

Contract No.:



U S DEPARTMENT OF TRANSPORTATION

FEDERAL HIGHWAY ADMINISTRATION

EASTERN FEDERAL LANDS HIGHWAY DIVISION

PROJECT: PRA-FOOT 8E15
Great Smoky Mountains National Park
PMIS: 51291

SOLICITATION

IFB NO. DTFH71-08-B-00009

This Contract Cites
Standard Specifications FP-03
U.S. Customary Units

CONTRACTOR:
ADDRESS:

STATE: TENNESSEE

COUNTY: BLOUNT

PARK / REFUGE / NF: GREAT SMOKY MOUTAINS NATIONAL PARK

ROADWAYS:	STATIONS	FEET
Foothill Parkway (Missing Link)	767+10 to 779+00	1,190

PROJECT LENGTH TOTAL: 1,190

TYPE OF IMPROVEMENT:

Bridge over Happy Hollow Road (Structure #: 5460-205P: Repair damaged beams & diaphragms and other work.

"Missing Link" alignment (767+10 to 779+00): Construct reinforced fill, aggregate surfacing, drainage and other work.

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***BOLD FACED ITEMS ARE TO BE INCLUDED WITH THE BID SUBMITTAL PACKAGE**

NOTICE TO BIDDERS

CONTRACT FORMAT:

Offerors should note that the format of this contract is in accordance with Federal Acquisition Regulations (FAR), promulgated by the General Services Administration (GSA), effective April 1, 1984, including all applicable revisions. Applicable FAR provisions and clauses are incorporated in this contract by reference or full text as indicated in the INDEX before the D-page in this booklet. FAR provisions and clauses incorporated by reference can be accessed on the Internet on the GSA website at www.arnet.gov/far/. Offerors are encouraged to review the documents thoroughly before bidding.

PROPOSAL BOOKLET AND OFFER SUBMITTAL:

It is the responsibility of the Offeror to verify that this proposal is complete as listed in the Table of Contents. The Offeror is responsible for submitting all required forms and documents with the offer. Offerors should use the Checklist for Bid Submittal included in this booklet to check that their bids are complete. **New Questionnaire Form on Calendar Days with required signature.**

CONSTRUCTION CONTRACTS:

As stated in FAR Clause 52.236-1, the **Contractor shall perform on the site, and with its own organization, work equivalent to at least 50%**. Additional guidance is given in FAR Subpart 35.005 where the majority of the project work is complex and specialized such as restoration work, bridge painting, and proprietary construction techniques (i.e. proprietary Cintec arch strengthening.) There are exceptions and they will be reviewed on a case-by-case basis.

HAZARDOUS MATERIALS IDENTIFICATION AND MATERIAL SAFETY DATA:

As required by FAR Clause 52.223-3, Hazardous Materials Identification and Safety Data, the apparent low Offeror must submit prior to award a Material Safety Data Sheet (MSDS's) for all hazardous materials that the Offeror identifies in paragraph (b) of this clause in the D-pages of this booklet. Failure to submit MSDS's may render the Offeror ineligible for award of contract. The apparent low Offeror should submit their MSDS's within two weeks after bid opening.

ATTENTION LARGE BUSINESSES - UTILIZATION OF SMALL BUSINESS CONCERNS:

Large business Offerors should note their responsibilities in the awarding of subcontracts in accordance with FAR Clause 52.219-8, Utilization of Small Business Concerns. The offeror, if a large business concern, should note its responsibility to establish and conduct a Subcontracting Plan in accordance with FAR Clause 52.219-9, Alternate I, Small Business Subcontracting Plan. If the apparent Low Offeror is a LARGE BUSINESS it will be required to submit a Subcontracting Plan within 2 weeks of receipt of request from the Contracting Officer. If the apparent low offeror fails to submit a subcontracting plan acceptable to the Contracting Officer within the allowable time, the offeror may be ineligible for award of the contract. PLEASE NOTE: A sample plan is included in this solicitation package for your use.

FINANCING ASSISTANCE: Minority, Women-owned, and Disadvantaged Business Enterprises (DBE's). The Department of Transportation (DOT) offers working capital financing assistance for transportation related contracts. DOT's Short-Term Lending Program (STLP) offers lines of credit to finance accounts receivable. Maximum line of credit is \$750,000 with interest at the prime rate. For further information, call (800) 532-1169. Internet address: <http://osdbuweb.dot.gov>.

INTERNET BASED DATA BASES - REQUIRED INPUT: According to the FAR Subpart 4.1102 contractors **MUST** be registered in Central Contractor Registration (CCR) **prior** to the award of any contract. Access the following web site to register: www.ccr.gov

According to the FAR Subpart 4.1201 contractors **MUST** complete their Online Annual

Representations and Certifications Application (ORCA) **prior** to the closing date of the bid on line at <http://orca.bpn.gov/>.

According to the FAR Subpart 22.1302 (b) contractors and sub-contractors **MUST** complete the required Annual Vets-100 Form in order to be eligible for a contract award. It can be completed on-line at <http://vets100.cudenver.edu/>.

NOTICE TO BIDDERS - (CONT'D.)

This should be completed before submitting a bid package.

PAYMENT:

Offerors are advised to review the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP), subsection 109.05, concerning **direct** and **indirect** payment included under a pay item in the bid schedule.

PROGRESS PAYMENTS:

ALL payments will be made via Electronic Funds Transfer (EFT) as such; the payment information in the CCR must be accurate in order for contractors' invoices to be considered proper invoices for the purpose of prompt payment under DOT contracts. Contractors must input and maintain (update as necessary) their EFT information in the CCR database. Offerors are advised that under FAR Clause 52.232-5, Payments Under Fixed Price Construction Contracts, upon request, progress payments will include premiums paid by the Contractor to obtain performance and payment bonds as required under this contract. These payments shall not be made in addition to the contract price. As specified in the FP, "Section 151 - MOBILIZATION", payments for performance and payment bond premiums shall be included in mobilization.

WELFARE-TO-WORK INITIATIVE:

The President's Welfare Reform Bill was initiated to assist welfare recipients and hopefully aid welfare recipients to find gainful employment. In support of this bill, Contractors are encouraged to hire welfare recipients whenever possible and to use welfare recipients in performance of duties on Government contracts.

INCREASING SEAT BELT USE IN THE UNITED STATES:

The President's Executive Order 13043 dated April 16, 1997, was issued to increase the use of seat belts in the United States. In support of this Order, contractors and subcontractors are encouraged to adopt and enforce on-the-job seat belt policies for their employees when operating company-owned, rented, or personally owned vehicles.

OBTAINING BID DOCUMENTS:

Bid documents **will not be** mailed. All bid documents are available for direct download from the Federal Business Opportunities (FBO) website:

<https://www.fbo.gov/index?s=opportunity&mode=list&tab=list&cck=1&au=&ck=>

Type DTFH71 in Keywords/Sol. # Block then click on GO, or the Eastern Federal Lands Highway Division website: <http://www.efl.fhwa.dot.gov/contracting/Documents.aspx>

Contractors are encouraged to register on the FBO website (for this specific project) in order to receive Email Notifications automatically when a document is added or updated for this specific project. All questions about this construction project must be emailed to the following address:

eflhd.contracts@fhwa.dot.gov.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MONITORING THE WEB PAGES NOTED ABOVE FOR ALL CHANGES TO THE SOLICITATION AND ACTING ON SAID CHANGES.

PLEASE NOTE: for security reasons, individuals requiring access to all government buildings must present a valid photo ID and be escorted to their destination by a Government employee. All visitors attending bid openings are urged to arrive at least 1 hour prior to schedule bid opening. All visitors must register with the receptionist in Room 100. A Government employee will collect all bids. Prior to bid opening, a Government employee will escort all bidders to the bid opening. Unescorted visitors will be denied entry and no exceptions will be made.

CHECKLIST FOR BID SUBMISSION

The following is a checklist of items included in the proposal/bid package that are required to be completed and returned (or filled in on-line) to the address in Block 8 of the Standard Form 1442, Solicitation, Offer, and Award (page A-1). This checklist is for informational purposes only and is not required to be filled out by the bidder. **Failure to submit a complete bid may be cause to reject your bid.**

1. Bid Envelope:

- a. Addressed as shown in Block 8 of Page A-1
- b. In lower left corner, indicate Solicitation No., Project Name & Number, time for Receipt of Offers and send to Room 105.

2. Standard Form 1442: Solicitation, Offer and Award (Pages A-1 and A-2)

- a. Block 14: Name and Address of Bidder.
- b. Block 15: Telephone Number of Bidder.
- c. Block 16: Remittance Address if different from Block 14.
- d. Block 19: **All** Amendments Acknowledged, with dates of Amendments.
- e. Block 20: Bid is signed and dated.

3. Bid Schedule - (Pages B-1 through B-5)

- a. Unit bid price and bid amount provided for each pay item in numbers.
- b. Corrections initialed.
- c. Price Evaluation eligibility is indicated on the Bid Summary page.

4. Standard Form 24, Bid Bond (Pages C-1 through C-2) (Required if bid guarantee is bid bond)

- a. Date executed
- b. Legal name and address of bidder.
- c. Type of organization.
- d. State of incorporation (if applicable).
- e. Name and business address of Treasury approved surety.
- f. Penal sum of bond (not less than 20% of bid total).
- g. Bid identification.
- h. Signature of Bidder
- i. Seal, if corporation
- j. Signature of Surety
- k. Seal, if corporation

BIDS RECEIVED WITHOUT A VALID BID BOND WILL BE REJECTED.

5. Power of Attorney.

- a. Dated on or before execution date of bond
- b. Power has original signature of surety, or is embossed with surety's seal in the certification section

BIDS RECEIVED WITHOUT A VALID POWER OF ATTORNEY WILL BE REJECTED.

CHECKLIST FOR BID SUBMISSION

6. Fill In's. The following full text Clauses and/or Provision numbers shall be checked or filled in and return with the bid package:

- a. 52.219-4 – HubZone ONLY - See Section F, Clause 52-219-4, paragraph "C", check block if wavier is applicable.

7. Bidder's Qualifications form (provided separately as part of the Bid Documents Package). Form completed, signed and submitted with bid

8. Bidder's Questionnaire on Calendar Days signature required (if not completed bid shall be found non-responsive).

9. Sub-Contracting Plan - Large Businesses Only: Submittal with the bid is not mandatory, **but it is encouraged**, as it will speed up the award process should your firm be the apparent low bid.

THE FOLLOWING THREE ITEMS ARE NOT TO BE SUBMITTED WITH THE BID; BUT FAILURE TO COMPLETE THE REQUIREMENTS WILL BE CAUSE TO REJECT THE BID.

10. Central Contractor Registration (CCR): The Contractor is currently registered in the Internet-Based CCR database at <http://www.ccr.gov>.

11. Online Representations and Certifications Application (ORCA): The Contractor's Representations and Certifications have been input online via the Internet-Based ORCA electronic database at <http://orca.bpn.gov>.

12. Vets100 Reporting: The Contractor has completed the annual Internet-Based reporting requirement online at <http://vets100>.

NOTE: THE CONTRACTOR IS FULLY RESPONSIBLE TO VERIFY THAT ALL DATA IN THE THREE DATABASES IS CORRECT EACH TIME A BID PACKAGE IS SUBMITTED. FAILURE PROPERLY INPUT AND/OR UPDATE YOUR DATA MAY CAUSE THE BID TO BE REJECTED.

Bidders Qualification questionnaire regarding the preparation of the bid for time:

- 1) Does the bid for time include the impact of normal weather conditions on the work of the Contract?
- 2) Does the bid for time include the impact of the terms of the Contract Specifications regarding work restrictions - including all identified delays, suspensions, and shut-downs?
- 3) Does the bid for time include sufficient time to allow that all contract work can be completed within contract time without the imposition of liquidated damages?
- 4) Does the bid for time include time for the review and approval process for all submittals required by the Contract?
- 5) Does the bid for time include time for the review and approval process for required drawings submitted under Subsection 104.03 of the Specifications?
- 6) Does the bid for time include the lead time required for the procurement, manufacture, and delivery of materials that are to be incorporated into the Contract work?
- 7) Does the bid for time include sufficient time to accommodate the fact that the date of Notice to Proceed is conditional upon the Government awarding the contract up to 60 days after the bid opening?
- 8) Does the bid for time include the 14 days after the award of the Contract that the Contractor has to provide Performance and Payment bonds?
- 9) Does the bid for time include sufficient time to accommodate the fact that the Contracting Officer has up to 30 days after receipt of acceptable Performance and Payment bonds to issue the Notice to Proceed?

I hereby certify that the answer to each and every one of the questions listed above is yes.

Signature of Authorized Representative

Title

Date

Note: If the questionnaire is not signed the bid shall be found non-responsive and rejected.

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. Solicitation No. DTFH71-08-B-00009	2. Type of Solicitation <input checked="" type="checkbox"/> Sealed Bid (<i>IFB</i>) <input type="checkbox"/> Negotiated (<i>RFP</i>)	3. Date Issued 06/02/08	Page of Pages 1 OF 4
	IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.			

4. Contract No.	5. Requisition/Purchase Request No.	6. Project No. PRA-FOOT 8E15
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7. Issued By: Federal Highway Administration Eastern Federal Lands Highway Division Loudoun Tech Center, Room 105 21400 Ridgetop Circle Sterling, Virginia 20166-6511	CODE: N/A:	8. Address Offer To: See Block 7
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9. FOR INFORMATION See Blocks 9A & 9B	A. Name: Joanne Lowe	B. Telephone No. (Include area code) (NO COLLECT CALLS) Email All Questions/Inquiries To: eflhd.contracts@fhwa.dot.gov
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SOLICITATION
See Continuation of SF 1442
NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

10. The Government requires performance of the work described in these documents (title, identifying no., date):
This Invitation for Bids is for the Foothills Parkway Great Smoky Mountains National Park in Sevier and Blount Counties, Tennessee in strict accordance with the Solicitation/Contract instructions, notices, clauses, provisions, *items listed below, and for the quantities of work actually performed at the unit prices as bid in the Bid Schedule, including all applicable Federal, State, and local taxes.

- * FP - Standard Specification for Construction of Roads & Bridges on Federal Highway Projects.
- * Bid Schedule, Section B - pages B-1 through B-5.
- * Special Contract Requirements, Section J - pages J-1 through J-42.
- * Plans (Drawings), Sheets 1 through 113.

11. The Contractor shall begin performance within **10** calendar days and complete it within calendar days after receiving
 Award, Notice to Proceed. This performance period is mandatory, negotiable. (See *Continuation Sheet)

12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO SEE SUBSECTION 102.06 OF FP.	12B. CALENDAR DAYS Within 14 calendar days after Notice of Award
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13. ADDITIONAL SOLICITATION REQUIREMENTS:

- a. Offers in original and **0** copies to perform the work required are due at the place specified in Item 8 by **2:00 PM** local time **07/03/08**. If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.
- b. An offer guarantee **is**, is not required.
- c. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.
- d. Offers providing less than **60** calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

OFFER (Must be fully completed by offeror)

14. Name and Address of Offeror (Include ZIP code)	15. Telephone No. (Include area code)
	16. Remittance Address (Include only if different than Item 14)
CODE	FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation if this offer is accepted by the Government in writing within ___ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.

AMOUNTS ➡ See Bid Schedule - Section "B" Pages

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGEMENT OF AMENDMENTS
(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

AMENDMENT NO.								
DATE								

20a. Name and title of person authorized to sign offer (Type or print)	20B. Signature	20C. Offer Date
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AWARD (To be completed by Government)

21. Items Accepted:

22. Amount	23. Accounting and appropriation data
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24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM See Block 26	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 15 USC 637(a)) <input type="checkbox"/> 41 USC 253(c) ()
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26. ADMINISTERED BY Federal Highway Administration Eastern Federal Lands Highway Division 21400 Ridgetop Circle Sterling, Virginia 20166-6511	27. PAYMENT WILL BE MADE BY: Federal Highway Administration Eastern Federal Lands Highway Division Finance Division, Room 357 21400 Ridgetop Circle Sterling, Virginia 20166-6511
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CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return ___ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.	<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.
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30a. Name and Title of Contractor or Person Authorized to Sign (Type or print)	31a. Name of Contracting Officer (Type or print)
30b. Signature	31b. United States of America BY
30C. Date	31C. Date

CONTINUATION OF SF 1442

Block 2:

This project is **UN-RESTRICTED** - Bids will be accepted from **ALL** eligible business concerns.

This procurement is made pursuant to Public Law 100-656 Title VII, which established the Small Business Competitiveness Demonstration Program. This procurement falls under North American Industry Classification System (NAICS) code 237310 - Highway, Street, and Bridge Construction (see FAR Subpart 19.10)

The award of this project is subject to a 10% price evaluation preference for eligible HubZone Small Business Concerns (must be on the SBA listing) (see FAR Clause 52.219-4).

Facsimile and electronic bids will not be accepted.

PHYSICAL DATA AVAILABLE FOR REVIEW

1. Manual on Uniform Traffic Control Devices for Streets and Highways, 2003 Edition, published by the Federal Highway Administration. <http://mutcd.fhwa.dot.gov>.
2. National Park Service Sign Manual, revised - January 1988, United States Department of the Interior. <http://www.nps.gov/npsigns>.

Block 9:

In accordance with FAR Provision 52.236-27, Site Visit, a Government representative can be available to show the project to prospective bidders. **All requests** for site visits and/or questions concerning this construction project to must be emailed to

eflhd.contracts@fhwa.dot.gov. Interested parties must provide the Solicitation Number and the relevant project name with all requests and questions.

*Block 11:

The maximum time for completion of the contract is * **376** calendar days.

The completion time for the contract will be the time offered by the successful bidder, **not to exceed** the maximum time above.

Notice to Proceed, or date specified in the Notice to Proceed will be issued within 30 days following receipt of acceptable performance and payment bonds.

Work Restrictions:

Work restrictions can be found in SCR Section 108 and 156 of the J pages.

CONTINUATION OF SF 1442

Block 12A:

Furnish performance and payment bonds in accordance with FAR Clause 52.228-15.

Block 13:

A bid guarantee in the amount of not less than 20 percent of the bid price or \$3 million, whichever is less, is required with this bid. If the bidder fails to provide the required bid guarantee, such failure may require rejection of the bid. Reference FAR Provision 52.228-1, Bid Guarantee.

Other:

The work requires contractor design or construction experience per Section 562 of the SCR's.

The estimated price is expected to fall within the price range of \$5,000, 000 to \$10,000,000.

Responsibility of bidders shall be evaluated in accordance with the information provided on the Bidder's Qualification Form, which can be downloaded from FHWA web site. FP versions can be downloaded at the FHWA web site. FHWA web site is <http://www.efl.fhwa.dot.gov/contracting/Documents.aspx>.

Subcontracting Goals

Required from all other than Small business when the requirement is expected to exceed \$500,000 [FAR 19.702]. The Contracting Officer, along review and advisory comments from the Office of Small Disadvantaged Business Utilization (OSDBU), is responsible for approving a reasonable and realistic plan [FAR 19.705-4] [TAM 1219.201(e)(6)]. The legislated subcontracting goals are as shown below. A copy of each subcontracting plan (or contractor statement that no subcontracts are to be awarded) must be provided to OSDBU prior to close of negotiations [TAM 1219.705-5 and - 6].

Legislated subcontracting goals: (15 USC 644 (g)(1))

- 5% Small Disadvantaged Businesses (SDB)
- 5% Small Woman Owned Business Entities (SWBE)
- 3% Service-Disabled Veteran-Owned Small Businesses (SDVOSB)

BID SCHEDULE INSTRUCTIONS

PROJECT: PRA-FOOT 8E15

BIDDERS PLEASE NOTE: Before preparing the bid, carefully read the Instructions to Bidders. While preparing the bid, comply with the following:

COMPLETING THE BID SCHEDULE

Complete the Bid Schedule(s) by handwriting in ink or typing. Specify a Unit Bid Price, in figures with cents to only two decimal places, for each pay item in the Unit Bid Price column for which a quantity is given. Do not enter or tender a Unit Bid Price for any pay item for which no estimated quantity appears in the Bid Schedule. Determine the products of the respective unit prices and quantities, and show them, in figures, in the Amount Bid column. If a Unit Bid Price and Amount Bid have been inserted by the Government for a pay item, do not change the Unit Bid Price and Amount Bid for the pay item. Determine the Bid Total by adding the amounts of the several items, and show in the block provided on **Page B-4**. In case of multiplication errors, the Amount Bid for the item will be based on the Unit Bid Price.

To be eligible for award, bidders must submit prices for each pay item.

Review Subsection 109.05 of the FP regarding scope of payment for direct and indirect payment work.

SCHEDULE OF WORK

The Bid Schedule is comprised of the following:

Schedule A – Construction of 0.2 miles of the “Missing Link” portion of the Foothills Parkway with reinforced fill and aggregate surfacing, with drainage and other miscellaneous work, and the repair of the bridge over Happy Hollow Road.

BIDDING OF CALENDAR DAYS

Determine the number of calendar days necessary to complete Schedule A work from Notice To Proceed to contract completion. **Specify the number of calendar days (NOT to exceed the maximum number of calendar days shown in Block 11 of the SF-1442)** in the space provided on the **Bid Summary** page. Failure to specify a number of calendar days for contract completion indicates the bidder accepts the maximum contract completion time provided in Block 11 of the SF-1442.

In developing a construction schedule to determine the number of calendar days included in their bid, bidders should include the work limitations shown in the Special Contract Requirements

(SCR's). Specific work limitations may be (but are not limited to): holidays, weekends; rush hours; night work; no work periods; work or traffic control phasing. Bidders are advised to consider those work items that are weather sensitive and when those work items will be performed. Specific work items are (but not limited to): those that require a minimum ambient air temperature (asphalt paving and surface treatment, pavement striping, stone masonry); those that require maintaining a minimum surface temperature (concrete pavement, structural concrete, painting); and those that have specific planting seasons (turf establishment, sod, trees and plants). Bidders are also advised to consider time required for preparing material and drawing submittals, and the allowable Government review times for those submittals (Subsection 104.03 of the FP and SCR's). The total calendar days bid should also include any work limitations and any delay days or contractor winter shutdowns required due to weather sensitive work items.

When evaluating the bids, the Government will consider the Contract Administrative Cost for the project to be \$2700 per calendar day bid. The Contract Administrative Cost is only used to determine the Evaluation Total Price of Project.

Add the **Bid Total(s)** and the **Contract Administrative Cost(s)** for each schedule of work as directed on the **Bid Summary** page(s). Show the **Evaluation Total Price of Project** in the space provided on the **Bid Summary** page.

BASIS FOR AWARD

The contract will be awarded to the responsive, responsible bidder with the lowest **Evaluation Total Price of Project**, which is defined as:

Bid Total of Schedule A + Contract Administrative Cost of Schedule A

The number of calendar days specified by the successful bidder for the completion of Schedule A work will become the performance period for the contract.

NOTE: Contract Administration Cost is used for evaluation and ranking purposes only.

