



Department of Purchasing and Contracting

Maloof Administration Building, 1300 Commerce Drive, 2nd Floor, Decatur, Georgia 30030

September 23, 2024

INVITATION TO BID (ITB) NO. 24-101687

FOR

**SANITARY SEWER CHEMICAL ROOT CONTROL
(THREE (3) YEAR MULTIYEAR CONTRACT)**

DEKALB COUNTY, GEORGIA

| | |
|---|---|
| Procurement Agent: | Tiffany Reid |
| Email: | tmreid@dekalbcountyga.gov |
| Mandatory DeKalb First LSBE Meeting: (Bidders must attend 1 meeting on either of the dates listed in person or via video conference.) | September 25, 2024, or October 2, 2024 (Meetings are held at 10:00 a.m. and 2:00 p.m.) For attendance instructions, utilize the following link: https://www.dekalbcountyga.gov/purchasing-contracting/general-information |
| Deadline for Submission of Questions: | 5:00 P.M. ET, October 4, 2024 |
| Bid Opening: | 3:00 P.M. ET, October 24, 2024 Via Zoom: https://dekalbcountyga.zoom.us/j/89829181222 |
| Price Schedule Opening: | 3 – 5 Business days after Bid Opening |
| Validity of Bid: | 120 Days |

| | |
|---|--|
| <p>FIRM'S NAME AND ADDRESS: (Street, City, State and Zip Code. Type or print):</p> <p>_____</p> <p>_____</p> <p>Federal Tax ID No. _____</p> <p>ARE YOU A DEKALB COUNTY FIRM? Yes ___ No ___</p> | <p>TELEPHONE AND FAX NUMBERS WITH AREA CODE:</p> <p>Phone: _____</p> <p>Fax: _____</p> <p>E-mail: _____</p> |
| <p>SIGNATURE OF PERSON AUTHORIZED TO SIGN BID AND DATE:</p> <p>_____</p> | <p>SIGNER'S NAME AND TITLE (Type of Print):</p> <p>_____</p> |

THE RESPONSIBILITY FOR SUBMITTING A RESPONSE TO THIS BID TO THE DEPARTMENT OF PURCHASING AND CONTRACTING OF DEKALB COUNTY GOVERNMENT ON OR BEFORE THE STATED DATE AND TIME WILL BE SOLELY AND STRICTLY THE RESPONSIBILITY OF THE BIDDER.

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INVITATION TO BID OVERVIEW

A. PURPOSE:

DeKalb County Government (the County) is soliciting bids for **ITB No. 24-101687 Sanitary Sewer Chemical Root Control (Three (3) Year Multiyear Contract)** from responsible contractors.

B. GENERAL INFORMATION:

1. BID TIMETABLE:

The anticipated schedule for the bid process is as follows:

| | |
|---|--|
| Date Issued: | September 23, 2024 |
| Mandatory DeKalb First LSBE Meeting: (Bidders must attend 1 meeting on either of the dates listed.) | September 25, 2024, or October 2, 2024 For attendance instructions utilize the following link: https://www.dekalbcountyga.gov/purchasing-contracting/general-information (Meetings are held at 10:00 a.m. and 2:00 p.m.) |
| Deadline for Submission of Questions: | 5:00 P.M. ET, October 4, 2024 |
| Bid Opening: | 3:00 P.M. ET, October 24, 2024 Via Zoom: https://dekalbcountyga.zoom.us/j/89829181222 |
| Price Schedule Opening: | 3 – 5 Business days after Bid Opening |
| Bids Valid Until: | Bids shall be valid for 120 days from and including the bid opening date. |

Sealed bids are to be addressed and delivered to:

DeKalb County Department of Purchasing and Contracting
Maloof Administration Building
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030, not later than **3:00 P.M. ET, October 24, 2024.**

***** PRICE SCHEDULE MUST BE SUBMITTED IN A SEPARATE SEALED ENVELOPE OR BIDDER WILL BE DEEMED NON-RESPONSIVE AND WILL NOT BE CONSIDERED FOR AWARD*****

Submit **one original bid package** (inclusive of the entire Invitation to Bid document and required documents, with the exception of the price schedule) stamped “Original”, **and one USB drive with an exact copy of the original bid package**, to the address listed above. Any pricing included in the bid package (original or copies) will cause the bidder to be deemed non-responsive.

2. CONTACT PERSON:

The contact person for this bid is **Tiffany Reid, Procurement Agent**. General inquiries concerning the meaning or interpretation of this Invitation to Bid (ITB) may be requested from the contact person via email at tmreid@dekalbcountyga.gov. Questions and requests for information or clarification concerning the specifications in this ITB must be submitted to the above listed contact person via email no later than the date and time listed in the bid timetable. Questions and requests received after the above stated time or sent to anyone other than the listed contact person will not receive a response or be the subject of addenda.

3. QUESTIONS:

All requests must be in writing. Any explanation desired by a bidder regarding the meaning or interpretation of the Invitation to Bid, drawings, specifications, requirements, etc., must be requested in writing and with sufficient time allowed for a reply to reach bidders before the submission of their bids. If any statement in the bidding documents, specifications, plans, etc., appear ambiguous to the Bidder, Bidder is specifically instructed to make a written request to the Department of Purchasing and Contracting as outlined *in* the preceding sentence. Any information given to a prospective bidder concerning an Invitation to Bid will be furnished to all prospective bidders, as an addenda to the Invitation, if such information is necessary to bidders in submitting bids on the Invitation or if the lack of such information would be prejudicial to uninformed bidders. Oral explanations or instructions given before the award of the contract will not be binding. **Questions must be submitted no later than 5:00 pm EST on October 4, 2024.**

4. ADDITIONAL INFORMATION/ADDENDA:

The County will issue responses to inquiries and any other corrections or amendments it deems necessary in written addenda issued prior to the bid opening date. Bidders should not rely on any representations, statements or explanations other than those made in this ITB or in any addendum to this ITB. Where there appears to be a conflict between the ITB and any addenda issued, the last addendum issued will prevail. It is the responsibility of the Bidder to ensure awareness of all addenda issued for this solicitation. Please acknowledge the addenda and submit to the DeKalb County Department of Purchasing and Contracting as requested. Bidders may contact the above listed contact person to verify the number of addenda prior to submission. Addenda issued for this ITB will be posted on DeKalb County's website, http://www.dekalbcountyga.gov/purchasing/pc_index_formal_solicitations.html. Bidder should regularly check the County's website for addenda.

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INVITATION TO BID PROCEDURES

A. BIDDER INFORMATION:

1. **FAILURE TO SUBMIT THE PRICE SCHEDULE IN A SEPARATE SEALED ENVELOPE SHALL DEEM THE BID NON-RESPONSIVE. INCLUDING THE PRICE SCHEDULE IN ANY AREA OUTSIDE OF ITS SEPARATE, SEALED ENVELOPE WILL RESULT IN BIDDER'S BID BEING DEEMED NON-RESPONSIVE.**
2. FAILURE TO RETURN ALL PAGES OF THIS INVITATION TO BID MAY RESULT IN THE BID BEING DEEMED NON-RESPONSIVE.
3. The *Scope of Work/Technical Specifications* are intended to be fair and non-restrictive. Contractors are invited to inform the DeKalb County Department of Purchasing and Contracting whenever specifications or procedures appear not to be fair and open. Such information should be supplied as early in the procurement process as possible. Information received in less than five (5) days prior to the scheduled bid opening will not be acted upon unless the DeKalb County Department of Purchasing and Contracting rules that it is in the best interest of the County to consider.
4. Brand names and numbers when provided in solicitations are for reference and to establish a quality standard. Any reference to a brand name shall not be construed as restricting Bidders to that manufacturer (unless "no substitutes" is stated). Bids on equal items will be considered, provided the bid clearly describes the article offered and it is equal or better in quality and function and fully compatible with this requirement.
5. By submitting a bid, the Bidder warrants that any good or service supplied to DeKalb County Government meets or exceeds the specifications set forth in this solicitation.
6. If any supplies, materials, and equipment are provided to the County under this solicitation, then such items shall be new and in first-class condition unless the solicitation specifically allows offers of used, reconditioned, or remanufactured items. If newly manufactured products are specified, such products shall be of recent origin and not previously used. No equipment of any type is acceptable if serial numbers or any other manufacturer's identification labels or marks have been removed, obliterated, or changed in any way. A Contractor delivering any such equipment to the County will be deemed to have breached the contract, and appropriate action will be taken by the DeKalb County Government Purchasing and Contracting Department.
7. Time of delivery is a part of the solicitation and an element of the contract that is to be awarded. If the Bidder cannot meet the required service delivery dates, a bid should not be submitted. Failure to deliver in accordance with the contract could result in the Contractor being declared in default.
8. Bid Withdrawal
Bids may be withdrawn at any time prior to the bid opening. After bids have been publicly opened, withdrawal of bids shall be based upon Part 3, Section IV, F. within the DeKalb County Purchasing Policy.

9. Expenses of Preparing Responses to this ITB

The County accepts no responsibility for any expenses incurred by the Bidders who submit bids in response to this ITB. Such expenses are to be borne exclusively by the Bidders.

10. It is the responsibility of each Bidder to ensure that its submission is received by 3:00 p.m. on the bid due date. The time/date stamp clock located in the Department of Purchasing & Contracting shall serve as the official authority to determine lateness of any bid. Be aware that visitors to our offices will go through a security screening process upon entering the building. Bidders should plan enough time to ensure that they will be able to deliver their submission prior to our deadline. Late submissions, for whatever reason, will not be evaluated. Bidders should plan their deliveries accordingly. Telephone or fax bids will not be accepted.

11. Price Schedule openings shall be conducted in the Department of Purchasing and Contracting three (3) to five (5) days after the bid opening. Only the Price Schedules of responsive bidders shall be opened. The County reserves the right to decide which bid(s) will be deemed responsive and said determination shall be made in accordance with the requirements stated in this solicitation.

12. Federal Work Authorization

Pursuant to O.C.G.A. §13-10-91, the County cannot enter into a contract for the physical performance of services unless the Contractor, its Subcontractor(s) and sub-subcontractor(s), as that term is defined by state law, register and participate in the Federal Work Authorization Program to verify specific information on all new employees. The Bidder certifies that he/she has complied and will continue to comply throughout the contract term with O.C.G.A. §13-10-91 and any related and applicable Georgia Department of Labor Rule. Contractor agrees that in the event it employs or contracts with any Subcontractor(s) in connection with this contract, Contractor will secure from each Subcontractor an affidavit that certifies the Subcontractor's current and continuing compliance with O.C.G.A. §13-10-91 throughout the contract term. Each Subcontractor agrees that in the event it employs or contracts with any sub-subcontractor(s), each Subcontractor will secure from each sub-subcontractor an affidavit that certifies the sub-subcontractor's current and continuing compliance with O.C.G.A. §13-10-91 throughout the contract term.

13. LSBE Information

a. It is the objective of the Chief Executive Officer and Board of Commissioners of DeKalb County to provide maximum practicable opportunity for all businesses to participate in the performance of government contracts. The current DeKalb County List of Certified Vendors may be found on the County website at <http://www.dekalbcountyga.gov/purchasing/>.

b. **It is required that all responding Bidders attend the mandatory LSBE meeting within two-weeks of the solicitation's advertisement, and comply with, complete and submit all LSBE forms with the Bidder's response in order to be responsive to the bid.** Attendance via video conference and/or teleconference. Instructions for attendance via video conference can be found on the County's website at <https://www.dekalbcountyga.gov/purchasing-contracting/general-information>.

c. For further details regarding the DeKalb First Local Small Business Enterprise Ordinance, contact the LSBE Program representative at DeKalbFirstLSBE@dekalbcountyga.gov.

14. First Source Jobs Information

- a. The First Source Ordinance is a public regulation which requires contractors and beneficiaries of eligible DeKalb County projects to make a good faith effort to hire fifty (50) percent of all jobs using the First Source Registry. Beneficiaries are immediate recipients of county grants or community development block funds administered by the county of at least \$50,000. Contractors include an individual or entity entering into any type of agreement with the county, funded in whole or in part with county funds. WorkSource DeKalb (WSD) maintains the First Source Registry, comprised of qualified and trained DeKalb County residents. Business Solutions Unit (BSU) is available to assist the employer with selecting the most qualified candidate by using the First Source Registry to meet the company's hiring needs. WSD manages the First Source program through the Business Solutions Unit by assigning a specific BSU Specialist. The First Source process is conducted similarly to the BSU business service request process. The BSU Specialist works closely with employers using TALEO and BSU processes to ensure the hiring needs of the employers are met.
- b. For more information on the First Source Jobs Ordinance requirement, please contact WorkSource DeKalb at www.dekalbcountyga.gov/workforce-center/welcome-workforce-development or 404-687-3400.

15. Attention to General Terms and Conditions

Bidders are cautioned to thoroughly understand and comply with all matters covered under the General Terms and Conditions section of this ITB. The successful Bidder(s) will enter into a contract approved by the County. The County's ITB document and attachments, subsequent County addenda, and the Bidder's response documents are intended to be incorporated into a contract. All Bidders should thoroughly review this document prior to submitting a bid. **Any proposed revisions to the terms or language of this document must be submitted in writing with the bid. Since proposed revisions may result in a bid being rejected if the revisions are unacceptable to the County, bidders should review any proposed revisions with an officer of the firm having authority to execute the contract. No alterations can be made in the contract after award is made.**

16. Required Signatures

Bids must be signed by an officer or agent of the firm having the authority to execute contracts.

17. Ethics Rules

- a. Bidders are subject to the Ethics provision within the DeKalb County Purchasing Policy; the Organizational Act, Section 22A, the Code of DeKalb County; and the rules of Executive Order 2014-4. Any violations will be addressed pursuant to these policies and rules.
- b. To the extent that the Organizational Act, Section 22A, the Code of DeKalb County, and the rules of Executive Order 2014-4 allow a gift, meal, travel expense, ticket, or anything else of value to be purchased for a CEO employee by a contractor doing business with the County, the contractor must provide written disclosure, quarterly, of the exact nature and value of the purchase to the Chief Integrity Officer, if created, or the Finance Director or his/her designee. Every contractor conducting business with the County will receive a copy of these ethical rules at the time of execution of the contract.

18. Business and Professional Licenses

Bidders shall submit a copy of its current, valid business license with its Bid or upon award. Georgia companies are to submit a valid county or city business license. Contractors that are not Georgia companies are to provide a certificate of authority to transact business in the State of Georgia and a copy of a valid business license issued by its home jurisdiction. If Bidder holds a professional certification which is licensed by the state of Georgia, then Bidder may submit a copy of its valid professional license with Bidder's bid or upon award unless the Technical Specifications require submittal with the bid. Any license submitted in response to this ITB shall be maintained by the Contractor for the duration of the contract.

B. BID SUBMITTAL:

1. All bids should be completed in ink or typewritten. Errors should be crossed out and corrections entered in ink or typewritten adjacent to the error. The person signing the bid should initial corrections in ink.
2. Bidders shall complete and submit Attachment A – Required Documents Checklist and all documents responsive to this requirement with the bid submittal.
3. If applicable, provide evidence that the Bidder is a DeKalb County Firm.
4. Bids must be submitted in a sealed envelope(s) or box(s) with the Bidder's name and **“ITB No. 24-101687 Sanitary Sewer Chemical Root Control (Three (3) Year Multiyear Contract)”** on the outside of each envelope or box. All Bidders delivering submittals via delivery services, please place the sealed bid envelope(s) or box(s) inside the delivery service envelope(s) or box(es). Bidders are responsible for informing any delivery service of all delivery requirements. No responsibility shall attach to the County for the premature opening of a submission not properly addressed and/or identified. The Decatur postmaster will not deliver certified or special delivery mail to specific addresses within DeKalb County Government.

C. CONTRACT AWARD:

1. Bids submitted will be evaluated and recommended for award to the lowest, responsive, and responsible Bidder(s).
2. The intent of this bid is to make an all-award to one or multiple bidders; however, the County reserves the right to award by line item. The County may accept any item or group of items on any bid, whichever is in the best interest of DeKalb County.
3. The County reserves the right to reject any and all bids, to waive informalities, and to re-advertise.
4. The judgment of DeKalb County Purchasing and Contracting on matters, as stated above, shall be final.

GENERAL TERMS AND CONDITIONS

- A. In the event of a conflict between any provisions contained in any of the documents governing this transaction, the following shall be the order of precedence: Change Orders or modifications; the Bidder's accepted Response; and the County's ITB.
- B. The Contractor's services shall include all things, personnel, and materials necessary to provide the goods and/or services that are in compliance with the specifications as authorized by the County.
- C. **DELIVERY:**

Delivery of services or goods will commence within Insert delivery requirements in five (5) calendar days upon request.

Bidder state agreement: Yes _____ No _____

Contact Person: _____

Telephone Number: _____ Cellular Phone Number: _____

Address: _____

Alternate delivery time may be considered provided it is so stated. Bidder state alternate terms for delivery or services below.

All prices are to be firm, F.O.B. Destination, Freight Prepaid and Allowed. This shall include delivered, unloaded, and placed in designated place. Delivery must be made between 7:00 A.M. and 5:00 P.M. Monday through Friday, unless otherwise required. The successful bidder shall give a 24-hour prior notice of delivery to Department or Division calling in the order, and must ask for caller's telephone number as well as Purchase Order form and address, since 24-hour Notice of Delivery is required. The County will unload after prior notice.

D. DELIVERIES BEYOND THE CONTRACTUAL PERIOD:

This contract covers all requirements that may be ordered, as distinguished from delivered, during the contract term. This is for the purpose of providing continuity of supply by permitting the County to place orders as requirements arise in the normal course of supply operations. Accordingly, any order mailed (or received, if forwarded by other means than through the mail) to the Contractor on or before the expiration date of the contract, and providing for delivery within the number of days specified in the contract, shall constitute a valid order.

E. FOREIGN PRODUCTS:

DeKalb County prefers to buy items produced and/or manufactured in the United States of America; however, foreign products may be considered provided it is so stated. Bidder certifies that items offered on this bid is/are manufactured and produced in the United States.

Yes _____ No _____

If “No”, state the exact location of plant or facility where items will be produced:

F. COUNTY REQUIREMENT:

The contract will be an “Indefinite Quantity” type with County requirements to be satisfied on an “as ordered” basis. The County makes no promise, real or implied, to order any quantity whatsoever. This invitation and resulting contract will provide for the normal requirements of DeKalb County, and contracts will be used as primary sources for the articles or services listed herein. Articles or services will be ordered from time to time in such quantities as may be needed. As it was impossible to determine the precise quantities of items described in this invitation that will be needed during the contract term, each contractor is obligated to deliver all articles and services that may be ordered during the contract term.

G. WARRANTY AND/OR GUARANTY:

The bidder will state below or will furnish a separate letter attachment, which fully explains the conditions of Warranty and/or Guaranty. If no Warranty and/or Guaranty are applicable, it must be so stated. **NOTE:** FAILURE TO RESPOND TO THE REQUIREMENTS OF THIS PARAGRAPH MAY RESULT IN THE BID BEING DEEMED NON-RESPONSIVE.

H. SAMPLES & TESTING:

Samples of items, when required, must be submitted within the time specified, and unless otherwise specified by the County, at no expense to the County. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Invitation to Bid. Since tests may require several days for completion, the County reserves the right to use a portion of any supplies before the results of the tests are known, without prejudice to any final adjustments, rejecting the unused portion of the delivery and payment will be made on an adjusted basis for the used portion. The costs of inspections and tests of any item which fails to meet the advertised specifications shall be borne by the bidder.

I. LITERATURE:

When the bidder proposes to furnish another product, he is required to furnish, with his bid, literature describing the item(s) being offered. Failure to furnish this literature may result in the bid being deemed non-responsive.

J. SILENCE OF SPECIFICATIONS:

The apparent silence of these specifications and any supplemental specifications as to any details, or the omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of this specification shall be made upon the basis of this statement, with County interpretation to prevail.

K. CONTRACT PURCHASE AGREEMENT:

A Contract Purchase Agreement (CPA) is being issued in lieu of a formal contract. Any reference to a contract refers to the CPA.

L. TERM (Bidder shall not fill in the blank in this section. This portion shall be completed by the Department of Purchasing and Contracting upon the acknowledgement of receipt of the Notice to Proceed):

The Contractor shall commence the Work under this Contract within ten (10) days from the Notice to Proceed (“Commencement Date”) and fully complete the work within one thousand ninety-five (1,095) days from and including the Commencement Date. As required by O.C.G.A §36-60-13, this Contract shall (i) terminate without further obligation on the part of the County each and every December 31st, as required by O.C.G.A. § 36-60-13, as amended, unless terminated earlier in accordance with the termination provisions of this Contract; (ii) automatically renew on each January 1st, unless terminated in accordance with the termination provisions of this Contract; and (iii) terminate absolutely, with no further renewals, on _____, 20____, unless extended by Change Order adopted and approved by the DeKalb County Governing Authority and the Contractor in accordance with the terms of this Contract.

M. PRICING:

1. Alterations to the Price Schedule may result in the Bidder being deemed non-responsive and/or bid rejection.
2. Price Reductions: If at any time after the date of award, the Contractor makes a general price reduction in the comparable price of any article or service covered by the contract to customers generally, an equivalent price reduction based on similar quantities and/or considerations shall apply to the contract for the duration of the contract period (or until the price is further reduced). Such price reduction shall be effective at the same time and in the same manner as the reduction in the price to customers generally. An occasional sale at a lower price, or sale of distressed merchandise at a lower price, would not be considered a general price reduction under this paragraph. For purposes of this paragraph, a general price reduction shall mean any reduction in the price of an article or service offered:
 - To Contractor’s customers.
 - In the Contractor’s price schedule for the class of customers; i.e., wholesalers, jobbers, retailers, etc., which was used as the basis for bidding on this contract.

The Contractor shall invoice the County at such reduced price indicating on the invoice that the reduction is pursuant to General Terms and Conditions, paragraph M. Pricing as stated within the ITB.

3. Price Escalation Clause: During the life of the contract, the awarded bidder shall furnish price lists to the County for increases, and those of the bidder’s supplier (e.g. factory) increases, as prices change. The bidder must also provide a list of the supplier’s (e.g. factory’s) previous price(s) to the County for purposes of comparison. Price changes will be in effect only after receipt and approval by the Director of the Department of Purchasing and Contracting. Price lists and changes thereto are to be furnished under the contract and without charge to the County. Prices should be held firm for the first 12 months of the contract. Catalogue(s) or Price List(s) must be submitted to the Department of Purchasing and Contracting, Maloof Administration Building, 1300 Commerce Drive, 2nd Floor, Decatur, Georgia 30030.

4. By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization that in connection with this procurement:

- a. The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- b. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and
- c. No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.

N. PAYMENT: (Bidder shall not fill in the blanks in this section. This portion shall be completed by the Department of Purchasing and Contracting upon contract award):

1. The County shall pay the Contractor based upon the accepted bid prices submitted by Bidder. Invoices should be signed by the Contractor or authorized delegate and must contain the authorizing a unique invoice number specific to the project, the DeKalb County Purchase Order (PO), and the Contract Purchase Agreement (CPA) Number in order for payment to be processed. The PO Number must also be on the delivery ticket, if applicable.
2. As full payment for the faithful performance of this Contract, the County shall pay the Contractor, the Contract Price, which is an amount not to exceed (\$ _____), unless changed by written Change Order in accordance with the terms of this Contract. The term "Change Order" includes the term "amendment" and shall mean a written order authorizing a change in the Work, and an adjustment in Contract Price to Contractor or the Contract Term, as adopted and approved by the Contractor and the DeKalb County Governing Authority, or the Chief Executive Officer, if exempted from Governing Authority adoption and approval in accordance with the express terms of this Contract. The Chief Executive Officer or his/her designee shall have the authority to approve and execute a Change Order lowering the Contract Price or increasing the Contract Price up to twenty percent (20%) of the original Contract Price, provided that the total amount of the increase authorized by such Change Order is less than \$100,000.00. If the original Contract or Purchase Order Price does not exceed \$100,000.00, but the Change Order will make the total Contract Price exceed \$100,000.00, then the Change Order will require approval by official action of the Governing Authority. Any other increase of the Contract Price shall be by Change Order adopted and approved by the DeKalb County Governing Authority and the Contractor in accordance with the terms of this Contract. Amounts paid to the Contractor shall comply with and not exceed the amounts listed below:
 - a. County shall pay the Contractor an amount not to exceed _____ for the initial year of the agreement.
 - b. County shall pay the Contractor an amount not to exceed _____ for the second year of the agreement.
 - c. County shall pay the Contractor an amount not to exceed _____ for the third year of the agreement.

Payment is to be made no later than thirty (30) days after submittal of undisputed invoice.

3. Invoice(s) and notice(s) must be submitted as follows:

a. Original invoice(s) must be submitted to:

Accounts Payable
DeKalb County Department of Finance
1300 Commerce Drive, 3rd Floor
Decatur, GA 30030

b. A copy of the original invoice(s) must be submitted to the department requesting services.

DeKalb County Department of Watershed Management
Attn: Shawna Prescott
sdprescott@dekalbcountyga.gov
180 Sams St
Decatur, GA 30034

c. Upon award, Prime Contractor(s) with Local Small Business Enterprise (LSBE) Subcontractor(s) shall enter utilization reports electronically at www.dekalblsbe.info. Proof of payment to the LSBE Subcontractor must be uploaded and submitted. LSBE Subcontractors shall confirm receipt of payment from the Prime, electronically also, at www.dekalblsbe.info.

4. The County's official payment terms are Net 30. Payment dates that fall on a weekend or on a holiday will be issued on the County's next business day.

O. ACCURACY OF WORK:

The Contractor shall be responsible for the accuracy of the Work and any error and/or omission made by the Contractor in any phase of the Work under this Agreement.

P. ADDITIONAL WORK:

The County shall in no way be held liable for any work performed under this section which has not first been approved in writing by the County in the manner required by applicable law and/or the terms of this Contract. The County may at any time order changes within the scope of the Work without invalidating the Contract upon seven (7) days written notice to the Contractor. The Contractor shall proceed with the performance of any changes in the Work so ordered by the County unless such change entitles the Contractor to a change in Contract Price, and/or Contract Term, in which event the Contractor shall give the County written notice thereof within fifteen (15) days after the receipt of the ordered change, and the Contractor shall not execute such changes until it receives an executed Change Order from the County. No extra cost or extension of time shall be allowed unless approved by the County and authorized by execution of a Change Order. The parties' execution of any Change Order constitutes a final settlement of all matters relating to the change in the Work which is the subject of the Change Order. The County shall not be liable for payment for any work performed under this section which has not first been approved in writing by the County in the manner required by applicable law and/or the terms of this Contract.

Q. OWNERSHIP OF DOCUMENTS:

All documents, including drawings, estimates, specifications, and data are and remain the property of the County. The Contractor agrees that the County may reuse any and all plans, specifications, drawings, estimates, or any other data or documents described herein in its sole discretion without first obtaining permission of the Contractor and without any payment of any monies to the Contractor therefore. Any reuse of the documents by the County on a different site shall be at its risk and the Contractor shall have no liability where such documents are reused.

R. RIGHT TO AUDIT:

1. The County shall have the right to audit all books and records, including electronic records, relating or pertaining to this contract or agreement, including but not limited to all financial and performance related records, property, and equipment purchased in whole or in part with County funds and any documents or materials which support those records, kept under the control of the Contractor, including but not limited to those kept by the Contractor's employees, agents, assigns, successors and subcontractors. The County also has the right to communicate with Contractor's employees related to the audited records.
2. The Contractor shall maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this contract and for seven (7) years after termination or expiration, including any and all renewals thereof. The books and records, together with supporting documents and materials shall be made available, upon request to the County or its designee, during normal business hours at the Contractor's office or place of business. In the event that no such location is available, then the books, records and supporting documents shall be made available for audit at a time and location which is convenient for the County.

S. SUCCESSORS AND ASSIGNS:

The Contractor agrees it shall not sublet, assign, transfer, pledge, convey, sell, or otherwise dispose of the whole or any part of this Contract or his right, title, or interest therein to any person, firm, or corporation without the previous written consent of the County. If the County consents to any such assignment or transfer, then the Contractor binds itself, its partners, successors and assigns to all covenants of this Contract. Nothing contained in this Contract shall create, nor be interpreted to create privity, or any other relationship whatsoever, between the County and any person, or entity or than Contractor.

T. REVIEWS AND ACCEPTANCE:

Work performed by the Contractor shall be subject to review and acceptance in stages as required by the County. Acceptance shall not relieve the Contractor of its professional obligation to correct, at his own expense, any errors in the Work.

U. TERMINATION OF AGREEMENT:

The Contractor understands and agrees that the date of the beginning of Work, rate of progress, and time for completion of the Work are essential conditions of this Contract. Both parties may, for its own convenience and at its sole option, without cause and without prejudice to any other right or remedy of the party, elect to terminate the Contract by delivering to the other party, at the address listed in the Notices article of this Contract, a written notice of termination specifying the effective date of termination. Such notice shall be delivered to the other party at least thirty (30) days prior to the effective date of termination. If Contractor's services are terminated by the County, the termination will not affect any

rights or remedies of the County then existing or which may thereafter accrue against Contractor or its surety. In case of termination of this Contract before completion of the Work, Contractor will be paid only for the portion of the Work satisfactorily performed through the effective date of termination as determined by the County. Neither party shall be entitled to recover lost profits, special, consequential or punitive damages, attorney's fees or costs from the other party to this Contract for any reason whatsoever. This Contract shall not be deemed to provide any third-party with any remedy, claim, right of action, or other right. The parties' obligations pursuant to this Section shall survive any acceptance of Work, or termination or expiration of this Contract.

V. INDEMNIFICATION AGREEMENT:

The Contractor shall be responsible from the execution date or from the time of the beginning of the Work, whichever shall be the earlier, for all injury or damage of any kind resulting from the Work to persons or property, including employees and property of the County. The Contractor shall exonerate, indemnify, and save harmless the County, its elected officials, officers, employees, agents and servants, hereinafter collectively referred to in this Section as "the County Indemnitees," from and against all claims or actions based upon or arising out of any damage or injury (including without limitation any injury or death to persons and any damage to property) caused by or sustained in connection with the performance of this Contract or by conditions created thereby or arising out of or any way connected with Work performed under this Contract, as well as all expenses incidental to the defense of any such claims, litigation, and actions. Furthermore, Contractor shall assume and pay for, without cost to the County Indemnitees, the defense of any and all claims, litigation, and actions suffered through any act or omission of the Contractor, or any Subcontractor, or anyone directly or indirectly employed by or under the supervision of any of them. Notwithstanding any language or provision in this Contract, Contractor shall not be required to indemnify any County Indemnitee against claims, actions, or expenses based upon or arising out of the County Indemnitee's sole negligence. As between the County Indemnitees and the Contractor as the other party, the Contractor shall assume responsibility and liability for any damage, loss, or injury, including death, of any kind or nature whatever to person or property, resulting from any kind of claim made by Contractor's employees, agents, vendors, Suppliers or Subcontractors caused by or resulting from the performance of Work under this Contract, or caused by or resulting from any error, omission, or the negligent or intentional act of the Contractor, vendors, Suppliers, or Subcontractors, or any of their officers, agents, servants, or employees. The Contractor shall defend, indemnify, and hold harmless the County Indemnitees from and against any and all claims, loss, damage, charge, or expense to which they or any of them may be put or subjected by reason of any such damage, loss, or injury. The Contractor expressly agrees to provide a full and complete defense against any claims brought or actions filed against the County Indemnitees, where such claim or action involves, in whole or in part, the subject of the indemnity contained in this Contract, whether such claims or actions are rightfully or wrongfully brought or filed. The County has the sole discretion to choose the counsel who will provide the defense. No provision of this Contract and nothing herein shall be construed as creating any individual or personal liability on the part of any elected official, officer, employee, agent, or servant of the County, nor shall the Contract be construed as giving any rights or benefits hereunder to anyone other than the parties to this Contract. The parties' obligations pursuant to this Section shall survive any acceptance of Work, or termination or expiration of this Contract.

W. INSURANCE:

Insurance must meet the County's requirements and will be furnished by the successful Bidder(s) upon award.

1. Successful Bidder(s) will advise their insurance agent of the County's requirements as listed below and that they may not proceed with any work until insurance is provided that is in compliance with these requirements.

2. Contractor's insurance company or agent must mail, email, or bring an original certificate of insurance and applicable declarations or endorsements to the DeKalb County address listed within this Insurance provision. Insurance must be from companies able to do business in Georgia and acceptable to the County as follows:
 - a. Certificates must cover:
 - i. Statutory Workers Compensation
 - (1) Employer's liability insurance by accident, each accident \$1,000,000
 - (2) Employer's liability insurance by disease, policy limit \$1,000,000
 - (3) Employer's liability insurance by disease, each employee \$1,000,000
 - ii. Business Auto Liability Insurance with a minimum \$1,000,000 Combined Single Limit/Each Occurrence (Including operation of non-owned, owned, and hired automobiles).
 - iii. Commercial General Liability Insurance
 - (1) Bodily Injury and Property Damage Liability (each occurrence) - \$2,000,000
 - (2) Fire Damage - \$250,000
 - (3) Medical Expense (any one person) - \$10,000
 - (4) Personal & Advertising Injury - \$1,000,000
 - (5) General Aggregate - \$4,000,000
 - (6) Products & Completed Operations - \$1,500,000
 - (7) Contractual Liability where applicable
 - b. DeKalb County, GA shall be named as Additional Insured under any General Liability, Business Auto and Umbrella Policies. Coverage shall apply as Primary and non-contributory with Waiver of Subrogation in favor of DeKalb County, Georgia. Such additional insured coverage shall be endorsed to Contractor's policy by attachment of ISO Additional Insured Endorsement forms CG 20 10 10 01 (ongoing operations) and CG 20 37 10 01 (products-completed operations), or form(s) providing equivalent coverage.
 - c. This insurance for the County as the additional insured shall be as broad as the coverage provided for the named-insured Contractor. It shall apply as primary insurance before any other insurance or self-insurance, including any deductible, non-contributory, and waiver of subrogation provided to the County as the additional insured.
 - d. Contractor agrees to waive all rights of subrogation and other rights of recovery against the County and its elected officials, officers, employees or agents, and shall cause each Subcontractor to waive all rights of subrogation for all coverages.
 - e. Certificates shall state that the policy or policies shall not expire, be cancelled or altered without at least sixty (60) days prior written notice to the County.
 - f. Contractor understands and agrees that the purchase of insurance in no way limits the liability of the Contractor.

