



COMPLEX PROJECTS
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**NORTON-HARDING-JIMTOWN PSD
RANDOLPH COUNTY, WEST VIRGINIA**

PHASE III SANITARY SEWER SYSTEM EXTENSION PROJECT

ADDENDUM #1

MARCH 8, 2023

THRASHER PROJECT #020-1387

TO WHOM IT MAY CONCERN:

A Pre-Bid Conference was held on Tuesday, February 28, 2023, on the above-referenced project, a copy of the sign in sheet is included in this Addendum. The following are clarifications and responses to questions posed by contractors for the above reference project.

A. GENERAL

1. All bids for this project shall be due at 2:00 PM LPT on Thursday, March 16, 2023, at the Norton-Harding-Jimtown Public Service District located at 104 Hayes Street, Norton, West Virginia 26285. **ALL BIDS MUST BE RECEIVED BY 2:00 PM.**
2. American Iron and Steel Act Compliance is required for this project.
3. This project is funded by the United States Department of Agriculture Rural Utilities Service and the West Virginia Infrastructure Jobs Development Council.

B. SPECIFICATIONS

Specification Section 012000 PRICE AND PAYMENT – REPLACE this section with the revised section attached to this addendum.

C. DRAWINGS

N/A.

D. QUESTIONS AND RESPONSES

QUESTION

1. What are the Contract Times?

RESPONSE

150 days to substantial completion. 180 days to final completion.

QUESTION

2. What is the Engineer's Estimate?

RESPONSE

\$1,150,000.

QUESTION

3. Can the bid opening date be changed?

RESPONSE

No. All bids for this project shall be due at 2:00 PM LPT on Thursday, March 16, 2023, at the Norton-Harding-Jimtown Public Service District located at 104 Hayes Street, Norton, West Virginia 26285. **ALL BIDS MUST BE RECEIVED BY 2:00 PM.**

QUESTION

4. Do Davis Bacon Wages apply?

RESPONSE

No, Davis Bacon Wages do not apply to this project.

QUESTION

5. Is American Iron and Steel Act Compliance required?

RESPONSE

Yes. Any materials that fall under the Act must comply.

QUESTION

6. What is the amount of the Bid Bond required?

RESPONSE

5% of the amount of the Total Bid. See Instructions to Bidders.

QUESTION

7. What is the duration of the bid hold period?

RESPONSE

90 calendar days.

QUESTION

8. Are B&O taxes applicable?

RESPONSE

No, this project does not require any B&O taxes.

QUESTION

9. Is a project sign required?

RESPONSE

Yes.

QUESTION

10. Is an office trailer required?

RESPONSE

Yes, however, if the Contractor would like to secure an alternative office (i.e. a rental) that is sufficient for the inspector's use, one can be submitted for approval to the Engineer.

QUESTION

11. Is it the responsibility of the Contractor to provide pre-construction video recording?

RESPONSE

Yes. Cost for pre-construction video recording shall be included in the mobilization/demobilization bid item.

QUESTION

12. Is it the responsibility of the Contractor to secure waste sites and storage areas?

RESPONSE

Yes. Contractor must obtain written permission from landowner(s) for storage/temporary work area(s). The Contractor shall provide a copy of written permission to Engineer, as appropriate.

QUESTION

13. Are traffic lights an acceptable method of traffic control?

RESPONSE

All proposed traffic control measures must be submitted to and approved by the WVDOH.

QUESTION

14. How should submittals be provided?

RESPONSE

A schedule of submittals shall first be provided. Submissions should include 1 PDF and 2 hard copies for all submittals.

E. CLARIFICATIONS

1. The bidding process is a two (2) envelope system. Envelope No. 1 must have the following information presented on the front:

Name and address of Bidder
Bid on Phase III Sewer System Extension Project
Received by the Norton Harding Jimtown PSD

Envelope No. 1 will be opened first and the Bid Opening Requirement items will be checked for compliance as outlined on the Bid Opening Checklist (BOR-1). If such documents are found to be in order, Envelope No. 2 "Bid Proposal", will be opened and will be publicly read aloud. If the documents required to be contained in Envelope No. 1 **are not in order**, Envelope No. 2 "Bid Proposal", **will not be opened** and the Bid will be considered non-responsive.

Envelope No. 2 labeled "Bid Proposal" shall be placed inside of Envelope #1

If you have any questions or comments, please feel free to contact me at your earliest convenience. As a reminder, bids will be received until 2:00 p.m. on Thursday, March 16, 2023, at the Norton-Harding-Jimtown Public Service District located at 104 Hayes Street, Norton, West Virginia 26285. Good luck to everyone and thank you for your interest in the project.

Sincerely,

THE THRASHER GROUP, INC.



