INVITATION TO BID,  
PREPARED 05/15/19

Sealed Envelope shall be marked with the following information:  
Bid # 19-37  
Panola Mountain Greenway Trail PATH  
Georgia Department of Transportation (GDOT) PI #0010721  
Opening:  3:00 PM, June 20, 2019

<table>
<thead>
<tr>
<th>SCHEDULE OF EVENTS FOR</th>
<th>BID # 19-37</th>
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<tbody>
<tr>
<td>Pre-Bid Conference and Site Visit</td>
<td>None</td>
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<tr>
<td>Deadline for requests for clarifications and questions. <strong>Any possible exceptions to the bid specifications and/or terms and conditions should be addressed during this phase.</strong> These requests will be answered in an addendum and must be emailed to: <strong><a href="mailto:henrycountysealedbid@co.henry.ga.us">henrycountysealedbid@co.henry.ga.us</a></strong></td>
<td>3:00 PM June 20, 2019</td>
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<td><em>Deadline for first addendum, if required, posted on the Henry County website: <a href="http://henrycounty-ga.com/purchasing">henrycounty-ga.com/purchasing</a></em></td>
<td>3:00 PM June 14, 2019</td>
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<td>Sealed bids will be accepted until the opening date and time. Any late submittals received will not be considered. Submittals are to be delivered to Henry County Purchasing Department, 140 Henry Parkway, McDonough, GA 30253.</td>
<td>3:00 PM June 20, 2019</td>
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**THIS FORM MUST BE SIGNED AND SUBMITTED TO BE CONSIDERED FOR AWARD**

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<td>PRINTED NAME:</td>
<td>TITLE OF AUTHORIZED REPRESENTATIVE:</td>
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<td>AUTHORIZED SIGNATURE:</td>
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*The posting of additional addenda may be required and it is the responsibility of the bidder to ensure that they review the County’s website for any additional addenda, and that they submit acknowledgement of all applicable addenda (on the included form) with their solicitation. Bidders should not expect to be individually notified by Henry County.*
The intent of this invitation is to obtain competitive sealed bids from qualified vendors for Panola Mountain Greenway Trail PATH, GDOT P.I. No. 0010721, located in Stockbridge, Henry County, GA. The Contractor shall furnish all labor, materials, equipment, and services required to fulfill the terms and conditions of the bid. **All bidders must be listed on the current Georgia Department of Transportation Directory of Prequalified Contractors and Registered Subcontractors.**

Sealed bids will be received by the Henry County Board of Commissioners, Purchasing Department, 140 Henry Parkway, McDonough, GA 30253, until **3:00 PM on June 20, 2019.** Bids received after the designated time will not be accepted. There will not be a pre-bid meeting. Deadline for requests regarding clarifications and questions is **3:00 PM on June 10, 2019.** Deadline for first addendum, if required, is **3:00 PM on June 14, 2019.**

Bids may be submitted by mail, common carrier or delivered in person. Fax or electronic bids are not acceptable. Bidders shall include one (1) electronic copy and one (1) bound copy both identical to the original bid documents with their submission. Bids will be opened at the Henry County Administration Building by staff personnel. Bidders submitting a bid $2,000,000 or less must be either a prequalified contractor or a registered subcontractor with GDOT. Bidders submitting bids in excess of $2,000,000 must be prequalified with GDOT.

The bid documents, specifications, and plans are available for review and download at the County website: [http://www.co.henry.ga.us/Departments/M-R/Purchasing-Department](http://www.co.henry.ga.us/Departments/M-R/Purchasing-Department)

The Bidder is expected to examine the site(s) of the proposed work, the Proposal Form, Specifications, Supplemental Specifications, Special Provisions and Contract forms before submitting a bid.

No bid will be considered unless accompanied by a certified check or acceptable Bid Bond in an amount not less than five percent (5%) of the bid and made payable to Henry County.

The successful Bidder shall be required to furnish a Contract Performance Bond equal to 100% of the contract price and a Payment Bond equal to 110% of the contract price, with the terms and surety to be approved by County; and furnish satisfactory proof of carriage of the insurance required.

Bids may not be withdrawn for sixty (60) days after the time and date set for closing, except as allowed by OCGA. Henry County reserves the right to reject any and all bids and to waive any technicalities.

If the contract is awarded, it will be awarded to the lowest reliable bidder whose bid shall have met all the prescribed requirements. The low bidder will be determined based upon the sum of the base bid. Any alternates will be considered as additional services, and would be selected at the discretion of the owner, the Henry County Board of Commissioners.
The applicable GDOT specifications govern over any conflicting requirements that may be found in the Sponsor/Contractor Construction Agreement, General Conditions, and Supplemental General Provisions.


A mandatory Preconstruction Conference, to include at a minimum, a County representative, the Contractor, selected DBE firms, and the GDOT Area Engineer will be held prior to commencing with construction activities.

The Contractor is advised that Federal Funds are being utilized for construction of this project. The GDOT Disadvantaged Business Enterprise (DBE) goal for this project is set at fourteen percent (14%). All subcontractors, including DBE firms, are to be GDOT registered subcontractors or prequalified contractors. Bidders will be required to complete Federal Aid Certification of compliance. Sub-contracts by the prime should also include these provisions. All DBE firms must be certified with the GDOT Equal Employment Opportunity Office.

The Contractor shall submit a completed DBE Goals Form, Federal Aid Certification, and Georgia Security and Immigration Compliance Act Affidavit with the bid.

The Henry County Board of Commissioners in accordance with Title VI of the Civil Rights Act of 1964 and 78 Stat. 252, 42 USC 2000d-42 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, part 21, Nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

The successful bidder shall commence work with adequate force and equipment on a date to be specified in a written order of the Henry County Board of Commissioners, and shall complete the work within three hundred sixty-five (365) consecutive calendar days from and including said date. Payment will be made to the contractor each calendar month based on the estimated work completed and in place as prescribed by the standard specifications. Final payment of amounts withheld or deposited in escrow will not be made until the State Highway Engineer and Henry County have certified that the work has been satisfactorily completed and accepted.

All testing is to meet the requirements outlined in the GDOT Sampling, Testing, and Inspection Guide. The Sponsor is to submit Form OM-LAP-1v8, Federal-Aid Local Let Projects Materials Quality Assurance, Revised August 31, 2017, to the GDOT Office of Materials prior to start of construction. The Sponsor is responsible for the quality assurance testing usually through use of a consulting firm qualified in Area Classes 604a and 604b. GDOT will perform the Independent Assurance testing based on the specific certified testers identified on the Form OM-LAP-1v8. The Contractor is responsible for asphalt mixture acceptance testing at the plant and verification testing for compaction results from the roadway. See GDOT Local Administered Projects Manual, Chapter 11 and Appendix G, for specific requirements.
Form FHWA-1273 and the related special provisions are to be physically attached to the contract between the Sponsor and the Contractor and to all subcontracts between the Contractor and Subcontractors.

Failure to complete the work within the timeframe stipulated herein will result in Liquidated damages being assessed in accordance with GDOT Specification 108.08.
Bid # 19-37  
Panola Mountain Greenway Trail PATH  
Georgia Department of Transportation (GDOT) PI #0010721  
Opening: 3:00 PM, June 20, 2019

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SECTION I - GENERAL OVERVIEW

A. PURPOSE
The intent of this invitation is to obtain competitive sealed bids from qualified vendors for PANOLA MOUNTAIN GREENWAY TRAIL PATH, GDOT P.I. No. 0010721, located in Stockbridge, Henry County, GA. The Contractor shall furnish all labor, materials, equipment, and services required to fulfill the terms and conditions of the Base Bid and as awarded, Bid Alternate 1 and/or Bid Alternate 2. All bidders must be listed on the current Georgia Department of Transportation Directory of Prequalified Contractors and Registered Subcontractors. Bidders submitting a bid $2,000,000.00 or less must be either a prequalified contractor or registered subcontractor with GDOT. Bidders submitting bids in excess of $2,000,000.00 must be prequalified with GDOT. Plans are available for review and download at the County website: http://www.co.henry.ga.us/Departments/M-R/Purchasing-Department.

B. GENERAL INSTRUCTIONS, TERMS, AND CONDITIONS
1. Bids Submission
   a. These instructions will bind bidders to terms and conditions herein set forth, except as specifically stated otherwise in special contract terms with any individual bid. These instructions are to be considered an integral part of the bid.
   b. Bids may be submitted by mail, common carrier or delivered in person. Fax or electronic bids are not acceptable. It shall be the duty of each Bidder to ensure that their bid is delivered within the time and at the place prescribed in this document. Bids received prior to the time fixed in this bid document will be securely kept unopened. A date/time stamp will be affixed to the envelope/package immediately upon its arrival to the Purchasing Department. Any bid received at the office designated in this document after the exact time and date specified, will not be considered. If a late bid is received via carrier, it will be marked “late bid” and will not be opened. If a late bid is hand delivered, it will be returned unopened to the presenter.
   c. At the date and time specified for the opening of the bid, the bid shall be publicly opened and read aloud for the information of Bidders and others present.
   d. The bid must be submitted in a sealed envelope/parcel on or before the date and time stated in this document and is to be mailed or delivered to:
      Henry County Purchasing Department
      140 Henry Parkway
      McDonough, GA 30253
      Bid # 19-37
      Panola Mountain Greenway Trail PATH
      Georgia Department of Transportation (GDOT) PI #0010721
   e. The Submittal Checklist must be reviewed and the bidder is to comply with the order of the submittal of documents. This document along with the cover page (page 1) is to be included with the bid.
   f. The following items are to be submitted:
      • One (1) unbound clearly marked “Original,” of the bid documents,
      • One (1) bound copy identical to the original bid documents, and
      • One (1) electronic version in PDF format on CD/DVD or USB flash drive identical to the original bid documents. The CD/DVD or USB flash drive should be labeled with the bid number and bidder’s name.
   g. All bids must be manually signed and filled out legibly (typewritten or printed in ink) with all changes or corrections initialed by the person signing the bid.
   h. If descriptive literature is attached to the bid, your firm’s name must be on all sheets submitted.
   i. Each bid submitted shall be deemed to have been made with full knowledge of all terms, conditions, and requirements contained in this Bid request. The failure or omission of any Bidder to examine any form, instrument or document shall in no way relieve any Bidder from obligations in respect to the bid submittal or the compliance of the terms, conditions and
requirements of the bid.

j. Individual contractors shall provide their Social Security number and proprietorships; partnerships and corporations shall provide their Federal Employer Identification number on page one of this bid documents and provide a completed W9 form to be submitted with the bid.

k. The authorized representative whose signature will appear on the bid submitted certifies that the Bidder has carefully examined the instructions of this bid and the terms and specifications applicable to and made a part of this bid. The Bidder further certifies that the prices shown on the Bid Price Submittal Form is in accordance with the conditions, terms and specifications of the bid and that any exception taken thereto may disqualify the bid.

l. Any documentation submitted with or in support of a bid or bid shall become subject to public inspection under the Georgia Open Records Act. Labeling such information “Confidential”, “Proprietary”, or in any other manner shall not protect this material from public inspection upon request. All records become subject to public inspection only after award of the contract or purchase order.

2. Preparation of Bids

a. Negligence on the part of the Bidder in preparing the bid confers no right for withdrawal or modification in any way after the deadline for the bid opening.

b. Unit price must be shown on the Bid Cost Submittal Form in this document. All bids should be tabulated, totaled and checked for accuracy. The unit price will prevail in case of errors.

c. All product, equipment, article or material must be new and unused or current production. No reconditioned or used item(s) will be accepted except as specifically requested herein. Units that are classified as prototype or discontinued models are not acceptable.

d. Samples of items, when required, must be submitted within the time specified and unless otherwise specified by the County, at no expense to the County. Unless otherwise specified, samples will be returned at the Bidder’s request and expense if items are not destroyed by testing.

e. Full identification of each item bid upon, including brand name, model, catalog number, etc., must be furnished to identify exactly what the Bidder is offering. Whenever an article or material is defined by describing a proprietary product or by using the name of a manufacturer, the term “or equal” if not inserted shall be implied. The specified article or material shall be understood as indicating the type, function, minimum standard of design, efficiency and quality desired and shall not be construed as to exclude other manufactured products of comparable quality, design and efficiency. In the event that any equivalent version is proposed, prospective Bidders are herewith advised that precise, adequate, and documented evidence of equivalency in performance, stability, and operational efficiency should be submitted with the bid for further consideration. Final determination of equivalency will be determined by Henry County.

3. Clarification and Communication to County Concerning Bid

a. From time to time, the Purchasing Department may have to release written changes to a solicitation. These formal written changes are called addendum or if multiple, Addenda. It is the ultimate responsibility of the Bidder to ensure that they have all applicable addenda prior to the bid/bid submission. Therefore, we encourage all Bidders to frequently review the County’s website: henrycounty-ga.com/purchasing. All addenda forms must be signed and submitted with the bid. Failure to respond and acknowledge any addenda or requests for clarification, even after the bid opening, shall result in a non-responsive bid.

b. The successful firm’s bid and all addenda will become a part of the agreement resulting from this document.

c. Bidders seeking an award of a Henry County contract shall not initiate or continue any verbal or written communication regarding a solicitation with any County officer, elected official, employee or other County representative without permission of the Purchasing Department between the date of the issuance of the solicitation and the date of the final contract award by the
Board of Commissioners. Violations will be reviewed by the Purchasing Director. If determined that such communication has compromised the competitive process, the offer submitted by the individual, firm or business shall be disqualified from consideration for award. EXCEPTION to the above would be emailing request for clarification and/or questions to the Purchasing Department – henrycountysealedbid@co.henry.ga.us. (These requests will be answered in an addendum. Please see schedule of events.)

4. **Pre-Bid Conference**
The Pre-Bid Conference or any other information session (if indicated in the schedule of events) will be held at the offices referred to in the “Schedule of Events” of this bid. Unless indicated otherwise, attendance is not mandatory; although suppliers are strongly encouraged to attend. However, in the event the conference has been identified as mandatory, then a representative of the supplier must attend the conference in its entirety to be considered eligible for contract award.

5. **Rejection and Withdrawal of Bids**
   a. Withdrawal of bid due to errors, the supplier has up to forty-eight (48) hours to notify the Purchasing Department of an obvious clerical error made in calculation of bid in order to withdraw a bid after bid opening. Withdrawal of bid for this reason must be done in writing within the forty-eight hour period.
   b. The County will make a recommendation of the bid/bid to the Board of Commissioners within 60 days from date of the opening, unless the successful Bidder agrees in writing to a longer period for the award.
   c. The County may reject all or part of the bid/bid within 60 days of bid opening.

6. **Bid and Contract Documents**
   a. A bid executed by an attorney or agent on behalf of the Bidder shall be accompanied by an authenticated copy of the Power of Attorney or other evidence of authority to act on behalf of the Bidder.

      **Corporation:** If the Bidder is a corporation, the bid must be submitted in the name of the corporation, not simply the corporation’s trade name. In addition, the bid shall be signed by an officer of the corporation.

      **Partnership:** If the Bidder is a partnership, all partners must sign the bid. If all the partners do not sign the bid, then the names of all those except limited partners must be furnished on the bid and evidence of the authority of the signers to execute the bid on behalf of the partnership.

      **Limited Liability Company (LLC):** If the Bidder is a limited liability company, the authorized agent having authority to bind the limited liability company must sign the bid documents.

      **Sole Proprietorship or Individual:** If the Bidder is a sole proprietor or individual, a signature is required on all bid documents by that individual.

   b. The contract documents consist of this Agreement, Specifications and Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement. These form the Contract and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated Agreement between the parties hereto and supersedes prior negotiations, representation or agreements, either written or oral.

   c. **Contract Term** – The time period of the agreement, if any is formed from this bid, will be determined after the review and evaluation of the Time Line Schedules submitted by the successful Consultant.

7. **Exceptions and Omissions**
Any exceptions to the specifications and/or terms and conditions must be addressed during the question/clarification and addendum phases.
8. **Alterations of Solicitation and Associated Documents**
ALTERATIONS OF COUNTY DOCUMENTS ARE STRICTLY PROHIBITED AND WILL RESULT IN AUTOMATIC DISQUALIFICATION OF THE BIDDER’S SOLICITATION RESPONSE

9. **Cost Incurred by Vendors**
All expenses involved with the preparation and submission of the bid to the Henry County Board of Commissioners, or any work performed in connection therewith is the responsibility of the vendor(s).

10. **Codes, Permits, Fees, Licenses and Law**
a. All permits, fees, arrangements for inspections, licenses, and costs incurred for the same shall be the sole responsibility of the successful Bidder. All materials, labor and construction must comply with all applicable rules and regulations of local, state and/or national codes, laws and ordinances of all authorities having jurisdiction over the project, shall apply to the contract throughout and will be deemed to be included in the contract the same as though herein written out in full.

b. **Effective July 1, 2008:** All General Contractors must have a current valid license from the State Licensing Board for Residential and General Contractors, unless specifically exempted from holding such license pursuant to Georgia law, O.C.G.A. Section 43-41-17.

c. State Law regarding Worker Verification requires that all who enter into a contract for the physical performance of services with the County must satisfy O.C.G.A. §13-10-91 and Rule 300-10-1-.02, in all manner, and such are conditions of the contract. By submitting a bid to the County contractor agrees that in the event the contractor employs or contracts with any subcontractor(s) in connection with the covered contract, the contractor will secure from the subcontractor(s) such subcontractor(s) indication of the employee-number category applicable to the subcontractor, as well as attestation(s) from such subcontractor(s) that they are in compliance. Such attestation(s) shall be maintained and may be inspected by the County at any time. An affidavit of such compliance included with the bid, must be signed by the contractor, and will become part of the contract.

11. **Safety**
All vendors and subcontractors performing services are required and shall comply with all Occupational Safety and Health Administration (OSHA), State and County Safety and Occupational Health Standards and any other applicable rules and regulations. Also, all contractors and subcontractors shall be held responsible for the safety of their employees and any unsafe acts or conditions that may cause injury or damage to any persons or property within and around the work site area under this Contract.

12. **Design, Standards and Practices**
Design, strength, quality of materials and workmanship must conform to the industry acceptable standards of engineering practices and/or professional services.

13. **Statement of Warranty**
A Statement of Warranty should include all applicable manufacturers’ warranty and the Contractor’s warranty in regards to equipment, materials and workmanship. This statement shall include the terms, conditions and the period of warranty coverage. Any exclusion(s) must be clearly stated.

14. **Non-collusion**
By submitting a bid in response to this solicitation, the Bidder represents that in the preparation and submission of this bid, said Bidder did not either directly or indirectly, enter into any combination or arrangement with any person, Bidder, Corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section I or Section 59.1-9.1 through 59.1-9.17 or Sections 59.1 – 68.6
15. **Nondiscrimination**
Notwithstanding any other provision of this Agreement, during the performance of this Agreement Contractor, for itself, its heirs, personal representatives, successors in interest and assigns, as part of the consideration of this Agreement does hereby covenant and agree, as a covenant running with the land, that:

a. No person on the grounds of race, color, religion, sex or national origin shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination;

b. In the production of the vehicle(s), and the furnishing of services therein or thereon, no person on the grounds of race, color, religion, sex or national origin shall be excluded from participation in, or denied the benefits of, such activities, or otherwise be subjected to discrimination.

16. **Drug Free Workplace Certification**
By signing the Supply Service Contract form, the Contractor certifies that the provisions of Code Sections 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the “Drug-free Workplace Act”, have been complied with in full. The undersigned further certifies that:

a. A drug-free workplace will be provided for the Contractor’s employees during performance of the contract; and

b. Each Contractor who hires a subcontractor to work in a drug-free workplace shall secure from that subcontractor the following written certification:

   "As part of the subcontracting agreement with (Contractor’s name), (Subcontractor’s name) certifies to the Contractor that a drug-free workplace will be provided for the subcontractor’s employees during the performance of this Contract pursuant to Paragraph (7) of Sub-section (b) of Code Section 50-24-3”.

c. The Contractor further certifies that he will not engage in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

d. Contractor may be suspended, terminated, or debarred if it is determined that:

   (1) The Contractor has made false certification hereinabove; or

   (2) The Contractor has violated such certification by failure to carry out the requirements of the Official Code of Georgia Section 50-24-3.

17. **Georgia Security and Immigration Compliance Act**
Pursuant to the Georgia Security and Immigration Compliance Act of 2006, the successful Contractor understands and agrees that compliance with the requirements of O.C.G.A.13-10-91 and Georgia Department of Labor Rule 300-10-02 are conditions of this bid and contract document. The Contractor further agrees that such compliance shall be attested by the Contractor and any of his Subcontractors by execution of the appropriate Affidavit and Agreement which will be included and become a part of the Agreement between Henry County and the successful Contractor.

18. **Systematic Alien Verification for Entitlements (SAVE) Program**
Since a contract has been deemed a “public benefit,” the contractor or other party to the contract must be run through the federal Systematic Alien Verification for Entitlements (SAVE) Program. This program requires that local government verify the legal status of non-U.S. citizens who apply for certain benefits. The contractor must execute a SAVE affidavit attesting that either he or she is a U.S. citizen or legally qualified to receive the benefit. If the contractor is not a U.S. citizen, then the local government has to run that contractor through the SAVE system. Only non-U.S. citizens can be processed through the SAVE program.

19. **Supplier Inclusion Program**
Small, local, veteran-owned, Disadvantaged Business Enterprise (DBE), and female-owned business enterprises are encouraged to participate in the solicitation process. Please see the Supplier Inclusion Program form for a description of each of these type businesses.

20. Delivery and F.O.B. Destination
a. All prices shall include shipping and delivery cost to our destination; F.O.B., Henry County, Georgia, unless otherwise requested. The Bidder shall handle all material procurement, storage and delivery to project site. Unless otherwise specified in this specification, Bidder shall supply all materials required. The County will grant no allowance for boxing, crating or delivery unless specifically provided for in this bid. The Bidder shall retain title for the risk of transportation, including the filing for loss or damages.
b. The County desires delivery of the product(s) or service(s) as specified at the earliest possible time after the date of award. Unreasonable delivery may be cause for disqualifying a bid. Each firm shall state a definite delivery time and avoid using general terms such as "ASAP" or approximately so many days.

21. Discounts
Cash discounts for early payment (i.e. 2%-10) or Net 30 terms should be shown separately, even if terms are Net.

22. County’s Tax Exemption
Henry County is exempt from Federal Excise Tax or Georgia Sales Tax with regard to goods and services purchased directly by Henry County. Exemption certificates furnished upon request.

23. Award of Contract
a. Henry County desires to complete the award process in a timely manner. Henry County reserves the right to reject or accept any or all bid/bids, whole or any parts hereof, by item or group of items, by section or geographic area, or make multiple awards and be the final approval of bid(s) selection which would be the most advantageous to the County with price and other factors considered. Henry County may elect to waive any technicalities. The bid will be awarded to the lowest responsive, responsible Bidder(s), if awarded. The bid specifications and results will be available on the County’s website: henrycounty-ga.com/purchasing
b. Henry County reserves the right to reject any bid if the evidence submitted by or investigation of, the Bidder fails to satisfy the County that the Bidder is properly qualified to carry out the obligations of the Contract. If the successful Bidder defaults on their bid, an award may be made to the next low responsive and responsible Bidder.

Responsibility - The determination of the Bidder’s responsibility will be made by the County based on whether the Bidder meets the following minimum standard requirements:
- Maintains a physical location presence and permanent place of business.
- Has the appropriate and adequate technical experience required.
- Has adequate personnel and equipment to perform the work expeditiously
- Able to comply with the required or proposed delivery and installation schedule.
- Has a satisfactory record of performance.
- The ability of Bidder to provide future maintenance and service for the use of the contract under consideration.
- Has adequate financial means to meet obligations incidental to the work.
- Such other factors as appear to be pertinent to either the bid or the contract.

Responsiveness - The determination of the Bidder’s responsiveness will be made by the County based on a consideration of whether the Bidder has submitted complete bid documents meeting bid requirements without irregularities, excisions, special conditions, or alternatives bids for any item unless specifically requested in the bid solicitation.
c. Henry County is subject to making records available for disclosure after the Board of Commissioners approval of the recommendation. The award shall be made by the Board of Commissioners of Henry County unless the lowest, qualified bid is less than the Board of Commissioners’ approval limit. No claim shall be made by the selected Consultant for loss of profit if the contract is not awarded or awarded for less work than is indicated and for less than the amount of the bid. The total of the awarded contract shall not exceed the available funds allocated for the bid project.

24. **Local Vendor Privilege**
   
a. There is established in Henry County, a local vendor privilege. Bids or bids awarded to local vendors contribute to the local tax base and will therefore be given special consideration when bidding against out-of-jurisdiction (out-of-county) vendors. Bids or bids received from local vendors will be given preference if such bid or bid is responsive and within five (5) percent of the low bid submitted by any out-of-county bidder. In such instance, the local vendor will be given the opportunity to match the low bid offered by the out-of-county vendor. If such local vendor agrees to match the low bid received from the out-of-county vendor within the time specified by the county, the bid shall be awarded to the local vendor.

b. A local vendor shall only be eligible to receive the benefit of this privilege if it meets each of the following requirements prior to any award of a contract or purchase:
   1. The business or supplier must operate and maintain a regular place of business within the geographical boundaries of Henry County; and
   2. The business or supplier must have a current occupational tax certificate; and
   3. The business or supplier must have paid all real and personal taxes owed the county; and
   4. The business or supplier must certify its compliance with the Georgia Security and Immigration Act.

c. This policy shall not apply to any bid or bid for material, equipment or services in excess of one hundred thousand dollars ($100,000.00). In such cases, the bid award shall be subject to the competitive bidding requirements as otherwise provided herein or general law.

25. **County Direction of Project Site and Monitoring of Work**
   
a. The Contractor may have a Project Coordinator, but the project site shall remain under the control of Henry County. The Contractor shall provide and make available an appointee to Henry County for project coordination and supervision of Bidder installation personnel. Coordination consist of meeting with the Henry County representatives to review the project; on site walk throughout of installation area(s) before the installation begins; review installation procedures; review installation progress and to handle any problems during installation until project completion.

b. The successful Bidder will promptly correct all work rejected by the County as faulty, defective, or failing to conform to the Minimum Specifications and/or to consensus standards adopted by both government and industry governing the repairs, whether observed before or after substantial completion of the work, and whether or not fabricated, installed, or completed. The successful Bidder will bear all costs of correcting such rejected work.

c. The Contractor shall insure all trash generated by work performed shall be removed from the site and properly disposed as each work operation is completed in a given area. Additionally, the Contractor shall ensure all disturbances to the area where the Contractor performed work are restored to the same condition prior to start of the project. If an inspection reveals that the Contractor fails to clean up after work has been performed. The County will notify the Contractor of the discrepancy and the Contractor will have twenty-four (24) hours to make the correction. Should the Contractor still fails to clean the area, the County reserves the right to make other arrangements to have the area cleaned and the County shall deduct the cost from the Contractor’s invoice.

d. No one except authorized employees of the Contractor is allowed on the premises of Henry
County facilities. Contractor employees are not to be accompanied in their work area by acquaintances, family members, assistants, or any other person unless said person is an authorized employee of the Contractor.

e. All information disclosed by Henry County to the successful Contractor for the purpose of the work to be done or information that comes to the attention of the successful Contractor during the course of performing such work is to be kept strictly confidential.

26. **Indemnification**

a. The vendor that is selected as the contractor shall, at its own expense, protect, defend, indemnify, save and hold harmless Henry County and its elected and appointed officers, employees, servants and agents from all claims, damages, lawsuits, costs and expenses including, but not limited to, all costs from administrative proceedings, court costs and attorney fees that Henry County and its elected and appointed officers, employees, servants and agents may incur as a result of the acts, omissions or negligence of the contractor or its employees, servants, agents or subcontractors that may arise out of the agreement.

b. The contractor’s indemnification responsibility under this section shall include the sum of damages, costs and expenses which are in excess of the sum of damages, costs and expenses which are paid out in behalf of or reimbursed to the County, its officers, employees, servants and agents by the insurance coverage obtained and/or maintained by the contractor.

27. **Controlling Law, Venue**

Any dispute arising as a result of this bid and/or an Agreement which was created from the terms, conditions and specifications of this document or their interpretation, litigation shall only be entered into and shall be performed in Henry County, Georgia. This Agreement shall be governed by the applicable laws of the County of Henry and the State of Georgia. Any dispute arising out of the agreement, this bid solicitation, its interpretations, or its performance shall be litigated only in the County of Henry Judicial Courts.

28. **Contractor as Independent Contractor**

In conducting its business hereunder, Contractor acts as an independent contractor and not as an employee or agent of County. The selection, retention, assignment, direction and payment of Contractor’s employees shall be the sole responsibility of Contractor.

29. **Assignment**

The Agreement, in whole or any part hereof, created by the award to the successful contractor shall not be sold, not be assigned or transferred by Contractor by process or operation of law or in any other manner whatsoever, including intra-corporate transfers or reorganizations between or among a subsidiary of Contractor, or with a business entity which is merged or consolidated with Contractor or which purchases a majority or controlling interest in the ownership or assets of Contractor without the prior written consent of Henry County.

30. **Performance of Contract**

a. Henry County reserves the right to enforce the Contractor’s performance of this Agreement in any manner prescribed by law or deemed to be in the best interest of the County in the event of breach or default or resulting contract award. It will be understood that time is of the essence in the Bidder’s performance.

b. The successful Contractor shall execute the entire work described in the Contract Documents, except to the extent specifically indicated in the Contract documents to be the responsibility of others.

c. The Contractor accepts the relationship of trust and confidence established by the award of this bid solicitation. The Contractor covenants with the County to utilize the Contractor’s best skill, efforts and judgment in furthering the interest of the County; to furnish efficient business
administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the work in the best way and most expeditious and economical manner consistent with the interest of the County.

d. All purchases for goods or services are subject to the availability of funds for this particular purpose.

31. Default and Termination

a. Termination by Contractor

The agreement resulting from this bid shall be subject to termination by Contractor in the event of any one or more of the following events: The default by County in the performance of any of the terms, covenants or conditions of this Agreement, and the failure of County to remedy, or undertake to remedy such default, for a period of thirty (30) days after receipt of notice from Contractor to remedy the same.

b. Termination by County

The agreement resulting from this bid shall be subject to termination by the County at any time in the opinion of the County; the contractor fails to carry out the contract provisions of any one or more of the following events:

(1) The default by Contractor in the performance of any of the terms, covenants or conditions of the Agreement, and the failure of Contractor to remedy, or undertake to remedy with sufficient forces and to the County’s reasonable satisfaction, the County shall provide the vendor with notice of any conditions which violate or endanger the performance of the Agreement. If after such notice the Contractor fails to remedy such conditions within thirty (30) days to the satisfaction of the County, the County may exercise their option in writing to terminate the Agreement without further notice to the Contractor and order the Contractor to stop work immediately and vacate the premises, to cancel ordered products and/or services with no expense to the County.

(2) Contractor files a voluntary petition in bankruptcy, including a reorganization plan, makes a general or other assignment for the benefit of creditors, is adjudicated as bankrupt or if a receiver is appointed for the benefit of creditors, is adjudicated as bankrupt or if a receiver is appointed for the property or affairs of Contractor and such receivership is not vacated within thirty (30) days after the appointment of such receiver.

(3) Contractors’ failure to conduct services according to the approved bid specifications.

(4) Contractors’ failure to keep, perform, or observe any other term or condition of this Agreement.

(5) Contractor’s performance of the contract is unreasonably delayed.

(6) Should the successful Bidder fail to provide the commodities or services when ordered, and in accordance with the General Terms and Conditions, specifications and any other requirements contained herein are not met, the County reserves the right to purchase commodities or services covered by this contract elsewhere if available from an alternate source.

(7) The Contractor agrees by its bid submission that the County’s decision is final and valid.

c. Force Majeure

Neither party shall be held to be in breach of the Agreement resulting from this bid, because of any failure to perform any of its obligations hereunder if said failure is due to any act of God, fire, flood, accident, strike, riot, insurrection, war, or any other cause over which that party has no control. Such party shall give notice and full particulars of such Force Majeure in writing to the other party within a reasonable time after occurrence of the event and the obligation of the party giving such notice shall endeavor to remove or overcome such inability with all reasonable dispatch.

d. Waiver
The waiver of any breach, violation or default in or with respect to the performance or observance of the covenants and conditions contained herein shall not be taken to constitute a waiver any subsequent breach, violation or default in or with respect to the same or any other covenant or condition hereof.

32. Invoices
Invoices and/or statements should not be faxed but originals must be mailed directly to:

Henry County Board of Commissioners  
SPLOST Management Division  
112 S. Zack Hinton Parkway  
McDonough, GA    30253

The following information must appear on all invoices submitted:

- Name and address of successful Bidder;
- Detailed breakdown of all charges for the services or products delivered stating any applicable period of time;
- Henry County’s Purchase Order Number and Bid Package number;
- Invoices shall be based upon actual services rendered, actual work performance and/or products delivered.

33. Payment
Payment shall be tendered to the successful Bidder upon acceptance and approval by the County for satisfactory compliance with the general terms, conditions and specifications of the bid; by completed services; verification of delivery of products; assurance that the product/service performs as specified and warranted; and receipt of a valid invoice.

a. Payment will be made using the percentage of completion method up to 100 percent (100%), with the Owner retaining zero percent (0%) until Contract completion. No retainage is allowed, per GDOT specification 109.H. Invoices shall be paid within 30 days after approval by the Engineer/Project Manager. The County’s determination of percentage complete shall prevail.

b. The Contractor shall promptly pay each Sub-contractor, upon receipt of payment from the Owner, the amount to which said Sub-contractor is entitled. The Contractor shall, by appropriate agreement with each Sub-contractor, require each Sub-contractor to make payments to Sub-subcontractors in similar manner.

c. Neither the Owner nor the Architect/Project Manager shall be obligated to pay or ensure the payment of money to a Sub-contractor except as otherwise may be required by law.

d. Payment to material suppliers shall be treated in a manner similar to that provided in sections 32 b and 32 c.

34. Owner and Ownership of Documents
The Henry County Board of Commissioners, 140 Henry Parkway, McDonough, Georgia 30253 is the owner of the proposed work. Reports and all relevant data such as maps, diagrams, plans, designs, electronic data, statistics, specifications, and other supporting records or drawings compiled or prepared in the course of performance of the Services required by this Contract shall be the absolute property of the County and shall not be used by the Contractor for purposes unrelated to this Contract without the prior written approval of the County. Such original documents shall be turned over to the County upon completion of the Project except that Contractor shall have the right to retain copies of the same.
SECTION II - SPECIFICATIONS

A. CONTRACT TERMS AND CONDITIONS

1. Contract Agreement
   The successful contractor will be required to execute the contract agreement (sample attached) within 15 calendar days of award by the Henry County Board of Commissioners. Failure to execute within the prescribed time will result in forfeiture of the submitted bid bond.

2. Date of Commencement and Substantial Completion
   a. The date of commencement is the date from which the Contract Time is measured, and shall be the date a Notice to Proceed is issued by the Owner.
   b. The Contractor shall achieve Substantial Completion of the entire Work not later than three hundred sixty-five (365) calendar days after receipt of Notice to Proceed subject to adjustments of this Contract Time as provided in the Contract Documents.
   c. Should the Contractor, or in case of default, the Surety fail to complete the work within the time stipulated in the contract or within such extra time that may be allowed, charges shall be assessed against any money due or that may become due the contractor at the rate per GDOT Specification 108, Prosecution and Progress.

3. Progress Payments and Final Payment
   a. Based upon Applications for Payment submitted to the Engineer by the Contractor and Certificates for Payment issued by the Engineer, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.
   b. The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:
   c. Request for payment must be received by the Engineer on or before the first day of the month. The Engineer will approve and send to the Owner's office by the eighth day of the same month in order for the Owner to make payment on the first Friday following the fifteenth of the same month. It shall be understood that if the Contractor's actual progress becomes more than ten percent (10%) behind the Contractor's anticipated progress, the Owner may direct the withholding of payments to the Contractor an amount equal to the percent behind Contractor's anticipated progress, in addition to the normal 10% withheld.
   d. Each Application for Payment shall be based upon the schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work and be prepared in such form and supported by such date to substantiate its accuracy as the Engineer may require. This schedule, unless objected to by the Engineer, shall be used as a basis for reviewing the Contractor's Applications for Payment.
   e. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when (1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 12.2.2 of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and (2) a final Certificate for Payment has been issued by the Engineer; such final payment shall be made by the Owner not more than 30 days after the
4. **Prompt Payment to Subcontractors**
   a. Prime Contractors, who sublet a portion of their work, shall pay their subcontractors for satisfactory performance of their contracts no later than ten (10) calendar days from receipt of each payment made to them.
   b. Any delay or postponement of payment among the parties may take place only for good cause with prior written approval from Henry County.
   c. If the contractor is found to be in noncompliance with these provisions, it shall constitute a breach of contract and further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of the contract.
   d. All subcontract agreements shall contain this requirement.

B. **INSURANCE REQUIREMENTS**

   General insurance requirements shall be applicable to the Contractor and any authorized subcontractor. Insurance requirements shall be based on conditions in place as of the date of the Contract's execution. Insurance companies must be licensed by the Georgia Department of Insurance and the Georgia Secretary of State to do business in the State of Georgia. The County reserves the right to require adjustments in the level of coverage or waive any or all requirements based on information pertinent to this Contract.

   The following requirements shall also be applicable to the Contractor:
   a. Evidence of insurance must be provided to the Purchasing Department, 140 Henry Parkway, McDonough, Ga. 30253, within five days of execution of this contract and prior to commencing operations under this Contract;
      **The certificate holder is to be issued to:**
      
      Henry County Board of Commissioners
      Henry County, Georgia
      but delivered to:
      Henry County Purchasing Department
      140 Henry Parkway
      McDonough, Georgia 30253
      
      The Bid Package number and project name should be referenced in the description of operations. The certificates may be faxed to the Purchasing Department at 770-288-6027.
   b. Any change in coverage or insurance carrier must be reported to the County’s Purchasing Office in writing within five business days of the change.
   c. Failure of any Contractor to procure and maintain the required insurance shall not relieve the Contractor of any liability under the Contract, nor shall these requirements be construed to conflict with the obligation of the Contractor concerning indemnification;
   d. Any and all insurance required by this Contract shall be maintained during the entire term of this Contract;
   e. The County shall, without exception, be given no less than thirty (30) days notice prior to cancellation for any and all reasons other than non-payment of premium; and
   f. The County shall, without exception, be given immediate notification in the event of cancellation for reasons of non-payment of premium.
   g. The Contractor shall procure and maintain insurance coverage in the following particulars:

   **Workers Compensation Insurance**
   In the amounts of the statutory limits established by the General Assembly of the State of Georgia (A self-insurer must submit a certificate from the Georgia Board of Workers compensation stating that the
Contractor qualifies to pay its own workers compensation claims.) In addition, the Contractor shall require that all subcontractors occupying the premises or performing the work under the contract to obtain an insurance certificate showing proof of Worker Compensation Coverage with the following minimum coverage:

**Georgia Statutory including Employers Liability**
- Bodily injury by Accident – each employee: $100,000
- Bodily injury by Disease - each Employee: $100,000
- Bodily injury by Disease – policy limit: $500,000

**Commercial General Liability**
- Each Occurrence Limit: $1,000,000
- Personal and Advertising Injury Limit: $1,000,000
- General Aggregate Limit: $2,000,000
- Products/Completed Operations Aggregate Limit: $2,000,000

**Automobile Liability**
- Combined Single Limit: $1,000,000

**C. BOND REQUIREMENTS**

a. All Bids shall be accompanied by a Bid Bond in an amount of not less than five percent (5%) of the bid for the complete work. The Bid Bond shall be forfeited to Henry County, Georgia as liquidated damages if the Bidder fails to execute the Contract and provide Performance and Payment Bonds within fifteen (15) calendar days after being notified that he has been awarded the Contract. The Bid Bond shall be in the form of a surety issued bond made payable to the Henry County Board of Commissioners. The Surety Company shall be licensed to do business in the State of Georgia and listed in the Department of the Treasury Circular 570, latest edition. The Surety Company shall have an A.M. Best Company minimum rating of “A” with a financial size of VI “6” or better.

b. The Owner will require 100% Performance Bond and 110% Payment Bonds. If awarded the Contract, the bidder will execute the Contract and provide the bond(s) as required by the Specifications. The successful bidder, upon his failure or refusal to execute and deliver the Contract and bonds required within fifteen (15) calendar days after he has received notice of the acceptance of the bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

c. All Proposal Guaranties may be retained until the Contract and the Contract Bonds have been signed and approved. Early release of Proposal Guaranties will be considered if a request is made in writing. The Department reserves the right to return all Proposal Guaranties by registered or certified mail, and its responsibility pertaining to them will end when they are mailed.
D. GENERAL REQUIREMENTS

1. All construction shall be done in accordance with and all materials shall meet the requirements of the Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2013 Edition, GDOT Supplemental Specifications Book, 2016 Edition, General Conditions and the Supplemental Specifications Modifying the Standard Specifications, except as noted in this document. Materials that require inspection prior to shipment to the Project shall have proper inspection seal, stamp or report as required by the Department of Transportation. If the Contractor fails to meet this requirement, the material shall be rejected and will not be allowed in the work.

2. DEFINITIONS: Section 101 of the Standard Specifications is modified as follows:

101.14 Commissioner HENRY COUNTY BOARD OF COMMISSIONERS

101.22 Department Same as 101.14

101.24 Engineer The CHAIRMAN OF THE HENRY COUNTY BOARD OF COMMISSIONERS acting directly or through his duly authorized representative.

101.62 Chief Engineer Same as 101.24

101.63 State: The State of Georgia HENRY COUNTY

101.81 Treasurer Same as 101.24

3. CONTRACT COMPLETION DATE: The Work on PANOLA MOUNTAIN GREENWAY TRAIL PATH, GDOT P.I. No. 0010721 shall be completed within three hundred sixty-five (365) calendar days.

4. CONSTRUCTION LAYOUT: The requirements of Section 149, Construction Layout, included in this Contract except where Special Provisions require that staking be provided by the Engineer. This work will not be paid for separately. The cost for performing layout work shall be included in the bid for the items of work to which the layout is incidental.

5. The Bidder must enter all unit prices, make all extensions, and total the bid.
E. SUPPLEMENTAL PROVISIONS

In addition to the following provisions, please see “GDOT Special Provisions Rev 2019.01.25”.

1. It shall be the Contractor’s responsibility to furnish suitable borrow material for the project and dispose of any unsuitable material. It shall be the Contractor’s responsibility to dispose of any excessive suitable material. No additional payment will be made to dispose excessive suitable material; it shall be included in the price bid for 210-Grading Complete. Undercut areas not shown in the Plans when directed by the Engineer will be paid according to the Georgia Department of Transportation Standard Specifications Construction Of Transportation Systems, 2013 Edition (as amended).

2. Debris from clearing and grubbing and demolition operations will not be disposed of onsite. It is the responsibility of Contractor to provide for disposal of all unsuitable material. No additional payment will be made for hauling and disposing of debris, it shall be included in the price bid for 210-Grading Complete.

3. Existing and additional roadway signs are to be removed/reset and placed in accordance with Georgia Department of Transportation Specifications and the current edition of the MUTCD by the Henry County Department of Transportation (HC DOT), and shall not be included in the price for 150 - Traffic Control. It is the responsibility of the Contractor to notify the Project Engineer in advance in order for HC DOT personnel to perform this function. All other applicable portions of sections 610 - REMOVAL OF MISCELLANEOUS ROADWAY ITEMS and 611 - RELAYING RECONSTRUCTING OR ADJUSTING TO GRADE OF MISCELLANEOUS ROADWAY STRUCTURES will remain in full effect for this Contract.

4. This project is being let to contract by Henry County Board of Commissioners using the 2013 standard specifications of the Georgia Department of Transportation and the supplemental specifications. All work shall conform to these documents.

5. All traffic control shall conform to the Department of Transportation, State of Georgia, Special Provision, Section 150 – Traffic Control.

6. This project shall be completed within three hundred sixty-five (365) calendar days after receipt of Notice to Proceed.

7. Henry County will be the contracting agency for this contract and will make all payments to the contractor and settle all claims that may be made relative to this contract. It is understood that time is an essential element of the contract and any delay in the prosecution of the work may inconvenience the public, obstruct traffic or interfere with business. For this reason, it is important that the work be pressed vigorously to completion. Should the Contractor, or in case of default, the Surety fail to complete the work within the time stipulated in the contract or within such extra time that may be allowed, charges shall be assessed against any money due or that may become due the contractor at the rate per GDOT Specification 108, Prosecution and Progress.

8. Henry County will notify all utility companies of Award of Contract and assist the Contractor in arranging for all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction. In accordance with Sub-section 105.06 of Georgia Department of Transportation specifications, Henry County shall not be liable for payment of any claims due to utility delays, inconvenience or damage sustained by the Contractor due to interference of any utilities appurtenances, or the operation of moving them. This shall not relieve the
9. All materials and workmanship must be inspected and approved by The Georgia Department of Transportation and the Henry County Department of Transportation prior to payment. All references to Engineer shall be deemed to mean Project Engineer of the Henry County Department of Transportation or his designee, 533 Hampton Road, McDonough, Georgia 30253.

10. Contractor shall provide all required certifications, invoices and any other documentation according to Section 106-Control of Materials of the State of Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2013 Edition.

11. All mailboxes, minor signs, or other such items to be relocated due to this construction shall be performed by the contractor and the cost of this relocation shall be included in the bid price. There will be no separate pay item for this work.

12. The contractor shall provide all materials, labor, tools, and equipment required for staking on this project. Contractor shall be responsible to provide, place, mark, maintain, replace, etc. all staking. The cost for these staking services shall be included in the bid price. There will not be a separate pay item for this work.

13. Job mix formulas for hot mix asphalt must be submitted and approved prior to the placement of any mix.

14. One full size set will be furnished to the successful contractor.

15. The Contractor shall provide a construction schedule of work at the Pre-construction meeting.

16. Removal of all existing fences shall be included in the overall bid. There shall not be a separate pay item for this work.
## Henry County Standard Contract Form

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<th>Solicitation Title</th>
<th>Solicitation Number</th>
<th>Contract Number</th>
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1. This Contract is entered into between Henry County and the Contractor named below:

**Henry County**

Contractor’s Name (hereafter called County)

**Contractor**

Contractor’s Name (hereafter called Contractor)

2. Contract to Begin: Date of Completion: Renewals:

3. Lump Sum Amount of this Contract (if applicable) Fee Represented as a Percentage Of Designated Cost (if applicable) Revenue Represented as a Percentage of a Designated Lump Sum or Income Stream (if applicable): Annual Contract Price Agreement (if applicable)

4. The parties agree to comply with the terms and conditions of the following documents which are by this reference made a part of the Contract:

1. All Terms, Conditions and Statements of Work Included in Solicitation and Addendum (referenced above)
2. Bid or Proposal Submitted by Contractor along with Contractor’s Final Response
3. Fee/Cost Submitted by Contractor
4. All Other Documentation Required in Solicitation

IN WITNESS WHEREOF, this Contract has been executed by the parties hereto.

5. **Contractor**

Contractor’s Name (If other than an individual, state whether a corporation, partnership, etc.)

Federal Identification No.

By (Authorized Signature) Date Signed

Printed Name and Title of Person Signing

Address

Telephone Number E-mail Address

6. **Henry County**

Chair or Designee

By (Authorized Signature) Date Signed

Printed Name and Title of Person Signing

Address

140 Henry Parkway, McDonough, Georgia 30253
BID BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE

______________________________ (hereinafter called the Principal)

and ______________________________ (hereinafter called the Surety), a Corporation
chartered and existing under the laws of the State of __________________ with its principal offices in the City of __________________ and authorized to do business in the State of Georgia, are held and firmly
bound unto Henry County, Georgia, in the full and just sum

of __________________ Dollars ($ __________________)
good and lawful money of the United States of America, to be paid upon demand to Henry County, Georgia, to
which payment will and truly to be made, we bind ourselves, our heirs, executors, administrators and assigns
jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to Henry County, Georgia, a proposal for
furnishing materials, labor and equipment for:

BID NUMBER: 19-37

HENRY COUNTY PROJECT: PANOLA MOUNTAIN GREENWAY TRAIL PATH
GDOT P.I. No. 0010721

WHEREAS, the Principal desires to file this Bond in accordance with law in lieu of a certified Bidder's check
otherwise required to accompany this Proposal.

NOW, THEREFORE, the conditions of this obligation are such that if the proposal be accepted, the Principal
shall within fifteen (15) days after receipt of notification of the acceptance, execute a Contract in accordance
with the Proposal and upon the terms, conditions, and prices set forth in the form and manner required by Henry
County, Georgia, and execute a sufficient and satisfactory Performance Bond and Payment Bond payable to
Henry County, Georgia, each in an amount of 100% of the total Contract Price, in form and with security
satisfactory to said Henry County, Georgia, and otherwise to be and remain in full force and virtue in law; and
the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the
time specified above, immediately pay to Henry County, Georgia, upon demand, the amount hereof in good and
lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed and sealed
this __________ day of ________________, 20__.

______________________________ (SEAL)  ______________________________ (SEAL)
Principal  Surety

By: ______________________________  By: ______________________________
**LIST OF SUBCONTRACTORS**

To be submitted within 24 hours of issuance of Notice to Proceed. All subcontractors shall be currently pre-qualified with the Georgia Department of Transportation.

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

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SIGNED: ___________________________ DATE: ________________
BID AUTHORIZATION AFFIDAVIT

STATE OF GEORGIA
COUNTY OF HENRY

BEFORE ME, the undersigned authority a Notary Public in and for the State of _________________, on this day personally appeared _______________________________ who, after having first been duly sworn, upon oath did depose and say; that the forgoing bid submitted by _________________________ hereafter called “Bidder” is duly authorized agent of said company and that the person signing said bid has been duly authorized to execute the same. Bidder affirms that they are duly authorized to execute this Agreement, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

The undersigned certifies that the bid prices contained in this bid have been carefully checked and are submitted as correct and final and if bid is accepted, agrees to furnish the articles and/or services listed and offered in this document at the prices and terms stated, subject to the conditions and specifications of this Request for Bid.

Bidder Information:

________________________________________ _____________________________________
(Company)       (Signature)

________________________________________ _____________________________________
(Address)       (Printed Name)

________________________________________ _____________________________________
(City, State, Zip)       (Title)

SWORN TO AND SUBSCRIBED BEFORE ME THIS ________ day of ____________________ 20___

_________________________________________________
Notary Public in and for the State of _________________
NON-CONFLICT OF INTEREST

By submitting an offer in response to this solicitation, the Firm represents that in the preparation and submission of this proposal, said Firm did not either directly or indirectly, enter into any combination or arrangement with any person, Proposer, Corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section I or Section 59.1-9.1 through 59.1-9.17 or Sections 59.1 – 68.6 through 59.68.8). Collusion and fraud in proposal preparation shall be reported to the State of Georgia Attorney General and the United States Justice Department.

____________________________________
(Officer of Firm) certifies that to the best of our knowledge, no circumstances exist which shall cause a conflict of interest in performing services for Henry County, and that no company or person other than bona fide employees working solely for our firm has been employed or retained to solicit or secure an agreement resulting from this request for proposal.

Signature: ____________________________________________________________

Type Name: __________________________________________________________

Title: ________________________________________________________________

Firm Address: ________________________________________________________
REFERENCES

Please provide three (3) current or very current customers for whom you have provided similar products or services as listed in the specifications of this bid.

Reference One

Government/Company Name ____________________________________________

Address _______________________________________________________________________

Contact Person and Title ________________________________________________________

Phone __________________________ Fax _______________________________________

Contract Period ________________ Scope of Work _____________________________

Reference Two

Government/Company Name ____________________________________________

Address _______________________________________________________________________

Contact Person and Title ________________________________________________________

Phone __________________________ Fax _______________________________________

Contract Period ________________ Scope of Work _____________________________

Reference Three

Government/Company Name ____________________________________________

Address _______________________________________________________________________

Contact Person and Title ________________________________________________________

Phone __________________________ Fax _______________________________________

Contract Period ________________ Scope of Work _____________________________

Information of person who prepared this form:

_______________________________________    _______________________
Company’s Name              Date

_________________________________________
Authorized Representative’s Name (Print or Type)       Authorized Representative’s Signature
GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT
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 engaged in the physical performance of services on behalf of the Henry County Board of Commissioners has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91. Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

Federal Work Authorization/ E-Verify User Identification Number

Date of Authorization

Name of Contractor

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

Executed on _____, ___ , 20___ in _____ (city), ______ (state).

Signature of Authorized Officer or Agent

Printed Name and Title of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE _____ DAY OF _____________, 20__.

NOTARY PUBLIC

My Commission Expires:
SAVE AFFIDAVIT

REQUIRED FOR LOCAL GOVERNMENT THAT MUST BE EXECUTED BY ANYONE ENTERING INTO A CONTRACT WITH A LOCAL GOVERNMENT

STATE OF GEORGIA
HENRY COUNTY

By executing this affidavit under oath, as an applicant for a Henry County, Georgia contract as referenced in O.C.G.A. § 50-36-1 and the August 1, 2010, “Report of the Attorney General on Public Benefits,” I am stating the following with respect to my ability to enter into a contract with Henry County:

__________________________________________________________________________________________

[Name of natural person applying on behalf of individual, business, corporation, partnership or other private entity]

As a representative of:  __________________________________________________________

(Name of the business, corporation, partnership, or other private entity)

1) _______ I am a United States citizen

OR

2) _______ I am a legal permanent resident 18 years of age or older or I am an otherwise qualified alien or non-immigrant under the Federal Immigration and Nationality Act 18 years of age or older and lawfully present in the United States.*

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of O.C.G.A. § 16-10-20.

This ____ day of ________________, 20____.

Signature of Applicant:  ________________________________________________

Printed Name: ________________________________________________

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE
____ DAY OF ________________, 20____

____________________________________
Notary Public
My Commission Expires:

*Note: O.C.G.A. § 50-36-1(e)(2) requires that aliens under the federal Immigration and Nationality Act, Title 8 U.S.C., as amended, provide their alien registration number. Because legal permanent residents are included in the federal definition of “alien,” legal permanent residents must also provide their alien registration number. Qualified aliens that do not have an alien registration number may supply another identifying number below: Alien Registration number for non-citizens: * ______________________________
SUPPLIER INCLUSION PROGRAM

Small, local, veteran-owned, Disadvantaged Business Enterprise (DBE), and female-owned business enterprises are encouraged to participate in the solicitation process. In order to give recognition to these type of business classification, please check all which apply:

☐ Small Business
   Small businesses are defined by size standards and can be found in Title 13 of the Code of Federal Regulations (CFR), Part 121, and are broken down by the different categories of business enterprises.

☐ Local Vendor
   Local vendors, as defined in the Henry First Initiative, must operate and maintain a regular place of business within the geographical boundaries of Henry County, must have a current occupational tax certificate, must have paid all real and personal taxes owed the County and must certify its compliance with the Georgia Security and Immigration Act.

☐ Veteran-Owned Business
   A veteran-owned business is a business in which a veteran owns a minimum of 51% of the business and also holds the highest position at the company and is active in the daily management and strategic direction of the company. Title 38 of the Code of Federal Regulations defines a veteran as “a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable.” This definition explains that any individual that completed a service for any branch of armed forces classifies as a veteran as long as they were not dishonorably discharged.

☐ DBE Business
   DBE businesses, as defined by the Georgia Department of Administrative Services, shall be certified by the Georgia Department of Transportation and shall consist of five (5) minority groups:
   - Asian American
   - Native American
   - African American
   - Hispanic/Latino
   - Pacific Islander.

☐ Female Owned Business
   A female-owned business is a business in which a female owns a minimum of 51% of the business and also holds the highest position at the company and is active in the daily management and strategic direction of the company.

☐ None of the Above Applies

____________________________________    __________________________
Company’s Name         Date

_________________________________________   ____________________________________
Authorized Representative’s Name (Print or Type)   Authorized Representative’s Signature
**CHECKLIST FOR BID DOCUMENTS**

*Failure to include all required documents will result in proposal being removed for consideration for award.*

<table>
<thead>
<tr>
<th>DOCUMENTATION DESCRIPTION</th>
<th>Please check</th>
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<tbody>
<tr>
<td>Any Required Documents cited in Bid Specifications</td>
<td>□</td>
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<tr>
<td>W-9</td>
<td>□</td>
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<tr>
<td><strong>Forms:</strong></td>
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<tr>
<td>Solicitation Form (Page 1 of this Document)</td>
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</tr>
<tr>
<td>Addendum Cover Sheet(s) (If applicable.)</td>
<td>□</td>
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<tr>
<td>Bid Bond</td>
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</tr>
<tr>
<td>List of Subcontractors</td>
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<tr>
<td>Bid Authorization Affidavit</td>
<td>□</td>
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<tr>
<td>Non-Conflict of Interest</td>
<td>□</td>
</tr>
<tr>
<td>References</td>
<td>□</td>
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<tr>
<td>Georgia Security &amp; Immigration Compliance Act Affidavit &amp; Agreement</td>
<td>□</td>
</tr>
<tr>
<td>SAVE Affidavit</td>
<td>□</td>
</tr>
<tr>
<td>Supplier Inclusion Program</td>
<td>□</td>
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<tr>
<td>Bid Price Sheet(s)</td>
<td>□</td>
</tr>
<tr>
<td>Checklist for Bid Documents/Addenda Acknowledgement (this page)</td>
<td>□</td>
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</table>

**ADDENDA ACKNOWLEDGEMENT**

*Failure to acknowledge any addenda will result in a non-responsive bid.*

The vendor has examined and carefully studied the Request for Proposals and the following Addenda, receipt of all of which is hereby acknowledged:

Addendum No. ______________________   _________________  Dated
Addendum No   ______________________   _________________  Dated
Addendum No. ______________________   _________________  Dated
Addendum No. ______________________   _________________  Dated

*This affirms that all documents are included with the bidder’s bid package.*

______________________________________    _______________________
Company’s Name              Date

______________________________________   _________________________________
Authorized Representative’s Name      Authorized Representative’s Signature
(Print or Type)
### Bid Price Sheets

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>ROADWAY ITEMS</th>
<th>APPROX QTY</th>
<th>UNITS</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
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<td>150-1000</td>
<td>TRAFFIC CONTROL - 0010721</td>
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<td>441-0105</td>
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<td>444-1000</td>
<td>SAWED JOINTS IN EXIST PAVEMENTS - PCC</td>
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<td>502-9000</td>
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<td>515-2020</td>
<td>GALV STEEL PIPE HANDRAIL, 2 IN, ROUND</td>
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<td>550-1180</td>
<td>STORM DRAIN PIPE 18 IN, H 1-10</td>
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<td>550-4218</td>
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<td>607-1000</td>
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<td>643-8200</td>
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<td>668-2100</td>
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**SUBTOTAL (ROADWAY ITEMS)**

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<tr>
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<td>163-0232</td>
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<td>163-0300</td>
<td>CONSTRUCTION EXIT</td>
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<td>163-0503</td>
<td>CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3</td>
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<td>163-0528</td>
<td>CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE</td>
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<tr>
<td>163-0550</td>
<td>CONSTRUCT AND REMOVE INLET SEDIMENT TRAP</td>
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<td>165-0010</td>
<td>MAINTENANCE OF TEMPORARY SILT FENCE, TP A</td>
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<td>165-0030</td>
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<td>165-0105</td>
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<td>165-0101</td>
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<td>167-1000</td>
<td>WATER QUALITY MONITORING AND SAMPLING</td>
<td>EA</td>
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</tbody>
</table>

Company’s Name: ___________________________________________________________
## Bid # 19-37

Panola Mountain Greenway Trail PATH  
Georgia Department of Transportation (GDOT) PI #0010721  
Bid Price Sheets

### WATER QUALITY INSPECTIONS

<table>
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<tr>
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<td>WATER QUALITY INSPECTIONS</td>
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### TEMPORARY SILT FENCE, TYPE A

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**SUBTOTAL (TEMPORARY EROSION CONTROL)**

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<td>SY</td>
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<td>603-7000</td>
<td>PLASTIC FILTER FABRIC</td>
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<td>700-8000</td>
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<td>700-8100</td>
<td>FERTILIZER NITROGEN CONTENT</td>
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<td>EROSION CONTROL MATS, SLOPES</td>
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**SUBTOTAL (PERMANENT EROSION CONTROL)**

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<td>636-1033</td>
<td>HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9</td>
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<td>652-5452</td>
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**SUBTOTAL (SIGNING & MARKING)**

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<td>999-3800</td>
<td>RECTANGULAR RAPID BEACON ASSEMBLY</td>
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**SUBTOTAL (SIGNALIZATION)**

---

Company’s Name: ________________________________
### Bid Price Sheets

**Item No.** | **Landscaping** | **Approx. Qty** | **Units** | **Unit Price** | **Amount**
--- | --- | --- | --- | --- | ---
702-0559 | Liriope Muscari - |  |  | 75 |  
754-4000 | Waste Receptacle Unit |  |  | 2 |  
754-5000 | Bench |  |  | 9 |  
900-0526 | Bollards |  |  | 12 |  

**Subtotal (Landscaping)**

**Item No.** | **Bridge No. 1 - Over Mitchell Branch** | **Approx. Qty** | **Units** | **Unit Price** | **Amount**
--- | --- | --- | --- | --- | ---
211-0300 | Bridge Excavation (Stream Crossing) | CY | 30 |  
500-1011 | Superstr Concrete, Cl D, Br No - 1 | LS | 1 |  
500-3002 | Class AA Concrete | CY | 2γ |  
511-1000 | Bar Reinf Steel | LB | 2,γηρ |  
511-3000 | Superstr Reinf Steel, Br No - 1 | LS | 1 |  
515-2050 | Handrail Special Design | LF | 52 |  
603-2024 | STN Dumped Rip Rap, TP 1, 42 IN | SY | 25 |  
603-7000 | Plastic Filter Fabric | SY | 25 |  

**Subtotal (Bridge No. 1 - Over Mitchell Branch)**

**Item No.** | **Bridge No. 2 - Over Unnamed Tributary** | **Approx. Qty** | **Units** | **Unit Price** | **Amount**
--- | --- | --- | --- | --- | ---
207-2023 | Found BKfill Matl, TP II | CY | 20 |  
211-0300 | Bridge Excavation (Stream Crossing) | CY | 148 |  
449-1350 | Performed Silicone Joint Seal, Br No - 2 ***Requires Special Provision*** | LF | 28 |  
500-1011 | Superstr Concrete, Cl D, Br No - 2 ***Requires Special Provision*** | LS | 1 |  
500-3002 | Class AA Concrete | CY | 1ψζ |  
501-3000 | Str Steel, Br No - 2 | LS | 1 |  
511-1000 | Bar Reinf Steel | LB | 1ψκτγ |  
511-3000 | Superstr Reinf Steel, Br No - 2 | LS | 1 |  
515-2050 | Handrail Special Design | LF | 448 |  

Company’s Name: ____________________________________________________________
### Bid Price Sheets

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>BRIDGE NO. 3 - OVER SR 155</th>
<th>APPROX QTY</th>
<th>UNITS</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
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<tr>
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<td>BRIDGE EXCAVATION (GRADE SEPARATION)</td>
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<td>500-3002</td>
<td>CLASS AA CONCRETE</td>
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<td>BAR REINF STEEL</td>
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<tr>
<td>534-1000</td>
<td>PEDESTRIAN OVERPASS BRIDGE, STA 86+76 TO 89+86 <em><strong>Requires Special Provision</strong></em></td>
<td>LS</td>
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**SUBTOTAL (BRIDGE NO. 3 - OVER SR 155)**

*Cash Allowance* $100,000.00

**TOTAL BID AMOUNT**

---

Total bid amount (words): __________________________________________________________

**CASH ALLOWANCE SCHEDULE:**

A cash allowance of $100,000.00 shall be included in the base bid for unforeseen conditions. Any portion of the allowance not used shall be credited back to the Owner. Any portion over the allowance shall be reimbursed back to the Contractor.

