

EAST BAY MUNICIPAL UTILITY DISTRICT

REQUEST FOR QUOTATION (RFQ) No. 2501 for LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT

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For complete information regarding this project, see RFQ posted at <https://www.ebmud.com/business-center/materials-and-supplies-bids/current-requests-quotation-rfqs/> or contact the EBMUD representative listed above. Please note that prospective bidders are responsible for reviewing this site during the RFQ process, for any published addenda regarding this RFQ.

Bids Due
by
1:30 p.m.
on
August 14, 2024

All bid submissions hand delivered or mailed (USPS, FedEx, UPS, etc.) to the address or PO Box noted below and must be received no later than 1:30 p.m. on the bid due date.

RESPONSE DELIVERED BY SERVICE (UPS, FedEx, DHL, etc., during business hours: 8:00 AM – 4:00 PM only) to: EBMUD–Purchasing Division RFQ 2501 – LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT 375 11 th Street Oakland, CA 94607	RESPONSE DELIVERED BY MAIL (U.S. Postal Service) to: EBMUD–Purchasing Division RFQ 2501 – LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT P.O. Box 24055 Oakland, CA 94623	RESPONSE HAND-DELIVERED (during business hours: 8:00 AM – 4:00 PM only) EBMUD–Purchasing Division RFQ 2501 – LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT Purchasing Office 375-11 TH Street, 1 st Floor Oakland, CA 94607
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EAST BAY MUNICIPAL UTILITY DISTRICT

RFQ No. 2501

for

LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT

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I. STATEMENT OF WORK

A. SCOPE

It is the intent of these specifications, terms, and conditions to describe the District requirements for supplying liquid oxygen (LOX) and preliminary inspection for the LOX storage tanks and filling station at the District's Main Wastewater Treatment Plant (MWWTP) during the 2-year construction period for rehabilitation of the existing oxygen production plant.

Under this proposal, the Contractor must furnish LOX free on board (f.o.b.) destination in accordance with the most recent revision of the American Water Works Association's (AWWA) Standard B300 for LOX, except as modified or supplemented herein.

East Bay Municipal Utility District (District) intends to award a two-year contract, with one option to renew for an additional one-year period, to the lowest cost bidder(s) whose response meets the District's requirements.

B. BIDDER QUALIFICATIONS

1. Bidder Minimum Qualifications

- a. Bidder, bidder's principal, or bidder's staff shall have been regularly engaged in the business of providing liquid oxygen, as well as maintenance and repair services for Oxygen Production and Storage Systems for at least five (5) years.
- b. Bidder shall possess all permits, licenses, and professional credentials necessary to supply product and perform services as specified under this RFQ.

C. SPECIFIC REQUIREMENTS

1. INSPECTION REQUIREMENTS

- a. EBMUD requires the Contractor that provides LOX to also provide a preliminary inspection of the LOX storage tanks and fill station equipment at the MWWTP to ensure the system is in functioning condition to accept LOX deliveries. The system at the MWWTP consists of four (4) 11,000-gallon vertical LOX storage tanks. The total daily demand of LOX averages approximately 120 tons per day or 30,000 CCF per day.
- b. The storage tanks, vaporizers, piping, instrumentation, and control system are owned by the District. The LOX system drawings are attached in EXHIBIT D.

- c. The District will provide the Contractor with Operation and Maintenance (O&M) Manual for the LOX system for the MWWTP after award of the contract.
- d. The Contractor shall provide a written record of inspection, inspection results, and maintenance services recommended as part of this contract within 15 days of performance of such services to the MWWTPs' supervisors, or a designee.
- e. Contractor will be responsible for providing technical support and assistance to the District through Contractor's own personnel, equipment and facilities as well as through manufacturer's technical representatives. As part of this technical support and assistance, the Contractor must provide personnel with in-depth technical knowledge of the products the Contractor is providing under this contract, to answer questions and offer any assistance required by the District staff, during District business hours, 7:00 A.M. – 4:00 P.M.

2. LOX SPECIFICATIONS

- a. The LOX supplier shall have the capacity to supply the required daily quantity of 30,000 CCF LOX per day for a planned 5-day time frame during one (1) scheduled plant turnaround that the District will provide a minimum of 10 business days' notice. If the supplier cannot meet this entire demand, the supplier agrees to provide the maximum daily quantity, and remaining balance of LOX will be offered to the next lowest bidder in response to this RFQ.
- b. The LOX supplier shall have the capacity to supply an optional LOX "top-off" of a maximum daily quantity of 10,000 CCF for a maximum of 3 days with a 48-hour notice provided by the District. If the supplier cannot meet this entire demand, the supplier agrees to provide the maximum daily quantity, and remaining balance of LOX will be offered to the next lowest bidder in response to this RFQ.
- c. The LOX supplier shall have the capacity to supply a required daily quantity of 30,000 CCF LOX per day for any unplanned emergency outages throughout the 2-year construction that the District will provide an immediate notice and require deliveries within 48 hours. If the supplier cannot meet this entire demand, the supplier agrees to provide their maximum daily quantity, and the remaining balance of LOX will be offered to the next lowest bidder in response to this RFQ.

- d. The LOX supplier shall have a production facility to supply oxygen with a quality verification level of Grade G or better for Type II liquid oxygen as defined by the Compressed Gas Association, Specification CGA-4.3, 2015 Edition, or latest revision. The production facility must be within reasonable distance from the MWWTP to ensure deliveries within a 48-hour time frame.
- e. Product must comply with Title 22, California Code of Regulation: Division 4: Chapter 16, California Water Works Standard: Article 7, Additives, certified as meeting the specifications of National Sanitation Foundation / American National Standard Institute Standard 60 (NSF/ANSI 60)-Drinking Water Treatment Chemicals Health Effects. NSF 60 certification must apply from manufacturer/ pickup location and to point of delivery on all orders.
- f. Contractor is responsible for informing the District, within 5 days, if and when their certification lapses or expires. Failure to inform the District within the allotted time will be sufficient grounds for immediate termination of the contract.
- g. Product must comply with AWWA Standard B304-13 or latest revision.
- h. Product shall not contain any substances that can cause deleterious health effects when used in dosages standard to the wastewater industry.
- i. Product shall not contain any substances that can cause wastewater treated with this product to fail to meet Federal and State wastewater standards when used in dosages standard to wastewater industry.
- j. Contractor shall provide 30 days advance written notice to EBMUD regarding any significant changes in the product manufacturing process or changes to the source of supply.
- k. The oxygen content of the delivered LOX shall not be less than 99.5 percent by weight.
- l. The dew point of the delivered LOX shall not be above -80°F (-62°C) at standard atmospheric pressure at the time of delivery.
- m. The total hydrocarbon content (THC) of the delivered LOX shall not exceed 40 ppm or the maximum specification defined by AWWA Standard B304-13, whichever is less, at the time of delivery.
- n. Contractor must have and maintain, throughout the contract term, and any extension thereof, the availability to deliver adequate levels of LOX required by the District.

All products shall be in new and unused condition and shall be of the most current and up to date model.

D. DELIVERABLES / REPORTS

LIQUID OXYGEN

1. The District shall give Contractor reasonable advance notice of the quantities of oxygen needed for its use. Contractor shall deliver such quantities within 48 hours after receipt of order. The delivery of oxygen by the Contractor, in accordance with all requirements of this Proposal and District’s acceptance of such delivery, shall constitute District’s purchase thereof, and quantities shall be measured in “hundred cubic feet” (CCF).

2. District staff will specify delivery date when placing the order with Contractor. District staff will also coordinate with other on-site contractors near the O2 Plant to ensure access to the fill station is clear. Most deliveries will be scheduled Mondays - Fridays, 7:00 A.M. – 3:00 P.M., except the District Holidays. All items shall be delivered f.o.b. destination to locations specified. District holidays are the following:
 - Martin Luther King, Jr. Day
 - Lincoln's Birthday
 - Washington's Birthday
 - Cesar Chavez' Birthday
 - Memorial Day
 - Juneteenth
 - Independence Day
 - Labor Day
 - Veterans' Day
 - Thanksgiving Day
 - Day After Thanksgiving
 - Christmas Day
 - Day After Christmas Day
 - New Year’s Day

3. Emergency 48 hour delivery may include weekends and District Holidays. Prior to each delivery, the Contractor shall send an email to the MWWTP that the delivery will be made to indicating the Driver’s License Number and bill of lading or other delivery certification number. Below is the email, and other contact information for the MWWTP:

Location	Telephone	Email
MWWTP	510-287-1522 or 510-287-1488	wwops.shiftsup@ebmud.com

4. The Contractor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require attendant delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies which would most commonly be expected to occur. The District reserves the right to refuse any and all deliveries made with equipment which is poorly maintained.

5. The tanks or trailers shall be clean and free of residue from previous loads which might contaminate the Contractor product or impede the unloading process. It is the Contractor's responsibility to verify the cleanliness of the transporting equipment before loading. All appurtenant valves, pumps, and discharge hoses used for the delivery of oxygen shall be clean and free from contaminating material.

6. The Contractor shall furnish a leak-free connection device between its delivery tank and the District's LOX tank intake receptacle. The Contractor shall observe the entire filling operation at each water treatment plant and shall immediately report any spills caused during the filling operations to the on-duty Plant Operator.

DELIVERY LOCATIONS

The LOX shall be delivered to the following locations:

1. MWWTP is located at 2020 Wake Ave., Oakland, CA 94607.
 - a. Prior to coming on plant grounds the drivers will be asked their name and that will be checked against their photo identification card and the information provided by the vendor.
 - b. The trailer license plate will be checked against the information provided by the vendor.

CERTIFICATE OF ANALYSIS

1. The LOX supplier shall provide analytical test results certifying that the liquid oxygen being bid meets the requirements of this section.

2. Verification of LOX quality will be determined by certified laboratory testing on at least a quarterly basis with documentation to be provided to the District. If the

supplier changes the source of liquid oxygen at any time, a new certification is required.

3. The District reserves the right to test samples of any loads delivered. If such test reveals that the material does not conform to these specifications, the Contractor shall reimburse the District for all charges related to the testing and replace the entire delivery at no charge.
4. Certificate of Analysis shall be submitted with the Bill of Lading at the time of each delivery.
5. The Certificate of Analysis shall contain the following:
 - Product lot number
 - Date of manufacturing
 - Percent available LOX
 - Total hydrocarbon (THC) of LOX
6. No deliveries will be accepted by the District unless accompanied by said analysis report for the specific batch or lot of chemical delivered.
7. Charges for the certified laboratory report shall be included in the bid price.

REQUIRED SUBMITTALS

1. With the bid proposal
 - a. Submit product data sheets demonstrating the LOX conformance to these specifications.
 - b. Submit proper documentation showing NSF/ANSI 60 certification of the LOX to be supplied.
 - c. Submit a Safety Data sheet (SDS) for products required by this contract.
2. After the Award of the Contract by the District
 - a. Submit qualifications of the independent testing laboratory for approval.

E. PLANT SECURITY PROCEDURES

These instructions cover Bulk Chemical Truck Drivers entering or leaving the District MWWTP on working days Monday through Friday during normal work hours 7:00 a.m. to 4:00 p.m. All entries shall be via the plants' entry gates.

1. Authorization for Clearance of Delivery Vehicles

The Division or Department Manager, a Section Superintendent, Supervisor, or a Wastewater Treatment Plant Operator responsible for the shift duties shall authorize clearance of delivery vehicles. The chemical supplier is responsible for sending pertinent information so that drivers will have prior authorization and clearance to allow entry into the MWWTP.

2. Prior to Chemical Delivery

Prior to chemical delivery, chemical suppliers will provide identification to each treatment plant containing a picture, name and drivers' license number of each driver delivering to the District. If there is a new driver, the identification will be emailed to the plant prior to the chemical truck leaving the chemical plant.

This following information will be sent to the MWWTP operations staff:

- A Bill of Lading
- A Certificate of Analysis
- A Truck Scale Weight

The chemical vendor will call the treatment plant prior to the delivery truck leaving the chemical plant. The driver's name, license plate number and expected time of arrival will be communicated to the plant staff at least four (4) hours before arrival.

F. INSPECTION

The District will inspect material after its arrival at the delivery point. If the rejection rate of a sample of components is 10% or higher, all components will be rejected. Contractor is solely responsible for ensuring the material arrives at the District's ship-to location free of defects and manufactured in strict conformance with the specifications.

In the case that an item or lot is rejected, District Inspectors will provide Contractor and the EBMUD Purchasing Division with an Inspectors Job Report which will itemize the product deficiencies and required corrective action.

The District reserves the right-of-access to the Contractor's facility to verify conformance to this specification at the District's expense.

G. FAILURE TO MEET SPECIFICATIONS

In the event any shipment or shipments of a Contractor's product do not meet the specification or delivery requirements, the District may reject the shipment or shipments and, at its option, may purchase this material from any supplier on the open market who can meet the District's specification requirements, or the District may demand immediate replacement by Contractor of the non-conforming product. Any

costs over and above the original contract price will be charged back to the Contractor. In addition, Contractor shall bear the costs of removal and disposition for any delivery which fails to conform to the specifications.

II. CALENDAR OF EVENTS

EVENT	DATE/LOCATION
RFQ Issued	July 24, 2024
Deadline For Submission of Questions	August 5, 2024
Response Due	August 14, 2024 by 1:30 p.m. At this time all bids will be opened publicly in the EBMUD Board Room at 375 Eleventh St., Oakland, CA 94607*
Anticipated Contract Start Date	January – March, 2025

Note: All dates are subject to change by District.

*Due to COVID-19, in-person bid inspection will be suspended. Following the opening a list of submitted pricing will be posted to:

<https://www.ebmud.com/business-center/materials-and-supplies-bids/>

Bidders are responsible for reviewing <https://www.ebmud.com/business-center/materials-and-supplies-bids/current-requests-quotation-rfqs/> for any published addenda. Hard copies of addenda will not be mailed out.

III. DISTRICT PROCEDURES, TERMS, AND CONDITIONS

A. RFQ ACCEPTANCE AND AWARD

1. RFQ responses will be evaluated to determine that they are responsive, responsible, and that they meet the specifications as stated in this RFQ.
2. The District reserves the right to award to a single or to multiple Contractors, dependent upon what provides the lowest overall cost to the District.
3. The District has the right to decline to award this contract or any part of it for any reason.
4. Any specifications, terms, or conditions, issued by the District, or those included in the bidder’s submission, in relation to this RFQ, may be incorporated into any purchase order or contract that may be awarded as a result of this RFQ.
5. Award of contract. The District reserves the right to reject any or all proposals, to accept one part of a proposal and reject the other, unless the bidder stipulates to

the contrary, and to waive minor technical defects and administrative errors, as the interest of the District may require. Award will be made, or proposals rejected by the District as soon as possible after bids have been opened.

B. BRAND NAMES, APPROVED EQUIVALENTS, DEVIATIONS, AND EXCEPTIONS

Any references to manufacturers, trade names, brand names, and/or catalog numbers are intended to be descriptive, but not restrictive, unless otherwise stated, and are intended to indicate the quality level desired. Bidders may offer an equivalent product that meets or exceeds the specifications.

The District reserves the right to be the sole judge of what shall be considered equal and/or acceptable and may require the bidder to provide additional information and/or samples. If the bidder does not specify otherwise, it is understood that the brand and/or product referenced in this RFQ will be supplied.

Taking exception to the RFQ, or failure on the part of the bidder to comply with all requirements and conditions of this RFQ, may subject the RFQ response to rejection. If no deviations are shown, the bidder will be required to furnish the material exactly as specified. The burden of proof of compliance with the specifications will be the responsibility of the bidder.

This RFQ is subject to acceptance only on the terms and conditions stated in this RFQ. Any additional or different terms and conditions proposed by the bidder are hereby rejected and shall be of no force or effect unless expressly assented to in writing by the District.

RFQ responses based on equivalent products must:

1. Use Exhibit A "Exceptions, Clarification and Amendments" to clearly describe the alternate offered and indicate specifically how it differs from the product specified in this RFQ.
2. Include complete descriptive literature and/or specifications as proof that the proposed alternate will be equal to or better than the product named in this RFQ.

C. PRICING

1. All prices are to be F.O.B. destination. Any freight/delivery charges are to be included.
2. All prices quoted shall be in United States dollars.
3. Price quotes shall include any and all payment incentives available to the District.

4. Bidders are advised that in the evaluation of cost, if applicable, it will be assumed that the unit price quoted is correct in the case of a discrepancy between the unit price and extended price.

D. PRICE ADJUSTMENTS

Prices shall be firm for the initial one-year term of the contract, except in the event of agreed price decrease(s). The District may consider price increases submitted by Contractor, once per each twelve-month period, in determining pricing for liquid oxygen for the term of this Agreement and any extension periods. Contractor may be required to provide substantiation for the increase request(s). Price decreases may be submitted at any time.

E. NOTICE OF INTENT TO AWARD AND PROTESTS

At the conclusion of the RFQ response evaluation process, all entities who submitted a bid package will be notified in writing by e-mail or USPS mail with the name of the Bidder being recommended for contract award. The document providing this notification is the Notice of Intent to Award.

Protests must be in writing and must be received no later than seven (7) workdays after the District issues the Notice of Intent to Award. The District will reject the protest as untimely if it is received after this specified time frame. Protests will be accepted from bidders or potential bidders only.

If the protest is mailed and not received by the District, the protesting party bears the burden of proof to submit evidence (e.g., certified mail receipt) that the protest was sent in a timely manner so that it would be received by the District within the RFQ protest period.

Bid protests must contain a detailed and complete written statement describing the reason(s) for protest. The protest must include the name and/or number of the bid, the name of the firm protesting, and include a name, telephone number, email address and physical address of the protester. If a firm is representing the protester, they shall include their contact information in addition to that of the protesting firm.

Protests must be mailed, hand delivered, or emailed to the Manager of Purchasing, Mailstop 102, East Bay Municipal Utility District, 375 Eleventh Street, Oakland, CA 94607 or P.O. Box 24055, Oakland, California 94623. Facsimile and electronic mail protests must be followed by a mailed or hand delivered identical copy of the protest and must arrive within the seven workday time limit. Any bid protest filed with any other District office shall be forwarded immediately to the Manager of Purchasing.

The bid protester can appeal the determination to the requesting organization's Department Director. The appeal must be submitted to the Department Director no

later than five workdays from the date which the protest determination was transmitted by the District, to the protesting party. The appeal shall focus on the points raised in the original protest, and no new points shall be raised in the appeal.

Such an appeal must be made in writing and must include all grounds for the appeal and copies of the original protest and the District's response. The bid protester must also send the Purchasing Division a copy of all materials sent to the Department Director. The Department Director will make a determination of the appeal and respond to the protester by certified mail in a timely manner. If the appeal is denied, the letter will include the date, time, and location of the Board of Directors meeting at which staff will make a recommendation for award and inform the protester it may request to address the Board of Directors at that meeting.

The District may transmit copies of the protest and any attached documentation to all other parties who may be affected by the outcome of the protest. The decision of the District as to the validity of any protest is final. This District's final decision will be transmitted to all affected parties in a timely manner.

F. METHOD OF ORDERING

1. POs and payments for products and/or services will be issued only in the name of Contractor.
2. Any and all change orders shall be in writing and agreed upon, in advance, by Contractor and the District.

G. TERM / TERMINATION / RENEWAL

1. The term of the contract, which may be awarded pursuant to this RFQ, will be three years.
2. At the sole discretion of the District, any contract which may be awarded pursuant to this RFQ, may be extended for one (1) additional one-year term at agreed prices with all other terms and conditions remaining the same. In the event that a Contractor does not agree to an extension, the District shall be given a minimum of 90 days' notice to locate a suitable replacement contractor.
3. This Agreement may be terminated for convenience by the District provided the Contractor is given written notice of not less than 30 calendar days. Upon such termination, the District shall pay the Contractor the amount owing for the products ordered and satisfactorily received by the District. This shall be the sole and exclusive remedy to which the Contractor is properly entitled in the event of termination by the District.

4. This Agreement may be terminated for cause at any time, provided that the District notifies Contractor of impending action.

