

REQUEST FOR BID

WALNUT CREEK FORCE MAIN REPLACEMENT

Bid Number 2020-PME-15

September 2020

Bid Opening:

Thursday, October 8, 2020 at 2:00 p.m. EST 1600 Battle Creek Road, Morrow, GA 30260

Non-Mandatory Pre-Bid Virtual Teams Meeting and Site Visits:

Thursday, September 24, 2020 at 2:00 p.m. EST

This solicitation has a SLBE bid discount

Division	1	General Information	
Section	1 Request for Bids		
Section	2	General Overview1-2.1	
		2.1 Intent and Purpose1-2.1	
		2.3 Bid Evaluation	
		2.4 Addendum1-2.2	
Division	2	Bid Requirements	
Section	1	Instructions to Bidders2-1.1	
Section	2	Risk Management Requirements2-2.1	
Section	3	Bid Submittals	
Section	4	Bid Form	
Section	5	Georgia Bid Bond2-5.1	
Section	6	Bidder Qualification Information	
Section	7	Contractor Affidavit & Agreement	
Section	8	Small Local Business Enterprises (General Information)2-8.1	
Division	3	Contract Forms	
Section	1	Agreement Form	
Section		Performance Bond	
Section		Payment Bond	
Section	4	Non-Collusion Certificate	
Division	4	Specifications	
Section	1	Work Assignment and Measurement for Payment	
		1.1 General	
		1.2 Application for Payment	
		1.3 Work Items and Measurement	
Section	2	Material Requirements4-2.1	
		2.1 General	
		2.2 Polyvinyl Chloride (PVC) Pipe	
		2.3 Ductile Iron Fitting	
		2.4 Miscellaneous Pipe	
		2.5 Steel Casing	
		2.6 Casing Spacer	
		2.7 Casing End Seal	
		2.8 Tapping Saddle4-2.7	
		2.9 Plug Valve	
		2.10 Corporation Valve	

	2.11		op Valve	
	2.12		uum Release Valve	
	2.13		ve and Threaded Pipe for ARV/CAV	
	2.14		ping for ARV/CAV	
	2.15		юх	
	2.16	•	larking Tape	
	2.17		acer Wire	
	2.18	-	ollar (Anti Seep)	
	2.19		ie-Back)	
	2.20		od	
	2.21		е	
	2.22		e Invert Sealing Compound	
	2.23		te and Reinforement	
	2.24		nd Mortar	
	2.25		iction Stone	
	2.26	•		
	2.27		ent Striping Paint	
	2.28	-	4-2.24	
	2.29		and Sedimentation Control Materials	
Section 3			Standards	
	3.1	Genera	I Requirements	4-3.1
		3.1.1	Project Submittals	
		3.1.2	Request for Information and Field Order	
		3.1.3	CCWA Requested Revisions	4-3.2
		3.1.4	Construction Schedule	4-3.3
		3.1.5	Differing Subsurface or Physical Conditions	4-3.4
		3.1.6	Weather Delays	4-3.5
		3.1.7	Project Meetings	4-3.5
		3.1.8	Land Disturbance Permits	4-3.6
		3.1.9	Work Times	4-3.7
		3.1.10	Site Safety and Precaution	4-3.7
		3.1.11	Site Access and Traffic Control	4-3.9
		3.1.12	Construction Facilities and House Keeping	4-3.10
		3.1.13	Temporary Utilities	4-3.11
		3.1.14	Construction Videos and Photographs	4-3.11
		3.1.15	Material Handling and Storage	4-3.11
		3.1.16	Construction/As-Built Surveying	4-3.13
		3.1.17	Material Testing Services	4-3.14
	3.2	Work S	equence	4-3.14
	3.3	Site Wo	ork	4-3.15

	3.3.1	General	4-3.15
	3.3.2	Clearing and Grubbing	4-3.16
	3.3.3	Access Road Construction	4-3.17
	3.3.4	Topsoil Stockpiling	4-3.18
	3.3.5	Existing Utilities	4-3.18
	3.3.6	Removing Pavement	4-3.18
	3.3.7	Grading	4-3.19
	3.3.8	Erosion Control and NPDES Monitoring	4-3.19
	3.3.9	Clean-Up	
3.4	Flow In	terruption	
3.5	Dewate	ering	
3.6	Vibratio	n Monitoring	
3.7	Excava	tion	4-3.24
	3.7.1	Shoring	4-3.24
	3.7.2	Pit and Trench	
	3.7.3	Rock	
3.8	Pipe W	ork	
	3.8.1	Bedding	
	3.8.2	Pipe Installation	
	3.8.3	Pipe Testing	
3.9	Manhol	e Work	
	3.9.1	New Manhole Installation	4-3.30
	3.9.2	Invert Construction	4-3.31
	3.9.3	Manhole Testing	4-3.31
3.10	Backfill	and Compaction	
	3.10.1	Backfill	
	3.10.2	Compaction	4-3.33
	3.10.3	Compaction Testing	4-3.33
3.11	Cased-	Crossings No. 1, 2, 3, 4, and 5	4-3.34
	3.11.1	General	4-3.34
	3.11.2	Bore and Receiving Pit	
	3.11.3	Installation	
	3.11.4	Pipe Insertion	
3.12	Asphalt Work4-3.36		
	•	te Work	
	Pavement Striping4-3.37		
3.15	Acceptance		

Attachments

- A) Geotechnical Report: Subsurface Investigation, Walnut Creek Force Main Replacement, Lovejoy, Clayton County, Georgia, GeoSystems Project No. 20-2729, March 30, 2020.
- B) Geotechnical Report: Subsurface Investigation, Horizontal Directional Drill Addendum Report, Walnut Creek Force Main Replacement, Lovejoy, Clayton County, Georgia, GeoSystems Project No. 20-2729, June 16, 2020.
- C) Interim Waiver and Release Upon Payment.
- D) Waiver and Release Upon Final Payment.
- E) W-9 Form.
- F) Vendor Form.

Addenda None issued at this time.

Construction Drawings Link provided <u>HERE</u>.

END OF TABLE OF CONTENTS

General Information

Section 1: Request for Bids

Clayton County Water Authority 1600 Battle Creek Road Morrow, Georgia 30260

Name of Project: Walnut Creek Force Main Replacement

The Clayton County Water Authority will open sealed bids from licensed utility contractors via a virtual Teams Meeting, at its office located at 1600 Battle Creek Road, Morrow, Georgia 30260, on Thursday, October 10, 2020 at 2:00 p.m. (local time) for Walnut Creek Force Main Replacement. Any bids received after the specified time will not be considered.

A Non-Mandatory pre-bid virtual Teams Meeting will be held on **Thursday**, **September 24**, **2020 at 2:00 p.m. (local time).** Please use the following call-in instructions to attend this meeting:

Join Microsoft Teams Meeting

Toll Number: **+1 912-483-5368** Conference ID: **314 489 178 #**

After the meeting, non-mandatory site visits will take place at the following locations:

- Walnut Creek Lift Station near 11650 SLR Boulevard, Hampton, 30228.
- Staging Area #1 near 11405 E Lovejoy Road, Hampton, 30228.
- CCWA Water Tower at intersection of McDonough Road and Hastings Bridge Road.
- Staging Area #4 at 10881 Southshore Court, Hampton, 30228.
- 1556 Pintail Court, Jonesboro, 30238.

CCWA encourages Small Local, Minority and Women-Owned businesses to participate and respond to this bid request.

In an effort to promote responsible environmental practices the bid package is available in electronic (Adobe PDF) format and can be requested by calling **770-960-5223**, M-F, 8:00 am - 5:00 pm or by e-mail to CCWA_Procurement@ccwa.us.

A hardcopy bid package can also be requested at a cost of \$25.

Clayton County Water Authority Robin Malone, Chairman

Section 2: General Overview

General Information

2.1 Intent and Purpose

The Clayton County Water Authority (CCWA) intends to contract with an experienced licensed utility contractor to complete the Walnut Creek Force Main Replacement Project. The purpose of the Project is to install approximately 15,580 linear feet of new 10-inch sanitary sewer force main replacing an existing 6-inch sanitary sewer force main. Approximately 105 linear feet of 18-inch sanitary sewer will be installed replacing an existing 10-inch sanitary sewer.

The sanitary sewer work will be completed using standard excavation techniques and trenchless techniques. Specifications herein and the Construction Drawings describe the details of the work to be completed.

2.2 Bid Evaluation

A contract will be awarded to the lowest responsive responsible bidder whose bid conforms to the Request for Bid specifications and will be the most advantageous to the CCWA. An evaluation will also be performed to ensure bidder complies with the required submittals. Determination of best responsive responsible bidder will be the sole judgment of the CCWA.

To be considered responsive to this bid, bidders are required to bid on all work items listed on the "Bid Form", and complete and provide all required bid submittals as listed on the "Bid Submittal Requirements".

2.3 Addendum

Bidders may ask questions regarding this bid prior to the bid opening. To be considered, all questions must be received in writing via email to *CCWA_Procurement@ccwa.us* by **2:00 p.m. (local time) on Monday, September 28, 2020**. Any and all responses to bidders' questions will be issued in the form of an Addendum via email. All addenda issued shall become part of the Bid Documents.

Bid Requirements

Section 1: Instructions to Bidders

These instructions are to be followed by every entity bidding to provide the Clayton County Water Authority (CCWA) with goods and/or services. These instructions constitute an integral part of the Bid, and any Bidder agrees that tender of a Bid constitutes acknowledgment and acceptance of its obligation to adhere to these instructions, which are to be incorporated into and considered part of any contract the Bidder ultimately executes with the CCWA.

- 1. If there is any question whatsoever regarding any portion of the specifications, it shall be the Bidder's responsibility to seek clarification immediately from the CCWA, as early as possible prior to the bid opening. Regarding public works projects, requests for interpretations of specifications must be made in writing to the department proposing out the project not later than five (5) days prior to receipt of bids.
- 2. Unless it is otherwise stated in the bid documents, it shall be the responsibility of the bidder to inform itself as to all conditions of the work site and to make and take account thereof in calculating and submitting its bid. Documents may be made available by the CCWA during the bidding process; no warranty of accuracy is made in regard to these documents, and it is the responsibility of the bidder to make its own investigations as to the nature of the work and the conditions under which it shall be performed, and to make its own independent assumptions as to these matters. The burden of anticipating unforeseen circumstances, either hidden or latent, and the conditions of the work site and all related circumstances be later encountered shall rest upon the bidder.
- 3. Pre-bid meeting or any other information session will be held at the location as indicated in the solicitation. Unless indicated otherwise, attendance is not mandatory; although vendors are strongly encouraged to attend. However, in the event the meeting is mandatory, then a representative of the vendor must attend the meeting in its entirety to be considered eligible for solicitation award. Late entry to the meeting will not be allowed.
- 4. In the event that, after the acceptance of a bid by the Board of Directors of the CCWA, any unsuccessful bidder wishes to contest such action, a written "Notice of Contest" must be filed with the General Manager no later than close of business on the 5th business day after the selection of successful bidder by the Board. Failure to timely file such notice shall forever preclude the filing of a contest of the award, or any civil action in the courts of the State of Georgia or of the United States.

Bid Requirements

Section 1: Instructions to Bidders

- 5. Information submitted by the Bidder in the bid process shall be subject to disclosure after bid award in accordance with the Georgia Open Records Act. Proprietary information must be identified and be accompanied by a signed affidavit outlining the redacted information. Entire bids may not be deemed proprietary.
- Bids must be made on the enclosed Bid Form. Unless otherwise requested, one (1) original and at least two (2) copies of the Bid Form need to be submitted, and these copies must be <u>typewritten or printed in ink.</u> All copies of any Bid Forms must be signed in ink by the person or persons authorized to sign the Bid Form. The person signing the Bid Form must initial any changes or corrections.
- 7. The name of the person, firm, or corporation making the Bid must be printed in ink, along with the Bidder's signature, on all separate sheets of the Bid Form. If a Bid is made by an individual, his name and post office address must be shown. If made by a firm, or partnership, the name and the post office address of each member of the firm or partnership must be shown. If made by a Corporation, the person or persons signing the Bid must show the name of the State under the laws of which the Corporation is chartered and his, or their authority for signing same. The names, titles and addresses of the President, Secretary and the Treasurer and the corporate authority for doing business in this state shall be listed and returned with the Bid Form.
- 8. All Bids must be hand delivered, delivered by courier service, or mailed via the United States Postal Service. No facsimiles will be accepted. The person, firm, or corporation making the Bid shall submit it in a sealed envelope on or before the date and time specified in the Bid package. The envelope shall be marked "**Sealed Bid**" and carry the Bid title, and date and time of opening as set forth in the Bid package. The envelope shall also bear the name of the party making the Bid and the party's address. Address Bids to *Clayton County Water Authority, 1600 Battle Creek Road, Morrow, Georgia, 30260.* Even if a Bid is not submitted, the Bid Form should be returned signed and with an explanation, otherwise the result will be deletion from the mailing list.
- 9. If published price books are a part of your Bid, one price book must be included with your Bid Form, and the successful Bidder is required to furnish additional current price books after award of the Bid.
- 10. Alterations to the documents are strictly prohibited and shall result in automatic disqualification of the Bidder's bid. If there are "exceptions" to the specifications or comments to any of the solicitation requirements or other language, then the bidder

Section 1: Instructions to Bidders

may ask questions regarding those requirements or submit additional documentation as to the variation from the specifications, but may not alter any of the language contained in the solicitation.

- 11. In the case of goods, the person, firm or corporation making the Bid may Bid all items. All items may be considered separately, at the discretion of the CCWA.
- 12. Bids for public works whose price exceeds \$100,000.00 must be accompanied by a certified check, cashier's check, or acceptable bid bond in an amount not less than five percent (5%) of the amount bid.
- 13. Bidders for construction contracts where the laws of Georgia or the United States of America require a license in order to perform such construction must list the license number and class on the face of the bid envelope and must enclose copies of any required license with the bid.
- 14. When public work is let out for bid, no person shall prevent or attempt to prevent competition in such bid. Such bidders must make an oath filed with the officer who makes payments under the contract that they have not prevented or attempted to prevent competition in the bid process. Such oath must be signed by: if a partnership, all partners and any officer or agent or other person who acted on the partnership's behalf during the bid process; if a corporation, all officers, agents, or other persons who acted for the corporation in the bid process.
- 15. Bids shall not be withdrawn or cancelled by the bidder past the bid opening date and time. The bidder may make modifications/corrections to the bid by submitting a corrected seal bid but only if the change is prior to the bid opening. The corrected document should be clearly marked that it supersedes the bid originally submitted. No modification or corrections will be allowed subsequent to the bid opening.
- 16. By tendering a bid, a Bidder agrees to leave the bid open for acceptance by the CCWA for sixty (60) days after the date set for the opening thereof.
- 17. By tendering a bid, the bidder certifies that the bidder has carefully examined these instructions and the terms and specifications applicable to and made a part of the bid. The Bidder further certifies that the prices shown in any schedule of items on which the Bidder is proposing are in accordance with the conditions, terms and specifications of the bid and that they are aware that any exception taken thereto may disqualify the bid. Bidders are required to inform themselves fully as to the availability of materials and the conditions relating to construction and labor under which any work will be or is now being performed. No error or misjudgment nor any

Section 1: Instructions to Bidders

lack of information on local conditions, general laws or regulations on the part of the Bidder shall merit withdrawal of the bid.

- 18. Copies of all communication pertaining to bids must be sent to the Contracts, Compliance and Risk Management Section.
- 19. The purpose of this bid is to establish contract prices. Unit price extension and net total must be shown if applicable. Cash discounts should be indicated separately. Any applicable sales taxes should be included in the unit prices for all materials to be provided by the successful Bidder.
- 20. Bidders are hereby notified and agree by submission of a Bid Form that if additional items not listed in the Bid Form become necessary and require unit prices not established by the Bid Form, the unit prices of such items shall be negotiated and shall be directly proportional to the established unit prices of similar items in the Bid Form.
- 21. All prices on goods shall be for delivery, our destination, f.o.b. freight prepaid Jonesboro, Georgia, and/or Morrow, Georgia, unless otherwise shown. Any deliveries shall be made as needed and requested throughout the contract period.
- 22. Quantities when shown are estimates only, based on anticipated needs. The CCWA reserves the right to purchase more or less based on actual need at contract price. If a Bidder intends to offer minimum or maximum shipment quantities, such intent and such quantities should be specified on the Bid Form. Otherwise, none will be assumed.
- 23. The time for completion of the work is stated in the Bid Form. Failure to complete the work within this period shall result in payment to the CCWA of liquidated damages in an amount provided for by contract for each calendar day in excess of the Contract time.
- 24. The Bidder must employ such methods and means in carrying out the work as will not cause any interruption of or interference with any other Contractor.
- 25. The successful Bidder must comply with the applicable Risk Management Requirements prior to beginning performance, and during the contract period.
- 26. The Contract between the CCWA and the Contractor shall be executed on a form provided by CCWA and will be subject to all requirements of the contract documents (which include but may not be limited to the Contract, these instructions,

Section 1: Instructions to Bidders

any Purchase Orders, and the Risk Management Requirements), and shall form a binding contract between the contracting parties.

- 27. Failure to execute the Contract, any required Surety Performance and Payment Bonds, or to furnish any required satisfactory proof of carriage of required insurance within ten (10) days from the date of notice of award of the Contract shall be just cause for the annulment of the award and for forfeiture of the bid guaranty to the CCWA, not as a penalty, but in liquidation of damages sustained. At the discretion of the CCWA, the award may then be made to the next lowest responsible vendor, or the work may be re-advertised or constructed by the CCWA.
- 28. Any Contract and Contract Bonds shall be executed in duplicate.
- 29. Award of this bid shall be by action of the CCWA Board at its regular monthly meeting.
- 30. The CCWA reserves the right, with or without notice or cause, to accept any bid regardless of the cost thereof; to reject any bid, or any number of bids; to negotiate with any Bidder for a reduction of or alterations in its bid; to reject all bids and to call for additional bids upon the same or different invitations to bid, plans or specifications; to be sole judge, in its discretion, on all questions as to whether or not a bid complies with the invitation to Bid, the plans or the specifications, and as to the solvency and sufficiency of any and all sureties on all bonds.
- 31. The apparent low bid for goods shall be considered to be the lowest aggregate total price of specified products at their unit prices times the estimated required quantities of these specified products.
- 32. Bids received from two (2) or more vendors that are identical in price, delivery and meet the requirements of the bid specifications shall be awarded on the following basis:
 - a. The bid submitted by a vendor who does not have a documented negative vendor performance record.
 - b. The bid submitted by a vendor who is located within Clayton County.
 - c. The bid submitted by a vendor who is certified by our Small Local Business Enterprise Program.
 - d. If the tie bids meet all the above criteria, and it is not in CCWA's best interest (at its sole discretion) to split the award, the bid award is based on the toss of

Bid Requirements

Section 1: Instructions to Bidders

a coin by CCWA staff in a public session. The vendors involved will be invited to attend the coin toss at a stated date and time. One or more witnesses from both CCWA Procurement and the Request Department may be present. A simple coin toss (called by the vendor listed first in the alphabet) will break the tie and decide the award.

- 33. While price is the prime criteria, and the CCWA intends to purchase at the lowest responsible bid available, price shall not be the sole criteria utilized by the CCWA in evaluating the bid package submitted. The following criteria shall also be utilized by the CCWA in determining the lowest responsible bid:
 - a. Ability of Bidder to perform in the time frame needed by the CCWA.
 - b. Reputation of the Bidder in its industry.
 - c. Reasonableness of the bid in relation to anticipated costs.
 - d. Ongoing relationships with the CCWA based on above-average prior performance of work with CCWA.
- 34. Bidders are notified that CCWA reserves the right except in the case of public works contracts to include among the factors considered in awarding the contract the proximity of each Bidder's place of business to any affected Authority facility. CCWA further reserves the right to award the contract to a Bidder other than the Bidder offering the lowest price where: (a) the difference in price between the low Bidder and the preferred Bidder is nominal: and (b) CCWA's Board determines that the preferred bid provides the most cost effective option due to the closer proximity of the preferred Bidder's place of business to the affected Authority facility or facilities. In such a situation, by responding to this bid, the Bidder waives any cause of action against CCWA for frustration of bid or under any similar legal theory; furthermore, the Bidder agrees to pay all costs and expenses, including but not limited to attorney fees, incurred by CCWA in defending against any such claim.
- 35. It is the policy of the Clayton County Water Authority (CCWA) to promote award of sub-agreements for goods and/or services to qualified minority and women-owned businesses. Bidders are encouraged to solicit minority and women-owned businesses whenever they are potential sources.
- 36. Bidders are encouraged to utilize the services and assistance of the U.S. Small Business Administration (SBA), and the office of the Department of Commerce Minority Business Development Agency (MBDA). These agencies can provide

Bid Requirements

Section 1: Instructions to Bidders

assistance in securing the names of qualified minority and women-owned businesses. Additionally, it is encouraged that bidders access certified Small Local Business Enterprise (SLBE) vendors from Clayton County, DeKalb County, and City of Atlanta.

The Georgia Department of Transportation (DOT) has established a list of qualified Disadvantaged Business Enterprises. Information is available online under the tab for "Directories", link for "UCP Directory - Excel" at:

http://www.dot.ga.gov/PS/Business/DBE.

The successful Bidder will be asked to provide, along with his Request for Payment each month a list of qualified SLBE and MBE/WBE businesses utilized on this Project.