Note: Completion time for this work is **three hundred sixty-five (365) calendar days** after receipt of written Notice to Proceed from the County; thereafter, liquidated damage charges shall be assessed at the rate per GDOT Specification 108, Prosecution and Progress.

---

___________________________________________     _______________________
Company’s Name                                      Date

___________________________________________    _________________________________
Authorized Representative’s Name (Print or Type)    Authorized Representative’s Signature
SECTION IV – GA DOT/FEDERAL REQUIREMENTS AND FORMS

Seal Bid No. 19-37, Panola Mountain Greenway Trail PATH, Georgia Department of Transportation (GDOT) PI #0010 includes the following items, which can be found on the PDF File titled “GA DOT/Federal Requirements and Forms”.

Required Contract Provisions Federal-Aid Construction Contracts

Special Provision – Required Contract Provisions Federal Aid Contracts

Compliance With Title VI of The Civil Rights Act of 1964 for Federal-Aid Contracts

Federal Register/Vol. 45, No. 194 / Friday, October 3, 1980 / Notices


Disadvantaged Business Enterprise Program Criteria for Acceptability

Instructions for List Of DBE Participants

DBE Goals Form

Instructions to Contractor DBE Participation Report

Monthly DBE Participation Report

Special Provision – Prompt Payment

Buy America and Convict Produced Materials

Federal Aid Certification

GDOT Conflict of Interest And Drug Free Workplace

Non-Collusion Certification

Notice To All Bidders

Notice To All Bidders
SEALED BID LABEL

PLEASE ATTACH LABEL TO OUTSIDE OF BID PACKAGE

This label **MUST** be affixed to the outside of the envelope or package, even if it is a “No RFP” response. Failure to attach the label may result in your bid being opened in error or not routed to the proper location for consideration. No RFP will be accepted after the date and time specified.

---

SEALED BID ENCLOSED

Bid # 19-37
Panola Mountain Greenway Trail PATH
Georgia Department of Transportation (GDOT) PI #0010721
Opening: 3:00 PM, June 20, 2019

______________________________________________
Vendor Name

______________________________________________
Address

______________________________________________
City, State, Zip Code

______________________________________________
DELIVER TO: Henry County Purchasing Department
140 Henry Parkway
McDonough, GA 30253
Required Contract Provisions for Bid Manuals for TE Funded Construction Contracts (11-21-2018)

1. Bidder Qualifications Notice
2. Bid Rigging Notice
9. Georgia Department of Transportation, Disadvantaged Business Enterprise Program, Criteria for Acceptability, Revised July 09, 2018
10. Instructions for List of DBE Participants and DBE Goals Form
11. Instructions To Contractor DBE Participation Report, Revised 06-01-2010, and Monthly DBE Participation Report
12. Special Provision, Prompt Payment, Updated July 01, 2018
14. Federal-Aid Certification, Revised: June 8, 2016
   a. Equal Employment Opportunity
   b. Examination of Plans and Specifications
   c. Conflict of Interest
   d. Drug Free workplace
   e. Boycott of Israel
   f. Non-Collusion Certification

Note: Davis Bacon wage rates apply to all projects. The applicable wage rate determination is included in this bid document and was posted on the Davis Bacon web site of the U.S. Department of Labor [http://www.wdol.gov/dba.aspx#0](http://www.wdol.gov/dba.aspx#0) on the date of preparation of this bid document. If a modification is posted less than 10 days before the opening of bids, it shall be effective unless the Sponsor finds that there is not a reasonable time still available before bid opening to notify bidders of the modification and a report of the finding is inserted in the contract file (29 CFR 1.6(c)(3)).
NOTICE TO ALL BIDDERS

ALL BIDDERS SUBMITTING IN EXCESS OF $2,000,000 SHALL BE PRE-QUALIFIED WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT).

ALL BIDDERS SUBMITTING BIDS $2,000,000 OR LESS SHALL BE REGISTERED SUBCONTRACTORS OR PRE-QUALIFIED WITH THE GDOT.

ALL SUBCONTRACTORS SHALL BE PRE-QUALIFIED OR REGISTERED WITH THE GDOT.

IF CONSTRUCTION WORK INVOLVES WELDED STRUCTURES, SUCH AS BRIDGES, THE MANUFACTURER OF THE STRUCTURE SHALL BE ON THE GDOT QPL LIST 60.
NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free “hotline” Monday through Friday, 8:00 AM to 5:00 PM, Eastern Time. Anyone with the knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report such activities.

The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse, and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under...
this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

“It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training.”

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are
applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor
will be required to collect and report training data. The
employment data should reflect the work force on board during
all or any part of the last payroll period preceding the end of
July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction
contracts and to all related construction subcontracts of
$10,000 or more.

The contractor must ensure that facilities provided for
employees are provided in such a manner that segregation on
the basis of race, color, religion, sex, or national origin cannot
result. The contractor may neither require such segregated
use by written or oral policies nor tolerate such use by
employee custom. The contractor’s obligation extends further
to ensure that its employees are not assigned to perform their
services at any location, under the contractor’s control, where
the facilities are segregated. The term “facilities” includes
waiting rooms, work areas, restaurants and other eating areas,
time clocks, restrooms, washrooms, locker rooms, and other
storage or dressing areas, parking lots, drinking fountains,
recreation or entertainment areas, transportation, and housing
provided for employees. The contractor shall provide separate
or single-user restrooms and necessary dressing or sleeping
areas to assure privacy between sexes.

IV. DAVIS–BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction
projects exceeding $2,000 and to all related subcontracts and
lower-tier subcontracts (regardless of subcontract size). The
requirements apply to all projects located within the right-of-
way of a roadway that is functionally classified as Federal-aid
highway. This excludes roadways functionally classified as
local roads or rural minor collectors, which are exempt.
Contracting agencies may elect to apply these requirements to
other projects.

The following provisions are from the U.S. Department of
Labor regulations in 29 CFR 5.5 "Contract provisions and
related matters" with minor revisions to conform to the FHWA-
1273 format and FHWA program requirements.

1. Minimum wages

   a. All laborers and mechanics employed or working upon
the site of the work will be paid at the rate or rates theretofore
hereunder determined for such and not less often than once a week, and without subsequent deduction or
rebate on any account (except such payroll deductions as are
permitted by regulations issued by the Secretary of Labor
under the Copeland Act (29 CFR part 3)), the full amount of
wages and bona fide fringe benefits (or cash equivalents
thereof) due at time of payment computed at rates not less
than those contained in the wage determination of the
Secretary of Labor which is attached hereto and made a part
hereof, regardless of any contractual relationship which may
be alleged to exist between the contractor and such laborers
and mechanics.

Contributions made or costs reasonably anticipated for bona
fide fringe benefits under section 1(b)(2) of the Davis-Bacon
Act on behalf of laborers or mechanics are considered wages
paid to such laborers or mechanics, subject to the provisions
of paragraph 1.d. of this section; also, regular contributions
made or costs incurred for more than a weekly period (but not
less often than quarterly) under plans, funds, or programs
which cover the particular weekly period, are deemed to be
constructively made or incurred during such weekly period.
Such laborers and mechanics shall be paid the appropriate
wage rate and fringe benefits on the wage determination for
the classification of work actually performed, without regard to
skill, except as provided in 29 CFR 5.5(a)(4). Laborers or
mechanics performing work in more than one classification
may be compensated at the rate specified for each
classification for the time actually worked therein: Provided,
That the employer’s payroll records accurately set forth the
time spent in each classification in which work is performed.
The wage determination (including any additional classification
and wage rates conforming under paragraph 1.b. of this
section) and the Davis-Bacon poster (WH–1321) shall be
posted at all times by the contractor and its subcontractors at
the site of the work in a prominent and accessible place where
it can be easily seen by the workers.

   b. (1) The contracting officer shall require that any class of
laborers or mechanics, including helpers, which is not listed in
the wage determination and which is to be employed under
the contract shall be classified in conformance with the wage
determination. The contracting officer shall approve an
additional classification and wage rate and fringe benefits
therefore only when the following criteria have been met:

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

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

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

(2) If the contractor and the laborers and mechanics to be
employed in the classification (if known), or their
representatives, and the contracting officer agree on the
classification and wage rate (including the amount
designated for fringe benefits where appropriate), a report
of the action taken shall be sent by the contracting officer to the
Administrator of the Wage and Hour Division, Employment
Standards Administration, U.S. Department of Labor,
Washington, DC 20210. The Administrator, or an authorized
representative, will approve, modify, or disapprove every
additional classification action within 30 days of receipt and
so advise the contracting officer or will notify the contracting
officer within the 30-day period that additional time is
necessary.

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

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from any payments or advances as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

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

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee’s social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

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

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(2) of this section.

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

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

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

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

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

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

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).


V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

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

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.
VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor’s own organization (23 CFR 635.116).

   a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term includes payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

      (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
      (2) the prime contractor remains responsible for the quality of the work of the leased employees;
      (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
      (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

   b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned, or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:
"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification — First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.
2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, the participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the
department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

   a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

   b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.
ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
   
a. To the extent that qualified persons regularly residing in the area are not available.

   b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

   c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.
The Cargo Preference Act (CPA) establishes certain requirements for the use of privately owned United States-flag commercial vessels in transporting equipment, materials, and commodities by ocean vessel. Contractors are required to comply with the CPA requirements and 46 CFR 381 and are required to insert the substance of these provisions into any subcontracts issued pursuant to this contract.

**Cargo Preference Act Requirements**

All Federal-aid projects shall comply with 46 CFR 381.7 (a)–(b) as follows:

(a) *Agreement Clauses.* Use of United States-flag vessels:

1. Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

2. Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a) (1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(b) *Contractor and Subcontractor Clauses.* Use of United States-flag vessels: The contractor agrees—

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the Gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.
The CPA requirements would be appropriate for oceanic shipments of materials or equipment that is intended for use on a specific Federal-aid project, such as a precast concrete structural members, fabricated structural steel, tunnel boring machines, or large-capacity cranes.

The CPA requirements are not applicable for goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project.

A test for whether CPA requirements apply or do not apply to shipped goods or materials would be if the goods or materials are what one would consider to be common inventory supplies for highway construction contractor, then CPA would not apply. If the materials or goods are considered to be supplies one would consider to be not common supplies of a highway construction contractor then CPA would apply.
SPECIAL PROVISION

Required Contract Provisions
Federal-Aid Construction Contracts

1. *Subsection I.4 Selection of Labor; Delete the last sentence in the paragraph.*

2. *Subsections IV Davis Bacon and Related Act Provisions; Delete the first paragraph in its entirety and substitute the following:*

   “This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts. The requirements apply to all projects located within the right-of-way of a roadway.”
APPENDIX A
NOTICE TO CONTRACTORS
COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964
FOR
FEDERAL-AID CONTRACTS

During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

1. Compliance with Regulations: The Contractor will comply with the Regulations of the Department of Transportation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (Title 49, Code of Federal Regulations, Part 21, hereinafter referred to as the “Regulations”), which are herein incorporated by reference and made a part of the Contract.

2. Nondiscrimination: The Contractor, with regard to the work performed by it afterward and prior to completion of the contract work, will not discriminate on the ground of race, color, national origin, disability, sex, or age in the selection and retention of subcontracts including procurements of materials and leases of equipment. This will be done in accordance with Title VI of the Civil Rights Act of 1964 and other Non-Discrimination Authorities i.e., Section 504 of the 1973 Rehabilitation Act, the 1973 Federal-Aid Highway Act, the 1975 Age Discrimination Act, and the Americans with Disabilities Act of 1990. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when contract covers a program set forth in Appendix B of the Regulations. In addition, the Contractor will not participate either directly or indirectly in discrimination prohibited by 23 CFR 710.405 (b).

3. Solicitations for subcontracts, including procurements of materials and equipment: In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor’s obligations under this Contract and the Regulations relative to nondiscrimination on the ground of race, color, national origin, disability, sex or age.
4. Information and Reports: The Contractor will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of the Contractor’s noncompliance with the nondiscrimination provisions of this Contract, the Department of Transportation shall impose such Contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   (a) withholding of payments to the Contractors under the Contract until the Contractor complies, and/or

   (b) Cancellation, termination or suspension of the Contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraph (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, orders or instruction issued pursuant thereto. The Contractor will take such action with respect to any subcontract or procurement as the Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as result of such direction, the Contractor may request the State to enter into such litigation to protect the interests of the State, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

A-2
STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246) (43 FR 14895)

1. As used in these specifications:
   a. “Covered area” means the geographical area described in the solicitation from which this contract resulted;
   b. “Director” means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegated authority;
   d. “Minority” includes:
      (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
      (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
      (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
      (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

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

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor’s or Subcontractor’s failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, nor the regulations promulgated pursuant thereto.

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

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

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

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

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

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

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

f. Disseminate the Contractor's EEO policy by providing the notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
g. Review, at least annually, the company’s EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc. prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

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

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246) (43 FR 14895)

1. The Offeror’s or Bidder’s attention is called to the “Equal Opportunity Clause” and the “Standard Federal Equal Employment Opportunity Construction Contract Specifications” set forth herein.

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

GOALS FOR FEMALE PARTICIPATION

APPENDIX A
(43 FR 19473)

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of $10,000. The goals are applicable to the contractor’s aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally-assisted construction contract or subcontract. Area covered: Goals for Women apply nationwide.

Goals and timetables

<table>
<thead>
<tr>
<th>Timetable</th>
<th>Goals (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1-78 to 3-31-79</td>
<td>3.1</td>
</tr>
<tr>
<td>4-1-79 to 3-31-80</td>
<td>5.0</td>
</tr>
<tr>
<td>4-1-80 Until Further Notice</td>
<td>6.9</td>
</tr>
</tbody>
</table>

GOALS FOR MINORITY PARTICIPATION

Appendix B-80

Until further notice, the following goals for minority utilization in each construction craft and trade shall be included in all Federal or federally assisted construction contracts and subcontracts in excess of $10,000 to be performed in the respective geographical areas. The goals are applicable to each nonexempt contractor’s total onsite construction workforce, regardless of whether or not part of that workforce is performing work on a Federal, federally assisted or non-federally related project, contact or subcontract.
Construction contractors which are participating in an approved Hometown Plan (see 41 CFR 60-4-5) are required to comply with the goals of the Hometown Plan with regard to construction work they perform in the areas covered by the Hometown Plan. With regard to all their other covered construction work, such contractors are required to comply with the applicable SMSA or EA goal contained in this appendix B-80.

<table>
<thead>
<tr>
<th>State</th>
<th>Goal (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Georgia:</strong></td>
<td></td>
</tr>
<tr>
<td>035 Augusta, GA:</td>
<td></td>
</tr>
<tr>
<td>SMSA Counties:</td>
<td></td>
</tr>
<tr>
<td>0600 Augusta, GA-SC</td>
<td>27.2</td>
</tr>
<tr>
<td>GA Columbia; GA Richmond, SC Aiken;</td>
<td></td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td>32.8</td>
</tr>
<tr>
<td>GA Burke; GA Emanuel; GA Glascock; GA Jefferson; GA Jenkins; GA Lincoln; GA McDuffie, GA Talleferro; GA Warren; GA Wilkes; SC Allendale; SC Barnwell; SC Edgefield; SC McCormick;</td>
<td></td>
</tr>
<tr>
<td>036 Atlanta, GA:</td>
<td></td>
</tr>
<tr>
<td>SMSA Counties:</td>
<td></td>
</tr>
<tr>
<td>0520 Atlanta, GA</td>
<td>21.2</td>
</tr>
<tr>
<td>GA Butts; GA Cherokee; GA Clayton; GA Cobb; GA DeKalb; GA Douglas; GA Fayette, GA Forsyth; GA Fulton; GA Gwinnett; GA Henry; GA Newton; GA Paulding; GA Rockdale; GA Walton</td>
<td></td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td>19.5</td>
</tr>
<tr>
<td>GA Banks; GA Barrow; GA Bartow; GA Carroll; GA Clarke; GA Coweta; GA Dawson; GA Elbert; GA Fannin; GA Floyd; GA Franklin; GA Gilmer; GA Gordon; GA Greene; GA Habersham; GA Hall; GA Haralson; GA Hart; GA Heard; GA Jackson; GA Jasper; GA Lamar; GA Lampkin; GA Madison; GA Morgan; GA Oconee; GA Oglethorpe; GA Pickins; GA Pike; GA Polk; GA Rabun; GA Spalding; GA Stephens; GA Towns; GA; Union; GA Upson White</td>
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</tr>
<tr>
<td>037 Columbus, GA:</td>
<td></td>
</tr>
<tr>
<td>SMSA Counties:</td>
<td></td>
</tr>
<tr>
<td>1800 Columbus, GA – AL</td>
<td>29.6</td>
</tr>
<tr>
<td>Al Russell; GA Chattahoochee; GA Columbus</td>
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</tbody>
</table>
Non-SMSA Counties ................................................................. 31.6
  Al Chambers; AJ Lee; GA Harris; GA Marion; GA Meriwether; GA Quitman; GA Schley; GA Stewart; GA Sumter; GA Talbot; GA Troup; GA Webster

038 Macon, GA:
  SMSA Counties:
    4680 Macon, GA ................................................................. 27.5
  GA Bibb; GA Houston; GA Jones; GATwiggs
  Non-SMSA Counties .......................................................... 31.7
    GA Baldwin; GA Bleckley; Crawford; GA Crisp;
    GA Dodge; GA Dooly; GA Hancock; GA Johnson;
    GA Laurens; GA Macon; GA Monroe; GA Peach;
    GA Pulaski; GA Putman; GA Taylor; GA Telfair;
    GA Treutlan; GA Washington; GA Wheeler;
    GA Wilcox; GA Wilkinson

039 Savannah, GA:
  SMSA Counties:
    7520 Savannah, GA ........................................................... 30.6
  GA Bryan; GA Chatham; GA Effingham
  Non-SMSA Counties .......................................................... 29.8
    GA Appling; GA Atkinson;
    GA Bacon, GA Bulloch; GA Candler; GA
    Coffee; GA Evans; GA Jeff Davis; GA Liberty;
    GA Long; GA McIntosh; GA Montgomery; GA
    Screven; GA Tattnall; GA Toombs; GA Wayne;
    SC Beaufort; SC Hampton; SC Jasper

040 Albany, GA:
  SMSA Counties:
    0120 Albany, GA ............................................................. 32.1
  GA Dougherty; GA Lee
  Non-SMSA Counties .......................................................... 31.1
    GA Baker; GA Ben Hill; GA Berrien; GA
    Brooks; GA Calhoun; GA Clay; GA Clinch;
    GA Colquitt; GA Cook; GA Decatur; GA
    Early; GA Echols; GA Grady; GA Irwin; GA
    Lanier; GA Lowndes; GA Miller; GA Mitchell;
    GA Randolph; GA Seminole; GA Terrell; GA
    Thomas; GA Tift; GA Turner; GA Worth

Florida:
  041 Jacksonville FL:
  Non-SMSA Counties............................................................22.2
    GA Brantley; GA Camden; GA Charlton; GA Glynn; GA Pierce; GA Ware
DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

CRITERIA FOR ACCEPTABILITY

The purpose of this special provision is to establish criteria for acceptability of DBE firms for work performed on this contract. The intent is to ensure all participation counted toward fulfillment of the DBE goals is (1) real and substantial, (2) actually performed by viable, independent DBE owned firms, and (3) in accordance with the spirit of the applicable laws and regulations.

The policy of the Georgia Department of Transportation is to ensure compliance with Title VI of the Civil Rights Act of 1964, 49 Code of Federal Regulations, Part 26 and related statutes and regulations in all program activities.

To this end the Georgia Department of Transportation shall not discriminate on the basis of race, color, sex or national origin in the award, administration and performance of any Georgia Department of Transportation assisted contract or in the administration of its Disadvantaged Business Enterprise Program. The Georgia Department of Transportation shall take all necessary and reasonable steps to ensure nondiscrimination.

The DBE Goal specified in the contract will be a percentage representing the DBE Race Conscious Participation. The Contractor will strive to achieve an additional percentage in his/her contracts for all projects during the course of the current State Fiscal Year, in order to meet the overall Georgia Department of Transportation DBE goal.

The DBE program applies to all Federal Aid projects regardless if a DBE Goal is established in the Contract or not. If no percentage goal is set forth in the proposal, the contractor may enter a proposed DBE participation. This voluntary DBE participation will count as race neutral DBE participation. Prime Contractor shall report race-neutral participation in accordance with the DBE Monthly Report requirements shown in this document.
Project DBE payments and commitments may not be transferred to or combined with another contract.

**DEFINITIONS:** For the purposes of this provision, the following definitions will apply:

**Disadvantaged Business Enterprises (DBE)** are firms Certified by the Georgia Unified Certification program that are for-profit small business concerns:

1. Which is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and
2. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own the business.

**Good Faith Efforts** means efforts to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement.

**Joint Venture** means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

**Socially and Economically Disadvantaged Individual** means any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is –

1. Any individual who the Department finds to be a socially and economically disadvantaged individual on a case-by-case basis.
2. Any individual in the following groups, members of which are reputedly presumed to be socially and economically disadvantaged.
   
   (i) “Black Americans,” which includes persons having origins, in any of the Black racial groups of Africa;
   (ii) “Hispanic Americans,” which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
   (iii) “Native Americans,” which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
“Asian-Pacific Americans,” which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;

“Subcontinent Asian Americans,” which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;

Women;

Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

(3) GDOT will presume that such persons are socially and economically disadvantaged only to the extent permitted by applicable federal law.

Race-conscious measure is one focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral measure is one being, or can be, used to assist all small businesses. For the purposes of this part, race-neutral includes gender-neutrality.

Joint Check is a two-party check written by a prime contractor, to a DBE firm and a regular dealer of material/supplies or another third party for items or services incorporated into a project. The prime contractor issues the check as payer to the DBE and the supplier jointly (to guarantee payment to the supplier) in payment for the material/supplies used by the DBE.

DBE DIRECTORY: A DBE directory or source list is available to facilitate identifying DBEs with capabilities relevant to general contracting requirements and to particular solicitations. The Department has made the directory electronically available to all bidders and proposers in their efforts to meet the DBE requirements. The directory or listing includes firms which the Department has certified to be eligible DBEs in accordance with 49 CFR Part 26.

GOAL FOR PARTICIPATION: If a percentage goal for DBE participation in this contract is set forth elsewhere in this proposal, the Contractor shall complete the DBE GOALS – Commitment List form included in the proposal.
The Contractor is encouraged to make every effort to achieve the goal set by the Department. However, if the Contractor cannot find sufficient DBE participants to meet the goal established by the Department, the Department may consider for award a proposal with less participation than the established goal in accordance with GDOT Standard Specification 102.07.H Failure to List Disadvantaged Business Enterprise (DBE) Participants, 49 Code of Federal Regulations 26.53 Good Faith Effort Procedures, and 49 CFR Appendix A to Part 26—Guidance Concerning Good Faith Efforts.

To be eligible for award of this contract, all bidders are required to submit the following information, as well as Good Faith Effort supporting documentation when applicable, to the Department by the close of business on the 3rd working day following opening of the bid as a matter of bidder responsibility.

i. The names and addresses of DBE firms committed to participate in the Contract;

ii. A description of the work each DBE will perform; The Contractor shall provide information with their bid showing that each DBE listed by the Contractor is certified in the NAICS code(s) for the kind of work the DBE will be performing.

iii. The dollar amount of participation for each DBE firm participating; Written documentation of the bidder’s commitment to use a DBE subcontractor whose participation it submits to meet a contract goal;

iv. Written confirmation from the DBE committed to participating in the contract, as provided in the prime contractor’s commitment.

v. If the contract goal is not met, evidence of good faith efforts must be provided.

Failure by a bidder to furnish the above information may subject the bid to disqualification. Also failure by the bidder to submit satisfactory evidence of good faith efforts may subject the bid to disqualification.

Award of a contract by the Department to a Prime Contractor who has listed DBE participants with the bid does not constitute final approval by the Department of the listed DBE. The Department reserves the right to approve or disapprove a Disadvantaged firm after a review of the Disadvantaged firm’s proposal participation. Payment to the Contractor under the contract may be withheld until
final approval of the listed DBEs is granted by the Department.

If the Contractor desires to substitute a DBE in lieu of those listed in the proposal, a letter of concurrence shall be required from the listed DBE prior to approval of the substitution, unless this requirement is waived by the Department.

Agreements between bidder and a DBE promising not to provide Subcontracting quotations to other bidders are prohibited.

**SUBLETTING DISCRIMINATION PROHIBITED:** No person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against in connection with the award and performance of this contract on the grounds of race, color, sex or national origin.

The following assurance becomes a part of this contract and must be included in and made a part of each subcontract the prime contractor enters into with their subcontractors (49 CFR 26.13):

> “The contractor, and/or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT – assisted contracts. Failure by the contractor to carry out these requirements is (breach) of this contract which may result in the termination of this contract or such other remedy as the Department deems appropriate”.

**FAILURE TO ACHIEVE REQUIREMENTS:** Periodic reviews shall be made by the Department to determine the extent of compliance with the requirements set forth in this provision. If the Contractor is found to be in noncompliance, further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of this contract. During the life of the contract, the contractor will be expected to demonstrate good faith efforts at goal attainment as provided by 49 CFR 26.

The contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the Department's written consent to substitute and, unless the Department’s consent is provided the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE, in accordance with 49 CFR 26.53.

Participation will be counted toward fulfillment of the DBE goal as follows:

(A) When a DBE participates in a contract, the Contractor counts only the value of
the work actually performed by the DBE toward DBE goals.

(1) Count the entire amount of the portion of a construction contract (or other contract not covered by paragraph (A) (2) of this section) performed by the DBE’s own forces. Include the cost of supplies and materials obtained by the DBE for the work of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).

(2) Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, toward DBE goals, provided the Department determines the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE’s subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

(B) **Joint Venture:** When a DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract the DBE performs with own forces toward DBE goals.

(C) **Commercially Useful Function:** Count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a commercially useful function (CUF) on that contract.

(1) A DBE performs a commercially useful function when responsible for execution of the work of the contract and carrying out responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.
a. **Joint Check Agreement:** All two-party checks written by a prime contractor, to a DBE firm and a third party must be approved by the Department prior to claiming DBE credit. After-the-fact requests may not be permitted toward the Goal.

(2) A DBE does not perform a commercially useful function if their role is limited to being an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

(3) If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of their contract with their own workforce, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the Department will presume the DBE is not performing a commercially useful function.

(4) When a DBE is presumed not to be performing a commercially useful function as provided in paragraph (C) (3) of this section, the DBE may present evidence to rebut this presumption.

(5) The Department’s decisions on commercially useful function matters are subject to review by the US DOT, but are not administratively appealable to the US DOT.

(D) **Trucking:** The following factors are to be used in determining whether a DBE trucking company is performing a commercially useful function:

(1) The DBE must be responsible for the management and supervision of the entire trucking operation for which they are responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

(2) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

(3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

(4) The DBE may lease trucks from another DBE firm, including an owner / operator who are certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provided on the contract.

(5) The DBE may also lease trucks from a non-DBE and is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE.

(6) The DBE may lease trucks without drivers from a non-DBE bona-fide truck leasing agency. If the DBE leases trucks from a non-DBE truck leasing agency and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

(7) For purposes of this paragraph (D), a lease must indicate the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display a “leased to” sign with the name and identification number of the DBE.

(E) Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:

(1) (i) If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals.

(ii) For purposes of this paragraph, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

(2) (i) If the materials or supplies are obtained from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals. (ii) For purposes of this section, a regular dealer is a firm owning, operating, or maintaining a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(A) To be a regular dealer, the firm must be an established, regular business engaging, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

(B) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this
paragraph (E)(2)(ii) if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers’ own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

(C) Packagers, brokers, manufacturers’ representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph (E)(2).

(3) With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided you determine the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals, however.

(4) You must determine the amount of credit awarded to a firm for the provision of materials and supplies (e.g., whether a firm is acting as a regular dealer or a transaction expediter) on a contract-by-contract basis. Do not count the participation of a DBE subcontractor toward the prime contractor’s DBE achievements until the amount being counted toward the goal has been paid to the DBE.

(5) No participation will be counted not in compliance with Special Provision entitled “Criteria for Acceptability” which is a part of this contract or with any provisions included in 49 CFR Part 26.
(6) If the contract amount overruns, the contractor will not be required to increase the dollar amount of DBE participation. Likewise, if the contract amount under runs, the contractor will not be allowed to under run the dollar amount of DBE participation except when the DBE subcontracted items themselves under run. Contractor must demonstrate Good Faith Effort in meeting the goal during commission of the contract.

REPORTS

A. The contractor shall submit a “DBE Participation Report” on this contract monthly which shall include the following:

1. The name of each DBE participating in the contract.

2. A description of the work to be performed, materials, supplies, and services provided by each DBE.

3. Whether each DBE is a supplier, subcontractor, owner/operator, or other.

4. The dollar value of each DBE subcontract or supply agreement.

5. The previous, current, and total-to-date payments to each DBE participating in the contract, minus any credits not allowed.

6. Must include Contractor’s signature with the following statement: “I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT. SUPPORTING DOCUMENTATION IS ON FILE AND IS AVAILABLE FOR INSPECTION BY DEPARTMENT PERSONNEL AT ANY TIME. ALL PARTICIPATION COUNTED TOWARD FULFILLMENT OF THE DBE GOAL IS (1) REAL AND SUBSTANTIAL; (2) ACTUALLY PERFORMED BY VIABLE, INDEPENDENT DBE OWNED FIRMS; AND (3) IN ACCORDANCE WITH THE SPIRIT OF APPLICABLE LAWS AND REGULATIONS”.

7. The report shall be updated by the Prime Contractor whenever the approved DBE has performed a portion of the work that has been designated for the contract. Copies of this report should be transmitted promptly to the Engineer. Failure to submit the report within 30 calendar days following the end of the month may cause payment to the contractor to be withheld.
8. The Prime Contractor shall notify the Project Engineer at least 24 hours prior to the time the DBE commences working on the project. The DBE must furnish supervision of the DBE portion of the work, and the person responsible for this supervision must report to the Project Engineer when they begin work on the project. They must also inform the Project Engineer when their forces will be doing work on the project.

B. In order to comply with 49 CFR 26.11, the Prime Contractor shall submit documentation regarding all payments made from the Prime to all DBE subcontractors on federal aid projects in the form of copies of cancelled checks or bank electronic fund transfer (EFT) receipts which validate said payments made on the DBE Monthly Participation Reports. This information shall be required monthly and submitted with the DBE Monthly Participation Report.

C. Failure to respond within the time allowed in the request will be grounds for withholding all payments on all Contracts.

SUBSTITUTION OF DBEs: The Contractor shall make reasonable efforts to replace a DBE Subcontractor unable to perform work for any reason with another DBE. The Department shall approve all substitutions of Subcontractors in order to ensure the substitute firms are eligible DBEs.

When a DBE subcontractor is terminated, or fails to complete its work on the contract for any reason, the prime contractor must make good faith efforts to find another DBE subcontractor to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. The good faith efforts shall be documented by the contractor. If the recipient requests documentation under this provision, the contractor shall submit the documentation within 7 days, which may be extended for an additional 7 days if necessary at the request of the contractor, and the recipient shall provide a written determination to the contractor stating whether or not good faith efforts have been demonstrated.

CERTIFICATION OF DBEs: To ensure the DBE Program benefits only firms owned and controlled by Disadvantaged Individuals, the Department shall certify the eligibility of DBEs and joint ventures involving DBEs named by bidders.

Questions concerning DBE Certification/Criteria should be directed to the EEO Office at (404) 631-1972.
INSTRUCTIONS FOR LIST OF DBE PARTICIPANTS

If a DBE Goal is indicated, you must propose to achieve a goal that is equal or greater then the percentage required. If no goal is indicated, you may propose your own goal.

The DBE firms to be utilized as counting toward the proposed goal must be listed on this form, along with their addresses, type of work, and the amount to be paid to each of the minority firms. The amount entered will not necessarily be the contract amount, but must be the actual amount that will be paid to the DBE firm. In the case of a DBE supplier, the amount paid and 60% of that amount both will be entered; and only the 60% figure should be added to the total. An example of this is shown in the example chart:

<table>
<thead>
<tr>
<th>Vendor Number</th>
<th>Company Name And Address (City and State)</th>
<th>Type Of Work</th>
<th>*Work Code</th>
<th>Race Neutral</th>
<th>Race Conscious</th>
<th>Amount</th>
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<tr>
<td></td>
<td>ABC Oil Company Atlanta, GA</td>
<td>Diesel Fuel Supplier</td>
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<td>(60% = $48,000.00)</td>
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* For Departmental use ONLY. Do not fill in Work Codes.

The Contractor shall indicate for each DBE and Type of Work whether the DBE Participant is Race Neutral or Race Conscious by placing a checkmark in the appropriate column.

PLEASE NOTE: For 60% of the amount paid to a DBE supplier to be eligible to count toward fulfilling the DBE goal, the supplier must be an established "regular dealer" in the product involved, and not just a broker. A "regular dealer" would normally sell the product to several customers and would usually have product inventory on hand.
DBE GOALS

VENDOR ID:  BIDDER'S COMPANY NAME:

PROJECT NO. & COUNTY: 0010721 Henry

LET NO:  LET DATE:  TOTAL BID:

THE REQUIRED DBE GOAL ON THIS CONTRACT IS: 14%

I PROPOSE TO UTILIZE THE FOLLOWING DBE CONTRACTORS:

**LIST OF DBE PARTICIPANTS**

<table>
<thead>
<tr>
<th>VENDOR NUMBER</th>
<th>DBE NAME/ ADDRESS (CITY, STATE)</th>
<th>TYPE OF WORK</th>
<th>*WORK CODE</th>
<th>Race Neutral</th>
<th>Race Conscious</th>
<th>AMOUNT</th>
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TOTAL

*For Departmental use only. Do not fill in Work codes.

PLEASE NOTE: Only 60% of the participation of a DBE Supplier who does not manufacture or install the product will be counted toward the goal. See below for further instructions.
INSTRUCTIONS TO CONTRACTOR
DBE PARTICIPATION REPORT

In order to receive credit toward the DBE Goal, the prime contractor must complete the report in its entirety and submit this form MONTHLY to the Project Manager in charge of the contract. Failure to submit this form will result in no credit toward the contract DBE requirements.

1. PROJECT NUMBER – This is the GDOT assigned project number – See Contract.
2. COUNTY – See Contract.
3. CONTRACT ID NUMBER – This is the GDOT Contract Identification Number – See Contract.
4. CONTRACTOR NAME –
5. REPORT SUBMISSION DATE – This is the date the report is completed.
6. REPORT NUMBER – Reports must be consecutively numbered.
7. REPORT TYPE – This should be checked monthly until all work has been completed, at which time the Report Type should be changed to Final and submitted to the Project Manager.
8. DATE WORK BEGAN – This is the date of the first day any work occurred on the project.
9. DBE REQUIREDPERCENTAGE – This is the total required % of the original contract amount.
10. CONTRACT $ AMOUNT – DBE Amount: The DBE amount and percentage are the DBE amount and percentage shown in the original contract. (In some instances, this amount may be greater than the percentage amount and may exceed the percentage in the contract; for reporting purposes, the amount over the DBE percentage on this contract is considered race neutral). Original subcontract amount should be at least the amount listed in the contract. Any amounts above the race conscious number or percentage are counted as race neutral and should be shown on report on a separate line than the race conscience. The contractor cannot add the race neutral until the race conscious is exceeded.
11. PERCENT $ COMPLETE – Insert the Percentage Complete, which reflects the percentage of project completed in dollars to the ending date of this report.
12. DBE $ AMOUNT – The is the total dollar amount representing the percentage of the original contract.
13. PERCENT PROJECT COMPLETE – Insert the Percentage of Project Complete, which indicates the time completed on the project.
14. DATE CLOSING THIS REPORT – Please check the appropriate date for the close of payments for this report.
15. SUPPLIER (S) – One who supplies material to the Project. The dollar value shown in the contracts for suppliers represents the calculated sixty percent (60%) dollar value of the original amount; therefore, the supplier percentage requires no further adjustments. The amount in the contact should be shown as the subcontract amount.
16. OWNER / OPERATOR (O) – One who owns and operates the equipment themselves.
17. SUBCONTRACTOR (SC) – Those who aren’t a supplier or owner/operator.
18. SUBCONTRACTOR AGREEMENT RECEIVED (SAR): The Department requests that you supply a copy of valid executable subcontract agreements between your company and your DBE subcontractors per section 108.01 of the Standard Specifications. All subcontracts shall include the Required Contract Provisions, FHWA 1273; these provisions shall not be incorporated by reference. A copy of subcontractor agreement (SAR) between the prime and each DBE must be submitted to the Area Engineer's Office.
19. RACE NEUTRAL (RN) – DBE participation that would have been used in the absence of any contract goal provisions.
20. RACE CONSCIOIUS – DBE participation that was utilized specifically to meet the proposed contract goal or portion thereof.
21. ORIGINAL SUBCONTRACT AMOUNT – This is the original amount shown in the Signed Contract.
22. PREVIOUS PAYMENTS – This totals all PAYMENTS prior to this report.
23. PAYMENTS THIS REPORT – These are the totals of PAYMENTS during this report period only.
24. PAYMENTS TO DATE – Show the actual amount that each DBE has payments to-date under the contract based on the unit prices paid to the DBE by the prime contractor and not contract unit prices. When a supplier is used to fulfill the DBE requirements, only 60% of the amount earned by the supplier may be entered. Show that total amount in the space provided.
25. CURRENT COLUMN TOTALS – Total each column.
26. PERCENT OF CONTRACT – This percentage is calculated using the contract amount and the total DBE payments-to-date.
27. CERTIFICATION – The contractor or his authorized representative must sign this form prior to submittal. Failure to complete and submit this form in a timely manner may delay monthly progress payments.
28. DBE must perform at least 30% of work with own forces to meet commercially useful function criteria (49CFR26.55). If a DBE subcontracts part of the work of its contract to another firm, the value of the work can only be counted toward the DBE goal if the DBE’s subcontractor is itself a DBE.
29. A DBE hauler must itself own and operate at least one fully licensed, insured and operational truck to be used on the contract.
30. Payments and commitments for Federal-aid projects shall be separate and distinct and cannot be transferred or combined in any manner.
31. Credits towards DBE goal can only be claimed after the amount being claimed toward the goal has been paid to the DBE. Attach cancelled checks: Prime Contractor shall submit documentation regarding all payments made from the Prime to all DBE subcontractors on federal aid projects in the form of copies of cancelled checks or notarized electronic documentation which validates said payments made on the DBE Monthly Participation Reports. This information shall be required monthly and submitted with the DBE Monthly Participation Report (49CFR26.11).

GENERAL INFORMATION

The prime contractor may change DBE firms only with the approval of the District Engineer, provided the changes confirm to contract regulations.

The prime contractor is responsible for sending a copy of the subcontractor agreement between the prime and its subcontractors to the Project Manager. After submitting this document to the Project Manager, the prime contractors checks the block on the DBE Participation Report. Only one copy of the subcontractor agreement is requested for each DBE subcontractor.

If the prime contractor has not submitted a copy of the subcontractor agreement between the prime and its DBE subcontractor(s), the project manager will contact the prime contractor and request this document.

The prime contractor is not requested to send copies of the subcontractor agreement signed with the DBE firms to multiple offices within GDOT. Sending this information to the Project Manager will satisfy the federal requirements.

The prime contractor is responsible to accurately complete the report prior to submitting to the department. Once submitted to the department, the department project manager is responsible for reviewing it for accuracy.
If the report is inaccurate, the department project manager shall send the report back to the prime contractor for corrections. Payment will be withheld by the Department until a correct report is received.

The prime contractor is required to submit the monthly DBE from the month of Notice To Proceed until the Final DBE Report is submitted. Payment will be withheld by the Department until the report is received.

Upon completion of the work, a final “DBE Participation Report” will be required and submitted to the Area Engineer prior to final payment. All information shown on the form must be completed, including the payments of each approved DBE.

Joint ventures between non-DBE and certified DBE: Only that portion of the work for which the DBE is responsible may be used to satisfy the requirements.

Should you have questions about the Monthly DBE Participation Report – ARRA Reporting, contact the local District Contracts Administration Office or District EEO Officer.

FOR DEPARTMENTAL USE ONLY:

Federal Law requires that the work of DBE contractors be monitored in the field as part of the effort to ensure that DBEs are actually performing the work (49CFR26.37 (b).

District EEO Officers must receive copies of the Monthly DBE Participation Reporting.
# MONTHLY DBE PARTICIPATION REPORT

**REPORT SUBMISSION DATE: __________________________**

**PROJECT NO.: __________________________________**

**COUNTY: _________________________________________**

**CONTRACT ID NO.: ________________________________**

**CONTRACTOR: ____________________________________**

**REPORT NO.: _________________________________**

**NOTICE TO PROCEED: ____________________________**

**DATE WORK BEGAN: ____________________________**

**CONTRACT $ AMOUNT: __________________________**

**DBE $ AMOUNT: $ 0.00 __________________________**

**DBE REQUIRED %: ______________________________**

**% DOLLAR COMPLETE: __________________________**

**% PROJECT COMPLETE: __________________________**

**31-Jan** ☐  **31-Jul** ☐  **31-Mar** ☐  **30-Sep** ☐  **31-Apr** ☐  **31-Oct** ☐  **31-May** ☐  **30-Nov** ☐  **30-Jun** ☐  **31-Dec** ☐

**DATE WORK BEGAN: ____________________________**

**DBE REQUIRED %: ______________________________**

**% DOLLAR COMPLETE: __________________________**

**% PROJECT COMPLETE: __________________________**

**31-Jan** ☐  **31-Jul** ☐  **31-Mar** ☐  **30-Sep** ☐  **31-Apr** ☐  **31-Oct** ☐  **31-May** ☐  **30-Nov** ☐  **30-Jun** ☐  **31-Dec** ☐

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**RN COLUMN TOTALS:** $ 0.00 $ 0.00 $ 0.00 $ 0.00

**RC COLUMN TOTALS:** $ 0.00 $ 0.00 $ 0.00 $ 0.00

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**TOTAL % PAID TO DATE:**

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**I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT AND SUPPORTING DOCUMENTATION IS ON FILE AND AVAILABLE FOR INSPECTION BY DEPARTMENT PERSONNEL AT ANY TIME.**

**ALL PARTICIPATION COUNTED TOWARD FULFILLMENT OF THE DBE GOALS IS (1) REAL AND SUBSTANTIAL; (2) ACTUALLY PERFORMED BY Viable, INDEPENDENT DBE OWNED FIRMS; AND (3) IN ACCORDANCE WITH THE SPIRIT OF APPLICABLE LAWS AND REGULATIONS.**

**PRINT NAME:** ____________________________

**NAME / TITLE**

**SIGNATURE:** ____________________________

( Mandatory)

**PRINT DOCUMENT HAS BEEN REVIEWED AT THE PROJECT LEVEL BY:**

**NAME / TITLE**

**PRINT NAME:** ____________________________

**NAME / TITLE**

( Mandatory)

**PRINT DOCUMENT HAS BEEN REVIEWED AT THE DISTRICT LEVEL BY:**

**NAME / TITLE**

**SIGNATURE:** ____________________________

( Mandatory)

---

Page 1 of 1
SPECIAL PROVISION

PROMPT PAYMENT:

Prime Contractors, who sublet a portion of their work, shall pay their subcontractors for satisfactory performance of their contracts no later than 10 calendar days from receipt of each payment made to them. Any delay or postponement of payment among the parties may take place only for good cause with prior written approval from the Department. If the contractor is found to be in noncompliance with these provisions, it shall constitute a breach of contract and further payments for any work performed may be withheld until corrective action is taken. If corrective action is not taken, it may result in termination of the contract.

Prime contractors must maintain records and documents of payments to subcontractors, including DBEs, for a minimum of three (3) years after Contract Final Acceptance. These records shall be made available for inspection upon request by any authorized representative of the Georgia Department of Transportation or USDOT.

All subcontract agreements shall contain this requirement.
REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONTRACTS

BUY AMERICA

Revised: March 25, 1992
Revised: January 7, 1994
Revised: June 9, 1995
First Use 2013 Specifications: November 1, 2013

All manufacturing processes for steel and iron materials and steel and iron coatings permanently incorporated into this project must occur in the United States of America. However, pig iron and processed, pelletized, or reduced iron ore used in the production of these products may be manufactured outside the United States.

This requirement, however, does not prevent a minimal use of foreign materials and coatings, provided the cost of materials and coatings used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or $2,500.00, whichever is greater.

NOTE: Coatings include: epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of the material.

CONVICT PRODUCED MATERIALS

March 25, 1992
Revised: September 6, 1993
First Use 2013 Specifications: November 1, 2013

Materials produced by convict labor after July 1, 1991, may not be used for Federal-Aid highway construction projects unless it meets the following criteria:

1. The materials must be produced by convicts who are on parole, supervised release or probation from a prison; or,

2. If produced in a qualified prison facility, the amount of such materials produced in any 12-month period shall not exceed the amount produced in such facility for such construction during the 12-month period ending July 1, 1987. A qualified prison is defined as one producing convict made materials prior to July 1, 1987.
Failure to complete appropriate certification requirements identified below or submission of a false certification shall render the bid non-responsive.

EQUAL EMPLOYMENT OPPORTUNITY

I further certify that I have ___/have not ___ participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that I have ___ / have not ___ filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

I understand that if I have participated in a previous Contract or Subcontract subject to the Executive Orders above and have not filed the required reports that 41 CFR 60-1.7(b)(1) prevents the award of this Contract unless I submit a report governing the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

Reports and notifications required under 41 CFR 604, including reporting subcontract awards in excess of $10,000.00 should be addressed to:

Mr. Sam Maiden
Regional Director, U.S. Department of Labor
Office of Federal Contract Compliance Programs, Region 4
Rm. 7B75
61 Forsyth Street, S.W.
Atlanta GA 30303

EXAMINATION OF PLANS AND SPECIFICATIONS

I acknowledge that this Project will be constructed in English units.

I certify that I have carefully examined the Plans for this Project and the Standard Specifications 2013 Edition, the 2016 Supplemental Specifications modifying the 2013 Standard Specifications and Special Provisions included in and made a part of this Proposal, and have also personally examined the site of the work. On the basis of the said Specifications and Plans, I propose to furnish all necessary machinery, tools, apparatus and other means of construction, and do all the work and furnish all the materials in the manner specified.

I understand the quantities mentioned are approximate only and are subject to either increase or decrease and hereby propose to perform any increased or decreased quantities of work or extra work on the basis provided for in the Specifications.

I also hereby agree that the State, or the Department of Transportation, would suffer damages in a sum equal to at least the amount of the enclosed Proposal Guaranty, in the event my Proposal should be accepted and a Contract tendered me thereunder and I should refuse to execute same and furnish bond as
herein required, in consideration of which I hereby agree that, in the event of such failure on my part to execute said Contract and furnish bond within fifteen (15) days after the date of the letter transmitting the Contract to me, the amount of said Proposal Guaranty shall be and is hereby, forfeited to the State, or to the Department of Transportation, as liquidated damages as the result of such failure on my part.

I further propose to execute the Contract agreement described in the Specifications as soon as the work is awarded to me, and to begin and complete the work within the time limit provided. I also propose to furnish a Contract Bond, approved by the State Transportation Board, as required by the laws of the State of Georgia. This bond shall not only serve to guarantee the completion of the work on my part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted, as well as to fully comply with all the laws of the State of Georgia.

CONFLICT OF INTEREST

By signing and submitting this Contract I hereby certify that employees of this company or employee of any company supplying material or subcontracting to do work on this Contract will not engage in business ventures with employees of the Georgia Department of Transportation (GA D.O.T.) nor shall they provide gifts, gratuities, favors, entertainment, loans or other items of value to employees of this department.

Also, by signing and submitting this Contract I hereby certify that I will notify the Georgia Department of Transportation through its District Engineer of any business ventures entered into between employees of this company or employees of any company supplying material or subcontracting to do work on this Contract with a family member of GA D.O.T. employees.

DRUG FREE WORKPLACE

The undersigned certifies that the provisions of Code Sections 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "Drug-free Workplace Act", have been complied with in full. The undersigned further certifies that:

(1) A drug-free workplace will be provided for the Contractor's employees during the performance of the Contract; and

(2) Each Contractor who hires a Subcontractor to work in a drug-free workplace shall secure from that Subcontractor the following written certification:

"As part of the subcontracting agreement with ___ (Contractor's name) ____ , (Subcontractor's name) certifies to the Contractor that a drug free workplace will be provided for the Subcontractor's employees during the performance of this Contract pursuant to paragraph (7) of subsection (b) of Code Section 50-24-3."

Also, the undersigned further certifies that he will not engage in the unlawful manufacture, sale distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the Contract.

BOYCOTT OF ISRAEL

By signing and submitting this Contract and Pursuant to O.C.G.A. Sec. 50-5-85, CONTRACTOR hereby certifies that it is not currently engaged in, and agrees that for the duration of this contract, it will not engage in a boycott of Israel.
NON-COLLUSION CERTIFICATION

I hereby certify that I have not, nor has any member of the firm(s) or corporation(s), either directly or indirectly entered into any agreement, participated in any collusion, nor otherwise taken any action in restraint of free competitive bidding in connection with this submitted bid.

It is understood and agreed that this Proposal is one of several competitive bids made to the Department of Transportation, and in consideration of mutual agreements of the bidders, similar hereto, and in consideration of the sum of One Dollar cash in hand paid, receipt whereof is hereby acknowledged, the undersigned agrees that this Proposal shall be an option, which is hereby given by the undersigned to the Department of Transportation to accept or reject this Proposal at any time within thirty (30) calendar days from the date on which this sealed proposal is opened and read, unless a longer period is specified in the Proposal or the successful bidder agrees in writing to a longer period of time for the award, and in consideration of the premises, it is expressly covenanted and agreed that this Proposal is not subject to withdrawal by the Proposer or Bidder, during the term of said option.

I hereby acknowledge receipt of the following checked amendments of the Proposal, Plans, Specifications and/or other documents pertaining to the Contract.

Amendment Nos.: 1 2 3 4 5. I understand that failure to confirm the receipt of amendments is cause for rejection of bids.

Witness my hand and seal this the ______ day of ____________________, 20_____.

The bidder(s) whose signature(s) appear on this document, having personally appeared before me, and being duly sworn, deposes and says that the above statements are true and correct.

Sworn to and subscribed before me this ______ day of ________________, 20_____.

(Notary Public)

My Commission expires the __________ day of ____________________, 20_____.

(Federal ID No./IRS No.)
# GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

<table>
<thead>
<tr>
<th>Contractor’s Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solicitation/Contract No./ Call No. or Project Description:</td>
</tr>
</tbody>
</table>

## CONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, entity or corporation which is engaged in the physical performance of services on behalf of the Georgia Department of Transportation has registered with, is authorized to use and uses the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

Furthermore, the undersigned contractor will continue to use the federal work authorization program throughout the contract period and the undersigned contractor will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the contractor with the information required by O.C.G.A. § 13-10-91(b). Contractor hereby attests that its federal work authorization user identification number and date of authorization are as follows:

<table>
<thead>
<tr>
<th>Federal Work Authorization User Identification Number (EEV/E-Verify Company Identification Number)</th>
<th>Date of Authorization</th>
</tr>
</thead>
</table>

Name of Contractor

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

<table>
<thead>
<tr>
<th>Printed Name (of Authorized Officer or Agent of Contractor)</th>
<th>Title (of Authorized Officer or Agent of Contractor)</th>
</tr>
</thead>
</table>

Signature (of Authorized Officer or Agent)

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE

___ DAY OF ____________________, 20___

________________________________________[NOTARY SEAL]

Notary Public

My Commission Expires: _______________________

Rev. 11/01/15
Utility Conflicts  
Dated: August 6, 2012

Section 103 - Award and Execution of Contract  
Revised: March 15, 2013

Section 105 - Control of Work  
Dated: April 9, 2018

Section 106 – Control of Materials  
Dated: June 22, 2018

Section 107 - Legal Regulations and Responsibility to the Public  
First Use: June 2016

Section 107.23.A - Legal Regulations and Responsibility to the Public  
First Use: December 1, 2016

Section 150 - Traffic Control  
Revised: October 22, 2018

Section 161 - Control of Soil Erosion and Sedimentation  
Revised: July 30, 2018

Section 163 - Miscellaneous Erosion Control Items  
Dated: August 10, 2017

Section 165 - Maintenance of Temporary Erosion and Sedimentation Control Devices  
Revised: October 27, 2017

Section 167 - Water Quality Monitoring  
Revised: July 30, 2018

Section 171 - Silt Fence  
Dated: January 24, 2018

Section 201 - Clearing and Grubbing of Right of Way  
First Use: December 13, 2013

Section 550 – Storm Drain Pipe, Pipe-Arch Culverts, and Side Drain Pipe  
Revised: July 27, 2016

Section 653 - Thermoplastic Traffic Stripe  
Dated: October 31, 2018
Section 893 - Miscellaneous Planting Materials
Dated: June 30, 2017
Utility companies having known facilities that conflict with the construction of this project will be directed by the Department to adjust or relocate their facilities and will be notified of the contract award.

Conform to all the requirements of the Specifications as they relate to cooperation with utility owners and the protection of utility installations that exist on the project. Refer to the requirements of Section 107, Legal Regulations and Responsibility to the Public, with particular attention to Subsection 107.21.

Coordinate The Work with any work to be performed by others in any right of way clearance and arrange a schedule of operations that will allow for completion of the Project within the specified contract time. Where stage construction is required, notify the utility owner when each stage of work is completed and the site is available for utility work to proceed.

Information concerning utility facilities known to exist within the project limits, including the list of owners, is available for reference.

Under Georgia Code Section 32-6-171, utilities are required to remove or relocate their facilities. The Department is required to give the utility at least 60 days written notice directing the removal, relocation, or adjustment and the utility owner is required to begin work within the time specified in the utility’s work plan or revised work plan.

Upon request, copies of all approved Work Plans submitted by utility companies having facilities on this project will be made available for examination by the Contractor at the Department's District Office. Utility Adjustment Schedules, when submitted to the Department by the utilities, will be made available to the Contractor after the Notice to Contractors has been posted by the Office of Construction Bidding Administration. The Contractor is responsible for considering in its bid all existing and proposed utility locations and the removals, relocations, and adjustments specified in the Utility’s Work Plan.

For this Project, Utility Owners that are required to remove, relocate, or adjust their facility to accommodate the construction of this Project may be liable to the Contractor for damages or delay costs resulting from the Utility Owner’s failure to clear conflicts.
within the time specified in the approved Utility Work Plan. If the Utility Owner is unable to submit and obtain Department approval of a revised Work Plan or fails to complete the removal, relocation, or adjustment of its facilities in accordance with the approved Work Plan, the Utility Owner may be liable to the Department, or the Contractor, for damages or delay costs.

In accordance with Subsection 105.06 of the Specifications, the Department is not liable for payment of any claims due to utility delays, inconvenience or damage sustained by the Contractor due to interference of any utilities or appurtenances, or the operation of moving them.

In any case in which the Contractor believes that it will be entitled to damages or delay costs from the Utility Owner in accordance with O.C.G.A. 32-6-171, the Contractor shall provide written notice to the Utility Owner and the Department within ten (10) days from the time of the dispute or potential dispute is identified. The Contractor shall follow the Procedures for Utility Damages or Delay Costs outlined in the latest edition of The Utility Accommodation Policy and Standards Manual. Failure to follow the above will result in waiver of the Contractor’s claim against the Utility Owner for damages or delay costs.

In accordance with Subsection 107.21.G delays by utilities will continue to be considered by the Department in charging Contract Time. For purposes of applying provisions of this paragraph, railroads and the Metropolitan Atlanta Rapid Transit Authority (MARTA) are considered utilities.
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL PROVISION

Section 103—Award and Execution of Contract
(120 Day Clause)

Delete paragraph one of Subsection 103.02 and substitute the following:

If a Contract is Awarded, it will be Awarded to the lowest reliable bidder whose Proposal shall have met all the prescribed requirements. The Contract will be Awarded, if at all, within 120 calendar days after the opening of the Proposals, unless a longer period is specified in the Proposal or the successful Bidder agrees in writing to a longer period for the Award.
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL PROVISION

Section 105—Control of Work

105.01 Authority of the Engineer
The Engineer will decide all questions that may arise as to the quality and acceptability of materials furnished, work performed, and the rate of progress of The Work; the interpretation of the Plans and Specifications, and all questions as to the acceptable fulfillment of the Contract on the part of the Contractor. The Engineer will determine the quantities of the several kinds of work performed and materials furnished which are to be paid for under the Contract and his determination shall be final.

The Engineer will have the authority to suspend The Work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workmen or general public; for failure to carry out provisions of the Contract, or for failure to carry out orders; for such periods as he may deem necessary due to unsuitable weather; for conditions considered unsuitable for the prosecution of The Work; or for any other condition or reason deemed to be in the public interest.

The Contractor may request and will receive written instructions from the Engineer upon any important items.

After the Contract has been executed, and before work begins, the Engineer may designate a time and place to hold a Preconstruction Conference with the Contractor. At such time, the Contractor shall furnish the Engineer with a Progress Schedule as provided in Subsection 108.03 unless this schedule has been specifically exempted by Special Provision. The Contractor will also be given a decision on any alternate Traffic Control Plan that he may have previously submitted.

Any matters pertaining to order of work, interpretation of Plans and Specifications, traffic control, utility adjustments, or others, may be discussed at the Preconstruction Conference.

105.02 Plans and Working Drawings
Plans will show details of all structures, lines, grades, typical cross sections of the roadway, location and design of all structures, and a summary of items appearing in the Proposal.

The Plans will be supplemented by such working drawings as are necessary to adequately control the Work. Working drawings for structures shall be furnished by the Contractor and shall consist of such detailed Plans as may be required to adequately control The Work and which are not included in the Plans furnished by the Department. They shall include stress sheets, shop drawings, erection plans, falsework plans, cofferdam plans, bending diagrams for reinforcing steel or any other supplementary plans, or similar data required of the Contractor. All working drawings must be approved by the Engineer and such approval shall not operate to relieve the Contractor of any responsibility under the contract for the successful completion of The Work. The Contract Bid Prices shall include the cost of furnishing all working drawings.

