Ohio Department of Transportation Prebid Questions

Project No. 100423 Sale Date - 6/24/2010

Question Submitted: 5/21/2010 Question Number: 1

ODOT Project 100423 (Washington/Athens) Culvert Replacement plans indicate 3 liner pipes to be installed using SS 937. The 54" liner and 60" liner do not call for a specific ID or OD. A 63" OD liner will have a 60" ID, and a 54" OD liner will have a 50.5" ID. What is ODOT's prefence for the liners, 54" and 60" inside or outside diameter? Secondly, SS 937 calls for a minimum RSC of 100. Is this the RSC that ODOT intends to utilize on this project?

Question Submitted: 5/25/2010 Question Number: 2

ODOT Project 100423 (Washington/Athens) question on specification. Based on sizes listed the spec should read SS 937 As per plan 937.02 Type B.937 Type A is OD (outside diameter) sensitive pipe and Type B is based on ID (inside diameter) pipe. Type B also requires an extrusion or fusion joint unlike Type A which does not require a pressure joint to keep out grout. Page 3 of 17 Item 837 states wording as "inside diameter" for 78" however the wording "inside" is omitted for 54" and 60" OD based SS 937.02 Type B pipe is available from multiple sources. Respectfully request an addendum be issued stating pipe shall be SS 937 Type B

Question Submitted: 5/26/2010 Question Number: 3

Follow up on addendum for ODOT Project 100423 (Washington/Athens) question on specification. RSC 100 pipe based on height of cover,condition of culverts as well as minimal thickness and strength of grout may not offer long term support of the host pipe. RSC 100 is no longer manufactured by some manufacturers due to contractor complaints that the pipe is too flexible to work with and has been replaced by RSC 160 or RSC 250 pipe. ODOT is allowing RSC 100 to be used which may not be capable of handling the design load required for culvert to act as a stand alone pipe. Most ODOT slip lining specifications require the manufacturer to submit custom design calculations to certify that the pipe meets loading conditions at the site as if it were being used as a direct burial installation. Request addendum requiring 937.02 Type B pipe as per plan. RSC 160 or greater.

Pipe liners are not stand alone pipes and are not designed as such. no addendum will be issued for this question.

<u>Question Submitted:</u> 6/10/2010 <u>Question Number:</u> 4

Please calrify the answer to the question dated 6/8/2010 regarding ss 837. When you same "Yes as long as it meets the specifications" are you referring to the project specifications and associated addenda that have been issued. Thank you

Please see addendum 2

Question Submitted: 6/11/2010 Question Number: 5

ODOT Project 100423 Per the question raised below about 937 Type A not having a pressure joint to keep grout out. Type A does allow for butt fusion joints, which makes a monolithic leak free system and when fused can be pressure rated with a PSI of 51. Also Type A calls for an HDPE liner with interlocking joints. The interlocking joint type has an ASTM D-3212 approved gasket that can withstand 25 ft of head or 10.8 psi. Supplemental Spec 937 Type A's interlocking joint HDPE pipe also meets AASHTO M-326-08, the only national specification for culvert relining in the US. Therefore, the statement that was raised on 5/26/10 is inaccurate. Respectfully request and addendum be issued allowing SS 937 Type A for the 54" and 60" liners. A prebid question has been submitted inquiring about the use of SS 837 materials being used on the project 100423. ODOT's response to this question was "yes, as long as it meets the specifications." The plans specifically call for liner pipe that meets the requirement of SS 937, therefore materials conforming to SS 837 do not meet the specifications for the project. The use of SS 837 materials, Contech Ultra Flo being the only 837 material able to meet the size requirements, does not match the material required by the plans and specifications. Furthermore, the joints of Ultra Flo do not respond nearly as well during the grouting process as SS 937 materials. The Mannings coefficient is higher than that of SS 937 materials, therefore reducing the amount of flow vs. SS 937. SS 937 materials also handle deformation, sags, and bends in the host pipe much better than SS 837 materials, as metal pipes are much more susceptible to damage during installation as liner pipe than HDPE. SS 937 materials also have a longer design life, and will respond very well to acidic soil conditions. We respectfully request the use of SS 837 materials be removed as acceptable materials for use on this project.

Question Submitted: 6/15/2010 Question Number: 6

ODOT Project 100423 SS 937 Type A is a solid wall (OD) Outside Diameter Spec per the pipe manufacturers. Request using in place of 54" ID a 54" OD (50.478" ID) which will flow 33,228 GPM or 74 cu./ft. sec, thus increasing the existing structure flow by 29%. Also request using in place of 60" ID a 63" OD (58.89" ID) which flow 50,124 GPM or 111.7 cu./ft. sec, thus increasing the existing structure flow by 54%. Twin 102" existing structures, requesting use of 84" ID HDPE Pipe meting SS 937 Type B. 84" ID HDPE Pipe will flow 130,961 GPM, thus increasing the existing structures by 37%. We respectfully request the use of 54" OD Solid Wall HDPE Pipe and 63" OD Solid Wall HDPE pipe, meeting SS 937 Type A and 84" S 937 Type B for use on this project.

Culverts were sized according to inside daimeter. smaller inside diameters will not be accepted. Please see addendum 2.

All prospective bidders, subcontractors, suppliers, materialmen and all others who have an interest in these prebid questions and answers are advised that these items are being provided for informational purposes only and are not part of the bidding documents. If a question warrants a clarification, the Department will issue an addenda addressing the request for clarification to all plan holders. If the Department believes that the bidding documents adequately address the request, the contractor will be advised accordingly.

Ohio Department of Transportation Prebid Questions

Question Submitted: 6/18/2010 Question Number: 7

We understand the 54" OD and the 63" OD have not been approved for this project. We would like to ask if an 84" ID is acceptable as well as the 78" ID liner. There is currently only one manufacturer of 78" ID HDPE pipes. If 84" ID HDPE liners are allowed, there are 3 manufacturers available to produce that size of pipe. An 84" ID liner with an OD of approximately 92" will still easily fit into the existing pipe. Allowing an 84" ID liner will ensure more competitive material pricing.

See addendum 3

Question Submitted: 6/8/2010 Question Number: 8

Will the alternate liner pipe materials listed in ss 837 be allowed on this project?

Please see addendum 2

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Project No. 100423 Sale Date - 6/24/2010

WAS-75693 - SR-618-2.30;ATH-50-37.84

Question Submitted: 6/21/2010 3:24:06 PM

Plan note states that the contractor is to install liner pipe without a cofferdam in Davis Creek. How would you clean the pipe and install pipe and grout in 3' of water?

Bid as per plan, the means and methods are up to the contractor.

Question Submitted: 6/21/2010 10:55:00 AM

With regards to a question posted on 6/18/2010 claiming only one manufacturer of 78" ID HDPE pipes. This question is erroneous and NOT based on fact and is a blatant attempt to appeal to the DOT's sensitivity about sole sourcing. In reality there are 3 manufacturers of 937.02 Type B pipe. One claims to make 18" thru 132", one claims to make 300mm (12") thru 4000mm (158")and one claims to make 18" thru 120" with an *note "Other sizes available upon request." This information supplied is right off each companies web site. I respectfully request the question dated 6/18/2010 not be considered due to the erroneous information being stated.

Erroneous or not, ODOT does not see a problem with allowing a larger conduit if the plans and specifications are met.

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Thursday, October 21, 2010 4:20:40 PM Page 1