

## **SECTION 01025**

### **MEASUREMENT AND PAYMENT**

#### **PART 1 — GENERAL**

##### **1.01 SECTION INCLUDES**

- A.** Methods of measurement and payment for items of work covered under the Bid Schedule

##### **1.02 SUMMARY**

- A.** The total bid price shall cover all work required by the Contract Documents. All work shall meet the Latest DeKalb County Department of Watershed Management Design Standards Manual. All costs in connection with the proper and successful completion of the Work, including all materials, equipment, supplies, and appurtenances; providing all equipment and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid.
- B.** All Work not specifically set forth as a pay item in the Bid Form shall be considered subsidiary obligations of Contractor and all costs in connection therewith shall be included in the prices bid.
- C.** All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only:
  - 1.** As a basis for estimating the probable cost of the Work.
  - 2.** For the purpose of comparing the bids submitted for the Work.
- D.** The basis of payment for work shall be in accordance with the unit price bid items in the Bid Schedule and shall be full compensation for all labor, materials, and equipment required to furnish, install, construct, and test the Work covered under the unit price bid item. Payment for work will be made on a linear foot, vertical foot, square foot, square yard, cubic yard, or each based on the Contractor's measurement, contingent on verification by Owner's Representative. Contractor agrees he will make no claim for additional time, damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished.
- E.** Payment will be made only for the actual quantities of work performed in compliance with the Drawings and Specifications. The Contractor will be paid an amount equal to the approved quantity times the applicable unit price. Any unused balance of the unit price work shall revert to the Owner upon completion of the project.
- F.** Pay requests for work performed shall be itemized by asset. The pay request should list each asset by ID number, describe the work performed per the payment bid form, provide the unit cost, and provide the extended cost. When seeking partial payment where work was attempted and could not be completed, Owner approved information shall be provided on the pay request to justify the amount requested. Work performed on pipes should be listed in a separate table from work performed on manholes. The Owner's Representative will provide an example of the table format.

Additional instructions and/or requirements may be provided by the Owner's Representative at the project Kick-off meeting.

## **1.03 MEASUREMENT AND PAYMENT**

### **DIVISION 1 – GENERAL REQUIREMENTS**

#### **General Conditions,**

- A.** Mobilization, Demobilization and Closeout. There will be no separate charge for mobilization, demobilization and closeout by the Contractor. Contractor must include any costs associated with mobilization, demobilization and closeout in the unit rates for bid items included in this Contract.
- B.** Allowance: See Section 01020. This Contract includes one (1) Allowance that will be used at the discretion of the Owner for any of the purposes designated below and for unforeseen conditions and additional work items associated with the original scope of work.
  - 1) Material Testing Services Section- Contractor shall procure the services of a Certified Material Testing Service to provide the testing described in Section 01410. The type and frequency of testing will be as agreed to by the County, or County representative, and will be paid for "per test" against the Allowance amount included in the contract. The maximum mark-up for overhead and profit on this item is 5%.
  - 2) Water Meter Fees- The Contractor will be required to meter all water used from hydrants for prosecution of work using portable water meters obtained from the County. Payment for water will be against the Allowance based on invoices from the County paid through the Allowance.
- C.** Work Zone Staging and Traffic Control (Per Link)- Traffic control measures for work in low-traffic/residential areas shall be included in the unit price. Additional traffic control measures required for work in high-traffic/commercial areas will be paid for separately when authorized by the Owner's Representative, as follows.

Payment will be remitted for furnishing, installation, maintenance and removal of temporary traffic control per link of roadway based upon the current functional classification of the affected roadway as defined by the Federal Highway Administration per day. A roadway link is defined by two nodes or intersections. In the event a single work zone spans one or more intersections, the average link length will be used to determine the eligible quantity or work zones for payment. Each unit price bid shall include all but not be limited to furnishing, installation, maintenance and removing all traffic control devices, temporary signage, temporary pavement markings and shall include flagging and other means necessary for safe guidance and protection of vehicular and pedestrian traffic through the Work Zone per site based upon the functional classification and site conditions. When Police are required for traffic control the cost shall be included in the unit bid price. All traffic control measures and plans shall conform to the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), Part 6 (Temporary Traffic Control), latest edition, as published by the US DOT / FHWA. The above referenced bid items are applicable to rehabilitation work within roadways with the following functional classifications:

17 - Collector Street

16 - Minor Arterial Street

14 - Urban Principal Arterial

Functional Classification Maps for the Atlanta Metro Counties are available through Georgia's Department of Transportation (GADOT) website at:

<http://www.dot.ga.gov/DS/Data>

In the event that a functional classification assignment conflict exists between the drawings and the GADOT, the GADOT classification shall preside. The Contractor shall submit proposed traffic control plans to required regulatory agencies and they shall grant approval before the Work begins. Notification to begin Work shall require at least 48-hour notice to the appropriate agency and the Owner. Traffic control for roadways with "local" or "rural" functional classifications are considered incidental to the Work and the cost shall be included in the unit price for the Work performed. These type roadways shall meet MUTCD requirements. No separate payment will be made for traffic control roadways with functional classification other than those stated herein, unless otherwise authorized by the Owner for exceptional circumstances.

## **GPS Data Collection**

- A. GPS Locate and Data Collection for Manholes- Measurement for payment will be per each (EA). Payment will constitute full compensation to locate, take coordinates and elevations, and provide attribute information for each located manhole (and associated sewer line assets as applicable) per the direction provided in the latest Department of Watershed Management Design Standards Manual. This payment includes compensation for all digital deliverables outlined in the Design Standards Manual.

## **Sanitary Sewer CCTV – Inspection**

- A. Sewer CCTV Inspection- Measurement for payment will be per linear foot (LF) from center of manhole to center of manhole. Payment will constitute full compensation to perform a CCTV sewer pipe inspection on sanitary sewer mains when called for by the County. No payment will be made when the Contractor needs to or is required to provide CCTV inspection to supplement a rehab or replacement work item. Defect coding, header data, and coding of service lateral locations are required and shall meet the Technical Specifications format and submittal requirements. There will be no separate payment made for light cleaning, use of an easement machine, or data delivery. Payment shall only be made for the footage of sewer inspection between the manholes. Maintenance of traffic and associated traffic control measures required for the Work shall be included in the unit price. Costs shall include, but are not limited to, labor, equipment, transportation, setup, tools, bypass pumping for flows up to 25% pipe volume, public notification, data management and all other related procedures and materials necessary to complete the inspections, in accordance with Section 01510. Flow volume greater than 25% will be paid for separately.