DANIEL E. FERRELL, P.E.
Project Manager



Enclosures: Pre Bid Meeting Sign In Sheet
Specification Section – 012000 Price and Payment Procedures

**NORTON – HARDING – JIMTOWN PUBLIC SERVICE DISTRICT
 RANDOLPH COUNTY, WEST VIRGINIA
 PHASE III – SANITARY SEWER SYSTEM EXTENSION**

PRE-BID CONFERENCE
 Tuesday, February 28, 2023

Thrasher Project #020-01387

Name	Representing	Phone #	Email Address
Kylea Radcliff	Thrasher	304-624-4108	
Ryan Holcomb	Thrasher	304	
Tony Classon	JF Allen Company	304-460-7424	Tclasson@JFAllenCo.Com
Colby Goldstrom	Bray Vanderender Con	304-376-3109	Colbyg@Bcallenco.com
Mike Jackson	Bear Contracting	304-695-2515	Dwilson@bear-contracting.com
Neil Smit	Smith Beck hoe	304 642 5718	smithbeckhoe@frontier.com
Abel Vir	Virco	304-543-7709	abc@virco.com
KEVIN LEWIS	WJDOH	(304)642-0437	Kevin.g.lewis@wv.gov

SECTION 012000 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract Documents, including General and Supplementary Conditions, Division 01, and all related Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Schedule of Values.
- B. Application for Payment.
- C. Change procedures.
- D. Defect assessment.
- E. Measurement and Payment.
- F. Alternates.

1.3 SCHEDULE OF VALUES

- A. Submit printed schedule on Progress Estimate schedule on EJCDC C-620.
- B. Submit Schedule of Values in duplicate within twenty (20) days after date established in Notice to Proceed.
- C. Format: Identify each line item with number and title of major Specification Section. Contractor shall submit a balanced Schedule of Values. The total value of activities shall equal the identifiable Contract Price. The Schedule of Values shall be accompanied by a proposed cash flow for the duration of the Project. Line items shall be broken down as appropriate and listed as units. Overhead and profit shall be prorated to all the activities.
 - 1. Schedules whose non-equipment related cash flow exceeds 10 percent of the total Contract amount (exclusive of equipment) in any one (1) month, or 45 percent of the total Contract amount (exclusive of equipment) in any three (3) consecutive months shall be deemed unacceptable and require revision. Exceptions may be granted at the discretion of the Engineer for unusual circumstances or non-routine construction.
 - 2. If, in the opinion of Engineer or Owner, the Schedule of Values is unbalanced, Contractor shall submit documentation substantiating the cost allocations of those activities believed to be

unbalanced. No pay requests will be accepted until the Schedule of Values submittals has been marked "No Exceptions Taken" or "Make Corrections Noted" by Engineer.

- D. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- E. Revise schedule to list approved Change Orders with each Application for Payment.

1.4 APPLICATION FOR PAYMENT

- A. Submit six (6) copies of each Application for Payment on EJCDC C-620 – Contractor's Application for Payment.
- B. Content and Format: Use Schedule of Values for listing items in Application for Payment.
- C. Submit updated construction schedule, weather day form, affidavit for payment, and payment schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Submit submittals with transmittal letter as specified in Section 013300 - Submittal Procedures.
- F. Substantiating Data: When Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Current construction photographs
 - 2. Partial release of Liens from major Subcontractors and vendors.
 - 3. Record Documents as specified in Section 017000 - Execution and Closeout Requirements, for review by Owner, which will be returned to Contractor.
 - 4. Affidavits attesting to off-Site stored products.
 - 5. Construction Progress Schedule, revised and current as specified in Section 013300 - Submittal Procedures.

1.5 CHANGE PROCEDURES

- A. Submittals: Submit name of individual who is authorized to receive change documents and is responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Engineer of any error, inconsistency, omission, or apparent discrepancy.
- C. Requests for Interpretation (RFI) and Clarifications: Allot time in construction scheduling for liaison with Engineer; establish procedures for handling queries and clarifications.
 - 1. Use Request for Information Form for requesting interpretations (provided by Engineer upon request).

2. Engineer may respond with a direct answer on the Request for Information form, separate Engineer Response, EJCDC C-942 - Field Order, or EJCDC C-940 - Work Change Directive Form.
- D. Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on EJCDC C-942.
- E. Engineer may issue Notice of Change including a detailed description of proposed change with supplementary or revised Drawings and Specifications, a change in Contract Time for executing the change with stipulation of overtime Work required and with the period of time during which the requested price will be considered valid. Contractor will prepare and submit estimate within ten (10) days.
- F. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change and the effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on the Work by separate or other Contractors.
- G. Stipulated Sum/Price Change Order: Based on Proposal Request or Work Change Directive and Contractor's maximum price quotation or Contractor's request for Change Order as approved by Engineer.
- H. Unit Price Change Order: For Contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of that which are not predetermined, execute Work under Work Directive Change. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.
- I. Work Change Directive: Engineer may issue directive, on EJCDC C-940 - Work Change Directive, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- J. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- K. Maintain detailed records of Work done on time and material basis. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.
- L. Document each quotation for change in Project Cost or Time with sufficient data to allow evaluation of quotation.
- M. Change Order Forms: EJCDC C-941 - Change Order.
- N. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- O. Correlation of Contractor Submittals:

1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
2. Promptly revise Progress Schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of Work affected by the change, and resubmit.
3. Promptly enter changes in Record Documents.

