



Purchasing Department
140 Stonewall Avenue West, Ste 204
Fayetteville, GA 30214
Phone: 770-305-5420
www.fayettecountyga.gov

March 6, 2020

Subject: Invitation to Bid #1781-B: Fayette County Resurfacing Program – FY 2019

Gentlemen/Ladies:

Fayette County, Georgia invites you to submit a bid for county road resurfacing. You are invited to submit a bid in accordance with the information contained herein.

Questions concerning this invitation to bid should be addressed to Natasha Duggan in writing via email to PurchasingGroup@fayettecountyga.gov or fax to (770) 305-5208. Questions will be accepted until 3pm, Friday, March 20, 2020.

Purchasing Department office hours are Monday through Friday 8:00 a.m. to 5:00 p.m. The office telephone number is (770) 305-5420.

Please return your response to the following address:

Fayette County Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, Georgia 30214

Bid Number: 1781-B
Bid Name: Fayette County Resurfacing Program – FY 2019

Your envelope *must* be sealed, and should show your company's name and address.

Bids will be received at the above address until 3pm, Wednesday, April 1, 2020 in the Purchasing Department, Suite 204. Bids will be opened at that time.

Bids must be signed to be considered. Late bids cannot be considered. Faxed bids or emailed bids cannot be considered.

If you download this invitation to bid from the county's web site, it will be your responsibility to check the web site for any addenda that might be issued for this solicitation. The county cannot not be responsible for a vendor not receiving information provided in any addendum.

Thank you for participating in the solicitation process.

Sincerely,

Ted L. Burgess
Director of Purchasing

GENERAL TERMS AND CONDITIONS
ITB #1781-B: Fayette County Resurfacing Program – FY 2019

1. **Definitions:** The term “contractor” as used herein and elsewhere in these Terms and Conditions shall be used synonymously with the term “successful bidder.” The term “county” shall mean Fayette County, Georgia.
2. **Bid is Offer to Contract:** Each bid constitutes an offer to become legally bound to a contract with the county, incorporating the invitation to bid and the bidder’s bid. The binding offer includes compliance with all terms, conditions, special conditions, specifications, and requirements stated in the invitation to bid, except to the extent that a bidder takes written exception to such provisions. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The bidder should take care to answer all questions and provide all requested information, and to note any exceptions in the bid submission. Failure to observe any of the instructions or conditions in this invitation to bid may result in rejection of the bid.
3. **Binding Offer:** Each bid shall constitute a firm offer that is binding for sixty (60) days from the date of the bid opening, unless the bidder takes exception to this provision in writing.
4. **Bidder’s Questions:** The Fayette County Purchasing Department must receive questions about this invitation to bid in writing at least six days before the scheduled bid opening, excluding Saturdays, Sundays, and holidays. The county will post answers to questions and/or other information concerning the invitation to bid in the form of an addendum on the county’s website at www.fayettecountyga.gov. It is the responsibility of the prospective bidder to check the website for any addenda issued for this invitation to bid.
5. **References:** Include with your bid a list of three (3) jobs that your company has done that are of the same or similar nature to the work described in this invitation to bid, on the form provided. Include all information as requested on the form.
6. **Bid Submission:** Submit your bid, along with any addenda issued by the county, in a sealed opaque envelope with the following information written on the outside of the envelope:
 - a. The bidder’s company name,
 - b. The bid number, which is #1781-B and
 - c. The bid name, which is **Fayette County Resurfacing Program – FY 2019**

Mail or deliver one (1) original bid, signed in ink by a company official authorized to make a legal and binding offer, and a copy on a flash drive, to:

Fayette County Government
Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, GA 30214

Attention: Contracts Administrator

You may submit bids in person, by U.S. mail, or by a commercial carrier. Do not submit bids by facsimile, e-mail, or other electronic means. Once submitted, all bids become the property of Fayette County.

7. **Bid Preparation Costs:** The bidder shall bear all costs associated with preparing the bid.
8. **Late Bids:** Bids not received by the time and date of the scheduled bid opening will not be considered, unless the delay is a result of action or inaction by the county.
9. **More than One Bid:** Do not submit alternate bids or options, unless requested or authorized by the county in the Invitation to Bid. If a responder submits more than one bid without being requested or authorized to do so, the county may disqualify the bids from that responder, at the county's option.
10. **Bid Corrections or Withdrawals:** The bidder may correct a mistake, or withdraw a bid, before the bid opening by sending written notification to the Director of Purchasing. Bids may be withdrawn after the bid opening only with written authorization from the Director of Purchasing.
11. **Defects or Irregularities in Bids:** The county reserves the right to waive any defect or irregularity in any bid received. In case of an error in extension of prices or totals in the bid, the unit prices shall govern.
12. **Prices Held Firm:** Prices quoted shall be firm for the period of the contract, unless otherwise specified in the bid. All prices for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or job site.
13. **Quantities are Estimates:** Quantities listed herein are estimates for the period specified. No guarantee to purchase the amounts shown is intended or implied. The county reserves the right to order larger or smaller quantities at the prices stated in the bid of the successful bidder.
14. **Brand Name:** If items in this invitation for bid have been identified, described or referenced by a brand name or trade name description, such identification is intended to be descriptive, but not restrictive and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the bid. Items offered must meet required specifications and must be of a quality which will adequately serve the use and purpose for which intended.
15. **Bidder Substitutions:** Bidders offering substitutions or deviations from specifications stated in the invitation to bid, shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the bid. The absence of such list shall indicate that the bidder has taken no exception to the specifications. The evaluation of bids and the determination as to equality and acceptability of products or services offered shall be the responsibility of the county.
16. **Samples:** When the county requires samples as part of the bid and vendor selection process, bidders must provide requested samples within the time allotted, and at no cost to the county unless otherwise specified. Any goods provided under contract shall conform to the sample submitted. The county will return samples only at the bidder's request, and at the bidder's expense, if they are

not destroyed by testing.

17. **Non-Collusion:** By responding to this invitation to bid, the bidder represents that the bid is not made in connection with any competing bidder, supplier, or service provider submitting a separate response to this invitation to bid, and is in all respects fair and without collusion or fraud.
18. **Bid Evaluation:** Award will be made to the lowest responsive, responsible bidder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The county may make such investigation as it deems necessary to determine the ability of the bidder to perform, and the bidder shall furnish to the county all information and data for this purpose as the county may request. The county reserves the right to reject any bid item, any bid, or all bids, and to re-advertise for bids.
19. **Payment Terms and Discounts:** The County's standard payment terms are Net 30. Any deviation from standard payment terms must be specified in the resulting contract, and both parties must agree on such deviation. Cash discounts offered will be a consideration in awarding the bid, but only if they give the county at least 15 days from receipt of invoice to pay. For taking discounts, time will be computed from the date of invoice acceptance by the County, or the date a correct invoice is received, whichever is the later date. Payment is deemed made, for the purpose of earning the discount, on the date of the check.
20. **Trade Secrets – Confidentiality:** If any person or entity submits a bid or proposal that contains trade secrets, an affidavit shall be included with the bid or proposal. The affidavit shall declare the specific included information which constitutes trade secrets. Any trade secrets must be either (1) placed in a separate envelope, clearly identified and marked as such, or (2) at a minimum, marked in the affidavit or an attached document explaining exactly where such information is, and otherwise marked, highlighted, or made plainly visible. See O.C.G.A. § 50-18-72 (A)(34).
21. **Trade Secrets – Internal Use:** In submitting a bid, the bidder agrees that the county may reveal any trade secret materials contained in the bid to all county staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The bidder agrees to hold harmless the county and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the bidder has designated as a trade secret.
22. **Ethics – Disclosure of Relationships:** Before a proposed contract in excess of \$10,000.00 is recommended for award to the Board of Commissioners or the County Administrator, or before the County renews, extends, or otherwise modifies a contract after it has been awarded, the contractor must disclose certain relationships with any County Commissioner or County Official, or their spouse, mother, father, grandparent, brother, sister, son or daughter related by blood, adoption, or marriage (including in-laws). A relationship that must be reported exists if any of these individuals is a director, officer, partner, or employee, or has a substantial financial interest in the business, as described in Fayette County Ordinance Chapter 2, Article IV, Division 3 (Code of Ethics).

If such relationship exists between your company and any individual mentioned above, relevant information must be presented in the form of a written letter to the Director of Purchasing. You must include the letter with any bid, proposal, or price quote you submit to the Purchasing

Department.

In the event that a contractor fails to comply with this requirement, the County will take action as appropriate to the situation, which may include actions up to and including rejection of the bid or offer, cancellation of the contract in question, or debarment or suspension from award of a County contract for a period of up to three years.

23. **Contract Execution & Notice to Proceed:** After the Board of Commissioners makes an award, all required documents are received by the county, and the contract is fully executed with signature of both parties, the county will issue a written Notice to Proceed. The county shall not be liable for payment of any work done or any costs incurred by any bidder prior to the county issuing the Notice to Proceed.
24. **Unavailability of Funds:** This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the county under the contract.
25. **Insurance:** The successful bidder shall procure and maintain the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:
 - a. **General Liability Insurance:** \$1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.
 - b. **Automobile Liability Insurance:** \$1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.
 - c. **Worker's Compensation & Employer's Liability Insurance:** Workers Compensation as required by Georgia statute.

Before a contract with the successful bidder is executed, the successful bidder shall provide Certificates of Insurance for all required coverage. The successful offeror can provide the Certificate of Insurance after award of the contract, but must be provided prior to execution of the contract document by both parties. The certificate shall list an additional insured as follows:

Fayette County, Georgia
140 Stonewall Avenue West
Fayetteville, GA 30214

26. **Bid Bond:** You must include a bid bond with your bid, equal to five percent (5%) of the total amount bid. Bid bonds shall be provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
27. **Performance and Payment Bonds:** Prior to execution of a contract, the successful bidder shall submit performance and payment bonds each equal to 100 percent of the contract value, provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).

28. **Building Permits:** Work performed for the county requiring building permits by licensed contractors will not have permit fees assessed, although any re-inspection fees for disapproved inspections will be the responsibility of the contractor prior to final inspections and the Certificate of Occupancy or Certificate of Completion being issued.
29. **Unauthorized Performance:** The county will not compensate the contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.
30. **Assignment of Contract:** Assignment of any contract resulting from this invitation to bid will not be authorized, except with express written authorization from the county.
31. **Indemnification:** The contractor shall defend, indemnify and save the county and all its officers, agents and employees harmless from all suits, actions, or other claims of any character, name and description brought for or on account of any damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the contractor or other persons employed or utilized by the contractor in the performance of the contract. The contractor shall pay any judgment with cost which may be obtained against the county growing out of such damages, losses, or expenses.
32. **Severability:** The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.
33. **Delivery Failures:** If the contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the county shall have authority to make open-market purchases of comparable goods or services. The county shall have the right to invoice the contractor for any excess expenses incurred, or deduct such amount from monies owed the contractor. Such purchases shall be deducted from contracted quantities.
34. **Substitution of Contracted Items:** The contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If a contractor is unable to deliver the products under the contract, it shall be the contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the contractor's original bid. In the event any contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.
35. **Inspection and Acceptance of Deliveries:** The county reserves the right to inspect all goods and products delivered. The county will decide whether to accept or reject items delivered. The inspection shall be conclusive except with respect to latent defects, fraud, or such gross mistakes as shall amount to fraud. Final inspection resulting in acceptance or rejection of the products will be made as soon as practicable, but failure to inspect shall not be construed as a waiver by the county to claim reimbursement or damages for such products which are later found to be in non-conformance with specifications. Should public necessity demand it, the county reserves the right to use or consume articles delivered which are substandard in quality, subject to an adjustment in price

to be determined by the Purchasing Director.

36. **Termination for Cause:** The county may terminate the contract for cause by sending written notice to the contractor of the contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the county's rights or remedies by law.
37. **Termination for Convenience:** The county may terminate the contract for its convenience at any time with 10 days' written notice to the contractor. In the event of termination for convenience, the county will pay the contractor for services performed. The county will compensate partially completed performance based upon a signed statement of completion submitted by the contractor, which shall itemize each element of performance completed.
38. **Force Majeure:** Neither party shall be deemed to be in breach of the contract to the extent that performance of its obligations is delayed, restricted, or prevented by reason of any act of God, natural disaster, act of government, or any other act or condition beyond the reasonable control of the party in question.
39. **Governing Law:** This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in the appropriate venue in Fayette County, Georgia.

SPECIAL TERMS AND CONDITIONS – FEDERAL COMMON RULE

Federal funds will be involved in this contract, so federal rules will apply. The contractor shall therefore comply with the following requirements.

40. **Access to Records:** The contractor will allow access by the federal grantor agency, the county, the Georgia Department of Transportation, the United States Comptroller General, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor which are directly pertinent to this contract for the purpose of making audits, examinations, excerpts, and transcriptions.
41. **Records Retention:** The contractor shall retain all records pertaining to the contract for three years after the county makes final payments to the contractor, and all other pending matters are closed.
42. **Small, Minority, & Women's Business Enterprise Opportunities:** If the contract is with a prime contractor, and subcontracts are to be let, the contractor shall take the affirmative steps listed below:
 - a. Place qualified small and minority businesses and women's business enterprises on solicitation lists;
 - b. Assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - c. Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business

enterprises;

- d. Establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
- e. Use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

43. **Compliance with Federal Environmental Requirements:** The contractor shall comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, Environmental Protection Agency regulations (40 CFR part 15), and mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat.871).

44. **Breach of Contract:** In the event that the contractor or a subcontractor should violate or breach contract terms, upon discovery of such violation or breach the county will notify the contractor in writing. The contractor or subcontractor shall be entitled to cure the breach within ten (10) days and provide evidence of such cure. If the contractor fails to cure the violation or breach within the ten-day time, the county shall be entitled to all available remedies, including termination of the contract, or the requirement that a subcontractor be dismissed from performing work under the contract. The county shall be entitled to any and all damages permissible by law.

45. **Work Hours and Safety Standards:** The contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5).

ITB #1781-B: Fayette County Resurfacing Program – FY 2019
Checklist of Documents to Return

(Please return this checklist and the documents listed below with your submittal)

Company Information form _____

Anti-Lobbying Certification _____

Certification Suspension & Debarment _____

E-Verify: Contractor Affidavit under O.C.G.A. § 13-10-91(b)(1) _____

List of DBE Participants _____

Non-Collusion Certification _____

Federal Aid Certification form _____

Bid Bond _____

Bid sheets: Grady Ave, Peachtree Pkwy, Hampton Rd, Robinson Rd,
Sandy Creek Rd, & Total Bid sheets _____

Exceptions, if any, on the form provided _____

References form _____

Signed addenda, if any are issued _____

COMPANY NAME: _____

ITB #1781-B: Fayette County Resurfacing Program FY 2019

COMPANY INFORMATION

COMPANY

Company Name: _____

Physical Address: _____

Mailing Address (if different): _____

AUTHORIZED REPRESENTATIVE

Signature: _____

Printed or Typed Name: _____

Title: _____

Email Address: _____

Phone Number: _____ Fax Number: _____

PROJECT CONTACT PERSON

Name: _____

Title: _____

Office Number: _____ Cellular Number: _____

Email Address: _____

ANTI-LOBBYING CERTIFICATION
ITB #1781-B: Fayette County Resurfacing Program – FY 2019

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

The undersigned _____ certifies, to the best of his or her knowledge, that:

1. 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 an 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.
2. 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 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.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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 (as amended by the Lobbying Disclosure Act of 1995). 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.

The Contractor, _____ certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

**CERTIFICATION
SUSPENSION AND DEBARMENT
ITB #1781-B Fayette County Resurfacing Program – FY 2019**

- (1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals, (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by Fayette County, Georgia. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Georgia Emergency Management Agency and Fayette County, Georgia, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Signature of Contractor's Authorized Official

Name and Title of Contractor's Authorized Official

Date

**Invitation to Bid #1781-B
Fayette County Resurfacing Project – FY 2019**

EXCEPTIONS TO SPECIFICATIONS

Please list below any exceptions or clarifications to the specifications of this bid. Explain any exceptions in full.

COMPANY NAME: _____

REFERENCES

ITB #1781-B: FAYETTE COUNTY RESURFACING PROJECT – FY 2019

Please list three (3) references for current or recent customers who can verify the quality of service your company provides. Projects of similar size and scope are preferable.

1. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

2. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

3. Government/Company Name _____

City & State _____

Work or Service Provided _____

Approximate Completion Date _____

Contact Person and Title _____

Phone _____ Email _____

COMPANY NAME _____

"General Decision Number: GA20200244 01/03/2020

Superseded General Decision Number: GA20190244

State: Georgia

Construction Type: Highway

County: Fayette County in Georgia.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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 \$10.80 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 2020. 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.

Modification Number	Publication Date
0	01/03/2020

SUGA2014-078 10/03/2016

Rates

Fringes

CARPENTER, Excludes Form Work....\$ 15.54	0.00
CEMENT MASON/CONCRETE FINISHER...\$ 14.70	0.00
FENCE ERECTOR.....\$ 16.54	0.00
FORM WORKER.....\$ 15.26	2.08
HIGHWAY/PARKING LOT STRIPING:	
Operator (Striping Machine).....\$ 12.37	1.95
INSTALLER - GUARDRAIL.....\$ 15.65	0.00
INSTALLER - SIGN.....\$ 13.03	0.00
IRONWORKER, REINFORCING.....\$ 14.64	0.00
IRONWORKER, STRUCTURAL.....\$ 15.12	0.00
LABORER: Concrete Paving Joint Sealer.....\$ 17.66	0.00
LABORER: Grade Checker.....\$ 11.45	0.00
LABORER: Mason Tender - Brick...\$ 11.61	0.00
LABORER: Mason Tender - Cement/Concrete.....\$ 11.44	0.00
LABORER: Pipelayer.....\$ 12.45	0.00
LABORER: Asphalt (Includes Distributor, Raker, Screed, Shoveler, and Spreader).....\$ 13.15	0.00
LABORER: Common or General, Includes Erosion Control.....\$ 10.36	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....\$ 16.69	2.41
OPERATOR: Bobcat/Skid Steer/Skid Loader.....\$ 13.38	0.00
OPERATOR: Broom/Sweeper.....\$ 14.83	1.38
OPERATOR: Bulldozer.....\$ 16.07	1.81
OPERATOR: Compactor.....\$ 14.64	0.00

OPERATOR: Concrete Saw.....	\$ 18.94	0.00
OPERATOR: Crane.....	\$ 21.06	4.24
OPERATOR: Distributor.....	\$ 17.00	1.93
OPERATOR: Grader/Blade.....	\$ 18.42	5.04
OPERATOR: Hydroseeder.....	\$ 15.20	0.00
OPERATOR: Loader.....	\$ 14.27	1.49
OPERATOR: Mechanic.....	\$ 19.54	0.00
OPERATOR: Milling Machine Groundsman.....	\$ 13.43	1.24
OPERATOR: Milling Machine.....	\$ 16.00	1.31
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.50	2.93
OPERATOR: Piledriver.....	\$ 16.70	0.00
OPERATOR: Roller.....	\$ 14.38	1.29
OPERATOR: Scraper.....	\$ 12.64	0.00
OPERATOR: Screed.....	\$ 14.67	1.86
OPERATOR: Shuttle Buggy.....	\$ 14.06	1.98
PAINTER: Spray.....	\$ 23.30	0.00
TRAFFIC CONTROL: Flagger.....	\$ 12.49	0.00
TRAFFIC CONTROL: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper.....	\$ 12.60	0.00
TRAFFIC SIGNALIZATION: Laborer.....	\$ 13.75	1.14
TRAFFIC SIGNALIZATION: Electrician.....	\$ 23.41	4.26
TRUCK DRIVER: Dump Truck.....	\$ 15.00	0.00
TRUCK DRIVER: Flatbed Truck.....	\$ 14.91	1.07

TRUCK DRIVER: Hydroseeder Truck.....	\$ 16.74	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 18.98	0.00
TRUCK DRIVER: Off the Road Truck.....	\$ 12.38	0.00
TRUCK DRIVER: Pickup Truck.....	\$ 13.29	0.00
TRUCK DRIVER: Water Truck.....	\$ 13.19	1.46
TRUCK DRIVER: Semi/Trailer Truck.....	\$ 16.26	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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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

"

PI #0016058

FAYETTE COUNTY

100% GEORGIA CONGRESSIONAL DISTRICT #3

100% within Fayette County

Completed Plans: 03/21/2019
 FFPR Revised Plans: 06/04/2019
 FFPR Revised Plans: 06/20/2019
 FFPR Revised Plans: 09/24/2019

ROADS TO BE RESURFACED

SANDY CREEK ROAD – 4.24 MILES
 (13' Exception at Railroad Right-of-Way)
 Lat. 33°29'37.53"N / Long. 84°32'39.51"W
 (mid-point coordinates of road)
 ADT - 5,600 (% Truck Not Available)

GRADY ROAD – 0.93 MILES
 (397' Exception at Roundabout)
 Lat. 33°26'30.97"N / Long. 84°27'44.08"W
 (mid-point coordinates of road)
 ADT - 10,300 (% Truck Not Available)

ROBINSON ROAD – 5.00 MILES
 (No Exceptions)
 Lat. 33°23'03.17"N / Long. 84°32'23.38"W
 (mid-point coordinates of road)
 ADT – 5,800 (2% Truck)

PEACHTREE PKWY – 0.35 MILES
 (No Exceptions)
 Lat. 33°22'04.96"N / Long. 84°31'23.30"W
 (mid-point coordinates of road)
 ADT – 6,500 (% Truck Not Available)

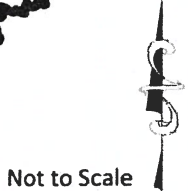
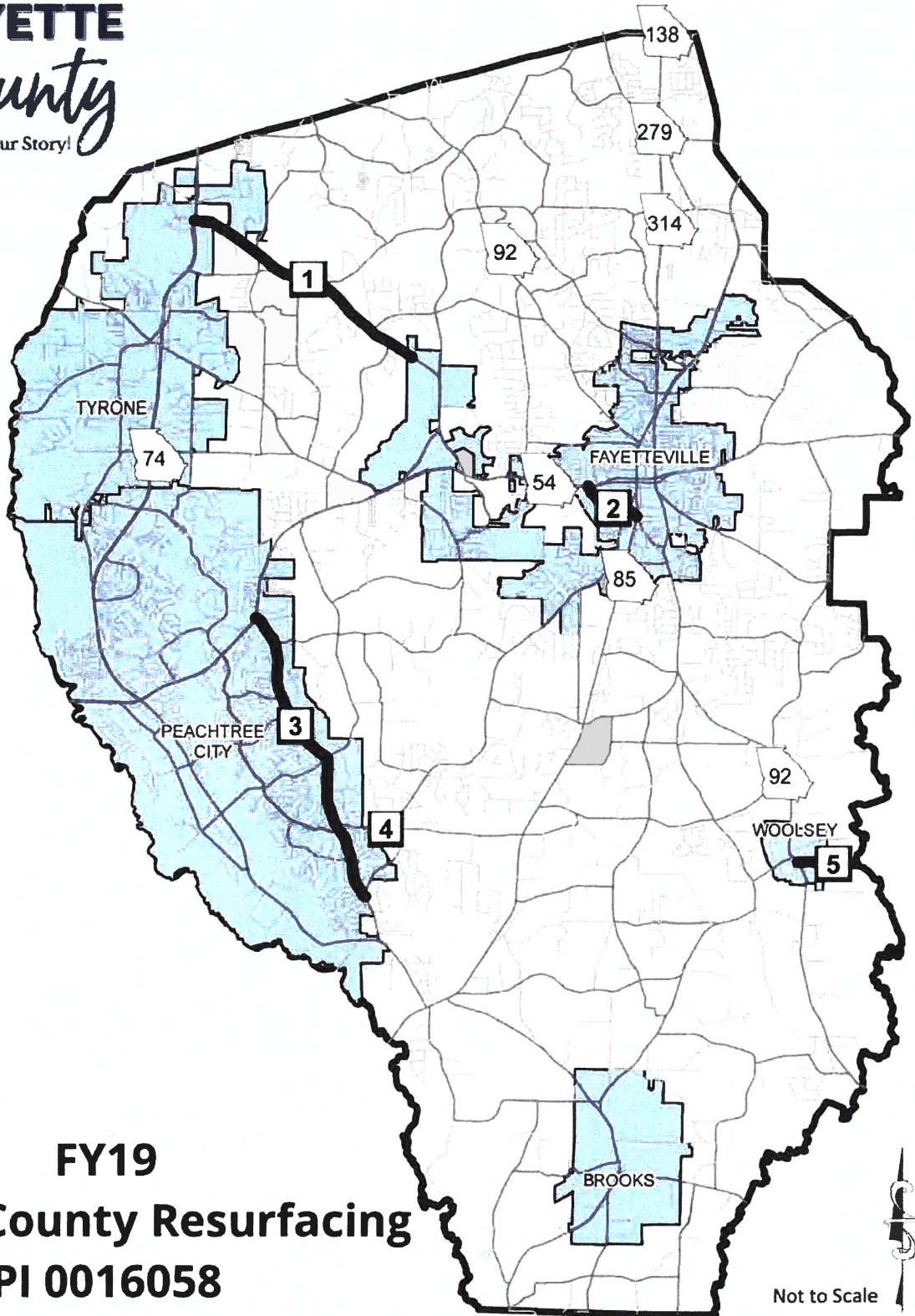
HAMPTON ROAD – 0.93 MILES
 (No Exceptions)
 Lat. 33°21'37.74"N / Long. 84°24'09.78"W
 (mid-point coordinates of road)
 ADT - 4,300 (% Truck Not Available)

Length of Project: 11.45 miles
Exceptions: 0.078 miles

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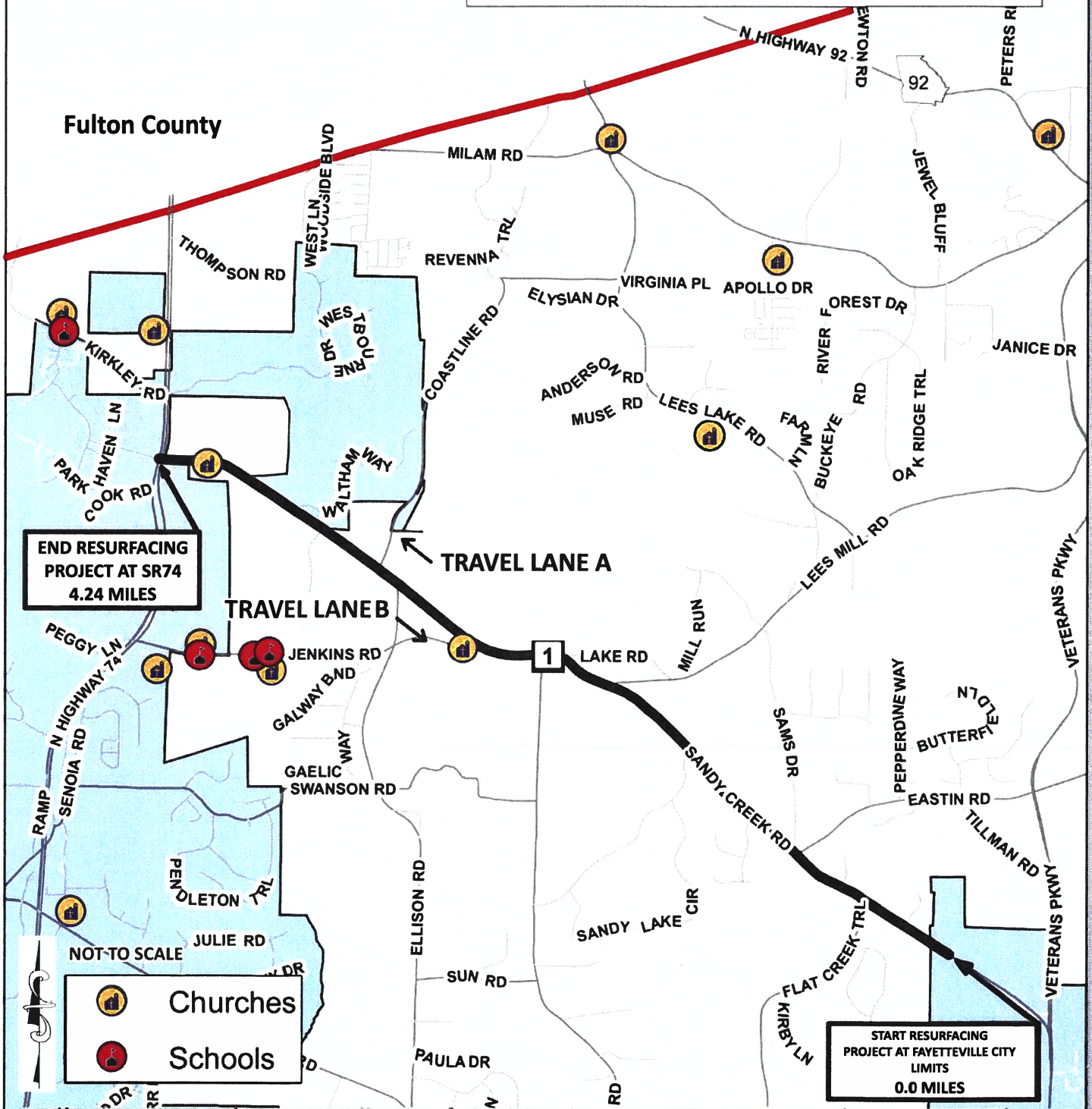


**FY19
Fayette County Resurfacing
PI 0016058**

Number	Road	Begin	End	Length (Miles)	Typ. Width (ft)	Segment	Functional Class	Jurisdiction
1	Sandy Creek	Fayetteville	SR74	4.24	24	Rural	Minor Arterial	Fayette County
2	Grady	SR85	SR54	0.93	11.5 - 36	Rural	Major Collector	Fayetteville
3	Robinson Road	SR54	City Limit	5	11 - 17.5	Urban	Minor Arterial	Peachtree City
4	Peachtree Pkwy	City limits	Redwine	0.35	30	Rural	Minor Arterial	Fayette County
5	Hampton Rd	SR92	County Line	0.93	24	Rural	Major Collector	Fayette County



FY19 Fayette County Resurfacing PI 0016058



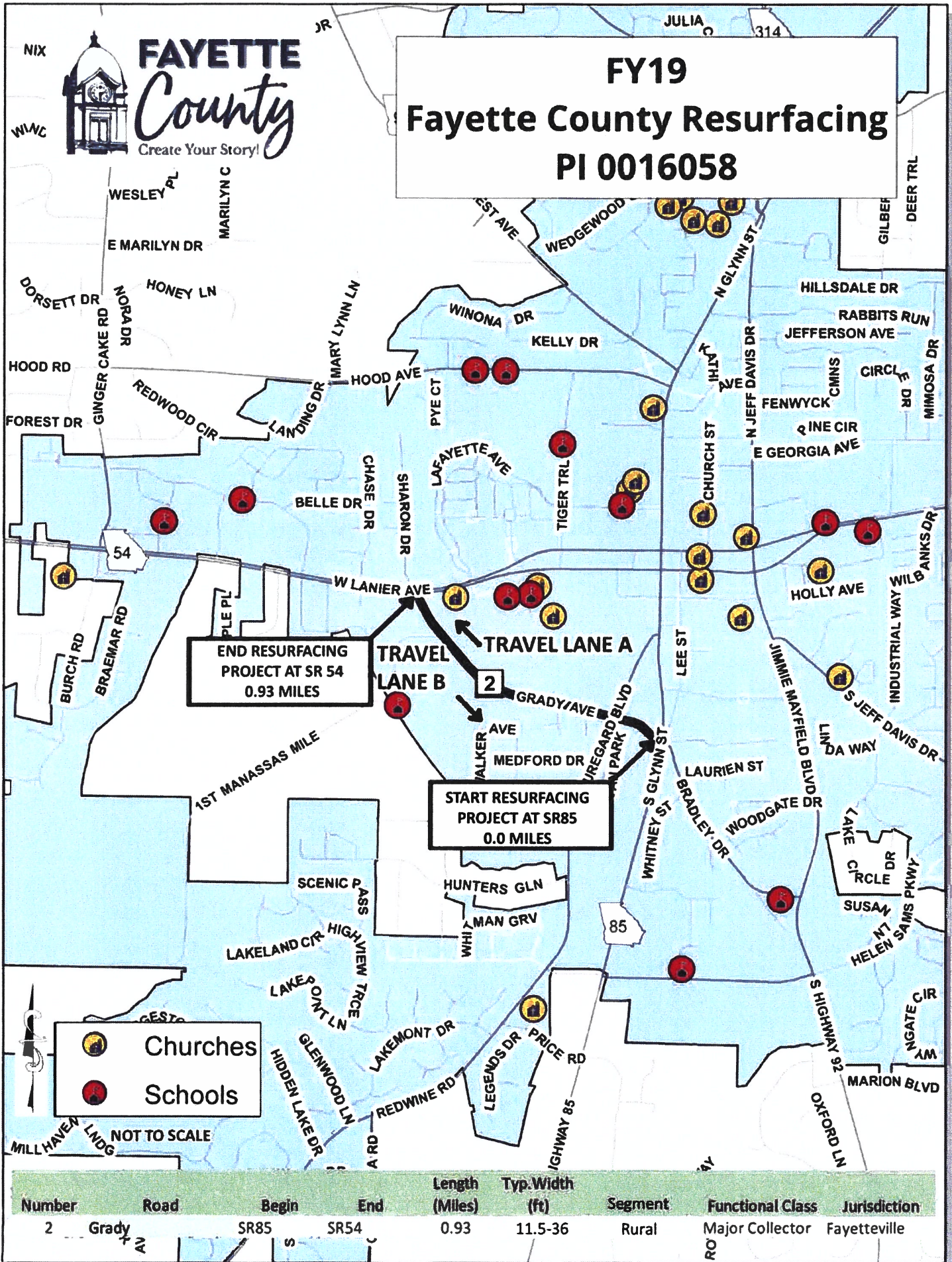
**END RESURFACING
PROJECT AT SR74
4.24 MILES**

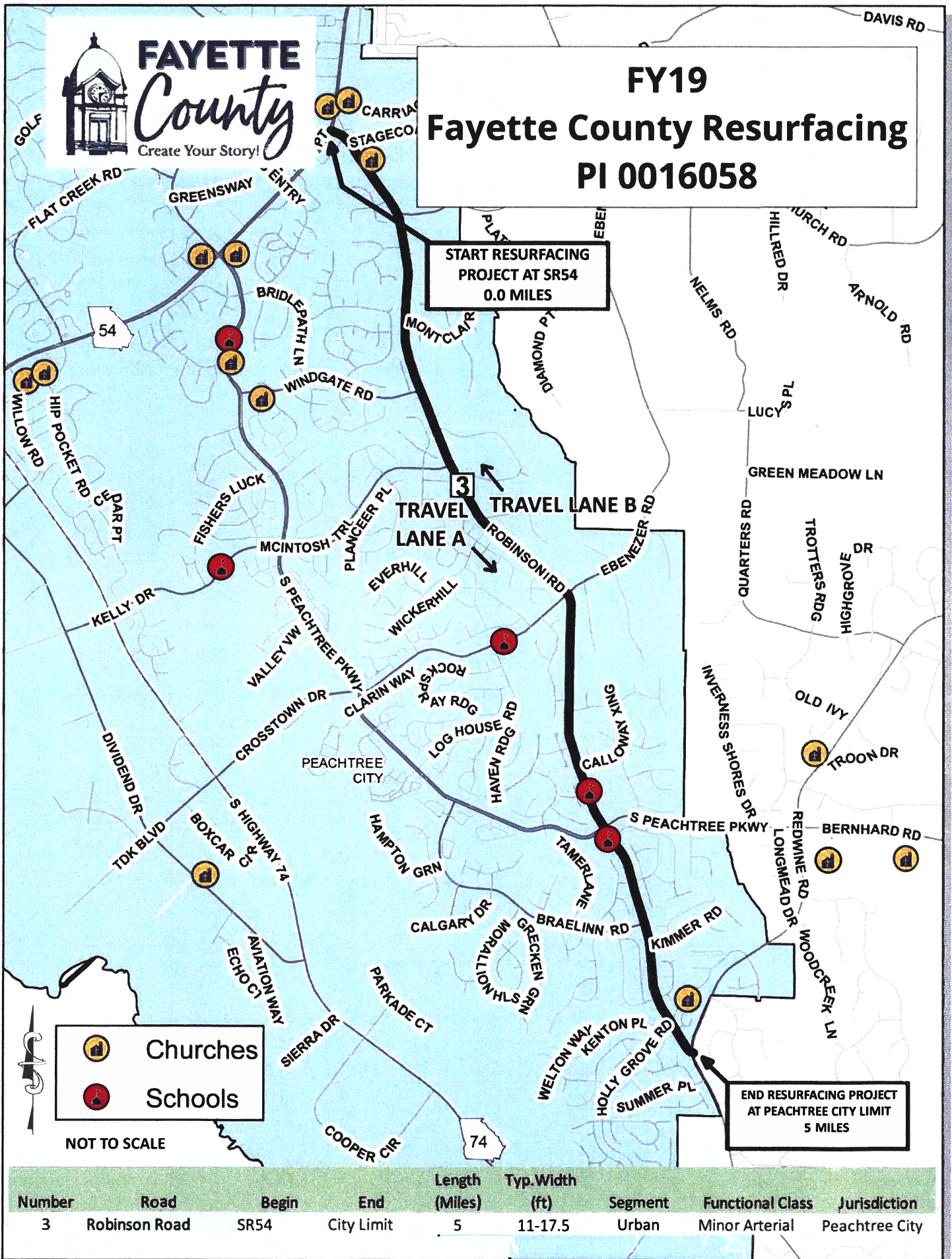
**START RESURFACING
PROJECT AT FAYETTEVILLE CITY
LIMITS
0.0 MILES**

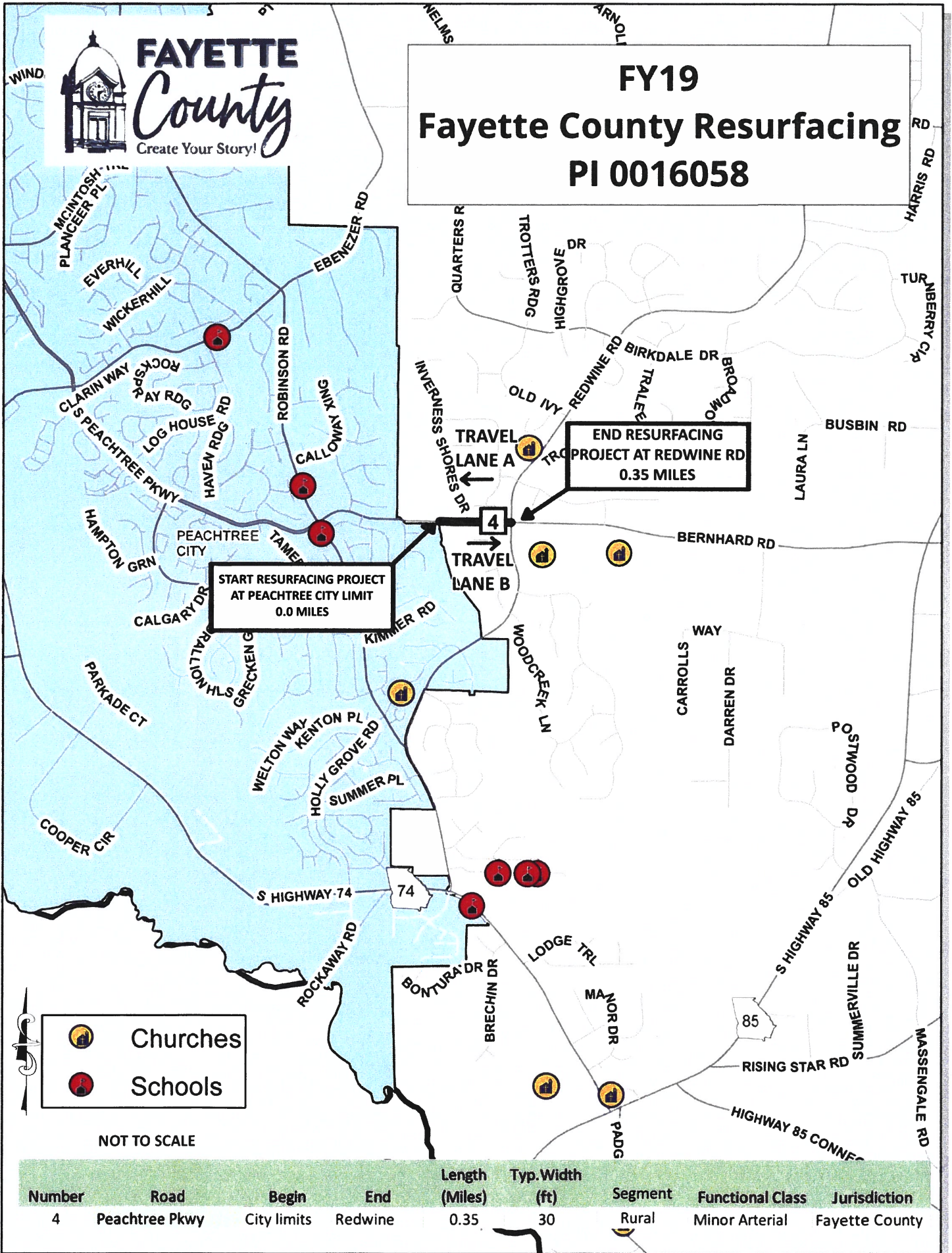
NOT-TO SCALE

- Churches
- Schools

Number	Road	Begin	End	Length (Miles)	Typ.Width (ft)	Segment	Functional Class	Jurisdiction
1	Sandy Creek	Fayetteville	SR74	4.24	24	Rural	Minor Arterial	Fayette County

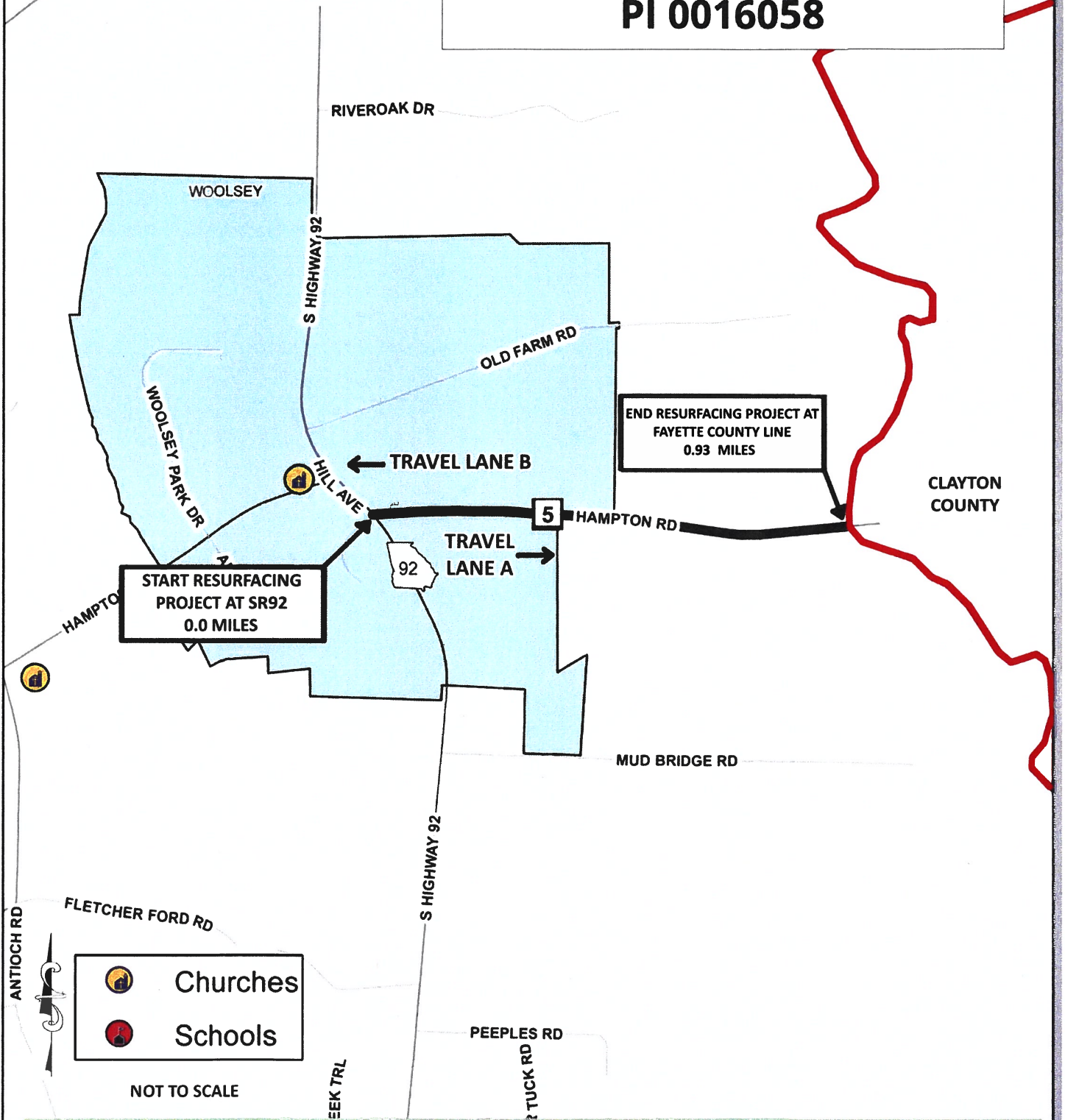










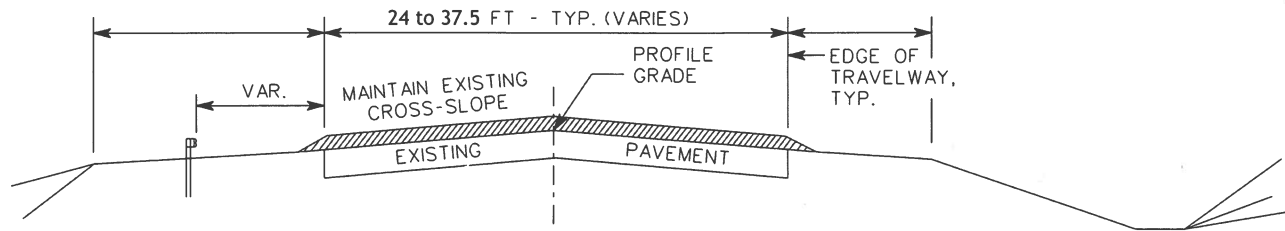
FY19 Fayette County Resurfacing PI 0016058



 Churches
 Schools

NOT TO SCALE

Number	Road	Begin	End	Length (Miles)	Typ. Width (ft)	Segment	Functional Class	Jurisdiction
5	Hampton Rd	SR92	County Line	0.93	24	Rural	Major Collector	Fayette County

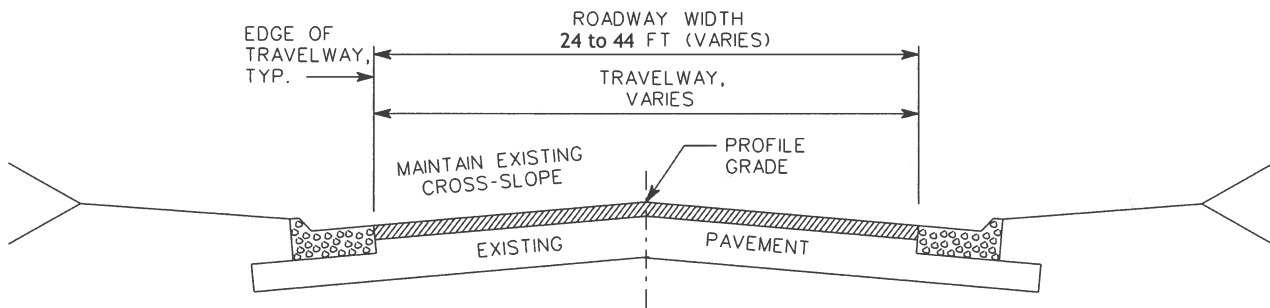


TANGENT SECTION
NOT TO SCALE

▨ - RESURFACED AREA

THIS TYPICAL SECTION APPLIES TO THE FOLLOWING LOCATIONS
 SANDY CREEK ROAD - FROM LOG 0.00 TO 4.14
 GRADY AVENUE - FROM LOG 0.00 TO 0.93
 PEACHTREE PARKWAY - FROM LOG 0.00 TO 0.35
 HAMPTON ROAD - FROM LOG 0.00 TO 0.87

MILL EXISTING PAVEMENT VARIABLE DEPTH AS INDICATED IN LOGS INLAY WITH 220 LBS PER SQUARE YARD RECYCLED ASPHALTIC CONCRETE 12.5MM TYPE II SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME



TANGENT SECTION
NOT TO SCALE

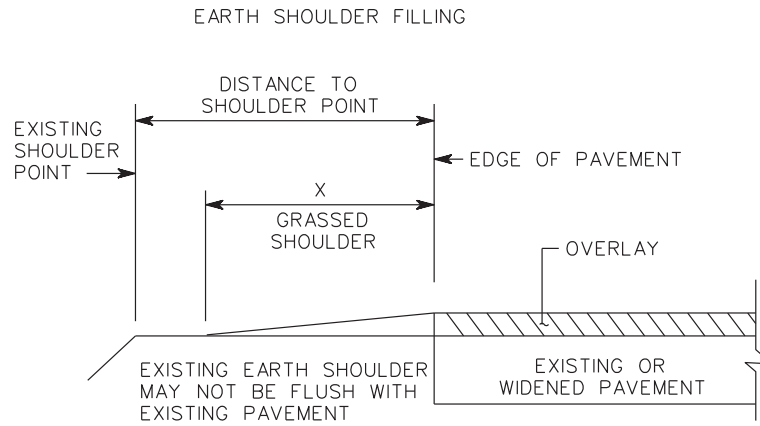
▨ - RESURFACED AREA

THIS TYPICAL SECTION APPLIES TO THE FOLLOWING LOCATIONS
 ROBINSON ROAD - FROM LOG 0.00 TO 4.93

MILL EXISTING PAVEMENT VARIABLE DEPTH AS INDICATED IN LOGS INLAY WITH 220 LBS PER SQUARE YARD RECYCLED ASPHALTIC CONCRETE 12.5MM TYPE II SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME

FAYETTE COUNTY
PUBLIC WORKS DEPARTMENT

TYPICAL SECTIONS
VARIOUS LOCATIONS
PI NO. 0016058



X = 4'-0" OR DISTANCE TO SHOULDER POINT, WHICHEVER IS THE LESSER WITH A MINIMUM OF 1'-0" REQUIRED AT ALL LOCATIONS

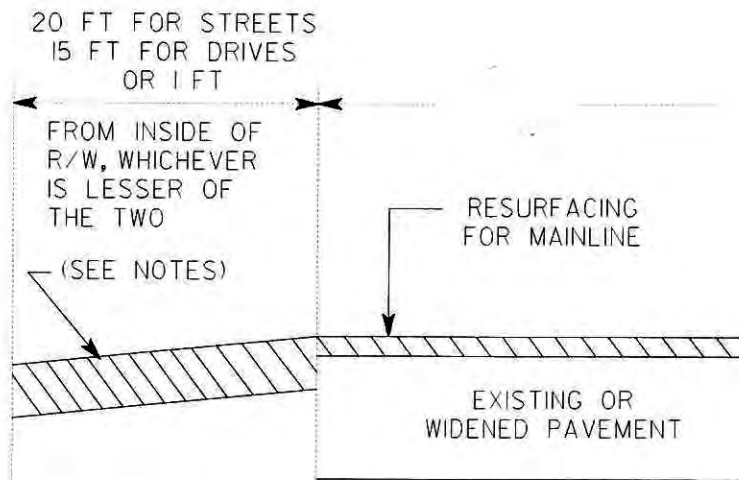
TYPICAL SECTION

SHOULDER FILLING
NOT TO SCALE

- (1) FILL EXISTING EARTH SHOULDER AT VARIABLE DEPTH AS REQUIRED TO PROVIDE A SMOOTH GRADE FROM THE NEW EDGE OF PAVEMENT ELEVATION TYING INTO EXISTING EARTH SHOULDER.
- (2) ALL GRADING, INCLUDING ANY BORROW MATERIAL, SHALL BE INCLUDED IN PRICE BID FOR GRADING PER MILE.

