

INVITATION TO BID  
PROPOSAL

**BID NO. 11-4-1-4**

**PAVING BILLINGS ROAD**

**PREBID CONF: 2:00PM, NOVEMBER 17, 2010**

**BID OPENING: 2:00PM, DECEMBER 1, 2010**

THE COMMISSIONERS OF CHATHAM COUNTY, GEORGIA

PETE LIAKAKIS, CHAIRMAN

COMMISSIONER HELEN J. STONE

COMMISSIONER HARRIS ODELL JR.

COMMISSIONER JAMES J. HOLMES

COMMISSIONER DAVID M. GELLATLY

COMMISSIONER PATRICK O. SHAY

COMMISSIONER DEAN KICKLIGHTER

COMMISSIONER PATRICK J. FARRELL

COMMISSIONER PRISCILLA D. THOMAS

R. JONATHAN HART, COUNTY ATTORNEY

CHATHAM COUNTY, GEORGIA  
DOCUMENT CHECK LIST

The following documents, when marked, are contained in and made a part of this Bid Package or are required to be submitted with the bid. It is the responsibility of the bidder to read, complete and sign, where indicated, and return these documents with his/her bid. **FAILURE TO DO SO MAY BE CAUSE FOR DISQUALIFYING THE BID.**

  X   GENERAL INFORMATION AND INSTRUCTIONS TO BID WITH ATTACHMENTS

  X   SURETY REQUIREMENTS (A Bid Bond of 5% with this ITB)

  X   PROPOSAL

       PLANS/DRAWINGS - ( Plans and Specifications are available and must be purchased at the  
Purchasing Department for \$50 non-refundable)

  X   BID SCHEDULE

       PERFORMANCE BOND - UPON AWARD OF CONTRACT

       PAYMENT BOND - UPON AWARD OF CONTRACT

       CONTRACT

  X   LEGAL NOTICE

  X   AFFIDAVIT OF PAYMENT

  X   ATTACHMENTS: A. DRUG FREE WORKPLACE; B. NONDISCRIMINATION STATEMENT; C. DISCLOSURE OF RESPONSIBILITY STATEMENT; D. IMMIGRATION & SECURITY FORM; E. CONTRACTOR/SUBCONTRACTOR AFFIDAVIT & AGREEMENT. F. DEBARMENT CERTIFICATION G. M/WBE COMPLIANCE REPORT

       DOCUMENTATION OF ABILITY TO PERFORM BID REQUIREMENTS. THIS MAY BE REQUIRED OF BIDDERS AFTER SUBMISSION OF BIDS.

**COUNTY TAX CERTIFICATE REQUIREMENT** - Contractor must supply a copy of their Tax Certificate from their location in the State of Georgia, as proof of payment of the occupational tax where their office is located.

CURRENT TAX CERTIFICATE NUMBER

CITY \_\_\_\_\_

COUNTY \_\_\_\_\_

OTHER \_\_\_\_\_

The Chatham County of Commissioners have established goals to increase participation of minority and female owned businesses. In order to accurately document participation, businesses submitting bids or proposals are encouraged to report ownership status. A minority or female business is defined as a business with 51% or greater minority or female ownership. Please check ownership status as applicable:

African-American \_\_\_\_\_ Asian American \_\_\_\_\_ Hispanic \_\_\_\_\_

Native American or Alaskan Indian \_\_\_\_\_ Female \_\_\_\_\_

In the award of "Competitive Sealed Proposals", minority/female participation may be one of several evaluation criteria used in the award process when specified as such in the Request for Proposal.

RECEIPT IS HEREBY ACKNOWLEDGED OF ADDENDA NUMBERS \_\_\_\_\_

The undersigned bidder certifies that he/she has received the above listed and marked documents and acknowledges that his/her failure to return each, completed and signed as required, may be cause for disqualifying his/her bid.

BY: \_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE

TITLE: \_\_\_\_\_

COMPANY: \_\_\_\_\_

CHATHAM COUNTY, GEORGIA  
OFFICE OF THE PURCHASING AGENT  
POST OFFICE BOX 15180  
SAVANNAH, GEORGIA 31416  
(912) 790-1622

**Date: October 14, 2010**

**BID NO. 11-4-1-4**

**GENERAL INFORMATION FOR INVITATION FOR BID/PROPOSAL**

This is an invitation to submit a bid or proposal to supply Chatham County with construction, equipment, supplies and/or services as indicated herein. Sealed bids or proposals will be received at the Office of the Purchasing Agent, **at The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia, up to 2:00PM, DECEMBER 1, 2010** at which time they will be opened and publicly read. **The County reserves the right to reject all bids or proposals for any bid or proposal that is non-responsive or not responsible.**

Instructions for preparation and submission of a bid or proposal are contained in this Invitation For Bid/Proposal package. Please note that specific forms for submission of a bid/proposal are required. Bids must be typed or printed in ink. If you do not submit a bid/proposal, return the signed bid invitation sheet and state the reason; otherwise, your name may be removed from our bidders list.

A **pre-bid conference** has been scheduled to be conducted **at the Chatham County Purchasing & Contracting Office located at The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia, at 2:00PM, NOVEMBER 17, 2010** to discuss the specifications and resolve any questions and/or misunderstanding that may arise. You are encouraged to attend.

Any changes to the conditions and specifications must be in the form of a written addendum to be valid; therefore, the Purchasing Agent will issue a written addendum to document each approved change. Generally when addenda are required, the bid opening date will be changed.

Chatham County has an equal opportunity purchasing policy. Chatham County seeks to ensure that all segments of the business community have access to supplying the goods and services needed by County programs. The County affirmatively works to encourage utilization of disadvantaged and minority business enterprises in our procurement activities. The County provides equal opportunity for all businesses and does not discriminate against any persons or businesses regardless of race, color, religion, age, sex, national origin or handicap. The terms "disadvantaged business," "minority business enterprise," and "minority person" are more specifically defined and explained in the Chatham County Purchasing Ordinance and Procedures Manual, Article VII - Disadvantaged Business Enterprises Program.

**This project is Special Purpose Local Option Sales Tax (SPLOST) Project. See paragraph 2.22 for MBE/WBE participation goals.**

## INSTRUCTIONS TO BIDDERS/PROPOSERS

1.1 **Purpose:** The purpose of this document is to provide general and specific information for use in submitting a bid or proposal to supply Chatham County with equipment, supplies, and/or services as described herein. All bids/proposals are governed by the Code of Chatham County, Chapter 4, Article IV, and the laws of the State of Georgia.

1.2 **How to Prepare Bid Proposals:** All bid proposals shall be:

- a. Prepared on the forms enclosed herewith, unless otherwise prescribed, and **all documents must be submitted.**
- b. Typewritten or completed with pen and ink, signed by the business owner or authorized representative, with all erasures or corrections initialed and dated by the official signing the proposal. **ALL SIGNATURE SPACES MUST BE SIGNED.**

Bidders are encouraged to review carefully all provisions and attachments of this document prior to submission. Each bid constitutes an offer and may not be withdrawn except as provided herein.

1.3 **How to Submit Bid Proposals:** All bid proposals shall be:

- a. **Submitted in sealed opaque envelopes, plainly marked with the bid number and title, date and time of bid opening, and company name.**
- b. Mailed or delivered as follows in sufficient time to ensure receipt by the Purchasing Agent on or before the time and date specified above.
  1. **Mailing Address: Purchasing Agent, Post Office Box 15180, Savannah, Georgia 31416.**
  2. **Hand Delivery: Purchasing Agent, Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia.**

**BIDS NOT RECEIVED BY THE TIME AND DATE SPECIFIED WILL NOT BE OPENED OR CONSIDERED.**

1.4 **How to Submit an Objection:** Objections from bidders to this invitation to bid and/or these specifications should be brought to the attention of the County Purchasing Agent in the following manner:

- a. When a pre-bid conference is scheduled, bidders shall either present their oral objections at that time or submit their written objections at least two (2) days prior to the scheduled pre-bid conference.
- b. When a pre-bid conference is not scheduled, the bidder shall submit any objections he may

have in writing not less than five (5) days prior to the opening of the bid.

- c. The objections contemplated may pertain to form and/or substance of the invitation to bid documents. Failure to object in accordance with the above procedure will constitute a waiver on the part of the business to protest this invitation to bid.

- 1.5 **Failure to Bid:** If a bid is not submitted, the business should return this invitation to bid document, stating reason therefore, and indicate whether the business should be retained or removed from the County's bidders list.
- 1.6 **Errors in Bids:** Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting bids. Failure to do so will be at the bidder's own risk. In case of error in extension of prices in the bid, the unit price will govern.
- 1.7 **Standards for Acceptance of Bid for Contract Award:** The County reserves the right to reject any or all bids and to waive any irregularities or technicalities in bids received whenever such rejection or waiver is in the best interest of the County. The County reserves the right to reject the bid of a bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or a bid from a bidder whom investigation shows is not in a position to perform the contract.
- 1.8 **Bidder:** Whenever the term "bidder" is used it shall encompass the "person," "business," "contractor," "supplier," "vendor," or other party submitting a bid or proposal to Chatham County in such capacity before a contract has been entered into between such party and the County.
- 1.9 **Responsible / Responsive Bidder:** *Responsible Bidder* means a person or entity that has the capability in all respects to perform fully and reliably the contract requirements. *Responsive Bidder* means a person or entity that has submitted a bid or proposal that conforms in all material respects to the requirements set forth in the invitation for bids or request for proposals.
- 1.10 **Compliance with Laws:** The bidder and/or contractor shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by federal, state or County statute, ordinances and rules during the performance of any contract between the contractor and the County. Any such requirement specifically set forth in any contract document between the contractor and the County shall be supplementary to this section and not in substitution thereof.
- 1.11 **Contractor:** Contractor or subcontractor means any person or business having a contract with Chatham County. The Contractor/Vendor of goods, material, equipment or services certifies that they will follow equal employment opportunity practices in connection with the awarded contract as more fully specified in the contract documents.
- 1.12 **\*Local Preference:** On 27 March, 1998 the Board of Commissioners adopted a Local Vendor Preference Ordinance. This Ordinance does not apply to construction contracts. However, contractors are encouraged to apply the same method when awarding bids to local and local M/WBE businesses when ever possible in order to promote growth in Chatham County's economy. **NOTE: Local Preference does not apply to Public Works Construction contracts.**

- 1.13 **Debarred Firms and Pending Litigation:** Any potential proposer/firm listed on the Federal or State of Georgia Excluded Parties Listing (Barred from doing business) **will not** be considered for contract award. Proposers **shall disclose** any record of pending criminal violations (Indictment) and/or convictions, pending lawsuits, etc., and any actions that may be a conflict of interest occurring within the past five (5) years. Any proposer/firm previously defaulting or terminating a contract with the County will not be considered. Also, any contractor or subcontractor that has pending litigation with the County will not be considered for contract award.

**\*\* All bidders or proposers are to read and complete the Disclosure of Responsibility Statement enclosed as an Attachment to be returned with response. Failure to do so may result in your solicitation response being rejected as non-responsive.**

Bidder acknowledges that in performing contract work for the Board, bidder shall not utilize any firms that have been a party to any of the above actions. If bidder has engaged any firm to work on this contract or project that is later debarred, Bidder shall sever its relationship with that firm with respect to Board contract.

- 1.14 **Performance Evaluation:** On April 11, 2008, the Chatham County Board of Commissioners approved a change to the County Purchasing Ordinance requiring Contractor/Consultant Performance Evaluations, as a minimum, annually, prior to contract anniversary date.

Should Contractor/Consultant performance be unsatisfactory, the appointed County Project Manager for the contract may prepare a Contractor/Consultant Complaint Form or a Performance Evaluation to the County Purchasing Agent.

- 1.15 **Payment of Taxes:** No contract shall be awarded unless all real and personal property taxes have been paid by the successful contractor and/or subcontractors as adopted by the Board of commissioners on April 8, 1994.

- 1.16 **State Licensing Board for General Contractors:** Pursuant to Georgia law, the following types of contractors **must obtain a license from the State Licensing Board of Residential and General Contractors by July 1, 2008:**

**\* Residential - Basic Contractor** (Contractor work relative to detached one-family and two-family residences and one-family townhouses not over three stories in height).

**\* Residential - Light Commercial Contractor** (Contractor work or activity related to multifamily and multiuse light commercial buildings and structures).

**\* General Contractor** (Contractor work or activity that is unlimited in scope regarding any residential or commercial projects).

**A copy of your licence must be a part of your bid documents at the time of the bid opening.**

- 1.17 **Immigration:** On July 1, 2008 the Georgia Security and Immigration Compliance Act (SB 529, Section 2) became effective. All contractors and subcontractors with 100 or more employees entering into a contract or performing work must sign an affidavit that he/she has used the E-Verify System. E-Verify is a no-cost federal employment verification system to insure employment eligibility. Affidavits are enclosed in this

solicitation. You may download M-274 Handbook for Employers at <http://www.dol.state.ga.us/spotlight/employment/rules>. You may go to <http://www.uscis.gov>. To find the E-Verify information.

**Protection of Resident Workers.** Chatham County Board of Commissioners actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.

## **GENERAL CONDITIONS**

- 2.1 **Specifications:** Any obvious error or omission in specifications shall not inure to the benefit of the bidder but shall put the bidder on notice to inquire of or identify the same from the County. Whenever herein mention is made of any article, material or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed to be the minimum requirements of these specifications.
- 2.2 **Multiple Bids:** No vendor will be allowed to submit more than one bid. Any alternate proposals must be brought to the Purchasing Agent's attention during the Pre-bid Conference or submitted in writing at least five (5) days preceding the bid opening date.
- 2.3 Not Used.
- 2.4 **Prices to be Firm:** Bidder warrants that bid prices, terms and conditions quoted in his bid will be firm for acceptance for a period of sixty (60) days from bid opening date, unless otherwise stated in the bid.
- 2.5 **Completeness:** All information required by Invitation for Bids/Proposals must be completed and submitted to constitute a proper bid or proposal.
- 2.6 **Quality:** All materials, or supplies used for the construction necessary to comply with this proposal shall be of the best quality, and of the highest standard of workmanship.  
  