1.6 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of Engineer or Owner, it is not practical to remove and replace the Work, Engineer or Owner will direct appropriate remedy or adjust payment.
- C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of Owner.
- D. Defective Work will be partially repaired according to instructions of Engineer, and unit sum/price will be adjusted to new sum/price at discretion of Owner.
- E. Individual Specification Sections may modify these options or may identify specific formula or percentage sum/price reduction.
- F. Authority of Owner to assess defects and identify payment adjustments is final.
- G. Nonpayment for Rejected Products: Payment will not be made for rejected products for any of the following reasons:
 1. Products wasted or disposed of in a manner that is not acceptable.
 2. Products determined as unacceptable before or after placement.
 3. Products not completely unloaded from transporting vehicle.
 4. Products placed beyond lines and levels of the required Work.
 5. Products remaining on hand after completion of the Work.
 6. Loading, hauling, and disposing of rejected products.

1.7 MEASUREMENT AND PAYMENT

A. General Requirements

1. Contractor shall take measurements and compute quantities. Resident Project Representative and Engineer will verify measurements and quantities.
2. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities provided shall determine payment.
 - a. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at Contracted unit sum/prices.
 - b. When actual Work requires 25 percent or greater change in quantity than those quantities indicated, Owner or Contractor may claim a Contract Price adjustment.

3. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.
4. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.

B. Measurement of Quantities

1. Weigh Scales: Inspected, tested, and certified by applicable West Virginia weights and measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested, and certified by applicable West Virginia department within past year.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

C. Unit Price Schedule:

1. Bid Item 1 – Mobilization/Demobilization

- a. This item shall include the performance of construction preparatory operations, including the movement of equipment and personnel to and from the Project Site, pre-construction video recording in accordance with specification section 024010, establishment and decommissioning of Contractor's Field Office, storage buildings, and other facilities necessary to conduct Work under this Contract.
- b. Payment shall be made at the lump sum (LS) price Bid for Mobilization/Demobilization, but in no case shall the total lump sum Bid Price exceed 5 percent of the total Bid.
- c. Partial Payments of the lump sum Bid amount for mobilization/demobilization shall be as follows:
 - 1) One-fourth of the amount Bid for Mobilization/Demobilization will be released to the Contractor as the first estimate payable, not less than fifteen (15) days after the start of Work at the Project Site.
 - 2) The second one-fourth of the amount Bid for Mobilization/Demobilization shall be released with the estimate payable thirty (30) days after the first estimate.
 - 3) The third one-fourth of the amount Bid for Mobilization/Demobilization shall be released with the estimate payable thirty (30) days later than the estimate in which the second one-fourth has been paid.

- 4) The final one-fourth of the amount Bid for Mobilization/Demobilization shall be released with the final payment.
- 5) No reduction will be made, nor any increase be made, in the lump sum mobilization item amount regardless of decreased or increases in the final total Contract amount or for any other cause.

2. Bid Item 2 – Erosion and Sedimentation Controls

- a. The cost for this Work shall be a lump sum.
- b. This Bid item shall include all costs associated with erosion and sedimentation controls including all materials and labor for installation, maintenance, and removal.
- c. The cost of this Work shall be paid for at the lump sum Bid price for all erosion and sedimentation controls at all locations directly and/or indirectly disturbed by the Work.

3. Bid Item 3, 4, 5, 6, 7 – Install New 8" PVC SDR 35 Gravity Sewer Line

- a. Bid items are broken out according to the depth of excavation required as shown on the Bid Form and as follows: 0'-6', 6'-9', 9'-12', 12'-15', 15'-18'. Depths of excavation required to install the pipe shall be measured from existing ground elevation to the top of the proposed pipe.
- b. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the complete installation of 8-inch PVC SDR 35 Gravity Sewer Line including, but not limited to, excavation, sheeting, shoring, bracing, trench boxes, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
- c. The sewers installed under this item shall be measured and paid for at the unit Bid Price per linear foot of pipe of each type and size as specified on Drawings or as directed by the Engineer. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed from the center of manhole to center of manhole.

4. Bid Item 8, 9, 10 – Install New 8" Ductile Iron CL 50 Push Joint Gravity Sewer Line

- a. Bid items are broken out according to the depth of excavation required as shown on the Bid Form and as follows: 12'-15', 15'-18'. Depths of excavation required to install the pipe shall be measured from existing ground elevation to the top of the proposed pipe.
- b. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the complete installation of 8-inch Ductile Iron CL 50 Push Joint Gravity Sewer Line including, but not limited to, excavation, sheeting, shoring, bracing, trench boxes, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
- c. The sewers installed under this item shall be measured and paid for at the unit Bid Price per linear foot of pipe of each type and size as specified on Drawings or as directed by the Engineer. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed from the center of manhole to center of manhole.

