Jeffrey Ballard

From: Jeffrey Ballard

Sent: Tuesday, October 04, 2016 12:55 PM

To: Water Permits

Cc: Khalid Ahmed; Michael White; Randall E. Mann; Lou Timms; John Hewitt; Michael

Welch; Ross Sherwood

Subject: Storm Water Permit Application, PIN 112956.00 - Creekwood Road, Bridges over

Branch of Sugar Creek, LM 0.50 and Sugar Creek, LM 0.56, Gibson Co.

Attachments: PIN 116956.00 Cover Letter.pdf; PIN 116956.00 NOI and Location Map.pdf

Storm Water Permit Application

Project No. 27946-1403-94 PIN 116956.00 Creekwood Road Bridges over Branch of Sugar Creek, LM 0.50 & Sugar Creek, LM 0.56 Gibson County

The Permits Section submits the attached cover letter and NOI for the storm water application on the above referenced project.

All of the SWPPP files have been placed on TDOT's FTP site for retrieval. To retrieve them, please follow these steps within seven days (files are deleted after this time):

- 1. Go to https://webftp.tdot.state.tn.us/
- 2. Select Business Partner
- 3. Select Receive Files
- 4. Right click the link named "Permit Application, PIN 116956.00.zip to Save Target As
- 5. Save to appropriate folder in your file system

If you have any questions or we can provide further assistance, please contact me or Khalid Ahmed at (615) 253-0021.

Thanks, Jeff



Jeffrey Ballard | Consultant Environmental Division/Natural Resources Office JK Polk Building, 9th floor 505 Deaderick St, Nashville, TN 37243 p. 615-532-4424 jeffrey.ballard@tn.gov tn.gov/tdot

Jeffrey Ballard

From: Jeffrey Ballard

Sent: Tuesday, October 04, 2016 1:00 PM

To: EPLANS TURNINS; TDOT PrintShopLettingInfo

Cc: TDOT.HQ Construction; TDOT EstimatingOffice; Khalid Ahmed; John Hewitt; Michael

White

Subject: PIN 116956.00, SWPPP SHEET SUBMITTAL (region 4)

Attachments: PIN 116956.00 SWPPP Plans.pdf

LETTING PLANS REVISION

Project No. 27946-1403-94
PIN 116956.00
Creekwood Road
Bridges over Branch of Sugar Creek, LM 0.50 & Sugar Creek, LM 0.56
Gibson County

Description of Revision: SWPPP Sheets

Number of Sheets Added: 8

This email serves as notification that the subject project is being electronically submitted for the December 2, 2016 Letting Process. Please find the SWPPP Sheets attached.

ATTENTION PRINT SHOP: 1 sets of 11" X17" prints of the revised sheets only is requested for the HQ Construction Office. Please contact their office when the prints are ready to be picked up.

Thanks, Jeff



Jeffrey Ballard | Consultant Environmental Division/Natural Resources Office JK Polk Building, 9th floor 505 Deaderick St, Nashville, TN 37243 p. 615-532-4424 jeffrey.ballard@tn.gov tn.gov/tdot



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL DIVISION

SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM GOVERNOR

October 3, 2016

Mr. Jim McAdoo, Permit Section TN Department of Environment and Conservation Division of Water Pollution Control 11th Floor William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue Nashville, Tennessee 37243

RE: NOI and SWPPP Submittals for TDOT Construction Activities

Dear Mr. McAdoo:

We request coverage under the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities for the subject project. Attached is the signed Notice of Intent (NOI) for Construction Activity – Storm Water Discharges and Quad Map. The Storm Water Pollution Prevention Plan and the full submittal package will be available on the TDOT FTP site.

Permit application files have been placed on TDOT's FTP site for retrieval. To retrieve them, please follow these steps within seven days (files are deleted after this time):

- Go to https://webftp.tdot.state.tn.us/
- Select Business Partner
- Select Receive Files
- 4. Right click the link named "Permit Application, PIN 116956.00.zip to Save Target As Save to appropriate folder in your file system.

Project No. 27946-1403-94
PIN 116956.00
Creekwood Road
Bridges over Branch of Sugar Creek, LM 0.50 & Sugar Creek, LM 0.56
Gibson County

By copy of this letter, we are sending three hard copies of the SWPPP and documentation binder and one CD of this SWPPP to the Region Construction Office (one copy for the contractor).

Please forward our office the Notice of Coverage (NOC) for this project as soon as it becomes available. Please contact me at (615) 253-0021 if I can be of any assistance.

Mr. Jim McAdoo October 3, 2016 Page 2

Sincerely,

Khalid Ahmed

Environmental Permits Section

Enclosures

JLH: KMA: JLB

Enclosures for:

cc: Mr. Ross Sherwood, Region 4 Construction (CD)

CONSTRUCTION GENERAL PERMIT - NOTICE OF INTENT (NOI) - INSTRUCTIONS

A completed NOI must be submitted to obtain coverage under the CGP. 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. CGP coverage is required for stormwater (SW) 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.

The application fee 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, etc.). A separate annual maintenance fee is also required for activities that exceed 1 year under CGP coverage. See TN Rules, Chapter 0400-40-11-.02(b)(12)).

Acres	= or > 150	= or > 50 < 150	= or > 20 < 50	= or > 5 < 20	= or > 1 < 5	Subsequent
Disturbed	acres	acres	acres	acres	acres	coverage
Fee	\$10,000	\$6,000	\$3,000	\$1,000	\$250	\$100

Who must submit the NOI form? All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of SW associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) 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 (e.g., subsequent builder), or the person that is the current land owner of the construction site, and is considered the primary permittee; or (2) 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 primary permittee, and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 of the permit and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage. Artificial entities (e.g., corporations or partnerships) must submit the Tennessee Secretary of State, Division of Business Services, control number. The division reserves the right to deny coverage to artificial entities that are not properly registered and in good standing with the Tennessee Secretary of State.