## **Sewer Flow Control**

- A. Sewer Flow Control: Bypass Pumping on 6" to and including 24" Diameter Pipe, greater than 25% pipe volume- Measurement for payment will be per linear feet (LF) of pipe segment being by-passed for the size and flow classification category of bypass pumping and temporary flow control. The determination of the percent of flow within the pipe segment being by-passed will be agreed upon by the Owner and the Contractor prior to

Owner approval of the by-pass pumping. Flow volume of 25% or less will not be paid for separately. Payment will be full compensation for furnishing by-pass pumping plans, all labor, materials, equipment, set-up, removal and incidentals necessary to produce the results specified in Section 01520.

## **DIVISION 2 – SITE WORK**

### **Access Route and Easement Access Clearing**

- A.** Construction Exit/Entrance Install and Removal- Measurement for payment will be per each (EA) entrance/exit suitably installed and maintained per the Manual for Erosion and Sediment Control of Georgia, latest edition. Payment will constitute full compensation for all costs associated with access entrances/exits, including installation, maintenance, repair, removal, disposal, and restoration to original grade.
- B.** Easement or Right of Entry (ROE) Access Road- Measurement for payment will be per linear foot (LF) of road suitably installed and maintained per the Manual for Erosion and Sediment Control of Georgia, latest edition or as required by the governing agency. Payment will constitute full compensation for all costs associated with access roads, including installation, maintenance, repair, removal, disposal, and restoration to original grade.
- C.** Easement or ROE Clearing, Light & Medium- Measurement for payment will be per square yard (SY) for the type classification category for clearing. The Contractor and the Owner's Representative will determine the category of cleaning Light or Medium prior to beginning the clearing. Light clearing can be achieved with hand equipment or bush hog; medium will use more of the same but larger equipment and add wood chipper(s). Payment will constitute full compensation for easement or ROE clearing, including, but not limited to labor, equipment, transportation, tools, and other related procedures and materials necessary to remove vegetation and other debris on or near the surface of the ground in the construction area to produce the results specified in Section 02110. Easements or ROEs will be cleared of debris or obstructions impeding access to work areas.
- D.** Easement Clearing, Heavy- Measurement for payment will be per caliper inch for the type classification category of clearing. The classification of per caliber inch will be measured at four (4) feet from the base of the tree. Heavy clearing may include similar equipment as with Light or Medium clearing but also need "timbering" equipment such as skidders or dozers. Payment will constitute full compensation for easement clearing, including, but not limited to labor, equipment, transportation, tools, disposal and other related procedures and materials necessary to remove vegetation and other debris on or near the surface of the ground in the construction area to produce the results specified in Section 02110. Easements or ROEs will be cleared of debris or obstructions impeding access to work areas.

### **Pavement Cutting**

- A.** Sawcut Pavement for trenching- Measurement and Payment will be per linear foot (lf) eight inches thick, whether asphalt or concrete. Payment for additional thickness will be based on four inches thick.

### **Site Restoration & Erosion Control**

- A.** Riprap- Measurement for payment will be per square yard (SY) for riprap installed, including geotextile filter fabric underlayment at a minimum 18-inch depth, or as directed by the Owner. When crossing a stream or ditch, the quantity eligible for payment shall be limited to 10 feet upstream and 10 feet downstream of top of disturbed area and from five feet from the top of bank, across a creek or ditch, banks and bottoms, to five feet beyond top of bank. Any other areas at creeks or ditches disturbed by the Contractor requiring riprap shall be riprapped at no additional cost to the Owner.
- B.** Tree Protection Fence- Measurement for payment will be per linear foot (LF) for tree protection fence suitably installed and maintained per Section 02276. Installed when required by Owner or governing agencies. Payment will constitute full compensation for all costs associated with tree protection fencing, including installation, maintenance, repair, removal, and disposal
- C.** Check Dam (Hay Bales)- Measurement for payment will be per each (EA) for check dams suitably installed and maintained per the Manual for Erosion and Sediment Control of Georgia, latest edition. Payment will constitute full compensation for all costs associated with check dams, including grading, installation, maintenance, repair, removal, and disposal.
- D.** Inlet Sediment Trap- Measurement for payment will be per each (EA) for inlet sediment traps suitably installed and maintained per the Manual for Erosion and Sediment Control of Georgia, latest edition. Payment will constitute full compensation for all costs associated with inlet sediment traps at existing storm water inlet structures, including installation, maintenance, repair, removal, and disposal. Contractor shall be responsible for installing the number of sedimentation traps required to adequately capture silt, from leaving construction sites.
- E.** Temporary Creek Crossings- Measurement for payment will be per diameter on a per linear foot (LF) basis for temporary stream crossings suitably installed, maintained, and removed per the Manual for Erosion and Sediment control of Georgia, latest edition. Prior to installation of the temporary creek crossing, the Contractor will be required to submit construction plans to include sizing of the pipe diameter to convey the required flow. Plans shall be sealed by a registered Professional Engineer in the State of Georgia. Payment will constitute full compensation for all costs associated with temporary stream (creek) crossings, each up to 40-foot span as measured from top of bank to top of bank, and shall include all necessary materials and labor to install, maintain, remove, and dispose. Cost of aggregate, pipe, and concrete supports shall be included under this item and not in any other bid items.
- F.** Tree/Shrubbery Replacement (Any type except Pine)- Measurement for payment will be per each (EA) bush removed and replace for either native or ornamental types. Payment will be per the 3-gallon or 5-gallon bid item and will constitute full compensation for removing and replacing bushes on private property. Replacement may include removal and replanting, or replacing with a new bush (as directed by the Owner) in accordance with Section 02276.
- G.** Chain Link Fence Removal & Replacement- Measurement for payment will be per linear foot (LF). Payment will constitute full compensation for removing and replacing chain link fence, in kind, on public or private property in accordance with Section 02776. Replacement may include installation of a new chain link fence (including

removal/disposal of existing fence) as directed by the Owner.