<p>FAYETTE COUNTY PUBLIC WORKS DEPARTMENT</p>
<p>4" SHOULDER REHAB VARIOUS LOCATIONS PI NO. 0016058</p>

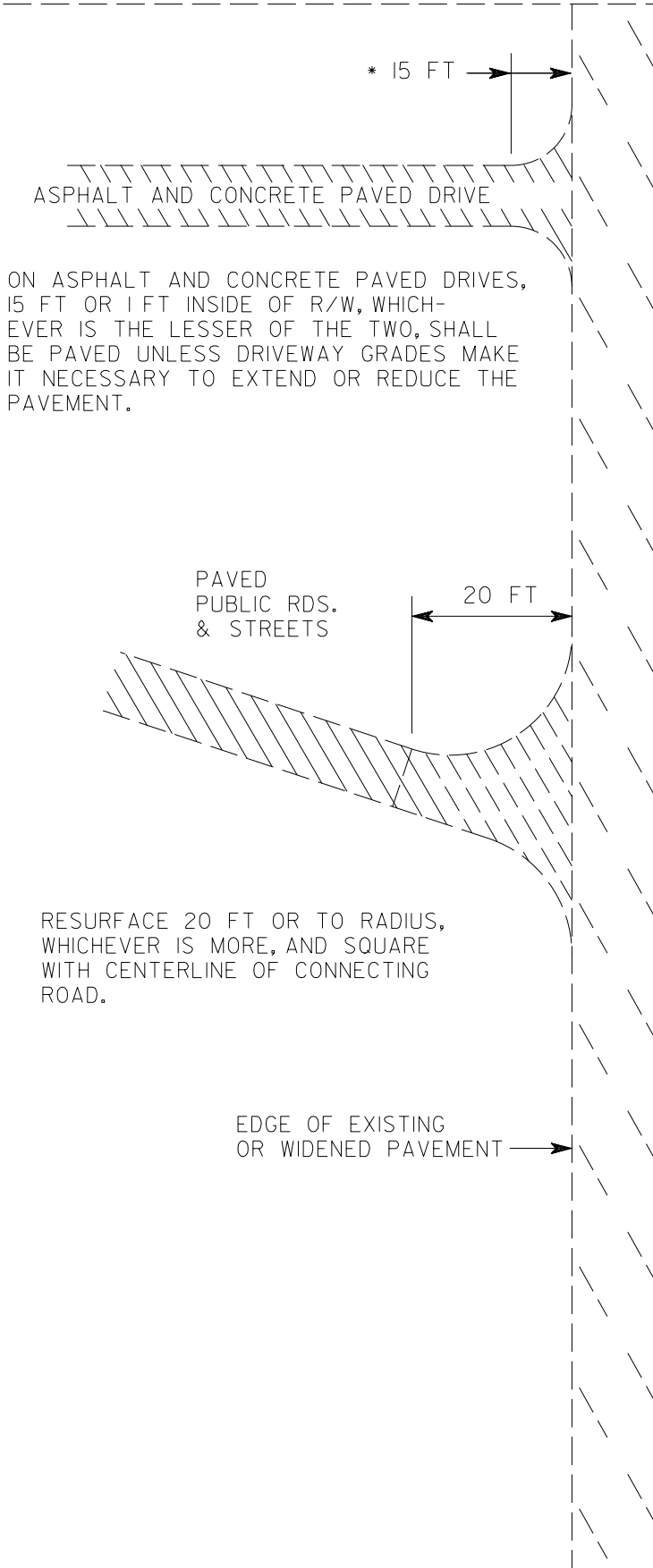
DETAIL FOR UNPAVED ROADS, STREETS AND DRIVES
FOR SURFACING AND WIDENING



REFERENCE PROJECT SPECIAL PROVISION SECTION 23I

NOTES: REMOVE AND DISPOSE OF EXCAVATED MATERIAL TO A DEPTH OF 4 INCHES, THEN SURFACE WITH 12.5 MM SUPERPAVE AT 440 LBS PER SQUARE YARD. THE ASPHALT SHALL BE PAID FOR BY THE TON

DETAIL FOR PAVING TURNOUTS FOR SIDE ROADS, STREETS, AND DRIVES



NOTES:

1. THE ENGINEER MAY MODIFY THESE DESIGNS AND THE DEPTH OF LEVELING AND SURFACING MAY VARY AS NECESSARY TO PROVIDE A SMOOTH, SAFE AND WELL DRAINED TRANSITION TO AND FROM PUBLIC ROADS AND DRIVEWAYS.
2. ALL PAVING TURNOUT REQUIREMENTS ARE TO BE MEASURED FROM FINAL EDGE OF PAVEMENT ON MAINLINE.
3. THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER, SHALL TIE-IN PAVED DRIVES, PUBLIC ROADS AND STREETS WITH 12.5 mm SUPERPAVE MIX NECESSARY TO EFFECT AN ACCEPTABLE TIE-IN. THE WORK SHALL BE PAID FOR UNDER 12.5 mm SUPERPAVE MIX.
4. IN THE EVENT ASPHALT AND CONCRETE PAVED DRIVES REQUIRE EXTENSION BEYOND THE DESCRIBED LIMITS TO EFFECT AN ACCEPTABLE TIE-IN, REFERENCE SPECIAL PROVISION SECTION 231.
5. WHEN MILLING IS INCLUDED AS A PAY ITEM, ALL PAVED SIDE STREETS AND ROADS WITHIN THE MILLING LIMITS SHALL BE MILLED VARIABLE DEPTH TO THE BACK OF RADIUS, UNLESS OTHERWISE NOTED IN THE LOG SHEETS. MILLING WILL NOT BE REQUIRED FOR DRIVEWAYS. MILLING TO BE PAID FOR UNDER ITEM 432-.

Route: Sandy Creek Road
 From: Fayetteville City Limits
 To: SR 74

SANDY CREEK ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (NORTHBOUND)				TRAVEL LANE B (SOUTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
0.00	0	12	Begin project at proposed transverse paving joint at the City Limits of Fayetteville.	0.00	0	12	End project at proposed transverse paving joint at intersection with new asphalt at SR 74.
			Begin 1.25" to 0" vertical joint for tie-in				Begin 1.25" to 0" vertical joint for tie-in
			Begin single surface treatment				Begin single surface treatment
			Begin asphalt overlay				Begin asphalt overlay
0.01	75	12	End of vertical joint tie-in.				Start 3" mill patch for failing pavement
0.08	410		Start 12' wide deep patch	0.01	75	12	End of vertical joint tie-in.
0.17	903		End 12' deep patch				
0.16	824	12	Start Planters Walk Turn Lane Edge Milling 9'	0.06	317	12	End 3" mill patch of failing pavement
0.21	1109	12	End Planters Walk Turn Lane Edge Milling 9'	0.08	396	10	Start Church DW #1 Driveway Edge Mill
0.46	2424	12	Start Hiett Court Turn Lane Edge Milling 12'	0.12	607	10	End Church DW #1 Driveway Edge Mill
0.52	2756	12	End Hiett Court Turn Lane Edge Milling 12'	0.17	871	10	Start Church DW #2 Driveway Edge Mill
0.69	3669	12	Start 6' wide deep patch	0.22	1151	10	End Church DW #2 Driveway Lane Edge Mill
0.73	3868	12	End 6' wide deep patch	0.56	2951	12	Begin deep patch 70 LF x 6' wide
0.75	3934	12	Eastin Road tie-in, cut tie-in at back of radius	0.57	3020	12	End deep patch 6' wide
0.77	4039	12	Sams Road tie-in, cut tie-in at back of radius	0.77	4066	12	Sandy Ridge Trail tie-in, cut tie-in at back of radius
0.80	4245	10	Start paved shoulder	0.93	4900	12	Start 6' wide 3" mill patch of failing pavement
0.85	4472	10	End paved shoulder	1.03	5438	12	End 6' wide 3" mill patch of failing pavement
0.87	4569	12	Start 12' wide deep patch	1.07	5640.5	12	Begin Exception at Rail Road R/W - tie-in
0.94	4945	12	End 12' deep patch	1.07	5653.5	12	End Exception at Rail Road R/W - tie-in
1.01	5332	12	Start 12' wide deep patch	1.16	6125	12	Ellison Road tie-in, cut tie-in at back of radius
1.04	5491	12	End 12' deep patch	1.52	8041	12	Start 6' wide deep patch
1.83	9662	11	Start Lee's Mill Road tie-in, cut tie-in at back of radius	1.54	8116	12	End 6' wide deep patch
		11	Start turn lane for Lee's Mill Road	1.62	8554	12	Jenkins Road tie-in, cut tie-in at back of radius
1.88	9926	11	End Lee's Mill Road tie-in, cut tie-in at back of radius	1.89	9979	12	Adams Road tie-in, cut tie-in at back of radius
1.92	10138	11	End center turn lane for Lee's Mill Road	2.17	11458	18	Start paved shoulder
2.15	11352	11	Lake Road tie-in, cut tie-in at back of radius	2.31	12197	18	End paved shoulder
2.20	11616	12	Start 3" mill patch of failing pavement	2.19	11553		Start 6' wide deep patch
2.28	12038	12	End 3" mill patch of failing pavement	2.21	11668		End 6' wide deep patch

SANDY CREEK ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (NORTHBOUND)				TRAVEL LANE B (SOUTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
2.59	13675	12	Start 12' wide deep patch				
2.67	14097	12	End 12' deep patch	2.69	14203	12	Walton Drive tie-in, cut tie-in at back of radius
2.88	15206	12	Start 12' wide deep patch	3.07	16210	12	Valley Green Drive tie-in, cut tie-in at back of radius
2.90	15312	12	End 12' deep patch				
				3.24	17107	11	Start Trustin Lake Drive turn lane edge mill
2.90	15312	12	Start 6' wide deep patch	3.32	17530	11	End Trustin Lake Drive turn lane edge mill
2.92	15417	12	End 6' deep patch				
				3.47	18321		Start 6' wide deep patch
2.93	15470	12	Start 6' wide deep patch	3.50	18480		End 6' wide deep patch
2.94	15500	12	End 6' deep patch				
				3.66	19325	12	Flat Creek Trail tie-in, cut tie-in at back of radius
3.05	16093.5	12	Begin Exception at Rail Road R/W - tie-in	4.23	22312	12	Start vertical joint tie-in
3.05	16106.5	12	End Exception at Rail Road R/W - tie-in	4.24	22387	12	End project at proposed transverse paving joint at the City limits of Fayetteville.
			Coastline Road tie-in, cut tie-in at back of radius				End 1.25" to 0" vertical joint for tie-in
							End single surface treatment
3.46	18269	12	Start Waltham Way Turn Lane Edge Milling				End asphalt overlay
3.50	18480	12	End Waltham Way Turn Lane Edge Milling				
4.05	21384	12	Start 3" mill patch of failing pavement				
4.23	22334	12	Start vertical joint tie-in				
4.24	22387	12	End project at proposed transverse paving joint at intersection with new asphalt at SR 74. 1. Deep patch through travel lane only. 2. Gore, turn arrows, striping, etc. not included. 3. Shoulders will need redressing.				
			End deep patch of failing pavement				
			End 1.25" to 0" vertical joint for tie-in				
			End single surface treatment				
			End asphalt overlay				

Route: Grady Ave
 From: SR 85
 To: SR 54

GRADY AVE							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (SOUTHBOUND)				TRAVEL LANE B (NORTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
	0	11.5	Begin project / joint		0		Begin project at SR 85 to SR 54.
			Begin 1.25 to 0 mill				Begin 1.25 to 0 mill
			Begin single surf				Begin single surf trtmn
			Begin asphalt overlay				Begin asphalt overlay
					0		Begin 4" deep patch (12')
0.01	75	11.5	End vert joint tie in	0.01	75	12	End vert joint tie in
				0.07	370	12	End 4" deep patch (12')
0.01	55	11.5	Begin 4" deep patch				
0.01	75	11.5	End 4" deep patch	0.08	415	12	Begin 4" deep patch (6')
				0.08	430	12	End 4" deep patch (6')
0.07	373		Variable mill vert joint tie in to back of Rad (driveway)				
				0.12	630	12	Begin 4" deep patch Bradford
0.07	390	12	Begin 4" deep patch (12')	0.14	748	12	End 4" deep patch (12')
0.13	675	12	End 4" deep patch (12')				
				0.20	1061	12	Begin 4" deep patch (5')
0.26	1371	12	Begin 4" deep patch (12')	0.20	1081	12	End 4" deep patch (5')
0.28	1465	12	End 4" deep patch (12')				
				0.23	1189	12	Begin 4" deep patch (10')
0.30	1595	11.5	Begin 4" deep patch (11')	0.23	1217	12	End 4" deep patch (10')
0.32	1700	11.5	End 4" deep patch (11')				
				0.23	1217	12	Begin 4" deep patch (5')
0.39	2080	12	Begin 4" deep patch (12')	0.24	1274	12	End 4" deep patch (5')
0.41	2140	12	End 4" deep patch (12')				
				0.23	1233	12	Begin edge mill curb to back of X-walk (2x)
0.44	2321	12	Begin 4" deep patch (6')	0.31	1631	12	End edge mill B.O.C.
0.50	2617	12	End 4" deep patch (6')				
				0.32	1670	12	Begin 4" deep patch (10')
0.61	3195	12	Begin 4" deep patch (12')	0.33	1735	12	End 4" deep patch (10')
0.61	3240	12	End 4" deep patch (12')				
				0.33	1735	12	Begin 4" deep patch (6')
0.67	3514	12	Begin 4" deep patch (10')	0.34	1791	12	End 4" deep patch (6')
0.68	3585	12	End 4" deep patch (10')				
				0.34	1791	12	Begin 4" deep patch (10')
0.67	3549	12	Begin Turn Lane	0.35	1871	12	End 4" deep patch (10')
0.73	3831	12	Begin Exception at Roundabout	0.35	1871	12	Begin 4" deep patch (5')
0.80	4228	12	End Exception at Roundabout	0.37	1976	12	End 4" deep patch (5')
0.79	4183	12	Begin 4" deep patch (6')	0.54	2855	11	Begin turn lane to Sparrow Cove
0.79	4193	12	End 4" deep patch (6')	0.59	3120	11	End Turn Lane
0.80	4248	12	Begin 4" deep patch (12')	0.57	3035	11	Begin variable mill tie in (Travel Lane)
0.84	4423	12	End 4" deep patch (12')	0.59	3095	11	End variable mill tie in
0.84	4423	12	Begin variable edge mill	0.58	3070	12	Begin 4" deep patch (5')
0.89	4674	12	End variable edge mill	0.59	3118	12	End 4" deep patch (5')
					Damage	By	Standing Water
0.89	4713	12	Begin 4" deep patch (12')				
0.91	4810	12	End 4" deep patch (12')	0.59	3118	12	Begin 4" deep patch (11')
				0.61	3220	12	End 4" deep patch (11')

GRADY AVE							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (SOUTHBOUND)				TRAVEL LANE B (NORTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
0.92	4838	12	Begin 4" deep patch (6')				
0.92	4878	12	End 4" deep patch (6')	0.71	3756	12	Begin variable mill tie in to vertical joint
0.93	4927	12	End Project	0.73	3831	12	End vertical joint tie in (@round-a-bout)
							Begin Exception at Roundabout
				0.80	4228	12	Begin vertical joint tie in 1.25 to 0
							End Exception at Roundabout
				0.81	4303	12	End vertical joint tie in
				0.85	4488	12	Begin edge mill fr end of radius (driveway)
				0.89	4708	12	End edge mill @ end of RAD (driveway)
				0.89	4708	12	Begin vert tie in (driveway)
				0.90	4753	12	End vert tie in (driveway)
				0.90	4752	12	Begin edge mill B.O.R. @ driveway
				0.92	4850	36	Begin vert joint tie in
				0.84	4436	36	Begin 4" deep patch (12') through prev travel lane
				0.93	4927	36	End vert joint tie in
							End Surf Treatment
							End overlay
							End edge mill curb
							End 4" deep patch (12') through prev travel lane

Route: Robinson Road
 From: SR54
 To: City Limit

ROBINSON ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (SOUTHBOUND)				TRAVEL LANE B (NORTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
5.00	0	12.5	Begin Travel Lane A at existing GDOT pavement joint near intersection of Hwy 54	0.00	0	14	Begin Travel Lane B at Redwine Road-variable mill cut to back of radius
5.00	0	12.5	Begin Vertical joint tie-in	0.00	0	14	Begin Vertical joint tie-in
5.00	0	12.5	Begin 2" mill of pavement	0.00	0	14	Begin variable depth mill of pavement
5.00	0	12.5	Begin single surface treatment	0.00	0	14	Begin single surface treatment
5.00	0	12.5	Begin asphalt overlay				Deep patch as needed
				0.00	0	14	Begin asphalt overlay
4.95	270	12.5	Shakerag Hill-variable mill cut to back of radius				
				0.14	747	14	Private Ashton Park - Do not mill to back of
4.87	673	12.5	Private Funeral Home driveway -Do not mill to back of radius.				
4.86	713		35' Patch	0.15	812	14	Golf Cart Crossing #1 (Striping)
4.84	836	12.5	Private Church driveway -Do not mill to back of radius.	0.19	979	14	Holly Grove Church Road-variable mill cut to back of radius
4.75	936		Begin deep patch	0.32	1673	14	Oakdale Avenue-variable mill cut to back of radius
4.72	1086		End deep patch	0.43	2274	14	Patch 50'
4.67	1364		Begin deep patch	0.58	3036	14	Kimmer Road-variable mill cut to back of radius
4.66	1400		End deep patch	0.66	3502	14	Golf Cart Crossing #3 (Striping)
4.62	2010	16	Golf Cart Crossing # 11 (Striping)	0.89	4692	14	Huntington Place-variable mill cut to back of
4.58	2210	16	Woodland Drive-variable mill cut to back of radius				
4.50	2275		Begin deep patch	1.18	6239	14	Peachtree Parkway-match pavement joints as proposed in Peachtree Parkway Project. Golf Cart Crossing #4 (Striping)
4.49	2345		End deep patch				
				1.26	6677	14	Private Braelinn Elementary Drive - Do not mill to back of radius.
4.33	3515	16	Whitfield Run Road-variable mill cut to back of radius				
4.22	4135		Patch for 120' Roots	1.36	7207	14	Private Braelinn Elementary Drive - Do not mill to back of radius.
4.05	5011		Patch for 66' Rut	1.37	7237	14	Golf Cart Crossing #5 (Striping)
4.00	5275	16.5	Golf Cart Crossing # 10 (Striping)	1.47	7785	14	Golf Cart Crossing #6 (Striping)
3.94	5250		Begin deep patch	1.50	7926	14	Calloway Crossing-variable mill cut to back of radius
3.93	5300		End deep patch				
3.70	6490		Begin deep patch	1.78	9401	14	Woodruff Way-variable mill cut to back of radius
3.70	6520		End deep patch				
				1.91	10108	14	Golf Cart Crossing #7 (Striping)
3.64	7201	16.5	Windgate-variable mill cut to back of radius	2.00	10538		Patch 160'
				2.34	12366	14.5	Ebenezer Road-variable mill cut to back of radius. Golf Cart Crossing #8 (Striping)
3.20	9134		Begin deep patch				Variable depth edge mill
3.20	9154		End deep patch				
				2.44	12905	16	Private Church driveway -Do not mill to back of radius.

ROBINSON ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (SOUTHBOUND)				TRAVEL LANE B (NORTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
3.25	9233	16.5	McIntosh Trail-variable mill cut to back of radius	2.51	13232	16	Private Church driveway -Do not mill to back of radius.
3.18	9615	16.5	Golf Cart Crossing # 9 (Striping)	2.82	14890		Begin deep patch along centerline
2.92	10990	Variable to 11	Begin 2" Mill of Right Turn Decel Lane.	2.83	14940		End deep patch along centerline
2.89	11120	16	Cameron Trail-variable mill cut to back of radius. End 2" mill of Right Turn Decel Lane.	2.84	15013		Patch 93'
2.82	11140		Begin deep patch	2.88	15192	16	Bradford Way-variable mill cut to back of radius
2.81	11200		End deep patch	3.06	16175		Patch Root 2'
2.57	12818	14.5	Jennings Yard-variable mill cut to back of radius	3.11	16435	16.5	Golf Cart Crossing # 9 (Striping)
2.50	12818		Begin deep patch	3.12	16495	16.5	Camp Creek Trail-variable mill cut to back of radius
2.49	12868		End deep patch	3.37	17785	16.5	Camp Creek Trail-variable mill cut to back of radius
2.41	13684	14.5	Crosstown Drive-variable mill cut to back of radius. Golf Cart Crossing #8 (Striping)	3.91	20665	16.5	Montclair Drive-variable mill cut to back of radius
	South to End		Should be full width variable depth overlay due to previous overlay which is 1 1/2" above curbline				Start deep patch 6' wide along centerline
2.27	14424		Patch 150' Rut	3.93	20775	16.5	Golf Cart Crossing # 10 (Striping)
2.18	14904		Patch 493' Rut				Deep patch at centerline Robinson Rd
				3.95	20850		End deep patch
				3.97	20949		Patch 155'
1.97	15990	14	Golf Cart Crossing #7 (Striping)	4.05	21400		Patch Root
			Deep patch as needed	4.43	23405	16	Spear Road-variable mill cut to back of radius
1.89	16403	14	Crestwood Drive-variable mill cut to back of radius	4.55	24040	16	Golf Cart Crossing # 10 (Striping)
1.74	17228		43' Patch	4.63	24437	Variable to 11	Begin 2" Mill of Right Turn Decel Lane
1.67	17567	14	Kennerly Way-variable mill cut to back of radius	4.69	24778	11 to Variable	Private Methodist Church driveway -Do not mill to back of radius.End 2"mill of Right Turn Decel Lane.
1.54	18293	14	Golf Cart Crossing #6 (Striping)	4.72	24939	Variable to 11	Begin 2" Mill of Right Turn Decel Lane
1.44	18813	14	Golf Cart Crossing #5 (Striping)	4.78	25254	11 to Variable	Private Methodist Church driveway -Do not mill to back of radius.End 2"mill of Right Turn Decel Lane.
1.43	18843	14	Korinna Court-variable mill cut to back of radius	4.84	25554	17.5	Stagecoach Road-variable mill cut to back of radius

ROBINSON ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (SOUTHBOUND)				TRAVEL LANE B (NORTHBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
1.25	19811	14	Peachtree Parkway-match pavement joints as proposed in Peachtree Parkway Project. Golf Cart Crossing #4 (Striping)				
				4.88	25744	16	Robinson Court-variable mill cut to back of radius
1.20	20068	14	Private Retail Road - Do not mill to back of radius.	4.88	25744	12.5	Begin 2" Mill of Right Turn Lane
							Edge mill, surface treatment and overlay
0.95	21358	14	Vardon Way-variable mill cut to back of radius				
				5.00	26400	12.5 & 11	End Travel Lane B and Right Turn Lane at existing GDOT pavement joint near the intersection of Hwy 54
0.74	22476	14	Braelinn Road-variable mill cut	5.00	26400	12.5 & 11	End Vertical joint tie-in
0.73	22548	14	Golf Cart Crossing #3 (Striping)	5.00	26400	12.5 & 11	End 2" mill of pavement
				5.00	26400	12.5 & 11	End single surface treatment
0.39	24337	14	Colonnade Drive-variable mill cut to back of radius	5.00	26400	12.5 & 11	End asphalt overlay
0.25	25071	14	Holly Grove Road-variable mill cut to back of radius. Golf Cart Striping #2 (Striping)				
0.22	25238	14	Golf Cart Crossing #1 (Striping)				
0.00	26050	14	End Travel Lane A at Redwine Road-variable mill cut to back of radius				
0.00	26050	14	End Vertical joint tie-in				
0.00	26050	14	End 2" mill of pavement				
0.00	26050	14	End single surface treatment				
0.00	26050	14	End asphalt overlay				

Note: 6' both sides of centerline needs deep patch if budget allows.

Route: Peachtree Pkwy
 From: City Limits
 To: Redwine

PEACHTREE PKWY							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (WESTBOUND)				TRAVEL LANE B (EASTBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
0.00	0	15	Begin project at proposed transverse paving joint at intersection with Redwine Road.	0.00	0	15	Begin project at proposed transverse paving joint at City limits of Peachtree City.
			Begin 1.25" to 0" vertical joint for tie-in				Begin 1.25" to 0" vertical joint for tie-in
			Begin 2" mill patch of failing pavement				Begin 2" mill patch of failing pavement
			Begin single surface treatment				Begin single surface treatment
			Begin asphalt overlay				Begin asphalt overlay
0.01	75	15	End of vertical joint tie-in.	0.01	75	15	End vertical joint tie-in
0.09	455	15	End 2" mill patch of failing pavement	0.08	400	15	End 2" mill patch of failing pavement
0.10	525	15	Begin 2" mill patch of failing pavement	0.09	500	15	Begin 2" mill patch of failing pavement
0.18	975	15	End 2" mill patch of failing pavement	0.15	800	15	End of 2" mill patch of failing pavement
0.19	1025	15	Begin 2" mill patch of failing pavement	0.17	900	15	Begin 2" mill patch of failing pavement
0.21	1125	15	End 2" mill patch of failing pavement	0.26	1370	15	Longmead Drive - variable mill cut to back of radius
			Inverness Shores Drive - variable mill cut to back of radius				
0.30	1575	15	Begin 2" mill patch of failing pavement	0.29	1550	15	End 2" mill patch of failing pavement
				0.32	1675	15	Begin 0" to 1.25" vertical joint for tie-in
0.32	1675	15	End 2" mill patch of failing pavement				
			Begin 0" to 1.25" vertical joint for tie-in	0.35	1834	15	End of vertical joint tie-in
							End of single surface treatment
0.35	1834	15	End of vertical joint tie-in				End of asphalt overlay
			End of single surface treatment				
			End of asphalt overlay				
NOTE: Recommend milling, surface treat and overlay Lane A and Lane B full width end to end.							

Route: Hampton Road
 From: SR 92
 To: Clayton County

HAMPTON ROAD							
PI #: 0016058 - Fayette County							
TRAVEL LANE A (EASTBOUND)				TRAVEL LANE B (WESTBOUND)			
LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description	LOG (Mi)	Distance (Ft)	Lane Width (Ft)	Description
0.00	0	12	Begin project at proposed transverse paving joint at intersection with State Route 92.	0.00	0	12	Begin project at proposed transverse paving joint at the bridge at Clayton County line
			Begin 1.25" to 0" vertical joint for tie-in				Begin 1.25" to 0" vertical joint for tie-in
			Begin single surface treatment				Begin single surface treatment
			Begin asphalt overlay				Begin asphalt overlay
							Begin 2" mill patch of failing pavement
0.01	75	12	End of vertical joint tie-in.				
0.04	225	12	Begin 2" mill patch of failing pavement	0.04	200	12	End 2" mill patch of failing pavement
0.06	325	12	End 2" mill patch of failing pavement	0.20	1050	12	Begin 2" mill patch of failing pavement
0.25	1300	12	Begin 2" mill patch of failing pavement	0.21	1100	12	End 2" mill patch of failing pavement
0.26	1350	12	End 2" mill patch of failing pavement	0.27	1400	12	Begin 2" mill patch of failing pavement
0.35	1825	12	Begin 2" mill patch of failing pavement	0.28	1475	12	End 2" mill patch of failing pavement
0.36	1925	12	End 2" mill patch of failing pavement	0.38	2025	12	Begin 2" mill patch of failing pavement
0.48	2515	12	Begin 2" mill patch of failing pavement	0.40	2100	12	End 2" mill patch of failing pavement
0.49	2575	12	End 2" mill patch of failing pavement	0.45	2375		Begin 2" mill patch of failing pavement
0.91	4805	12	Begin 0" to 1.25" vertical joint for tie-in	0.46	2425	12	End 2" mill patch of failing pavement
0.93	4911	12	End project at proposed transverse paving joint at the bridge at Clayton County line.	0.65	3425	12	Begin 2" mill patch of failing pavement
			End of vertical joint tie-in	0.66	3500		End 2" mill patch of failing pavement
			End of single surface treatment	0.73	3875	12	Begin 2" mill patch of failing pavement
			End of asphalt overlay	0.74	3885	12	End 2" mill patch of failing pavement
				0.77	4050	12	Start of rumble strips - set 1
				0.80	4240	12	Start of rumble strips - set 2
				0.83	4360	12	Start of rumble strips - set 3
				0.91	4805	12	Begin 0" to 1.25" vertical joint for tie-in
				0.93	4911	12	End project at proposed transverse paving joint at intersection with SR92.
							End of vertical joint tie-in
							End of single surface treatment
							End of asphalt overlay
NOTE: Recommend profile milling for Lane A and Lane B.							

**SUMMARY OF QUANTITIES
FAYETTE COUNTY
PI #: 0016058**

<u>ITEM NO.</u>	<u>ITEM</u>	<u>UNIT</u>	<u>QUANTITY</u>
150-1000	TRAFFIC CONTROL -	LS	1.00
163-0240	MULCH	TN	50.00
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	68.00
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP S	LF	5280.00
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	68.00
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	5280.00
210-0200	GRADING PER MILE	LM	11.45
402-1802	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME	TN	3905.00
402-1812	RECYC ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	1595.00
402-3113	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TN	20374.50
413-0750	TACK COAT	GL	13695.00
429-1000	RUMBLE STRIPS	EA	33.00
432-0208	MILL ASPH CONC PVMT, 2 IN DEPTH	SY	111283.00
432-0212	MILL ASPH CONC PVMT, 3 IN DEPTH	SY	6157.00
432-0216	MILL ASPH CONC PVMT, 4 IN DEPTH	SY	3564.00
432-5010	MILL ASPH CONC PVMT, VARIABLE DEPTH	SY	4620.00
647-0200	TRAFFIC DETECTION LOOP SYSTEM, NO-PAVEMENT MARKING, WORD, TP 1	LS	1.00
652-0210	PAVEMENT MARKING, WORD, TP 1	EA	3.00
653-0100	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL	EA	2.00
653-0110	THERMOPLASTIC PVMT MARKING, ARROW, TP 1	EA	12.00
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	31.00
653-0130	THERMOPLASTIC PVMT MARKING, ARROW, TP 3	EA	2.00
653-0296	THERMOPLASTIC PVMT MARKING, WORD, TP 15	EA	4.00
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	1683.00
653-1804	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	LF	1067.00
653-2501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LM	25.50
653-2502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LM	25.40
653-3501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GLF	3080.00
653-3502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	GLF	5280.00
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	589.00
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	1161.00
654-1001	RAISED PVMT MARKERS TP 1	EA	3452.00
654-1003	RAISED PVMT MARKERS TP 3	EA	95.00
700-6910	PERMANENT GRASSING	AC	30.53
700-7000	AGRICULTURAL LIME	TN	26.60
700-8000	FERTILIZER MIXED GRADE	TN	6.12
700-8100	FERTILIZER NITROGEN CONTENT	LB	1221.33
713-3011	WOOD FIBER BLANKET, TP I, SHOULDERS	SY	83248.00
713-3012	WOOD FIBER BLANKET, TP II, SHOULDERS	SY	83248.00
163-0232	TEMPORARY GRASSING	AC	17.20

**Fayette County, Georgia
Sandy Creek Road Resurfacing
PROPOSAL**

<u>ITEM NO.</u>	DESCRIPTION	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
1	TRAFFIC CONTROL - 150-1000	0.37	LS	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
2	MULCH 163-0240	50.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
3	MAINTENANCE OF TEMPORARY SILT FENCE, TP S 165-0030	5280.00	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
4	TEMPORARY SILT FENCE, TYPE C 171-0030	5280.00	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
5	GRADING PER MILE 210-0200	4.24	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
6	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME 402-1802	359.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
7	RECYC ASPH CONC LEVELING, INCL BITUM MATL & H LIME 402-1812	605.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Sandy Creek Road Resurfacing
PROPOSAL**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
8	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 402-3113	6050.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
9	TACK COAT 413-0750	4620.00	GL	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
10	RUMBLE STRIPS 429-1000	3.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
11	MILL ASPH CONC PVMT, 3 IN DEPTH 432-0212	2177.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
12	MILL ASPH CONC PVMT, VARIABLE DEPTH 432-5010	1540.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
13	TRAFFIC DETECTION LOOP SYSTEM, NO- 647-0200	1.00	LS	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
14	PAVEMENT MARKING, WORD, TP 1 652-0210	3.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Sandy Creek Road Resurfacing
PROPOSAL**

<u>ITEM NO.</u>	DESCRIPTION	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
15	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL 653-0100	2.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
16	THERMOPLASTIC PVMT MARKING, ARROW, TP 2 653-0120	10.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
17	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE 653-1704	369.60	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
18	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE 653-2501	9.50	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
19	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW 653-2502	9.40	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
20	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE 653-3501	550.00	GLF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Sandy Creek Road Resurfacing
PROPOSAL**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
21	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW 653-3502	5280.00	GLF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
22	THERMOPLASTIC TRAF STRIPING, WHITE 653-6004	275.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
23	THERMOPLASTIC TRAF STRIPING, YELLOW 653-6006	770.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
24	RAISED PVMT MARKERS TP 1 654-1001	1375.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
25	RAISED PVMT MARKERS TP 3 654-1003	66.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
26	PERMANENT GRASSING 700-6910	11.31	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
27	AGRICULTURAL LIME 700-7000	9.85	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Sandy Creek Road Resurfacing
PROPOSAL**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
28	FERTILIZER MIXED GRADE 700-8000	2.26	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
29	FERTILIZER NITROGEN CONTENT 700-8100	452.27	LB	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
30	WOOD FIBER BLANKET, TP I, SHOULDERS 713-3011	54724.27	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
31	WOOD FIBER BLANKET, TP II, SHOULDERS 713-3012	54724.27	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
32	TEMPORARY GRASSING 163-0232	11.31	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
SUBTOTAL OF SANDY CREEK ROAD				\$ _____	_____

**City of Fayetteville, Georgia
Grady Avenue Resurfacing
PROPOSAL**

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	\$	<u>UNIT PRICE</u>	\$	<u>TOTAL AMOUNT</u>
1	TRAFFIC CONTROL - 150-1000	0.08	LS		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
2	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP 163-0550	12.00	EA		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
3	MAINTENANCE OF INLET SEDIMENT TRAP 165-0105	12.00	EA		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
4	GRADING PER MILE 210-0200	0.93	LM		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
5	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME 402-1802	784.00	TN		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
6	RECYC ASPH CONC LEVELING, INCL BITUM MATL & H LIME 402-1812	138.00	TN		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		
7	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 402-3113	1658.00	TN		\$ _____		\$ _____
					Numerals		Numerals
					_____ Words(unit price only)		

**City of Fayetteville, Georgia
Grady Avenue Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
8	TACK COAT 413-0750	1210.00	GL	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
9	RUMBLE STRIPS 429-1000	6.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
10	MILL ASPH CONC PVMT, 4 IN DEPTH 432-0216	3564.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
11	MILL ASPH CONC PVMT, VARIABLE DEPTH 432-5010	2750.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
12	THERMOPLASTIC PVMT MARKING, ARROW, TP 1 653-0110	12.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
13	THERMOPLASTIC PVMT MARKING, ARROW, TP 2 653-0120	14.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
14	THERMOPLASTIC PVMT MARKING, WORD, TP 15 653-0296	4.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**City of Fayetteville, Georgia
Grady Avenue Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
15	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE 653-1704	79.20	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
16	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE 653-1804	176.00	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
17	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE 653-2501	2.20	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
18	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW 653-2502	2.20	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
19	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE 653-3501	2200.00	GLF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
20	THERMOPLASTIC TRAF STRIPING, WHITE 653-6004	204.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
21	THERMOPLASTIC TRAF STRIPING, YELLOW 653-6006	391.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**City of Fayetteville, Georgia
Grady Avenue Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
22	RAISED PVMT MARKERS TP 1 654-1001	275.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
23	RAISED PVMT MARKERS TP 3 654-1003	29.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
24	PERMANENT GRASSING 700-6910	2.48	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
25	AGRICULTURAL LIME 700-7000	2.16	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
26	FERTILIZER MIXED GRADE 700-8000	0.50	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
27	FERTILIZER NITROGEN CONTENT 700-8100	99.20	LB	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
28	WOOD FIBER BLANKET, TP I, SHOULDERS 713-3011	12003.20	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**City of Fayetteville, Georgia
Grady Avenue Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
29	WOOD FIBER BLANKET, TP II, SHOULDERS 713-3012	12003.20	SY	\$ _____ Numerals	\$ _____ Numerals

				Words(unit price only)	
30	TEMPORARY GRASSING 163-0232	2.48	AC	\$ _____ Numerals	\$ _____ Numerals
 SUBTOTAL OF GRADY AVENUE				 \$ _____	

**Peachtree City, Georgia
Robinson Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
1	TRAFFIC CONTROL - 150-1000	0.44	LS	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
2	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP 163-0550	54.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
3	MAINTENANCE OF INLET SEDIMENT TRAP 165-0105	54.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
4	GRADING PER MILE 210-0200	5.00	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
5	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME 402-1802	1879.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
6	RECYC ASPH CONC LEVELING, INCL BITUM MATL & H LIME 402-1812	715.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
7	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 402-3113	10890.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Peachtree City, Georgia
Robinson Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
8	TACK COAT 413-0750	6600.00	GL	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
9	RUMBLE STRIPS 429-1000	18.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
10	MILL ASPH CONC PVMT, 2 IN DEPTH 432-0208	103253.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
11	MILL ASPH CONC PVMT, 3 IN DEPTH 432-0212	3980.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
12	THERMOPLASTIC PVMT MARKING, ARROW, TP 2 653-0120	7.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
13	THERMOPLASTIC PVMT MARKING, ARROW, TP 3 653-0130	2.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
14	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE 653-1704	1029.60	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Peachtree City, Georgia
Robinson Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	\$ <u>UNIT PRICE</u>	\$ <u>TOTAL AMOUNT</u>
15	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE 653-1804	825.00	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
16	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE 653-2501	11.00	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
17	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW 653-2502	11.00	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
18	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE 653-3501	330.00	GLF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
19	THERMOPLASTIC TRAF STRIPING, WHITE 653-6004	110.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
20	RAISED PVMT MARKERS TP 1 654-1001	1441.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
21	PERMANENT GRASSING 700-6910	13.33	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Peachtree City, Georgia
Robinson Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	<u>EST. QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
22	AGRICULTURAL LIME 700-7000	11.62	TN	\$ _____ Numerals	\$ _____ Numerals
				Words(unit price only)	
23	FERTILIZER MIXED GRADE 700-8000	2.67	TN	\$ _____ Numerals	\$ _____ Numerals
				Words(unit price only)	
24	FERTILIZER NITROGEN CONTENT 700-8100	533.33	LB	\$ _____ Numerals	\$ _____ Numerals
				Words(unit price only)	
SUBTOTAL OF ROBINSON ROAD				\$ _____	

**Fayette County, Georgia
Peachtree Parkway Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
1	TRAFFIC CONTROL - 150-1000	0.03	LS	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
2	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP 163-0550	2.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
3	MAINTENANCE OF INLET SEDIMENT TRAP 165-0105	2.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
4	GRADING PER MILE 210-0200	0.35	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
5	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME 402-1802	744.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
6	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 402-3113	605.00	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
7	TACK COAT 413-0750	440.00	GL	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Peachtree Parkway Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
8	RUMBLE STRIPS 429-1000	3.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
9	MILL ASPH CONC PVMT, 2 IN DEPTH 432-0208	6765.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
10	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE 653-1704	204.60	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
11	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE 653-1804	66.00	LF	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
12	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE 653-2501	0.80	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
13	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW 653-2502	0.80	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
14	RAISED PVMT MARKERS TP 1 654-1001	101.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Peachtree Parkway Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
15	PERMANENT GRASSING 700-6910	0.93	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
16	AGRICULTURAL LIME 700-7000	0.81	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
17	FERTILIZER MIXED GRADE 700-8000	0.19	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
18	FERTILIZER NITROGEN CONTENT 700-8100	37.33	LB	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
19	WOOD FIBER BLANKET, TP I, SHOULDERS 713-3011	4517.33	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
20	WOOD FIBER BLANKET, TP II, SHOULDERS 713-3012	4517.33	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
21	TEMPORARY GRASSING 163-0232	0.93	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
SUBTOTAL OF PEACHTREE PKWY				\$ _____	

**Fayette County, Georgia
Hampton Road Resurfacing
PROPOSAL**

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	\$	<u>UNIT PRICE</u>	\$	<u>TOTAL AMOUNT</u>
1	TRAFFIC CONTROL - 150-1000	0.08	LS	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
2	GRADING PER MILE 210-0200	0.93	LM	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
3	RECYC ASPH CONC PATCHING, INCL BITUM MATL & H LIME 402-1802	139.00	TN	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
4	RECYC ASPH CONC LEVELING, INCL BITUM MATL & H LIME 402-1812	137.00	TN	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
5	RECYC ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME 402-3113	1171.50	TN	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
6	TACK COAT 413-0750	825.00	GL	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		
7	RUMBLE STRIPS 429-1000	3.00	EA	\$	_____	\$	_____
					Numerals		Numerals
					_____ Words(unit price only)		

**Fayette County, Georgia
Hampton Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
8	MILL ASPH CONC PVMT, 2 IN DEPTH 432-0208	1265.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
9	MILL ASPH CONC PVMT, VARIABLE DEPTH 432-5010	330.00	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
10	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE 653-2501	2.00	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
11	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW 653-2502	2.00	LM	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
12	RAISED PVMT MARKERS TP 1 654-1001	260.00	EA	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
13	PERMANENT GRASSING 700-6910	2.48	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
14	AGRICULTURAL LIME 700-7000	2.16	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					

**Fayette County, Georgia
Hampton Road Resurfacing
PROPOSAL**

ITEM <u>NO.</u>	DESCRIPTION	EST. <u>QTY.</u>	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>TOTAL AMOUNT</u>
15	FERTILIZER MIXED GRADE 700-8000	0.50	TN	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
16	FERTILIZER NITROGEN CONTENT 700-8100	99.20	LB	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
17	WOOD FIBER BLANKET, TP I, SHOULDERS 713-3011	12003.20	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
18	WOOD FIBER BLANKET, TP II, SHOULDERS 713-3012	12003.20	SY	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
19	TEMPORARY GRASSING 163-0232	2.48	AC	\$ _____ Numerals	\$ _____ Numerals
_____ Words(unit price only)					
SUBTOTAL OF HAMPTON ROAD				\$ _____	\$ _____

FY 2019 Fayette County Resurfacing

GDOT PI 0016058

TOTAL BID PROPOSAL

SUBTOTAL OF SANDY CREEK ROAD	\$ _____
SUBTOTAL OF GRADY AVENUE	\$ _____
SUBTOTAL OF ROBINSON ROAD	\$ _____
SUBTOTAL OF PEACHTREE PARKWAY	\$ _____
SUBTOTAL OF HAMPTON ROAD	\$ _____
TOTAL BID PRICE	\$ _____

Fayette County
GDOT PI 0016058

ENGINEER'S SUPPLEMENTAL DEFINITIONS

The following terms as used in this Contract and/or referred to in the Department of Transportation, State of Georgia, Standard Specifications, Construction of Transportation Systems, and Supplemental Specifications.