<u>Notice of Coverage:</u> The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). SW discharge from the construction site is authorized as of the effective date of the NOC.

<u>Complete the form:</u> Type or print clearly. Answer each item or enter "NA," for not applicable. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.**

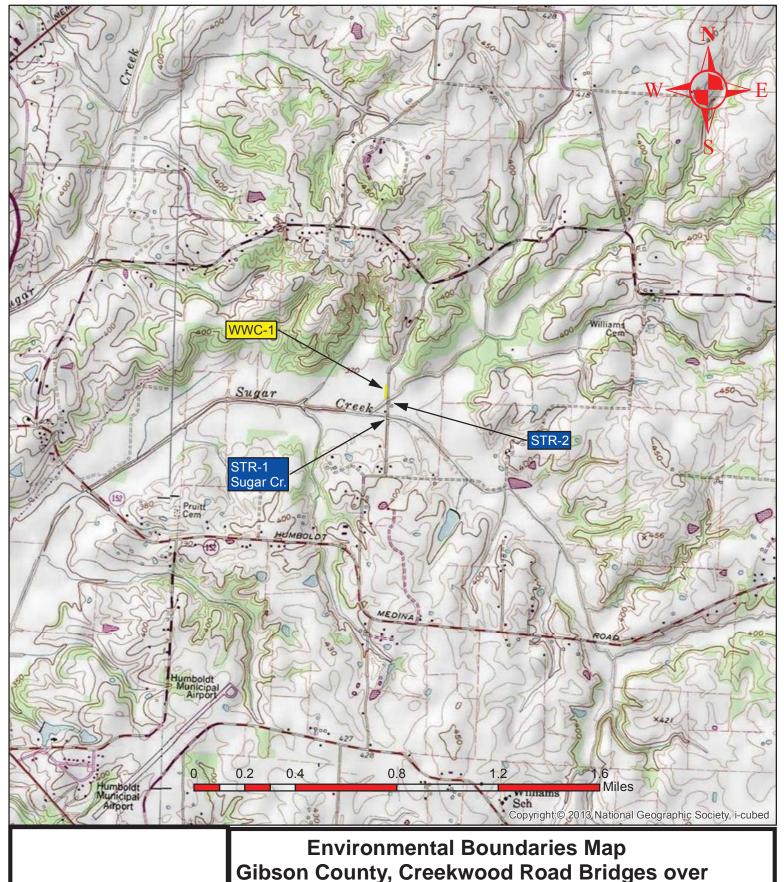
<u>Describe</u> and <u>locate the project</u>: Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate information available to describe the location (reference to adjacent highways, roads and structures; e.g., intersection of state highways 70 and 100). Latitude and longitude (in decimal degrees) can be found at numerous other web sites. Attach a copy of a 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, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

<u>Name of the receiving waters:</u> Trace the route of SW runoff from the site and determine the name of the water course(s) into which the stormwater 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 that the unnamed tributary enters.

An ARAP 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, contact your local Field Office (EFO).

<u>Submitting the form and obtaining more information:</u> 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: Stormwater NOI Processing**.

Tennessee Department of Environment and Conservation Division of Water Pollution Control, Permit Section Attn: Storm Water NOI Processing William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

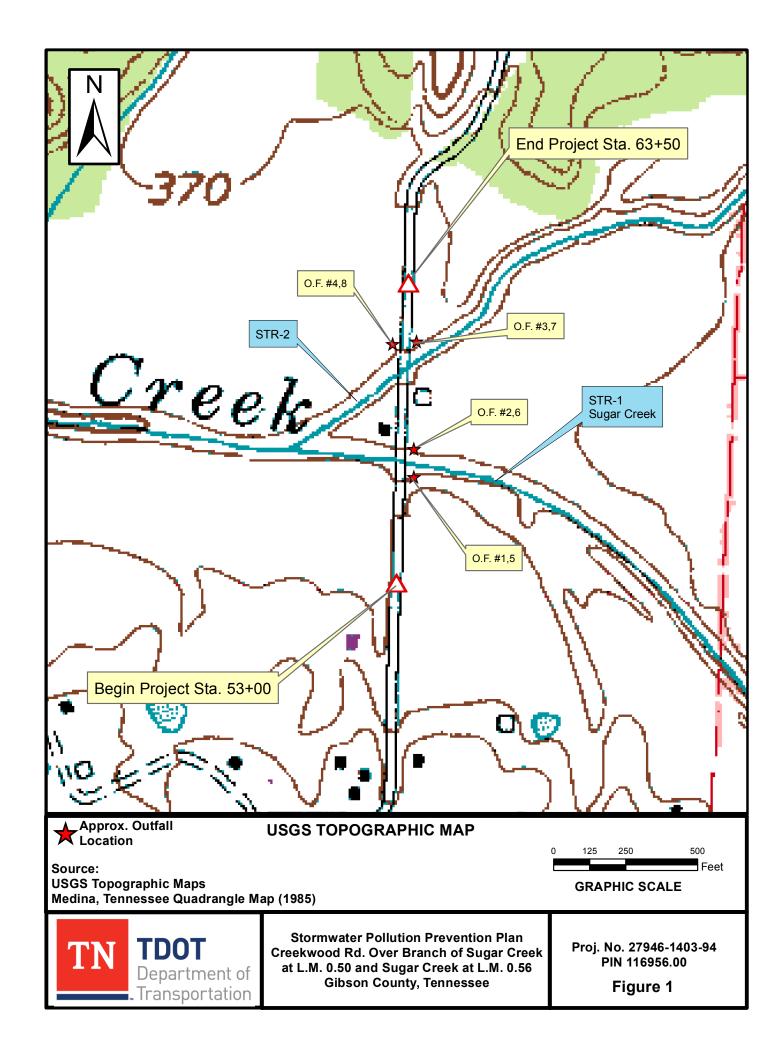




Gibson County, Creekwood Road Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56

