

EAST BAY MUNICIPAL UTILITY DISTRICT

REQUEST FOR QUOTATION (RFQ) No. 2702

for

EARTHQUAKE RESILIENT DUCTILE IRON PIPE AND FITTINGS

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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

2:00 p.m.

on

October 9, 2026

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 2:00 p.m. on the bid due date.

RESPONSE DELIVERED BY SERVICE (UPS, FedEx, DHL, etc., during business hours: 8:00 AM – 3:30 p.m. only) to: EBMUD–Purchasing Division Earthquake Resilient Ductile Iron Pipe and Fittings – RFQ 2702 375 11 th Street Oakland, CA 94607	RESPONSE DELIVERED BY MAIL (U.S. Postal Service) to: EBMUD–Purchasing Division Earthquake Resilient Ductile Iron Pipe and Fittings – RFQ 2702 P.O. Box 24055 Oakland, CA 94623	RESPONSE HAND-DELIVERED (during business hours: 8:00 AM – 3:30 p.m. only) EBMUD–Purchasing Division Earthquake Resilient Ductile Iron Pipe and Fittings – RFQ 2702 Purchasing Office 375-11 TH Street, 1 st Floor Oakland, CA 94607
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EAST BAY MUNICIPAL UTILITY DISTRICT

RFQ No. 2702

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Earthquake Resilient Ductile Iron Pipe and Fittings

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EXHIBIT F – NSF PFAS TESTING FOR DRINKING WATER SYSTEM COMPONENTS

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I. STATEMENT OF WORK

A. SCOPE

It is the intent of this RFQ, specifications, terms, and conditions to describe requirement to manufacture, complete, and deliver Kubota Corporation, Hazard Resilient Ductile Iron Pipe and Fittings (Kubota, HRDIP & HRDIF) herein referred to as “Earthquake Resilient Ductile Iron Pipe” (ERDIP) and “Earthquake Resilient Ductile Iron Fittings” (ERDIF). The pipe shall be bell and spigot restrained joint (push-on and mechanical design) ductile iron pipe and fittings with fusion bonded epoxy or cement mortar lining and zinc or zinc-alloy exterior coating as specified and all necessary components including fittings and gaskets to provide a functional installation of a potable water pipeline.

East Bay Municipal Utility District (District) intends to award a one (1)-year contract with four (4) options, exercised at the sole discretion of the District, to extend the contract for additional one (1)-year periods.

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 Kubota Corporation earthquake resilient ductile iron pipe and fittings for at least five (5) years.
- b. Bidder shall be a manufacturer or *authorized direct distributor* of Kubota earthquake resilient ductile iron pipe, fittings, and necessary components. **Bids from third-party distributors, brokers or non-value-added resellers will not be accepted.**

C. SPECIFIC REQUIREMENTS

Earthquake resilient ductile iron pipe (ERDIP) and earthquake resilient ductile iron fittings (ERDIF) shall be Kubota Corporation, Hazard Resilient Ductile Iron pipe and fittings with metallic zinc-alloy coated exterior and fusion bonded epoxy interior lined. ERDIP may also be double thickness cement mortar interior lined if specified in the Bid Form Schedules and according to Specification Section 33 05 19.15P in Exhibit E.

KUBOTA Hazard Resilient Ductile Iron Pipe and Fittings, GENEX (GX) joint type shall be gasketed push-on or mechanical joint with integral restraint and shall be manufactured by KUBOTA Corporation (Kubota).

Gaskets shall be for Kubota Licensed GX push-on, flanged, or restrained joints.

Refer to Exhibit E, "Specification Section 33 05 19.15P, Fabrication of Earthquake Resilient Ductile Iron Pipe and Fittings" for all requirements.

Materials in Contact with Drinking Water.

1. All materials, equipment, or products that will be in contact with drinking water (potable water) shall be tested and certified as meeting the specifications of NSF/ANSI 61 Standard in accordance with California Code of Regulations, Title 22, Section 64591. Examples include, but are not limited to, valves, pumps, flow meters, protective materials (coatings, linings, liners), joining and sealing materials, pipes, tanks, pipe fittings, filters, cleaning chemicals, and lubricants.
2. All chemicals that will be in contact with or added to drinking water shall be certified by NSF to NSF/ANSI Standard 60.
3. For materials:
 - a. Documentation which demonstrates current NSF/ANSI Standard 61 certification shall be submitted by the bidder in their bid package.
 - b. If awarded, 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.
 - c. Contractor must also include a statement or description of current or tentative plans for implementation of the NSF PFAS for Drinking Water System Components Testing/Certification Requirements (Exhibit F), should the proposed requirement become law. If contractor has no tentative or current plans, please state such.
 - d. Within 12 months of the contract award, contractor shall submit results from NSF PFAS Testing for Drinking Water System Components (Exhibit F).
4. For chemicals:
 - a. Documentation which demonstrates current NSF/ANSI Standard 60 certification shall be submitted by the bidder in their bid package.
 - b. If awarded, 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.

D. DELIVERABLES / REPORTS

IDENTIFICATION OF PIPE AND FITTINGS

ERDIP and ERDIF shall be clearly marked in compliance with manufacturing standards. Upon request, the Manufacturer shall provide information for deciphering the Manufacturer's production code.

At a minimum, the following shall be cast, labeled, or stenciled on the pipe and fittings:

1. Pressure or thickness class
2. Production code or lot number (lot no.) from which the manufactured date and location can be determined
3. Name and/or trademark of Manufacturer
4. Nominal pipe size
5. Fitting type (i.e. 45°), for fittings
6. NSF-61 marking
7. Manufacturing standard reference (AWWA, ASTM, etc.)
8. Application of zinc coating
9. Identification that pipe is within the OD tolerances of AWWA C151 or JWWA G120 for the full length of pipe, except for 2 feet from the bell end (for pipe larger than 12 inches in diameter according to Specification Section 33 05 19.15P in Exhibit E)

DELIVERY, STORAGE, AND HANDLING

Every shipment requires a completed copy of the “ERDIP (HRDIP) Inspection Check List” (EXHIBIT G).

Prior to delivery, each opening in the pipe or fitting shall be securely capped or plugged with removable plastic caps or plugs to prevent foreign matter from entering the pipe or fitting. The caps or plugs shall be designed to fit either as a cap on a spigot or a plug in a bell. Ends shall remain capped or plugged until ready for installation. Pipe ends shall be wrapped for shipment so that caps do not become dislodged during transport.

All pipes, fittings, and other accessories shall be stored such that they do not accumulate and hold rainwater, dirt, or debris. Plugs of rags, wood, cotton,

cardboard, waste or similar materials shall not be used. All furnished materials shall be stored away from standing water.

Gaskets shall be stored in cool, shaded, clean, moisture-free areas and away from sunlight and artificial light with high ultraviolet radiation content. The preferred storage temperature is 70°F (25°C) or lower. Gaskets must be stored so that they are free of tension, compression, and other deformation. Do not store gaskets in environments with equipment capable of generating ozone.

Gaskets shall not exceed the recommended shelf-life guidelines below.

Shelf-Life Guidelines for Rubber Gaskets

Material	Inside Storage	Outside Storage
Ethylene propylene diene monomer (EPDM)	3 years	1 year
Nitrile butadiene rubber (NBR) and Styrene butadiene rubber (SBR)	2 years	0 year

During loading, transportation, and unloading, every precaution shall be taken to prevent damage to the furnished material. Under no circumstances shall the pipe, fittings, and appurtenances be dropped or skidded against each other. Slings, hooks or pipe tongs shall be padded and used in such a manner as to prevent damage to the exterior surface or internal lining of the furnished material.

Pipe shall be packaged with 4"x 4" nominal or 90 mm x 90 mm square timbers under each stack and between each row of pipe with adequate blocking to prevent pipe from rolling or falling during unloading. District is responsible for all unloading and stacking of pipe. Fittings and other accessories shall be delivered on pallets, crates, or cases. Each individual pallet, crate, or case must be accompanied with an itemized list of each fitting type and fitting size packaged in the crate, pallet, or case.

Rope or other devices shall not be attached through the interior of pipe for handling. Soft slings may be used inside fittings for handling if needed.

If furnished materials are damaged or found defective upon delivery, the damaged or unsatisfactory pipe or fittings shall be replaced with materials conforming to these specifications.

Delivery of pipe shall be within fourteen to sixteen weeks after order release, in accordance with these specifications.

The manufacturer shall maintain an inventory of one and a half miles of 6-inch diameter pipe, one mile of 8-inch diameter pipe, and appropriate fittings which can be delivered to the District within eight to ten weeks after order release.

In case of emergency, the manufacturer shall maintain an inventory of all materials not less than 10% of the District's annual estimated requirements for 6-inch and 8-inch diameter pipes and fittings in the State of California, which can be delivered to the District within seven business days or less. The manufacturer must establish the inventory in the State of California within twenty-four months of signing this RFQ.