- g. The insurance carrier must have a minimum A.M. Best rating of not less than “A” (Excellent) with a Financial Size Category of VII or better.
- h. Certificates to contain policy number, policy limits and policy expiration date of all policies issued in accordance with this contract.
- i. Certificates to contain the location and operations to which the insurance applies.
- j. Certificates to contain successful contractor’s protective coverage for any subcontractor’s operations. If this coverage is included in General Liability, please indicate on the Certificate of Insurance.
- k. Certificates to contain successful contractor’s contractual insurance coverage. If this coverage is included in the General Liability, please indicate this on the Certificate of Insurance.
- l. Certificates shall be issued and delivered to the County and must identify the “Certificate Holder” as follows:

DeKalb County, Georgia
Director of Purchasing and Contracting
Maloof Administration Building
1300 Commerce Drive, 2nd Floor
Decatur, Georgia 30030

- 3. Contractor shall be wholly responsible for securing certificates of insurance coverage as set forth above from all subcontractors who are engaged in this work.
- 4. Contractor understands and agrees that the purchase of insurance in no way limits the liability of the Contractor.
- 5. Contractor is obligated to comply with any revisions to the County’s insurance requirements.
- 6. Failure of the County to demand such certificate or other evidence of full compliance with these insurance requirements or failure of the County to identify a deficiency from evidence provided will not be construed as a waiver of the Contractor’s obligation to maintain such coverage.

X. GEORGIA LAWS GOVERN:

The laws of the State of Georgia shall govern the construction of this Contract without regard for conflicts of laws. Should any provision of this Contract require judicial interpretation, it is agreed that the court interpreting or construing the same shall not apply a presumption that the terms hereof shall be more strictly construed against one party, by reason of the rule of construction, that a document is to be construed more strictly against the party who itself or through its agent prepared same; it being agreed that the agents of all parties have participated in the preparation hereof, and all parties have had an adequate opportunity to consult with legal counsel. In interpreting this Contract in its entirety, the printed provisions of this Contract, and any additions written or typed hereon, shall be given equal weight, and there shall be no inference by operation of law or otherwise; that any provision of this Contract shall be construed against either party hereto.

Y. VENUE:

This Agreement shall be deemed to have been made and performed in DeKalb County, Georgia. For the purposes of venue, all suits or causes of action arising out of this Agreement shall be brought in the courts of DeKalb County, Georgia.

Z. COUNTY REPRESENTATIVE:

The County may designate a representative through whom the Contractor will contact the County. In the event of such designation, said representative shall be consulted and his written recommendation obtained before any request for extra work is presented to the County. Payments to the Contractor shall be made only upon itemized bill submitted to and approved by said representative.

AA. CONTRACTOR'S STATUS:

The Contractor will supervise and direct the Work, including the Work of all Subcontractors. Only persons skilled in the type of work which they are to perform shall be employed. The Contractor shall, at all times, maintain discipline and good order among his employees, and shall not employ any unfit person or persons or anyone unskilled in the work assigned him. The relationship between the County and the Contractor shall be that of owner and independent contractor. Other than the consideration set forth herein, the Contractor, its officers, agents, servants, employees, and any Subcontractors shall not be entitled to any County employee benefits including, but not limited to social security, insurance, paid annual leave, sick leave, worker's compensation, free parking or retirement benefits. All services provided by Contractor shall be by employees of Contractor or its Subcontractors and subject to supervision by Contractor. No officer or employee of Contractor or any Subcontractor shall be deemed an officer or employee of the County. Personnel policies, tax responsibilities, social security payments, health insurance, employee benefits and other administrative policies, procedures, or requirements applicable to the Work or services rendered under this Contract shall be those of the Contractor, not the County.

BB. SOLE AGREEMENT:

This Contract constitutes the sole contract between the County and the Contractor. The terms, conditions, and requirements of this Contract may not be modified. No verbal agreement or conversation with any officer, agent, or employee of the County, either before or after the award of the Contract, shall affect or modify any of the terms or obligations herein contained. No representations, oral or written, shall be binding on the parties unless expressly incorporated herein.

CC. SEVERABILITY:

If any provision of this Contract or the application thereof to any person or circumstance shall to any extent be held invalid, then the remainder of this Contract or the application of such provision to persons or circumstances, other than those as to which it is held invalid, shall not be affected thereby, and each provision of this Contract shall be valid and enforced to the fullest extent permitted by law.

DD. NOTICES:

Any notice or consent required to be given by or on behalf of any party hereto to any other party hereto shall be in writing and shall be sent to the Director of the Department of Purchasing and Contracting or to the Contractor or his authorized representative on the work site by (a) registered or certified United States mail, return receipt requested, postage prepaid, (b) personal delivery, or (c) overnight courier

service. All notices sent to the addresses listed below shall be binding unless said address is changed in writing no less than fourteen days before such notice is sent. Future changes in address shall be effective upon written notice being given by the Contractor to the Director of the Department of Purchasing and Contracting or by the County to the Contractor's authorized representative via certified first-class U.S. mail, return receipt requested. Such notices will be addressed as follows:

If to the County: Chief Procurement Officer
 Department of Purchasing and Contracting
 Maloof Administration Building
 1300 Commerce Drive, 2nd Floor
 Decatur, Georgia 30030

If to the Contractor: Notices shall be sent to the contact information that is listed in the Bidder's Response to the ITB.

EE. GEORGIA OPEN RECORDS ACT:

Without regard to any designation made by the person or entity making a submission, DeKalb County considers all information submitted in response to this invitation or request to be a public record that will be disclosed upon request pursuant to the Georgia Open Records Act, O.C.G.A. §50-18-70 et seq., without consulting or contacting the Responder person or entity making the submission, unless a court order is presented with the submission. Bidders or Responders may wish to consult an attorney or obtain legal advice prior to making a submission.

FF. DEKALB COUNTY, GEORGIA'S TITLE VI POLICY STATEMENT

DeKalb County, Georgia is committed to compliance with Title VI of the Civil Rights Act of 1964 and all related regulations and directives. DeKalb County assures that no person shall on the grounds of race, color, sex, or national origin, as provided by Title VI of the Civil Rights Act of 1964, the Federal-Aid Highway Transportation Act of 1973, and the Civil Rights Restoration Act of 1987 be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity. DeKalb County further assures that no person shall on the grounds of age, low income, disability, sexual orientation or gender identity be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity.

DeKalb County assures every effort will be made to ensure nondiscrimination in all of its programs and activities, whether those programs and activities are federally funded or not. In addition, DeKalb County will take reasonable steps to provide meaningful access to services for persons with Limited English Proficiency (LEP).

GG. COOPERATIVE AGREEMENT

DeKalb County supports cooperative procurement allowing public procurement entities to leverage the benefits of volume purchases, delivery and supply chain advantages, best practices, and the reduction of administrative time and expenses. In certain, limited circumstances, the County may choose to make the same pricing structures, terms and conditions agreed to under this solicitation available to other public procurement entities. Bidders shall indicate below whether they shall agree to allow other entities to piggy-back off the agreement resulting from this solicitation. Inclusion as a piggy-back contract is not mandatory, may be based on specific contract terms, and will have no bearing on the contract award.

Agree to extend to other public procurement entities: Yes ___ No ___

[END OF GENERAL TERMS AND CONDITIONS]

SCOPE OF WORK

A. Background

DeKalb County Department of Watershed Management's (DWM) Wastewater Collection and Transmission System (WCTS) includes approximately 2,700 miles of sanitary sewer mains, 70,000 manholes, and 66 lift stations. DWM intends to award the Sanitary Sewer Chemical Root Control Services Project ("Project") for the purpose of treating portions of the County's gravity sewer system with a chemical root control herbicide agent to eliminate root growth present within the system without permanently damaging the vegetation producing the roots.

B. Scope of Work

The Work includes chemical root control treatment for approximately 3,000,000 Linear feet annually of gravity sewer mains of various sizes located throughout the WCTS. Manholes used to access main line pipe segments shall also be treated as part of the main line treatment. Sewer mains subject to chemical root control are located throughout DeKalb County and consist of various diameters and lengths. DWM shall direct performance of the Work through the issuance of work orders identifying manhole-to-manhole pipe segments subject to treatment. Approximately 9 months after chemical root control treatment, DWM will select 10% of the pipes treated and issue work orders for the Contractor to perform CCTV inspection to verify success of treatment.

In addition to the application of the chemical root control agent, supporting tasks to be provided by the Contractor in performance of the Work include, but are not limited to, notification of property owners adjacent to the work being performed, public notification, light clearing for access, and light traffic control.

In addition to the performance of work described below, the Contractor shall conform to the Standard Specifications for the Project included in Exhibit 1 of this solicitation.

C. Qualifications and Experience of Key Personnel:

Bidders must be licensed with the Georgia Department of Agriculture (hereafter, GA-DOA) prior to bid submittal.

The Georgia Certified Pesticide Applicators shall be on the job site at all times during performance of the work.

The Contractor is directed to ensure compliance with all Federal, State and Local ordinances pertaining to the type of work specified herein. Particular attention shall be paid to those laws and ordinances relating to transportation of material (DOT), the application of sewer root control herbicides (US EPA), and traffic safety regulations. The Contractor's Federal DOT number and material EPA registration number must be submitted with bid.

[END OF SCOPE OF WORK]

*****PRICE SCHEDULE MUST BE SUBMITTED IN A SEPARATE SEALED ENVELOPE OR BIDDER WILL BE DEEMED NON-RESPONSIVE AND WILL NOT BE CONSIDERED FOR AWARD. INCLUDING PRICE IN ANY AREA OUTSIDE OF THE SEPARATE SEALED ENVELOPE WILL RESULT IN THE BID BEING DEEMED NON-RESPONSIVE.*****

| PRICE SCHEDULE | | | | | |
|--|---|---------------------------|-------------|-------------------|-----------------------|
| ITEM NO. | DESCRIPTION | ESTIMATED QUANTITY | UNIT | UNIT PRICE | EXTENDED PRICE |
| Chemical Root Control and CCTV Verification | | | | | |
| 1. | 6-inch pipe diameter | 12,000 | LF | \$ _____ | \$ _____ |
| 2. | 8-inch pipe diameter | 6,600,000 | LF | \$ _____ | \$ _____ |
| 3. | 10-inch pipe diameter | 1,875,000 | LF | \$ _____ | \$ _____ |
| 4. | 12-inch pipe diameter | 270,000 | LF | \$ _____ | \$ _____ |
| 5. | 15-inch pipe diameter | 45,000 | LF | \$ _____ | \$ _____ |
| 6. | 18-inch pipe diameter | 9,000 | LF | \$ _____ | \$ _____ |
| 7. | CCTV Verification: 8-inch diameter | 660,000 | LF | \$ _____ | \$ _____ |
| 8. | CCTV Verification: > 8-inch to 18-inch diameter | 219,000 | LF | \$ _____ | \$ _____ |
| Allowance | | | | | |
| 9. | Owner Directed clearing, erosion & sediment control, and site restoration | 1 | LS | \$ 228,000 | \$228,000.00 |
| 10. | Contingency Allowance | 1 | LS | \$ 189,900 | \$ 189,900.00 |
| Grand Total | | | | \$ _____ | |

(END OF PRICE SCHEDULE)

BID ACKNOWLEDGEMENT FORM

I, the undersigned, acknowledge that I have read the Bid Document in its entirety and agree to conform to its every requirement. I further acknowledge that failure to prepare, submit, or execute this bid in the exact manner requested will be just cause to reject my entire bid.

| | |
|--|---|
| Name of Business Entity Submitting Bid | Print Name and Title of Authorized Signer |
| Business Entity Street Address | Authorized Signature |
| Business Entity City, State and Zip Code | Contact Person's Phone Number |
| Business Entity County | Contact Person's E-mail Address |

- Bidder acknowledges addendum(s): No. 1 ____, No. 2 ____, No. 3 ____ (If Applicable)
- Bidder acknowledges that this bid is valid for one hundred twenty (120) _____ (Initial) days from and including the actual bid opening date.
- Bidder acknowledges that bid meets or exceeds Technical Specifications. _____ (Initial)
Any deviation from Technical Specifications must be explained, in detail, by bidder as to how the bid does not meet the exact specifications.
- Bidder acknowledgement of Revisions to the above Terms and Conditions:
 - No revisions _____ (Initial)

OR

- There are revisions and they are included with the bid submittal _____ (Initial)

The above acknowledgment must be properly signed and firmly attached to your bid. The acknowledgment becomes a part of your bid and without it your bid is not complete and will be subject to rejection.

THIS PAGE MUST BE RETURNED WITH YOUR BID. FAILURE TO SUBMIT THIS COMPLETED FORM WILL RESULT IN YOUR BID BEING DEEMED NON-RESPONSIVE.

ATTACHMENT A**REQUIRED DOCUMENTS CHECKLIST**

Bidder complete and submit the following documents with your bid:

| Bid Page No. | Title | Check This Box If Included With Bid |
|---------------------|--|--|
| 1-20 | ITB Document, including completion of the following: General Terms and Conditions, Sections: C. Delivery (pg. 9); E. Foreign Products (pg. 9); G: Warranty and/or Guaranty (pg. 10); and GG. Cooperative Procurement (pg. 19) | |
| 21 | <u>Price Schedule submitted in a Separate, Sealed Envelope and clearly labeled as "Price Schedule" *</u> | |
| 22 | Bid Acknowledgement Form* | |
| 23 | Required Documents Checklist | |
| 24 | Contractor Reference and Release Form | |
| 25 | Subcontractor Reference and Release Form, if applicable | |
| 27 | Contractor Affidavit* | |
| 28 | Subcontractor Affidavit, if applicable** | |
| 29-37 | LSBE - Exhibits 1 and 2 of Attachment G* | |
| 38 | First Source Jobs Acknowledgement Form* | |
| 39 | New Employee Tracking Form | |
| - | A copy of current, valid Business License | |

***If these mandatory forms are not completed and submitted with the bid, the bidder will be deemed non-responsive.**

****These forms are applicable if a subcontractor will be utilized to fulfill the requirements of this contract. If these forms are applicable, they must be completed and submitted along with the bid. Failure to submit these forms, if applicable, will result in the bidder being deemed non-responsive.**

I, the undersigned, acknowledge that I have included the requested documents as listed above.

Printed Name

Signature

ATTACHMENT B

CONTRACTOR REFERENCE AND RELEASE FORM

List below at least three (3) references, including company name, contact name, address, email address, telephone numbers and contract period who can verify your experience and ability to perform the type(s) of product(s)/ service(s) listed in the solicitation.

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

REFERENCE CHECK RELEASE STATEMENT

You are authorized to contact the references provided above for purposes of this ITB.

Signature _____ Title _____
(Authorized Signature of Bidder)

Company Name _____ Date _____

ATTACHMENT C

SUBCONTRACTOR REFERENCE AND RELEASE FORM

List below at least three (3) references, including company name, contact name, address, email address, telephone numbers and contract period who can verify your experience and ability to perform the type(s) of product(s)/ service(s) listed in the solicitation.

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

| | | | |
|-------------------------------|--------------------------------------|-------|----------|
| Company Name | Contract Period | | |
| Contact Person Name and Title | Telephone Number (include area code) | | |
| Complete Primary Address | City | State | Zip Code |
| Email Address | Fax Number (include area code) | | |
| Project Name and Description | | | |

REFERENCE CHECK RELEASE STATEMENT

You are authorized to contact the references provided above for purposes of this ITB.

Signature _____ Title _____
 (Authorized Signature of Bidder)

Company Name _____ Date _____

ATTACHMENT D**CONTRACTOR & SUBCONTRACTOR EVIDENCE OF COMPLIANCE:**

- (1) County contracts for the physical performance of services within the state of Georgia shall include the following provisions: ¹
 - a. the contractor has registered with and is authorized to use the federal work authorization program to verify information on all newly hired employees or subcontractors;
 - b. by affidavit, the contractor must attest to the contractor's name, address, user identification number, date of authorization, and verification of the continual participation throughout the contract period, and
 - c. the affidavit shall become a part of the covered contract and must be attached.
- (2) No contractor or subcontractor who enters into a contract with the County shall enter into such a contract or subcontract in connection with the physical performance of services within Georgia unless the contractor or subcontractor registers and participates in the federal work authorization program to verify information of all newly hired employees. Any employee, contractor, or subcontractor of such contractor or subcontractor shall also be required to satisfy the requirements of O.C.G.A. § 13-10-91, as amended.
- (3) Upon contracting with a new subcontractor, a contractor or subcontractor shall, as a condition of any contract or subcontract entered into pursuant to O.C.G.A. § 13-10-91, as amended, agree to provide the County with notice of the identity of any and all subsequent subcontractors hired or contracted by the contractor or subcontractor. Such notice shall be provided within five (5) business days of entering into a contract or agreement for hire with any subcontractor. Such notice shall include an affidavit from each subsequent contractor attesting to the subcontractor's name, address, user identification number, and date of authorization to use the federal work authorization program.
- (4) An affidavit shall be considered an open public record; provided, however, that any information protected from public disclosure by federal law or by Article 4 of Chapter 28 of Title 50 shall be redacted. Affidavits shall be maintained by the County for five years from the date of receipt.
- (5) To verify compliance, the contractor agrees to participate in random audits conducted by the Commissioner of the Georgia Department of Labor. The results of the audits shall be published on the www.open.georgia.gov website, and on the Department of Labor's website no later than December 31 of each year.
- (6) Any person who knowingly and willfully makes a false, fictitious, or fraudulent statement in an affidavit submitted pursuant to O.C.G.A. § 13-10-91 shall be guilty of a violation of Code § 16-10-20 and, upon conviction, shall be punished as provided in such section. Contractors and subcontractors convicted for false statements based on a violation of such section shall be prohibited from bidding on or entering into any public contract for twelve (12) months following such conviction.

¹ O.C.G.A. § 13-10-91, as amended

ATTACHMENT E

CONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned verifies its compliance with O.C.G.A. § 13-10-91, as amended, stating affirmatively that the individual, firm or corporation which is contracting with DEKALB COUNTY, GA, a political subdivision of the State of Georgia, has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91, as amended]. The affiant agrees to continue to use the federal work authorization program throughout the contract period.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the COUNTY, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91, as amended, on the Subcontractor Affidavit form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the COUNTY, within five (5) days from when the subcontractor(s) is retained to perform such service.

BY: Authorized Officer or Agent
(Bidder's Name)

Federal Work Authorization
Enrollment Date

Title of Authorized Officer or Agent of Bidder

Identification Number

Printed Name of Authorized Officer or Agent

Address (* do not include a post office box)

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 20__

Notary Public

My Commission Expires: _____

ATTACHMENT F

SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned verifies its compliance with O.C.G.A. § 13-10-91, as amended, stating affirmatively that the individual, firm, or corporation which is engaged in the physical performance of services under a contract with _____ (name of contractor) on behalf of DEKALB COUNTY, GA, a political subdivision of the State of Georgia, has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91, as amended]. The affiant agrees to continue to use the federal work authorization program throughout the contract period.]

BY: Authorized Officer or Agent
(Bidder's Name)

Federal Work Authorization
Enrollment Date

Title of Authorized Officer or Agent of Bidder

Identification Number

Printed Name of Authorized Officer or Agent

Address (* do not include a post office box)

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

_____ DAY OF _____, 20_____

Notary Public
My Commission Expires: _____

ATTACHMENT G**LSBE INFORMATION
DEKALB FIRST LSBE INFORMATION
WITH EXHIBITS 1 – 2****SCHEDULE OF LOCAL SMALL BUSINESS ENTERPRISE PARTICIPATION
OPPORTUNITY TRACKING FORM**

The Chief Executive Officer and the Board of Commissioners of DeKalb County believe that it is important to encourage the participation of small and local businesses in the continuing business of County government; and that the participation of these types of businesses in procurement will strengthen the overall economic fabric of DeKalb County, contribute to the County's economy and tax base, and provide employment to local residents. Therefore, the Chief Executive Officer and the Board of Commissioners have made the success of local small businesses a permanent goal of DeKalb County by implementing the DeKalb First Local Small Business Enterprise Ordinance.

PROVISIONS OF DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE (LSBE) ORDINANCE

| |
|---|
| Percentage of LSBE Participation Required |
| 20% of Total Award |

| Certification Designation | Invitation to Bid (ITB) |
|----------------------------------|----------------------------|
| LSBE Within DeKalb (LSBE-DeKalb) | Ten (10) Preference Points |
| LSBE Outside DeKalb (LSBE-MSA) | Five (5) Preference Points |
| Demonstrated GFE | Two (2) Preference Points |

Certified Local Small Business Enterprises (LSBEs) located within DeKalb County and prime contractors utilizing LSBEs that are locally-based inside DeKalb County shall receive ten (10) points in the initial evaluation of their response to any Invitation to Bid. Certified LSBEs located outside of DeKalb County but within the nine (9) County Metropolitan Statistical Area (MSA) consisting of Cherokee, Clayton, Cobb, Douglas, Fayette, Fulton, Gwinnett, Henry, and Rockdale Counties shall receive five (5) points in the initial evaluation of their response to any Invitation to Bid. Prime Contractors who demonstrate sufficient good faith efforts in accordance with the requirements of the ordinance shall be granted two (2) points in their initial evaluation of responses to any Invitation to Bid. Pro-rated points shall be granted where a mixture of LSBE-DeKalb and LSBE MSA firms are utilized. Utilization of each firm shall be based upon the terms of the qualified sealed solicitation.

Prime Contractor(s) deemed responsible and remains responsive to an Invitation to Bid (ITB) because they are either a certified LSBE-DeKalb or LSBE-MSA firm or has obtained 20% participation of an LSBE-DeKalb or LSBE-MSA firm, submits the lowest bid price shall be deemed the lowest, responsive and responsible bidder.

Prime Contractor(s) deemed responsible and remains responsive to an Invitation to Bid (ITB) and documented good faith efforts, submits a lower bid price than a Prime Contractor that achieved 20% LSBE participation, or otherwise required benchmark, then the Prime Contractor who actually met the benchmark will be given the opportunity to match the lowest bid price of the Prime Contractor who only made good faith efforts. Prime Contractor(s) who choose **not** to match the lowest bid price, then the Prime Contractor who made the good faith efforts will be deemed the lowest, responsive and responsible bidder.

For all qualified sealed solicitations, the Director of Purchasing and Contracting, DeKalb County Government, shall determine if the bidder/proposer has included written documentation showing that at least twenty percent (20%) of the total contract award will be performed by a certified LSBE. This written documentation shall be in the form of a notarized Schedule of LSBE Participation (Attached hereto as "Exhibit 1".) For all contracts, a signed letter of intent from all certified LSBEs describing the work, material, equipment and/or services to be performed or provided by the LSBE(s) and the agreed upon percentage shall be due with the bid or proposal documents and included with "Exhibit 1". The certified vendor list establishes the group of Certified LSBE's from which the bidder/proposer must solicit subcontractors for LSBE participation. This list can be found on our website <http://www.dekalbcountyga.gov/purchasing-contracting/about-purchasing-and-contracting> or obtained from the Special Projects LSBE Program team.

Prime Contractors failing to meet the LSBE benchmark must document and demonstrate Good Faith Efforts in accordance with the attached "Checklist for Good Faith Efforts" portion of "Exhibit 1." The notarized Schedule of LSBE Participation shall be due and submitted with each bid or proposal. Failure to achieve the LSBE benchmark or demonstrate good faith efforts shall result in a bid or proposal being rejected. Prime Contractors that fail to attend the mandatory LSBE meeting in person or via video conference shall mean that the Prime Contractor has not demonstrated sufficient good faith efforts and its bid or proposal if submitted, shall be deemed non-responsive without any further review.

Upon award, Prime Contractors are required to submit a report detailing LSBE Sub-Contractor usage with each request for payment and not less than on a monthly basis. Prime Contractors shall ensure that all LSBE sub-contractors have been paid within seven (7) days of the Prime's receipt of payment from the County. Failure to provide requested reports/documentation shall constitute a material breach of contract, entitling the County to terminate the Contract for default or pursue other remedies. LSBE sub-contractors must confirm payments received from the Prime(s) for each County contract they participate in.

For eligible bids/proposals valued over \$5,000,000.00, the Mentor-Protégé provision of the Ordinance shall apply. Prime Contractors must agree to become mentors and take on an LSBE protégé in an effort to enhance the potential of future LSBEs. Qualifying projects shall be performed by both Mentor and Protégé through a subcontract between both parties. This requirement is in addition to all other applicable sections of the DeKalb First Ordinance. Please review the ordinance, section 2-214 or contact the LSBE Program Representative for detailed information regarding this initiative.

EXHIBIT 1

**SCHEDULE OF DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE PARTICIPATION
OPPORTUNITY TRACKING FORM**

As specified, Bidders and Proposers are to present the details of LSBE participation below:

PRIME BIDDER/PROPOSER _____

SOLICITATION NUMBER: **ITB 24-101687**

TITLE OF UNIT OF WORK: **Sanitary Sewer Chemical Root Control (Three (3) Year Multiyear Contract)**

1. My firm, as the prime bidder/proposer on this unit of work, is a certified (check all that apply):
 LSBE-DeKalb LSBE-MSA
2. If you are a Certified LSBE-DeKalb or MSA, please indicate below the percentage of work that your firm will carry out directly: _____.
3. If the prime bidder/proposer is a joint venture, please describe below the nature of the joint venture and level of work and percentage of participation to be provided by the LSBE-DeKalb or MSA joint venture firm.

4. List the LSBE-DeKalb or MSA subcontractors and/or firms (including suppliers) to be utilized in this contract, if awarded. No changes can be made in the subcontractors listed below without the prior written approval of the County. Please attach a signed letter of intent from all certified LSBEs describing the work, materials, equipment or services to be performed and/or provided and the agreed upon percentage of work to be performed. A Letter of Intent form is attached hereto as "Exhibit 2".

| | |
|--|--|
| Name of Company | |
| Address | |
| Telephone | |
| Fax | |
| Contact Person | |
| Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA | |
| Description of services to be performed | |
| Percentage of work to be performed | |

| | |
|--|--|
| Name of Company | |
| Address | |
| Telephone | |
| Fax | |
| Contact Person | |
| Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA | |
| Description of services to be performed | |
| Percentage of work to be performed | |

| | |
|--|--|
| Name of Company | |
| Address | |
| Telephone | |
| Fax | |
| Contact Person | |
| Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA | |
| Description of services to be performed | |
| Percentage of work to be performed | |

| | |
|--|--|
| Name of Company | |
| Address | |
| Telephone | |
| Fax | |
| Contact Person | |
| Indicate certification status and attach proof of certification: LSBE-DeKalb/LSBE-MSA | |
| Description of services to be performed | |
| Percentage of work to be performed | |

Please attach additional pages, if necessary.

EXHIBIT 1, CONT'D**DEKALB COUNTY**
CHECKLIST FOR GOOD FAITH EFFORTS

A bidder/proposer that does not meet the County's LSBE participation benchmark is required to submit documentation to support all "Yes" responses as proof of "good faith efforts." Please indicate whether or not any of these actions were taken:

| | Yes | No | Description of Actions |
|----|-----|----|---|
| 1. | | | Prime Contractors shall attend a MANDATORY LSBE Meeting in person or via video conference within two-weeks of advertisement the solicitation. |
| 2. | | | Provide a contact log showing the company's name, contact person, address, email and contact number (phone or fax) used to contact the proposed certified subcontractors, nature of work requested for quote, date of contact, the name and title of the person making the effort, response date and the percentage of work. |
| 3. | | | Provide interested LSBEs via email, of any new relevant information, if any, at least 5 business days prior to submission of the bid or proposal. |
| 4. | | | Efforts made to divide the work for LSBE subcontracting areas likely to be successful and to identify portions of work available to LSBEs consistent with their availability. Include a list of divisions of work not subcontracted and the corresponding reasons for not including them. The ability or desire of a bidder/proposer to perform the contract work with its own organization does not relieve it of the responsibility to make good faith efforts on all scopes of work subject to subcontracting. |
| 5. | | | Efforts were made to assist potential LSBE subcontractors meet bonding, insurance, or other governmental contracting requirements. Where feasible, facilitating the leasing of supplies or equipment when they are of such a specialized nature that the LSBE could not readily and economically obtain them in the marketplace. |
| 6. | | | Communication via email or phone with DeKalb First Program Staff seeking assistance in identifying available LSBEs. Provide DeKalb First Program Staff representative name and title, and date of contact. |
| 7. | | | For all contracts, a signed letter of intent from all certified LSBEs describing the work, materials, equipment or services to be performed or provided by the LSBE(s) and the agreed upon LSBE participation percentage shall be due with the bid or proposal documents. |
| 8. | | | Other Actions, to include Mentor/Protégé commitment for solicitations \$5M and above (specify): |

Please explain all "no" answers above (by number):

EXHIBIT 1, CONT'D

This list is a guideline and by no means is it exhaustive. The County will review these efforts, along with attached supporting documents, to assess the bidder/proposer's efforts to meet the County's LSBE Participation benchmark. If you require assistance in identifying certified, bona fide LSBEs, please contact the Purchasing and Contracting Department - DeKalb First Program, DeKalbFirstLSBE@dekalbcountyga.gov.

EXHIBIT 1, CONT'D**DEKALB FIRST LOCAL SMALL BUSINESS ENTERPRISE SCHEDULE OF PARTICIPATION
OPPORTUNITY TRACKING FORM****Bidder/Proposer Statement of Compliance**

Bidder(s)/Proposer(s) hereby state that they have read and understand the requirements and conditions as set forth in the objectives and that reasonable effort were made to support the County in providing the maximum practicable opportunity for the utilization of LSBEs consistent with the efficient and economical performance of this contract. The Bidder and any subcontractors shall file compliance reports at reasonable times and intervals with the County in the form and to the extent prescribed by the Director of DeKalb County Purchasing and Contracting Department. Compliance reports filed at such times as directed shall contain information as to the employment practices, policies, programs and statistics of Contractors and their subcontractors.

1. Non-Discrimination Policy

- a. During the performance of this agreement, Contractor agrees to conform to the following Non-Discrimination Policy adopted by the County.
- b. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or disability. The Contractor will take action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex, national origin, or disability. Such action shall include, but not be limited to, the following:
 - (1) Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth provisions of this non-discrimination clause.
 - (2) Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or disability.
- c. Without limiting the foregoing, Contractor shall not discriminate on the basis of disability in the admission or access to, or treatment or employment in, the programs and activities, which form the subject of the contract. The Contractor will take action to ensure that applicants for participation in such programs and activities are considered without regard to disability. Such action shall include, but not be limited to, the following:
 - (1) Contractor agrees to post in conspicuous places available to participants in its programs and activities notices to be provided setting forth the provisions of this non-discrimination clause.
 - (2) Contractor shall, in all solicitations or advertisements for programs or activities, which are the subject of the contract, state that all qualified applicants will receive consideration for participation without regard to disability.

2. Commitment

The undersigned certifies that he/she has read, understands, and agrees to be bound by the bid specifications, including the accompanying Exhibits and other terms and conditions of the Invitation to Bid and/or Request for Proposal regarding LSBE utilization. The undersigned further certifies that he/she is legally authorized by the bidder or responder to make the statements and representations in

EXHIBIT 1, CONT'D

Exhibit 1 and that said statements and representations are true and correct to the best of his/her knowledge and belief. The undersigned will enter into formal agreement(s) with the LSBE(s) listed in this Exhibit 1, which are deemed by the owner to be legitimate and responsible LSBEs. Said agreement(s) shall be for the work and contract with the County. The undersigned understands and agrees that if any of the statements and representations are made by the Bidder knowing them to be false, or if there is a failure of the successful Bidder (i.e., Contractor) to implement any of the stated agreements, intentions, objectives, goals and commitments set forth herein without prior approval of the County, then in any such events the contractor's act or failure to act, as the case may be, shall constitute a material breach of contract, entitling the County to terminate the Contract for default. The right to so terminate shall be in addition to, and not in lieu of, any other rights and remedies the County may have for other defaults under the Contract. Additionally, the Contractor will be subject to the loss of any future contract awards by the County for a period of one year.

Firm Name (Please Print):

Firm's Officer:

(Authorized Signature and Title Required)

Date

Sworn to and Subscribed to before me this ____ day of _____, 20__.

Notary Public

My Commission Expires: _____

EXHIBIT 2

**LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR
PROVIDING MATERIALS OR SERVICES**

Instructions:

1. Complete the form in its entirety and submit with bid documents.
2. Please be advised that LSBEs cannot be removed from a project without pre-approval from Contract Compliance.

To: _____
(Name of Prime Contractor Firm)

From: _____ **LSBE –DeKalb** **LSBE –MSA**
(Name of Subcontractor Firm) (Check all that apply)

ITB Number: 24-101687

Project Name: Sanitary Sewer Chemical Root Control (Three (3) Year Multiyear Contract)

The undersigned subcontractor is prepared to perform the following described work or provide materials or services in connection with the above project (specify in detail particular work items, materials, or services to be performed or provided).

| Description of Materials or Services | Project Commence Date | % of Contract Award |
|--------------------------------------|-----------------------|---------------------|
| | | |
| | | |
| | | |

Prime Contractor:

Sub-contractor:

Signature: _____

Signature: _____

Title: _____

Title: _____

Date: _____

Date: _____



ATTACHMENT H

FIRST SOURCE JOBS ORDINANCE INFORMATION
(WITH EXHIBITS 1 – 4)
EXHIBIT 1

FIRST SOURCE JOBS ORDINANCE ACKNOWLEDGEMENT

Contract No. _____

The DeKalb County First Source Ordinance requires contractors or beneficiaries of eligible projects entering into any type of agreement with the County, including purchase orders, regardless of what they may be called, for the procurement or disposal of supplies, services, construction projects, professional or consultant services, which is funded in whole or part with County funds or County administered funds in which the contractor is to receive \$50,000 or more in County expenditures or committed expenditures and recipient of urban redevelopment action grants or community development block funds administered in the amount of \$50,000 or more to make a good faith effort to hire DeKalb County residents for at least 50% of jobs created using the First Source Registry (candidate database) within one hundred twenty (120) days of contract execution. The work to be performed under this contract is subject to the provisions of the DeKalb County First Source Jobs Ordinance. All contractors will be asked to submit an Employment Roster and/or copies of active payroll registers on a monthly basis to verify compliance. The undersigned acknowledges and agrees to comply with the provisions of the DeKalb County First Source Jobs Ordinance.

CONTRACTOR OR BENEFICIARY INFORMATION:

Contractor or Beneficiary Name (Signature)

Contractor or Beneficiary Name (Printed)

Title

Telephone

Email

Name of Business

Please answer the following questions:

- 1. How many job openings do you anticipate filling related to this contract? _____
- 2. How many incumbents/existing employees will retain jobs due to this contract?
DeKalb Residents: _____ Non-DeKalb Residents: _____
- 3. How many work hours per week constitutes Full Time employment? _____

Please return this form to WorkSource DeKalb, fax (404) 687-3900 or email to WSDBusiness@dekalbcountyga.gov.

WorkSource DeKalb (WSD) is an EEO/M/F/D/V employer/program. Auxiliary aids/services are available upon request to individuals with disabilities. Persons with hearing impairments may call 1-800-255-0135 or 711 TTY for assistance. WSD is 100% funded by the U. S. Department of Labor and is a proud partner of the American Job Center Network.