1. Board – Council of Fayette County, Georgia/ City/ Representative
2. Commissioner – Fayette County Public Works Director
3. Department – Fayette County Public Works Department
4. Engineer – Croy Engineering, LLC
5. State – Fayette County/ State of Georgia
6. State Highway Engineer – Fayette County Public Works Director

Fayette County
GDOT PI 0016058

GENERAL NOTES

1. ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED, IN CONNECTION WITH THIS DOCUMENT, TO THE STATE HIGHWAY DEPARTMENT OF GEORGIA, STATE HIGHWAY DEPARTMENT, GEORGIA STATE HIGHWAY DEPARTMENT, HIGHWAY DEPARTMENT, DEPARTMENT, DOT, D.O.T. OR GDOT WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA, SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.
2. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY.
3. SELECTED GEORGIA STANDARDS HAVE BEEN ADDED TO THE PLANS FOR THE CONTRACTOR'S USE AND INFORMATION. IF LARGER COPIES OF THE GEORGIA STANDARDS ARE DESIRED, THE CONTRACTOR SHALL CONTACT THE D.O.T. AREA ENGINEER.
4. QUANTITIES FOR TURNOUTS, FLARES, ETC., ARE INCLUDED ON THE DETAILED ESTIMATE.
5. FLARES TO BE RESURFACED WILL REQUIRE NO ADDITIONAL BASE MATERIAL.
6. THE CONTRACTOR SHALL PERFORM ALL PATCHING AS DIRECTED BY THE ENGINEER, PRIOR TO LEVELING AND RESURFACING OPERATIONS. THE COST OF PATCHING WILL BE INCLUDED IN THE UNIT PRICE BID FOR 402-1802.
7. ROADS, STREETS AND DRIVEWAYS SHALL BE PAVED IN ACCORDANCE WITH DETAILS AND NOTES IN THE PLANS AND SPECIAL PROVISION SECTION 210-0200. THE CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION LAYOUT. THE COST OF CONSTRUCTION LAYOUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210-0200.
8. THE CONTRACTOR, UPON THE START OF THE PAVING OPERATION, SHALL COMPLETE THE OPERATION WITHIN NINETY (90) CALENDAR DAYS. FAILURE BY THE CONTRACTOR TO COMPLETE THE PAVING OPERATION WITHIN THE SPECIFIED TIME WILL RESULT IN LIQUIDATED DAMAGES TO BE ASSESSED IN ACCORDANCE WITH SUBSECTION 108.08 OF THE SPECIFICATIONS.

Fayette County

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GENERAL NOTES (CONTINUED)

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL DRAINAGE STRUCTURES WITHIN THE LIMITS OF THE PROJECT THROUGHOUT THE DURATION OF THE PROJECT. ANY DEBRIS THAT GOES IN DRAINAGE STRUCTURES AS A RESULT OF THE MILLING OPERATION SHALL BE CLEANED OUT BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT.
10. PROVIDE POSITIVE DRAINAGE IN THE MILLING OPERATION TO ENSURE WATER DOES NOT POND ON THE ROADWAY.
11. MILLED AREAS WILL BE COVERED WITH FINAL SURFACE COURSE WITHIN THREE (3) CALENDAR DAYS OF BEING MILLED. FAILURE TO COVER MILLED AREAS AS SPECIFIED WILL RESULT IN LIQUIDATED DAMAGES TO BE ASSESSED IN ACCORDANCE WITH SUBSECTION 108.08 OF THE SPECIFICATIONS.
12. THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN MILLING AT LOCATIONS WITH EXISTING TRAFFIC LOOPS. SEE SPECIAL PROVISION 647 PRIOR TO BEGINNING WORK. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE MILLING AT THESE LOCATIONS WITH THE ENGINEER. LOOPS THAT ARE REMOVED OR DESTROYED AS PART OF A CONSTRUCTION, REHABILITATION, OR MAINTENANCE PROJECT SHALL BE REPLACED AND RETURNED TO FULL OPERATION AS REQUIRED IN SPECIAL PROVISION 647 SUBSECTION 647.3.05(1)(5)(e). ALL PRIORITIZATION SHALL BE CONSIDERED CRITICAL/HIGH.
13. THE CONTRACTOR SHALL RESTRIPE ALL EXISTING ROADWAY MARKING AT EXISTING LOCATIONS ON ROADWAY AND AS CURRENTLY MARKED WITH THE EXCEPTION OF CROSSWALKS. EXISTING CROSSWALKS SHALL BE STRIPED IN ACCORDANCE WITH CROSSWALK DETAIL. THE CONTRACTOR SHALL RESTRIPE ALL EXISTING ROADWAY MARKINGS ON SIDE ROADS TO THE END OF THE NEW RESURFACED SECTION. ALSO, THE CONTRACTOR SHALL RESTRIPE OR STRIPE (WHERE NOT EXISTING) STOP BARS AT ALL PAVED SIDE ROADS AND STREETS. REFERENCE PAVEMENT MARKING DETAILS AND NOTES IN THE PLANS FOR LOCATING EDGE LINES. THE COST OF INTERIM STRIPING SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 150 – TRAFFIC CONTROL. THE COST OF RESTRIPING INCLUDING STOP BARS, CROSSWALKS, WORDS OR SYMBOLS WHICH SHALL BE THERMOPLASTIC AND PAID FOR UNDER PAY ITEMS 652 AND 653.

Fayette County

GDOT PI 0016058

GENERAL NOTES (CONTINUED)

14. TEMPORARY STRIPING IS REQUIRED IN ACCORDANCE WITH SECTION 150.04 OF GEORGIA SPECIFICATIONS. PLACEMENT OF PERMANENT EDGELINE PAVEMENT MARKINGS (THOSE FOR WHICH A PAY ITEM IS INCLUDED IN THE CONTRACT, ITEMS 652 AND 653) SHALL NOT BEGIN UNTIL ALL SHOULDER CONSTRUCTION HAS BEEN COMPLETED.
15. REHABILITATE THE EARTH SHOULDERS IN ACCORDANCE WITH DETAILS AND NOTES IN THE PLANS. THE FILLING SHALL INCLUDE GRADING, FURNISHING AND PLACEMENT OF BORROW MATERIAL. FILLING WORK SHALL BE PERFORMED AND PAID FOR IN ACCORDANCE WITH SECTION 210 OF THE SPECIFICATIONS EXCEPT AS NOTED IN DETAILS.
16. GRASS ALL AREAS OF EARTH SHOULDER FILLING DAILY. GRASSING SHALL BE PERFORMED DAILY AND PAID FOR IN ACCORDANCE WITH SECTION 700 OF THE SPECIFICATIONS.
17. IN PREPARATION OF THE ROADWAY PRIOR TO RESURFACING, BLADE THE EXISTING SHOULDERS NO LOWER IN ELEVATION THAN THE EXISTING PAVEMENT OR SHOULDER. SHOULDER MATERIAL DISPLACED BY THE CLEANING OPERATION PRIOR TO RESURFACING SHALL BE REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL SITE OFF RIGHT-OF-WAY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE OVERALL BID PRICE.
18. COMPLETE EARTH SHOULDER FILLING WORK WITHIN THIRTY (30) CALENDER DAYS, AFTER COMPLETION OF RESURFACING ROADWAY. FAILURE TO COMPLETE EARTH SHOULDER FILLING WORK WITHIN THIS TIME FRAME WILL RESULT IN LIQUIDATED DAMAGES ASSESSED IN ACCORDANCE WITH SECTION 108.08 OF THE SPECIFICATIONS.
19. PROPERLY INSTALL EROSION CONTROL DEVICES AT ALL AREAS OF EARTH SHOULDER FILLING WORK. EROSION CONTROL SHALL BE PERFORMED AND PAID FOR IN ACCORDANCE WITH SECTION 161 AND 163 OF THE SPECIFICATIONS.
20. NOTIFY UTILITY COMPANIES A MINIMUM OF SIXTY (60) DAYS IN ADVANCE OF ANY PROPOSED WORK IN ORDER FOR UTILITY COMPANIES TO BEGIN CLEARING CONFLICTS WITH SCHEDULED WORK. MILLING AROUND MANHOLES AND VALVES WILL BE ALLOWED IN ORDER TO MEET THE CONTRACT COMPLETION DATES, HOWEVER THESE AREAS SHALL BE COVERED WITH THE FINAL SURFACE COURSE THE SAME DAY AT NO ADDITIONAL COST TO THE DEPARTMENT.
21. THERE ARE NO ADDITIONAL ENVIRONMENTAL RESOURCE IMPACTS INCLUDED IN THIS PROJECT.

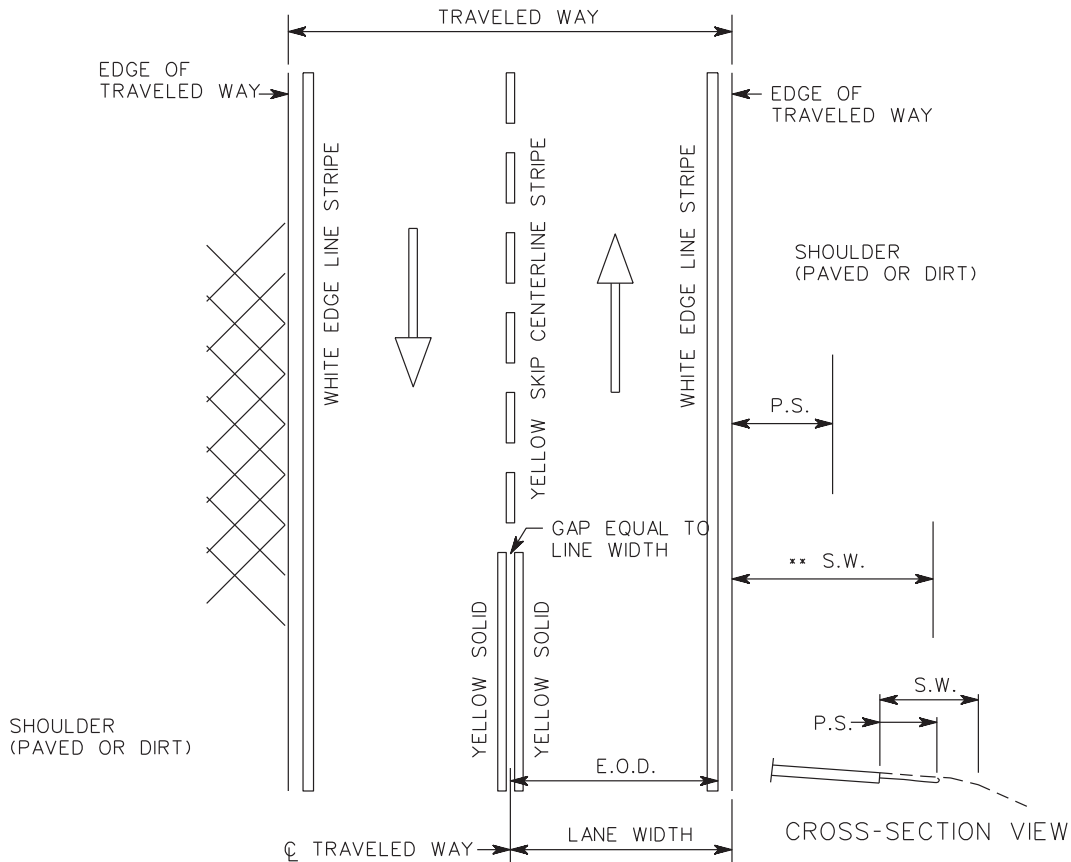
Fayette County

GDOT PI 0016058

GENERAL NOTES (CONTINUED)

22. ALL BORROW AND WASTE SITES FOR THIS PROJECT SHALL BE ENVIRONMENTALLY APPROVED PRIOR TO CONSTRUCTION ACTIVITIES OCCURRING IN THEM. ALL COMMON FILL OR EXCESS MATERIAL DISPOSED OUTSIDE THE PROJECT RIGHT OF WAY SHALL BE PLACED IN EITHER A PERMITTED SOLID WASTE FACILITY, A PERMITTED INERT WASTE LANDFILL OR IN AN ENGINEERED FILL. SEE SECTION 201 OF THE STANDARD SPECIFICATIONS AND SUPPLEMENTS THERETO FOR ADDITIONAL INFORMATION.
23. THERE IS NO KNOWN SUITABLE PLACE TO BURY THE EXISTING CONSTRUCTION DEBRIS WITHIN THE PROJECT'S LIMITS. THE CONTRACTOR SHALL PROVIDE AN ENVIRONMENTALLY APPROVED SITE AS SHOWN IN GA. SPECIFICATION 201 TO DISPOSE OF THE EXISTING CONSTRUCTION DEBRIS AT NO ADDITIONAL COST TO THE DEPARTMENT.
24. THIS PROJECT DOES NOT REQUIRE A NOI.
25. GDOT STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, 2013 EDITION, AND APPLICABLE SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS APPLY TO THIS CONTRACT.
26. THE DBE GOAL FOR THIS PROJECT IS THREE (3) %.
27. BIDDERS SUBMITTING A BID \$2,000,000 OR LESS MUST BE EITHER A PREQUALIFIED CONTRACTOR OR A REGISTERED SUBCONTRACTOR WITH GDOT. BIDDERS AND SUBCONTRACTORS MUST BE PREQUALIFIED IN THE WORK CLASS(ES) IN WHICH THEY ARE PERFORMING THE WORK.
28. BIDDERS SUBMITTING A BID IN EXCESS OF \$2,000,000 MUST BE PREQUALIFIED WITH GDOT. BIDDERS MUST BE PREQUALIFIED IN THE WORK CLASS(ES) IN WHICH THEY ARE PERFORMING THE WORK.
29. A PRECONSTRUCTION CONFERENCE WILL BE HELD WITH THE SPONSOR, CONTRACTOR, SELECTED DBE FIRMS, GDOT AREA ENGINEER AND THE GDOT PROJECT MANAGER
30. THE CONTRACTOR SHALL USE SUPPLIERS ON THE GDOT QUALIFIED PRODUCTS LIST.
31. ALL TESTING IS TO MEET THE REQUIREMENTS OUTLINED IN THE GDOT SAMPLING TESTING AND INSPECTION GUIDE.

L.W. AND P.S. FOR THIS PROJECT TO BE DETERMINED BY THE AREA ENGINEER



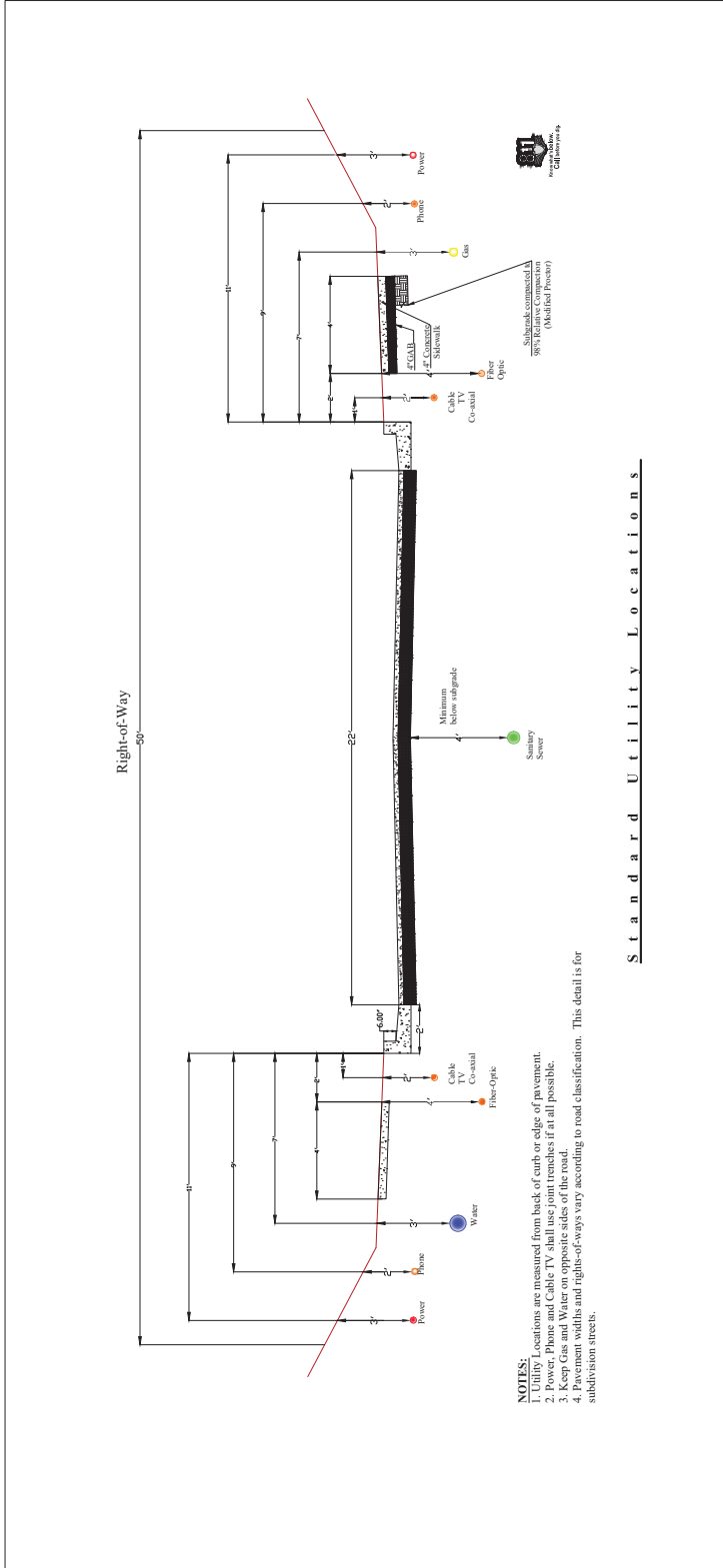
TWO-LANE ROADWAY - PAVEMENT MARKING DETAIL

- E.O.D. - EDGELINE OFFSET DISTANCE MEASURED FROM THE CENTERLINE
- L.W. - LANE WIDTH AS DETERMINED BY THE AREA ENGINEER
- P.S. - PAVED SHOULDER AS DETERMINED BY THE AREA ENGINEER
- T.W. - TRAVELED WAY - THE PORTION OF THE ROADWAY DESIGNATED FOR MOVEMENT OF VEHICLES, EXCLUSIVE OF SHOULDERS (PAVED OR DIRT)
- ** S.W. - SHOULDER WIDTH FOR DIRT/EARTH SHOULDER (MINIMUM)

NOTE: ANY SHOULDER CONSTRUCTION TO BE PERFORMED BY THE CONTRACTOR WILL BE SHOWN ON TYPICAL SECTION SHEETS.

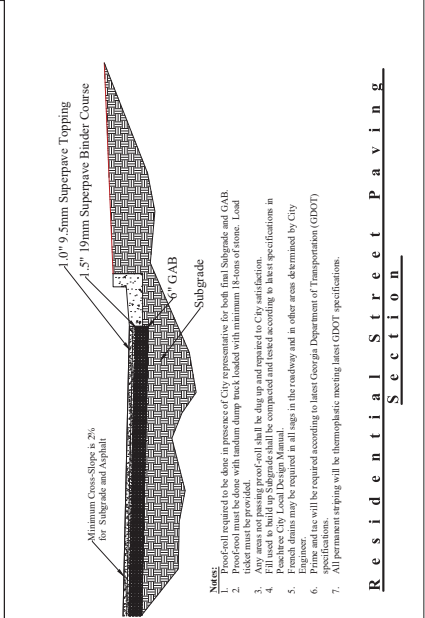
<p>FAYETTE COUNTY PUBLIC WORKS DEPARTMENT</p>
<p>STRIPING DETAILS VARIOUS LOCATIONS PI NO. 0016058</p>

General Notes													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>No.</th> <th>Issued</th> <th>WWW</th> <th>Date</th> </tr> <tr> <td>1.0</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">No.</td> <td colspan="2">Revision/Issue</td> </tr> </table>	No.	Issued	WWW	Date	1.0				No.		Revision/Issue		Date/Date Peachtree City Engineering Department Peachtree City Residential Street Details Sheet 1 of 1 Title N.T.S.
No.	Issued	WWW	Date										
1.0													
No.		Revision/Issue											



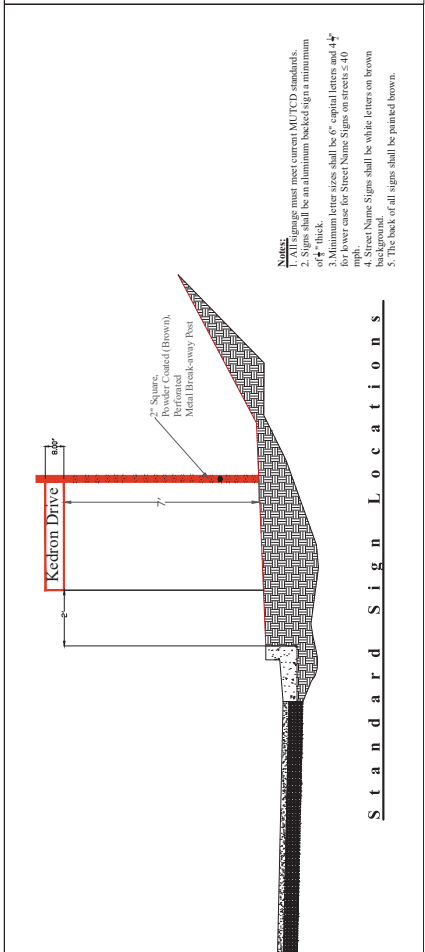
NOTES:
 1. Utility locations are measured from back of curb or edge of pavement.
 2. Power, Phone and Cable TV shall use joint trenches if at all possible.
 3. Keep Gas and Water on opposite sides of the road.
 4. Pavement widths and rights-of-ways vary according to road classification. This detail is for subdivision streets.

S t a n d a r d U t i l i t y L o c a t i o n s



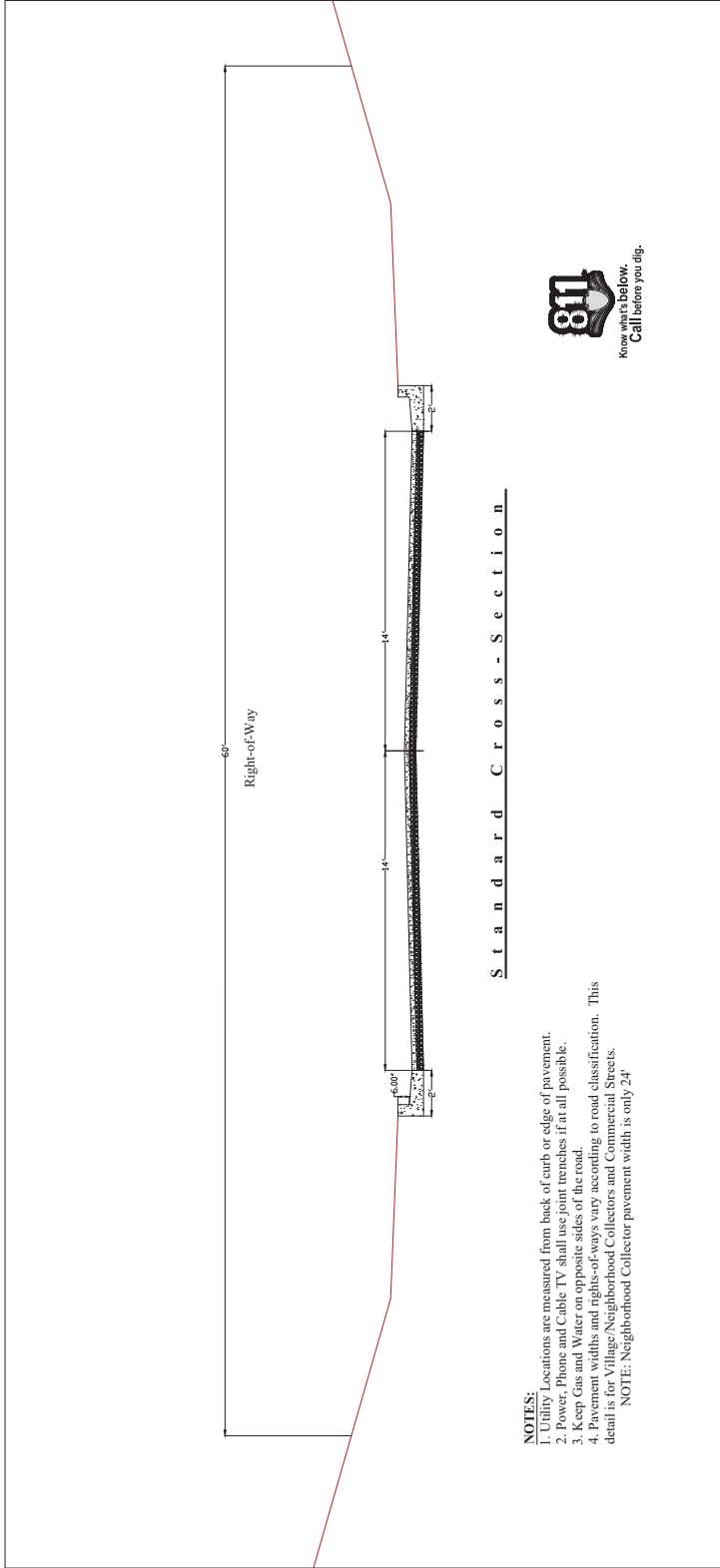
Notes:
 1. Proof-roll required to be done in presence of City representative for both final Subgrade and GAB.
 2. Proof-roll must be done with medium dump truck loaded with minimum 18 tons of stone. Load shall be applied in 3 passes.
 3. Any areas not passing proof-roll shall be dug up and repaired to City satisfaction.
 4. Fill used to build up Subgrade shall be compacted and tested according to latest specifications in City Local Design Manual.
 5. Fresh concrete may be required for all signs in the roadway and in other areas determined by City Engineer.
 6. Prime and seal will be required according to latest Georgia Department of Transportation (GDOT) specifications.
 7. All permanent striping will be thermoplastic meeting latest GDOT specifications.

R e s i d e n t i a l S t r e e t P a v i n g
S e c t i o n



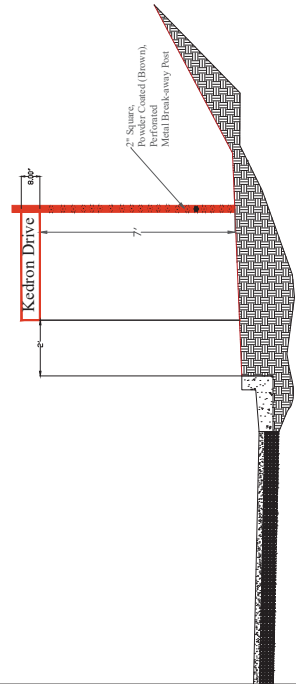
Notes:
 1. Signs shall be set in accordance with MUTCD standards.
 2. Signs shall be an aluminum backed sign a minimum of 1/4\"/>

S t a n d a r d S i g n L o c a t i o n s



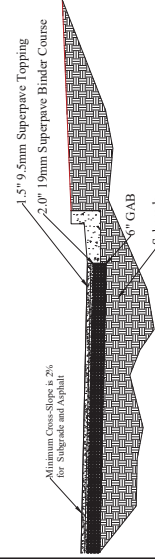
NOTES:

1. Utility Locations are measured from back of curb or edge of pavement.
 2. Power, Phone and Cable TV shall use joint trenches if at all possible.
 3. Keep Gas and Water on opposite sides of the road.
 4. Pavement widths and rights-of-ways vary according to road classification. This detail is for Village/Neighborhood Collectors and Commercial Streets.
- NOTE: Neighborhood Collector pavement width is only 24'



NOTES:

1. Signs shall be painted brown.
2. Signs shall be an aluminum backed sign a minimum of 4" thick.
3. Minimum letter sizes shall be 6" capital letters and 4" for lower case for Street Name Signs on streets 5' to 10' wide.
4. Street Name Signs shall be white letters on brown background.
5. The back of all signs shall be painted brown.



- Notes:**
1. Proof-roll required to be done in presence of City representative for both final Subgrade and GAB.
 2. Proof-roll must be done with medium dump truck loaded with minimum 18 tons of stone. Load shall be applied in 2 equal passes.
 3. Any areas not passing proof-roll shall be dug up and repaired to City satisfaction.
 4. Fill used to build up Subgrade shall be compacted and tested according to latest specifications in the City Local Design Manual.
 5. Fresh concrete may be required for all signs in the roadway and in other areas determined by City Engineer.
 6. Prime and seal will be required according to latest Georgia Department of Transportation (GDOT) specifications.
 7. All permanent striping will be thermoplastic meeting latest GDOT specifications.

**V i l l a g e / N e i g h b o r h o o d C o l l e c t o r
a n d C o m m e r c i a l P a v i n g S e c t i o n**

General Notes	

No.	Issued	Volume	State
Date/Date			

Peachtree City
Engineering Department

Peachtree City
Collector, Neighborhood
Collector and Commercial
Road
Details

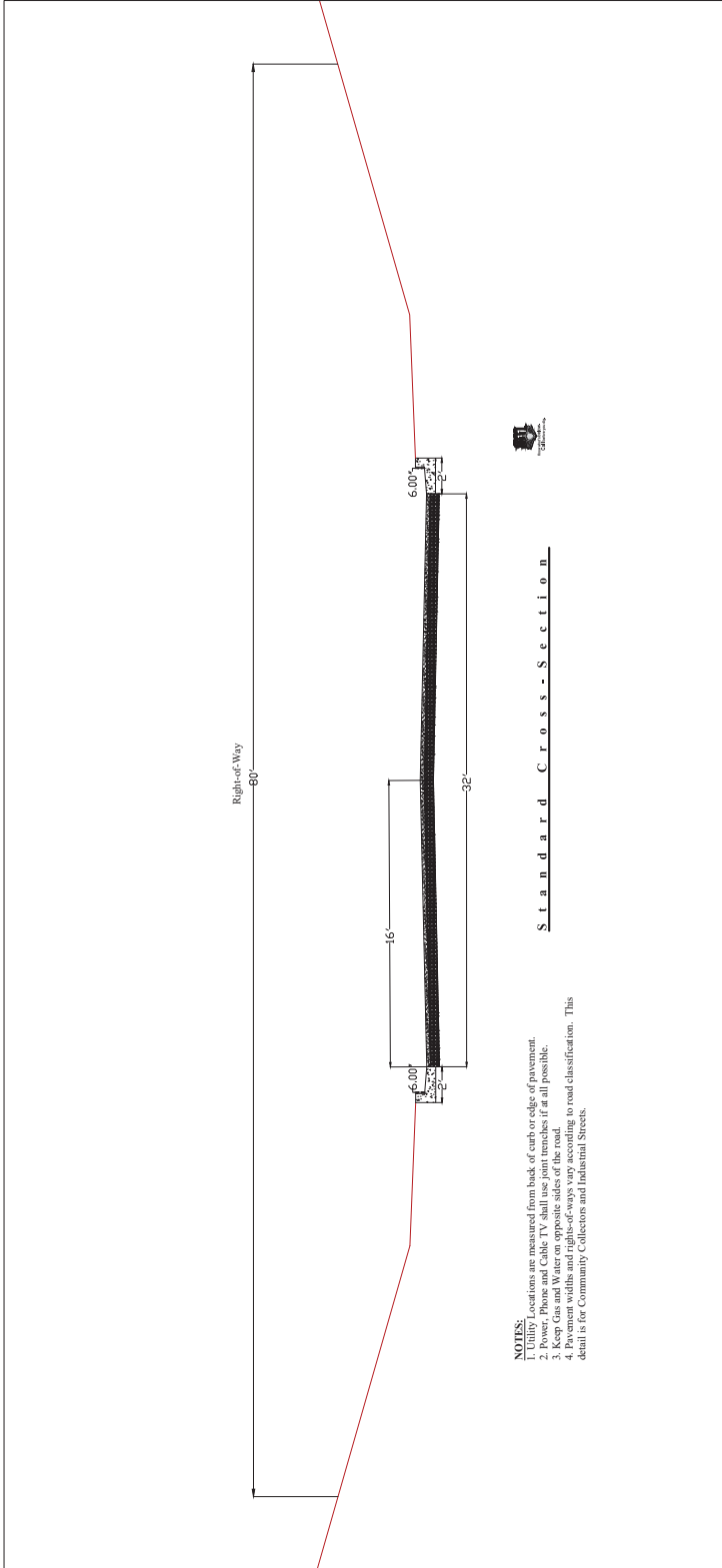
Sheet	1 of 1	Date	
Title			
Scale: N.T.S.			

General Notes	
No.	Date
1.0	Issued 11/2016
Revision/Issue	
Date	

Scale/Date
 Peachtree City
 Engineering Department
 PEACHTREE CITY

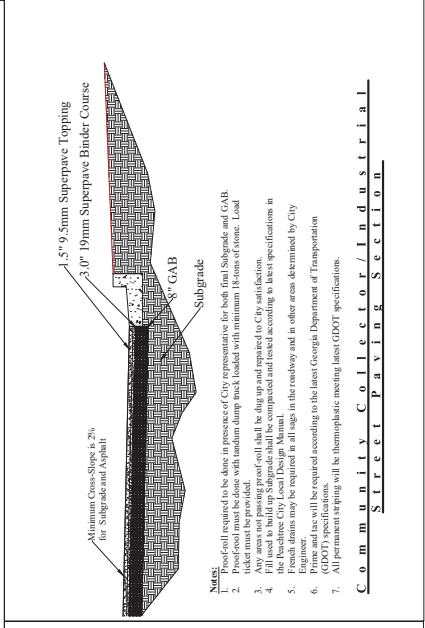
Project Name and Address
 Community Collector and
 Industrial Street Details

Sheet
 1 of 1
 Title
 N.T.S.



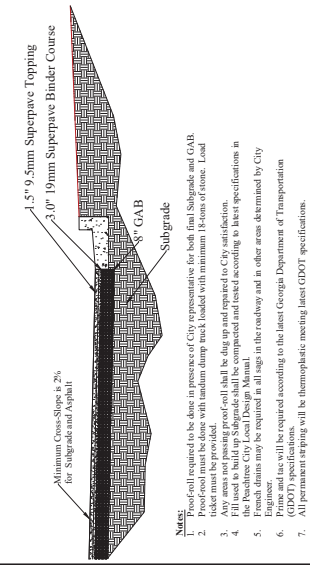
- NOTES:**
- Utility Locations are measured from back of curb or edge of pavement.
 - Power, Phone and Cable TV shall use joint trenches if at all possible.
 - Keep Gas and Water on opposite sides of the road.
 - Pavement widths and right-of-ways vary according to road classification. This detail is for Community Collectors and Industrial Streets.

S t a n d a r d C r o s s - S e c t i o n



- NOTES:**
- Signs shall be painted brown.
 - Signs shall be an aluminum backed sign a minimum of 1/4" thick.
 - Minimum letter sizes shall be 6" capital letters and 4" for lower case for Street Name Signs on streets 5 to 10 feet wide.
 - Street Name Signs shall be white letters on brown background.
 - The back of all signs shall be painted brown.

S t a n d a r d S i g n L o c a t i o n s

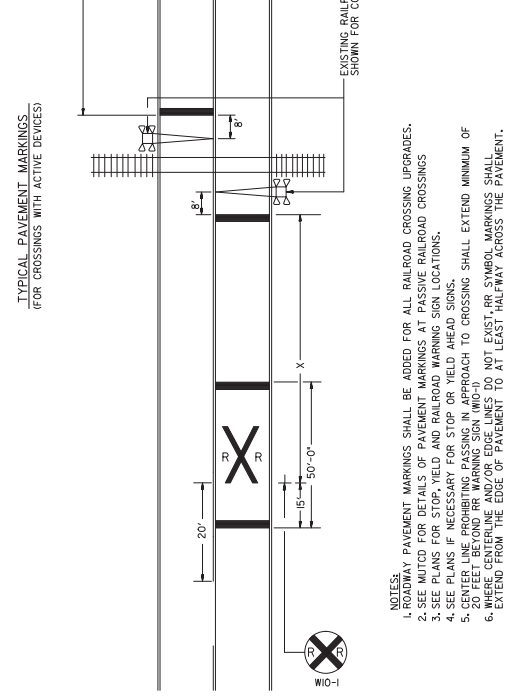


- Notes:**
- Proof-roll required to be done in presence of City representative for both final Subgrade and GAB.
 - Proof-roll must be done with medium dump truck loaded with minimum 18 tons of stone. Load must be applied in 3 passes.
 - Any areas not passing proof-roll shall be dug up and repaired to City satisfaction.
 - Fill used to build up Subgrade shall be compacted and tested according to latest specifications in the latest Georgia Department of Transportation Manual.
 - Proof-roll may be required in all bays in the roadway and in other areas determined by City Engineer.
 - Prime and tse coat will be required according to the latest Georgia Department of Transportation Manual.
 - All permanent striping will be thermoplastic meeting latest GDOT specifications.

C o m m u n i t y C o l l e c t o r / I n d u s t r i a l S t r e e t P a v i n g S e c t i o n

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

NOTES:
 1. A W10-I SIGN SUPPLEMENTED BY A W10-HA SIGN SHOULD BE USED WHERE THERE IS A HIGHWAY INTERSECTION IN CLOSE PROXIMITY TO THE GRADE CROSSING AND AN ENGINEERING STUDY DETERMINES THAT ADEQUATE SPACE IS AVAILABLE TO STORE A DESIGN VEHICLE BETWEEN THE HIGHWAY INTERSECTION AND THE TRAIN.
 2. THE W10-HA SIGN SHOULD BE MOUNTED IN ADVANCE OF THE HIGHWAY INTERSECTION AND THE GRADE CROSSING.
 3. OPTIONAL - A STORAGE SPACE W10-HB SIGN MAY BE MOUNTED BEYOND THE HIGHWAY INTERSECTION TO ADVISE TRAVELERS OF THE GRADE CROSSING AND THE SPACE AVAILABLE FOR HIGHWAY VEHICLE STORAGE BETWEEN THE HIGHWAY INTERSECTION AND THE GRADE CROSSING.
 4. THE W10-HB SIGN MUST BE MOUNTED PRIOR TO THE SIGNALIZED INTERSECTION TO REMIND DRIVERS OF THE STORAGE SPACE BETWEEN THE TRACKS AND THE HIGHWAY INTERSECTION.



TYPICAL PAVEMENT MARKINGS (FOR CROSSINGS WITH ACTIVE DEVICES)

NOTES:
 1. ROADWAY PAVEMENT MARKINGS SHALL BE ADDED FOR ALL RAILROAD CROSSING UPGRADES.
 2. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT PASSIVE RAILROAD CROSSINGS.
 3. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT ACTIVE RAILROAD CROSSINGS.
 4. SEE PLANS IF NECESSARY FOR STOP OR YIELD AHEAD SIGNS.
 5. CENTER LINE PROHIBITING PASSING IN APPROACH TO CROSSING SHALL EXTEND MINIMUM OF 20 FEET BEYOND RR WARNING SIGN (W10-I).
 6. WHERE CENTERLINE AND/OR EDGE LINES DO NOT EXIST, RR SYMBOL MARKINGS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO AT LEAST HALF-WAY ACROSS THE FAYETTEWAY.

GUIDELINES FOR ADVANCE PLACEMENT OF WARNING SIGNS (Source: 2009 Edition MUTCD)

ADVANCE PLACEMENT DISTANCE (FEET)	CONDITION A (ROADWAY CROSSINGS ONLY)	CONDITION B (PASSIVE CROSSINGS ONLY)
0-20	100	225
25	100	225
30	100	225
35	100	225
40	100	225
45	100	225
50	100	225
55	100	225
60	100	225
65	100	225
70	100	225
75	100	225
80	100	225
85	100	225
90	100	225
95	100	225
100	100	225
105	100	225
110	100	225
115	100	225
120	100	225

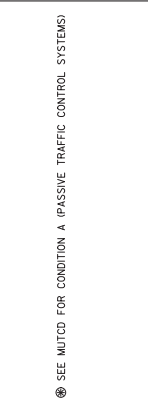
* WHERE THIS DISTANCE IS INTERRUPTED BY GRADES, OBSTACLES, OR OTHER CONDITIONS, ADJUSTMENTS WILL BE MADE ACCORDINGLY BY THE ENGINEER.

See Guidelines for Advance Placement of Warning Sign Distance Table



TYPICAL SIGN SYSTEM WHERE PARALLEL ROADWAY IS LESS THAN 100 FEET FROM CROSSING

NOTES:
 1. ROADWAY PAVEMENT MARKINGS SHALL BE ADDED FOR ALL RAILROAD CROSSING UPGRADES.
 2. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT PASSIVE RAILROAD CROSSINGS.
 3. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT ACTIVE RAILROAD CROSSINGS.
 4. SEE PLANS IF NECESSARY FOR STOP OR YIELD AHEAD SIGNS.
 5. CENTER LINE PROHIBITING PASSING IN APPROACH TO CROSSING SHALL EXTEND MINIMUM OF 20 FEET BEYOND RR WARNING SIGN (W10-I).
 6. WHERE CENTERLINE AND/OR EDGE LINES DO NOT EXIST, RR SYMBOL MARKINGS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO AT LEAST HALF-WAY ACROSS THE FAYETTEWAY.



TYPICAL SIGN SYSTEM WHERE PARALLEL ROADWAY IS 100 FEET OR GREATER FROM CROSSING

NOTES:
 1. ROADWAY PAVEMENT MARKINGS SHALL BE ADDED FOR ALL RAILROAD CROSSING UPGRADES.
 2. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT PASSIVE RAILROAD CROSSINGS.
 3. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT ACTIVE RAILROAD CROSSINGS.
 4. SEE PLANS IF NECESSARY FOR STOP OR YIELD AHEAD SIGNS.
 5. CENTER LINE PROHIBITING PASSING IN APPROACH TO CROSSING SHALL EXTEND MINIMUM OF 20 FEET BEYOND RR WARNING SIGN (W10-I).
 6. WHERE CENTERLINE AND/OR EDGE LINES DO NOT EXIST, RR SYMBOL MARKINGS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO AT LEAST HALF-WAY ACROSS THE FAYETTEWAY.



TYPICAL SIGN SYSTEM WHERE PARALLEL ROADWAY IS LESS THAN 100 FEET FROM CROSSING

NOTES:
 1. ROADWAY PAVEMENT MARKINGS SHALL BE ADDED FOR ALL RAILROAD CROSSING UPGRADES.
 2. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT PASSIVE RAILROAD CROSSINGS.
 3. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT ACTIVE RAILROAD CROSSINGS.
 4. SEE PLANS IF NECESSARY FOR STOP OR YIELD AHEAD SIGNS.
 5. CENTER LINE PROHIBITING PASSING IN APPROACH TO CROSSING SHALL EXTEND MINIMUM OF 20 FEET BEYOND RR WARNING SIGN (W10-I).
 6. WHERE CENTERLINE AND/OR EDGE LINES DO NOT EXIST, RR SYMBOL MARKINGS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO AT LEAST HALF-WAY ACROSS THE FAYETTEWAY.



TYPICAL SIGN SYSTEM WHERE PARALLEL ROADWAY IS 100 FEET OR GREATER FROM CROSSING

NOTES:
 1. ROADWAY PAVEMENT MARKINGS SHALL BE ADDED FOR ALL RAILROAD CROSSING UPGRADES.
 2. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT PASSIVE RAILROAD CROSSINGS.
 3. SEE MUTCD FOR DETAILS OF PAVEMENT MARKINGS AT ACTIVE RAILROAD CROSSINGS.
 4. SEE PLANS IF NECESSARY FOR STOP OR YIELD AHEAD SIGNS.
 5. CENTER LINE PROHIBITING PASSING IN APPROACH TO CROSSING SHALL EXTEND MINIMUM OF 20 FEET BEYOND RR WARNING SIGN (W10-I).
 6. WHERE CENTERLINE AND/OR EDGE LINES DO NOT EXIST, RR SYMBOL MARKINGS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO AT LEAST HALF-WAY ACROSS THE FAYETTEWAY.