- H. Wood Fence Removal & Replacement- Measurement for payment will be per linear foot (LF). Payment will constitute full compensation for removing and replacing wood fence, in kind, on public or private property in accordance with Section 02276. Replacement may include installation of a new wood fence (including removal/disposal of existing fence) as directed by the Owner.
- I. Unsuitable Soil Replacement, (Crusher Run)- Measurement for payment will be per cubic yard (CY) compacted in place. All costs for hauling and placing imported fill material shall be included in the unit price. Payment will be made on the basis of cubic yards (CY) compacted in place. No soil backfill shall be used in pipe trenches under roadways or other paved areas. In all paved areas, trenches shall be backfilled with crushed rock and compacted in lifts to a minimum required compaction of ninety-five percent (95%) of the maximum dry density. This pay item includes from the top of pipe envelope to the bottom of the concrete cap. Refer to the latest DeKalb County Department of Watershed Management Design Standards Manual Standard Detail No. G-005. Separate payment will be made for surface restoration. Payment for materials testing shall be made separately.
- J. Unsuitable Soil Replacement (soil – imported fill)- Measurement for payment will be per cubic yard (CY) compacted in place. All costs for hauling and placing imported fill material shall be included in the unit price. Payment will be made on a basis of cubic yards (CY) compacted in place. When allowed by the Owner, in non-paved areas the compaction may be less than ninety-five percent (95%) however not less than ninety percent (90%) of the maximum dry density. In non-paved areas unsuitable soil for final backfill shall be replaced at the Owner's direction. This pay item includes from the top of the pipe envelope to final grade. Separate payment will be made for surface restoration. Payment for materials testing shall be made separately.
- K. Sodding. Measurement for payment will be per square yard (SY). Payment will constitute full compensation for fine grading, fertilizing, and sodding disturbed landscaped areas on public or private property in accordance with Section 02485. Soil preparation and/or topsoil shall be included. Disturbed areas shall be sodded only when directed to do so by the Owner or Owner's Representative.
- L. Seeding- Measurement for payment will be per square yard (SY). Payment will constitute full compensation for fine grading, fertilizing, and sodding disturbed landscaped areas on public or private property in accordance with Section 02486. Grass seeding shall match in kind the existing adjacent grass of previously landscaped areas. Soil preparation and/or topsoil shall be included.
- M. Silt Fence- Measurement for payment will be per linear foot (LF) for Type C silt fence suitably installed and maintained per single row as required by the Manual for Erosion and Sediment control of Georgia, latest edition. Payment will constitute full compensation for all costs associated with silt fence, including installation, maintenance, repair, removal and disposal.

## Sanitary Sewer Lining

- A. Cured-In-Place-Pipe (CIPP) Felt, GRP Type or other as approved by the Owner, All Diameters, various thickness-- Measurement for payment will be per linear foot (LF) of



sewer acceptably lined based on the actual horizontal length of sewer line as field measured from center of manhole to center of manhole along the axis of the sewer. The length occupied by the manhole itself shall not be deducted. Payment for the diameter (or dimensions) of the sewer being lined and the wall thickness of the liner will constitute full compensation for the labor, equipment, and materials required to furnish and install the work complete. All costs for renewing gravity sewer pipe by CIPP liner will be included in the unit prices including, but not limited to, light cleaning of existing sewer pipe, type testing, wet-out, bypass pumping, insertion, Vericure type temperature monitoring system (only required on pipe lining sizes greater than 16”), curing, pre and post-installation CCTV inspection for condition confirmation and installation quality control, watertight sealing of connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No payment shall be made for any portion of failed CIPP lining attempts and result in other methods used, such as open cut. If a section of existing host pipe must be repaired or replace prior to installation, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item. Correction of failed CIPP or CIPP deemed defective from mid-warranty internal condition inspection or test reports for structural values, thickness, etc., shall be repaired or replaced at no extra cost to the Owner. Payment for quality assurance sampling and testing of installed liner will be included in the unit price.

### **Sanitary Sewer Service Laterals**

- A.** Robotic Reconnection of Existing Services Laterals- Measurement for payment will be per each (EA). Payment will constitute full compensation to re-connect active services complete and in operation to the lined sewer. Payment for each service re-connection associated with CIPP liners will include the opening of the service tap by robotically cutting the liner in situ, brushing and sealing cut edges as directed by the Owner's Representative. This includes CCTV monitoring of the reconnection process, as well as CCTV zoom into each service lateral after reconnection is complete per with Section 02520. There shall be no distinctions made for size of service connection or lateral. If, in the course of the work, an existing service connection is omitted and the Contractor must return to the location to reconnect a service, the reconnection shall be made at the unit price bid and there shall be no additional compensation for remobilization or set-up.
- B.** Robotic Reconnection of Existing Services Laterals, watertight- Measurement for payment will be per each (EA). Payment will constitute full compensation to re-connect active services complete and in operation to the lined sewer. Payment for each service re-connection associated with CIPP liners will include the opening of the service tap by robotically cutting the liner in situ, brushing and sealing cut edges as directed by the Owner's Representative. Each lateral shall include a watertight seal. There shall be no additional compensation to complete the watertight sealing of each lateral and shall be included within the unit price bid. This includes CCTV monitoring of the reconnection process, as well as CCTV zoom into each service lateral after reconnection is complete per with Section 02520. There shall be no distinctions made for size of service connection or lateral. If, in the course of the work, an existing service connection is omitted and the Contractor must return to the location to reconnect a service, the reconnection shall be made at the unit price bid and there shall be no additional compensation for remobilization or set-up.
- C.** Service Lateral Reconnection 4"-6" Diameter, Various Depths, All Materials, up to 5 LF- Measurement for payment will be per each (EA). Before each exposed service lateral is

reconnected it shall be inspected for defects with a CCTV push-camera manually inserted into the service lateral. When structural defects are observed during the inspection, the service lateral shall be replaced from the mainline to the right-of-way or easement boundary at the discretion of the Owner's Representative. Payment will constitute full compensation to reconnect services excavated and exposed in conjunction with open cut mainline replacement and external point repair work. Payment for each service reconnection will include a wye fitting or an electrofusion, saddle connection installed on the mainline, replacement of up to 5 linear feet of service lateral pipe to accommodate change in horizontal/vertical alignment, including replacement of service line fittings and connections, any additional excavation, removal, disposal, shoring, dewatering, pipe envelope bedding, final backfill not under pavement, compaction for installation of service lateral pipe, including but not limited to furnishing, transporting, storing, installing the pipe, cleaning and site restoration as specified in Section 02530. No separate payment will be made for cutting or beveling pipe. Saw cutting, final backfill under pavement, and surface restoration will be paid separately. All associated costs for testing, post-installation cleaning, if required, and post-installation CCTV video require quality control documentation for the work. No separate or additional payment will be made to install ductile iron piping or fittings for the service piping connections.

