



**City of Lake Oswego
Lake Oswego Interceptor Sewer
Lake Down Contract – Contractor Questions**

February 22, 2010

TO: Planholders for Lake Oswego Interceptor Sewer – Lake Down Project
FROM: Brown and Caldwell Design Team
SUBJECT: Bid-Phase Questions
DATE: February 22, 2010

The following questions were received from prequalified Contractors on the project. The design team's responses are provided in the table below.

Question #	Question	Response
1	The bid bond form that was provided shows the bid due date as Feb 17, 2009. Is it acceptable to use this form when we turn in the bid even though the bid date listed is wrong?	An updated form will be available in Addendum No. 5.

2	<p>Specification 02762 states that portions of Twin Points and Lost Dog trunklines may come in close contact with the bottom of the lake during a 22-foot drawdown. A 3 ft clear space is required between the tether bracket eye and the ground anchor eye nut. Upon examination of the drawings it is evident that the "block" will need to be approx 6 ft tall and therefore will not be a "block" but instead a 2 or 4 legged frame of some kind. For the Twin Points trunkline (see drawing 400-C-003) there appears to be 12 tethers between stations 2+11.31 and 4+07.82 that could come within 7 ft of mud line and would require support frames. Please verify that these tether locations are the ones that will require support frames.</p>	<p>The Twin Points trunkline is the only location where supports will be needed. Please refer to Section 02762 that will be re-issued as part of Addendum No. 5 for this clarification and more information on conceptual design alternatives.</p>
3	<p>For the Lost Dog Creek trunkline (see drawing 400-C-005) there do not appear to be any locations where the tethers can come within 7 ft of mudline during a 22-foot drawdown. The tethers from station 9+09.15 to 8+87.47 will be held up by the transition brackets in this area. The drawdown inverts given on drawing 000-D-028 verify this. Please let us know which tether locations, if any, will require tether support frames for the Lost Dog trunkline.</p>	<p>See answer to question 2 above.</p>
4	<p>If our analysis is correct, there are 12 possible tether frame locations for Twin Points and none for Lost Dog. Spec section 01025 for bid item 6 says to allow for 20 support blocks. Should we allow for 20 or 12?</p>	<p>Measurement and Payment for this item has been updated to include the 15 tether bracket supports that will be needed for a 24 foot drawdown. This will be included in Addendum No. 5.</p>

5	<p>Addendum 3 added wording to specification section 02762-3.02.C.2 that requires blocks to be installed on the bottom of each tether bracket. Does this mean that the support frame would be bolted to the tether bracket and float up and down with the buoyant pipe line? If so, are there restrictions on how much the support frame can weigh? If the support frame is connected to the tether bracket it would have to be configured so that it would miss the threaded eye nut of the ground anchor below when it came in contact with the mudline.</p>	<p>Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.</p>
6	<p>What is the expected load requirement for the support frames? The pipe assembly is very heavy and may be fully or partially filled with water. Can the w-beams of the tethers take the load?</p>	<p>Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.</p>
7	<p>Addendum 3 also requires the support blocks to be sufficiently stable to support the exposed pipeline during wind and severe weather events. In consideration of this and the above questions, we feel that a conceptual drawing and/or design should be provided to the contractor for the tether support blocks.</p>	<p>Please refer to Section 02762 that will be re-issued as part of Addendum No. 5. Three conceptual methods for tether bracket supports are included.</p>
8	<p>Specification 15065 calls for the tie-backs to be adjustable and to allow adjustment throughout the drawdown process at the direction of the Engineer. Is the system to be completed and tie-backs attached to the pipe before drawdown starts? If it is, all of this work will be performed in 15 to 20 ft of water.</p>	<p>Free-End Buoyant Pipeline Restraints shall be installed prior to a drawdown of 16 feet. Please refer to Sections 01015 and 02762 that will be re-issued as part of Addendum No. 5.</p>