DATE	REVISION
9-10-88	ADD W10-3(36) SIGN
2-1-89	UPGRADE TO MULTIC.D.
1-28-93	ADPT. SPEC. COND.
8-29-93	RR MARKINGS RELOCATED
10-19-96	RR MARKINGS RELOCATED
2-14-98	RR STANDARD MARKINGS CHART TO MULTIC.D. 2009 ED.
2-14-98	REVISED ADVANCE PLACEMENT
2-17-02	CORRECTED SPEC. CONDITIONS
2-17-02	REVISED ADVANCE PLACEMENT
2-17-02	REVISED ADVANCE PLACEMENT

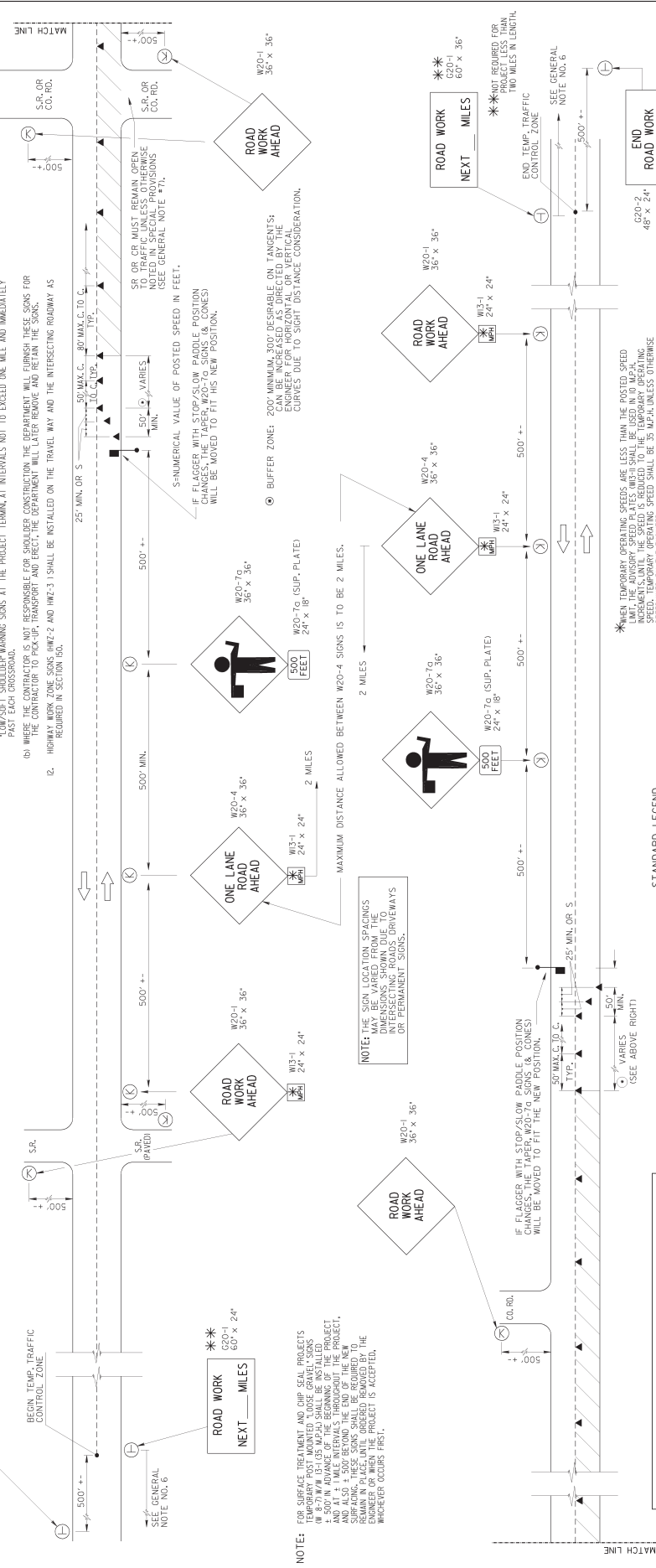
DEPARTMENT OF TRANSPORTATION
 STATE OF GEORGIA
 STANDARD
 RAILROAD GRADE CROSSINGS
 SIGNING & MARKING AT CROSSINGS
 WITH RR SIGNALS AND/OR GATES

NO SCALE
 DESIGNED BY: [Signature]
 REVISED BY: [Signature]
 CHECKED BY: [Signature]
 DATE: SEPT. 1982
 NUMBER: 9024A

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

- GENERAL NOTES:**
- ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERRECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MATCH, THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS (SEE SECTION 150) REQUIRED AS DIRECTED BY THE ENGINEER.
 - ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN OR AS DIRECTED BY THE ENGINEER. ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
 - ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF 10 FEET ABOVE THE LEVEL OF PAVEMENT EDGE FOR DIRECTIONAL SIGNS AND 8 FEET ABOVE THE LEVEL OF PAVEMENT EDGE FOR TEMPORARY MOUNTED SIGNS. PORTABLE SIGNS AND SIGN MOUNTING DEVICES UTILIZED IN THE WORK SHALL BE COMPLIANT WITH PORTABLE SIGNS MAY BE USED WHEN THE DURATION OF THE WORK IS LESS THAN 3 DAYS.
 - WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMP OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL PORTABLE SIGNS AND SIGN MOUNTING DEVICES MAY BE REQUIRED TO MAINTAIN THROUGH TRAFFIC FLOW THROUGH THE CONSTRUCTION AREA. WHEN ENTRANCE RAMP/INTERSECTIONS ARE IDENTIFIABLE, FLAGGERS ARE TO BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.

- FOR NIGHT TIME OPERATIONS, DRUMS SHALL HAVE, FOR THE LENGTH OF THE TAPER ONLY, A SIX (6) INCH GRANGE REFLECTIZED TOP STRIPE ON EACH DRUM IN THE TAPER AS REQUIRED IN SECTION 150. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES 1.25 MIN. MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
- SIGNS SHOWN HERE ARE IN ADDITION TO ALL ADVANCE WARNING SIGNS REQUIRED IN SECTION 150.
- FLAGGERS SHALL BE PROVIDED AS NECESSARY TO PROHIBIT WRONG DIRECTION OF TRAFFIC THRU WORK AREAS. SEE SECTION 150.
- WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED FROM THE TRAVELWAY SO THAT THE MESSAGE IS NOT VISIBLE TO THE MOTORIST. INTERMEDIATE SIGNS THAT ARE PERMANENT MOUNTED SHALL BE COVERED WHEN NOT APPLICABLE. SEE SECTION 150.
- PAYMENT FOR TRAFFIC CONTROL SHALL BE PER SECTION 150.
- PAYMENT WARNINGS FOR TEMPORARY TRAFFIC CONTROL, IF REQUIRED, SHALL BE IN ACCORDANCE WITH SECTION 150 AND AS DIRECTED BY THE ENGINEER OR SHOWN IN THE PLANS.
- WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION, THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK-UP, TRANSPORT AND ERRECT. THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS. FOR EACH CROSSROAD.
- HIGHWAY WORK ZONE SIGNS (HWZ-2 AND HWZ-3) SHALL BE INSTALLED ON THE TRAVEL WAY AND THE INTERSECTING ROADWAY AS REQUIRED IN SECTION 150.



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
TRAFFIC CONTROL DETAIL
FOR LANE CLOSURE
ON TWO-LANE HIGHWAY

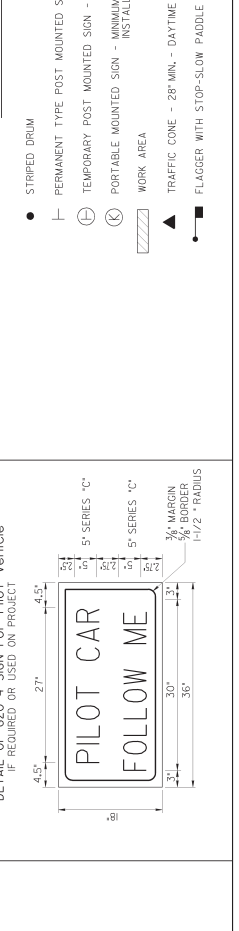
DATE	REVISION
3-30-06	GENERAL NOTES, REVISION AND REMOVED FLAGS AND REV.
3-30-06	REVISION

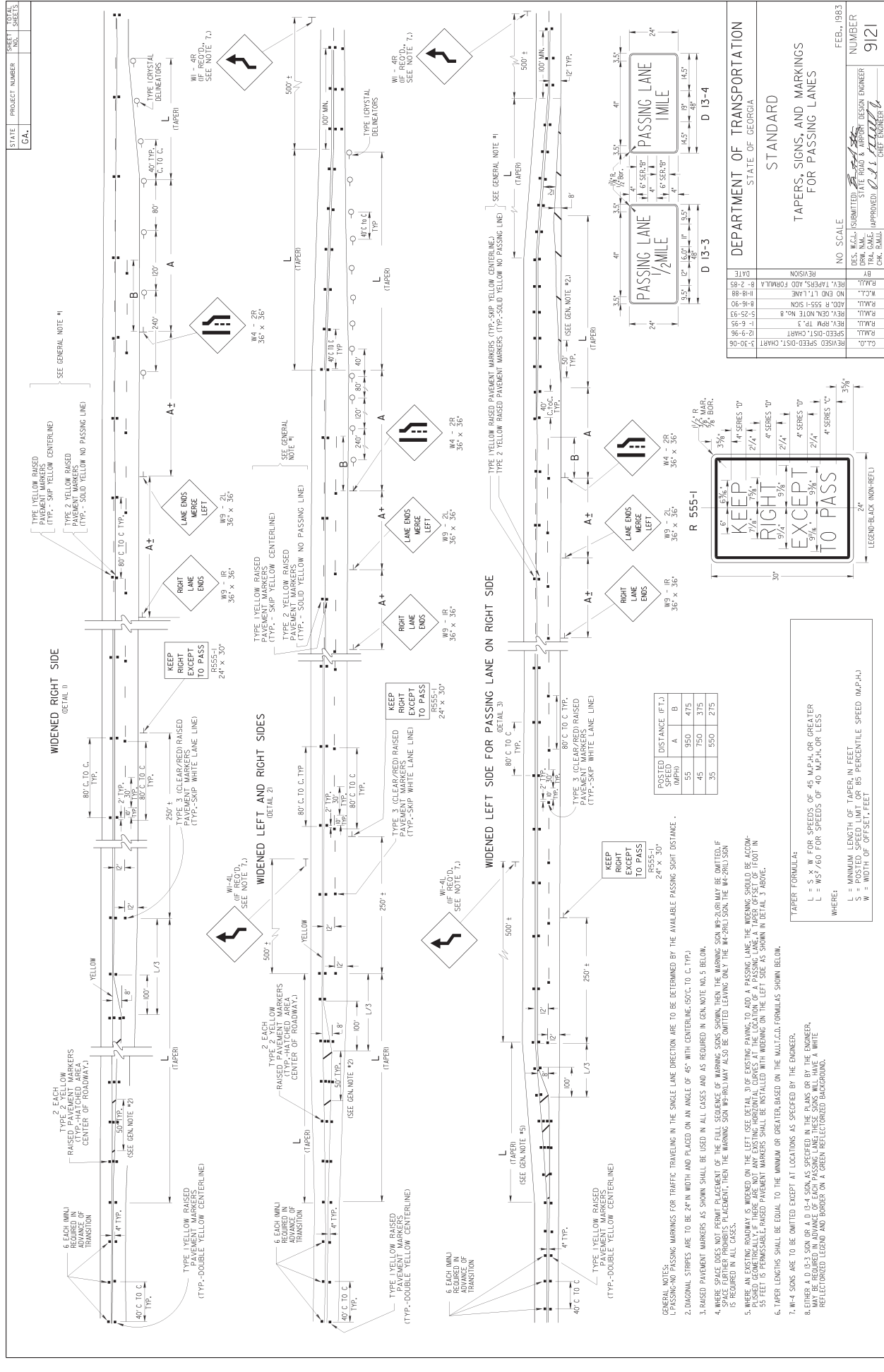
NO. SCALE	REV. & REDR. JULY, 1999
DESIGNED BY	STATE ROAD & BRIDGE DESIGN ENGINEER
APPROVED BY	CHIEF ENGINEER
DATE	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
TRAFFIC CONTROL DETAIL
FOR LANE CLOSURE
ON TWO-LANE HIGHWAY

NO. SCALE	REV. & REDR. JULY, 1999
DESIGNED BY	STATE ROAD & BRIDGE DESIGN ENGINEER
APPROVED BY	CHIEF ENGINEER
DATE	





STATE PROJECT NUMBER GA.	SHEET TOTAL NO. SHEETS
-----------------------------	---------------------------

ASPHALT PAVEMENT - OVERLAY

30° DESIRABLE **
40° MAXIMUM **

FINISH GRADED SHOULDER

EXISTING SHOULDER

EXISTING PAVEMENT

ASPHALT OVERLAY

EDGE OF PAVEMENT

TRAVEL LANE OR PAVED SHOULDER

** AS MEASURED DIRECTLY BEHIND THE PAVING SPREADER.

ADDITIONAL QUANTITIES:
 DEPTH OF OVERLAY (T), NO RUTTING
 (T)² (IN.) X 0.000441 TN/IN.-FT X LENGTH (FT) = _____ TN
 DEPTH OF OVERLAY (T), WITH FIN. RUTTING
 (T)² (IN.) X 0.000441 TN/IN.-FT X LENGTH (FT) + (T) (IN.) X 0.000882 TN/IN.-FT X LENGTH (FT) = _____ TN

ASPHALT PAVEMENT - NEW

30° DESIRABLE **
40° MAXIMUM **

FINISH GRADED SHOULDER

INTERMEDIATE GRADED SHOULDER

AGGREGATE BASE

ASPHALT BASE *

BINDER COURSE

SURFACE COURSE

EDGE OF PAVEMENT

TRAVEL LANE OR SHOULDER

** AS MEASURED DIRECTLY BEHIND THE PAVING SPREADER.

ADDITIONAL QUANTITIES:
 SURFACE PAVING DEPTH (T)
 (T)² (IN.) X 0.000441 TN/IN.-FT X LENGTH (FT) = _____ TN

PLAIN PC CONCRETE PAVEMENT OR ROLLER COMPACTED CONCRETE PAVEMENT

30° DESIRABLE **
40° MAXIMUM **

FINISH GRADED SHOULDER

INTERMEDIATE GRADED SHOULDER

AGGREGATE BASE

ASPHALT INTERLAYER *

CONCRETE PAVEMENT

EDGE OF PAVEMENT

FINISH GRADED SHOULDER

8"

14" MIN.

2" MIN.

* NOTE: IF REQUIRED.

ADDITIONAL QUANTITIES:
 CONCRETE
 0.07407 SY/FT X LENGTH (FT) = _____ SY
 ASPHALT INTERLAYER, IF REQUIRED
 (T) (IN.) X LENGTH (FT) X 0.004074 TN/IN.-FT = _____ TN
 AGGREGATE BASE (BASED ON 2.07 TN/CY)
 (T) (IN.) X LENGTH (FT) X 0.0042592 TN/IN.-FT = _____ TN

CONTINUOUS REINFORCED CONCRETE PAVEMENT

30° DESIRABLE **
40° MAXIMUM **

FINISH GRADED SHOULDER

INTERMEDIATE GRADED SHOULDER

AGGREGATE BASE

ASPHALT INTERLAYER *

CONTINUOUS REINFORCED CONCRETE

EDGE OF PAVEMENT

FINISH GRADED SHOULDER

8"

15"

14" MIN.

2" MIN.

* NOTE: IF REQUIRED.

ADDITIONAL QUANTITIES:
 CONCRETE
 0.07407 SY/FT X LENGTH (FT) = _____ SY
 ASPHALT INTERLAYER, IF REQUIRED
 (T) (IN.) X LENGTH (FT) X 0.004074 TN/IN.-FT = _____ TN
 AGGREGATE BASE (BASED ON 2.07 TN/CY)
 (T) (IN.) X LENGTH (FT) X 0.0042592 TN/IN.-FT = _____ TN

GENERAL NOTES:

- THE SAFETY EDGE SHALL BE CONSTRUCTED AS AN INTEGRAL OPERATION OF THE ROADWAY PAVEMENT PLACEMENT PROCESS. (ASPHALT PAVEMENT)
- USE AN APPROVED MECHANICAL DEVICE THAT WILL:
 - APPLY COMPACTIVE EFFORT TO THE ASPHALT MIXTURE TO ELIMINATE OBJECTABLE VOIDS AS THE MIXTURE PASSES THROUGH THE WEDGE DEVICE.
 - PRODUCE A WEDGE WITH A UNIFORM TEXTURE, SHAPE, AND DENSITY.
 - PRODUCE A WEDGE WITH A UNIFORM TO VARYING HEIGHTS ENCOUNTERED ALONG THE ROADWAY SHOULDER.
- A SINGLE-PLATE STRIKE-OFF METHOD SHALL NOT BE USED FOR BITUMINOUS PAVING, AS THE SINGLE-PLATE STRIKE-OFF METHOD HAS BEEN FOUND TO PRODUCE A NON-DURABLE EDGE.
- COMPACTION OF THE EDGE SHOULD NOT BE DONE WITH THE FIRST PASS OF THE ROLLER WITH THE ROLLER STAYING OFF THE EDGE BY AT LEAST 6 INCHES. THIS IS IN ORDER TO ALLOW THE EDGE MIX TO SLIGHTLY COOL PRIOR TO COMPACTION.
- SHORT SECTIONS OF HANDWORK ARE ALLOWED, WHEN NECESSARY, FOR TRANSITIONS AND TURNOUTS.

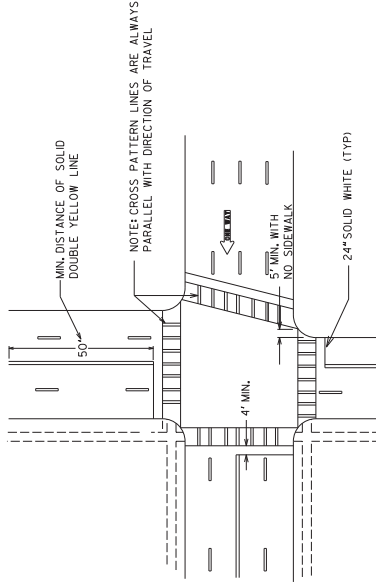
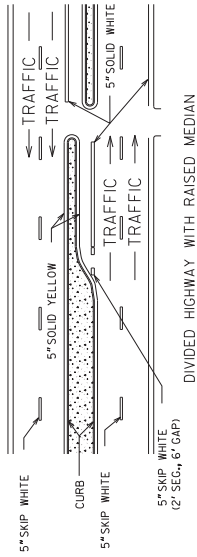
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	CONSTRUCTION DETAIL PAVEMENT EDGE TREATMENT ASPHALT AND CONCRETE PAVEMENT
--	---

DATE	REVISION	REVISED	SCALE	DATE
1-5-11	ANGLE & TOLERANCE	NO SCALE	SEPTEMBER 2011	

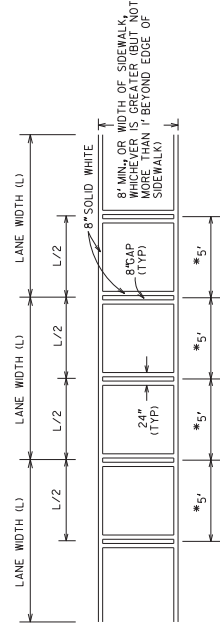
REVISED	DATE	BY	CHECKED	DATE
NO SCALE	SEPTEMBER 2011			

DRAWN	CHECKED	DATE	SCALE	NUMBER
				P-7

STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
G.A.			



TYPICAL LOCATION OF CROSSWALKS AND STOP BARS

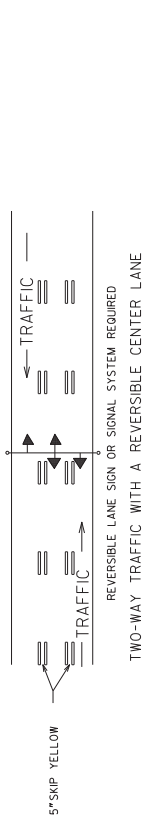


* USE WHERE THE LANE WIDTH EXCEEDS 12' OR WHERE LANE LINES HAVE BEEN OMITTED

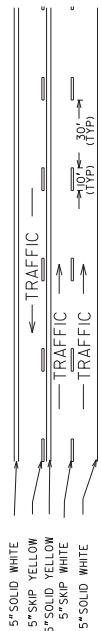
CROSSWALK DETAIL

GENERAL NOTES:

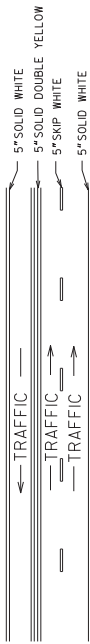
1. SPACING BETWEEN DOUBLE LINES SHALL BE EQUAL TO THE LINE WIDTH.
2. EDGE LINES SHALL BE PLACED A MINIMUM OF 4 INCHES FROM THE NORMAL EDGE OF PAVEMENT.
3. CONTRAST MARKINGS FOR SKIP STRIPING SHALL BE AS SHOWN IN DETAIL T-11B.



REVERSIBLE LANE SIGN OR SIGNAL SYSTEM REQUIRED
TWO-WAY TRAFFIC WITH A REVERSIBLE CENTER LANE



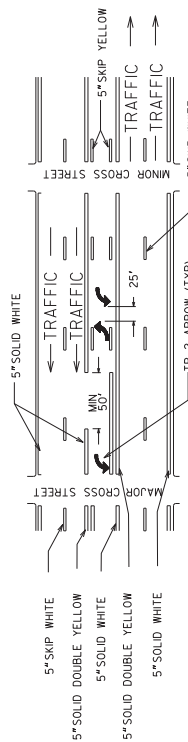
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE PERMITTED TO PASS



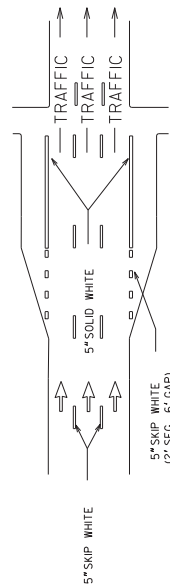
TWO-WAY TRAFFIC WHERE MOTORISTS IN A SINGLE LANE ARE NOT PERMITTED TO PASS



TWO-LANE, TWO-WAY TRAFFIC WITH PASSING PERMITTED



MULTI-LANE, TWO-WAY TRAFFIC WITH SINGLE LANE, TWO-WAY LEFT TURN CHANNELIZATION

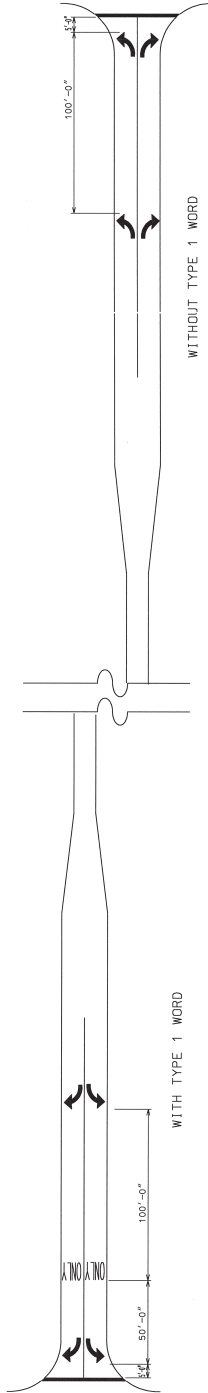


ONE-WAY TRAFFIC WITH ADDED TURN LANES

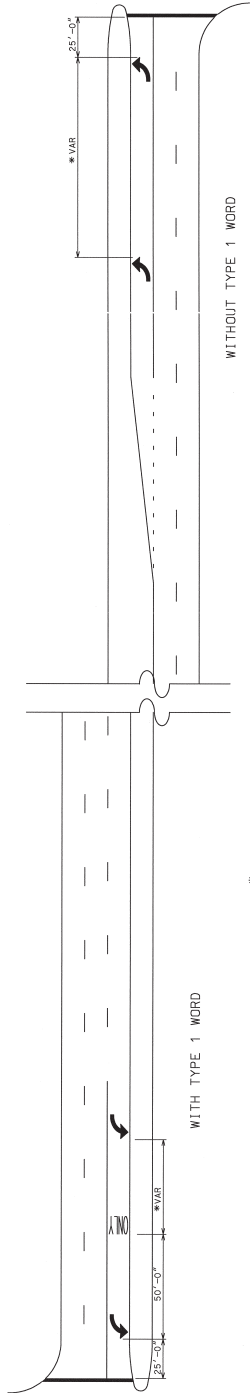
DEPARTMENT OF TRANSPORTATION		STATE OF GEORGIA	
CONSTRUCTION DETAILS			
PAVEMENT MARKING PLACEMENT			
NON-LIMITED ACCESS ROADWAY			
NO SCALE	JANUARY 2000	NUMBER	T-11A
DESIGNED		DRAWN	
CHECKED		TRACED	
		DATE	
		REVISION	
		ADOPTED GENERAL NOTE	3
		DATE	9-5-96

STATE	PROJECT NUMBER	SHEET TOTAL
G.A.		NO. SHEETS

EXIT RAMPS

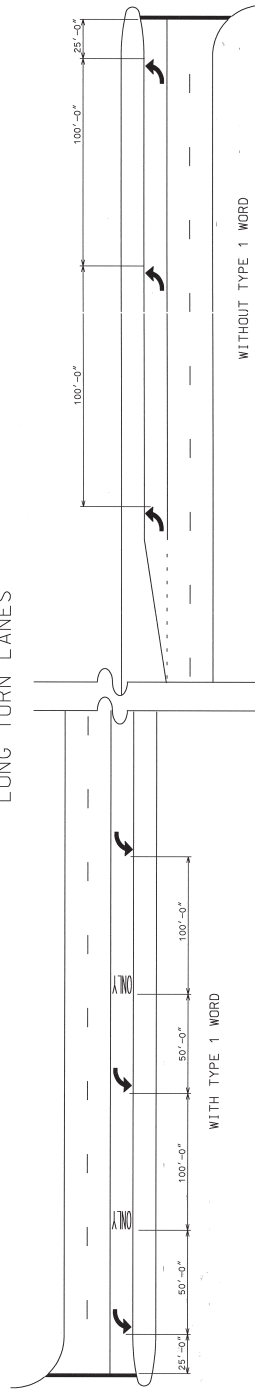


SHORT TURN LANES



* ADJUST TO MEET LOCAL CONDITIONS (NOT LESS THAN 50' NOR MORE THAN 100')

LONG TURN LANES



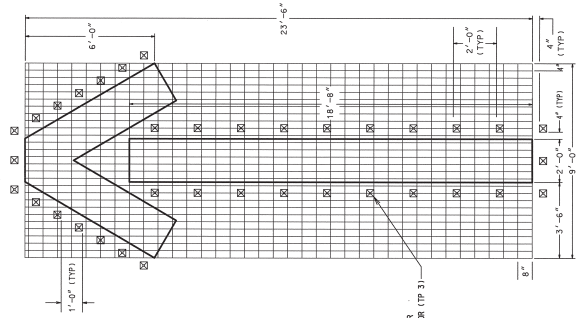
GENERAL NOTES:

1. SPACING OF TYPE 2 ARROW IS REPRESENTATIVE OF SPACING FOR TYPE 1, TYPE 3, TYPE 4, & TYPE 5 ARROWS.
2. ALL TURNING LANES SHALL HAVE A MINIMUM OF 2 ARROWS.
3. GROUND MOUNTED OR OVERHEAD SIGNING SHALL BE SUPPLEMENTED BY TYPE 1 WORD.

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
		DETAILS OF PAVEMENT MARKING ARROW LOCATION
		NO SCALE
		JANUARY 2000

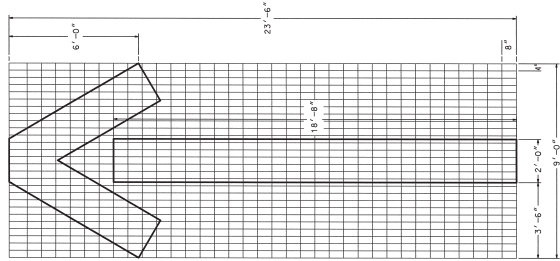
T-12A

STATE	PROJECT NUMBER	PERMIT NO. & SHEETS
G.A.		

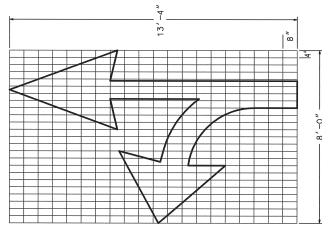


PAVEMENT MARKING, ARROW, WRONG WAY
WHITE
(64.5 SQ. FT.)

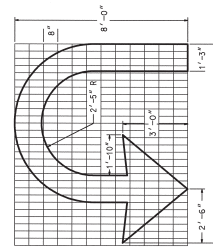
ARROW: WHITE REFLECTORIZED PAINT, THERMOPLASTIC, AS SPECIFIED BY GEORGIA STANDARD SPECIFICATIONS, SECTION 655.



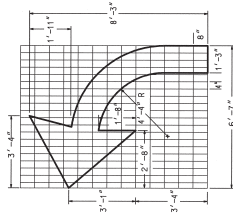
PAVEMENT MARKING, ARROW, TYPE 4
WHITE
(64.5 SQ. FT.)



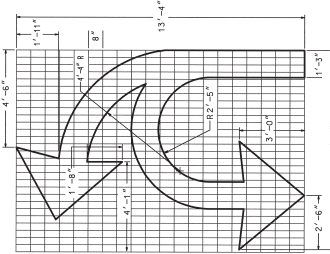
PAVEMENT MARKING, ARROW, TYPE 3
WHITE
(28.5 SQ. FT.)



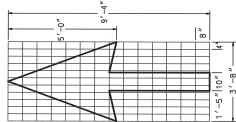
PAVEMENT MARKING, ARROW, TYPE 7
WHITE
(26.0 SQ. FT.)



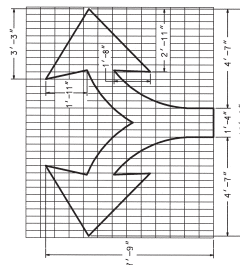
PAVEMENT MARKING, ARROW, TYPE 2
WHITE
(16.0 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 6
WHITE
(42.0 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 1
WHITE
(12.0 SQ. FT.)

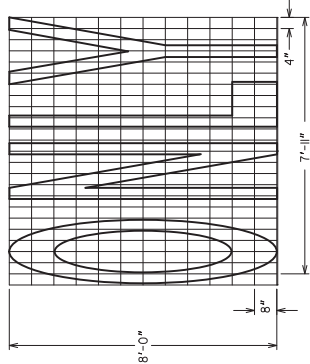


PAVEMENT MARKING, ARROW, TYPE 5
WHITE
(25.5 SQ. FT.)

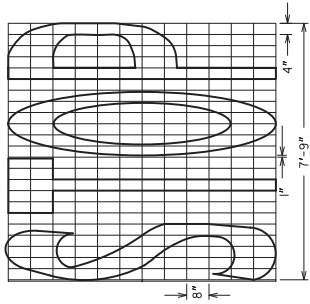
DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION
4-11-00	1. INITIAL DESIGN	OFFICE OF TRAFFIC SAFETY & DESIGN

DETAILS OF
PAVEMENT MARKINGS-ARROWS
NO SCALE
JANUARY 2000

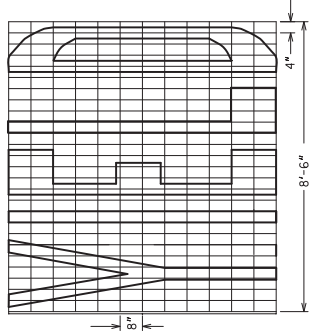
STATE	PROJECT NUMBER	SHEET	TOTAL
GA.		NO.	SHEETS



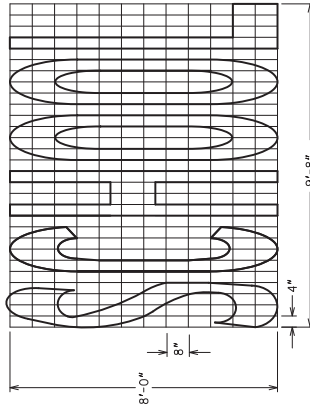
TYPE 1
AREA = 20.8 FT 2



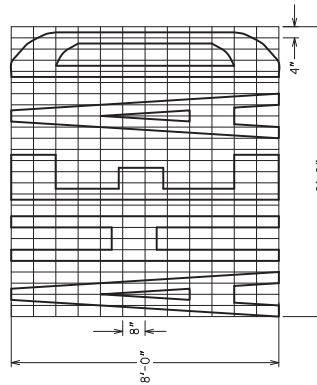
TYPE 2
AREA = 25.4 FT 2



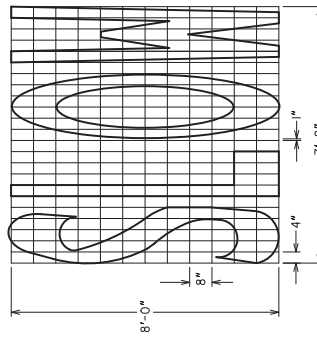
TYPE 15
AREA = 25.4 FT 2



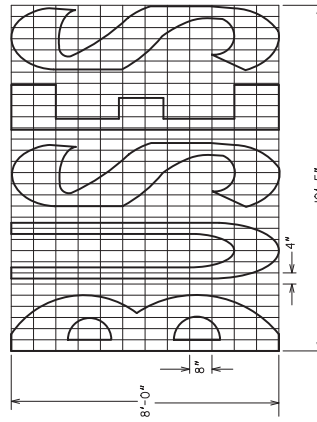
TYPE 3A
(SINGLE LANE)
AREA = 33.5 FT 2



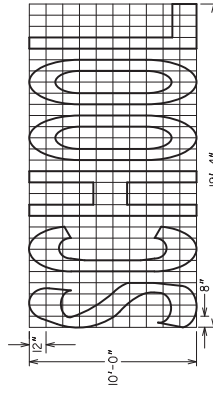
TYPE 4
AREA = 29.1 FT 2



TYPE 5
AREA = 25.4 FT 2



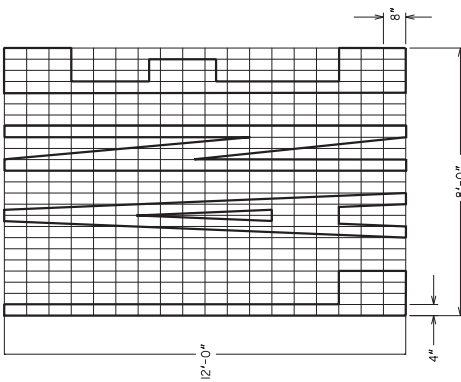
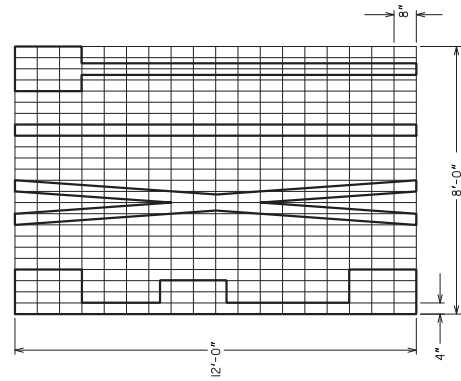
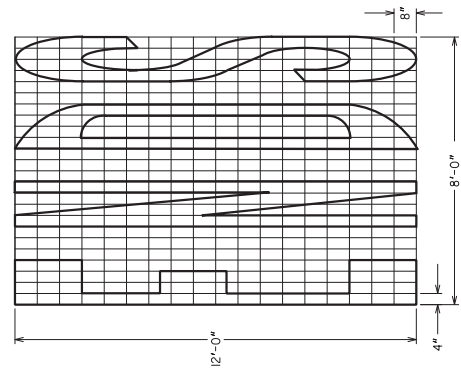
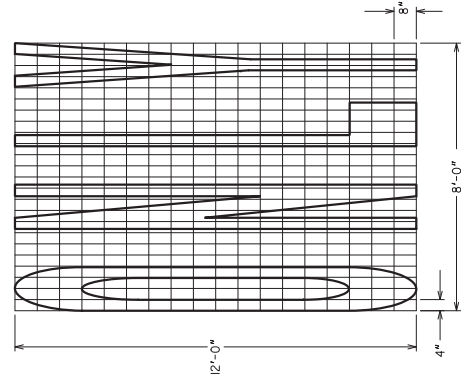
TYPE 6
AREA = 38.1 FT 2



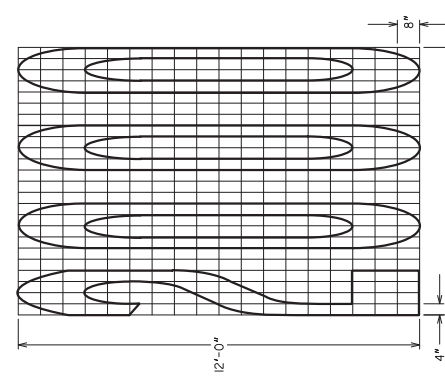
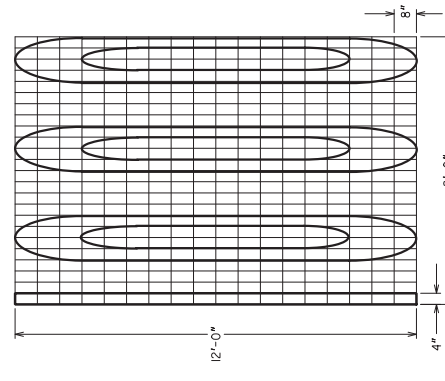
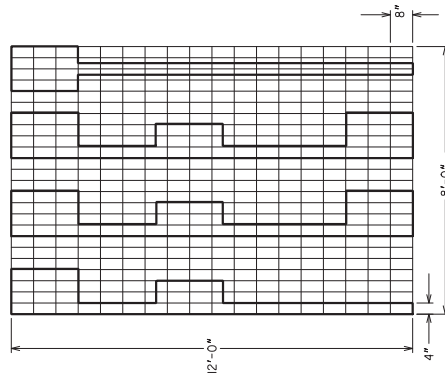
TYPE 3B
(TWO LANES)
AREA = 85.0 FT 2

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		CONSTRUCTION DETAILS	
DETAILS OF PAVEMENT MARKING WORDS		NO SCALE SHEET 1 OF 3 JANUARY 2000	
DATE	REVISION	DESIGNED	NUMBER
9-9-96	RENUMBER TO SH 10P 3	BY	T-13A
		DRAWN	
		CHECKED	

STATE	PROJECT NUMBER	SHEET	TOTAL
GA.		NO.	SHEETS



NOTE: EACH OF THE PAVEMENT WORDS ON THIS DETAIL DEPICTS WORDS BASED ON A DESIGN SPEED OF 50-70 MPH, (A= 12 FT DISTANCE), FOR DESIGN SPEEDS OF 35-45 MPH, (A=8 FT DISTANCE), USE PAVEMENT WORDS WITH THE FOLLOWING DIMENSIONS: VERTICAL 8'-0" AND HORIZONTAL 5'-4". SEE CONSTRUCTION DETAIL T-13C FOR SPEED LIMIT DISTANCE TABLE.



DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
CONSTRUCTION DETAILS DETAILS OF PAVEMENT MARKING WORDS	
NO SCALE	SHEET 2 OF 3
DATE	JANUARY 2000
REVISION	
BY	DESIGNED
REVIEWER TO SH 2 OF 3	DRAWN
ROAD DIM NOTE A=8 FT	CHECKED
9-15-16	NO. T-13B

STATE	PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
GA.			

FEET

1000

ENDS

LANE

TYPE 10

FEET

2000

ENDS

LANE

TYPE 11

FEET

1000

ONLY

EXIT

TYPE 12

FEET

2000

ONLY

EXIT

TYPE 13

SPEED LIMIT (MPH)	DISTANCE (FEET)	
	A	B
35-45	8	80
50-70	12	120

DATE	REVISION
BY	REVISION NUMBER TO SH 3 OF 3
DESIGNED	BY
DRAWN	NUMBER
CHECKED	T-13C

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

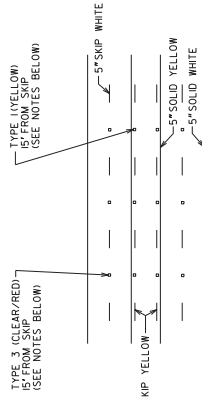
DETAILS OF PAVEMENT MARKING WORDS PLACEMENT

NO SCALE SHEET 3 OF 3 JANUARY 2000

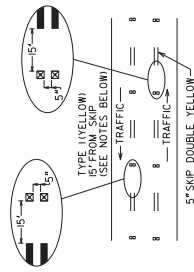
PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
COUNTY		
<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> FOR YELLOW STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY SHEETS, AND ESTIMATE SHEETS, INCLUDES THE AREA WITHIN THE BORDERS AND THE 5" SOLID DOUBLE YELLOW BORDER. FOR WHITE STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY AND ESTIMATE SHEETS, INCLUDES THE AREA WITHIN THE BORDERS AS WELL AS THE 8" SOLID WHITE BORDER. 		
<p>GEORGIA DEPARTMENT OF TRANSPORTATION</p>		
DATE	REVISIONS	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: TRAFFIC OPERATIONS
6/25/04	Modified general note 1	
1/18/05	CHANGED BORDER	
11/21/08	Modified general note 1	
		SIGNING AND MARKING PLANS
		DETAIL OF PAVEMENT MARKING
		HATCHING
		NUMBER
		T -14
		JANUARY 2000
		- NO SCALE -

STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
GA.			

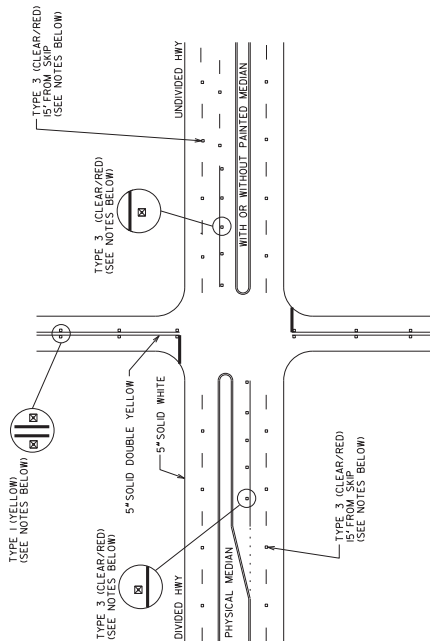
TWO WAY LEFT TURN LANE



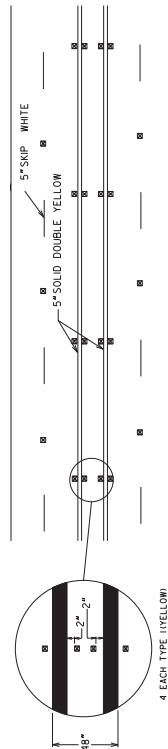
REVERSIBLE LANE



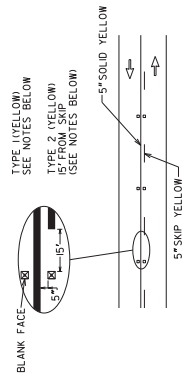
DIVIDED / UNDIVIDED HIGHWAY



4'-0" STRIPED FLUSH MEDIAN

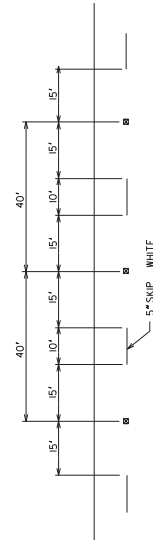


NO PASSING ZONE



- GENERAL NOTES:
1. RAISED PAVEMENT MARKERS SHALL BE SPALED EVERY 40 FT UNLESS OTHERWISE SPECIFIED.
 2. ON SOLID WHITE TURN BAY LINES, SPACING SHALL BE 20 FT.
 3. RAISED PAVEMENT MARKERS SHALL BE OFFSET 5 INCHES FROM SOLID LANE LINES.
 4. SOLID LANE LINES, 3 RAISED PAVEMENT MARKERS SHALL BE ORIENTED TOWARD ONCOMING TRAFFIC.

TYPICAL RPM/STRIPE SPACING



DATE	REV. BY	REVISION
9-15-2016		

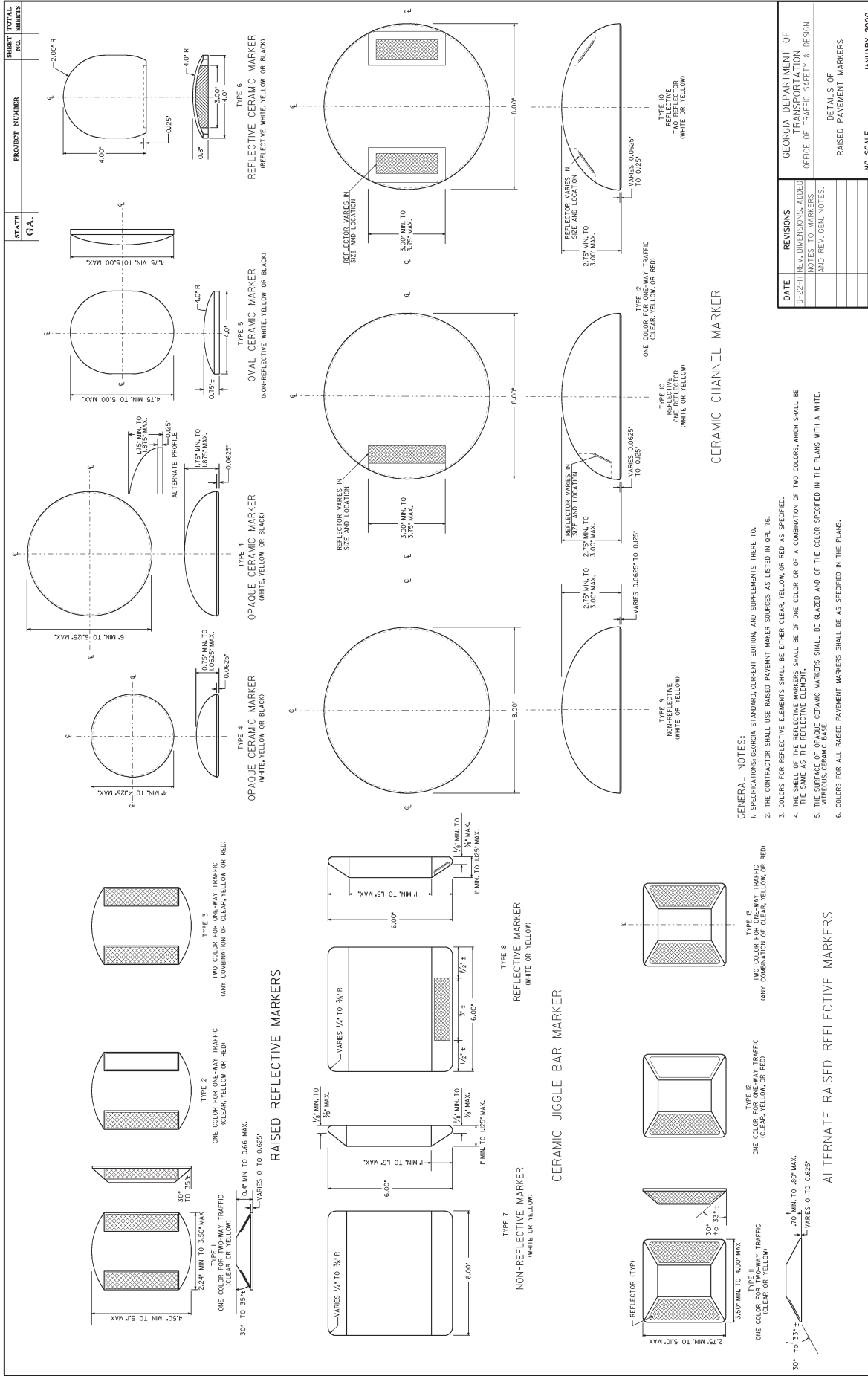
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS

RAISED PAVEMENT MARKER LOCATION
NON-LIMITED ACCESS ROADWAY

NO SCALE REV. AND REDRAWN, JUNE 2015

DESIGNED	NUMBER
DRAWN	T-15A
TRACED	
CHECKED	



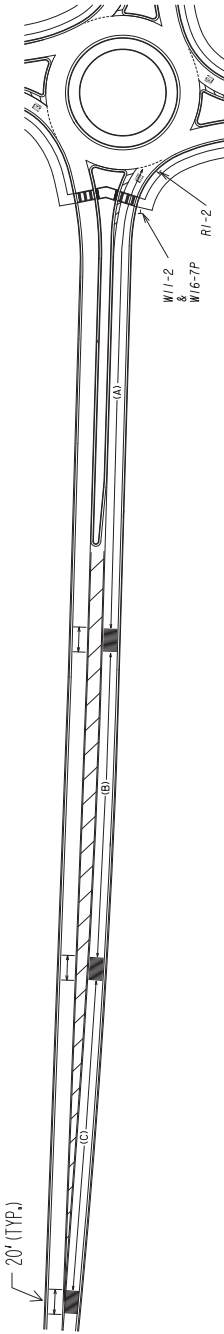
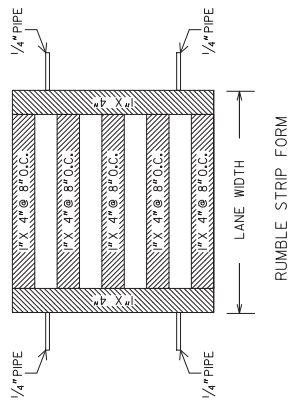
- GENERAL NOTES:**
1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERE TO.
 2. THE CONTRACTOR SHALL USE RAISED PAVEMENT MARKER SOURCES AS LISTED IN O.P. 16.
 3. COLORS FOR REFLECTIVE ELEMENTS SHALL BE EITHER CLEAR, YELLOW OR RED AS SPECIFIED.
 4. THE SHELL OF THE REFLECTIVE MARKERS SHALL BE OF ONE COLOR OR OF A COMBINATION OF TWO COLORS, WHICH SHALL BE THE SAME AS THE REFLECTIVE ELEMENT.
 5. THE SURFACE OF OPAQUE CERAMIC MARKERS SHALL BE GLAZED AND OF THE COLOR SPECIFIED IN THE PLANS WITH A WHITE, VITREOUS, CERAMIC BASE.
 6. COLORS FOR ALL RAISED PAVEMENT MARKERS SHALL BE AS SPECIFIED IN THE PLANS.