Delivery tags or packing slips must accompany every shipment to the District and must include the District's purchase order number, the EBMUD Item Number, a brief description for each item, and the quantity in shipment. When possible, all like items in each shipment should be palletized or crated together. **All items contained in each pallet or crate shall be clearly marked on the outside of each pallet or crate in a visible location.**

Deliveries will be accepted between the hours of 7:00 a.m. and 3:00 p.m., Monday through Friday. No deliveries will be received on holidays recognized by the District. The shipment date indicates the beginning date of the shipping schedule. Delivery address is Oakport Distribution Center, 5601 Oakport Street, Oakland, CA 94621.

SUBMITTALS

Manufacturer's Certificate of Compliance, including references to the casting period and day of manufacturing of the pipe and fittings, shall be submitted with each shipment prior to or at the time of delivery. The Certificate of Compliance shall state that the requirements of these specifications have been met for all pipe and fittings furnished, including National Sanitation Foundation (NSF) 61 certification and hydrostatic testing. Hydrostatic testing requirements for pipe and fittings shall also be met and included in the Certificate of Compliance.

Manufacturer's published catalog information for all products.

Manufacturer's approved installation and assembly instructions.

Manufacturer's specifications for welding standards.

Manufacturer's shop drawings.

Refer to Exhibit E, Specification 33 05 19.15P – Fabrication of Earthquake Resilient Ductile Iron Pipe and Fittings for additional submittal information.

E. INSPECTION**QUALITY ASSURANCE**

All ERDIP shall be subject to factory hydrostatic test of at least 500 psi for a period not less than 5 seconds per AWWA C151, JWWA G113, or JWWA G120. All ERDIF shall be subject to a factory hydrostatic test of at least 350 psi for a period not less than 10 seconds per JWWA G114, or JWWA G121 or equivalent as approved by the Engineer. Certified test results shall be furnished to the District prior to every shipment.

All furnished materials shall be new and as specified herein. Refurnished materials shall not be provided.

Inspection of pipe and fittings will be conducted by the District upon delivery, and at the jobsite prior to installation. The piping materials shall be subject to rejection at any time on account of failure to meet any of the specified requirements. Furnished pipe and materials rejected upon delivery will be returned to the Manufacturer. Pipe and materials rejected after delivery shall be marked for identification and removed from the storage yard or jobsite. In the case that an item or lot is rejected, the District will provide Contractor and the EBMUD Purchasing Division with a Construction Division Field Memo or Inspectors Job Report which will itemize the product deficiencies. Cost for returning rejected materials shall be borne by the Contractor.

Upon the District's request, records of quality control testing shall be furnished within five calendar days.

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.

At its discretion, the District may perform a factory inspection of the production facility before the contract is awarded to ensure conformance to the product specifications, at the District's expense. The District reserves the right to reject bid(s) due to non-conformance to the specifications.

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

F. 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	September 25, 2026
Response Due	October 9, 2026 by 2:00 p.m. At this time all bids will be opened publicly in the William "Bill" Patterson Boardroom at 375 Eleventh St., Oakland, CA 94607
Anticipated Contract Start Date	November 10, 2026

Note: All dates are subject to change **by District**.

Bidders are responsible for reviewing <https://www.ebmud.com/business-center/materials-and-supplies-bids/current-requests-quotation-rfq/> 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

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. Thereafter, prices may be adjusted to reflect changes in raw material costs and state or federally mandated fees. Price adjustment requests must be submitted to the District for review and consideration a minimum of 60 days prior to their going into effect. All increase requests must be accompanied by supporting documentation from the party levying the increase or fee (i.e. raw materials increase notifications or changes in state/federal fees on the letterhead of the supplier or agency). Increase requests will only be granted once in a given contract year, after the completion of the initial one-year term of the contract. The seller is expected to manage costs associated with labor and other overhead costs for the life of the original agreement and all related option-year extension periods.

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. Written POs may be issued upon approval of written itemized quotations received from the Contractor.
2. **Contractor shall provide clear shipping documentation (BOL, packing slip) with each shipment, including at a minimum: PO number, item name, District item number, description and quantity of each component included in the shipment.**
3. POs and payments for products and/or services will be issued only in the name of Contractor.
4. Invoices must correlate to shipments and invoices must contain all required information from the packing slip (**PO number, item name, District item number, description and quantity of each component**), as well as the **packing slip number and shipment date.**
5. 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 one year.
2. At the sole discretion of the District, any contract which may be awarded pursuant to this RFQ, may be extended for four (4) additional one-year terms 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 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.

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, PO number, Packing Slip number(s) and shipment date(s) item name, District item number, description and quantity of each component included in the shipment.**
4. Pipe shall be billed and paid for by the nearest whole foot. Sticks that do not measure to the foot precisely shall be rounded down for anything under 6" and rounded up to the next whole foot for anything over 6". For example, if a length of pipe is 17' 4", the contractor shall bill for 17 feet and the District will pay for 17 feet. If it is 17' 9", contractor shall bill for 18 feet and the District will pay for 18 feet. If the contractor does not bill correctly/by this calculation method, the District will adjust payment to match received amounts by this calculation method.
5. The District will pay Contractor in an amount not to exceed the total amount quoted in the RFQ response.

J. DAMAGES FOR LATE DELIVERY

In the event the Contractor is unable to deliver pipe of the size and quantity ordered within twelve weeks following order release, the District reserves the right to cancel the order and purchase the ordered material on the open market. The Contractor

shall be liable for the difference in cost between the purchase price and the price bid by the Contractor. In addition, the Contractor shall be liable for consequential damages which arise due to failure to deliver. Time is of the essence of this contract.

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.

PURCHASING DIVISION

Attn: Becky Sharpe, Purchasing Contract Supervisor

EBMUD–Purchasing Division

E-Mail: becky.sharpe@ebmud.com

PHONE: (510) 287-0644

CONTRACT EQUITY PROGRAM:

Attn: Contract Equity Office

PHONE: (510) 287-0114

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 2:00 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
Earthquake Resilient Ductile Iron Pipe and Fittings
RFQ No. 2702
EBMUD–Purchasing Division MS102
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
Earthquake Resilient Ductile Iron Pipe and Fittings
RFQ No. 2702
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. 2702 – Earthquake Resilient Ductile Iron Pipe and Fittings

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

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_____



BID FORM(S)

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 may bid on one or more of the schedules. Bidders must bid on all items in a set of schedules to be considered responsive. EBMUD reserves the right to award on a per size basis, line-item basis, to single or multiple vendors, or to award a schedule in its entirety, or to reject all bids.

MANUFACTURER OF PIPE AND FITTINGS

DATE QUOTED: _____ MANUFACTURER #1: _____

Total Schedule 1 – Earthquake Resilient Ductile Iron Pipe	
Total Schedule 2 – GX Bends and Offsets (Kubota licensed, AWWA)	
Total Schedule 3 – GX Tees, Reducers, Crosses (Kubota licensed, AWWA)	
Total Schedule 4 – GX Flange Adaptors, Collars, Nipples (Kubota licensed, AWWA)	
Total Schedule 5 – GX Bends and Offsets (Kubota licensed, JWWA)	
Total Schedule 6 – GX Tees and Reducers (Kubota licensed, JWWA)	
Total Schedule 7 – GX Flange Adaptors and Collars (Kubota licensed, JWWA)	
Total Schedule 8 – GX Accessories for GX Pipe and Fittings (Kubota licensed, AWWA)	
Total Schedule 9 – GX Accessories for GX Pipe and Fittings (Kubota Licensed, JWWA)	
TOTAL:	

All Pipe is to be quoted, shipped, and invoiced by the whole foot.

Schedule Group 1 – Earthquake Resilient Ductile Iron Pipe**(See Exhibit E - Specification Section 33 05 19.15P, Article 2.2)****1A – PIPE, KUBOTA, GX, T54 (Fusion bonded epoxy lined, zinc alloy coated)**

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060006	6"	feet	15,840		
060008	8"	feet	10,560		
060012	12"	feet	2,640		
				TOTAL COST:	

1B – PIPE, KUBOTA, GX, T54, JWWA (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060016	16"	feet	2,640		
				TOTAL COST:	

NOTE: Pipe under Schedule 1 shall be supplied without gaskets and with lock ring pre-installed in the bell.