- D.** Service Lateral Replacement, 4" to 6" Diameter, Various Depths, Up to the Right of way, including the cleanout- Measurement for payment will be per linear foot (LF) service lateral replaced. Payment will constitute full compensation at all depths to remove, and replace, the existing sewer lateral piping from the reconnection of the lateral at the sewer main up to 16 linear feet. Each service lateral replacement shall include, but not limited to excavation, shoring, dewatering, pipe envelope bedding, final backfill not under pavement, compaction for installation of service lateral pipe, including but not limited to furnishing, transporting, storing, installing the pipe, cleaning and site restoration as specified in Section 02530. No separate payment will be made for cutting or beveling pipe. Saw cutting, final backfill under pavement, and surface restoration will be paid separately. All related costs for testing, post-installation cleaning, if required and post-installation CCTV inspection for quality control shall be included under this item. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No separate or additional payment will be made to install ductile iron piping or fittings for the service pipe reconnection. Separate payment will be made for surface restoration.
- E.** Sewer, Service Lateral, Cap or Plug Existing Lateral, Any Depth- Measurement for payment will be per each (EA). Payment will constitute full compensation for excavating, cutting, plugging, bedding, pipe zone backfill and final backfilling the service lateral. The unit price bid shall include, but not limited to, all costs for material, labor, equipment, and other miscellaneous items as required for a complete installation.
- F.** Sewer, Cleanout, Install at ROW or Edge of Easement on Private Service- Measurement for payment will be per each (EA). Payment will constitute full compensation to install a two-way cleanout at the edge of the right-of-way or easement boundary complete to include riser piping, cleanout box and/or accessories, cleaning (if necessary), testing, and restoring the service laterals operation per Sections 02530, 02535, Drawing Details, and to the latest DeKalb County DWM Design Standards Manual. The cleanout shall incorporate all appropriate and necessary couplings to both the service connection and house connection. A cleanout shall be installed in conjunction with all service lateral replacements to edge of right-of-way or to edge of easement
- G.** Sewer, Internal Pipe Inspection,(Push Camera) Service Lateral, 4" to 8" Diameter-



Measurement for payment will be per linear foot (LF). Payment will constitute full compensation for inspection of service laterals, including, but not limited to, hand held (Push Camera) CCTV inspection. The Contractor shall perform service lateral television inspection on all service laterals exposed for open cut replacement, point repairs, HDD, or pipe bursting, and/or when directed by the Owner's Representative. This item does not include post-construction CCTV quality control inspection for service lateral rehabilitation or repair work. The cost for post CCTV quality control inspection for service lateral rehabilitation and repair work is to be included in the price of the respective service lateral rehabilitation or replacement bid item and will not be paid for separately. Payment shall only be made for the footage of service lateral inspected, as directed by the Owner's Representative, commencing with zero footage at the portal of the pipeline associated with the mainline or at the cleanout. If a defective service lateral must be repaired before inspection can continue, the service lateral will be replaced from the mainline to the property line and paid for separately under lateral replacement bid items

### **Sanitary Sewer Point Repairs**

- A.** Internal Pipe Point Repair with CIPP, Felt or GRP, all Diameters, all wall thickness- Measurement for payment will be per each (EA) point repair up to twenty (20) linear feet (LF) in length as measured from the centerline of each connection coupling along the longitudinal axis of the sewer main, rounded to the nearest foot. Payment for the liner will constitute full compensation for the labor, equipment, and materials required to furnish and install the work complete. All costs for repairing gravity sewer pipe by CIPP will be included in the unit prices. The unit prices shall include testing, wet-out, bypass pumping, pre-liner, insertion, curing, pre and post-installation CCTV inspection for quality control, watertight sealing connections at manholes, sealing of cut edges in pipe and/or manholes and all other related procedures and materials necessary to complete the pipe lining. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No payment shall be made for any portion of failed CIPP lining attempts and result in other methods used, such as open cut. If a section of existing host pipe must be repaired or replace prior to installation, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item. An additional CCTV inspection shall be allowed for in the Contractor's unit price and work schedule, to be performed two (2) years following the acceptance of a CIPP liner. Should any fault be found with the repair, the fault shall be rectified as specified by the Owner's Representative. Rectification may include complete removal and renewal of the previously installed liner and re-inspection one (1) year following the acceptance of the liner.
- B.** External Sewer Point Repairs, All Diameters, All Pipe Materials, All Depth Categories- Measurement for payment will be per each (EA) sewer main point repair up to twenty (20) linear feet (LF) in length as measured along the longitudinal axis of the sewer main, rounded to the nearest foot, and generally from new coupling to new coupling. Payment will constitute full compensation for each external point repair including, but not limited to, material, equipment, excavation, removal and disposal of existing pipe within the installation trench, pavements and excavated materials, excavation support system, utility support system, dewatering, bypass pumping for flows under 25% of pipe volume, post-construction CCTV quality control inspection, pipe envelope bedding, final backfill not under pavement, compaction for installation of pipe, including but not limited to furnishing, transporting, storing, installing the pipe, installing flexible repair couplings, cleaning and site restoration as specified in Section 02535, Gravity Flow Sanitary Sewers. No separate payment will be made for cutting or beveling pipe. Saw cutting, final backfill under pavement, and surface restoration will be paid separately. Payment shall be withheld due

to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No separate payment shall be made for concrete collars and couplings or rebuilding pipe penetrations and existing manhole inverts considered incidental to the Work. The point repair depth shall be considered the same as the average sewer main depth for measurement and payment purposes regardless of the actual excavation depth required. The average sewer main pipeline depth shall be as measured from the pipe invert to the existing ground level at the upstream and downstream manhole. Each point repair shall include replacing a section of sewer main pipe up to twenty (20) feet in length, replacing up to one (1) service reconnection including furnishing and installing necessary service connection pipe, fittings and flexible coupling for a complete reinstatement of the sewer collection piping assembly. Payment will not be remitted to repair any damage to the surrounding areas caused by the Contractor in performance of the Work unless specifically authorized in writing by the Owner's Representative.

