

**CITY OF DALTON, GEORGIA**



**CONTRACT DOCUMENTS**

For

**PROJECT:**

**2019 GUARDRAIL PROJECT FOR  
VARIOUS LOCATIONS**

**DALTON PROJECT NO. PW-2019-GUARDRAIL**

**CITY OF DALTON PUBLIC WORKS DEPARTMENT**

**PO BOX 1205**

**DALTON, GEORGIA 30722**

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SECTION 0400 – GENERAL NOTES

## SECTION 0100 – INFORMATION FOR BIDDERS

### 0101 RECEIPT AND OPENING OF BIDS

The CITY OF DALTON, GEORGIA (*hereinafter called the Owner*), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the CITY OF DALTON FINANCE DEPARTMENT  
300 W. WAUGH STREET, DALTON, GEORGIA 30722 until OCTOBER 22, 2019  
AT 2 PM and then at said office publicly opened and read aloud. The envelope containing the bids must be sealed and designated as the bid for the construction of the project entitled:

2019 GUARDRAIL PROJECT  
FOR VARIOUS LOCATIONS  
DALTON PROJECT NO. PW-2019-GUARDRAIL

The Owner, in its sole discretion, reserves the right to reject any and all bid submittals, waive any and all irregularities in bid submittals, and reject any and all bids not prepared and submitted in accordance with the provisions hereof. Any bid may be withdrawn prior to the above scheduled time for opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual date of the opening thereof.

### 0102 PREPARATION OF BID

Each bid must be submitted on the prescribed form. All blank spaces for bid prices must be filled in, in ink or typewritten, in numerals for unit prices and for total amounts.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his address, and the name of the project for which the bid is submitted. **ALL SEALED BIDS MUST INCLUDE AN EXECUTED E-VERIFY AFFIDAVIT, THIS DOCUMENT CAN BE FOUND IN THE BID PROPOSAL SECTION.** If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified in the bid form. Any bid which is not properly prepared and accompanied by required certifications may be rejected by the Owner.

Each bidder will be required to certify compliance with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act O.C.G.A. §13-10-90 et seq. by doing the following: registering at <https://www.vis-dhs.com/EmployerRegistration> to verify information of all newly hired employees in order to comply with the Immigration Reform and Control Act of 1986 (IRCA), D.L. 99-603 and the Georgia Security and Immigration Compliance Act. Each firm must submit a completed and notarized E-verify (Exhibit A) affidavit with their bid submittal. During the entire duration of this contract, Contractor and all sub-contractors must remain in compliance with Georgia Security and Immigration Compliance Act of 2007 and Georgia code §13-10-91 and §50-36-1.

#### 0103 TELEGRAPHIC MODIFICATION

Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.

#### 0104 QUALIFICATIONS OF BIDDERS

The Owner may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. By submission of his Bid, the Bidder acknowledges the right of the Owner to make such investigations, to contact references and utilize this information as a basis of determining award of the contract. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

Written information pertaining to the Bidder's qualifications may be requested by the Owner. Failure of the Bidder to provide such information within fifteen days of notification will be grounds for disqualification.

#### 0105 BID SECURITY

Each bid must be accompanied by a certified check or bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of five (5)% of the bid. Such certified checks or bid bonds will be returned to all

except the three lowest bidders within three days after the opening of bids, and the remaining certified checks or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contracts, or, if no award has been made within 60 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

0106 LIQUIDATED DAMAGES AND FAILURE TO ENTER INTO CONTRACT

The successful bidder, upon his failure or refusal to execute and deliver the contract and bonds required within 10 days after he has received notice of the acceptance of his bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his bid.

0107 TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidder must agree to commence work on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project by April 30, 2020. Bidders must agree also to pay as liquidated damages the sum of \$300.00 per each consecutive calendar day thereafter.

0108 CONDITION OF WORK

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as possible the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

0109 ADDENDA AND INTERPRETATIONS

Oral interpretations of the meaning of plans, specifications or other contract documents shall not be binding over written material.

Every request for such interpretation should be in writing addressed to City of Dalton Public Works, P.O. Box 1205, Dalton, Georgia 30722 or by email to Megan Elliott ([melliott@daltonga.gov](mailto:melliott@daltonga.gov)) and to be given consideration must be received at least ten days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications, which will be emailed to all prospective bidders. Failure of any bidder to receive any such addendum or interpretations shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

0110 SECURITY FOR FAITHFUL PERFORMANCE

Simultaneously with his delivery of the executed contract, the Contractor shall furnish a surety bond or bonds as security for faithful performance of his contract and for the payment of all persons performing labor on the project under this contract, and furnishing materials in connection with his contract, as specified in the General Conditions included herein. Surety companies executing Bonds must appear on the Treasury Department's most current list (*Circular 570 as amended*) and be authorized to transact business in the state where the project is located.

0111 POWER OF ATTORNEY

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

0112 NOTICE OF SPECIAL CONDITIONS

Attention is particularly called to those parts of the contract documents and specifications which are identified subsequently under Special Conditions.

0113 LAWS AND REGULATIONS

The bidders' attention is directed to the fact that all applicable federal and state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

0114 METHOD OF AWARD

If the Contract is awarded, it will be awarded to the lowest Bidder whose evaluation by Owner indicates to Owner that the award will be in the best interests of the project. The Owner shall have complete discretion in making this determination and may consider factors such as, but not limited to, the following:

- 0114.01 Unit bid prices of various items as they relate to total bid price.
- 0114.02 Proximity of the Bidder's permanent place of business as it may relate to Bidder's responsiveness in carrying out the contract.
- 0114.03 Litigation record of the Bidder.
- 0114.04 Satisfactory completion of similar projects.
- 0114.05 Resources pertaining to management, personnel and equipment.



0114.06 Financial history, credit rating and current resources.

0115 OBLIGATION OF BIDDER

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (*including all addenda*). The failure or omission of any bidder to examine any form, instrument, or document shall in no way relieve any bidder from any obligation in respect to his bid.

0116 CORRELATION AND INTENT OF DOCUMENTS

The contract documents are complementary, and what is called for by one shall be as binding as if called for by all.

The intent of the documents is to describe in detail all construction entailed in this project. The contractor will furnish all labor, materials, equipment, transportation, tools and appurtenances such as may be reasonably required under the terms of the contract to make each part of the work complete.

The drawings are intended to conform and agree with the specifications. If, however, discrepancies occur, the Owners will decide which shall govern. Special specifications stated on the drawings govern that particular piece of construction and have equal weight and importance as the printed specifications. In the event of any discrepancies between the drawings and the figures written thereon, the figures are to be taken as correct.

0117 CLAIMS

The Owner reserves the right to refuse to issue any voucher and to direct that no payment shall be made the contractor in the case they have reason to believe that said contractor has neglected or failed to pay any subcontractor, material dealer, worker or employee for work performed on or about the project including work as set forth in these specifications, until the Owner is satisfied that such subcontractors, material dealers, worker, or employees have been fully paid. However this provision shall not obligate the Owner to intervene in any claim.

0118 ORDER OF WORK

The work shall be started at such points as the Owner shall designate and shall be prosecuted in the order he directs. This applies to both location and items of construction.

0119 SUBCONTRACTS

If required by the Owner, the apparent Successful Bidder, and any other Bidder so requested, will within seven days after the day of the Bid opening submit to Owner a list of all Subcontractors and other persons and organizations (*including those who are to furnish the principal items of material and equipment*) proposed for those portions of the Work as to which such identification is so required. If the Owner, after due investigation, has reasonable objection to any proposed Subcontractor, other person or organization, may, before giving the Notice of Award, request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price. If the apparent Successful Bidder declines to make any such substitution, the contract shall not be awarded to such Bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any Subcontractor, other person or organization so listed and to whom the Owner does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner.

0120 TIMELY EXECUTION

When the Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by at least five unsigned counterparts of the Agreement and all other Contract Documents. Within ten days thereafter, the Contractor shall sign and deliver at least five counterparts of the Agreement to Owner with all other Contract Documents attached. Thereafter, the Owner will deliver two fully signed counterparts to Contractor.

..... END OF SECTION .....



SECTION 0200 – BID PROPOSAL

BID BOND  
(Five Percent of Bid)

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned \_\_\_\_\_

Gracie Gray Contractors, Inc.

of the City of Canton State of Georgia and County of Cherokee

as Principal and American Southern Insurance Company

as Surety, are hereby held and firmly bound unto the CITY OF DALTON, GEORGIA as

Owner in the penal sum of Five percent (5%) of the amount bid, penal sum not to exceed twenty thousand

<sup>PSNTE</sup>  
Dollars (\$ 20,000.00) for the payment of which, well and truly to be made,

we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this 22nd day of October, 2019.

The condition of the above obligation is such that whereas the Principal has submitted to the CITY OF DALTON, GEORGIA a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for the construction of the project entitled:

2019 GUARDRAIL PROJECT  
FOR VARIOUS LOCATIONS  
DALTON PROJECT NO. PW-2019-GUARDRAIL

NOW, THEREFORE,

- (a) If said bid shall be rejected or in the alternate,
- (b) If said bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (*properly completed in accordance with said bid*) and shall furnish a bond for his faithful performance of



BID BOND  
(Continued)

said contract and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void; otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.


The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such Bids, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

  
\_\_\_\_\_  
Witness As To Principal

  
\_\_\_\_\_  
Gracie Gray Contractors, Inc.  
Principal

By  SEAL

  
\_\_\_\_\_  
Witness As To Surety  
Judy McDonald

American Southern Insurance Company  
Surety  
365 Northridge Rd., Ste. 400  
Atlanta, GA 30350

Address \_\_\_\_\_  
By  SEAL  
Attorney-in-Fact, Michael J. Brown



# AMERICAN SOUTHERN INSURANCE COMPANY

Home Office: 3715 Northside Parkway, NW  
Suite 4-800  
Atlanta, Georgia 30327

Mailing Address: P. O. Box 723030  
Atlanta, GA 31139-0030

## GENERAL POWER OF ATTORNEY


Know all men by these Presents, that the American Southern Insurance Company had made, constituted and appointed, and by these presents does make, constitute and appoint Stefan E. Tauger of Parker, Colorado; Scott E. Stoltzner of Hoover, Alabama; Arthur S. Johnson of Atlanta, Georgia; Andrew C. Heaner of Atlanta, Georgia; Jeffery L. Booth of Blacklick, Ohio; James E. Feldner of West Lake, Ohio; David R. Brett of Columbia, South Carolina; Melanie J. Stokes of Atlanta, Georgia; Jason S. Centrella of Jacksonville, Florida; Michael J. Brown of Cumming, Georgia; Tamara D. Johnson of Atlanta, Georgia; or Omar G. Guerra of Overland Park, Kansas, EACH as its true and lawful attorney for it and its name, place and stead to execute on behalf of the said company, as surety, bonds, undertakings and contracts of suretyship to be given to all obligees provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed in amount of the sum of \$1,000,000 (one million dollars), including but not limited to consents of surety for the release of retained percentages and/or final estimates on construction contracts or similar authority requested by the Department of Transportation, State of Florida; and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of the presents, shall be as binding upon the Company as if they had been duly signed by the President and attested by the Secretary of the Company in their own proper persons.

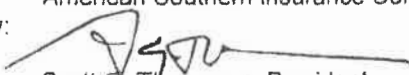
This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted pursuant to due authorization by the Executive Committee of the Board of Directors of the American Southern Insurance Company on the 26th day of May, 1998:

RESOLVED, that the Chairman, President or any Vice President of the Company be, and that each or any of them hereby is, authorized to execute Powers of Attorney qualifying the attorney named in the given Power of Attorney to execute in behalf of the American Southern Insurance Company bonds, undertakings and all contracts of suretyship; and that any Secretary or any Assistant Secretary be, and that each or any of them hereby is, authorized to attest the execution of any such Power of Attorney, and to attach thereto the seal of the Company.

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company when so affixed and in the future, with respect to any bond undertaking or contract of suretyship to which it is attached.

In Witness Whereof, the American Southern Insurance Company has caused its official seal to be hereto affixed, and these presents to be signed by its President and attested by its Secretary this 4<sup>th</sup> day of January, 2019.

Attest:  
  
Melonie A. Coppola, Secretary

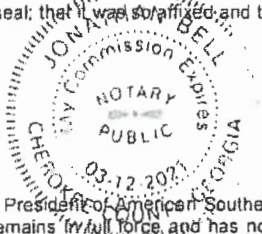
American Southern Insurance Company  
By:   
Scott G. Thompson, President

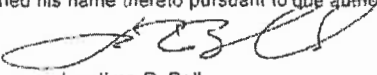


STATE OF GEORGIA  
SS.  
COUNTY OF FULTON

On this 4<sup>th</sup> day of January 2019, before me personally came Scott G. Thompson to me known, who being by me duly sworn, did depose and say that he resides in Atlanta, in the County of Fulton, State of Georgia, at 421 Hollydale Court; that he is the President of American Southern Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed, and that he signed his name thereto pursuant to due authorization.

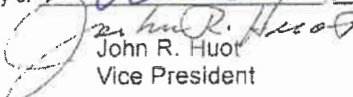
STATE OF GEORGIA  
SS.  
COUNTY OF FULTON



  
Jonathan R. Bell  
Notary Public, State of Georgia  
Qualified in Cherokee County  
Commission Expires March 12, 2021

I, the undersigned, a Vice President of American Southern Insurance Company, a Kansas Corporation, DO HEREBY CERTIFY that the foregoing and attached Power of Attorney remains in full force and has not been revoked; and, furthermore, that the Resolution of the Executive Committee of the Board of Directors set forth in the Power of Attorney is now in force.

Signed and sealed at the City of Atlanta, Dated the 22<sup>nd</sup> day of October 2019

  
John R. Huot  
Vice President

Power No. **48269**

BID PROPOSAL

Place Canton, Ga  
Date 10/22/2019

Proposal of Gracie Gray Contractors, Inc. (hereinafter called "Bidder") a contractor organized and existing under the laws of the City of Canton State of Georgia and County of Cherokee, \* an individual, a corporation, or a partnership doing business as Corporation.

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TO: CITY OF DALTON, GEORGIA  
(Hereinafter called "Owner")

Gentlemen:

The Bidder in compliance with your invitation for bids for the construction of 2019 GUARDRAIL PROJECT FOR VARIOUS LOCATIONS, PW-2019-GUARDRAIL having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the contract documents, within the time set forth herein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under this contract, of which this proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and fully complete the project by April 30, 2020. Bidder further agrees to pay as liquidated damages the sum of \$300.00 for each consecutive calendar day thereafter as hereinafter provided in the General Conditions under "Time of Completion and Liquidated Damages."

Bidder acknowledges receipt of the following addenda:

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\*Strike out inapplicable terms

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BID PROPOSAL  
(Continued)

Amount shall be shown in figures.

The prices submitted shall include all labor, materials, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

The undersigned further agrees that, in case of failure on his part to execute said contract and bond within ten (10) days after the award thereof, the check or bond accompanying his bid and the money payable thereon shall become the property of the Owner; otherwise, the check or bond accompanying this proposal shall be returned to the Bidder.

The Bidder declares that he understands that the quantities shown on the proposal are subject to adjustment by either increase or decrease, and that should the quantities of any of the items of work be increased, the undersigned proposes to do the additional work at the unit prices stated herein; and should the quantities be decreased, he also understands that payment will be made on actual quantities at the unit price bid and will make no claim for anticipated profits for any decrease in the quantities and that actual quantities will be determined upon completion of work, at which time adjustment will be made to the contract amount by direct increase or decrease.

Attached hereto is a bid bond or certified check on the \_\_\_\_\_ of \_\_\_\_\_ in the amount of 5% of Total Bid according to conditions under "Information For Bidders" and the provisions therein.

The full name and residence of persons or parties interested in the foregoing bids, as principals, are named as follows:

Gracie Gray Contractors, Inc.

102 Roberts Way Canton, Ga. 30114



BID PROPOSAL  
(Continued)

Dated at:

Gracie Gray Contractors, Inc.

The 22 day of October, 2019

  
\_\_\_\_\_  
Principal



By Matt Tucker SEAL





CONSTRUCTION PAYMENT BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR *(Name and Address):*

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---

OWNER *(Name and Address):*

CITY OF DALTON  
P.O. BOX 1205  
DALTON, GEORGIA 30722

CONSTRUCTION CONTRACT:

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

Amount: \_\_\_\_\_

Description *(Name and location):*

2019 GUARDRAIL PROJECT FOR  
VARIOUS LOCATIONS – DALTON PROJ. NO. PW-2019-GUARDRAIL

SURETY *(Name and Principal place of Business):*

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---

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BOND:

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

Amount: \_\_\_\_\_

Bond Number: \_\_\_\_\_

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner and for the use and protection of all subcontractors and persons supplying labor, materials, machinery, and

CONSTRUCTION PAYMENT BOND  
(Continued)

equipment in the prosecution of the Work involved in this Construction Contract.

2. With respect to the Owner, this obligation shall be null and void if the Contractor:
  - 2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and
  - 2.2. Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (*at the address described in Paragraph 11*) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
4. The Surety shall have no obligations to Claimant unless the Claimant has substantially complied with the requirements of O.C.G.A. 36-82-104 by giving the notices provided for therein. Each Claimant failing to substantially comply with said Code Section shall be deemed to have waived the protection of the payment bond. No Claimant shall file an action for payment against the Owner, Contractor or Surety, except in accordance with this section.
  - 4.1. Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (*at the address described in Paragraph 12*) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
  - 4.2. Claimants who do not have a direct contract with the Contractor:
    1. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed: and
    2. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
    3. Not having been paid within the above 30 days, have sent a written notice

CONSTRUCTION PAYMENT BOND  
(Continued)

to the Surety (*at the address described in Paragraph 12*) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.

5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.
6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
  - 6.1. Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and that basis for challenging any amounts that are disputed.
  - 6.2. Pay or arrange for payment of any undisputed amounts.
7. The Surety's total obligation shall not exceed the amount of this Bond and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
11. No suit or action on this bond shall be instituted by a Claimant after expiration of one (1) year from the completion of the contract and the acceptance of the work by the public entity responsible therefor.

CONSTRUCTION PAYMENT BOND  
(Continued)

12. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on this Bond.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in the Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

- 15.1. Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- 15.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONTRACTOR AS PRINCIPAL

Company: \_\_\_\_\_  
\_\_\_\_\_ (Corp. Seal)

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

Name and Title: \_\_\_\_\_

SURETY

Company: \_\_\_\_\_  
\_\_\_\_\_ (Corp. Seal)

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

Name and Title: \_\_\_\_\_



CONSTRUCTION PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR *(Name and Address):*

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OWNER *(Name and Address):*

CITY OF DALTON  
P.O. BOX 1205  
DALTON, GEORGIA 30722

CONSTRUCTION CONTRACT:

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

Amount: \_\_\_\_\_

Description *(Name and location):*

2019 GUARDRAIL PROJECT FOR  
VARIOUS LOCATIONS – DALTON PROJ. NO. PW-2019-GUARDRAIL

SURETY *(Name and Principal place of Business):*

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BOND:

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

Amount: \_\_\_\_\_

Bond number: \_\_\_\_\_

1. The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor

CONSTRUCTION PERFORMANCE BOND  
(Continued)

shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.

3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
  - 3.1. The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and
  - 3.2. The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
  - 3.3. The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
  
4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
  - 4.1. Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
  - 4.2. Undertake to perform and complete the Construction Contract through an independent contractor(s) acceptable to the Owner; or
  - 4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
  - 4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
    1. After investigation, determine the amount for which it may be liable to the

CONSTRUCTION PERFORMANCE BOND  
(Continued)

- Owner and, as soon as practicable after the amount is determined, tender payment therefore to the Owner; or
2. Deny liability in whole or in part and notify the Owner citing reasons therefor.
  5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
  6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
    - 6.1. The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
    - 6.2. Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
    - 6.3. Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
  7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.
  8. The Surety hereby waives notice of any change, including changes of time to the Construction Contract or to related subcontracts, purchase orders and other obligations.



## CONSTRUCTION PERFORMANCE BOND

*(Continued)*

9. Any proceeding, legal or equitable, under this Bond shall be brought in the Superior Court of Whitfield County, Georgia and the parties shall submit to the exclusive jurisdiction of such Court and waive any and all jurisdiction, venue, and inconvenient forum objections to such Court and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

### 12. Definitions.

- 12.1. Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- 12.2. Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 12.3. Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- 12.4. Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONTRACTOR AS PRINCIPAL

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

\_\_\_\_\_ (Corp. Seal)

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

Name and Title: \_\_\_\_\_

SURETY

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

\_\_\_\_\_ (Corp. Seal)

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

Name and Title: \_\_\_\_\_



CONTRACT

THIS AGREEMENT made this the 18th day of November, 2019, by  
and between the CITY OF DALTON, GEORGIA, hereinafter called "Owner",  
and Gracie Gray Contractors, Inc.

a contractor doing business as an individual, a partnership, or a corporation\* of the City  
of Canton, County of Cherokee, and State of Georgia  
hereinafter called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements  
hereinafter mentioned, to be made and performed by the Owner, the Contractor hereby  
agrees to commence and complete the construction of the project entitled:

2019 GUARDRAIL PROJECT FOR  
VARIOUS LOCATIONS – DALTON PROJECT NO. PW-2019-GUARDRAIL

hereinafter called the "Project", for the sum of \$251,904.08  
Dollars (Two hundred fifty one thousand nine hundred four dollars and eight cents) and  
all extra work in connection therewith, under the terms as stated in the Contract  
Documents, and at his (*its or their*) own proper cost and expense to furnish all materials,  
supplies, machinery, equipment, tools, superintendence, labor, insurance and other  
accessories and services necessary to complete the said project in accordance with the  
conditions and prices stated in the proposal, the General Conditions of the Contract, the  
specifications and contract documents therefore as prepared by the Owner and as  
enumerated in Paragraph 2 of the General Conditions, all of which are made a part hereof  
and collectively constitute the Contract.

The Contractor hereby agrees to commence work under this contract on or before a date  
to be specified in a written "Notice to Proceed" of the Owner and fully complete the project  
by April 30, 2020. The Contractor further agrees to pay as liquidated damages the sum  
of \$300.00 for each consecutive calendar day thereafter as hereinafter provided in the  
General Conditions under "Time of Completion and Liquidated Damages."

\*Strike out inapplicable terms.

CONTRACT  
(Continued)

The Owner agrees to pay the Contractor in current funds for the performance of the contract, subject to additions and deductions as provided in the General Conditions of the Contract, and to make payments on account thereof as provided in "Payments to Contractor," of the General Conditions.

IN WITNESS WHEREOF, the parties to those presents have executed this contract in five (5) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

ATTEST:

CITY OF DALTON, GEORGIA

\_\_\_\_\_  
City Clerk

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

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Title

ATTEST:

\_\_\_\_\_  
Secretary

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

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Title

Secretary of Owner should attest. If Contractor is corporation, secretary should attest.

Give proper title of each person executing contract.





**Bid Proposal Form - Dalton Project No. PW-2019-GUARDRAIL  
2019 GUARDRAIL PROJECT FOR VARIOUS LOCATIONS**

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
<b>Traffic Control and Grading Complete</b>					
				Unit Price	Total
150-1000	Traffic Control (For Entire Project)	LS	1.00	47475.00	47475.00
210-0100	Grading Complete (For Entire Project)	LS	1.00	<del>56850.00</del> 81850	<del>56850.00</del> 81850
<b>SUB TOTAL</b>					<del>104325.00</del> 129325

<b>Location 1: Abutment Rd Guardrail</b>				Unit Price	Total
163-0232	TEMPORARY GRASSING	0.03	AC	50.00	1.50
163-0240	MULCH	0.08	TN	100.00	8.00
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	194	LF	0.05	9.70
171-0010	TEMPORARY SILT FENCE, TYPE A	387	LF	0.15	58.05
610-9001	REM SIGN	1	EA	50.00	50.00
611-5551	RESET SIGN	1	EA	100.00	100.00
641-1100	GUARDRAIL, TP T	74	LF	62.50	4625.00
641-1200	GUARDRAIL, TP W	247	LF	30.25	7471.25
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA	1325.00	2650.00
700-6910	PERMANENT GRASSING	0.03	AC	450.00	13.50
700-7000	AGRICULTURAL LIME	0.02	TN	150.00	3.00
700-8000	FERTILIZER MIXED GRADE	0.02	TN	150.00	3.00
700-8100	FERTILIZER NITROGEN CONTENT	2	LB	2.50	5.00
<b>SUB TOTAL</b>					15147.00

<b>Location 2: South Hamilton Ave Guardrail</b>				Unit Price	Total
163-0232	TEMPORARY GRASSING	0.19	AC	50.00	9.50
163-0240	MULCH	0.47	TN	850.00	399.50
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	808	LF	0.15	121.20
171-0010	TEMPORARY SILT FENCE, TYPE A	1616	LF	1.75	2828.00

**Bid Proposal Form - Dalton Project No. PW-2019-GUARDRAIL  
2019 GUARDRAIL PROJECT FOR VARIOUS LOCATIONS**

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL	250	SY	37.65	9412.50
441-0301	CONC SPILLWAY, TP 3	1	EA	1650.00	1650.00
441-6216	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	314	LF	35.65	11180.10
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	37	CY	185.00	6845.00
641-1100	GUARDRAIL, TP T	287	LF	48.75	13991.25
641-1200	GUARDRAIL, TP W	312	LF	32.50	10140.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	1	EA	1650.00	1650.00
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	1	EA	3325.00	3325.00
647-5230	SIGNAL ASSEMBLY, FLASHING SCHOOL, COMPLETE	1	EA	7350.00	7350.00
653-0100	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL	1	EA	350.00	350.00
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	1463	LF	1.35	1975.05
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	1841	LF	1.35	2485.35
654-1001	RAISED PVMT MARKERS, TP 1	47	EA	22.10	1038.70
656-0050	REMOVE EXIST SOLID TRAF STRIPES, 5 IN, THERMOPLASTIC	1845	LF	1.75	3228.75
656-5000	REMOVE EXIST TRAF MARKINGS - RR/HWY CROSSING SYMBOL	1	EA	550.00	550.00
700-6910	PERMANENT GRASSING	0.19	AC	450.00	85.50
700-7000	AGRICULTURAL LIME	0.11	TN	150.00	16.50
700-8000	FERTILIZER MIXED GRADE	0.11	TN	150.00	16.50
700-8100	FERTILIZER NITROGEN CONTENT	10	LB	2.50	25.00
<b>SUB TOTAL</b>					<b>78673.40</b>

**Bid Proposal Form - Dalton Project No. PW-2019-GUARDRAIL  
2019 GUARDRAIL PROJECT FOR VARIOUS LOCATIONS**

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
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Location 3: South Thornton Ave Guardrail				Unit Price	Total
163-0232	TEMPORARY GRASSING	0.1	AC	50.00	0.50
163-0240	MULCH	0.26	TN	100.00	26.00
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE C	497	LF	0.15	74.55
171-0030	TEMPORARY SILT FENCE, TYPE C	994	LF	1.25	1242.50
610-9001	REM SIGN	5	EA	50.00	250.00
611-5551	RESET SIGN	4	EA	100.00	400.00
641-1200	GUARDRAIL, TP W	163	LF	62.50	10187.50
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA	1325.00	2650.00
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	2	EA	3635.00	7270.00
700-6910	PERMANENT GRASSING	0.1	AC	450.00	13.50
700-7000	AGRICULTURAL LIME	0.06	TN	150.00	3.00
700-8000	FERTILIZER MIXED GRADE	0.06	TN	150.00	3.00
700-8100	FERTILIZER NITROGEN CONTENT	6	LB	2.50	3.00
<b>SUB TOTAL</b>					<b>22125.55</b>

Location 4: West Emery St Guardrail				Unit Price	Total
163-0232	TEMPORARY GRASSING	0.03	AC	50.00	1.50
163-0240	MULCH	0.07	TN	100.00	7.00
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	87.5	LF	0.05	4.38
171-0010	TEMPORARY SILT FENCE, TYPE A	175	LF	0.15	26.25
610-9001	REM SIGN	2	EA	50.00	100.00
611-5551	RESET SIGN	2	EA	100.00	200.00
641-1200	GUARDRAIL, TP W	96	LF	38.50	3696.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA	1325.00	2650.00



**Bid Proposal Form - Dalton Project No. PW-2019-GUARDRAIL  
2019 GUARDRAIL PROJECT FOR VARIOUS LOCATIONS**

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
700-6910	PERMANENT GRASSING	0.03	AC	450.00	13.50
700-7000	AGRICULTURAL LIME	0.02	TN	150.00	3.00
700-8000	FERTILIZER MIXED GRADE	0.02	TN	150.00	3.00
700-8100	FERTILIZER NITROGEN CONTENT	2	LB	2.50	5.00
<b>SUB TOTAL</b>					<b>6709.63</b>

Company Name: Gracke Gray Contractors

Authorized Bid Rep. Signature: *[Signature]*

Authorized Bid Rep. Title: Director

TOTAL ~~226680.58~~
(MT)

*251,680.58*

**Corrected Total - \$251,904.08  
(See attached Bid Tabulation)  
ME- 10/24/2019**

**CITY OF DALTON**  
DALTON PROJECT NO: 2019 GUARDRAIL PROJECT

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	GRACIE GRAY CONTRACTORS, INC.		CORRECTED
				BID UNIT PRICE	AMOUNT	
<b>TRAFFIC CONTROL AND GRADING COMPLETE</b>						
150-1000	Traffic Control (For Entire Project)	LS	1.00	\$47,475.00	\$47,475.00	\$47,475.00
210-0100	Grading Complete (For Entire Project)	LS	1.00	\$81,850.00	\$81,850.00	\$81,850.00
				<b>Subtotal:</b>	<b>\$129,325.00</b>	<b>\$129,325.00</b>
<b>LOCATION 1: ABUTMENT RD GUARDRAIL</b>						
163-0232	TEMPORARY GRASSING	AC	0.03	\$50.00	\$1.50	\$1.50
163-0240	MULCH	TN	0.08	\$100.00	\$8.00	\$8.00
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	LF	194	\$0.05	\$9.70	\$9.70
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	387	\$0.15	\$58.05	\$58.05
610-9001	REM SIGN	EA	1	\$50.00	\$50.00	\$50.00
611-5551	RESET SIGN	EA	1	\$100.00	\$100.00	\$100.00
641-1100	GUARDRAIL, TP T	LF	74	\$62.50	\$4,625.00	\$4,625.00
641-1200	GUARDRAIL, TP W	LF	247	\$30.25	\$7,471.75	\$7,471.75
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	2	\$1,325.00	\$2,650.00	\$2,650.00
700-6910	PERMANENT GRASSING	AC	0.03	\$450.00	\$13.50	\$13.50
700-7000	AGRICULTURAL LIME	TN	0.02	\$150.00	\$3.00	\$3.00
700-8000	FERTILIZER MIXED GRADE	TN	0.02	\$150.00	\$3.00	\$3.00
700-8100	FERTILIZER NITROGEN CONTENT	LB	2	\$2.50	\$5.00	\$5.00
				<b>Subtotal:</b>	<b>\$15,147.00</b>	<b>\$14,998.50</b>
<b>LOCATION 2: SOUTH HAMILTON STREET GUARDRAIL</b>						
163-0232	TEMPORARY GRASSING	AC	0.19	\$50.00	\$9.50	\$9.50
163-0240	MULCH	TN	0.47	\$850.00	\$399.50	\$399.50
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	LF	808	\$0.15	\$121.20	\$121.20
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	1616	\$1.75	\$2,828.00	\$2,828.00
310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL	SY	250	\$37.65	\$9,412.50	\$9,412.50
441-0301	CONC SPILLWAY, TP 3	EA	1	\$1,650.00	\$1,650.00	\$1,650.00
441-6216	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	LF	314	\$35.65	\$11,180.10	\$11,194.10
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	CY	37	\$185.00	\$6,845.00	\$6,845.00
641-1100	GUARDRAIL, TP T	LF	287	\$48.75	\$13,991.25	\$13,991.25
641-1200	GUARDRAIL, TP W	LF	312	\$32.50	\$10,140.00	\$10,140.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	1	\$1,650.00	\$1,650.00	\$1,650.00
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	EA	1	\$3,325.00	\$3,325.00	\$3,325.00
647-5230	SIGNAL ASSEMBLY, FLASHING SCHOOL, COMPLETE	EA	1	\$7,350.00	\$7,350.00	\$7,350.00
653-0100	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL	EA	1	\$350.00	\$350.00	\$350.00
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	1463	\$1.35	\$1,975.05	\$1,975.05
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	1841	\$1.35	\$2,485.35	\$2,485.35
654-1001	RAISED PVMT MARKERS, TP 1	EA	47	\$22.10	\$1,038.70	\$1,038.70
656-0050	REMOVE EXIST SOLID TRAF STRIPES, 5 IN, THERMOPLASTIC	LF	1845	\$1.75	\$3,228.75	\$3,228.75
656-5000	REMOVE EXIST TRAF MARKINGS - RR/HWY CROSSING SYMBOL	EA	1	\$550.00	\$550.00	\$550.00
700-6910	PERMANENT GRASSING	AC	0.19	\$450.00	\$85.50	\$85.50
700-7000	AGRICULTURAL LIME	TN	0.11	\$150.00	\$16.50	\$16.50
700-8000	FERTILIZER MIXED GRADE	TN	0.11	\$150.00	\$16.50	\$16.50
700-8100	FERTILIZER NITROGEN CONTENT	LB	10	\$2.50	\$25.00	\$25.00
				<b>Subtotal:</b>	<b>\$78,673.40</b>	<b>\$78,687.40</b>
<b>LOCATION 3: SOUTH THORNTON AVE GUARDRAIL</b>						
163-0232	TEMPORARY GRASSING	AC	0.1	\$50.00	\$0.50	\$5.00
163-0240	MULCH	TN	0.26	\$100.00	\$26.00	\$26.00
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE C	LF	497	\$0.15	\$74.55	\$74.55
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	994	\$1.25	\$1,242.50	\$1,242.50
610-9001	REM SIGN	EA	5	\$50.00	\$250.00	\$250.00
611-5551	RESET SIGN	EA	4	\$100.00	\$400.00	\$400.00
641-1200	GUARDRAIL, TP W	LF	163	\$62.50	\$10,187.50	\$10,187.50
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	2	\$1,325.00	\$2,650.00	\$2,650.00
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	EA	2	\$3,635.00	\$7,270.00	\$7,270.00
700-6910	PERMANENT GRASSING	AC	0.1	\$450.00	\$13.50	\$45.00
700-7000	AGRICULTURAL LIME	TN	0.06	\$150.00	\$3.00	\$9.00
700-8000	FERTILIZER MIXED GRADE	TN	0.06	\$150.00	\$3.00	\$9.00
700-8100	FERTILIZER NITROGEN CONTENT	LB	6	\$2.50	\$3.00	\$15.00
				<b>Subtotal:</b>	<b>\$22,125.55</b>	<b>\$22,183.55</b>
<b>LOCATION 4: WEST EMERY STREET GUARDRAIL</b>						
163-0232	TEMPORARY GRASSING	AC	0.03	\$50.00	\$1.50	\$1.50
163-0240	MULCH	TN	0.07	\$100.00	\$7.00	\$7.00
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	LF	87.5	\$0.05	\$4.38	\$4.38
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	175	\$0.15	\$26.25	\$26.25
610-9001	REM SIGN	EA	2	\$50.00	\$100.00	\$100.00
611-5551	RESET SIGN	EA	2	\$100.00	\$200.00	\$200.00
641-1200	GUARDRAIL, TP W	LF	96	\$38.50	\$3,696.00	\$3,696.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	2	\$1,325.00	\$2,650.00	\$2,650.00
700-6910	PERMANENT GRASSING	AC	0.03	\$450.00	\$13.50	\$13.50
700-7000	AGRICULTURAL LIME	TN	0.02	\$150.00	\$3.00	\$3.00
700-8000	FERTILIZER MIXED GRADE	TN	0.02	\$150.00	\$3.00	\$3.00
700-8100	FERTILIZER NITROGEN CONTENT	LB	2	\$2.50	\$5.00	\$5.00
				<b>Subtotal:</b>	<b>\$6,709.63</b>	<b>\$6,709.63</b>
<b>Corrected Calculations</b>				<b>Bid Tabulation Total:</b>	<b>\$251,830.08</b>	<b>\$251,904.08</b>
<b>Bid Total</b>				<b>Bid Proposal Total:</b>	<b>\$251,680.58</b>	<b>\$251,904.08</b>
<b>Difference Between Corrected Calculations and Bid Total</b>					<b>\$149.50</b>	<b>\$223.50</b>

## SECTION 0300 - GENERAL CONDITIONS

### 0301 CONTRACT AND CONTRACT DOCUMENTS

The Contract Documents as hereinafter enumerated in Paragraph 2 of the General Conditions, shall form this Contract and the provisions thereof shall be as binding upon the parties hereto as if they were fully set forth. The Table of Contents, Titles, Headings, Running Headlines and Marginal Notes contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way effect, limit or cast light on the interpretation of the provisions to which they refer.

### 0302 DEFINITIONS

The following terms as used in this contract are respectively defined as follows:

- 0302.01 Contractor - A person, firm or corporation with whom the contract is made by the Owner.
- 0302.02 Contract Documents - The Contract Documents are composed of the Advertisement for Bids; Instructions to Bidders; Bid Package; Form of Proposal, General Conditions, Supplementary Conditions, Detail Specifications, Form of Contract, Form of Bond(s), Addenda and the drawings including all changes incorporated herein before their execution.
- 0302.03 Project Representative - Refers to the authorized representative of the Owner, who is assigned to the site or any part thereof.
- 0302.04 Owner - The party of the First Part in the accompanying Contract, and meaning the CITY OF DALTON, GEORGIA.
- 0302.05 Subcontractor - A person, firm or corporation supplying labor and materials or only labor for work at the site of the project for, and under separate contract or agreement with the contractor for performance of a part of the work at the site.
- 0302.06 Work on (at) the Project - Work to be performed at the location of the project, including the transportation of materials and supplies to or from the location of the project by employees of the Contractor and any Subcontractor.

### 0303 CORRELATION AND INTENT OF DOCUMENTS

The contract documents are complementary, and what is called for by any one shall be as binding as if called for by all.

0303.01 The intent of the documents is to describe all construction entailed in this project. The contractor will furnish all labor and materials, equipment, transportation, tools and appurtenances such as may be reasonably required under the terms of the contract to make each part of the work complete.

0303.02 The Drawings are intended to conform with and agree with the Specifications. In the event of a discrepancy between the Drawings and the Specifications, the Drawings shall control over the general Specifications. In the event of a discrepancy between special Specifications stated upon the Drawings and the Drawings, the special Specifications shall control over the Drawing and general Specifications. Contractor is responsible for confirmation of applicable specifications by Owner.

### 0304 MATERIALS, SERVICES AND FACILITIES

0304.01 It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

0304.02 Any work necessary to be performed by the Contractor to complete the project on time after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the Owner.

### 0305 CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims and/or encumbrances.

### 0306 MATERIALS FURNISHED BY THE CONTRACTOR

All materials used in the work including equipment shall be new and unused materials of a reputable U.S. Manufacturer conforming to the applicable requirements of the Specifications, and no materials shall be used in the work until

they have been approved by the Owner. The Contractor shall furnish all materials necessary except as otherwise specifically noted or specified.

### 0307 INSPECTION AND TESTING OF MATERIALS

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

### 0308 PATENTS

0308.01 The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.

0308.02 License and/or Royalty Fees for the use of a process which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, direct by the Owner and not by or through the Contractor.

0308.03 If the Contractor uses any design, device or materials covered by letters, patent or copyright, he shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood, that, without exception, arising from the use of such design, device, or materials or in any way involved in the work, the Contractor and/or his Sureties shall indemnify and save harmless the Owner of the project from all claims for infringement by the reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

### 0309 SURVEYS, PERMITS AND REGULATIONS

0309.01 Unless otherwise expressly provided for in the Specifications, the Owner will furnish to the Contractor any control alignment and bench mark data from previous engineering surveys.

0309.02 The Contractor shall procure and pay all permits, licenses and approvals necessary for the execution of his contract. The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to performance of the work, the protection of adjacent property, and the maintenance of passageways, guard fences or other protective facilities.

#### 0310 CONTRACTOR'S OBLIGATIONS

0310.01 The Contractor shall and will, in good workmanlike manner do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this contract, within the time herein specified, in accordance with the plans and drawings covered by this contract, any and all supplemental plans and drawings and in accordance with the directions of the Owner as given from time to time during the progress of the work. He shall furnish, erect, maintain and remove such construction plant and such temporary works as may be required. He alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure of their improper construction, maintenance or operation.

0310.02 The Contractor shall observe, comply with and be subject to all terms, conditions, requirements, and limitations of the Contract and specifications and shall do, carry on, and complete the entire work to the satisfaction of the Owner.

#### 0311 CONTRACTOR'S RESPONSIBILITY

The Contractor shall be responsible for all material and work until they are finally accepted by the Owner and shall repair at his own expense any damage that they sustain before their final acceptance. The Contractor shall be responsible for all damages caused by him of whatever nature and must settle all claims arising from such damage without cost to the Owner; he shall act as defendant in, and bear the expense of each and every suit of any and every nature which may be brought against him or the Owner, by reason of, or connected with the work under the Contract. Should any claim arise, the Owner may hold back sufficient money to meet said claims or until the Contractor has satisfied the Owner that all claims against him as the result of his work have been adjusted. He must also show that there are no claims or liens whatsoever outstanding at the completion of his contract before final payment is made.

#### 0312 WEATHER CONDITIONS

In the event of temporary suspension of work, or during inclement weather, or

whenever the Owner shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Owner, any work or materials shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors so to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

### 0313 SAFETY PROVISIONS

0313.01 The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (*PL 91-596*) and under Sec.107 of the Contract Work Hours and Safety Standards Act (*PL 91-54*).

0313.02 The Contractor shall be responsible for the Safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure of their improper construction, maintenance and operation.

0313.03 The Contractor shall employ, when necessary, watchmen on the work and shall, when necessary, erect and maintain such strong and suitable barriers and such light as will effectually prevent the happening of any accident to health, limb or property.

### 0314 SANITARY PROVISIONS

The Contractor shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees as may be necessary to comply with the regulations of the State Board of Health and all local ordinances. No nuisance will be permitted.

### 0315 PUBLIC CONVENIENCE AND SAFETY

Materials stored at the site of the work shall be so placed and the work shall, at all times, be so conducted as to cause no greater obstruction to traffic than is considered permissible by the Owner. No roadway shall be closed or opened except by express permission of the Owner and the Contractor's proper notification of local fire and police departments. Precaution shall be exercised at all times for the protection of persons and property. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery, equipment and other hazards shall be guarded in accordance with the safety provisions of the manual of Accident Prevention in Construction, published by the Associated General Contractors of America to extent that such provisions are not in contravention of applicable laws.

### 0316 PROTECTION OF WORK AND PROPERTY - EMERGENCY

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work, and that of adjacent property from damage. The Contractor shall replace or make good any such damage, loss or injury unless such be caused directly by errors contained in the contract or by the Owner, or his duly authorized representative.

- 0316.01 In case of an emergency which threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Owner in a diligent manner. He shall notify the Owner immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted to the Owner for approval.
- 0316.02 Where the Contractor has not taken action but has notified the Owner of an emergency threatening injury to persons or damage to the work or any adjoining property, he shall act as instructed or authorized by the Owner.
- 0316.03 The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Paragraph 0327 of the General Conditions.

### 0317 INSPECTION

The authorized representatives and agents of the Owner shall be permitted to observe all work, materials, payrolls, records of personnel, invoices of materials and other relevant data and records.

### 0318 REPORTS, RECORDS AND DATA

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

### 0319 SUPERINTENDENCE BY CONTRACTOR

At the site of the work, the Contractor shall employ a construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Owner and shall be one who can be continued in that capacity for the particular job involved unless he ceases to be on the Contractor's payroll. The Owner may require Contractor to remove and replace a site superintendent within its discretion.



### 0320 COMPETENT LABOR

- 0320.01 The Contractor shall employ only competent and skilled workers on the project. The Contractor shall have a competent superintendent or foreman present at all times when the work is in progress and with authority to receive orders and execute the work.
- 0320.02 The Contractor shall, upon demand from the Owner, immediately remove any superintendent, foreman or worker whom the Owner may consider incompetent or undesirable.

### 0321 CONSTRUCTION EQUIPMENT

The Contractor shall provide all necessary equipment in good repair for the expeditious construction of the work. Any equipment not adapted for the work, in such repair as to be dangerous to the project or workers, shall not be used.

### 0322 CHANGES IN THE WORK

- 0322.01 Without invalidating the Agreement, the Owner may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order, the Contractor will proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Paragraph 0328. A Change Order signed by the Contractor indicates his agreement therewith.
- 0322.02 The Owner may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the Contractor believes that any Field Order authorized by the Owner entitles him to an increase in the Contract Price or extension of Contract Time, he shall inform the Owner in writing of the amount of increased price or time associated with the Field Order, and he shall include reference to appropriate contract documents supporting the basis for the claim, and he shall not proceed with the work in question until a written decision has been rendered by the Owner.
- 0322.03 Any changes or additional work performed by the Contractor without authorization of a Change Order will not entitle him to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency.

0322.04 It is the Contractor's responsibility to notify his surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable bonds shall be adjusted accordingly. The Contractor will furnish proof of such adjustment to the Owner.

0322.05 The term Change Order is defined as a written order to the Contractor signed by the Owner which authorizes a change in the work or the contract price or the contract time issued after execution of the Agreement.

0322.06 The Contract Price constitutes the total compensation payable to the Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the Contractor shall be at his expense without changing the Contract Price, except where authorized by Change Order.

### 0323 CHANGE IN CONTRACT PRICE

0323.01 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

0323.01.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.

0323.01.2 By mutual acceptance of a lump sum (*which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 0327.04.2.1*).

0323.01.3 On the basis of the Cost of the Work (*determined as provided in Paragraphs 0327.04 and 0327.05*) plus a Contractor's Fee for overhead and profit (*determined as provided in Paragraphs 0327.4 and 0327.05*).

0323.02 The term Cost of the Work means the sum of all costs necessarily incurred and paid by the Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in Paragraph 0327.03.

0323.02.1 Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of

their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing work after regular working hours, on Sunday or legal holidays shall be included in the above to the extent authorized by Owner.

0323.02.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith.

0323.02.3 Payments made by Contractor to the Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from Subcontractors acceptable to him and shall deliver such Bids to Owner who will then determine which Bids will be accepted.

0323.02.4 Costs of special consultants (*including, but not limited to, engineers, architects, testing laboratories, surveyors, lawyers, and accountants*) employed for services specifically related to the Work.

0323.02.5 Supplemental costs including the following:

0323.02.5.1 The proportion of necessary transportation, traveling and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

0323.02.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of Contractor.

0323.02.5.3 Rentals of all construction equipment and machinery and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

0323.02.5.4 Sales, use or similar taxes related to the Work, and for which Contractor is liable, imposed by any governmental authority.

0323.02.5.5 Deposits lost for causes other than Contractor's negligence, royalty payments and fees for permits and licenses. Costs for permits and licenses must be shown as a separate item.

0323.02.5.6 Losses, damages and expenses, not compensated by insurance or otherwise, sustained by Contractor in connection with the execution of, and to, the Work, provided they have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's Fee.

0323.02.5.7 The cost of utilities, fuel and sanitary facilities at the site.

0323.02.5.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

0323.02.5.9 Cost of premiums for additional Bonds and Insurance required because of changes in the Work.

0323.03 The term Cost of the Work shall not include any of the following:

0323.03.1 Payroll costs and other compensation of Contractor's officers, executives, principals (*of partnership and sole proprietorships*), general managers, engineers, architects, estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor whether at the site or in his principal or a branch office for general administration of the Work and not specifically included in the schedule referred to in subparagraph 0327.02.1 - all of which are to be considered administrative costs covered by the Contractor's Fee.

0323.03.2 Expenses of Contractor's principal and branch offices other than his office at the site.

0323.03.3 Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

- 0323.03.4 Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- 0323.03.5 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 0327.04.
- 0323.04 The Contractor's Fee which shall be allowed to Contractor for his overhead and profit shall be determined as follows:
- 0323.04.1 a mutually acceptable firm fixed price; or if none can be agreed upon.
- 0323.04.2 a fee based on the following percentages of the various portions of the Cost of the Work.
- 0323.04.2.1 for costs incurred under paragraphs 0327.02.1 and 0328.02.2, the Contractor's Fee shall be fifteen percent.
- 0323.04.2.2 for costs incurred under paragraph 0328.02.3, the Contractor's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to Contractor on account of overhead and profit of all Subcontractors shall be fifteen percent:
- 0323.04.2.3 no fee shall be payable on the basis of costs itemized under paragraphs 0327.02.4, 0327.02.5, and 0327.03;
- 0323.04.2.4 the amount of credit to be allowed by Contractor to Owner for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in Contractor's Fee by an amount equal to ten percent of the net decrease; and
- 0323.04.2.5 when both additions and credits are involved in any one change, the adjustment in Contractor's Fee shall be computed on the basis of the net change in accordance with paragraphs 0327.04.2.1 through 0328.04.2.4, inclusive.
- 0323.05 Whenever the cost of any Work is to be determined pursuant to Paragraph 0327.02 or 0327.03. Contractor will submit in form acceptable to Owner an itemized cost breakdown together with supporting data.

#### 0324 CHANGE OF THE CONTRACT TIME

The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to Owner within ten days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless Owner allows an additional period of time to ascertain more accurate data. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.

0324.01 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if he makes a claim therefor as provided in Paragraph 0327.01. Such delays shall include, but not be restricted to, acts or neglect by any separate contractor employed by Owner, fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

0324.02 All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Paragraph 0328 shall not exclude recovery for damages (*including compensation for additional professional services*) for delay by either party.

#### 0325 CORRECTION OF WORK

All work, all materials, whether incorporated in the work or not, all processes of manufacture, and all methods of construction shall be at all times and places subject to the review of the Owner who shall be the final judge of the quality and suitability of the work, material, processes of manufacture and methods of construction for the purposed for which they are used. Should they fail too meet his approval, they shall be forthwith reconstructed, made good, replaced and/or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall immediately be removed from the site. If, in the opinion of the Engineer, it is undesirable to replace any defective or damaged materials or to reconstruct or correct any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the Engineer shall be equitable. It is not intended that the Engineer should be liable for the Contractor's performance of the work nor for safety during construction.

#### 0326 EXISTING UNDERGROUND UTILITIES AND STRUCTURES

0326.01 The Owners and/or operators of private or public utilities shall have access to such utility at all times, for the installation, maintenance, adjustment, repair and operation of said utility. No extra compensation will be allowed because of the delay or interference caused by such work.

0326.02 Wherever existing utilities are encountered which conflict in actual position and location with the proposed work, the Contractor shall promptly notify the Owner for resolution of the conflict.

0326.03 The Contractor shall be solely and directly responsible to the Owner and/or other operator of such utility properties for any damage, injury, expense, loss, inconvenience or delay, or for any suits, actions, claims of any character brought on account of any injuries or damages which may result from the carrying out of the work.

### 0327 SUBSURFACE CONDITIONS FOUND DIFFERENT

Should the Contractor encounter sub-surface and/or latent conditions at the site materially differing from those shown on the plans or indicated in the specifications, he shall immediately give notice to the Owner of such conditions before they are disturbed. The Owner will thereupon promptly investigate the conditions, and if he finds that they materially differ from those shown on the plans or indicated in the specifications, he will at once make such changes in the plans and/or specifications as he may find necessary, any increase or decrease of cost resulting from such changes to be adjusted in the manner provided in Paragraph 0326 of the General Conditions.

### 0328 CLAIMS FOR EXTRA WORK

No claim for extra work or cost shall be allowed unless the same was one in pursuance of a written order of the Owner and approved by the Owner, as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of Subparagraph 0326 of the General Conditions, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner, give the Owner access to accounts relating thereto.

### 0329 RIGHT OF THE OWNER TO TERMINATE CONTRACT

In the event that any of the provisions of this contract are violated by the Contractor or by any of his Subcontractors, the Owner may serve written notice upon the Contractor and the surety of its intention to terminate the contract, such notices to contain the reasons for such intention to terminate the contract, and unless within ten (10) days after the serving of such notice upon the Contractor such violation or delay shall cease and satisfactory arrangement of correction be made, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination the Owner shall immediately serve notice thereof upon the Surety and the Contractor and the Surety shall have the right to take over and perform the contract through an independent contractor(s) acceptable to the

Owner; provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion by contract or by force account for the account and at the expense of the Contractor and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances and plant as may be on the site of the work and necessary therefor.

### 0330 CONSTRUCTION SCHEDULE AND PERIODIC ESTIMATES

Immediately after execution and delivery of the contract, and before the first partial payment is made, the Contractor shall deliver to the Owner an estimated construction progress schedule in form satisfactory to the Owner showing the proposed dates of commencement and completion of each of the various subdivisions of work required under the contract documents and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish on forms to be supplied by the Owner, (a) a detailed estimate giving a complete breakdown of the contract price and (b) periodic itemized estimate of work done for the purpose of making partial payments thereon. The costs employed in making up any of these schedules will be used only for determining the basis of partial payments and will not be considered as fixing a basis for additions to or deductions from the contract price.

### 0331 PAYMENTS TO CONTRACTORS

0331.01 No later than thirty (30) days after submittal of a progress payment request the Owner shall make a progress payment to the Contractor on the basis of a duly certified and approved estimate of the work performed during the preceding calendar month under this contract, but to insure the proper performance of this contract, the Owner shall retain ten percent (10%) of the amount of each estimate until final completion and acceptance of all work covered by this contract. Provided, that the Contractor shall submit his estimate not later than the first day of the month; provided, further, that the Owner at any time after fifty percent (50%) of the work has been completed, if it finds that satisfactory progress is being made, *may* reduce the retainage to 5%.

0331.02 Where a project is under the jurisdiction of a Force Account Agreement between the Owner and the Georgia Department of Transportation, the Contractor shall maintain a *daily* report of the amount of completed work as shown in the bid proposal. A copy of the accepted report appears in Appendix A at the end of this section and may be reproduced for use on this project. The Contractor's representative shall certify by signature that the



report is accurate on behalf of the Contractor for the Owner (*shown as "Utility" on the report*). The Project Engineer representing the Georgia Department of Transportation shall certify by signature that the report is accurate for the "State". A copy of each days report properly certified as required by this part shall accompany each progress payment request by the Contractor. The quantity of work completed shown on the progress payment request *must* be supported by an equal quantity shown on the daily report for that progress payment period. Payment requested for quantities of work not supported by a properly certified daily report(s) may *not* be recommended for payment by the Owner.

- 0331.03 In preparing estimates, the material delivered on the site and preparatory work done may be taken into consideration. Where a project is under the jurisdiction of a Force Account Agreement between the Owner and the Georgia Department of Transportation, however, material delivered on the site and preparatory work done may *not* be taken into consideration.
- 0331.04 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the contract.
- 0331.05 The Contractor agrees that he will indemnify and save the Owner harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails to do so, then the Owner may, after having served written notice on the said Contractor, either pay unpaid bills, of which the Owner has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the contract by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

0331.06 If at any time the Owner shall determine that the amount of work completed at that time is lagging behind the expired contract time by more than 20 percent, the Owner may determine that the Contractor is not faithfully performing on the contract and therefore the Owner may elect to withhold all monies and refrain from making any additional payments to the Contractor until such time as the Owner determines the work to be progressing satisfactorily.

### 0332 ACCEPTANCE AND FINAL PAYMENT

When the project provided for under this contract shall have been completed by the Contractor, and all parts of the work have been approved by the Owner according to the contract, the Owner shall, within ten (10) days unless otherwise provided, make final inspection and advise the Contractor as to preparing a final estimate, showing the value of work as soon as the necessary measurements and computations can be made, all prior certificates or estimates upon which payments have been being made are approximately only, and subject to correction in the final payment. The amount of the final estimates, less any sums that may have been deducted or retained under the provisions of this contract, will be paid to the Contractor within sixty (60) days after approval by the Owner, provided that the contractor has properly maintained and operated the project as specified under these specifications, and provided, that he has furnished to the Owner a sworn affidavit to the effect that all bills are paid and no suits are pending in connection with the work done or labor and material furnished under this contract. A sample affidavit appears at the end of this section to be considered as an example of an acceptable affidavit.

### 0333 PAYMENTS BY CONTRACTORS

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered, (b) for all materials, tools, and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used, and (c) to each of his Subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his Subcontractors to the extent of each Subcontractor's interest therein.

## 0334 CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

0334.01 The Contractor shall not commence work under this Contract until he has obtained all the insurance required under this paragraph and such insurance has been reviewed by the Owner, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until the insurance has been so obtained and reviewed.

0334.01.1 Contractor's Liability Insurance: Contractor shall purchase and maintain such comprehensive general liability and other insurance as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the work and Contractor's other obligations under the Contract Documents, whether such performance is indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

0334.01.1.1 Claims under workers' or workmen's compensation, disability benefits and other similar employees benefit acts;

0334.01.1.2 Claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

0334.01.1.3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

0334.01.1.4 Claims for damages insured by personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or (ii) by any other person for any other reason.

0334.01.1.5 Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and

0334.01.1.6 Claims for damages because of bodily injury or death of any person or property damage arising out of the Ownership, maintenance or use of any motor vehicle.

The insurance required by this paragraph shall include the specific coverages and be written for not less than the limits of liability and coverages provided in these specifications, or required by law, whichever is greater. The comprehensive general liability insurance shall include completed operations insurance. All such insurance shall contain a provision that the coverage afforded will not be cancelled, materially changed or renewal refused until at least thirty

days prior written notice has been given to Owner. All such insurance shall remain in effect until final payment and at all times thereafter when Contractor may be correcting, removing or replacing defective work. In addition, Contractor shall maintain such completed operations insurance for at least two years after final payment and furnish Owner with evidence of continuation of such insurance at final payment. Renewal certificates shall be sent to the Owner 30 days prior to the expiration date of any policy required herein.

- 0334.02 Contractual Liability Insurance: The comprehensive general liability insurance required by paragraph 0338.01.1 will include contractual liability insurance applicable to Contractor's obligations under separate contract and subcontracting.
- 0334.03 Unless otherwise provided in these General Conditions, Contractor shall purchase and maintain property insurance upon the work at the site to the full insurable value thereof (*subject to such deductible amounts as may be provided in these general conditions or required by law*). This insurance shall include the interest of Owner, Contractor and Subcontractors in the work, shall provide "all risk" insurance for physical loss and damage including but not limited to fire, lightning, windstorms, hail, smoke, explosion, riot, aircraft, vehicles, falling objects, flood, earthquake, theft, vandalism, malicious mischief, collapse, water damage and other perils, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (*including fees and charges of engineers, architects, attorneys and other professionals*). If not covered under the "all risk" insurance or otherwise provided in these General Conditions, Contractor shall purchase and maintain similar property insurance on portions of the work stored on and off the site or in transit when such portions of the work are to be included in an Application for Payment. The policies of insurance required to be purchased and maintained by Contractor in accordance with paragraphs c and d shall contain a provision that the coverage afforded will not be cancelled, materially changed or renewal refused until at least thirty days prior written notice has been given to the Owner.
- 0334.04 Contractor shall purchase and maintain such boiler and machinery insurance as may be required by these General Conditions or by law. This insurance shall include the interest of Owners, Contractor and Subcontractors in the work and shall provide coverage for all installed and functional mechanical equipment for the full replacement value of the equipment.

0334.05 Owner shall not be responsible for purchasing and maintaining any property insurance to protect the interests of Contractor or Subcontractors in the work to the extent of any deductible amounts that are provided in the supplemental conditions. If Contractor wishes property insurance coverage within the limits of such amounts, Contractor may purchase and maintain it at his own expense.

0334.06 If Owner has any objection to the coverage afforded by or other provisions of the insurance required to be purchased and maintained by Contractor in accordance with paragraphs 0338.01.1. through 0338.01.1.4., Owner will notify Contractor thereof within ten days of the date of delivery of such certificates, to Owner. Contractor will provide to the Owner such additional information in respect of insurance provided by him as Owner may reasonably request. The right of the Owner to review and comment on Certificates of Insurance is not intended to relieve the Contractor of his responsibility to provide insurance coverage as specified nor to relieve the Contractor of his liability for any claims which might arise.

0334.07 Partial Utilization - Property Insurance: If Owner finds it necessary to occupy or use a portion or portions of the work prior to Substantial Completion of all the work, such use or occupancy may be accomplished provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be cancelled or lapse on account of any such partial use or occupancy.

0334.08 The Contractor shall carry and maintain Combined Excess Liability (*Umbrella*) Insurance for a limit of not less than the following:

Each Occurrence:	\$3,000,000
Aggregate:	\$3,000,000

0334.09 The limits of liability for the insurance required by paragraph 36.1.1. of the General Conditions shall provide coverage for not less than the following amounts or greater where required by law:

For claims under paragraph 0338.01.1.1. and 0338.01.1.2., Worker's Compensation:

State	Statutory
Federal	Statutory

Employer's Liability – Each Accident:	\$1,000,000
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Employer's Liability – Disease – Each Employee: \$1,000,000  
Employer's Liability – Disease – Policy Limit: \$1,000,000

If the Contractor chooses to maintain a policy with a maximum of the state mandated amounts of \$100,000 per accident, \$100,000 for disease per employee and a disease policy limit of \$500,000, the Contract required minimum of \$1,000,000 can be achieved by the excess liability policy required by paragraph 0338.08 above.

For claims under 0339.01.1.1. through 0339.01.1.5. (*General Liability*),

General Liability Provided Per Occurrence

Each Occurrence (Bodily and Property Damage Included): \$1,000,000

Fire Damage (*Any One Fire*): \$50,000

Medical Expense (*Any One Person*): \$5,000

Personal and Adv Injury, With Employment  
Exclusion Deleted: \$1,000,000

General Aggregate (*Per Project*): \$2,000,000

Products and Completed Operations Aggregate: \$1,000,000

Notes: Property Damage Liability Insurance will provide explosion, collapse and underground hazard coverages where applicable. Each detonation of blasting shall be considered a single occurrence. General Liability shall include Contractual Liability as stipulated in Paragraph 0339.02. above.

Comprehensive Automobile Liability:

Combined Single Limit Per Occurrence, For Any and  
All Autos, Including Bodily Injury and Property Damage: \$1,000,000

0334.10 Scope of Insurance and Special Hazards - The amounts stated in subparagraph 0334.09. above are minimum amounts of insurance to be carried. The Contractor shall carry such additional insurance as may be required to provide adequate protection of the Contractor and his Subcontractors, respectively, against any and all damage claims which may arise from operations under this Contract, whether such operations be by the insured or by anyone directly or indirectly employed by his and, also, against any of the special hazards which may be encountered in the performance of this Contract.

