



Central Purchasing

T. W. Sawyer, CPPO
Purchasing Agent

June 23, 2016

ADDENDUM NO. 2 - TO ALL BIDDERS

Reference – INVITATION FOR BID (IFB) #2002

LACKEY GRAVITY SEWER REHABILITATION – PHASE 1

Due Date: June 30, 2016

Final Date for Submitting additional questions for IFB2002: 5:00pm EST,
June 23, 2016

Item #1: Several questions have been asked in reference to the RFP, and we have included our answers on the ATTACHMENT of this Addendum.

Item #2: Section 01151, Measurement and Payment, DELETE and REPLACE with attached, revised Section 01151, located in the ATTACHMENT.

All other terms and conditions remain the same.

Note: A signed acknowledgment of this addendum must be received by this office either prior to the due date and hour or attached to your proposal. Signature on this addendum does not constitute your signature on the original document. The original document must be signed also.

Sincerely,
Janet Haney
Janet Haney
Management Analyst
Phone: (757)890-3680

Name of Firm

Signature/Title

Date



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A Hampton Roads Community

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Addendum No. 2 – June 23, 2016

ATTACHMENT

Item #1

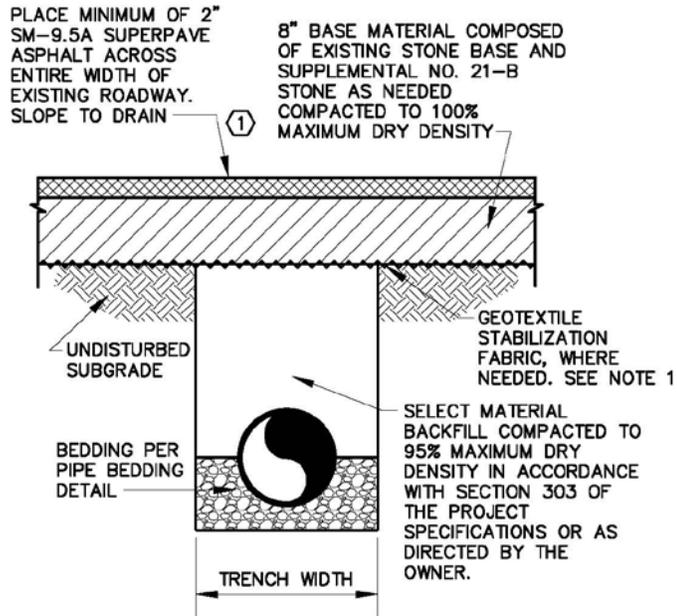
Lackey Gravity Sewer Rehabilitation – Phase 1

IFB No. 2002

This Addendum modifies the Contract Documents dated May 2016 as listed below, and is hereby incorporated into the Contract Documents. Bidder shall acknowledge receipt of this Addendum in the space provided on page 102-16 of the Bid Form (attached). Failure to do so may subject Bidder to disqualification.

Questions

1. Why are you requesting a 10-year warranty period? Can the warranty period be reduced to 5 years?
The intent of the project is to effect a repair with a 50-year service life. The longer the warranty period, the lower the likelihood of problems with workmanship and/or materials. The warranty period shall remain at 10 years.
2. Sheet C-5, MH 045103: what is meant by a 6x6x4 lateral drop?
The existing lateral is six inches in diameter. The drop shall be four-inch diameter pipe from the tee (to be installed) to the bench.
3. There appear to be bid quantities that are over-stated or not even on the plans. For example, there is a tree protection line item, but there is no tree protection symbol on the cover sheet.
Work is anticipated in the vicinity of landscaping on private parcels. Condition of public laterals and cleanouts, and locations for launching CIPP inversion and cure, are unknown at this time. Tree protection may be required by the Owner or Owner's representative, depending on Contractor's work plan, work to be performed, and site conditions.
4. Why are such large quantities are being placed under asphalt pavement, concrete/aggregate/ asphalt driveways? Why is so much DI casing pipe listed?
Condition of public laterals and cleanouts is unknown at this time. Some may require replacement rather than rehabilitation. The bid quantities allow for this unknown without having to process a change order. For laterals to be replaced per Owner, casing pipe may be required due to insufficient cover below the invert of a VDOT ditch, or due to insufficient separation from another utility.
5. Lateral lining work is traditionally done as a connection plus 5' with additional footage beyond 5' at a per foot basis. Given the plan set scale, it is not easy to get the exact footage and it would be nice if the engineer put the actual quantities in the bid item. The reality is that not all laterals are the same length and if something gets deleted or added, the unit price would not be accurate since they are all different. The same is true of the manhole rehab work. It is traditionally done on a per vertical foot basis since each manhole is a different depth.
The bid quantities for lateral rehabilitation have been revised to "each" for the first six feet (6') from the sewer main/manhole, with an additional per-foot cost for the remainder of each installation. The bid quantities for manhole rehabilitation have been revised to "VLF." See revised, attached Bid Form.
6. What is the difference between Bid Item Nos. 11 and 12? What are the thicknesses, and what are the units, as the units are contradictory between measurement and payment vs. bid form for Bid Item No. 11.
Bid Item No. 11 is a temporary pavement repair, whereas Bid Item No. 12 is a permanent pavement repair. See detail below for Reconstructed Asphalt Pavement (Bid Item No. 12).



NOTE:
 1. WHERE THE SUPPLEMENTAL VDOT TYPE 21-B STONE WILL BE PLACED ON SUBGRADE MATERIAL, A GEOTEXTILE STABILIZATION FABRIC CONFORMING TO THE REQUIREMENTS OF VDOT SPECIAL PROVISION FOR SECTION 245 - GEOSYNTHETICS, SHALL BE PLACED ON THE SUBGRADE BELOW THE SUPPLEMENTAL TYPE 21-B STONE.