9	Is a load cell required in the tie-back lines so that tension in the lines can be monitored?	No, please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
10	Are the tie-back lines required to be tensioned before the drawdown process begins?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
11	After the sunken pipelines are installed and the connections are made at the manholes, when are the restraining lines released and thereby transferring the load to the pipeline? Is there a required procedure for this?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
12	It appears that the free-end buoyant restraining anchor system is temporary and all materials used are to be removed after use. Is this assumption correct?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
13	Are there restrictions on the type of restraining anchors that may be used? Are concrete weights acceptable? If concrete weights will not work in an area, is it acceptable to drive and socket piles into rock for an anchoring system?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
14	There is a lateral shown on drawing 200-C-003 on the existing 16" CCP line with the key notes 5 and 6 attached to it (approximately in front of the property with the address 16757). Note 6 indicates that this lateral is to be routed to the front of the house and connected to the main in Maple Circle. Note 6 also references detail E/000-D-204, which is the connection to existing CCP pipes. Can you provide more information on this lateral?	Work at this lateral is not included in the Contract. Addendum No. 5. will address this question.
15	Section 02762.3.02.A Define the word "immediately" in this paragraph.	Please refer to Section 01015 that will be re-issued as part of Addendum No. 5.

16	Section 02762.3.02.B What are the design constraints for the buoyant manhole related to level, rotation, and connection stresses? Will adjustments be directed by the Engineer?	Yes, please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
17	Section 02762.3.02.C.2 This paragraph calls the Tether Blocks “permanent.” Specification 3.03.C.1 says “Remove blocks.” Are Tether Blocks permanent or temporary?	Tether blocks are permanent. Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
18	Section 02762.3.02.C.3 Where are Tether Bracket Strap Bolts located in relation to waterline? Will they require underwater welding?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
19	Section 02792.3.02.H Is attachment and maintenance of the wind and wave anchor system a continuous and ongoing process between the times of slack tethers and full draw down, or is the system only installed after full draw down?	Adjustment is only needed during drawdown level changes. Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
20	Section 02762.3.02.H Is there a required line tension when the wind and wave anchor system is attached to the pipe?	Only light tension should be experienced in the line unless there is a wind event. All lines must be pre-tensioned to ensure proper adjustment. Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.
21	Section 02762.3.03.E Is the wind and wave anchor system to be released all at one time, or is it to be maintained over the course of refill?	Please refer to Section 02762 that will be re-issued as part of Addendum No. 5.

22	Section 02762.3.03.C.2 After refill, do the tethers return to their “design position”, as stated, or will tethers require relocation as indicated in 3.04.F.1? If so, how many tethers will require relocation?	Contractor should plan on relocation of all 428 tether brackets. Please refer to the Bid Form and Section 01025 that will be re-issued as part of Addendum No. 5.
23	Section 02762.3.04.F.1 How is the “+/-0.25 feet in-line” to be determined if the pipe centerline is dynamic with temperature change?	The +/- 0.25 feet will be determined by comparing the horizontal survey position of each tether bracket to the as-built ground anchor location. Due to expansion loops centerline is dynamic only perpendicular to the alignment, thus distance will be determined “+/- 0.25 feet in-line” with in-line being defined as along the alignment.
24	Maple Circle Debris Sump: Can you verify the incoming flows at the Maple Circle Debris Sump? Flows were provided for the (3) other debris sump locations within specification section 02550.	Maple Circle Debris sump is not located on an existing active sewer until the conclusion of the Lake Down and Bryant Road Pump Station projects. There will be no bypass pumping required to install this debris sump.
25	Specification section 1.02.C in 02550-1 indicates “CONTRACTOR shall abide by Oregon State DEQ standards for permanent pump station requirements for each temporary bypass pump station”. We would like to see this removed completely from the specification requirements because we are utilizing a temporary pump setup.	The Contractor does not have to abide by all DEQ standards for temporary pumping stations. Applicable DEQ standards only include redundant pump and fuel storage requirements listed specifically in the specification. Please refer to Addendum No. 5.

26	Addendum 3 indicated Phase 2 bypass submittals will now be required to be submitted with our bid. I wanted to confirm that Phase 1 & 2 bypass submittals only pertain to the bypasses required for the pump stations 1-24 (the ones required for sewer line work needed to connect to the buoyant sewer line). The CIPP bypass submittals outlined on 02550-13.C are to be submitted after award of the project, correct?	Contractor shall include a Bypass Pumping Plan for pump stations 1-24 with their bid. The plan may come directly from the bypass pumping contractor. If plan is submitted, signed, and sealed by an Engineer in the State of Oregon, then procurement may begin after review and acceptance by the ENGINEER. Contractor may elect to submit additional bypass pumping work plans as signed and sealed documents to speed up procurement of items if desired.
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