

NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
I-95 over Lake Marion - Project ID P041130 - Clarendon and Orangeburg Counties

FINAL RFP - ROUND 2 (Addendum #3)

Date Received: 6/19/2025

Meeting Date: 6/25/2025

Question No.	Category	Section	Page / Doc No.	Question/Comment	Discipline	SCDOT	
						Response	Explanation
1	Attach_A	Exhibit 5	Pg. 65	Section 401: Full Depth Asphalt Pavement Patching requires 1500 square yards of full depth asphalt pavement patching to be performed. However, the uniform depth of patching is not provided. Please specify the depth of patching or consider changing the unit price to Ton.	Construction	Revision	Exhibit 5 will be updated to reflect 6" uniform depth for full depth patching.
2	Attach_A	Exhibit 5	Paragraph (33) pdf page 244	RFP states, "For the existing bridges over Lake Marion, entirely remove and dispose of existing footings and foundation seals at interior bents / piers. Remove existing piles to a depth of 2-feet below the lakebed (mudline)." Please clarify. Is it the intent of the Department to have all interior bents removed entirely, or just the ones located in the main channel? Can the foundation seals and footers outside the main channel be removed to the same requirements set for the pile foundations?	Construction	Revision	Footings and Seals for existing I-95 bridge piers in the channel, Piers S & T, are required to be entirely removed. For all other piers in the lake, remove substructure to a depth of 2-feet below the lakebed. An existing plan sheet will be added to Attachment B to clarify.
3	Attach_A	Exhibit 5	Paragraph (33) pdf page 244	RFP states, "For the existing bridges over Lake Marion, entirely remove and dispose of existing footings and foundation seals at interior bents / piers. Remove existing piles to a depth of 2-feet below the lakebed (mudline)." The piles extend out of the foundation seals into the foundation above which is above the mudline on the piers. The top of the foundation seals are below the mudline in the areas outside of channel which could require sheeting to contain the concrete debris as the foundation seals are demolish under the water and below the mudline. This would add a significant amount of time and cost to the project.	Construction	Revision	Footings and Seals for existing I-95 bridge piers in the channel, Piers S & T, are required to be entirely removed. For all other piers in the lake, remove substructure to a depth of 2-feet below the lakebed. An existing plan sheet will be added to Attachment B to clarify.
4	Attach_A	Exhibit 5	Paragraph (33) pdf page 244	If foundation seals are required to be removed, please provide details on how they were constructed. For example, was wood sheeting used to the form seal foundations or some other type of sheeting such as steel or a steel box?	Construction	Revision	Foundation seals are required to be entirely removed at existing piers S & T (I-95 bridges) only. Elsewhere, removal limits are to a depth of 2-feet below the mudline. Seals were poured concrete and underwater inspection report states seals "typically exhibit medium to soft concrete hardness". No details of how they were constructed are available.
5	Attach_A	Agreement	Section IV.A.2 pdf page 78	Clarify if Agreement Section XII. Demolition, Removal & Disposal of Structures will be included in the "Project Close-out Activities". RFP states "Project Close-out Activities" may include this section. May is abiguous language and clarification is requested for project scheduling purposes.	Construction	No_Revision	Some demolition may occur prior to Substantial Completion, however, the remainder of any demolition activities may/can occur after Substantial Completion. <u>Demolition is not a requirement to achieve Substantial Completion.</u>
6	Attach_A	Exhibit 4f	Geotechnical	The planned structures will be founded on drilled shafts within the Eocene Santee Limestone and underlying Undifferentiated Eocene. The primary path of earthquake energy transfer to the structure is expected to be from these Tertiary strata through the drilled shafts to the bridge structure. Has The Department considered whether H and V*sH values based on the profile condition at the structure may better characterize the seismic frequency content? The softer and scour-able overburden soils are not expected to meaningfully affect the earthquake energy or frequency content.	Geotechnical	No_Revision	Yes. Use the ADRS curves provided in the RFP.



