



City of Tacoma

Questions and Answers

Asphalt Plant Chip Seal Oil Tanks RFB Specification No. **PW23-0152F**

All interested parties had the opportunity to submit questions in writing by email to Brandon Snow, Senior Buyer by date questions were due. The answers to the questions received are provided below and posted to the City's website at www.TacomaPurchasing.org. Navigate to [Current Contracting Opportunities](#) / *Public Works and Improvements Solicitations*, and then click *Questions and Answers* for this Specification. This information IS NOT considered an addendum. Respondents should consider this information when submitting their proposals.

Question 1: The C2 drawing and specification section 40 05 00, 2.03.a states the two oil storage tanks are required to be 12,500 gallons. However, specification section 43 40 3?, 2.02.A.1 states the two tanks are required to be 15,000 gallons. Can you clarify tank size requirements.

Answer 1: Two (2) tanks, each with a capacity of 12,500 gallons providing at total of 25,000 gallons.

Question 2: The C2 indicate the diameter of the tank at 8' ID and 8' OD and a height of 27' – 33'. Please confirm the height requirements based on the required tank volume size question above.

Answer 2: Tanks are intended to be 8 feet inside diameter, with 6 inches of insulation and an exterior jacket for insulation protection to fit within the limitations of the concrete foundation and containment and for transportation limitations.

The tanks are bidder designed and the total height is anticipated to be between 27' and 33' in height with 33' maximum height. The actual height of the tanks is to be determined by the bidder but may not exceed 33' in total height.

Question 3: 40 05 00, Section 2.12: specification indicates equipment assemblies are to be on a single heavy cast iron or welded steel bedplate. Please verify what equipment this is in reference. Equipment such as steel tank typically comes with O.D. ring for anchoring. Pump skids are typically fabricated with anchor points on steel frame. If these are being referenced, please confirm no other equipment is intended.

Answer 3: Equipment references includes storage tanks, and pumps and associated pumping equipment.

Question 4: General Conditions, Section 5.15 – Specification states owner will contract separately for code required special inspections. Specification 01 14 00, 1.2.B.1 states owner will furnish and pay for independent testing and inspections. Specification section 40 05 00, 3.03.B.2.a states contractor to retain certified welding inspector during all inspections and testing for steel tank field installation. Please confirm owner is providing all testing



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and special inspections for project. If contractor is responsible for specific items, please provide a list for inclusion in proposal..

Answer 4: Specification Section 00 72 00 General Conditions for Washington State Facility Construction, Article 5.15 (A) states that the contractor to provide for all testing and inspection of Work and shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Specification Section 00 72 00 General Conditions for Washington State Facility Construction, Article 5.15 (B) states that the Owner may conduct tests and inspections as it deems necessary to ensure that the Work is in accordance with the Contract Documents.

Specification Section 01 14 00 Article 1.2.B.1 notes "Testing for quality control certification or special inspections as required by the permitting authority will be conducted by an independent laboratory which will be furnished and paid for by the City." These tests and inspections relate to the special inspections as noted on the "Special Inspection Schedule" on Sheet S1 of the Drawings only.

All other testing and inspection shall be the responsibility of the contractor per Specification Section 00 72 00 General Conditions for Washington State Facility Construction, Article 5.15 (A). Contractor shall maintain complete inspection records and make them available to Owner as required by the Contract Documents.

Question 5: Specification 40 05 00, please confirm that the only testing and test reports required for shop fabrication are mill certs for steel, radiographs and inspection reports for welding

Answer 5: As noted in Specification Section 40 05 00 General Equipment and Mechanical Requirements Article 2.03 (F) 3, the Source Quality Control Report shall include a shop inspection report including mill tests, radiographs, and inspections records.

Work shall conform to Specification Section 05 12 00 – Structural Steel, Specification Section 09 90 00 – Protective Coatings, Specification Section 43 41 13 – Welded Steel Tanks, and API 650 including required submittals and testing.

Question 6: Specification 40 05 00, 3.03.C Painting – Please verify if interior painting of steel tank is required in field or can occur offsite.

Answer 6: Interior and exterior painting can be shop applied unless otherwise specified in API 650.

Question 7: Specification 40 05 00, 3.03.C Painting – Please verify if owner or contractor is required to clean interior of tanks for steel tank interior coatings inspection at 1 year anniversary.



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Answer 7: Cleaning of the interior of the tanks will not be required at the 1- year anniversary.