H. WARRANTY

1. For any contract awarded pursuant to this RFQ, Contractor expressly warrants that all goods furnished will conform strictly with the specifications and requirements contained herein and with all approved submittals, samples and/or models and information contained or referenced therein, all affirmations of fact or promises, and will be new, of merchantable quality, free from defects in materials and workmanship, including but not limited to leaks, breaks, penetrations, imperfections, corrosion, deterioration, or other kinds of product deficiencies. Contractor expressly warrants that all goods and services furnished hereunder shall be guaranteed for a period of two years from the date of acceptance by the District.

I. INVOICING

1. Following the District's acceptance of product(s) meeting all specified requirements, and/or the complete and satisfactory performance of services, the District will render payment within thirty (30) days of receipt of a correct invoice.
2. The District shall notify Contractor of any invoice adjustments required.
3. Invoices shall contain, at a minimum, District purchase order number, invoice number, remit to address, and itemized products and/or services description.
4. The District will pay Contractor in an amount not to exceed the total amount quoted in the RFQ response.

IV. RFQ RESPONSE SUBMITTAL INSTRUCTIONS AND INFORMATION

A. DISTRICT CONTACTS

All contact during the competitive process is to be through the contact listed on the first page of this RFQ. The following persons are to be contacted only for the purposes specified below.

TECHNICAL SPECIFICATIONS:

Attn: John Law, Associate Civil Engineer

EBMUD-Wastewater Engineering Div. / Wastewater Dept.

E-Mail: john.law@ebmud.com

PHONE: (510) 287-7186

CONTRACT EQUITY PROGRAM:

Attn: Contract Equity Office

PHONE: (510) 287-0114

AFTER AWARD:

Attn: John Law, Associate Civil Engineer

EBMUD-Wastewater Engineering Div. / Wastewater Dept.

E-Mail: john.law@ebmud.com

PHONE: (510) 287-7186

B. SUBMITTAL OF RFQ RESPONSE

1. Responses must be submitted in accordance with Exhibit A – RFQ Response Packet, including all additional documentation stated in the “Required Documentation and Submittals” section of Exhibit A.
2. Late and/or unsealed responses will not be accepted.
3. RFQ responses submitted via electronic transmissions will not be accepted. Electronic transmissions include faxed RFQ responses or those sent by electronic mail (“e-mail”).
4. All RFQ responses must be SEALED and received by 1:30 p.m. on the due date specified in the Calendar of Events. Any RFQ response received after that time/date, or at a place other than the stated addresses, cannot be considered and will be returned to the bidder unopened. The EBMUD mailroom and Purchasing Division timestamp shall be considered the official timepiece for the purpose of establishing the actual receipt of RFQ responses.
5. RFQ responses are to be addressed/delivered as follows:

Mailed (USPS):

East Bay Municipal Utility District
LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT
PLANT
RFQ No. 2501
EBMUD–Purchasing Division
P.O. Box 24055
Oakland, CA 94623

Hand Delivered, delivered by courier or package delivery service (UPS, FedEx, DHL, etc.):

East Bay Municipal Utility District
LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT
PLANT

RFQ No. 2501
EBMUD–Purchasing Division
375 Eleventh Street, First Floor
Oakland, CA 94607

Bidder's name, return address, and the RFQ number and title must also appear on the mailing package.

6. All costs required for the preparation and submission of an RFQ response shall be borne by the bidder.
7. California Government Code Section 4552: In submitting an RFQ response to a public purchasing body, the bidder offers and agrees that if the RFQ response is accepted, it will assign to the purchasing 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 Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the RFQ response. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.
8. Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms “claim” and “knowingly” are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act.
9. The RFQ response shall remain open to acceptance and is irrevocable for a period of one hundred eighty (180) days, unless otherwise specified in the RFQ documents.
10. It is understood that the District reserves the right to reject any or all RFQ responses.
11. RFQ responses, in whole or in part, are NOT to be marked confidential or proprietary. The District may refuse to consider any RFQ response or part thereof so marked. RFQ responses submitted in response to this RFQ may be subject to public disclosure. The District shall not be liable in any way for disclosure of any such records.



EXHIBIT A
RFQ RESPONSE PACKET
RFQ No. 2501 – LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER
TREATMENT PLANT

To: The EAST BAY MUNICIPAL UTILITY District (“District”)

From: _____
(Official Name of Bidder)

RFQ RESPONSE PACKET GUIDELINES

- **BIDDERS ARE TO SUBMIT ONE (1) ORIGINAL HARDCOPY RFQ RESPONSE WITH ORIGINAL INK SIGNATURES AND ONE (1) COPY CONTAINING THE FOLLOWING IN THEIR ENTIRETY:**
 - **EXHIBIT A – RFQ RESPONSE PACKET**
 - **INCLUDING ALL REQUIRED DOCUMENTATION AS DESCRIBED IN “EXHIBIT A- REQUIRED DOCUMENTATION AND SUBMITTALS”**
- **ALL PRICES AND NOTATIONS MUST BE PRINTED IN INK OR TYPEWRITTEN; NO ERASURES ARE PERMITTED; ERRORS MAY BE CROSSED OUT AND CORRECTIONS PRINTED IN INK OR TYPEWRITTEN ADJACENT AND MUST BE INITIALED IN INK BY PERSON SIGNING THE RFQ RESPONSE.**
- **BIDDERS THAT DO NOT COMPLY WITH THE REQUIREMENTS, AND/OR SUBMIT AN INCOMPLETE RFQ RESPONSE MAY BE SUBJECT TO DISQUALIFICATION AND THEIR RFQ RESPONSE REJECTED IN TOTAL.**
- **IF BIDDERS ARE MAKING ANY CLARIFICATIONS AND/OR AMENDMENTS, OR TAKING EXCEPTION TO ANY PART OF THIS RFQ, THESE MUST BE SUBMITTED IN THE EXCEPTIONS, CLARIFICATIONS, AND AMENDMENTS SECTION OF THIS EXHIBIT A – RFQ RESPONSE PACKET. THE DISTRICT, AT ITS SOLE DISCRETION, MAY ACCEPT AMENDMENTS/EXCEPTIONS, OR MAY DEEM THEM TO BE UNACCEPTABLE, THEREBY RENDERING THE RFQ RESPONSE DISQUALIFIED.**
- **BIDDERS SHALL NOT MODIFY DISTRICT LANGUAGE IN ANY PART OF THIS RFQ OR ITS EXHIBITS, NOR SHALL THEY QUALIFY THEIR RFQ RESPONSE BY INSERTING THEIR OWN LANGUAGE OR FALSE CLAIMS IN THEIR RESPONSE. ANY EXCEPTIONS AND CLARIFICATIONS MUST BE PLACED IN THE “EXCEPTIONS/ CLARIFICATIONS” PAGE, NOT BURIED IN THE PROPOSAL ITSELF.”**



BIDDER INFORMATION AND ACCEPTANCE

1. The undersigned declares that all RFQ documents, including, without limitation, the RFQ, Addenda, and Exhibits, have been read and that the terms, conditions, certifications, and requirements are agreed to.
2. The undersigned is authorized to offer, and agrees to furnish, the articles and services specified in accordance with the RFQ documents.
3. The undersigned acknowledges acceptance of all addenda related to this RFQ.
4. The undersigned hereby certifies to the District that all representations, certifications, and statements made by the bidder, as set forth in this RFQ Response Packet and attachments, are true and correct and are made under penalty of perjury pursuant to the laws of California.
5. The undersigned acknowledges that the bidder is, and will be, in good standing in the State of California, with all the necessary licenses, permits, certifications, approvals, and authorizations necessary to perform all obligations in connection with this RFQ and associated RFQ documents.
6. It is the responsibility of each bidder to be familiar with all of the specifications, terms, and conditions and, if applicable, the site condition. By the submission of an RFQ response, the bidder certifies that if awarded a contract it will make no claim against the District based upon ignorance of conditions or misunderstanding of the specifications.
7. Patent indemnity: Contractors who do business with the District shall hold the District, its Directors, officers, agents, and employees, harmless from liability of any nature or kind, including cost and expenses, for infringement or use of any patent, copyright, or other proprietary right, secret process, patented or unpatented invention, article, or appliance furnished or used in connection with the contract or purchase order.
8. Insurance certificates are not required at the time of submission. However, by signing Exhibit A – RFQ Response Packet, the bidder agrees to meet the minimum insurance requirements stated in the RFQ. This documentation must be provided to the District prior to execution of an agreement by the District and shall include an insurance certificate which meets the minimum insurance requirements, as stated in the RFQ.
9. The undersigned acknowledges that RFQ responses, in whole or in part, are NOT to be marked confidential or proprietary. The District may refuse to consider any RFQ response or part thereof so marked. RFQ responses submitted in response to this RFQ may be subject to public disclosure. The District shall not be liable in any way for disclosure of any such records.
10. The undersigned bidder hereby submits this RFQ response and binds itself on award to the District under this RFQ to execute in accordance with such award a contract and to furnish the bond or bonds and insurance required by the RFQ. The RFQ, subsequent Addenda, bidder's Response Packet, and any attachments, shall constitute the Contract, and all provisions thereof are hereby accepted.

11. The undersigned acknowledges **ONE** of the following (please check only one box):

- Bidder is not an SBE and is ineligible for any bid preference; **OR**
- Bidder is an SBE or DVBE as described in the Contract Equity Program (CEP) and Equal Employment Opportunity (EEO) Guidelines, is requesting a 7% bid preference, and has completed the CEP and EEO forms at the hyperlink contained in the CEP and EEO section of this Exhibit A.

For additional information on SBE bid preference, please refer to the Contract Equity Program and Equal Employment Opportunity Guidelines at the above referenced hyperlink.

Official Name of Bidder (exactly as it appears on Bidder's corporate seal and invoice): _____

Street Address Line 1: _____

Street Address Line 2: _____

City: _____ State: _____ Zip Code: _____

Webpage: _____

Type of Entity / Organizational Structure (check one):

- Corporation
- Limited Liability Partnership
- Limited Liability Corporation
- Other: _____
- Joint Venture
- Partnership
- Non-Profit / Church

Jurisdiction of Organization Structure: _____

Date of Organization Structure: _____

Federal Tax Identification Number: _____

Department of Industrial Relations (DIR) Registration Number: _____

Primary Contact Information:

Name / Title: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

Street Address Line 1: _____

City: _____ State: _____ Zip Code: _____

SIGNATURE: _____

Name and Title of Signer (printed): _____

Dated this _____ day of _____ 20_____



BIDDING SHEET

Cost shall be submitted on this Bid Form as is. The prices quoted shall not include Sales Tax or Use Tax; said tax, wherever applicable, will be paid by the District to the contractor, if licensed to collect, or otherwise directly to the State.

No alterations or changes of any kind to the Bid Form(s) are permitted. RFQ responses that do not comply may be subject to rejection in total. The cost quoted below shall be the cost the District will pay for the term of any contract that is a result of this RFQ process.

Quantities listed herein are annual estimates based on past usage and are not to be construed as a commitment. No minimum or maximum is guaranteed or implied.

Bidders must bid on both line items to be considered responsive. Failure to do so will result in bid being rejected/disqualified.

Item	Estimated Quantity/Time	Description	Price Per Unit	Total
1.	150,000 CCF (30,000 CCF per day for 5 days)	Total liquid oxygen (LOX) requirement for one 5-day plant turnaround, f.o.b., for 4 x 11,000 gal. tanks at MWWTP. 30,000 CCF per day required for a 5-day interval. Oxygen shall be at least 99.5% oxygen by volume priced per 100 cubic feet at Standard Temperature and Pressure, i.e., 70 degrees Fahrenheit and 14.7 psia.	\$ _____ per CCF	\$ _____
2.	150,000 CCF (30,000 CCF per day for 5 days)	Optional Total liquid oxygen (LOX) requirement for one 5-day plant emergency outage, f.o.b., for 4 x 11,000 gal. tanks at MWWTP. 30,000 CCF per day required for a 5-day interval. Oxygen shall be at least 99.5% oxygen by volume priced per 100 cubic feet at Standard Temperature and Pressure, i.e., 70 degrees Fahrenheit and 14.7 psia.	\$ _____ per CCF	\$ _____

Item	Estimated Quantity/Time	Description	Price Per Unit	Total
3.	LOX System Preliminary Inspection	Preliminary inspection fee for LOX storage tanks and fill station at the MWWTP oxygen production plant.	\$ _____ Per inspection	\$ _____
4.	30,000 CCF (10,000 CCF per day for 3 days)	Optional bid item for total liquid oxygen (LOX) for three 1-day "top-offs", f.o.b., for 4 x 11,000 gal tanks at MWWTP. Oxygen shall be at least 99.5% oxygen by volume priced per 100 cubic feet at Standard Temperature and Pressure, i.e., 70 degrees Fahrenheit and 14.7 psia.	\$ _____ per CCF	\$ _____
TOTAL AMOUNT BID \$ _____				



REQUIRED DOCUMENTATION AND SUBMITTALS

All of the specific documentation listed below is required to be submitted with the Exhibit A – RFQ Response Packet. Bidders shall submit all documentation, in the order listed below, and clearly label each section of the RFQ response with the appropriate title (i.e. Table of Contents, Letter of Transmittal, Key Personnel, etc.).

1. **Description of the Proposed Equipment/System:** RFQ response shall include a description of the proposed equipment/system, as it will be finally configured during the term of the contract. The description shall specify how the proposed equipment/system will meet or exceed the requirements of the District and shall explain any advantages that this proposed equipment/system would have over other possible equipment/systems. The description shall include any disadvantages or limitations that the District should be aware of in evaluating the RFQ response. Finally, the description shall describe all product warranties provided by bidder.
2. **Description of Emergency Supply Plan:** The District requires that critical vendors be able to continue to supply product in case of an unexpected disaster or urgent emergency event. All bidders must supply supporting documentation and/or summary of plans addressing their ability to do so.
3. **Sustainability Statement:** Contractors shall submit a statement regarding any sustainable or environmental initiatives or practices that they or their suppliers engage in. This information can be in relation to the specific products procured under this RFQ or in relation to the manufacture, delivery, or office practices of your firm.

If applicable, please also provide any information you have available on the below:

- a. Has your firm taken steps to enhance its ability to assess, track and address issues regarding Greenhouse Gas (GHG) Emissions in answer to recent legislations such as the [Buy Clean California Act](#)? If so, please attach any data you can on the embedded greenhouse gas emissions in the production and transport of the products and/or services which will be provided via this RFQ. If this is not available, please describe the approach you plan to take in order to gather and report this information in the future. For further information in this topic, please see: <http://www.ghgprotocol.org/scope-3-technical-calculation-guidance>
4. **Evidence of current NSF 60 and/or 61 certification:**
5. **References:**
 - (a) Bidders must use the templates in the “References” section of this Exhibit A – RFQ Response Packet to provide references.

- (b) References should have similar scope, volume, and requirements to those outlined in these specifications, terms, and conditions.
 - Bidders must verify the contact information for all references provided is current and valid.
 - Bidders are strongly encouraged to notify all references that the District may be contacting them to obtain a reference.
- (c) The District may contact some or all of the references provided in order to determine Bidder's performance record on work similar to that described in this RFQ. The District reserves the right to contact references other than those provided in the RFQ response.

6. **Exceptions, Clarifications, Amendments:**

- (a) The RFQ response shall include a separate section calling out all clarifications, exceptions, and amendments, if any, to the RFQ and associated RFQ documents, which shall be submitted with Bidder's RFQ response using the template in the "Exceptions, Clarifications, Amendments" section of this Exhibit A – RFQ Response Packet.
- (b) **THE DISTRICT IS UNDER NO OBLIGATION TO ACCEPT ANY EXCEPTIONS, AND SUCH EXCEPTIONS MAY BE A BASIS FOR RFQ RESPONSE DISQUALIFICATION.**

7. **Contract Equity Program:**

- (a) Every bidder must fill out, sign, and submit the appropriate sections of the Contract Equity Program and Equal Employment Opportunity documents located at the hyperlink contained in the last page of this Exhibit A. Special attention should be given to completing Form P-25, "Contractor Employment Data and Certification". Any bidder needing assistance in completing these forms should contact the District's Contract Equity Office at (510) 287-0114 prior to submitting an RFQ response.



REFERENCES

RFQ No. 2501 – LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT

Bidder Name: _____

Bidder must provide a minimum of three (3) references.

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided / Date(s) of Service:	



EXCEPTIONS, CLARIFICATIONS, AMENDMENTS

RFQ No. 2501 - LOX SUPPLY AND INSPECTION FOR MAIN WASTEWATER TREATMENT PLANT

Bidder Name: _____

List below requests for clarifications, exceptions, and amendments, if any, to the RFQ and associated RFQ Documents, and submit with bidder’s RFQ response. **The District is under no obligation to accept any exceptions and such exceptions may be a basis for RFQ response disqualification.**

Reference to:			Description
Page No.	Section	Item No.	
p. 23	D	1.c.	<i>Bidder takes exception to...</i>

*Print additional pages as necessary



CONTRACT EQUITY PROGRAM & EQUAL EMPLOYMENT OPPORTUNITY

The District's Board of Directors adopted the Contract Equity Program (CEP) to enhance equal opportunities for business owners of all races, ethnicities, and genders who are interested in doing business with the District. The program has contracting objectives, serving as the minimum level of expected contract participation for the three availability groups: white-men owned businesses, white-women owned businesses, and ethnic minority owned businesses. The contracting objectives apply to all contracts that are determined to have subcontracting opportunities, and to all contractors regardless of their race, gender, or ethnicity.

All Contractors and their subcontractors performing work for the District must be Equal Employment Opportunity (EEO) employers and shall be bound by all laws prohibiting discrimination in employment. There shall be no discrimination against any person, or group of persons, on account of race, color, religion, creed, national origin, ancestry, gender including gender identity or expression, age, marital or domestic partnership status, mental disability, physical disability (including HIV and AIDS), medical condition (including genetic characteristics or cancer), genetic information, or sexual orientation.

Contractor and its subcontractors shall abide by the requirements of 41 CFR §§ 60-1.4(a), 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity, or national origin in the performance of this contract. Moreover, these regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

All Contractors shall include the nondiscrimination provisions above in all subcontracts.

Please include the required completed forms with your bid.

Non-compliance with the Guidelines may deem a bid non-responsive, and therefore, ineligible for contract award. Your firm is responsible for:

- 1) Reading and understanding the CEP guidelines.
- 2) Filling out and submitting with your bid the appropriate forms.

The CEP guidelines and forms can also be downloaded from the District website at the following link:
<http://ebmud.com/business-center/contract-equity-program/>

If you have questions regarding the Contract Equity Program, please call (510) 287-0114.



EXHIBIT B INSURANCE REQUIREMENTS

CONTRACTOR/COMPANY NAME: _____

PROPOSER shall take out and maintain during the life of the Agreement all insurance required and PROPOSER shall not commence work until such insurance has been approved by DISTRICT. The proof of insurance shall be on forms provided by DISTRICT directly following these Insurance Requirements.

PROPOSERS are not required to submit completed insurance verification documents with their bid but will be required to submit them upon notification of award. By signing Exhibit A – RFP Response Packet, the PROPOSER agrees to meet the minimum insurance requirements stated in the RFP.

