer shall be carefully placed to avoid damaged to the nozzle underdrain system. Each layer shall be completed before starting the layer above. For materials less than ½ inch in size, workmen shall not stand or walk directly on the media, but on boards which will sustain their weight without displacing the media.

Each layer of filter media shall be deposited by means of a tremie system to a uniform thickness, with the top surface screeded or otherwise brought to a true level plane. Care shall be taken in depositing each layer not to damage the quality or integrity of the media or to disturb the level surface of the layer beneath. The correct thickness of each layer shall be determined by screeding each layer to a continuous level line on the side of the filter box. The layer shall then be leveled with a water surface maintained at the appropriate elevation mark.

INTERRUPTION OF SERVICES

Interruptions to any services for the purposes of making or breaking a connection shall be made only after consulting with the District and shall be at such time and of such duration as may be directed.

SEQUENCE OF CONSTRUCTION OPERATIONS

Before starting construction operations, Contractor shall confer with the District arrange the sequence of the construction operations.

HOURS OF WORK

Contractor shall submit an approved work schedule prior to starting related work.

EVALUATION PROCESS AND SELECTION CRITERIA

The District's evaluation and selection process is based upon meeting all requirements listed above. to the District. The district reserves the right to award project to the lowest responsible responsive bidder.

ATTACHMENTS

Attachment A – Trident Water Systems Filter Media Design – Model

Attachment B – Air scour grid system Design - Model

WHEN BULK SHIPMENT IS USED, FILTER MEDIA AND GRAVEL MUST BE PROTECTED FROM THE WEATHER AND COVERED TO PREVENT WIND-BLOWN LOSS. FILTER MEDIA AND GRAVEL BAGS MUST BE PROTECTED FROM THE WEATHER AND TRIDENT WATER SYSTEMS FILTER MEDIA DESIGN — MODEL 1/2TR-840A DURING MEDIA PLACEMENT, APPROXIMATELY TWO BACKWASH AND SKIMMING OPERATIONS WILL BE REQUIRED. EACH BACKWASH WILL BE ABOUT 10 MINUTES DURATION. ALL LAYERS OF MEDIA AND GRAVEL TO BE LEVEL IN ACCORDANCE WITH CPC MEDIA AND GRAVEL PLACEMENT SPECIFICATIONS. PLACEMENT TOLERANCE: THE FOLLOWING TOLERANCE SHALL APPLY TO MEDIA AND GRAVEL PLACEMENT. $1-1/2\text{LAYERS} \pm 1/4\text{T}$ $3\text{LAYERS} \pm 1/2\text{T}$ $9\text{REFRS} \pm 1/2\text{T}$ 왕 FILTER MEDIA AND GRAVEL PLACEMENT MUST BE DONE UNDER CPC TECHNICAL DIRECTION AFTER ALL ELECTRICAL, HYDRAULIC AND CONTROL SYSTEMS ARE INSTALLED AND/OR REPAIRED AND OPERABLE PRIOR TO ARRIVAL OF TECHNICAL DIRECTOR. THIS RATE FOR EACKWASH DURING MEDIA PLACEMENT AND DOES NOT INCLUDE SURFACE WASH FLOW RATE OF APPROXIMATELY .75 TO 2.0 GPM/SQ.FT. TOTAL RISE RATE WITH SURFACE WASH ON AFTER MEDIA PLACEMENT APPROXIMATELY 27 IN./MIN. 441 MAIN STREET STURBRIDGE, MA 01562 TEL: 1-800-636-2674 100,000 GAL./TANK FILTER GUARANTEE REQUIRES CPC TECHNICAL DIRECTION DURING MEDIA PLACEMENT. STACKED NOT MORE THAN 5(FIVE) HIGH TO PRECLUDE BREAKAGE, B.O.M. QUANTITIES ARE FOR ONE TANK ONLY GPM/FT² 4200 GPM 1/2TR-840A L4C-1A 56 12 5 **1811158** finished gravel depth Finished filter bed VOLUME OF UNDERDRAIN WITHIN THE 1 1/2"x3/4" MS-1 LAYER (FT) BACKWASH FLOW AT 60° F BED AREA (SQ. FT. EACH FILTER) BACKWASH RATE AT 60°F. (SEE NOTE 5) VOLUME OF UNDERDRAIN HEADER WITHIN THE CONCRETE FILL (CU.FT.) MEDIA PLACEMENT WATER QUANTITY REQ'D AT 60' F UNIT DESIGNATION B.O.M. NUMBER DATE JUNE 84 DATE JUNE 84 NOTES: PLE: 140-1 DESIGNER RGS CHECKER EG MANAGER 1 ₹ N S 9 **Q** PIPE LATERAL UNDERDRAIN ₽. WNB Ş S SURFACE WASH 03/03/04 7/16/97 1-87 **Q** ROTARY DATE CHANGED MS-21 & MS-22 MATERIAL FROM ILMENITE TO GARNET. CONCRETE FILL BY OTHERS 560 CU. FT. APPROX. 1 REVD VOL.1 1/2 X 3/4, ADDED WATER QTY ٧ 1 1/2"x3/4"SILICA GRAVEL -1 3/8"x3/16"SILICA GRAVEL REPLACED OLD BORDER. 3/4"x3/8"SILICA GRAVEL -22 HIGH DENSITY GRAVEL -21 HIGH DENSITY SAND -18 SILICA SAND REV ۵. 4. -4 COAL Ą ŠΧ MS MS "5 "5 "5" 3.°3 .9-,1 "Σ 3.-2 1/5" 2,-8 1/5"

BAR = 1" AT PLOT SCALE

STD: 2-0600-11X17B

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- MENTS AND SHOULD BE PARTICULARLY NOTED. 🖈 A STAR DENOTES VARIANCE FROM CONTRACT DOCUM
- CONTRACTOR TO VERIFY OR SUPPLY ALL DIMENSIONS SHOWN IN CLOUDS.
- POSITION AND INTERFACE BETWEEN NEW OR EXISTING CONCRETE, EQUIPMENT, PLANT STRUCTURE, PROVIDED FOR CONFIRMATION BY OTHERS OF OTHER SYSTEMS AND APPURTENANCES AS SHOWN ON THE GENERAL ARRANGEMENT DRAWINGS DIMENSIONS, LOADS, AND OTHER INFORMATION ARE ო'⊴
- O BE USED FOR CONSTRUCTION OR INSTALLATION PURPOSES UNTIL CUSTOMER APPROVAL HAS BEEN ISSUED. WESTECH WILL NOT PROCEED WITH RECEIVED FABRICATION OR DELIVERY UNTIL SUCH APPROVAL IS SUBMITTED DRAWINGS AND INFORMATION ARE NOT 4.
- REINFORCEMENT FOR ANCHOR BOLTS, UNLESS SPECIFICALLY INDICATED ÓTHERWISE. THE SUITABILITY OF NEW OR EXISTING CONCRETE, EQUIPMENT, TANKAGE, OR STRUCTURES TO WITHSTAND THE DESIGN LOADS AT THE WESTECH IS NOT RESPONSIBLE FOR NEW OR EXISTING CONCRETE DESIGN, INCLUDING NECESSARY છે.

INED, CONFIRMED OR OTHERWISE PROVIDED BY OTHERS.

OR LOSS RESULTING FROM IMPROPER USE OF WESTECH IS NOT RESPONSIBLE FOR DAMAGE, INJURY THIS EQUIPMENT. ပ

INTERFACE OF WESTECH'S EQUIPMENT IS TO BE DEF

- MODIFICATIONS, ADDITIONS OR CORRECTIONS TO THE APPROVED EQUIPMENT WILL NOT BE ACCEPTED BY WESTECH, UNLESS A CHANGE ORDER IS ISSUED AND APPROVED. ۲.
- ROTATING EQUIPMENT IS DESIGNED TO OPERATE ONLY IN THE INDICATED DIRECTION. WESTECH IS NOT POSITE DIRECTION RESPONSIBLE FOR DAMAGE IF OPERATED IN THE OPI œ
- SUPPORTS OR FITTINGS, WALL BRACKETS, ELECTRICAL WIRING, CONDUIT, ELECTRICAL EQUIPMENT, ERECTION, INSTALLATION, FIELD ASSEMBLY, SHIMMING MATERIALS, CAULK OR MASTIC, FIELD PAINTING OR PAINT, FIELD WELDING OR WELD ROD, WATER FOR TESTING, GREASE, ANTI-SEIZE OR LUBRICATING OIL, WESTECH DOES NOT FURNISH CONCRETE, GROUT, CONCRETE REINFORCING, PIPING, VALVES, PIPE UNLESS SPECIFICALLY NOTED <u>ග</u>
- FIELD SURFACE PREPARATION, FIELD PAINT, TOUCH-UP, AND REPAIR TO SHOP PAINTED SURFACES ARE NOT BY WESTECH. RESPONSIBILITY FOR COMPATIBILITY OF SHOP AND FIELD APPLIED COATINGS IS BY OTHERS. EPARED OR PAINTED ITEMS ONCE THE ITEMS LEAVE THE SHOP. CUSTOMER SHOP INSPECTION OF PAINTED ITEMS IS WELCOME TO VERIFY APPLICATION. ALL 10. SHOP SURFACE PREPARATION AND SHOP PAINTING OF PRIME COATS ARE DESIGNED TO PROVIDE ONLY PER THE COATING MANUFACTURER'S DATA SHEET WESTECH DOES NOT GUARANTEE CONDITION OF PRE A MINIMAL PROTECTION FROM TIME OF APPLICATION
- CLEANING GRADE SHEET AND FINISH LEVEL SHEET ARRANGEMENT DRAWINGS AND WILL INCLUDE PREPARATION AND SHOP/FIELD PAINT DOCUMENTS DEFINING WESTECH SUPPLIED SURFACE SPECIFICATIONS ARE SUBMITTED WITH THE GENERAL COATING DATA SHEET(S) AND/OR A STAINLESS-STEEI [
- OWN ON JOB-SPECIFIC DRAWINGS AND SHALL WHERE APPLICABLE, ANCHOR BOLT DETAILS ARE SHOWN ON JOB-S CONFORM TO ONE OR MORE OF THE FOLLOWING SPECIFICATIONS: 7
- CARBON STEEL HEADED OR ALL-THREAD ROD ASTM F1554, GRADE 36, GRADE 55, OR GRADE 105
 - **ASTM F593, ASTM A193** STAINLESS STEEL HEADED OR ALL-THREAD ROD -
- ADHESIVE ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM E1512 AND SHALL HAVE A PUBLISHED ICC/ES REPORT
- WEDGE ANCHORS SHALL HAVE A PUBLISHED ICC/ES REPORT.
- IFIED ON JOB-SPECIFIC GENERAL ARRANGEMENT 13. MATERIALS AND COATINGS OF FASTENERS ARE IDENTIFIED ON JOB-SPECIFIC GENERAL ARRANGEN DRAWINGS. BOLTS SHALL CONFORM TO ONE OR MORE OF THE FOLLOWING SPECIFICATIONS WITH DIMENSIONS PER ASME B18.2.1 AND B18.2.2:
- A490; ASTM A307 GRADE A CARBON STEEL - ASTM F3125, GRADE A325, GRADE

THE FOLLOWING DEFINES THE ACCEPTABLE MATERIALS USED FOR WESTECH SUPPLIED EQUIPMENT AS SPECIFIED AND SHOWN ON THE GENERAL ARRANGEMENT DRAWINGS. ANY MATERIAL OR ITEMS NOT INCLUDED HERE SHALL BE CLEARLY SPECIFIED ON THE GENERAL ARRANGEMENT DRAWINGS. 4.

CARBON STEEL SHALL MEET THE FOLLOWING SPECIFICATIONS AND REQUIREMENTS: Ä

- STEEL SHAPES W, WT ASTM A992/A992M
- STEEL SHAPES M, MT, S, ST, C, MC, L ASTM A36/A36M
- STEEL PLATES AND BARS ASTM A36/A36M; A572/A572M GRADE 50, A529/A529M

 - STEEL SHAPE HP ASTM A572/A572M GRADE 50 STEEL PIPE ASTM A53/A53M GRADE B, ASTM 106/A106M, API 5L
- HOLLOW STRUCTURAL SECTIONS (HSS), ROUND, SQUARE, RECTANGULAR ASTM A500/A500M GRADE C; A1085/A1085M

- SHEETS A1011/A1011M PIPE FITTINGS ASTM A234/A234M; ASME B16.11 ALL WELDING SHALL CONFORM TO THE LATEST AWS D1.1 CODE OR ASME BPVC SECTION
- ESS ALL SUBMERGED STRUCTURAL STEEL MEMBERS SHALL HAVE A MINIMUM 1/4" THICKNESS UNL NOTED OTHERWISE.
 - SOME SHAPES MAY BE FORMED BY BENDING AND/OR WELDING. 🏝

STAINLESS STEEL SHALL MEET THE FOLLOWING SPECIFICATIONS AND REQUIREMENTS.