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT OF 2006

37. Pursuant to the Georgia Security and Immigration Compliance Act of 2006, the successful Contractor understands and agrees that compliance with the requirements of O.C.G.A.13-10-91 and Georgia Department of Labor Rule 300-10-02 are conditions of this bid and contract document. The Contractor further agrees that such compliance shall be attested by the Contractor and any of his Subcontractors by execution of the appropriate Affidavit and Agreement included after the Agreement Form of these documents.

Section 2: Risk Management Requirements

The Contractor will provide minimum insurance coverage and limits as per the following: The Contractor will file with the Authority Certificates of Insurance, certifying the required insurance coverages and stating that each policy has been endorsed to provide thirty (30) day notice to the Authority in the event that coverage is cancelled, non-renewed or the types of coverage or limits of liability are reduced below those required. All bonds and insurance coverage must be placed with an insurance company approved by Authority Management, admitted to do business in the State of Georgia, and rated Secure ("B+" or better) by A.M. Best Company in the latest edition of Property and Casualty Ratings, or rated by Standard & Poors Insurance Ratings, latest edition as Secure ("BBB" or better). Worker's Compensation self-insurance for individual Contractors must be approved by the Worker's Compensation Board, State of Georgia and/or Self-Insurance pools approved by the Insurance Commissioner, State of Georgia.

CONTRACTS FOR UP TO \$50,000

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$100,000 each Accident, Disease \$100,000 each employee, \$500,000 Disease policy limit.

Automobile Liability – Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$500,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

CONTRACTS FOR MORE THAN \$50,000

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$1,000,000. The increased Employer's Liability limit may be provided by an Umbrella or Excess Liability policy.

Automobile Liability - Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$1,000,000 combined single limit.

Commercial General Liability Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused Explosion, Collapse by and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

Bid Requirements

CONTRACTS FOR UP TO \$50,000 CONTRACTS FOR MORE THAN \$50,000

\$1,000,000	Per Occurrence
\$1,000,000	Personal and Advertising
\$50,000	Fire Damage*
\$5,000	Medical Payments*
\$1,000,000	General Aggregate
\$1,000,000	Products/Completed Operations per Occurrence and Aggregate

*These are automatic minimums

Owner's Protective Liability – The Authority's Management may, in its discretion, require Owner's Protective Liability in some situations.

Umbrella and/or Excess Liability – The umbrella or Excess Liability Policy may be used to combine with underlying policies to obtain the limits required. The Management of the Authority may elect to require higher limits.

Owner's Protective Liability – The Authority's Management may, in its discretion, require Owner's Protective Liability in some situations.

Bid Requirements

Section 3: Bid Submittals

3.1 Required Bid Submittals:

Please complete and submit the following forms with your bid:

- *A.* Bid Form Pay Item Schedule.
- B. Georgia Bid Bond in the amount of five percent (5%) of the total bid amount.
- C. Bidder Qualification Information, including References
- D. Georgia Security and Immigration Compliance Act of 2006 form.
- E. Contractor Affidavit and Agreement form.
- F. Subcontractor Affidavit form.

If a Contractor/Subcontractor will not be performing any services under this contract, the Contractor/company submitting the bid MUST also complete, sign, date, and have both Affidavit forms notarized and make proper notation of "N/A" - Not Applicable.

Clayton County Water Authority (CCWA) cannot consider any bid which does not include completed affidavits. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009. All Bidders intending to do business with CCWA are responsible for independently apprising themselves and complying with the requirements of that law and its effect on CCWA procurements and their participation in those procurements.

- G. Copies of any and all license(s) required to perform the work.
- H. Any other items as required in this RFB including but not limited to the items contained in the instructions to bidders.
- I. Non-Collusion Certificate provided on Division 3, Section 4.
- J. W-9 Form.
- K. Vendor Form.
- L. Addenda (if any issued).

Section 4: Bid Form

Bid Requirements

Bid of _____

(Hereinafter "Bidder"), organized and existing under the laws of the State of _____,

doing business as ______ (insert "a corporation," "a partnership," or "an individual" or such other business entity designation as is applicable).

To the Clayton County Water Authority (hereinafter "CCWA").

In compliance with the Request for Bids, Bidder hereby proposes to perform all Work for **Walnut Creek Force Main Replacement** in strict accordance with the Contract Documents as enumerated in the Request for Bids, within the time set forth therein, and at the prices stated below.

By submission of this bid, Bidder certifies, and in the case of joint bid each party thereto certifies as to the party's own organization that this bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other Bidder or with any competitor. Bidder also certifies compliance with the Instructions to Bidders.

In submitting this bid, Bidder certifies Bidder is qualified to do business in the state of Georgia as required by laws, rules and regulations or, if allowed by statute, covenants to obtain such qualification prior to contract award.

CONTRACT EXECUTION AND BONDS:

The undersigned Bidder agrees, if this bid is accepted, to enter into an Agreement with CCWA on the form included in the Documents to perform and furnish Work as specified or indicated in the Documents for the Contract Price derived from the bid and within the times indicated herein and in accordance with the other terms and conditions of the Documents.

Bidder accepts the terms and conditions of the Documents.

INSURANCE:

Bidder further agrees that bid amount(s) stated herein includes specific consideration for the specified insurance coverage.

CONTRACT TIME:

Bidder hereby agrees to commence work within fourteen (14) calendar days under this

Bid Requirements

Division 2

Section 4: Bid Form

contract or on a date to be specified in the Notice to Proceed. The total time for the Bidder to complete this project shall not exceed two hundred and seventeen (217) calendar days. The Bidder and CCWA recognize that time is of the essence in completing this work and that there are delays, expense and difficulties involved in resolving a dispute related to a loss suffered by CCWA if the Work is not completed on time. Accordingly, instead of requiring such proof, CCWA and Bidder agree that as liquidated damages for delay (but not as a penalty), the Bidder shall pay to CCWA, as liquidated damages the amount of five hundred dollars (\$500.00) per calendar day for each and every day or part of a day thereafter that any work as described in the Contract Documents remains incomplete and/or not accepted by CCWA.

PAYMENT TERMS:

Payment terms are net thirty (30) days after approval of completed work and receipt of a detailed payment application.

RETAINAGE:

Bidder accepts the provisions in the Agreement Form as to retainage.

ADDENDA:

Bidder acknowledges receipt of the following Addenda:

SURETY:

The project work will require Performance and Payment Bonds prior to the commencement of the work. Such work shall not commence until approval of such bonds has been given by CCWA.

<u>BID</u>:

By submitting a bid, and by executing this construction contract, the Contractor acknowledges that it understands that the goods and services under this contract are being funded with monies made available by the Clean Water State Revolving Fund or the Drinking Water State Revolving Fund and agrees to comply with any and all such requirements.

The undersigned proposes to complete, in all respects, sound and conformable with this Contract Document the work for the amounts as shown on the following Pay Item Schedule.

Section 4: Bid Form

Bid Requirements

	Pay Item Schedule					
No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
1	Mobilization	Not to exceed 5%	LS	1		
2	Easement Clearing	N/A	SF	650,533		
3	Silt Fence Installation	N/A	LF	19,562		
4	Silt Fence Removal	N/A	LF	19,562		
5	Construction Access Road Installation	N/A	LF	11,630		
6	Construction Access Road Removal	N/A	LF	11,630		
7	Erosion and Sediment Control Installation	N/A	SF	792,735		
8	Sod Installation	N/A	SF	16,200		
9	NPDES Monitoring and Reporting	N/A	LS	1		
10	Permanent Fence Replacement	N/A	LF	100		
11	Temporary Fence	Install/Remove	LF	2,760		
12	Asphalt Placement	N/A	SF	4,800		
13	Concrete Placement	N/A	SF	250		
14	Concrete Curb Placement	N/A	LF	305		
15	Tie-In No. 1	N/A	LS	1		
16	· Cased Crossing No. 1	Casing Install	LF	200		
17	Gased Grossilly NO. 1	Pipe Insertion	LF	200		
18	· Cased Crossing No. 2	Casing Install	LF	60		
19	Cased Crossing NO. 2	Pipe Insertion	LF	60		

Section 4: Bid Form

Bid Requirements

	Pay Item Schedule					
No.	Work Item	Detail	Unit	Estimated Quantity	Unit Price	Extended Total
20		Casing Install	LF	100		
21	Cased Crossing No. 3	Pipe Insertion	LF	100		
22		Casing Install	LF	130		
23	Cased Crossing No. 4	Pipe Insertion	LF	130		
24		Casing Install	LF	180		
25	Cased Crossing No. 5	Pipe Insertion	LF	180		
26	Force Main 10-inch Pipe Installation	N/A	LF	15,586		
27	ARV / CAV Installation	N/A	EA	10		
28	Thrust Restraint	N/A	EA	32		
29	Unsuitable Soil Excavation	N/A	CF	10,000		
30	Rock Excavation	N/A	CF	10,000		
31	Pipe Collar Installation	N/A	EA	20		
32	Unforeseen Existing Conditions Allowance	N/A	Allow- ance	1	\$50,000.00	\$50,000.00
	TOTAL BID AMOUNT					

N/A = Non-applicable; LS = Lump Sum; LF = Linear Foot; SF = Square Foot; CF = Cubic Foot; EA = Each; VF = Vertical Foot.

Submitted by: _____

(COMPANY NAME OF BIDDER)

is the Bidder a	CCWA	certified SLBE?
is the Diudel a	COVA	

O YES **O** NO

County:

Division 2 Section 4: Bid Form

Bid Requirements

I have read and understand the requirements of this request for bid and agree to provide the required goods and services in accordance with this bid and all attachments, exhibit(s), and drawings.

Submitted by:

(COMPANY NAME OF BIDDER)

By: (OFFICER NAME)

(SIGNATURE)

(TITLE)

(DATE)

(COMPANY ADDRESS)

(CITY, STATE, ZIP CODE)

PHONE NUMBER:

EMAIL ADDRESS:

WEBSITE:

DATE:

UTILITY CONTRACTOR'S LICENSE NUMBER:

Division 2			Bid Requirements
Section 6: Bidde	r Qualification Informa	ation	
COMPANY NAM	E OF BIDDER:		
NUMBER OF YE	ARS IN BUSINESS		
BUSINESS ADDI	RESS OF COMPANY:		
TELEPHONE NU	MBER:		
POINT OF CONT POINT OF CONT ADDRESS:	-		
COMPANY TAX	ID NUMBER:		
COMPANY WEB	SITE:		
ENTITY TYPE:	 Individual/Sole Pro Privately Held Con Publicly Owned Con Other (specify): 	rporation/LLC	 Employee Owned Company Partnership Attorney
NAME OF PRINC	CIPAL OFFICERS:		

September 2020

Bid Requirements

Section 6: Bidder Qualification Information

REFERENCES

PROVIDE AT LEAST 3 REFERENCES FOR SIMILAR PROJECTS COMPLETED WITHIN THE LAST FIVE (5) YEARS. EACH REFERENCE SHALL INCLUDE THE NAME OF THE AGENCY, THE NAME OF THE PROJECT, DATE OF THE PROJECT, A CURRENT AGENCY CONTACT, A CURRENT CONTACT PHONE NUMBER AND EMAIL ADDRESS.

OWNER:	
CONTACT NAME:	
ADDRESS:	
PHONE NUMBER:	
PROJECT NAME:	
PROJECT DATE:	
EMAIL ADDRESS:	
OWNER:	
CONTACT NAME:	
ADDRESS:	
PHONE NUMBER:	
PROJECT NAME:	
PROJECT DATE:	
EMAIL ADDRESS:	
OWNER:	
CONTACT NAME:	
ADDRESS:	
PHONE NUMBER:	
PROJECT NAME:	
PROJECT DATE:	
EMAIL ADDRESS:	

Bid Requirements

Section 7: Contractor Affidavit & Agreement

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT OF 2006

- A. Pursuant to the Georgia Security and Immigration Compliance Act of 2006, the Contractor understands and agrees that compliance with the requirements of O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-.02 are conditions of this Agreement. The Contractor further agrees that such compliance shall be attested by the Contractor through execution of the contractor affidavit required by Georgia Department of Labor Rule 300-10-1-.07, or a substantially similar contractor affidavit. The Contractor's fully executed affidavit is attached hereto as Exhibit _____ and is incorporated into this Agreement by reference herein.
- B. By initialing in the appropriate line below, the Contractor certifies that the following employee-number category as identified in O.C.G.A. § 13-10-91 is applicable to the Contractor:
 - 1. _____ 500 or more employees;
 - 2. _____ 100 or more employees;
 - 3. _____ Fewer than 100 employees.
- C. The Contractor understands and agrees that, in the event the Contractor employs or contracts with any subcontractor or subcontractors in connection with this Agreement, the Contractor shall:
 - 1. Secure from each such subcontractor an indication of the employee-number category as identified in O.C.G.A. § 13-10-91 that is applicable to the subcontractor;
 - 2. Secure from each such subcontractor an attestation of the subcontractor's compliance with O.C.G.A. § 13-10-91 and Georgia Department of Labor Rule 300-10-1-.02 by causing each such subcontractor to execute the subcontractor affidavit required by Georgia Department of Labor Rule 300-10-1-.08, or a substantially similar subcontractor affidavit. The Contractor further understands and agrees that the Contractor shall require the executed subcontractor affidavit to become a part of the agreement between the Contractor and each such subcontractor. The Contractor agrees to maintain records of each subcontractor attestation required hereunder for inspection by the Clayton County Water Authority at any time."

Contractor	
Authorized Signature:	
Name:	
Title:	
Date:	

Bid Requirements

Section 7: Contractor Affidavit & Agreement

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with <u>O.C.G.A.</u> <u>13-10-91</u>, stating affirmatively that the individual, firm, or corporation which is contracting with the Clayton County Water Authority has registered with, is participating in, uses, and will continue to use for the duration of the contract, the federal work authorization program -EEV/Basic Pilot Program operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA), commonly known as E-Verify, in accordance with the applicability provisions established in <u>O.C.G.A.</u> <u>13-10-91</u>.

The undersigned further agrees that, in connection with the physical performance of services pursuant to this contract with the Clayton County Water Authority, the contractor will only employ or contract with subcontractor(s), who can present a similar affidavit verifying the subcontractor's compliance with <u>O.C.G.A. 13-10-91</u>. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Clayton County Water Authority within five days of the subcontractor(s) presenting such affidavit(s) to the contractor.

EEV / Basic Pilot Program* User Identification Number *Enter four to seven-digit numbers*

Name of Contractor (Printed)

BY: Authorized Officer or Agent (Contractor Name)

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME ON THIS

THE _____ DAY OF _____ 20____.

Notary Public

September 2020

Bid Requirements

Section 7: Contractor Affidavit & Agreement

SUBCONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned subcontractor verifies its compliance with <u>O.C.G.A. 13-10-91</u>, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with

on behalf of the Clayton County Water Authority has registered with, is participating in, uses, and will continue to use for the duration of the contract the federal work authorization program - EEV/Basic Pilot Program operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA), commonly known as E-Verify, in accordance with the applicability provisions and deadlines established in <u>O.C.G.A. 13-10-91</u>.

The undersigned further agrees that, in connection with the physical performance of services pursuant to this contract with

on behalf of the Clayton County Water Authority, the subcontractor will only employ or contract with sub-subcontractor(s), who can present a similar affidavit verifying the sub-subcontractor's compliance with <u>O.C.G.A. 13-</u> <u>10-91</u>. The undersigned further agrees that the Subcontractor will maintain records of such compliance and provide a copy of each such verification to the Contractor within five days of the sub-subcontractor(s) presenting such affidavit(s) to the Sub-contractor.

EEV / Basic Pilot Program* User Identification Number *Enter four to seven-digit numbers*

 Name of Sub-Contractor (Printed)

 BY: Authorized Officer or Agent (Subcontractor Name)
 Date

 Title of Authorized Officer or Agent of Subcontractor
 Printed Name of Authorized Officer or Agent

 Printed Name of Authorized Officer or Agent
 20_____.

 Subscribed and sworn before me on this the ______ day of ______20___.
 Notary Public

Bid Requirements

Section 8: Small Local Business Enterprises (SLBE) - General Information

8.1 **Program Overview**

Clayton County Water Authority (CCWA) has implemented a Small Local Business Enterprise Program to promote full and open competition in all government procurement and purchasing. Bid discounts for the use of Small Local Business Enterprises (SLBE's) are set on a contract by contract basis for each specific prime contract with subcontracting possibilities. CCWA wants to ensure that Bidders are non-discriminatory in their process of selecting sub-contractors. CCWA also wants to encourage Bidders to utilize small, minority or woman-owned businesses whenever possible. All forms included in this solicitation must be completed for Bidder to be considered responsive.

SLBE means a locally-based small business operating inside or outside of Clayton County, which meets the following criteria:

- A) Independently owned and operated business concern whose average annual gross receipts for the previous three years must not exceed (1) Construction Firms \$18,250,000; (2) Professional Services Firms \$5,500,000; (3) Architectural Firms \$3,750,000; (4) Engineering Firms \$7,500,000, and (5) Goods and Services less than 250 employees.
- B) Locally based, meaning located and operating in Clayton County or the ten (10) counties of Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding for at least one year prior to submitting application for certification.

If a firm is locally-based in one of the counties mentioned above, is currently certified as a small business through Clayton County, the City of Atlanta, DeKalb County, or the Georgia Department of Transportation, and can provide evidence of its certification, the firm will be provisionally accepted as a SLBE, provided that they complete the official certification application for CCWA within two (2) years following the date of provisional certification. If a firm meets these qualifications, but is not currently certified as a CCWA small local business, then the firm must complete an application for certification with CCWA no later than seven (7) business days following the deadline for bid submission.

SLBE's must perform a commercially useful function, which means performance of provision of real and actual services under the contract or subcontract with CCWA. Factors such as the nature and amount of the work subcontracted; whether the SLBE has the skill and expertise to perform the work for which it has been certified; whether the SLBE actually performs, manages or supervises the work; and whether the SLBE intends to purchase commodities and/or services

Bid Requirements

Section 8: Small Local Business Enterprises (SLBE) - General Information

from a non-SLBE and simply resell them will be considered in determining if the SLBE is performing a commercially useful function.

Participation in the SLBE program is not a requirement to participate in contracting with CCWA. The use of an SLBE is a requirement when bid discounts are to be sought. The Bidder will be required to complete the required forms as outlined in the following section.

8.2 Overview of Bid Discount

Bid discounts are incentives that allow an original bid amount to be discounted for evaluation purposes in determining the lowest responsive, responsible bidder, while the original bid amount will be the basis for contract award.

Example: A \$100,000 bid with a 7.5% bid discount would be evaluated at \$92,500. However, \$100,000 would be paid to the successful bidder.

Bid Discounts will be applied to CCWA certified SLBE prime bidders <u>only</u>. The use of certified SLBE sub-contractors will not establish eligibility to receive Bid Discounts. Depending on the bidder's location, Bid Discounts will range between 7.5% and 10%.

The calculation of SLBE bid discounts shall be as follows:

There will be an applied tiered discount to bids based on what county the SLBE business is located.

- > 10 percent for SLBE's in Clayton County.
- 7.5 percent for SLBE's within the next surrounding 10 counties (Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding).
- (1) Discounts are given to Bidders who are SLBE prime bidders <u>only</u>.
- (2) In the event of a tie bid between a discounted bidder and a non-discounted bidder, the discounted bidder (SLBE) will be recommended for the contract.

By signing the bid, the bidder is certifying that he/she has complied with the requirements of this program. Please contact Contracts, Compliance and Risk Management at <u>ccwa_slbe_program@ccwa.us</u> for more information on CCWA's SLBE Program or visit our website at <u>www.ccwa.us</u>.

Contract Forms

Section 1: Agreement Form

STATE OF GEORGIA COUNTY OF CLAYTON

AGREEMENT FOR SINGLE PURCHASE OF GOODS AND SERVICES

This Agreement made and entered into this _____ day of ______, 2019, for Walnut Creek Force Main Replacement, between the CLAYTON COUNTY WATER AUTHORITY (hereinafter "CCWA") and _____ (hereinafter "the Contractor"), witnesseth:

WHEREAS, CCWA is contracting with the Contractor for the provision of certain goods and services described below for the term specified herein;

NOW THEREFORE, the parties agree as follows:

1. DESCRIPTION OF GOODS AND SERVICES:

The Contractor shall provide the goods and services to CCWA in such quantities as CCWA requires for **Walnut Creek Force Main Replacement**, as described in the Request for Bid dated September 2020.

2. COSTS:

CCWA shall pay the Contractor the prices as stipulated in the Bid Form hereto attached as full compensation relative to the Bid dated ______, a copy of which is attached and incorporated into this contract. The Contractor shall be paid for items of work as noted in Division 4, Section 1 "Work Items and Measurement".

Once the work commences CCWA shall make Progress Payments to the Contractor on a monthly basis. The Contractor shall submit an Application for Payment for the period ending the 15th day of the month. Each Application for Payment must be submitted to CCWA on or before the 20th day of each month in such form and manner, and with such supporting data and content as CCWA may require.

Per Georgia Code Section 13-10-2, CCWA will withhold a 10% retainage on each and every Application for Payment until such time as the value of the contract (including change orders) exceeds 50%; and as long as completion and progress of the work is acceptable to CCWA. If after reaching the 50% completion of the value of the contract, CCWA's representative has

Section 1: Agreement Form

determined that the work is unsatisfactory or has fallen behind schedule, then retainage will resume at the previous level of 10%. The Contractor may submit a request for release of retainage 30 days after the completion and final acceptance of the Project, and upon receipt of all necessary documentation including, but not limited to, a final affidavit and release of surety.