Where the scope of work involves crossing of a railway and/or railway rights-of-way, Contractor shall be required to furnish railway with a Railroad Protective Liability Insurance Policy naming railway as the named insured and issued to the Contractor with a combined single limit of \$2,000,000 for all damages arising out of bodily injury, death, property damage liability and physical damage to property liability per occurrence with an aggregate limit of \$6,000,000.

**0334.11 Certificate Holder should read:**

**CITY OF DALTON  
P.O. BOX 1205  
DALTON, GEORGIA 30722**

0334.12 Insurance company must have an A.M. Best Rating of A-6 or higher. Insurance company must be licensed to do business by the Georgia Secretary of State. Insurance company must be authorized to do business in the State of Georgia by the Georgia Insurance Department.

**0335 CONTRACT SECURITY**

The Contractor shall furnish a Construction Performance Bond in an amount at least equal to one hundred percent (100%) of the contract prices as security for the faithful performance of this contract and also a Construction Payment Bond in an amount at least equal to one hundred percent (100%) of the contract price or in a penal sum not less than that prescribed by State, Territorial or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The performance bond and the payment bond may be in one or in separate instruments in accordance with local law.

**0336 ADDITIONAL OR SUBSTITUTE BOND**

If at any time the Owner for justifiable cause shall be or become dissatisfied with any Surety or Sureties, then upon the Construction Performance or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner to do so, substitute an acceptable bond (*or bonds*) in such form and sum and signed by such other Surety or Sureties as may be satisfactory to the Owner. The premiums on such bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished such an acceptable bond to the Owner.

**0337 LIEN**

Neither the final payment nor any part of the retained percentage will become due

until the Contractor, if required, shall furnish the Owner a complete release from any liens which may arise out of this contract, or receipts in full in lieu thereof, and if required in either case, an affidavit that insofar as he has knowledge or information, the release and receipts include all materials, for which a lien might be filed. The Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner to indemnify it against any lien. If a lien shall remain unsatisfied after all payments are made, then the Contractor shall refund to the Owner all monies which the latter may be compelled to pay in discharging such lien, including all incidental costs and attorney's fees.

#### 0338 ASSIGNMENTS

The Contractor shall not assign the whole or any part of this contract or any money due to or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or part of any money due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assigned in and to any money due or to become due to the Contractor shall be subject to prior liens of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this contract.

#### 0339 MUTUAL RESPONSIBILITY OF CONTRACTORS

If through acts of neglect on the part of the Contractor, any other Contractor or subcontractor, shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

#### 0340 COORDINATION WITH OTHER CONTRACTORS

The Contractor shall coordinate his operations with those of other contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work. The Contractor, including his Subcontractors shall keep informed of the progress and the detail work of other Contractors and shall notify the Owner immediately of lack of progress or defective workmanship on the part of other contractors. Failure of a Contractor to keep informed of the work progressing on the site and failure to give notice of lack of progress or defective workmanship by others shall be construed as acceptance by him of the status of the work as being satisfactory for proper coordination with his own work.



### 0341 SUBCONTRACTING

The Contractor shall utilize the service of specialty subcontractor on those parts of the work which, under normal contracting practices, are performed by specialty Subcontractors. Provided - that if the Owner shall determine that the specialty work in question has been customarily performed by the Contractor's own organization and that such organization is presently competent to perform such work, the Contractor shall be permitted to do so. Provided, further - that if the Owner shall determine that the performance of any specialty work be specialty Subcontractors will result in materially increased costs or inordinate delays, the requirements of this paragraph shall not apply.

- 0341.01 The Contractor shall not be allowed to award work to any subcontractor prior to written approval of the Owner, which approval will not be given until the Contractor submits to the Owner, a written statement concerning the proposed award to the subcontractor, which statement shall contain such information as the Owner may require.
- 0341.02 The Contractor shall be as fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
- 0341.03 The Contractor shall cause appropriate provisions to be inserted in all Subcontracts relative to the work to bind subcontractors to the Contractor by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.
- 0341.04 Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the Owner.

### 0342 USE OF PREMISES AND REMOVAL OF DEBRIS

The Contractor expressly undertakes at his own expense:

- 0342.01 To take every precaution against injuries to persons or damage to property;
- 0342.02 To store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other Contractors;
- 0342.03 To place upon the work or any part thereof only such loads as are consistent

with the safety of that portion of the work.

- 0342.04 To clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
- 0342.05 Before final payment to remove all surplus material, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat orderly condition;

### 0343 QUANTITIES OF ESTIMATE

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents including the proposal, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this Contract, and such increase or diminution shall in no way vitiate this Contract, nor shall any such increase or diminution give cause for claims or liability for damages.

### 0344 RIGHTS-OF-WAY AND SUSPENSION OF WORK

The Owner shall furnish all land and rights-of-way necessary for the carrying out of this Contract and the completion of the work herein contemplated and will use due diligence in acquiring said land and rights-of-way as speedily as possible. But it is possible that all lands and rights-of-way may not be obtained as herein contemplated before construction begins, in which event the Contractor shall begin his work upon such land and rights-of-way as the Owner may have previously acquired, and no claim for damages whatsoever will be allowed by reason of the delay in obtaining the remaining lands and rights-of-way. Should the Owner be prevented or enjoined from proceeding with the work, or from authorizing its prosecution, either before or after the commencement, by reason of any litigation, or by reason of its inability to procure any lands or rights-of-way for the said work, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay, or, to withdraw from the contract except by consent of the Owner, but time for completion of the work will be extended to such time as the Owner determines will compensate for the time lost by such delay, such determination to be set forth in writing.

### 0345 GUARANTY

- 0345.01 All work constructed under this contract shall be fully guaranteed by the Contractor for a period of one year from the date of final inspection and

acceptance by the Owner. This guarantee shall cover any and all defects in workmanship or materials that may develop in this specified time, and any failure in such workmanship or materials shall be repaired or replaced to the satisfaction of the Owner by the Contractor at his own expense.

0345.02 Neither the final certificate of payment nor any provision in the contract documents nor partial or entire occupancy of the premises by the Owner shall constitute an acceptance of work not done in accordance with the contract documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship.

#### 0346 CONFLICTING CONDITIONS

Any provisions in any of the contract documents which may be in conflict or inconsistent with any of the paragraphs in these General Conditions shall be void to the extent of such conflict or inconsistency.

#### 0347 NOTICE AND SERVICE THEREOF

Any notice to any Contractor from the Owner relative to any part of this contract shall be in writing and considered delivered and the service thereof completed, when said notice is posted, by certified or registered mail, to the said Contractor at his last given address, or delivered in person to the said Contractor or his authorized representative on the work.

#### 0348 PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

#### 0349 SUSPENSION OF WORK

Should the Owner be prevented or enjoined from proceeding with work either before or after the start of construction by reason of any litigation or other reason beyond the control of the Owner, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay; but time for completion of the work will be extended to such reasonable time as the Owner may determine will compensate for time lost by such delay with such determination to be set forth in writing.

#### 0350 PROTECTION AND RESTORATION OF PROPERTY

- 0350.01 The Contractor shall not enter upon private property for any purpose without first obtaining permission, and he shall use every precaution necessary to prevent damage or injury to any public or private property, trees, fences, monuments, underground structures, etc., on and adjacent to the site of the work. He shall protect carefully, from disturbance or damage, all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location, and shall not remove them until directed.
- 0350.02 Except as specifically provided in the Contract Documents, the Contractor shall not do any work that would affect any railway track, pipeline, telephone, telegraph, or electric or transmission line, or other structure nor enter upon the right-of-way or other lands appurtenant thereto, until authority therefore has been secured from the proper parties. The Contractor shall not be entitled to any extension of time or any extra compensation on account of any postponement, interference, or delay resulting from his requirement, except as specifically provided in the contract.
- 0350.03 The Contractor shall be responsible for all damage or injury to property of any character resulting from any act, omission, neglect, or misconduct in his manner or method of executing said work, or due to his nonexecution of said work, or at any time due to defective work or materials, and he shall not be released from said responsibility until the work shall have been completed and accepted.
- 0350.04 When or where any direct or indirect damage or injury is done to public or private property by, or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor, he shall restore at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring, as may be directed, or he shall make good such damage or injury in an acceptable manner.

#### 0351 RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor shall be responsible for all injury or damage of any kind resulting from his work, to persons or property. The Contractor hereby assumes the obligation to indemnify and save harmless the Owner including associates, agents and representatives, from every expense, liability, or payment arising out of or through injury to any person or persons including death and loss of services, or damage to property, regardless of who may be the Owner of the property, suffered through any cause whatsoever in the construction work involved in the contract and to defend on their behalf any suit brought against them arising from any such

cause.

0352 INTEREST OF FEDERAL, STATE OR LOCAL OFFICIALS

No Federal, State or Local official shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

0353 OTHER PROHIBITED INTERESTS

No official of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, make, accept or approve or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part hereof. No officer, employee, architect, attorney, engineer or inspector of or for the Owner who is authorized in such capacity and on behalf of the Owner to exercise any legislative, executive, supervisory or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally in this contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

0354 USE OF CHEMICALS

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either E.P.A., or U.S.D.A. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

0355 MAINTENANCE OF TRAFFIC

0355.01 The Contractor shall notify the Owner and the appropriate department of transportation prior to performing any work which disrupts normal flow of traffic, and shall utilize appropriate warning signs, flagmen and other procedures necessary to ensure safety and minimize inconvenience to the public.

0356 ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No payment, however, final

or otherwise, shall operate to release the Contractor or his sureties from any obligations under this contract or the Construction Performance and Payment Bond.

**0357 OWNER'S RIGHT TO SUSPEND WORK**

The Owner shall have the authority to suspend the work, wholly or in part as he may deem necessary because of conditions unsuitable for proper prosecution of the work or failure on the part of the Contractor to carry out the provisions or to meet the specified requirements. The Contractor shall not suspend operations without the Owner's permission.

**0358 TIME FOR COMPLETION AND LIQUIDATED DAMAGES**

0358.01 It is hereby understood and mutually agreed, by and between the Contractor and the Owner, that the date of beginning and the time for completion as specified in the contract of the work to be done hereunder are ESSENTIAL CONDITIONS of this contract; and it is further mutually understood and agreed that the work embraced in this contract shall be commenced on a date to be specified in the "NOTICE TO PROCEED."

0358.02 The Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the Owner, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

0358.03 If the said Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the Owner, then the Contractor does hereby agree, as a part consideration for the awarding of this contract, to pay to the Owner the amount specified in the contract, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every calendar day that the Contractor shall be in default after the time stipulated in the contract for completing the work.

0358.04 The said amount is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is agreed to be the amount of damages which the Owner would sustain and said amount shall be retained from time to time by the Owner from current periodical estimates.

0358.05 It is further agreed that time is of the essence of each and every portion of this contract and of the specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where, under the contract, an additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this contract. Provided, that the Contractor shall not be charged with liquidated damages or any excess cost when the Owner determines that the Contractor is without fault and the Contractor's reasons for the time extension are acceptable to the Owner; provided, further, that the Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due:

0358.05.1 To any preference, priority or allocation order duly issued by the Government;

0358.05.2 To unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and

0358.05.3 To any delays of Subcontractors or suppliers occasioned by any of the causes specified in subsections 0369.05.1 and 0369.05.2 of this article.

0358.06 Provided, further, that the Contractor shall, within ten (10) days from the beginning of such delay, unless the Owner shall grant a further period of time prior to the date of final settlement of the contract, notify the Owner, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay, and notify the Contractor within a reasonable time of its decision in this matter.

..... END OF SECTION .....



SECTION 0300: APPENDIX A



AFFIDAVIT FOR FINAL PAYMENT AND RELEASE OF LIENS

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

COUNTY OF: \_\_\_\_\_

FROM: \_\_\_\_\_ (Contractor)

TO: CITY OF DALTON, GEORGIA (Owner)

RE: Contract entered into the \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between the above mentioned parties for the construction of the project entitled DALTON PROJ. NO. PW-2019-GUARDRAIL.

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that all work required under the above Contract has been performed in accordance with the terms thereof, that all material-men, sub-contractors, mechanics, and laborers have been paid and satisfied in full and that there are not outstanding claims of any character arising out of the performance of the Contract which have been paid and satisfied in full.
2. The undersigned further certifies that to the best of their knowledge and belief there are not unsatisfied claims for damages resulting from injury or death to any employees, sub-contractors, or the public at large arising out of the performance of the Contract or any suits or claims for any other damage of any kind, nature or description on which might constitute a lien upon the property of the Owner.
3. The undersigned makes this final affidavit as provided by the Contract and agrees that acceptance of final payment shall constitute full settlement of all claims against the Owner arising under or by virtue of the Contract.
4. IN WITNESS WHEREOF, the undersigned has signed and sealed this instrument this day of \_\_\_\_\_, \_\_\_\_\_.

SIGNED: \_\_\_\_\_ (SEAL)

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

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

Personally appeared before the undersigned who after being duly sworn, deposes and says that the facts stated in the above affidavit are true.

This \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

Notary Public: \_\_\_\_\_ SEAL

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

\_\_\_\_\_ County,

## SECTION 0400 – GENERAL NOTES

1. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS/BID PACKAGE, 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 CITY OF DALTON IN ANY WAY. THE ATTENTION OF THE BIDDER IS SPECIFICALLY DIRECTED TO GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATION SECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.
2. ALL WORK ASSOCIATED WITH THIS CONTRACT SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, CONSTRUCTION DETAILS, AND THE **SOUTHEASTERN ENGINEERING, INC. PLANS INCLUDED AS EXHIBIT A.**
3. THIS PROJECT WILL CONSIST OF FIVE (5) WORK LOCATIONS AS INDICATED ON THE PLANS.
4. TRAFFIC CONTROL SHALL MEET THE REQUIREMENTS OF THE 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
5. The Contractor will be responsible for coordinating with Dalton Utilities and other utility agencies for the coordination and adjustments (if applicable) of all utilities located within the project limits.
6. Contractor is required to call GA 811 or file online a utility locate request prior to commencing work and maintain active locate for the duration of the project.
7. Coordination of project with Owners – Where applicable, Contractor shall continuously make a good faith effort to coordinate work activities with owners of driveway crossings affected by the project.
8. Time of Work Restrictions – All work shall be completed in a manner that does not significantly impact AM rush hour [7:00 am – 8:00 am] and PM rush hour [4:45 pm – 6:00 pm]. The Contractor shall keep at least one travel lane open in each direction of travel at all times. Certified flaggers shall be used when a lane closure is required. Liquidated damages for failure to observe time of work restrictions shall be assessed to the Contractor at the rate of \$200 per hour.
9. Removal and proper disposal of existing guardrail shall be the responsibility of the Contractor. No separate payment will be made for this work.
10. Note: Contractor is responsible for erosion control BMPs as shown on plans.

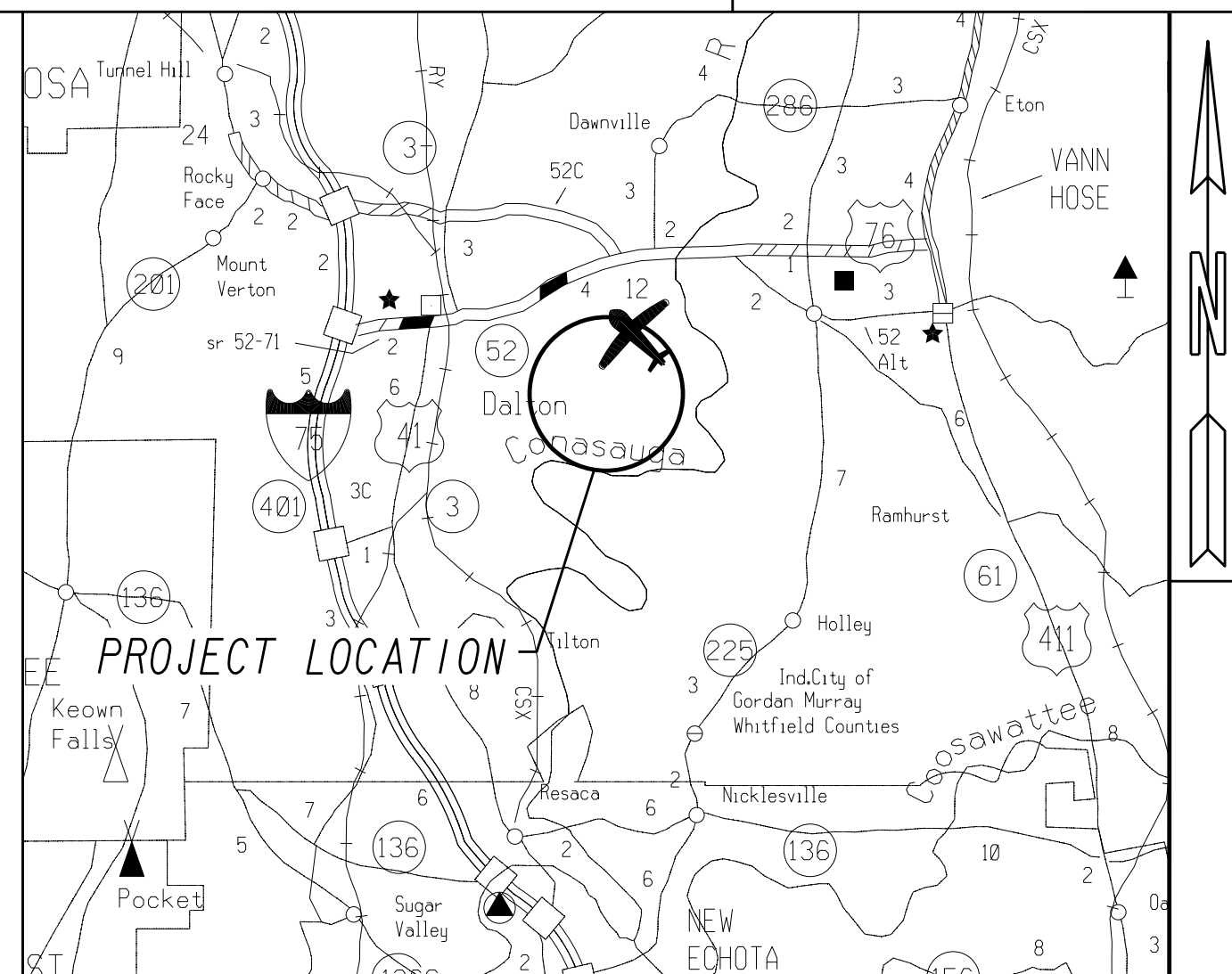
**EXHIBIT A:**

***SOUTHEASTERN ENGINEERING,  
INC. PLANS***

***DATED SEPTEMBER 11, 2019***

***FOR THE***

***2019 GUARDRAIL PROJECT FOR  
VARIOUS LOCATIONS***



LOCATION SKETCH

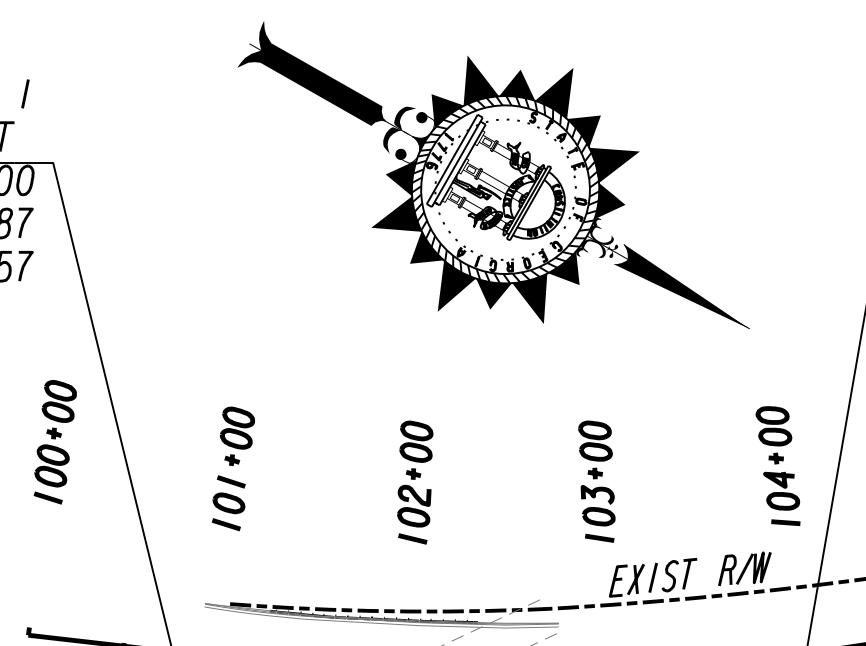
# CITY OF DALTON DEPARTMENT OF PUBLIC WORKS

## GUARDRAIL IMPROVEMENTS

### ABUTMENT ROAD, SOUTH HAMILTON STREET, SOUTH THORNTON AVENUE, & WEST EMERY STREET

FEDERAL ROUTE \* N/A  
STATE ROUTE \* N/A  
PROJECT NO. 931-19-103

LOCATION NO. 1  
BEGIN PROJECT  
STA. 100+75.00  
N 1728728.2987  
E 2058116.4757



END CONSTRUCTION  
ABUTMENT RD  
STA. 104+06.52  
N 1729018.1325  
E 2057957.4512

LOCATION NO. 1  
END PROJECT  
STA. 104+60.00  
N 1729060.7160  
E 2057925.1016

BEGIN CONSTRUCTION  
ABUTMENT RD  
STA. 101+24.49  
N 1728773.4817  
E 2058097.7758

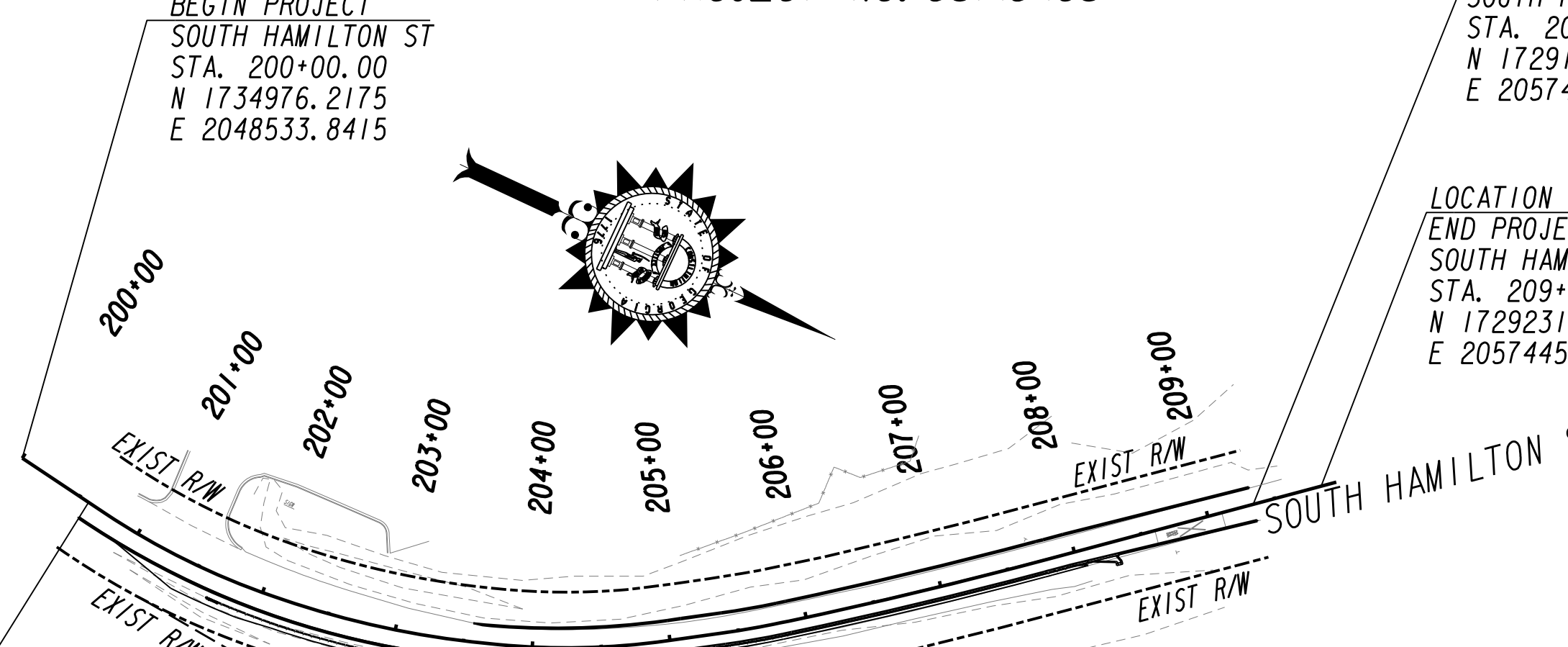
LOCATION 1  
ABUTMENT ROAD

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.

LENGTH OF PROJECT	COUNTY No. 313
	Project No. 931-19-103
	MILES
NET LENGTH OF ROADWAY	0.0000
NET LENGTH OF BRIDGES	0.0000
NET LENGTH OF PROJECT	0.3712
NET LENGTH OF EXCEPTIONS	0.0000
GROSS LENGTH OF PROJECT	0.3712

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY 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. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

LOCATION NO. 2  
BEGIN PROJECT  
SOUTH HAMILTON ST  
STA. 200+00.00  
N 1734976.2175  
E 2048533.8415



END CONSTRUCTION  
SOUTH HAMILTON ST  
STA. 209+34.11  
N 1729192.6878  
E 2057477.8287

LOCATION NO. 2  
END PROJECT  
SOUTH HAMILTON ST  
STA. 209+85.00  
N 1729231.7006  
E 2057445.1521

BEGIN CONSTRUCTION  
SOUTH HAMILTON ST  
STA. 200+57.64  
N 1728427.5859  
E 2057833.0466

LOCATION 2  
SOUTH HAMILTON STREET

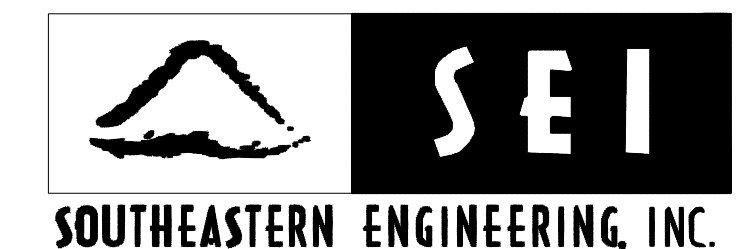
LOCATION NO. 2  
BEGIN PROJECT  
STA. 300+75.00  
N 1729361.4492  
E 2055445.2718

BEGIN CONSTRUCTION  
SOUTH THORNTON AVE  
STA. 301+29.91  
N 1729415.1931  
E 2055456.5049

LOCATION 3  
SOUTH THORNTON AVENUE

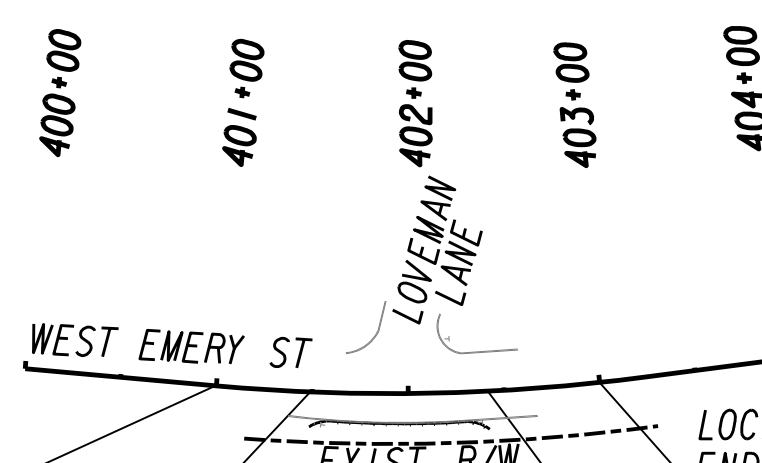
END CONSTRUCTION  
SOUTH THORNTON AVE  
STA. 304+13.32  
N 1729694.0559  
E 2055506.7662

LOCATION NO. 2  
END PROJECT  
STA. 304+65.00  
N 1729745.0503  
E 2055515.1722



PREPARED BY: \_\_\_\_\_  
DESIGN

LOCATION NO. 4  
BEGIN PROJECT  
STA. 401+00.00  
N 1734414.4366  
E 2049257.4933

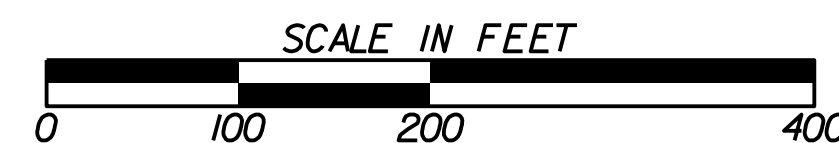


LOCATION NO. 4  
END PROJECT  
STA. 403+00.00  
N 1734476.4641  
E 2049447.2947

END CONSTRUCTION  
WEST EMERY ST  
STA. 402+41.57  
N 1734454.5087  
E 2049393.1535

BEGIN CONSTRUCTION  
WEST EMERY ST  
STA. 401+49.06  
N 1734426.1860  
E 2049305.1196

LOCATION 4  
WEST EMERY STREET



DATE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS

PLANS COMPLETED 09-11-19  
REVISIONS

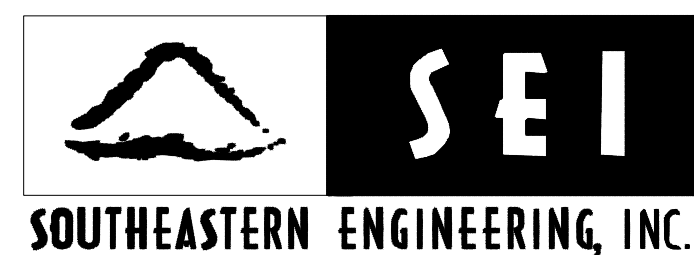


PROJECT GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE GEORGIA DEPARTMENT OF TRANSPORTATION STANDARD AND SUPPLEMENTAL SPECIFICATIONS, CURRENT EDITION.
2. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITY FACILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITY FACILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION.
3. THE FOLLOWING UTILITIES HAVE FACILITIES IN THE PROJECT AREA:  
  
\*\*UTILITY OWNER INFORMATION WAS NOT COLLECTED FOR THIS IMPROVEMENT PROJECT\*\*
4. INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB-SECTION 107.07 OF THE GEORGIA STANDARD SPECIFICATIONS.
5. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO FURNISH SUITABLE BORROW MATERIAL FOR THE PROJECT AND TO DISPOSE OF ANY UNSUITABLE OR WASTE MATERIAL IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. CONCRETE AND ASPHALT MATERIALS REMOVED FROM THE PROJECT SITE MAY NOT BE PLACED IN FILL LOCATIONS THAT FALL WITHIN EASEMENT AREAS. WITH THE PRIOR APPROVAL OF THE ENGINEER, THESE MATERIALS MAY BE PLACED WITHIN THE R/W PROVIDED THERE IS THREE (3') FEET OF MINIMUM COVER AND THERE ARE NO PLANS FOR THE FUTURE WIDENING OF THE ROADWAY.
6. PERFORATED UNDERDRAIN SHALL BE PLACED IN AREAS WHERE WET CONDITIONS EXIST IN THE SUBGRADE AS DIRECTED BY THE ENGINEER.
7. STRUCTURES, TREES, SHRUBS AND OTHER PLANT MATERIAL THAT FALL WITHIN THE RIGHT-OF-WAY AND EASEMENT LIMITS, BUT OUTSIDE THE LIMITS OF CONSTRUCTION, SHALL NOT BE DISTURBED UNLESS DIRECTED BY THE ENGINEER.
8. LUMP-SUM TRAFFIC CONTROL: THE PRICE BID FOR LUMP-SUM TRAFFIC CONTROL SHALL INCLUDE THE COST OF STAGED CONSTRUCTION, MAINTENANCE OF TRAFFIC (INCLUDING AGGREGATE SURFACE COURSE), INSTALLATION AND REMOVAL OF ALL TEMPORARY SIGNAGE, INTERIM PAVEMENT MARKINGS, BARRICADES, AND OTHER INTERIM TRAFFIC CONTROL DEVICES NECESSARY FOR THE CONSTRUCTION AND MAINTENANCE OF THE PROJECT. DEVICES UTILIZED ON THE PROJECT SHALL BE IN COMPLIANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION AND SECTION 150. ALL DEVICES, SIGNS, POSTS, BARRICADES, ETC SHALL BE FROM THE GDOT QUALIFIED PRODUCTS LIST (OPL). ALL DEVICES SHALL BE CRASHWORTHY UNDER AASHTO AND NCHRP 350 REQUIREMENTS. THE ENGINEER MAY DIRECT THAT ADDITIONAL DEVICES AND MARKINGS BE ADDED TO THE TRAFFIC CONTROL PLAN. THE COST OF NOMINAL ITEMS ADDED BY THE ENGINEER SHALL BE INCLUDED IN LUMP-SUM TRAFFIC CONTROL EXCEPT FOR THE ADDITION OF A CHANGEABLE MESSAGE SIGN(S). THE CONTRACT UNIT PRICE WILL BE PAID FOR A CHANGEABLE MESSAGE SIGN(S) OR A UNIT PRICE WILL BE DETERMINED WHEN A CHANGEABLE MESSAGE SIGN(S) IS NOT INCLUDED IN THE CONTRACT.
9. ALL CUT AND FILL SLOPES SHALL BE STABILIZED TO COMPLY WITH SECTION 161.3.05.B OF THE SPECIFICATIONS IN ORDER TO REDUCE THE POTENTIAL FOR EROSION. IF THE SEASON DOES NOT PERMIT PERMANENT GRASSING, TEMPORARY STRAW MULCH AND/OR TEMPORARY VEGETATION SHALL BE USED AS PER THE EROSION AND SEDIMENTATION POLLUTION CONTROL PLAN (ESPCP) OR AS DIRECTED BY THE ENGINEER.
10. AN N.O.I. (NOTICE OF INTENT) IS NOT REQUIRED FOR THIS PROJECT. THE DISTURBED AREA IS 0.35 ACRES
11. GUARDRAIL POSTS PLACED IN, OR IN PROXIMITY TO, EXISTING POST HOLE LOCATIONS SHALL BE GROUTED PER GDOT STANDARD 4381 AND SPEC. 600
12. REMOVAL AND PROPER DISPOSAL OF THE EXISTING GUARDRAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. ALL ITEMS NECESSARY FOR COMPLIANCE WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR "TRAFFIC CONTROL".
2. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
3. ALL SIGNS SHALL HAVE TYPE IX RETROREFLECTIVE SHEETING UNLESS OTHERWISE NOTED.
4. IN RESIDENTIAL AREAS, TEMPORARY AND PERMANENT SIGNS SHALL BE LOCATED ON OR AS CLOSE AS POSSIBLE TO PROPERTY LINES.
5. EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. MAINTENANCE INCLUDES REPLACING DAMAGED AND STOLEN SIGNS, AND PERIODIC CLEANING OF EXISTING SIGNS AND CONSTRUCTION RELATED TRAFFIC CONTROL DEVICES.
6. THE WORKSITE TRAFFIC CONTROL SUPERVISOR (WTCS) SHALL BE RESPONSIBLE FOR THE ELIMINATION OF ANY CONFLICTING PAVEMENT MARKINGS. THE WTCS SHALL NOT USE "BLACK OUT PAINT" TO ERADICATE CONFLICTING MARKINGS. THE ENGINEER SHALL MAKE THE FINAL DETERMINATION WHETHER THE CONFLICTING MARKINGS HAVE BEEN ADEQUATELY ELIMINATED.
7. TEMPORARY TRAFFIC BARRIERS SHALL HAVE A TWO (2') FEET MINIMUM OFFSET FROM THE EDGE OF ANY TRAVEL LANE. ONLY TRAFFIC DRUMS, MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150, AND TEMPORARY BARRIERS THAT ARE CRASHWORTHY SHALL BE USED ADJACENT TO TRAVEL LANES. UNLESS PRIOR APPROVAL IS GRANTED BY THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS, THE TEMPORARY BARRIERS CAN NOT BE PLACED LESS THAN TWO (2') FEET FROM THE EDGE OF THE TRAVEL LANE. THE USE OF TYPE I AND II BARRICADES AND TRAFFIC CONES IS PROHIBITED.
8. TRAFFIC DRUMS MEETING THE MINIMUM REQUIREMENTS OF THE MUTCD AND SECTION 150 SHALL BE USED FOR CHANNELIZATION OF TRAFFIC IN ALL TRAFFIC SHIFTS. FOR ANY WORK ZONE, THE MAXIMUM DRUM SPACING, IN FEET, SHALL BE THE DESIGN OR POSTED SPEED LIMIT, WHICHEVER IS LESS. BASED ON FIELD CONDITIONS, THE MAXIMUM SPACING OF THE TRAFFIC DRUMS MAY NEED TO BE FURTHER REDUCED.
9. ALL TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR SO AS NOT TO INTERFERE WITH SIGHT DISTANCES ALONG ANY ADJACENT SIDE ROAD OR DRIVEWAY.
10. THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS RESERVES THE RIGHT TO MODIFY THIS MAINTENANCE OF TRAFFIC PLAN AS FIELD CONDITIONS WARRANT. IF ADDITIONAL TRAFFIC CONTROL DEVICES ARE REQUIRED, THESE SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT OF PUBLIC WORKS.
11. THE CONTRACTOR MUST OBTAIN A ROAD CLOSURE PERMIT FROM THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS A MINIMUM OF 3 WEEKS PRIOR TO ROAD CLOSURE.
12. REFLECTORIZED TYPE 3 BARRICADES SHALL BE USED AT THE ACTUAL LOCATION OF TOTAL STREET CLOSURE. EACH BARRICADE SHALL HAVE TWO TYPE "A" LIGHTS AND ONE RT1-2 (ROAD CLOSED) SIGN ATTACHED.
13. ALL M4-9 SIGNS SHALL HAVE ADVISORY BLADES (INSTALLED ABOVE THE "DETOUR" SIGN) IDENTIFYING THE CLOSED STREET THAT THE DETOUR ROUTE SERVES.
14. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PREPARE A MAINTENANCE OF TRAFFIC PLAN FOR APPROVAL BY THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS BEFORE STARTING CONSTRUCTION. PAYMENT SHALL BE INCLUDED IN THE PRICE FOR "TRAFFIC CONTROL". THE CONTRACTOR WILL NOT BE ALLOWED TO CLOSE THE ROAD DURING THE CONSTRUCTION OF THE PROJECT WITHOUT APPROVAL BY THE ENGINEER.
15. NO LANE CLOSURES ARE ALLOWED BETWEEN 6-9AM AND 4-7PM WITHOUT PRIOR APPROVAL BY THE CITY OF DALTON DEPARTMENT OF PUBLIC WORKS.
16. THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO ALL DRIVEWAYS AT ALL TIMES.



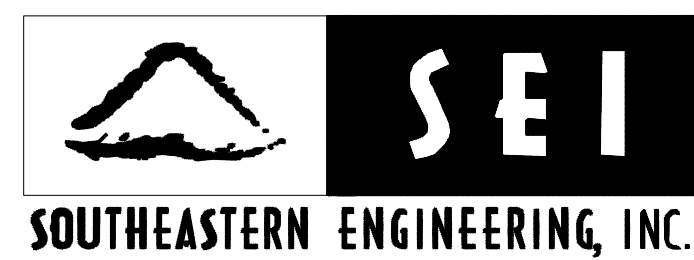
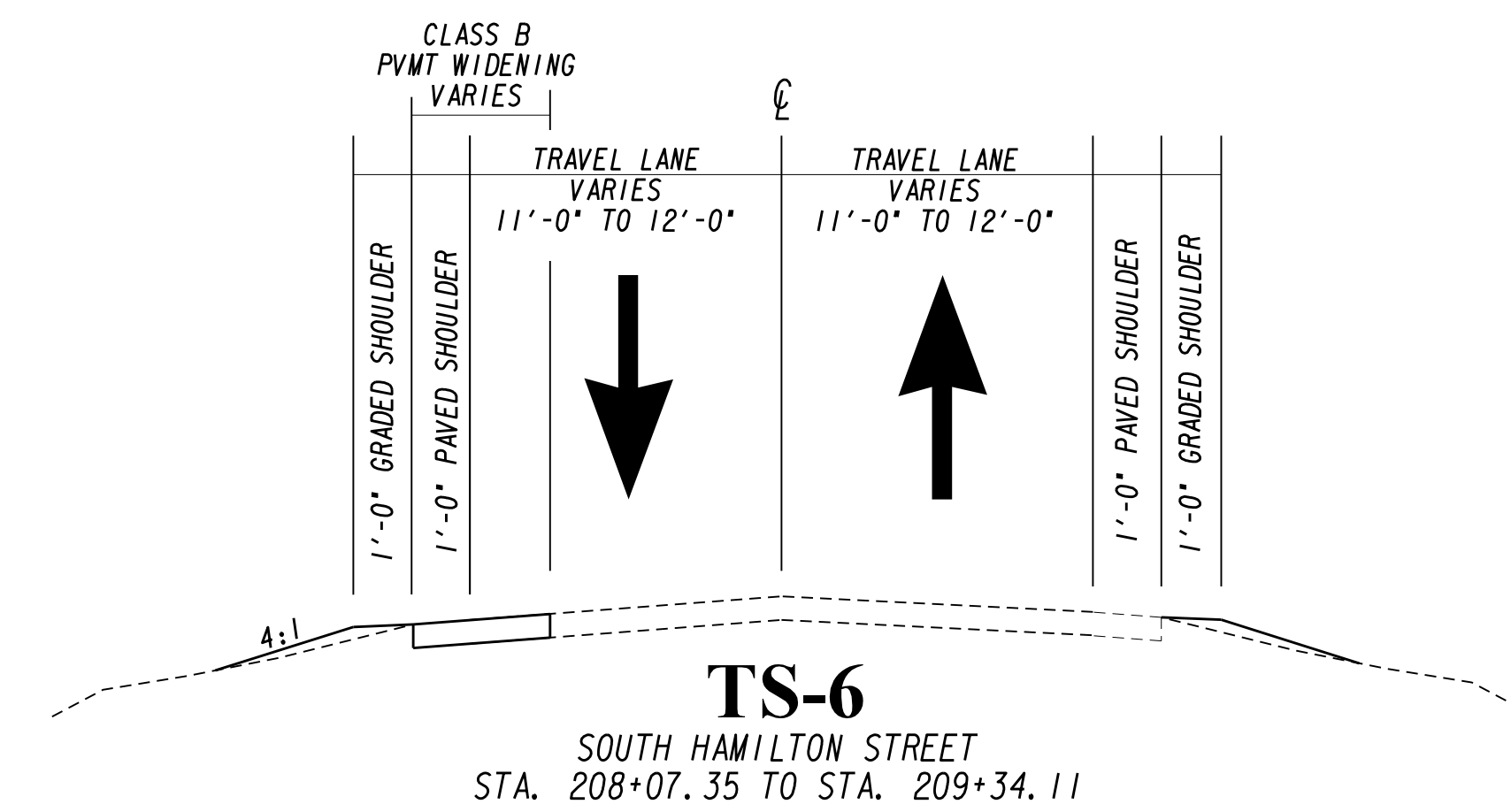
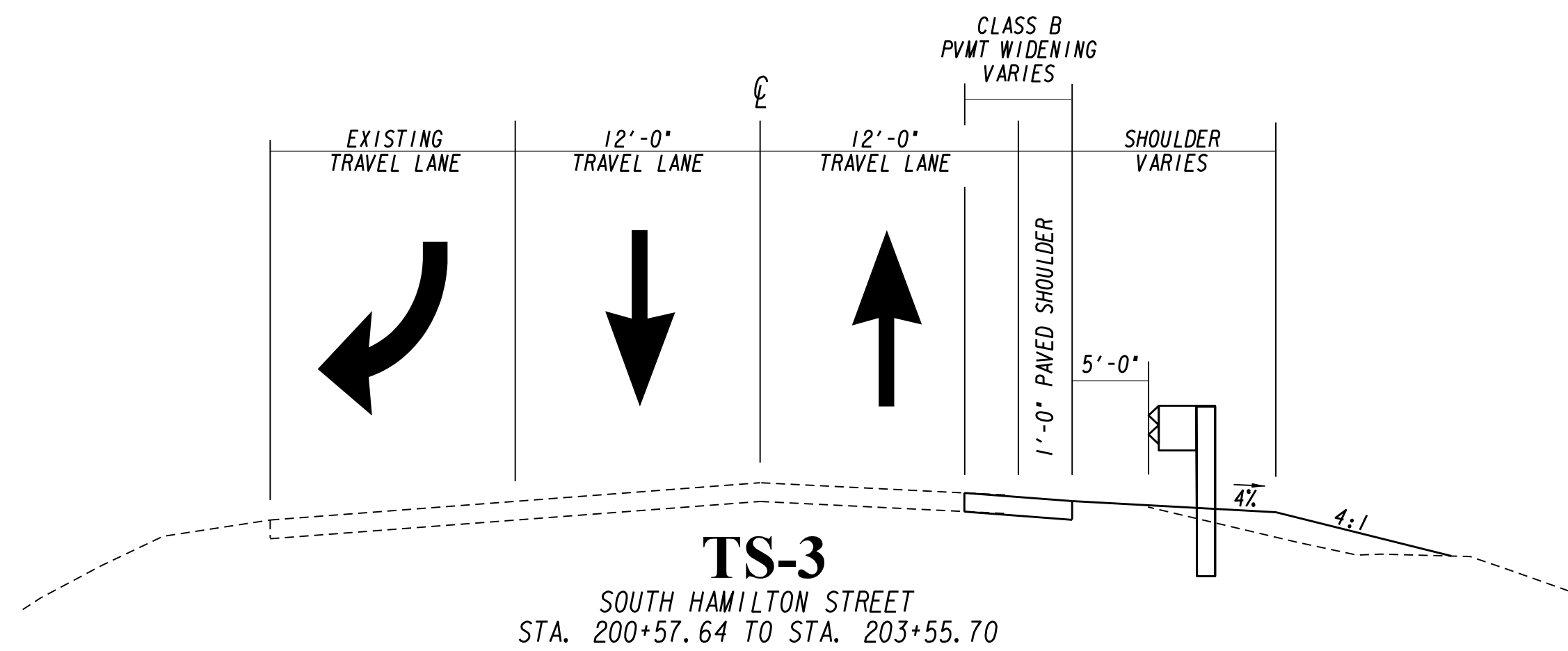
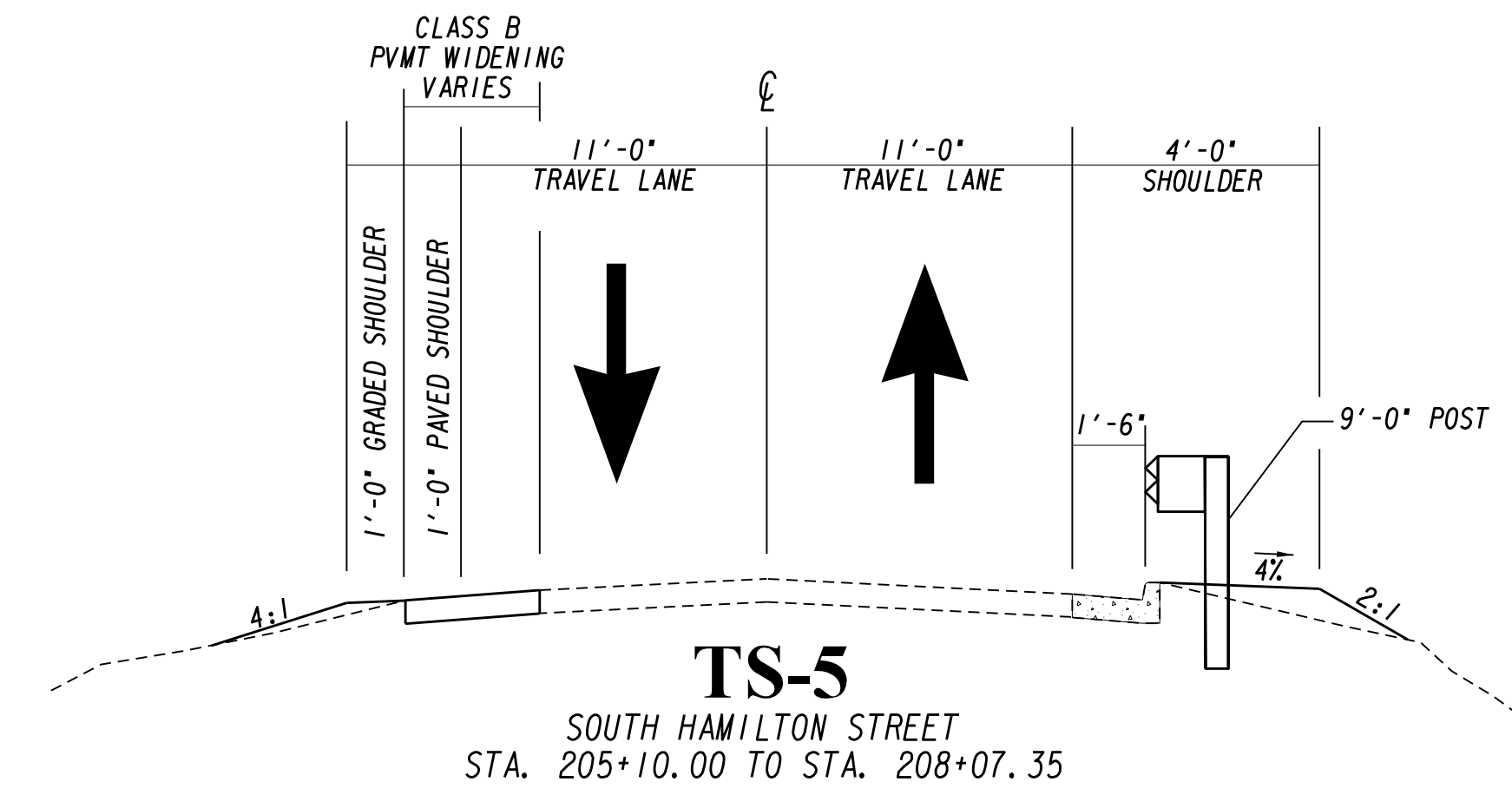
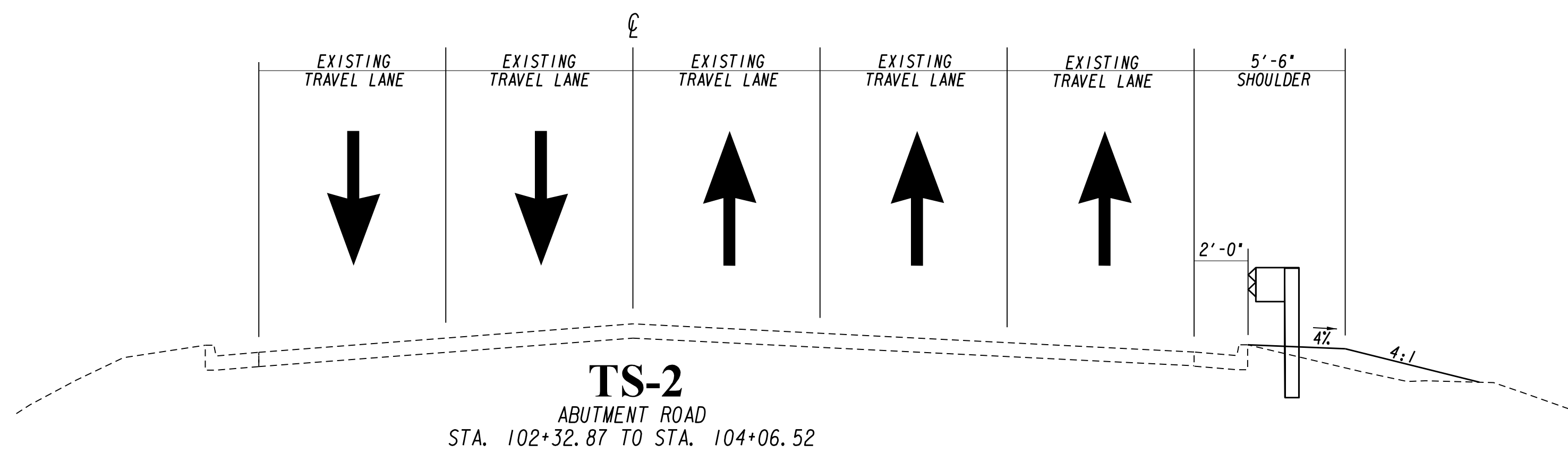
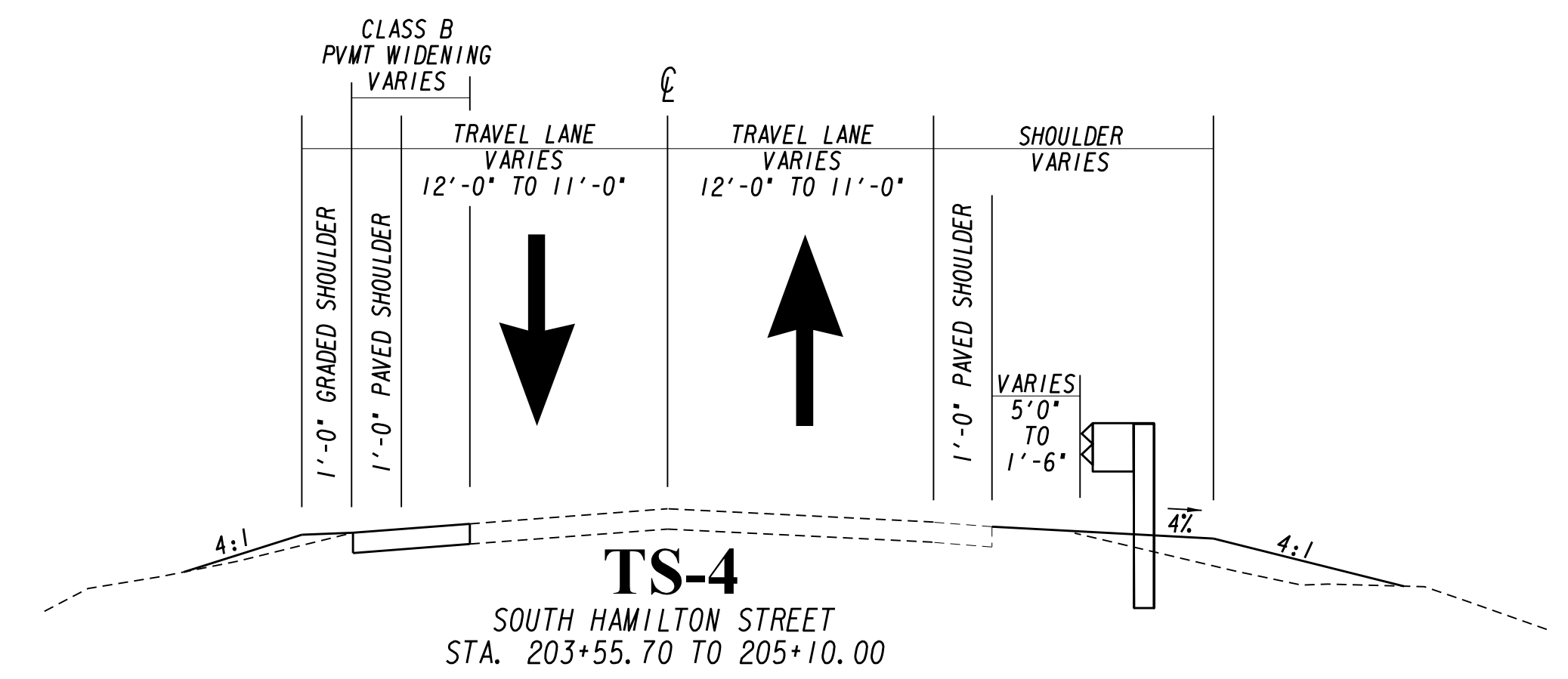
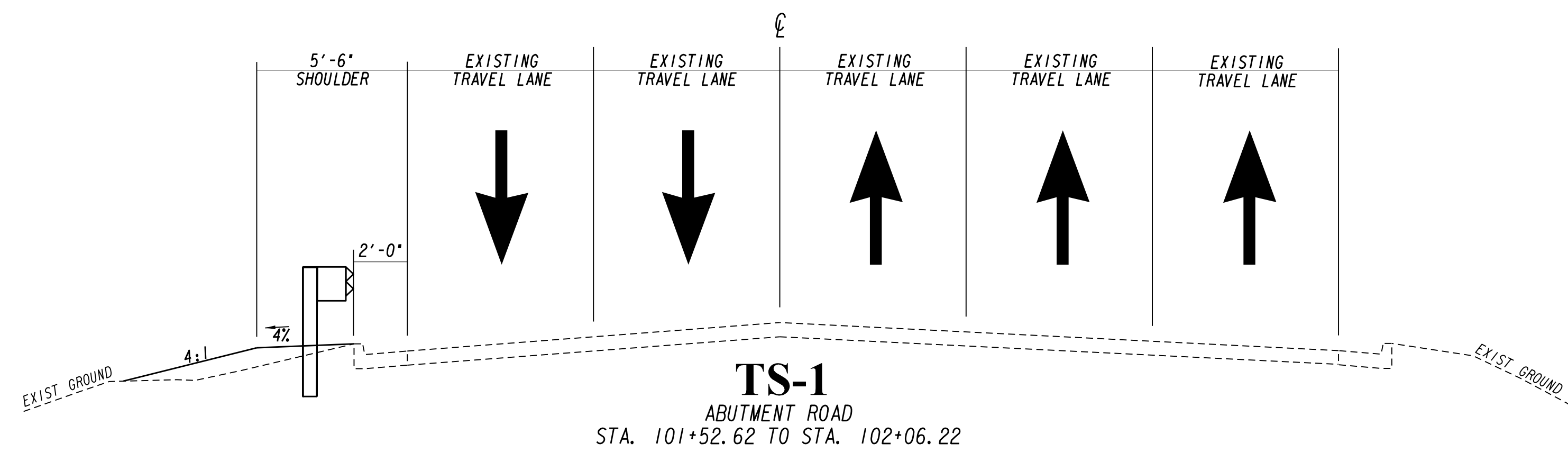
REVISION DATES


CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
**GENERAL NOTES**

GUARDRAIL IMPROVEMENTS

DRAWING No.  
**04-0001**



**NTS**

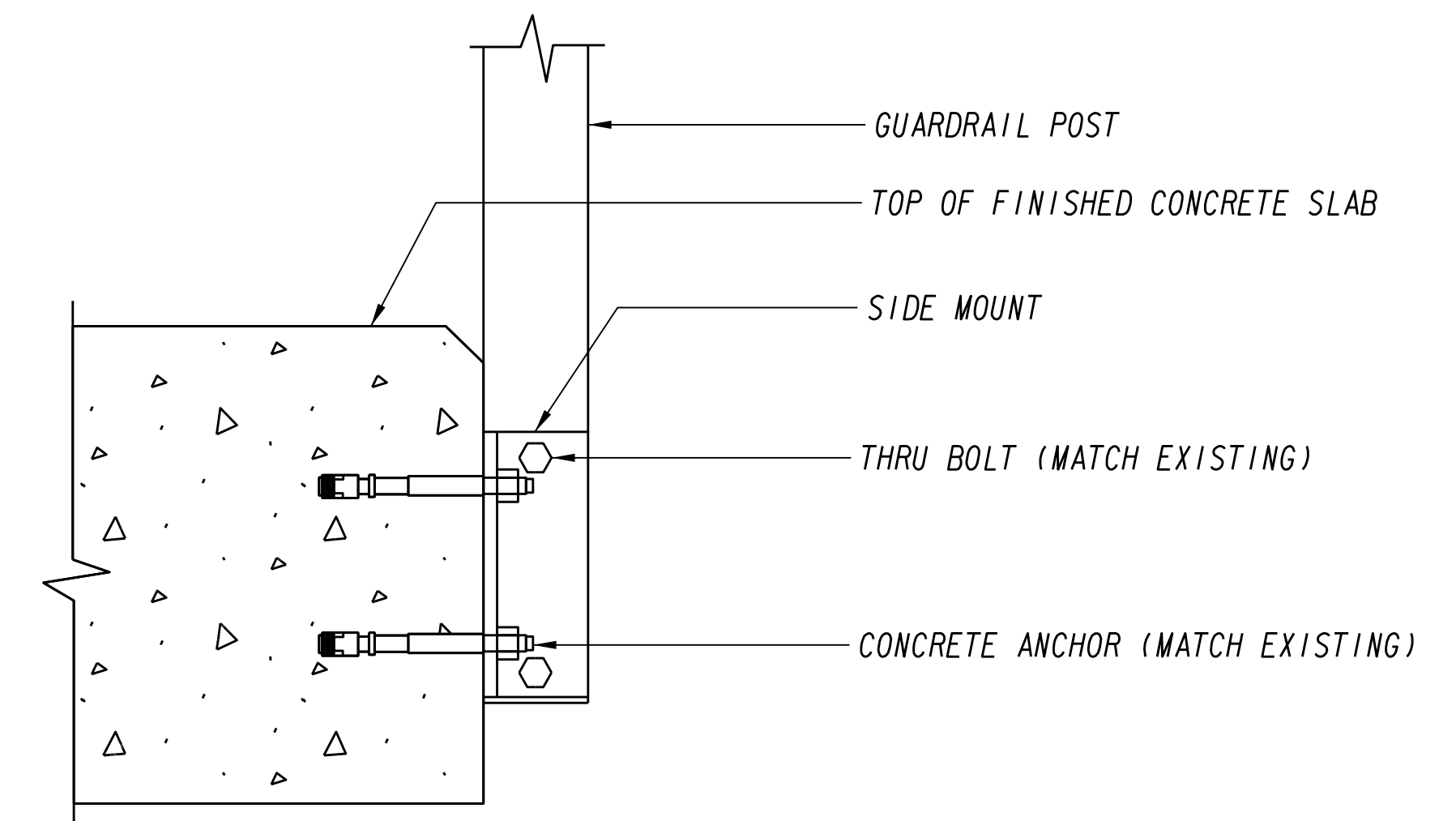
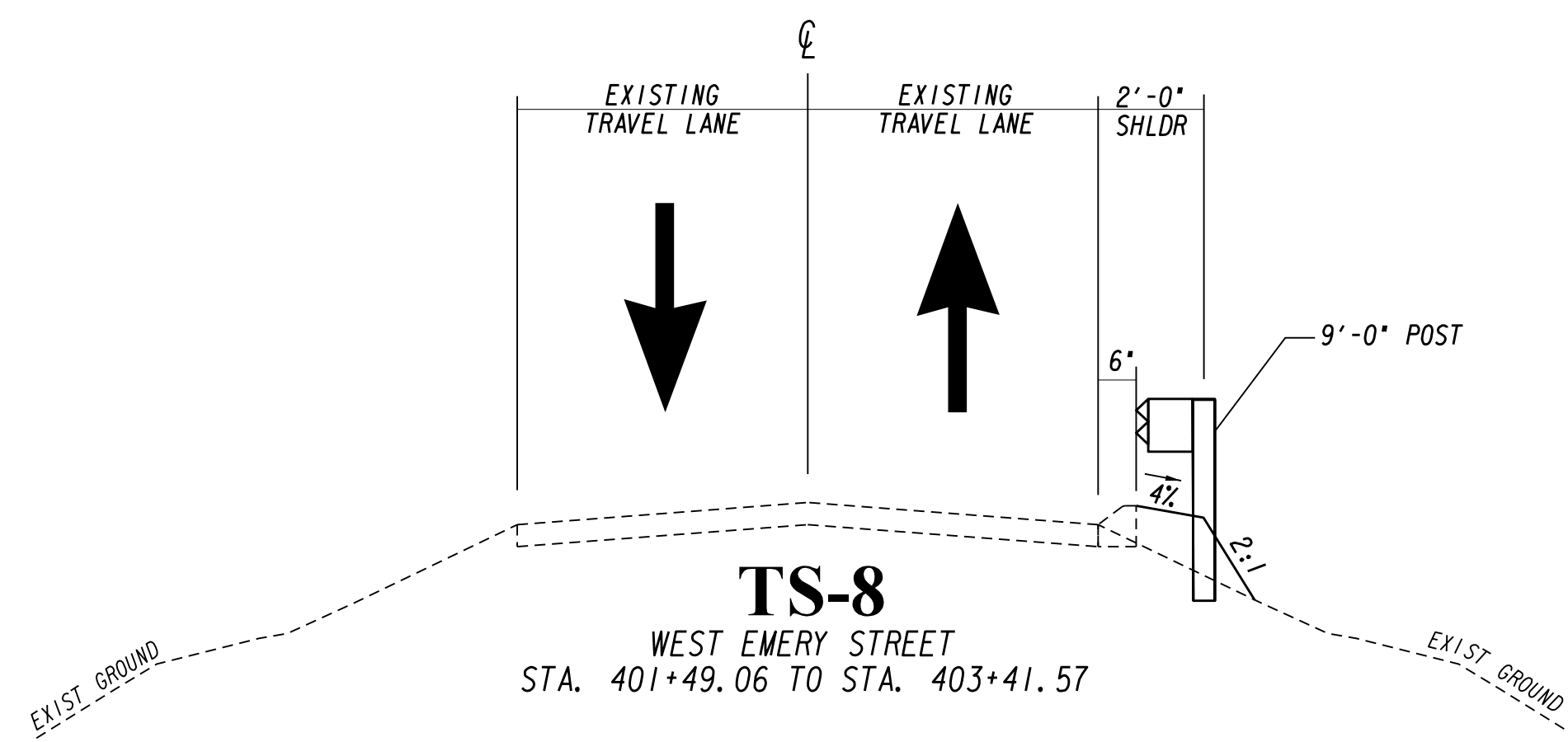
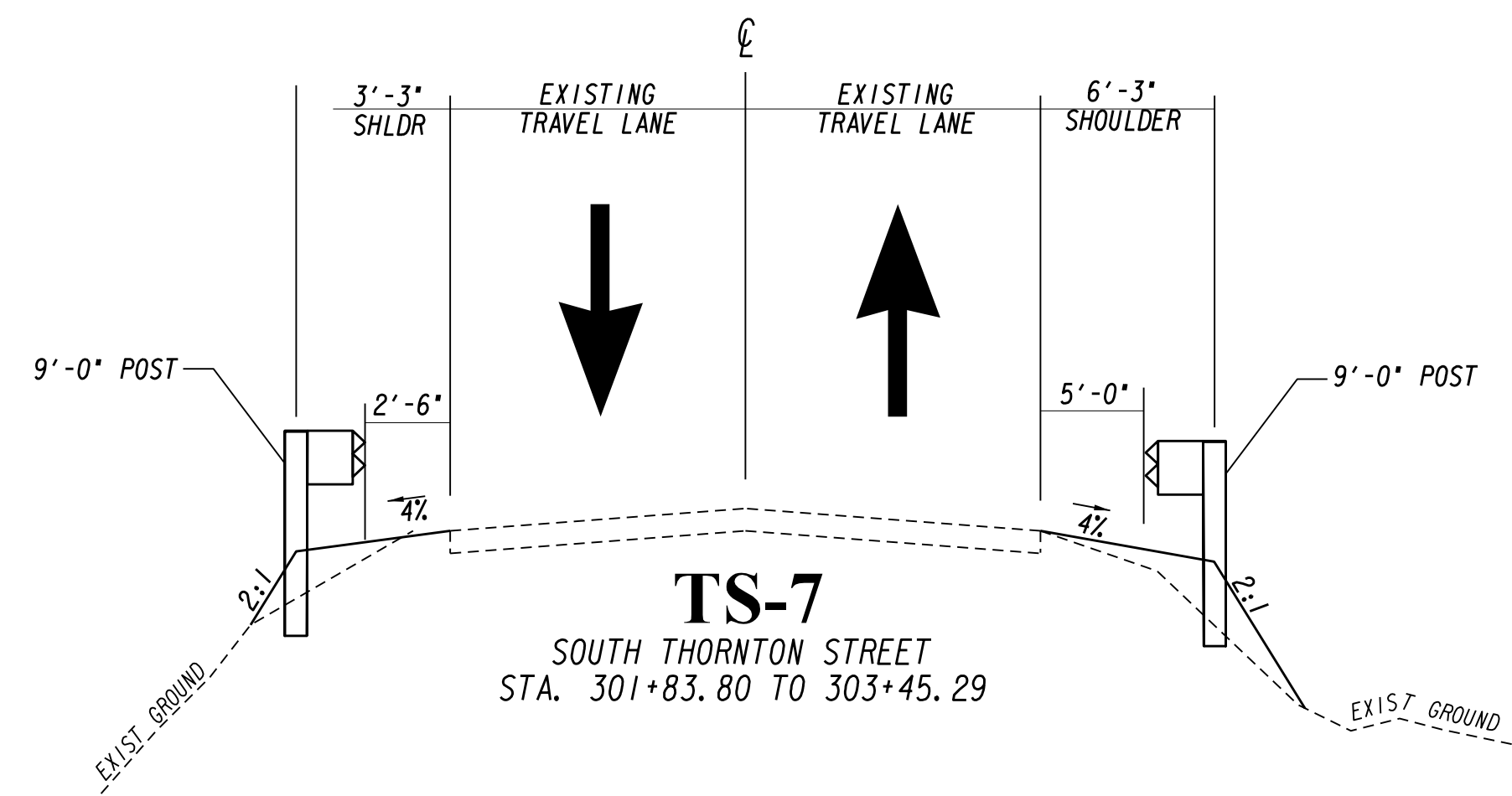
REVISION DATES


CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

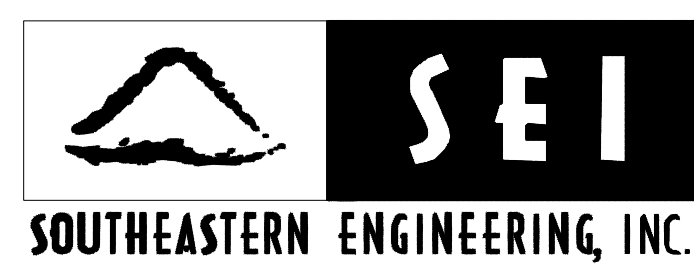
OFFICE:  
**TYPICAL SECTIONS**

GUARDRAIL IMPROVEMENTS

DRAWING No.  
**05-0001**



**SPECIAL DETAIL**  
GUARDRAIL POST ATTACHMENT TO EXISTING CULVERT  
LOCATION 3 - SOUTH THORNTON STREET



**NTS**

REVISION DATES		

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:

**TYPICAL SECTIONS**

GUARDRAIL IMPROVEMENTS

DRAWING No.  
**05-0002**



# DETAILED ESTIMATE

## LOCATION 1: ABUTMENT RD @ JD PARROT JR PKWY GUARDRAIL REPLACEMENT DETAILED ESTIMATE

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
<b>ROADWAY ITEMS</b>			
150-1000	TRAFFIC CONTROL	1	LS
210-0100	GRADING COMPLETE	1	LS
610-9001	REM SIGN	1	EA
611-5551	RESET SIGN	1	EA
641-1100	GUARDRAIL, TP T	74	LF
641-1200	GUARDRAIL, TP W	247	LF
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA

<b>EROSION CONTROL ITEMS</b>			
163-0232	TEMPORARY GRASSING	0.03	AC
163-0240	MULCH	0.08	TN
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	194	LF
171-0010	TEMPORARY SILT FENCE, TYPE A	387	LF
700-6910	PERMANENT GRASSING	0.03	AC
700-7000	AGRICULTURAL LIME	0.02	TN
700-8000	FERTILIZER MIXED GRADE	0.02	TN
700-8100	FERTILIZER NITROGEN CONTENT	2	LB

## LOCATION 2: SOUTH HAMILTON AVE GUARDRAIL REPLACEMENT DETAILED ESTIMATE

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
<b>ROADWAY ITEMS</b>			
150-1000	TRAFFIC CONTROL	1	LS
210-0100	GRADING COMPLETE	1	LS
310-5060	GR AGGR BASE CRS, 6 INCH, INCL MATL	250	SY
441-0301	CONC SPILLWAY, TP 3	1	EA
441-6216	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	314	LF
500-9999	CLASS B CONC, BASE OR PVMT WIDENING	37	CY
641-1100	GUARDRAIL, TP T	287	LF
641-1200	GUARDRAIL, TP W	312	LF
641-5001	GUARDRAIL ANCHORAGE, TP 1	1	EA
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	1	EA

<b>SIGNING &amp; MARKING ITEMS</b>			
647-5230	SIGNAL ASSEMBLY, FLASHING SCHOOL, COMPLETE	1	EA
653-0100	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL	1	EA
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	1463	LF
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	1841	LF
654-1001	RAISED PVMT MARKERS, TP 1	47	EA
656-0050	REMOVE EXIST SOLID TRAF STRIPES, 5 IN, THERMOPLASTIC	1845	LF
656-5000	REMOVE EXIST TRAF MARKINGS - RR/HWY CROSSING SYMBOL	1	EA

<b>EROSION CONTROL ITEMS</b>			
163-0232	TEMPORARY GRASSING	0.19	AC
163-0240	MULCH	0.47	TN
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	808	LF
171-0010	TEMPORARY SILT FENCE, TYPE A	1616	LF
700-6910	PERMANENT GRASSING	0.19	AC
700-7000	AGRICULTURAL LIME	0.11	TN
700-8000	FERTILIZER MIXED GRADE	0.11	TN
700-8100	FERTILIZER NITROGEN CONTENT	10	LB

## LOCATION 3: SOUTH THORNTON AVE GUARDRAIL REPLACEMENT DETAILED ESTIMATE

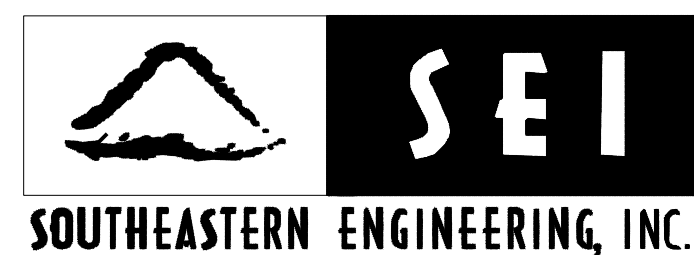
ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
<b>ROADWAY ITEMS</b>			
150-1000	TRAFFIC CONTROL	1	LS
210-0100	GRADING COMPLETE	1	LS
610-9001	REM SIGN	5	EA
611-5551	RESET SIGN	4	EA
641-1200	GUARDRAIL, TP W	163	LF
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA
641-5015	GUARDRAIL TERMINAL, TP 12A, 31 IN, TANGENT, ENERGY-ABSORBING	2	EA

<b>EROSION CONTROL ITEMS</b>			
163-0232	TEMPORARY GRASSING	0.10	AC
163-0240	MULCH	0.26	TN
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE C	497	LF
171-0030	TEMPORARY SILT FENCE, TYPE C	994	LF
700-6910	PERMANENT GRASSING	0.10	AC
700-7000	AGRICULTURAL LIME	0.06	TN
700-8000	FERTILIZER MIXED GRADE	0.06	TN
700-8100	FERTILIZER NITROGEN CONTENT	6	LB

## LOCATION 4: WEST EMERY ST @ LOVEMAN LN GUARDRAIL REPLACEMENT DETAILED ESTIMATE

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
<b>ROADWAY ITEMS</b>			
150-1000	TRAFFIC CONTROL	1	LS
210-0100	GRADING COMPLETE	1	LS
610-9001	REM SIGN	2	EA
611-5551	RESET SIGN	2	EA
641-1200	GUARDRAIL, TP W	96	LF
641-5001	GUARDRAIL ANCHORAGE, TP 1	2	EA

<b>EROSION CONTROL ITEMS</b>			
163-0232	TEMPORARY GRASSING	0.03	AC
163-0240	MULCH	0.07	TN
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TYPE A	88	LF
171-0010	TEMPORARY SILT FENCE, TYPE A	175	LF
700-6910	PERMANENT GRASSING	0.03	AC
700-7000	AGRICULTURAL LIME	0.02	TN
700-8000	FERTILIZER MIXED GRADE	0.02	TN
700-8100	FERTILIZER NITROGEN CONTENT	2	LB



SOUTHEASTERN ENGINEERING, INC.

REVISION DATES

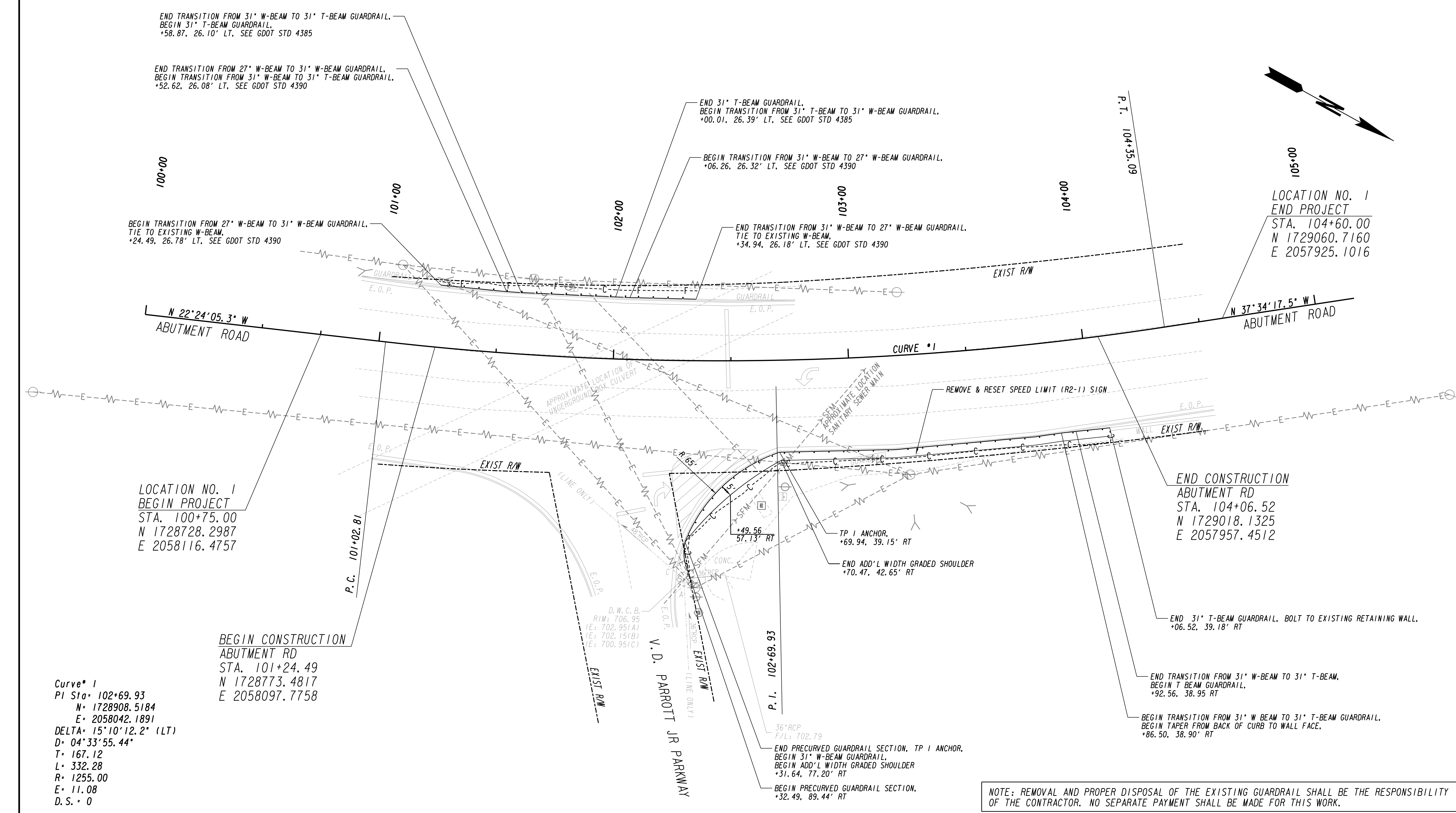

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:

**DETAILED ESTIMATE**

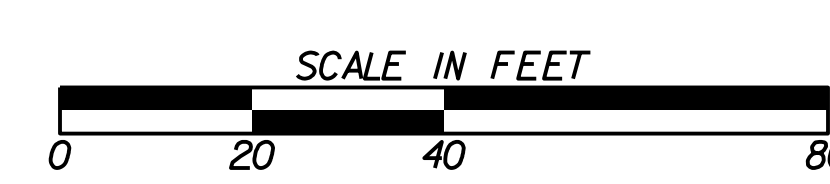
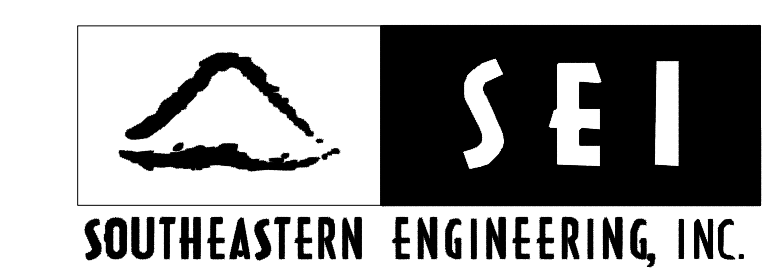
GUARDRAIL IMPROVEMENTS

DRAWING No.  
**09-0001**



NOTE: REMOVAL AND PROPER DISPOSAL OF THE EXISTING GUARDRAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.

PROPERTY AND EXISTING R/W LINE	---	BEGIN LIMIT OF ACCESS.....BLA	---
REQUIRED R/W LINE	---	END LIMIT OF ACCESS.....ELA	---
CONSTRUCTION LIMITS	---	REQ'D LIMIT OF ACCESS	---
EASEMENT FOR CONSTR	---	REQ'D LIMIT OF ACCESS & R/W	---
& MAINTENANCE OF SLOPES	---	ORANGE BARRIER FENCE	---
EASEMENT FOR CONSTR OF SLOPES	---	ESA - ENV. SENSITIVE AREA	---
EASEMENT FOR CONSTR OF DRIVES	---	(SEE ERIT TABLE)	---



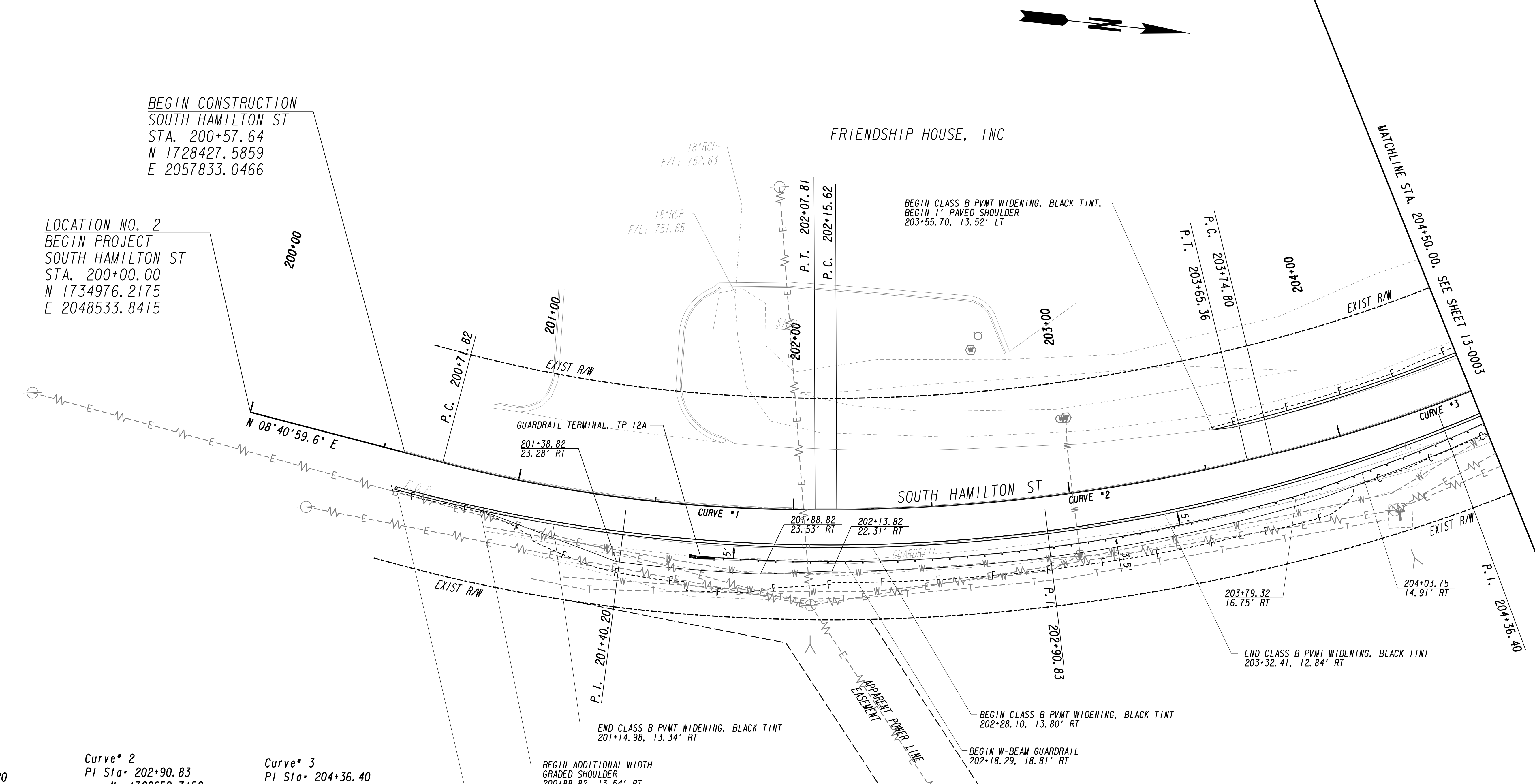
REVISION	DATE	DESCRIPTION

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT

OFFICE:  
**MAINLINE PLAN**

LOCATION NO. 1  
 ABUTMENT ROAD GUARDRAIL

DRAWING No.  
**13-0001**



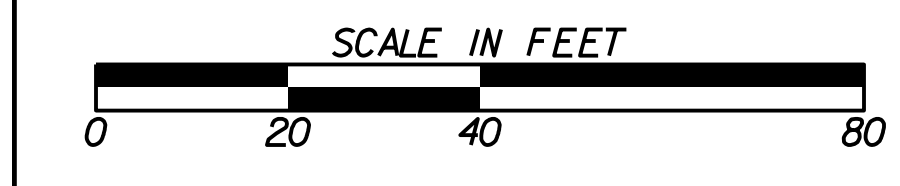
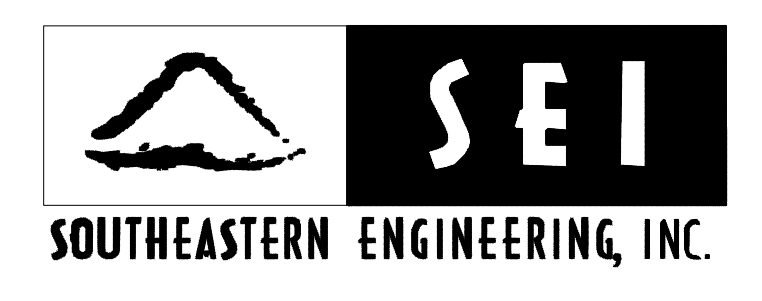
Curve #	PI Sta	N	E	DELTA	D	T	L	R	E	D.S.
Curve # 1	201+40.20	1728509.1958	2057845.5102	14°50'29.5" (LT)	10°54'48.53"	68.38	135.99	525.00	4.43	0
Curve # 2	202+90.83	1728659.7152	2057829.2694	13°18'05.2" (LT)	08°52'59.04"	75.21	149.74	645.00	4.37	0
Curve # 3	204+36.40	1728797.6117	2057780.5466	13°30'45.4" (LT)	11°01'06.31"	61.60	122.64	520.00	3.64	0

NOTE: SEE SHEETS 26-0001, 26-0002 FOR STRIPING LAYOUT

NOTE: REMOVAL AND PROPER DISPOSAL OF THE EXISTING GUARDRAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.

PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
 EASEMENT FOR CONSTR OF DRIVES

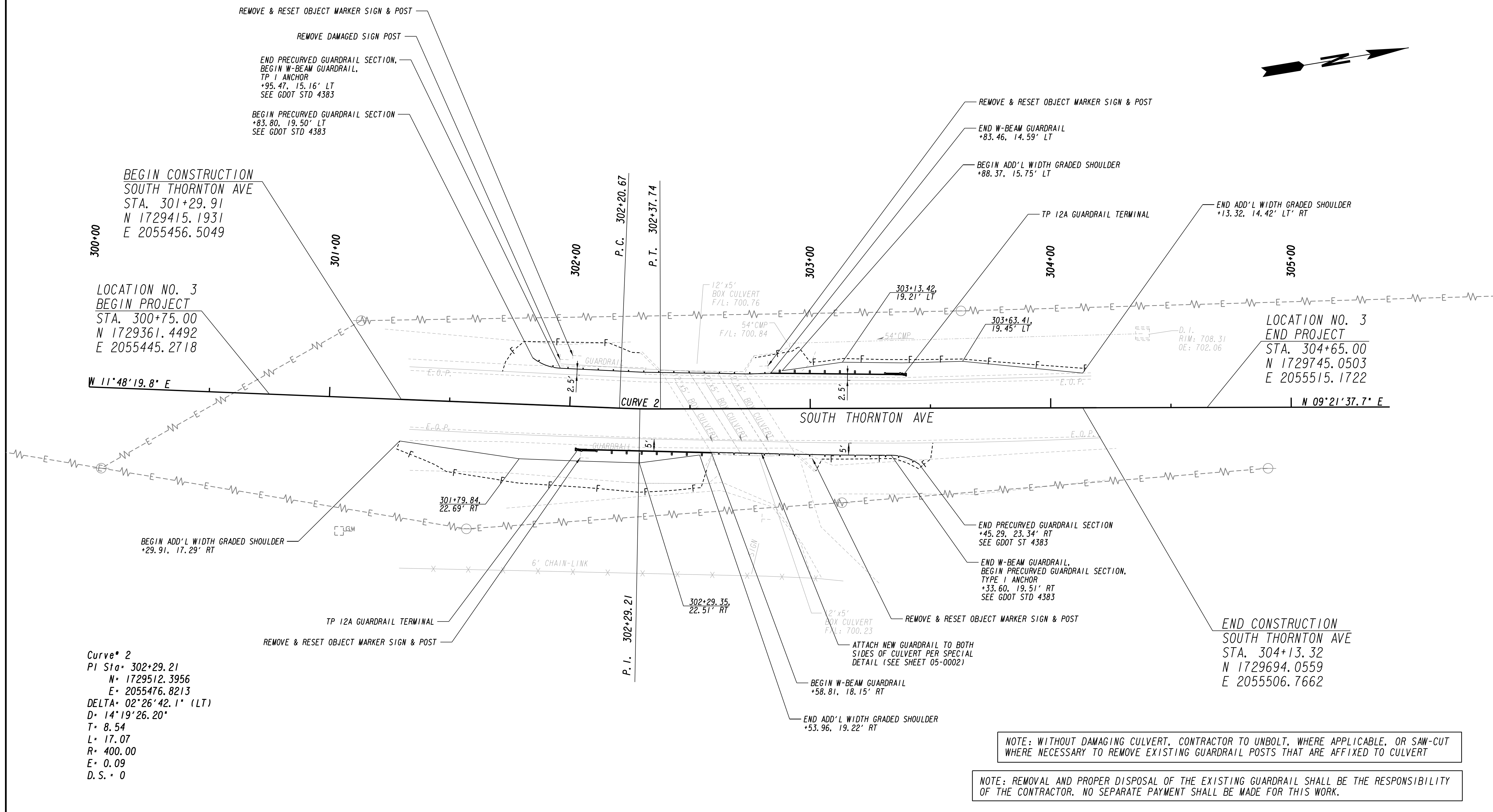
---E--- BEGIN LIMIT OF ACCESS.....BLA  
 ---F--- END LIMIT OF ACCESS.....ELA  
 ---G--- REQ'D LIMIT OF ACCESS  
 ---H--- REQ'D LIMIT OF ACCESS & R/W  
 ---I--- ORANGE BARRIER FENCE  
 ---J--- ESA - ENV. SENSITIVE AREA  
 (SEE ERIT TABLE)



REVISION DATES		

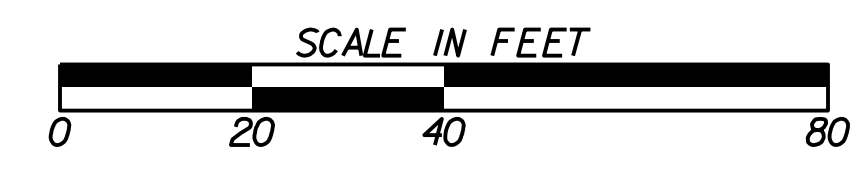
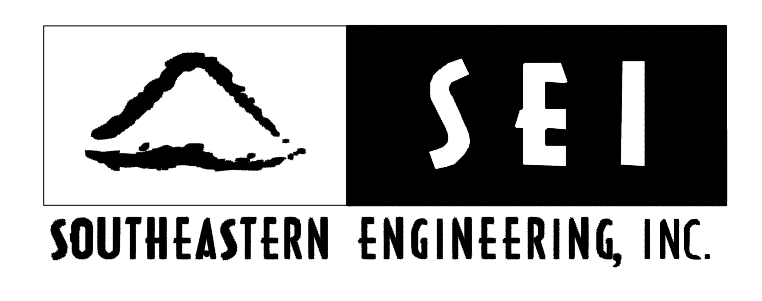
CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**MAINLINE PLAN**  
 LOCATION NO. 2  
 SOUTH HAMILTON ST GUARDRAIL  
 DRAWING No.  
**13-0002**





PROPERTY AND EXISTING R/W LINE	----
REQUIRED R/W LINE	----
CONSTRUCTION LIMITS	----
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	----
EASEMENT FOR CONSTR OF SLOPES	----
EASEMENT FOR CONSTR OF DRIVES	----

BEGIN LIMIT OF ACCESS.....BLA	----
END LIMIT OF ACCESS.....ELA	----
REQ'D LIMIT OF ACCESS	----
REQ'D LIMIT OF ACCESS & R/W	----
ORANGE BARRIER FENCE	----
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	----



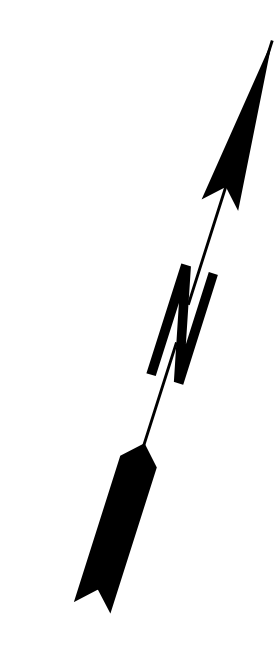
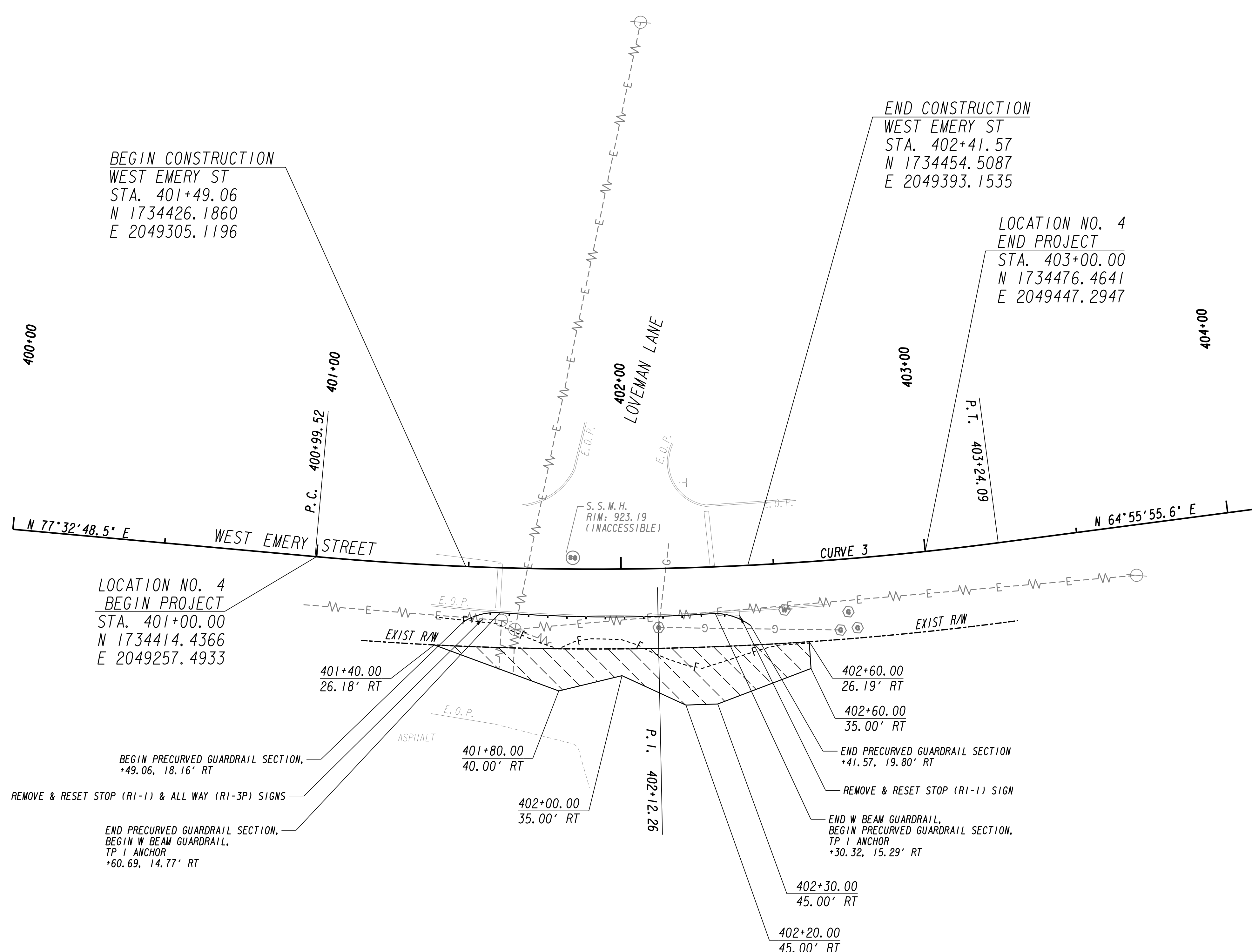
REVISION DATES	

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT

OFFICE:  
**MAINLINE PLAN**

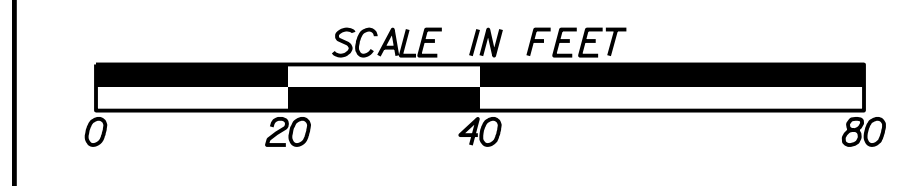
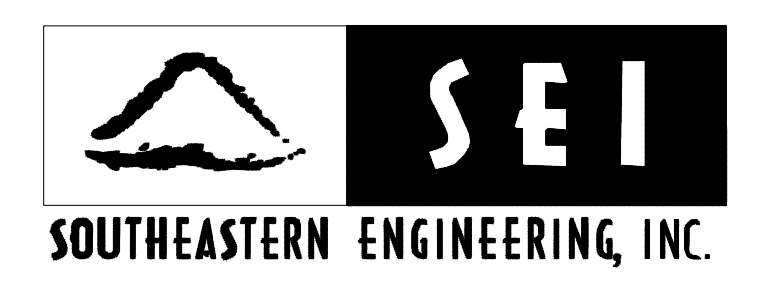
LOCATION 3  
 SOUTH THORNTON AVE GUARDRAIL

DRAWING No.  
**13-0004**



PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---C---F---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Hatched Box]

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
REQ'D LIMIT OF ACCESS	---o---o---
REQ'D LIMIT OF ACCESS & R/W	---  ---  ---
ORANGE BARRIER FENCE	---●---●---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---▲---▲---



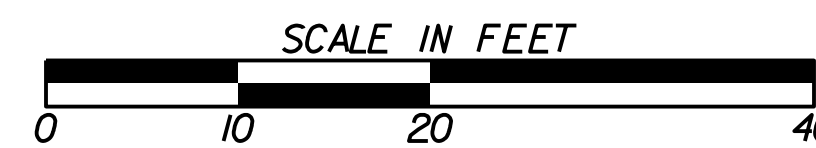
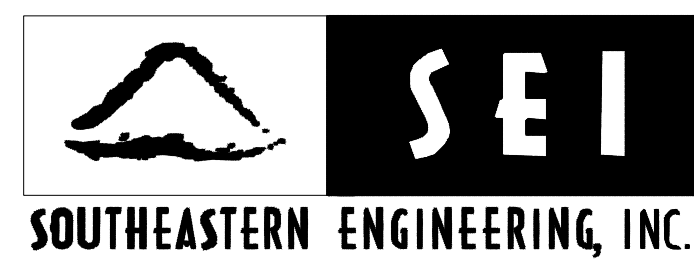
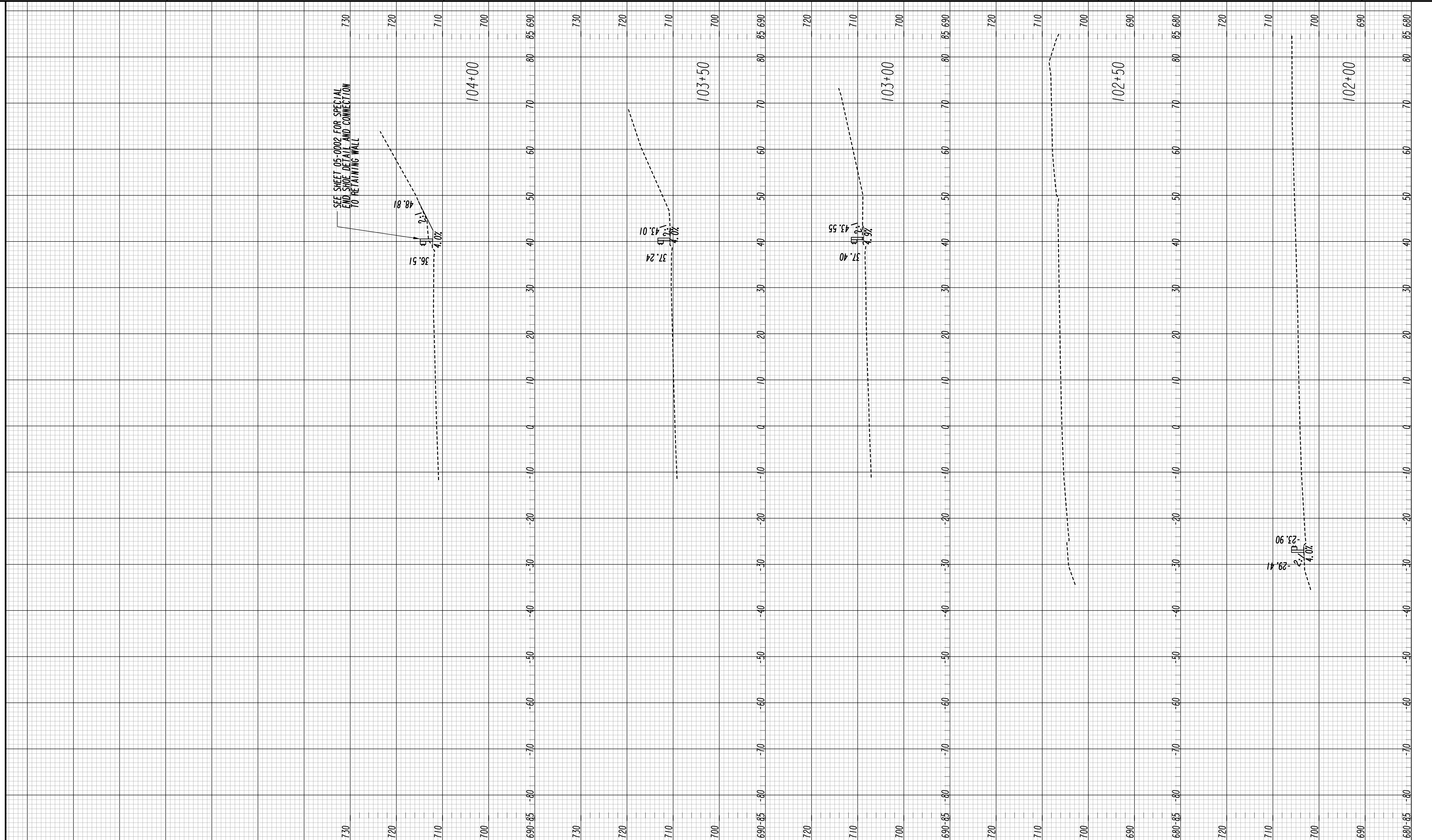
REVISION DATES	

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT

OFFICE:  
**MAINLINE PLAN**

LOCATION NO. 4  
 WEST EMERY ST GUARDRAIL

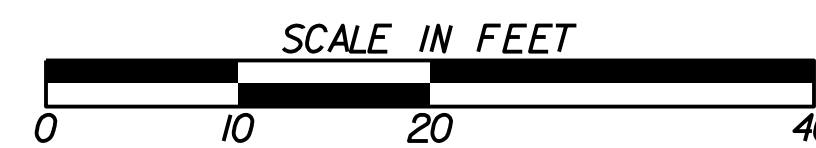
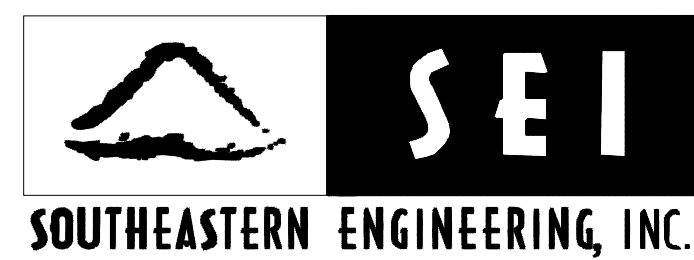
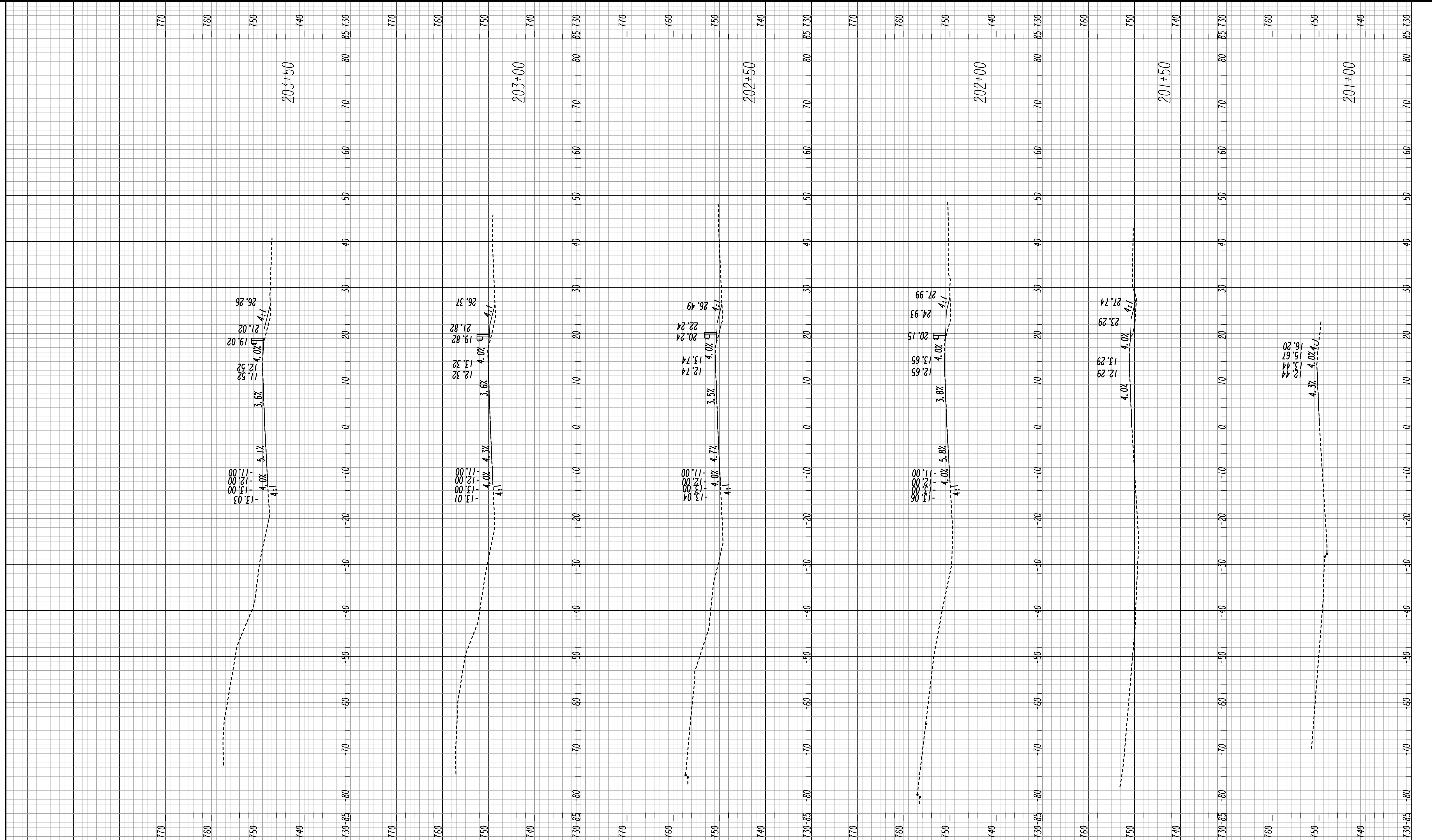
DRAWING No.  
**13-0005**



REVISION	DATE

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**CROSS SECTIONS**  
 LOCATION NO. 1  
 ABUTMENT ROAD GUARDRAIL

DRAWING No.  
**23-0001**



REVISION DATES


CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

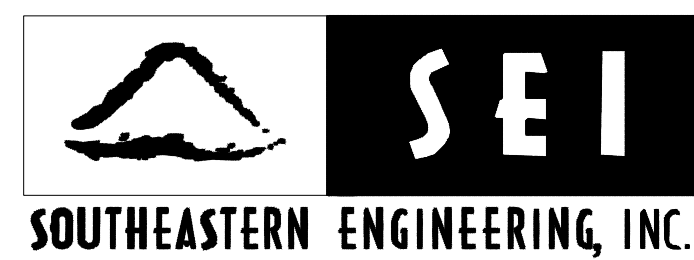
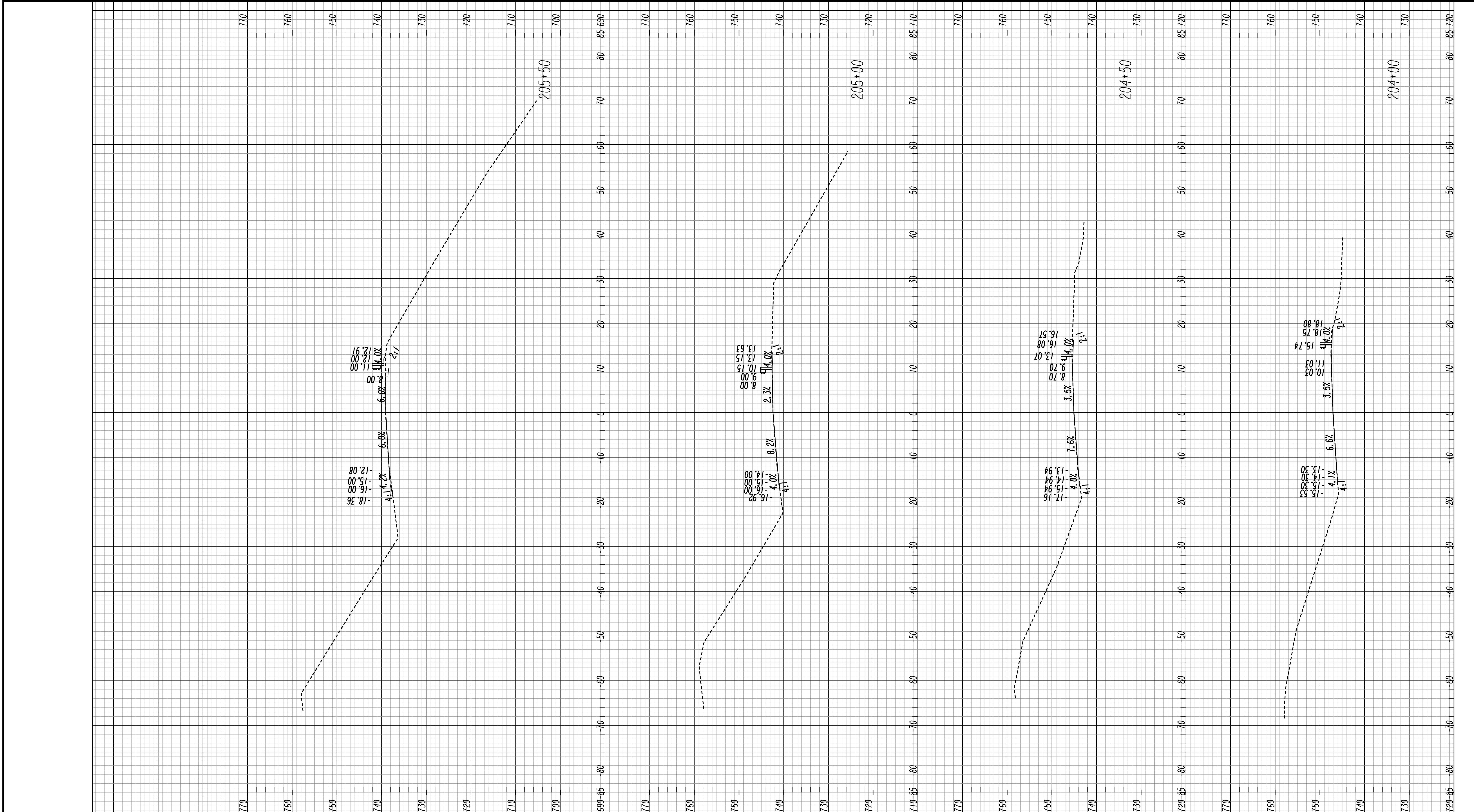
OFFICE:

**CROSS SECTIONS**

LOCATION NO. 2  
SOUTH HAMILTON GUARDRAIL

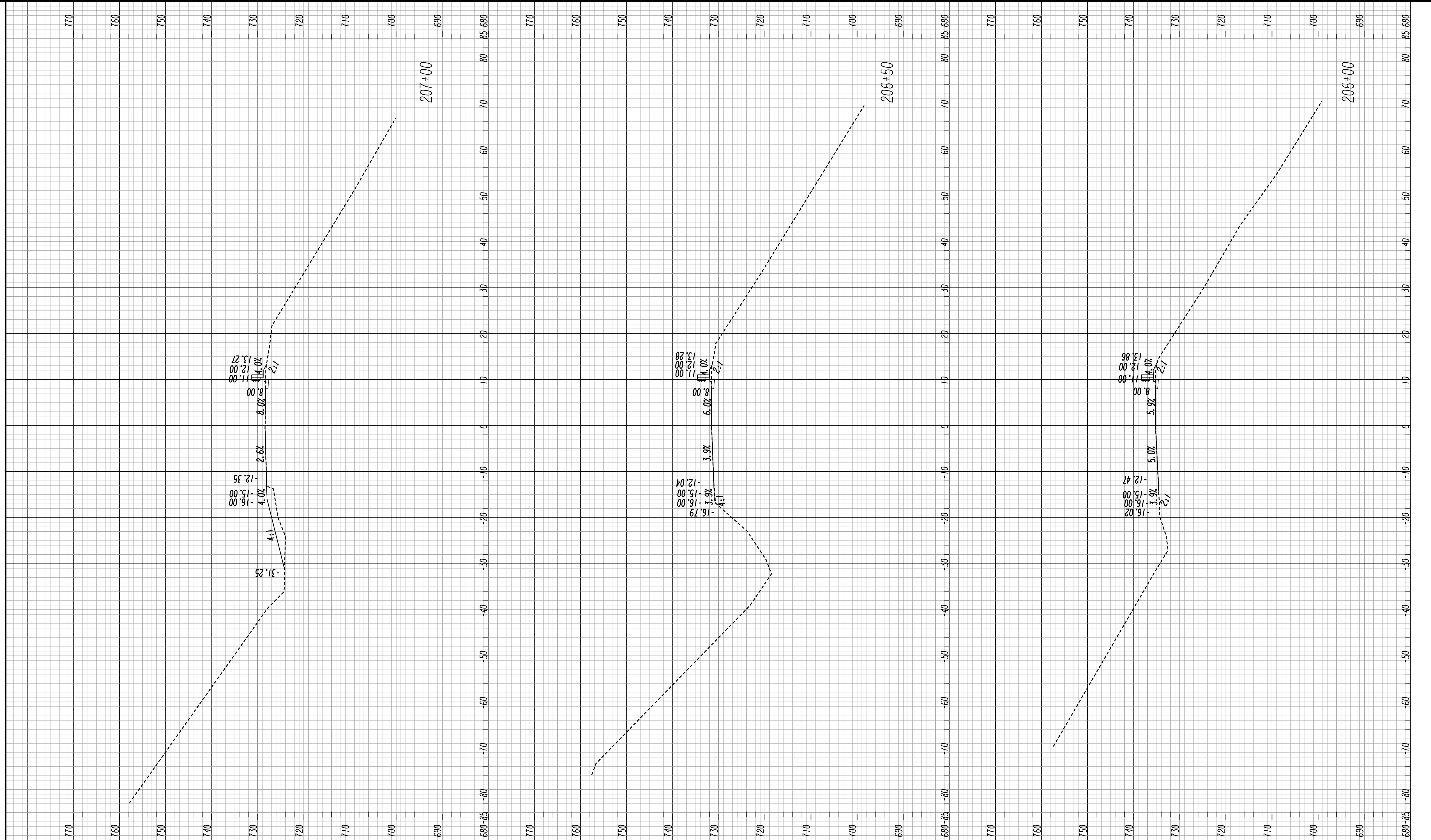
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REVISION DATES

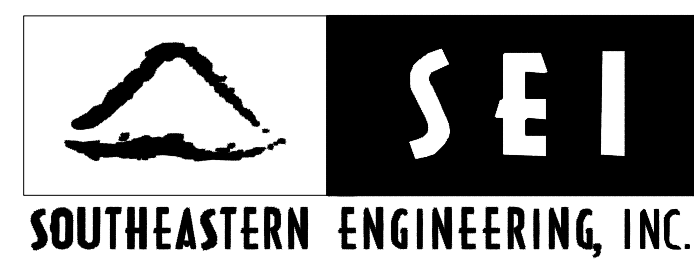
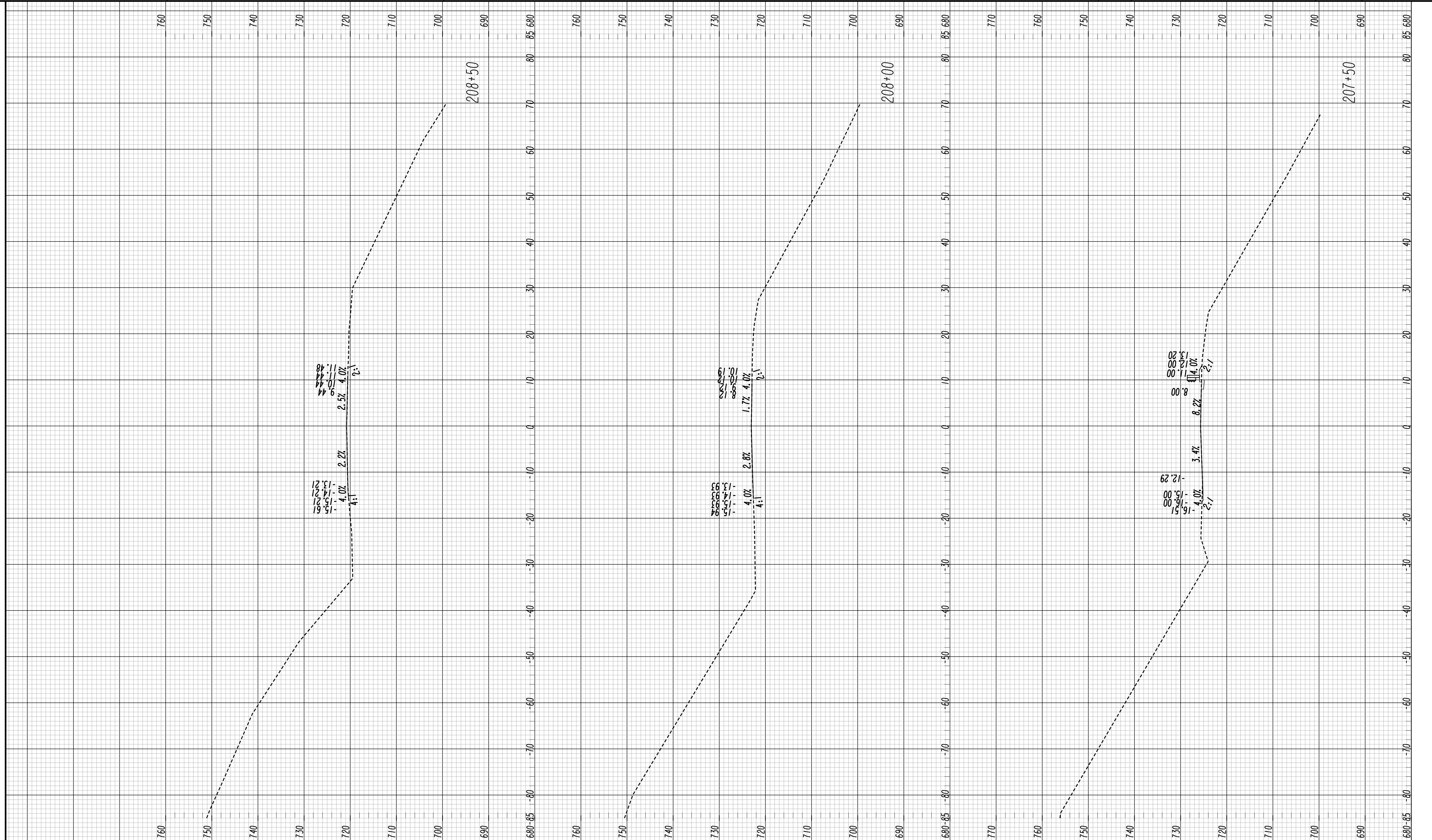
CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**CROSS SECTIONS**  
LOCATION NO. 2  
SOUTH HAMILTON GUARDRAIL  
DRAWING No. 23-0003