Provisions Applicable to All Required Insurance

- A. Prior to the beginning of and throughout the duration of Services, and for any additional period of time as specified below, CONTRACTOR shall, at its sole cost and expense, maintain insurance in conformance with the requirements set forth below.
- B. CONTRACTOR shall provide Verification of Insurance as required by this Agreement by providing the completed Verification of Insurance as requested below by signing and submitting Exhibit B (“Insurance Requirements”) to the DISTRICT. The Insurance Requirements may be signed by the insurance broker or the insurance broker’s agent (Insurance Broker/Agent) for the CONTRACTOR, or by an officer of the CONTRACTOR (Officer), or by the CONTRACTOR’s risk manager (Risk Manager). The Notice to Proceed shall not be issued, and CONTRACTOR shall not commence Services until a signed Verification of Insurance evidencing the specific coverages and limits required by this Agreement has been received by the DISTRICT.
- C. CONTRACTOR shall carry and maintain the minimum insurance requirements as defined in this Agreement. CONTRACTOR shall require any contractor/subcontractor to carry and maintain the minimum insurance required in this Agreement to the extent the insurance applies to the scope of the services to be performed by contractor/subcontractor.
- D. Receipt of a signed Verification of Insurance by the DISTRICT shall not relieve CONTRACTOR of any of the insurance requirements, nor decrease liability of CONTRACTOR.
- E. Insurance must be maintained, and an updated Verification of Insurance must be provided to the DISTRICT before the expiration of insurance by having the Insurance Broker/Agent, Officer, or Risk Manager update, sign and return the Insurance Requirements to the DISTRICT’s contract manager. The updated Insurance Requirements shall become a part of the Agreement but shall not require a change order to the Agreement. It is the CONTRACTOR’s sole responsibility to provide or to ensure that an updated Verification of Insurance is provided to the DISTRICT. The DISTRICT has no obligation to solicit, remind, prompt, request, seek, or otherwise obtain any updated Verification of Insurance, and any actual or alleged failure on the part of the DISTRICT to obtain any updated Verification of Insurance under this Agreement shall not in any way be construed to be a waiver of any right or remedy of the DISTRICT, in this or any regard.
- F. The insurance required hereunder may be obtained by a combination of primary, excess and/or umbrella insurance, and all coverage shall be at least as broad as the requirements listed in this Agreement.

- G. Any deductibles, self-insurance, or self-insured retentions (SIRs) applicable to the required insurance coverage must be declared to and accepted by the DISTRICT.
- H. At the option and request of the DISTRICT, CONTRACTOR shall provide documentation of its financial ability to pay the deductible, self-insurance, or SIR.
- I. CONTRACTOR is responsible for the payment of any deductibles or SIRs pertaining to the policies required under this Agreement. In the event CONTRACTOR is unable to pay the required SIR, CONTRACTOR agrees that such SIR may be satisfied, in whole or in part, by the DISTRICT as the additional insured at the DISTRICT's sole and absolute discretion, unless to do so would terminate or void the policy(ies).
- J. Unless otherwise accepted by the DISTRICT, all required insurance must be placed with insurers with a current A.M. Best's rating of no less than A- V.
- K. CONTRACTOR shall defend the DISTRICT and pay any damages as a result of failure to provide the waiver of subrogation from the insurance carrier required by this Agreement.
- L. For any coverage that is provided on a claims-made coverage form (which type of form is permitted only where specified), the retroactive date must be shown, must be before the date of this Agreement, and must be before the beginning of any Services related to this Agreement.
- M. For all claims-made policies the updated Verification of Insurance must be provided to the DISTRICT for at least three (3) years after expiration or termination of this Agreement.
- N. If claims-made coverage is canceled or is non-renewed and if the claims-made coverage is not replaced with another claims-made policy form with a retroactive date prior to the effective date of this Agreement and prior to the start of any Services related to this Agreement, CONTRACTOR must purchase an extended reporting period for a minimum of three (3) years after expiration or termination of the Agreement.
- O. In the event of a claim or suit, and upon request by the DISTRICT, CONTRACTOR agrees to provide a copy of the pertinent policy(ies) within 10 days of such request to the DISTRICT for review. Any actual or alleged failure on the part of the DISTRICT to request a copy of the pertinent policy(ies) shall not in any way be construed to be a waiver of any right or remedy of the DISTRICT, in this or any regard. Additionally, the DISTRICT may, at any time during CONTRACTOR's performance under this Agreement, request a copy of the Declarations pages and Schedule of Forms and Endorsements of any policy required to be maintained by CONTRACTOR hereunder, whether or not a suit or claim has been filed. Premium details may be redacted from any such documents requested.
- P. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained herein.
- Q. Where additional insured coverage is required, the additional insured coverage shall be primary and non-contributory, and will not seek contribution from the DISTRICT's insurance or self-insurance.
- R. CONTRACTOR agrees to provide immediate Notice to the DISTRICT of any loss or claim against CONTRACTOR arising out of, pertaining to, or in any way relating to this Agreement or to Services performed under this Agreement. The DISTRICT assumes no obligation or liability by such Notice but has the right (but not the duty) to monitor the handling of any such claim(s) if the claim(s) is likely to involve the DISTRICT.

- S. It is the obligation of the CONTRACTOR to ensure all contractors/subcontractors performing services under this Agreement maintain the necessary coverages and limits. CONTRACTOR shall ensure that all contractors/subcontractors agree to the same indemnity obligation that CONTRACTOR agrees to in this Agreement based on the nature and scope of services being performed by each contractor/subcontractor. CONTRACTOR shall require that each contractor/subcontractor include the DISTRICT, its directors, officers, and employees as additional insureds on its liability policy(ies) (excepting Professional Liability and Workers' Compensation) for all ongoing and completed operations with coverage as broad as required of CONTRACTOR under this Agreement. Failure or inability to secure fully adequate insurance shall in no way relieve the CONTRACTOR or all contractors/subcontractors of the responsibility for its own acts or the acts of any contractors/subcontractors or any employees or agents of either. All contractors/subcontractors are to waive subrogation against the DISTRICT on all policies. CONTRACTOR shall be responsible for maintaining records evidencing contractors'/subcontractors' compliance with the necessary insurance coverages and limits, and such records shall be made available to the DISTRICT within 10 days upon request.
- T. It is CONTRACTOR's responsibility to ensure its compliance with the insurance requirements. Any actual or alleged failure on the part of the DISTRICT to obtain proof of insurance required under this Agreement shall not in any way be construed to be a waiver of any right or remedy of the DISTRICT, in this or any regard.
- U. Notice of Cancellation/Non-Renewal/Material Reduction. The insurance requirements hereunder are mandatory, and the DISTRICT may, at its sole and absolute discretion, terminate the services provided by CONTRACTOR, should CONTRACTOR breach its obligations to maintain the required coverage and limits set forth in this Agreement. No coverage required hereunder shall be cancelled, non-renewed or materially reduced in coverage or limits without the DISTRICT being provided at least thirty (30) days prior written notice, other than cancellation for the non-payment of premiums, in which event the DISTRICT shall be provided ten (10) days prior written notice. Replacement of coverage with another policy or insurer, without any lapse in coverage or any reduction of the stated requirements does not require notice beyond submission to the DISTRICT of an updated Verification of Insurance which shall be met by having the Insurance Broker/ Agent, or Officer, or Risk Manager update, sign and return the Insurance Requirements.

I. Workers' Compensation and Employer's Liability Insurance Coverage

- A. Workers' Compensation insurance including Employer's Liability insurance with minimum limits as follows:
- | | |
|-------------|--|
| Coverage A. | Statutory Benefits Limits |
| Coverage B. | Employer's Liability of not less than: |
| | Bodily Injury by accident: \$1,000,000 each accident |
| | Bodily Injury by disease: \$1,000,000 each employee |
| | Bodily Injury by disease: \$1,000,000 policy limit |
- B. If there is an onsite exposure of injury to CONTRACTOR, and/or contractor/subcontractor's employees under the U.S. Longshore and Harbor Workers' Compensation Act, the Jones Act, or under laws, regulations or statutes applicable to maritime employees, coverage is required for such injuries or claims.
- C. If CONTRACTOR is exempt from carrying Workers' Compensation Insurance, CONTRACTOR must return the completed Verification of Insurance confirming that CONTRACTOR has no employees and is exempt from the State of California Workers' Compensation requirements.

- D. If CONTRACTOR is self-insured with respect to Workers' Compensation coverage, CONTRACTOR shall provide to the DISTRICT a Certificate of Consent to Self-Insure from the California Department of Industrial Relations. Such self-insurance shall meet the minimum limit requirements and shall waive subrogation rights in favor of the DISTRICT as stated below in section "E."
- E. Waiver of Subrogation. Workers' Compensation policies, including any applicable excess and umbrella insurance, must contain a waiver of subrogation endorsement providing that CONTRACTOR and each insurer waive any and all rights of recovery by subrogation, or otherwise, against the DISTRICT, its directors, board, and committee members, officers, officials, employees, agents, and volunteers. CONTRACTOR shall defend and pay any and all damages, fees, and costs, of any kind arising out of, pertaining to, or in any way relating to CONTRACTOR's failure to provide waiver of subrogation from the insurance carrier.

Verification of Workers' Compensation and Employer's Liability Insurance Coverage

By checking the box and signing below, I hereby verify that the CONTRACTOR is exempt from the State of California's requirement to carry Workers' Compensation insurance.

As the CONTRACTOR's Insurance Broker/Agent, Officer, or Risk Manager, I hereby verify that I have reviewed and confirmed that the CONTRACTOR carries Workers' Compensation insurance as required by this Agreement, including the relevant provisions applicable to all required insurance.

Self-Insured Retention: Amount: \$ _____

Policy Limit: \$ _____

Policy Number: _____

Policy Period: from _____ to _____

Insurance Carrier Name: _____

Insurance Broker/Agent or Officer or Risk Manager - Print Name: _____

Insurance Broker/Agent or Officer or Risk Manager's Signature: _____

II. Commercial General Liability Insurance ("CGL") Coverage

- A. CONTRACTOR's insurance shall be primary, and any insurance or self-insurance procured or maintained by the DISTRICT shall not be required to contribute to it.
- B. The insurance requirements under this Agreement shall be the greater of (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policies or proceeds available to the Named Insured. It is agreed that these insurance requirements shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums required herein. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of the CONTRACTOR.
- C. Minimum Requirements. CGL insurance with minimum per occurrence and aggregate limits as follows:

Bodily Injury and Property Damage	\$2,000,000 per occurrence & aggregate
Personal Injury/Advertising Injury	\$2,000,000 per occurrence & aggregate
Products/Completed Operations	\$2,000,000 per occurrence & aggregate

- D. Coverage must be on an occurrence basis and be as broad as Insurance Services Office (ISO) form CG 00 01.
- E. Coverage for Products, and Completed Operations, and Ongoing Operations must be included in the insurance policies and shall not contain any “prior work” coverage limitation or exclusion applicable to any Services performed by CONTRACTOR and/or contractor/subcontractor under this Agreement.
- F. There will be no exclusion for explosions, collapse, or underground liability (XCU).
- G. Insurance policies and Additional Insured Endorsement(s) shall not exclude liability and damages to work arising out of, pertaining to, or in any way relating to services performed by contractor/subcontractor on CONTRACTOR’s behalf.
- H. Contractual liability coverage shall be included and shall not limit, by any modification or endorsement, coverage for liabilities assumed by CONTRACTOR under this Agreement as an “insured contract.”
- I. Waiver of Subrogation. The policy shall be endorsed to include a Waiver of Subrogation ensuring that the CONTRACTOR and its insurer(s) waive any rights of recovery by subrogation, or otherwise, against the DISTRICT, its directors, board, and committee members, officers, officials, agents, volunteers, and employees. CONTRACTOR shall defend and pay any and all damages, fees, and costs, of any kind, arising out of, pertaining to, or in any way resulting from CONTRACTOR’s failure to provide the waiver of subrogation from its insurance carrier(s).
- J. Independent Contractor’s Liability shall not limit coverage for liability and/or damages arising out of, pertaining to, or in any way resulting from Services provided under this Agreement.
- K. To the fullest extent permitted by law, the DISTRICT, its directors, board, and committee members, officers, officials, employees, agents, and volunteers must be covered as Additional Insureds on a primary and noncontributory basis on all underlying, excess and umbrella policies that shall be evidenced in each case by an endorsement. Coverage for the Additional Insureds must be as broad as ISO forms CG 20 10 (ongoing operations) and CG 20 37 (completed operations) for liability arising in whole, or in part, from work performed by or on behalf of CONTRACTOR, or in any way related to Services performed under this Agreement.
- L. A severability of interest provision must apply for all the Additional Insureds, ensuring that CONTRACTOR’s insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the policies’ limit(s).

Verification of Commercial General Liability (CGL) Insurance Coverage

As the CONTRACTOR’S Insurance Broker/Agent, Officer, or Risk Manager, I hereby verify that I have reviewed and confirmed that the CONTRACTOR carries Commercial General Liability insurance, as required by this Agreement, including the relevant provisions applicable to all required insurance:

Self-Insured Retention: Amount: \$ _____

Policy Limit: _____

Policy Number: _____

Policy Period: from _____ **to** _____

Insurance Carrier Name: _____

Insurance Broker/Agent or Officer or Risk Manager - Print Name: _____

Insurance Broker/Agent or Officer or Risk Manager's Signature: _____

III. Business Auto Liability Insurance Coverage

- A. CONTRACTOR's insurance shall be primary, and any insurance or self-insurance procured or maintained by the DISTRICT shall not be required to contribute to it.
- B. The insurance requirements under this Agreement shall be the greater of (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policies or proceeds available to the Named Insured. It is agreed that these insurance requirements shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums required herein. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of the CONTRACTOR.
- C. Minimum Requirements. Auto insurance with minimum coverage and limits as follows:
Each Occurrence Limit (per accident) and in the Aggregate: \$2,000,000
Bodily Injury and Property Damage: \$2,000,000
- D. Coverage must include either "owned, non-owned, and hired" autos or "any" automobile. This provision ensures the policy covers losses arising out of use of company-owned vehicles ("owned autos"), employee's personal autos ("non-owned autos" meaning not owned by company/insured) or autos that are rented or leased ("hired autos").
- E. If CONTRACTOR is transporting hazardous materials or contaminants, evidence of the Motor Carrier Act Endorsement-hazardous materials clean-up (MCS-90, or its equivalent) must be provided.
- F. If CONTRACTOR's Scope of Services under this Agreement exposes a potential pollution liability risk related to transport of potential pollutants, seepage, release, escape or discharge of any nature (threatened or actual) of pollutants into the environment arising out of, pertaining to, or in any way related to CONTRACTOR's and/or contractor's/subcontractor's performance under this Agreement, then Auto Liability Insurance policies must be endorsed to include Transportation Pollution Liability insurance. Alternatively, coverage may be provided under the CONTRACTOR's Pollution Liability Policies if such policy has no exclusions that would restrict coverage under this Agreement. Coverage shall also include leakage of fuel or other "pollutants" needed for the normal functioning of covered autos.
- G. To the fullest extent permitted by law, the DISTRICT, its directors, board, and committee members, officers, officials, employees, agents, and volunteers must be covered as Additional Insureds on a primary and noncontributory basis on all underlying and excess and umbrella policies.
- H. A severability of interest provision must apply for all the Additional Insureds, ensuring that CONTRACTOR's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the insurer's limits of liability.

Verification of Business Auto Liability Insurance Coverage

As the CONTRACTOR’S Insurance Broker/Agent, Officer, or Risk Manager, I hereby verify that I have reviewed and confirmed that the CONTRACTOR carries Business Automobile Liability insurance, as required by this Agreement, including the relevant provisions applicable to all required insurance:

Self-Insured Retention: Amount: \$ _____

Policy Limit: \$ _____

Policy Number: _____

Policy Period: from _____ to _____

Insurance Carrier Name: _____

Insurance Broker/Agent or Officer or Risk Manager – Print Name: _____

Insurance Broker/Agent or Officer or Risk Manager’s Signature: _____

IV. Pollution Liability Insurance Coverage

- A. CONTRACTOR’s insurance shall be primary, and any insurance or self-insurance procured or maintained by the DISTRICT shall not be required to contribute to it.
- B. The insurance requirements under this Agreement shall be the greater of (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policies or proceeds available to the Named Insured. It is agreed that these insurance requirements shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums required herein. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of the CONTRACTOR.
- C. Minimum Requirements: Pollution Liability Insurance with minimum limits, as follows:

Each Claim or Occurrence Limit:	\$2,000,000
Aggregate Limit:	\$2,000,000
- D. Coverage must be included for bodily injury and property damage, including coverage for loss of use and/or diminution in property value, and for clean-up costs arising out of, pertaining to, or in any way related to the actual, alleged or threatened discharge, dispersal, seepage, migration, release or escape of contaminants or pollutants, arising out of, pertaining to, or in any way resulting from any Services performed by CONTRACTOR under this Agreement; including any transportation of hazardous wastes, hazardous materials, or contaminants.
- E. If Coverage is written on a claims-made form, the following shall apply:
 - 1. The retroactive date must be shown and must be before the date of the Agreement or the beginning of the Services.
 - 2. Insurance must be maintained, and evidence of insurance must be provided for a minimum of three (3) years after completion of the Services.

3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the effective date of the Agreement, CONTRACTOR must purchase an extended reporting period for a minimum of three (3) years after completion of the Services.

F. Insurance written on a claims-made basis shall include prior acts coverage sufficient to cover the services provided by CONTRACTOR under this Agreement.

Verification of Pollution Liability Insurance Coverage

As the CONTRACTOR’S Insurance Broker/Agent, Officer, or Risk Manager, I hereby verify that I have reviewed and confirmed that the CONTRACTOR carries Pollution Liability insurance, as required by this Agreement, including the relevant provisions applicable to all required insurance.

Self-Insured Retention: Amount: \$ _____

Policy Limit: \$ _____

Policy Number: _____

Policy Period: from _____ **to** _____

Insurance Carrier Name: _____

Insurance Broker/Agent or Officer or Risk Manager - Print Name: _____

Insurance Broker/Agent or Officer or Risk Manager’s Signature: _____

V. Excess and/or Umbrella Liability Insurance Coverage (Optional – See Paragraph A below)

- A. The insurance requirements set forth above may be satisfied by a combination of primary and excess or umbrella policies. Where excess or umbrella policies are used the following shall apply:
- B. CONTRACTOR’s insurance shall be primary, and any insurance or self-insurance procured or maintained by the DISTRICT shall not be required to contribute to it.
- C. The insurance requirements under this Agreement shall be the greater of (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policies or proceeds available to the Named Insured. It is agreed that these insurance requirements shall not in any way act to reduce coverage that is broader or that includes higher limits than the minimums required herein. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of the CONTRACTOR.
- D. Minimum Requirements: It is expressly understood by the parties that CONTRACTOR’s Excess and/or Umbrella Liability policies shall, at minimum, comply with all insurance requirements set forth within this Agreement, and shall be at least as broad as coverage required of the underlying policies required herein.
 - 1. Coverage for Products, Completed Operations, and Ongoing Operations must be included in the insurance policies and shall not contain any “prior work” coverage limitation or exclusion applicable to any Services performed under this Agreement and, if it is a claims-made policy, it must be maintained for a minimum of three (3) years following final completion of the Services.
 - 2. There will be no exclusion for explosions, collapse, or underground damage (XCU).

3. Insurance policies and Additional Insured Endorsements shall not exclude coverage for liability and damages from services performed by contractor/subcontractor on CONTRACTOR’s behalf.
4. Contractual liability coverage shall be included and shall not limit, by any modification or endorsement, coverage for liabilities assumed by CONTRACTOR under this Agreement as an “insured contract.”
5. Independent Contractor’s Liability shall not limit coverage for liability and/or damage arising out of, pertaining to, or in any way related to Services provided under this Agreement.
6. To the fullest extent permitted by law, the DISTRICT, its directors, officers, officials, agents, volunteers, and employees must be covered as Additional Insureds on a primary and noncontributory basis on all excess and umbrella policies. The Additional Insureds must be covered for liability arising in whole or in part from any premises, Products, Ongoing Operations, and Completed Operations by or on behalf of CONTRACTOR, in any way related to Services performed under this Agreement.
7. A severability of interest provision must apply for all the Additional Insureds, ensuring that the CONTRACTOR’s insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the policy’s limits.
8. CONTRACTOR and its excess and/or umbrella Liability insurance coverage must waive any rights of subrogation against the DISTRICT, its directors, officers, officials, employees, agents, and volunteers, and CONTRACTOR shall defend and pay any damages as a result of failure to provide the waiver of subrogation from the insurance carrier(s).

Verification of Excess and/or Umbrella Liability Insurance Coverage

As the CONTRACTOR’S Insurance Broker/Agent, Officer, or Risk Manager, I hereby verify that I have reviewed and confirmed that the CONTRACTOR carries Excess and/or Umbrella Liability insurance, as required by this Agreement, including the relevant provisions applicable to all required insurance.