105.03 Conformity with Plans and Specifications
All Work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the Plans or indicated in the Specifications.

Plan dimensions and contract Specification values are to be considered as the target values to be strived for and complied with as the design values from which any deviations are allowed. It is the intent of the Specifications that the materials and workmanship shall be uniform in character and shall conform as nearly as realistically possible to the prescribed target value or to the middle portion of the tolerance range. The purpose of the tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons. When either a maximum and minimum value or both are specified, the production and processing of the material and the performance of the work shall be so controlled that material or work will not be preponderantly of borderline quality or dimension.

In the event the Engineer finds the materials or the finished product in which the materials are used not within reasonably close conformity with the Plans and Specifications, but that reasonably acceptable work has been produced, the Engineer
shall then make a determination if the work shall be accepted and remain in place. In this event, except in cases where the appropriate price adjustments are provided for in the Specifications covering the materials and/or the finished product, a Supplemental Agreement will be executed documenting the basis of acceptance that will provide for an appropriate price adjustment in the Contract Price for such work or materials as the Engineer deems necessary to conform to his determination based on engineering judgement.

In the event the Engineer finds the materials or the finished product in which the materials are used or the work performed are not in reasonably close conformity with the Plans and Specifications, and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

105.04 Coordination of Plans, Specifications, Supplemental Specifications, and Special Provisions

These Standard Specifications, the Supplemental Specifications, the Plans, Special Provisions, and all supplementary documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work.

In cases of discrepancy, the governing descending order will be as follows:

1. Project Specific Special Provisions
2. Project Plans including Special Plan Details
4. Supplemental Specifications
5. Standard Plans including Standard Construction Details
6. Standard Specifications

Calculated dimensions will govern over scaled dimensions.

The Contractor shall take no advantage of any apparent error or omission in the Plans or Specifications. In the event the Contractor discovers such an error or omission, he shall immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Plans and Specifications.

A. Specifications of Other Organizations

When work is specified to be done or when materials are to be furnished according to the published specifications of organizations other than the Department, the latest specifications published by those organizations at the time bids are received shall apply unless otherwise specified.

AASHTO Interim Specifications and ASTM Tentative Specifications will be considered effective on date of issue.

B. Item Numbers

The first three digits of any Item Number in the itemized Proposal designates the Specification section under which the Item shall be constructed.

105.05 Cooperation by Contractor

The Contractor will be supplied with an electronic copy of approved Plans and Contract assemblies including Special Provisions. The Contractor shall be responsible for maintaining one set of the approved plans on the project site at all times.

The Contractor will be supplied with of approved Plans and Contract assemblies including Special Provisions.

The Contractor shall give The Work the constant attention necessary to facilitate the progress thereof, and shall cooperate with the Engineer, Inspectors, and other Contractors in every way possible.

The Contractor shall have accessible to the Engineer at all times, as his agent, a competent Superintendent, capable of reading and thoroughly understanding the Plans and Specifications, and thoroughly experienced in the type of work being performed, who shall receive instructions from the Engineer or his authorized representatives. The Superintendent shall have full authority to execute orders or directions of the Engineer without delay and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such superintendence shall be furnished irrespective of the amount of work sublet.
Section 105—Control of Work

The Superintendent shall notify the Engineer prior to starting any Pay Item Work. The Prime Contractor shall coordinate and be responsible to the Engineer for all activities of subcontractors.

105.06 Cooperation with Utilities

The Department will notify all utility companies, all pipeline owners, all railroad companies, or other parties affected of Award of the Contract, giving the name and address of the Contractor, and will assist the Contractor in arranging for all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction.

Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, railroad facilities, and all other utility appurtenances within the limits of the proposed construction which are to be relocated or adjusted are to be moved by the owners at their expense, except as otherwise provided for elsewhere in the Contract.

It is understood and agreed that the Contractor has considered in his bid all of the permanent and temporary utility appurtenances in their present location or relocated positions, and that no additional compensation will be allowed for any delays, inconvenience, or damage sustained by him due to any interference from said utility appurtenances or the operation of moving them. Delays and interruptions to the controlling item or items of The Work are covered in Subsection 107.21.G.

It shall be the Contractor’s responsibility to plan with each utility owner a schedule of operations which will clearly set forth at which stage of the Contractor’s operations the utility owner will be required to perform his removal and relocation work.

105.07 Cooperation Between Contractors

The Department reserves the right at any time to Contract for and perform other or additional work on or near The Work covered by the Contract.

When separate Contracts are let within the limits of any one Project, each contractor shall conduct his work so as not to interfere with or hinder the progress or completion of The Work being performed by other Contractors. Contractors working on the same Project shall cooperate with each other.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his Contract and shall protect and save harmless the Department from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by him because of the presence and operations of other Contractors working within the limits of the same Project.

The Contractor shall arrange his work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors within the limits of the same Project. He shall join his work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others. At the request of the Structure Contractor, the Engineer will designate an area within the right-of-way, adjacent to each structure, to be reserved for use by the Structure Contractor for Storage of Equipment and Materials necessary to construct the particular structure. So long as he occupies this area, the Structure Contractor shall be responsible for its maintenance. The Structure Contractor must relinquish this area, however, as it becomes practical to utilize completed portions of the structure.

105.08 Construction Stakes, Lines and Grades

(Subsection 105.08 Omitted)

105.09 Authority and Duties of the Resident Engineer

The Resident Engineer, regardless of his administrative title, is the Engineer designated by the Department to be the direct representative of the Chief Engineer. The Resident Engineer has immediate charge of the engineering details of each construction Project, and is responsible for contract administration. Such administration includes the designation of subordinates to represent him and make routine decisions. The Resident Engineer has the authority to reject defective material and to suspend any work that is being improperly performed.

105.10 Duties of the Inspector

Inspectors employed by the Department are authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of The Work and to the preparation, fabrication, or manufacture of the materials to be used. The Inspector will not be authorized to alter or waive the provisions of the Contract. The Inspector will not be authorized to issue instructions contrary to the Plans and Specifications or to act as foreman for the Contractor.
105.11 Inspection of the Work
All materials and each part of the detail of The Work shall be subject to inspection by the Engineer.

The Engineer shall be allowed access to all parts of The Work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

Upon the Engineer’s request, the Contractor, at any time before Final Acceptance of the project, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of The Work to the standard required by the Specifications. Should The Work thus exposed or examined prove acceptable, the uncovering or removing and the replacing of the covering or making good of the parts removed will be paid for as Extra Work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing and the replacing of the covering or making good of the parts removed will be at the Contractor’s expense.

Any work done or materials used without supervision or inspection by an authorized Department representative may be ordered removed and replaced at the Contractor’s expense, unless the Department representative failed to inspect after having been given reasonable notice in writing that The Work was to be performed.

When any unit of government or political subdivision or any railroad corporation is to pay a portion of the cost of The Work covered by the Contract, its respective representatives shall have the right to inspect The Work. Such inspection shall in no sense make any unit of government or political subdivision or any railroad corporation a party to the Contract and shall in no way interfere with the rights of either party hereunder.

105.12 Removal of Unacceptable and Unauthorized Work
All work that does not conform to the requirements of the Contract will be considered unacceptable unless otherwise determined acceptable under the provisions in Subsection 105.03.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the Final Acceptance of The Work, shall be removed immediately and replaced in an acceptable manner.

Except as elsewhere noted, no work shall be done without lines and grades having been given by the Engineer. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the Plans or as given, except as herein specified, or any Extra Work done without authority will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced at the Contractor’s expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this section, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and to cause unauthorized work to be removed, and to deduct the costs from any monies due or to become due the Contractor.

105.13 Claims for Adjustments and Disputes
Whenever the Contractor believes that it is or will be entitled to additional compensation, whether due to delay, extra work, breach of contract, or other causes, the Contractor shall follow the procedures set forth in this Sub-Section.

A. Claims For Acceleration
   The Department shall have no liability for any constructive acceleration. If the Department gives express written direction for the Contractor to accelerate its effort, then both parties shall execute a Supplemental Agreement as provided in Subsection 104.03.

B. Claims For Delay and All Other Claims Except Acceleration
   1. The Department shall have no liability for damages beyond those items which are specifically payable under this Sub-Section.
   2. The Department will be liable only for those delay damages caused by or arising from acts or omissions on the part of the Department which violate legal or contractual duties owed to the Contractor by the Department. The Contractor assumes the risk of damages from all other causes of delay.
Section 105—Control of Work

3. The parties recognize that delays caused by or arising from right of way problems, defects in plans or design, redesign, changes in The Work by the Department, the actions of suppliers or other Contractors, the shop-drawing approval process, injunctions, court orders and other such events, forces or factors are commonly experienced in highway construction work. Such delays shall not constitute breaches of the Contract. However, such delays may constitute a basis for a claim for delay damages, if found to be in accordance with Subsection 105.13.B.2 above and other provisions of the Contract, and/or a request for a time extension.

4. The term "delay" shall be deemed to mean any event, action, force or factor which extends the Contractor's time of performance. This Subsection is intended to cover all such events, actions, forces or factors, whether they be styled "delay," "disruption," "interference," "impedance," "hindrance", "impact" or otherwise.

5. Compliance with the provisions of Subsection 105.13 will be an essential condition precedent to any recovery of damages by the Contractor.

6. The following items, and only the following items, may be recoverable by the Contractor as "damages:
   a. Additional direct hourly rates paid to employees for job site labor, including payroll taxes, welfare, insurance, benefits and all other labor burdens.
   b. Documented additional costs for materials.
   c. Additional equipment costs, as determined in accordance with this Sub-Section.
   d. Documented costs of extended job-site overhead. (Not applicable for claims other than delay claims.)
   e. An additional 15 percent of the total of Subsections 105.13.B.6. a, b, c and d, which sum includes home office overhead and profit.
   f. Bond costs.
   g. Subcontractor costs, as determined by, and limited to, those items identified as payable under Subsection 105.13.B.6. a, b, c, d, e, and f.

7. For purposes of computing additional equipment costs, rates used shall be based on the Contractor's actual experienced cost for each piece of equipment. These rates shall be supported by equipment cost records furnished by the Contractor. In no case will equipment rates be allowed in excess of 70% of those determined utilizing the "Rental Rate Blue Book," with the appropriate adjustments noted in Subsection 109.05.

8. The parties agree that, in any claim for damages, the Department will have no liability for the following items of damages or expense:
   a. Profit, in excess of that provided herein.
   b. Loss of profit.
   d. Home office overhead in excess of that provided herein.
   e. Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities and insolvency.
   f. Indirect costs or expenses of any nature.
   g. Attorneys fees, claims preparation expenses, or costs of litigation.
   h. Interest of any nature.

9. NOTICE OF POTENTIAL CLAIM: In any case in which the Contractor believes that it will be entitled to additional compensation, the Contractor shall notify the Engineer in writing of its intent to claim such additional compensation. Such notice shall be given in order that the Department can assess the situation, make an initial determination as to who is responsible, and institute appropriate changes or procedures to resolve the matter.
   a. Claims for Delay - The Department shall have no liability for any delay which occurred more than one week prior to the filing of such written notice. Failure of the Contractor to give such written notice in a timely fashion will be grounds for denial of the claim.
   b. All Other Claims Except Acceleration and Delay - If the Contractor does not file such written notice before beginning the work out of which such claim arises, then the Contractor hereby agrees that it shall have waived any additional compensation for that work and the Contractor shall have no claim thereto.
10. RECORDS: After filing a "Notice of Potential Claim", the Contractor shall keep daily records of all labor, material, and equipment costs incurred for operations affected. These daily records shall identify each operation affected and the specific locations where work is affected. The Department will also keep records of all labor, material, and equipment used on operations affected. At the time and place, as designated by the Engineer, on Monday, or the first work day, of each week following the date of filing a "Notice of Potential Claim", the Contractor shall meet with the Department's representative and present the daily records for the preceding week. If the Contractor's records indicate costs greater than those kept by the Department, the Department will present its records to the Contractor. The Contractor shall notify the Engineer in writing within three (3) work days of any inaccuracies noted in, or disagreements with, the Department's records. Refusal or repeated failure by the Contractor to attend these weekly meetings and present its records will constitute a waiver by the Contractor of any objections as to the accuracy of the Department's records. When the Contractor makes an objection as to the accuracy of the Department's records, the Engineer shall review the matter, and correct any inaccuracies he finds in the Department's records. For purposes of computing damages, the Department's records will control.

In the event the Contractor wishes to contest the accuracy of the Department's records, it may file a petition pursuant to Rule 672-1-.05 of the Official Rules and Regulations of the Department of Transportation. The decision of the Engineer, or, if contested, the decision of the Agency, will be final and binding upon the parties as to any objections to the accuracy of the Department's records, subject to the Contractor's right to judicial review under O.C.G.A. Section 50-13-19.

11. On a weekly basis after filing a "Notice of Potential Claim" for delay damages, the Contractor shall prepare and submit to the Engineer written reports providing the following information:
   a. Potential effect to the schedule caused by the delay.
   b. Identification of all operations that have been delayed, or are to be delayed.
   c. Explanation of how the Department's act or omission delayed each operation, and estimation of how much time is required to complete the project.
   d. Itemization of all extra costs being incurred, including:
      1) An explanation as to how those extra costs relate to the delay and how they are being calculated and measured.
      2) Identification of all project employees for whom costs are being compiled.
      3) Identification of all manufacturer's numbers of all items of equipment for which costs are being compiled.

C. Required Contents of Claims

All claims shall be submitted in writing, and shall be sufficient in detail to enable the Engineer to ascertain the basis and the amount of each claim. The claim submission shall include six (6) printed copies and one (1) digital copy on Recordable disk. All information submitted to the Department under this Subsection will be used exclusively for analyzing the claim, resolving the claim or any litigation which might arise from the claim. At a minimum, the following information shall be provided:

1. A description of the operations that were delayed, the reasons for the delay, how they were delayed, including the report of all scheduling experts or other consultants, if any. (Not applicable for claims other than delay claims)
2. An as-built chart, CPM scheme or other diagram depicting in graphic form how the operations were adversely affected. (Not applicable for claims other than delay claims except where an extension of time is sought)
3. A detailed factual statement of the claim providing all necessary dates, locations and items of work affected by the claim.
4. The date on which actions resulting in the claim occurred or conditions resulting in the claim became evident.
5. A copy of the "Notice of Potential Claim" filed for the specific claim by the Contractor.
6. The name, function, and activity of each Department official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.
7. The name, function, and activity of each Contractor or Subcontractor official, or employee, involved in, or knowledgeable about facts that gave rise to such claim.
8. The identification of any pertinent documents, and the substance of any material oral communication relating to such claim.
9. A statement as to whether the additional compensation or extension of time sought is based on the provisions of the Contract or an alleged breach of Contract.
10. The specific provisions of the Contract which support the claim, and a statement of the reasons why such provisions support the claim.
11. The amount of additional compensation sought and a break-down of that amount into the categories specified as payable under Subsection 105.13.B.6, above.

12. If an extension of time is also sought, the specific days for which it is sought and the basis for such request.

D. Required Certification of Claims

When submitting the claim, the Contractor shall certify in writing, under oath in accordance with the formalities required by Georgia law, as to the following:

1. That the claim is made in good faith.
2. That supportive data are accurate and complete to the Contractor's best knowledge and belief that the amount of the claim accurately reflects what the Contractor in good faith believes to be the Department's liability.

The Contractor shall use the CERTIFICATE OF CLAIM form, which can be obtained from the Department, in complying with these requirements.

E. Auditing of Claims

All claims filed against the Department shall be subject to audit at any time following the filing of such claim, whether or not such claim is part of a suit pending in the courts of this State. The audit may be performed by employees of the Department or by an independent auditor on behalf of the Department. The audit may begin on ten days notice to the Contractor, Subcontractor, or Supplier. The Contractor, Subcontractor, or Supplier shall make a good faith effort to cooperate with the auditors. Failure to cooperate with the auditor shall constitute a waiver by the Contractor of the claim in its entirety. Failure of the Contractor, Subcontractor, or Supplier to maintain and retain sufficient records to allow the Department's auditor to verify the claim shall constitute a waiver of that portion of such claim that cannot be verified and shall bar recovery thereunder. If the claim is part of a suit pending in a court of this State or if the claim becomes a part of a suit in a court of this state, the questions of whether the Contractor has cooperated with the auditor or failed to maintain and retain sufficient records to allow the auditor to verify the claim shall be questions for determination by the judge without the assistance of a jury.

Without limiting the generality of the foregoing, and as a minimum, the auditors shall have available to them the following documents:

1. Daily time sheets and foreman's daily reports.
2. Project payroll register.
3. Profit and loss statements for the Project.
4. Payroll tax returns.
5. Material invoices, purchase orders, and all material and supply acquisition contracts for the Project.
6. Material cost distribution worksheet for the Project.
7. Equipment records (list of company equipment, rates, etc.)
8. Vendor rental agreements, and subcontractor invoices.
9. Subcontractor payment certificates.
10. Canceled checks (payroll and vendors) for the Project.
12. Job payroll ledger for the Project.
13. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.
15. Certified financial statements for all years reflecting the operations on this project.
16. Depreciation records on all company equipment whether such records are maintained by the company involved, its accountant, or others.
17. If a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
18. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim.
19. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents which establish the time periods, individuals involved, the hours and the rates for the individuals.
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F. Mediation

After compliance by the Contractor with parts B., C., D. and E. of Subsection 105.13 and if the Contractor’s claim has been disallowed in whole or in part, then the Contractor may, within 30 calendar days from receipt of the ruling of the Engineer, make a written request to the Engineer that the claim or claims be referred to mediation.

If requested in accordance with this specification, mediation shall be granted by the Department. In which case, within 30 days of receipt by the Department of the Contractor’s request for mediation, the Contractor and the Department will meet to select a mediator. The mediator will then schedule the mediation at a place, time, and earliest date agreeable to the Contractor and the Department.

The Contractor and the Department mutually agree that mediation shall be a condition precedent to the filing of any lawsuit concerning claims or alleged breaches of the Contract. The costs and expenses of the mediator, selected by mutual agreement of the parties, will be divided equally between the Department and the Contractor. Each party to the mediation shall bear its own costs of preparing for and participating in the mediation.

G. Remedies Exclusive

In the event any legal action is instituted against the Department by the Contractor on account of any claim for additional compensation, whether on account of delay, acceleration, breach of contract, claimed extra work, or otherwise, the Contractor agrees that the Department’s liability will be limited to those items which are specifically identified as payable in Sub-Section 105.13.

105.14 Maintenance During Construction

The Contractor shall maintain the project during construction and until the Project is accepted. This maintenance shall constitute the continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that all areas of the project are kept in satisfactory condition at all times.

The Contractor’s area of responsibility for maintenance is confined to the physical construction limits plus any areas affected by the Contractor’s activities. Once maintenance acceptance or final acceptance has been made, the Contractor is no longer responsible for damage to The Work other than that attributable to the Contractor’s actions or inadequate construction.

In case of separate contracts, each Contractor shall be responsible for any damage to the completed work of others caused by his actions or negligence. Where the work of one Contractor has been accepted by the Department, the Contractor performing subsequent work in the area shall be responsible for the maintenance and protection of all work previously completed.

If separate bridge contracts are let within the limits of a Roadway Project and the Bridge Contractor completes his Contract before the Roadway Contractor, the Bridge Contract may be accepted and the Roadway Contractor will be responsible for maintenance of the new bridge until it is opened to traffic. If the Roadway Contractor hauls materials across the bridge the Roadway Contractor shall protect the endposts, deck surface, deck edges, joints, and all other vulnerable features of the bridge by use of adequate timber or earth cushions as directed by the Engineer. The Roadway Contractor shall repair all damage caused by such use, including resealing of joints and rerubbing of finish at his own expense.

All cost of maintenance work during construction and before the Project is accepted shall be included in the Unit Prices Bid on the various Pay Items and the Contractor will not be paid an additional amount for such work except as provided in Subsection 104.05.B.

The Contractor shall not allow vegetative growth at any time to obstruct signs, delineation, traffic movements, or sight distance. The Contractor shall at intervals not to exceed six months, clean up and remove litter and debris; remove weeds from around guardrail, barrier, poles, standards, utility facilities, and other structures; and cut or trim trees, bushes or tall grass. These requirements shall apply to all areas within the project termini and lateral limits.

105.15 Failure to Maintain Roadway or Structures

If at any time, the Contractor fails to comply with the provisions of Subsection 105.14, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy the unsatisfactory maintenance within 48 hours after receipt of such notice, the Engineer may immediately proceed to maintain The Work, and the entire cost of this maintenance will be deducted from monies due or to become due the Contractor under the Contract. As an alternative to the Engineer’s maintaining the Work, all the Items and quantities of work done, but not properly maintained, may be deducted from the current progress estimate, even if such Items have been paid for in a previous estimate.
105.16 Final Inspection and Acceptance

A. Corrective list

Excluding resurfacing projects, no less than 60 (Sixty) calendar days prior to the Contract Completion Date the Engineer will hold a Closing Conference and perform an inspection of the Work. Any items found unsatisfactory during this inspection will be detailed as necessary remedial work and provided to the Contractor in the form of a Corrective list. A Corrective list is intended to facilitate timely completion of the Work. Resurfacing projects necessitate the Engineer commence a Closing Conference and inspection no less than 14 calendar days to the Contract Completion Date unless otherwise arranged and agreed to by the Contractor.

The Contractor is encouraged to request additional inspections earlier in the Project as major portions of the work appear complete.

Production of a Corrective list does not, in any way, represent a Final Inspection having been performed.

B. Final Inspection

Upon receipt of a written notice from the Contractor of completion of the entire Project, the Engineer will schedule and make an inspection for Acceptance within 7 business days. No time charges shall be applied to the Contractor for the Engineer’s inability to meet the 7 business day allowance. If all construction provided for and contemplated by the Contract is found completed to the Engineer’s satisfaction and all documents required in connection with the Project have been submitted by the Contractor, the Engineer will consider this the Final Inspection. The Engineer will subsequently make the Final Acceptance and notify the Contractor in writing of this acceptance. The Engineer will have the final decision on when the Project is complete.

If, however, the Inspection discloses any work, in whole or part, as being unsatisfactory, the Engineer will detail the remedial work required to achieve acceptance and provide the Contractor the necessary instructions for correction of same. Only one list of instructions will be generated by the Engineer. The Contractor shall immediately comply with and execute such instructions. Subsequent inspections will be made on the remedial work until the Engineer accepts all Work. Such subsequent inspections are only for the purpose of assessing completion of the instructions provided. When all construction provided for and contemplated by the Contract is found completed to the Engineer’s satisfaction, including submission of all documents required in connection with the Project, the Engineer will make the Final Acceptance and notify the Contractor in writing of this acceptance.

When the Contractor has finished a major portion of the Contract, the Contractor may request that a semi-final inspection be made. At the discretion of the Engineer, who shall be sole judge as to making the inspection, if the work is satisfactory, as described in the first paragraph of this Section, that portion of the Contract may be accepted, opened to traffic, if not already carrying traffic, and the Contractor relieved of the maintenance obligations as described elsewhere in these Specifications.

Such partial acceptance shall in no way relieve the Contractor of responsibility for satisfactory completion of the Contract, or for failure of any portion of the accepted work prior to Final Acceptance of the Project.
Delete Section 106 and substitute the following:

106.01 Source of Supply and Quantity of Materials
The materials used in The Work shall meet all quality requirements of the Contract. Materials will not be considered as finally accepted until all tests, including any to be taken from the finished Work have been completed and evaluated. To expedite the inspection and testing of materials, the Contractor shall notify the Engineer in writing of his proposed sources of materials at least 2 weeks before delivery, or earlier if blend determinations or mix designs are required. When required, representative preliminary samples of the character and quality prescribed shall be submitted for examination and testing. The approval of preliminary samples does not obligate the Engineer to accept materials from the same source delivered later. If, after trial, it is found that sources of supply for previously approved materials do not produce uniform and satisfactory products, or if the product from any source proves unacceptable at any time, the Contractor shall furnish materials from other sources. The Engineer shall have the right to reject the entire output of any source from which he finds it is impractical to secure a continuous flow of uniformly satisfactory material.

Upon request by the Department, the Contractor shall furnish formal written invoices from the materials suppliers.

The invoice shall show the date shipped, the quantities, and the unit prices.

The Contractor shall purchase materials from suppliers who are willing for the Contractor to furnish the Department copies of invoices as noted herein upon request by the Department.

Materials used and operations performed under Section 400- Hot Mix Asphaltic Concrete Construction, shall be controlled and tested by the Contractor. This shall be done in such a manner as to produce a uniform product that meets Specification requirements. In the event the Contractor’s quality control procedures do not achieve the desired objective, operations shall be suspended until satisfactory results are obtained.

The Contractor’s quality control personnel shall be properly instructed and trained to perform all tests and make calculations, and shall be competent to control all processes so that the requirements are met.

106.02 Unacceptable Material
All material not conforming to the requirements of the Specifications will be considered as unacceptable. All unacceptable materials, whether in place or not, will be rejected and shall be removed immediately from the site of The Work unless otherwise directed by the Engineer. In case of failure by the Contractor to comply promptly with any order by the Engineer to remove rejected materials, the Engineer shall have authority to have such rejected materials removed by other means and to deduct the expense of such removal from any monies due, or to become due, to the Contractor. No rejected materials, the defects of which have been corrected, shall be used until the Engineer has given approval.

106.03 Samples, Tests, Cited Specifications
All materials will be inspected, tested, and approved by the Engineer before incorporation into The Work. Samples will be taken by a qualified representative of the Department. Unless otherwise designated, tests will be made by and at the expense of the Department and in accordance with methods of AASHTO, ASTM, or the published Specifications of any other designated organization that are current on the date of advertisements for bids. Copies of all tests will be furnished to the
Contractor’s representative at his request. Sampling and testing by the Department will be performed in accordance with the Sampling, Testing and Inspection Manual.

For work performed under Section 400- Hot Mix Asphaltic Concrete Construction all materials shall be inspected and tested by the Contractor before incorporation into The Work. The Contractor’s Quality Control Technician shall sample and test all quality control samples. The Contractor’s quality control tests may be used as acceptance tests at the discretion of the Engineer. Sampling and testing by the Contractor shall be performed according to the Sampling, Testing, and Inspection Manual. Copies of all tests performed by the Contractor shall be furnished to the Engineer and will become a part of the project records. The Department will be responsible only for determining the acceptability of the construction and materials incorporated therein. The Contractor shall be responsible for the quality of the construction and materials incorporated therein. The Department will monitor the Contractor’s Quality Assurance Acceptance Program to verify test accuracy.

A. Testing and Acceptance Plans

A Lot: Work will be accepted on a Lot-to-Lot basis in accordance with the requirements specified in the Acceptance Plans specified in Section 400- Hot Mix Asphaltic Concrete Construction. Lot sizes will normally be specified. In the event, however, that operational conditions cause work to be interrupted, or only partially completed before the Lot size specified has been achieved, the Lot may be redefined by the Engineer as being either the amount of work accomplished within the day, or he may combine that work with the next Lot of work. A Lot is set forth in these Specifications as a defined quantity of a specified material from a single source or a measured amount of specified construction assumed to be produced by the same process.

Acceptance Plans: The Acceptance Plan for a material, product, or an Item of construction, or completed work will be as specified hereinafter in Section 400 and Section 430 of these Specifications. However, in addition to the following conditions, the Department reserves the right to test any additional material for work that appears defective and to require correction if necessary prior to Final Acceptance of the Project.

Resampling of Lots: It is the intent of these Specifications that Lots of materials, products, Items of construction, or completed construction will meet Specification requirements at the time of submission. Resampling of deficient Lots as a basis for check tests may be done by the Engineer at his option.

Non-conforming Lots, which can be corrected by reworking, will not be re-sampled before such corrective action is taken. Sampling and testing of reworked areas shall be at the expense of the Contractor.

Acceptance or Rejection: Nonconforming Lots, materials, products, or Items of construction that are not adaptable to correction by reworking shall be removed and replaced, accepted without payment, or accepted at an adjusted price as stated in the Specifications, or if not stated, as directed by the Engineer.

Following the application of the Acceptance Plan, the decision of the Engineer shall be final as to the acceptance, rejection, or acceptance at an adjusted price of the Lots unless the Contractor elects to remove and replace any deficient materials or work at his expense.

Adjusted Payment:

Single Deficiency: A single deficiency is defined as a deficiency involving one characteristic of a material within a Lot. In the case of single-characteristic deficiency, it shall be used directly to determine an adjusted Contract Price.

Multiple Deficiency: A multiple deficiency is defined as deficiencies involving more than one characteristic of construction within a Lot. In the case of multiple deficiencies, the related adjusted percentage of Contract Price for each characteristic shall be determined and the greatest reduction in price shall be used to determine the Contract Unit Price to be paid. Should the total adjustment for any individual Lot be 50 percent or more, the Engineer will determine whether the deficient Lot should be removed and replaced or allowed to remain in place. No payment will be made for the original Lot or for its removal. Replacement of the Lot will be paid for in accordance with the provisions for the Item.

106.04 Plant Inspection

At the option of the Engineer, materials may be sampled and tested at the source of supply. In the event plant inspection is undertaken, the following conditions shall be met:
A. The Engineer shall have the cooperation and assistance of the Contractor as well as the Contractor’s material supplier.

B. The Engineer shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials being furnished.

C. If specified in the Proposal, the Contractor shall arrange for an approved building for the use of the inspector; such building to be located conveniently near the plant, independent of any building used by the material producer, and conforming to the requirements of Subsection 106.11 and Section 152.

D. Adequate safety measures shall be provided and maintained. This shall include sampling valves on storage tanks for bituminous materials and safety stands for use in sampling from truck beds.

E. It is understood that the Department reserves the right to retest all materials which, prior to incorporation into The Work, have been tested and accepted at the source of supply and after the same have been delivered. The Department further reserves the right to reject all materials which, when retested, do not meet the requirements of the Contract Specifications.

106.05 Materials Certification

For certain products, assemblies, and materials, in lieu of normal sampling and testing procedures by the Contractor and the Department, the Engineer may accept from the Contractor the manufacturer’s certification with respect to the product involved, under the conditions set forth in the following paragraphs:

A. The certification shall state that the named product conforms to the Department’s requirements and that representative samples thereof have been sampled and tested as specified.

B. The certification shall either:
   1. Be accompanied with a certified copy of the test results, or
   2. Certify that such test results are on file with the manufacturer and will be furnished to the Engineer upon demand.

C. The certification shall give the name and address of the manufacturer and the testing agency and the date of tests, and shall set forth the means of identification which will permit field determination of the product delivered to the project as being the product covered by the certification.

D. The certification shall be in duplicate with one copy to be sent with the shipment of the covered product to the Department’s Project Engineer, and with one copy sent to Office of Materials and Research, 15 Kennedy Drive Forest Park, Georgia 30297.

   No Certificate will be required for Portland Cement when furnished from a manufacturer approved by the Department.

E. The Department will not be responsible for any costs of certification or for any costs of the sampling and testing of products in connection therewith.

F. The Department reserves the right to require samples and to test products for compliance with pertinent requirements irrespective of prior certification of the products by the manufacturer. Any materials that fail to meet specification requirements will be rejected.

106.06 Agricultural Lime and Fertilizer

The sale and distribution of Fertilizers and Agricultural Lime are governed by Acts of the Georgia General Assembly and Rules and Regulations of the State Department of Agriculture.

Therefore, either of these materials may be sampled by authorized representatives of the State Commissioner of Agriculture. The Contractor may use these materials in The Work without sampling provided he notifies the Engineer 48 hours in advance of anticipated delivery to the job site. The Engineer reserves the right to request random sampling by a representative of the State Department of Agriculture.

The Contractor will not be expected to withhold application pending completion of tests, but will not be relieved of the responsibility for the quality of the material furnished. In the event a sample fails to meet the requirements of the Georgia Law as evidenced by a report furnished by the Commissioner of Agriculture, the Engineer will deduct from monies due to the Contractor a sum equal to the penalty authorized by the above referenced Act.
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106.07 Sample Holes
All holes dug or drilled for the purpose of taking samples or determining thickness any time before Final Acceptance of the Project shall be repaired by the Contractor.

The material replaced shall be compacted and finished to the satisfaction of the Engineer. Costs of this work shall be included in the appropriate Bid Items.

106.08 Storage of Materials
For purposes of this Specification, flammable materials are defined as those materials capable of being easily ignited and of burning quickly. Combustible materials are those materials capable of producing a usually rapid chemical process that creates heat and usually light.

Portions of the right-of-way, approved by the Engineer, may be used for material storage purposes and for the placing of the Contractor’s plant and equipment. Additional space required must be provided by the Contractor at no additional expense to the Department. Private property shall not be used for storage purposes without written permission of the owner or lessee, and if requested by the Engineer, copies of such written permission shall be furnished.

Materials shall be stored to assure the preservation of their quality and fitness for The Work, and shall be located so as to facilitate their prompt inspection. Stored materials, even though approved before storage, may again be inspected before their use in The Work.

All storage sites shall be restored to their original condition by the Contractor at no additional expense to the Department.

No flammable or combustible materials or harmful chemicals shall be stored within 200 ft (60 m) of a structure, to include but not limited to bridges nor within 200 ft (60 m) of a roadway open to traffic. Such materials shall be stored in accordance with directions from the manufacturer and any applicable requirements of the Georgia Office of the Safety Fire Commissioner, Georgia Department of Community Affairs and current edition of the International Fire Code.

106.09 Handling Materials
All materials shall be handled in such a manner as to preserve their quality and fitness for The Work. Aggregates, and mixtures of aggregates with other materials, shall be transported from the storage site to The Work in tight vehicles so constructed as to prevent loss or segregation of materials after loading and measuring in order that there may be no inconsistency in the qualities of the materials intended for incorporation into The Work as loaded and the qualities as actually received at the place of operation. The actual incorporation of the material in The Work shall be such that the quality and fitness of the material is retained and no segregation results.

106.10 Local Material Sources
A. Sources Shown on the Plans

Possible sources of local materials and/or disposal areas may be designated on the Plans. The quality of materials in such deposits will be acceptable in general but the Department does not warrant either the quality or the quantity of materials shown on the Plans. The Contractor shall determine the amount of equipment and work required to produce a material meeting the Specifications. Pit mixing, selective excavation, and other such operations shall be expected and the Contractor shall determine the extent of these activities. It shall be understood that it is not feasible to ascertain from samples the limits for an entire deposit and that variations in quality and quantity shall be considered as usual and are to be expected.

1. When easements to secure local materials and/or disposal areas are obtained by the Department, the Plans will show the locations of the pits or areas, the amount of royalties and other costs and conditions of acquisition of the material. In all cases where the Department has secured easements for material pits and/or disposal areas, these easements will be assigned to the Contractor who shall make prompt payment to the owners of such pits for all royalty and crop damage costs for materials and/or areas, and who shall further fulfill all of the terms of the Easement. The Department does not warrant the title or any interest of the property owner in such Easements.

2. If the Contractor elects to use only a portion of the materials or area estimated to be available in any pit or disposal area, or only clears or partially clears the pit or area, and does not remove or deposit any material, he shall make a
minimum payment to the property owner of at least 33-1/3 percent of the estimated value of the pit or areas as shown in the Easement, plus any crop damage costs called for by the Easement.

The Contractor shall, before receiving final payment from the Department, submit to the Engineer a written statement signed by the owner stating that the owner has been paid in full and that all conditions agreed to have been fulfilled to the satisfaction of the owner. The Department will not take any separate payment to the Contractor for these material acquisition costs except that reclamation of the pit or area, if required, will be paid for in accordance with Section 160.

Should the Contractor fail to pay the property owner within 60 days after ceasing to use the pit or area, the Department may pay directly to the property owner any amounts due and deduct same from any funds due the Contractor. This provision does not affect the obligation of the Contractor under his Bond or the rights of the property owner or the Department under the Bond.

B. Substitution of Sources of Materials

1. If, after the Contract is awarded, the Contractor wishes to substitute other sources for sources designated on the Plans, he may do so provided the material to be substituted conforms to the Specifications. The Contractor shall make all necessary arrangements with the property owners for removal of the material from substituted pits. Payment will be made for Clearing and Grubbing, Stripping Excavation, Pit Reclamation, and Ditch Excavation only to the extent required for pits shown in the Plans. This does not relieve the Contractor from planting a satisfactory cover crop of the type called for on the Plans or required by the Specifications on all scarred areas created by the removal of materials.

In the event the Contractor substitutes a source for soil-cement, soil-bituminous, or other material to be stabilized, and the Engineer determines that the substitute source requires more stabilizing agent than the Plan pit, no payment will be made for the additional stabilizing agent required.

2. Substitution sources will not be allowed where the resulting scars will present an unsightly appearance from any State or Federal highway.

C. Material Pits Furnished By the Contractor

When sources of any, or all, local materials are not shown on the Plans, or when location maps of possible sources of materials are shown on the Plans for information but no Easements are obtained, the Contractor shall provide sources of material meeting Contract requirements and acceptable to the Engineer. The Contractor shall make arrangements with the property owner regarding rights to remove material from the pits but prior to Final Acceptance of the Project by the State, the Contractor shall furnish the Engineer documentary proof of payment to the property owner for all materials as stated in Subsection 106.10.A.2 above. Under these circumstances, no separate payment will be made for Clearing and Grubbing, or Reclamation of Pits. Material sources shall not be excavated at locations where the resulting scars will present an unsightly appearance from any State or Federal highway. No payment will be made for material obtained in violation of this provision.

The Contractor shall provide a survey and sketch for all contractor-furnished material pits and haul road routes in accordance with the following:

The pit boundaries and haul road routes shall be selected and staked at 200 ft (60 m) intervals or as required by the Engineer. Minimum work shall include measurement of pit boundaries and haul road routes using a chain or stadia and measurement of angles or bearings using a transit or a Brunton Compass. Pit boundaries and haul road routes shall be adequately marked and referenced to a centerline station number on the project.

D. Haul Roads

Unless specifically provided, no separate payment will be made to the Contractor for construction or maintenance of any roads constructed for hauling materials. The cost of constructing, maintaining, and revegetating, if necessary, these haul roads shall be included in the prices bid for the Pay Items pertaining to the part of The Work in which the materials are used. Other designated Haul Roads will be paid for in accordance with Section 233.
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106.11 Field Laboratory
The Contractor may be required to provide a field laboratory on or near the Project consisting of a suitable building in which to house and use the equipment necessary to perform the required tests. The building, if required, will meet the requirements of and be paid for in accordance with Section 152.

At all permanent plants producing asphaltic concrete, Portland cement concrete or cement stabilized base course materials, a fully equipped plant laboratory shall be furnished at no expense to the Department.

106.12 Inspection for Non-Domestic Materials
A. Materials Manufactured Outside the United States
   Materials which are manufactured outside the United States shall be delivered to a distribution point in the United States, where the materials shall be retained for a sufficient period of time to permit inspection, sampling, and testing. The Contractor, at no cost to the Department, shall furnish facilities and arrange for all testing as required by the Engineer to ensure that the materials comply with the Specifications. All such tests shall be made in the presence of the Engineer or his representative, and if the tests are performed outside of the boundaries of the State of Georgia and its contiguous area, the Contractor shall reimburse the Department for the expenses actually incurred by the Engineer or his representative in attending the tests.

B. Certified Mill Test Reports
   Certified mill test reports shall be furnished for all materials obtained from foreign manufacturers. Such reports shall be printed in English and shall be clearly identifiable to the lot of material tested.

C. Materials from Foreign Manufacturers
   Materials shall be furnished only from those foreign manufacturers who have previously established, to the satisfaction of the Engineer, the sufficiency of their in-plant quality control which will give satisfactory assurance of the manufacturer’s ability to furnish material uniformly and consistently in compliance with the Specifications. Such sufficiency shall be established by detailed written evidence to the Engineer’s satisfaction, or, if deemed necessary, through in-plant inspection by the Engineer or his representative; the cost of such inspection to be reimbursed by the Contractor.

D. Structural Steel Fabricated Outside the State of Georgia
   In the event the Contractor elects to have items of structural steel fabricated outside the boundaries of the State of Georgia and its contiguous area, the Contractor shall reimburse the Department for the actual cost of the shop inspection of such fabrication in excess of the average inspection cost for shop inspection of fabrication within the State of Georgia and its contiguous area. Such actual costs of shop inspection may include the actual expenses incurred by the Engineer or his representative in making an in-plant inspection, arranging for an approved inspection agency to make the shop inspection, and the cost of the shop inspection by the approved inspection agency.

E. Department Reimbursement
   In the event the Contractor fails to reimburse the Department promptly for any of the costs established by this provision, the Contractor agrees that the amount of such costs may be deducted from amounts of money owing to the Contractor on Monthly Estimates or Final Estimate.

F. Definitions
   The following definitions shall apply to Subsection 106.12.
   United States: The geographical area of the United States of America excluding its territories and possessions.
   State of Georgia and Contiguous Area: The geographical area within the State of Georgia and those states which share a common border with the State of Georgia.
   Average Inspection Cost: The average of the actual expenses incurred in making an inspection within the area designated as determined by the Engineer.
   Foreign Manufacturer: A manufacturer of materials where the materials are manufactured outside the geographical area of the United States.
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106.13 Out of State Materials Payment

Materials payments to Contractors who elect to have materials fabricated and stored outside the boundaries of the State of Georgia shall be made under the following guidelines.

The Contractor shall submit a written request to the Engineer for an inspection of out-of-state materials. This request shall state that the Contractor agrees to reimburse the Department for the actual cost of travel, subsistence, and extra expense incurred by the Department in the execution of this inspection and any subsequent inspection that may be necessary. This request shall be signed by a person legally responsible to bind the company and shall be notarized.

In the event the Contractor fails to reimburse the Department promptly for any of the costs established by this provision, the Contractor agrees that the amount of such costs may be deducted from amounts of money owing to the Contractor on Monthly Estimates or Final Estimate.

The above requirements are not applicable to the fabrication and materials payment for structural steel, prestress beams, precast bridge units, and piling for bridge construction within the states which share a common border with the State of Georgia.
Delete Section 107 and Substitute the following:

107.01 Laws to Be Observed
The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, codes, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on The Work, or which in any way affect the conduct of The Work. The Contractor shall at all times observe and comply with all such laws, ordinances, codes, regulations, orders, decrees, and permits; and shall protect and indemnify the Department and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, code, regulation, order, decrees, and permits, whether by himself, his employees, subcontractors, or agents.

107.02 Permits and Licenses
The Contractor shall procure all permits and licenses, pay all charges, taxes, and fees, and give all notices necessary and incidental to the due and lawful prosecution of The Work.

107.03 Patented Devices
If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, he shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the Department from any and all claims for infringement by reason of the use of any such patented design, device, material, or process, or any trademark or copyright, and shall indemnify the Department for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of The Work.

107.04 Restoration of Surfaces Opened By Permit
The right to construct or reconstruct any utility service in the highway or street and to grant permits for the same at any time, is expressly reserved by the Department for the proper authorities of the municipality or county in which The Work is done and the Contractor shall not be entitled to any damages either for the digging up of the street or highway, or for any delay occasioned thereby.

Any individual, firm, or corporation wishing to make an opening in the street or highway must secure a permit from the Department. The Contractor shall allow parties bearing such permits, and only those parties, to make openings in the street or highway. When ordered by the Engineer, the Contractor shall make in an acceptable manner all necessary repairs due to such openings and such necessary work will be paid for as Extra Work, or as provided in the Specifications, and will be subject to the same conditions as original work performed.

107.05 Federal-Aid Provisions
When the United States Government pays all or any part of the cost of a project, the Federal laws and the rules and regulations made pursuant to such laws must be observed by the Contractor, and The Work shall be subject to the
inspection of the appropriate Federal agency. Such inspection shall in no sense make the Federal Government a 
party to this Contract and will in no way interfere with the rights of either party hereunder.

107.06 Sanitary Provisions
The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his 
employees as may be necessary to comply with the requirements of the State Department of Health and other 
authorities having jurisdiction, and shall permit no public nuisance.

107.07 Public Convenience and Safety
The Contractor shall at all times so conduct The Work as to assure the least possible obstruction of traffic. The 
safety and convenience of the general public and the residents along the highway and the protection of persons and 
property shall be provided for by the Contractor as specified under Subsection 104.05, Subsection 107.09, Section 
150, the Project Plans, and Special Provisions.

Traffic whose origin and destination is within the limits of the Project shall be provided ingress and egress at all 
times unless otherwise specified in the Plans or Special Provisions. The ingress and egress includes entrance and 
exit via driveways at the various properties, and access to the intersecting roads and streets. The Contractor shall 
maintain sufficient personnel and equipment on the project at all times, particularly during inclement weather, to 
ensure that ingress and egress are provided when and where needed.

Two-way traffic shall be maintained at all times unless otherwise specified or approved. The Contractor shall not 
stop traffic without permission granted by the Engineer.

All equipment used on The Work shall come equipped with factory-installed mufflers, or manufacturer’s 
recommended equivalent, in good condition. These mufflers shall be maintained in good condition throughout the 
construction period.

107.08 Railroad-Highway Provisions
All work to be performed by the Contractor on a railroad company’s right-of-way or property shall be done in a 
manner satisfactory to the chief engineer of the railroad company, or his authorized representative, and shall be 
performed at such times and in such manner as not to unnecessarily interfere with the movement of trains or traffic 
upon the track of the railroad company. The Contractor shall use all reasonable care and precaution in order to avoid 
accidents, damage, or unnecessary delay or interference with the railroad company’s trains or other property, or 
property of tenants of railroad company.

The Contractor shall notify the railroad company and obtain its approval before commencing work on the railroad 
company’s right-of-way or property.

The Contractor shall determine what measures are required by the railroad company to protect its operations and 
right-of-way or property during construction. Such protection may include the use of a flagger or flaggers provided 
by the railroad company. The Contractor shall be responsible for ensuring that the required protection is provided 
and shall pay the railroad company directly for any and all such services which may be required to accomplish the 
construction unless otherwise specified.

Any temporary grade crossings or other means needed during construction by the Contractor for transporting 
materials of any nature and/or equipment across the railroad tracks will be the responsibility of the Contractor to 
handle directly with the railroad company and bear all costs incidental to such crossings including flagging services 
provided by the railroad company.

A “Special Provisions for the Protection of Railroad Interests” may be included in the proposal to stipulate insurance 
and other requirements of the railroad company.

107.09 Barricades and Danger, Warning, and Detour Signs
The Contractor shall furnish, install, and maintain all necessary and required barricades, signs, and other traffic 
control devices in accordance with these Specifications, Project Plans, Special Provisions, and the MUTCD, and 
take all necessary precautions for the protection of the work and safety of the public.

Unless otherwise specified, all traffic control devices furnished by the Contractor shall remain the property of the 
Contractor.
107.10 Forest Protection
In carrying out work within or adjacent to State or National Forests, or any other forests, parks, or other public or private lands, the Contractor shall obtain necessary permits and comply with all of the regulations of the appropriate authorities having jurisdiction over such forest, park, or lands. The Contractor shall keep the areas in an orderly condition, dispose of all refuse, obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other structures in accordance with the requirements of the appropriate authority.

The Contractor shall take all reasonable precautions to prevent and suppress forest fires and shall require his employees and subcontractors, both independently and at the request of forest officials, to do all reasonably within their power to prevent and suppress and to assist in preventing and suppressing forest fires; to notify a forest official at the earliest possible moment of the location and extent of any fire seen by them; and to extinguish or aid in extinguishing nearby fires.

107.11 Construction Over or Adjacent to Navigable Waters
A. Navigation to Be Protected
Since navigable waterways are under the jurisdiction of the United States Coast Guard and/or the United States Army Corps of Engineers, all work done in, over, on or adjacent to such waters shall comply with their requirements. Free navigation shall not be impeded, and navigable depths shall be maintained.

The Contractor shall comply with permits issued by the United States Coast Guard and/or the United States Army Corps of Engineers, and the Contractor shall obtain and comply with other permits in accordance with the requirements of Subsection 107.02

Special Provisions for environmental protection may be included in the proposal to stipulate environmental commitments and other requirements.

B. Obstructions to be Removed
When the construction has progressed enough to permit removal, all falsework, piling and other obstructions shall be removed to the satisfaction of the Federal agency having jurisdiction. In all cases such clearing must be done thoroughly before The Work will be accepted by the Department.

107.12 Use of Explosives
When the use of explosives is necessary for the prosecution of The Work, the Contractor shall exercise the utmost care not to endanger life or property, and shall obey all State, Federal and other Governmental regulations applying to transportation, storage, use, and control of such explosives. The Contractor shall be completely responsible for any and all damage resulting from the transportation, storage, use, and control of explosives in the prosecution of The Work by the Contractor, the Contractor’s agents, or employees; and shall hold the Department harmless from all claims of damages resulting in any manner therefrom.

The Contractor shall notify each public utility owner having structures or other installations, above or below ground, near the site of The Work of his intention to use explosives. Such notice shall be given sufficiently in advance to enable the utility owners to take such steps as they may deem necessary to protect their property from injury. Such notice shall not relieve the Contractor of responsibility for all damages resulting from his blasting operations.

All explosives shall be stored securely in compliance with all laws and ordinances, and all such storage places shall be clearly marked DANGEROUS EXPLOSIVES. Explosives and detonators shall be stored in separate storage facilities in separate areas. Where no laws or ordinances apply, locked storage shall be provided satisfactory to the Engineer, never closer than 1,000 ft (300 m) from any travel-road, building, or camping area.

In all cases where the transport, storage, or use of explosives is undertaken, such activities shall be controlled and directed by fully qualified representatives of the Contractor.

Whenever electric detonators are used, all radio transmitters shall be turned off within a radius of 500 ft (150 m). No blasting supplies shall be transported in vehicles with two-way radio unless the transmitter is turned off, or extra shielding precautions are taken. Appropriate signs shall be placed so as to give ample warning to anyone driving a vehicle equipped with two-way radio. Electrical detonators will not be used within 500 ft (150 m) of a railroad.
Submit a blasting plan to the Engineer a minimum of five working days prior to use of explosives that provides details of the proposed blasting plan, including, but not limited to, the type and amount of explosives, the shot sequence, the description of and distance to the closest inhabitable structure, and other information as requested by the Engineer. Submission of blasting plan does not relieve the contractor of the responsibility for the adequate and safe performance of the blasting.

107.13 Protection and Restoration of Property and Landscape

A. General Provisions

The Contractor shall be responsible for the preservation of all public and private property, crops, fish ponds, trees, monuments, highway signs and markers, fences, grassed and sodded areas, etc. along and adjacent to the highway, and shall use every precaution necessary to prevent damage or injury thereto, unless the removal, alteration, or destruction of such property is provided for under the Contract. The Contractor shall use suitable precaution to prevent damage to all underground structures, whether shown on the Plans or not, and shall protect carefully from disturbance or damage, all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed. The Contractor shall not willfully or maliciously injure or destroy trees or shrubs, and he shall not remove or cut them without proper authority.

The Contractor shall be responsible for the preservation of all public and private property, including, but not limited to, crops, fish ponds, trees, monuments, highway signs and markers, fences, grassed and sodded areas, etc. along and adjacent to the highway, and shall use every precaution necessary to prevent damage or injury thereto, unless the removal, alteration, or destruction of such property is provided for under the Contract. The Contractor shall use suitable precaution to prevent damage to all underground structures, whether shown on the Plans or not, and shall protect carefully from disturbance or damage, all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed. The Contractor shall not willfully or maliciously injure or destroy trees or shrubs, and he shall not remove or cut them without proper authority.

The Contractor shall be responsible for all sheet piling, shoring, underpinning, etc., as may be required for the protection of abutting property, nearby buildings, streets, and the like.

The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of The Work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing The Work, or at any time due to defective work or materials, and said responsibility will not be released until the Project shall have been completed and accepted.

When the Contractor’s excavating operations encounter remains of prehistoric people’s dwelling sites or artifacts of historical or archeological significance, the operations shall be temporarily discontinued. The Engineer will contact archeological authorities and the Office of Environmental Services to determine the disposition thereof. When directed by the Engineer, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and shall remove them for delivery to the custody of the proper authorities. Such excavation will be considered and paid for as Extra Work.

When the Contractor’s normal operations are delayed by such stoppage or extra work, an appropriate time extension will be granted.

The Contractor shall plan, coordinate, and prosecute the work so that disruption to personal property and business is held to a practical minimum.

No resident or business shall be denied vehicular access to their property for any length of time other than as determined by the Engineer is absolutely necessary. Where two or more existing driveways are present for a business, only one existing driveway shall be closed at any time. All construction areas abutting lawns and yards of residential or commercial property shall be restored promptly. Backfilling of each drainage structure or section of curb and gutter, sidewalk, or driveway shall be accomplished as soon as adequate strength is obtained. Finishing, dressing, and grassing shall be accomplished immediately thereafter as a continuous operation within each area being constructed with emphasis placed on completing each individual yard or business frontage. Care shall be taken to provide positive drainage to avoid ponding or concentration of runoff.

Handwork, including raking and smoothing, shall be required to ensure that roots, sticks, rocks, and other debris are removed in order to provide a neat and pleasing appearance. Grassing, when in season, shall immediately follow in order to establish permanent cover at the earliest date. If grassing is not in season, proper erosion control shall be installed and maintained.

The work described above shall be in addition to that required by Subsection 104.07, “Final Cleaning Up” and Subsection 105.16, “Final Inspection and Acceptance”.
B. Erosion and Siltation Control

The Contractor shall take all necessary measures throughout the life of the Project to control erosion and silting of rivers, streams, and impoundments (lakes, reservoirs, etc.). Construction of drainage facilities as well as performance of other Contract work which will contribute to the control of erosion and siltation shall be carried out in conjunction with clearing and grubbing, and earthwork operations as stipulated in Section 161.

C. Pollution

The Contractor shall exercise every reasonable precaution throughout the life of the Contract to prevent pollution of rivers, streams or impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage and other harmful waste shall not be discharged into or alongside rivers, streams, and impoundments, or into natural or manmade channels leading thereto. The Contractor shall also comply with the applicable regulations of other State and Federal departments and to all governmental statues relating to the prevention and abatement of pollution.

D. Insect Control Regulations

The Plant Pest Control Division of the U.S. Department of Agriculture and the Georgia State Department of Agriculture restrict the movement of certain items from areas infested with Japanese Beetles or Imported Fire Ants so as to prevent the spread of these pests to non-infested areas. Where insect infested areas are shown on the Plans, Contractors will control their operations in such a manner as to comply fully with the requirements of Section 155.

E. Reclamation of Material Pits and Waste Disposal Areas

Whenever or wherever the Contractor obtains material from a source or wastes material on an area other than within the Right-of-Way, regardless of the fashion, manner or circumstances for which the source or area is obtained, it shall be reclaimed in accordance with the requirements of Section 160.

F. Mailboxes

The property owner shall have the responsibility for removing and relocating the mailbox to an area outside construction limits.

The Engineer will mark a point for the relocation of the box. The stake should be set so that the location of the box will be convenient to both the mail carrier and the patron, yet not interfering with the proposed work. It may be necessary for the Engineer to confer with the Post Office serving the area.

The Contractor shall notify each affected owner, in writing, that their mailbox is in conflict with the proposed construction, that they have ten days to relocate the box and that, after the expiration of the 10 days’ notice, if the owner has not relocated the box, it shall be removed by the Contractor and laid upon the owner’s property, clear of the Right-of-Way.

Any cost to the Contractor for removing the mailboxes as stated above shall be included in the price bid for other items.

G. Failure to Comply

Failure of the Contractor to comply with any of the above provisions or to install erosion prevention items included in the Contract at the time specified, will be evidence of omission and neglect, and the Contractor will be liable for damages as outlined in Subsection 107.13.H below. Furthermore, the Engineer shall withhold payment on all Contract Items until such time as the Contractor complies in full with all of the aforesaid provisions.

H. Payment for Damages

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the Work, or in consequence of the nonexecution thereof by the Contractor, the Contractor shall restore, at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed, or shall make good such damage or injury in an acceptable manner.
I. Compensation

All costs pertaining to any requirement contained herein shall be included in the overall Bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

107.14 Load Restrictions

It is hereby agreed between the Department and the Contractor that in the performance of The Work under the Contract, the following load restrictions and stipulations shall be in full force and effect during the life of the Contract:

A. Parties Affected

The load restrictions and stipulations contained herein shall be applicable to the equipment of the Contractor; each agent or subcontractor employed by the Contractor; and each person or persons, firm, partnership, corporation or any combination thereof, hauling materials, supplies or equipment to or on the Project, by or for the Contractor.

B. Within Project Limits

No hauling equipment which is loaded beyond those limits provided by State Law shall be permitted on any portion of the new or existing pavement structure except that such loads will be permitted on nonstabilized bases and subbases prior to placing roadway paving subject to the provisions of Subsection 107.17.

Axle loads and gross weight limits will be evaluated in accordance with current Georgia Law.

All damage caused by any equipment to any permanent installation or portion of The Work shall be promptly repaired by the Contractor at his expense. When it becomes necessary to cross existing pavement with excessive loads, the Contractor shall provide and remove, at his own expense, proper cushioning by means of earth blanket or otherwise as directed.

C. Outside Project Limits

All equipment users included in Subsection 107.14.A, above, operating equipment on roads outside the Project limits shall be governed by the following regulations:

1. No vehicle shall carry any load in excess of that specified by Georgia Law.

2. On County System roads the maximum total gross weight shall not exceed 56,000 lbs. (25,400 kg) unless a vehicle is making a pickup or delivery on such roads.

3. For a specific individual trip the above weight limitations may be exceeded provided a special permit is obtained from the Department for each such movement. A special permit will not relieve the Contractor of liability for damage that may result from such a movement. Refer to O.C.G.A §32-6-26 Weight of Vehicle and Load, SB54 (2011) for compliance with weight limitations and exceptions.

4. Authorized personnel of the Department of Public Safety shall be permitted to weigh each truck hauling material to the Project whenever the Department so desires. The owner of each truck shall instruct his operators to cooperate with and assist the truck weighers in every way possible.

5. A Certified Public Weigher operating under the provisions of Standard Operating Procedure 15 shall not dispatch any vehicle loaded with material to be incorporated into the Project when the gross vehicle weight exceeds the limit established by law.

6. Ready Mix Concrete trucks shall comply with load restrictions as specified in Laboratory Standard Operating Procedure 10, “Quality Assurance for Ready-Mixed Concrete Plants in Georgia.”

D. Responsibilities

It will be the responsibility of the Contractor to advise his personnel, and all equipment users included in Subsection 107.14.A, as to the load restrictions and stipulations contained herein.

E. Excess Loads and Violations

If multiple violations assignable to a given Certified Public Weigher are occurring, that Certified Public Weigher may be suspended from weighing materials dispatched to Department of Transportation projects.
107.15 Responsibility for Damage Claims

The Contractor shall indemnify and save harmless the Department, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the said Contractor; or on account of or in consequence of any neglect in safe-guarding The Work; or through use of unacceptable materials in constructing The Work; or because of any act of omission, neglect or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the Workmen’s Compensation Act, or any other law, ordinance, order, or decree; and so much of the money due the said Contractor under and by virtue of his Contract as may be considered necessary by the Department for such purpose may be withheld for the use of the State; or, in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Department; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.

107.16 Opening Sections of Project to Traffic

Whenever any bridge or section of roadway is in acceptable condition for travel, the Engineer may direct that it be opened to traffic, whether or not the opening was originally provided for, and such opening shall not be held to be in any way an acceptance of the bridge or roadway, or any part thereof, or as a waiver of any of the provisions of the Contract. Necessary repairs or renewals made on any section of the roadway or bridge thus opened to traffic under instructions from the Engineer, due to defective material or work, or to any cause other than ordinary wear and tear, pending completion and acceptance of the roadway, bridge, or other work, shall be done by the Contractor, without additional compensation. Also, the Contractor shall not receive additional compensation for completing the Work except as specified in Subsection 104.03.

If the Contractor is dilatory in completing shoulders, drainage structures, or other features of work, the Engineer may so notify him in writing and establish therein a reasonable period of time in which the Work should be completed. If the Contractor is dilatory, or fails to make a reasonable effort toward completion in this period of time, the Engineer may then order all or a portion of the Project opened to traffic. On such sections which are so ordered to be opened, the Contractor shall conduct the remainder of his construction operations so as to cause the least obstruction to traffic and shall not receive any added compensation due to the added cost of the Work by reason of opening such section to traffic.

On any section opened to traffic under any of the above conditions, whether stated in the Special Provisions or opened by necessity of Contractor’s operations, or unforeseen necessity, any damage to the highway not attributable to traffic which might occur on such section (except slides) shall be repaired by the Contractor at his expense. The removal of slides shall be done by the Contractor on a basis agreed to prior to the removal of such slides.