REVISION	DATE	DESCRIPTION

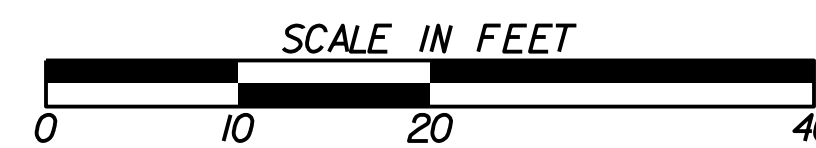
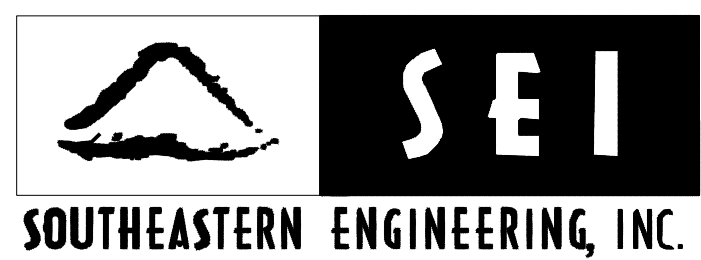
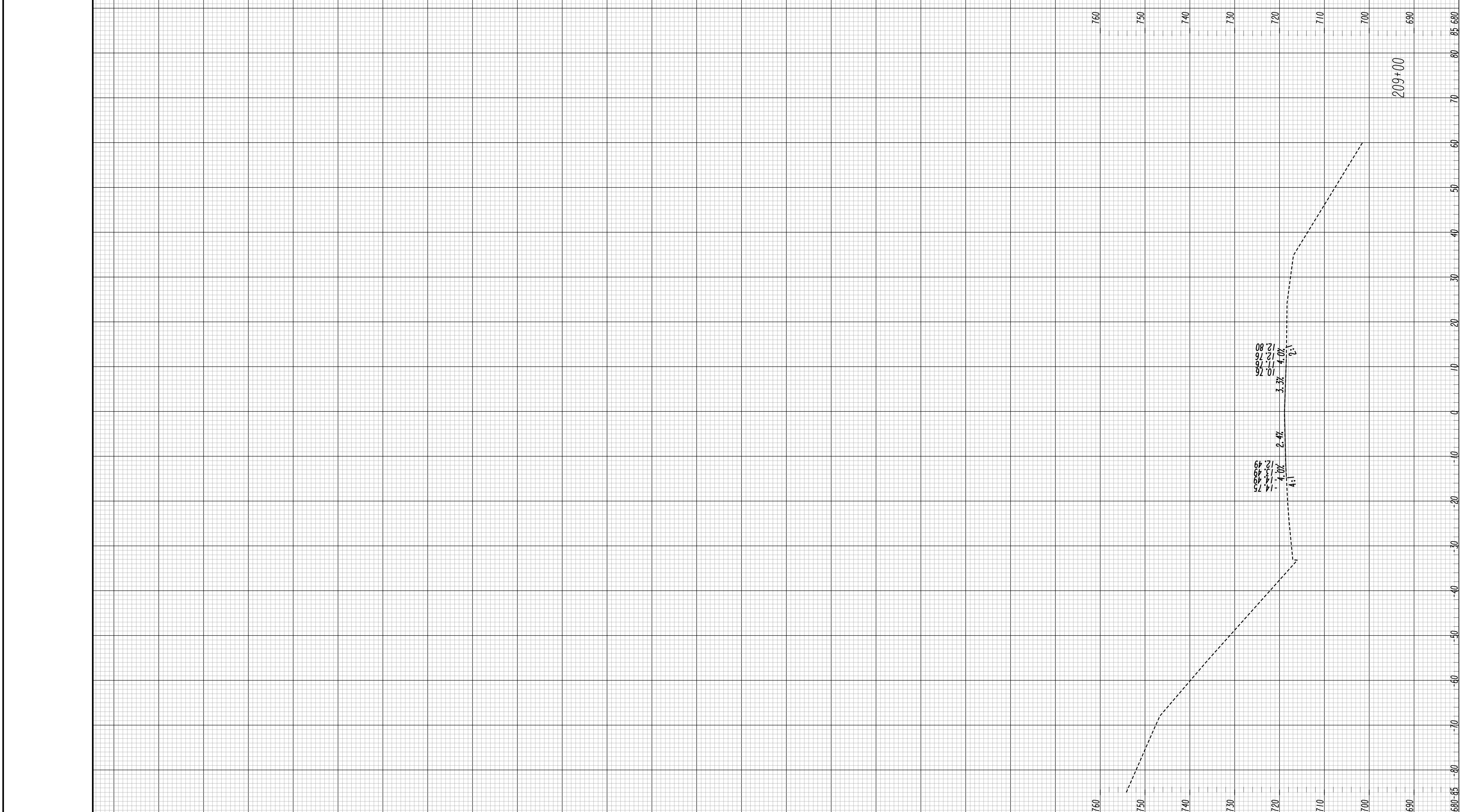
CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**CROSS SECTIONS**  
LOCATION NO. 2  
SOUTH HAMILTON GUARDRAIL

DRAWING No.  
**23-0004**



REVISION	DATE	DESCRIPTION

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**CROSS SECTIONS**  
LOCATION NO. 2  
SOUTH HAMILTON GUARDRAIL  
DRAWING No. 23-0005



REVISION DATES

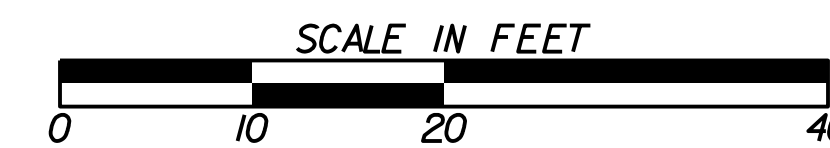
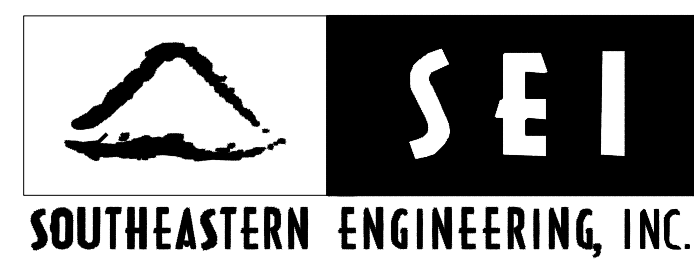
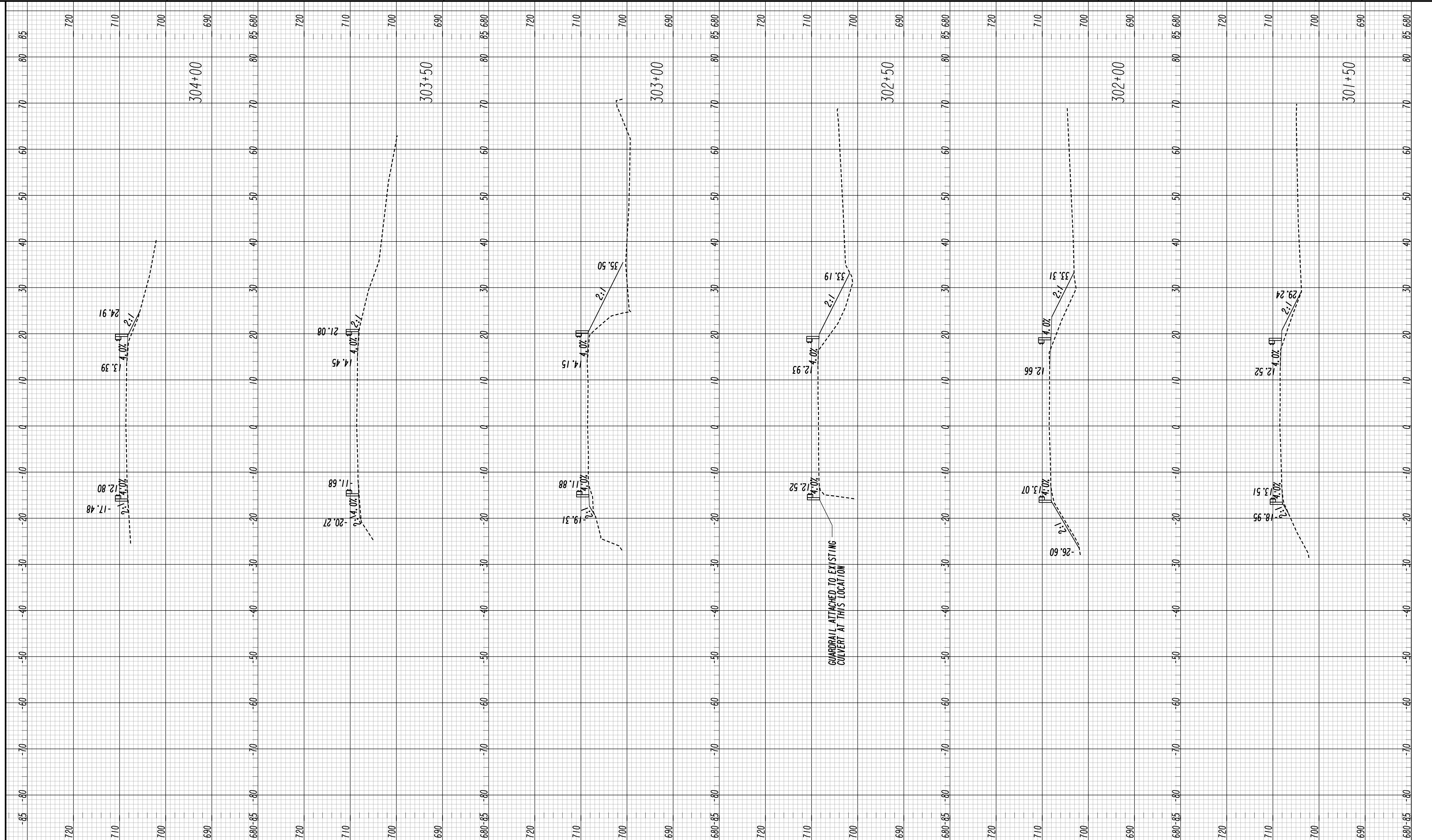

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:

**CROSS SECTIONS**

LOCATION NO. 2  
SOUTH HAMILTON GUARDRAIL

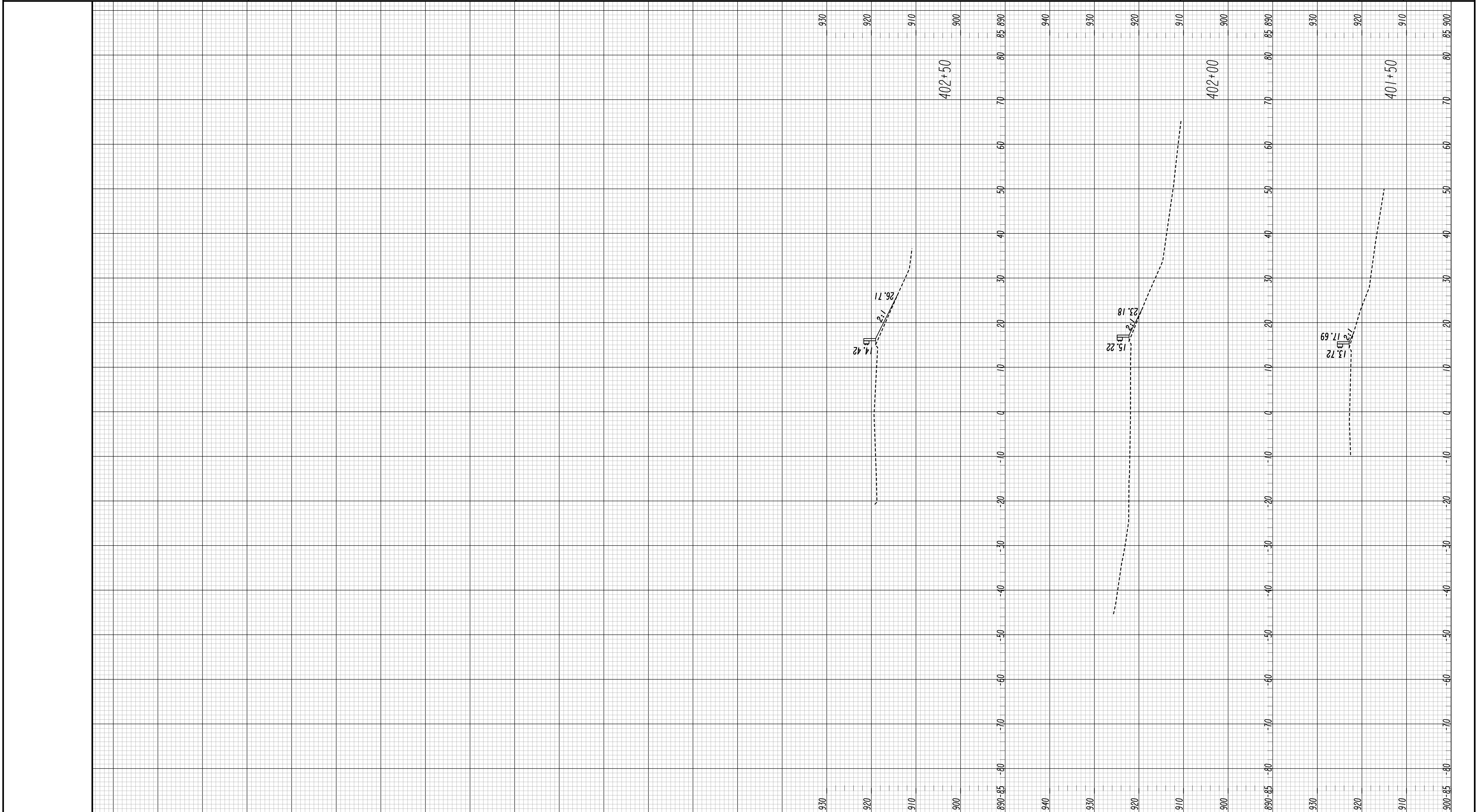
DRAWING No.  
**23-0006**



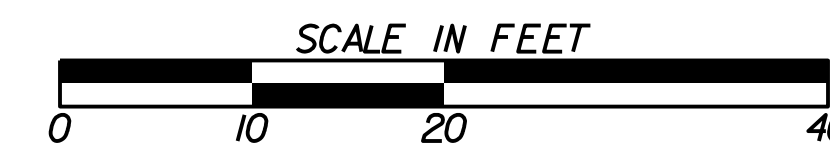
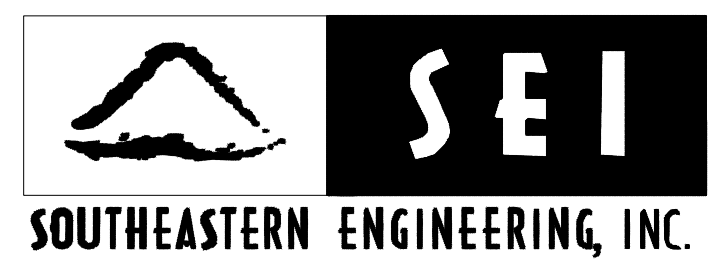
REVISION DATES	

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**CROSS SECTIONS**  
LOCATION NO. 3  
SOUTH THORNTON AVE GUARDRAIL

DRAWING No.  
**23-0007**

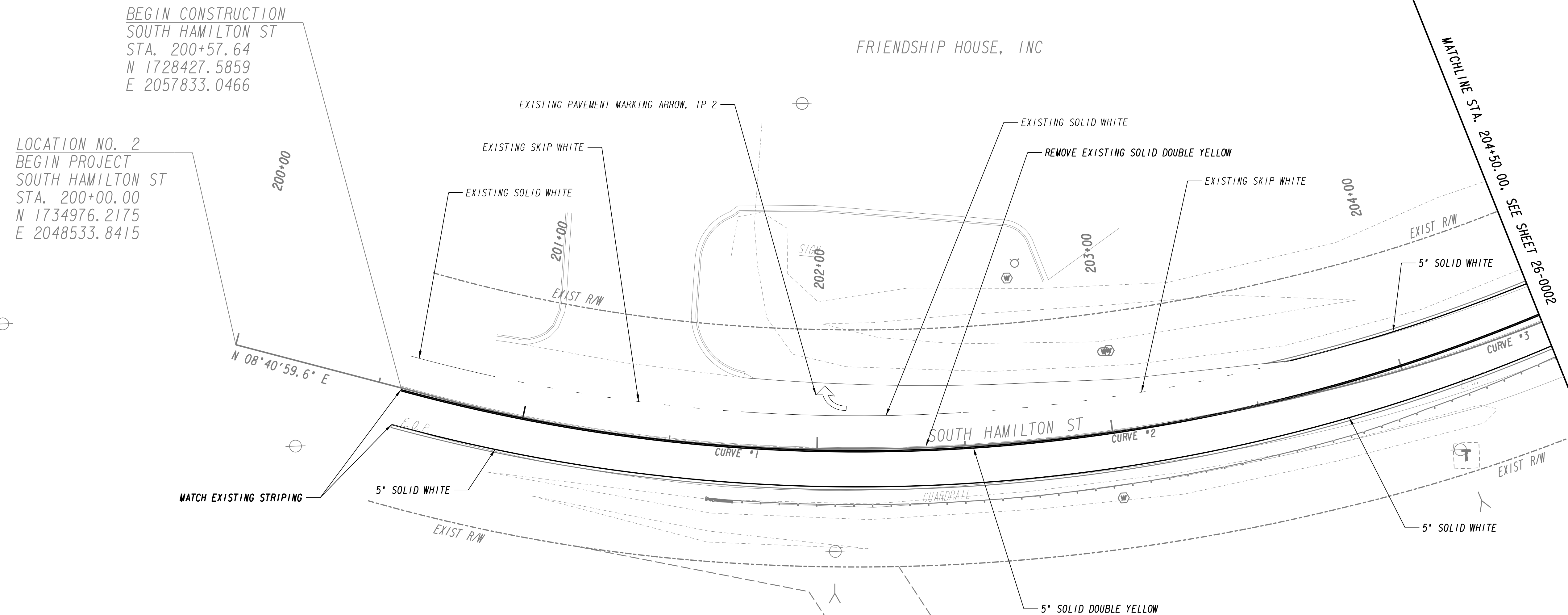


09/17/2015 SUXENOLD



REVISION	DATE	DESCRIPTION

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**CROSS SECTIONS**  
LOCATION NO. 4  
WEST EMERY STREET GUARDRAIL  
DRAWING No. 23-0008

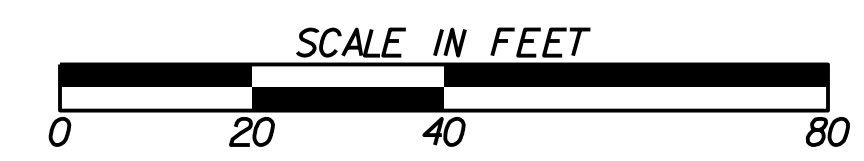
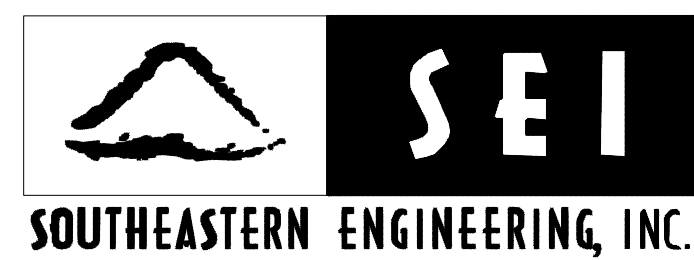


BEGIN CONSTRUCTION  
SOUTH HAMILTON ST  
STA. 200+57.64  
N 1728427.5859  
E 2057833.0466

LOCATION NO. 2  
BEGIN PROJECT  
SOUTH HAMILTON ST  
STA. 200+00.00  
N 1734976.2175  
E 2048533.8415

Curve # 1	Curve # 2	Curve # 3
PI Sta= 201+40.20	PI Sta= 202+90.83	PI Sta= 204+36.40
N= 1728509.1958	N= 1728659.7152	N= 1728797.6117
E= 2057845.5102	E= 2057829.2694	E= 2057780.5466
DELTA= 14°50'29.5" (LT)	DELTA= 13°18'05.2" (LT)	DELTA= 13°30'45.4" (LT)
D= 10°54'48.53"	D= 08°52'59.04"	D= 11°01'06.31"
T= 68.38	T= 75.21	T= 61.60
L= 135.99	L= 149.74	L= 122.64
R= 525.00	R= 645.00	R= 520.00
E= 4.43	E= 4.37	E= 3.64
D.S.= 0	D.S.= 0	D.S.= 0

NOTE: ENSURE ERADICATION OF EXISTING STRIPING IS DONE PROPERLY AND ALL TRACES OF EXISTING THERMOPLASTIC ARE COMPLETELY REMOVED. APPROVAL OF THIS WORK IS REQUIRED FROM THE CITY PRIOR TO APPLICATION OF THE NEW THERMOPLASTIC STRIPING LAYOUT.



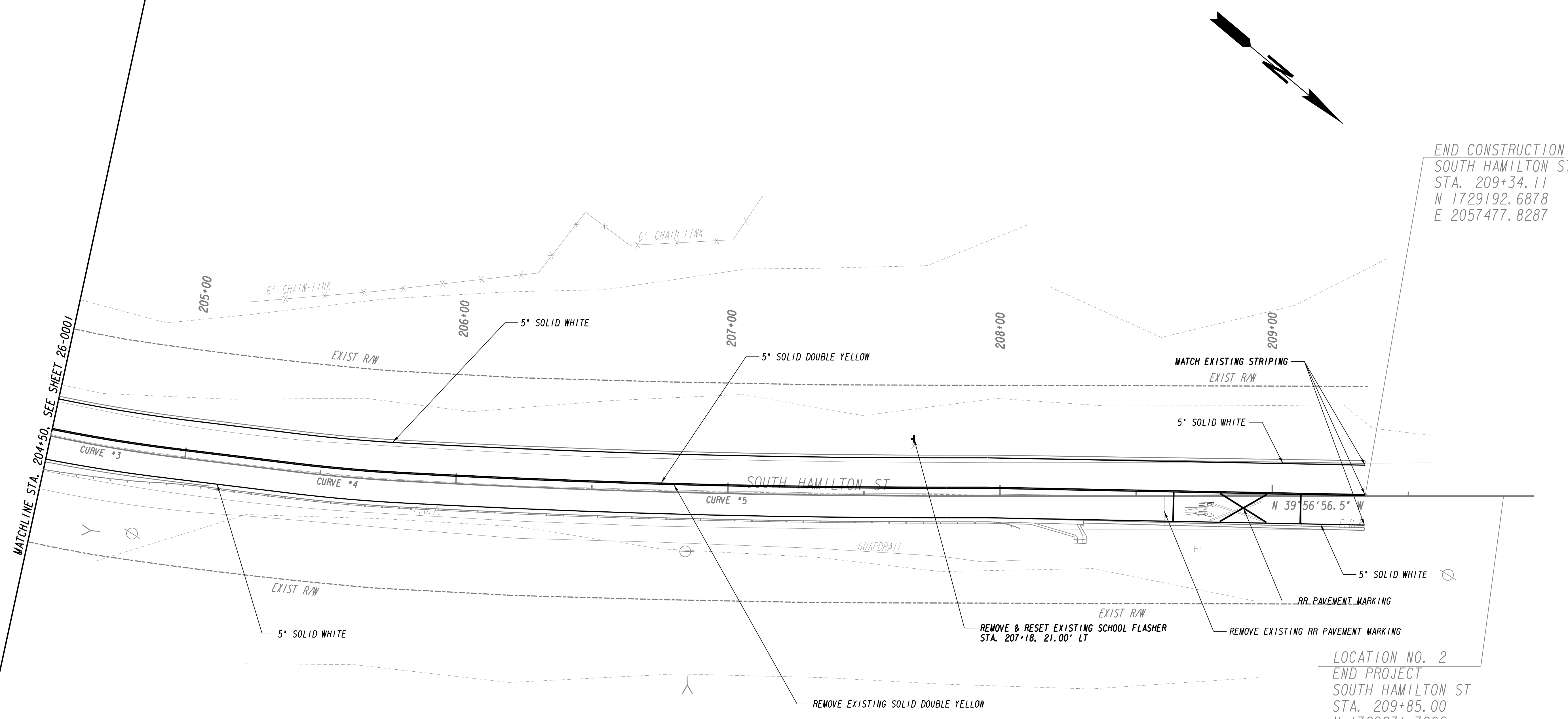
REVISION DATES	

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
**SIGNING AND MARKING PLANS**

LOCATION NO. 2  
SOUTH HAMILTON ST GUARDRAIL

DRAWING No.  
**26-0001**

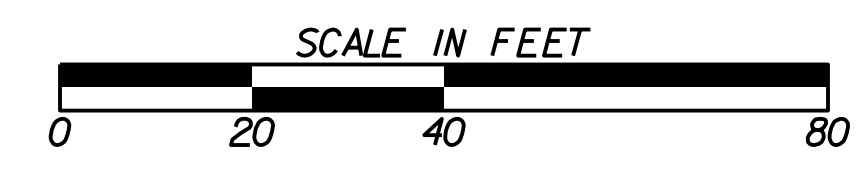
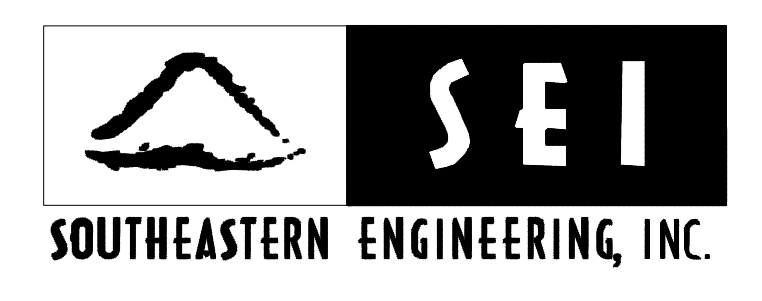


END CONSTRUCTION  
 SOUTH HAMILTON ST  
 STA. 209+34.11  
 N 1729192.6878  
 E 2057477.8287

LOCATION NO. 2  
 END PROJECT  
 SOUTH HAMILTON ST  
 STA. 209+85.00  
 N 1729231.7006  
 E 2057445.1521

NOTE: ENSURE ERADICATION OF EXISTING STRIPING IS DONE PROPERLY AND ALL TRACES OF EXISTING THERMOPLASTIC ARE COMPLETELY REMOVED. APPROVAL OF THIS WORK IS REQUIRED FROM THE CITY PRIOR TO APPLICATION OF THE NEW THERMOPLASTIC STRIPING LAYOUT.

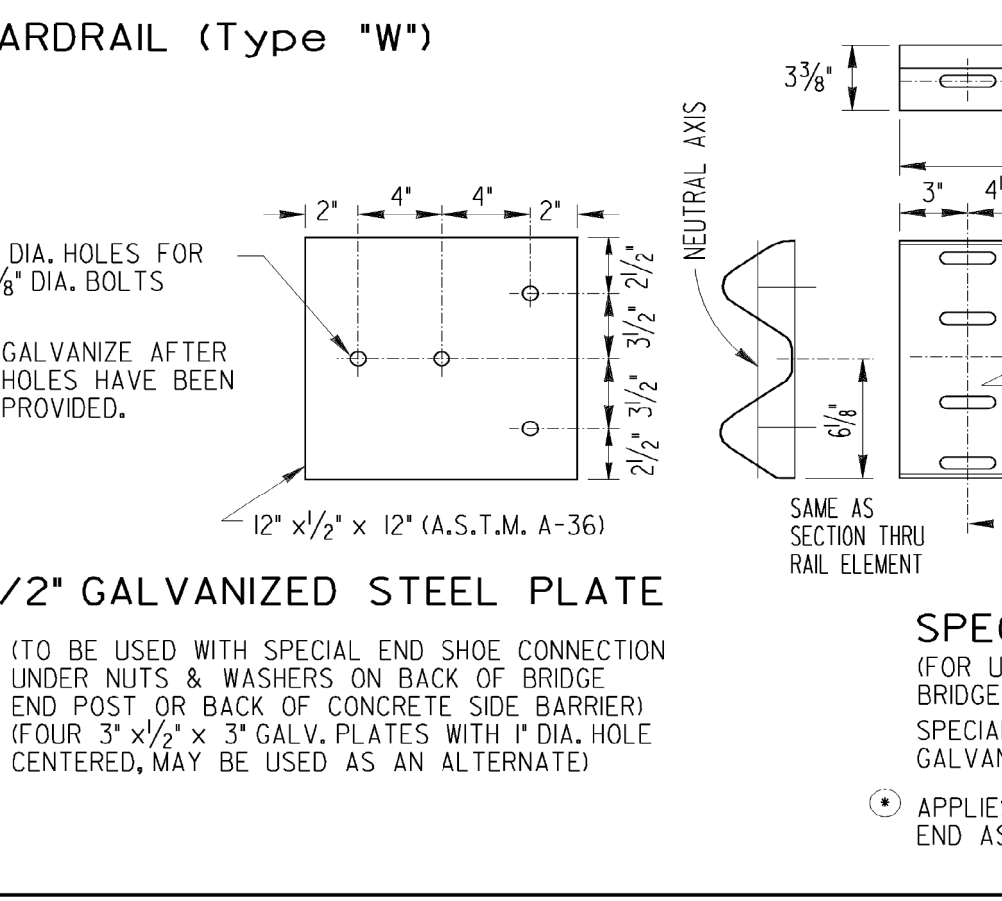
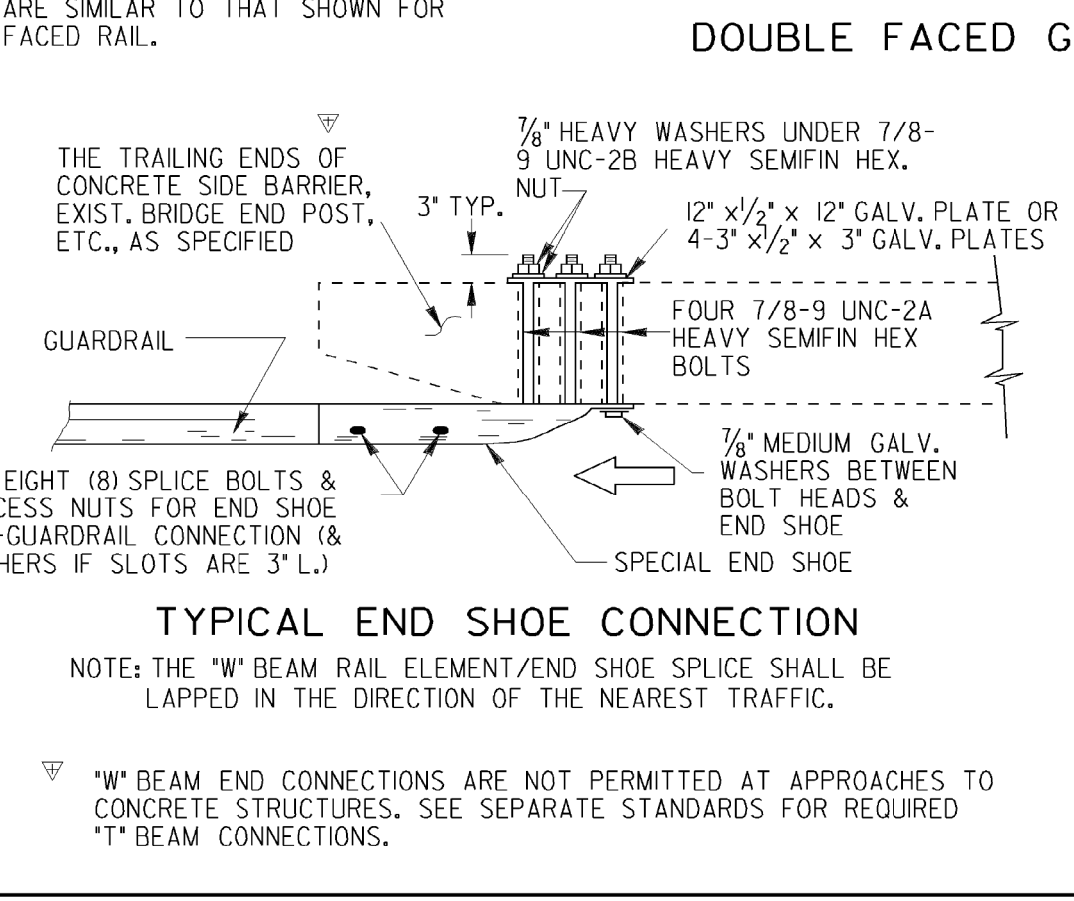
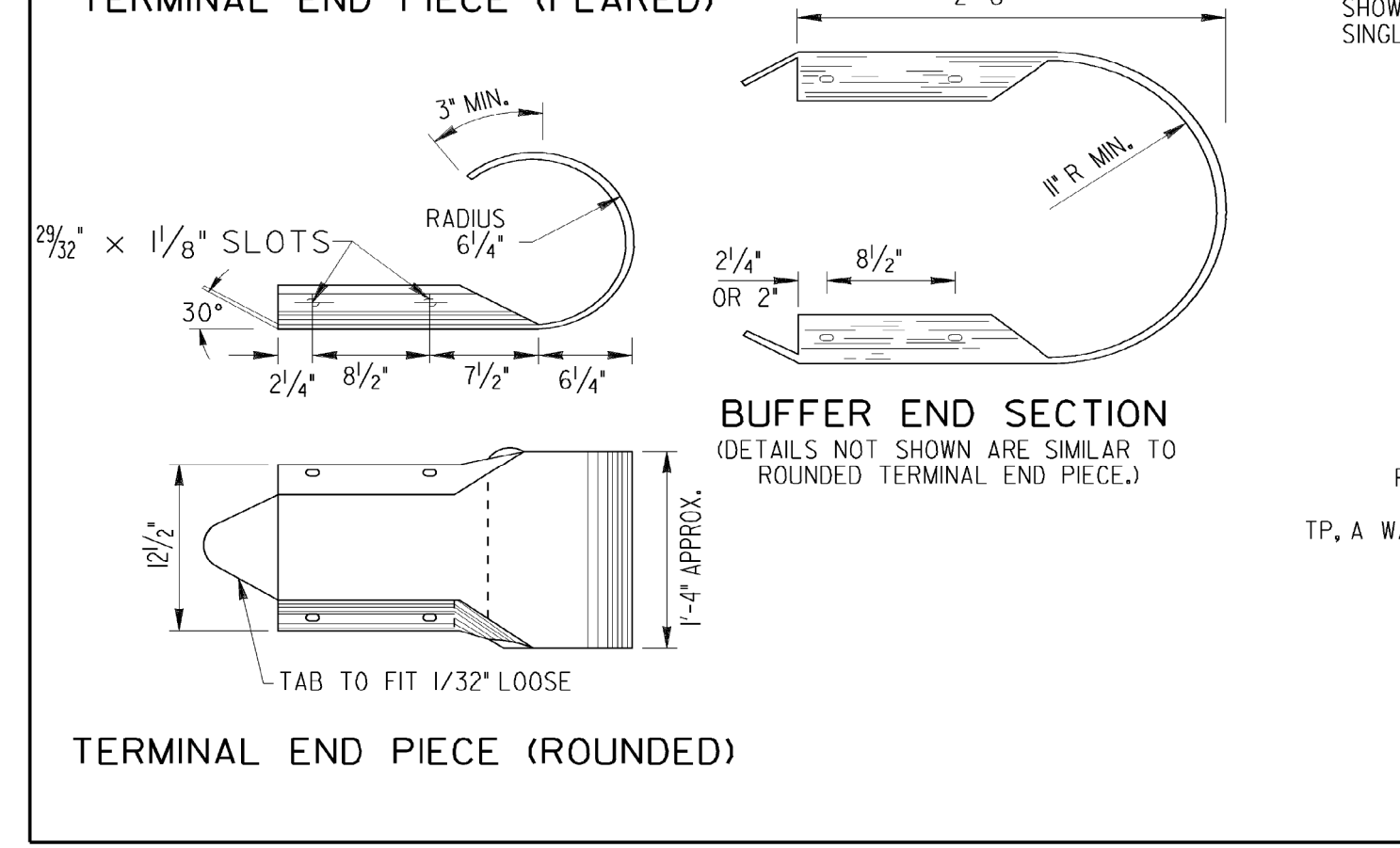
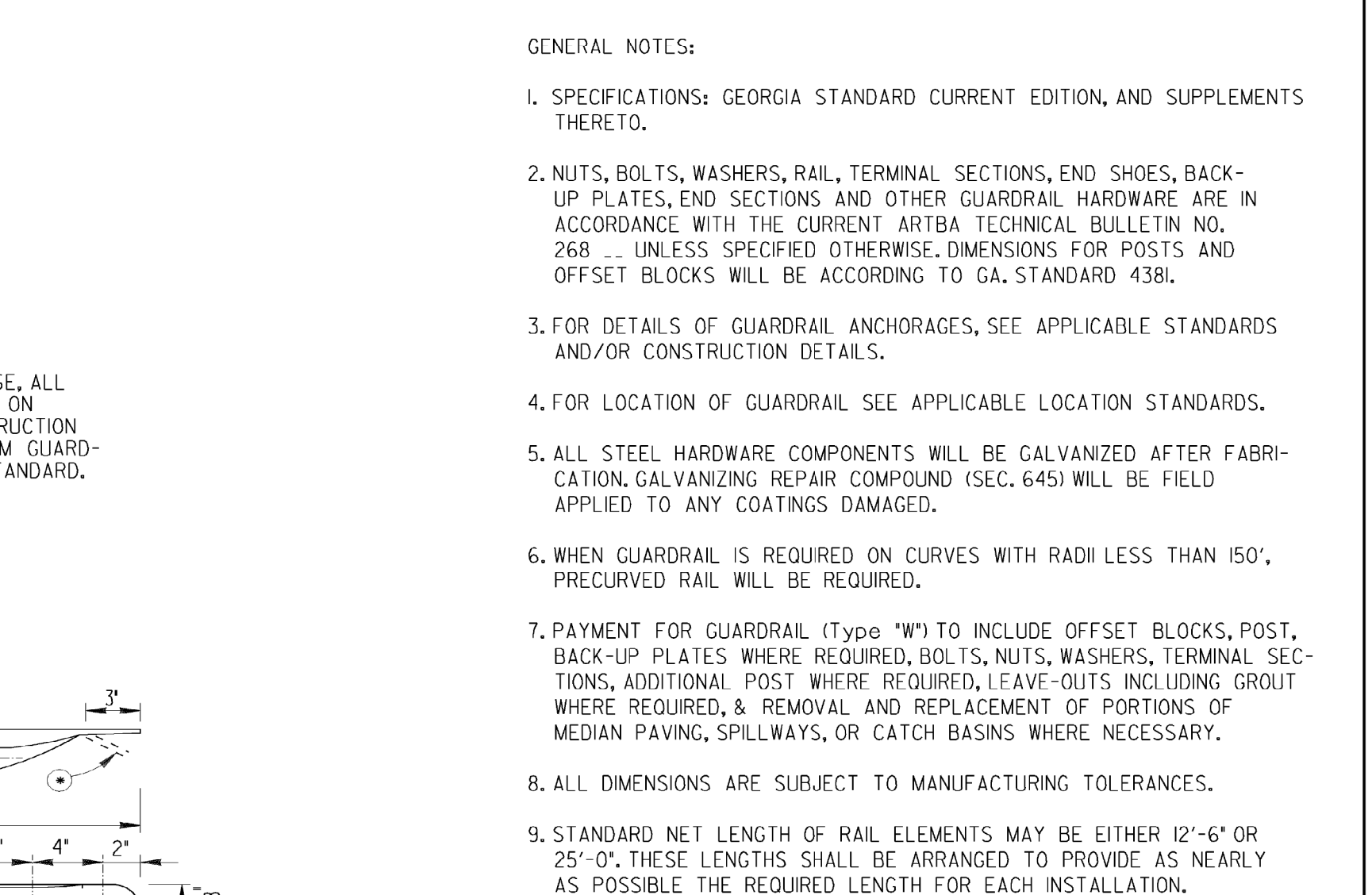
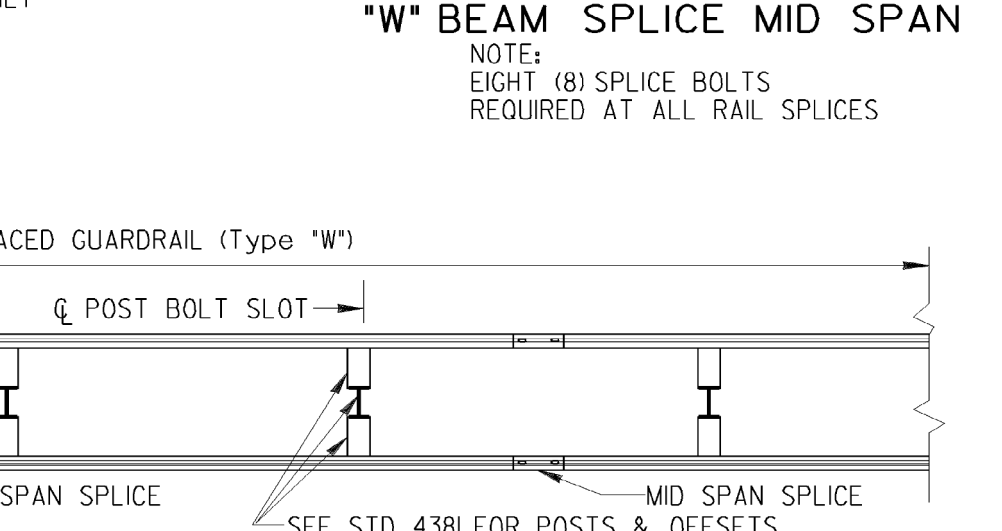
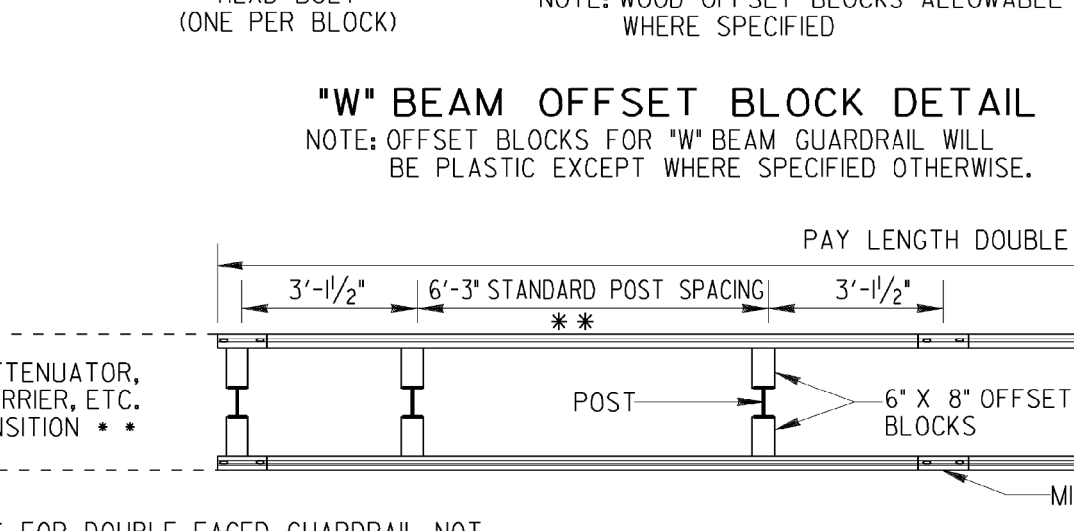
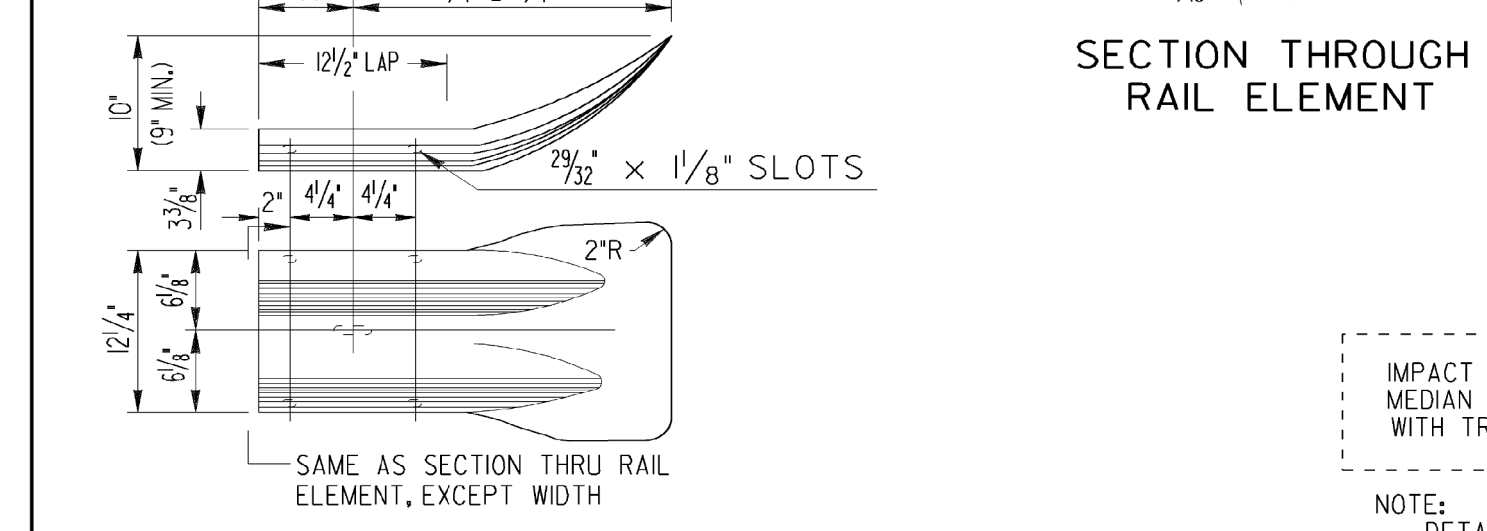
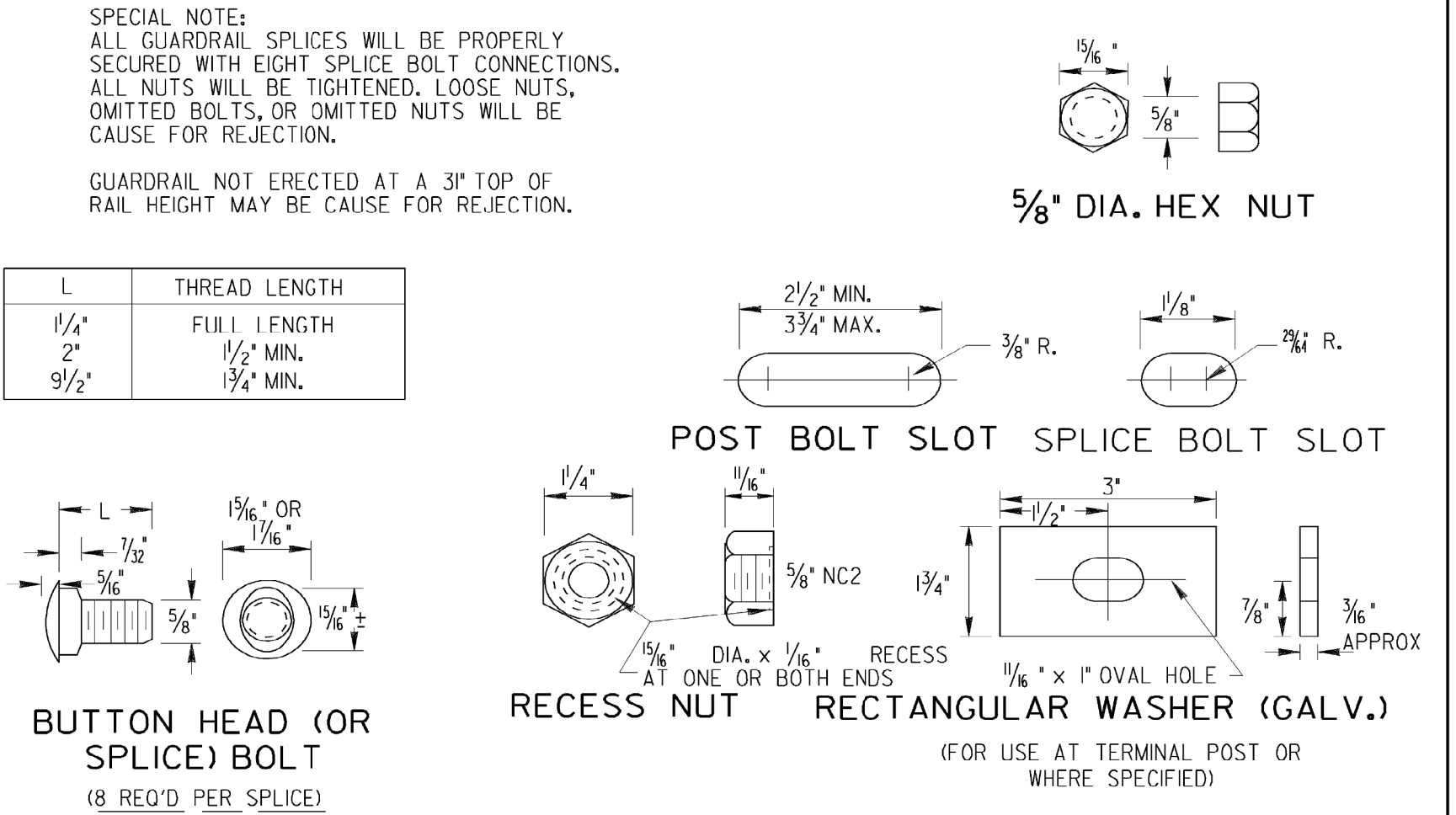
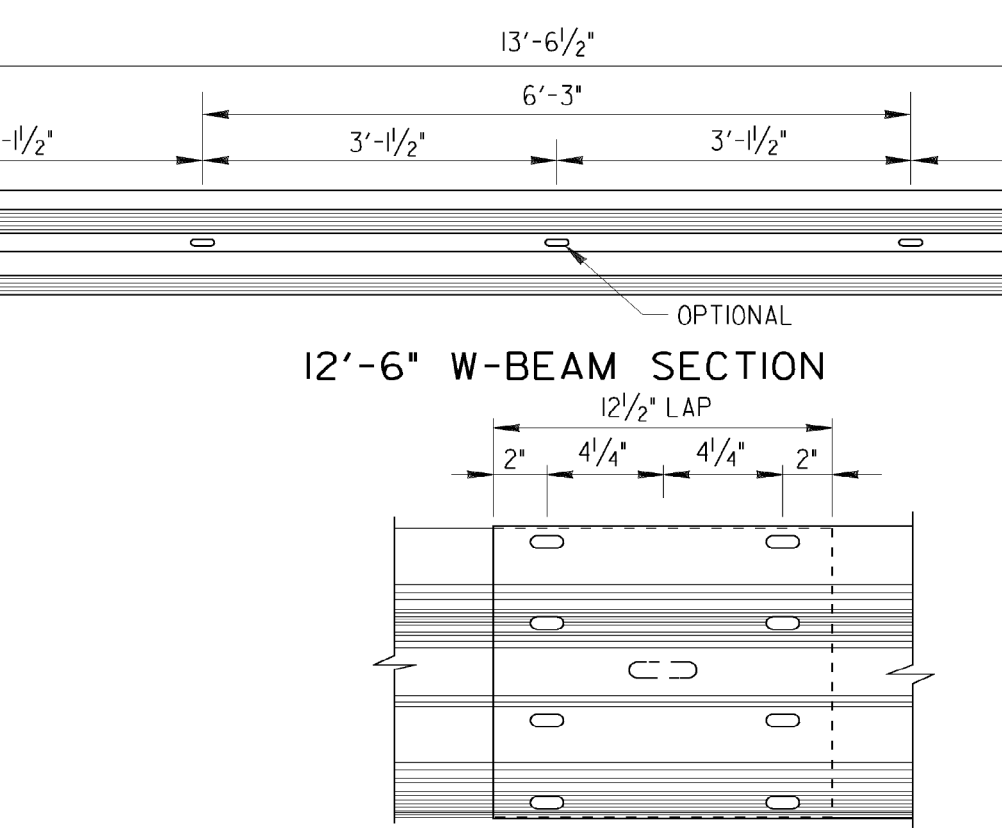
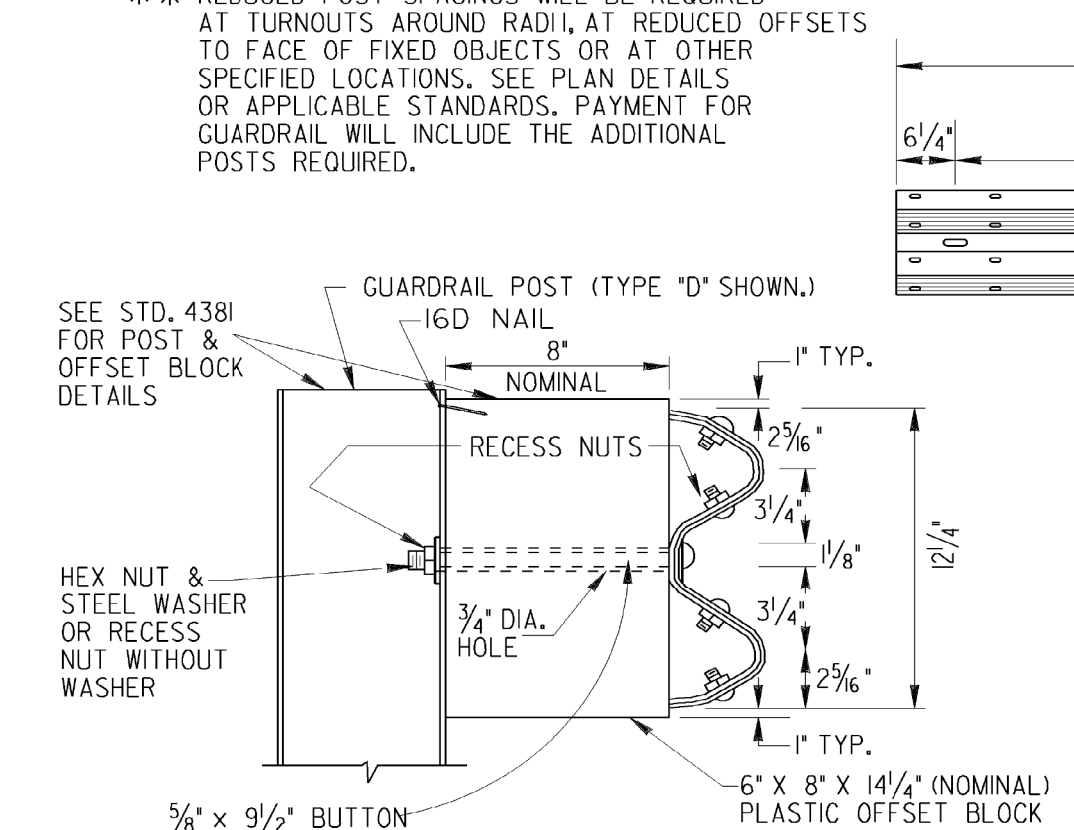
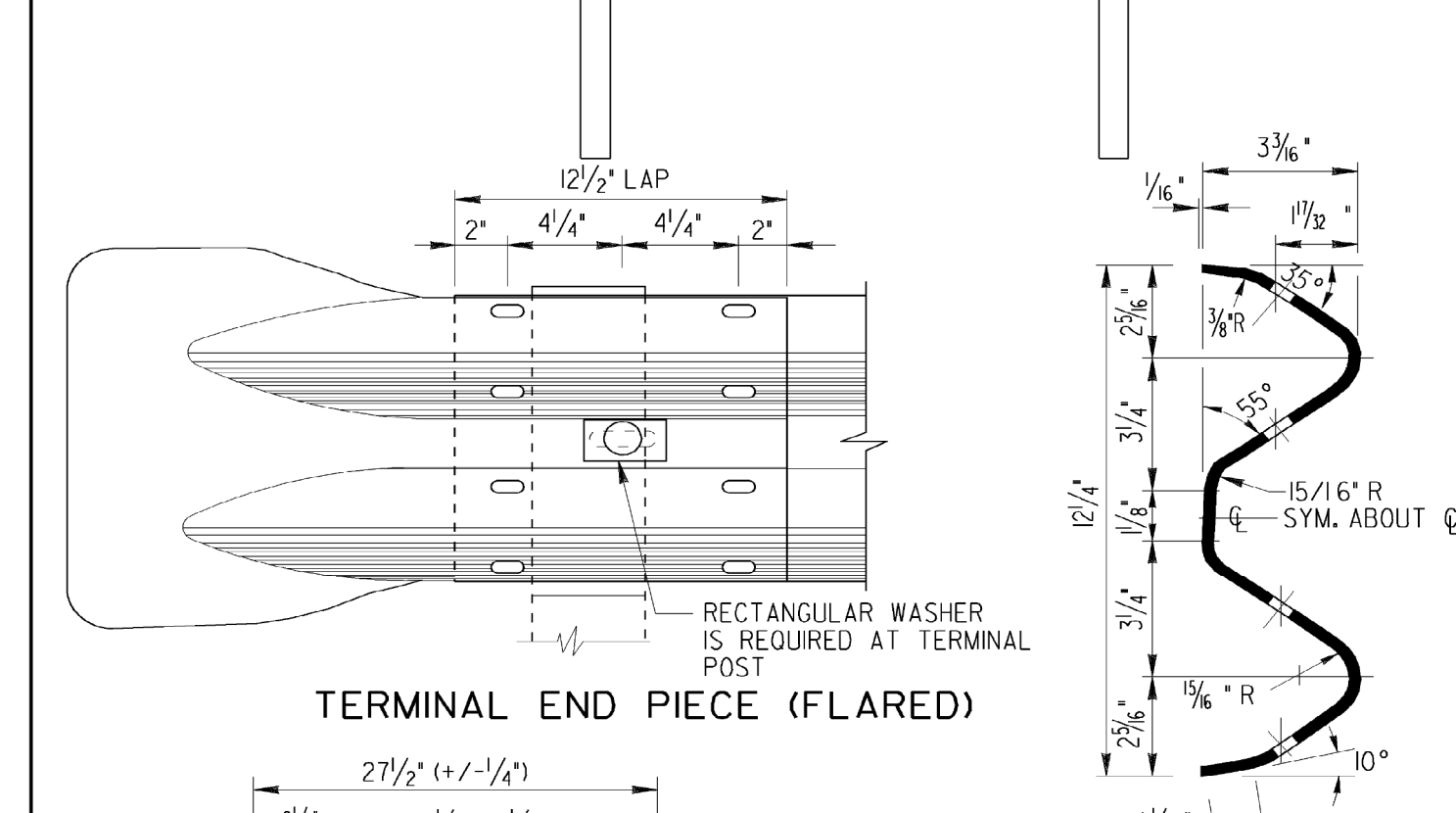
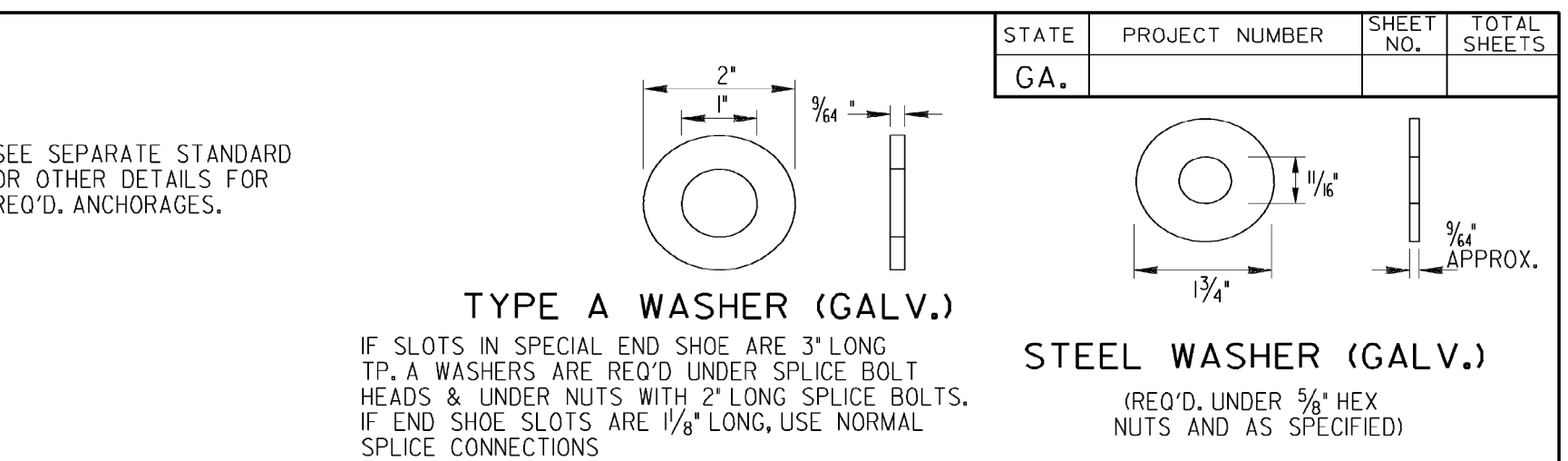
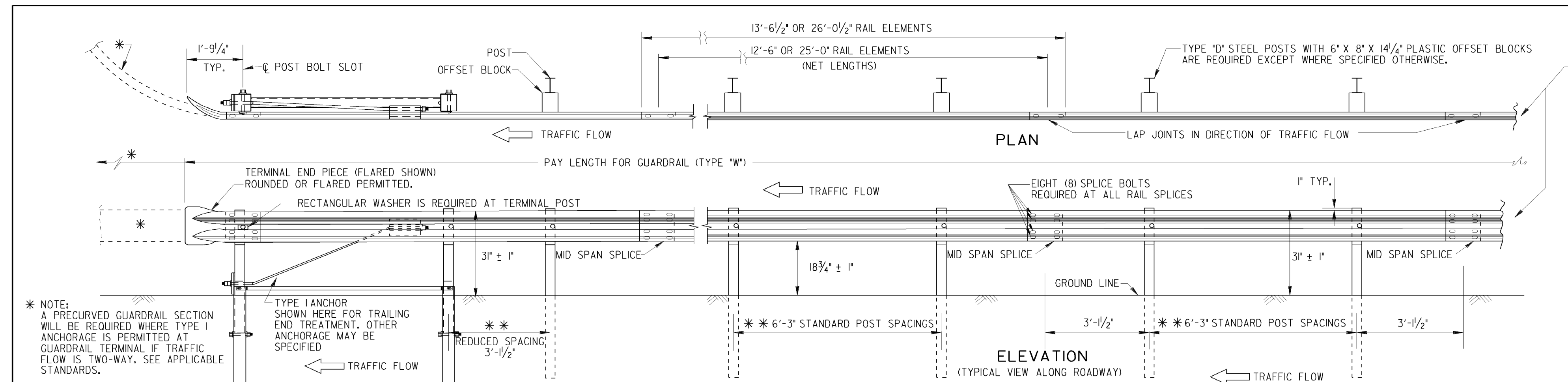
Curve #	PI Sta	N	E	DELTA	D	T	L	R	E	D.S.
Curve # 3	204+36.40	1728797.6117	2057780.5466	13°30'45.4" (LT)	11°01'06.31"	61.60	122.64	520.00	3.64	0
Curve # 4	205+60.17	1728901.9220	2057712.8782	03°57'45.6" (LT)	09°32'57.47"	20.76	41.50	600.00	0.36	0
Curve # 5	206+83.96	1729000.8814	2057638.4828	03°00'50.4" (LT)	01°33'47.96"	96.42	192.79	3665.00	1.27	0



REVISION DATES

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**SIGNING AND MARKING PLANS**  
 LOCATION NO. 2  
 SOUTH HAMILTON ST GUARDRAIL  
 DRAWING No. 26-0002





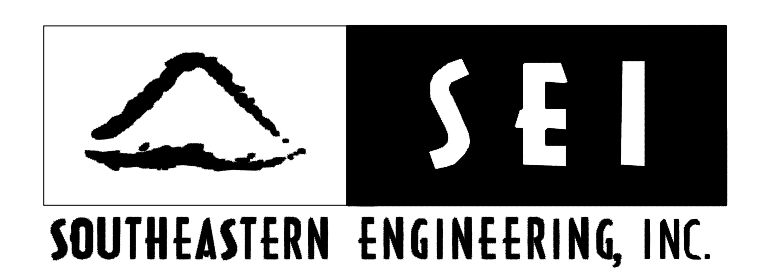
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA			
STANDARD "W" BEAM GUARDRAIL 31 INCH GUARDRAIL HEIGHT			
NO SCALE		AUGUST 2011	
DES. G.L.O.	(SUBMITTED)	STATE DESIGN POLICY ENGINEER	NUMBER
DRW. G.L.O.	(APPROVED)	<i>Margaret B. Pirelo</i>	4380
CHK. B.R.E.		CHIEF ENGINEER	
REVIEW B.A.S.			