TOTAL COST FOR SCHEDULE 1 (SUM OF SCHEDULES 1A THROUGH 1B): _____

Schedule Group 2 – GX Bends and Offsets, Kubota licensed, AWWA
(See Exhibit E - Specification Section 33 05 19.15P)

2A – ELBOW, KUBOTA GX, 11.25 DEGREE, DOUBLE SOCKET
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060100	6"	EA	60		
060104	8"	EA	40		
060108	12"	EA	10		
				TOTAL COST:	

2B – ELBOW, KUBOTA GX, 22.5 DEGREE, DOUBLE SOCKET
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060101	6"	EA	110		
060105	8"	EA	80		
060109	12"	EA	20		
				TOTAL COST:	

2C – ELBOW, KUBOTA GX, 45 DEGREE, DOUBLE SOCKET
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060102	6"	EA	110		
060106	8"	EA	80		
060110	12"	EA	20		
				TOTAL COST:	

2D – ELBOW, KUBOTA GX, 90 DEGREE, DOUBLE SOCKET
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060103	6"	EA	20		
060107	8"	EA	15		
060112	12"	EA	5		
				TOTAL COST:	

2E – OFFSET, KUBOTA GX, DOUBLE SOCKET, H = 12”**(Fusion bonded epoxy lined, zinc alloy coated)**

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060901	6”	EA	70		
060902	8”	EA	50		
060903	12”	EA	20		
				TOTAL COST:	

2F – OFFSET, KUBOTA GX, DOUBLE SOCKET, H = 18”**(Fusion bonded epoxy lined, zinc alloy coated)**

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060905	6”	EA	70		
060906	8”	EA	50		
060907	12”	EA	20		
				TOTAL COST:	

NOTE: Fittings under Schedule 2A through 2F shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 2 (SUM OF SCHEDULES 2A THROUGH 2F): _____

Schedule Group 3 – GX Tees, Reducers, Crosses, Kubota licensed, AWWA
(See Exhibit E - Specification Section 33 05 19.15P)

3A – TEE, KUBOTA GX, ALL SOCKET (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060200	6" x 6"	EA	50		
060201	8" x 6"	EA	40		
060202	8" x 8"	EA	40		
060203	12" x 6"	EA	10		
060204	12" x 8"	EA	10		
060205	12" x 12"	EA	10		
				TOTAL COST	

3B – TEE, KUBOTA GX, DOUBLE SOCKET x FLG
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060300	6" x 4"	EA	20		
060301	6" x 6"	EA	70		
060302	8" x 4"	EA	20		
060303	8" x 6"	EA	50		
060304	8" x 8"	EA	40		
060305	12" x 4"	EA	5		
060306	12" x 6"	EA	10		
060307	12" x 8"	EA	10		
060308	12" x 12"	EA	10		
				TOTAL COST	

3C – REDUCER, KUBOTA GX, DOUBLE SOCKET
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060400	8" x 6"	EA	20		
060401	12" x 6"	EA	5		
060402	12" x 8"	EA	5		
				TOTAL COST	

3D – CROSS, KUBOTA GX, ALL SOCKET (Fusion bonded epoxy lined, zinc alloy coated))

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060500	6" x 6"	EA	20		
060501	8" x 8"	EA	20		
060502	12" x 12"	EA	5		
				TOTAL COST:	

NOTE: Fittings under Schedule 3A through 3D shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 3 (SUM OF SCHEDULES 3A THROUGH 3D): _____

Schedule Group 4 – GX Flange Adaptors, Collars, Nipples, Kubota licensed, AWWA
(See Exhibit E - Specification Section 33 05 19.15P)

4A – ADAPTER, KUBOTA GX, SOCKET X FLG (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060600	6"	EA	110		
060601	8"	EA	80		
060602	12"	EA	20		
				TOTAL COST:	

4B – ADAPTER, KUBOTA GX, SPIGOT x FLG (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060603	6"	EA	40		
060605	8"	EA	30		
060607	12"	EA	10		
				TOTAL COST:	

4C – ADAPTER FOR COLLAR CONNECTION, KUBOTA GX, SPIGOT x FLG
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060609	6"	EA	50		
060610	8"	EA	30		
060611	12"	EA	10		
				TOTAL COST:	

4D – COLLAR, KUBOTA GX (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060700	6"	EA	50		
060701	8"	EA	30		
060702	12"	EA	10		
				TOTAL COST:	

4E – NIPPLE, KUBOTA GX (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060800	6"	EA	30		
060801	8"	EA	20		
060802	12"	EA	5		
				TOTAL COST:	

NOTE: Fittings under Schedule 4A and 4E shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 4 (SUM OF SCHEDULES 4A THROUGH 4E): _____

Schedule Group 5 – GX Bends and Offsets, Kubota licensed, JWWA
(See Exhibit E - Specification Section 33 05 19.15P)

5A – ELBOW, KUBOTA GX, 11.25 DEGREE, SOCKET x SPIGOT, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060113	16"	EA	10		
				TOTAL COST:	

5B – ELBOW, KUBOTA GX, 22.5 DEGREE, SOCKET x SPIGOT, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060114	16"	EA	5		
				TOTAL COST:	

5C – ELBOW, KUBOTA GX, 22 DEGREE, DOUBLE SOCKET, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060115	16"	EA	15		
				TOTAL COST:	

5D – ELBOW, KUBOTA GX, 45 DEGREE, SOCKET x SPIGOT, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060116	16"	EA	5		
				TOTAL COST:	

5E – ELBOW, KUBOTA GX, 45 DEGREE, DOUBLE SOCKET, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060117	16"	EA	20		
				TOTAL COST:	

5F – ELBOW, KUBOTA GX, 90 DEGREE, SOCKET x SPIGOT, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060118	16"	EA	5		
				TOTAL COST:	

5G – OFFSET, KUBOTA GX, H = 12”, JWWA (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060904	16”	EA	15		
				TOTAL COST:	

5H – OFFSET, KUBOTA GX, H = 18”, JWWA (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060909	16”	EA	15		
				TOTAL COST:	

NOTE: Fittings under Schedule 5A through 5H shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 5 (SUM OF SCHEDULES 5A THROUGH 5H): _____

Schedule Group 6 – GX Tees and Reducers, Kubota licensed, JWWA
(See Exhibit E - Specification Section 33 05 19.15P)

6A – TEE, KUBOTA GX, DOUBLE SOCKET, JWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060206	16" x 16"	EA	10		
				TOTAL COST	

6B – TEE, KUBOTA GX, SINGLE SOCKET x FLG, JWWA-AWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060309	16" x 6"	EA	10		
060310	16" x 8"	EA	5		
				TOTAL COST	

6C – REDUCER, KUBOTA GX, SOCKET x SPIGOT, JWWA-AWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060403	16" x 12"	EA	5		
				TOTAL COST	

6D – REDUCER, KUBOTA GX, SPIGOT x SOCKET, JWWA-AWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060404	16" x 12"	EA	5		
				TOTAL COST	

NOTE: Fittings under Schedule 6A through 6D shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 6 (SUM OF SCHEDULES 6A THROUGH 6D): _____

Schedule Group 7 – GX Flange Adaptors and Collars, Kubota licensed, JWWA
(See Exhibit E - Specification Section 33 05 19.15P)

7A – ADAPTER, KUBOTA GX, SPIGOT x FLG, JWWA-AWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060613	16"	EA	20		
				TOTAL COST:	

7B – ADAPTER, KUBOTA GX, SOCKET x FLG, JWWA-AWWA
(Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060614	16"	EA	10		
				TOTAL COST:	

7C – COLLAR, KUBOTA GX, JWWA (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060703	16"	EA	10		
				TOTAL COST:	

7D – SOCKET PIECE, KUBOTA GX, JWWA (Fusion bonded epoxy lined, zinc alloy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
060704	16"	EA	10		
				TOTAL COST:	

NOTE: Fittings under Schedule 7A through 7D shall be supplied with lock ring and lock ring stopper pre-installed and without gaskets.

TOTAL COST FOR SCHEDULE 7 (SUM OF SCHEDULES 7A THROUGH 7D): _____

Schedule Group 8 – GX Accessories for GX Pipe and Fittings, AWWA
(See Exhibit E - Specification Section 33 05 19.15P)

8A – GASKET, KUBOTA GX PIPE, SBR

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061001	6"	EA	1,150		
061002	8"	EA	750		
061007	12"	EA	150		
				TOTAL COST:	

8B – GASKET, KUBOTA GX PIPE, EPDM

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061011	6"	EA	950		
061012	8"	EA	650		
061013	12"	EA	150		
				TOTAL COST:	

8C – GASKET, KUBOTA GX PIPE, NBR

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061011	6"	EA	170		
061012	8"	EA	120		
061013	12"	EA	50		
				TOTAL COST:	

8D – GASKET, KUBOTA GX FITTING, SBR

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061101	6"	EA	1,650		
061102	8"	EA	1,250		
061103	12"	EA	400		
				TOTAL COST:	

8E – GASKET, KUBOTA GX FITTING, EPDM

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061105	6"	EA	1,400		
061106	8"	EA	1,050		
061107	12"	EA	300		
				TOTAL COST:	

8F – GASKET, KUBOTA GX FITTING, NBR

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061109	6"	EA	250		
061110	8"	EA	200		
061111	12"	EA	50		
				TOTAL COST:	

8G – LINER, KUBOTA GX (Fusion bonded epoxy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061200	6"	EA	1,100		
061201	8"	EA	750		
061202	12"	EA	150		
				TOTAL COST:	

8H – LINER BOARD, KUBOTA GX

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061205	6"	EA	1,100		
061206	8"	EA	750		
061207	12"	EA	150		
				TOTAL COST:	

8I – G-LINK, KUBOTA GX

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061208	6"	EA	1,500		
061209	8"	EA	1,100		
061210	12"	EA	300		
				TOTAL COST:	

8J – FITTING GLAND, KUBOTA GX

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061301	6"	EA	300		
061302	8"	EA	200		
061303	12"	EA	50		
				TOTAL COST:	

8K – T-HEAD BOLTS, KUBOTA GX, M20 X 100 mm

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061310	M20	EA	16,500		
				TOTAL COST:	

8L – T-HEAD BOLTS, KUBOTA GX, M20 X 110 mm

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061311	M20	EA	3,000		
				TOTAL COST:	

8M – NUTS, KUBOTA GX

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061312	M20	EA	19,000		
				TOTAL COST:	

8N – REPAIR PAINT, BRUSH TYPE, KUBOTA LICENSED, NSF-61 CERTIFIED

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061313		KG CANS	350		
				TOTAL COST:	

8O – REPAIR PAINT, SPRAY CAN TYPE, KUBOTA LICENSED, NSF-61 CERTIFIED

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061314		EA	100		
				TOTAL COST:	

NOTE: SBR gaskets for GX pipes and fittings will only be accepted for up to 24 months after signing of this RFQ. After 24 months from the signing of this RFQ, EPDM gaskets for GX pipes and fittings must be supplied. After 36 months from the signing of this RFQ, NBR gaskets for GX pipes and fittings must also be supplied.