- C. External Sewer Point Repairs, All Diameters, All Pipe Materials, All Depth Categories, Additional Linear Footage- Measurement for payment will be per linear foot of sewer pipe over the twenty (20) linear feet included in the unit price for an External Point Repair. All length measurements shall be taken as field measurements along the longitudinal axis of the sewer. The depth category shall be the same average sewer main depth as measured for the aforementioned point. Payment will constitute full compensation for all costs for additional new pipe and materials including,, but not limited to, material, equipment, excavation, removal and disposal of existing pipe within the installation trench, pavements and excavated materials, excavation support system, utility support system, dewatering, bypass pumping for flows under 25% of pipe volume, , post-construction CCTV quality control inspection, pipe envelope bedding, final backfill not under pavement, compaction for installation of pipe, including but not limited to furnishing, transporting, storing, installing the pipe, installing flexible repair couplings, cleaning and site restoration.
- D. Abandon (grout fill) Existing Sewer Line in Place, all Diameter- Measurement for payment will be per cubic yard. Payment will constitute full compensation for existing sewer abandonment by grout filling the existing sewer line in place. The unit price bid shall include, but not be limited to, all costs for material, labor, equipment, bulkheads, vent piping and other miscellaneous items as required for a complete installation.
- E. Cut & Plug Existing Sewer Line, 6' to and including 12' Diameter- Measurement for payment will be per each (EA). Payment will constitute full compensation for excavating, cutting, plugging, bedding, pipe zone backfill and final backfilling the sewer line. The unit price bid shall include, but not limited to, all costs for material, labor, equipment, and other miscellaneous items as required for a complete installation.
- F. Flowable Fill-. Price shall include furnishing and installing controlled low strength flowable fill concrete in accordance with Section 02535, including labor, materials, equipment and any misc. formwork (if required). Measurement shall be in cubic yards complete in-place and accepted.
- G. Concrete Encasement (if required)- Price shall include furnishing and installing concrete encasement in accordance with Section 02535, including labor, equipment, materials and any misc. formwork (if required). Measurement shall be in cubic yards complete in-place, tested and accepted. Payment for all soils and concrete testing shall be made separately.

## Sanitary Sewer Replacement

- A.** Pipe Boring and Jacking, Casing Diameter 18" to 36" for 8" to 24" DIP carrier pipe- Measurement and payment will be made for length of casing installed, including DIP carrier pipe per linear foot and sending and receiving pits up to 15' deep. Additional depth of sending and receiving pits will be per vertical linear foot each. Payment for crossing shall be made only at the completion of all work specified for the casing installation. No partial payment shall be made for the construction of the casing. Casing pipe or tunnel liner plate may be included in Partial Payment Requests as stored materials, if the casing pipe is stored at the Project site. Casing pipe which has been properly installed, but has not yet been paid for as installed casing, may also be included as stored materials. No payment shall be made for rock excavation through the casing or the tunnel. No additional payment will be made for control of water. Payment for sewer in casing or line plate shall be made only at the completion of all work specified for the pipe installation.
- B.** Pipe Boring and Jacking Receiving and Sending Pits, greater than 15 ft. deep, all diameters casing- Payment will be for each additional Vertical Foot (VF) of depth.
- C.** Replacement, Ductile Iron Pipe (DIP) Gravity Pipe (Replace), All Diameters, All Depth Categories, Open Cut- Measurement for payment will be per linear foot (LF) of pipe for gravity sewer replacement of existing pipe by open cut measured from inside face of manhole to inside face of manhole. Depth of cut shall be the average depth of the pipeline as measured from the pipe invert to the existing ground level at the upstream and downstream manhole. Payment will constitute full compensation , but not limited to, material, equipment, pressure testing, excavation, removal and disposal of existing pipe within the installation trench, pavements and excavated materials, excavation support system, utility support system, dewatering, bypass pumping for flows under 25% of pipe volume, pipe envelope bedding, final backfill not under pavement, compaction for installation of ductile iron pipe, including but not limited to furnishing, transporting, storing, installing the pipe, cleaning and site restoration, and all other work incidental to the installation as specified in Section 02537. Fittings and materials needed to reconnect service laterals will be a separate payment under Section 02530. Refer to Section 02324 for final backfill. No additional payment will be made for replacing defective materials. No separate payment will be made for cutting or beveling pipe. Saw cutting, final backfill under pavement, and surface restoration will be paid separately. All associated costs for air testing, post-installation cleaning (if required), and post-installation CCTV inspection for quality control shall be included under this item. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No separate payment shall be made for survey work performed by or for the Contractor to establish reference points, benchmarks, cut sheets, limits of rights-of-way or easement, including their restoration, centerlines or baseline points.
- D.** Replacement, Poly Vinyl Chloride (PVC) Gravity Pipe (Replace), All Diameters, All Depth Categories, Open Cut- Measurement for payment will be per linear foot (LF) of pipe for gravity sewer replacement of existing pipe by open cut measured from inside face of manhole to inside face of manhole. Depth of cut shall be the average depth of the pipeline as measured from the pipe invert to the existing ground level at the upstream and downstream manhole. Payment will constitute full compensation , but not limited to, material, equipment, pressure testing, excavation, removal and disposal of existing pipe within the installation trench, pavements and excavated materials, excavation support system, utility support system, dewatering, bypass pumping for

flows under 25% of pipe volume, pipe envelope bedding, final backfill not under pavement, compaction for installation of ductile iron pipe, including but not limited to furnishing, transporting, storing, installing the pipe, cleaning and site restoration, and all other work incidental to the installation as specified in Section 02535. Fittings and materials needed to reconnect service laterals will be a separate payment under Section 02530. Refer to Section 02324 for final backfill. No additional payment will be made for replacing defective materials. No separate payment will be made for cutting or beveling pipe. All associated costs for air testing, post-installation cleaning (if required), and post-installation CCTV inspection for quality control shall be included under this item. Payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the work. No separate payment shall be made for survey work performed by or for the Contractor to establish reference points, benchmarks, cut sheets, limits of rights-of-way or easement, including their restoration, centerlines or baseline points.