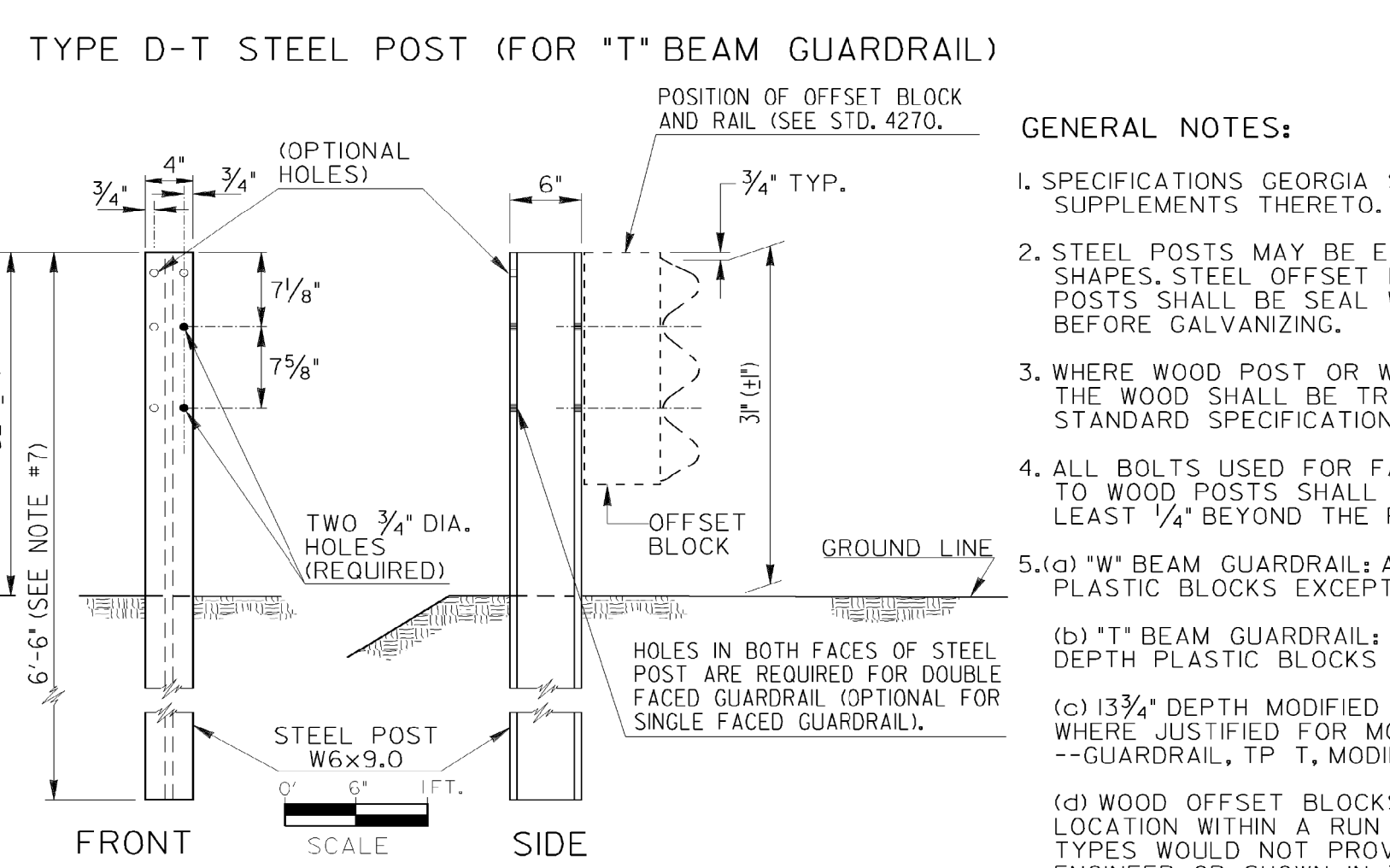
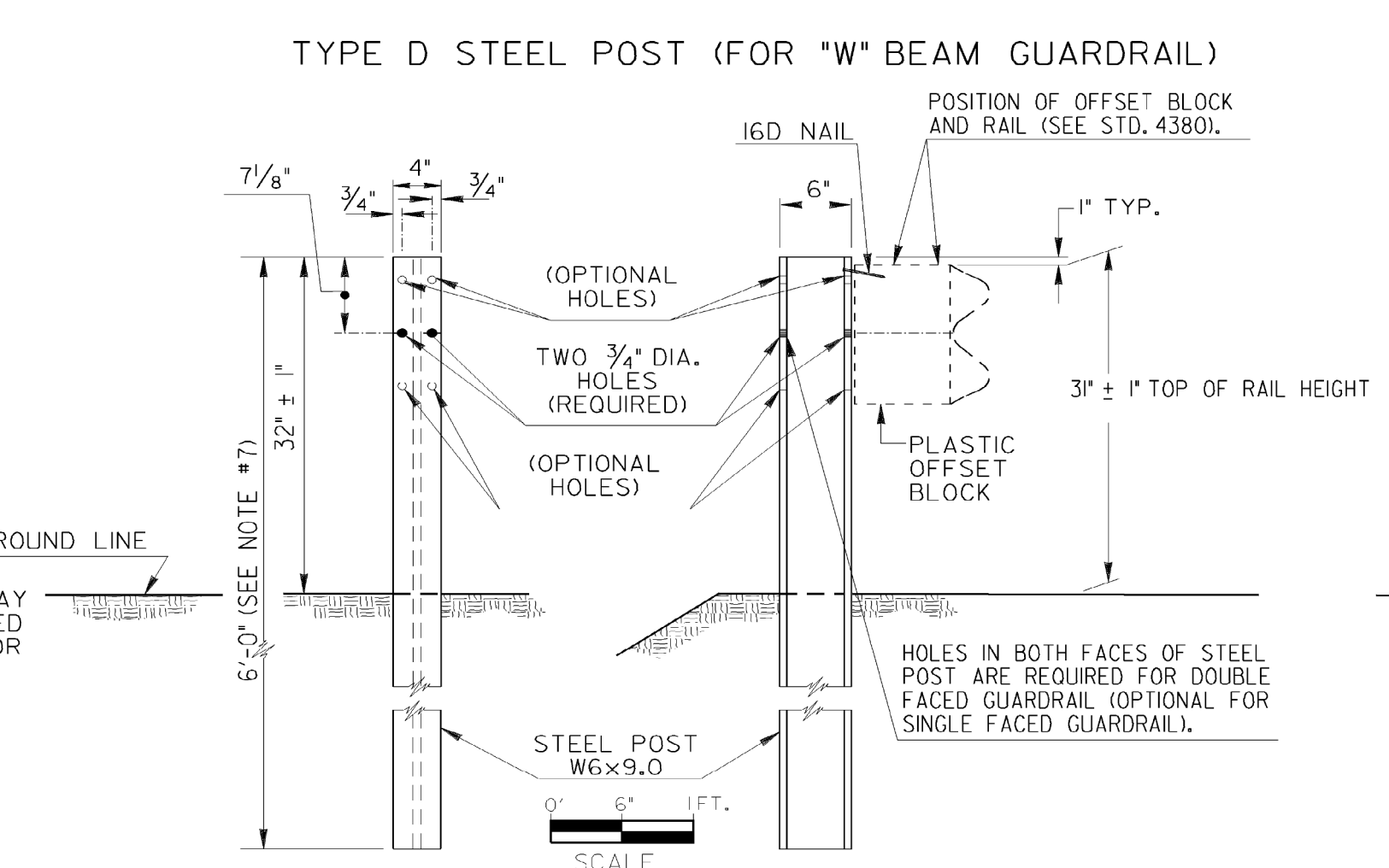
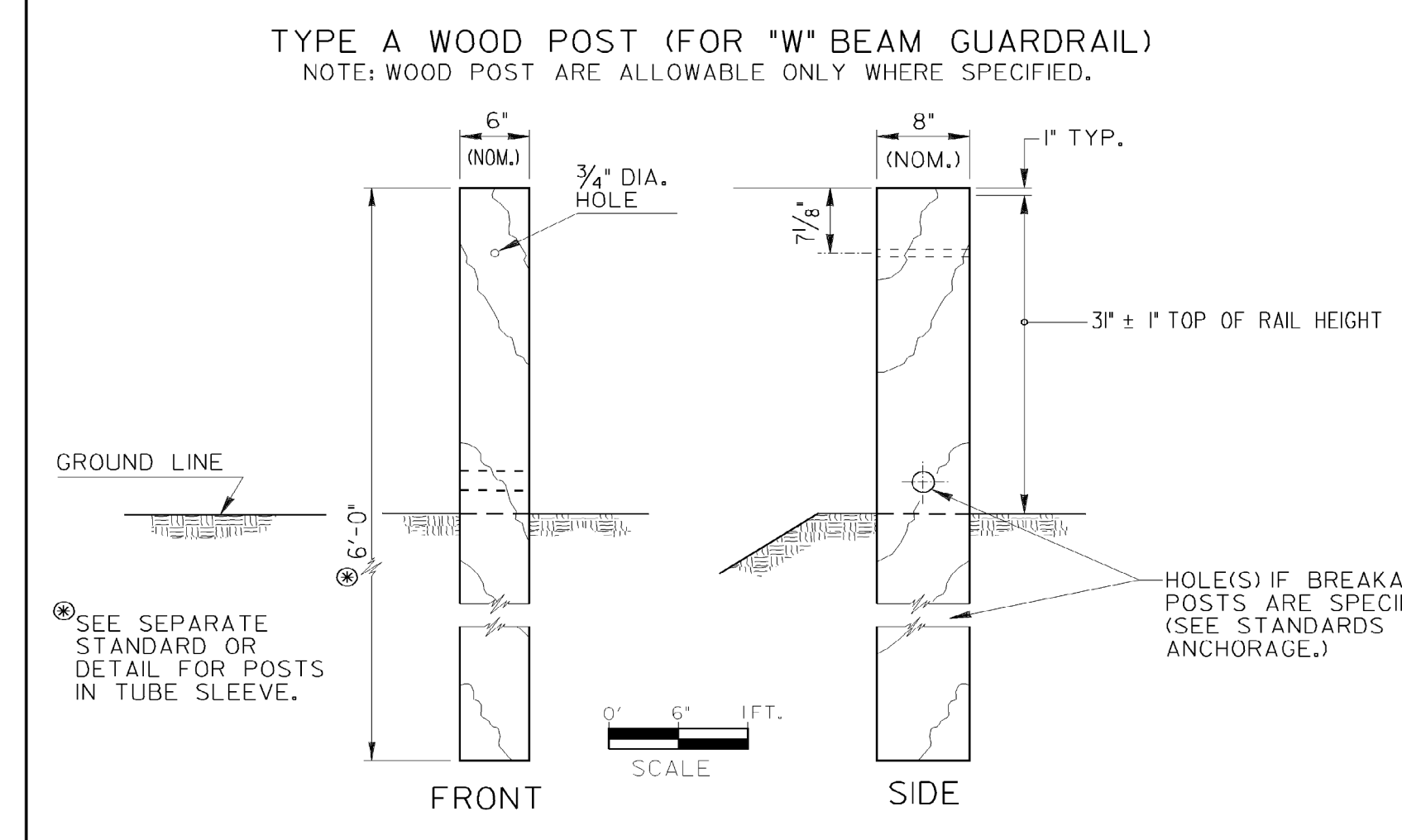
CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
**GEORGIA STANDARDS**

GUARDRAIL IMPROVEMENTS

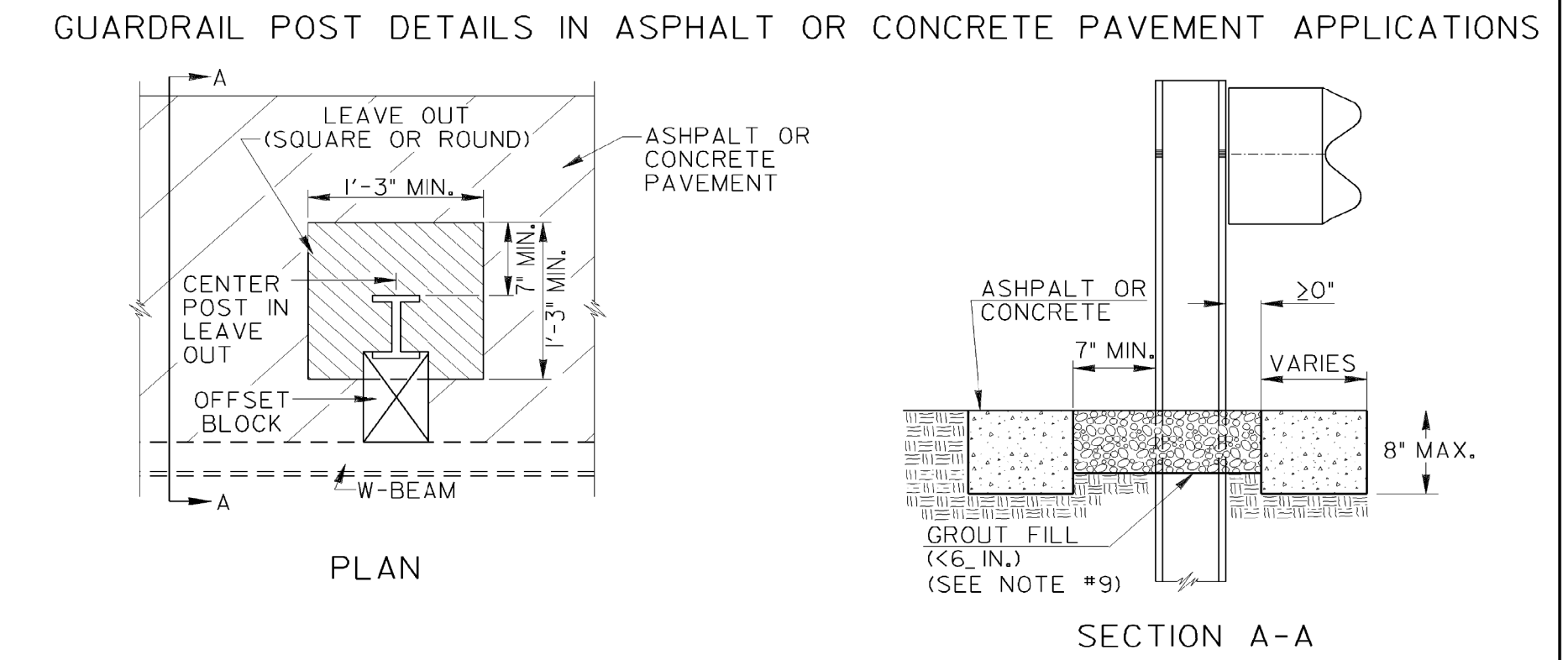
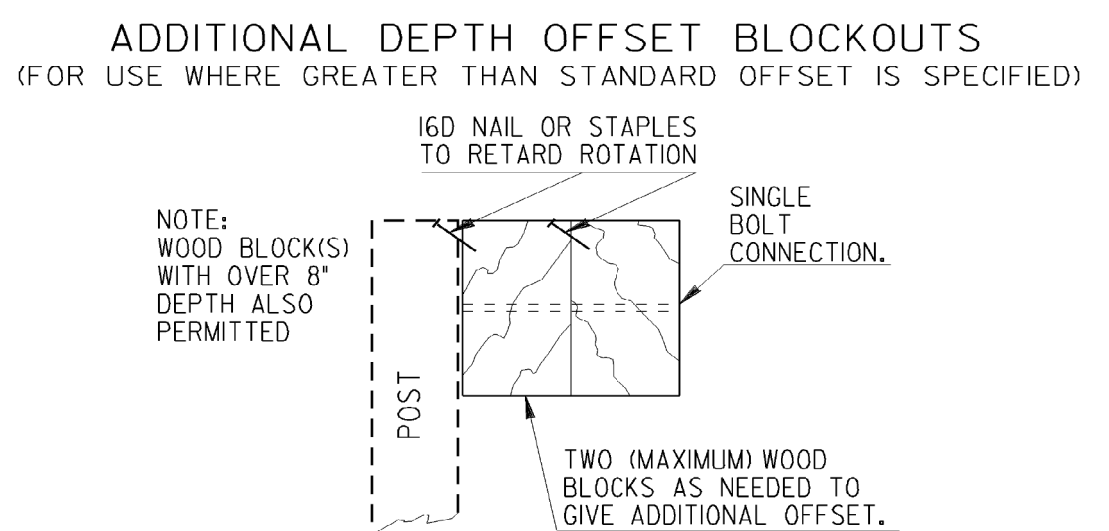
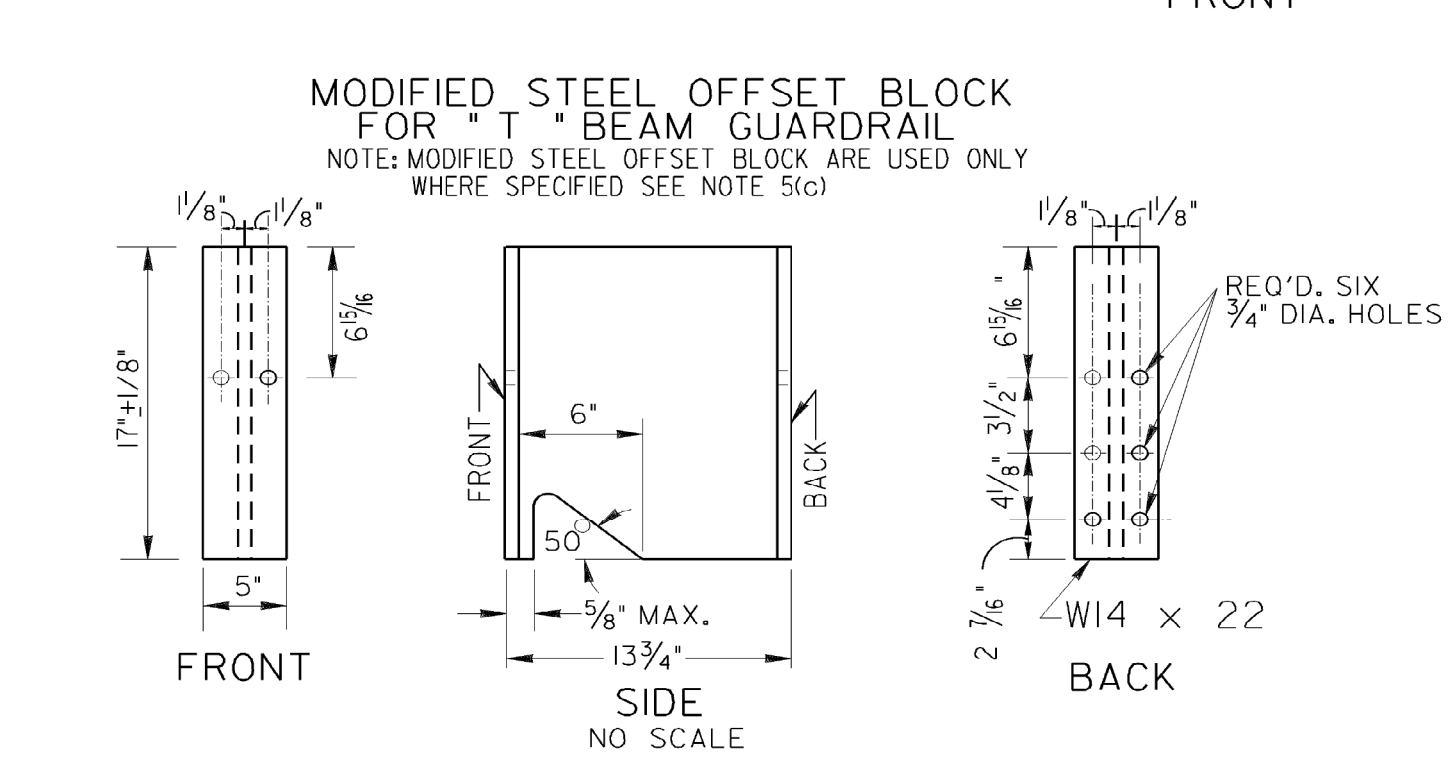
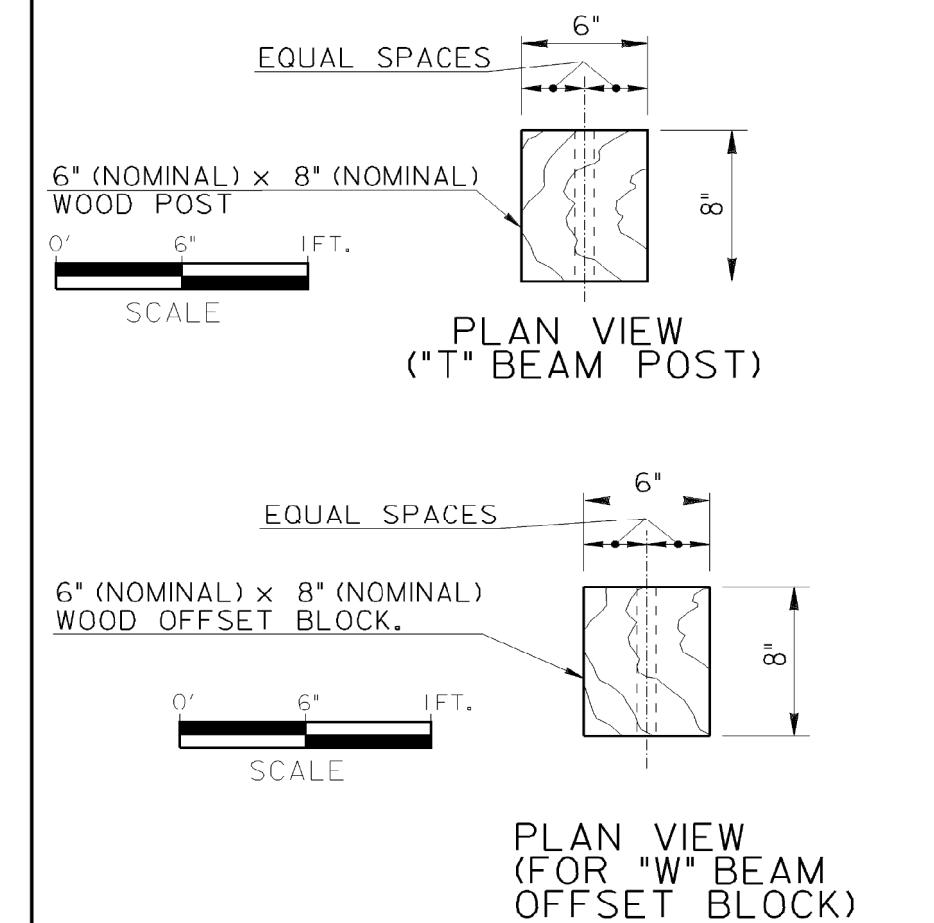
REVISION DATES	DRAWING No. <b>41-0001</b>
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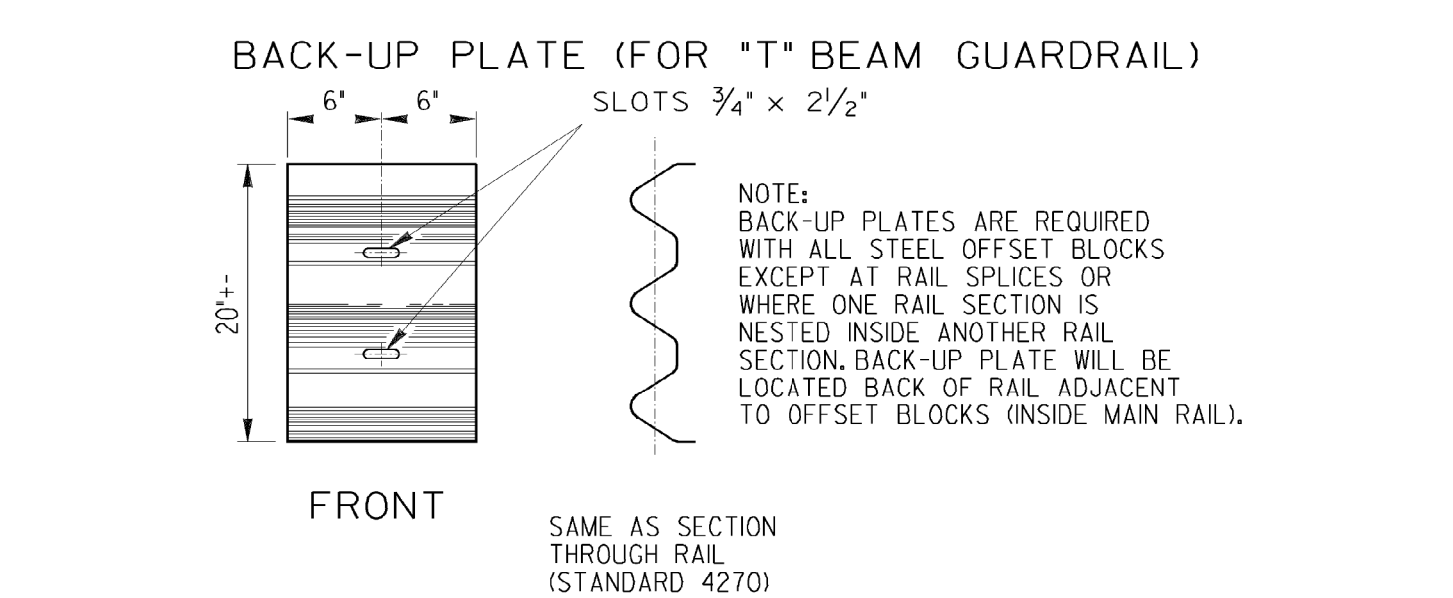


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	931-19-103		

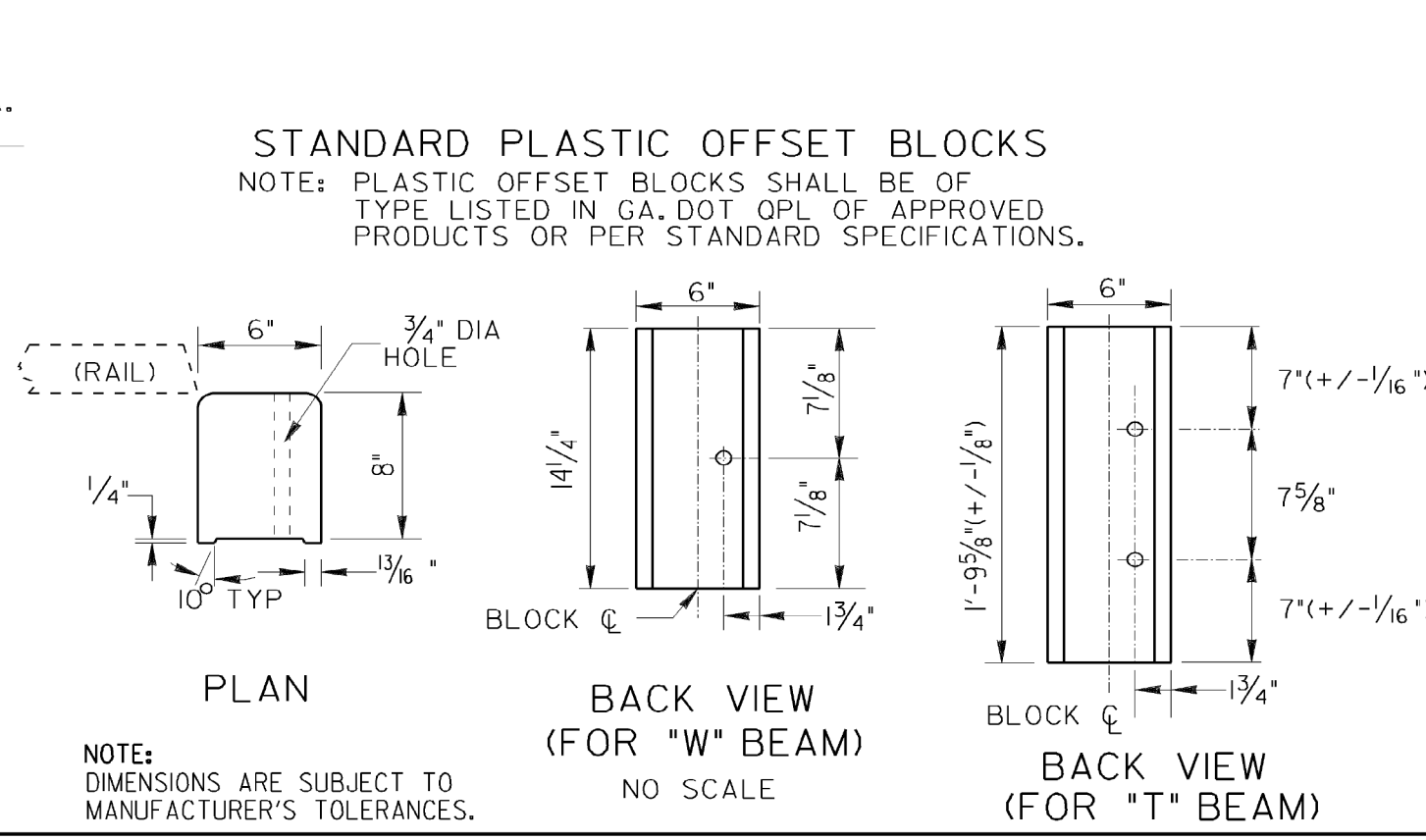
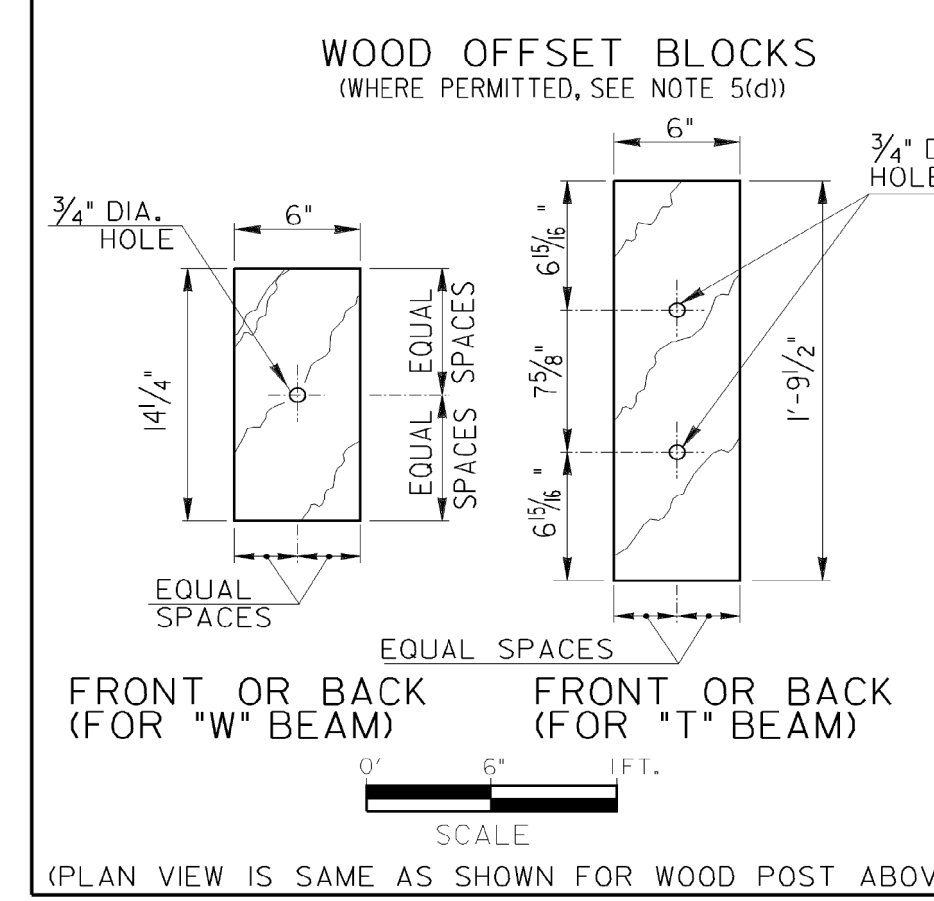
- GENERAL NOTES:**
- SPECIFICATIONS GEORGIA STANDARD, CURRENT EDITION AND SUPPLEMENTS THERETO.
  - STEEL POSTS MAY BE EITHER ROLLED OR WELDED STRUCTURAL SHAPES. STEEL OFFSET BLOCKS SHALL BE ROLLED, WELDED POSTS SHALL BE SEAL WELDED BETWEEN WEB AND FLANGE BEFORE GALVANIZING.
  - WHERE WOOD POST OR WOOD OFFSET BLOCKS ARE PERMITTED, THE WOOD SHALL BE TREATED IN ACCORDANCE WITH GEORGIA STANDARD SPECIFICATIONS.
  - ALL BOLTS USED FOR FASTENING THE RAIL AND OFFSET BLOCKS TO WOOD POSTS SHALL HAVE SUFFICIENT LENGTH TO EXTEND AT LEAST 1/2" BEYOND THE FULL NUT, UP TO 3" BEYOND.
  - (a) "W" BEAM GUARDRAIL: ALL OFFSET BLOCKS SHALL BE 8" DEPTH PLASTIC BLOCKS EXCEPT FOR (d) BELOW.  
 (b) "T" BEAM GUARDRAIL: STANDARD INSTALLATION WILL USE 8" DEPTH PLASTIC BLOCKS UNLESS OTHERWISE APPROVED.  
 (c) 13 3/4" DEPTH MODIFIED STEEL OFFSETS MAY BE SPECIFIED WHERE JUSTIFIED FOR MORE SEVERE CONDITIONS. PAY ITEM IS --GUARDRAIL, TP T, MODIFIED OFFSET BLOCK---PER LIN. FT.  
 (d) WOOD OFFSET BLOCKS MAY BE USED ONLY AT AN ISOLATED LOCATION WITHIN A RUN OF GUARDRAIL WHERE OTHER BLOCK TYPES WOULD NOT PROVIDE PROPER FIT, AS DETERMINED BY THE ENGINEER OR SHOWN IN THE PLANS.
  - POSTS WILL BE SPACED AT 6'-3" C. TO C., UNLESS OTHERWISE NOTED.
  - ADDITIONAL LENGTH POSTS, WHERE SPECIFIED, SHALL BE 7'-0" AND 7'-6" LONG FOR "W" BEAM AND "T" BEAM GUARDRAILS RESPECTIVELY, WITH HOLES DIMENSIONED FROM THE POST-TOP THE SAME AS SHOWN.
  - 9'-0" POST REQUIRED IF GUARDRAIL INSTALLED ON A 2:1 SLOPE.
  - GROUT FILL SHALL BE A CONTROLLED LOW STRENGTH FLOWABLE FILL THAT HAS A MAXIMUM 28-DAY COMPRESSIVE STRENGTH OF 100 P.S.I. ACCORDING TO SPEC. 600.



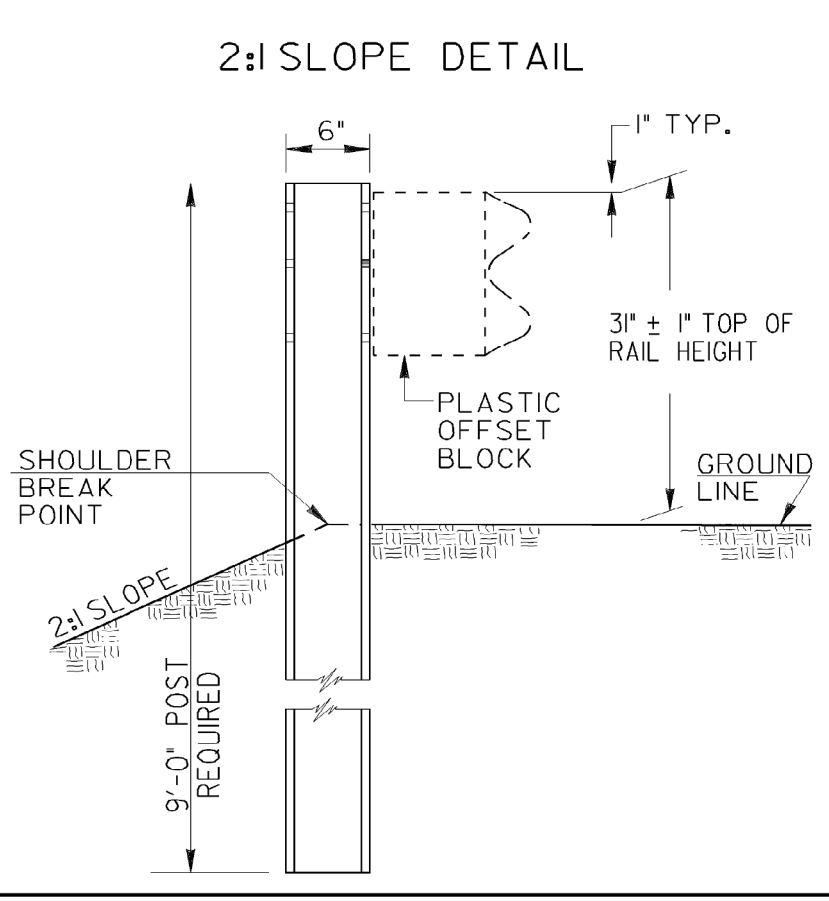
WOOD POSTS AND WOOD OFFSET BLOCKS MAY BE ROUGH OR SURFACED.  
 DIMENSIONS FOR WOOD POSTS AND WOOD OFFSET BLOCKS ARE NOMINAL IN ACCORDANCE WITH ACCEPTED LUMBER INDUSTRY STANDARDS.  
 NOTE: WHERE WOOD OFFSET BLOCK ON STEEL POST IS PERMITTED IN "W" BEAM INSTALLATION, A NAIL OR SCREW FROM POST TO WOOD IS REQUIRED TO PREVENT ROTATION OF THE BLOCK.



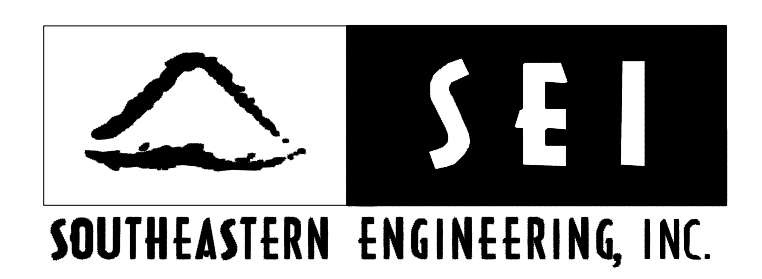
NOTE: WOOD BLOCK(S) WITH OVER 8" DEPTH ALSO PERMITTED  
 NOTE: ADDITIONAL DEPTH OFFSETS BELOW ARE SHOWN FOR "W" BEAM. SIMILAR OFFSETS MAY BE APPLIED FOR "T" BEAM GUARDRAIL.  
 NOTE: ADDITIONAL DEPTH OFFSETS ARE PERMITTED ONLY WHERE AN ISOLATED POST MUST BE PLACED AT A GREATER THAN NORMAL OFFSET.  
 NOTE: FOR BLOCK CONNECTION TO POST AND TO RAIL SEE STD. 4380 OR 4385.



PAYMENT FOR GUARDRAIL TO INCLUDE ALL EXTRA WORK AND MATERIALS INCLUDING CONCRETE (CL, A OR CL, B) AND NO. 4 BARS.  
 IF OFFSET FROM RAIL FACE TO HEADWALL IS LESS THAN 4'-3", POST SPACINGS ARE REDUCED TO 3'-1/2" C.C. ACROSS THE CULVERT WITH 7 SUCH SPACINGS IN ADVANCE AT NO ADDITIONAL PAYMENT.



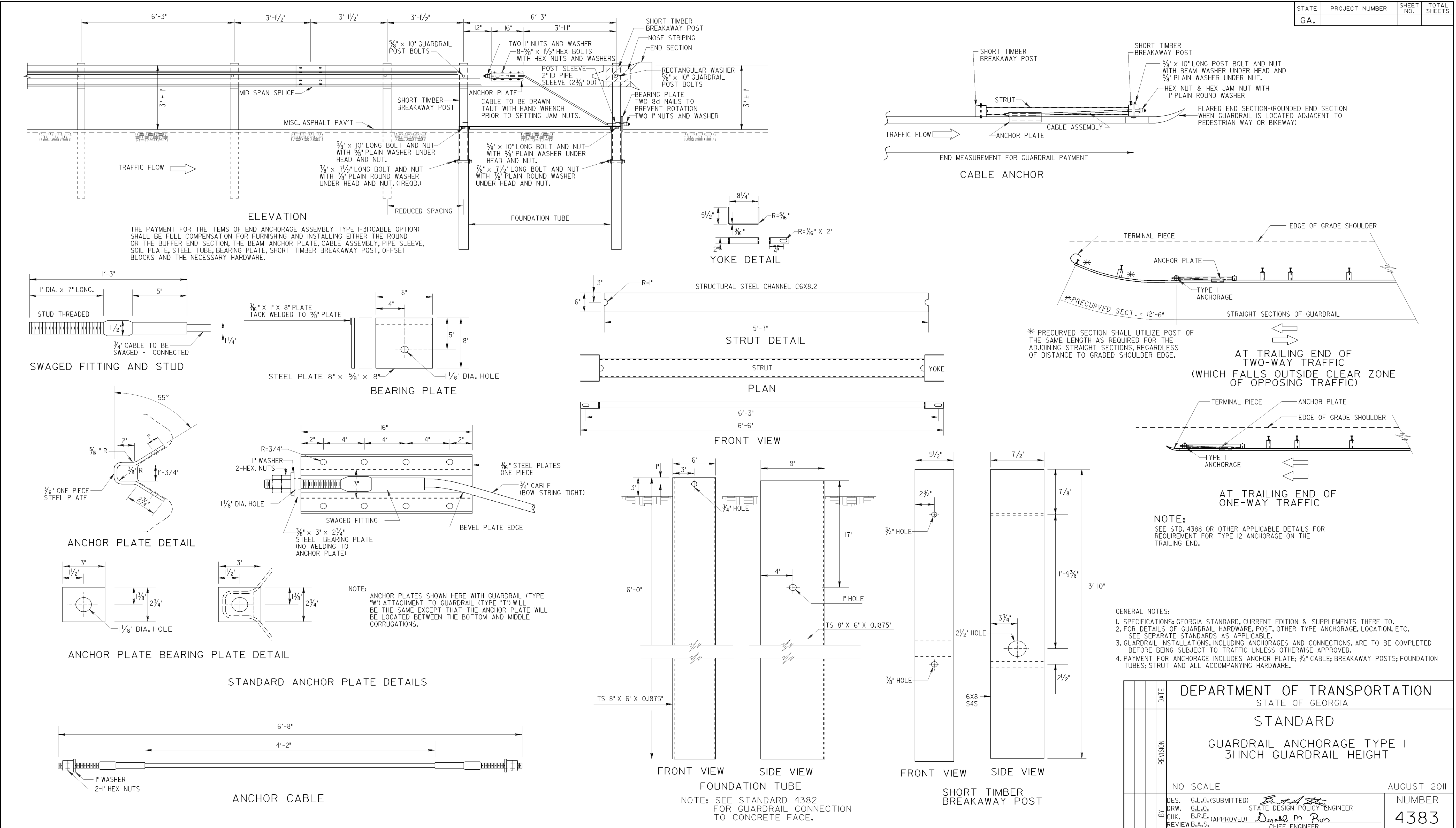
REV. #		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
1-23-16			STANDARD POSTS AND OFFSET BLOCKS FOR "W" & "T" BEAM GUARDRAIL 31 INCH GUARDRAIL HEIGHT	
REV. #		DATE	SCALE: AS SHOWN	
1-23-16			AUGUST 2011	
DES. G.L.D.	(SUBMITTED)	STATE DESIGN POLICY ENGINEER		NUMBER
DRW. G.L.D.		MARGARET B. PUELO		4381
CHK. B.R.E.	(APPROVED)	CHIEF ENGINEER		
REVIEW B.A.S.				



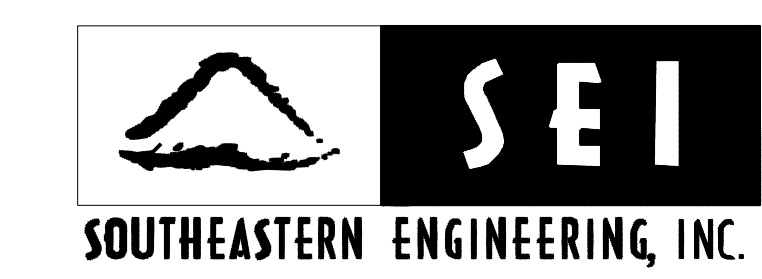
REVISION DATES

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**GEORGIA STANDARDS**  
 GUARDRAIL IMPROVEMENTS  
 DRAWING No. 41-0002

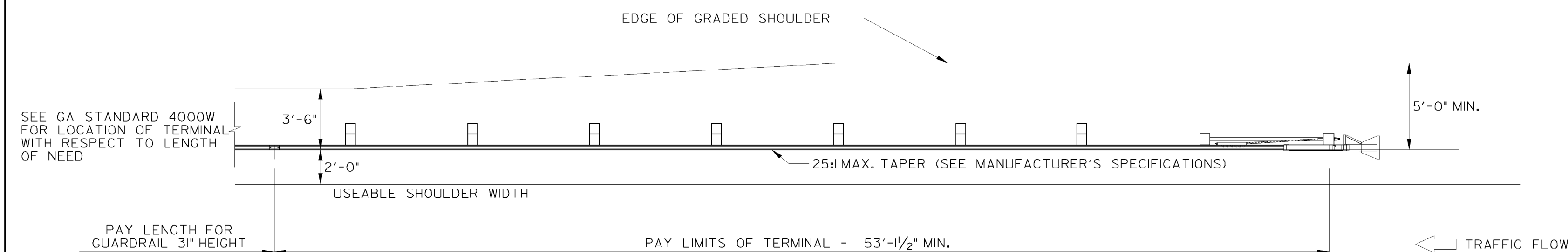
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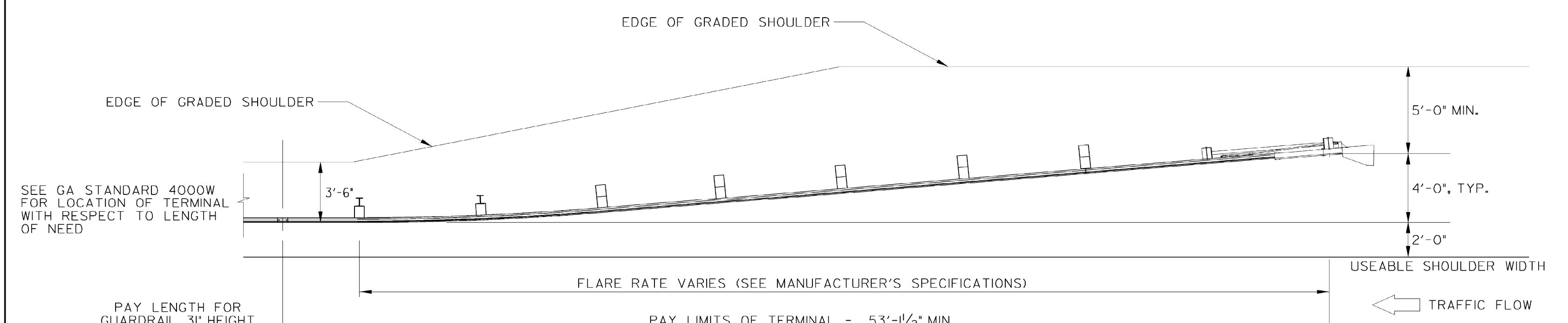
DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		STANDARD	
BY		GUARDRAIL ANCHORAGE TYPE I 31 INCH GUARDRAIL HEIGHT	
NO SCALE		AUGUST 2011	
DES. G.L.O. (SUBMITTED)		NUMBER	
DRW. G.L.O.		4383	
CHK. B.R.E. (APPROVED)		CHIEF ENGINEER	
REVIEW B.A.S.			



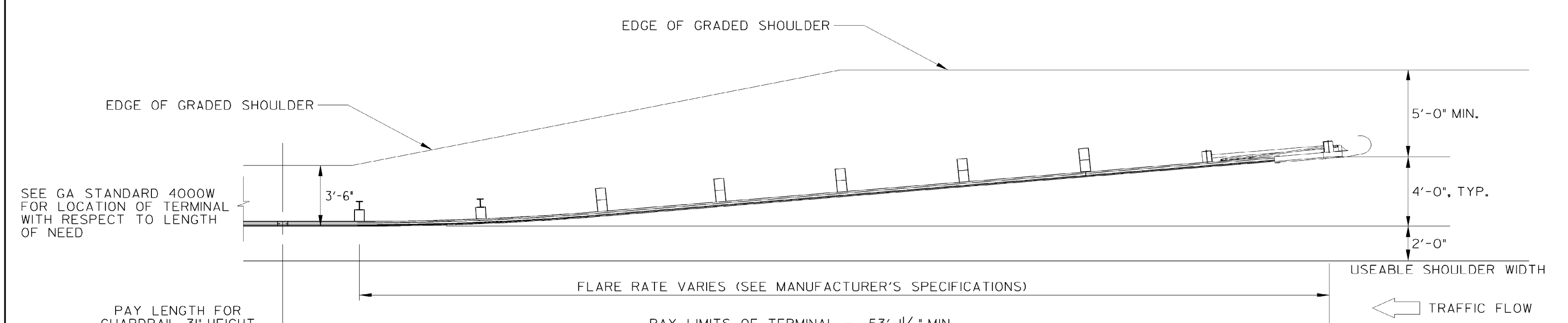
REVISION DATES		CITY OF DALTON PUBLIC WORKS DEPARTMENT	
		OFFICE:	
		GEORGIA STANDARDS	
		GUARDRAIL IMPROVEMENTS	
		DRAWING No. 41-0003	



**TYPE 12A - 31" GUARDRAIL TERMINAL  
(TANGENT, ENERGY-ABSORBING)**



**TYPE 12B - 31" GUARDRAIL TERMINAL  
(FLARED, ENERGY-ABSORBING)**

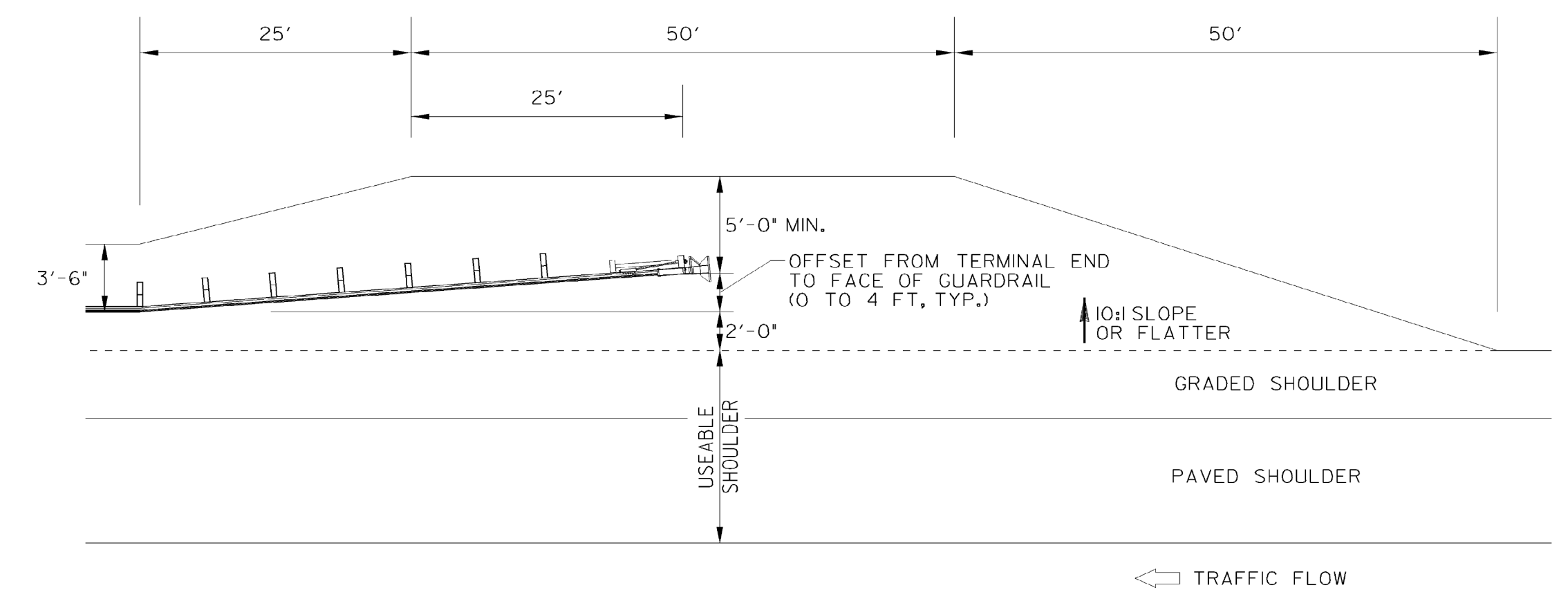


**TYPE 12C - 31" TERMINAL  
(FLARED, NON-ENERGY-ABSORBING)**

**GENERAL NOTES:**

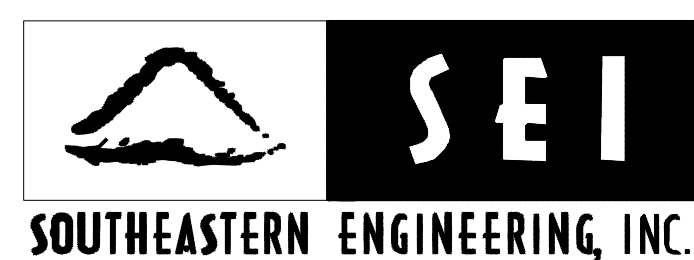
- SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
- SEE GDOT OPL 64 FOR APPROVED PRODUCTS.
- THIS SHEET DEPICTS THE PAY LIMITS FOR GUARDRAIL AND TYPE 12 TERMINALS. TYPE 12 TERMINALS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- W-BEAM INSTALLATIONS LESS THAN 150 FEET IN ADVANCE OF ANY SHIELDED OBJECT OR TOTAL LENGTH OF W-BEAM INSTALLATION IS LESS THAN ABOUT 150 FEET, AN ENGERY-ABSORBING TERMINAL SHOULD BE SELECTED.