**FINAL PAVEMENT
 RECONSTRUCTION DETAIL**
 NOT TO SCALE

Project Manual Addendum Items

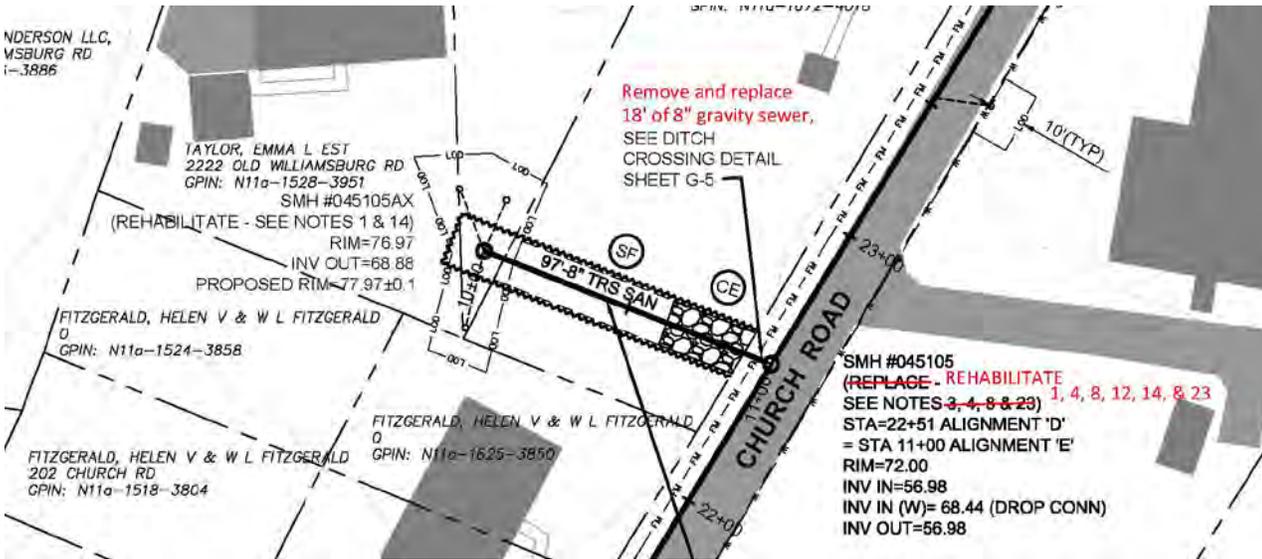
7. Section 01151, Measurement and Payment, DELETE and REPLACE with attached, revised Section 01151.

Drawing Addendum Items

8. Sheet G-2 – ADD Note 59 as follows:

“Where existing pipe does not extend far enough into manhole to attach drop connection fitting, Contractor shall replace the last eight feet (8’) of said pipe per point repair details on Sheet G-7. Payment shall be made at the applicable unit bid price for gravity sewer lateral replacement or gravity sanitary sewer main.”

9. Sheet C-6 – MODIFY as follows:

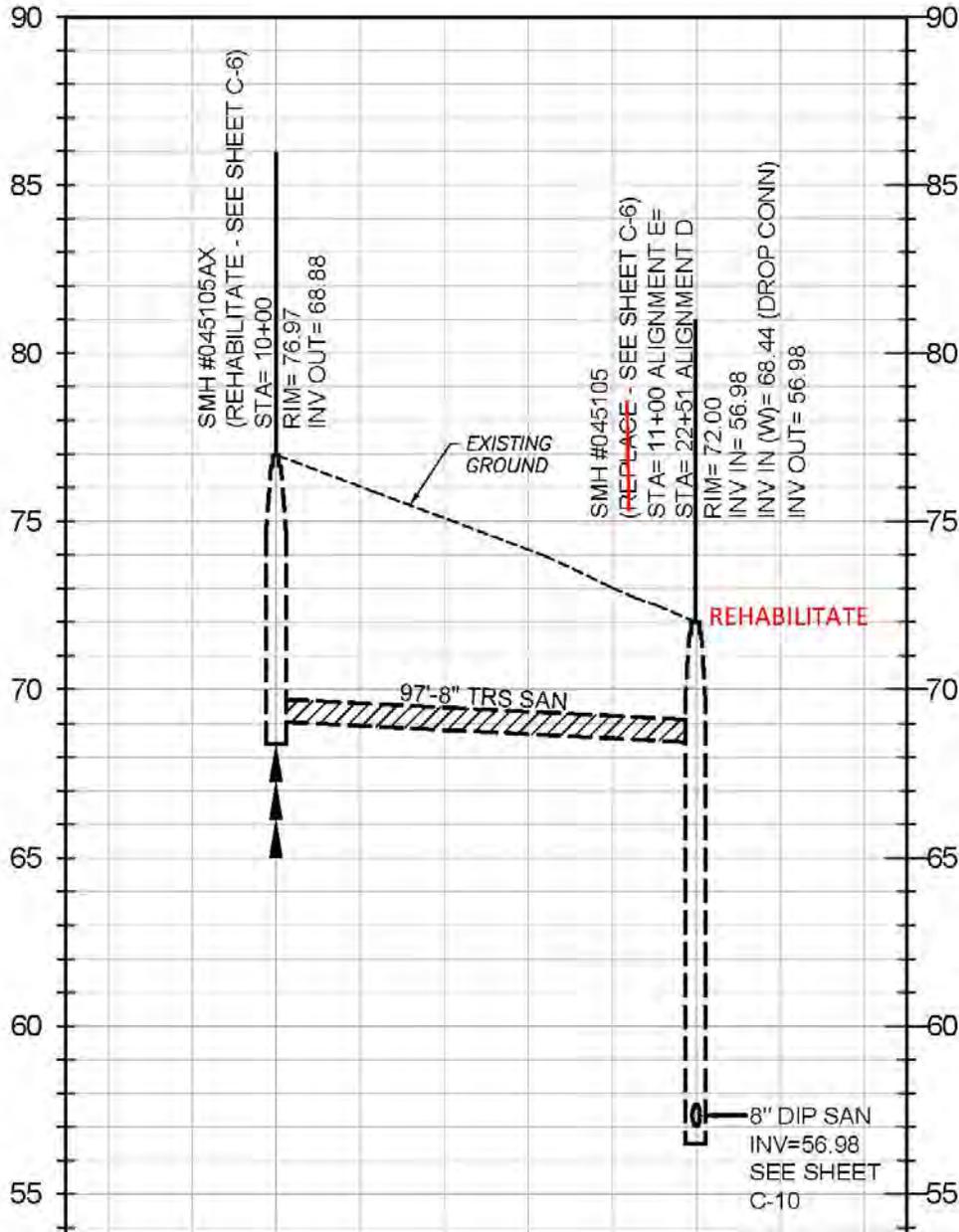


MH ID #	RIM ELEV(FT)	INV ELEV(FT)	MH DEPTH(FT)	MH DIA(FT)	MH REHAB (EPOXY)	REPLACE WITH 5' MANHOLE
045104	65.54	55.36	10.18	4 ft	X	
045105	72.00	56.98	15.02	4 ft	X	X

10. Sheet C-6 – DELETE Note 23 and REPLACE with the following:

“Remove last 18’, including drop tee, of 8” gravity sewer main from SMH #045105AX. Plug and abandon external drop connection. Install 18’ of 8” gravity sewer main, with 8” x 8” x 6” tee in manhole for 6” internal drop connection.”

