



# City of Austin

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Public Works Department, P.O. Box 1088, Austin, Texas 78767-8839

Administrative Offices: One Texas Center, 505 Barton Springs Road Telephone 512/974-7058

**Date: January 21, 2013**

**City of Austin**

**Project Name**

**Martin Hill Transmission Main Segment A, Segment B and Segment C**

**C.I.P. No. 2028.001**

**RE: Clarification Letter #4**

This document provides answers to Contractor questions received to date.

**These answers do not modify the Contract. Any modifications to the Contract will be through an Addenda.**

**Question:** "Tunnel Reach 7 which goes under the UPRR calls for 1" wall thickness casing under the RR (approx. 140 LF) and the balance to be min. 5/8" wall thickness. For safety reasons, the tunnel will be excavated and cased uphill from Sta. 73+76 to Sta. 79+23 which means that during the tunneling process, 5/8" wall thickness casing will be under the RR until the last 140 LF of the tunnel when the 1" wall thickness casing is pushed. Is it permissible to have 5/8" wall thickness casing under the RR during the tunneling process until the last 140 LF of tunneling?"

**Answer:** Yes. The 1" wall thickness must be the final installed casing pipe under the Railroad Right of Way.

**Question:** Is Bid Item 50 "Downtime Associated with Observation of Voids and/or Flowing Water" for open cut construction or tunnel construction or both? The cost for each are dramatically different. The GBR states that open cut construction "will" encounter voids and tunneling "may" encounter voids. It would be safe for bidding contractors to price the higher of the two which may make their price uncompetitive or may have the City paying the rate for tunneling downtime for an open cut delay.

**Answer:** This bid item is for the payment of downtime associated with observation of voids and/or flowing water during open-cut excavation.

**Question:** Is Bid Item 100 "Demobilization and Remobilization Associated with Project Delay Due to Void/Water Flow Feature Discovery and/or Mitigation" for open cut construction or tunnel construction or both? The GBR states that open cut construction "will" encounter voids and tunneling "may" encounter voids. To demobilize a TBM which is partially through a tunnel would require a rescue shaft to be installed above the TBM (presuming the location of the TBM would allow it) for retrieval of the machine.

**Answer:** This bid item is for the payment of a demobilization and remobilization associated with project delay due to void/water flow feature discovery and/or mitigation during open cut construction.

**Question:** For Bid Item 115 "Tunnel Excavation and Primary Liner Reach 11" are ring beams and timber lagging an allowable primary liner method?

**Answer:** Ring beams and timber lagging that meet the specifications would be an allowable primary liner method.

**Question:** Please review the quantities for the 54" Open Cut on Segments A & B. We calculate 8,180 LF and the bid items are for 8,810 LF.

**Answer:** The quantities in 00300U are correct.

**Question:** Bid Items 87, 88, and 89 are for welded steel pipe in Tunnel Reaches 1, 7, and 9 respectively. Where is the welded steel pipe for Tunnel Reach 11 measured and paid?

**Answer:** It is paid for under Bid Alternate 1: Bid Item 1.

**Question:** Bid Items 87, 88, and 89 are for welded steel pipe in Tunnel Reaches 1, 7, and 9 respectively. Where is the welded steel pipe for Tunnel Reach 3 and 5 measured and paid?

**Answer:** It is paid for under Bid Alternate 1: Bid item 1.

**Question:** "Section 2.2 Materials (pg. 13): Flanges are specified as AWWA C207, Class F. The 54-inch flanges for use at the butterfly valves are not available because AWWA C207 - Table 6 ends at 48-inch diameter. Please clarify the type of flange to use at the 54-inch valve locations, or provide the necessary custom flange design to incorporate into the project bid."

**Answer:** Addressed in Addendum #3.

**Question:** "SS 002621 Section 3.5, Item C.1 (pg. 23): The requirement for "excessive deflection" tests appears applicable to steel pipe only. Current specification limits ring deflection to 2-percent of diameter for steel pipe. Current specification allows ring deflection to 3-percent of diameter for ductile iron pipe in accordance with *AWWA Manual M41, Ductile Iron Pipe & Fittings*, Chapter 4, Section 4.2.6....Request requiring ductile iron pipe installation to include identical deflection tests."

**Answer:** This project is to be bid per the Contract Documents as issued.

**Question:** "SS002621 Section 2.1, Item 5.c (pg. 10): Specification states D/t of 165 for buried trench pipe and 200 for pipe in tunnels. Recommend revising D/t for buried sections to 240 which is consistent with *AWWA Manual M11, Steel Water Pipe: A Guide for Design & Installation, Chapter 4, Page 40....*"

**Answer:** This project is to be bid per the Contract Documents as issued.

**Question:** "Steel Pipe Schedule (pg. 32). Based on a conservative design, ductile iron pipe and steel pipe is currently over-specified 27-percent and 48-percent respectively using an arbitrary "standard" design pressure...Recommend revising working, surge, and any field test pressures to actual values."

**Answer:** This project is to be bid per the Contract Documents as issued.

**Question:** "Detail 510S-5 on Sheet D-01, Sheet 114 of 118, refers to specification 510.2(6) for the trench backfill above the bedding zone, calling this material Select Backfill or Borrow. It describes the material as free of stones or rocks over 8 inches and shall have a plasticity index of less than 20. A large portion of the existing soils in Segment C have a Plasticity Index greater than 20. When the pipeline section being installed is not under existing or future pavement, or located within 2 feet of any structure within the easement, will the Contractor be allowed to use the existing soil for trench backfill above the bedding envelope as long as the Backfill in the easement is installed to conform with section 510.3 (25) (g) Backfill in Easements?"

**Answer:** Addressed in Addendum #3.

**Question:** "How is the vertical pipe @ Sta. 5+65 and Sta. 14+80 measured and paid?"

**Answer:** Base Bid Item 87 "Pipe, 54-inch Diam. Welded Steel, STA 5+20 to STA 14+80, Complete and In-Place." Bidders are directed to Specification 510 – Pipe

510.4 Measurement that states "the length of a new line will be measured from the visible end of the existing system at the completed joint. Unless otherwise, indicated, the length of water, reclaimed and wastewater lines will be measured along pipe horizontal centerline stationing through fittings, valves, manholes, and other appurtenances."

**Question:** "Where does the Hot Mix Asphaltic Concrete Pavement, 2 Inches, Type D go?"

**Answer:** Segment C see sheets 92 thru 98.

**Question:** "There is a traffic control plan for closure of Westbound McNeil Dr. for the transmission main construction, milling, and overlay. Where is the traffic control plan for Eastbound McNeil Dr. for the milling and overlay?"

**Answer:** Contractor shall refer to the City of Austin's Standard Detail 804S-1 , 1 of 9 on drawing TC-830 as the Traffic Control guideline for pavement improvements along Eastbound McNeil Drive. Contractor shall close only one lane at a time and provide a minimum 10-ft wide traffic travel lane alongside. Extents of lane closure shall be directed in the field by the Owner's representative(s).

**Question:** "The legend in the traffic control plans indicates water filled traffic barrier for protecting the tunnel pits and the Detail TC-833 indicates concrete traffic barrier. Which one is correct?"

**Answer:** Contractor shall use water-filled traffic barriers to protect the bore pits.

**Question:** "Please provide a detail on how to replace the conduits under the pavement"

**Answer:** Existing loop detectors would be replaced with new loop detectors per drawing TC-818. Existing conduits would not be modified.