Excess/Umbrella Limits: Amount \$ _____

Policy Limit: \$ _____

Policy Number: _____

Policy Period from _____ **to** _____

Insurance Carrier Name: _____

Underlying Policy(ies) listed above to which Excess/Umbrella applies:

Insurance Broker/Agent or Officer or Risk Manager - Print Name: _____

Insurance Broker/Agent or Officer or Risk Manager’s Signature: _____

EXHIBIT C

GENERAL REQUIREMENTS

Effective: June 9, 2021
Supersedes: September 1, 2020

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1. DEFINITIONS

The following terms shall be given the meaning shown, unless context requires otherwise, or a unique meaning is otherwise specified.

- a. **"Change Order"** A Change Order is a written instrument used for modifying the contract with regards to the scope of Work, contract sum, and/or Contract Time. An approved Change Order is a Change Order signed by the District. An executed Change Order is a Change Order signed by both the District and the Contractor.
- b. **"Contract"** means the agreement between the District and Contractor as memorialized in the Contract Documents.

- c. **“Business Entity”** means any individual, business, partnership, joint venture, corporation, sole proprietorship, or other private legal entity recognized by statute.
- d. **“Buyer”** means the District’s authorized contracting official.
- e. **“Contract Documents”** comprise the entire agreement between the District and the Contractor and can include the District’s contract form if used, any purchase order, RFP, RFQ or Contractor response packet, and any addenda, appendices and District approved changes or amendments. The Contract Documents are intended to be complementary and include all items necessary for the Contractor’s proper execution and completion of the Work. Any part of the Work not shown or mentioned in the Contract Documents that is reasonably implied or is necessary or usual for proper performance of the Work, shall be provided by the Contractor at its expense.
- f. **“Contractor”** means the Business Entity with whom the District enters into a contractual agreement. Contractor shall be synonymous with “supplier”, “vendor”, “consultant” or other similar term.
- g. **“Day”** unless otherwise specified, days are calendar days, measured from midnight to the next midnight.
- h. **“District”** means the East Bay Municipal Utility District, its employees acting within the scope of their authority, and its authorized representatives.
- i. **“Goods”** means off the shelf software and all types of tangible personal property, including but not limited to materials, supplies, and equipment.
- j. **“Project Manager”** shall be the District designated individual responsible for administering and interpreting the terms and conditions of the Contract Documents, for matters relating to the Contractor’s performance under the Contract with the District, and for liaison and coordination between the District and Contractor.
- k. **“Work”** means all labor, tasks, materials, supplies, and equipment required to properly fulfill the Contractor’s obligations as required in the Contract Documents.
- l. **“Work Day”** Unless otherwise specified, work day includes all days of the year except Saturdays, Sundays and District holidays.

2. BOND

- a. When required in the District’s bid or proposal solicitation documents, the Contractor to whom award is made shall furnish a good and approved faithful performance bond and/or payment bond within ten business days after receiving the forms for execution.
- b. The bonds shall be executed by a sufficient, admitted surety insurer (i.e.: as listed on website [http://interactive.web.insurance.ca.gov/webuser/idb_co_list\\$.startup](http://interactive.web.insurance.ca.gov/webuser/idb_co_list$.startup)) admitted to transact such business in California by the California Department of Insurance. After acceptance of the bond(s) by the District, a copy of the bond(s) will be returned to the Contractor.
- c. If, during the continuance of the Contract, any of the sureties, in the opinion of the District, are or become irresponsible, the District may require other or additional sureties, which the Contractor shall furnish to the satisfaction of the District within ten

days after notice. If the Contractor fails to provide satisfactory sureties within the ten-day period, the Contract may be terminated for cause under Article 18.

3. CONTRACTOR'S FINANCIAL OBLIGATION

The Contractor shall promptly make payments to all persons supplying labor and materials used in the execution of the contract.

4. SAMPLES OR SPECIMENS

The Contractor shall submit samples or prepare test specimens of such materials to be furnished or used in the work as the Project Manager may require.

5. MATERIAL AND WORKMANSHIP

- a. All goods and materials must be new and of the specified quality and equal to approved sample, if samples have been required. In the event any goods or materials furnished, or services provided by the Contractor in the performance of the Contract fail to conform to the requirements, or to the sample submitted by the Contractor, the District may reject the same, and it shall become the duty of the Contractor to reclaim and remove the item promptly or to correct the performance of services, without expense to the District, and immediately replace all such rejected items with others conforming to the Contract. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these specifications or the drawings, and it shall be the duty of the Contractor to call attention to apparent errors or omissions and request instructions before proceeding with the work. The Project Manager may, by appropriate instructions, correct errors and supply omissions, which instructions shall be binding upon the Contractor as though contained in the original Contract Documents.
- b. All materials furnished and all Work must be satisfactory to the Project Manager. Work, material, or machinery not in accordance with the Contract Documents, in the opinion of the Project Manager, shall be made to conform.

6. DEFECTIVE WORK

The Contractor shall replace at its own expense any part of the work that has been improperly executed, as determined by the Project Manager. If Contractor refuses or neglects to replace such defective work, it may be replaced by the District at the expense of the Contractor, and its sureties shall be liable therefor.

7. WARRANTY

Contractor expressly warrants that all goods furnished will conform strictly with the specifications and requirements contained herein and with all approved submittals, samples and/or models and information contained or referenced therein, all affirmations of fact or promises, and will be new, of merchantable quality, free from defects in materials and workmanship, including but not limited to leaks, breaks, penetrations, imperfections, corrosion, deterioration, or other kinds of product deficiencies. Contractor expressly warrants that all goods to be furnished will be fit and sufficient for the purpose(s) intended. Contractor expressly warrants that all goods shall be delivered free from any security interest, lien or encumbrance of any kind, and free from any claim of infringement, copyright or other intellectual property violation, or other violation of laws, statutes, regulations, ordinances, rules, treaties, import

restrictions, embargoes or other legal requirements. Contractor guarantees all products and services against faulty or inadequate design, manufacture, negligent or improper transport, handling, assembly, installation or testing, and further guaranties that there shall be strict compliance with all manufacturer guidelines, recommendations, and requirements, and that Contractor guaranties that it will conform to all requirements necessary to keep all manufacturer warranties and guarantees in full force and effect. These warranties and guarantees are inclusive of all parts, labor and equipment necessary to achieve strict conformance, and shall take precedence over any conflicting warranty or guarantee. These warranties and guarantees shall not be affected, limited, discharged or waived by any examination, inspection, delivery, acceptance, payment, course of dealing, course of performance, usage of trade, or termination for any reason and to any extent. In the absence of any conflicting language as to duration, which conflicting language will take precedence as being more specific, Contractor's aforesaid warranties and guarantees shall be in full force and effect for a period of one year from the date of acceptance by the District but shall continue in full force and effect following notice from District of any warranty or guarantee issue, until such issue has been fully resolved to the satisfaction of District.

8. NOT USED

9. SAFETY AND ACCIDENT PREVENTION

In performing work under the Contract on District premises, Contractor shall conform to any specific safety requirements contained in the Contract or as required by law or regulation. Contractor shall take any additional precautions as the District may reasonably require for safety and accident prevention purposes. Any violation of such rules and requirements, unless promptly corrected, shall be grounds for termination of this Contract or Contractor's right to precede in accordance with the default provisions of the Contract Documents.

10. CHARACTER OF WORKFORCE

The Contractor shall employ none but skilled competent qualified personnel to perform the Work and shall maintain discipline and order in the conduct of the Work at all times.

11. PREVAILING WAGES & DIR REGISTRATION

- a. Please see www.dir.ca.gov for further information regarding the below.
- b. All Contractors and Subcontractors of any tier bidding on or offering to perform work on a public works project shall first be registered with the State Department of Industrial Relations (DIR) pursuant to Section 1725.5 of the Labor Code. No bid will be accepted, nor any contract entered into without proof of the Contractor and Subcontractors' current registration with the DIR (LC § 1771.1).
- c. All public works projects awarded after January 1, 2015, are subject to compliance monitoring and enforcement by the DIR (LC § 1771.4) and all Contractors are required
- d. to post job site notices, "as prescribed by regulation" (LC § 1771.4).
- e. To the extent applicable, pursuant to Section 1773 of the Labor Code, the District has obtained from the Director of Industrial Relations of the State of California, the general prevailing rates of per diem wages and the general prevailing rates for holiday and overtime work in the locality in which the Work is to be performed, for each craft, classification, or type of worker needed to execute the contract. Pursuant to Section

1773.2 of the Labor Code, a copy of the prevailing wage rates is on file with the District and available for inspection by any interested party at www.dir.ca.gov.

- f. The holidays upon which such rates shall be paid shall be all holidays recognized in the collective bargaining agreement applicable to the particular craft, classification, or type of worker employed on the Work.
- g. The Contractor shall post a copy of the general prevailing rate of per diem wages at the jobsite pursuant to Section 1773.2 of the Labor Code.
- h. Pursuant to Section 1774 of the Labor Code, the Contractor and any of its Subcontractors shall not pay less than the specified prevailing rate of wages to all workers employed in the execution of the contract.
- i. As set forth with more specificity in Section 1773.1 of the Labor Code, "per diem" wages include employer payments for health and welfare, pension, vacation, travel, subsistence and, in certain instances, apprenticeship or other training programs, and shall be paid at the rate and in the amount spelled out in the pertinent prevailing wage determinations issued by the Director of Industrial Relations.
- j. The Contractor shall, as a penalty to the State or the District, forfeit not more than the maximum set forth in Section 1775 of the Labor Code for each calendar day, or portion thereof, for each worker paid less than the prevailing rates for the work or craft in which the worker is employed under the contract by the Contractor or by any Subcontractor under him. The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which such worker was paid less than the stipulated prevailing wage rate shall be paid to such worker by the Contractor.
- k. The specified wage rates are minimum rates only and the District will not consider and shall not be liable for any claims for additional compensation made by the Contractor because of its payment of any wage rate in excess of the general prevailing rates. All disputes in regard to the payment of wages in excess of those specified herein shall be adjusted by the Contractor at its own expense.
- l. General prevailing wage determinations have expiration dates with either a single
- m. asterisk or a double asterisk. Pursuant to California Code of Regulations, Title 8, Section 16204, the single asterisk means that the general prevailing wage determination shall be in effect for the specified contract duration. The double asterisk means that the predetermined wage modification shall be paid after the expiration date. No adjustment in the Contract Sum will be made for the Contractor's payment of these predetermined wage modifications.

12. PAYROLL RECORDS & ELECTRONIC SUBMISSION

If prevailing wages apply, Contractor and each Subcontractor, as appropriate, shall comply with the following:

- a. Contractor and each Subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked 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. The payroll records shall be certified and shall be available for inspection in accordance with the provisions of Section 1776 of the Labor Code. Certified payroll records shall be on the forms provided by the DIR or contain the same information required on the Department's form.

- b. The Contractor shall submit for each week in which any contract Work is performed a copy of all payroll records to the Project Manager. The Contractor shall be responsible for submission of copies of payroll records of all Subcontractors.
- c. The Contractor or Subcontractor shall certify the payroll records as shown on the DIR form. In addition, the records shall be accompanied by a statement signed by the Contractor or Subcontractor certifying that the classifications truly reflect the Work performed and that the wage rates are not less than those required to be paid.
- d. For public works projects awarded on or after April 1, 2015, or that are still ongoing after April 1, 2016, no matter when awarded, each Contractor and Subcontractor shall furnish the certified payroll related records as more specifically described above and in Labor Code section 1776 directly to the Labor Commissioner (see LC § 1771.4). These records shall be provided to the Labor Commissioner at least monthly or more frequently if required by the terms of the Contract. For exception on projects covered by collective bargaining agreements like a PLA, please see Labor Code section 1771.4.
- e. In the event of noncompliance with the requirements of Section 1776 of the Labor Code, the Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with said Section. Should noncompliance still be evident after such 10-day period, the Contractor shall, as a penalty to the State or the District, forfeit the amount set forth in Section 1776 of the Labor Code for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due.
- f. The Contractor and every Subcontractor shall post at the workplace and comply with all required wage related workplace postings. Copies of the required postings may be downloaded or ordered electronically from the Department of Industrial Relations website at <http://www.dir.ca.gov/wpnodb.html>.

13. HOURS OF LABOR

Pursuant to the provisions of Sections 1810, et seq. of the Labor Code and any amendments thereof:

- a. Eight hours of labor constitutes a legal day's Work under the contract.
- b. The time of service of any worker employed upon the work shall be limited and restricted to eight hours during any one calendar day, and forty hours during any one calendar week except as provided in Article 13.iv below.
- c. The Contractor shall, as a penalty to the State or the District, forfeit the amount set forth in Section 1813 of the Labor Code for each worker employed in the execution of the contract by the Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any

calendar day and forty hours in any one calendar week in violation of this Article and the provisions of Labor Code, Sections 1810, et seq.

- d. Work performed by employees of the Contractor in excess of eight hours per day, and forty hours during any one calendar week, shall be permitted upon compensation for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay.
- e. The Contractor and every Subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the Work; the record shall be kept open at all reasonable hours to the inspection of the District and to the Division of Labor Standards Enforcement of the State of California.

14. EMPLOYMENT OF APPRENTICES

- a. In the performance of the contract, the Contractor and any Subcontractor shall comply with the provisions concerning the employment of apprentices in Section 1777.5 of the Labor Code and any amendments thereof.
- b. In the event the Contractor or any Subcontractor willfully fails to comply with the aforesaid section, such Contractor or Subcontractor shall be subject to the penalties for noncompliance in Labor Code, Section 1777.7.

15. CHANGES

- a. Changes in the Work can only be made in writing signed by an authorized employee of the District. If the change causes an increase or decrease in the contract sum, or a change in the time for performance under the Contract, an adjustment may be made as determined by the Project Manager.
- b. The District reserves the right to make changes in the design of materials, equipment, or machinery, to make alterations or additions to or deviations or subtractions from the Contract and any specifications and drawings, to increase or decrease the required quantity of any item or portion of the Work or to omit any item or portion of the Work, as may be deemed by the Project Manager to be necessary or advisable and to order such extra work as may be determined by the Project Manager to be required for the proper execution and completion of the whole Work contemplated. Any such changes will be ordered in writing by the Project Manager. The determination of the Project Manager on all questions relating to changes, including extra work, shall be conclusive and binding.
- c. Prior to issuing an amendment or change to the Contract, the Project Manager may request that the Contractor submit a proposal covering the changes. Within 10 business days of receiving the request, the Contractor shall submit its proposal to the Project Manager of all costs associated with the proposed amendment or change and any request for an extension of Contract time. Contractor's proposal shall include detailed estimates with cost breakdowns, including labor, material, equipment, overhead, and profit. Labor shall be broken down into hours and rate per hour. If applicable, the proposal shall include a breakdown for off-site labor (including factory labor, engineering, etc.). The Contractor's proposal shall include an analysis of schedule impact when the Contractor is requesting an adjustment in contract time. The

Contractor shall be responsible for any delay associated with its failure to submit its change proposal within the time specified. If the Project Manager decides not to issue an amendment or change after requesting a proposal from the Contractor, the Contractor will be notified in writing. The Contractor is not entitled to reimbursement for Change Order preparation costs if the Contractor's proposal is not accepted by the Project Manager.

- d. If the Contractor agrees with the terms and conditions of the approved Change Order, the Contractor shall indicate its acceptance by signing the original copy and returning it to the Project Manager within 10 Work Days after receipt or with reasonable promptness and in such sequence as to not delay the Work or activities of the District or of separate contractors, whichever is sooner. If notice of any change is required to be given to a surety by the provisions of any bond, the Contractor shall provide notice and the amount of each applicable bond shall be adjusted separately. Payment in accordance with the terms and conditions set forth in the executed Change Order shall constitute full compensation for all Work included in the Change Order and the District will be released from any and all claims for direct, indirect, and impact expenses and additional time impact resulting from the Work. If the Contractor disagrees with the terms and conditions of the approved Change Order, the Contractor shall indicate specific areas of disagreement and return the approved Change Order to the Project Manager with a detailed written dispute. No payment will be made on the disputed work until the approved Change Order is returned to the Project Manager. However, whether or not the Contractor agrees with the terms and conditions of an approved Change Order, the Contractor shall immediately revise its sequence of operations as required to facilitate timely completion of the changed work and shall proceed with the revised work sequence.
- e. The Project Manager may, after having received a written cost quotation from the Contractor, order the Contractor, in writing, to proceed with the work prior to issuance of an approved Change Order through a change directive. The change directive will authorize the Contractor to proceed with the work subject to the cost quotation submitted by the Contractor. Within five days following receipt of the change directive, the Contractor shall submit a detailed change proposal documenting the amount of compensation. The Project Manager will review the change proposal and, at its option, will either issue an approved Change Order for the work or direct the Contractor to perform the work through Force Account. Until the method of compensation is determined, and the approved Change Order is received, the Contractor shall keep full and complete time and material records of the cost of the ordered work and shall permit the Project Manager to have access to such records. An approved Change Order shall supersede any previously issued written change directive covering the same Work.

16. EFFECT OF EXTENSIONS OF TIME

The granting, or acceptance, of extensions of time to complete the Work or furnish the labor, supplies, materials or equipment, or any one of the aforementioned, will not operate as a release of Contractor or the surety on Contractor's faithful performance bond.

17. DELAYS

- a. The Contractor shall take reasonable precautions to foresee and prevent delays to the Work. When the Contractor foresees a delay event, and upon the occurrence of a delay

event, the Contractor shall immediately notify the Project Manager of the probability or the actual occurrence of a delay, and its cause. With respect to all delays (compensable, excusable or inexcusable), the Contractor shall reschedule the Work and revise its operations, to the extent possible, to mitigate the effects of the delay. Within 15 days from the beginning of a delay the Contractor shall provide the Project Manager with a detailed written description of the delay, its cause, its impact and the Contractor's mitigation plans. Failure to provide the notification required above waives the Contractor's right to any additional time or compensation resulting from the delay for whatever cause. The Project Manager will investigate the facts and ascertain the extent of the delay, and the Project Manager's findings thereon shall be final and conclusive, except in the case of gross error. An extension of time must be approved by the Project Manager to be effective, but an extension of time, whether with or without consent of the sureties, shall not release the sureties from their obligations, which shall remain in full force until the discharge of the contract.

- b. For inexcusable delays (delays caused by circumstances within the Contractor's control, the control of its subcontractors or supplies of any tier, or within the scope of the Contractor's contract responsibilities) the Contractor shall not be entitled to an extension of time or additional compensation for any loss, cost, damage, expense or liability resulting directly or indirectly from the inexcusable delay.
- c. For excusable delays (delays to completion of the Work within the time limits set forth in the Contract Documents directly caused by events beyond the control of both the Contractor and the District, which delay is not concurrent with an inexcusable delay and which could not have been avoided by the Contractor through reasonable mitigation measures the Project Manager will grant the Contractor an extension of time in an amount equal to the period of Excusable Delay based on the analysis of schedule impact and delay analysis diagram, which shall be the Contractor's sole and exclusive remedy for such delay. Excusable Delays shall include labor strikes, adverse weather, and Acts of God.
- d. For compensable delays (delays to completion of the Work within the time limits set forth in the Contract Documents that could not be avoided by Contractor mitigation, caused directly and solely by the District or by causes within the exclusive control of the
- e. District, and which were not concurrent with any other type of delay) the Project
- f. Manager will grant the Contractor an extension of the time to perform under the Contract and compensation in an amount that represents the Contractor's actual direct costs incurred as a direct result of the compensable delay. The Contractor may recover its direct costs only and may not recover (and waives) all other types of indirect, consequential, special and incidental damages.
- g. For concurrent delays (two or more independent causes of delay directly preventing the Contractor from completing the Work within the time limits set forth in the Contract Documents where the delays occur at the same time during all or a portion of the delay period being considered, and where each of the delays would have caused delay to the Contractor even in the absence of any of the other delays, and none of the delays could have been avoided by Contractor mitigations) the following rules apply:

- i. One or more of the concurrent delays are excusable or compensable, then the period of concurrent delay will be treated as an excusable delay; and
- ii. All of the concurrent delays are inexcusable, then the period of concurrent delay will be inexcusable.