Workmanship employed in any construction, repair, or installation required by this proposal shall be of the highest quality and meet recognized standards within the respective trades, crafts and of the skills employed.
- 2.7 **Guarantee:** Unless otherwise specified by the County, the bidder shall unconditionally guarantee the materials and workmanship on all material and/or services. If, within the guarantee period any defects occur which are due to faulty material and or services, the contractor at his expense, shall repair or adjust the condition, or replace the material and/or services to the complete satisfaction of the County. These repairs, replacements or adjustments shall be made only at such time as will be designated by the County as being least detrimental to the operation of County business.
- 2.8 **Liability Provisions:** Where bidders are required to enter or go onto Chatham County property to take



measurements or gather other information in order to prepare the bid or proposal as requested by the County, the bidder shall be liable for any injury, damage or loss occasioned by negligence of the bidder, his agent, or any person the bidder has designated to prepare the bid and shall indemnify and hold harmless Chatham County from any liability arising therefrom. The contract document specifies the liability provisions required of the successful bidder in order to be awarded a contract with Chatham County.

- 2.9 **Cancellation of Contract:** The contract may be canceled or suspended by Chatham County in whole or in part by written notice of default to the Contractor upon non-performance or violation of contract terms. An award may be made to the next low bidder, for articles and/or services specified or they may be purchased on the open market and the defaulting Contractor (or his surety) shall be liable to Chatham County for costs to the County in excess of the defaulted contract prices. See the contract documents for complete requirements.
- 2.10 **Patent Indemnity:** Except as otherwise provided, the successful bidder agrees to indemnify Chatham County and its officers, agents and employees against liability, including costs and expenses for infringement upon any letters patent of the United States arising out of the performance of this Contract or out of the use or disposal for the account of the County of supplies furnished or construction work performed hereunder.
- 2.11 **Certification of Independent Price Determination:** By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:
- (1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
  - (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and
  - (3) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not be submit a bid for the purpose or restricting competition.
- 2.12 **Award of Contract:** The contract, if awarded, will be awarded to that responsible bidder whose bid/proposal will be most advantageous to Chatham County, price and other factors considered. The Board of Commissioners will make the determination as to which bid or proposal that serves as the best value to Chatham County.
- 2.13 **Procurement Protests:** Objections and protests to any portion of the procurement process or actions of the County staff may be filed with the Purchasing Agent for review and resolution. The Chatham County Purchasing Procedures Manual, Article IX - Appeals and Remedies shall govern the review and resolution of all protests.
- 2.14 **Qualification of Business (Responsible Bidder or Proposer):** A responsible bidder or proposer is defined as one who meets, or by the date of the bid acceptance can meet, certifications, all requirements for licensing, insurance, and registrations, or other documentation required by the Design Professional engaged

to develop Scope of work, specifications and plans. These documents will be listed in the Special Conditions further on in this solicitation. Chatham County has the right to require any or all bidders to submit documentation of the ability to perform, provide, or carry out the service or provide the product requested.

Chatham County has the right to disqualify the bid or proposal of any bidder or proposer as being unresponsive or unresponsive whenever such bidder/proposer cannot document the ability to deliver the requested product.

- 2.15 **Chatham County Tax Certificate Requirement:** A current Chatham County Tax Certificate is required unless otherwise specified.

Please contact the Building Safety and Regulatory Services (912) 201-4300 for additional information.

- 2.16 **Insurance Provisions, General:** The selected CONTRACTOR shall be required to procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Bid. It is every contractor's responsibility to provide the County Purchasing and Contracting Division current and up-to-date Certificates of Insurance for multiple year contracts before the end of each term. Failure to do so may be cause for termination of contract. **NOTE: SOME OF THE INSURANCE REQUIREMENTS HAVE BEEN MODIFIED FOR THIS SPECIFIC PROJECT. READ CAREFULLY.**

2.16.1 General Information that shall appear on a Certificate of Insurance:

- I. Name of the Producer (Contractor's insurance Broker/Agent).
- II. Companies affording coverage (there may be several).
- III. Name and Address of the Insured (this should be the Company or Parent of the firm Chatham County is contracting with).
- IV. A Summary of all current insurance for the insured (includes effective dates of coverage).
- V. A brief description of the operations to be performed, the specific job to be performed, or contract number.
- VI. Certificate Holder (This is to always include Chatham County).

**Chatham County as an Additional Insured:** Chatham County invokes the defense of sovereign immunity. In order not to jeopardize the use of this defense, the County **is not** to be included as an Additional Insured on insurance contracts.

2.16.2 **Minimum Limits of Insurance** to be maintained for the duration of the contract:

- a. **Commercial General Liability:** Provides protection against bodily injury and property damage claims arising from operations of a Contractor or Tenant. This policy coverage includes: premises and operations, use of independent contractors, products/completed operations, personal injury, contractual, broad form property damage, and underground, explosion and collapse hazards. Minimum limits: \$1,000,000 per person and \$3,000,000 per occurrence.

- b. **Worker's Compensation and Employer's Liability:** Provides statutory protection against bodily injury, sickness or disease sustained by employees of the Contractor while performing within the scope of their duties. Employer's Liability coverage is usually included in Worker's Compensation policies, and insures common law claims of injured employees made in lieu of or in addition to a Worker's Compensation claim. Minimum limits: \$500,000 for each accident., disease policy limit, disease each employee and Statutory Worker's Compensation limit.
- c. **Business Automobile Liability:** Coverage insures against liability claims arising out of the Contractor's use of automobiles. Minimum limit: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage should be written on an Any Auto basis.

2.16.3 Special Requirements:

- a. **Claims-Made Coverage:** The limits of liability shall remain the same as the occurrence basis, however, the Retroactive date shall be prior to the coincident with the date of any contract, and the Certificate of Insurance shall state the coverage is claims-made. The Retroactive date shall also be specifically stated on the Certificate of Insurance.
- b. **Extended Reporting Periods:** The Contractor shall provide the County with a notice of the election to initiate any Supplemental Extended Reporting Period and the reason(s) for invoking this option.
- c. **Reporting Provisions:** Any failure to comply with reporting provisions of the policies shall not affect coverage provided in relation to this request.
- d. **Cancellation:** Each insurance policy that applies to this request shall be endorsed to state that it shall not be suspended, voided, or canceled, except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the County.
- e. **Proof of Insurance:** The contractor shall not produce or maintain in force any insurance policy which might have the effect of reducing the loss payable under any of the policies required by this agreement. Prior to issuance of the Notice to Proceed, the contractor shall deliver a current and valid certificate of insurance or statement of self-insurance to the County, together with reasonably satisfactory evidence to the County that premiums have been paid or, in the case of self-insurance that assets are available to cover claim costs that may be incurred during the period the Revocable License Agreement is in effect.
- f. **Insurer Acceptability:** Insurance is to be placed with an insurer having an A.M. Best's rating of A or better and a financial size rating of class "XI" or greater. If an insurer does not qualify for averaging on a five year basis, the current total Best's rating will be used to evaluate insurer acceptability.
- g. **Lapse in Coverage:** A lapse in coverage shall constitute grounds for contract termination

by the Chatham County Board of Commissioners.

- h. **Deductibles and Self-Insured Retention:** Any deductibles or self-insured retention must be declared to, and approved by, the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as related to the County, its officials, officers, employees, and volunteers; or the Contractor shall procure a bond guaranteeing payment of related suits, losses, claims, and related investigation, claim administration and defense expenses.
- i. **Wavier of Subrogation:** Each policy required by this Agreement shall also contain a provision waiving the contractor's or contractor's insurance carrier's right to subrogate against the County.

2.16.4 **Additional Coverage for Specific Procurement Projects:**

- a. **Professional Liability:** Insure errors or omission on behalf of architects, engineers, attorneys, medical professionals, and consultants.

Minimum Limits: \$1 million per claim/occurrence

Coverage Requirement: If claims-made, retroactive date must precede or coincide with the contract effective date or the date of the Notice to Proceed. The professional must state if tail coverage has been purchased and the duration of the coverage.

- b. **Builder's Risk: (For Construction or Installation Contracts)** Covers against insured perils while in the course of construction.

Minimum Limits: All-Risk coverage equal 100% of contract value

Coverage Requirements: Occupancy Clause - permits County to use the facility prior to issuance of Notice of Substantial Completion.

- 2.17 **Compliance with Specification - Terms and Conditions:** The Invitation to Bid, Legal Advertisement, General Conditions and Instructions to Bidders, Specifications, Special Conditions, Vendor's Bid, Addendum, and/or any other pertinent documents form a part of the bidders proposal or bid and by reference are made a part hereof.
- 2.18 **Signed Bid Considered Offer:** The signed bid shall be considered an offer on the part of the bidder, which offer shall be deemed accepted upon approval by the Chatham County Board of Commissioners, Purchasing Agent or his designee. In case of a default on the part of the bidder after such acceptance, Chatham County may take such action as it deems appropriate, including legal action for damages or lack of required performance.
- 2.19 **Notice to Proceed:** The successful bidder or proposer shall not commence work under this Invitation to Bid until a written contract is awarded and a Notice to Proceed is issued by the Purchasing Agent or his designee.

If the successful bidder does commence any work or deliver items prior to receiving official notification, he does so at his own risk.

2.20 **Payment to Contractors:** Instructions for invoicing the County for products delivered to the County are specified in the contract document.

- a. Questions regarding payment may be directed to the Finance Department at (912) 652-7905 or the County's Project Manager as specified in the contract documents.
- b. Contractors will be paid the agreed upon compensation upon satisfactory delivery of the products or completion of the work as more fully described in the contract document.
- c. Upon completion of the work or delivery of the products, the Contractor will provide the County or contractor with an affidavit certifying all suppliers, persons or businesses employed by the Contractor for the work performed for the County have been paid in full.
- d. Chatham County is a tax exempt entity. Every contractor, vendor, business or person under contract with Chatham County is required by Georgia law to pay State sales or use taxes for products purchased in Georgia or transported into Georgia and sold to Chatham County by contract. Please consult the State of Georgia, Department of Revenue, Sales and Use Tax Unit in Atlanta (404) 656-4065 for additional information.

2.21 Not Used.

2.22 The Chatham County Board of Commissioners has adopted an aggressive program that establishes goals for minority/female, small and disadvantaged business participation in construction, professional services, and general procurement.

- a. The Chatham County Board of Commissioners under Georgia law may reject any bid as non-responsive if they feel a bidder did not exercise **“Good Faith Effort”** in obtaining the goal established for M/WBE participation.
- b. The Chatham County Board of Commissioners adopted a policy establishing goals oriented to increase participation of minority and female owned businesses, through MBE/FBE certification and development. In order to accurately document participation, businesses submitting bids, quotes or proposals are encouraged to report ownership status. A bidder or vendor that is certified by any agency of the Federal Government or State of Georgia may submit a copy of their certification with their bid as proof of qualifications. Bidders that intend to engage in joint ventures or utilize subcontractors must submit to the County Contracts Administrator, a report on Minority/Female Business Enterprise participation.

**Goals established for this project is 30% MBE/ WBE combined.**

- c. A Minority/Female Business Enterprise (M/FBE) is a business concern that is at least 51% owned by one or more minority/female individuals (2) and whose daily business operations are managed and directed by one or more of the minority/female owners.

- 2.23 Bidders or proposers are required to make a **Good Faith Effort**, where subcontracting is to be utilized in performing the contract, to subcontract with or purchase supplies from qualified M/WBEs. Bidders or proposers are required to state if they intend to subcontract any part of the work. Goals will be established for each contract at the onset. **Forms** requiring the signatures of bidders or proposers are enclosed as **Attachments** and must be completed and returned with your bid response. If forms are not completed and submitted, the bid may be considered nonresponsive.

Each bidder or proposer is required to maintain records of such efforts in detail adequate to permit a determination of compliance with these requirements. All contracts will reflect **Good Faith Efforts** and reporting requirements for the term of the contract. The County particularly urges general contractors to give emphasis to subcontracting with local area firms. **For all questions regarding M/WBE participation and Good Faith Effort only**, contact : Arneja Riley, Chatham County M/WBE Coordinator, 124 Bull Street, Suite 310 Savannah, Ga. 31401. Ph 912-652-7860; fax 912-652-7849; e-mail [alriley@chathamcounty.org](mailto:alriley@chathamcounty.org) or <http://purchasing.chathamcounty.org>

- 2.24 **GEORGIA OPEN RECORDS ACT** - The responses will become part of the County's official files without any obligation on the County's part. Ownership of all data, materials and documentation prepared for and submitted to Chatham County in response to a solicitation, regardless of type, shall belong exclusively to Chatham County and will be considered a record prepared and maintained or received in the course of operations of a public office or agency and subject to public inspection in accordance with the Georgia Open Records Act, Official Code of Georgia Annotated, Section 50-18-70, et. Seq., unless otherwise provided by law.

Responses to RFPs shall be held confidential from all parties other than the County until after the contract is awarded by the Board of Commissioners.

The vendor and their bid price in response to IFBs will be read allowed at public bid openings. After Bid Tabulations, the IFB shall be available for public viewing.

Chatham County shall not be held accountable if material from responses is obtained without the written consent of the vendor by parties other than the County, at any time during the solicitation evaluation process.

- 2.25 **GEORGIA TRADE SECRET ACT of 1990**- In the event a Bidder/Proposer submits trade secret information to the County, the information must be clearly labeled as a Trade Secret. The County will maintain the confidentiality of such trade secrets to the extent provided by law.

- 2.26 **CONTRACTOR RECORDS**-The Georgia Open Records Act is applicable to the records of all contractors and subcontractors under contract with the County. This applies to those specific contracts currently in effect and those which have been completed or closed for up th three (3) years following completion. Again, this is contract specific to the County contracts only.

