Carrier Bridge Pump Station

Metropolitan Sewerage District of Buncombe County
Asheville, North Carolina

ADDENDUM NO. 2
June 13, 2025

TO: All Official Plan Holders

This Addendum is part of the Bidding Documents and the Contract Documents and modifies the original Bidding Documents dated April 2025 as indicated below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification for award of the associated Contract.

This Addendum consists of 5 pages and the attachments, if any, listed on the last page.

CHANGES TO PRIOR ADDENDA

None.

CHANGES TO INTRODUCTORY INFORMATION

None.

CHANGES TO BIDDING REQUIREMENTS

None.

CHANGES TO CONTRACTING REQUIREMENTS

None.

CHANGES TO SPECIFICATIONS

2.1. Specification 00 11 13, REVISE the bid date to Wednesday, June 25th, at 2:00 PM local time. The date for answering bidder questions has expired and will not be extended.

2.2. Specification 00 45 13, Par. 8.04. DELETE this paragraph in its entirety and REPLACE with the following:

"List a minimum of three and a maximum of six projects completed in the last 10 years in Schedule B and provide indicated information to demonstrate the Business's experience with projects similar in type and cost of construction. Similar projects shall meet the minimum criteria outlined in Specification 00 21 13, Par. 3.05"

2.3. Specification 33 05 07, Par. 1.2.E.1.a.5. ADD "Push-on restrained (interlocking) joints are acceptable. Trinity Products Tri-Loc, Northwest Pipe Permalok, or equal."

2.4. Specification 46 21 13, Par. 1.2.B.3. DELETE this paragraph in its entirety.

2.5. Specification 43 25 13, Par. 2.2.A.1. REVISE range to "58 FT to 80 FT".

2.6. Specification 43 25 13, Par. 2.3.A.3. REVISE impeller material to "Cast Iron, ASTM A48, Class 35b."

2.7. Specification 43 25 13, Par. 2.3.A.5. DELETE this paragraph in its entirety.

2.8. Specification 43 25 13, Par. 2.3.A.12. ADD “Hand hole can be in either the suction elbow or in the pump volute.”

2.9. Specification 43 25 13, Par. 2.4.B, REVISE impeller to be an “enclosed, multivane design”.

2.10. Specification 43 25 13, Par. 2.6.A.3 and 4. REVISE to “Factory testing shall be completed as a dry pit installation. The suction elbow does not need to be installed for the testing but the headloss of all piping, including the elbow, shall be accounted for.”

2.11. Specification 43 25 13, Par. 2.6.B. ADD “Include costs for the remote witness testing. If Owner elects to attend the witness testing in person, Owner will pay travel costs for their staff.”

2.12. Specification 43 25 13, Par. 2.6. ADD the following Paragraph C:

“C. FEA/Dynamic Analysis for Torsional and Lateral Critical Speed Analysis.

1. A Dynamic Analysis including finite element analysis shall be in accordance with a Level 3 analysis as required in the latest version of ANSI/HI Standards for the proposed type of pump and shall include a lateral rotodynamic analysis, a torsional analysis, and a structural analysis, and be certified (signed and sealed) by a Professional Engineer licensed in the State of North Carolina.

a. A torsional analysis shall be performed. Prior to manufacture of any equipment in accordance with ANSI/HI 9.6.8, the Pump Manufacturer shall determine the torsional critical speed characteristics of the equipment, including the pump and driver rotational inertias, pump and driver shaft rigidities and inertias and the rigidities of all other rotating equipment in the drive train between the pump and the driver. The analysis shall be performed using a finite element analysis method commercially available with the mass elastic information provided by the pump and drive manufacturers. A torsional critical speed that occurs within 25 percent above or below the rated operating speed of the pump and the driver will not be accepted.

b. The manufacturer shall determine the torsional critical speed of the pump rotor using manual calculation methods as described in ANSI/HI 9.6.8 or approved alternate method. A critical speed shall not occur within 25 percent above or below the rated operating speed of the pump.

c. The lateral dynamic analysis shall be performed. Prior to manufacture of any equipment, the Pump Manufacturer and the motor manufacturer in accordance with the ANSI/HI 9.6.8 or an approved alternate method shall determine the critical speeds of the equipment in the lateral directions. A natural frequency that occurs within 25 percent above or below the rated operating speed of the pump will not be accepted. The dynamic analysis model shall be constructed using a commercially available program that uses finite element analysis methods. The system shall be analyzed at the run (wet) condition considering the effect of water mass in the column and the damping effect of the highest and lowest wetwell water levels.

d. The manufacturer shall determine the lateral (dry) critical speed of the pump rotor using static deflection calculations as described in ANSI/HI 9.6.8 or approved alternate method. A critical speed shall not occur within 25 percent above or below the operating speeds of the pump.”

2.13. Specification 43 25 13, Par. 3.2. ADD the following Paragraph B:

“B. Provide services of pump manufacture’s field service representative to perform field vibration testing per the latest version of HI Standard 11.6.9. Contractor shall test each pumping unit to ensure vibration limits are not exceeded.”

2.14. Specification 08 31 00 – Access Doors. ADD the following specification, it applies to all access hatches:

"A. Materials: Aluminum, Sheet and Plate per ASTM B209, Extruded Shapes per ASTM B221.

B. Coat all aluminum components in contact with concrete or masonry with manufacturer's standard bituminous coating.

C. Frame: ¼-inch mill finish aluminum channel.

D. Cover: ¼-inch mill finish diamond plate aluminum.

E. Hardware: 316 stainless steel.

F. Grip handle: Vinyl.

G. Fabricate frame with anchor flange around perimeter and 1-1/2-inch diameter drainage coupling.

H. Reinforce cover with aluminum stiffeners.

I. Fabricate doors to open 900 degrees with assistance of spring operators and automatically lock into open position.

J. Furnish with slam lock and removable key handle.

K. Similar to Bilco Type "J-AL-H20" or "JD-AL-H20"."

2.15. Specification 40 05 59. ADD the following specification for Stop Logs:

"A. General:

a. The stop logs assemblies shall be as specified herein and will be engineered and manufactured to the application.
b. Leakage shall not exceed 0.05 gpm/ft of wetted seal perimeter.
c. Stop logs shall be provided with a resilient seal along the bottom edge of the gate as needed for single-direction or bi-directional sealing.
d. Stop logs shall not require additional weighting to seat properly.