5. Bid Item 11, 12, 13 – Install New 6" PVC SDR 35 Gravity Sewer Line

- a. Bid items are broken out according to the depth of excavation required as shown on the Bid Form and as follows: 0'-6', 6'-9', 9'-12'. Depths of excavation required to install the pipe shall be measured from existing ground elevation to the top of the proposed pipe.
 - b. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the complete installation of 6-inch PVC SDR 35 Gravity Sewer Line including, but not limited to, excavation, sheeting, shoring, bracing, trench boxes, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
 - c. The sewers installed under this item shall be measured and paid for at the unit Bid Price per linear foot of pipe of each type and size as specified on Drawings or as directed by the Engineer. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed from the center of manhole to center of manhole.
6. Bid Item 14 – 16” Steel Casing (Bore & Jack)
- a. This Bid Item shall include all labor and materials necessary for, and incidental to, the installation of the casing and carrier pipe, complete in place, including, but not limited to, excavation, sheeting, bracing, backfilling, casing seals, casing spacers, etc.
 - b. Measurement and payment under this item shall be measured and paid for at the unit price per linear foot of the overall length of the casing pipe satisfactorily installed.
 - c. Compensation for unauthorized lineal footage beyond that which is called for in the Drawings will not be made.
7. Bid Item 15 – 12” Steel Casing (Bore & Jack)
- a. This Bid Item shall include all labor and materials necessary for, and incidental to, the installation of the casing and carrier pipe, complete in place, including, but not limited to, excavation, sheeting, bracing, backfilling, casing seals, casing spacers, etc.
 - b. Measurement and payment under this item shall be measured and paid for at the unit price per linear foot of the overall length of the casing pipe satisfactorily installed.
 - c. Compensation for unauthorized lineal footage beyond that which is called for in the Drawings will not be made.
8. Bid Item 16 – 8” Steel Casing (Bore & Jack)
- a. This Bid Item shall include all labor and materials necessary for, and incidental to, the installation of the casing and carrier pipe, complete in place, including, but not limited to, excavation, sheeting, bracing, backfilling, casing seals, casing spacers, etc.
 - b. Measurement and payment under this item shall be measured and paid for at the unit price per linear foot of the overall length of the casing pipe satisfactorily installed.
 - c. Compensation for unauthorized lineal footage beyond that which is called for in the Drawings will not be made.
9. Bid Item 17 – 6” Steel Casing (Bore & Jack)
- a. This Bid Item shall include all labor and materials necessary for, and incidental to, the installation of the casing and carrier pipe, complete in place, including, but not limited to, excavation, sheeting, bracing, backfilling, casing seals, casing spacers, etc.

- b. Measurement and payment under this item shall be measured and paid for at the unit price per linear foot of the overall length of the casing pipe satisfactorily installed.
- c. Compensation for unauthorized lineal footage beyond that which is called for in the Drawings will not be made.

10. Bid Item 18 – 4” Steel Casing (Bore & Jack)

- a. This Bid Item shall include all labor and materials necessary for, and incidental to, the installation of the casing and carrier pipe, complete in place, including, but not limited to, excavation, sheeting, bracing, backfilling, casing seals, casing spacers, etc.
- b. Measurement and payment under this item shall be measured and paid for at the unit price per linear foot of the overall length of the casing pipe satisfactorily installed.
- c. Compensation for unauthorized lineal footage beyond that which is called for in the Drawings will not be made.

11. Bid Item 19 – Install New 2” HDPE DR-11 Force Main

- a. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of HDPE DR-11 force main including excavation, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings and tie-ins/manifolds used shall be included in the linear foot price of the pipe.

12. Bid Item 20 – Install New 1.5” HDPE DR-11 Force Main

- a. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of HDPE DR-11 force main including excavation, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings and tie-ins/manifolds used shall be included in the linear foot price of the pipe.

13. Bid Item 21 – Combination Air/Vac Release Valves

- a. This bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of the combination vacuum/air release valve with vault including excavation, bedding, backfill, materials, fittings, saddle or fitting, 2” ball valve, valve, vault, watertight frame and cover with 24” clear opening, tools, supplies, plugs, caps, marking tape, tracer wire, testing, and other appurtenances as indicated on Drawings. All fittings and vertical piping shall be included in the cost of the combination vacuum/air release valve.

14. Bid Item 22 – In-Line Pressure Cleanouts

- a. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of a force main in-line cleanout including excavation, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings used shall be included in the unit price of the in-line cleanout.

15. Bid Item 23 – Customer Connection, Complete

- a. Connection of new sewer customer will be paid for by the unit Bid price per each.
- b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of the reconnection including locating existing lines, dye testing, camera work, excavation, bypass pumping, bedding, backfill, materials, fittings, wye fittings, double sweep cleanout, reconnection of existing service regardless of existing pipe material, cut and plug existing service that is connected to the new service line, flexible connector, ductile iron cleanout frame and cover, plug for riser pipe, concrete, tools, supplies, plugs, caps, marking tape, testing, and other appurtenances as indicated on Drawings or required to make the reconnection. Riser piping shall be included in the cost of the connection.
- c. This Bid item shall include a 4” Gravity Service Double Sweep Cleanout and the wye fitting necessary to connect the customer to the main sewer line.
- d. The service lateral piping will be paid separately.