11. Sheet C-11 – MODIFY as follows:



Informational Addendum Items

12. The deadline for submitting additional questions is 5 p.m. local time Thursday, June 23rd.

End of Addendum No. 2

SECTION 01151

MEASUREMENT AND PAYMENT

I. GENERAL

1.1 MEASUREMENT OF QUANTITIES

- A. Measurement of quantities will be made by the Contractor in the presence of the Owner. The methods of measurement and computations used in determination of quantities of materials furnished and installed shall be those generally recognized as good engineering practice. Final payment request shall include all totals and approved change orders.
- B. Area measurements shall be measured on a horizontal plane of the ground surface. Pay quantities will not exceed plan dimensions except as approved by the Owner or his representative.
- C. Structure measurements shall be in accordance with the Contract Documents except as approved by the Owner or his representative.
- D. Linear foot measurements shall be measured along the horizontal plane of the ground or paved surface. Vertical foot measurements shall be measured along the vertical plane, perpendicular to the horizontal plane of the ground or paved surface. Pay quantities will not exceed plan dimensions except as approved by the Owner or his representative.
- E. Volume computations of excavation and fill shall use the average-end-area method.
- F. Weight measurement shall be made based on Owner-approved supplier delivery tickets submitted documenting the amount of material delivered in each truckload and the specific location by recorded plan station utilized. Pay measurement for delivery weights shall not exceed plan dimensions and shall be based on the average bulk density of the material as established in the Contract Documents.
- G. The term "Each" when used as an item of payment will mean complete payment for the unit of the work described.
- H. The word "Lump Sum" when used as an item of payment will mean complete payment for work described in the item including all materials, labor, and equipment necessary to complete the work in accordance with the Contract Documents.
- I. The term "complete in place" will mean that the item of work shall be furnished and installed in accordance with the Contract Documents complete with all appurtenances necessary for the item to be used for its intended function, including all materials, labor and equipment.

1.2 SCOPE OF PAYMENT

- A. The Contractor will receive and accept compensation provided for in the Contract as full payment for furnishing all materials, labor, tools, and equipment and for performing all Work under the Contract in a complete and acceptable manner and for all risk, loss, damage, or expense of whatever character arising out of the nature of the Work or the prosecution thereof, subject to the provisions of the Contract Documents.
- B. If any unit price in the Bid Schedule requires that the said unit price cover and be considered compensation for certain Work or material essential to the item, this same Work or material will not also be measured or paid for under any other pay item identified on the Bid Form.

1.3 PAYMENT ITEMS

- A. Bid Item No. 1 – Mobilization, Complete. Mobilization will be measured on the basis of completion of the Work in accordance with the Contract Documents and this Section. Mobilization will be paid for at the contract lump sum price up to 5% of all other applicable bid items as indicated on the Bid Form. No additional payment will be made for demobilization and remobilization because of shutdowns, suspensions of work, or other mobilization activities. An initial payment of 50% of the mobilization bid item, less retainage, will be made as an initial progress payment once the Work commences on-site, as determined by the Owner. The final 50%, less retainage, will be made upon satisfactory demobilization as determined by the Owner.
- B. Bid Item Nos. 2 through 5, inclusive – Erosion and Sediment Control Measures, Installed Complete in Place. Erosion and sediment control measures will be measured and paid for based on the unit and unit price indicated on the Bid Form for each measure. The cost of each unit shall include all materials, equipment, and labor required to furnish, install, maintain, and remove the erosion and sediment control measures, disposal of any and all accumulated silt and debris, as well as the removal and disposal of erosion and siltation control measures themselves. Surface restoration required as a result of erosion and sediment control shall be considered incidental to erosion and sediment control.
- C. Bid Item No. 6 – Undercut Excavation with Bedding Backfill as directed by Owner. When directed and authorized by Owner, replacement of unsuitable bearing material will be measured and paid for based on the cubic yards of undercut actually excavated in accordance with Section 303, “Earthwork.” Measurement shall be based on the following details as shown on the Contract Drawings:

1. Trench width details for payment of contingent items (Sheet G-5); and
2. Select material backfill pay quantities (Sheet G-5).

No payment will be made for material excavated and replaced as a result of native material becoming unsuitable due to acts of Contractor. Payment will include, but is not limited to, the cost of the following:

1. Excavation.
2. Disposal of unsuitable material.
3. Furnishing and installation of bedding in accordance with the Contract Documents.

- D. Bid Item Nos. 7 and 8 – Select Material, Type II – Sand and Type II – Stone as directed by Owner. Select Material Type II – Sand and Type II – Stone shall be in accordance with Section 200, “Products and Materials,” and Section 110, “Special Provisions.” When directed and authorized by Owner in accordance with Section 303 2.2.E.3, replacement of unsuitable backfill material with select material will be paid for at the unit price bid per ton of backfill satisfactorily installed. Select material will be measured based on the following details and as otherwise specified in the Contract Documents.

1. Trench width details for payment of contingent items (Sheet G-5); and
2. Select material backfill pay quantities (Sheet G-5).

No payment will be made for material excavated and replaced as a result of native material becoming unsuitable due to acts of Contractor. Payment will include, but is not limited to, the cost of the following:

1. Disposal of unsuitable material.
2. Furnishing and installation of Select Material Type II – Sand and Type II – Stone in accordance with the Contract Documents.

- E. Bid Item No. 9 – Miscellaneous Unclassified Excavation as Directed by Owner. When directed and authorized by Owner to excavate beyond plan dimensions, in a manner not measured or paid for as a separate Bid Item, miscellaneous unclassified excavation will be measured and paid for based on the cubic yards of excavation. Measurement shall be based on the details listed below and as required in the Contract Documents. Volumes shall be calculated as described above; payment height shall be the vertical distance measured between the plan elevation of the excavation bottom, measured horizontally at

25' maximum intervals for trenches, to the agreed upon extents of the excavation, or other measurement method as agreed to by Owner.

1. Trench width details for payment of contingent items (Sheet G-5); and
2. Select material backfill pay quantities (Sheet G-5).

No payment will be made for additional excavation and replacement material placed as a result of native material becoming unsuitable or excavation necessary due to acts of Contractor. Payment shall include excavation, shoring, backfill, compaction, grading, non-roadway surface restoration, disposal of materials, and incidental Work.

- F. Bid Item No. 10 – Aggregate Base Material, Complete in Place. Aggregate base material shall be placed as directed by Owner and shall be measured and paid for based upon the ton of aggregate base satisfactorily installed. Measurement for aggregate base material will be based on the presentation of delivery tickets to Owner. Each ticket will be serial numbered and shall list the name of the company supplying the material, truck identification number, date of delivery, size of load, and project location where delivered. Payment shall include all materials, equipment, and labor required to furnish, haul, place, manipulate, and compact the aggregate base material in accordance with these specifications and the Contract Documents.

