



CITY OF TACOMA

Tacoma Water

ADDENDUM NO. 1

DATE: 7/15/22

REVISIONS TO:

Request for Bids Specification No. TW22-0084F

Bonney Lake 950 Zone Tank and 950-1010 Zone Pump Station

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline has been changed to 11:00 a.m., Pacific Time, Tuesday, August 2, 2022.

REVISIONS TO THE TECHNICAL PROVISIONS:

Add Section 15.32.03 Butterfly Valves Class 150 as marked Addendum No. 1.

Add Section 15.33 Check Valves as marked Addendum No. 1.

Questions and Answers

Question 1: We are requesting the City reconsider lowering or eliminating the Local Employment and Local Apprenticeship goals as well as the Equity in Contracting Program (EIC) to allow more competitive bidding.

Answer 1: The City requirements will remain as stated in the specification.

Question 2: Could you please confirm what style of roof is requested? The specifications call out an umbrella roof but the design seems to indicate a column-supported cone roof.

Answer 2: The required roof is a column-supported cone roof per the design plans.

Question 3: Will the City be retaining a 3rd party testing agency for this project?

Answer 3: Yes. However, welding inspection will be provided by the Contractor per Division 13.

Question 4: I find no specification for Butterfly Valves or Check Valves – can you tell me where to find that information?

Answer 4: Technical specifications have been added to this addendum.

Question 5: Are there any Domestic requirements or Buy America(n) or AIS required for this project?

Answer 5: No.

Question 6: There is no bid item for Mechanical Piping so where do things like the Reservoir Meter Vault and overflow mechanical piping on M101 get paid for? Should that be considered site piping?

Answer 6: Per Division 18 Measurement and Payment, mechanical piping between the extents of the steel piping and what is detailed on the mechanical plans will be covered under Bid Item 5 - Site Utilities. Overflow piping within the reservoir will be covered under Bid Item 22- Reservoir Appurtenances.

Question 7: We respectfully request that Generac Power Systems be added to the approved generator manufactures list for this project. Generac is the 2nd largest industrial generator manufacturer in the North American market and meets or exceeds the approved generator specifications.

Answer 7: The approved manufacturer's list includes Cummins, Caterpillar, and Kohler and is not being amended at this time.

Question 8: Is there any way we could get the presentation or slides that were used in the meeting that we missed? Also, we are wondering if the City is open to pushing the bid date back a week or two?

Answer 8: An audio file of the pre-bid meeting is posted at [Public Works & Improvements Solicitations](#).

Question 9: Are different grades of steel (i.e. A516-70 or A573-70) allowed to be used for the tank shell than what's listed in Contract Spec 13.31.23.05, Part 2?

Answer 9: Revise Contract Spec 13.31.23.05, Part 2 – Materials, Reservoir Bottom, Shell, and Roof Plates to state "Per Contractor Design". All other material requirements in this paragraph are still valid.

Question 10: Contract Spec 13.31.23.13, Part 2 states, “The tank shall have an umbrella shaped roof as shown on the plans. Roof shall be supported using 9 interior columns.” The Contract Drawings show a rafter-supported cone roof. Please confirm that the “umbrella roof” listed in the specs is not correct. Also, does the roof need to be supported by exactly 9 interior columns or can the roof structure (and number of columns) be designed by the tank contractor?

Answer 10: The roof structure will be column supported per plans. The roof supports are shown schematically and are the responsibility of the contractor to design. Contractor design may have more or less than 9 columns.

Question 11: Contract Drawing S101, the notes in the upper middle portion of the sheet, 2nd bullet point states, "Roof members shall be designed to meet the L/240 deflection standard typical for serviceability criteria in IBC and ASCE 7." Table 1604.3 in 2018 IBC lists L/180 for snow deflection and L/120 for D+L deflection for roof members not supporting ceilings. Is L/240 really required or can we use L/180 for the snow load and L/120 for D+L?

Answer 11: Roof members shall be designed to meet the L/240 deflection standard to minimize ponding on the roof.

Question 12: Contract Drawing S105, Detail 503 shows the extension of the floor plate to be 3" past the outside face of the tank shell. Per AWWA D100-11, this dimension can be as little as 1-1/2". Is the 3" extension required? If not, can the eccentricity of the anchor bolt, away from the tank shell, be reduced from the 4-1/4" shown?

Answer 12: The plate extension can be reduced to 1-1/2".

Question 13: Are the concrete column footings required if the tank contractor can prove, via the stamped structural calculations, that large-thickened steel baseplates can distribute the column load adequately?