7	PIP	Geotechnical	Geotechnical Baseline Report	The Geotechnical Baseline report states that the nearby 500-ft deep geophysical test from the I-95 and US301 interchange project was relied on for development of the project ADRS parameters, specifically the depth to B/C boundary (H) and the weighted average shear wave velocity to depth H. That test record shows upper the strata, about +85-ft to -25-ft, has a shear wave velocity above the B/C boundary value; below this to the test termination at 500-ft the Vs measured a generally consistent Vs between 1500 and 2000 ft/sec. Due to the age, stiffness, and fabric of the deeper strata, has The Department considered whether using the soil column value of 577 ft best represents the frequency content of the seismic soil response, notwithstanding the typical definition in GDM Section 12.4?	Geotechnical	No_Revision	Yes. Use the ADRS curves provided in the RFP.
8	Attach_A	Exhibit 4f	SC Seismic ADRS Curve pdf page 204	The lower limit of TNH shown in the ADRS Curve Table on page 204 is 0.31, but if the 4H/V formula (shown in the table) is used, the calculated number is 1.28. Please clarify what lower limit of TNH is to be used.	Geotechnical	No_Revision	The lower limit is 0.31 as shown in the provided ADRS curve. The calculations consider both the Simplified Procedure and Successive 2-Layer Approach to provide a range for TNH.
9	Attach_A	Exhibit 4f	SC Seismic ADRS Curve pdf page 205	The RFP Exhibit 4f provides the ADRS curves for the project. It also provides the calculated natural period of the soil column. The ADRS curves are considered final. Based on the design team's evaluation, the structure configuration, and the final seismic soil-structure interaction (including SSL softening effects), may the natural period of the soil column TNH range be revised from that listed in the RFP to best represent the site condition?	Geotechnical	No_Revision	No. Use the ADRS curves provided in the RFP. Note that the period of the earthquake does not coincide with the natural period of the soil column.
10	PIP	Hydraulics	Existing Pipe Hydraulic Report	Have video pipe inspections been performed? If so, can those files be provided?	Hydrology	No_Revision	These will be provided in the Project Information Package via ProjectWise Exchange folders.
11	PIP	Hydraulics	Existing Pipe Hydraulic Report	If an existing crossline pipe does not currently meet the HW/D requirements, will SCDOT allow these pipes to be retained if headwater conditions are maintained or improved?	Hydrology	No_Revision	This would be considered pipe specific and not a general project wide acceptance. HW/D at all locations shall be improved to be less than 1.5. Please provide specific pipe(s) and locations in question.
12	PIP	Hydraulics	Existing Pipe Hydraulic Report	Please provide .dgn files with preliminary drainage area delineations used in Existing Pipe Hydraulic Report.	Hydrology	No_Revision	These will be provided in the Project Information Package.
13	RFP	3	Pg. 15	Due to the change in design criteria and procurement schedule, please consider increasing the stipend amount to \$1.1 million. This is equal to the total amount of stipends that would have originally been paid to two teams if three teams would have been shortlisted.	PM	Revision	SCDOT is discussing and considering this request.
14				Responses to confidential questions submitted on 4/23/2025 and confidential meeting follow up questions submitted on 5/14/2025 have not been provided by SCDOT. Please provide a response to these questions as soon as possible.	PM	No_Revision	We are investigating this and will correct if necessary.