Bid Schedule

Project: PRA-FOOT 8E15
FOOTHILLS PKWY

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	MOBILIZATION		
	ALL	Lump Sum	\$ _____
15201-0000	CONSTRUCTION SURVEY AND STAKING		
	ALL	Lump Sum	\$ _____
15401-0000	CONTRACTOR TESTING		
	ALL	Lump Sum	\$ _____
15703-2000	SOIL EROSION CONTROL, TEMPORARY TURF ESTABLISHMENT		
	2.0		
	ACRE	\$ _____	\$ _____
15705-0100	SOIL EROSION CONTROL, SILT FENCE (WIRE-BACKED SILT FENCE)		
	1,300		
	LNFT	\$ _____	\$ _____
15705-0200	SOIL EROSION CONTROL, BRUSH BARRIERS		
	560		
	LNFT	\$ _____	\$ _____
15705-0300	SOIL EROSION CONTROL, SLOPE DRAINS		
	200		
	LNFT	\$ _____	\$ _____
15706-0200	SOIL EROSION CONTROL, CHECK DAM		
	14		
	EACH	\$ _____	\$ _____
20101-0000	CLEARING AND GRUBBING		
	2.5		
	ACRE	\$ _____	\$ _____
20401-0000	ROADWAY EXCAVATION		
	12,500		
	CUYD	\$ _____	\$ _____
20451-1000	BORROW, ROCK (Select Limestone Shot Rock)		
	25,300		
	TON	\$ _____	\$ _____

Bid Schedule A

Project: PRA-FOOT 8E15
FOOTHILLS PKWY

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
20451-1000	BORROW, ROCK (Limestone Shot Rock) 68,000 TON	\$ _____	\$ _____
20701-0800	EARTHWORK GEOTEXTILE, TYPE II-B 110 SQYD	\$ _____	\$ _____
20701-1000	EARTHWORK GEOTEXTILE, TYPE III-A 430 SQYD	\$ _____	\$ _____
20703-0000	GEOGRID (type VII-A) 28,000 SQYD	\$ _____	\$ _____
20703-0000	GEOGRID (type VII-B) 12,600 SQYD	\$ _____	\$ _____
21101-1000	ROADWAY OBLITERATION, METHOD 1 690 SQYD	\$ _____	\$ _____
25102-3000	PLACED RIPRAP, CLASS 3 60 TON	\$ _____	\$ _____
30101-4000	AGGREGATE BASE GRADING C OR D 2,300 TON	\$ _____	\$ _____
40910-0700	SURFACE TREATMENT, DESIGNATION 2B 5,000 SQYD	\$ _____	\$ _____
55207-0000	REPAIR CONCRETE ALL	Lump Sum	\$ _____
55222-0000	GROUT 1,053 CUFT	\$ _____	\$ _____
56101-0000	STRUCTURAL CONCRETE BONDING 20 LNFT	\$ _____	\$ _____
60201-0800	24-INCH PIPE CULVERT (PE SMOOTH WALL-SOLID WALL) 54 LNFT	\$ _____	\$ _____

Bid Schedule A

Project: PRA-FOOT 8E15
FOOTHILLS PKWY

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
60201-1000	36-INCH PIPE CULVERT (PE SMOOTH WALL-SOLID WALL) 280 LNFT	\$ _____	\$ _____
60210-1000	END SECTION FOR 36-INCH PIPE CULVERT 1 EACH	\$ _____	\$ _____
60403-0900	INLET, TYPE 4B 1 EACH	\$ _____	\$ _____
60403-1800	INLET, TYPE 6A MODIFIED 1 EACH	\$ _____	\$ _____
60510-0700	6-INCH COLLECTOR PIPE (including 6" perforated plastic pipe, geotextile type I-D, and granular backfill) 5,000 LNFT	\$ _____	\$ _____
60801-0500	PAVED WATERWAY, TYPE 5 520 SQYD	\$ _____	\$ _____
60901-2300	CURB, ASPHALT, 6-INCH DEPTH 550 LNFT	\$ _____	\$ _____
62011-0500	STONE MASONRY HEADWALL FOR 24-INCH PIPE CULVERT 1 EACH	\$ _____	\$ _____
62501-0000	TURF ESTABLISHMENT 2.0 ACRE	\$ _____	\$ _____
62901-1400	ROLLED EROSION CONTROL PRODUCT, TYPE 5.C 281 SQYD	\$ _____	\$ _____
62903-0000	CELLULAR CONFINEMENT SYSTEM 220 SQYD	\$ _____	\$ _____
63502-0600	TEMPORARY TRAFFIC CONTROL, BARRICADE TYPE 3 4 EACH	\$ _____	\$ _____

Bid Schedule A

Project: PRA-FOOT 8E15
FOOTHILLS PKWY

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63502-1300	TEMPORARY TRAFFIC CONTROL, DRUM 20 EACH	\$ _____	\$ _____
63504-1000	TEMPORARY TRAFFIC CONTROL, CONSTRUCTION SIGN 310 SQFT	\$ _____	\$ _____
63701-0000	FIELD OFFICE 1 EACH	\$ _____	\$ _____
64705-1000	MITIGATION, AGRICULTURAL LIMESTONE 1 TON	\$ _____	\$ _____

TOTAL \$ _____

Submitted by: _____
Name of Bidder

BID SUMMARY

Project PRA-FOOT 8E15
(Complete for Pages B-1 through B-4)

(1) Schedule A Bid Total (from Page B-4) \$ _____

Contract Administrative Cost

Number of calendar days necessary to complete all Schedule A work from Notice to Proceed (or date specified in the Notice to Proceed) to completion of Schedule A.

(2) _____ calendar days x \$2700 per calendar day = \$ _____

Total Price of Project (for evaluation purposes only)

(1) Bid Total for Schedule A (1) \$ _____

+ (2) Contract Administrative Cost for Schedule A (2) \$ _____

= **EVALUATION TOTAL PRICE OF PROJECT** \$ _____

Does the Bidder claim the Price Evaluation Preference for HUBZone Small Business Concerns as defined in FAR Clause 52.219-4?

Yes

No

BID BOND <i>(See instruction on reverse)</i>	DATE BOND EXECUTED <i>(Must not be later than bid opening date)</i>	OMB NO.: 9000-0045
--	---	--------------------

Public reporting burden for this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVR), Federal Acquisition Policy Division, GSA, Washington, DC 20405.

PRINCIPAL <i>(Legal name and business address)</i>	TYPE OF ORGANIZATION <i>("X" one)</i> <input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION STATE OF INCORPORATION
--	--

SURETY(IES) *(Name and business address)*

PENAL SUM OF BOND					BID IDENTIFICATION	
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NO.
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS		
					FOR <i>(Construction, Supplies, or Services)</i>	

OBLIGATION:

We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.

CONDITIONS:
 The Principal has submitted the bid identified above.

THEREFORE:
 The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.

Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of the time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.

WITNESS:
 The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.

PRINCIPAL			
SIGNATURE(S)	1.	2.	3.
	<i>(Seal)</i>	<i>(Seal)</i>	<i>(Seal)</i>
NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.	3.
			<i>Corporate Seal</i>

INDIVIDUAL SURETY(IES)		
SIGNATURE(S)	1.	2.
	<i>(Seal)</i>	<i>(Seal)</i>
NAME(S) <i>(Typed)</i>	1.	2.

CORPORATE SURETY(IES)			
SURETY A	NAME & ADDRESS		STATE OF INC.
	SIGNATURE(S)	1.	LIABILITY LIMIT (\$)
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.
			<i>Corporate Seal</i>

SURETY B	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
SURETY C	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
SURETY D	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
SURETY E	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
SURETY F	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		
SURETY G	NAME & ADDRESS		STATE OF INC.	LIABILITY LIMIT (\$)	<i>Corporate Seal</i>
	SIGNATURE(S)	1.	2.		
	NAME(S) & TITLE(S) <i>(Typed)</i>	1.	2.		

INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., (e.g., 20% of the bid price but the amount not to exceed _____ dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designed "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.
 (b) Where individual sureties are involved, a completed Affidavit of Individual surety (Standard Form 28), for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capability.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

CONTRACT CLAUSES INDEX

FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

52.252-2 Clauses Incorporated By Reference (Feb 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this address: www.arnet.gov/far/

(End of Clause)

FAR & TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
52.202-01	DEFINITIONS	Jul-04	
52.203-03	GRATUITIES	Apr-84	
52.203-05	COVENANT AGAINST CONTINGENT FEES	Apr-84	
52.203-07	ANTI-KICKBACK PROCEDURES	Jul-95	
52.203-8	CANCEL. & RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	Jan-97	
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	Jan-97	
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	Sep-07	
52.204-04	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	Aug-00	
52.204-07	CENTRAL CONTRACTOR REGISTRATION	Jul-06	Contractor Mandatory Internet Data Input
52.209-06	PROTECTING GOV. INTEREST WHEN SUBCONTRACTING W/ CONT. DEB. SUSP. OR PROP. FOR DEB.	Sep-06	
52.214-26	AUDIT AND RECORDS--SEALED BIDDING	Oct-97	
52.214-27	PRICE REDUCTION FOR DEFECT. COST OR PRICING DATA-MODIFICATIONS -SEALED BIDDING	Oct-97	
52.214-28	SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS--SEALED BIDDING	Oct-97	
52.219-08	UTILIZATION OF SMALL BUSINESS CONCERNS	May-04	
52.219-09 ALT 1	SMALL BUSINESS SUBCONTRACTING PLAN (ALT 1 - (Oct 01))	Sep-07	Large Business Mandatory Submittal Requirement
52.219-14	LIMITATIONS ON SUBCONTRACTING	Dec-96	
52.219-16	LIQUIDATED DAMAGES - SUBCONTRACTING PLAN	Jan-99	
52.222-03	CONVICT LABOR	Jun-03	
52.222-04	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT--OVERTIME COMPENSATION	Jul-05	
52.222-06	DAVIS-BACON ACT	Jul-05	Contractor Mandatory Wage Rates Posting
52.222-07	WITHHOLDING OF FUNDS	Feb-88	
52.222-08	PAYROLLS AND BASIC RECORDS	Feb-88	Contractor Weekly Payroll Submittals
52.222-09	APPRENTICES AND TRAINEES	Jul-05	
52.222-10	COMPLIANCE WITH COPELAND ACT REQUIREMENTS	Feb-88	
52.222-11	SUBCONTRACTS (LABOR STANDARDS)	Jul-05	
52.222-12	CONTRACT TERMINATION--DEBARMENT	Feb-88	
52.222-13	COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS	Feb-88	
52.222-14	DISPUTES CONCERNING LABOR STANDARDS	Feb-88	
52.222-15	CERTIFICATION OF ELIGIBILITY	Feb-88	
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	Feb-99	
52.222-26	EQUAL OPPORTUNITY	Mar-07	
52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION	Feb-99	
52.222-35	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, & OTHER ELIGIBLE VETERANS.	Sep-06	

CONTRACT CLAUSES INDEX

FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

FAR & TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
52.222-36	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES	Jun-98	
52.222-37	EMPLOYMENT. REPORTS ON SPECIAL DISABLED VETS, VETS OF THE VIETNAM ERA, ETAL.	Sep-06	Contractor Annual Mandatory Reporting Requirement
52.222-39	NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING PAYMENT OF UNION DUES OR FEES	Dec-04	Contractor Mandatory Postings
52.223-05	POLLUTION PREVENTION AND RIGHT TO KNOW INFORMATION	Aug-03	
52.223-06	DRUG-FREE WORKPLACE	May-01	
52.223-14	TOXIC CHEMICAL RELEASE REPORTING	Aug-03	Contractor Annual Contractor Reporting Requirement
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	Feb-06	
52.227-01	AUTHORIZATION AND CONSENT	Jul-95	
52.227-02	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	Aug-96	
52.227-04	PATENT INDEMNITY-CONSTRUCTION CONTRACTS	Apr-84	
52.228-02	ADDITIONAL BOND SECURITY	Oct-97	
52.228-5	INSURANCE - WORK ON A GOVERNMENT INSTALLATION	Jan-97	Contractor Submittal Requirement
52.228-11	PLEDGES OF ASSETS	Feb-92	
52.228-12	PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS	Oct-95	
52.228-14	IRREVOCABLE LETTER OF CREDIT	Dec-99	
52.228-15	PERFORMANCE AND PAYMENT BONDS - CONSTRUCTION	Nov-06	Contractor Submittal Requirement
52.229-03	FEDERAL, STATE, AND LOCAL TAXES	Apr-03	
52.232-05	PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS	Sep-02	Contractor Submittal Requirement
52.232-17	INTEREST	Jun-96	
52.232-23	ASSIGNMENT OF CLAIMS	Jan-86	
52.232-27	PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS	Sep-05	
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER - CENTRAL CONTRACTOR REGISTRATION	Oct-03	
52.233-01 ALT I	DISPUTES (Alt-I, Dec-91)	Jul-02	
52.233-03	PROTEST AFTER AWARD	Aug-96	
52.233-04	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	Oct-04	
52.236-02	DIFFERING SITE CONDITIONS	Apr-84	
52.236-03	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK	Apr-84	
52.236-05	MATERIAL AND WORKMANSHIP	Apr-84	
52.236-06	SUPERINTENDENCE BY THE CONTRACTOR	Apr-84	
52.236-07	PERMITS AND RESPONSIBILITIES	Nov-91	
52.236-08	OTHER CONTRACTS	Apr-84	
52.236-09	PROTECTION OF EXIST. VEGETATION., STRUCTURES., EQUIPMENT., UTILITIES, & IMPROVEMENTS	Apr-84	
52.236-10	OPERATIONS AND STORAGE AREAS	Apr-84	
52.236-11	USE AND POSSESSION PRIOR TO COMPLETION	Apr-84	
52.236-12	CLEANING UP	Apr-84	
52.236-13	ACCIDENT PREVENTION	Nov-91	

CONTRACT CLAUSES INDEX
FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)
(Updated thru FAC 2005-20 on 09/06/2007)

FAR & TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
52.236-15	SCHEDULES FOR CONSTRUCTION CONTRACTS	Apr-84	Contractor Submittal Requirement
52.236-17	LAYOUT OF WORK	Apr-84	
52.236-21	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION	Feb-97	
52.236-26	PRECONSTRUCTION CONFERENCE	Feb-95	
52.242-13	BANKRUPTCY	Jul-95	
52.242-14	SUSPENSION OF WORK	Apr-84	
52.243-04	CHANGES	Jun-07	
52.244-06	SUBCONTRACTS FOR COMMERCIAL ITEMS	Mar-07	
52.245-02	GOVERNMENT PROPERTY (FIXED-PRICE CONTRACTS)	Jun -07	
52.246-12	INSPECTION OF CONSTRUCTION	Aug-96	
52.248-03 ALT I	VALUE ENGINEERING-CONSTRUCTION (Alt-I, Apr-84)	Sep-06	
52.249-01	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE)(SHORT FORM)	Apr-84	
52.249-02 ALT I	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE) (Alt-I, Sep-96)	May-04	
52.249-10	DEFAULT (FIXED PRICE CONSTRUCTION)	Apr-84	
52.253-01	COMPUTER GENERATED FORMS	Jan-91	

TAR CLAUSES INCORPORATED BY REFERENCE

CLAUSE	TITLE	DATE	REMARKS
1252.211-70	INDEX FOR SPECIFICATIONS	Apr-05	
1252.242-73	CONTRACTING OFFICERS TECHNICAL REPRESENTATIVE	Oct-94	

FAR & TAR PROVISIONS INCORPORATED BY REFERENCE

PROVISION	TITLE	DATE	REMARKS
52.217-03	EVALUATION EXCLUSIVE OF OPTION	Apr-84	
52.217-04	EVALUATION OF OPTIONS EXERCISED AT TIME OF CONTRACT AWARD	Jun-88	
52.217-05	EVALUATION OF OPTIONS	Jul-90	

CONTRACT CLAUSES INDEX

FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)

(Updated thru FAC 2005-20 on 09/06/2007)

FAR & TAR CLAUSES INCORPORATED BY FULL TEXT

CLAUSE	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
52.211-10	COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK	Apr-84	H	CONSTR. CONTRACT REQS.	Government Fill In
52.211-12	LIQUIDATED DAMAGES-CONSTRUCTION	Sep-00	H	CONSTR. CONTRACT REQS.	Government Fill In
52.211-18	VARIATION IN ESTIMATED QUANTITY	Apr-84	H	CONSTR. CONTRACT REQS	
52.219-4	NOTICE OF PRICE EVALUATION. PREFERENCE FOR HUBZONE SB CONCERNS	Jul-05	F	SOCIOECON PROG REQS	Contractor Fill-In
52.222-23	NOTICE OF REQ. FOR AFFIRMATIVE ACTION TO ENSURE E.E.O.	Feb-99	F	SOCIOECON PROG REQS	Contractor Reporting Requirements
52.223-03 ALT I	HAZARDOUS MAT. IDENT. & MATERIAL SAFETY DATA (Alt-I, Jul-95)	Jan-97	G	GEN'L CONTRACT REQS.	Contractor Submittal Requirements
52.223-09	EST. OF % OF REC. MAT. CONTENT FOR EPA DESIGN. PRODUCTS	Aug-00	G	GEN'L CONTRACT REQS	Contractor Reporting Requirement
52.225-09	BUY AMERICAN ACT-CONSTRUCTION MATERIALS	Jan 05	F	SOCIOECON PROG REQS	Government & Contractor Fill In's
52-236-01	PERFORMANCE OF WORK BY THE CONTRACTOR	Apr -84	H	CONSTR. CONTRACT REQS	Government Fill In
52.236-04	PHYSICAL DATA	Apr-84	H	CONSTR. CONTRACT REQS.	Government Fill In

TAR CLAUSES INCORPORATED BY FULL TEXT

CLAUSE	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
FAR PT 22.9	NONDISCRIMINATION BECAUSE OF AGE POLICY	Feb-64	F	SOCIOECON PROG REQS	Policy Statement - Not A Clause

(End of Clauses Index)

CONTRACT PROVISIONS INDEX
FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)
(Updated thru FAC 2005-20 on 09/06/2007)

52.252-1 Solicitation Provisions Incorporated by Reference
(Feb 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this address: www.arnet.gov/far/

(End of Clause)

FAR & TAR PROVISIONS INCORPORATED BY REFERENCE

PROVISION	TITLE	DATE	REMARKS
52.211-06	BRAND NAME OR EQUAL	Aug-99	
52.214-03	AMENDMENTS TO INVITATIONS FOR BIDS	Dec-89	
52.214-04	FALSE STATEMENTS IN BIDS	Apr-84	
52.214-05	SUBMISSION OF BIDS	Mar-97	
52.214-06	EXPLANATION TO PROSPECTIVE BIDDERS	Apr-84	
52.214-07	LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS	Nov-99	
52.214-18	PREPARATION OF BIDS--CONSTRUCTION	Apr-84	
52.214-19	CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION	Aug-96	
52.225-10	NOTICE OF BUY AMERICAN ACT REQUIREMENT - CONSTRUCTION MATERIAL.	May-02	

TAR PROVISIONS INCORPORATED BY REFERENCE

PROVISION	TITLE	DATE	REMARKS
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CONTRACT PROVISIONS INDEX
FEDERAL ACQUISITION REGULATION (FAR) & TRANSPORTATION ACQUISITION REGULATION (TAR)
(Updated thru FAC 2005-20 on 09/06/2007)

FAR PROVISIONS INCORPORATED BY FULL TEXT					
PROVISION	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
52.204-08	ANNUAL REPRESENTATIONS AND CERTIFICATIONS	Jan 06	D	REPS. & CERTIFICATIONS	Mandatory Contractor On-Line Input
52.211-04	AVAILABILITY FOR EXAM. OF SPECS NOT LISTED IN GSA INDEX OF FED SPECS/STANDARDS & COM. ITEM DESCRIPTION	Jun-88	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.216-01	TYPE OF CONTRACT	Apr-84	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.228-01	BID GUARANTEE	Sep-96	E	INSTRUCTIONS TO BIDDERS	Contractor Submittal Requirement
52.233-02	SERVICE OF PROTEST	Aug-96	E	INSTRUCTIONS TO BIDDERS	Government Fill In.
52.236-27	SITE VISIT (CONSTRUCTION)	Feb-95	E	CONSTR. CONTRACT REQS.	Government Fill In.
OTHER PROVISIONS INCORPORATED BY FULL TEXT					
PROVISION	TITLE	DATE	SECTION	SECTION TYPE	REMARKS
NONE					

(End of Provisions Index)

FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION PROVISIONS

REPRESENTATIONS AND CERTIFICATIONS

Annual Representations and Certifications. Prospective contractors shall complete electronic annual representations and certifications on-line at this web address: <http://orca.bpn.gov> (See FAR 4.1201) in conjunction with required registration in the Central Contractor Registration (CCR) database (see FAR 4.1102).

Vets100 Form must also be filled-in online at <http://vets100.cudenver.edu/> in accordance with FAR Clause 52.222-37.

Contractors are not eligible for award without completing these requirements.

4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.
(End of Provision)

52.204-8

52.204-8 – Annual Representations and Certifications.

As prescribed in 4.1202, insert the following provision:
Annual Representations and Certifications (Jan 2006)

- (a)
 - (1) The North American Industry classification System (NAICS) code for this acquisition is 237310.
 - (2) The small business size standard is **\$31,000,000**.
 - (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b)
 - (1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (c) of this provision applies.
 - (2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (c) of this provision instead of completing the corresponding individual representations and certification in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:
 - (i) Paragraph (c) applies.
 - (ii) Paragraph (c) does not apply and the offeror has completed the individual representations and certifications in the solicitation.
- (c) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov> . After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR

(End of Section D)

FEDERAL ACQUISITION REGULATION & TRANSPORTATION ACQUISITION REGULATION PROVISIONS

INSTRUCTIONS TO BIDDERS

52.211-4

AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS NOT LISTED IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND COMMERCIAL ITEM DESCRIPTIONS (JUN 1988)

The specifications cited in this solicitation are not available for distribution. However, they may be examined at the following location(s):

**FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
21400 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166-6511**

Send an email to the following address to make an appointment: eflhd.contracts@fhwa.dot.gov

TIME(S) FOR VIEWING: 8 A.M. TO 4 P.M.

All documents are available for direct download from the following website:
www.efl.fhwa.dot.gov/procurement/procurement.htm

(End of Provision)

52.216-1

TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a **firm-fixed-price** contract resulting from this solicitation.

(End of Provision)

52.233-2

SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

**FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
21400 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166-6511**

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of Provision)

52.236-27

Site Visit (Construction). (Feb 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting:

Name: Mr. Allan Sumeriski, Chief of Facility Management

Address: Great Smoky Mountains National Park
107 Park Headquarters Road

Gaitlinburg, TN 37788

Telephone: 865-436-1237

Email: Alan_Sumeriski@nps.gov

(End of Provision)

(End of Section E)

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52.219-4

Notice of Price Evaluation Preference for HUBZone Small Business Concerns.

(Oct 2004)

(a) *Definition.* HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(b) *Evaluation preference.*

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except—

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;

(ii) Otherwise successful offers from small business concerns;

(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and

(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(c) *Waiver of evaluation preference.* A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.

Offer elects to waive the evaluation preference.

(d) *Agreement.* A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a non-manufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.

(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants;

(f) A HUBZone small business concern non-manufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

FAR SUBPART 22.9

NONDISCRIMINATION BECAUSE OF AGE (FEB 96)

22.901 Policy. Executive Order 11141, February 12, 1964 (29 CFR 2477), states that the Government policy is as follows:

(a) Contractors and subcontractors shall not, in connection with employment, advancement, or discharge of employees, or the terms, conditions, or privileges of their employment, discriminate against persons because of their age except upon the basis of a bona fide occupational qualification, retirement plan, or statutory requirement.

(b) Contractors and subcontractors, or persons acting on their behalf, shall not specify in solicitations or advertisements for employees to work on Government contracts, a maximum age limit for employment unless the specified maximum age limit is based upon a bona fide occupational qualification, retirement plan, or statutory requirement.

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(c) Agencies will bring this policy to the attention of contractors. The use of contract clauses is not required.

(End of Policy Statement)

52.222-23

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction (Feb 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

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

Sevier, Tennessee

Goals for Minority Participation for Each Trade	Goals for Female Participation for Each Trade
4.5%	6.9%

Blount, Tennessee

Goals for Minority Participation for Each Trade	Goals for Female Participation for Each Trade
6.6%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the *Federal Register* in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on

(1) its implementation of the Equal Opportunity clause,

(2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and

(3) its efforts to meet the goals.

The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is as follows:

Sevier and Blount Counties, TN

(End of Provision)

52.225-9

Buy American Act-Construction Materials. (Jan 2005)

(a) *Definitions.* As used in this clause-

"Component" means an article, material, or supply incorporated directly into a construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site pre-assembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single

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and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means-

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Domestic construction material” means-

(1) An un-manufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which non-availability determinations have been made are treated as domestic.

“Foreign construction material” means a construction material other than a domestic construction material.

“United States” means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements the Buy American Act (41 U.S.C. 10a - 10d) by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows:

NONE

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that-

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic

construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including-

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material.

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However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data*. To permit evaluation of requests under paragraph 2 of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison			
Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
Item 1:			
Foreign construction material			
Domestic construction material			
Item 2:			
Foreign construction material			
Domestic construction material			
[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.] [Include other applicable supporting information.] [* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]			

(End of Clause)

52.225-10 -- Notice of Buy American Act Requirement— Construction Materials.

As prescribed in [25.1102](#)(b)(1), insert the following provision:

Notice of Buy American Act Requirement--Construction Materials (May 2002)

(a) *Definitions*. “Construction material,” “domestic construction material,” and “foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act--Construction Materials” (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) *Requests for determinations of inapplicability*. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination

regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) *Evaluation of offers*.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) *Alternate offers*.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested—

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

Alternate I (May 2002). As prescribed in [25.1102](#)(b)(2), substitute the following paragraph (b) for paragraph (b) of the basic provision:

(b) *Requests for determinations of inapplicability*. An offeror requesting a determination regarding the inapplicability of

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the Buy American Act shall submit the request with its offer, including the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9.

52.225-11

Buy American Act—Construction Materials under Trade Agreements.

(Nov 2006)

(a) *Definitions.* As used in this clause--

“Caribbean Basin country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Designated country” means any of the following countries:

(1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, or United Kingdom);

(2) A Free Trade Agreement country (Australia, Bahrain, Canada, Chile, El Salvador, Guatemala, Honduras, Mexico, Morocco, Nicaragua, or Singapore);

(3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or

(4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, or Trinidad and Tobago).

“Designated country construction material” means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

“Domestic construction material” means--

(1) An unmanufactured construction material mined or produced in the United States; or

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

“Free Trade Agreement country construction material means” a construction material that--

(1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or

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(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Foreign construction material” means a construction material other than a domestic construction material.