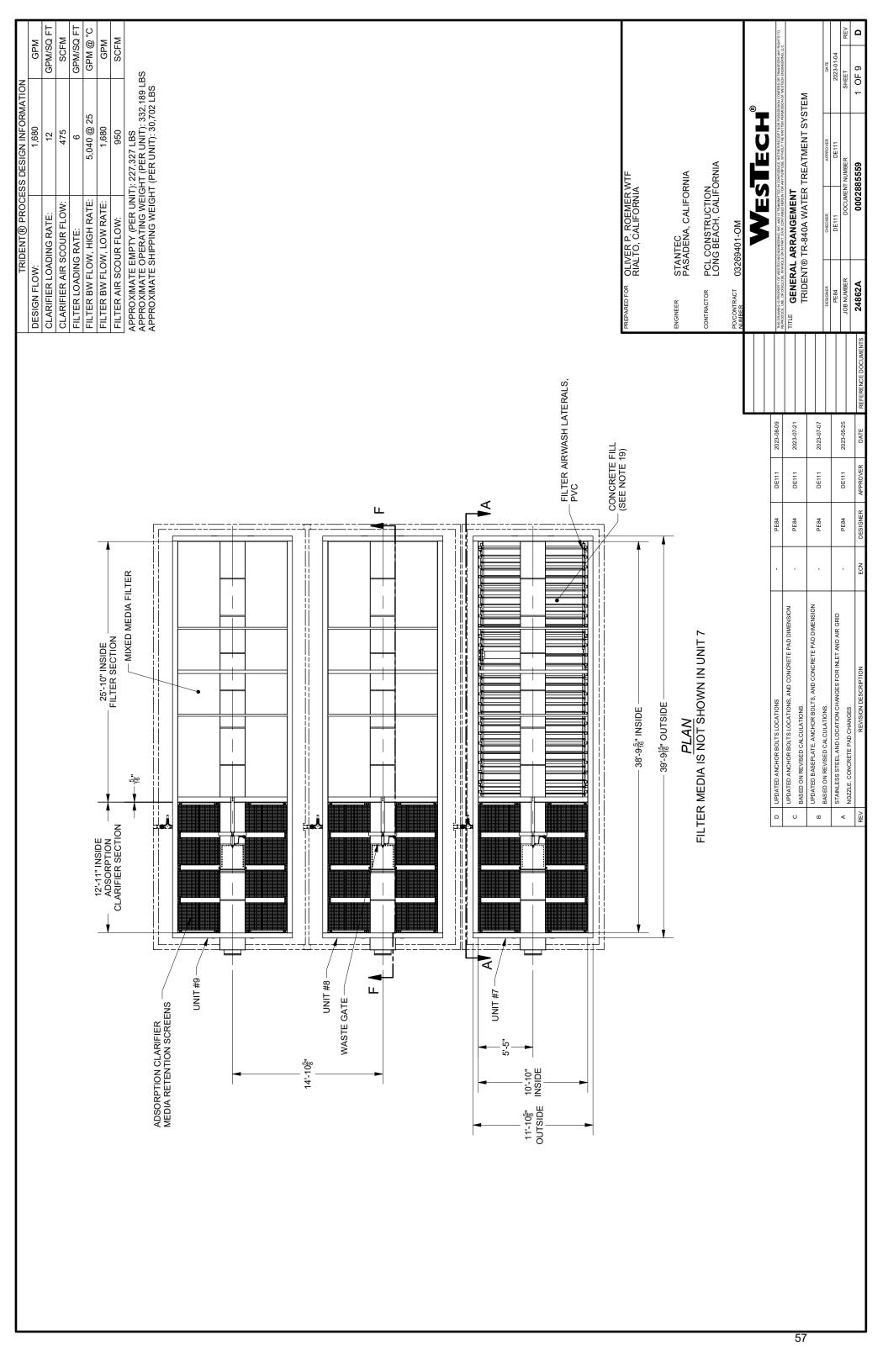
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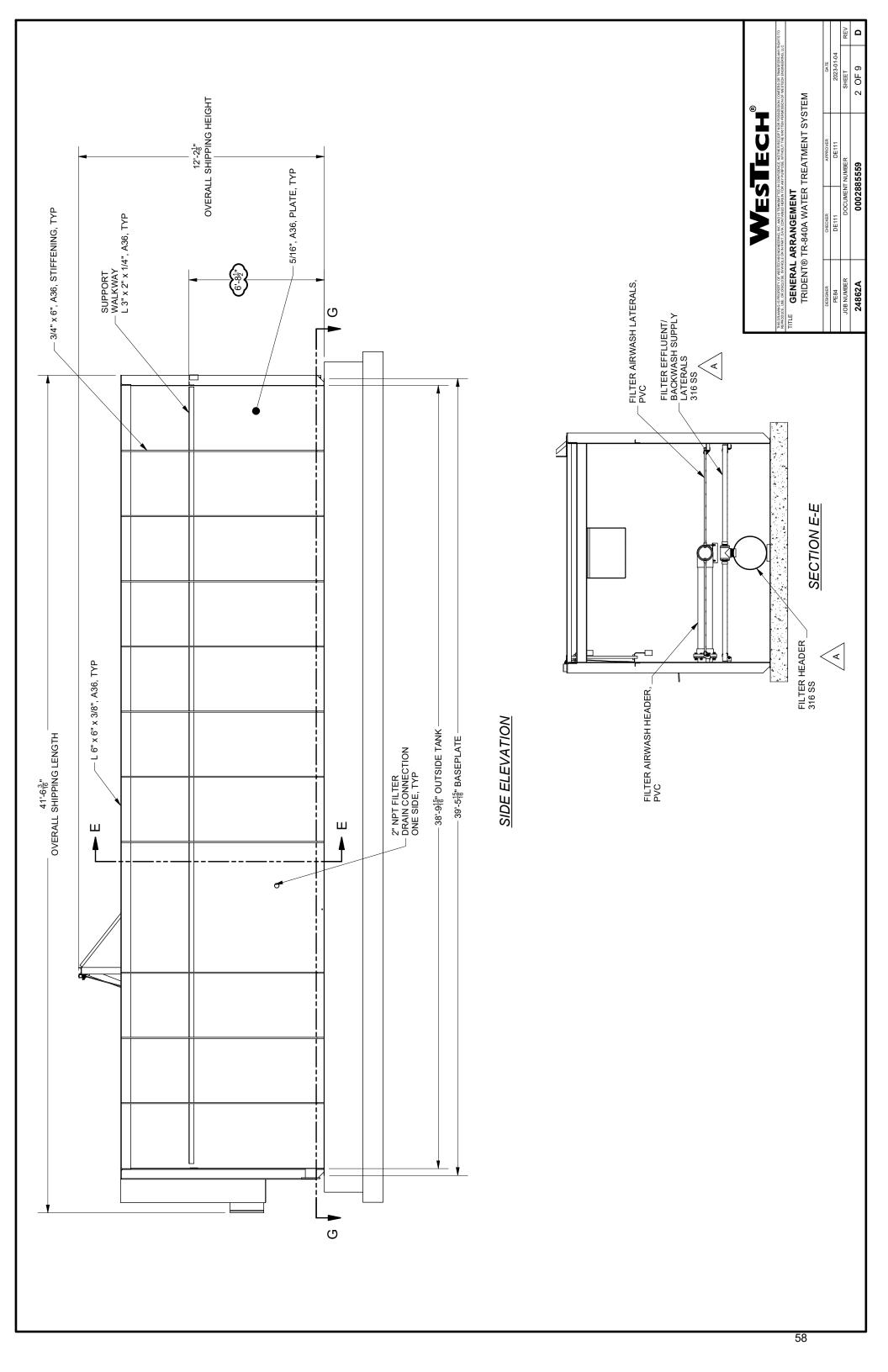
- AUSTENITIC BARS, ROUND AND SQUARES, AND HOT ROLLED EXTRUDED SHAPES SUCH AS ANGLES, TEES,
 - AND CHANNELS ASTM A276; ASTM A484/A484M; ASTM A564/A564M AUSTENITIC LASER-FUSED BARS, PLATES, ANGLES, TEES, CHANNELS, AND W SHAPES ASTM A1069/A1069M
 - AUSTENITIC PLATES, SHEETS, STRIPS ASTM A240/A240M; ASTM A480/A480M
 - AUSTENITIC PIPES ASTM A312/A312M
- AUSTENITIC HOLLOW STRUCTURAL SHAPES (HSS), ROUND, SQUARE, RECTANGULAR ASTM A554 PIPE FITTINGS ASTM A182; ASME SA 182; ASME B16.11 DUPLEX PLATES, SHEETS, STRIPS ASTM A240/A240M; ASTM A480/A480M DUPLEX PIPES ASTM A790/A790M DUPLEX PIPES ASTM A790/A790M DUPLEX HOLLOW STRUCTURAL SHAPES MADE FROM PLATE

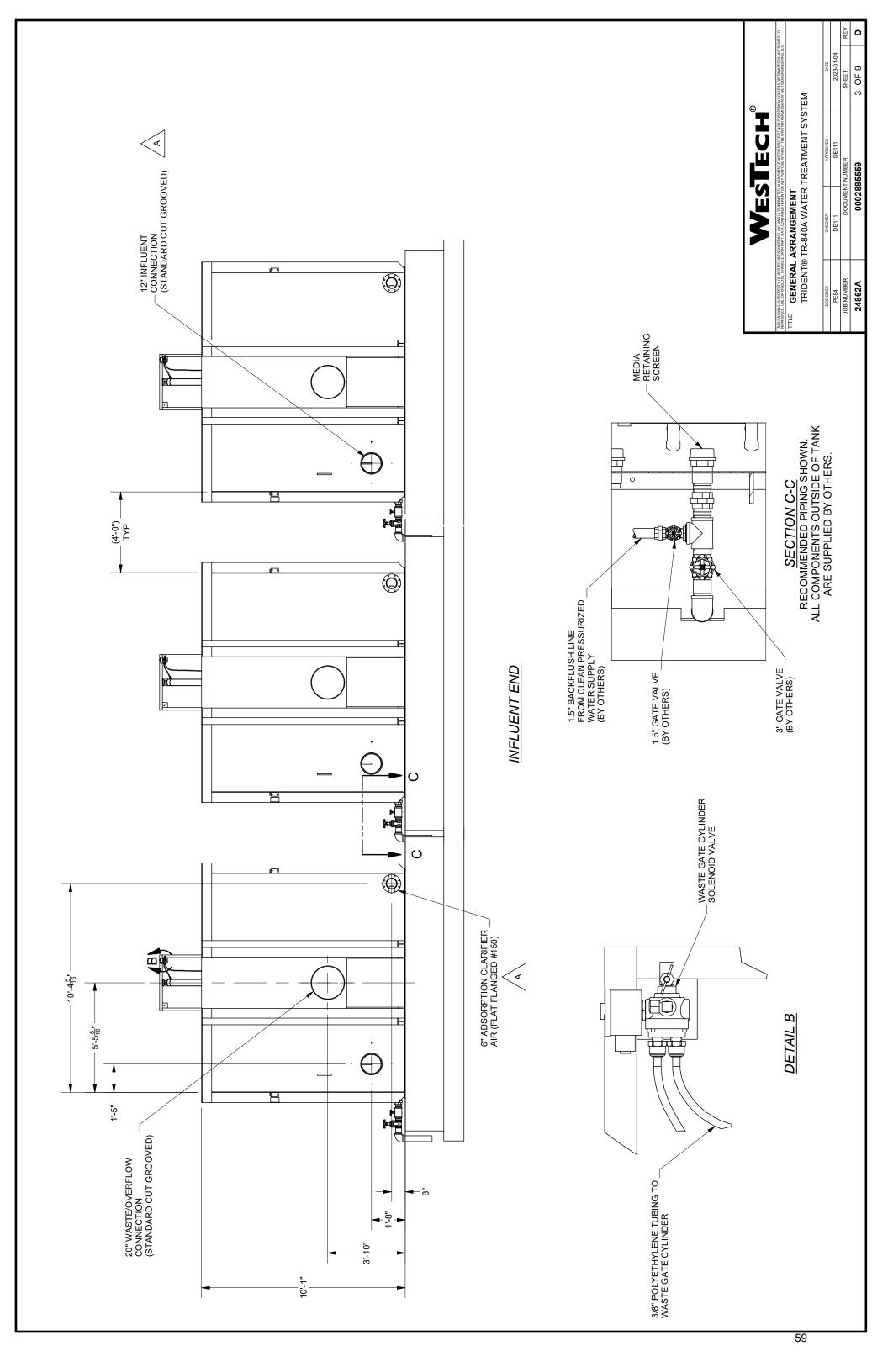
- ALL WELDING SHALL CONFORM TO THE LATEST AWS D1.6 CODE OR ASME BPVC SECTION IX. SOME SHAPES MAY BE FORMED BY BENDING AND/OR WELDING.

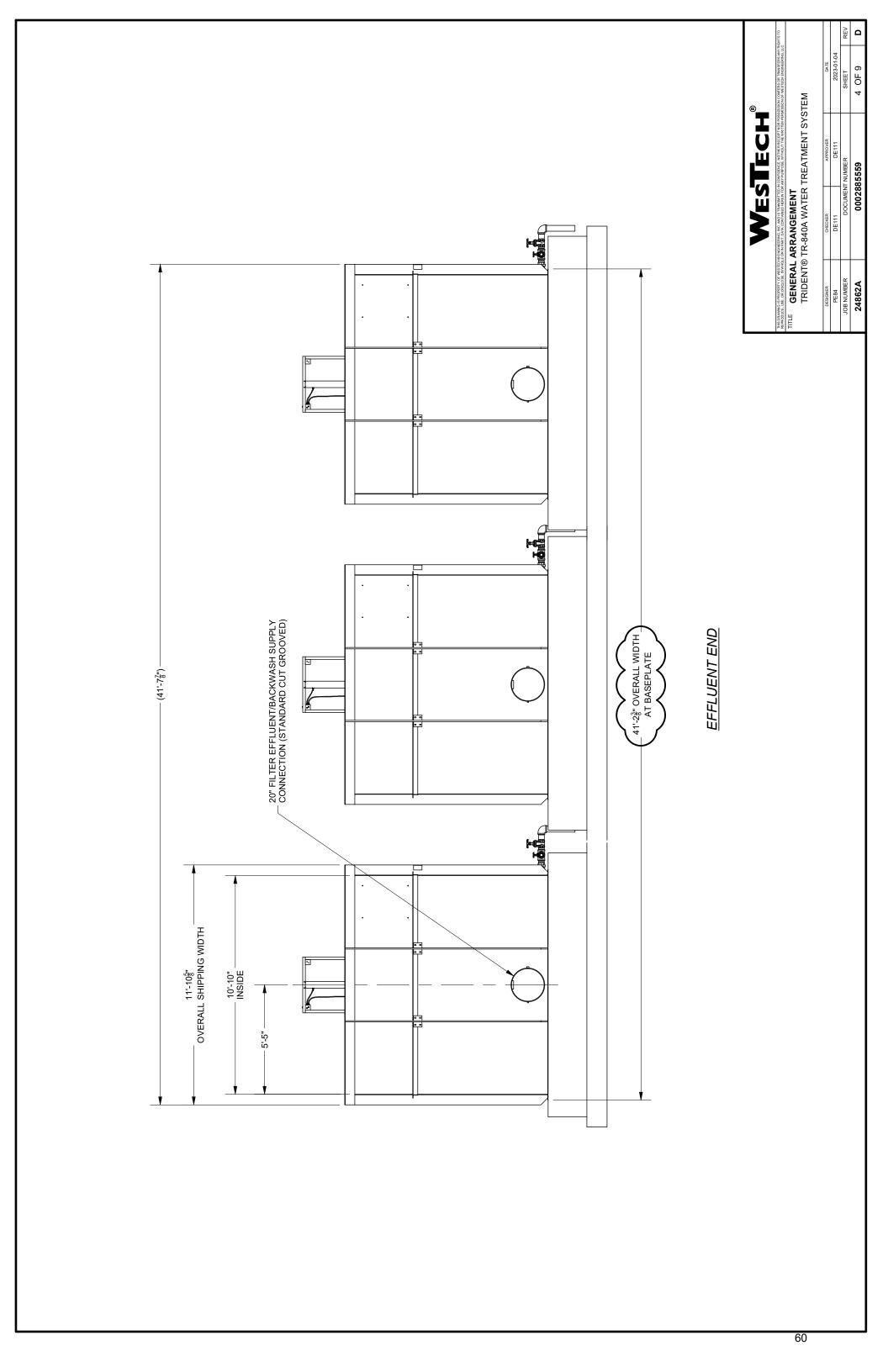
ALUMINUM SHALL MEET THE FOLLOWING SPECIFICATIONS AND REQUIREMENTS: ပ

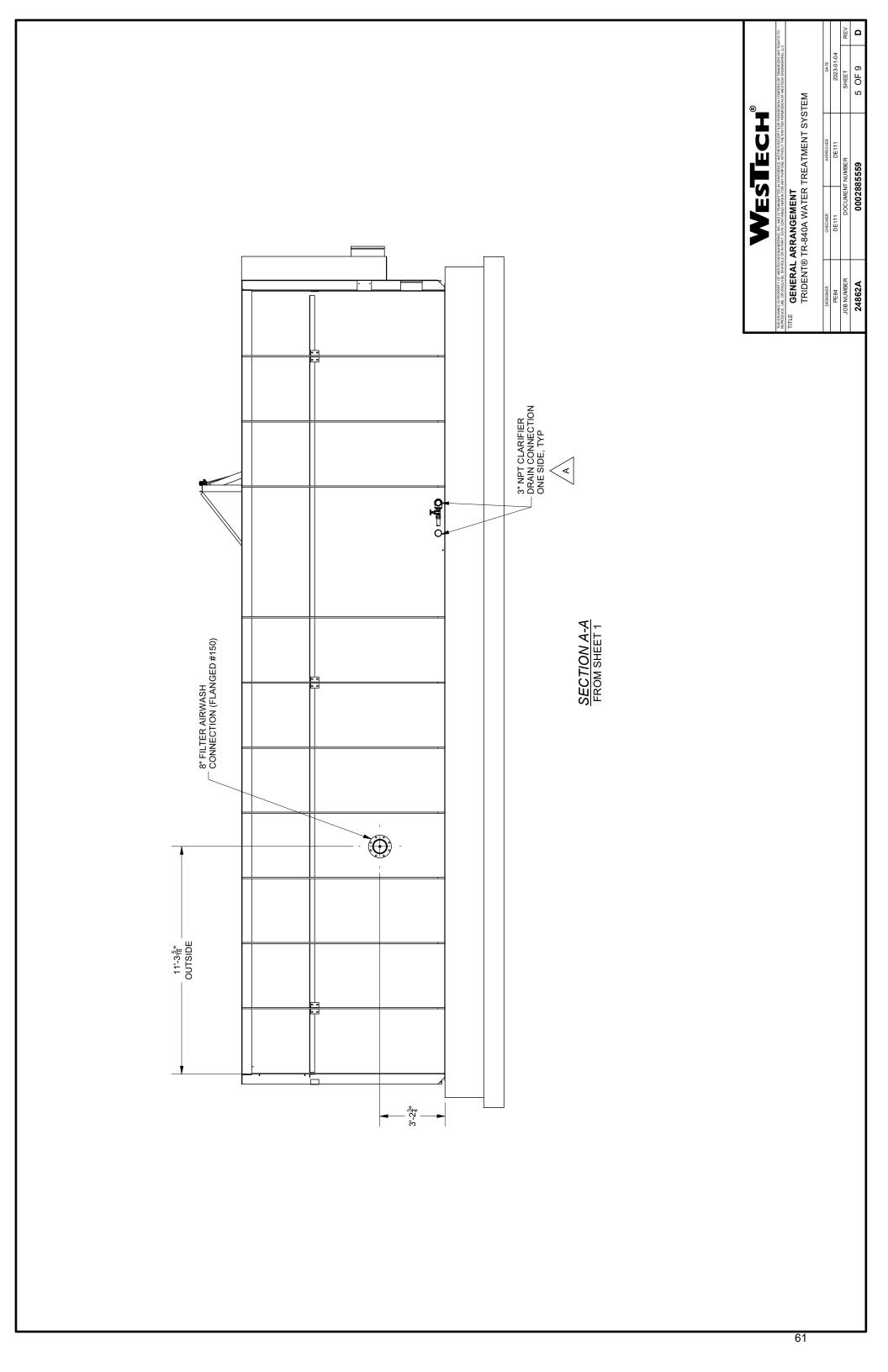
- EXTRUDED BARS, RODS, WIRE, STRUCTURAL PROFILES AND TUBES ASTM B221/B221M
 - STANDARD STRUCTURAL PROFILES ASTM B308/B308M (FOR ALLOY 6061-T6 ONLY) PLATE AND SHEET ASTM B209/B209M DRAWN SEAMLESS TUBE ASTM B210/B210M; ASTM B483/B483M
- EXTRUDED SEAMLESS TUBE AND PIPE ASTM B241/B241M; B429/B429M $ilde{ riangle}$ PIPE FITTINGS ASTM B361
- ALL WELDING SHALL CONFORM TO THE LATEST AWS D1.2 CODE.
 - SOME SHAPES MAY BE FORMED BY BENDING AND/OR WELDING.
- **TANK MATERIALS** SHALL CONFORM TO THE SPECIFICATIONS IN API 650 OR AWWA D100 AS NOTED ON THE GENERAL ARRANGEMENT DRAWINGS. SPECIFIED MATERIALS ARE SHOWN ON THE GENERAL ARRANGEMENT DRAWINGS. ALL WELDING SHALL CONFORM TO THE ASME BPVC SECTION IX. ο.
- E. ASME STAMPED PRESSURE VESSELS SHALL CONFORM TO ASME BPVC SECTION VIII OR SECTION X (FOR FRP TANKS), THE DESIGN CALCULATIONS AND THE GENERAL ARRANGEMENT DRAWINGS.
- /\eqrigin 15. ITEMS SHOWN, NOTED OR DESCRIBED ON THE GENERAL ARRANGEMENT DRAWINGS SUPERSEDE ANY CONFLICTING ITEMS WITHIN THESE NOTES.

