

**79. REFERENCE:** Drawing 79K38703, Sheet C-23

**QUESTION:** In package 3 there is a sewer manhole schedule on page C-23. The right hand column on the table says "diameter(ft)". Is this to mean the inside diameter of the manholes or something else? Some of the dimensions are other than 4' and are weird dimensions, ie: 3.28, 3.94, 4.92. Should we just price these as 4'ID and 5'ID?

**ANSWER: The inside dimensions indicated are actual field measurements. Standard manhole dimensions of 4', 5', etc... may be used.**

**80. REFERENCE:** Package 1 option 4 drawing c-55 18" double check valve assembly.

**QUESTION:** The plans show an 18" double check valve to be installed. That size is not available. 12" is available with special order. Please advise.

**ANSWER: The design depicts a constructed assembly of two 18" single check valves. Drawing 79K38699 Rev B, Sheet C55, Detail 2, change callout as follows:**

**From: "FEBCO MODEL 850 or ENGINEERED APPROVED EQUAL:**

**To: "VALMATIC 1800 SERIES check valves or engineered approved equal"**

**This model of check valve is available in 18" sizes. The offeror can alternatively submit during shop drawings the use of multiple pre-assembled double check backflow preventers in parallel providing the same functionality for approval. All other appurtenances shall still apply.**

**81. REFERENCE:** Page 2 of 1442 Form

**QUESTION:** There is a list of options and tasks. Where does the "Revitalize KSC Wastewater System, Design Package 3" go? Please clarify.

**ANSWER: Please see amendment #4.**

**82. REFERENCE:** Task 2 & Option 5

**QUESTION:** They appear to be the same, what is the difference?

**ANSWER: Please see amendment #4.**

**83. REFERENCE:** In General, Various Sheets and Locations

**QUESTION:** Is the water main that are to be abandoned in place to be grouted or just capped off?

**ANSWER: Please see Amendment #4 for modified drawings 79K38699 REV B. Most abandoned mains will be capped, mains running beneath major roadways have been identified to be grouted (See sheets V4, C4, C5, C13, C15).**

**84. REFERENCE:** Reference Lift Station # 1AA, Plan sheet # 37, Drawing M2, Flag Note #1

**QUESTION:** As stated “ Epoxy grout the mid seam crack in the wet well wall”, Does this note direct the contractor to dewater the lift station structure and repair the cracks from inside and outside of the structure, or can the structure remain in service and epoxy inject and repair from the exterior side of the structure?

**ANSWER: Exterior repairs are acceptable if repairs accomplish the primary goal of permanently sealing the cracks.**

**85. REFERENCE:** Drawing 79K38703

**QUESTION:** What pipe material was used for the existing sewer lines?

**ANSWER: Existing sewer lines have various pipe materials including vitrified clay, cast iron, PVC, and HDPE.**

**86. REFERENCE:** Drawing 79K38703

**QUESTION:** Are there any service laterals along the existing / proposed sewer lines or do the services enter the manholes? If the services connect to the sewer line, can locations and/or quantities be provided?

**ANSWER: Yes, service laterals intersect at sewer lines and at manholes. For bidding purposes the offeror shall assume twenty (20) service lateral locations along the existing/proposed sewer lines. Drawing 79K38703, Sheet V3, general note 7 requires the Contractor to field confirm the exact location.**

**87. REFERENCE:** L.6 Relevant Experience / Past Performance Proposal portion of the solicitation

**QUESTION:** Part I – Relevant Experience / Past Performance Summary provides for the offeror and each major subcontractor, as defined, to submit summaries for five projects. Part II – Safety Past Performance Supplement only mentions submitting and evaluating the safety information of the offeror. No mention is made regarding major subcontractor information or requirements for this part. Part III – Past Performance Questionnaire Copies only mentions submitting the first page of the past performance questionnaire that the offeror has sent to each of its customers from Part I. No mention is made regarding major subcontractor information or requirements for this part and the questionnaire itself has no means for identifying anyone other than the offeror. Please confirm that it is the government’s intention that information for major subcontractors is applicable to Part I (and subsequently Part IV) and is not required to be submitted under Part II or Part III. If such is not the intention, please clarify the page limit intent for Part II and the means of routing and identifying the e-mailed information under Part III to correspond with the proper offeror.