16. Bid Item 24 – 4” PVC SDR 35 Service Lateral Piping

- a. The cost for this Work shall be by linear foot.
- b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of service lateral piping including excavation, bedding, backfill, materials, fittings, wye fittings, pipe joints, pipe, tools, supplies, marking tape, and surface repair if another bid item does not cover repair such as flowerbeds, walls, shrubs, fencing, etc., testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
- c. The sewers installed under this item shall be measured and paid for at the unit price Bid per linear feet of pipe of each type and size as specified on Drawings or as directed by the Engineer, and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured from the wye connection to the lateral cleanout.
- d. Depth measurement will not be considered with this bid item.

17. Bid Item 25 – 6” Gravity Cleanout

- a. 6” gravity line cleanout will be paid for by the unit Bid price per each.
- b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of the clean-out including excavation, bedding, backfill, materials, fittings including the wye, 3 feet of piping out of the back of the clean-out, tools, supplies, plugs, caps, marking tape, ductile iron casting and lid, testing, and other appurtenances as indicated on Drawings. All fittings and vertical piping shall be included in the cost of the cleanout.
- c. The sewers installed under this item shall be measured and paid for at the unit price Bid per linear feet of pipe of each type and size as specified on Drawings or as directed by the Engineer, and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured from the wye connection to the end of the lateral.
- d. Depth measurement will not be considered with this bid item.

18. Bid Item 26 – Install New 48” Diameter Manhole Base, Cone Top, Watertight Frame and Cover

- a. Bid items shall include all required labor, materials, equipment and all other costs associated with excavation and backfill, installation of 48-inch pre-cast manhole, and other appurtenances as indicated on Drawings.
- b. Payment for manholes shall be as follows:
 - 1) Gravel sub-base, manhole base, steps, cone top, frame, and cover (water tight where indicated), up to 6-foot depth measured from invert out elevation to top of cover elevation, shall be paid at the Contract unit Bid price per each.
 - 2) Manhole riser piping of specified inside diameter required for additional depth over 6 feet shall be paid for at the unit Bid price per vertical foot for Precast Manhole Riser Pipe.
 - 3) All necessary tie-in’s will be included in the unit price for this bid item.
- c. This Bid item includes all necessary testing of the manholes and its appurtenances.

19. Bid Item 27 – 48” Concrete Manhole Riser Pipe

- a. Riser section required for depths over 6.0 feet will be measured and paid for by the unit Bid price per vertical foot measured to the nearest 0.1 foot.
- b. Measurement shall be made from the invert out elevation to the top of concrete cone top elevation minus 6.0 feet.
- c. Manhole base, cone top, frame, and cover, complete in place to a depth of 6 feet, shall be paid for by the unit Bid price per each for Manholes.

20. Bid Item 28 – Inside Drop Manhole Connection (2’-6’)

- a. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the installation of the drop bowl/hood assembly and drop pipe including stainless steel anchors and straps and other appurtenances as indicated on Drawings.
- b. Drop connections required for depths of 2.0 feet to 6.0 feet will be measured and paid for by the unit Bid Price per each.
- c. Measurement shall be made from the invert in elevation to the invert out elevation.

21. Bid Item 29 – Inside Drop Manhole Connection (6’+)

- a. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the installation of the drop bowl/hood assembly and drop pipe including stainless steel anchors and straps and other appurtenances as indicated on Drawings.
- b. Drop connections required for depths of 6.0 feet and over will be measured and paid for by the unit Bid Price per each.
- c. Measurement shall be made from the invert in elevation to the invert out elevation.

22. Bid Item 30 – Tie Into Existing Manhole, Complete

- a. This Bid item shall include all required labor, materials, excavation, core drilling, neoprene gasket, non-shrink concrete grout, existing manhole channel work and all other costs associated with the tie-in to the existing manhole as indicated on Drawings.

- b. Tie into existing manhole will be paid for by the unit Bid price per each.

23. Bid Item 31 – Tie Into Existing Forcemain, Complete

- a. This Bid item shall include all required labor, materials, excavation, fittings, manifolding/tie-ins, bypass pumping and all other costs associated with the tie-in to the existing force main as indicated on Drawings.
- b. Tie into existing manhole will be paid for by the unit Bid price per each.

24. Bid Item 32 – Package Duplex Grinder Station #D-1, Complete

- a. The cost for this Work shall be by the Unit Bid Price per each.
- b. This Bid Item shall include an E-One Duplex Grinder Pump Station complete and operable including all required labor, materials, equipment, excavation, bedding, backfill tools, supplies, site improvements, access road, electrical controls, power service, testing and all other appurtenances as indicated on Drawings.
- c. The Owner and Engineer shall assist in completing the power application and will provide to the contractor with the relative information, so the Contractor can arrange the power installation.