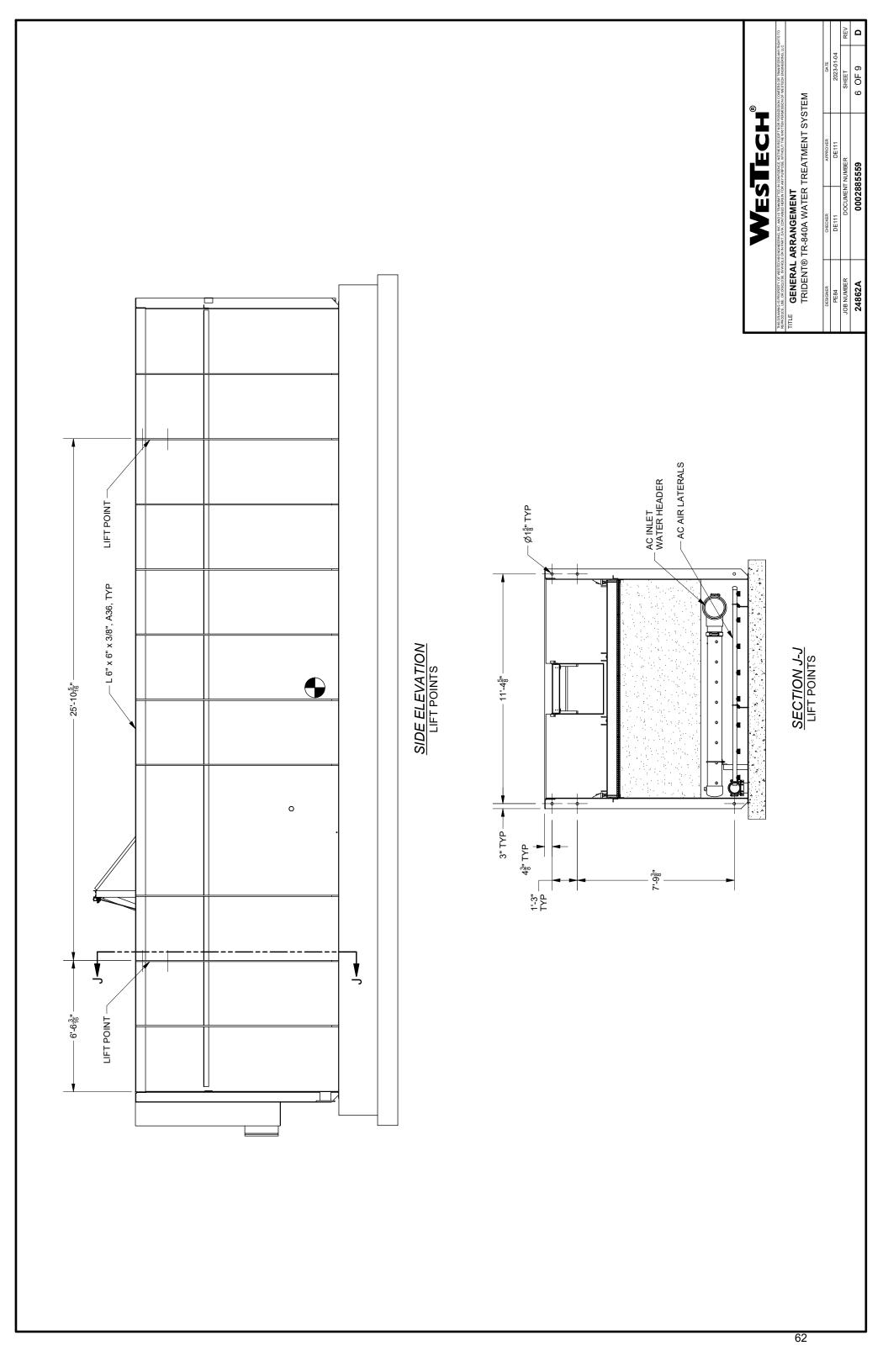


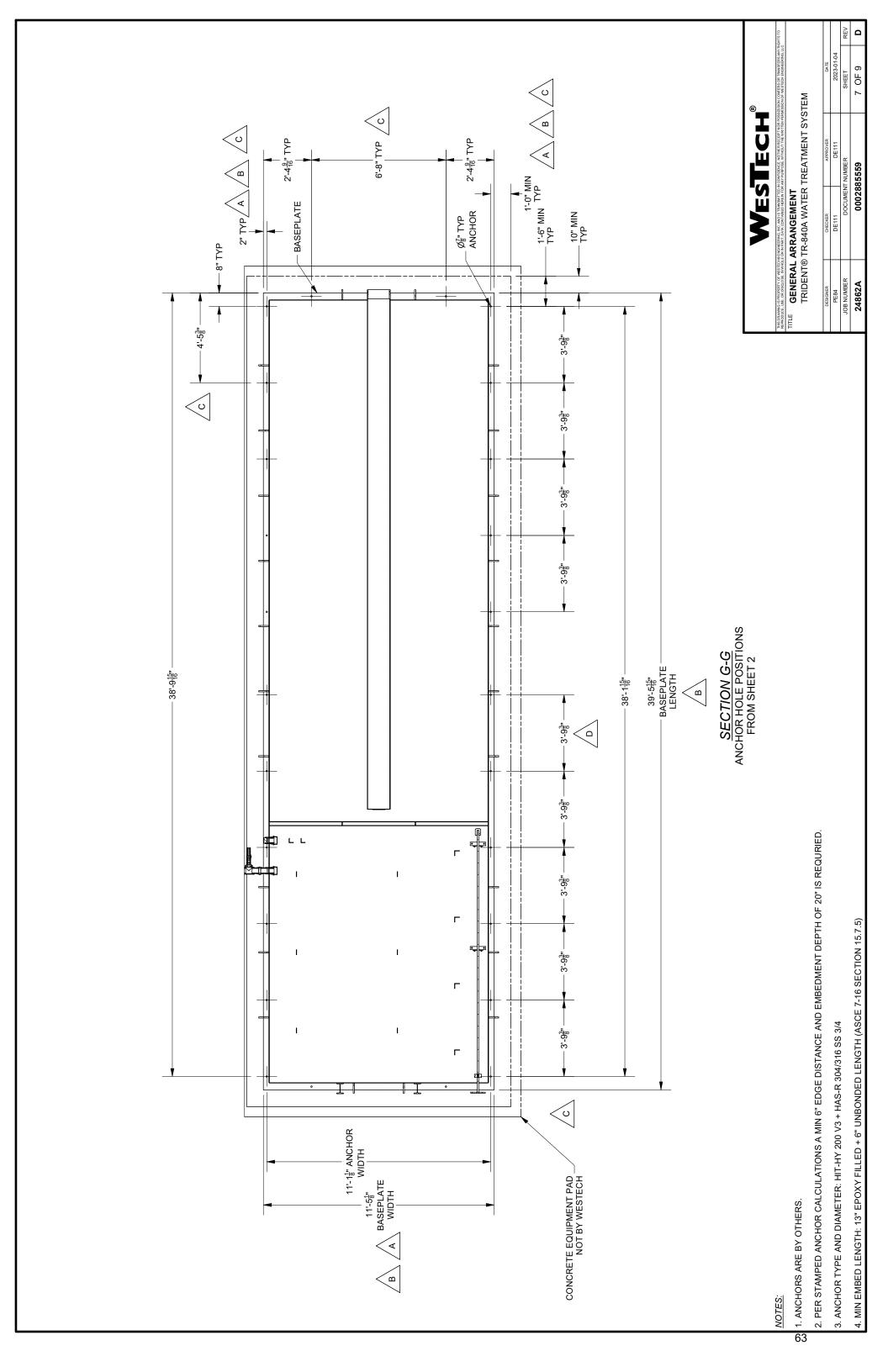


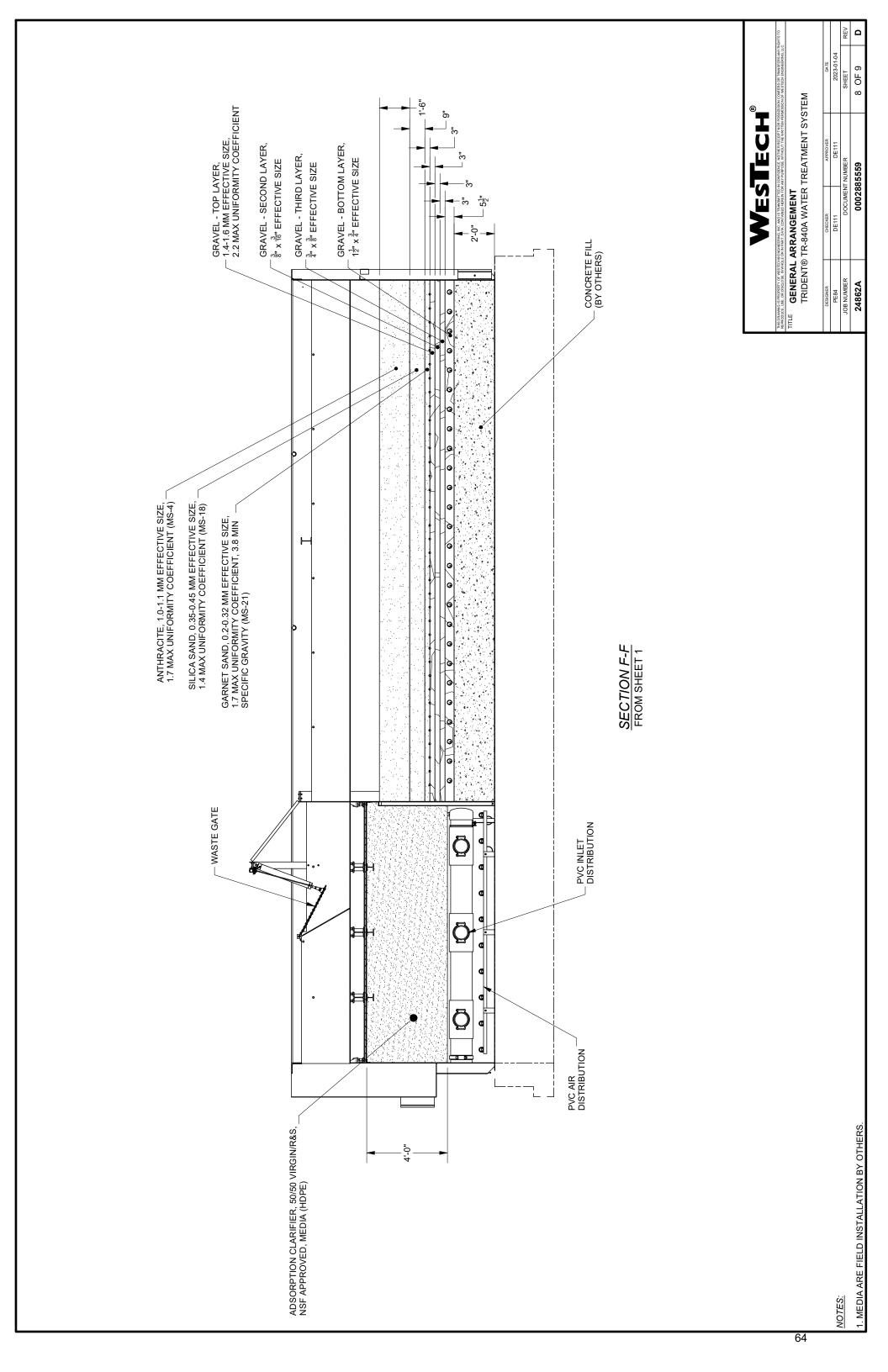










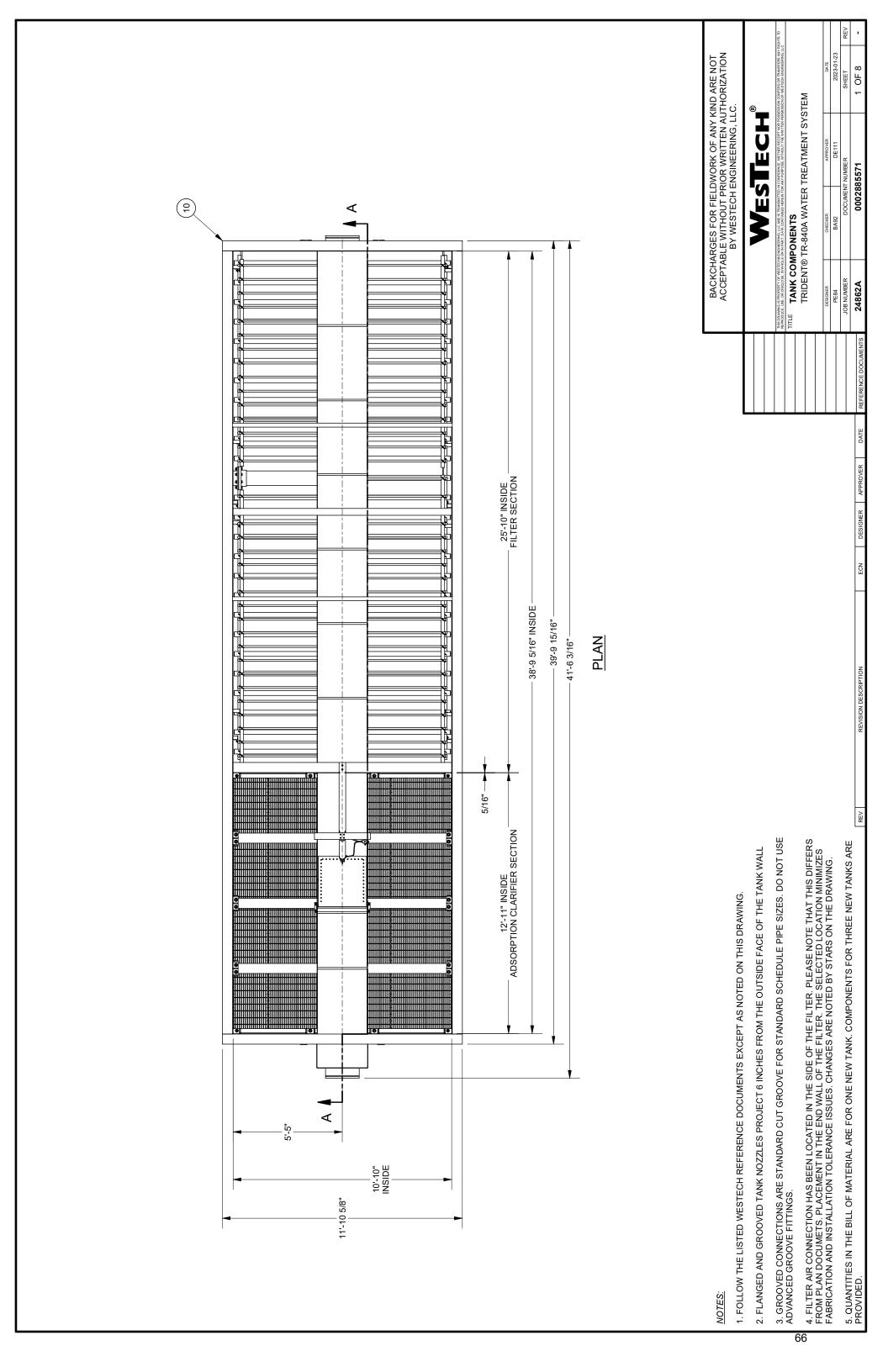


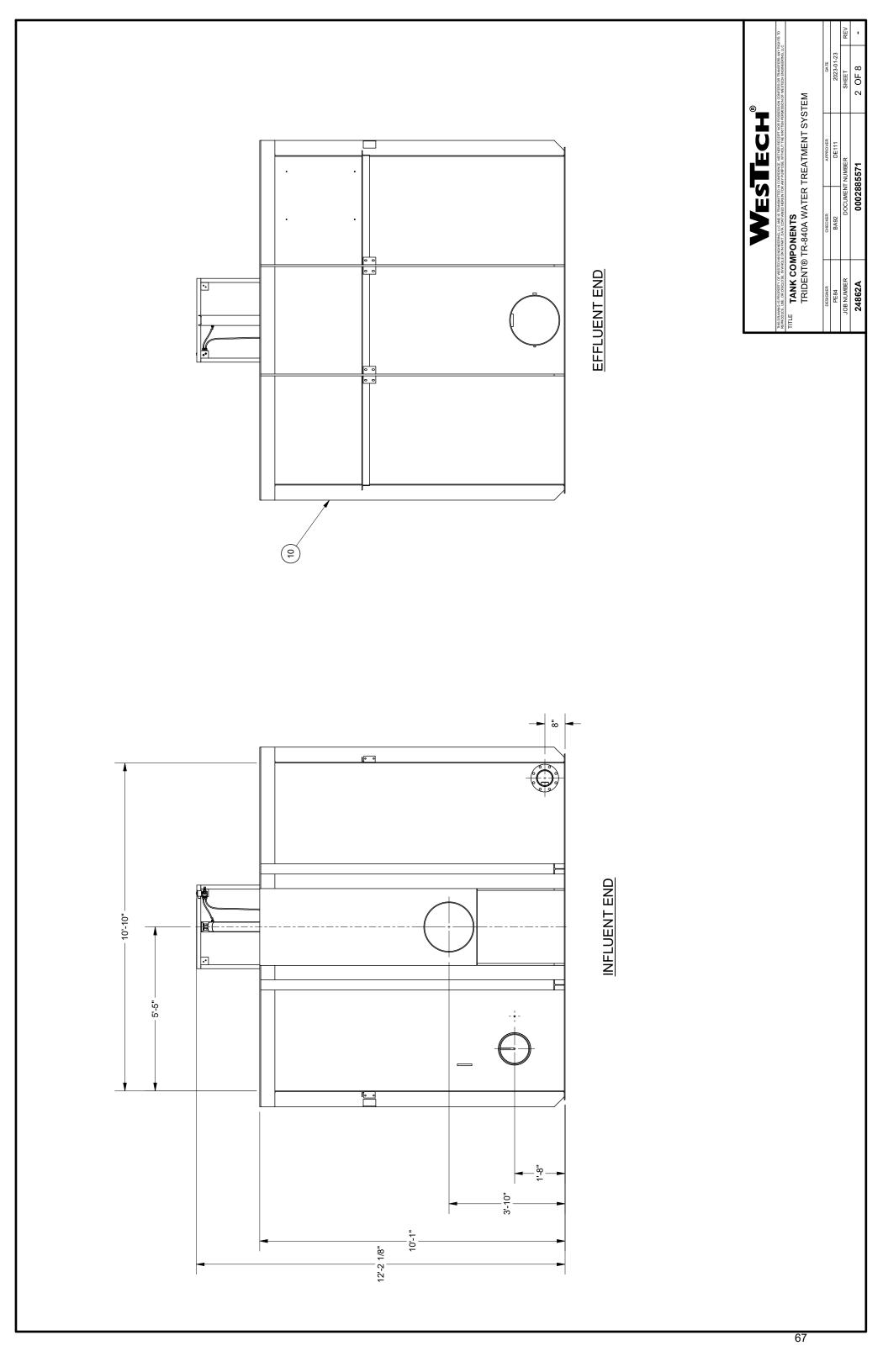
- 1. EQUIPMENT FURNISHED BY WESTECH IS DESCRIBED IN A SEPARATE EQUIPMENT LIST. ADDITIONAL PIPING, PIPE SUPPORTS, AND CONNECTION FITTINGS ARE NOT INCLUDED WITH STANDARD UNIT. MAJOR EQUIPMENT AND COMPONENTS TO BE INSTALLED AT THE JOBSITE BY THE INSTALLING CONTRACTOR.
- 2. EQUIPMENT CONCRETE PAD DESIGN IS THE RESPONSIBILITY OF THE CONSULTING ENGINEER.
- SPECIFICATION SHEETS, TECHNICAL DATA SHEET, FLOW SCHEMATIC, ELECTRICAL DIAGRAM AND ELECTRICAL SCHEMATIC. ARRANGEMENT 3. DESIGN AND APPLICATION FEATURES ARE DESCRIBED IN TYPICAL SHOWN IS FOR BELOW-GRADE FINISHED WATER STORAGE.
- 4. THE STANDARD DESIGN IS FOR INDOOR INSTALLATION.
- 5. CHECK VALVES OR BACKFLOW PREVENTERS ARE REQUIRED IN BACKWASH LINES AND FURNISHED BY OTHERS (NOT SHOWN ON DRAWING)
- 6. AUTOMATIC RATE OF FLOW CONTROL LOOPS ON EACH INFLUENT LINE MAINTAIN THE PRE-SET FLOW TO EACH UNIT. INFLUENT FLOW SET POINT MAY BE SET BY THE PLANT OPERATOR USING THE OIT. INFLUENT FLOW CONTROL IS INTERLOCKED WITH FLUSH AND BACKWASH CYCLES.
- AND FILTER-TO-WASTE MODULATING VALVES TO MAINTAIN CONSTANT FILTER LEVEL 7. FILTER LIQUID LEVEL CONTROLLERS OPERATE FILTER EFFLUENT
- 8. CONTROL CIRCUITS PROVIDE FOR AUTOMATIC FLUSH AND BACKWASH CYCLE WITH RETURN TO OPERATING SERVICE, INITIATED BY TIME CLOCK, HIGH HEADLOSS, OR MANUAL PUSHBUTTON
- 9. THREE LEVEL SWITCHES WITH DRY CONTACTS SHOULD BE PROVIDED BY THE CUSTOMER AND INSTALLED IN THE FINISHED WATER STORAGE TANK FOR THE AUTOMATIC OPERATION OF THE TRIDENT UNITS. ONE MID LEVEL SWITCH WILL SERVE AS A MINIMUM LEVEL TO ENABLE THE BACKWASH PROCESS.
- 10. THE HIGH LEVEL STOP AND THE MID LEVEL START SWITCHES SHOULD BE INSTALLED WITH SUFFICIENT VOLUME BETWEEN THEM TO PREVENT EXCESSIVE CYCLING OF THE TRIDENT UNITS.
- LED WHERE THE MINIMUM VOLUME IN THE BACKWASH SUPPLY TANK IS ADEQUATE TO PROVIDE A BACKWASH WITHOUT PULLING AIR INTO THE HOULD BE CONSIDERED WHEN CALCULATING THE MINIMUM BACKWASH VOLUME OR LEVEL IN THE TANK. 11. THE LOW LEVEL BACKWASH ENABLE SWITCH SHOULD BE INSTALI BACKWASH SUPPLY PUMP. THE MAXIMUM WATER TEMPERATURE SH
 - 12. AN AIR RELEASE VALVE (BY OTHERS) IS REQUIRED AT HIGH POINTS OF THE BACKWASH SUPPLY LINE TO VENT ACCUMULATED AIR. THE VALVE(S) ARE TO BE SIZED TO ALLOW THE COMPLETE VOLUME OF THE BACKWASH LINE FROM SOURCE TO FILTER, TO BE VENTED IN 20 SECONDS WITH DIFFERENTIAL OF APPROXIMATELY 10 PSIG, AND BE CAPABLE OF CONTINUOUSLY VENTING ACCUMULATED AIR. FOR INSTALLATIONS UTILIZING VERTICAL TURBINE OR "CAN-TYPE" PUMPS, A SEPARATE "TURBINE AIR VALVE" IS REQUIRED TO VENT THE AIR CONTENTS OF THE PUMP COLUMN WITHOUT LETTING THE AIR INTO THE BACKWASH PIPING.
- CONTROL OPTIONS 13. CONSULT WESTECH ENGINEERING FOR OTHER INFLUENT FLOW
- 14. LOCATION OF FLOW METERS ARE TO BE PER FLOWMETER MANUFACTURER'S WRITTEN RECOMMENDATIONS CONFIRMED BY THE CONSULTING ENGINEER
- INFLUENT FLOW MUST BE 20 FEET MINIMUM AT THE TANK CONNECTION. FOR INFLUENT PRESSURE OVER 30 FEET OF HEAD, CONTACT DITIONAL PRESSURE. 15. INFLUENT OPERATING PRESSURE REQUIRED FOR CONTROLLING WESTECH ENGINEERING. OPTIONAL STATIC MIXER WILL REQUIRE AL
- TO GIVE FREE DISCHARGE WITH AN AIRBREAK, FOR MAXIMUM WASTE FLOW 16. WASTE SUMP AND SUMP PIPING (BY CUSTOMER) MUST BE SIZED
- 17. WASTE TROUGH LIP IS POSITIONED ABOVE THE NORMAL OPERATING WATER LEVEL AND BELOW THE TOP OF THE TANK. THIS ALLOWS IT TO ACT AS AN EMERGENCY OVERFLOW
- FOR CUT GROOVED STYLE FLEXIBLE COUPLINGS, WITH THE EXCEPTION OF AIR CONNECTIONS. COUPLINGS AND/OR FLANGE ADAPTERS ARE 18. TANK CONNECTIONS ARE FURNISHED STANDARD CUT GROOVED BY OTHERS.
 - CUBIC YARDS OF FILL CONCRETE IN FILTER AREA. 19. TRIDENT MODEL TR-840A TANKS REQUIRE APPROXIMATELY 20.7

