



Invitation for Bid# 2021-051 853W Zone Improvements – Phase 1 Transmission Mains Rocky River Road & Secrest Shortcut Road

ADDENDUM No. 1

ISSUE DATE: February 26, 2021

Bidders on this project are hereby notified that this Addendum shall be made a part of the above named IFB document.

The following items add to, modify, and/or clarify the IFB documents and shall have the full force and effect of the original documents. This Addendum shall be acknowledged by the bidder in the IFB document.

Union County, NC 853W Zone Improvements – Phase 1 Transmission Mains Rocky River Road & Secrest Shortcut Road Black & Veatch Project # 186110

ADDENDUM NUMBER 1

February 26, 2021

BID DATE: March 4, 2021 at 2:00 p.m. EST

TO ALL BIDDERS:

This Addendum forms a part of the Contract Documents and modifies the Bidding Documents and all previous Addenda.

Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may disqualify the Bidder.

Below are changes, additions, and/or clarifications to the bid documents for this project.

Scope

This Addendum No. 1 consists of pages 1 through 10 and covers the following additions and changes to the Specifications and Drawings for this Project and contains the following attachments.

- C-410 BID FORM
- C-430 BID BOND
- Additional Geotechnical Data (additional borings not shown on Drawings)
- Approved Piedmont Natural Gas (Duke Energy) Encroachment Permit
- Revised Drawings Sheets: C1, C2, C3, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, D1, D5, AND D6
- Current Planholders List

Drawings

 DRAWINGS C1 THRU C3, C5 THRU C28, D1, D5, AND D6 shall be replaced with the attached revised drawings – Revisions include incorporation of various erosion & sedimentation control measures throughout, pipeline alignment revisions on Drawings C3 and C13, jack & bore revisions on Drawings C3 and C14, deletion of sidewalk on Drawings C7 and C8, addition of concrete encasement on Drawing C8, and update of bend stationing in profile to match plan on Drawing C20.

Specifications

- 1. Project Manual, Section C-410 BID FORM. DELETE the Bid Form in its entirety and replace with the revised Bid Form attached herein.
- 2. Project Manual, Section C-430 BID BOND. DELETE the Bid Bond (with "SAMPLE" watermark) in its entirety and replace with the revised Bid Bond attached herein.

- 3. Project Manual, Section 01015 PROJECT REQUIREMENTS, Paragraph 4, delete the first sentence and replace with, "Provisions for evaluation of proposed "or equal" items of materials or equipment are covered in Paragraph 6.05 of the General Conditions."
- 4. Project Manual, Section 01025 MEASUREMENT AND PAYMENT, Paragraph 11 UNIT PRICE,
 - a. AFTER the first sentence of Item 19a, 19b, and 19c Abandon Water Main, ADD the following sentence.

"The lump sum price shall also include filling all abandoned water mains with grout or flowable fill as defined in NCDOT Standard Specifications for Roads and Structures Section 1530-Abandon or Remove Utilities."

b. AFTER Item 29 F, ADD the following paragraphs.

"G. <u>Check Dam</u>. Payment for this item shall be per check dam in accordance with the detail on the Drawings.

H. <u>Diversion Ditch</u>. Payment for this item shall be lump sum including the diversion ditch in accordance with the detail on the Drawings, erosion control matting to stabilize the diversion ditch, temporary culvert pipe, and gravel driveway repair as shown on the Drawings."

I. <u>Silt Basin</u>. Payment for this item shall be per silt basin in accordance with the detail on the Drawings."

c. AFTER Item 36, ADD the following paragraph.

"Item 37 – Cast-in-Place Concrete Encasement. Payment for this item shall be per linear foot of concrete encasement in accordance with the detail on the Drawings and as specified where shown on the Drawings. The price shall include all labor, materials, equipment, and incidentals associated with furnishing and installing cast-in-place concrete encasement above and beyond the cost of the pipeline including, but not limited to; additional site work excavation, additional dewatering, excavation support, concrete reinforcement, backfill, compaction, coordination with all private and public utilities as necessary, concrete support, concrete forms, together with all other appurtenant work and miscellaneous costs required to complete the work as shown on the Drawings and /or specified.