107.17 Contractor’s Responsibility for the Work

From the first day the Contractor begins work, or from the date Contract Time commences, whichever occurs first, until written final acceptance of the project by the Engineer, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of The Work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of The Work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except that the Department may, in its discretion, reimburse the Contractor for the repair of damage to The Work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, of the public enemy or of governmental authorities. The Contractor’s responsibility for damages and injuries is defined in Subsection 104.05.A.

In case of suspension of work from any cause whatsoever, the Contractor shall be responsible for the Project and shall take such precautions as may be necessary to prevent damage to the Project, provide for normal drainage and shall erect any necessary temporary structures, signs, or other facilities at his expense.

107.18 Acquisition of Right-of-Way

Rights of Way for the project will be obtained by the Department, in coordination with local governments and others. However, the Contractor’s access to the portions of the right-of-way may be restricted. Where such
restrictions are known in advance to the Department they will be listed in the bid proposal. Delays to the progress of the Work may be encountered because of restricted access to portions of the right-of-way. When such delays occur, whether caused by restrictions listed in the bid proposal or restrictions that develop after the Contract is signed, the parties agree in executing the Contract that such delays do not constitute breach of the Contract. Delays in availability of right-of-way beyond those listed in the bid proposal, or that develop after the Contract has been signed, that impact the controlling Item or Items of the Work will not be charged against the Contract Time. Additional compensation for such delays shall not be paid, except as provided in Subsection 105.13, “Claims for Adjustments and Disputes,” or Subsection 109.09, “Termination Clause.” In the event the Department is unable to acquire right-of-way needed for the project, resulting in delay to or termination of the project, such situation will also be controlled by this Section, and will not constitute a breach of the Contract by the Department.

107.19 Personal Liability of Public Officials

In carrying out any of the provisions of the Contract or in exercising any power or authority granted to the Board, Commissioner, Chief Engineer, their agents and employees, by the Contract, there shall be no liability, either personally or as officials or representatives of the Department, it being understood that in all such matters they act solely as agents and representatives of the Department.

107.20 No Waiver of Legal Rights

Upon completion of The Work, the Department will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or estop the Department from correcting any measurement, estimate, or certificate made before or after completion of The Work, nor shall the Department be precluded or estopped from recovering from the Contractor or his Surety, or both, such over-payment as it may sustain, or by failure on the part of the Contractor to fulfill his obligations under the Contract. A waiver on the part of the Department of any breach of any part of the Contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Department for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Department’s rights under any warranty or guaranty.

107.21 General Description

The Contractor shall designate, prior to beginning any work, a Worksite Utility Coordination Supervisor (WUCS) who shall be responsible for initiating and conducting utility coordination meetings and accurately recording and reporting the progress of utility relocations and adjustment work. Also, the WUCS shall prepare an Emergency Response Plan for the purpose of planning, training, and communicating among the agencies responding to the emergency. The WUCS shall be the primary point of contact between all of the Utility companies, the Contractor and the Department. The WUCS shall recommend the rate of reoccurrence for utility coordination meetings and the Engineer will have the final decision on the regularity for utility coordination meetings. In no case will utility coordination meetings occur less than monthly until controlling items of utility relocations and adjustment milestones are completed. The WUCS shall contact each of the utility companies for the purpose of obtaining information including, but not limited to, a Utility Adjustment Schedule for the controlling items of utility relocations and adjustments. The WUCS shall notify the appropriate utility company and/or utility subcontractors and the Department of the status of controlling items of relocations and adjustment milestones as they are completed. The WUCS shall furnish the Engineer, for approval, a Progress Schedule Chart, immediately following the receipt of the Notice to Proceed unless otherwise specified, which includes the utility companies controlling items of work and other information in accordance with Section 108.03 or elsewhere in the Contract documents.

A. Qualifications

The WUCS shall be an employee of the Prime Contractor, shall have at least one year experience directly related to highway and utility construction in a supervisory capacity and have a complete understanding of the Georgia Utilities Protection Center operations, and shall be knowledgeable of the High-voltage Safety Act and shall be trained on the Georgia Utility Facility Protection Act (GUFPA). The Department does not provide any training on GUFPA but will maintain a list of the Georgia Public Service Commission certified training programs developed by other agencies. Currently the following companies offer approved GUFPA training programs:
The Prime Contractor is responsible for obtaining the GUFPA training for their employees. Questions concerning the Georgia Public Service Commission GUFPA training program should be directed to:

Georgia Public Service Commission
244 Washington St. SW
Atlanta, GA 30334-5701
404.463.9784

B. Ticket Status
During the utility coordination meetings the WUCS shall collect and maintain the Ticket Status information to determine the status of all locate requests within the project limits. This information will be used to assure those planning to use mechanized equipment to excavate or work within the project limits are prepared to begin work when they have reported or estimated beginning work. At points where the Contractor’s or utility company’s operations are adjacent to or conflict with overhead or underground utility facilities, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not commence until all arrangements necessary for the protection thereof have been made.

C. Notice
The names of known utility companies and the location of known utility facilities will be shown on the Plans, or listed in the Subsurface Utility Engineering Investigation if performed or in the Special Provisions; and the WUCS shall give 24-hour notice to such utility companies before commencing work adjacent to said utility facilities which may result in damage thereto. The WUCS shall further notify utility companies of any changes in the Contractor’s work schedules affecting required action by the utility company to protect or adjust their facilities. Notice to the utility companies by the Department of the Award of Contract, under Subsection 105.06, shall not be deemed to satisfy the notice required by this paragraph. Furthermore, this 24-hour notice shall not satisfy or fulfill the requirements of the Contractor as stated in Chapter 9 of Title 25 of the Official Code of Georgia Annotated, known as the "Georgia Utility Facility Protection Act".

D. Agenda
The WUCS shall cooperate with the companies of any underground or overhead utility facilities in their removal and relocations or adjustment work in order that these operations may progress in a reasonable manner, that duplication of their removal and relocations or adjustment work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted. To promote this effort the WUCS shall prepare an agenda for the utility coordination meetings and circulate same in advance of the meeting to encourage input and participation from all of the utility companies. The agenda will be prepared by an examination of the project site and may include photographs of potential/actual utility conflicts.

E. Emergency Response Plan
The WUCS shall prepare an Emergency Utility Response Plan (EURP) within 30 days following the receipt of the Notice to Proceed. The EURP shall indicate the project location (which includes street address and or major intersections / major highway route, if possible with a landmark) that would be reported in case of an emergency, WUCS, Emergency Utility Coordinator (EUC), utility company name, utility company emergency contact information to include but not limited to emergency phone number, response time for emergency, working condition of devices needed to facilitate prompt shut off, and primary point of contact name and phone number for the project.
Emergency Utility Coordinator (EUC) shall be an employee of the Prime Contractor and shall notify the appropriate utility company and/or utility subcontractors in case of an emergency. EURP must include the contact details of the EUC, if WUCS is not the primary emergency utility coordinator for this project.

The plan will also include a means of reporting emergencies and the Utility Emergency Response Information for each company. The WUCS/EUC shall post the EURP in an area readily accessible to the Department and project personnel. Also, WUCS shall distribute the copies of EURP by e-mail and hard copy to GA DOT Area Engineer, GA DOT Construction Project Engineer, Contractor’s project manager, superintendent, and all approved subcontractors whose work can be in conflict with utilities facilities, personnel of the each facility/owner/ operator who has facilities within the project limits and keep a copy in close proximity to active construction.

In the event of interruption to gas, water or other utility services as a result of accidental breakage or as a result of being exposed or unsupported, the WUCS/EUC shall promptly notify the appropriate emergency officials, the Georgia Utilities Protection Center and the appropriate utility facility company or operator, if known. Until such time as the damage has been repaired, no person shall engage in excavating or blasting activities that may cause further damage to the utility facility.

In order to keep up with the latest / most updated EURP contact information (name and phone numbers); WUCS shall include an item in the agenda of Utility Coordination meeting about the updates / changes in the EURP plan.

The Emergency Utility Response Plan and Emergency Utility Response Information template can be found at the State of Georgia, Office of Utilities Webpage.

F. Submission
Provisions for reporting all utility coordination meetings, the progress of utility relocation and adjustment work milestones and ticket status information will be reported on a form developed by the WUCS and will be distributed by the WUCS to all of the utility companies as milestones are met and shall be included as part of the project records. These reports shall be delivered to the Engineer for review, on a monthly basis. The WUCS shall immediately report to the Engineer any delay between the utility relocation and adjustment work, the existing Utility Adjustment Schedule, or the proposed Utility Adjustment Schedule so that these differences can be reconciled.

G. Delays
Delays and interruptions to the controlling Item or Items of The Work caused by the adjustment or repair of water, gas, or other utility appurtenances and property may be considered for an extension of Contract Time as provided in Subsection 108.07.E unless such delays are due to the negligence of the Contractor.

H. Facilities Supported on Bridges
If the utility facilities are to be supported on bridges, the following provisions shall apply:
1. The Plans will show the location of the facility and the auxiliary items necessary to support the facility.
2. The Contractor constructing the bridge shall install anchor bolts, thimbles, inserts, or other auxiliary items attached to the bridge as a part of the support for the utility facility. The Utility Company shall furnish these auxiliary items, unless the Contract indicates these items are to be furnished by the Contractor as a part of the bridge construction.
3. The Utility or its subcontractor constructing the utility facility shall install hanger rods, pipe rollers, and other attachments necessary for the support of the utility facility as indicated on the Plans. The Utility Company shall furnish these attachments at no cost to the Department or the prime contractor unless otherwise specified. This work shall also include:
   a. Caulking the openings around the utility where it passes through endwalls to prevent the passage of undesirable materials.
   b. Painting the exposed portions of utility supports unless such supports are corrosion resistant. Painting shall be done in accordance with the applicable portions of Section 535, unless otherwise specified.
4. The sequence of bridge construction work may be set forth in the Plans and/or the Special Provisions and will show at what stage of the Work a utility company will be allowed to make the utility installation. Further, all or any portion of The Work under Subsection 107.21.H.3 may be included in the bridge Contract by the Plans and/or the Special Provisions.
5. Any damage to the bridge structure caused by the utility installation shall be repaired to the satisfaction of the Engineer at the expense of the Utility or its subcontractor installing the utility facility.

I. Clearances
The Plans provide for at least minimum clearance of utilities as required by the National Electrical Safety Code, U.S. Department of Commerce, and National Bureau of Standards. Any additional clearance the Contractor may desire or require in performing The Work shall be arranged by the Contractor with the utility company. The Department will pay no extra compensation for such additional clearances.

J. Utility Relocation Progress Schedule
The purpose of the Utility Adjustment Schedule is to provide the Contractor with the pertinent information, including any utility staging required, dependent activities, or joint-use coordination that is required for the creation of a feasible progress schedule. A suitable Utility Adjustment Schedule form is available from the Department for the WUCS to circulate to utility companies for any proposed project construction staging or should a utility company not duly file a Utility Adjustment Schedule to the Department during the preconstruction phase of the project. The WUCS shall submit a Utility Relocation Progress Schedule showing together the Progress Schedule Chart referenced in Section 108.03 and the proposed Utility Adjustment Schedules from all utility companies to the Engineer for review and approval. Copies of existing Utility Adjustment Schedules with utility companies having facilities on this project will be made available at the Georgia Department of Transportation, Office of Construction Bidding Administration, located at One Georgia Center, 600 West Peachtree Street, NW, Atlanta, GA 30308, for examination by the Contractor. The Utility Adjustment Schedules are available on-line at: www.dot.ga.gov/partner smart/contractors/bidding letting/bidx/default.aspx

K. Compensation
There will be no separate measurement or payment for this Work. The cost associated with this Work shall be included in the overall Bid submitted.

107.22 Hazardous and/or Toxic Waste
When the Contractor’s operations encounter or expose any abnormal condition which may indicate the presence of a hazardous and/or toxic waste, such operations shall be discontinued in the vicinity of the abnormal condition and the Engineer shall be notified immediately. The presence of barrels, discolored earth, metal, wood, or visible fumes, abnormal odors, excessively hot earth, smoke, or anything else which appears abnormal may be indicators of hazardous and/or toxic wastes and shall be treated with extraordinary caution as they are evidence of abnormal conditions.

The Contractor’s operations shall not resume until so directed by the Engineer.

Disposition of the hazardous and/or toxic waste will be made in accordance with the requirements and regulations of the Department of Human Resources and the Department of Natural Resources. Where the Contractor performs work necessary to dispose of hazardous and/or toxic waste, payment will be made at the unit prices for pay items included in the contract which are applicable to such work or, where the contract does not include such pay items, payment will be as provided in Subsection 109.05, “Extra Work.”

107.23 Environmental Considerations
A. Construction
Erosion control measures shall be installed, to the greatest practical extent, prior to clearing and grubbing. Particular care shall be exercised along stream buffers, wetlands, open waters and other sensitive areas to ensure that these areas are not adversely affected.

Construction equipment shall not cross streams, rivers, or other waterways except at temporary stream crossing structures shown on the plans or as allowed by permit.

Construction activities within wetland areas are prohibited except for those within the construction limits as shown on the Plans and as specified in Subsection 107.23.E.
All sediment control devices (except sediment basins) installed on a project shall, as a minimum, be cleaned of sediment when one half the capacity, by height, depth or volume, has been reached. Sediment basins shall be cleaned of sediment when one-third the capacity by volume has been reached.

B. **Bridge Construction Over Waterways**

Construction waste or debris, from bridge construction or demolition, shall be prevented from being allowed to fall or be placed into wetlands, streams, rivers or lakes.

Excavation, dewatering, and cleaning of cofferdams shall be performed in such a manner as to prevent siltation. Pumping from cofferdams to a settling basin or a containment unit will be required if deemed necessary by the Engineer.

Operations required within rivers or streams, i.e. jetting or spudding, shall be performed within silt containment areas, cofferdams, silt fence, sediment barriers or other devices to minimize migration of silt off the project.

C. **Environmental Clearance of Local Material or Disposal Sites**

Specific written environmental approval from the Engineer will be required for any local material or disposal sites not included in the Plans. No work shall be started at any potential local material or waste site not shown on the plans prior to receiving said environmental approval from the Engineer. Local material sites are defined as borrow pits, common borrow, base, embankment, sand clay base, topsoil base, soil cement base, granular embankment, asphalt sand, maintenance pits, or stockpiled borrow sources. Disposals sites, as defined in Standard Specification 201.3.05.E.3, may be defined as excess material, common fill, or inert waste.

The Contractor may obtain environmental approval on a site with one of two methods: 1) GDOT provided environmental surveys or 2) environmental surveys obtained by the Contractor at no cost to the Department. The Contractor must choose one method for review and approvals, which will apply to all sites required for a given project, and submit an Environmental Review Notification indicating their chosen method.

1. If the Contractor chooses to obtain their own environmental surveys, they shall be conducted by a consultant(s) prequalified to work with the Department in the following area classes: 1.06(b) – History; 1.06(e) – Ecology; and 1.06(f) – Archaeology. Background research and field methods shall be conducted in accordance with the Office of Environmental Services Environmental Procedures Manual, with documentation in an Environmental Survey Results Memorandum (template available from the Office of Environmental Services).

2. If the Contractor requests that GDOT conduct required environmental surveys, an Environmental Survey Request shall be submitted for each site (template available from the Office of Environmental Services).

Upon receipt of an Environmental Survey Request, the Office of Environmental Services shall provide environmental approval or denial within thirty (30) business days. Upon receipt of an Environmental Survey Results Memorandum, the Office of Environmental Services shall provide environmental approval or denial within ten (10) business days. The Department will not accept requests for review of sites before a Notice to Proceed is issued. Incomplete Survey Requests, surveys that are not conducted by a GDOT prequalified consultant, or surveys that do not meet the required level of field effort or documentation, will be denied by GDOT OES and may require resubmittal.

The Engineer will inform the Contractor in writing as to the approval or denial of environmental clearance. Approvals may be provided upon condition that an Environmentally Sensitive Area (ESA) be designated within or adjacent to the site prior to use. All ESA stipulations shall be adhered to in accordance with Standard Specification 107.23.F. If a site is denied, the Contractor may, at no expense to the Department, seek to obtain permits or pursue other remedies that might otherwise render the site(s) acceptable, if available. Any and all changes to proposed sites or their associated haul roads that are not included within the original Environmental Survey Request or Environmental Survey Results Memorandum, including expansion,
utilization for purposes other than those indicated in the original submittal, etc. must be submitted for further environmental review and approval prior to use.

Sites included in the Plans have environmental clearance and shall be used only for the purpose(s) specified in the Plans or other contract documents. Should the Contractor wish to expand or utilize said sites for any purpose other than that provided for in the Plans or other contract documents, specific written environmental clearance as noted above shall be obtained.

D. Control of Pollutants

Pollutants or potentially hazardous materials, such as fuels, lubricants, lead paint, chemicals or batteries, shall be transported, stored, and used in a manner to prevent leakage or spillage into the environment. The Contractor shall also be responsible for proper and legal disposal of all such materials.

Equipment, especially concrete or asphalt trucks, shall not be washed or cleaned-out on the Project except in areas where unused product contaminants can be prevented from entering waterways.

E. Temporary Work in Wetlands Outside of the Construction Limits within the Right-of-Way and Easement Areas

Temporary work in wetlands (that are not delineated with orange barrier fence) will be subject to the following requirements:

1. Temporary work in wetlands shall be accomplished by using temporary structures, timber, concrete, soil with geotextile fabric, or other suitable matting. The area shall not be grubbed.
2. Soil matting shall be protected from erosion in accordance with the Specifications.
3. Whenever temporary work is required in Saltwater Marsh Wetlands, all temporary structures and/or matting shall be removed in their entirety prior to Final Acceptance of the Project. Matted and compressed soils shall be backfilled to their original ground elevation with material meeting the requirements of Section 212 – Granular Embankment.
4. Whenever temporary work is required in Freshwater Wetlands, all temporary structures and/or matting (exclusive of soil matting to be retained in the final roadway section) shall be removed in their entirety prior to Final Acceptance of the Project.

Once the temporary materials have been removed, the area shall be covered by Excelsior or Straw blankets according to Section 713 of the Specifications. The grassing and ground preparation referenced in Subsection 713.3.03, “Preparation”, will not be applicable to this Work.
5. The Engineer shall be notified so that a field inspection may be conducted to certify that the temporary materials were properly removed and that the area was properly restored. The Contractor shall be responsible for any corrective action required to complete this Work.
6. There will be no separate measurement or payment for this Work. The cost associated with this work shall be included in the overall Bid submitted.

F. Environmentally Sensitive Areas

Some archaeological sites, historic sites, wetlands, streams, stream and pond buffers, open waters and protected animal and plant species habitat within the existing/required Right-of-Way and easement areas may be designated as ENVIRONMENTALLY SENSITIVE AREAS (ESAs). These areas are shown on the applicable Plan sheets and labeled “ESA” (e.g. ESA – Historical Boundary, ESA – Wetland Boundary). The Department may require that some ESAs or portions thereof be delineated with orange barrier fence. The Contractor shall install, maintain, and replace as necessary orange barrier fence at ESAs as delineated in the Plan sheets.

The Contractor shall not enter, disturb, or perform any construction related activities, other than those shown on the approved plan sheets within areas designated as ESAs including ESAs or portions thereof not delineated with orange barrier fence. This includes but is not limited to the following construction activities: clearing and grubbing; borrowing; wasting; grading; filling; staging/stockpiling; vehicular use and parking;
sediment basin placement; trailer placement; and equipment cleaning and storage. Also, all archaeological sites, historic sites, wetlands, streams, stream and pond buffers, open waters, and protected animal and plant species habitat that extend beyond the limits of existing/required Right-of-Way and easement areas shall be considered ESAs and the Contractor shall not perform any construction related activities (such as those listed above) within these areas or make agreements with property owners to occupy these areas for construction related activities (such as those listed above). The Contractor shall make all construction employees aware of the location(s) of each ESA and the requirement to not enter or otherwise disturb these areas.

If the Contractor is found to have entered an ESA, either within or outside the project area, for any purpose not specifically shown on the approved plan sheets, the Department may, at its discretion, issue a stop work order for all activities on the project except erosion control and traffic control until such time as all equipment and other items are removed and the ESA is restored to its original condition.

However, should damage to an ESA occur as a result of the Contractor’s action in violation of this section, and notwithstanding any subsequent correction by the Contractor, the Contractor shall be liable for any cost arising from such action, including but not limited to, the cost of repair, remediation of any fines, or mitigation fees assessed against the Department by another government entity.

G. Protection of Migratory Birds and Bats

The following conditions are intended as a minimum to protect migratory birds and bats during construction activities.

1. Project personnel shall be advised about the potential presence and appearance of federally protected migratory birds, including the barn swallow (Hirundo rustica), cliff swallow (Petrochelidon pyrrhonota), and eastern phoebe (Sayornis phoebe), and that there are civil and criminal penalties for harassing, harming, pursuing, hunting, shooting, wounding, killing, capturing, or collecting these species in violation of the Migratory Bird Treaty Act of 1918. The law protects adults, fledglings, nestlings, eggs, and active nests. All bats are protected under Georgia state law (Official Code of Georgia § 27-1-28), with some species protected under the federal Endangered Species Act of 1973. Pictures and habitat information shall be posted in a conspicuous location in the Project field office until such time that construction has been completed and time charges have stopped.

2. The demolition of existing bridge and culvert, the extension of existing culvert, and bridge maintenance activities on the underside of the bridge deck shall take place outside of the breeding and nesting season of phoebes, swallows and other migratory birds, which begins April 1 and extends through August 31, unless exclusionary barriers are put in place to prevent birds from nesting. For bridges, exclusionary barriers may be made of plastic, canvas or other materials proposed by the Contractor and approved by the State Environmental Administrator prior to installation. For box culverts, exclusionary barriers may be overlapping strips of flexible plastic (also called “PVC Strip Doors” or “Strip Curtains”) or an alternate material proposed by the Contractor and approved by the State Environmental Administrator prior to installation. Exclusionary barriers must be installed on the bridge(s) and/or box culvert(s) prior to March 1 or after August 31, but in no time in between this period. Exclusionary barriers are not a guaranteed method of preventing migratory birds from nesting beneath bridges and work schedules shall take into account the possibility that barriers will not be successful. If exclusionary barriers are to be used, these steps shall be followed:

   a. The Project ecologist shall be notified by phone (404) 631-1100 of the decision to install exclusionary barriers and the date of the proposed installation prior to the installation of any exclusionary devices.

   b. The structure(s) shall be checked for nests prior to the placement of exclusionary barriers. If nests are present, they shall be inspected to ensure that eggs or birds are not present. If the nests are found to be occupied, construction activities associated with the bridge shall be postponed until after August 31 when the breeding season is complete.
c. For any box culvert(s) being replaced, exclusionary barriers shall be installed on both the inlet and outlet openings. For any box culvert(s) being extended, exclusionary barriers shall be placed on the opening(s) (inlet and/or outlet) where work is taking place. For bridge(s) being removed, barriers shall be installed along the full length of the bridge(s). In all cases, barriers shall be installed prior to March 1 and left in place until August 31 or until the culvert removal, culvert extension, or bridge demolition is complete. If the exclusionary barriers fail to prevent nesting (i.e., birds are able to bypass barriers and build nests), construction activities associated with the bridge shall be postponed until after August 31.

d. During construction activities, exclusionary barriers shall be inspected daily for holes or other defects that impair its ability to exclude migratory birds from nesting beneath the bridge. Any holes or defects shall be repaired immediately.

e. Entanglement and/or entrapment of barn swallows, cliff swallows, and eastern phoebes in exclusionary netting constitutes harm to migratory birds. Any entanglement and/or entrapment of migratory birds shall be reported immediately to the Project Engineer, who in turn will notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at (404) 631-1101.

3. Migratory birds may nest in other structures or natural features that will be impacted by construction activities. If active nests containing eggs are encountered within the footprint of construction activities, the finding shall be reported immediately to the Project Engineer, who in turn shall notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at (404) 631-1101. All activity within 50 feet of active nests shall cease pending consultation by the Department with the U. S. Fish and Wildlife Service and the lead Federal Agency.

4. When working on bridges and culverts, sightings of bat species shall be reported immediately to the Project Engineer who in turn will notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at (404) 631-1101. All construction activity on the structure shall cease pending consultation by the Department with the U. S. Fish and Wildlife Service and/or the Georgia Department of Natural Resources and/or the lead Federal Agency. The Department will inform the Contractor of any changes to the project.

5. In the event any incident occurs that causes harm or injury to migratory birds during construction activities, the incident shall be reported immediately to the Project Engineer who in turn shall notify the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services at (404) 631-1101. All activity shall cease pending consultation by the Department with the U. S. Fish and Wildlife Service and the lead Federal Agency.

6. Within 30 days of the completion of construction and the stopping of time charges, a report shall be provided to the State Environmental Administrator, Georgia Department of Transportation, Office of Environmental Services, 600 West Peachtree Street NW, Atlanta, Georgia 30308. GDOT in turn will provide copies of the report to the U.S. Fish and Wildlife Service, the Georgia Department of Natural Resources Wildlife Resources Division, and the lead Federal Agency. The following information will be included in the report:

   a. Contractor name and address.
   
   b. Name and title of report preparer.
   
   c. GDOT Project Identification (PI) number.
   
   d. County(s) in which project is located.
   
   e. Project description.
f. Construction start and end dates.

g. Date GDOT was notified of intent to install barrier(s) per # 107.23G.2.a.

h. Number and type(s) of structures on which exclusion barriers were installed.

i. Type(s) of exclusion material used on each structure.

j. Start and end date(s) of installation of exclusionary barrier on each structure.

k. Start and end date(s) of removal of exclusionary barrier from each structure.

l. Photographs of each structure before and after exclusionary barrier installation.

m. Statement regarding whether the exclusionary barrier was effective in deterring bird use of the structure during construction.

n. Description of any incidents causing harm or injury to migratory birds during construction. This should include incidents that were reported as required under 107.23G.5.

o. Description of any sightings of bat species when working on bridges and culverts. This should include incidents that were reported as required under 107.23G.4.

7. All costs pertaining to any requirement contained herein shall be included in the overall bid submitted unless such requirement is designated as a separate Pay Item in the Proposal.

107.24 Closing of Roadways without On-Site Detours

When existing roadways are to be closed to through traffic and on-site detours are not provided, the Contractor shall submit a written notice to the Engineer for approval 14 days prior to the closure of the existing roadways.

After receiving approval from the Engineer for the closure, the Contractor shall install signs at each closure site, in accordance with the MUTCD, to inform the traveling public of the proposed closure, including the date of closure. The sign shall be placed 5 days prior to the closure, at the direction of the Engineer.

Prior to the closure, the Area Engineer will inform local government officials and agencies, local news media, and the DOT Public Information Office of the proposed closure of the roadways.

107.25 Disruption to Residential and Commercial Property

The Contractor shall plan, coordinate, and prosecute the work such that disruption to personal property and business is held to a practical minimum.

All construction areas abutting lawns and yards of residential or commercial property shall be restored promptly. Backfilling of each drainage structure or section of curb and gutter, sidewalk, or driveway shall be accomplished as soon as adequate strength is obtained. Finishing, dressing and grassing shall be accomplished immediately thereafter as a continuous operation within each area being constructed with emphasis placed on completing each individual yard or business frontage. Care shall be taken to provide positive drainage to avoid ponding or concentration of runoff.

Handwork, including raking and smoothing, shall be required to ensure that roots, sticks, rocks, and other debris is removed in order to provide a neat and pleasing appearance. Grassing, when in season, shall immediately follow in order to establish permanent cover at the earliest date. If grassing is not in season, proper erosion control shall be installed and maintained.

The work described herein shall be in addition to that required by Subsection 104.07 “Final Cleaning Up” and Subsection 105.16 “Final Inspection and Acceptance.”
Retain Section 107.23 A and add the following:

107.23 Environmental Considerations

A. Construction

For plan sets that include an Environmental Resources Impacts Table in the General Notes section, the Contractor shall abide by all restrictions noted in the Environmental Resources Impact Table.
SECTION 108 - PROSECUTION AND PROGRESS

Retain Sub-Section 108.08 as written and add the following:

108.08. Failure or Delay in Completing Work on Time

C: Restrictive Work Hours

1. Failure to re-open travel lanes as specified in Special Provision Section 150.6.A will result in the assessment of liquidated damages in the amount of $1,000.00 per hour or portion thereof.

The above rates are cumulative and are in addition to any Liquidated Damages which may be assessed for failure to complete the overall project.
Add the following:

150.6 Special Conditions:

A. The Contractor shall not install lane closures, pace traffic or move equipment or materials that interfere with traffic on SR 155/Snapfinger Road between the hours of 6:00 am to 9:00 am and 4:00 pm to 7:00 pm, Monday through Friday.
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL PROVISION

Section 150—Traffic Control

150.1 General Description

This section, as supplemented by the Plans, Specifications, and Manual on Uniform Traffic Control Devices (MUTCD) shall be considered the Temporary Traffic Control (TTC) Plan in accordance with Work Zone Safety and Mobility Policy. Activities shall consist of furnishing, installing, maintaining, and removing necessary traffic signs, pedestrian signs, barricades, lights, signals, cones, pavement markings and other traffic control devices and shall include flagging and other means for guidance and protection of vehicular and pedestrian traffic through the Work Zone. This Work shall include both maintaining existing devices and installing additional devices as necessary in construction work zones.

The contractor shall be responsible for the maintenance of traffic signals and Advanced Traffic Management system (ATMs) devices from the time that the system is modified until final acceptance. The maintenance of traffic signals and ATMs devices that are not a part of the work and that are not in conflict with any portion of the work shall not be the responsibility of the contractor. However, the contractor is still responsible for damages to all devices that he or his subcontractors cause, in accordance with Section 107 and other specifications.

When any provisions of this Specification or the Plans do not meet the minimum requirements of the MUTCD, the MUTCD shall control. The 2009 Edition of the MUTCD shall be in effect for the duration of the project.

All traffic control devices used during the construction of the project shall meet the standards utilized in the MUTCD, and shall comply with the requirements of these Specifications, Georgia Construction Standards and Details, Project Plans, Design Manuals, and Special Provisions.

The needs and control of all road users (motorists, bicyclists and pedestrians within the highway right-of-way and easements, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) through a Temporary Traffic Control (TTC) zone shall be an essential part of highway construction, utility work, maintenance operations and management of traffic incidents.

Utilities included in the contract are bounded by Special Provision 150 and shall follow its requirements. For utilities not included in the contract but working within the project limits, they shall, at a minimum follow the MUTCD. Moreover, in accordance with Utility Accommodation Policy and Standards Manual dated 2016, the Engineer reserves the right to require additional certified flaggers, signs, warning lights, channelization devices, and other safety devices as may be necessary to properly protect, warn, and safeguard the traveling public. In addition, the Department reserves the right to place time restrictions or moratoriums on all utility work covered under a permit when, in the opinion of the Department, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive, or would unnecessarily inconvenience the traveling public. In case of emergencies, Utilities shall be provided access in accordance with Utility Accommodation Policy and Standard Manual.

150.1.01 Definitions

For Special Provision 150, the definitions for “shall”, “should”, and “may” will be in accordance with MUTCD (1A.13).

Shall (Standard) - a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device.
Should (Guidance) - a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate.

May (Option) — a statement of practice that is a permissive condition and carries no requirement or recommendation.

150.1.02 Content

150.1 General Description

150.1.01 Definitions

150.1.02 Content

150.1.03 Related References

A. Standard Specification
B. Reference Documents

150.1.04 Submittals/Preconstruction

A. Worksite Traffic Control Supervisor
B. Sequence of Operations
C. Pedestrian Considerations
   1. Pedestrian Signage
   2. Temporary Pedestrian Facilities

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

A. NCHRP 350 and MASH
B. Approval
C. Quality Guidelines for All Temporary Traffic Devices

150.2.02 Reflectorization Requirements

A. Signs

B. Channelization Devices

150.2.03 Arrow Panels

150.2.04 Channelization Devices

A. General
B. Drums
   1. Design
   2. Application
   3. Longitudinal Channelization
   4. Removal
C. Vertical Panels
   1. Design
2. Application

D. Cones

1. Design
2. Applications

E. Barricades

1. Design
2. Application

F. Warning Lights

1. Design
2. Application

150.2.05 Flashing Beacon

150.2.06 Guardrail

150.2.07 Interim Signs

A. Posts
B. Sign Blanks and Panels

150.2.08 Pavement Markings

A. All Traffic Striping for Forty-Five (45) Days or Less (≤45 Days)
B. All Temporary Striping Beyond Forty-Five (45) days (>45 Days)
C. All Temporary Traffic Striping on Final Surface

150.2.09 Portable Changeable Message Signs

150.2.10 Portable Impact Attenuators

150.2.11 Portable Temporary Traffic Control Signals

150.2.12 Raised Pavement Markers

150.2.13 Rumble Strips

150.2.14 Temporary Barriers

A. Design
B. Application

150.2.15 Temporary Guardrail Anchorage- Type 12

150.2.16 Temporary Traffic Signal

150.3 Construction Requirements

150.3.01 General

A. Implementation Requirements
B. Maintenance of Traffic Control Devices
C. Traffic Interruption Restrictions
D. Work Zone Restrictions
   1. Interstate
   2. Non-Interstate Divided Highways
   3. Non-Divided Highways

E. Work Zone Geometric Restrictions
   F. Clear Zone
   G. Milled Surface Restrictions
   H. Construction Vehicle
   I. Environmental Impacts
   J. Existing Street Lights
   K. Nighttime Work Lighting
   L. Removal/Reinstallation of Miscellaneous Items

150.3.02 Personnel – Worker Safety Apparel

150.3.03 Signage – General
   A. Signing Requirements of the Temporary Traffic Control (TTC) Plan
   B. Conflicting or Non-Applicable Signs
   C. Removal of Existing Signs and Supports
   D. Interim Guide, Warning and Regulatory Signs
   E. Existing Special Guide Signs
      1. Special Guide Signs
      2. Interim Special Guide Signs
      3. Interim Overhead Guide Sign Structures
      4. Permanent Special Guide Signs
   F. Stop Sign Regulated Intersections
   G. Low Shoulder Signage
      1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects
      2. Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project
   H. Bump Signage
   I. Sign Visibility

150.3.04 Advance Warning Signs
   A. Project Signs - All Type of Highways
      1. State Routes
      2. Interstate, Limited Access and Multilane Divided Highways
      3. Ramp Work on Limited Access Highways
   B. Highway Work Zone
      1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone
      2. Reducing the Speed Limit in a Highway Work Zone
      3. Variable Speed Limit Zones
   C. Installation/Removal of Work Area Signage
150.3.05 Shoulder/Lane Closure

A. Approval/Restrictions

1. Closure Length
2. Duration

B. Shoulder Closure
C. Lane Closure

1. Advance Warning Signs
2. Transition Area – Taper
3. Activity Area
4. Termination Area

D. Removal of Lane Closures
E. Exit and Entrance Ramps

150.3.06 Traffic Pacing Method

A. Pacing Of Traffic
B. Methods of Signing For Traffic Pacing

150.3.07 Flagging Operation

A. Flaggers
B. Flagger Certification
C. Flagger Appearance and Equipment
D. Flagger Warning Signs
E. Pilot Vehicle Requirements
F. Automated Flagger Assistance Devices
G. Portable Temporary Traffic Control Signals

150.3.08 Traffic Signals

A. Responsibility/Cost
B. Law Enforcement Officer Requirement

150.3.09 Mobile Operations

150.3.10 Pavement Markings

A. General

1. Resurfacing Projects
2. Widening and Reconstruction Projects
3. New Location Construction Projects

B. Installation and Removal of Pavement Markings

1. Installation
2. Removal
3. Intermediate Surface
4. Final Surface
5. Pav Factor Reduction for Asphaltic Concrete Final Surfaces
6. Preparation and Planning for Traffic Shifts
C. Raised Pavement Markers
   1. Supplementing Lane Lines
   2. Supplementing Ramp Gore Lines
   3. Other Lines

D. Exceptions for Interim Markings
   1. Two-Lane, Two-Way Roadway
   2. Multi-Lane Highway – with No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less (≤ 4')
   3. Limited Access Roadways and Roadways with Paved Shoulder Greater than Four Feet (>4')
   4. Ramps for Multi-land Divided Highways
   5. Miscellaneous Pavement Markings

150.3.11 Differences in Elevation between Travel Lanes and Shoulders

A. Differences in Elevations
   1. Difference of Two Inches (≤ 2") or Less Between Adjacent Travel Lanes
   2. Difference of Two Inches (≤ 2") or Less Between Adjacent Travel Lane and Paved Shoulder
   3. Difference of Greater Than Two Inches (>2") is Permitted for Continuous Operations
   4. Difference of Greater Than Two Inches (>2") Between Travel Lanes and/or Shoulders for Non-Continuous Operations

B. Healed Section
C. Emergency Situations
D. Plating
E. Asphaltic Concrete Resurfacing Projects

   1. Shoulders Construction Included as a Part of the Contract
   2. Shoulders Construction Not Included as a Part of the Contract

150.3.12 Work Zone Law Enforcement

150.4 Measurement

150.4.01 Traffic Control Items

A. Traffic Control
B. Changeable Message Sign, Portable
C. Flashing Beacon Assembly
D. Pavement Markings
E. Portable Impact Attenuators
F. Signs

   1. Interim Ground Mounted or Interim Overhead Special Guide Signs
   2. Remove And Reset Existing Special Guide Signs, Ground Mount or Overhead
   3. Modify Special Guide Signs, Ground Mount or Overhead

G. Temporary Audible Information Device
H. Temporary Barrier
I. Temporary Curb Cut Wheelchair Ramps
J. Temporary Guardrail Anchorage, Type 12
K. Temporary Walkways with Detectable Edging
L. Traffic Signal Installation - Temporary
M. Work Zone Law Enforcement

150.5 Payment

150.5.01 Enforcement and Adjustments

150.1.03 Related References

A. Standard Specifications

Section 104-Scope of Work
Section 105-Legal Regulations and Responsibility to the Public
Section 107-Legal Regulations and Responsibility to the Public
Section 108-Prosecution and Progress
Section 209-Subgrade Construction
Section 400-Hot Mix Asphaltic Concrete Construction
Section 441-Miscellaneous Concrete
Section 429-Rumble Strips
Section 620-Temporary Barrier
Section 632-Portable Changeable Message Signs
Section 641-Guardrail
Section 647-Traffic Signal Installation
Section 648-Traffic Impact Attenuator
Section 652-Painting Traffic Stripe
Section 653 – Thermoplastic Traffic Stripe
Section 654-Raised Pavement Markers
Section 656-Removal of Pavement Markings
Section 657 – Preformed Plastic Pavement Markings
Section 658 – Standard and Wet Weather Polyurea Traffic Stripe
Section 659 Hot Applied Preformed Plastic Pavement Markings
Section 911-Sign Posts
Section 912-Sign Blanks and Panels
Section 913 - Reflectorizing Materials
B. Referenced Documents

ASTM D4956-13 (Retro-reflectivity)

American Traffic Safety Services Association (ATSSA)

Construction Detail A-3 Curb Cut (Wheelchair) Ramps Concrete Sidewalk Details

Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements

Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail)

GDOT Signing and Marking Design Guidelines

Georgia Standard 4000W “Lengths of Advancement, Clear Zone Distances, Fill Height Embankment”

Georgia Standard 4960 “Temporary Barrier (End Treatment Options)”

Georgia Standard 9102 “Traffic Control Detail for Lane Closure on Two-Lane Highway”

Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”

Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”

Georgia Standard 9121 “Tapers, Signs, and Markings for Passing Lanes”

Manual for Assessing Safety Hardware (MASH)

Manual on Uniform Traffic Control Devices (MUTCD)

National Cooperative Highway Research Program (NCHRP) 350

National Safety Council

Quality Product List #29 (QPL-29) Reflective Sheeting

Quality Product List #34 (QPL-34) Work Zone Traffic Control Devices (Drums, Type III Barricades, Vertical Panels, and Portable Sign Systems)

Quality Product List #35 (QPL-35) Drive Type Galvanized Steel Sign Posts

Quality Product List #46 (QPL-46) Traffic Pavement Markings

Quality Product List #64 (QPL-64) Attenuator Units (Compression Crash Cushion) and Guardrail End Treatments

Quality Product List #76 (QPL-76) Raised Pavement Markers and Channel Markers

Quality Product List #79 (QPL-79) Portable Arrow Boards

Quality Product List #82 (QPL-82) “Portable Changeable Message Signs”

Utility Accommodation Policy and Standards Manual

Work Zone Safety and Mobility Policy

150.1.04 Submittals/Preconstruction
A. Worksite Traffic Control Supervisor

The Contractor shall designate a qualified individual as the Worksite Traffic Control Supervisor (WTCS). The WTCS shall be responsible for selecting, installing and maintaining all traffic control devices in accordance with the Plans, Specifications, Special Provisions and the MUTCD. The WTCS shall be currently certified by the American Traffic Safety Services Association (ATSSA) Work Site Traffic Supervisor Certification program or the National Safety Council Certification program. On-line classes will not be accepted.

The WTCS shall be available on a twenty-four (24) hour basis to perform his duties. If the work requires traffic control activities to be performed during the daylight and nighttime hours, it may be necessary for the Contractor to designate an alternate WTCS. An alternate WTCS must meet the same requirements and qualifications as the primary WTCS and be accepted by the Engineer prior to beginning any traffic control duties. The Worksite Traffic Control Supervisor’s traffic control responsibilities shall have priority over all other assigned duties.

As the representative of the Contractor, the WTCS shall have full authority to act on behalf of the Contractor in administering the TTC Plan. The WTCS shall have appropriate training in safe traffic control practices in accordance with Part 6 of the MUTCD. In addition to the WTCS, all other individuals making decisions regarding traffic control shall meet the training requirements of the Part 6 of the MUTCD.

The Worksite Traffic Control Supervisor (WTCS) shall have a copy of Part 6 of the MUTCD and the Contract on the job site. Copies of the current MUTCD may be obtained from the FHWA web page at http://mutcd.fhwa.dot.gov.

The WTCS shall supervise the initial installation of traffic control devices. The Engineer, prior to the beginning of construction, will review the initial installation. Modifications to traffic control devices as required by sequence of operations or staged construction shall be reviewed by the WTCS.

Any work performed on the interstate or limited access highway right-of-way that requires traffic control shall be supervised by a submitted/approved certified Worksite Traffic Control Supervisor. No work requiring traffic control shall be performed unless the certified WTCS is on the worksite. Failure to maintain a Certified Worksite Traffic Control Supervisor on the work will be considered as non-performance under Subsection 150.5.01.

The WTCS or alternate WTCS shall be available on a full-time basis to maintain traffic control devices with access to all personnel, materials, and equipment necessary to respond effectively to an emergency situation within forty-five (45) minutes of notification of the emergency.

The WTCS shall perform inspections, at a minimum once a month, to ensure that traffic control is maintained. For all interstate and limited access highways, the WTCS shall perform, as a minimum, weekly traffic control inspections. The inspections will start with the installation of the advance warning signs and will stop when a maintenance acceptance is issued or when the punch list is completed.

An inspection shall include both daytime and nighttime reviews. The inspection shall be reported to the Engineer on a Traffic Control Inspection Report, (TC-1). Unless modified by the special conditions or by the Engineer, routine deficiencies shall be corrected within a twenty-four (24) hour period. Failure to comply with these provisions shall be grounds for dismissal from the duties of WTCS and/or removal of the WTCS from the project. Failure of the WTCS to execute his duties shall be considered as non-performance under Subsection 150.5.01.
TRAFFIC CONTROL INSPECTION REPORT (TC-1)

Project No.: ____________________________ County: ________________
Contractor: ____________________________ Date: ___________ Daytime: ___________
                          Nighttime: ___________

PURPOSE: To provide adequate warning, delineation, and channelization to assist in guiding road users in advance of and through the work zone by utilizing proper pavement markings, signs, and other MUTCD compliant devices.

RESPONSIBILITY: The Worksite Traffic Control Supervisor (WTCS) has the duty of ensuring that all traffic control devices are installed and maintained according to the requirements of the Traffic Control Plan.

DEFICIENCIES: Items noted below required corrective measures be performed with the next _____ hours/days.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DESCRIPTION</th>
<th>ACTION REQUIRED</th>
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<tbody>
<tr>
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</tbody>
</table>

(Use additional sheets if needed)

Signature: ____________________________ WTCS or DOT performing inspection

DOT inspection presented to WTCS Date: ___________ Time: ___________

TO BE COMPLETED BY THE WTCS

The attached deficiencies were corrected by Date: ___________ Time: ___________

Signature ____________________________ Return TC-1 to DOT inspector.

The WTCS certifies that all traffic control devices in use on the project are MASH/NCHRP 350 crashworthy compliant.
<table>
<thead>
<tr>
<th>Traffic Control Checklist</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>Non-applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>Are the signs correctly installed?</td>
<td></td>
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<td></td>
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<tr>
<td>Signs are in place according to TTC plans. Signs are plumb and level. Signs are at the proper height.</td>
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<tr>
<td>Are the signs visible and readable to the public both daytime and nighttime?</td>
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<tr>
<td>Is retroreflectivity good?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are signs not in use including PCMS properly stored?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TTC Devices</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>Are they MASH/NHCRP 350 approved? Do they meet MUTCD and Special Provision 150 requirements?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Are they installed according to manufacture recommendation?</td>
<td></td>
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<tr>
<td>Are they in acceptable/marginal condition? Are they stable? Is the retroreflectivity good?</td>
<td></td>
<td></td>
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<tr>
<td><strong>Clear Zone</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>Are all material and equipment stored beyond the clear zone?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>If stored in clear zone, are they protected by positive barrier?</td>
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<td></td>
</tr>
<tr>
<td>Are drop-off marked and healed according to Special Provision 150?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Positive Barriers</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>Are the barriers in acceptable/marginal condition and FHWA approved?</td>
<td></td>
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<tr>
<td>Are the barrier reflectors proper and in good condition?</td>
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<tr>
<td>Do the barriers extend to the proper advancement length? Are the tapers according to GA Standards?</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attenuators and Guardrails</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
</tr>
<tr>
<td>Are the proper attenuators assemblies in use?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gating Is the recovery area free of debris and provide the necessary recovery area?</td>
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<tr>
<td>Is the assembly in accordance with manufacture recommendation?</td>
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<tr>
<td>Are the guardrails properly anchor and/or attached to the barrier?</td>
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<tr>
<td>Are shoes and transition sections in accordance with Standards?</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Pavement Markings</strong></td>
<td>S</td>
<td>U</td>
<td>N</td>
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<tr>
<td>Are the pavement making visible and legible?</td>
<td></td>
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<tr>
<td>Can they be seen during the daytime and nighttime?</td>
<td></td>
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<td></td>
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<tr>
<td>Are there no conflicting pavement markings?</td>
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<td></td>
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<tr>
<td>Are the pavement markings including RPM installed and maintained according to section 150?</td>
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</table>
The Engineer will periodically review the work for compliance with the requirements of the TTC plan.

On projects where traffic control duties will not require full time WCTS supervision, the Engineer may allow the Contractor’s Project superintendent, foreman, subcontractor, or other designated personnel to serve as the WTCS as long as satisfactory results are obtained. Nevertheless, the individual shall meet the requirements and perform the duties of a WTCS.

B. Sequence of Operations

Any Sequence of Operations provided in this Contract in conjunction with any staging details which may be shown in the plans, is a suggested sequence for performing the Work. It is intended as a general staging plan for the orderly execution of the work while minimizing the impact on pedestrian facilities, mainline, cross-streets and side streets. The Contractor shall develop detailed staged and temporary traffic control plans for performing specific areas of the Work including but not limited to all traffic shifts, detours, bridge widenings, paces, or other activities that disrupt traffic or pedestrian flow.

The Engineer may require detailed staging and TTC plans for lane closures or disruption to pedestrian facilities. These plans shall be submitted for approval at least two (2) weeks prior to the scheduled date of the activity. Activities that have not been approved at least seven (7) days prior to the scheduled date shall be rescheduled.

Where traffic is permitted through the work area under stage construction, the Contractor may choose to construct, at no additional expense to the Department, temporary on-site bypasses or detours in order to expedite the work. Plans for such temporary bypasses or detours shall be submitted to the Engineer for review and approval thirty (30) calendar days prior to the proposed construction. Such bypasses or detours shall be removed promptly when in the opinion of the Engineer; they are no longer necessary for the satisfactory progress of the Work. Bypasses and detours shall meet the minimum requirements of Subsection 150.3.01.D.

As an option to the Sequence of Operations in the Contract, the Contractor may submit an alternative Sequence of Operations for review and approval. Alternate Sequence of Operations for pedestrian facilities shall be in compliance with the MUTCD and ADA. Pedestrian needs identified in the preconstruction phase shall be included in the proposed alternate plan.

The Department will not pay, or in any way, reimburse the Contractor for claims arising from the Contractor’s inability to perform the Work in accordance with the Sequence of Operations provided in the Contract or from an approved Contractor alternate.

The Contractor shall secure the Engineer’s approval of the Contractor’s proposed plan of operation, sequence of work and methods of providing for the safe passage of vehicular and pedestrian traffic before it is placed in operation. The proposed plan of operation shall supplement the approved traffic control plan. Any major changes to the approved TTC plan, proposed by the Contractor, shall be submitted to the Department for approval.

Some additional traffic control details will be required prior to any major shifts or changes in traffic. The traffic control details shall include, but not be limited to, the following:

1. A detailed drawing showing traffic locations and lanes for each step of the change.
2. The location, size, and message of all signs required by the MUTCD, Plan, Special Provisions, and other signs as required to fit conditions. Any portable changeable message signs used shall be included in the details.
3. The method to be used in, and the limits of, the obliteration of conflicting lines and markings.
4. Type, location, and extent of new lines and markings.
5. Horizontal and vertical alignment and superelevation rates for detours, including cross-section and profile grades along each edge of existing pavement.
6. Drainage details for temporary and permanent alignments.
7. Location, length, and/or spacing of channelization and protective devices (temporary barrier, guardrail, barricades, etc.)
8. Starting time, duration and date of planned change.

9. For each traffic shift, a paving plan, erection plan, or work site plan, as appropriate, detailing workforce, materials, and equipment necessary to accomplish the proposed work. This will be the minimum resource allocation required in order to start the work.

A minimum of three (3) copies of the above details shall be submitted to the Engineer for approval at least fourteen (14) days prior to the anticipated traffic shift. The Contractor shall have traffic control details for a traffic shift which has been approved by the Engineer prior to commencement of the physical shift. All preparatory work relative to the traffic shift, which does not interfere with traffic, shall be accomplished prior to the designated starting time. The Engineer and the Contractor’s representative will verify that all conditions have been met prior to the Contractor obtaining materials for the actual traffic shift.

C. Pedestrian Considerations

All existing pedestrian facilities, including access to transit stops, shall be maintained. Where pedestrian routes are closed, alternate routes shall be provided. Closures of existing, interim and final pedestrian facilities shall have the prior written approval of the Engineer. When existing pedestrian facilities are disrupted, closed or relocated in a TTC zone, the temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility. Pedestrian facilities are considered improvements and provisions made to accommodate or encourage walking. Whenever a sidewalk is to be closed, the Engineer shall notify the maintaining agency two (2) weeks prior to the closure. Prior to closure, detectable barriers (that are detectable by a person with a visual disability traveling with the aid of a long cane), as described by the MUTCD, shall be placed across the full width of the closed sidewalk. Barriers and channelizing devices used along a temporary pedestrian route shall be in compliance with the MUTCD.

Temporary Traffic Control devices used to delineate a Temporary Traffic Control Zone Pedestrian Walkway shall be in compliance with Subsection 150.3.01.A. Appropriate signs as described in the MUTCD shall be maintained to allow safe passage of pedestrian traffic or to advise pedestrians of walkway closures (Refer to MUTCD Figures TA-28 and TA-29 for guidance). Advance closure signing should be placed at intersections rather than midblock locations so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing. Temporary Traffic Control devices and construction material shall not intrude into the usable width of the pedestrian walkway. Signs and other devices shall be placed such that they do not narrow or restrict any pedestrian passage to less than forty-eight inches (≥ 48”).

1. Pedestrian Signage

A pedestrian walkway shall not be severed or relocated for non-construction activities, such as parking for construction vehicles and equipment. Movement by construction vehicles and equipment across designated pedestrian walkways should be minimized. When necessary, construction activities shall be controlled by flaggers. Pedestrian walkways shall be kept free of mud, loose gravel or other debris.

When temporary covered walkways are used, they shall be lighted during nighttime hours. When temporary traffic barrier is used to separate pedestrian and vehicular traffic, the temporary barrier shall meet NCHRP-350 Test Level Three. The barrier ends shall be protected in accordance with Georgia Standard 4960. Curbing shall not be used as a substitute for temporary traffic barriers when temporary traffic barriers are required. Tape, rope or plastic chain strung between temporary traffic control devices are not considered as detectable and shall not be used as a control for pedestrian movements.

The WTCS shall inspect the activity area daily to ensure that effective pedestrian TTC is being maintained. The inspection of TTC for pedestrian traffic shall be included as part of the TC-1 report.

2. Temporary Pedestrian Facilities

Temporary pedestrian facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. The geometry, alignment and construction of the facility should meet the
applicable requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”.

a. Temporary Walkways with Detectable Edging

A smooth, continuous hard surface (firm, stable and slip resistant) shall be provided throughout the entire length of the temporary pedestrian facility. Compacted soils, sand, crushed stone or asphaltic pavement millings shall not be used as a surface course for walkways.

Temporary walkways shall include detectable edging as defined in the MUTCD. When temporary traffic barrier is included as a pay item in the contract and where locations identified on the plans for positive protection will also allow them to serve as pedestrian detectable edging, payment will be made for the temporary traffic barrier in accordance with Section 620. No payment will be made for temporary walkways with Detectable Edging where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized as temporary walkways. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavements shall be included in Traffic Control-Lump Sum.

Regardless of the materials used, temporary walkways shall be constructed with sufficient thickness and durability to withstand the intended use for the duration of the construction project. If concrete or asphalt is used as the surface course for the walkway, it shall be a minimum of one and one-half inches (≥ 1-1/2") thick. Temporary walkways constructed across unimproved streets and drives shall be a minimum thickness of four inches (≥ 4”) for concrete and three inches (≥ 3”) for asphalt. Joints formed in concrete sidewalks shall be in accordance with Section 441. Concrete surfaces shall have a broom finish.

If plywood is used as a walkway, it must be a minimum of three quarters of an inch (≥ 3/4”) thick, pressure treated and supported with pressure treated longitudinal joists spaced a maximum of sixteen inches (≤ 16”) on center. The plywood shall be secured to the joist with galvanized nails or galvanized deck screws. Nails and screws shall be countersunk to prevent snagging or tripping the pedestrians. A slip resistant friction course shall be applied to any plywood surface that is used as a walkway. Any slip resistant material used shall have the prior written approval of the engineer.

The contractor may propose alternate types of Temporary Walkways provided that the contractor can document that the proposed walkway meets the requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. Alternate types of Temporary Walkways shall have the prior written approval of the engineer.

Temporary walkways shall be constructed and maintained so there are no abrupt changes in grade or terrain that could cause a tripping hazard or could be a barrier to wheelchair use. The contractor shall construct and maintain the walkway to ensure that joints in the walkway have a vertical difference in elevation of no more than one quarter (≤ 1/4") of an inch and that the horizontal joints have gaps no greater than one half (≤ 1/2") of an inch. The grade of the temporary walkway should parallel the grade of the existing walkway or roadway and the cross slope should be no greater than two percent (≤ 2%).

A width of sixty inches (60”), if practical, should be provided throughout the entire length of any temporary walkway. The temporary walkway shall be a minimum width of forty eight inches (48”). When it is not possible to maintain a minimum width of sixty inches (60”) throughout the entire length of temporary walkway, a sixty inch (60”) by sixty inch (60”) passing space should be provided at least every two hundred feet (200 ft.), to allow individuals in wheelchairs to pass.

Temporary walkways shall be constructed on firm subgrade. Compact the subgrade according to Section 209. Furnish and install any needed temporary pipes prior to constructing any walkway to ensure positive drainage away from or beneath the temporary walkway. Once the walkway is no longer required, remove any temporary materials and restore the area to the original conditions or as shown in the plans.

b. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps shall be constructed in accordance with Section 441 and Construction Detail A-3 Curb Cut (Wheelchair) Ramps Concrete Sidewalk Details. Ramps shall also include a detectable
warning surface in accordance with Construction Detail A-4 Detectable Warning Surface Truncated Dome Size, Spacing and Alignment Requirements. Other types of material for the construction of the temporary curb cut wheelchair ramps, including the detectable warning surface, may be used provided the contractor can provide documentation that the material to be used meets the requirements of the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. When a wheelchair ramp is no longer required, remove the temporary materials and restore the area to existing conditions or as shown in the plans. For the items required to restore the area to original conditions or as shown in the plans, measures for payment shall be covered by contract pay items. If pay items are not included in the contract, then payment for these items shall be included in Traffic Control-Lump Sum.

c. Temporary Audible Information Device

Temporary audible information devices, when shown in the plans, shall be installed in compliance with the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)”. The devices shall be installed in accordance with the manufacturer’s recommendations. Prior to installation, the contractor shall provide the engineer with a set of manufacturer’s drawings detailing the proper installation procedures for each device. When no longer required, the devices shall remain the property of the contractor.

150.2 Materials and Traffic Control Devices

150.2.01 Traffic Control Devices

A. NCHRP 350 and MASH

All devices shall be certified in accordance with the Manual for Assessing Safety Hardware (MASH) Test Level 3 and/or the National Cooperative Highway Research Program (NCHRP) 350 Test Level 3 as applicable unless modified by this Special Provision. In addition, temporary work zone devices, including portable barriers, manufactured after December 31, 2019, must have been successfully tested under 2016 edition of MASH requirements. Such devices manufactured on or before this date, and successfully tested under either NCHRP Report 350 or the 2009 edition of MASH, may continue to be used throughout their normal service lives.

B. Approval

All traffic control devices with applicable Qualified Products List (QPL) categories shall come from the appropriate QPL list. Products not on the QPL may be used with an approval letter from the Georgia Department of Transportation Office of Materials and Testing. If there are no applicable QPL, the Contractor shall provide proof of MASH/NCHRP 350 certification. The proof may be a letter or written statement from the manufacturer that the product is MASH/NCHRP 350 approved. Decal certifications are not proof of certification and are not required.

C. Quality Guidelines for All Temporary Traffic Devices

All traffic control devices found to be unacceptable in accordance with the current ATSSA, “Quality Guidelines for Temporary Traffic Devices and Features” regardless of total numbers shall be replaced within twenty-four (24) hours unless stated otherwise in the specifications, in the contract, or as directed by the Engineer.

150.2.02 Retroreflectivity Requirements

A. Signs

Reflective sheeting should meet the requirements of Section 913 and QPL-29

All construction warning signs (black on fluorescent orange) shall meet the minimum reflectivity and color requirements of ASTM D4956 Type XI regardless of the mounting height. All other signs reflectorization shall be in accordance with the plans, contract, and “GDOT Signing and Marking Design Guidelines”.

B. Channelization Devices
Reflective sheeting should meet the requirements of Section 913 and QPL-29.

All channelization devices (white/fluorescent orange and white/red) shall meet the minimum retroreflectivity requirements of ASTM D4956 Type VI.

150.2.03 Arrow Panels

Arrow panel should meet the requirements for MUTCD (6F.61) and QPL-79.

Portable sequential arrow, sequential chevron, or flashing arrow panels shall be a minimum size of forty-eight inches (48”) high by ninety-six inches (96”) wide with not less than fifteen (15) lamps used for the arrow. The arrow shall occupy virtually the entire size of the arrow panel and shall have a minimum legibility distance of one (1) mile. The minimum legibility distance is the distance at which the arrow panel can be comprehended by an observer on a sunny day, or clear night. Arrow panels shall be equipped with automatic dimming features for use during hours of darkness. The arrow panels shall also meet the requirements for a Type C panel as shown in the MUTCD (6F.61). The sequential or flashing arrow panels shall not be used for lane closure on two-lane, two-way highways when traffic is restricted to one-lane operations in which case, appropriate signing, flaggers and when required, pilot vehicles will be deemed sufficient.

The arrow panels shall be placed on the shoulder at or near the point where the lane closing transition begins. The panels shall be mounted on a vehicle, trailer, or other suitable support. Vehicle mounted panels shall be provided with remote controls. Minimum mounting height shall be seven feet (7’) above the roadway to the bottom of the panel, except on vehicle mounted panels which should be as high as practical.

For emergency situations, arrow display panels that meet the MUTCD requirements for Type A or Type B panels may be used until Type C panels can be located and placed at the site. The use of Type A and Type B panels shall be held to the minimum length of time possible before having the Type C panel(s) in operation. The Engineer shall determine when conditions and circumstances are considered to be emergencies. The Contractor shall notify the Engineer, in writing, when any non-specification arrow display panel(s) is being used in the work.

150.2.04 Channelization Devices

A. General

Channelization shall clearly delineate the travel way through the work zone and alert drivers and pedestrians to conditions created by work activities in or near the travel way. Channelization shall be accordance with the plans, specifications, MUTCD, QPL-34, and the following requirements.