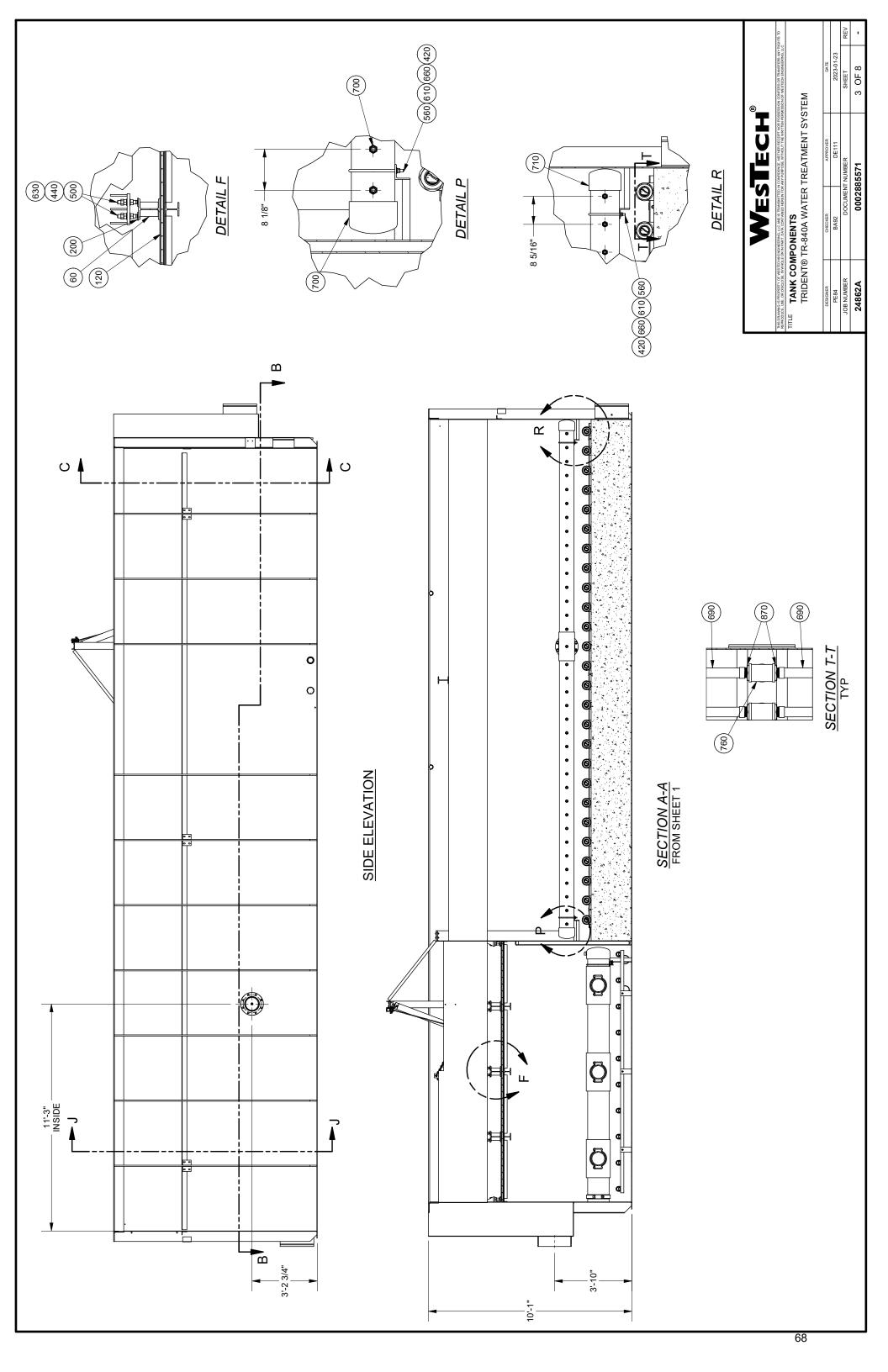
GENERAL ARRANGEMENT
TRIDENT® TR-840A WATER TREATMENT SYSTEM TITLE

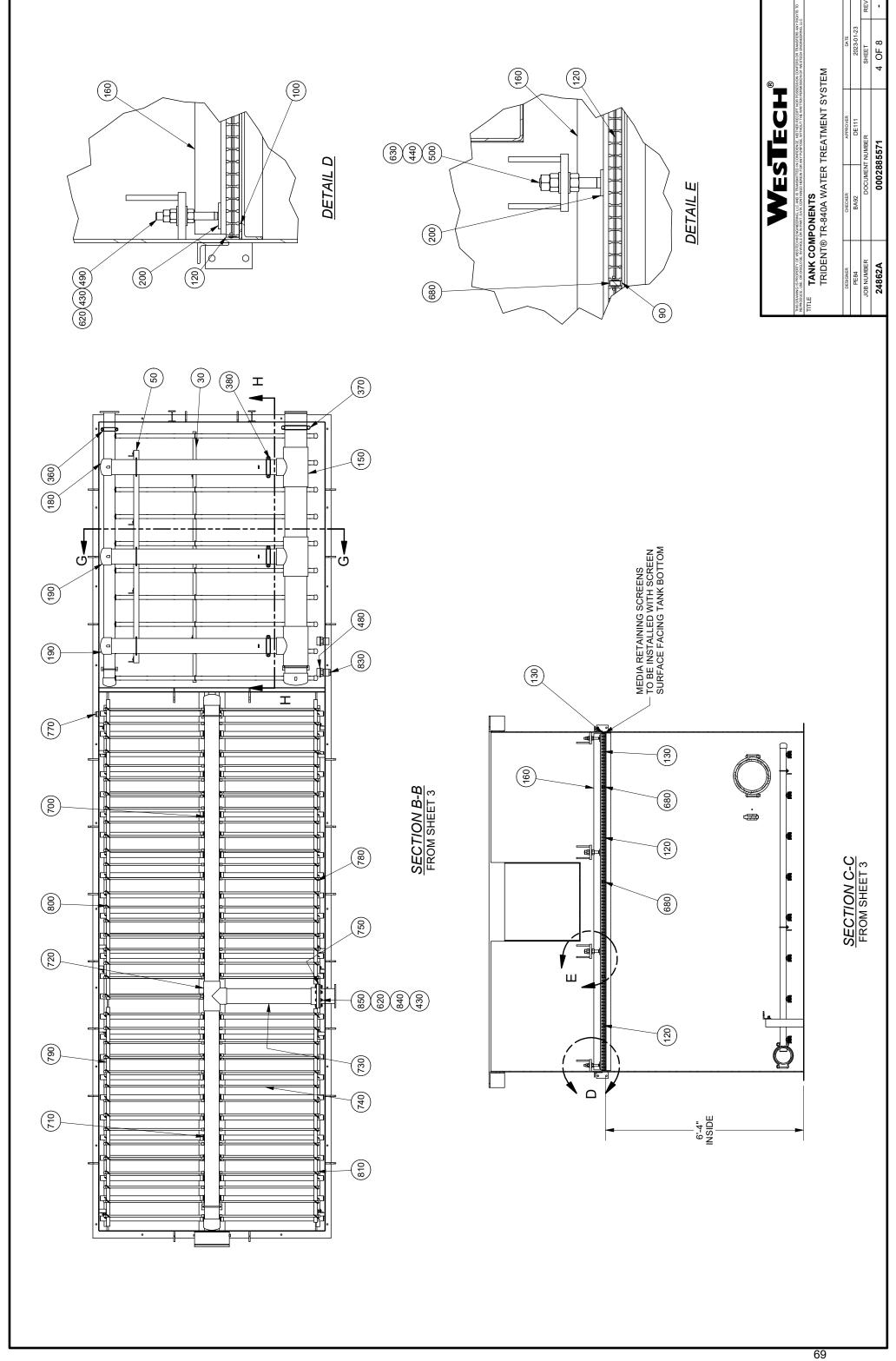
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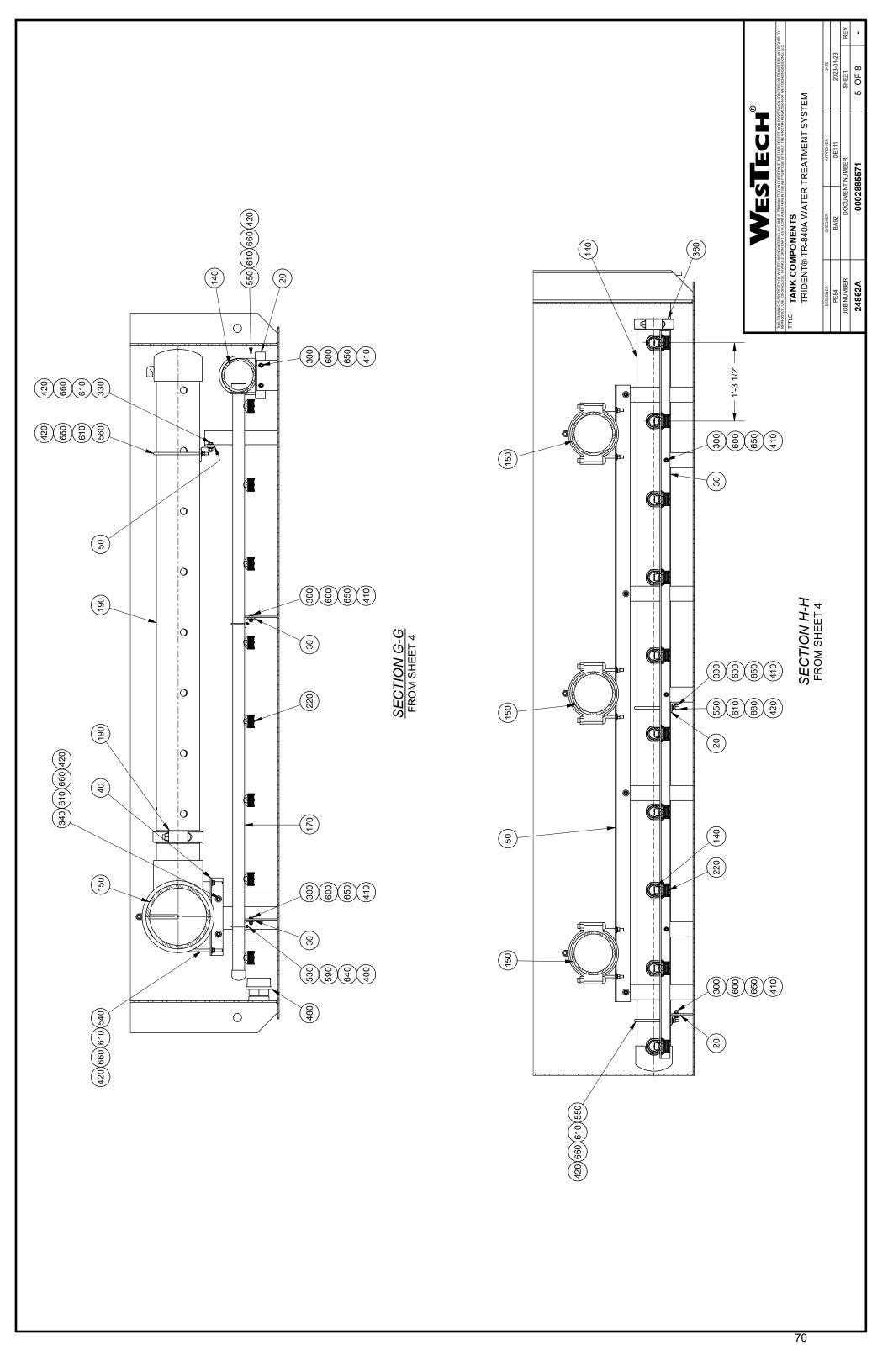
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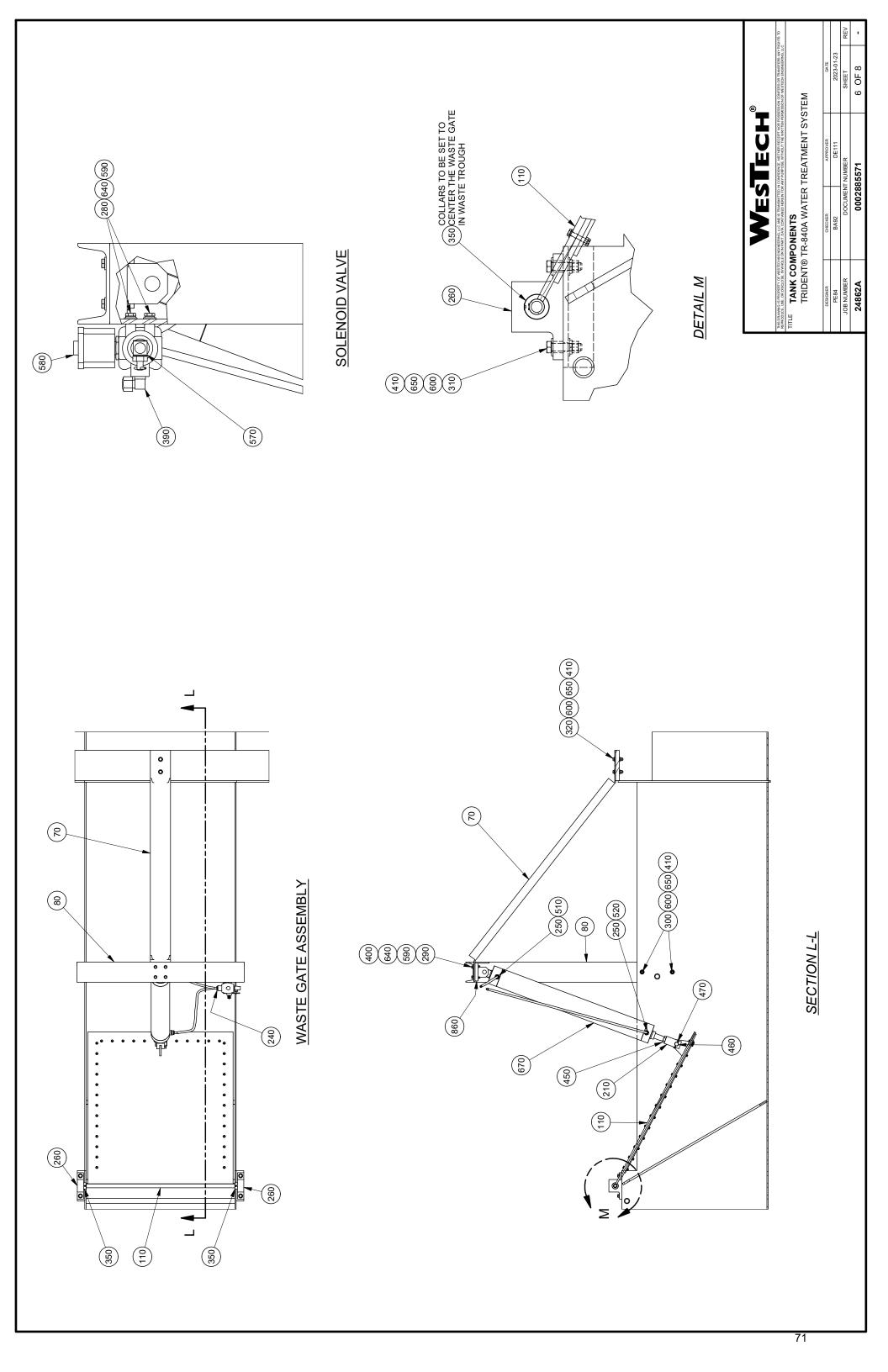