Prior to delivery of materials, contractor shall submit a certification of scales calibration from the materials provider(s). Certification shall be considered valid only if the date of calibration is within 180 days of the Bid opening.

- G. Bid Item No. 11 – Prime Coat Over Trench Prior to Reconstruction, Complete in Place. Measurement for prime coat over trench shall be made in ~~linear feet~~ *square yards* as specified. Payment will be made at the unit price bid per ~~linear foot~~ *square yard* as stated on the Bid Form, complete in place, including all materials, equipment, and labor required to furnish and install prime coat over trench including compaction, prime coat, sand cover, maintenance and replacement of aggregate base and prime materials with sand cover as required, traffic control, and all other Work incidental thereto, until final pavement is placed.

- H. Bid Item No. 12 – Reconstructed Asphalt Pavement, Complete in Place. Measurement will be made at the unit price bid per square yard of reconstructed asphalt pavement suitably placed in accordance with the Contract Documents. Payment at the unit price bid shall include all work necessary and incidental to reconstructing asphalt pavement including, but not limited to:

1. Furnishing, hauling, placing, manipulating, and compacting the asphalt pavement material.
2. Milling and compaction of milled material and newly placed aggregate base materials.
3. Edge clipping.
4. Asphalt prime coat.
5. Shoulder restoration.
6. Tie-ins with all existing driveways regardless of type.

- I. Bid Item No. 13 – Concrete Driveway Restoration at Main Line or Lateral Crossing, Complete in Place. Measurement will be made at the unit price bid per linear foot as specified. Concrete driveway restoration at perpendicular mainline or lateral crossing shall be measured to the limits of payment specified for each type of pipeline or to the linear limit of driveway actually restored, whichever is less. Payment will be made at the unit price bid per linear foot, complete in place, for concrete driveway restoration at perpendicular mainline or lateral crossing in accordance with Contract Documents or as directed by Owner. Payment at the unit price bid shall include all Work necessary and incidental to concrete driveway restoration including furnishing, hauling, placing, manipulating, and vibrating the concrete material, matching and saw cutting of existing concrete, removal and disposal of existing and

temporary materials, construction joint(s), steel reinforcement, formwork, tie-in to existing pavement, surface treatments, protection, and pavement markings.

- J. Bid Item No. 14 – Exposed Aggregate Concrete Driveway Restoration at Main Line or Lateral Crossing, Complete in Place. Measurement will be made at the unit price bid per linear foot as specified. Exposed aggregate concrete driveway restoration at perpendicular mainline or lateral crossing shall be measured to the limits of payment specified for each type of pipeline or to the linear limit of driveway actually restored, whichever is less. Payment will be made at the unit price bid per linear foot, complete in place, for exposed aggregate concrete driveway restoration at perpendicular mainline or lateral crossing in accordance with the Contract Documents or as directed by Owner. Payment at the unit price bid shall include all Work necessary and incidental to exposed aggregate concrete driveway restoration including furnishing, hauling, placing, manipulating, and vibrating the concrete material, matching and saw cutting of existing pavement, removal and disposal of existing and temporary materials, construction joint(s), steel reinforcement, formwork, tie-in to existing pavement, surface treatments, protection, and pavement markings.
- K. Bid Item No. 15 – Asphalt Driveway Restoration at Main Line or Lateral Crossing, Complete in Place. Measurement will be made at the unit price bid per linear foot as specified. Asphalt driveway restoration at perpendicular mainline or lateral crossing shall be measured to the limits of payment specified for each type of pipeline or to the linear limit of driveway actually restored, whichever is less. Payment will be made at the unit price bid per linear foot, complete in place, for asphalt driveway restoration at perpendicular mainline or lateral crossing in accordance with the Contract Documents or as directed by Owner. Payment at the unit price bid shall include all Work necessary and incidental to asphalt driveway restoration including furnishing, hauling, placing, manipulating, and compacting the pavement material, testing, matching and saw cutting of existing pavement, edge clipping, removal and disposal of existing and temporary materials, asphalt tack coat, tie-in to existing pavement, and pavement markings.
- L. Bid Item No. 16 – Aggregate Driveway Restoration, Complete in Place. Aggregate driveway restoration material shall be measured and paid for based upon the ton of aggregate satisfactorily installed. Measurement for aggregate driveway restoration will be based on the presentation of delivery tickets to Owner. Each ticket will be serial numbered and shall list the name of the company supplying the material, truck identification number, date of delivery, size of load, and project location where delivered. Payment shall include all materials, equipment, and labor required to match, furnish, haul, place, manipulate, and compact the aggregate material in accordance with the Contract Documents.

Prior to delivery of materials, contractor shall submit a certification of scales calibration from the materials provider(s). Certification shall be considered valid only if the date of calibration is within 180 days of the Bid opening.

- M. Bid Item No. 17 and 18 – 4-inch, 6-inch PVC Gravity Sewer Lateral Replacement, Installed Complete in Place. Gravity sewer lateral replacement will be measured from the centerline of the sewer main to a vertical sawcut of the lateral 4.0 feet away from the sewer main centerline. Measurement will be based on linear footage in the horizontal plane in accordance with the Contract Documents regardless of depth. Payment at the unit price bid shall include all Work necessary and incidental to lateral replacement including, but not limited to, the following:
1. Saw cutting pavement and pavement removal for trench excavation.