18. TERMINATION

a. Termination by the District for Cause:

- i. District may terminate the Contractor's right to proceed under the Contract, in whole or in part, for cause at any time after the occurrence of any of the following events, each of which constitutes a default:
 - 1. The Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
 - 2. The Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.
 - 3. A receiver is appointed to take charge of the Contractor's property.
 - 4. The Contractor fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the Work in accordance with the Contract Documents.
 - 5. The Contractor fails to make progress so as to endanger performance of the Work within the contractually required time.
 - 6. The Contractor disregards legal requirements of agencies having jurisdiction over the Work, the Contractor, or the District.
 - 7. The Contractor fails to provide the District with a written plan to cure a District identified default within five business days after the District's request for a plan to cure; the District does not accept the Contractor's plan for curing its default; or the Contractor does not fully carry out an accepted plan to cure.
 - 8. The Contractor abandons the Work. Abandonment is conclusively presumed when the District requests a written plan to cure a default and the Contractor does not submit the plan within five business days of the District's request.
 - 9. The Contractor materially fails to meet its obligations in accordance with the Contract Documents.
 - 10. The Contractor is in default of any other material obligation under the Contract Documents.
- ii. If any of the above events occur, the District may, in its discretion, require that the Contractor submit a written plan to cure its default, which plan must be provided to the District within 5 business days of the request and must include a realistic, executable plan for curing the noted defaults.

- iii. Upon any of the occurrences referred to in Article 18.a.i. above, the District may, at its election and by notice to the Contractor, terminate the Contract in whole or in part; accept the assignment of any or all of the subcontracts; and then complete the Work by any method the District may deem expedient. If requested by the District, the Contractor shall remove any part or all of the Contractor's materials, supplies, equipment, tools, and machinery from the site of the Work within seven days of such request; and, if the Contractor fails to do so, the District may remove or store, and after 90 days sell, any of the same at the Contractor's expense.
- iv. No termination or action taken by the District after termination shall prejudice any other rights or remedies of the District provided by law or by the Contract Documents.
- v. Conversion: If, after termination for other than convenience, it is determined that the Contractor was not in default or material breach, or that the default or material breach was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for convenience pursuant to Article 18.b. below.

b. Termination by the District for Convenience:

- i. The District may, at its option, and for its convenience, terminate the Contract at any time by giving written notice to the Contractor specifying the effective date of termination. Upon such termination, the Contractor agrees to comply with the notice and further agrees to waive any claims for damages, including loss of anticipated profits, on account of the termination; and, as the sole right and remedy of the Contractor, the District shall pay the Contractor as set forth below.
- ii. Upon receipt of a notice of termination for convenience, the Contractor shall, unless the notice directs otherwise, do the following:
 - 1. Immediately discontinue its performance of the Contract to the extent specified in the notice.
 - 2. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of a portion of the Work that is not discontinued or that is necessary for an orderly cessation of the Work.
 - 3. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent they relate to the performance of the discontinued portion of the Work.
 - 4. Thereafter, do only such Work as may be necessary to preserve and protect Work already in progress and to protect materials, plants, and equipment in transit to or on the site of performance.
- iii. Upon such termination for convenience, the District will pay to the Contractor the sum of the following:

1. The amount of the contract sum allocable to the portion of the Work properly performed by the Contractor as of the effective date of termination, less sums previously paid to the Contractor.
 2. Previously unpaid costs of any items delivered to the project site that were already fabricated for subsequent incorporation into the Work.
 3. Any proven losses with respect to materials and equipment directly resulting from the termination.
 4. Reasonable demobilization costs.
- iv. The above reimbursement is the sole and exclusive remedy to which the Contractor is entitled in the event the contract is terminated for convenience; and the Contractor expressly waives any other claims, damages, demands, compensation or recovery related to this contract or project. The Contractor agrees to sign a general release incorporating this waiver.
- c. Effect of Termination: Upon termination, the obligations of the Contract shall continue as to portions of the Work already performed and, subject to the Contractor's obligations under Article 18.b.ii, as to bona fide obligations assumed by the Contractor prior to the date of termination.
- d. Force Majeure: If the contract is suspended or terminated by the District because Contractor's performance is prevented or delayed by an event including an irresistible, superhuman cause, or by the act of public enemies of the State of California or of the United States ("Force Majeure"), the Contractor will be paid for Work performed prior to the Force Majeure event at either (i) the unit prices named in the Contract; or (ii) in the event no unit prices are named, a sum equal to the percentage of the total contract amount that matches the percentage of the total contract Work performed prior to the Force Majeure event.

19. DAMAGES

All losses or damages to material or equipment to be furnished pursuant to the Contract Documents occurring prior to receipt and final acceptance of the Work shall be sustained by the Contractor. The Contractor shall sustain all losses arising from unforeseen obstructions or difficulties, either natural or artificial, encountered in the prosecution of the Work, or from any action of the elements prior to final acceptance of the work, or from an act or omission on the part of the Contractor not authorized by the Contract Documents.

20. ORDER OF PRECEDENCE

- a. In the case of conflicts, errors, or discrepancies in any of the Contract Documents, the order of precedence is as follows. Within the same order of precedence, specific requirements shall take precedence over general requirements.
 - i. Approved Change Orders.
 - ii. Addenda.
 - iii. RFQ or RFP.
 - iv. Referenced Standard Specifications and Drawings.
 - v. Contractor's Response Packet.

- b. With reference to drawings:
 - i. Numerical dimensions govern over scaled dimensions.
 - ii. Detailed drawings govern over general drawings.
 - iii. Addenda/Change Order drawings govern over contract drawings.
 - iv. Contract drawings govern over standard drawings.
 - v. Notes apply only to the drawing where the notes appear, unless classified as “typical” or intended to apply elsewhere in which case they apply to all drawings where the conditions or circumstance noted occurs.
 - vi. Typical details apply to all drawings unless a specific different detail is shown.

21. INDEMNIFICATION

Contractor expressly agrees to defend, indemnify, and hold harmless DISTRICT and its Directors, officers, agents and employees from and against any and all loss, liability, expense, claims, suits, and damages, including attorneys’ fees, arising out of or resulting from Contractor's, its associates’, employees’, subconsultants’, or other agents’ negligent acts, errors or omissions, or willful misconduct, in the operation and/or performance under this Agreement.

22. PROHIBITION OF ASSIGNMENT

The Contractor shall not assign, transfer, or otherwise dispose of any of its rights, duties or obligations under this Contract. This prohibition does not apply to the District. The District retains the right to assign this Contract in whole or in part at any time upon reasonable terms.

23. NEWS RELEASES

The Contractor, its employees, subcontractors, and agents shall not refer to the District, or use any logos, images, or photographs of the District for any commercial purpose, including, but not limited to, advertising, promotion, or public relations, without the District's prior written consent. Such written consent shall not be required for the inclusion of the District's name on a customer list.

24. SEVERABILITY

Should any part of the Contract be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of the Contract, which shall continue in full force and effect, provided that the remainder of the Contract can be interpreted to give effect to the intentions of the parties.

25. COVENANT AGAINST GRATUITIES

The Contractor warrants that no gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the District with a view toward securing the Contract or securing favorable treatment with respect to any determinations concerning the performance of the Contract. For breach or violation of this warranty, the District shall have the right to terminate the Contract, either in whole or in part, and any loss or damage sustained by the District in procuring on the open market any items which Contractor agreed to supply shall be borne and paid for by the Contractor. The rights and remedies of the District provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or in equity.

26. RIGHTS AND REMEDIES OF THE DISTRICT

The rights and remedies of the District provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

27. WAIVER OF RIGHTS

Any action or inaction by the District or the failure of the District on any occasion, to enforce any right or provision of the Contract, shall not be construed to be a waiver by the District of its rights and shall not prevent the District from enforcing such provision or right on any future occasion. Rights and remedies are cumulative and are in addition to any other rights or remedies that the District may have at law or in equity.

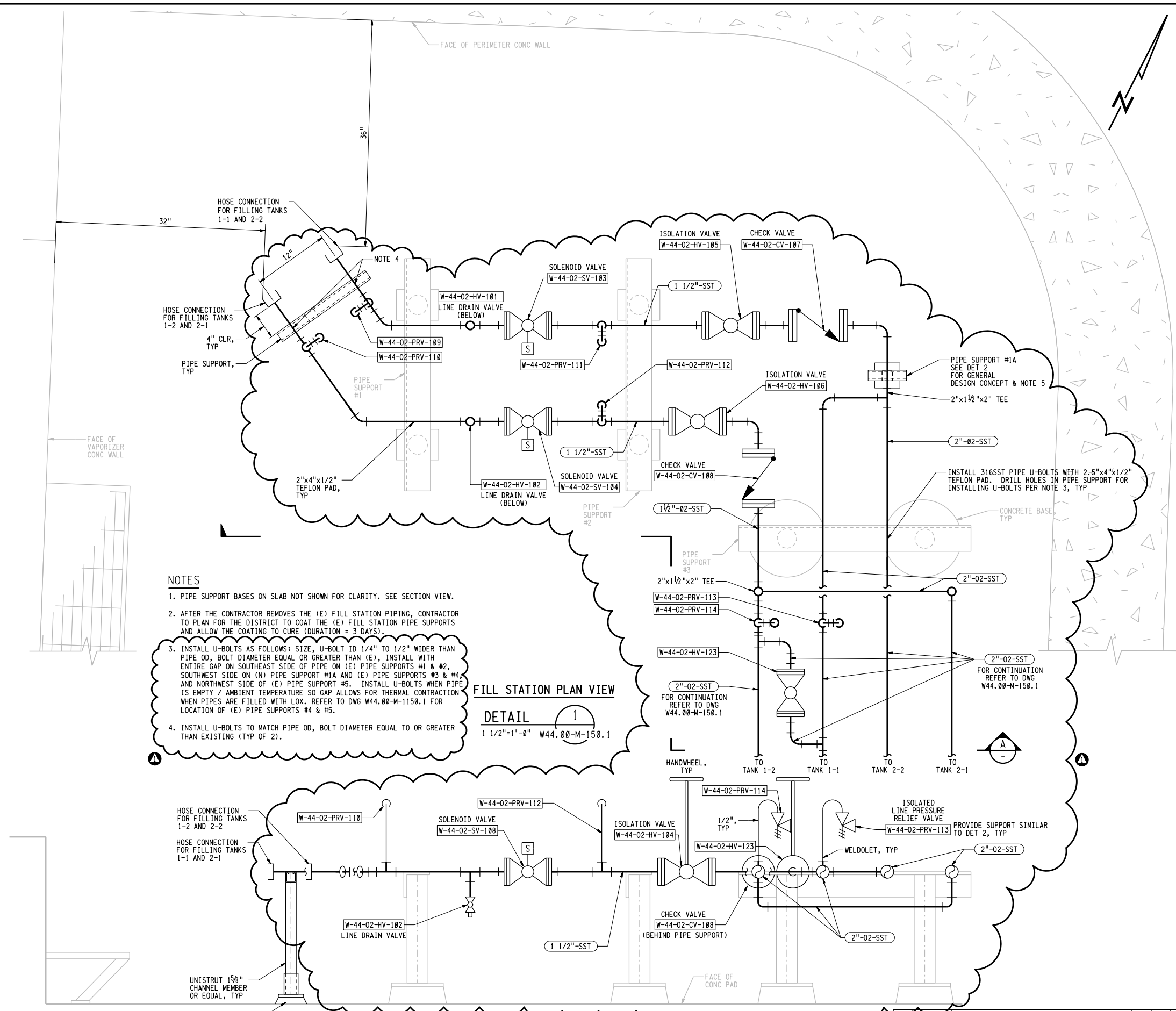
28. CONFIDENTIALITY

Contractor agrees to maintain in confidence and not disclose to any person or entity, without the District's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of the District. Contractor further agrees to maintain in confidence and not to disclose to any person or entity, any data, information, technology, or material developed or obtained by Contractor during the term of the Contract. The covenants contained in this paragraph shall survive the termination of this Contract for whatever cause.



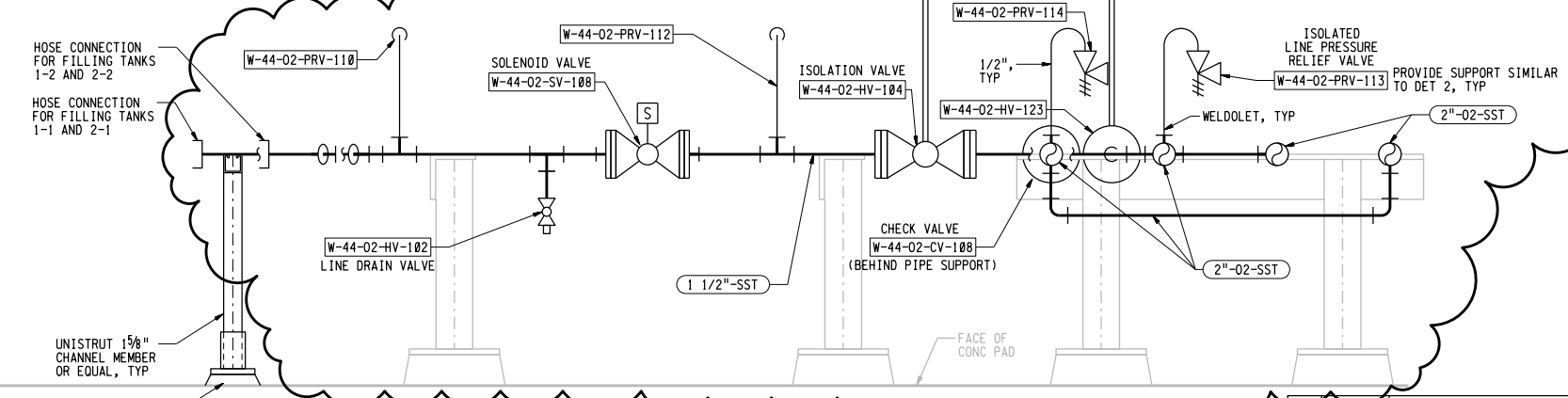
EXHIBIT D
WW LOX SYSTEM DRAWINGS

REF 7: REF 8: REF 9:
 REF 1: J:\SD\3390_MWTP_Hypochlorite Piping Replacement Phase2\bor\dwg\mbr.mst
 REF 2: J:\44\mst\4400\ksta.mst
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 USER: lducker



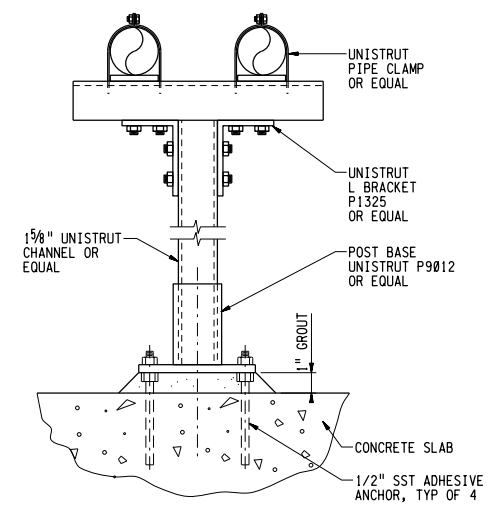
- NOTES**
- PIPE SUPPORT BASES ON SLAB NOT SHOWN FOR CLARITY. SEE SECTION VIEW.
 - AFTER THE CONTRACTOR REMOVES THE (E) FILL STATION PIPING, CONTRACTOR TO PLAN FOR THE DISTRICT TO COAT THE (E) FILL STATION PIPE SUPPORTS AND ALLOW THE COATING TO CURE (DURATION = 3 DAYS).
 - INSTALL U-BOLTS AS FOLLOWS: SIZE, U-BOLT ID 1/4" TO 1/2" WIDER THAN PIPE OD, BOLT DIAMETER EQUAL OR GREATER THAN (E), INSTALL WITH ENTIRE GAP ON SOUTHEAST SIDE OF PIPE ON (E) PIPE SUPPORTS #1 & #2, SOUTHWEST SIDE ON (N) PIPE SUPPORT #1A AND (E) PIPE SUPPORTS #3 & #4, AND NORTHWEST SIDE OF (E) PIPE SUPPORT #5. INSTALL U-BOLTS WHEN PIPE IS EMPTY / AMBIENT TEMPERATURE SO GAP ALLOWS FOR THERMAL CONTRACTION WHEN PIPES ARE FILLED WITH LOX. REFER TO DWG W44.00-M-1150.1 FOR LOCATION OF (E) PIPE SUPPORTS #4 & #5.
 - INSTALL U-BOLTS TO MATCH PIPE OD, BOLT DIAMETER EQUAL TO OR GREATER THAN EXISTING (TYP OF 2).

FILL STATION PLAN VIEW
 DETAIL 1
 1 1/2"=1'-0" W44.00-M-150.1



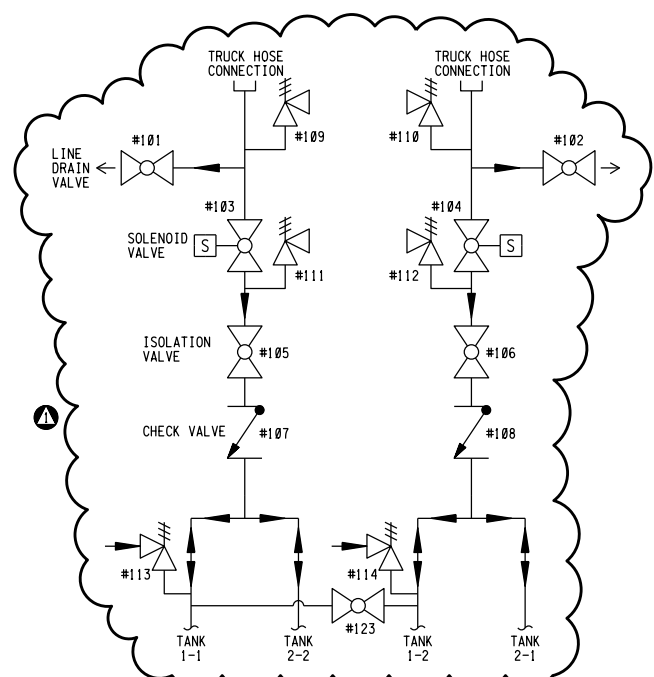
FILL STATION SECTION VIEW
 SECTION A
 1 1/2"=1'-0"

3" ON ORIGINAL DOCUMENT
 0 1 2 3



- NOTES:**
- ALL COMPONENTS SHALL BE 316 SST.
 - ALL BOLTS/ANCHORS SHALL BE 316 SST.