B. Dimensions:

a. Channel width: 5'-0"
b. Channel depth: 45'-9" from top of slab to bottom of channel
c. Stop logs height: 8'-0" (min.)

C. Frames and Guides:

a. The frame and guides shall consist of rigid sub-units composed of formed stainless steel construction that shall be mechanically assembled to form a single rigid unit at installation.
b. The frame and guide bearing surfaces shall consist of minimum ¼ inch material. Mounting type shall be either embedded in channel walls or surface mounted to channel walls.

D. Stop Logs:

a. Bending stress level shall not exceed ¼ of the minimum material yield strength. Deflection shall not exceed 1/360 of span under full design head.
b. Hardware will interface with a manual lifter for removal and installation of logs in framework. Logs shall be fitted with UHMWPE guide pads to reduce contact frictional

load with the frame and guides as well as to provide protection and retention for the resilient seals.

c. The joints shall be square and shop welds shall be fillet type. Field welding shall not be permitted.
d. Adequate drainage shall be provided for the interior of the stop logs to prevent buoyancy and retention of water.
e. Provide lifting slots in the top of each stop log.

E. Seals:

a. The logs shall be fitted with seals on both vertical edges and the bottom edge.
b. Seals shall be mechanically attached to the logs.

F. Stop Log Lifter:

a. Stainless steel, AISI type 316.
b. Capable of both installing and removing stop logs.

G. Materials:

a. Frame and Logs: Stainless steel – ASTM A 240, ASTM A 276, AISI type 316.
b. Fasteners and Anchor Bolts: Stainless Steel – ASTM F 593 and F 594, AISI Type 316 CW.
c. Vertical Seals: Neoprene Rubber – ASTM D 2000 BC 615/625 Grade BE 625.
d. Log Guides: Ultra High Molecular Weight Polyethylene (UHMW).

H. Field Quality Control:

a. Employ and pay for services of manufacturer's field service representative to:
    i. Inspect equipment covered by this Specification Section.
    ii. Supervise adjustments and installation checks.
    iii. Provide test equipment, tools, and instruments necessary to accomplish equipment testing.
    iv. Conduct initial start-up of equipment, perform operational checks, and supervise acceptance testing.
    v. Provide, through Contractor, a written statement that manufacturer's equipment has been installed properly, started up and is ready for operation by Owner's personnel.
    vi. Instruct Owner's personnel on operation and maintenance of furnished equipment.
b. Field leakage test for logs:
    i. Test logs under design seating head and adjust to maximum leakage specified.”

2.16. Specification 08 33 22 – Aluminum Rolling Overhead Doors. ADD the attached specification to the Contract Documents.

2.17. Specification 14 20 00, Par. 1.10.B. DELETE this paragraph in its entirety.

2.18. Specification 00 52 13, Par. 6.02.A.1.a. REVISE “5 percent” to “95 percent”.

2.19. Specification 26 28 00, Par. 2.2.A.3. ADD “d. Electrically operated (EO) as indicated on the Drawings.”

2.20. Specification 26 28 17, Par. 2.2.D.1. ADD “a. Draw out type.”

CHANGES TO DRAWINGS

2.21. Sheet 01C301, Keynote 6 and proposed fire hydrant location are shown correctly. Move Keynote 4 to the west side of Keynote 6 at the connection point of the fire hydrant leg to the 6" main. Move Keynote 7 to the west side of the 6" x 6" tee at the hydrant leg. Move Keynote 9 to the west side of Keynote 7. The piping through the water meter and backflow preventer is 2". Reference is made to Detail 4/01C508, the gate valve shown in this detail is not to be installed.

2.22. Sheet 01C301, Keynote 18, ADD "Install gas service line along the existing driveway to the intersection of Riverview Drive.

2.23. Sheet 01C302, the 6" service line into Manhole 2 shall PVC, AWWA C900, DR 25 per specification section 40 05 00, par. 3.10.B.1. An inside 6" PVC drop pipe with tee at top and 45-deg fitting at bottom and 316 stainless steel supports shall be installed inside Manhole 2.

2.24. Sheet 10D103, ADD a 48" x 48" aluminum hatch inside the northwest corner of Room 102 to provide access to the foul air pipe below this concrete floor. Fill void in area below the hatch with #57 stone up to elevation 1983.0.

2.25. Sheet 10D301, REVISE note "Non Shrink Grout Fillet" to "Concrete Fillet per Detail 7/99S503".

2.26. Sheet 99S506, ADD attached detail for the aluminum checkered plat which shall be used at all locations.

2.27. Sheet 10A102, REVISE Keynote 2 from "1-1/2" Grating" to "Aluminum Checkered Plate".

2.28. Sheet 10A301, DELETE reference to "Hollow Core Slab", all slabs are poured-in-place concrete per the structural drawings.

2.29. Sheet 10A503, REVISE reference to "see Detail 11 this sheet" to "see Detail 7/99S507".

2.30. Sheet 10A503, REVISE reference on Detail 8 from "see Detail x/xxx" to "see Detail 7/99S507".

2.31. Sheet 10A601, Door Schedule, Door Number 104B is a double door with a monorail opening at the top.

2.32. Sheet 10S306, Section J shows gravel under the concrete slab of the pump station structure. ADD note "Place a minimum of 12-inches of #57 stone below the entire concrete structure, or as required by the Geotechnical Engineer."