ITEM NO.	UNITS	DESCRIPTION
641-5015	EA	GUARDRAIL TERMINAL, TP 12A - 31", TANGENT, ENERGY-ABSORBING
641-5020	EA	GUARDRAIL TERMINAL, TP 12B - 31", FLARED, ENERGY-ABSORBING
641-5025	EA	GUARDRAIL TERMINAL, TP 12C - 31", FLARED, NON-ENERGY-ABSORBING



**TERMINAL PAD GRADING DETAIL**

1-29-16		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
ADDED 02A, 12B, & 12C; ADDED GRADING DTL		REVISION	STANDARD GUARDRAIL TERMINALS, TYPE 12A, 12B, AND 12C 31 INCH GUARDRAIL HEIGHT	
NO SCALE			AUGUST 2011	
DES. G.L.O. (SUBMITTED)	DRW. G.L.O.	CHK. B.B.E. (APPROVED)	REVIEW B.A.S.	NUMBER 4384
			STATE DESIGN POLICY ENGINEER	
			CHIEF ENGINEER	



**REVISION DATES**

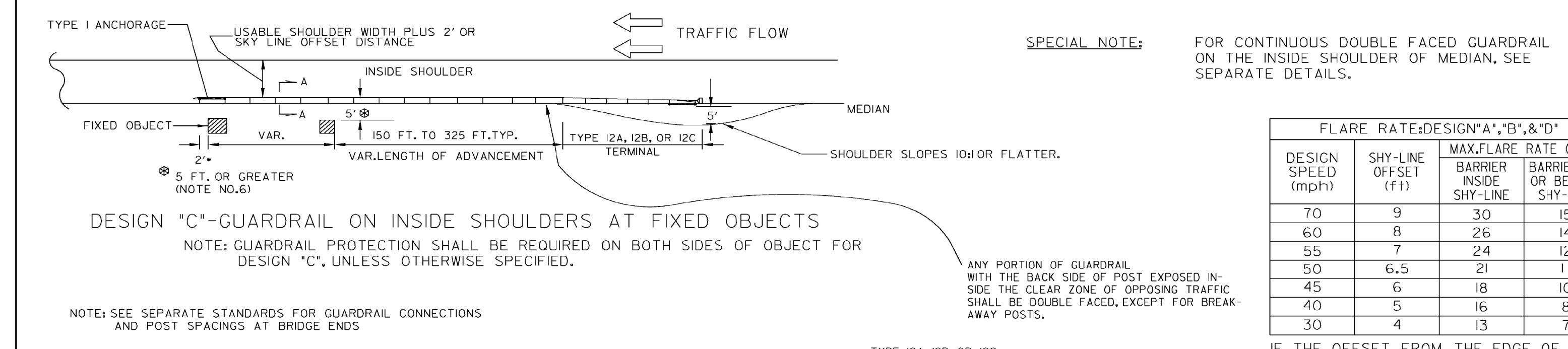
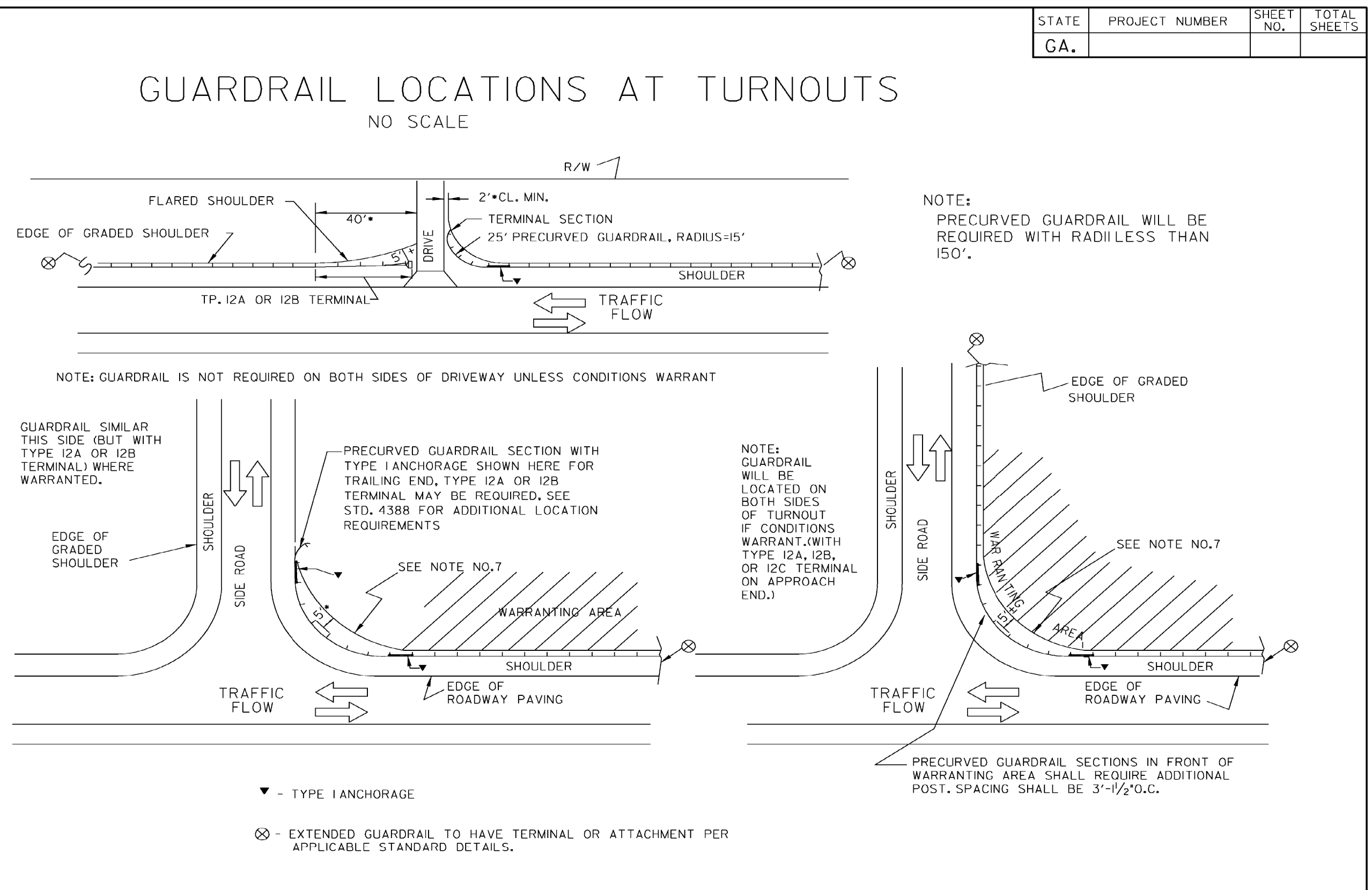
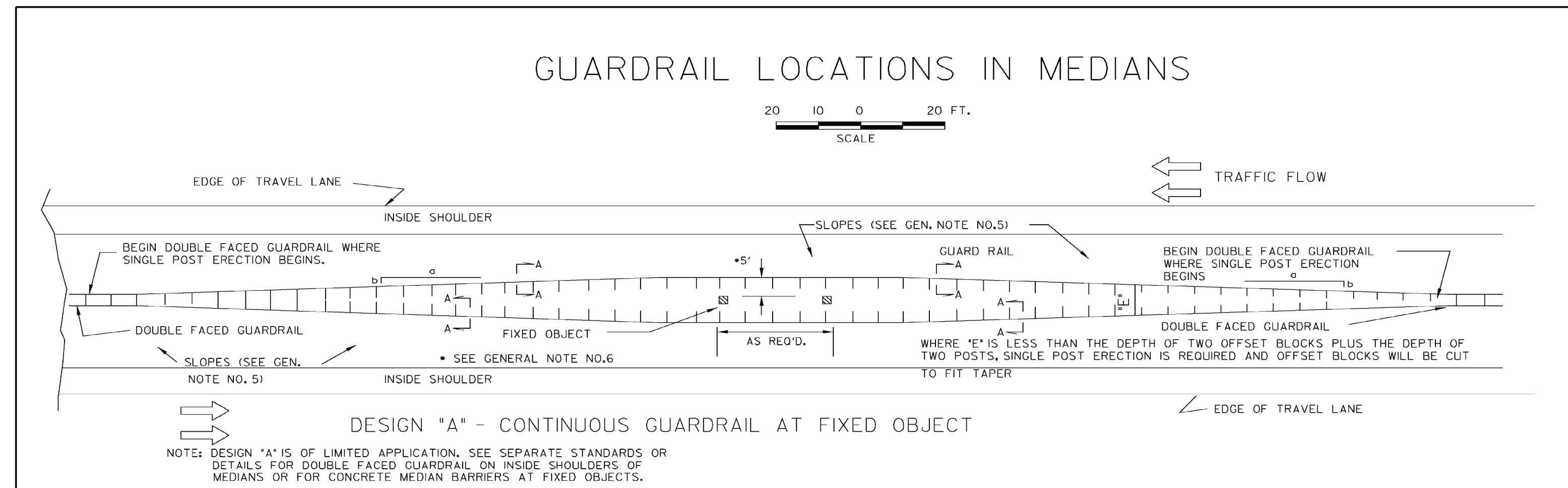

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
**GEORGIA STANDARDS**

GUARDRAIL IMPROVEMENTS

DRAWING No.  
**41-0004**

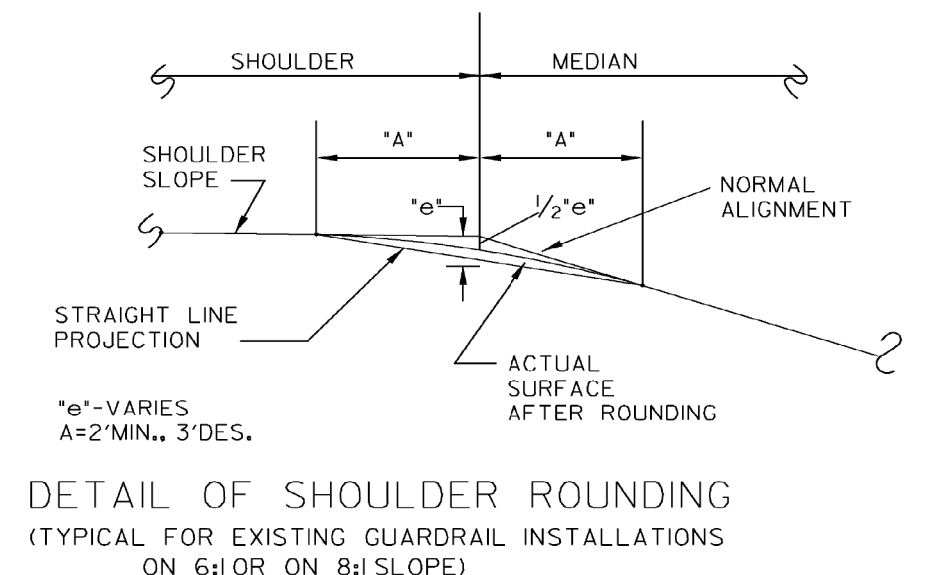




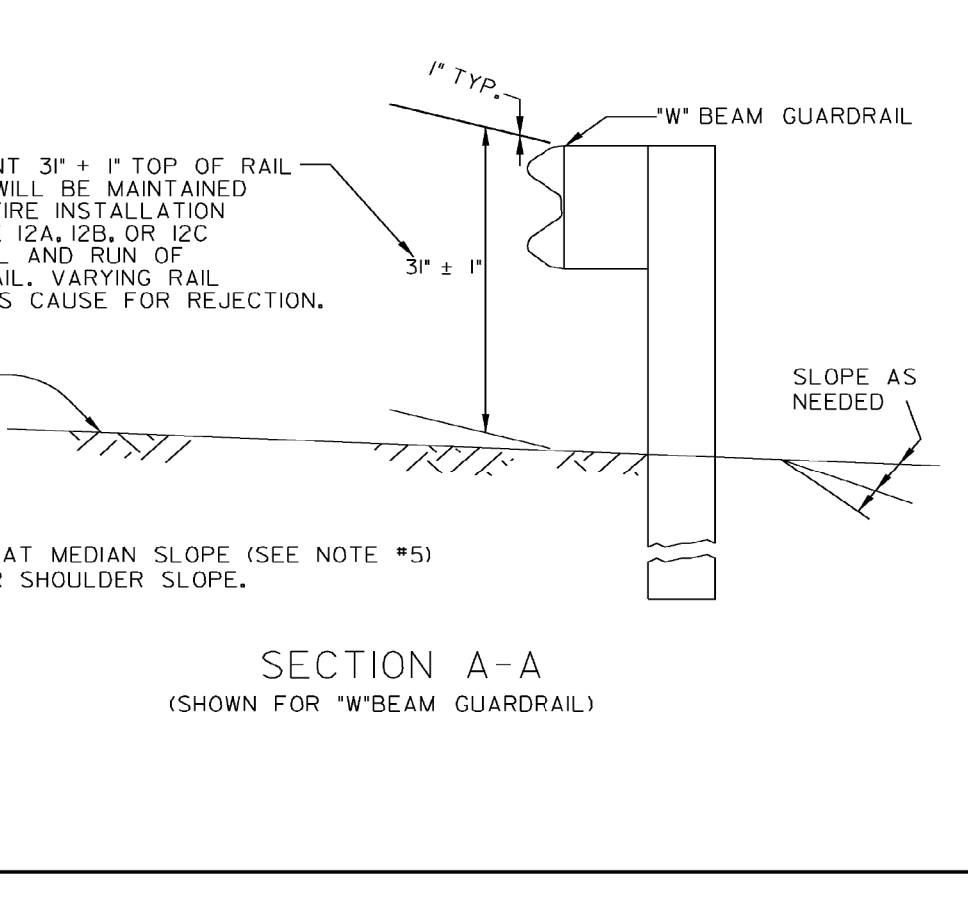
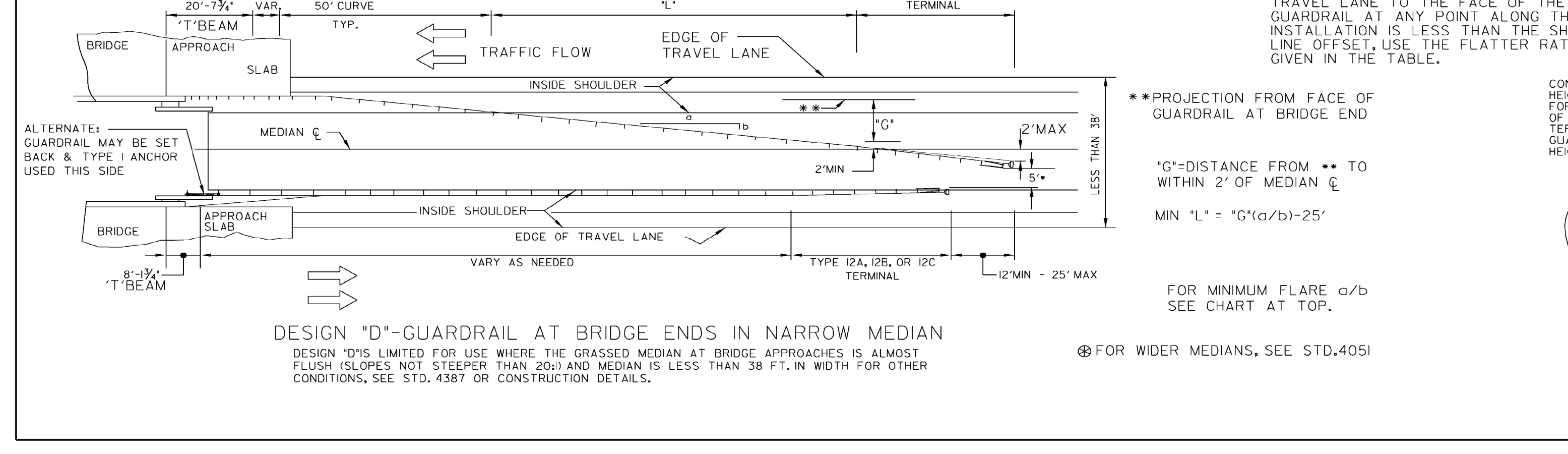
FLARE RATE: DESIGN "A", "B", & "D"

DESIGN SPEED (mph)	SHY-LINE OFFSET (ft)	MAX. FLARE RATE (a/b) BARRIER INSIDE SHY-LINE	BARRIER AT OR BEYOND SHY-LINE
70	9	30	15
60	8	26	14
55	7	24	12
50	6.5	21	11
45	6	18	10
40	5	16	8
30	4	13	7

IF THE OFFSET FROM THE EDGE OF THE TRAVEL LANE TO THE FACE OF THE GUARDRAIL AT ANY POINT ALONG THE INSTALLATION IS LESS THAN THE SHY-LINE OFFSET, USE THE FLATTER RATES GIVEN IN THE TABLE.

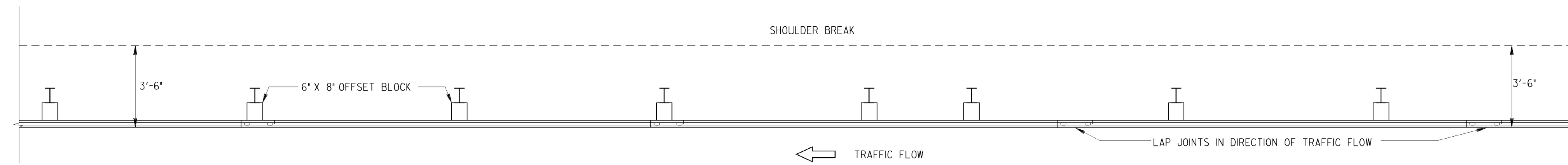


- GENERAL NOTES:
- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
  - FOR DETAILS OF GUARDRAIL HARDWARE, POST, AND OFFSET BLOCKS, SEE STANDARDS 4381 AND 4382.
  - FOR DETAILS OF GUARDRAIL TERMINALS AND ANCHORAGES, SEE SEPARATE STANDARDS, OR CONSTRUCTION DETAILS AS APPLICABLE.
  - FOR DETAILS OF DOUBLE FACED GUARDRAIL ATTACHED TO OR TERMINATED AT CONCRETE MEDIAN BARRIER, SEE STANDARD 4940.
  - NEGATIVE SLOPES IN FRONT OF GUARDRAIL AND ALL TERMINALS SHALL BE 10:1, OR FLATTER, FOR ALL NEW INSTALLATIONS.
  - OFFSET BETWEEN FACE OF GUARDRAIL AND FACE OF FIXED OBJECT SHALL BE 5 FT. + DESIRABLE, 4'-3" MINIMUM, WHERE AN OFFSET OF LEAST 4'-3" CANNOT BE OBTAINED. DOUBLE POST SPACINGS (3'-1/2' O.C.) IN FRONT OF OBJECT PLUS A MINIMUM OF 7 SUCH SPACINGS IN ADVANCE OF OBJECT IS REQUIRED WITH A 3 FT. MINIMUM OFFSET.
  - WHERE PRECURVED GUARDRAIL IS INSTALLED AROUND RADIAT INTERSECTING SIDE ROADS, THE SHOULDER AREA BACK OF THE GUARDRAIL IS TO BE WIDENED AS SHOWN ABOVE WITH THE OFFSET BETWEEN THE TRAVEL LANE AND GUARDRAIL REMAINING APPROXIMATELY CONSTANT.

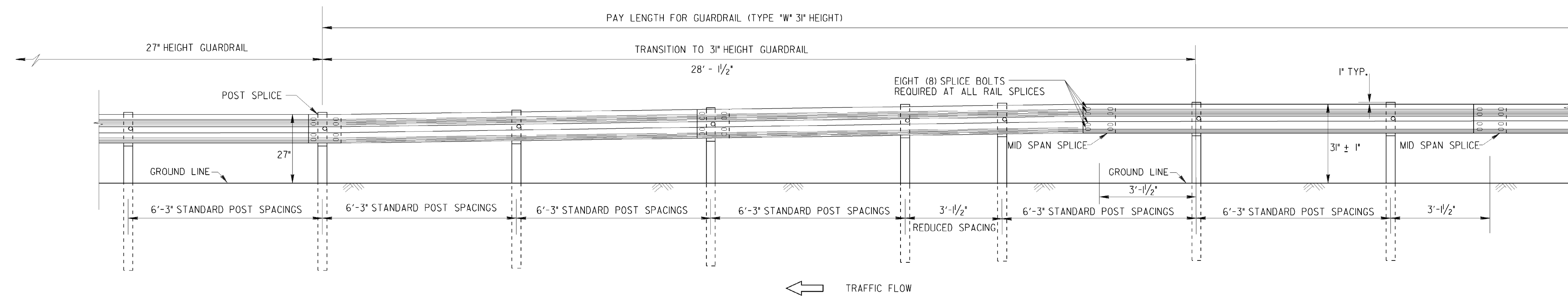


REV		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
BY		REVISION	STANDARD GUARDRAIL LOCATIONS IN MEDIANS GUARDRAIL LOCATIONS AT TURNOUTS 31 INCH GUARDRAIL HEIGHT	
REV		DATE	SCALE: AS SHOWN	
REV		DATE	AUGUST 2011	
DES.	G.L.O.	(SUBMITTED)	NUMBER	
DRW.	G.L.O.	STATE DESIGN POLICY ENGINEER	4386	
CHK.	B.R.E.	(APPROVED)		
REVIEW	B.A.S.	CHIEF ENGINEER		

3/24/2016 10:14:20 AM \\GDOT\DSN\GDPLOT\OCF\OCG.qpl\_bqvar1.cae\_P:\Pol\cy&L\Light\Standard\GA\_Standards\4390\Rev1\Jan\_2016-1-29\4390\_Rev1\std\_2016-1-29.dwg



PLAN



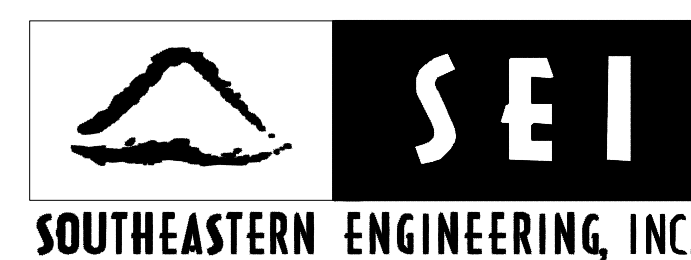
ELEVATION  
(TYPICAL VIEW ALONG ROADWAY)

GENERAL NOTES:

- SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
- NUTS, BOLTS, WASHERS, RAIL, TERMINAL SECTIONS, END SHOES, BACK-UP PLATES, END SECTIONS AND OTHER GUARDRAIL HARDWARE ARE IN ACCORDANCE WITH THE CURRENT ARTBA TECHNICAL BULLETIN NO. 268 -- UNLESS SPECIFIED OTHERWISE, DIMENSIONS FOR POSTS AND OFFSET BLOCKS WILL BE ACCORDING TO GA. STANDARD 438I.
- FOR DETAILS OF GUARDRAIL ANCHORAGES AND TERMINALS, SEE APPLICABLE STANDARDS AND/OR CONSTRUCTION DETAILS.
- FOR LOCATION OF GUARDRAIL SEE APPLICABLE LOCATION STANDARDS.
- ALL STEEL HARDWARE COMPONENTS WILL BE GALVANIZED AFTER FABRICATION, GALVANIZING REPAIR COMPOUND (SEC. 645) WILL BE FIELD APPLIED TO ANY COATINGS DAMAGED.
- WHEN GUARDRAIL IS REQUIRED ON CURVES WITH RADII LESS THAN 150', PRECURVED RAIL WILL BE REQUIRED.
- PAYMENT FOR GUARDRAIL (Type "W") TO INCLUDE OFFSET BLOCKS, POST, BACK-UP PLATES WHERE REQUIRED, BOLTS, NUTS, WASHERS, TERMINAL SECTIONS, ADDITIONAL POST WHERE REQUIRED, & REMOVAL AND REPLACEMENT OF PORTIONS OF MEDIAN PAVING, SPILLWAYS, OR CATCH BASINS WHERE NECESSARY.
- ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- STANDARD NET LENGTH OF RAIL ELEMENTS MAY BE EITHER 12'-6" OR 25'-0", THESE LENGTHS SHALL BE ARRANGED TO PROVIDE AS NEARLY AS POSSIBLE THE REQUIRED LENGTH FOR EACH INSTALLATION.

REV. 31" W-BW BLOCK TO 6" H		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REV. 31" W-BW BLOCK TO 6" H		DATE	STANDARD "W" BEAM GUARDRAIL TRANSITION 27 INCH GUARDRAIL TO 31 INCH GUARDRAIL HEIGHT	
REV. 31" W-BW BLOCK TO 6" H		DATE	NO SCALE	AUGUST 2011
DES. G.L.O. (SUBMITTED)	DRW. G.L.O. (APPROVED)	CHK. B.R.E. (APPROVED)	REVIEW G.A.S.	NUMBER 4390
			STATE DESIGN POLICY ENGINEER <i>Manoel B. Puelo</i> CHIEF ENGINEER	

3/24/2016 10:14:20 AM \\GDOT\DSN\GDPLOT\OCF\OCG.qpl\_bqvar1.cae\_P:\Pol\cy&L\Light\Standard\GA\_Standards\4390\Rev1\Jan\_2016-1-29\4390\_Rev1\std\_2016-1-29.dwg



REVISION DATES

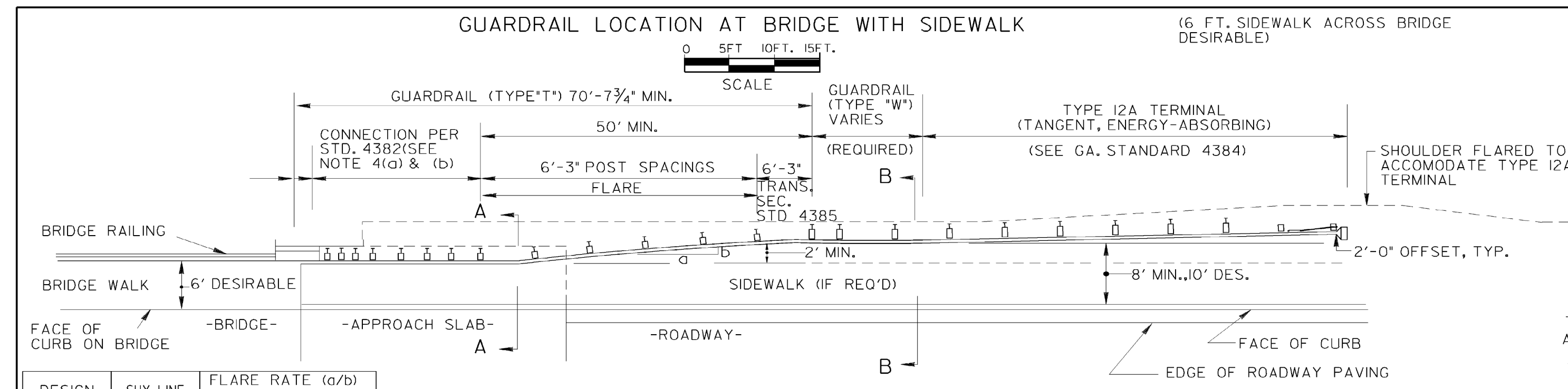

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
GEORGIA STANDARDS

GUARDRAIL IMPROVEMENTS

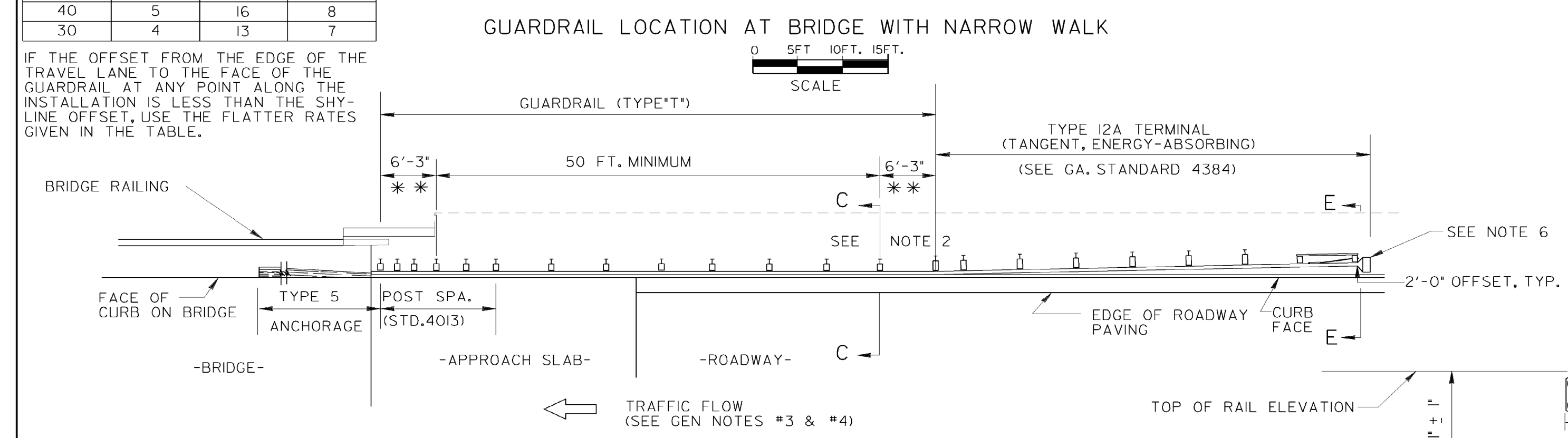
DRAWING No.  
41-0007

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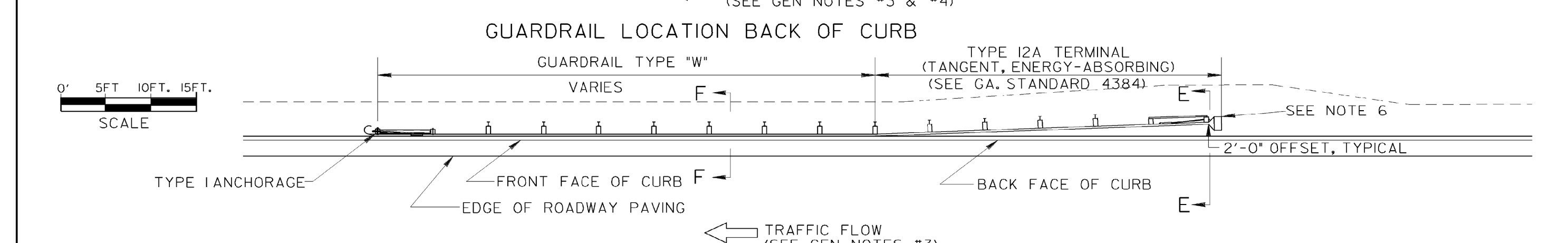
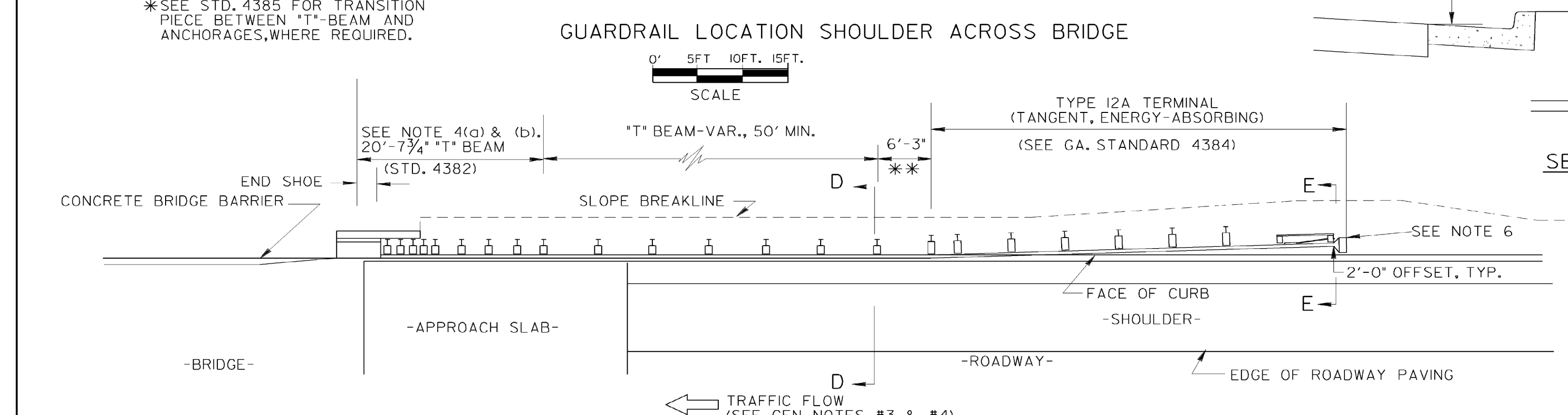


DESIGN SPEED (mph)	SHY-LINE OFFSET (ft)	FLARE RATE (a/b)	
		BARRIER INSIDE SHY-LINE	BARRIER AT OR BEYOND SHY-LINE
70	9	30	15
60	8	26	14
55	7	24	12
50	6.5	21	11
45	6	18	10
40	5	16	8
30	4	13	7

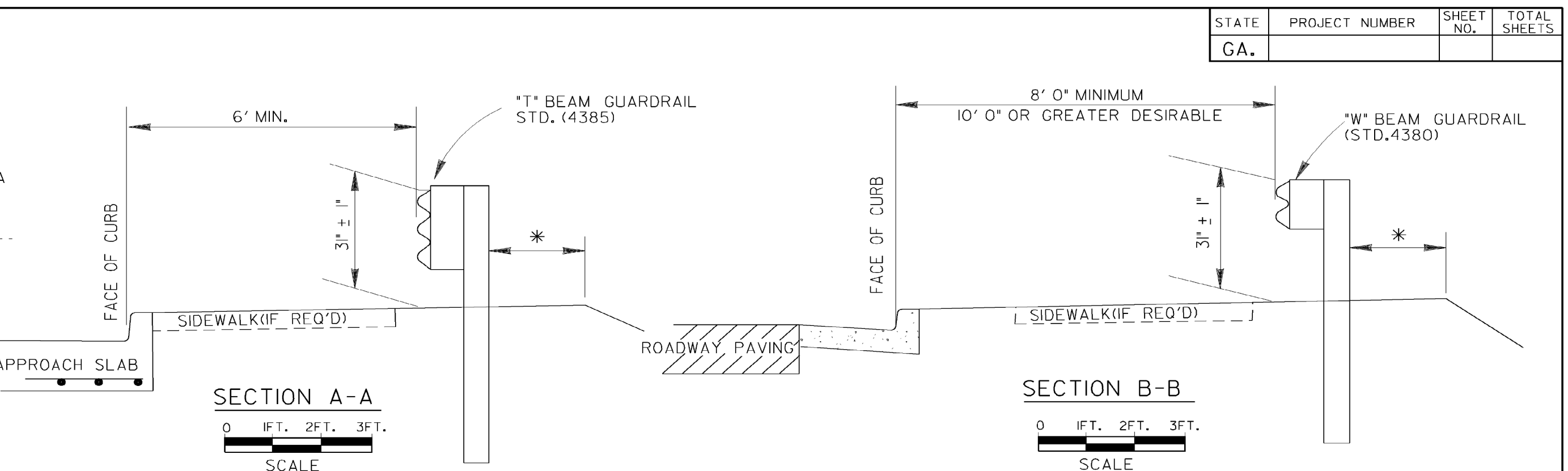
IF THE OFFSET FROM THE EDGE OF THE TRAVEL LANE TO THE FACE OF THE GUARDRAIL AT ANY POINT ALONG THE INSTALLATION IS LESS THAN THE SHY-LINE OFFSET, USE THE FLATTER RATES GIVEN IN THE TABLE.



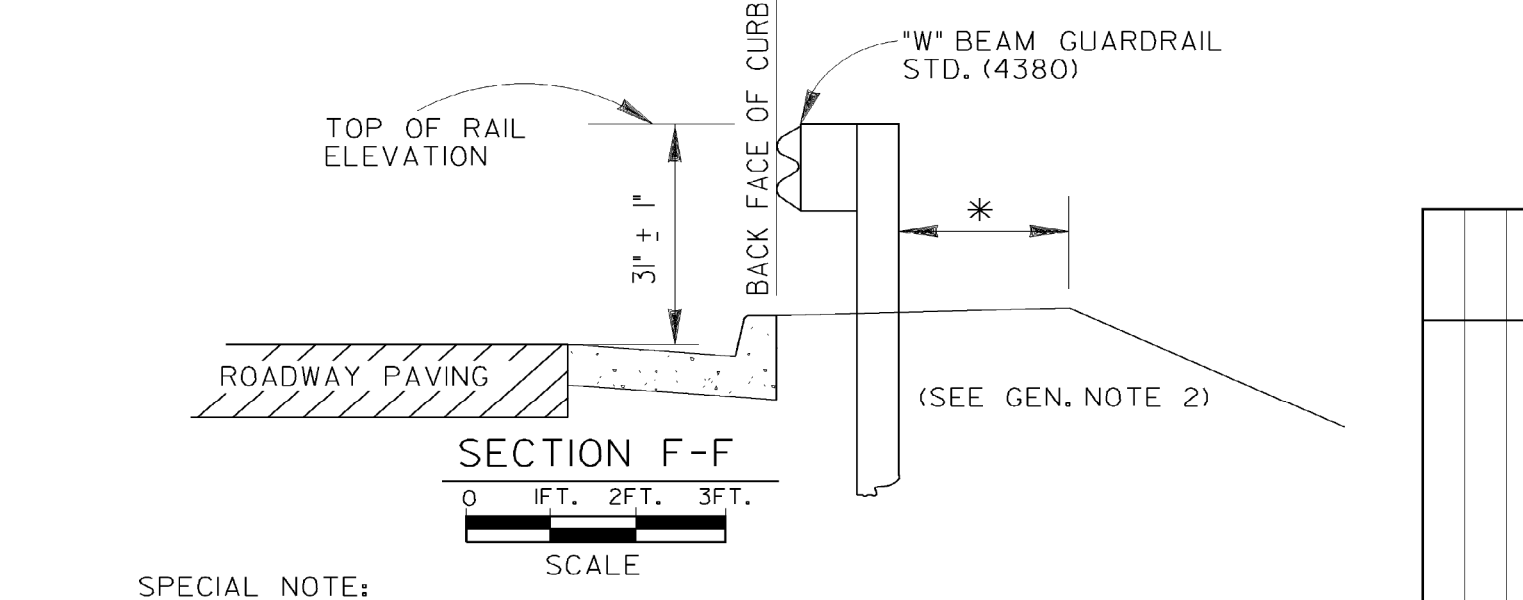
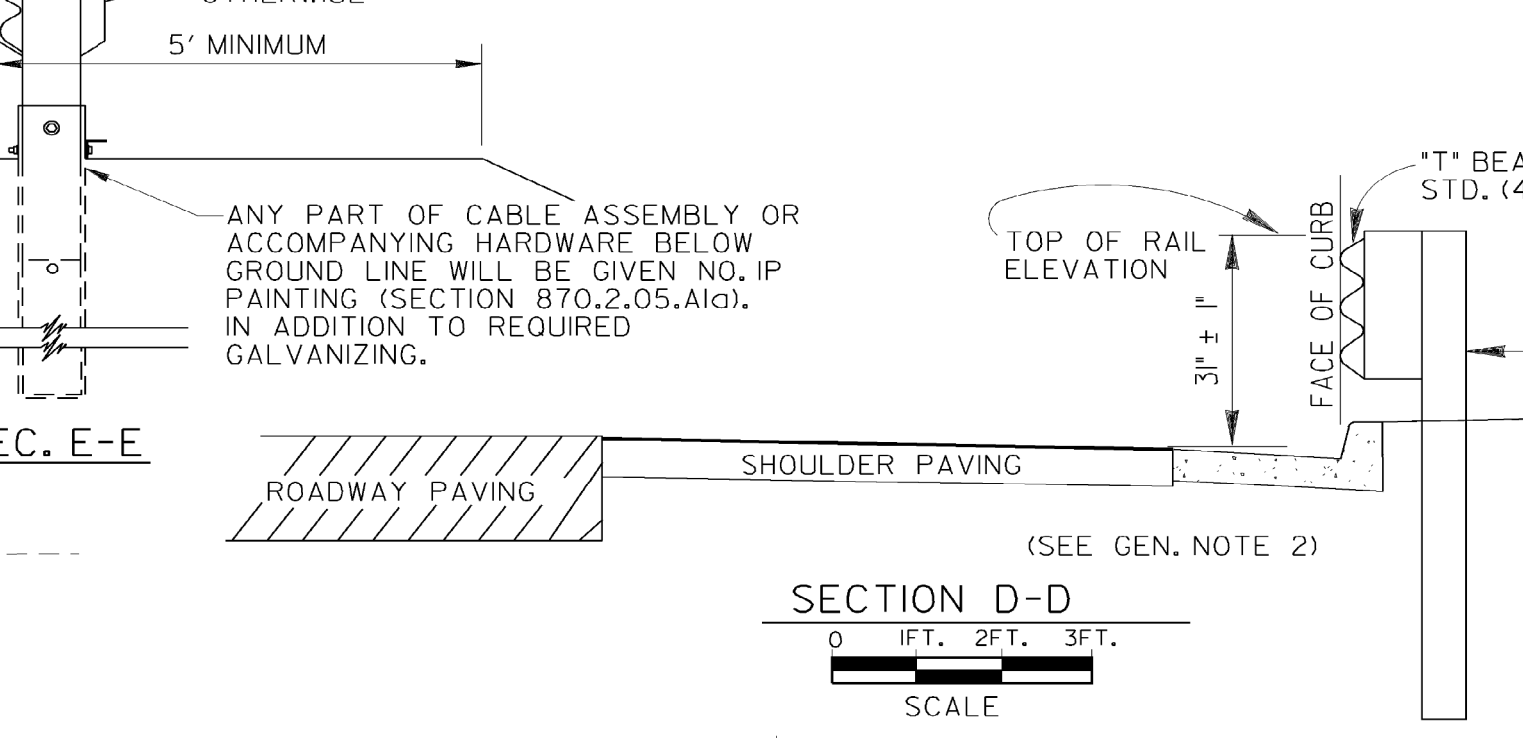
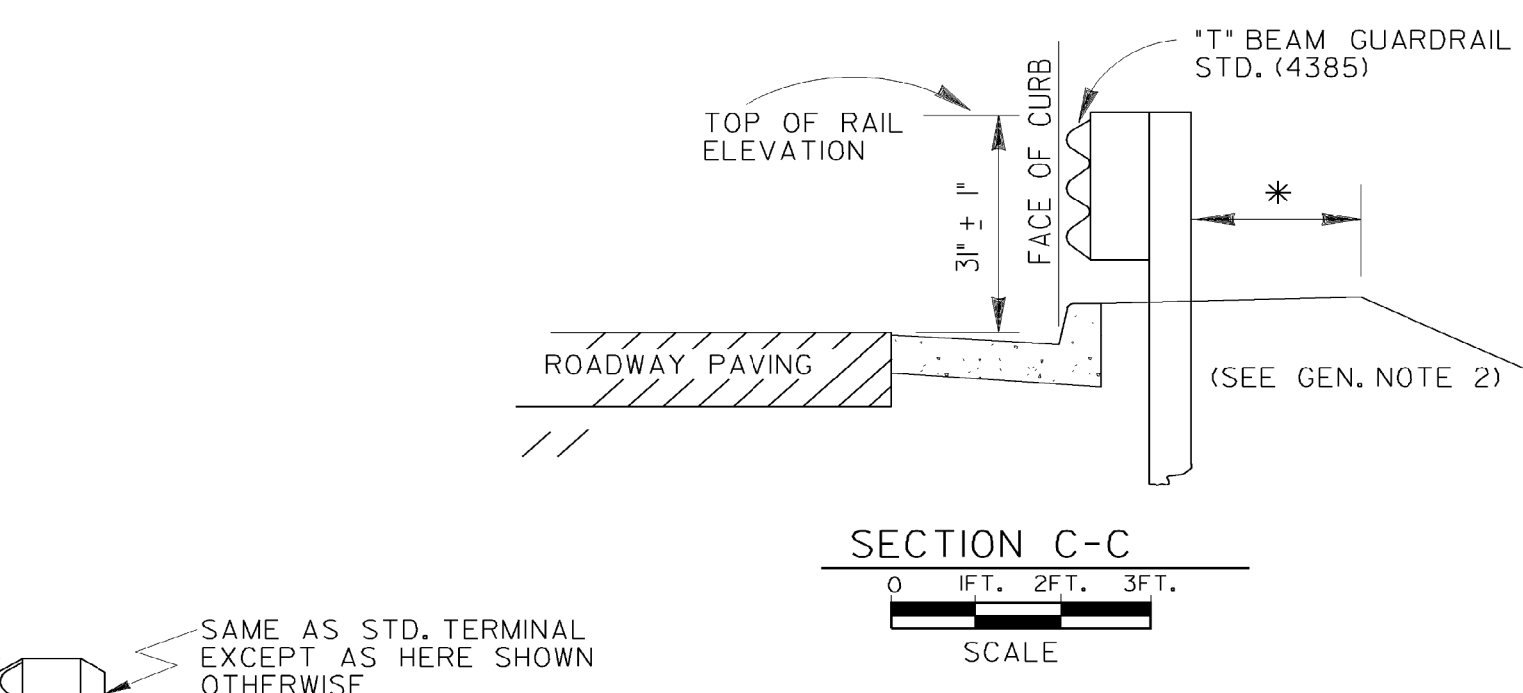
\*SEE STD. 4385 FOR TRANSITION PIECE BETWEEN "T"-BEAM AND ANCHORAGES, WHERE REQUIRED.



NOTE: APPLICATION OF ABOVE DETAILS IS TYPICAL FOR URBAN TYPE FACILITIES WITH CONTINUOUS CONCRETE CURB & GUTTER ADJACENT TO THE PAVEMENT. SEE SEPARATE DETAILS WHERE SECTIONS OF ASPHALT CURB ARE LOCATED UNDER GUARDRAIL ON SHOULDERS OF RURAL TYPE FACILITIES.



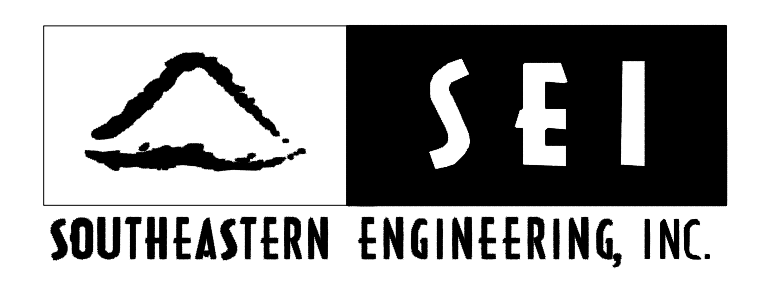
\* DISTANCE FROM BACK OF POST TO EDGE OF GRADED SHOULDER SHALL NOT BE LESS THAN 2 FEET WITH NORMAL LENGTH POST AND NOT LESS THAN 1 FOOT WITH ADDITIONAL LENGTH POST. (STD. 4380)



SPECIAL NOTE: LOCATION AND QUANTITIES GIVEN IN THE PLANS FOR GUARDRAIL, TERMINALS, AND ANCHORAGES ARE ESTIMATES MADE FROM OFFICE COMPUTATIONS. A FINAL DETERMINATION AS TO LOCATIONS AND QUANTITIES OF GUARDRAIL, TERMINALS, AND ANCHORAGES WILL BE MADE BY THE ENGINEER OR A REPRESENTATIVE FROM THE OFFICE OF TRAFFIC OPERATIONS AFTER CONSTRUCTION OF ROADWAY AND CURB. THIS APPLIES TO ALL CONDITIONS SHOWN ON THIS STANDARD.

- GENERAL NOTES:**
- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
  - IF GUARDRAIL IS DIRECTLY ABOVE CURB, DO NOT USE STD. I033D, I033G, I034D, I034G CATCH BASINS AT SAME LOCATION. EITHER USE OTHER DRAINAGE STRUCTURES OR ADJUST LOCATION OF CATCH BASINS TO MISS GUARDRAIL.
  - (a) TYPE I2A, I2B, OR I2C TERMINALS ARE REQUIRED AT ALL APPROACH ENDS OF GUARDRAIL AND AT TRAILING ENDS THAT FALL WITHIN THE C.Z.W. OF THE TWO-WAY TRAFFIC. C.Z.W.=CLEAR ZONE WIDTH.  
(b) TYPE I ANCHORAGE WITH A 30' R PRECURVED RAIL SECTION MAY BE USED AT TRAILING ENDS THAT FALL OUTSIDE THE C.Z.W. OF THE TWO-WAY TRAFFIC.  
(c) TYPE I ANCHORAGES ARE USED AT THE TRAILING ENDS OF ONE-WAY TRAFFIC.
  - (a) GUARDRAIL PER APPLICABLE DETAIL AT LEFT IS REQUIRED AT BOTH APPROACH BRIDGE END POSTS WITH ONE-WAY TRAFFIC AND AT ALL 4 BRIDGE END POSTS WITH 2-LANES & 2-WAY TRAFFIC.  
(b) BRIDGE END POSTS AT THE TRAILING END OF ONE-WAY TRAFFIC OR AT THE TRAILING END OF TWO-WAY TRAFFIC ON MULTI-LANE (FOUR OR MORE) FACILITIES DOES NOT REQUIRE GUARDRAIL UNLESS STEEP SLOPES OR OTHER CONDITION WARRANTS GUARDRAIL FOR TRAFFIC COMING OFF OF BRIDGE. IF REQUIRED FOR THIS CONDITION, GUARDRAIL SHALL BE AS WARRANTED & WITHOUT ADDITIONAL POST/DOUBLE THICK RAIL.
  - SKETCHES SHOWN HERE FOR GUARDRAIL, TERMINALS, AND ANCHORAGES ARE REPRESENTATIVE. SEE SEPARATE STANDARDS OR DETAILS FOR SPECIFIC REQUIREMENTS.
  - TYPE I2A TERMINALS SHALL BE TAPERED PER MANUFACTURER'S SPECIFICATIONS SO THAT THE EXTRUDER/IMPACT HEAD WILL NOT PROTRUDE OVER CURB FACE.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		DATE	1-29-16
STANDARD GUARDRAIL LOCATION (ON ROADS WITH CURB & GUTTER, HEADER CURB OR INTEGRAL CURB) 3 INCH GUARDRAIL HEIGHT		REVISION	NO. 6
SCALE AS SHOWN		DATE	AUGUST 2011
NUMBER 4391		DES. G.L.O. (SUBMITTED)	
		DRW. G.L.O. (APPROVED)	
		CHK. B.R.E. (APPROVED)	
		REVIEW B.A.S.	

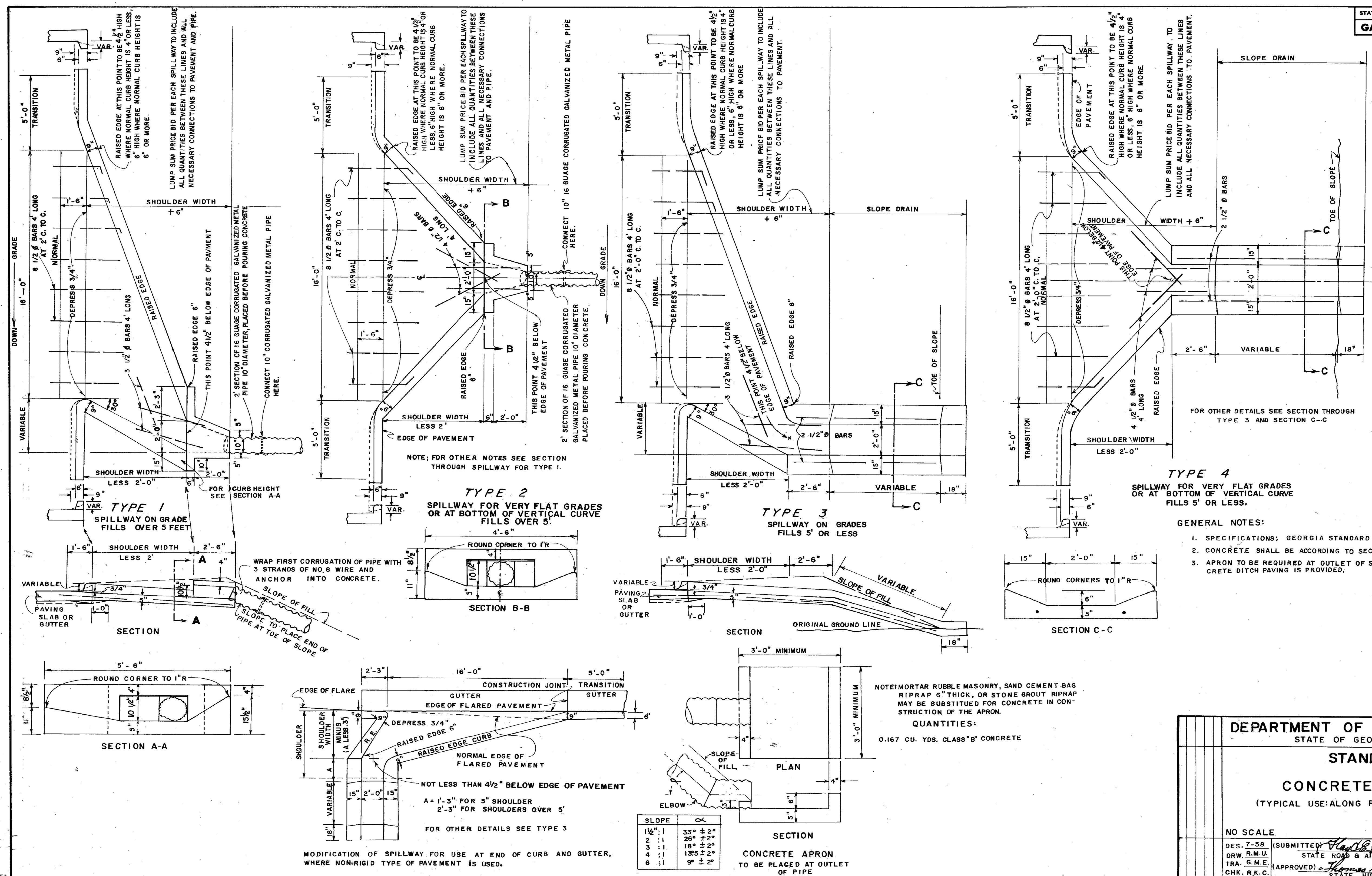


REVISION DATES	DATE	DESCRIPTION

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT  
OFFICE:  
**GEORGIA STANDARDS**  
GUARDRAIL IMPROVEMENTS

DRAWING No.  
**41-0008**





STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA			

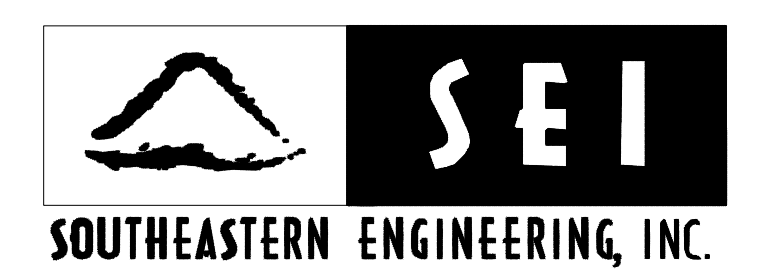
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

**STANDARD**  
**CONCRETE SPILLWAYS**  
(TYPICAL USE: ALONG ROADWAY AT END OF CURB)

NO SCALE  
DES. 7-58 (SUBMITTED) *Handwritten Signature*  
DRW. R.M.U. STATE ROAD & AIRPORT DESIGN ENGR.  
TRA. G.M.E. (APPROVED) *Handwritten Signature*  
CHK. R.K.C. STATE HIGHWAY ENGINEER

REV. & REDR. FEBRUARY, 1981

NUMBER  
**9013**



REVISION DATES

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

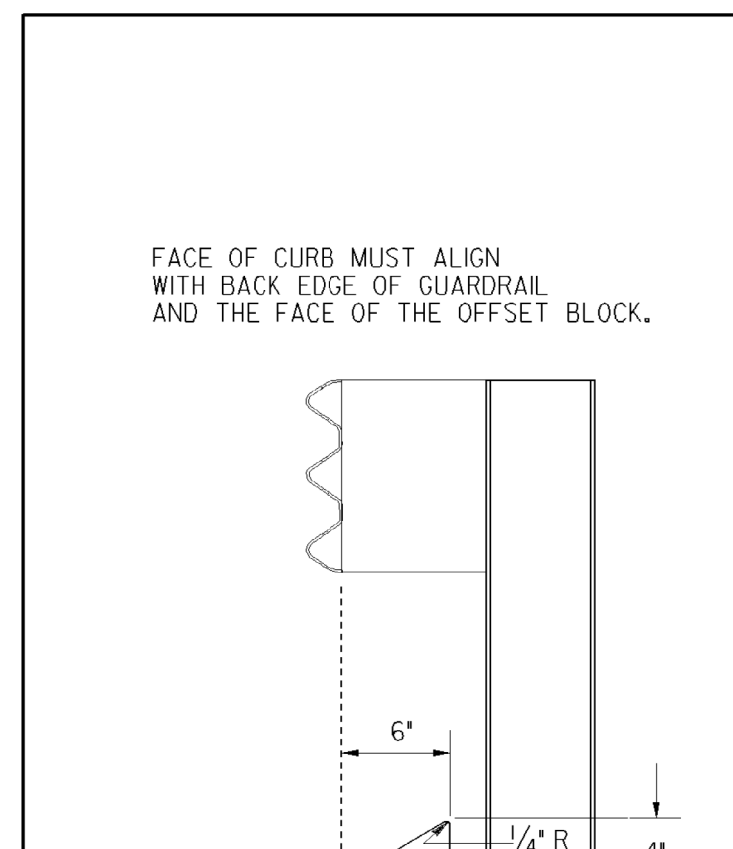
OFFICE:  
**GEORGIA STANDARDS**

GUARDRAIL IMPROVEMENTS

DRAWING No.  
**41-0009**



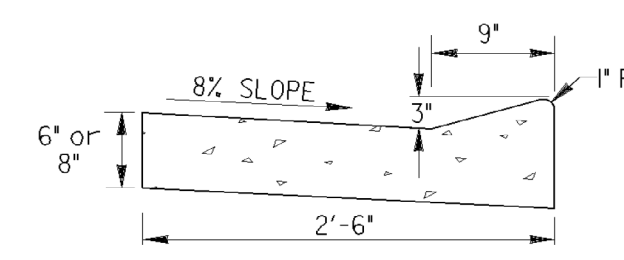
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TYPE 8

TYPE 8 CURB IS USED IN CONJUNCTION WITH GUARDRAIL CONNECTIONS TO CONCRETE BARRIER AS NOTED ON GA. STD. 4012C.

RAISED EDGE WITH CONCRETE GUTTER

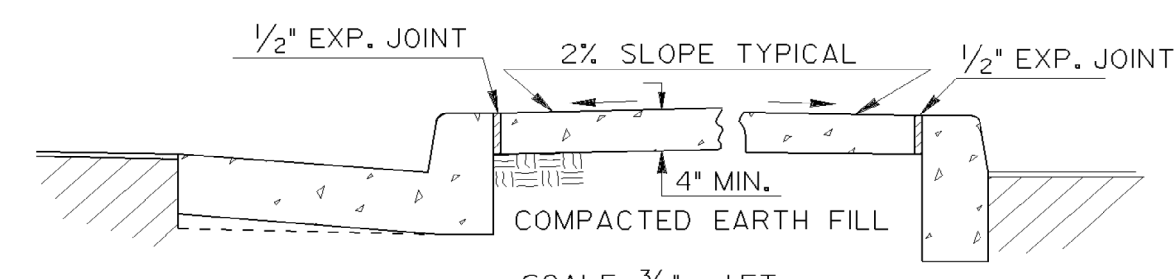


SCALE: 1" = 1 FT.

RAISED EDGE TO BE CONSTRUCTED WITH SAME CONCRETE MIX AS THE GUTTER AND SHALL BE FORMED MONOLITHIC WITH GUTTER. JOINTS IN RAISED EDGE SHALL MATCH THOSE IN THE GUTTER.

CONCRETE MEDIAN (Between Curbs)

NOTE: CURB TYPES SHOWN ARE TYPICAL. OTHER TYPES MAY BE SPECIFIED.



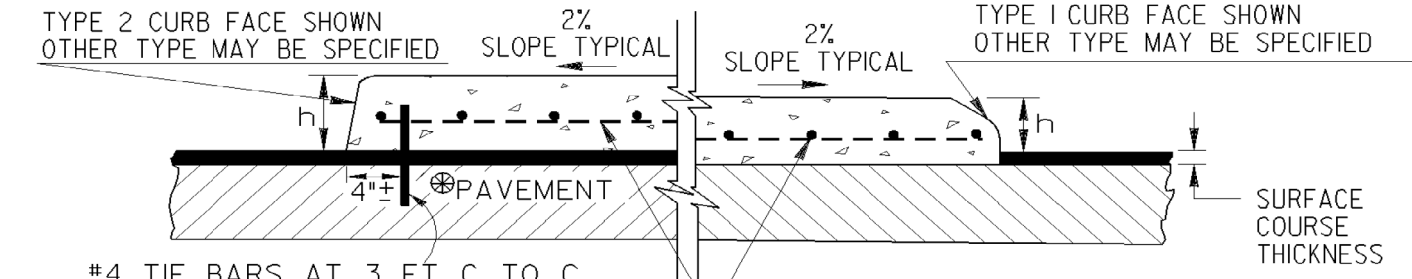
SCALE: 3/4" = 1 FT.

NOTE: WIDTH OF CONCRETE MEDIAN WILL BE AS SHOWN IN PLANS

CONCRETE MEDIANS (Integral)

SCALE: 1" = 1 FT.

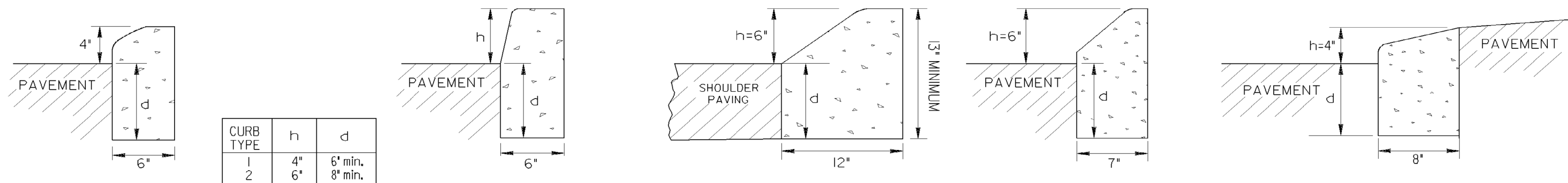
-WITH TIE BARS- -WITHOUT TIE BARS-



SCALE: 1" = 1 FT.

NOTE: IF FINAL SURFACE COURSE IS PRESENT OR MUST BE INSTALLED BEFORE THE CONCRETE MEDIAN CAN BE INSTALLED, THEN DOWELED IN CONCRETE MEDIAN IS REQUIRED.

CONCRETE HEADER CURBS



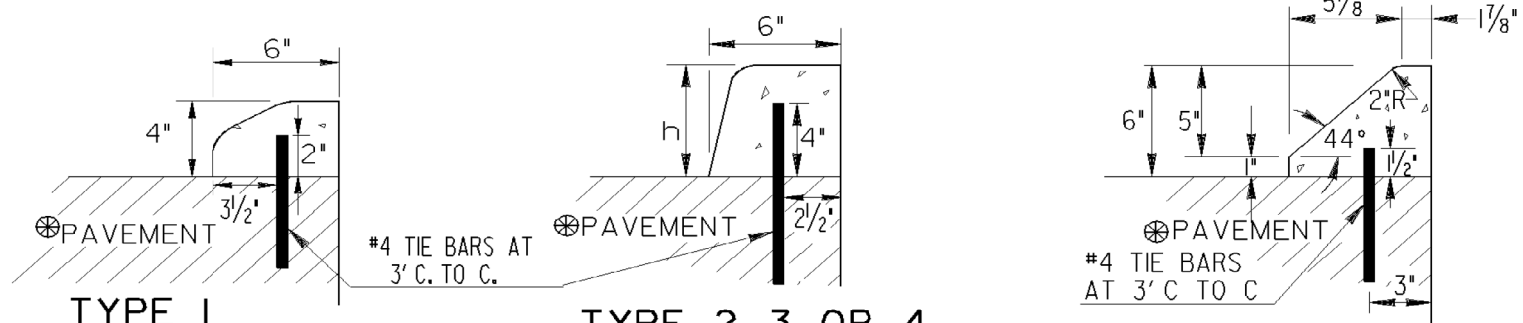
CURB TYPE	h	d
1	4"	6" min.
2	6"	8" min.
3	8"	10" min.
4	10"	12" min.
6	6"	7" min.
7	6"	8" min.
9	4"	8" min.

THE DIMENSION d MAY BE INCREASED AT CONTRACTOR'S OPTION SO BOTTOM OF HEADER CURB WILL ALIGN WITH BOTTOM OF PAVEMENT TYPICAL SECTION.

SCALE: 1/2" = 1 FT.

CONCRETE DOWELED INTEGRAL CURBS

SCALE: 1" = 1 FT.



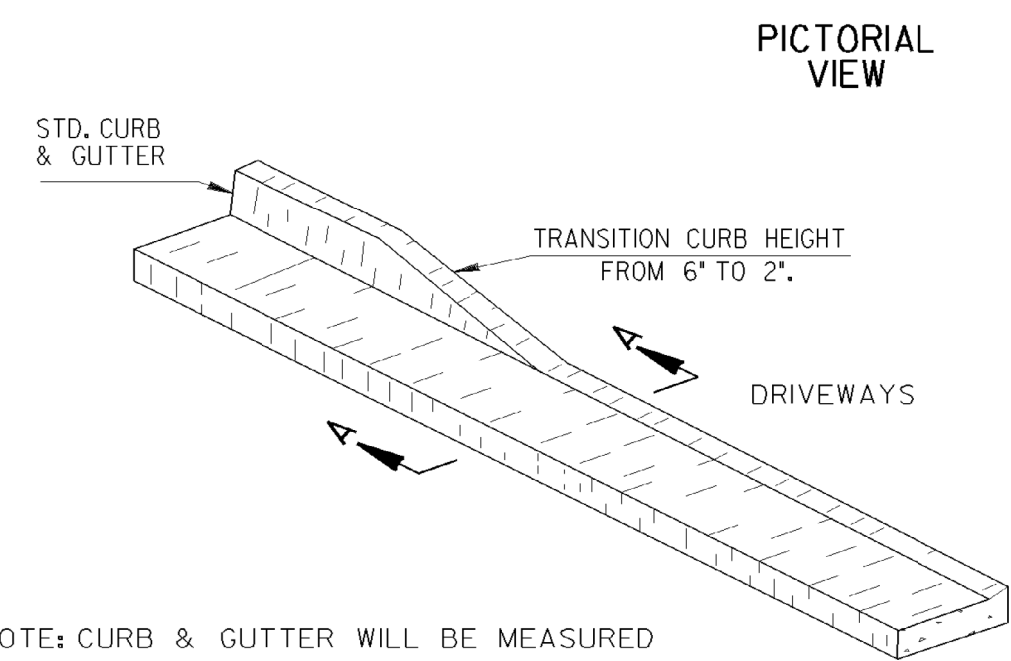
- 1. CONCRETE CURB CAN BE INSTALLED AFTER INITIAL SET AS LONG AS TIE BARS ARE DRILLED INTO UNDERLYING CONCRETE PAVEMENT.
- 2. CONCRETE CURB CAN BE INSTALLED BEFORE INITIAL SET WITH DOWELS THAT ARE DRIVEN INTO UNDERLYING CONCRETE PAVEMENT.
- 3. JOINTS IN CURB AND CONCRETE MEDIAN WILL MATCH THOSE IN THE CONCRETE PAVEMENT.
- 4. ALL TYPES OF CONCRETE CURB CAN BE PLACED ON ASPHALT PAVEMENTS WHERE TIE BARS MAY BE EITHER DRIVEN OR DRILLED INTO THE UNDERLYING PAVEMENT. CONTRACTION JOINTS SHALL BE CONSTRUCTED IN CURB OR CONCRETE MEDIAN AT 20 FT. SPACING.

CURB TYPE	MINIMUM TIE BAR LENGTHS (FOR CONG. DOWELED CURBS OR CONG. MEDIAN)	
	P.C. CONG. PAV.	ASPHALT PAV.
1	6"	8"
2, 3 or 4	8"	12"
7	6"	8"

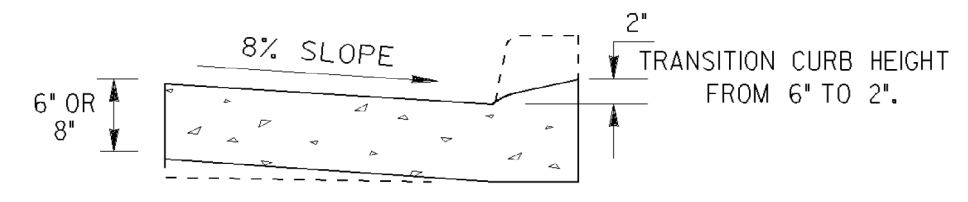
NOTE: TIE BARS FOR DOWELED CURBS MAY BE UNCOATED PLAIN OR DEFORMED BILLET-STEEL BARS (GRADE 40) AS USED FOR CONCRETE REINFORCEMENT. (AASHTO M-3)

DETAILS OF RECESSED CURB FOR DRIVEWAYS

NO SCALE



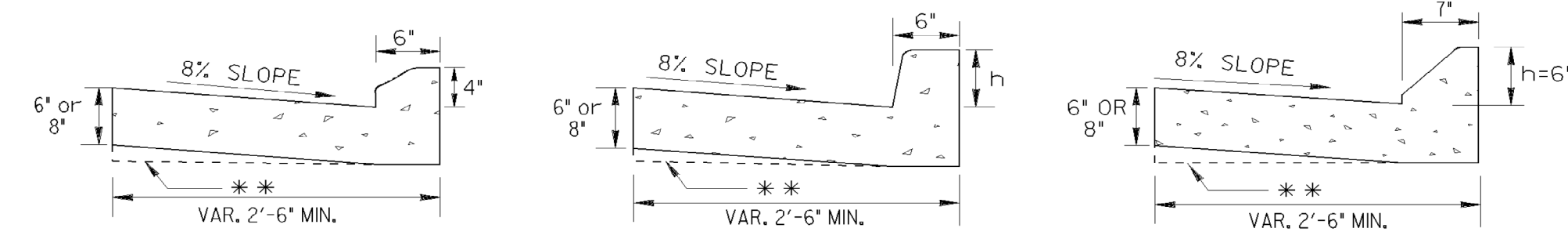
NOTE: CURB & GUTTER WILL BE MEASURED FOR PAYMENT THRU THE DRIVE



SECTIONAL VIEW SECTION A-A

(SEE SEPARATE CONSTRUCTION DETAILS FOR DRIVEWAYS)

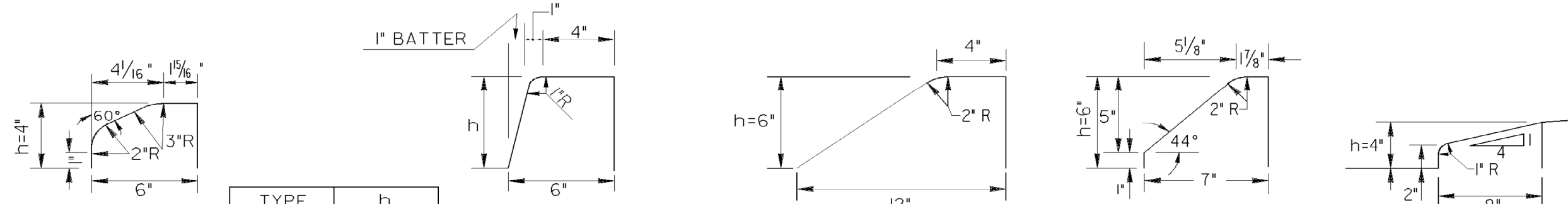
CONCRETE CURB & GUTTER



SCALE: 1" = 1 FT.