FIRST SOURCE JOBS ORDINANCE INFORMATION

EXHIBIT 2

NEW EMPLOYEE TRACKING FORM

Name of Bidder _____

Address _____

Email _____

Phone Number _____

Fax Number _____

Do you anticipate hiring from the First Source Candidate Registry? Y or N (Circle one)

If so, the approximate number of employees you anticipate hiring: _____

| Type of Position (s) you anticipate hiring: (List position title, one position per line) Attach job description per job title: | The number you anticipate hiring: | Timeline |
|--|-----------------------------------|----------|
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Please return this form to DeKalb Workforce Development, fax (404) 687-4099 or email to FirstSourceJobs@dekalbcountyga.gov.

WorkSource DeKalb (WSD) is an EEO/M/F/D/V employer/program. Auxiliary aids/services are available upon request to individuals with disabilities. Persons with hearing impairments may call 1-800-255-0135 or 711 TTY for assistance. WSD is 100% funded by the U. S. Department of Labor and is a proud partner of the American Job Center Network.



BUSINESS SERVICE REQUEST FORM

Please complete this form for each position that you have available.

DATE: _____ FEDERAL TAX ID: _____ WEBSITE: _____

COMPANY NAME: _____

ADDRESS: _____

(WORKSITE ADDRESS IF DIFFERENT): _____

CONTACT NAME: _____ TITLE: _____

CONTACT PHONE: _____ CONTACT EMAIL ADDRESS: _____

Are you a private employment agency or staffing agency? YES NO

JOB DESCRIPTION: *(Please include a copy of the Job Description)*

POSITION TITLE: _____

NUMBER OF POSITIONS AVAILABLE: _____ TARGET START DATE: _____

WEEKLY WORK HOURS: 20-30 hours 30-40 hours Other _____

SALARY RATE: (OR RANGE) _____ WORK SCHEDULE: _____

PERM TEMP TEMP-TO-PERM SEASONAL

PUBLIC TRANSPORTATION ACCESSIBILITY: YES NO

SCREENINGS ARE REQUIRED: YES NO SELECT ALL THAT APPLY: _____

CREDIT CHECK DRUG MVR BACKGROUND OTHER _____

HOW TO APPLY: _____

Please return form to: _____

DO NOT WRITE BELOW THIS LINE - TO BE COMPLETED BY WORKSOURCE DEKALB ONLY

TYPE: First Source Direct Hire Work Experience (WEX) SYSTEM ENTRY DATE: _____

ASSIGNED TO: _____ DATE: _____

We are an EEO/M/F/D/V Employer/Program; and 100% Federally Funded by the U.S. Department of Labor. Auxiliary aids/services are available upon request to individuals with disabilities.

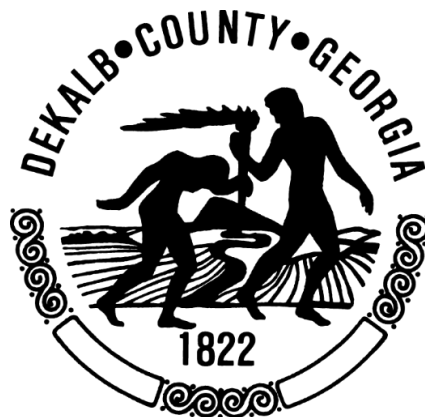
Technical Specifications ITB No. 24-101687

for

Sanitary Sewer Chemical Root Control

August 2024

Owner:



DeKalb County

Department of Watershed Management

178 Sams St

Decatur, Georgia 30030

SECTION 00000

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SECTION 01010 SUMMARY OF WORK

PART 1 – GENERAL

1.01 PURPOSE AND NEED

- A. DeKalb County Department of Watershed Management's (DWM) Wastewater Collection and Transmission System (WCTS) includes an estimated 2,700 miles of sanitary sewer lines, and approximately 70,000 manholes. Sanitary sewer root control services and associated work activities completed under this Contract will serve to improve sanitary sewer system operation.
- B. In addition to the application of the chemical root control agent, supporting tasks to be provided by the Contractor in performance of the Work include, but are not limited to, CCTV verification, public notification, light clearing for access, and traffic control.

1.02 SCOPE OF WORK

- A. The Work will include, but is not limited to, the following:
 - 1. Light clearing associated with site access.
 - 2. Traffic control.
 - 3. Treatment of sewer mains and manholes used to access sewer mains for root control.
 - 4. CCTV verification of sewer mains where root control treatment has been performed.
 - 5. Coordinate DWM's Community Outreach requirements to minimize impact to the citizens of DeKalb County,
 - 6. Other work associated with the above items and all other aspects of the Contract Documents.
- B. Perform all work in accordance with the Contract Documents.

1.03 PROJECT LOCATION

- A. The Work is required at multiple locations within the WCTS and will be directed through the issuance of work orders by the Owner.

1.04 WORK COORDINATION

- A. The Contractor shall:
 - 1. Coordinate the Work with third parties, (such as public utilities, other DeKalb County departments, and emergency service providers) in areas where such parties may have rights to underground property or facilities.
 - 2. Request maps or other descriptive information as to the nature and locations of such underground facilities or property.

3. Coordinate the Work with owners of private and public property where access is required for the performance of the work.
 4. Legal access (Rights of Entry) will be acquired by the Contractor in accordance with the Contract Documents.
- B. The Owner, through the Program Manager:
1. Will work with the Contractor to specify the order and sequencing of the work in a logical and efficient format
 - a. All items in this contract shall be priced so each item can be assigned independently or combined with other items at the Program Manager's sole discretion.
 - b. No consideration of any claim or extra payment will be considered for:
 - 1) Extra payment arising from a decision to assign potential work items under this contract in any combination or in combination with another contract utilizing alternates by the Department of Watershed Management at the prices specified herein.

1.05 EXISTING SITE(S) CONDITIONS

- A. The Contractor shall:
1. Make all necessary investigations to determine the existence and location of above ground and underground utilities that could impact the work.
 2. Evaluate surface features that may impact the work.
 3. Be held responsible for documenting, recording, maintaining and protecting existing utilities, structures, and personal property.
 - a. Damage to any existing utilities, structures, personal property will be repaired/replaced to equal or better condition by the Contractor at no additional cost to the project.
- B. Nothing in these Contract Documents shall be construed as a guarantee, existing utilities are either not located, or located as shown within the area of the work.

END OF SECTION

**SECTION 01015
CONTROL OF WORK**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. This section includes:
 - 1. The general use of the site including properties inside and outside of the right of way,
 - 2. Work affecting existing utilities, roadways, streets, driveways, and traffic patterns.
 - 3. Requirements for notification to adjacent landowners and occupants.

1.02 PERSONNEL- COOPERATION WITHIN THIS CONTRACT

- A. The Contractor shall furnish:
 - 1. Manpower knowledgeable and experienced with the type of work detailed in these Contract Documents to deliver a quality project.
 - 2. Equipment in sufficient numbers, size and capacity that is efficient, capable and appropriate to produce Work that meets or exceeds the quality requirements of the Contract and maintains a rate of progress Insuring the completion of the work in a manner that complies with, and is within the time stipulated in the Contract Documents.
- B. Program Manager/Owner's Representative:
 - 1. May and at no additional cost to the Owner, order the Contractor to increase manpower or equipment if:
 - a. Rate of progress will not meet that required to complete the project per the Contract Documents.
 - b. Rate of progress is not in agreement with the accepted baseline schedule
 - c. Quality of performed work appears to be decreasing, or otherwise fails to meet the minimum standards required by the Contract
 - 2. The Contractor shall immediately conform to such order and continue to do so until the Work is on schedule and meets the minimum standards required by the Contract.
 - 3. Failure of the Program Manager to give such order shall in no way relieve the Contractor of his obligations to meet the requirements of the Contract Documents.
- C. All firms or persons authorized to perform any work under this Contract shall:
 - 1. Cooperate with the General Contractor and his subcontractors or trades,
 - 2. Assist in incorporating the work of other trades where necessary or required.

3. Comply with the requirements of all local state and federal agencies and other utility/facility Owners.
- D. Milestone – Chemical Root Control: The Contractor is expected to complete 1/3 of the quantities appropriated for Chemical Root Control by the end of the 1st year following notice to proceed. The Contractor is expected to complete an additional 1/3 during the second year and the final 1/3 during the third year.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Private Land:
 1. The Contractor shall not enter or occupy any private land outside of existing easements except, by permission of the property owner and the County per the Public Notification requirements listed in all applicable Specification Sections.

The Contractor will be required to coordinate the work with DWM Outreach and local residents through the use of door hangers and will be required to obtain rights-to-enter where that work extends onto easements traversing private property. An executed “Right-of-Entry” form will be required from each property traversed unless entry is specifically authorized by the Program Manager.

 - a. The Contractor shall precisely and thoroughly document the location and condition of all private property features just prior to any disturbance or access. This would include location of features, species of trees bushes, etc. and all other pertinent information. Any failure to do so may require the Contractor, at the Contractor's expense to complete all restoration requirements required by property owners regardless of their validity. In such occurrences, the contractor shall provide to the County, a written release from the property Owner.
 2. Take precautions to prevent pedestrians/public from entering any construction zone.
 - a. Use all available measures to prevent injury including applying all applicable OSHA standards.
 - b. Night watchmen may be required where special hazards exist
 - c. Police protection provided for traffic while work is in progress.
 - d. The Contractor shall be fully responsible for damage or injuries
- B. Maintenance of Traffic
 1. Contractor shall submit a Traffic Control Plan to the Owner's Representative documenting traffic control procedures in accordance with the Manual on

Uniform Traffic Control Devices (MUTCD), latest edition and the specific direction of the authority having jurisdiction.

2. Maintain vehicular and pedestrian traffic at all times:
 - a. Obtain and obey fully, street closure permission/permit from proper authority.
 - b. Conduct no construction operations in, and remain clear of the work area outside the hours allowed by the permit and Contract. The most stringent shall apply.
 - c. Temporarily stockpiling excavated or stored material on street or pedestrian walkways without proper closure permit is not allowed.
 - d. Use available construction methods to mitigate any traffic hazards created.
 - 1) Provide temporary roadways, erect wheel guards or fences or other methods approved by the Program Manager/Owner's Representative.
 3. Detours around construction or assessment activities will be subject to the approval of the Owner's Representative.
 4. Where detours are permitted:
 - a. Provide all necessary barricades and signs as required to divert the flow of traffic.
 - b. Expedite construction operations and periods when traffic is being detoured.
 - c. Allowable periods when traffic is being detoured will be strictly controlled by the County.
- C. Work Within GDOT Right-Of-Way
1. All roadway restoration shall be done in accordance with the lawful requirements of the governing authorities within whose jurisdiction such pavement is located.
 2. All highway utilities and traffic controls are to be maintained.
 - a. Work shall conform to the rules and regulations of the governing authorities, including the use of standard signs, barricades, and warning devices.
 3. Conduct no construction operations in, and remain clear of the work area outside the hours allowed by the permit and Contract. The most stringent shall apply.
 4. The Contractor shall furnish all such bonds or checks required by the governing authorities to ensure proper restoration of paved areas.
- D. Care and Protection of Property
1. The Contractor shall be
 - a. Responsible for the preservation of all public and private property affected by his operations.

- b. Use every precaution necessary to prevent damage thereto.
 - c. Any direct or indirect damage to public or private property (through act, omission, neglect, misconduct in the execution of the work) shall be restored by the Contractor,
 - 1) At his expense,
 - 2) To a condition similar or equal to that existing before the damage was done.
 - d. Pre and post photographs of the access route across the property are recommended.
- E. Protection of Existing Structures and Utilities
- 1. The Contractor shall assume full responsibility for the protection of all buildings, structures, and utilities, public or private, including poles, signs, services to buildings, utilities in the street, such as pipes, water pipes, hydrants, sewers, drains, gas and electric and telephone cables.
 - a. Carefully and fully support and protect all such structures and utilities from injury of any kind. Protect and restore damage to any cathodic protection components or locating devices including wires, tape, etc.
 - b. Damage resulting from the Contractor's operations shall be repaired by him at his expense, to the satisfaction of the property owner
- F. Water for Construction Purposes:
Refer to Section 01030 – Special Project Procedures, 3.01, Paragraph F.
- G. Maintenance of Flow:
Refer to Section 01520 – Sewer Flow Control.

3.02 CLEANUP

Refer to Section 01710 Clean up, and all other sections that require special clean up and disposal requirements. The most stringent shall apply.

END OF SECTION

SECTION 01016
CONTROL OF MATERIALS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes the responsibilities of the Contractor regarding materials used on this project.

1.02 RELATED SECTIONS

- A. Section 01300 – Submittals

1.03 QUALIFICATIONS

- A. Only new materials and equipment shall be incorporated in the work.
 - 1. Materials and equipment furnished shall be subject to the inspection and approval of the Owner's Representative. Contractor shall be responsible for the close inspection, storage, maintenance and all protection of all materials and equipment delivered and used in the project
 - 2. No material shall be delivered to the job site without prior approval of the Owner's Representative.
 - 3. No materials or equipment shall be delivered to the project for which the manufacturer's published storage and handling instructions have not been provided
 - 4. Like items of products furnished and installed in the Work shall be end products of one manufacturer and of the same series or family of models.
- B. The materials and equipment used on the work shall correspond to the approved samples or other data.
- C. **MANUFACTURER'S CERTIFICATE OF COMPLIANCE**
When required by Owner's representative, a Manufacturer's Certificate of Compliance, shall be provided and signed by entity supplying the product, material, or service, and submitted prior to shipment of product or material or execution of the services.
- D. Engineer may permit use of certain materials or assemblies prior to sampling and testing if accompanied by accepted certification of compliance.

1.04 SUBMITTALS

- A. Within two (2) weeks of receiving the Notice-To-Proceed, the Contractor shall submit to the Owner's Representative a complete schedule of submittals and submittal log for review and approval. The Contractor shall submit either Action or Informational submittals on a timely basis as indicated in the schedule to not delay the Work. Such submittals shall be in sufficient detail to enable the Owner's Representative to

identify the particular project and to form an opinion as to its conformity to the Specifications.

- B. The Contractor shall submit data and samples to permit consideration and approval before materials are necessary for incorporation in the work.
 - 1. Allow for a 10 working day review time for Owner/Owner's Representative.
 - 2. Any delay of approval resulting from the Contractor's failure to submit samples or data promptly or from required re-submittal shall not be used as a basis of a claim against the Owner.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Facilities and labor for handling storing, maintaining and inspecting all materials and equipment shall be furnished by the Contractor.
- B. At the Owner's Representative's request, either prior to beginning or during the progress of the work,
 - 1. the Contractor shall submit samples of materials for such special tests as may be necessary to demonstrate conformity to the specifications.
 - 2. samples shall be furnished, stored, packed, and shipped as directed at the Contractor's expense.
 - 3. Except as otherwise noted, the Owner's Representative will make arrangements and pay for the tests.

PART 2 – PRODUCTS: (Not Used)

PART 3 – EXECUTION: (Not Used)

END OF SECTION

SECTION 01020
ALLOWANCES

PART 1 – GENERAL

1.01 SECTION INCLUDES

This section includes administrative and procedural requirements governing allowances.

1.02 QUALIFICATIONS AND REQUIREMENTS

- A. Contractor agrees any contingency or other allowance, if any, is for the sole use of the Owner to cover unanticipated costs for additional related work.
- B. Selected materials and equipment, and in some cases, installation is included in Contract Documents by cash allowances. Allowances are established to defer selection or scope until more information is available. Other requirements will be issued by a Change Order.
- C. Allowances are included in the Bid Tab for miscellaneous modifications, additional inspection and testing, additional associated work, and other unforeseen conditions. Inspection and testing allowances include the cost of engaging any third party inspection or testing agency if required, along with costs for reporting results as well as costs for actual inspections and tests.
- D. Procedures for submitting and handling Change Orders are included in General Conditions of these Contract Documents.
- E. The allowance does not include incidental labor required to assist the Owner, or costs for retesting on failure of previous tests and inspections. The allowance does not include costs of services not required by Contract Documents.
- F. Prior to final payment, an appropriate Change Order will be issued as recommended by the Owner to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.
- G. Any unused allowances will be returned to the Owner by deductive Change Order.

1.03 SCHEDULE OF ALLOWANCES

- A. Contingency Allowance:
 - 1. This item shall consist of miscellaneous work to be accomplished at the direction of the Owner. It shall include items of work consistent with and related to the project which may be necessary to the successful completion of the contractual agreement. It is expected the work under this item will be accomplished utilizing pay items indicated in the Bid Tab.
 - 2. All work performed under this section shall comply with the various sections of these specifications as appropriate to the specific items involved. This work shall be further described, by the Owner, in written form and/or

supplemental exhibits. In any event, no work will be allowed under this section without the prior written approval of the Owner.

- B. Owner Directed Site Clearing, Erosion & Sediment Control and Site Restoration
1. This item directed by the Owner shall consist of miscellaneous work ancillary to the contracted work to be accomplished, said work being outside the scope of the bid items. This item will be restricted to work associated with clearing, access road construction, erosion and sediment control, and site restoration.
 2. This item will not be considered for use for payment of items included in the scope of work for the various pay items under the Contract, i.e., access route construction for areas accessible by easement machine, etc.
 3. Each request for use of the allowance pay item shall be submitted in the form of a Request for Information (RFI) form and will only be assigned and approved upon completion of an approved Request for Quote (RFQ)
 4. For any unused allowance and prior to final payment, an appropriate Change Order will be issued as recommended by the Program Manager to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted
 5. All work performed under this section shall comply with the various sections of these specifications as appropriate to the specific items involved. This work shall be further described, by the Owner, in written form and/ or supplemental exhibits. In any event, no work will be allowed under this section without the prior written approval of the Owner.

1.04 SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form of Change Orders.
- B. Submit invoices or delivery slips to indicate quantities of materials delivered for use in fulfillment of each allowance.
- C. At Project Closeout, the unused amounts remaining in the various allowances will be credited to the Owner by Change Order.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

(Not Used)

END OF SECTION

**SECTION 01025
MEASUREMENT AND PAYMENT**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Methods of measurement and payment for items of work conducted under the Project.

1.02 SUMMARY

- A. 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 prices bid.
- B. All work not specifically set forth as a pay item in the Bidder's Unit Price Form shall be considered subsidiary obligations of the Contractor and all costs in connection therewith shall be included in the unit prices bid.
- C. All estimated quantities stipulated in the Unit Price 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. All estimated quantities stipulated in the Bidder's Unit Price Form are total quantities for the life of the contract. The County reserves the right to award the contract to multiple Contractors and quantities will be divided amongst the Contractors. The Bidders are informed that the actual estimated quantities to be awarded in a contract to each successful bidder could vary dependent on the number of successful bidders. The County reserves the right to distribute the estimated quantities based on project needs to include but not limited to priority, location, etc. Goals listed in the Contract documents will apply toward the actual quantities awarded to the bidder.
- E. The basis of payment for work shall be in accordance with the unit price bid items in the Unit Price Form and shall be full compensation for all labor, materials, and equipment required to furnish, install, construct, maintain, protect, and test the Work covered under the unit price bid item. Contractor agrees he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished.
- F. Payment will be made only for the actual quantities of work performed in compliance with the Contract Documents. The Contractor will be paid an amount equal to the approved quantity multiplied by the applicable unit price for items specified on the Unit Price Form. Any unused balance of the unit price work shall revert to the Owner upon completion of the project.
- G. Pay requests for work performed shall be itemized by asset ID. The pay request shall list each asset by ID number, describe the work performed per the payment bid form, provide the unit cost, and provide the extended cost.
- H. When submitting pay requests for periodic payment, the following documentation should be submitted at a minimum:

1. Contractor Payment Checklist
2. Application for Payment Form (AIA DOCUMENT G702 · APPLICATION AND CERTIFICATION FOR PAYMENT · 1992 EDITION · AIA® · © 1992 or later)
3. Payments Summary Sheet (Excel file with date, asset ID, and units for each payment line item submitted for payment)
4. LSBE Report(s)
5. Photo Documentation of Activities Illustrating Pre and Post Conditions

Additional instructions and/or requirements may be provided by the Program Manager at the project Kick-off meeting.

1.03 MEASUREMENT AND PAYMENT

- A. Sanitary Sewer Root Control, All Diameters - Bid Items 1- 6: Measurement for payment will be per linear foot (LF) of sewer acceptably treated with the Contractor's root control process based on the actual horizontal length of sewer treated as field measured from center of manhole to center of manhole along the axis of the sewer. The unit price applied shall be based upon the diameter of the treated sewer line and the diameters provided on the Contract Bid Form. Unit prices bid shall include all labor, equipment, material, chemicals, safety measures, debris disposal (including dumping fees), permit, and bonds required to perform the Work. Manholes used to access main line pipe segments shall also be treated as part of the main line treatment and shall be included in the unit price bid. Payment for warranty inspections and re-treatment due to guarantee provisions shall be included in the unit price bid. Light clearing as defined as areas requiring "bush hog" equipment for small tree and shrub removal and all traffic control measures with the exception of police support shall also be included in the unit price bid. The cost of police presence as may be required in support of traffic control in high traffic areas shall be compensated from the Contingency Allowance.
- B. CCTV Verification, All Diameters – Bid Items 7 - 8: CCTV Verification will be by assignment by the Program Manager. Measurement for Payment will be per linear foot (LF) of sewer, measured along the centerline of the pipe from centerline of structure to the end of survey or centerline of structure to centerline of structure, whichever is applicable. Lengths will be as recorded in the CCTV Verification Survey. Payment will constitute full compensation for authorized CCTV Verification completed and approved per Specification Section 01510#. No payment will be made for any unauthorized CCTV Verification. No separate payment will be made for mobilization/demobilization that might be required to perform the CCTV Verification. Maintenance of traffic and associated traffic control measures required for the work shall be included in the unit price. No separate payment will be made for data delivery and/or data quality control. Costs shall include, but not be limited to, labor, equipment, transportation, setup, tools, notifications, and all other related procedures and materials necessary to complete the CCTV Verification in accordance with Specification Section 01510#.
- C. Owner Directed Clearing, Erosion & Sediment Control and Site Restoration Allowance, Bid Item 9: Provides for site restoration work on private or County property outside the scope of the bid items. Site restoration shall only be performed as directed where property has been damaged during the course of the work, not due to Contractor negligence. Each request for use of the allowance pay item shall be submitted in the

form of a Request for Information (RFI) form and will only be assigned and upon completion and approval of a Request for Quote (RFQ). For any unused allowance and prior to final payment, an appropriate Change Order will be issued as recommended by the Program Manager to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

- D. Contingency Allowance, Bid Item 10: This Bid Item shall consist of miscellaneous work including, but not limited to, police presence in support of traffic control. Each request for use of the allowance pay item shall be submitted in the form of a Request for Information (RFI) form and will only be assigned and approved upon completion and approval of a Request for Quote (RFQ). For any unused allowance and prior to final payment, an appropriate Change Order will be issued as recommended by the Program Manager to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

1.04 ALLOWANCES

- A. The Contractor shall include in their Bidder's Unit Price Form all allowances stated in the Contract Documents.
- B. The Contractor shall cause work covered by these allowances to be performed for such amounts as estimated by the Contractor and agreed upon and directed by the Owner. However, the Contractor will not be required to employ persons against whom a reasonable objection is made. If the cost, when determined, is more than or less than the allowance, the Contract sum shall be adjusted via Change Order as an additional payment to the Contractor or as a credit to the Owner, accordingly.
- C. Schedule of Allowances
1. Owner Directed Clearing, Erosion & Sediment Control and Site Restoration As Specified in Section 01020.
 2. Contingency Allowance. As Specified in Section 01020

END OF SECTION

**SECTION 01030
SPECIAL PROJECT PROCEDURES**

PART 1 – GENERAL

1.01 SECTION INCLUDES

This section includes responsibilities and requirements of the Contractor specific to this project.

PART 2 - PRODUCTS

(Not Used)

PART 3 - EXECUTION

3.01 INSTALLATION

- A. The Contractor shall provide labor and material in a timely manner and of sufficient quantities to result in the performance of, but not limited to, the following:
1. Daily removal of all sanitary debris, work debris and trash resulting from any work activities identified within the Contract Documents. Disposal locations for any sanitary debris and/or hazardous materials shall be approved prior to disposal. Disposal of sanitary debris and/or hazardous materials shall be disposed only at approved locations. Manifests of hauling and such material shall be submitted to the Program Manager by the Contractor.
 2. If any discrepancies exist between drawings and specifications, the more stringent shall apply.
 3. Coordinate with all trades and other Owner or Program Manager work that may occur at or near the project location as generally described below.
 4. It is this Contractor's responsibility to advise the Program Manager as to any discrepancies in the work of others prior to starting the work.
 5. All field engineering and layout required for this work shall be the responsibility of this Contractor.
 6. All protection of finished work, including the work of others shall be the responsibility of this Contractor.
 7. The Contractor agrees to attend meetings promptly and their company will be represented with an authorized field representative and an authorized office representative capable and responsible for committing to delivery, manpower and completion dates for their work assignments
 8. The Contractor agrees all forms and reports (including technical data reports and forms) required by the Owner and Program Manager will be completed as required of these Specifications or as otherwise directed. Failure to submit these completed on time could result in a delay in payment.
 9. The Contractor agrees all Change Order work will be agreed upon in writing and signed by the Program Manager and the Owner before this work will begin.

10. The Contractor agrees to properly protect all materials and Owner assets from damage resulting from Contractor's work activities and assumes responsibility to replacement of such materials at their cost. This cost will be assessed by back charge and incorporated into a change order by the end of the month.
11. The Contractor agrees to properly protect all materials from damage by weather and assumes responsibility to replacement of such materials at their cost.
12. The Contractor agrees to work within the defined work hours of the Owner being typically 8:00a.m. to 5 p.m. or other hours as directed by the Owner or Program Manager to adhere to the requirements of the Work, including those related to Public Outreach and Notification. The Contractor agrees to perform all necessary overtime to get their work back on schedule if necessary. If due to this Contractor's failure to perform in a timely manner, premium time is required by any other Contractor(s) to bring the project back to the original schedule, the cost of such premium time shall be borne solely by the Contractor.
 - a. The Contractor agrees to honor following County holidays unless authorized to work by the Owner or Program Manager
 - 1) New Year's Day
 - 2) MLK Day
 - 3) President's Day
 - 4) Memorial Day
 - 5) Juneteenth
 - 6) Independence Day
 - 7) Labor Day
 - 8) Veteran's Day
 - 9) Thanksgiving Day
 - 10) Christmas Day
13. The Contractor agrees to provide certificates of insurance prior to their mobilization. Prior to commencing work the Contractor agrees to provide a current copy of the workman's compensation and liability insurance certificate.
14. The Contractor assumes responsibility for insurance coverage on all their equipment and tools against theft and damage. No claims will be registered against the Owner for loss of same. The Contractor will not lien the project for payment of any claims on equipment loss or damage due to vandalism or any other form.
15. The Contractor will abide by all OSHA requirements and/or instruction from the Program Manager and/or supervising and/or competent field personnel to make a safe work area. OSHA requirements to be the minimum safety level accepted.

16. Contractor agrees to respond to all Contractor change notifications within 24 hours and further to provide the Program Manager and/or Owner with the complete change estimate cost data within 7 calendar days.
17. Contractor shall provide fulltime onsite supervision of their work.
18. Contractor agrees with the performance schedule for each assessment assignment as established by the Program Manager and will provide any necessary measures required to achieve and maintain this schedule at no additional cost to the Owner, Program Manager and Owner's Representative.
19. Contractor agrees to provide all required submittals and receive approvals relative to crew supervisory personnel, manpower safety and training certifications, and equipment specifications prior to performing any field work. The Contractor will not occupy any assigned job site without a properly badged workforce and having other permissions including an approved Traffic Control Plan.

B. RESPONSIBILITY FOR OVERFLOWS/SPILLS AND DAMAGE TO PROPERTY AND UTILITIES:

1. It shall be the responsibility of the Contractor to schedule and perform the Work in a manner not causing or contributing to incidences of sanitary sewer overflows (SSOs) as defined in the latest Consent Decree.
2. In the event the Contractor's activities cause or contribute to SSOs (including work related building backups), the Contractor shall immediately take appropriate action to contain and/or stop the overflow, clean up the spillage, and disinfect the area affected by the SSO. Simultaneously, the Contractor will notify the Owner's Dispatch Center, the Owner, and the Program Manager to provide information concerning location, cause, volume of the SSO, and assessment whether the spill entered a stream or storm drain and assist in completing associated spill investigative paperwork. The Contractor shall be familiar with the details of spill response referred to in the Sanitary Sewer Overflow Contingency and Emergency Response Plan (CERP) approved by Owner. This document can be found on Department of Watershed Management website under the Consent Decree Program or upon request to the Owner or Program Manager.
3. The Contractor shall indemnify and hold harmless the Owner and the Owner's Representatives (including the Program Manager) for any fines or third-party claims for personal or property damage arising out of an SSO that is fully or partially the responsibility of the Contractor, including the legal, engineering, and administrative expenses of the Owner and Owner's Representatives (including the Program Manager) in defending such fines and claims.
4. Any damage to public or private property due to the work performed by the Contractor is the sole responsibility of the Contractor. Any damage to municipal or private utilities caused by the Contractor's equipment or operation shall be repaired in a manner approved by the Owner/Program Manager at the Contractor's expense. Any damage caused by the Contractor to utilities or property belonging to other entities shall be repaired by the Contractor to the satisfaction of the utility/property owner at the Contractor's sole expense. Any equipment stuck or left in the sewer line/lateral shall be retrieved by the Contractor within twenty-four (24) hours. The Contractor will notify the Owner and/or Project Manager immediately of such an incident.

The equipment will be removed at the sole expense of the Contractor or Depending upon circumstances at costs agreed upon by the Owner/Project Manager. Any damage to the Contractor's equipment is the Contractor's sole responsibility. If the equipment is stuck or left in the sewer line/lateral and causes an SSO, then the Contractor is liable for the SSO and all associated damages.

5. The Owner (and the Program Manager) reserves the right to make any repairs or retrieve any equipment and charge the Contractor accordingly.

C. RELOCATIONS

NOT USED

D. EXISTING UNDERGROUND PIPING, STRUCTURES, AND UTILITIES

1. The attention of the Contractor is drawn to the fact that during any earth disturbing activity, the possibility exists of the Contractor encountering various water, gas, telephone, electrical, or other utility lines not indicated on drawings or located in the field. The Contractor shall exercise extreme care before and during any land disturbing activity to avoid damage to the existing lines. Should damage occur to existing County water and/or sewer line, the Contractor shall repair the line at no cost to the Owner if directed to do so by the Owner/Project Manager.
2. The work assignments will be through work orders and associated GIS mapping through the Mobile Mapping Tool and maps which will not indicate the location of other underground facilities. Should such be provided by the Owner/Project Manager, the locations of existing underground piping structures and utilities are shown without express or implied representation, assurance, or guarantee that they are complete or correct or that they represent a true picture of underground piping to be encountered.
3. The Contractor shall exercise care in locating existing piping and utilities. All utilities, which do not interfere with complete work, shall be carefully protected against damage. Any existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at its expense as directed by the Program Manager.
4. During execution of the work if the Contractor notices any manholes without a cover, they should immediately notify the Owner/Program Manager as soon as possible.

E. HAZARDOUS LOCATIONS

The existing wet wells, manholes and related areas may be considered hazardous locations, in that explosive concentrations of sewage gas may be present.

F. WATER FOR CONSTRUCTION PURPOSES

The approval of the Owner shall be obtained before County water is used. Hydrants shall only be operated under the supervision of the Owner. Contractor shall be responsible for obtaining a hydrant meter from the Owner for this water use as directed by the Program Manager. Contractor shall be responsible for all costs (including water consumption) associated with hydrant meter(s). There shall be installed in each and every connection to the Owner's potable water supply, a

backflow preventer and calibrated metering device meeting the requirements of the Owner.

G. MOBILE MAPPING TOOL

The Contractor will be required to provide updates and edits to a live web mapping tool that will be displaying field work as well as the current status of field efforts. The Contractor shall provide their own tablet or laptop with internet connection (via air card or data plan or tablet), with one per crew minimum. Contractor shall provide an email address so that the Program Manager may set up a login for Contractor access to the web mapping tool. It is expected that the Contractor will be able to perform simple edits to the web map including, but not limited to, placing points on assets on which work is being performed that will include tabulated attribute information such as current work status, type of work being performed and other tracking variables for the web tool as directed by the Program Manager. Program Manager shall provide up to three hours of instruction on how the contractor shall populate the live web mapping tool.

F. CITYWORKS

1. All work on this project will be assigned, tracked, monitored and documented using Cityworks. Prior to start of the project the Contractor will provide appropriate employees for Cityworks training at no cost to the County. The Contractor will be required to identify assigned work orders, provide updates to work orders received, and closeout completed work orders via the County's Cityworks asset management platform as work progresses.
2. The Contractor shall update the daily progress at the end of each workday. It is recommended to update the work order while the work is being done in the field. The intent is for the Contractor's work progress performed during the day to be entered and viewable to the Program Manager by the start of the Contractor's next workday.
3. The Contractor shall provide field and office staff names and email addresses to the Program Manager for login access to the Cityworks platform, and Contractor will be responsible for providing a computer or tablet with internet access for use of the system. The Program Manager will provide access to the site, technical support, and training of up to two hours of instruction detailing how the Contractor shall receive and populate the work orders. The Contractor will provide appropriate employees for training at no cost to the County.

END OF SECTION

SECTION 01041 PROJECT COORDINATION

PART 1 - GENERAL

1.01 SECTION INCLUDES

The work under this Section includes the requirements of the Contractor to use standard methods suitable to the Owner, which produce results compliant and which meet the intent of the Contract Documents.

1.02 RELATED SECTIONS

This Section applies to the work of every division and every section of these Specifications.

1.03 QUALIFICATIONS AND REQUIREMENTS

- A. Management of the Project shall be through the use of standard methods suitable to the Owner, which produce results compliant and with which meet the intent of the Contract Documents.

1.04 RESPONSIBILITY FOR COORDINATION

- A. Carefully coordinate work with all other contractors and/or subcontractors to ensure proper and adequate interface of the work of other trades and subcontractors with the work of every section of these Specifications.
- B. The Contractor shall coordinate and schedule as necessary, operations with all utility companies in or adjacent to the area of Contractor's work. The Contractor shall require said utilities to identify in the field their property and provide drawings as necessary to locate them.
- C. The Contractor shall schedule the Contractor's Work, so the Contractor does not interrupt the operation of any existing facility, including, but not limited to water mains, sewers, gas, telephone, power, cable or transit. In the event certain tie-ins or other operations make it absolutely necessary to interrupt the operation of existing facilities, the Owner of such utility or facility will be notified and such work will be done at a time and in a manner acceptable to the utility/facility Owner and project Owner/Program Manager.
- D. The Contractor shall coordinate with all property owners and governing authorities impacted by the execution of work activities to prevent access or service interruptions to critical public institutions such as hospitals, nursing homes, churches, schools, police and fire services, etc. and any other businesses deemed necessary for public welfare and safety. The Contractor shall notify the Owner's Representative in a timely manner of any related coordination efforts required prior to commencing work activities possibly causing impacts. Failure to provide ample notification to the Owner's Representative will not justify claim for

delays.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

3.01 PREPARATION

A. Inspection

1. Prior to performing any work under a section, the Contractor shall carefully investigate and confirm existing conditions that could affect the Work as well as inspect the installed work of other trades and verify all such work is complete to the point where the work under the section may properly commence.
2. The Contractor shall verify that all materials, equipment and products to be installed under a section may be installed in strict accordance with the manufacturer's recommendation and standard details.

