

**BIDDING DOCUMENTS AND TECHNICAL SPECIFICATIONS**

**2015 STREETS, DRAINAGE AND UTILITY  
IMPROVEMENTS**

**CITY OF WAYCROSS, GEORGIA**

**GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS  
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM**

**MARCH 27, 2015**



**COASTAL ENGINEERING CONSULTANTS, INC.  
P. O. BOX 1895  
BRUNSWICK, GEORGIA 31521  
(912) 223-0647**

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ADVERTISEMENT FOR BIDS  
2015 STREETS, DRAINAGE AND UTILITY IMPROVEMENTS  
WAYCROSS, GEORGIA**

**GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS  
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM  
PENDING GRANT APPLICATION**

**OWNER**

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City of Waycross  
P.O. Drawer 99  
417 Pendleton Street  
Waycross, Georgia 31502-0099  
Phone: (912) 287-2945  
www.waycrossga.com

**ENGINEER**

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Coastal Engineering Consultants, Inc.  
P.O. Box 1895  
Brunswick, Georgia 31521  
Contact Person: N. John Hunkele, Jr., P.E.  
Phone: (912) 223-0647  
E-mail: [johnh@cec-ga.com](mailto:johnh@cec-ga.com)

The City of Waycross (OWNER) will receive sealed bids for all material, labor and equipment necessary for the construction of 2015 Streets, Drainage and Utility Improvements at the OWNER's address listed above until 2:00 p.m. prevailing local time on **(To Be Determined)**, at which time and place bids will be opened and read. All interested parties are invited to attend. Proposals may be mailed or delivered to the attention of **Jessica King Deal, City Engineer** at the OWNER's address. Proposals received after the designated date and time will not be considered. No bid may be withdrawn after the closing time for receipt of bids for a period of sixty (60) days. Detailed instructions for the preparation and submission of a bid may be found in the **Specification Section 00200 - Instructions to Bidders**. This project is funded in part by a grant from the Georgia Department of Community Affairs Community Development Block Grant Program. The City of Waycross may select a successful low bidder after evaluation of all bids.

The City of Waycross is committed to Affirmatively Further Fair Housing. This project is covered under the requirements of Section 3 of the HUD Act of 1968. As such Section 3 business concerns are encouraged to participate.

This project is advertised in the legal organ of the Owner. The advertisement may also be viewed on the City of Waycross's website [www.waycrossgaga.com](http://www.waycrossgaga.com). Click the DEPARTMENTS tab, then ENGINEERING DIVISION and then 2015 CDBG INFRASTRUCTURE IMPROVEMENTS.

Any Contractor submitting a bid must be a licensed Utility Contractor in the State of Georgia. **Contractor pre-qualification is required.** Pre-qualification submittals must be received at least ten (10) days prior to the date set for receipt of bids. It is the responsibility of each firm to ensure that pre-qualification has been approved prior to submitting a bid. Bids will only be accepted from firms that have pre-qualified.

The work of this contract includes, but is not limited to, the work includes, but is not limited to, multi-infrastructure improvements along Walker, Owens, Izlar and Roosevelt Streets consisting of the following: construction of new 2" and 8" PVC water mains with related fittings, valves, hydrants and appurtenances; new gravity sewer mains with associated manholes, sewer services and cleanouts; new storm water drainage system consisting of 15" through 24" pipes and associated curb inlets and junction boxes; street improvements consisting of new concrete curb and gutter, spot repairs to subgrade and base, milling and

asphalt resurfacing. All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed.

Contractor pre-qualification forms and plans, specifications and contract documents are on file at the Waycross City Hall, 417 Pendleton Street, Waycross, Georgia 31502. Copies may be obtained from Coastal Engineering Consultants, Inc., P.O. Box 1895, Brunswick, Georgia 31521 (Phone: 912-223-0647; E-mail: [JohnH@cec-ga.com](mailto:JohnH@cec-ga.com)) upon payment of a non-refundable **\$350.00** for each set of full printed plans and specifications requested (There is no charge for the Contractor pre-qualification forms). The documents are also available electronically (CD), or via e-mail upon payment of a non-refundable **\$100.00**. All bidders must receive a bid package from the Engineer in order to be considered certified. Bids from non-certified bidders will not be considered. Contract documents may also be examined at the following locations:

1. Construction Bulletin – Stuart, Florida
2. AGC Builders Exchange – Smyrna, Georgia
3. Reed Construction Data – Norcross, Georgia
4. ISQFT – Cincinnati, Ohio

Bids must be accompanied by a bid bond or certified cashier's check in an amount not less than 5% of the base bid. Performance and Payment Bonds, each in an amount equal to 100% of the contract amount, shall be required of the successful bidder, if contract is awarded. All bonds shall be by a surety licensed in the State of Georgia with an "A" minimum rating of performance and a financial strength of at least five (5) times the contract price. Each bond shall be accompanied by a "Power of Attorney" authorizing the attorney-in-fact to bind the surety and certified to include the date of the bond. The bid bond shall be forfeited to the City of Waycross as liquidated damages if successful bidder fails to execute a Contract and provide Performance and Payment bonds within ten (10) days after being notified of contract award.

Bidders are encouraged to examine the site of the work and to inform themselves fully as to the conditions present at the site. A **pre-bid conference** will be held at the Waycross City Hall on **(To Be Determined)** at 2:00 P.M. Attendance is not mandatory, however all Bidders are encouraged to attend.

The City of Waycross, Georgia reserves the right to reject any or all bids including without limitation, the rights to reject any or all nonconforming, nonresponsive, unbalanced or conditional Bids; and to make an award in the best interest of the City of Waycross. The City of Waycross provides equal opportunity for all businesses and does not discriminate against any person or business because of race, color, religion, sex, national origin, and handicap or veterans status.

**SECTION 00200  
INSTRUCTIONS TO BIDDERS**

**1.0 INTENT**

It is intended that the Bidding Documents, Contract Documents, General Terms and Conditions, Supplementary General Conditions, Special Conditions pertaining to requirements for compliance with DCA's Section 3 Policy for Covered HUD Funded Activities, the Technical Specifications and the Construction Plans shall define and describe the complete work to which they relate.

**2.0 WORK TO BE DONE**

The work of this contract includes, but is not limited to, the work includes, but is not limited to, multi-infrastructure improvements along Walker, Owens, Izlar and Roosevelt Streets consisting of the following: construction of new 2" and 8" PVC water mains with related fittings, valves, hydrants and appurtenances; new gravity sewer mains with associated manholes, sewer services and cleanouts; new storm water drainage system consisting of 15" through 24" pipes and associated curb inlets and junction boxes; street improvements consisting of new concrete curb and gutter, spot repairs to subgrade and base, milling and asphalt resurfacing. All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed.

**3.0 CONTRACTOR PRE-QUALIFICATION**

Any Contractor submitting a bid must be a licensed Utility Contractor in the State of Georgia. **Contractor pre-qualification is required.** Pre-qualification submittals must be received at least ten (10) days prior to the date set for receipt of bids. It is the responsibility of each firm to ensure that pre-qualification has been approved prior to submitting a bid. Bids will only be accepted from firms that have pre-qualified. Contractor pre-qualification forms may be obtained from Coastal Engineering Consultants, Inc., P.O. Box 1895, Brunswick, Georgia 31521 (Phone:912-223-0647; E-mail: [JohnH@cec-ga.com](mailto:JohnH@cec-ga.com)). There is no charge for the Contractor pre-qualification forms.

**4.0 SITE AND BIDDING DOCUMENTS EXAMINATION**

Bidders are encouraged to examine the site of the work and to inform themselves fully as to the conditions present at the site. A **pre-bid conference** will be held at the Waycross City Hall on **(To Be Determined)** at 2:00 P.M. Attendance is not mandatory, however all Bidders are encouraged to attend.

Complete sets of Bidding Documents must be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. Owner and Engineer in making copies of Bidding Documents available for a non-refundable deposit do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use. All bidders must receive a bid package from the Engineer in order to be considered certified. Bids from non-certified bidders will not be considered.

It is the responsibility of each bidder, before submitting a Bid:

- A. To examine and study thoroughly the Bidding Documents and other related data identified in the Bidding Documents;
- B. To visit the work site to ascertain by inspection pertinent conditions such as location, character and accessibility of the site including existing surface and subsurface conditions in the work area; availability of facilities, location and character of existing work within or adjacent thereto, labor conditions, etc.
- C. To become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, or performance of the Work;
- D. To obtain and carefully study (or assume responsibility for doing so) all additional or supplementary examination investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate in any aspect to the means, methods, techniques, sequences, and procedures of construction expressly required of the bidding documents, and safety precautions and programs incident thereto;
- E. To study and carefully correlate Bidder's knowledge and observations with the Bidding Documents and such other related data;
- F. To promptly notify Engineer of all conflicts, errors, ambiguities or discrepancies which Bidder has discovered in or between the Bidding Documents and such other related documents;
- G. To agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies or data are necessary for the determination of its Bid for performance of the work at the price bid and within the times and in accordance with the other terms and conditions of the Bidding Documents; and
- H. To become aware of the general nature of the work to be performed by Owner and others (if any) at the Site that relates to the Work as indicated in the Bidding Documents;

## **5.0 BID AND CONTRACT SECURITY**

Bids must be accompanied by a bid bond or certified cashier's check in an amount not less than 5% of the base bid. The Owner will return bid guarantees, other than bid bonds, to unsuccessful Bidders as soon as practicable, but not sooner than the execution of a contract with the successful Bidder. If for any reason whatsoever the successful Bidder withdraws from the competition after opening the bids, or refuses to execute the Contract, the Owner will proceed on the Bid Bond or deposit the certified check or cashier's check as damages for the Bidder's failure to enter into a contract for the work.

Performance and Payment Bonds, each in an amount equal to 100% of the contract amount, shall be required of the successful bidder, if contract is awarded.

All bonds shall be by a surety licensed in the State of Georgia with an “A” minimum rating of performance and a financial strength of at least five (5) times the contract price. Each bond shall be accompanied by a “Power of Attorney” authorizing the attorney-in-fact to bind the surety and certified to include the date of the bond. The bonds and surety shall be subject to the approval of Owner's legal counsel.

## 6.0 BID FORM

Bids shall be submitted on the Bid Form included. Bids shall be based upon both lump sum and unit prices as indicated on the Bid Form. Where errors or omissions result in discrepancies in bid totals, prices per unit as submitted will be binding. Final payment will be based upon actual in-place quantities for unit price items, completed work for lump sum items and upon acceptance by the Owner.

Bidders are requested to review bid alternates, if any, as outlined on the bid form.

## 7.0 INTERPRETATIONS AND ADDENDA

All questions about the meaning or intent of the Bidding Documents are to be directed to the Engineer. The person submitting the request shall do so in writing and be responsible for its prompt delivery. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the bidding Documents in accordance with Paragraph 4.0 of this Section. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner or Engineer.

## 8.0 SUBMISSION OF BIDS

Bids shall be submitted at the time and place designated in the Advertisement for Bids. Bidders shall submit an original and three (3) copies of its Bid in an opaque sealed envelope. The outside of the envelope containing the Bid shall also be marked with the following: **(SEALED BID FOR: “2015 Streets, Drainage and Utility Improvements” (Georgia Department of Community Affairs Community Development Block Grant Program – Pending Grant Application))**. The outside of the envelope shall also bear the name, address and Utility Contractor License Number(s).

All blanks on the Bid Form must be completed and written or printed in ink.

Bids by corporations must be executed in the corporate name by the President or Vice-President (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested to by the secretary or an assistant secretary of the corporation. The corporate address and state of incorporation must be shown on the Bid Form.



Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown on the Bid Form.

The address, telephone number, fax number and email address for communications regarding the Bid must be shown on the Bid Form.

All names and titles must be typed or printed in ink below the signature.

The Bid shall contain an acknowledgement of receipt of all addenda, if any. The numbers of each addendum must be filled in on the Bid Form.

The following must be completed, executed (where required), and submitted with the bid:

- Section 00410 - Bid Form
- Section 00430 - Bid Bond
- Section 00450 - Oath
- Section 00460 - Mandatory Section 3 Solicitation Package
- Section 00480 - Non-Collusion Affidavit
- Section 00490 - Contractor Certification Regarding Debarment
- Section 00623 - E Verify Contractor Affidavit and Agreement
- Section 00624 - E Verify Subcontractor Affidavit and Agreement (if applicable)

***Failure to include any of the above documentation with the Bid will be cause for your response to be deemed non-responsive and not eligible for award. Should any of the required documentation noted above be missing from the Bid Package, such bid will not be read at the bid opening and will not be evaluated or considered for a contract award.***

The Bidder should give particular attention to the requirements and conditions set forth in DCA's Section 3 Policy for Covered HUD Funded Activities.

The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of the Bidding Documents, that without exception the Bid is premised upon performing the work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of performance of the Project.

## **9.0 DETERMINATION OF SUCCESSFUL BIDDER**

The contract(s), if awarded, will be awarded to the lowest responsive and responsible Bidder. The determination of Bidder's responsibility will be made by the Owner based upon the Pre-qualification requirements of Section 3.0 of these Instructions to Bidders.

The determination of responsiveness will be made by the Owner based on a consideration of whether the Bidder has submitted a complete Bid Form without irregularities, excisions, special

conditions, or alternate proposals for any item unless specifically requested in the Bid Form, and shall include fully executed Oath, Representation and Affidavit forms and evidence of compliance with the requirements of the DCA's Section 3 Policy for Covered HUD Funded Activities.

The City of Waycross, Georgia reserves the right to reject any or all bids including without limitation, the rights to reject any or all nonconforming, nonresponsive, unbalanced or conditional Bids and to make an award in the best interest of the City of Waycross. The City of Waycross provides equal opportunity for all businesses and does not discriminate against any person or business because of race, color, religion, sex, national origin, and handicap or veterans status.

**10.0 CONTRACT TIME**

All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed.

**(END OF SECTION)**

**SECTION 00410  
BID FORM**

**PROJECT NAME:** 2015 Streets, Drainage & Utility Improvements  
City of Waycross, Georgia  
Georgia Department of Community Affairs  
Community Development Block Grant Program  
Grant Application Pending

**SUBMITTED TO:** City of Waycross  
417 Pendleton Street  
Waycross, Georgia 31502

**SUBMITTED BY:**

**Company Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Georgia Utility Contractor's License Number:** \_\_\_\_\_

**Acknowledge Receipt of Addenda Numbers:** \_\_\_\_\_  
\_\_\_\_\_

The undersigned as **BIDDER** hereby declares that the only person or persons interested in the Proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in the proposal or in the Contract to be entered into; that this Proposal is made without connection with any other person or parties making a Proposal, and that it is in all respects fair and in good faith without collusion or fraud.

The **BIDDER** declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the plans and specifications for the work and the documents relative thereto; and has read all General Conditions, Supplementary Conditions and CDBG Contract Conditions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The **BIDDER** proposes and agrees, if the Proposal is accepted, to contract with the **City of Waycross, Georgia** to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor to complete the work in full and complete accordance with the shown, noted, described and reasonably intended requirements of the plans, specifications and contract documents to the full and entire satisfaction of the **City of Waycross, Georgia** with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and contract documents for the prices set forth on the following pages.

**BID ITEMS TO BE DEVELOPED AND INSERTED HERE**

The **BIDDER** agrees to perform all work for the unit price or lump sum prices stated above. Items of work not listed but required for a complete installation shall be included in the price of related items. The **BIDDER** further agrees and understands that the quantities shown for unit price items are approximate and, as such, are subject to either increase or decrease, and that the **BIDDER** will be paid for actual quantities installed at the unit prices stated in the bid form. Lump sum prices stated above are subject to increase or decrease only by a properly executed change order.

The **BIDDER** understands that the **City of Waycross, Georgia** reserves the right to accept or reject either of the Additive Alternates, or delete one or more Bid Items for the purpose of making an award; and the right to reject any or all bids including without limitation, the right to reject any or all nonconforming, nonresponsive, unbalanced or conditional Bids; and to make an award in the best interest of the City of Waycross.

The **BIDDER** further proposes and agrees to commence work under this contract, with adequate force and equipment, on a date to be specified in a written order of the Owner and shall fully complete all work hereunder within **180** consecutive calendar days from and including said date.

The undersigned **BIDDER** further agrees that, in case of failure on his part to execute the said Contract and Bonds within fifteen (15) consecutive calendar days after written notice being given of the award of the Contract, the check or bid bond accompanying this Bid and the monies payable thereto, shall be paid into the funds of the **City of Waycross, Georgia** as liquidated damages for such failure, otherwise, the check or bid bond accompanying this Bid shall be returned to the undersigned.

The undersigned agrees to abide by all conditions of this Advertisement for Bids and certifies that he/she is authorized to sign this Bid for the **BIDDER**.

This the \_\_\_\_\_ day of \_\_\_\_\_, 2015.

**Company Name (Please type or Print):**

**Person Authorized to Sign:**

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Street: \_\_\_\_\_

Signature: \_\_\_\_\_

City: \_\_\_\_\_

Title: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**SECTION 00430  
BID BOND**

**State of Georgia  
City of Waycross  
County of Ware**

**KNOW ALL MEN BY THESE PRESENT**, that we \_\_\_\_\_

\_\_\_\_\_, as Principal, and \_\_\_\_\_

\_\_\_\_\_, as Surety, are held and firmly bound unto the

City of Waycross, Georgia in the sum of \_\_\_\_\_

\_\_\_\_\_ \$ ( \_\_\_\_\_ ) lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, personal representatives, successors and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, the Principal has submitted to the City of Waycross a Bid for: **“2015 Streets, Drainage & Utility Improvements” (Georgia Department of Community Affairs Community Development Block Grant Program Grant Application Pending – March 27, 2015)**

**NOW THEREFORE**, the conditions of this obligation are such that if the Bid be accepted, the Principal shall, within fifteen days (15) days after receipt of conformed contract documents, execute a contract in accordance with the Bid upon the terms, conditions and prices set forth therein, and in the form and manner required by the City of Waycross and execute a sufficient and satisfactory Performance Bond and Payment Bond payable to the City of Waycross, each in an amount of one hundred percent (100%) of the total contract price, in form and with security satisfactory to the City of Waycross, then this obligation shall be void; otherwise, it shall be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all to the foregoing requirements within the time specified above, immediately pay to the aforesaid City of Waycross, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

This bond is given pursuant to and in accordance with the provisions of Section 23-1705 et seq. of the Code of Georgia, as amended by the Act approved February 27, 1956, and all the provisions of the law referring to this character of bond as set forth in said sections or as may be hereinafter enacted and these are hereby made a part hereof to the same extent as if set out herein in full.

***(Continued on Next Page)***

**IN WITNESS WHEREOF**, the said Principal has hereunder affixed its signature and said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers, on

This \_\_\_\_\_ Day of \_\_\_\_\_, 2014

**PRINCIPAL:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SURETY:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SECTION 00450  
OATH**

**State of Georgia  
City of Waycross  
County of Ware**

I \_\_\_\_\_ (Name of Individual) solemnly swear that in the procurement of the Contract for **“2015 Streets, Drainage & Utility Improvements” (Georgia Department of Community Affairs Community Development Block Grant Program – Pending Grant Application – March 27, 2015)** that I or any other person associated with me or my business, corporation or partnership has prevented or attempted to prevent competition in the bidding of said project or from submitting a bid for this project by any means whatsoever.

Lastly, I swear that neither I, nor any other person associated with me or my business, Corporation or partnership has caused or induced any other bidder to withdraw his/her bid from consideration for this project. Said oath is filed in accordance with the requirements set forth in O.C.G.A. § 36-91-21 (e).

This \_\_\_\_\_ Day of \_\_\_\_\_, 2014

Name of Party: \_\_\_\_\_

Corporate or Partnership Name: \_\_\_\_\_

Sworn to and subscribed before me this \_\_\_\_\_ Day of \_\_\_\_\_, 2014

NOTARY PUBLIC:

Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(SEAL)



**SECTION 00460**  
**MANDATORY SECTION 3 SOLICITATION PACKAGE**

# DO YOU USE THIS PACKAGE?

(ANSWER ALL 3 QUESTIONS)

YES    NO



1. Did you contract for \$200,000 or more directly from DCA? If so, you are a Sub-recipient and this package is applicable to you.



2. Did you contract for \$100,000 or more directly from the Sub-recipient (see above)? If so, you are a Contractor and this package is applicable to you.



3. Did you contract for \$100,000 or more directly from the Contractor (see above)? If so, you are a Sub-Contractor and this package is applicable to you.



If you answered “**YES**” to any question, this package **IS** applicable to you

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### IMPORTANT NOTE!!!

Even if you answered “**NO**” to **ALL** questions, this package **BECOMES APPLICABLE** to you when, during the life of your contract, you trigger “**YES**” to any of the above questions.

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This form must be returned to the soliciting entity with your bid package. Failure to return this documentation will render your bid package as non-responsive.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Position Title

\_\_\_\_\_  
Entity Name

\_\_\_\_\_  
Date

**Georgia Department of Community Affairs  
60 Executive Park South, NE, Atlanta, GA 30329**

## Mandatory Section 3 Solicitation Package

This mandatory solicitation package has been developed in accordance with DCA's Section 3 Policy for Covered HUD Funded Activities. DCA encourages all sub-recipients, contractors, and sub-contractors to review this policy prior to completion of the solicitation package. For those solicitations that meet the applicable Section 3 thresholds, this package must be returned in its entirety to the contracting entity. The Section 3 Clause, required forms, and instructions are included in this package.

The following Section 3 forms must be completed and returned as instructed:

- Section 3 Self Certification and Action Plan
- Previous Section 3 Compliance Certification
- Assurance of Compliance Certification

Additionally, if the contractor is claiming certification as a 51% Resident Owned Business (ROB) or is certifying as a 30% employer, the Resident Self-Certification and Skills Data Form must be returned for all employees who meet the low- or very low-income requirement as well as the appropriate Section 3 Business Certification.

## Section 3 Solicitation Overview and Instructions for Contractors

The DCA Section 3 Policy requires that, when the **Section 3 regulation is triggered**, every effort within the contractor's disposal must be made, to the greatest extent feasible, to offer all available employment and contracting opportunities to Section 3 residents and Section 3 businesses based on the compliance methods below.

### All Contracts and All Contractors must meet Section 3 compliance by:

- A. Giving notice of any and all opportunities for employment and contracting to residents of the local Public Housing Authority (PHA), and other low and very low income area residents and businesses, by posting the opportunity in community sources generally available to low income residents and the general public. Exercising a **minimum of three (3)** of the following listed sources must be completed prior to offering employment to anyone not covered by Section 3 requirements:
  1. The local community newspaper
  2. The most widely distributed newspaper
  3. Company or agency website
  4. The management office of the local housing authority/homeless service agency/local low income housing community
  5. Local Workforce Board (i.e. Department of Labor)
  6. Local office of the Georgia Division of Family and Children Services
  7. Dodge Room <http://www.construction.com/dodge/dodge.asp>
  8. Other locations as approved by DCA
- B. Clearly stating in notices that the position is a "Section 3 covered position under the HUD Act of 1968 and that Section 3 Residents and Business Concerns are encouraged to apply."
- C. Placing the Section 3 Clause provided in Appendix A in ALL solicitations.
- D. When possible, other activities may be done to demonstrate effort to comply with the Safe Harbor Limits. These other efforts are listed in the appendix to part 135 of the Code of Federal Regulations—24 CFR Part 135 and include:
  1. Distributing or posting flyers advertising positions to be filled;
  2. Contacting the local government or housing authority for a list of residents who have expressed interest in Section 3 employment;
  3. Holding job informational meetings for residents, contractors, etc...;
  4. Contacting agencies administering HUD YouthBuild programs and requesting their assistance in recruiting HUD YouthBuild program participants for training and employment positions.

- E. Linking residents or businesses to local resources that may be available to help prepare them for applying for and achieving the opportunity.
- F. Working with DCA, the subrecipient or contractor as applicable in developing a communication and follow up process to track and report all Section 3 applications and hiring activities to ensure the reporting of compliance efforts, and that contracting and sub-contracting are accurate. Provide preference in hiring and contracting to Section 3 applicants and contractors when employment or contracting opportunities are offered and all requirements are met and remain equal. Contractors must:
  - 1. Provide this package to all sub-contractors when soliciting bids for all contracts or sub-contracts;
  - 2. Meet all the same processes in A-E; and
  - 3. Provide Preference to all sub-contractors meeting the definitions as stated in Section VI of DCA's Section 3 Policy for Covered HUD Funded Activities.
- G. In order for Preference as a Section 3 Contractor to be factored into the award decision, all elements of the solicitation criteria must be equal between contracts. This means price and all other factors must be equal. Then the contractors that elect Preference on the Certification and Action Plan form that meet that Preference criterion will be provided Preference in the award of the contract as provided in Part VI., Preferences and Eligibility of DCA's Section 3 Policy for Covered HUD Funded Activities.

Example:

Bill's electrical and Sue's Electrical bid a job where the housing authority has a budget of \$500,000. Bill bids \$480,000 and elects a Preference as a Section 3 business concern because he qualifies as a 51% Resident Owned Business. Sue bids \$450,000 but does not elect any Preference. Both companies met all the other requirements. Sue will be awarded the contract because Bill's bid was higher.

**Important items to remember about receiving Preferences in contract award:**

All contractors and/or subcontractors that elect a Preference and are awarded a contract must be in compliance prior to the issuance of a Notice to Proceed by DCA, the subrecipient, or the contractor based on the policies established for the applicable DCA funding program. The contractor and/or subcontractor must maintain the elected Preference standard during the entire contract or risk having the contract terminated for failure to comply. **See Appendix B for further details.**

When a contractor and/or subcontractor that elected a Preference is unable to identify a Section 3 resident or a Section 3 business for employment or contracting opportunities, the contractor then **must** offer employment related training to the Section 3 residents in the county. The training must be provided according to Part VII – Other Economic Opportunities in DCA's Section 3 Policy.

## **Appendix A**

### **Section 3 Clause**

#### **Training and Employment Opportunities for Residents in the Project Area (Section 3, HUD Act of 1968; 24 CFR 135)**

(a) The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(b) The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.

(c) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of Section 3 apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(d) The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.

(e) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 135.

(f) Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

## **Appendix B**

### **Section 3 Contract Non-Compliance Cure /Termination Processes**

This language is a component of contract compliance with the work to which you are responding in this solicitation. The full requirements are provided in the Section 3 Clause found elsewhere in this package and in DCA's Section 3 Policy for Covered HUD Funded Activities.

Any subrecipient or contractor claiming Preference **must be in compliance prior to issuance of a notice to proceed by DCA, subrecipient, or contractor based on the policies established for the applicable DCA funding program. This preference can be met by any of the three qualifications:**

1. Resident Owned Businesses (ROBs) owned and operated at 51% by Section 3 Residents.
2. Businesses that employ Section 3 residents at no less than 30% of the contractors aggregate full time staff.
3. Contractors that at the time of bid show evidence (meaning the specific name and preference met) of their intent to award no less than 25% of their total award to Section 3 business concerns.

The subrecipient or contractor must maintain compliance throughout the life of the contract. The contractor understands and agrees that a compliance management firm may be used to conduct routine and certified payroll reviews to ensure compliance. The Contractor agrees to provide the payroll data in an Excel or Word format each time the payroll is processed throughout the contract.

Failure to meet the Section 3 requirements will result in penalties up to and including contract termination. Any contractor triggering the regulation by doing any hiring or contracting once they are awarded the contract through execution must comply with the Section 3 requirements by executing the efforts on their Certification and Action Plan in accordance with DCA's Section 3 Policy.

DCA, the subrecipient or contractor shall execute these remedies to achieve compliance in this order:

#### **NON-COMPLIANCE CURE PROCESS**

- A. Based on the first observation or report of non-compliance with Section 3, the subrecipient or contractor will be sent an e-mail by the compliance manager notifying them of their non-compliance issue. The subrecipient or contractor will have until the next payroll or 10 business days, whichever is less, to bring the contract into compliance and/or justify in writing why they cannot meet compliance requirements.
- B. DCA, the subrecipient or contractor must render a response to the violating party within 10 business days of receipt of the violating party's letter of reason for non-compliance. If DCA, the subrecipient, or the contractor deems the reason to be unacceptable, at its option, DCA, the subrecipient, or the contractor can extend the response period one time

for up to 5 business days to allow the violating party to identify and secure other compliance options.

### **NON-COMPLIANCE TERMINATION PROCESS**

If the violating party fails to take any corrective action to bring the contract into compliance within the allotted time, or DCA, the subrecipient, or the contractor rejects any of the corrective plans and justifications for non-compliance, DCA, the subrecipient, or the contractor will either terminate the contract immediately or impose liquidated damages equal to the number of days out of compliance divided by the total contract period multiplied by the contract amount. For example, if a violating party is out of compliance for 30 days of a total contract period of 120 days and as part of total contract of \$600,000, then the liquidated damages will equal 25% (30/120) of the total contract amount (\$600,000), or \$150,000. At DCA's determination, any liquidated damages received must be paid to the subrecipient or DCA, at DCA's determination, and be used to promote economic opportunities for Section 3 Residents and Business Concerns.

DCA, the sub-recipient, or the contractor will hold **all funds due to the violating party until such time that a financial workout is completed.**

***Additionally the violating party may be banned by DCA, the sub-recipient, and the contractor on future HUD funded projects.***



**Appendix C**  
**Section 3 Forms**

**Georgia Department of Community Affairs  
Required Submittal - Section 3 Self-Certification and Action Plan**

All firms and individuals intending to do business with DCA, its subrecipients and contractors MUST complete and submit this Action Plan and submit it with the bid, offer, or proposal. **Any solicitation response that does not include this document (completed, signed, and notarized) will be considered non-responsive and not eligible for award.**

Business Name:		
D.B.A. (if different from above):		
Address:	City:	State/Zip:
Business Phone: (     )	Fax: (     )	
E-Mail:	Business Website:	
Federal Employer Identification Number:	Owner Social Security Number (if no EIN):	
Contact Person & Title:	Contact Phone:	
Trade Description: <input type="checkbox"/> Carpentry <input type="checkbox"/> Heating (HVAC) <input type="checkbox"/> Electrical <input type="checkbox"/> Painting <input type="checkbox"/> Masonry Restoration <input type="checkbox"/> Asbestos <input type="checkbox"/> Plumbing <input type="checkbox"/> Roofing <input type="checkbox"/> Lead (Abatement) <input type="checkbox"/> General Contractor <input type="checkbox"/> Concrete <input type="checkbox"/> Ironwork <input type="checkbox"/> Carpet/Flooring <input type="checkbox"/> Rubbish Removal/Hauling <input type="checkbox"/> Appraisal Services <input type="checkbox"/> Landscaping <input type="checkbox"/> Demolition <input type="checkbox"/> Other: _____ _____ _____		
Date Business was established (MM/DD/YYYY): _____		
Type of Business (Check One): <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Limited Liability Corporation (LLC) <input type="checkbox"/> Limited Liability Partnership (LLP) <input type="checkbox"/> Joint Venture <input type="checkbox"/> Other (Describe): _____ _____ _____		
Number of employees: Full-time: _____ Part-time: _____ Contract: _____ Total: _____		
Section 3 employees: Full-time: _____ Part-time: _____ Contract: _____ Total: _____		
<b>I am Certifying as a Section 3 Business Concern and requesting Preference accordingly (Select only One Option):</b>		

Option 1

- A business claiming status as a Section 3 Resident-Owned Business Concern (ROB) entity:

\_\_\_\_\_ Initial here to confirm selection of this option

Option 2

- A business claiming Section 3 status, because at least 30% of the existing or newly hired workforce for this specific contract will be Section 3 residents throughout the entire contract period. If a Prime or General Contractor is electing this option, the 30% employment requirement will be for the entire project including all the sub-contractors' employees:

**Check all methods you will employ to secure Section 3 Residents/Persons**

Posting the position in community sources that are generally available to low income residents and the general public is a standard requirement. **Check at least three (3) methods you will employ:**

- The local community newspaper
- The most widely distributed newspaper
- Company or agency website
- The management office of the local housing authority, or homeless service agency, or local low income housing community
- Local Workforce Board (i.e., Department of Labor)
- Local office of the Georgia Division of Family and Children Services
- Local office of the Georgia Department of Public Health
- Dodge Room <http://www.construction.com/dodge/dodge.asp>
- Other locations identified below and subject to DCA approval:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Initial here to confirm selection of this option

*I anticipate my total number of employees for this contract to be \_\_\_\_ and \_\_\_\_ will be qualified Section 3 Residents/persons.*

Option 3

- A business claiming Section 3 status by subcontracting 25% of the dollar award to qualified Section 3 Business:

*Attach a list of intended subcontract Section 3 business(es) with subcontract amount.*

*Attach certification & all supporting documentation for each planned subcontract Section 3 Business.*

\_\_\_\_\_ Initial here to confirm selection of this option

**I am NOT Requesting Preference under Section 3:**

- I am **NOT** certifying as a qualified Section 3 Business Concern and I am not requesting a preference. However if I do trigger the regulation by doing any sub-contracting or hiring, I will comply by meeting all requirements of DCA's Section 3 policy and am committing to do the outreach as specified below.