25. Bid Item 33 – Package Duplex Grinder Station #D-2, Complete

- a. The cost for this Work shall be by the Unit Bid Price per each.
- b. This Bid Item shall include an E-One Duplex Grinder Pump Station complete and operable including all required labor, materials, equipment, excavation, bedding, backfill tools, supplies, site improvements, access road, electrical controls, power service, testing and all other appurtenances as indicated on Drawings.
- c. The Owner and Engineer shall assist in completing the power application and will provide to the contractor with the relative information, so the Contractor can arrange the power installation.

26. Bid Item 34 – Package Duplex Grinder Station #D-3, Complete

- a. The cost for this Work shall be by the Unit Bid Price per each.
- b. This Bid Item shall include an E-One Duplex Grinder Pump Station complete and operable including all required labor, materials, equipment, excavation, bedding, backfill tools, supplies, site improvements, access road, electrical controls, power service, testing and all other appurtenances as indicated on Drawings.
- c. The Owner and Engineer shall assist in completing the power application and will provide to the contractor with the relative information, so the Contractor can arrange the power installation.

27. Bid Item 35 – Package Duplex Grinder Station #D-4, Complete

- a. The cost for this Work shall be by the Unit Bid Price per each.
- b. This Bid Item shall include an E-One Duplex Grinder Pump Station complete and operable including all required labor, materials, equipment, excavation, bedding, backfill tools, supplies, site improvements, access road, electrical controls, power service, testing and all other appurtenances as indicated on Drawings.

- c. The Owner and Engineer shall assist in completing the power application and will provide to the contractor with the relative information, so the Contractor can arrange the power installation.

28. Bid Item 36 – WVDOH Type “B” Trench Repair

- a. This Bid item shall include all required labor, materials, equipment and all other costs associated with trench repair in the WVDOH right-of-way. All costs required for traffic control shall be included in the unit price. Trench repairs shall be paid for by the linear foot, without regard to width, times the Bid price. No payment shall be made for trench repair outside the limits shown on the Contract Documents. Straight perpendicular saw cuts between the existing asphalt or concrete surfaces shall be included in the Contractor’s Unit Bid Price for this work. No payment will be made for temporary paving required during construction. Payment will include any necessary striping and traffic markings. All WVDOH Type “B” Trench Repair work shall be included in this linear foot Bid Price.
- b. No payment will be made for temporary paving required during construction.

29. Bid Item 37 – WVDOH Type “C” Trench Repair

- a. The Bid item installed shall be measured and paid for at the unit price Bid per linear feet of trench repair as specified on Drawings or as directed by the Engineer. Width of repair will not be considered.
- b. This Bid item shall include all required labor, materials, equipment, and all other costs associated with trench repair including but not limited to traffic control.
- c. All areas of stone surfacing disturbed due to any of the Contractor’s operations shall also be satisfactorily repaired at no additional cost to the Owner.
- d. No payment will be made for temporary stone surfacing required during construction.

30. Bid Item 38 – HMA Driveway/Road Repair

- a. HMA Driveway/Road Repair shall be paid for on a linear foot basis measured along the center line of the pipe or length of paved area disturbed, as shown on the plans or directed by the Engineer.
- b. Width shall not be considered. The Contractor shall repair all pavement disturbed as determined by the Engineer or his representative. Pavement unnecessarily disturbed by the Contractor shall be replaced at the Contractor’s expense.
- c. Stone base or flowable fill shall be included in the price of the pavement repair as called for in the plans.
- d. Stone materials, and the maintenance thereof, shall be included in the price of the pavement repair when the pavement is not replaced immediately.
- e. Straight, perpendicular saw cuts between the existing asphalt or concrete surfaces shall be included in the Contractor’s Unit Bid Price for this work.
- f. Payment for footages that have less than the excavation width shall be prorated per linear foot.
- g. Payment shall include all required stripes and painting.

31. Bid Item 39 – Gravel Driveway/Road Repair

- a. Gravel Driveway/Road Repair shall be paid for on a linear foot basis measured along the center line of the pipe or length of area disturbed, as shown on the plans or directed by the Engineer.
- b. Width shall not be considered. The Contractor shall repair all stone areas disturbed as determined by the Engineer or his representative. Stone areas unnecessarily disturbed by the Contractor shall be replaced at the Contractor's expense.
- c. Stone base or flowable fill shall be included in the price of the pavement repair as called for in the plans.
- d. Stone materials, and the maintenance thereof, shall be included in the price of the gravel repair when the area is not replaced immediately.
- e. Payment for trench repair shall include at a minimum, the width of the excavation. Payment for footages that have less than the excavation width shall be prorated per linear foot.
- f. The bid for Gravel Driveway/Road Repair shall be Linear Feet.

32. Bid Item 40 – Restoration

- a. This bid item shall include all labor, materials, equipment, and other costs associated with the reclamation of disturbed areas, including the purchase and application of seed, mulch, fertilizer, and other necessary products to stabilize disturbed areas.
- b. The bid for Restoration shall be linear feet.

