

**West Point Treatment Plant –
Digester 1 to 5 Low-pressure Sludge Gas (LSG) Pipe Replacement**

Contract Number KC000106

CLARIFICATION 1

Prospective bidders are hereby notified that pursuant to §00 20 00-1.02, King County provides the following questions and responses as clarifications of the referenced Contract Documents. This Clarification form and these clarifications herein are not part of the Contract nor part of the Contract Documents.

Ref.	Section and Page or Drawing	Questions and Responses
1.	M201 M501	<p>Q. Drawing M201 key note 4 states to install an auto drain per drawing M501 detail C. M501 was revised, detail C no longer shows an auto drain trap, now a p-trap type drain. Please confirm that King County's intent is to get eliminate all Shands and Jurs auto drain traps?</p> <p>R. All Shand & Jurs drain traps are eliminated. P-trap drains are to be used. See Addendum 4.</p>
2.	M407 M409 M410 M411	<p>Q. M409 has a picture modified to show future install. It shows a flex between the existing valve and new tee. This flex does not show on any of the other drawings, M407, 410 or 411 that show this area. Please clarify whether or not a flex is required.</p> <p>R. The 24" Flanged Expansion Joint shown on Photo B on Drawing M409 is required and should have been shown on the other drawings cited in the bidder's question. M407, M410, and M411 have been revised to show the expansion joint depicted on M409. See Addendum 4.</p>
3.	00 10 00-2 00 20 00-4	<p>Q. Due to the limited number of scopes available for subcontracting, we respectfully request a 2 week extension to the bid due date to allow us to do a broader search for subcontractors that will help us achieve the 15% SCS utilization requirement for the project.</p> <p>R. See Addendum 4</p>
4.	00 10 00-1	<p>Q. Piping specifications have limited a number of manufacturers. None of them can have pricing by 3/9/21. We request a bid deadline postponement of at least one week.</p> <p>R. See Addendum 4</p>
5.	00 10 00-2 00 20 00-4	<p>Q. SCS currently is 15%. For the work scopes contained in this contract, we are anticipating a lower SCS participation level. Electrical is typically the area of SCS relied upon, however this contract contains very little. We request KC revise the SCS requirement to no more than 5%.</p> <p>R. No. See Addendum 4</p>
6.	40 42 00-4 M411	<p>Q. Per Spec Section 40 42 00, 3.02, A and Drawing M411, Key Note 9, is this the only location on the project that requires insulation?</p> <p>R. Specification Section 40 42 00 paragraph 3.02.A refers to Drawing M411 for the area to receive the specified insulation. Drawing M409 also shows this same area, and helps describe the limits of the insulation in Keynote 6. This is the only area getting the specified insulation.</p>

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7.	40 05 23-2	<p>Q. Weld Examinations: Section 40 05 23, 1.02, D, 2 states "For ASME Fluid Service Category Normal piping, in addition to ASME B31.3 requirements, all pipe field and shop welds shall be visually examined per ASME B31.3 and root welds shall have dye penetrant testing. At least twenty percent of the welds must be examined by dye penetrant testing." Does this mean 100% of the root welds shall have dye penetrant testing and 20% of completed welds shall be examined by dye penetrant testing or does the 20% refer to the number of root welds that require dye penetrant testing?</p> <p>R. Dye penetrant testing shall be done on 20% of the root welds. See Addendum 5.</p>
8.	40 05 23-2	<p>Q Is the dye penetrant testing intended for 20% of the root welds or 100% of the root welds and 20% of the final welds?</p> <p>R Dye penetrant testing shall be done on 20% of the root welds. See Addendum 5.</p>
9.	40 05 23-2	<p>Q. Can the root weld inspections can be bypassed (especially on welds getting RT inspected)?</p> <p>R. No. Radiographic Testing (RT) is only required if 10% of the required dye penetrant testing fails their examination, and would be at the Contractor's expense to perform.</p>
10.	40 42 00-4 M409 M411	<p>Q. Per Spec Section 40 42 00, 3.02, A and Drawing M411, Key Note 9, is this the only location on the project that requires insulation?</p> <p>R. Specification Section 40 42 00 paragraph 3.02.A refers to Drawing M411 for the area to receive the specified insulation. Drawing M409 also shows this same area, and helps describe the limits of the insulation in Keynote 6. This is the only area getting the specified insulation.</p>
11.	01 14 00-2 33 01 30.72-4 40 05 01-5	<p>Q. Do you have any more information available regarding the extents and severity of pyrophoric scale in the LSG piping system? We have experience dealing with pyrophoric scale but the safe handling of pyrophoric scale is on a case-by-case basis-- contingent on both severity and demands of the owner. Given the plan for handling, storing, and disposing of pipe containing pyrophoric scale is developed by the contractor, we wanted to get a better idea for the county's expectations (e.g. decontamination with KMnO4, water submersion, etc.).</p> <p>R. At this time the County cannot offer any further information on the extent or severity of pyrophoric scale in the LSG system. Severity of the issue on past projects has varied as have the mitigation measures. For the purpose of bidding, it may be assumed that pyrophoric scale is not of sufficient severity or extent to require mitigation measures. See Addendum 5.</p>
12.	01 14 00-2 33 01 30.72- 40 05 01-5	<p>Q. There are only two instances of pyrophoric scale mentioned in the specs. The first instance, in Work Restrictions, mentions the contractor providing a plan to KC. Provided there are no other details relating to this, I cannot accurately put together a plan aside from a safety plan. To give a fair, fixed price bid, the best route would be to have an accurate appraisal of what is contaminated and what is-not. If that information is not available, I would imagine change orders would be the best route.</p>