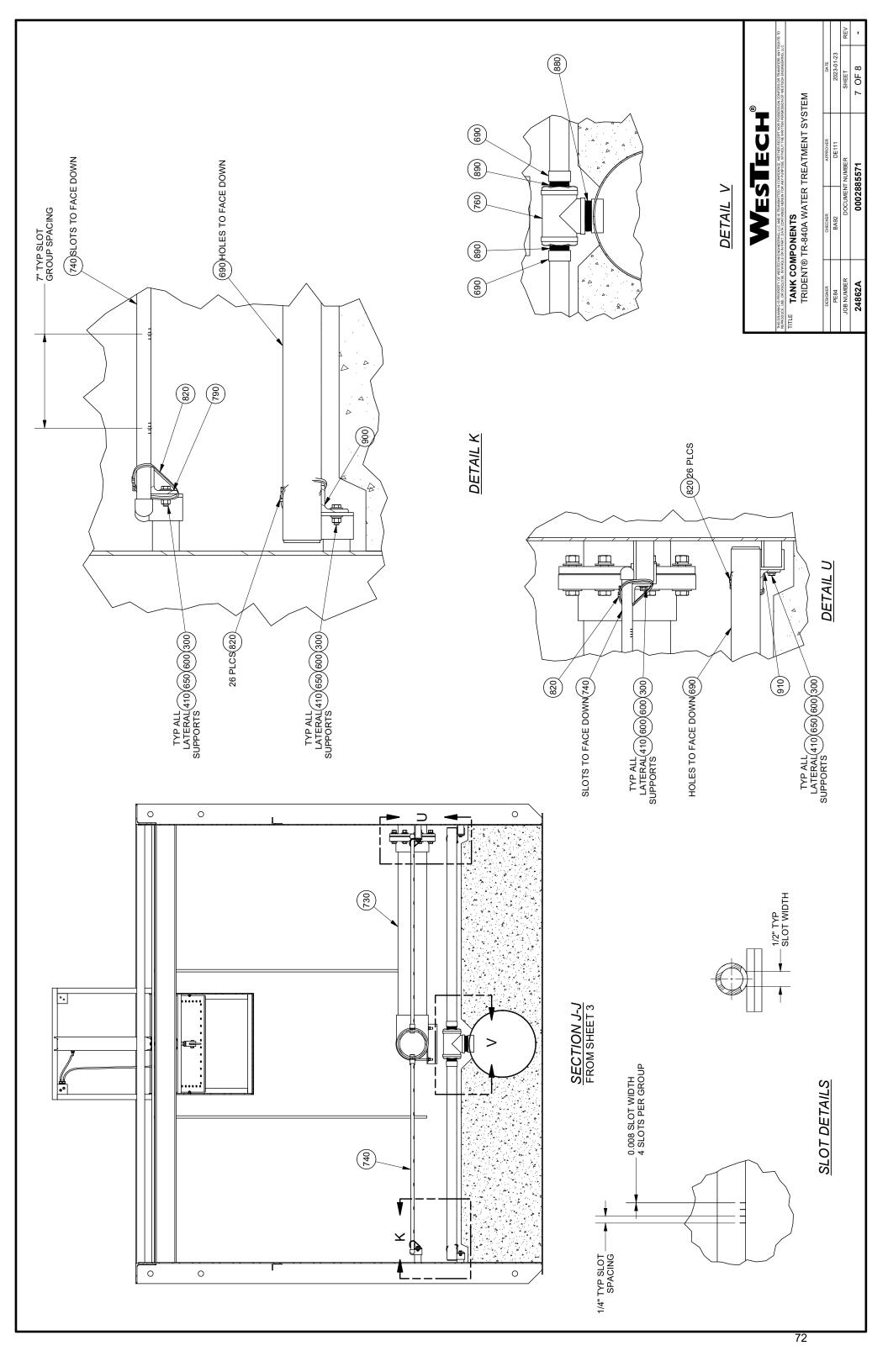








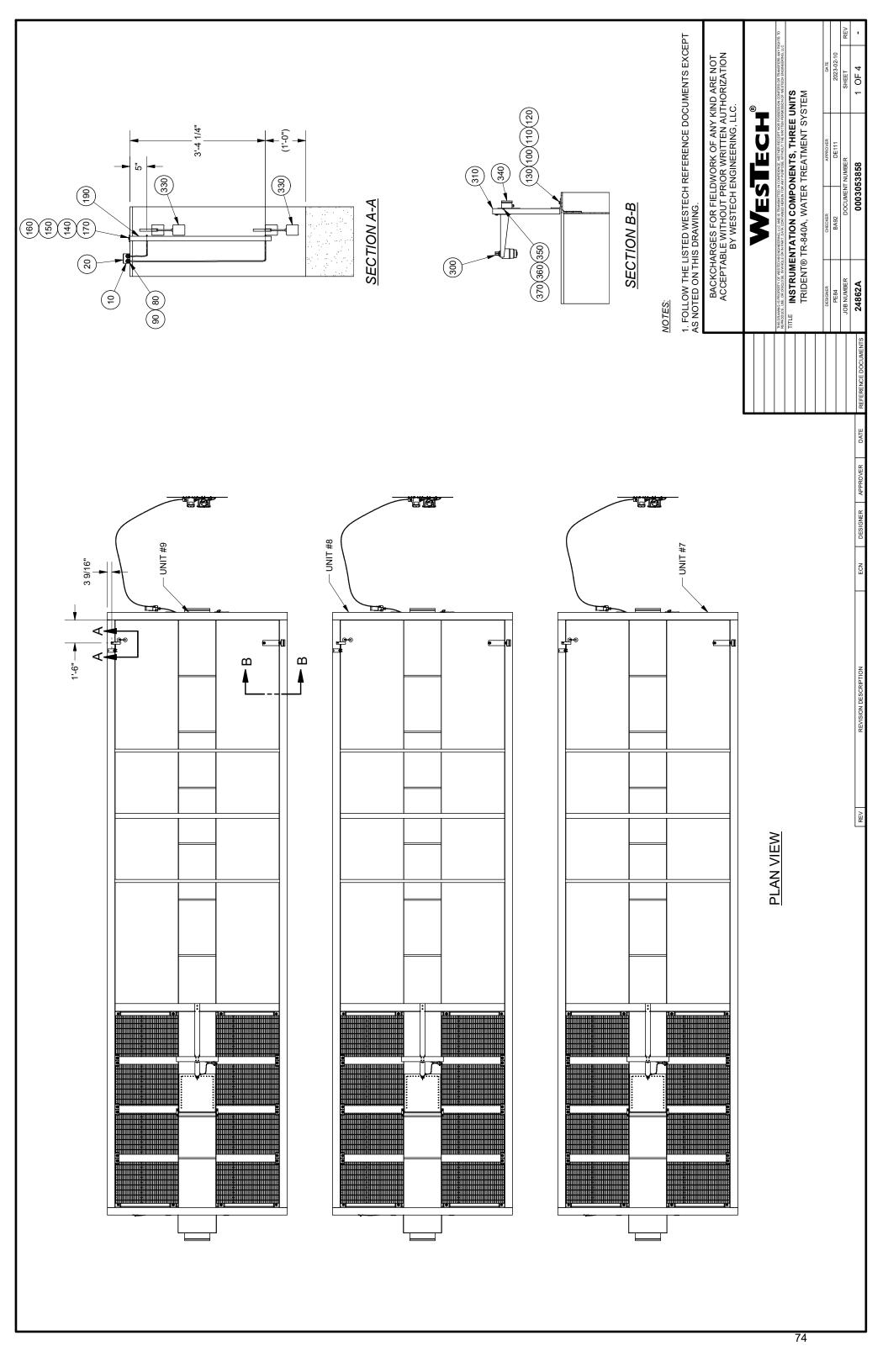


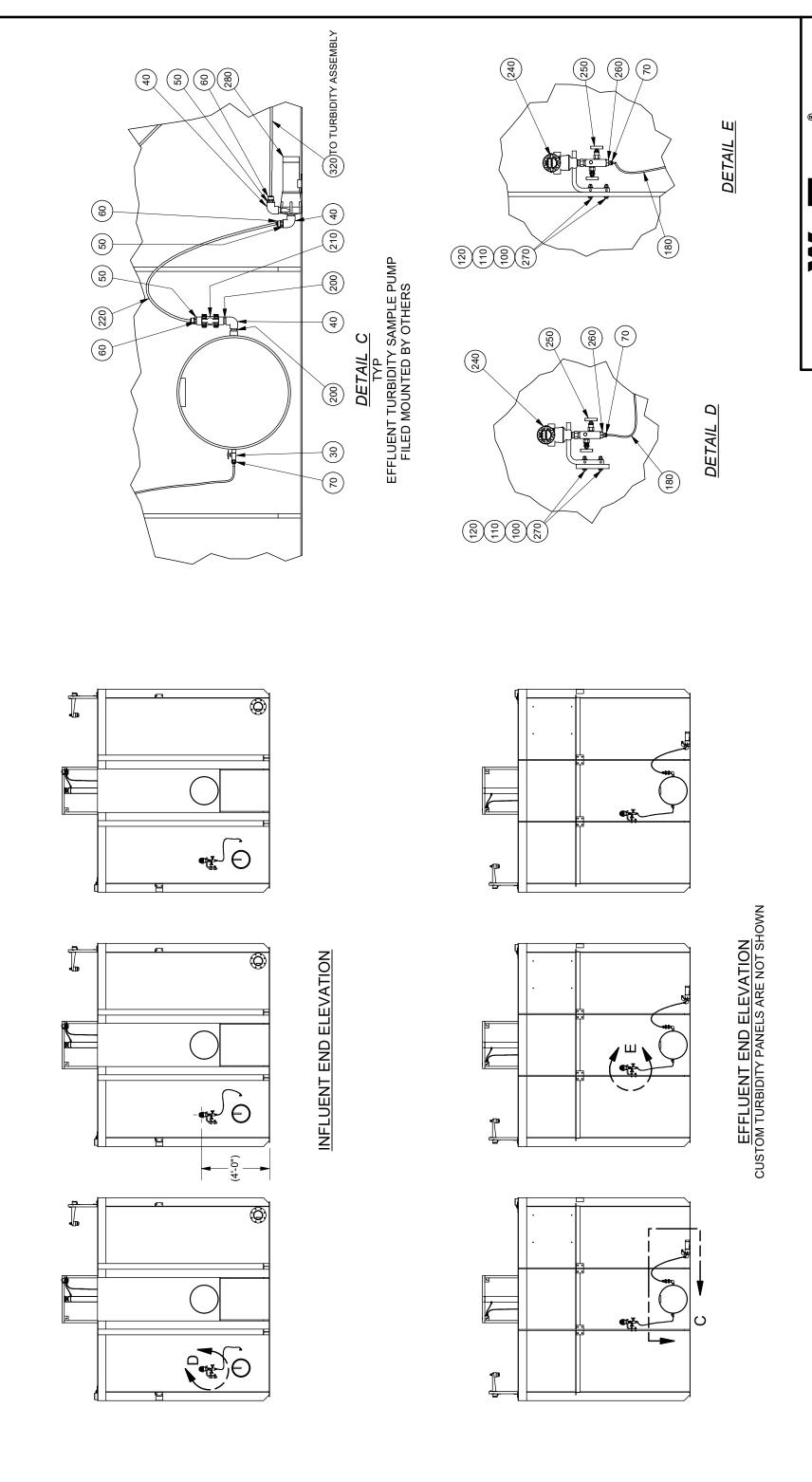


			BILL OF MATERIAL								BILL OF MATERIAL				
PIECE	UNIT QTY	PART NO	DESCRIPTION	MATERIAL	LENGTH	WIDTH	TOTAL WT, LB	PIECE	UNIT QTY	PART NO	DESCRIPTION	MATERIAL	LENGTH	WIDTH	TOTAL WT, LB
10	-	0002885518	TANK FABRICATION, TRIDENT® TR-840 WATER TREATMENT	STL			0.90808	510	-	2-48809	TUBE, EXTRUDE, 0.375 OD x 0.0625 WALL x 60, WHITE,	PE			0.0
20	2	1-12729	ANGLE SUPPORT, ACAIR DIST HEADER, TR-840A	304-304L			0.00	520	-	2-48809	SEMI-CLEAR, FOOD GRADE TUBE: EXTRUDE: 0.375 OD x 0.0625 WALL x 60. WHITE	H.			0.1
30	2	1-12277	ANGLE, SUPPORT, AC AIR DIST LATERAL, TR-840A	304-304L			79.0	}	-		SEMI-CLEAR, FOOD GRADE	Į.			
40	-	1-12728	ANGLE, SUPPORT, AC INFLUENT HEADER, TR-840A	304-304L			5.3	530	20	2-7769	U-BOLT, RND BEND, 0.25-20UNC x 2 PIPE SIZE x 3.25 LG	304			2.4
50	1	1-12276	ANGLE, SUPPORT, AC INFLUENT LATERAL, TR-840A	304-304L			50.8	540	1	2-11153	U-BOLT, RND BEND, 0.5-13UNC x 12 PIPE SIZE x 15.25 LG	304			2.2
09	3	1-12281	BEAM, MEDIA RETAINER, HOLD DOWN, TR-840	STL			825.2	250	2	2-7781	U-BOLT, RND BEND, 0.5-13UNC x 6 PIPE SIZE x 8.375 LG	304			2.4
70	1	1-10212	BRACE, WASTE GATE FRAME, TR-840A	A36			22.9	260	5	2-7783	U-BOLT, RND BEND, 0.5-13UNC x 8 PIPE SIZE x 10.375 LG	304			7.5
80	1	1-9703	FRAME, SUPPORT, WASTE GATE CYLINDER, TR-840A	A36			54.0	220	1	2-10656	VALVE, NEEDLE, 0.25 FNPT x 0.25 MNPT	BRS			0.2
06	2	1-48421	GASKET, MEDIA RETAINER, 0.25 x 1.5 x 130	NPRN			3.3	280	1		VALVE, SOLENOID, NC, 0.25 x FNPT, 120VAC, 60HZ	BRASS			2.4
100	2	1-48422	GASKET, MEDIA RETAINER, 0.25 x 1.5 x 152	NPRN			3.8	290	90		WSHR, FLAT, 0.25	304			0.2
110	1	1-9707	GATE, WASTE, ASSEMBLY, TR-840A	304-304L			2'96	009	89		WSHR, FLAT, 0.375	304			0.8
120	ဧ	1-12279	GRATING, AC MEDIA RETAINER A, TR-840A	SST-AL			367.8	610	28	2-5405	WSHR, FLAT, 0.5	304			6.0
130	-	1-12280	GRATING, AC MEDIA RETAINER B, TR-840A	SST-AL			9.07	620	24		WSHR, FLAT, 0.75	304			2.1
140	-	1-12284	HEADER, AIR DISTRIBUTION, AC, TR-840A	PVC			67.1	630	32		WSHR, FLAT, 1	304			3.4
150	-	1-13068		PVC			329.7	640	46		WSHR, LOCK, MDM SPLIT, 0.25	304			0.1
160	2	0003532637	L 3 x 3 x 0.5 x 129				202.1	650	34	2-5433	WSHR, LOCK, MDM SPLIT, 0.375	304			0.2
170	10	1-12275	LATERAL, AIR DISTRIBUTION, AC, TR-840A	PVC			2.29	099	22	2-5434	WSHR, LOCK, MDM SPLIT, 0.5	304			0.3
180	1	1-12282	LATERAL, INFLUENT, AC, TR-840A, STYLE A	PVC			1.69	029	1	2-11120	CYL, PNEU, 3.25 BORE, 29 STRK, DBL ACT, PIVOT MNT	304			22.2
190	2	1-12283	LATERAL, INFLUENT, AC, TR-840A, STYLE B	PVC			138.3	089	3	2-8022	GASKET, STRIP, 0.5 THK x 1.0 WIDE, 1 SIDE(S) SKINNED, WITH	NPRN	154		7.8
200	20	1-10213	PL 0.25 x 2.5 x 2.5	304			9.0				ADHESIVE ON 1 SIDE(S)				
210	-	1-9696	ROD CLEVIS, FABRICATED, 0.75-16UNF ROD, 3.125 LG, 0.75 PIN	304-304L			1.5	069	52 0	0002890199	EFFLUENT LATERAL PIPE ASSEMBLY				978.8
220	80	2-11030	STRAINER, MEDIA RETAINING, 0.75 MNPT, 640 STYLE	ABS-SST			11.9	700	1	0002890191	FILTER AIR HEADER PIPE ASSEMBLY				119.9
230	-	2-10985	ADHESIVE, MULTIPURPOSE, 24FL OZ AEROSOL, CLEAR	ı			1.1	710	1	0002890192	FILTER AIR HEADER PIPE ASSEMBLY SHORT				93.9
240	2	2-11227	ADPTR, TUBE, RDCG, 150LB, 0.375 PUSH x 0.25 MPTF	ACETAL			0.0	720	1 0	0002890207	TEE, SCH 40, 6 SOC				14.4
250	2	2-11228	ADPTR, TUBE, RDCG, 150LB, 0.375 PUSH x 0.5 MPTF	ACETAL			0.1	730	1 0	0002890209	FILTER AIR HEADER PIPE				45.4
260	2	1-28893	BEARING, PLBLK, 0.75 SHAFT, 2 MOUNTING HOLES, SOLID	UHMWPE			9.0	740	71 0	0002890193	LATERAL, SLOTTED, 41 LONG ASSEMBLY				30.8
			HOUSING					750	1	2-2732	GSKT, FLG, FULL FACE, 150LB, 8, 0.125 THK	NPRN			0.3