**Check all methods you will employ to secure Section 3 Residents/Businesses**

Posting the position/contract opportunity in community sources that are generally available to low income residents and Section 3 Businesses and the general public is a standard requirement. **Check at least three (3) methods you will employ:**

- The local community newspaper
- The most widely distributed newspaper
- Company or agency website
- The management office of the local housing authority, or homeless service agency, or local low income housing community
- Local Workforce Board (i.e., Department of Labor)
- Local office of the Georgia Division of Family and Children Services
- Local office of the Georgia Department of Public Health
- Dodge Room <http://www.construction.com/dodge/dodge.asp>
- Other locations identified below and subject to DCA approval:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Initial here to confirm selection of this option

Signature: \_\_\_\_\_

Printed/Typed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Notarial Affidavit**

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
*Signature of Notary Public*

\_\_\_\_\_  
*Printed Name of Notary Public*

Commission Expiration Date: \_\_\_\_\_

*(Notarial Seal)*

**Georgia Department of Community Affairs**  
**Required Submittal - Previous Section 3 Compliance Certification**

---

Name of Business: \_\_\_\_\_

Address of Business: \_\_\_\_\_

Type of Business (Check One):     Corporation                       Partnership  
     Sole Proprietorship             Other

Business Activity: \_\_\_\_\_

All firms and individuals intending to do business with DCA, its subrecipients, or contractors **MUST** complete and submit this certification of prior compliance with their bid, offer, or proposal. Any solicitation response that does not include this document will be considered non-responsive and not eligible for award. Please check the appropriate line box below and sign and date the form.

1. I am certifying that I have complied with the HUD Section 3 Regulations, when triggered by new hiring or contracting opportunities, in my past contracts **when required** by the recipient, subrecipient or contractor by either:

- i. Certifying as Resident Owned Business (ROB); or,
- ii. Employing Section 3 residents for at least 30% of the newly hired workforce; or,
- iii. Subcontracting 25% of the total dollar award to a qualified Section 3 Business; or,
- iv. Hiring or contracting to the "greatest extent feasible" with Section 3 Residents or Section 3 Businesses.

Check this box

2. I have never done any HUD funded contracting.

Check this box

3. I completed HUD Section 3 covered contracts in the past three years but the regulation was not triggered because either there were no new hires on the contract(s) and/or I did not do any new contracting or subcontracting.

Check this box

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Required Submittal - Assurance of Compliance Certification**  
**Section 3 Action Plan**  
**Housing and Urban Development Act of 1968**  
**(12 U.S.C. 1701 U)**

**Contract/Solicitation Name or Number:**

---

**DCA Funding**

**Program:** \_\_\_\_\_

**Entity Receiving DCA Funding Award:** \_\_\_\_\_

**Purpose:** To ensure that regulations promulgated under 24 CFR Part 135 Employment Opportunities for Businesses and Lower Income Persons in Connection with Assisted Projects and the Section 3 Policy of DCA, its subrecipients and contractors to the greatest extent feasible is adhered to, and to serve as the "assurance of compliance" certification and action plan as required in the bid documents, supplemental general conditions, and required forms for the contract for any HUD work funded by DCA.

**Description of the project's work detail:** The project work will be as listed in the final scope of work in the contract with DCA, its subrecipients and contractors including any change orders. List all known subcontractors below:

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

**Subcontractor(s):** \_\_\_\_\_

*Use an additional sheet if required.*

*Note: If subcontractors are unknown at this time, print UNKNOWN on the line above. Also, the contractor must notify DCA or subrecipient if subcontractors are added or changed during the contract.*

*Any changes to this certification requires a resubmission of this form to DCA or subrecipient.*

**Preliminary Statement for Work Force Needs:**

DCA intends to meet Section 3 compliance at the highest level and it is our intent to identify any short-term and long-term employment or contracting opportunities for qualified Section 3 persons and Business Concerns during the course of the contract funded by DCA via its subrecipients and contractors. Please list the status of all planned employment positions and opportunities for this contract. **Preference for all opportunities must be given to low and very low-income residents if they qualify. If awarded a contract, regardless of whether your firm has elected a preference, you are required to provide a list of your aggregate workforce on this project. Any changes to that workforce during the project will constitute NEW hires. You must notify DCA, its subrecipient or contractor (respectively) overseeing your contract of any new hire opportunities that arise during the life of your contract. The anticipated workforce list may be provided on a separate sheet or in a different format.**

<u>List All Employees</u>	<u>Date Hired</u>	<u>Section 3 Resident (Yes/No)</u>	<u>Job Title/Trade</u>	<u>Salary Range</u>
Name: Address: City, ZIP:				
Name: Address: City, Zip Code:				
Name: Address: City, Zip Code:				
Name: Address: City, Zip Code:				

Use additional pages as needed.

**“To the Greatest Extent Feasible”:**

The Contractor has identified \_\_\_ # of **OPEN** positions with respect to this contract. The positions are filled by the \_\_\_\_\_ (Position title) of the Contractor.

Should the scope of work or duties of the contractor change to a degree requiring a modification of the work force needs, the contractor shall put forth a reasonable effort to fill vacant positions with eligible Section 3 residents.

**Documentation of “To the Greatest Extent Feasible”:**

The contractor will work with DCA, its subrecipients, and contractors staff to notify residents of any opportunities afforded under the contract. The contractor will partner with DCA, its subrecipients, and contractors by giving preference of any employment opportunities to the Section 3 persons or businesses.

The contractor shall recruit or attempt to recruit from the Section 3 area the necessary number of low-income and very low-income residents and Section 3 businesses, as applicable. The contractor must also document their recruiting efforts and any impediments to compliance with DCA’s Section 3 policy and the requirements of this solicitation package. This documentation must be submitted to the recipient or sub-recipient.

1. DCA, its subrecipients and contractors shall: Maintain a list of all low-income area residents who have applied, either on their own or from referral from any source, and employ such person if otherwise eligible and if a trainee vacancy exists.
2. Conduct solicitation in accordance with DCA’s Section 3 policy and the requirements outlined in the solicitation package.

The contractor shall review all employment applications and determine if low-income and very low-income residents or Section 3 businesses meet minimum hiring or contracting qualifications. If these applicants meet such minimum qualifications, but are not hired due to lack of employment opportunities or for other reasons, they will be placed on a priority list and offered positions/contracts upon the occurrence of the first available appropriate opening.

**Utilization of Section 3 Businesses Located Within the County:**

The subrecipient or contractor does \_\_\_ does not \_\_\_ intend to subcontract any of the work indentified in the scope of work cited in the bid specifications, scope of work or General Conditions. Should the scope of work or needs of the contractor change, the contractor shall, to the greatest extent feasible, assure that subcontracts be awarded to business concerns within the Section 3 covered area, or to business concerns owned in the substantial part (at least 51%) by persons residing in the Section 3 covered area.

**Record Keeping:**

The subrecipient, contractor or subcontractor, as applicable, shall maintain on file all records related to employment and job training of low-income and very low-income residents or other such records, advertisements, legal notices, brochures, flyers, publications, assurances of compliance from sub-contractors, etc, in connection with this contract. If a report is needed in the future, the subrecipient,



contractor or subcontractor, as applicable, agrees to provide all records upon request. The contractor shall, upon request, provide such records or copies of records to HUD, DCA, their subrecipients, contractors, staff, or agents. Records shall be maintained for at least three (3) years after the close of the contract.

**Reports:**

The subrecipient or contractor shall provide reports as required in connection with the contractor specifications. All certified and regular payrolls shall clearly detail which employees qualify under Section 3.

**Certification:**

The subrecipient or contractor will certify that any vacant employment positions, including training positions that filled:

- 1) After the subrecipient or contractor is selected but before the contract is executed, and
- 2) With persons other than those to who the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the subcontractor's obligations under 24 CFR Part 135.

**Grievance and Compliance:**

The subrecipient, contractor or subcontractor hereby acknowledges that they understand that any low-income and very low-income resident of the project area, for him/her or as representatives of persons similarly situated, seeking employment or job training opportunities in the project area, or any eligible business concerns seeking contract opportunities may file a grievance if efforts to the greatest extent feasible were not executed. The grievance must be filed with HUD not later than one hundred eighty (180) calendar days from the date of the action (or omission) upon which the grievance is based.

I attest that the information on the preceding pages is true and correct.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title



**Purpose:**

The purpose of Section 3 of the Housing and Urban Development of 1968 (12 U.S.C. 1701u) (Section 3) is to ensure that employment and other economic and business opportunities generated by HUD Financial Assistance shall be directed to the Authority Residents and other low- and very low-income persons, particularly those who are recipients of government housing assistance and to business concerns which provide economic opportunities to Residents and other low- and very low-income persons.

Section 3 resident means:

- (1) A public housing resident; or
- (2) An individual who resides in the metropolitan area or non-metropolitan county in which the section 3 covered assistance is expended, and who is:
  - I. A low-income person, as this term is defined in section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)). Section 3(b)(2) of the 1937 Act defines this term to mean families (including single persons) whose incomes do not exceed 80% of the median family income for the area, as determined by the Secretary, with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher or lower than 80% of the median for the area on the basis of the Secretary's findings that such variations are necessary because of prevailing levels of construction costs or unusually high or low-income families; or
  - II. A very low-income person, as this term is defined in section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2)). Section 3(b)(2) of the 1937 Act (42 U.S.C. 1437a(b)(2) defines this term to mean families (including single persons) whose incomes do not exceed 50% of the median family income for the area, as determined by the Secretary with adjustments made for smaller or larger families, except that the Secretary may establish income ceilings higher or lower than 50% of the median for the area on the basis of the Secretary's findings that such variations are necessary because of unusually high or low family incomes.
- (3) A person seeking the training and employment preference provided by section 3 bears the responsibility of providing evidence (if requested) that the person is eligible for the preference.

Service area means the geographical area in which the persons benefiting from the Section 3-covered project reside.

The figures below represent very low-income families; bottom figures represent low-income families. The most recent income limits established for each county may be found

at: <http://www.hud.gov/offices/cpd/affordablehousing/programs/home/limits/income/>.

**Subrecipient or Contractor to Insert 2013 Income Limits for Project Location**

FY 20XX Income Limit Area	Median Income	FY 20XX Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
		<b>Very Low (50%) Income Limits</b>								
		<b>Low (80%) Income Limits</b>								

**RESIDENT SECTION 3 SELF-CERTIFICATION  
AND SKILLS DATA FORM  
AFFADAVIT**

---

STATE OF \_\_\_\_\_

County of \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public of the City/County of \_\_\_\_\_,  
State of \_\_\_\_\_, do hereby certify that, \_\_\_\_\_, whose  
name is signed to the writing above bearing date on the \_\_\_\_\_ Day of \_\_\_\_\_,  
20\_\_\_\_, has acknowledged the same before me in my State aforesaid.

Given under my hand and official seal, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
*Signature of Notary Public*

\_\_\_\_\_  
*Printed Name of Notary Public*

Commission Expiration Date: \_\_\_\_\_

*(Notarial Seal)*

### SECTION 3 BUSINESS CONCERN SELF CERTIFICATION

The Georgia Department of Community Affairs (DCA) is seeking to extend the benefits of and to promote compliance with Section 3 by identifying Section 3 Business Concerns and targeting Section 3 Business Concerns for business opportunities, events and educational programs.

In an effort to comply with Federal Section 3 Regulations which promote contract, employment and training opportunities for State of Georgia residents, DCA has instituted a Section 3 Self Certification process.

Businesses seeking certification must complete and submit the attached Section 3 Business Concern Self Certification forms as follow:

1. If your company is qualified because it is owned (51% or more) by one or more Section 3 residents, then complete **Form A, "Section 3 Business Concern – Resident Business Owner(s) Verification"**;

**OR**

2. If your company is qualified because 30% or more of its full time permanent workforce are Section 3 Residents\*, then complete **Form B, "Section 3 Business Concern – 30% + Workforce"**.

**OR**

3. If more than 25% of all subcontract work to be awarded shall be performed by Section 3 business concerns as described above, then complete **Form C, "Section 3 Business Concern-Subcontractor"**.

Please answer all questions, sign the completed forms, and notarize the affidavit.

Completed packets must be returned to the subrecipient or contractor as follows:

Name of subrecipient/contractor: \_\_\_\_\_

Attn: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

If you have any questions or require assistance, please contact:

Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

**Form A**  
**SECTION 3 BUSINESS CONCERN**  
**Resident Business Owner(s) Verification**

A business can be certified as a Section 3 Business Concern if the business is owned (51% or more) by Georgia Section 3 Resident(s).

Name of Owner: \_\_\_\_\_

Home Street Address: \_\_\_\_\_

Home City, County, & Zip Code: \_\_\_\_\_

Name of Business: \_\_\_\_\_

Percentage of Ownership: \_\_\_\_\_%

**Low- to – Moderate Income (80% of Median)**

Check the appropriate box for your family size and income *if your total household income is equal to or less than the Gross Household Income Maximum amount listed for your appropriate household size:*

Check Box	# of Persons in Household	Gross Household Income Maximum
	1 Individual	
	2 Individuals	
	3 Individuals	
	4 Individuals	
	5 Individuals	
	6 Individuals	
	7 Individuals	
	8 Individuals	

(Effective \_\_\_\_\_, 2013)

*If the business is owned by more than one Section 3 resident, list each owner below and each should submit a separate Resident Business Owner Verification Form (Form A).*

Please list additional Section 3 Resident owners of the business below:

Name	Position	% Percentage of Ownership

**I certify that I am a resident of the State of Georgia and my total household income last year was not more than the amount shown above for my family size. I further certify the information provided is true and accurate and agree to provide upon request, documents verifying the information submitted to qualify as a Section 3 Business Concern.**

**Print:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Form B**  
**SECTION 3 BUSINESS CONCERN**  
**30% + Workforce**

A business can be certified as a Section 3 Business Concern if at least 30% of its permanent, full-time employees are Section 3 residents, or were Section 3 residents within three years of the date of the first employment with the business. You may also certify as a Section 3 Business Concern if, for this award, you will hire Section 3 residents for at least 30% of your permanent, full-time employees for this specific project. For your firm to be eligible UNDER THIS CRITERIA, you must provide the following information for **all permanent, full-time employees**.

**You may attach additional copies of this chart, if necessary.**

List All Employees	Date Hired	Section 3 Resident	Job Title/Trade	Salary Range
Name: Address: City/Zip:				
Name: Address: City/Zip:				
Name: Address: City/Zip:				
Name: Address: City/Zip:				
Name: Address: City/Zip:				
Name: Address: City/Zip:				
Total Number of Employees:	<b>Full-Time:</b> _____	<b>Part-Time:</b> _____	<b>Contract:</b> _____	
Number of Section 3 Residents:				
Section 3 % of Total Workforce:				

**I certify that the information provided is true and accurate and agree to provide upon request, any/all documents verifying the information submitted to qualify as a Section 3 Business Concern.**

**Print Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Form C**  
**SECTION 3 BUSINESS CONCERN**  
**Subcontractor Awarded**

A business can be certified as a Section 3 Business Concern if the firm makes a commitment to subcontract in excess of twenty-five percent (25%) of the total amount of subcontracts to be awarded to: A) Section 3 Resident Owned Businesses; or B) Businesses for which 30% or more of their permanent full-time workforce is comprised of Section 3 Residents.

List all work performed by Section 3 Business Concerns Identified (This Form is to be updated as Section 3 Business Concerns are awarded through the completion of the project):

Name of Business	Qualifying Conditions	Total Contract Award

All identified Section 3 Business Concerns listed above are required to complete a Section 3 Self Certification Application (Forms A – C as appropriate) or provide proof of Section 3 Certification status. Attach all required documents to this form.

**I certify that the information provided is true and accurate and agree to provide upon request, any/all documents verifying the information submitted to qualify as a Section 3 business concern.**

**Print Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**SECTION 00480**  
**NON-COLLUSION AFFIDAVIT**

This Bid is submitted to the City of Waycross, Georgia by the undersigned who is an authorized officer of the company and said company is licensed to do business in Georgia. Further, the undersigned is authorized to make these representations and certifies these representations are valid. The Proposer recognizes that all representations herein are binding on the Company and failure to adhere to any of these commitments, at the City of Waycross's option, may result in a revocation of the granted contract.

Consent is hereby given to the City of Waycross to contact any person or organization in order to make inquiries into legal, character, technical, financial, and other qualifications of the Bidder.

The Bidder understands that, at such time as the City of Waycross decides to review this Bid, additional information may be requested. Failure to supply any requested information within a reasonable time may result in the rejection of the Bid with no re-submittal rights.

The successful Bidder understands that the City of Waycross, after considering the legal, financial, technical, and character qualifications of the Bidder, as well as what in the City of Waycross's judgment may best serve the interest of its tax payers and employees, may grant a contract.

The successful Bidder understands that this Bid is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a Bid for the same, and is in all respects fair and without collusion or fraud. I understand that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.

Any contract issued will be on the basis of the Bidder's service, financial plans and arrangements being feasible and adequate to fulfill the conditions set forth in this project and the successful Bidder's response.

**Company Name (Please Type or Print):**

**Person Authorized to Sign:**

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Street: \_\_\_\_\_

Signature: \_\_\_\_\_

City: \_\_\_\_\_

Title: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**SECTION 00490  
CONTRACTOR CERTIFICATION REGARDING DEBARMENT**

ACCEPTABLE ALTERNATE WORK SHEET FOR CONTRACTOR CERTIFICATION  
REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION  
(LOWER-TIER PARTICIPANT) FOR HUD PROGRAMS

Certification regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower-Tier Covered Transactions pursuant to 24 Code of Federal Regulations, Part 24.510(b).

1. By signing and submitting this proposal, the prospective lower-tier participant certifies that neither it, its principals nor affiliates, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Further, the Participant provides the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that an erroneous certification was rendered, in addition to other remedies available to the Federal Government, the Department or agency with which this transaction originated may pursue available remedies.
3. Further, the Participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the Participant learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. By submitting this proposal, it is agreed that should the proposed covered transaction be entered into, the Participant will not knowingly enter into any lower-tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the agency with which this transaction originated.
5. It is further agreed that by submitting this proposal, the Participant will include this Certification, without modification, in all lower-tier covered transactions and in all solicitations for lower-tier covered transactions.

Contractor Name \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**NON-CERTIFICATION:**

As the perspective lower-tier participant, I am unable to certify to statements in this Certification as explained in the attachment to this proposal.

Contractor Name \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

*The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S. C. 1001.*

**SECTION 00520  
AGREEMENT**

**CONTRACT FOR SERVICES  
BY AND BETWEEN  
THE CITY OF WAYCROSS, GEORGIA  
AND  
(COMPANY TO BE NAMED)**

This CONTRACT made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2015 by and between the **City of Waycross, Georgia**, party of the first part (hereinafter referred as **OWNER**), and \_\_\_\_\_ party of the second part (hereinafter referred to as **CONTRACTOR**)

**WITNESSETH**

**OWNER** and **CONTRACTOR**, in consideration of the mutual covenants hereinafter set forth, agree as follows:

**ARTICLE 1 – WORK**

The work of this contract includes, but is not limited to, the work includes, but is not limited to, multi-infrastructure improvements along Walker, Owens, Izlar and Roosevelt Streets consisting of the following: construction of new 2" and 8" PVC water mains with related fittings, valves, hydrants and appurtenances; new gravity sewer mains with associated manholes, sewer services and cleanouts; new storm water drainage system consisting of 15" through 24" pipes and associated curb inlets and junction boxes; street improvements consisting of new concrete curb and gutter, spot repairs to subgrade and base, milling and asphalt resurfacing. All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed.

**ARTICLE 2 – THE PROJECT**

The WORK described under ARTICLE 1 above shall be performed in strict conformity with the plans entitled:

**2015 Streets, Drainage & Utility Project  
City of Waycross, Georgia**

**ARTICLE 3 – ENGINEER**

The PROJECT has been designed by Coastal Engineering Consultants, Inc., P.O. Box 1895, Brunswick, Georgia 31521, and is hereinafter called **ENGINEER**. The **ENGINEER** has the rights and authority, as the **OWNER'S** representative, to oversee the construction phase of the project and to assume all duties and responsibilities assigned by the **OWNER** in connection with the completion of the WORK in accordance with the Contract Documents.

#### ARTICLE 4 – CONTRACT TIMES

The **CONTRACTOR** shall commence the **WORK** to be performed under this Contract on a date to be specified in a written order from the **OWNER** and shall fully complete all work hereunder within one hundred eighty (180) consecutive calendar days from that date, except as otherwise provided for in these documents. Time is of the essence of this Contract, and the **CONTRACTOR** shall pay to the **OWNER**, not as a penalty, but as liquidated damages, the sum of \$300 dollars for each calendar day that he shall be in default of completing the work within the time frame stated herein. Because of the difficulty in fixing damages suffered by the **OWNER** on account of such default, damages are herein agreed upon as stated.

The right of the **CONTRACTOR** to proceed shall not be terminated nor shall the **CONTRACTOR** be charged for liquidated damages for any delays in the completion of the work due to:

- A. Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency
- B. Any acts of the **OWNER**
- C. Causes not reasonably foreseeable by the parties to this Contract at the time of execution of the Contract which are beyond the control and without the fault or negligence of the **CONTRACTOR** including, but not limited to, acts of God or of the public enemy, acts of another **CONTRACTOR** in the performance of some other Contract with the **OWNER**, fires, floods, epidemics, quarantine, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes and cyclones
- D. Any delay of any subcontractor occasioned by any of the causes specified in paragraphs A, B or C of this ARTICLE 4.

Provided however that the **CONTRACTOR** promptly notified the **OWNER** within ten (10) days of the cause of the delay. Upon receipt of such notification, the **OWNER** shall ascertain the facts and the cause and extent of the delay. If upon the basis of the terms of this Contract the delay is properly excusable, the **OWNER** shall extend the time for completing the Work for a period of time commensurate with the period of excusable delay.

#### ARTICLE 5 – CONTRACT PRICE

The **OWNER** hereby agrees to pay to the **CONTRACTOR** for the faithful performance of this Contract, subject to additions and deductions as provided for in the construction specifications or Bid Form, in lawful money of the United States, the amounts listed below:

- A. For all unit price work, an amount equal to the sum of the established unit price for each separately identified item of unit price work times the estimated quantity of that item as established in the Bid Form.
- B. For all lump sum work, an amount equal to the lump sum price for each separately identified lump sum item as established in the Bid Form.

- C. As provided for in the Bid Form, The **CONTRACTOR** agrees and understands that the quantities shown for unit price items are approximate and, as such, are subject to either increase or decrease, and that the **CONTRACTOR** will be paid for actual quantities installed at the unit prices stated in the Bid Form.
- D. Lump sum prices stated in the Bid Form are subject to increase or decrease only by a properly executed change order.

The Total Amount Bid for all unit price and lump sum items is \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).

#### **ARTICLE 6 – PAYMENT PROCEDURES**

Not later than the 25<sup>th</sup> day of each calendar month, provided estimates are promptly submitted as the work progresses, the **OWNER** shall make partial payment to the **CONTRACTOR** up to 90% of the value of labor and materials incorporated in the work and of materials on hand at the site of the work for and including the last day of the preceding month, less payments already made and less deductions for any unacceptable or defective work. The **OWNER** may also withhold from time to time payment to the **CONTRACTOR** in such an amount or amounts as may be necessary to pay and fully satisfy all claims and demands for labor and services rendered and materials furnished in or about the work as elsewhere provided for in these documents.

Upon completion of the work, the **ENGINEER** will make a final inspection of the work and, if acceptable under the Contract, will issue a final certificate of completion and a statement that the balance is due the **CONTRACTOR**. The **OWNER** shall then make final payment to the **CONTRACTOR** of the balance due under the Contract, less such amounts as may have been withheld and employed by the **OWNER** from time to time, as provided for in the preceding paragraph, to pay all claims and demands for labor, service and materials furnished; provided that before the **CONTRACTOR** shall be entitled to final payment the **CONTRACTOR** shall submit satisfactory evidence under oath that all payrolls and all amounts due for labor and materials and other indebtedness connected with the work have been fully paid and satisfied and that there are no outstanding claims or demands against the **CONTRACTOR** connected with the work.

#### **ARTICLE 7 – CONTRACTOR'S REPRESENTATIONS**

In order to induce the **OWNER** to enter into this Agreement **CONTRACTOR** makes the following representations:

- A. **CONTRACTOR** has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. **CONTRACTOR** has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress and performance of the Work.
- C. **CONTRACTOR** is familiar with and is satisfied as to all Federal, State and local laws and regulations that may affect cost, progress and performance of the Work.

- D. **CONTRACTOR** is familiar with and is satisfied as to all funding requirements that are included in SECTION 00460 – Mandatory Section 3 Solicitation Package and SECTION 00810 – CDBG Contract Conditions that may affect cost, progress and performance of the Work.
- E. **CONTRACTOR** is familiar with and is satisfied as to all Disadvantaged Business Enterprise (DBE) program requirements, if any, included in SECTION 00810 – CDBG Contract Conditions that may affect cost, progress and performance of the Work.
- F. **CONTRACTOR** has carefully studied all drawings of physical conditions in or relating to existing surface or subsurface features at or contiguous to the site (except underground utilities).
- G. **CONTRACTOR** has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by **CONTRACTOR**, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by **CONTRACTOR**, and safety precautions and programs incident thereto.
- H. **CONTRACTOR** does not consider that any further examinations, investigations, explorations, tests, studies or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance the other terms and conditions of the Contract Documents.
- I. **CONTRACTOR** is aware that no work indicated in the Contract Documents is to be performed by the **OWNER** or others.
- J. **CONTRACTOR** has correlated the information known to **CONTRACTOR**, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents, and all additional examinations, investigations, explorations, test, studies and data in the Contract Documents.
- K. **CONTRACTOR** has given **ENGINEER** written notice of all conflicts, errors, ambiguities, or discrepancies that **CONTRACTOR** has discovered in the Contract Documents, and the written resolution thereof by **ENGINEER** is acceptable to **CONTRACTOR**.
- L. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance of the Work.
- M. **CONTRACTOR** acknowledges that it will not discriminate against any employee or applicant for employment with respect to hire, tenure, conditions or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or a disability that can be reasonably accommodated. **OWNER** will require this covenant be placed in the contract with any subcontractor employed in the performance of this Contract. A breach of this covenant shall be regarded as a material breach of the Contract.

## **ARTICLE 8 – CONTRACT DOCUMENTS**

The construction plans together with this Agreement, the foregoing Bid Form, Advertisement for Bids, Instructions to Bidders, General Conditions, Supplemental General Conditions, CDBG Contract Conditions, Oath, Mandatory Section 3 Solicitation Package, Non-Collusion Affidavit, Performance Bond, Payment Bond, Certificate of Insurance, Wage Rate Determination, Technical Specifications and all Addenda hereto annexed, shall form essential parts of this Contract as if fully contained herein. Also forming essential parts of this Contract as if fully contained herein are the Notice of Award, Notice to Proceed, subsequent written amendments, work change directives and change orders.

## **ARTICLE 9 – TERMINATION FOR CAUSE**

Unearned payments under this contract may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by **OWNER**; or if the grant to the **OWNER** under the Community Development Block Grant Program is suspended or terminated. Moreover, if through any cause, the **CONTRACTOR** shall fail to fulfill its obligations under this contract in a timely and proper manner, or if the **CONTRACTOR** shall violate any of the covenants, agreements, conditions or obligations of the contract documents; the **OWNER** may terminate this contract by giving written notice to the **CONTRACTOR** and surety of such termination and specifying the effective date of such termination. In such event, the **OWNER** may take over the work and prosecute the same to completion, by contract or otherwise, and the **CONTRACTOR** and his sureties shall be liable to the **OWNER** for any additional cost incurred by the **OWNER** in its completion of the work and they shall also be liable to the **OWNER** for liquidated damages for any delay in the completion of the work as provided below. Furthermore, the **CONTRACTOR** will be paid an amount which bears the same ratio to the total compensation as the work and services actually performed bear to the total work and services required. Provided, however, that if less than sixty percent of the services required by this Contract have been performed upon the effective date of such termination, the **CONTRACTOR** shall be reimbursed (in addition to the above payment) for that portion of the actual out-of-pocket expenses (not otherwise reimbursed under this Contract) incurred by the **CONTRACTOR** during the Contract period which are directly attributable to the uncompleted portion of the services required by this Contract.

## **ARTICLE 10 – TERMINATION FOR CONVENIENCE**

The **OWNER** may terminate this contract at any time for any reason by giving at least thirty (30) days notice in writing to the **CONTRACTOR**. If the contract is terminated by the **OWNER** as provided herein, the **CONTRACTOR** will be paid a fair payment as negotiated with the **OWNER** for the work completed as of the date of termination.

## **ARTICLE 11 – TERMS**

Terms used in this Agreement shall have the meanings indicated in SECTION 00700 – General Conditions.

## **ARTICLE 12 – ASSIGNMENT OF CONTRACT**

No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically

stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

**ARTICLE 13 – SUCCESSORS AND ASSIGNS**

**OWNER** and **CONTRACTOR** each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

**ARTICLE 14 – SEVERABILITY**

Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon **OWNER** and **CONTRACTOR**, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

*(Signatures on Next Page)*



In witness whereof, the parties hereto have executed this Contract under their respective seals on the day and date first above written in three (3) counterparts, each of which shall without proof or accounting for the other counterparts be deemed an original Contract.

COMPANY TO BE NAMED

By: \_\_\_\_\_  
Name and title of corporate officer to be named

Attest to:

By: \_\_\_\_\_ Date and SEAL  
Name and title of corporate officer to be named

**CITY OF WAYCROSS, GEORGIA**

By: \_\_\_\_\_  
CLARENCE E. BILLUPS, Mayor

Attest to:

By: \_\_\_\_\_ Date and SEAL

**SECTION 00610  
PERFORMANCE BOND**

**State of Georgia  
City of Waycross  
County of Ware**

**KNOW ALL MEN BY THESE PRESENT**, that we \_\_\_\_\_

\_\_\_\_\_, as Principal, and \_\_\_\_\_

\_\_\_\_\_, as Surety, do hereby acknowledge ourselves indebted and firmly bound and held unto the City of Waycross, Georgia, for the use and benefit of those entitled thereto in the not to exceed sum of \_\_\_\_\_

\_\_\_\_\_ \$ ( \_\_\_\_\_ )  
for the payment of which will and truly to be made, in lawful money of the United States, we do hereby bind ourselves, successors, assigns, heirs, and personal representatives.

**BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:**

WHEREAS, the City of Waycross has engaged the said Contractor for the not to exceed sum of \_\_\_\_\_

\_\_\_\_\_ \$ ( \_\_\_\_\_ )

for the Project entitled:

**2015 Streets, Drainage & Utility Project  
City of Waycross, Georgia**

as more fully appears in a written Agreement bearing the same project title, a copy of which Agreement is by reference hereby made a part thereof.

**NOW, THEREFORE**, if said Contractor shall fully and faithfully perform all the undertakings and obligations under the said agreement or contract herein before referred to and shall fully indemnify and save harmless the City of Waycross from all costs and damage whatsoever which it may suffer by reason of any failure on the part of said Contractor to do so, and shall fully reimburse and repay the City of Waycross such default, and shall guarantee all products and workmanship against defects for a period of one year, then this obligation or bond shall be null and void, otherwise, it shall remain in full force and effect.

And for value received it is hereby stipulated and agreed that no change, extension of time, alteration or addition to the terms of the said Agreement or Contract or in the work to be performed there under, or the Specifications accompanying the same shall in any way affect the obligations under this obligation or bond, and notice is hereby waived of any such damage, extension of time, alteration or addition to the terms of the Agreement or Contract or to the work or to the Specifications.

This bond is given pursuant to and in accordance with the provisions of O.C.G.A. §§ 36-10-1 *et seq.* and 36-82-100 *et seq.* and all the provisions of the law referring to this character of bond as set forth in said sections or as may be hereinafter enacted, and these are hereby made a part hereof to the same extent as if set out herein in full.

**IN WITNESS WHEREOF**, the said Principal has hereunder affixed its signature and said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers, on

This the \_\_\_\_\_ day of \_\_\_\_\_, 2015, executed in three (3) counterparts.