B. Discrepancies

1. In the event of discrepancy, immediately notify the Owner's Representative.

3.02 REQUIREMENTS

- A. The Contractor shall coordinate the Work with the Owner's Representative so the Contractor performance will not restrain or hinder the operation of existing water or wastewater facilities. If, at any time, any portion of the water or wastewater facilities or system is scheduled to be out of service, the Contractor must obtain prior approval from the Owner's Representative as to the date, time, and length of time such facilities are out of service.
- B. Connections to the existing facilities, temporary service interruptions and/or alteration of existing facilities will be made at times when the piping, asset, or facility involved is not in use, or at times, as established by the County, when the piping, asset, or facility involved can be conveniently interrupted for the period needed to execute the work activity involved.
- C. After having coordinated the work with the County/Program Manager, the Contractor shall notify the Program Manager of the time, time limits, and methods of each connection or alteration and have the approval of the Program Manager before any work is undertaken on the connections or alterations.
- D. Before work is performed in close proximity of any wastewater treatment facility, the Owner's approval shall be obtained to coordinate operations for the wastewater facilities and assets,

3.03 PUBLIC NOTIFICATION

- A. Public notification is critical and compliance with the public notification criteria is a prerequisite for the Work, especially when performing Work on sewers in easements which pass through private properties. Notification must be provided to all property occupiers/owners likely to be affected including residential, commercial and institutional (schools, hospitals, nursing homes, etc.). At a minimum, the following steps shall be taken:
4. The Contractor shall print and distribute pre-approved advance notice door hangers 72 hours before conducting Work. Expedited Work may only require 24 hours' notice before conducting Work upon approval by County. The Contractor shall distribute the door hangers to the property owners (residential, commercial and institutional) in the affected area(s). The advance notice door hangers shall be customized by Public Outreach to suit this project and will be provided to the Contractor for printing prior to project's commencement. The Contractor must notify Public Outreach before notification to the property owners. If the Work is delayed, the Contractor must re-distribute door hangers.
 5. The Contractor is responsible for utilizing the "Right of Entry" (ROE) Protocol as a guide to obtain the ROE and/or Permission form from property owners.
 - a. The Contractor is responsible for distributing pre-approved "Right-of-Entry" (ROE) forms if land disturbance will occur on the owner's property. Secured signatures from affected property owners on the ROE forms are needed prior to conducting Work activities such as CCTV and/or Cleaning.
 - b. The Contractor is responsible for distributing pre-approved Permission forms and securing signatures from affected property owners, if access is needed to an owner's property and no land disturbance will occur. The Permission form is needed prior to conducting Work such as CCTV and/or Cleaning.
 - c. The Contractor will utilize the ROE/Permission Form Cover letter to accompany both the ROE and/or Permission form.
- B. The Contractor shall keep a daily log of the distribution of the door hangers. This shall be maintained and submitted to the County and/or Program Manager upon request.
- C. The Contractor shall also utilize Cityworks to update the status of: the distribution of door hangers, and the ROE and/or Permission form needed at a particular address.
- D. The Contractor shall alert the appropriate County, Program Manager and/or personnel of their work locations on a daily basis.
- E. The Contractor will provide and place "Right-of-Way" signs in prominent locations where the Work is planned 24-hours in advance of commencing the inspection. Signs will be a minimum of 24 inches wide by 18 inches high with letters a minimum of 2 inches high. Signs will be supported at a minimum of 12 inches above grade by integral metal frames. Wording on the signs shall be similar to the following:
- SANITARY SEWER CHEMICAL ROOT CONTROL AND/OR ASSESSMENT WILL BE CONDUCTED ON "date" and "time." Contact "person" with "company" at "phone number" for additional information.**

END OF SECTION

SECTION 01060 REGULATORY REQUIREMENTS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Contractor's general responsibilities for adhering to all County, State, and Federal regulatory division's rules, regulations, and laws even when plans or specifications do not indicate permitting actions are required for the project.
- B. Permits and Responsibilities: The Contractor shall, without additional expense to the Owner, comply with any applicable Federal, State, County and municipal laws, codes and regulations, in connection with the execution of the Work.
- C. The Contractor shall take proper safety and health precautions to protect the Work, the workers, the public and the property of others.
- D. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the Work, except for any completed unit of work previously accepted.
- E. Business Licenses: The Contractor shall provide the Owner, on the proper form, proof of being licensed to do business within DeKalb County; proof of proper business licenses shall also be provided by the Contractor for any and all subcontractors coming under the jurisdiction of this Contract.

1.02 ROADWAY PERMITTING

- A. Traffic control shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), latest edition and the specific direction of the authority having jurisdiction.
- B. The Contractor is responsible for obtaining road opening permits from the DeKalb County Department of Public Works Transportation Division at (770) 492-5222, including providing any required restoration bonds.
- C. The Contractor is responsible for obtaining (coordinating all applications with the Owner) all permits required by the GDOT. The Contractor is not permitted to work within the rights-of-way of any road requiring a permit from the GDOT until such time as the permit is provided and prominently displayed onsite.

1.03 EPD stream buffer Permits Activities

- A. Buffers on state waters are valuable in protecting and conserving land and water resources, therefore buffers should be protected. The buffer variance process will apply to all projects legally eligible for variances and to all state waters having vegetation wrested from the channel by normal stream flow, provided adequate erosion control measures are incorporated and all requirements in the project plans and specifications are implemented. The following activities do not require application to or approval from the EPD.

1. Stream crossings for water lines or stream crossing for sewer lines occurring at an angle, as measured from the point of crossing, within 25 degrees of perpendicular to the stream and causing a width of disturbance of not more than 50 feet within the buffer; or
2. Where drainage structures must be constructed within the twenty-five (25) foot buffer area of any state water not classified as a trout stream; or
3. Where roadway drainage structures must be constructed within the twenty-five (25) foot buffer area of any state waters or the fifty (50) foot buffer of any trout stream.

1.04 ACOE Permits for MISCELLANEOUS Activities

NOT USED.

1.05 Quality Assurance

- A. Contractor shall perform all work under this Section in accordance with all pertinent Rules and regulations including, but not necessarily limited to, those stated herein and these Specifications, the more stringent provisions shall govern.
- B. The Contractor shall allow access to ACOE, EPA, EPD and other enforcing personnel should they wish to visit the work sites. This includes assisting with transportation as may be required along easements, if necessary.

PART 2 - PRODUCTS

2.01 Materials

NOT USED

PART 3 – EXECUTION

3.01 GENERAL

Provide all materials and promptly take actions necessary to achieve effective compliance with regulations in accordance with Section 404 of the Clean Water Act, the enforcing agency (ACOE), other enforcing personnel and these Specifications.

3.02 EPD STREAM BUFFER PERMIT CONDITIONS

NOT USED

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. General requirements for project meetings with the Program Manager and Owner's Representative including:
 - 1. Kickoff Meeting
 - 2. Progress meetings,
 - 3. Inspection tours.
 - 4. All other meetings determined to be necessary by the Owner or Owner's Representative.

1.02 RELATED SECTIONS

- A. Section 01010: Summary of Work
- B. Section 01300: Submittals

1.03 RESPONSIBILITY

- A. The Program Manager will determine the agenda for and chair the meetings described below; and shall prescribe the documentation and format of that documentation for the meetings to be presented. The Contractor will furnish information needed by the Program Manager when requested.
- B. Periodic progress meetings and specially called progress meetings throughout the progress of the Work shall be held at times to be determined by the Program Manager, but at least on a monthly basis.
- C. The Contractor shall have the following specific responsibilities:
 - 1. Assist the Program Manager by providing information needed for the meeting
 - 2. Comment on, recommend items for discussion, and/or approve the proposed meeting agenda
 - 3. Provide appropriate personnel at the meeting to discuss items associated with the agenda
 - 4. Review, comment on and/or approve minutes of the meeting
- D. Representatives of contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.
- E. The County/Program Manager shall attend progress meetings to ascertain the work is expedited consistent with the Contract Documents and the project schedules.

1.04 KICKOFF MEETING

- A. The Program Manager will schedule this meeting within 5 days of the issuance of the Notice to Proceed.
- B. The location of the meeting will be designated by the Program Manager.
- C. The following parties shall attend the meeting:
 - 1. Program Manager
 - 2. Owner/Owner's Representative
 - 3. Contractor's Superintendent and/or Responsible Representative
 - 4. Subcontractors as appropriate to the agenda
 - 5. Other agency representatives (EPD, EPA, DWM, etc.) as appropriate to the agenda
 - 6. Representatives of suppliers and manufacturers as appropriate to the agenda
 - 7. Others as requested by the Program Manager the Owner's Representative, or Contractor
- D. Suggested Agenda:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.
 - b. Projected Project Schedules. (submittal schedule, preliminary progress schedule, payment schedule)
 - 2. Critical work sequencing. (Contract start date and completion date)
 - 3. Major equipment submittals, deliveries and priorities.
 - 4. Project Coordination including:
 - a. Project constraints
 - b. Critical work areas
 - c. Traffic concerns
 - d. Pedestrian/traffic safe passage
 - e. Working hours
 - f. Non-working hours.
 - g. Designation of responsible personnel.
 - h. Contractor's responsibility for Contract compliance and quality control
 - i. Project field coordination
 - j. pre, and post construction, and progress photos and documentation
 - 5. Procedures and processing of:
 - a. Field decisions.
 - b. Proposal requests.
 - c. Submittals.
 - d. WCD/Field Orders/ NCN/Change Orders.

- e. Applications for Payment. Lien waivers
- 6. Adequacy of distribution of Contract Documents.
- 7. Procedures for maintaining Record Documents.
- 8. Temporary utilities and facilities/storage and staging facilities
- 9. Safety and first aid procedures and responsibilities.
- 10. Security Procedures/responsibilities
- 11. Insurance and bonds
- 12. Close out, Substantial and Final completion

1.05 Progress Meetings

- A. Scheduling: Meetings shall be conducted at least monthly throughout the construction or at other intervals directed by the Owner's Representative.
- B. Progress meetings will be held on a bi-weekly basis for at least the first 3 months.
 - 1. Special meetings can be called by the Owner's Representative when warranted.
 - a. Need for a Special Meeting will be determined by the Owner's Representative.
 - b. Pre-installation meetings as determined necessary by the Owner's Representative
 - 2. Meeting frequency may be reduced at the request of the Owner's Representative.
- C. Location of the meetings: Department of Watershed Management, 180 Sams Street, Decatur, GA (30030) or other location designated by the Owner's Representative.
- D. Progress meetings shall include (as a minimum)
 - 1. Attendance:
 - a. Owner and/or Owner's Representative(s), as appropriate
 - b. Program/Construction Manager, as appropriate
 - c. Resident Project Representative
 - d. Contractor's Project Manager, Superintendent, and other representative(s) as appropriate
 - e. Subcontractors and suppliers as appropriate to the agenda
 - f. Other governing agencies as appropriate for the work being completed
 - g. Others when appropriate
 - h. Subcontractors and suppliers as appropriate to the agenda
 - 2. Suggested minimum agenda:
 - a. Review and approval of minutes of previous meeting
 - b. Actual vs. scheduled progress since previous meeting

- c. Planned activities for the next two weeks
 - d. Problems with and revisions to schedule/narrative
 - e. Corrective measures and procedures to regain projected schedule
 - f. Contract and/or Record Document clarifications
 - g. Field observations, problems, and conflicts
 - h. Quality control
 - i. Actual and potential changes and their impacts
 - j. Review proposed changes for:
 - 1) Effect on Schedule and on completion date.
 - 2) Effect on other components of the Project.
 - k. Safety issues
- E. The Program Manager shall have the following specific responsibilities:
- 1. Distribute agenda for meetings
 - 2. Distribute written notice of each meeting a minimum of seven days in advance of meeting date to all parties involved
 - 3. Make physical arrangements for meetings
 - 4. Record minutes to include significant proceedings, decisions and action items
 - 5. Provide and record a sign-in sheet for all attendees
 - 6. Reproduce and submit word-processed minutes
- F. Representatives of contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.06 INSPECTION TOURS

- A. Formal inspection tours shall be made of the job progress for the Owner and any other officials as the occasion warrants and as scheduled by the Program Manager.
- B. If requested by the Program Manager, the Contractor shall be prepared to show and explain work completed and in progress throughout the Project to the inspection parties.

END OF SECTION

SECTION 01300 SUBMITTALS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Provisions in this Section are mandatory procedures for preparing and submitting equipment data sheets, assessment reports, procedures, schedules, certifications or any other submittals to be prepared and submitted as required of the Contract Documents.
- B. Submissions shall be in orderly sequence and timed to cause no delay in the Work.
- C. Delays occasioned by requirement of submissions of any required submittal data not in accordance with Contract Documents are Contractor's responsibility, and will not be considered valid justification for extension of Contract Time.
- D. Commence no portion of work requiring submittals until submittal has been acted upon by the Program Manager.
- E. Project delays or delays in the purchasing of materials or equipment occasioned by the requirement for resubmission of submittal data initially rejected by the Program Manager and/or the Owner, or are not originally in accordance with the Contract Documents upon review by the Program Manager and/or Owner, are the Contractor's sole responsibility and will not be considered valid justification for time extensions.
- F. No portion of the Work requiring the review of submittal data shall be commenced until each such submittal has been reviewed by the Program Manager and/or Owner, and the action required on the returned submittal does not require a correction and resubmittal (i.e. "Reviewed" or "Revise and Resubmit," or similar notation); and further, each installer shall have possession of such final reviewed submittal prior to commencing its portion of the Work.
- G. At the time of submission the Contractor shall clearly delineate any deviations in the submittals from the requirements of the Contract Documents so, if the deviations are deemed acceptable, suitable action may be taken for proper adjustment. Otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the Control Documents.
- H. Submittals shall clearly indicate the applicable details of information being proposed. Generalized product information not clearly defining specific equipment or materials to be provided will be rejected.
- I. Certificates of compliance shall be provided, as required or requested by the County's Program Manager, for any items utilized in the work.

1.02 RELATED SECTIONS

- A. SECTION 01015 - CONTROL OF WORK

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

3.01 SUBMITTAL REQUIREMENTS

- A. Within 2 weeks of receiving the Notice To Proceed, the Contractor shall submit to the Owner, data relating to materials and equipment he or she proposes to furnish for the work. Such data shall be in sufficient detail to enable the Owner to identify the particular project and to form an opinion as to its conformity to the Specifications.
- B. Provide six (6) copies of submittals to the Program Manager.
- C. Submittals shall be digitally submitted in PDF format in color with all pages legible when reprinted on 8.5" x 11" paper.
- D. Each submission must be accompanied by a consecutively numbered letter of transmittal, listing the contents of the submission and identifying each item by reference to Specification Section or Drawing number. The Submittal shall contain a Submittal Identification Number.
- E. Submittals shall contain:
 - 1. The date of submission and the dates of any previous submissions.
 - 2. The Project title and the Owner's Project Number.
 - 3. Contract identification.
 - 4. Identification of the submittal/product, with the Specification Section number.
 - 5. Field dimensions clearly identified as such.
 - 6. Relation to adjacent or critical features of the work or materials.
 - 7. Applicable standards, such as ASTM or Federal Specification numbers.
 - 8. Identification of deviations from Contract Documents.
 - 9. Identification of revisions on re-submittals.
 - 10. An 8 inch by 3 inch blank space for Contractor and Program Manager stamp.
 - 11. Contractor's stamp shall be initialed or signed, certifying approval of the submittal and to the coordination of the information within the submittal with the requirements of the work and of Contract Documents.
- F. Other special requirements may be listed in the Technical Specifications and/or given to the Contractor by the Program Manager.

3.02 CONTRACTOR'S REVIEW

- A. Review all submittals before forwarding to the Program Manager and stamp to indicate conformance with requirements of the Contract Documents.
- B. Determine and verify field measurements and construction, materials, catalog numbers and similar data. Coordinate each submittal with requirements of work and Contract Documents.
- C. Where work is indicated "By Others", Contractor shall indicate subcontractor responsibility for providing and coordinating such work.

- D. Contractor agrees the submittals processed by the Program Manager are not Change Orders, the purpose of submittals by Contractor is to demonstrate the Contractor understands design concept, he demonstrates his understanding by indicating materials he intends to furnish and install, and by detailing fabrication and installation methods he intends to use.
- E. Contractor represents, by submitting any submittals he has complied with provisions specified above. Submissions made without Contractor's approval indicated thereon will be returned without being reviewed for compliance with this requirement.
- F. Date each submittal and indicate name of Project, Program Manager, Contractor and Subcontractor, as applicable, description or name of submission
- G. Accompany submittal with transmittal letter containing project name, Contractor's name, number of submittals, titles and other pertinent data. Transmittal shall outline deviations, if any, in submittals from requirements of Contract Documents.

3.03 PROGRAM MANAGER'S REVIEW

- A. Program Manager will review submittals within 10 working days so as to cause no delay in work.
- B. Program Manager's review is only to determine conformance with design concept of project and with information in Contract Documents. Program Manager's determination regarding an individual item shall not extend to the entire assembly in which the item functions.
- C. Program Manager's review of submittals shall not relieve Contractor of responsibility for any deviation from requirements of Contract Documents unless Contractor has informed Program Manager in writing of such deviation at time of submission and Program Manager has given written acknowledgment of the specific deviation. Program Manager's review shall in no way relieve Contractor from responsibility for errors or omissions in submittals.
- D. Program Manager will return submittals to Contractor marked with appropriate comment as defined below:
 - 1. "Reviewed" indicates the drawings have been reviewed for conformance with design and no exceptions are taken. Proceed with the work.
 - 2. "Revise and Resubmit" indicates the annotations are to be confirmed in a resubmittal of the affected drawing. However, subject to prior arrangement with the Engineer, the Contractor may proceed with the work as annotated during the interim required for resubmittal.
 - 3. "Rejected" indicates drawing to be revised and resubmitted for further review prior to proceeding with the work.
 - 4. "Furnish as Corrected" indicates Contractor is to move forward with minor corrections as Indicated. A resubmittal to the Program Manager is not required before purchasing and/or proceeding. A final submittal with corrections will be submitted to the Program Manager upon completion.
- E. Program Manager will return one (1) copy in PDF format for printing and distribution by Contractor.

3.04 RESUBMISSION

- A. Make corrections and changes indicated for unacceptable submissions and resubmit in same manner as specified above. Resubmission for review shall be made by Contractor within 10 working days of documented receipt of returned submittals by Contractor.
- B. In resubmission transmittal direct specific attention to revisions other than corrections requested by Program Manager on previous submissions, if any.

3.05 DISTRIBUTION

- A. Contractor is responsible for obtaining and distributing copies of submittals to his Subcontractors and material suppliers after as well as before final approval.

PART 4 – PRODUCTS

(Not Used)

PART 5 – EXECUTION

(Not Used)

END OF SECTION

SECTION 01310 SCHEDULING OF WORK

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Describing the scheduling and progress reporting requirements of the Contract. The primary objectives of the requirements of this Section are:
 - 1. To insure adequate planning and execution of the Work by the Contractor;
 - 2. To assist the Program Manager in evaluating the progress of the Work;
 - 3. To provide for optimum coordination by Contractor of its subcontractors, and of its Work with the work or services provided by the Owner or any separate contractors; and
 - 4. To permit the timely prediction or detection of events or occurrences affecting the timely prosecution of the Work.
- B. Nothing in this Section shall be construed to usurp the Contractor's authority, responsibility, and obligation to plan and schedule the Work as Contractor deems, subject to all other requirements of the Contract Documents.

1.02 DEFINITIONS

- A. Critical Path Method (CPM): A planning and scheduling technique involving the charting of all events and operations to be encountered in completing a given process, rendered in a form permitting determination of the relative significance of each event and establishing the optimum sequence and duration of operations.
- B. Schedule of Record: The Schedule of Record will be the Official Project Schedule for this Contract All updates and/or revisions relating to coordinating the Work, scheduling the Work, monitoring the Work, reviewing the progress payment requests, evaluating time extension requests, and all other objectives shall be made to this Schedule. No other Schedule will be recognized for this Contract
- C. Total Float Total float or slack time associated with one chain of activities is defined as the amount of time between earliest start date and latest start date or between earliest finish date and latest finish date for such activities, as calculated as part of the accepted Schedule Submittal.

1.03 GENERAL SCHEDULING REQUIREMENTS

- A. The Work of this Contract shall be planned, scheduled, executed, and reported using the critical path method (CPM).The Contractor shall use either Microsoft Project 2013 Professional version or later (MPP file) or Oracle Primavera P6 Version 8: Professional Project Management (MPX file) software program to develop and maintain its Schedule Submittal:
- B. The Preliminary Schedule Submittal, as defined herein, shall represent the Contractor's commitment and intended plan for the Work in compliance with the Contract completion date and interim milestone dates specified or as directed by the Program Manager. The Preliminary Schedule Submittal shall take into account all

foreseeable activities to be accomplished by any separate contractors or the Owner, and interface dates with utility companies, the Owner's operations, and others. The Preliminary Schedule Submittal shall anticipate all necessary manpower and resources to complete the Work within the dates set forth or as directed and agreed to.

- C. A Preliminary Schedule Submittal found unacceptable by the Program Manager shall be revised by the Contractor and resubmitted within five (5) working days.
- D. Once reviewed and accepted by the Program Manager, the Preliminary Schedule Submittal will become the Baseline Schedule. A copy of the Baseline Schedule should immediately be made and labeled as the Schedule of Record. The purpose of the Schedule of Record is to capture actual and current status each update period, and it can be compared against the Baseline Schedule as needed.
- E. The Contractor is responsible for determining the sequence of activities, the time estimates of the detailed design activities and the means, methods, techniques and procedures to be employed. The Schedule of Record shall represent the Contractor's best judgment of how it will execute the Work in compliance with the Contract requirements. The Contractor shall ensure the Schedule of Record is current and accurate and is properly and timely monitored, updated and revised as Project conditions and the Contract Documents require.

1.04 SCHEDULE SUBMITTAL

- A. Within ten (10) workdays after the Notice to Proceed, the Contractor shall submit the Preliminary Schedule Submittal according to the requirements established herein. The Schedule of Record and accompanying reports, statused through the period agreed upon by the Program Manager will be presented twenty four (24) hours ahead of at each construction meeting, to give the Program Manager time to review to review it and formulate initial comments.
- B. The Schedule of Record shall be based upon the quantities of Work presented in the Contract Document's Bidder's Unit Price Form.
- C. The Schedule of Record shall include, but not be limited to, the following information:
 - 1. Project name
 - 2. Distinct, logical and identifiable subdivisions of Work
 - 3. Activities for all aspects of the Work, with durations. Submittals and other similar activities may exceed ten (10) workdays if approved by the Program Manager.
 - 4. All start dates, milestones, total float and completion dates.
 - 5. Responsibility for each activity.
 - 6. Cost loaded values for each activity for which payment is required. The cost breakdown shall have a direct correlation to the Schedule of Values to be used as the basis for Applications for Payment
 - 7. Labor resources
 - 8. Confirm the Work is to be performed on single shift and 5 day per work week basis. This period is further defined as Monday through Friday from 8:00am-5:00pm or other hours as directed by the Owner or Program Manager to

- adhere to the requirements of the Work as described in specification Section 01030.
9. Shall consider all foreseeable factors or risks affecting, or may affect, performance of the Work including: historical and predicted weather conditions, applicable laws, regulations or collective bargaining agreements pertaining to labor, transportation, traffic, air quality, noise, and any other applicable regulatory requirements.
 10. A tabular report listing all predecessor and successor activities for each activity.
 11. A legible time scaled network diagram.
 12. A listing of the project calendar, indicating the anticipated days of work performance and non-work (Contractor/County holidays) that extends through end of contract period.
 13. Contractor shall submit three (3) 11" x 17" colored copies and one (1) electronic copy of all Construction Schedules. Contractor shall submit three (3) copies of all bar charts, reports and/or other required data.
 14. A digital submittal, in a form and format acceptable to the Program Manager, is a requirement of the Schedule Submittal. This electronic media should include a copy of all bar charts, schedule reports and narrative in pdf format and the Schedule of Record statused through the current period in MPP or MPX format.
- D. Activities and milestones to appear on the Schedule Submittal shall include, but not be limited to, Work Progress Meetings, Submittals, Pre installation meetings, Owner/Program Manager reviews impacting the Work, preconstruction documentation, Site work and restoration, demolition, excavation, pipe laying, other pipe installation related activities, structure installation, paving, major material fabrication and delivery, shop drawings submittals, progress meetings, equipment delivery and installation, coordination requirements, inspections, dates of Substantial and Final Completion, testing and instruction, and any other activities required by the Program Manager. In lieu of including submittals in the Schedule of Record, a separate Submittal Schedule may be prepared and maintained. For each major material submittal, a string of four (4) activities should be incorporated to reflect: preparation of the submittal, review by Program Manager (based on ten (10) workdays), procurement and delivery. The delivery of said material is to occur prior to its scheduled installation.
- E. The Program Manager shall have the right to require the Contractor to modify any portion of the Contractor's Schedule of Record or Recovery Schedule, as herein required, (including cost loading) with the Contractor bearing the expense thereof, which the Program Manager reasonably determines to be:
1. Impractical or unreasonable;
 2. Based upon erroneous assumptions, calculations, or estimates;
 3. Not in compliance with other provisions of the Contract Documents;
 4. Required to ensure proper coordination by the Contractor of the Work of its subcontractors and with the work or services being provided by any separate contractors;

5. Necessary to avoid undue interference with the Owner's operations
6. Necessary to ensure completion of the Work by the milestone and completion dates set forth in the Contract Documents;
7. Required for the Contractor to comply with the requirements of this Section or any other requirements of the Contract Documents; or
8. Not in accordance with the Contractor's actual operations.

1.05 UPDATING OF DESIGN SCHEDULE/PROGRESS REPORTS

- A. The Program Manager shall review the Contractor's report of actual progress at each Progress Meeting. At a minimum, this report should be submitted 24 hours in advance of the Progress Meeting to allow the Program Manager to review it and formulate initial comments. Prepared by the Contractor, the progress reports shall set forth up-to date and accurate progress. Said reports shall be prepared by the Contractor in consultation with all principal subcontractors.
- B. The Schedule Report of the Contractor shall show the activities, or portions of activities, completed during the reporting period, the actual start and finish dates for these activities, remaining duration and estimated completion dates for both activities currently in progress and those expected to begin within the next two weeks. This shall be provided in both hard copy and electronic format.
- C. At the Progress Meeting a total review of the Project will take place including but not limited to, the following:
 1. Current update of the Schedule of Record
 2. Anticipated detailed design activities for the subsequent report period plus a two week look ahead.
 3. Critical items pending
 4. Contractor requested changes to the Schedule of Record accompanied by a detailed narrative.
- D. The Contractor shall submit a detailed narrative with the progress report including, but not be limited to, a narrative describing actual Work accomplished during the reporting period, a description of problem areas, current and anticipated delaying factors and their impact, explanations of corrective actions taken or planned, any proposed newly planned activities or changes in sequence, and proposed logic for a Recovery Schedule as further described herein.
- E. No invoice for payment shall be submitted and no payment whatsoever will be made to the Contractor until the Schedule of Record, and narrative reports as defined herein, are updated and provided, in both hard copy and electronic format, to the Program Manager for review and approval.

1.06 SCHEDULE REVISIONS

- A. Should the Contractor desire to or be otherwise required under the Contract Documents to make modifications or changes in its method of operation, its sequence of Work or the duration of the activities in the Schedule of Record, it shall do so in accordance with the requirements of this Paragraph and the Contract

Documents. The approved Schedule of Record may only be revised by written approval of the Program Manager as provided herein.

- B. The Contractor shall submit requests for revisions to the Schedule of Record to the Program Manager using the Schedule Revision Form provide by the Program Manager. The Contractor shall identify revisions and descriptions of logic for rescheduling work and substantiate the milestone and completion dates will be met as listed in the Contract Documents. Proposed revisions acceptable to the Program Manager will be approved in writing and incorporated into the Schedule of Record.
- C. Requests for revision will be accompanied by evidence acceptable to the Program Manager stating the Contractor's subcontractors agree with the proposed revisions.
- D. The impact of all change orders to this Contract shall be included in the project schedule. When Work is associated with a Change Order, incorporate adjustments to the schedule. The adjustments shall be resource-loaded with material unit quantities and the corresponding cost accounts, resources account codes, activity description, accepted costs and time adjustments. The activity ID number shall identify the number of the Change Order.

1.07 RECOVERY SCHEDULE

- A. Should the updated Schedule of Record, at any time during the Contractor's performance, show, in the sole opinion of the Program Manager, the Contractor is behind schedule for any milestone or completion date for any location or category of work, the Contractor, at the request of the Program Manager, shall prepare a Schedule Revision for the purpose of displaying recovery. The revision shall identify how the Contractor intends to reschedule its Work in order to regain compliance with the Schedule of Record within fourteen (14) calendar days, and shall be provided to the Program Manager in both hard copy and electronic format
- B. Within ten (10) workdays, the Contractor shall prepare and submit to the Program Manager, in both hard copy and electronic format, a Recovery Schedule, incorporating the best available information from subcontractors and others permitting a return to the Schedule of Record at the earliest possible time. The Contractor shall prepare a Recovery Schedule to the same level of detail as the Schedule of Record. The Recovery Schedule shall be prepared in coordination with other separate contractors on the Project.
- C. Within two (2) workdays after submission of the Recovery Schedule to the Program Manager, the Contractor shall participate in a conference with the Program Manager to review and evaluate the Recovery Schedule. Within two (2) workdays of the conference, the Contractor shall submit the revisions necessitated by the review for the Program Manager's review and acceptance. The Contractor shall use the accepted Recovery Schedule as its plan for returning to the Schedule of Record.
- D. The Contractor shall confer continuously with the Program Manager to assess the effectiveness of the Recovery Schedule. As a result of these conferences, the Program Manager will direct the Contractor as follows:
 - 1. If the Program Manager determines the Contractor continues behind schedule, the Program Manager will direct the Contractor to prepare a Schedule Revision and comply with all the requirements of a Schedule Revision as stated herein and the other requirements of the Contract Documents; provided, however, nothing herein shall limit in any way the

rights and remedies of the Owner and Program Manager as provided elsewhere in the Contract Documents; or

2. If the Program Manager determines the Contractor has successfully complied with provisions of the Recovery Schedule, the Program Manager will direct the Contractor to return to the use of the approved Schedule of Record.

1.08 TOTAL FLOAT TIME

- A. Total float or slack time shown on the currently approved Schedule of Record is not for exclusive use or benefit of either the Program Manager or the Contractor and is available for use by either of them according to whichever first needs the benefit of the total float to facilitate the effective use of available resources and to minimize the impact of Project problems, delays, impact, acceleration or changes in the Work arising during performance. The Contractor specifically agrees total float time may be used by the Program Manager in conjunction with their review activities or to resolve Project problems. The Contractor agrees there will be no basis for any modification of the milestone or completion dates or an extension of the Contract Time, or a claim for additional compensation as a result of any Project problem, delay, impact, acceleration, or change order only resulting in the loss of available total float on the currently approved Schedule of Record
- B. Total float time shown on the Schedule of Record shall not be used arbitrarily by the Contractor in a manner, in the opinion of the Program Manager, unnecessarily delays separate contractors from proceeding with their work in a way detrimental to the interests of the Owner.

END OF SECTION

SECTION 01320
PROGRESS REPORTS & VIDEOS

PART 1 – GENERAL

1.01 SECTION INCLUDES

This Section includes administrative and procedural requirements for documenting the progress of assessment during performance of the Work, including the following:

- A. Daily Reports
- B. Pre & Post Work Site Videos

1.02 RELATED SECTIONS

- A. Section 01300 - Submittals
- B. Section 01420 - Inspection of Work
- C. Section 01700 - Project Closeout

1.03 SUBMITTALS

A. DAILY REPORTS

1. The Contractor's Superintendent shall prepare and submit Daily Reports throughout the project, from Notice to Proceed to Final Acceptance. Daily Reports shall be kept in an orderly manner, available for inspection or review when requested by the County and Program Manager. Copies of Daily Reports shall be accumulated and submitted to the Program Manager on a weekly basis, on a regular day and time to be determined by the Program Manager. Failure to submit Daily Reports or to comply with the format requirements below is cause for the County to retain additional monies due the Contractor from the monthly Application(s) for Payment until such time as the reports have been brought up to date by the Contractor.

a. Each Report shall include the following information at a minimum:

- 1) Manpower by subcontractor, trade, and skill level
- 2) Weather and temperatures (summary of conditions)
- 3) List of visitors to the jobsite
- 4) Specific work performed with locations
- 5) Situations or circumstances which could delay the Work or give cause for a time extension or additional cost
- 6) Instructions requested (and of whom)
- 7) Materials received
- 8) Major equipment arrival/departure
- 9) Total days accrued under the terms of the Contract Documents
- 10) Accidents and incidents
- 11) Safety issues
- 12) Meetings

- 13) A copy of a delivery receipt of all deliveries, to the project on that day, of equipment and/or materials
 - 14) A copy of all field reports from testing activities that were performed
 - 15) Other significant events at the jobsite
2. The Contractor shall take the necessary action required to specifically alert the Program Manager to potential items impacting the progress of the Work. Such items shall be clearly highlighted in the report.
 3. All Daily Reports shall be clearly handwritten or typed. Poor copies report in sloppy or illegible handwriting or on wrinkled paper will not be accepted.
 4. Contractor must adhere to reporting requirements in this Specification Section as well as any other reporting requirements listed in other Specification Sections, specifically those related to reporting associated with assessment activities.

B. VIDEOS

1. Accompanying each work order and prior to the beginning of any work, the Contractor shall take a pre-site work video of the site work area to record existing conditions. Video shall show all conditions which might later be subject to disagreement. These conditions shall be shown in sufficient detail to provide a basis for decisions. The video shall be submitted in external hard drive format, with a log of the items taped prior to assessment activities. No request for payments will be processed until the pre-site work video has been submitted and approved by the Program Manager. 2 copies each are required for close-out.
2. Following completion of the work, another recording shall be made showing the same site work areas and features as in the pre-site work video. Post-site work video shall be made prior to final acceptance and before submitting a request for final payment. Video shall be submitted in external hard drive format, with a log of the items taped, with the final payment application. 2 copies each are required for close-out.
3. At the conclusion of the Project, the Contractor shall have all videos generated for the project consolidated and copied onto an external hard drive and prepare a Table of Contents for the drive. A copy of the external hard drive and Table of Contents for the external hard drive shall be transmitted to the Program Manager with the request for final payment. 2 copies each are required for close-out.