- E. Rock Excavation-** This item shall cover costs associated with rock removal with regard to pipe and manhole installation. Payment for rock excavation will be made for the quantities as described herein measured in place by the cubic yard at the Bid Form unit price. Payment shall be full compensation for labor, equipment, materials, excavation, blasting, monitoring, and/or mechanical removal and disposal of rock, and blasting insurance. Payment for placement of backfill material will be made from Unsuitable Soil Replacement (crusher run or imported fill). When rock is encountered the material shall be uncovered and the Owner's Representative notified. The Contractor shall take cross sections of the rock surface. Failure to uncover the rock, notify the Owner's Representative, and provide cross sections of the undisturbed material shall give the Contractor no right of claim to any classification other than unclassified soils. The top of the trench will be ground elevation as determined by the Owner's Representative prior to excavation. The quantity of rock excavation to be paid shall be the number of cubic yards of rock measured in place, per the trench width pay limits. Measurement for width shall be limited to 12 inches beyond the outside of the pipe. Measurement for rock excavation will extend to a depth of 8 inches below the pipe barrel for pipe diameter of 21 inch or less and extend to a depth of 12 inches for larger diameter pipe. At manholes and other structures, measurement will be to 24 inches from the outside face of the structure and 12 inches below the bottom of the slab. No measurement or payment will be made for over excavation. The Owner's Representative must confirm the volume of rock removal within the limits herein specified. Weathered rock and mixed face or any material removable with moil-point hydra hoe attachment or a rock bucket on a Cat 345 Backhoe will not be considered rock removal. The Contractor will need to submit a blasting plan to the Owner for review and approval prior to the occurrence of any blasting operations.

## **Manhole Rehab**

- A. Locate and Expose Buried Manhole, Street-** Contractor will be paid for locating and exposing buried manholes on a per each basis. Locating and exposing manholes to the proper elevation shall be done according to Section 02607 or 02700, whichever is most applicable for the site and approved by Owner's Representative. Payment shall be made at the bid price for each buried manhole that is acceptably located and exposed and will constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to perform all work. Payment for pavement patch or restoration will be a separate payment item.

- B.** Locate and Expose Buried Manhole, Non-Street- Contractor will be paid for locating and exposing buried manholes on a per each basis. Locating and exposing manholes to the proper elevation shall be done according to Section 02607 and approved by Owner's Representative. Payment shall be made at the bid price for each buried manhole that is acceptably located and exposed and will constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to perform all work.
- C.** Height Adjustment, Each 12" Height Adjustment Lift- Measurement for payment will be per each (EA) 12" height adjustment. The final adjustment may be less than 12" but total adjustment payment will be based on the number of 12" adjustment lifts required to reach the proper height and maintaining a 24" clear manhole opening concentric with the frame. Work shall include removing the casting frame and building up the chimney section of the manhole (reuse existing casting frame and cover). Payment will constitute full compensation for all costs for uncovering and/or adjusting each manhole to grade or higher will be included in the unit price, including, but not limited to, labor, equipment, transportation, tools, manhole vacuum testing and all other related procedures and materials necessary to produce the results specified in Section 02607. Contractor will advise the Owner's Representative in writing prior to proceeding. There shall be no distinctions made for diameter of the manhole or its material composition. No separate payment shall be made for resetting existing manhole frames and covers. This work shall be considered an integral part of raising manholes.
- D.** Pavement Patch, Manhole Height Adjustment/Raising.- Measurement for payment will be per each (EA) pavement completed. Payment will constitute full compensation for removal and disposal of existing pavement and placement of new pavement including restoration of existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work per the latest DeKalb County DWM Design Standards Manual Standard Detail No. S-007. (Note: A copy of the Standard Details is available upon request). No additional payment will be made for removing and replacing adjacent pavement damaged while performing the sewer rehabilitation and replacement work.
- E.** Replace Manhole Frame & Cover, All Types- Measurement for payment will be per each (EA). Payment will constitute full compensation for costs for replacing manhole frames and covers including, but no limited to labor, equipment, transportation, tools, pavement removal/disposal/replacement, and all other related procedures and materials necessary to produce the results specified in Section 02608. Contractor and Owner's Representative shall verify the type of frame and cover required for each location prior to replacement. Contractor will advise the Owner's Representative in writing in the daily report identifying each manhole with replaced type frame and cover.
- F.** Replace Manhole Cover, All Types- Measurement for payment will be per each (EA). Payment will constitute full compensation for costs for replacing manhole covers including, but no limited to labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 02608. Contractor will advise the Owner's Representative in writing in the daily report identifying each manhole with replaced type cover.
- G.** Manhole Frame Sealing- Measurement for payment will be per each (EA). Payment will constitute full compensation for all costs for installing a manufactured or applied internal or external flexible seal to frame joints including, but no limited to, labor, equipment, transportation, tools, and all other related procedures and materials.



- H.** Inside Drop Connection- Measurement for payment will be per vertical foot (VF). Payment will constitute full compensation for all costs for installing a new inside drop connection per the latest DeKalb County DWM Design Standards Manual Standard Detail No. S-027, including, but not limited to labor, equipment, transportation, tools, and all other related procedures and materials.
- I.** Rebuild Invert and Bench- Measurement for payment will be per each (EA). Payment will constitute full compensation for all costs for rebuilding the invert and bench including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials.
- J.** Manhole Connections, All Diameters, all Depths- Measurement and Payment shall be per each (EA). Payment shall include pipe dewatering, excavation, cutting and coring, grout, concrete, connection fittings and flexible couplings, backfill and all requirements in accordance with the plans and specifications. Pavement replacement and rock excavation shall be paid for under their respective bid items.
- K.** Sealing and Patching, 48" to and including 72" Diameter Manhole- Measurement for payment will be per square yard (SY) of manhole wall actually sealed and/or patched. Payment will constitute full compensation for all manhole surface preparation and cleaning, patching, sealing active leaks, flow control/bypass pumping, clean up, inspection, quality assurance testing and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth. Sealing and patching work under this item is "stand-alone" and will be paid only for manholes not to be subsequently lined under another pay item. Payment will include all costs associated performing the work in accordance with Section 02900.
- L.** Cementitious Manhole Coating, 48" to and including 72" Diameter- Measurement will be per square yard (SY) of manhole wall coated. Payment will constitute full compensation for all labor, equipment, transportation, tools, removal of steps, surface preparation, removal of intruding connections, cleaning, patching, sealing, coating, flow control/bypass pumping, clean up, inspection, quality assurance testing, and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth per Section 02900.
- M.** Epoxy Manhole Coating, 48' to and including 72" Diameter- Measurement will be per square yard (SY) of manhole wall coating. Payment will constitute full compensation for all labor, equipment, transportation, tools, removal of steps, surface preparation, removal of intruding connections, cleaning, patching, sealing, coating, flow control/bypass pumping, clean up, inspection, quality assurance testing, and any other work or materials necessary to complete the work for up to thirty (30) vertical feet of depth per Section 02900.
- N.** Abandon & Fill Existing Manhole, Roadway, Any Depth, All Sizes- Measurement for payment will be per each (EA). Payment will constitute full compensation for existing manhole abandonment by removing frame and cover and demolishing structure as per DeKalb County DWM Design Standards Manual Standard Detail No. S-005, Method of Manhole Abandonment. Finish by grout filling the existing manhole in place. Road surface repair will be a separate pay item and completed as per the latest DeKalb County DWM Design Standards Manual Standard Detail G-005 Typical Patch and Resurfacing Detail. The unit price bid shall include, but not be limited to, all costs for material, labor, equipment, bulkheads, and other miscellaneous items as required for a complete installation.