15	Attach_A	Exhibit_4b	Pg. 3	Exhibit 4b, Section 2.1.4 titled "Prestressed Concrete Girders" instructs proposers to use the severe corrosive conditions stress limits found in AASHTO LRFD Table 5.9.2.3.2b-1 for the "entire girder...(not only the "Precompressed Tensile Zone"). Is the intent of the modification to prohibit the use of AASHTO LRFD Section 5.12.3.3.6, which modifies the required stresses and design approach for the tops of the ends of girders made continuous? If so, would a moderately corrosive stress limit be permissible due to the relatively protected girder location?	Structures	Revision	Better control of concrete cracking at the service limit was the desire with the respect to the AASHTO Guide Specification for service life design, under the assumption that girder ends may be exposed to deicing salts at leaking expansion joints, over the life of the structure. Requirement will be revised to use the moderate corrosion stress limit in Table 5.9.2.3.2b-1.
16	Attach_A	Exhibit_4a	Pg. 1	Section 2.5 Horizontal Alignment states the proposed design shall be an equal or better safety performance than the base line alignments found in Attachment B 4.I95_AlternativeC2_Reference Data as determined by a Highway Safety Manual analysis. Additionally, Attachment B provides the I-95 over Lake Marion Alternative C2 HSM Crash Prediction Analysis Memo R1 output for comparison. To ensure an equivalent comparison can be performed, please provide the input file that generated the Alternative C2 HSM Crash Prediction Analysis Memo, including the input parameters.	Traffic	Revision	This will be provided in Project Information Package.
17	Attach_B	Traffic	Alternative C2 HSM Crash Analysis Memo	Please confirm that lane widths in the Analysis are 12-ft wide for the entire corridor.	Traffic	Revision	This will be provided in Project Information Package via HSM Input File. Note: the initial utilization of IHSDM was intended to develop a minimum safety baseline for teams to match or improve specifically regarding horizontal geometry. The analysis was tailored to specifically analyze alignments, lanes, and shoulders. Barriers and clear zones were not included in this analysis.
18	Attach_B	Traffic	Alternative C2 HSM Crash Analysis Memo	For the shoulders used in the analysis, please provide the following; Shoulder start and end locations, edge of pavement location, shoulder cross slope, and shoulder widths.	Traffic	Revision	This will be provided in Project Information Package via HSM Input File. Note: the initial utilization of IHSDM was intended to develop a minimum safety baseline for teams to match or improve specifically regarding horizontal geometry. The analysis was tailored to specifically analyze alignments, lanes, and shoulders. Barriers and clear zones were not included in this analysis.
19	Attach_B	Traffic	Alternative C2 HSM Crash Analysis Memo	Was outside barrier data included in the analysis? If so, please provide the following; Barrier start and end locations, edge of pavement, offset of outside barrier to edge of travel way.	Traffic	Revision	This will be provided in Project Information Package via HSM Input File. Note: the initial utilization of IHSDM was intended to develop a minimum safety baseline for teams to match or improve specifically regarding horizontal geometry. The analysis was tailored to specifically analyze alignments, lanes, and shoulders. Barriers and clear zones were not included in this analysis.
20	Attach_B	Traffic	Alternative C2 HSM Crash Analysis Memo	Was clear zone data included in the analysis? If so, please provide the following; Clear zone start and end locations, edge of pavement, clear zone width.	Traffic	Revision	This will be provided in Project Information Package via HSM Input File. Note: the initial utilization of IHSDM was intended to develop a minimum safety baseline for teams to match or improve specifically regarding horizontal geometry. The analysis was tailored to specifically analyze alignments, lanes, and shoulders. Barriers and clear zones were not included in this analysis.
21	Attach_B	Traffic	HSM Memo	Please provide IHSDM Analysis files to teams to ensure that the same parameters are being met for comparison. We would ask that this request be expedited if approved in order to meet Horizontal Alignment FATC submittal date of June 26, 2025.	Traffic	Revision	This will be provided in Project Information Package via HSM Input File. Note: the initial utilization of IHSDM was intended to develop a minimum safety baseline for teams to match or improve specifically regarding horizontal geometry. The analysis was tailored to specifically analyze alignments, lanes, and shoulders. Barriers and clear zones were not included in this analysis.