“Least developed country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a least developed country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“WTO GPA country construction material” means a construction material that--

(1) Is wholly the growth, product, or manufacture of a WTO GPA country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) *Construction materials.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials.

(2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows: **NONE**.

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that--

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)

(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier;
and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does

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not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(End of clause)

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data.* To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) *
<i>Item 1</i>			
Foreign construction material			
Domestic construction material			
<i>Item 2</i>			
Foreign construction material			
Domestic construction material			

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

Alternate I (Nov 2006). As prescribed in [25.1102\(c\)\(3\)](#), add the following definitions of “Bahrainian construction material” and “Mexican construction material” to paragraph (a) of the basic clause, and substitute the following paragraphs (b)(1) and (b)(2) for paragraphs (b)(1) and (b)(2) of the basic clause:

“Bahrainian construction material” means a construction material that—

(1) Is wholly the growth, product, or manufacture of Bahrain; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in Bahrain into a new and different construction material distinct from the materials from which it was transformed.

“Mexican construction material” means a construction material that—

(1) Is wholly the growth, product, or manufacture of Mexico; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in Mexico into a new and different construction material distinct from the materials from which it was transformed.

(b) *Construction materials.*

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and all the Free Trade Agreements except NAFTA apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials other than Bahrainian or Mexican construction materials.

(2) The Contractor shall use only domestic, or designated country construction material other than Bahrainian or Mexican construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

52.225-12

Notice of Buy American Act Requirement—Construction Materials Under Trade Agreements.

(Jan 2005)

(a) *Definitions.* “Construction material,” “designated country construction material,” “domestic construction material,” and

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“foreign construction material,” as used in this provision, are defined in the clause of this solicitation entitled “Buy American Act--Construction Materials Under Trade Agreements” (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) Requests for determination of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material, other than designated country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material, and the offeror shall be required to furnish such domestic or designated country construction material. An offer based on

use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

Alternate II (Nov 2006). As prescribed in [25.1102](#)(d)(3), add the definitions of “Bahrainian construction material” and “Mexican construction material” to paragraph (a) and substitute the following paragraph (d) for paragraph (d) of the basic provision:

(d) Alternate offers.

(1) When an offer includes foreign construction material, except foreign construction material from a designated country other than Bahrain or Mexico, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material other than Bahrainian or Mexican construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material other than Bahrainian or Mexican construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of Section F)

MINIMUM WAGE SCHEDULE

U.S. Department of Labor
 Employment Standards Administration
 Wage and Hour Division

GENERAL DECISION: **TN20080010** 02/08/2008 TN10

Date: February 8, 2008

General Decision Number: **TN20080010** 02/08/2008

Superseded General Decision Number: TN20070017

State: Tennessee

Construction Types: Highway

Counties: Anderson, Blount, Carter, Cheatham, Davidson, Dickson, Grainger, Hamilton, Hawkins, Jefferson, Knox, Madison, Marion, Montgomery, Robertson, Rutherford, Sevier, Shelby, Sullivan, Sumner, Tipton, Unicoi, Union, Washington, Williamson and Wilson Counties in Tennessee.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/08/2008

SUTN1996-001 01/01/1996

	Rates	Fringes
Bricklayer.....	\$ 11.49	
Carpenter.....	\$ 10.41	
Concrete Finisher.....	\$ 10.01	
Drill Operator (Caisson).....	\$ 12.65	
Electrician.....	\$ 16.60	
Ironworkers:		
Reinforcing.....	\$ 9.63	
Structural.....	\$ 12.32	
Laborers:		
GROUP 1.....	\$ 7.62	
GROUP 2.....	\$ 8.89	
Mechanic		
Heavy Duty.....	\$ 10.33	
Light Duty.....	\$ 12.36	

Painter & Sandblaster.....\$ 12.94

Powder Person (BLASTER).....\$ 10.14

Power equipment operators:

GROUP 1.....\$ 11.46

GROUP 2.....\$ 9.97

GROUP 3.....\$ 10.07

GROUP 4.....\$ 9.33

GROUP 5.....\$ 10.30

GROUP 6.....\$ 8.00

Truck drivers:

2 OR 3 AXLES.....\$ 8.43

4 or 5 axles heavy duty.....\$ 8.75

LABORER CLASSIFICATIONS

GROUP 1: Unskilled Laborer; Flaggers; Traffic Control Pickup driver

GROUP 2: Skilled Laborers: Air Tool Operator, Asphalt Raker, Chain Saw Operator, Concrete Mixer Operator (Less than 1 Yard), Concrete Rubber/Edger, Fence Erector, Form Setter (Steel Road), Guard Rail Erector, Mechanic's Tender (Tire Changer or Oiler), Mortar Mixer, Nozzelman or Gun Operator (Gunite), Pipelayer, Sign Erector.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backhoe/Hydraulic Excavator (3/4 Yard & Over), Crane, End Loader (3 Yards & Over), Motor Patrol (finish), Piledriver, Dragline

GROUP 2: Backhoe/Hydraulic Excavator (less than 3/4 yard), Bull Dozer or Push Dozer, End Loader (less than 3 yards), Motor Patrol Operator, (rough), Tractor (crawler/utility), Scraper, Shovel, Trenching Machine.

GROUP 3: Asphalt Paver, Concrete Finishing Machine, Concrete Paver, Scale, Spreader (self-Propelled), Concrete Grinder, Asphalt Milling Machine, Boring Machine Operator (horizontal)

GROUP 4: Bobcat, Central Mixing Plant, Concrete Pump, Concrete Saw, Curb Machine (automatic or manual), Dozer or Loader Operator (stockpile), Drill Operator (piling), Mulcher or Seeder, Rock Drill (truck mounted), Roller (asphalt), Roller (compaction self-propelled), Soil Stabilization Machine, Tractor (boom & hoist), Bituminous Distributor Machine, Pump, Track Drill, Striping Machine Operator.

GROUP 5: Sweeping Machine Operator

GROUP 6: Farm Tractor Operator

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

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

GENERAL CONTRACT REQUIREMENTS

52.223-3

Hazardous Material Identification and Material Safety Data. (Jan 1997) Alt I (Jul 1995)

(a) "Hazardous material," as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material (If none, insert "None")	Identification No.
None	

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered non-responsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations

(including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to-

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with paragraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(i) Except as provided in paragraph (i)(2), the Contractor shall prepare and submit a sufficient number of Material Safety Data Sheets (MSDS's), meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous materials identified in paragraph (b) of this clause.

(1) For items shipped to consignees, the Contractor shall include a copy of the MSDS's with the packing list or other suitable shipping document, which accompanies each shipment. Alternatively, the Contractor is permitted to transmit MSDS's to consignees in advance of receipt of shipments by consignees, if authorized in writing by the Contracting Officer.

(2) For items shipped to consignees identified by mailing address as agency depots, distribution centers or customer supply centers, the Contractor shall provide one copy of the MSDS's in or on each shipping container. If affixed to the outside of each container, the MSDS's must be placed in a weather resistant envelope.

(End of Clause)

52.223-9

**Estimate of Percentage of Recovered Material Content
for EPA-Designated Products.
(AUG 2000)**

(a) *Definitions.* As used in this clause— “Post consumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Post consumer material is a part of the broader category of “recovered material.” “Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material used in contract performance, including, if applicable, the percentage of post consumer material content; and

(2) Submit this estimate to:

**Contracting Officer
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, VA 20166.**

(End of Clause)

52.228-15

**Performance and Payment Bonds -- Construction
(Nov 2006)**

(a) *Definitions.* As used in this clause --

“Original contract price” means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) *Amount of required bonds.* Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) *Performance Bonds (Standard Form 25).* The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) *Payment Bonds (Standard Form 25-A).* The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) *Additional bond protection.*

(i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) *Furnishing executed bonds.* The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) *Surety or other security for bonds.* The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier’s check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of Treasury
Financial Management Service
Surety Bond Branch
3700 East West Highway, Room 6F01
Hyattsville, MD 20782
Or via the internet at
<http://www.fms.treas.gov/c570/> .

(e) *Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)).* Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of Clause)

52.248-3

**Value Engineering – Construction.
(Feb 2000)**

(a) *General.* The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP’s) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP’s, in accordance with paragraph (f) below.

(b) *Definitions.* “Collateral costs,” as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

“Collateral savings,” as used in this clause, means those measurable net reductions resulting from a VECP in the

agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that --

- (1) Requires a change to this, the instant contract, to implement; and
- (2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change-
 - (i) In deliverable end item quantities only; or
 - (ii) To the contract type only.

(c) *VECP preparation.* As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (c)(1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

- (1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.
- (2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.
- (3) A separate, detailed cost estimate for

(i) the affected portions of the existing contract requirement and

(ii) the VECP.

The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) *Submission.* The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) *Government action.*

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it will not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral

decision made solely at the discretion of the Contracting Officer.

(f) *Sharing* --

(1) *Rates*. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by --

- (i) 45 percent for fixed-price contracts; or
- (ii) 75 percent for cost-reimbursement contracts.

(2) *Payment*. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to --

- (i) Accept the VECP;
- (ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and
- (iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) *Collateral savings*. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) *Subcontracts*. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; *provided*, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) *Data*. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

These data, furnished under the Value Engineering -- Construction clause of contract DTFH71-08-C-000XX, shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information

contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations.

(End of Section G)

FEDERAL ACQUISITION REGULATION AND TRANSPORTATION ACQUISITION REGULATION CLAUSES

CONSTRUCTION CONTRACT REQUIREMENTS

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within (**SEE SF 1442, BLOCK 11 FOR NUMBER OF DAYS**) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than (**THE TIME INDICATED IN THE CONTINUATION OF THE SF 1442, BLOCK 11**). The time stated for completion shall include final cleanup of the premises. **(End of Clause)**.

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEPT 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of (**SEE SUBSECTION 108.04 OF THE FP AND/OR SPECIAL CONTRACT REQUIREMENTS FOR AMOUNT**) for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause. **(End of Clause)**

52.211-18 -- Variation in Estimated Quantity.

As prescribed in [11.703\(c\)](#), insert the following clause in solicitations and contracts when a fixed-price construction contract is contemplated that authorizes a variation in the estimated quantity of unit-priced items:

Variation in Estimated Quantity (Apr 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an

extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgment of the Contracting Officer, is justified. **(End of Clause)**

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR. (Apr 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least **50** percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of Clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations (**SEE CONTINUATION OF SF 1442, BLOCK 9**).

(b) Weather conditions: **CONTACT LOCAL OFFICE OF NATIONAL WEATHER SERVICE, U.S. DEPARTMENT OF COMMERCE.**

(c) Transportation facilities: **N/A**

(d) Other Information: **SEE CONTINUATION OF SF 1442, BLOCK 9.**

(End of Clause)

(End of Section H)

FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION
SPECIAL CONTRACT REQUIREMENTS
Project **PRA-FOOT 8E15**
GREAT SMOKY MOUNTAINS NATIONAL PARK
FOOTHILLS PARKWAY

The following Special Contract Requirements amend and supplement the *Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-03) U. S. Customary Units*, U. S. Department of Transportation, Federal Highway Administration.

Section 101.—TERMS, FORMAT, AND DEFINITIONS

101.01. Delete the last paragraph.

101.04. Delete the definition for "Substantial Completion" and substitute the following:

Substantial Completion -- Point at which all bridge repair, subsidence repair, permanent sign installation, surface treatment, curb, paved waterways, and turf establishment work is completed. For all other work, the point at which the CO determines the project can be accepted for maintenance without further delays, disruptions, or other impediments.

Section 102.—BID, AWARD, AND EXECUTION OF CONTRACT

102.04. Add the following:

Furnish documentary evidence as to the ownership and value of the assets pledged in support of the bond and details of the security interest in the assets by the individual sureties for the apparent low bidder within 14 calendar days after the opening of bids. Failure to submit evidence within the time required will be grounds for declaring the surety unacceptable.

In addition, the CO may, after reviewing the Affidavit of Individual Surety and documentary information on the security interest and the assets pledged, by certified mail to the surety's business or residence address (as shown on the bond), request the surety to provide further information and/or documents with respect to any of the documents provided. The CO may require such information to be furnished under oath. Failure of the surety to accept such mail, or failure of the surety to respond with the requested information or documents within 7 business days of receipt of the request, will be cause for rejection of the surety.

These requirements are in addition to the requirements in FAR Subpart 28.203, except where in conflict with the requirements in the FAR, in which case the FAR controls.

102.06. Add the following after the last paragraph:

Submit the documentary evidence for individual sureties at the same time as the Affidavit of Individual Surety and security interest in assets pledged. A Contractor submitting an unacceptable individual surety in satisfaction of a performance or payment bond before the issuance of the Notice to Proceed will be permitted one opportunity to substitute an acceptable surety or sureties within 7 business days of receipt of notification that the surety is unacceptable.

The Government's right to direct the substitution of sureties to ensure the continuing acceptability of the bonds during the performance of the Contract according to FAR Clause 52.228-2, Additional Bond Security, is not restricted.

These requirements are in addition to the requirements in FAR Subpart 28.203, except where in

conflict with the requirements in the FAR, in which case the FAR controls.

Section 104.—CONTROL OF WORK

104.03(a). Add the following to the third paragraph:

Drawings will be reviewed in the order they are received.

104.03(b). Add the following after 104.03(b):

(c) As-built working drawings. Furnish 2 sets of as-built working drawings. The Government will provide 2 sets of contract drawings to be used exclusively for recording the as-built details of the project.

Keep the as-built working drawings current on a weekly basis and have at least 1 set available on the jobsite at all times. Accurately and neatly record changes from the contract plans, which are made in the work, or additional information, which might be uncovered in the course of construction, as they occur by means of details and notes. Maintain a log of all changes made to the as-built working drawings, and monthly, at the estimate cutoff date, make the as-built working drawings and log available for review by the CO.

Note all additions or revisions to the location, character, and dimensions of the prescribed work shown on the contract drawings. Line out all details shown that are not applicable to the completed work. Use the red-line process (red pencil or red ink) to record on the as-built working drawings and final as-built drawings, as a minimum, but not limited to, the information described below:

(1) Typical section(s)

(a) Revisions in dimensions; and

(b) Revisions in materials.

(2) Plan and profile

(a) Plan

(1) Revisions to the alignment;

(2) Changes in the construction limits;

(3) Revisions in location, type, and grade of road approaches;

(4) Location and type of utilities;

- (5) Location, size, and type of underdrains;
- (6) Skew of culverts;
- (7) Channel changes;
- (8) Location of monuments and permanent references;
- (9) Elevations for all aerial and underground crossings of utilities; and
- (10) Location, length, and type of fencing.

(b) Profile

- (1) Revisions to grades, elevations, and stationing of intersection PIs;
- (2) Equations;
- (3) Culvert diameter, length, type, and stationing;
- (4) Length of culvert extension, and length of existing culvert;
- (5) Location, length, stationing, and type of retaining walls; and
- (6) Location, length, stationing, and end treatment of guardrail.

(3) Bridge

- (a)* Stationing of bridge ends;
- (b)* Elevations including footing, bearing pads, deck, and top of walls;
- (c)* Pile driving record with pile length, size, type, and tip elevation;
- (d)* Post-tensioning records including stressing sequence, jacking force, and duct size and layout;
- (e)* Construction and concrete placement sequences;
- (f)* Bearing details with orientation;
- (g)* Expansion joints including actual clearance with atmospheric temperature; and
- (h)* Any changes in plan or dimensions including any major changes in reinforcing.

(4) Miscellaneous

- (a) Revisions to parking areas or turnouts;
- (b) Final location, type and length of curbs, sidewalks, etc.;
- (c) Fencing type and limits; and
- (d) Landscaping and planting.

(5) Special Contract Procedures

- (a) Method of excavation, concrete placement, girder erection, structure repairs, etc.

Prepare final as-built drawings after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The as-built working drawings and final as-built drawings will be jointly reviewed for accuracy and completeness by the CO and the Contractor prior to submission of each monthly pay estimate.

If the monthly review finds that the Contractor is not maintaining the as-built working drawings, payment of the Contractor's invoice will be withheld until the as-built working drawings are brought up to date.

Furnish the as-built working drawings to the CO before the final inspection. Correct all details found during the final inspection that are not shown on the as-built working drawings and return to the CO within 5 working days for approval.

Once final as-built working drawings have been approved by the CO, provide final as-built drawings in the latest version of Adobe Acrobat (PDF) format (at the time of submission) on two sets of CD-R or DVD-R. Include the latest version Adobe Acrobat reader on the CD-R or DVD-R. Provide the final as-built drawings with a resolution quality such that the redlined drawings and notations are clearly discernable. Final payment per Subsection 109.09 will not be made until the CD-R or DVD-R of the final as-built drawings have been reviewed and approved by the CO.

No direct payment will be made for maintaining and furnishing as-built working drawings.

104.05. Add the following:

Construction traffic and hauling of material and equipment to project sites will only be permitted from the southwest ramp at the junction of US Route 321 and Foothills Parkway (at Wears Valley, TN). Keep the existing access gate in closed position at all times during the construction.

Do not exceed the following load restrictions:

<u>Truck Type</u>	<u>Gross Vehicle Weight – pounds</u>
H	80,000
HS	120,000
Type 3	114,000
Type 3S2	138,000

Where the ground is saturated with water or during periods of freezing and thawing, the CO may impose further load restrictions or suspend hauling.

Do not exceed 30 miles per hour on the the Foothills Parkway and space trucks at 500-foot minimum intervals on all National Park Service roads. Do not exceed 25 miles per hour or operate more than 1 loaded hauling vehicle at a time on a bridge.

Section 105.—CONTROL OF MATERIAL

105.02(b). Add the following:

If any material is to be excavated from any material source outside the construction limits, other than commercially operated sites, before work begins provide a certification from the State Historic Preservation Officer or Indian Tribal Council, if applicable, stating:

- (1) That a cultural resource survey (a survey for historical sites and archeological remains) has been performed at the proposed site, and
- (2) That no significant cultural resources exist in the area that will be disturbed by the Contractor.

Section 106.—ACCEPTANCE OF WORK

106.03. Delete the first sentence of the second paragraph and substitute the following:

Other than references in or to the FAR or Federal Law, when these Standard Specifications or Supplemental Contract Requirements reference certifications; certificates; or certified documents, equipment, or individuals, these references are not certifications under Section 4301 of Public Law 104-106, National Defense Authorization Act for Fiscal Year 1996.

Section 107.—LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

107.01. Add the following:

The following permits may be required for this project:

- (a) Water Quality Permit
- (b) Hazardous Waste Permit
- (c) Disposal Permit or Agreement

This list of permits may not be all inclusive of those required for construction. No time or damages, including impact damages, will be allowed for failure to obtain necessary permits or agreements. Provide copies of these permits and agreements upon request.

107.01. Delete the second sentence of the third paragraph and substitute the following:

Obtain all additional permits or agreements and modifications to Government-obtained permits or agreements that are required.

107.02. Add the following after the third paragraph:

For the full duration of construction, protect the existing trees that are tagged by the CO in the following manner:

- (a) Install and maintain a 4-foot high wood slat fence with steel posts around the perimeter of the root protection area, per Subsection 619.06. The root protection area is defined as an area equal to 10 feet outside the dripline.
- (b) All construction which takes place within the root protection area must be approved by the CO. Do not store or locate construction materials, vehicles, staging areas, topsoil, disposal areas, or trailers within the root protection area. Protect the area from flooding, erosion, sedimentation, and potentially harmful materials through run-off or spillage.
- (c) Remove all tree protection prior to final acceptance.
- (d) Make restitution to the Great Smoky Mountains National Park for any trees damaged due to careless construction or inappropriate protection of existing trees. The amount of restitution, for each tree, will depend on the extent of damage.

If a tree is destroyed, remove the tree and make restitution for the loss of the tree. The value of the tree will be determined at \$35.00 per square inches of trunk area (determined by diameter at 5 feet above the ground). A tree will be considered destroyed if any of the following apply:

- (1) Any of the buttress root is debarked.

(2) 20 percent of the root protection area is impacted by equipment or stockpiled materials.

(3) Wound(s) to the tree trunk measure to 20 percent or more of the total circumference of the tree.

If a tree is damaged, make restitution for the repair of the tree. A resource management specialist will dress each wound. The cost will be determined at \$25.00 per wound on the trunk below the 8-foot level and \$40.00 per wound at and above the 8-foot level. A tree will be considered damaged if it suffers wounds to the trunk of less than 20 percent of the total circumference of the tree.

If any limbs or branches are broken or cut off without prior approval from the CO, make restitution for the repair. A resource management specialist will prune and dress each wound. The cost will be determined at \$45.00 per limb or branch.

(e) Make restitution to the Great Smoky Mountains National Park for the introduction of any exotic vegetation introduced into the Park through the careless use of unclean turf establishment equipment. The amount of restitution will be based on the number of man-hours required to remove the vegetation at \$20.00 per man-hour.

107.02. Add the following after the sixth paragraph:

Notify the CO in writing at least 48 hours in advance of any scheduled utility shutdown, investigation, and /or related work.

107.05. Add the following after the second paragraph:

Submit all claims to the insurance company for investigation, regardless of deductible, unless the Contractor has chosen to pay the claim directly. Provide the results of any investigations and subsequent actions to the CO within 1 week of receipt from the insurance company or of action. Determination by the insurance company that the claim is not covered by the policy is not an adequate basis for the Contractor to fail to meet its obligations under the requirements of this Section.

107.08. Add the following after the third paragraph:

The Contractor is required by OSHA to have a current safety and occupational health program that addresses all potential safety threats associated with this project. If the Contractor's general safety plan does not address the threat on this project, a Site Specific Safety Plan needs to be developed that will address them. This plan shall be submitted to the CO at the Pre-construction Conference. The safety plan should, as a minimum, address the following:

(a) Subcontractors. The Contractor is ultimately responsible for all work on the project, if the Contractor is using Subcontractors, each Subcontractor should provide a Site Specific

Safety Plan that meets the prime Contractor's approval. Subcontractor's plans shall be submitted with the Contractor's plan.

(b) Environmental Concerns. Address the potential for release of hazardous materials. Identify what measures the Contractor will take to minimize the risk of hazardous liquids being released into the watershed, how the Contractor proposes to contain and cleanup any such releases, certification requirements for Contractor employees responsible for the cleanup, and notification to the appropriate environmental agencies. Identify the proper storage of hazardous materials and how to properly dispose of hazardous waste and who the responsible person is for disposal. Find the requirements for this in 29 CFR 1926 Subpart H.

(c) Accident/Near Miss Reporting. State the requirement for documenting accidents. Notify the CO or NPS representative of all accidents, and address notification procedures. Find the requirements for this in 29 CFR 1960.68.

(d) Safety Training/Meetings. Identify all safety training requirements for each employee or job title that is specific to this project, such as hearing conservation, respiratory protection, hazard communication, personal protective equipment, hypothermia, heat illnesses, and first responder awareness. Find the requirements for this in 29 CFR 1960.59.

Make available upon request, to the CO or NPS representative, the lesson plan and attendance roster for each required training requirement.

(e) Qualified Employees. Address the requirements to assure only qualified employees who are operating equipment. Find the requirements for this in 29 CFR 1926.20(b)(4).

(f) Hazard Communications. Identify how to implement hazard communication program, such as labeling of hazardous materials, requirements for material safety data sheets, employee training, and a chemical control inventory. Find the requirements for this program in 29 CFR 1910.1200.

(g) First Aid. At least one person, who is CPR Certified and trained, is on site at all times. Find the requirements for this in 29 CFR 1926.50(c).

(h) Personal Protective Equipment. Identify what and when the employees wear personal protective equipment, such as hard hats, hearing protection, safety footwear, gloves, and safety glasses. Find the requirements for this in 29 CFR 1926.28. Examples: Wear safety goggles and face shields when pouring hazardous liquids; Wear safety glasses when using a grinder.

Identify specific areas and jobs that require hearing protection with the proper noise reduction rating. Identify specific areas or jobs that require the use of respirators such as negative pressure half mask or full face piece respirators, powered-air purifying respirators, airline respirators, or self contained breathing apparatus. Identify employee training in respiratory protection and fit testing requirements for negative pressure respirator use. Find the requirements for these in 29 CFR 1926 Subpart E.

(i) Motor Vehicle Operations. Address safety requirement for all motor vehicles used on the project including the use of rollover protection. Find the requirements for this in 29 CFR 1926 Subpart O and in 29 CFR 1926 Subpart W.

(j) Safety Inspections. Address formal safety inspections during the project to include documentation of any hazards identified and their abatement. Find the requirements for this in 29 CFR 1926.20(b)(2).

(k) Fire. Address in the plan contingencies for equipment fires. Find the requirements for this in 29 CFR 1926 Subpart F.

(l) Fall protection. Develop a section in the safety program that will address how to protect employees from being injured or killed as a result of falls while they are working on the new bridge structure before installing rails, while working on steep hillsides or cliffs, or while working in other locations where there is a potential for injury due to falling from unsafe heights. Find the requirements for this in 29 CFR 1926.500.