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION
9-22-11	REV. DIMENSIONS, ADDED NOTES TO MARKERS AND REV. GEN. NOTES.	OFFICE OF TRAFFIC SAFETY & DESIGN
		DETAILS OF RAISED PAVEMENT MARKERS
		NO SCALE
		JANUARY 2000

T-15C

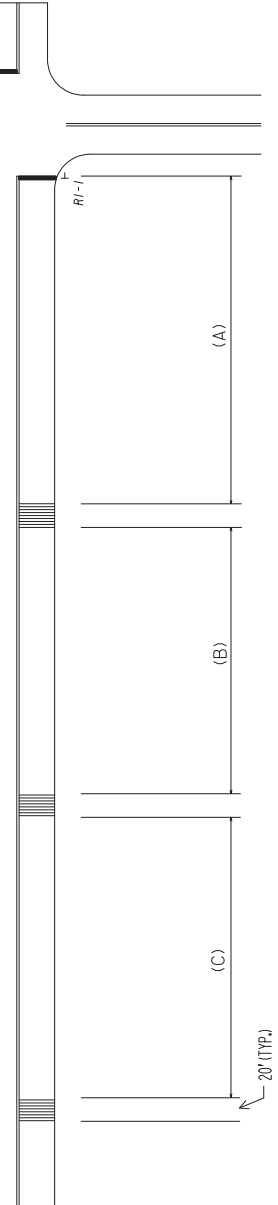
STATE	PROJECT NUMBER	SHEET	TOTAL SHEETS
G.A.			

ROUNDABOUT



STOP CONTROLLED INTERSECTION

- GENERAL NOTES**
1. FORM SHALL BE FULL WIDTH OF LANE (NOTE: NOT TO EXCEED CENTER LINE OR EDGE LINE PAVEMENT MARKINGS INCLUDING IF APPLICABLE, RAISED PAVEMENT MARKERS). FOR MULTILANE APPROACHES, RUMBLE STRIPS SHALL BE PLACED ACROSS BOTH LANES.
 2. SEE SECTION 429 OF THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS FOR MATERIALS, CONSTRUCTION REQUIREMENTS, MEASUREMENT, AND PAYMENT.
 3. FORM SHOWN FOR REQUIRED SIZE AND SPACING OF RUMBLE STRIPS, OTHER MATERIALS FOR CONSTRUCTION OF FORM MAY BE USED AS APPROVED BY THE ENGINEER.
 4. THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING COMPOUND, RUMBLE STRIPS SHALL BE USED ON APPROACHES WITH 50 MPH OR GREATER SPEED LIMIT. FOR APPROACHES WITH SPEED LIMITS LESS THAN 50 MPH, THERMOPLASTIC REFLECTORIZED PAVEMENT MARKING COMPOUND MAY BE USED IN LIEU OF ASPHALTIC CONCRETE IF APPROVED BY THE DISTRICT MAINTENANCE ENGINEER.



SPEED LIMIT	(A)	(B)	(C)
40 MPH		325'	475'
45 MPH	200'	325'	550'
50 MPH		375'	625'
55 MPH		450'	700'
60 MPH	300'	500'	775'
65 MPH		550'	850'

DRAWINGS ARE NOT TO SCALE

AP	ADD ROUNDABOUT DTL.	02-04-19
	POSTED 3'-6" SIGN LOC.	
	CHANGED LANE WIDTH OF	4-08-03
	RUMBLE STRIPS, GEN. NOTES	
	CHANGED REVISION TO 36 IN	3-31-00
	REVISION	
DATE		
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		
CONSTRUCTION DETAILS		
RUMBLE STRIPS: ROUNDABOUTS AND STOP CONTROLLED INTERSECTIONS		
NO SCALE		
JANUARY 2000		
NUMBER	T-19	
DESIGNED		
DRAWN		
TRACED		
CHECKED		

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
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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.

ATTACHMENTS

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

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.

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).

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 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 prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

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.

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.

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.

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).

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.

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.

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 there under. 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 under this contract.

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of 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 conformed 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 the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

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)(ii) 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).

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

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 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 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 may include 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 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).

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.epls.gov/>), which is compiled by the General Services Administration.

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

j. Except for transactions authorized under paragraph (f) 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 may terminate this transaction for cause or default.

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, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.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 in 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.

First Use Date: October 18, 2013

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.”

12-15-2008

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.

A-1

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.

2/26/09

FEDERAL REGISTER / VOL. 45, NO. 194 / FRIDAY, OCTOBER 3, 1980 / NOTICES

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 of federally-assisted construction contract or subcontract. Area covered: Goals for Women apply nationwide.

Goals and timetables

Timetable	Goals (percent)
4-1-78 to 3-31-79	3.1
4-1-79 to 3-31-80	5.0
4-1-80 Until Further Notice	6.9

**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, contract or subcontract.

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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.

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State	Goal (percent)
Georgia:	
035 Augusta, GA:	
SMSA Counties:	
0600 Augusta, GA-SC	27.2
GA Columbia; GA Richmond, SC Aiken;	
Non-SMSA Counties	32.-8
GA Burke; GA Emanuel; GA Glascock; GA Jefferson;	
GA Jenkins; GA Lincoln; GA McDuffie, GA Talferro;	
GA Warren; GA Wilkes; SC Allendale; SC Bamberg;	
SC Barnwell; SC Edgefield; SC McCormick;	
036 Atlanta, GA:	
SMSA Counties:	
0520 Atlanta, GA	21.2
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	
Non-SMSA Counties	19.5
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	
037 Columbus, GA:	
SMSA Counties:	
1800 Columbus, GA – AL	29.6
Al Russell; GA Chattahoochee; GA Columbus	

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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; GA Twiggs

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**

**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;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the 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.

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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.

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- 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

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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).

Revised: July 09, 2018

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;

- (iv) “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, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (v) “Subcontinent Asian Americans,” which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (vi) Women;
- (vii) 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 work force, 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. The

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 than 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:

Vendor Number	Company Name And Address (City and State)	Type Of Work	*Work Code	Race Neutral	Race Conscious	Amount
	ABC Oil Company Atlanta, GA	Diesel Fuel Supplier				\$80,000.00 (60%= \$48,000.00)

* 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: **PI# 0016058, FAYETTE COUNTY**
 LET NO: _____ LET DATE: _____ TOTAL BID: _____
 THE REQUIRED DBE GOAL ON THIS CONTRACT IS: **3%**
 I PROPOSE TO UTILIZE THE FOLLOWING DBE CONTRACTORS:

LIST OF DBE PARTICIPANTS

VENDOR NUMBER	DBE NAME/ ADDRESS (CITY, STATE)	TYPE OF WORK	*WORK CODE	Race Neutral	Race Conscious	AMOUNT
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.

Revised 06-01-2010

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 REQUIRED PERCENTAGE – 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 – This 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 contract 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 CONSCIOUS – 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 CONTACT – 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 contractor 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: _____

DBE REQUIRED %: _____
 % DOLLAR COMPLETE: _____
 % PROJECT COMPLETE: _____

31-Jan		31-Jul	
28-Feb		31-Aug	
31-Mar		30-Sep	
30-Apr		31-Oct	
31-May		30-Nov	
30-Jun		31-Dec	

S = SUPPLIER

SC = SUBCONTRACTOR

APPROVED DBE				VENDOR ID	DESCRIPTION OF WORK	
	S	SC	ORIGINAL SUBCONTRACT AMOUNT	PREVIOUS PAYMENTS	PAYMENTS THIS REPORT	TOTAL PAYMENTS TO DATE
1						
RN						
RC						
2						
RN						
RC						
3						
RN						
RC						
4						
RN						
RC						
5						
RN						
RC						
6						
RN						
RC						
RN COLUMN TOTALS:						
RC COLUMN TOTALS:						

TOTAL % PAID TO DATE: _____

I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT AND SUPPORTING DOCUMENTATION IS ON FILE AND IS 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: _____

FOR DEPARTMENT USE ONLY

THIS DOCUMENT HAS BEEN REVIEWED AT THE PROJECT LEVEL BY:

PRINT NAME: _____
 NAME / TITLE

SIGNATURE: _____
 (Mandatory)

THIS DOCUMENT HAS BEEN REVIEWED AT THE DISTRICT LEVEL BY:

PRINT NAME: _____
 NAME / TITLE

SIGNATURE: _____
 (Mandatory)

FHWA Tips on Evaluating a Commercially Useful Function

Of all the many elements in the DBE program there is one that can have the most detrimental impact on the ability of the prime contractor to meet its contract goal as well as the ability of a recipient to meet its overall goal. This element is commonly referred to as commercially useful function or “CUF”. How can just one element of the program have such an impact achieving the results Congress intended when it established the DBE program?

Both the prime contractor and the State Transportation Agency (STA) receive credit toward the DBE goal (contract and overall) only when a DBE working on a contract performs a CUF. DBEs generally perform work on a contract either as a contractor, a trucker, a regular dealer, or a manufacturer. While each of these categories is evaluated differently when determining whether the DBE has performed a CUF, there is one guiding principle that must be followed. Under the terms established in 49 CFR §26.55, a DBE firm performs a CUF when it is:

"Responsible for execution of the work of the contract or a distinct element of the work . . . by actually performing, managing, and supervising the work involved."

The question contract administrators often face is, “What are the management, supervision, and performance actions of a DBE firm that satisfactorily meet this requirement?” Evaluating these areas will form the basis to render a determination that a DBE has in fact performed a CUF. The contract is the one key reference point for any contract administrator and it is essential for this evaluation process. The contract has an effective description of the work to be performed by a DBE and is a legally recognized document.

The USDOT DBE regulations identify the following key factors that should be analyzed when determining whether a CUF is being performed:

- ❑ Evaluation of the amount of work subcontracted, whether it is consistent with normal industry practices;
- ❑ Whether the amount the firm is paid under the contract is commensurate with the work that is actually being performed to be credited towards the goal;
- ❑ When the DBE furnishes materials, the DBE must be responsible for negotiating the price, for determining the quality and quantity of the material, ordering the material, and paying for it. As a contractor, a DBE firm would typically be hired to both furnish the material and install it with its own labor force;
- ❑ Whether the DBE’s role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In essence, was the role merely a contrived arrangement for the purpose of meeting the DBE contract goal?

In determining whether a DBE is such an extra participant, you must examine similar transactions, particularly those performed by non-DBEs. A DBE must have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the program. The firm’s role must not be a superfluous step added in an attempt to obtain credit towards the goal.

Normal Industry Practice

One of the most important elements to consider in any analysis of whether the DBE is performing a CUF is determining whether its role on the project is consistent with “normal industry practice.” This means, one must determine if the DBE is performing the work or services in the manner normally performed by all contractors—DBEs and non-DBEs. However, even if a DBE is performing pursuant to normal industry practices if those practices, in fact, erode the ability of the DBE to control its work and remain independent, the practice may affect how much can be credited toward the DBE goal and may raise questions about the DBE eligibility.

One general rule of thumb that can be considered is whether a DBE would be performing in the same manner if there was no DBE program. As further evidence of meeting normal industry practice, one must consider if the DBE performs this work on non-federally assisted contracts.

Monitoring

In keeping with normal contract requirements, it is the primary responsibility of the prime contractor to ensure that the DBE is performing a CUF. The STA, as the contracting agency, has oversight responsibility to ensure that the prime contractor has effectively met this responsibility under its contract with the STA.

The STA needs to have sufficient field personnel and general headquarters staff to monitor the performance of work performed by DBEs on all federal aid projects, including those of sub-recipients. Contractors, DBEs, local public agencies, and all employees are required to cooperate in carrying out this responsibility. The STA should establish and enforce monitoring procedures that include the following:

- ❑ Clearly written directives defining the role and interrelationship of the STA’s various departmental staff responsible to monitor and evaluate the contractor’s compliance with the DBE contract provisions;
- ❑ Procedures that spell out specific monitoring activities and responsibilities of a project level monitoring program;
- ❑ Exchange of information between departmental, central and field offices in reporting accomplishments, violations and enforcement; and
- ❑ Procedures for the application of appropriate sanctions once a determination of failure to meet the DBE contract requirements is made.

DBE Performance - CUF

Highway firms certified in the DBE program typically perform in four (4) categories: prime or subcontractor, trucker, regular dealer, and manufacturer. The following is an overview of each category, typical CUF questions, and a list of documents to review.

While DBEs are occasionally awarded prime contracts, DBEs primarily work as subcontractors for the prime. Subcontractors typically perform specific contract items and provide their own labor and materials. To determine whether a DBE subcontractor is performing a CUF, five (5) distinct operations must be considered: management, workforce, equipment, materials, and performance.

These areas must be evaluated to make a CUF determination, and situations need to be reviewed on a case by case basis. Some of the CUF questions cited below may also be quite adaptable to the other three types of work categories.

MANAGEMENT

The DBE must manage the work that has been contracted to its firm. Management includes, but is not limited to:

- Scheduling work operations;
- Ordering equipment and materials;
- Preparing and submitting certified payrolls;
- Hiring and firing employees.

The DBE owner must supervise daily operations, either personally, or with a full time, skilled and knowledgeable superintendent employed by and paid wages by the DBE. The superintendent must be present on the job site and under the DBE owner's direct supervision. The DBE owner must make all operational and managerial decisions for the firm. Mere performance of administrative duties is not considered supervision of daily operations.

Red Flags

Red flags are questionable practices which may warrant further review. The red flags for management operations may include, but are not limited to:

- The DBE owner or superintendent provides little or no supervision of the work;
- The DBE's superintendent is not a regular employee of the firm or supervision is performed by personnel associated with the prime contractor, or another business;
- Key staff and personnel are not under the control of the DBE;
- The DBE's owner is not aware of the status of the work or the performance of the business;
- Inquiries by department or FHWA representatives are answered by the prime contractor.

Typical CUF questions could include:

- Is there a written legal document executed by the DBE to perform a distinct element of work?
- Who does the on-site DBE representative report to?
- Has this individual ever shown up on any other contractor's payroll?
- Has the DBE owner been present on the jobsite?

Typical documentation to evaluate:

- Written contract
- Daily inspection reports and project diaries
- Payrolls

WORKFORCE

In order to be considered an independent business, a DBE must keep a regular workforce. DBEs cannot "share" employees with non-DBE contractors, particularly the prime contractor. The DBE shall perform its work with employees normally employed by and under the DBE's control. All work must be performed with a workforce the DBE controls, with a minimum of **30%** of the work to be performed by the DBE's regular employees, or those hired by the DBE for the project from a source, such as a labor union. The DBE, in all instances, must have direct supervision over all of its employees.

The DBE must be responsible for payroll and labor compliance requirements for all employees performing on the contract and is expected to prepare and finance the payrolls. Direct or indirect payments by any other contractor are not allowed.

The DBE must perform at least 30% of the total cost of its contract with its own workforce. The DBE must not subcontract a greater portion of the work than would be expected on the basis of normal industry practice for the type of work involved.

☐ Red Flags

Some questionable workforce practices which may warrant further review include, but are not limited to:

- ☐ Supervision of DBE employees by another contractor;
- ☐ Actual work is performed by personnel normally employed by the prime contractor or another business;
- ☐ Employees are paid by the DBE and the prime contractor.

Typical CUF questions could include:

- ☐ Who prepares the DBE's certified payroll?
- ☐ Have any of the DBE's employees ever shown up on any other contractor's payroll?
- ☐ Who does the DBE on-site representative contact for hiring, firing or to modify the contract due to site condition changes or change orders?
- ☐ Asking DBE employees on the jobsite who they report to and who signs their checks.

Typical Documents to evaluate:

- ☐ Written contract
- ☐ Daily inspection reports and project diaries
- ☐ Certified payrolls
- ☐ Copies of cancelled checks, if necessary

EQUIPMENT

A DBE may lease specialized equipment from a contractor, excluding the prime, if it is consistent with normal industry practices and at rates competitive for the area. The lease must specify the terms of the agreement. The lease must be for a short period of time and involve a specialized piece of equipment to be used at the job site. The lease may include an operator for the equipment who remains on the lessor's payroll if this is a generally acceptable practice within the industry. The operation of the equipment must be subject to the full control of the DBE.

The DBE is expected to provide the operator for non-specialized equipment and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required. All lease agreements should be approved by the STA prior to the DBE starting the work.

On a case by case basis, the STA may approve the DBE to lease a specialized piece of equipment from the prime. However, the STA must ensure that the lease amount is not counted toward the contract goal. Equipment leased and used by the DBE with payment deducted from the prime contractor's payment (s) to the DBE is not allowed.

☐ Red Flags

Some questionable equipment practices which may warrant further review include, but are not limited to:

- ☐ Equipment used by the DBE belongs to the prime contractor or another contractor with no formal lease agreement;
- ☐ The equipment signs and markings cover another owner's identity, usually through the use of magnetic signs;
- ☐ A DBE trucking business uses trucks owned by the prime contractor.

Typical CUF questions could include:

- ☐ List the major self-propelled (engine) equipment used by the DBE. Determine if the equipment belongs to the DBE. Is it owned or leased?
- ☐ If leased, is there an agreement identifying the terms and parties? Is it signed by the DBE owner?
- ☐ Does the equipment have the DBE's markings or emblems?
- ☐ Is the equipment under the direct supervision of the DBE?
- ☐ Is the operator of the leased equipment the DBE's employee?
- ☐ If the equipment is leased, is the payment for the equipment deducted from the work performed?

Typical Documents to evaluate:

- ☐ Written contract
- ☐ Daily inspection reports and project diaries
- ☐ Leases

MATERIALS

For a DBE contractor (furnish and install) to receive credit for supplying materials, the DBE must perform the following four functions: (1) negotiate price; (2) determine quality and quantity; (3) order the materials; and (4) pay for the material itself. If the DBE does not perform all of these functions, it has not performed a CUF with respect to obtaining the materials, and the cost of the materials may not be counted toward the DBE goal. Invoices for the material should show the payor as the DBE.

While the regulations tell recipients to consider normal industry practices, this does not overrule the requirement that the DBE must perform the four functions enumerated above. For example, even if standard industry practices in certain areas of the country allow no subcontractor to perform all four functions enumerated above (e.g. manufacturers will only negotiate with a prime, thereby eliminating the DBE's ability to negotiate the price), the "furnish" portion of the transaction does not lend itself to the performance of a CUF by the DBE, and credit cannot be given for the acquisition or cost of the materials.

☐ Red Flags

Some questionable material supply practices which may warrant further review include, but are not limited to:

- ☐ Materials for the DBE are ordered, or paid for, by the prime contractor;
- ☐ Two party checks or joint checks are sent by the prime to the supplier or manufacturer, instead of sent by the DBE;
- ☐ Materials or supplies necessary for the DBE's performance are delivered to, billed to, or paid by another business;
- ☐ Materials are delivered to the jobsite by a party separate from the DBE;
- ☐ Payment for materials is deducted by the prime contractor from payments to the DBE for work performed;
- ☐ A DBE prime contractor only purchases materials while performing little or no work.

Typical CUF questions could include:

- ☐ Is there a written contract executed by the DBE to perform a distinct element of work? Is the work to be performed by a DBE a "furnish and install" item of work?
- ☐ Who makes arrangements for delivery of materials?
- ☐ Who are the material invoices made out to?
- ☐ Who scheduled delivery of materials?
- ☐ In whose name are materials shipped?
- ☐ Who actually delivered the materials?
- ☐ If two party checks are used, who are the parties identified as payable to?

Typical Documentation to evaluate:

- ☐ Written contract
- ☐ Delivery tickets
- ☐ Invoices
- ☐ Daily inspection reports and project diaries

PERFORMANCE

The DBE must be responsible for the performance, management and supervision of a distinct element of the work, in accordance with normal industry practice (except where such practices are inconsistent with the DBE regulations).

□ Red Flags

Some questionable performance practices which may warrant further review include, but are not limited to:

- Work is being done jointly by the DBE and another contractor;
- The work to be performed by the DBE is outside of the DBE's known experience or capability;
- Any portion of the work designated to be performed by a DBE subcontractor is performed by the prime contractor or any other firm;
- The DBE is working without a subcontract approved by the department, except in the case of trucking;
- A DBE prime contractor subcontracts more than 50% of the contract value;
- The agreement between the prime contractor and DBE artificially inflates the DBE participation;
- An agreement that erodes the ownership, control or independence of the DBE subcontractor;
- A DBE works for only one prime contractor, or a large portion of the firm's contracts are with one contractor;
- The volume of work is beyond the capacity of the DBE.

Typical CUF questions could include:

- Does the DBE on-site representative effectively manage the job site without any interference from the prime contractor?
- Does the DBE appear to have control over methods of work on its contract items?
- Is the DBE actually scheduling work activities, material deliveries and other related actions required for execution of the work?
- Has any other contractor performed any amount of work specified in the DBE's contract?

Typical Documents to evaluate:

- Written contract
- Daily inspection reports or project diaries

DBE TRUCKING FIRMS

To be certified in the DBE program as a trucking firm, the DBE is required to own and operate at least one fully licensed, insured, and operational truck used on the contract. To perform a CUF, a DBE must also be responsible for the management and supervision of the entire trucking operation or a specified portion of the trucking operation to which it has been committed. There cannot be a contrived arrangement for the purpose of meeting a DBE goal.

A DBE can supplement its fleet by leasing a truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE has exclusive use of and control over the truck. This requirement 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. Otherwise, the DBE does not receive full credit for DBE participation.

Leased trucks must display the name and identification number of the DBE. The DBE trucker must also hold the necessary, where appropriate, license, hauling permit, etc., as required by the State to transport material on public highways.

To count the value of DBE trucking services toward a contract goal, the following can occur:

- ❑ The DBE may lease trucks from another DBE, including an owner-operator that is certified as a DBE. The DBE can count the entire value of services performed by these DBE trucks.
- ❑ The DBE may also lease trucks from non-DBEs and owner--operators. The DBE can count the value of these trucking services up to the value of services performed by the DBE trucks used on the contract.
- ❑ DBE participation can be counted for the value of services of non-DBE trucks that exceed the value of the services performed by DBE trucks only in the amount of the fee or commission a DBE receives as a result of the lease arrangement.

In order for the STA or subrecipient to monitor the performance of a DBE trucking firm, the work to be performed must be covered by a subcontract approved by the STA prior to performing the work. Additional documentation required when the DBE leases equipment is a valid lease to be provided to the STA for appropriate action. To be considered valid, the lease must include such items as the lessor's name, list of trucks to be leased by vehicle identification number (VIN), and the agreed upon amount of the cost and method of payment. It should be the responsibility of the DBE to provide the operator's fuel, maintenance and insurance for all leased trucks.

Typical CUF questions could include:

- ❑ Do the trucks used on the project belong to the DBE?
- ❑ If leased, is there a formal lease identifying the terms and parties?
- ❑ Are the rates appropriate?
- ❑ Is there an approved subcontract?
- ❑ If so, who are the parties?
- ❑ Are the DBE's employees shown on the certified payrolls?

Typical Documentation to evaluate:

- ❑ Subcontracts
- ❑ Leases
- ❑ Payroll records
- ❑ Daily inspection reports and project diaries

DBE REGULAR DEALERS

In order for a firm to operate as a regular dealer, it must perform CUF, and must also comply with other requirements applicable to regular dealers. It must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. In addition, a regular dealer is a firm that owns, operates, or maintains 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, except as noted below.

It is important to make a distinction between a regular dealer and a firm that supplies a product on an *ad hoc* basis in relation to a particular contract or contractor. A regular dealer has a regular trade with a variety of customers. One of the key considerations of being a regular, established dealer is the presence of an inventory of materials and/or supplies. A regular dealer assumes the actual and contractual responsibility for the provision of the material and/or supplies.

A firm may be a regular dealer in bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the firm 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.

If a DBE meets the requirements of a regular dealer, it may count 60% of the cost of the materials, if reasonable, toward the contract goal. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers.

Typical CUF questions could include:

- ❑ Does the regular dealer have an established storage facility and inventory?
- ❑ Does the dealer have a business that sells to the public on a routine basis in the product being supplied?
- ❑ Does the business stock the product for use on the project as a normal stock item?
- ❑ Who is delivering and unloading the material?
- ❑ Is distribution equipment owned or leased, long term by the DBE, used in delivering the product?
- ❑ For bulk items, where does the material come from? Does the DBE have a distribution agreement?

Typical Documentation to evaluate:

- Purchase Orders
- Invoices
- Delivery Tickets

DBE MANUFACTURERS

As described in 26.55(e)(1)(ii)), 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. Examples of such items could be a concrete ready mix plant, a crushing operation, or a steel or concrete fabricating plant.

Typical CUF questions could include:

- Is the business's primary function to manufacture construction products?
- Does the business stock the product altered for this project as a normal stock item?
- Is the quality of the materials controlled by the DBE?
- Does the DBE purchase the raw material used in its plant?

Typical Documents to evaluate:

- Purchase orders
- Bill of lading
- Shipping tickets

Sanctions for Compliance and Enforcement

The prime contractor is ultimately responsible for ensuring that a DBE performs a CUF. Failure of a DBE to perform a commercially useful function should result in the STA taking specific definitive actions to enforce the CUF requirement of the contract. Some of the actions an STA could take include, but are not limited to, the following:

- Deny or limit credit towards the contract goal;
- Require the prime to make GFE to replace the DBE to meet the goal on remaining work;
- Withhold progress payments;
- Terminate the contract;
- Reduce the contractor's prequalification limit.

Some questions that could be part of an evaluation procedure:

- If a CUF was not performed by the DBE, what action was taken to correct the deficiency?
- Did the action taken correct the deficiency?

List of Typical Documentation to Collect:

- Executed contracts

- ❑ Material/ supply agreements
- ❑ Invoices of materials/supplies
- ❑ Equipment titles of ownership
- ❑ Equipment lease/rental agreements
- ❑ Hauling tickets
- ❑ Delivery tickets
- ❑ Canceled checks
- ❑ Project inspection/diaries
- ❑ Payroll records

When a DBE is presumed not to be performing a CUF, the DBE may present evidence to rebut this presumption. Decisions regarding CUF determinations are subject to review by concerned operating administrations, such as the FHWA. However, CUF decisions are not appealable to USDOT, they are contract administration issues.

CUF & Certification

Certification and commercially useful function are separate and distinct issues. Certification decisions address the nature of a firm's ownership and structure while CUF primarily concerns the role a firm has played in a particular transaction. Even if the certification process has identified the DBE's ability to perform as a contractor, regular dealer, or manufacturer, it is important to review and determine what and how a DBE actually performs during the performance of the contract.

A DBE's repeated failure to perform a CUF may raise questions regarding the firm's control, as it relates to independence, and perhaps ownership. If there is evidence of a pattern of failing to perform a CUF that raises serious issues with the firm's ability to control the work and its independence from the non-DBE firm, the STA should address this matter. An STA may commence a proceeding under 26.87 to determine the continued eligibility of the DBE firm.

In cases of deliberate attempts to circumvent the intent of the DBE program, or fraud, these actions may lead to criminal prosecution of both the prime contractor and the DBE. If fraud is suspected the STA should contact the DOT Office of Inspector General.

COMMERCIALLY USEFUL FUNCTION CHECKLIST

Project Name and Number: _____

Prime Contractor: _____

DBE Firm's Name: _____

Type of Operation

- Contractor
 Trucker
 Manufacturer
 Regular Dealer

Date Contract/Subcontract/Agreement Approved: _____

Start Date(s) of DBE's Work: _____ Date DBE to Complete Work: _____

Date of review:

Describe the type of work observed: _____

Check off each item used in conducting this review. The documents checked need not be attached to the review report, but should be filed with the report for easy reference if needed. If the answer is no to any of the following questions provide an explanation in the general notes at the end of the report.

1. Management:

a. Is there a legal contract executed by the DBE to perform a distinct element of work?
 Yes No

b. Name of the on-site representative: _____

c. On-site representative reports to: _____

d. Has the on-site representative been identified as an employee of the DBE?
 Yes No

e. Has this individual ever appeared on any other contractor's payroll?
 Yes No

f. Does the DBE on-site representative effectively manage the job without interference from any other non-DBE contractor?
 Yes No

g. Who does the DBE on-site representative contact for hiring, firing, or to modify the contract? _____

h. Has the DBE owner been present on the jobsite?
 Yes No

i. Does the DBE appear to have control over methods of work on its contract items?
 Yes No

- j. Is the DBE maintaining its own payroll?
 Yes No
- k. Who prepares the DBEs certified payroll? _____
- l. Is the DBE actually scheduling work activities, material deliveries and other related actions required for prosecution of the work?
 Yes No
- m. Did the DBE subcontract any items or portions of the work to any other firm?
 Yes No
 If yes, what % was subcontracted? _____%
 Name of the firm _____

2. Equipment

- a. List the major self-propelled (engine) equipment used by the DBE: _____
- b. Does the equipment have the DBE's markings or emblems?
 Yes No
 If another firm's markings are discernible, note the name: _____
- c. Is the DBE's equipment?
 Owned Leased from _____
- d. If leased, is there a formal agreement identifying the terms and parties?
 Yes No
- e. Is the equipment under the direct supervision of the DBE?
 Yes No
- f. Is the operator of the leased equipment the DBE's employee?
 Yes No
 If not the DBE's, whose employee is he/she? _____
- g. If the equipment is leased, is the payment for the equipment deducted from the work performed?
 Yes No

3. Workforce:

- a. List the name of DBE's crew as observed during the operation described above:

- b. Has any of this crew ever shown up on any other contractors' payroll?
 Yes No
- c. Does the DBE's workforce know who they work for?
 Yes No

4. Materials:

- a. Is the DBE contracted to furnish and install a contract item?
 Yes No
- b. Is the quality and quantity of the materials controlled by the DBE?
 Yes No
- c. If two party checks used, who are the parties identified as payable to:

- d. Who makes arrangements for delivery of materials? _____
- e. Material Invoices made out to: _____
- f. Who scheduled delivery of materials? _____
- g. In whose name area materials shipped? _____
- h. Does the prime contractor direct whom the DBE is to obtain the material from and at what price?
 Yes No

5. Performance:

- a. Does the DBE appear to have control over methods of work on its contract items?
 Yes No
- b. Has any other contractor performed any amount of work specified in the DBE contract?
 Yes No

6. Other Work categories:

Truckers:

- a. Are DBE trucks present on the job site? Yes No
 Are they Owned Leased from _____
- If leased, is there a formal agreement identifying the terms and parties?
 Yes No
- b. Are the rates appropriate?
 Yes No
- c. Is there an approved subcontract or written agreement?
 Yes No
 Who are the parties? _____

- d. Are DBE employees shown on the certified payroll?
 Yes No

Regular Dealers:

- a. Does the regular dealer have an established storage facility and inventory?
 Yes No
- b. Does the dealer have a business that sells the product being supplied to the public on a routine basis?
 Yes No
- c. Does the business stock the product being supplied as a normal stock item?
 Yes No
- d. Is the quantity and quality of the materials controlled by the DBE?
 Yes No
- e. In whose name are the materials shipped? _____
- f. Who is delivering and unloading the material? _____
- g. Is the distribution equipment used in delivering the product the DBE's?
 Yes No
 If so, is it: Owned Leased
- h. If leased, is it a long term lease and not a lease developed specifically for the project?
 Yes No

7. Manufacturer

- a. Is the business's primary function to manufacturer construction products?
 Yes No
- b. Does the business stock the product manufactured or altered for this project as a normal stock item?
 Yes No
- c. Is the quality of the materials controlled by the DBE?
 Yes No

General Notes:

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STATE OF GEORGIA**

First Use 2013 Specifications: November 01, 2013

Updated July 01, 2018

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.

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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.

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FEDERAL AID CERTIFICATION
(English Project)

First Use Date 2013 Specifications: November 22, 2013
Revised: June 8, 2016

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, Region4
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

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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.

DEPARTMENT OF TRANSPORTATION
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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.)

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)

Joint Bidder:

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)

Joint Bidder:

(Print Company Name)

By _____ (Seal)
Corporate President/Vice President or
Individual Owner or Partner (Strike
through all except the one which applies.)



Contractor's Name:	
Solicitation/Contract No./ Call No. or Project Description:	

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:

Federal Work Authorization User Identification Number
(EEV/E-Verify Company Identification Number)

Date of Authorization

Name of Contractor

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

Printed Name (of Authorized Officer or Agent of Contractor)

Title (of Authorized Officer or Agent of Contractor)

Signature (of Authorized Officer or Agent)

Date Signed

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE

____ DAY OF _____, 20 ____

[NOTARY SEAL]

Notary Public

My Commission Expires: _____

**DEPARTMENT OF TRANSPORTATION STATE OF
GEORGIA**

SPECIAL PROVISION

Utility Conflicts

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.

First Use Date 2001 Specifications: May 17, 2006

Revised: December 8, 2008

January 10, 2014

**DEPARTMENT OF TRANSPORTATION
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SUPPLEMENTAL SPECIFICATION

Section 107—Legal Regulations and Responsibility to the Public

Delete Subsection 107.21 and Substitute the following:

107.21—Contractor’s Worksite Utility Coordination Supervisor

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:

Associated Damage Consultants

Phone: 706.234.8218 or 706.853.1362

Georgia Utility Contractors Association

Phone: 404.362.9995

Section 107—Legal Regulations and Responsibility to the Public

Georgia Utilities Protection Center

Phone: 678.291.0631 or 404.375.6209

H B Training & Consulting

Phone: 706.619.1669 or 877.442.4282 (Toll Free)

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.

Section 107—Legal Regulations and Responsibility to the Public

E. Emergency Response Plan

The WUCS shall prepare an Emergency Response Plan within 30 days following the receipt of the Notice to Proceed. The WUCS shall clearly mark and highlight the gas, water and other pressurized pipeline shut-off valves and other utility services including overhead switch locations on the utility plans; and prepare a chart to indicate the location of each site (Street address or intersections), the utility company or operator of the facility with emergency contact information and the working condition of the device to facilitate prompt shut-off. The WUCS shall post the Emergency Response Plan in an area readily accessible to the Department. 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 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.

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 will 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.

Section 107—Legal Regulations and Responsibility to the Public

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: <http://www.dot.ga.gov/doingbusiness/contractors/Pages/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.

Revised November 8, 2005

Revised November 7, 2006

Revised July 15, 2008

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

SPECIAL PROVISION

Section 161—Control of Soil Erosion and Sedimentation

Add the following:

161.1 General Description

This Work includes using control measures 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 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 WECS certification course.

Design Professional as defined in the current GAR100002 NPDES permit.

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—Temporary Silt Fence](#)

[Section 205—Roadway Excavation](#)

[Section 434—Sand Asphalt Paved Ditches](#)

[Section 441—Miscellaneous Concrete](#)

[Section 603—Rip Rap](#)

[Section 700—Grassing](#)

[Section 710—Permanent Soil Reinforcing Mat](#)

[Section 715—Bituminous Treated Roving](#)

[Section 716—Erosion Control Mats \(Blankets\)](#)

Erosion control measures contained in the Specifications include:

Erosion Control Measure	Section
Temporary Check Dams	163.3.05.J
Bituminous Treated Mulch	700.3.05.G
Concrete Paved Ditches	441
Bituminous Treated Roving	715
Erosion Control Mats (Blankets)	716
Erosion Control Check Dams	162
Grassing	700
Maintenance of Temporary Erosion Control Devices	165
Permanent Soil Reinforcing Mat	710
Reclamation of Material Pits and Waste Areas	160
Rip Rap	603
Restoration or Alteration of Lakes and Ponds	166
Sand-Asphalt Ditch Paving	434
Sediment Basin	163.3.05.C
Silt Control Gate	163.3.05.A
Silt Retention Barrier	170
Sod	700.3.05.H & 700.3.05.I
Mulch	163
Temporary Grassing	163.3.05.F
Temporary Silt Fence	171
Temporary Slope Drains	163.3.05.B
Triangular Sediment Barrier	720
Silt Filter Bag	719
Organic & Synthetic Material Fiber Blanket	713

B. Referenced Documents

Erosion and Sedimentation Pollution Control Plans (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 or correction shall be completed within 72 hours.

B. Erosion and Sedimentation Pollution Control Plan

1. Project Plans

An erosion and sedimentation 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 preparing erosion and sedimentation control plans for construction access roads and or haul roads borrow pits, excess material pits, etc (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 access roads, haul roads, borrow pits, 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 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.

161.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

161.3 Construction Requirements

161.3.01 Personnel

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 designee 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:

1. Be available or have an approved representative available 24 hours a day and have access to the equipment, personnel, and materials needed to maintain erosion control and flooding control.
2. Inform the Engineer in writing whenever the alternate WECS assumes project responsibilities.
3. Ensure that erosion control deficiencies are corrected within seventy two (72) hours or immediately during emergencies. Deficiencies that interfere with traffic flow, safety or downstream turbidity are to be corrected immediately.
4. During heavy rain, have the construction area patrolled day or night, any day of the week to quickly detect and correct erosion or flooding problems before they interfere with traffic flow, safety, or downstream turbidity.
5. 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."](#)
6. Maintain and submit for project record, "As-built" Erosion and Sedimentation 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.
7. Ensure that both the WECS and the alternate meet the criteria of this Subsection.
8. The WECS shall maintain a current certification card for the duration of the project. Recertification of the WECS will be required prior to the expiration date shown on the Certification card in order to remain as Certified Personnel and the WECS for the project.

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, shall 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 Sections 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 Sections 105.05 and 108.05

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

Coordinate the temporary and permanent erosion control provisions in this Specification with the permanent erosion control provisions in the Contract to ensure economical, effective, and continuous erosion control throughout the construction and post-construction periods.

At all times that land disturbing activity is underway, a person meeting the requirements of, "certified person" by the GSWCC (Level IA) must be on the project.

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 or 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 or concurrently with clearing and grubbing operations.
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 conditions that develop during construction but were unforeseen during the design stage.
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.

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. Complete each roadway cut and embankment continuously, unless otherwise specified in the Contract or ordered by the Engineer.
2. Maintain the top of the earthwork in roadway sections throughout the construction stages to allow water to run off to the outer edges. .
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
 - 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 are 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. General Requirements

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:

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.

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.

NOTE: Never allow the surface area of erodible earth material exposed at one time to exceed 1 acre (0.4 ha).

1. Do not allow the disturbed exposed erodible area to exceed 1 acres (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.
2. 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.)
3. 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 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.

4. 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.

Install temporary grass or permanent grass according to seasonal limitations and Specifications. When temporary grass is used, use the overseeding method ([Subsection 700.3.05.E.4](#)) when planting permanent grass.

3. 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.

4. 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.

5. 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.

6. Do not allow the grading (height of cut or fill) to exceed the operating range of the grassing equipment.

7. 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.

8. Use temporary erosion control measures to:

To correct conditions that develop during construction but were unforeseen during the design stage.

To use as needed before installing permanent erosion control features.

To temporarily control erosion that develops during normal construction practices but are not associated with permanent control features on the Project.

9. When conditions warrant, such as unfavorable weather (rain event), the Engineer may require more frequent intervals for this work.

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 Contractor 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

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.

If a construction Project has separate contractors, the Prime Contractor shall maintain the erosion control features at grading sites as acceptable to the Engineer until the Contract is accepted. If any erosion control devices are damaged by any contractor either by neglect, by construction methods, or any other reasons, including acts of nature, they shall be repaired within 24 hours by the Prime Contractor at no cost to the Department.

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 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 a WECS

If a designated WECS is not maintained or if the Contractor does not comply with this Specification, cease activities except traffic control and erosion control work. Monies that are due or that may become due also may be withheld according to the Specifications

B. Failure to submit reports

A non-refundable deduction will be taken from the schedule below whenever the WECS fails to submit completed reports required by [Subsection 167.3.05.C](#) in accordance with the provisions of this specification.

C. Failure to Comply with Specifications

If the Contractor fails to comply with any of the requirements of this Specification, all activities shall 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.

D. Receipt of a Consent Order or Notice of Violation, etc

Regulatory enforcement actions will be resolved including at a minimum the 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.

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.

First Use Date: January 17, 2014

Section 163—Miscellaneous Erosion Control Items

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
- Sediment basins
- Baled straw sediment barrier and check dams
- Rock filter dams
- Stone filter berms
- Stone filter rings
- Other temporary erosion control structures shown on the Plans or directed by the Engineer

This work also includes applying mulch (straw or 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—Temporary Silt Fence

Section 500—Concrete Structures

Section 603—Rip Rap

Section 700—Grassing

Section 715—Bituminous Treated Roving

Section 720 – Triangular Silt Barrier

Section 800—Coarse Aggregate

Section 801—Fabrics

Section 822—Emulsified Asphalt

Section 860—Lumber and Timber

Section 863—Preservative Treatment of Timber Products

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.

Delete Subsection 163.2 and substitute the following:

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:

Material	Section
Mulch	893.2.02
Temporary Silt Fence	171
Concrete Aprons and Footings shall be Class A	500
Riprap	603
Temporary Grass	700
Triangular Silt Barrier	720
Lumber and Timber	860.2.01
Preservative Treatment of Timber Products	863.1
Corrugated Polyethylene Temporary Slope Drain Pipe	AASHTO M252 or M294

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.
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. Sediment Basins

Construct sediment basins according to the Plans at the required location, or as modified by the Engineer.

1. Construct the unit complete as shown, including:
 - Grading
 - Drainage
 - Rip rap
 - 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 Barrier (baled straw)

Construct sediment barrier (baled straw) according to the Plan details. Use rectangular, standard size baled straw in mechanically produced bales.

The following items may be substituted for sediment barrier (baled straw)

1. Type B Silt Fence.
2. Triangular Silt Barrier.
3. 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.
4. 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/ft³ (112 kg/m³). 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.
5. 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/ft³ (22 kg/m³). 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).
6. Compost Filter Sock: Use general use compost (see Subsection 893.2.02.A.5.b) in circular bales at least 18 in diameter. Use compost baled with photo-degradable plastic mesh 3 mils thick with a maximum 0.25 in X 0.25 in (6 mm X 6 mm) openings. 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). 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.

7. Compost Filter Berm: Use erosion control compost (see Subsection 893.2.02) to construct an uncompacted 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.

G. Mulch

When stage 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 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. Temporary Check Dams

Temporary check dams are constructed of the following materials;

- Stone plain rip rap according to Section 603 or of sand bags as in Section 603 without Portland cement. (Place plastic filter fabric on ditch section before placing rip rap.)
- Fabric (Type C silt fence)
- Hay Bales

Temporary 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.

L. Retrofit

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 Trap

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.

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. Sediment Basins

Sediment basins are measured for payment by the entire structure complete, including construction, maintenance, and removal. Measurement also includes:

- Earthwork
- Drainage
- Spillways
- Baffles
- Rip rap
- Final cleaning to remove the basin

Permanent and temporary grassing for sediment basins is measured separately for payment.

D. Diversion Channels

Diversion channels 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.

E. 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.

F. Mulch

Mulch (straw or hay, or erosion control compost) is measured for payment by the ton (megagram).

G. Baled Straw Sediment Barrier, Baled Straw Check Dam and Fabric Check Dams

Baled straw sediment barrier, baled straw check dams, and fabric check dams are measured by the linear foot (meter). When the Contractor substitutes a product allowed in [Subsection 163.3.05.D](#) for baled straw sediment barrier or when the Engineer directs this substitution, the product will be measured by the linear foot (meter).

H. Rip Rap Check Dams

Rip Rap Check Dams are measured per each which will include all work necessary to construct the check dam including plastic filter fabric placed beneath the rip rap or sand bags.

I. 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.

J. 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.

K. Inlet Sediment Trap

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.

L. 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.

Delete Subsection 163.4.M. and substitute the following:

M. 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.

N. 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.

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. Sediment Basin

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. Diversion Channel

Diversion channels are not paid for separately; they are included in the price bid for the drainage structure or for other Contract Items.

E. 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.

F. 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.

G. Baled Straw Sediment barrier, Baled Straw Check Dams and Fabric Check Dams (Type C Silt Fence)

Baled straw sediment barrier, baled straw check dams and fabric check dams (type C silt fence), complete in place and accepted are paid for at the Contract Unit Price bid per linear foot (meter). Payment is full compensation for constructing, and removing (when directed) the baled straw sediment barrier or either check dam.

When the Contractor substitutes any product allowed in [Subsection 163.3.05.D](#) for baled straw sediment barrier or when the Engineer directs this substitution, payment is made at the bid price per linear foot (meter) for baled straw sediment barrier.

H. Rip Rap Check Dams

Rip Rap Check Dams are paid for per each. Payment is full compensation for all materials, construction, and removal. Reused stone plain rip rap or sandbags are paid for on the same basis as new items. Filter fabric required under rip rap check dams is included in the price bid for each check dam.

I. Construction Exits

Construction exits are paid for per each. Payment is full compensation for all materials including the required geotextile, construction, and removal.

J. Retrofit

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.

K. Inlet Sediment Trap

Inlet sediment traps are paid for per each. Payment is full compensation for all materials, construction, and removal.

L. 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.

Delete Subsection 163.5.M. and substitute the following:

M. 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 stone Type 3 riprap and #3 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).