P.E. 27946-0403-94 PIN 116956.00





TENNESSEE D.O.T.	DESIGN DIVISION

SWPPP INDEX OF SHEETS

DE	SCRIPTION	SH
1.	SWPPP REQUIREMENTS (3.0)	S-
2.	SITE DESCRIPTION (3.5.1)	
3.	ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a)	S-
4.	STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	S-
5.	EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3)	S-
6.	POLYACRYLAMIDE	S
7.	UTILITY RELOCATION	S-
8.	MAINTENANCE AND INSPECTION	S-
9.	SITE ASSESSMENTS (3.1.2)	
10.	STORMWATER MANAGEMENT (3.5.4)	S-
11.	NON-STORMWATER DISCHARGES (3.5.9)	
12.	SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)	S
13.	RECORD-KEEPING	
14.	SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)	
15.	SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)	
16.	ENVIRONMENTAL PERMITS (9.0)	S
	OUTFALL TABLE	S-

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

1.	SWPPP	REQUIREMENTS	(3.0)
			, ,

- 1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING CERTIFICATIONS (3.1.1)?
 - ▼ YES □ NO (CHECK ALL THAT APPLY BELOW)
 - □ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
 - ☑ TDEC LEVEL II
- 1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (SEDIMENT BASINS, ETC.) (3.1.1)? YES ☐ NO ☐ IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? ☐ YES ☒ NO
- 1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)?
 ✓ YES NO (CHECK ALL THAT APPLY BELOW)
 ✓ IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
 ✓ KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)

IF YES TO SECTION 1.3, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)

☑YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION); AND

IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)

¥YES ☐ NO

2. SITE DESCRIPTION (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.g): REFER TO TITLE SHEET
- 2.2. PROJECT DESCRIPTION (3.5.1.a):

TITLE: Creekwood Road Bridge and Approaches Over Branch of Sugar Creek at L.M. 0.50 and Sugar Creek at L.M. 0.56

COUNTY: Gibson County

PIN: 116956.00

- 2.3. SITE MAP(S) (3.5.1.g): REFER TO TITLE SHEET
- 2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 8,9, DRAINAGE MAP SHEET(S) 6, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3.
- 2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
 - ☑ CLEARING AND GRUBBING
 - ▼ EXCAVATION
 - ☑ CUTTING AND FILLING
 - ▼ FINAL GRADING AND SHAPING
 UTILITIES
 - OTHER (DESCRIBE):
- 2.6. TOTAL PROJECT AREA (3.5.1.c): <u>2.0</u> ACRES

- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c):1.79 ACRES

 NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT
 ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.
- 2.8. IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW (3.5.3.1.k)?

 ☐ YES ☐ NO ☒ N/A
- 2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? ☐ YES ☒ NO IF YES, LIST THE CORRESPONDING PLAN SHEET: _____
- 2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?

 ☐ YES ______ (DATE) ☑ NO

 IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS

 CONSIDERED A PRE-APPROVED SITE (4.1.2.2)
- 2.11. ARE UTILITIES INCLUDED IN THE CONTRACT? ☐ YES ☒ NO
- 2.12. SOIL PROPERTIES (3.5.1.e)(4.1.1).
 SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
Collins Silt Loam (Co)	В	100	0.55

- 2.13. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? ☐ YES ☒ NO
 - 2.13.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐ YES ☐ NO; AND
 - 2.13.2. IF YES TO SECTION 2.13.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? TYES NO N/A (TDOT SP107L WILL BE APPLIED.)

2.14. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1.f).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
PERVIOUS (OPEN SPACE GOOD CONDITION)	1.6	80	61	
IMPERVIOUS	0.4	20	98	
WEIGHTED CURVE NUMBER OR C-FACTOR =			68	

RUNOFF COEFFIC	CIENTS FOR F	OST-CONSTRUCT	TON CONDITI	ons
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
PERVIOUS (OPEN SPACE GOOD CONDITION)	1.5	75	61	
IMPERVIOUS	0.5	25	98	
WEIGHTED CURVE NUMBER OR C-FACTOR = 70				

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	BRZ-2700(56)	S - 1
P.E.	2016	27946-1403-94	

3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a)

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

- 3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS N/A)
- 3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.
- 3.4. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL)
 MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING,
 BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK
 OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC
 MEASURES...
- 3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).
- 3.6. REMOVE AND STORE TOPSOIL.
- STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.8. INSTALL STORM SEWERS AND BRIDGE STRUCTURES.
- INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.
- 3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.
- 3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE
- 3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.
- 3.13. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)
- 3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.
- 3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION 4.1. STREAM INFORMATION

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE

PROJECT LIMITS? YES IND

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

- 4.1.2. HAVE ANY OF THE RECEIVING WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):
 - 303d IMPAIRED FOR SILTATION
 - 303d IMPAIRED FOR HABITAT ALTERATION
 - KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)
- 4.1.3. RECEIVING STREAMS (3.5.1.j).

	RECEIVI	NG STREAM INF	ORMATIC	N	
NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	303d IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	KETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR-1	Sugar Creek	Yes	NO	Yes	Yes
STR-2	Unnamed Tributary to Sugar Creek	Yes	NO	Yes	Yes

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

4.1.4.	ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? ☐ YES 🛛 NO
	IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S)
	IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF
	BUFFER.
	☐ 60-FEET FOR IMPAIRED AND KNOWN EXCEPTIONAL
	TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A

MINIMUM OF 30-FEET) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. 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 30 FEET AT ANY MEASURED LOCATION.