3. TIME FOR COMPLETION OF PROJECT:

Contractor hereby agrees to commence work within fourteen (14) calendar days under this contract or on a date to be specified in the Notice to Proceed. The total time for the Contractor to complete this project shall not exceed two hundred and seventeen (217) calendar days. The Contractor and CCWA recognize that time is of the essence in completing this work and that there are delays, expense and difficulties involved in resolving a dispute related to a loss suffered by CCWA if the Work is not completed on time. Accordingly, instead of requiring such proof, CCWA and Contractor agree that as liquidated damages for delay (but not as a penalty), the Contractor shall pay to CCWA, as liquidated damages the amount of \$500.00 per calendar day for each and every day or part of a day thereafter that any work as described in the Contract Documents remains incomplete and/or not accepted by CCWA.

4. WARRANTY ON SERVICES RENDERED:

The Contractor warrants its workmanship to be free from defects for a period of two (2) years from the date of final acceptance. The Contractor further warrants that its workmanship will conform to all specifications and will perform as specified. Upon receipt of written notice of a defect in workmanship, the Contractor shall repair the defect in a timely manner at no expense to CCWA.

5. WARRANTY ON GOODS PROVIDED:

The Contractor warrants its goods for a period of two (2) years from the date of final acceptance. Furthermore, the Contractor warrants that goods ordered to specifications will conform thereto and to any drawings, samples, or other description furnished or adopted by CCWA, and will be fit and sufficient for the purpose intended; and that all goods are merchantable, of good material and workmanship, and free from defect. Such warranties, together with the Contractor's service warranties and guarantees, if any, shall survive inspection, test, acceptance of, and payment for the goods and shall run to

Section 1: Agreement Form

CCWA, its successors, assigns, customers at any tier, and ultimate user and ioint users. Notices of any defects or non-conformity shall be given by CCWA to the Contractor within fifteen (15) months after acceptance by ultimate user; provided however that in the event the goods are designed by the Contractor, notice must be given within three (3) years after acceptance by ultimate user. The rights and remedies of CCWA concerning latent defects shall exist indefinitely and shall not be affected in any way by any terms and conditions of this Agreement, including this clause. CCWA may, at its option, and in addition to other remedies available at law, either (i) return for credit, (ii) require prompt correction or replacement of the defective or nonconforming goods, or (iii) have the defective items corrected or replaced at the Contractor's expense and deduct the cost thereof from any monies due the Contractor. The return to the Contractor of any defective or nonconforming goods and delivery to CCWA of any corrected or replaced goods shall be at the Contractor's expense. Goods required to be corrected or replaced shall be subject to the provision of this paragraph and the paragraph of this Agreement entitled "inspection" in the same manner and to the same extent as goods originally delivered under this Agreement. In addition to correcting or replacing any defective or nonconforming goods, the Contractor shall also reimburse CCWA for all costs and expenses incurred by CCWA in connection with inspection and discovery of the defects, identifying and correcting the cause of such defects and all other activities reasonably undertaken by CCWA to obtain conforming goods or attempting to obtain from the ultimate user a waiver to permit the defective goods to be used with all or part of the defective conditions.

6. **INSPECTION:**

CCWA shall have the right to inspect the goods supplied hereunder at any time during the manufacture or fabrication thereof at the Contractor's facilities or elsewhere. Such inspection may include, without limitation, raw materials, components, work in process, and completed products as well as drawings, specifications, and released data. Final inspection and acceptance shall be after delivery to the delivery point designated by CCWA. If any inspection or test is made by CCWA at the Contractor's facility or elsewhere, the Contractor shall provide reasonable facilities and assistance for the inspection personnel. CCWA may reject all goods supplied hereunder, which are found to be defective. Goods so rejected may be returned to the Contractor at the Contractor's expense. No inspection, examination or test, regardless of

Contract Forms

Contract Forms

Division 3

Section 1: Agreement Form

extensiveness or type, and no approval give in connection with any such inspection, examination or test, whether under this Agreement or another contract for the same or similar goods, shall relieve it, of any obligation to comply fully with all requirements of this Agreement, including the obligation to produce gods that conform to all requirements of the drawings, specifications and any other Contract Documents. At CCWA's request, the Contractor shall repair or replace defective goods at the Contractor's expense. Failure to inspect goods, failure to discover defects in goods or payment for goods shall not constitute acceptance or limit any of CCWA's rights, including without limitation those under the WARRANTY provisions of this Agreement. In the event inspection reveals a defect or defects and schedule urgency requires that the defect or defects be corrected by CCWA to support production, all cost of such correction, including without limitation installation and removal, will be charged to the Contractor; such charges will also include time and material and appropriate indirect and overhead expenses. The Contractor shall maintain in inspection system acceptable to CCWA covering the goods furnished hereunder.

7. CONTRACTOR'S AFFIDAVITS:

The Contractor shall issue a "Standard Contractor's Affidavit Interim Waiver and Release Upon Payment" and a "Standard Contractor's Affidavit Unconditional Waiver and Release upon Final Payment" provided by CCWA before receiving any interim or final payment for any services performed.

8. ASSIGNMENT AND SUBCONTRACTING:

The Contractor shall not assign this Agreement or any portion of this Agreement, nor shall the Contractor sub-contract for goods or completed or substantially completed services purchased hereunder without the prior express written consent of CCWA. No assignment or subcontract by the Contractor, including any assignment or subcontract to which CCWA consents, shall in any way relieve the Contractor from complete and punctual performance of this Agreement, including without limitation all of the Contractor's obligations under the WARRANTY provisions of this Agreement.

9. CCWA'S ASSISTANCE AND COOPERATION:

During the Contractor's performance of this Agreement, CCWA may, but has no obligation to, provide assistance to, or cooperate with, the Contractor in activities that facilitate the proper performance and completion of this

Contract Forms

Section 1: Agreement Form

Agreement by the Contractor. Such assistance and cooperation may include without limitation: (i) providing engineering or other analysis or advice on correcting problems; (ii) refraining from strict enforcement of time schedule requirements under this Agreement; (iii) permitting use of test materials or documentation not performed or produced under this Agreement. Such assistance or cooperation by CCWA shall not be construed, and the Contractor agrees that it will not claim that any such assistance or cooperation operates, to relieve the Contractor from complete, proper and punctual performance of all the Contractor's obligations under this Agreement.

10. WORK ON CCWA'S DESIGNATED PREMISES:

In the event that the Contractor, the Contractor's employees or agents or the Contractor's subcontractors enter CCWA's designated premises for any reason in connection with this Agreement, the Contractor and such other parties shall observe all security requirements and all plant safety, plant protection, and traffic regulations.

The Contractor shall defend, indemnify, and hold CCWA harmless from all claims, actions, demands, loss, and causes of action, arising from injury, including death, to any person, or damage to any property, when such injury or damage results in whole or in part from the acts or omissions of the Contractor, the Contractor's employees or agents or the Contractor's subcontractor, save and except damage caused by the sole negligence of CCWA. The Contractor, and any subcontractors used by the Contractor in connection with this Agreement, shall carry Workmen's Compensation and Employees' Liability Insurance to cover the Contractor's and any subcontractor's legal liability on account of accidents to their employees. The Contractor and any subcontractor shall carry adequate Comprehensive General Liability and adequate Comprehensive Automobile Liability Insurance covering accidents to their employees. The Contractor and any subcontractor shall carry adequate Comprehensive General Liability and adequate Comprehensive Automobile Liability Insurance covering legal liability of the Contractor and any subcontractor on account of accidents arising out of the operations of the Contractor or any subcontractor and resulting in bodily injury, including death, being sustained by any person or persons, or in any damage to property. At CCWA's request, the Contractor shall furnish to CCWA certificates from the Contractor's insurers showing such coverage in effect and agreeing to give CCWA thirty (30) days prior written notice of cancellation of the coverage.

Contract Forms

Section 1: Agreement Form

11. RISK MANAGEMENT REQUIREMENTS:

The Contractor shall abide by CCWA's applicable Risk Management Requirements, attached to this Agreement as Exhibit A and hereby incorporated into this Agreement.

12. **TERMINATION FOR DEFAULT:**

- (a) CCWA may, subject to the provisions of subparagraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this Agreement in any one of the following circumstances; (i) if the Contractor fails to perform this Agreement within the time specified herein or any extension thereof; or (ii) if the Contractor fails to perform any of the other provisions of this Agreement, or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and does not cure such failure within a period of ten (10) days or longer period (as CCWA may authorize in writing) after receipt of notice from CCWA specifying such failure.
- (b) In the event CCWA terminates this Agreement in whole or in part as provided in subparagraph (a) above, CCWA may procure, upon such terms and in such manner as CCWA may deem appropriate, services, similar to those so terminated, and the Contractor shall be liable to CCWA for any Excess costs for the same, including without limitation all cost and expenses of the type specified in the "WARRANTY" paragraph of this Agreement; provided, that the Contractor shall continue the performance of this Agreement to the extent not terminated hereunder.
- (c) Except with regard to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform this Agreement arises out of causes beyond the control and without the fault of negligence of the Contractor such causes may include, but are not limited to, acts of God, or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, flood, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and the subcontractor, and without the fault of negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform,

Contract Forms

Section 1: Agreement Form

unless the services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule. The term "subcontractor" shall mean subcontractor at any tier.

- (d) If, after notice of termination of this Agreement under the provisions of this paragraph, it is determined for any reason that the Contractor was not in default under the provisions above or that the default was excusable under the provisions of this paragraph, the rights and obligations of the parties shall be the same as if the notice of termination has been issued pursuant to the "Termination for Convenience" paragraph of this Agreement.
- (e) The rights and remedies of CCWA provided in this paragraph shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

13. TERMINATION FOR CONVENIENCE:

CCWA may at any time by written notice terminate all or any part of this Agreement for CCWA's convenience. If this Agreement is terminated, in whole or in part, for CCWA's convenience, the Contractor shall be paid an amount, to be mutually agreed upon, which shall be adequate to cover the actual and reasonable cost paid by the Contractor for the actual goods and labor reasonably used by the Contractor to perform the work under this Agreement to the effective date of termination, plus a reasonable profit thereon; provided that no amount shall be paid to the Contractor for (i) any anticipatory profits related to work under this Agreement not yet performed, or (ii) costs incurred due to the Contractor's failure to terminate work as ordered on the effective date of termination. In no event shall the total amount paid under the provisions of this paragraph exceed the prices set forth in this Agreement for the work terminated.

14. DISPUTES:

Pending resolution of any dispute hereunder, the Contractor shall proceed diligently with the performance of work in accordance with CCWA's direction.

15. **NOTICES:**

All notices required or permitted to be given hereunder shall be deemed to be properly given if delivered in writing personally or sent by United States

Section 1: Agreement Form

certified or registered mail addressed to the Contractor or CCWA, as the case may be, with postage thereon fully prepaid. The effective time shall be at the time of mailing.

16. ATTORNEYS' FEES:

The Contractor shall pay reasonable attorneys' fees to CCWA should CCWA be required to incur attorneys' fees in enforcing the provisions of this Agreement or in the collection of any monies herein required to be paid by the Contractor to CCWA.

IN WITNESS WHEREOF this _____ day of _____, 2020, said parties have hereunto set their seals the day and year above first written.

Executed on behalf of:

CLAYTON COUNTY WATER AUTHORITY

By: By: By: Name: Name: Name: Title: General Manager Title: Attest: Attest: Name: Name: Name: Title: Date: Date: Date:

[Corporate Seal]

[Corporate Seal]

CONTRACTOR

Section 1: Agreement Form

Contract Forms

EXHIBIT A

RISK MANAGEMENT REQUIREMENTS

The Contractor will provide minimum insurance coverage and limits as per the following: The Contractor will file with CCWA Certificates of Insurance, certifying the required insurance coverage and stating that each policy has been endorsed to provide thirty (30) day notice to CCWA in the event that coverage is cancelled, non-renewed, or the types of coverage or limits of liability are reduced below those required. All bonds and insurance coverage must be placed with an insurance company approved by CCWA's Management, admitted to do business in the State of Georgia, and rated Secure ("B+" or better) by A.M. Best Company in the latest edition of Property and Casualty Ratings, or rated by Standard & Poors Insurance Ratings, latest edition as Secure ("BBB" or better). Worker's Compensation self-insurance for individual Contractors must be approved by the Worker's Compensation Board, State of Georgia and/or Self-Insurance pools approved by the Insurance Commissioner, State of Georgia.

CONTRACTS FOR UP TO \$50,000

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$100,000 each Accident, Disease \$100,000 each employee, \$500,000 Disease policy limit.

Automobile Liability – Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$500,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

CONTRACTS FOR MORE THAN \$50,000

Worker's Compensation – Worker's Compensation coverage on a statutory basis for the State of Georgia with an Employer's Liability limit of \$1,000,000. The increased Employer's Liability limit may be provided by an Umbrella or Excess Liability policy.

Automobile Liability - Automobile liability coverage for owned, hired and non-owned vehicles in the amount of \$1,000,000 combined single limit.

Commercial General Liability – Coverage to be provided on "occurrence" not "claims made" basis. The coverage is to include Contractual liability, Per Project Limit of Liability, losses caused by Explosion, Collapse and Underground ("xcu") perils, the "Clayton County Water Authority" is to be added as an Additional Insured and Products and Completed Operations coverage is to be maintained for three (3) years following completion of work.

Section 1: Agreement Form

RISK MANAGEMENT REQUIREMENTS (Cont'd)

CONTRACTS FOR UP TO \$50,000

CONTRACTS FOR MORE THAN \$50,000

LIMITS OF LIABILITY:

\$1,000,000	Per Occurrence
\$1,000,000	Personal and Advertising
\$50,000	Fire Damage*
\$5,000	Medical Payments*
\$1,000,000	General Aggregate
\$1,000,000	Products/Completed Operations per Occurrence and Aggregate

*These are automatic minimums

Owner's Protective Liability – CCWA's Management may, in its discretion, require Owner's Protective Liability in some situations. However, it is not required for this project. **Umbrella and/or Excess Liability** – The Umbrella or Excess Liability Policy may be used to combine with underlying policies to obtain the limits required. The Management of the CCWA is requiring a \$5,000,000 Umbrella or Excess Liability Limit for this project.

Owner's Protective Liability – CCWA's Management may, in its discretion, require Owner's Protective Liability in some situations. However, it is not required for this project.

END OF SECTION

Contract Forms

Contract Forms

Section 2: Performance Bond

KNOW ALL MEN BY THESE PRESENTS THAT _____

______ (as CONTRACTOR, hereinafter referred to as the "Principal"), and _______ (as SURETY COMPANY), hereinafter referred to as the "CONTRACTOR'S SURETY"), are held and firmly bound unto the Clayton County Water Authority (as OWNER, hereinafter referred to as the "Authority"), for the use and benefit of any "Claimant" as hereinafter defined in the sum of ______ Dollars (\$_____) lawful money of the United States of America, for the payment of which the Principal and the Contractor's Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered, or is about to enter, into a certain written agreement with the Authority, dated _______, which is incorporated herein by reference in its entirety (hereinafter referred to as the "CONTRACT"), for the construction of a project known as <u>Walnut Creek Force Main Replacement</u>, (hereinafter referred to as "the PROJECT").

NOW THEREFORE, the conditions of this obligation are as follows:

1. That if the Principal shall fully and completely perform each and all of the terms, provisions and requirements of the Contract, including and during the period of any warranties or guarantees required thereunder, and all modifications, amendments, changes, deletions, additions, and alterations thereto that may hereafter be made; and if the Principal and the Contractor's Surety shall indemnify and hold harmless the Authority from any and all losses, liability and damages, claims, judgments, liens, costs and fees of every description, including but not limited to, any damages for delay, which

Contract Forms

Section 2: Performance Bond

the Authority may incur, sustain or suffer by reason of the failure or default on the part of the Principal in the performance of any and all of the terms, provisions and requirements of the Contract, including all modifications, amendments, changes, deletions, additions, and alterations thereto and any warranties or guarantees required thereunder, then this obligation shall be void; otherwise to remain in full force and effect;

- 2. In the event of a failure of performance of the Contract by the Principal, which shall include, but not be limited to, any breach of default of the Contract;
 - a. The Contractor's Surety shall commence performance of its obligations and undertakings under this Bond no later than thirty (30) days after written notice from the Authority to the Contractor's Surety;
 - b. The means, method or procedure by which the Contractor's Surety undertakes to perform its obligations under this Bond shall be subject to the advance written approval of the Authority.

The Contractor's Surety hereby waives notice of any and all modifications, omissions, additions, changes and advance payments or deferred payments in or about the Contract, and agrees that the obligations undertaken by this Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, and advance payments or deferred payments. The Parties further expressly agree that any action on this Bond may be brought within the time allowed by Georgia law for suit on contracts under seal.

Division 3	Contract Forms				
Section 2: Performance Bond					
IN WITNESS WHEREOF, the principal and Contractor's Surety have hereunto					
affixed their corporate seals and caused this obligation to be signed by their duly authorized					
officers or attorneys-in-fact, this	day of20				
	(Name of Principal)				
	Ву:				
	Name Printed:				
	Title:				
• <i>••</i> • •	Corporate Seal				
Attested:					
Date:					
	(Name of Contractor's Surety)				
	Ву:				
	Name Printed:				
	Title:				
Attested:	Corporate Seal				
Date:					

(ATTACH SURETY'S POWER OF ATTORNEY)

END OF SECTION

Contract Forms

KNOW ALL MEN BY THESE PRESENTS THAT				
	(as CONTRACTOR, hereinafter			
referred to as the "Principal"), and				
(as SURETY COMPANY, hereinafter refer	rred to as the "CONTRACTOR'S SURETY"), are			
held and firmly bound unto the Clayton C	ounty Water Authority (as OWNER, hereinafter			
referred to as the "Authority"), for the us	e and benefit of any "Claimant" as hereinafter			
defined in the sum of	Dollars (\$),			
lawful money of the United States of Ame	rica, for the payment of which the Principal and			
the Contractor's Surety bind themselves, t	heir heirs, executors, administrators, successors			
and assigns, jointly and severally, firmly b	y these presents.			
WHEREAS, the Principal has entered, or i	s about to enter, into a certain written agreement			
with the Authority, dated	, which is incorporated herein by reference in			
its entirety (hereinafter referred to as the '	'CONTRACT"), for the construction of a project			
known as <u>Walnut Creek Force Main I</u>	Replacement (hereinafter referred to as "the			
PROJECT").				

NOW THEREFORE, the condition of this obligation is such, that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor, services and materials used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

A "Claimant" shall be defined herein as any Subcontractor, person, Party, partnership, corporation or other entity furnishing labor, services or materials used or reasonably required for use in the performance of the Contract, without regard to whether such labor, services or materials were sold, leased or rented, and without regard to whether 3-3.1

Contract Forms

Division 3

Section 3: Payment Bond

such Claimant is or is not in privity of the Contract with the Principal or any Subcontractor performing Work on the Project.

In the event of any claim made by the Claimant against the Authority, or the filing of a Lien against the property of the Authority affected by the Contract, the Contractor's Surety shall either settle or resolve the Claim and shall remove any such Lien by bond or otherwise as provided in the Contract.

The Parties further expressly agree that any action on this Bond may be brought within the time allowed by Georgia law for suit on contracts under seal.

(SIGNATURES ON NEXT PAGE)

<u>[</u>

Division 3		Contract Forms
Section 3: Paymer	nt Bond	
IN WITNESS	S WHEREOF, th	e Principal and Contractor's Surety have hereunto
affixed their corpora	te seals and caus	sed this obligation to be signed by their duly authorized
officers on this	day of	20
		(Name of Principal)
		Ву:
		Name Printed:
		Title:
Attested:		Corporate Seal
 Date:		
		(Name of Contractor's Surety)
		By:
		Name Printed:
		Title:
		Corporate Seal
Attested:		
Date:		

(ATTACH SURETY'S POWER OF ATTORNEY)

END OF SECTION

Section 4: Non-Collusion Certificate

STATE OF

, COUNTY OF

Personally appeared before the undersigned officer duly authorized by law to administer oaths

who, after being first duly sworn, depose and say that they are all the officers, agents, persons or employees who have acted for or represented

, and that said

in proposing or procuring the Contract with the Clayton County Water Authority on the

following project: Walnut Creek Force Main Replacement

has not by (himself, themselves) or through any persons, officers, agents or employees prevented or attempted to prevent by any means whatsoever competition in such bidding; or by any means whatsoever prevented or endeavored to prevent anyone from making a proposal therefore, or induced or attempted to induce another to withdraw a bid for said work.

ATTEST:	By: Bidder	
By: Name	_ By: Name	
Title:	Title:	
Sworn to and subscribed before me this _	day of	, 20
Notary Public:	My Commission expires:	

END OF SECTION

Contract Forms

Specifications

Section 1: Work Assignment and Measurement for Payment

1.1 General

- A. This section provides an explanation of the work that is to be completed as part of each Work Item and how the Work Item will be measured for payment.
 - 1. Work Item descriptions incorporate work shown on the Construction Details or Construction Drawings/Detailed Site Map and all related work/specifications referenced in Division 4, Section 3.
 - 2. The Work Items correspond to the Work Items listed on the "Pay Item Schedule" of the Bid Form.
- B. The Contractor shall provide all labor, equipment, tools, materials (unless indicated otherwise as detailed in Division 4, Section 2) and incidental items to complete the Work Items in accordance with the Contract Documents.
- C. The basis for payment will be the bid unit cost amounts included in the "Pay Item Schedule" and the actual quantities of work completed by the Contractor and approved by the CCWA.
- D. Nothing in this Section shall be construed as providing for additional payment beyond the Work Items. The Contractor shall be paid only for the quantity of a Work Item that is completed and authorized/approved by CCWA. No payment will be made for the completion of excessive quantities of a Work Item as determined by the CCWA.
- E. Materials (Stored Material) that will become part of a finished product may be purchased by the Contractor in advance of the work and stored on the project site. Payment for Stored Materials may be requested by the Contractor during monthly invoicing. A request for payment of a Stored Material must be accompanied with that material's supporting invoice.
- F. The CCWA reserves the right to adjust the quantity of a Work Item up or down as necessary to address needs. Work Items and quantities of a Work Item not completed will be removed from the contract.