**PRINCIPAL:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SURETY:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SECTION 00615  
PAYMENT BOND**

**State of Georgia  
City of Waycross  
County of Ware**

**KNOW ALL MEN BY THESE PRESENT**, that we \_\_\_\_\_

\_\_\_\_\_, as Principal, and \_\_\_\_\_

\_\_\_\_\_, as Surety, do hereby acknowledge ourselves indebted and firmly bound and held unto the City of Waycross, Georgia, for the use and benefit of those entitled thereto in the not to exceed penal sum of \_\_\_\_\_

\_\_\_\_\_ \$ ( \_\_\_\_\_ )  
for the payment of which will and truly to be made, in lawful money of the United States, we do hereby bind ourselves, successors, assigns, heirs, and personal representatives.

**BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:**

WHEREAS, the City of Waycross has engaged the said Contractor for the not to exceed sum of \_\_\_\_\_

\_\_\_\_\_ \$ ( \_\_\_\_\_ )

for the Project entitled:

**2015 Streets, Drainage & Utility Project  
City of Waycross, Georgia**

as more fully appears in a written Agreement bearing the same project title, a copy of which Agreement is by reference hereby made a part thereof.

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH**, that if said Contractor and all subcontractors to whom any portion of the work provided for in said Contract is sublet and all assignees of said Contract and of such subcontractors shall promptly make payments to all persons supplying him or them with labor, products, services, or supplies for or in the prosecution of the work provided for in such Contract, or in any amendment or extension of or addition to said Contract, and for the payment of reasonable attorney's fees, incurred by the claimants in suits on this bond, then the above obligation shall be void; otherwise, it shall remain in full force and effect.

**HOWEVER**, this bond is subject to the following conditions and limitations:

- (a) Any person, firm or corporation that has furnished labor, products, or supplies for or in the prosecution of the work provided for in said Contract shall have a direct right of action

against the Contractor and Surety on this bond, which right of action shall be asserted in a proceeding, instituted in the county in which the work provided for in said Contract to be performed or in any county in which Contractor or Surety does business. Such right of action shall be asserted in proceedings instituted in the name of the claimant or claimants for his or their use and benefit against said Contractor and Surety or either of them (but not later than one year after the final settlement of said Contract) in which action such claim or claims shall be adjudicated and judgment rendered thereon.

- (b) The Principal and Surety hereby designate and appoint \_\_\_\_\_ as agent of each of them to receive and accept service of process or other pleading issue or filed in any proceeding instituted on this bond and hereby consent that such service shall be the same as personal service on the Contractor and/or Surety.
- (c) In no event shall the Surety be liable for a greater sum than the penalty of this bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the final settlement of said Contract.
- (d) This bond is given pursuant to and in accordance with the provisions of O.C.G.A. §§ 36-10-1 *et seq.* and 36-82-100 *et seq.* and all the provisions of the law referring to this character of bond as set forth in said sections or as may be hereinafter enacted, and these are hereby made a part hereof to the same extent as if set out herein in full.

***(Signatures on Next Page)***

**IN WITNESS WHEREOF**, the said Principal has hereunder affixed its signature and said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers, on

This the \_\_\_\_\_ day of \_\_\_\_\_, 2015, executed in two (2) counterparts.

**PRINCIPAL:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SURETY:** \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

**(SEAL)**

Signed and Sealed in the Presence of:

1. \_\_\_\_\_

2. \_\_\_\_\_

**SECTION 00621  
CERTIFICATE OF INSURANCE**

This is to certify that \_\_\_\_\_  
(Insurance Company)

of \_\_\_\_\_  
(Insurance Company Address)

has issued policies of insurance, as identified by a policy number to the insured name below, and that such policies are in full force and effect at this time. Furthermore, this is to certify that these policies meet the requirements described in the General Conditions of this project; and it's agreed that none of these policies will be canceled or changed so as to affect this Certificate until thirty (30) days after written notice of such cancellation or change has been delivered to:

THE CITY OF WAYCROSS  
417 PENDLETON STREET  
WAYCROSS, GEORGIA 31639-0495.

It is further agreed that the City of Waycross, Georgia and Coastal Engineering Consultants, Inc. shall be named as an additional insured on the Contractor's policy.

1. **Insured:** \_\_\_\_\_
2. **Project Name:** **2015 Streets, Drainage & Utility Project  
City of Waycross, Georgia**
3. **Policy Number(s):** \_\_\_\_\_

**Date:** \_\_\_\_\_  
(Insurance Company)

**Issued At:** \_\_\_\_\_  
(Authorized Representative)

**Address:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note:** Please attach Certificate of Insurance form to this page.

**SECTION 00622  
CERTIFICATE OF DRUG FREE WORKPLACE**

In order to have a drug- free workplace, a business shall:

Publish a statement notifying employees that the unlawful, manufacture, distribution, dispensing, possession, or use of controlled substances is prohibited in the workplace and specifying the actions that shall be taken against employees for violation of such prohibition.

Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

As a condition of working on the commodities or contractual services then under bid, the employee shall notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of any controlled substance law of the United States or any State, for a violation occurring in the workplace no later than five (5) days after such conviction.

Impose a sanction on, or require satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

**Company Name:** \_\_\_\_\_

**Authorized Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**SECTION 00623  
E-VERIFY CONTRACTOR AFFIDAVIT AND AGREEMENT**

***Georgia Security Immigration and Compliance (GSIC) Act***

The City of Nashville, Georgia and Contractor agree that compliance with the requirements of O.C.G.A. § 13-10-91 and Rule 300-10-1-.02 of the Rules of the Georgia Department of Labor are conditions of this Agreement for the physical performance of services.

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, *stating affirmatively that the individual, firm, or corporation which is contracting with the City of Nashville, Georgia has registered with and is participating in the federal work authorization program known as: "E-Verify", web address <https://e-verify.uscis.gov/enroll/> operated by the United States Citizenship and Immigration Services Bureau of the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. The undersigned Contractor also verifies that he/she/it is using and will continue to use the federal work authorization program throughout the contract period.*

The undersigned Contractor agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to the contract with the City of Nashville, Georgia, Contractor will secure from each subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees the Contractor will advise the City of Nashville, Georgia of the hiring of a new subcontractor and will provide the City of Nashville, Georgia with a Subcontractor Affidavit attesting to the Subcontractor's name, address, user identification number, and date of authorization to use the Federal Work Authorization Program within five (5) days of the hiring before the Subcontractor begins working on the Project. Contractor also agrees to maintain all records of such compliance for inspection by the City of Nashville, Georgia at any time and to provide a copy of each such verification to the City of Nashville, Georgia at the time the subcontractor(s) is retained to perform such services.

***(Continued on Next Page)***

\_\_\_\_\_  
**E-Verify Employment Eligibility Verification User I.D. Number**

\_\_\_\_\_  
**Date of Authorization To Use Federal Work Authorization Program**

\_\_\_\_\_  
**Name of Contractor**

\_\_\_\_\_  
**Title of Authorized Officer or Agent of Contractor**

\_\_\_\_\_  
**Signature and Printed Name of Authorized Officer or Agent**

Sworn to and subscribed before me this the \_\_\_\_\_ day of \_\_\_\_\_, 2014.

NOTARY PUBLIC:

Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**(NOTARY SEAL)**

As of the effective date of O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "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).

Authority O.C.G.A. § 13-10-91. **History.** Original Rule entitled "Contractor Affidavit and Agreement" adopted F. May 25, 2007; eff. June 18, 2007, as specified by the Agency.

**SECTION 00624  
E-VERIFY SUBCONTRACTOR AFFIDAVIT AND AGREEMENT**

***Georgia Security Immigration and Compliance (GSIC) Act***

The City of Nashville, Georgia and Subcontractor agree that compliance with the requirements of O.C.G.A. § 13-10-91 and Rule 300-10-1-.02 of the Rules of the Georgia Department of Labor are conditions of this Agreement for the physical performance of services.

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, *stating affirmatively that the individual, firm, or corporation which is contracting with a Contractor contracting with the City of Nashville, Georgia has registered with and is participating in the federal work authorization program known as: E-Verify”, web address <https://e-verify.uscis.gov/enroll/> operated by the United States Citizenship and Immigration Services Bureau of the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicable provisions and deadlines established in O.C.G.A. §13-10-91. The undersigned Subcontractor also verifies that he/she/it is using and will continue to use the federal work authorization program throughout the contract period.*

The undersigned Subcontractor agrees that, should it employ or contract with any other subcontractor(s) in connection with the physical performance of services pursuant to the contract with the City of Nashville, Georgia, Subcontractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Subcontractor further agrees the Subcontractor will advise the City of Nashville, Georgia of the hiring of a new subcontractor and will provide the City of Nashville, Georgia with a Subcontractor Affidavit attesting to the Subcontractor’s name, address, user identification number, and date of authorization to use the Federal Work Authorization Program within five (5) days of the hiring before the Subcontractor begins working on the Project. Subcontractor also agrees to maintain all records of such compliance for inspection by the City of Nashville, Georgia at any time and to provide a copy of each such verification to the City of Nashville, Georgia at the time the subcontractor(s) is retained to perform such services.

***(Continued on Next Page)***

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**E-Verify Employment Eligibility Verification User I.D. Number**

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**Date of Authorization To Use Federal Work Authorization Program**

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**Name of Subcontractor**

---

**Title of Authorized Officer or Agent of Subcontractor**

---

**Signature and Printed Name of Authorized Officer or Agent**

Sworn to and subscribed before me this the \_\_\_\_\_ day of \_\_\_\_\_, 2014.

NOTARY PUBLIC:

Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**(NOTARY SEAL)**

As of the effective date of O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "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).

Authority O.C.G.A. § 13-10-91. **History.** Original Rule entitled "Contractor Affidavit and Agreement" adopted F. May 25, 2007; eff. June 18, 2007, as specified by the Agency.

**SECTION 00640**  
**CONTRACTOR'S CERTIFICATE AND RELEASE**  
*(Submitted with Final Invoice)*

**FROM:** \_\_\_\_\_  
(Name of Contractor)

**TO:** City of Waycross, Georgia

With reference to the agreement entered into the \_\_\_\_ day of \_\_\_\_\_, 2015 between the City of  
Waycross, Georgia (OWNER) and \_\_\_\_\_ (CONTRACTOR)  
(Name of Contractor)

For the Project entitled:

**2015 Streets, Drainage & Utility Project**  
**City of Waycross, Georgia**

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that there is due from and payable by the **OWNER** to the **CONTRACTOR**, under the contract and duly approved Change Orders and modifications the balance of \$ \_\_\_\_\_

2. The undersigned further certifies that in addition to the amount set forth in paragraph 1, there are outstanding and unsettled the following items which he claims are just and due and owing by the **OWNER** to the **CONTRACTOR**:

- |           |          |
|-----------|----------|
| (a) _____ | \$ _____ |
| (b) _____ | \$ _____ |
| (c) _____ | \$ _____ |
| (d) _____ | \$ _____ |

(Itemize claims and amounts due) (If none, so state)

3. The undersigned further certifies that all work required under this contract including change orders has been performed in accordance with the terms thereof, and that there are no unpaid claims for materials, supplies or equipment and no claims of laborers or mechanics for unpaid wages arising out of the performance of this contract, and that the wage rates paid by the Contractor and all Subcontractors were in conformity with the contract provisions relating to said wage rates.

4. Except for the amounts stated under paragraphs 1 and 2 hereof, the undersigned has received from the **OWNER** all sums of money payable to the undersigned under or pursuant to the above mentioned Agreement or any modification or change thereof.
  
5. That in consideration of the payment of the amount stated in paragraph 1 hereof the undersigned does hereby release the **OWNER** from any and all claims arising under or by virtue of this contract, except the amount listed in paragraph 2 hereof; provided, however, that if for any reason the **OWNER** does not pay in full the amount stated in paragraph 1 hereof, said deduction shall not affect the validity of this release, but the amount so deducted shall be automatically included under paragraph 2 as an amount which the **CONTRACTOR** has not released but will release upon payment thereof. The **CONTRACTOR** further certifies that upon the payment of the amount listed in paragraph 2 hereof, and of any amount which may be deducted from paragraph 1 hereof, he will release the **OWNER** from any and all claims of any nature whatsoever arising out of said contract or modification thereof, and will execute such further releases or assurances as the **OWNER** may request.

**CONTRACTOR**

**Company:** \_\_\_\_\_

**By:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**(SEAL)**

Sworn to and subscribed before me this the \_\_\_\_\_ day of \_\_\_\_\_, 2015.

NOTARY PUBLIC:

Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

**(NOTARY SEAL)**

**SECTION 00700  
GENERAL CONDITIONS**

**INDEX:**

<b>0.0</b>	<b>Definitions</b>	<b>1.0</b>	<b>Contract Administration</b>
<b>2.0</b>	<b>Contract Project Representative</b>	<b>3.0</b>	<b>Notice of Award of Contract</b>
<b>4.0</b>	<b>Execution of Contract Documents</b>	<b>5.0</b>	<b>Notice to Proceed</b>
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<b>10.0</b>	<b>Indemnification</b>	<b>11.0</b>	<b>Assignments</b>
<b>12.0</b>	<b>Laws and Regulations</b>	<b>13.0</b>	<b>Notice and Service Thereof</b>
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<b>16.0</b>	<b>Payments and Completion</b>	<b>17.0</b>	<b>Contractor's Claim</b>
<b>18.0</b>	<b>Contract Agreement Jurisdiction</b>	<b>19.0</b>	<b>Ownership of Data</b>
<b>20.0</b>	<b>Contractor's Status</b>		

## 0.0 Definitions

Where used throughout these contract documents the following words and terms shall have the meanings indicated. The meanings shall be applicable to the singular, plural, masculine and feminine of the words and terms.

**Acceptance.** Formal action of the CITY OF WAYCROSS, GEORGIA in determining that the Contractor's work has been completed in accordance with the contract and in notifying the Contractor in writing of the acceptability of the work.

**Act of God.** A cataclysmic phenomenon of nature, such as a hurricane, earthquake or abnormal flood. Rain, wind, high water, or other natural phenomenon which might reasonably have been anticipated from historical records of the general locality of the work shall not be construed as acts of God.

**Addenda.** Supplemental written specifications or drawings issued prior to execution of the contract which modify or interpret the project manual by addition, deletion, clarification, or corrections.

**Bid.** Offer of a bidder submitted on the prescribed form setting forth the price or prices of the work to be performed.

**Bidder.** Individual, partnership, corporation, or a combination thereof, including joint ventures, offering a bid to perform the work.

**Contract.** The writings and drawings embodying the legally binding obligations between the CITY OF WAYCROSS, GEORGIA and the Contractor for completion of the work; Contract Documents attached to the Contract and made a part thereof as provided herein.

**Contract Documents.** The Advertisement for Bids, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award), the Contract, the Notice to Proceed, the Bonds, these General Conditions, the Special Conditions, the Specifications and Drawings, together with all Written Amendments, Change Orders, Work Change directives, and Field Orders.

**Contract Price.** Amount payable to the Contractor under the terms and conditions of the contract. Based on the price given on the Bid schedule, with adjustments made in accordance with the contract. The base amount given in the Bid schedule shall be a lump sum Bid.

**Contract Time.** Number of consecutive calendar days stated in the contract for the completion of the work or portions thereof.

**Contractor.** The individual, partnership, corporation, or combination thereof, including joint ventures who enter into the contract with the CITY OF WAYCROSS, GEORGIA for the performance of the work. The term covers subcontractors, equipment and material suppliers, and their employees.



**Contractor's Plant and Equipment.** Equipment, material, supplies, and all other items, except labor, brought onto the site by the Contractor to carry out the work, but not to be incorporated in the work.

**Day.** Calendar day.

**Defective.** An adjective which when modifying the word "work" refers to work, including but not limited to the furnishing of materials, that is unsatisfactory, faulty, deficient, or performed in an unworkmanlike manner, in that it does not conform to or meet the requirements of the Contract, any inspection, reference standard, test or approval referred to in the Contract, or has been damaged prior to a recommendation of final payment.

**Direct.** Action of the CITY OF WAYCROSS, GEORGIA by which the Contractor is ordered to perform or refrain from performing work under the contract.

**Directive.** Written documentation of the actions of the Engineer or the CITY OF WAYCROSS, GEORGIA in directing the Contractor.

**Engineer.** Whenever the word "Engineer" is used in the contract, it shall be understood as referring to the Engineer of the CITY OF WAYCROSS, GEORGIA, or such other Engineer, supervisor or inspector as may be authorized by the CITY OF WAYCROSS, GEORGIA to act in any particular area of the Contract.

**Equipment.** Mechanical, electrical, instrumentation or other device with one or more moving parts, or devices requiring an electrical, pneumatic, electronic, or hydraulic connection.

**Furnish.** To deliver to the job site or a specified location any item, equipment or material.

**Holidays.** Legal holidays designated by the CITY OF WAYCROSS, GEORGIA.

**Install.** Placing, erecting, or constructing in place any item, equipment, or material.

**May.** Refers to permissive actions.

**Owner.** The City of Waycross, Georgia.

**Owner's Representative.** The person, firm or corporation designated by the CITY OF WAYCROSS, GEORGIA.

**Paragraph.** For reference or citation purposes, paragraph shall refer to the paragraph, or paragraphs, called out by section number and alphanumeric designator where applicable.

**Person.** The term, person, includes firms, companies, corporations, partnerships, and joint ventures.

**Project.** The undertaking to be performed under the provisions of the contract.

**Punch List.** List of incomplete items of work and of items of work which are not in conformance with the contract. The list will be prepared by the Owner's Representative when the Contractor (1) notifies the Owner's Representative in writing that the work has been completed in accordance with the contract and (2) requests in writing that the CITY OF WAYCROSS, GEORGIA accept the work.

**Shall.** Refers to actions by either the Contractor or the CITY OF WAYCROSS, GEORGIA and means the Contractor or CITY OF WAYCROSS, GEORGIA has entered into a covenant with the other party to do or perform the action.

**Specifications.** That part of the contract documents consisting of written descriptions of the technical features of materials, equipment, construction system, standards, and workmanship.

**Work.** The labor, materials, equipment, supplies, services, and other items necessary for the execution, completion and fulfillment of the Contract.

*Continued on Next Page*

## 1.0 Contract Administration

The Contract Administrator for this RFP shall be Ms. Mandy Luke, City Manager/Finance Director for the City of Waycross. The Contract Administrator shall act as the CITY OF WAYCROSS, GEORGIA's Representative during the execution of any subsequent contract and related amendments. She will evaluate any contract disputes in a fair and unbiased manner. The decisions of the Contract Administrator shall be final and conclusive and binding upon all parties to the Contract. Any contractual questions arising during the Bid period or during the contract period(s) are to be addressed to the Contract Administrator at the following address:

City of Waycross  
Attn: Jessica King Deal  
417 Pendleton Street  
Waycross, Georgia 31502  
Phone: (912) 287-2945  
E-Mail: [jdeal@waycrossga.com](mailto:jdeal@waycrossga.com)

## 2.0 Owner's Representative

The Owner's Representative is the CITY OF WAYCROSS, GEORGIA's day-to-day manager of the contracted services. He shall provide the successful Bidder direction and monitor the results within the limits of the contract's terms and conditions. He will decide questions that may arise as to quality and acceptability of services performed. He shall judge as to the accuracy of quantities submitted by the successful Bidder in payment requests and the acceptability of the services that these quantities represent. He will be the point-of-contact for developing contract changes and amendments to be approved by the CITY OF WAYCROSS, GEORGIA. Any project questions arising, subsequent to contract award, are to be addressed to the Owner's Representative at the following address:

Coastal Engineering Consultants, Inc.  
Attn: Mr. N. John Hunkele, Jr., P.E.  
P. O. Box 1895  
Brunswick, Georgia 31521  
Phone: (912) 223-0647  
Email: [JohnH@cec-ga.com](mailto:JohnH@cec-ga.com)

## 3.0 Notice of Award of Contract

As soon as possible, and within sixty (60) days after receipt of bids, the CITY OF WAYCROSS, GEORGIA shall notify the successful Bidder of its intent to enter into a contract agreement. Should the CITY OF WAYCROSS, GEORGIA require additional time to award a contract, the time may be extended by mutual agreement between the parties. If an Award of Contract has not been made within sixty (60) days from the bid opening date or within the extension mutually agreed upon, the Bidder may withdraw the bid without further liability on the part of either party.

#### **4.0 Execution of Contract Documents**

- 4.1** Within fifteen (15) days subsequent to successful contract negotiations, the CITY OF WAYCROSS, GEORGIA shall furnish the successful Bidder the conformed copies of Contract Documents for execution by him.
- 4.2** Within fifteen (15) days after receipt of the Contract Documents, the successful Bidder shall return all the documents properly executed by him. Attached to each document shall be the certificate of insurance and proper licenses required by Federal, State, or Local authorities.
- 4.3** Within thirty (30) days after receipt of the Contract Documents, executed by the successful Bidder certificates of insurances and licenses, the CITY OF WAYCROSS, GEORGIA shall complete the execution of the documents. Distribution of the completed documents will be made upon completion.
- 4.4** Should either party require an extension of any of the time limits stated above, this shall be done only by mutual agreement between both parties.

#### **5.0 Notice to Proceed**

The Notice to Proceed shall be issued within ten (10) days of the execution of the Contract Agreement by the CITY OF WAYCROSS, GEORGIA. If there are reasons why the Notice to Proceed should not be issued within this period, the time may be extended by mutual agreement between the CITY OF WAYCROSS, GEORGIA and successful Bidder. If the Notice to Proceed has not been issued within the ten (10) day period or within the period mutually agreed upon, the successful Bidder may terminate the Contract Agreement without further liability on the part of either party.

#### **6.0 Protest of Award**

All protests of the award must be filed in writing with the CITY OF WAYCROSS, GEORGIA within ten (10) days after the award of bid. The protest must describe in detail all alleged deficiencies. Any violations of law not specifically set forth in the protest are deemed waived. The validity of the protest shall be determined by the CITY OF WAYCROSS, GEORGIA Contract Administrator and the review shall be limited to any alleged violation of federal, state or local law.

#### **7.0 Insurance**

The successful Bidder shall not commence the Work under the Contract until all insurance described below has been obtained and such insurance has been approved by the CITY OF WAYCROSS, GEORGIA, nor shall the successful Bidder allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved by the successful Bidder.

The successful Bidder shall maintain insurance with companies reasonably acceptable to the CITY OF WAYCROSS, GEORGIA, authorized to do business in Georgia, and having a rating with A.M. Best & Co. of A-VII or better, unless otherwise approved in writing by the CITY OF WAYCROSS, GEORGIA. Such insurance as will protect the successful Bidder from claims set forth herein below which may

arise out of or result from the operations of the successful Bidder under the contract, whether such operations be by the successful Bidder, by anyone directly or indirectly employed by the successful Bidder or by anyone for whose acts the successful Bidder may be liable including, but not limited to, the following:

- 7.1** Claims under workers' compensation, disability benefit, and other similar employee benefit acts;
- 7.2** Claims for damages because of bodily injury, occupational sickness, disease, or death of any employee of the successful Bidder;
- 7.3** Claims for damages because of bodily injury, sickness, disease, or death of any person other than an employee of the successful Bidder;
- 7.4** Claims for damages insured by usual personal injury liability coverage which are sustained by any other person;
- 7.5** Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from;
- 7.6** Claims for contractually assumed liability under the contract.

The aforesaid insurance required to be maintained by the successful Bidder may be written under an umbrella policy or policies, but shall not be written for less than the limits of liability specified herein below or less than any limits required by law, whichever is greater. The successful Bidder shall maintain during such time as the successful Bidder is performing hereunder the services, subject to a policy or policies having a deductible not greater than \$25,000 on account of any one occurrence, (i) workers' compensation insurance in an amount not less than the greater of that required by law or \$1,000,000 for injuries, including accidental death to any one person, (ii) commercial general liability insurance with a general aggregate of \$2,000,000 and not less than \$1,000,000 for each occurrence, (iii) automobile liability insurance in an amount not less than a combined single limit of \$1,000,000 for injuries, including accidental death, and (iv) property damage liability insurance in an amount not less than \$1,000,000 on account of any one occurrence with a \$2,000,000 aggregate.

Certificates of insurance indicating that the successful Bidder has obtained such coverage and a copy of the policies evidencing such coverage, if requested by the CITY OF WAYCROSS, GEORGIA, shall be filed with the CITY OF WAYCROSS, GEORGIA prior to the commencement by the successful Bidder of the contracted services. Such certificates shall be in form and substance reasonably acceptable to the CITY OF WAYCROSS, GEORGIA, shall indicate that, except in respect to workers' compensation insurance coverage, CITY OF WAYCROSS, GEORGIA and Coastal Engineering Consultants, Inc. are additional named insured with respect to such coverage, shall indicate that such coverage is primary and is not contributory with any similar insurance purchased by the CITY OF WAYCROSS, GEORGIA, and shall contain a provision that such coverage shall not be canceled until at least thirty (30) days prior written notice has been given to the CITY OF WAYCROSS, GEORGIA and Coastal Engineering Consultants, Inc.

## **8.0 Quantities**

None of the various CITY OF WAYCROSS, GEORGIA departments, divisions, employees or agencies, individually or collectively, shall be required to purchase any minimum or maximum amount during the life of any contract, or extension thereof, as a result of this Advertisement for Bids.

## **9.0 Suspension or Termination of Services**

The anticipated contract between the successful Bidder and the CITY OF WAYCROSS, GEORGIA may be terminated based on any one of the following:

- 9.1** Failure of the Bidder to perform based on the Bidder's bankruptcy, lack or loss of skilled personnel, or disregarding laws, ordinances, rules, regulations or orders of any public body having jurisdiction. Should any single, multiple or all of the above conditions occur the CITY OF WAYCROSS, GEORGIA shall have the authority to terminate the contract with written notice to the successful Bidder. The successful Bidder shall be liable for any losses occurring as a result of not abiding by the terms of the contract.
- 9.2** The CITY OF WAYCROSS, GEORGIA may terminate the contract at will. All correspondence of this nature will be forwarded by certified or registered mail with return receipt requested.
- 9.3** Any termination of the successful Bidders services shall not affect any right of the CITY OF WAYCROSS, GEORGIA against the successful Bidder then existing or which may thereafter occur. Any retention of payment of monies by the CITY OF WAYCROSS, GEORGIA due the successful Bidder will not release the successful Bidder from compliance with the Contract Documents.

## **10.0 Indemnification**

The successful Bidder will indemnify and hold harmless the CITY OF WAYCROSS, GEORGIA and their officers, employees, Engineers, and agents, each and any one of them, from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the services, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the successful Bidder and anyone directly or indirectly employed by him or anyone for whose acts any of them may be liable. In any and all claims against the CITY OF WAYCROSS, GEORGIA or any of their agents or employees, by any employee of the successful Bidder, directly or indirectly employed by him, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the successful Bidder or under federal and state workers' compensation and disability benefits statutes, and applicable laws relating thereto. No party shall indemnify any other party for their own sole negligence.

## **11.0 Assignments**

The successful Bidder shall not assign the whole or any part of this Contract or any monies due or to become due hereunder without written consent of the CITY OF WAYCROSS, GEORGIA. In case the successful Bidder assigns all or any part of any monies due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the successful Bidder shall be subject to prior liens of all persons, firms, and corporations for services rendered or materials supplied for the performance of the services set forth in this contract.

## **12.0 Laws and Regulations**

The successful Bidder's attention is directed to the fact that all applicable Federal, State and Local laws and ordinances, including rules and regulations of all authorities having jurisdiction over the services, shall apply to the contract throughout. The successful Bidder shall keep himself fully informed of all laws, ordinances and regulations of the Federal, State, County and municipal governments or authorities in any manner affecting those engaged or employed in providing these services or in any way affecting the conduct of the services and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in these Contract Documents or in the specifications herein referred to, in relation to any such law, ordinance, regulation, order or decree, he shall herewith report the same in writing to the CITY OF WAYCROSS, GEORGIA.

The successful Bidder shall at all times observe and comply with all such existing laws, ordinances and regulations, and shall protect and indemnify the CITY OF WAYCROSS, GEORGIA and its agents against the violation of any such law, ordinance, regulation, order or decree, whether by himself or by his employees. Licenses of a temporary nature, necessary for the prosecution of the services, shall be secured and paid for by the successful Bidder.

## **13.0 Notice and Service Thereof**

**13.1** All notices, demands, requests, instructions, approvals, and claims shall be in writing.

**13.2** Any notice to or demand upon the Contractor shall be sufficiently given if delivered at the office of the Contractor specified in his Bid (or at such other office as the Contractor may from time to time designate to the CITY OF WAYCROSS, GEORGIA in writing), or if deposited in the United States Mail in a sealed, postage- prepaid envelope, or delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

**13.3** All papers required to be delivered to the CITY OF WAYCROSS, GEORGIA shall, unless otherwise specified in writing to the Contractor, be delivered to the Contract Administrator. Any notice to or demand upon the CITY OF WAYCROSS, GEORGIA will be sufficiently given if delivered to the Office of said Contract Administrator or if deposited in the United States Mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Contract Administrator or to such other representative of the CITY OF WAYCROSS,

GEORGIA or to such other address as the CITY OF WAYCROSS, GEORGIA may subsequently specify in writing to the Contractor.

#### **14.0 Schedule, Reports and Records**

The Contractor shall submit to the CITY OF WAYCROSS, GEORGIA schedules, reports, estimates, records and other data as the CITY OF WAYCROSS, GEORGIA may request concerning services performed or to be performed.

#### **15.0 Changes in the Contract**

**15.1 Changes in the Service.** The CITY OF WAYCROSS, GEORGIA may at any time, as the need arises, order changes within the scope of the services without invalidating the Contract Agreement. If such changes increase or decrease the amount due under the Contract Documents, or in the time required for performance of the services, an equitable adjustment shall be negotiated culminated by the issuance of a Contract Amendment and signed and sealed by the parties. The Contractor shall proceed with the performance of any changes in the services so ordered by the Contract Administrator unless the Contractor believes that such order entitles him to a change in the fee or time or both, in which event he shall give the Contract Administrator written notice thereof within fifteen (15) days after the receipt of the Contract Amendment, and the Contractor shall not execute such amendments pending the receipt of an executed Notice to Proceed instruction from the CITY OF WAYCROSS, GEORGIA.

The CITY OF WAYCROSS, GEORGIA may, when changes are minor or when changes would result in relatively small changes in the Fee or Contract Time, elect to postpone the issuance of a Contract Amendment until such time that a single amendment of substantial importance can be issued incorporating several changes. In such cases, the CITY OF WAYCROSS, GEORGIA shall indicate this intent in a written notice to the Contractor.

**15.2 Changes in Contract Price.** The contract price shall be changed only by a mutual agreement by the Contractor and the CITY OF WAYCROSS, GEORGIA transmitted as a Contract Amendment. The Contractor shall, when required by the CITY OF WAYCROSS, GEORGIA, furnish to the CITY OF WAYCROSS, GEORGIA the method and justification used in computing the change in price as related to the services ordered.

**15.3 Changes in Contract Period.** The Contract Period shall be changed only by a Contract Amendment. Changes in the services described in above and any other claim made by the Contractor for a change in the Contract Period shall be evaluated by the CITY OF WAYCROSS, GEORGIA and if the conditions warrant, an appropriate adjustment of the Contract Periods will be made.

#### **16.0 Payments and Completion**

**16.1 Application for Payment.** The Contractor shall submit an application for payment (invoice) for services rendered during the preceding calendar month. This application shall be sent to the Owner's Representative listed in Paragraph 2.0.



**16.2 Certificate for Payments.** If the Contractor has made application for payment, as above, then the Owner's Representative will issue a Certificate for Payment to the Owner for such amount as is determined to be properly due, or state in writing the itemized and specific reasons for withholding a Certificate. After the Certificate for Payment has been issued, the Owner shall pay to the Contractor within thirty (30) days the amount covering services completed. No Certificate for Payment, nor any payment, shall constitute an acceptance of any services not in accordance with the Contract Documents.

**16.3 Failure of Payment.**

If the Owner's Representative fails to approve an application for payment, through no fault of the Contractor, within seven (7) working days after receipt from the Contractor, or if the Owner fails to pay the Contractor within thirty (30) days after receipt of a Certificate for Payment, then the Contractor shall receive interest on the balance due with the interest being one percent (1%) per month not to exceed three (3) months (3%). The CITY OF WAYCROSS, GEORGIA reserves the right to reject the Owner's Representative's certification of any request for payment by the Contractor without the accrual of interest.

**16.4 Governing Document.** All parties expressly agree that the provisions of the Georgia Prompt Pay Act, Title 13, Chapter 11, of the Official Code of Georgia Annotated, are superseded by the terms and conditions of this agreement.

**16.5 Final Payment.** Upon receipt of written notice from the Contractor that all contracted services are complete, the Owner's Representative will, within a reasonable time, review all services and reports. If the Owner's Representative finds the services and reports of the Contractor complete and acceptable in accordance with the provisions of the Contract Documents, he shall, within a reasonable time, recommend to the Owner that final payment be made. The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

**17.0 Contractor's Claim**

No claim for additional or other compensation beyond the contract price shall be allowable unless the Contractor makes **written demand therefore within thirty (30) days** of the occurrence of any event which gives rise to such claim.