1.8 ALTERNATES

- A. Definition: An amount proposed by Bidders and stated on the Bid Form for certain Work defined in the Bidding requirements that may be added to or deducted from the base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 1. Alternates are part of the Work only if enumerated in the Agreement.
 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.
- B. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement. The Owner-Contractor Agreement may identify certain Alternates to remain an Owner option for a stipulated period of time.
- C. Coordinate related Work and modify surrounding Work. Description for each Alternate is recognized to be abbreviated but requires that each change shall be complete for scope of Work affected.
 1. Coordinate related requirements among Specification Sections as required.
 2. Include as part of each Alternate, miscellaneous devices, appurtenances, and similar items incidental to or necessary for complete installation.

3. Coordinate Alternate with adjacent Work and modify or adjust as necessary to ensure integration.

D. Measurement of Quantities

1. Weigh Scales: Inspected, tested, and certified by applicable West Virginia weights and measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested, and certified by applicable West Virginia department within past year.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

E. Unit Price Schedule:

1. Alternate 1 Bid Item 1 – Install New 1.5” HDPE DR-11 Force Main
 - a. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of HDPE DR-11 force main including excavation, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings and tie-ins/manifolds used shall be included in the linear foot price of the pipe.
2. Alternate 1 Bid Item 2, 3, 4 – Install New 6” PVC SDR 35 Gravity Sewer Pipe
 - a. Bid items are broken out according to the depth of excavation required as shown on the Bid Form and as follows: 0’-6’, 6’-9’, 9’-12’. Depths of excavation required to install the pipe shall be measured from existing ground elevation to the top of the proposed pipe.
 - b. This Bid Item shall include all required labor, materials, equipment, and all other costs associated with the complete installation of 6-inch PVC SDR 35 Gravity Sewer Line including, but not limited to, excavation, sheeting, shoring, bracing, trench boxes, bedding, backfill, materials, fittings, pipe joints, pipe, tools, supplies, testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
 - c. The sewers installed under this item shall be measured and paid for at the unit Bid Price per linear foot of pipe of each type and size as specified on Drawings or as directed by the Engineer. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed from the center of manhole to center of manhole.
3. Alternate 1 Bid Item 5 – Install New 48” Diameter Manhole Base, Cone Top, Watertight Frame and Cover

- a. Bid items shall include all required labor, materials, equipment and all other costs associated with excavation and backfill, installation of 48-inch pre-cast manhole, and other appurtenances as indicated on Drawings.
4. Alternate 1 Bid Item 6 – 48” Concrete Manhole Riser Pipe
 - a. Riser section required for depths over 6.0 feet will be measured and paid for by the unit Bid price per vertical foot measured to the nearest 0.1 foot.
 - b. Measurement shall be made from the invert out elevation to the top of concrete cone top elevation minus 6.0 feet.
 - c. Manhole base, cone top, frame, and cover, complete in place to a depth of 6 feet, shall be paid for by the unit Bid price per each for Manholes.
5. Alternate 1 Bid Item 7 – 6” Gravity Cleanout
 - a. 6” gravity line cleanout will be paid for by the unit Bid price per each.
 - b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of the clean-out including excavation, bedding, backfill, materials, fittings including the wye, 3 feet of piping out of the back of the clean-out, tools, supplies, plugs, caps, marking tape, ductile iron casting and lid, testing, and other appurtenances as indicated on Drawings. All fittings and vertical piping shall be included in the cost of the cleanout.
 - c. The sewers installed under this item shall be measured and paid for at the unit price Bid per linear feet of pipe of each type and size as specified on Drawings or as directed by the Engineer, and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured from the wye connection to the end of the lateral.
 - d. Depth measurement will not be considered with this bid item.
6. Alternate 1 Bid Item 8 – Customer Connection, Complete
 - a. Connection of new sewer customer will be paid for by the unit Bid price per each.
 - b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of the reconnection including locating existing lines, dye testing, camera work, excavation, bypass pumping, bedding, backfill, materials, fittings, wye fittings, double sweep cleanout, reconnection of existing service regardless of existing pipe material, cut and plug existing service that is connected to the new service line, flexible connector, ductile iron cleanout frame and cover, plug for riser pipe, concrete, tools, supplies, plugs, caps, marking tape, testing, and other appurtenances as indicated on Drawings or required to make the reconnection. Riser piping shall be included in the cost of the connection.
 - c. This Bid item shall include a 4” Gravity Service Double Sweep Cleanout and the wye fitting necessary to connect the customer to the main sewer line.
 - d. The service lateral piping will be paid separately.
7. Alternate 1 Bid Item 9 – 4” PVC SDR 35 Service Lateral Piping
 - a. The cost for this Work shall be by linear foot.