30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 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 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION

IF NO, CHECK THE APPROPRIATE BOX BELOW. ■ BUFFERS NOT REQUIRED (i.e. NO STREAM, WETLAND, ETC.

ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES

IMPACTS) TDEC ARAP APPLIES

BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)

- 4.1.5. ARE THERE BUFFER ZONE EXEMPTIONS (4.1.2.1)? ☐ YES 🛛 NO IF YES, EXISTING CONDITIONS DESCRIPTION:____
- 4.1.6. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BEUSED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. OUTFALL INFORMATION:

A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS. FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE EPSC PLANS OR SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS. (3.5.3.3)

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS. FOR PROJECTS THAT DISCHARGE INTO KNOWN **EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY** SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR

MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS. (5.4.1.f).

- 4.2.2. OUTFALL TABLE (3.5.1.d, 5.4.1.f). SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.
- 4.2.3. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT SO AS TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THERBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA? ¥YES ☐ NO ☐ N/A
- 4.2.4. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? ☐ YES ☐ NO ☒ N/A
- 4.2.5. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.g, 5.4.1.f)? **☒** YES ☐ NO
- 4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)? **⊠**YES □ NO
- 4.3. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? ☐ YES 🛛 NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION							
WETLAND FROM STATION TO STATION TEMPORARY IMPACTS (AC) LABEL LT OR RT LT OR RT IMPACTS (AC) PERMANENT IMPACTS (AC) (AC)							
N/A							

- 4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10) 4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION?
 - 4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)? ☐ YES ☐ NO
 - 4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION? ☐ YES ☐ NO
 - 4.4.4. IF YES, HAS A SUMMARY OF THE CONSULTATION LETTER BEEN INCLUDED WITH THE SWPPP DOCUMENTATION? ☐ YES ☐ NO
- 4.5. ECOLOGY INFORMATION (3.5.5.e) IF SPECIAL NOTES ARE PRESENT IN THE TDOT ECOLOGY REPORT, HAVE THE NOTES BEEN ADDED TO THE APPROPRIATE PLAN SHEETS? ☐ YES ☐ NO ☒ NO NOTES REQUIRED
- 4.6. ENVIRONMENTAL COMMITTMENTS

☐YES
☐ NO

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET? ¥ YES □ NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 1B

IF YES. THEY HAVE BEEN INCLUDED ON PLAN SHEET(S)

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- EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3) 5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).
- 5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES. INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME. TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS. (4.1.1)
- 5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED ACCORDING TO THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (3.5.3.3)? ¥YES □ NO
- 5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (3.5.3.3, 5.4.1.a).
- 5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS (3.5.1.n)? **☒** YES **☐** NO
- 5.6. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)? YES NO ☐ (IF YES, CHECK ONE BELOW)
 - 5.6.1. PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)
 - 5.6.2. PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)
- 5.7. IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.4.1.a)? ☐ YES 🛛 NO
- 5.8. HAVE STEEP SLOPES (GREATER THAN 35%) BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE (3.5.3.2) (10. "STEEP SLOPE")? ☐ YES ☐ NO 🛛 N/A
- 5.9. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE RESEARCHED, APPLIED IN ACCORDANCE WITH MANUFACTURE'S GUIDELINES AND FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).
- 5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO TDOT STANDARDS (i.e. STANDARD DRAWINGS)
- 5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.
- 5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS. MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.4).
- 5.13. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS MUST USE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT, UNLESS INFEASIBLE (4.1.7).
- 5.14. THE CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 7 HAVE BEEN SELECTED IN ACCORDANCE WITH TOOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).
- 5.15. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 7 (3.5.3.1.n).
- 5.16. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- 5.17. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES OR ROW/ EASEMENT LINE, WHICHEVER IS LESSER.
- 5.18. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE, UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

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- 5.19. EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- 5.20. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.
- 5.21. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE 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) ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WIHTOUT GUIDANCE FROM TDOT ENVIRONMENTAL PERSONNEL
- 5.22. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- 5.23. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT, DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT, DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- 5.24. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR IMPAIRED AND KNOWN EXCEPTIONAL TENNESSEE WATERS AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.
- 5.25. DISCHARGES FROM SEDIMENT BASINS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT, WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE.
- 5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED. REMOVED OR DISTURBED MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (3.5.3.1.h).
- 5.27. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION

WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (3.5.3.2).

- 5.28. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-**ERODIBLE SURFACE**
- 5.29. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- 5.30. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- 5.31. STEEP SLOPES (3.5.3.2): STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 5.32. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (3.5.1.i). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEETS-7. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER

6. POLYACRYLAMIDE

- 6.1. ENSURE POLYACRYLAMIDE (PAM) EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE AND MEET THE FOLLOWING REQUIREMENTS: 6.1.1. MEETS THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF
 - EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER. 6.1.2. HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE.
 - 6.1.3. MIXTURE IS NON-COMBUSTIBLE.
 - 6.1.4. CONTAINS ONLY MANUFACTURER'S RECOMMENDED ADDITIVES.
- 6.2. PAM SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USES CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.
- 6.3. ALL VENDORS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPA REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC POTENTIALS HAVE BEEN REDUCED. CATIONIC FORMS OF PAM ARE NOT ALLOWED UNDER THIS SECTION DUE TO HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. PAM EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUE TO SURFACTANT TOXICITY. THE CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DESIGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR USE ON THIS PROJECT.
- 6.4. ALL VENDORS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL SUPPLY WRITTEN "SITE SPECIFIC" TESTING RESULTS DEMONSTRATING THAT A PERFORMANCE OF 95% OR GREATER REDUCTION OF NTU OR TSS FROM STORMWATER DISCHARGES.
- 6.5. EMULSION BATCHES SHALL BE MIXED FOLLOWING RECOMMENDATIONS OF THE TESTING LABORATORY THAT DETERMINES THE PROPER PRODUCT AND RATE TO MEET SITE REQUIREMENTS. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS.
- 6.6. PAM POWDER MAY BE APPLIED BY A HAND OR MECHANICAL SPREADER MIXING PAM POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.
- 6.7. PREMIXING OF PAM POWDER INTO FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS IS ALLOWED WHEN SPECIFIED IN THE DESIGN PLAN.

APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.

6.8. PAM LOGS OR BLOCKS SHALL BE APPLIED FOLLOWING SITE TESTING RESULTS TO ENSURE PROPER PLACEMENT AND PERFORMANCE AND SHALL MEET OR EXCEED STATE AND FEDERAL WATER QUALITY REQUIREMENTS.

7. UTILITY RELOCATION

- 7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.
- 7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY
- 7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS, ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
- 7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.
- 7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES). TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TOOT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES, IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.
- 7.6. IN REGARD TO EPSC. TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.
- 7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TOOT PROJECT ENGINEER.
- 7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- 7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TOOT RESPONSIBLE PARTY.
- 7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TOOT ENGINEER BEFORE COMMENCING WORK.

8. MAINTENANCE AND INSPECTION

8.1. INSPECTION PRACTICES (3.5.8)

8.1.1. PROJECT EPSC INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION. MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL

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SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.

- 8.1.2. THE TDOT CONSTRUCTION SUPERVISOR (OR THEIR DESIGNEE)
 AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE
 RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR
 ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE
 TDOT CONSTRUCTION SUPERVISOR OR THEIR DESIGNEE SHALL
 COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE
 COPIES PER THE CONTRACT.
- 8.1.3. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT.
- 8.1.4. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
- 8.1.5. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24 HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
- 8.1.6. INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES SHALL BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.
- 8.1.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- 8.1.8. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS A PART (3.5.8.2.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE AUDITS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL COMPLIANCE OFFICE.
- 8.1.9. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC.) WITH WRITTEN NOTIFICATION BY THE TDOT REGIONAL ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (3.5.8.2.a).
- 8.1.10. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL

MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. AND EACH OUTFALL WILL BE INSPECTED (3.5.8.2.b).

- 8.1.11. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").
- 8.1.12. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION (3.8.5.2.e AND 3.8.5.2.f).
- 8.1.13. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 "INSPECTOR") (3.5.1.n).
- 8.1.14. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT SUPERVISOR PER THE CONTRACT.
- 8.1.15. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.
- 8.1.16. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (3.8.5.2.H).
- 8.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)

THE PROJECT SUPERVISOR MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT SUPERVISOR AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST PERFORM THE FOLLOWING:

- 8.2.1. COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.
- 8.2.2. SUBMIT THE EPSC DELEGATION OF AUTHORITY TO THE LOCAL TDEC EFO.
- 8.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)
 - 8.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER. NECESSARY REPAIRS OR MAINTENANCE WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT AND IN NO CASE MORE THAN 24 HOURS AFTER THE NEED IS IDENTIFIED. IN A CASE WHERE THE ACTIVITY IS DEEMED IMPRACTICABLE, ANY SUCH CONDITIONS WILL BE DOCUMENTED (3.5.8.2.e).
 - 8.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)
 - 8.3.3. SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, AND OTHER CONTROLS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50% (3.5.3.1.e).
 - 8.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

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- 8.3.5. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF OF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (3.5.3.1.f).
- 8.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.
- 8.3.7. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

9. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED ACCORDING TO THE TDOT ENVIRONMENTAL DIVISION COMPREHENSIVE INSPECTIONS OFFICE GUIDELINES.

10. STORMWATER MANAGEMENT (3.5.4)

- 10.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE SHOWN ON THE PLANS AND NOTED AS PERMANENT.
- 10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.F, 3.5.4): N/A
- 10.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
- ☑ CONCRETE WASHOUT
- ☑ CONCRETE AND CORRUGATED METAL PIPES
- MINERAL AGGREGATES, ASPHALT
- 🛛 EARTH
- ☑ LIQUID TRAFFIC STRIPING MATERIALS. PAINT
- **⊠** ROCK
- ☑ CURING COMPOUND
- EXPLOSIVES
- OTHER ____
- THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.4. WASTE MATERIALS (3.5.5.b)

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE TDOT CONSTRUCTION CONTRACT AND FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

10.4.1. HAZARDOUS WASTE (3.5.5.c) (7.9)

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

10.4.2. SANITARY WASTE (3.5.5.b)

PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED

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WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.4.3. OTHER MATERIALS

THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

- ▼ FERTILIZERS AND LIME
- ☑ PESTICIDES AND/OR HERBICIDES
- ☑ DIESEL AND GASOLINE
- MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

11. NON-STORMWATER DISCHARGES (3.5.9)

- 11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT (CHECK ALL THAT APPLY):
 - ☑ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER
 - WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE
 - WATER USED TO CONTROL DUST (3.5.3.1.n)
 - POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE
 - UNCONTAMINATED GROUNDWATER OR SPRING WATER
 - IN FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS
 - □ OTHER: _____
- 11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE.
- 11.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.
- 11.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- 11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.h)? TYES X NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: ____

12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)

12.1. SPILL PREVENTION (3.5.5.c)

CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY LAW AND BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE TOOT CONSTRUCTION SUPERVISOR.