**18.0 Contract Agreement Jurisdiction**

Contractor irrevocably consents that any legal action or proceeding against it under, arising out of, or in any manner relating to, this Agreement shall be brought in any court in Berrien County, Georgia. Contractor designates the Secretary of the State of Georgia as its agent for service of process, provided no such agent located in Georgia is on file with the said Secretary. Contractor, by the execution and delivery of this Agreement, expressly and irrevocably assents to and submits to the personal jurisdiction of any court in Berrien County, Georgia, and in any said action or proceeding. Contractor hereby expressly and irrevocably waives any claim or defense in any said action or proceeding based on any alleged lack of jurisdiction, improper venue or *forum non conveniens* or any similar basis.

## **19.0 Ownership of Data**

All data and other records supplied to the Contractor for this project shall remain the sole property of the Engineer. The Contractor shall not, without written consent, copy or use such records, except to carry out contracted work, and will not transfer such records to any other party not involved in the performance of the Contract pursuant to this Advertisement for Bids, and will return submitted records to the CITY OF WAYCROSS, GEORGIA upon completion of the work hereunder. The CITY OF WAYCROSS, GEORGIA shall have the right, without the consent of the Contractor, to extract such data in industry standard formats, using standard Contractor utilities and at no cost to the CITY OF WAYCROSS, GEORGIA. The CITY OF WAYCROSS, GEORGIA acknowledges that the storage, compilation, format, and layout constitute proprietary and secret trade information of the Contractor, and are protected by Federal copyright law.

## **20.0 Contractor's Status**

It is agreed that the Contractor shall occupy the status of an Independent Contractor and the Contractor's employees are not employees of the Owner.

**SECTION 00800  
SUPPLEMENTARY CONDITIONS**

These Supplementary Conditions amend or supplement the SECTION 00700 - General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

**1.0 CONSTRUCTION DRAWINGS.**

The Work shall conform to the following construction drawings provided in conjunction with these specifications:

**2015 Streets, Drainage & Utility Project  
City of Waycross, Georgia**

In the event of a discrepancy between the construction drawings and the Project Technical Specifications, the Technical Specifications shall take precedence.

**2.0 CDBG CONTRACT PROVISIONS**

In the event of a discrepancy between SECTION 00700 – General Conditions and SECTION 00810 CDBG Contract Conditions, SECTION 00810 shall take precedence.

**(END OF SECTION)**

**SECTION 00810**  
**CDBG Contract Conditions**  
*As of September 1, 2011*

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***Be sure to have your local attorney review and approve all contract provisions.***

### **Section 3 Clause of the Urban Development Act of 1968**

- 1.) The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project to be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- 2.) The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- 3.) The contractor will send to each labor organization or representative of workers with which he has a collective bargain-agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- 4.) The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The contractor will not subcontract with any subcontractor where it has notice or knowledge that the letter has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.
- 5.) Compliance with the provisions of Section 3, the regulations set forth in the 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

## Sample "Provision for Remedies" Clause

*Note: It is required that any contract, regardless of value, contain a provision for remedies in case of violation or breach of terms, including sanctions. The following is a sample clause which meets the requirement. There is no specific required language and the recipient's attorney should approve whatever language is used.*

1.) **Termination:** Unearned payments under this contract may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by City/County; or if the grant to the City/County under the Community Development Block Grant Program is suspended or terminated. Moreover, if through any cause, the contractor shall fail to fulfill its obligations under this contract in a timely and proper manner, or if the contractor shall violate any of the covenants, agreements, conditions or obligations of the contract documents; the City/County may terminate this contract by giving written notice to the contractor and surety of such termination and specifying the effective date of such termination. In such event, the City/County may take over the work and prosecute the same to completion, by contract or otherwise, and the contractor and his sureties shall be liable to the City/County for any additional cost incurred by the Owner in its completion of the work and they shall also be liable to the Owner for liquidated damages for any delay in the completion of the work as provided below. Furthermore, the Contractor will be paid an amount which bears the same ratio to the total compensation as the work and services actually performed bear to the total work and services required. Provided, however, that if less than sixty percent of the services required by this Contract have been performed upon the effective date of such termination, the Contractor shall be reimbursed (in addition to the above payment) for that portion of the actual out-of-pocket expenses (not otherwise reimbursed under this Contract) incurred by the Contractor during the Contract period which are directly attributable to the uncompleted portion of the services required by this Contract.

2.) **Liquidated Damages for Delays.** If the work is not completed within the time stipulated, therefore, including any extensions of time for excusable delays as herein provided, the Contractor shall pay to the Owner as fixed and agreed liquidated damages (it being impossible to determine the damages occasioned by the delay) for each working day of delay, until the work is completed, the amount as set forth in *(insert location of liquidated damages statement, normally found in the Contract General Conditions)* and the Contractor and his sureties shall be liable to the Owner for the amount thereof.

3.) **Excusable Delays.** The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due:

(a) To any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, National Defense, or any other national emergency;

(b) To any acts of the Owner;

(c) To causes not reasonable foreseeable by the parties to this Contract at the time of the execution of the Contract which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God or of the public enemy, acts of another Contractor in

the performance of some other contract with the Owner, fires, floods, epidemics, quarantine, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, and cyclones; and

(d) To any delay of any subcontractor occasioned by any of the causes specified in subparagraphs (a) (b) and (c) or this subparagraph "d".

Provided, however, that the Contractor promptly notified the Owner within ten (10) days of the cause of the delay. Upon receipt of such notification, the Owner shall ascertain the facts and the cause and extent of delay. If upon the basis of the terms of this contract the delay is properly excusable, the Owner shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

### **Sample "Termination for Convenience Clause"**

*Note: it is required that a "termination" clause be included in any contract over \$10,000 in value. This is a sample clause. The recipient's attorney should approve whatever language is used in the contract. There is no required language.*

#### **1.) Termination for Convenience of the (city or county):**

The (city or county) may terminate this contract at any time for any reason by giving at least thirty (30) days notice in writing to the contractor. If the contract is terminated by the (city or county) as provided herein, the contractor will be paid a fair payment as negotiated with the (city or county) for the work completed as of the date of termination.

## **Equal Employment Opportunity (EEO) Clause**

During the performance of this contract, the Contractor agrees as follows:

- 1.) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated during employment without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2.) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- 3.) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4.) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- 5.) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- 6.) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by the rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7.) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon



each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION  
CONTRACT SPECIFICATIONS  
(EXECUTIVE ORDER 11246)**

1.) As used in these specifications:

a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

b. "Director" means Director, Office of Federal Contract Compliance Program, United States Department of Labor, or any person to whom the Director delegates authority;

c.. "Employer identification number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, US. Treasury Department Form 941.

d. "Minority" includes:

(i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

(ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);

(iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

(iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2.) Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3.) If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the US. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trade which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan

does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4.) The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5.) Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications. Executive Order 11246, or the regulations promulgated pursuant thereto.

6.) In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.

7.) The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reasons therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, lay-off, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Directs its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source. The Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment of minority and female youth both on the site and in other areas of a Contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8.) Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through p of those Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9.) A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10.) The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race color, religion, sex or national origin.

11.) The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12.) The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13.) The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.S.

14.) The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15.) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO EQUAL  
EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1.) The Offerer's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2.) The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

<u>Timetable:</u>	<u>Goals for minority participation</u>	<u>Goals for female participation</u>
Until Further Notice	31.1% *	6.9%

These goals are applicable to each non-exempt contractor's total on-site construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, Federally assisted or non-Federally related project, contract or sub-contract.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3.) The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4.) As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is *(insert description of the economic area in which the contract will be performed, giving the city, SMSA or non SMSA designation, and a list of the counties included in the economic area).*

\*Note: See the following Federal Register, Vol. 44, No. 175, dated 9-7-79, for appropriate goals arranged by economic area. The goal for female participation is 6.9% statewide.

**Federal Register, Vol. 44, No 175 (8/7/79)**  
**E.O. 11246: Goals for Minority Participation in the Construction Industry**

<b>Augusta, Georgia SMSA</b>			<b>Columbus, Georgia SMSA</b>	
<u>SMSA Counties</u>	27.2%		<u>SMSA Counties</u>	29.5%
Columbia			Chattahoochee	
Richmond			Columbus/Muscogee	31.8%
<u>Non-SMSA Counties</u>	32.8%		<u>Non-SMSA Counties</u>	
Burke			Harris	
Emanuel			Marion	
Glascocock			Meriwether	
Jefferson			Quitman	
Jenkins			Schley	
Lincoln			Stewart	
McDuffie			Sumter	
Taliaferro			Talbot	
Warren			Troup	
Wilkes			Webster	
<b>Atlanta, Georgia SMSA</b>			<b>Macon, Georgia SMSA</b>	
<u>SMSA Counties</u>	21.2%		<u>SMSA Counties</u>	27.5%
Butts			Bibb	
Cherokee			Houston	
Clayton			Jones	
Cobb			Twiggs	
Dekalb			<u>Non-SMSA Counties</u>	31.7%
Douglas			Baldwin	
Fayette			Bleckley	
Forsyth			Crawford	
Fulton			Crisp	
Gwinette			Dodge	
Henry			Dooly	
Newton			Hancock	
Paulding			Johnson	
Rockdale			Laurens	
Walton			Macon	
<u>Non-SMSA Counties</u>	19.5%		Monroe	
Banks			Peach	
Barrow			Pulaski	
Bartow			Putnam	
Carroll			Taylor	
Clarke			Telfair	
Coweta			Treutlin	
Dawson			Washington	
Elbert			Wheeler	
Fannin			Wilcox	
Floyd			Wilkinson	
Franklin				
Gilmer			<b>Savannah, Georgia SMSA</b>	30.6%
Gordon			<u>SMSA Counties</u>	
Greene			Bryan	
Habersham			Chatham	
Hall			Effingham	
Haralson			<u>Non-SMSA Counties</u>	29.8%
Hart			Appling	
Heard			Atkinson	
Jackson			Bacon	
Jasper			Bulloch	
Lamar			Candler	
Lumpkin			Coffee	
Madison			Evans	
Morgan			Jeff Davis	
Oconee			Liberty	
Oglethorpe			Long	
Pickens			McIntosh	
Pike			Montgomery	
Polk			Screven	
Rabun			Toombs	
Stephens			Wayne	
Towns				
Union				
Upson				
White				



<b>Albany Georgia SMSA</b>	
<u>SMSA Counties</u>	32.1%
Dougherty	
Lee	
<u>Non-SMSA Counties</u>	31.1%
Baker	
Ben Hill	
Berrien	
Brooks	
Calhoun	
Clay	
Clinch	
Colquitt	
Cook	
Decatur	
Early	
Echols	
Grady	
Irwin	
Lanier	
Lowndes	
Miller	
Mitchell	
Randolph	
Seminole	
Terrell	
Thomas	
Tift	
Turner	
Worth	

<b>Jacksonville, Florida SMSA</b>	
<u>Non-SMSA Counties</u>	22.2%
Brantley	
Camden	
Charlton	
Glynn	
Pierce	
Ware	
<b>Chattanooga, Tennessee SMSA</b>	
<u>SMSA Counties</u>	12.5%
Catoosa	
Dade	
Walker	
<u>Non-SMSA Counties</u>	8.5%
Chattoga	
Murray	
Whitfield	

## **Certification of Nonsegregated Facilities**

By the submission of this bid, the bidder, offerer, applicant or subcontractor certifies that s/he does not maintain or provide for his/her employees any segregated facility at any of his/her establishments, and that s/he does not permit employees to perform their services at any location, under his/her control, where segregated facilities are maintained. S/He certifies further that s/he will not maintain or provide for employees any segregated facilities at any of his/her establishments, and s/he will not permit employees to perform their services at any location under his/her control where segregated facilities are maintained. The bidder, offerer, applicant or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause of this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. S/He further agrees that (except where s/he has obtained identical certifications from proposed subcontractors for specific time periods) s/he will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that s/he will retain such certifications in his/her files; and that s/he will forward the following notice to such proposed subcontractors (except where proposed subcontractors have submitted identical certifications for specific time periods).

## **FEDERAL LABOR STANDARDS PROVISION Georgia Community Development Block Grant**

### **Applicability**

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A.1.(i) **Minimum Wages.** All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii)) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(a) The contracting officer shall require that any class of laborers or mechanics, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division,

Employment Standards Administration, US. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary.

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 for under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its

designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) **Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project.) Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable program (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii)(a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), US. Government Printing Office, Washington, DC, 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4.(i) **Apprentices and Trainees.** Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the US. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ration permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeymen's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits,

apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification.

If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the US. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journey hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performs. In addition, any trainee performing work on the job site in excess of the ration permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. **Contract termination:** debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounded for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. **Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. **Disputes concerning labor standards.** Disputes arising out of a labor standards provision of this contract shall to be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the US. Department of Labor, or the employees or their representatives.

10. (i) **Certification of Eligibility.** By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the US. Criminal Code, 18 U.S.C. 1001. Additionally, US. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of ...influencing in any way the action of such Administration...makes, utters or publishes any statement, knowing the same to be false...shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. **Complaints, Proceedings, or Testimony by Employees.** No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

**B. Contract Work Hours and Safety Standards Act.** As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) **Overtime requirements:** No contractor or subcontractor contracting for any part of the contract work may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such



work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation:** liability for unpaid wages, liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) **Withholding for unpaid wages and liquidated damages:** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any money payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) **Subcontracts:** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

### **C. Health and Safety**

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

**ACCEPTABLE ALTERNATE WORK SHEET FOR CONTRACTOR CERTIFICATION  
REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION  
(LOWER-TIER PARTICIPANT) FOR HUD PROGRAMS**

Certification regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower-Tier Covered Transactions pursuant to 24 Code of Federal Regulations, Part 24.510(b).

1. By signing and submitting this proposal, the prospective lower-tier participant certifies that neither it, its principals nor affiliates, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Further, the Participant provides the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that an erroneous certification was rendered, in addition to other remedies available to the Federal Government, the Department or agency with which this transaction originated may pursue available remedies.
3. Further, the Participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the Participant learns that this certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. By submitting this proposal, it is agreed that should the proposed covered transaction be entered into, the Participant will not knowingly enter into any lower-tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the agency with which this transaction originated.
5. It is further agreed that by submitting this proposal, the Participant will include this Certification, without modification, in all lower-tier covered transactions and in all solicitations for lower-tier covered transactions.

Contractor Name \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**NON-CERTIFICATION:**

As the perspective lower-tier participant, I am unable to certify to statements in this Certification as explained in the attachment to this proposal.

Contractor Name \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

*The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.*

## **COMPLIANCE WITH CLEAN AIR AND WATER ACTS**

The contract is subject to the requirements of the Clean Air Act, as amended, 42 USC 1857 et. seq., and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.

In compliance with said regulations:

- 1.) The Contractor shall require of subcontractors that any facility to be utilized in the performance of any nonexempt contract or subcontract is not listed on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 4C CFR 15.20.
- 2.) The Contractor will comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 USC 1857c-8) and section 308 of the Federal Water Pollution Control Act as amended, (330 USC 1318) relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in said section 114 and section 308, and all regulations and guidelines issued thereunder.
- 3.) The Contractor will provide prompt notice of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- 4.) The Contract will include or cause to be included the criteria and requirements to paragraph (1) through (4) of this section in every nonexempt subcontract and take such action as the Government will direct as a means of enforcing such provisions.

## **PERFORMANCE, PAYMENT and BID BONDS**

Contract Performance and Payment Bonds issued in the full amount of the contract are required by federal procurement rules if the contract is for \$100,000 or more.

A Bid Bond or other security is required by federal rules whenever the contract is for \$100,000 or more.

Generally these bonds must be issued by a surety company satisfactory to the local government, qualified to do business in Georgia, and in a format meeting the federal and state legal requirements. The bonding company must also appear on the "List of Acceptable Sureties" published annually by the US Department of the Treasury.

DCA recommends that CDBG Recipients be sure to assign responsibility for reviewing construction bonds. This job may be given to the local attorney, the grant administrator, or the project architect/engineer. Specific duties include verification that the agent is licensed by the state and authorized by the bonding company and verification through the Insurance Commissioner that the company is financially sound and licensed in Georgia. The actual bond should also be reviewed and verified as being valid.

**Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1)**

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

\_\_\_\_\_  
Federal Work Authorization User Identification Number

\_\_\_\_\_  
Date of Authorization

\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Name of Project

\_\_\_\_\_  
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, \_\_\_\_, 201\_\_ in \_\_\_\_\_(city), \_\_\_\_\_(state).

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
\_\_\_\_\_

**Subcontractor Affidavit under O.C.G.A. § 13-10-91(b)(3)**

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with (name of contractor) on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the subcontractor with the information required by O.C.G.A. § 13-10-91(b). Additionally, the undersigned subcontractor will forward notice of the receipt of an affidavit from a sub-subcontractor to the contractor within five business days of receipt. If the undersigned subcontractor receives notice of receipt of an affidavit from any sub-subcontractor that has contracted with a sub-subcontractor to forward, within five business days of receipt, a copy of such notice to the contractor. Subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

\_\_\_\_\_  
Federal Work Authorization User Identification Number

\_\_\_\_\_  
Date of Authorization

\_\_\_\_\_  
Name of Subcontractor

\_\_\_\_\_  
Name of Project

\_\_\_\_\_  
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, \_\_\_\_, 201\_\_ in \_\_\_\_\_(city), \_\_\_\_\_(state).

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:  
\_\_\_\_\_

**Sub-subcontractor Affidavit under O.C.G.A. § 13-10-91(b)(4)**

By executing this affidavit, the undersigned sub-subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract for (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract) and (name of contractor) on behalf of (name of public employer) has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned sub-subcontractor will continue to use the federal work authorization program throughout the contract period and the undersigned sub-subcontractor will contract for the physical performance of services in satisfaction of such contract only with sub-subcontractors who present an affidavit to the sub-subcontractor with the information required by O.C.G.A. § 13-10-91(b). The undersigned sub-subcontractor shall submit, at the time of such contract, this affidavit to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Additionally, the undersigned sub-subcontractor will forward notice of the receipt of any affidavit from a sub-subcontractor to (name of subcontractor or sub-subcontractor with whom such sub-subcontractor has privity of contract). Sub-subcontractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

\_\_\_\_\_  
Federal Work Authorization User Identification Number

\_\_\_\_\_  
Date of Authorization

\_\_\_\_\_  
Name of Sub-subcontractor

\_\_\_\_\_  
Name of Project

\_\_\_\_\_  
Name of Public Employer

I hereby declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, \_\_\_\_, 201\_\_ in \_\_\_\_\_(city), \_\_\_\_\_(state).

\_\_\_\_\_  
Signature of Authorized Officer or Agent

\_\_\_\_\_  
Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME  
ON THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_,201\_\_.

\_\_\_\_\_  
NOTARY PUBLIC  
My Commission Expires:

**SECTION 00815  
WAGE RATE DETERMINATION**

**Current Wage Rate Determination to be inserted here**



## SECTION 01100 SUMMARY OF WORK

### PART 1 GENERAL

#### 1.1 DESCRIPTION

The work to be performed on this project shall consist of furnishing all labor, materials, equipment and incidentals and performing all work required to construct the **2015 Streets, Drainage and Utility Project** complete in place and ready to operate. All work shall be performed as shown on the drawings entitled

2015 Streets, Drainage and Utility Project  
City of Waycross, Georgia  
March 27, 2015

and as specified. More specifically the work includes, but is not limited to, multi-infrastructure improvements along Walker, Owens, Izlar and Roosevelt Streets consisting of the following:

- Construction of new 2" and 8" PVC water mains with related fittings, valves, hydrants and appurtenances;
- New gravity sewer mains with associated manholes, sewer services and cleanouts;
- New storm water drainage system consisting of 15" through 24" pipes and associated curb inlets and junction boxes;
- Street improvements consisting of new concrete curb and gutter, spot repairs to subgrade and base, milling and asphalt resurfacing.

All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed.

#### 1.2 PARTIAL OWNER OCCUPANCY

The existing facilities to which these improvements are being made will continue in operation during the construction period with the exception of necessary outages of short duration to facilitate connections to existing water mains designated to remain in service. All such necessary outages must be coordinated in advance with the OWNER at least 72 hours in advance. Arrangements can be made by contacting Jessica Deal @ (912) 506-0150 or Gene Thomas @ (912) 287-5846. The OWNER will furnish no work or materials associated with this project.

### PART 2 (Not Used)

### PART 3 (Not Used)

(END OF SECTION)

## **SECTION 01110 SPECIAL PROVISIONS**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The scope of this Section is to convey to the Contractor unique and unusual stipulations and requirements which have been established for this project. The Provisions of this Section shall supersede the provisions of Division 1 through Division 17 but shall not supersede the Bidding Requirements, Contracting Requirements, or any of the General, Supplementary or CDBG Conditions of the Contract.

#### **1.2 EXISTING FACILITY OPERATIONS**

The Contractor shall coordinate the work with the Owner so that the construction activities required do not interfere with or prevent the operation of the existing facilities. If at any time, any portion of the facility is out of service, the Contractor must obtain approval from the Owner as to the date, time and length of time that portion of the facility is out of service.

Connections to the existing facilities or alteration of existing facilities will be made at times when the facility involved is not in use or at times established by the Owner when the use of the facility can be conveniently interrupted for the period of time needed to make the connection or alteration. Notify the Owner at least 72 hours prior to relocating any piping or taking any existing system component out of service. See SECTION 01100 for contact information.

#### **1.3 PROJECT SCHEDULE**

All work must be completed within **180** consecutive calendar days from receipt of written Notice to Proceed. Substantial Completion for the purposes of assessing liquidated damages shall be defined as the time at which the Work has progressed to the point where, in the opinion of the Engineer, the work has been substantially completed in accordance with the Contract Documents, so that the work can be utilized for the purpose or purposes intended. At minimum, Substantial Completion shall be defined as follows:

That degree of completion of operating facilities or systems sufficient to provide the Owner full time, uninterrupted, continuous operation and;

All required functional, performance and operational or start-up testing has been successfully demonstrated for all components, devices, equipment and systems, to the satisfaction of the Engineer and;

All inspections required have been performed

Specific items of work that must be completed before a certificate of substantial completion can be issued include, but are not limited to, the following:

Correcting deficient work items listed by any regulatory agencies

All submittals must be received and approved including

- Record documents
- Factory test reports
- Equipment and structure test reports
- Manufacturer's certificate of proper installation
- Operation and maintenance information, manuals, drawings, diagrams, etc.
- Spare parts lists

Warranty or insurance information has been provided

All manufacturer provided operator training is completed and documented

### **1.3 CONSTRUCTION SCHEDULE**

Immediately after execution and delivery of the contract the Contractor shall prepare for delivery to the Owner an estimated construction progress schedule showing the proposed dates of commencement and completion of the various milestones of the work required under the contract as well as the anticipated amounts of each monthly payment that will become due to the Contractor in accordance with the progress schedule. Such schedule shall be presented at the pre-construction meeting and shall be updated monthly throughout the construction period. The construction schedule will be a true reflection of the actual construction progress, shall be reviewed and updated monthly and submitted with the monthly periodic payment request. The monthly payment request shall not be considered complete without the accurately updated construction progress schedule.

**PART 2 (Not Used)**

**PART 3 (Not Used)**

**(END OF SECTION)**

## **SECTION 01120 FIELD ENGINEERING**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

Field engineering shall include all surveying work required to layout the proposed facilities and control the location of the finished project. The Contractor shall be solely responsible for constructing the project to the correct horizontal and vertical alignment as shown on the drawings and as specified herein. The Contractor shall assume all costs associated with rectifying any work constructed in the wrong location.

The drawings provide the location and/or coordinates of principal components of the project.

#### **1.2 OWNER'S RESPONSIBILITIES**

The Owner will provide the following:

One (1) vertical control point on the project site with its elevation (included on the drawings)

A topographic survey (included on the drawings)

The Owner may, acting through the Engineer of Record, order changes to the location of some of the components of the project or provide clarification to questions regarding the correct alignment.

#### **1.3 CONTRACTOR'S RESPONSIBILITIES**

The Contractor's responsibilities include but are not limited to the following:

Be responsible for setting reference points and/or offsets, establishment of baselines, and all other layout, staking and other surveying required for the construction of the project.

Safeguard all reference points, stakes, grade marks, horizontal and vertical control points, and bear the cost of re-establishing same if disturbed.

Stake out temporary and permanent easements or the limits of construction to ensure the work is not deviating from the indicated limits.

Record drawing surveys shall be performed in accordance with Section 01700 of these specifications. Baselines shall be defined as the line to which the location of the work is referenced, i.e. edge of pavement, road centerline, property line, right of way or survey line.

## **1.4 STAKING PRECISION**

### **1.4.1 Site Work**

The precision of construction staking shall match the precision of a component's location as indicated on the drawings. Staking of utilities shall be done in accordance with generally accepted practice for the type of utility.

### **1.4.2 Water Mains and Accessories**

The precision of construction staking required shall be that which the correct location of the water main can be established for construction and verified by the Engineer of Record. Where the location of the components of the water main, such as valves, fittings, fire hydrants, etc. are not dimensioned on the drawings, they shall be located based upon scaling these locations from the drawings with relation to readily identifiable landmarks (survey reference points, power poles, manholes, etc.).

### **1.4.3 Sewer Mains, Manholes and Appurtenances**

The precision of construction staking shall be no less than 1:10,000. Horizontal distances shall be measured with a precision no less than 0.01 feet and horizontal angles measured with a precision of no less than 10 seconds.

## **1.5 QUALITY ASSURANCE**

The Contractor shall furnish documentation, prepared by a Registered Professional Surveyor currently licensed in the State of Georgia, confirming that staking is being done to the horizontal and vertical alignment shown in the Contract Documents. This requires that the Contractor hire at his own expense, a registered surveyor suitable to the OWNER to provide on-going construction staking and confirmation of such.

Any deviations from the drawings shall be confirmed by the Engineer of Record prior to construction of that portion of the project.

**PART 2 (Not Used)**

**PART 3 (Not Used)**

**(END OF SECTION)**

## **SECTION 01340 SHOP DRAWINGS**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The work under this Section includes submittal to the OWNER of shop drawings, product data and samples required by the various Sections of these specifications. The submittal contents required are specified under each Section.

#### **1.2 DEFINITIONS**

##### **1.2.1 Shop Drawings**

Shop drawings include technical data, drawings, diagrams, procedures and methodology, performance curves, schedules, templates, patterns, test reports, calculations, instructions, measurements and similar information as applicable to the specific item for which the shop drawing is prepared.

##### **1.2.2 Product Data**

Product data includes standard printed information on materials, products and systems, not specifically prepared for this project other than the designation of selections from among available choices printed therein.

##### **1.2.3 Samples**

Samples include both fabricated and un-fabricated physical examples of materials, products and units of work, both as complete units and smaller portions of units of work, either for limited visual inspection or more detailed testing and analysis.

#### **1.3 ROUTING OF SUBMITTALS**

Submittals and routine correspondence shall be routed as follows:

Supplier to Contractor  
Contractor to Engineer/OWNER  
Engineer/OWNER to Contractor  
Contractor to Supplier

#### **1.4 SUBMITTAL LOG**

At the discretion of the OWNER, a submittal log shall be created and issued to the Contractor as the complete listing of submittals required for the project.

## PART 2 (Not Used)

## PART 3 EXECUTION

### 3.1 CONTRACTOR'S RESPONSIBILITIES

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall ensure that the material or equipment shall be as described in the submittal. The Contractor shall verify in writing that all features of all products conform to the requirements of the drawings and specifications. Submittal documents shall be clearly edited to indicate only those items which are being submitted for review. All extraneous material shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and shall notify the OWNER in each case where his submittal may affect the work of another contractor or the OWNER. The Contractor shall ensure coordination of submittals among the related crafts and subcontractors.

Before each submittal, the Contractor shall have determined and verified all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto; all materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the work; and all information relative to the Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.

Submittal documents common to more than one piece of equipment shall be identified with the appropriate equipment numbers and specification section and paragraph. Each submittal shall bear a stamp or written indication that the Contractor's obligations under the contract with respect to the Contractor's review and approval of that submittal have been met. Any deviations from the requirements of the drawings and specifications shall be noted on the submittals. The Contractor shall submit six copies of all specified information. **Submittals which do not have all the information required to be submitted including deviations, are not acceptable and will be returned without review.**

**In lieu of hard copies, submittals may be made electronically via email to [johnh@cec-ga.com](mailto:johnh@cec-ga.com). The routing of submittals shall remain as specified in Paragraph 1.3 of this Section.**

### 3.2 REVIEW PROCEDURES

The OWNER's review will not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights, or fabrication processes, or to safety precautions or programs incident thereto. Unless otherwise specified, within fourteen days after receipt of a submittal, The OWNER will review the submittal and return three copies to the Contractor with comments. The returned submittals will indicate one of the following actions:

If the review indicates conformance with the drawings and specifications, submittal copies will be marked "**NO EXCEPTIONS TAKEN**". In this event, the Contractor may begin to implement the work or incorporate the material or equipment covered by this submittal.

If the review indicates limited corrections are required, submittal copies will be marked **“MAKE CORRECTIONS NOTED”**. The Contractor may begin implementing the work or incorporate the materials or equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated into Operation and Maintenance data, a corrected copy shall be provided.

If the review indicates that the submittal is insufficient or contains incorrect data, submittal copies will be marked **“AMEND AND RESUBMIT”**. Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted, and returned marked either **“NO EXCEPTION TAKEN”** or **“MAKE CORRECTIONS NOTED”**.

If the review indicates that the submittal does not comply with the drawings and specifications, submittal copies will be marked **“REJECTED - SEE REMARKS”**. Submittals with deviations that have not been clearly identified will be rejected. Except at his own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted, and returned marked either **“NO EXCEPTIONS TAKEN”** or **“MAKE CORRECTIONS NOTED”**.

Review of drawings, submittals, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors and omissions therein and shall not be regarded as an assumption of risks or liability by the OWNER or the Engineer of Record or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure or partial failure, or the method of work, material, or equipment so reviewed. A mark of **“NO EXCEPTION TAKEN”** or **“MAKE CORRECTIONS NOTED”** shall mean that the OWNER has no objection to the Contractor, upon his own responsibility, using or providing the materials or equipment proposed.

**(END OF SECTION)**



## **SECTION 01500 TEMPORARY FACILITIES**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

Temporary facilities required for this work include, but are not necessarily limited to the following:

Temporary utilities such as water and electricity

First aid facilities

Sanitary facilities

Potable water

Temporary enclosures and construction facilities

#### **1.2 GENERAL**

First aid facilities, sanitary facilities and potable water shall be available on the project site on the first day that any activities are conducted on site. The other facilities shall be provided as the schedule of the project dictates.

Use all means necessary to maintain temporary facilities in proper and safe condition throughout the construction period. In the event of loss or damage, immediately make all repairs and replacements necessary at no additional cost to the OWNER.

Remove all temporary facilities as rapidly as the progress of the work will allow.

#### **1.3 TEMPORARY UTILITIES**

##### **1.3.1 General**

Provide and pay all costs for water, electricity and other utilities required for the performance of the work. Pay all costs for temporary utilities until project completion.

##### **1.3.2 Temporary Water**

Provide temporary piping and upon completion of the work remove all such temporary piping. Provide and remove water meters.

### **1.3.3 Temporary Electricity**

Provide all necessary wiring for the Contractor's use. Furnish, locate and install area distribution boxes such that the individual trades may use their own construction type extension cords to obtain adequate power and artificial lighting at all points where required.

### **1.4 FIRST AID FACILITIES**

The Contractor shall provide a suitable first aid station, equipped with all facilities and medical supplies necessary to administer emergency first aid treatment. The Contractor shall have standing arrangements for the removal and hospital treatment of any injured person. All first aid facilities and emergency ambulance service shall be made available by the Contractor to the OWNER and the Engineer's personnel.

### **1.5 SANITARY FACILITIES**

The Contractor shall furnish, for use of the Contractor's personnel all necessary toilet facilities which shall be secluded from public observation. These facilities shall be chemical toilets. All facilities shall be kept in a clean and sanitary condition and shall comply with the requirements and regulations of the area in which the work is performed.

### **1.6 POTABLE WATER**

The Contractor shall be responsible for furnishing a supply of potable drinking water for employees, subcontractors, inspectors, engineers and the OWNER who are associated with the work.