**ANSWER: Parts I, III and IV are for both the offeror and major subcontractors. Part II applies to the offeror. Past performance questionnaires are to be sent to each customer contact identified in the relevant experience past performance summary. The offeror shall identify in Section I of the past performance questionnaire the name of the major subcontractor being evaluated as well as the name of the offeror submitting a proposal for this acquisition.**

**88. REFERENCE:** Specification 79K38704, Section 03 40 00.00 10 Plant-Precast Concrete Products for Below Grade Construction

**QUESTION:** Is any type of lining required for the interior of new manholes? If yes, can a specification be provided?

**ANSWER: As noted in the Specification Section 03 40 00.00 10, Part 1.1, References, ACPA 01-110 (1984) Design Manual for Sulfide and Corrosion Prediction and Control, hydrogen sulfide corrosion is a concern with new manholes. Coating requirements for new manholes shall be in accordance with Specification Section 09 93 00, Concrete Repair and Hydrogen Sulfide Protective Coating.**

**89. REFERENCE:** Specification 79K38704, Section 03 40 00.00 10 Plant-Precast Concrete Products for Below Grade Construction

**QUESTION:** Can precast inverts be used?

**ANSWER: Yes.**

**90. REFERENCE:** Drawing 79K38703, Sheet C25

**QUESTION:** Sheet C25 – Detail 1 shows a 2' – 8" opening in the manhole but Detail 5 shows smaller opening...which is correct?

**ANSWER: Detail 5 is correct. See Section C.2(b), as amended. Drawing 79K38703, sheet C25, Detail 1, change the upper manhole width as follows:**

**FROM: 2' – 8"            TO: 2' – 0"**

**91. REFERENCE:** Drawing 79K38699, Detail 1, sheet C56

**QUESTION:** Detail 1, sheet C56 indicates the annular space between the carrier pipe and casing pipe shall be empty. Part 2.5 of Section 33 05 23.16 appears to indicate a sand & grout mixture is to be placed in the annular space. Please clarify if the annular space between carrier pipes and steel casings should be filled with sand or left empty.

**ANSWER: The carrier pipe shall be empty as shown on Drawing C56, except as noted in Detail 1 on Drawing C56. The concrete shall comply with Specification Section 33 05 23.16, Part 2.6.**

**92. REFERENCE:** Specification 79K38700, Section 33 11 00 Part 2.1.2.29

**QUESTION:** Part 2.1.2.29 references bonded joints installed where indicated. We do not find any reference on the drawings that would indicate the pipe is to be bonded. Please confirm no bonding of ductile iron pipe joints is required.

**ANSWER: No bonding of ductile iron (DI) pipe joints is required.**

**93. REFERENCE:** Drawing 79K38699, sheet C55

**QUESTION:** We are being told a backflow preventer assembly in the size required on detail 2, sheet C55 (18") is not available. Perhaps dual 10" BFP assemblies should be utilized as a solution to the issue? Please advise.

**ANSWER: Please reference question/answer #80.**

**94. REFERENCE:** Drawing 79K38699, sheet C41

**QUESTION:** Detail 17 on sheet C41 indicates connection to an existing 4" water main, however the material type for this line is not indicated. Please clarify the material type.

**ANSWER: See Note 40 on Drawing V3.**

**95. REFERENCE:** Drawing 79K38699, sheet C44

**QUESTION:** Referencing detail 35 on sheet C44, this detail indicates 4" PVC for the branch piping however on sheet C18 this same piping is called out as 2" in size. Please clarify which size is correct.

**ANSWER: The correct pipe size is 2". See Section C.2(b) as amended. Drawing 79K38699, Sheet C44, Detail 35, change the following callouts as follows:**

**FROM: 4"x3" RED                      TO: 3"x2" RED**

**FROM: 4" PVC WM                      TO: 2" PVC WM**

**96. REFERENCE:** Specification 33 05 24

**QUESTION:** Specification 33 05 24 indicates the HDPE used for directional drilling is to be DR 11, IPS size. Specification 33 11 00 references HDPE to be DIPS in size and difference DR values depending on the size. We would assume specification 33 11 00 should be followed, but wanted to confirm. Please advise.