\*\* AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT EDGE OF PAVEMENT TO MAKE BOTTOM OF CUTTER PARALLEL WITH PAVING OF BASE COURSE, BUT THE GUTTER THICKNESS MUST NOT BE LESS THAN THE SPECIFIED 6" OR 8" AT ANY POINT.

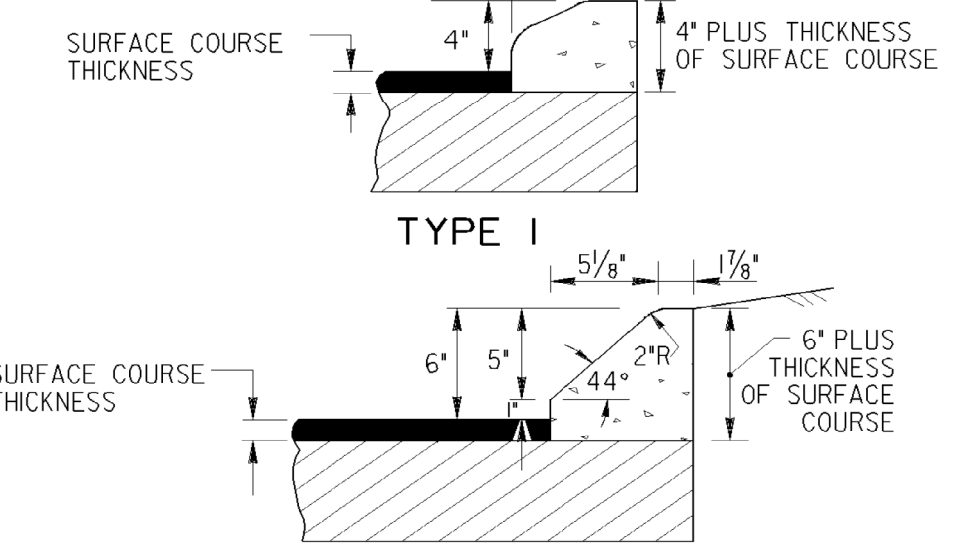
CURB FACE DESIGN



TYPE	h
1	4"
2	6"
3	8"
4	10"
6	6"
7	6"
9	4"

SCALE: 2" = 1 FT.

CONCRETE INTEGRAL CURB



SCALE: 1/2" = 1 FT.

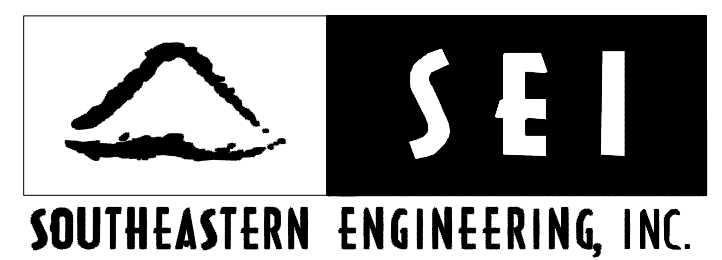
DEPARTMENT OF TRANSPORTATION  
 STATE OF GEORGIA

STANDARD  
 CONCRETE CURB & GUTTER  
 CONCRETE CURBS, CONCRETE MEDIANS

SCALE: AS SHOWN REVISED AND REDRAWN OCT. 2011

DES. (SUBMITTED)	NUMBER
DRW. (APPROVED) <i>Donald M. Run</i>	9032B
TRA. (APPROVED)	
CHK. (APPROVED)	

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REVISION DATES

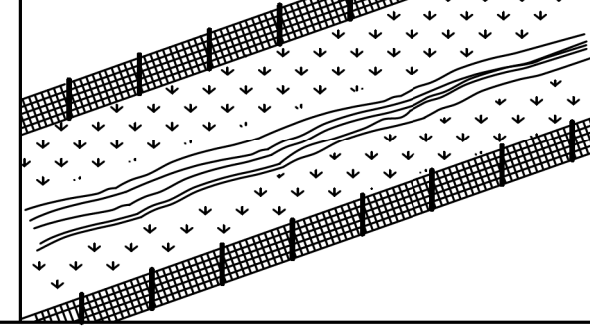

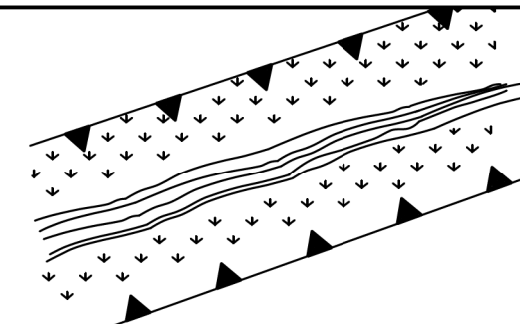

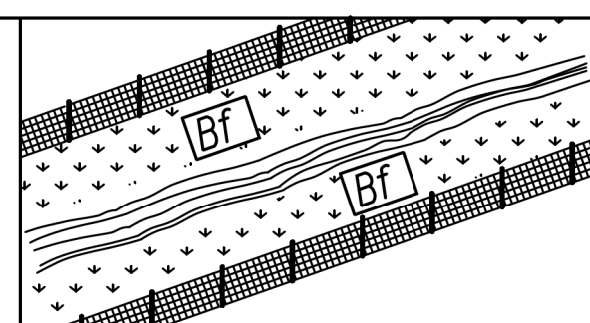
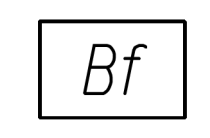
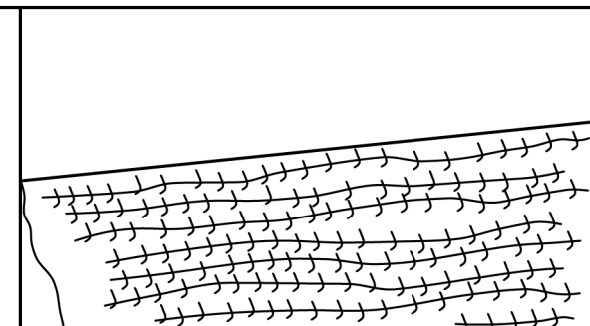
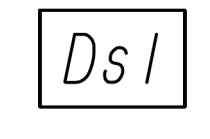
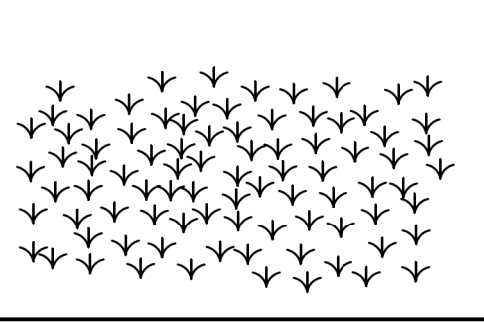
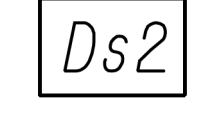
CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT

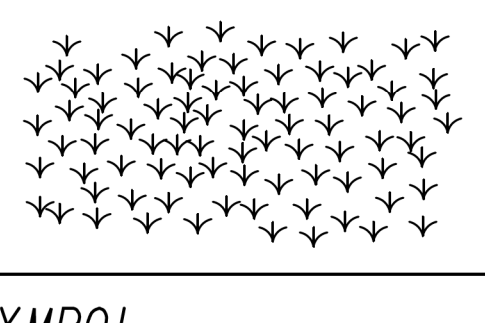
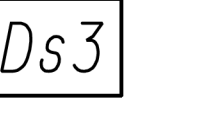
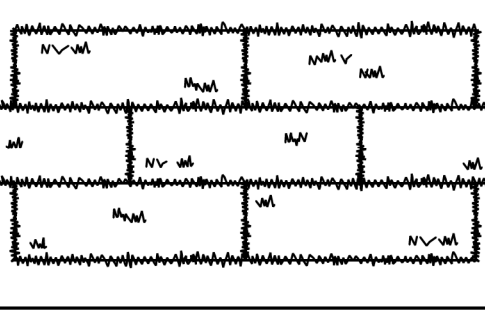
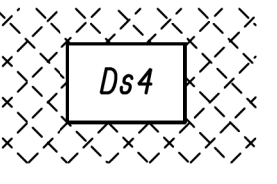
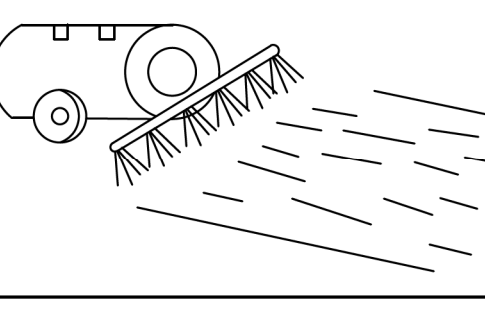
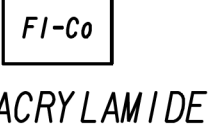
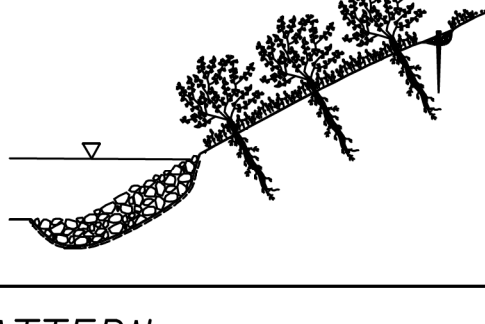
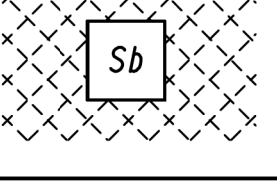
OFFICE:

GEORGIA STANDARDS

GUARDRAIL IMPROVEMENTS

DRAWING No.  
 41-0011



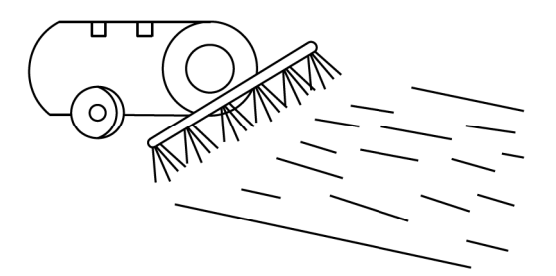

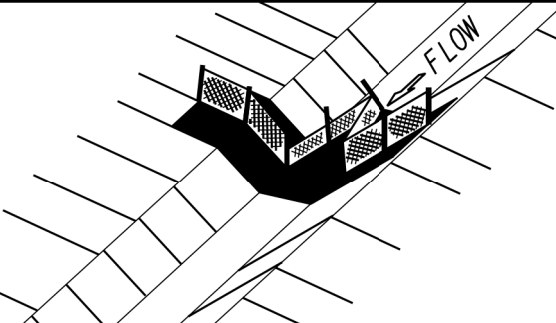

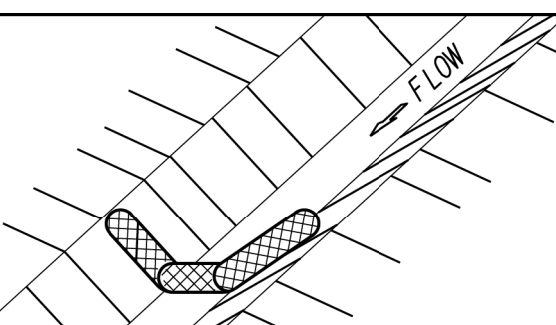

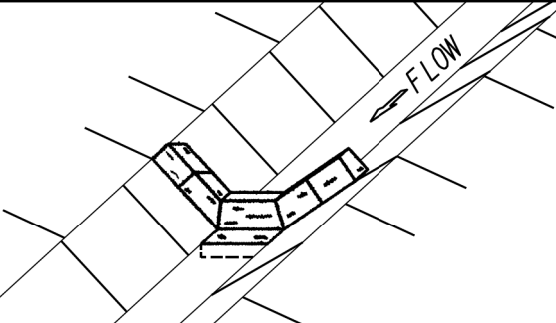
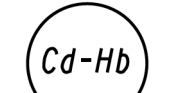
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
		LINE CODE 	
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS.  IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
		LINE CODE 	
	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS.  WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
Bf		SYMBOL 	
Ds1	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING.  MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER.  THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL 	
Ds2	TEMPORARY GRASSING SECTION 163,700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST.  TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS.  THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL 	

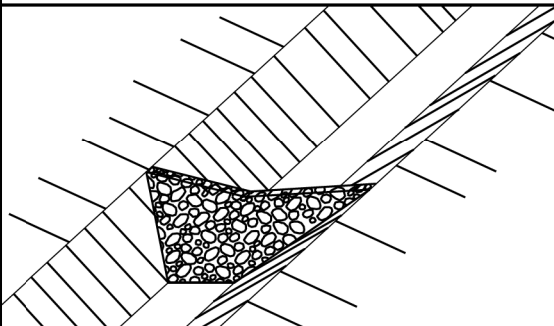

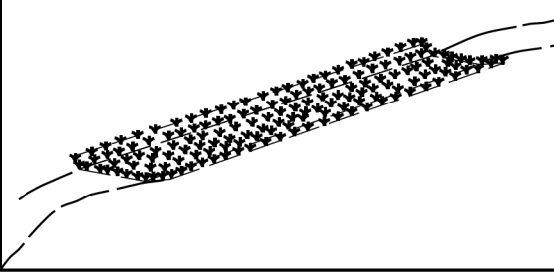

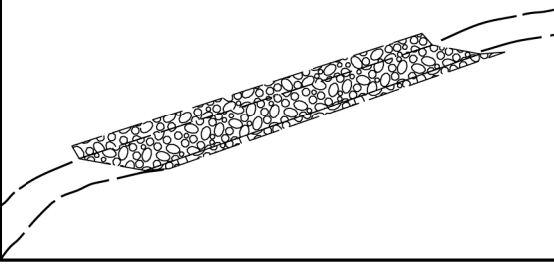

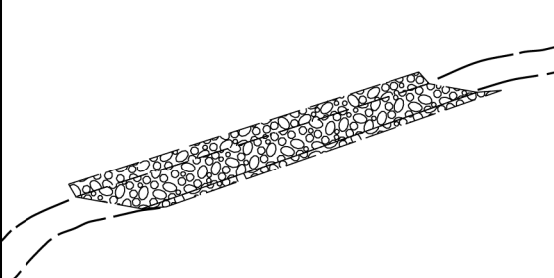

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON.  PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION.  THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL 	
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION.  SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS.  THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		PATTERN 	
F1-Co	FLOCCULANTS COAGULANTS SECTION 163,700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION.  ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs!  FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
		SYMBOL 	
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS.  STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
		PATTERN 	

**NOTE:**

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 1 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No. 52-0001	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS.  SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP).  SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS.  NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
		PATTERN 	
Tac	TACKIFIERS  SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH.  TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING.  REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR CRITERIA.
		SYMBOL  POLYACRYLAMIDE	
Cd-F	FABRIC CHECK DAM  CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS.  THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE.  IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Fs	COMPOST FILTER SOCK CHECK DAM  CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS.  REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MATERIAL SPECIFICATIONS.  IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Hb	BALED STRAW CHECK DAM  CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASHPAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS.  IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM  CONSTRUCTION DETAIL D-56 SECTION 163, 603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE.  SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS.  IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Ch-1	VEGETATED CHANNEL STABILIZATION  SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.  TYPICALLY NOT SHOWN IN PLANS.
		LINE CODE 	
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1  CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3  CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	

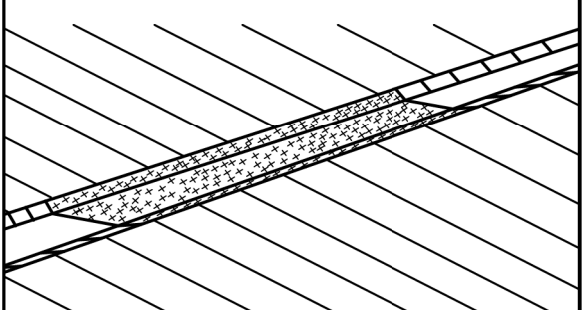
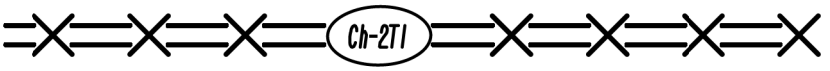
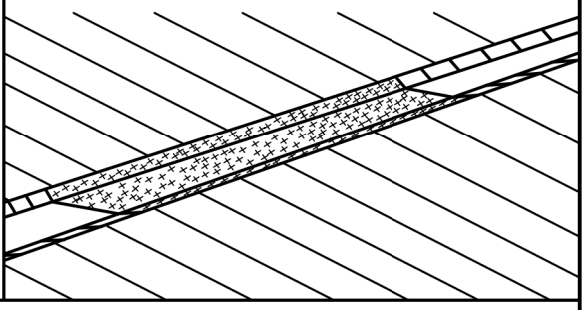
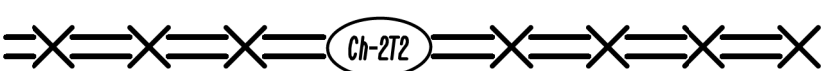
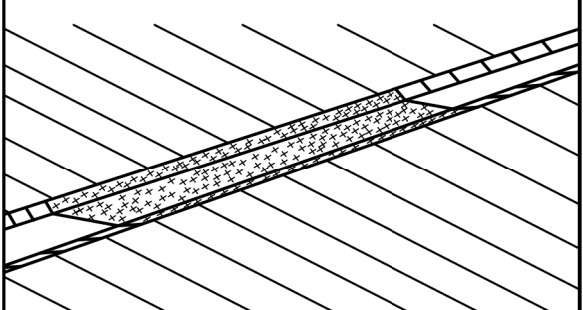
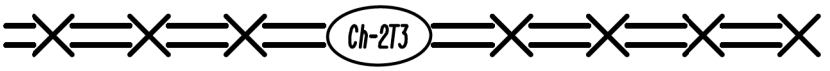
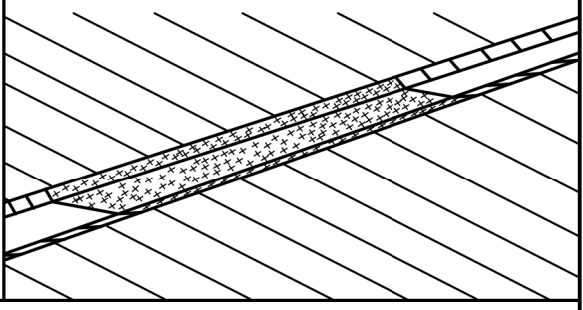
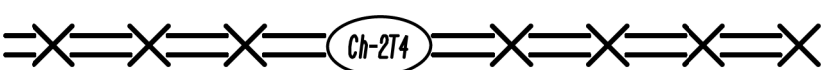
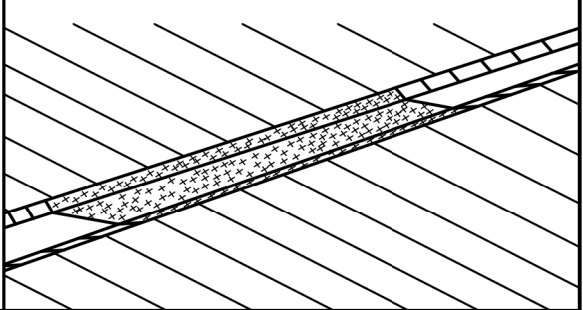
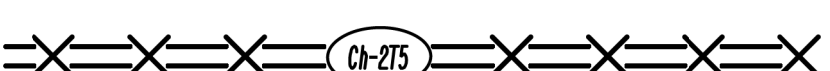
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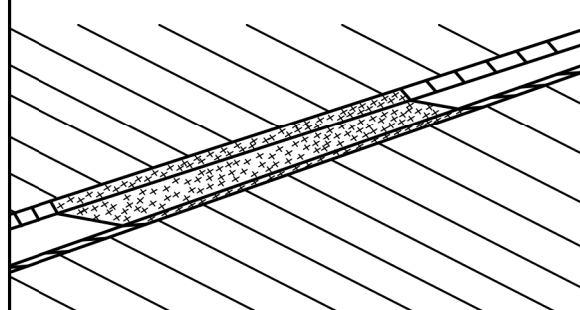
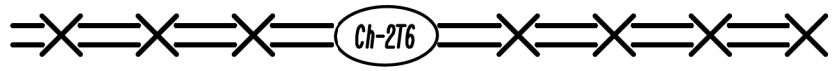
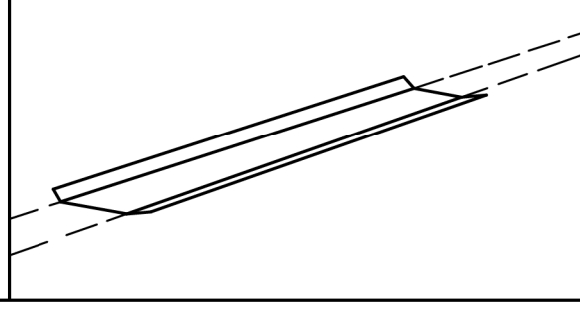

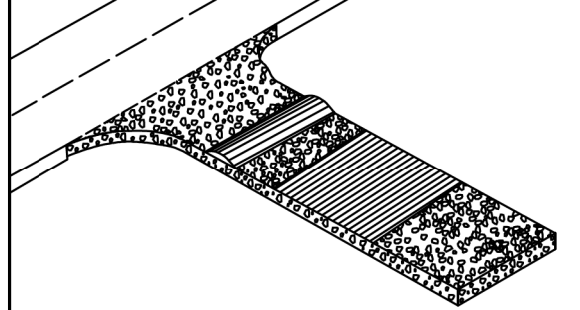
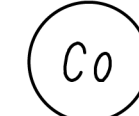
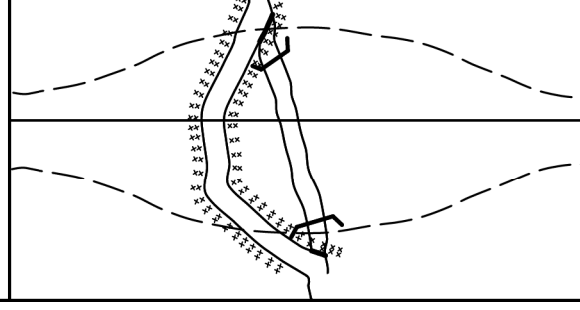

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
1/28/2018		SHEET 2 OF 7	
		CHECKED: D. EAGLETON	DATE: 01/01/16
		BACKCHECKED:	DATE:
		CORRECTED:	DATE:
		VERIFIED:	DATE:
		DRAWING No. 52-0002	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T1	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		
Ch-2T2	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		
Ch-2T3	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		
Ch-2T4	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		
Ch-2T5	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T6	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
	LINE CODE		
Ch-3	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL D-10, D-49 SECTION 441		CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >/= 10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.  *Dp* SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.  RIP-RAP SHOULD BE USED TO DISSIPATE ENERGY DOWNSTREAM OF CONCRETE LINED CHANNELS.
	LINE CODE		
Co	CONSTRUCTION EXIT CONSTRUCTION DETAIL D-41 SECTION 163, 800		A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.E. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.  ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
	SYMBOL		
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps.  THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE.  CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	LINE CODE		

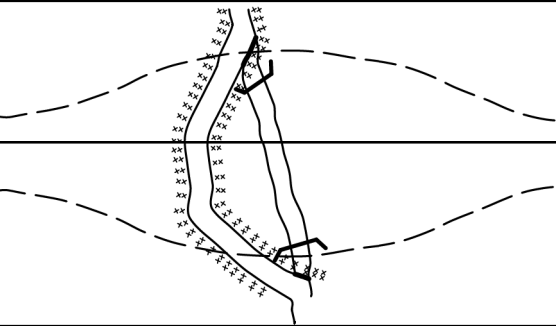
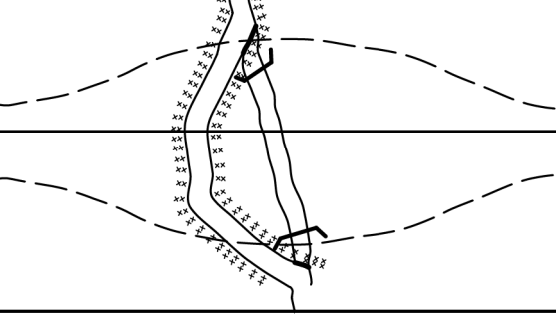
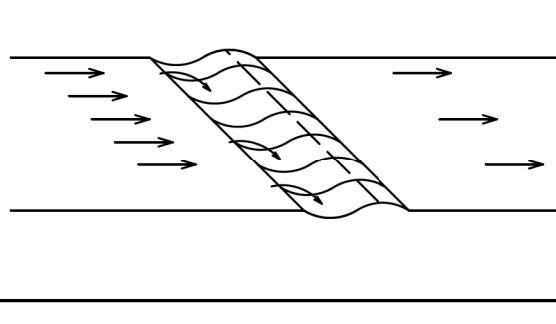
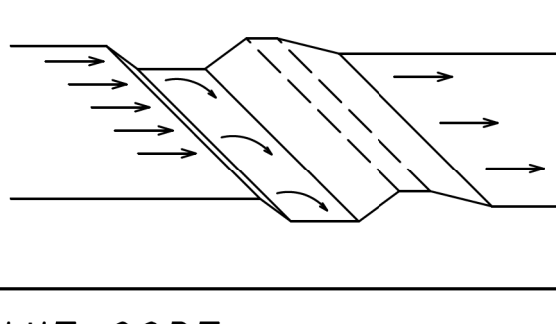
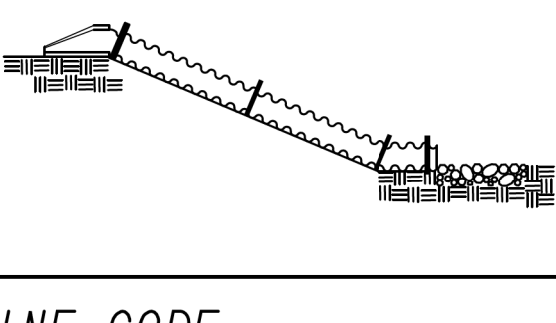
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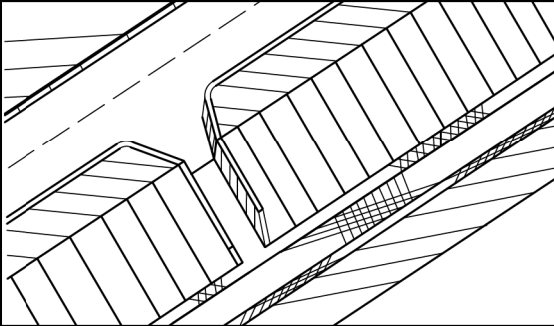
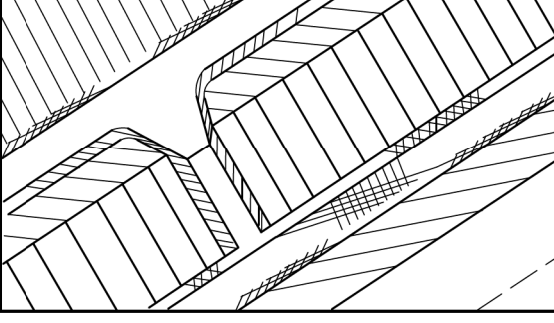
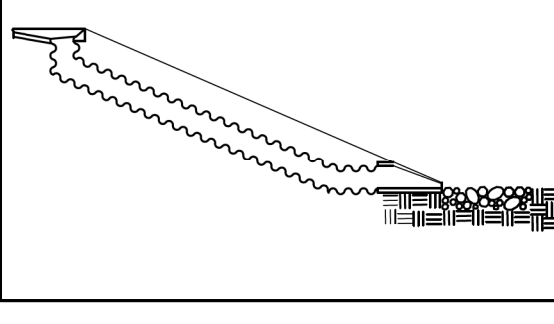
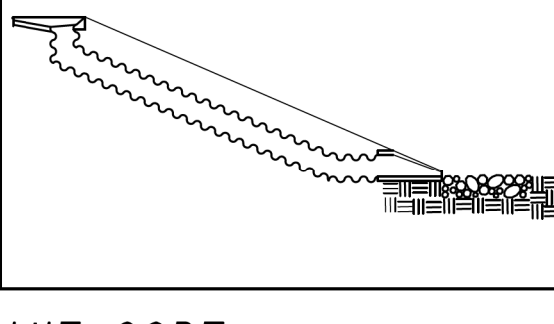
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
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NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 3 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No. 52-0003	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps.
	LINE CODE		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps.
	LINE CODE		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
DI-1	DIVERSION BERM CONSTRUCTION DETAIL D-47 SECTION 205		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS 'Dn1' OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
	LINE CODE		
DI-2	DIVERSION CHANNEL SECTION 205		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP.
	LINE CODE		RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE CONSTRUCTION DETAIL D-19 SECTION 163		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10". THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'.
	LINE CODE		THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'A' IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
	LINE CODE		
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'B' IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1, DETAIL D-26 TP1 SECTION 576, 577		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2, DETAIL D-26 TP2 SECTION 576, 577		CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE		

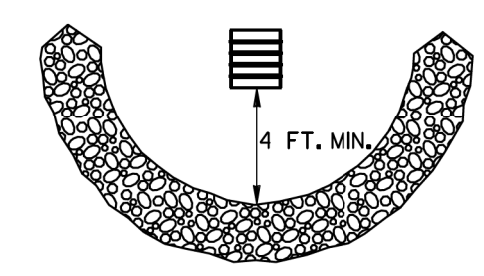

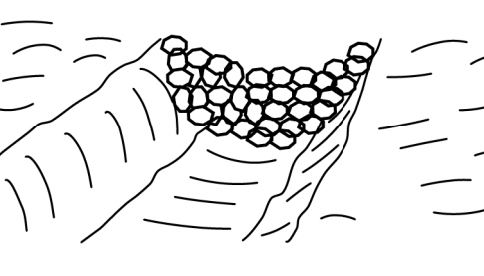

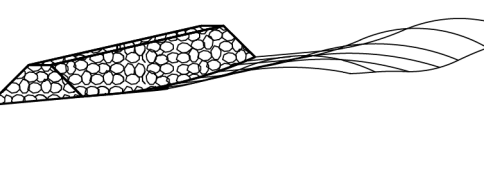
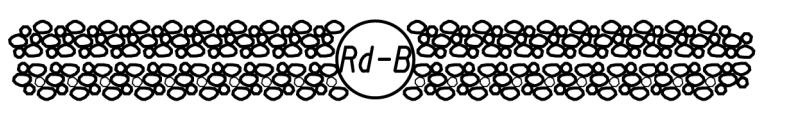
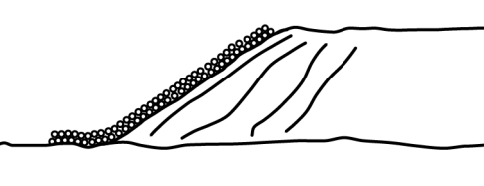
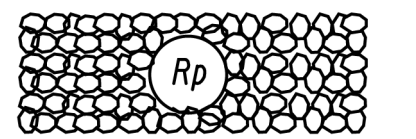
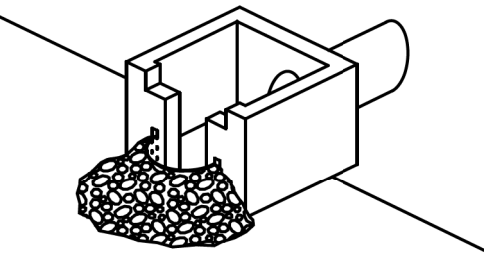

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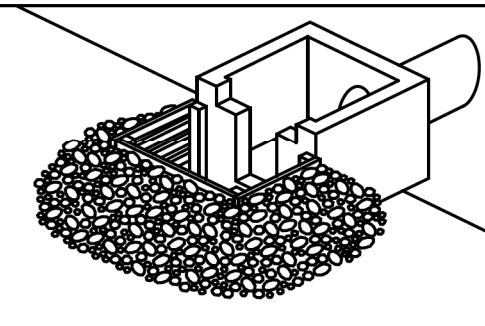

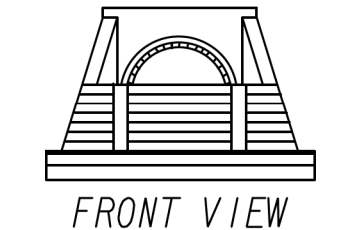

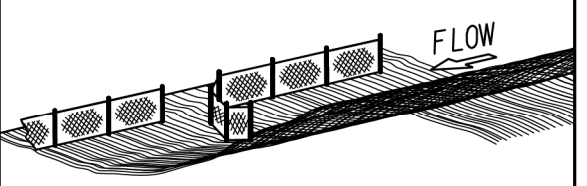

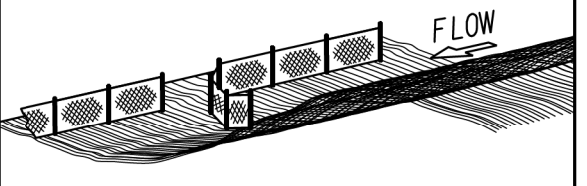

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE


REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 4 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No.	
		52-0004	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA.  REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR ADDITIONAL INFORMATION ON USAGE.
	SYMBOL 		
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603		ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH *57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS.  THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS.  ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
	SYMBOL 		
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH *57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS.  STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT, THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
	LINE CODE 		
Rp	RIP-RAP SECTION 603		RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS.  RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
	PATTERN 		
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163		A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.  SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA.  SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA.  REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA.
	SYMBOL 		

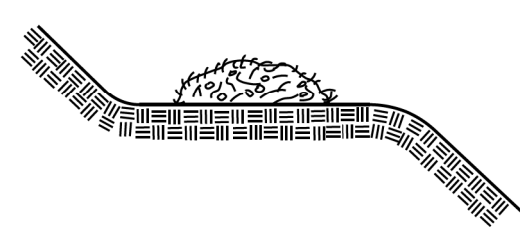
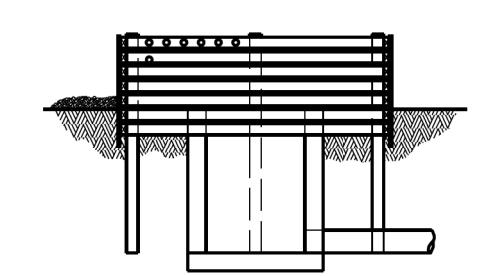
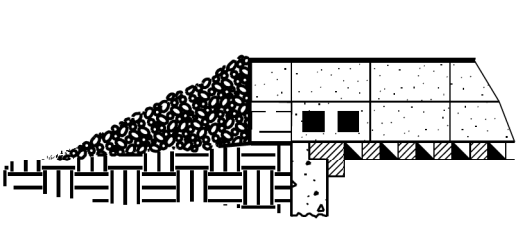
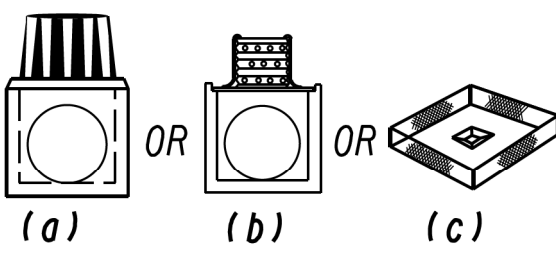
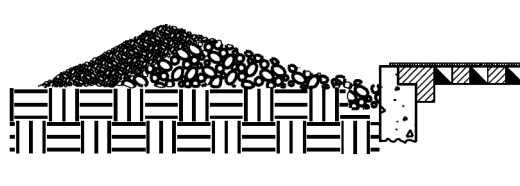
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION		
Rt-B	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163		A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5' - 1.0' SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER.  PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA  ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES  REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA.		
	SYMBOL 				
Rt-Sg1	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163		A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA.  DO NOT USE SILT GATES IN STATE WATERS.  Rt-Sg1*TYPE 1: USED ON BOX CULVERTS Rt-Sg2*TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3*TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS		
				SYMBOL 	
SdI-NS	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW.  TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'.  IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.		
	LINE CODE 				
SdI-S	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW.  TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER.  ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS.  IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.		
	LINE CODE 				

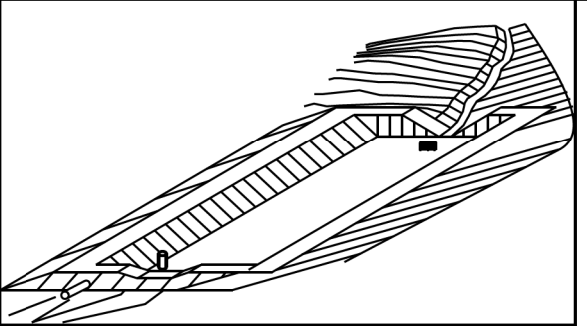
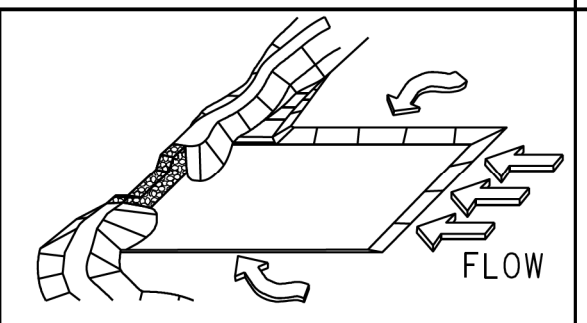
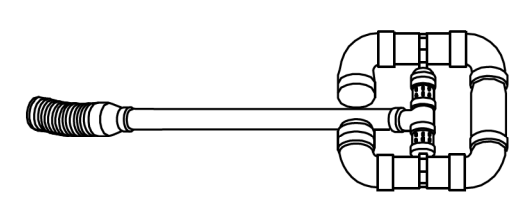
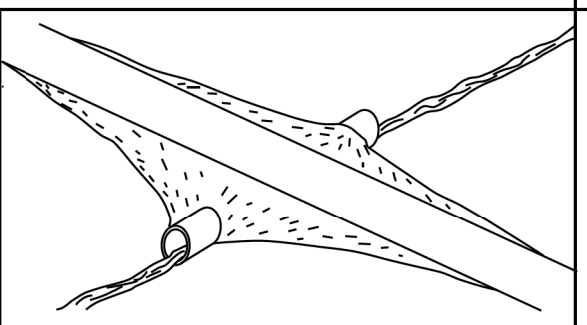
**NOTE:**

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.

	NO SCALE	<table border="1"> <thead> <tr> <th colspan="2">REVISION DATES</th> </tr> </thead> <tbody> <tr> <td>3/2/2017</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>	REVISION DATES		3/2/2017								<p><b>EROSION CONTROL LEGEND</b> UNIFORM CODE SHEET SHEET 5 OF 7</p> <table border="1"> <tr> <td>CHECKED: D. EAGLETON</td> <td>DATE: 01/01/16</td> <td>DRAWING No.</td> </tr> <tr> <td>BACKCHECKED:</td> <td>DATE:</td> <td></td> </tr> <tr> <td>CORRECTED:</td> <td>DATE:</td> <td></td> </tr> <tr> <td>VERIFIED:</td> <td>DATE:</td> <td></td> </tr> </table> <p style="font-size: 24pt; text-align: right;">52-0005</p>	CHECKED: D. EAGLETON	DATE: 01/01/16	DRAWING No.	BACKCHECKED:	DATE:		CORRECTED:	DATE:		VERIFIED:	DATE:	
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CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER  CONSTRUCTION DETAIL D-24B SECTION 201		THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS.  TYPICALLY NOT SHOWN ON PLANS.  PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
	LINE CODE  * * * Sd1-BB * * *		
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163		BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
	SYMBOL Sd2-B		
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163		BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
	SYMBOL Sd2-Bg		
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-24C SECTION 163		(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%.  THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
	SYMBOL Sd2-F		
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163		GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.
	SYMBOL Sd2-G		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN  CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS.  SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd3		
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP  CONSTRUCTION DETAIL D-53 SECTION 163		TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET.  A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED.  REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd4-C		
Sk	FLOATING SURFACE SKIMMER  CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS.  SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE.  REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
	SYMBOL Sk		
Sr	TEMPORARY STREAM CROSSING  SECTION 107		A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN.  THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".  FOR CONTRACTOR'S USE ONLY!
	SYMBOL Sr		

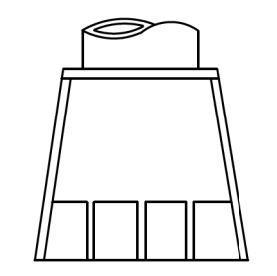

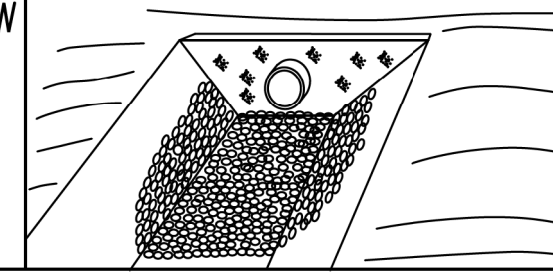
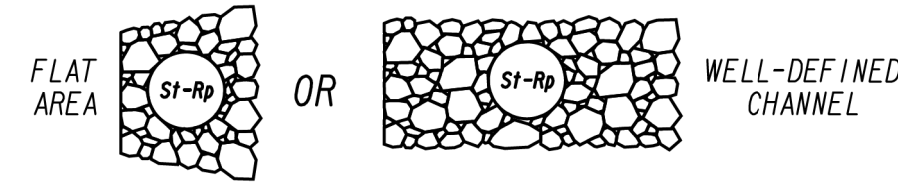
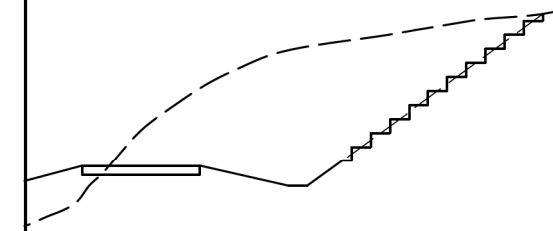
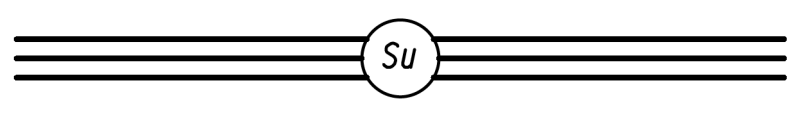
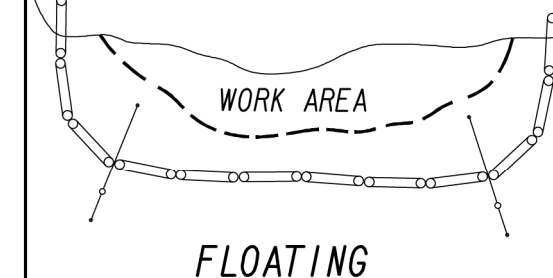

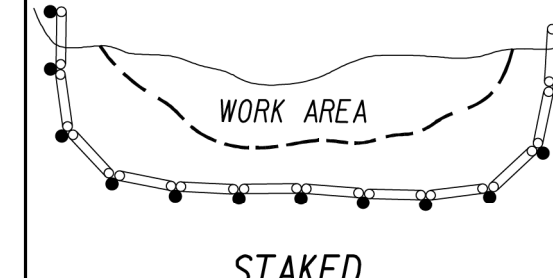

**NOTE:**

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
11/28/2018		SHEET 6 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
			DRAWING No.
			52-0006

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
St	STORM DRAIN OUTLET PROTECTION  GA. STD. 1125 & 2332		A PIPE OR BOX CULVERT OUTLET HEADWALL WITH AN APRON AND DISSIPATOR BLOCKS IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM.  IT IS USED ON THE OUTLET OF ALL BOX CULVERTS AND ON 48" AND LARGER PIPES. MAY BE USED ON INLET FOR FLOWING STREAMS. USE ON SMALL PIPES WHEN OUTLET VELOCITY OF THE 25-YEAR STORM IS 12 fps AND GREATER.
	SYMBOL 		
St-Rp	STORM DRAIN OUTLET PROTECTION (RIP-RAP)  CONSTRUCTION DETAIL D-55 SECTION 603		RIP-RAP OUTLET PROTECTION IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE, CHANNEL, OR STRUCTURE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. THE MINIMUM DESIGN OF RIP-RAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM PEAK FLOW, BUT LARGER STORMS ARE RECOMMENDED.  TYPE-1 RIP-RAP AT A DEPTH OF 36" AND PLACED ON FILTER FABRIC IS PREFERRED FOR ALL d50 <math>\leq 1.2</math> FEET. TYPE-3 RIP-RAP AT A DEPTH OF 18" AND PLACED ON FILTER FABRIC MAY BE USED FOR d50 <math>\leq 0.7</math> FEET.
	PATTERN 		REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR REQUIRED DESIGN DIMENSIONS AND OTHER INFORMATION TO BE INCLUDED IN THE PLANS.
Su	SURFACE ROUGHENING SERRATED SLOPES CONSTRUCTION DETAIL S-7 SECTION 205		PROVIDING A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS, BY OPERATING A CLEATED DOZER ON THE SLOPE IN A VERTICAL DIRECTION. CREATING SERRATED SLOPES IN THE GRADING PROCESS TO CONSTRUCT BENCHES WILL REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION OF WATER.  IN MOST CASES THIS BMP IS NOT REQUIRED TO BE SHOWN ON THE PLANS, BUT REQUIRED TO BE COMPLETED BY THE CONTRACTOR UNDER ALL PROJECTS.  IF SERRATED SLOPES ARE SPECIFIED BY THE SOIL SURVEY, THEN THIS BMP SHALL BE SHOWN ON THE PLANS WHERE SERRATED SLOPES ARE TO BE USED.
	LINE CODE 		
Tc-F	TURBIDITY CURTAIN FLOATING  CONSTRUCTION DETAIL D-51 SECTION 170		A FLOATING TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED WHERE CONSTRUCTION IS REQUIRED IN A LARGE BODY OF WATER SUCH AS LAKES AND RIVERS. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER.  THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs.
	LINE CODE 		IT MAY ALSO BE REFERRED TO AS A FLOATING BOOM, SILT BARRIER, OR SILT CURTAIN.
Tc-S	TURBIDITY CURTAIN STAKED  CONSTRUCTION DETAIL D-51 SECTION 170		A STAKED TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED IN SHALLOW INUNDATED AREAS. IT MAY BE USED TO PROTECT A SMALL STREAM BEING REALIGNED OR RESTORED. IN THIS CASE, CURTAIN SHOULD EXTEND TO BOTTOM OF STREAMBED. THE HEIGHT SHOULD BE LIMITED TO 5 FEET UNLESS DIRECTED AND EXTEND 2 FEET ABOVE NORMAL WATER ELEVATION. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER.  THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs.
	LINE CODE 		IT MAY BE REFERRED TO AS A SILT BARRIER OR SILT CURTAIN.

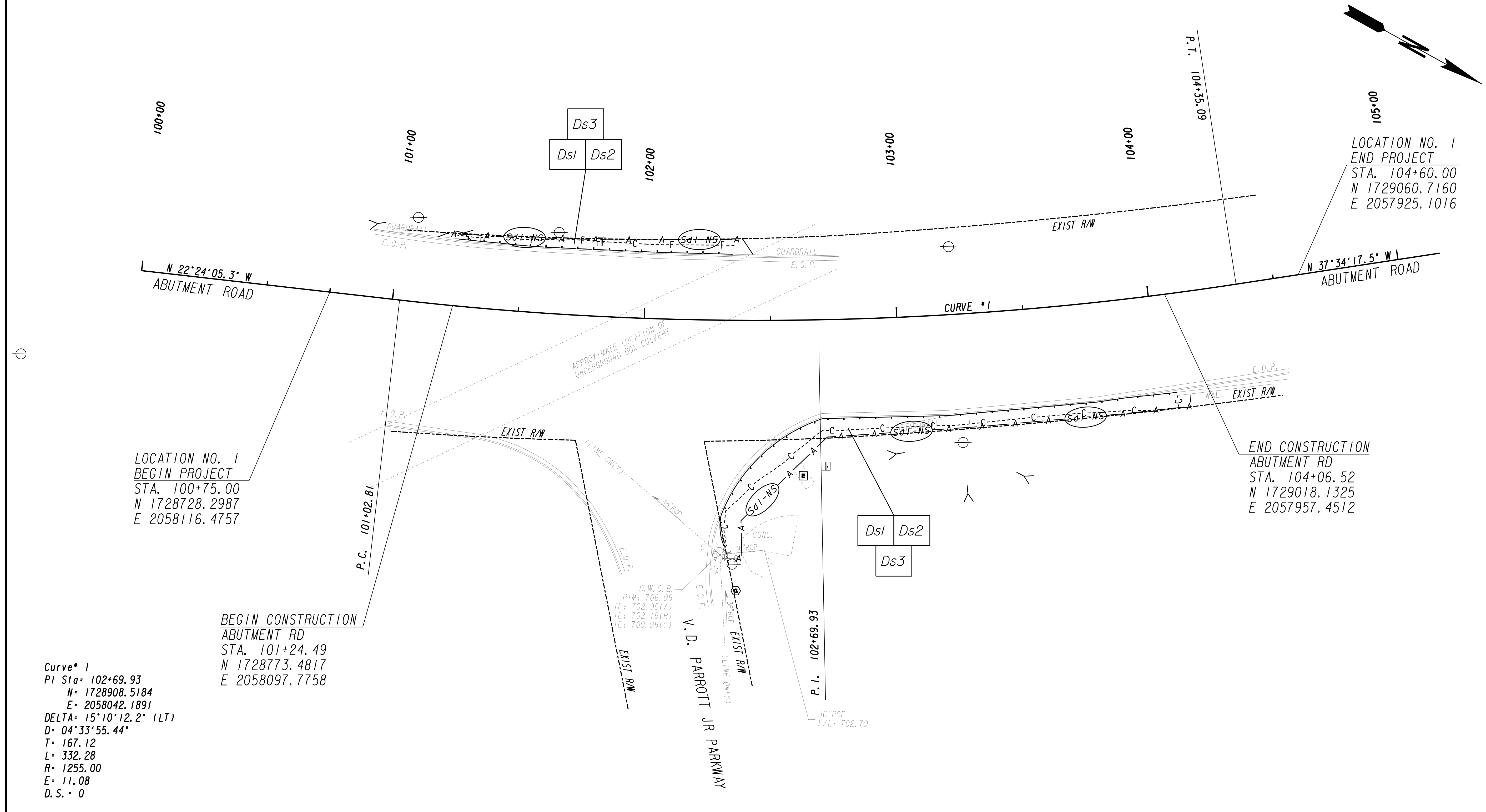
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION

- NOTE:**
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
  - FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 7 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No.	
		52-0007	



LOCATION NO. 1  
 BEGIN PROJECT  
 STA. 100+75.00  
 N 1728728.2987  
 E 2058116.4757

LOCATION NO. 1  
 END PROJECT  
 STA. 104+60.00  
 N 1729060.7160  
 E 2057925.1016

BEGIN CONSTRUCTION  
 ABUTMENT RD  
 STA. 101+24.49  
 N 1728773.4817  
 E 2058097.7758

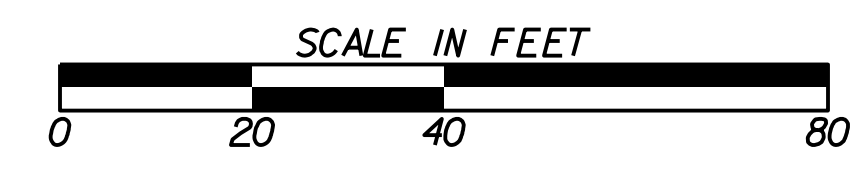
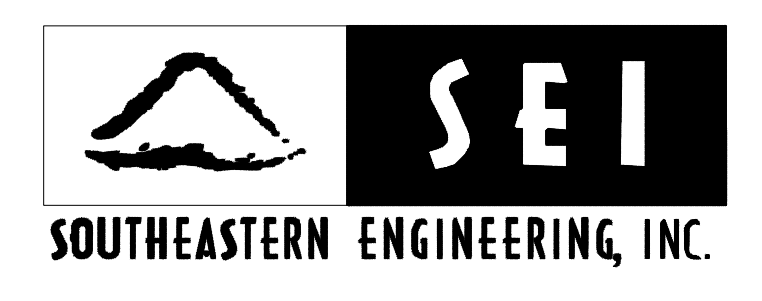
END CONSTRUCTION  
 ABUTMENT RD  
 STA. 104+06.52  
 N 1729018.1325  
 E 2057957.4512

Curve # 1  
 PI Sta. 102+69.93  
 N = 1728908.5184  
 E = 2058042.1891  
 DELTA = 15°10'12.2" (LT)  
 D = 04°33'55.44"  
 T = 167.12  
 L = 332.28  
 R = 1255.00  
 E = 11.08  
 D.S. = 0

D.W.C.B.  
 RIM: 706.95  
 (E: 702.95(A)  
 E: 702.15(B)  
 E: 700.95(C)  
 V.D. PARROTT JR PARKWAY  
 36" RCP  
 F/L: 702.79

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	-C-F-
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Hatched Box]

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
REQ'D LIMIT OF ACCESS	---
REQ'D LIMIT OF ACCESS & R/W	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



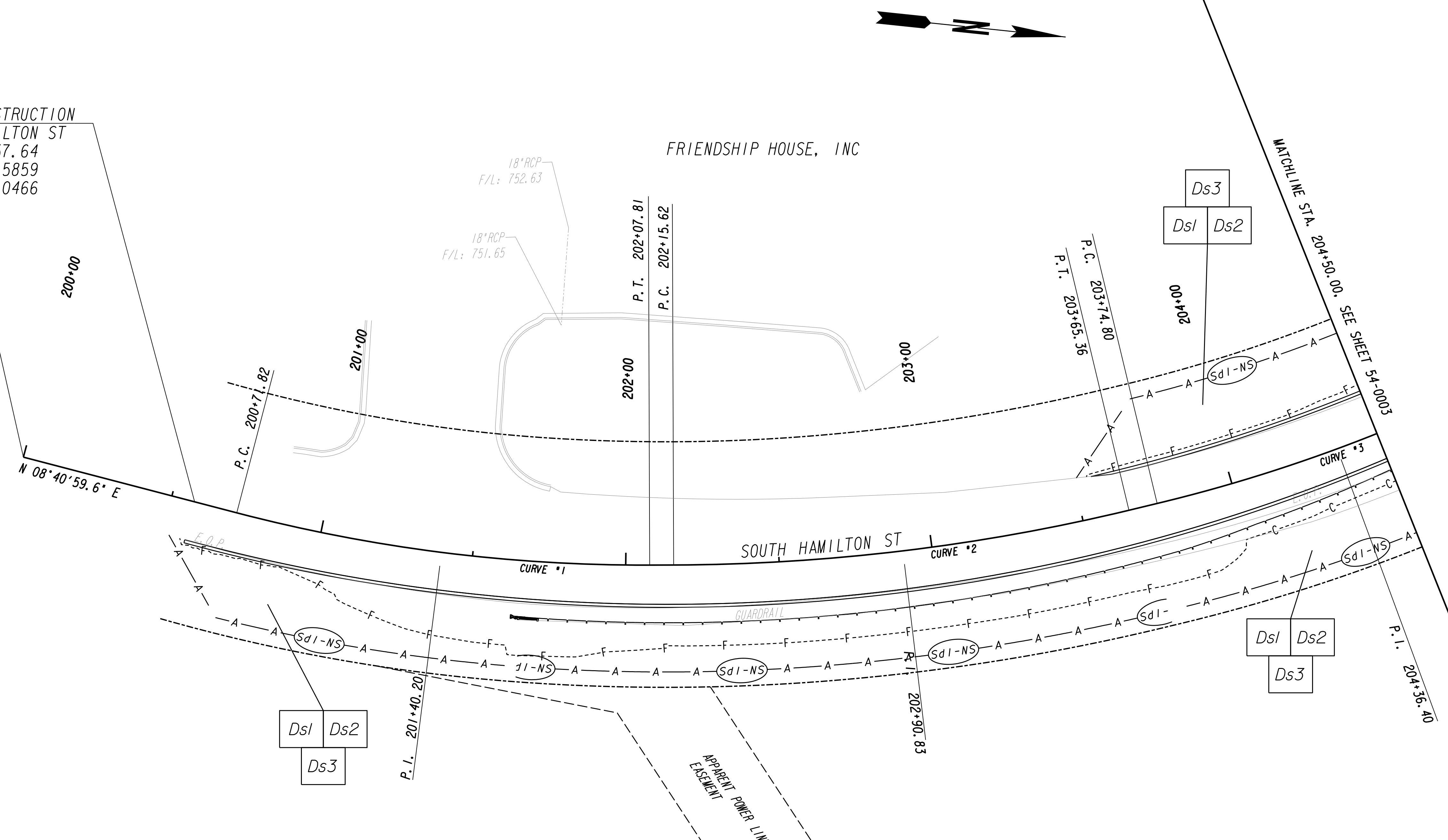
REVISION DATES	

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**BMP LOCATION DETAILS**  
 LOCATION NO. 1  
 ABUTMENT ROAD GUARDRAIL  
 DRAWING No. 54-0001

BEGIN CONSTRUCTION  
 SOUTH HAMILTON ST  
 STA. 200+57.64  
 N 1728427.5859  
 E 2057833.0466

LOCATION NO. 2  
 BEGIN PROJECT  
 SOUTH HAMILTON ST  
 STA. 200+00.00  
 N 1734976.2175  
 E 2048533.8415

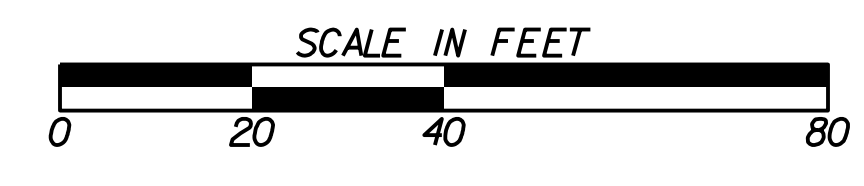
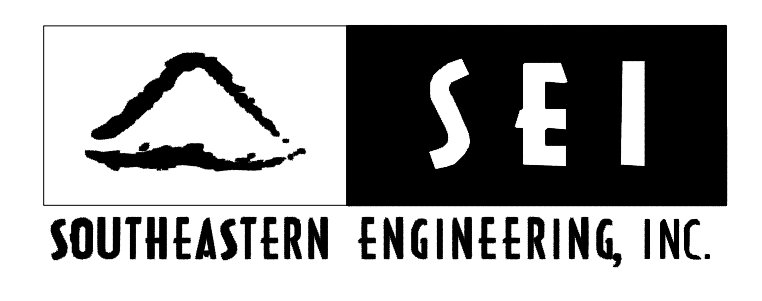
FRIENDSHIP HOUSE, INC



Curve # 1	Curve # 2	Curve # 3
PI Sta= 201+40.20	PI Sta= 202+90.83	PI Sta= 204+36.40
N= 1728509.1958	N= 1728659.7152	N= 1728797.6117
E= 2057845.5102	E= 2057829.2694	E= 2057780.5466
DELTA= 14°50'29.5" (LT)	DELTA= 13°18'05.2" (LT)	DELTA= 13°30'45.4" (LT)
D= 10°54'48.53"	D= 08°52'59.04"	D= 11°01'06.31"
T= 68.38	T= 75.21	T= 61.60
L= 135.99	L= 149.74	L= 122.64
R= 525.00	R= 645.00	R= 520.00
E= 4.43	E= 4.37	E= 3.64
D.S.= 0	D.S.= 0	D.S.= 0

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
REQ'D LIMIT OF ACCESS	---
REQ'D LIMIT OF ACCESS & R/W	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