PART 2 – PRODUCTS

(not used)

PART 3 – EXECUTION

(not used)

END OF SECTION

**SECTION 01420
INSPECTION OF WORK**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes guidelines for the inspection of contract work.

1.02 QUALIFICATIONS AND REQUIREMENTS

- A. The Program Manager shall have the right of access to and inspection of the work at all times. Materials, equipment, and products shall be subject to the Program Manager's review as specified herein.
- B. The Program Manager is responsible for general surveillance of the work on behalf of the County. The Program Manager is not responsible for construction means, methods, sequences, or procedures or for safety precautions and programs in connection with the work. The Program Manager is not responsible for supervision of the work and shall not give instruction to the Contractor's personnel as to methods of executing the work. The Program Manager is not responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.
- C. Any government representative or other individual identified by the County shall have access to the work wherever it is in preparation or progress. The Contractor shall provide proper facilities for such access and inspection.

1.03 RESPONSIBILITY OF THE CONTRACTOR

- A. The Contractor is responsible for all materials, equipment, methods, and procedures in execution of the work.
- B. The Contractor shall correct, to the satisfaction of the Program Manager, any work or material found to be defective or of deficient quality. Such corrections shall be made by the Contractor at no additional expense to the County.

1.04 RIGHT OF ENTRY

- A. Representatives of DeKalb County, the Environmental Protection Division of the Georgia Department of Natural Resources, and the U.S. Environmental Protection Agency and others, as may be identified by the County, shall have access to the work wherever it is in preparation or progress. The Contractor shall provide proper facilities for such access and inspection.

END OF SECTION

SECTION 01510#
SANITARY SEWER MAIN TELEVISION FOR VERIFICATION

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes guidelines and requirements for closed circuit television (CCTV) inspection. CCTV inspection will lead to a confirmation that chemical root control has been performed in accordance with the Specifications. CCTV inspection will be requested on approximately 10% of pipes treated with chemical root control. CCTV inspection assignments will be chosen by the Program Manager to be completed and estimated 9 months after chemical root control treatment has been applied. All operations are adjunct to the Chemical Root Control Operation and the sole purpose of the CCTV video is to provide verification that the pipe has been treated for roots and pay lengths for invoicing purposes.

1.02 REFERENCES

- A. Manual on Uniform Traffic Control Devices (MUTCD) standards
- B. **Attachment A** – Access Exchange Database Anticipated Inspection Header Form Attribute Guidance Table (CCTV)

1.03 RELATED SECTIONS

- A. Section 01056 – GPS Data Collection
- B. Section 01320 - Progress Reports & Videos
- C. Section 01520 – Sewer Flow Control
- D. Section 13080 – Chemical Root Control

1.04 DEFINITIONS

- A. **Television Inspection:** Operation necessary to complete a true-color visual inspection for verification that cleaned pipe segments and manholes are free of roots, grease, debris, deposits, sediments, obstructions, etc.
- B. **MPEG:** MPEG (pronounced M-peg), which stands for Moving Pictures Experts Group, is the nickname given to a family of International Standards used for coding audio-visual information in a digital compressed format. For the purposes of this specification, MPEG shall be defined as an ISO-MPEG Level 4 standard (MPEG- 4) digital audio-visual coding having a minimum resolution of 500 lines. All video files shall be named using .mpg or .wmv as the file extension.
- C. **External Hard Drive:** For the purposes of this specification, an external hard drive is a peripheral auxiliary device that connects to the computer via a high-speed interface cable. The interface cable allows the external hard drive to communicate with the computer so that data may be passed back and forth. The Contractor will deliver all

inspection standard exchange databases, digital reports and media to the County/Program Manager on an external hard drive that is compatible with the County and Program Manager's equipment and software and will be of adequate storage to contain all deliverables as outlined in the Specifications.

- D. **Buried Manhole:** A manhole where the manhole cover (lid) is not visible at ground surface. Buried manholes usually require removing the material covering the manhole lid and raising the manhole frame and cover (lid). All buried manholes on the sanitary systems shall be reported for raising following their location discovery by the Contractor
1. Note that manholes located as indicated on the County's mapping system and covered with a small layer of forest litter and/or a thin layer of soil or grass and where the location is apparent does not represent a "buried" manhole for "Locate & Expose" purposes.

1.05 SUBMITTALS

- A. Submittals are to be in color PDF format for printed documents as well as other required formats when applicable for digital transfers.
- B. Submit one example video on external hard drive or electronically of previous sewer cleaning work that shows post cleaned pipe.
1. Videos and inspection logs will be reviewed by Program Manager to determine if quality of CCTV image is acceptable, picture clarity, advancement speeds and lighting are acceptable and documented according to the Program Manager's requirements. This video submittal is expected to represent the standard quality that the Contractor will provide throughout the Contract for all video submittals from all crews.
 2. Modify equipment and/or inspection procedures to achieve report material of acceptable quality.
 3. Do not commence Work prior to approval of report material quality by the Program Manager. Upon acceptance, report material shall serve as standard for remaining Work.
- C. Records reports shall include a separate report for each pipe segment showing inspection setup data, Each report shall also note the labeling number of the corresponding video recording of that pipe segment. The video record of the pipe inspections shall be provided digitally on an approved mass storage device or submitted electronically. These records shall include all video information. The video files shall have unique name that are referenced in the inspection database. The file name shall include manhole ID numbers for upstream and then downstream manholes as the start of the file name. It is preferred that the direction of the inspection and inspection date be included as well.
- D. Camera specification sheet
- E. References: Contact names and telephone numbers
- F. List of staff and equipment to be used on this Project

- G. Supervisor and field crew leader's contact information including name and mobile telephone numbers
- H. Confined space entry certification that staff to be used on this project have been properly trained should confined space entry be required
- I. Contractor's Safety Plan
- J. 21 day look ahead schedule weekly based on Program Manager's work priority schedule
- K. Public notification door hanger based on Program Manager's provided example
- L. Inspection (See Documentation Section for additional information);
 - 1. Initial first day's inspections within 24 hours after first day's work is completed.
- M. Include the following with each weekly submittal:
 - 1. Inspection media (videos and photographs)
 - 2. Quality controlled Inspection database (Exchange Access Database)
- N. Traffic control plan
- O. Quality control plan

1.06 EXPERIENCE

- A. Supervisor of the field crews performing these functions shall have the proper training in these types of equipment and monitoring functions and have a minimum of three (3) years' experience in performing such assignments including safe work practices, etc.
- B. Field crew leaders performing these functions shall have the proper training in these types of equipment and monitoring functions and have a minimum of two (2) years' experience in performing such assignments including safe working practices, etc.
- C. The Contractor shall provide the County with written documentation (certification) that the supervisor, field crew leader and all crewmembers responsible for these work orders have the proper training and the requisite experience.
- D. No crew members shall enter confined spaces without the necessary certified training and permit.
- E. The required experience for the Field Crew Supervisor shall be documented in the Contractor's Bid submittal. Field Crew Leader qualifications will be reviewed and approved (if appropriate) by the Program Manager.

1.07 RESPONSIBILITY FOR OVERFLOWS/SPILLS AND DAMAGE TO PROPERTY AND UTILITY

- A. Reference Specification Section 01030 – Special Project Procedures.

PART 2 – PRODUCTS

2.01 CCTV/SONAR PERFORMANCE

- A. The Contractor shall furnish the following, but not limited to: the mobile (off-road) television/sonar inspection studio, television camera, audio-visual digital encoding

equipment / software, and other necessary equipment, materials, power, labor, and technicians as needed to perform the television inspection; Easement machine necessary to perform cleaning of lines.

- B. The surveying/inspecting equipment will be capable of surveying/inspecting a length of sewer up to at least five hundred (500) feet where a self-propelled unit is used, where entry is possible at one (1) end only. This equipment will be maintained in full working order.
- C. Each survey/inspection unit will contain a means of transporting the CCTV camera and/or sonar equipment in a stable condition through the sewer under survey and/or inspection. Such equipment will ensure the maintained location of the CCTV camera or sonar equipment when used independently on or near to the central axis of a circular shaped sewer when required in the prime position.
- D. Where the CCTV camera are towed by winch and bond through the sewer, all winches will be stable with either lockable or ratcheted drums. All bonds will be steel or of an equally non-elastic material to ensure the smooth and steady progress of the CCTV camera. All winches will be inherently stable under loaded conditions. The bonds shall be oriented in such a manner as to enable unhindered extension or retraction through the line. All effort shall be made to prevent damage to the pipe during the television inspection. In the case where damage is caused by the Contractor, for any reason, such as would be caused by incorrect deployment of bonds or retrieval of lodged equipment, the cost of repair or remedy shall be borne solely by the Contractor and repaired immediately after notification to the Program Manager within 24 hours.
- E. Each unit will carry sufficient numbers of guides and rollers such that, when surveying or inspecting, all bonds are supported away from pipe and manhole structures and all CCTV cables and/or lines used to measure the CCTV camera's head location within the sewer are maintained in a taut manner and set at right angles where possible, to run through or over the measuring equipment.
- F. Each unit shall carry or have access to flow control plugs as required to accommodate the diameter range in which inspection is to occur. See Sewer Flow Control Specification 01520 for additional details and requirements.
- G. Television/Sonar Inspection: The Contractor shall inspect pipelines with conventional television imagery as indicated in the contract documents so as to record the cleaned condition of the pipeline under inspection. Inspection of pipelines shall be carried out utilizing the County approved formats only.
- H. **External Hard Drive (Videos) (if utilized):**
 - 1. Store in upright position with temperature range of 45 to 80 degrees F (7 to 27 degrees C).
 - 2. Identify each hard drive with labels showing County's name, Contractor's name, the inspection period, and project area or sewer segments on the hard drive.
- I. **Hard Drive Titling:**

Each segment shown on the external hard drive should have its own video titled with the beginning and end point of the pipe segment.
- J. **CCTV Camera Prime Position:**

The CCTV camera will be positioned to reduce the risk of picture distortion. In circular sewers the CCTV camera lens and/or sonar head will be positioned centrally (i.e. in

prime position) within the sewer. In non-circular sewers, picture orientation will be taken at mid-height, unless otherwise agreed, and centered horizontally. In all instances the camera lens/sonar head will be positioned looking along the axis of the sewer when in prime position.

K. CCTV Camera Speed:

The camera speed shall be that required to provide a representative video of the cleaned pipe and manholes.

A. CCTV Color Camera:

The television camera used for the pipe line inspection shall be one specifically designed for hazardous and corrosive environments and constructed for pipeline inspection. Lighting for the camera shall be suitable to allow a clear picture of the entire periphery of the pipe. The camera shall adhere to the following requirements:

2. Waterproof and shall be operative in 100% humidity conditions without lens fogging and any conditions that may be encountered in the inspection environment. Camera lens will be free of scratches and other faults that may reduce the video quality. The operator will take precautions to clean the lens of all foreign matter prior to inserting the camera and will attempt to reduce the amount of water on the lens during the survey/cleaning process.
3. The view seen by the television camera shall be transmitted to a monitor of not less than 11 inches in size.
4. The travel speed of the television inspection camera (through the pipe) shall be uniform and shall not exceed the maximum speed herein specified.
5. The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the Program Manager; and if unsatisfactory, equipment shall be removed and no payment will be made for an unsatisfactory inspection.
6. The adjustment of focus and iris will allow optimum picture quality to be achieved and will be remotely operated.
7. The adjustment of focus and iris will provide a minimum focal range from six (6) inches in front of the camera's lens to infinity.
8. The distance along the sewer in focus from the initial point of observation will be a minimum of twice the vertical height of the sewer.
9. The illumination must be mounted on and turned in the direction of the camera such as to allow an even distribution of the light around the sewer perimeter without the loss of contrast picture, flare out, or shadowing, light sensitivity to be greater than 1.5 lux minimum, minimize reflective glare, remote variable intensity control, provide a clear in-focus picture of entire inside periphery of pipe and the ability to achieve proper balance of tint and brightness.

B. Color CCTV:

All CCTV work will use color CCTV reproduction.

C. Off road inspection equipment/easement machine proposed by the Contractor shall be reviewed and approved by the Program Manager before the Contractor utilizes said equipment.

PART 3 – EXECUTION

3.01 GENERAL

- A. The following guidelines concerning the use of CCTV will be followed:
1. Generally CCTV alone will be used for internal condition assessment where the depth of flow is less than twenty-five (25%) percent of overall sewer diameter at the start of the survey. A case-by-case determination will be made whether to use CCTV where the depth of flow is more than twenty-five (25%) percent level but no greater than forty (40%) percent of overall sewer diameter at any time throughout the length. The use of flow control (plugging, flow restriction and/or bypassing pumping) to reduce flow to 25% or less is required.
- B. Confined Space Entry: Crews shall minimize the physical entry into manholes. Manhole entry shall be performed in accordance with Federal, State, Local and any other regulations for confined space entry. Only trained crews and staff may perform confined space entry after obtaining an entry permit. Staff must use safety required equipment, including harnesses, ventilation equipment, etc.
- C. Traffic Control: All traffic control measures shall comply with the requirements of MUTCD, Part 6 – Temporary Traffic Control, Latest Edition as published by USDOT/FHWA.
- D. Site Security: Wear all required safety equipment, such as safety vests, hardhats, safety glasses, and steel toe boots. Follow all applicable state and local traffic safety procedures. Alert the closest fire department/Emergency Medical Services (EMS) as to the location of the day's work and to stand by for emergencies.
- E. Scheduling Time: Crews shall begin inspections after 8:00 am and terminate inspections no later than 5:00 pm each day unless otherwise directed by the Program Manager in order to address localized special requirements. Authorization should be obtained if work is to be performed outside of the designated hours. Work should be performed by the Contractor in time frames that will allow compliance with the County's noise ordinance.
- F. Permits for Rights of Ways & Contract Utility Licensing:
The Contractor shall obtain work permits for all work to be performed in State and/or County Right of Ways. The Contractor shall also plan for all other insurances, traffic control measures, and other terms of the permit in advance. The Contractor shall also obtain all necessary and applicable licensing.
- G. Sequence of Work:
1. Perform Work in the following sequence:
 - a. Treat sewer lines as directed with chemical root control in accordance with the requirements of Section 13080, Chemical Root Control.
 - b. Approximately 9 months after chemical root control treatment, Program Manager will select 10% of the pipe segments for CCTV inspection.
 - c. The inspection then will be done one linear section at a time and the flow in the section being inspected will be suitably controlled as specified (see Sewer Flow Control Specification 01520). All CCTV

inspections shall be performed in a manner so as to visually show the pipe and manhole conditions.

- H. Inspection equipment shall utilize software capable of providing complete survey reports, inspection standard exchange database, and linked media files.
- I. If television inspection (tractor mounted) of an entire manhole to manhole sewer segment cannot be successfully performed from one manhole, a reverse setup shall be performed to obtain a complete inspection. A reverse setup shall be considered incidental to and included in the segment's unit price bid for CCTV Verification. If upstream (reverse) setup, is required, establish new inspection run separate from downstream (normal) setup so two inspection records exist in the software, one with the normal setup and one with the reverse setup.
- J. Televised pipe segment inspection is represented by one manhole-to-manhole pipe segment or other structural access-to-access point; not multiple manhole-to-manhole segments.
- K. Show continuous footage reading and other required information on inspections image. Place on screen where it is clearly visible (if black font, do not place on dark background, if white font, do not place on light background). This will be the basis for payment for the Cleaning & CCTV Cleaning Verification pay item.
- L. Viewing shall be in direction of flow, except while camera is being used in a reverse setup. Inspection shall proceed from upstream to downstream, unless prohibited by obstruction.
- M. Keep camera lens clean and clear. If material or debris obscures image or causes reduced visibility, clean or replace lens prior to proceeding with recording operation.
- N. Camera lens shall remain above visible water level and may submerge only while passing through clearly identifiable line sags or vertical misalignments. If flow exceeds 25 percent of diameter, such that the camera lens becomes obscured, pause inspection until flow subsides. If necessary, reschedule CCTV operation. Surcharging and flooding of camera lens is not an excusable condition if it has been artificially created upstream, i.e., placement of flow plugs or freshwater flushing in pipe.
- O. Immediately report to Program Manager any obstructions that restrict flow and cause inspection to be interrupted that can't be cleared under the cleaning process. Assure that the obstruction is documented in the inspection. Document condition with still photographs, and begin a reverse inspection setup or inspections of other pipelines to the satisfaction of the Program Manager.
- P. Any equipment stuck or left in the sewer line/lateral shall be retrieved by the Contractor within twenty-four (24) hours. The Contractor is expected to use due caution when cleaning and assessing the sewer line segments. The Contractor shall make numerous attempts to recover any lodged equipment without causing additional harm to the sanitary sewer structure(s). Equipment stuck in the line due to the Contractor's negligence will require that equipment be recovered at the sole expense of the Contractor. DWM shall not be financially responsible for any Point Repairs derived from such lodged equipment with the exception if the equipment was lodged in the system due to poor pipe condition. The Contractor shall present CCTV video of the pipe condition when making a claim. DWM will review the video and Contractor activities to make a decision as to causation and liability. DWM will provide inspection services to ensure such extraction point repair is completed in compliance with the County's sanitary sewer guidelines. Any damage to the Contractor's equipment is the

Contractor's sole responsibility. If the equipment is stuck or left in the sewer line/lateral causes an SSO (including building backup), then the Contractor is liable for the SSO/backup and all associated damages.

- Q. Televising pipe segments from manhole to manhole on same video in continuous run.
1. Video shall clearly show camera starting and ending at manhole, unless defects do not allow it.
 2. Do not perform partial televising on one video and then complete run on another video.
 3. If line is partially televised, due to excusable condition, i.e., collapsed line, televised length shall be viewed by the Program Manager.
 4. If a portion of the Contractor's inspection is unacceptable to the County or Program Manager, the entire pipe segment shall be deemed unacceptable and the Contractor shall re-televising the entire pipe segment at the Contractor's sole expense.
- R. The Program Manager may, on occasion, accept a physical inspection that does not adhere to minimum standards if adverse conditions are encountered and re-inspection is not advised.
- S. At the end of each day, update the status of what sewer segments were inspected in Cityworks. Refer to Section 01030 – Special Project Procedures.

3.02 CCTV INSPECTION

- A. **Data Transfer:** Upon completion of CCTV inspection, transfer inspection data to an external hard drive (HD) of sufficient capacity and compatibility with County's and Program Manager's equipment and available programs, or submit electronically; include code required for proper playback of video file.
- B. **Labeling:** Provide printed label on outside of HD that indicates the following:
1. Name of County
 2. Project title
 3. Date of submittal
 4. Inspection company
 5. Deliverable number
 6. Project work order area (provided by Program Manager)
- C. **Media:**
1. **Video:**
 - a. Inspections completed, with a unique filename per manhole to manhole pipe segment inspection.
 - b. Continuous digital video recordings of the inspection view as it appears on the television monitor shall be taken. The recording shall also be used as a permanent record of defects.
 - c. The recording shall be MPEG-4. Separate MPEG-4 files shall be created for each pipe segment inspection. In case of a reverse setup, such inspection shall be stored in a separate inspection record and MPEG

file. MPEG files shall be written to External Hard Drive media for delivery to the Program Manager or submitted electronically per Program Manager's procedures.

- d. MPEG files shall be named according to the following file specification:
[Upstream
Manhole]_[DownstreamManhole]_[MMDDYYYY]_[IncrementalNumber].mpg
- e. The "IncrementalNumber" shall be used if multiple inspections are performed for the same line, such as a reverse inspection setup. IncrementalNumber is to ensure no two videos are the same. The number can be the video ID if the software doesn't already have a random number generator.
- f. The County, at its sole discretion, reserves the right to refuse any MPEG, on the basis of poor image quality, excessive bit rates, inconsistent frame rates or any other characteristics that may affect usability by the County.
- g. The digital video encoding shall include video information that can be reproduced with a video image equal or very close to the quality of the original picture on the television monitor. The replay of the recorded video information shall be free of electrical interference and shall produce a clear, stable image.

D. Database:

- 1. Include all inspections in an Access Standard Exchange database that will be regularly submitted to the Owner. The Owner and contract will agree on submittal schedule. A database, with attached videos, will be submitted with each interim submittal. Consolidation of the database is not the responsibility of the Contractor.
- 2. Provide an Access standard exchange database of collected data including anticipated inspection header field attribute information as shown in **Attachment A** to this Section.
- 3. File Type: MS Access, .MDB, .ACCDB
- 4. Database Format: Format of the database shall be acceptable by the Owner.
- 5. List inspection media names in corresponding asset/inspection/defect information field within database.

E. Linear Measurement:

- 1. The CCTV monitor display will incorporate an automatically updated record in feet and tenths of a foot of the footage of the camera or center point of the transducer, whichever unit is being metered, from the cable calibration point, the pipe diameter (physical measurement by Contractor), and verified pipe material. The relative positions of the two (2) center points will also be noted.
- 2. The Contractor shall use a suitable metering device that enables the cable length to be accurately measured; this shall be accurate to 0.20 feet. Measurement shall be zeroed after each segment inspected. The Contractor

shall calibrate the footage meter on a regular basis This measurement will be vetted against the GIS map length for quality check

F. Data Display, Recording and Start of Survey/Inspection:

1. At the start of each sewer length being surveyed or inspected and each reverse set-up, the length of pipeline from zero (0) footage, the entrance to the pipe, up to the cable calibration point will be recorded and reported in order to obtain a full record of the sewer length. Only one (1) survey will be indicated in the final report. All reverse set-ups, blind manholes, and buried manholes will be logged on a separate log. Regardless, each set-up will be recorded as a separate inspection and the header and observed defects recorded appropriately. Video digits will be recorded so that every recorded feature has a correct tape elapsed time stamp. Each log will make reference to a start and finish manhole unless abandonment took place because of blockage.
2. The footage reading entered on to the data display at the cable calibration point must allow for the distance from the start of the survey/inspection to the cable calibration point such that the footage at the start of the survey is zero (0).
3. In the case of surveying through a manhole where a new header sheet and file must be created, the footage will be set at zero (0) with the camera focused on the outgoing pipe entrance.
4. At the start of each manhole length a data generator will digitally generate and clearly display on the viewing monitor and subsequently on the video recording a record of data in alpha-numeric form containing the following minimum information:
 - a. Automatic update of the camera's footage position in the sewer line from adjusted zero (0)
 - b. Sewer dimensions
 - c. Manhole/pipe asset ID number
 - d. Date of survey
 - e. Road name/location
 - f. Direction of survey
 - g. Time of start of survey
 - h. The size and position of the data display will be such as not to interfere with the main subject of the picture.
5. Once the survey of the pipeline is under way, the following minimum information will be continually displayed:
 - a. Automatic update of the camera's footage position in the sewer line from adjusted zero (0).
 - b. Manhole or pipe asset ID number.
 - c. Defect/observation code(s) (temporarily display when encountered)
 - d. Date and Time
6. Before camera enters the pipe, inspection shall provide video of the manhole. Video recording shall begin by facing pipe segment to be televised and then pan/tilt/zoom as necessary to point camera up toward the manhole opening.

3.03 DELIVERABLES

- A. **Digital Access Standard Exchange database** shall be submitted on external hard drive or electronically to the Program Manager. The database must contain all the data required by this specification.
- B. MPEG videos shall also be submitted to the Program Manager as outlined by this specification.

3.04 PUBLIC NOTIFICATION – CCTV INSPECTION

- D. Public Notification will be in accordance with that specified in Section 13080 - Chemical Root Control.

3.02 QUALITY ASSURANCE/QUALITY CONTROL

- A. Prior to CCTV verification data submission to the Program Manager, the Contractor shall review videos for Quality Control (QC) as required by the Program Manager. The Contractor shall correct any data conflict, missing data, or other questionable entry identified by the QC reports prior to submitting the CCTV inspection data to the Program Manager.
- B. The Program Manager will periodically request the Contractor to review the QC results with the Program Manager.
- C. CCTV video of insufficient quality may result in the line segment being re-CCTV'd at the Contractor's expense, depending upon circumstances. The video must be of sufficient quality to allow a review of the cleaning operation results.
- D. The Program Manager will perform random review checks of the Contractor's submitted data. Should accuracy or qualitative levels of any of the data fall below those deemed acceptable to the Program Manager; the data submittal will be refused and returned to the Contractor for correction. The Contractor will be required to correct or re-do inspections until the Program Manager is satisfied with the quality of the work.
- E. The Contractor shall complete work on each asset as described herein. Refer to the Measurement and Payment Section (Section 01025) on documentation requirements to be provided with each pay request.
- F. **Measurement Units:** All dimensions will be in feet and tenths of a foot and/or feet and inches depending upon the technology performed. Measurement of sewers will be to the nearest tenth of a foot.

**Attachment A - Standard Exchange Database Anticipated Inspection Header Form
 Attribute Guidance Table (CCTV)**

| NUMBER | FIELD | FIELD REQUIRED | DESCRIPTION/INSTRUCTIONS |
|--------|------------------------|----------------|---|
| 1 | Surveyed by | Y | Name of individual conducting survey - eg KTRAN |
| 2 | P/O Number | Y | DeKalb DWM Contract number |
| 3 | Work Order Number | Y | DeKalb DWM Work Order number assigned |
| 4 | Media Label | Y | |
| 5 | Date | Y | Inspection Date - YYYYMMDD |
| 6 | Time | Y | Time Inspection Started - Military Time |
| 7 | Date Cleaned | Y | Date when sewer was cleaned prior to survey if applicable, YYYYMMDD |
| 8 | Flow Control | Y | Flow-through plug, bypass, etc. |
| 9 | Direction of Survey | Y | |
| 10 | Drainage Area | Y | Sewer Shed Name – e.g. Nancy Creek |
| 11 | Pipe Segment Ref | Y | USMH__DSMH - Pipe Facility ID |
| 12 | Street (Name & Number) | Y | |
| 13 | City | Y | |
| 14 | Height (Diameter) | Y | |
| 15 | Shape | Y | |
| 16 | Length Surveyed | Y | |
| 17 | Upstream MH Number | Y | Client provided designation for upstream manhole (e.g. 15-304-s122) |
| 18 | Downstream MH Number | Y | Client provided designation for downstream manhole (e.g. 18-325-s289) |
| 19 | Location Code | Y | (1) Within roadway; (2) Off-Road Easement |

Y – Required by DeKalb County

END OF SECTION

SECTION 01520 SEWER FLOW CONTROL

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. The purpose of this section is to define the various methods of wastewater flow control including plugging/blocking and bypass/diversion pumping. Wastewater flow control shall maintain an efficient and uninterrupted level of service to the sewer system while performing investigative or construction operations.

1.02 RELATED SECTIONS

- A. Section 01510# – Sanitary Sewer Main Television for Verification
- B. Section 13080 – Chemical Root Control

1.03 REFERENCES

- A. ASTM D1238 - Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
- B. ASTM D1248 - Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable
- C. ASTM D1505 - Standard Test Method for Density of Plastics by the Density-Gradient Technique
- D. ASTM D1693 - Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics
- E. ASTM D2122 - Standard Test Method for Determining Dimensions of Thermoplastic Pipe and Fittings
- F. ASTM D2657 - Standard Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings
- G. ASTM D2837 - Standard Test Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials or Pressure Design Basis for Thermoplastic Pipe Products

1.04 QUALIFICATIONS

- A. Qualification documentation will be submitted as required of the Contract Documents.
- B. The Contractor must meet all of the following criteria to be considered qualified to propose and/or bid on the subject contract:
 - 1. The Contractor, or their subcontractor, must document they, not their parent company, related company, or the experience of an individual/s, have been in this line of business a minimum of five (5) years.
 - 2. The Contractor, or their subcontractor, must document they, not their parent company, related company, or the experience of an individual/s, have performed gravity sewer bypass/diversion pumping for the sizes of sewer

mains and flows expected under this contract in the past two (2) years. This documentation shall include locations, references (including names and phone numbers), pipe sizes, pump sizes and pumping rates. This documentation must include a minimum of ten (10) different projects and must cover the range of sizes of sewer mains and flows expected under this contract.

1.05 SUBMITTALS

- A. Seven (7) calendar days prior to any bypass/diversion pumping activity the Contractor shall submit two (2) hard copies and one electronic copy of the complete and detailed plan to the Program Manager for review. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction. The Contractor may submit a general bypass/diversion pumping plan to be used when bypassing sewer mains **smaller than or equal to 12-inch** diameters. Once the Contractor has received written approval from the Program Manager for **the smaller than or equal to 12-inch** sewer main plan, the Contractor may use the plan without re-submittal.
- B. The **bypass/diversion pumping plan** submittal shall have sufficient detail to show the following:
1. Lowest overflow point upstream of the bypass/diversion.
 2. Pump stations upstream of the bypass/diversion.
 3. Staging area for pumps.
 4. Sewer plugging method and types of plugs.
 5. Number, size, material, location and method of installation of suction piping.
 6. Number, size, material, location and method of installation of discharge piping.
 7. Bypass pump sizes, capacity, number of each size to be onsite and the power requirements.
 8. System curve design calculations detailing the static lift, friction losses, velocity losses and flow velocities.
 9. Pump curves with the system curves plotted showing the pump operation range and confirming the pump size, horsepower and impeller required.
 10. Standby power generator size and location, if utilized.
 11. Noise control and abatement measures.
 12. Downstream discharge plan including pipe routing plan and profile views.
 13. Sections showing suction and discharge pipe depth, embedment, joint restraints, thrust blocking and backfilling.
 14. Method of protecting discharge manholes or structures from erosion and damage.
 15. Location and position, in detail, where pipes cross roadways and driveways.
 16. Traffic Control Plan, if applicable.
- C. For bypass plans associated with sewer mains **larger than 12-inches** in diameter, a Georgia certified Professional Engineer must sign and seal the bypass/diversion plan.
- D. The Contractor will provide an emergency response plan for each bypass/diversion pumping system. The plan will be followed in the event of failure of the bypass/

diversion pumping system. The Contractor shall provide names and phone numbers for twenty-four (24) hour emergency contact. The Contractor shall have field personnel onsite while performing bypass operations at all times. The bypass operation shall never be left unattended or unsupervised.

- E. The Contractor must identify all pump stations and the lowest overflow point upstream of the plugging/block and/or bypass/diversion pumping. The Contractor may be required to station personnel at upstream pump stations and overflow points.
- F. The Contractor shall notify the Program Manager 48 hours prior to commencing any plugging/block and/or bypass/diversion pumping.
- G. The Contractor shall complete a daily written record (diary) detailing the work carried out and any small items of Work incidental to the Work. The Contractor shall include in his daily record and reference to the following:
 - 1. **Delays:** Dense traffic, lack of information, sickness, labor or equipment shortage, etc.
 - 2. **Weather:** Conditions (e.g., rain, sunny, windy, etc.).
 - 3. **Equipment:** On site (e.g., specialty cleaning, by-pass equipment, etc.).
 - 4. **Submittals:** To the County's Program Manager.
 - 5. **Personnel:** On site by name (e.g., all labor, specialty services, etc.).
 - 6. **Accident:** Report (e.g., all injuries, vehicles, etc.).
 - 7. **Incident:** Report (e.g., damage to property, property owner complaint, etc.).
 - 8. **Major defects encountered:** including collapsed pipe, if any, cave-ins, sink holes, etc.
 - 9. **Visitors:** On site.
 - 10. **Disposals:** Type and quantity of debris (including liquids).

1.06 EXPERIENCE

- A. Experience documentation will be submitted as required of the Contract Documents. The Contractor shall provide the Program Manager with written documentation acknowledging the supervisor and field crew leaders responsible for this work have received the proper training, are certified, and have the requisite experience. This documentation will include dates of hands-on experience, employer, description of duties/experience, contact name and phone number. Documentation on any person shall not be longer than one (1) page.
- B. Supervisor of the field crews must be properly trained in this function and have a minimum of two (2) years' experience in performing gravity sewer bypass/diversion pumping, to include safe working practices for the types of equipment and operation of the equipment used for this contract.
- C. Field crew leaders must be properly trained in the function and have a minimum of two (2) years hands-on experience in performing bypass/diversion pumping, to include safe working practices for the types of equipment and operation of the equipment used for this contract.
- D. No crew members shall enter confined spaces without the necessary certified training.
- E. All on-site personnel must be badged by the County.

1.07 PERSONNEL

- A. The Supervisor must visit the project site daily, checking on their personnel and subcontractors, meeting with the field crew leaders, as well as checking on the status and progress of the project.
- B. A field crew leader must be with their crew when their crew is working. Each field crew leader can only have one crew. Each crew must have its own field crew leader.

1.08 RESPONSIBILITY FOR SANITARY SEWER OVERFLOWS AND DAMAGE TO PROPERTY AND UTILITY

- A. Reference Specification Section 01030 – Special Project Procedures.

1.09 SAFETY

- A. All work shall be performed in accordance with OSHA standards and state and federal safety regulations.
- B. No person shall enter a confined space without the documented requisite training, certification, and entry permit.

PART 2 – PRODUCTS

2.01 PIPE FOR FLOW DIVERSION

- A. Ductile Iron Pipe: Ductile iron pipe, as specified in DeKalb County Design Standard for Ductile Iron Sanitary Sewer Pipe and Fittings, is acceptable for use for flow diversion during construction.
- B. Steel pipe is permitted for flow diversion.
- C. High Density Polyethylene Pipe (HDPE) is permitted for flow diversion. Polyethylene material shall comply with the requirements for Type III polyethylene, C-5 and P-34 as tabulated in ASTM D-1248 and has the Plastic Pipe Institute recommended designation PE3406. The material shall also have an average specific base resin density of between 0.94 g/cc and 0.955 g/cc (ASTM D-1505). Pipe made from these resins must have a long-term strength (50 years) rating of 1,250 psi or more per hydrostatic design basis categories of ASTM D-2837. The polyethylene resin shall contain antioxidants and be stabilized against ultraviolet degradation to provide protection during processing and subsequent weather exposure. The polyethylene resin shall have an environmental stress crack resistance condition C, as shown in ASTM D-1693, to be greater than 500 hours, 20% failure. All pipes shall be made from virgin quality material. No rework compound, except when obtained from the manufacturer's own production of the same formulation shall be used. The polyethylene resin shall have an average melt flow index, condition E as shown in ASTM D-1238, not in excess of 0.25 g/10 mm. Pipe shall be homogeneous throughout, and free of visible cracks, holes, foreign material, blisters, or other deleterious faults. Diameters and wall thickness shall be measured in accordance with ASTM D-2122. Pipe joining will be done by thermal butt fusion method in accordance with ASTM D-2657.
- D. Polyvinylchloride (PVC) pipe is permitted for flow diversion. PVC pipe shall be rigid and securely coupled with a minimum number of connections. Glued PVC is not allowed.