(m) Electrical Safety. Develop a section in the safety program that will address how to protect employees from energized electrical equipment used on the work site. Find the requirements for this in 29 CFR 1926 Subpart K.

(n) Cranes and Rigging. Develop a section in the safety program that will address specifications and limitations applicable to the operation of any and all cranes and derricks. The program also include determining and posting rated load capacities, inspection of all machinery, equipment, and slings and ropes, applicable clearances around cranes and operation of equipment by certified operators. Find the requirements for this in 29 CFR 1926.550.

(o) Persons Authorized to Repair Equipment. Identify authorized individuals to repair equipment that may break down or need servicing during the length of contract. Include all electrical and mechanical equipment.

(p) Driver Safety. Address the safety of employees driving to and from the project site including all roadways existing on Government property, such as the closed section of the Foothills Parkway.

(q) Spill Containment Kit. Address how the Contractor will remediate against spills. This includes all areas on or off government property. Provide and maintain no less than two 210-liter (55 gallon) hazardous materials containment kits on the project at all times. Immediately report all hazardous material spills to the CO.

107.09. Add the following:

Pick up all trash from the project site and along the Foothills Parkway from Wears Valley Road to the project site on a daily basis. Remove all accumulated trash from the project area each week to the satisfaction of the CO. Failure to maintain an acceptable litter control program will result in the following:

The CO will give a written request to the Contractor to clean-up the affected area(s). The Contractor shall comply within 24 hours of receipt of the request. If still not in compliance, the CO will assess a daily fee of \$200 per calendar day until all trash is removed.

Section 108.—PROSECUTION AND PROGRESS

108.01. Add the following:

Construction operations are limited as follows:

Complete the repair on bridge over Happy Hollow Road, shoulder at bridge approach slabs and subsidence area prior to mobilization for constructing reinforced fill.

Work will be permitted on Sundays and National legal holidays as approved by the CO.

Do not use the existing Pioneer Road Trace beyond station 779+00 for access to or egress from the project site.

No advertising is permitted in the Park.

Obtain approval for location of washout pit. Construct washout pit before any concrete is delivered to the project. Dispose of excess concrete per Subsection 203.05(a). Do not waste concrete on site.

Do not operate track vehicles across bridge decks unless placing minimum 4 inches thick hardwood timber mat for track vehicles to run on.

Section 109.—MEASUREMENT AND PAYMENT

109.02(m). Add the following:

Do not measure overlaps.

109.08(b). Add the following:

Submit invoices by the 7th day after the closing date. Invoices received after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following month's invoice.

109.08(c). Add the following:

The Government's designated billing office is:

Federal Highway Administration
Eastern Federal Lands Highway Division
Loudoun Tech Center
21400 Ridgetop Circle
Room 200
Sterling, Virginia 20166-6511
ATTN: CONSTRUCTION DIVISION

Section 152.—CONSTRUCTION SURVEY AND STAKING

152.03. Delete the text of paragraphs (h), (i), (j), and (k).

152.03(a). Add the following:

Set benchmarks (at least every 200 feet of roadway). Replace any missing control points.

152.03(c). Add the following:

Perform slope staking prior to clearing and grubbing operations (with the exception for line clearing required to set stakes). Submit the original ground cross-sections, slope stake notes, and reference data in the approved format prior to setting clearing and grubbing limits.

Adjust slope stake to protect significant trees, features, or to better fit the shape of the mountain as directed by the CO. Slope stakes must be approved in the field by the CO before work begins.

152.03(f). Delete the third paragraph and substitute the following:

The maximum longitudinal spacing between stakes is 25 feet when the centerline curve radius is less than or equal to 500 feet. When the centerline curve radius is greater than 500 feet, the maximum longitudinal spacing between stakes is 50 feet. The maximum transverse spacing between stakes is 25 feet. Reset grade finishing stakes as many times as necessary to construct the subgrade and each aggregate course. Use brushes or guard stakes at each stake.

152.03(l). Delete items (9) and (10) and substitute the following:

(9) Traffic control (both permanent and temporary) signs, signals, markings, delineators, object markers, etc; and

152.03(m). Add the following:

Once construction is complete, set permanent centerline references at all control points (PS, SC, CS, ST, PC, PT, etc.) using durable (metal) markers in the roadway for future use in the construction of adjacent sections and the paving of the entire roadway.

Take intermediate cross-sections as directed by the CO.

Section 154.—CONTRACTOR SAMPLING AND TESTING

154.02. Delete the fourth sentence of the second paragraph and substitute the following:

Deliver the Government's portion of the sample or split sample in an acceptable container suitable for shipment to:

FHWA
112 Industrial Park Dr
Sevierville, TN 37862

154.03. Add the following:

Furnish test results to the CO immediately after completing the test. Report early breaks performed at the Contractor's option to the CO immediately after completing the test. The requirements for furnishing test results do not include sample aging or curing time; therefore, reporting times will be extended accordingly.

Submit proposals for using alternate AASHTO or State approved test methods in writing for approval. Alternate methods may be allowed based on documented equivalence to the method specified.

154.04. Add the following:

On a weekly basis, submit a copy of all current Contractor test results and pay factor calculations based on those tests for items accepted under Subsection 106.05. When large quantities are produced, calculate pay factors as soon as possible. Use this information to make any necessary adjustments to operations to achieve acceptable pay factors. The Government may use the Contractor's test results to determine final pay factors for acceptance according to Subsection 154.05.

Section 155.—SCHEDULES FOR CONSTRUCTION CONTRACTS

155.02. Add the following:

Show the completion of the work on bridge over Happy Hollow Road, shoulder at bridge approach slabs and subsidence area prior to mobilization for constructing reinforced fill.

Add the following table at the end of Section 155:

TABLE 155-1

Project Number _____

Location of NOAA Data Collection Station _____

Data Years (10-year history): 19__ through 20__

REASONABLY PREDICTABLE WEATHER

MONTH	AVERAGE WORKDAYS LOST	STANDARD DEVIATION	TOTAL LOST DAYS
JANUARY			
FEBRUARY			
MARCH			
APRIL			
MAY			
JUNE			
JULY			
AUGUST			
SEPTEMBER			
OCTOBER			
NOVEMBER			
DECEMBER			

Section 156.—PUBLIC TRAFFIC

156.03. Add the following:

Construction traffic and hauling of material and equipment to project sites will only be permitted from the southwest ramp at the junction of US Route 321 and Foothills Parkway (at Wears Valley, TN). Keep the existing access gate in closed position at all times during the construction.

156.04(c). Delete the Subsection and substitute the following:

(c) Snow removal to facilitate the work is the Contractor's responsibility. The NPS does not maintain access on closed sections of the Foothills Parkway. Provide appropriate locks and devices for "double locking" the gate to ensure access to the project. Trees occasionally fall on the Foothills Parkway which may block access to the project site. Remove and dispose of fallen trees as directed by the CO. No allowances will be made to compensate Contractor if they cannot reach the project site.

156.04(f). Add the following:

Ensure that all drains and inlets within the project limits are fully functional throughout the duration of the project.

156.06(e). Add the following:

Pullouts and parking areas along the unfinished section of the Foothills Parkway may be used for staging and storage. Proposed stockpile areas must be approved in advance by the CO. Limit the amount of stockpiled materials as directed by the CO in these areas to avoid failure of fill slopes. Upon completion of the project, restore all staging areas to original or better condition.

156.08. Delete the second sentence of the first paragraph and substitute the following:

The traffic safety supervisor may be the superintendent.

Section 157.—SOIL EROSION CONTROL

157.09. Add the following:

Use alternative methods for diverting water around disturbed areas. Example: staked sediment logs with plastic sheeting where construction of earth berms will be difficult or cause additional disturbance.

157.10(c). Delete the Subsection and substitute the following:

(c) Check dams. Construct riprap, sandbags, earth berms, or use logs for temporary dams to reduce the velocity of runoff in ditches and swales.

157.11. Add the following:

Install and maintain all erosion and sediment control measures by hand at the bridge, at the toe of the fill, and other areas as directed by the CO. Minimize disturbance to existing vegetation.

Install silt fence along the downhill perimeter of all staging areas not within a curb line.

Some sediment control devices may be left in place as directed by CO. All others are to be removed per contract.

157.11. Delete Table 157-1 and substitute the following:

Table 157-1
Application Rates for Temporary Turf Establishment

Material	Application Rate (pounds/acre)
Fescue, Hard	48
Fescue, Red	48
Fescue, Chewings	27
Annual Ryegrass	27
Native Seed (provided by the Park as available)	24

157.13. Add the following:

Failure to properly maintain erosion control devices as set forth in the contract may result in the following actions:

- (a) CO withholding payment for erosion control devices on any subsequent invoice payments to the Contractor until devices are properly restored to working condition.
- (b) Failure to comply with requests to maintain erosion control devices from CO within 24 hours of receipt may result in a non-refundable penalty of \$200 per offense for each offense per calendar day until corrective action is taken.

Section 201.—CLEARING AND GRUBBING

201.03. Add the following:

No clearing or grubbing will be permitted until cross sections and slope staking are completed, adjusted, and approved by the CO for entire project.

201.08. Add the following:

Do not measure removal of vegetation for repair on bridge over Happy Hollow Road, shoulder at bridge approach slabs and subsidence area for payment.

Section 203.—REMOVAL OF STRUCTURES AND OBSTRUCTIONS

203.04. Add the following:

(a) Concrete Removal by Mechanical Impact Methods. Furnish equipment that complies with the following:

(1) Use power-driven hand tools for removal of existing concrete with the following restrictions:

- (a) Do not use jackhammers heavier than 30 pounds.
- (b) Do not operate 30-pound jackhammers and mechanical chipping tools at an angle in excess of 45 degrees measured from the surface of the slab.
- (c) Do not use chipping hammers heavier than a nominal 15-pound class to remove concrete from beneath any reinforcing bar.

(2) Use hand tools (hammers and chisels) for removal of final particles of concrete or to achieve the required depth.

(b) Reinforcing Steel. Clean all reinforcing steel that is to remain in place and has been exposed by removal operations. Remove all rust and corrosive products, including oil, dirt, concrete fragments, laitance, loose scale, and other coating of any character that would destroy or inhibit the bond with the new concrete.

When cleaned reinforcing steel will be exposed for more than 7 calendar days before placing the concrete, protect the steel from corrosion and contamination. Clean and/or replace all reinforcing steel corroded or contaminated because of the Contractor's failure to protect the steel.

Prevent cutting or damaging reinforcing steel designated to remain in place. Repair or replace any damaged bars.

203.05(b). Delete the Subsection and substitute the following:

(b) Burn. Burning is prohibited. Dispose of material according to Subsection 203.05(a).

203.05(c). Delete the Subsection and substitute the following:

(c) Bury. Burying debris is prohibited. Dispose of material according to Subsection 203.05(a).

Section 204.—EXCAVATION AND EMBANKMENT

204.03. Add the following:

Geogrid	714.03
Rock Borrow (Limestone Shot Rock)	705.07
Select Rock Borrow (Select Limestone Shot Rock)	705.08

204.06. Add the following:

Conserve excavated material in place until it is ready for use.

Pyritic (acid-producing) excavation materials may be encountered during construction operations. Notify the CO 72 hours prior to beginning excavation operations. Conduct verification testing using an independent laboratory to determine whether or not the material is pyritic. If pyritic material is found in test result, perform the following special handling manner:

Separate pyritic material from other excavated material and stockpile as directed by the CO. The volume of stockpiled pyritic material will be determined by field testing. Mix one part

of pyritic material with at least four parts of limestone (by mass) to produce a backfill pyritic mixture (pyritic-mix) for constructing embankment. Do not incorporate pyritic-mix (or pyritic material) into the select limestone shot rock. Do not place pyritic-mix less than 6 feet below subbase layer nor less than 5 feet away from the fill slope surface. Do not place pyritic-mix within 5 feet of underdrain plastic pipe.

At the end of each day's operation, cover all pyritic material stockpiled according to Section 648.

At the end of each day's operation, cover all exposed surfaces of pyritic-mix used in embankment area with an 8-inch layer of limestone. Shape this layer to drain to temporary erosion control devices as approved by the CO.

Geogrid foundation preparation: Level the select limestone shot rock to a flat pad (zero degree slope in all directions) that when laying out the geogrid, it gets placed on a horizontal plane. Install the geogrid according to the manufacture's recommendations. Construct embankment structure as shown on plans. Repeat the process until the final geogrid layer is reached.

Place the geogrid to the extent shown on the plans. Place the geogrid reinforcement in continuous longitudinal strips such that the principle (highest) strength axis is perpendicular to the fill slope.

Overlap the geogrids a minimum of 2 feet at the ends and sides of adjoining sheets as necessary. Do not place longitudinal overlaps below anticipated wheel loads. Hold the geogrids in place with pins, staples, or piles of cover material.

Use suitable means (such as pins, staples or pile of cover material) to pull and hold tight geogrid reinforcement during the backfill of subsequent layer. Compact the material with rubber-tired or nonvibratory smooth drum rollers as approved by the CO. Avoid sudden stops, starts, turns or any activities of the construction equipment that cause displacement of embankment and damage to the geogrid reinforcement. Do not operate track-mounted equipment on the geogrid reinforcement until at least 12 inches of subsequent layer has been placed over the geogrid. Place and compact the next succeeding layer of material as shown on the plans according to Subsections 204.10 and 204.11.

204.10. Add the following:

Collect and test samples for acid producing potential by using Acid-Base Accounting procedure or other methods as approved by the CO.

Take a minimum of 2 samples during the excavation for each bench for embankment construction at locations specified by the CO.

Provide all test results to the CO immediately after completion of test.

204.11(b). Add the following:

Use AASHTO T180 method for all classifications. Adjust optimum moisture to +/- 2 percent optimum for all classifications.

204.13(d). Add the following:

Flush the exposed faces of rock embankment with soil conserved from the excavation.

204.15. Add the following:

Material for geogrid reinforcement will be evaluated under Subsections 106.02, 106.04, and 714.03. Geogrid reinforcement installation will be evaluated under Subsections 106.02 and 106.04.

Rock Borrow and Select Rock Borrow will be evaluated under Subsection 106.02.

204.16(a)(1). Add the following:

(j) Material excavated when benching for embankment.

204.16(a)(2). Delete the text of paragraph (i).

Section 205.—ROCK BLASTING

Delete the entire Section and substitute the following:

Blasting is not permitted on the project. Use mechanical methods such as hoe ramming, or alternate methods as approved by the CO, for rock removal.

Section 301.—UNTREATED AGGREGATE COURSES

301.03. Add the following after the second paragraph:

Submit the representative 300-pound sample to the EFLHD Central Laboratory in Sevierville, Tennessee.

301.03. Add the following:

If an alternate State gradation is produced as provided in Subsection 703.05, notify the CO in writing. The target values with respect to the State gradation will be the midpoint of the allowable State specification band. The allowable deviation (D) will be $\frac{1}{2}$ the State specification band width, and the maximum allowable pay factor under subsection 301.08 will be 1.0.

Section 409.—ASPHALT SURFACE TREATMENT

409.07. Delete the Subsection.

409.14. Delete the second paragraph and substitute the following:

Measure asphalt surface treatment (including both asphalt and aggregate) by the square yard.

Section 552.—STRUCTURAL CONCRETE

552.01. Add the following:

This specification is also intended for use in defining the requirements of reinforced concrete strengthening using fiber reinforced polymer systems. The contractor shall be responsible for furnishing all submittals, materials, tools, equipment, transportation, appropriate storage, labor and supervision required for the installation of the composite system.

This work consists of erosion repair by installing joint material to the opening between approach slab and wingwall or parapet wall and furnishing, placing grout beneath both approach slabs and west abutment. This work also consists of concrete crack and spall repair.

552.02. Add the following:

Aggregate	703.05
Polyethylene film	711.01(b)
Fiber Reinforced Polymer Strengthening Systems	725.30
Grout	725.22

552.03. Add the following:

Submit the shop drawing details, procedures, and material list for use in the installation of the composite system to the CO for approval.

Submit the shop drawing details, procedures, equipment and material list for use in the pumping the grout for filling undermining to the CO for approval.

552.09(b)(4). Add the following:

Provide for compressive strength testing of the concrete cylinders by an independent laboratory, qualified to perform the testing, and as approved by the CO.

552.11(a). Add the following to the third paragraph:

Dispose of mortar, debris, foreign material and excess concrete according to Section 203.

552.11(b). Add the following:

Before placing new concrete, grout, joint material or composite system, clean the existing concrete surface and any exposed reinforcement of all loose material, dust, etc., by shot blasting and thoroughly flushing with clean water under pressure.

If there is an interval of more than 24 hours between cleaning of the sound concrete surface and placement of new concrete, or there are previously prepared concrete surfaces that have been contaminated by any substance detrimental to good bonding, clean or remove the concrete.

Saw cut approximately 0.75 inches deep along all boundaries of the repair areas. Point saw cuts, extending beyond the limits of repair areas, flush with the surface with Portland cement or epoxy mortar.

Where the bond between existing concrete and reinforcing steel has been destroyed, remove the concrete adjacent to the steel to a depth that will permit new concrete to bond to the entire periphery of the exposed steel. Provide a minimum of 0.75 inches clearance behind the steel.

Remove and replace all badly deteriorated reinforcing steel.

After removal of deteriorated or unsound concrete, shotblast exposed structural steel, reinforcing steel and any concrete surfaces which will be in contact with repair material until free of rust and foreign material. Clean the sound concrete surface by flushing with clean water from a high pressure water jet or compressed air.

Install the composite system in accordance to the approved shop drawing submittals, manufacturer's recommendations, and as directed by the CO.

552.19. Add the following:

Materials used for concrete repair will be evaluated under Subsection 106.03.

All work will be accepted as complete once the CO has verified and approved that all areas have been prepared, that all composite systems have been installed and finished according to the manufacturer's recommendations and according to approved shop drawing submittals.

552.20. Add the following:

Measure the composite system repairs and concrete repairs according to Subsection 109.02. Measurement will be by lump sum.

Measure the flowable grout according to Subsection 109.02. Measurement will be by the cubic foot. Include the cost for furnishing, installation and finishing the joint filler between the approach slabs and wingwalls or parapet walls, furnishing and installing grout for spall repairs, and repairs of approach and abutment undermining including drilling and patching access holes under this pay item.

552.21. Add the following:

The accepted quantities will be paid at the contract unit price of measurement for the pay items listed in the bid schedule. Payment shall be full compensation for the materials, labor, and equipment necessary to install the composite system outlined in this Section. Payment will also include all material, labor and equipment necessary for concrete crack/spall and grout repairs as outlined in this Section.

Section 561.—STRUCTURAL CONCRETE BONDING

Description

561.01 This work consists of repairing cracks in concrete structures by pressure injecting epoxy at the locations directed by “CO”.

Material

561.02 Conform to the following Subsections

Epoxy resin adhesives	725.21
Polymer grout	725.22

Construction Requirements

561.03 Crack Preparation Provide notice of crack sealing at least 14 days before beginning work. Mark the locations to be repaired as identified by the CO. Remove all dirt, laitance and other debris from the exterior and interior of cracks. Apply a temporary surface seal material to the face of cracks. Use surface seal material with sufficient strength and adhesion to confine the injected epoxy material until cured.

Provide openings (entry ports) in the surface seal along the crack. Make the distance between entry ports at most the thickness of the concrete member being repaired or directed by the CO.

After the injection adhesive has cured, remove the surface seal. Finish face of the crack and entry ports flush with the adjacent surface.

561.04 Injection Procedures. Begin injecting epoxy at the lowest entry port. Continue injection at the first port until epoxy begins to flow out of the next highest port. Plug the first port and inject epoxy in the second port until the epoxy flows from the next highest port. Continue this sequence until the entire crack is filled. Use a 2-component epoxy system. Maintain the mix ratio for the epoxy as prescribed by the manufacturer within 5 percent by volume at any discharge pressure not to exceed 200 pounds per square inch. Do not use solvents to thin the epoxy.

Use positive inline displacement type equipment to meter, mix and inject the epoxy at pressures not to exceed 200 pounds per square inch.

(a) Test for proper ratio. Perform this test for each injection unit at the beginning and at the end of every day that the unit is used. Disconnect the mixing head of the injection equipment and pump the 2 adhesive components through a ratio check device with 2 independent valved nozzles capable of controlling flow rate and back pressure by opening or closing valves on the check device. Use a pressure gauge capable of sensing back pressure behind each valve to

adjust the discharge pressure to 200 pounds per square inch for both epoxy components into separate calibrated containers. Compare the discharged amounts to determine the mix ratio.

After the test is completed at 200 pounds per square inch discharge pressure, repeat the procedures for 0-pounds per square inch discharge pressure

(b) Test for pressure check. Perform this test for each injection unit at the beginning and at the end of every day that the unit is used.

Disconnect the mixing head of the injection equipment and attach the 2 adhesive component delivery lines to a pressure check device with 2 independent valved nozzles capable of controlling flow rate and pressure by opening or closing the valves. Use a pressure gauge capable of sensing the pressure build-up behind each valve. Close the valves on the pressure-check device and operate the equipment until the gauge pressure on each line reads 200 pounds per square inch. When the pumps are stopped, the gauge pressure must not drop below 190 pounds per square inch within 3 minutes.

(c) Records. Maintain and make available complete and accurate records of the ratio check tests and the pressure check tests. Additional ratio and pressure check tests may be required.

561.05 Coring. Take one 2” diameter test core according to AASHTO T 24 for every 50 feet of repaired crack at designated locations. The crack repair is acceptable if the core sample indicates that 90 percent or more of the crack has been successfully bonded.

When a test core shows that the epoxy bonding has penetrated less than 90 percent of the crack volume within the core sample, redo that 50-foot crack segment that the core represents and resample. Repeat this procedure until acceptable crack repair is achieved.

Fill all sample core holes with polymer grout and finish the surface to match the adjacent concrete.

Exclude coring of prestressed beams.

561.06 Acceptance. Material for structural bonding will be evaluated under Subsections 106.02 and 106.03.

Structural concrete bonding work will be evaluated under Subsections 106.02 and 106.04. See Table 561-1 for sampling and testing requirements. Crack repair will be evaluated according to Subsection 561.05.

Measurement

561.07 Measure structural concrete bonding by the linear foot

When measurement is by the linear foot, measure the actual linear feet of the surface crack acceptably repaired. Include the cost for surface sealing of cracks in this pay item.

Payment

561.08 The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the pay items listed below that are shown in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05

Section 562.—TEMPORARY WORKS

562.02. Delete the second sentence and substitute the following:

Furnish factory fabricated components of vertical shoring towers complying with the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033).

562.03. Delete the third from the last paragraph and substitute the following:

Do not use deck overhang form brackets for girder bridges that require holes to be cast or drilled into the girder webs.

562.07. Delete this Subsection and substitute the following:

562.07 Maintenance and Inspection. Inspect and maintain temporary works in an acceptable condition throughout the period of use.

In the presence of the CO, perform an in-depth inspection of temporary works not more than 24 hours before beginning each concrete placement or before allowing people to enter a cofferdam or excavation support structure. Inspect other temporary works at least once a month to ensure they are functioning properly. Use a registered professional engineer to inspect cofferdams, shoring, support of excavation structures, and support systems for load tests before loading.

Furnish written results of the inspections to the CO before placing concrete, allowing people to enter a cofferdam or excavation support structure, or loading temporary works. Include a certification that the system meets the requirements of the contract and drawings.

Clearly mark the capacity of factory fabricated components of vertical shoring towers according to *the Certification Program for Bridge Temporary Works* (FHWA-RD-93-033). Make

inspections and certifications for factory fabricated components of vertical shoring towers according to the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033).

Section 602.—CULVERTS AND DRAINS

602.03. Add the following:

Furnish Smooth Wall (Solid Wall) Polyethylene Plastic pipe culvert.

Section 620.—STONE MASONRY

620.01. Add the following:

Masonry is designated as Class B masonry with a one inch RF finish for stone masonry. The Class B masonry shall match the masonry on Bridges No. 9 and No. 10 in appearance.

620.02. Delete the mortar reference and substitute the following:

Mortar shall be colored to match the stone masonry mortar on Bridges No. 9 and No. 10. Submit preliminary samples of colored mortar to the CO for approval.

Section 625.—TURF ESTABLISHMENT

625.01. Add the following:

The work does not include areas previously protected by soil erosion control measures according to Section 157, and upon which permanent suitable vegetation has started growth. When the temporary seeding is only partial turf coverage, scarify the areas void of turf prior to permanent seeding. Then seed, protect, and care for seeding areas to provide complete and acceptable turf coverage.

Apply the mulch in a manner as to avoid tree trunks, sign posts, and guardwalls.

625.03. Add the following:

Apply all seed, fertilizer, mulch, etc., using the hydraulic method only. Dry method hand seeding will only be allowed in otherwise inaccessible areas at the discretion of the CO.