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		<p>The other issue we're having is we've made this aware to our SCS subcontractor and they're expressing their concerns. Therefore, it may be difficult to obtain a demo proposal from an SCS subcontractor given the risks associated with this spec. I believe it would be beneficial to get more clarification or a clause update.</p> <p>First, in 01 14 00-2 Work Restrictions: 2. Contractor shall safely handle, store, and dispose of pipe containing pyrophoric scale according to a plan provided to and approved by the County. All LSG handling components (e.g. pipe, valves, tanks, etc.) may contain pyrophoric scale.</p> <p>Second, in 33 01 30.72-4 Cured-In-Place Pipe Lining: 3.01 INITIAL CLEANING, CLEARING AND FIELD MEASUREMENT</p> <p>A. Steel pipe surfaces are adequately prepared and ready for lining when they are free of dust, dirt, oil, grease, fat, efflorescence, hydrogen sulfide corrosion product, biogas condensate, other penetrating contaminants, and pyrophoric scale. This preparation is expected provide a contamination-free and sound surface.</p> <p>R. At this time the County cannot offer any further information on the extent or severity of pyrophoric scale in the LSG system. Severity of the issue on past projects has varied as have the mitigation measures. For the purpose of bidding, it may be assumed that pyrophoric scale is not of sufficient severity or extent to require mitigation measures. See Addendum 5.</p>
13.	09 90 00-10 40 05 19-3	<p>Q. 09 90 00 Coatings Systems Paragraph (PP) 3.06 Coating Systems lists A. Surfaces to be coated, surfaces not to be coated, coating systems to be used, and required finishes and colors are as follows: New pipe supports welded to the top of the floating roof shall be coating system A-1. Digester 1 to 5 floating roof to restore coating where affected by work and damage under this contract. Is this the only scope of work within this division?</p> <p>R. Yes – The cited paragraph represents the scope of work for the Section 09 90 00 Coating Systems.</p> <p>Ductile iron pipe coating system is specified in Section 40 05 19. See Addendum 5 for change to 40 05 19 paragraph 2.06.D.</p>
14.	09 90 00 40 05 19-3	<p>Q. 40 05 19 Ductile Iron Pipe, PP 2.06 Pipe Coating, C & D. Does this indicate a field applied topcoat over factory coating, or just touch up?</p> <p>R. A final top coat is required and where it needs to be applied is not specified. If the final top coat is applied prior to installation then touch-up in the field would be required to fix any damage to the coating. See Addendum 5 for change to 40 05 19 paragraph 2.06.D.</p>
15.	09 90 00 40 05 19-3	<p>Q. PP D. lists three systems per section 09 90 00; L-1a, B-1, C-1. These are not located within 09 90 00</p> <p>R. See Addendum 5 for change to 40 05 19 paragraph 2.06.D. For top coat apply a Surface Tolerant Epoxy, 8 mils DFT nominal, 250 g/l max VOC compatible final base coat system.</p>
16.	S007 S009 Detail 5 S010	<p>Q. On S007, the design has two typical supports, one longitudinally restrained (detail 2), the other not (detail 1). The longitudinally restrained support adds (2) figure 212 pipe clamps either side of the saddle/u-bolt assembly. On S010, typical details for the 24" across the basin roof, all details show the longitudinally restrained support. We typically see longitudinally restrained supports on a fraction of the total</p>