5. Project Manual, Section 01025 – MEASUREMENT AND PAYMENT, Paragraph 11 UNIT PRICE, DELETE Item 23 – Short Side Water Service and REPLACE with the following, "Item 23 – Short Side Water Service. Short side water services shall be installed by open cut at the grades and locations shown on the Drawings. Payment will be made on the basis of the unit price bid. The unit price bid for construction of the short side water service shall include, but not limited to 10 linear feet of ¾" copper tubing, appurtenances, new meter box, furnish new meter assembly, relocating/resetting existing water meter, excavation, backfill, restoration and all of the Contractor's cost of the complete construction of the water service, exclusive of the items provided elsewhere on the Bid Form."

- 6. Project Manual, Section 01025 MEASUREMENT AND PAYMENT, DELETE Item 24 Long Side Water Service and REPLACE with the following, "Item 24 Long Side Water Service. Long side water services shall be installed by trenchless methods where services cross an existing road and shall include, but not limited to 30 linear feet of ¾" copper tubing, appurtenances, new meter box, furnish new meter assembly, relocating/resetting existing water meter, excavation, backfill, restoration and all of the Contractor's cost of the complete construction of the water service, exclusive of the items provided elsewhere on the Bid Form."
- 7. Project Manual, Section 02330 TUNNEL ANNULAR BACKFILLING, Paragraph 1-1. SCOPE, DELETE the reference to, "fiberglass reinforced polymer mortar carrier pipe" and REPLACE with "ductile iron carrier pipe".

Q/A & Clarifications

- There is no vicinity map in either the printed set or the electronic file for the geotechnical information. Can you please have that sent out to the bidders? The boring locations are shown on the plans with the boring symbol and respective number. Refer to the legend in sheet A1 for the boring symbol.
- 2. Are there portions to be bored? Yes.
- Will the portions be directionally bored or jack and bored?
 Portions will be installed using trenchless methods as shown and specified.
- What are the lengths and sizes of the portions to be bored? Approximately 2,000 linear feet of 54" and 30" steel casings in various locations will be installed using trenchless methods.
- 5. How much is the required bid bond for the project? A Bid must be accompanied by Bid security made payable to Owner in an amount of [5%] percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.
- How much is the cost estimate of the project? The Opinion of Probable Construction Costs for the project is \$22,420,000.
- 7. The contract documents that I received have a bid bond that has SAMPLE stamped across the form. In the ITB it states that there was a loose bid form/bond form but I didn't receive that. Should we just use the one stamped SAMPLE or do you want to issue a clean one? An unbound Section C-430 Bid Bond without the "SAMPLE" watermark has been included as an attachment to this Addendum.
- I noticed that Minority Business/Small Business good faith efforts are encouraged. Where can I look for more information on this? There are no MWBE requirement on this project. Bidders are encouraged to use MWBE subs but no credit will be given for it.

- 9. There are 57 soil borings reported in the Exploration Report by ESP. However, it does not give the locations. Can you assist us finding what these locations are? The boring locations are shown on the plans with the boring symbol and respective number. Refer to the legend in sheet A1 for the boring symbol. Additionally, borings B6, B7, B47, B48, B49, B50, B51, B52, B53, and B54 were collected earlier in the design phase and are not within the project area. These bore logs shall be removed in their entirety from the Geotechnical Report.
- 10. Regarding the waterline abandonment, there was some language in the plans and specs about abandoning in place and capping it off with a plug as needed. Can you clarify that all the waterlines we are to abandon are to be filled in with a flowable fill or sand? The existing waterline shall be abandoned per NCDOT Specification Section 1530 as noted in the revised Specification Section 01025 – Measurement & Payment revised per this addendum.
- 11. Are we correct to assume that the bore & jack crossings are to be priced as guaranteed bores with rock excavation to be included? Yes.
- 12. It appears that the 16" & 8" (depending on pipe material) pipes to be abandoned within the NCDOT ROW need to be removed or grouted per NCDOT specifications, but the bid documents don't mention grouting or removal, just cutting/capping. Please provide guidance. The existing waterline shall be abandoned per NCDOT Specification Section 1530 as noted in the revised Specification Section 01025 – Measurement & Payment revised per this addendum.
- 13. Section 02330 calls for cellular concrete grouting around FRP, but all carrier pipes appear to be DIP. Please clarify if the design life for the crossings is 100 years to avoid having to grout the annular space, or if 02330 should be used for grouting the annular space on cased DIP crossings within the NCDOT ROW. Specification Section 02330 has been revised per this Addendum as noted above and Section 02330 shall be used for grouting the annular space between all steel casing and carrier pipes as specified and shown on the Drawings.
- 14. Are you intending the 36" Ductile Iron Fittings to be manufactured restrained? 36" Ductile Iron Fittings shall be as specified in Section 15061, Paragraph 2.2.
- In section 2.3 of 15061, you are calling out for tangential outlets for your blow-off assemblies. Will you accept MJ Tees as an alternate to tangential outlets in this instance?
 No, tangential outlets will be required for all blow-off assemblies as specified in Section 15061 Ductile Iron Pipe and shown on the Drawings.
- 16. What is the anticipated Notice to Proceed date? The anticipated Notice to Proceed is approximately May 2021.
- 17. "The notes on the plans indicate that the contractor is to deal with conflicts between the new water line and existing utilities. There are several locations where power poles or guy wires for poles are in direct conflict with the new pipe. What is an acceptable means for dealing with this conflict i.e. move the center line over, add fittings, relocate the pole (*this would have to be approved by the owner of the utility*) etc....? If extra fittings or power pole relocation is utilized to mitigate the conflict, will the contractor be paid the additional