PIPE SUPPORT BASE
 DETAIL 2
 NTS

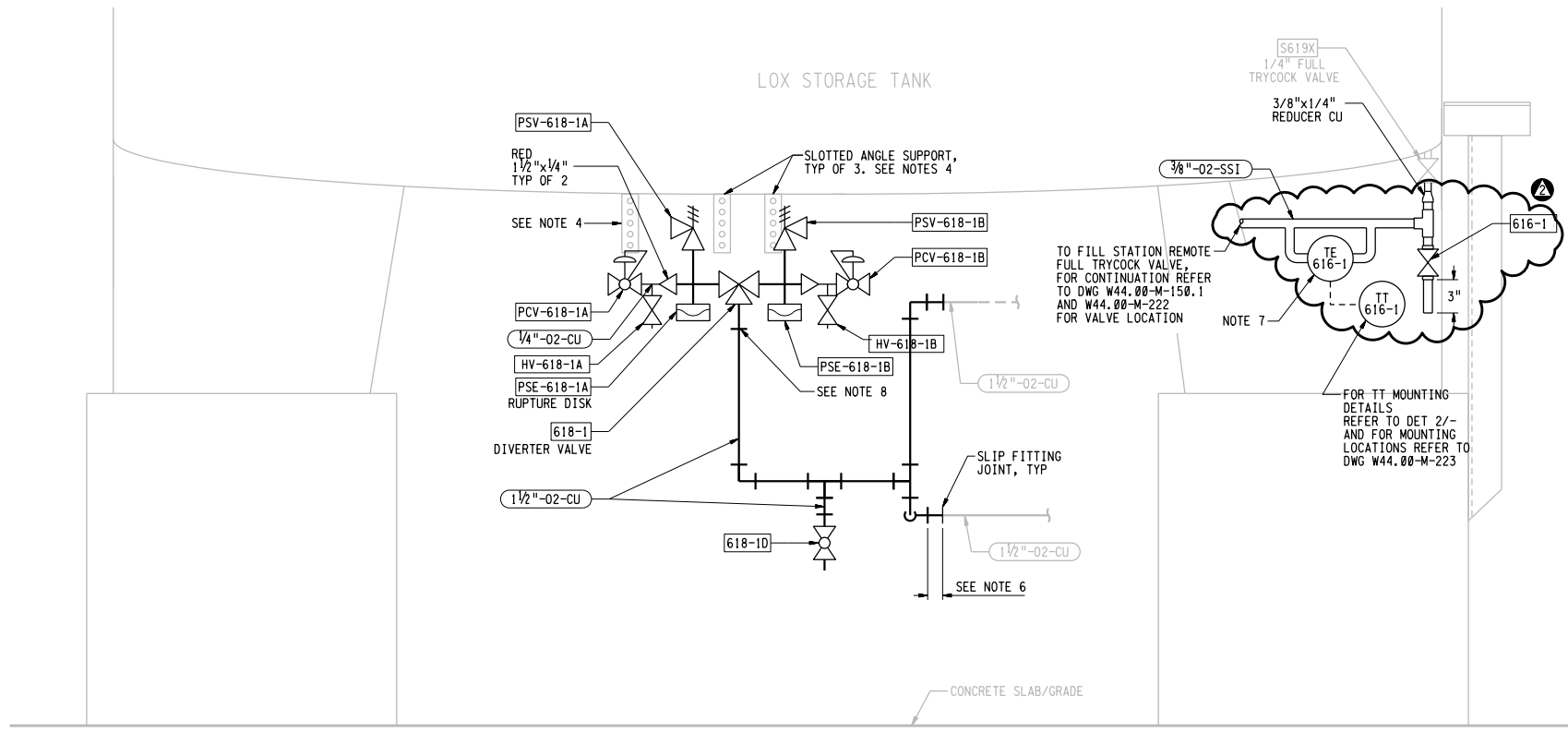


FILL STATION FLOW DIAGRAM



SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS		EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT NO. 1 OAKLAND, CALIFORNIA	
DESIGN BY: K. YAKICH	DRAWN BY: S. UPSORNSOPAKIT	PROJECT ENGINEER: <i>Karl J. Yakich</i>	
DESIGN CHECKED BY: <i>Garin D. Warren</i>	CONSTRUCTABILITY CHECKED BY: <i>William E. Chaffer</i>	PROJECT MANAGER: <i>Karl J. Yakich</i>	MECHANICAL
PROJECT ENGINEER: <i>Karl J. Yakich</i>	SR. ENGINEER: <i>Garin D. Warren</i>	DATE: 30/JAN/2020	SCALE: AS SHOWN
PROJECT MANAGER: <i>Karl J. Yakich</i>	R.P.E. No. C65259	DATE: 30/JAN/2020	W44.00-M-220
RECOMMENDED: <i>Garin D. Warren</i>	R.P.E. No. C65259	DATE: 30/JAN/2020	1
NO.	DATE	REVISION	BY REC. APP.
28JAN2021		COR PER SD390 FOR FILL STA VLV RECONFIG	<i>[Signature]</i>

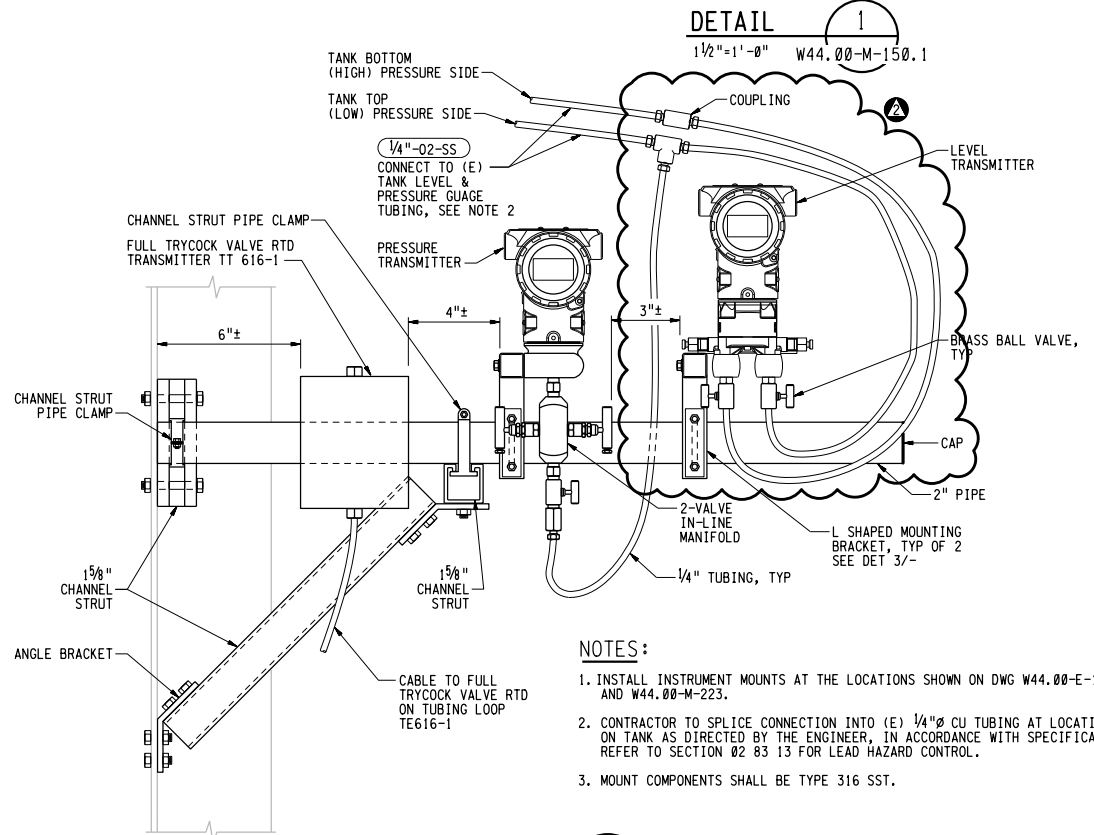
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NOTES:

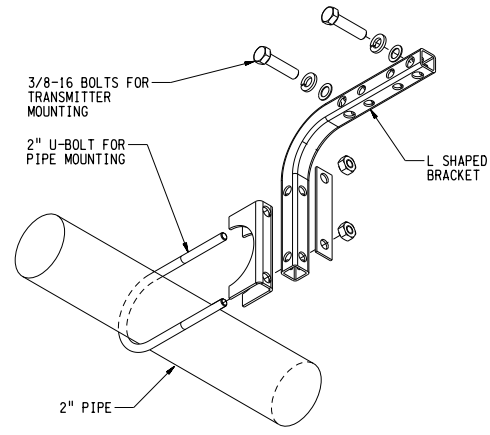
- EQUIPMENT NUMBERS SHOWN HERE FOR LOX TANK 1-1. SEE DWG W44.00-I-107 & 113 FOR EQUIPMENT NUMBERS ON THE OTHER 3 TANKS.
- PURCHASE FULL TRYCOCK VALVE FLOW INDICATION SYSTEM, INCLUDING TEMPERATURE RTD, SS TUBING LOOP, AND TRANSMITTER SYSTEM FROM CHART INC. REFER TO SPEC.
- DEMO EXISTING SINGLE PRESSURE RELIEF VALVE (PRV) ASSEMBLY AND PIPING (REFER TO DWG W44.00-C-150.10, W44.00-I-107D & 113D) PRIOR TO INSTALLING THE DUAL PRV ASSEMBLY AS SHOWN IN THIS DETAIL.
- REFER TO DWG SD390-S-902 FOR (N) SAFETY VALVES SUPPORTS WHICH UTILIZE THESE (E) SLOTTED ANGLE SUPPORTS.
- AFTER REMOVING (E) PRESSURE RELIEF VALVE AND RUPTURE DISC SUPPORTS FROM (E) 7" LONG CHANNEL SUPPORTS WHICH ARE WELDED TO TANK, AND PRIOR TO INSTALLING DUAL SAFETY VALVE ASSEMBLY SUPPORTS, NOTIFY DISTRICT AT LEAST 2 WEEKS IN ADVANCE FOR DISTRICT TO COAT (E) CHANNEL SUPPORTS.
- LENGTH AS REQUIRED TO FIT FIELD CONDITIONS.
- MOUNTING SUPPORT FOR SSI TUBING LOOP & TEMPERATURE RTD NOT SHOWN. CONTRACTOR TO PROVIDE PER SPEC SECTION 05 45 13.
- FLANGE OR THREADED COUPLING.

ELEVATION - LOX STORAGE TANK DUAL PRESSURE RELIEF ASSEMBLY & FULL TRYCOCK VALVE FLOW INDICATION SYSTEM (TYP OF 4 TANKS)



NOTES:

- INSTALL INSTRUMENT MOUNTS AT THE LOCATIONS SHOWN ON DWG W44.00-E-102.5 AND W44.00-M-223.
- CONTRACTOR TO SPLICE CONNECTION INTO (E) 1/4" CU TUBING AT LOCATION ON TANK AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH SPECIFICATIONS, TYP. REFER TO SECTION 02 83 13 FOR LEAD HAZARD CONTROL.
- MOUNT COMPONENTS SHALL BE TYPE 316 SST.



L SHAPED MOUNTING BRACKET

DETAIL 3
NTS

3" ON ORIGINAL DOCUMENT
0 1 2 3

DETAIL 2
3"-1'-0" W44.00-M-150.1

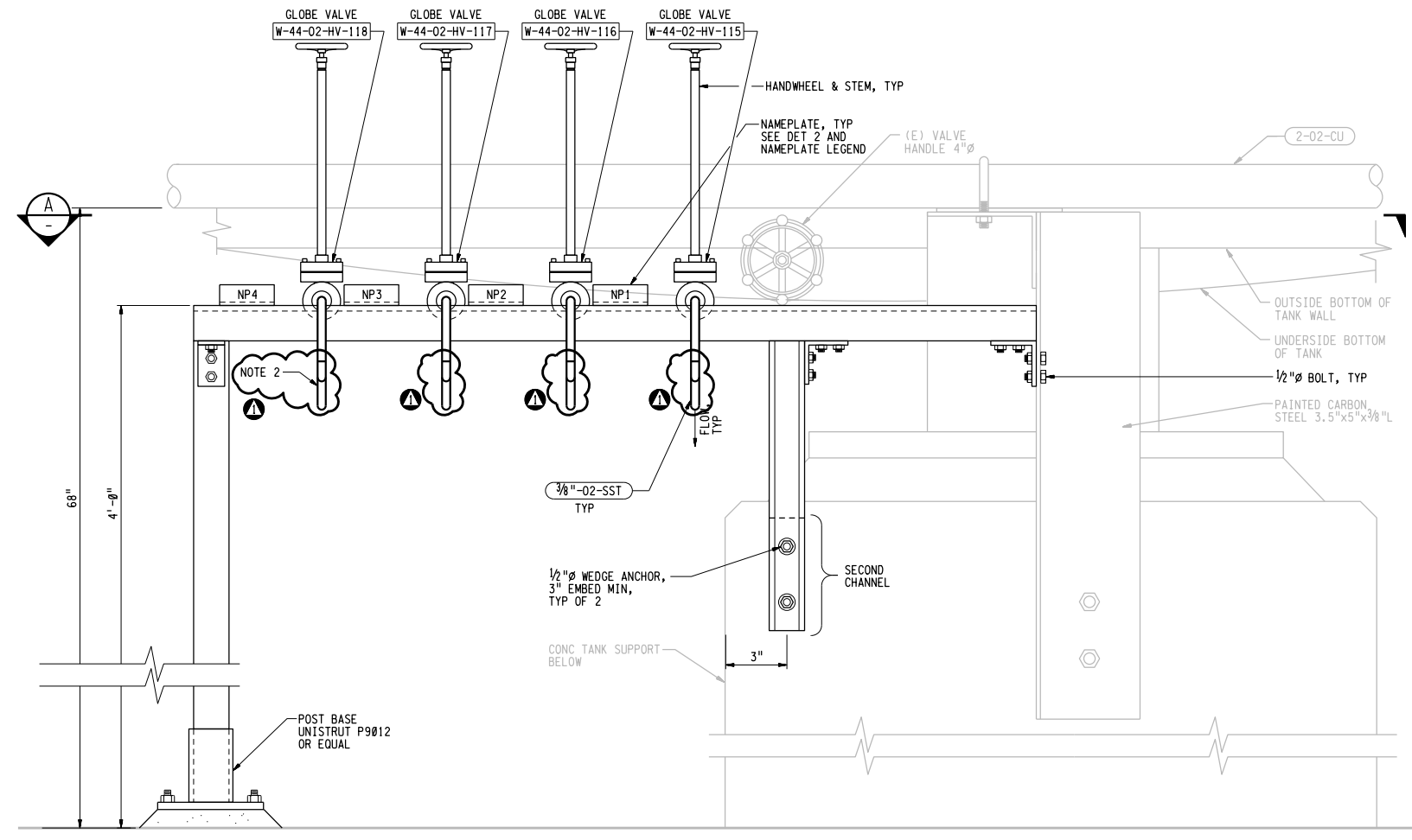


SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS		EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT NO. 1 OAKLAND, CALIFORNIA					
DESIGN BY:	K. YAKICH	MAIN WASTEWATER TREATMENT PLANT OXYGEN PRODUCTION PLANT MECHANICAL LOX STORAGE TANKS SECTIONS AND DETAILS - 1 OF 2					
DRAWN BY:	S. UPSORNSOPAKIT						
DESIGN CHECKED BY:	<i>Garin D. Warren</i> GARIN D. WARREN						
CONSTRUCTABILITY CHECKED BY:	<i>William E. Chaffer</i> WILLIAM E. CHAFFER						
PROJECT ENGINEER	<i>Karl J. Yakich</i> KARL J. YAKICH	SHEET NO. 105					
PROJECT MANAGER	<i>Karl J. Yakich</i> KARL J. YAKICH	SCALE AS SHOWN					
RECOMMENDED BY:	<i>Garin D. Warren</i> GARIN D. WARREN	DATE 30JAN2020					
NO.	DATE	REVISION	BY	REC.	APP.	DRAWING NUMBER	2
28JAN2021	28JAN2021	COR PER SD390 FOR FILL STA VLV RECONFIG	<i>GPW</i>			W44.00-M-221	REV.
		CLARIFICATIONS	<i>GPW</i>				

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REF 9:

REF 1:
REF 2:
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USER: lducker
DATE: 02-FEB-2021 09:05
FILE: J:\SD\SD390\MWTP_Hypochlorite Piping Replacement Phase2\4400-222-001.dwg

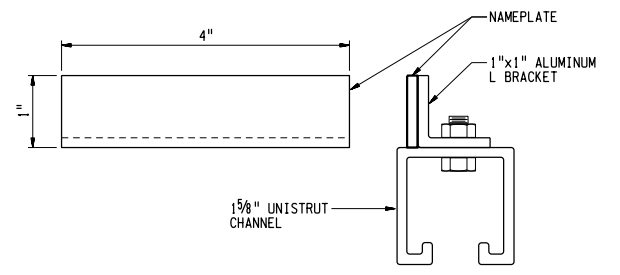


REMOTE FULL TRYCOCK VALVES

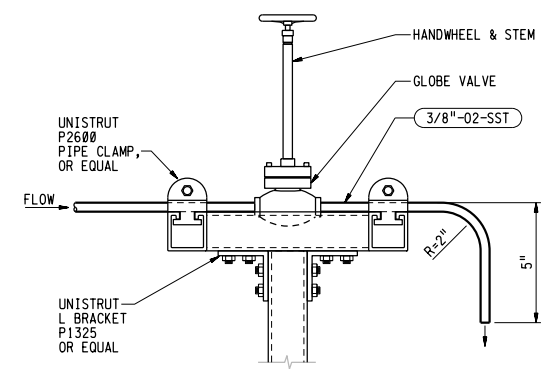
ELEVATION A
3"=1'-0" W44.00-M-150.1

NAMEPLATE LEGEND				
NP No.	LINE 1 TEXT	LINE 2 TEXT	NAMEPLATE SIZE #	LETTER SIZE
1	LOX TANK 1-1	REMOTE TRYCOCK VLV	1" x 4"	1/4"
2	LOX TANK 1-2	REMOTE TRYCOCK VLV	1" x 4"	1/4"
3	LOX TANK 2-1	REMOTE TRYCOCK VLV	1" x 4"	1/4"
4	LOX TANK 2-2	REMOTE TRYCOCK VLV	1" x 4"	1/4"

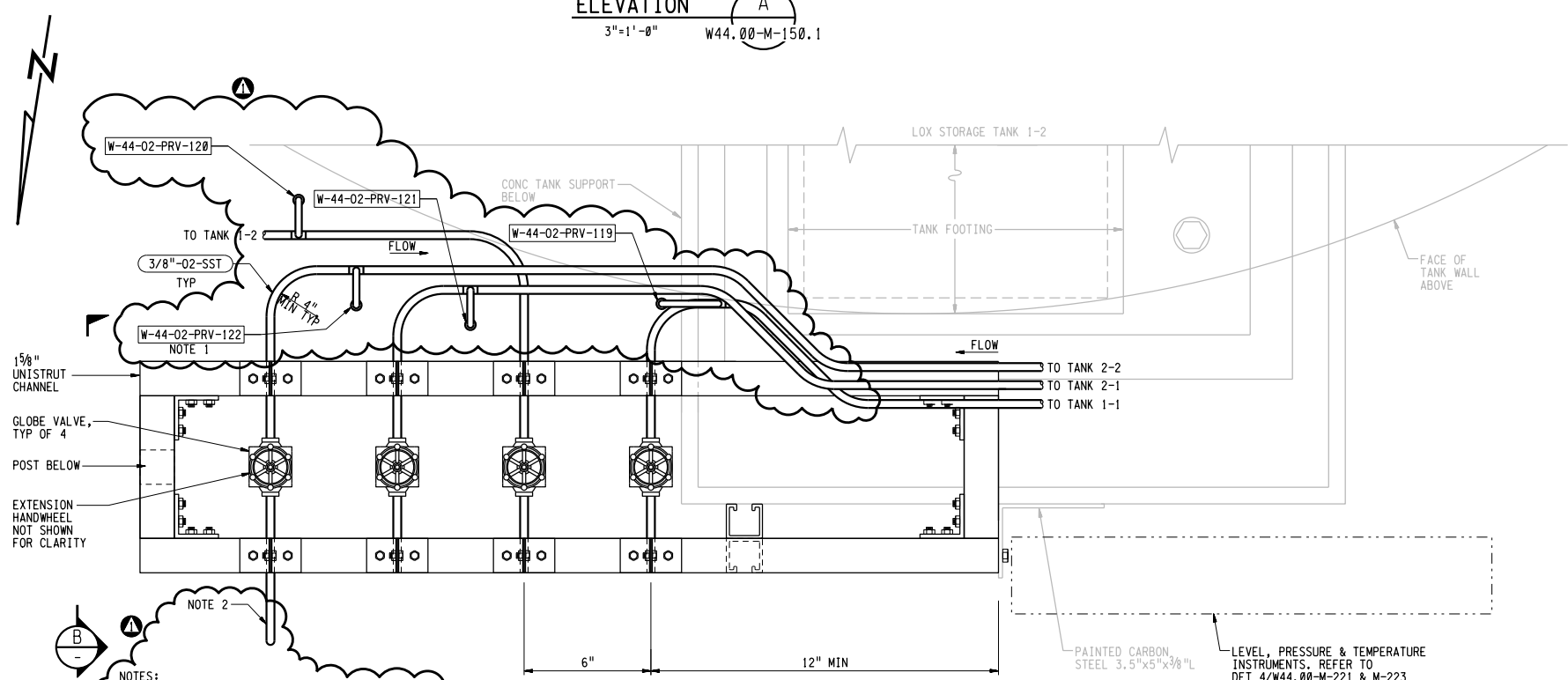
* MINIMUM LABEL TEXT HIGHT = 1/4" TYP.