TOTAL COST FOR SCHEDULE 8 (SUM OF SCHEDULES 8A THROUGH 8O): _____

Schedule Group 9 – GX Accessories for GX Pipe and Fittings, JWWA
(See Exhibit E - Specification Section 33 05 19.15P)

9A – GASKET, KUBOTA GX PIPE, SBR, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061014	16"	EA	160		
				TOTAL COST:	

9B – GASKET, KUBOTA GX PIPE, EPDM, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061015	16"	EA	140		
				TOTAL COST:	

9C – GASKET, KUBOTA GX PIPE, NBR, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061016	16"	EA	20		
				TOTAL COST:	

9D – GASKET, KUBOTA GX FITTING, SBR, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061104	16"	EA	200		
				TOTAL COST:	

9E – GASKET, KUBOTA GX FITTING, EPDM, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061108	16"	EA	170		
				TOTAL COST:	

9F – GASKET, KUBOTA GX FITTING, NBR, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061112	16"	EA	30		
				TOTAL COST:	

9G – LINER, KUBOTA GX, JWWA (Fusion bonded epoxy coated)

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061203	16"	EA	150		
				TOTAL COST:	

9H – LINER BOARD, KUBOTA GX, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061211	16"	EA	150		
				TOTAL COST:	

9I – SPIGOT RING, KUBOTA GX, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061212	16"	EA	170		
				TOTAL COST:	

9J – FITTING GLAND, KUBOTA GX, JWWA

EBMUD Stores Code	Size	Unit of Measure	Quantity	Unit Price	Extended Price
061304	16"	EA	30		
				TOTAL COST:	

NOTE: SBR gaskets for GX pipes and fittings will only be accepted for up to 24 months after signing of this RFQ. After 24 months from the signing of this RFQ, EPDM gaskets for GX pipes and fittings must be supplied. After 36 months from the signing of this RFQ, NBR gaskets for GX pipes and fittings must also be supplied.

TOTAL COST FOR SCHEDULE 9 (SUM OF SCHEDULES 9A THROUGH 9J): _____



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. **Evidence of Qualification Testing:** RFQ response provides evidence that the proposed equipment/system has successfully completed the qualification test standard requirements defined in this RFQ. Evidence shall include a statement from an Independent Testing Authority (ITA) that both the hardware elements and the software elements of the proposed equipment/system comply with the requirements of the qualification standard. If the equipment/system specified requires the addition of components or features not previously tested by the ITA, the District will determine, in its sole discretion, whether qualification testing of such components or features will be required prior to the award of a contract.
2. **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>.
3. Evidence of current NSF 60 and/or 61 certification.
- 3b. Statement or description of current tentative plans for implementation of the NSF PFAS for Drinking Water System Components Testing/Certification Requirements (Appendix F), should the proposed requirement become law. If contractor has no current or tentative plans please state such.

4. **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.

5. **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. **This includes any exceptions or amendments to the District’s General Requirements, General Conditions or Contract/Agreement Documents included in this RFQ.**
- b) **THE DISTRICT IS UNDER NO OBLIGATION TO ACCEPT ANY EXCEPTIONS, AND SUCH EXCEPTIONS MAY BE A BASIS FOR RFQ RESPONSE DISQUALIFICATION.**

6. **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. 2702 – Earthquake Resilient Ductile Iron Pipe and Fittings

Bidder Name: _____

Bidder must provide a minimum of 5 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:	



The District is under no obligation to accept any exceptions and such exceptions may be a basis for RFQ response disqualification.

*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

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 _____

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: _____

VI. 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 <https://www.cslb.ca.gov/OnlineServices/InsuranceSearch/INSRequest.aspx>) 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/wpndb.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

IRAN CONTRACTING ACT CERTIFICATION

Pursuant to Public Contract Code (PCC) § 2204, an Iran Contracting Act Certification is required for solicitations of goods or services of \$1,000,000 or more.

To submit a bid or proposal to East Bay Municipal Utility District (District), you must complete **ONLY ONE** of the following two paragraphs. To complete paragraph 1, check the corresponding box **and** complete the certification for paragraph 1. To complete paragraph 2, check the corresponding box and attach a copy of the written permission from the District.

- ☐ 1. We are not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (“DGS”) pursuant to PCC § 2203(b), and we are not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

CERTIFICATION FOR PARAGRAPH 1:

I, the official named below, CERTIFY UNDER PENALTY OF PERJURY, that I am duly authorized to legally bind the BIDDER/bidder to the clause in paragraph 1. This certification is made under the laws of the State of California.

Firm: _____

By: _____ Date: _____
(Signature of Bidder)

Title: _____

Signed at: _____ County, State _____

OR

- ☐ 2. We have received written permission from the District to submit a bid or proposal pursuant to PCC § 2203(c) or (d). *A copy of the written permission from the District is included with our bid or proposal.*

EXHIBIT E

SPECIFICATIONS

SECTION 33 05 19.15P

FABRICATION OF EARTHQUAKE RESILIENT DUCTILE IRON PIPE AND FITTINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes: Fabrication of Earthquake Resilient Ductile Iron pipe, fittings, gaskets, and all necessary components to provide functional installation of a potable water pipeline, including but not limited to the following:
 - 1. 6-inch through 16-inch Earthquake Resilient Ductile Iron Pipe (ERDIP) with integral restrained push-on joints with zinc exterior coating and cement mortar or fusion bonded epoxy lining.
 - 2. 6-inch through 16-inch Earthquake Resilient Ductile Iron Fittings (ERDIF) with integral restrained push-on or mechanical joints with zinc exterior coating and cement mortar or fusion bonded epoxy lining.
 - 3. 6-inch through 16-inch gaskets for ERDIP and ERDIF: Push-on, mechanical, and flange

1.2 RELATED SECTIONS

- A. Section 05 05 26P – Flange Bolting
- B. Section 33 05 19.17P – Installation of Earthquake Resilient Ductile Iron Pipe and Fittings

1.3 REFERENCES

All standards, codes, and specifications referred to in this section refer to the latest edition, including amendments, published and in effect at the date of advertising of these specifications, unless stated otherwise herein. In case of conflict, the District's specifications shall govern.

- A. American Water Works Association (AWWA)
 - 1. C104 – Cement-Mortar Lining for Ductile-Iron Pipe and Fittings
 - 2. C110 – Ductile-Iron and Gray-Iron Fittings
 - 3. C111 – Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
 - 4. C115 – Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges

5. C116 – Protective Fusion-Bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile-Iron and Gray-Iron Fittings
 6. C150 – Thickness Design of Ductile-Iron Pipe
 7. C151 – Ductile-Iron Pipe, Centrifugally Cast
 8. C153 – Ductile-Iron Compact Fittings
- B. Japan Water Works Association (JWWA)
1. A113 – Mortar Lining of Ductile Iron Pipes for Water Supply
 2. G112 – Epoxy-Powder Coating for Interior of Ductile Iron Pipes and Fittings for Water Supply
 3. G113 – Ductile Iron Pipes for Water Supply
 4. G114 – Ductile Iron Fittings for Water Supply
 5. G120 – GX Type Ductile Iron Pipes for Water Supply
 6. G121 – GX Type Ductile Iron Fittings for Water Supply
 7. K139 – Synthetic Resin Paints for Ductile Iron Pipes for Water Supply
 8. K156 – Rubber Materials for Water Supply
- C. Other Standards:
1. ANSI/NSF-61 – Drinking Water System Components – Health Effects
 2. ASME/ANSI B16.1 – Gray Iron Pipe Flanges and Flanged Fittings
 3. ASME/ANSI B16.5 – Pipe Flanges and Flanged Fittings
 4. ASTM C150 – Standard Specification for Portland Cement
 5. ASTM A536 – Standard Specification for Ductile-Iron Castings
 6. ASTM D3359 – Standard Test Methods for Rating Adhesion by Tape Test
 7. ASTM D4541 – Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers
 8. ISO 8179-1 – Ductile iron pipes, fittings, accessories and their joints – External zinc-based coating — Part 1: Metallic zinc with finishing layer
 9. ISO 16134 – Earthquake-resistant and subsidence-resistant design of ductile iron pipelines