Question 8: Specification 40 05 00.3.07 – Please verify if oil used during startup and testing will be required to be disposed and if so, if contractor is responsible for disposal.

Answer 8: Oil used for initial lubrication of equipment during startup and testing should be disposed of by the contractor.

Question 9: Specification 40 05 00.3.07 – Please verify if contractor is responsible to supply oil for startup and testing or if owner will be furnishing.

Answer 9: The contractor is responsible for supplying oil (liquid asphalt) for startup and testing. The contractor shall coordinate with the City to determine the type of liquid asphalt to be supplied.

Question 10: Specification 40 05 00.3.09 – Sound Level Testing – Please verify if sound testing is required in outdoor areas as section indicates inside buildings containing equipment. If sound testing is required, will operations in area be complete to allow testing of only equipment installed under the contract.

Answer 10: Sound Level Testing should be conducted to verify that sound levels meet the requirements of Specification Section 40 05 00 Article 2.19 – Noise and Vibration.

**Question 11: Assumptions based on drawings:
(2) Asphalt Storage Tanks
12,500 Gallons Each**

Answer 11: See response to Question 1.

**Question 12: Double Wall Vertical Tank Dimensions Each:
33' High O.D.
27' High I.D.**

Answer 12: See response to Question 2.

**Question 13: 9' Wide O.D.
8' Wide O.D.**

Answer 13: See response to Question 2.



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Question 14: Asphalt weighs approx. 18.7Lbs/Gallon x 12,500 Gallons = 233,750 Lbs. of asphalt per tank.

Answer 14: The liquid asphalt storage and handling system will store liquid asphalt typically used in the performing of asphalt roadway chip-seal (ie.AC -15P or similar)

The liquid asphalt storage and handling system portion of the project is bidder designed. This includes but is not limited to the storage tank shells, insulation, insulation jacket, accessways, heaters, mixers, pumps, valves, stairs, catwalks, piping, piping insulation, pipe and equipment supports, electrical and controls, and miscellaneous fittings to provide a complete liquid asphalt storage and handlings system as indicated in the Drawings and Specifications.

This includes but is not limited to the requirements for system design including seismic design, deferred permit submittals, procurement, fabrication, testing, transporting, loading and offloading, installation, and startup as indicated in the Drawings and Specifications.

Question 15: What type of material should we assume for the tank body?

Answer 15: Please see Specification Section 40 05 00 Article 2.03 and Section 43 41 13 Article 2.01.

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Question 16: Assuming plate steel how thick (1/4", 1/2" etc.)?

Answer 16: Please see Specification Section 40 05 00 Article 2.03 and Section 43 41 13 Article 2.01.

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Question 17: What is the max thickness of steel we can roll in our shop?

Answer 17: This question appears to be intended for internal contractor communication; no response provided.

Question 18: It looks like these tanks are double wall, with a 6" void between inner and outer walls. Does this void get filled with insulation or is it more of just an air gap?

Answer 18: See response to Question 2.

Question 19: Does this tank need to be ASME rated?

Answer 19: Please see Specification Section 40 05 00 Article 2.03 and Section 43 41 13 Article 2.01.

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Question 20: Assuming we would not be painting the exterior of the tank.

Answer 20: See Specification Section 40 05 00 Article 3.03. Painting shall comply with API 650 or as otherwise indicated in the Drawings and Specifications.

Tanks shall be provided with Jacket for Tank Insulation per 40 42 13 Article 2.02. Aluminum jacket may be left natural.

Question 21: Do we need to provide the pump? If so, we would need make/model.

Answer 21: The liquid asphalt storage and handling system portion of the project is bidder designed. This includes but is not limited to the storage tank shells, insulation, insulation jacket, accessways, heaters, mixers, pumps, valves, stairs, catwalks, piping, piping insulation, pipe and equipment supports, electrical and controls,



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This includes but is not limited to the requirements for system design including seismic design, deferred permit submittals, procurement, fabrication, testing, transporting, loading and offloading, installation, and startup as indicated in the Drawings and Specifications.

Question 22: Specification section 40 42 13, 3.05 lists the insulation thickness for the piping system as 2 inches. Detail #7 on sheet C3 notes the insulation thickness as 4 inches. Given the temperature of this system as noted in 40 05 00, 2.09 please confirm that 4 inches is the correct minimum insulation thickness.

Answer 22: Intent is for piping to have 4" of insulation meeting Specification Section 40 42 13 Article 2.01, heat tracing, and jacket as shown on Detail 7, Sheet C3.