- O. Abandon & Fill Existing Manhole, Easement, Any Depth, All Sizes- Measurement for payment will be per each (EA). Payment will constitute full compensation for existing manhole abandonment as per DeKalb County DWM Design Standards Manual Standard Detail No. S-005, Method of Manhole Abandonment. The unit price bid shall include, but not be limited to, all costs for material, labor, equipment, bulkheads, and other miscellaneous items as required for a complete installation. Surface restoration will be paid separately per Section 02485 or 02486, whichever is most applicable.
- P. Remove & Dispose of Existing Manhole, Any Surface Type, Any Depth, All Sizes- Demolition of manholes in the roadway will be paid for per vertical foot (VF), all manhole sizes. Payment will include all costs associated with excavation, removal of existing structure, compacted backfill, and proper disposal of manhole materials. Pavement or grassing will be paid separately according to Section 02700, 02485, or 02486, whichever is appropriate. Abandonment of connecting pipe(s) (if required) and flow control/bypass pumping will be paid for as separate items. Measurement for payment shall be made from the top of the existing manhole frame and cover to the invert at the outgoing pipe (VF)

## Manhole Replacement

- A. Sewer Manholes, 48" to and including 60" Diameter, Any Depth, Pre-Cast Concrete- Payment will be for each (EA) replacement manhole per the diameter and the depth range the manhole falls within as measured from the top of the frame to the invert of the outgoing pipe. Payment will constitute full compensation for all costs for installing new pre-cast concrete manholes complete per Section 02641 and Section 02900. The unit price bid shall include, but not limited to, excavation, shoring, manhole bedding, base, riser sections(s), cone, anti-floatation measures (if required), chimney, frame, cover, sealant, flexible piping connections, invert, bench(s), trough, connecting the pipes to the manhole, backfill and manhole vacuum testing.

## Pavement Repairs

- A. Road Pavement Patch, with Concrete Cap- Measurement for payment will be per square yard (SY) of pavement removed and replaced. Payment will constitute full compensation for removal and disposal of existing pavement and placement of new pavement to include concrete cap, restoration of existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work in accordance with the latest DeKalb County DWM Design Standards Manual Standard Detail G-005, Typical Patch and Resurfacing Detail. No additional payment will be made for removing and replacing adjacent pavement damaged while performing the sewer rehabilitation and replacement work.
- B. Road Pavement Patch, Asphalt- Measurement for payment will be per square yard (SY) of pavement removed and replaced. Payment will constitute full compensation for removing and disposing existing pavement and placing new pavement, including restoring existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work in accordance with the latest DeKalb County DWM Design Standards Manual Standard Detail G-006, Typical Asphalt Pavement Patch). Sawcutting pavement will be paid separately. No additional payment will be made for removing and replacing adjacent pavement damaged while performing the sewer rehabilitation and replacement work.
- C. Asphalt Milling and Overlay- Measurement for payment will be per square yard (SY) of pavement removed *and* replaced in two inch lifts. Payment will constitute full

compensation for removing and disposing existing pavement and placing new pavement, including restoring existing pavement markings. The unit price shall include, but not be limited to, labor, equipment, materials, transportation, and tools required to perform the work in accordance with Section 02700.

- D. Specialty Brick Paver Replacement- Measurement for payment will be per square yard (SY) of brick paver removed and replaced. Reuse existing pavers to the greatest extent possible. Payment will constitute full compensation for removing and replacing a public or private sidewalk per Section 02700.
- E. Specialty Brick Sidewalk Replacement- Measurement for payment will be per square yard (SY) of brick sidewalk removed and replaced. Reuse existing brick to the greatest extent possible. Payment will constitute full compensation for removing, disposing, and replacing a public or private sidewalk per Section 02700.
- F. Asphaltic Concrete Driveway Replacement, Residential & Commercial- Measurement for payment will be per square yard (SY) of driveway removed and replaced. Payment will constitute full compensation for removing, disposing, and replacing asphalt driveways. Replaced driveways shall be installed per the Drawings and Section 02700. Traffic control measures required for work in low-traffic or residential areas shall be included in the unit price.
- G. Concrete Curb & Gutter, Remove and Replace- ..Measurement for payment will be per linear foot (LF) of curb removed and replaced. Payment will constitute full compensation for sawcut, removing, disposing, and replacing existing curb and gutter as necessary to complete the sewer rehabilitation or replacement work. Replacing concrete curbs and gutters shall be per Section 02710.
- H. Granite Curb, Remove and Reset- Measurement for payment will be per linear foot (LF) of granite curb removed and reset. Payment will constitute full compensation for sawcut, removing and resetting existing curb as necessary to complete the sewer rehabilitation or replacement work. Replacing granite curbs and gutters shall be per Section 02700.
- I. Concrete Driveway Replacement, Residential & Commercial- Measurement for payment will be per square yard (SY) of driveway removed and replaced (6" +/- thick). Payment will constitute full compensation for sawcut, removing, disposing, and replacing concrete driveways. Replaced driveways shall be installed per the Drawings and Section 02710.
- J. Concrete Sidewalk- Measurement for payment will be per square yard (SY) of concrete sidewalk removed and replaced, 4" thick +/- . Payment will constitute full compensation for sawcut, removing, disposing, and replacing a public or private sidewalk per Section 02710.

