

NON-CONFIDENTIAL DESIGN-BUILD QUESTIONS
Bridge Package 20 - Contract ID 5462320 - Chesterfield, Fairfield, Lancaster, and York Counties

RFP FOR INDUSTRY REVIEW

Date Received: 8/25/2023

Question No.	Category	Section	Page / Doc No.	Question/Comment	SCDOT	
					Response	Explanation
1	Attach_A	Agreement	9	Paragraph 3 states - A complete submittal package shall be limited to one phase (ex. Preliminary/Right Of Way (ROW)/Final/Release For Construction (RFC)) of one roadway segment or structure and include all design deliverables specified in Exhibit 4z. Can this be changed change to "...one roadway segment and/or structure..." to allow roadway and bridge plans to be submitted concurrently.	Revision	Yes. Revision will be made.
2	Attach_A	Exhibit 4z	2.0	The list of submittals required includes submittals for ITS and for Independent Peer Reviews. Please clarify if these submittals are required for this project.	Revision	Submittals for ITS and independent peer reviews will be removed.
3	PIP	Geotechnical	S-13-130 BRO Clay Creek - Geotechnical Baseline Report	Both soil test borings for S-13-130 BRO Clay Creek report SPT N-values consistent with the SCDOT GDM definition of rock (50/2"), but no rock coring was performed. What rock quality and strength should be assumed for this site?	No_Revision	GDM Section 5.3.2.4 says rock coring should begin when drilling refusal is encountered "and" an SPT N-value of 50 blows per 2 inches or less of penetration is encountered. Drilling refusal was not encountered, so rock coring was not conducted. Engineering judgement must be exercised by the Geotechnical Engineer of Record.
4	PIP	Geotechnical	S-13-531 BRO Mangum Branch - Geotechnical Baseline Report	Both soil test borings for S-13-531 BRO Mangum Branch report SPT N-values consistent with the SCDOT GDM definition of rock (50/2"), but no rock coring was performed in these zones. What rock quality and strength should be assumed for these zones?	No_Revision	GDM Section 5.3.2.4 says rock coring should begin when drilling refusal is encountered "and" an SPT N-value of 50 blows per 2 inches or less of penetration is encountered. Some rock coring was performed in boring S-13-531-1, however, the rock cores exhibited an RQD value of 0%, so unconfined compressive strength testing was not possible. See Exhibit A-10 of the Geotechnical Subsurface Data Report for photos of the material recovered. Engineering judgement must be exercised by the Geotechnical Engineer of Record.
5	Attach_A	Exhibit 4z	3.3.5	Section 3.3.5 of Exhibit 4z states Final Bridge Hydraulic Design Reports shall include, but not be limited to "Address CLOMR and/or "No Impact" Certifications (for each applicable location)." Two bridges are located within regulatory floodways. If the final designs for these two bridges meet No Rise/No Impact requirements, will the Department allow No Impact Certifications in lieu of MT-2 applications (CLOMR)?	No_Revision	If no Impact criteria is met, then there should be no MT-2 application required. See Hydraulic Design Bulletin 2019-4 for details.
6	Attach_B	Hydraulics	3. Package 20_Bridge Info.pdf	If all SCDOT requirements related to hydraulic design and other disciplines can be met, will the Department consider ATCs that reduce the Minimum Bridge Lengths shown in the table?	No_Revision	ATC's can be proposed to reduce Minimum Bridge lengths when all other design criteria is being met.



7	Attach_A	Exhibit 4e	Page 3 / Section 2.2.1.2	Section 2.2.1.2 specifically calls for the bridges at S-1086, S-292, and S-998 to be design for a 2% AEP (50-year) storm event. The Project Information Package (PIP) hydraulic models, hydraulic reports, and conceptual plans that use a 4% AEP (25-year) storm event. While we understand the PIP if for information only, if these models were used to establish any other project information, there could be contradictions in design. Please clarify.	Revision	This will be corrected in 4e.
8	Attach_A	Exhibit 4e	Page 4 / Section 2.2.1.4	Does 2.2.1.4 apply to both full design criteria bridges and low volume bridge criteria designed bridges?	Revision	Correction made in 4e for Low volume bridge sites.
9	Attach_A	Exhibit 4e	Page 4 / Section 2.2.1.5	Does 2.2.1.5 apply to both full design criteria bridges and low volume bridge criteria designed bridges?	Revision	PCDM-11 allows for maintaining or improving for low volume sites. Revision made in 4e
10	Attach_A	Exhibit 4e	Page 4 / Section 2.2.1.5	Will the Department allow the low chord to be lowered if the proposed bridge will pass the 500-year storm event for the Low Volume Bridges?	No_Revision	This can be proposed as an ATC with appropriate justification.
11	Attach_A	Exhibit 4e	Page 4 / Section 2.2.1.6	Section 2.2.1.6 states <i>"Bridge ends shall not be inside the limits of existing bridge ends (as defined along the centerline of the roadway)."</i> Is there a minimum set-back for new bridge ends?	No_Revision	No setback distance required.
12	Attach_A	Exhibit 4e	Page 5 / Sections 2.2.1.7 & 2.2.1.8	Bullet 2 of Section 2.2.1.7 states <i>"Provide a minimum 5-foot setback from the top of the channel bank to the centerline of the pier (pile or column) on the overbanks for Low Volume Criteria sites."</i> Bullet 3 of Section 2.2.1.8 states <i>"Provide a minimum 5 foot abutment toe setback from the top of the channel bank for Low Volume Criteria sites. S-296 Blackwell Mill Stream has no defined channel, so no setback distance will be required."</i> Please clarify how the top of channel bank for S-296 is defined for 2.2.1.7. Is the intention that 2.2.1.8 supercedes 2.2.1.7 for S-296? Please clarify the contradiction between these two sections.	Revision	S-296 has no defined channel so no setbacks are required for pier or abutment. A revision will be made in 4e. New abutment toes must not extend past the abutment toe of the existing bridge.
13	Attach_A	Exhibit 4e	Page 6 / Section 2.2.2	Section 2.2.2 requires use of the USGS Regression equations to generate discharges for the SCDOT runs. The USGS has provided updated regression equations. Have these been adopted by the SCDOT? Which version of the equations should be used for the SCDOT model?	Revision	The latest USGS regression equations are based off of additional data acquired and should be used. A revision will be made in exhibit 4e.
14	Attach_A	Exhibit 4e	5	Exhibit 4e Section 2.2.1.7 states that centerline of piers (pile or column) are to be set back 10' from top of bank and references Figures 4 and 5 in HDB 2019-4. HDB 2019-4 and the referenced figures only require a 5' setback for pile supported bents. Recommend Exhibit 4e be modified to allow a 5' setback for pile supported bents per HDB 2019-4.	Revision	5' setback for pile supported bents will be revised in 4e.
15	Attach_A	Agreement	9	Agreement Section II.D.3 does not appear to allow roadway and bridge packages to be submitted together. Recommend this be allowed similar to other recent DB packages.	Revision	Agreement revised to allow both road and bridge submittal simultaneously for each site.



