



DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I

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DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAI'I
HILO, HAWAI'I

ADDENDUM NO. 2

MATERIAL BID NO. 2025-01

INVITATION FOR BIDS

FURNISHING AND DELIVERING
PIPES, FITTINGS, WATER METERS, FIRE HYDRANTS, BRASS GOODS, VALVES, ELECTRICAL
SUPPLIES, ELECTRICAL EQUIPMENT, SCADA, WATER QUALITY EQUIPMENT,
CHLORINATORS, MOTORS, AND MISCELLANEOUS ITEMS

FOR THE

DEPARTMENT OF WATER SUPPLY STOCK

DISTRICTS ISLANDWIDE

County of Hawai'i – State of Hawai'i

The following revisions and changes shall be made a part of the contract bidding documents:

I. Changes to **INSTRUCTION TO BIDDERS**:

- A. **DELETE** from page IB-14, requirements in reference to Title 33 U.S.C. §3914 and CFR Title 40 §35.10030 "American Iron & Steel", and P.L. 117-58, §§ 70901-52, "Build America, Buy America" Act.

II. Changes to **PROPOSAL**:

- A. **DELETE** in its entire Proposal Part 1 and **REPLACE** with the attached revised Proposal Part 1B.
- B. **ADD** Section 77A of the Proposal Part 2 with the attached Section 77A.
- C. **DELETE** from all Sections, requirements in reference to Title 33 U.S.C. §3914 and CFR Title 40 §35.10030 "American Iron & Steel", and P.L. 117-58, §§ 70901-52, "Build America, Buy America" Act.

III. Changes to **SPECIAL PROVISIONS**:

- A. Page SP-2, STORAGE OF MATERIALS, Section 77A **ADD** shall be added to the listing of sections designated to include the option for delivery to additional locations of the Department's Waimea Baseyard or Kona Baseyard.

... Water, Our Most Precious Resource ... Ka Wai A Kāne ...

The Department of Water Supply is an Equal Opportunity provider and employer.

B. Page SP-117, Section 223.04, **ADD** the following shall be added:

223.04 – ASME HYDROPNEUMATIC TANKS

A. General.

1. Summary

a. Section Includes:

- i. Factory-fabricated, ASME-rated hydropneumatic bladder tanks constructed of stainless steel.
- ii. Internal replaceable bladder for air/water separation.
- iii. Factory passivated and surface treatment for corrosion resistance.
- iv. Accessories and appurtenances required for proper function and connection to system piping.

2. References

- a. This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.
- b. Unless otherwise specified, references to documents shall mean the latest adopted edition of the documents at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued or replaced.

Reference Standards
American Society of Mechanical Engineers (ASME)
ASME BPVC Section VIII, Division 1 – Boiler and Pressure Vessel Code
American Society for Testing and Materials (ASTM)
ASTM A240 – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip
ASTM A479 – Standard Specification for Stainless Steel Bars and Shapes for Use in Boilers and Other Pressure Vessels
ASTM A380 – Standard Practice for Cleaning, Descaling, and Passivation of Stainless Steel
ASTM A967 – Standard Specification for Chemical Passivation Treatments for Stainless Steel
American National Standards Institute (ANSI)

Reference Standards
ANSI B31.3 – Process Piping Code
American Water Works Association (AWWA)
AWWA D100 – Welded Carbon Steel Tanks for Water Storage
National Sanitation Foundation (NSF)
NSF 61 – Drinking Water System Components – Health Effects

3. Submittals

- a. Product Data
 - i. Manufacturer's catalog sheets, performance data, and dimensions
 - ii. Construction materials and finishes
 - iii. Certification of ASME compliance
 - iv. Bladder material specifications
- b. Shop Drawings
 - i. Tank volume, design pressure, and test pressure
 - ii. Base ring and seismic anchorage requirements
 - iii. Tank layout with lifting point locations
- c. Certifications
 - i. ASME U-Stamp or UM-Stamp (if volume < 36" diameter)
 - ii. NSF/ANSI 61 compliance for potable use.
 - iii. Passivation certification per ASTM A967
- d. Warranty
 - i. Manufacturer's standard warranty including bladder and structural components.