**ANSWER: Specification Section 33 05 24, Part 2.4.2 describes HDPE piping specifically for electrical when referencing DR 11, IPS size.**

**97. REFERENCE:**

**QUESTION:** In regards to the tanks: Are both tanks to be taken down at the same time? Can they be removed right away, or is there a waiting period? Also, what are the working hours at KSC?

**ANSWER: Please see amendment #4. For tank demolition schedule see section F.1. For working hours at KSC please see section F.2.**

**98. REFERENCE:**

**QUESTION:** regards to specification Section 09 93 00, page 231, Item 1.8 Qualifications, paragraph 3, states the products you are calling for but with the term "or equal as specified". Does the suggested or equal products need to be approved **prior to** submittal of the offer, or is it done after the submission?

**ANSWER: Suggested or equal products do not need to be approved prior to submittal of the offer. Please see question/answer #5 in Amendment 4.**

**99. REFERENCE:**

**QUESTION:** The plan calls for an 18" Backflow preventer. No-one manufactures an 18" Backflow, we can do a parallel 10". Please Advise

**ANSWER: Please see question/answer #80.**

**100. REFERENCE:** Drawing 79K38703

**QUESTION:** The plans do not show any invert elevations for the drop manholes.

**ANSWER: Drawing V3, general note 7 requires the Contractor to field confirm the inlets and inverts prior to construction. The offeror shall assume 10% of the inlets shall require the drop inlet.**

**101. REFERENCE:** Drawing 79K38703, Sheet M11

**QUESTION:** The discharge piping on LS 12A is 3" per plan. Manufacturers do not make 3" DIP "lined". What kind of pipe do we use?

**ANSWER: See Section C.2(b) as amended. After the transition from the 4 inch discharge piping to 3 inch for connection to the existing forcemain, the new 3 inch piping shall be PVC. Drawing 79K38703, sheet M11, add an additional row to "LIFT STATION DATA" table for LS 12A as follows: "DISCHARGE PIPE MATERIAL - PVC".**

**102. REFERENCE:** Specifications 79K38700

**QUESTION:** The Fiber Optic specifications, 27 13 23.00, list 36 count and 72 count single mode Fiber Optic Cable. The Instrumentation specs 40 95 00 indicate 12 fiber count. Please clarify which is required?

**ANSWER: The Contractor is to provide 12-count cables. Specifications 79K38700, Section 27 13 23.00, Part 2.1.3.7 is replaced in its entirety with the following:**

**2.1.3.7 Number of Fibers Per Tube Per Cable**

**12-fiber cable shall contain single mode fibers. Cable core configuration shall be comprised of two loose buffer tubes, each containing six fibers. Six fibers in each loose buffer tube shall be color coded using the first colors of the standard Munsell color code, Blue, Orange, Green, Brown, Slate, and White. Loose buffer tubes shall be color coded using the standard Munsell color code, Blue, Orange, Green, Brown and Slate. Consider single mode fibers last in configuration.**

**103. REFERENCE:** Drawings 79K38703

**QUESTION:** I did not see a Electrical drawing For LS 10A. drawing I-5 in package 3 shows fiber run to FOT panel but no designation or drawing to determine distance. How far is the run in Communication Block Diagram ?

**ANSWER: Information specific for Lift Station 10-A can be found in drawing 79K38703 sheets M8, E15, E16, I3, I4, and I5. Reference sheet I-5, note 1 located in Grid G7/G8 "ALL SCREENED ELEMENTS DENOTE FUTURE WORK"; the run and termination to the FOT panel in question will be performed by the government.**

**104. REFERENCE:** Drawings 79K38703

**QUESTION:** Regards Plan Page # V2, titled, Drawing Index, category Design Package #3, line 66 and 67, we see electrical drawings, but cannot locate the mechanical drawing to indicate the scope of work as applicable to Lift Station 4S.

**ANSWER: Rehabilitated lift stations site plans are shown on sheets M8 and M9, typical plans for these lift stations are shown on sheet M10 with lift station specific data provided in tables.**

**105. REFERENCE:** Design Package 2 drawings 79K38701, Water Towers, sheets D1 and D2

**QUESTION:** Are the existing foundations for the water towers to be removed? If so please provide sizes of existing foundations?