2. Stripping and stockpiling topsoil.
 3. Bedding as detailed on the plans and required by the Contract Documents.
 4. Gravity sewer pipe, fittings, adapter, and appurtenances.
 5. Tracer wire and subsurface marking tape.
 6. Flushing.
 7. Testing.
 8. Geotextile fabrics or matting.
 9. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
 10. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
 11. Concrete-lined ditch replacement and/or restoration.
- N. Bid Item Nos. 19 and 20 – 4-inch, 6-inch PVC Gravity Sewer Lateral Cleanout Assembly, Installed Complete-in-Place. Lateral cleanouts will be measured based upon each installed in accordance with the Contract Documents and satisfactorily tested. Cleanouts will be paid for at the unit price bid and shall include all Work necessary and incidental including, but not limited to, the following:
1. Excavation outside trench limits.
 2. Bedding as detailed on the plans and required by the Contract Documents.
 3. Geotextile fabrics or matting.
 4. All fittings, caps, pipe, and necessary appurtenances.
 5. Cleanout box, frame, and cover with bedding stone.
 6. Tracer wire and subsurface marking tape.
 7. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
- O. Bid Item No. 21 – Heavy Duty Sanitary Cleanout Frame and Cover, Installed Complete-in-Place. Heavy duty cleanout frames and covers will be measured based upon each installed in accordance with the Contract Documents. Heavy duty cleanout frames and covers will be paid for at the unit price bid and shall include all Work necessary and incidental including, but not limited to, the cleanout frame and cover with bedding stone.
- P. Bid Item Nos. 22 and ~~23~~ 24 – **6-foot long** 4-inch, 6-inch Gravity Sewer Lateral CIPP T-Liner, Installed Complete in Place. ***The first six feet of*** ~~four-inch~~ and six-inch T-liners for gravity sewer laterals connected to the gravity sewer main will be measured based upon each installed in accordance with the Contract Documents regardless of depth, length, or material. Payment at the unit price bid shall include all Work necessary and incidental to sewer lateral CIPP lining including, but not limited to:
1. Cleaning and pre-lining CCTV inspection.
 2. Repair of significant inflow/infiltration defects that would adversely impact curing of the liner.
 3. Installation and curing of liner.
 4. Cooling and disposal of cure water (if water-cured).
 5. Testing and post-lining CCTV inspection.
 6. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
 7. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
- Q. Bid Item Nos. 23 and 25 – **4-inch, 6-inch CIPP T-Liner Additional Length, Installed Complete in Place. Measurement for additional length of four-inch and six-inch T-liners beyond the first six feet from the sewer main centerline shall be made per linear foot to the downstream joint for a dual-service wye/single-service tee. For cleanout drop structures, length shall be measured from centerline of sewer main to vertical elbow, plus vertical distance from said elbow to three inches (3”) below invert of (lowest) private lateral, less six feet (6’). Payment will be made at the unit price bid per linear foot as**

stated on the Bid Form, complete in place, including all materials, equipment, and labor required to furnish and install full length of four-inch and six-inch T-liners for gravity sewer laterals connected to the gravity sewer main.

- R. Bid Item Nos. ~~24 and 25~~ 26 and 28 – 6-foot long 4-inch, 6-inch Gravity Sewer Lateral CIPP Tube Liner, Installed Complete in Place. *The first six feet of* ~~four-inch and six-inch~~ tube liners for gravity sewer laterals connected to manholes, or connected to the gravity sewer main where installation of T-liner is not feasible per Owner, will be measured based upon each installed in accordance with the Contract Documents regardless of depth, length, or material. Payment at the unit price bid shall include all Work necessary and incidental to sewer lateral CIPP lining including, but not limited to:
1. Cleaning and pre-lining CCTV inspection.
 2. Repair of significant inflow/infiltration defects that would adversely impact curing of the liner.
 3. Installation and curing of liner.
 4. Cooling and disposal of cure water (if water-cured).
 5. Testing and post-lining CCTV inspection.
 6. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
 7. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
- S. Bid Item Nos. 27 and 29 –4-inch, 6-inch CIPP Tube Liner Additional Length, Installed Complete in Place. *Measurement for additional length of four-inch and six-inch tube liners beyond the first six feet from inner manhole wall for gravity sewer laterals connected to manholes, or from sewer main centerline for where installation of T-liner is not feasible per Owner, shall be made per linear foot as specified. For cleanout drop structures, length shall be measured from inner wall of manhole or centerline of sewer main to vertical elbow, as applicable, plus vertical distance from said elbow to three inches (3”) below invert of (lowest) private lateral, less six feet (6’). Payment will be made at the unit price bid per linear foot as stated on the Bid Form, complete in place, including all materials, equipment, and labor required to furnish and install full length of four-inch and six-inch tube liners for gravity sewer laterals connected to manholes, or to the gravity sewer main where installation of a T-liner is not feasible per Owner.*
- T. Bid Item Nos. ~~26, 27, and 28~~ 30, 31, and 32 – 6”-, 8”-, and 12”-DI Casing Pipe, Installed Complete-in-Place. Ductile Iron casing pipe installed at special, ditch, and storm sewer crossings will be measured based upon the linear foot of casing pipe satisfactorily installed in accordance with the Contract Documents. Casing pipe will be paid for at the unit price bid and will include, but not be limited to, the cost of furnishing and installing the proposed ductile iron casing pipe, excavation, compaction and testing, bedding, end seals, support spacers, and all other Work incidental to the casing installation. Price does not include carrier pipe but does include the installation of the carrier pipe within the casing.
- U. Bid Item No. ~~29~~ 33 – Heavy Cleaning, Gravity Sanitary Sewer. Heavy cleaning will be measured based upon the linear foot of gravity sewer main satisfactorily cleaned in accordance with the Contract Documents. Heavy cleaning will be paid for at the unit price bid and will include, but not be limited to, the cost of furnishing the cleaning water, cleaning and re-inspecting the sewer main, and all other Work incidental to heavy cleaning.
- V. Bid Item Nos. ~~30 and 31~~ 34 and 35 – 8-Inch Gravity Sewer CIPP Lining for Partially/Fully Deteriorated Host Pipe, Installed Complete-in-Place. Gravity sewer mains will be measured from the center of the manhole cover at each end based on linear footage in the horizontal plane in accordance with the Contract Documents regardless of depth or material. Payment at the unit price bid shall include all Work necessary and incidental to sewer main CIPP lining including, but not limited to:
1. Cleaning and pre-lining CCTV inspection.
 2. Repair of significant inflow/infiltration defects that would adversely impact curing of the liner.

3. Installation and curing of liner.
4. Cooling and disposal of cure water (if water-cured).
5. Testing and post-lining CCTV inspection.
6. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
7. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
8. Concrete-lined ditch replacement and/or restoration.

W. Bid Item No. ~~32~~ 36 – 8-Inch Gravity Sewer CIPP Point Repair (4’ Length), Installed Complete-in-Place. Gravity sewer CIPP point repairs will be measured based upon each installed in accordance with the Contract Documents regardless of depth, diameter, or material. Payment at the unit price bid shall include all Work necessary and incidental to sewer main CIPP point repair including, but not limited to:

1. Cleaning and pre-repair CCTV inspection.
2. Repair of significant inflow/infiltration defects that would adversely impact curing of the liner.
3. Grouting pipe voids per *Regional Construction Standards*.
4. Installation and curing of liner.
5. Cooling and disposal of cure water (if water-cured).
6. Testing and post-repair CCTV inspection.
7. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
8. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
9. Concrete-lined ditch replacement and/or restoration.