cost required to correct the issue or is such cost to be estimated and included in the bid as incidental cost to build the project?"

Refer to Section 01025 Measurement and Payment, Paragraph 5 and 6 for powerline temporary supports and shielding and utility locations and relocations. Regarding direct conflicts, relocation of the water main within the permanent utility easement will be allowed on a case-by-case basis with approval from the Engineer/Owner. Any adjustment to the alignment will be paid for under the pipeline and fittings bid items and shall include all materials, labor and equipment to adjust the alignment of the pipe around the conflict.

- 18. When we encounter rock on the project, I understand we won't be allowed to backfill it over the pipe, but can we bury the rock on the permanent easement and use suitable materials mined while burying the rock to backfill the pipe trench? No.
- 19. What are the rates for water usage during testing, flushing and disinfecting? Contractor will be required obtain hydrant meter from the County which requires a \$300 deposit. The water usage is billed at the current bulk rate of \$4.85/1,000gal.
- 20. Would HDPE or stainless-steel bolt on type seep collars be acceptable in lieu of cast in place concrete seep collars?

Per paragraph 4, Section 01015 – Project Requirements, "Requests for review of equivalency will not be accepted by Engineer from anyone except Contractor, and such requests will not be considered until after the Effective Date of the Agreement."

- 21. Would bolt on HDPE or stainless steel seep collars be acceptable for use in lieu of soil plugs in embedment stone every 400 feet? Per paragraph 4, Section 01015 – Project Requirements, "Requests for review of equivalency will not be accepted by Engineer from anyone except Contractor, and such requests will not be considered until after the Effective Date of the Agreement."
- 22. Please confirm that connections (Items 12-18) do not include the proposed fittings on the proposed main line but that the lump sum price includes all piping, fittings and hardware from that point to the connection to the existing watermain being connected.

For Bid Item 12, the MJ coupling for the connection to the existing 36" main shall be included in the lump sum price. For Bid Items 13-18, the proposed fittings for the connection to the 36" and 16" mains are excluded from these items and are included in items 3A and 3B.

23. We see that Permalok by Northwest pipe is allowed in lieu of butt welded pipe. Will you allow Tri-LOC by Trinity as well if it meets the same watertightness and tensile strength specs? I have attached a cut sheet and list of completed projects using this product. The product is also included under interlocking joints approved for use under railways in the AREMA handbook.

Per paragraph 4, Section 01015 – Project Requirements, "Requests for review of equivalency will not be accepted by Engineer from anyone except Contractor, and such requests will not be considered until after the Effective Date of the Agreement."

24. Is the hydrant tee considered part of the hydrant assembly or paid per pound with fittings? The hydrant tee is included as part of Bid Item 22, Fire Hydrant Assembly.

25. Spec section 01310 states that payment is to be based on monthly schedule and that cost loading is to match the contract total. How do you propose cost loading items which are at engineer's discretion such as stabilization stone?

Items that are at the engineer's discretion can be initially spread out equally over the entire contract and adjusted monthly for actual values. The exact schedule implementation can be coordinated after contract award.