Thoroughly clean all equipment used for applying seed and mulch prior to use on this project. This equipment will be subject to inspection at the CO's discretion. This is to preclude the introduction of exotic vegetation into the Park. Make restitution for the removal of the exotic vegetation as described in Section 107.

625.06. Add the following:

Apply limestone and fertilizer at the following rates:

<u>Item</u>	<u>Rate (pounds per acre)</u>
Agricultural Limestone (85 percent CaCO ₃)	3,000
Fertilizer	1,800

Spread fertilizer and lime evenly across slope utilizing the hydraulic seeding process.

625.07. Delete the Subsection and substitute the following:

Hydraulic method. Use hydraulic-type equipment capable of providing a uniform application of using water as the carrying agent. Add a tracer material consisting of **Soil Guard® Bonded Fiber Matrix** (BFM) to the water. Apply the tracer material at a rate of 400 pounds per acre to provide visible evidence of uniform application. Add the seed to the water slurry no more than 30 minutes before application. Seed by hand areas inaccessible to seeding equipment.

Apply seed at the rates for each season as follows:

<u>Name of Seed</u>	<u>Rates (pounds per acre)</u>
Fescue, Hard	80
Fescue, Red	80
Fescue, Chewings	45
Annual Ryegrass	45
Native Seed (Provided by NPS as available)	<u>40</u>
	Total Seed: 290

Furnish signed copies by the seed vendor certifying that each lot of seed has been tested by a recognized laboratory of a seed testing within 12 months of date of delivery.

Notify the CO a minimum of two weeks in advance of need for native seed. Use annual rye for temporary seeding or as directed by the CO.

625.08. Delete this subsection and substitute the following:

Hydraulic method. Apply mulch, in a separate application, within 48 hours after seeding by the hydraulic-type equipment according to Subsection 625.07.

Use individual who is certified by the manufacturer or other acceptable certification training to install BFM.

Furnish a mixture of BFM according to the manufacturer's recommendations and provide "free liquid" test if requested by the CO.

Use standard hydraulically seeding equipment in successive layer to spray-applied BFM, at a rate of 3,000 pounds to 4,000 pounds per acre, until to achieve 100 percent coverage of all exposed soil. Apply the product so no hole in the matrix is greater than 1 millimeter and no gaps exist between the matrix and the soil.

Do not apply BFM immediately before, after or during rainfall such that the BFM will have opportunity to dry for up to 24 hours after installation.

625.09. Delete the last sentence and substitute the following:

Apply supplemental fertilizer at a rate of 400 pounds per acre. Apply supplemental seed at the same rate as the initial seeding. Apply supplemental mulch at the same rate as the initial mulching and hold in place with a stabilizing emulsion tackifier.

625.09. Add the following:

Protect and care for seeded areas, including watering when needed, until acceptance or for 30

days after final acceptance, if just completed prior to final acceptance of project. This includes repaired areas and areas receiving supplemental applications of seed. At the discretion of the CO, maintain moisture more than 10 days after germination. Apply additional watering at the discretion of the CO.

625.10. Add the following:

Acceptance will not be granted until the permanent seeding has properly germinated, minimum turf coverage of 95 percent has been obtained on all areas seeded, and the turf has reached a minimum overall height of 3 inches, as approved by the CO. Furnish vendor signed copies certifying that each lot of seed has been tested by a recognized laboratory of seed testing within 12 months of delivery date.

625.12. Add the following:

Partial payments for turf establishment will be made as follows:

- (a) 50 percent of the bid price will be paid upon installation.
- (b) The remaining 50 percent of the bid price will be paid following acceptance.

Section 635.—TEMPORARY TRAFFIC CONTROL

635.02. Delete the Construction sign panels Section reference and substitute the following:

Construction sign panels	633.02
--------------------------	--------

635.03. Add the following:

For all signs and other devices requiring orange color, use fluorescent orange, fluorescent red-orange or fluorescent yellow-orange color.

635.03(i). Add the following:

Submit a certification that the devices have been successfully crash tested to meet the requirements of NCHRP 350 and/or have been accepted by the FHWA.

635.07. Delete the last sentence of the first paragraph and substitute the following:

Remove or completely cover all unnecessary signs, or signs that conflict with the construction signing or Traffic Control Plan. Cover signs that are not removed so that no part of the covered sign is visible to traffic. Provide sign covers for temporary signs meeting the following requirements:

- (a) Large enough to completely cover the sign.
- (b) Easy to attach to and remove from the sign without damaging the sign face. Do not use adhesives, glues, tapes, or mechanical fasteners that mar the sign face.
- (c) Black, non-reflective, and opaque.
- (d) Made of plywood (minimum of 3/8-inches thick), aluminum (minimum of 0.040 inches thick), or sheet metal of a sufficient thickness that the covering will not be lifted, bent or damaged by wind.
- (e) Durable enough to resist deterioration due to weathering and atmospheric conditions for the duration of the project.

Section 637.—FACILITIES AND SERVICES

637.02. Add the following:

Locate the Government field office within 5 miles of the project site as approved by the CO. Provide high-speed Internet access, as described in Subsection 637.03(a)(7).

637.03. Delete the third and fourth sentences of the first paragraph and substitute the following:

Provide local and long distance telephone services. The Government will be responsible for the cost of long distance calls made by Government employees for Government business and charged against this phone service. Bill the Government separately for these charges.

637.03(a). Add the following:

Divide the field office into 3 areas by permanent walls with hinged doors. If window air conditioning is provided, provide a separate unit for each room.

Clean the field office weekly to the approval of the CO.

Supply the following equipment in the field office:

(1) Copy machine. One self-feeding plain paper photo copying machine with the following minimum capabilities:

(a) Automatic document feeder capable of making at least 8 copies per minute.

(b) Reproducing copies at standard sizes up to and including 11 x 17 inches.

(c) Reducing 11 x 17 inches plan sheets to 8 ½ x 14 inches legal size and to 8 ½ x 11 inches letter size.

Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

(2) Printer. One plain paper printing machine with printing capabilities of standard sizes up to and including 11 x 17 inches. The printer must be capable of printing from direct personal computer (PC) and local area network (LAN) hookups. The printer may be one machine in combination with the copy machine. Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

(3) Facsimile (FAX) machine. One FAX machine with the following minimum capabilities:

(a) Automatic document feeder with a minimum capacity of 20 pages.

(b) Sending standard size documents up to and including 11 x 17 inches.

(c) Printing on plain paper.

(d) Automatic dial/redial.

The FAX machine may be one machine in combination with the copy machine. Furnish all necessary supplies, except paper. Paper will be supplied by the Government.

(4) Telephone. Two dual line telephones (touch tone, hold button, intercom, and conference calling capabilities) with 2 separate lines, for the exclusive use of the CO.

(5) Answering machine. One digital answering device capable of answering, recording, storing, and playing back messages at least 30 minutes in length.

(6) Cellular telephone. Two durable, hand held digital/cellular wireless telephone(s), manufactured by Motorola/Nextel, or approved equal, for the use of the CO. Furnish cellular telephone(s) that are similar or compatible with the Contractor's key field personnel (Project Superintendent, and Traffic Control Supervisor) to enable the direct communication between the CO and the Contractor's key field personnel. Furnish each cellular telephone(s) with the following minimum capabilities:

- (a) Direct Connect feature, or equivalent, to communicate onsite with Contractor's key field personnel.
- (b) Voicemail capable of answering, recording, storing, and playing back messages at least 30 minutes in length;
- (c) Hands free device that can be used safely and effectively while driving, and is acceptable by the local law enforcement agencies.
- (d) Customized communication configuration, independent of the other units, so that the CO may limit any features if necessary.
- (e) Carrying case that can be worn on the belt and is appropriate for use on construction projects.
- (f) Other necessary cellular telephone accessories including a cigarette lighter power adapter/charger.

The cellular telephone plan shall provide the necessary amount of monthly Direct Connect airtime and monthly Digital/Cellular airtime for use on the project. Ensure that each unit has unlimited Direct Connect capabilities and each unit is equipped with a minimum of 600 minutes per month of local and long distance airtime for official business only.

(7) High-speed Internet access. Provide, install, and maintain high-speed Internet access service having at least 768kbps download and 256kbps upload speed. The high-speed Internet access service can be provided via DSL, FIOS, a dedicated T1 line, or cable. Alternate Internet access service options may be submitted to the CO for approval. The system must include a modem and a router with a firewall or a router and a firewall appliance. The system must have the capability to support simultaneous Internet access of at least 3 workstations connected by Category 6 RJ45 LAN office drop cables. If the router supports wireless Internet access, this feature must be disabled. Wireless Internet access does not meet U.S. DOT security requirements and is not acceptable. The firewall configuration must be submitted to the CO for approval and cannot be changed after it is approved, unless a change request is submitted and approved in advance. Only U.S. DOT equipment is to be connected to the system.

If any equipment supplied becomes defective, is stolen, or for any other reason does not function as intended, replace the equipment with an equal or better unit at no additional cost to the Government. Replace any defective equipment within eight hours after being notified by the CO.

The Contractor will retain ownership of all equipment supplied by the Contractor. The CO will notify the Contractor when the equipment is no longer needed, and request its removal.

Provide continuous supply of electrical power, telephone, and water for office facility.

Provide a chilled, bottled water service for use by Government personnel. Provide no less than 38 liters (10 gallons) per week.

Add the following after Section 637:

Section 648.—LIME TREATMENT OF PYRITIC MATERIAL

Description

648.01 This work consists of placing agricultural ground limestone on pyritic surfaces. This includes furnishing and spraying a water/agricultural limestone slurry on stockpiled pyritic material and pyritic cut slopes by hydraulic method, or any other method as approved by the CO.

Material

648.02 Conform to the following Subsections:

Granular Backfill	703.03
Agricultural limestone	713.02
Geotextile Type VII	714.01(c)
Water	725.01

Construction Requirements

648.03 Application. Apply the agricultural limestone in dry form by mechanical (or manual) method, at the rate of 5 pounds per square yard or as directed by the CO, on stockpiled pyritic material. Furnish geotextile (type VII - moisture barrier) to cover this limestone layer. Cap with a final 6-inch layer of granular backfill. Install silt fence around stockpiled material for controlling sediment runoff.

For protection of pyritic cut slopes, spray a slurry mix of approximately 5 pounds of agricultural limestone and 5 gallons of water per square yard to cover each area designated by the CO.

Mix the ground limestone in a slurry tank, and maintain the ground limestone particles in uniform suspension in the water (by continuous stirring or agitating) when the slurry is being sprayed.

Spray the upper reaches of the slope first with the slurry before proceeding to spray the lower portions. Spray up the slope on cuts to ensure that all exposed surfaces and crevices are coated

with the lime slurry treatment.

Protect all the lime-treated areas. Repair any damages caused by workers or equipment at no cost to the Government.

648.04 Acceptance. Lime treatment work will be evaluated under Subsection 106.01.

Geotextile will be evaluated under Section 207.

Aggregate will be evaluated under Section 301.

Granular backfill will be evaluated under Section 605.

Measurement

648.05 Measure the Section 648 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Agricultural limestone will be measured by the ton in pyritic stockpiled areas, and will be measured by the number of tons of dry material used in the slurry for treatment of pyritic cut slopes.

Payment

648.06 The accepted quantities will be paid at the contract price per unit of measurement for the Section 648 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Section 703.—AGGREGATE

703.02. Add the following:

Gravel will not be permitted.

703.05(a). Delete items (3) and (4).

703.05(b). Add the following:

(3) Plasticity Index, AASHTO T90

3 Max

703.05(b). Add the following:

Material shall have a minimum California Bearing Ratio of 70 percent as determined by AASHTO T 193 at 95 percent of maximum dry density in accordance with AASHTO T 180 (Method D).

703.05(b)(1). Add the following:

At the option of the Contractor, the gradation only of the aggregate base surface course may conform to the requirements of aggregate for mineral aggregate base courses, grading B or C, Subsection 903.05, as specified in the March 1, 2006 edition of the Standard Specifications for Road and Bridge Construction of the Tennessee Department of Transportation, which are as follows:

Grading Table for Type A and Type B Aggregate for Mineral Aggregate Base and Surface Courses

Total Per Cent by Weight, Passing Sieves

Sieve Size	Grading A	Grading B	Grading C	Grading D	Grading E
2-1/2 in. (63 mm)	100				
2 in. (50 mm)	95-100	100			
1-1/2 in. (37.5 mm)		95-100	100	100	
1 in. (25 mm)			90-100	85-100	100
3/4 in. (19 mm)		65-95		60-95	90-100
3/8 in. (9.5 mm)	35-65		45-74	50-80	65-100
No. 4 (4.75 mm)		35-55	30-55	40-65	
No. 16 (1.18 mm)		15-45		20-40	
No. 100 (150 μm)	0-10	4-15	4-15	9-18	5-15

703.10. Delete items (f) and (g).

Section 705.—ROCK

705.07. Add the following Subsection:

705.07 Rock Borrow (Limestone Shot Rock). Furnish limestone that is hard, durable and angular and is free of organic or other unsuitable material. The shot rock gradation is visually accepted and may be changed as approved by the CO. It is the intent of this specification for the Contractor to do minimal or no processing of the shot rock. Generally, conform to the following:

Percent of Rock by Mass	Mass (Pounds)	Approximate Cubic Dimensions (2),(3) (inches)
20	1540 to 2200	26 to 28
30	770 to 1540	20 to 26
40	55 to 770	8 to 20
10 (1)	0 to 55	0 to 8

- (1) Furnish spalls and rock fragments graded to provide a stable dense mass
- (2) The volume of a rock with these cubic dimensions has a mass approximately equal to the specified rock mass.
- (3) Furnish rock with breadth and thickness at least one-third its length.

705.08. Add the following Subsection:

705.08 Select Rock Borrow (Select Limestone Shot Rock). Furnish limestone that is hard, durable and angular and is free of organic or other unsuitable material. Conform to the following:

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T27 & T 11)
4 inch	100
No. 40	0 – 60
No. 200	0 - 15

Section 713.—ROADSIDE IMPROVEMENT MATERIAL

713.01. Add the following:

For furnished topsoil, submit a soil analysis report from the State University Agricultural Extension Service or other approved soil testing laboratory. Include in the report the soil textural classification (percentage of sand, silt, clay and organic matter) and additive recommendations.

Furnished topsoil is to be subsurface soil, clean and free of exotic weeds. Seek a source of topsoil where it is possible to get below the root zone of any established vegetation. Source is to be approved by the CO, after inspection by the NPS. The NPS will need 14 days advance notification to inspect the source. If it is found to be unsuitable, locate another source and provide the NPS the same number of days to inspect the new source. Stockpiled material in Contractor's yard area is considered unsuitable. Do not excavate the material prior to approval of the source.

713.02. Add the following:

Use a maximum of 0.17 pounds of limestone per cubic foot of topsoil in order to adjust an acidic condition.

713.03. Delete the Subsection and substitute the following:

713.03 Fertilizer. Furnish Biosol Mix® fertilizer which contains the following minimum available nutrients:

	<u>Percent</u>
Total nitrogen	7.0
Nitrogen (water soluble)	0.5
Available phosphoric acid	2.0
Water-soluble potash	3.0

Supply the fertilizer in new, clean, sealed, and properly labeled containers with name, mass and guaranteed analysis of contents clearly marked.

713.05. Delete the Subsection and substitute the following:

713.05 Mulch. Furnish Soil Guard® Bonded Fiber Matrix (BFM) which conforms to the following:

- (1) Contains material that is 100 percent biodegradable;
- (2) Does not dissolve or disperse when wetted;
- (3) Forms no water insensitive crust and contains no synthetic fiber;
- (4) Holds at least 10 ounces of water per 1 ounce of dry matrix;
- (5) Is non toxic and harmless to fish, birds, plants, and animal;

- (6) Has no germination or growth inhibiting factors;
- (7) Contains no gypsum;
- (8) Contains no heavy metals;
- (9) The tackifier shall consist of guar gum and contain no polymers;
- (10) Is colored with a green dye noninjurious to plant growth.

Section 714.—GEOTEXTILE AND GEOCOMPOSITE DRAIN MATERIAL

714.03. Add the following Subsection:

714.03 Geogrid. Furnish geogrid with a regular network of integral connected polymer tensile elements having aperture geometry and junction strength to sufficiently permit significant mechanical interlock with the surrounding soil or rock. Provide geogrid with a structure dimensionally stable and able to retain its geometry under manufacture, transport, installation, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being reinforced.

(a) Physical requirements. Provide geogrids composed of fibers or ribs that are at least 85 percent by weight polyethylene, polypropylene or polyester. Form a network of fibers that will retain dimensional stability. The geogrid shall meet or exceed the physical requirements shown in Table 714-1.

**Table 714-1
Geogrid Physical Requirements**

Property	Test Method	Minimum Acceptable Values	
		Type VII-A	Type VII-B
Wide Width Tensile Strength (ultimate), lb/ft	ASTM D 4595	4405/2000 ⁽¹⁾	5507/2000 ⁽¹⁾
Wide Width Tensile Strength (5% strain), lb/ft	ASTM D 4595	1000/500 ⁽¹⁾	1000/500 ⁽¹⁾
Maximum Aperture Size, inches	-----	0.8/0.8 ⁽¹⁾	0.8/0.8 ⁽¹⁾
Weight, oz/yd ²	ASTM D 5261	8	8
Resistance to Soil Burial	ASTM D 3083	No Change	No Change
Long Term Design Strength, lb/ft	GRI:GG4	2000 ⁽²⁾	2500 ⁽²⁾

(1) Machine direction/Cross machine direction

(2) Principle strength (highest strength) direction

Identify, store, and handle geogrid according to ASTM D 4873-88. Limit geogrid exposure to ultraviolet radiation to less than 10 days.

(b) Evaluation procedures. Geogrid will be evaluated under Subsection 106.03. Furnish to the CO three copies of a commercial certification that the geogrid supplied meets the respective index criteria, measured in full accordance with all test methods and standards set forth in these specifications. State on the commercial certification the name of the manufacturer, product name, style number, chemical composition of the filaments, ribs, or yarns, and other pertinent information to fully describe the geogrid. Attest the certification by a person having legal authority to bond the manufacturer. In case of dispute over validity of values, the CO can require the Contractor to supply test data from an agency approved laboratory to support the certified values submitted.

When samples are required, remove a 3 foot long, full-width sample from beyond the first outer wrap of the roll. Label the sample with the lot and batch number, date of sampling, project number, item number, manufacturer, and product name.

Manufacturing Quality Control: The manufacturer is responsible for establishing and maintaining a quality control program to ensure compliance with the requirements of this specification.

Perform conformance testing as part of the manufacturing process; testing may vary for each type of product. Consider the Table 714-2 for applicable index tests as a minimum for an acceptable QA/QC program.

**Table 714-2
Minimum Index Tests for QA/QC**

Property	Test Method	Minimum Conformance Requirement
Specific Gravity (HDPE only)	ASTM D-1505	To be provided by the material supplier of specialty company
Wide Width Tensile	ASTM D-4595	
Melt Flow (HDPE and PP only)	ASTM D-1238	
Intrinsic Viscosity (PET only)	ASTM D-4603	
Carboxyl End Group (PET only)	ASTM D-2455	
Single Rib Tensile (geogrids)	GRI:GG1	

Section 725.— MISCELLANEOUS MATERIALS

725.21. Add the following:

Furnish a 2-component epoxy resin binder mixed together at the site as prescribed by the manufacturer. The pot life of the epoxy, mixing period, maximum time lapse between mixing and application, and the curing period are all dependent on the temperature, humidity, and wind conditions, and the proprietary product being used.

Package epoxy components in containers that are clearly marked with a warning of the hazards involved in handling the material.

Obtain technical assistance from the manufacturer of the epoxy binder and follow the manufacturer's recommendations concerning proper use and installation. Submit the product proposed for use, manufacturer's name, and data concerning composition and application for approval before use on the project.

725.30. Add the following Subsection:

725.30 Fiber Reinforced Polymer Strengthening System. The composite system shall be the Tyfo Fiberwrap System by Fyfe Co. or an approved equal.

PERMITS OBTAINED FOR THIS PROJECT



STATE OF TENNESSEE
 DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 KNOXVILLE ENVIRONMENTAL FIELD OFFICE
 DIVISION OF WATER POLLUTION CONTROL
 3711 MIDDLEBROOK PIKE
 KNOXVILLE, TN 37921

PHONE 865-594-6035 STATEWIDE 1-888-891-8332 FAX 865-594-6105

December 21, 2007

Mr. Kevin Rose
 Federal Highway Administration
 21400 Ridgetop Circle
 Sterling, VA 20166

Subject: **NPDES Construction General Permit Tracking No. TNR132938
 Great Smoky Mountains, Site 1
 Federal Highway Administration, Eastern Federal Lands Highway Division
 Blount County, Tennessee**

Dear Mr. Rose:

The Division of Water Pollution Control (the division) acknowledges receipt of the Notice of Intent (NOI) form for the above referenced project. The NOI was received on December 10, 2007. The NOI was submitted to obtain coverage under a General NPDES Permit for Storm Water Discharges Associated with Construction Activity. Enclosed is the Notice of Coverage (NOC) form which shows the site name and location, receiving stream, effective date of coverage, etc.

Contractor Information

As of the date this NOI was processed, no contractor was identified on the NOI. A primary contractor, or contractor otherwise responsible for sediment and erosion controls on the construction site, must be identified and must submit an NOI to this office prior to beginning earth clearing operations on site. When submitting the NOI, the contractor should indicate on the NOI form the above referenced permit tracking number.

Storm Water Pollution Prevention Plan (SWPPP)

You have submitted a Storm Water Pollution Prevention Plan (SWPPP) as required by Part 402 of the CGP. Please note that the division has not performed an engineering review of the SWPPP and does not certify whether the SWPPP adequately provides for the pollution prevention requirements of the permit described in the general permit. The division acknowledges that you have submitted a SWPPP that appears to include the required components of a SWPPP. It is the responsibility of all site owners, design, implement, and maintain measures that are sufficient to prevent pollution at the referenced site, and to remain in compliance with the terms and conditions of the general permit.

RECEIVED
 2007 DEC 26 PM 1:55
 EASTERN FEDERAL LANDS
 HIGHWAY DIVISION
 KNOXVILLE, TN 37921

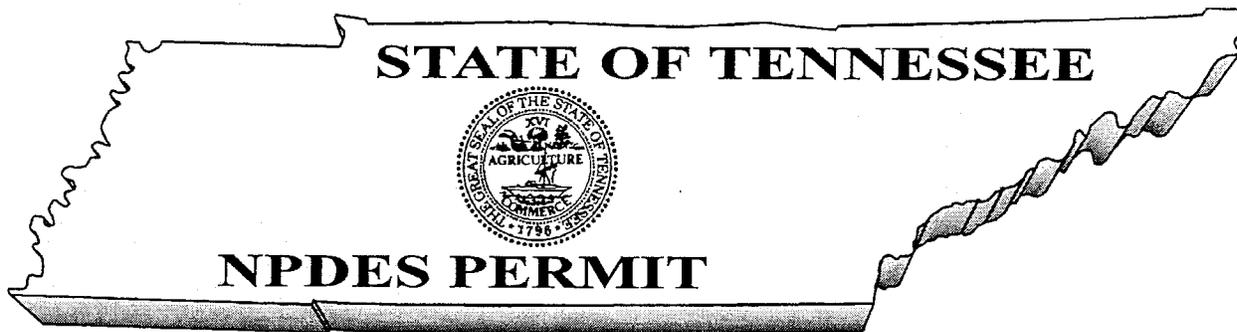
We appreciate your attention to the general construction storm water permit and its requirements. We believe this does make a difference to the quality of state waters. If you have any questions, please contact Mr. Leigh Yates at (865) 594-5592 or by e-mail at *Leigh.Yates@state.tn.us*.