1.2 Application for Payment

- A. An application for payment shall conform in general with The American Institute of Architects (AIA) contract documents and incorporate the Pay Item Schedule of the Bid Form.
- B. Provide document(s) to support each monthly application for payment.

Specifications

Section 1: Work Assignment and Measurement for Payment

- 1. Provide two (2) copies of the application for payment with original signatures.
- 2. Provide a spreadsheet summary with each application for payment that documents the Work Items and their quantities being requested for payment. Work Items shall be quantified by using survey stations, individual labels, units installed, percent complete, etc. as shown on the Construction Drawings or specifications herein.
- 3. Provide two (2) copies of the applicable Waiver and Release Upon Payment Affidavit with original signatures.
- 4. Additional items to be included with each application for payment are as follows.
 - a) Updated Construction Schedule.
 - b) Construction Photos (10).
 - c) Pipe and Manhole Testing Documentation.
 - d) NPDES monitoring reports.
 - e) Contractor's safety orientation sign-in form.
 - f) Contractor's weekly safety meeting sign-in form.

1.3 Work Items and Measurement

Work Item 1. Mobilization: Defined as the Contractor's preparatory operations necessary to initiate the work. Mobilization shall not exceed 5% of the total bid amount. The Work Item will be paid on a "lump sum" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA. Preparatory operations shall include providing the following and will be paid by the indicated percentage when accepted by CCWA.

- A. Construction schedule: 5% of mobilization expense.
- B. Work Sequence: 5% of mobilization expense.
- C. Flow Interruption Plan: 5% of mobilization expense.
- D. Material Submittals: 10% of mobilization expense.
- E. Preconstruction Video: 5% of mobilization expense.
- F. Stake/Flag Construction Limits and Wetlands: 10% of mobilization expense.
- G. Deliver to site all equipment necessary to begin construction of the project: 60% of mobilization expense.

Specifications

Section 1: Work Assignment and Measurement for Payment

Work Item 2. Easement Clearing: Defined as the Contractor completing clearing and grubbing in the permanent 20-foot easement areas and other areas as necessary within the construction limits and disposing of all debris from the work site in accordance with the Construction Documents. Debris includes but is not limited to trees, brush, household trash, household items, construction trash, tires, metal and any other material. Areas within the construction limits having only mowed grass and asphalt/concrete pavement surfaces shall not be considered for easement clearing. The Work Item will be paid on a per "square foot" unit cost of construction limits cleared in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 3. Silt Fence Installation: Defined as the Contractor completing silt fence installation and/or filter sock installation in accordance with Construction Documents. The Work Item will be paid on a per "linear foot" unit cost of single-row silt fence and/or filter sock installed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 4. Silt Fence Removal: Defined as the Contractor completing the removal and disposal of silt fence and/or filter sock and stabilizing any subsequent disturbed soil in accordance with the Construction Documents. The Work Item will be paid on a per "linear foot" unit cost of single-row silt fence and/or filter sock removed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 5. Construction Access Road Installation: Defined as the contractor installing and maintaining a construction access road at locations as indicated in Division 4, Section 3.3.3. CCWA will pay for the initial installation of the access road; Contractor will be responsible for the cost of maintaining the road during construction. Any other access or access roads beyond what is referenced will be at the expense of the Contractor. The Work Item will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 6. Construction Access Road Removal: Defined as the Contractor removing the construction access road (Work Item 5). Erosion and Sediment Control Installation will be paid from other Work Item. The work will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Specifications

Section 1: Work Assignment and Measurement for Payment

Work Item 7. Erosion and Sediment Control Installation: Defined as the Contractor completing the installation of erosion and sediment control measures, including permanent grassing, throughout the entire width of the construction limits and material staging areas in accordance with the Construction Documents. Construction limits where asphalt and concrete are situated are not eligible for payment. The Work Item will be paid on a per "square foot" unit cost of construction limits completed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 8. Sod Installation: Defined as the Contractor completing the installation of sod, throughout the width of the construction limits in the front yards in accordance with the Construction Documents. The Work Item will be paid on a per "square foot" unit cost of area grassed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 9. NPDES Monitoring and Reporting: Defined as the Contractor completing NPDES monitoring and reporting requirements in accordance with the Contract Documents. The Work Item will be paid on a "lump sum" unit cost with the lump sum being equally divided over the duration of the construction time in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 10. Permanent Fence Replacement: Defined as the Contractor completing the removal of existing fencing of any type and disposing and providing and installing new fence, post and accessories in accordance with manufacturer instructions to match the existing fence. New fencing per property parcel will not be installed until all construction work has been completed on the property parcel. The Work Items will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Work Item 11. Temporary Fence: Defined as the Contractor, prior to commencing construction in the respective area, installing temporary fence as indicated in Division 4, Section 3.3.1. The Work Item will be paid on a per "linear foot" unit cost in accordance with Pay Item Schedule as authorized/approved by CCWA. Temporary fencing to be installed as part of trench excavation and flow interruption is not included in this Work Item.

Work Item 12. Asphalt Placement: Defined as the Contractor removing and/or milling existing asphalt of various thicknesses due to construction activity and

Section 1: Work Assignment and Measurement for Payment

disposing of and installing new asphalt in accordance with the Contract Documents. The Work Item will be paid on a per "square foot" unit cost of material installed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 13. Concrete Placement: Defined as the Contractor removing existing concrete of various thicknesses due to construction activity and disposing of and installing new concrete in accordance with the Contract Documents. The Work Item will be paid on a per "square foot" unit cost of concrete installed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 14. Concrete Curb Replacement: Defined as the Contractor removing existing concrete curb due to construction activity and disposing of and installing new concrete curb in accordance with the Contract Documents. The Work Items will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Work Item 15. Tie-In No. 1: Defined as the Contractor completing all necessary work as described in the Contract Documents to install pipe, manholes and inverts from station 162+50 to station 163+65as indicated as "Tie-In (1)". Erosion and Sediment Control Installation will be paid from other Work Item. Only when testing on all work has been accepted by CCWA will the Work Item be eligible for payment. The Work Item will be paid on a "lump sum" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Items 16 – 25. Cased Crossing No. 1, 2, 3, 4, and 5 (Casing and Pipe Insertion): Defined as the Contractor completing all necessary work as described in the Contract Documents to complete Cased Crossings No. 1, 2, 3, 4, and 5. Concrete Curb Replacement will be paid from other Work Item. Erosion and Sediment Control Installation will be paid from other Work Item. The Work Item will be paid on a per "linear foot" unit cost of cased crossing installed and pipe installed in accordance with the Pay Item Schedule and applicable work Detail as authorized/approved by CCWA.

Work Item 26. Force Main 10-inch Pipe Installation: Defined as the Contractor completing all necessary work as described in the Construction Documents to install the Primary Pipe from survey station 0+00 to survey station 162+50 (beginning of Tie-In No. 1). This Work Item does not include pipe installed as part

Specifications

Specifications Section 1: Work Assignment and Measurement for Payment

of Work Items Cased Crossing No. 1, 2, 3, 4, and 5. The work will be measured horizontally from end pf pipe to end of pipe. Only pipe installed where testing has been accepted by CCWA will be eligible for payment. The Work Item will be paid on a per "linear foot" unit cost in accordance with the Pay Item Schedule and applicable depth Detail as authorized/approved by CCWA.

Work Item 27. ARV / CAV Installation: Defined as assembling and installing an air or combination / vacuum release valve(s) or assembly of various sizes onto a threaded or flanged tapping saddle or sleeve. Shut-off valves, bends, thread sealant associated with the valve(s) and manholes shall be installed as part of the Work Item. The Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Items 28. Thrust Restraint: Defined as installing cast-in-place concrete thrust restraint tie-back or block for the specified pipe size. The Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule and applicable Detail as authorized/approved by CCWA.

Unsuitable Soil Excavation: Defined as the Contractor Work Item 29. completing the excavation and disposal off site of unsuitable soil and replacing excavated volume with suitable soil or stone in accordance with the Contractor Documents. The quantity of work completed will be determined by measuring the vertical and horizontal distance of removed material from the planned excavation. The Work Item will be paid on a per "in-place cubic foot" unit cost of material removed in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 30. Rock Excavation: Defined as the Contractor completing the removal and disposal off site of rock and replacing removed volume of rock inside of the pipe zone with stone and outside of the pipe zone with suitable soil in accordance with the Contract Documents. The quantity of work completed will be determined by measuring the vertical and horizontal distance of removed material from the planned excavation. The Work Item will be paid on a per "in-place cubic foot" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 31. Pipe Collar Installation: Defined as the Contractor completing the installation of pipe collars in accordance with the Contract Documents. The

Specifications

Section 1: Work Assignment and Measurement for Payment

Work Item will be paid on a per "each" unit cost in accordance with the Pay Item Schedule as authorized/approved by CCWA.

Work Item 32. Unforeseen Existing Conditions Allowance: This Work Item will only be used when CCWA requests additional services in writing from the Contractor as may be required to complete the Project. This Work Item will only be used when unexpected conditions arise as determined by the CCWA. Payment shall be for all labor, equipment, materials and incidental costs which are necessary to complete the work.

END OF SECTION

Specifications

Section 2: Material Requirements

2.1 General

- A. This section describes in general the materials that are to be provided for the work.
- B. An indication is provided in each below section of whether the material is to be provided by the Contractor or provided by CCWA.
- C. The material conformance reference forms a part of the specifications and shall be of the latest editions.
- D. All materials provided shall be new and domestically manufactured unless approved otherwise.
- E. Where a material is required and not specifically described below, the material shall be provided by the Contractor and shall conform to this Section "2.1 General".
- F. The Contractor shall submit, for CCWA approval to use, product information on all materials required to be provided by the Contractor unless noted otherwise.
 - 1. For each material supplied, provide the following minimum information.
 - a) Shop drawings and manufacturer's data showing compliance with Contract Documents.
 - b) Identify any deviation from Contract Documents.
 - c) Resubmission of a submittal shall clearly identify the correction or change made.
 - d) Handling and storage instructions, as applicable.
 - e) Installation instructions, as applicable.
 - f) Manufacturer's Warranty, as applicable.
 - 2. Materials provided by the Contractor not approved by the CCWA shall be subject to rejection without further justification.

Specifications

Section 2: Material Requirements

2.2 Polyvinyl Chloride (PVC) Pipe

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ASTM D3034: Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings.
 - 2. ASTM F679: Standard Specification for Poly(Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings.
 - 3. AWWA C900: Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water Transmission and Distribution.
 - 4. AWWA C905: Polyethylene (PE) Pressure Pipe and Fittings, 4 In. (100 mm) Through 63 In. (1,600 mm), for Water Distribution and Transmission.
 - ASTM D1784: Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.
 - 6. ASTM D3139: Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
 - 7. ASTM D3212: Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals.
 - 8. ASTM D2412: Standard Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading.
 - 9. ASTM F477: Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- C. Pipe description.
 - 1. Pipe for open cut gravity flow application shall be standard dimension ratio/pipe stiffness SDR 26 / PS115 push-on joint type.
 - 2. Force Main pipe shall be C900 dimension ratio DR 18 push-on joint type.

Specifications

Section 2: Material Requirements

- 3. The following information shall be stamped on each pipe.
 - a) Class identifier.
 - b) ASTM designation.
 - c) Manufacturer's identifying mark.
- 4. Nominal length per joint of pipe is 14 feet or 20 feet.
- 5. Pipe shall be green in color for sanitary sewer service.
- 6. Joint lubricant as provided by the pipe manufacturer.
- D. Gasket and restrained joint description.
 - 1. Gaskets shall be plain rubber suitable for sanitary sewer service.
 - 2. Gaskets used to restrain joint may be modified with stainless steel teeth.
 - 3. Pipe bell used to restrain joint may be fabricated with internal lock ring (removable).

Acceptable Manufacturers

> As Approved.

2.3 Ductile Iron Fitting

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ANSI/AWWA C110/A21.10: Ductile-Iron and Gray-Iron Fittings.
 - 2. ANSI/AWWA C153/A21.53: American National Standard for Ductile-Iron Compact Fittings for Water Service.
 - 3. ANSI/AWWA C111/A21.11: Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
 - 4. ANSI/AWWA C104/A21.4: Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.

Specifications

Section 2: Material Requirements

- 5. ANSI/AWWA C116/A21.16: Protective Fusion-Bonded Coatings for the Interior and Exterior Surfaces of Ductile-Iron and Gray-Iron Fittings.
- 6. ASTM A563: Standard Specification for Carbon and Alloy Steel Nuts.
- 7. ASTM A307: Standard Specification for Carbon Steel Bolts, and Studs.
- C. Fitting description.
 - 1. Mechanical fittings shall be standard mechanical, compact series, having a minimum pressure rating of 250 psi.
- D. Gasket description.
 - 1. Gaskets for push-on and standard mechanical joints shall be plain rubber (Styrene Butadiene Copolymer).
 - 2. Gaskets (FIELD LOK[®]) and (MJ FIELD LOK[®]) used to restrain push-on joint pipe and/or standard mechanical joint fittings, respectively, shall be plain rubber (Styrene Butadiene Copolymer) modified with stainless steel teeth.
- E. Retaining glands and adapter coupling description.
 - 1. Retaining gland (MEGALUG[®]) where the gland acts as the restraining mechanism, shall include gripping wedges with torque limiting twist-off nuts.
- F. Bolt description.
 - 1. Bolts and nuts used for standard mechanical connections shall be tee head type with heavy hex nut.
 - 2. Bolts and nuts used for flanged connections shall be hex type of low carbon steel, cadmium plated, or zinc plated.
- G. Coating and lining description.
 - 1. Fittings placed on or beneath the ground surface shall have an exterior coating of asphalt (one mil).
 - 2. Fittings used in sanitary sewer systems shall be lined with 401 Protecto[™] ceramic epoxy.

Specifications

Section 2: Material Requirements

Acceptable Manufacturers - Model

> As Approved.

2.4 Miscellaneous Pipe

- A. Material provided by CCWA
- B. Miscellaneous type stormwater pipe/fittings of various sizes (concrete, HDPE, corrugated metal) and process pipe/fittings of various sizes (schedule 40 PVC).

Acceptable Manufacturers

As Approved

2.5 Steel Casing

- A. Material is provided as follows:
 - 1. Casing provided by CCWA.
 - 2. Gear box, black iron rods, welding rod, other items and accessories provided by Contractor.
 - 3. Coating material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM A252: Standard Specification for Welded and Seamless Steel Pipe Piles.
- C. Casing Description.
 - 1. Diameter as indicated on the Construction Drawings.
 - 2. Casing steel shall have minimum mechanical properties of a Grade 2.
 - 3. Casing steel wall thickness shall be as follows:
 - a) 18-inch will be 0.25 inch.
 - b) 24-inch will be 0.25 inch.
 - c) 36-inch will be 0.375 inch.

Specifications

Section 2: Material Requirements

- 4. Casing shall have end treatments being a 30° bevel or square (when requested).
- 5. Nominal length per joint of casing is 20 feet.
- D. Coating.

Provide coating to aerial portion (2 feet into embankment) of casing only.

- 1. Prime Coat: Polyamide Epoxy, two-component with high build solids. Finish shall be satin. Color shall be other than finish coat, selected by the CCWA.
- 2. Finish Coat: Aliphatic or Acrylic Polyurethane, two-component. Finish shall be semi-gloss. Color to be green as selected by the CCWA.

Acceptable Manufacturers

> As Approved.

2.6 Casing Spacer

- A. Material provided by CCWA.
- B. Description.
 - Spacer body shall be constructed of 14-gauge stainless steel (Type 304) in widths from 8 to 12 inches.
 - Spacer riser shall be 10-gauge stainless steel with a minimum width of 2 inches. Spacer shell shall be fitted with a minimum of four risers, welded.
 - 3. Each riser shall be capped with a glass filled polymer runner. Runner shall be attached to riser using stainless steel bolts and nuts.
 - 4. Make up of spacer shall center pipe in casing and limited radial movement of pipe within the casing to no more than $\frac{3}{4}$ inch.

Acceptable Manufacturers

> As Approved.

Specifications

Section 2: Material Requirements

2.7 Casing End Seal

- A. Material provided by CCWA.
- B. Description.
 - 1. End seal shall be minimum 1/8-inch thick neoprene rubber.
 - 2. End seal may be pull-on or wrap-around and secured using stainless steel (Type 304) banding, ¹/₂-inch width.

Acceptable Manufacturers

> As Approved.

2.8 Tapping Saddle

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ASTM A240: Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - 2. ASTM A276: Standard Specification for Stainless Steel Bars and Shapes.
 - 3. ASTM A193 and A194: Standard Specification for Alloy-Steel and Stainless-Steel Bolting for High Temperature or High-Pressure Service and Other Special Purpose Applications. Bolt/Nut requirement.
- C. Description.
 - 1. Tapping saddle shall be stainless steel (Type 304: 18-8).
 - 2. Tapping saddle shall seal with pipe by an O-ring gasket (Buna-N, NBR).
 - 3. Saddle outlet to pipe shall be tapped with pipe threads, NPT.

Acceptable Manufacturers - Product

Smith Blair - 313 with 015 stainless steel bales (4" to 16") for 2" iron pipe threads.

Specifications

Section 2: Material Requirements

- Smith Blair 372 for pipe diameters 4 inches through 12 inches.
- > Powerseal 3412AS for pipe diameters 3 inches through 12 inches.
- Romac 306 for pipe diameters 3 inches through 12 inches.
- > As Approved.

2.9 Plug Valve

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ASTM A126: Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - 2. ASTM A743: Standard Specification for Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application.
 - 3. ANSI 125/150: Flange Material Requirement.
 - 4. AWWA C111-64: Mechanical joint requirement.
- C. Description.
 - 1. Plug shall be for 10-inch diameter pipe and as follows.
 - a) Eccentric plug (non-lubricated) having a 100% full-port design.
 - b) Plug shall be cast iron.
 - c) Plug shall have a resilient facing of carboxylic acrylonitrile butadiene or chloroprene.
 - 2. Valve shall be generally comprised as follows.
 - a) Body shall be cast iron, Class B.
 - b) Seat shall be nickel, raised and welded to the body.
 - c) Bearings shall be oil impregnated permanently lubricated stainless steel Type 316, Grade CF-8M.
 - d) Packing shall be acrylonitrile butadiene V-type.

Specifications

Section 2: Material Requirements

- 3. End connections shall be as follows.
 - a) Buried service shall have standard mechanical joint ends with retaining gland that acts as a restraining mechanism.
- 4. Actuator type shall be as follows.
 - a) Buried service shall have G-series worm gear for buried service, with 2-inch square nut actuator input, clockwise to close.
- 5. Valve interior and exterior surfaces shall have one (1) coat, 4 to 5 mils of TNEMEC 140 Pota-Pox Plus epoxy paint, surface preparation of SSPC-SP10.

Acceptable Manufacturers

- > Dezurik.
- > As Approved.

2.10 Corporation Valve

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ASTM B61 and B62: Standard Specification for Steam or Valve Bronze Castings.
- C. Description.
 - 1. Valve shall be of the ball valve type and manufactured of bronze complying with NSF 61.
 - 2. Valve shall be suited for a minimum working pressure of 150 psi.
 - 3. Valve shall be threaded, for connection to tapping saddle, and a flared copper outlet.
 - 4. Valve shall be $\frac{3}{4}$ -inch in size.

Acceptable Manufacturers

Ford Meter Box Co.

Specifications

Section 2: Material Requirements

- Mueller Brass.
- > A.Y. McDonald Mfg.
- > As Approved.

2.11 Curb Stop Valve

- A. Material provided by CCWA.
- B. Material conformance reference.
 - 1. ASTM B61 and B62: Standard Specification for Steam or Valve Bronze Castings.
- C. Description.
 - 1. Valve shall be of the ball valve type and manufactured of bronze and comply with NSF 61.
 - 2. Valve shall be suited for a minimum working pressure of 150 psi.
 - 3. Internal ball shall be manufactured of low carbon steel coated with brass.
 - 4. Internal O-rings and seats shall be of Buna-N.
 - 5. Valve shall be fitted with iron pipe threads and flared copper.
 - 6. Valve shall be fitted with wing locks suitable to accept a keyed padlock.
 - 7. Valve shall be $\frac{3}{4}$ -inch in size.

Acceptable Manufacturers

- Ford Meter Box Co.
- Mueller Brass.
- A.Y. McDonald Mfg.
- As Approved.

2.12 Air/Vacuum Release Valve

A. Material provided by CCWA.

Specifications

Section 2: Material Requirements

- B. Material conformance reference.
 - 1. ASTM A126: Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - 2. ASTM A240: Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - 3. ASTM A269: Standard Specification for Seamless and Welded Austenitic Stainless-Steel Tubing for General Service.
 - 4. ASTM A 276: Standard Specification for Stainless Steel Bars and Shapes.
 - 5. ANSI 125/150: Flange Material Requirement.
 - 6. PH 15-7 MO: Stainless Steel Material Requirement.
- C. Description.
 - 1. Valve shall automatically release large quantities of air during pipeline filling and automatically allow air to reenter the pipeline when internal pressure of the pipeline approaches a negative value (vacuum). Valve shall automatically release small quantities of air from the pipeline while under normal pressure conditions.
 - 2. Valve shall be suitable for sanitary sewer service having a working pressure of 150 psi and a test pressure of 225 psi.
 - 3. Valve inlet shall be 2-inch and outlet shall be 1-inch threaded, NPT.
 - 4. Valve body, cover and baffle shall be stainless steel.
 - 5. Seat and orifice button shall be Buna-N.
 - 6. All internal components shall be stainless steel T304.