22	Attach_A	Exhibit 7	Pg. 1	Following up on Question 59 from 1/23/2025 and Question 3 from 5/7/2025 regarding the forthcoming revision to RFP Exhibit 7 to include information the Contractor will need to implement post-award for in-contract utility relocations. Please provide a status to this RFP revision and confirm the full relocation costs is not included in the cost proposal.	Utilities	Revision	The MOAs for Town of Santee have been executed. Exhibit 7 will be revised to include the in-contract work.
ADDITIONAL QUESTION FROM 6/25 NCQ MEETING							
1	Attach_A	Exhibit 4e	Section 2.0 pdf 196 of 346	This is a follow-up to the response to Question 11 provided on June 25, 2025. The existing 24-in crossline half-line pipes connected by an inlet at station 5291+00 both show HW/D > 1.5 in the Existing Pipe Hydraulic Report. These crossings are referred to as Pipe 37 (I95 SB) and Pipe 38 (I95 NB). If the headwater is contained within the median inlet for Pipe 37 without surcharging into the ditch, can this pipe be retained? If the drainage area to Pipe 38 doesn't change and no new imperviousness from this project is being added to the drainage area, can this pipe be retained in place with an HW/D > 1.5?	Hydrology	Revision	A revision will be made in exhibit 4e so that only pipes 37 and 38 will need to be replaced.
2	PIP	Hydraulics	2. Existing Pipe Hydraulic Report	Exhibit 4e, Section 2.1 Roadway Drainage states "Adequately size and replace all drainage components that are analyzed within the project limits and found to be undersized." The "2. I-95 Bridge Replacement Lake Marion ExistingPipeHydraulicReport" located in PIP/Hydro lists pipes 23, 34, 37, 38, and 56 as hydraulically deficient. If hydraulic conditions are improved or maintained as a result of the project construction, can these existing pipes be retained in place?	Hydrology	Revision	A revision will be made in exhibit 4e so that only pipes 37 and 38 will need to be replaced.
3	RFP	3	Section 3.12 pdf 16 of 346	The resubmittal of Formal ATCs was due on May 20, 2025, however Addendum 1 of the Final RFP was not issued until June 5, 2025 with Addendums 2 & 3 coming after that date. There was a lot of new information in those Addendums and we request that the department consider adding additional non-horizontal alignment related ATCs so that teams may address some items that were not captured in the original Final RFP.	PM	Revision	This will be revised in addendum #4. Three additional ATC not related to Horizontal Alignment may be submitted per the revised milestone schedule.
4	PIP	Environmental	3. Sonar Data	Sonar data was provided which included .SDS files which is the raw data from a side scan sonar system (SSS). SSS data is intended to create a mosaic image of the seabed, which was provided. If the system that was used to obtain the survey was a Marine Sonic, they could have acquired depth information. The DPT (depth) from the SDS is most likely a conversion from pressure and attitude sensors that could produce XYZ right under the towed instrument. You would have an approximate single beam bathymetry, and not a full swath multi beam bathymetry for accurate floor mapping. We request that XTF and DPT files be produced and provided, if possible.	PM	Revision	XTF files will be provided in PIP via ProjectWise. DPT files are not currently available. A bathymetric survey was included within the survey documents so water depth information should be available.
5	Attach_A	Exhibit_4b	Page 11,12	Exhibit 4b, Section 2.1.23 Slope Protection states "Armoring of the western embankment face of the causeway, in the vicinity of the abandoned US 301 roadway, shall extend from bridge-end-riprap of the relief bridge to the bridge-end-riprap of the main bridge." This is interpreted to mean that armoring is required along the western embankment shoreline along the causeway that bends and meanders from the bridge-end-riprap of the relief bridge to the bridge-end-riprap of the main bridge. Please confirm this interpretation.	Structures	Revision	The interpretation is correct. "In the vicinity of the abandoned US 301 roadway" will be deleted. Armoring of the entire western causeway embankment is required in between bridge-end-riprap.