**ANSWER: No. See sheet V2, note 21. Also see callouts on sheets D1 and D2 stating "EST FOOTER TO REMAIN".**

**106. REFERENCE:** Design Package 2 drawings 79K38701, Water Towers, sheets D1 and D2

**QUESTION:** Who retains the salvage rights of the steel from the water towers?

**ANSWER: Please see question/answer #67. See section J-B-21 – Recycling and Salvaging Materials under “Contractor Property”. The contractor shall assume ownership of all metals.**

**107. REFERENCE:** Design Package 3 drawings 79K38703, C3, Manholes S47, S41A, S43, and S50

**QUESTION:** According to the Gravity Sewer Manhole Schedule on sheet C23 Manhole S41A invert elevation is -0.52, Manhole S47 is -0.03, Manhole S43 is -1.74, and S50 is +0.10. According to these elevations all sewer is flowing to S43. This does not appear to be correct. Please confirm if the invert elevations are correct?

**ANSWER: The invert elevations are correct. The Contractor shall confirm existing conditions per Drawing V3, General Note 7. Additional manholes exist between manholes S43 and S47 which are not in contract.**

**108. REFERENCE:** Design Package 3 drawings 79K38703, C24, Detail 1

**QUESTION:** The detail calls out for excavatable flowable fill around and over the pipe. Shouldn't compacted clean fill be installed over the flowable fill or pipe?

**ANSWER: The asphalt pavement restoration work shall be in accordance with the Detail 1, sheet C24.**

**109. REFERENCE:** Design Package 1 drawings 79K38699, E7

**QUESTION:** Is the SQ D monitor being located in the MCC and also at the transformer?

**ANSWER: No. The Square D Monitor shall be located Inside the MCC as shown on Drawing 79K38699, Sheet E7.**

**110. REFERENCE:** Design Package 1 specifications 79K38700, Section 26 12 19.00 40, Page 474, 2.1.3.1 Specified Transformer Losses

**QUESTION:** The specification calls for 300 and 500 kVA transformers to have specified load losses. There are no 300 or 500kVA transformers on this project. Are there losses specified to the 750 kVA transformer?

**ANSWER: Yes, the No load losses (NLL) for the 750 kVA transformer shall be 1006 watts max at 20 degrees C and load losses (LL) shall be 5134 watts max at 85 degrees C.**

**111. REFERENCE:** Design Package 1 drawings 79K38699, Sheet E11

**QUESTION:** Please provide fiber stand counts that are required from the Utility Annex to Pump Station 5?

**ANSWER: Please see question/answer #102.**

**112. REFERENCE:** Design Package 1 drawings 79K38699, Sheet E11

**QUESTION:** Please provide fiber stand counts that are required from FOT098A to the Analyzer Building?

**ANSWER: Please see question/answer #102.**

**113. REFERENCE:** Design Package 3 drawings 79K38703, Sheets C1 through C22

**QUESTION:** The plans do not indicate any laterals coming off of pipe mains, but only manholes. For the pipes being repaired by the lining process this can be an issue because if there are any laterals the lining needs to be cut at these locations. Are we to assume the plans are correct and there are no laterals off of the main lines?

**ANSWER: Please see question/answer #86.**

**114. REFERENCE:** Drawing 79K38699 Rev. A, Design Package 1, Sheet 3 (V3), General Note 21 / Drawing 79K38703 Rev. A, Design Package 3, Sheet 3 (V3) General Note 21

**QUESTION:** Design Package 1 & 3, Sheet 3 (V3) General Note 21 states that the Contractor shall make all connections to the new and existing utilities as shown on the drawings and shall furnish all labor and materials necessary to complete the work. Is the Contractor to assume that all connections to the existing utilities that require a depressurized line will be performed under a utility outage? Given the potential difficulties of obtaining water main outages at KSC in the recent past, is the Contractor to include the use of line stops to facilitate the connection to existing utilities in instances where a utility outage is not available? If the line stops will be required, please specify the size, offset from connection, and location?