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		<p>supports. The longitudinally restrained supports are much more expensive than the gravity and transverse supports. Is King County's intention that every support be the S007 detail 2 style?</p> <p>Similarly, drawing S009 Detail 5 shows restrained supports. As it stands there would be 188 – 12" figure 212 pipe clamps and 164 – 18" figure 212 pipe clamps. There would be a major cost savings if many of the supports were gravity and transverse but not longitudinal.</p> <p>R. No change to the structural design. The intent is for all supports across the East Primary Sedimentation Basin roof to provide gravity, transverse, and longitudinal bracing. Bracing was spaced per the SMACNA Seismic Restraint Manual Guidelines for Mechanical Systems 2008 requirements, except for the supports on the roof of the primary sed tank where it was impractical to meet the maximum SMACNA spacing with mitigating circumstances that justify the increase in spacing.</p>
17.	40 05 23-2	<p>Q. Is the intention of the County supplied CWI inspections to meet the requirements of in process and final Visual inspection on all welds.</p> <p>R. No. Examinations are the Contractor's quality control responsibility as defined in ASME B31.3 Chapter VI. The Owner's inspector is to verify that all required examinations and testing have been completed and to inspect the piping to extent necessary to be satisfied that it conforms to all applicable examination requirements of the Code and of the engineering design.</p>
18.	M109, M110, M111, M112, M113, and M114 40 06 71	<p>Q. There are ball / needle valves that are on the PIDs but no size is given or a detail. Specifically for the Sample ball & needle valves, PDI ball & needle valves, and there is no spec for the needle valves. Please clarify. There are ball 21 valves marked valves on the schedule. Where are these located?</p> <p>R. The intent is for the new sst sensing lines to be sized based on existing differential pressure gauge, which is to be reinstalled with the existing needles valves. Notes and demo hatching on P&IDs, demolition P&IDs and Instrument Schedule in Section 40 06 71 are consistent with this intent. Drawing key notes will be edited to better reflect this intent. See Addendum 5.</p>
19.	02 83 00	<p>Q. 02 83 00 – Lead Paint Abatement lists procedures only for 12 and 18-inch diameter LSG piping in the tunnel galleries.</p> <p>a. How much of this pipe will need Lead Paint Removal? What is the longest section of pipe you are able to maneuver and remove from the tunnel galleries?</p> <p>b I can work up a number for each flange, valve, bolted connection, but the magnitude for this scope of work for this is going to be quite small.</p> <p>R. The amount of lead abatement and longest section of LSG piping able to maneuver in the tunnel is related to the Contractor's means and methods and will not be commented on.</p>
20.	00 10 00-2 00 20 00-4	<p>Q. Request SCS requirement be lowered to no more than 2%.</p> <p>R. No. See Addendum 4. SCS was dropped to 10%.</p>
21.	M108 01 78 40-A 40 05 64	<p>Q. Butterfly Valves 167711, 16721 & 16731 as shown on Drawing M-108 do not seem to appear on the Section 40 05 64, B. Valve List. Are these new valves or existing to be re-used?</p>

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		<p>R. These valves will be added to 01 78 40-A and the valve list in 40 05 64. See Addendum 5.</p>
22.		<p>Q. Piping specifications have limited a number of manufacturers. None of them can have pricing by 3/9/21. We request a bid deadline postponement of at least one week.</p> <p>R. See Addendum 4.</p>
23.		<p>Q. SCS currently is 15%. For the work scopes contained in this contract, we are anticipating a lower SCS participation level. Electrical is typically the area of SCS relied upon, however this contract contains very little. We request KC revise the SCS requirement to no more than 5%.</p> <p>R. No. See addendum 4. SCS was dropped to 10%.</p>
24.	01 14 30 1.06	<p>Q. Will the Contractors be allowed to use King County's cranes?</p> <p>R. Yes, Contractors can use King County's cranes if the requirements in the specifications are followed, See 01 14 30 1.06.</p>
25.	G103	<p>Q. Where will cranes be allowed for lifting operations on this project?</p> <p>R. See drawing sheet G103.</p>
26.	§01 13 00-1	<p>Q. Is there CCTV available to get eyes on the existing segment slated for CIPP lining? What is the footage of CIPP lining?</p> <p>R. Length of buried 24 inch LSG pipe is approximately 470 feet, to be verified by the Contractor. CCTV video will be provided as reference documentation to the Contractor after Notice to Proceed.</p>
27.	M108 01 78 40-A 40 05 64	<p>Q. Just a FYI there are 3 6" valves on sheet M108 167711, 167721 & 167731 that are not on the valve schedule.</p> <p>R. See Addendum 5 for valves added to 01 78 40-A and the valve list in 40 05 64.</p>

This Clarification will not form a part of the Contract Documents. Bidders are reminded to review addenda for changes to the Invitation to Bid documents.

Issue date: 03/17/2021

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