280	2	2-6318	CAP SCR, HEX, 0.25-20UNC x 0.5, FULL THREAD	304			0.0	260	26		TEE, 150LB, 4 FNPT	316			339.9
290	4	2-6323	CAP SCR, HEX, 0.25-20UNC x 1.25	304			0.1	2770	1	2-25623	PLUG, PIPE, HEX HEAD, SOLID, 2 MNPT, BLK	A105			2.2
300	28	2-6354	CAP SCR, HEX, 0.375-16UNC x 1.25	304			1.6	780	1	0002937290	LATERAL SUPPORT ANGLE RIGHT LONG				45.0
310	4	2-6355	CAP SCR, HEX, 0.375-16UNC x 1.5	304			0.3	790	1 0	0002937288	LATERAL SUPPORT ANGLE LEFT				34.6
320	2	2-6356	CAP SCR, HEX, 0.375-16UNC x 1.75	304			0.1	800			LATERAL SUPPORT ANGLE RIGHT				47.4
330	4	2-6370	CAP SCR, HEX, 0.5-13UNC x 1.5	304			0.5	810		6	LATERAL SUPPORT ANGLE LEFT SHORT				33.8
340	2	2-6371	CAP SCR, HEX, 0.5-13UNC x 1.75	304			0.3	820	123	2-36268	CABLE TIE, 11 LG, 0.18 WD, STANDARD, LOCKING	304			1.2
350	2	2-3809	COLLAR, SHAFT, SET SCREW, SOLID, 0.75	303			0.3	830	-		PLUG, PIPE, HEX HEAD, SOLID, 3 MNPT, BLK	A105			5.5
360	-	2-32669	CPLG, PIPE, FLEX, 6 GRV	316			11.3	840	8		WSHR, LOCK, MDM SPLIT, 0.75	304			0.3
370	-	2-32672	CPLG, PIPE, FLEX, 12 GRV	316			24.4	820	80		CAP SCR, HEX, 0.75-10UNC × 3.5	304			4.7
380	8	2-32670	CPLG, PIPE, FLEX, 8 GRV	316			55.5	860	-		BRACKET, CLEVIS, 0.75 PIN DIA	SST			3.3
390	- 1	2-7071	ELBOW, RDCG, 90 DEG, 3000LB, 0.375 CPRSN x 0.25 MNPT	BRS			0.1	870	52		BUSHING, PIPE, OUTSIDE HEX, 150LB, 4 MNPT x 2.5 FNPT	316			88.4
400	4 2	2-5882	NUT, HEX, 0.25-20UNC	304			4.0	880	26		NIPPLE, PIPE, PLAIN, TBE, NPT, SCH 40, 4 x CLOSE, N/A	CHANGE ME			67.6
014	4 8	7-2000	NOT, TEX, U.S.79-TOUNC	304			0.0	060		Z-50000	NIPPLE, PIPE, PLAIN, 1BE, NPI, 3CH 403, 2.3 X 3 LG	310-310L			4.0.4
420	77 8	2-3090	NOT, TIES, U.S. 130NC	304			0.1	900		T	TITI LINE ATTOWN OF THE SUPPORT AND IN THE PROPERTY OF THE PRO				92.4
0.54	02 04	2-2093	NOT, TIES, U. 3-100NC	304			2.0	016	-		EFFLUENT LATERAL SIDE SUPPORT ANGLE, SIDE BACK				4:70
440	40	9060-7	NOI, HEA, I-BOING	304			0.01								
450	- ,	2-5980	NUT, JAM, 0.75-16UNF	304			0.1								
460	- ,	2-11060	PIN, CLEVIS, FLAT HEAD × HOLE END, 0.75 DIA, 2 LG	304			0.3								
470	← c	2-11075	PIN, COTTER, EXT PRONG, CHISEL PT, 0.125 x 1.25	18-8			0.0								
460	7 8	2-10949	STAINER, SUCTION SCREEN, 3 MNP1, 10 MESH	NYL 304			1.0								
500	16	2-7580	STUD, FULL THD, U.TS-10 UNC X 0 STUD, FULL THD, 1-8 UNC X 6	304			21.6								

WESTECH®

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	2023-01-23	DE111	BA92	PE84
	DATE	APPROVER	CHECKER	DESIGNER



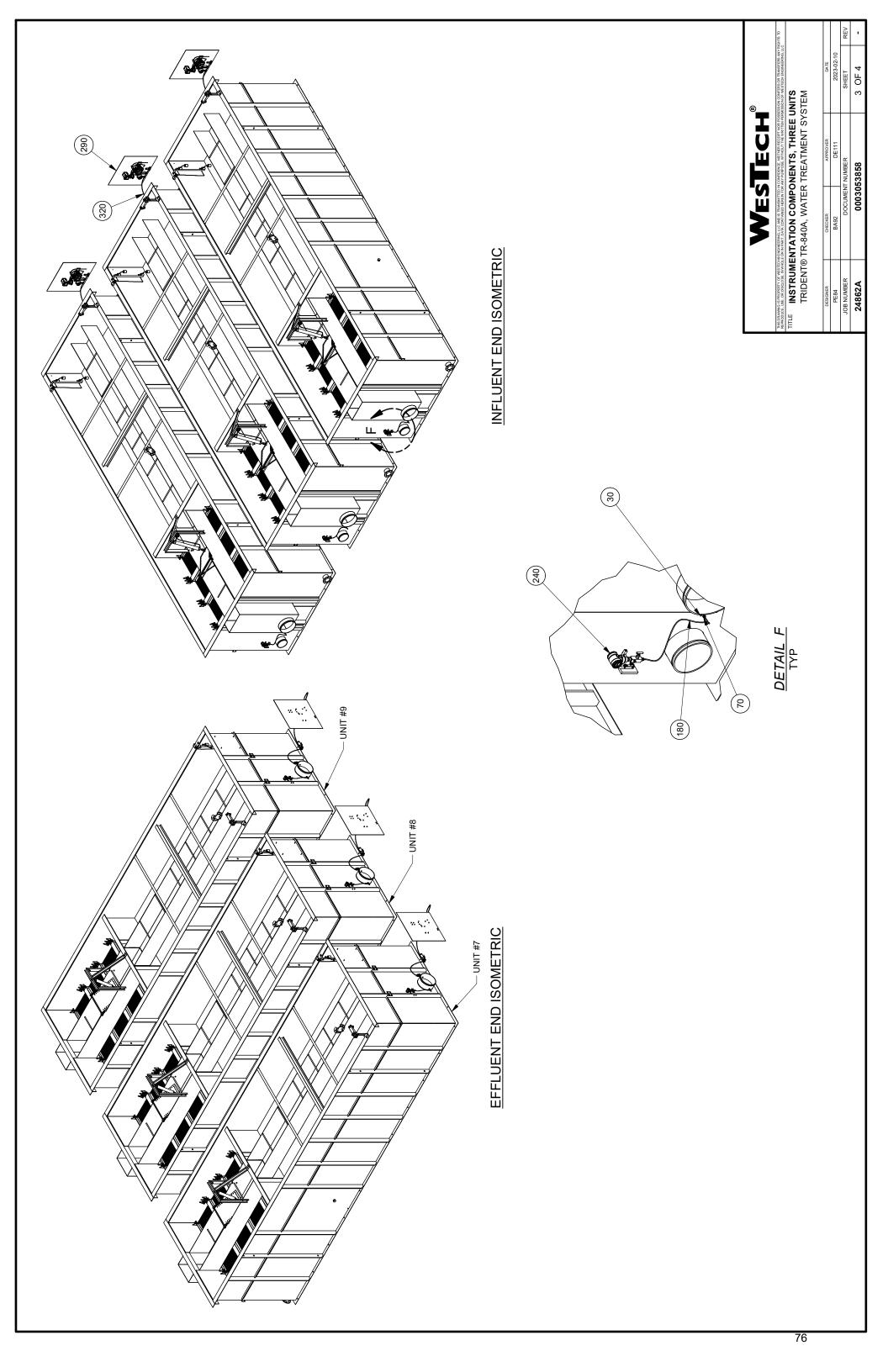


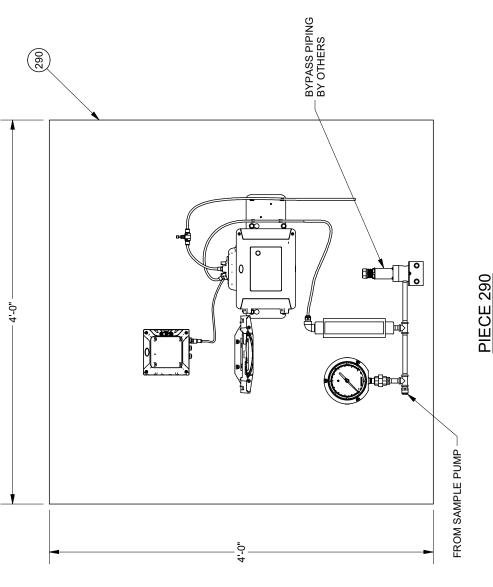
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 2 OF 4





PIECE 290 EFFLUENT TURBIDITY ASSEMBLY FIELD MOUNTED BY OTHERS

- NOTED ON THIS DRAWING. 1. FOLLOW THE LISTED WESTECH REFERENCE DOCUMENTS EXCEPT AS
- 2. SET CLARIFIER PRESSURE GAUGE AT ZERO AFTER THE TANK IS FILLED TO OPERATING WATER LEVEL BUT BEFORE PLANT FLOW HAS BEEN STARTED. SET SWITCH CONTACTS TO CLOSE AT A READING OF 3 PSI ON THE GAUGE. THIS SETTING IS VITAL TO THE STRUCTURE OF THE ADSORPTION CLARIFIER AND MUST BE SET AS ACCURATELY AS POSSIBLE. SET SWITCH CONTACTS TO CLOSE AT A READING OF 2 PSI ON THE GAUGE. PROCESS AND PLANT OPERATION REQUIREMENTS MAY VARY THIS SETTING PLUS OR MINUS BUT THE SETTING SHOULD NOT EXCEED 2.5 PSI.
- 3. SET FILTER HEADLOSS GAUGE AT ZERO AFTER THE TANK IS FILLED TO OPERATING WATER LEVEL BUT BEFORE FILTERING FLOW HAS BEEN STARTED. SET HEADLOSS SWITCH CONTACTS TO CLOSE AT A READING OF 8 FT H2O VAC ON THE GAUGE. PROCESS AND PLANT OPERATION REQUIREMENTS MAY VARY THIS SETTING PLUS OR MINUS. SET SWITCH CONTACTS TO CLOSE AT A READING OF 4 PSI.
- 4. LENGTH OF SAMPLE TUBING TO BE AS SHORT AS PRACTICAL TO MINIMIZE LAG TIME IN SAMPLING.
- 5. ADJUST TURBIDIMETER NEEDLE VALVE TO OBTAIN AN APPROXIMATE 5 TO 7 GPH SAMPLE RATE.