- 26. Please consider adding a bid item for fabric embedment stone barrier discussed in section 02202 3-4.03.01. Type A filter fabric for encapsulating embedment stone as specified in Specification 02202 – Trenching and Backfilling paragraph 3-4.03.01 shall be included as incidental to Bid Items 2A-2D – Pipeline.
- 27. Spec section 02231 Jack and Bore 1.1 states that drill and blast method is unacceptable. In trenchless applications where geotechnical suggests a split faced condition between PWR and competent rock will the contractor be allowed to raise or lower the casing to pass in either solid rock or PWR? Non-explosive hand mining of split faced material will not support the project schedule. It is understood that explosives will not be allowed in the Railroad ROW but will the use of explosives be allowed in DOT crossings and off ROW applications?

Drill and blast methods are not acceptable as specified in section 02231 - Jack and Bore. The casing pipe may be lowered to pass in solid rock or PWR, but all costs associated with adjustments to the alignment shall be incidental to the respective trenchless bid item.

- 28. Can you confirm that steel trench shields will be allowed for jacking and receiving pits? The Contractors trench and excavation support system shall be installed in accordance with the project specifications and in accordance with OSHA requirements.
- 29. Does the 11" base and 2" surface asphalt section included in the plan set apply to parking lot and driveway crossings?

Refer to the note shown on Detail D, Drawing D2, "FOR NCDOT ROADWAYS OR COMMERCIAL/INDUSTRIAL DRIVEWAYS, MATCH EXISTING ASPHALT BASE THICKNESS OR PROVIDE 11" ACBC TYPE B 25.0C (WHICHEVER IS GREATER). FOR RESIDENTIAL DRIVEWAYS, MATCH EXISTING ASPHALT BASE THICKNESS OR PROVIDE 6" ACBC TYPE B 25.0C (WHICHEVER IS GREATER)"

- 30. On drawing sheet C12 note 3 states that work shall proceed without stoppage referencing the Jack and bore under the CSX railroad. Is this for the entire bore or only for the portion within the influence lines of the track (1:1) shown on the profile? Normally 24 hour tunneling is only required within the influence line. The trenchless installation under the CSX railroad ROW shall be in accordance with the Drawings and specifications.
- 31. Drawing sheet C12 note 3 also states that work stoppage is only allowed when adding lengths of pipe. Does this mean that auger may not be withdrawn to validate line and grade? The Contractor is required to prevent settlement and progress the work as expeditiously as possible. It is not the intent of the Engineer to dictate means and methods of the Contractor.
- 32. Drawing sheet C12 note 4 states that the boring head must be capable of being withdrawn through the casing. I assume this precludes the use of microtunneling and weld on disc cutter heads if the bore is in solid rock as they cannot be withdrawn. Please confirm. Alternate trenchless installation methods are not precluded, but the work must be performed in accordance with CSX standard design and construction specifications.

- 33. Drawing sheet C12 note 12 states that casing shall be minimum wall thickness of 0.781". Specifications state minimum thickness of 1". Please confirm that the wall thickness cannot be less for the railroad bore. The minimum thickness for a 54" casing pipe at railroad crossings shall be 0.781" as shown on sheet C12 and as noted in detail A, Drawing D2. Refer to the table included in detail A, Drawing D2 for minimum casing thickness for both street and railroad crossings.
- 34. Drawing sheet C12 note 12 also states the casing is to be spiral welded while the specifications do not indicate a spiral weld option. Would Tri-LOC spiral weld with interlocking joints be allowable in this case? Specifications provided in previous email of questions.

As noted in Note 12 on Sheet C12 the steel casing for the crossing shall be spiral welded steel with a minimum wall thickness equal to 0.781 inches and a minimum yield strength equal to 35,000 psi. Additionally, CSX Pipeline Design and Construction Specifications state that joints can be either constructed through butt welding or through the use of interlocking joints.

Regarding Tri-LOC, Per paragraph 4, Section 01015 – Project Requirements, "Requests for review of equivalency will not be accepted by Engineer from anyone except Contractor, and such requests will not be considered until after the Effective Date of the Agreement."

- 35. Will the gravel lot at Sta. 127+00 be allowable as use for laydown while working in other areas or only while working in the immediate area of the lot? This area may be utilized for a laydown and staging area when actively working in the general vicinity of the lot (within 1 mile of the lot). Usage of this lot for laydown and staging will not be permitted for the duration of the project.
- 36. There are inconsistencies between the bend angle shown on plan and profile views between Sta. 136+37 and 138+02. Please advise.The bends between the stations have been revised in the attached Drawing C13 to reflect the correct bend
- 37. In section 1310 it specifies to use Primavera P6. Will other scheduling software's like Microsoft Project be allowed? Yes.

angles.