### **1.7 ENCLOSURES AND CONSTRUCTION FACILITIES**

Furnish, install and maintain for the duration of the construction all required scaffolds, tarpaulins, canopies, steps, bridges, platforms and other temporary construction necessary for the completion of the work in compliance with all pertinent safety and other regulations

### **1.8 PARKING FACILITIES**

Parking facilities for the Contractor's employees and subcontractors shall be the Contractor's responsibility. The storage and work facilities provided by the OWNER, if any, shall not be used for parking by the Contractor.

**PART 2 (Not Used)**

**PART 3 (Not Used)**

**(END OF SECTION)**

## **SECTION 01510 JOB SITE SECURITY**

### **PART 1 GENERAL**

#### **1.1 BARRICADES, LIGHTS AND SIGNALS**

The Contractor shall furnish and erect such barricades, fences, lights and danger signals and shall provide such other precautionary measures for the protection of persons or property and of the work as necessary. Barricades shall be painted in a color that will be visible at night. From sunset to sunrise, the Contractor shall furnish and maintain at least one light at each barricade and sufficient numbers of barricades shall be erected to keep vehicles from being driven on or into any work under construction.

The Contractor will be held responsible for any damage to the work due to failure of barricades, signs and lights. The Contractor's responsibility for the maintenance of barricades, signs and lights shall not cease until the project has been accepted by the OWNER.

### **PART 2 (Not Used)**

### **PART 3 (Not Used)**

**(END OF SECTION)**

## SECTION 01600 SUBSTITUTIONS

### PART 1 GENERAL

#### 1.1 SCOPE

This Section outlines the restrictions and requirements for substitutions, product and manufacturer options, and construction method options.

#### 1.2 DEFINITIONS

For the purposes of these Contract Documents, a “substitute item” shall be defined as one of the following:

A product or manufacturer offered as a replacement to a specified product or manufacturer.

A product or manufacturer offered in addition to a specified product or manufacturer.

A “substitute construction method” shall be defined as one of the following:

A mean, method, technique, sequence or procedure of construction offered as a replacement for a specified mean, method, technique, sequence or procedure of construction.

A mean, method, technique, sequence or procedure of construction offered in addition to a specified mean, method, technique, sequence or procedure of construction.

#### 1.3 GENERAL

An item or construction method, which is offered where no specific product, manufacturer, mean, method, technique, sequence or procedure of construction is specified or shown on the drawings, shall not be considered a substitute and shall be at the option of the Contractor, subject to compliance with all provisions in the Contract Documents for that item or construction method.

For products specified only by a referenced standard, the Contractor may select any product by any manufacturer, which meets the requirements of the Specifications, unless otherwise indicated in the Contract Documents.

If the manufacturer is named on the drawings or in the Specifications as an acceptable manufacturer, products of that manufacturer meeting all requirements of the drawings and specifications are acceptable.

Whenever the OWNER's or Engineer of Record's design is based upon a specific product or process of a specific manufacturer, that manufacturer shall be so listed in the specifications and such product or process **shall be used in the base bid.**

## 1.4 APPROVALS

Any **Contractor** proposing to furnish products or processes other than those listed in the specifications shall make a written application for approval of the proposed substitution to the OWNER or Engineer of Record at least 10 days prior to the date set for receipt of bids. The minimum information required in the application is listed below.

- A. Documentation demonstrating that the item being proposed as a substitute will fit in the space allowed, perform the same functions and have the same capabilities as the product or process specified.
- B. A letter signed by an officer of the company certifying compliance with the specifications without exception.
- C. Installation list with contacts and phone numbers for the same minimum number of installations and years of experience as the specified product or process.
- D. Complete descriptive and technical data addressing all specification requirements.
- E. Complete list of deviations from the specifications as written.
- F. Identification of accessory items required as a result of the proposed substitution.
- G. Identification of all architectural, structural, mechanical, piping, electrical or other modifications required as a result of the proposed substitution.

Whenever a product specification includes minimum experience requirements which the proposed substitution cannot meet, a condition of approval will require that the manufacturer furnish the OWNER with a cash deposit or bond acceptable to the OWNER in an amount equal to the cost of the product or process which shall remain in effect until the experience requirement has been met.

The burden of proving equivalency of a proposed substitute to an item designated by trade name or manufacturer's name referenced on the drawings or in the specifications rests on the party submitting the request for approval. The OWNER will give consideration to reports from reputable independent testing laboratories, verified experience records showing the reputation of the proposed product with previous users or any other written information that is reasonable under the circumstances. The degree of proof required for approval of a proposed substitute as equivalent to a named product is the amount of proof necessary to convince the OWNER beyond all doubt. To be acceptable, a proposed substitute must meet or exceed all requirements of the plans or specifications.

If the proposed substitution is approved, an addendum will be issued to all prospective bidders at least five days prior to the date set for the opening of bids listing any and all approved substitutions. If approved the bidder may offer a price for the substitution. The bid offered shall include the cost of all additional architectural, structural, mechanical, piping, electrical or other

modifications, including engineering and design costs, required as a result of the proposed substitution. The OWNER shall be the final judge on questions of equivalence.

**PART 2 (Not Used)**

**PART 3 (not Used)**

**(END OF SECTION)**

## **SECTION 01700 RECORD DOCUMENTS**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The work under this Section includes but is not limited to the compiling, maintaining, recording and submitting of project record documents as herein specified.

Record documents include but are not limited to the following:

1. Drawings
2. Specifications
3. Change orders and other modifications to the Contract
4. OWNER field orders or written instructions, including requests for information (RFI) and clarification memos
5. Reviewed shop drawings, product data and samples
6. Test records

The Contractor shall maintain an up to date set of Record Drawings

#### **1.2 SYSTEM SOURCE AND QUALITY ASSURANCE**

##### **1.2.1 STORAGE**

Store documents and samples in the Contractor's office, apart from documents used for construction. File documents and samples in accordance with the format of these specifications

##### **1.2.2 Maintenance**

Maintain documents in a clean, dry legible condition and in good order. Do not use record documents for construction purposes. Record documents shall at all times be available for inspection by the OWNER. Failure to maintain record documents in a satisfactory manner may be cause for withholding of a certificate for payment.

Each document shall be labeled "PROJECT RECORD" in neat, large printed letters. All record information shall be kept concurrently with construction progress. Do not conceal any work until the project information is recorded.

### **1.3 RECORD DRAWINGS**

Record drawings maintained by the Contractor shall provide dimensions, distances and coordinates to the nearest 0.1 foot. Elevations shall be provided to the nearest 0.01 foot.

Final record drawings shall be prepared by a professional surveyor licensed in the State of Georgia from a post construction field run survey. The Contractor shall pay all surveying and preparation costs associated with the final record drawings. The final record drawings shall provide elevations to the nearest 0.01 foot for the invert of all precast structures, access covers, and all other pertinent items constructed by the Contractor. The final record drawings shall provide dimensions, distances and coordinates to the nearest 0.01 foot and angles to the nearest 10 seconds.

Final Record Drawing shall be labeled "FINAL RECORD DRAWINGS" and shall include the name of the surveyor who prepared the drawings as well as the date the drawings were prepared.

Record drawings shall include the following:

Horizontal and vertical location of all exposed and underground piping systems including valves, hydrants and fittings

Location and dimensions of roadways and parking areas

Location of structures including finish floor elevations

### **1.4 SPECIFICATIONS**

Legibly mark each section to record the manufacturer, trade name, catalog number and supplier of each product and item of equipment actually furnished. Also record all changes made by Requests for Information (RFI), field order, clarification memorandums of Contract change order.

### **1.5 SUBMITTAL**

At the completion of the project, deliver Record Documents to the OWNER. Include a signed transmittal letter which lists the title and number of each record document.

**PART 2 (Not Used)**

**PART 3 (Not Used)**

**(END OF SECTION)**



## **SECTION 01710 OPERATION AND MAINTENANCE MANUALS**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The Contractor shall provide five copies of complete Operation and Maintenance manuals for each item of equipment installed containing sufficient information to enable system operators to correctly operate service and maintain all equipment and accessories provided under the Contract. The data contained in the manual shall explain and illustrate clearly and simply all principles and theory of operation, operating instructions, maintenance and calibration procedures and safety precautions and procedures for the equipment involved.

#### **1.2 SUBMITTAL FORMAT**

Each copy of the manual shall be assembled in one or more 3-ring hardback loose leaf binders, each with a title page, table of contents and lists of tables and figures. The cover and binding edge of each manual shall have the project name, specification number and title and manual title printed thereon.

#### **1.3 CONTENTS**

Each manual shall the following items:

Title page which includes the equipment name and model number as well as the name, address and contact information of the Manufacturer, Supplier and Contractor.

Detailed Table of Contents

Equipment function, normal operating characteristics, performance data and limiting conditions

Detailed disassembly, overhaul and reassembly, installation, alignment, adjustment and testing procedures

Operating checklists

Detailed operating instructions for startup, calibration, routine and normal operation, regulation and control, safety procedures, shut down and emergency conditions

Detailed list of settings for relays, pressure switches, temperature switches, level switches, thermostats, alarms, relief valves, rupture discs, etc.

Preventative maintenance procedures and schedules including detailed lubrication instructions, identification of required lubricants and operating fluids and diagrams illustrating lubrication points

Detailed troubleshooting guide

Detailed parts list with name and part number

Recommended spare parts list

Electrical and instrumentation schematics including motor control centers, control panels, instrument panels and analyzer panels

List of special tools required

Name, address and contact information of nearest service center for parts, overhaul and service

Procedures for storing, handling and disposing of any chemicals or products used with the equipment or system

**PART 2 (Not Used)**

**PART 3 (Not Used)**

**(END OF SECTION)**

## **SECTION 02060 DEMOLITION**

### **PART 1 GENERAL**

#### **1.1 WORK INCLUDED**

The work of this section includes, but is not limited to furnishing all material and equipment and furnishing all labor necessary for the following:

- Demolition, removal and disposal of existing concrete curb & gutter
- Demolition, removal and disposal of existing drainage structures
- Demolition, removal and disposal of existing storm drainage pipes
- Demolition and/or abandonment of existing water and sewer utilities as indicated
- Removal and replacement of existing asphalt pavement as indicated

#### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

02120	Erosion, Sedimentation and Pollution Control
02220	Trenching Excavation, Bedding and Backfill
02500	Paving for Resurfacing Projects
02511	Milling of Existing Asphalt Pavement
02555	Water Distribution System
02650	Sanitary Sewer System
02700	Storm Drainage System

#### **1.3 SUBMITTALS**

The Contractor shall submit to the Owner at least 10 days before demolition is started, a detailed description of his proposed demolition procedure including the methods and procedures to be used and the proposed sequence of the work. The Contractor's procedure shall address by-pass pumping requirements and other procedures to illustrate how the existing treatment plant will be maintained in operation throughout construction of the proposed facilities and improvements. All outages must be clearly noted and coordinated with the Owner.

The demolition procedures shall provide for the safety of workers and plant personnel and the protection of facilities to remain undisturbed.

### **PART 2 PRODUCTS (Not Used)**

### **PART 3 EXECUTION**

#### **3.1 DEMOLITION**

All structures designated for demolition shall be removed as necessary to accommodate new construction. Any portion of an existing structure to remain in place must be approved by the Owner or his designated representative.

Any structure or portion thereof remaining below grade shall be mechanically fractured so that subsurface water will freely pass through the floor slab of the structure. The structure shall be filled so that no voids remain after backfilling to finish grade. The Contractor shall properly plug all piping to be abandoned in place.

Any damage to existing structures to remain as a result of the Contractor's demolition operations shall be promptly repaired to the complete satisfaction of the Owner without additional compensation. All salvageable equipment and materials shall remain the property of the Owner and shall be cleaned and stored on the Owner's property as directed by the Owner.

### **3.2 DISPOSAL**

All materials which are not salvageable and delivered to the Owner as specified above shall become the property of the Contractor and shall be demolished and completely removed from the site by the Contractor in a manner suitable to the Owner. Manner of disposal shall be in accordance with all applicable Federal, State and Local requirements.

No material may be buried, burned or otherwise disposed of on site.

**(END OF SECTION)**

## **SECTION 02120 EROSION, SEDIMENTATION AND POLLUTION CONTROL**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The work of this section includes implementation of the Erosion, Sedimentation and Pollution Control plan including but not limited to the installation and maintenance of all structural and vegetative Best Management Practices (BMP's), and all other work and appurtenances required.

#### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

SECTION 02210	Trenching Excavation, Bedding and Backfill
SECTION 02555	Water Distribution System
SECTION 02650	Sanitary Sewer System

#### **1.3 APPLICABLE STANDARDS**

The following standards and/or publications are made a part of this specification by reference. The Contractor shall obtain copies all referenced standards or publications and keep available on the jobsite at all times during the construction period. In the event of conflicts among the various sources cited below, the most stringent criteria shall take precedence.

"Manual for Erosion and Sediment Control in Georgia", latest edition copies of which are available from the State Soil and Water Conservation Commission.

##### Plan Sheets

ES-1	Erosion Control General Notes
ES-2	Erosion Control Plan
ES-3	Vegetative Plan & Uniform Coding System
ES-4	Details – Structural BMP's

#### **1.4 QUALIFICATIONS**

##### **1.4.1 Installers**

Installation of BMP's must be performed by an installer who has completed Erosion, Sedimentation and Pollution Control Plans similar in material, design and extent to that indicated for this project and whose work has resulted in construction with a record of successful in-service performance.

The Contractor must disclose to the OWNER/ENGINEER prior to project award all violations and citations received in the last five (5) years from the Georgia Environmental Protection Division, Army Corps of Engineers, and other City/County/State agencies dealing with erosion and sediment control deficiencies or wetlands deficiencies.

### 1.4.2 Inspectors

Contractor shall have a Qualified Personnel, as defined by the NPDES Permit on site whenever construction activity occurs. "Qualified Personnel" means a person who has successfully completed an erosion and sediment control short course eligible for continuing education units, or an equivalent course approved by the Georgia Environmental Protection Division and the State Soil and Water Conservation Commission.

## 1.5 SUBMITTALS

The following information shall be submitted to the OWNER prior to commencement of the work.

Copy of Certification with GSWCC number of Qualified Person(s)

Technical Product Data for  
Sediment barriers  
Inlet protection materials

NPDES Forms

A Notice of Intent (NOI) with the OWNER's and Operator's signatures is **required** for this project.

Notice of Implementation immediately after completing the installation of the initial BMP's

## PART 2 MATERIALS

### 2.1 MATERIALS

All materials shall conform to these specifications and to the applicable standards listed in Paragraph 1.3 of this Section. BMP's required but not specified below shall be in accordance with the "Manual for Erosion and Sediment Control in Georgia" latest edition.

#### 2.1.1 Ds1 - Disturbed Area Stabilization (Mulching Only)

Ds1 is a temporary cover of plant residues applied to the soil surface for a period of six (6) months or less when seeding is not practical. Materials shall consist of the following.

Compressed and compacted bound bundles of wheat, oat, rye or other local hays free of weeds

Wood waste consisting of chips, sawdust or bark

Polyethylene film

Hydro-mulch

Composed of wood cellulose fiber containing no germination or growth inhibiting factors

Colored green to allow visual metering in application and properties evenly dispersed and suspended when agitated in water

Add hydro-mulch water slurry in hydraulic seeder after proportionate quantities of seed, fertilizer and other materials have been introduced

Moisture Content	9.9% (+ or -) 3.0%
Organic Matter	99.2% (+ or -) 0.8%
Ash Content	0.8% (+ or -) 0.2%
Water Holding Capacity (min)	1150 grams water per 100 grams fiber

### **2.1.2 Ds2 - Disturbed Area Stabilization (Temporary Seeding)**

Ds2 is a temporary vegetative cover with fast growing seedings for up to a twelve (12) month period or until permanent vegetated is established. Materials shall consist of the following.

#### Lime

Lime shall be natural limestone containing minimum 85% total carbonates.

- 95% or more pass 20 mesh sieve
- 55% pass 60 mesh sieve
- 40% pass 100 mesh sieve

#### Fertilizer

Fertilizer shall be as follows.

Dry or hydro

Commercial grade manufactured in accordance with Georgia Department of Agriculture Specifications and bearing approval label of State of Georgia

Grade containing plant food elements determined by laboratory analysis

#### Grass Seed

Grass Seed must be planted according to recommendations contained the "Manual for Erosion and Sediment Control in Georgia" or as approved by a Landscape Architect.

Ryegrass, annual (*Lolium Multiflorum*) containing minimum 98% pure seed with 90% minimum germination and maximum 0.5% weed seed

Bermuda 100% hulled common Bermuda grass (Cynodun Dactylon) containing minimum 87% pure Bermuda with 85% minimum germination and maximum 1% weed seed

All seed types listed in the "Manual for Erosion and Sediment Control in Georgia".

Hydro-seed shall be applied at the following rates.

Ryegrass	250	Lbs/Acre
Bermuda	175	Lbs/Acre

**2.1.3 Ds3 - Disturbed Area Stabilization (Permanent Vegetation)**

Ds3 is permanent vegetative cover using grasses, trees, shrubs or legumes on highly erodible or critically eroded lands. Materials shall consist of the following.

Lime

Lime shall be natural limestone containing minimum 85% total carbonates. Dolomitic limestone shall be used in sandy plains and coastal soils. Conventional equipment shall be use to ground limestone.

- 95% or more pass 20 mesh sieve
- 55% pass 60 mesh sieve
- 25% pass 100 mesh sieve

For hydraulic seeding use finely ground limestone.

- 98% or more pass 20 mesh sieve
- 70% pass 100 mesh sieve

Fertilizer

Fertilizer shall be as follows.

Dry or hydro

Commercial grade manufactured in accordance with Georgia Department of Agriculture Specifications and bearing approval label of State of Georgia

Grade containing plant food elements determined by laboratory analysis

Grass Seed



Grass Seed must be planted according to recommendations contained the "Manual for Erosion and Sediment Control in Georgia" or as approved by a Landscape Architect.

Ryegrass, annual (*Lolium Multiflorum*) containing minimum 98% pure seed with 90% minimum germination and maximum 0.5% weed seed

Bermuda 100% hulled common Bermuda grass (*Cynodun Dactylon*) containing minimum 87% pure Bermuda with 85% minimum germination and maximum 1% weed seed

Hydro-seed shall be applied at the following rates.

Ryegrass	250	Lbs/Acre
Bermuda	175	Lbs/Acre

#### **2.1.4 Cd - Check Dam**

Check dam (Cd) is a small temporary barrier consisting of stone or hay bales constructed across a swale, drainage ditch or area of concentrated flow.

##### Hay Bale Check Dams

Compressed and compacted bound bundles of wheat, oat, rye or other local hays free of weeds

#### **2.1.5 Co - Construction Exit**

Construction Exit (Co) is a stone stabilized pad located at any point where traffic will be leaving a construction site to a public right of way, street, alley, sidewalk or parking area.

Aggregate size shall be National Stone Association R-2 (1 1/2-inch to 3 1/2-inch stone)

Approved Geo-textiles

Amoco CEF-1199, 2019  
Carthage 6%  
Contech C70/06  
GT-400E  
Geotex 104 F  
Filterweave 403, 700  
TNS Advanced Technologies M706  
US Fabrics 670  
Terratex EP

#### **2.1.6 Sd1-Sediment Barrier**

A temporary structure made of silt fence supported by steel or wooden posts, sandbags, straw bales or other filtering material.

Sediment Barrier Type 'NS' (Sd1-NS)

Fabric height	36-inches
Trench Depth	6-inches

Fence Posts	48-inches long 1 1/2-inch by 1 1/2-inch Oak 3-inch diameter or 2-inch by 4-inch softwood Steel 1.3 Lbs/Ft Minimum
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Approved silt fence fabrics

Amoco CEF 2019  
Beltech 755 & 890  
Cady bag Company 20-CSF 350/26  
LINQ Industrial Fabrics, Inc. GTF-200S  
Geotex 914SC, 915SC  
TNS Advanced Technologies TNSW101  
Terratex GASF  
Willacoochee Industrial Fabrics, Inc. 1215 Silt Fence

**PART 3 EXECUTION**

**3.1 PERFORMANCE REQUIREMENTS**

Erosion control devices shall be installed as shown on the plans (and elsewhere as deemed necessary) and are required for all earth areas disturbed by grading and construction operations. The extent of disturbed areas is shown on the construction plans. Erosion control activities include but are not limited to:

- Initial installation of erosion control devices
- Implementation of Best management Practices (BMP's)
- Application of temporary ground cover
- Maintenance of erosion control devices for the duration of the construction period.
- Application of permanent ground cover
- Removal of erosion control devices

**3.1.1 Non-Compliance**

Upon notification by the OWNER of non-compliance with this specification, the Contractor has seven (7) days to address and install additional erosion control devices or otherwise correct the deficiencies noted.

### **3.1.2 Temporary Erosion Control Measures**

Contractor shall install, maintain, repair and/or replace all temporary erosion control measures including, but not limited to, the following:

- Silt fences
- Construction exits
- Check Dams

The Contractor shall be responsible for providing additional erosion control measures as needed to prevent sediment from leaving the site. Contractor shall be responsible for all additional costs associated with additional erosion control measures.

### **3.1.3 Maintenance of Erosion Control Measures**

The Contractor is responsible for maintenance, repair and/or replacement of erosion control measures throughout the construction period due to any of the following causes:

- Downed silt fences
- Washed out silt fences and rock
- Vandalism
- When silt overburdens structure
- Erosion of earth or dam
- Damage due to abnormal weather conditions

## **3.2 SEQUENCE OF EVENTS**

Best Management Practices (BMP's) shall be implemented during construction activities from commencement of construction to completion. Schedule grading operations so as to minimize the time that denuded soils are exposed. Any exposed area left undisturbed for a period of 14 days or longer shall be stabilized with mulch or temporary seeding.

## **3.3 INSTALLATION AND MAINTENANCE**

### **3.3.1 Ds1 - Disturbed Area Stabilization (Mulching Only)**

Install mulch on all building pad area left for more than seven (7) days. Mulch shall be applied whenever ground cover is less than 90%.

Dry straw or hay shall be applied uniformly at a depth of 2-inches to 4-inches by hand or by mechanical equipment. Straw or hay mulch shall be anchored immediately after application. Mulch can be pressed into the soil with a disk harrow using packer disk. Mulch spread with special blower-type equipment may be anchored with emulsified asphalt, tackifiers and/or binders.

Wood waste shall be applied at a depth of 2-inches to 3-inches.

Cut back asphalt shall be applied at the rate of 1200 gallons per acre.

Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection.

### **3.3.2 Ds2 - Disturbed Area Stabilization (Temporary Seeding)**

All disturbed areas shall be seeded within seven (7) days of the completion of land disturbing activities or when land disturbing activities are to be discontinued for longer than two weeks. Seed areas outside buildings, walks and paving not to immediately receive permanent grass or landscaping with temporary seed producing fast growing cover resistant to erosion.

Maintenance of seeded areas shall include but not be limited to watering, re-fertilization, weeding, mowing and repairing washouts and gullies.

### **3.3.3 Ds3 - Disturbed Area Stabilization (Permanent Vegetation)**

Permanent vegetation and structural control measures must be installed as soon as practicable.

### **3.3.4 Cd - Check Dams**

Construct temporary ditch checks of stone, sand or cement bagged, rip-rap, or treated timber post in all ditches and drainage areas on or adjacent to the work area and/or as shown on the plans. The toe of the upstream dam shall be at the same elevation as the top of the downstream dam. The height of check dams shall be 24-inches maximum at center. Check dams shall be 9-inches lower at the center than the outer edges. Side slopes shall be 2:1 or flatter.

### **3.3.5 Co - Construction Exit**

Contractor shall provide temporary construction exits at all locations where vehicles exit the construction site. The stone pad thickness shall be at least 6-inches and shall cover the full width of the entrance. in no case shall the pad width be less than 20 feet. The length of the stone pad shall be at least 50 feet. A layer of geo-textile fabric shall be placed between the stone pad and the soil surface as specified in paragraph 2.1.6 above. Periodically add a 2-inch thick top dressing to maintain pad effectiveness and sprinkle regularly to settle accumulated sediment.

### **3.3.6 Sd1 - Sediment Barriers**

Construct silt fences in accordance with applicable regulations and details. Sediment barriers shall be installed at the toe of all embankments or at the perimeter of all disturbed areas and shall be located to interrupt silt transport conveyed by surface runoff.

Remove, re-distribute and compact sediments which accumulate behind silt fences when such accumulations reach one-half the original height of the barrier and immediately before beginning temporary grassing operations.

Replace fabric whenever it has deteriorated to such extent that the effectiveness of the barrier is compromised or every six months, whichever comes first.

### **3.4 CONCRETE WASHOUT AREAS**

Contractor shall provide at least one 10' by 10' washout area for the disposal of excess concrete, mortar and similar products. Washout areas shall be cleaned as needed. Washout areas shall be completely removed after construction has been completed. Remove all concrete and silt and dispose of materials in an approved landfill. Backfill, grade and stabilize area.

### **3.5 REMOVAL OF TEMPORARY DEVICES**

Temporary erosion control devices shall remain in place and be properly maintained until one of the following has occurred:

A permanent device has been installed to replace the function of the temporary device.

The Contractor has achieved 95% stabilization of disturbed areas and a Notice of Termination has been submitted.

Remove erosion control devices installed under this contract and any erosion control devices left from previous phases of work.

**(END OF SECTION)**

## **SECTION 02220 TRENCHING EXCAVATION, BEDDING AND BACKFILL**

### **PART 1 GENERAL**

#### **1.1 SCOPE**

The work of this section includes trench excavation, dewatering, bedding, backfilling and all other work required for the installation of underground water, and sewer systems as shown on the drawings and/or specified herein.

#### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

02120	Erosion, Sedimentation and Pollution Control
02555	Water Distribution System
02650	Sanitary Sewer System

#### **1.3 APPLICABLE STANDARDS**

All work to be performed in accordance with applicable provisions of the Southern Standard Building Code, OSHA Safety Requirement, State and Local Ordinances and other authorities having jurisdiction.

All construction shall comply with the Department of Labor, Occupational Safety and Health Administration, 29 CFR Part 1926, subpart P, revised July 1, 1995.

If local authorities have standard specifications for pavement removal and replacement, work shall be done in accordance with such standards.

In the event of conflicts among the various sources cited above, the most stringent criteria shall take precedence.

#### **1.4 PROTECTION**

##### **1.4.1 Existing Utilities**

Contractor shall contact the Utilities Protection Center at 1-800-282-7411 at least 72 hours in advance of trenching operations. The location of existing underground utilities shown on the plans is based upon the best information available and may not accurate or complete. The Contractor shall verify the location of all underground utilities prior to commencing work and shall be responsible for the protection of same. Any damage to existing utilities shall be promptly repaired at the Contractor's expense to the full and complete satisfaction of the utility owner.

#### 1.4.2 Existing Structures

Contractor shall protect from damage all existing structures, roads, sidewalks, curbing, etc. against damage from foot or vehicular traffic. Install and maintain adequate barricades, planking, bridging as necessary. Underpin or otherwise support adjacent structures, including service lines and pipe chases, to prevent damage by excavation work.

#### 1.4.3 Excavations

Protect excavations by shoring, sheeting, bracing or other means as required to prevent cave-ins or loose dirt from falling into excavated trenches. Methods and procedures utilized shall conform to, as a minimum, the requirements of OSHA and other governing authorities having jurisdiction.

### 1.5 QUALITY ASSURANCE

Tests for compaction and density, where required, shall be conducted by an independent testing laboratory selected by the OWNER and paid for by the Contractor. The Contractor shall make all necessary excavations and provide access to the work by the testing laboratory. The cost of all retests made necessary by the failure of materials to conform to the requirements of these specifications shall be paid for the Contractor.

## PART 2 MATERIALS

### 2.1 BEDDING AND BACKFILL MATERIALS

Pipe bedding and backfill materials shall be as follows:

**Class I:**

This Class includes angular, 1/4-inch to 1-1/2-inch graded stone including a number of fill materials including coral, slag, crushed stone and crushed shells.

**Class II:**

This Class includes coarse sands and gravels with maximum particle size of 1-1/2-inches including variously graded sands and gravels containing small percentages of fines, generally granular and non-cohesive, either wet or dry. Soil Types GW, GP, SW and SP are included in this Class.

**Class III:**

This Class includes fine sand with clayey gravels including fine sands, clay-sand mixtures, and gravel-clay mixtures. Soil types GM, GC, SM and SC are included in this Class.

**Class IV:**

This Class includes silt, silty clays and clays including organic clays and silts of medium to high plasticity and liquid limits. Soil Types MH, ML, CH and CL are included in this Class.  
***Class IV materials may only be used with the approval of the Engineer.***

**Class V:**

This Class includes the organic soils OL, OH and PT as well as soil containing frozen earth, debris, rocks larger than 1-1/2-inches in diameter and other foreign materials. ***Class V materials shall not be used.***

**PART 3 EXECUTION**

**3.1 EXCAVATION**

The contractor shall examine the work site and inform himself fully as to the nature of all materials to be encountered during excavation for the construction of the various facilities and related appurtenances. The contractor shall perform excavation of all substances encountered to the depth shown on the drawings.

During excavation, pile excavated materials that are suitable for backfilling in an orderly manner and at a sufficient distance from the trench banks to avoid overloading and prevent slides or cave-ins. Remove and dispose of unsuitable material in a manner acceptable to the OWNER.

Grade work site as necessary to prevent surface water from flowing into trenches or other excavations and remove any water accumulating therein by pumping or other approved methods.

Excavation shall not be carried below the required level. Where excavation is carried below the grade indicated through error, the contractor shall refill to the proper grade with Class I or Class II material as directed by the OWNER to obtain a suitable pipe support.

Where wet or otherwise unsuitable material incapable of properly supporting the pipe, as determined by the OWNER, is encountered in the trench bottom, the Contractor shall remove such soil or unsuitable material, dewater to the depth required and backfill trench to proper grade with a foundation of Class I or Class II material as directed by the OWNER to obtain a suitable pipe support.

**3.2 DEWATERING**

The contractor shall keep all excavations clear of water while pipe and appurtenances are being installed. All water pumped or bailed from trenches and other excavated areas shall be conveyed to a point of discharge where it will cause no hazard to the safety and protection of the public, to private property or to other work in progress.

Provide all necessary equipment including well points, pumps, piping and temporary drains sufficient to handle both surface and subsurface water. Maintain equipment for the duration of trench exposure to the elements.

**3.3 PIPE BEDDING**

Pipe bedding shall be Class A, B, C or D as specified below or as shown on the construction plans. Rigid pipe includes ductile iron (DIP), reinforced concrete (RCP), or steel pipes with or without coatings. Flexible pipe includes PVC and HDPE.



**3.3.1 Bedding Classifications**

The following bedding classifications shall be used as specified below or where shown on the drawings.

**Class A:**

This bedding class shall consist of a continuous concrete cradle or a concrete arch with granular bedding. Locations shall be as shown on the drawings.

**Class B:**

Class B Standard - shall consist of granular Class I material placed a minimum of 4-inches below the pipe and continuing to the spring line of the pipe.

Class B Modified - shall consist of granular Class I material placed a minimum of 4-inches below the pipe and continuing to 6-inches above the top of the pipe.

**Class C:**

This bedding class shall consist of granular Class I material placed a minimum of 4-inches below the pipe with Class II or Class III material continuing to the spring line of the pipe.

**Class D:**

This bedding class shall consist of a native undisturbed earth trench bottom with an area excavated for the pipe bell. This bedding class may only be used for dry trench conditions. If the trench becomes wet, Class B bedding shall be used.

**3.3.2 Bedding Requirements**

Bedding requirements for the various piping systems shall be as shown in the following table.

PIPE SYSTEM	BEDDING CLASS
<b>Sanitary &amp; Storm Sewers (Gravity)</b>	
Rigid Pipe	Class C
Flexible Pipe	Class B Modified
<b>Watermains &amp; Force mains</b>	
Rigid Pipe	Class C
Flexible Pipe	Class B Standard

Bedding material under and around the pipe shall be placed in 6-inch layers and compacted by rodding, spading or with approved vibratory equipment to obtain not less than 98% standard proctor as determined by ASTM Method D698.

**3.4 BACKFILLING**

If unsuitable materials are encountered, such materials may not be used for backfilling operations and shall be removed from the site. Unsuitable material includes but is not limited to debris, muck, clay, large clods, stones, wood, stumps, and roots. Prior to backfilling, piping and appurtenances shall be observed by the OWNER's Inspector.

Contractor shall carefully backfill trenches with approved materials. Only Class III (or Class IV if approved by the OWNER/Engineer) materials shall be used. Backfill materials shall be free from large clods of earth or stone and shall be deposited in 6-inch layers and carefully compacted until the following densities are obtained:

Areas under structures	100% Standard Proctor (ASTM D698)
Areas under walks and pavements	98% Standard Proctor (ASTM D698)
Areas under lawns and landscaping	95% Standard Proctor (ASTM D698)

Re-open improperly backfilled trenches (trenches where settlement occurs, or where tests indicate non-compliance with the densities specified above) to depth required for proper compaction. Then refill and compact with surface restored to required grade.