2.33. Sheet 98E601, In switchboard MSB, only the main breaker is draw out type.

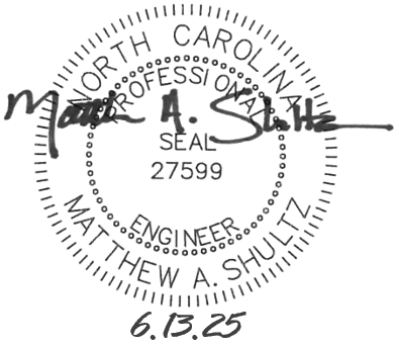
CLARIFICATIONS

2.34. Questions posed by prospective bidders and the Owner/Engineer's responses are included in the attached Question Log.

ATTACHMENTS

The items listed below and bound following this document's "End of Addendum" designation, are part of this Addendum.

1. Question Log
2. Specification 08 33 22 – Aluminum Rolling Overhead Doors
3. Checkered Plate Detail



END OF ADDENDUM NO. 2

Carrier Bridge Pump Station - Question Log

Question No.	Question	Response
36	Section 00 21 13 Article 5.02.A.2 - States that the Technical Data reports are not part of the Contract Documents, but the bidder can rely on the accuracy of the reports. Please confirm that if site conditions are different from the reports provided, Contractor will be entitled to cost and/or schedule changes.	Refer to the General Conditions.
37	If Contractor fails to achieve Substantial Completion of the Carrier Bridge Pump Station on time, please specify the estimated daily rate of "special damages" that the Metropolitan Sewerage District of Buncombe County will incur for engineering, construction observation, inspection, and administrative services as per Section 4.06.B of the Standard General Conditions of the Construction Contract.	Special Damages were addressed in a previous addendum.
38	Please provide a specification section and detail for the stop log shown on sheet 10D301.	This will be clarified via addendum.
39	Detail 2 on plan sheet 97Y605 note 2 calls for a saddle to be used on ductile iron pipe to connect the pressure transmitter to the pipe. Plan sheet 10D304 does not show a saddle installed for PIT-1000. Is a saddle required here?	A saddle is required. MSD prefers a minimum 1" opening in the saddle with a bushing installed as needed to reduce down to 1/2"
40	Detail 1 and 2 on plan sheet 97Y605 note 2 calls for a saddle to be used on ductile iron pipe to connect the pressure transmitter to the pipe. Is it acceptable to tap the pipe with 1/2" NPT threads and eliminate the tapping saddles for all pressure gauges and pressure transmitters on ductile iron pipe.	A saddle is required. MSD prefers a minimum 1" opening in the saddle with a bushing installed as needed to reduce down to 1/2"
41	Specification 44 31 16 2.11 A indicates the contractor is required to design duct supports for the FRP odor control duct work. The odor control ductwork shown on the 10D drawings calls out support locations with reference to standard details. Please confirm the contractor is to use the standard detail pipe supports for the FRP ductwork.	Pipe supports provided in the standard details can be used as part of the required duct support design.
42	Plan sheet 10D102 calls for the fillet by Wet Well chamber 3 to be concrete. Sheet 10D301 calls for non shrink grout in this locaiton. Please verify material type.	The material is concrete, also see Detail 7/99S503.
43	Please confirm there are no Buy America / Buy American requirements for this contract?	Project does not have these requirements.
44	Has a recent CCTV of the existing lines and manholes that are required to be rehabbed been completed? If so, can this video be released for review? If no CCTV has been completed, then please provide direction on the amount of cleaning and repair effort is required. Specification reads any and all debris, grease, damage etc. need to be cleaned/repaired prior to lining is completed. The level of effort for cleaning and repairs is vauge and hard to quantify.	No CCTV is available.
45	On Plan Sheet 10S104 9 each gate and stoplog openings require aluminum checkered plate covers, please provide a detail showing the plate thickness and type of frame that is required.	This will be clarified via addendum.
46	Plan Sheet 10S104 shows 6 each 3'-0" x 3'-0" openiings - please clarify whether these opening require hatches, if so please provide details.	Hatches are required and noted on Drawing 10D103, this will be clarified via addendum.
47	Plan Sheet 10S101 Key notes number 2 and 3 are for 2' deep sumps, do these openings require any covers or lids?	The sump denoted as Keynote 1 shall be covered with grating as shown on 10S102. The other sump below the manlift shall remain open.
48	On Plan Sheet 10A102 the Catwalk Plan El. 1982.5 shows gate openings receive 1-1/2' grating (Keynote #2), the gate openings are shown to receive aluminum checkered plate on the Structural Drawings (10S104), please clarify whether these openings at catwalk level require grating or plate?	These opening shall be plated per the structural drawings and the detail included in the addendum.
49	On Plan Sheet 10A503 Details 2,3 and 4 show stair rail base plates with a note saying "see Detail 11 this sheet", there is no detail 11 on that sheet, please provide.	Refer to Detail 7/99S507.
50	Detail 8 shows guardrail on conc structure base plate with a note saying "see x/xxx", please provide a detail.	Refer to Detail 7/99S507.
51	Please advise if questions and answers will be responded to and issued to all Contractors?	Yes, they will be distributed via addendum.