4. Quality Assurance

- a. Manufacturer's Qualifications
 - i. Minimum 10 years' experience in manufacturing ASME pressure vessels.
 - ii. Certified in accordance with ASME Section VIII.
- b. Welders Qualifications
 - i. Welders must be certified per ASME Section IX.
- c. Surface Treatment
 - i. Pickling and passivation shall be performed in accordance with ASTM A380 and A967.
- d. Inspection and Testing
 - i. Factory hydrostatic test at 1.5X rated pressure.
 - ii. Visual inspection of welds.
 - iii. Air-leak and pressure-retention test of bladder.

5. Delivery, Storage, and Handling

- a. Deliver tanks on pallet, with protective end caps on all ports and valves.
- b. Store tanks above grade, and protect from moisture, dirt and mechanical damage.
- c. Do not drop or drag tank. Load and unload with fork lift.

B. Products.

1. Manufacturers

a. Basis of Design Manufacturers

- i. AA Tanks Co., (586) 427-7700; www.aatanks.com.

- a) SS-FXA Series

- ii. Wessels Company, (317) 888-9800; wessels@westank.com; www.westank.com/hydropneumatic-tanks/bladder-tanks/

- a) SS-FXA Series

- b. Provide basis of design manufacturer or equal by approval per substitution request provisions prior to bid opening.

2. Materials

a. Tank Shell and Heads

- i. Material: ASTM A240 and A479 Gr. 316L
- ii. Finish: Brushed finished to $\leq Ra\ 32\ \mu in$
- iii. Wall Thickness: Shall conform to ASME BPVC as appropriate for pressure rating and volume.

b. Bladder

- i. Material: Butyl rubber, NSF/ANSI 61 listed
- ii. Type: Replaceable, seamless construction with integral air stem seal
- iii. Temperature Range: -20°F to 240°F

c. Flange/Fittings

- i. NPT threaded system connections.
- ii. ANSI B16.1 flange for access to replaceable bladder.
- iii. 316L stainless steel fittings and lifting lugs.

3. Technical Details

- a. Volume: As indicated in proposal bid item.
- b. Design Pressure: 125 psi, unless specified otherwise
- c. Operating Temperature Range: 33°F to 200°F
- d. Installation Orientation: Vertical
- e. Internal Bladder Pressure: Pre-charge to standard factory pressure

4. Fabrication

a. Welding

- i. Full penetration welds conforming to ASME Section VIII.

- ii. Interior and exterior welds ground smooth.
- b. Surface Treatment
 - i. Full chemical descaling and passivation post-weld per ASTM A380 and A967.
 - ii. Passivation with nitric or citric acid, with neutralization and rinsing.
- c. Testing
 - i. Hydrostatic testing at 1.5 times design pressure.
 - ii. Documentation of all tests to be submitted with tank.
- 5. Accessories
 - a. Pressure gauge with stainless steel bourdon tube.
 - b. Schrader valve (0.302" – 32NC).
 - c. Nameplate with stamped ASME U-Stamp, serial number, and pressure rating.
 - d. Two (2) lifting ring set 180° apart and normal to access in support base for system connection, and seismic support base.

BY AUTHORITY OF THE DEPARTMENT OF
WATER SUPPLY COUNTY OF HAWAI'I

Date: April 24, 2025

By: 
Keith K. Okamoto, P.E., Manager-Chief Engineer

Please sign and return immediately to the Manager-Chief Engineer of the Department of Water Supply.

Receipt of a copy of **ADDENDUM NO. 2** for MATERIAL BID NO. 2025-01, INVITATION FOR BIDS FURNISHING AND DELIVERING PIPES, FITTINGS, WATER METERS, FIRE HYDRANTS, BRASS GOODS, VALVES, ELECTRICAL SUPPLIES, ELECTRICAL EQUIPMENT, SCADA, WATER QUALITY EQUIPMENT, CHLORINATORS, MOTORS, AND MISCELLANEOUS ITEMS FOR THE DEPARTMENT OF WATER SUPPLY STOCK, Districts Islandwide, County of Hawai'i, State of Hawai'i, is hereby acknowledged.

NAME OF BIDDER

Date: _____

By: _____