N. 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.

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:

Item No. 163	Construct and remove silt control gate, type__	Per each
Item No. 163	Construct and remove temporary pipe slope drains	Per linear foot (meter)
Item No. 163	Construct and remove temporary sediment barrier or baled straw check dam	Per linear foot (meter)
Item No. 163	Construct and remove sediment basin type__, Sta. No.____	Per each
Item No. 163	Construct and remove Fabric Check Dam - type C silt fence	Per linear foot (meter)
Item No. 163	Construct and remove Rip Rap Check Dams ,Stone Plain Rip Rap/Sand Bags	Per Each
Item No. 163	Construction exit	Per each
Item No. 163	Construct and remove retrofit, Sta. No.____	Per each
Item No. 163	Construct and remove rock filter dam	Per each
Item No. 163	Construct and remove stone filter berm	Per linear foot (meter)
Item No. 163	Construct and remove stone filter ring	Per each
Item No. 163	Construct and remove inlet sediment trap	Per each
Item No. 163	Temporary grass	Per acre (hectare)
Item No. 163	Mulch	Per ton (megagram)

163.5.01 Adjustments

General Provisions 101 through 150.

First Use Date 2013 Specifications: March 22, 2013

Revised: March 18, 2013

Revised: October 22, 2013

Revised: May 2, 2014

Revised: September 2, 2014

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SUPPLEMENTAL SPECIFICATION
Section 167—Water Quality Monitoring**

Delete 167 and substitute the following:

167.1 General Description

This Specification establishes the Contractor’s responsibility to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Infrastructure Permit No. GAR 100002 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 WECS certification course.

Water Quality Sampling – as used within this specification, the term “monitoring” shall be inclusive of the acts of detecting, noting, discerning, observing, 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 2013 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

EPD Rule Chapter 391-3-7

GSWCC Certification Level IA Course

OCCA 12-7-1

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 GSWCC 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 GAR100002 Permit onsite at all times.

167.3.02 Equipment

Provide equipment necessary to complete the Work or as directed.

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 GAR100002. Note that GAR100002 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):

Conduct inspections on the following areas daily:

- 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
- 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 of the site that have undergone ~~where~~ final stabilization or have established a crop of annual vegetation and a seeding of target perennials appropriate for the region ~~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.

Correct 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 are to be corrected as soon as practical but in case later than seven (7) calendar days following the inspection.

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)
- 6) NTU of each sample & analytical method
- 7) Location where each sample was taken (station number and left or right offset)
- 8) Identification of whether a sample is a receiving-water sample or an outfall sample
- 9) Project number and county
- 10) References and written procedures, whenever available, for the analytical techniques or methods used: whether the samples were taken by automatic sampler, rising-stage sampler, or manually (grab sample)
- 11) The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results
- 12) A clear note if a sample exceeds 1000 NTUs by writing “exceeds 1000 NTUs” prominently upon the report.

b. 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 GAR100002 Permit, a written justification must be included in the report as required at Part IV.D.4.a.(6) of the GAR100002 Permit.

c. 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 EPD resulting in enforcement actions.

3. Rainfall Data Reports:

Record the measurement of rainfall 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.

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 incidentals, 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:

Item No. 167	Water quality inspections	Per month
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Water Quality Monitoring and Sampling will be paid per each qualifying rainfall sampling event.

Payment will be made under:

Item No. 167	Water quality monitoring and sampling	Per each
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167.5.01 Adjustments

Revised: November 5, 2013
First Use: December 13, 2013

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

SUPPLEMENTAL SPECIFICATION

Section 201 – Clearing and Grubbing Right of Way

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.

Revised: November 5, 2013
First Use: December 13, 2013

- 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

EROSION CONTROL PLAN FOR MAINTENANCE RESURFACING PROJECTS

This plan has been established to identify the proper procedure and techniques to be utilized during land disturbing activities associated with roadway maintenance projects. Erosion and sediment loss will be minimized by limiting land disturbing activities to less than one (1) acre of exposed material at a given time and providing immediate stabilization. This stabilization is accomplished by a best management practice that requires a hydroseeding application, which includes a mixture of bonded fiber matrix, Polyacrylamide (PAM), grass seed, lime and fertilizer. The implementation of this BMP provides both a temporary and permanent stabilization. This method along with proper installation has proven successful in reducing sediment loss. The hydroseeding application is listed as a Type II Wood Fiber Blanket within the contract.

By Federal Highway definition, the shoulder area serves as part of the roadway by providing a safe recoverable area for errant motorists. Additionally, the shoulder provides a drainage area which allows water to sheet flow away from the roadway surface as standing water can potentially present a hazard to motorist. The contractor is required to provide a Level 1A certified Worksite Erosion Control Supervisor (WECS) who shall be onsite at all times during land disturbing activities. State waters may or may not be identified in these contracts. This certified individual shall be able to identify these waters and use sound conservation and engineering practices, along with safe and effective changes to operation, in order to reduce and minimize erosion and impact to these waters and surrounding environment. Extreme caution shall be used while filling adjacent to or perpendicular to a live stream and/or culverts. The contractor shall immediately apply the Type II Wood Blanket for permanent stabilization in these areas. The contractor shall also use sound judgment when scheduling work during or with the threat of any inclement weather. In the event of rain, a Type I Wood Fiber Blanket (mat) shall be utilized as permanent stabilization in case of this type emergency. The Type II Wood Fiber Blanket referenced above requires a 24 hour drying time after application and shall not be applied to saturated soil.

The initial cutting of shoulder build up prior to the roadway resurfacing operation will be kept to a minimum and excess material shall be removed daily without disturbance to remaining vegetation. The filling operation associated with replacing a safe shoulder transition within these type projects should not disturb any existing natural vegetation which is allowed to remain in place. This operation shall be kept to a limit of less than one (1) acre of exposed soil. Permanent stabilization must be installed as soon as practical and once the areas have been permanently stabilized with the required hydroseeding application the contractor may continue. **At the end of each day, the WECS shall ensure a continuous, 100 percent coverage of the bonded fiber matrix application has been applied to all exposed areas. At the beginning of each work day, the contractor shall review previously installed stabilization measures for the entire project and repair any damaged or deficient areas prior to initiating additional land disturbing activities.**

Fill areas and contractors equipment shall not encroach on natural watercourses, waters of the State, or adjoining property. Equipment must cross streams by the means of an existing roadway culverts and bridges. Refueling or routine servicing of equipment shall not be performed within 200 foot of any state water or natural water course. The contractor shall also be responsible for stabilization of equipment staging areas and areas utilized for loading and off-loading of equipment. These areas will be included into the total disturbance allowed. The contractor shall be responsible for obtaining permission from the property owner if these staging areas are outside the State rights-of-way. Regardless, these areas should be kept to a minimum and the WECS shall ensure proper daily stabilization.

For projects that include shoulder paving, the operation shall be performed as follows: milling type equipment shall be used to trench the existing shoulder; waste material shall be discharged directly into trucks and removed from the shoulder and roadway and properly disposed of in accordance with all local, state and federal regulations. Shoulder paving material shall be placed into the open trench to the level of the adjoining pavement in the same working day.

The following GDOT special provisions and specification sections relate specifically to maintenance resurfacing projects. This detail is intended to serve as a reduced erosion control plan for these type projects and to serve as a map to the specifications should further information be required.

Section 161, Control of Soil Erosion and Sedimentation (July 15, 2008)

- A)** As stated in section 161.3.05.I, General Requirements; no more than 1 acre of exposed earth shall be allowed at any time.
- B)** Wood Fiber Blanket, Type II is required daily for permanent stabilization.
- C)** In case of a rain event, Wood Fiber Blanket, Type I, will be installed and is for emergency use only.

Section 700, Grassing (October 23, 2008)

- A)** As stated in section 700.3.05 D.1.A, Agricultural Lime may be used as a filler material in mixed fertilizer in lieu of inert material, Agricultural Lime is to be spread uniformly at the rate determined by laboratory soil tests.
- B)** D.2 requires mixed grade fertilizer at 400 lbs per acre of 19-19-19.
- C)** 700.3.05 I; is the application of Polyacrylamide (PAM) for permanent stabilization.

Section 713, Organic and Synthetic Material Fiber Blanket (October 31, 2005)

- A)** Section 713.1.01 defines the Wood Fiber Blanket, Type II and the 100 percent coverage requirement.
- B)** The bonded fiber matrix is applied at a rate of 3000 lbs per acre as stated in section 713.2.D

The Special Provision (Construction Details for Resurfacing and Shoulder Widening Projects) should be referred to for Maintenance resurfacing projects which include shoulder extension paving. (March 11, 2005)

- A)** Section C, Shoulders; states that trenching consists of the removal, satisfactory disposal and replacement of existing shoulder material. This operation is required to be completed to the level of existing pavement in the same working day.

105.07 Special Provision

PI 0016058 Fayette County Federal Resurfacing Program – FY 2019

Section 105-Control of Work

Delete Sub-Section 105.07 and substitute the following:

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. Previously let contracts in the area include, but are not limited to:

NONE CURRENTLY KNOWN

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.

108.08 Special Provision

PI 0016058 Fayette County Federal Resurfacing Program – FY 2019

Section 108-Prosecution and Progress

Add the following to Subsection 108.08

C. Intermediate Completion Schedule

An overall Completion Date is established for this Project. However, it is necessary to complete certain portions of The Work at an earlier time.

For this Project, the following items of work and corresponding intermediate completion times are required:

1 Earth Shoulder Rehabilitation

Failure to complete earth shoulder filling work within thirty (30) Calendar days after completion of paving operations of the roadway will result in the assessment of Liquidated Damages at a rate of \$500.00 per calendar day.

2 Cover Milled Area

Failure to cover each milled area, within three (3) calendar days per milled area will result in the assessment of Liquidated Damages at a rate of \$1,000.00 per calendar day.

3 Complete Paving Operations

Failure to complete all paving operations, excluding patching, (e.g. shoulder clipping, asphalt shoulder widening, milling, leveling, resurfacing, etc.) within ninety (90) calendar days from the start date of any of the paving operations will result in the assessment of Liquidated Damages at a rate of \$500.00 per calendar day.

4 Permanent Striping Placement

Failure to ensure placement of permanent striping does not begin until fifteen (15) calendar days after completion of the final surface course and completion within forty-five (45) calendar days after completion of the final surface course will result in the assessment of liquidated damages at a rate of \$1,000.00 per calendar day.

5 Lane Closures

Failure to adhere to Special Provision 150.6 Lane Closures will result in the assessment of liquidated damages at a rate of \$500.00 per hour.

6 Traffic Loop Operation

Traffic Loops removed during the resurfacing shall be replaced and operational within forty-eight (48) hours. Failure in having replacement traffic loops operational within the time specified will result in the assessment of liquidated damages at a rate of \$1,000.00 per calendar day.

These rates are in addition to Liquidated Damages that may be assessed in accordance with Subsection 108.08 for failure to complete the overall project.

150.6 Special Provision

PI 0016058 Fayette County Federal Resurfacing Program – FY 2019 Section 150-Traffic Control

Add the following to Subsection 150.6

C. Lane Closures

Lane closures are not allowed between dusk and dawn (night closures). No weekend work will be permitted without prior approval from the governing agency.

The following additional traffic control restrictions apply for this project during School Days, which are defined as August 5, 2019 to May 22, 2020:

1. Fayetteville

- Grady Avenue: No work on Grady Avenue between the hours of 7:00am to 9:00am and 2:00pm to 4:00pm.

2. Fayette County

- No work allowed on Sundays.
- Sandy Creek Road: No work on Sandy Creek Road from SR 74 to Lee's Mill Road from 8:00am to 9:00am and 3:00pm to 4:00pm.
- Peachtree Parkway: No work on Peachtree Parkway between the hours of 7:00am to 8:00am and 2:00pm to 3:00pm.
- Hampton Road: No work restrictions.

3. Peachtree City

- Weekend work allowed with written approval from the City.
- Robinson Road: No work on Robinson Road from Calloway Crossing to S Peachtree Parkway between the hours of 7:00am to 8:00am and 2:00pm and 3:00pm.

Failure to reopen lanes within the times specified time will result in the assessment of penalties as specified in Special Provision 108.08.C.5.

First use; March 20, 2009
July 8, 2013

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

SPECIAL PROVISION

Section 161—Control of Soil Erosion and Sedimentation

Retain as written and add the following:

161.3.05.1

10. The WECS shall be onsite at all times land disturbing activities are occurring.

Office of Maintenance

July 8, 2013
Revision Date: December 17, 2010

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

Section 231—Miscellaneous Construction, Unpaved Roads and Streets

Delete Section 231 and substitute the following:

Section 231—Miscellaneous Construction, Unpaved Roads, Streets, and Driveways

231.1 General Description

This work consists of grading, excavating, removing and disposing of excavated material and compaction of subgrade. The work also includes all incidental work required to prepare an area so that the unpaved roads, streets and driveways can be surfaced to tie into the mainline of the resurfacing and/or widening projects, according to Project Details.

Perform items of work and furnish all items of material, equipment, and labor, including incidentals, required to complete this work to the satisfaction of the Engineer.

231.1.01 Definitions

General Provisions 101 through 150.

231.1.02 Related References

A. Standard Specifications

Section 108—Prosecution and Progress

Section 205—Roadway Excavation

Section 400—Hot Mix Asphaltic Concrete Construction

B. Referenced Documents

General Provisions 101 through 150.

231.1.03 Submittals

General Provisions 101 through 150.

231.2 Materials

Ensure that materials required in preparing the unpaved roads, streets, and driveways meet the applicable requirements of Sections 205 of the Specifications. Bituminous prime is not required for this work.

231.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

231.3 Construction Requirements

Perform all work described herein and according to Plan Details. Assume responsibility for furnishing and setting all required construction stakes and establishing lines, slopes and profile grades as directed by the Engineer.

231.3.01 Personnel

General Provisions 101 through 150.

231.3.02 Equipment

General Provisions 101 through 150.

231.3.03 Preparation

General Provisions 101 through 150.

231.3.04 Fabrication

General Provisions 101 through 150.

231.3.05 Construction

Ensure that construction methods and equipment required to complete the work is approved by the Engineer and conforms to applicable portions of Section 108 and Section 205.

231.3.06 Quality Acceptance

General Provisions 101 through 150.

231.3.07 Contractor Warranty and Maintenance

General Provisions 101 through 150.

231.4 Measurement

This work is measured by each unpaved area to be surfaced as specified in the Project Details and Plans.

231.4.01 Limits

General Provisions 101 through 150.

231.5 Payment

Payment for this Item, complete and accepted, will be made at the Contract Unit Price Per Each. Payment will be full compensation for furnishing all materials, all labor, tools, equipment and incidentals necessary to complete the Item satisfactorily. Asphaltic concrete will be paid for under the asphalt item provided in the Contract.

Payment will be made under:

Item No. 231	Miscellaneous Construction, Unpaved Roads, Streets, and Driveways	Per each
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231.5.01 Adjustments

General Provisions 101 through 150.

Office of Maintenance

June 19, 2017

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
SPECIAL PROVISION

Section 647—Traffic Signal Installation

Delete Section 647 and substitute the following:

647.1 General Description

This work consists of furnishing materials and erecting a traffic signal installation including all traffic signal equipment, poles, bases, wires and miscellaneous materials required for completion of the installation. Ramp Meters are defined as a form of traffic signalization and all general provisions for traffic signalization are applicable unless otherwise noted in the Plans and Specifications.

It also includes all test periods, warranties and guarantees as designated in subsequent sections, and response to maintenance and operational issues as described in subsequent sections.

Apply for, obtain and pay for all utility services, communications services to, and pole attachment permits required by all utility owners that are necessary for the signal installation and operation required in the Plans. The Contractor will be responsible for establishing utility services and ongoing monthly costs related to utility services until final acceptance of the signal project.

Upon completion of a successful “burn in” or operational testing period for the signal installation, the Contractor will be responsible for an orderly and uninterrupted transfer of these services and permits to the local government or other jurisdiction that will be responsible for subsequent maintenance and operation.

647.1.01 Definitions

General Provisions 101 through 150.

647.1.02 Related References

A. Standard Specifications

Section 106—Control of Materials

Section 107—Legal Regulations and Responsibility to the Public

Section 108 —Prosecution and Progress

Section 150 —Traffic Control

Section 500—Concrete Structures

Section 501—Steel Structures

Section 535—Painting Structures

Section 615—Jacking or Boring Pipe

Section 631—Changeable Message Signs

Section 636 – Highway Signs

Section 639—Strain Poles for Overhead Sign and Signal Assemblies

Section 645—Repair of Galvanized Coatings

Section 680—Highway Lighting

Section 681—Lighting Standards and Luminaires

Section 682—Electrical Wire, Cable, and Conduit

Section 700—Grassing

Section 755—Electrical Work

Section 800—Coarse Aggregate

Section 801—Fine Aggregate

Section 832—Curing Agents

Section 833—Joint Fillers and Sealers

Section 850—Aluminum Alloy Materials

Section 852—Miscellaneous Steel Materials

Section 853—Reinforcement and Tensioning Steel

Section 854—Castings and Forgings

Section 861—Piling and Round Timber

Section 870—Paint

Section 886—Epoxy Resin Adhesives

Section 910—Sign Fabrication

Section 911—Steel Sign Posts

Section 912—Sign Blanks and Panels

Section 913—Reflectorizing Materials

Section 915—Mast Arm Assemblies

Section 922—Electrical Wire and Cable

Section 923—Electrical Conduit

Section 924—Miscellaneous Electrical Materials

Section 925—Traffic Signal Equipment

Section 926 – Wireless Communication Equipment

Section 927 – Wireless Communication Installation

Section 935—Fiber Optic System

Section 936—CCTV System

Section 937—Video Detection System

Section 939—Communications & Electronic Equipment

Section 940—Navigator Integration

B. Referenced Documents

National Electrical Manufacturers Association (NEMA) Traffic Control Systems Standards No. TS 1

NEMA Traffic Control Systems Standards No. TS 2

AASHTO Roadside Design Guide

The Manual on Uniform Traffic Control Devices (MUTCD), current edition

National Electrical Code

National Electrical Safety Code (NEC)

GDT 7 Determining Maximum Density of Soils

GDT 24a Determining the Theoretical Minimum Dry Density of Soils or Soil Aggregates containing > 45% Retained on the No. 10 Sieve

GDT 24b Determining the Theoretical Minimum Dry Density of Soils or Soil Aggregates containing > 5% Retained on 2-Inch Sieve using a 5.5 Pound Rammer and a 12 Inch Drop

GDT 67 Family of Curves Method for Determining Maximum Density of Soils

647.1.03 Submittals

Use only equipment and materials that are on the Department's Qualified Products List (QPL)

These products have been evaluated by the Office of Traffic Operations and have proven their capability of meeting the appropriate Georgia Department of Transportation Specification. Any of these products may be used without sampling or pre-testing. The Contractor shall submit a letter to the Field Engineer, stating which QPL items they will use. Submittal letter shall include QPL number and product description. The Field Engineer and/or department designee must ascertain that the construction item is the same material identified on the appropriate QPL and will acknowledge receipt of these items in the project diary or as required by the Construction manual.

Written approval is required from the State Traffic Engineer or District Engineer prior to beginning any work on the traffic signal installation and/or installing the proposed on the work site.

A. Review

For all traffic signal material submittals, the Engineer's review of the material should be completed within forty five (45) days from the date of receipt of the submission unless otherwise specified. The State Traffic Engineer or District Engineer will advise in writing, as to the acceptability of the material submitted.

The State Traffic Engineer or District Engineer may determine that submitted equipment is approved, in which no further action is required. In the event, materials submitted for use are rejected the Contractor is required to re-submit materials, within fifteen (15) days of notification of material failure or rejection. Resubmittal of subsequent materials for review will be considered the start point of a new approval cycle as described.

The Department reserves the right to be reimbursed by the Contractor for reviewing any equipment and/or component submittals after a second submittal of equipment proposed for use on the project.

B. Submittal Costs

No separate measurement or payment will be made for submittal costs. All costs associated with reproduction of submittal material documents, samples and mailing expensed will be the responsibility of the Contractor and are not subject to reimbursement by the Department. All submittal material becomes the property of the Department and will not be returned to the Contractor.

C. Steel Strain Pole, Concrete Strain Pole or Steel Pole Certification

Instruct the supplier or manufacturer of the strain poles or steel poles with traffic signal mast arms to submit a certification, including mill certificates to:

Department of Transportation
Office of Materials and Research
15 Kennedy Drive
Forest Park, Georgia 30297

Include the following in the certification:

- A statement that the items were manufactured according to the Specifications, including the Specification Subsection number
- Project number and P.I. number

Instruct the supplier or manufacturer to send copies of the transmittal letter to the Engineer.

Prepare Shop Drawings and related signal strain pole design calculations with the following criteria, 5% sag and 18 foot signal head height. Provide "bending moment at yield" to determine the foundation size according to the signal strain pole foundation drawings. Submit all Shop Drawings and related signal strain pole design calculations to the Traffic Engineer. The Traffic Engineer will forward to the State Bridge and Structural Design Engineer for review and approval. Obtain written approval prior to pole fabrication and installation. Upon acceptance of the pole certification provide one copy of the design calculations and shop drawings to the agency responsible for maintaining the traffic signal installation.

All pole drawings shall include roadway and pole elevations.

Show all dimensions and material designations of the designs on the Drawings. See Subsection 501.1.03 for the certification procedure for poles and anchor bolts.

D. Signal Item Certification

Only Equipment and/or material on QPL shall be submitted for certification. All others will be rejected. Submit four (4) copies of material catalog product numbers and descriptions to the Engineer. One copy of all submittals is to be provided to the maintaining agency. Reference the project number, P.I. number, and QPL number, for the following traffic signal items:

- Signal heads
- LED Signal Modules
- Mounting hardware
- Controllers
- Cabinet assemblies
- Battery Backup System (BBS)
- Detectors
- Monitors (conflict/IVDS)
- Cable
- Load switches
- Blank-out signs
- Lane use signals
- Preformed cabinet bases

- Other related signal equipment (including but not limited to Conduit, Pull boxes, Ground Rods, Enforcement Indications, etc.)

E. Test Results Submittal

Submit the results of the testing of the following items to the Engineer. A copy of the test result submittals shall be provided to the maintaining agency.

- Loop Detector Testing
- Signal Cable Testing
- Interconnect Cable Testing
- Pre-emption Testing
- Controller and Cabinet Testing from Manufacturer (Including conflict monitor)
- Traffic Signal Monitor
- Any other operational testing required by the Engineer

F. Mast Arm Pole Chart

For locations with mast arm pole installations, submit a “Mast Arm Pole Chart” for review and approval by the State Bridge and Structural Design Engineer. The “Mast Arm Pole Chart” shall also include a sketch on an 8 ½ inch x 11 inch (216 mm x 279 mm) sheet of paper showing the following:

- Curb lines
- Location of mast arm pole based on utility information and field location verified by Contractor. (Final location of mast arm pole must meet the criteria for setback from the road as specified in the Roadside Design Guide by AASHTO and in the Standard Detail Drawings.
- Distance from both adjacent curbs to mast arm pole
- Distance along mast arm from pole to curb and from curb to each proposed signal head
- Directional arrow
- Street names
- Position of Luminaries

Label the sketched distances. Once this pole chart is approved, the Contractor shall use the distances measured to the proposed signal head locations when ordering the mast arm to ensure that the mast arm is fabricated with holes for signal head wiring in the correct locations.

647.2 Materials

647.2.01 Delivery, Storage, and Handling

A. State-supplied Equipment

For projects where traffic signal equipment is to be supplied by the Georgia Department of Transportation, obtain State-supplied traffic signal equipment from the Traffic Signal Electrical Facility (TSEF):

1. Contact the Engineer by phone or correspondence within one week after receiving the Notice to Proceed and arrange for a date, time and location to pick up the signal equipment and materials from the Traffic Signal and Electrical Facilities (TSEF).

2. Sign GDOT’s Warehouse Issue Request Form 592 to accept delivery of the State-supplied equipment from GDOT’s Traffic Signal Equipment Warehouse. Initial Form 592 if equipment is received from a GDOT District Field Office.
3. Inspect the equipment to ensure that it is operating properly and perform any operational tests within ten (10) calendar days after receiving the equipment.
4. Before installation, and within ten (10) calendar days, certify to the Engineer in writing that the State-supplied equipment was received in good condition.
5. Notify the Engineer in writing if the State-supplied equipment is defective. The State Signal Engineer will replace the defective State-supplied equipment.
6. If no written dissent is received after ten (10) calendar days or if equipment is installed in the field, the Engineer will consider this equipment to be satisfactory and accepted.
7. The Contractor shall supply new in like and kind State approved equipment to replace State-supplied equipment that is damaged or lost.

B. Signal Equipment

See Section 925 for signal equipment specifications.

The signal equipment, components, supplies, or materials used in traffic signal installation may be sampled and tested if not previously approved by the Department.

Test according to the Specifications and the Sampling, Testing, and Inspection Manual using one or more of the following methods:

- Have the Department use their own facilities.
- Have the supplier or manufacturer use their facilities with an authorized Department representative to witness the testing.
- Provide independent laboratory test results indicating compliance with Department Specifications referenced in Subsection 647.1.02, “Related References”, of this document.
- When testing by the Department is required, supply the item to the Department. Acceptance of materials tested does not exclude further testing or waive warranties and guarantees required by the Specifications.

C. Cable

Use cable conforming to Section 680, Section 922, and Section 925 and the appropriate IMSA, NEMA, or UL Specifications for the wire or cable.

Obtain pole attachment permits required by local utility companies or pole owners to allow joint use for signal cable, hardware, or other auxiliary devices.

D. Interconnect Communications Cable

- 1 Use fiber optic interconnect cable or spread spectrum radio for all new interconnected signal systems. See Section 935 for fiber optic cable or spread spectrum information, specifications, marking and installation and testing techniques.
- 2 Use copper cable only as directed by the Engineer or where specifically shown in the Plans. Refer to Subsection 647.3.05, “Construction”, of this document for installation.

E. Conduit on Structures

Use galvanized rigid steel materials for all exposed conduit for cabling. Use galvanized rigid steel (GRS) conduit on the exterior of signal poles and other structures and to house signal conductors for the entire length from the weather head on

the pole to the interior of the cabinet or to the pull box and ground conduit using an approved grounding bushing.(see Subsection 647.3.05V).

647.3 Construction Requirements

Refer to Subsection 107.07 of the Specifications regarding proper conduct of The Work.

647.3.01 Personnel

For the definition of a qualified electrician, see Subsection 755.1.01.

647.3.02 Equipment

Use machinery such as trucks, derricks, bucket vehicles, saws, trenchers, and other equipment necessary for the work and approved by the Engineer prior to installation operations.

647.3.03 Preparation

Utility Permits

A. Application

Apply for, obtain, and pay for utility services and pole attachment permits for signal operation, traffic signal communications including standard telephone service and signal communications as required in the Plans.

B. Maintenance

The Contractor will be responsible for establishing utility services and ongoing monthly costs related to utility services until Final Acceptance of the signal(s) installation, or in the event of multiple installations, the Contractor will be responsible for utility costs until overall project acceptance. After Final Acceptance, the Contractor will provide an orderly transfer these services and permits to the local government or jurisdiction responsible for maintenance and operation. Ensure that the transfer does not interrupt service.

C. Utility Location

1. Adjustment

Prior to ordering signal poles, locate utilities and adjust the location of poles, where necessary, to minimize utility conflicts. Obtain approval from the District Traffic Engineer for any deviation from the Plans.

Determine the final length of mast arms based on any field adjusted pole locations. Final location shall be approved by the District Traffic Engineer.

2. Clearance

When installing aerial cable of any type, it is the Contractor’s responsibility to ensure that overhead clearance and separation requirements conform to local utility company standards, the NEC and the NESC. Refer to the Standard Details Drawings for further information on utility clearances.

3. Pre-emption

When traffic signal pre-emption is used, coordinate with the railroad, fire department or any other agency that uses pre-emption to obtain pre-emption output and route output cable to the signal controller operating the intersection to be pre-empted. It is the Contractor’s responsibility to obtain all permits and approval for crossing at grade or grade separated railroad facilities.

647.3.04 Fabrication

General Provisions 101 through 150.

647.3.05 Construction

A. Acquiring and Disposing of Equipment

Do not modify the signal equipment, design, and operation without the District Traffic Operations Engineer's written approval.

All traffic signal equipment removed or replaced shall be returned to District Traffic Signal Shops unless otherwise noted in the Plans or as directed by the Engineer or District Signal Engineer. Provide an inventory list and arrange a mutually agreeable delivery time with the District Signal Engineer twenty-four (24) hours in advance. All materials not returned to the District Signal shop shall be the responsibility of the Contractor to remove and dispose.

B. Traffic Signal Equipment Modification and Removal

Upon the Department issuance of Notice to Proceed any existing traffic signal equipment, responsibilities for maintenance, operations and response to traffic signal malfunction become the responsibility of the Contractor and provisions of Subsection 647.3.07, "Contractor Warranty and Maintenance", apply.

1. Remove existing signal equipment that is not used in the final installation when the new signal equipment is operational.

Carefully remove equipment to minimize damage and retain it in its original form. This equipment may include:

- Strain poles including the foundation down to 3 feet (900 mm) below ground level finished grade
- Timber poles
- Traffic signal cabinets including contents, cabinet base and work pads
- Original signal heads including span wire support
- Other equipment not retained in the final installation

Ensure that unused equipment is secured and disposed of in accordance with all Environmental Protection Agency regulations and Department instructions.

2. Replace traffic signal equipment that the District Signal Engineer determines has been damaged or destroyed during installation, modification, or removal of the traffic signal, at no expense to the Department. Replace with new material.
3. If the Engineer finds that the existing material shown in the Plans to be relocated is unsatisfactory, replace with new material. The costs will be paid for as Extra Work.
4. Remove old signal heads by the end of the day that the new signal equipment is placed in operation. Remove all other signal equipment within seven (7) days after operations of the newly installed equipment.

C. Auxiliary Cabinet Equipment

Provide auxiliary cabinet equipment or special purpose equipment with connecting harnesses, if necessary, or as shown in the Plans or Standard Detail Drawings.

1. Install the equipment in its associated cabinet. Extraneous wiring may be necessary to install the equipment. Additional cabling shall be enclosed in NEMA enclosure and neatly secured.
2. Connect the auxiliary equipment to its cable harness, or insert it in premounted racks or sockets.

D. Signal Controllers

Furnish and install approved microprocessor controllers at the locations shown in the Plans or as directed by the Engineer. All equipment furnished shall comply with Section 925, "Traffic Signal Equipment".

1. Identify the controller and other auxiliary equipment by model and revision numbers. These numbers shall agree with previously approved catalog submittals.

2. Assemble the controller, cabinet, and auxiliary equipment to provide the operational sequence shown in the Plans and future operations specified. Ensure the controller functions as a unit with the cabinet assembly.
3. Ensure controller and auxiliary equipment are provided AC power from receptacles marked for controller power.
4. The Department will provide controller firmware. The Contractor shall provide the controller to the Department. The Department will load the firmware into the controller and notify the Contractor that the controller is ready to be picked up. If the controller is purchased with applications firmware, ensure that the firmware provided is the current Department licensed version of firmware including “boot code”. Current firmware version shall be at the date of application “turn on”.
5. Unless otherwise specified in the Plans or directed by the Engineer, thirty days prior to installation of equipment the Contractor shall deliver the controllers to and pick up the controller from the Traffic Signal Electrical Facility (TSEF) Atlanta office. The Department shall have 30 work days to load the controller firmware starting from the date the Contractor delivered the controllers to the Department.
6. For 2070 signal controllers used for Ramp Metering ensure the Watchdog Timer “Muzzle Jumper” is selected on the field input/output module. This is required for operating with a 208 monitor.

E. Cabinet Assembly

1. Location

The cabinet should be located in accordance with the Plan location, however if the cabinet location needs to be moved, choose a location that:

- a. Protects maintenance personnel from vehicles when servicing the equipment
- b. Allows the front panel door of the controller to open away from the intersection for view of signal indications while servicing or performing cabinet work.
- c. Does not block a sidewalk or passageway and complies with Federal regulations for Americans with Disabilities Act (ADA) clearance requirements.
- d. Is located away from the roadway or curb line to prevent vehicular damage to the cabinet.
- e. Is not located within drainage areas or installed in areas likely to collect and hold surface water.
- f. Relocate the cabinet to avoid conflicts from proposed reconstruction projects, commercial driveways, etc. within the right-of-way at the Engineer’s discretion.

2. Erection

Install and level traffic signal controller cabinets at locations shown in the Plans and/or as directed by the Engineer.

- a. Install cabinets to conform to the Standard Detail Drawings. Install pole or base-mounted as indicated in the Plans. Cabinet base shall not extend more than 9 inches above final grade.
- b. Seal base-mounted cabinets to their base using silicone based sealer. Pliable sealant used shall not melt or run at temperatures as high as 212 °F (100 °C).
- c. Use prefabricated bases and work pads
- d. Install technician pad in front and rear of the controller cabinet door and if applicable in front of battery backup cabinet door. See Standard Details for pad information.
- e. Close all unused conduit in the controller base with a PVC cap sized appropriately. Do not permanently affix the conduit cap to the conduit. Seal those conduits used for signal cable with a pliable sealant to prevent moisture and insects from entering the cabinet via the conduit.

3. Field Cabinet Wiring

All wiring shall be neat and secured and comply with NEC, NEMA, and Table 647-1, Table 647-2, Table 647-3 Table 647-4, Table 647-5, and Table 647-6 of this Specification.

- a. Cut field cabinet wiring to the proper length and organize it in the cabinet. Wire lengths should be slack (minimum 10 feet) allowing for future modifications.
 - Use at least No. 6 AWG wire for the conductors between service drop and AC+ and the AC- terminals.
- b. Do not mount electrical meter to the cabinet. Submit “power pedestal” or other method of providing location for mounting to the Engineer.
- c. Label all field terminals and conductors so as to identify the specific field input.
- d. Crimp terminal connections to conductors with a ratchet-type crimping tool that will not release until the crimping operation is completed.
- e. Do not use splices inside the controller cabinet, base, or conduit.
- f. Do not use solid wire, except grounding wire.
- g. Supply the cabinets with cabinet wiring diagrams, schematic drawings, pin assignment charts, and manuals for circuits and components. Store these documents in the cabinet in a resealable, weatherproof container.

F. Signal Monitors

Furnish signal monitor equipment as follows,

1. Mount signal monitors in a rack with appropriate connectors to attach to the wiring harness.
2. Program the monitor according to the signal operation indicated in the Signal Plans before placing the installation in flash or stop-and-go operation. Provide any signal monitoring programming tools required to program the monitor to the maintaining agency.
3. Configure and equip the signal monitor to monitor all red signal indications. Ensure that the red output for unused or vacant load bays or output slots is jumpered to 120 V AC+.
4. For ITS Cabinets configure the CMU and AMU.
5. For Ramp Metering Cabinets mount model 208 monitor in rack and provide the necessary programming required for the Ramp Meter operation as shown in the Plans.

G. Power Disconnect

Install a power disconnect box at each intersection as shown in the Standard Detail Sheets. Ensure the power disconnect is installed at the top of the cabinet pole or as indicated on plans. Install service cables from disconnect box and terminate as specified on the controller cabinet-wiring or battery backup diagram.

H. Flashing Beacon

Furnish and install the flashing beacon controller at the locations shown in the Plans and/or as directed by the Engineer. Install it as a complete unit (solid state flasher and cabinet with time clock, if applicable) and ensure that it conforms to this Specification.

I. Loop Detector Systems

Install and test loop detector systems according to NEMA Standards Publication TS 1-1983, Section 15, Inductive Loop Detectors, subsequent revisions (except as shown in the Plans), Details, notes, and this Specification.

Ensure that loop detectors are complete and fully operational before placing the signal in stop-and-go operation.

1. General Installation Requirements

Each loop must consist of at least two turns of conductor, unless otherwise shown in the Plans or this Specification. Do not place a portion of the loop within 3 feet (1 m) of a conductive material in the pavement such as manhole covers, water valves, grates, etc.

- a. Install pull boxes, condulets, and conduits before beginning loop installation.
- b. Ensure that the ambient pavement surface temperature in the shade is at least 40 °F (5 °C) before cutting roadway and placing sealant into saw cuts.

2. Loop Saw Cuts

- a. Outline the loop on the pavement to conform to the specified configuration.
- b. Ensure each loop has a separate saw cut with a minimum distance between saw cuts of 6 inches.
- c. Install the detector loop in a sawed slot in the roadway surface deep enough to provide at least 3 inches (76 mm) of sealant cover.
- d. Ensure that the slot is at least 0.25 inches (6 mm) wide for stranded No. 14 AWG loop wire, THWN, XHHW, or XLPE, and at least 0.31 inches (7 mm) wide for polyethylene or PVC encased No. 14 AWG loop wire.
 - 1) At the intersection of the slots, drill a 2 inch (51 mm) diameter hole or make miter saw cuts in the pavement. Overlap miter saw cuts at the intersection of saw cuts so that the slots have a full-depth and smooth bottom.
 - 2) Prevent the wire from bending sharply.
 - 3) Do not install detector loop wire unless sawed slots are completely dry and free of debris. Pressure wash the slot to guarantee adhesion of the loop sealant. Use compressed air to thoroughly dry the sawed slot.
 - 4) Install the loop wire starting at the nearest pull box or condulet, around the loop for the specified number of turns, and back to the pull box or condulet.

NOTE: Loop wire from the street is to be spliced in condulets or pull boxes only.

- 5) Refer to table 647-9 for the number of turns for Quadrupole loops. Refer to table 647-8 for the number of turns for Bipole loops. Bipole loops require at least three (3) turns.
- e. Press the wire in the slot without using sharp objects that may damage the jacket.
- f. Hold the loop in place every 5 feet (1.5 m) with 1 inch (25 mm) strips of rubber, neoprene, flexible tubing, or foam backer rod as approved by the Engineer.
- g. Leave the hold down strips in place when filling the slot with loop sealant.
- h. Where encased loop wire is used, apply a waterproof seal to the ends of the polyethylene tubing that encase the wire to prevent moisture from entering the tube.
- i. Where the loop wires cross pavement joints and cracks, protect the loop wires using the method specified in "Traffic Signal Details" in the Plans. When crossing expansion joints drill a 2 inch diameter hole minimum 3 inches deep, or to bottom of saw cut. Do not install loop wires in an expansion joint.
- j. Twist Loop Lead-in 3 turns per foot.

3. Loop Sealing

After successfully testing each loop, fill the slots with sealant to fully encase the conductors.

- a. Seal the slot within one hour of cutting slot.
- b. Ensure that the sealant is at least 3 inches (75 mm) thick above the top conductor in the saw cut.
- c. Apply the sealant so that subsequent expansion does not extend the sealant material above the pavement surface.
- d. In case of accidental spill, before the sealant sets, remove surplus sealant from the adjacent road surfaces without using solvents or epoxy sealants.

- e. When the Engineer determines that the loop sealant can accommodate traffic but the surface is tacky, dust the sealer on the pavement surface with cement dust before opening the roadway to traffic.
- f. Dispose of the solvents used to clean loop installation equipment according to the manufacturer’s specifications and local, State, and Federal regulations.

4. Loop Connections

Connect loop conductors to a shielded lead-in cable that runs from the pull box adjacent the pavement edge or conduit to the detector hook-up panel in the controller cabinet, unless otherwise specified in the Plans.

- a. Use continuous (no splices) shielded lead-in cable from the pull box or conduit to the cabinet input file terminal. Do not ground the shield in the loop lead-in cable at the cabinet.
- b. Connect each loop to an individual detector channel as specified in the Plans.
- c. If the Plans specify that two or more loops will be operated on the same detector channel or detector amplifier unit, wire them in series to their loop lead-in at the pull box or conduit.
- d. Use series-parallel connections when series connections do not meet the manufacturer’s specified operating range for the detector amplifier unit.
- e. Make weather-tight and waterproof splices as detailed on the Plan Standard Detail Sheets. Make loop splices to loop lead-in cable only after the detector system has been tested and demonstrated under traffic conditions to the Engineer’s satisfaction.

5. Loop Maintenance

- a. Locate all existing loops, determine the operational status of all loop assemblies, and notify the Engineer prior to commencing loop construction activities at the intersection.
- b. Maintain all existing, operational loops, unless otherwise notified by the Engineer. Repair of an existing loop that is non-operational prior to beginning work will be considered as extra work.
- c. Locate points of conflict between new loops and existing loops, and install all new loops and saw cuts so as not to cut existing loop lead-ins and loop wires that are to be retained.
- d. If an existing operational loop that is not scheduled for replacement fails during the construction time frame, notify the Engineer and complete the replacement of the damaged loops immediately.
- e. Loops that are removed or destroyed as part of a construction, rehabilitation, or maintenance project shall be replaced and returned to full operation within the following time frames, based on the route prioritization rating:

State Route Prioritization Rating	Left-turn Loop Detection	Mainline/Side-street Presence Loop Detection	Set-back Loop Detection
CRITICAL/HIGH	5 calendar days	5 calendar days	28 calendar days
MEDIUM	14 calendar days	14 calendar days	28 calendar days
LOW	28 calendar days	28 calendar days	28 calendar days

The Office of Transportation Data will provide the prioritization rating of the state route. All costs associated with the replacement of the loops damaged during construction shall be the responsibility of the Contractor.

J. Pedestrian Push Button

Install the push button with a pedestrian instruction sign as illustrated on the Department’s Standard Detail Sheets and according to the Plans.

- 1. Place the pedestrian buttons as shown on the Signal Plan Sheet and within 10 inches (254 mm) of sidewalk or concrete landing pad. Position the pedestrian button to correspond to the appropriate signal phase. Locate pedestrian buttons perpendicular to the appropriate signal indication and signal phase, and as field conditions require.

2. Place the center of the buttons between 38 inches (0.965 m) and 42 inches (1.05 m) above the sidewalk or ground level.
3. Seal all openings to prevent moisture from entering the pushbutton.

K. Cable

Install and connect electrical cable to the proper equipment to produce an operating traffic signal system. Use stranded copper cable conforming to Section 925.

Install wiring in accordance with IMSA, NEMA, UL, and the Department’s Traffic Signal Wiring Standards, shown in Tables 647-1, 647-2, 647-3, 647-4, 647-5, and 647-6 of this Specification.

In addition to the information provided below, see Section 682, Section 922, and Section 925 for cable equipment and installation specifications.

Table 647-1 Vehicular Signals Georgia DOT Wiring Standards						
Signal Indications	Four Conductor Cable		Seven Conductor Cable		Ten Conductor Cable	
	Phases 2, 4, 6, & 8	Phases 1, 3, 5, & 7	Phases 2, 4, 6, & 8	Phases 1, 3, 5, & 7	Phases 2, 4, 6, & 8	Phases 1, 3, 5, & 7
Red	Red Wire		Red Wire		Red Wire	
Yellow	Black Wire		Orange Wire		Orange Wire	
Green	Green Wire		Green Wire		Green Wire	
Red Arrow		Red Wire		White Wire with Black Tracker		Red Wire with Black Tracker
Yellow Arrow		Black Wire		Black Wire		Orange Wire with Black Tracker
Flashing Yellow Arrow		Green Wire		Orange Wire		Blue Wire
Green Arrow		Green Wire		Blue Wire		Green Wire with Black Tracker
Auxiliary					Black Wire	Black Wire
Neutral	White Wire	White Wire	White Wire	White Wire	White Wire	White Wire
Spare					White Wire with Black Tracker	White Wire with Black Tracker

Table 647-2 Vehicular Loop Detectors Georgia DOT Wiring Standards				
Detectors	Phases 3, 4, 7, and 8 Presence Loops		Phases 2 and 6 Setback Pulse Loops and Phases 1 and 5 Presence Loops	
	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair
Right Curb Lane	Red Wire	Red/Black Pair (1)	Red Wire	Red/Black Pair (1)
Second Lane	Green Wire	Green Black Pair (1)	Green Wire	Green Black Pair (1)
Third Lane	White Wire	White/Black Pair (1)	White Wire	White/Black Pair (1)
Fourth Lane	Red Wire	Red/Black Pair (2)	Red Wire	Red/Black Pair (2)
Fifth Lane	Green Wire	Green/Black Pair (2)	Green Wire	Green/Black Pair (2)
Sixth Lane	White Wire	White/Black Pair (2)		
First Left-Turn Lane			Red Wire	Red/Black Pair (3)
Second Left-Turn Lane			Green Wire	Green/Black Pair (3)

Table 647-3 Pedestrian Signals Georgia DOT Wiring Standards				
Signal Indications	Four Conductor Cable		Seven and Ten Conductor Cable	
	Phases 2 and 6	Phases 4 and 8	Phases 2 and 6	Phases 4 and 8
Don't Walk	Red Wire	Red Wire	Red Wire	Orange Wire
Walk	Green Wire	Green Wire	Green Wire	Blue Wire
Neutral	White Wire	White Wire	White Wire	White Wire

Table 647-4 Pedestrian Detectors Georgia DOT Wiring Standards		
Push Buttons	3 Pair Shielded Cable	
	Phase 2 and 6	Phase 4 and 8
Call	Green and Black Pair	Red and Black Pair

NOTE: Do not use aluminum cable.

Table 647-5 Ramp Meter Signals Georgia DOT Wiring Standards	
Signal Indications	3-Section Signal Heads Seven Conductor Cable L1,L2,L3
Red	Red Wire
Yellow	Orange Wire
Green	Blue Wire
Neutral	White Wire

Table 647-6 Ramp Meter Loop Detectors Georgia DOT Wiring Standards				
	Demand Detector Loops		Queue Detector Loops	
	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair
Lane 1	Red Wire	Red/Black Pair (2)	Red Wire	Red/Black Pair (1)
Lane 2	Green/Wire	Green Black Pair (2)	Green Wire	Green/Black Pair (1)
Lane 3	White Wire	White/Black Pair (2)	White Wire	White/Black Pair (1)
	Passage Detector Loops		Mainline Detector Loops (if used)	
	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair	Loop Wires	Shielded Loop Lead-in Cable, 3 Pair
Lane 1	Red Wire	Red/Black Pair (3)	Red Wire	Red/Black Pair (4)
Lane 2	Green Wire	Green/Black Pair (3)	Green Wire	Green/Black Pair (4)
Lane 3	White Wire	White/Black Pair (3)	White Wire	White/Black Pair (4)

L. Signal Cable for Vehicular Signal Heads and Pedestrian Heads

Install cable for signal heads and pedestrian heads as follows:

1. For vehicle signal heads, install one 7-conductor or 10-conductor signal cable for each intersection approach from the controller cabinet to the through-signal head on each approach as directed by the Engineer. From this leftmost signal head, install a 7-conductor or 10-conductor signal cable to each of the other signal heads on the same approach in sequence. If a flashing yellow arrow signal head is used for the left turn display, install either a second 7-conductor signal cable per left turn phase or one 10-conductor signal cable for each intersection approach.
2. For pedestrian signal heads, install one 4-conductor or 7-conductor signal cable from the controller cabinet to each pedestrian head installation location to operate either one or two pedestrian heads.
3. Make a minimum 1 foot (300 mm) diameter 3 turn weather drip loop as shown in the Standard Detail Drawings in the Plans at the entrance to each signal head.
4. Neatly tie signal cables leaving a structure or weatherhead to enter a signal fixture. Tie the cables to the messenger cable as illustrated in the Standard Detail Drawings.
5. For Ramp Meter signal heads install one 7-conductor signal cable for each lane of the Ramp Meter operation from the controller cabinet.