Question No.	Question	Response
52	The Contractor is required to construct a substantial segmental block retaining wall along the embankment of Riverview Drive and the Pump Station site itself. This wall will require temporary support of excavations. The geotechnical report only included borings adjacent to the pump station structure. Currently, there are no borings in the area of the retaining wall for the Contractor to base the support of excavation design. This area is at much higher elevation and the contractor has no way of quantify subsurface conditions. Are additional borings available for this area? Will Contractors be permitted time and access to perform onsite test digs / drilling in this area to confirm conditions?	No additional information beyond the geotechnical data in Appendix A is available. No access to perform test digs / drilling is permitted.
53	This drawing includes a matchline indicating a drawing 01C309. We are unable to find this drawing. Please advise?	This matchline should refer to Drawing 01C308. Adjust other matchlines by one sheet as needed.
54	Please confirm if the Safety Manager is required to be onsite full time during construction?	Contractor shall make that decision.
55	Please confirm if the Quality Control manager is required to be onsite full time during construction?	Contractor shall make that decision.
56	Please confirm if there are prevailing wages for labor on this project	No prevailing wages.
57	Apart from the permits in Appendix C – Approved Permits, is the Metropolitan Sewerage District of Buncombe County obtaining any other permits for the Carrier Bridge Pump Station? If so, what permit(s)?	Yes, City of Asheville Development Approvals, NCDEQ Wastewater Approval, and Duke Energy Right-of-Way Encroachment Approval.
58	Specification Section 01 11 00 at 1.6 (WORK BY OTHERS NOT UNDER OWNER'S CONTROL) states, "Owner is not aware of any work to be performed at or adjacent to the Site, by utility owners (not under Owner's control) or owners of transportation facilities (not under Owner's control)." (emphasis added). Considering this, Contractor has the following questions and request: 1.Are there any utilities performing work at the Site or adjacent to the Site? 2.If utilities are performing work at the Site or adjacent to the Site, considering the above-quoted language, are these utilities under the Metropolitan Sewerage District of Buncombe County's control (i.e., the Metropolitan Sewerage District of Buncombe County either contracted or arranged for these utilities to perform work at or adjacent to the Site)? 3.If utilities at or near the Project site need to be relocated and the Metropolitan Sewerage District of Buncombe County has not either contracted or arranged for these utilities to perform work at or adjacent to the Site, who is responsible for contracting or arranging with such utilities for any needed utility relocation? 4.If the Metropolitan Sewerage District of Buncombe County is aware of utilities performing work at the Site or adjacent to the Site, please identify the utilities.	Adjacent to the site' could be defined in different ways. Considering that the adjacent areas include a public park, public roads, and private property, the Owner cannot control, or have complete knowledge of what other utilities are currently doing, or may potentially do in adjacent areas in the future.
59	May the Contractor rely on the accuracy of utility information contained in the Contract Documents?	Refer to the General Conditions.
60	Section 6.02.A.1 of the Agreement states, "Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract. a.5 percent of the value of the Work completed (with the balance being retainage). Should 5 percent be 95 percent?	Yes, this should be 95 percent. This will be clarified via addendum.
61	The Contractor is submitting Unit Price alternates for the two Gravity Sewer alignments as shown on the plans. Will award be based on the lowest cost alternate item? Please confirm.	The Owner is working with the City Park Department on the alignment and may announce the basis for award prior to Bid Opening.
62	The drawings appear to show the float switch wired to a separate intrinsically safe junction box, ISB-1000. Specification Section 40 67 00A outlines this junction box being provided by the systems integrator and the drawings show additional connections to devices that are outside of Hubers scope. Can you confirm that the intrinsically safe junction box and any intrinsically safe barriers inside the junction box shall be provided by others?	All components shown on the Drawings shall be incorporated into the project costs.
63	Can it be clarified what is specifically required by a "statement of qualification"?	This requirement has been removed and the specification has been updated via addendum.

Question No.	Question	Response
64	Please confirm whether this level of calculation is acceptable for compliance: structural calculations based on a 3D transformed model of the screen to evaluate hydrostatic loading on structural components (excluding minor non-load-bearing parts), using established material properties and applicable safety factors. Please confirm whether this meets the Engineer's intent.	The level of calculation listed is acceptable for compliance and meets the Engineer's Intent.
65	The specified load of 150 lb/ft of rake approaches the maximum lifting capacity of our equipment. Can you confirm whether this value is intended to be a minimum required load capacity or an absolute maximum applied load?	The racks must be rated for a minimum lifting capacity of 150 lb/ft. Racks rated for higher capacities is acceptable.
66	Can you clarify if each screen is expected to handle 50 MGD independently (i.e., N+1 configuration), or is the intent for flow to be split evenly at 25 MGD per screen?	The intent is that each screen handle 50 MGD.
67	Alternatively, how were the water surface elevations at peak flow determined, and are these based on pump discharge conditions or assumed tailwater levels?	This was addressed via previous addendum.
68	Can adjustments to water level assumptions be considered if needed to meet hydraulic criteria?	This was addressed via previous addendum.
69	Lastly, are these screens expected to operate continuously or only during peak/emergency flow events? This will impact sizing and screening capacity assumptions.	The screens will operate continuously.
70	Our proposed equipment offers a bar spacing of 40mm (~1.57"). Can this spacing be incorporated as an acceptable alternative in the specification, as well as a flat profile instead of teardrop?	This is acceptable.
71	Will steel casing with press fit joints be allowed for the trenchless tunnels?	Yes, this has been clarified via addendum.
72	Will a pre bid attendee list be provided?	This was addressed via previous addendum.
73	In reference to question 35 on Addendum 1, our sub is asking for the diameter of the tee bases as well. Is it safe to assume they are 8' like the new ones going in on the same line?	The entire manhole riser section is 48-inches, the gravity sewer pipe has a hole cut out of the top to open into the manhole above.
74	On sheet 10A301, there appears to be a stone backfill with geotextile around the underground portion of the new pump station. Neither of these are called out on the plans. Could you provide the extents and type of stone backfill/geotextile that is required?	This will be clarified via addendum.
75	We would also like to respectfully request a 2-week bid extension in order to properly review the recent addendum and any forthcoming ones as well as to allow our vendors to properly work up pricing.	The bid date will be extended to Wednesday June 25th, 2025 at 2 PM.
76	In CITI's proposal taxes have been excluded from the cash allowance total. Please update the cash allowance to include any applicable taxes for the materials provided by CITI.	No change, taxes shall be included in the Base Bid by the Bidder.
77	The Contract Drawings and Specifications indicate that the contractor is responsible for the design and installation of a segmental block retaining wall to support the existing hill on the west side of the pump station. Constructing this permanent wall will require a temporary excavation support wall. To eliminate the redundancy of a temporary shoring wall and a new structural wall, will the Owner consider accepting a soil nail wall with a permanent finish as an alternative to the segmental block retaining wall? A clarification on this alternate pre bid will ensure consistent bid pricing.	No, a segmental block retaining wall is required.
78	Key note 10 on 01C305 indicates a temporary manhole may be installed to bypass the 10" line. If this route is chosen, can the temporary manhole be left as a permanent manhole.	Yes, if the manhole is constructed per MSD's standard detail and the technical specifications.
79	Key Note 6 states that contractor needs to "relocate existing underground electric as required to construct manholes and gravity sewer". Is there existing data providing information (size/location) of existing electric utility? Has any coordination been done with owner of electric utility ? If no existing information is existent for the electric utility, what should the contractor assume for size?	No information is available.
80	The General Notes in the contract documents indicate that the survey was completed prior to Hurricane Helene, and no subsequent updates have been made to the contract documents. The contractor is responsible for verifying current field conditions. In the event that a material change in the design is required due to current field conditions, and such change impacts the project schedule and/or cost, please confirm that the contractor will be entitled to an equitable adjustment	Refer to the General Conditions.