## **Sanitary Sewer and Manhole Cleaning**

- A. Sanitary Sewer, Light Cleaning, 6" to and including 24" Diameter- No Bid Item Section 02956: Light cleaning is associated with a rehab technology such as cured in place pipe is not included in this payment item but is included in the cost of the rehab application. Sewers will be cleaned to remove debris or obstructions found in sewers impeding or prohibiting flow. All sewer-cleaning debris shall be collected and removed from the line through the manhole by bucket, suction, or other means.
- B. Sanitary Sewer, Heavy Cleaning, 6" to and including 24" Diameter- Measurement for payment will be per linear foot (LF) for the size classification category of sewer acceptably

cleaned. Payment will constitute full compensation for sewer cleaning including, but not limited to, labor equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 02956. Sewers will be cleaned to remove debris or obstructions found in sewers impeding or prohibiting flow. All sewer-cleaning debris shall be collected and removed from the line through the manhole by bucket, suction, or other means. Removal and disposal of debris and other solids removed from the sewers shall be paid separately under Section 02956. Post cleaning CCTV inspection shall be included in this bid item cost for all heavy cleaned pipe segments and be performed per Section 01510 except defect coding will not be required. CCTV inspection shall also include the manhole to manhole segment immediately downstream of the last heavy cleaned sewer segment. If more than 5% of the pipe's cross-sectional area of any inspected pipe remains then the sewer shall be re-cleaned at the contractor's sole expense.

- C. Sewer, Root Removal, 6" to and including 24" Diameter- Measurement for payment will be per linear foot (LF) as measured from the farthest root removal section to the nearest manhole for the actual lineal footage of pipeline having roots removed. Payment shall include, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary per Section 02956. Payment will not be remitted for the entire pipe segment length unless continuous root removal is required from the upstream to the downstream manhole. The Contractor must receive authorization for payment from the Owner's Representative prior to proceeding.
- D. Sewer, Debris Removal and Disposal from Heavy Cleaning- Measurement for payment will be per ton for actual tonnage disposed as documented on an official copy of the disposal manifest form or ticket receipt provided by the disposal site. Payment will constitute full compensation for removal, transportation and disposal of debris from sewer cleaning operations including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results per Section 02956. The official copy of the disposal manifest form or ticket receipt must clearly indicate the tonnage disposed, and must be submitted to the Owner's Representative no later than three (3) days after the debris was disposed.
- E. Manhole Debris Removal and Disposal- Measurement for payment will be per cubic yard (CY) of material disposed as verified by the Owner's Representative. Payment will constitute full compensation for removal, transportation and disposal of debris from manhole cleaning operations including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results per Section 02956.
- F. Protruding Lateral Removal and Disposal- Measurement for payment will be per each (EA) for each protruding service lateral removed. Payment will constitute full compensation for cutting and/or grinding down protruding service laterals, including, but not limited to, labor, equipment, transportation, tools, and all other related procedures and materials necessary to produce the results specified in Section 01510. Removal of protruding laterals will be done to remove obstructions and/or upsize sewers. Contractor will advise the Owner's Representative in writing prior to proceeding.

## **Sanitary Sewer Pipe Bursting**

- A. Sewer, Replacement with HDPE or DIP using Pipe-Bursting Methods, All Diameters, All Depths- Measurement for payment will be per linear foot (LF) of sewer replace by bursting. Payment will constitute full compensation for replacing existing gravity sewer

mains with HDPE or DIP piping using pneumatic or static pipe-bursting methods. The unit price bid shall include, but not limited to, furnishing material, installation, equipment, stringing pipe, bypass pumping for flows under 25% of the pipe volume, installing pipe, lubrication, connecting pipes, rebuilding existing manhole wall and invert, air testing, material testing, post-installation cleaning (if required), post-installation CCTV inspection for quality control, and all other related procedures and materials necessary to complete pipe-bursting per Section 02958. Payment for reconnecting service laterals shall be a separate pay item under 02530. Pipe Bursting payment shall be withheld due to failure to submit all post-installation CCTV video and other required quality control documentation for the Work. No payment shall be made for any portion of a failed pipe-bursting attempt and results in the use of other replacement methods such as open cut. If a section of existing pipe must be otherwise replaced, then the section will be paid for only by the appropriate conventional pipe work/point repair bid item.

- B.** Pipe-Bursting Launch Pits, All Depths- Measurement of payment will be per each (EA) pit depth range regardless of pit width and length. Payment shall include but not limited to labor, equipment, transportation, tools, excavation, shoring, dewatering, pavement saw-cutting, bedding, pipe zone backfill, final backfill, removal and disposal of excavated material if replaced with imported material, and all other related procedures and materials required for replacing gravity sewer by pipe-bursting. Depth of cut for excavation of pit shall be measured from the installed pipe invert to existing ground level at pipe centerline of horizontal alignment. The unit price shall also include installing and removing appropriate trench stabilization equipment. Payment for surface restoration will be a separate pay item and calculated as actual surface area needing restoration or no greater than a surface restoration area allowance; whichever results in the smaller area. The restoration allowance is calculated whereby the pit width is two times the pit depth and the pit length is three times the pit depth.
- C.** Pipe-Bursting Receiving Pits- Measurement of payment will be per each (EA) pit depth range regardless of pit width and length. Payment shall include but not limited to labor, equipment, transportation, tools, excavation, shoring, dewatering, pavement saw-cutting, bedding, pipe zone backfill, final backfill, removal and disposal of excavated material if replaced with imported material, and all other related procedures and materials required for replacing gravity sewer by pipe-bursting. Depth of cut for excavation of pit shall be measured from the installed pipe invert to existing ground level at pipe centerline of horizontal alignment. The unit price shall also include installing and removing appropriate trench stabilization equipment. Payment for surface restoration will be a separate pay item and calculated as actual surface area needing restoration or no greater than a surface restoration area allowance; whichever results in the smaller area. The restoration allowance is calculated whereby the pit width is two times the pit depth and the pit length is three times the pit depth.

## **Community Outreach/ Right of Entry Acquisition**

- A.** No separate payment for Outreach. Contractor shall provide according to provisions of Community Outreach services, Section 01335. The Contractor will be responsible for providing notifications to the Public, including community notices as well as individual notices.
- B.** No separate payment shall be made for obtaining the Right of Entry. The Contractor shall

be responsible for obtaining executed Right of Entry (ROE) agreements prior to the start of the Work. The Contractor shall make up to three documented attempts to obtain each ROE, including after work hours.

## **Permitting**

- A.** The Contractor is responsible for obtaining all city, county and state permits required for prosecution of the work *except* Army Corps of Engineers and Georgia EPD. The County will obtain and pay for Army Corps of Engineers Permits.

**END OF SECTION**