- 2.27 **EXCEPTIONS**-All proceedings, records, contracts and other public records relating to procurement transactions shall be open to the inspection of any citizen, or any interested person, firm or corporation, in accordance

with the Georgia Open Records Act except as provided below:

- a. Cost estimates relating to a proposed procurement transaction prepared by or for a public body shall not be open to public inspection.
- b. Any competitive sealed bidding bidder, upon request, shall be afforded the opportunity to inspect bid records within a reasonable time after the opening of all bids but prior to award, except in the event that the County decides not to accept any of the bids and to rebid the contract. Otherwise, bid records shall be open to public inspection only after award of the contract. Any competitive negotiation offeror, upon request, shall be afforded the opportunity to inspect proposal records within a reasonable time after the evaluation and negotiations of proposals are completed but prior to award except in the event that the County decides not to accept any of the proposals and to reopen the contract. Otherwise, proposal records shall be open to the public inspection only after award of the contract except as provided in paragraph "c" below. Any inspection of procurement transaction records under this section shall be subject to reasonable restrictions to ensure the security and integrity of the records.
- c. Trade secrets or proprietary information submitted by a bidder, offeror or contractor in connection with a procurement transaction shall not be subject to public disclosure under the Georgia Open Records Act; however, the bidder, offeror or contractor must invoke the protections of this section prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and state the reasons why protection is necessary.
- d. Nothing contained in this section shall be construed to require the County, when procuring by "competitive negotiation" (Request for Proposal), to furnish a statement of the reasons why a particular proposal was not deemed to be the most advantageous to the County.

2.28      **REFERENCES - \$500,000 or more:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$500,000 or more, for bidders to be responsive each must provide information on the most recent five (5) projects with similar scope of work as well as other information to determine experience and qualifications as follows:

- a. Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_
- b. The awarded bid amount and project start date.
- c. Final cost of project and completion date.

- d. Number of change orders.
- e. Contracted project completion in days.
- f. Project completed on time. Yes\_\_\_ No\_\_\_ Days exceeded\_\_\_\_\_.
- g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.
- h. Has contractor ever failed to complete a project? If so, provide explanation.
- i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

**\$499,000 and less:** Provide references from owners of at least three (3) projects of various sizes for which contractor was the prime contractor. Include government owners if possible. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government. provide in the format as in (a) above on the attached form.

**Failure to provide the above information may result in your firm's bid being rejected and ruled as non-responsive.**

**NOTE: FORMS FOR YOU TO FILL OUT FOR YOUR REFERENCES ARE ATTACHED TO THE BACK OF THIS BID PACKAGE.**



## **ADDITIONAL CONDITIONS**

**3.1 Price Change:** Preference shall be given to the bidder submitting the lowest and best firm price as his bid. Should it be found that due to unusual market conditions it is to the best interest of the County to accept a price with an escalation clause, the following shall apply:

The contract price shall be frozen for a specified period. This period must be shown on your bid 11-4-1-4 Cost data to support any proposed increase must be submitted to the Purchasing Agent not less than ten (10) days prior to the effective date of any such requested price increase.

Any adjustment allowed shall consist of bona fide material cost increases which may be passed on to the consumer.

No adjustment shall be made to compensate a supplier for inefficiency in operation, or for additional profit.

Bids indicating "price in effect at time of shipment" will be considered invalid.

**3.2. METHOD OF COMPENSATION.** The compensation provided for herein shall include all claims by the CONTRACTOR for all costs incurred by the CONTRACTOR in the conduct of the Project as authorized by the approved Project Compensation Schedule and this amount shall be paid to the CONTRACTOR after receipt of the invoice and approval of the amount by the COUNTY. The COUNTY shall make payments to the CONTRACTOR within thirty (30) days from the date of receipt of the CONTRACTOR's acceptable statement on forms prepared by the CONTRACTOR and approved by the COUNTY.

Should the Project begin within any one month, the first invoice shall cover the partial period from the beginning date of the Project through the last day of the month (or on a mutually agreeable time) in which it began. The invoices shall be submitted each month until the Project is completed. Invoices shall be itemized to reflect actual expenses for each individual task; also refer to the requirements concerning changes, delays and termination of work under Sections I-8, 9, and 10 of the contract. Each invoice shall be accompanied by a summary progress report which outlines the work accomplished during the billing period and any problems that may be inhibiting the Project execution. The terms of this contract are intended to supersede all provisions of the Georgia Prompt Pay Act.

As long as the gross value of completed work is less than 50% of the total contract amount, or if the contractor is not maintaining his construction schedule to the satisfaction of the engineer, the County shall retain 10% of the gross value of the completed work as indicated by the current estimate approved by the engineer.

After the gross value of completed work becomes to or exceed 50% of the total contract amount within a time period satisfactory to the County, then the total amount to be retained may be reduced to 5% of the gross value of the completed work as indicated by the current estimate approved by the engineer, until all pay items are substantially completed.

When all work is completed and time charges have ceased, pending final acceptance and final payment the amount retained may be further reduced at the discretion of the County.

The CONTRACTOR may submit a final invoice to the County for the remaining retainage upon COUNTY'S acceptance of the Certificate of Substantial Completion. Final payment constituting the entire unpaid balance due shall be paid by the COUNTY to the CONTRACTOR when work has been fully completed and the contract fully performed, except for the responsibilities of the CONTRACTOR which survive final payment. The making of final payment shall constitute a waiver of all claims by Chatham County except those arising from unsettled liens, faulty or defective work appearing after substantial completion, failure of the work to comply with the requirements of the Contract Documents, or terms of any warranties required by the Contractor Documents or those items previously made in writing and identified by the COUNTY as unsettled at the time of final application for payment. Acceptance of final payment shall constitute a waiver of all claims by the CONTRACTOR, except those previously made in writing and identified by the CONTRACTOR as unsettled at the time of final application for payment.

3.2.1. **FORCE ACCOUNT:** When no agreement is reached for additional work to be done at Lump Sum or Unit Prices, then such additional work shall be done based on the following Cost-Plus-Percentage basis of payment. The Georgia Department of Transportation specifications for the use of a force account will not be used.

- a. For work performed by the prime contractor/general contractor, the contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 15% to cover overhead and profit.
- b. For work performed by a sub-contractor, the sub-contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 10% to cover overhead and profit. The contractor shall be allowed an overhead and profit mark-up not to exceed 7% on the subcontractor's price. The County shall not recognize subcontractors of subcontractors.
- c. The term "Actual Cost" shall include the cost of material and labor as follows:
  - i. Material cost - Direct cost of material, sales tax, freight and equipment rental.
  - ii. Labor cost - Man hour cost listed separately by trade, payroll costs including workman's compensation, social security, pension and retirement.
- d. The term "Overhead and Profit" shall include bonds (Payment & Performance, Roof & Wall), insurance (Liability, Builders Risk), permits, supervision costs (cost of subcontractor to supervise own work, cost of contractor to supervise work of sub-contractor), proposal preparation and all administrative costs.

3.2.2. **LIQUIDATED DAMAGES:** Failure to complete the work within the duration of **90 calendar days** plus any extension authorized in writing by the County Engineer shall entitle the County to deduct as "Liquidated Damages" from the monies due the Contractor the amount of **\$250** for each calendar day in excess of the authorized construction time.

3.3 **SURETY REQUIREMENTS and Bonds:** (Check where applicable)

- ☒ A. Such bidder shall post a bid bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 5% of the bid price.
- ☒ B. Contractor(s) shall post a payment/performance bond, certified check or money order made payable to the Chatham County Finance Department in the amount of 100% of the bid price if

awarded the purchase. Such bond(s) are due prior to contract execution as a guarantee that goods meet specifications and will be delivered per contract. Such bonds will also guarantee quality performance of services and timely payment of invoices to any subcontractors.

- X C. Whenever a bond is provided, it shall be executed by a surety authorized to do business in the State of Georgia and approved by Chatham County.
- X D. Bidder acknowledges Chatham County's right to require a Performance and Payment Bond of a specific kind and origin. "Performance Bond" means a bond with good and sufficient surety or surities for the faithful performance of the contract and to indemnify the governmental entity for any damages occasioned by a failure to perform the same within the prescribed time. Such bond shall be payable to, in favor of, and for the protection of the governmental entity for which the work is to be done. "Payment Bond" means a bond with good and sufficient surety or sureties payable to the governmental entity for which the work is to be done and intended for the use and protection of all subcontractors and all persons supplying labor, materials, machinery, and equipment in the prosecution of the work provided for in the public works construction contract.
- X E. Forfeit the amount of the Bid Bond if he/she fails to enter into a contract with Chatham County to do and/or furnish everything necessary to provide service and/or accomplish the work stated and/or specified in this bid proposal for the bid amount, and;

3.4 **Warranty Requirements:** (Check where applicable):

- a. Provisions of item 2.12 apply.
- b. Warranty required.
  - 1. Standard warranty shall be offered with bid.
  - 2. Extended warranty shall be offered with bid. The cost of the extended warranty will be listed separately on the bid sheet.

3.5 **Terms of Contract:** (check where applicable):

- a. Annual Contract
- b. One-time Purchase
- X c. Other **ONE TIME CONTRACT**

**CONVERSATIONS OR CORRESPONDENCE REGARDING THIS SOLICITATION OR REPORT BETWEEN PROSPECTIVE OFFERORS AND PERSONS OUTSIDE THE CHATHAM COUNTY PURCHASING OFFICE WILL NOT BE CONSIDERED OFFICIAL OR BINDING UNLESS OTHERWISE SPECIFICALLY AUTHORIZED WITHIN THIS DOCUMENT.**

The undersigned bidder or proposer certifies that he/she has carefully read the preceding list of instructions to bidders and all other data applicable hereto and made a part of this invitation; and, further certifies that the prices shown in his/her bid/proposal are in accordance with all documents contained in this Invitation for Bids/ Proposals package, and that any exception taken thereto may disqualify his/her bid/proposal.

This is to certify that I, the undersigned bidder, have read the instructions to bidder and agree to be bound by the provisions of the same.

This \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_.

BY \_\_\_\_\_

SIGNATURE

\_\_\_\_\_

TITLE

\_\_\_\_\_

COMPANY

\_\_\_\_\_

Phone / Fax No's.

## CHECKLIST FOR SUBMITTING BID

Sign below and submit this sheet with Bid

**NOTE:** All of the following items must be submitted with your Bid to be considered “responsive”.

1. ACKNOWLEDGMENT OF ANY/ALL ADDENDUMS (Page 3 of ITB)
2. ORIGINAL SURETY BOND (5% OF BID) ALONG WITH *SURETY REQUIREMENTS* SHEET FILLED OUT (Page 15 of ITB )
3. BID SHEET COMPLETELY FILLED OUT AND SIGNED.
4. “LIST OF SUBCONTRACTORS” SHEET FILLED OUT WITH ALL SUBCONTRACTORS AND SUPPLIERS.
5. “% TO MBE SUBCONTRACTORS/SUPPLIERS” SHEET COMPLETELY FILLED OUT SHOWING \$ AMOUNT AS WELL AS % OF PROJECT THAT IS PROJECTED TO GO TO M/WBE SUBCONTRACTORS / SUPPLIERS.
6. SECTION 2.28 OF ITB (page 15) REFERENCES: Read this section and submit the correct number of “References” (based on total dollar amount of project) Note: Supply ALL the information that is requested for each Reference. NOTE: *Forms for Reference Information are attached to this Bid Package.*
7. COMPLETE AND SUBMIT ALL *ATTACHMENTS* TO THE ITB (Attachments A thru G).
8. SUBMIT A COPY OF YOUR *STATE OF GEORGIA CONTRACTORS LICENSE*.

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NAME / TITLE

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COMPANY

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ADDRESS

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PHONE / FAX NO'S.

## **PROPOSAL**

SPECIFICATIONS FOR:

### **PAVING BILLINGS ROAD**

**BID NO. 11-4-1-4**

Billings Road is located off of Montgomery Cross Road near the intersection of Montgomery Cross and Skidaway Road. The project consists of a total of 0.011 miles of grading (complete), drainage, base and paving.

All work under this contract shall be done in accordance with the Georgia Department of Transportation (GDOT) Standard Specifications, latest edition, subsequent supplemental specifications and special provisions included in and made part of this Bid Documents / Plans.

All materials used in the process of completion of the work included in the contract will be furnished from GDOT certified suppliers only.

Contract administration and inspection will be performed by Chatham County.

**Note: This shall be a unit price contract. Quantities are approximate and payment shall be for actual in-place work measurements.**

### **COMMENCEMENT AND COMPLETION:**

**WORK SHALL BEGIN WITHIN 10 DAYS AFTER RECEIPT OF "NOTICE TO PROCEED". ALL WORK SHALL BE COMPLETED WITHIN 90 CALENDAR DAYS AFTER THE TEN DAY PERIOD.**

# Billings Road

TEM NO.	GDOT NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
<b>ROADWAY</b>						
1	150-1000	TRAFFIC CONTROL	LS	1		
2	210-0100	GRADING COMPLETE	LS	1		
3	310-5080	GR AGGR BASE CRS, 8 INCH INCL MATL	SY	1172		
4	318-3000	AGGR SURF CRS	TN	10		
5	402-3113	RECYCLED ASP CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	97		
6	413-1000	BITUM TACK COAT	GL	5		
7	441-0016	DRIVEWAY CONC 6 INCH TK	SY	41		
8	441-6002	CONC CURB & GUTTER, 6" X 18" TP-2	LF	894		
9	550-1180	STORM DRAIN PIPE, 18" 1-10	LF	212		
10	668-1100	CATCH BASIN, GP 1	EA	2		
11	668-4300	STORM SEWER MANHOLE, TP 1	EA	2		
<b>PERMANENT EROSION CONTROL</b>						
12	706-1003	TURF ESTABLISHMENT TP-C	AC	0.33		
<b>TEMPORARY EROSION CONTROL</b>						
13	163-0300	CONSTRUCTION EXIT	EA	1		
14	163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	2		
15	163-0232	TEMPORARY GRASSING	AC	0.15		
16	163-0240	MULCH	TN	1		
17	171-0020	SILT FENCE TP-B	LF	820		
<b>SIGNING AND MARKING</b>						
	611-5551	RESET SIGN, INCL REMOVAL	EA	1		
	636-1029	HIGHWAY SIGNS, TP2 MATL, REFL SHEETING, TP3	SF	10		
	636-1003	HIGHWAY SIGNS, TP1 MATL, REFL SHEETING, TP9	SF	8		
	636-2070	GALV STEEL POSTS, TP7	LF	20		
	653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24" WHITE	LF	10		
	653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8" WHITE	LF	193		
	635-1000	TP3 BARRICADE	LF	8		
<b>WATER DISTRIBUTION SYSTEM</b>						
	670-1500	6 INCH CAP W/2000 SERIES MEGALUG RESTRAINT	EA	1		

TOTAL \_\_\_\_\_

NAME / TITLE

COMPANY

ADDRESS

PHONE / FAX NO'S.