### **3.5 PAVEMENT REMOVAL AND REPLACEMENT**

#### **3.5.1 Removal**

Where necessary to cut existing pavements, curbs and gutters, walks, driveways, etc. make cut with neat parallel straight lines at least 12" wider than the required trench width on each side.

#### **3.5.2 Replacement**

Replace pavements, curbs and gutters, walks and driveways with the same materials and cross section as the original except when otherwise detailed on the construction plans.

Backfill open trenches across roadways, or other areas to be paved as specified in Paragraph 3.4 above except backfill entire trench depth in 6-inch layers, moisten and compact each layer to density of 100% of standard proctor test, so that paving of area can proceed immediately after backfilling is complete.

#### **3.5.2 Temporary Surfaces**

Use temporary road surface of gravel or crushed stone as approved. Maintain one-way traffic at all times and street must be fully opened to traffic as quickly as possible. Completely remove temporary materials and dispose of when permanent pavement is placed.

**(End of Section)**

**SECTION 02500**  
**PAVING for RESURFACING PROJECTS**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

A. This Section provides asphalt paving requirements.

**1.2 QUALITY ASSURANCE**

CONTRACTOR shall be responsible for employing an independent testing laboratory to prepare required design mixes and to monitor his quality control procedures. CONTRACTOR shall be responsible for all asphalt plant testing.

CONTRACTOR shall provide a certificate that all materials and workmanship provided by him conform to Contract Requirements.

OWNER will retain an independent testing laboratory to field verify quality of materials used in paving work.

Where the "Standard Specifications" require that materials be from a source approved by the Department of Transportation, CONTRACTOR may provide proof of such source approval or he may employ an independent testing laboratory to perform necessary sampling and testing and to certify that all source meets requirements for Department approval.

**1.3 REFERENCE STANDARDS**

The "Standard Specifications" referred to in this Section are the Georgia Department of Transportation, Standard Specifications for Road and Bridge Construction. The most current edition shall be used. Those paragraphs in the "Standard Specifications" referring to Measurement and Payment are not applicable to work under this contract.

References to AASHTO shall mean the American Association of State Highway and Transportation Officials.

**1.4 SUBMITTALS**

Submit Certificate of Compliance with specified requirements in duplicate for OWNER's and ENGINEER's file. Design mixes, complete with back-up data, shall be submitted before paving begins in quadruplicate for use by OWNER, ENGINEER, Quality Control Laboratory and field inspector.

## **1.5 JOB CONDITIONS**

**Alignment and Elevations.** Establish and maintain alignment and elevations as shown or specified.

**Weather Limitations.** Conform to weather limitations specified in the GDOT Specifications for each component of the paving system. Under no circumstances shall paving proceed when it is raining, or when the surface to be paved has standing water on it.

**Plant Location.** The asphaltic concrete manufacturing plant used to supply the asphalt for this project shall be a maximum of fifty (50) miles from the project site.

## **PART 2 - MATERIALS AND EQUIPMENT**

### **2.1 MATERIALS FOR ASPHALTIC CONCRETE MIXTURES**

Materials for use in asphaltic concrete mixtures shall conform to the requirements listed in "Standard Specifications". The mix design and gradation for this project shall be Superpave SP - 9.5, fine gradation or SP - 12.5.

CONTRACTOR shall employ an independent testing laboratory to test materials and prepare a design mix for the type of mix to be used on the project and to monitor plant asphalt production for quality control, as specified by OWNER. The mix design shall be submitted to the Engineer before paving operations begin.

### **2.2 MATERIALS FOR PRIME AND TACK COATS FOR BASE COURSES**

Materials used for prime and tack coats shall conform to the requirements of Section 300 of the "Standard Specifications", latest Edition.

## **PART 3 - EXECUTION**

### **3.1 INSPECTION**

Examine areas where pavements are to be constructed. In non-curbed sections, ensure that all grass or other material has been cleared to expose the roadway edge before paving. In curbed sections, mill, broom and tack the surface before paving.

### **3.2 ASPHALTIC CONCRETE LEVELING COURSE**

Where the roadway surface is rutted or otherwise uneven, a leveling course shall be installed prior to installing the resurfacing course.

### **3.3 PRIME AND TACK COATS**

A tack coat shall be applied to every asphalt surface before receiving new asphalt surfacing.

Equipment for application, preparation of surfaces, weather limitations, methods and rates of application shall conform to the requirements of section 300-3 through 300-7 of the "Standard Specifications", latest Edition.

## **PART 4 - SPECIAL CONDITIONS**

### **4.1 SEQUENCE OF OPERATIONS**

The Contractor shall submit a proposed sequence and schedule of paving operations for review before beginning paving. The Contractor shall not mill streets more than one week in advance of paving operations.

### **4.2 CLEAN UP & RESTORATION**

Immediately following paving operations (allowing time for set up and curing) the Contractor shall clean up the work area, removing all construction debris from his operations, including sweeping the work area to remove loose tailings, and any sod or loose lawn material swept away from the pavement's edge.

Any private property damaged as a result of his operations shall be restored in a timely manner (within the same week that it occurs). This includes damage to irrigation systems and landscaping harmed by machinery or men.

If cleanup or damage restoration of paved areas does not occur within one week of paving, the ENGINEER shall have the right to direct the CONTRACTOR to cease further paving operations until cleanup or restoration occurs, contract time will continue to run during this shutdown period.

### **4.3 Maintenance of Traffic**

Traffic shall be maintained by the contractor throughout the construction project and will maintain traffic in accordance with Georgia Department of Transportation Standard Details current edition. The contractor shall post electronic message boards with appropriate message as approved by the Owner, towards the limits of resurfacing on both ends of all arterial roads, collector roads or as otherwise specified within the contract documents. The electronic message boards shall be posted at least one week prior to the beginning of actual work on each required roadway.

**END OF SECTION**

**SECTION 02511**  
**MILLING OF EXISTING ASPHALT PAVEMENT**

**PART 1 - GENERAL**

**1.1 DESCRIPTION OF WORK**

The work consists of removing existing asphaltic concrete pavement to lower the finished grade prior to resurfacing and includes the removing of the milled asphaltic concrete pavement, transporting it off the site and disposing of it. The extent of milling will be determined in the field by the ENGINEER

**1.2 QUALITY ASSURANCE**

All materials and workmanship shall conform to the GDOT Standard Specifications (latest edition).

**PART 2 - PRODUCTS**

**2.01 MILLING MACHINE**

The equipment for this operation shall be a machine capable of maintaining a depth of cut and cross slope which will achieve the results specified. The machine shall be equipped with automatic grade controls which will operate by sensing from one or more skids moving along the pavement surface and where required shall produce a skid resistant surface texture.

The machine shall be equipped with a means to effectively limit the amount of dust escaping from the removal operation.

**PART 3 - EXECUTION**

**3.1 REMOVAL OPERATION**

The existing pavement shall be removed to varying depths in a manner which will restore the pavement surface to a uniform longitudinal profile and cross section as specified. Where indicated on the plans, removal shall be to a specified depth and shall produce a specified cross slope.

The longitudinal profile of the milled surface shall be established by a skid sensor on the side of the cut nearest the centerline of the road. The cross slope of the milled surface shall be established by a second skid sensing device near the outside edge of the cut or by an automatic cross slope control mechanism. The plans may waive the requirement for automatic grade or cross controls where the situation warrants such action.

The CONTRACTOR may elect to make multiple cuts to achieve the required pavement configuration of depth of cut.

The milling machine shall be operated to effectively minimize the amount of dust emitted from the machine. Prewetting of the pavement may be required.

Prior to applying the tack coat and placing the asphaltic concrete, the pavement shall be thoroughly swept with a power broom or other approved equipment to remove to the greatest extent practicable fine material. The operation shall be conducted in a manner so as to minimize air pollution.

### **3.2 FINISHED SURFACE**

Where pavement is to be constructed over the milled surface, it shall have a texture which will provide good bonding.

The finished surface shall have a reasonably uniform texture and shall be within 1/4-inch of a true profile grade and shall have no deviation in excess of 1/4-inch from a straightedge applied to the pavement perpendicular to the centerline. Areas varying from a true surface in excess of the above stated tolerance may be accepted without correction if the ENGINEER determines that they were caused by a pre-existing condition which could not have reasonably been corrected by the milling operations. Any unsuitable texture or profile, as determined by the ENGINEER, shall be corrected by the CONTRACTOR at no additional compensation.

The ENGINEER may require remilling of any area where a surface lamination causes a non-uniform texture to occur.

### **3.3 OBSTRUCTIONS**

Existing asphalt pavement shall be milled up to and around all immovable obstructions, such as manholes, inlets, valve boxes or concrete paving. Pavement removal around such obstructions shall be equal to the depth of adjacent milled areas. It is the intent that the new asphaltic concrete will be applied uniformly around obstructions to a depth equal to the adjacently overlaid areas.

**END OF SECTION**

## SECTION 02555 WATER DISTRIBUTION SYSTEM

### PART 1 GENERAL

#### 1.1 WORK INCLUDED

Provide all labor, materials and equipment necessary to install, test, disinfect (where required) and place into operation the water distribution system as shown on the drawings, as specified herein and as required for a complete and operational system.

#### 1.2 SUBMITTALS

Complete shop drawings and product data on all piping and fittings shall be submitted to the Engineer in accordance with the requirements of Section 01340 of these specifications.

#### 1.3 RELATED WORK SPECIFIED ELSEWHERE

01340	Shop Drawings
01600	Substitutions
02220	Trench Excavation, Bedding and Backfill

### PART 2 PRODUCTS

#### 2.1 GENERAL REQUIREMENTS

The contractor shall furnish and install water distribution systems in accordance with the material specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise.

Any item required but not specified herein, or any product or manufacturer other than those listed will be considered a substitution. **Material submittals are required for such items.** Substitutions will not be allowed without the prior written approval of the OWNER. Substitutions, if allowed, shall meet all criteria delineated in Section 01600 of these technical specifications. The burden of proof of compliance for any proposed substitution rests with the Contractor. The OWNER will be the sole judge as to the acceptance of a proposed substitution and such decisions will be final.

#### 2.2 POTABLE WATER PIPE

Pipe sizes and applications shall be as indicated on the plans and shall conform to the following table.



Pipe Material	Pipe Size	Joint Types	Applications
Ductile Iron	≥4-inch	Mechanical Joint Push-on Joint Flanged Joint*	Water Mains Above Ground Below Ground
PVC DR 18	≥4-inch	Push-on Joint	Water Mains Below Ground
PVC (ASTM D2241 SDR-21)	2-inch	Push-on Joint – Below Ground	Potable Water Below Ground
Polyethylene Tubing	≤2-inch	See Specifications Below	Water Services
HDPE	≥2-inch	Fused	Water Mains Water Services Below Ground
Steel	≥4-inch	Welded	Casings Only

\* Flanged joints for above ground applications only

### 2.2.1 Ductile Iron Pipe

Ductile iron pipe wall thicknesses and pressure class shall conform to ANSI A21.50 (AWWA C150) and ANSI A21.51 (AWWA C151) with pressure class 150 as a minimum. Each length shall be clearly marked with the name of the manufacturer, pressure rating, thickness or pressure class and nominal pipe diameter.

All ductile iron pipe shall be externally coated with a bituminous coating per ANSI A21.51. In areas of corrosive soils as defined in AWWA C105, Appendix A, all bolts, nuts, studs and other uncoated parts of joints for underground installations shall be coated with asphalt or coal tar prior to backfilling.

The interior of all ductile iron pipe, fittings and specials shall be cement lined with a seal coat. The lining shall comply with ANSI A21.4 (AWWA C104). In areas of severely aggressive soils, provide polyethylene encasement for all ductile iron piping systems in accordance with AWWA C105.

### 2.2.2 Polyvinyl Chloride (PVC) Pipe

Pipe shall be virgin polyvinyl chloride (PVC) pipe for potable water and shall have a bell type coupling with a thickened wall section integral with the pipe barrel in accordance with ASTM D3139. Provisions must be made for expansion and contraction at each joint with flexible ring gaskets made of rubber or other suitable material. Elastomeric seals shall meet ASTM F477.

PVC water pipe four (4) inches through twelve (12) inches in diameter shall conform to AWWA C900 Pressure Class (PC) 235 DR-18. PVC water pipe fourteen (14) inches and larger shall conform to AWWA C905 Pressure Class (PC) 235 DR-18. Pipe is to be manufactured to ductile iron pipe equivalent outside diameters. Pipe for water mains shall be blue in color with each length marked with name of the manufacturer, pressure rating, nominal pipe diameter and the seal of the National Sanitation Foundation (NSF).

PVC water pipe two (2) inches in diameter and smaller shall conform to ASTM D2241, Pressure Rating (PR) 200 SDR-21 with push-on type jointing. Glued or Solvent weld joints

shall not be used. Pipe for water mains shall be blue in color (preferred) with each length marked with name of the manufacturer, pressure rating, nominal pipe diameter and the seal of the National Sanitation Foundation (NSF). If blue is not available, white may be used.

### **2.2.3 Polyethylene Tubing**

All water services two (2) inches in diameter and smaller shall be manufactured of PE 3408, high density polyethylene in accordance with AWWA C901, ASTM D1248, ASTM D2239, ASTM D2737 and ASTM D3350. Tubing shall have a minimum working pressure of 200 PSI, shall be copper tube size SDR-9 and shall be blue in color. Couplings shall be made of bronze with compression fittings on both ends suitable for connection to polyethylene tubing with inserts.

Tubing shall be approved for use with potable water by the National Sanitation Foundation and shall be continuously marked at intervals of not more than four (4) feet with the nominal size, pressure rating, NSF seal, manufacturer's name, standard dimension ratio and ASTM specification.

### **2.2.4 High Density Polyethylene (HDPE) Pipe**

Materials used for the manufacturing of polyethylene pipe and fittings shall be PE3408 high density polyethylene meeting cell classification 345464C per ASTM D3350; and meeting Type III, Class B or Class C, Category 5, Grade P34 per ASTM D1248.

HDPE pipe four (4) inches in diameter and larger shall conform to AWWA C906, DR-11, ductile iron pipe size and NSF 61 Standard. HDPE pipe shall be manufactured in accordance with ASTM F714, Polyethylene (PE) Plastic Pipe (SDR-PR) based on Controlled Outside Diameter and shall be so marked. Pipe sizes are nominal and may require up-sizing so that the inside pipe diameter is approximately the same as the PVC pipe diameter where applicable. HDPE pipe used for potable water shall be permanently identified by multiple co-extruded blue color stripes equally spaced into the outside surface of the pipe.

Electro fusion branch saddles for wet tap applications shall meet AWWA C906 and be designed and manufactured in accordance with ASTM F1055 for use with HDPE pipe. Outlets shall be in accordance with ASTM D3261 specifically manufactured for HDPE pipe.

Polyethylene flange adaptors shall be made with sufficient through bore length to be clamped in a butt fusion joining machine without the use of a stub end holder. The sealing surface of the flange adaptor shall be machined with a series of small v-shaped grooves to provide gasket-less sealing or to restrain the gasket against blow out. Flange adaptors shall be fitted with convoluted type ductile iron back up rings meeting ASTM A536, Grade 65/45/12. Flange bolts and nuts shall be grade 2 or higher.

Polyethylene mechanical joint adaptors used for connections of HDPE pipe to ductile iron or PVC piping, mechanical joint fittings or valves shall be self-restraining, fusible

mechanical joint adaptors and shall be of the same SDR rating as the pipe. Adaptors shall include longer T-bolts or all thread rods with nuts at the mechanical joint bell.

### 2.2.5. Steel Casing Pipe

Steel casing pipe shall conform to either ASTM A139 for *Electric Fusion (arc) Welded Steel Pipe* with a minimum yield strength of 35,000 PSI or API-5LX, Grade X-42.

Wall thicknesses shall meet the requirements of the American Railway Engineering Association Manual of Recommended Practice or the Georgia (GDOT) Standard Specifications. For street or highway crossings which are not under railroad or GDOT jurisdiction, the GDOT standards shall be used. Pipe inside diameter shall be in accordance the OWNER standard water construction details. Pipe lengths shorter than eight (8) feet long may not be used unless approved by the OWNER.

## 2.3 FITTINGS

Fittings for PVC and ductile iron pipe 4-inches in diameter and larger shall be ductile iron with mechanical joints for below ground applications and flanged joints for above ground installations. Fittings for PVC piping two (2) inches in diameter and smaller shall be push-on bell type.

### 2.3.1 Ductile Iron Fittings

Ductile iron fittings shall conform to ANSI A21.10 (AWWA C110), ANSI A21.11 (AWWA C111), A21.15 (AWWA C115), and/or A21.53 (AWWA C153). **Compact fittings shall normally be used** but this does not preclude the use of standard or long body fittings where shown on the plans or at the direction of the OWNER. All ductile iron fittings shall be externally coated and internally lined as specified in paragraph 2.2.1 of this section.

Fittings shall have cast on them the pressure rating, nominal diameter, manufacturer's name, foundry location and type of fitting (degrees or fraction of a circle). Cast letters and figures shall be on the outside body of the fitting. Fittings shall have a minimum working pressure of 250 PSI.

### 2.3.2 PVC Fittings

PVC 1120, SDR-21 fittings shall be injection molded, push-on bell type with elastomeric rubber seals in accordance with ASTM D3139. Seals shall conform to ASTM F477.

### 2.3.3 Non-Standard Fittings and Wall Castings

The OWNER shall approve all fittings having non-standard dimensions and cast specifically for a particular project. Such fittings shall meet the requirements of the same standards listed in paragraph 2.3.1 and shall have the same diameter and thickness as standard fittings. Laying lengths and types of ends shall be determined by the particular application and the piping to which they connect.

Wall castings shall be as indicated on the drawings. Flanges shall be faced and drilled to 125-pound ANSI Standards. Flanges shall be tapped for studs.

## **2.4 JOINTS**

The type of joints used for piping and fittings shall be in accordance with the following specifications. Joints shall be made in accordance with the manufacturer's printed instructions.

### **2.4.1 Mechanical Joints**

Mechanical joint materials, assembly and bolting shall be in accordance with ANSI A21.11 (AWWA C11). All glands shall be epoxy coated ductile iron.

### **2.4.2 Flanged Joints**

Flanged joints for ductile iron piping shall conform to ANSI A21.10 (AWWA C110), and ANSI A21.15 (AWWA C115). Flanges shall be in accordance with ANSI B16.1, Class 125. Gaskets shall be used on all flanges. Gaskets shall be rubber ring type with cloth inserts and a minimum thickness of one eighth (1/8) inches. Bolts and nuts shall be Grade B conforming to ASTM A307. The number and size of bolts shall be in accordance with the same ANSI Standard as the flanges.

### **2.4.3 Restrained Joints**

On ductile iron fittings, mechanical joint restraints shall be incorporated into the design of the follower gland. Restraint devices shall consist of multiple gripping wedges incorporated into the follower gland and meeting the requirements of ANSI A21.10 (AWWA C110). Gland body, wedges and wedge actuating components shall be ductile iron in accordance with ASTM A536. Dimensions of the gland shall be such that it can be used with the standard mechanical joint bell and tee head bolts. Twist off nuts (same size as the tee head bolts) shall be used to ensure proper actuation of the restraining device. The mechanical joint restraint shall be designed to accommodate the full working pressure of the pipe with a minimum safety factor of 2.0.

Where called for on the plans, joints on ductile iron piping may be restrained by utilizing a joint restrained gasket which includes a stainless steel locking segment vulcanized into the rubber gasket. The gasket shall be rated for operating pressures up to 250 PSI in accordance with ANSI A21.11 (AWWA C111).

Where it is necessary to restrain PVC pipe bells adjacent to valves and fittings, a harness restraint device shall be used in lieu of thrust blocking. The restraint shall be manufactured of ductile iron in accordance with ASTM A536. A split ring shall be used behind the pipe bell with a serrated ring to grip the pipe. A sufficient number of steel tie rods/bolts shall be used to connect the bell ring and the gripping ring. The harness restraint device shall accommodate the full working pressure of the pipe with a minimum safety factor of 2.0.

The use of concrete thrust blocks as a method of joint restraint shall be limited to situations such as ties to or work associated with existing systems where exposing several joints of pipe is not feasible due to existing ground conditions. In such cases other restraining devices may be required at the direction of the OWNER. Concrete thrust blocks may be used in combination with tie rods in accordance with the OWNER standard construction details. Where used concrete shall be 2,500 PSI minimum.

Where tie rods are used as a method of restraint at mechanical joint fittings and valves, offset eyebolts shall be used to connect tie rods to the fitting. Tie rods shall be steel, threaded as required and installed with a washer and nut (same material as the rod) on either side of the joint. The size and number of tie rods shall be in accordance with the following table.

**Tie Rod Size and Number Table**

Pipe Size	No. of Rods	Rod Size
4"	2	3/4"
6"	2	3/4"
8"	2	3/4"
10"	4	3/4"
12"	4	3/4"
14"	6	3/4"
16"	6	3/4"
>16"	*	*

\* Contact OWNER

## 2.5 WATER VALVES AND APPURTENANCES

Water valves shall be of the size and type shown on the approved construction plans. All valves shall open by turning left or "counter-clockwise". Extension stems on buried valves will be used only at the direction of the Engineer.

### 2.5.1 Gate Valves

Gate valves four (4) inches in diameter and larger shall be resilient seat wedge type conforming to applicable sections of AWWA C509 or C515 designed for a minimum working pressure of 250 PSI. When fully open, gate valves shall have a clear port equal to the nominal diameter of the pipe on which it is installed.

Buried gate valves shall be non-rising stem type, epoxy coated, iron body, bronze mounted with all exterior mounted bolts and nuts of 316 stainless steel. Buried gate valves shall have mechanical joint ends and be equipped with a two (2) inch square operating nut and adjustable valve boxes and covers. Valve boxes shall be as specified in paragraph 2.4.4.3 below.

Gate valves installed above ground may be hand wheel operated, non-rising stem type with flanged ends meeting the same general construction as buried valves. Hand wheels shall not be used inside structures or vaults.

Gate valves two (2) inches to three (3) inches in diameter shall be non-rising stem, resilient seat wedge type with epoxy coated iron body and two (2) inch square operating nut. Valve shall conform to the applicable requirements of AWWA C509 and ASTM A126 Class B with threaded ends and designed for 200 PSI working pressure.

### **2.5.2 Fire Hydrants**

Fire hydrants shall be of the compression type, closing with line pressure, and conforming to AWWA C502. Fire hydrants shall have a minimum valve opening of five and one-fourth (5 ¼) inches with two and one-half (2 ½) inch hose nozzles and one four and one-half (4 ½) inch pumper nozzle. Hydrants shall open left or counterclockwise. The nozzle caps shall be securely chained to the hydrant barrel and be constructed of heavy duty corrosion resistant material.

Fire hydrants shall be fully bronze mounted. All nuts and bolts shall be 304 stainless steel. All working parts, including the valve seat ring, shall be removable through the top of the hydrant without disturbing the barrel. The operating threads shall be totally enclosed in an operating chamber separated from the hydrant barrel by a rubber o-ring stem seal and lubricated by a grease or oil reservoir. The hydrant operating nut shall be pentagon shaped (5-sided) measuring one and one-half (1 ½) inches from point to flat. The inlet connection shall be six (6) inch mechanical joint type.

Fire hydrants shall be traffic type such that the barrel will break away from the standpipe at a point above grade to prevent damage to the barrel and stem. Fire hydrants shall be of a non-freezing type design and shall be provided with a simple and positive automatic drain which will be fully closed whenever the main valve is opened.

The entire outside surfaces of the fire hydrant barrel above grade shall be factory primed and then painted with Koppers GLAMORTEX 501 red enamel paint. The base shoe shall be painted with a minimum 4 mils thick epoxy and the lower barrel shall be asphaltic or epoxy coated.

### **2.5.3 Valve Boxes**

Valve boxes shall be cast iron, heavy duty roadway, screw type adjustable to six (6) inches up and down from the nominal required cover over the pipe. Six (6) inch PVC C900 Pipe shall be used to extend valve boxes to grade. Cast iron castings shall be manufactured of clean, even grain, gray cast iron conforming to ASTM A48, Class 20B. Valve boxes shall have cast iron drop covers with the word "WATER" stamped on it.

#### **2.5.4 Tapping Valves and Sleeves**

Tapping sleeves shall be used for live tap applications or where directed by the OWNER. Tapping sleeves shall be stainless steel wrap around type conforming to ASTM A126 and shall accommodate the full working pressure of the system.

Tapping valves shall meet the requirements of paragraph 2.5.1 of this section. Tapping valves shall be flanged on one end for connection to the tapping saddle and mechanical joint on the other end. MJ tapping saddles and valves shall be used where the main to be tapped is not level so that the valve operator may be installed in a vertical position.

#### **2.5.5 Yard Hydrants**

Yard hydrant shall be high capacity freeze proof type hydrants as Merrill Manufacturing C-1000 Series or approved equal with the following features:

- Inlet – 1" NPT in no lead brass casting
- Outlet – ¾" no-lead hose thread & outside of nozzle has 1" pipe thread
- Stainless steel operating rod
- Teflon packing
- Stainless steel and molded rubber plunger made of self-lubricating material
- 1" no-lead galvanized pipe

### **2.6 WATER SERVICES AND APPURTENANCES**

#### **2.6.1 Corporation Stops**

Corporation stops are required on all water services. Corporation stops shall be made of brass conforming to AWWA C800, ASTM B62 and/or ASTM B584 and shall accommodate the full working pressure of the system. The inlet connection shall be AWWA standard iron pipe (IPT) thread. The outlet connection shall be compression type for polyethylene tubing.

#### **2.6.2 Curb Stops**

Curb stops shall be ball valve type conforming to AWWA C800. Curb stops shall be made of brass conforming to AWWA C800, ASTM B62 and/or ASTM B584 and shall accommodate the full working pressure of the system. Service line connections shall be compression type for polyethylene tubing.

#### **2.6.3 Double Strap Tapping Saddles**

Double strapped tapping saddles shall be epoxy coated ductile iron body type with NPT service outlet. The saddles shall have a self-energizing, o-ring rubber gasket, two alloy steel straps, and a female iron pipe tap conforming to AWWA C800.

#### **2.6.4 Meter Boxes**

Meter boxes for residential services shall be furnished and installed by the contractor/developer. Boxes shall be oval in shape, of cast iron construction with minimum dimensions of 20" L x 10¼" W x 9¾" D suitable for a one (1) inch meter set.

Meter boxes for two (2) inch meters shall be rectangle in shape. Boxes shall be constructed of a light weight plastic composite material with a minimum tensile strength of 3400 PSI. Dimensions shall be suitable for the meter installed.

### **2.7 BACKFLOW PREVENTION DEVICES**

Provide reduced pressure zone backflow preventers or double check valve assemblies where shown on the drawings. Backflow preventers shall be rated for operation with inlet water pressures up to 175 psig and water temperatures up to 140°F.

#### **2.7.1 Double Check Valve (DCV) Assemblies**

The backflow preventer shall feature modular check assemblies with center stem guiding. Each check module shall have a captured spring and be accessible through a bolted cover plate. Seats shall be replaceable without special tools. The device shall be completely factory assembled and include, in addition to the check modules, tight closing resilient seated shut off valves, test cocks and strainer.

The assembly shall meet the requirements of USC Manual 8th Edition, ASSE No. 1015, AWWA C510, CSA B64.5, IAPMO PA31 and UL Classified File No. EX3185.

#### **2.7.2 Reduced Pressure Zone (RPZ) Assemblies**

The RPZ shall consist of an internal pressure differential relief valve located in a zone between two positive seating check modules with captured springs and silicone seat discs. Seats and seat discs shall be replaceable in both check modules and the relief valve. There shall be no threads or screws in the waterway exposed to line fluids. Service of all internal components shall be through a single access cover secured with stainless steel bolts. The assembly shall also include two resilient seated isolation valves, four resilient seated test cocks and an air gap drain fitting.

The assembly shall meet the requirements of USC Manual 8th Edition, ASSE Std. 1013, AWWA C511, IAPMO File No. 1563 and CSA B64.4.

### **2.8 MISCELLANEOUS ITEMS**

#### **2.8.1 Detection Tape**

Detection tape shall be composed of a solid aluminum foil encased in a protective plastic jacket. The tape shall be safety blue in color, shall be at least two and half (2-1/2) inches wide and will bear the printed identification "CAUTION: BURIED WATER LINE BELOW".



### **2.8.2 Tracer Wire**

Water pipe tracer wire shall be AWG 12/1, single conductor solid copper with blue jacket, UL rated suitable for direct burial, temperature range -20° C to 60° C, 600 Volts RMS.

### **2.8.3 Casing Spacers**

Casing spacers shall be a two piece shell per carrier pipe and made from T-304 stainless steel of a minimum 14 gauge thickness. Each shell section shall be lined with a 0.090" thick, ribbed PVC extrusion with a retaining section that overlaps the edges of the shell and prevents slippage. Bearing surfaces (runners) shall be ultra-high molecular weight polyethylene to provide abrasion resistance and a low coefficient of friction. The runners shall be attached to support structures (risers) at appropriate positions to properly support the carrier pipe within the casing pipe. The runners shall be mechanically bolted to the riser. Risers shall be made of T-304 stainless steel of a minimum 10 gauge. All risers shall be MIG welded to the shell. Bottom risers six (6) inches and over in height shall be reinforced. All reinforcing plates shall be 10 gauge T-304 stainless steel and shall be MIG welded to mating parts. All nuts, bolts and washers shall be 304 stainless steel.

### **2.8.4 Casing End Seals**

Unless dictated otherwise by GDOT or railroad specifications, casing and seals shall be pull-over type made from neoprene with T-304 stainless steel bands for securing to the carrier and casing pipe.

## **PART 3 EXECUTION**

### **3.1 PRODUCT DELIVERY, STORAGE AND HANDLING**

The contractor shall inspect all materials delivered to the job site for damage. Materials shall be unloaded and stored with a minimum of handling. Materials shall be stored above ground and the interior of pipe and fittings shall be kept free of dirt and debris. Store non-metallic piping and rubber gaskets under cover and protect from exposure to sunlight.

Valves, hydrants, and other appurtenances shall be handled to ensure delivery at the point of installation in sound, undamaged condition. If coating or linings of pipe or fittings are damaged, such pipe and fittings shall be removed from the site and new materials furnished. Pipe shall not be dragged.

### **3.2 INSTALLATION OF WATER MAINS**

The contractor shall install all pipe, valves, hydrants and other appurtenances in accordance with the specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise. Requirements for trench excavation, dewatering, bedding, backfill and compaction may be found in Section 02220 of these specifications.

#### **3.2.1 Pipe Installation**

All PVC C900/C905 pipe shall be laid in accordance with AWWA C605. All ductile iron pipe and fittings shall be laid in accordance with the manufacturer's recommendations and AWWA C600. Each section of pipe shall rest upon the pipe bed for the full length of its barrel, with recesses excavated to accommodate bells and joints.

Excavation, cleaning, laying, jointing and backfilling shall follow as closely as possible during prosecution of the work. In no case shall pipe be left in the trench overnight without completing the jointing. All precautions shall be taken to prevent sand, dirt and debris from entering the pipe during installation. Any time that pipe installation is not in progress, open pipe ends shall be closed by a watertight plug or other method approved by the OWNER.

Plugs shall remain in pipe ends until all water has been removed from the trench and any foreign material that enters the pipe shall be removed immediately. No pipe shall be installed when trench or weather conditions are unsuitable for such work.

### **3.2.2 Pipe Alignment**

Pipe alignment and gradient shall be straight or shall follow true curves as near as practicable. Curvature in pipe lines, where required, shall be well within (no more than 80% of) the manufacturer's allowable joint deflection or laying radius for the pipe supplied. Otherwise fittings shall be required.

Water mains shall be installed in locations shown on the plans. New water mains in residential subdivisions shall generally be located five (5) feet behind the curb where curb and gutter is used. Where roadside ditches are used in lieu of curb and gutter, the water mains should be placed at the edge of the road shoulder no closer than four (4) feet from the edge of pavement. The placement of water lines, valves and hydrants within the ditch shall require the approval of the OWNER.

### **3.2.3 Pipe Cover**

Pipe shall be laid with a minimum cover of forty two (42) inches in paved areas and thirty six (36) inches in unpaved areas with an allowable maximum of sixty (60) inches. Cover in all areas shall be measured from crown of pipe to finish grade. Reductions in pipe cover requirements require the approval of the OWNER.

Greater depths are permissible when required to clear obstructions, conflicts, etc. The contractor shall contact the OWNER in advance for instructions as to the modifications necessary. A detail for utility conflicts is shown on the **PLANS**.