- E. Lay flat hose is permitted for use with 2" and 3" gas powered portable pumps.
- F. Irrigation type piping is not allowed.
- G. No more than two (2) pump discharge hoses will be allowed at any given time. The length of these hoses shall be limited at the direction of the Program Manager.
- H. The Contractor, at a minimum, shall design all piping, joints and accessories to withstand twice the maximum operating pressure or 100 psi whichever is greater.
- I. If required the Contractor must provide air relief (air relief valves, etc.) on bypass/diversion pumping discharge piping to insure proper operation.
- J. All pumps used shall be fully automatic self-priming units and do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric, gas, or diesel powered, provided they meet all specified sound level requirements. If electric pumps are used, the combined generator/pump system shall meet the specified sound level requirements. All pumps used shall be constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows.
- K. Maintain sufficient equipment and materials on site to ensure continuous and successful operation of bypass and dewatering systems.
 - 1. Keep standby pumps fueled and operational at all times.
 - 2. Maintain sufficient number of valves, tees, elbows, connections, tools, sewer plugs, piping, and other parts or system hardware on-site to ensure immediate repair or modification of any part of system as necessary.
- L. Unless specified otherwise in these Specifications or approved by the Program Manager, all pumps (and generators if used) shall be fully sound attenuated and shall produce a noise level of sixty-five (65) dB or less at a distance of twenty-three (23) feet.
- M. The Contractor shall provide the necessary stop/start controls for each pump.

PART 3 – EXECUTION

3.01 GENERAL STANDARDS AND REQUIREMENTS

- A. Prior to commencing each bypass/diversion pumping activity the Contractor must receive written approval from the Program Manager.
- B. Ensure all levels of sewage flow are continuously and effectively handled.
- C. The Contractor shall use ingenuity and skill to develop a bypass/diversion pumping plan.
- D. The back-up pump, appropriate piping, fuel, lubrication and spare parts shall be incorporated into the bypass/diversion pumping arrangement at the site, ready for use in case of a breakdown.
- E. At no cost to the County and Program Manager, the Contractor will carry out a "trial run" of the bypass/diversion arrangement on all sewers greater than 12-inches. This trial run must be conducted before the Program Manager will accept the arrangement. The "trial run" shall demonstrate the incorporation of all standby equipment to handle flows when the main pump set is switched off.
- F. All materials used for bypass/diversion pumping shall be pre-approved by the Program Manager prior to commencing pumping activities.

- G. When wastewater flows at the upstream manhole of the sewer main being televised prohibit a satisfactory verification video, or do not allow the proper sewer or manhole repair, the flows shall be reduced to the levels required by one of the following methods: plugging/blocking or bypass/diversion pumping of the flows, as approved by the Program Manager.
- H. In some applications, the wastewater flow may be plugged/blocked and contained within the capacity of the collection system. This shall only be done when it has been determined by the Contractor and approved by the Program Manager the system can accommodate the surcharging without any adverse impact.
- I. The plan must keep the wastewater flowing without discharge or spills into any adjacent creeks or on to the ground. No bypassing to ground surface, receiving waters, storm drains, or bypassing resulting in groundwater contamination or potential health hazards shall be permitted. The Contractor will seek and obtain inspection of each section of newly laid sewer before removing the flow diversion from service and placing the newly installed or rehabilitated section into service.
- J. All pipe materials utilized in wastewater flow control shall be in good condition, and free of defects, and leaks. The Contractor, at no cost to the County and Program Manager, shall replace any defective material. Upon completion of the job, wastewater flow control materials shall be removed from the site.
- K. Before any wastewater flow control equipment is installed, the Contractor shall de-silt the segment of sewer to be bypassed while it is still under flow. Subsequent jetting and final cleaning before inspection or repair shall be undertaken while the segment of sewer is bypassed.
- L. The Contractor is responsible for locating any existing utilities in the area the Contractor selects to locate the bypass pipelines. The Contractor shall locate his bypass pipelines to minimize any disturbances to existing utilities and shall obtain approval of the pipeline locations from the Program Manager. All costs associated with relocating utilities and obtaining all approvals shall be paid by the Contractor.
- M. During all wastewater flow control operations, the Contractor shall protect manholes and all local sewer lines from damage inflicted by any equipment. The Contractor shall be responsible for all physical damage to mainlines, manholes, and all local sewer lines caused by human or mechanical failure. The Contractor shall protect open manholes from access by non-Contractor personnel, pets, etc.
- N. The Contractor shall complete all wastewater flow control activities with the minimum sound level compatible with accepted industry standards for sound attenuated temporary pumping systems.

3.02 DEPTH OF FLOW

- A. The Contractor will control the depth of flow to that necessary to provide a CCTV video of sufficient quality to provide sufficient information to make a decision that the pipe segment and manhole was cleaned in accordance with the Specifications. For information purposes only, normal CCTV work requires the following guidelines: In performing television inspection, joint testing, and/or sealing and other sewer rehabilitation work, the Contractor shall control the depth of flow in the sewer within the following guidelines:

Maximum Pipe Flow Depth

| Television Inspection | | Joint Testing and Sealing | |
|-----------------------|-------------|---------------------------|-------------|
| Pipe Size | % Pipe Dia. | Pipe Size | % Pipe Dia. |
| 6"-12" | 15 | 6"-12" | 20 |
| 15"-24" | 25 | 15"-24" | 25 |
| 27" or larger | 25 | 27" or larger | 30 |

- B. When sewer line flows, as measured in the first manhole upstream of the sewer segment being inspected, exceed the maximum depth listed above or inspection of the complete pipe periphery is necessary for effective testing, sealing, or line work, the Contractor shall implement wastewater flow control methods. The implementation of the flow control method shall be reviewed and approved by the Program Manager.

3.03 PLUGGING AND BLOCKING

- A. The Contractor shall insert a sewer line plug into the line at a manhole upstream from the section being inspected or repaired. The plug shall be so designed so all or any portion of the flow can be released. Plugs should be secured to manhole to prevent movement downstream. Flows shall be shut off or reduced to within the maximum flow limits specified. Wastewater flow shall be restored to normal following completion of work.
- B. No Plumbers plugs will be allowed.

3.04 BYPASS/DIVERSION PUMPING

- A. When bypass/diversion pumping is required, a pump size shall be recommended by the Contractor and approved by the Program Manager. The Contractor shall supply the necessary pumps, conduits, and other equipment to divert the flow of wastewater around the sewer section where the work is to be performed. The bypass system shall have sufficient capacity to handle existing flows plus additional flow potentially occurring during periods of rainstorms as indicated from the flow monitoring program. The Contractor shall be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system on a continuous basis. A "setup" consists of the necessary pumps, conduits, fuel, and other equipment required to divert the flow of wastewater from the start to finish of work performed.
- B. Wastewater shall be pumped directly into the nearest available downstream manhole, provided the existing sewer has the capacity to transport the flow. The Contractor shall request the Program Manager to determine the capacity of the downstream existing system. The Contractor shall request this determination fourteen (14) calendar days prior to the planned bypass/diversion pumping.
- C. The Contractor shall be responsible for keeping the pumps running continuously 24 hours a day, if required, until the bypass operation is no longer required. The Contractor shall have standby pumps at all times. The County will reimburse the Contractor for hourly costs associated with providing manpower, materials and equipment necessary to continually operate the bypass system at the price bid per hour. The Contractor will provide the Program Manager the minimum personnel requirements for operating the system for review and approval prior to manning the system for continued operation. The payment will be per LF for installation and maintenance and per hour for operation.

- D. Bypass pumping systems shall have sufficient capacity to pump peak flows in the pipes being bypassed (flows in the existing interceptor sewers can increase dramatically during periods of wet weather). The Contractor shall provide all pipeline plugs, pumps of adequate size to handle wet weather peak flows, and temporary discharge piping to ensure the total flow of the interceptor sewer is safely diverted around the section to be repaired. Wastewater flow control system will be required to be operated twenty-four (24) hours per day.
- E. Maintenance personnel capable of starting, stopping, refueling, and maintaining the pumps and equipment during the bypass/diversion pumping operation shall continuously monitor pumps and equipment. If pumping is required on a 24-hour basis, engines shall be equipped in a manner to keep noise to a minimum. Bypass pumping may, at times, have to remain in operation for an extended period of time in situations when the work is stopped and workers have left the site. The Contractor shall be responsible for maintaining, monitoring, managing and implementing a successful pump bypass operation during such occurrences. Compensation for this occurrence is addressed the in Measurement and Payment (paragraph C).

3.05 FLOW CONTROL PRECAUTIONS

- A. Where the wastewater flow is plugged/blocked, the Contractor shall be responsible for taking sufficient precautions to protect public health. The sewer lines shall also be protected from damage. The following shall apply:
 - 1. No wastewater shall be allowed to back up into any homes or buildings.
 - 2. No wastewater shall overflow any manholes, cleanouts, or any other outlet.
 - 3. Customers upstream of the flow control area shall be able to use all their water and sewer utilities without interruption.
 - 4. If any of the above occur or are expected to occur, the Contractor shall provide bypass/diversion pumping to alleviate one or all of the conditions. Additionally, the Contractor shall observe the conditions upstream of the plug and be prepared to immediately start bypass/diversion pumping, if needed.
- B. Any sump pumps, bypass pumps, trash pumps, or any other type of pump, pulling wastewater or any type of material out of the manhole or sewer, shall discharge the material into another manhole, or appropriate vehicle or container approved by the Program Manager. **Under no circumstances shall this material be discharged, stored, or deposited on the ground, swale, road, or open environment.**
- C. The Contractor shall take appropriate steps to ensure all pumps, piping, and hoses carrying raw wastewater are protected from traffic. Traffic control shall be performed in accordance with the requirements of the governing agency.
- D. Prior to any wastewater flow control operations the Contractor will identify the pump stations and lowest overflow point upstream of the planned plugging/blocking or bypass/diversion. During operations the Contractor will monitor the pump stations and lowest points to ensure overflow does not occur.
- E. In the event, during any form of "Sewer Flow Control," raw wastewater is spilled, discharged, leaked, or otherwise deposited in the open environment, the Contractor shall immediately stop overflow and shall immediately report overflows to the Program Manager. The Contractor shall be responsible for any cleanup of solids and stabilization of the area affected. This work shall be performed at the Contractor's

expense with no additional cost to the County or Program Manager. The Contractor shall also be responsible for notifying the Program Manager and complying with any and all regulatory requirements for cleaning up the spill at no additional cost to the County. The Contractor shall be responsible for any fines assessed by regulatory agencies including the Georgia Environmental Protection Division (EPD).

- F. During wastewater flow control operations, the Contractor shall take proper precautions to prevent damage to existing sanitary sewer facilities, flooding, or damage to public or private property.
- G. The Contractor shall make repairs, replacements or rebuilds, as directed by the Program Manager, to any portion of the sewer system damaged during any plugging or bypass/diversion pumping operation. All such repairs, replacements, and rebuilding shall be paid for by the Contractor.
- H. The Contractor shall make such provisions, as are necessary, for handling all flows in existing sewers, connections, and manholes by pipes, flumes, or by other approved methods at all times, when his operations would, in any way, interfere with normal functioning of those facilities.
- I. The Contractor shall be responsible for the removal of any debris and sedimentation in the existing sewers, laterals, and manholes, etc., attributable to his work under this Contract. The Contractor is responsible for the proper disposal of these items. The debris and liquids are to be disposed of properly in accordance with all applicable laws. The local municipality can furnish a letter to the landfill stating the contractor is authorized to dispose of the non-hazardous materials. Debris and liquids type and quantities are to be tracked in the daily Contractor diary. Hauling and disposal costs will be borne by the Contractor.

3.06 CLEAN UP

- A. Keep premises free from accumulations of waste materials, rubbish, and other debris resulting from the Work.
- B. Restore to original condition portions of site not designated for alterations by Contract Documents.
- C. When by-pass pumping operations are complete, drain piping into sanitary sewer prior to disassembly.

END OF SECTION

SECTION 01540 SECURITY AND SAFETY

PART 1 – GENERAL

1.01 SECTION INCLUDES

This section includes procedures and guidelines for ensuring the safety and security of Owner's job sites and Department of Watershed Management (DWM) facilities. The Contractor shall obtain the latest official copies of these requirements from the Owner's Representative.

1.02 RELATED SECTIONS

This Section applies to the work of every division and every section of these Specifications.

1.03 REFERENCES

- A. Occupational Safety and Health Standards issued by the Secretary of Labor pursuant to the Williams-Steiger Occupational Safety and Health Act of 1970 and as amended.
- B. American National Standards Institute (ANSI Z117.1-20030) for New Construction – Confined Space.
- C. Manual of Uniform Traffic Control Devices for Streets and Highways latest edition and as amended.

1.04 DEFINITIONS

- A. Owner's Representative: The Owner's representative authorized to make decisions regarding the contract.
- B. Project Safety Coordinator: a representative on behalf of the Contractor who is responsible for the safety of the Contractor's and Program Manager's employees, the Owner's personnel and all other personnel at the site of the work caused by their operations.
- C. Competent Person: A representative on behalf of the Contractor who is able to identify existing and predictable hazards in the workplace as unsanitary, hazardous, or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate them.

1.05 SUBMITTALS

- A. The Contractor shall provide the Program Manager and Owner's Representative with a list of 24-hour emergency phone numbers and names including the chain of command.
- B. The Contractor shall maintain a current Employee Log of employees performing work on-site, as well as a Visitor Log, with both available to the County upon request. This log shall be immediately available to the Program Manager and Owner's Representative upon request and submitted as necessary throughout the course of

the project. An example of the Employee Log and Visitor's Log can be found in Attachment C and Attachment D of this Specification Section.

- C. Prior to the performance of any work, the Contractor will prepare and submit a Safety/Health and Security Plan to include, but is not limited to, the following minimum requirements:
1. Basic pre-employment background checks for criminal convictions, veracity of previous employment and education statements, driving record and financial responsibility as applicable to the position.
 2. Security Education and Awareness training applicable to the job.
 3. Standard operating procedures (SOPs) for safeguarding County equipment, supplies and property.
 4. Certification requested under the SAFETY Act, Homeland Security Act of 2002, if applicable. Provide date and result as requested.
 5. Established process for identification of employees and emergency notification procedures.
 6. If applicable, procedures for obtaining entry permits and badges. Procedures for returning badges upon termination of employment
 7. Anti-terrorism training provided to employees including the state of national alert with appropriate procedures.
 8. Emergency evacuation procedures including accounting for employees at a safe haven.
 9. Procedures for reporting post contract criminal convictions and traffic accidents to the Contract Officer or DWM project manager.
 10. SOPs for protecting employees when performing required duties off-site including training for reporting accidents, calling for immediate assistance, job reporting procedures and personal duress codes or alarms.
 11. Contact information for the person(s) responsible for implementation and enforcement of Safety/Health and Security rules and regulations for this contract.
 12. Safe work procedures for the activities within the Contractor's scope of work. New employee orientation program which addresses job and site specific rules, regulations and hazards.
 13. The Contractor's Drug Free Work Place Policy including substance abuse prevention and testing program.
 14. Provisions to protect all of the Contractor's employees, other persons and organizations that may be affected by the work from injury, damage or loss.
 15. Demonstrated compliance with Safety Audit Evaluations, Safety Inspections, current Federal/OSHA Safety/Health and Security Plan, facility safety program (when applicable), and locally accepted safety codes, regulations and practices.
 16. A site-specific emergency and evacuation plan.
 17. Hazard Communication/Right to Know Program

18. Security procedures for the Contractors work, tools, and equipment.
 19. Capability of providing the Program Manager with documentation to show compliance with their plan, plus accidents and investigation reports.
 20. Fire Prevention Measures
 21. Safety in Wastewater Works, to include training employees on the biological, chemical, and atmospheric hazards associated with working in sewer systems, Common hazards include hydrogen sulfide, low oxygen, methane gas, and biologicals
 22. Confined Space Sewer System Entry, including "Permit Required"
 23. Measures to comply with all State and County regulations relative to closing or restricting the use of public streets, roads, or highways. Traffic control procedures, devices and the use of flaggers shall meet all requirements of the applicable current rules and regulations for traffic control.
 24. Any other contract specific requirements.
- D. Provide a Job Safety Analysis (JSA) for the scope of work, prior to the start of work.
- E. The Contractor shall provide the Owner Representative with all safety reports, training records, competent person list, and accident reports prepared in compliance with Federal/OSHA and the Project Safety/Health and Security Plan as requested.

1.06 DELIVERY, STORAGE AND HANDLING

The Contractor is solely responsible for the security of any offices or any temporary staging areas utilized by the Contractor. The Contractor is also responsible for the security and protection of his personnel, materials, tools, vehicles and equipment on-site at all of the various work locations throughout the County.

1.07 PERSONNEL

- A. All personnel working on a DWM project site must wear a visible County issued ID badge authorizing the person to be on the project site. All personnel must obtain and display an identification badge, issued by DWM's safety representative before reporting to work on any DWM CIP project site. Contractors and Subcontractors working on DWM projects, sites, and facilities must have their assigned badge on their person at all times. All Contractors and Subcontractors personnel without a current badge will not be allowed to continue to work at a DWM project, site or facility. Attachment A of this Specification Section describes the badging procedures required to obtain badge.
- B. The Contractor shall have a Project Safety Coordinator who shall be identified on the employee log to be submitted.
- C. The Project Safety Coordinator shall ensure compliance with all applicable health and safety requirements of all governing legislation.
1. The Project Safety Coordinator should have OSHA 30-Hour training as a minimum.
 2. The Project Safety Coordinator should have the authority to resolve safety-related issues on the jobsite.

3. The Project Safety Coordinator should make regular site inspections as commensurate with the size and scope of the Project.
- D. Contractor shall have a "Competent Person" on site at all times when excavation, scaffolding, confined space and open trench operations are being performed.
 - E. Contractor shall have at least one currently certified person in First Aid and CPR on-site at all times.
 - F. Contractor shall provide suitable first aid provisions and medical supplies necessary to administer emergency first aid treatment. The Contractor shall have standing arrangements for the removal and hospital treatment of an injured person. All first aid facilities and emergency ambulance service shall be made available by the Contractor to the Owner and the Program Manager's personnel.
 - G. Should the Contractor dismiss employees who have been given access to the DWM facilities while the contract is in force, the Contractor will advise the DWM safety representative.
 - H. The Owner may request the Contractor to immediately remove from the premises and/or dismiss any employee found unfit to perform duties due to one or more of the following reasons:
 1. Neglect of duty, absenteeism, security or safety problems and sleeping on the job.
 2. Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words, actions or fighting.
 3. Theft, vandalism, immoral conduct or any other criminal action.
 4. Selling, consuming, possessing, or being under the influence of intoxicants, alcohol or illegal substances, which produce similar effects while on duty.
 5. Involved in a vehicle accident while on the Owner's property or driving the Owner's equipment. No employee, Contractor, or Subcontractor will be extended privileges to drive the Owner's equipment on the Owner's property if driving privileges have been withdrawn by the person's State of residence.
 - I. Contractor's and Subcontractor's vendors or their transient onsite visitors, which are not fulltime employees of the site, shall be escorted while onsite as a visitor by a DWM badged Contractor. Contractor shall maintain a daily sign-in sheet record of their daily workers under its supervision which includes Subcontractor's vendors or their transient onsite visitors.
 - J. All employees shall be required to wear at all times in an observable location, above the waist, on outer clothing, an appropriate photo ID badge to be furnished by the Contractor and approved by the Owner. The ID badge shall identify the employee and employer.
 - K. No one under age sixteen is permitted at work sites after normal working hours. Contractor's employees are allowed on work sites only during the specified hours and only when working on this contract. No Contractor employee will be allowed on sites when not specifically working on this contract's predetermined times and dates.
 - L. All employees and agents of the Contractor must read the Project Site Rules statement and sign a log acknowledging understanding of project site rules provided in Attachment E of this Specification Section.

- M. The Contractor is solely responsible for the security and protection of their personnel.

1.08 RESPONSIBILITY

- A. Contractor must cooperate with Owner on all security matters and must promptly comply with any project security arrangements established by the Owner's Representative or Program Manager.
- B. It is the Contractor's obligations to comply with all applicable governmental requirements and regulations and to undertake necessary actions to establish and maintain secure conditions at any jobsite.
- C. The Contractor and his Subcontractors are wholly responsible for the security of their employees, work areas, and for all their material, equipment and tools at all times.
- D. The Contractor shall comply with the site security program at all times on Owner's facilities.
- E. The Contractor shall maintain the security program throughout the Contract duration.
- F. The Contractor shall restrict entry of unauthorized personnel and employees and vehicles onto the Project site.
- G. The Contractor shall only allow entry to authorized persons with proper Owner approved identification. All Contractor and Subcontractor employees will be required to have personnel working at these facilities photographed for an Owner-provided identification (ID) badge before they start work.
- H. The Contractor will be held responsible for all damage to the work and any negligence resulting in injuries due to his failure of erecting and maintaining adequate barricades, signs, fences, lights and safety provisions as required. Whenever evidence is found of such damage, the Contractor shall immediately remove the damaged portion and replace it at the Contractor's expense.
- I. The Contractor's responsibility for the maintenance of barricades, signs, fences, lights, and safety provisions as required, shall not cease until the Owner's Representative has accepted, in writing, the Project.
- J. The Contractor shall not allow cameras on site or photographs to be taken, except those required to perform the Work in accordance with the Contract Documents or otherwise approved by Owner's Representative.
- K. It is not the Owner's Representative's responsibility to verify the Contractor's safety plan for the adequacy and compliance of the plan.
- L. The Contractor shall be fully responsible for the safety and health of the employees, its Subcontractors, and lower tier contractors during the performance of its work.
- M. The Contractor shall be responsible for the safety of the Contractor's and Program Manager's employees, the Owner's personnel, and all other personnel at the work site caused by their operations.
- N. It is the responsibility of the Contractor to ensure all articles of possible personal or monetary value found by the Contractor's employees are turned into the Owner's Representative.
- O. The Contractor shall be responsible for maintaining satisfactory standards of employees' competency, conduct, courtesy, appearance, honesty and integrity, and

shall be responsible for taking such disciplinary action with respect to any employee, as may be necessary.

- P. The Contractor is solely responsible for the security of any offices or any temporary staging areas utilized by the Contractor. The Contractor is also responsible for the security of his materials, tools, vehicles and equipment on-site at all of the various work locations throughout the County.

1.09 SAFETY

The Owner's Representative has the right to refuse access to the site or request a person, equipment, or vehicle be removed from the site if found violating any of the safety, security, project conduct rules, laws, and ordinances as outlined.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

3.01 PREPARATION

- A. All Contractors/Subcontractors will be required to have personnel working at these facilities photographed for identification (ID) badges before they start work.
- B. The Contractor shall require all employees performing activities on site to sign Attachment E Acknowledgment of DeKalb County Project Site Rules" included at the end of this Specification Section. All Contractor employees, Subcontractor employees and lower tier Contractor employees will attend a new employee orientation session. Signature of the project site rules form by the employee certifies the orientation training has been received.
- C. Review of the Contractor's Safety Plan by the Owner's Representative shall not impose any duty or responsibility upon the Owner for the Contractor's performance of the work in a safe manner.

3.02 INSTALLATION

The Contractor shall furnish and erect such barricades, fences, lights, and safety provisions for the protection of persons or property and of the work as necessary.

END OF SECTION

Attachment A- Badging

DeKalb County Badging Procedures

Every person working on a new DeKalb County Watershed Management (DWM), CIP construction site must wear a County issued ID badge authorizing the person to be on the project site. This new standard applies to all Contractors and Subcontractors. All workers must obtain and display an identification badge issued by the DWM's safety representative **before** reporting to work on any new CIP project. The ID badge will play a key role in DWM's security efforts on project sites. Therefore, individuals should wear the assigned badge at all times. All workers shall display the badge on the outer layer garment of clothing between the belt and shoulder. All persons working on a CIP project must wear badges in a manner which is easily displayed.

Prior to Badging:

Training Requirements

- All Contractor and Subcontractor employees are required to attend safety training prior to receiving a badge
- Minimum training duration is 2 hours
- The Contractor and Subcontractor are responsible for conducting and/or arrangement of their employees training
- OSHA 10 hour or OSHA 30 hour or project site specific safety training along with the Contractor receiving and acknowledging a copy of Attachment E DeKalb County Project Site Rules will be in compliance with the training requirements to receive a badge and start work on the DWM construction project(s), site or facility.
- Whereas the OSHA 10 hour and 30 hour training does not expire, actual date of training must be less than 12 months prior to the start of work on the DWM construction project(s) to qualify as "current". In the case where the OSHA 10 hour and 30 hour date of training is more than 12 months prior to the start of the work on the DWM construction project(s), project site specific safety verification of training is required. Contractor's training should include general construction safety and the specific safety concerns/hazards employees may encounter at the DWM construction site. Refer to Attachment B for suggested project site safety topics.
- DWM safety representative shall review a copy of the Contractor's project site specific safety training topics outline prior to the Contractor's employees being approved for badging. If training is to be received online, include training web site information in the submitted safety training topics outline.
- Contractor and Subcontractor employees are required to read, understand, and agree to abide by Attachment E DeKalb County Project Site Rules.
- Employees should have adequate knowledge of all company safety rules and applicable OSHA standards
- Personal instruction, safety videos, and on-line training are permissible
- Upon completion, employees should have a basic knowledge of safety, know the company's views about safety, know safety concerns specific to DWM's construction projects, and know what PPE to use on the jobsite.

Badging:

Verification of Training

- Contractors will need to document their employees training using a Verification of Training Document (VOTD). This training verification form is included as Attachment F at the end of this specification.
- The Contractor's authorized management representative will need to sign the VOTD verifying the training on the form is correct. The authorized representative must be employed by the contract organization for whom they are verifying training records.
- A signed copy of the VOTD will need to be provided to the DWM's safety representative prior to or the day of badging. All Contractor's employees requesting a badge will need to submit a VOTD. The VOTD shall be sent to VOTD@dekalbcountyga.gov prior to the date of appointment.

Verification of Identity Requirements

- During the badging process, the Contractor and Subcontractor employees must provide documentation to the DWM's safety representative to verify their identity and authorization to work.
- DeKalb County only accepts form 1-9 acceptable documentation with accompanying photo.
- 1-9 acceptable documents must be from List A and List B (examples)
 - ID cards issued by federal, state, local government agencies
 - TWIC (Transportation Worker Identification Credential)
 - Driver License or identification card issued by a state motor vehicle department with a photo that clearly identifies the individual.

DWM Site Inspection and Audits

- Field verification will be done randomly by the DWM safety staff to ensure employees are trained and following County, OSHA, and State regulations.

Badging Office Address

DeKalb County Department of Watershed Management, Safety Division
1641 Roadhaven Drive, Stone Mountain, GA 30083
Badging office hours: Tuesday and Thursday 9:00am until 12:00 pm.

Badging Expiration Date

- Badges are valid until the expiration date of the prime contractor's contract.

Transfer Contractors

- If a worker changes companies or projects, the badge must be surrendered and a new badge will be issued if needed.
- If applicable, the new employer will provide the employee certification that the safety training is completed.
- Only those employees registered in the badging system are eligible to receive a badge.
- After verification by the safety representative, the badging database will be updated and a new badge issued.

Special Circumstances

- The County can grant/permit a Contractor the right to badge their employees and Subcontractors. However, the badge template shall be approved by DWM safety representative. The ID badge shall include worker's name, picture, and company affiliation.

Additional Training Requirements

- Additional training requirements may be requested if there is a change in the Contractor's scope of work or responsibilities. Badge Replacement
- Contractor must notify DWM's safety representative immediately if a badge is lost, stolen, or an employee is no longer employed by the Contractor.

Badge Collection/Return Policy

- It shall be the Contractor's responsibility to collect the ID badge from any employee who is discharged or resigns prior to completion of the project as well as completion of the hours of their collection. The Contractor shall return the ID badge to the DWM safety representative within 48 hours of their collection. The Contractor shall be charged a fee of \$25.00 per badge for any badges not returned at completion of the project.
- For ID badges lost or stolen during the duration of the project, there will be a charge for reissuance of \$15.00 per ID badge. The Contractor shall deduct these charges from its periodic or closeout payment request or the County shall deduct them.

Attachment B

COMPANY NAME

PROJECT SITE SPECIFIC SAFETY ORIENTATION ACKNOWLEDGEMENT SHEET

By signing this log, I acknowledge that I understand and agree to abide by the project rules outline below. I further acknowledge that I have been briefed on the project site specific hazards, the site emergency action procedure and prohibited activities.

| These Items Include: | Initial |
|--|---------|
| Company Safety Policy/Rules | _____ |
| Safety in Wastewater Works | _____ |
| Drug and Alcohol Policy | _____ |
| Competent Person Requirements | _____ |
| Personal Protective Equipment Requirements | _____ |
| Disciplinary Policy | _____ |
| Personal Protective Equipment | _____ |
| Trenching and Excavations | _____ |
| Fire Prevention and Protection | _____ |
| Fall Protection | _____ |
| Scaffolding | _____ |
| Confined Space | _____ |
| Electrical | _____ |
| Cranes | _____ |
| Traffic Control/Traffic Safety | _____ |
| Concrete/Masonry Construction | _____ |
| Hazard Communication/Global Harmonizing | _____ |
| Action Plan for Chlorine Gas Release | _____ |

I understand that these policies are a term and condition of this project and that violation of any policy or any aspect of it may result in disciplinary action up to and including being denied access to DeKalb County project, sites and facilities.

Signing this sheet indicates that I have read and understand the above detailed items. I understand that this is part of my ongoing training and I was given the opportunity to ask questions to ensure my full understanding of the items presented.

Contractor Signature

Date

Company Authorized Representative

Date

Attachment C-Employee Log

By signing this log; I acknowledge I have read; understand and agree to abide by Attachment D Project Site Rules and all local; state; federal and/or any other applicable contract obligations. I further acknowledge I have been informed by a representative of the company as to the site specific hazards, any hazardous substances I may be exposed to while on the site and the site/company emergency action procedures.

| EMPLOYEES (PRINT) | SIGNATURE | Company Name | Date |
|-------------------------------------|-----------|--------------|------|
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| Signature of Company Representative | | Date Signed | |

Attachment D-Visitors Log

By the signing of this log I acknowledge I have read, understand and agree to abide by Attachment D project site rules. This is not for a vehicle access permit.

| VISITOR'S NAME (PRINT) | SIGNATURE | Company Name | Date | IN | OUT |
|-----------------------------------|------------------|---------------------|-------------|-----------|------------|
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Attachment E – Acknowledgement of DeKalb County Project Site Rules

PROHIBITED ACTIVITIES:

1. Unauthorized removal or theft of Owner property.
2. Violation of safety or security rules or procedures.
3. Possession of firearms or lethal weapons on jobsite
4. Acts of sabotage
5. Destruction or defacing County property
6. Failure to use sanitary facilities
7. Knowingly or purposely failing to report accidents/incidents or job related injuries
8. Being under the apparent influence of drugs, alcohol or other intoxicants or in possession of drugs, alcohol or other intoxicants on the property
9. Wearing shorts or tennis shoes on jobsite
10. Failure to wear required personal protective equipment
11. Gambling, fighting, threatening behavior, or engaging in horseplay on the project
12. Smoking in unauthorized areas on the project
13. Open fire cooking or making unauthorized fires on project property
14. Selling items or raffles without authorization
15. Use of unauthorized cameras on the project
16. Use of radio or television in the construction area
17. Failure to park personal vehicle in authorized parking area
18. Failure to wear designated identification (Site Specific)
19. Failure to use designated gates
20. Condoning or knowingly allowing a person to engage in or work around a patently unsafe or environmental compromising act or condition
21. Knowingly or purposely falsifying records, documents, or providing false testimony

I have read, understand and agree to abide by the DeKalb County Project Site Rules. Furthermore, I understand failure to abide by these rules is grounds for being denied access to the project site. I have received a personal copy for my use and reference.

Signature

Date

Attachment F Training Verification Form

Appointment Date: _____

(Tues./Thurs.9am-12pm)

Applicants Name: _____

Company Name & DeKalb Contract #: _____

Course Name: OSHA 10

Successfully Completed: Yes No In Progress

Date Completed: _____

Course Name: OSHA 30

Successfully Completed: Yes No In Progress

Date Completed: _____

Course Name: SITE SPECIFIC SAFETY TRAINING

Successfully Completed: Yes No In Progress

Date Completed: _____

Course Name: DeKalb County Project Site Rules

Successfully Completed: Yes No In Progress

Date Completed: _____

I HAVE READ, UNDERSTAND AND AGREE TO ABIDE BY DEKALB COUNTY PROJECT SITE RULES. I HAVE RECEIVED A PERSONAL COPY FOR MY USE AND RECORDS. FURTHERMORE, I UNDERSTAND THAT KNOWINGLY OR PURPOSELY FALSIFYING RECORDS IS GROUNDS FOR BEING DENIED ACCESS TO THE PROJECT SITE. BY MY SIGNATURE BELOW, I AFFIRM THE ABOVE INFORMATION IS ACCURATE AND TRUE.

Company Employee Name (Print):

Company Employee Signature:

Authorized Company Rep (Print):

Authorized Company Rep Signature

SECTION 01600 MATERIAL AND EQUIPMENT

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes requirements of material and equipment incorporated into the work including, but not limited to:
 - 1. Contractor to conform to applicable specifications and standards.
 - 2. Materials and equipment are to comply with size, make, type and quality specified, or as specifically approved in writing by the Program Manager.
 - 3. Manufactured and Fabricated Products:
 - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - b. Manufacturer like parts of duplicate units to standard size and gages. to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service conditions.
 - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 - 4. Contractor is not to use material or equipment for any purpose other than what it is designed or is specified for.

1.02 RELATED SECTIONS

- A. General Conditions of the Agreement
- B. Section 01010: Summary of Work.
- C. Section 01300: Submittals.

1.03 DELIVERY, STORAGE AND HANDLING

- A. Arrange deliveries of Products in accord with construction schedules; coordinate to avoid conflict with work and conditions at the site.
 - 1. Deliver Products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately upon delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals and the Products are properly protected and undamaged.
- B. Provide equipment and personnel to handle Products by methods to prevent soiling or damage to Products or packaging.

- C. Store Products in accord with manufacturer's published instructions, with seals and labels intact and legible.
 - 1. Store Products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
- D. Exterior Storage:
 - 1. Store fabricated products above the ground, on blocking or skid, to prevent soiling or staining. Cover products subject to deterioration with impervious sheet coverings while providing adequate ventilation to avoid condensation.
 - 2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter or other stored materials
- E. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure the Products are maintained under specified conditions and free from damage or deterioration.
- F. Protection After Installation: Provide substantial coverings and all other necessary provisions required to protect installed Products from damage from traffic and subsequent construction operations. Remove when no longer needed.