## LIST OF SUBCONTRACTORS

I do \_\_\_\_\_, do not \_\_\_\_\_, propose to subcontract some of the work on this project. I propose to subcontract work to the following subcontractors:

[illegible]

SIGNED: \_\_\_\_\_  
CONTRACTOR



[illegible]

TOTALS

## **SPECIAL CONDITIONS**

### **PROJECT: Billings Road Paving**

#### **1. DESCRIPTION OF WORK:**

The work will consist of furnishing all materials, labor and equipment for:

A total of 0.011 miles of grading (complete), drainage, base and paving on Billings Road.

A location map, construction plans, technical specifications and special provisions for the project is provided elsewhere in these contract documents.

All work under this contract shall be done in accordance with the Georgia Department of Transportation Standard Specifications, latest edition, subsequent supplemental specifications and special provisions included in and made a part of this proposal and plans.

Contract administration and inspection will be performed by Chatham County.

All materials used in the process of completion of the work included in the contract will be furnished from Georgia Department of Transportation certified suppliers only.

It is the responsibility of the bidder to carefully examine and fully understand the construction contract, construction plans, technical specifications, and other documents hereto attached and make a personal examination of the site of the proposed work, and has satisfied him or herself as to the actual conditions and requirements of the work.

The bidder further agrees that the cost of any work performed, materials furnished, services provided, or expenses incurred, which are not specifically delineated in the contract documents but which are incidental to the scope, intent, and completion of the contract, shall be deemed to have been included in the prices bid for the various items scheduled.

**2. COMMENCEMENT AND COMPLETION:** The Contractor shall agree to commence work under this contract within ten (10) working days after the Notice to Proceed is issued, and complete all work within 90 calendar days after the 10-day period. The Contractor shall work continuously on the project after the Notice to Proceed is issued

**3. MAINTENANCE:** Once the Notice to Proceed has been issued, the Contractor is held responsible for all maintenance included within the limits of the project throughout the duration of the contract without exception.

**4. LIQUIDATED DAMAGES:** Failure to complete the work within the duration given in Item #2 plus any extension authorized in writing by the County Engineer shall entitle the County to deduct as "Liquidated Damages" from the monies due the Contractor in the amount of **\$250 for each calendar day** in excess of the authorized construction time.

5. **CONSTRUCTION SCHEDULE:** The Contractor shall prepare a detailed schedule showing progress dates and completion dates of all phases of each project. The schedule shall be presented to the County Engineer prior to commencing work and shall be updated and re-submitted to the Project Manager with each request for payment.

6. **LAYOUT OF THE WORK:** The requirements of Section 149 of the Georgia Department of Transportation specifications shall apply. The Contractor will layout his own construction survey work and be responsible for all measurements in connection therein.

7. **PAYMENT:** Quantities are approximate and payment shall be for actual in-place work measurements. Any quantity of material exceeding the contract amount shall be approved, in writing, by the County Engineer prior to completion of the work.

8. **SAFETY:** The project will be open to traffic at all times. Traffic safety is paramount. The Contractor will be responsible for all traffic signage, in accordance with the Manual on Uniform Traffic Control Devices, The Georgia Department of Transportation, and all other safety measures that will enhance the safety of the construction site. The contractor must submit a phased traffic control plan to the County Engineer for approval prior to commencing work. Any changes to the approved traffic control plan must be submitted to and approved in writing by the County Engineer.

9. **PRE-CONSTRUCTION CONFERENCE:** The Contractor shall attend a pre-construction conference prior to commencing any work.

10. **EXCESS DIRT:** Excess clean material, as determined by the engineer, removed from the site as the result of grading or other excavation shall be removed by the contractor. Debris and unsuitable material shall become the property of the contractor and removed from the site.

11. **DRUG-FREE WORKPLACE CERTIFICATION:** The Contractor is required to certify a drug-free workplace for all employees including all sub-contractors.

12. **MINORITY PARTICIPATION GOAL:** The Contractor shall establish a goal of a minimum of 30% participation by minority owned businesses to function as sub-contractors. The contractor shall include a plan with the bid proposal to show how minority sub-contractors are to be encouraged to participate. Also, the contractor shall provide documentation showing the procedures actually accomplished to meet the goal. Should the goal not be met, the documentation will provide evidence that a concerted effort to solicit minority sub-contractors was made. The Contractor will submit a quarterly report to the County Engineer during the duration of the project describing the effectiveness of the minority participation. A final report must accompany the final payment request. A copy of the form to be used for the quarterly and final Minority Business Enterprise (M.B.E.) report is enclosed in the contract documents.

13. **INCIDENTAL ITEMS OF CONSTRUCTION:** The cost associated with any incidental items of construction in which no specific pay items are set up for shall be included in the overall cost of the project.

14. **USE OF CITY OF SAVANNAH WATER SERVICE:** If Contractor desires the use of City of Savannah owned water supply system for construction of this project, then the Contractor is required to contact Ebrahim Ghazi (912-651-6573) at least 24 hours before use.

15. **FORCE ACCOUNT:** When no agreement is reached for additional work to be done at Lump Sum or Unit Prices, then such additional work shall be done based on the following Cost-Plus-Percentage basis of payment:

a. For work performed by the prime contractor/general contractor, the contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 15% to cover overhead and profit.

b. For work performed by a sub-contractor, the sub-contractor shall be reimbursed for actual cost incurred in doing the work, and an additional payment of 10% to cover overhead and profit. The contractor shall be allowed an overhead and profit mark-up not to exceed 7% on the subcontractor's price. The County shall not recognize subcontractors of subcontractors.

c. The term "Actual Cost" shall include the cost of material and labor as follows:

i. Material cost - Direct cost of material, sales tax, freight and equipment rental.

ii. Labor cost - Man hour cost listed separately by trade, payroll costs including workman's compensation, social security, pension and retirement.

d. The term "Overhead and Profit" shall include bonds (Payment & Performance, Roof & Wall), insurance (Liability, Builders Risk), permits, supervision costs (cost of subcontractor to supervise own work, cost of contractor to supervise work of sub-contractor), proposal preparation and all administrative costs.

16. **SAMPLING AND TESTING OF MATERIALS:**

All sampling and testing services shall be performed by an independent testing agency which operates in accordance to ASTM D3470 and E329, latest edition, and accepted by the County Engineer, at the contractor's expense. All sampling and testing will be in accordance with the Georgia Department of Transportation Standard Specifications and Sampling, Testing and Inspection Guide except as modified here. It should be understood that these are minimum requirements and that additional testing may be requested by the Engineer as needed. A copy of all test reports shall be sent to the Engineer. The cost associated with testing should be included in the bid price for that item.

a. Section 207 Backfill for Minor Structures - One sample per major soil type shall be taken to ensure that the material meets requirements for Type 1 Backfill material, unless embankment material is used which has already been established as meeting the Class IIB3 or better soil requirement. One in-place density test shall be taken for every three lines of longitudinal pipe between drainage structures or every 1,000 feet, whichever is less. One in-place density test shall be taken for every cross drain pipe which passes under the road. One in-place density test shall be taken for every five drainage structures.

Required compaction is 95% of the maximum dry density with optimum moisture content as determined by the testing agency. Testing as per GDT 7.

b. Section 208 Embankment- One sample per major soil type shall be taken to ensure that the material meets the requirement for Class IIB3 or better soils as per GDOT Standard Specification 810.2.01. One in-place density test shall be taken per area of embankment constructed at one time on every other lift, or every 2,000 cubic yards, whichever is less. Required compaction is a minimum of 95% of the maximum dry density and optimum moisture content as determined by the testing agency. Any areas that fail a compaction test must pass a retest prior to any additional embankment being placed at that location. Testing as per GDT 7, 20, 21, 24a, 24b, 59, 67.

c. Section 209 Subgrade - One in-place density test shall be taken per every 1,000 linear feet, maximum 24 foot width, for each section set up at one time. Compaction shall be a minimum of 100% of maximum dry density and optimum moisture content as determined by the testing agency. Any areas that fail a compaction test must pass a retest prior to placement of base course. The subgrade shall be proof rolled with a loaded dump truck and approved by the Engineer prior to placement of any base course. Testing as per GDT 7, 20, 24a, 24b, 59, 67.

d. Section 310 Graded Aggregate Construction - One thickness measurement and one in-place density test per 1,000 linear feet, maximum 24 foot width, for each section set up at one time. A proof roll with a loaded dump truck may be required by the Engineer prior to placement of any asphalt or bituminous prime coat. Testing as per GDT 21, 59.

e. Section 400 & 402 Hot Mix Asphalt Construction - The contractor shall be responsible for comparison testing and quality assurance according to GDOT Standard Specification 400.3.06.A. 3.4. and compaction testing according to GDOT Standard Specification 400.3.06.B. This testing may be waived by the Engineer for projects with a total of 500 tons or less of asphalt.

f. Section 441 Miscellaneous Concrete - One set of test cylinders per each 100 cumulative cubic yards or one set per week if placement is less than 100 cumulative cubic yards per week. Air and slump test are required when cylinders are made and as necessary to insure adequate control. Cylinders shall be tested at 28 days in accordance with ASTM C39.

g. Section 500 Concrete Structures - One set of test cylinders per each 50 cubic yards or fraction thereof placed daily. Air and slump test are required when cylinders are made and approximately every third load thereafter to insure adequate control. Cylinders may be waived for certain items such as pipe headwalls, spillways, class B pavement widening, or other miscellaneous items as determined by the Engineer. Cylinders shall be tested at 28 days in accordance with ASTM C39. Additional cylinders may be taken for early breaks as necessary.

**17. TREE PROTECTION & REMOVAL**

Individual trees greater than 8" DBH and located outside of the construction limits (cut and fill lines) shall not be removed unless specifically called out for removal. All such trees, as well as those specifically labeled for protection, shall be protected per the County tree protection standards for road construction projects. If the contractor feels a tree should be removed that is not shown as such, he shall notify the engineer immediately so that a determination can be made. Further, during construction, the engineer may identify additional trees within the project limits that must be removed in the interest of safety and/or maintenance. In either case, the contractor shall remove such trees at the direction of the engineer at no additional cost to the County.

**18. WATER MAIN CAP**

Contact Frank Banks at (912) 651-6573 with the City of Savannah Water and Sewer Department for specific relocation requirements, a minimum of 48 hours prior to relocation of said hydrant.

**19. GRADED AGGREGATE BASE**

The graded aggregate base will be granite only.

## TREE PROTECTION STANDARDS FOR CHATHAM COUNTY ROAD CONSTRUCTION PROJECTS

The following notes will be made part of the specifications for Chatham County road construction projects:

1. Tree protection methods are to be in accordance with the latest edition of the City of Savannah / Chatham County Land-Clearing and Tree Protection Activities Manual.
2. All trees shown on the plans to remain will be considered specimen trees and will be protected even if located within clearing areas. A radius of one foot for every one inch in diameter at breast height (d.b.h.) shall be considered the tree protection zone for an individual tree. If it is determined during construction that a tree that has been retained must be removed in order to proceed with construction, permission must be obtained from the Project Manager.
3. The contractor shall install a continuous line of bright orange polyethylene barrier fence along the limits of clearing and around the tree protection zone for individual trees to be saved. Other types of barrier fence may be used subject to approval from the Project Manager. A barrier fence should be installed prior to the beginning any construction work on the site and maintained in good condition until final inspection and approval.
4. Install silt fence along the outer uphill edge of a tree protection zone to prevent sediment from soil erosion from entering the tree protection zone.
5. No clearing shall occur within the designated tree protection zones, outside of the property lines or beyond the clearing limits except as otherwise shown.
6. Caution shall be taken during clearing operations to avoid felling trees into the tree protection zones.
7. No disposal or burning of clearing debris will be allowed within the tree protection zones. Clearing debris of the size that can be mechanically chipped into a mulch material can be hand spread over the tree protection zone in areas where there is no existing grass.
8. No material storage, earth storage, gas fueling, concrete washout, dumping or construction traffic is allowed within the tree protection zones.
9. Trenching for the construction of utilities, including but not limited to water/sewer, power, gas, telephone and cable, shall be located outside of the tree protection zones except where indicated. Route utilities within the same trench where feasible and maintain trenches as far away from trees as possible. Install utilities by tunneling rather than by trenching if utilities are installed through a tree protection zone.
10. When tree roots are severed or exposed during trenching or grading operations, re-cut roots with a sharp saw below finished grade so that roots remain covered with soil and are not allowed to dry out.
11. If a preserved tree is damaged by construction, an International Society of Arboriculture Certified Arborist shall be engaged by the contractor to assess and direct any remedial tree care or replacement as deemed appropriate. All cost associated with these actions shall be at the contractors expense.

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
  
SPECIAL PROVISION**

**Section 653—Thermoplastic Traffic Stripe**

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*Delete Section 653 and substitute the following:*

**653.1 General Description**

This work includes furnishing and applying thermoplastic reflectorized pavement marking compound. Ensure that markings conform to Plan details and locations, these Specifications, and the Manual on Uniform Traffic Control Devices.

Thermoplastic traffic stripe consists of solid or broken (skip) lines, words, and symbols according to Plan color, type, and location.

**653.1.01 Definitions**

Thermoplastic Marking Compound: A heated compound extruded or mechanically sprayed on the pavement that cools to pavement temperature. When combined with glass spheres it produces a reflectorized pavement marking.