M. Interconnect Communications Cable

Use fiber optic interconnect cable as specified in the Plans for all new interconnected signal systems. See Section 935 for fiber optic cable information, specifications and installation and testing techniques, and all other signal interconnect methods. Install interconnect communications cable as follows:

1. Provide support for the interconnect cable on new or existing utility poles or signal poles; install underground in conduit.
2. Use fiber optic standoff brackets as needed to prevent damage from poles, trees and other structures.
3. Pull cables with a cable grip that firmly holds the exterior covering of the cable.
4. Pull the cables without dragging them on the ground, pavement or over or around obstructions. The Engineer will inspect and approve the cable prior to installation. Use powdered soapstone, talc, or other approved inert lubricants to pull the cable through the conduit.
5. When using a separate messenger cable, spirally wrap the communications cable with a lashing machine according to the IMSA-20-2 Specifications.
6. Do not splice outside the signal cabinet except at the end of full reels of 5,000 feet (1500 m).
7. Ensure that splice points are near support poles and accessible without closing traffic lanes.
8. Unless drop cable assemblies for communications are used, loop the cable in and out of the control cabinets. Coil and tie 10 feet (3 m) of cable in the controller cabinet foundation. Tape the cable ends to keep moisture out until the terminals are attached.
9. Prevent damage to the cable during storage and installation.

NOTE: Do not allow anyone to step on or run over any cable with vehicles or equipment.

N. Loop Detector Lead-in Cable

Use 3-pair shielded lead-in cable in compliance with Section 925 and manufacturer's recommendations for Detector loop lead-in installed for loop detectors. Ensure the three pair has 3 separate distinguishing colors. Use a shielded lead-in cable connecting the loop to the detector hook-up panel in the controller cabinet, unless otherwise specified in the Plans. Provide a separate 3- pair for each phase or future phase.

1. Splice the loop detector wire to a shielded loop detector lead-in cable in a pull box adjacent to the loop detector installation.
2. Use continuous (no splices) shielded lead-in cable from the pull box or conduit to the cabinet input file terminal. If induced voltage is present, the shield in the loop lead-in cable shall be grounded to cabinet per NEC. Otherwise do not ground the shield in the loop lead-in cable at the cabinet.
3. Connect each loop to an individual detector channel as specified in the Plans.
4. Each detection loop shall be connected to the control cabinet via separate lead-in pair.
5. Set back loops with aerial loop leads to the control cabinet shall be supported by ¼ inch messenger cable with no splices between the control cabinet and the initial point of aerial attachment.
6. Make weather tight and waterproof splices between lead-in and loop wire. Loop installation may be approved only after the detector system has been tested and demonstrated under traffic conditions to the Engineer's satisfaction, during the Operational Test Period.

O. Pedestrian Push Button Lead-in

Use 3-pair shielded lead-in cable compliant with Section 925 for pedestrian push buttons. Install one 3-pair shielded lead-in cable to each pedestrian push button station(s) location to operate either one or two push buttons. Do not ground

the shield for the push button lead-in cable at the controller cabinet. Do not use the same 3 pair cable for loop and pedestrian detectors.

P. Messenger Cable, Stranded-Steel

The messenger is used to support signal cable indicated in the Plans as overhead cable. Use devices such as aluminum wrap, aluminum wire ties or lashings to attach the cable.

- Before erecting the messenger strand, determine the suspension strand length to span the distance between the poles.
- Run the messenger strand from structure to structure without splicing.
- The minimum allowable sag is two and one-half percent (2.5%) for timber poles, five (5%) for strain poles of the longest diagonal distance between the signal poles unless pole manufacturers specifications exceed 2.5%. The contractor is responsible for providing the District Signal Engineer with sag calculations for new installations.
- Calculate attachment points for the messenger strand at the signal pole according to the Plan Detail Sheet.

Set messenger strands so that the height conforms to the clearances on the Standard Detail Drawings. Attach cables to messenger cable using lashing wire, aluminum ties, or lashing rods (Subsection 925.2.43). If lashing rods are used use lashing rods sized for the cables and messenger strand. Only use lashing rods that are of the same material as the messenger strand. Lashing wire shall only be used to support aerial loop lead-in and fiber optic.

1. Drill wood poles to receive the eye bolts so that the span wire and eyebolt at each connection form a straight angle.
2. Never pull or strain the messenger on the eye bolt to an angle of variance greater than ten degrees (10°).
3. Attach down guy wires to guy hooks. Use a minimum 3/8 inch messenger cable for down guys. Never attach them directly to the eye of an eyebolt.
4. Ensure that messenger strand clearances conform with local utility company Standards.
5. Make stranded messenger cable attachment points with the appropriate size strand vises or 3 bolt clamps. Stranded steel messenger cable is not paid for separately under this Specification.
6. Use minimum ¼ inch messenger cable.
7. Use standoff brackets as needed to prevent damage from poles, trees or other structures.

NOTE: Never splice messenger cable between structures or stand off brackets.

Q. Underground Cable for Signal Circuits

Underground cable for signal circuits includes cable, with conduit, as shown in the Plans. Install cable under existing pavement or surfaced shoulder, according to Subsection 680.3.05.

1. Cable in Conduit

Pull cable into conduits as follows:

- a. Pull cables into conduits without electrical or mechanical damage. Pull cables by hand only. The use of trucks or other equipment is not permitted, unless approved by the Engineer. If mechanical pulling is approved, do not exceed the manufacturer’s tension rating for the cable.
- b. Pull cables with a cable grip that firmly holds the exterior covering of the cable.
- c. Use powdered soapstone, talc, or other inert lubricants to place conductors in conduit according to manufacturer’s recommendations.
- d. Handle and install the conductors to prevent kinks, bends, or other distortion that may damage the conductor or outer covering.

- e. Pull all cables in a single conduit at the same time. When pulling cables through hand holes, pole shafts, etc., use a pad of firm rubber or other material between the cable and the opening edges to prevent cable damage.
- f. When installing cable in conduit with existing signal cable circuits remove all existing cables and pull them back into the conduit with the new cables.
- g. The distance between pull boxes in a run of conduit shall not be greater than 100 feet (30 m), unless otherwise shown in the Plans or approved by the Engineer or District Signal Engineer, with the exception of fiber optic cable.
- h. The distance between pull boxes in a run of conduit for fiber optic cable shall not exceed 750 feet (225 m), unless otherwise shown in the Plans or approved by the Engineer. Identification tape and tone detection wire shall be used for fiber optic cable in conduit. All unused conduit shall have a continuous pull cable installed between pull boxes.

2. Splices

Required splicing shall be performed according to the National Electric Code; use materials compatible with the sheath and insulation of the cable.

Insulate required splices with electrical insulation putty tape, plastic, pressure sensitive, all-weather 1.5 mil (0.038 mm) electrical tape in accordance to standard details.

- a. Make the spliced joints watertight.

Note: Splice detector wires to shielded loop detector lead-in at pull boxes located immediately after the loop wire leaves the roadway. No splices will be permitted in shielded loop detector lead-in cable from this point to the controller cabinet.

R. Conduit and Fittings

Install conduit by type (GRS, HDPE, PVC) as shown in the Plans and the Standard Detail Drawings. Refer to the NEC, for conduit full percentages.

Separate the power cable to the controller cabinet from all other cables in its own 1 in (25 mm) galvanized rigid steel conduit except inside poles. Ensure that conduit conforms to Section 682, Section 923 and Section 925 with the following addition:

- Use flexible conduit only where shown in the Details or as directed to do so in writing by the District Signal Engineer.

Use the conduit size specified in the Plans, unless otherwise directed by the Engineer. Obtain written approval from the Engineer prior to installing conduit other than the size specified in the Plans.

All 2 inch (50 mm) conduit elbows shall be “sweep” type. The minimum radius for the elbow is 18 inches (450 mm), unless otherwise approved by the Engineer.

NOTE: Do not use multi-cell conduit.

Install conduit and fittings as follows:

- 1. Ensure that exposed conduit on poles are galvanized rigid steel (GRS) conduit.
- 2. Ream the ends of metallic conduit after cutting the threads. Ream other conduit as necessary.
- 3. Cut the ends square, and butt them solidly in the joints to form a smooth raceway for cables.
- 4. Make conduit joints to form a watertight seal.

5. Coat metallic conduit threads with red- or white-lead pipe compound, thermoplastic or Teflon seal. Ensure that they are securely connected.
6. Make plastic conduit joints with materials recommended by the conduit manufacturer.
7. Install bushings in the conduit to protect the conductors. When conduit is installed for future use, properly thread and cap the ends of the metallic conduit runs.
 - a. Plug the ends of nonmetallic conduit runs to prevent water or other foreign matter from entering the conduit system.
 - b. Seal the exposed conduit ends with a permanently malleable material.
 - c. Ensure that empty conduit installed for future wire or cable has a nylon pull string or cord inside that is impervious to moisture and rot and can withstand a load of 50 pounds (23 kg) without breaking. Secure this pull cord at each open end and at each pull box.
8. Ensure that conduit on pole exteriors are mounted with galvanized, two-hole straps or clamps. Place the clamps not more than 3 feet (1 m) from junction boxes, condulets, or weatherheads. Place it at 3 foot (0.9 m) intervals elsewhere.
 - a. Fasten the clamps to wood poles with galvanized screws or lag bolts.
 - b. Do not install conduit risers on concrete, steel, or mast arm poles unless approved by the Engineer.
9. Install a weatherhead at the end of exterior conduit runs on a pole or other structure to prevent moisture or other matter from entering the conduit.
10. After installation, ensure that the conduit or fitting placement has not warped or distorted any condulet, terminal, control or junction box.
11. Ensure Conduit that is terminated at poles is grounded at the pull box.

S. Underground Conduit

Underground conduit includes encased or direct burial conduit.

1. Install the conduit in a trench excavated to the dimensions and lines specified in the Plans.
 - a. Provide at least 18 inches (450 mm) finished cover, unless otherwise specified.
 - b. Under pavement, excavate at least 36 inches (900 mm) below the bottom of the pavement.
2. Before excavation, the Contractor is responsible for determining the location of electrical lines, drainage, or utility facilities in the area to prevent damage.
 - a. Place the conduit where it will not conflict with proposed guardrail, sign posts, etc.
 - b. Change locations of conduit runs, pull boxes, etc., if obstructions are encountered during excavation. Changes are subject to the Engineer's approval.
 - c. Where possible, provide at least 12 inches (300 mm) between the finished lines of the conduit runs and utility facilities such as gas lines, water mains, and other underground facilities not associated with the electrical system.
3. When the conduit run is adjacent to concrete walls, piers, footings, etc. maintain at least 4 inches (100 mm) of undisturbed earth or firmly compacted soil between the conduit and adjacent concrete or, when the conduit is encased, between the encasement and the adjacent concrete. Unless specified in the Plans, do not excavate trenches in existing pavement or surfaced shoulders to install conduit.
4. When placing conduit under an existing pavement, install the conduit by directional boring, or other approved means. See Section 682 for directional boring pipe specifications. Obtain the Engineer's approval prior to installing conduit by means of boring-method.
5. When the Plans allow trench excavation through an existing pavement or surfaced shoulder, restore the pavement shoulder surface, base, and subgrade according to the Specification.

6. Cut trenches for conduit on a slight grade (0.25 percent minimum) for drainage, unless otherwise specified. When the grade cannot be maintained all one way, grade the duct lines from the center, both directions, down to the ends.
7. Avoid moisture pockets or traps. Excavate vertical trench walls.
8. Tamp the bottom of the trench to produce a firm foundation for the conduit.
9. When necessary to prevent damage, sheet and brace the trenches and support pipe and other structures exposed in the trenches.
10. Conduit installed for fiber optic cable installation shall have identification tape and detectable tone wire installed for detection as specified and detailed in the Project Standard Detail Sheets.
11. Install direct burial conduit as shown in the Plans. Use rigid galvanized steel, or polyethylene conduit. Excavate at least 36 inches (900 mm) below the top of the finished ground or 36 inches (900 mm) below the bottom of the pavement.
12. When rock is in the bottom of the trench, install the conduit on a bed of compacted, fine-grain soil at least 4 inches (100 mm) thick.
13. Conduit installed for fiber optic cable installation shall have detectable tone wire installed for detection as specified in Section 682 and detailed in Standard Detail Sheets.

T. Encased Conduit

Place encased conduit in the locations shown in the Plans unless otherwise specified. Construct as follows:

1. Construct the encasement using Class A concrete that meets requirements in Section 500 .
2. Extend the encasement or conduit under roadway pavements or surfaces 6 inches (150 mm) past the outer edge of paved shoulders or sidewalks, or past curbs if no shoulder or sidewalk is present.
3. Extend the conduit at least 3 inches (75 mm) beyond the encasement.
4. Place 3 inches (75 mm) of concrete in the bottom of the trench and place the conduit on top of it.
5. Temporarily plug the ends of the conduit to prevent concrete or foreign materials from entering.
6. Cover the conduit with at least 3 inches (75 mm) of concrete. Wait to encase the conduit with concrete until the Engineer inspects and approves the conduit.
7. Cure the concrete encasement according to Subsection 500.3.05.Z, except curing may be reduced to twenty-four (24) hours. Use a precast encasement if approved by the Engineer.

U. Backfilling

Immediately backfill the conduit after the Engineer's inspection and approval, except for encased conduit, which must complete a twenty-four (24) hour cure period.

1. Backfill with approved material free of rocks or other foreign matter.
2. Backfill in layers no greater than 6 inches (150 mm) loose depth, up to the original ground level.
3. Compact each layer to one hundred percent (100%) of the maximum laboratory dry density as determined by GDT 7, GDT 24a, GDT 24b, or GDT 67 whichever applies.-

V. Conduit on Structures

Install conduits, condulets, hangers, expansion fittings, and accessories on structures according to the Plans and, unless otherwise specified, the following:

1. Run the conduit parallel to beams, trusses, supports, pier caps, etc.
2. Install horizontal runs on a slight grade without forming low spots so they may drain properly.
3. Run conduits with smooth, easy bends. Hold the conduit ends in boxes with locknuts and bushings to protect the conductors.

4. When not specified in the Plans or Special Provisions, submit the type and method for attachment to structures to the Engineer for submission to the District Signal Engineer for approval.
5. Ground galvanized rigid steel conduit in pull boxes.

All exposed conduit shall be galvanized, rigid conduit unless otherwise specified.

W. Testing Conduit

After installing the conduit, test it in the presence of the Engineer.

1. Test conduit using a mandrel 2 inches (50 mm) long and 0.25 inches (6 mm) smaller in diameter than the conduit.
2. Repair conduit to the Engineer's satisfaction if the mandrel cannot pass through. If repairs are ineffective, remove and replace the conduit at no additional cost to the Department.
3. Thoroughly clean the conduits. When installing conduit but wiring at a later date:
 - a. Perform the mandrel test.
 - b. Ream the duct opening to remove burrs or foreign matter.
 - c. Thoroughly clean the duct.
 - d. Provide and install a weatherproof cap at each open end.
 - e. All installed conduit not used or containing cable shall have a continuous nylon pull string installed between junction boxes.

X. Grounding

Ground the cabinets, controller, poles, pull boxes, and conduit to reduce extraneous voltage to protect personnel or equipment.

NOTE: Grounding shall meet the minimum requirements of the NEC.

Provide permanent and continuous grounding circuits with a current-carrying capacity high enough and an impedance low enough to limit the potential above the ground to a safe level.

Perform grounding as follows:

1. Bond the grounding circuits to nonferrous metal driven electrodes. Use electrodes that are at least 0.625 inches (15 mm) in diameter, 8 feet (2.4 m) long, and are driven straight into the ground.
2. Use the shortest possible ground lead that leads directly to a grounding source.
3. Ensure that the maximum resistance between the ground electrode and the earth ground is no greater than twenty five (25) ohms.
4. Connect the ground electrodes and the ground wire with an exothermic weld or ground rod clamp as approved by Signal Engineer.
5. Connect neutral conductors to the cabinet buss-bar and ground them at each terminal point.
6. Ground the cabinet with a No. 6 AWG solid copper wire between the buss-bar to the ground electrode. Bends shall not exceed 4 inch (100 mm) radius bends.
7. Permanently ground the poles by bonding the No. 6 AWG solid copper wire to a separate ground rod.
8. Ground pole-mounted accessories to the pole.
9. Underground metallic conduit or down guys are not acceptable ground electrodes. Do not use Snap-On connections.
10. For extended distances between Ramp Meter and IVDS additional grounding may be required by the manufacturer.

Y. Ground Rod

Install copper clad ground rods adjacent to the traffic signal pole bases, controller cabinet bases, and in pull boxes to shield and protect the grounding system.

When ground rods are not protected, bury them at least 2 inches (50 mm) below the finished ground level.

1. Use 0.625 inch (15 mm) diameter ground rods at least 8 feet (2.4 m) long. Use copper clad ground rods.
2. Drive single ground rods vertically until the top of the rod is no more than 2 inches (50 mm) above the finished ground.
3. Attach a length of No. 6 AWG solid copper wire to the top of the ground rod using an exothermic weld.
4. When controller cabinets are mounted on timber poles, ground them with No. 6 AWG solid copper wire attached to the ground rod. Run the wire inside a minimum 0.75 inch (19 mm) rigid conduit attached to the timber pole and to the chassis ground in the controller cabinet.
5. When ground penetration is not obtained:
 - a. Place a horizontal ground rod system of three (3) or more parallel ground rods at least 6 feet (1.8 m) center-to-center and 30 inches (720 mm) below the finished ground.
 - b. Ensure that this grounding system produces a resistance of 25 ohms or less.
 - c. Join the ground rods and connect them to the grounding buss of the traffic signal cabinet with No. 6 AWG solid copper wire.
6. Install a ground wire on wood poles.
 - a. Use at least No. 6 AWG solid copper wire bonded to the grounding electrode and extending upward to a point perpendicular to the uppermost span.
 - b. Place wire staples no greater than 2 feet (0.6 m) apart to secure the ground wire to the pole.
 - c. Connect the span wire to the pole ground using copper split bolt connectors. Provide a separate ground rod for pole mount cabinets. Do not use the pole ground. Bond the pole ground to the pole cabinet ground rod.
7. Ensure that grounding for signal strain poles conforms to the grounding assembly typical erection Detail Sheet in the Plans.
8. Permanently ground cabinet and cabinet conduits to a multi-terminal main ground buss.
 - a. Use a No. 6 AWG solid copper wire bonded between the buss and grounding electrode.
 - b. Connect the power company neutral, conduit ground, and grounds of equipment housed in the cabinet to the buss-bar.
 - c. Do not ground to a permanent water system instead of the driven ground rod. Ensure that grounding devices conform to the requirements of the NEC and NEMA.
9. When testing for resistance ensure the ground is dry. The Contractor is responsible for submitting the ground test results.

Z. Signal Poles

See Section 501 for signal pole materials certification and Subsection 925.2.27, Subsection 925.2.28, Subsection 925.2.29, Subsection 925.2.30 and Subsection 925.2.31 for traffic signal equipment. Refer to the Plans for pole locations.

Where necessary, adjust pole location to avoid utility conflicts. Provide minimum clearance distances between the signal pole and the roadway as specified in the Plans and on the Standard Detail Drawings.

1. Strain Poles

Provide signal strain poles that conform to Section 639.

Provide caissons or foundations that conform to the “Construction Detail for Strain Pole and Mast Arm Pole Foundations” in the Plans.

Determine the required foundation size based on the manufacturer’s specified “bending moment at yield” for each pole.

Provide strain poles with manufacturer-installed holes for pedestrian heads and push buttons. Seal unused holes with water tight plugs that match the pole finish provided by the manufacturer of the pole. All steel strain pole holes that are used shall have a rubber grommet or weather head.

Rake the poles during installation to provide a pole that is plumb once the load is applied.

2. Metal Poles

Install metal poles as follows:

- a. Ensure that anchor bolts, reinforcing bars, and ground rods conform to Section 639 and Section 852 and are placed in the excavation.
- b. Support the anchor bolts with a template to provide the proper bolt circle for the pedestal or pole to be installed. Anchor bolts shall be installed without any modifications. Refer to signal details for proper installation.
- c. Wire the reinforcing bars together or to the anchor bolts.
- d. Wire the conduits in the base to the reinforcing bars for support. Ensure that they are accessible above and beyond the foundation.
- e. Before pouring the foundation concrete, determine that the anchor bolt orientation is correct so that the tensile load is divided between at least two anchor bolts. Pour and vibrate the concrete with the Engineer present.
- f. Ensure that the pole foundations and pedestals with the anchor-type base conform to Section 500 and Section 639. Do not install or locate poles without the Engineer’s approval. Ensure the foundation meets AASHTO guidelines.
 - 1) The Engineer may take a concrete test cylinder as it is being poured.
 - 2) Cure the cylinder and submit it for testing to the Office of Materials and Research.
- g. If the concrete foundation fails to meet the requirements of the Specifications and is not accepted, replace the foundation upon notification of failure.
- h. After installing poles and applying the load of the signal span, inspect them for plumb and for the proper horizontal position of the mast arm, when applicable. Make sure all threads of the nut are threaded onto the anchor bolt.
- i. Correct deficiencies by using the leveling nuts on the anchor bolts or by adjusting the mast arm.
- j. The Engineer will examine the pedestals and poles for damaged paint or galvanizing. Restore the finish coating where necessary.
- k. After the Engineer approves the pole installation, provide an acceptable method of protecting the area between the pole base and the top of the foundation to prevent the accumulation of debris.

If the finish or galvanized steel materials is scratched, chipped, or damaged, the material will be rejected. The finish may be replaced as specified under Section 645, with the Engineer’s approval.
- l. For poles or arms that need galvanization, thoroughly clean the steel poles and arms and touch up non-galvanized parts with i-d red or original-type primer.
- m. Apply the remaining coats according to the System V (Heavy Exposure) Section 535, unless otherwise indicated in the Plans. The entire pole shall be the same color.
- n. Install a service bracket and insulator on one pole at each intersection to attach power service wire as specified in the Plan Details. Install a disconnect box on the cabinet pole at each intersection to attach power service where the power service is provided overhead.

- o. Install poles to which controller cabinets are attached with mounting plates, bolts, nipples, and at least two, 2.5 inch (64 mm) threaded openings at the top and at least two (2) 2 inch (50 mm) at the bottom of the pole.
- p. Attach the fittings to the poles as specified by the manufacturer in the Plans or as the Engineer directs. The fittings may include:
 - Cast aluminum cap
 - Pole clamp hardware for span wire attachment
 - Weatherhead with chase nipples and couplings
 - Galvanized elbow with bushing installed by cutting the pole and welding in place around the entire circumference
- q. The Office of Materials and Research will inspect the anchor bolts. If approved, the Office of Materials and Research will display the inspector’s hammer stamp mark on the top of the bolt.

NOTE: Never add holes or openings to the metal pole or mast arm without approval from the Office of Bridge and Structural Design.

3. Concrete Strain Poles

- a. Ensure that concrete strain poles meet the requirements of Section 639 and detailed construction drawings.
- b. Install concrete strain poles so that the angle of variance between the eye bolt on the pole and the span wire is less than ten degrees (10°).
- c. Verify pole hole orientations for pedestrian heads, pedestrian push button stations, luminaries arms, etc., with the Engineer prior to proceeding with traffic signal installation. For poles at cabinet location provide at least two 2.5 inch (64 mm) openings at the top of pole and at least two 2.0 inch (50 mm) threaded openings at the bottom.
- d. Plug all unused holes. Use Grout or threaded fittings. Match the finish of the pole.

4. Mast Arms

Install mast arms that can accommodate traffic signal mounting hardware and that adhere to the manufacturer’s recommended procedures and Section 925 and Section 915. Do not add holes.

- a. Seal the openings in the mast arms to prevent pests from entering.
- b. Align the mast arm to allow the signal heads to hang plumb at the correct height without using extensions.
- c. All Mast arms are to be galvanized unless indicated otherwise in the Plans.

NOTE: The Contractor shall submit a “Mast Arm Pole Chart” to the Engineer and the Office of Bridge and Structural Design for review and approval as described in Subsection 647.1.03.F of this Specification.

Verify pole hole orientations for pedestrian heads, pedestrian push button stations, luminaries arms, etc., with the Engineer prior to proceeding with traffic signal installation.

5. Aluminum Pedestrian Pedestals Poles

Install aluminum pedestal poles, which adhere to Section 850 on breakaway aluminum bases that meet the requirements for breakaway construction. See Section 925 for breakaway base requirements. See the Standard Detail Drawings for Pole and Foundation Details.

- a. Secure at least four anchor bolts in a concrete foundation as shown in the construction Detail.
- b. As an alternate to a concrete foundation install a Pedestal Foundation Anchor Assembly (Subsection 925.2.29). Install the foundation until the top of the base plate is level with the ground. Slide bolt heads through the keyhole and under the base plate against the bolt head keepers with threads up. Bolt the pole base to the foundation. Adhere to the manufacturer’s instructions for installation.
 - 1) Use a Universal Driving Tool with the correct kelly bar adaptor and bolts supplied with the tool.

- 2) Attach driving tool assembly to the foundation base plate using the bolts provided with each foundation. Be sure to align the tool so the holes in the tool line up with the proper bolt circle on the foundation.
 - 3) Stand the foundation, with the attached drive tool assembly, upright and attach the drive-tool-foundation to the kelly bar.
 - 4) Raise the kelly bar until the foundation swings free of the ground. Maneuver the kelly bar until the point of the foundation is over the marked installation location.
 - 5) Lower the kelly bar until the point of the foundation is forced into the ground and the helix is flush with the ground surface.
 - 6) Ensure the shaft of the foundation is plumb by checking the shaft with a level on two sides that are at least 90 degrees from each other. Recheck the shaft to be sure it is plumb when the foundation has penetrated 1 foot into the ground.
 - 7) When the base plate of the foundation is 1 (25 mm) to 2 (50 mm) inches above the ground line remove driving tool.
- c. Contain the wiring inside the pole or in approved hardware. Do not allow conduit outside the pole.
 - d. Position the pedestal pole plumb and high enough to clear the pedestrian's head as shown in the Plans. Ensure that the bottom of the pedestrian signal housing including brackets is not less than 10 feet (3 m) from the ground line. If using a vehicle signal housing ensure pole is adequate to give signal head a height of 12 feet (3.6 m)
 - e. Instruct the supplier to furnish a mill certificate that shows the alloy and physical properties of the steel used in fabricating the anchor bolts. The bolts may be subjected to a tensile and shear strength test.
6. Timber Poles

Timber poles do not require the use of concrete for filling the cavity around the pole base.

Use timber poles that meet the requirements of Section 861 and Section 639. Use Class II for all signal support poles. Use Class IV for aerial loop lead-in or communication cable if approved by the Engineer. Poles shall be inspected and include AWW stamp.

Drill wood poles to receive the eye bolt so that the angle of variance between the eye bolt and span wire at each connection is less than ten degrees (10°). See the Standard Detail Drawings for additional information.

Guy timber poles use single or double guy wires as shown in the Plans and as directed by the Engineer. Guy helper cables with separate guy wires when helper signal span cables are indicated in the Plans.

NOTE: Never attach down guy wires to eye bolts. Attach down guy wires to angle guy attachment only and install insulating rods on all down guy installations as detailed on Standard Detail Sheets.

AA. Pull Boxes

Ensure that pull boxes conform to the Standard Detail Drawings or Plan Detail Sheet. Install pull boxes as required by the Specifications and Plans.

1. Include provisions for drains in pull box excavations as specified.
2. Do not place the aggregate for the drain until the Engineer approves the excavation.
3. Do not set the pull box until the aggregate is in place.
4. Set the pull boxes in place, level, and install conduits as required. Conduit entrance shall be through the open bottom in Types 1, 2, 3, 4S and 5S. Conduit entrance shall be directly through cored holes in the side walls in Types 4 and 5. Conduit entrance shall be through the conduit terminators in Types 6 and 7.

Adjust the location of the pull box if necessary to avoid obstacles.

Where conduit entrance will be through the side wall in Types 4 and 5, or for conduit other than the terminator size provided in Types 6 and 7, use field cored conduit entrance holes in the side wall of the box. All field coring shall be made with a diamond-tipped masonry hole saw and according to the pull box manufacturer's recommendations.

Use an approved HDPE to EPVC coupling or an underground-type conduit adhesive where joining conduit or conduit bodies of dissimilar materials, such as HDPE-to-EPVC sweeps into pull boxes or installing into pull box conduit terminators.

- Do not locate pull boxes on the curb side of the signal pole in the intersection radius return
 - Install pull boxes so that the long dimension is parallel to the adjacent roadway
 - Install the pull box at a location that is level with the surrounding ground or pavement. Do not place a pull box in a ditch or depression. Unless otherwise shown in the Plans, when installed either in a sidewalk or in the ground, the top of the pull box shall be level with the sidewalk or ground surface.
5. Obtain the Engineer's approval, and begin backfilling and installing the frame and cover. Ground metal lids or covers.

BB. Span Wire and Span Wire Assemblies

Use span wire to support signal heads, cable, and other hardware only. Use messenger cable to support the aerial cable plant. Install span wire and messenger wire where specified in the Plans and in accordance with the Standard Detail Drawings. See Section 925 for information on span wire and messenger cable.

1. Install signal span wire not to exceed the sag specified by the pole manufacturer. Span wire used with timber pole installation shall have a minimum 2.5% sag. Span wire used with strain pole installation shall have a minimum 5% sag.
2. Use helper cables where specified in the Plans and on the Standard Detail Drawings.
3. For construction of a box or modified box span, use bullrings. Be consistent throughout the intersection in use of bull rings or strandvises. If bull rings are not used, standvises shall be interlocked.
4. Install 12 inch (300 mm) diameter drip loop wrapped three times at the cable entrance to signal heads. Arrange cable so that it enters the structure from the bottom of the drip loop. Use a 24 inch (600 mm) diameter drip loop where cables enter a weatherhead and use 24 inch (600 mm) sag at corners of a span.
5. Use aluminum ties, lashing rods, or aluminum wrap to attach cables to span wire. When using aluminum wrap or aluminum ties, space at 6 inch (150 mm) increments. Aluminum wrap shall have at least three turns of wrap. Do not use lashing wire on span wire.
6. Ground all span wire and down guy assemblies as shown on Standard Detail Sheets. Bond all span wire together and bond to ground at every pole.

CC. Traffic Signal Heads

Place traffic signal heads according to the signal design and Plan Detail Drawings. Deviation from the Plans must be according to the MUTCD, current edition and at the Engineer's approval. Ensure all Traffic Signal Heads at an installation have the same appearance for the signal heads and the LED Modules. The Ramp Metering enforcement device shall be mounted on the back of one signal per lane and wired to the red display. The enforcement device shall be able to be viewed from downstream on the ramp.

1. Install traffic signal heads at least 17 feet (5.1 m), but no greater than 19 feet (5.7 m) over the roadway. All vertically attached signal head assemblies shall have a metal support plate installed within the top section (RED) indication of the signal head for additional support and stability. Install Ramp Metering traffic signal heads as shown on the Plans Detail Drawings.
2. Adjust signal heads on the same approach to have the same vertical clearance.
 - a. Measure the clearance from the pavement to the lowest part of the assembly, including brackets and back plates.

- b. Mount traffic signals on poles with a clearance of at least 12 feet (3.6 m) but no more than 19 feet (5.8m) above the sidewalk or pavement grade of the center of the highway, whichever grade is higher.
 - c. Mount and adjust Ramp Metering traffic signals as per the Plan Detail Drawings.
 - d. Mount and adjust Ramp Meter enforcement device (head) as per the Plan Detail Drawings.
3. Connect the signal cable to the wire in each signal head to provide the correct signal indication when the cables are connected to the controller cabinet back panels. Do not splice cables. Use wire nuts to make the connections to the LED signal modules lead-in. Make all connections in the top section. Ensure that the black jacket is pulled into the signal head 6 inches (150 mm).
 4. Install optically programmable (OP) signal heads as shown in the Plans and Standard Detail Sheet and as directed by the manufacturer.
 5. Mount OP heads securely or tether them to limit movement.
 6. Mask the OP lamp for directing visibility under the Engineer’s supervision.
 7. Tether signal heads that have tunnel visors longer than 12 inches (300 mm), at the discretion of the Engineer.
 8. Attach signal heads to mast arms using rigid mounting brackets. See Section 925 for equipment information. Adjust signal heads on mast arms so that all red indications on the same mast arm are at the same elevation.
 9. Install lane control heads for reversible lane systems and Ramp Metering heads as shown in the Plans and the Standard Detail Drawings. Center each signal over the lane or lanes under signal control.
 10. Leave a vertical clearance for blank-out signs as shown on the Standard Detail Drawings. Use a spirit level to ensure that the bottom edge of each sign is horizontal.
 11. All LED modules shall be labeled with their turn on date on the backside of the LED insert.

DD. Pedestrian Signal Heads

Install pedestrian signal heads on wood, concrete, steel strain poles, wood or steel auxiliary poles, or metal pedestal poles. Do not mix pole mount methods at the same intersection installation.

Install the pedestrian signal heads as shown on the Standard Detail Drawings and the intersection Plan Sheets and Drawings.

Leave a vertical clearance from the bottom of the head to the ground level of least 10 feet (3 m) unless specified by the Engineer.

1. Pedestal Mounts

Make pedestal mounts with a lower supporting assembly consisting of:

- a. A 4 inch (100 mm) slip-fitter bracket
- b. Hollow aluminum arms with a minimum inside cross-sectional area equal to a 1.5 inch (38 mm) pipe

Use serrated locking devices that firmly hold the signal heads in the required alignment.

- c. For Pedestal Mounts using side hinge “clamshell”. Secure “clamshell” to pedestal using 0.75 inch (19 mm) wide and 0.30 inch (0.75 mm) thick stainless steel bands.

2. Pole Mounts (Side of Pole)

For Metal poles, use side hinge “clamshell” mounting hardware or hardware as described in Wood Pole, Metal Pole alternate, or pedestrian pole.

a. Side Hinge “Clamshell”

- Secure the hubs to metal or concrete poles using 0.75 inch (10 mm) wide and 0.030 inch (0.75 mm) thick stainless steel bands. Secure the hubs to wood poles using lag bolts.

b. Wood Pole or Metal Pole alternate:

Make pole mounts with the upper and lower assembly consisting of:

- A post arm with a minimum cross-sectional area equal to a 1.5 inch (38 mm) pipe
- A post hub plate that matches the outside pole contour
- Secure the hubs to metal or concrete poles using 0.75 inch (19 mm) wide and 0.030 inch (0.75mm) thick stainless steel bands. Secure the hubs to wood poles using lag bolts, or banding.

Space the junctions so that each pedestrian signal head can be directed toward approaching traffic as needed.

Use serrated locking devices that hold the pedestrian signal heads in alignment.

EE. Blank-out Signs

Install blank-out signs as shown on Plans or as follows:

1. Securely fasten the signs to a stationary structure or to a messenger strand support system.
2. Center each sign over the lane or lanes under sign control, where applicable.
3. Leave a vertical clearance for blank-out signs as shown in the Plans or in Subsection 647.3.05.EE, “Traffic Signal Heads.” Use a spirit level to ensure that the bottom edge of each sign is horizontal.
4. Use terminal strips to connect each sign electrically to the external control box or cabinet.

FF. Battery Backup System (BBS)

Install Battery Backup System (BBS) if indicated on the Plans. Install in accordance with the option as indicated on the Plans and as directed by the Engineer.

With the Battery Backup submittal provide calculations for determining the size of the inverter and batteries based on the actual power requirements for the intersection installation. Ensure that all auxiliary items are included in the calculations. Ensure the submittal specifies the model number and the firmware revision that is being supplied.

Ensure that the external cabinet supplied meets the Section 925 Specifications and is base mounted next to the 332A cabinet as specified. Do not attach the battery external cabinet to the 332A cabinet unless otherwise specified. The external cabinet option allows for 2 separate configurations. Ensure that the correct configuration is installed in accordance with the Plans. Make all connections to the 332A cabinet through the base of the cabinets.

Provide date of manufacture of all batteries provided.

Ensure the BBS functions as required by the specifications. Ensure the “ON BATTERY” relay provides an input into the controller Alarm 2. Install the two hour run time circuitry from the normally open contacts in the BBS controller to the AC+ and the mercury coil terminal in the traffic signal cabinet.

Ensure that the BBS is enabled to communicate via Ethernet connection.

Provide copy of all documentation (Operation and Maintenance Manual) for items supplied. Include with documentation any communications firmware and cable required to interrogate the unit for status, setup or logs.

GG. Power Meters

Install Power Meters per GDOT Standard Drawings and Utility Provider’s Specifications.

647.3.06 Quality Acceptance

A. Testing Loop Detector Installation

Test each loop after installing the conductors in the slots cut in the pavement and before sealing.

- Perform a test where the loop wire is spliced to the shielded lead-in wire and where the shielded lead-in wire enters the controller cabinet
- If there are no splice points, such as in direct entry to the controller cabinet, only perform the tests at the controller

- Record the test results on the Loop Installation Data Sheet in Table 647-10, as shown in this section. Make copies of the data sheet as needed.
- Include the data sheets in the records, and place a copy in the controller cabinet.

Conduct the following five (5) tests to evaluate each loop installation for acceptance before sealing the loop in the pavement:

1. Induced AC Voltage Test

Read 0.05 V AC or less on a digital voltmeter or no deflection on the pointer of an analog meter.

2. Inductance

Inductance (I) is measured in microhenries (mH), and the total inductance is equal to the inductance of loop plus inductance of the loop lead-in.

Acceptable inductance is within 10 percent (10%) of the calculated value for a single loop with the design criteria listed in Table 647-8 and Table 647-9:

Table 647-8 Standard (Bi-Pole) Loops	
6 ft x 6 ft (3 turns) [1.8 m x 1.8 m (3 turns)]	I = 76 mH + 23 mH per 100 feet of loop lead-in cable I = 76 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 30 ft (2 turns) [1.8 m x 9 m (2 turns)]	I = 126 mH + 23 mH per 100 feet of loop lead-in cable I = 126 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 40 ft (2 turns) [1.8 m x 12 m (2 turns)]	I = 165 mH + 23 mH per 100 feet of loop lead-in cable I = 165 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 50 ft (2 turns) [1.8 m x 15 m (2 turns)]	I = 205 mH + 23 mH per 100 feet of loop lead-in cable I = 205 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 70 ft (2 turns) [1.8 m x 21 m (2 turns)]	I = 285 mH + 23 mH per 100 feet of loop lead-in cable I = 285 mH + 23 mH per 30 m of loop lead-in cable

Table 647-9 Quadrupole (QP) Loops	
6 ft x 30 ft (2, 4, 2 turns) [1.8 m x 9 m (2, 4, 2, turns)]	I = 269 mH + 23 mH per 100 feet of loop lead-in cable I = 269 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 40 ft (2, 4, 2 turns) [1.8 m x 12 m (2, 4, 2 turns)]	I = 349 mH + 23 mH per 100 feet of loop lead-in cable I = 349 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 50 ft (2, 4, 2 turns) [1.8 m x 15 m (2, 4, 2, turns)]	I = 429 mH + 23 mH per 100 feet of loop lead-in cable I = 429 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 60 ft (2, 4, 2 turns) [1.8 m x 18 m (2, 4, 2, turns)]	I = 509 mH + 23 mH per 100 feet of loop lead-in cable I = 509 mH + 23 mH per 30 m of loop lead-in cable
6 ft x 70 ft (2, 4, 2 turns) [1.8 m x 21 m (2, 4, 2, turns)]	I = 589 mH + 23 mH per 100 feet of loop lead-in cable I = 589 mH + 23 mH per 30 m of loop lead-in cable

3. Leakage Resistance to Ground

The resistance to ground shall be 5 Mohm or more.

4. Loop Resistance

The resistance reading on an ohmmeter is approximately within ten percent (10%) of the calculated value:

- Acceptable Resistance @ (dc @ 68 °F [20 °C]):ohms(μ)
- No. 18 AWG wire: $R = 29.4\mu/\text{mile}$ (or) $R = 5.5 \times 10^{-3}\mu/\text{ft}$. Approximately 5.5 ohms per 1,000 feet of No. 18 AWG wire)[$R = 18.3\mu/\text{km}$ (or) $R = 18.3 \times 10^{-3}\mu/\text{m}$]
- No. 14 AWG wire: $R = 13.32\mu/\text{mile}$ (or) $R = 2.523 \times 10^{-3}\mu/\text{ft}$. Approximately 2.52 ohms per 1,000 feet of No. 14 AWG wire)[$R = 8.3\mu/\text{km}$ (or) $R = 8.3 \times 10^{-3}\mu/\text{m}$]
- No. 12 AWG wire: $R = 5.2\mu/\text{mile}$ (or) $R = 9.85 \times 10^{-4}\mu/\text{ft}$. Approximately 0.98 ohms per 1,000 feet of No. 12 AWG wire [$R = 3.24\mu/\text{km}$ (or) $R = 3.24 \times 10^{-3}\mu/\text{m}$]

5. Loop Q

Q at 50 kHz is greater than 5.

Report to the Engineer an out-of-range reading on any of the above tests. If a test is found unacceptable, remove the loop, install new wire, and repeat the test procedure.

Include in the test results:

- Type and model number of the equipment used (must be ohmmeter having a high resistance scale of $R \times 10$ KW or greater)
- The last calibration date of the equipment and the scale used

Check the loop using an impedance tester to determine the natural operating frequency and impedance. Ensure that the completed units detect all motor vehicles. If the loop detection system does not meet the above test requirements, payment will not be made for work on the signal installation until corrections are completed.

Table 647-10 Loop Installation Data Sheet	
Conditions	
Project Number:	
Date:	
Contractor:	
Weather:	
Temperature:	
Pavement Condition - Wet () or Dry ()	
Location	
City or County:	Phase:
Intersection Name or Number:	Function:
Route Number(s) or Name (s):	Lane Location:
Installation or Plan Sheet Number:	No. of Turns:
Size and Type of Loop:	Downstream/Upstream: Down () Up ()
Distance from Stop Bar:	Distance E.O.P/Curb to Lead-in:
Distance Lead-in Cable:	
Material	
Loop Wire Color/Insulation Type/Gauge:	
Loop Lead-In Wire Color/Insulation Type/Gauge:	
Splice Point:	
Conduit Length from Curb/E.O.P. to Splice Point:	
Conduit Length from Splice Point to Cabinet:	
Sealant Type and Part Number:	
Sealant Manufacturer and Lot No.:	
Interconnect Wire Type and Length:	
Loop Tests	
1. Induced Voltage ____ 2. Inductance ____ microhenries 3. Leakage Resistance to Ground ____ megohms 4. Loop Resistance ____ ohms 5. Loop Q (Quality) ____ Q	
Comments	
Inspector's Name, and Title	

B. Field Tests

In addition to performing tests during installation and before turning on the equipment, perform the following tests on traffic signal circuits in the presence of the Engineer:

- Test each circuit for continuity

Test each circuit for grounds. If a test fails, repair the circuit immediately. New signals shall operate in the flash mode for three (3) days prior to beginning stop-and-go operation unless otherwise directed by the Traffic Engineer.

For Ramp Metering:

The Contractor shall submit to and obtain approval from the Engineer for Ramp Metering testing procedures for each specific Ramp Meter location. The testing procedure shall demonstrate that all components: hardware, cable, and connections furnished and installed by the Contractor operates correctly and that all functions are in conformance with the specifications.

At a minimum, the Contractor shall demonstrate to the Engineer:

- The IVDS and loop detectors at each location are functioning properly with expected accuracy as specified. IVDS burn-in period shall only be in conjunction with the Ramp Meter signal burn-in period of 30 days.
- The Ramp Meter signals function properly at all stages, including non-metering, startup, metering, and shutdown.
- In multi-lane configurations, the Ramp Meter can operate a simultaneous release of vehicles from all lanes and as well as an alternating or staggered release of vehicles from the two (or three) lanes.;
- Queue detectors are functioning as specified, including both queue detection and queue override.
- The Ramp Meter functions properly for both local traffic responsive and time of day operations.
- The advance warning sign can be clearly seen and can be activated and deactivated properly.
- The Ramp Meter can communicate properly with the hub/TMC.
- The traffic enforcement heads are operating as per the Plans and can be seen by enforcement personnel.

The Contractor shall coordinate closely with Engineer for conducting Ramp Meter field operational tests. Note: Pretest should be performed prior to calling the Engineer for formal field tests inspection. Pretest shall be defined as conducting all field tests in accordance with the Ramp Metering field testing procedures submitted and approved. Results of pretests shall be recorded and submitted to the Engineer. The Engineer may require the Contractor to address particular items noted in the pretest before beginning the actual field tests.

Operational test shall not begin until the field tests are accepted by the engineer-that will be performed during the Engineer's inspection. Begin operational tests after the Engineer is satisfied that all work has been completed. After the Ramp Meter has been placed in operation, the Contractor, in coordination with the system integrator, shall demonstrate that all equipment furnished and installed by the Contractor operates with all software and firmware as specified.

After successful completion of the test procedure, each Ramp Meter assembly shall go through a burn-in period for 30 consecutive days of normal Ramp Metering operations. During the burn-in period, the Contractor shall ensure that all Contractor-supplied equipment operates without failures of any type. If any equipment component malfunctions or fails to provide the specified functionality during the 30-day burn-in period, the Contractor shall replace or repair the defective equipment within 48 hours of notification by the Engineer.

After the malfunctioning component(s) have been repaired or replaced to the satisfaction of the Engineer, the Contractor shall begin a new 30-day burn-in period. The new 30-day burn-in period shall apply only to equipment components supplied by the Contractor. In the event of a failure or malfunctioning of equipment furnished by others which prevents the 30-day burn-in test from continuing, the Engineer will suspend the burn-in test and resume when the other equipment failures are corrected.

C. Operational Tests and Equipment Activation

After the equipment is installed and the field tests are completed successfully the Contractor shall request an initial equipment inspection. The Engineer shall notify in writing the District Signal Engineer a minimum of 14 working days prior to the inspection. The District Signal Engineer shall provide an in depth inspection and provide a written punch list of items for the Contractor to correct. Within fourteen days of the notification the Contractor shall correct the items noted.

Prior to activating new equipment and before removal of any existing intersection control or equipment, test and ensure any communications equipment is functional.

In the event that programming of the controller application is not a pay item for the contract the Engineer will notify the District Signal Engineer a minimum of 14 working days prior to activating the equipment.

Prior to activating equipment all Inductance loop, video detection equipment and detection zones shall be functional and operational.