Question No.	Question	Response
81	Standard General Conditions of the Construction Contract, Article 6.05, A, 1, contains the Waiver of Subrogation with regard to property losses. This section requires Contractor's builder's risk policy to waive all rights against the Engineer, its consultants and all Subcontractors. Builder's risk insurers will only agree to waive subrogation against Engineers and it's subconsultants for claims arising out of construction activities. Waivers of subrogation due to Engineer's and its subconsultants professional errors or omissions is not commercially available. Please amend this language as follows: "waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the waivers in this Contract shall extend to the rights of the Builder's Risk insurer for losses and damages arising out of the rendering or the failure to render any professional services against the Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors."	No change.
82	Supplementary Conditions of the Construction Contract, Article 2.01, B, requires Contractor to deliver copies of all insurance policies upon delivery of signed counterparts of the Agreement to Owner. Contractor is a large, sophisticated entity whose corporate policies insure all operations in the United States. Providing complete copies of a corporate policy is an onerous and unnecessary requirement. Per market precedence, certificates of insurance with applicable endorsements should suffice.	Will be reviewed with the selected bidder.
83	Supplementary Conditions of the Construction Contract, Article 6.03, G, 2, requires that the Commercial General Liability (CGL) Insurance, include coverage for "Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18." Please confirm this requirement is limited to coverages that are commercially available and provided under ISO Form CG 00 01. Accordingly, we request the following revision: "Blanket contractual liability coverage, including but not limited to coverage of CMAR's insurable contractual indemnity obligations in Paragraph 7.18."	No change.
84	Supplementary Conditions of the Construction Contract, Article 6.03, G, 6 and 7, requires General Liability Additional Insured Endorsements ISO CG 20 10 10 01, CG 20 37 10 01, and CG 20 32 07 04 or their equivalents. The current forms of these endorsements utilized by ISO are the ISO CG 20 10 12 19, CG 20 37 12 19, and CG 20 32 12 19 versions. Please amend to require the use of these current ISO forms.	The latest versions are acceptable.

Question No.	Question	Response
85	Supplementary Conditions of the Construction Contract, Article 6.04, F, 2, requires Builder's Risk insurance to cover "the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work." Builder's Risk insurance does not provide coverage for equipment that is not permanently installed into the Work. Other equipment is insured by a standalone property and equipment policy. Please amend to: "cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property, unless insured under a separate construction equipment policy; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures, unless insured under a separate construction equipment policy.	No change.
86	Supplementary Conditions of the Construction Contract, Article 6.04, G, requires the Builder's Risk policy to provide "Coverage for Completion Delays" and "such coverage will include, without limitation, fixed expenses and debt service for a minimum of 12 months with a maximum deductible of 30 days, compensation for loss of net revenues, rental costs, and attorneys' fees and engineering or other consultants' fees, if not otherwise covered." Please provide the limit and required underwriting details that Contractor will need in order to procure this Coverage for Completion Delays for the benefit of Owner. In order to quote coverage for soft costs, the underwriters will need to know the limit necessary and a breakdown of the limit on a monthly basis. Please provide the limit of softs costs required and a monthly breakdown by type and amount.	No change.
87	Please confirm that Contractor will be required to have builder's risk in place prior to the start of construction rather than upon execution of the Agreement. It is poor value for money to have builder's risk in place when there is no Work to insure.	No change.
88	Please see question from SOE subcontractor: Are there soils / rock bid assumptions we should make for the excavation characteristics in the vicinity of the proposed block retaining wall?	No additional information beyond the geotechnical data in Appendix A is available.
89	Are approximate existing elevations available for where B5 and B7 were drilled?	No additional information beyond the geotechnical data in Appendix A is available.
90	If soil nailing is used to shore the excavation for the new pump station, nails could extend across the French Broad River Park property line. Is this permissible?	No.
91	Can manhole #14 be shifted to shorten the tunnel length on page 01C302A for the open cut option?	No.
92	Please confirm transition point for the 6 in DIP to 2 in Copper for water line on sheet 01C301 and confirm the size of the meter and BFP. The keynotes on sheet 01C301 directs to detail showing a 2 in meter on sheet 2/01C508 (W.03) and a detail showing a 6 in BFP on sheet 2/01C509 (STD No. W.08).	This will be clarified via addendum.
93	The keynotes on sheet 01C301 state a 6x6x6 tee with plug for the copper transition and directs to detail 4/01C508 that shows an in-line Gate Valve. The gate valve is not shown on sheet 01C301, please confirm if the engineer would like this valve.	This will be clarified via addendum.
94	Please confirm material for 6 in Service line relocation to Manhole 2 on sheet 01C302. Please confirm this will be an outside drop into Manhole 2.	This will be clarified via addendum.
95	Is the owner providing the screening dumpsters?	Dumpsters shall be provided by the Owner.
96	Door 104B is listed as an overhead door, is this correct?	It's a double door, this will be clarified via addendum.
97	Can you please provide a specification for the Overhead Doors?	This will be added via addendum.