### **3.2.4 Separation Requirements**

Water lines shall not be laid closer than ten (10) feet horizontally from a sanitary sewer main unless otherwise indicated on the drawings or directed by the OWNER/Engineer. Sanitary sewer lines shall pass beneath water lines with the top of the sewer being at least eighteen (18) inches below the bottom of the water line, Where sewer lines cross water

lines, no joints in the sewer line shall be located closer than ten (10) feet horizontal distance from the water line.

### **3.2.5 Thrust Restraints**

All non-flanged fittings and valves shall be restrained. This shall be accomplished using mechanical restraints at fittings and mechanical restraint along adjacent joints of pipe in accordance with the **Standard Details**. Restraining devices and tie rods, where required, shall be in accordance with paragraph 2.4.3 above.

The use of concrete thrust blocks as a method of joint restraint shall be limited to situations such as point repair where exposing several joints of pipe is not feasible due to existing ground conditions. In such cases other restraining devices may be required at the direction of the OWNER. Concrete thrust blocks may be used in combination with tie rods in accordance with the OWNER standard construction details. Where used concrete shall be 2,500 PSI minimum.

All joints within steel casing pipe shall be restrained with mechanical restraining devices. Harness restraints on PVC (caps) pipe installed within casings may require larger casing pipes.

### **3.2.6 Tracer Wire and Detection Tape**

Contractor shall furnish and install locate wiring on all non-metallic water mains in accordance with the **Standard Details**. Locate wire shall be brought to grade outside a valve box or locating station box, as required, at four hundred and seventy five (475) foot intervals (maximum). In addition, all water mains shall have detection tape installed two (2) feet above the pipe. Tracer wire and detection tape shall be as specified in paragraphs 2.8.1 and 2.8.2 above.

Installed locate wiring shall be tested by the contractor as part of the inspection process, using a qualified tester and suitable testing equipment. The contractor shall notify the OWNER Inspector at least 48 hours in advance of the locate wire field testing schedule.

### **3.2.7 Casing Spacers**

All carrier pipes located within steel casings shall be installed utilizing casing spacers in accordance with the **Standard Details**. Casing spacers shall be installed one (1) foot on either side of each carrier pipe joint and at no more than ten (10) foot intervals along the pipe. A casing spacer shall also be installed within two feet of the ends of the casing pipe. See paragraph 2.8.3 for material specifications.

## **3.3 VALVES AND APPURTENANCES**

### **3.3.1 Valves**

All buried valves shall be carefully mounted in their respective positions free from distortion and strain. Valves shall be placed as shown on the drawings. Gate valves shall

be installed as near as possible to tee and cross fittings. The contractor shall check all exposed bolts on all valves to ensure that they are tight prior to installation. Where required, extension stems shall be furnished and located as directed by the Engineer.

Adjustable valve boxes shall be installed with each buried valve, placed vertically and concentric with the valve stem. Any valve box which has been moved from its original position by trench settlement or other causes, and which prevents the use of a valve wrench for opening and closing of the valve, shall be reset by the Contractor prior to final acceptance. The entire assembly shall be plumb.

In unpaved areas, a poured in place reinforced concrete valve pad shall be installed around all valve boxes. The concrete thickness shall be four (4) inches for poured in place collars. The top of poured in place collar shall be level with the top of the cast iron valve box and level with the **final grade**.

### **3.3.2 Fire Hydrants**

Immediately before installation of the fire hydrant, the hydrant shall be thoroughly inspected and cleaned; and shall be opened and closed to determine if all parts are in working order with valves seating properly and drain valve operating freely. All fire hydrants shall have a minimum cover of 36-inches over the branch supply line and shall be restrained as shown on the **Standard Details**. The hydrant assembly includes the hydrant tee, six (6) inch hydrant supply pipe, six (6) inch gate valve and valve box, tie rods and all other appurtenances as shown on the aforementioned detail.

Hydrant drainage shall be provided by installing at least seven (7) cubic feet of No.57 gravel around the hydrant and below the top of the hydrant supply pipe. The barrel of the hydrant shall be set plumb with the lowest discharge outlet at least fifteen (15) inches and no more than twenty four (24) inches above **final grade**.

The minimum spacing for fire hydrants shall be 500 feet unless directed otherwise by the OWNER. No fire hydrant shall be installed within ten (10) feet of any private or commercial driveway unless directed by the OWNER.

### **3.3.3 Backflow Prevention Devices**

Backflow prevention devices shall be installed in accordance with applicable state and local ordinances. Double check valve assemblies shall be used in low to medium (non-health) hazard locations such as restaurants, lawn sprinkler systems, swimming pools, fire sprinkler systems, etc.

For high (health) hazard locations such as hospitals, medical clinics, car wash facilities, wastewater treatment plants, pumping stations, etc., a reduced pressure zone (RPZ) assembly shall be used. Fire suppression systems utilizing reclaimed water or other chemicals and additives are also considered high hazard locations. Typical installation requirements are shown on the **Standard Details**.

### **3.4 SYSTEM CONNECTIONS**

Unless otherwise approved, all connections and ties to the existing public water system shall be performed by the OWNER upon payment of applicable fees. No taps shall be made within 5 pipe diameters or five (5) feet (whichever is smaller) of a joint. The contractor/developer shall coordinate the tap with the OWNER and pay all applicable fees.

The contractor/developer shall furnish and install the required tapping saddle and tapping valve in accordance with OWNER Standards, after which OWNER personnel will make the actual tap to the main. A typical water main connection is shown on the *Standard Details*.

#### **3.4.1 Water Service Connections (1-inch Meter)**

All water service connections to mains within new developments under construction and not yet accepted by the OWNER shall be performed in accordance with the OWNER Standards and shall include service tap, corporation stop, service tubing, curb stop and meter box. Water meters will be installed by the OWNER. Water service connections to existing mains shall be made by the OWNER upon payment of all operational, impact and account setup fees. No service taps shall be made within 5 pipe diameters or 5-feet (whichever is smaller) of a joint. Service tubing shall be as specified in paragraph 2.2.3 above. Typical residential water service details for single, double or multiple service lines are shown on the *Standard Details*.

#### **3.4.2 Water service Connections (2-inch and Larger Meter)**

Water service connections to existing mains shall be made by the OWNER. The contractor/developer shall coordinate the tap with the OWNER and pay all applicable fees. The contractor/developer shall furnish and install the required tapping saddle and tapping valve in accordance with OWNER standards, after which OWNER personnel will make the actual tap to the main. No service taps shall be knowingly made within five (5) pipe diameters or five (5) feet (whichever is smaller) of a joint. Water meters will be obtained from the OWNER but may be installed by a licensed plumber or utility contractor. Unless otherwise approved, meters shall be installed in vaults below ground. Above ground installations may be approved on a case by case basis. Meters two (2) inches and larger shall be installed with a bypass. Typical large meter installation details are shown on the *Standard Details*.

### **3.5 PRESSURE AND LEAKAGE TESTING**

Upon completion of backfilling operations and prior to disinfection, all completed water lines shall be subject to hydrostatic (pressure and leakage) testing in accordance with AWWA C600 or AWWA C605 as appropriate and as outlined below. Pressure and leakage testing shall be conducted simultaneously. The contractor shall test all new water lines in the presence of a OWNER Inspector.

The test pressure shall be measured at the lowest point. All required blow offs shall be installed by the contractor prior to the hydrostatic test. See also paragraph 3.6 below for required sampling locations for bacteriological testing.

The contractor shall furnish clean water as well as temporary plugs, caps, bulkheads, test pump and all other necessary equipment and labor for the test. The section of water main to be tested shall be filled with water of approved quality and all air shall be expelled from the pipe. Water for testing may be obtained from any existing fire hydrant or special wet tap of an existing water line provided that the method of backflow prevention used is approved by the OWNER Inspector.

**The OWNER will operate all valves and hydrants on the existing water distribution system.** If blow offs or other outlets are not available at high points for releasing air, the contractor shall make the necessary taps at such points and shall plug such holes at the completion of the test. The Table below lists the approximate amount of water which must be added to the pipe to raise line pressure from 0 to 150 PSI when no air is present.

**Water / Pipe Ratio Table**

Pipe Diameter	Gallons/1000 LF
6"	0.73
8"	1.31
10"	2.04
12"	2.94
16"	5.22

If the actual field test quantities (additional water amount) is over 4 times greater than the amounts listed in the table above, severe air entrapment is likely and additional efforts should be made to expel air from the pipe prior to testing.

All piping shall be pressure and leakage tested for a minimum of 2-hours duration at 150 PSI. All valved sections shall be hydrostatically tested to ensure sealing (leak allowance) of all line valves. During the 2-hour test period, no pipe will be accepted if pressure loss is greater than 5 PSI regardless of the leakage test results. The allowable testing leakage shall not exceed 11.65 GPD/Mile/inch of nominal diameter at a pressure of 150 PSI. If the initial test results are unsatisfactory, damaged or defective pipe, fittings and valves shall be repaired or replaced and the test repeated until satisfactory results are obtained.

**3.6 DISINFECTION OF WATER MAINS**

Upon satisfactory completion of the hydrostatic test (where applicable), all new potable water lines and other pipe related installations which may have been contaminated by the work shall be disinfected in accordance with AWWA C651, the Rules for Safe Drinking Water as published by the Georgia Environmental Protection Division, and as outlined below. The contractor shall disinfect all new water lines in the presence of the OWNER Inspector.

Prior to disinfection, water lines shall be thoroughly flushed to remove contaminated materials from the line. The contractor is referred to AWWA C651 for precautions during construction and procedures for flushing.

Disinfection shall be accomplished by introducing chlorine into the main to be disinfected. The disinfection procedure used may be any of the methods or procedures outlined in AWWA C651. A chlorine residual of at least 25 milligrams per liter (mg/l) shall be maintained for 24 hours in the water line to be disinfected. After the 24 hour holding or contact period, the heavily chlorinated water shall be flushed from the main until the chlorine residual within the main reaches the level of chlorine normally carried in the distribution system (1.0 mg/l). De-chlorination of the flushing water may be required if the highly chlorinated water is to be discharged directly to a surface water stream or storm drain system. If the water can be sheet-flowed over a large area or discharged to a holding pond, de-chlorination may be avoided.

After final flushing and before the new water main is connected to the distribution system, two consecutive sets of acceptable samples, taken at least 24-hours apart, shall be collected from the new main.

At least one set of samples shall be collected from every twelve-hundred (1200) linear feet of new water main, plus one set from the end of each line and at least one set from each branch. The OWNER will determine the number and location of the required sampling points to meet the current standards. All required sampling taps shall be installed by the contractor, at his expense, prior to disinfection.

The collection of samples and bacteriological testing will be performed by the OWNER at the Contractor's expense unless noted otherwise on the construction plans. If the bacteriological tests are unsatisfactory, disinfection procedure shall be repeated until satisfactory results are obtained.

**(END OF SECTION)**

## SECTION 02650 SANITARY SEWER SYSTEM

### PART 1 GENERAL

#### 1.1 WORK INCLUDED

Provide all labor, materials and equipment necessary to install, test, and place into operation the precast concrete wetwell, gravity sewer mains, pump station discharge piping and valves, effluent flow meter, PVC force main with related fittings and appurtenances as shown on the drawings, as specified herein and as required for a complete and operational system.

#### 1.2 SUBMITTALS

Complete shop drawings and product data in accordance with the requirements of Section 01340 of these specifications shall be submitted on all the following items:

1. Round precast manhole and wetwell bottoms, riser sections and top
2. Complete product data on wetwell and influent manhole coating system
3. Square and rectangular precast structures (Flow Meter Vault)
4. Complete product data on all piping, valves, flow meter and appurtenances

#### 1.3 RELATED WORK SPECIFIED ELSEWHERE

01340	Shop Drawings
02220	Trench Excavation, Bedding and Backfill

### PART 2 PRODUCTS

#### 2.1 GENERAL REQUIREMENTS

All material shall be free from defects impairing strength and durability, shall be of the best commercial quality for the purpose specified, shall have structural properties sufficient to safely sustain or withstand strains and stresses to which it is normally subjected and be true to detail.

#### 2.2 PIPE AND FITTINGS

The contractor shall furnish and install gravity sewer and pressure piping systems in accordance with the material specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise. All materials shall be new.

Any item required but not specified herein, or any product or manufacturer other than those listed will be considered a substitution. **Material submittals are required for such items.** Substitutions will not be allowed without the prior written approval of the OWNER. Substitutions, if allowed, shall meet all criteria delineated in Section 01600 of these technical specifications. The burden of proof of compliance for any proposed substitution rests with the Contractor. The OWNER will be the sole judge as to the acceptance of a proposed substitution and such decisions



will be final. Pipe sizes and applications shall be as indicated on the plans and shall conform to the following table.

**Pipe Size and Application Table**

Pipe Material	Pipe Size	Joint Types	Applications
Ductile Iron	≥ 4-inch	Mech. Joint – Below Ground Flanged Joint – Above Ground Flanged Joint – Inside Structures	LS Discharge Piping Buried FM Fittings
PVC (AWWA C900 DR-18)	4 to 12-inch	Push-on Joint – Below Ground	Sewage Forcemains Casing Pipes
PVC (AWWA C905 DR-18)	14 to 24-inch	Push-on Joint – Below Ground	Sewage Forcemains Casing Pipes
PVC (AWWA C905 DR-21)	> 24-inch	Push-on Joint – Below Ground	Casing Pipes
PVC (ASTM D2241 SDR-21)	1.5 to 3-inch	Push-on Joint – Below Ground	Sewage Forcemains
PVC (ASTM D2241 SDR-17)	4 to 12-inch	Push-on Joint – Below Ground	Gravity Sewer Mains
PVC (ASTM D3034 SDR-26)	4 to 15-inch	Push-on Joint – Below Ground	Gravity Sewer Mains
HDPE (DR-11)	≥ 2-inch	Fused – Below Ground Flanged – Inside Structures	Sewage Forcemains
Steel	≥4-inch	Welded	Casings Pipes Only

### 2.2.1 Gravity Sewer Mains and Fittings

Each length shall be clearly marked with the name of the manufacturer, location of the plant, pressure rating, nominal pipe diameter and length. All PVC pipe used for gravity sewer applications shall be green in color.

Gravity sewer pipe for use where cover exceeds 36-inches shall be PVC SDR-26 and shall conform to ASTM D3034 for size 4-inch through 15-inch and ASTM F679 for 18-inch through 36-inch. The pipe material shall be clean, virgin, National Sanitation Foundation approved, Class 12454-B PVC compound conforming to ASTM resin specification D1784 with wall thickness T-1. Pipe shall have a bell type coupling with a thickened wall section integral with the pipe barrel in accordance with ASTM D3212. Elastomeric seals shall meet ASTM F477 or ASTM F913. The pipe shall be designed to pass without failure a sustained pressure test of 340 PSI in conformance with ASTM D1598 and a quick burst test of 400 PSI in conformance with ASTM D1784.

Fittings shall meet the requirements of ASTM D3034 and ASTM F1336 for sizes 4-inch through 15-inch in diameter and ASTM F679 and ASTM F1336 for sizes 18-inch through 36-inch in diameter with minimum wall thickness of SDR-26. Fittings shall be gasket joint type meeting the requirements of ASTM D3212. Elastomeric gaskets shall conform to ASTM F477 or ASTM F913. PVC material shall have a cell classification of 12454-B in accordance with ASTM D1784.

Where minimum cover requirements cannot be maintained, pipe for gravity sewer applications shall be PVC SDR-17 I.P.S. pressure rated pipe meeting the requirements of ASTM D2241. All pipe shall be made from quality PVC resin, compounded to provide physical and mechanical properties that equal or exceed cell class 12454 as defined in ASTM D1784. Provisions must be made for expansion and contraction at each joint with

an elastomeric ring. The bell shall consist of an integral wall section with a factory installed, solid cross section Rieber elastomeric gasket which meets the requirements of ASTM F477. The bell section shall be designed to be at least as hydrostatically strong as the pipe barrel and meet the requirements of ASTM D2241. The joint design shall meet the requirements of ASTM D3139 under both pressure and 22-inches Hg vacuum.

## 2.2.2 Sewage Forcemain Pipe and Fittings

### 2.2.2.1 Polyvinyl Chloride (PVC) Pipe

All PVC force main piping shall be green in color. Pipe shall be virgin polyvinyl chloride (PVC) pipe and shall have a bell type coupling with a thickened wall section integral with the pipe barrel in accordance with ASTM D3139. Provisions must be made for expansion and contraction at each joint with flexible ring gaskets made of rubber or other suitable material. Elastomeric seals shall meet ASTM F477.

PVC force mains four (4) inches through twelve (12) inches in diameter shall conform to AWWA C900 Pressure Class (PC) 235 DR-18. PVC force mains fourteen (14) inches and larger in diameter shall conform to AWWA C905 Pressure Class (PC) 235 DR-18. Pipe is to be manufactured to ductile iron pipe equivalent outside diameters. Fittings shall be ductile iron as specified below.

PVC force mains 1.5-inch thru 3-inch in diameter shall be SDR-21 I.P.S. pressure rated pipe meeting the requirements of ASTM D2241. Fittings shall be injection molded, push-on bell type with elastomeric rubber seals in accordance with ASTM D3139. Seals shall conform to ASTM F477.

### 2.2.2.2 Ductile Iron Pipe and Fittings

All ductile iron pipes and fittings for Lift Station discharge piping and buried fittings shall be Sewer Safe internally lined with an approved amine cured novalac epoxy coating containing at least 20% by volume of ceramic quartz pigment. All buried ductile iron pipe shall have mechanical joints or push-on type pipe joints. Buried fittings shall be mechanical joint with mega-lug type joint restraints. Exposed or above ground ductile iron pipe and fittings shall have flanged joints. ***Ductile iron pipe will not be allowed for use in gravity sewer applications without the written authorization of the OWNER.***

Ductile iron pipe wall thickness and pressure class shall conform to ANSI A21.50 (AWWA C150) and ANSI A21.51 (AWWA C151) with pressure class 350 as a minimum. Pipe shall be clearly marked with the name of the manufacturer, location of the foundry, pressure rating, thickness or pressure class, nominal pipe diameter, weight of pipe without lining, maximum depth of bury and length. All pipe furnished by the approved manufacturer shall be cast and machined at one foundry location to ensure quality control and provide satisfactory test data. All ductile iron pipe for sewer service shall be color coded green by field painting green stripe, three (3) inches wide along the crown of the pipe barrel. All exposed

or above ground ductile iron pipe and fittings shall be painted in accordance with Section 09900 of these specifications.

Horizontal and vertical directional changes in forcemains shall be accomplished with properly restrained bends of 45° or less. Ductile iron fittings shall have a minimum working pressure of 350 PSI. Fittings shall conform to ANSI A21.10 (AWWA C110), ANSI A21.11 (AWWA C111), ANSI A21.15 (AWWA C115) and/or ANSI A21.53 (AWWA C153). Compact fittings shall normally be installed. Long body fittings shall be used where shown on the drawings, where compact fittings are not available, or at the option of the Contractor when the laying length is not controlled by compact fitting patterns. All fittings shall be UL/FM approved and shall conform to NSF Standard 61 as applicable. All fittings furnished by the approved manufacturer shall be cast and machined at one foundry location to ensure quality control and provide satisfactory test data. Fittings shall have cast on them the pressure rating, nominal diameter, manufacturer's name, foundry location, plant code and degrees or fraction of a circle. Cast letters and figures shall be on the outside body of the fitting.

All buried ductile iron pipe and fittings shall be externally coated with a bituminous coating as specified in ANSI A21.51 and be continuous, smooth, neither brittle when cold or sticky when exposed to the sun, and be strongly adherent to the fitting. If pipe is installed in a corrosive soil, all nuts, bolts, studs and other uncoated parts of joints for underground installation shall be coated with asphalt or coal tar prior to backfilling. All exposed or above ground ductile iron pipe and fittings shall be painted in accordance with Section 09900 of these specifications.

#### 2.2.2.3 High Density Polyethylene (HDPE) Pipe and Fittings

All interior wetwell discharge piping shall be IPS DR-11 (160 PSI) flange by flange high density polyethylene (HDPE) pipe with 316 stainless steel backup rings, nuts, bolts and washers. Each discharge leg shall be one continuous pipe joint.

#### 2.2.2.4 Joint Restraints

Force mains shall have mechanically restrained joints at changes in direction. The restrainer shall be manufactured of ductile iron and shall meet or exceed the requirements of ANSI A21.11 (AWWA C111) and ASTM A536. The restrainer system shall provide anchoring of ductile iron pipe or fittings or bell to spigot PVC pipe joints. The restrainer shall accommodate the full working pressure rating of the pipe plus surge allowance.

### 2.2.3 Casing Pipes

Casing pipe interior diameter shall, at a minimum, be 2-inches larger than the outside diameter of pipe bells, joint restraints, etc. Carrier pipes shall be installed with casing spacers and casings shall be provided with end seals in accordance with the requirements of the authority having jurisdiction (i.e. Railroad, GDOT, OWNER, etc.)

### 2.2.3.1 Steel Casing Pipes

Steel casing pipe shall conform to either ASTM A139 for *Electric Fusion (arc) Welded Steel Pipe* with a minimum yield strength of 35,000 PSI or API-5LX, Grade X-42.

Wall thicknesses shall meet the requirements of the American Railway Engineering Association Manual of Recommended Practice or the Georgia (GDOT) Standard Specifications. For street or highway crossings which are not under railroad or GDOT jurisdiction, the GDOT standards shall be used. Pipe lengths shorter than eight (8) feet long may not be used unless approved by the OWNER.

### 2.2.3.2 HDPE Casing Pipes

High density polyethylene (HDPE) casing pipes shall be DR 9 meeting the requirements of ASTM D3035 and butt fusion welded.

### 2.2.3.3 PVC Casing Pipes

PVC casing pipes 24-inches in diameter and less shall be DR 18 meeting the applicable requirements of AWWA C900 or C905 as appropriate for the pipe diameter. PVC casing pipes larger than 24-inches in diameter shall be DR 21 meeting the applicable requirements of AWWA C905.

All pipes shall be hydrostatically proof tested at the factory in conformance with UNI-B-11 standards. In case of conflict between standards specified herein, the requirements of AWWA Standard C900 and C905 shall prevail. Pipe is to be manufactured to ductile iron pipe equivalent outside diameters. The pipe material shall be clean, virgin, National Sanitation Foundation approved, Class 12454-B PVC compound conforming to ASTM resin specification D1784.

## 2.3 PRECAST CONCRETE STRUCTURES

### 2.3.1 Lift Station Wetwells

Precast wet well base, sections and related structures shall be of the size indicated on the drawings and shall conform to the requirements of ASTM C478 (specification for precast concrete manhole sections and structures) except as modified herein. Cement shall be minimum 4,000 psi concrete meeting the requirements of ASTM C150 (specification for Portland cement, type II). Precast sections shall be provided with "O" ring gasket type joints, conforming to ASTM Designation C443-77, or flexible joint sealant roping of butyl rubber conforming to Federal Specification SS-S-210A, AASHTO M-198, Type B-Butyl Rubber with a minimum cross section of 1 ¼ inches. Lifting devices for handling precast section components shall comply with OSHA Standard 1926.704. Wetwell coatings shall be in accordance with Section 09900 of these specifications.

Wall thickness shall be determined by the precast manufacturer and shall **be not less than** 1/12<sup>th</sup> the inside diameter in inches plus one (1) inch. Ring reinforcement shall be custom-made with openings to meet indicated pipe alignment conditions and invert elevations. Bases for wet wells shall be cast integrally with the bottom section.

A Flexible Neoprene-EPDM pipe connector, conforming to ASTM C443 shall be used to connect the sewer influent pipe to the precast concrete wet well. The connector shall be a minimum of three-eighths (3/8) inches thick or greater and resistant to ozone, weathering, aging, chemicals and petroleum products. The securing bands shall be stainless steel and screw assembly and totally non-magnetic Series 304 stainless steel. The connector shall be of a size specifically designed for the specified pipe material and size. The interior annular space between the exterior of the pipe and the interior of the connector shall be filled with a Type II lean cement grout. The exterior (below grade) of precast concrete wet wells shall be given two coats of an approved bituminous water proofing materials.

### **2.3.2 Round Precast Concrete Manholes**

Precast concrete manholes or calcium aluminate cement concrete manholes used shall conform to all requirements of ASTM Designation C478 at minimum and be provided with "O" ring gasket type joints, conforming to ASTM Designation C443-77, or flexible joint sealant roping of butyl rubber conforming to Federal Specification SS-S-210A, AASHTO M-198, Type B-Butyl Rubber with a minimum cross section of 1 ¼ inches. Lifting devices for handling precast manhole section components shall comply with OSHA Standard 1926.704. Manhole coatings shall be in accordance with Section 09900 of these specifications.

#### **2.3.2.1 Top Section**

Top Section shall be cast monolithically and shaped as an eccentric cone except that a concentric cone shall be used for manhole depths 5-feet or less. Joint systems must match associated riser or base sections. The clear opening for the manhole frame and cover shall not be less than 24-inches for main sewers 6-inches thru 18-inches in diameter, and not less than 32-inches for main sewers greater than 18-inches in diameter.

Where manhole depth will not permit a diameter transition or cone section, a precast flat slab top section shall be provided with a 24-inch or 32-inch diameter hole (as required above) for the manhole frame and cover opening.

#### **2.3.2.2 Riser and Transition Sections**

Riser and transition sections shall be cast monolithically and have a minimum length of 16-inches. Joint systems must match associated riser, cone or base sections.

#### 2.3.2.3 Base Section

Base sections shall be cast monolithically and have a minimum length of 16-inches. Joint systems must match associated riser sections.

#### 2.3.2.4 Manhole Inverts

Manhole inverts shall be precast and provide clearance for pipe projecting a minimum of 2-inches inside the manhole wall. For straight through flow manholes, troughs shall be formed and finished to the same slope as the incoming and outgoing sewer mains. Manholes placed at changes in grade or direction shall be formed and finished to provide a minimum drop of 0.10-feet between the inlet and outlet pipes.

The minimum thickness of precast inverts from the bottom of the lowest invert to the bottom of the base shall not be less than 8- inches. Benches shall have a uniform 2:1 slope from the high point at the manhole wall to the lip of the invert trough. The invert trough shall have a minimum depth of  $\frac{1}{2}$  of the main pipe diameter. Precast inverts shall be free from depressions, high points, voids, chips or fractures over  $\frac{1}{4}$ -inch in diameter or depth.

Hand-formed inverts, when approved for use, shall meet or exceed the durability, strength, configuration and hydraulic "smoothness" required for precast inverts. Filler for hand formed inverts shall be holed burned brick.

#### 2.3.2.5 Manhole Steps

Manhole steps shall be provided on the vertical or straight wall of 4-foot and 5-foot diameter manholes and shall be aligned vertically on 16-inch centers. Steps shall be secured to the manhole wall with a compression fit in tapered holes or cast in place. Steps shall be coated with a copolymer polypropylene plastic coating, reinforced with a  $\frac{1}{2}$ -inch diameter grade 60 bar, and be provided with serrated treads and tall end lugs. Step pullout strength shall be 2000 lbs. minimum when tested according to ASTM C497. Steps shall begin no less than 18-inches from the manhole rim and end no closer than 16-inches above the manhole bench.

Manhole steps shall not be used on manholes greater than 5-feet in diameter or where a concentric cone or flat-slab top is the final section.

#### 2.3.2.6 Pipe Connections

Provide preformed rubber boots at all pipe connections to manholes. Rubber boots, with stainless steel fasteners shall be equal to those manufactured by Kor-N-Seal or Press Seal Gasket Corporation.

### 2.3.3 Square and Rectangular Precast Structures and Vaults

Precast concrete sections shall meet the requirements of ASTM C 913. The minimum 28-day compressive strength of the concrete in precast sections shall be 4,000 PSI.

The design of each structure shall be the responsibility of the manufacturer and shall conform to ACI 318 and the minimum structural design loading requirements as defined in ASTM C 890. The minimum design dead load shall be based on the depth shown on the drawings.

Precast sections shall be manufactured such that the spigot end is at the top of each section. Dimensions for square and rectangular precast sections, where required, are shown on the drawings.

### 2.3.4 Corrosion Protection

#### 2.3.4.1 Precast Concrete Manholes

Manhole corrosion protection shall be provided for manholes in accordance with the following schedule based on detention time of sewer flow from the uppermost region of the contributing pipe reach using an average velocity of two (2) feet/sec.

Vapor H2S	Corrosion Risk Level	Detention Time	Corrosion Protection
0-10 PPM	No or Low Risk	<2 Hours	None
11-50 PPM	Moderate Risk	2 - 4 Hours	Coal Tar Epoxies
>50 PPM	High Risk	>4 Hours	Calcium Aluminates Epoxy Coatings Approved Lining Systems
FM Discharge Manhole	High Risk	N.A.	Calcium Aluminates Epoxy Coatings Approved Lining Systems

Corrosion protection for *High Risk* manholes shall be hydrogen sulfide resistant cementitious products containing calcium aluminates applied at a minimum of one-half (½) inch to three-fourths (¾) inch in thickness or epoxy coatings applied a minimum of 150 mil thickness onto all interior manhole surfaces, excluding the trough, after proper substrate preparation; or precast manholes manufactured of calcium aluminate cement concrete; or manholes manufactured of fiberglass. Alternatives that provide equal or better protection may be approved.

Any manholes receiving the discharge from upstream lift stations shall be considered a *High Risk* manhole and the 2<sup>nd</sup> and 3<sup>rd</sup> manholes downstream shall be considered *Moderate Risk* manholes and protected per this standard.

### 2.3.4.2 Precast Wetwells

The interior corrosion protection for precast concrete wet wells shall be in accordance with the following schedule based on detention time of sewer flow from the uppermost region of the contributing pipe reach using an average velocity of two (2) feet/sec.

Vapor H <sub>2</sub> S	Corrosion Risk Level	Detention Time	Corrosion Protection
0-10 PPM	No or Low Risk	<2 Hours	None
11-50 PPM	Moderate Risk	2 - 4 Hours	Coal Tar Epoxies
>50 PPM	High Risk	>4 Hours	Calcium Aluminates Epoxy Coatings Approved Coating Systems

Corrosion protection for *High Risk wetwells* shall be hydrogen sulfide resistant cementitious products containing calcium aluminates applied one-half (½) inch to three-fourths (¾) inches of thickness onto all interior surfaces after proper substrate preparation; precast wet well structures manufactured of calcium aluminate cement concrete or precast structures with approved epoxy coatings applied a minimum of 150 mil thickness. Alternatives that provide equal or better protection may be approved. A (ten 10) year warranty will be required.

All wet wells designed with the intention of being used as a receiving wet well from upstream lift stations, or considered by the OWNER to be Regional Lift Stations, shall be considered *High Risk wetwells*.

## 2.4 MANHOLE FRAMES AND COVERS

Manhole frames and covers shall be Gray Cast iron conforming to specification ASTM-A48 Class 35B. Castings shall be of uniform quality, and free from blowholes, porosity, hard spots, shrinkage distortion and other defects. Frames and covers shall be smooth, well-cleaned by shot blasting and shall remain unpainted. All castings shall be manufactured true to pattern, and component parts shall fit together in a satisfactory manner. The frame and cover shall be designed to withstand an AASHTO H-20 wheel loading. The frame and cover shall have an "O" Ring type rubber seal or neoprene gasket designed to eliminate or significantly reduce surface water infiltration, have two non-penetrating pick-holes in the cover and four one (1) inch diameter anchor holes in the frame flange. The cover shall read "Sanitary Sewer".

Manhole frames and covers on 4-foot diameter manholes shall have a minimum inside opening diameter of not less than 23-inches and no more than 24-inches. Manhole frames and covers on 5-foot diameter manholes and greater shall have a minimum inside opening diameter of not less 30-inches and not more than of 31-inches.

Manhole frames and covers within easements or in areas where security is an issue shall be equipped with manhole locking devices or bolt down covers.



## **2.5 VALVES AND APPURTENANCES**

All lift stations shall be equipped with an isolation valve, check valve and gauge fitting on its discharge header. The common manifold header for the pumps shall be equipped with a combination air/vacuum release valve and isolation valve to isolate the entire pumping system from the serving force main.

### **2.5.1 Plug Valves**

Lift station isolation valves shall be plug valves mounted horizontally on the discharge header. All plug valves shall be non-lubricated eccentric plug type with Buna "N" neoprene, epoxy or fusion bonded, nylon faced plugs. Valve bodies shall be ASTM A126, Class B cast iron with all exterior mounted bolts and nuts to be of stainless steel. The interior of all plug valves shall be epoxy coated. Plug valves shall be rated for a minimum of 150 PSI and shall provide drip tight shut off with this pressure in either direction.