X. Bid Item No. ~~33~~ 37 – 8-Inch Gravity Sewer Point Repair (10’ Length) including Tap Replacement, Installed Complete-in-Place. Gravity sewer point repairs will be measured based upon each completed in accordance with the Contract Documents regardless of depth or material. Payment at the unit price bid shall include all Work necessary and incidental to point repair installation including, but not limited to, the following:

1. Saw cutting pavement and pavement removal for trench excavation.
2. Stripping and stockpiling topsoil.
3. Disposal of excess material and excavated material unsuitable for placement as fill.
4. Bedding as detailed on the Contract Drawings and required by the Contract Documents.
5. Gravity sewer pipe, fittings, adapters, and appurtenances.
6. Flushing.
7. Testing.
8. Temporary seeding and stabilization.
9. Geotextile fabrics or matting.
10. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
11. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.
12. Concrete-lined ditch replacement and/or restoration.

Y. Bid Item No. ~~34~~ 38 – 8-inch PVC Gravity Sewer Main, Installed Complete-in-Place. Gravity sewer will be measured based upon the linear footage, in the horizontal plane, of pipe installed in accordance with the Contract Documents and satisfactorily tested regardless of depth. Pipe in place will be paid for at the unit price bid and will include, but is not limited to, the cost of the following:

1. Furnishing and installing the proposed gravity sewer, fittings, and appurtenances.
2. Connections to existing/proposed manholes.

3. Saw cutting pavement and pavement removal for trench excavation.
4. Stripping and stockpiling topsoil.
5. Bedding as described on the plans and required by the Contract Documents.
6. Tracer wire and subsurface marker tape.
7. Temporary and final restoration, in the right-of-way and easements, of shoulders and grade surface features including drainage ditches, culverts, curb and gutter, topsoil, seeding, stabilization, and plantings.
8. Protection, maintenance, restoration, and replacement of utility lines and other underground facilities (public or private) disturbed or otherwise displaced during construction.
9. Testing.

Z. Bid Item Nos. ~~35 and 36~~ 39, 40, and 54 – PVC Gravity Sewer Lateral Internal Drop Assembly, 8-inch/~~6-inch~~ PVC Gravity Sewer Main Internal Drop Assembly, Installed Complete-in-Place. Gravity sewer lateral and main internal drop assemblies will be measured based upon each assembly installed in accordance with the Contract Documents regardless of lateral/main diameter and drop height. Each assembly in place will be paid for at the unit price bid and will include, but is not limited to, the cost of the following:

1. Furnishing and installing the proposed drop assembly, fittings, and appurtenances.
2. Connections to existing laterals/mains at manholes.
3. Bench modification.

AA. Bid Item No. ~~37~~ 41 – Raised Manhole Frame and Cover, Installed Complete-in-Place. Raising of manhole frame and cover will be measured based upon each frame and cover satisfactorily raised in accordance with the Contract Documents. Raising will be paid for at the unit price bid and will include, but not be limited to, the cost of removing and disposing of existing riser/adjustment rings; furnishing, installing, and sealing new adjustment rings, slope rings, and riser rings if necessary in paved areas; sawcutting of pavement and excavation as necessary; pavement patch; and all other Work incidental to raising manhole frame and cover.

BB. Bid Item No. ~~38~~ 42 – Replacement Manhole Frame and Cover, Installed Complete-in-Place. Replacement manhole frame and cover will be measured based upon each frame and cover satisfactorily replaced in accordance with the Contract Documents. Replacement will be paid for at the unit price bid and will include, but not be limited to, the cost of removal and disposal of pavement and existing frame and cover; excavation; furnishing, installing, cleaning, and sealing new frame and cover; repairs; pavement patch; and all other Work incidental to replacing manhole frame and cover.

CC. Bid Item No. ~~39~~ 43 – Stainless Steel Manhole Insert, Installed Complete-in-Place. Stainless steel manhole insert (“rain cover”) will be measured based upon each insert satisfactorily installed in accordance with the Contract Documents. Insert will be paid for at the unit price bid and will include, but not be limited to, the cost of measuring frame and cover, furnishing and installing insert, and all other Work incidental to manhole insert.

AB. Bid Item No. ~~40~~ 44 – PVC Manhole Vent, Installed Complete-in-Place. PVC manhole vent will be measured based upon each vent satisfactorily installed in accordance with the Contract Documents. Vent will be paid for at the unit price bid and will include, but not be limited to, the cost of furnishing and installing vent, appurtenances, and attachments; and all other Work incidental to manhole vent.

- AC. Bid Item No. 41 45 – Manhole Chimney Interior Mechanical Seal, Installed Complete-in-Place. Manhole chimney interior mechanical seal will be measured based upon each seal up to 10 inches wide satisfactorily installed in accordance with the Contract Documents. Seal will be paid for at the unit price bid and will include, but not be limited to, the cost of measuring chimney dimensions; cleaning and preparing chimney from three inches (3”) below chimney to the full depth of manhole frame casting; applying protective coating to cleaned manhole frame casting that is not replaced; removal and disposal of dust cover; furnishing and installing seal; and all other Work incidental to mechanical seal.
- AD. Bid Item No. 42 46 – Manhole Chimney Interior Parging and Chemical Sealant, Installed Complete-in-Place. Manhole chimney interior parging and chemical sealant will be measured based upon each manhole chimney satisfactorily sealed in accordance with the Contract Documents. Parging and sealant will be paid for at the unit price bid and will include, but not be limited to, the cost of measuring chimney dimensions; cleaning and preparing chimney from three inches (3”) below chimney to the full depth of manhole frame casting; applying protective coating to cleaned manhole frame casting that is not replaced; removal and disposal of dust cover; parging interior of chimney to provide smooth transition from frame inner diameter to chimney inner diameter; furnishing and installing sealant; disposal of waste and excess material; and all other Work incidental to parging and chemical sealant.
- AE. Bid Item No. 43 47 – Parge Manhole Exterior and Apply Cement Layer, Installed Complete-in-Place. Parge manhole exterior and apply cement layer will be measured based upon each manhole exterior satisfactorily parged and coated in accordance with the Contract Documents. Manhole parge and cement layer will be paid for at the unit price bid and will include, but not be limited to, the cost of removal and disposal of exterior manhole seal material, cleaning of manhole exterior to a depth six inches (6”) below grade, furnishing and installing cement layer, disposal of waste and excess material, and all other Work incidental to manhole parge and cement layer.
- AF. Bid Item No. 44 48 – 4-foot Sanitary Sewer Manhole Abandonment, Complete. Manhole abandonment will be measured based upon each manhole abandoned in accordance with the Contract Documents regardless of depth. Manhole abandonment will be paid for at the unit price bid and will include, but is not limited to, the cost of the following:
1. Formwork, whether temporary or permanent, for CIPP liner installed through manhole.
 2. Furnishing and installing flowable fill and concrete cap.
 3. Removal and disposal of manhole sections and appurtenances to be abandoned.
- AG. Bid Item Nos. 45 and 46 49 and 51 – 4-foot/5-foot Sanitary Sewer Manhole *up to 4’ Deep* Rehabilitated with Epoxy Coating, Complete-in-Place. Manhole rehabilitation with epoxy coating will be measured based upon each manhole rehabilitated in accordance with the Contract Documents regardless of depth. Manhole rehabilitation with coating will be paid for at the unit price bid and will include, but is not limited to, the cost of the following:
1. Flow control.
 2. Root removal.
 3. Removal of steps.