Acceptable Manufacturers - Model

- Val-Matic Valve and Manufacturing Corp. 801AS, 48AS
- > As Approved.

Specifications

Section 2: Material Requirements

2.13 Ball Valve and Threaded Pipe for ARV/CAV

- A. Material provided as follows:
 - 1. Ball valve and threaded pipe by CCWA.
 - 2. Thread sealant by Contractor.
- B. Material conformance reference.
 - 1. ASTM A351-CF8M: Standard Specification for Castings, Austenitic, Austenitic-Ferric (Duplex), for Pressure-Containing Parts.
- C. Ball Valve Description.
 - 1. Body and ball material shall be 304 or 316 stainless steel.
 - 2. Seat shall be polytetrafluoroethylene (PTFE).
 - 3. Valve opening is 2-inch diameter, full port.
 - 4. End connections are general female threaded, NPT
 - 5. Handle type is lever, lockable.
- D. Threaded Pipe Description.
 - 1. Material shall be 304 or 316 stainless steel.
 - 2. Schedule 40 class
 - 3. Size is 2-inch diameter by 3-inch length.
 - 4. End connections are general male threaded, NPT
- E. Thread Sealant.
 - 1. For use with stainless steel.
 - 2. Chemical type is polytetrafluoroethylene (PTFE).
 - 3. Vibration resistant.

Acceptable Manufacturers

Ball Valve - As Approved.

Specifications

Section 2: Material Requirements

- Threaded Pipe As Approved.
- > Thread Sealant Rectorseal Brand, Tru-Blu.

2.14 PVC Piping for ARV/CAV

- A. Material provided as follows:
 - 1. PVC piping and fittings by CCWA.
 - 2. Glue and primer by Contractor.
 - 3. Thread sealant by Contractor.
- B. PVC Pipe and Fitting Description.
 - 1. Schedule 80 class.
 - 2. Size is 1-inch diameter; length as required.
 - 3. End connection at ARC/CAV is general male threaded, NPT.
- C. Glue and Primer.
 - 1. Commercially available.
- D. Thread Sealant.
 - 1. For use with PVC.
 - 2. Chemical type is polytetrafluoroethylene (PTFE).
 - 3. Vibration resistant.

Acceptable Manufacturers

- > PVC piping and fittings As Approved.
- > Thread Sealant Rectorseal Brand, Tru-Blu.

2.15 Valve Box

- A. Material provided by CCWA.
- B. Description.
 - 1. Valve box shall be of the two-piece type and manufactured of cast iron.

Specifications

Section 2: Material Requirements

- 2. Section assembly shall be either slip or screw.
- 3. Internal diameter is 5.25 inches.
- 4. Valve box shall be fitted with a cast iron cover with the word "SEWER" integrally cast in the cover depending on the service.

Acceptable Manufacturers

- Bingham-Taylor.
- > As Approved.

2.16 Utility Marking Tape

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM D2103: Standard Specification for Polyethylene Film and Sheeting.
 - 2. ASTM D882: Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
- C. Description.
 - 1. Tape shall have a minimum overall thickness of 5 mils and a width as follows.
 - a) 2-inch width for pipes up to 12 inches in diameter.
 - b) 3-inch width for pipes greater than 12 to 24 inches in diameter.
 - 2. Tape shall have a 0.35 mil solid aluminum foil core with a reverse print laminate to the aluminum foil.
 - 3. Tape shall have a tensile strength of 35 pounds per inch.
 - 4. Tape shall be color-coded in accordance with the American Public Works Association as follows.
 - a) "Green" for sanitary sewer and associated lines.

Specifications

Section 2: Material Requirements

Acceptable Manufacturers

> As Approved.

2.17 Pipe Tracer Wire

- A. Material provided by CCWA.
- B. Description.
 - 1. Wire shall be minimum No. 12 American Wire Gauge (AWG), fully annealed.
 - 2. Wire shall be 1055 high grade steel clad with copper.
 - 3. Wire shall be insulated with a minimum 30 mil high density polyethylene coating suitable for buried service.
 - 4. Wire coating shall be color-coded as follows.
 - a) "Blue" for potable water and associated lines.
 - b) "Green" for sanitary sewer and associated lines.
 - 5. Connectors shall be mechanical as provided by wire manufacturer.

Acceptable Manufacturers

As Approved

2.18 Pipe Collar (Anti Seep)

- A. Material provided by Contractor.
- B. Description.
 - 1. Bentonite-clay coated aggregate.

Acceptable Manufacturers

- > Aqua-Blok.
- > As Approved.

2.19 Steel (Tie-Back)

- A. Material provided by Contractor.
- B. Material conformance reference.

Specifications

Section 2: Material Requirements

- 1. ASTM A36: Standard Specification for Carbon Structural Steel.
- C. Steel Description.
 - 1. Steel shall be a W Shape designation, size W6 x 25.
 - 2. Steel shall be length as required by detail.
 - 3. Steel surface shall be clean and prepared to receive coating system.
- D. Coating Description.
 - 1. Steel shall be coated with a bitumastic coating suited for buried service.
 - 2. Coating shall be applied and fully cured before installation in accordance with manufacturer instructions.

Acceptable Manufacturers

- Steel As Approved.
- Coating: Carboline Bitumastic 300M.
- Coating: Royston Roskote A51 Plus Mastic.
- > As Approved.

2.20 Steel Rod

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM F593: Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
 - 2. ASTM F594: Standard Specification for Stainless Steel Nuts.
- C. Description.
 - 1. Steel rod shall be all-thread, ³/₄-inch diameter having standard National Pipe Threads.
 - 2. Steel rod shall be one continuous piece. Mechanical or welded splices are prohibited.
 - 3. Steel rod, nut and washer shall be stainless steel, grade 304.

Acceptable Manufacturers

As Approved.

Section 2: Material Requirements

2.21 Manhole

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM C478: Standard Specification for Circular Precast Reinforced Concrete Manhole Sections.
 - 2. AASHTO M199: Standard specification for precast reinforced concrete sections.
 - 3. ASTM A615: Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
 - 4. ASTM D4101: Standard Specification for Polypropylene Injection and Extrusion Materials.
 - 5. Fed. Spec. SS-S-00210: Preformed sealing material requirement.
 - ASTM C990: Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.
 - 7. ASTM C923: Standard Specification for Resilient Connectors between Reinforced Concrete Manhole Structures, Pipes, and Laterals.
 - 8. ASTM C1478: Standard Specification for Storm Drain Resilient Connectors between Reinforced Concrete Storm Sewer Structures, Pipes, and Laterals.
 - 9. ASTM F2510: Standard Specification for Resilient Connectors between Reinforced Concrete Manhole Structures and Corrugated High-Density Polyethylene Drainage Pipes.
 - 10. ASTM C1244: Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill.
 - 11. ASTM A48: Standard Specification for Gray Iron Castings.
 - 12. AASHTO M306-10: Standard Specification for Drainage, Sewer, Utility, and Related Castings.

Specifications

Section 2: Material Requirements

- 13. ASTM D4833: Standard Test Method for Index Puncture Resistance of Geomembranes and Related Products.
- 14. ASTM D6693: Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene and Nonreinforced Flexible Polypropylene Geomembranes.
- 15. ASTM D1004: Standard Test Method for Tear Resistance (Graves Tear) of Plastic Film and Sheeting.
- C. Manhole Description.
 - 1. Manholes shall be cylindrical and constructed of steel reinforced precast concrete.
 - 2. Minimum compressive 28-day strength of concrete in all sections shall be 4,000 psi.
 - 3. Manholes shall have a minimum inside diameter of four (4) feet or as indicated on the Construction Drawings.
 - 4. Pre-cast sections shall consist of a base section (base slab monolithically poured with vertical wall), riser section, reducer section (as applicable) and eccentric cone top or flat slab top section. The sections shall form a continuous uniform assembly.
 - 5. Joints shall be tongue and groove.
 - 6. Each section shall have not more than two (2) holes for purposes of handling.
 - 7. Ring and cover shall be integrally cast in the top cone section unless indicated otherwise.
- D. Step Description.
 - 1. Manhole sections of four (4) foot diameter and not lined only shall be fitted with polypropylene plastic-coated steel steps unless indicated otherwise.
 - 2. Steps shall be integrally cast into manhole sections.
 - 3. Steps shall be twelve (12) inches wide and spaced at 1'-0" on center.

Section 2: Material Requirements

- E. Joint Sealant Description.
 - 1. Joints between each section shall be sealed watertight with a preformed semi-solid butyl plastic.
 - 2. Gasket shall be provided in such size so that when installed, "squeeze out" of the gasket material, can be observed internally and externally along the entire joint when the joint is completed.
- F. Boot Connector Description.
 - 1. Connector for sealing pipe to precast concrete structure opening shall be flexible natural or synthetic rubber suitable for sanitary sewer service.
 - 2. A sleeve/boot connector when used shall be fitted with series 300 stainless steel internal expansion sleeve components and series 300 stainless steel external compression take-up clamps, all constructed utilizing no welds.
 - 3. A gasket connector when used shall be integrally cast into the concrete section by the manhole manufacturer.
- G. Cast Iron Frame and Cover Description
 - 1. Manhole frame shall provide a nominal opening of twenty-four (24) inches in diameter and be traffic rated.
 - 2. Frame, cover, grate shall meet load specifications of AASHTO H-20 and H-25.
 - 3. Manhole cover shall have the word "SEWER" cast on top in letters two (2) inches high.
 - 4. Manhole cover at ARV/CAV location shall have six (6) 1-inch diameter holes in the cover.
- H. Composite Frame and Cover Description.
 - 1. Composite material shall be comprised of a polymer containing 45 to 70% fiber reinforcement with a thermoset resin matrix.
 - 2. All components of the ring and cover shall be resistant to the effects of hydrogen sulfide gas.

Section 2: Material Requirements

- 3. Manhole frame shall provide a nominal opening of twenty-four (24) inches in diameter and be either traffic rated, or non-traffic rated.
- 4. Ring and cover shall meet load specifications of AASHTO H-20 and H-25.
- 5. Ring and cover shall have an integrated gasket system, lockable with a cam-type assembly and have a combined weight not to exceed 100 pounds.
- 6. Cover shall have the word "SEWER" cast on top in letters two (2) high.
- 7. Provide a lock wrench with each cover as provided by the ring and cover manufacturer.
- I. High Density Polyethylene (HDPE) Liner Description.
 - 1. Where called for lining on manhole structures shall be provided on all vertical riser walls, cone sections and underside of reducer slabs.
 - 2. Liner shall have a mechanical bond to the concrete structure.
 - 3. Liner shall return through each opening created for pipe penetration.
 - 4. Liner color shall be yellow in color.
 - 5. Liner shall have a minimum thickness of 2 mm and resist a back pressure of 29 psi.
 - 6. Section joints shall be sealed water-tight with suitable strips of liner material, extrusion welded by a representative of the liner manufacturer or section joints shall be sealed water-tight by providing a liner that returns over the section joint and by providing a joint sealant that contacts the entire lined surface of the return and is suitable to resist degradation by hydrogen sulfide.

Acceptable Manufacturers

- Manhole As Approved.
- ➢ Ring, Frame, Cover As Approved.
- > HDPE Liner Agru America (HDPE AGRU Sure Grip).

Specifications

Section 2: Material Requirements

2.22 Manhole Invert Sealing Compound

- A. Material provided by Contractor.
- B. Description.
 - 1. Liquid compound that penetrates concrete and mortar providing a seal against the effects of hydrogen sulfide and sulfuric acid.

Acceptable Manufacturers

- Navion, Inc. RadonSeal
- Crystal Lok.
- > As Approved.

2.23 Concrete and Reinforcement

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ACI 318: Building Code Requirements for Structural Concrete.
 - 2. ASTM C150: Standard Specification for Portland Cement.
 - 3. ASTM C33: Standard Specification for Concrete Aggregates.
 - 4. ASTM A615: Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
 - 5. ASTM A185: Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
- C. Concrete Mix Description.
 - 1. Design mix shall be in accordance with ACI 318, latest revision.
 - 2. Provide readily available commercial mix.
 - 3. 28-Day Strength: 3,000 psi, unless otherwise noted.
 - 4. Type: Normal Weight.
 - 5. Slump Range: 3 inch to 5 inch.

Specifications

Section 2: Material Requirements

- 6. Weight: 135 pcf to 160 pcf.
- 7. Air Content: 5% to 7%.
- 8. Water-Cement Ratio: 0.45 Maximum.
- D. Concrete Materials Description.
 - 1. Portland cement: Type I, natural color. Use only one brand of cement throughout project.
 - 2. Fine Aggregates: Meeting ASTM C33.
 - 3. Coarse Aggregates: Meeting ASTM C33, No. 57 Stone.
 - 4. Water: Clean, potable and free from deleterious amounts of alkalis, acids and organic matter.
- E. Steel Reinforcement Description.
 - 1. Reinforcement Bar: No. 4 size, Grade 60.
 - 2. Welded Wire: 4x4 W2.1xW2.1wire mesh.
 - 3. Tie Wire: 16-1/2 or 16-gauge black soft annealed wire.
 - 4. Bar supports, chairs and spacers shall comply with the CRSI "Recommended Practice for Placing Reinforcing Bars".

Acceptable Manufacturer

> As Approved.

2.24 Brick and Mortar

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM C32: Standard Specification for Sewer and Manhole Brick.
 - 2. ASTM C270: Standard Specification for Mortar for Unit Masonry.
 - 3. ASTM C144: Standard Specification for Aggregate for Masonry Mortar.

Specifications

Section 2: Material Requirements

- C. Description.
 - 1. Brick shall be either solid or cored, medium hard or better, Grade SS and SM, plain textured surface for sewer service.
 - 2. Mortar shall be comprised of one (1) part Portland cement to two (2) parts clean sand. Mortar shall be Type S.
 - 3. Sand shall conform to ASTM C-144.
 - 4. Water shall be clean, potable and free from deleterious amounts of alkalis, acids and organic matter.

Acceptable Manufacturers

> As Approved.

2.25 Construction Stone

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. ASTM D2321: Material requirements for flexible pipe.
 - 2. ASTM D2487: Material designation.
 - 3. ASTM C33: Fine and coarse aggregate requirements.
- C. Description.
 - 1. Stone size shall be as indicated on Construction Drawings.
 - 2. Stone shall be Class I embedment or backfill material consisting of manufactured aggregates (crushed stone).
 - 3. Stone shall be clean, tough, uniform quality, durable fragments of crushed rock, free from flat, elongated, soft or disintegrated pieces, or other objectionable matter occurring either free or as coating on stone.

Acceptable Manufacturers

As Approved.

Specifications

Section 2: Material Requirements

2.26 Asphalt

- A. Material provided by Contractor.
- B. Material conformance reference.
 - 1. Georgia Department of Transportation "Asphalt Pavement Selection Guidelines, November 2006".
- C. Description.
 - 1. Aggregate shall be Group II.
 - 2. Asphalt cement shall be grade PG64-22, PG67-22 or PG76-22.
 - 3. Hot mix asphalt type shall be Mix Type 9.5, Type I or Type II.

Acceptable Manufacturers

> As Approved.

2.27 Pavement Striping Paint

- A. Material provided by Contractor.
- B. Description.
 - 1. Water-based paint intended for use for pavement application.
 - 2. Paint shall be fast dry, dry to the touch in 5 minutes, ready for traffic in 15 minutes.
 - 3. Color as required to match existing striping.

Acceptable Manufacturers

As Approved.

2.28 Sign and Post

- A. Material provided by Contractor.
- B. Sign Description.
 - 1. Size shall be 12-inch by 18-inch.
 - 2. Material and thickness shall be aluminum, minimum 63 mil.

Specifications

Section 2: Material Requirements

- 3. Color shall be "Green" with "White" lettering.
- 4. Wording for sign is "Detection Wire", two rows.
- 5. Provide two 3/8-inch diameter holes for mounting to post.
- C. Post Description.
 - 1. Galvanized u-channel.
 - 2. Weight shall be 2 pounds/foot.
 - 3. Minimum length of 7 feet.
 - 4. 3/8-inch diameter holes space 1 inch apart.
 - 5. Provide mounting hardware, bolts, nuts, washers.

Acceptable Manufacturers

> As Approved.

2.29 Erosion and Sedimentation Control Materials

- A. Material provided by Contractor.
- B. Description.
 - 1. Materials shall be in accordance with the Manual for Erosion and Sediment Control in Georgia, 2016 Edition.

Acceptable Manufacturers

> As Approved.

END OF SECTION

Section 3: Construction Standards

3.1 General Requirements

Where a contradiction exists between language written herein in the specifications and an item shown or note indicated on the Construction Drawings, the written specifications herein shall govern.

3.1.1 **Project Submittals**

- A. The Contractor shall schedule and submit required information for CCWA review as to cause no delay in the work and/or Time for Completion of Project.
- B. Submittal review by CCWA will not commence until the date of the Notice to Proceed.
- C. Upon receipt of a submittal, CCWA shall complete its review and return CCWA comments to Contractor within 10 business days.
- D. Submittals shall be sequentially numbered. Resubmission of a submittal shall have the original submittal number with sequential alphabetic suffix.
- E. Each submittal or resubmittal shall be provided with the following minimum information:
 - 1. Project title.
 - 2. Contractor name.
 - 3. Submittal number.
 - 4. Date of submittal.
 - 5. Reference of the specific contract section.
- F. Submittals may be provided via email. Where hard copy submittals are provided, three (3) copies of final approved material data will be required; one (1) copy of approved product material will be returned to the Contractor.

Specifications

Section 3: Construction Standards

3.1.2 Request for Information and Field Order

- A. Contractor's questions/clarifications shall be submitted in writing in the form of a Request for Information (RFI). Each RFI shall be provided with the following minimum information.
 - 1. Project title.
 - 2. Contractor name.
 - 3. RFI number; each RFI shall be sequentially numbered.
 - 4. Date of RFI.
 - 5. Reference the Contract Specification section.
- B. Minor variations in the work may occur that do not change the value of the contract or the completion date of the contract as agreed to by the Contractor and CCWA. Such variations shall be documented by CCWA in the form of a Field Order. Upon agreement, a Field Order shall be signed by the Contractor. Each Field Order shall be provided to the Contractor with the following information.
 - 1. Project title.
 - 2. Contractor name.
 - 3. Field Order Number: each Field Order shall be sequentially numbered.
 - 4. Date of Field Order.
 - 5. Explanation of the change; reference Contract Specification section where applicable.

3.1.3 CCWA Requested Revisions

- A. The CCWA may at any time request additions, deletions or revisions to the Project. Requests for additions, deletions or revisions where the value of the contract changes shall be made in written form via a Change Order signed by the Contractor and the CCWA Engineer.
- B. Should the Change Order request be a work item that is listed and priced on the Bid Form, a cost for the item shall be established using the listed unit price and a quantity mutually agreed upon by the Contractor and CCWA prior to performing the work.

Specifications

Section 3: Construction Standards

- C. Should the Change Order request be an item not listed on the Bid Form, a cost for the item and a quantity shall be negotiated and mutually agreed upon by the Contractor and CCWA prior to performing the work.
- D. Work described by the Change Order shall be completed under the terms of the original Contract, except that any claim for the extension of the time caused thereby shall be approved by the CCWA Engineer at the time of signing such a change order.
- E. Work performed by the Contractor that is not required by the Contract Document, Construction Plan or as requested by a Change Order shall not entitle the Contractor to an increase in contract price or an extension of contract time.

3.1.4 Construction Schedule

- A. This section requires the Contractor to provide documents to CCWA.
- B. Prepare and submit to CCWA for approval a comprehensive construction schedule.
 - 1. The schedule shall begin with the date of Notice to Proceed and conclude with the date of Final Completion.
 - 2. The schedule shall use days as a unit of measure.
- C. Show a complete sequence of construction and identify work of separate stages and other grouped activities and clearly identify critical paths of activities. Include as a minimum:
 - 1. Submittals for early product procurement.
 - 2. Mobilization and other preliminary activities.
 - 3. Site clearing.
 - 4. Access road installation.
 - 5. Flow bypass set up.
 - 6. Tie-In (1).
 - 7. Pipe, ARV and CAV installation work.
 - 8. Cased Crossing No. 1, 2, 3, 4 and 5.
 - 9. Asphalt replacement

Specifications

Section 3: Construction Standards

- 10. Project restoration.
- 11. Project cleanup and demobilization.
- D. The construction schedule shall be updated and submitted to the CCWA on a monthly basis and include the following as a minimum:
 - 1. Progress of work to within five (5) working days prior to submission.
 - 2. Approved changes in work scope and activities modified since original submission.
 - 3. Delays in submittals, resubmittals, deliveries or work.
 - 4. Other identifiable changes.
 - 5. Revised projections of progress and completion.

3.1.5 Differing Subsurface or Physical Conditions

- A. If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
 - 1. Is of such a nature as to require a change in the Contract Documents; or
 - 2. Differs materially from that shown or indicated in the Contract Documents; or
 - 3. Is of an unusual nature and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.
- B. Then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any work in connection therewith except in an emergency, notify CCWA in writing about such condition. Contractor shall not further disturb such condition or perform any work in connection therewith (except as aforesaid) until receipt of written order to do so by CCWA. In the case of emergency, the Contractor must notify CCWA immediately, not to exceed 12 hours, of becoming aware of the condition.
- C. After receipt of required written notice, the CCWA and Contractor shall promptly review the pertinent condition, determine the necessity of

Specifications

Section 3: Construction Standards

obtaining additional exploration or tests with respect thereto, and determine a mutually accepted course of action.