Answer 13: The contractor may submit an alternative column support design approach. The design will be subject to review and approval by the owner.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. TW22-0084F Addendum No.1. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Carol Powers, P.E./Tacoma Water

15.32.03 Butterfly Valves Class 150

[CSI 40 05 64.16]

Part 1 – General**Design Requirements**

Butterfly valves shall be tight-closing rubber seat type with a minimum 150 psi working pressure rating. Valves 3-inch and larger must meet full requirements of AWWA Standard C504. Valves smaller than 3-inch shall be high performance valves specifically designed for shutoff and throttling control of liquids and gas. Valve components shall withstand an operator input torque of 300 foot-pounds without damage.

Butterfly valves shall be constructed and adjusted as necessary to withstand a leak tight pressure test against the closed valve seat per the pressures listed in Division 1.81.40 Pressure Ratings. The valve will not be operated under test pressure. If the valve must be oriented in a particular direction to achieve the test rating, the manufacturer shall show the orientation on the valve body or provide clear directions in the submittal. If the valve requires special modifications to achieve the test pressure rating, a description of those modifications shall be provided with the submittal.

Part 2 – Products**Manufacturers**

- M&H 4500
- Dezurik BAW
- Mueller LineSeal III
- Pratt Groundhog (buried) or In-Plant (above grade flanged or wafer).

Manufactured Units

Three-inch and larger valve bodies shall be cast iron ASTM A-126 Class B or ductile iron. Provide valve disc constructed of cast iron ASTM A48 Class 40, cast iron ASTM A126 Class C, or ductile iron ASTM 536 Grade 65-45-12. The disc seating edge shall be solid stainless steel. Sprayed mating seat surfaces are not acceptable. Valves smaller than 3-inch shall have 316 stainless steel body and disc and shall be lug style. The seat shall be of acrylonitrile-butadiene or EPDM for water; or as appropriate for other services. Valve bearings shall be sleeve-type and corrosion-resistant. Valve bearings shall be of traveling nut type and shall open left.

Supply valves with the valve operator on the side of the valve shown on the Plans.

Provide fusion bonded epoxy or two-part liquid epoxy coating to all internal and external surfaces.

Part 3 – Execution**Installation**

Install per manufacturer's instructions. When installing on thick wall pipe such as HDPE or C900 PVC, verify if there are any interferences with the valve disc and the pipe wall. If the disc does not operate freely, install valve spacers to provide clearance. Beveling the interior of the pipe will only be allowed if approved by the Engineer.

All butterfly valves shall be test operated prior to burial in the presence of the Owner's representative to prove full open and closing capability. Testing procedure: Close the valve prior to applying test pressure. Do not operate the valve under test pressure. Bleed off pressure to below the working pressure rating prior to operating the valve.

15.33 Check Valves

15.33.02 Swing Check Valves

[CSI 40 05 65.23]

Part 1 – General

Design Requirements

The swing check valve shall function to permit flow in only one direction. The valve shall close tightly, without slamming, when the pressure on the discharge side exceeds the pressure on the inlet side. All swing check valves shall conform with AWWA C508 and the following specifications.

The valve shall be constructed to withstand the pressures stated in Division 1.81.40. Flanges shall be drilled to ANSI B16.1, Class 125# or as specified in the Plans.

Operating pressure range is 30 psi (low) to 60 psi (high). The manufacturer shall certify that the check valve will seal completely within the operational range.

Part 2 – Products

Manufacturers

The valve shall be equal to Golden Anderson Fig. 220-DS swing check valve or M&H Model 159 Swing Check Valve. Valve swing arm shall be weighted. Swing arm shall be oriented as shown on the plans. If not shown, swing arm shall be located to be free to move without restriction.

Manufactured Units

The swing check valve body shall be constructed with heavy cast iron or cast steel and have a bronze or stainless-steel seat ring, rubber clapper facing, a non-corrosive shaft and external counterweight attachment. See Plans for which side of the valve to locate the counterweight.

A limit switch shall be included and mounted to the valve body for remote indication of valve position.

The valve disc shall be constructed of cast iron or cast steel and shall be suspended from a non-corrosive shaft. The valve shall allow the equivalent flow area of the adjoining pipe. The shaft shall pass through a stiffing box and be connected to the swing arm in the outside of the valve.

Finishes

The interior and exterior of the valve body, bonnet and seal plate shall be coated with fusion-bonded epoxy meeting AWWA C-550 (latest revision). Interior coating shall be a minimum dry film thickness of 7 Mils, not including primer. Exterior coating shall be a minimum dry film thickness of 5 Mils, not including primer. Alternatively, exterior may be coated per Division 9.91.23.01.