16	Attach_A	Agreement	35	Would SCDOT consider lowering the Umbrella Liability Coverage to be more in line with Packages 14 and 15. As stated, the amount is high for the work and risks associated with close and detour type projects not on primary routes.	Revision	Revised to be in line with Package 14 and 15.
17	Attach_A	Exhibit_4a	5	Section 2.14 states to accommodate the Lindsay Pettus Greenway. Are any documents, planning level documents, or designs available for the teams to review regarding this project?	Revision	Conceptual sketches will be provided in the PIP, these are for information only. The Carolina Thread Trail Master Plan does not provide a specific design for this portion of the Lindsey Pettus Greenway. What the master plan does provide is general design guidance for trails, which has been reflected in the RFP. Additional information can be found at https://lindsaypettusgreenway.org/ .
18	Attach_A	Exhibit_4a	3	Exhibit 4a Section 2.10 requires MASH compliant guardrails at all bridge quadrants except for S-292. Recommend this section be modified to allow pre-mash guardrail at locations where the use of MASH guardrail would require a driveway to be relocated resulting in the need for additional right-of-way to be purchased and to eliminate the requirement for trailing end guardrails at locations where additional right-of-way would be required for driveway installation if the trailing end of the bridge is outside the clear zone. These modifications will also aid in meeting turning movement requirements for impacted driveways.	No_Revision	A modification will not be made to the guardrail requirements, but engineering judgement/practice should be used to reduce guardrail length of need where feasible.
19	PIP	Structures		Will Microstation files be available for the R2 Bridge Plans?	No_Revision	Microstation files currently on the website (version dated 07/18/23) are the latest and greatest and should match the R2 Conceptual Bridge Plans (version dated 08/21/23). No update needed.
20	Attach_A	Exhibit_4b	2.1.2	Section 2.1.2 of Exhibit 4b states Seismic Design Summary Reports are not required for all sites, however Exhibit 4z Section 2.0 requires Preliminary, Final, & RFC Seismic Design Summary submittals. Please clarify.	Revision	Exhibit 4z will be revised.
21	Attach_A	Exhibit_4b	2	Exhibit 4b Section 2.1.6 states minimum the minimum span length for any structure type is 40 feet. SCDOT standard drawings allow for use of 30' prestressed cored slabs (704-30). Recommend revising minimum span length to 30' to be consistent with standard drawings and request review of minimum bridge lengths if the 30' span is allowed.	No_Revision	40' is the minimum span length for this project.
22	PIP	Utilities		Are CADD files available with the Utility information provided in .pdf format?	Revision	Files will be provided in Attachment B.
23			Page 6 / Section 2.2.3	Will The Alligator Rural Water 4" waterline be allowed to reattach to the new structure at S-296?	No_Revision	SCDOT is currently pursuing no re-attachment.
24	Attach_B	Environmental		Can the environmental boundaries shown in the conceptual plans be provided in CADD format be provided?	Revision	Files will be provided in PIP.



25	Attach_A	Exhibit_4a	2.6	Section 2.6 states "Retain existing centerline for all bridge sites." The centerline for S-130 provided in Attachment B appears to be off approximately 1'-1.3', resulting in existing widths to the edge of pavement of approximately 7.5'-8' and 11'-11.5' from STA 24+50 to 26+50. Are Design-Build Teams expected to revise the best fit existing centerline to tie in the edge of pavements?	Revision	Based on the existing bridge plans, this alignment is correct. RFP Section 2.6 has been revised to state "Retain existing survey centerline for all bridge sites." The Design-Build Team is expected to taper the proposed edges of pavement at an appropriate rate to tie into the existing edges of pavement.
26	Attach_A	Exhibit_4a		Section 2.11 states "Secure a minimum right-of-way width of 75 feet on each side of the structure centerline and minimum 75 feet from each end of the bridge at each site where any right-of-way is required as described herein; refer to SCDOT Roadway Design Manual Chapter 12 Section 12.1.14". Section 12.1.14, Figure 12.1-D, of the RDM specifies extending the New R/W to the nearest even station or 25' interval beyond 75'. Please clarify if the minimum New R/W is 75' or 75' plus the required distance to get to an even station or 25' interval.	No_Revision	If your bridge begin/end does not fall on an even station, then extend past the 75' minimum to an even station. If your bridge begin/end does fall on an even station, 75' minimum is appropriate.