Question No.	Question	Response
98	Please explain the intent of for paragraph 1.10 B in specification section 14 20 00?	This paragraph will be deleted via addendum.
99	At what point on the site is the contractor responsible for the natural gas line? From the gas meter to the MAU HVAC equipment?	This will be clarified via addendum.
100	Will there be additional geotechnical exploration? B5 and B7 are in the vicinity of the new pump station, but there is no soil info further up the hill in the vicinity of the proposed cut slope and retaining wall that runs along the western portion of the property.	No additional information beyond the geotechnical data in Appendix A is available.
101	Are actual elevations available for where B5 and B7 were drilled so that the impacts of water intrusion and rock encountered can be determined?	No additional information beyond the geotechnical data in Appendix A is available.
102	If soil nailing is used to shore the excavation for the new pump station, nails could extend beyond the limits of disturbance lines shown and into the park area. Is this permissible?	No.
103	The two main concrete mixes are 1) normal weight water bearing concrete and 2) Mass Concrete. Both of these mixes give target total cementitious material desired in the mix. Based on what is known of our local materials and mix performance, this top end limit of cement content may cause the mix to not reach the desired strength in 28 days in the case of the normal weight mix and 56 days in the case of the mass concrete mix. Will it be acceptable to increase the cement content to achieve the desired strengths?	The contractor may propose a mix design with more cement than the noted "target total cement" as long as it meets the design criteria (including allowable shrinkage limit and coarse aggregate testing related to ASR with the proposed aggregate and proposed cementitious materials).
104	There does not appear to be a partition schedule in the plans. The structural plans appear to depict all of the interior CMU partition as 12" thick CMU. However, the section cuts shown on the Architectural plans appear to show these same partitions as 8" CMU. Which is correct? Please advise.	The drawings accurately show wall thicknesses.
105	There are 42" high removable handrails shown to be installed on the low side of the roof. 1) what portions of these handrails are to be removable? 2) How are we to waterproof the base of the removable sections of handrail?	All handrail on the low side of the roof is removable. Refer to detail 7/99S507.
106	There does not appear to be a hatch shown on the roof of the building. Where do the details on this sheet apply?	There is no hatch on the roof of the building.
107	The structural plans do not depict any structural steel or steel plates at the opening for the OH coiling door, only a bent plate for a brick lintel. There is a steel plate depicted in the architectural detail at this opening. Which is correct? Please advise.	The structural drawings shall be used, finish opening as recommended by the door manufacture.
108	There is fiberglass ductwork shown to be installed in the tall void directly adjacent to Wet Well # 1. Once the ground level slab is placed over this void, it does not appear that there will be a means to access this space to demolish the formwork for the slab, install the ductwork, or for future maintenance or repairs of the duct in this area. Is this the designer's intent? Please advise.	An opening with hatch is required, this will be added via addendum.
109	Would the designers consider extending the bid date beyond 6/18/25 to allow time for the trades to absorb the impacts of the addenda received last week and the forthcoming Addenda?	The bid date will be extended to June 25th, 2025 at 2 PM.
110	Can the compressive strengths of the rock cores be provided for the following test locations: GS-1, GS-2, GS-3, GS-4, GS-5, & GS-6?	No additional information beyond the geotechnical data in Appendix A is available.
111	Please confirm that spec section 33 05 07 – Tunneling for Buried Piping part 1.2.I.3.j is in reference to direct jack applications and not to be applied for steel casing?	Correct, section 33 05 07 is in reference to direct jack applications only.
112	Is the contractor allowed to provide their own bypass plan?	Yes, the contractor is allowed to provide a bypass plan, but it will be subject to MSD's and Engineer's review and approval.
113	Note 6 on 10E103 calls for a remote breaker operator station. Please provide intent and wiring diagram, number of breakers controlled, etc. Is this a breaker or selector switch?	The remote breaker operator station is specified in Section 26 24 13 - 2.2.H. The electrically operated breakers that are connected to the remote station are shown on the one-line diagram on sheet 98E601 and are denoted by the text descriptor "(EO)". Wiring diagram will be provided by the switchboard manufacturer.
114	Plan sheet 00G004 indicates no fire alarm system is required under the Life Saving Systems Requirements, but plan sheet 00G006 calls out a fire alarm system is requirement for the Odor Control System. Please clarify if a fire alarm system is required for the pump station.	A fire alarm system is not required.

Question No.	Question	Response
115	Drawing 10A301 calls out a 1hr rated hollow core slab. It also appears the roof details could be hollow core slabs as well. Please clarify if the slab on top of the roof beams and stair well 1 are hollow core slabs. If so, please provide a specification section and a detail for the hollow core slabs.	The reference to hollow-core is incorrect. This is a poured-in-place slab, see Drawing 10S106. There are no hollow-core slabs on the project, all slabs are poured-in-place concrete.
116	Ref Sheet 01C305: Note 7 identifies the plug location in the pump station receiving gravity line. What is this line's diameter & invert elevation?	Per available drawings, the pipe diameter inside the pump station is 36", the pipe diameter in the manhole just outside of the pump station is 48", the invert elevation at each location is approx. 1961.0
117	Ref Sheet 01C305: Note 10 identifies an existing 10" SS line that will require bypass during rehabilitation via temporary manhole to be installed. Does the engineer have a required flow rate for bypass pumping of this line?	No flow rate information is available, assume full pipe flow.

SECTION 08 33 22
ALUMINUM ROLLING OVERHEAD DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Aluminum rolling overhead doors.
   2. Motor operators.
   3. Control Systems.

B. Related Specification Sections include but are not necessarily limited to:
   1. Section 01 61 03 - Common Work Results for Equipment.