1.04 SUBMITTALS

- A. The Bidder shall submit a separate substitution request for each product, supported with complete data, with drawings and samples as appropriate, including (as applicable) and in conformance with Specification 01300, Submittals, and the General Requirements.

1.05 RESPONSIBILITY FOR ADHERING TO MANUFACTURER'S INSTRUCTIONS

- A. When Contract Documents requires that the storage, monitoring and protection of materials or the installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two copies to Program Manager. All such instructions shall be provided prior to arrival of material or equipment and shall be a part of the submittal.
 - 1. Maintain one set of complete instructions at the job site during installation and until completion.
 - 2. Keep digital copies available for distribution in PDF format.
- B. Handle, install, connect, clean. Condition, protect and adjust products in strict accord with such instructions and in conformance with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Program Manager for further instructions immediately.
 - 2. Do not proceed with work Without clear instructions from the Program Manager.

- C. Perform work in accord with manufacturer's published instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

PART 2 – PRODUCTS

2.01 PRODUCT OPTIONS

- A. Products List

Within 10 working days submit to Program Manager a complete list of major products proposed to be used, with the name of the manufacturer and the installing subcontractor. This list shall be submitted with the complete schedule of submittals and submittal log as stipulated in the Specifications.

- B. Contractor's Options:

1. For Products specified only by reference standard, select any product meeting the standard.
2. For Products specified by naming several products or manufacturers, select any one of the products or manufacturers named within the specifications.
3. For Products specified by naming one or more Products or manufacturers and "or equal", Contractor must submit a request for substitutions for any Product or manufacturer not specifically named.
4. For Products specifically identified herein by a manufacturer's name, model, or catalog number and the words "or equal" or "or approved equal" do not follow the manufacturer's name, only such items may be used in the Base Bid, except as hereinafter provided:
 - a. Products of the Contractor's choice may be offered as substitutions to such specified products in accordance with the General Requirements.
 - b. Substitute products must be accompanied by full descriptive and technical data for products proposed.
 - c. The Contractor must first confirm that the substitute product is of comparable character to the specified item. Unless otherwise specified within this division, the Program Manager will not approve or disapprove any substitute products before the bids are opened.
 - d. Any impacts or changes to other trades as a result of the use of substitute products will be the responsibility of the Contractor submitting these products. The Bidder shall include in his bid all additional construction and re-design costs associated with that substitute product including but not limited to mechanical, electrical, plumbing, fire protection, civil, architectural, structural, and instrumentation changes.
 - e. In the event the Program Manager does not allow the product for use as a substitute, then the product item as specified shall be furnished for the amount indicated in the Base Bid.

- f. It is the Contractor's responsibility to show all work in design parameters to prove product substitution is equal or superior than specified.

2.02 PRODUCT SUBSTITUTIONS

A. General

1. Allowance of substitute products does not constitute a waiver of the specifications.
2. Substitute products may be deemed equal provided the equal product is the same or better than the product specified in function, performance, reliability, quality, and general configuration.
3. Determination of "equal" in reference to the project design requirements will be made solely by the Program Manager.
4. No substitute equipment will be considered unless, in the opinion of the Program Manager, it conforms to the Contract Drawings and Specifications in all respects, except for make, manufacturer and minor details.
5. Should the Bidder propose substitute products, he shall notify the Program Manager in writing, after the award of the contract and prior to initiating construction, of all dimensional, mechanical, electrical, instrumentation, and structural changes and/or requirements for the substitute product, including relationships between the substitute product and other products or facilities and shall reimburse the Program Manager through the Owner for any associated redesign and/or construction drawings or specifications modifications.
6. Reimbursement for the Engineer's redesign work and any other costs resulting from consideration of substitutions shall be at the Contractor's expense.

B. Contractor's Representations:

A request for a substitution represents the Contractor:

1. Has investigated the proposed Product and determined it is equal to or superior in all respects to that specified.
2. Will provide the same warranties or bonds for the substitution as for the Product specified.
3. Will coordinate the installation of an accepted substitution into the work, and make such other changes, as may be required, to make the work complete in all respects.
4. Waives all claims for additional cost, under his responsibility, which may subsequently become apparent.

- C. Program Manager will review requests for substitutions with reasonable promptness, and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

PART 3 – EXECUTION

(Not Used)

END OF SECTION

SECTION 01700 PROJECT CLOSEOUT

PART 1 – GENERAL

1.01 SECTION INCLUDES

Comply with requirements for administrative procedures stated in this Section and as required of the Contract Documents in closing out the Work. Minimal closeout procedures are summarized in this Section.

1.02 RELATED SECTIONS

- A. General Requirements

1.03 QUALIFICATIONS AND REQUIREMENTS

- A. Contract requirements shall be met when construction and related activities have successfully produced, in order, completion of these three closeout stages:
 - 1. Substantial Completion
 - 2. Final Completion
 - 3. Final Payment
- B. The Contractor shall provide all written notices and supporting documentation as described below when requesting Substantial Completion and Final Completion, respectively. Partial submittals of the required documents shall not represent a valid request, and the Program Manager shall not be liable for any delays in the Substantial and Final Completion dates arising there from.

1.04 SUBMITTALS

- A. The Contractor shall provide to the Owner's Representative the following documents, in PDF and hard copy, in the quantity of one original and two copies unless otherwise noted.
- B. All submittals for approval shall have already been made and reconciled prior to Substantial Completion.
- C. Submittals under this Paragraph would be for a final submittal should revisions or additional copies are required of previously submitted documentation.
 - 1. Evidence of Compliance with all requirements of governing authorities to include Certificates of Inspection.
 - 2. Record documents (reports, final data, etc.), as required of the Contract Documents.
 - 3. Subcontractor List: A complete listing of all subcontractors and their suppliers, indicating business addresses, telephone numbers, contact names, and items supplied by each.

4. Manufacturer List A listing of manufacturers of major materials, equipment and systems installed in the Work, and local contact addresses and phone numbers.
5. Warranties: All warranties transferred to the County. Special Guarantees and service agreements
6. Payment of Debts and Claims and Consent of Surety: The Contractor shall submit adequate evidence the Contractor has paid all obligations to date arising out of the Contract. Contractor shall also submit written consent of its Surety to final payment.
7. Release of Claims and Liens: The Contractor and each subcontractor shall also submit a certified Release of Claims and Liens, indicating the releases for waivers submitted are complete to the best of its knowledge and information upon receipt of final payment. Example form attached.
8. Certificate of Insurance for Products and Complete Operations.
9. No partial submittals of the above items are to be made to the Program Manager. All items of each category are to be collected by the Contractor and delivered at one time to the Program Manager, together with a letter of transmittal listing all items. Where items are to be delivered to the Program Manager, the Contractor shall include a copy of the transmittal letter listing all enclosures, signed by the respective representative acknowledging receipt.
10. Consent of Surety to Final Payment: As required in General Conditions.
11. Releases from Agreements
12. Final Application for Payment
13. Extra Materials/Spare Parts: As required by individual Specification sections.

1.05 INSPECTION FEES

When the Program Manager performs re-inspections due to failure of the work to comply with the claims of status of completion made by the Contractor:

1. Owner will compensate Program Manager for such additional services.
2. Owner will deduct the amount of such compensation from the Final Payment to the Contractor.

1.06 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to the Program Manager.
- B. Statement shall reflect all adjustments to the Contract Price:
 1. The original Contract Price.
 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Allowances.
 - c. Unit Prices.
 - d. Deductions for uncorrected work.

- e. Penalties and Bonuses.
 - f. Deductions for liquidated damages.
 - g. Deductions for re-inspection payments.
 - h. Other adjustments.
3. Total Contract Price as adjusted.
 4. Previous payments.
 5. Sum remaining due.
- C. Program Manager will prepare final Change Order reflecting approved adjustments to the Contract Price not previously made by Change Orders.

1.07 APPLICATION FOR PAYMENT

Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated In the Conditions of the Contract.

PART 2 – PRODUCTS

(Not Used)

PART 3 EXECUTION

3.01 COMPLETION

- A. Reference the Definitions, regarding Substantial Completion in the Agreement.
- B. When the Work is substantially complete, the Contractor shall submit to the Program Manager:
 1. A written notice the Work or a designated and acceptable portion thereof, is substantially complete.
 2. An original Certificate of Occupancy for the Project (as applicable).
 3. A list of items to be completed or corrected (hereinafter referred to as a "Punch List").
 4. All executed work orders signed and accepted by the Program Manager.
 5. Project closeout documents, warranties, and certificates for review and approval.
- C. Within 10 working days of such notice, the Contractor and Program Manager will make an inspection to determine the status of completion.
- D. The Punch List submitted by the Contractor will be reviewed and tracked for completion by the Program Manager. Once complete, the Program Manager shall provide a punch list for any remaining items for the Contractor to complete. The Program Manager may withhold the issuance of the Certificate of Substantial Completion until corrections required by the Program Manager are made or all parties are satisfied they will be made.

- E. Should the Program Manager determine the Work is not substantially complete:
 - 1. The Program Manager will promptly notify the Contractor in writing, giving the reasons therefore.
 - 2. The Contractor shall remedy the deficiencies in the Work, and then send a second written notice of Substantial Completion to the Program Manager.
- F. When the Program Manager concurs the Work is substantially complete, the Program Manager will:
 - 1. Prepare a Certificate of Substantial Completion accompanied by the Contractor's Punch List of items to be completed or corrected, as verified and amended by the Program Manager. (Note: Contract responsibilities are not altered by inclusion or omission of required Work for the Punch List.)
 - 2. Sign the Certificate of Substantial Completion and submit it to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

3.02 FINAL COMPLETION

- A. Reference the Definitions, regarding Final Completion in the Agreement.
- B. To attain Final Completion, the Contractor shall complete the activities pertaining to the Certificate of Substantial Completion and complete work on all Punch List items. Only then shall a written request to the Program Manager for final inspection be submitted.
- C. When the Work is complete, the Contractor shall submit to the Program Manager written certification, signed jointly by the Program Manager, indicating:
 - 1. The Contract Documents have been complied with in their entirety.
 - 2. The Work has been inspected for compliance with Contract Documents.
 - 3. The Work has been completed in accordance with Contract Documents.
 - 4. The Work is completed and ready for final inspection.
- D. The Contractor and Program Manager will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- E. Should the Program Manager determine the Work is incomplete or defective:
 - 1. The Program Manager will promptly notify the Contractor in writing, listing the incomplete or defective Work.
 - 2. The Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to the Owner stating the Work is complete.
- F. When the Program Manager finds the Work is acceptable under the Contract Documents, the Contractor will be requested to make a final closeout submittal.

END OF SECTION

UNCONDITIONAL WAIVER AND RELEASE
UPON FINAL PAYMENT

STATE OF GEORGIA

DEKALB COUNTY

The undersigned mechanic and/or material man has been employed by _____
(name of contractor) to furnish _____
(describe materials and/or labor) for the construction of improvements known as _____
_____ (title of the project or building) which is located in the City of
_____ and is owned by _____ (name of owner) and
more particularly described as follows:

(DESCRIBE THE PROPERTY UPON WHICH THE IMPROVEMENTS WERE MADE BY
USING EITHER A METES AND BOUNDS DESCRIPTION, THE LAND LOT DISTRICT, BLOCK
AND LOT NUMBER, OR STREET ADDRESS OF THE PROJECT.)

Upon the receipt of the sum of \$ _____, the mechanic and/or material man waives and
releases any and all liens or claims of liens or any right against any labor and/or material bond it
has upon the foregoing described property.

Given under hand and seal this _____ day of _____, 20_____.

_____(Seal)

(Witness)

SECTION 01710 CLEAN-UP

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes policies and procedures preventing the accumulation of waste materials on the site and the clean-up of waste materials throughout the duration and upon the completion of work.
- B. This section includes miscellaneous work related to quality control including, but not limited to, protecting active utilities and general procedures for utility crossings. The Contractor shall also reference the General Requirements related to protection of existing utilities.
- C. This section includes operations not specified in detail as separate items, but can be sufficiently described as to the kind and extent of work involved. Furnish all labor, materials, equipment and incidentals to complete the work under this Section.

1.02 RELATED SECTIONS

NOT USED

1.03 QUALIFICATIONS AND REQUIREMENTS

- A. Contractor shall keep the project site free from accumulated waste materials and rubbish at all times during the Work. At completion of the work, the Contractor shall remove all waste materials and rubbish from and about the Project, as well as his tools, equipment, machinery, and surplus/stockpiled materials, except those specifically required by the Contract Documents to be salvaged or left for the Owner's use.
- B. If Contractor fails to keep project clean on a daily basis or as directed, or to clean up prior to Date of Substantial Completion, the Program Manager may do so, and the cost will be charged to the Contractor.
- C. Attention is directed to the State Soil Erosion and Sediment Control laws, ordinances and requirements, as well as Georgia's NPDES Permit No. GAR 100001, 100002, or 100003, as applicable, and as detailed in the drawings, or addressed in other sections.

1.04 SAFETY

- A. Store volatile or sanitary waste as required by State and Federal requirements, and remove from project site daily to an approved facility.
 - 1. Allow no volatile wastes to accumulate on project site.
 - 2. Provide adequate ventilation during use of volatile substances.
- B. Do not burn or bury waste materials and/or rubbish on project site

- C. Do not dispose of any volatile wastes such as, but not limited to, mineral spirits, oil, or paint thinner, in storm or sanitary drains, on pavements, In gutters, or on the project site.
- D. Do not dispose any waste or cleaning materials containing materials harmful to plant growth on the project site. Immediately clean up materials accidentally spilled.

PART 2 – PRODUCTS

(Not Used)

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Clean-up during construction
 - 1. Execute cleaning procedures to ensure the streets, easements, rights of way, work areas; project site and adjacent properties are maintained free from debris, dust, and rubbish unauthorized stockpiled or stored materials.
 - 2. Wet down materials subject to blowing. Do not throw waste materials from heights.
 - 3. Provide covered, on-site containers for waste collection. Place all waste materials and rubbish in containers in an expeditious manner to prevent accumulation. Remove waste from project site when containers become full or daily if so directed.
 - 4. Legally dispose all waste materials, rubbish, volatile materials and cleaning materials off project site.
 - 5. Maintain project in a "broom-clean" state until Date of Substantial Completion. Protect surfaces from contamination during all operations.
 - 6. Do not allow debris contributing to the survival or spread of rodents, roaches or other pests to accumulate.
 - a. Remove debris containing food scraps on a daily basis.
 - b. Should pests inhabit project, Contractor shall be responsible for securing services of a pest exterminator at no additional cost to the Owner.
- B. Protection and clean-up of roads
 - 1. Spillovers on roads from trucks entering or leaving the site shall be immediately cleaned up and monitored on a continuing basis so pavements and adjacent sidewalks and property will not be littered with earth, stones, mud or any other debris resulting from assessment and construction related operations.
 - 2. Accumulations of earth, sand, gravel and mud shall be removed from vehicle wheels and vehicle underbodies and ledges before entry upon public roads
- C. Stripping

In areas so designated, topsoil shall be stockpiled. The topsoil shall be protected until it is placed as specified. Any topsoil remaining after all work is in place shall be used on-site in designated areas.

D. Bench marks

Carefully protect and maintain all benchmarks, monuments, and other reference points. If disturbed, replace at no additional cost to the Owner, as directed by the Owner's Representative.

E. Incidental work

Do all incidental work not otherwise specified, but obviously and reasonably necessary or directed, for the proper completion of the contract as specified at no additional cost to the Owner.

3.02 ACTIVE UTILITIES

- A. Active utilities traversing the site shall be adequately protected and preserved in operating condition. Repair damage to all such utilities due to work under this Contract, to the satisfaction of the authority having jurisdiction over the utility at no additional cost to the Owner. If damaged, tracer wires and marking materials shall be restored, repaired or replaced as necessary, to the satisfaction of the authority having jurisdiction over a utility.

3.03 FINAL Clean-Up

- A. All general and specific cleaning shall be performed prior to Contractor's request for the project or portion thereof be inspected for Substantial Completion.
- B. Clean disturbed areas of project site of debris.
1. Broom clean paved surfaces, driveways and sidewalks.
 2. Rake clean all landscaped surfaces
 3. Remove oil and similar deleterious substances.

END OF SECTION

SECTION 02110
ACCESS ROUTE & EASEMENT ACCESS CLEARING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes, but is not limited to, removing and disposing of trees, stumps, roots, brush, structures, abandoned utilities, trash, debris, and all other materials found on or near the surface of the ground in the construction area and, understood by generally accepted engineering practice, not to be suitable for construction of the type contemplated from the work site. Precautionary measures to prevent damage to existing features to remain are considered part of the work.
- B. The Program Manager will designate all trees, shrubs, plants, and other things to remain. Paint required for cut or scarred surface of trees or shrubs selected for retention shall be an asphaltum base paint prepared especially for tree surgery and approved by the Program Manager.
- C. Sewer Easement Clearing Operations shall be coordinated with temporary and permanent erosion and sedimentation control procedures.

1.02 RELATED SECTIONS

- A. Section 02276 – Site Restoration and Erosion Control
- B. Section 02486 – Seeding
- C. Section 02542 – Silt Fence

1.03 DEFINITIONS

- A. Light Clearing: This area requires "bush hog" equipment for tree and shrub removal.
- B. Medium Clearing: This area requires "bush hog" and "chipper" equipment for tree and shrub removal.
- C. Heavy Clearing: This area requires "timbering" equipment for tree and shrub material.

1.04 QUALIFICATIONS AND REQUIREMENTS

- A. The Contractor shall comply with all applicable codes, ordinances, rules, regulations, and laws of local, municipal, State or Federal authorities having jurisdiction over the work. All required permits shall be obtained for construction operations by the Contractor and submitted to Program Manager for verification.
- B. All persons involved in land disturbance work shall be trained and certified in accordance with the requirements of the Georgia Erosion and Sedimentation Act.
- C. Open burning will not be permitted.

1.05 SUBMITTALS

- A. Prior to beginning easement clearing, the Contractor shall submit to the Program Manager a map showing the location of all easements to be cleared. The Contractor

- shall label each easement as requiring light clearing, medium clearing or heavy clearing.
- B. The Contractor shall submit to the Program Manager a schedule for clearing the easements.
 - C. The easement clearing map and schedule must be submitted to the Program Manager fourteen (14) calendar days prior to beginning easement clearing.
 - D. The easement clearing map and schedule must be approved by the Program Manager before the Contractor can begin Work.
 - E. Copies of all permits required for clearing operations shall be provided to the Program Manager prior to beginning work.
 - F. Equipment list and specification for all pieces planned for use on site.
 - G. Maintenance log of equipment to be used to show that all equipment has been properly maintained.
 - H. Plan for approved fuel storage areas, if applicable.

PART 2 – PRODUCTS

2.01 EQUIPMENT

- A. The Contractor shall furnish equipment with operators of the type normally used in clearing and grubbing operations including, but not limited to tractors, trucks, loaders, stump grinders, and root rakes.

PART 3 – EXECUTION

3.01 INSTALLATION AND EXECUTION

- A. Clearing and grubbing activities will be conducted at the minimum level necessary to provide access to an assessment or construction activity location and to the level necessary to perform the assigned work.
- B. Clear and grub (where required by other specifications and/or the Project Manager) the permanent easement, but not to exceed limits of easements on each side of the pipeline or authorized access area, before initiating other items of work. The removal of trees, growth, debris, stumps and other objectionable matter, will be to the extent necessary to obtain access and perform the assigned work except as directed otherwise by the Project Manager.
- C. Materials to be cleared, grubbed and removed from the construction area include, but are not limited to the following: trees, stumps, roots, brush, trash, organic matter, paving, miscellaneous structures, debris, and abandoned utilities.
- D. Grubbing shall consist of completely removing roots, stumps, trash, and other debris from all graded areas so the topsoil is free of roots and debris. Topsoil is to be left sufficiently clean so further picking and raking will not be required. Grubbing shall only be performed at the specific direction of the Project Manager.
- E. Where directed, all stumps, roots, foundations and planking embedded in the ground shall be removed and disposed of in a proper manner. Piling and butts of utility poles shall be removed to a minimum depth of two feet below the limits of excavation for

structures, trenches and roadways or two feet below finished grade, whichever is lower.

- F. Prior to clearing landscaping features, but not necessarily limited to, specimen trees, fences, cultivated trees, cultivated shrubbery, property corners, man-made improvements, subdivision and other signs, shall be noted on the easement clearing maps and shall be reviewed with the Project Manager. The Project Manager will determine which landscape features are to remain undisturbed. The Contractor shall take extreme care in moving landscape features and shall re-establish these features as directed by the Project Manager.
- G. Where directed, surface rocks and boulders shall be grubbed from the soil and removed from the site, if not suitable as rip rap.
- H. Where tree limbs interfere with utility wires, or where the trees to be felled are in close proximity to utility wires, the tree shall be taken down in sections to eliminate the possibility of damage to the utility.
- I. Any work pertaining to utility poles shall comply with the requirements of the appropriate utility.
- J. Fences adjoining any excavation or embankment in conflict with the assigned work and/or subject to being damaged or buried, shall be carefully removed, stored and reset or replaced. Any fencing, in the Project Manager's opinion, significantly damaged by the work shall be replaced with new fence material of equal or better quality at the Contractor's expense.
- K. Where required, stumps and roots shall be grubbed and removed to a depth not less than 2 feet below grade. All holes or cavities extended below the subgrade elevation of the proposed work shall be filled with crushed rock or other suitable material, compacted to the same density as surrounding material.
- L. The Contractor shall exercise special precautions for the protection and preservation of trees, cultivated shrubs, sod, fences, etc. situated within limits of the construction area, but not directly within excavation and/or fill limits. The Contractor shall be held liable for any damage his operations have inflicted on such property.
- M. The Contractor shall be responsible for all damages to existing improvements outside the permanent easement resulting from Contractor's operations.
- N. Burying of residual materials will not be allowed.

3.02 CONSTRUCTION ACCESS ROUTE ON EASEMENT

- A. When directed by the Project Manager, a construction access route shall be built on the sewer easement for the purpose of accessing the assigned work.
- B. Construction roads, when required, shall be cut twelve (12) feet wide and as long as required, and six (6) inches deep below existing grade. Filter fabric shall be placed at the bottom of the cut, and stone shall be placed on top of the fabric, filling the six inch depth along the road.
- C. Provide and install the filter fabric and stone as indicated in the Manual for Erosion and Sediment Control in Georgia.
- D. The Contractor is required to maintain the exit/entrance and roadway to include periodic top dressing of gravel to maintain a 6 inch depth. Remove all spilled materials and debris from graveled surfaces.

3.03 CLEAN-UP

- A. The debris resulting from the clearing and grubbing operation shall be hauled to a disposal site secured by the Contractor and approved by the Project Manager. The debris shall be disposed of in accordance with all requirements of Federal, State, County and municipal regulations. No debris of any kind shall be deposited in any stream or body of water, or in any street or alley. No debris shall be deposited upon any private property, except with written consent of the property owner. In no case shall any material or debris be left on the worksite, shoved onto abutting private properties, or buried on the worksite.
- B. Open burning will not be permitted.

END OF SECTION

SECTION 02276
SITE RESTORATION AND EROSION CONTROL

PART 1 – GENERAL REQUIREMENTS

1.01 SECTION INCLUDES

- A. The work specified in this Section consists of providing, maintaining and removing temporary erosion and sedimentation controls as necessary.
- B. Temporary erosion controls include, but are not limited to, Best Management Practices (BMP's) such as: grassing, mulching, netting, and watering, and reseeding on-site surfaces and spoil and borrow area surfaces and providing interceptor ditches at ends of berms and at those locations ensuring the erosion during construction will be either eliminated or maintained within acceptable limits as established by the Program Manager, Local Issuing Authority and State.
- C. Temporary sedimentation controls include, but are not limited to, Best Management Practices (BMP's) such as: silt fencing, silt dams, temporary sediment traps, check dams, temporary inlet sediment traps, barriers, rock filter dams, temporary creek crossings, diversion ditches, tree protection fencing, and appurtenances at the foot of sloped surfaces ensuring the sedimentation pollution will be either eliminated or maintained.

1.02 RELATED SECTIONS

- A. Section 02485: Sodding
- B. Section 02486: Seeding

1.03 REFERENCES

- A. Clean Water Act
- B. Georgia Building Code
- C. Any Soil Erosion and Sediment Control Ordinances in force by the local Government.
- D. State of Georgia, Department of Transportation, Standard Specifications.
- E. Manual for Erosion and Sediment Control in Georgia, latest edition.
- F. Georgia Erosion and Sedimentation Control Act
- G. Georgia Water Quality Control Act

1.04 QUALIFICATIONS AND REQUIREMENTS

- A. Provide effective temporary erosion and sediment control measures during construction in accordance with the Georgia Soil and Water Conservation

Commission (GSWCC) Manual for Erosion and Sediment Control in Georgia, latest edition, until final controls become effective.

- B. Erosion, Sedimentation and Pollution Control shall be performed in accordance with Georgia's NPDES Permit No. GAR 100001, 100002, or 100003, as applicable, and as detailed in the drawings.

PART 2 – PRODUCTS

1.05 EROSION CONTROL

- A. Mulch
- B. Temporary grass seed
- C. Permanent grass seed
- D. Sod
- E. Dust control
- F. Slope stabilization blankets
- G. Flocculants and coagulants
- H. Tackifiers
- I. Stream bank stabilization products
- J. Slope stabilization products:
 - 11. Rolled Erosion Control Products (RECPs): A natural fiber blanket with single or double photodegradable or biodegradable nets.
 - a. Blankets shall be non-toxic to vegetation, seed, or wildlife. At a minimum, the plastic or biodegradable netting shall be stitched to the fibrous matrix to maximize strength and provide for ease of handling.
 - b. Products shall be determined to be non-toxic in accordance with EPA-821-R-02-012.
 - 12. Hydraulic Erosion Control Products (HECPs): shall utilize straw, cotton, wood or other natural based fibers held together by a soil binding agent working to stabilize soil particles. Paper mulch should not be used for erosion control.
 - a. HECPs shall be prepackaged from the manufacturer. Field mixing of performance enhancing additives will not be allowed. Fibrous components should be all natural or biodegradable.
 - b. Products shall be determined to be non-toxic in accordance with EPA-821-R-02-012.

1.06 SEDIMENTATION CONTROL

- A. Bales - clean, seed free cereal hay type.

- B. Netting - fabricated of material acceptable to the County.
- C. Filter stone - No. 57 - crushed stone.
- D. Filter media sock, silt fencing (Type NS or Type S).
- E. Tree protection fencing.

PART 3 – EXECUTION

1.07 GENERAL

- A. All erosion control measures are to be installed per the requirement listed in the construction documents as well as defined with Georgia's Manual for Erosion and Sediment Control, latest edition. *GSWCC Field Manual for Erosion and Sedimentation Control in Georgia* – latest edition.

1.08 VEGETATIVE MEASURES

- A. Erosion control should be addressed in the planning stages of all proposed land-disturbing activities. While erosion is difficult to control completely, methods to reduce it are practical, affordable, and cost effective. Erosion control techniques shall be used on all areas exposed for a prolonged period of time, including areas that will be paved or built upon in the future. Various types of vegetative practices are used for erosion control. The time-line for the implementation of various vegetative practices is as follows:
- B. Mulch, temporary vegetation, or permanent (perennial) vegetation shall be completed on all exposed areas within 14 days after disturbance.
- C. **Ds1 - Disturbed Area Stabilization (With Mulching Only)** Mulching can be used as a singular erosion control method on areas at rough grade. Mulch can be an option for up to six months provided the mulch is applied at the appropriate depth (depending on type of mulch used), anchored, and has a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth, anchorage, and 90% cover. If an area will remain undisturbed for greater than six months, permanent (perennial) vegetation shall be used.
- D. **Ds2 - Disturbed Area Stabilization (With Temporary Seeding)** Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months.
- E. **Ds3 - Disturbed Area Stabilization (With Permanent Vegetation)** Permanent (perennial) vegetation or sod shall be used immediately on areas at final grade. Permanent (perennial) vegetation shall be used on rough graded areas to be undisturbed for more than six months.
- F. **Ds4 - Disturbed Area Stabilization (With Sodding)** may be used in place of Ds3.
- G. **"Stabilization"** of an area is accomplished when 70% of the surface area is covered in a uniform, vegetative cover (permanent or temporary) or anchored mulch of the appropriate thickness with 90% coverage. "Final stabilization" means all soil

disturbing activities at the site have been completed, and for unpaved areas and areas not covered by permanent structures and areas located outside the waste disposal limits of a landfill cell certified by EPD for waste disposal, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures.

H. **Permanent (perennial) vegetation** shall consist of: planted trees, shrubs, perennial vines; a crop of perennial vegetation appropriate for the time of year and region; or a crop of annual vegetation and a seeding of target crop perennials appropriate for the region, such that within the growing season a 70% coverage by perennial vegetation shall be achieved.

1. For linear construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by stabilizing the disturbed land for its agricultural or silvicultural use.
2. For the purposes of this specification, permanent vegetation is used synonymously with perennial vegetation. Perennial vegetation is plant material that lives continuously from year to year although it may have a dormant season when the leaves and possibly the stems “die back” to the ground. No vegetative planting can technically be considered permanent. Annual vegetation is plant material lives for only one growing season. This type of vegetation is typically used for temporary establishment due to its quick germination. Some perennial vegetation can be used for temporary stabilization.

I. Slope Stabilization

1. It is the intention of this specification to allow interchangeable use of RECPs and HECs for erosion protection on slopes. The project engineer should select the type of erosion control product best fitting the need of the particular site.
 - a. Installation and stapling of RECPs and application rates for the HECs shall conform to manufacturer’s guidelines for application.
 - b. Products shall have a maximum C-factor (ASTM D6459) for the following slope grade:

| Slope (H:V) | C-Factor (max.) |
|----------------|-----------------|
| 3:1 or greater | 0.080 |

2. RECPs will be categorized as follows:
 - a. Short term (functional longevity 12 mos.)
 - i. Photodegradable: Straw blankets with a top and bottom side photo degradable net. The maximum size of the mesh shall be openings of ½” X ½”. The blanket should be sewn together on 1.5” centers with degradable thread. Minimum thickness should be 0.35” and minimum density should be 0.5 lbs. per square yard.
 - ii. Biodegradable: Straw blanket with a top and bottom side biodegradable jute net. The top side net shall consist of

machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh shall be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.5 lbs. per square yard.

- b. Extended term (functional longevity 24 mos.)
 - i. Photodegradable: Blankets that consist of 70% straw and 30% coconut with a top and bottom side photodegradable net. The top net should have ultraviolet additives to delay breakdown. The maximum size of the mesh shall be openings of 0.65" X 0.65". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.35" and minimum density should be 0.6 lbs. per square yard.
 - ii. Biodegradable: Blankets that consist of 70% straw and 30% coconut with a top and bottom side biodegradable jute net. The top side net shall consist of machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh shall be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.65 lbs. per square yard.
- c. Long-term (functional longevity 36 mos.)
 - i. Photodegradable: Blankets that consist of 100% coconut with a top and bottom side photodegradable net. Each net should have ultraviolet additives to delay breakdown. The maximum size of the mesh shall be openings of 0.65" X 0.65". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.3" and minimum density should be 0.5 lbs. per square yard.
 - ii. Biodegradable: Blankets that consist of 100% coconut with a top and bottom side biodegradable jute net. The top side net shall consist of machine direction strands that are twisted together and then interwoven with cross direction strands (leno weave). The bottom net may be leno weave or otherwise to meet requirements. The approximate size of the mesh shall be openings of 0.5" X 1.0". The blanket should be sewn together on 1.5" centers with degradable thread. Minimum thickness should be 0.25" and minimum density should be 0.5 lbs. per square yard.
- d. **Site Preparation:** After the site has been shaped and graded to the approved design, prepare a friable seedbed relatively free from clods and rocks more than one inch in diameter, and any foreign material preventing contact of the soil stabilization mat with the soil surface. Surface must be smooth to ensure proper contact of blankets or

matting to the soil surface. If necessary, redirect any runoff from the ditch or slope during installation.

- i. **Maintenance:** All erosion control blankets and matting should be inspected periodically following installation, particularly after rainstorms to check for erosion and undermining. Any dislocation or failure should be repaired immediately. If washouts or breakage occurs, reinstall the material after repairing damage to the slope or ditch. Continue to monitor these areas until they become permanently stabilized.

1.09 SEDIMENTATION CONTROL

- A. Install and maintain silt fencing, silt dams, traps, barriers and all other appurtenances as shown on the approved descriptions and working drawings. Hay bales, silt fencing, filter socks, and other BMP's which deteriorate and filter stone which is dislodged shall be replaced when needed.
- B. Install and maintain temporary stream crossings as indicated in the Manual for Erosion and Sediment Control in Georgia, and as modified in these specifications.
- C. Install and maintain riprap for all erosion and sediment control methodologies as indicated in the Manual for Erosion and Sediment Control in Georgia and as specified or modified in the Contract Documents.

1.010 ACCEPTANCE

- A. Should any of the temporary erosion and sediment control measures employed fail to produce results complying with the requirements of the State, immediately take whatever steps are necessary to correct the deficiency within the limits defined in the NPDES permit and the GSWCC Manual for Erosion and Sediment Control Georgia latest edition.
- B. For a product or practice to be approved as slope stabilization, that product or practice must have a documented C-factor of 0.080.

1.011 DOCUMENTATION

Contractor shall monitor, report and retain records as required by the GA NPDES Permit No. GAR 100001, 100002, or 100003, as applicable. Attached to the end of this section are the minimal, but not limited to, reports which should be performed and maintained. The following are the attached reports:

- A. Daily Inspection Report
- B. Daily Rainfall Monitoring Report
- C. Weekly Inspection Report
- D. Stormwater Monitoring Data
- E. Monthly Inspection Report

- F. Inspection Summary Report for violations and corrective actions.
- G. Erosion and Sedimentation Control Inspection Report

END OF SECTION

Daily Inspection Report

Inspection performed by certified personnel each day construction activity occurs on-site

| Project Information | |
|--|--|
| Date: | Project Name: |
| Project Location: | |
| Inspection Observations | |
| Rainfall within past 24 hours (inches): | Is rainfall greater than 0.5"? Inspection Required <input type="checkbox"/> |
| Inspection Observations | |
| Petroleum Product Storage Areas: Are all of the temporary and permanent controls contained in Plan in place? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, describe the location(s) of deficiencies and corrective actions that must be taken. | |
| Vehicle Entrances and Exits: Is there tracking of sediment from locations where vehicles enter and leave the project? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe the location(s) and the corrective actions that must be taken. | |
| Other Observations | |
| Is an Erosion, Sedimentation and Pollution Control Plan revision required? <input type="checkbox"/> Yes <input type="checkbox"/> No Date of revision: | |
| Corrective Actions and Date: | |

Signature of Certified Personnel

Printed Name of Certified Personnel

Weekly Inspection Report

Inspection performed by certified personnel at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater

Project Information

| | |
|--------------------|---------------|
| Date: | Project Name: |
| Project Location: | |
| Name of Inspector: | |

Inspection Event

| | |
|---|---|
| Regular weekly inspection: <input type="checkbox"/> | Inspection within 24 hours of 0.5" storm event <input type="checkbox"/> |
|---|---|

Inspection Observations

Disturbed areas that have not undergone final stabilization:

Are all of the temporary and permanent controls contained in Plan in place and properly maintained? Yes No

If no, describe the location(s) of deficiencies and corrective actions that must be taken.