D. The contract price or the contract times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor cost of, or time required for, performance of the Work; subject, however, to that the condition meets above Section 3.1.3, Part A.

3.1.6 Weather Delays

- A. When no pipe installation work and/or no manhole installation work other work approved by CCWA can be performed on a particular day due to measurable precipitation, freezing temperatures or unsuitable ground surface conditions, then the contract is subject to a time extension of one (1) day only. The Contractor cannot charge for overhead, labor, equipment or incidental expenses due to a weather delay.
- B. When any pipe installation work and/or manhole installation work or other work is performed on a particular day and measurable precipitation, freezing temperatures or unsuitable ground surface conditions do occur, then the Contract shall not be subject to a time extension.
- C. Weather recording devices shall be situated on the Project site.
- D. Contractor shall deliver a written contract time extension request to CCWA for a weather delay within 24 hours of measuring the weather event. A contract time extension shall not be granted should a written request not be received by CCWA as indicated.

3.1.7 Project Meetings

- A. A preconstruction meeting and construction progress meetings shall be conducted by CCWA and attended by the Contractor.
 - 1. The dates, times and place of meetings shall be mutually agreed upon by both parties.
 - 2. CCWA will document the meetings and distribute meeting minutes.

Section 3: Construction Standards

- B. A preconstruction meeting will be conducted prior to mobilization and discuss at a minimum the following:
 - 1. Submittals.
 - 2. Initial construction schedule.
 - 3. Site safety and construction facilities.
 - 4. Material handling and storage.
 - 5. Work sequence.
 - 6. Notice to Proceed work date.
- C. A construction progress meeting will be conducted every two weeks and discuss at a minimum the following:
 - 1. Review work progress to date.
 - 2. Construction schedule updates.
 - 3. Changes in the work.
 - 4. Work sequence.

Should the need not exist for meetings every two weeks, then the progress meetings will be held on a monthly basis.

3.1.8 Land Disturbance Permits

- A. CCWA shall obtain necessary Land Disturbance Activity (LDA) permits from the local issuing authority and pay associated fees. Contractor shall have a copy of the LDA permit and construction plan (as applicable) stamped approved by the local issuing authority on the job site whenever work is being performed.
- B. CCWA submitted a Preconstruction Notification (PCN) and supporting documentation to the United States Army Corps of Engineers for this project. This project will be constructed in accordance Nation Wide Permit conditions.
- C. CCWA shall obtain the National Pollutant Discharge Elimination System (NPDES) permit from the Georgia Environmental Protection Division (EPD) and pay associated fees. Contractor shall provide a signature as the operator when CWWA submits the Notice of Intent.

Specifications

Section 3: Construction Standards

3.1.9 Work Times

- A. Work on the Project site area shall be allowed seven (7) days a week from 7 a.m. to 7 p.m. with the exceptions listed in Items "B and C" below. Other times may be allowed by CCWA permission only.
- B. No work shall be allowed on the following days/dates except to maintain flow bypass. Dates may be added if contract last longer than expected:
 - 1. December 24 25, 2020
 - 2. January 1, 2021
 - 3. May 31, 2021
 - 4. July 4 5, 2021
- C. See Section 3.1.15 for delivery times to Staging Area No. 4.

3.1.10 Site Safety and Precaution

- A. This section requires the Contractor to provide documents to CCWA.
- B. Prepare and submit to CCWA the Contractor's Safety Plan for the project. The Safety Plan shall include copies of the orientation sign-in form and weekly safety meeting forms. The Safety Plan and all construction shall comply with the Department of Labor, Occupational Safety and Health Administration (OSHA), 29 Code of Federal Regulations Part 1926, latest revision. This Safety Plan shall detail safety methods and procedures to assure the safety of employees, subcontractors and other visitors to the construction site.

The Contractor shall also develop a Safety Orientation for all employees, subcontractors and other visitors to the construction site.

- 1. Orientation training shall address all components identified in the safety program.
- 2. Orientation training shall be completed prior to allowing employees and subcontractors to start on-site work.
- 3. All employees, subcontractors and other site visitors shall sign a form created by the Contractor showing they received the orientation training, Copies of the signed forms shall be provided to CCWA once a month with the pay application.

Specifications

Section 3: Construction Standards

- C. The Contractor shall be responsible for preparing and implementing a Confined Space Entry Plan in accordance with OSHA's Permit Required Confined Space standard, contained in 29 Code of Federal Regulations (CFR) 1910.146. The CCWA reserves that right to have this document submitted at any time.
- D. The Contractor shall hold an onsite safety meeting once a week with all employees and subcontractors.
 - 1. The Contractor shall provide a form showing the safety topic covered, date, time and signatures of attendees. Copies of the safety meeting forms shall be submitted to CCWA once a month with the pay application.
- E. The Contractor shall provide all staff with photo identification and use vehicles with permanent company logos/markings/identification that are prominently displayed and clearly visible at all times.
- F. The Contractor shall provide an experienced supervisor in charge of field operations and subcontractors. The field supervisor shall be responsible for the safety of all site workers and site conditions, as well as ensuring that all work is conducted in conformance with these Specifications and to the level of quality specified. The field supervisor shall be responsible for reporting any safety or regulatory issue of concern immediately to CCWA. The Contractor's superintendent or foreman shall be on-site at all times when any work is being performed, including any work being performed by their subcontractors.
- G. The Contractor shall be responsible for site security. Contractor shall remove as necessary fences and gates and/or other controls to facilitate work. Removed fences shall be reinstalled no later than at the end of that day the fence was removed.
- H. The Contractor shall use special care in work methods and take all necessary precautions against improper use of equipment to avoid damaging pipe and/or structures or CCWA, public and private property. If, in CCWA's opinion, the Contractor's work has caused damage, the Contractor shall repair the damage timely and to the complete satisfaction of CCWA at no additional cost. In the event that

Specifications

Section 3: Construction Standards

funds are expended by CCWA related to these activities the Contractor shall reimburse CCWA for any and all such costs.

- I. The CCWA shall not be responsible or compensate the Contractor for the damage to and/or loss of Contractor's equipment as result of the work.
- J. Note that the Project site area is situated within a 100-year flood zone. The project site area floods on low frequency storm events. Take precautions to protect work, equipment and materials. The CCWA shall not be responsible or compensate the Contractor for the damage to and/or loss of Contractor's equipment as result of flooding.

3.1.11 Site Access and Traffic Control

- A. This section requires the Contractor to provide documents to CCWA.
- B. Site Access.
 - 1. All access to the site shall be through the "Staging Areas" or "Construction Entrances" designated as shown on the Construction Drawings. Access from public roads, parking lots or private property is not allowed.
 - 2. The Contractor and/or any other worker(s) must park vehicles only in the "Construction Limits" or "Staging Area" designations as shown on the Construction Drawings. The parking of any vehicle or equipment on public roads, parking lots or private property is not allowed.
 - 3. Access to homes and business must be maintained at all times.
 - 4. Contractor shall keep roads open at all times.
- C. Traffic Control.
 - 1. CCWA operates as an agency within Clayton County and in coordination with other agencies including Clayton County and incorporated cities. The CCWA shall be responsible for coordinating the work in accordance with the requirements of local, state and federal authorities and jurisdictions as required; this includes fire, police, school, traffic and other public safety authorities.

Specifications

Section 3: Construction Standards

- 2. When required the Contractor shall provide and maintain traffic control. Prior to a lane closure or road closure, the Contractor shall prepare and provide the CCWA a copy of the traffic control plan for local/state approval. Traffic safety devices including cones, signs, flashing lights and other necessary safety equipment must be used to comply with local jurisdiction requirements and standard industry practices.
- 3. A minimum of two Department of Transportation (D.O.T.) certified Flaggers will be required when directing traffic and/or closing any lane or road.

3.1.12 Construction Facilities and House Keeping

- A. The Contractor may utilize areas within the "construction limits" designation as shown on the Construction Drawings for Project use.
- B. The Contractor may move Contractor's field office and other containers on to Project site areas designated as staging areas.
- C. The Contractor or any other worker may not establish quarters for the purpose of overnight stay or temporary residency on the Project site or other CCWA property.
- D. The Contractor shall employ the "best practicable means" to minimize and mitigate noise as well as disturbance resulting from operations. Mitigation measures shall include the utilization of sound suppression devices on all equipment and machinery, particularly in residential areas and in the near vicinity of hospitals and schools and especially at night.
- E. The Contractor shall remove and dispose of papers, plastics, tin cans and general garbage from the site on a daily basis. Keep the Project site clean.
 - 1. Where in these specifications the term "disposal of" is used, the contractor shall dispose of the material/debris off of the project site in accordance with local and state regulations.
- F. The burning of materials is not permitted on the Project site or other CCWA property.

Section 3: Construction Standards

3.1.13 Temporary Utilities

- A. CCWA shall provide the Contractor a meter/backflow device to collect potable water from a nearby fire hydrant at no cost to the Contractor.
 - 1. The Contractor shall be responsible for and return the meter/backflow device to CCWA in the same condition as received. Should the Contractor damage or lose the meter/backflow device, then the Contractor shall be responsible for compensating CCWA for the damages.
 - 2. The Contractor shall be responsible for moving water to Project site area.
- B. The Contractor shall provide and maintain sanitary sewer facilities for Contractor's employees, subcontractors and all other on-site employees. Service, clean and maintain facilities and enclosures.
- C. Contractor shall provide any necessary electrical power.

3.1.14 Construction Videos and Photographs

- A. This section requires the Contractor to provide documents to CCWA.
- B. Complete the following videos and provide in such file format as required.
 - 1. A preconstruction video prior to any disturbance of all Project site areas documenting preconstruction conditions. The video shall begin at survey station 0+00.
 - A post construction video upon completion of all work activities of all Project site areas documenting completed conditions. The video shall begin at survey station 0+00.
- C. Complete a minimum of 10 photos each month that sufficiently documents work progress and provide to CCWA is such file format as required.

3.1.15 Material Handling and Storage

A. Prior to accepting (unloading) any material on the Project site, the Contractor shall complete a thorough inspection of the material for contract compliance and damages.

Specifications

Section 3: Construction Standards

- 1. Once an unloading process has started, the Contractor is responsible for storage and protection of the material until Final Acceptance by CCWA.
- 2. Any material found to be out of compliance with contract conditions or damaged shall be immediately reported to CCWA and its manufacturer for further inspection.
- 3. Should CCWA agree to accept a material that is out of compliance with contract conditions or damaged, then the Contractor shall not be responsible for the material.
- B. The Contractor shall furnish equipment and facilities for loading, unloading and material distribution.
 - 1. The Contractor shall handle the material in accordance with the manufacturer's instructions.
 - 2. Contractor shall be responsible for moving material from storage areas to areas where work is being performed. Along Project route, pipe shall not be strung farther than that can be laid in that day; drainage ditches shall not be obstructed. Any pipe strung and not laid at the end of the day shall be returned to a storage area.
 - 3. Any pipe, piping component or material dropped, dumped or damaged by the Contractor during handling procedures shall be subject to rejection by the CCWA without further justification and replaced at the expense of the Contractor.
- C. CCWA intends for all material to be delivered to the Project site area.
 - If necessary, some material may be delivered to the CCWA Warehouse Building "B" located at 7340 Southlake Parkway in Morrow, Clayton County.
 - 2. Material delivered to the Warehouse Building "B" location will require Contractor pickup.
- D. Materials may be stored at Staging Areas #1 #2, #3, #4 and #5 along the Project route as shown on Construction Drawings S-1 and S-2.

Specifications

Section 3: Construction Standards

- 1. Piping components shall be stored above ground level and adequately supported on wood blocking or other approved support material.
- 2. Any material in the possession of the Contractor that is stolen or damaged by impact, vibration, abrasion, discoloration or other damage shall be repaired in accordance to manufacturer instructions or replaced at the discretion of the CCWA at the expense of the Contractor.
- 3. Delivery of Material to Staging Area No. 4 shall be limited to the times between 9 a.m. and 2 p.m., Monday through Friday.

3.1.16 Construction / As-Built Surveying

- A. This section requires the Contractor to provide documents to CCWA.
- B. CCWA will provide a survey coordinate file for Contractor use.
- C. Contractor shall perform all survey work.
- D. Stake/flag in advance of the work the Construction Limits and wetlands as shown on the Construction Drawings.
- E. Install stakes in advance of the work at 25-foot station intervals along centerline of alignment and indicate on each stake the depth of cut to the bottom of the proposed pipe trench.
- F. Complete all other surveying/staking needs required to complete the work. Contractor shall immediately notify the CCWA of any error or concern the Contractor may have with regards to the survey work.
- G. CCWA may perform periodic checks of the Contractor's survey work to verify accuracy. The Contractor shall facilitate CCWA's work.
- H. Complete a surveyed as built of the valves, bends, valve box, ARV's, CAV's, bore casing ends and manholes installed for the project and provide data electronically in such manner as required.
 - 1. Provide the center location and elevation of the manhole, invert elevation of all incoming and outgoing pipes in the manhole.
 - 2. Provide the elevation on the top of the ring and cover.

Specifications

Section 3: Construction Standards

3.1.17 Material Testing Services

- A. CCWA shall contract with a material testing laboratory and provide soil compaction and concrete strength material testing services.
 - 1. Testing shall be performed at intervals selected by CCWA.
 - 2. The Contractor shall cooperate and facilitate material testing services' work.
- B. Testing and reporting shall be performed in accordance with applicable ASTM standards.
 - 1. Testing services shall promptly notify CCWA of irregularities or deficiencies in the work.
 - 2. Testing services shall provide CCWA and the Contractor copies of field reports and test results.
- C. The testing of pipe and manhole components is described in later sections and is not included as part of CCWA's provided material testing services.

3.2 Work Sequence

- A. This section requires the Contractor to provide documents to CCWA.
- B. The Contractor shall propose a work sequence(s) to perform the work and submit for approval.
- C. The following two (2) work sequences are general in nature and are intended to guide the Contractor in performing the work.

Sequence No. 1

- A. Install 10" pipe for new force main from station 0+00 to station 162+50.
- B. Install Cased Crossings (1, 2, 3, 4 and 5).
- C. Install all ARV's and CAV's.
- D. Test all pipe, ARV's and CAV's installed.
- E. Complete restoration.

Sequence No. 2

Survey Stations (162+50 – 163+65)

Survey Stations (0+00 – 162+50)

A. Provide flow by-pass from existing 10" Outfall at Existing Manhole (46) to Existing Manhole (48).

Specifications

Section 3: Construction Standards

- B. Install all pipe and manholes for Tie-In #1.
- C. Test all pipe and manholes associated with Tie-In #1.
- D. Discontinue flow by-pass.
- E. Complete restoration.

3.3 Site Work

3.3.1 General

- A. Display permits and contact respective agencies as required by applicable permit conditions.
- B. Locate existing utilities in accordance with state and local regulations.
- C. Prior to commencing any on-site work, establish perimeter erosion control measures and construction exits as indicated on the Construction Drawings.
- D. Prior to commencing any other job site activity, installed erosion control measures shall be inspected and approved by CCTD.
- E. Providing and maintain a safe work site. Utilize safety cones, barricades, caution lights, caution tape, safety fencing, etc. as necessary to protect the workers and the public at all times.
- F. Install temporary galvanized mesh fence up to a minimum height of 6 feet, corner post, line posts, top rail, bottom tension wire, accessories and fasteners and subsequently remove all fencing materials from work site and disposing any remaining soil and/ or other construction related materials/debris. Any holes remaining from post removal shall be filled with dry sand. Fence shall be installed in such manner as to prevent property owners' pets from passing through/under fence, install gates at locations determined by CCWA. Temporary fence shall be installed and remain in-place until construction is completed in the respective area. Locations for Temporary Fencing are as follows:
 - 1. On the construction limits on the south side of East Lovejoy Road on the Landfills Property.
 - 2. On both sides of the construction limits from station 49+00 to station 49+60.

Specifications

Section 3: Construction Standards

- 3. On the construction limits on the north side of East Lovejoy Road at station 49+00.
- 4. On the construction limits next to Hastings Bridge Road from station 75+50 to station 78+00.
- 5. On the construction limits next to McDonough Road at station 78+00.
- 6. On both sides of the construction limits from station 78+60 to station 79+40.
- 7. On the construction limits next to McDonough Road at Station 78+60.
- 8. On both sides of the construction limits from station 107+15 to station 108+35.
- 9. On the construction limits parallel to Tara Blvd at station 108+35.
- 10. On both sides of the construction limits from station 110+00 to station 112+80.
- 11. On the construction limits parallel to Tara Blvd at station 110+00.
- 12. Around the four sides of staging areas #2 and #4. Need to install gates at each staging area for access.

3.3.2 Clearing and Grubbing

- A. Stake/flag the Construction Limits in advance of the work. Contractor shall not remove stakes or clear those flagged trees/brush.
- B. Area within the permanent easement, road right-of-way or 20-foot width centered over the pipe shall be cleared of all trees, stumps, buried logs, brush, grass, household items, construction trash, tires, metal and any other unsatisfactory debris unless indicated otherwise. Contractor should assume that all work will require clearing.
 - 1. Cut and remove the three trees, grind their stumps below ground surface and remove all debris located at Staging Area #???
- C. Areas outside the permanent easement but within the construction limits may be cleared at the Contractor's discretion.

Specifications

Section 3: Construction Standards

- D. Trees to remain in or near work area shall be protected from clearing activities. Should trees left remaining in the construction limits at the discretion of the Contractor subsequently die during the warranty period, then the Contractor shall be responsible for their removal and disposal and any related restoration work.
- E. All damaged trees over three (3) inches in diameter shall be repaired by an experienced nursery expert.
- F. Tap roots and other projections exceeding 1-inch in diameter shall be grubbed out to a depth of at least 18 inches.
- G. All holes remaining after grubbing activities shall be filled with suitable material and properly compacted in layers to density required for inplace backfill.
- H. All materials cleared and grubbed shall be disposed of off-site in accordance with applicable local, state and federal regulations.
- I. Burning of any material or debris shall not be permitted.
- J. Prior to and upon completion of clearing and grubbing activities, install erosion control measures as identified on the construction drawings.

3.3.3 Access Road Construction

- A. Construct access road at Contractor's discretion (size and material determined by Contractor) from station 0+00 to station 27+50, station 49+00 to station 55+00, station 79+00 to station 106+00, station 113+85 to station 162+00 and from staging area #4 to the construction route to be used to transport material for construction.
- B. Contractor is to maintain access road during construction at their expense.
- C. Upon completion of construction, stone for access road is to be removed and hauled to a CCWA facility; facility location to be determined at that time.
- D. Area of access road will be graded to within four (4) inches of existing finish grade and topped with four (4) inches of clean topsoil, graded to match existing adjacent grades.
- E. Area to be seeded and mulched once topsoil is installed.

Specifications

Section 3: Construction Standards

3.3.4 Topsoil Stockpiling

- A. Remove topsoil to full depth encountered in areas to be graded and stockpile soil.
- B. Soil shall be placed such that the integrity of an excavation or proposed excavation is not jeopardized.
- C. Stockpile shall be shaped to drain and install appropriate erosion control measures.

3.3.5 Existing Utilities

Remove and subsequently replace at same grade and elevation existing utility pipes and associated components.

3.3.6 Removing Pavement

- A. All asphalt pavement within the Construction Limits and where trenching is to be completed shall be removed and replaced unless indicated otherwise on the Construction Drawings. Work shall be coordinated and in compliance with the appropriate road and highway agencies.
- B. Driveways shall be removed to their full width from the edge of road pavement to the back of the construction lane.
- C. Sidewalks shall be removed to their full width from the edge of curb, road pavement or construction/control joint to the nearest adjacent construction/control joint.
- D. Curbs shall be removed for the entire length from control joint to control joint.
- E. Pavement shall be marked squarely and neatly to size as indicated on Construction Drawings.
- F. Pavement shall be scored and broke along the marked lines using a rotary saw and jackhammer. Pavement shall not be machine pulled for initial brake.
- G. Adjacent pavement damaged during construction shall be removed as described above and replaced in accordance with the Construction Drawings at the expense of the Contractor.

H. Upon removal, asphalt and concrete shall be loaded and disposed of off-site the same day of removal.

3.3.7 Grading

- A. Finish grade areas to lines and elevations indicated as existing grades on construction drawings or to surrounding surface grades.
- B. Provide additional soil to areas indicated on the construction drawings.
- C. Graded areas shall be within 0.10 foot of required subgrade elevation and shall not permit the ponding of water.
- D. In areas to receive grassing, redistribute stockpiled topsoil over graded areas to a minimum depth of four (4) inches. Provide additional topsoil to achieve required depth.
- E. Where finish grade meets or abuts curbs, walks or pavement, uphill grades shall be slightly higher than curb or pavement to permit drainage.
- F. In yard, right-of-way and mowed areas, remove rocks and dirt clods ³/₄-inch in size and larger.
- G. Excess soil, rock and debris shall be removed from the project site and disposed of.

3.3.8 Erosion Control and NPDES Monitoring

A. Stabilize Project site areas in accordance with the erosion control plans and details and/or the "Manual for Erosion and Sediment Control in Georgia", latest edition.

1. Contractor shall apply water, without causing soil erosion, to newly planted grassed areas on an as-needed basis until grass growth can be observed across all grassed areas.

2. Contractor shall apply water to a depth of 4-inches, without causing soil erosion, to newly planted sod areas on an as-needed basis until root growth can be observed as a dense root mat across all sod areas.