Sincerely,

Natalie Harris

Natalie Harris
Knoxville Field Office Manager
Division of Water Pollution Control

CC: TNR132938
LTY



Tracking No. TNR132938

**NOTICE OF COVERAGE UNDER THE GENERAL NPDES
PERMIT FOR STORM WATER DISCHARGES ASSOCIATED
WITH CONSTRUCTION ACTIVITY (CGP)**

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
401 Church Street, 6th Floor, L&C Annex
Nashville, Tennessee 37243-1534

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the delegation of authority from the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.):

Name of the Construction Project: **Great Smoky Mountains, Site 1 (2.61 acres)**

Construction site Owner/Developer: **Federal Highway Administration, Eastern Federal Lands
Highway Division Office**

Contractor(s): **no contractor**
is authorized to discharge: **storm water associated with construction activity**

from site located at: **Foothills Parkway, 767+10 to 779+00, Blount County**

to receiving waters named: **Smith Hollow to Brickey Branch to Little River**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

Likely presence of threatened or endangered species in one mile radius: **NO**

Likely presence of threatened or endangered species downstream: **NO**

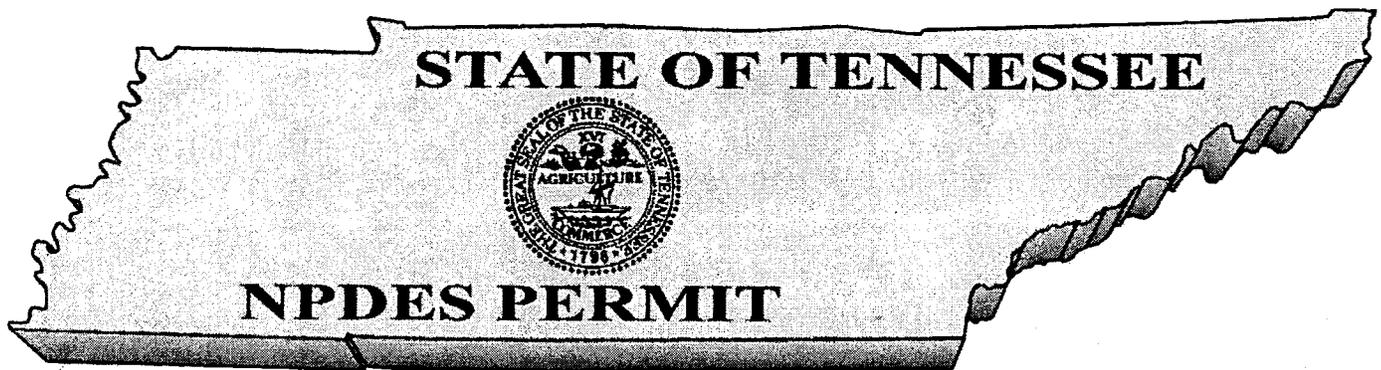
Additional pollution prevention requirements apply for discharges into waters which TDEC identifies as:

a) impaired by siltation: **NO** b) discharging into high quality waters: **NO**

Your coverage under the CGP shall become effective on **December 21, 2007**, and shall be terminated upon receipt of Notice of Termination, or the date of expiration of the CGP, **May 30, 2010**.

A handwritten signature in black ink that reads "Paul E. Davis". The signature is written in a cursive style and is positioned above a horizontal line.

Paul E. Davis, Director
Division of Water Pollution Control



GENERAL NPDES PERMIT
FOR DISCHARGES OF STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PERMIT NO. TNR100000

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.) and the Water Quality Act of 1987, P.L. 100-4, except as provided in part 4.4 (Discharges into Impaired or High Quality Waters) of this general permit, operators of point source discharges of storm water associated with construction activities into waters of the State of Tennessee, are authorized to discharge storm water associated with construction activities in accordance with the following permit monitoring and reporting requirements, effluent limitations, and other provisions as set forth in parts 1 through 8 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: **June 16, 2005**

This permit is effective on: **June 17, 2005**

This permit expires on: **May 30, 2010**

A handwritten signature in black ink that reads "Paul E. Davis".

Paul E. Davis, P.E., Director
Division of Water Pollution Control

Tennessee General Permit No. TNR100000
Storm Water Discharges Associated with Construction Activities

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APPENDIX A – Notice of Intent (NOI) Form
APPENDIX B – Notice of Termination (NOI) Form
APPENDIX C – Inspection Report Form

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

This construction general permit (CGP) covers all areas of the State of Tennessee.

1.2. Discharges Covered by this Permit

1.2.1. Storm water discharges associated with construction activities

This permit authorizes point source discharges of storm water from construction activities including clearing, grading, filling and excavating (including borrow pits containing erodible material), or other similar construction activities that result in the disturbance of one acre or more of total land area. Projects or developments of less than one acre of land disturbance are required to obtain authorization under this permit if the construction activities at the site are part of a larger common plan of development or sale that is at least one acre in size.

Projects or developments of less than one acre of total land disturbance may also be required to obtain authorization under this permit if:

- a) the director has determined that the storm water discharge from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;
- b) the director has determined that the storm water discharge is, or is likely to be a significant contributor of pollutants to waters of the state, or
- c) changes in state or federal rules require sites of less than one acre to obtain a storm water permit.

Note: Any discharge of storm water or other fluid to an improved sinkhole or other injection well, as defined, must be authorized by permit or rule as a Class V underground injection well under the provisions of TDEC Rules, Chapter 1200-4-6.

1.2.2. Storm water discharges associated with construction support activities

This permit also authorizes storm water discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

- a) the support activity is primarily related to a construction site that is covered under this general permit;
- b) the operator of the support activity is the same as the operator of the construction site;
- c) the support activity is not a commercial operation serving multiple unrelated construction projects by different operators;
- d) the support activity does not operate beyond the completion of the construction activity of the last construction project it supports; and
- e) support activities are identified in a notice of intent (NOI) and appropriate controls and measures are described in a comprehensive storm water pollution prevention plan (SWPPP) covering the discharges from the support activity areas.

Storm water discharges associated with support activities that have been issued a separate individual permit or an alternative general permit are not authorized by this general permit. This permit does not authorize any process wastewater discharges from support activities. Process wastewater discharges from support activities must be authorized by an individual permit or other appropriate general permit.

1.2.3. Non-storm water discharges authorized by this permit

The following non-storm water discharges from active construction sites are authorized by this permit provided the non-storm water component of the discharge is in compliance with section 3.5.9 below (*Pollution prevention measures for non-storm water discharges*):

- a) dewatering of work areas of collected storm water and ground water;
- b) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;
- c) water used to control dust in accordance with section 3.5.5 below;
- d) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;
- e) routine external building washdown which does not use detergents or other chemicals;
- f) uncontaminated groundwater or spring water; and
- g) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.).

All non-storm water discharges authorized by this permit must be free of sediment or other solids and must not cause erosion of soil or the stream bank, or result in sediment impacts to the receiving stream.

1.2.4. Other NPDES-permitted discharges

Discharges of storm water or wastewater authorized by and in compliance with a different NPDES permit (other than this permit) may be mixed with discharges authorized by this permit.

1.3. Limitations on Coverage

Except for discharges from support activities, as described in section 1.2.2 above and certain non-storm water discharges listed in section 1.2.3 above, all discharges covered by this permit shall be composed entirely of storm water. The following discharges are not authorized by this permit:

- a) Post-Construction Discharges - Storm water discharges associated with construction activity that originate from the construction site after construction activities have been completed, the site has undergone final stabilization, and the coverage under this permit has been terminated.
- b) Discharges Mixed with Non-Storm Water - Discharges that are mixed with sources of non-storm water, other than discharges which are identified in section 1.2.4 above (*Other NPDES-permitted discharges*) and in compliance with section 3.5.9 below (*Pollution prevention measures for non-storm water discharges*) of this permit.

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- c) Discharges Covered by Another Permit - Storm water discharges associated with construction activity that have been issued an individual permit in accordance with subpart 6.12 below (*Requiring an Individual Permit*).
- d) Discharges Threatening Water Quality - Storm water discharges from construction sites, that the director determines will cause, have the reasonable potential to cause, or contribute to violations of water quality standards. Where such determination has been made, the discharger will be notified by the director in writing that an individual permit application is necessary as described in subpart 6.12 below (*Requiring an Individual Permit*). However, the division may authorize coverage under this permit after appropriate controls and implementation procedures have been included in the SWPPP that are designed to bring the discharge into compliance with water quality standards.
- e) Discharges into Impaired Streams - This permit does not authorize discharges that would add loadings of a pollutant that is identified as causing or contributing to the impairment of a water body on the list of impaired waters. Impaired waters means any segment of surface waters that has been identified by the division as failing to support its designated classified uses.
- f) Discharges into Outstanding National Resource Waters - The director shall not grant coverage under this permit for discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRWs). Designation of ONRWs are made according to TDEC Rules, Chapter 1200-4-3-.06.
- g) Discharges into High Quality Waters - The director shall not grant coverage under this permit for potential discharges of pollutants which would cause degradation to waters designated by TDEC as high quality waters. Identification of high quality waters is made according to TDEC Rules, Chapter 1200-4-3-.06.
- h) Discharges Not Protective of Federal or State listed Threatened and Endangered Species, Species Deemed in Need of Management or Special Concern Species - Storm water discharges and storm water discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna (or species proposed for such protection) in the receiving stream(s); or discharges or activities that would result in a "take" of a state or federal listed endangered or threatened aquatic or wildlife species, or such species' habitat. If the division finds that storm water discharges or storm water related activities are likely to result in any of the above effects, the director will deny the coverage under this general permit unless and until project plans are changed to adequately protect the species.
- i) Discharges from a New or Proposed Mining Operation - Discharges from a new or proposed mining operation are not covered by this permit.
- j) Discharges Negatively Affecting a Property on the National Historic Register - Storm water discharges that would negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.
- k) Discharging into Receiving Waters With an Approved Total Maximum Daily Load Analysis - Discharges of pollutants of concern to waters for which there is an EPA-approved total maximum daily load (TMDL) are not covered by this permit unless measures or controls that are consistent with the assumptions and requirements of such TMDL are incorporated into the SWPPP. If a specific wasteload allocation has been established that would apply to the discharge, that allocation must be incorporated into the SWPPP and steps necessary to meet that allocation must be implemented. In a situation where an EPA-approved or established TMDL has specified a general wasteload allocation applicable to construction storm water discharges, but no specific requirements for construction sites have been identified, the permittee should consult with the division to confirm that adherence to a SWPPP that meets the requirements of

this permit will be consistent with the approved TMDL. Where an EPA-approved or established TMDL has not specified a wasteload allocation applicable to construction storm water discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of the CGP will generally be assumed to be consistent with the approved TMDL. If the EPA-approved or established TMDL specifically precludes such discharges, the operator is not eligible for coverage under the CGP.

1.4. Obtaining Permit Coverage

Submitting a complete NOI, a SWPPP and an appropriate permitting fee are required to obtain coverage under this general permit. Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions.

1.4.1. Notice of Intent (NOI)

Operators wishing to obtain coverage under this permit must submit a completed NOI in accordance with requirements of part 2 below, using the NOI form provided in Appendix A of this permit (or a copy thereof). The division will review NOIs for completeness and accuracy and, when necessary, investigate the proposed project for potential impacts to the waters of the state. Upon completing NOI review, the division will:

- a) prepare and transmit a notice of coverage (NOC) to the operator identified as a primary permittee on the NOI form (see subpart 1.5 below - *Effective Date of Coverage*);
- b) notify the applicant of needed changes to their NOI submittal (see section 2.6.3 below - *NOI completeness*); or
- c) deny coverage under this general permit (see subpart 6.12 below - *Requiring an Individual Permit*).

1.4.2. Storm Water Pollution Prevention Plan (SWPPP)

Operators wishing to obtain coverage under this permit must develop and submit a site-specific SWPPP with the NOI. The initial, comprehensive SWPPP, developed and submitted by the initial permittee (typically owner/developer), should address all construction-related activities from the date construction commences to the date of termination of permit coverage, to the maximum extent practicable. The SWPPP must be developed, implemented and updated according to the requirements in part 3 below (*SWPPP Requirements*) and subpart 2.3 below (*Responsibilities of Operators*). The SWPPP must be implemented prior to commencement of construction activities.

Preparation and implementation of the SWPPP may be a cooperative effort where there is more than one operator at a site. Other primary permittees at the site may develop a SWPPP addressing only their portion of the project, as long as the BMPs are compatible with the comprehensive SWPPP and complying with conditions of this general permit. New operators with design and operational control of their portion of the construction site are not precluded from developing and implementing their own SWPPP, but are instead encouraged to adopt, modify, update and implement a comprehensive SWPPP.

1.4.3. Permit application fees

The permit application fee should accompany the NOI form. The fee schedule is based on the total acreage to be disturbed by an entire construction project, including any associated construction support activities (see section 1.2.2 above). The area disturbed shall be assumed to be the total area that is presented as part of the development and/or of a larger common plan of development that is subject to being cleared, graded, or excavated during the life of the development. The area cannot be limited to only the portion of the total area that the owner/developer initially disturbs through the process of various land clearing activities and/or in the construction of roadways, sewers and water utilities, storm water drainage structures, etc., to make the property marketable. The owner/developer may present documentation of common areas in the project that will not be subject to disturbance at anytime during the life of the project and have these areas excluded from the fee calculation.

The permit coverage fees shall be as specified in the TDEC Rules, Chapter 1200-4-11. The operator must submit a check made payable to "Treasurer, State of Tennessee" for the appropriate fee. There is no additional fee for subsequent owner/operator to obtain permit coverage (see section 2.4.3 below - *New operator*) because the original operator initially paid the appropriate fee for the entire area of site disturbance. If a project was previously permitted, but permit coverage was terminated, and re-development occurs, the new operator must obtain coverage and pay the appropriate fee for the disturbed acreage.

1.4.4. Certain applicants must submit a copy of the NOI and NOT to the local municipality

Applicants who discharge storm water through an NPDES-permitted municipal separate storm sewer system (MS4) who are not exempted in section 1.4.5 below must submit a copy of the original signed NOI (and at project completion, a copy of the original signed notice of termination - NOT) to the MS4. A most current list of the MS4s is available at our web site: <http://www.state.tn.us/environment/wpc/stormh2o/MS4.php>.

1.4.5. Permit Coverage through Qualifying Local Program

Coverage equivalent to coverage under this general permit may be obtained from a qualifying local erosion and sediment control Municipal Separate Storm Sewer System (MS4) program. A qualifying local program (QLP) is a municipal storm water program for storm water discharges associated with construction activity that has been formally approved by the division. If a construction site is within the jurisdiction of and has obtained a notice of coverage from a QLP, the operator of the construction activity is authorized to discharge storm water associated with construction activity under this general permit without the submittal of an NOI to the division. The permittee is also not required to submit a notice of termination or a permit fee to the division. At the time of this permit issuance, there were no qualifying local erosion prevention and sediment control MS4 programs in Tennessee. Permitting of storm water runoff from construction sites from federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT), Tennessee Valley Authority (TVA)) and the local MS4 program itself will remain solely under the authority of TDEC.

The division may require any owner/developer or operator located within the jurisdiction of a QLP to obtain permit coverage directly from the division. The operator shall be notified in writing by the division that coverage by the QLP is no longer applicable, and how to obtain coverage under this permit.

1.5. Effective Date of Coverage

1.5.1. Notice of Coverage (NOC)

The NOC is a written notice from the division sent to the permittee, informing the permittee that the NOI was received and storm water discharges from a construction activity have been approved under this general permit. The operator is authorized to discharge storm water associated with construction activity as of the effective date the division prepares the NOC for the construction site.

Assigning a permit tracking number by the division to a proposed discharge from a construction site does not confirm or imply an authorization to discharge under this permit. Correspondence with the permittee is maintained through the primary contact person listed on the NOI.

1.5.2. Permit tracking numbers

Construction sites covered under this permit will be assigned permit tracking numbers in the sequence TNR100001, TNR100002, etc. Previously assigned permit tracking numbers will be retained for operators of existing sites, presently permitted under the construction general permit (see section 2.4.1 below). An operator of a new construction site will be assigned a new permit tracking number (see section 2.4.2 below).

If a new operator (see section 2.4.3 below) assumes ownership and operational control of an entire permitted construction site, the previously assigned tracking number may be retained. If a new operator assumes ownership and operational control of a portion of a construction site, a new tracking number may be assigned. If a new operator is a new contractor added to an existing permitted construction site, the previously assigned tracking number will be retained.

1.6. Termination of Coverage

1.6.1. Notice of Termination (NOT)

Operators wishing to terminate coverage under this permit must submit a completed NOT in accordance with requirements of part 7 below, using the NOT form provided in Appendix B of this permit (or a copy thereof).

2. NOTICE OF INTENT (NOI) REQUIREMENTS

2.1. Who Must Submit an NOI?

All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of storm water associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria:

- a) The person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project, and is considered the initial permittee; or

- b) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the initial permittee or the primary permittee, and is considered a secondary permittee.

2.2. Typical Construction Site Operators

2.2.1. Owner/Developer

An owner/developer(s) is considered an initial permittee. This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person may include, but is not limited to, a developer, landowner, realtor, commercial builder, etc. An owner/developer's responsibility to comply with requirements of this permit extends until:

- a) permit coverage is terminated in accordance with requirements of part 7 below; or
- b) operational or design control of the entire site (including, but not limited to, infrastructure, common areas, storm water drainage structures, sediment treatment basin, etc.) is transferred to one or more new owner(s)/operator(s).

2.2.2. Commercial builders

A commercial builder can be a primary or secondary permittee at a construction site. The commercial builder who purchases one or more lots from an owner/developer (initial permittee) for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility, etc.) and has design or operational control over construction plans and specifications becomes a primary permittee for that portion of the site. The commercial builder is considered a new operator and must submit a new NOI following requirements in section 2.4.3 below.

The commercial builder may also be hired by the owner/developer or a lot owner to build a structure for an end user. In this case, the commercial builder submits an NOI as a contractor (see section 2.2.3 below) and is considered a secondary permittee.

2.2.3. Contractors

A contractor is considered a secondary permittee. This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., contractor is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

A contractor is typically hired by the initial permittee or by the primary permittee. This person may include, but is not limited to a general contractor, grading contractor, erosion control contractor, sub-contractor responsible for any land disturbing activities and/or erosion prevention and sediment control (EPSC) implementation/maintenance, commercial builder hired by the owner/developer, etc. The contractor should sign the same NOI as the initial or primary permittee who hired them.

2.3. Responsibilities of Operators

A permittee may meet one or more of the operational control components in the definition of "operator" found in subpart 2.1 above. Either section 2.3.1 or 2.3.2 below, or both, will apply depending on the type of operational control exerted by an individual permittee.

2.3.1. Permittee(s) with design control

Permittee(s) with design control (i.e., operational control over construction plans and specifications) at the construction site, including the ability to make modifications to those plans and specifications (e.g., owner/developer) must:

- a) Ensure the project specifications they develop meet the minimum requirements of part 3 below (storm water pollution prevention plan - SWPPP) and all other applicable conditions;
- b) Ensure that the SWPPP indicates the areas of the project where they have design control (including the ability to make modifications in specifications), and ensure all other permittees implementing portions of the SWPPP impacted by any changes they make to the plan are notified of such modifications in a timely manner;
- c) Ensure that all common facilities (i.e., sediment treatment basin and drainage structures) that are necessary for the prevention of erosion or control of sediment are maintained and effective until all construction is complete and all disturbed areas in the entire project are stabilized.
- d) If parties with day-to-day operational control of the construction site have not been identified at the time the comprehensive SWPPP is initially developed, the permittee with design control shall be considered to be the responsible person until such time the supplemental NOI is submitted, identifying the new operator(s) (see section 2.4.3 below). These new operators (e.g., general contractor, utilities contractors, sub-contractors, erosion control contractors, hired commercial builders) are considered secondary permittees. The SWPPP must be updated to reflect the addition of new operators as needed to reflect operational or design control.
- e) Ensure that all operators on the site have permit coverage and are complying with the SWPPP.

2.3.2. Permittees with day-to-day operational control

Permittee(s) with day-to-day operational control of those activities at a project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions (e.g., general contractor, utilities contractors, sub-contractors, erosion control contractors, hired commercial builders) must:

- a) Ensure that the SWPPP for portions of the project where they are operators meets the minimum requirements of part 3 below and identifies the parties responsible for implementation of control measures identified in the plan;
- b) Ensure that the SWPPP indicates areas of the project where they have operational control over day-to-day activities;
- c) Ensure that measures in the SWPPP are adequate to prevent erosion and control any sediment that may result from their earth disturbing activity.

- d) Permittees with operational control over only a portion of a larger construction project (e.g., one of four commercial homebuilders in a subdivision) are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site. This includes, but is not limited to, implementation of Best Management Practices (BMPs) and other controls required by the SWPPP. Permittees shall ensure either directly or through coordination with other permittees, that their activities do not render another person's pollution control ineffective. Permittees must implement their portions of a comprehensive SWPPP. New operators with design and operational control of their portion the construction site are not precluded from developing and implementing their own SWPPP, but are instead encouraged to adopt, modify, update and implement a comprehensive SWPPP.

2.4. Deadlines for NOI Submittal

2.4.1. Existing site

An operator of an existing site presently permitted under the existing construction general permit shall be granted coverage under this new general permit. The division will notify all permittees regarding an extension of coverage under the new permit. There will be no additional fees associated with an extension of coverage for existing sites under the new permit. The division may, at its discretion, require permittees to confirm their intent to be covered under this new general permit following its effective date (June 17, 2005). NOT requirements for site operators, as described in part 7 below of this permit, are still applicable, even when the coverage under the new permit is granted as an existing site under the previous general permit.

2.4.2. New site

Except as provided in section 2.4.3 below, operators must submit a complete NOI, SWPPP and an appropriate fee in accordance with the requirements described in subpart 1.4 above. The complete application should be submitted at least 30 days prior to commencement of construction activities. The land disturbing activities shall not start until a NOC is prepared and written approval by the division staff is obtained according to subpart 1.5 above.

2.4.3. New operator

For storm water discharges from construction sites or portions of the sites where the operator changes (new owner), or projects where an operator is added (new contractor) after the initial NOI and comprehensive SWPPP have been submitted, the supplemental NOI should be submitted as soon as practicable, but no later than 2 days prior to when the new operator assumes operational control over site specifications or commences work at the site. The supplemental NOI must reference the project name and tracking number assigned to the initial NOI.

If the sale or transfer of ownership does not change the signatory requirements for the NOI (see section 6.7.1 below), a new NOI does not have to be submitted. If the new operator agrees to comply with an existing comprehensive SWPPP already implemented at the site, a copy of the supplemental or modified SWPPP does not have to be submitted with the NOI. There will be no additional fees associated with the sale or transfer of ownership for existing permitted sites.

2.4.4. Late NOIs

Dischargers are not prohibited from submitting late NOIs. When a late NOI is submitted, and if the division authorizes coverage under this permit, such authorization is only for future discharges; any prior, unpermitted, discharges or permit noncompliances are subject to penalties as described in section 6.1.2 below.

2.5. **Who must sign the NOI form?**

All construction site operators must sign the NOI form. Signatory requirements for a NOI are described in section 6.7.1 below. All signatures must be original. The NOI that does not bear an original signature will be deemed incomplete.

2.6. **NOI Form**

2.6.1. Contents of the NOI form

NOI for construction projects shall be submitted on the form provided in Appendix A of this permit, or on a copy thereof. This form and its instructions set forth the required content of the NOI. The NOI form must be filled in completely. If sections of the NOI are left blank, a narrative explaining the omission must be provided as an attachment.

Owner/developer and all contractors (including commercial builders hired as contractors) shall apply for permit coverage on the same NOI form, insofar as possible. The division's NOI form is designed for more than one operator. The division may accept separate NOI forms from different operators for the same construction site when warranted.

After permit coverage has been granted to the initial permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and construction project (site) name. Except as provided in section 2.4.3 above, a comprehensive site-specific SWPPP, prepared in accordance with the requirements of part 3 below, must be submitted with the NOI.

2.6.2. Construction site map

A map of the site must be included with the NOI with the proposed construction area clearly outlined. NOIs for linear projects must specify the location of each end of the construction area. The map should outline the boundaries of projects, developments and the construction site in relation to major roads, streams or other landmarks. If feasible due to the scale of a quad map, all outfalls where runoff will leave the property should be identified. Stream(s) receiving the discharge, and storm sewer system(s) conveying the discharge from all site outfalls should be clearly identified and marked on the map. An 8 ½ by 11 inch excerpt from the appropriate 7.5 minute United States Geological Survey (USGS) quad map, with the site centered, is preferred.

2.6.3. NOI completeness

Based on a review of the NOI or other available information, the director may:

1. prepare the notice of coverage (NOC) for the construction site (see subpart 1.5 above);
2. prepare a deficiency letter stating that additional information must be provided before the NOC can be issued; or
3. deny coverage under this general permit and require the discharger to obtain coverage under an individual NPDES permit (see subpart 6.12 below).

2.7. Where to Submit the NOI, SWPPP and Permitting Fee?

The applicant shall submit the NOI, SWPPP and permitting fee to an appropriate TDEC Environmental Field Office (EFO) for the county(ies) where the construction activity is located and where storm water discharges enters waters of the state. If a site straddles a county line of counties that are in areas of different EFOs, the operators shall send NOIs to each EFO. The permitting fee should be submitted to the EFO that provides coverage for the majority of the proposed construction activity.

A list of counties and the corresponding EFOs is provided in subpart 2.8 below. The division's Nashville Central Office will serve as a processing office for NOIs submitted by federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT), Tennessee Valley Authority (TVA)) and the local MS4 program.

2.8. List of the TDEC Environmental Field Offices (EFOs) and Corresponding Counties

EFO Name	List of Counties
Chattanooga	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie
Columbia	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry, Wayne
Cookeville	Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Van Buren, Warren, White
Jackson	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Gibson, Hardeman, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, Madison, McNairy, Obion, Weakley
Johnson City	Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, Washington
Knoxville	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union
Memphis	Fayette, Shelby, Tipton
Nashville	Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, Robertson, Rutherford, Stewart, Sumner, Trousdale, Williamson, Wilson

TDEC may be reached by telephone at the toll-free number 1-888-891-8332 (TDEC). Local EFOs may be reached directly when calling this number from the construction site, using a land line.

3. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

3.1. The General Purpose of the SWPPP

A comprehensive SWPPP must be prepared prior to submission of an NOI as required in section 1.4.2 above. The initial permittee must implement the SWPPP as written from commencement of construction activity until final stabilization is complete, or until the permittee does not have design or operational control of any portion of the construction site. Requirements for termination of site coverage are provided in part 7 below.

At least one site-specific SWPPP must be developed for each construction project or site covered by this permit. Such SWPPP must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of Best Management Practices (BMPs). The SWPPP must:

- a) identify all potential sources of pollution which are likely to affect the quality of storm water discharges from the construction site;
- b) describe practices to be used to reduce pollutants in storm water discharges from the construction site; and
- c) assure compliance with the terms and conditions of this permit.

Once a definable area has been finally stabilized, the permittee may mark this on the SWPPP and no further SWPPP or inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is finally stabilized, one mile of a roadway or pipeline project is done and finally stabilized, etc).

For more effective coordination of Best Management Practices (BMPs) and opportunities for cost sharing, a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is encouraged. Primary permittees at a site may, but are not required, to develop separate SWPPPs that cover only their portion of the project. In instances where there is more than one SWPPP for a site, the permittees must ensure the storm water discharge controls and other measures are compatible with one another and do not prevent another operator from complying with permit conditions. The comprehensive SWPPP developed and submitted by the initial permittee (typically owner/developer) must assign responsibilities to various operators (typically contractors) and coordinate all BMPs at the construction site. Assignment and coordination can be done by name or by job title.

3.1.1. Registered engineer or landscape architect requirement

The narrative portion of the SWPPP may be prepared by an individual that has a working knowledge of erosion prevention and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC). For SWPPPs that include preparation of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations, those SWPPPs shall be prepared by a licensed professional engineer or landscape architect in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see part 8 below) and the

rules of the Tennessee Architectural and Engineering Examiners Board. Engineering design of sediment basins and other sediment controls must be included in SWPPPs for construction sites involving disturbance of 10 or more acres. This requirement is in addition to any requirements of Title 62, Chapter 2 and the rules promulgated thereunder, including without limitation, any definition of the scope of practice of engineering or landscape architecture.

3.2. Deadlines for SWPPP Preparation and Compliance

3.2.1. Existing site

Operator(s) of an existing site presently permitted under division's previous construction general permit shall maintain full compliance with the current SWPPP. The current SWPPP should be modified, if necessary, to meet requirements of this new general permit, and the SWPPP changes implemented no later than 12 months following the new permit effective date (June 17, 2005). The permittee shall make the updated SWPPP available for the division's review upon request.

3.2.2. New site

For discharges not authorized under an NPDES permit as of the effective date of this permit, the SWPPP shall be completed prior to the submittal of an NOI to be covered under this permit and updated as appropriate.

3.3. Signature Requirements, Plan Review and Making Plans Available

3.3.1. Signature requirements for a SWPPP

The SWPPP shall be signed by the operator(s) in accordance with subpart 6.7 below, and if applicable, certified according to requirements in section 3.1.1 above. A copy of the SWPPP shall be retained on-site at the location which generates the storm water discharge in accordance with part 5 below of this permit. If the site is inactive or does not have an onsite location adequate to store the SWPPP, the location of the SWPPP, along with a contact phone number, shall be posted on site. If the SWPPP is located offsite, reasonable local access to the plan, during normal working hours, must be provided as described in section 3.3.2 below.

The permittee shall make updated plans and inspection reports available upon request to the director, local agency approving erosion prevention and sediment control plan, grading plans, or storm water management plans, or the operator of an MS4.

3.3.2. Posting information at the construction site

The permittee shall post a notice near the main entrance of the construction site accessible to the public with the following information:

- a) a copy of the notice of coverage (NOC) with the NPDES permit tracking number for the construction project;
- b) name, company name, E-mail address (if available), telephone number and address of the project site owner or a local contact person;
- c) a brief description of the project; and

- d) the location of the SWPPP if the site is inactive or does not have an on-site location to store the plan.

The notice must be maintained in a legible condition. If posting this information near a main entrance is infeasible due to safety concerns, or not accessible to the public, the notice shall be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site. This permit does not require that permittees allow members of the public access to a construction site.

3.4. Keeping Plans Current

3.4.1. SWPPP modifications

The permittee must modify and update the SWPPP:

- a) whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the SWPPP;
- b) whenever inspections or investigations by site operators, local, state or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under section 3.5.2 below of this permit, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity;
- c) to identify any new operator (typically contractor and/or subcontractor) as needed to reflect operational or design control that will implement a measure of the SWPPP (see subparts 2.1 and 2.2 above for further description of which operators must be identified); and
- d) to include measures necessary to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection). Amendments to the SWPPP may be reviewed by the division, a local MS4, the EPA or an authorized regulatory agency.

3.5. Components of the SWPPP

The SWPPP shall include the following items, as described in sections 3.5.1 to 3.5.10 below: site description, description of storm water runoff controls, erosion prevention and sediment controls, storm water management, description of the items needing control, approved local government sediment and erosion control requirements, maintenance, inspections, pollution prevention measures for non-storm water discharges, and documentation of permit eligibility related to Total Maximum Daily Loads (TMDL).

3.5.1. Site description

Each plan shall provide a description of pollutant sources and other information as indicated below:

- a) a description of all construction activities at the site (not just grading and street construction);
- b) the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.);
- c) estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling, or other construction activities;
- d) a description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on the site; such estimation should be on a basis of a drainage area serving each outfall, rather than an entire project;
- e) any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and the expected quality of any discharge from the site;
- f) an estimate of the runoff coefficient of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream;
- g) an erosion prevention and sediment control map of the site with the proposed construction area clearly outlined. The map should indicate the boundaries of the permitted area, drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, the location of areas where stabilization practices are expected to occur, surface waters including wetlands, sinkholes, and careful identification on the site map of outfall points intended for coverage under the general permit for storm water discharges from the site;
- h) a description of any discharge associated with industrial activity other than construction storm water that originates on site and the location of that activity and its permit number;
- i) identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or the tracking number of the Aquatic Resources Alteration Permit or Section 401 Certification issued for the alteration;
- j) the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site;
- k) if applicable, identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project;
- l) for projects which will be subdivided, such as residential developments or industrial parks, the developer/owner must describe how he will prevent erosion and/or control any sediment from portions of the property that will be sold prior to completion of construction; once the property is sold, new operator must obtain coverage under this permit, and assume operational control and responsibility of that portion of the site;
- m) for projects of more than 50 acres, the construction phases must be described; and
- n) if only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed, i.e., caution fence, stream side buffer zones, etc.

3.5.2. Description of storm water runoff controls

The SWPPP shall include a description of appropriate erosion prevention and sediment controls and other Best Management Practices (BMPs) that will be implemented at the construction site. The SWPPP must clearly describe each major activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.):

- a) appropriate control measures and the general timing for the measures to be implemented during construction activities; and
- b) which permittee is responsible for implementation of which controls.

The SWPPP must include erosion control drawings showing the approximate location of each control measure along with a description of the timing during the construction process for implementing each measure (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The description and implementation of controls shall address the following minimum components, as described in sections 3.5.3, 3.5.4 and 3.5.5 below. Additional controls may be necessary to comply with section 4.3.2 below.

3.5.3. Erosion prevention and sediment controls

3.5.3.1. General criteria and requirements

- a) The construction-phase erosion prevention controls shall be designed to minimize the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site.
- b) All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications (where applicable) and good engineering practices. All control measures selected must be able to slow runoff so that rill and gully formation is prevented. When steep slopes and/or fine particle soils are present at the site, additional physical or chemical treatment of storm water runoff may be required, and must be fully described. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for relevant site situations.
- c) If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be discussed in the SWPPP. Delay in planting cover vegetation until winter months or dry months should be avoided, if possible.
- d) If sediment escapes the construction site, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation/restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.
- e) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as necessary, and must be removed when design capacity has been reduced by 50%.
- f) Litter, construction debris, and construction chemicals exposed to storm water shall be picked up prior to anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for storm water discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control should be removed or otherwise prevented from becoming a pollutant source for storm water discharges.

- g) Offsite erodible material storage areas (also including overburden and stockpiles of dirt, etc.) used primarily by the permitted project are considered a part of the project and shall be addressed in the SWPPP and included in the fee calculation.
- h) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 10 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- i) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation.
- j) Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- k) Construction must be phased for projects in which over 50 acres of soil will be disturbed. Areas of the completed phase must be stabilized within 15 days (see subsection 3.5.3.2 below). No more than 50 acres of active soil disturbance is allowed at any time during the construction project.
- l) Erosion prevention and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday.
- m) The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records.
- n) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

3.5.3.2. Stabilization practices

The SWPPP shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Site plans should comply with buffer zone requirements (see section 4.4.2 below), if applicable, in which construction activities, borrow and/or fill are prohibited. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization, erosion control or sediment treatment measures are to be installed in a stream without obtaining an Aquatic Resource Alteration Permit (ARAP).

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed not later than 15 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- a) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
- b) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 15 days.

Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface.

3.5.3.3. Structural practices

The SWPPP shall include a description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural controls shall not be placed in streams or wetlands except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.

Erosion prevention and sediment control measures shall be designed according to the size and slope of disturbed drainage areas with the goal of detaining runoff and trapping sediment. In addition, erosion prevention and sediment controls shall be designed to control the rainfall and runoff from a 2 year, 24 hour storm, as a minimum. When clay and other fine particle soils are present at the construction site, chemical treatment may be used to minimize amount of sediment being discharged.

For an outfall in a drainage area of a total of 10 or more acres, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2 year, 24 hour storm and runoff from each acre drained, or equivalent control measures, shall be provided until final stabilization of the site. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified to the division. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin. Diverted runoff can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included and a marker installed signifying the need for cleanout of the basin.

All calculations of drainage areas, runoff coefficients and basin volumes must be provided in the SWPPP. The discharge structure from a sediment basin must be designed to retain sediment during the lower flows. Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

3.5.4. Storm water management

The SWPPP shall include a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed.

For projects discharging to waters considered impaired by sediment or habitat alteration due to in-channel erosion, the SWPPP shall include a description of measures that will be installed during the construction process to control pollutants and any increase in the volume of storm water discharges that will occur after construction operations have been completed. For steep

slope sites, the SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the storm water runoff to pre-development levels.

This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed, the site has undergone final stabilization, and the permit coverage has been terminated. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff, if not required by local building regulations, in order to minimize in-stream channel erosion in the receiving stream.

Construction storm water runoff management practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (no significant changes in the hydrological regime of the receiving water). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed pre-development levels.

3.5.5. Other items needing control

- a) No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/or Aquatic Resource Alteration Permit.
- b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be described and implemented, as needed, to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- c) For installation of any waste disposal systems on site, or sanitary sewer or septic system, the SWPPP shall provide for the necessary sediment controls. Permittees must also comply with applicable state and/or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent these are located within the permitted area.
- d) The SWPPP shall include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP shall also include a description of controls used to reduce pollutants from materials stored on site, including storage practices to minimize exposure of the materials to storm water, and spill prevention and response.
- e) A description of storm water sources from areas other than construction and a description of controls and measures that will be implemented at those sites.
- f) A description of measures necessary to prevent "taking" of legally protected state or federal listed threatened or endangered aquatic fauna and/or critical habitat (if applicable). The permittee must describe and implement such measures to maintain eligibility for coverage under this permit.

3.5.6. Approved local government sediment and erosion control requirements

Permittees should comply with any additional erosion prevention, sediment controls and storm water management measures required by a local MS4 program or municipality. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific local government plan or permit that is issued for the construction site.

3.5.7. Maintenance

The SWPPP shall describe procedures to ensure that vegetation, erosion and sediment control measures, buffer zones, and other protective measures identified in the site plan are kept in good and effective operating condition. Maintenance needs identified in inspections or by other means shall be accomplished before the next storm event, but in no case more than seven days after the need is identified.

3.5.8. Inspections

3.5.8.1. Inspector training and certification

Inspectors must have successfully completed the "Fundamentals of Erosion Prevention and Sediment Control" course, or an equivalent course, for individuals involved in land-disturbing activities which provides a working knowledge of erosion prevention and sediment controls. An engineer or a landscape architect (see section 3.1.1 above) that prepared the drainage and structure design portion of the SWPPP may also conduct the required inspections. This requirement goes in effect 24 months following the new permit effective date (June 17, 2005). A copy of the certification or training record for inspector certification should be kept on site.

3.5.8.2. Schedule of inspections

- a) Inspections described in paragraphs b, c and d below, shall be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), such inspection only has to be conducted once per month until thawing results in runoff or construction activity resumes. Inspections requirements do not apply to definable areas that have been finally stabilized, as described in subpart 3.1 above. Written notification of the intent to conduct only monthly inspections and the justification for such request must be submitted to the local Environmental Field Office, or the division's Nashville Central Office for projects of the Tennessee Department of Transportation (TDOT) and the Tennessee Valley Authority (TVA).
- b) Qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.
- c) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion prevention and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly.

- d) Outfall points (where discharges leave the site or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- e) Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified.
- f) Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 above of this permit and pollution prevention measures identified in the SWPPP in accordance with section 3.5.2 above of this permit shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.
- g) Inspections shall be documented and include the scope of the inspection, name(s) and title of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan (including the location(s) of discharges of sediment or other pollutants from the site and of any control device that failed to operate as designed or proved inadequate for a particular location), and actions taken in accordance with section 3.5.8 above of this permit. Inspection documentation will be maintained on site and made available upon request. Inspection reports must be submitted to the division within 10 days of the request. Permittees not discharging into impaired or high quality waters may, but are not required to, use the inspection form provided in Appendix C.

3.5.9. Pollution prevention measures for non-storm water discharges

Sources of non-storm water listed in section 1.2.3 above of this permit that are combined with storm water discharges associated with construction activity must be identified in the SWPPP. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge. Any non-storm water must be discharged through stable discharge structures.

3.5.10. Documentation of permit eligibility related to Total Maximum Daily Loads (TMDL)

The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an approved TMDL for a pollutant of concern, including:

- a) identification of whether the discharge is identified, either specifically or generally, in an approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge;
- b) summaries of consultation with the division on consistency of SWPPP conditions with the approved TMDL, and
- c) measures taken to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the discharge.

4. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

4.1. Releases in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the storm water discharge(s) from a facility shall be prevented or minimized in accordance with the applicable storm water pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR 117 and 40 CFR 302. Where a release containing a hazardous substance in an amount equal to or in excess of a reportable quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period:

- a) the permittee is required to notify the National Response Center (NRC) (800-424-8802) and the Tennessee Emergency Management Agency (emergencies: 800-262-3300; non-emergencies: 800-262-3400) in accordance with the requirements of 40 CFR 117 or 40 CFR 302 as soon as he or she has knowledge of the discharge;
- b) the permittee shall submit within 14 days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, what actions were taken to mitigate effects of the release, and steps to be taken to minimize the chance of future occurrences, to the appropriate Environmental Field Office (see subpart 2.8 above); and
- c) the SWPPP required under part 3 above of this permit must be modified within 14 days of knowledge of the release: to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the SWPPP must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

4.2. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

4.3. Discharge Compliance with State Water Quality Standards

4.3.1. Violation of Water Quality Standards prohibited

This permit does not authorize storm water or other discharges that would result in a violation of a state water quality standard (the TDEC Rules, Chapters 1200-4-3, 1200-4-4). Such discharges constitute a violation of this permit.

Where a discharge is already authorized under this permit and the division determines the discharge to cause or contribute to the violation of applicable state water quality standards, the permitting authority will notify the operator of such violation(s). The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and shall document these actions in the SWPPP.

4.3.2. Discharge quality

- a) The construction activity shall be carried out in such a manner that will prevent violations of water quality criteria as stated in the TDEC Rules, Chapter 1200-4-3-.03. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated for that water body by TDEC Rules, Chapter 1200-4-4.
- b) There shall be no distinctly visible floating scum, oil or other matter contained in the storm water discharge.
- c) The storm water discharge must not cause an objectionable color contrast in the receiving stream.
- d) The storm water discharge must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream. This provision includes species covered under subpart 1.3 above.

4.4. **Discharges into Impaired or High Quality Waters**

4.4.1. Additional SWPPP requirements for discharges into impaired or high quality waters

Discharges that would add loadings of a pollutant that is identified as causing or contributing to an impairment of a water body on the list of impaired waters or which would cause degradation to waters designated by TDEC as high quality waters are not authorized by this permit (see subpart 1.3 above). To be eligible to obtain and maintain coverage under this permit, the operator must satisfy, at a minimum, the following additional requirements for discharges into waters impaired by siltation (or discharges upstream of such waters and because of the proximity to the impaired segment and the nature of the discharge is likely to contribute pollutants of concern in amounts measurable in the impaired segment that may affect the impaired waters) and for discharges to waters identified by TDEC as high quality waters:

- a) The SWPPP must certify that erosion prevention and sediment controls used at the site are designed to control storm runoff generated by a 5-year, 24-hour storm event. When clay and other fine particle soils are found on sites, additional physical or chemical treatment of storm water runoff may be used.
- b) The permittee shall perform inspections described in section 3.5.8 above at least twice every calendar week. Inspections shall be performed at least 72 hours apart.
- c) The permittee must certify on a quarterly basis, on the form provided in Appendix C of this permit: i. that the twice weekly inspections of erosion and sediment controls and of outfall points were performed; and ii. whether or not all planned and designed erosion prevention and sediment controls are installed and in working order. The certification must be executed by a person who meets the signatory requirements of section 6.7.2 below of this permit. The record of certifications must be kept at the construction site with a copy of the SWPPP. For record retention requirements, see part 5 below.
- d) In the event the division finds that a discharger is complying with the SWPPP, but contributing to the impairment of receiving stream, then the discharger will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the changes designed to eliminate further impairment of the receiving stream. If the permittee does

not implement the SWPPP changes within 7 days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit (see subpart 6.12 below). To obtain the individual permit, the operator must file an individual permit application. The project must be stabilized until such time as the SWPPP is re-developed and the individual permit is issued. No earth disturbing activities, except those necessary for stabilization, are authorized to continue until the individual permit is issued.

- e) For an outfall in a drainage area of a total of 5 or more acres, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 5 year, 24 hour storm and runoff from each acre drained, or equivalent control measures, shall be provided until final stabilization of the site. A drainage area of 5 or more acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin and, if so, can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included and a marker installed signifying a cleanout need.
- f) The director may require revisions to the SWPPP necessary to prevent a negative impact to legally protected state or federally listed aquatic fauna, their habitat, or the receiving waters.

4.4.2. Buffer zone requirements for discharges into impaired or high quality waters

A 60-foot natural riparian buffer zone adjacent to the receiving stream designated as impaired or high quality waters shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified on a 7.5-minute USGS quadrangle map, or as determined by the director. Buffer zones are not sediment control measures and should not be relied upon as primary sediment control measures. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites, as described in section 2.4.2 above.

The riparian buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-foot criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 25 feet at any measured location.

Every attempt should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in reduction of sediment in storm water runoff as a natural riparian zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc.

This requirement does not apply to any valid Aquatic Resource Alteration Permits (ARAP), or equivalent permits issued by federal authorities. Additional buffer zone requirements may be established by the local MS4 program.

4.4.3. Pre-Approved Sites

Construction activity at sites that have been pre-approved before the issuance date of this permit (June 16, 2005) are exempt from the design storm requirements of section 4.4.1 a) and e) above and the buffer requirements of section 4.4.2 above. Evidence of pre-approval for highway projects shall be a final right-of-way plan and for other construction projects, the final design drawings with attached dated, written approval by the local, state or federal agency with authority to approve such design drawings for construction.

5. RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS

5.1. Documents

The permittee shall retain copies of storm water pollution prevention plans and all reports required by this permit, and records of all data used to complete the NOI and the NOT to be covered by this permit, for a period of at least one year from the date the notice of termination is filed. This period may be extended by written request of the director.

5.2. Accessibility and Retention of Records

The permittee shall retain a copy of the SWPPP required by this permit (including a copy of the permit) at the construction site (or other local location accessible to the director and the public) from the date construction commences to the date of termination of permit coverage. Permittees with day-to-day operational control over pollution prevention plan implementation shall have a copy of the SWPPP available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. Once coverage is terminated, the permittee shall maintain a copy of all records for a period of three years.

5.3. Electronic Submission of NOIs, NOTs and Reports

If the division notifies dischargers (directly by mail or E-mail, by public notice, or by making information available on the world wide web) of electronic forms or other report options that become available at a later date (e.g., electronic submission of forms), the operators may take advantage of those options to satisfy the NOI, NOT and other report notification requirements.

6. STANDARD PERMIT CONDITIONS

6.1. Duty to Comply

6.1.1. Permittee's duty to comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Tennessee Water Quality Control Act (TWQCA) and is grounds for

enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

6.1.2. Penalties for violations of permit conditions

Pursuant to T.C.A. § 69-3-115 of The Tennessee Water Quality Control Act of 1977, as amended:

- a) any person who violates an effluent standard or limitation or a water quality standard established under this part (T.C.A. § 69-3-101, et. seq.); violates the terms or conditions of this permit; fails to complete a filing requirement; fails to allow or perform an entry, inspection, monitoring or reporting requirement; violates a final determination or order of the board, panel or commissioner; or violates any other provision of this part or any rule or regulation promulgated by the board, is subject to a civil penalty of up to ten thousand dollars (\$10,000) per day for each day during which the act or omission continues or occurs;
- b) any person unlawfully polluting the waters of the state or violating or failing, neglecting, or refusing to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class C misdemeanor. Each day upon which such violation occurs constitutes a separate offense;
- c) any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data required by the board or the commissioner, or who willfully and knowingly pollutes the waters of the state, or willfully fails, neglects or refuses to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class E felony and shall be punished by a fine of not more than twenty-five thousand dollars (\$25,000) or incarceration, or both.

6.1.3. Civil and criminal liability

Nothing in this permit shall be construed to relieve the discharger from civil or criminal penalties for noncompliance. Notwithstanding this permit, the discharger shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the discharger to conduct storm water discharge activities in a manner such that public or private nuisances or health hazards will not be created. Furthermore, nothing in this permit shall be construed to preclude the State of Tennessee from any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act.

6.1.4. Liability under state law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local, state or federal law.

6.2. Continuation of the Expired General Permit

This permit expires on May 30, 2010. Permittees may maintain coverage under the expired general permit (until a new general permit is issued) by providing notice to the division at least 30 days prior to the expiration date of this general permit. The notice may be submitted in a letter, or by re-submitting the NOI form. The notice shall be submitted to the appropriate Environmental Field Office of the Division of Water Pollution Control, as provided in subpart 2.8 above. The notice must be signed in accordance with section 6.7.1 below of this permit and must contain the following information:

- a) the existing construction storm water general permit tracking number;
- b) the name of the construction site and the city and county where located; and
- c) name, address and telephone number of the operator.

Permittees who choose not to maintain coverage under the expired general permit, or are required to obtain an individual permit, must submit an application (Forms 1 and 2F and any other applicable forms) at least 180 days prior to expiration of this general permit. Permittees who are eligible and choose to be covered by the new general permit must submit an NOI by the date specified in that permit. Facilities that have not obtained coverage under this permit by the permit expiration date cannot become authorized to discharge under the continued permit.

6.3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

6.4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

6.5. Duty to Provide Information

The permittee shall furnish to the division or an authorized representative of the division, within a time specified by the division, any information that the division may request to determine compliance with this permit or other information relevant to the protection of the waters of the state. The permittee shall also furnish to the division, upon request, copies of records required to be kept by this permit.

6.6. Other Information

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the director, he or she shall promptly submit such facts or information.

6.7. Signatory Requirements

All Notices of Intent (NOI), storm water pollution prevention plans (SWPPPs), requests for termination of permit coverage, reports, certifications or information either submitted to the director or the operator of a large or medium municipal separate storm sewer system and/or any other information either submitted to the division, or that this permit requires be maintained by the permittee, shall be signed and dated.

6.7.1. Signatory requirements for a notice of intent (NOI)¹

NOI shall be signed as follows:

- a) For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated site including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate officers. The division will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

- b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- c) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
- (i) the chief executive officer of the agency, or
 - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

¹ As specified in 40 CFR 122.22(a)(1)-(3) [48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39619, Sept. 1, 1983; 49 FR 38047, Sept. 29, 1984; 50 FR 6941, Feb. 19, 1985; 55 FR 48063, Nov. 16, 1990; 65 FR 30907, May 15, 2000]

6.7.2. Signatory requirements for reports

Storm water pollution prevention plans, reports, certifications or other information submittals required by the permit and other information requested by the division shall be signed by a person described in section 6.7.1 above, or by a duly authorized representative of that person.