10. NAPF 500-03 – Surface Preparation Standard for Ductile Iron Pipe and Fittings in Exposed Locations Receiving Special External Coatings and/or Special Internal Linings
11. JDPA G 1049 – GX Type Ductile Iron Pipes and Fittings
12. JIS G 5526 – Standard Specification for Ductile Iron Pipes
13. JIS G 5527 – Standard Specification for Ductile Iron Fittings

Referenced Standards	Equivalent Standards
AWWA C104	JWWA A113, G113, G114, G120, G121
AWWA C111	JWWA G113, G114, G120, G121, K156
AWWA C116, ASTM D3359	JWWA G112
AWWA C151	JWWA G113, G120
AWWA C153, AWWA C110	JWWA G114, G121
ASTM A536	JIS G 5526, 5527
ISO 8179-1	JWWA G113, G114, G120, G121, K139 JDPA G 1049

1.4 SUBMITTALS

- A. Manufacturer's Certificate of Compliance, including references to the casting period and day of manufacturing of the pipe and fittings, shall be submitted with each shipment prior to or at the time of delivery. The Certificate of Compliance shall state that the requirements of these specifications have been met for all pipe and fittings furnished, including National Sanitation Foundation (NSF) 61 certification and hydrostatic testing. Hydrostatic testing requirements for pipe and fittings shall be met and included in the Certificate of Compliance.
- B. Manufacturer's published catalog information for all products.
- C. Manufacturer's approved installation and assembly instructions.
- D. Manufacturer's specifications for welding standards.
- E. Manufacturer's shop drawings.

- F. Certified test results shall be furnished to the Engineer for approval prior to every shipment of pipe:
 - 1. Hydrostatic testing per AWWA C151 or equivalent
 - 2. Tensile testing per AWWA C151/153 or equivalent
 - 3. Impact testing per AWWA C151 or equivalent
 - 4. Lining testing per AWWA C104 or equivalent
 - 5. Zinc coating testing per ISO 8179-1 or equivalent
- G. Prior to delivery, manufacturers shall inspect 20% of items according to the Earthquake Resilient Ductile Iron Pipe and Fitting Inspection Checklist, which shall be submitted with each shipment. Inspection of 100% of items according to the inspection checklist may be required in the event that faulty material is found.

1.5 QUALITY ASSURANCE

- A. All ERDIP shall be subject to a factory hydrostatic test of at least 500 psi for a period not less than 5 seconds per AWWA C151 or equivalent. All ERDIF shall be subject to a factory hydrostatic test of at least 350 psi for a period not less than 10 seconds per JWWA G114 or JWWA G121 or equivalent as approved by the Engineer.
- B. Confirm linings and coatings on pipes and fittings meet the minimum requirements of this specification.
- C. All furnished materials shall be new and as specified herein. Refurbished ERDIP and ERDIF shall not be provided.
- D. The outside diameter (OD) of all ERDIP diameter sizes 12 inches and smaller should be within the OD tolerances of AWWA C151 or JWWA G120 for the full length, except for 2 feet from the bell end. The outside diameter of 15% of ERDIP diameter sizes greater than 12 inches should be within the OD tolerances of AWWA C151 or JWWA G120 for the full length of pipe, except for 2 feet from the bell end and labeled as such. Any ERDIP found to be not within the OD tolerances of AWWA C151 or JWWA G120 when measured according to the instructions on the Earthquake Resilient Ductile Iron Pipe and Fitting Inspection Checklist shall be rejected.
- E. Inspection of pipe and fittings will be made by the District upon delivery, and at the jobsite prior to installation using the form at the end of this section, Earthquake Resilient Ductile Iron Pipe and Fitting Inspection Checklist. The piping materials shall be subject to rejection at any time on account of failure to meet any of the specified requirements. Pipe and materials rejected upon delivery shall be returned to the Manufacturer. Pipe and materials rejected after delivery shall be marked for identification and removed from the storage yard or jobsite.

- F. Upon the Engineer's request, records of quality control testing shall be furnished within five calendar days.

1.6 IDENTIFICATION OF PIPE AND FITTINGS

- A. ERDIP and ERDIF shall be clearly marked in compliance with manufacturing standards. Upon request, the Manufacturer shall provide information for deciphering the Manufacturer's production code.
- B. At a minimum, the following shall be cast, labeled, or stenciled on the pipe:
 - 1. Pressure or thickness class
 - 2. Production code or lot number (lot no.) from which the manufactured date and location can be determined
 - 3. Name and/or trademark of manufacturer
 - 4. Nominal pipe size
 - 5. Fitting type (e.g. 45°), for fittings
 - 6. NSF-61 marking
 - 7. Manufacturing standard reference (AWWA, ASTM, etc.)
 - 8. Application of zinc coating
 - 9. Identification that pipe is within the OD tolerances of AWWA C151 or JWWA G120 for the full length of pipe, except for 2 feet from the bell end (for pipe larger than 12 inches in diameter per Section 1.5D)

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Prior to delivery, each opening in the pipe or fitting shall be securely capped or plugged with removable plastic caps or plugs to prevent foreign matter from entering the pipe or fitting. The caps or plugs shall be designed to fit either as a cap on a spigot or a plug in a bell. Ends shall remain capped or plugged until ready for installation. Pipe ends shall be wrapped for shipment so that caps or plugs do not become dislodged during transport.
- B. All pipes, fittings, and other accessories shall be stored such that they do not accumulate and hold rainwater, dirt, or debris. Plugs of rags, wood, cotton, cardboard, waste or similar materials shall not be used. All furnished materials shall be stored away from standing water.
- C. Gaskets shall be stored in cool, shaded, clean, moisture-free areas and away from sunlight and artificial light with high ultraviolet radiation content. The preferred storage temperature is 70°F (25°C) or lower. Gaskets must be stored so that they are

free of tension, compression, and other deformation. Do not store gaskets in environments with equipment capable of generating ozone.

- D. Gaskets shall not exceed the recommended shelf-life guidelines in Table 1 below.

Table 1 – Shelf-Life Guidelines for Rubber Gaskets

<u>Material</u>	<u>Inside Storage</u>	<u>Outside Storage</u>
Ethylene propylene diene monomer (EPDM)	3 years	1 year
Nitrile butadiene rubber (NBR)	2 years	0 year

- E. During loading, transportation, and unloading, every precaution shall be taken to prevent damage to the furnished material. Under no circumstances shall the pipe, fittings, and appurtenances be dropped or skidded against each other. Slings, hooks or pipe tongs shall be padded and used in such a manner as to prevent damage to the exterior surface or internal lining of the furnished material.
- F. Pipe shall be packaged with 4" by 4" nominal or 90 mm by 90 mm square timbers under each stack and between each row of pipe with adequate blocking to prevent pipe from rolling or falling during unloading. The District is responsible for all unloading and stacking of pipe upon delivery. Fittings and other accessories shall be delivered on pallets or in crates. Each individual pallet or crate must be accompanied with an itemized list of each fitting type and fitting size packaged in the crate, pallet, or case.
- G. Pipe laid out for installation shall be placed on earth berms, sand berms, or timber cradles to prevent damage to the bottom during storage.
- H. Rope or other devices shall not be attached through the interior of pipe for handling. Soft slings may be used inside fittings for handling, if needed.
- I. District shall perform inspection of pipe and fittings prior to installation using the form at the end of this section, Earthquake Resilient Ductile Iron Pipe and Fitting Inspection Checklist. If furnished materials are damaged or found defective upon delivery, the damaged or unsatisfactory pipe or fittings shall be replaced with materials conforming to these specifications.

PART 2 - PRODUCTS

2.1 GENERAL

- A. All water system materials that may come into contact with drinking water shall be certified as meeting the specifications of NSF-61. This includes, but is not limited to pipes, fittings, coatings, linings, solvent cements, sealing materials, gaskets, and lubricating oils.

- B. Joint lubricants shall be provided with pipe materials. Lubricants shall be compatible with the pipe, fittings, and gasket materials, shall be water-soluble, and shall be certified by NSF-61 for use with potable water.

2.2 EARTHQUAKE RESILIENT DUCTILE IRON PIPE (ERDIP)

- A. **Overview:** ERDIP shall be integral restrained push-on joints in accordance with ANSI/AWWA C111/A21.11 or equivalent unless otherwise specified herein. Pipes furnished under these standards shall be manufactured in accordance with the requirements of ANSI/AWWA C151/A21.51 or equivalent. Iron used in the manufacture of pipes shall be Grade 60-42-10 per ASTM A536 or equivalent.
- B. **Rated Working Pressure:** Pipe and gaskets shall be rated for a minimum working pressure of 350 psi.
- C. **Pipe Diameter:** ERDIP shall have nominal pipe diameters in imperial units meeting the requirements of ANSI/AWWA C151/A21.51.
- D. **Pipe Thickness:** ERDIP shall be Special Thickness Class 54 as shown in ANSI/AWWA C150/A21.50 and in Table 2 below, unless otherwise shown on the bid form.