Specifications

Section 3: Construction Standards

- B. The construction site is upstream and within 1 mile of an impaired stream segment. The following erosion control measures and monitoring shall be completed.
 - 1. Use flocculants or coagulants and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days.
 - 2. Use mulch filter berms, in addition to silt fence, on the site perimeter where indicated on Construction Drawings. Mulch filter berms are not to be placed in waterways or areas of concentrated flow.
 - 3. Certified personnel shall conduct inspections at least once every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater.
 - 4. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24-hour period.
- C. Complete monitoring and reporting in accordance with NPDES standards and erosion control notes.
 - 1. Submit results of monitoring and reporting to CCWA on a monthly basis.

3.3.9 Clean-Up

- A. Upon completion of each day's work, broom sweep/pressure wash as necessary any dirt/mud/debris from sidewalk, curb and pavement surfaces and dispose.
- B. Upon site being stabilized with vegetation, all erosion control measures and any remaining debris (i.e. silt fence, stakes, hay bales) shall be removed from site areas.

3.4 Flow Interruption

- A. This section requires the Contractor to provide documents to CCWA.
- B. Prepare a flow interruption plan for CCWA review and approval.
- C. No excavation activities shall commence until a flow interruption plan is approved by CCWA.

Specifications

Section 3: Construction Standards

- D. Flow interruption may be completed using plugging and/or bypass pumping methods. Use upstream manholes for bypass pumping. Newly installed 18" sanitary sewer segments (manhole to manhole) may receive flow as soon as all testing is completed and accepted.
- E. Bypass pump systems set in streets for service reconnects shall be removed immediately upon approved testing of pipe.
- F. The following provides the peak flow that is to be considered when planning flow interruption.
 - 1. 10" Outfall: 1,900 gpm
- G. The flow interruption plan shall indicate the following as a minimum:
 - 1. Flow interruption method; flow bypass or plugging.
 - 2. Map that shows manholes/structures affected; this includes plugging/suction points, flow discharge points, space required for pump(s) set up and route for discharge piping.
 - 3. Indicate pump(s) and piping size; pumping capacity shall be capable of handling peak flows. Provide a single pump system curve that represents all pumps at a single pumping location; the pump system curve shall show the system can meet or exceed the anticipated peak flow.
 - 4. Emergency response plan to be followed in the event of a failure of the system.
- H. Furnish, install and maintain primary and redundant pumps, automated emergency call services, other devices, bypass piping and fuel required to maintain peak flows and services. All pumps used shall be fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric, or diesel powered. All pumps used must be capable of running dry. Bypass pumping systems will be equipped to be operated continuously 24 hours per day. Each pump shall have its own suction piping; two or more pumps cannot be manifolded together sharing a single suction line. No more than two (2) pump discharge hoses shall be used for the bypass/diversion. If the flow exceeds the capacity of 2 hoses, then rigid piping shall be used. The rigid piping shall consist of HDPE or steel pipes with suitably pressure rated couplings to withstand twice

Specifications

Section 3: Construction Standards

the maximum system pressure or 50 psi, whichever is greater. Under no circumstances will aluminum irrigation type piping or glued PVC pipe be allowed.

- I. Pumped sewage shall be in an enclosed hose or pipe that is adequately protected from traffic. Install traffic rated hose/ramp assemblies where discharge crosses paved surfaces and entrances to businesses/residential properties.
- J. All pump/engine assemblies shall be fully enclosed and equipped with sound suppression systems.
- K. All bypass pump suction point locations and discharge point locations shall be covered/sealed to prevent odor.
- L. All bypass pumps shall be installed with the bottom of the skids out of or above the 100-year flood elevation. Piping crossing swamps and creeks shall be installed above the 100-year flood elevation and secured to a ridged structure. All other piping within the 100-year flood elevation shall be secured to prevent pipe movement during rain events and flooding.
- M. Install temporary fence (8-feet in height) around bypass pumps, suction point locations and discharge point locations to provide precautionary measures for the protection of persons or property.
- N. A bypass pumping "drill" shall be performed by the Contractor to demonstrate system readiness if requested by CCWA. The drill shall demonstrate the incorporation of all standby equipment to handle flows when the main pump set is switched off. Provisions to accommodate any of the CCWA's review comments following the drill shall be adhered to in full at no additional cost.
- O. The Contractor shall take all necessary steps to eliminate the overflow of sewerage. In the event of an overflow of sewerage, the Contractor shall be responsible for cleanup of the area and all other pertinent activities as required by the Georgia Environmental Protection Division (GAEPD). All costs of these restoration/cleanup activities shall be the responsibility of the Contractor. In the event that funds are expended by the CCWA related to these activities the Contractor shall reimburse the CCWA for any and all such costs including but not limited to the costs expended by the CCWA for fines levied by the GAEPD.

Section 3: Construction Standards

- P. The Contractor shall be responsible for damage to public or private property due to flow interruption. All costs of restoration/cleanup activities shall be the responsibility of the Contractor. In the event that funds are expended by the CCWA related to these activities the Contractor shall reimburse the CCWA for any and all such.
- Q. The Contractor will indemnify and hold harmless the CCWA for any fines or third-party claims for personal or property damage arising from flow interruption that is the responsibility of the Contractor. Should fines subsequently be imposed as a result of any flow interruption for which the Contractor is fully or partially responsible, the Contractor shall pay all such fines and all of the legal, engineering, and administrative costs in defending such fines and claims associated with flow interruption.

3.5 Dewatering

- A. This section requires the Contractor to provide documents to CCWA.
- B. Provide an excavation dewatering plan for CCWA review and approval.
- C. Refer to "Subsurface Investigation, Clayton County Water Authority, Walnut Creek Force Main Replacement, Clayton County, Georgia, GeoSystems Project No. 20-2729, March 30, 2020".
- D. Provide dewatering systems as necessary to maintain excavations dry at all times during construction.
- E. Water withdrawn from excavations or dewatering systems shall be filtered using containerized sedimentation systems, filter bags and/or filter tubes.
- F. Install appropriate erosion control measures as may be necessary.
- G. Sediment collected within the systems shall be disposed of offsite.

3.6 Vibration Monitoring

- A. This section requires the Contractor to provide documents to CCWA.
- B. The contractor shall prepare a plan to perform vibration monitoring along the retaining wall at the Home Depot property.
- C. Monitor the retaining wall for vibration damage during construction in accordance with industry standards.

Specifications

Section 3: Construction Standards

- D. Monitoring shall take place during excavation work, pipe installation, manhole installation, backfilling, compaction and grading.
- E. The Contractor shall be responsible for damage to public or private property due to vibration.
- F. Complete a pre-construction survey of the existing structures to establish a baseline of existing damage prior to the start of any construction. Complete the following as a minimum.
 - 1. Complete a thorough walkthrough as part of the assessment.
 - 2. Complete documentation (notes, photographs, videos) of existing distress, and measurements of pre-existing cracks in foundation and walls.
- G. Complete a post-construction survey of the existing structures to document any changes to the structures upon completion of the construction.
 - 1. Prepare a report that summarizes all data collected during the preconstruction assessment, data collected during construction and data collected as part of the post construction survey. The report should provide a concluding summary of conditions found after construction and potential causes. Provide a copy of the report to CCWA.

3.7 Excavation

3.7.1 Shoring

- A. This section requires the Contractor to provide documents to CCWA.
- B. Prepare an excavation shoring plan for CCWA review.
- C. Refer to "Subsurface Investigation, Clayton County Water Authority, Walnut Creek Force Main Replacement, Clayton County, Georgia, GeoSystems Project No. 20-2729, March 30, 2020".
- D. The Contractor shall assume the responsibility for design and construction of excavation shoring and bracing capable of supporting excavations and construction loads.
 - 1. Where depths require, provide shore design and details stamped and sealed by a Professional Engineer Licensed in the State of Georgia for CCWA review.

Specifications

Section 3: Construction Standards

- E. Use trench boxes wherever possible to prevent the weakening of surrounding soils.
- F. Use trench boxes when digging next and near power/utility poles.

3.7.2 Pit and Trench

- A. Contractor shall refer to "Subsurface Investigation, Clayton County Water Authority, Walnut Creek Force Main Replacement, Clayton County, Georgia, GeoSystems Project No. 20-2729, March 30, 2020".
- B. Excavation shall include those measures necessary to establish trench widths and grades as indicated on the Construction Drawings.
 - 1. Excavation shall include removal and disposal off-site of all pipe and manhole materials encountered in the proposed locations of new pipe and manholes.
 - Excavation should be completed to natural undisturbed soil. Where unsuitable material is encountered, the contractor shall immediately notify the CCWA inspector. Over excavate through unsuitable material and backfill to required grade with Surge Stone or No. 57 stone and consolidate with vibrator. The CCWA Inspector shall determine depth of over excavation.
- C. Excavated soil shall be placed in a location such that the integrity of the excavation is not jeopardized.
- D. The excavation shall provide space for inspection of utilities and appurtenances.
- E. Maintain excavations dry at all times using pumps, well points or other dewatering means.
- F. When laying pipe, limit trenching to not greater than 100 feet ahead of completely backfilled work.
- G. Open excavations shall be made safe at all times. Excavations shall be covered in accordance with applicable regulations and/or barricaded and roped-off with identifying tape during work progress.
- H. Install temporary fence (8-feet in height) around any open excavation at the end of each workday to provide precautionary measures for the protection of persons or property.

Specifications

Section 3: Construction Standards

3.7.3 Rock

- A. Rock is defined as removing and disposing of solid material being greater than one (1) cubic yard in size which by actual demonstration cannot, in the opinion of the CCWA Engineer, be reasonably excavated with the excavator being used to install the pipe and manholes for the project that is in good condition and equipped with manufacturer's standard boom and rock points or similar approved equipment; and which must be systematically drilled and blasted or broken by power-operated hammer, hydraulic rock breaker or expansive compounds.
- B. Excavation shall include those measures necessary to establish grades indicated on drawings for utilities and appurtenances. Rock shall be excavated to a minimum depth of six (6) inches below grades indicated on drawings.
- C. The Contractor shall be responsible for determining methods required for removal of rock or hard materials (i.e. systematically drilled and blasted or broken by power-operated hammer, hydraulic rock breaker or expansive compounds).
- D. A licensed explosive contractor shall perform blasting operations.
- E. Blasting operations shall be conducted in accordance with all local, state and federal regulations. The Contractor is responsible for repairs and/or replacement of damaged property(s) resulting from the work.
- F. Excavated rock shall not be used as backfill in excavations. Contractor shall replace volume of excavated rock inside the pipe zone with suitable stone and outside of the pipe zone with suitable soil.
- G. Excavated rock shall be removed from the project site and disposed of.

3.8 Pipe Work

3.8.1 Bedding

- A. Pipe bed shall be established to elevations and grade as shown on the Construction Drawings or to match a requested condition.
- B. Pipe bed material and depth shall be as indicated on the Construction Detail/Construction Drawings. Stone shall be shovel sliced/

Specifications

Section 3: Construction Standards

consolidated using any means from beneath the pipe up to one-half (1/2) the pipe diameter prior to placing subsequent backfill. The entire length of barrel shall be fully supported with stone.

- C. Stone shall be used to backfill pipe to a height of one (1) foot above the top of the pipe.
- D. When installing pipe in areas of excavated rock, pipe shall be placed on a bed of stone, minimum six (6) inches in depth.
- E. Soil determined to be unsuitable by the CCWA Inspector shall be removed to a determined depth and replaced with stone to desired grade.

3.8.2 Pipe Installation

- A. Comply with manufacturer's installation instructions.
- B. Contractor shall submit for manufacturer approval, a material/ assembly that will protect pipe's end where force is applied for jointing purposes. Contractor will provide CCWA a copy of the manufacturer's approval.
- C. Install pipe of material type and size as shown on the Construction Drawings.
 - 1. Install restrained joint pipe at fitting and valve locations shown on the Construction Drawings.
 - 2. Install restrained joint pipe lengths and indicated in the Restrained Joint Pipe Length Table shown in the Construction Details.
- D. Install tapping saddles, taps, threaded piping, thread sealant, ball valves, plug valves, corporation valves, curb stop valves, ARVs / CAVs, PVC piping at locations shown on the Construction Drawings.
- E. Prior to placement, the interior of pipes and fittings shall be cleaned free of dirt and debris.
- F. Pipe, fittings and accessories shall not be laid or jointed in water.
- G. Pipe, fittings and accessories shall be handled and lowered into their respective positions using choker straps.

Section 3: Construction Standards

- H. A slight hole shall be dug where pipes are to be jointed to relieve pipe bell of any load. Pipe barrel shall be supported for its entire length.
- I. Install compression type full-face gasket coupling or solid sleeve style coupling on pipe to ensure proper joint sealing. The pipe mating ends and coupling shall be thoroughly cleaned and soaped before jointing. The mating ends shall be aligned in accordance with the manufacturer's tolerance and carefully shoved together using a steady force.
- J. Prior to joining consecutive pipe, backfill previously jointed pipe with sufficient material to prevent movement.
- K. Backfill pipe trench to the required grade in accordance with backfill and compaction requirements.
- L. Pipe Identification: Install tracer wire and pipe detection tape over buried piping during backfill operations.
 - 1. Tracer wire shall be attached centered to the top of buried pipe and pipe inside of casing with duct tape.
 - 2. Detection tape shall be installed centered, approximately 24 inches above the buried pipe.
- M. Cut pipe as required in accordance with manufacturer instructions using a rotary-type saw. Prepare cut ends in accordance with manufacturer instructions.
- N. When installing a pipe into a manhole or box structure, pipe end shall not extend greater than 6-inches beyond the inside face of the structure as measured at the 3 or 9 o'clock position.
- O. Install pipe collars of size and at locations as shown on the Construction Drawings.
- P. Install Protective Casing around pipe of size and length at locations as shown on the Construction Drawings.
- Q. Where casing is being installed in an open excavation, casing lengths shall be as long as practical and joined by single grooved butt weld for the entire circumference of the casing.

Specifications

Section 3: Construction Standards

- R. Place a plug in the open end of uncompleted laid piping at the end of each day.
- S. Pipe shall not be placed in service until all testing has been accepted by CCWA.
- T. Pipe not laid to the requested grade/alignment shall be removed and subsequently laid to the requested grade/alignment and the expense of the contractor.

3.8.3 Pipe Testing

- A. Testing shall be performed when backfill to finished grade and compaction are complete and dewatering has been discontinued for a minimum 24-hour period at the location of the test.
 - 1. All pipe installed shall be tested as indicated below.
 - 2. Contractor shall document all testing in such manner as necessary to show completion of the work.
 - 3. A CCWA Inspector must be present and witness any type of testing for acceptance.
 - 4. Any pipe not passing required testing shall be replaced or repaired at the Contractor's expense.
- B. <u>Hydrostatic Pressure Testing</u>: Force main piping shall be subject to a hydrostatic pressure test. Piping shall be filled with clean potable water to a pressure of 100 psi. The test shall begin after the pressure has stabilized for a period of 15 minutes. Test and pipe shall be considered acceptable when the stabilized pressure is maintained for a period of two (2) hours or other time as determined by CCWA.
- C. <u>Air Pressure Testing</u>: Sanitary sewer gravity-flow pipe installed between new manholes shall be subjected to a low air pressure test at each joint. Pipe shall be free of dirt and debris prior to testing. The internal air pressure of the pipe shall be raised to approximately four (4) psi. The test shall begin when the stabilized pressure is at a minimum of 3.5 psi. Test and pipe shall be considered acceptable when an air pressure equivalent to the stabilized pressure is maintained for a period of five (5) minutes.

Specifications

Section 3: Construction Standards

- D. <u>Deformation Testing</u>: Sanitary sewer gravity-flow pipe shall be tested for deformation. Pipe shall be free of dirt and debris. Any measured location may not show deformation of more than three (3) % of the pipe's manufactured published inside diameter.
 - 1. Deformation in the pipe shall be determined by using a mandrel measuring device being pulled throughout the entire length of the pipe segments.
- E. <u>Televising Testing</u>: Sanitary sewer gravity-flow pipe shall be televised to ensure integrity and document installed condition. Pipe shall be free of dirt and debris prior to televising. A video recording in general compliance with ASTM and National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) standards shall be completed through the pipe from manhole to manhole to show completed work. A video recording and report of each segment laid shall be provided to CCWA.

3.9 Manhole Work

3.9.1 New Manhole Installation

- A. Install manholes of required sizes and at locations and elevations as shown on Construction Drawings. Manholes shall be set atop stone as indicated on the Construction Drawings.
- B. The bed shall be prepared so that the manhole is set level.
- C. Manhole sections shall be handled with lifting straps or hooked cables using a minimum of two (2) of the manufactured manhole lifting holes.
- D. Manhole sections shall be positioned such that influent and effluent piping enter the center of their respective opening not pinching the rubber boot seal. Pipe shall not rest on invert of opening.
- E. Manhole sections shall be stacked level and plumb at all times.
- F. Prior to joining consecutive sections, tongue-and-grooved ends shall be cleaned free of dirt and debris.
- G. Tongue-and-grooved ends shall be fitted with preformed gasket sealing compound. Sealing compound shall be installed in such manner that when consecutive sections are stacked, sealing

Specifications

Section 3: Construction Standards

compound can be visually observed "squeezing out" from all sections of the joint.

- H. Manhole lifting holes shall be plugged with rubber stoppers or sealed using non-shrink grout throughout the entire depth of hole.
- I. Seal annulus between pipe and core opening using rubber boot in accordance with the manufacturer's instructions.
- J. Upon completion of visual testing activities, install HDPE cap over manhole joint locations.
- K. Manholes may not be placed in service until all testing has been accepted by CCWA.
- L. Manholes not set to the requested grade/alignment shall be removed and subsequently set to the requested grade/alignment and the expense of the contractor.

3.9.2 Invert Construction

- A. Clean new and existing manhole base free of dirt and debris before constructing invert.
- B. Construct "U-shape" style smooth invert from brick and mortar or castin-place concrete to size and elevation as shown on the Construction Drawings and as necessary to direct flow.
- C. Special care shall be taken such that the finished invert does not touch any pipe material.
- D. Apply sealing compound to invert material in accordance with the manufacturer's instructions.
- E. Invert construction shall have sufficient time to cure as not to be affected by in-service conditions.

3.9.3 Manhole Testing

- A. Testing shall be performed when backfill to finished grade and compaction are complete and dewatering has been discontinued for a minimum 24-hour period at the location of the test.
 - 1. Every newly installed manhole shall be tested.

Specifications

Section 3: Construction Standards

- 2. Contractor shall document all testing in such manner as necessary to show completion of the work.
- 3. A CCWA Inspector must be present and witness any type of testing for acceptance.
- 4. Any manhole not passing required testing shall be replaced or repaired at the Contractor's expense.
- B. <u>Visual Water Infiltration Testing</u>: Manhole testing shall be performed by visually observing for water infiltration at all manhole sections, at all pipe / rubber boot seal connections, at all manhole / rubber boot seal connections. Test shall be considered acceptable when no water infiltration is observed at any described observation points.
- C <u>HDPE Liner Testing</u>: Holiday test HDPE caps at joints using applicable voltage spark test. Test shall be considered acceptable when spark test reveals no holidays. Other testing procedure may be considered.

3.10 Backfill and Compaction

3.10.1 Backfill

- A. Excavations shall be backfilled using suitable material in accordance with the Construction Drawings or applicable Details.
- B. Place no backfill until any poured concrete has sufficient compressive strength.
- C. Place backfill against below grade walls (i.e. manhole sections) in uniform level lifts to prevent wedging action.
- D. When backfilling areas to be paved, the final 6 inches is to be filled with graded aggregate base. Prior to paving, remove required aggregate and dispose.
- E. Backfill shall not be placed on surfaces that are saturated, frozen or containing frost or ice.
- F. Place backfill in excavations as follows.
 - 1. Backfill in loose lifts not exceeding 6 inches when compacting using manual tamping devices (jumping jack).

Specifications

Section 3: Construction Standards

- 2. Backfill in loose lifts not exceeding 12 inches when compacting using vibrating/ramming devices (sheep-foot vibratory roller).
- G. Any settlement shall be filled and compacted to conform with adjacent surfaces.

3.10.2 Compaction

- A. Backfill shall be compacted using manual tamping devices or vibrating/ramming devices.
- B. Use manual tamping devices to compact soil as follows, otherwise use vibratory devices.
 - 1. When area is inaccessible to vibrating devices and within 2 feet of below grade walls (includes manholes).
 - 2. From bottom of pipe trench to twelve (12) inches above the top of pipe.
- C. Compaction requirements are as follows.
 - 1. Backfill in road right-of-way shall be compacted the entire depth to a minimum of 95% of the maximum dry density as determined by a Standard Proctor Analysis.
 - 2. Backfill not described above shall be compacted for the entire depth to a minimum of 90% of the maximum dry density as determined by a Standard Proctor Analysis.
 - 3. Soil installed and not meeting the compaction requirements shall be removed and re-installed and compacted or replaced with other approved material and compacted at the expense of the contractor.

3.10.3 Compaction Testing

- A. Samples from the proposed construction area shall be analyzed for maximum dry density in accordance with ASTM 698 – Method C or applicable GDOT standard.
- B. The extent of testing required shall be dependent upon soil conditions, Contractor's methods of construction and regulatory requirements.

Specifications

Section 3: Construction Standards

- C. Minimum compaction testing shall be as follows.
 - Backfill in excavations shall be tested at 2-foot lift intervals per 1,000 square feet of fill or as deemed necessary by the CCWA Inspector.
 - 2. Backfill in trench excavations shall be tested at 2-foot intervals per 400 linear feet of fill or as deemed necessary by the CCWA Inspector.
- D. Samples from the proposed construction area shall be analyzed for maximum dry density in accordance with ASTM 698 – Method C or applicable GDOT standard.