1.2 QUALITY ASSURANCE

A. Referenced Standards:
   1. Aluminum Association (AA):
      a. DAF 45, Designation System for Aluminum Finishes.
   2. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):
      a. 90.1, Energy Standard for Buildings Except Low-Rise Residential Buildings.
   3. ASTM International (ASTM):
      a. A36/A36M, Standard Specification for Carbon Structural Steel.
      b. A53/A53M, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
      c. A123/A123M, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
      d. A153/A153M, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
      e. A307, Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 psi Tensile Strength.
      f. A666, Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
      g. A500/A500M, Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
      h. A501/A501M, Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
      i. B209, Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
      j. B221, Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
      k. E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
      l. E330/E330M, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
      m. F467, Standard Specification for Nonferrous Nuts for General Use.
      n. F468, Standard Specification for Nonferrous Bolts, Hex Cap Screws, Socket Head Cap Screws, and Studs for General Use.
      o. F3125, Standard Specification for High Strength Structural Bolts, Steel and Alloy Steel, Heat Treated, 120 ksi (830 MPa) and 150 ksi (1040 MPa) Minimum Tensile Strength, Inch and Metric Dimensions.
   4. International Code Council (ICC):
      a. International Energy Conservation Code (IECC).
   5. National Electrical Manufacturers Association (NEMA):
      a. 250, Enclosures for Electrical Equipment (1000 Volts Maximum).

6. National Fenestration Manufacturer's Council (NFRC):
    a. 102, Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
7. Underwriter's Laboratories (UL):
    a. 325, Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems.

B. Qualifications:
1. Installer to be licensed or approved in writing by door manufacturer.

1.3 DEFINITIONS

A. Installer or Applicator:
1. Installer or applicator is the person actually installing or applying the product in the field at the Project site.
2. Installer and applicator are synonymous.

1.4 SUBMITTALS

A. Shop Drawings:
1. Product technical data including:
    a. Acknowledgement that products submitted meet requirements of standards referenced.
    b. Manufacturer's installation instructions.
2. Schedule of doors using same reference number for openings as indicated on Drawings.
3. Motor operator and accessories technical data including complete wiring and control diagram for motor operators and control stations.
4. Certifications:
    a. Certification of Installer's qualifications.

B. Samples:
1. Actual metal color samples of manufacturer's full line of colors available.

C. Contract Closeout Information:
1. Operation and Maintenance Data:
    a. See Specification Section 01 78 23 for requirements for the mechanics, administration, and the content of Operation and Maintenance Manual submittals.

D. Informational Submittals:

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
1. Aluminum rolling overhead doors:
    a. CornellCookson
    b. Wayne Dalton.
    c. Overhead Door Corporation.
    d. Raynor Garage Doors.

2.2 PERFORMANCE AND DESIGN REQUIREMENTS

A. Design Wind Load: ASTM E330/E330M.
1. Exterior doors: See Structural Drawings.
2. Interior doors: 20 psf minimum.

B. Air Infiltration:
1. Meet ASHRAE 90.1 and IECC C402.4.3.
2. Air leakage: <1.00 cfm/SQFT.

C. Thermal performance:

1. NFRC 102: U-factor: 0.91.

D. Sound Rating:
1. ASTM E90.
2. Minimum assembly rating: STC-21.

2.3 MATERIALS

A. Aluminum:
1. Shapes, plate: ASTM B221.
2. Sheet: ASTM B209.
3. Bolts and nuts: ASTM F467 and F468.

B. Insulation:
1. Closed cell polyurethane foam.
2. CFC free.

C. Weatherproofing:
1. Resilient: Neoprene or vinyl.
2. Brush type: Nylon or polypropylene.

D. Miscellaneous Fasteners: Aluminum or stainless steel.

2.4 MANUFACTURED UNITS

A. Door Curtain:
1. Insulated flat profile:
a. 2-5/8 inches high.
b. Interlocking face sheets:
1) Exterior face: 0.040 inches.
2) Interior face: 0.024 inches.
c. Galvanized endlocks.
d. Core: Insulated.
2. Bottom bar:
a. Two structural angles bolted back-to-back.
1) Minimum 1/8 inches thick.
b. Aluminum or stainless steel.

B. Operation:
1. Motor operated with integral chain hoist backup.

C. Guides:
1. Manufacturer's standard structural angle guide system for size of door specified.
a. Cold-rolled guides are not acceptable.
b. Furnish curtain wind locks as necessary for design wind load.
c. Material:
1) Exterior doors:
a) Doors requiring wind locks: Stainless steel.
2. Mounting:
a. Interior face of wall.
b. Exterior face of wall.
c. Between jamb.

D. Headplates:
1. Stainless steel plate mounted to guides.
2. Sized to support counterbalance assembly, curtain, motor operator and hood.
a. Field verify headroom and side clearances and coordinate motor operator mounting accordingly.

E. Counterbalance Assembly:
1. Pipe barrel:

a. Stainless steel.
b. Maximum deflection: 0.03 inches/FT.

2. Torsion springs:
a. Oil-tempered helical torsion springs on cast anchors.
b. 100,000 cycle.

3. Adjustable tension wheel.

F. Hood:
1. Minimum 0.040 inches aluminum or minimum 24 GA stainless steel.
2. Air baffle extending full length.

G. Weatherstripping:
1. Guide tracks: Exterior and interior weatherseal.
2. Lintel: Brush-type weatherseal.
3. Bottom seal:
a. Manually-operated doors: Resilient weather seal.
b. Motor-operated doors: Electric safety edge.
c. Motor-operated doors: Resilient weather seal.

H. Finish:
1. Curtain:
a. Architectural Class 1 coating per AA DAF 45.
b. Powder coat:
1) Factory prime and finish coats.
2) Prime coat: Minimum 0.2 mil baked-on prime paint.
3) Finish coat: Minimum 0.6 mil baked-on polyester powder coat.
4) Color: To be selected by Engineer from manufacturer's complete offering.