- b. This Bid item shall include all required labor, materials, equipment and all other costs associated with the complete installation of service lateral piping including excavation, bedding, backfill, materials, fittings, wye fittings, pipe joints, pipe, tools, supplies, marking tape, and surface repair if another bid item does not cover repair such as flowerbeds, walls, shrubs, fencing, etc., testing, and incidentals. All fittings used shall be included in the linear foot price of the pipe.
 - c. The sewers installed under this item shall be measured and paid for at the unit price Bid per linear feet of pipe of each type and size as specified on Drawings or as directed by the Engineer, and installed complete in place. The measurement under this item shall be the length of pipe and fittings as installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured from the wye connection to the lateral cleanout.
 - d. Depth measurement will not be considered with this bid item.
8. Alternate 1 Bid Item 10 – Package Duplex Grinder Station #D-5, Complete
 - a. The cost for this Work shall be by the Unit Bid Price per each.
 - b. This Bid Item shall include an E-One Duplex Grinder Pump Station complete and operable including all required labor, materials, equipment, excavation, bedding, backfill tools, supplies, site improvements, access road, electrical controls, power service, testing and all other appurtenances as indicated on Drawings.
 - c. The Owner and Engineer shall assist in completing the power application and will provide to the contractor with the relative information, so the Contractor can arrange the power installation.
9. Alternate 1 Bid Item 11 – WVDOT Type “C” Trench Repair
 - a. The Bid item installed shall be measured and paid for at the unit price Bid per linear feet of trench repair as specified on Drawings or as directed by the Engineer. Width of repair will not be considered.
 - b. This Bid item shall include all required labor, materials, equipment, and all other costs associated with trench repair including but not limited to traffic control.
 - c. All areas of stone surfacing disturbed due to any of the Contractor’s operations shall also be satisfactorily repaired at no additional cost to the Owner.
 - d. No payment will be made for temporary stone surfacing required during construction.
10. Alternate 1 Bid Item 12 – HMA Driveway/Road Repair
 - a. HMA Driveway/Road Repair shall be paid for on a linear foot basis measured along the center line of the pipe or length of paved area disturbed, as shown on the plans or directed by the Engineer.
 - b. Width shall not be considered. The Contractor shall repair all pavement disturbed as determined by the Engineer or his representative. Pavement unnecessarily disturbed by the Contractor shall be replaced at the Contractor’s expense.
 - c. Stone base or flowable fill shall be included in the price of the pavement repair as called for in the plans.
 - d. Stone materials, and the maintenance thereof, shall be included in the price of the pavement repair when the pavement is not replaced immediately.

- e. Straight, perpendicular saw cuts between the existing asphalt or concrete surfaces shall be included in the Contractor's Unit Bid Price for this work.
- f. Payment for footages that have less than the excavation width shall be prorated per linear foot.
- g. Payment shall include all required stripes and painting.

11. Alternate 1 Bid Item 13 – Erosion Control Matting

- a. Installation of erosion control matting shall be paid for by the linear foot Bid price measured along the centerline of the pipe without regard to width.

12. Alternate 1 Bid Item 14 – Concrete Anchors

- a. Installation of concrete anchors on the pipe shall be paid for by the Unit bid price per each installed.

13. Alternate 1 Bid Item 15 – Restoration

- a. This bid item shall include all labor, materials, equipment, and other costs associated with the reclamation of disturbed areas, including the purchase and application of seed, mulch, fertilizer, and other necessary products to stabilize disturbed areas.
- b. The bid for Restoration shall be linear feet.

14. Alternate 2 Bid Item 1 – Horizontal Directional Drill from MH 1-4 to 1-6

- a. The pipe installed under this item shall be measured and paid for by the linear feet of pipe for each of the types and sizes as specified on the plans or as directed by the Engineer and installed complete in place. The measurements under this item shall be the length of various sizes and classes of pipe and fittings installed in place and accepted and shall be measured in the horizontal plane along the centerline of each pipe installed, measured centerline of tie-in to centerline of tie-in. Unauthorized footages beyond those called for in the plans and specifications shall not be compensated for, unless approved by the Engineer.
- b. The quantities determined as provided above will be paid for at the contract unit prices bid for the items listed in the Proposal Form. Prices and payments shall be full compensation for excavation, bore pit construction, all drilling operations, drill fluid management, shoring, sheeting, traffic control, bedding, backfilling, warning tape, tracer wire, casing pipe, carrier pipe, and furnishing all materials and doing all the work herein prescribed in a workmanlike and acceptable manner, including all labor, tools, inadvertent return plan, WVDOH coordination, equipment, supplies, testing and incidentals necessary to complete the work.
- c. Fittings, whether used in ductile iron, PVC, or HDPE, will be paid for as part of linear foot of pipe, if shown on the plans or not.
- d. All work associated with this bid item shall be in place of the conventionally proposed method of pipe installation between MH 1-4 and 1-6. Method of installation for this section of the project may either be completed according to the base bid schedule and quantities within or under this alternate bid item. Contract adjustments as necessary will be conducted via Change Order.

- e. The bid for Horizontal Directional Drill from MH 1-4 to MH 1-6 shall be Linear Feet.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012000