Table 2 – Pipe Wall Thickness (inches)

<u>Nominal Diameter</u>	<u>Outside Diameter</u>	<u>Wall Thickness</u>
6	6.90	0.37
8	9.05	0.39
12	13.20	0.43
16	17.40	0.46

- E. **16-inch ERDIP:** With approval of the Engineer, 16-inch ERDIP may have nominal pipe diameters in metric units meeting the requirements of JWWA G113 or JWWA G120. 16-inch ERDIP shall be Special Thickness Class 54 in accordance with JWWA G113 or JWWA G120.
- F. **Pipe Lengths:** ERDIP shall be furnished with minimum standard laying lengths meeting the requirements of Table 3, or as otherwise specifically requested by the District. Non-standard lengths shall not be furnished.
- A maximum of 20 percent of the total number of standard pieces of pipe of each size specified in an order may be provided in lengths that are not more than one foot shorter than the nominal laying length; an additional 10 percent may be provided in lengths that are not more than 6 inches shorter than the nominal laying length.
 - Each nipple piece shall match the ERDIP thickness, lining, and coating requirements defined in these specifications.

- G. **Pitting:** Any ERDIP with excessive pitting on the exterior surface will be rejected. Pitting will be measured by a pit depth gauge. Pitting will be considered excessive when it exceeds 10 percent of the wall thickness of the pipe or when the pitting exceeds 10 pits over a one square foot area. A pit is defined as a surface void caused by any foreign material or gas on the interior of the mold that displaces the molten iron during the casting process that exceeds 10 percent of wall thickness in depth. Surface pitting data for pipes or fittings shall be submitted for review and approval upon the Engineer's request.
- H. **Joints:** The push-on or mechanical joint of pipe shall have ends that are compatible with the bell and spigot of ERDIF and conform to the joint performance requirements in this specification for ERDIP. ERDIP joints shall be earthquake resilient allowing for expansion, contraction, slip-out resistance, and joint deflection without deformation or damage to the joint. Joint performance requirements in this specification shall meet the Class A, S1, and M1 requirements of ISO 16134, Section 7 as shown in Table 3.

Table 3 – ERDIP Joint Performance Requirements

<u>Nominal Diameter (inches)</u>	<u>Minimum Standard Pipe Length (feet)</u>	<u>Slip-out Resistance (lbf)</u>	<u>Expansion and Contraction</u>	<u>Deflection Angle (per standard piece of pipe)</u>
6	16	102,000		
8	16	136,000	±1.0% of pipe	≥ 8°
12	19	204,000	length or more	
16	19	272,000		

- a. ERDIP joints shall not have leakage at the deflection angles presented in Table 3 and be able to expand and contract ±1.0% of pipe length or more under an allowable joint deflection of no less than 4-degrees.
- I. **Thrust Restraint:** A liner or spacer may be placed into the bell of pipes to convert the ERDIP joint into restrained type when pipes are used for the thrust protection of fittings. The joint shall meet the "slip-out resistance" requirements listed in Table 3. Liners or spacers shall be made of ductile iron and coated with fusion-bonded epoxy or asphaltic paint.
- J. **Field Cutting and Joint Assembly Tools:** Furnished ERDIP shall have a means for accomplishing restraint at field cuts that allows for the use of restrained joints to be approved by the Engineer. Restraint must be accomplished without the use of field grooving or field welding. Joint assembly tools shall include all specialized materials to assemble and disassemble the ERDIP joint.
- a. Restraint may be accomplished with the use of field grooving or field welding for 16-inch ERDIP with the approval of the Engineer.
- b. The vendor shall be able to furnish all tools necessary to properly assemble and disassemble the ERDIP joint, including the field cutting

tool set, without damaging the pipe lining or coating, so that the pipe joint can meet the joint requirements of this specification.

- c. The vendor shall be able to provide asphaltic paint or repair paint compatible with the existing topcoat.

2.3 EARTHQUAKE RESILIENT DUCTILE IRON FITTINGS (ERDIF)

- A. **Overview:** ERDIF shall have integral restrained push-on or mechanical joints in accordance with ANSI/AWWA C111/A21.11 or equivalent unless otherwise shown on the drawings. Fittings furnished under these specifications shall conform to all applicable requirements of ANSI/AWWA C110/A21.10, ANSI/AWWA C153/A21.53, or equivalent. Iron used in the manufacture of fittings shall be Grade 70-50-5 or 65-45-12 per ASTM A536 or equivalent.
- B. **Rated Working Pressure:** Fittings, flanged fittings, and gaskets shall have a minimum rated working pressure of 350 psi.
- C. **Fitting Diameters:** ERDIF shall have nominal fitting diameters in imperial units meeting the requirements of ANSI/AWWA C153/A21.53.
- D. **Fitting Thickness:** ERDIF shall have outside diameter meeting the requirements of ANSI/AWWA C150/A21.50 and minimum wall thickness meeting the requirements of ANSI/AWWA C153/A21.53 as specified in Table 4.

Table 4 – Fitting Wall Thickness (inches)

<u>Nominal Diameter</u>	<u>Outside Diameter</u>	<u>Wall Thickness</u>
6	6.90	0.36
8	9.05	0.38
12	13.20	0.42
16	17.40	0.50

- E. **16-inch ERDIF:** With approval of the Engineer, 16-inch ERDIF may have nominal fitting diameters in metric units meeting the requirements of JWWA G114 or JWWA G121. 16-inch ERDIF may have outside diameter and minimum wall thickness meeting the requirements of JWWA G114 or JWWA G121.
- F. **Flanged Fittings:** All flanged fittings shall be manufactured with cast-on or threaded flanges in accordance with ANSI/AWWA C153/A21.53, or equivalent.
 - a. Flanged fittings, including bell and spigot adapters, shall be one-piece castings with a manufacturer recommended gasket and shall conform to all applicable requirements of ANSI/AWWA C110/A21.10, ANSI/AWWA C153/A21.53, or equivalent.
 - b. Minimum thickness of flanges shall conform to ASME/ANSI B16.1 Class 125.

- c. Bolt circle and bolt holes shall match those of ASME/ANSI B16.1 Class 125 and ASME/ANSI B16.5 Class 150 flanges.
 - d. Flange facing shall be smooth or with shallow serration per ANSI/AWWA C115/A21.15. If shallow serrated, the serrations shall be spiral or concentric and uniformly spaced.
 - e. Flange faces on flanged fittings may be coated with asphalt varnish or epoxy only.
 - f. Provide flange bolts, nuts, and washers per Section 05 05 26P - Flange Bolting.
- G. **Joints:** The push-on or mechanical joint of fittings shall have ends that are compatible with the bell and spigot of ERDIP and conform to the joint performance requirements in this specification for ERDIF. The joints shall be earthquake resilient allowing for expansion, contraction, slip-out resistance, and joint deflection in accordance with Table 5 without deformation or damage to the joint.
- a. The joint for collar/sleeve fittings must be able to expand and contract under an allowable joint deflection of no less than 4-degrees.

Table 5 – ERDIF Joint Performance

<u>Nominal Diameter</u> <u>(inches)</u>	<u>Slip-out Resistance</u> <u>(lbf)</u>	<u>For Collar/Sleeve Only</u>	
		<u>Expansion and</u> <u>Contraction (per</u> <u>joint)</u>	<u>Deflection Angle</u> <u>(per joint)</u>
6	102,000	± 1.96 in	≥ 8°
8	136,000	± 1.96 in	≥ 8°
12	204,000	± 2.36 in	≥ 8°
16	272,000	± 2.36 in	≥ 8°

2.4 JOINT ACCESSORIES FOR EARTHQUAKE RESILIENT DUCTILE IRON PIPE AND FITTINGS

- A. All joint accessory kits for push-on and mechanical joints shall be furnished. All joint accessory kits shall meet the following requirements:
- a. One lock ring or locking segment kit shall be included with each pipe bell or fitting. The lock ring or locking segment shall meet the “slip-out resistance” requirements list in Table 3 and Table 5 and be coated with synthetic resin epoxy, asphaltic paint, or fusion bonded epoxy.
 - b. One rubber gasket for push-on or mechanical joint shall be included with each pipe or fitting bell. The gasket shall meet the requirements of ANSI/AWWA C111/A21.11 or equivalent. Gaskets shall be sized according to the pipe or fitting diameter and completely fill the groove of the pipe or fitting bell to provide a watertight seal under all conditions of

design pressure and allow for joint expansion, contraction, and deflection in accordance with Tables 3 and 5.