12.2. MATERIAL MANAGEMENT

12.2.1. HOUSEKEEPING

ONLY NEEDED PRODUCTS WILL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

12.2.2. HAZARDOUS MATERIALS

PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL PH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING. AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

12.3. PRODUCT SPECIFIC PRACTICES

- 12.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.
- 12.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY TDOT. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.
- 12.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- 12.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

12.4. SPILL MANAGEMENT

- 12.4.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.
- 12.4.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.
- 12.4.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE. EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.
- 12.4.4. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR

APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

- 12.4.5. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.
- 12.4.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.
- 12.4.7. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
- 12.4.8. IF A SPILL OCCURS THE CONTRACTOR'S SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT CONSTRUCTION SUPERVISOR AND/OR PROJECT ENGINEER. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
- 12.4.9. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

12.5. SPILL NOTIFICATION (5.1)

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:

- 12.5.1. THE TDOT PROJECT SUPERVISOR IS RESPONSIBLE FOR NOTIFYING THE REGIONAL ENVIRONMENTAL COORDINATOR OR ASSISTANT REGIONAL ENVIRONMENTAL COORDINATOR AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.
- 12.5.2. THE TDOT REGIONAL ENVIRONMENTAL COORDINATOR WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.
- 12.5.3. A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE. AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.
- 12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE. CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

13. RECORD-KEEPING

13.1. REQUIRED RECORDS

TDOT OR THEIR DESIGNEE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (6.2.1):

- THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR
- THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE

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- CONST. BRZ-2700(56) 27946-1403-94 13.6.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT
- THE DATES WHEN STABILIZATION MEASURES ARE INITIATED
- RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES
- COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION

RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS

13.2. RAINFALL MONITORING PLAN (3.5.3.1.o):

13.2.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

13.2.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

13.2.3. METHODS

RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

- 13.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS. THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS, A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.
- 13.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TOOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.
- 13.2.6. IF, IN THE EVENT THAT THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME. THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.
- 13.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL. WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

13.3. KEEPING PLANS CURRENT (3.4)

TDOT OR THEIR DESIGNEE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

- 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;
- 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 CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES. A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;
- WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP:
- TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA:
- WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 7 DAYS BY THE PROJECT EPSC INSPECTOR.

- 13.4. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.
- 13.5. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS, IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE STAGES DEPICTED IN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE PHASES OF CONSTRUCTION THAT WILL OCCUR. THUS THESE DOCUMENTS WILL HAVE TO BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

13.6. MAKING PLANS ACCESSIBLE

13.6.1. TDOT WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE "DOCUMENTATION AND PERMITS" BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION. TDOT WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE (6.2).

- UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA. TDOT OR THEIR DESIGNEE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):
 - A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;
 - THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;
 - A BRIEF DESCRIPTION OF THE PROJECT; AND
 - THE LOCATION OF THE SWPPP.
- 13.6.3. ALL INFORMATION DESCRIBED IN SECTION 10.3.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

13.7. NOTICE OF TERMINATION (8.0)

- 13.7.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE TDOT REGIONAL ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.
- 13.7.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:
 - ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND
 - ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED: AND
 - ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED;
 - ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED: AND
 - THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE: AND
 - TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
 - ALL STORMWATER 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.

13.8. RETENTION OF RECORDS (6.2)

TDOT WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

> STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

YEAR

PROJECT NO.

EE D.O.T.	DIVISION
TENNESS	DESIGN

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14.	SITE WIDE/PRIMARY PERMITTEE CERTIFICATION	(7.7.5)

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.

AUTHORIZED TOOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT

PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR

TITLE

10/3/2016

DATE

15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

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.

AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)
PRINTED NAME
TITLE
DATE

PROJECT NO. YEAR CONST. BRZ-2700(56) P.E. 27946-1403-94

16. ENVIRONMENTAL PERMITS (9.0)

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT (TO BE COMPLETED AT THE ENVIRONMENTAL PRECONSTRUCTION MEETING BY TDOT CONSTRUCTION OR THEIR DESIGNEE):

ENVIRONMENTAL PERMITS							
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*				
TDEC ARAP							
CORPS OF ENGINEERS (USACE)							
TVA 26A							
TDEC CGP							
OTHER:							

^{*}THE TOOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

TENNESSEE D.O.T.
DESIGN DIVISION

4.2.2 OUTFALL TABLE (3.5.1.d, 5.4.1.f)

4.2.2 OUTFALL TABLE (3.5.1.d, 5.4.1.f)										
EPSC STAGE	OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 (P1) DRAINAGE AREA (AC)	STAGE 2 (P2) DRAINAGE AREA (AC)	STAGE 3 (P3) DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL	COMMENTS
1	1		56+75.21 RT	0.3	0.353			N/A	STR-1	
1	2		57+56.30 RT	0.1	0.257			N/A	STR-1	
1	3		60+34.54 RT	0.7	0.374			N/A	STR-2	
1	4		60+25.38 LT	0.4	0.626			N/A	STR-2	
2	5		56+86.14 RT	0.3		0.353		N/A	STR-1	
2	6		57+54.45 RT	0.1		0.257		N/A	STR-1	
2	7		60+33.60 RT	.7		0.374		N/A	STR-2	
2	8		60+25.38 LT	0.4		0.626		N/A	STR-2	

^{*} SEE COMMENTS SECTION FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AREA.

ALL UNUSED FIELDS WITHIN THE OUTFALL TABLE ARE TO BE SHADED, HATCHED, OR REMOVED TO INDICATE THEIR NON-USAGE.

P.E. 2016 27946-1403-94

CONST.

PROJECT NO.