- 38. In section 1380 it references that pictures must be taken by a professional photographer. Would someone on the contractor's staff that regularly takes photos of construction projects be considered a professional photographer?
 Yes.
- 39. Will we be able to hold progress meetings at UCPW office or at our office located in Union County or do we have to establish a field office to hold meetings? Yes.
- 40. Who is to pay for railroad flagman as needed, contractor or owner? The Contractor. Per paragraph 10, Section 01025 – Measurement & Payment, "No separate payment shall be made in connection with any insurance, training, coordination, traffic control, flagging, inspections or other permitting requirements associated with Work within railroad right-of-way. All such costs associated with Work within railroad right-of-way shall be included in the cost of the railroad crossing bore & jack."

- 41. Are the water mains that are to be abandoned to be filled with flowable fill or just capped. I saw the section under CSX has to be filled with flowable fill but do any of the others?
 The existing waterline shall be abandoned per NCDOT Specification Section 1530 as noted in the revised Specification Section 01025 Measurement & Payment revised per this addendum.
- 42. There is a location in front of Union Power Coop. that it appears we are in between 2 power poles (only 1 shown on plans) and there is not enough room to fit a track machine in between them to dig safely. There are also some huge power boxes right behind one of them. This would be near station 83+75. Would you consider adding a bore and jack in this location? For bidding purposes, pipeline shall be installed as shown on the plans.
- 43. From about stations 155+00 to 165+00 there is only a 20' wide easement. On the road side of the easement there is an overhead power line with low hanging wires so that leaves only a 10' wide easement on the back side. Is there any way we could get some temporary easement in this location so that we have some where to place the dirt during excavation?

Additional easement outside of what is currently shown on the drawings would have to be obtained by the Contractor.

44. There are some buildings that are in line with the water main. Is it the contractors or home owners responsibility to relocate these? And if it is the contractors do they go back where they are or will they stay where we move them to?

The Contractor is responsible, Per paragraph 11, Section 01025 – Measurement & Payment, Items 2a thru 2d. – Pipeline Subparagraph p, "All required easement provisions noted on the Contract Drawings including sign removal, stockpile and replacement; mailbox removal and replacement; temporary gravel parking area; temporary gravel walkway; topsoil removal, stockpile and replacement; additional clearing area outside of easement areas; relocated sheds and doghouses and any associated fencing; temporary fencing for dog containment; location, protection, and repair of existing irrigation systems; tree protection with one-year inspection and replacement if needed; and removal and replacement of existing backflow preventer and associated piping."

They will be reinstalled in the existing location unless otherwise noted or specified.

45. Under letter G of Article 7- Attachments to This Bid for the 853W Zone Improvements- Phase 1 project, it states we are to submit a Required Bidder Qualification Statement with supporting data. I was unable to locate the qualification statement in the project manual. Can you please provide the qualification statement to complete?

It is up to the Bidder to submit enough information to ascertain if the Bidder is qualified. The bid package allows Union County to request more information after the bids are opened if there is any question as to the qualifications.

46. The Short Side and Long Side Water Service bid items 23 and 24 appear to be just unit price items that are meant to cover services as needed, unless I missed them somewhere on the plans. Can you tell us what are the service sizes, how much footage of pipe should we account for on each, and will we need to include meters or backflow preventors?

The short side service is shown on Drawing C27 at approximately STA 274+65. The long side service item is to cover long services as needed. The descriptions for Bid Items 23 and 24 have been revised per this addendum as noted above to include additional specifics for these pay items.

This addendum and all attachments will be distributed to registered plan holders via email.