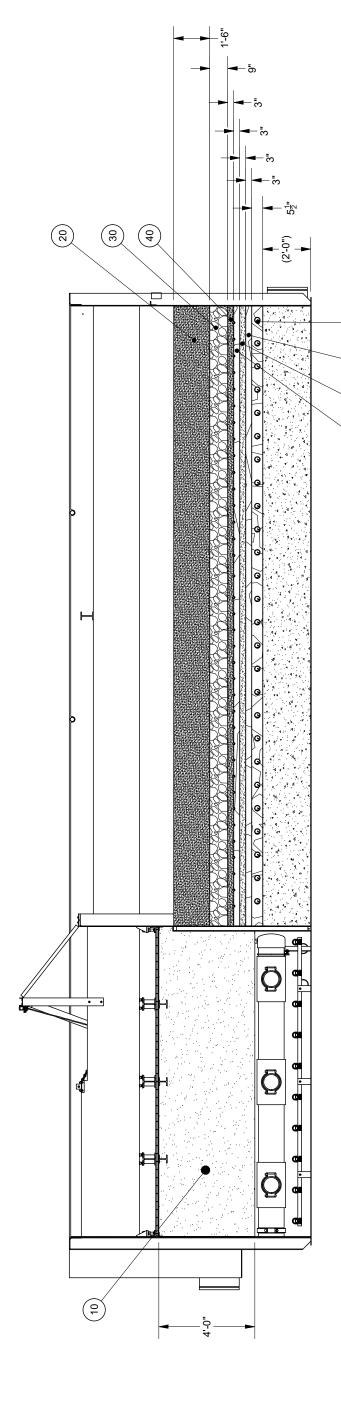
			BILL OF MATERIAL				
PIECE	UNIT QTY	PART NO	DESCRIPTION	MATERIAL	LENGTH	WIDTH	TOTAL WT, LB
10	3	2-11247	BOX, ELEC, 1 GANG, 4 HUB, 0.5 HUB SIZE, 17 CU IN	AL			1.8
20	က	2-11248	COVER, ELEC BOX, BLANK, 1 GANG, BRUSHED ALUM FINISH	AL			0.0
30	9	2-10656	VALVE, NEEDLE, 0.25 FNPT × 0.25 MNPT	BRS			1.2
40	6	2-5995	ELBOW, 90 DEG, SCH 80, 0.75 FNPT	PVC			6.0
20	o	2-4088	BUSHING, PIPE, FLUSH, SCH 80, 0.75 MNPT × 0.375 FNPT	PVC			0.3
09	6	2-11221	ADPTR, TUBE, 150LB, 0.375 PUSH x 0.375 MPTF	ACETAL			0.3
70	12	2-11219	ADPTR, TUBE, 150LB, 0.25 PUSH x 0.25 MPTF	ACETAL			0.2
80	9	2-11287	GRIP, CORD, STRAIGHT, 0.5 HUB, 0.125-0.375 CORD	6061			0.4
06	9	2-11254	NUT, LOCK, SEALING, 0.5-14NPT, YLW ZINC	STL			0.1
100	36	2-5404	WSHR, FLAT, 0.375	304			0.4
110	18	2-5433	WSHR, LOCK, MDM SPLIT, 0.375	304			0.1
120	18	2-5887	NUT, HEX, 0.375-16UNC	304			0.3
130	9	2-6355	CAP SCR, HEX, 0.375-16UNC x 1.5	304			0.4
140	12	2-5402	WSHR, FLAT, 0.25	304			0.1
150	ဖ	2-5415	WSHR, LOCK, MDM SPLIT, 0.25	304			0.0
160	ه ا ه	2-5882	NUI, HEX, U.ZS-ZOUNC	304			0.1
170	ယ ထ	2-6324	THIRE EXTRINE 0.25-20UNC x 1.5	304 PF	99		0.2
200	Þ	2-40013	SEMI-CLEAR, FOOD GRADE	L L	9		
190	8	1-49992	BRACKET, FLOAT SWITCH, 6.25 PJTN x 42 LG	304-304L			21.1
200	9	2-5814	NIPPLE, PIPE, PLAIN, TBE, NPT, SCH 80, 0.75 x SHORT	PVC			0.2
210	က	2-11403	VALVE, BALL, TRUE UNION, FULL PORT, SCH 80, T HDL, OTR TURN, 0.75, SOC	PVC			1.5
220	က	2-48814	TUBE, EXTRUDE, 0.375 OD × 0.0625 WALL × 72, WHITE, SEMI-CLEAR, FOOD GRADE	E E	75		0.3
240	ď	2-56/22	TRANSMITTER PRESSIBE GA BRESS O 5 ENDT				77
			-14.7 TO 30 PSI , 0.05 % ACCURACY, 4-20 mA 2 WIRE SIGNAL, LOCAL DISPLAY				!
250	9	2-18100	MANIFOLD, 2-VALVE, N/A, 0.5 FNPT INLET x 0.5 MNPT	316			5.5
			OUTLET X 0.25 FNPT BLEED, INCINE, PTFE PACKING				
260	9	2-4316	BUSHING, PIPE, OUTSIDE HEX, 150LB, 0.5 MNPT x 0.25 FNPT	304			0.8
270	12	2-6358	CAP SCR, HEX, 0.375-16UNC x 2.25	304			1.1
280	3	2-35967	PUMP, CNTFGL, 0.75 x 0.75, 0.063HP, 3150RPM, 115VAC, 60HZ, MNPT	ЬР			27.0
290	ဇ	0003513125	TURBIDIMETER PANEL ASSY, CUSTOM, LASER, SC4500 CONTROLLER, PUMP				140.0
300	က	2-54277	TRANSMITTER, LEVEL, RADAR, TIME OF FLIGHT,	AL			16.5
			NON-HAZARDOUS AREA, 2 WIRE, 4-20MA LOOP, 19M MAX RANGE, 2 MNPT				
310	က	0003529271	RADAR LEVEL MOUNTING AND BRACKET ASSEMBLY				28.9
320	က	2-48814	TUBE, EXTRUDE, 0.375 OD x 0.0625 WALL x 72, WHITE, SEMI-CLEAR, FOOD GRADE	J.	438		1.3
330	9	2-57464	SWITCH, FLOAT, SUSPENSION, NO/NC, MERCURY FREE SWITCH 180 CRI	ď			19.8
340	٣	0 57364	LOOP DOWERED BROCESS INDICATOR BLASTIC	EV/OE			т 7
340	ກ	7-57.304	FIELD HOUSING, 4-20mA +HART +LEVEL FOR EMPSOALENCY ALASON AND HART ALEVEL FOR EMPSOALENCY ALENCED NOW HAZADDOUS ABEA				_
350	ď	2 22295	CAD SCD HEY CLASS A3 ZA MG 1 × 30 EIII THDEAD	304			c
360	9 2	2-33285	CAP SCR, HEX, CLASS AZ-70, MO-1 x 20, FULL I HREAD WELL I ME AT M6	304			0.0
360	77	2-18/15	WSHK, FLAT, M6	304			1.0
2/2	0	2-20033	NOT, ECON, INTELINOENT, CEASO AZ, IND-1.00	100			0.0

WESTECH®

INSTRUMENTATION COMPONENTS, THREE UNITS TRIDENT® TR-840A, WATER TREATMENT SYSTEM

	Н		
4 OF 4	SHEET	2023-02-10	DATE
0003053858	DOCUMENT NUMBER	DE111	APPROVER
00030	DOCUMEN	BA92	CHECKER
24862A	JOB NUMBER	PE84	DESIGNER

			טובר טר ואיאו בואאר				
PIECE	PART NO	MEDIA VOLUME	DESCRIPTION	MATERIAL	LENGTH	WIDTH	TOTAL WT, LB
10	2-6992	560 ft [^] 3	MEDIA, AC, 50/50 VIRGIN/R&S (MS107/MS110), NSF	HDPE			20720.0
			APPROVED				
20	2-4804	425 ft ⁴ 3	ANTHRACITE, 1.0-1.1 MM EFF SIZE, 1.7 MAX UC, 1.4	ANTHRACITE			22525.0
			MIN SG, MS-4				
30	2-11029	221 ft ⁴ 3	SAND, SILICA, 0.35-0.45 MM EFF SIZE, 1.4 UC MAX,	SAND SIL			22100.0
			MIN SG OF 2.60, MS-18				
40	2-5953	74 ft^3	SAND, GARNET, 0.2-0.32 MM EFF SIZE, 1.7 UC MAX,	SAND GAR			9028.0
			MIN SG OF 3.8, MS-21				
20	2-4795	74 ft^3	GRAVEL, GARNET, 1.4 x 1.6, 1.6 UC MAX, 3.8 SG MIN,	GRAVEL			10730.0
			MS-22				
09	2-4761	74 ft^3	GRAVEL, GRADED, 0.1875 x 0.375, 2.5 SG MIN	GRAVEL			7400.0
70	2-4762	74 ft^3	GRAVEL, GRADED, 0.375 x 0.75, 2.5 SG MIN	GRAVEL			7400.0
80	2-4745	139 ft^3	GRAVEL, GRADED, 0.75 x 1.5, 2.5 SG MIN	GRAVEL			13900.0



NO TES:

1. THE BILL OF MATERIAL LISTS THE MEDIA REQUIRED FOR ONE UNIT, INCLUDING OVERAGE. MEDIA QUANTITY PROVIDED FOR THREE NEW UNITS.

(8)

(F)

(8)

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2. FOLLOW THE LISTED WESTECH REFERENCE DOCUMENTS EXCEPT AS NOTED ON THIS DRAWING.

3. ALL LAYERS OF MEDIA TO BE LEVEL AND IN ACCORDANCE WITH MEDIA PLACEMENT SPECIFICATIONS. PLACEMENT TOLERANCE:

LAYERS 3" AND LESS: ±1/2"

LAYERS 9" AND DEEPER: ±1"

FINISHED FILTER BED: ±1"

FILTER GUARANTEE REQUIRES WESTECH ENGINEERING'S TECHNICAL DIRECTION DURING MEDIA 4. FILTER GU/ PLACEMENT. 5. FILTER MEDIA BAGS MUST BE PROTECTED FROM THE WEATHER AND STACKED NOT MORE THAN 5 (FIVE) HIGH TO PREVENT BREAKAGE. WHEN BULK SHIPMENT IS USED THE FILTER MEDIA MUST BE PROTECTED FROM THE WEATHER AND COVERED TO PREVENT WIND-BLOWN LOSS DURING MEDIA PLACEMENT.

BACKCHARGES FOR FIELDWORK OF ANY KIND ARE NOT ACCEPTABLE WITHOUT PRIOR WRITTEN AUTHORIZATION BY WESTECH ENGINEERING, LLC.

WESTECH[®]

MEDIA LOADING SCHEDULE TRIDENT® TR-840A WATER TREATMENT SYSTEM

TITLE

1 OF 1

BA92
DOCUMENT NUMBER 0002885579

DESIGNER
PE84
JOB NUMBER 24862A

BE REQUIRED DURING MEDIA 6. APPROXIMATELY TWO BACKWASH AND SKIMMING OPERATIONS WILL PLACEMENT. EACH BACKWASH WILL BE ABOUT A 10 MINUTE DURATION. 7. FILTER MEDIA PLACEMENT MUST BE DONE UNDER WESTECH ENGINEERING'S DIRECTION AFTER ALL ELECTRICAL, HYDRAULIC AND CONTROL SYSTEMS ARE INSTALLED AND/OR REPAIRED AND OPERABLE PRIOR TO ARRIVAL OF TECHNICAL DIRECTOR. 78

8. MEDIA SHOULD BE PLACED IN ADSORPTION CLARIFIER AFTER ALL AIR WASH LATERALS AND SUPPORTS HAVE BEEN ASSEMBLED AND PRIOR TO INSTALLATION OF MEDIA RETAINER COVER. THERE IS TO BE NO UNSCREENED OPENINGS IN MEDIA RETAINING COVER. SEE PROJECT'S O&M MANUAL FOR MEDIA INSTALLATION PROCEDURES.