Corrective Action Taken and Date:

Material storage areas exposed to precipitation:

Are all of the temporary and permanent controls contained in Plan in place and properly maintained? Yes No

If no, describe the location(s) of deficiencies and corrective actions that must be taken.

Corrective Action Taken and Date:

Discharge locations or points.

Are erosion control measures preventing impacts to receiving waters? Yes No

If no, describe observations:

Month: _____ Year: _____

Sheet _____ of _____

Submit to EPD by 15th of Following Month

Project Location: _____

Project Location: _____

Storm Water Monitoring Data

To be used within 24-hours of a qualifying rainfall event of 0.5-inches or more.

| Date Sampled | Rainfall Amount (Inches) | Exact Location of Sample | Time Sampled | Sampling Technique (Manual or Automatic Grab) | Sampled by | Date of Analysis | Time Analyzed | Analyzed By | Analytical Technique or Method Used (Meter #) | Results (NTU) |
|--------------|--------------------------|--------------------------|--------------|---|------------|------------------|---------------|-------------|---|---------------|
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I certify that all sampling and analysis was conducted as per the Plan. _____
(Signature of Certified Personnel)

Monthly Inspection Report

Inspection performed by certified personnel at least once per month

| Project Information | |
|---|--|
| Date: | Project Name: |
| Project Location: | |
| Inspection Observations | |
| Rainfall within past 24 hours (inches): | Is rainfall greater than 0.5"? Inspection Required <input type="checkbox"/> |
| Inspection Observations | |
| Areas that have undergone final stabilization: Are all permanent stabilization controls contained in Plan in place? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, describe the location(s) of deficiencies and corrective actions that must be taken. | |
| Other observations: Are pollutants entering the drainage system or receiving waters? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe the location(s) and the corrective actions that must be taken. Are all erosion and sediment control measures operating properly? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, describe the location(s) and the corrective actions that must be taken. | |
| Other Observations | |
| Is an Erosion, Sedimentation and Pollution Control Plan revision required? <input type="checkbox"/> Yes <input type="checkbox"/> No Date of revision: | |
| Corrective Actions and Date: | |

Signature of Certified Personnel

Printed Name of Certified Personnel

Inspection Summary

Site: _____

LDA No. _____

| Map Site | Violation | First Date | Date Corrected |
|----------|-----------|------------|----------------|
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Site Inspection Report

Erosion and Sedimentation Inspection Report

Maintain Reports on-site

| | | |
|---|------------------------|--------------|
| Site: | Date: | Time: |
| Inspector: | Accompanied By: | |
| Stage of Construction: | | |
| | | |
| Site: | | |
| Observation: | | |
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| Recommendations: | | |
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| Contractor's Corrective Action (and Date): | | |
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| Site: | | |
| Observation: | | |
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| Recommendations: | | |
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| Contractor's Corrective Action (and Date): | | |
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SECTION 02485 SODDING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes the Contractor's responsibility to furnish all labor, materials, equipment, and incidentals necessary to place sod and maintain all sodded areas disturbed by the Contractor's operations.
- B. Work includes all soil preparation, soil additives, and the storage, transportation, placing, and maintenance of sod at all locations as required or as directed by the Program Manager.
- C. Ds3 and Ds4 Requirements for Regulatory Compliance

1.02 RELATED SECTIONS

- A. Section 02276: Site Restoration and Erosion Control

1.03 SUBMITTALS

- A. Product labels/data sheets.
- B. Certification of sod; include source and harvest date of sod, and sod seed mix.

1.04 DELIVERY, STORAGE, AND PROTECTION

- A. Sod:
 - 1. Do not harvest if sod is excessively dry or wet to the extent survival may be adversely affected.
 - 2. Harvest and deliver sod only after laying bed is prepared for sodding.
 - 3. Roll or stack to prevent yellowing.
 - 4. Deliver and lay within 64 hours of harvesting.
 - 5. Keep moist and covered to protect from drying from time of harvesting until laid.

1.05 WEATHER RESTRICTIONS

- A. Perform Work under favorable weather and soil moisture conditions as determined by accepted local practice.

1.06 GUARANTEE

- A. Establish an acceptable growth of the specified sod on all areas as directed by the Program Manager.

- B. An area is considered acceptable if the majority of each piece of sod is alive and healthy and generally free from weeds, insects, and disease.
- C. The Contractor is responsible for watering, weeding, and mowing, the sod during the maintenance period.

1.07 MAINTENANCE SERVICE

- A. Begin maintenance immediately after each area is planted and continue for a period of 60 days after all planting under this section is completed.
- B. Perform maintenance operations during maintenance period to include:
 - 1. Watering: First 2 weeks water daily, thereafter keep surface moist.
 - 2. Washouts: Repair by filling with topsoil, liming, fertilizing, and resodding.
 - 3. Mowing: Mow to 2 inches after grass height reaches 3 inches, and mow to maintain grass height from exceeding 3-1/2 inches.
 - 4. Resod unsatisfactory areas, or portions thereof, immediately at the end of the maintenance period if a satisfactory stand has not been produced.

PART 2 – PRODUCTS

2.01 SOD

- A. New sod consisting of live, dense, well rooted growth; well suited for the intended purpose and soil conditions; completely free of noxious weeds and grasses (crab grass, quack grass, Johnson grass, Canada thistle); and containing less than 5 plants of objectionable weeds per 100 square feet.
- B. Obtain all sod from an approved nursery with a Georgia Live Plant license.
- C. Replacement sod will match existing lawn grass type.

2.02 FERTILIZER

- A. Commercially manufactured, Grade 10-10-10; furnished in standard containers clearly marked with the name, weight, and guaranteed analysis of the contents and ensuring proper protection in transportation and handling; and in compliance with all local, state, and federal fertilizer laws.

2.03 AGRICULTURAL LIMESTONE

- A. Containing a minimum of 85 percent calcium carbonate and magnesium carbonate combined, 85 percent of which passes a No. 10 mesh sieve.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Place sod as soon as practical after its removal from point of origin. Keep it moist while displaced.
- B. Scarify each area to be sodded a minimum of 2 inches and remove stones larger than 3/4 inch in any dimension.
- C. Before beginning sodding operations in any area, complete placing the topsoil and final grading, and have the area approved by the Program Manager.

3.02 APPLICATION

- A. Set sod between April 1 and October 31 and when the soil is in a workable condition. If weather is acceptable to the Program Manager, the dates may be extended beyond those stated.
- B. Do not set sod out of season unless soil conditions are favorable and written permission is obtained from the Program Manager.
- C. During times when sodding cannot be conducted, erosion control and silt fences shall be placed and maintained. If property owner and the Program Manager agree, seeding may be substituted for sodding.
- D. Apply fertilizer and agricultural limestone uniformly over the sod bed at the rates shown below. Immediately prior to placing sod, water the sod bed until it is saturated to a depth of 1 inch, and keep it moist until the sod is placed.
 - 1. Fertilizer: 15 pounds per 1,000 square feet of 10-10-10.
 - 2. Agricultural Limestone: 40 pounds per 1,000 square feet.
- E. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; to not overlap. Stagger strips to offset joints in adjacent courses. Work from boards to avoid damage to subgrade or sod. Tamp or roll lightly to ensure contact with subgrade. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass. Lay sod on slopes with short dimension running up and down.
- F. Saturate sod with fine water spray within 2 hours of planting. During first week, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.
- G. Two weeks after the sod is installed, top dress and thoroughly water it. Top dressing shall consist of the following:
 - 1. 1/2 to 1 Pound: 38 percent urea formaldehyde per 1,000 square feet.
 - 2. 20 Pounds: 6-12-12 per 1,000 square feet.

3.03 MAINTENANCE

- A. Begin maintenance immediately after sodding and continue until final acceptance of the Contract.
- B. Maintain lawns for not less than three mowings or 60 days, whichever is longer.
- C. Maintain lawns by watering, fertilizing, weeding, mowing, trimming, and other operations, such as rolling, re-grading and replanting, as required to establish an acceptable lawn, smooth and free of stones, weeds, and eroded or bare areas.
- D. The standard of acceptability for bare areas is no larger than 3 inches in any dimension, nor greater than 5 percent of the lawn.

3.04 INSPECTION

- A. The Program Manager shall inspect the sod within 30 days after installation and determine if it is acceptable.
- B. The Program Manager will again review the sod for acceptance 30 and 60 days after installation. This acceptance by the County is for the purposes of payment only.

3.05 PROTECTION

- A. No equipment, material storage, construction traffic, etc., will be permitted on newly sodded areas.

3.06 CLEANING

- A. Dispose of all surplus material in compliance with all applicable laws and regulations and in accordance with contract requirements.

END OF SECTION

SECTION 02486 SEEDING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. This section includes the Contractor's responsibility to furnish all labor, materials, equipment and incidentals necessary and place seed and maintain all seeded areas as specified herein including all areas disturbed by the Contractor's operations.
- B. Ds3 and Ds4 Requirements for Regulatory Compliance

1.02 RELATED SECTIONS

- A. Section 02276: Site Restoration and Erosion Control

1.03 SUBMITTALS

- A. Product labels/data sheets
- B. Seed: Certification of seed analysis, germination rate, and inoculation:
 - 1. Certify each lot of seed has been tested by a testing laboratory certified in seed testing, within 6 months of date of delivery, Include with certification:
 - a. Name and address of laboratory
 - b. Date of test
 - c. Lot number for each seed specified
 - d. Test Results: (i) name, (ii) percentages of purity and of germination, and (iii) weed content for each kind of seed furnished
 - 2. Mixtures: Proportions of each kind of seed
- C. Seed Inoculant Certification: Bacteria prepared specifically for legume species to be inoculated

1.04 DELIVERY, STORAGE, AND PROTECTION

- A. Furnish in standard containers with seed name, lot number, net weight, percentages of purity, germination, and hard seed and maximum weed seed content, clearly marked for each container of seed.
- B. Keep dry during storage.

1.05 WEATHER RESTRICTIONS

- A. Perform work under favorable weather and soil moisture conditions as determined by accepted local practice.

1.06 GUARANTEE

- A. Secure an acceptable growth of grass in all areas designated for seeding
- B. An area is considered acceptable if it is represented by a minimum of 100 seedlings per square foot of the permanent species of grass representative of the seed mixture. If an acceptable growth is not obtained on the first planting, reseeding and remulching will be required
- C. If the planting is less than 50 percent successful, rework the ground, refertilize, reseed, and remulch the entire area.

1.07 MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until final acceptance of the Contract.
- B. Maintenance is necessary to help establish a good healthy uniform growth over the entire seeded area. Maintenance to be performed includes the following:
 - 1. Watering: First 2 weeks every day, thereafter keep surface moist.
 - 2. Washouts: Re-grade and re-seed at the Contractor's expense until good sod is established.
 - 3. Mulch: Replace wherever and whenever washed or blown away
 - 4. Mowing:
 - a. Mow to 2 inches after grass height reaches 3 inches, and mow to maintain grass height from exceeding 3-1/2 inches.
 - b. Mowing should not be performed during the quail nesting season (May to September)
 - 5. Rake clippings and leaves, and appurtenances until the project is completed.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Products and applications to match Contract application period and meet manufacturers' recommendations.
- B. Fertilizer shall be a complete commercial fertilizer. It shall be delivered to the site in the original unopened containers each showing the manufacturer's guaranteed analysis of the contents and that ensure proper protection in transportation and handling, and in compliance with all local, state, and federal fertilizer laws. Store fertilizer, so when used, it shall be dry and free flowing.
- C. Lime shall be ground limestone containing not less than 85 percent calcium and magnesium carbonates.
- D. Seed shall be from the same or previous year's crop; each variety of seed shall have a percentage of germination not less than 90, a percentage purity of not less than 85, and shall have not more than one percent weed content.

- E. The mixture for lawn areas shall consist of seed proportioned by weight as indicated on the drawings.
- F. Seed Quality:
1. The term “pure live seed” is used to express the quality of seed and is not shown on the label. Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. Information on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination; i.e.,
$$(PLS = \% \text{ germination} \times \% \text{ purity})$$

EXAMPLE:

Common Bermuda seed

70% germination, 80% purity

$$PLS = 70\% \text{ germination} \times 80\% \text{ purity}$$
$$PLS = 56\%$$
 2. The percent of PLS helps you determine the amount of seed you need. If the seeding rate is 10 pounds PLS and the bulk seed is 56 % PLS, the bulk seeding rate is:
$$10 \text{ lbs. PLS/acre} = 17.9 \text{ lbs. /acre}$$

56% PLS
 3. You would need to plant 17.9 lbs. /acre to provide 10 lbs. /acre of pure live seed.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Soil samples to be obtained to determine lime requirements.
- B. Lime shall be applied at the rate as shown on the drawings.
- C. Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate otherwise. Graded areas require lime application. If lime is applied within six months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of Agriculture.
 1. Lime spread by conventional equipment shall be “ground limestone.” Ground limestone is calcitic or dolomitic limestone ground so 90 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will

pass through a 50-mesh sieve, and not less than 25 percent will pass through a 100-mesh sieve.

2. Fast-acting lime spread by hydraulic seeding equipment should be "finely ground limestone" spanning from the 180 micron size to the 5 micron size. Finely ground limestone is calcitic or dolomitic limestone ground so 95 percent of the material will pass through a 100-mesh sieve.
 3. It is desirable to use dolomitic limestone in the Sand Hills, Southern Coastal Plain and Atlantic Coast Flatwoods MLRAs.
 4. Agricultural lime is generally not required where only trees are planted.
 5. Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species or combination of species shall be followed.
- D. Fertilizer shall be applied at the rate as shown per the drawings or at minimum follow the guidelines within the Georgia Manual for Erosion and Sediment Control latest edition.

3.02 INSTALLATION

- A. With the exception of temporary grassing, grading and shaping shall be at final grade prior to seeding (hydraulic or otherwise). Vertical banks shall be sloped to enable plant establishment.
1. When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.
 2. In residential or commercial mowed and/or landscaped areas, grading will include raking and grubbing to remove unwanted materials.
 3. Concentrations of water will cause excessive soil erosion and shall be diverted to a safe outlet. Diversions and other treatment practices shall conform to the appropriate standards and specifications.
- B. The subgrade of all areas to be seeded shall be raked and all rubbish, sticks, roots and stones larger than 2 inches shall be removed.
- C. When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.
1. When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.
- D. Lime shall be spread evenly over surface and thoroughly incorporated with loam by heavy raking to at least 2 inches deep at a rate determined by soil samples to match Contract.
- E. When hydraulic seeding equipment is used, the initial fertilizer shall be mixed with seed, inoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The inoculant, if needed, shall be mixed with the seed prior to being

placed into the hydraulic seeder. The slurry mixture will be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within one hour after being placed in the GSWCC (Amended - 2013) 6-89 hydro seeder.

1. Finely ground limestone can be applied in the mulch slurry or in combination with the top dressing.
 2. When conventional planting is to be done, lime and fertilizer shall be applied uniformly in one of the following ways:
 - a. Apply before land preparation so it will be mixed with the soil during seedbed preparation.
 - b. Mix with the soil used to fill the holes, distribute in furrows.
 - c. Broadcast after steep surfaces are scarified, pitted or trenched.
 - d. A fertilizer pellet shall be placed at root depth in the closing hole beside each pine tree seedling.
- F. Fertilizer shall be uniformly spread and immediately mixed with the upper 2 inches of the soil.
- G. Seeding
1. Hydraulic Seeding
Mix the seed (inoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.
 2. Conventional Seeding
Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.
 3. No-Till Seeding
No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.
- H. Mulching
- Mulching is required for all permanent vegetation applications. Mulch applied to seeded areas shall achieve 75% to 100% soil cover. When selecting mulch, design professionals should consider the mulch's functional longevity, vegetation

establishment enhancement, and erosion control effectiveness. Select the mulching material from the following and apply as indicated:

1. Dry straw or dry hay of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.
2. Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.
 - a. Sericea Lespedeza hay containing mature seed shall be applied at a rate of three tons per acre.
 - b. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes. Other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is not appropriate for seeded areas.
 - c. When using temporary erosion control blankets or block sod, mulch is not required.
 - d. Bituminous treated roving may be applied on planted areas, slopes, in ditches or dry waterways to prevent erosion. Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

- I. Immediately following this presentation the seed shall be uniformly applied and lightly raked into the surface. Lightly roll the surface and water with a fine spray. Seed shall be sown in a favorable season, as approved by the Program Manager.
- J. Wildlife plantings should be included in critical area plantings.

END OF SECTION

SECTION 13080 CHEMICAL ROOT CONTROL

PART 1 – GENERAL

1.01 SECTION INCLUDES

This section includes requirements for the Contractor to provide all labor, equipment, materials, and incidentals necessary to apply a chemical, herbicide root control agent within existing sanitary sewer mains. The agent shall be specifically designed to control tree root intrusions by killing root growth and inhibiting root regrowth within the pipeline without damaging the vegetation producing the roots. The root control agent shall not adversely affect wastewater treatment plant processes.

1.02 RELATED SECTIONS

- A. Section 01015: Control of Work
- B. Section 01016: Control of Materials
- C. Section 01300: Submittals
- D. Section 01310: Scheduling of Work
- E. Section 01320: Progress Reports & Videos
- F. Section 01710: Clean up

1.03 SUBMITTALS

- A. Submit shop drawings, product data, and experience in accordance with the requirements of Section 01300 of those Specifications.
- B. Material Submittals: The Contractor shall provide shop drawings, product data, and other pertinent information as follows:
 - 1. Product data for the chemical, herbicide root control agent.
 - a. Material Safety Data Sheet (MSDS) and Product Specimen Label.
 - b. Registration with United States Environmental Protection Agency and State Herbicide Regulatory Agency (Georgia Department of Agriculture).
- C. Environmental hazard submittal
Root control agent product information required with bid.
- D. Contractor's qualification submittal
The Contractor shall demonstrate a minimum level of five (5) year's direct experience in applying chemical sewer root control agents. The Contractor shall be licensed as a pesticide-application business with the Georgia Department of Agriculture prior to the bid opening. Contractors who do not meet the experience and other qualifications specified herein shall not be considered for award of the contract.
- E. Contractor experience submittal

The Contractor must submit three (3) municipal references for chemical sewer root control work which the agency can verify. Each reference must meet or exceed a project size of 100,000 linear feet. Each reference must be for work actually performed by the Bidder within the last five (5) years. All references must pertain to actual root control work performed by the Contractor (sub-Contractor references are not applicable). Reference work shall have been performed with the materials, and the manner of application specified herein. Previous work for the agency is applicable. Reports for completed work and customer invoices shall be submitted on request to verify experience.

F. Herbicide applicator experience submittal

Herbicide applicators shall have a minimum three years' experience in performing the type of work specified, while licensed as a state-certified applicator. To be considered as qualifying experience, experience must meet the three following requirements: 1) the experience must be obtained as a state licensed and certified applicator, and 2) the experience must have been obtained while the applicator was in the employ of the bidder, and, 3) the experience must be for the type of herbicide applications described herein. Each herbicide applicator shall have personally performed a minimum of 500,000 linear feet of treatments as a State certified applicator, while in the employ of the Contractor. The Contractor must submit a list of three (minimum) employees that are certified with the GA-DOA, and that meet these requirements with the bid.

G. Study Regarding Effects of Proposed Product on Wastewater Treatment Plant Facilities

The Contractor shall submit with bid a recent study from an accredited research facility documenting the *effects* of the proposed product on wastewater treatment plant facilities. At a minimum, this study shall address the toxicity of the product on wastewater treatment plant biota, including nitrifiers and denitrifiers, the toxicity of the product on treatment plant effluent, and the environmental fate of the product. This requirement is mandatory.

1.04 DELIVERY, STORAGE AND HANDLING

All materials shall be transported, stored, and protected in accordance with manufacturer's recommendations and applicable Federal and State guidelines. Liquid chemicals must be packaged in mini-bulk containers that are designed for re-use with dry lock connectors, as part of a closed chemical handling system. Disposable herbicide containers will not be accepted for use on this project.

1.05 RESPONSIBILITY OF THE CONTRACTOR

A. The Contractor's attention is drawn to the following terms, conditions and responsibilities:

1. Contractor must be licensed with the Georgia Department of Agriculture prior to the bid date. All Bidders must have a minimum level of herbicide application experience and employ a State Certified applicator on the job site at all times.
2. Contractor shall provide Pollution Liability Insurance; in addition to all other insurance and bonds specified herein.

3. The Contractor shall provide a money-back guarantee on all work specified herein as set forth below.
4. The Contractor is responsible for all property damage and for all cleanup and restoration associated with any chemical spill.
5. The Contractor shall not responsible for damages resulting from sewer stoppages caused by roots.
6. The Contractor shall be responsible for damages resulting from sewer stoppages determined by the Owner to be caused by the Contractor's operations in performance of the Work.
7. The Contractor shall place proper traffic warning devices to protect the specific job site and to prevent accidents or personal injury to the public.
8. The Contractor shall use a reduced-pressure-zone backflow prevention device or air gap whenever accessing fresh water for mixing chemical.
9. The Contractor shall comply with all Federal, State and Local Laws, with special attention to those laws that pertain to the handling, transportation, and use of any hazardous materials, and disposal of all herbicide containers

PART 2 – PRODUCTS

2.01 CHEMICAL ROOT CONTROL AGENT

- A. The chemical root control agent shall be registered with the EPA and the Georgia Department of Agriculture, prior to the bid opening and throughout the contract, and shall be labeled for use in sewers to control tree roots. The chemical root control agent shall contain an active ingredient for controlling sewer roots and deterring their re-growth. There shall also be a surfactant system to deliver the active ingredient (herbicide) to the target root tissue. The use of the name of a manufacture, brand, make or catalog designation specifying an item does not restrict contractors to that manufacture, brand, make or catalog designation. This is used simply to indicate the character, quality and/or performance equivalence of the commodity on which bids are submitted; approved equals are acceptable.
 1. Active ingredient:
 - a. Shall be a Category "E" compound, the most favorable rating attainable on the U.S. EPA's chronic exposure toxicological rating scale.
 - b. Root Control products submitted for use that are labeled "RESTRICTED USE: DUE TO ACUTE TOXICITY" by the US EPA are not allowed.
 - c. Herbicides submitted for use must be currently classified by the U.S. EPA as a non-carcinogen, i.e. as "Not Likely to Be Carcinogenic to Humans" under either the 1985 or 2005 classification systems. In addition, herbicides submitted for use must not be considered a carcinogen, teratogen, mutagen, or oncogene, by the United States Environmental Protection Agency.
 - d. Bidders must submit a chemical label and material data safety sheet(s), for all chemicals used on the project.

- e. Herbicidal active ingredients must be non-volatile in order to prevent inhalation exposure to workers, homeowners and the general public in the vicinity of treated areas.
 - f. Shall carry a "signal word" assigned by the U.S. EPA of either "Warning" or "Caution" on the product label. Herbicides carrying the signal word "Danger" will not be accepted.
 - g. Products containing the active ingredient copper sulfate are not allowed.
2. Surfactant system:
- a. Shall produce a dense, small bubble, clinging foam, which sustains its shape for minimum of one hour.
 - b. Shall enhance the penetration of herbicide into root masses.
 - c. Products that generate foam chemically, upon contact with water shall not be accepted.
- B. Substitutes and Proven Equivalents:
- Use of any substitute or equivalent procedures, methods, or materials shall be approved by the Owner.
- Should the Contractor wish to use any brand of material other than as specified herein, he shall submit to the Owner for review, complete descriptive literature naming the proposed substitution and manufacturer.

PART 3 - EXECUTION

3.01 MANNER OF APPLICATION

- A. All work must be performed by on-site herbicide certified applicators. "Certified applicator" as described herein, refers to an herbicide applicator certified and licensed by the official state lead agency responsible for the regulation of herbicides. All work shall be performed according to label instructions and in accordance with the best recommended practice for conditions present in the line under treatment. All applications shall be done by foaming or other methods as provided on the product label.
- B. The application of material shall be performed in such a way as to contact roots within the primary main line sewer to be treated. Effort will also be made to penetrate secondary lateral sewers in order to contact roots residing in the "wye" connections. The foam must be generated through the use of air injection equipment, and the foam must be pumped into the sewer under pressure-as foam. Foam quality must be sufficient to penetrate "wye" connections and reach a distance of 10 to 15 feet into the connected service lateral; effectively treat large diameter pipe and to enhance treatment effectiveness overall. Therefore, applications of chemicals designed to generate foam "chemically" on contact with water shall not be accepted.

Materials that are labeled to be poured down manholes or sprayed on to roots shall not be accepted.

- C. Sewer pipe cannot be treated effectively when surcharging flow conditions exist. If a surcharging condition exists on a sewer to be treated (i.e., flow is greater than 60% of the pipe diameter), the Contractor will return to treat that sewer when the flow is

normalized. If a sewer surcharges within a 12 hour period after a treatment has been made, the Contractor will be required to retreat that section of sewer at the Contractor's expense.

- D. Hydraulic sewer cleaning machines shall not be used prior to, or during the treatment process. In addition, due to efficacy and risk of exposure, high pressure application equipment shall not be used prior to or during the treatment process.
- E. Manholes used to access a main line sewer section for treatment must be treated as part of the main line treatment and included as part of the main line section price per foot. The Contractor must fully cover the inside manhole wall with a three inch coating of foam within twelve inches of the road/ground surface. The Contractor must incorporate a treatment method that complies with all safety and label instructions of the herbicide product accepted for use.
- F. Contractors submitting products for use that prohibit the active pumping of root control herbicide product within 50 feet of access manholes must submit an application plan to treat the remaining 50 feet of pipe and manholes that is consistent with label instructions and without exposing applicators, owner's personnel and bystanders to herbicide vapors. Particular attention must be paid to large diameter pipe and manholes, in which simple purging of the hose will not produce sufficient foam to guarantee full coverage of pipe and manhole walls.

3.02 PUBLIC NOTIFICATION

- A. Public notification is critical and compliance with the public notification criteria is a prerequisite for sanitary sewer cleaning, especially when conducting root control activities in easements which pass through private property. Notification must be provided to all property occupiers/owners likely to be affected including residential, commercial and institutional (schools, hospitals, nursing homes, etc.). At a minimum, the following steps shall be taken:
 - 1. The Contractor shall print and distribute pre-approved advance notice door hangers 72 hours before conducting root control activities. The Contractor shall distribute the door hangers to the property owners (residential, commercial and institutional) in the affected area(s). The advance notice door hangers shall be customized by the County's Public Outreach team to suit this project and will be provided to the Contractor for printing prior to project commencement. If root control efforts are delayed, the Contractor must re-distribute door hangers.
 - 2. The Contractor shall be responsible for distributing pre-approved "Right-of-Entry" (ROE) forms and securing signatures from affected property owners on the ROW forms prior to conducting root control services.
- B. The Contractor shall keep a daily log of the distribution of door hangers. This shall be maintained and submitted to the Owner and/or Program Manager upon request.
- C. The Contractor shall alert the appropriate Owner personnel of their work locations on a daily basis.
- D. Contractor shall provide and place "Right-of-Way" signs in prominent locations where root control is planned 24-hours in advance of commencing the operation. Signs shall be a minimum of 24 inches wide by 18 inches high with letters a minimum of 2 inches high. Signs shall be supported a minimum of 12 inches above grade by integral metal frames. Wording on the signs shall be similar to the following:

ROOT CONTROL WITHIN SANITARY SEWER PIPES WILL BE CONDUCTED ON "date" and "time". Contact "person" with "company" at "phone number" for additional information.

3.03 PROTECTION OF WASTEWATER TREATMENT PLANT AND RECEIVING WATERS

- A. The Contractor shall take all steps necessary and appropriate to prevent adverse effects on wastewater treatment plant processes.
- B. The Contractor attests, through submittal of this bid and entering into this contract, that the Contractor is expert in this type of work, and recognizes and understands the risks posed by this type of work on wastewater treatment plant processes. The Contractor shall not rely on the Owner for guidance in this regard.
- C. Introduction of any materials in any wastewater treatment plant must be with the approval of the wastewater treatment plant operator for that plant.
- D. The Contractor shall notify the Wastewater Treatment Plant Operator of any wastewater treatment plant that may be affected by the Contractor's performance of the Contract, of the date and time of all intended work, and provide the Operator with data or other information requested by the Operator, including specimen product labels and Material Safety Data Sheets, for any materials introduced to the collection system.
- E. The Contractor shall provide the Wastewater Treatment Plant Operator with names and phone numbers of individuals in a position to notify the Contractor's crews of the need to immediately stop work, including the names and phone numbers of the Owner, the Contractor, and the hotel or other local phone number of the Contractor's on-site supervisor. The Contractor shall maintain daily communications with the Wastewater Treatment Plant Operator to assure that the chemical root control treatments are not having any adverse effects on wastewater treatment plant processes. In the event that a wastewater treatment plant experiences any reduction in operating efficiency during the execution of the contract, whether the result of the chemical treatments or not, the Contractor shall immediately suspend all applications, and notify the Owner.
- F. The contractor shall continue operations only after problems at the wastewater treatment plant have been corrected, and the Contractor has taken appropriate steps, satisfactory to the Owner and the Wastewater Treatment Plant Operator, to prevent recurrence of any problems at the wastewater treatment plant that may be the result of chemical applications.
- G. The Contractor shall be financially responsible for any adverse effects on wastewater treatment plant processes which are, directly or indirectly, caused by the chemical applications, including but not limited to the following: damages to plant processes or equipment, clean-up and restoration costs, fines imposed on the Owner or on the operator of the wastewater treatment plant by State or Federal agencies, pollution of receiving waters, and civil suits. The Contractor shall further indemnify and hold harmless the Owner and the operator of the wastewater treatment plant, against all costs, including legal expenses, relating to treatment plant failure or other damages or pollution caused, directly or indirectly, by the applications of chemicals by the Contractor.

3.04 TRAFFIC CONTROL

- A. Traffic control shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), latest edition and the specific direction of the authority having jurisdiction.
- B. No work shall be performed until proper traffic control devices have been installed at the work site.
- C. The Contractor shall provide 48 hour notice to any property owner where ingress egress may be blocked or impeded during execution of the work.
- D. The Contractor shall not close any roadway without obtaining prior approval from the County. The Contractor shall submit a closure plan to the County for approval prior to the roadway closure.
- E. All traffic control devices shall be removed and normal traffic patterns restored at the end of each workday.

3.05 POLLUTION LIABILITY INSURANCE

- A. The pollution liability insurance described herein is in addition to all other insurance required of the contractor by the agency, including any insurance described in the general conditions, any insurance required by law, or any other insurance requested by the agency.
- B. At the time of the bid opening, the contractor shall submit written evidence that he has obtained pollution liability coverage. This coverage shall protect the contractor, the agency, and the agency's officer, agents and employees from claims for damages for bodily or personal injury, sickness or disease, including death, and from claims for damages to property and/or the environment, which may arise directly out of the use of chemicals and/or pollution. The minimum amount of such insurance shall be five million (\$5,000,000.00) dollars total loss. This insurance shall be provided to the contractor by an insurance company that holds at least an "A" rating by A.M. Best Rating Service. Nothing contained in this section shall be construed as limiting the extent of the contractor's responsibility for payment of damages resulting from his operations under the contract.

3.06 REPORTING AND DOCUMENTATION

- A. Upon completion of the project and accompanying any invoice, or whenever requested to by the Owner, the Contractor shall submit logsheets and reports which show, as a minimum, the following information:
 - 1. The name of the Owner
 - 2. The report date
 - 3. The date each given sewer line was treated
 - 4. Street name for each given sewer line
 - 5. Manhole ID and/or sewer line ID for each structure treated to enable the Owner to accurately identify the exact location
 - 6. The pipe size for each given sewer line
 - 7. The length (manhole to manhole) for each given sewer line
 - 8. Approximate depth of flow in sewer line

9. Special conditions found by the Contractor's crew
 10. The date the guarantee expires on each given sewer line
- B. The reports on completed work shall be submitted in two separate formats to assist the Owner, as follows:
1. Arranged by Date Treated: In order for the Owner to easily determine and compare which sewer lines were treated on a given day, the Contractor will submit a complete set of completed work reports sorted on the date treated.
 2. Arranged by Street Name: In order for the Owner to easily look up a particular street or sewer section, and determine particulars of the treatment, the Contractor will submit a complete set of reports sorted by street name.
- In addition, all reports shall be provided in an acceptable software form, and formatted for a program designated by the owner at the time of billing.
- C. In addition, data included in the reports shall be submitted electronically in a format to be designated by the Owner to facilitate tracking in the Owner's CMMS.

3.07 **GUARANTEE AND WARRANTY**

- A. For each sewer section (manhole-to-manhole) that is treated under the Contract, the Contractor shall guarantee the work as follows.
- B. At the option of the Owner, the Contractor shall, at his own expense, re-treat a sewer section, or refund 100% of the payment received to treat that section, in the event that: (1) live roots are found in the section within six months after the application; or, (2) the section becomes blocked and surcharges overflows due to tree root obstructions within a period of two years, beginning the date of treatment, and ending two years after the date of treatment.
- C. Retreatments, performed at no charge in honor of the guarantee, do not extend the expiration date of the guarantee.
- D. The guarantee applies only to sewer stoppages caused by live tree roots. It does not apply to stoppages caused by grease or other foreign matter; flat, collapsed or deformed pipe; or flooding caused by a surcharged sewer section downstream from a guaranteed sewer section. This guarantee applies to main line sewers only. The Contractor shall not be responsible for any damages caused by sewer stoppages that occur after the course of treatment.
- E. Within six months of treatment, the Contractor shall inspect up to ten percent of the treated system to verify the success of the Project. The sewer line segments subject to warranty inspection shall be selected randomly by the Owner. The method of inspection shall be by use of a pole mounted, high resolution camera and lighting system or by use of a CCTV tractor mounted camera suitable for inspection of gravity sewer lines. For use of a pole mounted camera, the entire pipe segment from manhole to manhole must be visible; otherwise, a CCTV tractor mounted camera shall be required. Any inspected sewer lines found to contain live roots shall be retreated at no cost to the Owner. A written report and corresponding video shall be provided to the Owner for all segments inspected.
- F. Should the Contractor or his employees cause any damage to public or private property, the Contractor will be required to make repairs immediately. The Owner may, however, elect to make repairs or replacements of damaged property and

deduct the cost of such from moneys due or to become due the Contractor under this contract with the Owner.

- G. The root treatment warranty shall remain in full effect for a period of two years.

END OF SECTION