**ANSWER: Please see amendment #4 including revised bid documents, drawings, and specifications for line stop information.**

**115. REFERENCE:** Drawing 79K38701 Rev A, Design Package 2, Sheet 2 (v2), General Note 35

**QUESTION:** Design Package 2, Sheet 2 (V2) General Note 35 states that the Contractor shall conduct seismic monitoring, displacement monitoring, and other measures deemed necessary to monitor and document the criteria to ensure that the surrounding facilities suffered no adverse impacts or structural damage during demolition activities. The general note also refers to Specification 02 41 00 for additional information; however this specification appears to be silent about any monitoring being required. Will seismic monitoring, displacement monitoring or any other measures be required for the performance of this work? If monitoring is required please provide further information on what data is to be collected and locations that will be require monitoring?

**ANSWER: Please see question/answer #73 in Amendment 4.**

**116. REFERENCE:** Drawing 79K38703 Rev A, design Package 3, Sheet 2 (V2) Drawing Index and Sheet 79 (I5)

**QUESTION:** Design Package 3, Sheet 2 (V2) Drawing Index states that Sheet 79 (I5) should be supplied as Rev A. Sheet 79 (I5) as furnished under this solicitation does not include Rev A. Please provide sheet 79 Rev A if applicable?

**ANSWER: New sheet provided with Amendment #4, 79K38703 REV B; no changes.**

**117. REFERENCE:**

**QUESTION:** What are the insurance requirements for this project? We would like to submit this to our insurance agent to provide an estimated cost for this project.

**ANSWER: Please see Section I, I.2 Listing of Federal Acquisition Regulation (48 CFR Chapter 1) Clauses Incorporated by Reference and I. 3 NASA Federal Acquisition Regulation (48 CFR Chapter 18) Clauses Incorporated by Reference:**

**52.228-5 INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997)**

**NFS 1852.228-75 MINIMUM INSURANCE COVERAGE (OCT 1988)**

**118. REFERENCE:**

**QUESTION:** There is no space on the bid form that references bid package #3. Please revise bid form accordingly.

**ANSWER: Please see amendment #4.**

**119. REFERENCE:**

**QUESTION:** Sheet C-3/Note#1 shows 16" steel casing and drawing C-56 details show a requirement of 10" pipe with 24" casing. Please specify which is correct.

**ANSWER: Drawing 79K38699, Sheet C-56, Detail 1 is correct. See Section C.2(b) as amended. Drawing 79K38699, Sheet C3, Note 1, change as follows:**

**FROM: JACK AND BORE WITH 16" STEEL CASING PIPE AND 10"DI CARRIER PIPE**

**TO: JACK AND BORE WITH 24" STEEL CASING PIPE AND 10"DI CARRIER PIPE**

**120. REFERENCE:**

**QUESTION:** Detail #4 on page C-39 is referring to Detail #3 on page C-51; we are advising that this be changed as it is the incorrect fitting to be used under that application.

**ANSWER: See Section C.2(b) as amended. Drawing 79K38699, Sheet C51, Detail 3; delete the following callouts in their entirety: Socket clamp Anvil International, Figure 594 (typ); Anchor strap Anvil International, Figure 592.**

**Drawing 79K38699, Sheet C51, Detail 3; Add Detail Notes 1 and 2 as follows:**

1. **Restrained plugs for PVC pipe materials shall conform to Socket clamp Anvil International, Figure 594, or approved equal (typ).**
2. **If a restrained plug is not beside a MJ fitting, the Contractor can install a restrained cap. Restrained mechanical joint ductile iron plugs and caps shall conform to ANSI/AWWA C153/A21.53.**

**121. REFERENCE: Drawing 79K38703, Sheet C9**

**QUESTION: What are the limits of the sleeved pipe?**

**ANSWER: See Drawing 79K38703, Sheet C26, Detail 5.**

**122. REFERENCE: Drawing 79K38699 & Drawing 79K38703**

**QUESTION: Is all pipe abandoned in place? Some sections show it is and others it does not...**

**ANSWER: Existing pipes are to be either be abandoned in place or left in service per the drawings. Some abandoned pipes shall be grout filled; please see question/answer #83.**