B. Drums

1. Design

Drums shall meet the minimum requirement of the MUTCD (6F.67). For all projects let June 2018 and afterward, drums shall have six inch (6”) wide stripes – white/fluorescent orange.

2. Application

Drums shall be used as the required channelizing device to delineate the full length of a lane closure, shift, or encroachment, except as modified by this Subsection.

3. Longitudinal Channelization

Drums shall be spaced as listed below for various roadside work conditions except as modified by Subsection 150.3.11. Spacing shall be used for situations meeting any of the conditions listed as follows:

a. FORTY FOOT (40’) SPACING MAXIMUM
- For difference in elevation exceeding two inches (> 2”).
- For healed sections no steeper than 4:1 as shown in Subsection 150.3.11, Detail 150-H.

b. EIGHTY FOOT (80’) SPACING MAXIMUM
- For difference in elevation of two inches (≤ 2”) or less.
- Flush areas where equipment or workers are within ten feet (≤ 10’) of the travel lane.

c. 200 FOOT SPACING MAXIMUM: Where equipment or workers are more than ten feet (> 10’) from travel lane. Lateral offset clearance to be four feet (4’) from the travel lane.
- For paved areas, eight feet (> 8’) or greater in width that are paved flush with a standard width travel lane.
- For disturbed shoulder areas not completed to typical section that are flush to the travel lane and considered a usable shoulder.

4. Removal of Drums

Drums may be removed after shoulders are completed to typical section and grassed. Guardrail and other safety devices shall be installed and appropriate signs advising of conditions such as soft or low shoulder shall be posted before the drums are removed.

C. Vertical Panels

1. Design

All vertical panels shall meet the minimum requirements of the MUTCD (6F.66). All vertical panels shall have a minimum of 270 square inches of retroreflective area facing the traffic and be a minimum thirty-six inches (≥ 36”) high. For all projects let June 2018 and afterward, the vertical panel shall be in addition a minimum eight inches (≥ 8”) wide with a stripe width of six inches (6”) – white/fluorescent orange.

2. Application

Vertical panels with retroreflectivity less than type VI can only be used when traffic drums reduce the travel lane to less than ten feet (≤ 10’); vertical panels shall be used to restore the travel lane to ten feet (≥ 10’) or greater. No other application of vertical panels with retroreflectivity less than type VI will be permitted.

Vertical panels with a minimum type VI retroreflectivity and six inch (6”) stripe may be used for longitudinal channelization in the activity zone where work takes place for short-term stationary lane closures and intermediate-term stationary lane closures. They can be used for lane closures lasting three (3) days and with Engineer approval up to seven (7) days. They shall not be used in the transition zone including the tapers and the tangent lengths between tapers.

D. Cones

1. Design:

All cones shall be a minimum of twenty-eight inches (≥ 28”) in height regardless of application and shall meet the requirements of the MUTCD (6F.64). Retroreflectivity may be be deleted from all cones.

2. Application

On interstate cones shall be prohibited. On all other routes cones may only be used for longitudinal channelization in the activity zone where work takes place for short-term stationary lane closures. They shall not be used in the
transition zone including the tapers and the tangent lengths between tapers. The use of cones for nighttime work will not be permitted. Cones shall not be stored or allowed to be visible on the worksite during nighttime.

Cones may be used for daytime flagging operations including tapers at flagging stations.

**E. Barricades**

1. **Design**

   Type 3 barricades shall meet the minimum requirements of the MUTCD (6F.68). The Contractor has the option of choosing Type 3 barricades from the QPL-34 or the Contractor may utilize generic barricades that are approved by the Federal Highway Administration (FHWA). When barricades have been specifically crash tested with signs attached, the contractor has the responsibility to attach the signs as per the manufacturer’s recommendations to ensure crashworthiness. If the barricades were not tested with the signs, crashworthy compliance may require that rigid signs be mounted separate from the Type 3 barricade.

   The use of Type 1 and Type 2 barricades will not be permitted.

2. **Application**

   Type 3 barricades shall be placed as required by the plans, the Standards, and as directed by the Engineer.

   When a barricade is placed so that it is subject to side impact from a vehicle, a drum shall be placed at the side of the barricade to add target value to the barricade.

**F. Warning Lights**

1. **Design**

   All warning lights shall meet the requirements of the MUTCD (6F.83).

2. **Application:**

   a. Type A low-intensity flashing lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.

   b. Type C Steady-Burn lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer.

**150.2.05 Flashing Beacon**

The flashing beacon assembly, when specified, shall be used in conjunction with construction warning signs, regulatory, or guide signs to inform traffic of special road conditions which require additional driver attention. The flashing beacon assembly shall be installed in accordance with the requirements of Section 647.

**150.2.06 Guardrail**

Guardrail shall comply with Section 641 Guardrail and the guardrail standards.

When the removal and installation of guardrail is required, as a part of the work, the following time restrictions shall apply unless modified by the special conditions:

From the time that the existing guardrail or temporary positive barrier protection is removed, the Contractor has fourteen (14) days to install the new guardrail and anchors. During the interim, the location without guardrail shall be protected with drums spaced at a maximum spacing of twenty feet (20’). The guardrail blunt end is to be treated as a fix object and shall be projected. The maximum length of rail that can be removed at any time without being replaced with positive barrier protection is a total of 2000 linear feet of existing rail or the total length of one run of existing rail, whichever is less. Based on existing field conditions, the Engineer may review the work and require that the guardrail be installed earlier than the maximum time allowed.
The contractor shall install new guardrail, such that traffic exposure to fixed objects is minimized. Within the same workday, temporary attenuators, as defined in Subsection 150.2.10, should be installed on the approach to fixed objects that can’t be protected with guardrail. Truck mounted attenuators may be used to shield exposed fixed objects for periods not to exceed fourteen (14) days. No separate payment will be made for truck mounted attenuators, attenuators, or other methods unless provided for in the contract.

When the roadway is open to traffic, guardrail panels shall be lapped to comply with the directional flow of traffic. Should the staging of the work require that the lap of the guardrail be changed, this work shall be completed before the roadway is opened to traffic. The work to change the lap of any guardrail shall be included in Traffic Control-Lump Sum.

The laps on anchors shall be in accordance with the manufacture’s recommendations and installation instructions. As a result, a trailing anchor may be lapped opposing the flow of traffic.

Failure to comply with the above time and quantity restrictions shall be considered as non-compliance under Subsection 150.5.01.

150.2.07 Interim Signs

A. Posts

Permanent mounting height to the bottom of sign shall be seven (7) feet – eight (8) feet measured vertically from the bottom of the sign to the elevation of the near edge of the pavement or from the walkway. Posts for all interim signs should be square tubular post meeting the requirements of Section 911, QPL-35, and Construction Detail T-3A (Type 7, 8, and 9 Square Tube Post Installation Detail). Ground mounted sign(s) greater than 48” wide shall be mounted on two posts. For barrier mounted sign, single post mount is allowed. The post(s) shall not extend beyond the top of the sign(s). The sign(s) shall be substantially plumbed and leveled.

Galvanized U-Channel post can be used in lieu of square tubular posts until December 31, 2019. The U-Channel post shall meet the requirements of Section 911. Ground mounted sign(s) greater than nine (9) square feet shall be mounted on two posts. All posts replaced or installed on or after January 01, 2020 shall be square tubular posts.

Unprotected interim posts shall be spliced as shown in Detail 150-A, unless full length unspliced posts are used. Unprotected post splices will not be permitted any higher than four inches above the ground line to lessen the possibility of affecting the undercarriage of a vehicle. Installation of posts may require establishment of openings in existing pavements, islands, shoulders etc.
B. Sign Blanks and Panels

All TTC sign blanks and panels should conform to Section 912 of the Specifications. Alternative sign blank materials (composites, polycarbonates, fiberglass reinforced plastics, recycled plastics, etc.) shall have a letter of approval from the Office of Materials and Testing for use as interim construction signs before these materials are allowed to be incorporated into the work, unless these rigid sign blanks are currently approved as a crashworthy sign blank material under QPL 34. Unless specified elsewhere in the contract, specifications, plans, and/or directed by the Engineer, sign sizes are according to the following:

1. All construction signs sizes should follow the dimensions provide in MUTCD Table 6F-1 “Temporary traffic Control Zone Sign and Plaque Sizes” under the column for “Freeway or Expressway”.

2. For all other signs used just for staging, the sign sizes should follow the dimensions provide in MUTCD Table 2B-1 “Regulatory Sign and Plaque Sizes” for the largest size.

3. Permanent signs used for staging shall be according to plans.

Plywood blanks or panels will not be permitted.

The use of flexible signs will not be permitted.

For utility work not included in the contract, the utility contractor may use flexible signs within the project limits.

150.2.08 Pavement Markings

All temporary traffic striping shall conform to the requirements of Section 652, Section 653, Section 657, Section 658, Section 659, and QPL-46.
A. All Traffic Striping for 45 Days or Less (≤45 Days)

All traffic striping that will be in place for 45 days or less shall be 4 inches or greater in width.

B. All Temporary Striping Beyond 45 days (>45 Days)

All traffic striping applied on intermediate surfaces shall be a minimum 5 inches in width or as shown on plans. On final surfaces when temporary striping will be overlaid or eradicated, the temporary striping shall be a minimum 5 inches in width.

C. All Temporary Traffic Striping on Final Surface

All temporary traffic striping applied to final surfaces which will not be overlay or grinded may be 4 inches in width or as shown on the plans.

150.2.09 Portable Changeable Message Signs

Unless specified as a paid item in the contract, the use of a portable changeable message sign will not be required. When specified, a portable changeable message sign (PCMS) shall meet the minimum requirements of Section 632, MUTCD (6F.60) and be on QPL-82. The maximum amount of messages allowed to be flashed on one PCMS is two phases (flashes). The language and the timing of the messages shall comply with the MUTCD and Section 632. When used as an advanced device, the PCMS should typically be placed ahead of the construction activities. If the PCMS is used as a substitute for another device, then the requirements for the other device apply.

Any PCMS in use, which is not protected by positive barrier protection, shall be delineated by a minimum of three drums that meet the requirement of Subsection 150.2.04.B. The drum spacing shall not exceed a maximum of ten (10’) feet as shown in Detail 150-B. When the PCMS is within twenty (20’) feet of the opposing traffic flow, the trailing end of the PCMS shall be delineated with a minimum of three drums spaced in the same manner as the approach side of the PCMS.
When not in use, the PCMS shall be removed from the roadway, unless protected by positive barrier protection. If the PCMS is protected by positive barrier protection, the sign panel shall be turned away from traffic when not in use.

**150.2.10 Portable Impact Attenuators**

This work consists of the furnishing (including spare parts), installation, maintenance, relocation, reuse as required, and removal of Portable Impact Attenuator Units/Arrays.

Portable Impact Attenuator Unit/Arrays installation shall conform to the requirements of Section 648, Manufacturer’s recommendations and Georgia Standard 4960 “Temporary Barrier (End Treatment Options)” and shall be installed at locations designated by the Engineer, and/or as shown on the plans. When gating attenuators are used, the contractor shall maintain the appropriate recovery area in accordance with the manufacturers’ recommendations.

Generic sand/water loaded modules are prohibited. Manufacturers’ sand/water loaded modules with specific arrays that have been NCHRP 350/MASH approved can be used in appropriate locations.

The test level of protection provided shall equal or exceed the speed limit. Test level 3 shall be used for forty-five (45) mph or above.

**150.2.11 Portable Temporary Traffic Control Signals**

The use of Portable Temporary Traffic Control Signals shall meet the following minimum requirements:

Only two-lane, two-way roadways will be allowed to utilize Portable Temporary Traffic Control Signals.

All portable traffic control signals shall meet the physical display and operational requirements of conventional traffic signals described in the MUTCD.
Each signal face shall have at least three lenses. The lenses shall be red, yellow, or green in color and shall give a circular type of indication. All lenses shall be twelve (12") inches nominal in diameter. A minimum of two signal faces shall face each direction of traffic. A minimum of one signal head shall be suspended over the roadway travel lane in a manner that will allow the bottom of the signal head housing to be not less than seventeen (17’) feet above and not more than nineteen (19’) feet above the pavement grade at the center of the travel lane. The second signal head may be located over the travel lane with the same height requirements or the second signal head may be located on the shoulder. When the signal head is located on the shoulder, the bottom of the signal head housing shall be at least eight (8’) feet but not more than (15’) feet above the pavement grade at the center of highway.

Advance warning signage and appropriate pavement markings shall be installed as part of the temporary signal operation.

The signals shall be operated in a manner consistent with traffic requirements. The signals may be operated in timed-mode or in a vehicle-actuated mode. The signals shall be interconnected in a manner to ensure that conflicting movements cannot occur. To ensure that the appropriate operating pattern, including timing is displayed to the traveling public, regular inspections, including the use of accurate timing devices shall be made by the Worksite Traffic Control Supervisor. If, at any time, any part of the system fails to operate within these requirements then the use of the signal shall be suspended and the appropriate flagging operation shall begin immediately.

The Worksite Traffic Control Supervisor (WTCS) shall continuously monitor the portable traffic control signal to insure compliance with the requirements for maintenance under the MUTCD. The signal shall be maintained in a manner consistent with the intention of the MUTCD, with emphasis on cleaning of the optical system. Timing changes shall be made only by the WTCS. The WTCS shall keep a written record of all timing changes.

The portable temporary signal shall have two power sources and shall be capable of running for seven calendar days continuously.

The Contractor shall have an alternate temporary traffic control plan in the event of failure of the signal.

150.2.12 Raised Pavement Markers

Raised pavement markers (RPMs) shall meet the requirements of Section 654 and QPL-76.

150.2.13 Rumble Strips

Rumble strips incorporated into the work shall meet the requirements of Section 429 and the MUTCD. Existing rumble strips that are positioned in the traveled way to warn traffic of a stop condition shall be reinstalled prior to opening to traffic. Based on the following requirements:

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have rumble strips reinstalled on the traveled way in the area of a stop condition. Non-refundable deductions in accordance with Subsection 150.5.01 will be assessed for any intermediate surface in place for greater than 45 days without rumble strips.

Rumble strips shall be installed on the final surface within fourteen (14) calendar days of the placement of the final surface in the area of the stop condition. Failure to install within fourteen (14) calendar days will result in assessment of non-refundable deductions in accordance with Subsection 150.5.01.

Prior to the removal of any rumble strips located in the travel lane, stop ahead (W3-1) warning signs shall be double indicated ahead of the stop condition. These warning signs shall be a minimum of 48 inches by 48 inches. These warning signs shall remain in place until the rumble strips have been reinstalled on the traveled way. Any existing warning signs for the stop ahead condition shall be removed or covered while the 48” X 48” (W3-1) signs are in place. When the rumble strips have been reinstalled, these warning signs should be promptly removed and any existing signage placed back in service.

150.2.14 Temporary Barriers

A. Design:

Temporary barriers shall meet the requirements of Sections 620. The lengths of advancement should be in accordance with Georgia Standard 4000W “Lengths of Advancement, Clear Zone Distances, and Fill Height Embankment”. The
approach end of the taper should have 10:1 or flatter ground slope. Temporary barriers shall not be used as a channelization device. Their use is in accordance with MUTCD (6F.85).

B. Application:

Temporary barriers shall be placed as required by the plans, standards, and as directed by the Engineer. When Temporary barrier is located twenty feet (≤ 20’) or less from a travel lane, yellow reflectors shall be fixed to the top of the barrier at intervals not greater than forty feet (≤ 40’) in the longitudinal section and twenty feet (20’) in the taper section and shall be mounted approximately two inches (2”) above the barrier. If both lanes of a two-lane two-way roadway are within twenty feet (≤ 20’) or less of the barrier then the reflectors shall be installed for both directions of traffic.

The reflectors shall be hundred (100) square inches (ASTM Type VII or VIII/ Type XI) reflective sheeting mounted on flat-sheet blanks. The reflectors shall be mounted approximately two inches above the top of the barrier. The reflectors shall be attached to the barrier with adhesive or by a drilled-in anchor type device. The reflectors shall not be attached to a post or board that is placed between the gaps in the barrier sections.

Approach end of Temporary barrier shall be protected according to Georgia Standard 4960 “Temporary Barrier (End Treatment Options)” or by a portable impact attenuator.

On interstates or other controlled access highways where lane shifts or crossovers cause opposing traffic to be separated by less than forty feet (<40’), portable barrier should be used as a separator.

150.2.15 Temporary Guardrail Anchorage- Type 12

This work consists of the furnishing, installation, maintenance and removal of Temporary Guardrail Anchorage- Type 12 used for Portable Barrier or temporary guardrail end treatment. Materials used in the Temporary Guardrail Anchorage- Type 12 shall meet the requirements of Section 641 of the Specifications and current Georgia Standards and may be new or used. Materials salvaged from the Project, which meet the requirements of Standards, may be utilized if available. The use of any salvaged materials will require prior approval of the Engineer.

Installation of the Temporary Guardrail Anchorage- Type 12 shall conform to the requirements of the Plans, current Georgia Standards and Section 641 of the Specifications. Installation shall also include sufficient additional guardrail and appurtenances to effect the transition and connection to Temporary Concrete Barrier as required by the details in Georgia Standard 4960 “Temporary Barrier (End Treatment Options)”.

150.2.16 Temporary Traffic Signals

Temporary traffic signals shall meet the requirements of Section 647 and the MUTCD.

150.3 Construction Requirements

150.3.01 General

A. Implementation Requirements

No work shall be started on any project phase until the appropriate traffic control devices have been placed in accordance with the Project requirements. Changes to traffic flow shall not commence unless all labor, materials, and equipment necessary to make the changes are available on the Project.

When any shift or change is made to the location of traffic or to the flow patterns of traffic, including pedestrian traffic, the permanent safety features shall be installed and fully operational before making the change. If staging or site conditions prevent the installation of permanent features then the equivalent interim devices shall be utilized. This work shall also include any necessary removal and reinstallation of guardrail panels to achieve the required panel lap to accommodate the appropriate shift and traffic flow including the final traffic flow configuration. The cost of performing this work shall be included in Traffic Control-Lump Sum.
Any section of the work that is on a new location shall have all permanent safety features installed and fully operational before the work is opened to traffic. Safety features shall include, but are not limited to the following items:

1) Guardrails including anchors and delineation with properly lapped panels
2) Impact attenuators
3) Traffic signals
4) Warning devices
5) Pavement markings including words, symbols, stop bars, and crosswalks
6) Roadway signs including regulatory, warning, and guide

Outdoor lighting shall be considered as a safety feature for welcome centers, rest areas, and weigh station projects. For typical roadway type projects, new street lighting is not considered a safety feature, unless specifically noted in the plans or in the special conditions.

B. Maintenance of Traffic Control Devices

Traffic control devices shall be in acceptable condition when first erected on the project and shall be maintained in accordance with Section 104, throughout the construction period. All unacceptable traffic control devices shall be replaced within twenty-four (24) hours. When not in use, all traffic control devices shall be removed, placed or covered so as not to be visible to traffic. All construction warning signs shall be removed within seven (7) calendar days after time charges are stopped or pay items are complete. If traffic control devices are left in place for more than ten (10) calendar days after completion of the Work, the Department shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

C. Traffic Interruption Restrictions

The Department reserves the right to restrict construction operations when, in the opinion of the Engineer, the continuance of the Work would seriously hinder traffic flow, be needlessly disruptive or unnecessarily inconvenience the traveling public. The Contractor shall suspend and/or reschedule any work when the Engineer deems that conditions are unfavorable for continuing the Work.

Advanced notification requirements to the Contractor to suspend work will be according to the events and the time restrictions outlined below:

Incident management - No advanced notice required

Threatening/Inclement weather – twenty-four (24) hours

Holiday, sporting events, unfavorable conditions - Three (3) calendar days

If the work is suspended, the Contractor may submit a request for additional contract time as allowed under Section 108. The Department will review the request and may grant additional contract time as justified by the impact to the Contractor’s schedule. Compensation for loss of productivity, rescheduling of crews, rental of equipment or delays to the Contractor’s schedule will not be considered for payment. Additional contract time will be the only consideration granted to the Contractor.

D. Work Zone Restrictions

1. Interstate

The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance.

2. Non-Interstate Divided Highways
The Contractor should not simultaneously perform work on both the inside shoulder and outside shoulder on either
direction of traffic flow when the Work is within 12 feet of the travel-way. Shoulders can be alternated if areas are
separated by at least one-half mile distance in rural areas or at least 500 feet of distance in urban areas.

3. Non-Divided Highways

a. The Contractor should not simultaneously perform work on opposite sides of the roadway when the work is within
12 feet of the travel-way. Shoulders can be alternated if areas are separated by at least one-half mile of distance in
rural areas or at least 500 feet of distance in urban areas.

b. On two-lane projects where full width sections of the existing subgrade, base or surfacing are to be removed, and new
base, subgrade, or surfacing are to be constructed, the Contractor should maintain one-lane traffic through the
construction area by removing and replacing the undesirable material for half the width of the existing roadway at a
time. Replacement should be made such that paving is completed to the level of the existing pavement in the adjacent
lane by the end of the workday or before opening all the roadway to traffic.

E. Work Zone Geometric Restrictions

There should be no reduction in the total number of available traffic lanes including turning lanes that existed prior to
construction, except as specifically allowed by the Contract and as approved by the Engineer.

Travel lane Clearances: All portions of the work should maintain the following minimum requirements:

Horizontal: The combined dimensions of the paved shoulder and the roadway surface remaining outside the Work Zone
should be no less than sixteen feet (≥ 16’) in width at any location.

Vertical: The overhead clearance should not be reduced to less than fifteen feet (≥ 15’) at any location.

The restrictions above apply to all shifts, lane closures, on-site detours and off-site detours whether shown in the contract
or proposed by the Contractor. It shall be the responsibility of the Contractor to verify that these minimum requirements
have been met before proceeding with any phase of the Work. Two-lane, two-way roadways may have temporary
horizontal restrictions of less than sixteen feet (≥ 16’) during flagging operations. The minimum horizontal clearance
should be restored before the flagging operation is removed.

F. Clear Zone

At the end of the workday, all equipment, materials, and TTC devices not in use should be moved out of the clear zone or
behind positive protection. The clear zone is defined by Georgia Standard 4000W “Lengths of Advancement, Clear Zone
Distances, Fill Height Embankment”. For urban roadway with curb, the minimum set back is six (6’) feet from the curb
face. If stored behind positive protection, proper lengths of advancement should be maintained. If stored behind guardrail
the items shall be a minimum five feet (≥ 5’) from the face of the guardrail and not in the recovery zone of the anchor.

The Worksite Traffic Control Supervisor (WTCS) shall monitor the work to ensure that all the rocks, boulders, construction
debris, stockpiled materials, equipment, tools and other potential hazards are kept clear of the travel lane.

G. Milled Surface Restrictions

Unless modified by the special conditions, a milled surface on any asphaltic concrete surface shall not be allowed to remain
open to traffic for a period of time that exceeds thirty (> 30) calendar days.

H. Construction Vehicles

The Contractor’s vehicles shall travel in the direction of normal roadway traffic and shall not reverse direction except at
intersections, interchanges, or approved temporary crossings. The Contractor may submit a plan requesting that
construction traffic be allowed to travel in the opposite direction of normal traffic when it would be desirable to modify
traffic patterns to accommodate specific construction activities.
Prior approval of the Engineer shall be obtained before any construction traffic is allowed to travel in a reverse direction. If the Contractor’s submittal is approved, the construction traffic shall be separated from normal traffic by appropriate traffic control devices.

The parking of Contractor’s and/or workers’ personal vehicles within the work area or adjacent to traffic is prohibited. It shall be the responsibility of the Worksite Traffic Control Supervisor to ensure that any vehicle present at the worksite is necessary for the completion of the work.

I. Environmental Impacts

The Contractor shall ensure that dust, mud, and other debris from construction activities do not interfere with normal traffic operations or adjacent properties.

J. Existing Street Lights

Existing street lighting shall remain lighted as long as practical and until removal is approved by the Engineer.

K. Nighttime Work Lighting

Adequate temporary lighting shall be provided at all nighttime work sites where workers will be immediately adjacent to traffic.

L. Removal/Reinstallation of Miscellaneous Items

In the prosecution of the Work, if it becomes necessary to remove any existing signs, markers, guardrail, etc. not covered by specific pay item, they shall be removed, stored and reinstalled, when directed by the Engineer, to line and grade, and in the same condition as when removed.

150.3.02 Personnel – Worker Safety Apparel

In accordance with MUTCD (6D.03) all workers, within the right-of-way who are exposed either to traffic or to work vehicles and construction equipment within the TTC zone, shall wear high-visibility safety apparel that meets the Performance Class 2 or better.

150.3.03 Signage - General

A. Signing Requirements of the Temporary Traffic Control (TTC) Plan

When existing regulatory, warning or guide signs are required for proper traffic and pedestrian control, the Contractor shall maintain these signs in accordance with the temporary traffic control (TTC) plan. The Contractor shall review the status of all existing signs, interim signs added to the work, and permanent sign installations that are part of the work to eliminate any conflicting or non-applicable signage in the TTC Plan. The Contractor’s review of all signs in the TTC Plan shall establish compliance with the requirements of the MUTCD and Section 150. Any conflicts shall be reported to the Engineer immediately and the WTCS shall take the necessary measures to eliminate the conflict.

The Contractor shall make every effort to eliminate the use of interim signs as soon as the Work allows for the installation of permanent signs.

All existing illuminated signs shall remain lighted and be maintained by the Contractor.

Existing street name signs shall be maintained at street intersections.

B. Conflicting or Non-Applicable Signs

Any sign(s) or portions of a sign(s) that are not applicable to the TTC plan shall be covered so as not to be visible to traffic or shall be removed from the roadway when not in use. The WTCS shall review all traffic shifts and changes in the traffic patterns to ensure that all conflicting signs have been removed. The review shall confirm that the highest priority signs have been installed and that signs of lesser significance are not interfering with the visibility of the high priority signs.
High priority signs include signs for road closures, shifts, detours, lane closures and curves. Any signs, such as speed zones and speed limits, passing zones, littering fines and litter pick up, that reference activities that are not applicable due to the presence of the Work shall be removed, stored and reinstalled when the Work is completed.

Failure to promptly eliminate conflicting or non-applicable signs shall be considered as non-performance under Subsection 150.5.01.

C. Removal of Existing Signs and Supports

The Contractor shall not remove any existing signs and supports without prior approval from the Engineer. All existing signs and supports which are to be removed shall be stored and protected if this material will be required later in the work as part of the TTC plan. If the signs are not to be utilized in the work then the signs will become the property of the Contractor unless otherwise specified in the contract documents.

D. Interim Guide, Warning and Regulatory Signs

Interim guide, warning, or regulatory signs required to direct traffic and pedestrians shall be furnished, installed, reused, and maintained by the Contractor in accordance with the MUTCD, the Plans, Special Provisions, Special Conditions, or as directed by the Engineer. These signs shall remain the property of the Contractor. When the signs are used for long-term stationary operations as defined MUTCD (6G.02), the bottom of all interim signs shall be mounted seven feet (7’) to eight feet (8’) above the level of the pavement edge or sidewalk. The signs offset should be six feet (6’) to twelve feet (12’) from the pavement edge or two feet (≥ 2’) minimum for sidewalks according to MUTCD (6F-1). Special Conditions under Subsection 150.6 may modify this requirement.

Portable signs may be used when the duration of the work is less than three (3) days or as allowed by the special conditions in Subsection 150.6. Portable signs shall be used for all punch list work. Portable interim signs shall be mounted a minimum of one foot (≤ 1’) above the level of the pavement edge for directional traffic of two (2) lanes or less and at seven feet (7’) for directional traffic of three (3) or more lanes according to MUTCD (6F-2). Signs shall be mounted at the height recommended by the manufacturer’s crashworthy testing requirements.

All sign blanks shall be rigid whether the sign is mounted as a portable sign, on a Type III barricade or as a permanent mount height sign. Utilities and their subcontractors working in the project limits, and not included in the project contract, may use non-rigid signs.

E. Existing Special Guide Signs

Existing special guide signs on the Project shall be maintained until conditions require a change in location or legend content. When change is required, existing signs shall be modified and continued in use if the required modification can be made within existing sign borders using design requirements (legend, letter size, spacing, border, etc.) equal to that of the existing signs, or of Subsection 150.3.E.2. Differing legend designs shall not be mixed in the same sign.

1. Special Guide Signs

Special guide signs are those expressway or freeway guide signs that are designed with message content (legend) that applies to a particular roadway location. When an existing special guide sign is in conflict with work to be performed, the Contractor shall remove the conflicting sign and reset it in a new, non-conflicting location which has been approved by the Engineer.

2. Interim Special Guide Signs

When it is not possible to utilize existing signs, either in place or relocated, the Contractor shall furnish, erect, maintain, modify, relocate, and remove new interim special guide signs in accordance with the Plans or as directed by the Engineer. Interim special guide signs that may be required in addition to, or a replacement for, existing expressway and freeway (interstate) signs shall be designed and fabricated in compliance with the minimum requirements for guide signing contained in Part 2E “Guide Signs – Freeway and Expressway” of the MUTCD. All interstate shields on these signs shall be 48 inches and 60 inches for two-numeral and three-numeral routes, respectively.

The road name of the exit or route shield shall be placed on the exit gore sign.
3. Interim Overhead Guide Sign Structures

Interim overhead special guide sign structures are not required to be lighted unless specifically required by the Plans. If lighting is required, the sign shall be lighted as soon as erected and shall remain lighted, during the hours of darkness, until the interim sign is no longer required. The Contractor shall notify the Power Company at least thirty (30) days prior to desire connection to the power source.

4. Permanent Special Guide Signs

The installation of new permanent special guide signs and the permanent modification or resetting of existing special guide signs, when included in the contract, shall be accomplished as soon as practical to minimize the use of interim special guide signs. If lighting is required by the Plans, all new permanent overhead special guide signs shall be lighted as soon as erected.

F. Stop Sign Regulated Intersections

For intersections that utilize stop sign(s) to control the flow of traffic and to restrict the movement of vehicles, the stop sign(s) shall be maintained for the duration of the work or until such time that the stop condition is eliminated or until an interim or permanent traffic signal can be installed to provide proper traffic control. The traffic signal shall be installed and properly functioning before the removal of the existing stop sign(s) is permitted. If the existing intersection is enhanced traffic control features, such as stop lines, double indicated stop signs, oversized signs, advanced warning stop ahead signs, rumble strips on the approaches or flashing beacons located overhead or on the shoulders then these features shall be maintained for the duration of the project or until the permanent traffic control plan has been implemented.

Whenever the staging of the work requires that the traveled way be relocated or realigned the Contractor shall reinstall all enhanced traffic control features noted above on the newly constructed sections of the work. The cost of relocating the stop lines, stop signs, advanced warning signs, the rumble strips and the flashing beacons shall be included in the price bid for Traffic Control - Lump Sum unless individual pay items are included in the contract for rumble strips and/or flashing beacons. When pay items are included in the contract for rumble strips or flashing beacons then these items will be paid per each.

When staging requires the relocation or realignment of an existing stop condition, it may be necessary to consider the addition of enhanced traffic control features even though none existed at the original location. Horizontal and vertical alignment changes at a new location may have decreased or restricted sight distance or the stop condition may occur sooner than in the previous alignment. If these conditions occur, then the Engineer and/or the WTCS should consider additional measures to enhance the motorist’s awareness of the changes even though the staging plans may not address enhanced features. Stop signs should be a minimum of 36 inches for interim situations. The use of 48 inch stop signs may be warranted under project specific conditions. Flags may be used on interim/permanent stop signs that are mounted at seven (7’) feet in height for a short duration in order to direct additional attention to a new or relocated stop sign(s). Flags should not be used for durations exceeding two weeks unless unusual or site specify conditions warrant a longer period of time. The use of Type “A” flashing red light(s) attached to the stop sign(s) may be appropriate during the same period that the flags are in use to increase attention.

The use of rumble strips and/or portable changeable message signs may be considered. The use of new rumble strips, where none previously existed, shall have the prior approval of District Traffic Operations before being included as part of the temporary traffic control plan. The message(s) displayed on any PCMS shall have the prior approval of the Engineer and the message(s) shall be included as part of the TTC plan for the interim staging.

The placement of any additional interim ground mounted signs and posts or stop lines shall be considered as incidental to the price bid for Traffic Control - Lump Sum. The installation of rumble strips, flashing beacons or the use of Portable Changeable Message Signs (PCMS) shall be considered as Extra Work unless pay items are included in the contract.

G. Low Shoulder Signage

1. Low Shoulder for Construction/Reconstruction/Resurfacing Projects
“Low Shoulder” (W8-9) signs shall be erected when a difference in elevation less than four (<4’) feet from the traveled way, exceeds one inch (>1”) but does not exceed three inches (≤3”) between the travel lane and any type of shoulder.

The spacing of the signs shall not exceed one (1) mile and the signs shall be placed immediately past each crossroad intersection. The “Low” signs shall remain in place until the difference in elevation is eliminated and the shoulder has been dressed and permanently grassed for a minimum of thirty (30) calendar days. These signs shall be furnished, installed, maintained and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be fluorescent orange with black borders.

2. Shoulder Drop-Off for Construction/Reconstruction/Resurfacing Project

“Shoulder Drop-Off” (W8-17) signs shall be used when a difference in elevation, less than four feet (<4’) from the traveled way, exceeds three inches (>3”) and is not protected by positive barrier protection. These warning signs shall be placed in advance of the drop-off.

The spacing of the signs shall not exceed one (1) mile and the signs shall be placed immediately past each crossroad intersection. The “Shoulder Drop-Off” signs shall remain in place until the difference in elevation is eliminated and the shoulder has been dressed and permanently grassed for a minimum of thirty (30) calendar days. These signs shall be furnished, installed, maintained, and removed by the Contractor as part of Traffic Control-Lump Sum. These signs shall be black borders on fluorescent orange background.

H. Bump Signage

A bump sign (W8-1) shall be utilized when a transverse joint in the pavement structure has a vertical difference in elevation of three quarters (≥3/4") of an inch or greater in depth with no horizontal taper to ramp the traffic from one elevation to the other. This condition typically occurs at approach slabs during pavement milling operations and at transverse joints in asphaltic pavement lifts. Other conditions include utility and storm drainage repairs that require concrete placement for patching and/or steel plating.

The W8-1 sign shall be placed sufficiently in advance to warn the motorist of the condition.

I. Sign Visibility

All existing, interim and new permanent signs shall be installed so as to be completely visible and legible for an advance distance in compliance with the MUTCD. Any clearing required for maintaining the line of sight to existing, interim or permanent signs shall be done as part of the requirements of the TTC plan. The clearing shall include any advance warning signs, both interim and permanent, that are installed as a part of the work including advance warning signs that are installed outside the limits of the project. Limbs, brush, construction equipment and materials shall be kept clear of the driver’s line of sight to all signs that are part of the TTC plan.

150.3.04 Advance Warning Signs

A. Project Signs - All Type of Highways

Advance warning signs shall be placed ahead of the work area in accordance with Part 6 of the MUTCD and shall include a series of at least three advance road work (W20-1) signs placed at the termini of the project. The series shall have the legend ROAD WORK (1500 FEET, 1000 FEET, AND 500 FEET).

At grade intersecting roadways and on-ramps shall be signed with a minimum of one ROAD WORK AHEAD sign.

When work terminates at a “T” intersection, a minimum of one “ROAD WORK AHEAD” sign shall be placed in advance of the intersection and one “END ROAD WORK” sign shall be placed at the termination end of the intersection. Field conditions may require the use of additional warning signage.

1. State Routes

Advanced Warning Signs on State Routes shall be a minimum dimension of forty-eight inches by forty-eight inches (48” x 48”). When a State Route intersects a project which consists of adding travel lanes, reconstructing an existing roadway or new location work, the State Route approaches shall have a minimum of three (W20-1) advanced warning
signs (1500 ft., 1000 ft., 500 ft.). The termination end of an intersecting State Route shall have END ROAD WORK signage.

The W20-1 signs shall be placed at the termini of the project or sufficiently in advance of the termini to allow for lane shifts, lane closures and other activities which may also require advanced warning signs. The advanced warning signs for the project should not overlap with the advanced warning signs for lane shifts, lane closures, etc.

The length of a work zone should be held to the minimum length required to accomplish the work. If a project has multiple individual worksites within the overall limits of the project, each site should be signed individually if the advance warning signs for each site can be installed without overlapping an adjacent worksite. As soon as the work is completed at any individual site, the warning signs shall be removed from that site. Clean-up work and punch list work shall be performed with portable signage.

Project mileage indicated on the G20-1 sign shall be the actual project mileage rounded up to the nearest whole mile. Projects less than two (<2) miles in length or individual worksites that are part of a multiple worksite project may delete this sign. The G20-1 sign shall be forty-eight inches by twenty-four inches (48” x 24”) and the G20-2 sign shall be forty-eight inches by twenty-four inches (48” x 24”).

2. Interstate, Limited Access and Multilane Divided Highways

In addition to the W20-1 signs required at 500 ft., 1000 ft. and 1500 ft., multi-lane divided highways shall also have additional advanced warning signs installed with the legend “ROAD WORK (2 MILES, 1 MILE and 1/2 MILE). All construction warning signs on divided highways shall be double indicated (i.e., on the left and right sides of the roadway.) If the use of the half (½) mile, one (1) mile and two (2) mile advanced warning signs cause an overlap with other work or do not benefit field conditions then the Engineer may review the use of these signs and eliminate their installation. When the posted speed limit is fifty (≤50) mph or less, the one-half (½) mile, one (1) mile and two (2) mile signs should be eliminated especially in urban areas.

The W20-1 advance warning signs for ROAD WORK 500 FEET; 1000 FEET; and 1500 FEET shall be temporarily covered when work involving the advanced warning signs for lane shifts and lane closures overlap these signs. The ROAD WORK ½ MILE, ROAD WORK 1 MILE, and ROAD WORK 2 MILES shall be in place when the 500, 1000 and 1500 feet signs are temporarily covered.

When the temporary traffic control zone already has advanced warning (W20-1) signs installed the W20-1 signs required for lane closures under Standard 9106 should be eliminated.

3. Ramp Work on Limited Access Highways

The work zone shall not be signed for the entire length of the mainline of a limited access highway when only short individual worksites, interchange or ramp work is being performed.

When work is restricted to ramp reconstruction or widening activities, the advance warning signs on the mainline section of the limited access highway shall be limited to the use of portable advance warning signs. These portable advance warning signs shall only be utilized when work activity is within the gore point of the ramp and the mainline traveled way or work is active in the acceleration/deceleration lane adjacent to the mainline traveled way. Portable advance warning signs (W20-1: 1500 ft./1000 ft./500 ft.) shall be installed on the traveled way of the limited access highway when the above conditions are present. The advance warning signs shall be installed only in one direction where work is active. All portable signs shall be double indicated. When work is not active, the ramp work shall be advanced warned by the use of a single forty-eight inches by forty-eight inches (48” x 48”) “ROAD WORK AHEAD” (W20-1) with an “ON RAMP” plaque (W13-4p) sign along the right shoulder of the mainline traveled way prior to the beginning of the taper for the deceleration lane. Differences in elevation shall be in compliance with the requirements of Subsection 150.3.11 prior to the removal of the portable (W20-1) advanced warning signs from the mainline.

B. Highway Work Zone

In accordance with Georgia Code, O.C.G.A. § 40-6-188, all sections or segments of the roadway under construction or reconstruction shall be signed as a Highway Work Zone except non-state highway two-lane two-way resurfacing projects.
Two conditions can be applied to a Highway Work Zone. Condition 1 is when no reduction in the existing speed limit is required. Condition 2 is when worksite conditions require a reduction of the speed limit through the designated Work Zone. Properly marking a Highway Work Zone shall include the following minimum requirements:

1. No Reduction in the Existing Posted Speed Limit in Highway Work Zone
   a. Signage shall be posted at the beginning point of the Highway Work Zone warning the traveling public that increased penalties for speeding violations are in effect. The beginning point of Highway Work Zone is at the project limits, start of work zone, or at the start of the first taper. The **HWZ-2** sign shall be placed a minimum of 600 feet in advance of the Highway Work Zone and shall not be placed more than 1000 feet in advance of the Work Zone. If no speed reduction is required, it is recommended that the **HWZ-2** be placed at 750 feet from the work area between the ROAD WORK 500 FT. and the ROAD WORK 1000 FT. signs. **HWZ-2** signs shall be placed at intervals not to exceed one mile for the length of the project. **HWZ-2** signs should be placed on the mainline after all major intersections except State Routes. State Routes shall be signed as per the requirements for intersecting roadways below.
   b. The existing speed limit shall be posted at the beginning of the Work Zone. Existing Speed Limit signs (R2-1) shall be maintained.
   c. Intersecting state routes shall be signed in advance of each intersection with the Work Zone with a **HWZ-2** sign to warn motorists that increased fines are in effect. All other intersecting roadways that enter into a designated Highway Work Zone may be signed in advance of each intersection with the Work Zone. When construction equipment and personnel are present in the intersection on the mainline of a multi-lane roadway, the intersecting side roads shall be signed in advance with **HWZ-2** signs. As soon as the work operation clears the intersection, the signage may be removed.
   d. Sign **HWZ-3** shall be posted at the end of the Highway Work Zone indicating the end of the zone and indicating that increased penalties for speeding violations are no longer in effect.
   e. When a designated Highway Work Zone is no longer necessary, all signs shall be removed immediately.

2. Reducing the Speed Limit in a Highway Work Zone
   Highway Work Zone signs shall be posted as required in Condition 1 above in accordance with **Detail 150-C**.
   A “Reduce Speed Limit Ahead” (W3-5) sign shall be posted 600 feet prior to the reduced speed limit.
   Then a “Speed Limit” signage (R2-1) for the reduced speed limit shall be erected at the beginning of the work zone. Additional signs shall be placed at whichever is least:
   a. on non-interstate roads after every junction with a numbered (state or U.S.) route.
   b. on interstates entrance ramp 1,500 feet from the end of the entrance taper. **Detail 150-D**
   c. on non-interstate and interstate a maximum spacing of no greater than one (1) mile apart.
   On multi-lane divided highways, the speed limit signs shall be double indicated when the reduced speed is in use.
   Additional signs may be necessary to adjust for actual field conditions.
   For limited access (interstate) highways and controlled access multi-lane divided highways, the posted speed limit shall be reduced as required below.
   When any one or more of the following conditions exist and the existing speed limit is sixty-five (65) mph or seventy (70) mph, the speed limit shall be reduced by ten (10) mph. If the existing speed limit is sixty (60) mph, the speed limit should be reduced by five (5) mph. If the existing speed limit is fifty-five (≤ 55) mph or less, the Contractor can
only reduce the speed limit with the prior approval of the Engineer. The reduction in the speed limit shall be no greater than ten (10) mph:

a) Lane closure(s) of any type and any duration.
b) The difference in elevation exceeds two inches (> 2") adjacent to a travel lane as shown in Subsection 150.3.11, Detail 150-E, Detail 150-F.
c) Any areas where equipment or workers are within ten feet (10’) of a travel lane.
d) Temporary portable concrete barriers located less than two feet (2’) from the traveled way.
e) As directed by the Engineer for conditions distinctive to this project.

When the above conditions are not present, the speed limit shall be immediately returned to the existing posted speed limit. A speed reduction shall not be put in place for the entire length of the project unless conditions warranting the speed reduction are present for the entire project length. All existing speed limit signs within the temporary speed reduction zone shall be covered or removed while the temporary reduction in the speed limit is in effect. All signs shall be erected to comply with the minimum requirements of the MUTCD.

At a minimum, the following records shall be kept by the WTCS:

a) Identify the need for the reduction.
b) Record the time of the installation and removal of the temporary reduction.
c) Fully describe the location and limits of the reduced speed zone.
d) Document any accident that occurs during the time of the reduction.

A copy of the weekly records for reduced speed zones shall be submitted to the Engineer.

When a pilot vehicle is used on a two-lane two-way roadway, the speed limit should not be reduced. For special conditions specific to the work, on two-lane two-way roadways or multi-lane highways, the contractor may reduce the posted speed limit with the prior approval of the Engineer.

3. Variable Speed Limit Zones

Projects that are within or extends into variable speed limit zones shall be posted according to condition 1 with HWZ-1, HWZ-2, and HWZ-3 signs. No additional “speed limit” signs, (R2-1), shall be posted. Any reduction or increase in speed limits will be controlled by the normal operation of the variable speed limit system.

Upon request, a maximum speed limit of fifty-five (55) mph may be set for the project limits.
COLORS
TOP PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - FLUORESCENT ORANGE

MIDDLE & BOTTOM PANELS
LEGEND & BORDER - BLACK
BACKGROUND - WHITE

NOTES:
1. ALL HWZ-2 SIGN PANELS SHALL BE RIGID.
2. THE SIZE OF THE HWZ-2 SIGN SHALL NOT BE REDUCED FOR USE ON TWO-LANE ROADWAYS.
WORK ZONE
END
INCREASED SPEEDING FINES

COLORS
TOP PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - FLUORESCENT ORANGE

BOTTOM PANEL
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE

NOTES:
1. ALL HWZ-3 SIGN PANELS SHALL BE RIGID.
2. THE SIZE OF THE HWZ-3 SIGN SHALL NOT BE REDUCED FOR USE ON TWO-LANE ROADWAYS.
Speed Limit Reduction for Highway Work Zone

Interstate and Multi Lane Divided Highway Signing Shall Be Double Indicated (Right Shoulder and Median Shoulder)

Traffic

Work Zone

0.0 FT - 400 FT

600 FT

Required for speed reduction

K

K

K

K

HWZ - 2 Sign

SPEED LIMIT

W3.5

48" X 48"

R2-1

48" X 48"

Reduce speed limit shall be posted at the project limit, or at the start of work zone, or at the start of the first taper.

Detail 150 - C

Original Speed Limit

Speed Limit Reduction for Highway Work Zone

At Entrance Ramp for Interstates

Singing Shall Be Double Indicated

1,500 FT

R2 - 1

48" X 48"

Detail 150 - D
C. Installation/Removal of Work Area Signage

No payment will be made for Traffic Control-Lump Sum until the Work has actually started on the project. The installation of traffic control signage does not qualify as the start of work. Advanced warning signs shall not be installed until the actual beginning of work activities. Any permanent mount height signs installed as the work is preparing to start shall be covered until all signs are installed unless all signs are installed within seven (≤ 7) calendar days after beginning installation.

All temporary traffic control devices shall be removed as soon as practical when these devices are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate, shall be removed or covered.

All construction warning signs shall be removed within seven (≤ 7) calendar days after time charges are stopped or pay items are complete. If traffic control devices are left in place for more than ten (> 10) calendar days after completion of the Work, the Department shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

PUNCH LIST WORK: Portable signs shall be utilized to accomplish the completion of all punch list items. The portable signs shall be removed daily. All permanent mount height signs shall be removed prior to the beginning of the punch list work except “Low/Soft Shoulder” signs and any signs that have the prior written approval of the Engineer to remain in place while the punch list work is in progress.

Failure to promptly remove the construction warning signs within the seven (7) calendar days after the completion of the Work or failure to remove or cover signs when work is suspended for short periods of time shall be considered as non-performance under Subsection 150.5.01.

150.3.05 Shoulder/Lane Closures

A. Approval/Restrictions

All shoulder closures and lane closures of any type or duration shall have the prior approval of the Engineer.

1. Closure Length

The length of a shoulder closure and a lane closure shall not exceed two (2) miles in length excluding the length of the tapers unless the prior approval of the Engineer has been obtained. The Engineer may extend the length of the closure based upon field conditions; however, the length of a work zone should be held to the minimum length required to accomplish the Work. Shoulder closure and Lane Closures shall not be spaced closer than one mile. The advanced warning signs for the project should not overlap with the advanced warning signs for lane shifts, lane closures, etc.

2. Duration

The first (7) calendar days in an Urban area and the first three (3) calendar days in a Rural area of any lane closure shall be signed and marked as per Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” or Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”. However, lane closures that exist for a duration longer than three (> 3) calendar days may be signed and marked as per the details in Georgia Standard 9121 “Tapers, Signs, and Markings for Passing Lanes”, provided the prior approval of the Engineer is obtained. The approved lane drop shall utilize a Portable Message Board (PCMS) and only the signs and markings shown for the termination end of the lane drop in Georgia Standard 9121. All warning signs in the lane drop sequence shall be used. Drums may be substituted for the Type I Crystal Delineators at the same spacing.

B. Shoulder Closures

In accordance with MUTCD 6G.07, when paved shoulders, having a width of eight feet (≥ 8’) or more are closed, at least one (1) advance warning sign shall be used. The sign(s) should read SHOULDER CLOSED (W21-5a). The signs are only posted on the side with the shoulder closure. Where the downstream end of the shoulder closure extends beyond the distance
that can be perceived by road users, a supplementary plaque bearing the message NEXT XX FEET (W16-4P) or MILES (W7-3aP) should be placed below the SHOULDER CLOSED (W21-5a) sign. These signs shall be placed 500 feet prior to the shoulder closure. For multi-shoulder closures, the Shoulder Closed sign shall be repeated after two (2) miles at 500 feet prior to the next shoulder closure.

A shoulder closure will require a shoulder taper of \((1/3) \, L\) \((L=\text{merging taper length})\). Traffic drums shall be used for the taper. Arrow boards are not required.

If positive barriers are used to closed the shoulder, the taper and drums shall be in accordance with Standard 4960, Temporary Barrier (End Treatment Options). The approach end of the barrier taper should be 10:1 or flatter slope.

C. Lane Closure

1. Advance Warning Signs

The advance Warning signs shall be in accordance with MUTCD and Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway” and Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”.

When the temporary traffic control zone already has advanced warning (W20-1) signs installed the W20-1 signs required for lane closures under Standard 9106 and 9107 should be eliminated.

For Interstate, Limited Access and Multi-lane Divided Highways, an additional Portable Changeable Message Sign (PCMS) shall be placed one (1) mile in advance of a lane closure with a message denoting the appropriate lane closure one (1) mile ahead. No other message shall be displayed on this PCMS. The PCMS shall be placed on the outside shoulder in accordance with Detail 150-B [PCMS]. This is in addition to the other traffic control devices required by Standard 9106.

At the discretion of the Engineer, the Contractor may start placing advance warning signs a half-hour (1/2 hr.) prior to the lane closure.

2. Transition Area – Taper

Drums shall be used on all transition tapers. If traffic drums with retroreflectivity of less than type VI are used for a merge taper that exists into the night, all drums located in the taper shall have, for the length of the taper only, a six inch (6") fluorescent orange (ASTM Type VI, VII, VIII, IX or X) reflectorized top stripe on each drum. The top six inch (6") stripe may be temporarily attached to the drum while in use in a taper. The Engineer may allow the fluorescent orange reflectorized six inch (6") top stripe on each drum in a merging taper to remain in place during daylight hours provided there is a lane closure(s) with a continuous operation that begins during one nighttime period and ends during another nighttime period. All drums that have the six inch (6") top stripe permanently attached shall not be used for any other conditions.

In accordance with MUTCD (6C.08), the minimum length for a merging taper for a lane closure on the travel way shall be as shown in Table 150-1:
If site conditions require a longer taper, then the taper shall be lengthened to fit particular individual situations.

The length of shifting tapers should be at least one-half (1/2) L.

Multiple Lane Closures:

a. A maximum of one (1) lane at a time shall be closed with each merge taper.

b. A minimum tangent length of two (2) L shall be installed between each individual lane closure taper. The tangent length is part of the transition area. Therefore, only traffic drums can be used in the tangent.

3. Activity Area

The activity area consists of a buffer and the work space. **Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”** states “Buffer zones of 300’ minimum, 500’ desirable are required for tangent sections and shall be increased for horizontal or vertical curves due to sight distance considerations.”

**Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”** requires a fifty feet (50’) buffer. The buffer shall be increased for horizontal or vertical curves due to sight distance considerations.

The channelization devices are spaced at a maximum of eighty feet (80’).

4. Termination Area

**Georgia Standard 9106 “Traffic Control Detail for Lane Closure on Multi-Lane Divided Highway”** requires a 150 feet buffer and a minimum 200 feet downstream taper.

**Georgia Standard 9107 “Traffic Control Detail for Lane Closure on Multi-Lane Undivided Highway”** requires 150 feet downstream taper.

D. Removal of Lane Closures

To provide the greatest possible convenience to the public in accordance with **Section 107**, the Contractor shall remove all signs, lane closure markings, and devices immediately when lane closure work is completed or temporarily suspended for any length of time or as directed by the Engineer. All portable signs and portable sign mounting devices shall be removed from the roadway to an area which will not allow the sign to be visible and will not allow the sign or sign mounting device to be impacted by traffic. All devices shall be stored beyond the clear zone or behind positive protection.
E. Exit and Entrance Ramps

On multi-lane highways, where traffic has been shifted to the inside lanes, the exit and entrance ramps shall have drums placed on both sides of the ramp. This requirement will apply to any situation where traffic is shifted to contra flows or inside staging lanes to facilitate reconstruction work in the vicinity of exit and entrance ramps. The temporary ramp taper length should be greater than, or equal to, the existing taper length. Interim EXIT gore signs shall be placed at the ramp divergence. The “EXIT OPEN” sign shown in Figure TA-42 of the MUTCD shall be utilized. For exit ramps, drums spacing shall be decreased to ten feet (10’) for 200 feet in advance of the temporary gore, and be decreased to ten feet (10’) for the first 100 feet of the temporary gore, and throughout the exit ramp. For on-ramps, drums should be used 200 feet prior to the ramp and end 100 feet past the merge taper. The drum spacing for the on ramp may be decreased but should not obstruct the view of the drivers i.e. for the ramp vehicles.

150.3.06 Traffic Pacing Method

A. Pacing Of Traffic

With prior approval from the Engineer, traffic may be paced allowing the Contractor up to twenty (20) minutes maximum to work in or above all lanes of traffic for the following purposes:

1. Placing bridge members or other bridge work.
2. Placing overhead sign structures.
3. Other work items requiring interruption of traffic.

The Contractor shall provide a uniformed law enforcement officer with patrol vehicle and blue flashing light for each direction of pacing. The law enforcement officer, Engineer, and flaggers at ramps shall be provided with a radio which will provide continuous contact with the Contractor.

When ready to start the work activity, the law enforcement vehicle will act as a pilot vehicle slowing the traffic, thereby providing a gap in traffic allowing the Contractor to perform the Work. Any on-ramps between the pace and the work area shall be blocked during pacing of traffic, with a flagger properly dressed and equipped with a Stop/Slow paddle. Each ramp should be opened after the law enforcement vehicle has passed.

Pilot vehicles shall travel at a safe pace speed. The Contractor shall provide a vehicle to proceed in front of the law enforcement vehicle and behind the other traffic in order to inform the Contractor’s work force when all vehicles have cleared the area.

Traffic should not be permitted to stop during pacing unless approved by the Engineer.

B. Methods of Signing For Traffic Pacing

At a point not less than 1,000 feet in advance of the beginning point of the pace, the Contractor shall place a portable changeable message sign with the message “TRAFFIC SLOWED AHEAD EXPECT SHORT DELAY”.

150.3.07 Flagging Operations

A. Flaggers

Flaggers shall be provided as required to handle traffic, as specified in the Plans or Special Provisions, and as required by the Engineer.

B. Flagger Certification

All flaggers shall meet the requirements of the MUTCD and shall have received training and a certificate upon completion of the training from one of the following organizations:

National Safety Council
American Traffic Safety Services Association (ATSSA)
On-line classes are not accepted.

Failure to provide certified flaggers as required above shall be reason for the Engineer suspending work involving the flagger(s) until the Contractor provides the certified flagger(s). Flaggers shall have proof of certification and valid identification (photo I.D.) available any time they are performing flagger duties.

C. Flagger Appearance and Equipment

Flaggers shall wear Performance Class 3 or better high-visibility clothing. Flagger stations shall be illuminated at night according to MUTCD (6F.82). They shall use a Stop/Slow paddle meeting the requirements of the MUTCD (6E.03) for controlling traffic. The Stop/Slow paddles shall have a shaft length of seven feet (≥ 7’) minimum. The Stop/Slow paddle shall be retroreflectorized for both day and night usage. In addition to the Stop/Slow paddle, a flagger may use a flag as an additional device to attract attention. This flag shall meet the minimum requirements of the MUTCD (6E.03). The flag shall, as a minimum, be twenty-four inches (≥ 24”) square and red or red/orange in color.

D. Flagger Warning Signs

Signs for flagger traffic control shall be placed in advance of the flagging operation, in accordance with the MUTCD and Georgia Standard 9102 “Traffic Control Detail for Lane Closure on Two-Lane Highway”. In addition, signs at regular intervals, warning of the presence of the flagger shall be placed beyond the point where traffic can reasonably be expected to stop under the most severe conditions for that day’s work.

E. Pilot Vehicle Requirements

Pilot vehicles should be required during placement of bituminous surface treatment or asphaltic concrete on two-lane roadways unless otherwise specified. Pilot vehicles shall meet the requirements of the MUTCD (6C.13).

F. Automated Flagger Assistance Devices

The Contractor may request, in writing, the use of Automated Flagger Assistance Devices (AFAD). The equipment shall meet the requirements of MUTCD (6E.04). As a part of this request, the Contractor shall also submit an alternate temporary traffic control plan in the event of a failure of the AFAD. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Contractor shall obtain the approval of the Engineer before the use of any AFAD will be permitted.

G. Portable Temporary Traffic Control Signals

The Contractor may request, in writing, the substitution of portable temporary traffic control signals for flaggers on two-lane two-way roadways provided the temporary signals meets the requirements of the MUTCD, Section 647, and subsection 150.2.11. As a part of this request, the Contractor shall also submit an alternate temporary traffic control plan in the event of a failure of the signals. Any alternate plan that requires the use of flaggers shall include the use of certified flaggers. The Contractor shall obtain the approval of the Engineer before the use of any portable temporary traffic control signals will be permitted.

150.3.08 Traffic Signals

A. Responsibility/Cost

If the sequence of operations, staging, or the temporary traffic control plan requires the relocation or shifting of any components of an existing traffic signal system then any work on these traffic signals will be considered as part of Traffic Control – Lump Sum.

B. Law Enforcement Officer Requirement

In accordance with Georgia law § 40-6-20, law enforcement officers shall be used to regulate and maintain traffic control at functioning signalized intersections when lane closures or traffic shifts block or restrict movements causing interference with road user flows and will not allow the activated traffic signal to guide the traffic through the signal site.
150.3.09 Mobile Operations

A mobile operation is defined by a minimum speed of three (3) mph. When pavement markings (centerlines, lane lines, and edge lines) are applied in a continuous operation by moving vehicles and equipment, the following minimum equipment and warning devices shall be required. These devices and equipment are in addition to the minimum requirements of the MUTCD.

All vehicles shall be equipped with the official slow moving vehicle symbol sign. All vehicles shall have a minimum of two (2) flashing or rotating beacons visible in all directions. All protection vehicles shall have an arrow panel mounted on the rear. All vehicles requiring an arrow panel shall have, as a minimum, a Type B panel. All vehicle mounted signs shall be mounted with the bottom of the sign a minimum height of forty-eight inches (48") above the pavement. All sign legends shall be covered or removed from view when work is not in progress.

The lead vehicle may be a separate vehicle or the work vehicle applying the pavement markings may be used as the lead vehicle. The lead vehicle shall have an arrow panel mounted so that the panel is easily visible to oncoming (approaching) traffic. The arrow panel should operate in the caution mode.

The work vehicle(s) applying markings shall have an arrow panel mounted on the rear. The arrow panel should typically operate in the caution mode. The work vehicle placing cones shall follow directly behind the work vehicle applying the markings.

A protection vehicle shall follow the last work vehicle at all times and shall be equipped with a truck mounted attenuator that shall be certified for impacts not less than sixty-two (62) mph in accordance with MASH/NCHRP350 Test Level Three (3).

150.3.10 Pavement Markings

A. General

Full pattern pavement markings in conformance with Section 3A and 3B, except 3B.02, of the MUTCD are required on all courses before the roadway is opened to traffic, unless noted in this section. No passing zones shall be marked to conform to Subsection 150.3.10.D.1.b. During construction and maintenance activities on all highways open to traffic, both existing markings and markings applied under this Section shall be fully maintained until Final Acceptance. If the pavement markings are, or become, unsatisfactory in the judgment of the Engineer due to wear, weathering, or construction activities, they shall be restored immediately.

Markings on the final surface course, which must be removed, shall be a removable type. The Contractor will be permitted to use paint, thermoplastic, or tape on pavement which is to be overlaid as part of the project, unless otherwise directed by the Engineer. Partial (skip) reflectorization (i.e. reflectorizing only a portion of a stripe) will not be allowed.

1. Resurfacing Projects

Pavement markings shall be provided on all surfaces that are placed over existing markings. Interim and final markings shall conform in type and location to the markings that existed prior to resurfacing unless changes or additions are noted in the Contract. The replacement of parking spaces will not be required unless a specific item or note has been included in the Contract. Any work to make additions to the markings that existed prior to resurfacing is to be considered as extra work.