3.11 Cased-Crossings No. 1, 2, 3, 4 and 5

3.11.1 General

- A. This section requires the Contractor to provide documents to CCWA.
- B. Contractor is responsible for establishing elevations, grades and alignment provided from the Construction Drawings.
- C. Contractor shall monitor ground movement during construction.
 - 1. Prior to construction, establish ground monitoring points on the pavement surface at 10-foot intervals along the centerline of the alignment and at 10-foot offsets each side of centerline interval using survey methods and produce a scaled layout drawing referenced to a benchmark.
 - 2. Collect surface elevation readings immediately prior to construction, once per week during construction, once one week after all construction is completed and once four weeks after all construction is completed from the monitoring points to the nearest one-hundredth of a foot (0.01) and maintain a log of measurements documenting location point, date, time and elevation.
 - 3. Work shall be immediately stopped when readings indicate any surface movement.
 - 4. Contractor shall propose immediate action to remedy the problem for review and approval by the CCWA.

Specifications

Section 3: Construction Standards

- 5. Any surface repair is the Contractor's sole responsibility including cost.
- 6. Provide a table of all monitoring recorded data.

3.11.2 Bore and Receiving Pit

- A. Bore entry and receiving pits shall be completed and sized as required by the Contractor.
- B. The base of the bore pit and bore pit walls shall be prepared in such a manner as to support equipment loading anticipated during bore operations.
- C. Construction of pits shall comply with Excavation and Backfill, and Compaction specifications referenced herein.
- D. Equipment set-up in the bore pit shall be set to the grade that matches the construction drawings.

3.11.3 Installation

- A. Cased Crossing No. 1, No. 4 and No. 5 shall be steered. Boring, jacking and steering of casings through soil shall be completed by dry auger boring without jetting, sluicing or wet boring.
- B. The boring diameter shall be essentially the same as the outside diameter of the casing.
- C. Upon completion of bore, casing shall be cleaned free of all dirt and debris using manual methods, high pressure water via appropriate jet cleaning nozzles and vacuum methods.
- D. Should a boring encounter refusal or other unforeseen conditions, Contractor shall notify CCWA immediately in writing before advancing the casing.
- E. For steered casings, record an indication of the grade at the beginning of each piece of casing installed; the record shall be provided to CCWA.
 - 1. CCWA shall be notified immediately in writing when the Contractor has determined the bore is not on the required grade.

Section 3: Construction Standards

3.11.4 Pipe Insertion

- A. Pipe shall be inserted by means of pulling or pushing as recommended by the pipe manufacturer.
- B. Contractor shall prepare an end assembly to pull from/push against such that ends of pipe are not damaged during insertion.
- C. Pipe shall be supported within casing to limit radial movement to a maximum of 3/4 inch.
- D. A minimum of three (3) spacers shall be installed on each nominal section of pipe at spacing recommended by the pipe or casing manufacturer.
- E. The annulus between the pipe and casing, at each end, shall be sealed using a flexible rubber seal.

3.11.5 Testing

- A. The cased crossings (casing/pipe/plates) shall be televised in accordance with Section 3.8.4 "Pipe Testing" prior to installing the sanitary sewer pipe.
- B. The sanitary sewer pipe shall be tested in accordance with Section 3.8.4 "Pipe Testing".

3.12 Asphalt Work

- A. Compact existing base and/or add and compact necessary aggregate base/concrete material in accordance with the Construction Drawings.
- B. Cut edges of existing asphalt neat and square.
- C. Apply prime / tack coat as necessary to facilitate asphalt placement.
- D. Install asphalt using mechanical spreader machine and compact to thicknesses as shown on the Construction Drawings or to thickness to match existing asphalt.

3.13 Concrete Work

- A. Construct formwork to lines and elevations as shown on Construction Drawings.
- B. Clean forms of dirt and debris prior to each use.

Specifications

Section 3: Construction Standards

- C. Install steel reinforcement and/or wire as shown on Construction Drawings, support on chairs and secure to prevent movement.
- D. Concrete shall not be placed on loose, saturated or frozen soil.
 - 1. Concrete shall be placed when ambient temperature is at a minimum 40 degrees Fahrenheit and rising.
 - 2. Maintain ambient temperature around concrete above 40 degrees Fahrenheit for a period of 24 hours after placement.
- E. Place concrete using suitable means and consolidate concrete with vibrator of suitable vibrations per minute.
- F. Screed slabs / curbs by use of straight edge or screed board.
- G. Saw control joints into slabs / walks as soon as concrete can be traveled by foot without leaving impressions.
 - 1. Control joints shall be installed at interval spacing of 1-1/2 times slab width or at a maximum spacing of 10 feet, whichever is closer.
 - 2. Saw joint depth shall be 1/4 of the slab depth.
- H. Concrete walks shall be finished with a slight broom finish perpendicular to the travel path.
- I. Begin curing after placement and finishing of concrete as soon as free water has disappeared from concrete surface.
 - 1. Curing methods shall be by the continuous application of water for 72 hours or by applying a liquid membrane forming curingsealing compound to the fresh concrete surface.
- J. Removal of formwork shall take place no sooner than 24 hours after placement of concrete.

3.14 Pavement Striping

- A. Install pavement striping and symbols having neat, clean edges and sizes to match existing striping and symbols or as detailed in the Construction Drawings.
- B. Provide a sufficient thickness of paint such that pavement color/surfaces are nonvisible through the paint.

Section 3: Construction Standards

3.15 Acceptance

- A. A CCWA Inspector shall inspect all components of work for compliance with the Contract. The Contractor shall, at all times, permit and facilitate inspection of work by the CCWA. The presence of a CCWA Inspector or other CCWA staff on the site of work shall not be construed to, in any manner, relieve the Contractor of their responsibility for strict compliance with the Contract. The CCWA Inspector shall inform the Contractor when work is deficient from the Contract. Deficiencies shall be addressed in a timely manner as determined by the CCWA Inspector.
- B. Final Acceptance of the work by the CCWA shall be when the Contractor has met all terms and conditions as set forth by the Contract. The date of Final Acceptance shall be no later than the date the CCWA approves the Contractor's final request for payment. Where applicable, Final Acceptance shall be written, signed and dated by the CCWA.

END OF SECTION

ATTACHMENT A

Geotechnical Report

Click <u>HERE</u> for the:

Subsurface Investigation, Walnut Creek Force Main Replacement, Lovejoy, Clayton County, Georgia, GeoSystems Project No. 20-2729, March 30, 2020

ATTACHMENT B

Geotechnical Report:

Click <u>HERE</u> for the:

Subsurface Investigation, Horizontal Directional Drill Addendum Report, Walnut Creek Force Main Replacement, Lovejoy, Clayton County, Georgia, GeoSystems Project No. 20-2729, June 16, 2020.

ATTACHMENT C

Interim Waiver and Release Upon Payment

INTERIM WAIVER AND RELEASE UPON PAYMENT

The undersigned mechanic and/or materialman has been employed by the Clayton County Water Authority to furnish:

and/or labor];

for the construction of improvements known as:

_____ [title of the project or building];

[describe materials

which is located in the City of ______, County of ______, and is owned by the Clayton County Water Authority at the following address:

and more particularly described by the following metes and bounds description, land lot district, or block and lot number:

See Attachment: yes no

Upon the receipt of the sum of: \$_____

the mechanic and/or materialman waives and releases any and all liens or claims of liens it has upon the foregoing described property through the date signed below and excepting those rights and liens that the mechanic and/or materialman might have in any retained amounts, on account of labor or materials, or both, furnished by the undersigned to or on account of said contractor for said building or premises.

NOTICE: WHEN YOU EXECUTE AND SUBMIT THIS DOCUMENT, YOU SHALL BE CONCLUSIVELY DEEMED TO HAVE BEEN PAID IN FULL THE AMOUNT STATED ABOVE, EVEN IF YOU HAVE NOT ACTUALLY RECEIVED SUCH PAYMENT, 60 DAYS AFTER THE DATE STATED ABOVE UNLESS YOU FILE EITHER AN AFFIDAVIT OF NONPAYMENT OR A CLAIM OF LIEN PRIOR TO THE EXPIRATION OF SUCH 60 DAY PERIOD. _(L.S.)

(Signature of Deponent)

(Printed/Typed Name and Title)

Deponent, individually, and as duly authorized agent and duly elected and acting officer of Contractor

(Company Name)

PERSONALLY APPEARED BEFORE ME, a Notary Public in and for said State and County, the Deponent, who, being personally known to the undersigned and being duly sworn and on oath deposed and said that the within and foregoing statements are true and correct this ______ day of ______, 20____.

Notary Public _____

Commission Expiration Date: _____

(NOTARY SEAL)

(Witness)

(Address)

ATTACHMENT D

Waiver and Release Upon Final Payment

STATE OF GEORGIA COUNTY OF CLAYTON

WAIVER AND RELEASE UPON FINAL PAYMENT

The undersigned mechanic and/or materialman has been employed by the Clayton County Water Authority to furnish:

_____ [describe materials

and/or labor];

for the construction of improvements known as:

	ftitle	of	the	pro	iect	or	buil	ding];	
. 1				r·				······	

which is owned by the Clayton County Water Authority at the following address:

and more particularly described by the following metes and bounds description, land lot district, or block and lot number:

See Attachment: yes no

Upon the receipt of the sum of: \$_____;

the mechanic and/or materialman 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.

THE MECHANIC AND/OR MATERIALMAN WAIVES AND RELEASES ANY AND ALL LIENS OR CLAIMS OF LIENS IT HAS UPON THE FOREGOING DESCRIBED PROPERTY OR ANY RIGHTS AGAINST ANY LABOR AND/OR MATERIAL BOND ON ACCOUNT OF LABOR OR MATERIALS, OR BOTH, FURNISHED BY THE UNDERSIGNED TO OR ON ACCOUNT OF SAID CONTRACTOR FOR SAID PROPERTY.

NOTICE: WHEN YOU EXECUTE AND SUBMIT THIS DOCUMENT, YOU SHALL BE CONCLUSIVELY DEEMED TO HAVE BEEN PAID IN FULL THE AMOUNT STATED ABOVE, EVEN IF YOU HAVE NOT ACTUALLY RECEIVED SUCH PAYMENT, 60 DAYS AFTER THE DATE STATED ABOVE UNLESS YOU FILE EITHER AN AFFIDAVIT OF NONPAYMENT OR A CLAIM OF LIEN PRIOR TO THE EXPIRATION OF SUCH 60 DAY PERIOD. **PERSONALLY APPEARED BEFORE ME**, the undersigned attesting officer, duly authorized by law to administer oaths (the "Deponent"), who being duly sworn according to law, deposes and says on oath:

1. That Deponent is the duly authorized agent and duly elected and acting officer of (the "Contractor"), and is duly authorized to execute this Final Contractor's Affidavit, Lien Waiver and Indemnification (this "Affidavit") in a representative capacity on behalf of Contractor, as well as in Deponent's individual capacity, and Deponent has made diligent inquiry into and is personally familiar with and has full knowledge of all facts set forth herein.

2. That Contractor acted as the sole general contractor in charge of and directly responsible for the building and construction of all improvements (the "Work") located as reflected above (the "Property"), all of which Work was performed pursuant to the terms of that certain agreement dated _______ (the "Agreement") by and between Contractor and the Clayton County Water Authority as the owner or agent of the owner of the Property (the "Owner"). The Work includes, without limitation, all Work under or related to the Agreement and all change orders to the Agreement, and all supplemental contracts and subcontracts, whether oral or written, for any extra, additional or replacement labor or materials. Contractor is, and performed the Work as, an independent general contractor and Contractor is not an agent of Owner, and all of the Work was furnished and performed at the instance of Contractor as general contractor.

3. That the Work has been fully and finally completed in strict accordance with the terms of the Agreement, and Contractor has at all times since the commencement of the Work been in direct charge of all aspects of the Work, and Contractor has obtained a current valid permanent certificate of occupancy for the Property and the Work, and the Work has been completed within the boundary lines of the Property.

4. Upon receipt of the sum reflected above, Contractor acknowledges that Owner has paid in full to Contractor the full contract price under the Agreement (the "Contract Price"), which Contract Price includes, without limitation, all amounts and bills for all labor, materials, fixtures and supplies of any type whatsoever used in the Work. Upon receipt of these monies, all contractors, subcontractors, subcontractors of subcontractors, materialmen, suppliers and laborers will be paid in full the agreed price or reasonable value for all materials and supplies ordered, used or furnished and services and labor rendered in connection with or as a part of the Work, and none of such parties have or will have any claim, demand or lien against the Property, and all of the amounts paid by Owner to Contractor under the Agreement have been and will be used to pay for labor or materials used in the Work when no liens or claims of lien were filed or outstanding. There are no disputes regarding the Agreement or any other contracts or subcontracts with respect to the Work or the Property, and, except for bills associated with these final monies, there are no amounts due or unpaid bills of any nature, either for labor or services related to the Work or the Property or any materials which have been or may have been placed upon, or applied or delivered to the Property, and Contractor does hereby unconditionally agree to hold harmless and indemnify Owner from and against all claims for mechanic's or materialman's liens or claims of lien, including, without limitation, any attempted foreclosure thereof, which in any way arise out of or are related to the Work or the Property, including, without limitation, any attorney's fees incurred in connection therewith.

5. That Contractor does hereby for itself, and its employees, suppliers, subcontractors, mechanics and materialmen and all other persons acting for, through, or under Contractor, waive, remise, relinquish and release all right to file or to have filed or to maintain any materialman's or mechanic's lien or liens or claim or claims against the Property or arising out of or related to the Work. This Affidavit is executed and given in favor of and for the benefit of, and may be relied upon by, Owner and each and every party legally or equitably, now or hereafter, owning or holding any interest in the Property.

6. That this Affidavit is a sworn statement made under the provisions of Official Code of Georgia Annotated Section 44-14-361.2, and is made for the purpose of inducing Owner to pay to Contractor the balance of the Contract Price pursuant to the terms of the Agreement.

_____(L.S.) (Signature of Deponent)

(Printed/Typed Name and Title)

Deponent, individually, and as duly authorized agent and duly elected and acting officer of Contractor

(Company Name)

PERSONAL	LY APPEARED	BEFORE ME , a Notary	Public in and for said	State and
County, the	Deponent, who,	being personally known to	o the undersigned and b	being duly
sworn and o	n oath deposed a	and said that the within and	foregoing statements ar	e true and
correct this	day of _	, 20	·	

Notary Public _____

Commission Expiration Date: _____

(NOTARY SEAL)

(Witness)

(Address)

ATTACHMENT E

<u>W-9 Form</u>

► Go to www.irs.gov/FormW9 for instructions and the latest information.

	2 Business name/disregarded entity name, if different from above						
Je 3.		4 Exemptions (codes apply only to					
on page		certain entities, not individuals; see instructions on page 3):					
e. ns c		Exempt payee code (if any)					
ctio	Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►						
rint or type. Instructions	II C if the II C is classified as a single-member II C that is disregarded from the owner unless the owner of the II C is	Exemption from FATCA reporting					
า ม ม	another LLC that is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.	code (if any)					
P Specific		(Applies to accounts maintained outside the U.S.)					
	5 Address (number, street, and apt. or suite no.) See instructions. Requester's name and	d address (optional)					
See							
	6 City, state, and ZIP code						
	7 List account number(s) here (optional)						
Par	t I Taxpayer Identification Number (TIN)						

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid	Social security number
backup withholding. For individuals, this is generally your social security number (SSN). However, for a	
resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other	
entities, it is your employer identification number (EIN). If you do not have a number, see How to get a	
TIN, later.	or
Note: If the account is in more than one name, see the instructions for line 1. Also see What Name and	Employer identification number

Number To Give the Requester for guidelines on whose number to enter.

Certification Part II

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign	Signature of		
Here	U.S. person >		

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

• Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)

Date 🕨

- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest),
- 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

• An individual who is a U.S. citizen or U.S. resident alien;

• A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

An estate (other than a foreign estate); or

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

 In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for
Corporation	Corporation
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
Partnership	Partnership
Trust/estate	Trust/estate

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

• Generally, individuals (including sole proprietors) are not exempt from backup withholding.

• Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

• Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.

• Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1 - An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4-A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

7-A futures commission merchant registered with the Commodity Futures Trading Commission

8-A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10-A common trust fund operated by a bank under section 584(a)

11-A financial institution

 $12-A \ \mbox{middleman}$ known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

TE the second sector for a	
IF the payment is for	THEN the payment is exempt for
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B-The United States or any of its agencies or instrumentalities

C-A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D-A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F-A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H-A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K-A broker

L-A trust exempt from tax under section 664 or described in section 4947(a)(1)

M-A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester,* later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.SSA.gov.* You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at *www.irs.gov/Businesses* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *www.irs.gov/Forms* to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to *www.irs.gov/OrderForms* to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax- exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
 Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B)) 	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships*, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- · Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft. The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.ldentityTheft.gov* and Pub. 5027.

Visit *www.irs.gov/IdentityTheft* to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

ATTACHMENT F

Vendor Form



COVER SHEET

FOR

VENDOR INFORMATION FORM

The enclosed Vendor Information Form is used by the Clayton County Water Authority (CCWA) for adding vendors to its financial database system that are awarded procurement or service work. This form has two parts. **Part 1** is designed to obtain general company information. Completion of this part is required to successfully add the vendors to CCWA's financial database system. Part 2 is intended for information gathering purposes only. While information requested on Part 2 is optional to the vendors, it will help the CCWA obtain business ownership classification description from its vendors.

Product(s) / Service(s) Provided: Select a NIGP code from the drop-down menu. If the code is unknown, you can search it by clicking the link provided on the form. Go to page 5. At the same time, press CTRL-F. This will open a small FIND box on your screen. In the box, type the key word that best describes your goods or services and click NEXT until you find the best fit. Write down the 5 digit code number and go to the drop-down menu of this Form to select the code.

For the purposes of executing this document, the following definitions apply:

- Small Local Business Enterprise (SLBE) is one that is at least 51% owned by one or more of the applicant individuals identified and a citizen or lawfully admitted permanent resident of the United States. Independently owned and operated with average annual gross receipts for the previous three years not exceeding (1) Construction Firms- \$18,250,000 (2) Professional Services Firms - \$5,500,000, Architectural Firms - \$3,750,000, Engineering Firms- \$7,500,000 and Goods & Services - less than 250 employees. Locally based, meaning located and operating in Clayton County or the ten (10) counties of Cherokee, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Rockdale and Spalding for at least one year prior to submitting application for certification.
- > A Woman Business Enterprise (WBE) is one that is at least 51% owned by a Female, who also controls and operates the business, and is a permanent resident of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia and must be lawfully licensed within the relevant jurisdiction.
- \blacktriangleright A Minority Business Enterprise (MBE) is one that is at least 51% owned by one of the minority groups identified below, who also control and operate the business, and are permanent residents of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia and must be lawfully licensed within the relevant jurisdiction.

Minority Groups:

Hispanic American

African American

- Native American
- Asian American

- Pacific Islander \geq
- > A Disabled Citizen Enterprise (DCE) of the US refers to a business that is at least 51% owned by one or more disabled US citizens, who also control and operate the business, and are permanent residents of the State of Georgia. The business must have a permanent, functioning office within the State of Georgia, and must be lawfully licensed within the relevant jurisdiction.

Vendor Information Forms should be submitted to the Procurement Department.

For questions related to the verification of certifications, please email ccwa_slbe_program@ccwa.us

VENDOR INFORMATION FORM

	PART 1	
Vendor Name:		
Phone Number:	Fax #:	
E-Mail Address:		
Mailing Address:		
Pay to Address:		
Same as above		
	noney between banks electronically. If you are interested in ACH payments, please complete all of the attach a copy of a voided check confirming your account information:	
Bank Name:		
Routing No.:	Account No.:	
Account Name:		
Remittance to Email	Address: rs should send all invoices to: CCWA Accounts Payable@ccwa.us	
Entity Type:	adividual/Sole Proprietor Employee Owned Company Partnership rivately Held Corporation/LLC Publicly Owned Company Attorney ther	
-	Fax Identification Number (TIN):	
Payment Terms:	NET 30 DAYS Cher:	
	VICES PROVIDED: GP Code(s)	
	For help finding NIGP Codes, click here: <u>NIGP Code Listing</u>	
R	equired: A signed W-9 form must be submitted with this form.	
	<u>PART 2</u>	
<u>(For informat</u>	ion gathering purposes only. You are not required to complete PART 2).	
COMPANY'S (OWNERSHIP CLASSIFICATION - See Cover Sheet for additional information.	
<u>To partipate in</u>	the Small Local Business Program, please complete the following section:	
SLBE Are yo	u certified? 🗌 Yes 🔲 No Certifying Agency	
County of Primar	y Business Located:	
If you are certified as one of the following classifications, please check the appropriate box: WBE MBE * DCE		
* IF MBE , PLEAS CHOOSE ONE ONL		
	Company " has been chosen, no other designation (Hispanic American, African American, This option will serve as your company's classification.	

<u>Vendor Information Forms should be submitted to ccwa_slbe_program@ccwa.us.</u> If your company's ownership is certified as SLBE, WBE, MBE, or DCE with the State of Georgia (GDOT) Certification Program, Clayton County, DeKalb County or with the City of Atlanta, please submit a copy of your business certification (including your phone, fax, and email address) to: ccwa_slbe_program@ccwa.us Certification from any other entity is not needed at this time.

CONSTRUCTION DRAWINGS

Click HERE