When defects are resolved, the District Signal Engineer will begin the Contractor's operational test period to demonstrate that every part of the system functions as specified. The operational test shall be concurrent for the entire project.

1. The operational test for the traffic signal and Ramp Metering projects shall be at least thirty (30) days of continuous, satisfactory operation.
2. If a component or system fails or shows unsatisfactory performance, the condition must be corrected and the test repeated until thirty (30) days of continuous satisfactory operation is obtained.
3. The District Traffic Engineer will send the Engineer and Construction Office a letter showing the start, termination, suspension, or successful completion of the operational test period.
4. The Contractor shall obtain written acceptance of the signal installation from the District Traffic Operations Engineer before Final Acceptance.

Costs incurred during operational tests, including power consumption, shall be at the Contractor's expense and included in the price bid for Contract Items.

647.3.07 Contractor Warranty and Maintenance

A. Traffic Signal Equipment Maintenance

See Section 150.

If a signal that is the responsibility of the contractor is not functioning properly:

1. Non-Emergency

Commence work on this signal within three (3) days of the written notice from the Engineer. Failure to respond shall result in a per calendar day charged against monies due or that may become due until the maintenance work is started. See Section 108.

The Contractor shall be responsible for all materials, equipment and expertise necessary to correct signal malfunction or repair.

The Department or local municipality will not be held responsible or liable for any alleged damage to the signal or as a result of the signal malfunction due to problems that may occur after the Department or local municipality forces make repairs.

Upon Notice to Proceed, The Contractor shall check and make any needed adjustments to time clocks on a monthly basis. No additional payment shall be made for this requirement.

2. Emergency

If the Engineer determines that the signal malfunction or failure is an operational hazard, the Contractor is to take corrective action within three (3) hours of the first attempt of notification. Response shall be considered only when qualified personnel and equipment are provided.

Failure to respond within three (3) hours will result in a non-refundable deduction of money of \$1,000.00 with an additional charge of \$500.00 per hour after the first three (3) hours until qualified personnel and equipment arrives on site and begins corrective action.

In addition, the cost of labor and material will be charged by the Department if the Department takes corrective action using its own forces or local municipality forces.

Total charges will not exceed \$5,000.00 (per emergency call) in addition to the material cost and labor incurred to make repairs by the Department or local municipality forces responding to the malfunction.

The Department will not be held responsible or liable for any alleged damage to the signal or as a result of the signal malfunction due to problems that may occur after Department or local municipality forces make emergency repairs.

The Contractor shall be responsible for all materials and equipment necessary to correct signal malfunction or repair.

Final Acceptance will not be given until payment for such work is received.

B. Warranties

Provide manufacturer's warranties or guarantees on electrical, electronic, or mechanical equipment furnished, except state-supplied equipment.

Ensure that warranties and/or guarantees are consistent with those provided as customary trade and industry standard practices; or as otherwise specified in the Plans, Standard Specifications, or Special Provisions.

Upon Final Acceptance, transfer the manufacturer and Contractor warranties or guarantees to the Engineer. Ensure that warranties are continuous and state that they are subject to transfer.

Acceptance or approval of the Work does not waive warranties or guarantees where required by the Specifications. Final Acceptance will not be granted until all warranties and guarantees are received.

C. Guarantees

Repair and/or replace all equipment and material supplied under these Contract Documents which has been determined by the Engineer to not meet Specifications.

The Engineer reserves the sole right to determine suitability or unsuitability of the supplied equipment and material. The Contractor shall bear the total cost of delivery and transportation related to the repair and replacement of equipment and material throughout the duration of the Contract unless otherwise approved by the Engineer.

Transfer to the Engineer any warranties and guarantees remaining on all items after Final Acceptance. Perform transfer at 12:01 AM of the day following Final Acceptance.

647.4 Measurement

647.4.01 General

Traffic signal items complete, in place, and accepted of the kind, size, and type specified are measured as follows:

A. Traffic Signal Installation

Signal installation will be paid for by lump sum, including furnishing labor, materials, tools, equipment, and incidentals required to complete the work unless otherwise specified in this Subsection.

B. Communications Wire, Fiber Optic Cable

The number of feet (meters) of communications cable, wire or fiber optic cable is the actual number of linear feet (meters) of the size installed and accepted. Communications cable shall be paid for under Section 935.

B. Strain Poles, Traffic Signs

Highway signs are measured and paid for under Section 636. Strain poles are measured and paid for under Section 639.

C. Type 4, 4S, 5, 5S, 6 and 7 Pull Boxes

The number of pull boxes will be the actual number of pull boxes installed and accepted.

D. Loop Detector – Maintenance Milling and Resurfacing Projects

The number of loop detectors will be the actual number of loop detectors installed as specified in the Plans or as directed by the Engineer and accepted. Loop detector lead-in cable will not be measured separately for payment but will be included in the price submitted for Loop Detectors.

647.4.02 Limits

General Provisions 101 through 150.

647.5 Payment

647.5.01 General

The lump price bid for Traffic Signal and/or Ramp Meter Installation covers all Items of work in this Specification including furnishing labor, materials, tools, equipment, and incidentals required to complete the work.

Costs for installation, operation, maintenance, and removal of the traffic signal equipment are included under this Item.

Include payment for removal; disposal of existing pavement, shoulder surface, base and sub-grade; and restoration to original condition in the Contract Price for the items to which they pertain. They will not be paid for separately.

Furnishing, installing, and removing sheeting, bracing, and supports will not be paid for separately, but is included in the Contract Prices for other items.

No additional payment will be made for testing and storing State-supplied or Contractor-furnished traffic signal equipment.

No payment will be made for individual items unless a pay item is included in the Plans for the specific item.

Type 4, 4S, 5, 5S, 6, and 7 pull boxes will be paid for per each. Loop Detector will be paid for per each.

Payment will be made under:

Item No. 647	Traffic signal installation no-	Per lump sum
Item No. 647	Pull Box PB4	Per each
Item No. 647	Pull Box PB4S	Per each
Item No. 647	Pull Box PB5	Per each
Item No. 647	Pull Box PB5S	Per each
Item No. 647	Pull Box PB6	Per each
Item No. 647	Pull Box PB7	Per each
Item No. 647	Loop Detector	Per each

Payment for various elements of traffic signals will be as shown on the Plans.

A. Partial Payment

Prior to commencement of the work, the Contractor shall initiate a partial payment process for the lump sum traffic signal items by submitting a written payment schedule of the installation items for consideration and approval by the

Engineer. The submittal should consider staged work. Invoices shall be provided upon the Engineer’s request if necessary to substantiate the schedule of values. The Engineer’s determination of any progress amount paid shall be final. In the event a submittal is not provided, the schedule below will be utilized.

Underground (loops, pull boxes (if not paid for separately), and conduits)	20%
Overhead (span, heads, push buttons)	30%
Cabinet, contents, and base (cabinet must be fully wired to signal and be ready for operation including written final acceptance from the District Traffic Operations Engineer)	50%

B. Additional Items

Payment Items related to Section 647 are described in the following sections:

Strain Poles	Section 639
Highway Lighting	Section 680
Lighting Standards and Luminaries	Section 681
Electrical Wire, Cable, and Conduit*	Section 682
Grassing	Section 700
Timber Poles	Section 639 and Subsection 861.2.02
Sign Blanks	Section 912
Reflectorization Materials	Section 913
Traffic Signal Equipment/Ramp Metering Equip.	Section 925
* Payment for conduit installation shall be as described in Section 682 unless conduit installation is performed as part of a traffic signal installation, in which case measurement and payment is a part of the complete traffic signal installation. Payment is Lump Sum, unless listed as a separate pay item.	

647.5.02 Adjustments

General Provisions 101 through 150.

Office of Traffic Operations

Date: May 21, 2019

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PI No. 0016058, Fayette County

CSX Transportation, Inc.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

Maintenance Resurfacing project on Sandy Creek Road between Ellison Road and Coastline Road Street in Fayette County, Georgia should pave up to 6.25 feet from the centerline of track for asphalt railroad crossing surfaces or pave up to the railroad precast concrete panels for railroad concrete panel surfaces as per GA STD 9021A. The work will require construction activities within the right of way of the railroad at RR inv. No. 639498T, Milepost No. ANB-838.35. The average train movement through this area is approximately 15 trains per day at typical speeds of 55 mph. There are no passenger trains at this location.

1. AUTHORITY OF RAILROAD ENGINEER AND HIGHWAY ENGINEER:

The authorized representative of the Railroad, hereinafter referred to as Railroad Engineer, shall have final authority in all matters affecting the safe maintenance of Railroad traffic and facilities including the adequacy of the foundations and structures supporting the railroad tracks and the necessity for flagging during construction.

The authorized representative of the Chief Engineer, hereinafter referred to as the Highway Engineer, shall have authority over all other matters as prescribed herein and in the Department's Standard Specifications, current edition, as may be revised for this project.

2. NOTICE OF STARTING WORK:

A. The Contractor shall not commence any work on Railroad right-of-way until it has complied with the following conditions:

- (1) Given the Railroad written notice, with copy to the Department, at the addresses shown below and to the Highway Engineer who has been designated to be in charge of the work, at least 10 working days in advance of the date he proposes to begin work on Railroad right-of-way. If flagging is required, it may take up to 30 days to obtain flagging from the Railroad and no work shall be undertaken until flagging is present at the job site.

Notice to:

Jeff Chafin - Regional Engineer
Southwest Region
CSX Transportation, Inc.
1250 Louisville Street
Montgomery, AL 36104

Copy to:

State Utilities Engineer
Georgia Department of Transportation
One Georgia Center 10th Floor
600 West Peachtree Street NW
Atlanta, Georgia 30308

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

334-224-9154

jeff_chafin@csx.com

AND

Usman Enabulele - CSXT Roadmaster

6557 Watson St.

Union City, GA 30291

404-452-0193

usman_enabuelele@csx.com

- (2) Obtained written authorization from the Railroad to begin work on Railroad right-of-way. Such authorization may include an outline of specific and general conditions with which he must comply.
 - (3) Obtained written approval from the Railroad of railroad protective and general liability insurance coverage as required by paragraph 11 herein.
 - (4) Furnished a schedule for all work within the Railroad right-of-way as required by paragraph 6 B (1) herein.
- B. The Railroad's written authorization to proceed with the work shall include the names, addresses, and telephone numbers of the Railroad's representatives who are to be notified as hereinafter required. Where more than one representative is designated, area of responsibility of each representative shall be specified.

3. INTERFERENCE WITH RAILROAD OPERATIONS AND PROPERTY:

- A. The Contractor shall so arrange and conduct its work that there will be no interference with Railroad operations, including train, signal, and communication services, or damage to the facilities or property of the Railroad or tenants on the right-of-way of the Railroad. Whenever work is liable to affect such operations, safety, facilities, or property, the method of doing such work shall first be submitted to the Railroad Engineer for review and approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor which requires flagging and inspection by the Railroad shall be deferred by the Contractor until the flagging and inspection required by the Railroad is available at the job site.
- B. Whenever work within Railroad right-of-way is of such a nature that impediment to Railroad operations such as use of runaround or detour tracks or necessity for reduced speed is unavoidable, the Contractor shall schedule and conduct its operations so that such impediment is reduced to the absolute minimum.
- C. Should conditions arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations, facilities, and property of the Railroad, the Contractor shall make such provisions. If in the judgement of the Railroad Engineer, or in his absence, the Highway Engineer, such provision is insufficient, either may require or make such provisions as he

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

deems necessary. In any event, such unusual provisions shall be at the Contractor's expense and without cost to the Railroad or the Department.

4. CONSTRUCTION PROCEDURES:

A. General:

Construction work and operations by the Contractor on Railroad right-of-way, or property, shall be:

- (1) Subject to the inspection and approval of the Railroad.
- (2) In accord with the Railroad's most current version prior to project let date of *Public Project Information For Construction and Improvement Projects That May Involve the Railroad* and additional written outline of specific conditions if provided by the Railroad.
- (3) In accord with the Railroad's general rules, regulations, and requirements including those relating to safety, fall protection, and personal protective equipment. Safety guidelines are given in paragraph 10 herein.
- (4) In accord with this special provision and Railroad Special Provision.

B. Track Clearances:

The minimum track clearances to be maintained by the Contractor during construction are shown on the highway project plans and included in project special provisions or other contract documents. Clearances less than these will not be permitted unless specifically authorized by the Railroad Engineer. If minimum clearances are not stated in project plans and or contract documents, then such clearances shall be specified by the Railroad Engineer.

C. Temporary Excavation:

The subgrade of an operated track shall be maintained with edge of berm at least 10 feet from centerline of track and not more than 24 inches below top of rail. The Contractor will not be required to make existing section meet this specification if the existing section is substandard, in which case the existing section will be maintained.

D. Excavation for Structures:

The Contractor will be required to take special precaution and care in connection with excavating and shoring pits for construction of bridges, walls, footings, drainage pipes or structures under or adjacent to tracks, and any other structures or construction, including the driving of piles or sheeting, adjacent to tracks to provide adequate lateral and vertical support for the tracks and the loads which they carry, without disturbance of track alignment and surface, and to avoid obstructing track clearances with working equipment, tools or other material. The

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

procedure for doing such work, including need of and plans for excavation and shoring, shall first be approved by the Railroad Engineer, but such approval shall not relieve the Contractor from liability. Before submission of plans to the Railroad Engineer for approval, such plans shall first be reviewed by the Department's Office of Bridge and Structural Design. Shoring plans submitted must be prepared, signed and sealed by a Registered Professional Engineer in the state of Georgia.

E. Demolition, Erection, Hoisting:

- (1) Railroad tracks and other railroad property must be protected from damage during the procedure.
- (2) The contractor is required to submit a plan showing the location of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities as well as all obstructions such as wire lines, poles, adjacent structures, etc. must be shown.
- (3) Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.
- (4) Plans and computations showing the weight of the pick must be submitted. Calculations shall be made from plans of the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure. If plans do not exist, lifting weights must be calculated from field measurements. The field measurements are to be made under supervision of the Registered Professional Engineer submitting the procedure and calculations.
- (5) A data sheet must be submitted listing the types, size, and arrangements of all rigging and connection equipment.
- (6) A complete procedure is to be submitted, including the order of lifts, time required for each lift, and any repositioning or re-hitching of the crane or cranes.
- (7) All erection or demolition plans, procedures, data sheets, etc. submitted must be prepared, signed and sealed by a Registered Professional Engineer in the state of Georgia.
- (8) The Railroad's representative must be present at the site during the entire demolition and erection procedure period.
- (9) All procedures, plans, and calculations shall first be approved by the Highway Engineer and the Railroad Engineer, but such approval does not relieve the Contractor from liability.

F. Blasting:

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

(1) The Contractor shall obtain advance approval from the Railroad Engineer and the Highway Engineer for use of explosives on or adjacent to Railroad right-of-way. The request for permission to use explosives shall include a detailed blasting plan. If permission for use of explosives is granted, the Contractor will be required to comply with the following:

- (a) Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of the Contractor.
- (b) Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
- (c) No blasting shall be done without the presence of an authorized representative of the Railroad. At least 72 hours advance notice to the person designated in the Railroad's notice of authorization to proceed (see paragraph 2B above) will be required to arrange for the presence of an authorized Railroad representative and such flagging the Railroad may require.
- (d) Have at the job site adequate equipment, labor and materials and allow sufficient time to clean up debris resulting from the blasting without delay to trains. Correction of any track misalignment or other damage to Railroad property resulting from the blasting shall be done as directed by the Railroad's authorized representative at the Contractor's expense. If its actions result in delay of trains, the Contractor shall bear the entire cost thereof.
- (e) Storage of explosives on Railroad property will not be permitted.
- (f) Furnish satisfactory evidence of XCU (explosion-collapse-underground damage) insurance coverage.

(2) The Railroad Representative will:

- (a) Determine the approximate location of trains and advise the Contractor the approximate amount of time available for the blasting operation and clean-up.
- (b) Have the authority to order discontinuance of blasting if, in its opinion, blasting is too hazardous or is not in accord with this special provision.

(3) Other Requirements:

Each Railroad has its own requirements for blasting which may include provisions in addition to the above. It is the contractor's responsibility to contact the Railroad before performing any blasting and determine and comply with these requirements. The Contractor shall handle all matters relating to blasting with the Railroad and pay for all costs involved.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

G. Maintenance and Repair of Railroad Facilities:

- (1) The Contractor will maintain all ditches and drainage structures free of silt or other obstructions which may result from its operations and provide and maintain any erosion control measures as required by Highway Project plans and contract documents. The Contractor will promptly repair eroded areas within Railroad right-of-way.
- (2) The Contractor will also repair, or cause to be repaired, any other damage to the property or facilities of the Railroad or its tenants.
- (3) All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.

H. Storage of Materials and Equipment:

Materials and equipment shall not be stored where they will interfere with Railroad operations, nor on the rights-of-way of the Railroad without first having obtained permission from the Railroad Engineer, and such permission will be with the understanding that the Railroad will not be liable for damage to such material and equipment from any cause and that the Railroad Engineer may move or require the Contractor to move, at the Contractor's expense, such material and equipment. All grading or construction machinery that is left parked unattended near the track or on the Railroad right-of-way shall be effectively immobilized so that it cannot be moved by unauthorized persons. Safety guidelines are given in paragraph 10 herein.

I. Cleanup:

Upon completion of the work, the Contractor shall remove from within the limits of the Railroad right-of-way, all machinery, equipment, surplus materials, falsework, temporary erosion measures, rubbish or temporary buildings of the Contractor, and leave said right-of-way in a neat condition satisfactory to the Chief Engineer of the Railroad or his authorized representative.

5. DAMAGES:

- A. The Contractor shall assume all liability for any and all damages to its work, employees, servants, equipment and materials caused by Railroad traffic.
- B. Any cost incurred by the Railroad for repairing damages to its property or to property of its tenants, caused by or resulting from the operations of the Contractor, shall be paid directly to the Railroad by the Contractor.

6. FLAGGING SERVICES:A. When Required

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

Under the terms of the agreement between the Department and the Railroad, the Railroad has sole authority to determine the need for flagging required to protect its operations and facilities. In general, the requirements for flagging will be whenever the Contractor's personnel or equipment are, or are likely to be, working on the Railroad's right-of-way, or within distances as may be specified by Railroad's authorized representative, or across, over, adjacent to, or under a track, or when such work has disturbed or is likely to disturb a railroad structure or the railroad roadbed or surface and alignment of any track to such extent that the movement of trains must be controlled by flagging. These requirements include situations where a crane, or other piece of equipment, is located such that its boom, or extremity, could move and pass within 20 feet of the centerline of a track or within a distance as may otherwise be specified by Railroad's authorized representative. Safety guidelines are given in paragraph 10 herein. **Normally the Railroad will assign one flagman to a project, based on an 8 hour workday and 40 hour workweek, but in some cases more than one may be necessary.**

B. Scheduling and Notification

- (1) Not later than the time that approval is initially requested to begin work on Railroad right-of-way, Contractor shall furnish to the Railroad and the Department a schedule for all work required to complete the portion of the project within Railroad right-of-way.
- (2) The Contractor will be required to give the Railroad representative at least 10 working days of advance notice of intent to begin work within Railroad right-of-way in accordance with paragraph 2.A.(1) of this special provision. Once begun, when such work is then suspended at any time, or for any reason, the Contractor will be required to give the Railroad representative at least 3 working days of advance notice before resuming work on Railroad right-of-way. Such notices shall include sufficient details of the proposed work to enable the Railroad representative to determine if flagging will be required. If such notice is in writing, the contractor shall furnish the Highway Engineer a copy; if notice is given verbally it shall be confirmed in writing with copy to the Highway Engineer. If flagging is required, no work shall be undertaken until the flagman is, or flagmen are, present at the job site. It may take up to 30 days to obtain flagging initially from the Railroad. When flagging begins, the flagman is usually assigned by the Railroad to work at the project site on a continual basis until no longer needed and cannot be called for on a spot basis. If flagging becomes unnecessary and is suspended, it may take up to 30 days to again obtain flagging from the Railroad. Due to Railroad practices, in some cases it may be necessary to give 6 days notice before flagging service may be discontinued and payment stopped.
- (3) If, after the flagman is assigned to the project site, unusual circumstances or conditions arise which require the flagman's presence elsewhere, then the Contractor shall delay work on Railroad right-of-way until such time as the flagman is again available. Any additional costs incurred by the Contractor resulting from such delays shall be the sole responsibility of the Contractor.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

C. Payment

- (1) **The Contractor will be responsible for paying the Railroad directly for any and all costs of flagging which may be required to accomplish the construction. The Contractor shall not delegate this responsibility to any subcontractor or any other party.** The Department will not reimburse the Railroad for any costs of the flagging which is required by the Contractor's work. The cost of flagging service is approximately **\$162.50** per hour or **\$1300.00** per day based on an 8-hour work day and 40-hour work week. This cost includes the base pay for the flagman, overhead, and generally includes travel expenses, meals, lodging, equipment, etc. The charge to the Contractor by the Railroad will be the actual cost based on the rate of pay for the Railroad's employees who are available for flagging service at the time the service is required. Work by a flagman in excess of 8 hours per day and 40 hours per week may result in overtime pay at 1 ½ time the appropriate rate. Also, certain unusual conditions may arise which may result in overtime pay at 2 times the appropriate rate. Railroad work involved in preparing and handling bills may also be charged to the Contractor. Charges to the Contractor by the Railroad shall be in accordance with Federal-Aid Highway billing procedures and requirements as contained in applicable provisions of Part 140, Subpart I, and Part 646, Subpart B, of Title 23, Highways, of the Code of Federal Regulations, current edition, and shall further be on the same basis as the Department would be billed by the Railroad if the Department was paying for the charges.
- (2) Option 1: The Contractor shall make advance deposit of funds based on estimate of the cost of protective flagging or other services as determined by the Railroad. The cost for Railroad services shall then be assessed by the Railroad against this advanced deposit. Upon completion of the Project, any unused funding will be returned to the Contractor. If the Railroad's cost exceeds the advance deposit(s), a request will be made to the Contractor for additional funds or an invoice will be issued to the Contractor for final payment. The Contractor shall remit payment to the Railroad within thirty (30) days of receipt of either a request for additional funds or an invoice.
- (3) Option 2: The contractor will be billed for flagging services on a periodic basis directly by the Railroad. The Contractor will promptly pay such bills within 30 days after each bill is rendered. Should the Contractor fail to pay the Railroad within 60 days after any bill is rendered, the Department may pay directly to the railroad any amounts due and deduct the amount of such payments from any funds due the contractor. This provision does not affect the obligation of the Contractor under his bond or the rights of the Railroad or the Department under the bond.

D. Verification

- (1) The Contractor will review and sign the Railroad flagman's semi-monthly time sheet, or other similar documentation, attesting that the flagman was present during the time recorded.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

- (2) The Railroad flagman assigned to the project will be responsible for notifying the Highway Engineer upon arrival at the job site on the first day (or as soon thereafter as possible) that flagging services begin and on the last day that he performs such services for each separate period that services are provided. The Highway Engineer will document such notification in the project records. When requested, the Highway Engineer will also sign the flagman's time sheets showing daily time spent at the project site.

7. TRANSPORTING MATERIALS AND EQUIPMENT ACROSS TRACKS:

Any existing or temporary grade crossings, work mats, or other means needed during construction by the Contractor for transporting materials of any nature or equipment across railroad tracks or property of Railroad will be the responsibility of the Contractor to handle directly with the Railroad and to make all necessary arrangements and to obtain all required approvals. The Contractor may be required to execute a written agreement with the Railroad to cover such matters and appropriate time should be allowed for the preparation and handling of such agreement. The Contractor will be required to bear all costs incidental to such matters including but not limited to watching and flagging services by Railroad personnel, Right of Entry Agreements or Private Crossing Agreement. Safety guidelines are given in paragraph 10 herein.

8. WORK FOR THE BENEFIT OF THE CONTRACTOR:

- A. All temporary or permanent changes in wire lines or other facilities which are considered necessary to the project are shown on the plans; included in the force account agreement between the Department and the Railroad; or will be covered by appropriate revisions to same which will be initiated and approved by the Department and the Railroad.
- B. Should the Contractor desire any changes in addition to the above, then it shall make separate arrangements with the Railroad for same to be accomplished, including any required flagging service, at the Contractor's expense.

9. COOPERATION AND DELAYS

- A. It shall be the Contractor's responsibility to arrange a schedule with the Railroad for accomplishing stage construction involving work by the Railroad or tenants of the Railroad. In arranging the schedule the contractor shall ascertain, from the Railroad, the lead time required for assembling crews and materials and shall make due allowance therefore.
- B. No charge or claims of the Contractor against either the Department or the Railroad will be allowed for hindrance or delay on account of railway traffic, any work performed or to be performed by the Railroad, or other delay incident to or necessary for safe maintenance of railway traffic and facilities, or for any delays due to compliance with this special provision.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

10. SAFETY GUIDELINES:A. Guidelines for Personnel on Railroad Right-of-Way

- (1) All persons shall wear hard hats. Appropriate eye and hearing protection must be used. Working in shorts is prohibited. Shirts must cover shoulders, back and abdomen. Working in tennis or jogging shoes, sandals, boots with high heels, cowboy and other slip-on type boots is prohibited. Hard-sole, lace-up footwear, zippered boots or boots cinched up with straps which fit snugly about the ankle are adequate. Safety boots are strongly recommended.
- (2) No one is allowed within 25 feet of the centerline of track without specific authorization from the flagman.
- (3) All persons working near track while train is passing are to look out for dragging bands, chains and protruding or shifted cargo.
- (4) No one is allowed to cross tracks without specific authorization from flagman.
- (5) All welders and cutting torches working within 25 feet of the track must stop when train is passing.
- (6) No steel tape or chain will be allowed to cross or touch rails without permission.

B. Guidelines for Equipment on Railroad Right-of-Way

- (1) No crane or boom equipment will be allowed to set up to work or park within boom distance plus 15 feet of the centerline of track without specific permission from railroad official and flagman.
- (2) No crane or boom equipment will be allowed to foul track or lift a load over the track without flag protection and track time.
- (3) All employees will stay with their machines when crane or boom equipment is pointed toward track.
- (4) All cranes and boom equipment under load will stop work while train is passing (including pile driving).
- (5) Swinging loads must be secured to prevent movement while train is passing.
- (6) No loads will be suspended above a moving train.

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

- (7) No equipment will be allowed within 25 feet of centerline of track without specific authorization of the flagman.
- (8) Trucks, tractors or any equipment will not touch ballast line without specific permission from railroad official and flagman.
- (9) No equipment or load movement within 25 feet or above a standing train or railroad equipment without specific authorization of flagman.
- (10) All operating equipment within 25 feet of track must halt operations when a train is passing. All other operating equipment may be halted by the flagman if the flagman views the operation to be dangerous to the passing train.
- (11) All equipment, loads, and cables are prohibited from touching rails.
- (12) While clearing and grubbing, no vegetation will be removed from railroad embankment with heavy equipment without specific permission from the Railroad Engineer and flagman.
- (13) No equipment or materials will be parked or stored on Railroad's property unless specific authorization is granted from the Railroad Engineer.
- (14) All unattended equipment that is left parked on Railroad property shall be effectively immobilized so that it cannot be moved by unauthorized persons.
- (15) All cranes and boom equipment will be turned away from track after each work day or whenever unattended by an operator.

11. INSURANCE: SPECIAL NOTE: PLEASE READ SUBPARAGRAPHS A, B, C & D IN THEIR ENTIRETY PRIOR TO ACQUIRING ANY INSURANCE POLICIES.

A. In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, the Contractor will be required to carry insurance of the following kinds:

- (1) Contractor's Public Liability and Property Damage Liability Insurance.

The Contractor shall furnish to the Railroad and copy to the Department the certificate of insurance as evidence that with respect to the operations it performs it carries regular Contractor's Public Liability Insurance and regular Contractor's Property Damage Liability Insurance both providing for limits of not less than \$5,000,000.00. The Contractor shall name CSX Transportation, Inc. as additionally insured.

CERTIFICATE HOLDER for (1) above is as follows:

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

CSX Transportation, Inc.
 500 Water Street, C907
 Jacksonville, Florida 32202

(2) Workers Compensation Insurance.

The Contractor is required to have workers compensation insurance as described in state law and contractor insurance will waive subrogation against CSX Transportation, Inc where permitted by law.

(3) Railroad Protective Liability Insurance.

The Contractor shall furnish to the Railroad and copy to the Department on the Railroad Protective Insurance Policy with limits of liability as follows:

<u>COVERAGE</u>	<u>MINIMUM COMBINED LIMITS OF LIABILITY</u>
Bodily Injury Liability]	\$5,000,000.00 per occurrence
Property Damage Liability]	\$10,000,000.00 aggregate
Physical Damage to Property]	

The Standards for this protective insurance shall follow the requirements of Part 646, Subpart A, of Title 23, Highways, of the Code of Federal Regulations, current edition.

Railroad protective insurance shall be provided on “ISO-RIMA” (Insurance Services Office – Railroad Insurance Management Association) policy form No. CG 00 35 01 96. ISO Amendatory Endorsement No. CG 28 31 10 93 should also be included if a policy form number other than the foregoing is used. The equivalent of the foregoing will also be acceptable.

BINDERS ARE NOT ACCEPTABLE FOR THIS COVERAGE

NAMED INSURED for Railroad Protective Liability Insurance is as follows:

CSX Transportation, Inc.
 500 Water Street, C907
 Jacksonville, Florida 32202

B. Evidence of insurance as required in Paragraph 11.A.3. above shall be furnished to the address shown below for review and approval by the Railroad and copied to the Department:

Notice to:

Copy to:

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

Matt Meyer
ARCADIS
Matt.Meyer@arcadis.com

State Utilities Engineer
 Georgia Department of Transportation
 One Georgia Center 10th Floor
 600 West Peachtree Street NW
 Atlanta, Georgia 30308

The project number, description of the work and designation of the job site to be shown on all insurance certificates and policies are as follows:

PI No. 0016058, Fayette County. Maintenance Resurfacing project on Sandy Creek Road between Ellison Road and Coastline Road Street in Fayette County, Georgia should pave up to 6.25 feet from the centerline of track for asphalt railroad crossing surfaces or pave up to the railroad precast concrete panels for railroad concrete panel surfaces as per GA STD 9021A. The work will require construction activities within the right of way of the railroad at RR Inv. No. 639498T, Milepost No. ANB-838.35. The average train movement through this area is approximately 15 trains per day at typical speeds of 55 mph. There are no passenger trains at this location.

- C. The Contractor shall obtain insurance premium price quotes for Railroad Protective Liability Insurance for the same such project listed in Paragraph 11.B. above, but with the following limits of liability:

<u>COVERAGE</u>	<u>MINIMUM COMBINED LIMITS OF LIABILITY</u>
Bodily Injury Liability]	\$2,000,000.00 per occurrence
Property Damage Liability]	\$6,000,000.00 aggregate
Physical Damage to Property]	

- D. If any part of the work is sublet, similar insurance and evidence thereof in the same amounts as required of the Prime Contractor, shall be provided by or in behalf of the subcontractor to cover its operations. Endorsements to the Prime Contractor's policies specifically naming subcontractors and describing their operations will be acceptable for this purpose.
- E. All insurance hereinbefore specified shall be carried until all work required to be performed under the terms of the contract has been satisfactorily completed within the limits of the rights-of-way of the Railroad as evidenced by the formal acceptance by the Department and the Railroad. Insuring companies may cancel insurance by permission of the Department and Railroad or on THIRTY (30) days written notice to the Department and Railroad as follows:

NOTICE TO:

COPY NOTICE TO:

SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS

Matt Meyer
ARCADIS
Matt.Meyer@arcadis.com

State Utilities Engineer
Georgia Department of Transportation
One Georgia Center 10th Floor
600 West Peachtree Street NW
Atlanta, Georgia 30308

12. FAILURE TO COMPLY:

In the event the Contractor violates or fails to comply with any of the requirements of this special provision:

- (1) The Railroad Engineer may require that the Contractor vacate Railroad right-of-way.
- (2) The Highway Engineer may withhold all monies due the Contractor on monthly statements.

Any such orders shall remain in effect until the Contractor has remedied the situation to the satisfaction of the Railroad Engineer and the Highway Engineer.

13. PAYMENT FOR COST OF COMPLIANCE:

No separate payment will be made for any cost incurred on account of compliance with this special provision. All such cost shall be included in prices bid for other items of the work.

Office of Maintenance

GENERAL TERMS AND CONDITIONS

1. **Definitions:** The term "contractor" as used herein and elsewhere in these specifications shall be used synonymously with the term "successful bidder." The term "county" shall mean Fayette County, Georgia.
2. **Bid is Offer to Contract:** Each bid constitutes an offer to become legally bound to a contract with the county, incorporating the invitation to bid and the bidder's bid. The binding offer includes compliance with all terms, conditions, special conditions, specifications and requirements stated in the invitation to bid, except to the extent that a bidder takes written exception to such provisions. All such terms, conditions, special conditions, specifications, and requirements will form the basis of the contract. The bidder should take care to answer all questions and provide all requested information, and to note any exceptions in the bid submission. Failure to observe any of the instructions or conditions in this invitation to bid may result in rejection of the bid.
3. **Binding Offer:** Each bid shall constitute a final offer that is binding for ninety (90) days from the date of the bid opening, unless the bidder takes exception to this provision in writing.
4. **Bidder's Questions:** The Fayette County Purchasing Department must receive questions about this invitation to bid in writing at least ten (10) days before the scheduled bid opening, excluding Saturdays, Sundays, and holidays. The county will post answers to questions and/or other information concerning the invitation to bid in the form of an addendum on the county's website at https://www.fayettecountyga.gov/purchasing/bids_and_proposals.htm. It is the responsibility of the prospective bidder to check the website for any addenda issued for this invitation to bid.
5. **References:** Include with your bid a list of three (3) jobs that your company has done that are of the same or similar nature to the work described in this invitation to bid, on the form provided. Include all information as requested on the form.
6. **Bid Submission:** Submit your bid, along with any addenda issued by the county, in a sealed opaque envelope with the following information written on the outside of the envelope:
 - a. The bidder's company name,
 - b. The bid number, which can be found on the invitation to bid or on the website, and
 - c. The "reference" which identifies the bid, which can be found on the invitation to bid or on the website.

Mail or deliver one (1) unbound original bid (paperclip or binder clip acceptable, no staples), signed in ink by a company official authorized to make a legal and binding offer, to:

Fayette County Georgia
Purchasing Department
140 Stonewall Avenue West, Suite 204
Fayetteville, GA 30214
Attention: Contracts Administrator

You may submit bids in person, by U.S. mail, or by a commercial carrier. Do not submit bids by facsimile, e-mail, or other electronic means. Once submitted, all bids become the property of Fayette County.

7. **Bid Preparation Costs:** The bidder shall bear all costs associated with preparing the bid.
8. **Late Bids:** Bids not received by the time and date of the scheduled bid opening will not be considered, unless the delay is a result of action or inaction by the county.
9. **More than One Bid:** Do not submit alternate bids or options, unless requested or authorized by the county in the Invitation to Bid. If a responder submits more than one bid without being requested or authorized to do so, the county may disqualify the bids from that responder, at the county's option.
10. **Bid Corrections or Withdrawals:** The bidder may correct a mistake, or withdraw a bid, before the bid opening by sending written notification to the Director of Purchasing. Bids may be withdrawn after the bid opening only with written authorization from the Director of Purchasing.
11. **Defects or Irregularities in Bids:** The county reserves the right to waive any defect or irregularity in any bid received. In case of an error in extension of prices or totals in the bid, the unit prices shall govern.
12. **Prices Held Firm:** Prices quoted shall be firm for the period of the contract, unless otherwise specified in the bid. All prices for commodities, supplies, equipment, or other products shall be quoted FOB Destination, Fayette County or job site.
13. **Quantities are Estimates:** Quantities listed herein are estimates for the period specified. This will be an indefinite-quantity type contract, with county requirements fulfilled on an "as ordered" basis. No guarantee to purchase the amounts shown is intended or implied. The county reserves the right to order larger or smaller quantities at the prices stated in the bid of the successful bidder.
14. **Brand Name:** If items in this invitation for bid have been identified, described or referenced by a brand name or trade name description, such identification is intended to be descriptive, but not restrictive and is to indicate the quality and characteristics of products that may be offered. Alternative products may be considered for award if clearly identified in the bid. Items offered must meet required specifications and must be of a quality which will adequately serve the use and purpose for which intended.
15. **Bidder Substitutions:** Bidders offering substitutions or deviations from specifications stated in the invitation to bid, shall list such substitutions or deviations on the "Exceptions to Specifications" sheet provided, or on a separate sheet to be submitted with the bid. The absence of such list shall indicate that the bidder has taken no exception to the specifications. The evaluation of bids and the determination as to equality and acceptability of products or services offered shall be the responsibility of the county.
16. **Samples:** When the county requires samples as part of the bid and vendor selection process, bidders must provide requested samples within the time allotted, and at no cost to the county unless otherwise specified. Any goods provided under contract shall conform to the sample submitted. The county will return samples only at the bidder's request, and at the bidder's expense, if they are not destroyed by testing.
17. **Non-Collusion:** By responding to this invitation to bid, the bidder represents that the bid is not made in connection with any competing bidder, supplier, or service provider submitting a separate response to this invitation to bid, and is in all respects fair and without collusion or fraud.
18. **Arrears:** Bids will not be accepted from any person, firm, or corporation who is in arrears in any debt or obligation to Fayette County.

19. **Bid Evaluation:** Award will be made to the lowest responsive, responsible bidder, taking into consideration payment terms, vendor qualifications and experience, quality, references, any exceptions listed, and/or other factors deemed relevant in making the award. The county may make such investigation as it deems necessary to determine the ability of the bidder to perform, and the bidder shall furnish to the county all information and data for this purpose as the county may request. The county reserves the right to reject any bid item, any bid, or all bids, and to re-advertise for bids.
20. **Determination of Lowest Bidder:** If the Invitation to Bid includes a base bid and alternates, the low bid will be determined based on the sum of the base bid and any alternates selected by the Sponsor.
21. **Partial Award:** The county reserves the right to make award by item, by group of items, by any combination of items, or by lump sum award. The award will be made in the best interest of the county. Bidders may restrict their bids to consideration of a lump sum award or other restriction only by so indicating on the pricing sheet or the "Exceptions to Specifications" sheet included in the invitation to bid. Bidders who do not restrict consideration of their bids in this manner shall be expected to accept any portion of the bid awarded. The county reserves the right to award multiple contracts for the products or services sought by this invitation to bid.
22. **Secondary Contracts:** The County may award a secondary contract to the responsive, responsible bidder making the second lowest bid. Considerations in selecting a secondary contract will be the same as for the primary contract.
23. **Discounts:** Cash discounts offered will be a consideration in awarding the bid, but only if they give the county at least fifteen (15) days from receipt of invoice to pay. For taking discounts, time will be computed from the date of acceptance at destination or the date a correct invoice is received, whichever is the later date. Payment is deemed made, for the purpose of earning the discount, on the date of the check. For payment of full invoice price, minimum terms of net 30 are preferred.
24. **Trade Secrets - Confidentiality:** If any person or entity submits a bid or proposal that contains trade secrets, an affidavit shall be included with the bid or proposal. The affidavit shall declare the specific included information which constitutes trade secrets. Any trade secrets must be either (1) placed in a separate envelope, clearly identified and marked as such, or (2) at a minimum, marked in the affidavit or an attached document explaining exactly where such information is, and otherwise marked, highlighted, or made plainly visible. See O.C.G.A. § 50-18-72 (A)(34).
25. **Trade Secrets - Internal Use:** In submitting a bid, the bidder agrees that the county may reveal any trade secret materials contained in the bid to all county staff and officials involved in the selection process, and to any outside consultant or other third parties who may assist in the selection process. The bidder agrees to hold harmless the county and each of its officers, employees, and agents from all costs, damages, and expenses incurred in connection with refusing to disclose any material which the bidder has designated as a trade secret.
26. **Ethics - Disclosure of Relationships:** Before a proposed contract in excess of \$10,000.00 is recommended for award to the Board of Commissioners or the County Administrator, or before the County renews, extends, or otherwise modifies a contract after it has been awarded, the contractor must disclose certain relationships with any County Commissioner or County Official, or their spouse, mother, father, grandparent, brother, sister, son or daughter related by blood, adoption, or marriage (including in-laws). A relationship that must be reported exists if any of these individuals is a director, officer, partner, or employee, or has a substantial financial interest the business, as described in Fayette County Ordinance Chapter 2, Article IV, Division 3 (Code of Ethics).

If such relationship exists between your company and any individual mentioned above, relevant information must be presented in the form of a written letter to the Director of Purchasing. You must include the letter with any bid, proposal, or price quote you submit to the Purchasing Department.

In the event that a contractor fails to comply with this requirement, the County will take action as appropriate to the situation, which may include actions up to and including rejection of the bid or offer, cancellation of the contract in question, or debarment or suspension from award of a County contract for a period of up to three years.

27. **Contract Execution & Notice to Proceed:** After the Board of Commissioners makes an award, all required documents are received by the county, and the contract is fully executed with signature of both parties, the county will issue a written Notice to Proceed. The county shall not be liable for payment of any work done or any costs incurred by any bidder prior to the county issuing the Notice to Proceed.
28. **Term of Contract:** The term of this agreement shall begin upon acceptance of the contract by the county. Thereafter, this agreement may be renewed by the county for two additional one-year renewal terms (each a "Renewal Term" and together with the Initial Term, the "Term), which renewal will be by letter or other written correspondence from the county to the contractor ninety (90) days prior to expiration of the Initial Term or the then-current Renewal Term. If the county fails to provide notice of renewal, this Agreement will terminate at the end of the Initial Term or the then-current Renewal Term. This agreement is subject to the multi-year contractual provisions of O.C.G.A. 36-60-13(a).
29. **Unavailability of Funds:** This contract will terminate immediately and absolutely at such time as appropriated and otherwise unobligated funds are no longer available to satisfy the obligations of the county under the contract.
30. **Insurance:** The successful bidder shall procure and maintain the following insurance, to be in effect throughout the term of the contract, in at least the amounts and limits as follows:
 - a. General Liability Insurance: \$1,000,000 combined single limit per occurrence, including bodily and personal injury, destruction of property, and contractual liability.
 - b. Automobile Liability Insurance: \$1,000,000 combined single limit each occurrence, including bodily injury and property damage liability.
 - c. Worker's Compensation & Employer's Liability Insurance: Workers Compensation as required by Georgia statute.

Before a contract with the successful bidder is executed, the successful bidder shall provide Certificates of Insurance for all required coverage. The successful offeror can provide the Certificate of Insurance after award of the contract, but must be provided prior to execution of the contract document by both parties. The certificate shall list an additional insured as follows:

Fayette County, Georgia
140 Stonewall Avenue West
Fayetteville, GA 30214

31. **Bid Bond:** You must include a bid bond with your bid, equal to five percent (5%) of the total amount bid. Bid bonds shall be provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
32. **Performance and Payment Bonds:** Prior to execution of a contract, the successful bidder shall submit performance and payment bonds each equal to 100 percent of the contract value, provided by a surety which appears on Georgia's list of approved sureties administered by the State Insurance Commissioner, or the U.S. Treasury's list of approved bond sureties (Circular 570).
33. **DBE Goals:** The completed DBE Goals Form, Federal Aid Certification and Georgia Security and Immigration Compliance Act Affidavit shall be submitted with the bid.
34. **Unauthorized Performance:** The County will not compensate the contractor for work performed unless the work is authorized under the contract, as initially executed or as amended.
35. **Assignment of Contract:** Assignment of any contract resulting from this invitation to bid will not be authorized, except with express written authorization from the County.
36. **Indemnification:** The contractor shall defend, indemnify and save the county and all its officers, agents and employees harmless from all suits, actions, or other claims of any character, name and description brought for or on account of any damages, losses, or expenses to the extent caused by or resulting from the negligence, recklessness, or intentionally wrongful conduct of the contractor or other persons employed or utilized by the contractor in the performance of the contract. The contractor shall pay any judgment with cost which may be obtained against the county growing out of such damages, losses, or expenses.
37. **Patent Indemnity:** The contractor guarantees to save the county, its agents, officers, or employees harmless from liability of any nature or kind for use of any copyrighted or un-copyrighted composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, for which the contractor is not the patentee, assignee or licensee.
38. **Severability:** The invalidity of one or more of the phrases, sentences, clauses or sections contained in the contract shall not affect the validity of the remaining portion of the contract. If any provision of the contract is held to be unenforceable, then both parties shall be relieved of all obligations arising under such provision to the extent that the provision is unenforceable. In such case, the contract shall be deemed amended to the extent necessary to make it enforceable while preserving its intent.
39. **Delivery Failures:** If the contractor fails to deliver contracted goods or services within the time specified in the contract, or fails to replace rejected items in a timely manner, the county shall have authority to make open-market purchases of comparable goods or services. The county shall have the right to invoice the contractor for any excess expenses incurred, or deduct such amount from monies owed the contractor. Such purchases shall be deducted from contracted quantities.
40. **Substitution of Contracted Items:** The contractor shall be obligated to deliver products awarded in this contract in accordance with terms and conditions specified herein. If a contractor is unable to deliver the products under the contract, it shall be the contractor's responsibility to obtain prior approval of the ordering agency to deliver an acceptable substitute at the same price quoted in the contractor's original bid. In the event any contractor consistently needs to substitute or refuses to substitute products, the County reserves the right to terminate the contract or invoke the "Delivery Failures" clause stated herein.

41. **Inspection and Acceptance of Deliveries:** The county reserves the right to inspect all goods and products delivered. The county will decide whether to accept or reject items delivered. The inspection shall be conclusive except with respect to latent defects, fraud, or such gross mistakes as shall amount to fraud. Final inspection resulting in acceptance or rejection of the products will be made as soon as practicable, but failure to inspect shall not be construed as a waiver by the county to claim reimbursement or damages for such products which are later found to be in non-conformance with specifications. Should public necessity demand it, the county reserves the right to use or consume articles delivered which are substandard in quality, subject to an adjustment in price to be determined by the Purchasing Director.
42. **Termination for Cause:** The County may terminate the contract for cause by sending written notice to the contractor of the contractor's default in the performance of any term of this agreement. Termination shall be without prejudice to any of the county's rights or remedies by law.
43. **Termination for Convenience:** The County may terminate the contract for its convenience at any time with 10 days' written notice to the contractor. In the event of termination for convenience, the county will pay the contractor for services performed. The county will compensate partially completed performance based upon a signed statement of completion submitted by the contractor, which shall itemize each element of performance completed.
44. **Force Majeure:** Neither party shall be deemed to be in breach of the contract to the extent that performance of its obligations is delayed, restricted, or prevented by reason of any act of God, natural disaster, act of government, or any other act or condition beyond the reasonable control of the party in question.
45. **Governing Law:** This agreement shall be governed in accordance with the laws of the State of Georgia. The parties agree to submit to the jurisdiction in Georgia, and further agree that any cause of action arising under this agreement shall be required to be brought in the appropriate venue in Fayette County, Georgia.