Receipt of this addendum must be acknowledged on Page 1 of EJCDC C-410, Bid Form. Sincerely, **Black & Veatch**

Patrick Stout, P.E. Engineering Manager

END OF ADDENDUM No.1

Add documents below

Full Addendum can be downloaded at this link:

https://www.dropbox.com/l/scl/AAAbspd9Pi-KY4RhlBiGd7tSAMZpzQYP1Gk

C-410 – BID FORM

BID FORM

853W Zone Improvements - Phase I Transmission Mains Rocky River Road & Secrest Short Cut Road UCPW Project No. WT-061

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ARTICLE 1 – BID RECEIPIENT

1.01 This Bid is submitted to:

Vicky Watts, Senior Procurement Specialist Union County Procurement Department 500 N. Main Street, Suite 709 Monroe, NC 28112 704-283-3601 Email: vicky.watts@unioncountync.gov

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

Addendum No.	Addendum, Date

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2)

reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 – BIDDER'S CERTIFICATION

- 4.01 Bidder certifies that:
 - A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
 - B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
 - C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
 - D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at

artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

- 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
- 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the e execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization (Shall Not Exceed 3% of the Total Bid)	LS	1		
2a	Pipeline – 36" Ductile Iron Pipe	LF	7,830		
2b	Pipeline – 36" Restrained Joint Ductile Iron Pipe	LF	14,350		
2c	Pipeline – 16" Ductile Iron Pipe	LF	1,890		
2d	Pipeline – 16" Restrained Joint Ductile Iron Pipe	LF	1,310		
3a	36" Ductile Iron Fittings	LBS	262,100		
3b	16" Ductile Iron Fittings	LBS	4,700		
4a	36" Gate Valves	EA	9		
4b	16" Gate Valves	EA	3		
5a	Bore & Jack Creek Crossing – 54" Steel Casing with 36" Carrier Pipe	LF	98		
5b	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Rocky River Road Sta 35+56.94)	LF	55		
5c	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Goldmine Road)	LF	274		

	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
5d	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Westwood Industrial Dr)	LF	102		
5e	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Union Power Way)	LF	62		
5f	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Aeropointe Pkwy)	LF	130		
5g	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Rocky River Road STA 114+39.61)	LF	61		
5h	Bore & Jack Roadway Crossing – 30" Steel Casing with 16" Carrier Pipe (Rocky River Road W/L Sta 0+15.17 – Sheet C12)	LF	67		
5i	Bore & Jack Railroad Crossing – 54" Steel Casing with 36" Carrier Pipe	LF	200		
5j	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Old Charlotte Highway)	LF	81		
5k	Bore & Jack – 54" Steel Casing with 36" Carrier Pipe (STA 136+47.11)	LF	146		
51	Bore & Jack – 54" Steel Casing with 36" Carrier Pipe (STA 140+20.02)	LF	330		
5m	Bore & Jack Roadway Crossing– 54" Steel Casing with 36" Carrier Pipe (US Route 74)	LF	149		
5n	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (James Hamilton Road)	LF	136		
50	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Chatterleigh Drive)	LF	105		
5p	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Rocky River Road STA 228+96.13)	LF	80		

	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
5q	Bore & Jack Roadway Crossing – 54" Steel Casing with 36" Carrier Pipe (Myers Road)	LF	66		
5r	Bore & Jack Roadway Crossing – 30" Steel Casing with 16" Carrier Pipe (Secrest Short Cut Road)	LF	57		
6a	Open Cut Crossing – 54" Steel Casing with 36" Carrier Pipe (James Hamilton Road)	LF	136		
6b	Open Cut Crossing – 54" FRP SN46 Casing with 36" Carrier Pipe	LF	90		
7	Anti-Seep Collar – 36" Pipe	EA	3		
8a	Stream/Creek Crossing w/ Matting – 16" Pipe	LF	20		
8b	Stream/Creek Crossing w/ Matting – 36" Pipe	LF	105		
8c	Stream/Creek Crossing w/ Riprap – 36" Pipe	LF	140		
8d	Stream/Creek Crossing w/ Riprap – 36" Pipe (Dry Fork Creek)	LF	20		
8e	Stream/Creek Crossing w/ Riprap – 36" Pipe (Stewarts Creek)	LF	20		
9a	Air release valve manhole for 36" Transmission Main	EA	7		
9b	Air release valve manhole for 16" Transmission Main	EA	1		
10a	Manual air release valve for 36" Transmission Main	EA	18		
10b	Manual air release valve for 16" Transmission Main	EA	6		
11a	10" Blow Off	EA	5		
11b	2" Blow Off	EA	1		
12	Connection to Existing 36" Transmission Main (STA 10+00)	LS	1		
13	Existing 16" Water Main Connection to Proposed 36" Water Main (Station 58+21)	LS	1		