Short Lines: Crosswalks, stop bars, arrows, symbols, and crosshatching. Extrude short lines rather than spraying them on. Unless otherwise specified, spray all other lines.

**653.1.02 Related References**

**A. Standard Specifications**

Section 652—Painting Traffic Stripe

**B. Referenced Documents**

QPL 46

QPL 71

Federal Test Standard Number 595B

AASHTO M 249

ASTM D 92

ASTM D 476

ASTM D 762

ASTM D 2240

ASTM D 4960

ASTM E 1710

40 CFR 261.24

EPA Method 3050

EPA Method 6010



## Section 653—Thermoplastic Traffic Stripe

EPA Method 7000

Federal Test Standard Number 595B

### 653.1.03 Submittals

Ensure that the producers of the thermoplastic compound and glass spheres furnish to the Department copies of certified test reports showing results of all tests specified in this Section. Also ensure that producers certify that the materials meet the other requirements of this Section by submitting copies of certification at the time of sampling.

### 653.2 Materials

#### A. Requirements

Ensure the resin of the thermoplastic material is an alkyd binder. Use alkyd binder consisting of a mixture of synthetic resins and a high boiling point plasticizer. Use at least one synthetic resin that is a solid at room temperature. Ensure at least 50% of the binder composition is 100% maleic-modified glycerol ester resin. Ensure at least 15% by weight of the entire material formulation consists of binder. Do not use alkyd binder that contains petroleum based hydrocarbon resins. Ensure the finished thermoplastic material is not adversely affected by contact with pavement materials or by petroleum droppings from traffic. Use thermoplastic material that has been evaluated (2 year field evaluation) by the National Transportation Product Evaluation Panel (NTPEP) test facility or other approved test facility. Use thermoplastic material produced from an approved source listed on QPL 46. Use thermoplastic material that meets the requirements of AASHTO M 249 with the following exceptions:

##### 1. Color

Confirm the color of thermoplastic as follows:

- a. White – Use titanium dioxide that meets the requirements of ASTM D 476, Type II, Rutile, as the pigment for white thermoplastic material. Do not use anatase titanium dioxide pigment. Use thermoplastic material free from dirt or tint. Ensure white thermoplastic material heated for  $240 \pm 5$  minutes at  $425 \pm 3$  °F ( $218 \pm 3$  °C) and cooled to  $77 \pm 3$  °F ( $25 \pm 2$  °C) matches Federal Test Standard Number 595B-Color 17925. Use material, when compared to the magnesium oxide standard using a standard color spectrophotometer according to ASTM D 4960, meets the following:

Scale	Definition	Magnesium Oxide Standard	Sample
Rd	Reflectance	100	75 min.
a	Redness-Greenness	0	-5 to + 5
b	Yellowness-Blueness	0	-10 to + 10

- b. Yellow – Use only non-hazardous pigments as defined by the Resource Conservation and Recovery Act (RCRA) Subarticle C rules, table 1 of 40 CFR 261.24 “Toxicity Characteristic”. Do not use yellow thermoplastic containing more than 3.0 ppm lead by weight when tested in accordance with the most up to date EPA Methods 3050 and 6010 or 7000. Ensure yellow thermoplastic material heated for  $240 \pm 5$  minutes at  $425 \pm 3$  °F ( $218 \pm 2$  °C) and cooled to  $77 \pm 3$  °F ( $25 \pm 2$  °C) matches Federal Test Standard Number 595B-Color 13538. Use material, when compared to PR#1 Chart using a standard color spectrophotometer according to ASTM D 4960, plots within the following chromaticity coordinates:

	1	2	3	4
X	0.455	0.510	0.472	0.530
Y	0.444	0.485	0.400	0.456

Initial Reflectance (CIE Y): 45 minimum

Ensure the in-service daytime chromaticity for yellow material plots within the following coordinates after a period of 30 days:

## Section 653—Thermoplastic Traffic Stripe

	1	2	3	4
X	0.435	0.510	0.449	0.530
Y	0.429	0.485	0.377	0.456

### 2. Indentation Resistance

Measure the hardness by a Shore Durometer, Type A2, as described in ASTM D 2240. Maintain the temperature of the Durometer, 4.4 lb. (2 kg) load and the specimen for 2 hours at 115 °F (45 °C). Apply the Durometer and 4.4 lb. (2 kg) load to the specimen. The reading must fall between 50 to 75 units, after 15 seconds.

### 3. Reheating

Ensure that the compound does not break down, deteriorate, scorch, or discolor if held at application temperature of 425 °F (218 °C) for 6 hours and if reheated up to 4 times to the application temperature. Ensure that the color of white and yellow thermoplastic comply with Subsection 653.2.A.1.a and Subsection 653.2.A.1.b after prolonged heating or reheating.

### 4. Drop-On Glass Spheres

Use spheres that meet the requirements of Subsection 652.2. Also, use spheres produced from an approved source listed on QPL-71.

### 5. Sealing Primer

Place the particular type of two-part epoxy binder-sealer at the application rate as recommended in writing by the thermoplastic material manufacturer.

### 6. Flashpoint

Ensure the thermoplastic flashpoint is not less than 500 °F (260 °C) as determined by ASTM D 92.

### 7. Specific Gravity

Ensure the specific gravity of the thermoplastic is between 2.00 to 2.20 as determined by ASTM D 762.

## B. Performance Requirements

### 1. General

For a minimum of 30 days from the time of placement, ensure the thermoplastic pavement marking material shows no signs of failure due to blistering, excessive cracking, chipping, bleeding, staining, discoloration, oil content of the pavement materials, smearing or spreading under heat, deterioration due to contact with grease deposits, oil, diesel fuel, or gasoline drippings, spilling, poor adhesion to the pavement material, vehicular damage, and normal wear. In the event that failures mentioned above occur, ensure corrective work is completed at no additional cost to the Department.

### 2. Retroreflectivity

At the time of installation, ensure the in-place markings when tested according to ASTM E 1710 meet the following minimum reflectance values:

White	375 mcd/lux/m <sup>2</sup>
Yellow	250 mcd/lux/m <sup>2</sup>

Retest the in-place markings 30 days after installation to ensure these minimum retroreflectance values are maintained.

**NOTE: The Contractor is responsible for retroreflectivity testing. Furnish all test reports to the Department.**

## Section 653—Thermoplastic Traffic Stripe

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In the event failures occur, ensure corrective work is completed at no additional cost to the Department. Perform testing according to ASTM E 1710 at above described intervals. Any retest due to failures will be performed at no additional cost to the Department. Furnish all test reports to the Department.

### 653.2.01 Delivery, Storage, and Handling

Use material delivered in 50 lb (22.7 kg) unit cardboard containers or bags strong enough for normal handling during shipment and on-the-job transportation without loss of material.

Ensure that each unit container is clearly marked to indicate the following:

- Color of the material
- Process batch number or similar manufacturer's identification
- Manufacturer's name
- Address of the plant
- Date of manufacture

## 653.3 Construction Requirements

### 653.3.01 Personnel

General Provisions 101 through 150.

### 653.3.02 Equipment

Depending on the marking required, use hand equipment or truck-mounted application units on roadway installations.

#### A. Spray Application Machine

Ensure that each spray application machine is equipped with the following features:

- Parts continuously mix and agitate the material.
- Truck-mounted units for lane, edge, and center lines can operate at a minimum of 5 mph (8 kph) while installing striping.
- Conveying parts between the main material reservoir and the shaping die or gun prevent accumulation and clogging.
- Parts that contact the material are easily accessible and exposable for cleaning and maintenance.
- Mixing and conveying parts, including the shaping die or gun, maintain the material at the plastic temperature with heat transfer oil or electrical element controlled heat. Do not use an external source of direct heat.
- Parts provide continuously uniform stripe dimensions.
- Applicator cleanly and squarely cuts off stripe ends and applies skip lines. Do not use pans, aprons, or similar appliances that the die overruns.
- Parts produce varying widths of traffic markings.
- Applicator is mobile and maneuverable enough to follow straight lines and make normal curves in a true arc.

#### B. Automatic Bead Dispenser

Apply glass spheres to the surface of the completed stripe using a dispenser attached to the striping machine to automatically dispense the beads instantaneously upon the installed line. Synchronize the glass sphere dispenser cutoff with the automatic cutoff of the thermoplastic material.

#### C. Special Kettles

Use special kettles for melting and heating the thermoplastic material. Kettles equipped with automatic thermostatic control devices provide positive temperature control and prevent overheating. Ensure that the applicator and kettles are equipped and arranged according to the requirements of the National Fire Underwriters.

## Section 653—Thermoplastic Traffic Stripe

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### D. Hand Equipment

Use hand equipment for projects with small quantities of lane lines, edge lines, and center lines, or for conditions that require the equipment. Use hand equipment approved by the Engineer.

Ensure that hand equipment can hold 150 lbs (68 kg) of molten material and is maneuverable to install crosswalks, arrows, legends, lane, edge, and center lines.

### E. Auxiliary Vehicles

Supply the necessary auxiliary vehicles for the operation.

### 653.3.03 Preparation

General Provisions 101 through 150.

### 653.3.04 Fabrication

General Provisions 101 through 150.

### 653.3.05 Construction

#### A. General Application

Thoroughly clean pavement areas to be striped. Use hand brooms, rotary brooms, air blasts, scrapers, or other approved methods that leave the pavement surface clean and undamaged. Take care to remove all vegetation and road film from the striping area. All new Portland Cement Concrete pavement surfaces shall be mechanically wire brushed or abrasive cleaned to remove all laitance and curing compound before being striped.

Lay stripe with continuous uniform dimensions.

Apply the type of stripe at each location according to the Plans, using one of the following methods:

- Spray techniques
  - Extrusion methods wherein one side of the shaping die is the pavement, and the other three sides are contained by or are part of the suitable equipment to heat and control the flow of material.
1. Temperature

Apply thermoplastic traffic stripe only when the pavement temperature in the shade is above 40 °F (4 °C).  
To ensure optimum adhesion, install the thermoplastic material in a melted state at the manufacturer's recommended temperature but not at less than 375 °F (190 °C).
  2. Moisture

Do not apply when the surface is moist. When directed by the Engineer, perform a moisture test on the Portland cement concrete pavement surface. Perform the test as follows:

    - a. Place approximately 1 yd<sup>2</sup> (1m<sup>2</sup>) of roofing felt on the pavement surface.
    - b. Pour approximately 1/2 gallon (2 L) of molten thermoplastic onto the roofing felt.
    - c. After 2 minutes, lift the roofing felt and inspect to see if moisture is present on the pavement surface or underside of the roofing felt.
    - d. If moisture is present, do not proceed with the striping operation until the surface has dried sufficiently to be moisture free.
  3. Binder-Sealer

To ensure optimum adhesion, apply a binder-sealer material before installing the thermoplastic in each of the following cases:

    - Extruded thermoplastic
    - Where directed by the Engineer for sprayed thermoplastic
    - Old asphaltic concrete pavements with exposed aggregates
    - Portland cement concrete pavements as directed by the Engineer

## Section 653—Thermoplastic Traffic Stripe

Ensure that the binder-sealer material forms a continuous film that mechanically adheres to the pavement and dries rapidly. Use a binder-sealer currently in use and recommended by the thermoplastic material manufacturer according to OPI 46.

To ensure optimum adhesion, apply a two-part epoxy binder-sealer on all Portland cement concrete pavements for either sprayed or extruded thermoplastic material.

Apply the epoxy binder-sealer immediately in advance of, but concurrent with, the application of the thermoplastic material. Apply in a continuous film over the pavement surface.

4. Bonding to Old Stripe

The old stripe may be renewed by overlaying with new material. Ensure the new material bonds to the old line without splitting or cracking.

5. Offset from Construction Joints

Off-set longitudinal lines at least 2 in (50 mm) from construction joints of Portland cement concrete pavements.

6. Crosswalks, Stop Bars, and Symbols

Make crosswalks, stop bars, and symbols at least 3/32 in (2.4 mm) thick at the edges and no more than 3/16 in (4.8 mm) thick at the center.

7. Film Thickness

a. Maintain the following minimum average film thicknesses on all open graded asphalt concrete friction courses:

- 0.120 in (3.0 mm)\* for lane lines
- 0.090 in (2.3 mm)\* for edge lines
- 0.150 in (3.8 mm)\* for gore area lines

b. Maintain the following minimum average film thicknesses on all other pavement types:

- 0.090 in (2.3 mm)\* for lane lines
- 0.060 in (1.5 mm)\* for edge lines
- 0.120 in (3.0 mm)\* for gore area lines

(See below for '\*' reference.)

Compute the minimums by the amount of material used each day, as follows:

<b>(For 5 in wide stripe)</b>	
* Average Film Thickness (in) =	$[(\text{lbs used}) \div (\text{total linear feet})] \times 0.236$
<b>(For 125 mm wide stripe)</b>	
*Average Film Thickness (mm) =	$[(\text{kg used}) \div (\text{total linear meters})] \times 4.0$
<b>(For 10 in wide stripe)</b>	
* Average Film Thickness (in) =	$[(\text{lbs used}) \div (\text{total linear feet})] \times 0.118$
<b>(For 250 mm wide stripe)</b>	
* Average Film Thickness (mm) =	$[(\text{kg used}) \div (\text{total linear meters})] \times 2.0$

8. Glass Spheres

a. Apply glass spheres to installed stripe surface at a minimum rate of 14 lbs of spheres to each 100 square feet ((700 g/m<sup>2</sup>) of thermoplastic material.

b. Apply the glass sphere top-coating with a pressure-type gun specifically designed for applying glass spheres that will embed at least one-half of the sphere's diameter into the thermoplastic immediately after the material has been applied to the pavement.

### B. Removing Existing Stripe

Remove existing stripe according to Section 656.