2. Widening And Reconstruction Projects

If the lane configuration is altered from the preconstruction layout then pavement markings will be as required by the plans or the Engineer.

3. New Location Construction Projects

Pavement marking plans will be provided.
B. Installation and Removal of Pavement Markings

1. Installation

All pavement markings, both interim and permanent, shall be applied to a clean surface. The Contractor shall furnish the layout and preline the roadway surface for the placement of pavement markings applied as part of the temporary traffic control plan. All interim marking tape and RPM's on the final surface shall be removed prior to the placement of the final markings.

The Contractor shall sequence the work in such a manner as to allow the installation of markings in the final lane configuration at the earliest possible stage of the work.

2. Removal

Markings no longer applicable shall be removed in accordance with Section 656. The elimination of conflicting pavement markings by overpainting with unapproved paint or any type of liquid asphalt is not acceptable.

3. Intermediate Surface

Interim markings shall be removed by methods that will cause minimal damage to the pavement surface, while also ensuring that traveling public will not be confused or misdirected by any residual markings remaining on the intermediate surface. The use of approved black-out tape and black-out paint (manufactured for the sole purpose of covering existing pavement markings) may be permitted on some interim surfaces, provided the results are satisfactory to the Engineer.

4. Final Surface

No interim paint or thermoplastic markings will be permitted on any final surface unless the interim markings are in alignment with the location of the permanent markings and the interim marking will not interfere or adversely affect placement of the permanent markings. The proposed method of removal for layout errors that require markings to be removed from the final surface shall have the prior approval of the Engineer. Any damage to the final pavement surface caused by the pavement marking removal process shall be repaired at the Contractor’s expense by methods acceptable and approved by the Engineer. Section 400 shall apply when corrective measures are required. The use of black-out tape or black-out paint will not be permitted under any circumstance to correct layout errors on any final surface.

Traffic shifts that are done on the final surface shall be accomplished using interim traffic marking tape that can be removed without any blemishing of the final surface. Interim traffic marking tape shall be used on any of the following final surfaces; asphaltic concrete, Portland cement concrete, and bridge deck surfaces. The contractor may propose alternate traffic markings and removal methods on the final surface. Submitted proposals shall include the type of material, method of removal and a cost comparison to the traffic marking tape method. Prior to any approval, the contractor shall field demonstrate to the satisfaction of the Engineer that the proposed traffic markings can be removed without any blemishing of the final surface. If the proposal is determined to be acceptable, a supplemental agreement will be executed prior to the installation of the proposed alternate traffic markings. The supplemental agreement shall denote the type of traffic marking materials, method of removal and any cost and/or time savings to the Department. The Department will not consider or participate in any cost increase that may result from implementing the proposed alternate method.

5. Pay Factor Reduction for Asphaltic Concrete Final Surfaces

When the correction of an error in the layout of the final pavement markings requires the final surface to be grounded, blemished, scarred, or polished the pay factor shall be reduced to 0.95 for the entire surface area of the final topping that has a blemish, polished or a scarred surface. The reduced pay factor shall not be confined to only the width and length of the stripe or the dimensions of the blemished areas, the whole roadway surface shall have the reduced pay factor applied. The area of the reduced pay factor shall be determined by the total length and the total width of the roadway affected. If the affected area is not corrected, the reduction in pay shall be deducted from the final payment.
for the topping layer of asphaltic concrete. The Engineer shall make the final determination whether correction or a reduced pay factor is acceptable.

The eradication of pavement markings on intermediate and final concrete surfaces shall be accomplished by a method that does not grind, polish, or blemish the surface of the concrete. The method used for the removal of the interim markings shall not spall chip the joints in the concrete and shall not damage the sealant in the joints. Any joint or sealant repairs shall be included in the bid price for Traffic Control-Lump Sum. The proposed method of removal shall have the prior approval of the Engineer.

Failure to promptly remove conflicting or non-applicable pavement markings shall be considered as non-performance under Subsection 150.5.01.

6. Preparation and Planning For Traffic Shifts

When shifting of traffic necessitates removal of centerline, lane lines, or edge lines, all such lines shall be removed prior to, during, or immediately after any change so as to present the least interference with traffic. Interim traffic marking tape shall be used as a temporary substitute for the traffic markings being removed.

Before any change in traffic lane(s) alignment, marking removal equipment shall be present on the project for immediate use. If marking removal equipment failures occur, the equipment shall be repaired or replaced (including leasing equipment if necessary), so that the removal can be accomplished without delay.

Except for the final surface, markings on asphaltic concrete may be obliterated by an overlay course, when approved by the Engineer. When an asphaltic concrete overlay is placed for the sole purpose of eliminating conflicting markings and the in place asphaltic concrete section will allow, said overlay will be eligible for payment only if designated in the Plans. Overlays to obliterate lines will be paid for only once and further traffic shifts in the same area shall be accomplished with removable markings. Only the minimum asphaltic concrete thickness required to cover lines will be allowed. Excessive build-up will not be permitted. When an overlay for the sole purpose of eliminating conflicting markings is not allowed, the markings no longer applicable shall be removed in accordance with Section 656.

C. Raised Pavement Markers

Retroreflective raised pavement markers (RPMs) should be placed as listed below for all asphaltic concrete pavements before the roadway is open to traffic, unless noted this section. On the final surface, RPM’s shall be placed according to the timeframes specified in Subsection 150.3.10.D for full pattern pavement markings. When Portland Cement Concrete is an intermediate or final surface and is open to traffic, one (1) calendar day is allowed for cleaning and drying before the installation of RPMs is required.

Raised pavement markers are not allowed on the right edge lines under any situation.

Retroreflective raised pavement markers (RPMs) should be placed and/or maintained on intermediate pavements surfaces on all highways that the final ride surface is not completed within 45 calendar days which is open to traffic, This includes all resurfacing projects along with widening and reconstruction projects. The RPMs shall be placed as follows:

1. Supplementing Lane Lines:
   a. Eighty foot (80’) center on skip lines with curvature less than three degrees. (Includes tangents)
   b. Forty foot (40’) centers on solid lines and all lines with curvature between three degrees and six degrees.
   c. Twenty foot (20’) centers on curves over six degrees.
   d. Twenty foot (20’) centers on lane transitions or shifts.

2. Supplementing Ramp Gore Lines:
   a. Twenty foot (20’) centers, two each, placed side by side.
3. Other Lines:
   a. As shown on the plans or directed by the Engineer.

D. Exceptions for Interim Markings

Some exceptions to the time of placement and pattern of markings are permitted as noted below; however, full pattern pavement markings are required for the completed project.

1. Two-Lane, Two-Way Roadways
   a. Skip Lines

If used, interim temporary tape or paint skip (broken) stripe may only be used for a maximum of three (3) calendar days. The stripes shall be at least two feet (> 2') long with a maximum gap of thirty-eight feet (≤ 38'). On curves greater than six degrees (>6⁰), a one-foot (1') stripe with a maximum gap of nineteen feet (≤ 19') shall be used. In lane shift areas, solid lines will be required.

Interim raised pavement markers may be substituted for the interim skip (broken) stripes. If raised pavement markers are substituted for the two foot (2') interim skip stripe, three (3) markers spaced at equal intervals over a two feet (2') distance will be required. No separate payment will be made if the interim raised pavement markers are substituted for interim skip lines.

Interim raised pavement markers shall be retro-reflective, shall be the same color as the pavement markers for which they are substituted, and shall be visible during daytime.

The type of interim marker and method of attachment to the pavement shall be approved by the Office of Materials and Testing but in no case will the markers be attached by the use of nails. Flexible reflective markers, Type 14 or Type 15, may be used for a maximum of three (3) calendar days as an interim marker. Any flexible reflective markers in use shall be from the QPL-76.

The interim raised pavement markers shall be maintained until the full pattern pavement markings are applied. At the time full pattern markings are applied the interim raised markers shall be removed in a manner that will not interfere with application of the full pattern pavement markings.

b. No Passing Zones Two-Lane, Two-Way Roadways

Passing zones shall be re-established in the locations existing prior to resurfacing. No changes to the location of passing zones shall be done without the written approval of the Engineer. For periods not to exceed three (3) calendar days where interim skip centerlines are in place, no-passing zones shall be identified by using post or portable mounted DO NOT PASS regulatory signs (R4-1) twenty-four inches by thirty inches (24" x 30") at the beginning and at intervals not to exceed one-half (≤½) mile within each no-passing zone. A post or portable mounted PASS WITH CARE regulatory sign (R4-2) twenty-four inches by thirty inches (24" x 30") shall be placed at the end of each no-passing zone. Post mounted signs shall be placed in accordance with the MUTCD. Portable signs shall be secured in such a manner to prevent misalignment and minimize the possibility of being blown over by weather conditions or traffic.

On new location projects and on projects where either horizontal or vertical alignments has been modified, the location of No-Passing Zones will be identified by the Engineer.

c. Edge lines

   - Bituminous Surface Treatment Paving

Edge lines will not be required on intermediate surfaces (including asphaltic concrete leveling for bituminous surface treatment paving) that are in use for a period of less than sixty (<60) calendar days except at bridge
approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within thirty (≤ 30) calendar days of the time that the final surface was placed.

- **All Other Types of Pavement**

  Edge lines will not be required on intermediate surfaces that are in use for a period of less than thirty (<30) calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edge lines shall be placed within fourteen (≤ 14) calendar days of the time that the surface was placed.

2. **Multi-Lane Highways – With No Paved Shoulder(s) or Paved Shoulder(s) Four Feet or Less (≤ 4’)**

   a. **Undivided Highways (Includes Paved Center Turn Lane)**

      - Centerlines and No-Passing Barrier-Full Pattern centerlines and no-passing barriers shall be restored before opening to traffic.

      - Lane lines- Interim skip (broken) stripe as described in Subsection 150.3.10.D.1.a. may be used for periods not to exceed three (≤ 3) calendar days. Skip lines are not permitted in lane shift areas. Solid lines shall be used.

      - Edge lines- Edge lines shall be placed on intermediate and final surfaces within three (3) calendar days of obliteration.

   b. **Divided Highways (Grass or Raised Median)**

      - Lane lines- Full pattern skip stripe shall be restored before opening to traffic. Skip lines are not permitted in lane shift areas. Solid lines shall be required.

      - Centerline/Edge line- Solid lines shall be placed on intermediate and final surfaces within three calendar days of obliteration.

3. **Limited Access Roadways and Roadways with Paved Shoulders Greater Than Four Feet (> 4’)**

   a. Same as Subsection 150.3.10.D.2 except as noted in (b) below.

   b. **Edge lines**-

      - Asphalitic Concrete Pavement- Edge lines shall be placed on intermediate and final surfaces prior to opening to traffic.

      - Portland Cement Concrete Pavement- Edge lines shall be placed on any surface open to traffic no later than one calendar day after work is completed on a section of roadway. All water and residue shall be removed prior to daily striping.

4. **Ramps for Multi-Lane Divided Highways**

   A minimum of one solid line edge stripe shall be placed on any intermediate surface of a ramp prior to opening the ramp to traffic. The other edge stripe may be omitted for a maximum period of three (3) calendar days on an intermediate surface. Appropriate channelization devices shall be spaced at a maximum of twenty-five feet (25’) intervals until the other stripe has been installed.

   The final surface shall have both stripes placed prior to opening the ramp to traffic.

5. **Miscellaneous Pavement Markings**
a. Final Surface

School zones, railroads, symbols, words and other similar markings shall be placed on final surfaces conforming to Section 652 within fourteen (14) calendar days of completion of the final surface. Final markings shall conform to the type of pay item in the plans. When no pay item exists in the plans the final markings shall conform to Section 652 for painted markings.

b. Intermediate Surface

Intermediate surfaces that will be in use for more than forty-five (45) calendar days shall have the miscellaneous pavement markings installed to conform to the requirement of Section 652. Under Subsection 150.6, Special Conditions, or as directed by the Engineer these markings may be eliminated.

c. Stop Line

All stop signs and traffic signals shall have temporary twelve inch (12”) stop lines placed in accordance with MUTCD (3B.16) on all surfaces prior to opening to traffic. Temporary tape may be used.

150.3.11 Differences In Elevations Between Travel Lanes And Shoulders

All time frames and requirements may be changed with the Engineer’s approval.

A. Differences in Elevations

Difference in elevations due to construction between travel lanes and/or shoulders within the clear zone should be limited to the following:

1. Difference of two inches (≤ 2”) or less between adjacent travel lanes should remain for a maximum period of fourteen (14) calendar days.

2. Difference of two inches (≤ 2”) or less between adjacent travel lane and paved shoulder should remain for a maximum of thirty (30) calendar days. Traffic control devices shall be in accordance with Detail 150-G.

3. Difference of greater than two inches (> 2”) is permitted for continuous operations. Traffic control devices shall be in accordance with Detail 150-E.

4. Difference of greater than two inches (> 2”) between travel lanes and/or shoulders for non-continuous operations will not be allowed for more than a twenty-four (24) hour period. For the first twenty-four (24) hours, traffic control shall be in accordance with Detail 150-E. After twenty-four (24) hours the section should be healed according to Detail 150-H. This condition can exist for a maximum sixty (60) calendar days.

   a. A single length of area that does not exceed 1000 feet total length may be left open as a startup area for periods not to exceed forty-eight (48) hours provided the Contractor can demonstrate the ability to complete the Work in a proficient manner. Prior approval of the Engineer shall be obtained before any startup area may be allowed.

   b. For cement stabilized base, work adjacent to the travel lane and/or shoulders shall be healed as per Detail 150-H within forty-eight (48) hours after the seven (7) calendar day curing period is complete for each section placed. During the placement and curing period, traffic control shall be in accordance Detail 150-E.

Failure to meet these requirements shall be considered as non-performance of Work under Subsection 150.5.01.

B. Healed Section

Healed section and traffic control devices should be placed in accordance with Detail 150-H. If crushed stone materials are used to provide a healed section no separate payment will be made for the material used to heal any section. The
Contractor may submit a plan to utilize existing pay items for crushed stone provided the plan clearly demonstrates that the materials used to heal an area will be incorporated into the work with minimal waste. Handling and hauling of any crushed stone used to heal shall be kept to a minimum. The Engineer shall determine if the crushed stone used to heal meets the specifications for gradation and quality when the material is placed in the final location.

C. Emergency Situations

Inclement weather, traffic accidents, and other events beyond the control of the Contractor may prevent the work from being completed as required above. The Contractor shall notify the Engineer in writing stating the conditions and reasons that have prevented the Contractor from complying with the time limitations. The Contractor shall also outline a plan detailing immediate steps to complete the work. Failure to correct these conditions on the first calendar day that conditions will allow corrective work shall be considered as non-performance of Work under Subsection 150.5.01.

D. Plating

Plating for drainage structures, utility facilities, etc. is prohibited on the interstates. Plating on State Routes and secondary roads will require the prior approval of the project engineer. Steel plates shall not be used on highways with a posted speed greater than forty-five (45) mph. The plate shall completely cover the pavement cut or excavation. The plate shall be adequately secured and shall provide a safe and reasonable transition to the adjoining roadway surface. An asphalt wedge can be used to provide a smooth transition over the plate(s). Temporary traffic control warning signs W8-24 shall be posted in advance warning motorist about plates in roadway in accordance with the MUTCD. Plating should not remain in place for more than four (4) calendar days.

E. Asphaltic Concrete Resurfacing Projects

1. Shoulder Construction Included as a Part of the Contract

When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2") between the earth shoulder (grassed or un-grassed) and the edge of travel lane or between the earth shoulder and a paved shoulder that is less than four feet (< 4’) in width, the Contractor shall place and maintain drums in accordance with the requirements of Subsection 150.2.04.B.3. When the edge of the paved surface is tapered with a safety edge, drums may be spaced at two (2) times the speed limit in MPH. Drums shall remain in place and be maintained until the difference in elevation has been eliminated by the placement of the appropriate shoulder materials.

2. Shoulder Construction Not Included as a Part of the Contract

When the placement of asphaltic concrete materials creates a difference in elevation greater than two inches (> 2") between the earth shoulder (grassed or un-grassed) and the edge of travel lane or between the earth shoulder and a paved shoulder that is less than four feet (< 4’) in width, the Contractor shall notify the Engineer, in writing, when the resurfacing work including all punch list items has been completed.
<table>
<thead>
<tr>
<th>Drums spaced at twenty foot (20') intervals. <strong>Note:</strong> If the travel way width is reduced to less than ten feet (&lt; 10’) by the use of drums, vertical panels shall be used in lieu of drums.</th>
<th>Location of drums when Elevation Difference exceeds four inches (&gt; 4”)</th>
</tr>
</thead>
</table>

Drums spaced at forty foot (40’) intervals. Location of drums when Elevation Difference is greater than two inches (> 2”) to four inches (4”).

ELEVATION DIFFERENCE GREATER THAN FOUR INCHES (> 4”)  
DETAIL 150-E

ELEVATION DIFFERENCE GREATER THAN TWO INCHES (> 2”) TO FOUR INCHES (4”)  
DETAIL 150-F
Drums spaced at eighty foot (80’) intervals.

Location of drums when Elevation Difference is two inches (≤ 2”) or less.

Drums spaced at eighty foot (80’) intervals.

Location of drums when Elevation Difference is two inches (≤ 2”) or less.

ELEVATION DIFFERENCE OF TWO INCHES (≤ 2”) OR LESS

DETAIL 150-G

Location of drums immediately after completion of healed sections spaced at 40 foot (40’) intervals

Healed Section

Compacted graded aggregate, subbase material or dirt.

NO STEEPER THAN 4:1

TOP OF DRUM TO BE LEVEL

2 feet ±

HEELED SECTION

DETAIL 150-H
150.3.12 Work Zone Law Enforcement

Work zone law enforcement consists of utilizing a uniformed law enforcement officer equipped with patrol vehicle and blue flashing lights to enforce traffic laws in construction work zones and the administration of this service. Payment for work zone law enforcement will be made only for the utilization in work zones during lane closures, traffic pacing, or other activities that occur within travel lanes. The Contractor will be responsible for negotiating a rate of reimbursement and making reimbursement to that law enforcement agency.

The Contractor will be responsible for coordinating and scheduling the utilization of the work zone law enforcement. The Engineer may require the use of work zone law enforcement at specific times and locations.

150.4 Measurement

150.4.01 Traffic Control Items

A. Traffic Control

When listed as a pay item in the Proposal, payment will be made at the lump sum price bid, which will include all traffic control not paid for separately, and will be paid as follows:

When the first Construction Report is submitted, a payment of twenty-five percent (25%) of the lump sum price will be made. For each progress payment thereafter, the total of the Project percent complete shown on the last pay statement plus twenty-five percent (25%) will be paid (less previous payments), not to exceed one hundred percent (100%).

When no payment item for Traffic Control-Lump Sum is shown in the Proposal, all of the requirements of Section 150 and the Temporary Traffic Control Plan shall be in full force and effect. The cost of complying with these requirements will not be paid for separately, but shall be included in the overall bid submittal.

B. Changeable Message Sign, Portable

Portable changeable message sign will be measured as specified in Section 632.

C. Flashing Beacon Assembly

Flashing beacon assemblies will be measured as specified in Section 647.

D. Pavement Markings

Pavement markings will be measured as specified in Section 150.

E. Portable Impact Attenuators

Each portable impact attenuator will be measured by the unit/array which shall include all material components, hardware, incidentals, labor, site preparation, and maintenance, including spare parts recommended by the manufacturer for repairing accident damage. Each unit will be measured only once regardless of the number of locations installed, moves required, or number of repairs necessary because of traffic damage. Upon completion of the project, the units shall be removed and retained by the Contractor.

F. Signs

When shown as a pay item in the contract, interim special guide signs will be paid for as listed below. All other regulatory, warning, and guide signs, as required by the Contract, will be paid for under Traffic Control Lump Sum or included in the overall bid submitted.

1. Interim ground mounted or interim overhead special guide signs will be measured for payment by the square foot. This payment shall be full compensation for furnishing the signs, including supports as required, erecting, illuminating
overhead signs, maintaining, removing, re-erecting, and final removal from the Project. Payment will be made only one time regardless of the number of moves required.

2. Remove and reset existing special guide signs, ground mount or overhead, complete, in place, will be measured for payment per each. Payment will be made only one time regardless of the number of moves required.

3. Modify special guide signs, ground mount or overhead, will be measured for payment by the square foot. The area measured shall include only that portion of the sign modified. Payment shall include materials, removal from posts or supports when necessary, and remounting as required.

G. Temporary Audible Information Device

Temporary audible information devices are measured as the actual number furnished and installed in accordance with the manufacturer’s recommendations, which shall include all necessary materials, equipment, labor, site preparation, maintenance and removal. Each temporary audible information device will be paid for only one time regardless of the number of times it’s reused during the duration of The Work. These devices shall remain the property of the Contractor.

H. Temporary Barrier

Temporary barrier shall be measured as specified in Sections 620.

I. Temporary Curb Cut Wheelchair Ramps

Temporary curb cut wheelchair ramps are measured as the actual number formed and poured, complete and accepted, which shall include all necessary materials, equipment, labor, site preparation, maintenance and removal. No additional payment will be made for sawing existing sidewalk and removal and disposal of removed material for temporary wheelchair ramp construction. No additional payment will be made for constructing the detectable warning surface.

J. Temporary Guardrail Anchorage, Type 12

Temporary guardrail anchorage- type 12 will be measured by each assembly, complete in place and accepted according to the details shown in the plans, which shall also include the additional guardrail and appurtenances necessary for transition and connection to temporary concrete barrier. Payment shall include all necessary materials, equipment, labor, site preparation, maintenance and removal.

K. Temporary Walkways with Detectable Edging

Temporary walkways with detectable edging will be measured in linear feet (meters), complete in place and accepted, which shall include all necessary materials, equipment, labor, site preparation, temporary pipes, passing spaces, maintenance and removal. Excavation and backfill are not measured separately for payment. No payment will be made for temporary walkways where existing pavements or existing edging (that meets the requirements of MUTCD) are utilized for the temporary walkway. Payment for temporary detectable edging, including approved barriers and channelizing devices, installed on existing pavement shall be included in Traffic Control-Lump Sum.

L. Traffic Signal Installation- Temporary

Temporary traffic signal installation will be measured as specified in Section 647.

M. Work Zone Law Enforcement

When work zone law enforcement is shown as a pay item, work zone law enforcement will be measured for payment by the hour. The Contractor shall provide a daily work record containing the actual number of hours charged by the law enforcement officer. The daily work record shall be compiled on a form provided by the Department, signed by the law enforcement officer, signed by the Contractor's Worksite Traffic Control Supervisor attesting that the law enforcement was utilized during the time recorded, and then submitted to the Engineer.
Work zone law enforcement will be measured for payment by the hour up to the maximum number of hours included in the contract. The Engineer may at his discretion increase the maximum number of hours.

Payment shall be full compensation for reimbursing the law enforcement agency, and for all cost incurred by the Contractor in coordinating, scheduling, and administering the item work zone law enforcement.

If no work zone law enforcement pay item is included in the contract, then all work zone law enforcement cost shall be included in Traffic Control – Lump Sum.

150.5 Payment

When shown in the Schedule of Items in the Proposal, the following items will be paid for separately. Payment will be made under:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>Traffic control - Lump sum</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>Traffic control, solid traffic stripe ___ inch, (color)</td>
<td>Per linear mile</td>
</tr>
<tr>
<td>150</td>
<td>Traffic control, skip traffic stripe ___ inch, (color)</td>
<td>Per linear mile</td>
</tr>
<tr>
<td>150</td>
<td>Traffic control, solid traffic stripe, thermoplastic 24 inch, color</td>
<td>Per linear mile</td>
</tr>
<tr>
<td>150</td>
<td>Traffic control, raised pavement markers –all types</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Remove and reset, existing special guide signs, overhead, complete-in-place</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Temporary walkways with detectable edging</td>
<td>Per linear foot</td>
</tr>
<tr>
<td>150</td>
<td>Temporary curb cut wheelchair ramps</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Temporary audible information device</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Single lane closure</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Multilane closure</td>
<td>Per each</td>
</tr>
<tr>
<td>150</td>
<td>Work Zone Law Enforcement</td>
<td>Per hour</td>
</tr>
</tbody>
</table>

150.5.01 Enforcement and Adjustments

The safe passage of pedestrians and traffic through and around the temporary traffic control zone, while minimizing confusion and disruption to traffic flow, shall have priority over all other Contractor activities. Continued failure of the Contractor to comply with the requirements of Section 150 - Traffic Control will result in non-refundable deductions of monies from the Contract as shown in this Subsection for non-performance of Work.

Failure of the Contractor to comply with this Specification shall be reason for the Engineer suspending all other work on the Project, except erosion control and traffic control, taking corrective action as specified in Section 105, and/or withholding payment of monies due to the Contractor for any work on the Project until traffic control deficiencies are corrected. These other actions shall be in addition to the deductions for non-performance of traffic control.

<table>
<thead>
<tr>
<th>SCHEDULE OF DEDUCTIONS FOR EACH CALENDAR DAY OF DEFICIENCIES OF TRAFFIC CONTROL INSTALLATION AND/OR MAINTENANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGINAL TOTAL CONTRACT AMOUNT</td>
</tr>
<tr>
<td>From More Than</td>
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<tr>
<td>$0</td>
</tr>
<tr>
<td>$100,000</td>
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<tr>
<td>$20,000,000</td>
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<tr>
<td>$40,000,000</td>
</tr>
</tbody>
</table>
Add the following to Section 161:

161.1 General Description
This Work includes using best management practices (BMPs) shown on the Plans, ordered by the Engineer, or as required during the life of the Contract to control soil erosion and sedimentation through the use of any of the devices or methods referred to in this Section.

161.1.01 Definitions
Certified Personnel— certified personnel are defined as persons who have successfully completed the Level IA, or higher, certification course approved by the Georgia Soil and Water Conservation Commission. For Department projects the certified person must also have successfully completed the Department’s Worksite Erosion Control Supervisor (WECS) certification course.

Design Professional— as used within this specification, means that which is defined in the current National Pollutant Discharge Elimination System (NPDES) Infrastructure Permit No. GAR100002, Part I.B.

161.1.02 Related References
A. Standard Specifications
   Section 105—Control of Work
   Section 106—Control of Materials
   Section 107—Legal Regulations and Responsibility to the Public
   Section 109—Measurement and Payment
   Section 160—Reclamation of Material Pits and Waste Areas
   Section 162—Erosion Control Check Dams
   Section 163—Miscellaneous Erosion Control Items
   Section 166—Restoration or Alteration of Lakes and Ponds
   Section 170—Silt Retention Barrier
   Section 171—Silt Fence
   Section 205—Roadway Excavation
   Section 434—Asphalt Paved Ditches
   Section 441—Miscellaneous Concrete
   Section 603—Rip Rap
   Section 700—Grassing
   Section 711—Turf Reinforcement Matting
   Section 716—Erosion Control Mats (Slopes)
Erosion control measures contained in the Specifications include:

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<td>Maintenance of Temporary Erosion and Sedimentation Control Devices</td>
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<td>Temporary Sediment Basin</td>
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<td>Silt Control Gates</td>
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<td>Mulch</td>
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<td>Triangular Silt Barrier</td>
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<td>Silt Filter Bag</td>
<td>719</td>
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<td>Organic and Synthetic Material Fiber Blanket</td>
<td>713</td>
</tr>
</tbody>
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B. Referenced Documents

NPDES Infrastructure Permit No. GAR100002

GDOT WECS seminar

Georgia Soil and Water Conservation Commission Certification Level IA and Level II courses

Environmental Protection Divisions Rules and Regulations (Chapter 391-3-7)

OCGA 12-7-1

Erosion, Sedimentation and Pollution Control Plan (ESPCP)

161.1.03 Submittals

A. Status of Erosion Control Devices

The Worksite Erosion Control Supervisor (WECS) or certified personnel will inspect the installation and maintenance of the Erosion Control Devices according to Subsection 167.3.05.B and the ESPCP.

1. Submit all reports to the Engineer within 24 hours of the inspection. Refer to Subsection 167.3.05.C for report requirements.

2. The Engineer will review the reports and inspect the Project for compliance and concurrence with the submitted reports.
3. The Engineer will notify the WECS or certified personnel of any additional items that should be added to the reports.

4. Items listed in the report requiring maintenance shall be completed within seventy-two (72) hours.

5. BMPs that have failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State shall have immediate reasonable steps taken to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. If the correction requires a new or replacement BMP or significant repair, the correction must be completed and operational within seven (7) days from the time of discovery. If seven (7) days is infeasible, document why the timeframe is infeasible and coordinate with the Engineer to schedule the correction as soon as feasible after the seven (7) day timeframe. The Department must be in agreement with the infeasibility.

B. Erosion and Sediment Pollution Control Plan

1. Project Plans

An Erosion, Sedimentation and Pollution Control Plan (ESPCP) for the construction of the project will be provided by the Department. The ESPCP will be prepared for the various stages of construction necessary to complete the project. If the Contractor elects to alter the stage construction from that shown in the plans, it will be the responsibility of the Contractor to have the plans revised and prepared in accordance with the current GAR100002 NPDES permit by a Design Professional to reflect all changes in Staging. This will also include any revisions to erosion and sedimentation control item quantities. If the changes affect the Comprehensive Monitoring Program (CMP), the Contractor will be responsible for any revisions to the CMP as well. Submit revised plans and quantities to the Engineer for review prior to land disturbing activities.

2. Haul Roads, Borrow Pits, Excess Material Pits, etc.

The Contractor is responsible for amending the approved erosion, sedimentation and control plans if they add a haul road that is outside of the project roadway but within the right of way or construct any borrow pits, or excess material pits inside the Right of Way. Prepare these plans for all stages of construction and include the appropriate items and quantities. Submit these plans to the Engineer for review prior to land disturbing activities. These plans are to be prepared by a Design Professional.

If construction of haul roads, or borrow pits, or excess material pits, etc., (inside the Right of Way) encroach within the 25 foot (7.6 m) buffer along the banks of all state waters or within the 50 ft. (15 m) buffer along the banks of any state waters classified as a “trout stream”, a state water buffer variance must be obtained by the Contractor prior to beginning any land disturbing activity in the stream buffer.

3. Erosion Control for Borrow and Excess Material Pits Outside the Right-of-Way

Erosion control for borrow pits and excess material pits outside the right of way is the responsibility of the Contractor. If borrow or excess material pits require coverage under the National Pollutant Discharge Elimination System permit (NPDES) or other permits or variances are required, submit a copy of all documentation required by the permitting agency to the Engineer. All costs associated with complying with local, state, and federal laws and regulations are the responsibility of the Contractor.

4. Culverts and Pipes

The ESPCP does not contain approved methods to construct a stream diversion or stream diversion channel. The Contractor shall prepare a diversion plan utilizing a Design Professional as defined in the current NPDES permit. See Subsection 161.3.05 G for additional information.

5. Temporary Asphalt or Concrete Batch Plants

In addition to the requirements of any applicable specifications, if the Department authorizes the temporary installation and use of any asphalt, concrete or similar batch plants within its right of way, the contractor shall submit an NOI to the Georgia Environmental Protection Division for coverage under the following NPDES permits: The Infrastructure permit for the construction of the plant, and the Industrial permit for the operation of, such a plant. The contractor shall submit the NOIs as both the Owner and the Operator.

161.2 Materials

General Provisions 101 through 150.
161.3 Personel

A. Duties of the Worksite Erosion Control Supervisor

Before beginning Work, designate a Worksite Erosion Control Supervisor (WECS) to initiate, install, maintain, inspect, and report the condition of all erosion control devices as described in Sections 160 through 171 or in the Contract and ESPCP documents. The designate shall submit their qualifications on the Department provided resume form for consideration and approval. The contractor may utilize additional persons having WECS qualifications to facilitate compliance however, only one WECS shall be designated at a time.

The WECS and alternates shall:

- Be an employee of the Prime Contractor.
- Have at least one year of experience in erosion and sediment control, including the installation, inspection, maintenance and reporting of BMPs.
- Successfully completed the Georgia Soil and Water Conservation Commission Certification Course Level IA and the Department’s WECS Certification Course.
- Provide phone numbers where the WECS can be located 24 hours a day.

The WECS’ duties include the following:

- Be available 24 hours a day and have access to the equipment, personnel, and materials needed to maintain erosion control, and to the extent practicable, flooding control. An approved representative can be substituted for the WECS in regard to 24 hour availability. This representative shall be at least GSWCC Level IA, or higher, but is not required to be certified as a WECS.
- Inform the Engineer in writing whenever the alternate WECS will assume project responsibilities for more than 3 (three) days.
- Ensure that erosion control deficiencies are corrected within seventy-two (72) hours.
- Ensure that erosion control deficiencies that resulted in sediment deposition into waters of the State are corrected.
- Deficiencies that interfere with traffic flow, safety, or downstream turbidity are to be corrected immediately.
- Be on the site within three (3) hours after receiving notification of an emergency prepared to positively respond to the conditions encountered. The Department may handle emergencies without notifying the Contractor. The Department will recover costs for emergency maintenance work according to Subsection 105.15, “Failure to Maintain Roadway or Structures.”
- Maintain and submit for project record, “As-built” Erosion, Sedimentation and Control Plans that supplement and graphically depict EC-1 reported additions and deletions of BMPs. The As-Built plans are to be accessed and retained at a Department facility at all times.
- Ensure that both the WECS and the alternate meet the criteria of this Subsection.
- The WECS shall maintain a current certification card for the duration of the project. Recertification of the WECS may begin within 365 days of the expiration date of the current certification and upon receiving a passing examination grade; the current expiration date shall be extended three (3) years. Certification shall be allowed to occur without a lapse of the credential for a period not to exceed ninety (90) days after the current expiration date. If the allowed ninety (90) days has lapsed, the individual is no longer certified to serve in a WECS capacity on the project until the individual attends and passes the course examination.
161.3.02 Equipment

General Provisions 101 through 150.

161.3.03 Preparation

General Provisions 101 through 150.

161.3.04 Fabrication

General Provisions 101 through 150.

161.3.05 Construction

A. Control Dust Pollution

The contractor shall keep dust pollution to a minimum during any of the activities performed on the project. It may be necessary to apply water or other BMPs to roadways or other areas reduce pollution.

B. Perform Permanent or Temporary Grassing

Perform permanent grassing, temporary grassing, or mulching on cut and fill slopes weekly (unless a shorter period is required by Subsection 107.23) during grading operations. When conditions warrant, the Engineer may require more frequent intervals.

Under no circumstances shall the grading (height of cut) exceed the height operating range of the grassing equipment. It is extremely important to obtain a cover, whether it is mulch, temporary grass or permanent grass. Adequate mulch is a must.

When grading operations or other soil disturbing activities have stopped, perform grassing or erosion control as shown in the Plans, as shown in an approved Plan submitted by the Contractor, or as directed by the Engineer.

C. Seed and Mulch

Refer to Subsection 161.3.05 B, “Perform Permanent and Temporary Grassing.”

D. Implement Permanent or Temporary Erosion Control

1. Silt fence shown along the perimeter, e.g. right of way, and sediment containment devices, e.g. sediment basins, shall be installed prior to major clearing and grubbing operations. Minor clearing and grubbing are allowed for the sole purpose of installing perimeter controls and other initial phase BMPs.

2. Incorporate permanent erosion control features into the Project at the earliest practicable time, e.g. velocity dissipation, permanent ditch protection.

3. Use temporary erosion control measures to address minor conditions that develop during construction, e.g. between construction stages.

4. Use temporary erosion control measures when installation of permanent erosion control features cannot be accomplished.

The Engineer has the authority to:

- Limit the surface area of erodible earth material exposed by clearing and grubbing.
- Limit the surface area of erodible earth material exposed by excavation and borrow and fill operations.
- Limit the area of excavation, and embankment operations in progress to correspond with the Contractor’s ability to keep the finish grading, mulching, seeding, and other permanent erosion control measures current.
- Direct the Contractor to provide immediate permanent or temporary erosion control to prevent contamination of adjacent streams or water courses, lakes, ponds, or other areas of water impoundment.

Such Work may include constructing items listed in the table in Subsection 161.1.02.A, “Related References” or other control devices or methods to control erosion.
Section 161—Control of Soil Erosion and Sedimentation

E. Erodible Area

NOTE: Never allow the surface area of erodible earth material exposed at one time to exceed 17 acres (7 ha) except as approved by the State Construction Engineer.

The maximum of 17 acres (7 ha) of exposed erodible earth applies to the entire Project and to all of its combined operations as a whole, not to the exposed erodible earth of each individual operation.

Upon receipt of a written request from the contractor the State Construction Engineer, or his designee, will review; the request, any justifications and the Project conditions for waiver of the 17 acres (7 ha) limitation. If the 17 acre limitation is increased by the State Construction Engineer, the WECS shall not be assigned to another project in that capacity and should remain on site each work day that the exposed acreage exceeds 17 acres.

After installing temporary erosion control devices, e.g., grassing, mulching, stabilizing an area, and having it approved by the Engineer, that area will be released from the 17 acres (7 ha) limit.

F. Perform Grading Operations

Perform the following grading operations:

1. Whenever practicable, complete each roadway cut and embankment continuously.

2. Maintain the top of the earthwork in roadway sections throughout the construction stages to allow water to run off to the outer edges, including techniques to minimize concentrated flow.

3. Provide temporary slope drain facilities with inlets and velocity dissipaters (straw bales, silt fence, aprons, etc.) to carry the runoff water to the bottom of the slopes. Place drains at intervals to handle the accumulated water.

4. Continue temporary erosion control measures until permanent drainage facilities have been constructed, pavement placed, and the grass on planted slopes stabilized to deter erosion.

G. Perform Construction in Rivers and Streams

Perform construction in river and stream beds as follows:

1. Unless otherwise agreed to in writing by the Engineer, restrict construction operations in rivers, streams, and impoundments to areas where channel changes or access for construction are shown on the Plans to construct temporary or permanent structures.

2. If channel changes or diversions are not shown on the Plans, the Contractor shall develop diversion plans prepared in accordance with the current GAR100002 NPDES Infrastructure Construction permit utilizing a design professional as defined within the permit. The Engineer will review prepared diversion plans for content only and accepts no responsibility for design errors or omissions. Amendments will be made part of the project plans by attachment. Include any associated costs in the price bid for the overall contract. Any contract time associated with the submittal or its review and subsequent response will not be considered for an extension of Contract time. All time associated with this subsection shall be considered incidental.

3. If additional access for construction or removal of work bridges, temporary roads/access or work platforms is necessary, and will require additional encroachment upon river or stream banks and bottoms, the contractor shall prepare a plan in accordance with the current GAR100002 NPDES Infrastructure Construction permit utilizing a design professional as defined within the permit. Plans should be submitted at least 12 weeks prior to the date the associated work is expected to begin. If necessary, the plan will be provided to the appropriate regulating authority, e.g. United States Army Corps of Engineers by the Department for consideration and approval. No work that impacts areas beyond what has been shown in the approved plans will be allowed to begin until written approval of the submitted plan has been provided by the Department. Approved plan amendments will be made part of the project plans by attachment. Include any associated costs in the price bid for the overall contract. Any contract time associated with the submittal or its review and subsequent response will not be considered for an extension of Contract time. All time associated with this subsection shall be considered incidental.

4. Clear rivers, streams, and impoundments of the following as soon as conditions permit:
   - Falsework
Section 161—Control of Soil Erosion and Sedimentation

- Piling that is to be removed
- Debris
- Other obstructions placed or caused by construction operations

5. Do not ford live streams with construction equipment.

6. Use temporary bridges or other structures that are adequate for a 25-year storm for stream crossings. Include costs in the price bid for the overall contract.

7. Do not operate mechanized equipment in live streams except to construct channel changes or temporary or permanent structures, and to remove temporary structures, unless otherwise approved in writing by the Engineer.

H. State Water Buffers and Environmental Restrictions

1. The WECS shall review the plans and contract documents for environmental restrictions, Environmentally Sensitive Areas (ESA), e.g. buffers, etc prior to performing land disturbing activities.

2. The WECS shall ensure all parties performing land disturbing activities within the project limits are aware of all environmental restrictions.

3. Buffer delineation shall be performed prior to clearing, or any other land disturbing activities. Site conditions may require temporary delineation measures to be implemented prior to the installation of orange barrier/safety fencing. The means of temporary delineation shall have the Engineer’s prior approval.

4. The WECS shall allow the Engineer to review the buffer delineation prior to performing any land disturbing activities, including but not limited to clearing, grubbing and thinning of vegetation. Any removal and relocation of buffer delineation based upon the Engineer’s review will not be measured for separate payment.

5. The WECS shall advise the Engineer of any surface water(s) encountered that are not shown in the plans. The WECS shall prevent land disturbing activities from occurring within surface water buffers until the Engineer provides approval to proceed.

I. Maintenance Projects

Projects that consist of asphalt resurfacing, shoulder reconstruction and/or shoulder widening; schedule and perform the construction of the project to comply with the following:

1. After temporary and permanent erosion control devices are installed and the area permanently stabilized (temporary or permanent) and approved by the Engineer, the area may be released from the 1 acre (0.4 ha) limit.

2. The maximum of 1 acre (0.4 ha) of erodible earth applies to the entire project and to all combined operations, including borrow and excess material operations that are within the right of way, not 1 acre (0.4 ha) of exposed erodible earth for each operation.

3. Do not allow the disturbed exposed erodible area to exceed 1 acre (0.4 ha). This 1 acre (0.4 ha) limit includes all disturbed areas relating to the construction of the project including but not limited to slope and shoulder construction.

4. At the end of each working day, permanently stabilize all of the area disturbed by slope and shoulder reconstruction to prevent any contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment. For purposes of this Specification, the end of the working day is defined as when the construction operations cease. For example, 6:00 a.m. is the end of the working day on a project that allows work only between 9:00 p.m. and 6:00 a.m.)

5. Stabilize the cut and fill slopes and shoulder with permanent or temporary grassing and a Wood Fiber Blanket (Section 713, Type II). Mulching is not allowed. Borrow pits, soil disposal sites and haul roads will not require daily applications of wood fiber blanket. The application rate for the Wood Fiber Blanket on shoulder reconstruction is the rate specified for Shoulders. For shoulder reconstruction, the ground preparation requirements of Subsection 700.3.05.A.1 are waived. Preparation consists of scarifying the existing shoulders
Section 161—Control of Soil Erosion and Sedimentation

4 to 6 in (100 to 150 mm) deep and leaving the area in a smooth uniform condition free from stones, lumps, roots or other material.

6. If a sudden rain event occurs that would not allow the Contractor to apply the Type II Wood Fiber Blanket per Section 713, install Wood Fiber Blanket Type I per Section 713 if directed by the Engineer. Wood Fiber Blanket Type I application is for emergency use only.

7. Install temporary grass or permanent grass according to seasonal limitations and Specifications. When temporary grass is used, use the over seeding method (Subsection 700.3.05.E.4) when planting permanent grass.

8. Remove and dispose of all material excavated for the trench widening operation at an approved soil disposal site by the end of each working day. When shoulder reconstruction is required, this material may be used to reconstruct the graded shoulder after all asphaltic concrete pavement has been placed.

9. Provide immediate permanent and/or temporary erosion control measures for borrow pits, soil disposal sites and haul roads to prevent any contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment.

10. Place asphalt in the trench the same day as the excavation occurs. Place asphalt or concrete in driveways and side roads being re-graded the same day as the excavation occurs. Stabilize any disturbed or exposed soil that is not covered with asphalt with a Wood Fiber Blanket (and grass seed). Payment will be made for the Wood Fiber Blanket and grass seed only if the shoulder has been constructed to final dimensions and grade and no further grading will be required.

11. Do not allow the grading (height of cut or fill) to exceed the operating range of the grassing equipment.

12. When grading operations or other soil disturbing activities are suspended, regardless of the reason, promptly perform all necessary permanent stabilization and/or erosion control work.

13. Use temporary erosion control measures to:
   - Correct conditions that develop during construction but were unforeseen during the design stage.
   - Use as needed before installing permanent erosion control features.
   - Temporarily control erosion that develops during normal construction practices but are not associated with permanent control features on the Project.

14. When conditions warrant, such as unfavorable weather (rain event), the Engineer may require more frequent intervals for this work.

J. Other Projects

On non-NOI construction projects that have minimal amounts of grading with the installation of BMP’s, the Contractors qualified personnel shall be required to submit a weekly EC-1 inspection form in accordance with Section 167. This weekly EC-1 inspection shall begin when BMP’s are installed and continue until the acceptance of permanent stabilization.

161.3.06 Quality Acceptance

Before Final Acceptance of the Work, clean drainage structures within the project limits, both existing and newly constructed, and ensure that they are functioning properly. Costs to accomplish this work are incidental and shall be included in the overall bid for the Contract.

161.3.07 Contactor Warranty and Maintenance

Maintain the erosion control features installed to:
   - Contain erosion within the limits of the right-of-way
   - Control storm water discharges from disturbed areas
Section 161—Control of Soil Erosion and Sedimentation

Effectively install and maintain the erosion control features. Ensure these features contain the erosion and sediment within the limits of the rights of way and control the discharges of storm-water from disturbed areas to meet all local, state, and federal requirements on water quality.

161.4 Measurement

Control of soil erosion and sedimentation is not measured separately for payment.

161.4.01 Limits

General Provisions 101 through 150.

161.5 Payment

When no pay item is shown in the Contract, the requirements of this Specification and the Erosion, Sedimentation and Pollution Control Plan shall be in full effect. The cost of complying with these requirements will not be paid for separately, but shall be included in the overall bid submitted with the exception of inspections performed by qualified personnel which will be included in Section 167.

When listed as a pay item in the Contract, payment will be made at the unit price bid for each particular item.

No payment will be made for erosion control outside the Right-of-Way or construction easements except as provided for by the Plans.

161.5.01 Enforcement and Adjustments

A. Failure to Provide WECS

If a designated WECS is not maintained, activities will cease except traffic control and erosion control work. Monies that are due or may become due could be withheld according to the Specifications.

B. Failure to Comply with Specifications

If the Contractor repeatedly fails to comply with any of the requirements of this Specification, all activities should cease immediately except traffic control and erosion control related work.

Monies that are currently due or that may become due shall be withheld according to the specifications. In addition, nonrefundable monies shall be deducted from the contract as shown in the Schedule of Deductions table below. These deductions are in addition to any actions taken in the above subsections. Deductions assessed for uncorrected deficiencies shall continue until all corrections are completed to the satisfaction of the Engineer.

Failure of the WECS or alternate to perform the duties specified in the Contract, or whose performance, has resulted in a citation being received from a State or Federal Regulatory Agency, e.g. the Georgia Environmental Protection Division, should result in one or more of the following:

- Suspension of the WECS’ certification for a period of not less than 30 days
- Removal of the Contractor’s project superintendent in accordance with Subsections 105.05 and 108.05 for a period not less than 14 days
- Department wide revocation of the WECS certification for a period of 12 months
- Removal of the Contractor’s project superintendent in accordance with Subsections 105.05 and 108.05

C. Receipt of a Consent Order, Notice of Violation, etc.

Regulatory enforcement actions will be resolved including the minimum following steps:

- The Department will perform an internal review of the alleged violations
- The Department will then meet with the Contractor to review and further determine responsibilities for the alleged violations
- The Department will then arrange to collectively meet with the regulatory agencies to negotiate resolutions and/or settlements.
Section 161—Control of Soil Erosion and Sedimentation

The Department does not waive any rights of the Contractor to resolve such matters however, in the event that regulatory agency communication is addressed jointly to the Department and to the contractor, the Department reserves the right to coordinate all communications, e.g., written correspondence, and to schedule jointly attended meetings with Regulatory agencies such that timely and accurate responses are known to the Department.

Such Orders or Notices may result in the assessment of Deductions from the table below for each day the condition remains non-compliant following an agreed remedy.

Monetary penalties for which the contractor is obligated for as a result of regulatory enforcement may be withheld from future monies due the contractor.

| Schedule of Deductions for Each Calendar Day of Erosion Control Deficiencies Initial Occurrence* Original Total Contract Amount |
|---|---|---|
| From More Than | To and Including | Daily Charge |
| 0 | $100,000 | $750 |
| $100,000 | $1,000,000 | $1125 |
| $1,000,000 | $5,000,000 | $2000 |
| $5,000,000 | $15,000,000 | $3000 |
| $15,000,000 | - | $5000 |

*Continued non-compliance with the requirements of this specification may result in the doubling of the above tabulated Daily Charge.

Upon written request from the Contractor, the Engineer may allow, limited activities to concurrently proceed once significant portions of the corrective work have been completed. This authorization may be similarly rescinded if in the opinion of the Engineer corrective work is not being diligently pursued.
Delete Section 163 and substitute the following:

163.1 General Description
This work includes constructing and removing:
- Silt control gates
- Temporary erosion control slope drains shown on the Plans or as directed
- Temporary sediment basins
- Sediment barriers and check dams
- Rock filter dams
- Stone filter berms
- Stone filter rings
- Temporary sediment traps
- Other temporary erosion control structures shown on the Plans or directed by the Engineer
This work also includes applying mulch (e.g., straw, hay, erosion control compost), and temporary grass.

163.1.01 Related References
A. Standard Specifications
   Section 109—Measurement and Payment
   Section 161—Control of Soil Erosion and Sedimentation
   Section 171—Silt Fence
   Section 500—Concrete Structures
   Section 576—Slope Drain Pipe
   Section 603—Rip Rap
   Section 700—Grassing
   Section 711—Turf Reinforcement Matting
   Section 716—Erosion Control Mats (Slopes)
   Section 720 – Triangular Silt Barrier
   Section 800—Coarse Aggregate
   Section 801—Fine Aggregate
   Section 822—Emulsified Asphalt
   Section 845—Smooth Lined Corrugated Polyethylene (PE) Culvert Pipe
   Section 860—Lumber and Timber
   Section 863—Preservative Treatment of Timber Products
   Section 881—Fabrics
Section 163 – Miscellaneous Erosion Control Items

Section 890—Seed and Sod
Section 893—Miscellaneous Planting Materials

B. Referenced Documents

AASHTO M252
AASHTO M294

163.1.02 Submittals
Provide written documentation to the Engineer as to the average weight of the bales of mulch.

163.2 Materials
Provide materials shown on the Plans, such as pipe, spillways, wood baffles, and other accessories including an anti-seep collar, when necessary. The materials shall remain the Contractor’s property after removal, unless otherwise shown on the Plans.

Materials may be new or used; however, the Engineer shall approve previously used materials before use.

Materials shall meet the requirements of the following Specifications:

<table>
<thead>
<tr>
<th>Material</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mulch</td>
<td>893.2.02</td>
</tr>
<tr>
<td>Temporary Silt Fence</td>
<td>171</td>
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<tr>
<td>Concrete Aprons and Footings shall be Class A</td>
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<td>Rip Rap</td>
<td>603</td>
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<td>Temporary Grass</td>
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<td>Triangular Silt Barrier</td>
<td>720</td>
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<tr>
<td>Coarse Aggregate</td>
<td>800</td>
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<tr>
<td>Lumber and Timber</td>
<td>860.2.01</td>
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<td>Preservative Treatment of Timber Products</td>
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<tr>
<td>Corrugated Polyethylene Temporary Slope Drain Pipe</td>
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</table>

163.2.01 Delivery, Storage, and Handling
General Provisions 101 through 150.

163.3 Construction Requirements

163.3.01 Personnel
General Provisions 101 through 150.

163.3.02 Equipment
General Provisions 101 through 150.

163.3.03 Preparation
General Provisions 101 through 150.

163.3.04 Fabrication
General Provisions 101 through 150.

163.3.05 Construction

A. Silt Control Gates

If silt control gates are required or are directed by the Engineer, follow these guidelines to construct them:

1. Clear and grade only that portion of the roadway within the affected drainage area where the drainage structure will be constructed.
Section 163 – Miscellaneous Erosion Control Items

2. Construct or install the drainage structure and backfill as required for stability.
3. Install the silt control gate at the inlet of the structure. Use the type indicated on the Plans.
4. Vary the height of the gate as required or as shown on the Plans.
5. Finish grading the roadway in the affected drainage area. Grass and mulch slopes and ditches that will not be paved. Construct the ditch paving required in the affected area.
6. Keep the gate in place until the work in the affected drainage area is complete and the erodible area is stabilized.
7. Remove the Type 1 silt gate assembly by sawing off the wood posts flush with the concrete apron. Leave the concrete apron between the gate and the structure inlet in place. The gate shall remain the property of the Contractor.

B. Temporary Slope Drains

If temporary slope drains are required, conduct the roadway grading operation according to Section 161 and follow these guidelines:
1. Place temporary pipe slope drains with inlets and velocity dissipaters (straw bales, silt fence, or aprons) according to the Plans.
2. Securely anchor the inlet into the slope to provide a watertight connection to the earth berm. Ensure that all connections in the pipe are leak proof.
3. Place temporary slope drains at a spacing of 350 ft (105 m) maximum on a 0% to 2% grade and at a spacing of 200 ft (60m) maximum on steeper grades, or more frequently as directed by the Engineer. Keep the slope drains in place until the permanent grass has grown enough to control erosion.
4. Remove the slope drains and grass the disturbed area with permanent grass. However, the temporary slope drains may remain in place to help establish permanent grass if approved by the Engineer.

C. Temporary Sediment Basins

Construct temporary sediment basins according to the Plans at the required locations, or as modified by the Engineer.
1. Construct the unit complete as shown, including:
   • Grading
   • Drainage
   • Riprap
   • Spillways
   • Anti-seep collar
   • Temporary mulching and grassing on internal and external slopes
   • Accessories to complete the basin
2. When the sediment basin is no longer needed, remove and dispose of the remaining sediment.
3. Remove the sediment basin. Grade to drain and restore the area to blend with the adjacent landscape.
4. Mulch and permanently grass the disturbed areas according to Section 700.

D. Sediment Barriers

Construct sediment barriers according to the Plan details.

The following items may be used for sediment barriers
1. Type A Silt Fence.
2. Type C Silt Fence.
4. Triangular Silt Barrier.
5. Synthetic Fiber: Use synthetic fiber bales of circular cross section at least 18 in (450 mm) in diameter. Use synthetic bales of 3 ft or 6 ft (0.9 m or 1.8 m) in length that are capable of being linked together to form a continuous roll of the desired total length. Use bales that are enclosed in a geotextile fabric and that contain a pre-made stake hole for anchoring.
6. Coir: Use coir fiber bales of circular cross section at least 16” (400mm) in diameter. Use coir bales of 10 ft, 15 ft, or 20 ft (3 m, 4.5 m, or 6 m) in length. Use coir baled with coir twine netting with 2 in X 2 in (50 mm X 50 mm)
openings. Use coir bales with a dry density of at least 7 lb/ft$^3$ (112 kg/m$^3$). Anchor in place with 2 in X 4 in (50 mm X 100 mm) wooden wedges with a 6 in (150 mm) nail at the top. Place wedges no more than 36 in (900 mm) apart.

7. Excelsior: Use curled aspen excelsior fiber with barbed edges in circular bales of at least 18 in (450 mm) in diameter and nominally 10 ft (3 m) in length. Use excelsior baled with polyester netting with 1 in X 1 in (25 mm by 25 mm) triangular openings. Use excelsior bales with a dry density of at least 1.4 lb/ft$^3$ (22 kg/m$^3$). Anchor in place with 1 in (25 mm) diameter wooden stakes driven through the netting at intervals of no more than 2 ft (600 mm).

8. Compost Filter Sock: Use general use compost (see Subsection 893.2.02.A.5.b) in circular bales at least 18 in (450 mm) diameter. Use compost baled with photo-degradable plastic mesh 5 mils thick with a maximum 0.38 in X 0.38 in (10 mm X 10 mm) openings. Use compost bales with a dry density of at least 1.4 lb/ft$^3$ (22 kg/m$^3$). Anchor in place with 1 in (25 mm) diameter wooden stakes driven through the netting at intervals of no more than 2 ft (600 mm) in concentrated flow applications and no more than 5 ft (1500 mm) in sheet flow applications. The sock shall be dispersed on site when no longer required, as determined by the Engineer. Do not use Compost Filter Socks in areas where the use of fertilizer is restricted.

9. Compost Filter Berm: Use erosion control compost (see Subsection 893.2.02) to construct an noncompacted 1.5 ft to 2 ft (450 mm to 600 mm) high trapezoidal berm which is approximately 2 ft to 3 ft (600 mm to 1 m) wide at the top and minimum 4 ft (1.2 m) wide at the base. Do not use Compost Filter Berms in areas where the use of fertilizer is restricted.

The construction of the compost filter berm includes the following:

a. Keeping the berm in a functional condition.

b. Installing additional berm material when necessary.

c. Removing the berm when no longer required, as determined by the Engineer. At the Engineer’s discretion, berm material may be left to decompose naturally, or distributed over the adjacent area.

E. Other Temporary Structures

When special conditions occur during the design stage, the Plans may show other temporary structures for erosion control with required materials and construction methods.

F. Temporary Grass

Use a quick-growing species of temporary grass such as rye grass, millet, or a cereal grass suitable to the area and season.

Use temporary grass in the following situations:

- When required by the Specifications or directed by the Engineer to control erosion where permanent grassing cannot be planted.

- To protect an area for longer than mulch is expected to last (60 calendar days), plant temporary grass as follows:
  1. Use seeds that conform to Subsection 890.2.01, “Seed.” Perform seeding according to Section 700; except use the minimum ground preparation necessary to provide a seed bed if further grading is required.
  2. Prepare areas that require no further grading according to Subsection 700.3.05.A, “Ground Preparation.” Omit the lime unless the area will be planted with permanent grass without further grading. In this case, apply the lime according to Section 700.
  3. Apply mixed grade fertilizer at 400 lbs/acre (450 kg/ha). Omit the nitrogen. Mulch (with straw or hay) temporary grass according to Section 700. (Erosion control compost Mulch will not be allowed with grassing.)
  4. Before planting permanent grass, thoroughly plow and prepare areas where temporary grass has been planted according to Subsection 700.3.05.A, “Ground Preparation”.
  5. Apply Polyacrylamide (PAM) to all areas that receive temporary grassing.
  6. Apply PAM (powder) before grassing or PAM (emulsion) to the hydroseeding operation.
  7. Apply PAM according to manufacturer specifications.
  8. Use only anionic PAM.

For projects that consist of shoulder reconstruction and/or shoulder widening, refer to Section 161.3.05H for Wood Fiber Blanket requirements.
Section 163 – Miscellaneous Erosion Control Items

G. Mulch
When staged construction or other conditions prevent completing a roadway section continuously, apply mulch (straw or hay or erosion control compost) to control erosion. Mulch may be used without temporary grassing for 60 calendar days or less. Areas stabilized with only mulch (straw/hay) shall be planted with temporary grass after 60 calendar days.

Apply mulch as follows:
1. Mulch (Hay or Straw) - Without Grass Seed
   a. Uniformly spread the mulch over the designated areas from 2 in to 4 in (50 mm to 100 mm) thick.
   b. After spreading the mulch, walk in the mulch by using a tracked vehicle (preferred method), empty sheep foot roller, light disking, or other means that preserves the finished cross section of the prepared areas. The Engineer will approve of the method.
   c. Place temporary mulch on slopes as steep as 2:1 by using a tracked vehicle to imbed the mulch into the slope.
   d. When grassing operations begin, leave the mulch in place and plow the mulch into the soil during seed bed preparation. The mulch will become beneficial plant food for the newly planted grass.
2. Erosion control compost - Without Grass Seed
   a. Uniformly spread the mulch (erosion control compost) over the designated areas 2 in (50 mm) thick.
   b. When rolling is necessary, or directed by the Engineer, use a light corrugated drum roller.
   c. When grassing operations begin, leave the mulch in place and plow the mulch into the soil during seed bed preparation. The mulch will become beneficial plant food for the newly planted grass.
   d. Plant temporary grass on area stabilized with mulch (erosion control compost) after 60 calendar days.
   e. Do not use Erosion Control Compost in areas where the use of fertilizer is restricted.

H. Miscellaneous Erosion Control Items Not Shown on the Plans
When conditions develop during construction that were unforeseen in the design stage, the Engineer may direct the Contractor to construct temporary devices such as but not limited to:
- Bulkheads
- Sump holes
- Half round pipe for use as ditch liners
- U-V resistant plastic sheets to cover critical cut slopes
The Engineer and the Contractor will determine the placement to ensure erosion control in the affected area.

I. Diversion Channels
When constructing a culvert or other drainage structure in a live stream that requires diverting a stream, construct a diversion channel.

J. Check Dams
Check dams are constructed of the following materials;
- Stone plain riprap according to Section 603 (Place woven plastic filter fabric on ditch section before placing riprap.)
- Sand bags as in Section 603 without Portland cement
- Baled wheat straw
- Compost filter socks
- Fabric (Type C silt fence)
Check dams shall be constructed according to plan details and shall remain in place until the permanent ditch protection is in place or being installed and the removal is approved by the Engineer.