BRZ-2700(56)

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

Index Of Sheets

SEE SHEET 1A FOR INDEX & STANDARD DRAWINGS

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

GIBSON COUNTY

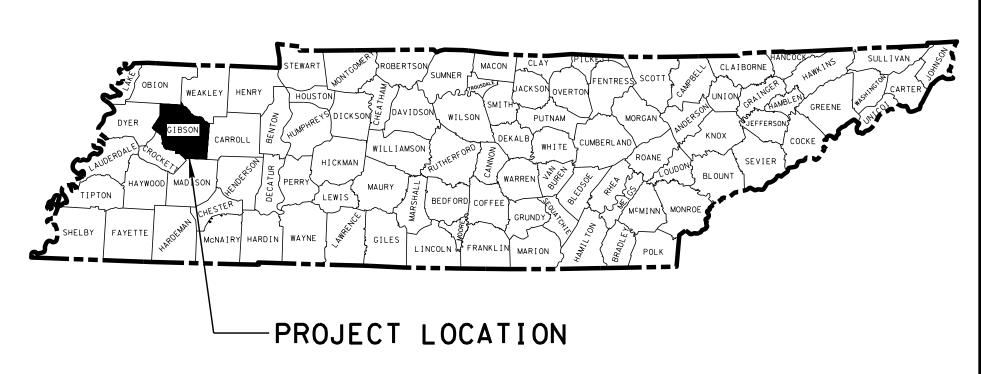
CREEKWOOD ROAD (L.R. A752)

BRIDGE AND APPROACHES OVER BRANCH OF SUGAR CREEK AT L.M. 0.50 AND SUGAR CREEK AT L.M. 0.56.

GRADE, DRAIN, BASE & SURFACE, STRUCTURE, GUARDRAIL, & PVMT. MARKINGS

CONSTRUCTION

STATE HIGHWAY NO. N.A. F.A.H.S. NO. N.A.



TENN.

FED. AID PROJ. NO

STATE PROJ. NO.

BRANCH OF SUGAR CREEK BRIDGE TO REMAIN OPEN DURING CONSTRUCTION OF SUGAR CREEK BRIDGE

SUGAR CREEK BRIDGE TO REMAIN OPEN DURING CONSTRUCTION OF BRANCH OF SUGAR CREEK BRIDGE

> SET NOT FOR **BIDDING**

SHEET NO.

2016

BRZ-2700(56)

27946-3403-94

NO EXCLUSIONS NO EQUATIONS

ORIGINAL SURVEY 02-05-14

TRAFFIC	DATA
ADT (2016)	160
ADT (2036)	200
DHV (2036)	28
D	65 - 35
T (ADT)	3 %
T (DHV)	2 %
V	30 MPH
	· ·

DATE: APPROVED:

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION APPROVED: DIVISION ADMINISTRATOR DATE

27946-3403-94 PROJECT NO. BRZ-2700(56) (CONST.) FROM STA. 53+00.00 TO 63+50.00

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TRANS. PROJ. SUPV. 2 <u>STEPHANIE KISSELL, P.E., REG. 4</u>

DESIGNER <u>LARRY BRASHER, E.I., REG.4</u> CHECKED BY <u>DEREK LINK, REG. 4</u>

P.E. NO. 27946-1403-94 (DESIGN)

PIN NO. 116956.00

SCALE: 0 MILES SCALE: 1"= 1 MILE

> ROADWAY LENGTH BRIDGE LENGTH BOX BRIDGE LENGTH

0.158 MILES 0.041 MILES 0.000 MILES PROJECT LENGTH 0.199 MILES

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		EX	
74	L		

STANDARD ROADWAY DRAWINGS

DWG. NO REV.

08-01-12

08-01-12

08-01-12

08-01-12

08-01-12

EC-STR-2

EC-STR-3B

EC-STR-3C

EC-STR-6

EC-STR-6A

EC-STR-11

EC-STR-25

EC-STR-37

DESCRIPTION

SEDIMENT FILTER BAGS

ROCK CHECK DAM

08-01-12 CULVERT PROCTECTION TYPE 1

SILT FENCE WITH WIRE BACKING

ENHANCED ROCK CHECK DAM

EXIT, CONSTRUCTION FORD

TEMPORARY CULVERT CROSSING, CONSTRUCTION

EROSION PREVENTION AND SEDIMENT CONTROL

08-01-12 SILT FENCE

06-10-14 SEDIMENT TUBE

SHEET NAME	SHEET NO.
TITLE SHEET	1
INDEX AND STANDARD DRAWINGS	1A
PROJECT COMMITMENTS	1B
ESTIMATED BRIDGE QUANTITIES AND BRIDGE INDEX	2
ESTIMATED ROADWAY QUANTITIES	2A
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B
GENERAL NOTES AND SPECIAL NOTES	2C – 2E
PRESENT LAYOUT	3 - 4
PROPOSED LAYOUT	3A - 4A
PROFILE	3B - 4B
PROFILE OF PRIVATE DRIVES	5
DRAINAGE MAP	6
EROSION PREVENTION AND SEDIMENT CONTROL PLAN	7 - 11
TRAFFIC CONTROL PLAN	12-12B
ROADWAY CROSS SECTIONS	13 - 18
UTILITIES INDEX	U1 - 1
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INDEX	S-1 – S-X

DWG. NO	REV.	DESCRIPTION
ROADWAY	DESIGN S	STANDARDS
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-TS-1	02-05-16	DESIGN STANDARDS FOR LOCAL ROADS AND

PIPE - CULVERTS AND ENDWALL

D-PB-1	01-02-13	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PB-2	01-29-14	STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE

ROADWAY AND PAVEMENT APPURTENANCES

05-27-01 STANDARD RAMPS TO SIDE ROADS

STREETS

SAFETY DEVICES AND FENCES

TRAFFIC CONTROL DESIGN				
S-GRT-3P		EARTH PAD FOR TYPE 21 TERMINAL		
S-GRT-3D		TYPE 21 GUARDRAIL TERMINAL (DETAILS)		
S-GRT-3		TYPE 21 GUARDRAIL TERMINAL		
S-GRC-2	04-11-14	GUARDRAIL CONNECTION TO BRIDGE ENDS FOR LOW-VOLUME LOCAL ROADS (ADT<= 400)		
S-PL-3		SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS		
S-CZ-1		CLEAR ZONE CRITERIA		