- c. Gaskets made of synthetic ethylene propylene diene monomer (EPDM) and gaskets made of nitrile butadiene rubber (NBR) must be provided. Other gasket materials may be accepted and approved by the District on a case-by-case basis. No gasket substitution will be accepted without prior District approval.
 - d. One bolt/nut and gland set shall be included with each mechanical joint. Bolt/nut and gland set shall meet the requirements of ANSI/AWWA C151/A21.51 or equivalent for pipes and ANSI/AWWA C153/A21.53 or equivalent for fittings.
- B. All mechanical joint restraint kits for push-on and mechanical joints shall include one restraining device, one rubber gasket, and one complete bolt/nut set. All mechanical joint restraint kits shall meet the following requirements and shall fully restrain the joint from movement.
 - a. The restraining device shall meet the "slip-out resistance" requirements listed in Tables 3 and 5 and be coated with synthetic resin epoxy, asphaltic paint, or enamel primer.
 - b. One rubber gasket shall be included for each restrained fitting. The gasket shall meet the requirements of ANSI/AWWA C111/A21.11 or equivalent. Gaskets shall be sized according to the pipe or fitting diameter and completely fill the groove of the pipe or fitting bell to provide a watertight seal under all conditions of design pressure.
 - c. Gaskets made of synthetic ethylene propylene diene monomer (EPDM) and gaskets made of nitrile butadiene rubber (NBR) must be provided. Other gasket materials may be accepted and approved by the Engineer on a case-by-case basis. No gasket substitution will be accepted without prior Engineer approval.
 - d. One complete bolt and nut set shall be included for each restrained fitting and shall meet the requirements of ANSI/AWWA C153/A21.53 or equivalent.

2.5 JOINT PERFORMANCE VERIFICATION REQUIREMENTS

- A. Test results with a non-bias third party inspection group demonstrating that ERDIP, ERDIF, and mechanical joint restraint kits for push-on and mechanical joints meet the joint performance requirements of this specification shall be furnished to and approved at the discretion of the Engineer.
 - a. Compliance with Table 3 joint performance requirements for ERDIP must be provided for each different pipe diameter furnished. Compliance

with expansion and contraction requirements under an allowable joint deflection may be provided for one pipe diameter if the joint type is the same for other pipe diameters furnished.

- b. Compliance with Table 5 joint performance requirements for ERDIF must be provided for each different fitting diameter furnished. Compliance with expansion and contraction requirements under an allowable joint deflection may be provided for one collar/sleeve diameter if the joint type is the same for other diameters furnished.
- c. Compliance with Table 3 and Table 5 “slip-out resistance” requirements for restraining devices must be provided for each different restraining device diameter provided.

B. Joint performance tests may be waived if joint performance tests have already been conducted with a non-bias third party group. Such reports shall be reviewed and approved by the Engineer.

2.6 LINING AND COATING FOR EARTHQUAKE RESILIENT DUCTILE IRON PIPE AND FITTINGS

A. ERDIP and ERDIF interior shall be fusion bonded epoxy lined.

- a. ERDIP and ERDIF interior may be double thickness cement-mortar lined with a seal coat with the approval of the Engineer.

B. ERDIP and ERDIF exterior shall be coated with metallic zinc-alloy and followed by an asphaltic paint or synthetic resin topcoat compatible with the metallic zinc alloy.

- a. The metallic zinc-alloy shall be of metallic zinc and aluminum alloy type, or equivalent metallic zinc-alloy meeting the requirements of ISO 8179-1, Annex B.3 or B.4 or equivalent.

Table 6 – Interior Lining and Exterior Coating for ERDIP and ERDIF

Nominal Diameter (inches)	Interior Lining*	Exterior Coating
6	Fusion bonded epoxy lined OR Double thickness cement mortar lined with seal coat	Zinc-alloy coating with synthetic resin topcoat OR Zinc-alloy coating with asphaltic paint topcoat
8		
12		
16		

*Interior lining in this table DOES NOT refer to interior surface of the pipe or fitting bell

C. The interior surface of the pipe or fitting bell shall be lined with a synthetic resin conforming to JWWA K139, FBE conforming to ANSI/AWWA C116/A21.16 or equivalent, or asphaltic paint conforming to ANSI/AWWA C153 /A21.53. All

interior linings shall conform to NSF/ANSI 61 and shall have a minimum thickness of 3.0 mils dry film thickness (DFT). The lining thickness shall maintain the required bell-to-spigot dimensional tolerances to mitigate any binding between the interior surface of the bell and exterior surface of the spigot. The pipe or fitting bell shall also be lined with no runs or bumps such that the gasket is able to completely fill the groove to provide a watertight seal. Pipe or fittings found to have the interior lining for the bell on or under the interior lining of the pipe or fitting body will be rejected.

- D. The bell ends shall be checked with a calibrated profile and gage after coating and prior to shipping to the District.

2.7 FUSION BONDED EPOXY LINING (FBE)

- A. Fusion bonded epoxy (FBE) lining shall meet the requirements of ANSI/AWWA C116/A21.16 or equivalent. The FBE shall have a minimum thickness of 11.8 mils DFT. The FBE lining shall be NSF/ANSI 61 approved for potable water application. The FBE shall be qualified, production tested, and holiday tested per ANSI/AWWA C116/A21.16 or equivalent. The contractor shall provide the manufacturer product data sheet for the interior lining material used.
 - a. Interior lined surfaces of the pipe and fitting shall be holiday-free when tested with a low voltage holiday detector set to a minimum of 125 volts per millimeter. Failure to meet the requirements will be the basis of rejection. The lining that failed shall be repaired and retested for acceptance by the Engineer. Certified test results shall be accompanied with each shipment.
 - b. Adhesion test will be made on one randomly selected pipe and fitting of each diameter in accordance with ASTM D3359 or equivalent. After completion of the tape test, the applicator shall repair the damaged test surface in accordance with lining manufacturer's repair procedures. Certified test results shall be accompanied with each shipment.
 - c. All surfaces shall be dry and free from dirt, oil, grease, asphalt, loose rust, or any non-adhering particle or foreign material prior to the application of the FBE. The contractor shall submit surface preparation procedure for review and approval.

2.8 CEMENT MORTAR LINING (CML)

- A. Cement mortar lining shall meet the requirements of ANSI/AWWA C104/A21.4 or equivalent. Application of the CML shall be performed within 7 calendar days of the pipe barrel or fitting being manufactured. The fittings shall be hand applied using masonry tools and the lining thickness may be tapered at the end but should not be less than single thickness. The length of the taper shall not exceed 4 inches.

- a. The cement mortar lining shall be at least double thickness in accordance with ANSI/AWWA C104/A21.4 or equivalent, shall have a smooth finish, and shall be thoroughly bonded to the interior of the pipe wall or fitting.
- b. Portland cement shall meet the requirements of ASTM C150. The free calcium oxide content shall not exceed 1.5 percent. Total alkalis, considered as the sum of the sodium oxide and potassium oxide, with the latter calculated and included as sodium oxide, shall not exceed 0.6 percent. The contractor shall, within 7 days of request, submit records of the Portland cement used in fabrication.
- c. Prior to lining, the surfaces shall be thoroughly cleaned and shall be free of blacking, graphite, grease, dirt, loose sand, rust, slag, flux, and any other foreign materials. The surface shall also be free from any projections that may protrude the lining.
- d. Curing shall commence after the mortar has set but not later than 12 hours after the application of the lining. Clean, potable water shall be used for curing of the cement mortar lining. The lining shall be cured in accordance with one of the following methods:
 - 1) The steam curing method shall not begin sooner than 4 hours after application of the lining. Steam for curing shall be moist. The lining shall be cured a minimum of 16 hours prior to moving from the curing area. Steam temperatures shall not be less than 120°F and no more than 150°F.
 - 2) The water curing method shall keep the entire surface of the lining wet throughout the entire curing period. The interior lining shall be water cured for no less than 7 days prior to shipping.
 - 3) Any alternative curing method shall be submitted to the Engineer for approval prior to manufacturing.
 - 4) Freshly cement lined pipe and fittings shall be cured indoors for not less than 24 hours if outside temperatures are above 50°F or 36 hours if outside temperatures are less than 50°F.

2.9 METALLIC ZINC-ALLOY COATING

- A. The minimum application mass density of the metallic zinc with aluminum alloy shall be no less than 400 grams per square meter when measured in accordance with ISO 8179-1, Section 7, or equivalent, as approved by the Engineer. The mass of the metallic zinc-alloy shall be verified at the beginning of each shift, at changes to application equipment settings, and at sufficiently frequent intervals to verify conformance to the mass requirements. Results shall be documented and kept on file for a period of one year and be furnished at the request of the Engineer.