4. Removal of loose and unsound material.
5. ***Removal of existing drop structure(s).***
6. Cleaning and preparation of manhole surface to be coated.
7. Manhole structure and/or bench and invert reconstruction.
8. Furnishing and installing manhole coating.
9. Testing.
10. Disposal of excess and waste material.

AH. Bid Item Nos. 50 and 52 – 4-foot/5-foot Sanitary Sewer Manhole Extra Depth Rehabilitated with Epoxy Coating, Complete-in-Place. Measurement for additional depth of manhole, from four feet (4') above lowest invert to three inches (3") below bottom of chimney, or to bottom of chimney where interior mechanical chimney seal is to be installed, shall be made per vertical linear foot as specified. Payment will be made at the unit price bid per vertical linear foot as stated on the Bid Form, complete in place, including all materials, equipment, and labor required to furnish and install coating. Unit price bid includes but is not limited to the cost of the following:

1. ***Flow control.***
2. ***Root removal.***
3. ***Removal of steps.***
4. ***Removal of loose and unsound material.***
5. ***Removal of existing drop structure(s).***
6. ***Cleaning and preparation of manhole surface to be coated.***
7. ***Manhole structure reconstruction.***
8. ***Furnishing and installing manhole coating.***
9. ***Testing.***
10. ***Disposal of excess and waste material.***

AI. Bid Item No. 47 53 – 5-foot Sanitary Sewer Manhole Replacement, Installed Complete-in-Place. Sanitary sewer manhole replacement will be measured based upon each installed in accordance with the Contract Documents regardless of depth. Payment at the unit price bid shall include all Work necessary and incidental to manhole replacement including, but not limited to, the following:

1. Flow control.
2. Removal and disposal of 4-foot manhole and external drop connection.
3. Furnishing, installing, and sealing 5-foot manhole.
4. Gravity sewer main cut-back from and reconnection to manhole.
5. Furnishing and installing internal drop connection.
6. Drop connection pipe, fittings, adapter, and appurtenances.
7. Installing bench as detailed on the Contract Drawings.
8. Testing.
9. Disposal of surplus, excess, and waste materials.
10. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.
11. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.

AJ. Bid Item No. 55 – Plug and Abandon External Drop Connection, Remove Drop Tee, Replace 18' of 8" Sewer with DI Casing, Installed Complete-in-Place. Plug and abandon external drop connection, with removal of drop tee and replacement of 18' of 8" sewer main with DI casing, will be measured based upon each installed in accordance with the Contract Documents regardless of depth. Payment at the

unit price bid shall include all Work necessary and incidental to external drop connection abandonment including, but not limited to, the following:

- 1. Flow control.*
- 2. Removal and disposal of 8" sewer main including tee for external drop connection.*
- 3. Plugging and abandoning external drop connection.*
- 4. Installing 18' of replacement 8" sewer main.*
- 5. Furnishing and installing 8" x 8" x 6" tee for internal drop connection.*
- 6. Disposal of surplus, excess, and waste materials.*
- 7. Maintenance, restoration, and replacement of utility lines disturbed or otherwise displaced during construction.*
- 8. Temporary and final restoration in the right-of-way and easements of shoulders and grade surface features including drainage ditches, culverts, curb, gutter, topsoil, seeding, and plantings.*

1.4 PAYMENT

- A. Measurement of the several Bid Items listed on the Bid Form will be in the units indicated. No measurement will be made until the item has been installed and accepted as complete by the Owner and the Owner's Representative.
- B. Payment at the unit price bid shall constitute full compensation for furnishing all labor, material, and equipment required for provision of the item in accordance with the Contract Documents.

II. PRODUCTS

NOT APPLICABLE TO WORK IN THIS SECTION

III. EXECUTION

NOT APPLICABLE TO WORK IN THIS SECTION

END OF SECTION 01151

III. BID FORM

Bids to be opened: **2:00 p.m., June 30, 2016**
 Work to be Completed in: **150 Calendar Days (Substantial)**
180 Calendar Days (Final)
 Liquidated Damages: **\$500.00** per calendar day after time for Substantial
 Completion has expired.
\$500.00 per calendar day after time for Final
 Completion has expired.
 Performance Bond: 100%
 Payment Bond: 100%
 Bid Security: 5%

To: **County of York, Virginia**

105 Service Drive

Yorktown, Virginia 23690
IFB No. 2002

A. BID PRICE

OPTION A - LUMP SUM BID (Unused)

OPTION B - COMBINATION LUMP SUM AND UNIT PRICE BID (Unused)

OPTION C - UNIT PRICE BID

In compliance with the Bid Documents, titled **Lackey Gravity Sewer Rehabilitation – Phase 1, which incorporates the HRPDC Regional Construction Standards, Fifth Edition as amended for the Project, including** all Addenda issued to date all of which are part of this Bid, the undersigned hereby proposes to furnish all items including materials, supervision, labor, and equipment in strict accordance with said Contract Documents for the sum of:

NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
1	Mobilization, Complete (up to 5% of total price of all other base bid items)	LS	1		
2	Construction Entrance	EA	7		
3	Inlet Protection	EA	6		
4	Silt Fence	LF	2,500		
5	Tree Protection	EA	200		
6	Undercut Excavation with Bedding Backfill as Directed by Owner	CY	100		
7	Select Material, Type II – Sand as Directed by Owner, Complete-in-Place	Ton	50		
8	Select Material, Type II – Stone as Directed by Owner, Complete-in-Place	Ton	50		
9	Miscellaneous Unclassified Excavation as Directed by Owner	CY	100		
10	Aggregate Base Material, Complete-in-Place	Ton	50		