Remove 100 percent of existing traffic stripe from:

## Section 653—Thermoplastic Traffic Stripe

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- Portland cement concrete pavement where the new stripe will be placed at the same location as the existing marking
- Pavement where the new stripe will be placed at a different location from the existing markings

### C. Tolerance and Appearance

No traffic stripe shall be less than the specified width and shall not exceed the specified width by more than 1/2 in (13mm). The length of the 10 ft (3 m) segment for skip stripe and the 30 ft (9 m) gap between segments may vary plus or minus 1 ft (300 mm). The alignment of the stripe shall not deviate from the intended alignment by more than 1 in (25 mm) on tangents and on curves up to and including 1 degree (radius of 1745 m or greater). On curves exceeding 1 degree (radius less than 1745 m), the alignment of the stripe shall not deviate from the intended alignment by more than 2 in (50 mm).

Stop work when deviation exceeds the above dimensions, and remove the nonconforming stripe.

### 653.3.06 Quality Acceptance

Segments of the thermoplastic traffic stripe placed according to the Plans and Specifications may be accepted 30 days after the required work is complete in that segment.

If thermoplastic traffic stripe fails to meet Plan details or Specifications or deviates from stated dimensions, correct it at no additional cost to the Department. If removal of pavement markings is necessary, perform it according to Section 656 and place it according to this Specification. No additional payment will be made for removal and replacement of unsatisfactory striping.

## 653.4 Measurement

When stripe will be paid for by the square yard (meter), the actual number of square yards (meters) painted will be measured. The space between the stripes will be included in the overall measurement.

Linear measurements may be made by electronic measuring devices attached to a vehicle.

Thermoplastic traffic stripe, complete in place and accepted, is measured as follows:

### A. Solid Traffic Stripe

Stripe is measured by the linear foot (meter), linear mile (kilometer), or square yard (meter). Breaks or omissions in solid lines or stripes at street or road intersections are not measured for payment.

### B. Skip Traffic Stripe

Skip stripe is measured by the gross linear mile (kilometer) as specified. The unpainted space between the painted stripes is included in the overall measurement if the Plan ratio of one to three (10 ft [3 m] segment and 30 ft [9 m] gap or other patterns as designated on the Plans) remains uninterrupted. Measurement begins and ends on a stripe.

### C. Words and Symbols

Each word or symbol complete according to Plan dimensions is measured by the Unit.

### 653.4.01 Limits

General Provisions 101 through 150.

## 653.5 Payment

Payment is full compensation for the Work under this section, including:

- Cleaning and preparing surfaces
- Furnishing all materials
- Applying, curing, and protecting stripe
- Protecting traffic, including providing necessary warning signs
- Furnishing tools, machines, and other equipment necessary to complete the Item

## Section 653—Thermoplastic Traffic Stripe

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Measurement and payment for removing pavement markings will be according to Section 656 when shown in the Proposal as a payment Item. Otherwise, removal will not be paid for separately, but will be included in the payment for other Work under this section.

Payment will be made under:

Item No. 653	Thermoplastic solid traffic stripe, ___ in (mm), (color)	Per linear foot (meter)
Item No. 653	Thermoplastic solid traffic stripe, ___ in (mm), (color)	Per linear mile (kilometer)
Item No. 653	Thermoplastic skip traffic stripe, ___ in (mm), (color)	Per gross linear foot (meter)
Item No. 653	Thermoplastic skip traffic stripe, ___ in (mm), (color)	Per gross linear mile (kilometer)
Item No. 653	Thermoplastic pavement markings, words, and symbols (color), type _____	Per each
Item No. 653	Thermoplastic traffic stripe	Per square yard (meter)

### 653.5.01 Adjustments

General Provisions 101 through 150.

Office of Materials and Research

Date: November 1, 2002  
First Use Date January 1, 2003  
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First Use Date June 1, 2004  
Revised October 31, 2005  
Revised October 23, 2008

## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

### SPECIAL PROVISION

#### Section 700—Grassing

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*Delete Section 700 and substitute the following:*

##### **700.1 General Description**

This work includes preparing the ground, furnishing, planting, seeding, fertilizing, sodding, and mulching disturbed areas within the Right-of-Way limits and easement areas adjacent to the right-of-way as shown on the Plans except as designated by the Engineer to remain natural.

##### **700.1.01 Definitions**

General Provisions 101 through 150.

##### **700.1.02 Related References**

###### **A. Standard Specifications**

Section 160—Reclamation of Material Pits and Waste Areas

Section 163—Miscellaneous Erosion Control Items

Section 718—Wood Fiber

Section 822—Emulsified Asphalt

Section 882—Lime

Section 890—Seed and Sod

Section 891—Fertilizers

Section 893—Miscellaneous Planting Materials

Section 895—Polyacrylamide

###### **B. Referenced Documents**

QPL 33

QPL 84

##### **700.1.03 Submittals**

Submit manufacturer's product expiration date along with written instructions to ensure proper application, safety, storage, and handling of Polyacrylamide products used in The Work.



## Section 700—Grassing

### 700.2 Materials

Use materials that meet the requirements of the following Specifications:

Material	Section
Wood Fiber Mulch	<u>718.2</u>
Emulsified Asphalt	<u>822</u>
Agricultural Lime	<u>882.2.01</u>
Liquid Lime	<u>882.2.01</u>
Seed	<u>890.2.01</u>
Sod	<u>890.2.02</u>
Fertilizer	<u>891.2.01</u>
Plant Topsoil	<u>893.2.01</u>
Mulch	<u>893.2.02</u>
Inoculants	<u>893.2.04</u>
Tackifiers	<u>QPL 33</u>
Anionic Polyacrylamide	<u>QPL 84 &amp; Section 895</u>

#### A. Seeds

Whenever seeds are specified by their common names, use the strains indicated by their botanical names.

#### B. Water

Obtain the water for grassing from an approved source. Use water free of harmful chemicals, acids, alkalies, and other substances that may harm plant growth or emit odors. Do not use salt or brackish water.

#### C. Asphalt

Secure the mulch with asphalt made of a homogenous emulsification of a refined petroleum. Ensure that the asphalt can be sprayed on with or without diluting with water.

Use suitable asphalt free of petroleum solvents or other diluting agents that may harm plant growth. Use asphalt according to Section 822 or Section 824, “slow setting”. Do not use asphalt that separates after freezing or from any other cause.

#### D. Fertilizer Mixed Grade

Select fertilizer mixed grade such as 10-10-10, 6-12-12, 5-10-15, or other analysis within the following limits:

- Nitrogen 5 to 10 percent
- Phosphorus 10 to 15 percent
- Potassium 10 to 15 percent

If using mixed grade fertilizer for hydroseeding, ensure that it has the following analysis:

- Nitrogen 5 to 19 percent
- Phosphorus 10 to 19 percent
- Potassium 10 to 19 percent

#### E. Mulch

Use straw or hay mulch according to Subsection 700.3.05.G.

Use wood fiber mulch in hydroseeding according to Subsection 700.3.05.F.1.

## **Section 700—Grassing**

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### **700.2.01 Delivery, Storage, and Handling**

General Provisions 101 through 150.

## **700.3 Construction Requirements**

### **700.3.01 Personnel**

General Provisions 101 through 150.

### **700.3.02 Equipment**

Use grassing equipment able to produce the required results.

Never allow the grading (height of cut) to exceed the grassing equipment's operating range.

#### **A. Blower Equipment**

When using blower equipment to apply bituminous treated mulch in a single operation, place two or more jets or spray nozzles at or near the end of the discharge spout to eject a uniform coat of mulch.

#### **B. Mulch Material Equipment**

Use mulching equipment that uniformly cuts the specified materials into the soil to the required control depth.

#### **C. Rollers**

Use at least 12 in (300 mm) diameter rollers with corrugated or notched surfaces. Do not use smooth surface rollers.

#### **D. Hydroseeding Equipment**

For hydroseeding equipment, see Subsection 700.3.05.F.

### **700.3.03 Preparation**

General Provisions 101 through 150.

### **700.3.04 Fabrication**

General Provisions 101 through 150.

### **700.3.05 Construction**

Follow the planting zones, planting dates, types of seed, seed mixtures, and application rates described throughout this Section. The Engineer has the authority to alter the planting dates as set forth by a period of 2 weeks. This 2-week period may be applied to either the beginning of the specified planting and/or to the end of the end of the specified planting season.

In general:

- Obtain the Engineer's approval before changing the ground cover type.
- Do not use annual rye grass seeds with permanent grassing.
- Follow the planting zones indicated on the Georgia State Planting Zone Map, below.
- Sod may be installed throughout the year, weather permitting.

For permanent grassing, apply the combined amounts of all seeds for each time period within each planting zone and roadway location listed in the Seeding Table, below. Do not exceed the amounts of specified seed.

Planting Zone Map



## Section 700—Grassing

SEEDING TABLE

PLANT THESE COMBINATIONS ON SHOULDERS, MEDIANS, AND RELATIVELY FLAT AREAS. (SLOPES 3:1 OR FLATTER)		Rye Grass, Millet Cereal Grass (Oats)	Common Bermuda Grass (Hulled)	Common Bermuda Grass (Unhulled)	Tall Fescue	Pensacola Bahia Grass	Weeping Love Grass	Scarified interstate Lespedeza	Unscarified Interstate	REQUIRED PERMANENT GRASSING
PLANTING ZONES	PLANTING DATES									
1	MARCH 1 – MAY 15		10 (11)	10 (11)	50 (56)					COMMON BERMUDA GRASS
1	MAY 16 – AUGUST 31		10 (11)	10 (11)						
1	SEPT 1 – FEBRUARY 28	50 (56)								
2,3,4	APRIL 1 – OCTOBER 31		10 (11)	10 (11)		20 (23)				BERMUDA/ BAHIA
2,3,4	NOV 1 – MARCH 31	50 (56)								

PLANT THESE COMBINATIONS ON BACK SLOPES, FILL SLOPES AND AREAS WHICH WILL NOT BE SUBJECT TO FREQUENT MOWING, SLOPES STEEPER THAN 3:1.										REQUIRED PERMANENT GRASSING
1,2	MARCH 1 – AUGUST 31						10 (11)	50 (56)		INTERSTATE LESPEDEZA
1,2	SEPT 1 – FEBRUARY 28				50 (56)				75 (84)	
3,4	APRIL 1 – OCTOBER 31						10 (11)	50 (56)		INTERSTATE LESPEDEZA
3,4	NOV 1 – MARCH 31	50 (56)								

### A. Ground Preparation

Prepare the ground by plowing under any temporary grass areas and preparing the soil as follows:

#### 1. Slopes 3:1 or Flatter

On slopes 3:1 or flatter, plow shoulders and embankment slopes to between 4 in and 6 in (100 mm and 150 mm) deep.

Plow front and back slopes in cuts to no less than 6 in (150 mm) deep. After plowing, thoroughly disk the area until pulverized to the plowed depth.

#### 2. Slopes Steeper Than 3:1

Serrate slopes steeper than 3:1 according to Plan details when required.

On embankment slopes and cut slopes not requiring serration (sufficient as determined by the Engineer), prepare the ground to develop an adequate seed bed using any of the following methods as directed by the Engineer:

- Plow to a depth whatever depth is practicable.
- Use a spiked chain.
- Walk with a cleated track dozer.

## Section 700—Grassing

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- Scarify.

Disking cut slopes and fill slopes is not required.

### 3. All Slopes

#### a. Obstructions

Remove boulders, stumps, large roots, large clods, and other objects that interfere with grassing or may slide into the ditch.

#### b. Topsoil

Spread topsoil stockpiled during grading evenly over cut and fill slopes after preparing the ground.

Push topsoil from the top over serrated slopes. Do not operate equipment on the face of completed serrated cuts.

## B. Grassing Adjacent to Existing Lawns

When grassing areas adjacent to residential or commercial lawns, the Engineer shall change the plant material to match the type of grass growing on the adjacent lawn. The Contract Unit Price will not be modified for this substitution.

If the Engineer believes bituminous treated mulch would harm other portions of the work, bituminous treated mulch may be substituted with 1,500 lbs/acre (1680 kg/ha) of wood fiber mulch with tackifier.

## C. Temporary Grassing

Apply temporary grassing according to Subsection 163.3.05.F. Determine lime requirements by a laboratory soil test.

In March or April of the year following planting and as soon as the weather is suitable, replace all areas of temporary grass with permanent grass by plowing or overseeding using the no-till method. If the no-till method is used, ensure that temporary grass is less than 3 inches in height (this may be achieved by mowing). Additional mulch will be required only if the temporary grass does not provide adequate mulch to meet the requirements of Subsection 700.3.05.G, "Mulching."

Temporary grass, when required, will be paid for according to Section 163.

Projects that consist of asphalt resurfacing with shoulder reconstruction and/or shoulder widening: Type II Wood Fiber Blanket is used to stabilize disturbed areas, no till seeding will be used when permanent grassing is applied and the areas will not be re-disturbed.

## D. Applying Agricultural Lime and Fertilizer Mixed Grade

Apply and mix lime and fertilizer as follows:

### 1. Agricultural Lime

Uniformly spread agricultural lime on the ground at the approximate rate determined by the laboratory soil test.

A. Liquid Lime (Flowable Dolomitic Lime) may be applied during the hydroseeding operation at the rate of 2.5 gallons (of Liquid Lime concentrate) per acre (23.75 liters per hectare). This provides the equivalent of 1 ton per acre (2.25 mg per hectare) of agricultural lime. The remainder of lime specified by the soil test is applied as agricultural lime and uniformly spread over the surface of the ground.

B. Agricultural Lime may be used as filler material in mixed grade fertilizer in lieu of inert material. The use of agricultural lime as filler material is to be shown on the fertilizer bag or invoice from the supplier. Do not deduct any amount of fertilizer when lime is used as filler.

### 2. Fertilizer Mixed Grade

Uniformly spread the fertilizer selected according to Subsection 700.2.D over the ground at approximately 1,200 lbs/acre (1350 kg/ha).

If using a higher analysis fertilizer with hydroseeding, apply it at the same rate per acre (hectare) as the standard fertilizer.

### 3. Mixing

## Section 700—Grassing

Before proceeding, uniformly work the lime and fertilizer into the top 4 in (100 mm) of soil using harrows, rotary tillers, or other equipment acceptable to the Engineer.

On cut slopes steeper than 3:1, other than serrated slopes, reduce the mixing depth to the maximum practical depth as determined by the Engineer.