- B. ERDIP and ERDIF surface shall be dry and free from dirt, oil, grease, asphalt, loose rust, or any non-adhering particle or foreign material. The metallic zinc-alloy shall be applied to a blast cleaned surface.
 - a. External surfaces of ERDIP shall be abrasive blasted to NAPF 500-03-04. Internal and external surfaces of ERDIF shall be abrasive blasted to NAPF 500-03-05, Blast Clean #2. ERDIP and ERDIF shall be solvent cleaned to NAPF 500-03-01 after abrasive blasting to remove all soluble contaminants from iron surfaces.
- C. Zinc coating shall cover the outside exterior surface and shall be free from bare patches or areas with lack of adhesion which reveals bare iron surfaces. A spiraled appearance is permissible provided the zinc coating masses comply with the requirements described in this specification.
- D. After zinc coating, a finish layer of asphaltic paint or synthetic resin topcoat compatible with metallic zinc-alloy shall be applied in accordance with ANSI/AWWA C151/A21.51, ISO 8179-1, or equivalent.
 - a. Topcoat shall be applied immediately after zinc coating is applied. Application of the finishing layer may be done by spray, brush, or roller at the manufacturer's discretion. The finishing layer shall uniformly cover the zinc coating and be free from bare patches or lack of adhesion. Repairs to the finishing layer shall be in accordance with manufacturer's recommendations. The mean DFT of the finishing layer shall be at least 3 mils and not have any blistering and permit proper performance of the zinc coating.
- E. Any uncoated area under the test coupon on the pipe or fitting shall be repaired in accordance with ISO 8179-1.

PART 3 - EXECUTION

3.1 SUPPLEMENTS

- A. The following supplements follow END OF SECTION and are a part of this Section:
 - 1. EARTHQUAKE RESILIENT DUCTILE IRON PIPE AND FITTING INSPECTION CHECKLIST

END OF SECTION

EXHIBIT F
NSF PFAS TESTING FOR DRINKING WATER
SYSTEM COMPONENTS



PFAS Testing for Drinking Water System Components



Information You Need to Know from NSF

PFAS (Per- & Polyfluoroalkyl Substances)- is the name that refers to a class of thousands of individual compounds defined by the presence of at least one fully fluorinated methyl (-CF₃) or methylene (-CF₂-) carbon atom without any H/Cl/Br attached. The C-F bond is very strong, limiting the ability of these compounds to degrade in the environment, causing PFAS to be nicknamed “forever chemicals”. Many PFAS compounds are known to bioaccumulate or bioconcentrate and some PFAS compounds have been linked to a variety of harmful health effects in humans and animals.

PFAS compounds are widely used in many different consumer, commercial, and industrial products, including components of drinking water systems. PFAS are found as pollutants in water, air, fish, and soil at locations across the nation and the globe. Because of their widespread use and persistence in the environment, many PFAS compounds are found in the blood of people and animals worldwide.

Given their link to harmful health effects, the US EPA, Health Canada, and other state and local regulatory agencies have been taking steps to limit PFAS in drinking water. These actions include regulation of some PFAS compounds at the federal level via the creation of maximum contaminant levels (MCLs), in addition to limits on other PFAS compounds in drinking water. Once established, these limits will be incorporated into NSF/ANSI/CAN 600 and thus become a requirement for drinking water system components evaluated to NSF/ANSI/CAN 61.

Since products certified to NSF 61 have not typically been tested for PFAS in the past, there is no test history to help manufacturers predict how their products will perform when new criteria for PFAS are added to NSF 600. To help manufacturers stay a step ahead of these new requirements, NSF is now offering in-house test-only services for the below list of PFAS compounds, with additional compounds available upon request.

PFAS Compound	NSF Reporting Limit
PFOA (perfluorooctanoic acid)	4 ppt
PFOS (perfluorooctane sulfonic acid)	4 ppt
PFNA (perfluorononanoic acid)	5 ppt
PFHxS (perfluorohexanesulfonic acid)	4 ppt

This R&D testing will provide manufacturers with the data they need to determine whether their products may be leaching any of these PFAS compounds, maximizing their opportunity to bring their products into compliance with the PFAS regulations that are on the horizon and to ensure that their products remain safe for contact with drinking water.

PFAS Compound	NSF Reporting Limit
PFBS (perfluorobutane sulfonic acid)	6 ppt
GenX (HFPO-DA and its ammonium salt)	4 ppt
PFHxA (perfluorohexanoic acid)**	4 ppt
PFDA (perfluorodecanoic acid)	3 ppt
PFHpA (perfluoroheptanoic acid)	3 ppt

Get your products tested for PFAS now. Start checking if your products are leaching PFAS for reassurance to you and your clients. By working with NSF, you will have the combined expertise of the NSF 61 exposure test combined with the analytic capabilities.

To learn more about bringing your products into compliance, contact info@nsf.org

NSF

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EXHIBIT G
ERDIP (HRDIP) INSPECTION CHECKLIST

Earthquake Resilient Ductile Iron Pipe and Fitting Vendor Inspection Checklist Form

Inspected By (Vendor Staff): _____ Inspection Date: _____

Items Inspected: _____ Delivery Date: _____

Vendor/Manufacturer: _____ Batch / Lot #: _____

TO BE COMPLETED BY VENDOR: Check the following inspection items on 20% of pipe and fittings and include this form with each delivery. If form is not included, the shipment may be rejected by EBMUD staff upon delivery. Pipe and Cement Mortar Lining (CML) Dimensional Tolerance Tables are found on the backside of this form.

Visual Inspection of Packing and Shipment

- ☐ Pipe packaged with 4" x 4" or 90 mm x 90 mm timbers below and between each row of pipe and with adequate blocking between each pipe in a row.
- ☐ Fittings packaged on pallets, crates, or cases with an itemized list of each fitting type and fitting size accompanying each individual pallet, crate, or case.
- ☐ **OR** No fittings shipped with this order
- ☐ Pipe end caps in place and pipe interior is clear of debris.
- ☐ No surface irregularities or flat spots, no excessive surface pitting as described in 33 05 19.15P.
- ☐ No repairs by welding or caulking.

Pipe Dimensional Verification

- ☐ Thickness of iron not to be less than the "Minimum Cylinder Thickness" in Table 1.
- ☐ Pipe outside diameter to be within "Outside Diameter Range" in Table 1.
- ☐ Pipes are minimum standard lengths as described in 33 05 19.15P.

Visual Lining Inspection

- ☐ Bell and gasket groove to be completely free of casting or lining defects.
- ☐ Linings are smooth, free from ridges, corrugations, or defects that reduce the thickness below the minimum.
- ☐ Longitudinal cracks in the cement mortar lining may be acceptable if the crack length is less than the pipe diameter.
- ☐ Cement mortar lining is "Double Thickness", no less than the values listed in Table 2.
- ☐ **No cement mortar lining in the gasket groove.**
- ☐ Asphaltic seal coat, fusion bonded epoxy lining, or synthetic resin is present, **with no pooling in bells or gasket grooves.**

Visual Coating Inspection

- ☐ Asphaltic paint coating or synthetic resin topcoat on top of the zinc is intact without major defects.
 - ☐ Seal-coat finish shall be continuous, smooth, strongly adherent, and neither brittle when cold nor sticky in the sun.
 - ☐ Electronic gauge may be used to ensure at least 2 mil coating thickness at each end of the pipe.
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TO BE COMPLETED BY EBMUD STAFF: This is an acknowledgement the vendor completed the form with the delivered materials. By signing, EBMUD does not waive the ability to reject delivered materials at a later date and reserves the right to reject and return defective materials as needed.

Received By (EBMUD Representative): _____

Rejected By EBMUD: ☐ Yes ☐ No

Comments: _____

Table 1: Earthquake Resilient Ductile Iron Pipe Dimensional Tolerances (AWWA C151 and JWWA G120)

Pipe Size	AWWA C151				JWWA G120		
	Class	Nominal Cylinder Thickness	Minimum Cylinder Thickness	Outside Diameter Range	Nominal Cylinder Thickness	Minimum Cylinder Thickness	Outside Diameter Range
6"	54	0.37"	0.32"	6.90" ± 0.06"			
8"	54	0.39"	0.34"	9.05" ± 0.06"			
12"	54	0.43"	0.37"	13.20" ± 0.06"			
16"	54	0.46"	0.39"	17.40" + 0.05"/-0.08"	0.46"	0.41"	16.76" + 0.06"/-0.08"

Instructions: Measure cylinder wall thickness at each end of the pipe. An additional minus tolerance of 0.02" is permitted for cylinder wall thickness along the barrel of the pipe for a distance not to exceed 12". Measure OD four times around the circumference of the pipe to check for roundness and at two locations along the barrel of the pipe. OD measurements shall be taken with a caliper tool and not be taken within 2' of bell end.

Table 2: Required CML Thickness (AWWA C104 and JWWA A113)

Pipe Size	AWWA C104		JWWA A113	
	Thickness Class	Minimum CML Thickness	Thickness Class	Minimum CML Thickness
6"	Double	1/8" (0.125")		
8"	Double	1/8" (0.125")		
12"	Double	1/8" (0.125")	Standard	0.190"
16"	Double	3/16" (0.188")	Standard	0.190"

Instructions: Measure CML thickness at each end of pipe. CML thickness measurement shall not be collected within 4" of pipe or fitting end.