11	Prime Coat Prior to Reconstruction, Complete-in-Place	SY	500		
12	Reconstructed Asphalt Pavement, Complete-in-Place	SY	500		
13	Concrete Driveway Restoration at Main Line or Lateral Crossing, Complete-in-Place	SY	100		
14	Exposed Aggregate Concrete Driveway Restoration at Main Line or Lateral Crossing, Complete-in-Place	SY	100		
15	Asphalt Driveway Restoration at Main Line or Lateral Crossing, Complete-in-Place	SY	500		
16	Aggregate Driveway Restoration, Complete-in-Place	Ton	50		
17	4" PVC Gravity Sewer Lateral Replacement, Installed Complete-in-Place	LF	50		
18	6" PVC Gravity Sewer Lateral Replacement, Installed Complete-in-Place	LF	50		
19	4" PVC Gravity Sewer Lateral Cleanout Assembly, Installed Complete-in-Place	Each	4		
20	6" PVC Gravity Sewer Lateral Cleanout Assembly, Installed Complete-in-Place	Each	4		
21	Heavy Duty Sanitary Cleanout Frame and Cover, Installed Complete-in-Place	Each	20		
22	6' x 4" Gravity Sewer Lateral CIPP T-Liner, Installed Complete-in-Place	Each	36		
23	4" CIPP T-Liner Additional Length, Installed Complete-in-Place	LF	900		
24	6' x 6" Gravity Sewer Lateral CIPP T-Liner, Installed Complete-in-Place	Each	11		
25	6" CIPP T-Liner Additional Length, Installed Complete-in-Place	LF	400		
26	6' x 4" Gravity Sewer Lateral CIPP Tube Liner, Installed Complete-in-Place	Each	33		
27	4" CIPP Tube Liner Additional Length, Installed Complete-in-Place	LF	900		
28	6' x 6" Gravity Sewer Lateral CIPP Tube Liner, Installed Complete-in-Place	Each	6		
29	6" CIPP Tube Liner Additional Length, Installed Complete-in-Place	LF	300		
30	6" DI Casing Pipe, Installed Complete-in-Place	LF	100		
31	8" DI Casing Pipe, Installed Complete-in-Place	LF	100		
32	12" DI Casing Pipe, Installed Complete-in-Place	LF	200		
33	Heavy Cleaning, Gravity Sanitary Sewer	LF	2000		
34	8" Gravity Sanitary Sewer CIPP Lining for Partially Deteriorated Host Pipe, Installed Complete-in-Place	LF	8630		
35	8" Gravity Sanitary Sewer CIPP Lining for Fully Deteriorated Host Pipe, Installed Complete-in-Place	LF	1130		

36	4' x 8" Gravity Sanitary Sewer CIPP Sleeve, Installed Complete-in-Place	Each	1		
37	10' x 8" Gravity Sanitary Sewer Point Repair incl. Replace Tap, Installed Complete-in-Place	Each	3		
38	8" PVC Gravity Sanitary Sewer Main, Installed Complete-in-Place	LF	52		
39	PVC Gravity Sewer Lateral Internal Drop Assembly, Installed Complete-in-Place	Each	2		
40	8" PVC Gravity Sewer Main Internal Drop Assembly, Installed Complete-in-Place	Each	5 4		
41	Raised Manhole Frame and Cover, Installed Complete-in-Place	Each	3		
42	Replacement Manhole Frame and Cover, Installed Complete-in-Place	Each	5		
43	Stainless Steel Manhole Insert, Installed Complete-in-Place	Each	45		
44	PVC Manhole Vent, Installed Complete-in-Place	Each	2		
45	Manhole Chimney Interior Mechanical Seal, Installed Complete-in-Place	Each	5		
46	Manhole Chimney Interior Parging and Chemical Sealant, Installed Complete-in-Place	Each	46		
47	Parge Manhole Exterior and Apply Cement Layer, Installed Complete-in-Place	Each	1		
48	4' Sanitary Sewer Manhole Abandonment, Complete	Each	1		
49	4' Sanitary Sewer Manhole <i>up to 4' Deep</i> Rehabilitated with Epoxy Coating, Complete-in-Place	Each	40		
50	<i>4' Sanitary Sewer Manhole Extra Depth Rehabilitated with Epoxy Coating, Complete-in-Place</i>	<i>VLF</i>	<i>200</i>		
51	5' Sanitary Sewer Manhole <i>up to 4' Deep</i> Rehabilitated with Epoxy Coating, Complete-in-Place	Each	9		
52	<i>5' Sanitary Sewer Manhole Extra Depth Rehabilitated with Epoxy Coating, Complete-in-Place</i>	<i>VLF</i>	<i>100</i>		
53	5' Sanitary Sewer Manhole Replacement, Installed Complete-in-Place	Each	2 1		
54	<i>6" PVC Gravity Sewer Main Internal Drop Assembly, Installed Complete-in-Place</i>	<i>Each</i>	<i>1</i>		
55	<i>Plug and Abandon External Drop Connection, Remove Drop Tee, Replace 18' of 8" Sewer with DI Casing, Installed Complete-in-Place</i>	<i>Each</i>	<i>1</i>		
			Total		

Bidder acknowledges that 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 provided, determined as provided in the Contract Documents. The prices quoted shall include without exception all materials, supervision, labor, equipment, appliances, clean-up, incidental items, applicable sales, use and other taxes, insurance, building permit or fees, and the Contractor's labor, overhead, profit, mobilization and other mark-ups, and in full accordance with the Contract Documents. Include allowance for waste where appropriate. The unit prices shall be maintained throughout the Contract IFB No. 2002 – Addendum No. 2 – June 23, 2016

Time. Unit prices shall be used in determining additions or deductions from the total Contract Price in the event of changes due to unforeseen conditions in the Work.

B. ADDENDA

The undersigned acknowledges receipt of the following addenda:

Addendum No. 1 Dated: June 20, 2016.

Addendum No. 2 Dated: June 23, 2016.

Addendum No. _____ Dated: _____.

C. We agree to enter into an Agreement with the **County of York**, Virginia within ten (10) days of the award of same to us for the price named in our Bid.

D. It is expressly agreed by us that the **County of York**, Virginia shall have the right to reject any and all Bids and to waive any minor non-substantive errors in the Bid and accept the Bid in the **County of York's** best interests.

E. In default of the performance on our part of the conditions of Bid, our failure to enter into an Agreement with the **County of York**, Virginia, within the time above set, we herewith furnish a Bid Security in the amount of \$ _____, which shall be absolutely forfeited to the **County of York**, Virginia, but otherwise the said Bid Security shall be returned.

F. We agree to begin Work at any time we may be notified by the Owner, and complete all of the Work embraced in the Agreement within **180 Calendar** Days;

G. [This applies to projects over \$200,000 unless otherwise indicated]. I/We elect to utilize the Escrow Account Procedure described in the provision of this bid if determined to be the successful low Bidder. _____ (write "Yes" or "No").

_____ Bid total does not qualify for escrow account option

H. The undersigned has read all sections under "Instructions to Bidders."

I. By signing, each signatory acknowledges any strike-throughs contained herein, unless hand-written.