Omit mixing on serrated slopes.

### E. Seeding

Following is a list of both common names and botanical names for approved seed types. Whenever seeds are specified by the common names, the strains indicated by their botanical name apply.

Common Name	Botanical Name
Annual Ryegrass	<i>Lolium multiflorum</i>
*Bermuda Grass, Common Hulled and Unhulled	<i>Cynodon dactylon</i>
**Lespedeza Virgata	<i>Lespedeza Ambro Virgata</i>
**Lespedeza Sericea	<i>Lespedeza cuneta</i> , Var. <i>Sericea</i>
**Lespedeza Serala	<i>Lespedeza cuneta</i> , Var. <i>Serala</i>
**Lespedeza Interstate	<i>Lespedeza cuneta</i> , Var. <i>Interstate</i>
**Lespedeza Korean	<i>Lespedeza stipulacea</i> Maxim
Pensacola Bahiagrass	<i>Paspalum notatum</i> , var. <i>Pensacola</i>
Tall Fescue	<i>Festuca arundinacea</i>
Weeping Love Grass	<i>Eragrostis curvula</i>
*Do not use Giant Bermuda Seed ( <i>Cynodon</i> species) including NK-37.	
**Requires inoculation.	

Prepare seed and sow as follows:

#### 1. Inoculation of Seed

Inoculate each kind of leguminous seed separately with the appropriate commercial culture according to the manufacturer's instructions for the culture.

When hydroseeding, double the inoculation rate.

Protect inoculated seed from the sun and plant it the same day it is inoculated.

#### 2. Sowing

Weather permitting, sow seed within 24 hours after preparing the seed bed and applying the fertilizer and lime.

Sow seed uniformly at the rates specified in the Seeding Table. Use approved mechanical seed drills, rotary hand seeders, hydraulic equipment, or other equipment to uniformly apply the seed. Do not distribute by hand.

To distribute the seeds evenly sow seed types separately, except for similarly sized and weighted seeds. They may be mixed and sown together.

#### 3. Rolling

Roll seeded areas before applying mulch, except on steep slopes where rollers cannot operate satisfactorily. On slopes inaccessible to compaction equipment, cover the seeds by dragging spiked chains over them or by using other methods.

Do not sow during windy weather, when the prepared surface is crusted, or when the ground is frozen, wet, or otherwise non-tillable.

#### 4. Overseeding

## Section 700—Grassing

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Temporary grass areas that were prepared in accordance with Subsection 700.3.05.A, may be overseeded using the no-till method. The no-till method is defined by planting permanent grass seeds using a drill-type seeder over existing temporary grass without plowing or tilling soil and in accordance with Subsection 700.3.05.C.

### F. Hydroseeding

Hydroseeding may be used on any grassing area. Under this method, spread the seed, fertilizer, and wood fiber mulch in the form of a slurry. Seeds of all sizes may be mixed together. Apply hydroseeding as follows:

1. Use wood fiber mulch as a metering agent and seed bed regardless of which mulching method is chosen. Apply wood fiber mulch at approximately 500 lbs/acre (560 kg/ha).
2. Prepare the ground for hydroseeding as for conventional seeding in Subsection 700.3.05.A.
3. Use specially designed equipment to mix and apply the slurry uniformly over the entire seeding area.
4. Agitate the slurry mixture during application.
5. Discharge slurry within one hour after being combined in the hydroseeder. Do not hydroseed when winds prevent an even application.
6. Closely follow the equipment manufacturer's directions unless the Engineer modifies the application methods.
7. Mulch the entire hydroseeded area according to Subsection 700.3.05.F.1, above, and Subsection 700.3.05.G, below.

### G. Mulching

Except as noted in Subsection 700.3.05.B and Subsection 700.3.05.C, apply mulch immediately after seeding areas as follows:

Areas with permanent grass seed and covered with slope mats or blankets will not require mulch.

Evenly apply straw or hay mulch between 3/4 in and 1-1/2 in (20 mm and 40 mm) deep, according to the texture and moisture content of the mulch material.

Mulch shall allow sunlight to penetrate and air to circulate as well as shade the ground, reduce erosion, and conserve soil moisture. If the type of mulch is not specified on the Plans or in the Proposal, use any of the following as specified.

#### 1. Mulch with Binder

Apply mulch with binder regardless of whether using ground or hydroseeding equipment for seeding.

- a. Mulch uniformly applied manually or with special blower equipment designed for the purpose. When using a blower, thoroughly loosen baled material before feeding it into the machine so that it is uniformly coated with binder and broken up.
- b. After distributing the mulch initially, redistribute it to bare or inadequately covered areas in clumps dense enough to prevent new grass from emerging.  
Do not apply mulch on windy days.
- c. Apply enough binder to the mulch to hold it in place. Immediately replace mulch that blows away.  
When using a power blower to distribute the mulch, spray the binder onto the mulch as the mulch is ejected from the machine. If distributing the mulch by hand, immediately apply the binder uniformly over the mulched areas.

Use one of the following binders:

- Emulsified asphalt, SS-1h or SS-1 (Section 822) : The public, adjacent property, bridges, pavements, curbs, sidewalks, and other existing structures shall be protected from discoloration by the asphalt. Correct discoloration damage at no expense to the Department.
- Tackifier: Use a tackifier listed in the Laboratory Qualified Products Manual may be used at the manufacturer's recommended rates.

#### 2. Walked-in-Mulch

Apply walked-in-mulch on slopes ranging in steepness from 5:1 to 2:1 and treat as follows:

- a. Immediately walk it into the soil with a cleated track dozer. Make dozer passes vertically up and down the slope.
- b. Where walked-in-mulch is used, do not roll or cover the seeds as specified in Subsection 700.3.05.E.3.

## Section 700—Grassing

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### H. Sod

Furnish and install sod in all areas shown on the Plans or designated by the Engineer.

#### 1. Kinds of Sod

Use only Common Bermudagrass (*Cynodon dactylon*) or one of the following Bermudagrass varieties:

Tifway 419  
Tifway II  
Tift 94  
Tifton 10  
Midlawn  
Midiron  
GN-1  
Vamont

No dwarf Bermuda types shall be used. Sod shall be nursery-grown and be accompanied with a Georgia Department of Agriculture Live Plant License Certificate or Stamp. Sod shall consist of live, dense, well-rooted material free of weeds and insects as described by the Georgia Live Plant Act.

#### 2. Type And Size Of Sod:

Furnish either big roll or block sod. Ensure that big roll sod is a minimum of 21 inches wide by 52 feet long. Minimum dimensions for block sod are 12 inches wide by 22 inches long. Ensure all sod consists of a uniform soil thickness of not less than 1 inch.

#### 3. Ground Preparation

Excavate the ground deep enough and prepare it according to Subsection 700.3.05.A to allow placing of sod. Spread soil, meeting the requirements of Subsection 893.2.01, on prepared area to a depth of 4 inches.

#### 4. Application Of Lime And Fertilizer

Apply lime and fertilizer according to Subsection 700.3.05.D within 24 hours prior to installing sod.

#### 5. Weather Limitation

Do not place sod on frozen ground or where snow may hinder establishment.

#### 6. Install Sod

Install Sod as follows:

- Place sod by hand or by mechanical means so that joints are tightly abutted with no overlaps or gaps. Use soil to fill cracks between sod pieces, but do not smother the grass.
- Stake sod placed in ditches or slopes steeper than 2:1 or any other areas where sod slipping can occur.
- Use wood stakes that are at least 8 in (200 mm) in length and not more than 1 in (25 mm) wide.
- Drive the stakes flush with the top of the sod. Use a minimum of 8 stakes per square yard (meter) to hold sod in place.
- Once sod is placed and staked as necessary, tamp or roll it using adequate equipment to provide good contact with soil.
- Use caution to prevent tearing or displacement of sod during this process. Leave the finished surface of sodded areas smooth and uniform.

#### 7. Watering Sod

After the sod has been placed and rolled or tamped, water it to promote satisfactory growth. Additional watering will be needed in the absence of rainfall and during the hot dry summer months. Water may be applied by Hydro Seeder, Water Truck or by other means approved by the Engineer.

#### 8. Dormant Sod

Dormant Bermuda grass sod can be installed. However, assume responsibility for all sod through establishment and until final acceptance.



## Section 700—Grassing

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### 9. Establishment

Sod will be inspected by the Engineer at the end of the first spring after installation and at the time of Final Inspection. Replace any sod that is not live and growing. Any cost for replacing any unacceptable sod will be at the Contractor's expense.

### I. Application of Nitrogen

Apply nitrogen at approximately 50 lbs/acre (56 kg/ha) when specified by the Engineer after plants have grown to 2 in (50 mm) high.

One application is mandatory and must be applied before Final Acceptance.

Apply nitrogen with mechanical hand spreaders or other approved spreaders capable of uniformly covering the grassed areas. Do not apply nitrogen on windy days or when the foliage is damp.

Do not apply nitrogen between October 15 and March 15 except in Zone 4. In planting zones 3 and 4 apply an additional application of nitrogen.

### J. Application of Polyacrylamide (PAM)

1. Prepare soil according to project Plans and Specifications prior to applying PAM.
2. Apply PAM according to manufacturer's recommendations and the requirements listed herein.
3. Apply Polyacrylamide (PAM) to all areas that receive permanent grassing.
4. Apply PAM (powder) before grassing or PAM (emulsion) to the hydroseeding operation.
5. Use only anionic PAM.
6. Ensure that the application method provides uniform coverage to the target and avoids drift to non-target areas including waters of the state.
7. Achieve > 80% reduction in soil loss as measured by a rainfall simulator test performed by a certified laboratory (1 hour storm duration, 3 inches (75 mm) rainfall per hour).
8. Ensure uniform coverage to the target area and minimize drift to non-target areas. Apply anionic PAM to all cut and fill slopes, permanently grassed or temporarily grassed, either prior to grassing or in conjunction with hydroseeding operations. Mulch will not be eliminated.
9. Use application rates in accordance with manufacturer's instructions.
10. Do not exceed 200 lbs/acre/year (224 kg/ha/year).

### 700.3.06 Quality Acceptance

The Engineer may require replanting of an area that shows unsatisfactory growth for any reason at any time.

Except as otherwise specified or permitted by the Engineer, prepare replanting areas according to the Specifications as if they were the initial planting areas. Use a soil test or the Engineer's guidance to determine the fertilizer type and application rate, then furnish and apply the fertilizer.

### 700.3.07 Contractor Warranty and Maintenance

#### A. Plant Establishment

Before Final Acceptance, provide plant establishment of the specified vegetation as follows:

1. Plant Establishment  
Preserve, protect, water, reseed or replant, and perform other work as necessary to keep the grassed areas in satisfactory condition.
2. Watering  
Water the areas during this period as necessary to promote maximum growth.
3. Mowing  
Mow seeded areas of medians, shoulders, and front slopes at least every 6 months. Avoid damaging desirable vegetation.

In addition, mow as necessary to prevent tall grass from obstructing signs, delineation, traffic movements, sight distance, or otherwise becoming a hazard to motorists.

## Section 700—Grassing

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Do not mow lespedezas or tall fescue until after the plants have gone to seed.

### B. Additional Fertilizer Mixed Grade

Apply fertilizer at approximately 600 lbs/acre (675 kg/ha) each spring after initial plant establishment. Continue annual applications until Final Acceptance. This additional fertilizer will be measured and paid for at the Contract Unit Price for fertilizer mixed grade.

### C. Growth and Coverage

Provide satisfactory growth and coverage, ensuring that vegetation growth is satisfactory with no bare spots larger than 1 ft<sup>2</sup> (0.1 m<sup>2</sup>). Bare spots shall comprise no more than 1 percent of any given area. An exception is given for seed not expected to have germinated and shown growth at that time.

### D. Permissible Modifications

When all Items of the work are ready for Final Acceptance except for newly planted repaired areas or other areas with insufficient grass, the Contractor may fill the eroded areas or treat bare areas with sod obtained, placed, and handled according to Subsection 700.3.05.H.

Carefully maintain the line and grade established for shoulders, front slopes, medians, and other critical areas.

Sod as described above will not be paid for separately, but will be an acceptable substitute for the satisfactory growth and coverage required under this Specification. These areas treated with sod are measured for payment under the Item for which the sod is substituted.

## 700.4 Measurement

### A. Permanent Grassing

Permanent Grassing will be measured for payment by the acre (hectare).

### B. Mulches

Straw or hay mulch applied to permanent grassing areas will be measured by the ton (megagram). Wood fiber mulch furnished by the Contractor for permanent grassing is not measured for separate payment.

### C. Quantity of Sod

Sod is measured for payment by the number of square yards (meters) , surface measure, completed and accepted.

### D. Water

Water furnished and applied to promote a satisfactory growth is not measured for payment.

### E. Quantity of Lime and Fertilizer Mixed Grade

Lime and fertilizer are measured by the ton (megagram). Lime used as a filler in fertilizer is measured by the ton (megagram). Liquid lime is measured by the gallon (liter).

### F. Quantity of Nitrogen Used for Permanent Grassing

Nitrogen is measured in pounds (kilograms) based on the weight of fertilizer used and its nitrogen content.

### G. Replanting and Plant Establishments

No measurement for payment is made for any materials or work required under Subsection 700.3.06 and Subsection 700.3.07.

### H. Temporary Grass

Temporary grass is measured for payment by the acre (hectare) of seed according to Section 163.

#### 700.4.01 Limits

General Provisions 101 through 150.

## 700.5 Payment

As grassing and planting progress, the Contractor will receive full measurement and payment on regular monthly estimates provided the work complies with the Specifications.

## Section 700—Grassing

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### A. Permanent Grassing

Permanent grassing will be paid for at the Contract Price per acre (hectare), complete and in place. Payment is full compensation for preparing the ground, seeding, wood fiber mulch, polyacrylamide, and providing plant establishment and other incidentals.

### B. Straw or Hay Mulch

Straw or hay mulch required for Permanent Grassing will be paid for according to [Section 163](#).