K. Construction Exits
Locate construction exits at any point where vehicles will be leaving the project onto a public roadway. Install construction exits at the locations shown in the plans and in accordance with plan details.

Construction exit tire wash assemblies shall be installed when conditions dictate additional tire cleaning measures are necessary to assist in protecting public roadways. Install construction exit tire wash assemblies in accordance with the Plan details as directed by the Engineer. The Contractor may submit other construction exit tire wash assembly and
sediment storage methods for review and approval by the Engineer. Remove the construction exit tire wash assembly from the construction exit as directed by the Engineer.

L. Retrofits
Add the retrofit device to the permanent outlet structure as shown on the Plan details.

When all land disturbing activities that would contribute sediment-laden runoff to the basin are complete, clean the basin of sediment and stabilize the basin area with vegetation.

When the basin is stabilized, remove the retrofit device from the permanent outlet structure of the detention pond.

M. Inlet Sediment Traps
Inlet sediment traps consist of a temporary device placed around a storm drain inlet to trap sediment. An excavated area adjacent to the sediment trap will provide additional sediment storage.

Inlet sediment traps may be constructed of Type C silt fence, plastic frame and filter, hay bales, baffle box, or other filtering materials approved by the Engineer. Construct inlet sediment traps according to the appropriate specification for the material selected for the trap. Place inlet sediment traps as shown on the Plans or as directed by the Engineer.

N. Rock Filter Dams
Construct rock filter dams of the material selected as shown in the approved erosion and sediment control plan. Construct and place this item in accordance with the approved erosion control construction detail(s) and Standard Specification Section 603.

Rock filter dams shall remain in place until the permanent ditch protection is in place or is being installed and their removal is approved by the Engineer.

O. Stone Filter Berms
Construct stone filter berms of the material selected as shown in the approved erosion and sediment control plan. Construct and place this item in accordance with the approved erosion control construction detail(s) and Standard Specification Section 603.

Stone filter berms shall remain in place until the permanent slope protection is in place or is being installed and their removal is approved by the Engineer.

P. Stone Filter Rings
Construct stone filter rings of the material selected as shown in the approved erosion and sediment control plan. Construct and place this item in accordance with the approved erosion control construction detail(s) and Standard Specification Section 603.

A stone filter ring shall remain in place until final stabilization of the area which drains toward it is achieved and its removal is approved by the Engineer.

Q. Temporary Sediment Traps
Construct temporary sediment traps of the material selected as shown in the approved erosion and sediment control plan. Construct and place this item in accordance with the approved erosion control construction detail(s) and Standard Specification Section 603.

A temporary sediment trap shall remain in place until final stabilization of the area which drains toward it is achieved and its removal is approved by the Engineer.

163.3.06 Quality Acceptance
General Provisions 101 through 150.

163.3.07 Contractor Warranty and Maintenance
General Provisions 101 through 150.
163.4 Measurement

A. Silt Control Gates
Silt control gates are measured for payment by the entire structure constructed at each location complete in place and accepted. Silt control gates constructed at the inlet of multiple lines of drainage structures are measured for payment as a single unit.

B. Temporary Slope Drains
Temporary slope drains are measured for payment by the linear foot (meter) of pipe placed. When required, the inlet spillway and outlet apron and/or other dissipation devices are incidental and not measured separately.

C. Temporary Sediment Basins
Temporary sediment basins are measured for payment by the entire structure complete, including construction, maintenance, and removal. Temporary grassing for sediment basins is measured separately for payment. Measurement also includes:
- Earthwork
- Drainage
- Spillways
- Baffles
- Riprap
- Final cleaning to remove the basin

D. Sediment Barriers
Sediment barriers are measured by the linear foot (meter).

E. Other Temporary Structures
Other temporary structures are not measured for payment. Costs for the entire structure complete, including materials, construction (including earthwork), and removal is included in the price bid for the drainage structure or for other Contract items.

F. Temporary Grass
Temporary grass is measured for payment by the acre (hectare). Lime, when required, is measured by the ton (megagram). Mulch and fertilizer are measured separately for payment.

G. Mulch
Mulch (straw or hay, or erosion control compost) is measured for payment by the ton (megagram).

H. Miscellaneous Erosion Control Items Not Shown on the Plans
These items are not measured for payment. The cost for construction, materials, and removal is included in the price bid for other contract items.

I. Diversion Channels
Diversion channels are not measured for payment. The cost for the entire structure complete, including materials, construction (including earthwork), and removal is included in the price bid for the drainage structure or for other contract items.

J. Check Dams
Stone, sand bags, baled wheat straw, and compost filter sock check dams are measured per each, which includes all work necessary to construct the check dam including woven plastic filter fabric placed beneath stone check dams. Fabric check dams are measured per linear foot.

K. Construction Exits
Construction exits are measured per each which will include all work necessary to construct the exit including the required geotextile fabric placed beneath the aggregate.
Construction exit tire wash assemblies are measured per each when added to an existing construction exit. Measurement includes all work necessary to construct the construction exit tire wash assembly including an acceptable sediment trap, water source, and removal.

L. **Retrofit**

Retrofit will be measured for payment per each. The construction of the detention pond and permanent outlet structure will be measured separately under the appropriate items.

M. **Inlet Sediment Traps**

Inlet sediment traps, regardless of the material selected, are measured per each which includes all work necessary to construct the trap including any incidentals and providing the excavated area for sediment storage.

N. **Rock Filter Dams**

Rock filter dams are measured for payment per each required. This includes the entire structure at each location and all the work necessary for construction.

O. **Stone Filter Berms**

Stone filter berms are measured for payment per linear foot (meter) required. This includes the entire structure at each location and all the work necessary for construction.

P. **Stone Filter Rings**

Stone filter rings are measured for payment per each required. This includes the entire structure at each location and all the work necessary for construction.

Q. **Temporary Sediment Traps**

Temporary sediment traps are measured for payment per each required. This includes the entire structure at each location and all the work necessary for construction.

163.4.01 **Limits**

General Provisions 101 through 150.

163.5 **Payment**

A. **Silt Control Gates**

The specified silt control gates are paid for at the Contract Unit Price per each. Payment is full compensation for:

- Furnishing the material and labor
- Constructing the concrete apron as shown on the Plans
- Excavating and backfilling to place the apron
- Removing the gate

B. **Temporary Slope Drains**

Temporary slope drains are paid for by the linear foot (meter). Payment is full compensation for materials, construction, removal (if required), inlet spillways, velocity dissipaters, and outlet aprons.

When temporary drain inlets and pipe slope drains are removed, they remain the Contractor’s property and may be reused or removed from the Project as the Contractor desires. Reused pipe or inlets are paid for the same as new pipe or inlets.

C. **Temporary Sediment Basins**

Temporary sediment basins, measured according to Subsection 163.4,C “Measurement,” are paid for by the unit, per each, for the type specified on the Plans. Price and payment are full compensation for work and supervision to construct, and remove the sediment basin, including final clean-up.

D. **Sediment Barriers**

Sediment barriers are paid by the linear foot (meter). Price and payment are full compensation for work and supervision to construct, and remove the sediment barrier, including final clean-up.
Section 163 – Miscellaneous Erosion Control Items

E. Other Temporary Structures
   Other temporary structures are not measured for payment. Costs for the entire structure complete, including materials, construction (including earthwork), and removal is included in the price bid for the drainage structure or for other Contract items.

F. Temporary Grass
   Temporary grass is paid for by the acre (hectare). Payment is full compensation for all equipment, labor, ground preparation, materials, wood fiber mulch, polyacrylamide, and other incidentals. Lime (when required) is paid for by the ton (megagram). Mulch and fertilizer are paid for separately.

G. Mulch
   Mulch is paid for by the ton. Payment is full compensation for all materials, labor, maintenance, equipment and other incidentals.
   The weight for payment of straw or hay mulch will be the product of the number of bales used and the average weight per bale as determined on certified scales provided by the Contractor or state certified scales. Provide written documentation to the Engineer stating the average weight of the bales.
   The weight of erosion control compost mulch will be determined by weighing each loaded vehicle on the required motor truck scale as the material is hauled to the roadway, or by using recorded weights if a digital recording device is used. The Contractor may propose other methods of providing the weight of the mulch to Engineer for approval.

H. Miscellaneous Erosion Control Items Not Shown on the Plans
   These items are not paid for separately. They are included in the price bid for other contract items.

I. Diversion Channel
   Diversion channels are not paid for separately. They are included in the price bid for other contract items.

J. Check Dams
   Payment is full compensation for all materials, construction, and removal. Stone plain riprap, sand bag, baled wheat straw, or compost filter socks check dams are paid for per each. The required woven filter fabric required under each stone check dams is included in the bid price. Fabric check dams are paid for per linear foot.

K. Construction Exits
   Construction exits are paid for per each. Payment is full compensation for all materials including the required geotextile, construction, and removal.
   Construction exit tire wash assemblies are paid for per each when added to an existing construction exit. Payment is full compensation for all labor, equipment, materials, construction, and removal. An acceptable sediment trap and water source is required and included in the price bid for each.

L. Retrofits
   This item is paid for at the Contract Unit Price per each. Payment is full compensation for all work, supervision, materials (including the stone filter), labor and equipment necessary to construct and remove the retrofit device from an existing or proposed detention pond outlet structure.

M. Inlet Sediment Traps
   Inlet sediment traps are paid for per each. Payment is full compensation for all materials, construction, and removal.

N. Rock Filter Dams
   Rock filter dams are paid for per each. Payment is full compensation for all materials, construction, and removal for each. Clean reused stone Type 3 riprap and #57 stone are paid for on the same basis as new items. Plastic woven filter fabric is required under rock filter dams and is included in the price bid for each.

O. Stone Filter Berms
   Stone filter berms are paid for per linear foot (meter). Payment is full compensation for all materials, construction, and removal for each. Clean reused stone Type 3 riprap and #57 stone are paid for on the same basis as new items. Plastic woven filter fabric is required under rock filter berms and is included in the price bid for linear foot (meter).
### Section 163 – Miscellaneous Erosion Control Items

#### P. Stone Filter Rings

Stone filter rings are paid for per each. Payment is full compensation for all materials, construction, and removal for each. Clean reused stone Type 3 riprap and #57 stone are paid for on the same basis as new items. Plastic woven filter fabric is required under stone filter rings and is included in the price bid for each.

#### Q. Temporary Sediment Traps

Temporary sediment traps are paid for payment per each required. This includes the entire structure at each location and all the work necessary for construction.

The items in this section (except temporary grass and mulch) are made as partial payments as follows:

- When the item is installed and put into operation the Contractor will be paid 75 percent of the Contract price.
- When the Engineer instructs the Contractor that the item is no longer required and is to remain in place or is removed, whichever applies, the remaining 25 percent will be paid.

Temporary devices may be left in place at the Engineer’s discretion at no change in cost. Payment for temporary grass will be made based on the number of acres (hectares) grassed. Mulch will be based on the number of tons (megagrams) used.

Payment is made under:

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<th>Item No. 163</th>
<th>Construct and remove silt control gates</th>
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<tr>
<td>Item No. 163</td>
<td>Construct and remove temporary pipe slope drains</td>
<td>Per linear foot (meter)</td>
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<td>Item No. 163</td>
<td>Construct and remove temporary sediment barriers</td>
<td>Per linear foot (meter)</td>
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<tr>
<td>Item No. 163</td>
<td>Construct and remove sediment basins</td>
<td>Per each</td>
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<td>Item No. 163</td>
<td>Construct and remove check dams except fabric dams</td>
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<tr>
<td>Item No. 163</td>
<td>Construct and remove fabric check dams</td>
<td>Per linear foot (meter)</td>
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<td>Construct and remove construction exits</td>
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<td>Construct and remove construction exit tire wash assembly</td>
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<td>Construct and remove rock filter dams</td>
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<td>Mulch</td>
<td>Per ton (megagram)</td>
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#### 163.5.01 Adjustments

General Provisions 101 through 150.
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
SPECIAL PROVISION  

Section 165—Maintenance of Temporary Erosion and Sedimentation Control Devices

Delete Section 165 and substitute the following:

165.1 General Description
This work consists of providing maintenance on temporary erosion and sediment control devices, including but not limited to the following:

- Silt control gates
- Temporary erosion control slope drains shown on the Plans or as directed
- Temporary sediment basins
- Silt control gates
- Check dams
- Sediment barriers
- Rock filter dams
- Stone filter berms
- Stone filter rings
- Temporary sediment traps

It also consists of removing sediment that has accumulated at the temporary erosion and sedimentation control devices.

165.1.01 Definitions
General Provisions 101 through 150.

165.1.02 Related References
A. Standard Specifications
   General Provisions 101 through 150.
B. Referenced Documents
   General Provisions 101 through 150.

165.1.03 Submittals
General Provisions 101 through 150

165.2 Materials
General Provisions 101 through 150.
Section 165—Maintenance of Temporary Erosion and Sedimentation Control Devices

165.2.01 Delivery, Storage, and Handling
General Provisions 101 through 150.

165.3 Construction Requirements

165.3.01 Personnel
General Provisions 101 through 150.

165.3.02 Equipment
General Provisions 101 through 150.

165.3.03 Preparation
General Provisions 101 through 150.

165.3.04 Fabrication
General Provisions 101 through 150.

165.3.05 Construction
As a minimum, clean sediment from all temporary erosion control devices (except temporary sediment basins) installed on the project when one-half the capacity by volume, as measured by depth, has been reached. Clean sediment from all temporary sediment basins installed on a project when one-third the capacity of the storage volume has been filled.

Handle excavated sediment from any erosion or sediment control device in one of the following ways:

- Remove sediment from the immediate area and immediately stabilize it to prevent the material from refilling any erosion or sediment control device.
- Place and mix it in the roadway embankment or waste it in an area approved by the Engineer.

Repair or replace at no cost to the Department any erosion or sediment control device that is not functioning properly or is damaged due to negligence or abuse.

A. Temporary Silt Fence

Maintenance of temporary silt fence consists of furnishing all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). Also included is the removal of sediment accumulations (“filtercake”) on the fabric by tapping the fabric on the downstream side. Maintenance of silt fence also includes the removal and replacement of any deteriorated filter fabric reducing the effectiveness of the silt fence on any properly installed silt fence.

B. Silt Control Gates

Maintenance of temporary silt control gates consists of all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). When applicable, this item will include the removal of sediment accumulations on the fabric by tapping the fabric on the downstream side.

C. Check Dams (all types)

Maintenance of temporary erosion control check dams shall consist of all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). This item also includes the removal of any material deposited in sump holes. When applicable, this item will include the removal of sediment accumulations on the fabric by tapping the fabric on the downstream side, or from the baled straw by similar means.
D. Silt Retention Barriers

Maintenance of temporary silt retention barriers consists of all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled).

E. Temporary Sediment Basins

Maintenance of temporary sediment basins consists of all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original bottom of the basin. This also includes removing accumulated sediment from the rock filter and restoring the rock filter to its original specified condition and any work necessary to restore all other components to the pre-maintenance conditions.

F. Sediment Barriers

Maintenance of sediment barriers consists of furnishing all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). Also included is the removal of sediment accumulations on the barriers by tapping.

G. Triangular Silt Barriers

Maintenance of triangular silt barriers consists of all labor, tools, materials, equipment and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled).

H. Retrofits

Maintenance of the retrofits device consists of all labor, tools, materials, equipment and necessary incidentals to remove and properly dispose of accumulated sediment in the permanent detention pond being utilized as a temporary sediment basin. This item also includes any maintenance that is required to ensure the retrofit device is maintained per Plan details and any maintenance of the stone filter to maintain its filtering ability, including cleaning and replacement.

I. Construction Exits

Maintenance of the construction exits consists of all labor, tools, materials, equipment and incidentals, including additional stone and geotextile fabric as required to prevent the tracking or flow of soil onto public roadways. This includes scarifying existing stone, cleaning existing stone, or placement of additional stone.

Maintenance of the construction exit tire wash assembly consists of all labor, tools, materials, and equipment and incidentals, including stone and geotextile fabric as required to prevent the tracking or flow of soil onto public roadways. This includes scarifying existing stone, cleaning existing stone, cleaning tire wash assembly area, or placement of additional stone. It also includes the removal and dispose of accumulated sediment in the required approved sediment storage device down to the original ground line (0% filled).

Cleaning of the construction exit by scraping and/or brooming only will not be measured for payment.

J. Inlet Sediment Traps

Maintenance of inlet sediment traps consists of all labor, tools, materials, equipment, and necessary incidentals to remove and properly dispose of accumulated sediment in the trap and/or the excavated area adjacent to the trap. It also includes any maintenance that is required to remove sediment accumulations (“filtercake”) from the material selected to construct the inlet sediment trap.

K. Rock Filter Dams

Maintenance of rock filter dams consists of all labor, tools, materials, equipment, and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). This item also includes the removal of any material deposited in sump holes.
Section 165—Maintenance of Temporary Erosion and Sedimentation Control Devices

L. **Stone Filter Berms**
   Maintenance of stone filter berms consists of all labor, tools, materials, equipment, and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). This item also includes the removal of any material deposited in sump holes.

M. **Stone Filter Rings**
   Maintenance of stone filter rings consists of all labor, tools, materials, equipment, and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). This item also includes the removal of any material deposited in sump holes.

N. **Temporary Sediment Traps**
   Maintenance of temporary sediment traps consists of all labor, tools, materials, equipment, and necessary incidentals to remove and dispose of accumulated sediment down to the original ground line (0% filled). This item also includes the removal of any material deposited in sump holes.

165.3.06 **Quality Acceptance**
   General Provisions 101 through 150.

165.3.07 **Contractor Warranty and Maintenance**
   General Provisions 101 through 150.

165.4 **Measurement**

A. **Temporary Silt Fence**
   Maintenance of temporary silt fence, Type A or C, is the actual linear feet (meter) of silt fence measured in place where sediment is removed or where the silt fence has become undermined due to no fault or negligence of the Contractor. Any deteriorated filter fabric reducing the effectiveness of the silt fence that needs to be removed and replaced will be measured as maintenance of temporary silt fence.

B. **Silt Control Gates**
   Maintenance of temporary silt control gates, Type 1, 2, or 3, as specified on the Plans is measured as a single unit.

C. **Check Dams (All Types)**
   Maintenance of temporary erosion control check dams as specified on the Plans is the actual linear feet (meter) of baled straw, or rip rap, measured in place, where sediment is removed.

D. **Silt Retention Barriers**
   Maintenance of temporary silt retention barrier as specified on the Plans is measured by the linear foot (meter) where sediment is removed.

E. **Temporary Sediment Basins**
   Maintenance of temporary sediment basins as specified on the Plans is measured as a single unit.

F. **Sediment Barriers**
   Maintenance of sediment barriers is the actual linear feet (meter) measured in place where sediment is removed.

G. **Triangular Silt Barriers**
   Maintenance of triangular silt barrier as specified on the plans is measured by the linear foot (meter) where sediment is removed.
H. **Retrofits**

Maintenance of retrofit devices at the location specified on the Plans is measured per each.

I. **Construction Exits**

Maintenance of construction exits at the location specified on the Plans, or as directed by the Engineer is measured per each.

Maintenance of construction exit tire wash assemblies, including the required approved sediment storage device, at the location specified on the Plans, or as directed by the Engineer are measured per each when added to an existing construction exit.

Each location will be measured as either maintenance of construction exit or maintenance of construction exit tire wash assembly, but not measured simultaneously for payment.

J. **Inlet Sediment Traps**

Maintenance of inlet sediment traps at the location specified on the Plans, or as added by the Engineer is measured per each.

K. **Rock Filter Dams**

Maintenance of rock filter dams as specified on the plans is measured as a single unit.

L. **Stone Filter Berms**

Maintenance of stone filter berms as specified on the plans is measured per linear foot (meter).

M. **Stone Filter Rings**

Maintenance of stone filter rings as specified on the plans is measured as a single unit.

N. **Temporary Sediment Traps**

Maintenance of temporary sediment traps as specified on the plans is measured as a single unit.

165.4.01 **Limits**

General Provisions 101 through 150.

165.5 **Payment**

A. **Temporary Silt Fence**

Maintenance of temporary silt fence, Type A or C, is paid for at the contract unit price bid per linear foot (meter).

B. **Silt Control Gates**

Maintenance of temporary silt control gates, Type 1, 2, or 3, as specified on the Plans is paid for at the contract unit price bid per each.

C. **Check Dams**

Maintenance of check dams as specified on the Plans is paid for at the contract unit price bid per linear foot (meter).

D. **Silt Retention Barriers**

Maintenance of temporary silt retention barriers as specified on the Plans is paid for at the contract unit price bid per linear foot (meter).

E. **Temporary Sediment Basins**

Maintenance of temporary sediment basins as specified on the Plans is paid for at the contract unit price bid per each.
Section 165—Maintenance of Temporary Erosion and Sedimentation Control Devices

F. Sediment Barriers
   Maintenance of sediment barriers as specified on the Plans is paid for at the contract unit price bid per linear foot (meter).

G. Triangular Silt Barriers
   Maintenance of triangular silt barriers as specified on the Plans is paid for at the contract unit price bid per linear foot (meter).

H. Retrofits
   Maintenance of the retrofit devices at the location specified on the Plans is paid for at the contract unit price bid per each.

I. Construction Exits
   Maintenance of the construction exits at the location specified on the Plans or as added by the Engineer is paid for at the contract unit price per each.
   Maintenance of construction exit tire wash assembly at the location specified on the Plans or as added by the Engineer is paid for at the contract unit price per each when added to an existing construction exit.

J. Inlet Sediment Traps
   Maintenance of the inlet sediment traps at the location specified on the Plans or at the location specified by the Engineer is paid for at the contract unit price per each.

K. Rock Filter Dams
   Maintenance of rock filter dams as specified on the Plans is paid for at the contract unit price bid per each.

L. Stone Filter Berms
   Maintenance of stone filter berms as specified on the Plans is paid for at the contract unit price bid per linear foot (meter).

M. Stone Filter Rings
   Maintenance of stone filter rings as specified on the Plans is paid for at the contract unit price bid per each.

N. Temporary Sediment Traps
   Maintenance of temporary sediment traps as specified on the Plans is paid for at the contract unit price bid per each.

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 165</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maintenance of temporary silt fence</td>
<td>per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of silt control gates</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of check dams</td>
<td>per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of silt retention barriers</td>
<td>per foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of temporary sediment basins</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of sediment barriers</td>
<td>per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of triangular silt barriers</td>
<td>per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of retrofits</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of construction exits</td>
<td>per each</td>
</tr>
</tbody>
</table>
### Section 165—Maintenance of Temporary Erosion and Sedimentation Control Devices

<table>
<thead>
<tr>
<th>Item No. 165</th>
<th>Maintenance of construction exit tire wash assembly</th>
<th>per each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No. 165</td>
<td>Maintenance of inlet sediment traps</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of rock filter dams</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of stone filter berms</td>
<td>per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of rock filter dams</td>
<td>per each</td>
</tr>
<tr>
<td>Item No. 165</td>
<td>Maintenance of temporary sediment traps</td>
<td>per each</td>
</tr>
</tbody>
</table>

**165.5.01 Adjustments**

General Provisions 101 through 150.
Delete Section 167 and substitute the following:

167.1 General Description
This Specification establishes the Contractor’s responsibility to meet the requirements of the current National Pollutant Discharge Elimination System (NPDES) Infrastructure Permit No. GAR100002 as it pertains to Part IV. Erosion, Sedimentation and Pollution Control Plan. In the case of differing requirements between this specification and the Permit, whichever is the more stringent requirement shall be adhered to.

167.1.01 Definitions
Certified Personnel—certified personnel are defined as persons who have successfully completed the appropriate certification course approved by the Georgia Soil and Water Conservation Commission. For Department projects the certified person must also have successfully completed the Department’s Worksite Erosion Control Supervisor (WECS) certification course.

Water Quality Sampling—as used within this specification, the term “sampling” shall be inclusive of the acts of detecting, noting, discerning, monitoring, etc. for the purpose of gauging compliance with the NPDES General Permit GAR100002.

Qualifying Rainfall Sampling Event—as used within this specification, means that which is defined in the NPDES General Permit GAR100002, Part IV.D.6.d(3).

167.1.02 Related References
A. Standard Specifications
   Section 161—Control of Soil Erosion and Sedimentation
B. Referenced Documents
   NPDES Infrastructure Permit No. GAR100002
   GDOT WECS seminar.
   Environmental Protection Divisions Rules and Regulations (Chapter 391-3-7)
   Georgia Soil and Water Conservation Commission Certification Level IA course
   OCGA 12-7-1
   Erosion, Sedimentation and Pollution Control Plan (ESPCP)

167.1.03 Submittals
General Provisions 101 through 150

167.2 Materials
General Provisions 101 through 150.
167.2.01 Delivery, Storage, and Handling
General Provisions 101 through 150.

167.3 Construction Requirements

167.3.01 Personnel
Use GASWCC Level IA certified and WECS certified personnel to perform all monitoring, sampling, inspections, and rainfall data collection.

Use the Contractor-designated WECS or select a prequalified consultant from the Qualified Consultant List (QCL) to perform water quality monitoring, sampling, inspections, and rainfall data collection.

The Contractor is responsible for having a copy of the current GAR100002 Permit onsite at all times.

167.3.02 Equipment
Provide equipment necessary to complete the Work or as directed by the Engineer.

167.3.03 Preparation
General Provisions 101 through 150.

167.3.04 Fabrication
General Provisions 101 through 150.

167.3.05 Construction
A. General
Perform inspections, rainfall data collection, testing of samples, and reporting the test results on the project according to the requirements in Part IV of the NPDES Infrastructure Permit and this Specification. Take samples manually or use automatic samplers, according to the GAR100002 permit. Note that the GAR100002 permit requires the use of manual sampling or rising stage sampling for qualifying events that occur after the first instance of the automatic sampler not being activated during a qualifying event. Analyze all samples according to the Permit, regardless of the method used to collect the samples. If samples are analyzed in the field using portable turbidimeters, the monitoring results shall state they are being used and a digital readout of NTUs is what is provided. Submit bench sheets, work sheets, etc., when using portable turbidimeters. There are no exceptions to this requirement. Perform required inspections and submit all reports required by this Specification within the time frames specified. Failure to perform the inspections within the time specified will result in the cessation of all construction activities with the exception of traffic control and erosion control. Failure to submit the required reports within the times specified will result in non-refundable deductions as specified in Subsection 161.5.01.B.

B. Water Quality Inspections
The Department will provide one copy of the required inspection forms for use and duplication. Inspection forms may change during the contract to reflect regulatory agency needs or the need of the Department. Any costs associated with the change of inspection forms shall be considered incidental. Alternate formats of the provided forms may be created, used and submitted by the Contractor provided the required content and/or data fields and verbatim certification statements from the Department’s current forms are included.

The Engineer shall inspect the installation and condition of each erosion control device required by the erosion control plan within seven days after initial installation. This inspection is performed for each stage of construction when new devices are installed. The WECS shall ensure all installation deficiencies reported by the Engineer are corrected within two business days.

Ensure the inspections of the areas listed below are conducted by certified personnel and at the frequencies listed. Document all inspections on the appropriate form provided by the Department.

1. Daily (when any work is occurring):
   a. Petroleum product storage, usage and handling areas for spills or leaks from vehicles or equipment.
   b. All locations where vehicles enter/exit the site for evidence of off-site sediment tracking.
Continue these inspections until a Notice of Termination (NOT) is submitted and use the daily inspection forms.

2. Weekly and after Rainfall Events:
   Conduct inspections on these areas every seven calendar days and within twenty-four hours after the end of a rainfall event that is 0.5 in (13 mm) or greater (unless such storm ends after 5:00 PM on any Friday or any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first):
   a. Disturbed areas not permanently stabilized
   b. Material storage areas that are exposed to precipitation or stormwater and poses a risk to discharging pollutants
   c. Structural control measures, Best Management Practices (BMPs) to ensure they are operating correctly
   d. Water quality sampling locations and equipment
   e. Discharge locations or points, e.g., outfalls and drainage structures that are accessible to determine if erosion control measures are effective in preventing significant impacts to receiving waters
   Continue these inspections until all temporary BMPs are removed and a NOT is submitted and use the EC-1 Form.

3. Monthly:
   Once per month, inspect all areas where final stabilization has been completed. Look for evidence of sediments or pollutants entering the drainage system and or receiving waters. Inspect all permanent erosion control devices remaining in place to verify the maintenance status and that the devices are functioning properly. Inspect discharge locations or points, e.g. outfalls, drainage structures, that are accessible to determine if erosion control measures are effective in preventing significant impacts to receiving waters.
   Continue these inspections until the Notice of Termination is submitted and use the monthly inspection form.

C. Water Quality Sampling
   When the sampling location is a receiving water, the upstream and downstream samples are taken for comparison of NTU values. When the sampling location is an outfall, a single sample is taken to be analyzed for its absolute NTU value.

D. Reports
   1. Inspection Reports:
      Summarize the results of inspections noted above in writing on the appropriate Daily, Weekly, Monthly, or EC-1 form provided by the Department and includes the following information:
      • Date(s) of inspection
      • Name of certified personnel performing inspection
      • Construction phase
      • Status of devices
      • Observations
      • Action taken in accordance with Part IV.D.4.a.(5) of the GAR100002 Permit
      • Signature of personnel performing the inspection
      • Any instance of non-compliance
      When the report does not identify any non-compliance instances, the inspection report shall contain a statement that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. (See the EC-1 form.)
      The reports shall be made and retained at the site or be readily available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to the Georgia Department of Natural Resources.
Environmental Protection Division (GAEPD). Such reports shall be readily available by the end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the Plan. The inspection form certification sheet shall be signed by the project WECS and the inspector performing inspections on behalf of the WECS (if not the same person). Submit all inspection reports to the Engineer within twenty-four hours of the inspection. The Engineer will review the submitted reports to determine their accuracy. The Engineer will notify the certified personnel of any additional items that should be added to the inspection report.

Complete any items listed in the inspection report requiring routine maintenance within seventy-two (72) hours of notification or immediately during perimeter BMP failure emergencies. Deficiencies that interfere with traffic flow, safety, or downstream turbidity shall have immediate reasonable steps taken to address the deficiencies.

BMPs that have failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State shall have immediate reasonable steps taken to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. If the correction requires a new or replacement BMP or significant repair, the repair must be completed and operational within seven (7) days from the time of discovery. If seven (7) days is infeasible, document why the timeframe is infeasible and coordinate with the Engineer to schedule the correction as soon as feasible after the seven (7) day timeframe. The Department must be in agreement with the infeasibility.

Assume responsibility for all costs associated with additional sampling as specified in Part IV.D.6.d.3.(c) of the NPDES GAR100002 Permit if either of these conditions arise:

- BMPs shown in the Plans are not properly installed and maintained, or
- BMPs designed by the Contractor are not properly designed, installed and maintained.

2. Sampling Reports
   a. All sampling shall be performed in accordance with the requirements of the GAR100002 Permit for the locations identified in the ESPCP approved by the Department.
   b. Report Requirements
      Include in all reports, the following certification statement, signed by the WECS or consultant providing sampling on the project:
      "I certify under penalty of law that this report and all attachments were prepared under my direct supervision in accordance with a system designed to assure that certified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

When a rainfall event requires a sample to be taken, submit a report of the sampling results to the Engineer within seven working days of the date the sample was obtained. Include the following information in each report:

1) Date and time of sampling
2) Name of certified person(s) who performed the sampling and analyses.
3) Date the analyses were performed
4) Time the analyses were initiated
5) Rainfall amount on the sampling date (sampling date only)
Section 167 – Water Quality Monitoring

6) References and written procedures, when available, for the analytical techniques or methods used
7) Whether the samples were taken by automatic sampler, rising-stage sampler, or manually (grab sample)
8) The NTU of each sample, the results of the analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine the results
9) Location where each sample was taken (station number and left or right offset)
10) Identification of whether a sample is a receiving-water sample or an outfall sample
11) Project number and county
12) A clear note if a sample exceeds 1000 NTUs by writing “exceeds 1000 NTUs” prominently upon the report

c. Report Requirements with No Qualifying Rainfall Events
   In the event a qualifying rainfall event does not produce a discharge to sample, or sampling is “impossible”, as defined in the GAR1000002 Permit, a written justification must be included in the report as required at Part IV.D.4.a.(6) of the GAR100002 Permit.

d. Sampling Results
   Provide sampling results to the Project Engineer within 48 hours of the samples being analyzed. This notification may be verbal or written. This notification does not replace the requirement to submit the formal summary to the Engineer within 7 working days of the samples being collected. The Engineer will ensure submission of the sampling report to GAEPD by the 15th of the month following the sampling results as per the GAR100002 Permit. The WECS will be held accountable for delayed delivery to the Department which results in late submissions to GAEPD resulting in enforcement actions.

3. Rainfall Data Reports:
   Record the measurement of rainfall within disturbed areas that have not met final stabilization once each twenty-four hour period, except for non-working Saturdays, non-working Sundays and non-working Federal Holidays until a Notice of Termination is submitted. Project rain gauges and those used to trigger the automatic samplers are to be emptied after every rainfall event. This will prevent a cumulative effect and prevent automatic samplers from taking samples even though the rainfall event is not a qualifying event. The daily rainfall data supplied by the WECS to the Engineer will be the official rainfall data for the project for compliance with the permit.

167.3.06 Quality Acceptance
General Provisions 101 through 150.

167.3.07 Contractor Warranty and Maintenance
General Provisions 101 through 150.

167.4 Measurement
Water Quality Inspections in accordance with the inspection and reports sub-sections will be measured for payment by the month up to the time the Contract Time expires. Required inspections and reports after Contract Time has expired will not be measured for payment unless a time extension is granted.

Water Quality Sampling is measured per each. “Each” means each qualifying rainfall sampling event, not each sampled site.

167.4.01 Limits
General Provisions 101 through 150. Submit the monitoring summary report to the Engineer within 7 working days

167.5 Payment
Payment for Water Quality Inspections and Water Quality Sampling will be made as follows:

Water Quality Inspections will be paid at the Contract Price per month. This is full compensation for performing the requirements of the inspection section of the NPDES Permit and this Specification, any and all necessary
Section 167 – Water Quality Monitoring

incidentally, and providing results of inspections to the Engineer, within the time frame required by the NPDES Infrastructure Permit, and this Specification.

Water Quality Monitoring and Sampling per each qualifying rainfall sampling event is full compensation for meeting the requirements of the monitoring sections of the NPDES Permit and this Specification, obtaining samples, analyzing samples, any and all necessary incidentals, and providing results of turbidity tests to the Engineer, within the time frame required by the NPDES Infrastructure Permit, and this Specification. This item is based on the rainfall events requiring sampling as described in Part IV.D.6 of the Permit. The Department will not pay for samples taken and analyzed for rainfall events that are not qualifying events as compared to the daily rainfall data supplied by the WECS.

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 167</th>
<th>Water quality inspections</th>
<th>Per month</th>
</tr>
</thead>
</table>

Water Quality Monitoring and Sampling will be paid per each qualifying rainfall sampling event.

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 167</th>
<th>Water quality monitoring and sampling</th>
<th>Per each</th>
</tr>
</thead>
</table>

167.5.01 Adjustments

General Provisions 101 through 150.
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
SUPPLEMENTAL SPECIFICATION  
Section 171—Silt Fence

Delete Section 171 and substitute the following:

171.1 General Description  
This work includes furnishing, installing, and removing a water permeable filter fabric fence to remove suspended particles from drainage water.

171.1.01 Definitions  
General Provisions 101 through 150.

171.1.02 Related References  
A. Standard Specifications
   Section 163—Miscellaneous Erosion Control Items  
   Section 700—Grassing  
   Section 862—Wood Posts and Bracing  
   Section 881—Fabrics  
   Section 894—Fencing

B. Referenced Documents  
   ASTM D 3786  
   ASTM D 4355  
   ASTM D 4632  
   ASTM D 4751  
   GDT 87  
   QPL 36

171.1.03 Submittals  
General Provisions 101 through 150.

171.2 Materials  
Materials shall meet the requirements of the following Specifications:

<table>
<thead>
<tr>
<th>Material</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabrics</td>
<td>881</td>
</tr>
<tr>
<td>Fencing</td>
<td>894</td>
</tr>
<tr>
<td>Wood Posts and Bracing</td>
<td>862</td>
</tr>
</tbody>
</table>

Conditions during Project construction will affect the quantity of the silt fence to be installed.

The Engineer may increase, decrease, or eliminate the quantity at his or her direction. Variations in quantity are not changes in details of construction or in the character of the work.
Section 171—Silt Fence

For Type A, B, and C fences, use fabric as specified in Subsection 881.2.07, “Silt Fence Filter Fabric.”

171.2.01 Delivery, Storage, and Handling

During shipment and storage, wrap the fabric in a heavy-duty covering protecting the cloth from sunlight, mud, dust, dirt, and debris. Do not expose the fabric to temperatures greater than 140 °F (60 °C).

When installed, the Engineer will reject the fabric if it has defects, rips, holes, flaws, deterioration, or damage incurred during manufacture, transportation, or storage.

171.3 Construction Requirements

171.3.01 Personnel
General Provisions 101 through 150.

171.3.02 Equipment
General Provisions 101 through 150.

171.3.03 Preparation
General Provisions 101 through 150.

171.3.04 Fabrication
General Provisions 101 through 150.

171.3.05 Construction
Install the silt fence according to this Specification, as shown on the Plans, or as directed by the Engineer

A. Install Silt Fence

1. Install silt fence by either of the following methods:
   a. Excavated Trench Method
      Excavate a trench 4 to 6 in (100 to 150 mm) deep using equipment such as a trenching machine or motor grader. If equipment cannot be operated on the site, excavate the trench by hand.
   b. Soil Slicing Method
      Create a mechanical slice in the soil 8 to 12 in (200 to 300 mm) deep to receive the silt fence. Ensure the width of the slice is not more than 3 in (75 mm). Mechanically insert the silt fence fabric into the slice in a simultaneous operation with the slicing ensuring consistent depth and placement.

2. Install the first post at the center of the low point (if applicable). Space the remaining posts a maximum of 6 ft (1.8 m) apart for Types A and B fence and 4 ft (1.2 m) apart for Type C fence.

3. Bury the posts at least 18 in (450 mm) into the ground. If this depth cannot be attained, secure the posts enough to prevent the fence from overturning from sediment loading.

4. Attach the filter fabric to the post using wire, cord, staples, nails, pockets, or other acceptable means.
   a. Staples and Nails (Wood Posts): Evenly space staples or nails with at least five per post for Type A fence and four per post for Type B fence.
   b. Pockets: If using pockets and they are not closed at the top, attach the fabric to a wood post using at least one additional staple or nail, or to a steel post using wire. Ensure the additional attachment is within the top 6 in (150 mm) of the fabric.
   c. Install the filter fabric so 6 to 8 in (150 to 200 mm) of fabric is left at the bottom to be buried. Provide a minimum overlap of 18 in (450 mm) at all splice joints.
   d. For Type C fence:
      1) Woven Wire Supported
         • Steel Post: Use wire to attach the fabric to the top of the woven wire support fence at the midpoint between posts. Also, use wire to attach the fabric to the post.
      2) Polypropylene Mesh Supported
         • Wood Post: Use at least six staples per post. Use two staples in a crisscross or parallel pattern to secure the top portion of the fence. Evenly space the remaining staples down the post.
         • Steel Post: Use wire to attach the fabric and polypropylene mesh to the post.
5. Install the fabric in the trench so 4 to 6 in (100 to 150 mm) of fabric is against the side of the trench with 2 to 4 in (50 to 100 mm) of fabric across the bottom in the upstream direction.

6. Backfill and compact the trench to ensure flow cannot pass under the barrier. When the slice method is used, compact the soil disturbed by the slice on the upstream side of the silt fence first, and then compact the downstream side.

7. When installing a silt fence across a waterway producing significant runoff, place a settling basin in front of the fence to handle the sediment load, if required. Construct a suitable sump hole or storage area according to Section 163.

B. Remove the Silt Fence

1. Keep all silt fence in place unless or until the Engineer directs it to be removed. A removed silt fence may be used at other locations if the Engineer approves of its condition.
2. After removing the silt fence, dress-the area to natural ground, grass-and mulch the area according to Section 700.
3. The silt fence shall remain until the Project is accepted or until the fence is removed. Also, remove and dispose of the silt accumulations at the silt fence.
4. Remove and replace any deteriorated filter fabric reducing the effectiveness of the silt fence.

171.3.06 Quality Acceptance
Approved silt fence is listed in QPL 36. Approved fabrics must consistently exceed the minimum requirements of this Specification as verified by the Office of Materials and Research. The Office of Materials and Research will remove fabric failing to meet the minimum requirements of this specification from the QPL until the products’ acceptability has been reestablished to the Department’s satisfaction.

At the time of installation, the Engineer will reject the fabric if it has defects, rips, holes, flaws, deterioration, or damage incurred during manufacture, transportation, or storage.

171.4 Measurement
The quantity of silt fence to be paid for is the actual number of linear feet (meters) of silt fence, measured in place from end post to end post of each separate installation. The silt fence must be complete and accepted.

171.4.01 Limits
General Provisions 101 through 150.

171.5 Payment
Silt fence Type A, B, or C measured as defined in Subsection 171.4, “Measurement,” is paid for at the Contract Unit Price bid per linear foot (meter).

Payment is full compensation for the following:
- Furnishing materials
- Erecting the fence
- Dressing and grassing, when required
- Removing the fence, when required

Payment for this Item is made as follows:
- Seventy-five percent of the Contract Price bid per linear foot (meter) is paid when each fence is complete in place.
- Twenty-five percent is paid at removal or acceptance.

If the silt fence must be repaired or removed, as the result of neglect or damage, perform the work at no additional cost to the Department.

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 171</th>
<th>Silt fence, type</th>
<th>Per linear foot (meter)</th>
</tr>
</thead>
</table>

171.5.01 Adjustments
General Provisions 101 through 150.
Delete Subsection 201.3.05.E.3 and substitute the following:

3. Solid Waste Material

   a. Nonregulated Material

      1) Common fill is defined as soil, rock, brick, concrete without reinforcement, concrete with reinforcement where the reinforcement has been removed flush with the surface of the concrete and cured asphalt, provided that such material does not contain hazardous waste constituents above background levels and the material results from Department funded construction contracts. Such fill is not subject to the Georgia Comprehensive Solid Waste Management Act of 1990 and the Solid Waste Management Rules when used as fill material on Department funded construction contracts or Department property or when used as fill material on property not owned by the Department when all requirements of this specification are fully met. Common fill meeting this definition may be placed as follows:

      a. At a permitted municipal, construction and demolition materials or inert landfill fully meeting all requirements of the Solid Waste Rules and Act and any other applicable laws or ordinances.

      b. At an off-site engineered fill location in accordance with the following requirements;

         • Place the material in uniform layers 3 ft thick or less and distributed to avoid the formation of large voids or pockets.
         • Fill voids with finer material.
         • Cover the last layer of fill with at least 2 ft of soil.
         • Construct the fill according to Section 208, except compact it to at least 90 percent of the maximum laboratory dry density.
         • A Georgia registered professional engineer shall document, certify and submit the following information on behalf of the Contractor to the Department; compaction rates, waste description including average particle size, and the depth of clean earthen fill lying above the engineered fill.
Revised: November 5, 2013
First Use: December 13, 2013

c. On site as compacted fill if prior written approval has been granted by the Engineer and in accordance with the following requirements:

- As compacted fill incorporated into embankment only. No area shall be excavated for the sole purpose of disposing of common fill.
- Place the material in uniform layers 3 ft thick or less and distributed to avoid the formation of large voids or pockets.
- Fill voids with finer material.
- Cover the last layer of fill with at least 2 ft of soil.
- Construct the fill according to Section 208, except compact it to at least 90 percent of the maximum laboratory dry density.
- Records of the exact location by station and offsets, amount disposed per location in cubic yards, waste description including average particle size, compaction rates and depth of clean earthen fill lying above the composite materials shall be kept by the Engineer.

d. Materials that may be recycled or reused such as asphaltic concrete, Portland cement concrete, plastic, metal and materials that qualify under EPD regulations for sale or use may be reclaimed by the Contractor.

b. Regulated Material

1) Inert waste is defined as organic debris such as stumps, limbs and leaves, cured asphalt and any of the aforementioned common fill items that do not meet the compaction requirements when placed in an excess materials pit. An inert waste landfill permit shall be obtained in accordance with GDNR/EPD Rules to properly record the disposal of inert waste when compaction requirements are not met at an excess materials pit. If disposed of at a landfill, inert waste may only be disposed at a permitted municipal, construction and demolition materials or inert landfill fully meeting all requirements of the Solid Waste Rules and Act and any other applicable laws or ordinances.

2) Construction and demolition waste is defined as construction forms, barrels, scrap metal, and other such by-products of construction not specifically listed above as either common fill or inert waste. Construction and or demolition waste must be disposed of at a permitted municipal, construction and demolition materials, or inert landfill fully meeting all requirements of the Solid Waste Rules and Act and any other applicable laws or ordinances.

3) Dispose of oils, solvents, fuels, untreated lead paint residue, and other solid hazardous waste through a properly licensed hazardous waste disposal facility.
4) Remove municipal solid waste discovered during construction or shown on the Plans according to Section 215.

c. Solid Waste Handling and Disposal Documentation Requirements:

1) Waste disposed at a permitted municipal or construction and demolition landfill – all tipping receipts generated by the receiving landfill shall be provided to the Engineer.

2) Waste disposed at inert landfill – a copy of the landfill’s Permit By Rule notification, and for landfills exceeding one acre, a copy of the landfill’s NPDES General Storm water Permit Notice of Intent (NOI) and any local jurisdiction Land Disturbing Activity Permit, if applicable, shall be provided to the Engineer.

3) Any necessary documentation regarding a disposal site’s permit status must be obtained by the Contractor and verified by the Department before any common fill, inert waste, or other solid waste is allowed to leave the site.

4) The documentation listed herein shall be maintained on-site in the project files and at any other location the Department deems necessary until a valid NPDES Notice of Termination is filed.

Recyclable materials must be separated from all waste materials and shall be properly stored in containers when practicable.

Excluding the above allowances, all types of waste shall be handled in full compliance with the following:

- The Georgia Solid Waste Management Rules, as amended (391-3-4)
- Georgia Comprehensive Solid Waste Management Act of 1990, as amended (O.C.G.A. 12-8-20)
- The Georgia Erosion & Sedimentation Act as amended (O.C.G.A. 12-7-1) and any applicable Local and State requirements as well as the General Permits of the Georgia Water Quality Control Act
- Any other applicable Federal, State, or Local rules or laws

Office of Construction
Add the following Subsections to Section 449:

449.1 General Description

- A preformed silicone joint seal, or

449.2 Materials

J. Performed Silicone Joint Seal

The preformed silicone joint seal shall as a minimum:

- Be held in place by a non-sag, high modulus silicone adhesive.
- Be compatible with epoxy and elastomeric concrete header material and steel headers (if required).
- Withstand the effects of vertical and lateral movements, skew movements and rotational movement without adhesive or cohesive failure.
- The depth of the joint shall be recessed below the riding surface throughout the normal limits of joint movement.
- Be resistant to ultraviolet rays
- Be resistant to abrasion, oxidation, oils, gasoline, salt, and other materials that may be spilled on or applied to the surface.
Ensure the joint meets the following physical properties:

<table>
<thead>
<tr>
<th>Test</th>
<th>Requirements</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness Type A durometer</td>
<td>53 ± 5</td>
<td>ASTM D 2240</td>
</tr>
<tr>
<td>Tensile Strength (min)</td>
<td>550 psi (3.8 Mpa)</td>
<td>ASTM D 412</td>
</tr>
<tr>
<td>Elongation at break (min)</td>
<td>350%</td>
<td>ASTM D 412</td>
</tr>
<tr>
<td>Tear Strength (min)</td>
<td>80 lb/in (92 kg/cm)</td>
<td>ASTM D 624</td>
</tr>
<tr>
<td>Compression set (max)</td>
<td>30% at 350o F</td>
<td>ASTM D 395</td>
</tr>
<tr>
<td>Operating temp range (min)</td>
<td>-60°F to 450°F (51°C to 232°C)</td>
<td></td>
</tr>
</tbody>
</table>

The adhesive shall also have the following properties:

<table>
<thead>
<tr>
<th>Test</th>
<th>Requirements</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sag/flow (max)</td>
<td>3/16” (4.8 mm)</td>
<td>ASTM C 639</td>
</tr>
<tr>
<td>Hardness</td>
<td>23 ± 3</td>
<td>ASTM C 661</td>
</tr>
<tr>
<td>Tack free time (max)</td>
<td>30 minutes</td>
<td>ASTM C 679</td>
</tr>
<tr>
<td>Skin over time (tooling Time) (max)</td>
<td>5 minutes</td>
<td>AT 75°F/50% RH</td>
</tr>
<tr>
<td>Cure through to ¼” thickness (max)</td>
<td>16 hours</td>
<td>AT 75°F/50% RH</td>
</tr>
<tr>
<td>Resistance to UV</td>
<td>No Degradation</td>
<td>ASTM C 793</td>
</tr>
<tr>
<td>Peel Adhesion to substrates (min)</td>
<td>50 lb/in (58kg/cm)</td>
<td>ASTM C 794</td>
</tr>
</tbody>
</table>

### 449.3.03 Preparation

#### A. Surface Preparation

2. **Preparation for Joint Seal**

   **Delete:** “Saw-cutting of the concrete deck may be necessary to provide an acceptable attachment surface for the joint seal”.
449.3.05 Construction

H. Preformed Silicone Joint Seal

1. After the epoxy or elastomeric concrete has developed enough strength to be traffic ready, remove the temporary joint filler (when called for) and thoroughly clean the joint faces of all joint filler.

2. Lightly sandblast the joint to remove all residues. Prior to installation, ensure surfaces are completely dry and all recommendations of the manufacture have been completed.

3. Clean the seal prior to installation by wiping it down with a cloth saturated with denatured alcohol.

4. Apply a 3/8” thick bead of adhesive along both sides of the joint at the depth recommended by the manufacturer.

5. Position the joint seal to the proper depth as recommended by the manufacturer.

6. Apply a bead of adhesive along the top side of the joint on each side as recommended by the manufacturer.

7. Tool the adhesive twice to insure complete contact with the vertical edge.

449.5 Payment

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 449</th>
<th>Preformed Silicone Joint Seal, Bridge No - _____, Bent No - _____</th>
<th>Per Linear Foot (meter)</th>
</tr>
</thead>
</table>
Add the following to 500.1.03.A:
The Contractor is responsible for all concrete mix designs. Submit a mix design for approval to the Office of Materials and Testing. Include the sources, actual quantity of each ingredient, design slump, design air and laboratory results that demonstrate the ability of the design to attain the required compressive strength at 28 days.

Prepare and test at least 8 cylinders according to ASTM C192 and AASHTO T22 to ensure that the demonstrated laboratory compressive strength at 28 days exceeds the minimum acceptance strength (X). Make the specimens from two or more separate batches with an equal number of cylinders made from each batch. The minimum acceptance strength is:

\[ X = f'c + 500 \text{ psi} \] (\[ X = f'c + 3.4 \text{ MPa} \])

Where, \( f'c \) is the required minimum compressive strength at 28 days for Class D concrete as shown in Table 1—Concrete Mix Table.

Add the following to Table 1—Concrete Mix Table:

<table>
<thead>
<tr>
<th>Class of Concrete</th>
<th>(2) Coarse Aggregate Size No.</th>
<th>(1 &amp; 6) Minimum Cement Factor lbs/yard³</th>
<th>Max Water/Cement Ratio lbs/lb</th>
<th>(5) Slump Acceptance Limits (in) Lower - Upper</th>
<th>(3 &amp; 7) Entrained Air Acceptance Limits (%) Lower - Upper</th>
<th>Minimum Compressive Strength at 28 days (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class D</td>
<td>57,67</td>
<td>650</td>
<td>0.445</td>
<td>2 - 4</td>
<td>3.5 - 7.0</td>
<td>4000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class of Concrete</th>
<th>(2) Coarse Aggregate Size No.</th>
<th>(1 &amp; 6) Minimum Cement Factor kg/m³</th>
<th>Max Water/Cement Ratio kg/kg</th>
<th>(5) Slump Acceptance Limits (mm) Lower - Upper</th>
<th>(3 &amp; 7) Entrained Air Acceptance Limits (%) Lower - Upper</th>
<th>Minimum Compressive Strength at 28 days (MPa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class D</td>
<td>57,67</td>
<td>386</td>
<td>0.445</td>
<td>50 - 100</td>
<td>3.5 - 7.0</td>
<td>28</td>
</tr>
</tbody>
</table>

Delete Subsection 500.3.04.F.1.b

Add the following to Subsection 500.3.04.F.1:

f. Class D—Bridge superstructure concrete or as called for on the Plans

MATERIALS AND TESTING
Add the following:

534.1 General Description
This Specification covers the design, materials, fabrication, transportation, erection, measurement, and payment for a Pedestrian Bridge complete in place above substructure. The superstructure of the pedestrian bridge shall be prefabricated steel truss. The deck shall be concrete on galvanized composite steel floor deck. The roof system shall consist of steel framing, galvanized wide rib metal deck, and standing-seam metal roof.

534.1.01 Definitions
General Provisions 101 through 150.

534.1.02 Related References
A. Standard Specifications
   Section 105—Control of Work
   Section 106—Control of Materials
   Section 500—Concrete Structures
   Section 501—Steel Structures
   Section 511—Reinforcement Steel

B. Referenced Documents
   AASHTO LRFD Pedestrian Bridge Guide Specifications, 2009

534.1.03 Submittals
A. Plans
   Submit plans and calculations to the Engineer for approval prior to beginning fabrication and construction. Sign and seal plans and calculations by a registered professional engineer currently licensed to practice in the State of Georgia

B. Fabricator Qualifications
   Proposed suppliers must be on the GDOT Qualified Products List 60 – Steel Bridge Fabricators and have at least five (5) years experience designing and fabricating these type structures and a minimum of five (5) successful bridge projects, of similar construction, each of which has been in service at least three (3) years. List the location, bridge size, owner, and a contact for reference for each project.

   Bridge(s) shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Major Steel Bridges” as set forth in the AISC Certification Program. Quality control shall be in accordance with procedures outlined for AISC certification.
C. Shop Drawings

Provide shop drawings for fabrication and erection of the Pedestrian Overpass Bridge to the GDOT Office of Bridge Design for review and acceptance after being reviewed and stamped approved by the Engineer of Record for the original contract plans. Shop drawings shall contain material sizes and types, weld sizes and locations and all necessary details, dimensions and information to allow fabrication of the Pedestrian Overpass Bridge in conformance with the requirements of the contract.

D. Fabrication Schedule

Ensure that the fabricator submits a proposed fabrication schedule to the State Materials Engineer that includes the following:

- Correct PI Number, County and Project Number (as applicable)
- Bridge number
- Starting date
- Estimated completion date

534.2 Design Criteria

A. Geometry

Provide the following:

1. Inside clear width between handrails of 12’- 0”, as shown on the Plans for Bridge No. 3.
2. The length as shown on the Plans for Bridge No. 3.
3. Standing seam roof system as shown on the plans for Bridge No. 3.

B. Loading

Include the following loads in the design:

1. Self weight.
2. Uniformly distributed load of 90 pounds per square foot.
3. A moving concentrated load equal to AASHTO H-10 loading; truck only, with impact.
4. Uniform roof load of 40 pounds per square foot of roof area.

534.3 Materials

A. Structural Steel

Use unpainted structural steel.

Fabricate structural steel in accordance with ASTM A 709 Grade 50W (A 709M Grade 345) for plates and structural shapes, and ASTM A 606 (A 606M) or ASTM A 847 (A 847M) for tubular sections.

Minimum yield strength is equal to or greater than 50,000 psi (345 MPa).

The minimum material thickness for structural steel members shall be in accordance with the provisions of Article 10.8 of the AASHTO Standard Specification for Highway Bridges except that the minimum material thickness of closed structural tubular members is 1/4 inch (6 mm).

B. Concrete

Use Class D, 4000 psi concrete placed in accordance with the Plans.

C. Composite Steel Floor Deck

1. Use a galvanized steel composite floor deck with a minimum thickness of .0336 inch (.85mm) (22 gage). Manufacture the composite floor deck by a member of the Steel Deck Institute. Galvanizing shall meet ASTM A924 G-60.

D. Bolts

Bolt field splices with Type 3 High Strength ASTM F3125 Grade A325 (A325M) or A490 (A490M) bolts.

E. Accessories

1. Railing

Use railings with a smooth outside surface without protrusions and depressions. Attach railing thirty six (36) inches above the floor deck in accordance with the AASHTO Specifications. Grind-smooth the ends of all angles that are provided as part of the railing assembly. Use only tubes with closed ends.
2. **Toe Plate**
   Attach a five (5) inch (125 mm) steel channel two (2) inches (50 mm) above the floor deck.

F. **Standing Seam Roof System**
1. 1 ½” 22 gage galvanized Type B Wide Rib Roof Deck manufactured to Steel Deck Institute (SDI) requirements. Galvanizing shall meet ASTM A924 G-60.
2. Standing Seam roof panels in accordance with the specifications noted on the Plans for Bridge No. 3.

### 534.4 Construction Requirements

#### 534.4.01 Personnel
General Provisions 101 through 150.

#### 534.4.02 Equipment
General Provisions 101 through 150.

#### 534.4.03 Preparation
General Provisions 101 through 150.

#### 534.4.04 Fabrication

A. **Fabrication**
   1. **Workmanship**
      Perform the fabrication, welding, shop connections, and workmanship in accordance with Section 501 of the Georgia D.O.T. Specifications.
   2. **Welding**
      Perform all field welding by certified welders that have in their possession a current welding certification card issued by the Georgia D.O.T. Office of Materials and Testing and in accordance with section 501 of the Georgia D.O.T. Specifications.
   3. **Camber**
      Fabricate each truss to produce a 1.0% positive camber after all dead loads have been applied.
   4. **Finish**
      Sand blast all prominently exposed surfaces of weathering steel in accordance with the Steel Structures Painting Council (SSPC) Surface Preparation Specification No. 6 “Commercial Blast Cleaning”.

B. **Delivery and Erection**
   1. Notify the Engineer two weeks in advance of delivery of the bridge superstructure unit.
   2. Install anchor bolts in accordance with the manufacturer’s recommendations.
   3. Paint anchor bolts, bearing assemblies and all steel members within 3’-0” from bearing assemblies in accordance with section 535 of the Specifications. Paint to match color of steel pedestrian bridge.

#### 534.4.05 Quality Acceptance

**Shop Inspection:**
Give two weeks’ notice to the Department’s State Materials Engineer before beginning mill or shop work so that inspection arrangements can be made. Inspection at the mill or shop is intended to facilitate work and avoid errors and does not relieve the Contractor of responsibility for imperfect material or work quality.

Do not roll or fabricate material until:
- The State Materials Engineer has been informed where the orders have been placed.
- The inspection is arranged or waived.

Furnish the facilities necessary for the inspection of materials and work quality in the mill and shop. Allow Inspectors free access to the necessary mill and shop locations, and cooperate with the Inspector during inspection.

Shop inspection is required for steel and other metal materials being fabricated.

Inspectors will do the following:
- a. Determine if steel members, member components, or other fabricated steel components meet the Plans and Specifications and Standard Operating Procedures.
- b. Identify the steel by color code and correlate its heat numbers obtained from certified mill test reports.

**NOTE:** Do not cut steel or apply prime paint until the Inspector completes this step.
Section 534 – Pedestrian Overpass Bridge

c. Check fabrication, especially the grade of steel, dimensions, welding, and bolting.
d. Perform necessary non-destructive testing to determine conformance with the Specifications and Plans.
e. Reject materials or work that does not meet the Specifications.

NOTE: Even if the Inspector accepts materials or members, they can be rejected later if found defective. Promptly replace or repair rejected materials or members at no additional cost to the Department.

534.4.06 Quality Assurance
Furnish a warranty against defects in material and workmanship for a period of ten (10) years from the manufacturer.

534.4.07 Contractor Warranty and Maintenance
General Provisions 101 through 150.

534.5 Measurement
This work will be measured for payment on a Lump Sum basis, complete and accepted in place.

534.5.01 Limits
General Provisions 101 through 150.

534.6 Payment
This work will be paid for at the Contract Price per pedestrian overpass bridge complete in place. Payment includes all material (structural steel, high strength bolts, composite steel deck forms, concrete, bearing assemblies, anchor bolts, and lights), labor, equipment and design as necessary to complete the work.

Payment will be made under:

| Item No. 534 | Pedestrian Overpass Bridge, STA 88+76 | Lump Sum |

534.6.01 Adjustments
General Provisions 101 through 150.3
Delete Section 550 and Substitute the following:

550.1 General Description
This work includes furnishing and installing the following:

- Storm drain pipe
- Side drain pipe
- Pipe-arch culverts
- Elliptical pipe
- Flared end sections
- Safety end sections
- Tapered pipe inlets

Install structures according to the Specifications and the details shown on the Plans, or as directed by the Engineer.