DETAIL 2
NTS

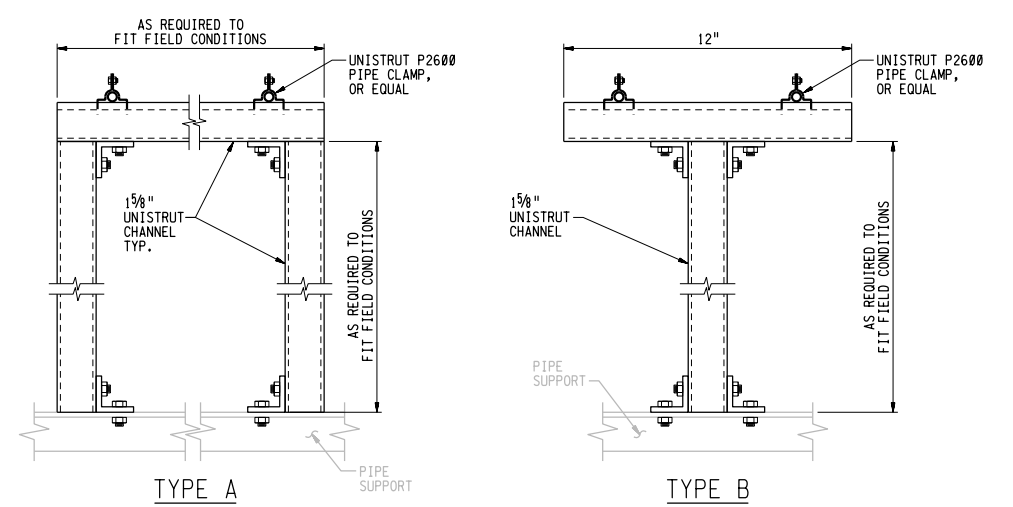


SECTION B
3"=1'-0"



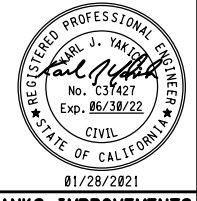
PLAN VIEW
SECTION A
3"=1'-0"

- NOTES:
- INSTALL 45 DEGREE ELBOW & 3" LONG 1/2" Ø 3616 SS SPOOL PIECE, TYP.
 - INSTALL 45 DEGREE ELBOW & 3" LONG 3/8" Ø 3616 SS SPOOL PIECE, TYP.



- NOTES
- SUPPORT MATERIAL SHALL BE TYPE 316SST.
 - INSTALL TYPE A OR B AS REQUIRED TO FIT FIELD CONDITIONS.

DETAIL 1
3"=1'-0" W44.00-M-150.1



SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS		EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT NO. 1 OAKLAND, CALIFORNIA	
DESIGN BY: K. YAKICH	DRAWN BY: S. UPSORNSOPAKIT	MAIN WASTEWATER TREATMENT PLANT OXYGEN PRODUCTION PLANT	
DESIGN CHECKED BY: <i>Garin D. Warren</i> R.P.E. No. C65259	CONSTRUCTABILITY CHECKED BY: <i>William E. Chaffer</i> R.P.E. No. C37427		
PROJECT ENGINEER: <i>Karl J. Yakich</i> R.P.E. No. C37427	PROJECT MANAGER: <i>Karl J. Yakich</i> R.P.E. No. C37427	MECHANICAL LOX STORAGE TANKS SECTIONS AND DETAILS 2 OF 2	
RECOMMENDED BY: <i>Garin D. Warren</i> SR. ENGINEER R.P.E. No. C65259	DATE: 28JAN2021	SCALE: AS SHOWN	DATE: 30JAN2020
COR PER SD390 FOR FILL STA VLV RECONFIG		W44.00-M-222	1
NO. DATE REVISION BY REC. APP.		DRAWING NUMBER	REV.



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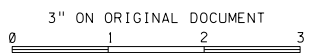
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DATE: 02-FEB-2021 09:05
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VALVE SCHEDULE

EQUIP TAG NO.					ITEM	TYPE	OPERATOR TYPE	SIZE (IN)	CAPACITY (EACH)	ΔP (PSIG)	MOTOR HP (EACH)	POWER (V/PH/HJZ)	SPEC SECTION	REMARKS
AREA	SYS	TYPE	ID#	MOD										
W-44	O2	HV	101	--	LINE DRAIN VALVE	GLOBE VALVE		1-1/2						
W-44	O2	HV	102	--	LINE DRAIN VALVE	GLOBE VALVE		1-1/2						
W-44	O2	SV	103	--	DELIVERY OVER PRESSURE GLOBE TYPE SOLENOID VALVE	GLOBE TYPE SOLENOID VALVE		1-1/2						
W-44	O2	SV	104	--	DELIVERY OVER PRESSURE GLOBE TYPE SOLENOID VALVE	GLOBE TYPE SOLENOID VALVE		1-1/2						
W-44	O2	HV	105	--	FILL LINE ISOLATION GLOBE VALVE	GLOBE VALVE		1-1/2						
W-44	O2	HV	106	--	FILL LINE ISOLATION GLOBE VALVE	GLOBE VALVE		1-1/2						
W-44	O2	CV	107	--	FILL LINE CHECK VALVE	SWING CHECK VALVE		1-1/2						
W-44	O2	CV	108	--	FILL LINE CHECK VALVE	SWING CHECK VALVE		1-1/2						
W-44	O2	PRV	109	--	ISOLATED FILL LINE PRV FOR LOX TANKS 1-1 & 2-2	PRESSURE RELIEF VALVE		1/2						
W-44	O2	PRV	110	--	ISOLATED FILL LINE PRV FOR LOX TANKS 1-2 & 2-1	PRESSURE RELIEF VALVE		1/2						
W-44	O2	PRV	111	--	ISOLATED FILL LINE PRV FOR LOX TANKS 1-1 & 2-2	PRESSURE RELIEF VALVE		1/2						
W-44	O2	PRV	112	--	ISOLATED FILL LINE PRV FOR LOX TANKS 1-2 & 2-1	PRESSURE RELIEF VALVE		1/2						
W-44	O2	PRV	113	--	ISOLATED TRANSFER LINE PRV FOR LOX TANKS 1-1 & 2-2	PRESSURE RELIEF VALVE		1/2						
W-44	O2	PRV	114	--	ISOLATED TRANSFER LINE PRV FOR LOX TANKS 1-2 & 2-1	PRESSURE RELIEF VALVE		1/2						
W-44	O2	HV	115	--	REMOTE FULL TRYCOCK VALVE LOX TANK 1-1	GLOBE VALVE		3/8						
W-44	O2	HV	116	--	REMOTE FULL TRYCOCK VALVE LOX TANK 1-2	GLOBE VALVE		3/8						
W-44	O2	HV	117	--	REMOTE FULL TRYCOCK VALVE LOX TANK 2-1	GLOBE VALVE		3/8						
W-44	O2	HV	118	--	REMOTE FULL TRYCOCK VALVE LOX TANK 2-2	GLOBE VALVE		3/8						
W-44	O2	PRV	119	--	ISOLATED LOX LINE PRV NEAR REMOTE FULL TRYCOCK VALVES	PRESSURE RELIEF VALVE		1/4						
W-44	O2	PRV	120	--	ISOLATED LOX LINE PRV NEAR REMOTE FULL TRYCOCK VALVES	PRESSURE RELIEF VALVE		1/4						
W-44	O2	PRV	121	--	ISOLATED LOX LINE PRV NEAR REMOTE FULL TRYCOCK VALVES	PRESSURE RELIEF VALVE		1/4						
W-44	O2	PRV	122	--	ISOLATED LOX LINE PRV NEAR REMOTE FULL TRYCOCK VALVES	PRESSURE RELIEF VALVE		1/4						
W-44	O2	HV	123	--	ISOLATION VALVE BETWEEN TRANSFER/FILL LINES INTERCONNECTION	GLOBE VALVE		2						
W-44	O2	HV	616	-1A	LOX TANK 1-1 REMOTE FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						DELETE VALVE
W-44	O2	HV	618	-1	LOX TANK 1-1 FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						
W-44	O2	HV	618	-1D	LOX TANK 1-1 VENT	GLOBE VALVE		1-1/2						
W-44	O2	HV	618	-1	LOX TANK 1-1 DIVERTER VALVE	3-WAY BALL VALVE		1-1/2						
W-44	O2	PSV	618	-1A	LOX TANK 1-1 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	PSV	618	-1B	LOX TANK 1-1 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	HV	618	-1A	LOX TANK 1-1 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	HV	618	-1B	LOX TANK 1-1 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	PSE	618	-1A	LOX TANK 1-1 RUPTURE DISC A	RUPTURE DISC		1-1/2						
W-44	O2	PSE	618	-1B	LOX TANK 1-1 RUPTURE DISC B	RUPTURE DISC		1-1/2						
W-44	O2	PCV	618	-1A	LOX TANK 1-1 SAFETY VALVES PCV-A	PRESSURE CONTROL VALVE		1/2						
W-44	O2	PCV	618	-1B	LOX TANK 1-1 SAFETY VALVES PCV-B	PRESSURE CONTROL VALVE		1/2						
W-44	O2	HV	626	-1A	LOX TANK 1-2 REMOTE FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						DELETE VALVE
W-44	O2	HV	626	-1	LOX TANK 1-2 FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						
W-44	O2	HV	626	-1D	LOX TANK 1-2 VENT	GLOBE VALVE		1-1/2						
W-44	O2	BLV	626	-1	LOX TANK 1-2 DIVERTER VALVE	3-WAY BALL VALVE		1-1/2						
W-44	O2	PSV	626	-1A	LOX TANK 1-2 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	PSV	626	-1B	LOX TANK 1-2 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	HV	626	-1A	LOX TANK 1-2 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	HV	626	-1B	LOX TANK 1-2 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	PSE	626	-1A	LOX TANK 1-2 RUPTURE DISC A	RUPTURE DISC		1-1/2						
W-44	O2	PSE	626	-1B	LOX TANK 1-2 RUPTURE DISC B	RUPTURE DISC		1-1/2						
W-44	O2	PCV	626	-1A	LOX TANK 1-2 SAFETY VALVES PCV-A	PRESSURE CONTROL VALVE		1/2						
W-44	O2	PCV	626	-1B	LOX TANK 1-2 SAFETY VALVES PCV-B	PRESSURE CONTROL VALVE		1/2						
W-44	O2	HV	616	-2A	LOX TANK 2-1 REMOTE FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						DELETE VALVE
W-44	O2	HV	618	-2	LOX TANK 2-1 FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						
W-44	O2	HV	618	-2D	LOX TANK 2-1 VENT	GLOBE VALVE		1-1/2						
W-44	O2	BLV	618	-2	LOX TANK 2-1 DIVERTER VALVE	3-WAY BALL VALVE		1-1/2						
W-44	O2	PSV	618	-2A	LOX TANK 2-1 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	PSV	618	-2B	LOX TANK 2-1 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	HV	618	-2A	LOX TANK 2-1 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	HV	618	-2B	LOX TANK 2-1 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	PSE	618	-2A	LOX TANK 2-1 RUPTURE DISC A	RUPTURE DISC		1-1/2						
W-44	O2	PSE	618	-2B	LOX TANK 2-1 RUPTURE DISC B	RUPTURE DISC		1-1/2						
W-44	O2	PCV	618	-2A	LOX TANK 2-1 SAFETY VALVES PCV-A	PRESSURE CONTROL VALVE		1/2						
W-44	O2	PCV	618	-2B	LOX TANK 2-1 SAFETY VALVES PCV-B	PRESSURE CONTROL VALVE		1/2						
W-44	O2	HV	626	-2A	LOX TANK 2-2 REMOTE FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						DELETE VALVE
W-44	O2	HV	626	-2	LOX TANK 2-2 FULL TRYCOCK VALVE LINE ISOLATION VALVE	GLOBE VALVE		3/8						
W-44	O2	HV	626	-2	LOX TANK 2-2 VENT	GLOBE VALVE		1-1/2						
W-44	O2	BLV	626	-2	LOX TANK 2-2 DIVERTER VALVE	3-WAY BALL VALVE		1-1/2						
W-44	O2	PSV	626	-2A	LOX TANK 2-2 PRV	PRESSURE RELIEF VALVE		1-1/2						
W-44	O2	PSV	626	-2B	LOX TANK 2-2 PRV	PRESSURE RELIEF VALVE		1-1/2						
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W-44	O2	HV	626	-2B	LOX TANK 2-2 PRV VENT	GLOBE VALVE		1/4						
W-44	O2	PSE	626	-2A	LOX TANK 2-2 RUPTURE DISC A	RUPTURE DISC		1-1/2						
W-44	O2	PSE	626	-2B	LOX TANK 2-2 RUPTURE DISC B	RUPTURE DISC		1-1/2						
W-44	O2	PCV	626	-2A	LOX TANK 2-2 SAFETY VALVES PCV-A	PRESSURE CONTROL VALVE		1/2						
W-44	O2	PCV	626	-2B	LOX TANK 2-2 SAFETY VALVES PCV-B	PRESSURE CONTROL VALVE		1/2						

NOTES

1. NOT ALL VALVES ARE INDICATED ON THE VALVE SCHEDULE AND DO NOT RELIEVE THE CONTRACTOR FROM PROVIDING AS SHOWN ON THE DRAWINGS.



NO.	DATE	REVISION	BY	REC.	APP.
28JAN2021		COR PER SD390 FOR FILL STA VLV RECONFIG	WJ	WJ	GPW
28JAN2021		CLARIFICATIONS	WJ	WJ	GPW

SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS		EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT NO. 1 OAKLAND, CALIFORNIA	
DESIGN BY: K. YAKICH	DRAWN BY: S. UPSORNSOPAKIT	PROJECT ENGINEER: R.P.E. No. C37427	
DESIGN CHECKED BY: <i>WJ</i>	CONSTRUCTABILITY CHECKED BY: <i>WJ</i>	PROJECT MANAGER: R.P.E. No. C37427	
ELECTRICAL CHECKED BY: ---		RECOMMENDED: SR. ENGINEER: R.P.E. No. C65259	
SCALE: NONE		DATE: 30JAN2020	
DRAWING NUMBER: W44.00-M-320		SHEET NO. 108	
DATE: 30JAN2020		DRAWING NUMBER: W44.00-M-320	



USER: lducker
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MATCH LINE - FOR CONTINUATION SEE DWG W44.00-E-102.3

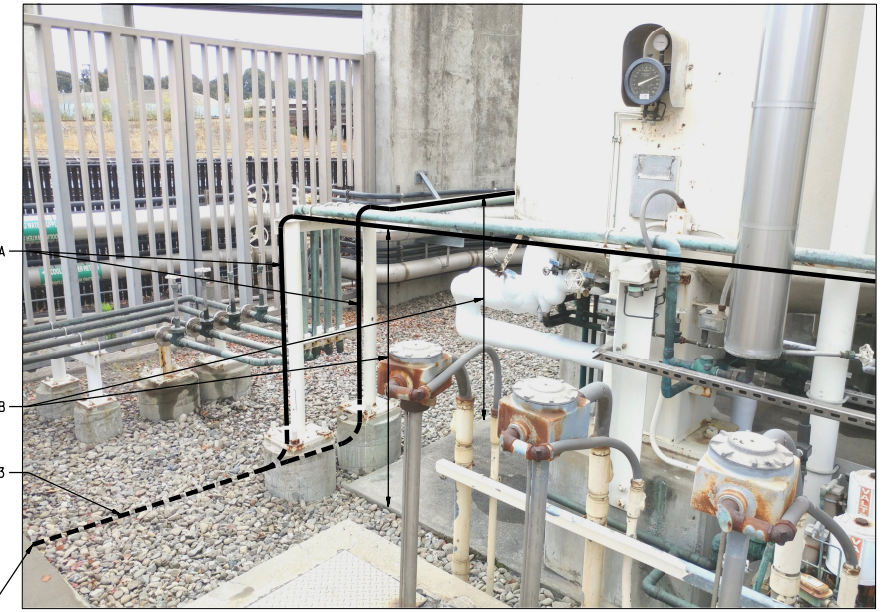
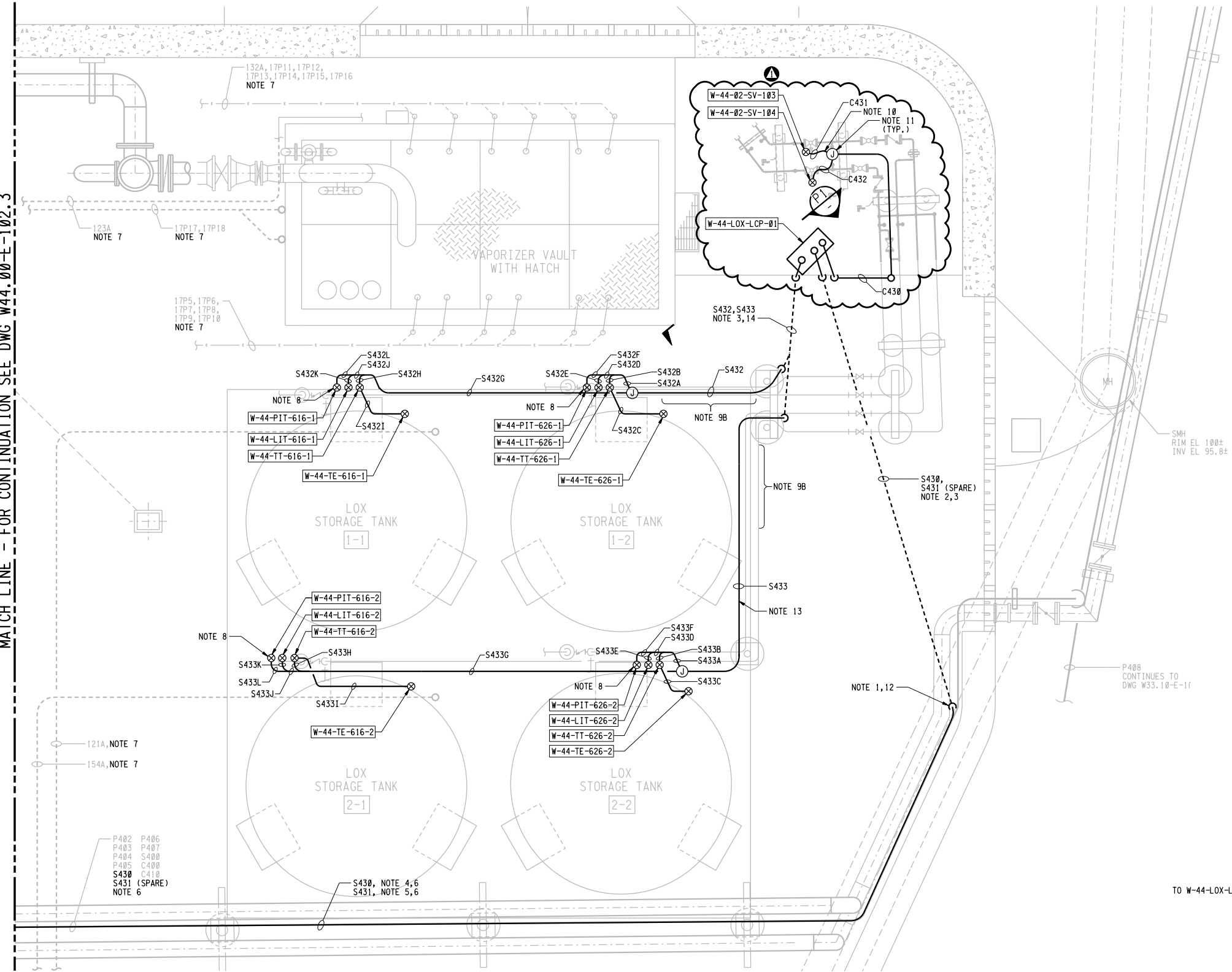
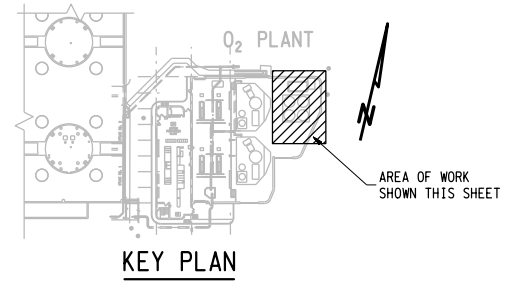