### C. Fertilizer Mixed Grade

Fertilizer mixed grade will be paid for at the Contract Price per ton (megagram). Payment is full compensation for furnishing and applying the material.

### D. Lime

Lime will be paid for at the Contract Price per ton (megagram). Lime used as a filler in fertilizer will be paid for per ton (megagram). Liquid lime will be paid for per gallon (liter). Payment is full compensation for furnishing and applying the material.

### E. Nitrogen

Nitrogen will be paid for at the Contract Price per pound (kilogram) of nitrogen content. Payment is full compensation for furnishing and applying the material.

### F. Sod

Sod will be paid by the square yard (meter) in accordance with the following schedule of payments. Payment is full compensation for ground preparation, including addition of topsoil, furnishing and installing live sod, and for Plant Establishment.

1. 70% of the Contract Price per square yard will be paid at the satisfactory completion of the installation.
2. 20% of the Contract Price will be paid upon satisfactory review of sod which is healthy, weed free and viable at the inspection made at the end of the first spring after installation.,.
3. 10% of the contract price will be paid upon satisfactory review of sod that is healthy, weed free and viable at the Final Acceptance.

### G. Temporary Grass

Temporary Grass will be paid for under [Section 163](#).

Payment will be made under:

Item No. 700	Permanent grassing	Per acre (hectare)
Item No. 700	Agricultural lime	Per ton (megagram)
Item No. 700	Liquid Lime	Per gallon (liter)
Item No. 700	Fertilizer mixed grade	Per ton (megagram)
Item No. 700	Fertilizer nitrogen content	Per pound (kilogram)
Item No. 700	Sod	Per square yard (meter)

### 700.5.01 Adjustments

General Provisions 101 through 150.

ATTACHMENT A

**DRUG - FREE WORKPLACE CERTIFICATION**

THE UNDERSIGNED CERTIFIES THAT THE PROVISIONS OF CODE SECTIONS 50-24-1 THROUGH 50-24-6 OF THE OFFICIAL CODE TO GEORGIA ANNOTATED, RELATED TO THE \*\*DRUG-FREE WORKPLACE\*\*, HAVE BEEN COMPLIED WITH IN FULL. THE UNDERSIGNED FURTHER CERTIFIES THAT:

1. A Drug-Free Workplace will be provided for the employees during the performance of the contract; and
2. Each sub-contractor under the direction of the Contractor shall secure the following written certification:

\_\_\_\_\_ (CONTRACTOR) certifies to Chatham County that a Drug-Free

Workplace will be provided for the employees during the performance of this contract known as **Paving Billings Road.**  
(PROJECT)

pursuant to paragraph (7) of subsection (B) of Code Section 50-24-3. Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, possession, or use of a controlled substance or marijuana during the performance of the contract.

\_\_\_\_\_  
CONTRACTOR

\_\_\_\_\_  
DATE

\_\_\_\_\_  
NOTARY

\_\_\_\_\_  
DATE

ATTACHMENT B

PROMISE OF NON-DISCRIMINATION STATEMENT

Know All Men By These Presence, that I (We), \_\_\_\_\_,

Name

(herein after

"Company"),

Title

Name of Bidder

in consideration of the privilege to bid/or propose on the following

Chatham County project procurement Paving Billings Road. hereby consent,  
covenant and agree as follows:

- (1) No person shall be excluded from participation in, denied the benefit of or otherwise discriminated against on the basis of race, color, national origin or gender in connection with the bid submitted to Chatham County or the performance of the contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested with the Company, including those companies owned and controlled by racial minorities, and women;
- (3) In connection herewith, I (We) acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide minority and women owned companies with the maximum practicable opportunities to do business with this Company on this contract;
- (4) That the promises of non-discrimination as made and set forth herein shall be continuing throughout the duration of this contract with Chatham County;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made a part of and incorporated by reference in the contract which this Company may be awarded;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth above may constitute a material breach of contract entitling the County to declare the contract in default and to exercise appropriate remedies including but not limited to termination of the contract.

Signature

Date

## Attachment C

### DISCLOSURE OF RESPONSIBILITY STATEMENT

Failure to complete and return this information will result in your bid/offer/proposal being disqualified from further competition as non-responsive.

1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.  

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2. List any indictments or convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offenses indicating a lack of business integrity or business honesty which affects the responsibility of the contractor.  

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3. List any convictions or civil judgments under states or federal antitrust statutes.  

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4. List any violations of contract provisions such as knowingly (without good cause) to perform, or unsatisfactory performance, in accordance with the specifications of a contract.  

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5. List any prior suspensions or debarments by any governmental agency.  

---
6. List any contracts not completed on time.  

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7. List any penalties imposed for time delays and/or quality of materials and workmanship.  

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8. List any documented violations of federal or any state labor laws, regulations, or standards, occupational safety and health rules.  

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I, \_\_\_\_\_, as \_\_\_\_\_  
Name of individual Title & Authority

of \_\_\_\_\_, declare under oath that

Company Name \_\_\_\_\_

the above statements, including any supplemental responses attached hereto, are true.

\_\_\_\_\_  
Signature

State of \_\_\_\_\_

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

Subscribed and sworn to before me on this \_\_\_\_\_ day of \_\_\_\_\_

2008 by \_\_\_\_\_ representing him/herself to be

\_\_\_\_\_ of the company named herein.

\_\_\_\_\_  
Notary Public

My Commission expires:

\_\_\_\_\_  
Resident State: \_\_\_\_\_

## Attachment D

### IMMIGRATION AND SECURITY FORM

SB529 (The Ga Security and Immigration and Compliance Act) requires contractors to file an affidavit that the contractor and its subcontractors have registered and participate in a federal work authorization program intended to insure that only lawful citizens or lawful immigrants are employed by the contractor or subcontractor. This requirement of SB529 is a phased-in affidavit filing requirement based on the size of the contractor. Contractors with 500 or more employees are required to file an affidavit of compliance beginning 7/1/07. However, because the requirement is set forth in OCGA 13-10-91 which is a part of Chapter 10 of Title 13 governing public works contracts, the affidavit filing requirements of SB529 therefore only apply to public works contracts.

- A. In order to insure compliance with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act OCGA 13-10-90 et seq., Contractor must initial one of the sections below:

\_\_\_\_ Contractor has 500 or more employees and Contractor warrants that Contractor has complied with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act by registering at <https://www.vis-dhs.com/EmployerRegistration> and verifying information of all new employees; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et seq.

\_\_\_\_ Contractor has 100-499 employees and Contractor warrants that no later than July 1, 2008, Contractor will register at <https://www.vis-dhs.com/EmployerRegistration> to verify information of all new employees in order to comply with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et seq.

\_\_\_\_ Contractor has 99 or fewer employees and Contractor warrants that no later than July 1, 2009, Contractor will register at <https://www.vis-dhs.com/EmployerRegistration> to verify information of all new employees in order to comply with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act; and by executing any affidavits required by the rules and regulations issued by the Georgia Department of Labor set forth at Rule 300-10-1-.01 et seq.

- B. Contractor warrants that Contractor has included a similar provision in all written agreements with any subcontractors engaged to perform services under this Contract.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

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

Street/Mailing Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

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

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



## Attachment E

### CONTRACTOR AFFIDAVIT AND AGREEMENT

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 (name of public employer) has registered with and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with (name of public employer), contractor 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. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the (name of the public employer) at the time the subcontractor(s) is retained to perform such service.

EEV / Basic Pilot Program\* User Identification Number

BY: Authorized Officer or Agent  
(Contractor Name)

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN  
BEFORE ME ON THIS THE

\_\_\_\_ DAY OF \_\_\_\_\_, 200\_\_

Notary Public

My Commission Expires:

\* 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).

## SUBCONTRACTOR AFFIDAVIT

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 and is participating in a federal work authorization program\* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

\_\_\_\_\_  
EEV / Basic Pilot Program\* User Identification Number

\_\_\_\_\_  
BY: Authorized Officer or Agent  
(Subcontractor Name)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title of Authorized Officer or Agent of Subcontractor

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

SUBSCRIBED AND SWORN

BEFORE ME ON THIS THE

\_\_\_\_ DAY OF \_\_\_\_\_, 200\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_  
\* 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).

**ATTACHMENT F**

**CHATHAM COUNTY, GEORGIA**

**BIDDER'S CERTIFICATION REGARDING DEBARMENT, SUSPENSION,  
INELIGIBILITY AND VOLUNTARY EXCLUSION**

**The undersigned certifies, by submission of this proposal or acceptance of this contract, that neither Contractor nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency, State of Georgia, City of Savannah, Board of Education of local municipality. Bidder agrees that by submitting this proposal that Bidder will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the Bidder or any lower tier participant is unable to certify to this statement, that participant shall attach an explanation to this document.**

**Certification – the above information is true and complete to the best of my knowledge and belief.**

---

(Printed or typed Name of Signatory)

---

(Signature)

---

(Date)

**NOTE:** The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001

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**END OF DOCUMENT Mod. CC P & C 6/2005**

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**Attachment G**

**Chatham County  
Minority and Women Business Enterprise Program  
M/WBE Compliance Report**

Name of Bidder: \_\_\_\_\_

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

Bid No: \_\_\_\_\_

M/WBE Firm	Type of Work	Contact Person/ Phone #	City, State	%	MBE or WBE

MBE Total \_\_\_\_\_%

WBE Total \_\_\_\_\_%

M/WBE  
Combined \_\_\_\_\_%

The undersigned should enter into a formal agreement with M/WBE Contractor identified herein for work listed in this schedule conditioned upon execution of contract with the Chatham County Board of Commissioners.

Signature \_\_\_\_\_ Print \_\_\_\_\_

Phone (    ) \_\_\_\_\_ Fax (    ) \_\_\_\_\_

# # 1

## REFERENCE FORM

**REFERENCES - \$499,999 or less:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

- a. Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_
- b. The awarded bid amount and project start date. \_\_\_\_\_  
c. Final cost of project and completion date. \_\_\_\_\_  
d. Number of change orders. \_\_\_\_\_  
e. Contracted project completion in days. \_\_\_\_\_  
f. Project completed on time. Yes \_\_\_ No \_\_\_ Days exceeded \_\_\_\_\_.  
g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.  
h. Has contractor ever failed to complete a project? \_\_\_ If so, provide explanation.  
i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? \_\_\_ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

## # 2

### REFERENCE FORM

**REFERENCES - \$499,999 or less:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

- a. Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
  
\*Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_
- b. The awarded bid amount and project start date. \_\_\_\_\_  
c. Final cost of project and completion date. \_\_\_\_\_  
d. Number of change orders. \_\_\_\_\_  
e. Contracted project completion in days. \_\_\_\_\_  
f. Project completed on time. Yes \_\_\_ No \_\_\_ Days exceeded \_\_\_\_\_.  
g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.  
h. Has contractor ever failed to complete a project? \_\_\_ If so, provide explanation.  
i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? \_\_\_ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

### # 3

#### REFERENCE FORM

**REFERENCES - \$499,999 or less:** On July 25, 2003 the Board of Commissioners directed that all construction projects with a bid of \$499,999 or less, for bidders to be responsive each must provide information on the most recent three (3) projects with similar scope of work as well as other information to determine experience and qualifications as follows. If the contractor has performed any work for the Chatham County Board of Commissioners within the last five (5) years, at least one (1) of the three (3) owner references must be from the appropriate party within the Chatham County Government

- a. Project Name: \_\_\_\_\_  
Location: \_\_\_\_\_  
Owner: \_\_\_\_\_  
Address: \_\_\_\_\_  
City and State: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
  
\* Architect or Engineer: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone & Fax: \_\_\_\_\_  
Email: \_\_\_\_\_
- b. The awarded bid amount and project start date. \_\_\_\_\_  
c. Final cost of project and completion date. \_\_\_\_\_  
d. Number of change orders. \_\_\_\_\_  
e. Contracted project completion in days. \_\_\_\_\_  
f. Project completed on time. Yes\_\_\_ No\_\_\_ Days exceeded\_\_\_\_\_  
g. List previous contracts your company performed for Chatham County by Project Title, date and awarded/final cost.  
h. Has contractor ever failed to complete a project?\_\_\_ If so, provide explanation.  
i. Have any projects ever performed by contractor been the subject of a claim or lawsuit by or against the contractor? \_\_\_ If yes, please identify the nature of such claim or lawsuit, the court in which the case was filed and the details of its resolution.

LEGAL NOTICE

CC NO. 164365

Invitation to Bid

Sealed Bids will be received until 2:00 P.M. on DECEMBER 1, 2010 and publicly opened in Chatham County Purchasing & Contracting Department, at The Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia, for: BID NO : 11-4-1-4 PAVING BILLINGS ROAD.

PRE-BID CONFERENCE: 2:00 P.M., NOVEMBER 17, 2010. A Conference will be held at the Chatham County Citizens Service Center, 1117 Eisenhower Drive, Suite C, Savannah, Georgia. You are encouraged to attend.

Bid Packages and Plan sheets are available from the office of the Chatham County Purchasing & Contracting Department, at the above address. **There is a \$50 non-refundable charge for this package.**

The Bid Package can be downloaded and printed from the County website <http://purchasing.chathamcounty.org> Also, all firms requesting to do business with Chatham County must also register on-line at website <http://purchasing.chathamcounty.org>

**The Bid Package and Plans must still be picked up and purchased from the Purchasing & Contracting Office.**

Bid Bond shall be required at the time of bid. (5% of total bid)

Payment and Performance Bonds (100% of bid) will be required for this project at the time of contract award.

CHATHAM COUNTY HAS THE AUTHORITY TO REJECT ALL BIDS AND WAIVE MINOR FORMALITIES.

"CHATHAM COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER, M/F/H, ALL BIDDERS ARE TO BE EQUAL OPPORTUNITY EMPLOYERS"



WILLIAM R. PARSON, CPPO, PURCHASING AGENT

SAVANNAH NEWS/PRESS INSERT: Oct. 26, Nov.15 , 2010

Please send affidavit to:  
Chatham County Purchasing & Contracting Department  
P.O. Box 15180  
Savannah, Georgia 31416  
(912) 790-1622