2. Hood:
a. Aluminum: Match curtain.

3. Guides, head plates, and counterbalance assembly:
a. Manufacturer's standard powder coating.

I. Trim Pieces: Material and finish to match door curtain.

J. Locking:
1. Motor operated doors: Integral motor brake.

2.5 ACCESSORIES

A. Motor Operator:
1. Minimum 1/2 hp with integral brake.
a. Single or 3 PH, 60 Hz, designed for the supply voltage shown on the Drawings.
b. See Specification Section 01 61 03 for additional motor requirements.
1) Provide manufacturer's standard reversing controller with motor thermal protection if motor is not internally protected as specified in Specification Section 01 61 03.
c. Motor shall be sized by door manufacturer for door size indicated on Drawings.
1) Opening/Closing rate: Between 2/3 and 1 FPS.

2. Provide enclosures with the required rating per NEMA 250 to meet classifications identified in the Contract Documents.
a. See Specification Section 01 61 03.

3. Provide integral backup chain hoist and release with integrated interlock.
a. Provide chain keeper for each hoist.

4. Control System:
a. General:
1) Control system shall be hard wired to the voltage system in the motor operator.
a) Battery powered control stations or receivers are not acceptable.
2) Provide wiring terminations for all supplied control system components.

a) Wireless control stations or entrapment protection components are not acceptable.

3) Provide enclosures with the required rating per NEMA 250 to meet classifications identified in the Contract Documents.

b. Manual control station:

1) Interior controls: Surface mounted.

a) Pushbutton operation: Open, Close, Stop.

2) Exterior controls: Surface Mounted.

a) Key operation: Open, Close, Stop.

(1) Coordinate keying with master keying specified in Section 08 70 00.

b) Pushbutton and key operation: Open, Close, Stop.

c) Coordinate keying with master keying specified in Section 08 70 00.

d) Card reader operation.

(1) Coordinate with access control system provided by Owner.

c. Entrapment protection:

1) Comply with UL 325.

a) Instant reversing.

b) When activated shall prevent operator from closing an open door.

2) Electric safety edge:

a) Contact-type sensor installed on leading edge of the door.

b) When activated shall prevent operator from closing an open door.

c) Safety edge on exterior doors shall act as a weatherseal.

2.6 MAINTENANCE MATERIALS

A. Provide 2 oz of touch-up paint properly labeled for each different color of door.

1. Touch-up paint shall be formulated to be compatible with finish specified and shall be capable of being applied without special equipment or tools.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Installation shall be done by manufacturer's authorized representative.

C. Provide all required trim, weatherstripping, closures etc., for complete weather tight installation.

D. Adjust for proper counter balance.

E. Seal along bottom of vertical track (guides), seal the vertical joint between the two separate track angles (if not filled by welding) and seal all holes in vertical track (not being used for fasteners) to provide a completely weather tight track and door system.

1. At fastener locations provide aluminum washers under bolt head to completely cover the slotted holes in the vertical guide.

F. Electrical disconnect and conduit and wiring from standard three pushbutton control to motor operator is provided as indicated on the Electrical Drawings.

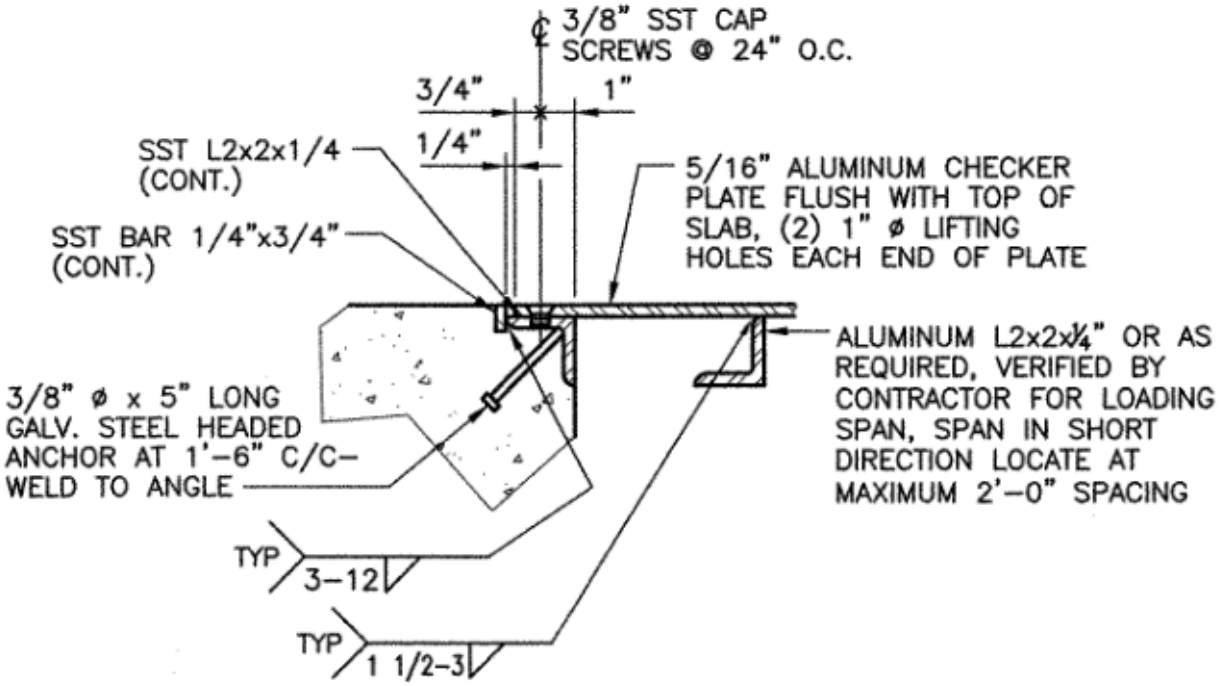
G. Provide aluminum or stainless steel bracing for motor operator to eliminate vibration.

H. Provide dissimilar materials protection on all surfaces coming in contact with dissimilar materials.

3.2 ADJUSTMENT

A. Prior to occupancy, adjust door for smooth operation.

END OF SECTION



CHECKERED PLATE SUPPORT

NOT TO SCALE