NOTED ON THIS DRAWING. WESTECH.		SHALL BE IN ACCORDANCE WITH NACE/SSPC STANDARDS, COATING MANUFACTURER'S PRODUCT DATA SHEET AND WESTECH WORKMANSHIP STANDARD QR-00-063 (SECTION 3.1).	ARE FREE OF WELD SLAG, SPATTER, SHARP EDGES, AND BURRS PER QR-00-063 (SECTION 2.1).	CLEANING - PRIOR TO ABRASIVE BLAST CLEANING, SOLVENT WIPE PER SSPC SP1. REMOVE ALL VISUAL GREASE, OIL, WAX, AND ALL OTHER CONTAMINATION	ACE VIS 1 SHREACE CHEANING SHALL BE SP10	TOTAL TO LOCATION DATE AND FOR EVALUATION DATES CONTACT	ING MANUFACTURER S PRODUCT DATA SHEET, AND FOR EAACT SHOP COATING APPLICATION DATES, CONTACT	IN ACCORDANCE WITH SSPC PA2, TABLE 1 - RESTRICTION LEVEL 3 (80%-120%).	MACHINED SURFACES AND FORGED (ANSI) PIPE FLANGE FACES SHALL BE PROTECTED FROM ABRASIVE BLAST CLEANING AND COATING APPLICATION IN ACCORDANCE WITH THE WESTECH WORKMANSHIP STANDARD OR-00-063 (SECTIONS 2 & AND 3 1) AFTER COATING APPLICATION IS COMPIETE APPLY 1 PS3 COSMOI INFOR	SHIPPING.	FOR SUBMERGED APPLICATIONS: STRIPE COAT ALL WELDS, CUT EDGES, BOLT HOLES AND SLOTS USING A BRUSH. STRIPE COAT PER SSPC PA GUIDE 11 MAY BE COMPLETED AFTER PRIME COAT. STRIPE COAT 1" [25mm] BEYOND EDGE OR WELD.	PIPING 24" OR LESS IN DIAMETER IS ONLY COATED ON THE OUTSIDE SURFACES, EXCEPT FOR TANK AND VESSEL NOZZLES, WHICH REQUIRE COATINGS TO BE APPLIED BOTH INTERNALLY AND EXTERNALLY.	, BEARING HOUSINGS, AND MOTORS RECEIVE MANUFACTURER'S STANDARD PROTECTIVE COATINGS.	NON-FERROUS MATERIALS, SUCH AS FIBERGLASS, ALUMINUM, PLASTIC, ETC. SHALL NOT BE COATED, EXCEPT WHEN SPECIFICALLY STATED ON DRAWINGS OR IN THE PIRCHASE ORDER	E ANCHOR PROFILE. COATING SYSTEMS OF LESS THAN (15) mils DRY FILM THICKNESS (DFT) SHALL	INCLUDE A "BASE METAL READING" ADJUSTMENT TO THE DRY FILM THICKNESS GAGE. WHEN THE ABRADED SURFACE IS INACCESSIBLE DUE TO COATING APPLICATION, AND NO REFERENCE SURFACE IS AVAILABLE, A MINIMUM OF (1) mil DRY FILM THICKNESS SHALL BE SUBTRACTED FROM THE DRY FILM THICKNESS GAGE READINGS.	JEMEC SERIES 21.	FIC DATA IS LISTED UNDER "INSPECTION REQUIREMENTS"	CERTIFIED COATING INSPECTION - (IF YES) - COATING SHALL BE INSPECTED BY A NACE CERTIFIED INSPECTOR, LEVEL 1 OR HIGHER.		IALL BE IN ACCORDANCE WITH THE COATING MANUFACTURER'S PRODUCT DATA SHEET 3188.	SOLUBLE SALT TEST - (IF YES) - TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SSPC GUIDE-15. LIMITS SHALL BE DEFINED AS MILLIGRAMS/METER² (mα/m²). IF CLIENT DOES NOT SPECIFY, SEND REQUEST FOR INFORMATION.	PERFORMED IN ACCORDANCE WITH ASTM D3359 "X.CUT ADHESION" (TAPE) OR ASTM D4541	N SHALL BE SPECIFIED IN PSI AND BASED ON COATING MÁNUFACTURER'S	D COATINGS USING SERIES 21 IS 20 mils. DO NOT EXCEED.	BE COATED EXCEPT WHERE NOTED ON DRAWING.	PREPAREDFOR OLIVER P. ROEMER WTF RIALTO, CALIFORNIA	C.L. T. L. C.L. C.L. C.L. C.L. C.L. C.L.	ENGINEEK STANTEC PASADENA, CALIFORNIA	CONTRACTOR PCL CONSTRUCTION		NUMBER 03269401-OM		THE DRIVING BROOFIT OF WEETING FOR BOUNDERS AN INDICE THAT DE NICOMBRIGHE, METHER REGISTRON POSSESSON COMPANS FOR SAMPRONS TO REPONDE. ELECONOLISION OF MESTER PROPERTIES IN THAT THE WAITEN PRINSSON OF WESTER HEARDERS OF THE WEIGHT OF THE WAITEN PRINSSON OF WESTER HEARDERS OF THE WEIGHT OF THE WAITEN PRINSSON OF WESTER HEARDERS OF THE WEIGHT OF THE WAITEN PRINSSON OF WESTER HEARDERS OF THE WAITEN PRINSSON	SUBMERGED WATER (MICROFLOC PACKAGE SYSTEM)	DESIGNER CHECKER APPROVER DATE	PE84 DE111 DE111 2023-02-03 PE94 DOC: IMMERT NU MAREP SHIEFT PE	COCOMEN NOMBER
NOTES: 1. FOLLOW THE LISTED WESTECH REFERENCE DOCUMENTS EXCEPT AS NOTED ON THIS DRAWING 2. FIELD TOUCH-UP PAINT, LABOR AND COATINGS ARE NOT SUPPLIED BY WESTECH. 3. EPOXY COATINGS CHALK WHEN EXPOSED TO UV LIGHT AND WILL FADE.		a. SHALL BE IN ACCORDANCE WITH NACE/SSPC STANDARDS, COAT STANDARD QR-00-063 (SECTION 3.1).	b. PRE-CLEANING - VERIFY THAT ALL SURFACES ARE FREE OF WEL	c. CLEANING - PRIOR TO ABRASIVE BLAST CLEANING, SOLVENT WI	WHEN SSPC SPEIS SPECIFIED AND NEW STEEL IS LISED. PER NACE VISA SUBFACE CLEANING SHALL BE SPACE.		 FOR FIELD RECOAL WINDOWS, REFER TO THE COALING MANOFACTOR WESTECH. 	6. COATING THICKNESS RESTRICTION LEVEL SHALL BE IN ACCORDANCE	7. MACHINED SURFACES AND FORGED (ANSI) PIPE FLANGE FACES SHAL WITH THE WESTECH WORKMANSHIP STANDARD OR-00-063 (SECTIONS		S FOR SUBMERGED APPLICATIONS: STRIPE COAT ALL WELDS, CUT EDG COMPLETED AFTER PRIME COAT. STRIPE COAT 1" [25mm] BEYOND EDG	9. PIPING 24" OR LESS IN DIAMETER IS ONLY COATED ON THE OUTSIDE & BOTH INTERNALLY AND EXTERNALLY.	10. ALL BUYOUT ITEMS SUCH AS NON-WESTECH DRIVES, BEARING HOUSI	11. NON-FERROUS MATERIALS, SUCH AS FIBERGLASS, ALUMINUM, PLAST PIECHASE ORDER	12. COATING THICKNESS SHALL BE MEASURED ABOVE THE PEAKS OF THE	INCLUDE A "BASE METAL READING" ADJUSTMENT TO THE DRY FILM TH AND NO REFERENCE SURFACE IS AVAILABLE, A MINIMUM OF (1) mil DF	(3) USE A MAXIMUM OF 5% F041-0088 THINNER CLEAR BY VOLUME WITH TNEMEC SERIES 21	♠ REFERENCE NOTES: ONLY APPLICABLE WHEN SPECIFIC DATA IS LISTE	NACE CERTIFIED COATING INSPECTION - (IF YES) - COATING SHA	SPECIFY LEVEL ON THE NEXT LINE.	HOLIDAY TEST - (IF YES) - HOLIDAY TESTING SHALL BE IN ACCOR ———————————————————————————————————	SOLUBLE SALT TEST - (IF YES) - TESTING SHALL BE PERFORMED MILLIGRAMS/METER ² (mg/m²). IF CLIENT DOES NOT SPECIFY	ADHESION TEST - (IF YES) - TESTING SHALL BE PERFORMED IN A	——————————————————————————————————————		⟨♠ STAINLESS STEEL COMPONENTS WELDED TO CARBON STEEL SHALL BE COATED EXCEPT WHERE NOTED ON DRAWING		COATING #2	TNEMEC DHENAL KAMINE	(EPOXY)	SERIES 21		5-7 mils OFF WHITE (WH16)		IICKNESS: 10-14 mils (\$\ightarrow\$)			
SUBMERGED PROCESS EQUIPMENT (DOMESTIC) ALL PARTIALLY SUBMERGED OR TOTALLY SUBMERGED ITEMS	◆CARBON STEEL		0°F TO 120°F MAXIMUM	100%	SUBMERGED	ON	POTABLE WATER	NEUTRAL (6-9)	CZ	(\$) YES	1,000 PPM		ON	ON	ON		♠NOT REQUIRED / NOT BY WESTECH	NOT REQUIRED / NOT BY WESTECH (♠)	⟨♠ YES	NOT REQUIRED / NOT BY WESTECH ﴿◆	♠NOT REQUIRED / NOT BY WESTECH	NOT REQUIRED / NOT BY WESTECH(4♦		NACE 2 / SP10	2.0 mils			AT #1	TNEMEC TNEMEC DHENALKAMINE		♦ SERIES 21	<	5-7 mils (8) BEIGE (1255) OFF WHITE (WH16)		TOTAL DRY FILM THICKNESS:			•
EQUIPMENT DESCRIPTION: TYPE OF EQUIPMENT / TAG NUMBER(S): ITEMS REQUIRING THIS COATING SYSTEM:	MATERIAL TO BE COATED:	PROCESS APPLICATION	DESIGN / OPERATING TEMPERATURE:	HUMIDITY:	SERVICE CONDITIONS:	UV EXPOSED:	PROCESS ENVIRONMENT:	pH LEVEL:	IF PH IS NOT NEUTRAL, WATED CHEMISTEV ANALYSIS IS BEOLIDED:	COATINGS SHALL MEET NSF 61 CERTIFICATION:	MAXIMUM PPM CHLORIDES:	EINISHING	INSULATED:	FIREPROOFING:	CATHODIC PROTECTION SYSTEM:	(♣) INSPECTION REQUIREMENTS	NACE CERTIFIED COATINGS INSPECTOR:	NACE CERTIFICATION LEVEL REQUIRED:	HOLIDAY TEST (NACE SP0188):	SOLUBLE SALT TEST:	MILLIGRAMS / METERS 2 ACCEPTABLE:	ADHESION TEST:	SURFACE PREPARATION	NACE/SSPC SURFACE CLEANING STANDARD:	MINIMUM ANGULAR ANCHOR PROFILE RANGE:			COATING SYSTEM SPECIFICATION	COATING MANUFACTURER:	(GENERIC):	PRODUCT NAME/NUMBER:	DRY FILM THICKNESS (DFT)	MINIMUM-MAXIMUM mils: COLOR NAME/ NI IMBER:					

EQUIPMENT DESCRIPTION:		NOTES:
TYPE OF EQUIPMENT:	NON-SUBMERGED PROCESS EQUIPMENT (DOMESTIC)	1. FOLLOW THE LISTED WESTECH REFERENCE DOCUMENTS EXCEPT AS NOTED ON THIS DRAWING.
TAG NUMBER(S):	N/A	2. FIELD TOUCH-UP PAINT, LABOR AND COATINGS ARE NOT SUPPLIED BY WESTECH.
ITEMS REQUIRING THIS COATING SYSTEM:	\leq	3. EPOXY COATINGS CHALK WHEN EXPOSED TO UV LIGHT AND WILL FADE.
MATERIAL TO BE COATED:	CARBON STEEL (4)	4. SURFACE PREPARATION AND COATING APPLICATION:
PROCESS APPLICATION		a. SHALL BE IN ACCORDANCE WITH NACE/SSPC STANDARDS, COATING MANUFACTURER'S PRODUCT DATA SHEET AND WESTECH WORKMANSHIP STANDARD QR-00-063 (SECTION 3.1).
DESIGN / OPERATING TEMPERATURE:	DRY 140°F MAXIMUM CONTINUOUS	b. PRE-CLEANING - VERIFY THAT ALL SURFACES ARE FREE OF WELD SLAG, SPATTER, SHARP EDGES, AND BURRS PER QR-00-063 (SECTION 2.1).
HUMIDITY:	0 -100% ATMOSPHERIC	C. CLEANING - PRIOR TO ABRASIVE BLAST CLEANING, SOLVENT WIPE PER SSPC SP1. REMOVE ALL VISUAL GREASE, OIL, WAX, AND ALL OTHER CONTAMINATION WHEN SSPC SP6 IS SPECIFIED AND NEW STEFL IS LISED PER NACE VIS 1 SIREACE CLEANING SHALL BE SP10
SERVICE CONDITIONS:	NON-SUBMERGED	FACO FILE OF GENERAL SWINGS FACOUR OF FEED TO SERVICE STATES OF THE STAT
UV EXPOSED:	ON	3. FOR FIELD RECORT WINDOWS, REFER TO THE COATING MANOFACTORERS PRODUCT DATA SHEET, AND FOR EXACT SHOP COATING AFFEICATION DATES, CONTACT WESTECH.
PROCESS ENVIRONMENT:	PROCESS WATER	6. COATING THICKNESS RESTRICTION LEVEL SHALL BE IN ACCORDANCE WITH SSPC PA2, TABLE 1 - RESTRICTION LEVEL 3 (80%-120%).
ph LEVEL:		7. MACHINED SURFACES AND FORGED (ANSI) PIPE FLANGE FACES SHALL BE PROTECTED FROM ABRASIVE BLAST CLEANING AND COATING APPLICATION IN ACCORDANCE
IF PH IS NOT NEUTRAL,	9	WITH THE WESTECH WORKMANSHIP STANDARD QR-00-063 (SECTIONS 2.6 AND 3.1). AFTER COATING APPLICATION IS COMPLETE, APPLY LPS3, COSMOLINE OR EQUIVALENT RUST INHIBITOR TO PROTECT THESE SURFACES DURING SHIPPING.
WATER CHEMISTRY ANALYSIS IS REQUIRED:	ON	8. PIPING 24" OR LESS IN DIAMETER IS ONLY COATED ON THE OUTSIDE SURFACE, EXCEPT FOR TANK AND VESSEL NOZZLES, WHICH REQUIRE COATINGS TO BE APPLIED BOTH INTERNALLY AND EXTERNALLY.
FINISHING		9. ALL BUYOUT ITEMS SUCH AS NON-WESTECH DRIVES, BEARING HOUSINGS, AND MOTORS RECEIVE MANUFACTURER'S STANDARD PROTECTIVE COATINGS.
INSULATED:	ON	10. NON-FERROUS MATERIALS, SUCH AS FIBERGLASS, ALUMINUM, STAINLESS STEEL, PLASTIC, ETC. SHALL NOT BE COATED, EXCEPT WHEN SPECIFICALLY STATED ON
FIREPROOFING:	ON	DRAWINGS OR IN THE PURCHASE ORDER.
CATHODIC PROTECTION SYSTEM:	ON	11. COATING THICKNESS SHALL BE MEASURED ABOVE THE PEAKS OF THE ANCHOR PROFILE. COATING SYSTEMS OF LESS THAN (15) mils DRY FILM THICKNESS (DFT) SHALL INCLUDE A "BASE METAL READING" ADJUSTMENT TO THE DRY FILM THICKNESS GAGE. WHEN THE ABRADED SURFACE IS INACCESSIBLE DUE TO COATING APPLICATION, AND NO REFERENCE SURFACE IS AVAILABLE, A MINIMUM OF (1) mil DRY FILM THICKNESS SHALL BE SUBTRACTED FROM THE DRY FILM THICKNESS GAGE READINGS.
⟨♦⟩ INSPECTION REQUIREMENTS	<	(2) USE A MAXIMUM OF 5% F041-0088 THINNER CLEAR BY VOLUME WITH TNEMEC SERIES 21.
NACE CERTIFIED COATINGS INSPECTOR:	(♣ NOT REQUIRED / NOT BY WESTECH	🕸 REFERENCE NOTES: ONLY APPLICABLE WHEN SPECIFIC DATA IS LISTED UNDER "INSPECTION REQUIREMENTS"
NACE CERTIFICATION LEVEL REQUIRED:	NOT REQUIRED / NOT BY WESTECH(多	NACE CERTIFIED COATING INSPECTION - (IF YES) - COATING SHALL BE INSPECTED BY A NACE CERTIFIED INSPECTOR, LEVEL 1 OR HIGHER.
HOLIDAY TEST (NACE SP0188):	⟨ŷ YES	SPECIFY LEVEL ON THE NEXT LINE.
SOLUBLE SALT TEST:	NOT REQUIRED / NOT BY WESTECH (3)	HOLIDAY TEST - (IF YES) - HOLIDAY TESTING SHALL BE IN ACCORDANCE WITH THE COATING MANUFACTURER'S PRODUCT DATA SHEET (PREFERRED METHOD) OR PER NACE SP-0188
MILLIGRAMS / METERS ² ACCEPTABLE:	♠ NOT REQUIRED / NOT BY WESTECH	(THE ENGLE METTO) OF ENTRY OF STATE OF STATE OF STATE OF STATE STATE OF STATE
ADHESION TEST:	NOT REQUIRED / NOT BY WESTECH	SOLOBLE SALLI TEST - (TT TES) - TESTING SHALL BE PERFORMED IN ACCONDANCE WITH SOPICIONE. MILLIGRAMS/METER? (mg/m²). IF CLIENT DOES NOT SPECIFY, SEND REQUEST FOR INFORMATION.
SURFACE PREPARATION		ADHESION TEST - (IF YES) - TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D3359 "X-CUT ADHESION" (TAPE) OR ASTM D4541 (PULL-OFF). IF PULL-OFF IS SPECIFIED, MINIMUM ADHESION SHALL BE SPECIFIED IN PSI AND BASED ON COATING MANUFACTURER'S RECOMMENDATIONS
NACE/SSPC SURFACE CLEANING STANDARD:	NACE 2 / SP10	A EXTERIOR BOTTOM OF TANK LINCOATED INSTALLING CONTRACTOR TO ASPHALTIC COATING TO FOLIDMENT BASE DAD BRIOR TO TANK PLACEMENT
MINIMUM ANGULAR ANCHOR PROFILE RANGE:	2.0 mils	
		CHANGE IS REQUIRED, THEN WESTECH WILL PROVIDE COMMUNICATION OF THE UPDATE AT THE TIME OF APPLCATION, UNLESS OTHER NOTED IN SUBSEQUENT COMMUNICATIONS, TNEMEC SERIES 73 WILL BE USED.
		PREPAREDFOR OLIVER P. ROEMER WTF RIALTO, CALIFORNIA
COATING SYSTEM SPECIFICATION	PRIMER COAT #1	ENGINEER STANTEC
COATING MANUFACTURER:	TNEMEC	PASADENA, CALIFORNIA
TYPE OF COATING:	PHENALKAMINE ALAPHATIC ACRYLIC	CONTRACTOR PCL CONSTRUCTION
(GENERIC):	(EPOXY) POLYURETUANE	
PRODUCT NAME/NUMBER:	♦ SERIES 21	POICONTRACT 03269401-OM NUMBER 03269401-OM
DRY FILM THICKNESS (DFT)		
MINIMUM-MAXIMUM mils:		DENCE. NEITHE
COLOR NAME / NUMBER:	BEIGE (1255) AQUA SKY (10GN)	— A TITLE COATING DATA SHEET NON-SUBMERGED (TRIDENT®)
OTAL DRY FILM THICKNESS OF SYSTEM:	8-12 mils	DESIGNER CHECKER APPROVER DATE
	V V	DOCOMEN NOWIBEN

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