550.1.01 Definitions
Side Drain – All driveway pipes (commercial, non-commercial, residential, utility, farm, logging, and mining).
Storm Drain Pipe – All pipe used in the highway drainage system that receives surface water through inlets and conveys the water through conduits to a pipe outlet
Thermoplastic Pipe – High Density Polyethylene (HDPE), Polypropylene (PP) and Polyvinyl Chloride (PVC).

General Provisions 101 through 150.

550.1.02 Related References
A. Standard Specifications
   Section 205—Roadway Excavation
   Section 207—Excavation and Backfill for Minor Structures
   Section 208—Embankments
   Section 645—Repair of Galvanized Coatings
   Section 812—Backfill Materials
   Section 815—Graded Aggregate
   Section 834—Masonry Materials
   Section 840—Corrugated Aluminum Alloy Pipe
   Section 841—Iron Pipe
   Section 843—Concrete Pipe
Section 844—Steel Pipe
Section 845—Thermoplastic Pipe
Section 847—Miscellaneous Pipe
Section 848—Pipe Appurtenances

B. Referenced Documents

General Provisions 101 through 150.
GDOT Manual on Drainage Design for Highways
Ga. Std. 1030D
Ga. Std. 1030P
GDT 136
ASTM D 2321

550.1.03 Submittals
General Provisions 101 through 150.

550.2 Materials
Ensure materials meet the requirements of the following Specifications:

<table>
<thead>
<tr>
<th>Material</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backfill Materials</td>
<td>207</td>
</tr>
<tr>
<td>Graded Aggregate</td>
<td>815</td>
</tr>
<tr>
<td>Reinforced Concrete Pipe</td>
<td>843.2.01</td>
</tr>
<tr>
<td>Nonreinforced Concrete Pipe</td>
<td>843.2.02</td>
</tr>
<tr>
<td>Mortar And Grout</td>
<td>834.2.03</td>
</tr>
<tr>
<td>Bituminous Plastic Cement</td>
<td>848.2.05</td>
</tr>
<tr>
<td>Rubber Type Gasket Joints (Concrete Pipe)</td>
<td>848.2.01</td>
</tr>
<tr>
<td>Preformed Plastic Gaskets</td>
<td>848.2.06</td>
</tr>
<tr>
<td>Corrugated Steel Pipe</td>
<td>844.2.01</td>
</tr>
<tr>
<td>Bituminous Coated Corrugated Steel Pipe</td>
<td>844.2.02</td>
</tr>
<tr>
<td>Corrugated Aluminum Alloy Pipe</td>
<td>840.2.01</td>
</tr>
<tr>
<td>Bituminous Coated Corrugated Aluminum Pipe</td>
<td>840.2.03</td>
</tr>
<tr>
<td>Aluminized Type 2 Corrugated Steel Pipe</td>
<td>844.2.06</td>
</tr>
<tr>
<td>Ductile Iron Pipe, Fittings and Joints</td>
<td>841</td>
</tr>
<tr>
<td>Precoated, Galvanized Steel Culvert Pipe</td>
<td>844.2.05</td>
</tr>
<tr>
<td>Smooth Lined Corrugated High Density (HDPE) Polyethylene Culvert Pipe</td>
<td>845.2.01</td>
</tr>
<tr>
<td>Polyvinyl Chloride (PVC) Profile Wall Drain Pipe</td>
<td>845.2.02</td>
</tr>
<tr>
<td>Polyvinyl Chloride (PVC) Corrugated Smooth Interior Drain Pipe</td>
<td>845.2.03</td>
</tr>
<tr>
<td>Smooth Lined Corrugated Polypropylene (PP) Pipe</td>
<td>845.2.05</td>
</tr>
<tr>
<td>Miscellaneous Pipe</td>
<td>847</td>
</tr>
</tbody>
</table>

Use any of the following types of pipe:

- Reinforced concrete
- Nonreinforced concrete
- Corrugated steel or Aluminum
- Smooth-lined corrugated high density polyethylene (HDPE)
- Ductile iron
- Polyvinyl Chloride (PVC) Profile Wall Drain Pipe
- Polyvinyl Chloride (PVC) Corrugated Smooth Interior Drain Pipe
- Precoated, Galvanized Steel Culvert Pipe (Polymer)
- Smooth Lined Corrugated Polypropylene (PP) Pipe

Use the type of pipe designated on the Plans, or acceptable alternate types when applicable. For a listing of acceptable alternate pipe types see the GDOT Approved Material Selections List in Chapter 7– Storm Drain Design of the Department’s Manual on Drainage Design for Highways. This document summarizes general applications for pipe.

For concrete, corrugated steel and aluminum pipes see Ga. Std. 1030D for minimum thicknesses, minimum cover, maximum fill, allowable pipe diameters and trench construction detail.

For thermoplastic pipes see Ga. Std. 1030P for minimum cover, maximum fill, allowable pipe diameters and trench construction details.

A. Thermoplastic Pipe Project Restrictions

Thermoplastic pipe is restricted to the following project conditions:

1. Storm Drain
   a. Travel Bearing: ADT equal to or less than 15,000
   b. Non-Travel Bearing: Non-Interstate

2. Side Drain
   a. Allowed on all projects

550.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

550.3 Construction Requirements

550.3.01 Personnel

General Provisions 101 through 150.

550.3.02 Equipment

General Provisions 101 through 150.

550.3.03 Preparation and Backfill

Before installing pipe, shape the foundation material as shown on the Plans.

Prepare structure excavations, foundation and backfill according to Section 207. Except, use the following foundation and backfill material requirements for thermoplastic pipe installations:

1. For storm drain applications (cross and longitudinal) use graded aggregate material meeting Subsection 815.2.01.
   a. 20 ft (6.1 m) maximum fill height for High Density (HDPE) Polyethylene Culvert Pipe.
   b. 25 ft (7.6 m) maximum fill height for Polyvinyl Chloride (PVC) and Polypropylene (PP) Pipe.

2. For side drain applications (driveway) use backfill material based on fill height.
a. Fill heights up to 10 ft (3 m), use normal backfill material meeting the following soil classes per Subsection 810.2.01.
   
   - High Density (HDPE) Polyethylene Culvert Pipe use Class II B2 soil or better.
   - Polyvinyl Chloride (PVC) and Polypropylene (PP) Pipe use Class II B3 soil or better.
   - If the required soil Class is not available use graded aggregate material meeting Subsection 815.2.01.

b. Fill heights above 10 ft (3 m), use graded aggregate material meeting Subsection 815.2.01.

550.3.04 Fabrication
General Provisions 101 through 150.

550.3.05 Construction

A. Drainage

Provide necessary temporary drainage. Periodically remove any debris or silt constricting the pipe flow to maintain drainage throughout the life of the Contract.

B. Damage

Protect the structure by providing sufficient depth and width of compacted backfill before allowing construction over a culvert. Repair damage or displacement from traffic or erosion occurring after installing and backfilling at no additional cost to the Department.

C. Installation

Check vertical and horizontal alignment of the pipe culvert or pipe barrel by sighting along the crown, invert and sides of the pipe, and by checking for sagging, faulting and invert heaving. Repair any issues involving incorrect horizontal and/or vertical alignment before backfilling pipe.

1. Concrete Pipe

   Lay sections in a prepared trench with the socket ends pointing upstream. Join section using rubber gasket installed according to Subsection 848.2.01 and the manufacturer’s recommendations.

2. Ductile Iron Pipe

   Lay pipe sections in a prepared trench, with bells pointing upstream. Construct joints according to Subsection 841.2.02.A.

3. Corrugated Aluminum or Steel Pipe and Pipe-Arches

   Lay pipe sections in a prepared trench, with outside laps of circumferential joints pointing upstream and longitudinal joints at the sides. Join the sections with coupling bands, fastened by two or more bolts. Before backfilling the structure:
   
   a. Repair areas of damaged coatings and exposed base metal according to applicable AASHTO Standard Specification specified in Section 844.

4. Smooth-Lined Corrugated HDPE Pipe

   Install smooth-lined corrugated HDPE pipe according to ASTM D 2321 using backfill requirements in Subsection 550.3.03. Use fitting and couplings that comply with the joint performance criteria of AASHTO Standard Specifications for Highway Bridges, Division II. Ensure all joints are “silt tight” as stated in the AASHTO bridge specifications.

5. Specials (Wyes, Tees, and Bends)

   Install wyes, tees, and bends as shown on the Plans or as directed.

6. Tapered Pipe Inlets

   Locate and install tapered pipe inlet end sections as shown on the Plans or as directed.

7. Elongation

   Elongate metal pipe as shown on the Plans. Order the elongation of the vertical axis of the pipe to be done in the shop.
Ensure the manufacturer ship metal pipe with wire ties in the pipe ends. Remove wire-ties immediately after completing the fill.

8. Flared End Sections
   Use flared end sections on the inlet, outlet, or on both ends of storm drain pipe, according to Plan details.

9. PVC Drain Pipe
   Install polyvinyl chloride (PVC) drain pipe according to ASTM D 2321 using backfill requirements in Subsection 550.3.03. Use fittings and couplings complying with the joint performance criteria of AASHTO Standard Specifications for Highway Bridges, Division II. Ensure all joints are “silt tight” as stated in the AASHTO bridge specifications.

10. Smooth-Lined Polypropylene Pipe
    Install smooth-lined polypropylene pipe according to ASTM D 2321 using backfill requirements in Subsection 550.3.03. Use fittings and couplings complying with the joint performance criteria of AASHTO Standard Specifications for Highway Bridges, Division II. Ensure all joints are “silt tight” as stated in the AASHTO bridge specifications.

550.3.06 Quality Acceptance

A. Post Installation Inspection

   For projects located on the State Route system, including interstates, inspect 100% of all storm drain pipe and a minimum of 10.0% of all side drain pipe installations. Conduct post installation inspections in accordance with the requirements of this Specification and GDT 136.

   Before post installation inspection, dewater installed pipe (if necessary) and provide the Engineer with a post installation inspection schedule. Notify the Engineer at least seven days in advance of beginning inspection. Perform post installation inspections once compacted backfill has reached a depth of 8 feet or after completion of the pipe installation and final cover, which includes the embankment and all non-asphalt bases and/or subgrades. Notify the Engineer of problems found during the inspection. The Engineer will determine if corrective action is necessary.

   Perform post installation inspection with the use of low barrel distortion video equipment with laser profile technology, non-contact video micrometer and associated software.

   Video and laser profiling and measurement technology must be certified by the company performing the work to meet the requirements of GDT 136. Inspection contractor personnel completing remote inspections shall be NASSCO – PACP Certified Technicians.

   For video recorded, laser profiled pipe indicating deflection is in excess of Specification requirements, the Contractor may elect to further test the pipe with the use of a mandrel. Ensure mandrel meets requirements of GDT 136 and the Engineer has approved before use. Pull the mandrel by hand.

   Manual post installation inspection allowed for pipe diameters greater than 48 inches per Subsection 550.3.06.B. Re-inspect 100% of pipe remediation locations or where replacement was required.

B. Manual Post Installation Inspections

   Perform a manual inspection by entering the pipe structure to record video and to make measurements. For all pipe structures considered a confined space, provide entry for all project inspection personnel according to OSHA requirements. Furnish a video recording of each inspection. On the recording, identify the date and time of the inspection, a description of the pipe structure, location, and viewing direction. Record the entire run of pipe. Provide a light source which allows observation of all areas of concern on the video recording. Furnish the video recording in a digital, reproducible format on one of the following media types: DVD or CD.

   Measure the deflection of the pipe using either a metal or fabric tape and read to the nearest 0.5 inch (10 mm). Measure crack width using either a crack comparator or a feeler gage capable of measuring 0.01 inch (0.25 mm). Measure joint gaps using a tape or ruler and read to the nearest 0.5 inch (10 mm). Other measuring devices may be used if approved by the Engineer.

   Record the measurements and include them in the inspection report. Measure and record the following:
   1. The location, length and greatest width of each crack.
   2. Smallest inside diameter three times for each pipe section in the run. Take the first measurement vertically from the crown to invert (12 o’clock to 6 o’clock positions). Take the second measurement by rotating 60 degrees from
vertical (2 o’clock to 8 o’clock positions). Take the third measurement by rotating 120 degrees from vertical (4 o’clock to 10 o’clock positions). For all measurements, stretch tape to full extent across inside of pipe.

3. Widest gap at each joint in the run.

Record the location and describe other defects not listed above. For each measurement location in a pipe, record the length from the nearest drainage structure.

C. Inspection Report
Submit inspection report to the Engineer after completion of the required post installation inspection. Ensure inspection report meets the requirements of this Specification and GDT 136.

D. Requirements for Concrete Pipe

1. Joints: Note differential movement, cracks, spalling, improper gasket placement, movement or settlement of pipe sections, and leakage in the inspection report. Repair or replace pipe sections to the satisfaction of the Engineer where joint separation is greater than 1 inch (25 mm). Repair or replace pipe sections where soil migration through the joint is occurring.

2. Longitudinal and Transverse Cracks: Cracks with a width less than 0.01 inch (0.25 mm) are considered hairline and minor and only need to be noted in the inspection report, no corrective action is necessary. When cracks are wider than 0.01 inch (0.25 mm) and extend for a length of 12 inch (300 mm) or more, regardless of position in the wall of the pipe, measure the width, length, and locations of the cracks and diameter of the pipe, both horizontally and vertically, use remediation methods in accordance with recommendations of the pipe manufacturer and submit to the Engineer for review and approval an evaluation utilizing a Professional Engineer that takes into consideration structural integrity, environmental conditions, and the design service life of the pipe. Seal by a method approved by the Engineer cracks having widths equal to or greater than 0.01 inch (0.25mm) that extend for a length of 12 inch (300 mm) or more and determined to be detrimental. Remediate or replace pipe with cracks widths greater than 0.1 inch (2.5 mm) and determined by the Engineer to be beyond satisfactory structural repair. Repair or replace pipes having displacement across the crack.

E. Requirements for Thermoplastic Pipe

1. Joints: Remediate pipe showing evidence of crushing at the joints. Note differential movement, improper joint sealing, movement or settlement of pipe sections, and leakage in the inspection report. Remediate joint separation of greater than 1 inch (25 mm). Repair or replace pipe sections where soil migration through the joint is occurring.

2. Cracks: Remediate cracks or splits in the interior wall of the pipe. Use remediation methods in accordance with recommendations of the pipe manufacturer and accepted and authorized by the Engineer.

3. Buckling, bulging, and racking: Note flat spots or dents at the crown, sides or flowline of the pipe due to racking. Note areas of wall buckling and bulging in the inspection report. The Engineer will determine if corrective action is necessary.

4. Deflection: Where pipe deflection exceeds 5% of the nominal diameter, submit to the Engineer for review and approval an evaluation utilizing a Professional Engineer taking into consideration the severity of the deflection, structural integrity, environmental conditions, and the design service life of the pipe. Remediate or replace pipe where the evaluation finds the deflection could be problematic or where pipe deflection exceeds 7.5% of the nominal diameter.

F. Requirements for Corrugated Aluminum or Coated Steel Pipe

1. Joints: Remediate pipe showing evidence of crushing at the joints. Note differential movement, improper joint sealing, movement or settlement of pipe sections, and leakage in the inspection report. Remediate joint separation of greater than 1 inch (25 mm). Repair or replace pipe sections where soil migration through the joint is occurring.

2. Cracks: Remediate cracks or splits in the interior wall of the pipe. Use remediation methods in accordance with recommendations of the pipe manufacturer and accepted and authorized by the Engineer.

3. Buckling, bulging, and racking: Note flat spots or dents at the crown, sides or flowline of the pipe due to racking in the inspection report. Note areas of wall buckling and bulging in the inspection report. The Engineer will determine if an additional evaluation by a Professional Engineer is required. Remediate or replace pipe where the evaluation finds the damaged section could be problematic.
4. **Deflection:** Where pipe deflection exceeds 5% of the nominal diameter, submit to the Engineer for review and approval an evaluation utilizing a Professional Engineer that takes into consideration the severity of the deflection, structural integrity, environmental conditions, and the design service life of the pipe. Remediate or replace pipe where the evaluation finds the deflection could be problematic or where pipe deflection exceeds 7.5% of the nominal diameter.

5. **Coating:** Note areas of the pipe where the original coating has been scratched, scoured or peeled in the inspection report. The Engineer will determine if repair is necessary. Use remediation methods in accordance with recommendations of the pipe manufacturer and accepted and authorized by the Engineer.

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**550.3.07 Contractor Warranty and Maintenance**

General Provisions 101 through 150.

**550.4 Measurement**

**A. Excavation and Backfill**

Foundation backfill materials Types I, II and III are measured according to Subsection 207.4, “Measurement.”

Normal backfill is not measured separately.

No measurement will be made for grade aggregate used for structural backfill of thermoplastic pipe.

**B. Flat Bottom and Circular Pipe (All Types)**

The overall length of pipe installed, excluding tapered inlets, is measured in linear feet (meters), along the central axis of the diameter of the pipe. Wyes, tees, and bends are included in this measurement.

**C. Pipe-Arches**

The overall length of pipe-arch installed is measured in linear feet (meters), along the bottom center line of the pipe.

**D. Multiple Installations**

In multiple installations, each single line of culvert structure is measured separately.

**E. Tapered Pipe Inlets**

Tapered pipe inlet sections are measured as a unit; do not include them in the overall length of the pipe.

**F. Flared-End Sections**

Flared-end sections are measured separately by the unit and not included in the overall pipe length.

**G. Smooth-Flow Pipe**

Smooth-flow pipe is measured by the linear foot (meter) along the pipe invert.

**H. Elliptical Pipe**

Elliptical pipe is measured in linear feet (meters) along the bottom center line of the pipe.

**I. Post Installation Inspection**

No measurement will be made for post installation inspection.

**550.4.01 Limits**

Excavation and normal backfill are not measured for payment.

**550.5 Payment**

**A. Backfill**

Foundation backfill material Type II and III will be paid for according to Section 207.

Foundation backfill material Type I will be paid for according to Section 205 or Section 206.

Graded aggregate used for structural backfill of thermoplastic pipe will not be paid for separately, payment will be included in the overall price bid for pipe.
B. Pipe Installations

Pipe installations complete in place and accepted will be paid for at the Contract Price for each item.

This payment is full compensation for excavating, furnishing, and hauling materials; installing, cutting pipe where necessary; repairing or replacing damaged sections; post installation inspection, making necessary connections; strutting, elongating, providing temporary drainage; joining an extension to an existing structure where required; and removing, disposing of, or using excavated material as directed by the Engineer.

1. Smooth Flow Pipe
   The quantity of each diameter and steel thickness of smooth flow pipe as measured will be paid for at the Contract Unit Price per linear foot (meter) bid for the various sizes. Payment is full compensation for furnishing labor, materials, tools, O-ring mechanical joints, equipment, and incidentals to complete this Item, including removing and disposing excavation material.

2. Flared-End Sections
   Flared-end sections, measured as specified above, will be paid for at the Contract Unit Price for each section of the specified size.

   Payment will also include sawing, removing, and replacing existing pavement removed to install a new drainage structure.

C. Post Installation Inspection

No separate payment will be made for this work. Include the cost in the bid submitted for this pay item.

Payment for this item is made as follows:

One hundred percent of the Contract Price bid per linear foot (meter) is paid when the pipe is installed per the specifications including the required material documentation. The Contract Price is paid before post installation inspection.

Payment will be made under:

<table>
<thead>
<tr>
<th>Item No. 550</th>
<th>Storm drain pipe___ in (mm), H=___</th>
<th>Per linear foot (meter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No. 550</td>
<td>Side drain pipe___ in (mm), H=___</td>
<td>Per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 550</td>
<td>Pipe arch (span) ___ in (mm) x (rise) ___ in (mm)</td>
<td>Per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 550</td>
<td>Tapered pipe inlet ___ in (mm),</td>
<td>Per each</td>
</tr>
<tr>
<td>Item No. 550</td>
<td>Flared-end section ___ in (mm),</td>
<td>Per each</td>
</tr>
<tr>
<td>Item No. 550</td>
<td>Elliptical pipe___ in (mm) wide x ___ in (mm) high</td>
<td>Per linear foot (meter)</td>
</tr>
</tbody>
</table>

550.01 Adjustments

Excavation will not be paid for separately, but the other provisions of Section 205 and Section 208 shall govern.

Office of Materials and Testing
Replace Section 653 with the following:

653.1 General Description
This work includes furnishing and applying standard, wet weather, and audible profiled thermoplastic reflectorized pavement marking compound. Ensure 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 and/or reflective composite optics it produces a reflectorized pavement marking.

Short Lines: Crosswalks, stop bars, arrows, symbols, and crosshatching. Extrude short lines rather than spraying them on.

653.1.02 Related References
A. Specifications
   Section 656—Removal of Pavement Markings
B. Referenced Documents
   QPL 46
   QPL 71
   SOP 37
   SOP 38
   SOP 39
   Federal Test Standard Number 595B
   Federal Test Standard Number 695B
   AASHTO M 247
   AASHTO M 249
   ASTM D 92
   ASTM D 476
   ASTM D 2240
   ASTM D 4960
   ASTM E 1710
   ASTM E 2177
   40 CFR 261.24
   EPA Method 3050
Section 653—Thermoplastic Traffic Stripe

EPA Method 3052
EPA Method 6010
EPA Method 7000A

653.1.03 Submittals
Ensure the producers of the thermoplastic compound and the producers of both the intermix and drop-on 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. General Characteristics of Thermoplastic
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. Material Composition
   Ensure the resin of the thermoplastic material is an alkyd binder. Ensure the alkyd binder consists of a mixture of synthetic resins and a high boiling point plasticizer. Ensure at least one synthetic resin is a solid at room temperature. Ensure at least 50% of the binder composition is 100% maleic-modified glycerol ester resin. Ensure at least 18% 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.

2. Suitability for Markings
   Use thermoplastic material that is especially compounded for traffic markings and has the following characteristics:
   - Prevents markings from smearing or spreading under normal traffic conditions at temperatures below 120°F (49°C)
   - Gives a uniform cross section, with pigment evenly dispersed throughout the material
   - Has a uniform material density and character throughout its thickness
   - Allows the stripe to maintain its original dimensions and placement
   - Ensures that the exposed surface is free from tack and is not slippery when wet
   - Does not lift from the pavement in freezing weather
   - Has cold ductility properties that permit normal movement with the road surface without chipping or cracking

3. 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. Ensure thermoplastic material is free from dirt or tint. Ensure white thermoplastic material heated for 240 ± 5 minutes at 425 ± 3 ºF (218 ± 3 ºC) and cooled to 77 ± 3 ºF (25 ± 2 ºC) matches Federal Test Standard Number 695B-Color 17925. Ensure the material, when compared to the magnesium oxide standard using a standard color spectrophotometer according to ASTM D 4960, meets the following:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Definition</th>
<th>Magnesium Oxide Standard</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rd</td>
<td>Reflectance</td>
<td>100</td>
<td>75 min.</td>
</tr>
<tr>
<td>a</td>
<td>Redness-Greenness</td>
<td>0</td>
<td>-5 to + 5</td>
</tr>
<tr>
<td>b</td>
<td>Yellowness-Blueness</td>
<td>0</td>
<td>-10 to + 10</td>
</tr>
</tbody>
</table>

   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 recent EPA Methods 3050 and 6010 or 7000. Ensure yellow thermoplastic material heated for 240 ± 5 minutes at 425 ± 3 °F (218 ± 2 °C) and cooled to 77 ± 3 °F (25 ± 2 °C) matches Federal Test Standard Number 595B-Color 13538. Ensure the material, when compared to PR#1 Chart using a standard color spectrophotometer according to ASTM D 4960, plots within the following chromaticity coordinates:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>0.455</td>
<td>0.510</td>
<td>0.472</td>
<td>0.530</td>
</tr>
<tr>
<td>Y</td>
<td>0.444</td>
<td>0.485</td>
<td>0.400</td>
<td>0.456</td>
</tr>
</tbody>
</table>

c. Initial Reflectance (CIE Y): 45 minimum
d. Ensure the in-service daytime chromaticity for yellow material plots within the following coordinates after a period of 30 days:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>0.435</td>
<td>0.510</td>
<td>0.449</td>
<td>0.530</td>
</tr>
<tr>
<td>Y</td>
<td>0.429</td>
<td>0.485</td>
<td>0.377</td>
<td>0.456</td>
</tr>
</tbody>
</table>

4. 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.

5. 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.3.a and Subsection 653.2.A.3.b after prolonged heating or reheating.

6. Intermixed Glass Spheres and Reflective Composite Optics

Ensure glass spheres meet the requirements of AASHTO M 247.

Do not use glass spheres and/or reflective composite optics containing greater than 200 ppm total arsenic, 200 ppm total antimony, or 200 ppm total lead when tested according to US EPA Methods 3052 and 6010C, or other approved methods.

7. Flashpoint

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

B. Drop-On Glass Spheres and Reflective Composite Optics

Ensure glass spheres meet the requirements of AASHTO M 247. Use spheres produced from an approved source listed on QPL 71. Glass spheres conforming to an alternative gradation may be used provided all other requirements of AASHTO M 247 and this specification are met. Do not use glass spheres and/or reflective composite optics containing greater than 200 ppm total arsenic, 200 ppm total antimony, or 200 ppm total lead when tested according to US EPA Methods 3052 and 6010C, or other approved methods.

C. Sealing Primer

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

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
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. Application Machine

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

- Parts continuously mix and agitate the material.
- Truck-mounted units for lane, edge, and center lines operate at a uniform, predetermined rate of speed, both uphill and downhill, in order to produce a uniform application of striping material and capable of following straight lines and making normal curves in a true arc.
- 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 and/or reflective composite optics to the surface of the completed stripe using a dispenser attached to the striping machine to automatically dispense the beads/optics instantaneously upon the installed line. Synchronize the glass sphere/optics dispenser cutoff with the automatic cutoff of the thermoplastic material.

C. Special Kettles

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

D. Hand Equipment

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

Ensure 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

For asphaltic concrete pavement, do not begin placement of thermoplastic striping until 15 calendar days after completion of the final surface course.

653.3.04 Fabrication

General Provisions 101 through 150.
Section 653—Thermoplastic Traffic Stripe

653.3.05 Construction

A. General Application

Notify the Engineer prior to the placement of the thermoplastic materials. Furnish the Engineer with the manufacturer’s name and batch numbers of the thermoplastic materials and glass spheres to be used. Ensure that the approved batch numbers appear on the thermoplastic materials and glass spheres packages.

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. Ensure all new Portland cement concrete pavement surfaces are 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.
- Extrusion methods using a pressurized ribbon gun to control the application 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 yd² (1m²) 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. Sealing Primer
   To ensure optimum adhesion, apply a binder-sealer material before installing the thermoplastic in each of the following cases:
   - Where directed by the Engineer for sprayed thermoplastic
   - Old asphaltic concrete pavements with exposed aggregates
   - Portland cement concrete pavements
   - Bridge Deck Polmer Overlay
   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 QPL 46.
   Apply the 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
   If the old stripe is to 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. Thickness
   a. Maintain the following minimum average dry thicknesses above the surface on all types of pavements
      - 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
      - 0.120 in (3.0 mm)* for polymer overlay edge lines and lane lines

   (See below for ‘*’ reference.)

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

<table>
<thead>
<tr>
<th>Material Width</th>
<th>Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 in wide stripe</td>
<td>*(Average Thickness (in) = [(lbs. used) ÷ (total linear feet)] × 0.236)</td>
</tr>
<tr>
<td>125 mm wide stripe</td>
<td>*(Average Thickness (mm) = [(kg used) ÷ (total linear meters)] × 4.0)</td>
</tr>
<tr>
<td>10 in wide stripe</td>
<td>*(Average Thickness (in) = [(lbs. used) ÷ (total linear feet)] × 0.118)</td>
</tr>
<tr>
<td>250 mm wide stripe</td>
<td>*(Average Thickness (mm) = [(kg used) ÷ (total linear meters)] × 2.0)</td>
</tr>
</tbody>
</table>

   b. Audible Profiled Thermoplastic – Apply a flat edge line having a thickness of 0.100 inches – 0.150 inches (100 mils – 150 mils) above the surface on all types of pavements, exclusive of bumps.

8. Glass Spheres and Reflective Composite Optics
   a. Apply glass spheres and/or reflective composite optics to installed stripe surface above the minimum rate recommended by the thermoplastic material manufacturer to produce the required retro-reflectivity value in accordance with Subsection 653.3.06.
   b. Apply the glass sphere and/or reflective composite optics top-coating with a pressure-type gun specifically designed for applying glass spheres and/or reflective composite optics that will embed at least one-half of the sphere’s and optic’s diameter into the thermoplastic immediately after the material has been applied to the pavement.
   c. Audible Profiled Thermoplastic – Apply glass sphere and/or reflective composite optics to all markings at the rates determined by the manufacturer’s recommendations as identified in the APL system.

9. Dimensions of Raised Bumps:
   a. Apply the raised bumps with a profile such that the leading and trailing edges are sloped at a sufficient angle to create an audible and vibratory warning.
   b. Bumps on the edge line and centerline marking shall be at least 0.45 inches (11 mm) at the highest point of the bump, above the pavement surface including the base line. The height measures after the application of the drop-on retroreflective elements or glass spheres.
   c. Bumps shall have a minimum baseline coverage dimension of 2.5 inches (65 mm) in both the transverse and longitudinal directions.
   d. The bumps may have a drainage channel. The width of each drainage channel will not exceed 0.25 inches (6 mm) at the bottom of the channel. The longitudinal distance between bumps shall be approximately 30 inches (762 mm).

B. Removing Existing Stripe

Remove existing stripe according to Section 656.

Remove 100 percent of existing traffic stripe from:
   - 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

a. No traffic stripe shall be less than the specified width and shall not exceed the specified width by more than 1/2 in (13 mm). 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 straight lines. On curves up to and including 1 degree (radius of 1745 m or greater), the alignment of the stripe shall not deviate from the intended alignment by more than 1 in (25 mm). 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).

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

c. No more than 1% of the bumps or more than three consecutive bumps are missing or broken (less than half a bump remaining) within the first 45 days under traffic, replace all failed bumps at no cost to the Department.

d. If the bumps are replaced and more than 2% of the replaced bumps fail within the first 45 days under traffic, the replacement period will be extended an additional 45 days from the date all replacement bumps were installed.

e. If at the end of the additional 45 days more than 2% of all bumps (initial and replacement) fail, replace all failed bumps at no expense to the Department.

D. Traffic Marking Protection (Audible Profile Thermoplastic)

Do not allow traffic onto or permit vehicles to cross newly applied pavement markings until they are sufficiently dry. Remove and replace any portion of the pavement markings damaged by passing traffic or from any other cause, at no additional cost to the Department.

653.3.06 Quality Acceptance

A. General

For a minimum of 30 days from the time of placement, ensure the thermoplastic pavement marking material and/or audible profiled thermoplastic 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.

Obtain pavement marking retroreflectivity values with a 30 meter geometry retroreflectometer.

B. Initial Retrosreflectivity

1. Longitudinal Lines

   Within 30 days of installation, ensure the in-place markings meet the following minimum reflectance values:

   a. Standard

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry (ASTM E 1710)</td>
<td>400 mcd/lux/m^2</td>
<td>300 mcd/lux/m^2</td>
</tr>
</tbody>
</table>

   b. Wet Weather

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry (ASTM E 1710)</td>
<td>400 mcd/lux/m^2</td>
<td>300 mcd/lux/m^2</td>
</tr>
<tr>
<td>Wet recovery (ASTM E 2177)</td>
<td>150 mcd/lux/m^2</td>
<td>125 mcd/lux/m^2</td>
</tr>
</tbody>
</table>

   c. Audible Profile Thermoplastic

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry (ASTM E 1710)</td>
<td>300 mcd/lux/m^2</td>
<td>250 mcd/lux/m^2</td>
</tr>
</tbody>
</table>

For each center line, edge line, and skip line, measure retroreflectivity 9 times for each mile; 3 times within the first 500 ft (152 m), 3 times in the middle, and 3 times within the last 500 ft (152 m). For projects less than one mile (1600 m) in length, measure retroreflectivity 9 times as above.

Record all retroreflectivity measurements on the form OMR CVP 66 in SOP 39.
Section 653—Thermoplastic Traffic Stripe

2. Messages, Symbols, and Transverse Lines
   At the time of installation, ensure the in-place markings when tested according to ASTM E 1710 meet the following minimum reflectance value of 275 mcd/lux/m².
   Perform at a minimum, one retroreflectivity measurement at one message, one symbol and one transverse line per intersection. Take one measurement per mile (1600 m) for locations other than intersections (i.e. school messages, railroad messages, bike symbols etc.)

C. Six Month Retroreflectivity (Longitudinal Lines)
   Maintain the following minimum reflectance values for 180 days after installation:
   1. Standard
      |         | White | Yellow         |
      |---------|-------|----------------|
      | Dry (ASTM E 1710) | 400 mcd/lux/m² | 300 mcd/lux/m² |
      | Wet recovery (ASTM E 2177) | 150 mcd/lux/m² | 125 mcd/lux/m² |
   2. Wet Weather
      |         | White | Yellow         |
      |---------|-------|----------------|
      | Dry (ASTM E 1710) | 400 mcd/lux/m² | 300 mcd/lux/m² |
      | Wet recovery (ASTM E 2177) | 150 mcd/lux/m² | 125 mcd/lux/m² |
   3. Audible Profile Thermoplastic
      |         | White | Yellow         |
      |---------|-------|----------------|
      | Dry (ASTM E 1710) | 300 mcd/lux/m² | 250 mcd/lux/m² |

Retest the in-place markings according to Subsection 653.3.06.B.1, 180 days after installation to ensure these minimum retroreflectance values are maintained.

NOTE: The Contractor is responsible for retro-reflectivity testing. Furnish initial test results to the Engineer within 30 days of application. Furnish additional testing for a period that totals 180 days from initial application or the stoppage of contract time, whichever comes first.

D. Thickness
   1. New Striping
      Check the thicknesses on all skip lines, edge lines and center lines with an approved traffic marking thickness gage consisting of 3 dials as follows:
      For each center line, edge line, and skip line, measure thickness above the pavement 3 times for each mile (1600 m); once within the first 500 ft (150 m), once in the middle, and once within the last 500 ft (150 m). For projects less than one mile (1600 m) in length, measure the thickness above the pavement 3 times.
      Record all thickness measurements on the form OMR CVP 66 in SOP 39.
   2. Recapping Refurbishment Thermoplastic
      Place durable tape, film, or metal plate of known and uniform thickness on an area to be striped. After the striper has passed over, remove the sample and measure the thickness with calipers or a micrometer.
      For each center line, edge line, and skip line, measure thickness above the pavement 3 times for each mile (1600 m); once within the first 500 ft (150 m), once in the middle, and once within the last 500 ft (150 m). For projects less than one mile (1600 m) in length, measure the thickness above the pavement 3 times.
      Submit results to the Engineer.
   3. Audible Profiled Thermoplastic
      Ensure the thickness of white and yellow pavement marking conform to Subsection 653.3.05.A.7.b
      Record all thickness measurements on the form OMR CVP 66 in SOP 39 and submit to the Engineer.
      The Engineer will verify the thickness of the pavement marking in accordance with Subsection 653.3.05.A.7.b within 30 days of receipt of the Contractor’s certification.
      Thickness measurement may be performed using a strong adhesive tape to install a metal plate (approximately 6 inches (150 mm) wide by 8 inches (200 mm) long, the thickness of the plate can by 1/8 inch (3 mm) as long as the plate does not deform) to the roadway where the pavement marking will be placed. After the material has dried remove the plate and check the thickness of the pavement marking material on the plate with a micrometer.
E. Corrective Work

For each mile (1600 m) section, if the 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. Ensure corrective work is completed at no additional cost to the Department. Perform testing according to this Specification. Any retest due to failures will be performed at no additional cost to the Department. Furnish all test reports to the Department.

Retroreflectivity and Thickness Longitudinal Line Deficiency: A deficiency will ensue when two or more Location Average results as recorded on form OMR CVP 66 within a One-Mile (1600 m) Section do not meet the performance criteria herein. The entire line within this one mile (1600 m) section will be determined to be deficient. If the evaluated section is less than 1.0 mile (1600 m), a single Location Average result not meeting the performance criteria herein will result in the entire line to be determined to be deficient.

Retroreflectivity Transverse Markings and Symbol Deficiency: A single Location Average result on the marking or symbol not meeting the performance criteria herein will result in the marking or symbol to be determined to be deficient.

653.3.07 Verification
See SOP 39

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 (Including Audible 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

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) |
### Section 653—Thermoplastic Traffic Stripe

<table>
<thead>
<tr>
<th>Item No. 653</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No. 653</td>
<td>Thermoplastic solid traffic stripe, __ in (mm), (color)</td>
<td>Per linear mile (kilometer)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Thermoplastic skip traffic stripe, __ in (mm), (color)</td>
<td>Per gross linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Thermoplastic skip traffic stripe, __ in (mm), (color)</td>
<td>Per gross linear mile (kilometer)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Audible profiled thermoplastic solid traffic stripe, __ in (mm), (color)</td>
<td>Per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Audible profiled thermoplastic solid traffic stripe, __ in (mm), (color)</td>
<td>Per linear mile (kilometer)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Audible profiled thermoplastic skip traffic stripe, __ in (mm), (color)</td>
<td>Per gross linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Audible profiled thermoplastic skip traffic stripe, __ in (mm), (color)</td>
<td>Per gross linear mile (kilometer)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Thermoplastic pavement markings, words, and symbols (color), type ______</td>
<td>Per each</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Thermoplastic traffic stripe</td>
<td>Per square yard (meter)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Wet Weather Thermoplastic solid traffic stripe, __ in (mm), (color)</td>
<td>Per linear foot (meter)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Wet Weather Thermoplastic solid traffic stripe, __ in (mm), (color)</td>
<td>Per linear mile (kilometer)</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Wet Weather Thermoplastic skip traffic stripe, __ in (mm), (color)</td>
<td>Per gross linear foot (meter)</td>
</tr>
<tr>
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<td>Wet Weather Thermoplastic skip traffic stripe, __ in (mm), (color)</td>
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</tr>
<tr>
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<td>Wet Weather Thermoplastic pavement markings, words, and symbols (color), type ______</td>
<td>Per each</td>
</tr>
<tr>
<td>Item No. 653</td>
<td>Wet Weather Thermoplastic traffic stripe</td>
<td>Per square yard (meter)</td>
</tr>
</tbody>
</table>

#### 653.01 Adjustments

General Provisions 101 through 150.
Delete Section 893 and substitute the following:

893.1 General Description
This section includes the requirements for miscellaneous planting materials, such as the following:

- Plant topsoil
- Mulch
- Vines, shrubs, trees, and miscellaneous plants
- Inoculants
- Porous material
- Prepared plant topsoil
- Tree paint
- Stakes
- Organic soil additives
- Erosion Control Compost
- Engineered Topsoil

893.1.01 Related References
A. Specifications
   Section 814—Soil Base Materials
   Section 822—Emulsified Asphalt

B. Referenced Documents
   ANSI Z60.1 American Standard for Nursery Stock
   “Standardized Plant Names”
   “Method of Test for Moisture Content of Hay or Straw” United States Department of Agriculture and the United States Composting Council, “Test Methods for the Examination of Composting and Compost” (TMECC).
   GDT 41

893.1.02 Submittals
For erosion control compost submit a notarized certification that includes the following:

- The feedstock by percentage in the final compost product.
- A statement that the compost meets federal and state health and safety regulations.
- A statement that the composting process has met time and temperature requirements.
- A copy of the lab analysis, less than four months old, performed by a Seal of Testing Assurance certified lab verifying that the compost meets the physical requirements specified.

When requested by the Engineer, one Solvita Compost Maturity Test kit (six tests) for every 1000 yd\(^3\) (765 m\(^3\)) of compost supplied shall be provided. The Solvita Compost Maturity Test kit is available from:
893.2 Materials

893.2.01 Plant Topsoil

A. Requirements

1. Use plant topsoil with the following characteristics:
   - Obtained from well-drained, arable land, but not from fields where tobacco grew in the last three years, or where Johnson grass or kudzu is present.
   - Friable, loamy soil with between 2 and 30 percent organic matter. Determine the percentage by measuring the loss on ignition of oven-dried samples ignited at 1,200 °F (650 °C).
   - Reasonably free from subsoil, heavy or stiff clay, coarse sand, and other deleterious substances.
   - Has no toxic amounts of acid or alkaline elements.
   - Can sustain healthy plant life.
   - Meets the grade requirements of Subsection 814.2.01.A.8.

2. The Department reserves the right to inspect all plant topsoil during the planting period. The Department will reject any material that does not meet the Specifications.

3. Do not use frozen, muddy, or nonfriable topsoil.

4. Before delivering any topsoil to the job site, clear stones larger than 2 in (50 mm) size and roots, sticks, brush, coarse litter, and other substances that would interfere with mixing, planting, and maintenance.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

General Provisions 101 through 150.

D. Materials Warranty

General Provisions 101 through 150.

E. Delivery and Packaging

1. Delivery
   - Give the Engineer at least 24 hours notice before delivering any stock to the job site.
   - Send an invoice with each shipment that shows the sizes and varieties of material included.

2. Packaging
   - Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

893.2.02 Mulch

A. Requirements

1. Use mulch materials from two groups:
   - Grassing and Erosion Control: Threshed rye, oat or wheat straw; or Bermuda grass hay
   - Vine, Shrub, Tree, and Miscellaneous Plant Plantings: Pine straw, pine bark, or hardwood mulch (see 893.2.07.A.2 for pine bark and hardwood mulch).

2. Use mulch materials from either group that meet the following requirements:
   - Are accepted by the Engineer.
   - Can be distributed uniformly when properly loosened
Section 893 – Miscellaneous Planting Materials

- Produce the desired results
- Meet the moisture requirements specified herein
- Contain no excessive amounts of noxious weed seeds

3. Noxious Weed Seeds

Do not use hay or straw mulch material that has matured seeds from noxious weeds or other species that would harm surrounding farmland.

4. Moisture Content

Ensure that the mulch material is reasonably dry.

5. Erosion Control Compost

Use compost that meets the requirements in Table 1. Erosion Control Compost can be 100% compost or a blend of no more than 50% wood chips by volume.

a. Wood Chips shall be fresh or partially composted wood chips less than or equal to 3 in (75 mm) in length with 100% passing a 2 in (50 mm) sieve and less than 10% passing a 1 in (25 mm) sieve. Wood chips shall not contain any visible refuse or other physical contaminants, material toxic to plant growth, or over 5% sand, silt, clay or rock material.

b. Produce General Use Compost by aerobic (biological) decomposition of organic matter. Compost feedstock may include, but is not limited to, leaves and yard trimmings, Class A biosolids, food scraps, food processing residuals, manure or other agricultural residuals, forest residues, bark, and paper. Compost shall not contain any visible refuse or other physical contaminants, material toxic to plant growth, or over 5% sand, silt, clay or rock material. Mixed municipal solid waste compost and Class B biosolids, as defined in the United States Environmental Protection Agency Code of Federal Regulations (USEPA, CFR), Title 40, Part 503 are unacceptable. Ensure Compost meets all applicable USEPA, CFR, Title 40, Part 503 Standards for Class A biosolids and the following requirements:

<table>
<thead>
<tr>
<th>Test</th>
<th>Requirements</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Matter Content</td>
<td>25-100% (dry mass)</td>
<td>TMECC 05.07-A</td>
</tr>
<tr>
<td>Particle Size</td>
<td>100% passing 2 in (50 mm) sieve</td>
<td>TMECC 02.02-B</td>
</tr>
<tr>
<td></td>
<td>50-70% retained on 3/8 in (9.5 mm) sieve</td>
<td></td>
</tr>
<tr>
<td>Soluble Salts</td>
<td>5.0 max. * dS/m</td>
<td>TMECC 04.10-A</td>
</tr>
<tr>
<td>Fecal Coliform</td>
<td>Pass</td>
<td>TMECC 07.01-B</td>
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<tr>
<td>pH</td>
<td>5.5 – 8.5 pH</td>
<td>TMECC 04.11-A</td>
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<tr>
<td>Stability</td>
<td>8 or below</td>
<td>TMECC 05.08-B,</td>
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<tr>
<td>Maturity</td>
<td>greater than 80%</td>
<td>TMECC 05.05-A</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>Pass</td>
<td>TMECC 04.06 and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TMECC 04.13-B</td>
</tr>
</tbody>
</table>

*A soluble salt content up to 10.0 dS/m for compost used in Compost Manufactured Topsoil will be acceptable.

NOTE: All physical requirements are in accordance with the United States Department of Agriculture and the United States Composting Council, “Test Methods for the Examination of Composting and Compost” (TMECC). Organic Matter Content and Particle Size requirements are in accordance with AASHTO R51-13.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

1. If the material feels damp, the Department will use GDT 41 to test for moisture content.
2. To pass, materials shall have a moisture content of 12 percent or less.
D. Materials Warranty
   General Provisions 101 through 150.

E. Delivery and Packaging
   1. Delivery
      a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
      b. Send an invoice with each shipment that shows the sizes and varieties of material included.
   2. Packaging
      Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

893.2.03 Vines, Shrubs, Trees, and Miscellaneous Plants
A. Requirements
   1. Use stock that meets the requirements of all State and Federal Laws for inspection of plant diseases and infestation.
   2. Use nursery grown and collected plant materials that meet all regulations of the States of their origin and destination, and that meet Federal regulations governing interstate movement of nursery stock.
   3. Use stock that is true to name and variety and is of first class quality with well developed tops and vigorous, healthy root systems.
      NOTE: Use plant names according to the edition of “Standardized Plant Names” in effect at the time of Invitation For Bids.
   4. Use only nursery-grown stock that conforms to ANSI Z60.1 American Standard for Nursery Stock.
      a. The Department will not accept plants and/or trees that are severely cut back or pruned to conform to contract size requirements.
      b. The Department will reject trees and shrubs that are undersized, have poorly developed tops or root systems, or are infected with disease or infested with insects.
   5. Certification
      Furnish all certificates of disease and infestation inspection, a list of plant materials purchased, and a complete list of nurseries from which each plant was grown.

B. Fabrication
   General Provisions 101 through 150.

C. Acceptance
   The Department will inspect plants at the nursery whenever necessary.
   1. Inspect and grade living plants for type, size, and quality according to ANSI Z60.1 American Standard for Nursery Stock.
   2. Even if the Department accepts materials after a test at the source, the Department may inspect the stock during planting and reject any that does not meet specification.
   3. The Department will reject any of the following:
      - Stock damaged during digging, loading, transporting, planting, and transplanting
      - Broken or loose balls or balls of less diameter than that specified
      - Large canopy shade trees without a single dominant central leader
   4. Replace rejected stock at your own expense.
   5. Dispose of rejected stock to the satisfaction of the Engineer.

D. Materials Warranty
   General Provisions 101 through 150.

E. Delivery and Packaging
   1. Delivery
Section 893 – Miscellaneous Planting Materials

- Give the Engineer at least 24 hours notice before delivering any stock to the job site.
- Send an invoice with each shipment that shows the sizes and varieties of material included.

2. Packaging
   Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

893.2.04 Inoculants

A. Requirements
   1. Use a pure culture of nitrogen-fixing bacteria for an inoculant to treat seeds. Select an inoculant for maximum vitality and ability to transform nitrogen from the air into soluble nitrates and deposit them into the soil.
   2. Use only purebred cultures less than one year old.

B. Fabrication
   General Provisions 101 through 150.

C. Acceptance
   The Engineer will review acceptable cultures.

D. Material Warranty
   General Provisions 101 through 150.

E. Delivery and Packaging
   1. Delivery
      a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
      b. Send an invoice with each shipment that shows the sizes and varieties of material included.
   2. Packaging
      Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

893.2.05 Prepared Plant Topsoil

A. Requirements
   1. Use prepared plant topsoil made from plant topsoil, organic soil additive, commercial fertilizer, and lime, as described in Subsection 893.2.07.B.
   2. Base any volume for peat moss used as an organic soil additive on the compressed bale.
   3. For loose peat, double the volume.

B. Fabrication
   1. Make prepared plant topsoil from the following:
      - Four parts plant topsoil, Subsection 893.2.01
      - At least one part organic soil additive, by volume, Subsection 893.2.07.
      - A commercial fertilizer, grade 6-12-12, at the rate of 3 lb/yd³ (1.8 kg/m³)
      - Lime at the rate of 5 lb/yd³ (3 kg/m³)
   2. Base the above volumes on naturally compacted, undisturbed topsoil.

C. Acceptance
   The Department will accept the materials based upon their compliance with this specification.

D. Material Warranty
   General Provisions 101 through 150.

E. Delivery and Packaging
   1. Delivery
      a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
b. Send an invoice with each shipment that shows the sizes and varieties of material included.

2. Packaging
   Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

**893.2.06 Stakes**

**A. Requirements**

1. Use wood stakes as indicated in the Specifications or shown on the Plans. Use the stakes for vine, shrub, tree, and miscellaneous plantings.
2. Saw wood stakes from either oak or gum. Use only stakes that are number two common or better, either rough or dressed.

**B. Fabrication**

1. Cut the stakes from sound, solid, undecayed wood, without unsound knots.
2. Shape stakes to within 1/4 in (6 mm) for all dimensions.
3. Taper all stakes at one end.

**C. Acceptance**

The Department will reject any stake that does not meet the following test:

1. Draw a line from the center of the top to the center of the butt of each stake.
2. Ensure that the line stays within the body of the stake and is not more than 1 in (25 mm) from the geometric center of the stake.

**D. Materials Warranty**

General Provisions 101 through 150.

**E. Delivery and Packaging**

1. Delivery
   a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
   b. Send an invoice with each shipment that shows the sizes and varieties of material included.
2. Packaging
   Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

**893.2.07 Organic Soil Additives**

**A. Requirements**

Use four types of organic additives: peat moss, pine bark, compost, and hardwood mulch.

1. Peat Moss
   Use peat moss that meets the following requirements:
   - Be granulated sphagnum virtually free from woody substances, consisting of at least 75 percent partially decomposed stems and leaves of sphagnum
   - Be essentially brown in color
   - Be free of sticks, stones, and mineral matter
   - Be in an air-dry condition
   - Shows an acid reaction of 3.5 pH to 5.5 pH
   - Meets State and Federal regulations

2. Pine Bark
   Use pine bark that meets the following requirements:
   - Be obtained from disease-free wood, 100 percent of which is 9 in² (5625 mm²) or less in area, and 50 percent is more than 1 in² (625 mm²) in area.
Section 893 – Miscellaneous Planting Materials

- Contain no noxious weed seeds, soil, sawdust or any substance toxic to plant growth
- Be at least two years old

3. Compost

Use compost that meets the following requirements:
- Be organic materials that have undergone biological decomposition
- Be disinfected using composting or similar technologies
- Be stabilized so it is beneficial to plant growth
- Be mature, dark brown or black in color and have minimal odors
- Contain no human pathogens
- Fall within a pH range of 5 to 8

Provide to the Department a list of all the ingredients in the original compost mix in the order of their relative proportions on a weight basis.

4. Hardwood Mulch

Use hardwood mulch that meets the following requirements:
- Derived from disease-free deciduous trees
- Particle size of less than 1 in (25 mm) diameter and less than 3 in (75 mm) in length. Hardwood mulch shall complete two composting cycles of 140 °F (60 °C) so that all viable weed seeds are destroyed and no further decomposition due to nitrification will occur
- Free from toxic levels of acidity and alkalinity
- Derived from sources other than cypress trees

Provide test results stating that the ingredients meet Federal, State, and local requirements for priority pollutant limits and do not contain levels of any chemicals that are harmful to plants or humans.

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

The Department will accept the materials based upon their compliance with this specification.

D. Material Warranty

General Provisions 101 through 150.

E. Delivery and Packaging

1. Delivery
   a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
   b. Send an invoice with each shipment that shows the sizes and varieties of material included.

2. Packaging

   Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.

893.2.08 Engineered Topsoil

A. Requirements

1. Use an engineered mixture meeting the requirements herein. Do not use a mixture containing deleterious substances. Obtain the materials from sources approved by the Engineer. Ensure the aggregate retained on No. 10 (2 mm) sieve is of hard, durable particles.

2. Remove particles with diameters greater than 2 in (50 mm) before placing the topsoil. Remove particles with screens or by hand if few oversized pieces exist. Otherwise, crush the oversized pieces to less than 2 in (50 mm) and use them in the proportions shown by the sieve table below.

3. Use 5-10% by dry weight aerobically composted organic matter as topsoil components. The composting pile shall reach temperatures of 55-65°C (131-149°F) for a minimum period of 24 hours to kill pathogens. Obtain composted
organic matter certified as having gone through the prescribed composting process and whose raw materials are from the following approved sources: grass clippings; leaf litter; cafeteria waste (with the exception of meat products); livestock manure from cows, sheep, goats, pigs, horses, chickens, etc.; and brewery waste. All components shall be free of pesticides and herbicides.

4. Use 90-95% by dry weight inorganic topsoil components with the following properties:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing 2 in (50 mm)</td>
<td>100</td>
</tr>
<tr>
<td>Passing 1-1/2 in (37.5 mm)</td>
<td>95-100</td>
</tr>
<tr>
<td>Passing No. 10 (2 mm) sieve</td>
<td>75-90</td>
</tr>
<tr>
<td>Passing No. 40 (425 µm)</td>
<td>50-70</td>
</tr>
<tr>
<td>Passing No. 60 (250 µm) sieve</td>
<td>30-60</td>
</tr>
<tr>
<td>Passing No. 200 (75 µm) sieve</td>
<td>10-25</td>
</tr>
<tr>
<td>Clay size (&lt; 2 µm)</td>
<td>3-10</td>
</tr>
</tbody>
</table>

5. Ensure material passing the No. 10 (2 mm) sieve meets the following requirements:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid Limit (LL)</td>
<td>25 or less</td>
</tr>
<tr>
<td>Plasticity Index (PI)</td>
<td>10 or less</td>
</tr>
<tr>
<td>Volume change, max. percent</td>
<td>12</td>
</tr>
<tr>
<td>Maximum dry density, lb/ft³ (kg/m³)*</td>
<td>105 (1680)</td>
</tr>
</tbody>
</table>

*by standard proctor

B. Fabrication

General Provisions 101 through 150.

C. Acceptance

The engineered topsoil to be used shall be sampled and tested as directed by the Engineer according to the following properties:

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil gradation</td>
<td>GDT 4</td>
</tr>
<tr>
<td>Volume change</td>
<td>GDT 6</td>
</tr>
<tr>
<td>Maximum density</td>
<td>GDT 7</td>
</tr>
<tr>
<td>Liquid Limit</td>
<td>AASHTO T 89</td>
</tr>
<tr>
<td>Plastic Limit and Plasticity Index</td>
<td>AASHTO T 90</td>
</tr>
</tbody>
</table>

The engineered topsoil shall be resampled and retested as directed by the Engineer when 150 tons of use on a project is reached; and it shall be resampled and retested for every 150 tons of use thereafter.

D. Materials Warranty

General Provisions 101 through 150.

E. Delivery and Packaging

1. Delivery
   a. Give the Engineer at least 24 hours notice before delivering any stock to the job site.
b. Send an invoice with each shipment that shows the sizes and varieties of material included.

2. Packaging
   Pack stock for shipment to properly protect against drying, freezing, breaking, or other injury.
General Decision Number: GA190254 01/04/2019  GA254

Superseded General Decision Number: GA20180266

State: Georgia

Construction Type: Highway

County: Henry County in Georgia.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

<table>
<thead>
<tr>
<th>Modification Number</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>01/04/2019</td>
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</table>

SUGA2014-088 10/03/2016

<table>
<thead>
<tr>
<th>Rates</th>
<th>Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringes</td>
<td></td>
</tr>
<tr>
<td>CARPENTER, Excludes Form Work...$ 15.54</td>
<td>0.00</td>
</tr>
<tr>
<td>CEMENT MASON/CONCRETE FINISHER...$ 14.14</td>
<td>1.47</td>
</tr>
<tr>
<td>FENCE ERECTOR...................$ 16.54</td>
<td>0.00</td>
</tr>
<tr>
<td>FORM WORKER....................$ 15.26</td>
<td>2.08</td>
</tr>
<tr>
<td>HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....$ 12.37</td>
<td>1.95</td>
</tr>
<tr>
<td>INSTALLER - GUARDRAIL............$ 14.82</td>
<td>0.00</td>
</tr>
<tr>
<td>INSTALLER - SIGN.................$ 13.03</td>
<td>0.00</td>
</tr>
<tr>
<td>IRONWORKER, REINFORCING.........$ 14.64</td>
<td>0.00</td>
</tr>
<tr>
<td>Laborer/Operator</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Ironworker, Structural</td>
<td>$15.12</td>
</tr>
<tr>
<td>Laborer</td>
<td>Concrete Paving Joint Sealer</td>
</tr>
<tr>
<td>Laborer</td>
<td>Grade Checker</td>
</tr>
<tr>
<td>Laborer</td>
<td>Mason Tender - Brick</td>
</tr>
<tr>
<td>Laborer</td>
<td>Mason Tender - Cement/Concrete</td>
</tr>
<tr>
<td>Laborer</td>
<td>Pipelayer</td>
</tr>
<tr>
<td>Laborer</td>
<td>Asphalt (Includes Distributor, Raker, Screed, Shoveler, and Spreader)</td>
</tr>
<tr>
<td>Laborer</td>
<td>Common or General, Includes Erosion Control</td>
</tr>
<tr>
<td>Operator</td>
<td>Backhoe/Excavator/Trackhoe</td>
</tr>
<tr>
<td>Operator</td>
<td>Bobcat/Skid Steer/Skid Loader</td>
</tr>
<tr>
<td>Operator</td>
<td>Broom/Sweeper</td>
</tr>
<tr>
<td>Operator</td>
<td>Bulldozer</td>
</tr>
<tr>
<td>Operator</td>
<td>Compactor</td>
</tr>
<tr>
<td>Operator</td>
<td>Concrete Saw</td>
</tr>
<tr>
<td>Operator</td>
<td>Crane</td>
</tr>
<tr>
<td>Operator</td>
<td>Distributor</td>
</tr>
<tr>
<td>Operator</td>
<td>Grader/Blade</td>
</tr>
<tr>
<td>Operator</td>
<td>Hydroseeder</td>
</tr>
<tr>
<td>Operator</td>
<td>Loader</td>
</tr>
<tr>
<td>Operator</td>
<td>Mechanic</td>
</tr>
<tr>
<td>Operator</td>
<td>Milling Machine Groundsman</td>
</tr>
<tr>
<td>Operator</td>
<td>Milling Machine</td>
</tr>
<tr>
<td>Operator</td>
<td>Paver (Asphalt, Aggregate, and Concrete)</td>
</tr>
<tr>
<td>Operator</td>
<td>Piledriver</td>
</tr>
<tr>
<td>Operator</td>
<td>Roller</td>
</tr>
<tr>
<td>Operator</td>
<td>Scraper</td>
</tr>
<tr>
<td>Operator</td>
<td>Screed</td>
</tr>
<tr>
<td>Operator</td>
<td>Shuttle Buggy</td>
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<tr>
<td>Classification</td>
<td>Rate</td>
</tr>
<tr>
<td>------------------------------------</td>
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</tr>
<tr>
<td>PAINTER: Spray</td>
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</tr>
<tr>
<td>TRAFFIC CONTROL: Flagger</td>
<td>$13.33</td>
</tr>
<tr>
<td>TRAFFIC CONTROL: Laborer-Cones/</td>
<td>$13.82</td>
</tr>
<tr>
<td>Barricades/Barrels -</td>
<td></td>
</tr>
<tr>
<td>Setter/Mover/Sweeper</td>
<td></td>
</tr>
<tr>
<td>TRAFFIC SIGNALIZATION: Laborer</td>
<td>$15.30</td>
</tr>
<tr>
<td>TRAFFIC SIGNALIZATION: Electrician</td>
<td>$23.41</td>
</tr>
<tr>
<td>TRUCK DRIVER: Dump Truck</td>
<td>$15.00</td>
</tr>
<tr>
<td>TRUCK DRIVER: Flatbed Truck</td>
<td>$14.91</td>
</tr>
<tr>
<td>TRUCK DRIVER: Hydroseeder Truck</td>
<td>$16.74</td>
</tr>
<tr>
<td>TRUCK DRIVER: Lowboy Truck</td>
<td>$18.98</td>
</tr>
<tr>
<td>TRUCK DRIVER: Off the Road Truck</td>
<td>$12.38</td>
</tr>
<tr>
<td>TRUCK DRIVER: Pickup Truck</td>
<td>$13.29</td>
</tr>
<tr>
<td>TRUCK DRIVER: Water Truck</td>
<td>$13.19</td>
</tr>
<tr>
<td>TRUCK DRIVER: Semi/Trailer Truck</td>
<td>$16.26</td>
</tr>
</tbody>
</table>

**WELDERS** - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).
The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

**Union Rate Identifiers**

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

**Survey Rate Identifiers**

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

**Union Average Rate Identifiers**

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of
each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

----------------------------------------------------------------

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

================================================================
END OF GENERAL DECISION