	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
14	Existing 16" Water Main Connection to Proposed 16" Water Main (W/L Station 1+01.94 – Sheet C12)	LS	1		
15	Existing 16" Water Main Connection to Proposed 36" Water Main (Station 133+03)	LS	1		
16	Existing 16" Water Main Connection to Proposed 36" Water Main (Station 165+37)	LS	1		
17	Existing 6" Water Main Connection to Proposed 16" Water Main (Station 275+95)	LS	1		
18	Existing 8" Water Main Connection to Proposed 16" Water Main (Station 284+51)	LS	1		
19a	Abandon 16" Water Main	LS	1		
19b	Abandon 8" Water Main	LS	1		
19c	Abandon 2" Water Main	LS	1		
20	Remove and Replace Existing 8" & 12" Gravity Sewer	LF	400		
21	Asphalt Pavement Removal and Replacement	SY	1,900		
22	Fire Hydrant Assembly	EA	3		
23	Short Side Water Service	EA	1		
24	Long Side Water Service	EA	1		
25a	Gravel Driveway Repair	SY	2,250		
25b	Concrete Driveway Repair	SY	380		
26	Miscellaneous Concrete	CY	20		
27	Curb & Gutter Removal and Replacement	LF	200		
28	Trench Stabilization Stone	СҮ	2,300		
29a	Erosion Control – Construction Entrance	EA	36		
29b	Erosion Control – Stone Outlet	EA	175		
29c	Erosion Control – Silt Fence	LF	41,000		

	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
29d	Erosion Control – Half-ring Inlet Protection	EA	45		
29e	Erosion Control – Erosion Control Matting	SY	21,100		
29f	Erosion Control – Wattle	EA	185		
29g	Erosion Control – Check Dam	EA	2		
29h	Erosion Control – Diversion Ditch	LS	1		
291	Erosion Control – Silt Basin	EA	2		
30	Pipeline Pressure Leakage Testing	LF	27,572		
31	Cleaning and Disinfection of Pipelines	LS	1		
32	Fertilizing and Seeding	LF	24,865		
33	Clearing & Grubbing	LS	1		
34	Landscaping	LS	1		
35a	Additional Restorative Planting – Lot #52	LS	1		
35b	Additional Restorative Planting – Lot #53/54	LS	1		
35c	Additional Restorative Planting – Lot #36	LS	1		
36	Magnetic Markers	LS	1		
37	Cast-in-Place Concrete Encasement	LF	290		
A. Total of All Unit Price Bid Items					\$

5.02 A Contingency line item of 5% is to be added to the base bid. This allowance shall be used only upon issuance of a written work order by the Engineer for work not included in other items. The amount paid will be negotiated as a lump sum or unit price per each item of additional work. Any unused portion of the allowance remaining at the completion of the contract shall revert to the Owner as a credit. The Owner reserves the right to delete the allowance from the contract prior to award. Should an amount other than 5% of the subtotal be entered in the space below, the Owner reserves the right to change this amount to the correct figure.

B. Owner Contingency Allowance, A times 5%	\$
Total Bid Price = A + B	\$

(total bid price in words)

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. List of Project References;
 - E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
 - F. Contractor's License No.:
 - G. Required Bidder Qualification Statement with supporting data

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

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ARTICLE 9 – BID SUBMITTAL

BIDDER: [Indicate correct name of bidding entity]

y: Signature]
Printed name] f Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach vidence of authority to sign.)
ttest: Signature]
Printed name]
itle:
ubmittal Date:
ddress for giving notices:
elephone Number:
ax Number:
ontact Name and e-mail address:
idder's License No.: (where applicable)

C-430 - BID BOND

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):	
Union County	
500 N. Main Street	
Monroe, NC 28112	
BID	
Bid Due Date:	
Description (Project Name and Include Location):	
BOND	
Bond Number:	
Date (Not earlier than Bid due date):	
Penal sum	\$

(Words)

(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDE	R	(Seel)	SURETY (
Bidder's	s Name and Corporate Seal	(Seal)	Surety's	Surety's Name and Corporate Seal	
By:			By:		
-	Signature			Signature (Attach Power of Atte	orney)
	Print Name	_		Print Name	-
	Title	_		Title	-
Attest:			Attest:		
	Signature	_		Signature	-
	Title			Title	-
	bove addresses are to be used for givi such as joint venturers, if necessary.	ing any re	equired no		dditional

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1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

- 3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

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