Port areas of four (4) inch through twelve (12) inch valves shall be 100% of full pipe area. Valve seat shall consist of either a welded 1/8-inch overlay of pure nickel, or shall be 316 stainless steel screwed into the cast iron body.

Upper and lower plug stem bearings shall be sleeve type of a stainless steel or other non-corrosive bearing material. The packing shall be adjustable and the bonnet shall be bolted. All bolts, nuts and washers shall be 316 stainless steel.

Plug valves up to six (6) inches in size shall be lever operated. All plug valves eight (8) inches and larger shall be equipped with totally enclosed worm gear actuators complying with AWWA C504. All gearing shall run in oil. The actuator housing shall be semi-steel with seals to prevent dirt or water from entering the housing. Shaft bearings shall be permanently lubricated bronze bushings. Appropriately sized hand wheel operators shall be provided for each gear actuated valve.

### **2.5.2 Check Valves**

Lift station check valves shall be swing check valves mounted horizontally on the discharge header upstream of the isolation plug valve. Swing check valves shall conform to the requirements of AWWA C508. All check valve interiors shall be fully coated with a liquid thermosetting epoxy suitable for use in wastewater applications.

Swing check valves larger than two (2) inches in diameter shall be rated for a working pressure of 150 PSI. Valves shall have a cast iron body with stainless steel bolts and nuts, flanged ends, 316 stainless steel shaft connected to steel outside lever and stainless steel spring, swing type with straight away passageway of full pipe area. The valve shall have a renewable bronze seat ring and rubber faced disk.

Swing check valves two (2) inches in diameter and smaller shall be all brass swing check valves with a 200 PSI working pressure.

### 2.5.3 Air Release Valves

Lift station air release valves shall be combination air and vacuum release valves placed on the discharge header manifold piping upstream of the manifold's station isolation valve on the common header.

Combination air release valves shall have a minimum inlet size of two (2) inches, stainless steel internal trim (including float, lever arm, linkage, etc.), stainless steel assembly bolts, and stainless steel ball valves. The body of the air valve shall be of composite material, stainless steel (SAE 316) or ductile iron.

Air release valves shall be Model D-025 as manufactured by A.R.I. optimal Flow Solutions.

### 2.5.4 Discharge Gauge Fittings

A discharge gauge fitting shall be installed on the discharge header of each submersible pump a minimum of six (6) inches upstream from the discharge valve. Gauges shall be 4-1/2 inch diameter glycerin filled Wika discharge gauge, graduated in one (1) PSI increments (0 to 60 PSI) and one (1) foot increments of water (0 to 140 feet) scale range. Gauges shall be provided in plastic protective cases and equipped with quick disconnects. Complete assembly to include gauge, 316 stainless steel nipple approximately two (2) inches in length, 1/4 inch stainless steel ball valve and a 1/4 inch NPT quick connect coupler.

## 2.6 MAGNETIC FLOW METER

Furnish, install and test electromagnetic flowmeters and all necessary appurtenances on lift station discharge piping at the locations indicated. The function of the flowmeter shall be to measure, indicate and transmit the flow of a conductive process liquid in a full pipe.

### 2.6.1 Type

Electromagnetic flowmeter with operation based on Faraday's Law utilizing pulsed dc coil excitation. The meter shall utilize a full bore flow tube with magnetic field traversing the entire cross-section. Insertion style, multiple point probes inserted into a spool piece, or "liner less" spool piece designs with modular sensors inserted into standpipes are not acceptable. The unit shall be suitable for raw wastewater or liquids with a minimum conductivity of 5 microS/cm. Meter shall be Emerson Process Management – Rosemount Division model 8750WA Magmeter. See Specification Section 01600 for restrictions and requirements for substitutions, product and manufacturer options, and construction method options.

### 2.6.2 Operating Temperature

Flow Tube:	Ambient	5°F to 150°F
	Process	0°F to 140°F for polyurethane
Transmitter:	Ambient	-20°F to 140°

Storage (For surface mount w/integral display)  
 -22°F to 175°F  
 (For surface mount)

**2.6.3 Performance**

Flow Ranges: Site specific - to suit pumping requirements

Minimum flow	_____	GPM
Maximum flow	_____	GPM

Accuracy: Plus or minus 0.5% of rate for all flows resulting from pipe velocities of one (1) to thirty (30) FPS, with option for 0.25% of rate

Turndown ratio: Minimum of 30 to 1 when flow velocity at minimum flow is at least one (1) FPS

Repeatability: Plus or minus 0.1% of reading

Response Time: 0.2 seconds maximum response to step change in output

Stability: Plus or minus 0.1% of rate over six (6) months

Ambient Temperature Effect: 0.25% over operating temperature range

**2.6.4 Features**

The flowmeter shall be equipped with the following features:

- Ability to check zero alignment without stopping flow
- Capable of measuring bi-directional flow
- Low flow adjustable between 0.01 FPS and 1 FPS. Below selected value, output is driven to the zero flow rate signal level
- Non-volatile totalizer
- Forward, reverse and net totals
- 75 process updates per second

**2.6.5 Process Connection**

Meter size: (Site specific) \_\_\_\_\_ inches

Connection Type: 150-pound ANSI raised-face flanges

Flange Material: Carbon steel

### 2.6.6 Materials of Construction

Power Transmitter:	120V ac, 60 Hz	
Flow Tube:	Meter Tube	316 SS
	Liner Material	Polyurethane
	Coil Drive Power	Not less than 0.5 Amps
	Electrode Type	Flush
	Electrode Material	316 SS or Hastelloy-C
	Grounding Rings	316 SS
	Enclosure	NEMA 4X 316 SS

### 2.6.7 Transmitter

Transmitter shall be field mounted with digital LCD display indicating flow rate and total. Parameter adjustments shall be by keypad or non-intrusive means. Enclosure shall be NEMA 4X 316 SS dual compartment housing with the terminal block isolated from the electronics compartment.

Empty Pipe Detection: Drives display and outputs to zero when empty pipe is detected

4 to 20 mA Output Signal: Isolated 4 to 20 mA, jumper selectable as internally or externally powered 5 to 24 volt dc, 0 to 1000 ohm load

Supports superimposed digital HART protocol for reading totalized flow values

Frequency Adjustment: 0 to 10,000 Hz, externally powered at 5 to 24 volt dc

Transistor switch closure supports power loads up to 2W for frequencies up to 4,000 Hz and 5 volt dc at 0.1W at maximum frequency of 10,000 Hz

Pulse can be set to equal desired velocity or volume in user selectable engineering units

Pulse width adjustable from 1.5 to 500 msec, below 1.5 msec pulse width automatically switches to 50% duty cycle

Discrete Outputs: Two discrete outputs rated for up to 30 volts typical

Programmable for the following typical parameters:

- High/low flow rates
- Percent of range
- Empty pipe zero
- Fault conditions

Discrete Inputs:	<p>Configured for the following typical parameters:</p> <ul style="list-style-type: none"><li>• Reset totalizer</li><li>• Change rate</li><li>• Hold output constant</li><li>• Drive output to zero</li><li>• Low flow cutoff</li></ul>
Output Testing:	<p>Analog output test – transmitter may be commanded to supply a specific current between 3.75 and 23.25 mA</p> <p>Pulse output test – transmitter may be commanded to supply a specified frequency between 1 pulse/day and 10,000 Hz</p>
Damping:	Adjustable between 0.0 and 256 seconds
Cables:	Cables used to interconnect the flow tube and transmitter for remote operation shall be standard Belden or Alpha equivalent, lengths as required to accommodate device locations
Built-in Diagnostics:	<p>Features:</p> <ul style="list-style-type: none"><li>• Field programmable electronics</li><li>• Self-diagnostics with troubleshooting codes</li></ul> <p>Meter verification capability</p> <ul style="list-style-type: none"><li>• Coil resistance</li><li>• Coil signature value</li><li>• Electrode resistance</li><li>• High process noise detection</li><li>• Electronics temperature monitoring</li><li>• Wiring and grounding verification</li><li>• Coil fault detection</li><li>• Empty pipe detection</li></ul> <p>Fully functional diagnostics in AMS Device manager including help screens with troubleshooting guidance</p> <p>Transmitter shall be capable of interoperability with flow tubes from all manufacturers. This includes the ability to drive the flow tubes at different coil currents and provide meter verification diagnostics for the magmeter system.</p> <p>The flow meter system will be verifiable without an external device.</p>

Factory Calibration: Shall be calibrated in an ISO 9001 and NIST certified facility

Factory flow calibration system must be certified by volume or weight certified calibration devices

## **2.7 MISCELLANEOUS ITEMS**

### **2.7.1 Detection Tape**

Detection tape shall be provided on all gravity sewer and force mains. Detection tape shall be at least two inches wide mylar encased metal marking tape and will bear the printed identification "CAUTION: SEWAGE FORCE MAIN BELOW" or "CAUTION: GRAVITY SEWER MAIN BELOW". Detection tape shall be buried eight to twelve inches below plan finished grades.

### **2.7.2 Tracer Wire**

Tracer wire shall be installed on all buried PVC force mains. Tracer wire shall be continuous or properly spliced single strand No. 10 solid plastic coated (30 mil) copper wire from iron fitting to iron fitting.

## **PART 3 EXECUTION**

### **3.1 PRODUCT DELIVERY, STORAGE AND HANDLING**

The contractor shall inspect all materials delivered to the job site for damage. Materials shall be unloaded and stored with a minimum of handling. Materials shall be stored above ground and the interior of pipe and fittings shall be kept free of dirt and debris. Store non-metallic piping and rubber gaskets under cover and protect from exposure to sunlight.

Precast concrete manholes and other appurtenances shall be handled to ensure delivery at the point of installation in sound, undamaged condition. If coating or linings of pipe or fittings are damaged, such pipe and fittings shall be removed from the site and new materials furnished. Pipe shall not be dragged.

### **3.2 INSTALLATION**

The contractor shall install all pipe, fittings, valves, wetwells, manholes and appurtenances in accordance with the specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise.

#### **3.2.1 Pipe and Fittings**

The type, class, grade, and alignment of sewer pipe may be changed only at manholes. Sanitary sewer mains crossing under storm drains shall be installed in a casing pipes centered under the storm drain.

### 3.2.1.1 General

Excavation, cleaning, laying, jointing and backfilling shall follow as closely as possible during prosecution of the work. In no case shall pipe be left in the trench overnight without completing the jointing. All precautions shall be taken to prevent sand, dirt and debris from entering the pipe during installation. Any time that pipe installation is not in progress, open pipe ends shall be closed by a watertight plug or other method approved by the Engineer.

Plugs shall remain in pipe ends until all water has been removed from the trench and any foreign material that enters the pipe shall be removed immediately. No pipe shall be installed when trench or weather conditions are unsuitable for such work.

Sewer mains shall not be laid closer than ten (10) feet horizontally from a water line unless otherwise indicated on the drawings or directed by the Engineer. Sanitary sewer lines shall pass beneath water lines with the top of the sewer being at least eighteen (18) inches below the bottom of the water line. Where sewer lines cross water lines, no joints in the sewer line shall be located closer than ten (10) feet horizontal distance from the water line.

Trench excavation, bedding, backfill and compactions shall be in accordance with Section 02220 of these specifications.

### 3.2.1.2 Pressure Pipe

All PVC C900/C905 pipe shall be laid in accordance with AWWA C605. All ductile iron pipe and fittings shall be laid in accordance with the manufacturer's recommendations and AWWA C600. Each section of pipe shall rest upon the pipe bed for the full length of its barrel, with recesses excavated to accommodate bells and joints.

Pipe alignment and gradient shall be straight or shall follow true curves as near as practicable. Curvature in pipe lines, where required, shall be well within (no more than 80% of) the manufacturer's allowable joint deflection or laying radius for the pipe supplied. Otherwise fittings shall be required.

Forcemain pipe shall be laid with a minimum cover of forty two (42) inches in paved areas and thirty six (36) inches in unpaved areas with an allowable maximum of sixty (60) inches. Cover in paved areas shall be measured from crown of pipe to finish grade. Greater depths are permissible when required to clear obstructions, conflicts, etc.

Contractor shall furnish and install locate wiring on all non-metallic pressure mains. Locate wire shall be brought to grade outside a valve box or locating station box, as required, at four hundred and seventy five (475) foot intervals (maximum). In addition, all pressure mains shall have detection tape installed two

(2) feet above the pipe. Tracer wire and detection tape shall be as specified in Paragraph 2.7 of this Section.

Installed locate wiring shall be tested by the contractor as part of the inspection process, using a qualified tester and suitable testing equipment. The contractor shall notify the OWNER/Engineer at least 48 hours in advance of the locate wire field testing schedule.

#### 3.2.1.3 Non-Pressure Pipe

Plastic piping installation shall be in accordance with ASTM D2321. Pipe laying shall proceed upgrade with pipe bells on the upper end. Pipe to be laid with joints close and even, butting all around. Sagging joints will not be tolerated. Pipe shall be straight and of uniform grade between manholes, laid to line and grade. Bell holes shall be dug so that the pipe barrel will carry the load of the pipe.

Where sewers or force mains, are to be connected to existing manholes or other structures, and where no stub or opening has been provided for the connection, the Contractor shall core drill an opening of minimum diameter through the side wall of the existing structure for inserting the sewer pipe. A flexible rubber boot shall then be installed to seal around the new pipe for a watertight connection.

The Contractor shall install a continuous run of plasticized metallic detection tape above the top of the sewer main at 12" to 18" below finished grade. Detection tape shall be as specified in Paragraph 2.6 of this Section.

### 3.2.2 Wet Wells and Manholes

Wet wells and manholes shall be installed at the locations and elevations shown on the plans. Standard details for the installation of precast concrete wet wells manholes are provided on the construction plans. Outside drop connections shall be installed where indicated.

The base section shall be set in a twelve (12) inch (minimum) leveling course of granular material (57 stone). Precast concrete sections shall be set so the wet well will be vertical and with sections in true alignment.

All holes in sections used for their handling and the annular space between the wall and entering pipes shall be thoroughly plugged with an approved, non-shrinking mortar or grout, applied and cured in strict conformance with the manufacturer's recommendations, so that there will be zero leakage through openings and around pipes. The mortar shall be finished smooth and flush with the adjoining interior and exterior wall surfaces.

Joint contact surfaces shall be formed with machined castings and shall be exactly parallel and sealed with a joint sealer over the entire joint surface. Joints shall be water tight. Excess joint sealer shall be trimmed flush with the inside and outside surface of the structure.



All exterior joints of precast concrete wet well shall be sealed with one twelve (12) inch wide exterior joint sealant membrane centered on the joint. The tape shall be capable of sealing joints against groundwater infiltration. The installation of the membrane shall be in conformance with the recommendations of the manufacturer. The concrete surface must be smooth, clean, dry and free of voids, loose aggregate, dirt or other matter that will hinder the adhesion of the membrane. A primer shall be used in accordance with the recommendations of the membrane manufacturer.

Outside drops, where the vertical distance of the drop is ten (10) feet or less, shall be constructed of SDR-35 PVC pipe, bedded and backfilled along with the entire manhole structure to within ten (10) inches of the final grade with Class I material; where the vertical distance of the drop is greater than ten (10) feet, the drop shall be encased in a concrete column of a minimum two (2) inches thickness around all pipe walls, and poured so as to provide a concrete base as a foundation for the drop bottom connection; the entire concrete structure shall be tied to the manhole wall with rebar studs for the full depth of the drop.

Inside drops, where approved, must enter the manhole with a PVC tee fitting with a gasketed cap cut to one-half ( $\frac{1}{2}$ ) of the host pipe diameter attached to the branch following the slope of the pipe reach being drained, the down leg placed closely against the manhole wall fastened with (316) stainless steel anchor bolts and bands on two (2) foot centers, an angled fitting and invert trough at the base to direct the flow smoothly into the existing flow line; all PVC piping and fittings shall be SDR-35 (*See Standard Details*).

Wet well and manhole coatings shall be in accordance with Section 09900 of these specifications.

### **3.2.3 Manhole Frame and Covers**

The top rim of manhole frames and covers shall be set to conform to grades and transverse slopes. Manhole rim elevations are indicated on the plans but shall be adjusted as required to meet these specifications. Generally along outfall lines, the manhole frame and covers shall extend approximately 6" above finish grade or to a designated elevation for flood protection. Generally along paved streets and parking areas, and other unpaved areas subject to vehicular traffic the manhole frames and covers shall be set flush with the surface.

Grade rings, where necessary to serve as spacers between the top cone of the manholes and the base of the manhole cover frame to bring the manhole to design or finish grade, shall be hard rubber in paved areas and high density polyethylene or cement rings in off road applications. Adjustments using clay or cement brick are not acceptable. On new construction, an adjustment using metal riser rings to extend the manhole cover frame to grade is not permitted. No adjustment using grade rings between the top cone section and the manhole cover frame shall exceed 16-inches.

### **3.2.4 Valves**

All valves and appurtenances shall be installed in the locations shown on the drawings, true to alignment and properly supported. Any damaged items shall be repaired to the satisfaction of the OWNER/Engineer before they are installed.

Install all valve boxes, brackets, extension rods, guides, the various types of operators and appurtenances as shown on the drawings. Flanged or buried mechanical joints shall be made with cadmium plated bolts. All exposed bolts shall be cadmium plated bolts. All exposed bolts and nuts and all above ground valves shall be painted in accordance with Section 09900 of these specifications

### **3.2.5 Discharge Gauge Fittings**

The gauge fittings shall be installed on discharge header piping a minimum of six (6) inches upstream from each pumps check valve. The gauge fitting shall be installed by drilling and tapping a ¼-inch NPT hole, installing a 316 stainless steel nipple, a ¼-inch stainless steel ball valve, another 316 stainless steel nipple to the ball valve and attaching a ¼-inch NPT quick connect coupler to the nipple.

## **3.3 FORCE MAIN TESTING**

Force mains shall be hydrostatically tested to 1.5 times the working pressure of the associated lift station or 100 PSI whichever is greater in accordance with the procedures of AWWA C600. Testing shall be observed by the OWNER inspector.

All installed isolation, air release and check valves shall be tested for proper operation. Force main tracer wire shall be checked for continuity along the pipe run and checked at terminus points for proper connection.

## **3.4 GRAVITY SEWER SYSTEM TESTING AND INSPECTION**

### **3.4.1 Low Pressure Air Test**

All gravity sewer lines up to and including 30-inches in diameter, to include connected services and/or main stub outs shall be low pressure air tested in accordance with ASTM F1417 and conducted in substantial conformance with the procedures below.

- Air testing shall be performed as soon as possible after completing a reasonable length of gravity sewer installation, and before scheduling Preliminary Record Drawing Line Televising.
- The system installer shall furnish all equipment, material, and personnel to conduct the test using low pressure air.
- The test equipment shall be approved and the test conducted in the presence of a OWNER Construction inspector.

- Testing shall be conducted after backfilling has been completed but before finish grading or surface improvements.
- All wye's, tees, and lateral stubs or other fittings shall be suitably capped to withstand the internal test pressures.
- After a manhole to manhole section of line has been cleaned, it shall be plugged at each manhole with pneumatic plugs inflated to 25 PSI internal pressure. Plug bracing may be used as necessary to keep plugs from being blown out of lines.
- One of the test plugs shall have two factory equipped hose connections in addition to the hose connection used to inflate the plug. One connection shall be used to continuously monitor the rising air pressure in the sealed line. The other connection shall be used only for introducing the low pressure air into the sealed line.
- A 3.5-inch diameter, 0-30 PSI air gauge shall be supplied for reading the internal pressure of the line being tested. Calibrations from the 0-10 PSI range shall be in tenths.
- Low pressure air shall be introduced into the sealed line until the internal pressure reaches 3.5 PSI greater than the average back pressure of any groundwater that may be above the pipe, but not greater than 9 PSI. At least 2-minutes shall be allowed for the air pressure to stabilize. After this period the hose used to introduce the pressure shall be disconnected from the air source in such a manner as to retain the pressure in the sealed line and the compressor shall be shut down.
- The portion of the line being tested shall be accepted if it does not loose air at a rate greater than 0.0015 CFM per SF of internal pipe surface when tested at an average pressure between 3.5 and 4.0 PSI greater than any back pressure exerted by groundwater that may be over the pipe at the time of the test.
- Time requirements for a pressure drop of 1.0 PSI or 0.5 PSI (3.5 to 2.5 PSI or 3.5 to 3.0 PSI greater than the average back pressure of any groundwater that may be over the pipe) shall not be less than the time shown for the given diameter in the tables provided in the ASTM Standards.
- Where high groundwater is known to exist, the height in feet of groundwater above the invert of the sewer shall be divided by 2.31 and added to the 3.5 PSI to establish the amount of pressure to be used for the test.
- If the line fails to meet the requirements of the test, the source of leakage shall be identified, corrected and the line re-tested.

Gravity sewer mains greater than 30-inches in diameter shall be low pressure air tested at the joints and/or noted defects using equipment capable of isolating each joint or defect from the rest of the pipe. Testing pressures and passing values shall be the same as cited above.

### **3.4.2 Infiltration Test**

Where gravity sewer lines cannot be low pressure air tested in accordance with these specifications, the system shall be subjected to an infiltration test to establish leakage less than 100 gallons per inch per day per mile (gal/in/day/mile) using a V-notch weir; however, where ground water conditions are not favorable for testing, (ground water levels less than 8- feet over the pipe invert for any individual line segment), the end of the line to be checked shall be plugged at the downstream manhole, the upstream manhole partially filled to place a 3.5 psi head on the subject line at the lowest end, and the change in water depth noted during the test period converted to a volume; such volume and test time duration shall be compared against the 100 gal/in/day/mile Standard.

### **3.4.3 CCTV Inspection**

All sanitary sewer mains shall be visually inspected using color CCTV provided equipment by a PACP (Pipeline Assessment Certification Program) certified operator using PACP certified software. This service will be provided by the CONTRACTOR upon demonstration by the installer that the sewer lines and manholes have passed the required tests, the lines have been hydraulically cleaned using a combination cleaner and presentation of a Preliminary Record Drawing of the sanitary sewer system as installed.

The CCTV equipment shall include inclinometer capabilities that capture the line grade values in percent as the camera proceeds along the line and also provides a chart showing the average line grade from pipe start to pipe end for verification of record drawing slopes. The system installer is responsible for providing adequate vehicular access to the system components to perform this work.

A CCTV re-inspection of any and all defects found in mains during any previous test shall be required prior to acceptance.

### **3.4.4 Deflection Testing**

Deflection testing shall be performed on any flexible pipe reach installation where CCTV inspection observations indicate that the pipe may be deflected or flattened in any dimension beyond allowable values. Where required deflection testing shall be performed in substantial compliance with the following procedures.

- Deflection testing shall be accomplished by pulling a 5% mandrel through the line if it has been installed for less than 30-days, or a 7.5% mandrel on any line which has been installed longer than 30-days.
- An approved mandrel, proving ring, pulling ropes and cables shall be provided by the installer for testing PVC pipe.
- The mandrel shall be hand pulled through the pipe using no wenches or other mechanical devices except a pulley at the manhole invert. The pulley allows the mandrel to be pulled from ground level rather than from inside the manhole.

- If at any point in the pipe one man is unable to hand pull the mandrel through the pipe, then the pipe will be deemed unacceptable.
- The failed pipe shall be repaired by the installer, the mandrel re-pulled and the line re-televised at the Contractor's expense.

**(END OF SECTION)**

## SECTION 02700 STORM DRAINAGE SYSTEM

### PART 1 GENERAL

#### 1.1 WORK INCLUDED

Provide all labor, materials and equipment necessary to install, test, and place into operation the storm drain lines, drainage structures, and drainage appurtenances as shown on the drawings, as specified herein and as required for a complete and operational system.

#### 1.2 SUBMITTALS

Complete shop drawings and product data in accordance with the requirements of Section 01340 of these specifications shall be submitted on all the following items:

1. Precast concrete headwalls and flared end sections
2. Area drains and appurtenances
3. Complete product data on frames and covers
4. Complete product data on all piping and appurtenances

#### 1.3 RELATED WORK SPECIFIED ELSEWHERE

02060	Demolition
02120	Erosion, Sedimentation and Pollution Control
02220	Trenching Excavation, Bedding and Backfill
02500	Paving for Resurfacing Projects
02511	Milling of Existing Asphalt Pavement
02555	Water Distribution System
02650	Sanitary Sewer System

### PART 2 PRODUCTS

#### 2.1 GENERAL REQUIREMENTS

The contractor shall furnish and install storm drain and related appurtenances in accordance with the material specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise. All materials shall be new.

#### 2.2 REINFORCED CONCRETE PIPE (RCP)

##### 2.2.1 Pipe

Reinforced Concrete Pipe (RCP) for storm drains shall be bell and spigot reinforced concrete conforming to ASTM C76 for Class III Pipe. Wall thickness design shall correspond to Wall B. RCP shall be supplied in lengths of at least 6-feet.

### **2.2.2 Joints**

Pipe shall have rubber gasket type joints conforming to ASTM C443 or ASTM C361. A rectangular groove shall be supplied in the spigot end to receive the rubber gasket, and it shall be so formed that when the joint is complete the gasket will be deformed to a rectangular shape and confined on all four sides. Bell and spigot surfaces shall be accurately formed and smooth to provide a close sliding fit with a nominal clearance of 1/16-inch.

## **2.3 CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE)**

### **2.3.1 Pipe**

Virgin material for pipe and fittings shall be impact modified copolymer polypropylene conforming to the requirements of ASTM D4101. Pipe sizes 12-inch through 30-inch shall have a smooth interior and annular exterior corrugations and have a minimum pipe stiffness of 46 psi when tested in accordance with ASTM D2412.

Pipe shall be ADS N-12 HP storm pipe for gravity flow applications or approved equal.

### **2.3.2 Joints**

Pipe shall be joined with a watertight integral bell and spigot joint in accordance with ASTM D3212. Spigot shall have two gaskets meeting the requirements of ASTM F477. Gaskets shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure that the gaskets are free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

## **2.4 PRECAST CONCRETE DRAINAGE STRUCTURES**

### **2.4.1 Round Precast Concrete Manholes**

Precast concrete manholes or calcium aluminate cement concrete manholes used shall conform to all requirements of ASTM Designation C478 at minimum and be provided with "O" ring gasket type joints, conforming to ASTM Designation C443-77, or flexible joint sealant roping of butyl rubber conforming to Federal Specification SS-S-210A, AASHTO M-198, Type B-Butyl Rubber with a minimum cross section of 1 ¼ inches. Lifting devices for handling precast manhole section components shall comply with OSHA Standard 1926.704. Manhole coatings shall be in accordance with Section 09900 of these specifications.

#### **2.4.1.1 Top Section**

Top Section shall be cast monolithically and shaped as an eccentric cone except that a concentric cone shall be used for manhole depths 5-feet or less. Joint systems must match associated riser or base sections. The clear opening for the manhole frame and cover shall not be less than 24-inches for main sewers 6-

inches thru 18-inches in diameter, and not less than 32-inches for main sewers greater than 18-inches in diameter.

Where manhole depth will not permit a diameter transition or cone section, a precast flat slab top section shall be provided with a 24-inch or 32-inch diameter hole (as required above) for the manhole frame and cover opening.

#### 2.4.1.2 Riser and Transition Sections

Riser and transition sections shall be cast monolithically and have a minimum length of 16-inches. Joint systems must match associated riser, cone or base sections.

#### 2.4.1.3 Base Section

Base sections shall be cast monolithically and have a minimum length of 16-inches. Joint systems must match associated riser sections.

#### 2.4.1.4 Manhole Inverts

Manhole inverts shall be precast and provide clearance for pipe projecting a minimum of 2-inches inside the manhole wall. For straight through flow manholes, troughs shall be formed and finished to the same slope as the incoming and outgoing sewer mains. Manholes placed at changes in grade or direction shall be formed and finished to provide a minimum drop of 0.10-feet between the inlet and outlet pipes.

The minimum thickness of precast inverts from the bottom of the lowest invert to the bottom of the base shall not be less than 8- inches. Benches shall have a uniform 2:1 slope from the high point at the manhole wall to the lip of the invert trough. The invert trough shall have a minimum depth of  $\frac{1}{2}$  of the main pipe diameter. Precast inverts shall be free from depressions, high points, voids, chips or fractures over  $\frac{1}{4}$ -inch in diameter or depth.

Hand-formed inverts, when approved for use, shall meet or exceed the durability, strength, configuration and hydraulic "smoothness" required for precast inverts. Filler for hand formed inverts shall be holed burned brick.

#### 2.4.1.5 Manhole Steps

Manhole steps shall be provided on the vertical or straight wall of 4-foot and 5-foot diameter manholes and shall be aligned vertically on 16-inch centers. Steps shall be secured to the manhole wall with a compression fit in tapered holes or cast in place. Steps shall be coated with a copolymer polypropylene plastic coating, reinforced with a  $\frac{1}{2}$ -inch diameter grade 60 bar, and be provided with serrated treads and tall end lugs. Step pullout strength shall be 2000 lbs. minimum when tested according to ASTM C497. Steps shall begin no less than 18-



inches from the manhole rim and end no closer than 16-inches above the manhole bench.

Manhole steps shall not be used on manholes greater than 5-feet in diameter or where a concentric cone or flat-slab top is the final section.

#### **2.4.2 Square and Rectangular Precast Structures and Vaults**

Precast concrete sections shall meet the requirements of ASTM C 913. The minimum 28-day compressive strength of the concrete in precast sections shall be 4,000 PSI.

The design of each structure shall be the responsibility of the manufacturer and shall conform to ACI 318 and the minimum structural design loading requirements as defined in ASTM C 890. The minimum design dead load shall be based on the depth shown on the drawings.

Precast sections shall be manufactured such that the spigot end is at the top of each section. Dimensions for square and rectangular precast sections, where required, are shown on the drawings.

### **PART 3 EXECUTION**

#### **3.1 PRODUCT DELIVERY, STORAGE AND HANDLING**

The contractor shall inspect all materials delivered to the job site for damage. Materials shall be unloaded and stored with a minimum of handling. Materials shall be stored above ground and the interior of pipe and fittings shall be kept free of dirt and debris. Store non-metallic piping and rubber gaskets under cover and protect from exposure to sunlight.

Precast concrete drainage structures and other appurtenances shall be handled to ensure delivery at the point of installation in sound, undamaged condition. If coating or linings of pipe or fittings are damaged, such pipe and fittings shall be removed from the site and new materials furnished. Pipe shall not be dragged.

#### **3.2 INSTALLATION**

The contractor shall install all pipe, fittings, drainage structures and appurtenances in accordance with the specifications detailed below. All references to industry standards (ASTM, ANSI, AWWA, etc.) shall be to the latest revision unless stated otherwise.

##### **3.2.1 General**

Each section of pipe shall be carefully examined before being laid, and defective or damaged pipe shall not be used.

Under no circumstances shall pipe be laid in water, and no pipe shall be laid when trench conditions or weather are unsuitable for such work. Diversion of drainage or dewatering of trenches during construction shall be provided as necessary. Pipe shall be laid true to

line and grades indicated and shall rest upon the pipe bed for the full length of each section. Runs of pipe shall be laid with outside bells or grooved ends up-grade beginning at the lower end of the pipeline. Pipe having its grade and/or joint disturbed after laying shall be removed, cleaned and re-laid.

When pipes are protected by headwalls or connect with drainage structures, the exposed ends of the pipe shall be placed or cut flush with the inside face of the structure. After the pipe is cut the rough edges shall be smoothed up in an approved manner. All pipes shall be laid so that markings are on top and the inner surfaces abut neatly, tightly and smoothly.

All pipes in place shall be observed by the Engineer before being covered and concealed. Contractor shall clear all pipe of silt debris prior to final acceptance.

Trench excavation, bedding, backfill and compactions shall be in accordance with Section 02220 of these specifications.

### **3.2.2 Reinforced Concrete Pipe (RCP)**

Joint installation shall be in accordance with the manufacturer of the joint material. Surface to receive lubricants, cements, or adhesives shall be clean and dry. Gaskets and jointing materials shall be affixed to the pipe not more than 24 hours prior to the installation of the pipe, and shall be protected from the sun, blowing dust, and other deleterious agents at all times. Gaskets and jointing materials shall be inspected before installation of the pipe, and any loose or improperly affixed gaskets and jointing materials shall be removed and replaced.

The pipe shall be aligned with the previously installed pipe, and the joint pulled together. If, while making the joint, the gasket or jointing material becomes loose and can be seen through the exterior joint recess when the joint is pulled up to within one inch of closure, the pipe shall be removed and the joint remade.

All RCP pipe joints shall be wrapped with a minimum of 30-inches Amoco non-woven needle-punched geotextile or approved equal.

### **3.2.3 Corrugated High Density Polyethylene Pipe (HDPE)**

Installation shall be in accordance with ASTM D2321 and the manufacturers recommended installation guidelines.

**(END OF SECTION)**