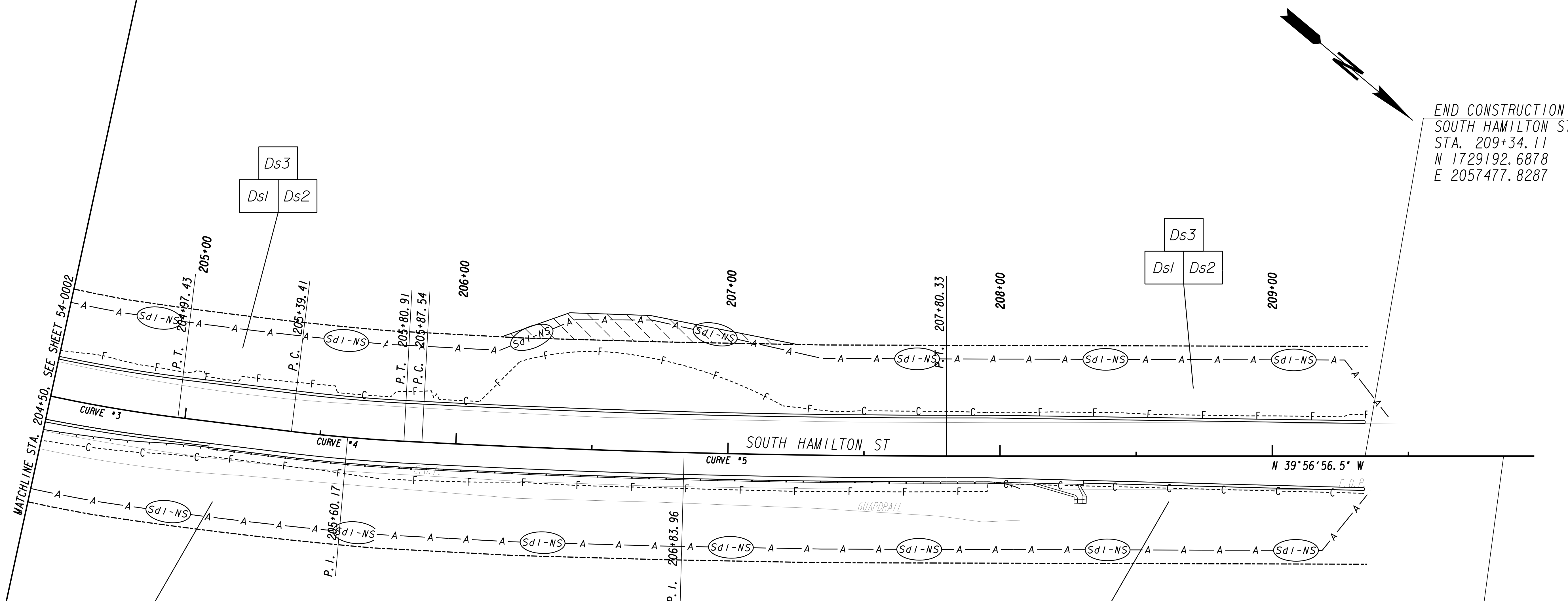
REVISION DATES

CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT

OFFICE:  
**BMP LOCATION DETAILS**

LOCATION NO. 2  
 SOUTH HAMILTON ST GUARDRAIL

DRAWING No.  
**54-0002**

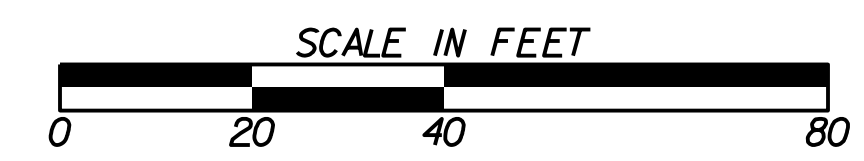
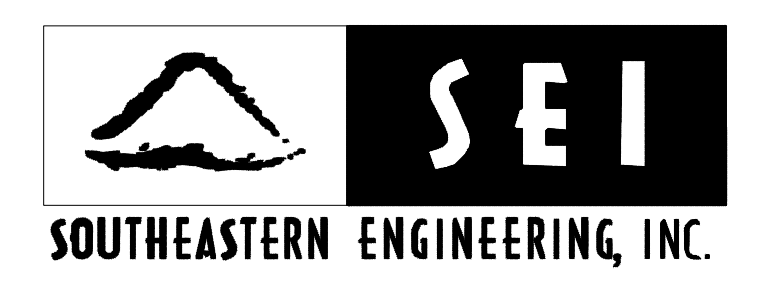


END CONSTRUCTION  
 SOUTH HAMILTON ST  
 STA. 209+34.11  
 N 1729192.6878  
 E 2057477.8287

LOCATION NO. 2  
 END PROJECT  
 SOUTH HAMILTON ST  
 STA. 209+85.00  
 N 1729231.7006  
 E 2057445.1521

Curve #	PI Sta	N	E	DELTA	D	T	L	R	E	D.S.
Curve* 3	204+36.40	1728797.6117	2057780.5466	13°30'45.4" (LT)	11°01'06.31"	61.60	122.64	520.00	3.64	0
Curve* 4	205+60.17	1728901.9220	2057712.8782	03°57'45.6" (LT)	09°32'57.47"	20.76	41.50	600.00	0.36	0
Curve* 5	206+83.96	1729000.8814	2057638.4828	03°00'50.4" (LT)	01°33'47.96"	96.42	192.79	3665.00	1.27	0

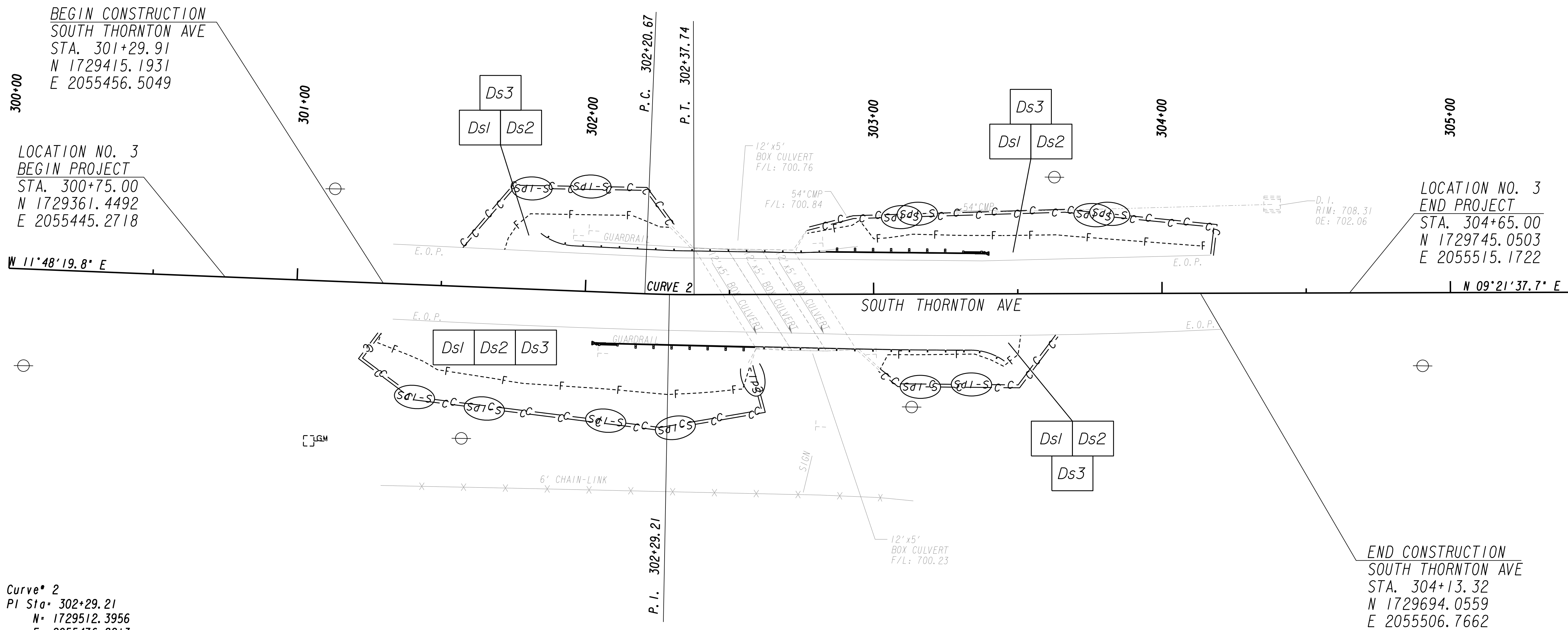
PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES		BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA REQ'D LIMIT OF ACCESS REQ'D LIMIT OF ACCESS & R/W ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)
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REVISION DATES

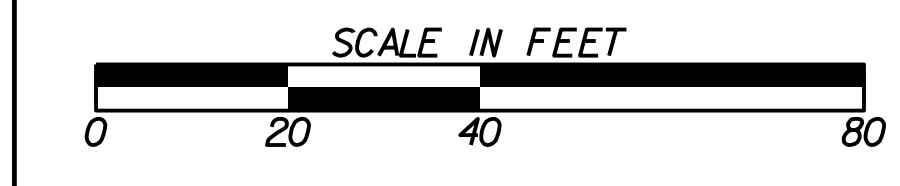
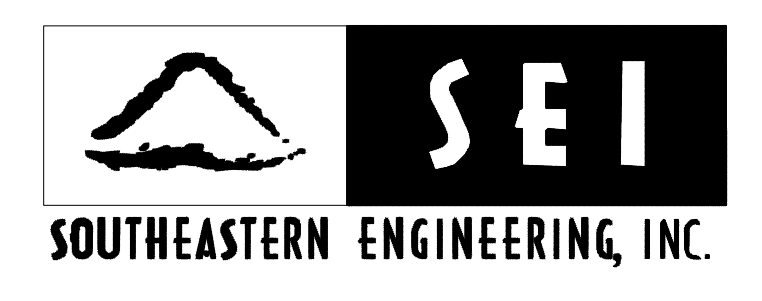
CITY OF DALTON  
 PUBLIC WORKS DEPARTMENT  
 OFFICE:  
**BMP LOCATION DETAILS**  
 LOCATION NO. 2  
 SOUTH HAMILTON ST GUARDRAIL

DRAWING No.  
**54-0003**



PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
REQ'D LIMIT OF ACCESS	---
REQ'D LIMIT OF ACCESS & R/W	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



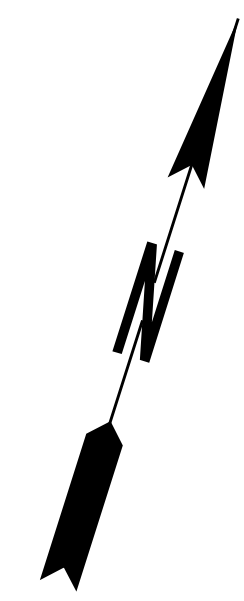
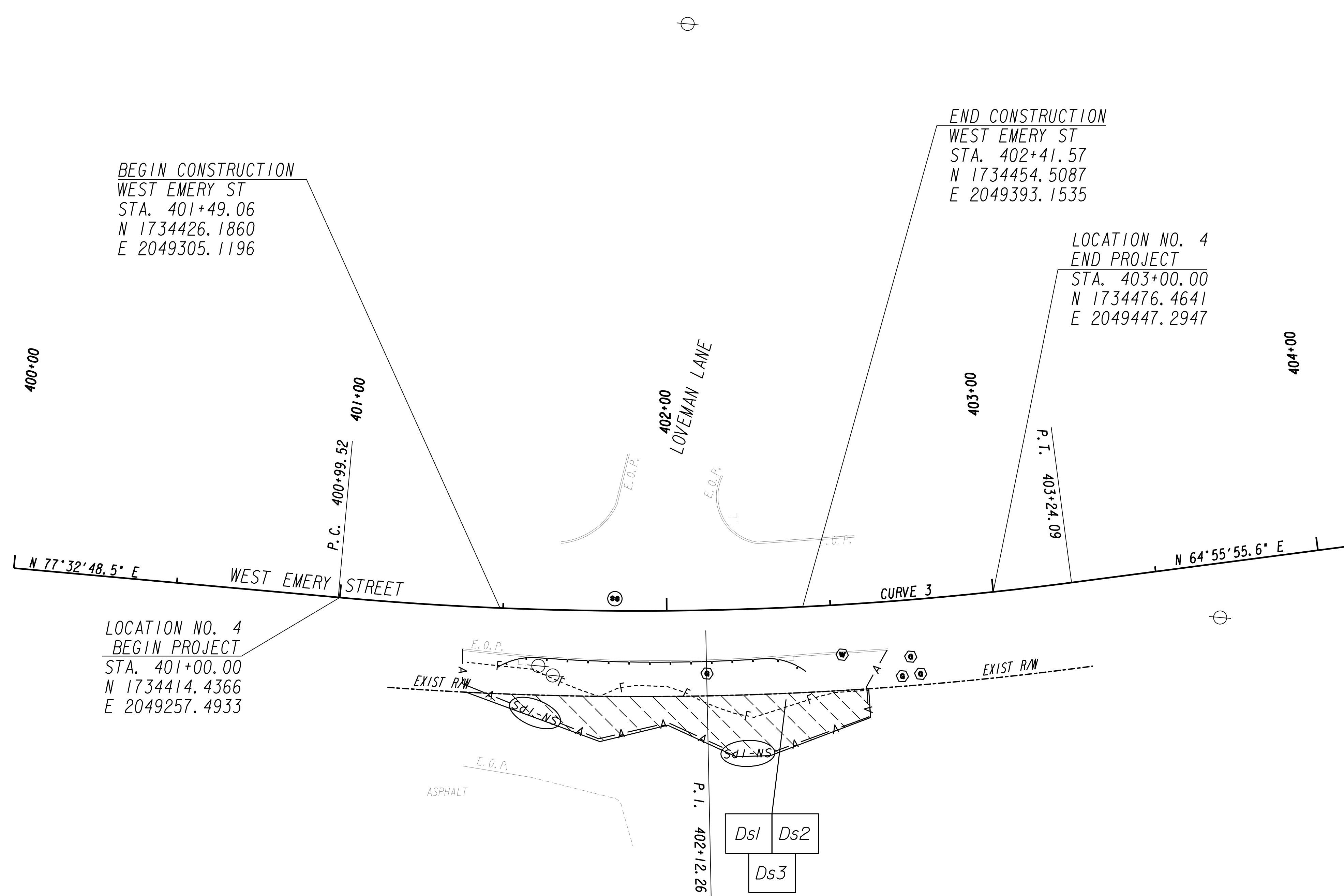
REVISION DATES	

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE:  
**BMP LOCATION DETAILS**

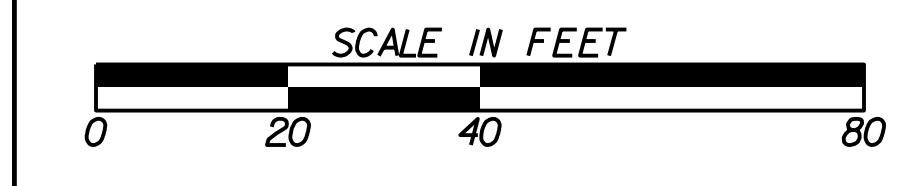
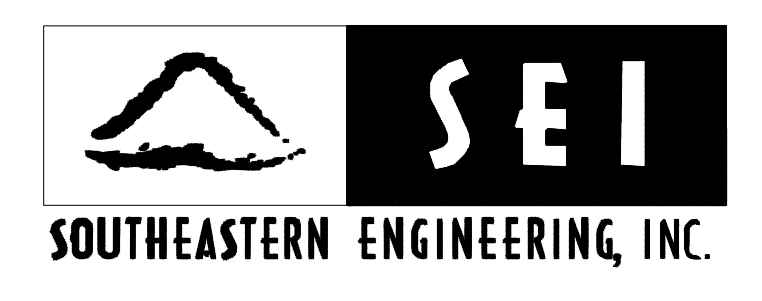
LOCATION 3  
SOUTH THORNTON AVE GUARDRAIL

DRAWING No.  
**54-0004**



PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES	
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BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA REQ'D LIMIT OF ACCESS REQ'D LIMIT OF ACCESS & R/W ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	
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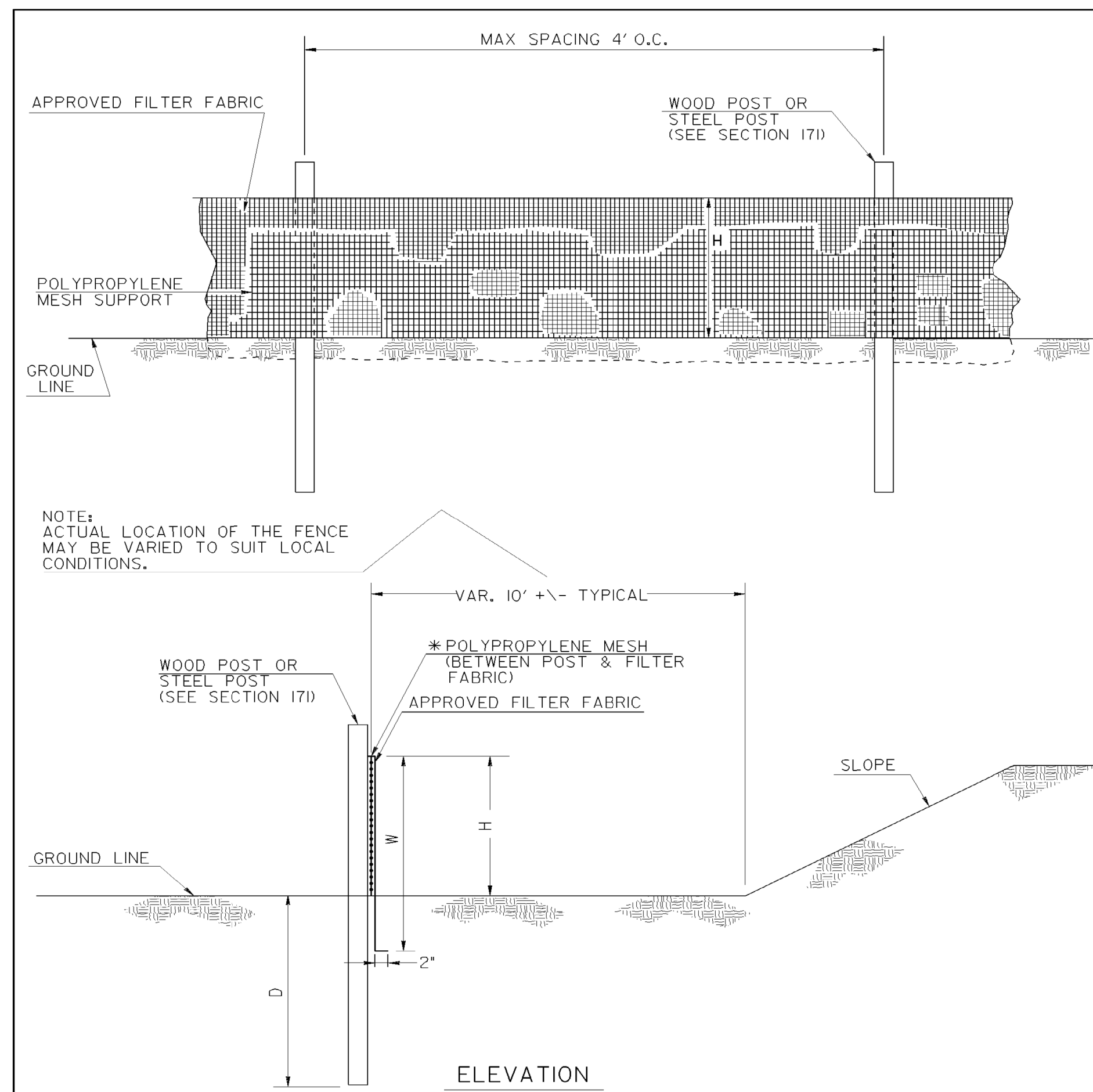
REVISION DATES		

CITY OF DALTON  
PUBLIC WORKS DEPARTMENT

OFFICE: **BMP LOCATION DETAILS**

LOCATION NO. 4  
WEST EMERY ST GUARDRAIL

DRAWING No.	54-0005
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SINGLE ROW TYPE C SILT FENCE WITH POLYPROPYLENE MESH SUPPORT

OMITTED

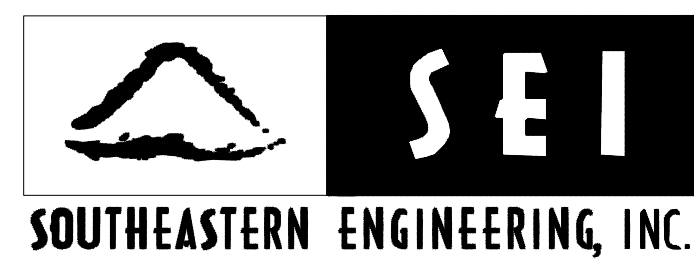
OMITTED

FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
<i>OMITTED</i>					
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

NOTES:

1. WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST 1/2 INCHES LONG AND A CROWN AT LEAST 3/4 INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, 1 INCH LONG, WITH BUTTON HEADS AT LEAST 3/4 INCHES WIDE.
2. NAILS OR STAPLES SHALL BE EVENLY PLACED WITH AT LEAST 5 PER POST FOR TYPE A FENCE AND 4 PER POST FOR TYPE C FENCE.
3. THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAUGE.
4. TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
5. SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
6. SEE SECTION 894 FOR FENCING SPECIFICATIONS.
7. SEE QPL-36 FOR A LIST APPROVED SILT FENCE FABRIC.
8. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
	REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE
	BY	NO SCALE REV. AND REDRAWN JAN. 2011
		NUMBER D-24A (SHEET 1 OF 4)



SOUTHEASTERN ENGINEERING, INC.

REVISION DATES		

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

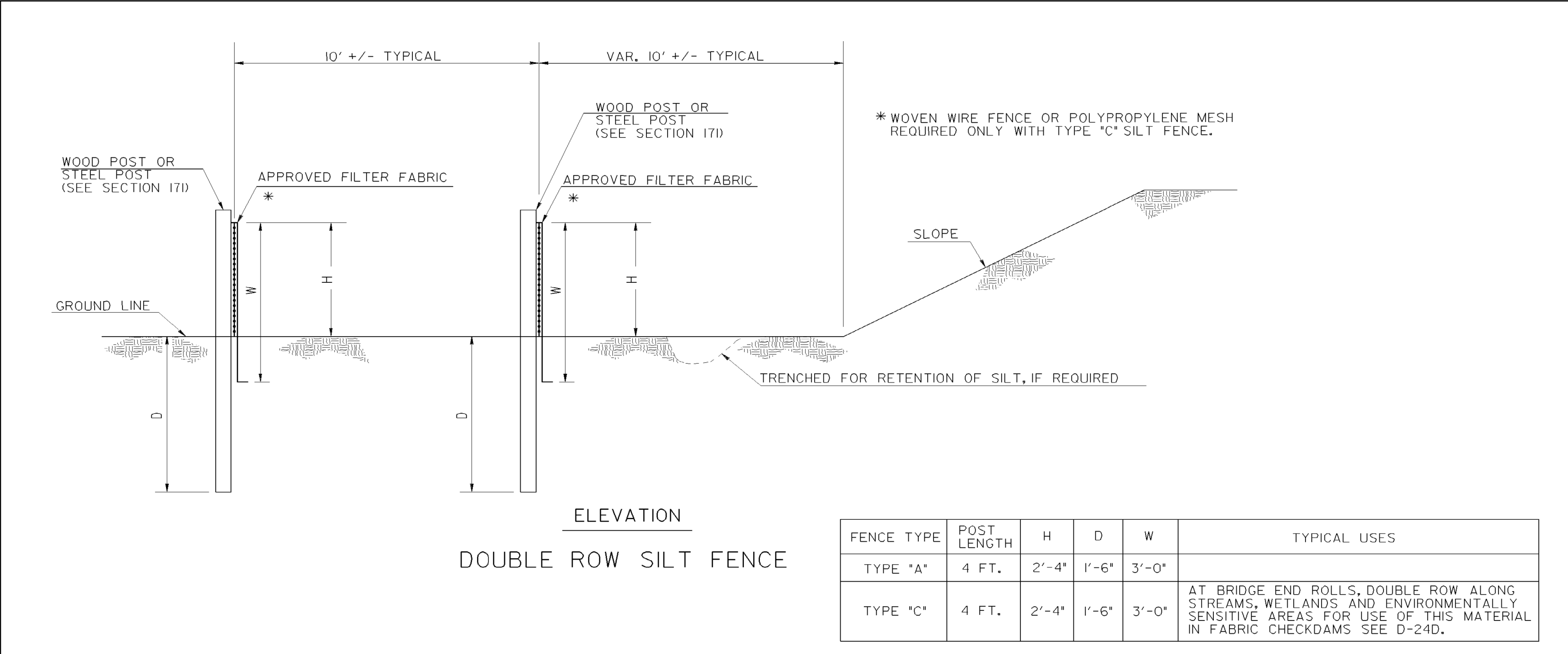
OFFICE:

**EROSION CONTROL  
CONSTRUCTION DETAILS**

DRAWING No.  
**56-0001**

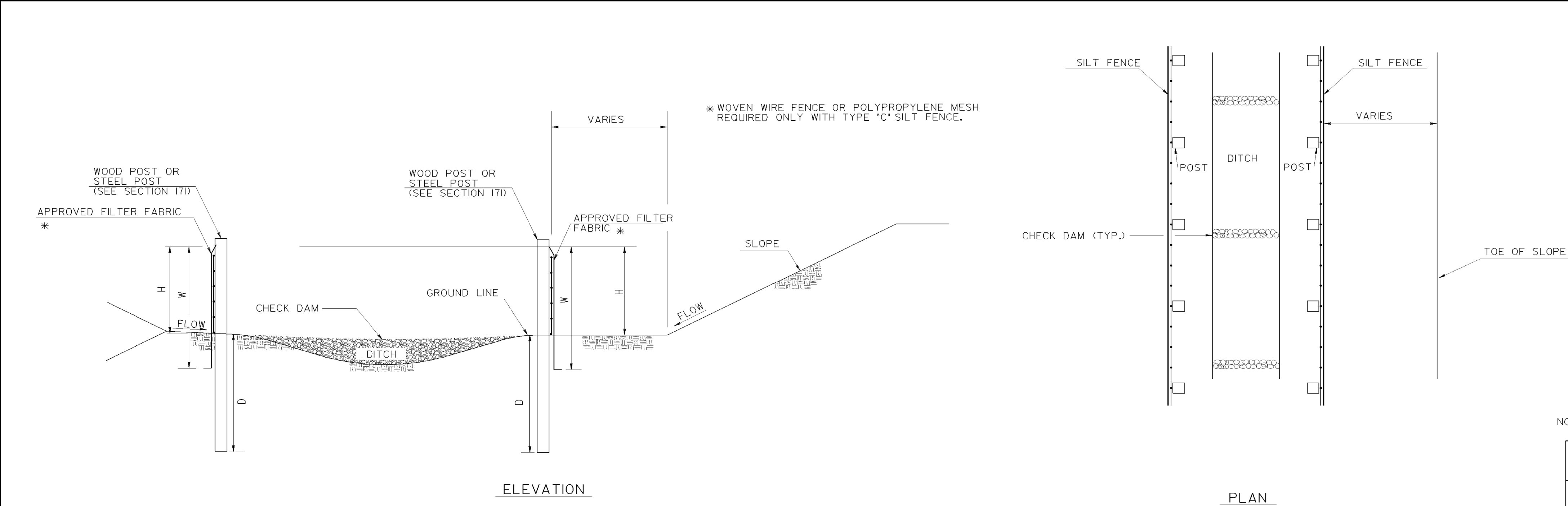


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STATE PROJECT NUMBER SHEET NO. TOTAL SHEETS

OMITTED

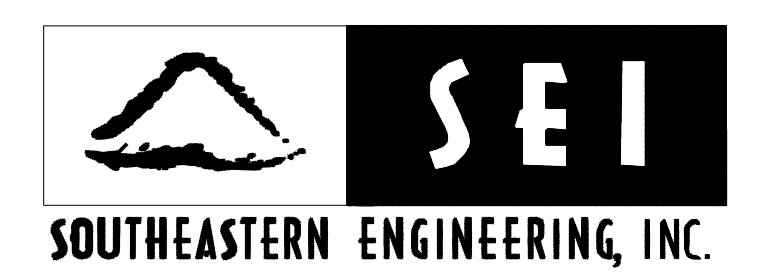


FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	

NOTE: TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE BERM DITCH, INSTALLATION, BRUSH BARRIER
BY	NO SCALE REV. AND REDRAWN JAN. 2011
	NUMBER D-24B (SHEET 2 OF 4)

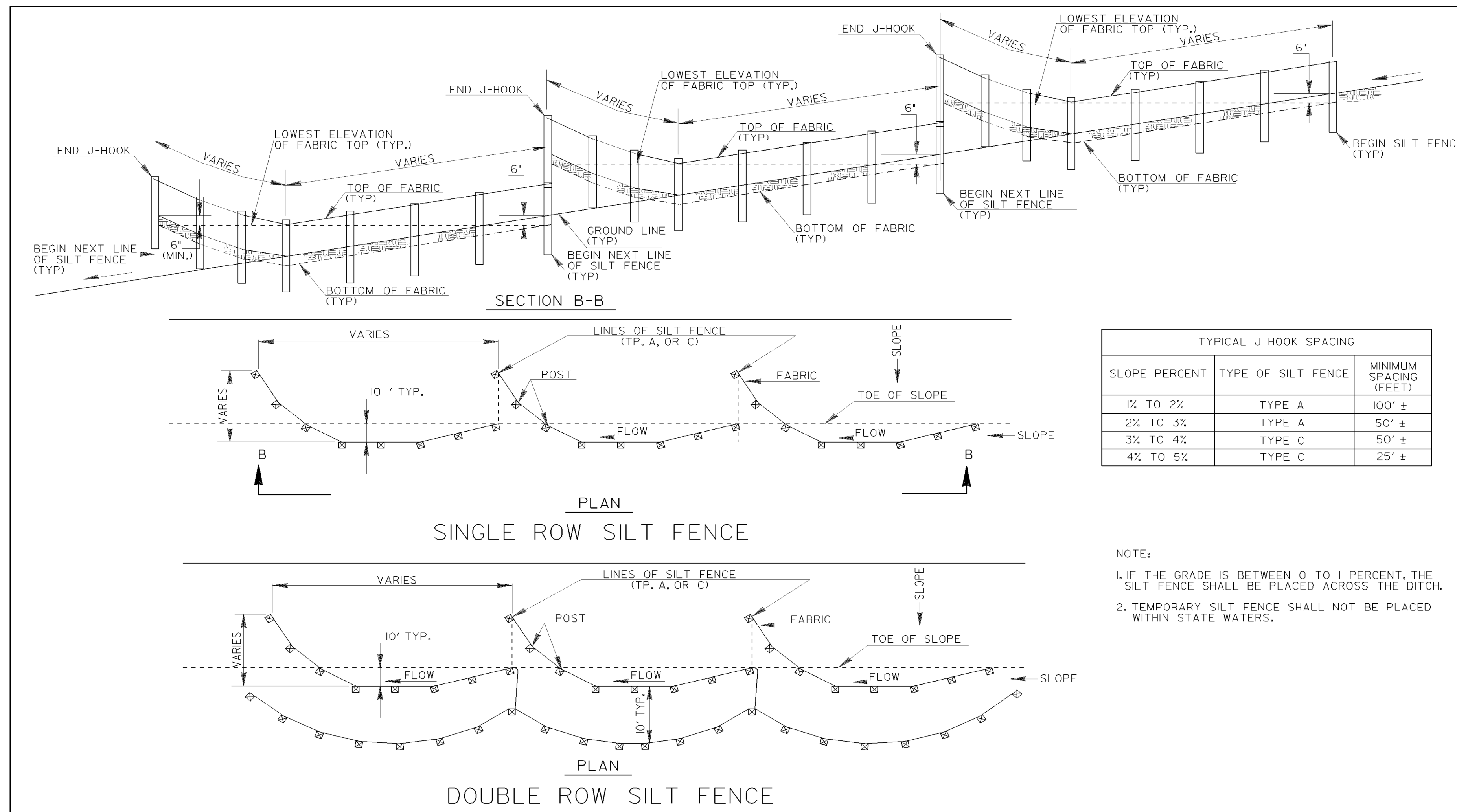
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REVISION DATES

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE:  
**EROSION CONTROL  
CONSTRUCTION DETAILS**

DRAWING No.  
**56-0002**



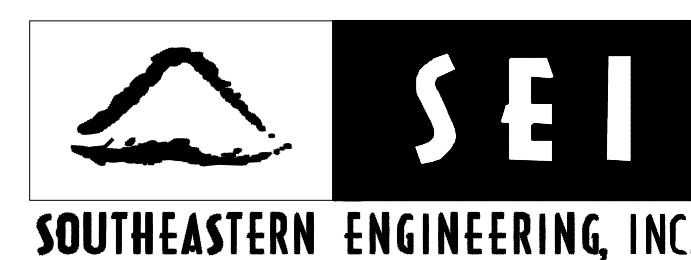
SLOPE PERCENT	TYPE OF SILT FENCE	MINIMUM SPACING (FEET)
1% TO 2%	TYPE A	100' ±
2% TO 3%	TYPE A	50' ±
3% TO 4%	TYPE C	50' ±
4% TO 5%	TYPE C	25' ±

NOTE:  
1. IF THE GRADE IS BETWEEN 0 TO 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.  
2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

OMITTED

OMITTED

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE J-HOOK, INLET SEDIMENT TRAPS
BY	NO SCALE JANUARY 2011 NUMBER D-24C (SHEET 3 OF 4)



SOUTHEASTERN ENGINEERING, INC.

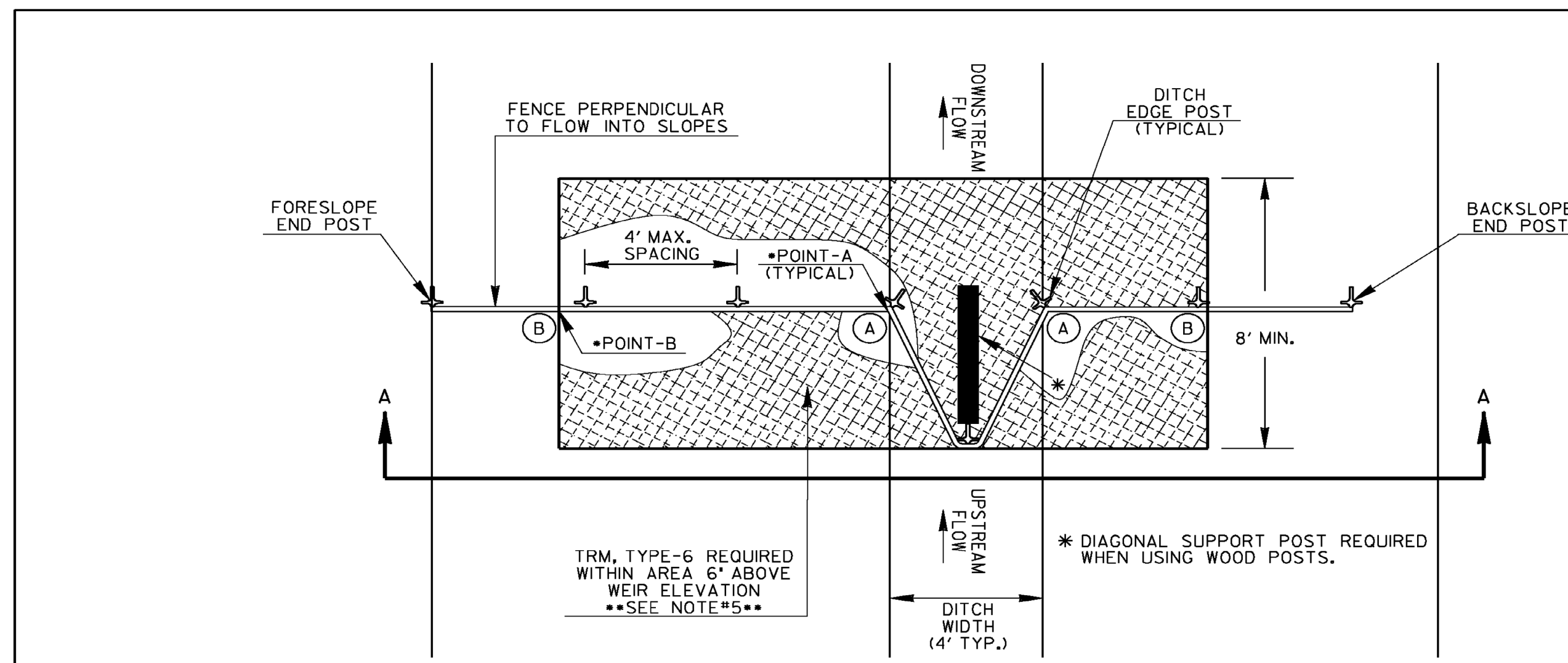
REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE:

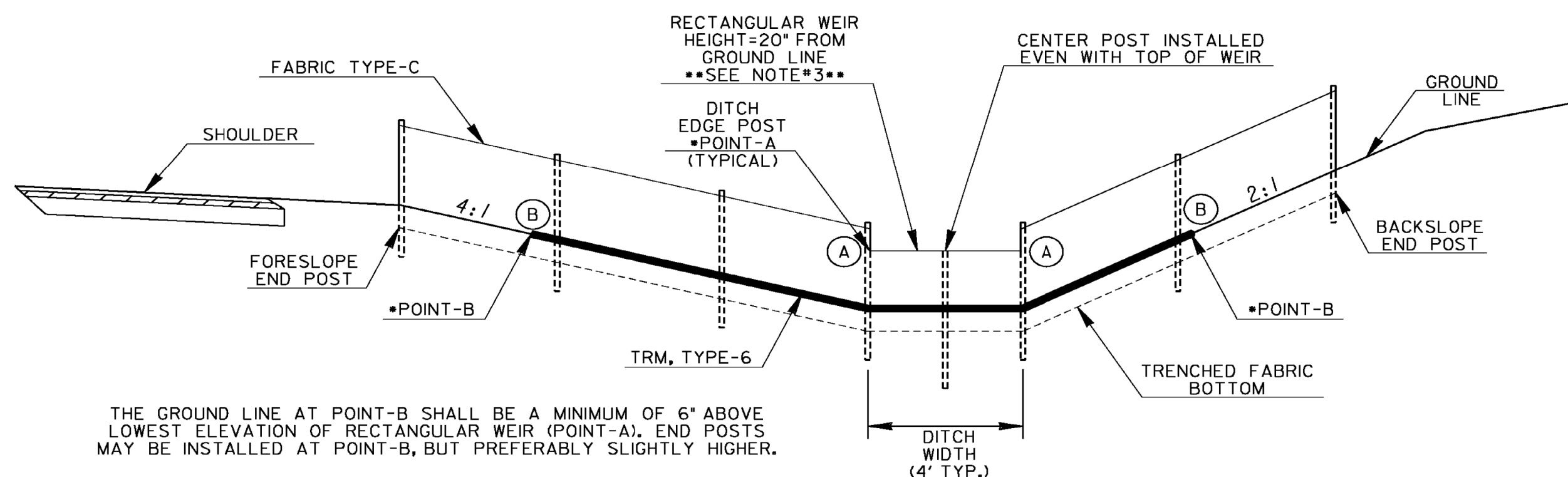
EROSION CONTROL  
CONSTRUCTION DETAILS

DRAWING No.  
56-0003



PLAN VIEW

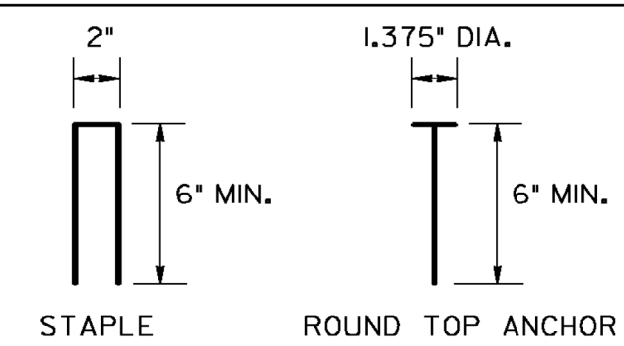
GRADE OF DITCH	MINIMUM SPACING (FEET)
LESS THAN 1/2%	100' ±
1/2% TO 3%	75' ±
3% TO 6%	50' ±
6% TO 8%	25' ±



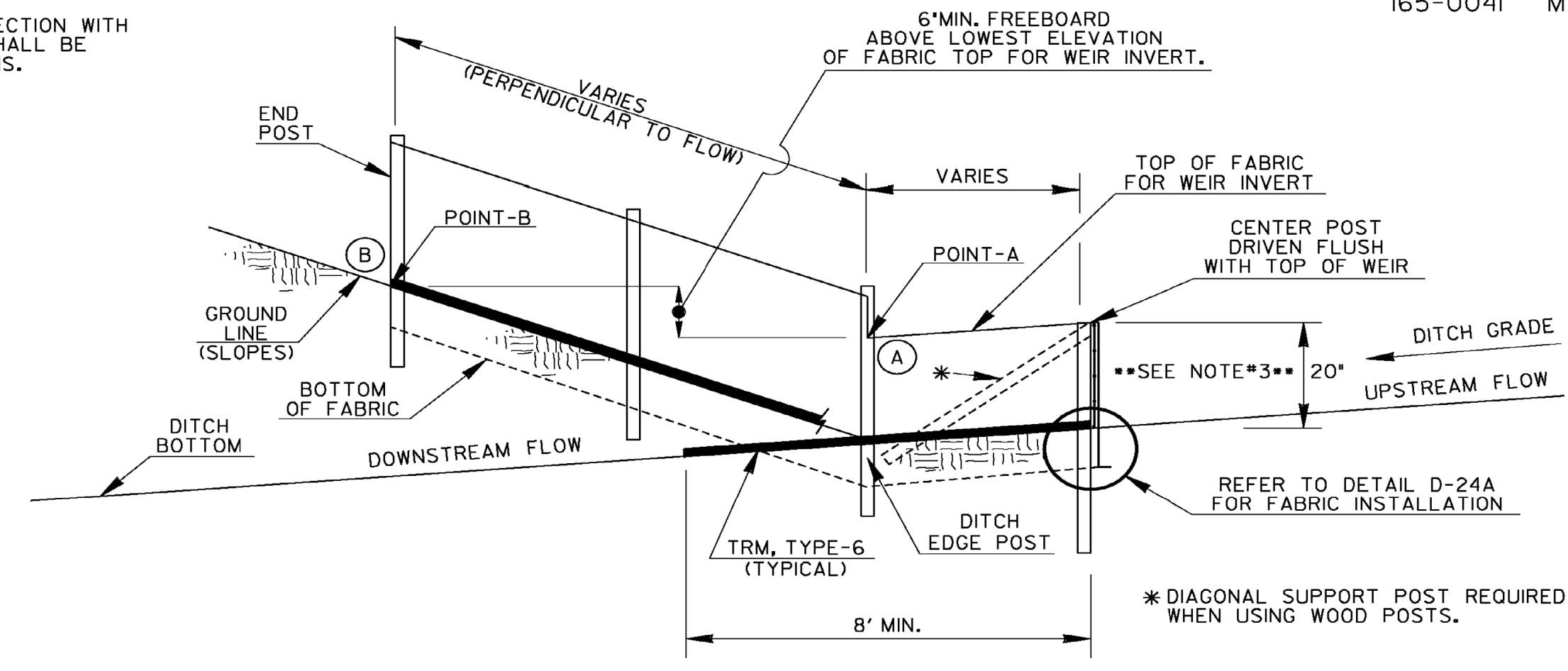
SECTION A-A

NOTE: CROSS-SECTION SHOWN IS AN EXAMPLE OF A TYPICAL CUT SECTION WITH A 4-FT FLAT BOTTOM DITCH. ACTUAL FABRIC CHECK DAMS SHALL BE INSTALLED SIMILARLY ACCORDING TO ROADWAY CROSS-SECTIONS.

TURF REINFORCEMENT MATTING ANCHOR



NOTE: TURF REINFORCEMENT MATTING SHALL BE ANCHORED WITH 8-GAUGE METAL STAPLES OR ROUND TOP ANCHORS. ANCHORS SHALL BE LONG ENOUGH TO PROVIDE SUFFICIENT GROUND PENETRATION TO RESIST PULL OUT.



NOTES:

- FABRIC CHECK DAMS MAY BE USED FOR FLOWS UP TO 2.0-CFS. A ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM POINT FOR FLOWS GREATER THAN 2.0-CFS.
- FABRIC CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STATE WATERS.
- FABRIC CHECK DAMS MAY BE USED IN DITCHES WITH DEPTHS AT LEAST 26-IN. IF DITCH DEPTH IS LESS THAN 26-IN, THE WEIR INVERT MAY BE LOWERED SLIGHTLY IN THE FIELD TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A OR TO MATCH SPACING OF WIRE SUPPORT. THE WEIR HEIGHT SHALL BE NO LESS THAN 15-IN. THE DESIGNER SHALL CONSIDER OTHER APPROPRIATE BMPs FOR CONCENTRATED FLOW FOR DITCH DEPTHS LESS THAN 26-IN.
- THE FOLLOWING STEPS ARE RECOMMENDED FOR PROPER FABRIC CHECK DAM INSTALLATION:
  - DETERMINE DITCH CENTERLINE AND USE A LINE LEVEL OR OTHER MEANS TO FIND POINT-B WITHIN THE DITCH FORESLOPE AND BACKSLOPE TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A.
  - CREATE TRENCH 6-IN BELOW DITCH GRADE TO FIT LAYOUT FROM STEP-A WITH MINIMAL SOIL DISTURBANCE.
  - LAYOUT TURF REINFORCEMENT MATTING (TRM), TYPE-6 TO PROVIDE PROTECTION A MINIMUM LENGTH OF 8-FT DOWNSTREAM OF CENTER POST TO FUNCTION AS A SPLASH PAD TO PREVENT SCOURING. ADDITIONAL NECESSARY TRM SHALL BE OVERLAPPED 3-FT. THE WIDTH SHALL BE THE DISTANCE BETWEEN POINT-B ON THE DITCH FORESLOPE AND POINT-B ON BACKSLOPE.
  - INSTALL FENCE POSTS THROUGH TRM WITHIN TRENCH. CENTER POST AND POSTS WITHIN WEIR AREA SHALL BE INSTALLED FLUSH WITH WEIR. CUT TRM WITHIN TRENCH FOLLOWING CHECK DAM LAYOUT AND SAVE UPSTREAM PORTION OF TRM FOR FURTHER USE.
  - PROPERLY INSTALL TYPE-C SILT FENCE. TRENCH BACKFILL SHALL BE COMPACTED WITH A HAND TAMPER, JUMPING JACK COMPACTOR, OR PLATE COMPACTOR TO PREVENT UNDERMINING.
  - INSTALL PREVIOUSLY CUT TRM FROM STEP-D UPSTREAM AGAINST CHECK DAM. INSTALLING UPSTREAM AND DOWNSTREAM TRM ACCORDING TO DETAIL D-35 FOR THIS TEMPORARY APPLICATION IS NOT REQUIRED. HOWEVER, TRM SHALL HAVE PROPER CONTACT WITH GROUND SURFACE, ANCHORED 6-IN MAXIMUM SPACING ALONG THE EDGES, AND ADEQUATELY WITHIN THE MATTED AREA.
- TEMPORARY INSTALLATION OF TRM WITH FABRIC CHECK DAMS SHALL BE INCLUDED IN THE LINEAR COST OF THE CONSTRUCTION, REMOVAL, AND MAINTENANCE OF EACH FABRIC CHECK DAM. NO ADDITIONAL PAYMENT WILL BE MADE.

PAY ITEMS:

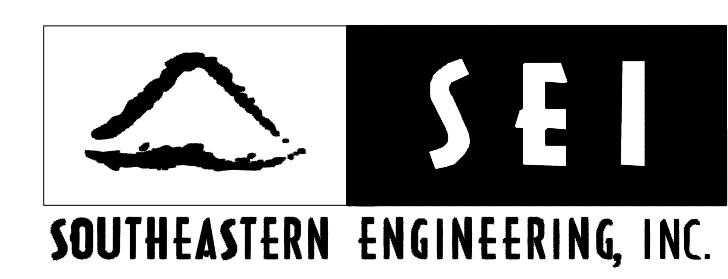
- 163-0528 CONSTRUCT & REMOVE FABRIC CHECK DAM, TYPE-C SILT FENCE (LF)
- 165-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAILS TEMPORARY SILT FENCE FABRIC CHECK DAM	
BY		NO SCALE REV. AND REDRAWN, JULY 2015	
		NUMBER D-24D (SHEET 4 OF 4)	

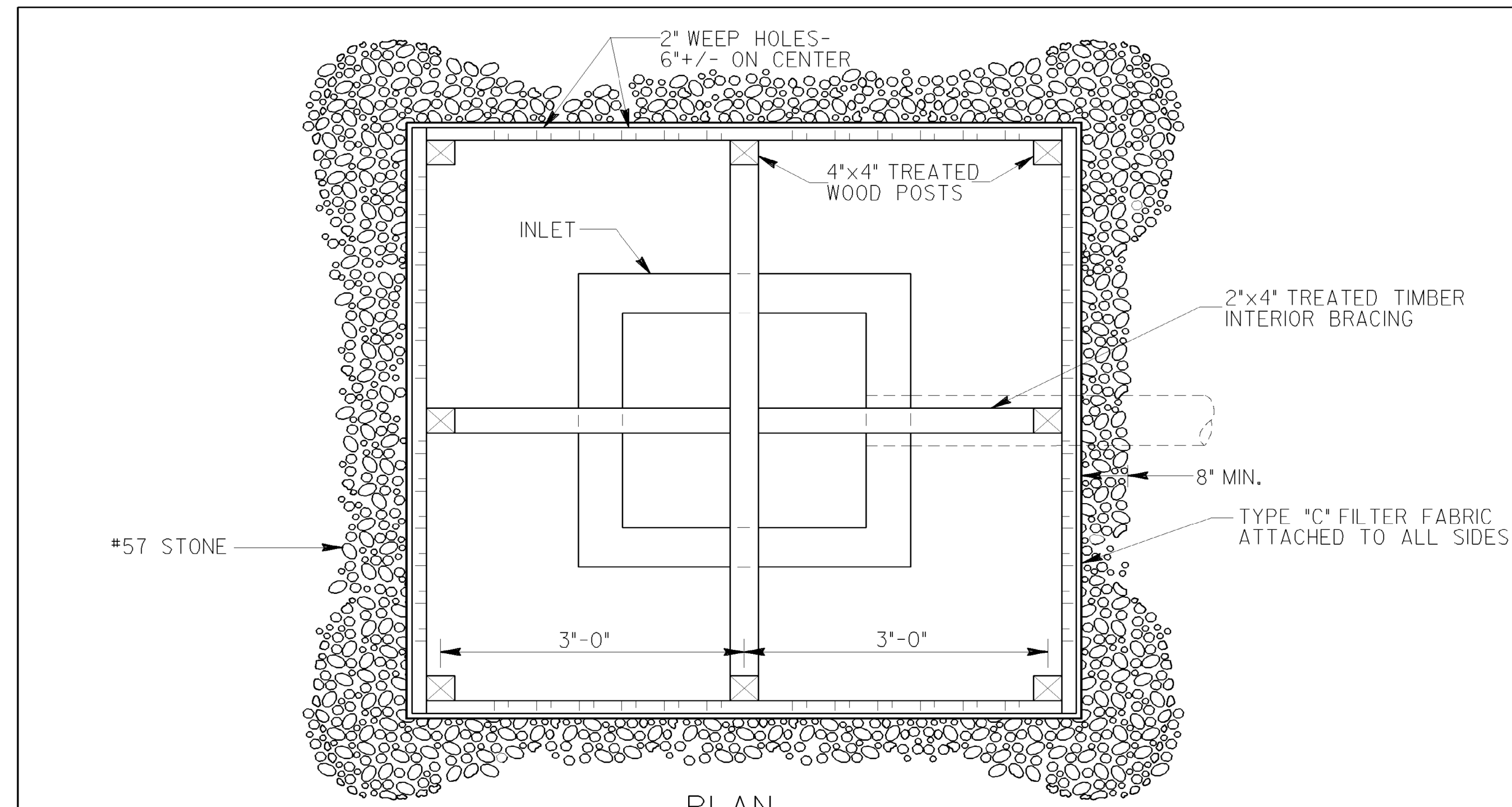
REVISION DATES


STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION

OFFICE:  
**EROSION CONTROL  
CONSTRUCTION DETAILS**



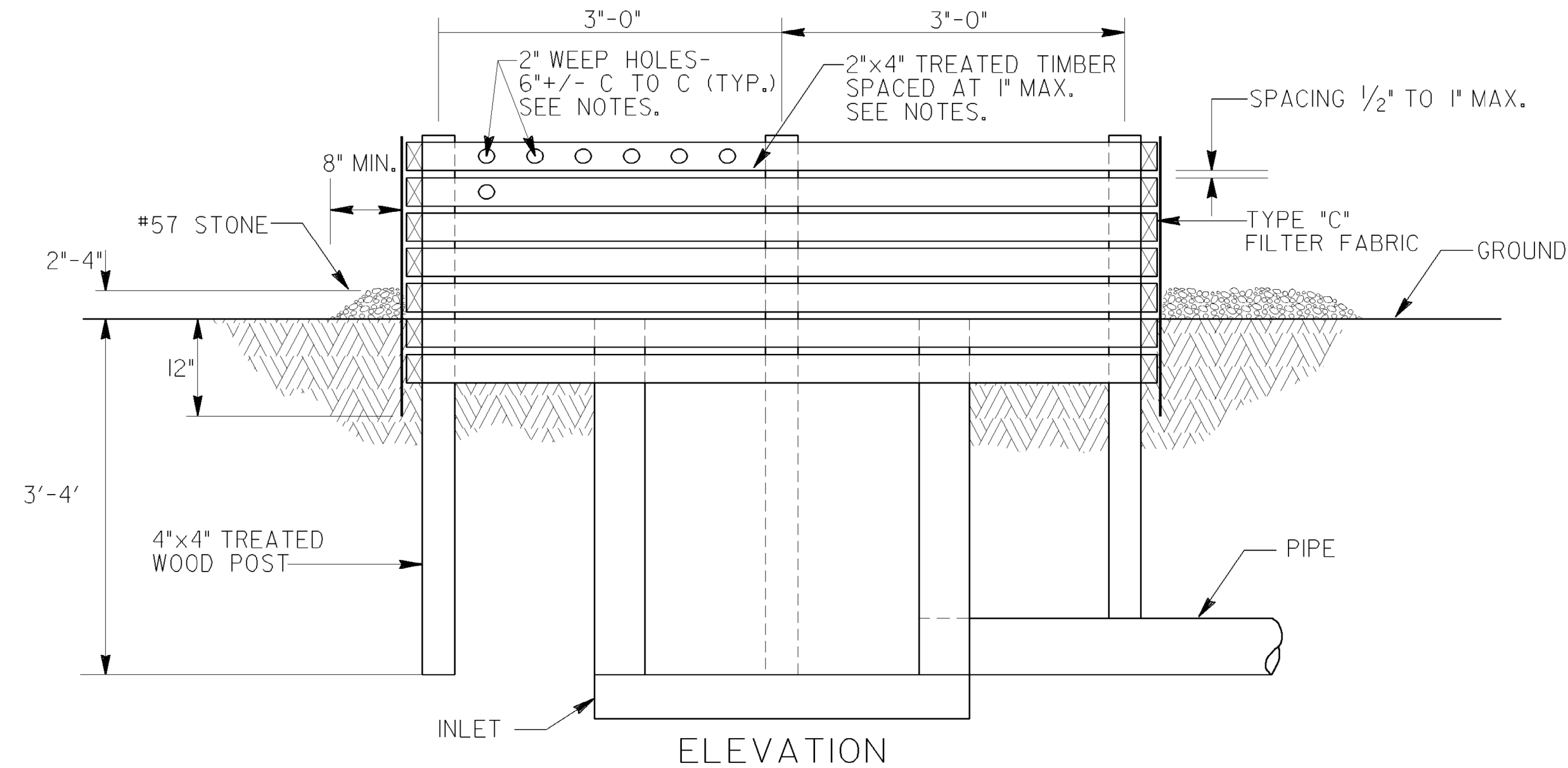
DRAWING No.  
**56-0004**



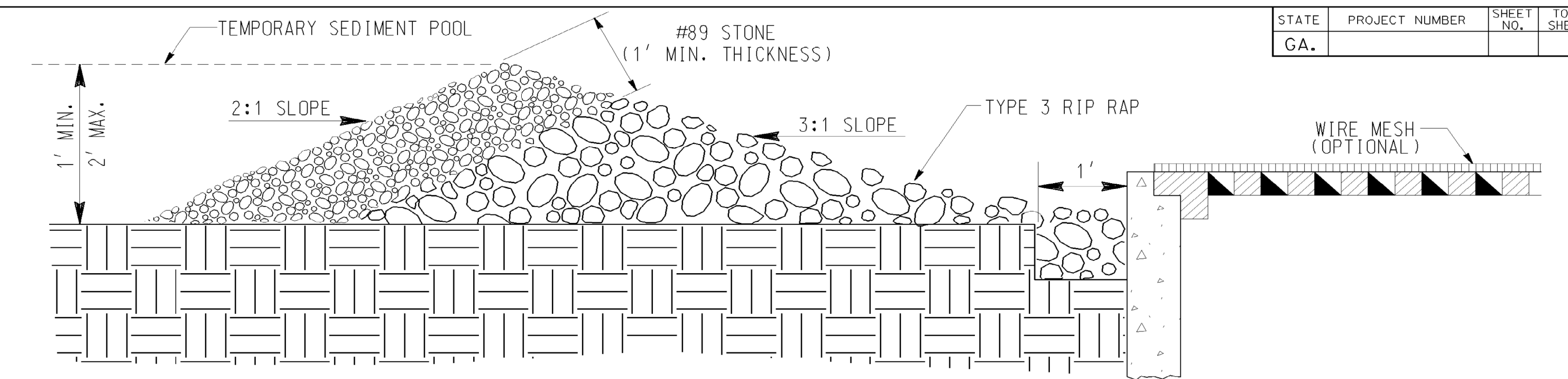
NOTES:

BAFFLE BOX SHALL BE CONSTRUCTED OF 2"x4" TREATED TIMBER SPACED A MAXIMUM OF 1' APART OR OF PLYWOOD WITH WEEP HOLES 2" IN DIAMETER PLACED APPROXIMATELY 6" ON CENTER VERTICALLY AND HORIZONTALLY.

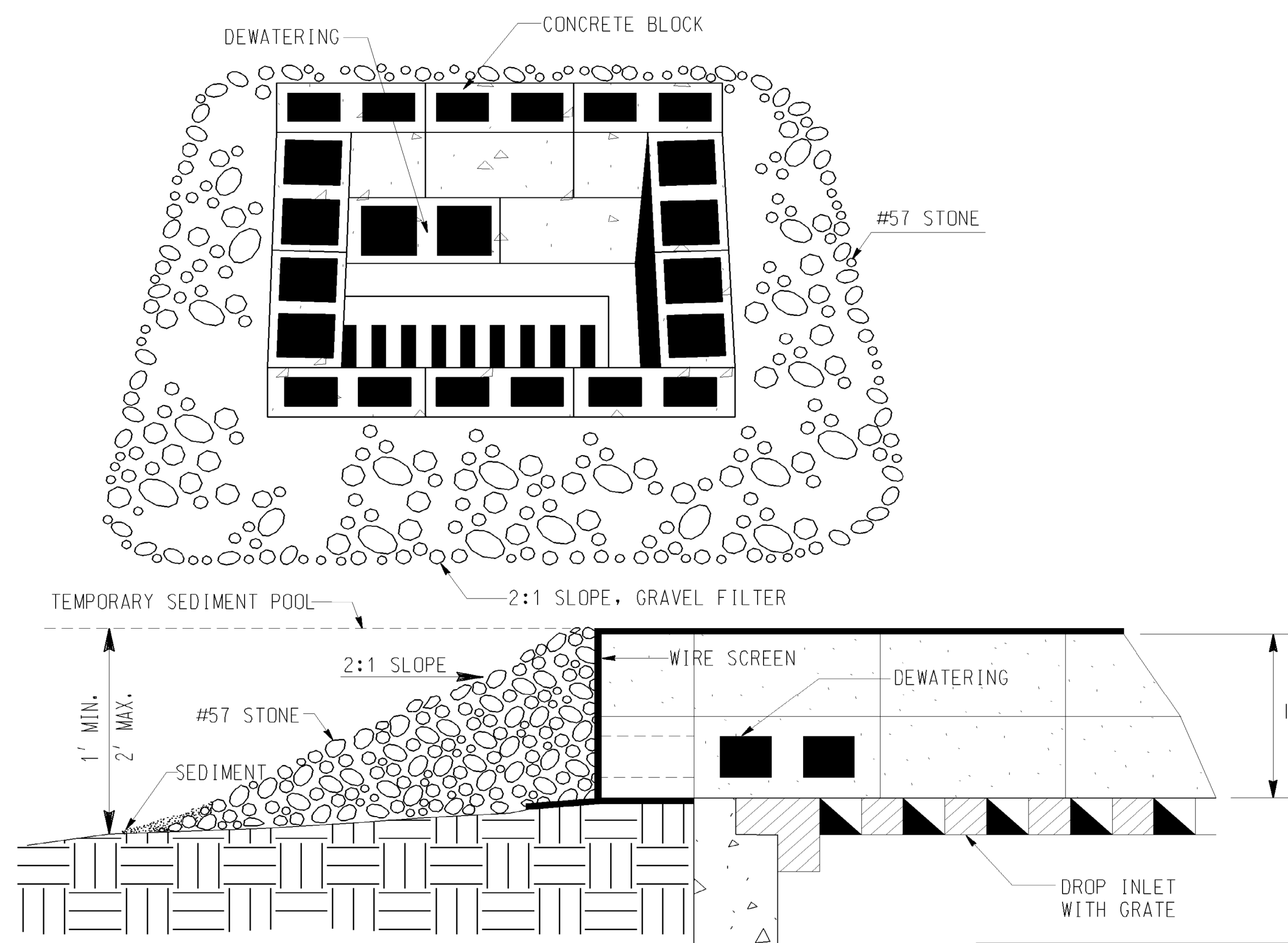
GRAVEL SHALL BE PLACED OUTSIDE THE BOX, ALL AROUND THE INLET, TO A DEPTH OF 2 TO 4 INCHES. THE ENTIRE BOX SHALL BE WRAPPED IN TYPE "C" FILTER FABRIC THAT SHALL BE ENTRENCHED 12 INCHES AND BACKFILLED.



BAFFLE BOX (Sd2-B)



GRAVEL DROP INLET PROTECTION (GRAVEL DONUT) Sd2-G

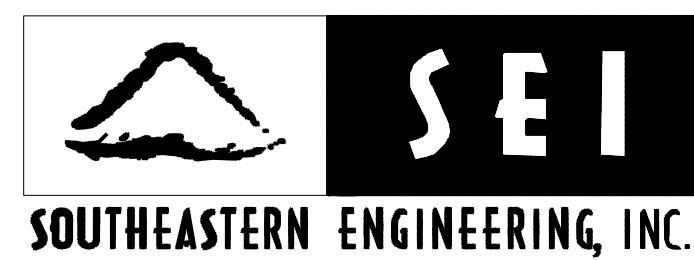


BLOCK & GRAVEL DROP INLET PROTECTION (Sd2-Bg)

BASIS OF PAYMENT:  
CONSTRUCT AND REMOVE INLET SEDIMENT TRAP \_\_\_\_\_ EACH

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAIL INLET SEDIMENT TRAPS BAFFLE BOX Sd2-B BLOCK AND GRAVEL DROP INLET PROTECTION Sd2-Bg GRAVEL DROP INLET PROTECTION Sd2-G NO SCALE MAY 2008
BY	NUMBER D-42

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SOUTHEASTERN ENGINEERING, INC.

REVISION	DATE

STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
OFFICE:  
**EROSION CONTROL  
CONSTRUCTION DETAILS**

DRAWING No.  
**56-0005**