PHOTO DETAIL P1
 NTS



DETAIL 5
 3/8"=1'-0" W44.00-E-102

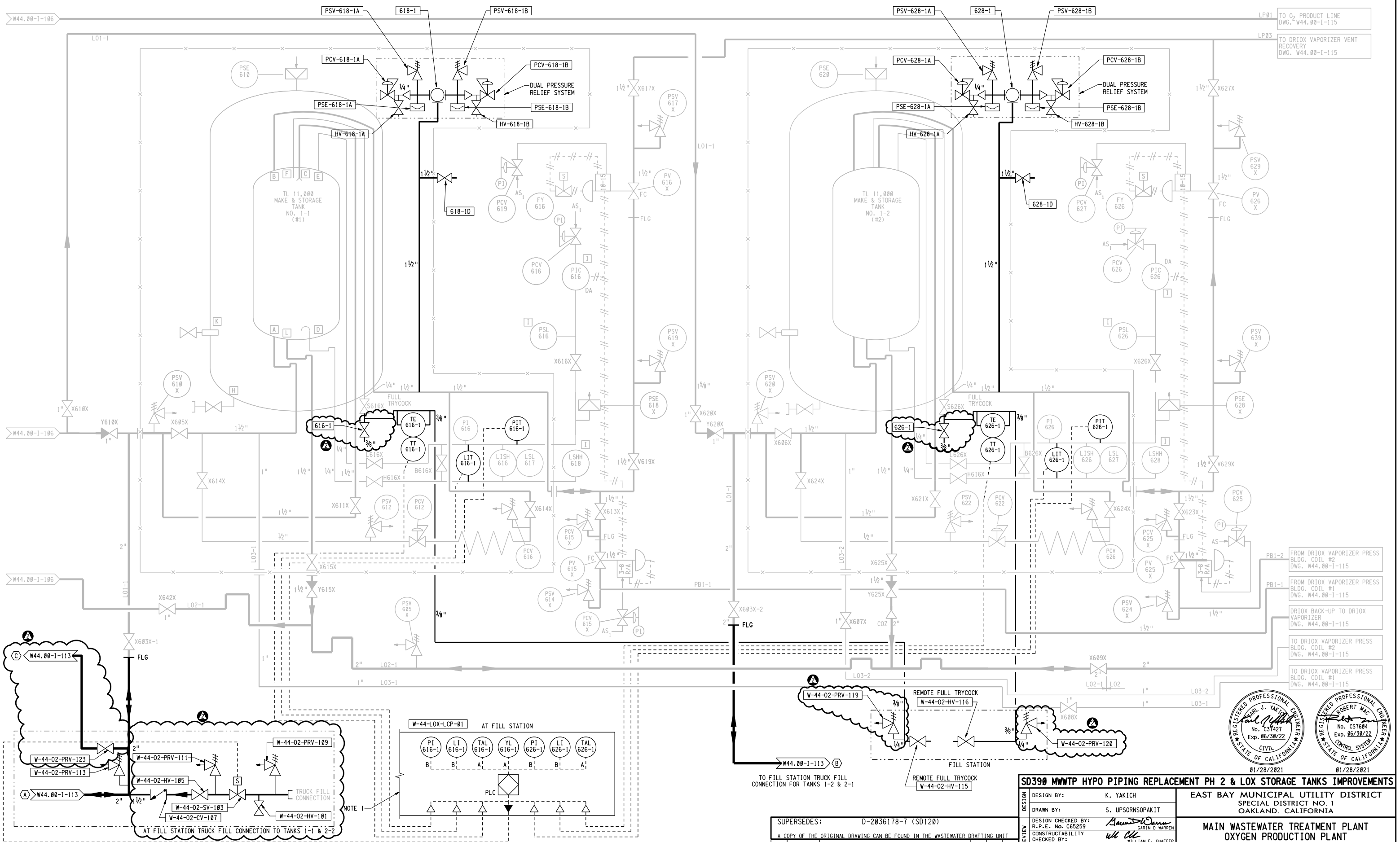


3" ON ORIGINAL DOCUMENT
 0 1 2 3

- NOTES
- TRANSITION CONDUIT S430 TO UNDERGROUND. INSTALL L-B FITTING FOR THE TRANSITION. TRANSITION S431 TO UNDERGROUND VIA T-FITTING.
 - CONTRACTOR TO INSTALL UNDERGROUND PORTION OF DISTRICT PROVIDED CONDUITS S430 AND S431 IN ACCORDANCE WITH DWG SD390-E-902 DET 1 AND W44.00-C-150.1D. CONTRACTOR TO COORDINATE AND NOTIFY DISTRICT AT LEAST TWO WEEKS PRIOR TO TRENCHING TO ALLOW DISTRICT TO PREPARE AND FURNISH THE 2" CONDUITS.
 - UNDERGROUND CONDUITS TO BE STUBBED-UP AND SECURED AT BOTH ENDS.
 - CONDUIT S430 FROM (E) DCS DROP 15 AND (E) O2 COOLING LCP TO (N) W-44-LOX-LCP-01 SHALL BE INSTALLED WITH 1#12 (BLUE WIRE), 1#12 (BLUE WITH GREY WIRE), 1#12 (GREEN WIRE) GND, AND PULL ROPE BETWEEN O2 COOLING LCP AND W-44-LOX-LCP-01. INSTALL 10#16 (BLUE WIRES) AND 8#18TSP CABLES BETWEEN DCS DROP 15 AND W-44-LOX-LCP-01. WIRE LABEL PRINTED FORMAT SHALL BE IN ACCORDANCE TO SPECIFICATION 26 05 53.
 - SPARE CONDUIT S431 FROM DCS DROP 15 TO W-44-LOX-LCP-01 SHALL HAVE PULL ROPE.
 - ABOVE GROUND PORTION OF CONDUIT S430 AND S431 ONLY SHALL BE FURNISHED AND INSTALLED BY DISTRICT FORCES. CONTRACTOR TO FURNISH AND INSTALL WIRES. CONTRACTOR TO NOTIFY AND COORDINATE WITH DISTRICT AT LEAST TWO WEEKS PRIOR TO INSTALLING WIRES.
 - SEE SD120 REFERENCE DRAWINGS FOR EXISTING CONDUIT INFORMATION.
 - FOR ADDITIONAL INFORMATION ON INSTRUMENT MOUNTING LOCATIONS AND DETAILS SEE DET 4/W44.00-M-221 & M-223.
 - PROPOSED CONDUIT ROUTING.
 - MAINTAIN EXISTING VERTICAL DISTANCE/CLEARANCE FOR ACCESS.
 - APPROX 3 FT FLEXIBLE CONDUIT AND TRANSITION PVC COATED RIGID GALVANIZED CONDUIT.
 - USING T-FITTING IS ACCEPTABLE.
 - DISTRICT FORCES TO FURNISH AND INSTALL ABOVE GROUND PORTION OF CONDUIT AND T-FITTING UP TO THIS POINT. CONTRACTOR TO INSTALL VERTICAL PORTION AND UNDERGROUND CONDUITS FROM THIS POINT TO THE W-44-LOX-LCP-01. SEE NOTE 2 FOR WORK DETAILS.
 - INSTALL CONDUIT ON (E) PIPING SUPPORT APPROXIMATELY 5 FEET ABOVE GROUND.
 - INSTALL UNDERGROUND PORTION OF CONDUITS S432 AND S433 IN ACCORDANCE WITH DWG SD390-E-902 DET 1 AND W44.00-C-150.1D.
 - MAINTAIN MINIMUM 3" CLEARANCE BETWEEN CONDUITS AND LOX PIPING.

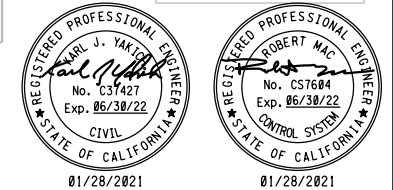
SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS									
DESIGN	DESIGN BY:	R. MAC	EAST BAY MUNICIPAL UTILITY DISTRICT SPECIAL DISTRICT NO. 1 OAKLAND, CALIFORNIA						
DESIGN	DRAWN BY:	S. UPSORNSOPAKIT							
REVIEW	DESIGN CHECKED BY:	<i>W. Chen</i> WIZHEN CHEN	MAIN WASTEWATER TREATMENT PLANT OXYGEN PRODUCTION PLANT						
	CONSTRUCTABILITY CHECKED BY:	<i>W. Chen</i> WILLIAM E. CHAFFER							
REVIEW	ELECTRICAL CHECKED BY:	<i>R. Mac</i> ROBERT MAC	ELECTRICAL PARTIAL POWER PLAN 5						
	PROJECT ENGINEER	<i>R. Mac</i> ROBERT MAC							
REVIEW	PROJECT MANAGER	<i>K. J. YAKICH</i> KARL J. YAKICH	SHEET NO. 151						
	SR. ENGINEER	<i>K. J. YAKICH</i> KARL J. YAKICH							
NO.	DATE	REVISION	BY	REC.	APP.	RECOMMENDED:	SCALE	DRAWING NUMBER	REV.
28	JAN 2021	COR PER SD390 FOR FILL STA VLV RECONFIG	WO	WO	RM	R. MAC	3/8"=1'-0"	W44.00-E-102.5	1
						R. MAC	DATE	30/JAN/2020	

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LP01 TO O₂ PRODUCT LINE DWG. W44.00-1-115
LP03 TO DRIOX VAPORIZER VENT RECOVERY DWG. W44.00-1-115

PB1-2 FROM DRIOX VAPORIZER PRESS BLDG. COIL #2 DWG. W44.00-1-115
PB1-1 FROM DRIOX VAPORIZER PRESS BLDG. COIL #1 DWG. W44.00-1-115
DRIOX BACK-UP TO DRIOX VAPORIZER DWG. W44.00-1-115
TO DRIOX VAPORIZER PRESS BLDG. COIL #2 DWG. W44.00-1-115
TO DRIOX VAPORIZER PRESS BLDG. COIL #1 DWG. W44.00-1-115



NOTES
1. FOR CONTINUATION OF PANEL SEE DWG W44.00-1-113.

LEGEND
A. INDICATING DEVICE.
B. PROCESS DISPLAY METER.
3" ON ORIGINAL DOCUMENT

SUPERSEDES: D-2036178-7 (SD120)
A COPY OF THE ORIGINAL DRAWING CAN BE FOUND IN THE WASTEWATER DRAFTING UNIT

NO.	DATE	REVISION	BY	REC.	APP.
28	JAN2021	COR PER SD390 FOR PRV ON LOX VLV LINES			
28	JAN2021	CLARIFICATIONS			

SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS

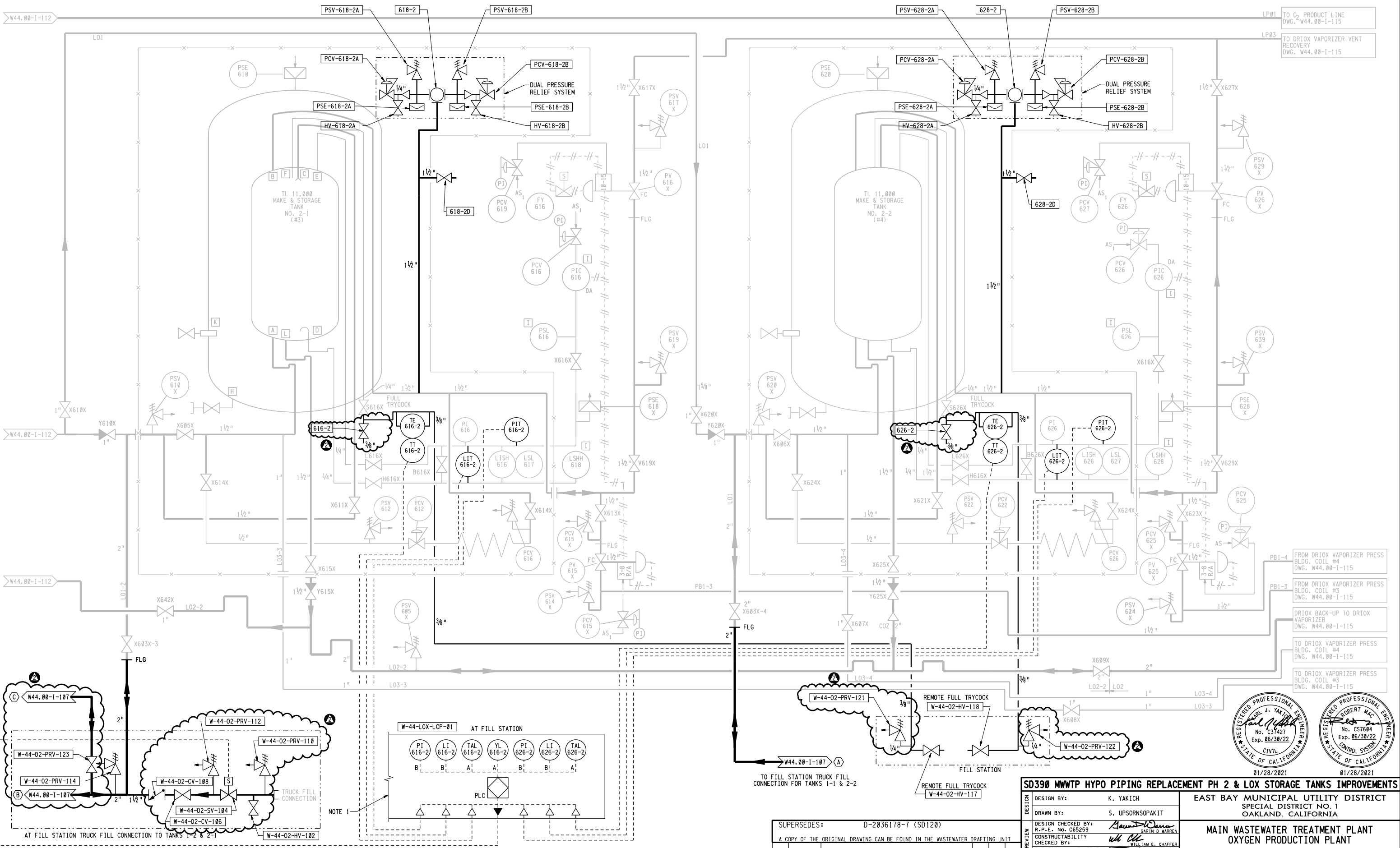
DESIGNER: K. YAKICH
DRAWN BY: S. UPSORNSOPAKIT
DESIGN CHECKED BY: CARIN D. WARREN
CONSTRUCTABILITY CHECKED BY: WILLIAM E. CHAFFER
ELECTRICAL CHECKED BY: ROBERT MAC
PROJECT ENGINEER: KARL J. YAKICH
R.P.E. No. C37427
PROJECT MANAGER: KARL J. YAKICH
R.P.E. No. C37427
RECOMMENDED BY: ROBERT MAC
SR. ENGINEER R.P.E. No. E16072

**EAST BAY MUNICIPAL UTILITY DISTRICT
SPECIAL DISTRICT NO. 1
OAKLAND, CALIFORNIA**

**MAIN WASTEWATER TREATMENT PLANT
OXYGEN PRODUCTION PLANT**
INSTRUMENTATION
P&ID - LOX STORAGE TANKS PLANT NO. 1

SCALE: NONE
DATE: 30JAN2020
SHEET NO. 199
DRAWING NUMBER: W44.00-1-107
REV. 2

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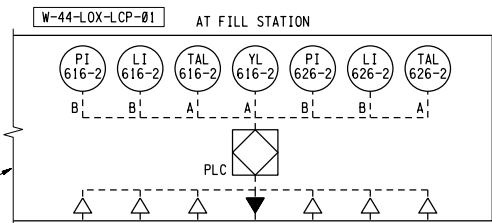
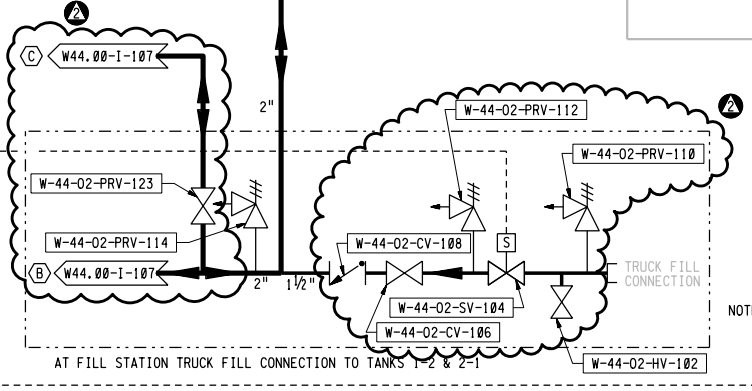


LP01 TO O₂ PRODUCT LINE
 DWG. W44.00-1-115
 LP03 TO DRIOX VAPORIZER VENT
 RECOVERY
 DWG. W44.00-1-115

PB1-4 FROM DRIOX VAPORIZER PRESS
 BLDG. COIL #4
 DWG. W44.00-1-115
 PB1-3 FROM DRIOX VAPORIZER PRESS
 BLDG. COIL #3
 DWG. W44.00-1-115
 DRIOX BACK-UP TO DRIOX
 VAPORIZER
 DWG. W44.00-1-115
 TO DRIOX VAPORIZER PRESS
 BLDG. COIL #4
 DWG. W44.00-1-115
 TO DRIOX VAPORIZER PRESS
 BLDG. COIL #3
 DWG. W44.00-1-115

REGISTERED PROFESSIONAL ENGINEER
 CARL J. YAKICH
 No. C37427
 Exp. 06/30/22
 CIVIL
 01/28/2021

REGISTERED PROFESSIONAL ENGINEER
 ROBERT MAC
 No. C57684
 Exp. 06/30/22
 CONTROL SYSTEMS
 01/28/2021



NOTES
 1. FOR CONTINUATION OF PANEL SEE DWG W44.00-1-107.

LEGEND
 A. INDICATING DEVICE.
 B. PROCESS DISPLAY METER.



SUPERSEDES: D-2036178-7 (SD120)

A COPY OF THE ORIGINAL DRAWING CAN BE FOUND IN THE WASTEWATER DRAFTING UNIT

NO.	DATE	REVISION	BY	REC.	APP.
28JAN2021		COR PER SD390 FOR FILL STA VLV RECONFIG			
28JAN2021		CLARIFICATIONS			

SD390 MWTP HYPO PIPING REPLACEMENT PH 2 & LOX STORAGE TANKS IMPROVEMENTS

DESIGNER: K. YAKICH
 DESIGN CHECKED BY: S. UPSORNSOPAKIT
 R.P.E. No. C65259
 CONSTRUCTION CHECKED BY: WILLIAM E. CHAFFER
 ELECTRICAL CHECKED BY: ROBERT MAC
 R.P.E. No. E16072
 PROJECT ENGINEER: CARL J. YAKICH
 R.P.E. No. C37427
 PROJECT MANAGER: CARL J. YAKICH
 R.P.E. No. C37427
 RECOMMENDED BY: ROBERT MAC
 SR. ENGINEER: ROBERT MAC
 R.P.E. No. E16072

**EAST BAY MUNICIPAL UTILITY DISTRICT
 SPECIAL DISTRICT NO. 1
 OAKLAND, CALIFORNIA**

**MAIN WASTEWATER TREATMENT PLANT
 OXYGEN PRODUCTION PLANT**

INSTRUMENTATION
 P&ID - LOX STORAGE TANKS PLANT NO. 2

SHEET NO. 201
 SCALE: NONE
 DATE: 30JAN2020
W44.00-1-113
 DRAWING NUMBER
 2
 REV.