6.7.3. Duly authorized representative

For a purpose of satisfying signatory requirements for reports (see section 6.7.2 above), a person is a duly authorized representative only if:

- a) the authorization is made in writing by a person described in section 6.7.1 above;
- b) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated site or activity such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; a duly authorized representative may thus be either a named individual or any individual occupying a named position and,
- c) the written authorization is submitted to the director.

6.7.4. Changes to authorization

If an authorization under section 6.7.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the site, a new authorization satisfying the requirements of section 6.7.4 above must be submitted to the director prior to or together with any reports, information, or applications to be signed by an authorized representative.

6.7.5. Certification

Any person signing a document under section 6.7.1 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

6.7.6. Signatory requirements for secondary permittees

Secondary permittees (typically construction contractors) required to sign an NOI and SWPPP because they meet the definition of an operator but who are not primarily responsible for preparing an NOI and SWPPP, shall sign the following certification statement on the NOI and SWPPP:

"I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements."

6.8. Penalties for Falsification of Reports

Knowingly making any false statement on any report or form required by this permit may result in the imposition of criminal penalties as provided for in Section 309 of the Clean Water Act and in T.C.A. §69-3-115 of the Tennessee Water Quality Control Act.

6.9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

6.10. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. The issuance of this permit does not authorize trespassing or discharges of storm water or non-storm water across private property.

6.11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

6.12. Requiring an Individual Permit

6.12.1. Director can require a site to obtain an individual permit

The director may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit in order to obtain adequate protection of designated uses of a receiving stream. Any interested person may petition the director in writing to take action under this paragraph, but must include in their petition the justification for such an action. Where the director requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the director shall notify the discharger in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that coverage under this general permit shall terminate upon the effective date of an individual NPDES permit or denial of coverage under an individual permit. The notification may require stabilization of the site and suspend coverage under this general permit until the individual permit is issued. Applications shall be submitted to the appropriate Environmental Field Office of the division as indicated in subpart 2.8 above of this permit. The director may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the director under this paragraph, then the applicability of this permit to the discharger will be terminated at the end of the day specified by the director for application submittal.

If the decision to require an individual NPDES permit precedes the issuance of coverage under this general permit, earth disturbing activities cannot begin until the individual permit is issued.

6.12.2. Permittee may request individual permit instead of coverage under this general permit

Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the appropriate division's Environmental Field Office. The request may be granted by issuance of an individual permit, or alternative general permit, if the reasons cited by the permittee are adequate to support the request.

6.12.3. Individual permit terminates general permit

When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the discharger is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is terminated on the date of such denial, unless otherwise specified by the director. Coverage under the Tennessee Multi-Sector General Permit for the Discharge of Storm Water from an Industrial Activity (TMSP) will not be considered as an alternative general permit under this section without being specified by the director.

6.13. Other, Non-Storm Water, Program Requirements

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

6.14. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related equipment) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans.

Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee, when determined by the permittee or the division to be necessary to achieve compliance with the conditions of the permit.

6.15. Inspection and Entry

The permittee shall allow authorized representatives of the Environmental Protection Agency, the director or an authorized representative of the commissioner of TDEC, or, in the case of a construction site which discharges through a municipal separate storm sewer, an authorized representative of the MS4 receiving the discharge, upon the presentation of credentials and other documents as may be required by law:

- a) to enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b) to have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
- c) to inspect any facilities or equipment (including monitoring and control equipment).

6.16. Permit Actions

This permit may be issued, modified, revoked, reissued or terminated for cause in accordance with this permit and the applicable requirements of T.C.A. § 69-3-108. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. REQUIREMENTS FOR TERMINATION OF COVERAGE

7.1. Requesting Termination of Coverage

Operators wishing to terminate coverage under this permit must submit a completed notice of termination (NOT). The notice shall be submitted on the division's NOT form provided in Appendix B of this permit (or copy thereof). The division will review NOTs for completeness and accuracy and, when necessary, investigate the proposed termination of coverage.

7.1.1. Termination of site coverage

The permittee must request termination of coverage under this permit when a site, or a portion of the site, has been finally stabilized and all storm water discharges from construction activities that are authorized by this permit are eliminated. Compliance with this permit is required until the complete NOT form is submitted.

Termination of permit coverage for a construction site (or a portion of the site) can be requested only by a primary permittee that has operational and/or design control of the site (or a portion of the site). For the purpose of the certification in section 7.1.3 below, the primary permittee must retain permit coverage until all construction within the development (including, but not limited to; infrastructure, common areas, storm water drainage structures, sediment control basin, etc.) is completed and all disturbed soils have been finally stabilized and temporary erosion and sediment control measures have been removed.

When the initial permittee has sold and ceases to have operational control over the entire construction site, the termination of coverage will be effective when the replacement NOC has been issued to the new operator (transfer of coverage) according to requirements in section 2.4.3 above (New operator).

The division will review NOTs for completeness and accuracy and, when necessary, investigate the proposed site for which the NOT was submitted. Upon completing the NOT review, the division will:

- a) prepare and transmit a notification that a NOT form was received;
- b) notify the applicant of needed changes to their NOT submittal; or
- c) deny a request for termination of coverage under this general permit.

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the EFO has information indicating that the permit coverage is not eligible for termination, written notification will be provided that permit coverage has not been terminated. The notification will include a summary of existing deficiencies.

7.1.2. Termination of contractor coverage

Contractors must request a termination of coverage under this permit when they are no longer an operator at the construction site. Contractors are considered secondary permittees and do not receive a notice of coverage under this permit. Therefore, the division will not notify contractors that their permit coverage has been terminated.

7.1.3. NOT certification

The NOT and the following certification must be signed in accordance with subpart 6.7 above (Signatory Requirements) of this permit:

I certify under penalty of law that either: (a) all storm water discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge storm water

associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

7.2. Where to Submit a Notice of Termination (NOT)?

The NOT shall be submitted to the Environmental Field Office (EFO) which issued the notice of coverage (NOC) for the construction site. A list of counties and the corresponding EFOs is provided in subpart 2.8 above. The appropriate permit tracking number must be clearly printed on the form.

8. DEFINITIONS

24-Hour Rainfall Amounts by Return Period in Tennessee are summarized in the following table (from Rainfall Atlas of the United States, TP-40; see also <http://www.intelisolve.com/>)

	24-Hour Rainfall Amounts in Inches					
	2-year	5-year	10-year	25-year	50-year	100-year
Memphis	4.0	5.0	5.7	6.5	7.2	7.9
Nashville	3.5	4.4	4.9	5.7	6.4	6.8
Chattanooga	3.6	4.6	5.2	6.1	6.8	7.1
Knoxville	3.2	4.0	4.6	5.3	6.0	6.4

“Best Management Practices” (“BMPs”) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

“Borrow Pit” is an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this permit.

“Buffer Zone” is a strip of dense undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when storm water runoff is flowing into and through the buffer zone as shallow sheet flow, rather than in concentrated form such as in channels, gullies, or wet weather conveyances. Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in storm water runoff flowing into and through the buffer zone as shallow sheet flow.

“Clearing” in the definition of discharges associated with construction activity, typically refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of

construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities; for instance, clearing forested land in order to convert forest land to pasture for wildlife management purposes. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or power lines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal storm water NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state storm water NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).

“Commencement of construction” The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

“Common plan of development or sale” is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

“Control measure” As used in this permit, refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.

“CWA” means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)

“Department” means the Department of Environment and Conservation.

“Director” means the director, or authorized representative, of the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

“Discharge of storm water associated with construction activity” As used in this permit, refers to storm water point source discharges from areas where soil disturbing activities (e.g., clearing, grading, excavation, etc.), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material etc.) are located.

“Division” means the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

“Final stabilization” means that all soil disturbing activities at the site have been completed, and that a perennial vegetative cover sufficient to prevent erosion has been well established on all unpaved areas and areas not covered by permanent structures, and/or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

“High quality waters” are surface waters of the State of Tennessee that satisfy characteristics of high quality waters as listed Chapter 1200-4-3-.06 of the official compilation - Rules and Regulations of the State of Tennessee. Characteristics include waters designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW); waters that provide

habitat for ecologically significant populations of certain aquatic or semi-aquatic plants or animals; waters that provide specialized recreational opportunities; waters that possess outstanding scenic or geologic values; or waters where existing conditions are better than water quality standards.

“Impaired waters” means any segment of surface waters that has been identified by the division as failing to support classified uses. The division periodically compiles a list of such waters. The division will notify applicants and permittees if their discharge is into, or is affecting, impaired waters. For the purpose of this permit, pollutants of concern include, but are not limited to: siltation (silt/sediment) and habitat alterations. A list of the streams and lakes not meeting water quality standards in 2002 can be found at http://www.state.tn.us/environment/wpc/publications/2002_303dFinal.pdf. A proposed final list of the streams and lakes not meeting water quality standards in 2004 can be found at http://www.state.tn.us/environment/wpc/publications/2004_303dlist.pdf.

“Improved sinkhole” is a natural surface depression that has been altered in order to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under the Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone).

“Linear Project” – is a land disturbing activity as conducted by an underground/overhead utility or highway department, including but not limited to any cable line or wire for the transmission of electrical energy; any conveyance pipeline for transportation of gaseous or liquid substance; any cable line or wire for communications; or any other energy resource transmission ROW or utility infrastructure, e.g., roads and highways. Activities include the construction and installation of these utilities within a corridor. Linear project activities also include the construction of access roads, staging areas, and borrow/spoil sites associated with the linear project.

“Monthly” refers to calendar months.

“Municipal Separate Storm Sewer System” or **“MS4”** is defined at 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying storm water;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

“NOI” means notice of intent to be covered by this permit (see part 2 above of this permit.)

“NOT” means notice of termination (see part 7 above of this permit).

“Operator” for the purpose of this permit and in the context of storm water associated with construction activity, means any person associated with a construction project that meets either of the following two criteria:

- a) This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project, and is considered the primary permittee; or
- b) This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of “operator.”

“Point source” means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include introduction of pollutants from non point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands or return flows from irrigated agriculture or agricultural storm water runoff.

“Qualifying State, Tribal, or local erosion and sediment control program” is one that includes, as defined in 40 CFR 122.44(s):

- (i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- (ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (iii) Requirements for construction site operators to develop and implement a storm water pollution prevention plan. (A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges); and
- (iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

“Registered Engineer” and “Registered Landscape Architect” An engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.

“Runoff coefficient” means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is NOT absorbed by the surface to the total amount of water that falls during a rainstorm.

“Sediment” means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported, or has been moved from the site of origin by wind, water, gravity, or ice as a product of erosion.

“Sediment basin” A temporary basin consists of an embankment constructed across a drainage way, or an excavation that creates a basin, or by combination of both. A sediment basin typically consists of an impoundment, a dam, a riser pipe outlet, and an emergency spillway. The size of the structure will depend upon the location, size of the drainage area, soil type land cover/use, rainfall amount, and any unique site conditions favorable to producing high runoff volume, velocity, or sediment. Retention and detention ponds are both designed and constructed for the purpose of managing the runoff from a development. A retention pond retains most of sediment in the pond. A detention pond detains the higher flows and releases the flow over a longer time and at a reduced rate; it may or may not offer any sediment control.

“Sedimentation” means the action or process of forming or depositing sediment.

“Significant contributor of pollutants to waters of the state” means any discharge containing pollutants that are reasonably expected to cause or contribute to an impairment of receiving stream water quality or designated uses.

“Soil” means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.

“Storm water” means rain fall runoff, snow melt runoff, and surface runoff and drainage.

“Storm water associated with industrial activity” is defined at 40 CFR 122.26(b)(14) and incorporated here by reference. Most relevant to this permit is 40 CFR 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities (including borrow pits containing erodible material). Disturbance of soil for the purpose of crop production is exempted from permit requirements, but storm water discharges from agriculture-related activities which involve construction of structures (e.g., barn construction, road construction, pond construction, etc.) are considered associated with industrial activity. Maintenance performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility, e.g. re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair, and repaving of an existing road, is not considered a construction activity for the purpose of this permit.

“Storm water discharge-related activities” include: activities which cause, contribute to, or result in point source storm water pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control storm water including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent storm water pollution.

“Storm Water Pollution Prevention Plan” (SWPPP): A written plan required by this permit that includes site map(s), an identification of construction/contractor activities that could cause

pollutants in the storm water, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

“Take” of an endangered species means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.

“Temporary stabilization” is achieved when vegetation and/or a non-erodible surface have been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease. However, if future construction activity is planned, permit coverage continues.

“Total maximum daily load” (TMDL) The sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(I)). TMDL is a study that: quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant, and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. Some of the actions that might be taken are: 1.) Re-allocation of limits on the sources of pollutants documented as impacting streams. It might be necessary to lower the amount of pollutants being discharged under NPDES permits or to require the installation of other control measures, if necessary, to ensure that water quality standards will be met. 2.) For sources over which the division does not have regulatory authority, such as ordinary agricultural or forestry activities, provide information and technical assistance to other state and federal agencies that work directly with these groups to install appropriate Best Management Practices (BMPs). Even for impacted streams, TMDL development is not considered appropriate for all bodies of water: if enforcement has already been taken and a compliance schedule has been developed; or if best management practices have already been installed for non-regulated activities, the TMDL is considered not applicable. In cases involving pollution sources in other states, the recommendation may be that another state or EPA perform the TMDL. TMDLs can also be described by the following equation:

$$\text{TMDL} = \text{sum of non point sources (LA)} + \text{sum of point sources (WLA)} + \text{margin of safety}$$

A list of completed TMDLs that have been approved by EPA cab found at our web site:
<http://www.state.tn.us/environment/wpc/tmdl/approved.php>

“Waters” or **“waters of the state”** means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

“Waste site” is an area where material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.

“Wet weather conveyances” are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and which do not support fish or aquatic life and are not suitable for drinking water supplies. (Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(3)).

9. LIST OF ACRONYMS

ARAP	Aquatic Resource Alteration Permit
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGP	Construction General Permit
CWA	Clean Water Act
EFO	Environmental Field Office
EPA	(U.S.) Environmental Protection Agency
EPSC	Erosion Prevention and Sediment Control
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Coverage
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
ONRW	Outstanding National Resource Waters
POTW	Publicly Owned Treatment Works
SWPPP	Storm Water Pollution Prevention Plan
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TMDL	Total Maximum Daily Load
TMSP	Tennessee Multi-Sector General Permit for the Discharge of Storm Water from an Industrial Activity
TVA	Tennessee Valley Authority
TWQCA	Tennessee Water Quality Control Act
UIC	Underground Injection Control
USGS	United States Geological Survey

(End of body of permit; appendices follow.)

APPENDIX A – Notice of Intent (NOI) Form
(next page)



**CONSTRUCTION ACTIVITY – STORM WATER DISCHARGES
NOTICE OF INTENT (NOI)**

Site Name:		Existing Tracking No.	
Street Address or Location:		Start date:	
		Estimated end date:	
Site Description:		Latitude:	
		Longitude:	
County(ies):		Acres Disturbed:	
Does a topographic map show dotted or solid blue lines <input type="checkbox"/> and/or wetlands <input type="checkbox"/> on or adjacent to the construction site? If wetlands are located on-site and may be impacted, attach wetlands delineation report. If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.:			
Receiving waters:			
Attach the SWPPP with the NOI <input type="checkbox"/> SWPPP Attached		Attach a site location map <input type="checkbox"/> Map Attached	
Site Owner/Developer: (person, company, or legal entity that has operational or design control over construction plans and specifications)			
Site Owner/Developer Contact: (individual responsible for site)		Title or Position:	
Mailing Address:		City:	State:
		Zip:	
Phone: ()		E-mail:	
Optional Contact:		Title or Position:	
Address:		City:	State:
		Zip:	
Phone: ()		E-mail:	
Owner/Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official)			
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
Owner/Developer name; print or type		Signature	Date
Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official)			
I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above, and/or my inquiry of the person directly responsible for assembling this NOI, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.			
Primary contractor name and address; print or type		Signature	Date
Other contractor name and address; print or type		Signature	Date
Other contractor name and address; print or type		Signature	Date
OFFICIAL STATE USE ONLY			
Received Date	Reviewer	Field Office	Permit Number TNR
Fee(s)	T & E Aquatic Fauna	Impaired Receiving Stream	High Quality Water Notice of Coverage Date

**CONSTRUCTION ACTIVITY – STORM WATER DISCHARGES
NOTICE OF INTENT (NOI) - INSTRUCTIONS**

Purpose of this form A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Storm Water Associated with Construction Activity. **Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions.** This permit is required for storm water discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

Permit fee (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites). There is no fee for sites less than 1 acre.

Acres Disturbed	Fee	Acres Disturbed	Fee	Acres Disturbed	Fee
= or > 500 acres	\$7,500	= or > 75 < 100 acres	\$2000	= or > 20 < 30 acres	\$ 500
= or > 250 < 500 acres	\$5000	= or > 50 < 75 acres	\$1000	= or > 10 < 20 acres	\$ 400
= or > 150 < 250 acres	\$4000	= or > 40 < 50 acres	\$ 750	= or > 5 < 10 acres	\$ 300
= or > 100 < 150 acres	\$3000	= or > 30 < 40 acres	\$ 600	= or > 1 < 5 acres	\$ 250

Who must submit the NOI form? The NOI form must be signed by the "operator(s)" of the construction site. Operators will most likely include the developer of the site, and the primary contractor(s). "Operator" means any party associated with the construction project that meets either of the following two criteria: (1) the party has design or operational control over project specifications (including the ability to make modifications in specifications); or (2) the party has day-to-day operational control of those activities at a project site which are necessary to ensure compliance with the storm water pollution prevention plan (SWPPP) or other permit conditions (e.g., they are authorized to direct workers at the site to carry out activities identified in the storm water pollution prevention plan or comply with other permit conditions). If a contractor has not been identified at the time the NOI is submitted by the developer, the contractor(s) must sign an NOI for the project in order to obtain authorization under this permit. The contractor must include the NPDES permit number that is already assigned to the site, along with the name of the construction project and its location.

Notice of Coverage The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). Storm water discharge from the construction site is authorized as of the effective date of the NOC.

Complete the form Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a map and the SWPPP.**

Describe and locate the project Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at 1-800-USA-MAPS, or at the Census Bureau world wide web site: <http://www.census.gov/cgi-bin/gazetteer>. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas and stockpiles. For linear projects give location at each end of the construction area.

Give name of the receiving waters Trace the route of storm water runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the storm water runoff drains. Note that the receiving water course may or may not be located on the construction site. If the first water body receiving construction site runoff is unnamed ("unnamed tributary"), determine the name of the water body which the unnamed tributary enters.

ARAP permit may be required **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Storm Water NOI Processing.**

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	2510 Mt. Moriah Road STE E-645	38115-1520	Cookeville	1221 South Willow Ave.	38506
Jackson	362 Carriage House Drive	38305-2222	Chattanooga	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	2700 Middlebrook Pike STE 220	37921
Columbia	2484 Park Plus Drive	38401	Johnson City	2305 Silverdale Road	37601

APPENDIX B – Notice of Termination (NOT) Form
(next page)



**NOTICE OF TERMINATION (NOT) – STORM WATER DISCHARGES
CONSTRUCTION ACTIVITY**

This form is required to be submitted when requesting termination of coverage from the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities. The purpose of this form is to notify the Tennessee Department of Environment and Conservation that you, as a permitted operator of storm water discharges from a construction activity, no longer have responsibilities related to erosion and sediment controls at the construction site. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the local Division of Water Pollution Control, Environmental Field Office (EFO) address (see table below), and marked "Storm Water Notice of Termination". For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). **Type or print clearly, using ink and not markers or pencil.**

Site Name:		Tracking No.	
Street Address or Location:			
Site Description:			
Site Owner/Developer: (person, company, or legal entity that has operational or design control over construction plans and specifications)			
Site Owner/Developer Contact: (individual responsible for site)		Title or Position:	
Mailing Address:		City:	State: Zip:
Phone: ()		E-mail:	

Check the reason for termination of permit coverage:

<input type="checkbox"/>	Storm water discharge associated with construction activity is no longer occurring and the area previously under construction has been restabilized (i.e., termination of initial permittee coverage). Explain:
<input type="checkbox"/>	You are no longer the operator of the facility/site (i.e., termination of primary or secondary permittee coverage). Name of Permittee requesting termination of coverage: Explain:

Certification and Signature (must be signed by president, vice-president or equivalent, or ranking elected official)

I certify under penalty of law that either: (a) all storm water discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge storm water associated with construction activity under this general permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act.

For the purposes of this certification, elimination of storm water discharges associated with construction activity means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time to insure final stabilization is maintained, or that all storm water discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated from the portion of the construction site where the operator had control.

Operator name; print or type	Signature	Date
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EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	2510 Mt. Moriah Road STE E-645	38115-1520	Cookeville	1221 South Willow Ave.	38506
Jackson	362 Carriage House Drive	38305-2222	Chattanooga	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	2700 Middlebrook Pike STE 220	37921
Columbia	2484 Park Plus Drive	38401	Johnson City	2305 Silverdale Road	37601

APPENDIX C – Inspection Report Form
(next page)



Construction Storm Water Inspection Certification

(Twice weekly inspections are required only for all sites.)

Construction Site Information **Outfall No. _____ (or station no. or other identifier of drainage area represented)**

NPDES Permit No. TNR _____ Notice of Coverage (NOC) Date: _____ County: _____

Name of Project: _____

Developer and/or Contractor Name: _____

Month/Year	Week 1	Week 2	Week 3	Week 4	Week 5
	<i>Yes or No / Initials</i>				
_____, _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Inspections Performed	/	/	/	/	/
E&S Controls in Order	/	/	/	/	/
_____, _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Inspections Performed	/	/	/	/	/
E&S Controls in Order	/	/	/	/	/
_____, _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Inspections Performed	/	/	/	/	/
E&S Controls in Order	/	/	/	/	/
_____, _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Inspections Performed	/	/	/	/	/
E&S Controls in Order	/	/	/	/	/
_____, _____	Date: _____	Date: _____	Date: _____	Date: _____	Date: _____
Inspections Performed	/	/	/	/	/
E&S Controls in Order	/	/	/	/	/

Provide the following information for the person(s) who have performed and initialed the above inspections. If more than two persons have performed these inspections, give information for the two persons who performed the most numbers of inspections.

Initials: _____	Name: _____	Phone No. _____
Initials: _____	Name: _____	Phone No. _____

Quarterly Inspection Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated information presented. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that inspections of storm water discharge points (outfalls) and of erosion and sediment controls have been performed as recorded in the table above. I certify that erosion prevention and sediment controls in the drainage area of the identified outfall were installed as planned and designed and in working order as recorded in the table above. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name _____ Title _____ Signature _____

Company _____ Date _____

Environmental Field Offices - Division of Water Pollution Control - Addresses

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	2510 Mt. Moriah Road, Suite E-645	38115-1520	Cookeville	1221 South Willow Ave.	38506
Jackson	362 Carriage House Drive	38305-2222	Chattanooga	540 McCallie Avenue, Suite 550	37402-2013
Nashville	711 R.S. Gass Blvd	37243	Knoxville	2700 Middlebrook Pike, Suite 220	37921
Columbia	2484 Park Plus Drive	38401	Johnson City	2305 Silverdale Road	37601

Information and Instructions

The purpose of this form is to certify that inspections of storm water discharge points and erosion prevention and sediment controls (E&S Controls) at the construction site have been performed. You are required to complete this form for your weekly (at a minimum) inspections, but are only required to perform twice-weekly inspections if discharges from the construction site enter waters that have been identified as being impaired by siltation, or if they enter high quality waters. You can determine whether you are discharging to an impaired or high quality stream by looking at the Notice of Coverage (NOC) returned to you after you applied for coverage under the TNCGP. You may also call your local Environmental Field Office (EFO) at the toll-free number of 1-888-891-TDEC.

You are required to inspect outfall points (where discharges leave the site or enter waters of the state) to ascertain whether your erosion prevention and sediment control measures are effective in preventing soil from leaving the construction site and entering nearby streams. You are also required to inspect the erosion prevention and sediment control measures being used at the site, whether these controls have been installed according to the storm water pollution prevention plan (SWPPP), and whether these controls are in working order. These inspections must be performed at the frequency indicated in the appropriate section of the permit.

To record the inspections and observations, write the date that inspections were performed, in the appropriate week's column; write *Yes* or *No* to indicate if the inspections, both of the outfall points and of the erosion prevention and sediment control measures, were performed; and write *Yes* or *No* to indicate whether or not erosion prevention and sediment controls are installed and in working order. Sign your initials under the date for that week and to the right of the Yes or No. Certification of inspections is required at the end of each quarter and covers all inspections performed during the quarter.

The inspection results shall be kept at the construction site with a copy of the SWPPP. Use a new form for each quarter until the Notice of Termination is filed.