S-F-1	05-24-12	HIGH VISIBILITY FENCE
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

TYPE	YEAR	PROJECT NO.	NO.
CONST.	2016	BRZ-2700(56)	1 A

NOT FOR **BIDDING**

> State of tennessee DEPARTMENT OF TRANSPORTATION

> > INDEX AND STANDARD DRAWINGS

PROJECT COMMITMENTS					
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION		
EDHZ001	Environmental Division, Hazardous Materials	An Asbestos Containing Material (ACM) survey was conducted on Bridge # 270A7520001, Creekwood Road over Branch of Sugar Creek, LM 0.50 and270A7520003, Creekwood Road over Sugar Creek, LM 0.56. No ACM was detected. No special accommodations for demolition and waste disposal are anticipated for these structures and the material can be deposited in a C&D landfill. Even though no asbestos was detected, the demolition contractor is required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the Tennessee Division of Air Pollution Control. (Standard Specifications for Road and Bridge Construction Sections 107.21 and 202.03) Contact the Hazmat Coordinator at 615-532-8684 for a copy of the asbestos survey.	Bridges over Branch of Sugar Creek, L.M. 0.50 and Sugar Creek, L.M.		

	TYPE	YEAR	PROJECT NO.	SHEET NO.
	CONST.	2016	BRZ-2700(56)	1 B
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UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

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			TOTAL
ITEM NO.	DESCRIPTION	UNIT	QUANTIT
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1597
203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	704
203-06	WATER	M.G.	6
209-05	SEDIMENT REMOVAL	C.Y.	62
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1425
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	1200
209-08.07	ROCK CHECK DAM PER	EACH	3
209-08.08	ENHANCED ROCK CHECK DAM	EACH	6
209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	2
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	1000
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	1621
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	11
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	298
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	4
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	14
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	1
411-01.10	ACS MIX(PG64-22) GRADING D	TON	173
607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	40
204 20 20	40" TEMBODA DV (DDA INIA OE DIDE		
621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	36
705-01.05	GUARDRAIL AT BRIDGE ENDS LOW VOLUME	EACH	8
705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	8
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	940
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	731
	,		
709-05.09	MACHINED RIP-RAP (CLASS C)	TON	702
712-01	TRAFFIC CONTROL	LS	1
712-05.01	WARNING LIGHTS (TYPE A)	EACH	8
712-06	SIGNS (CONSTRUCTION)	S.F.	186
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	60
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	0.6
717-01	MOBILIZATION	LS	1
740 10 02		le V	210
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	318
740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	333
740-11.02	TEMPORARY SEDIMENT TUBE 12IN (EROSION CONTROL)	L.F.	100
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	27
801-03	WATER (SEEDING & SODDING)	M.G.	32
803-01	SODDING (NEW SOD)	S.Y.	2908
		J.11.	
			-
•	-	-	-

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	BRZ-2700(56)	2A

FOOTNOTES

- 1) INCLUDES 15 C.Y. FOR TEMP. CONST. EXITS. INCLUDES 739 C.Y. FOR EXCAVATION UNDER THE BRIDGES.
- ② SEE E.P.S.C. PLAN SHEETS 7-11 FOR FURTHER DETAILS. SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 3) SEE TRAFFIC CONTROL SHEETS NOS. 12-12B FOR FURTHER DETAILS.
- 4) FOR FINAL PAVEMENT MARKINGS.
- (5) 26 TONS FOR USE ON FIELD ENTRANCES.
- 6 44 TONS FOR USE ON FIELD ENTRANCES.
- (7) 240 TONS FOR USE ON FIELD ENTRANCES.

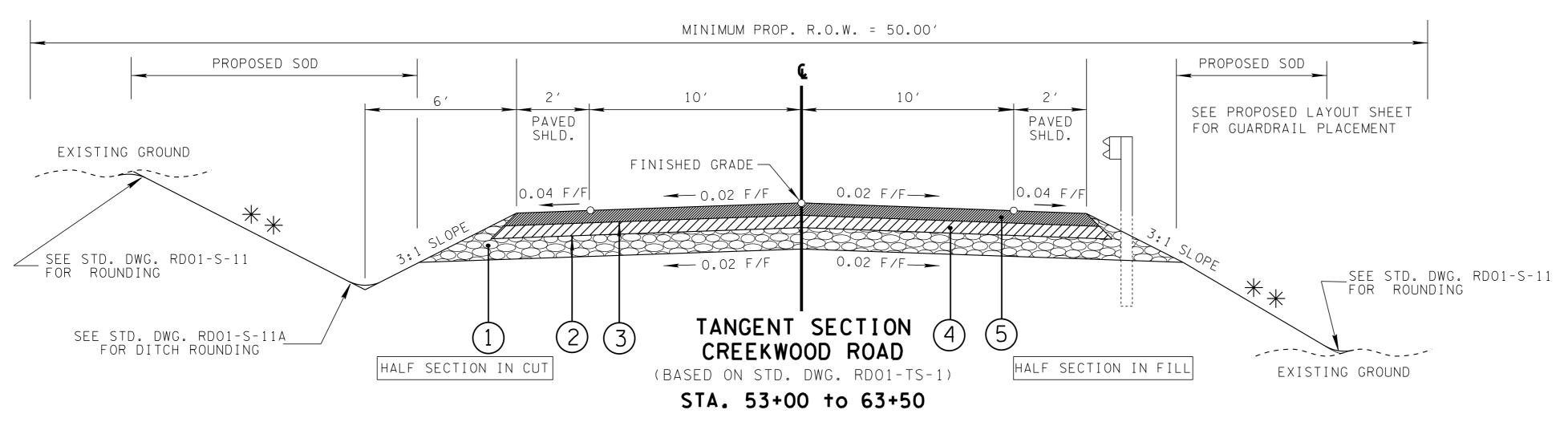
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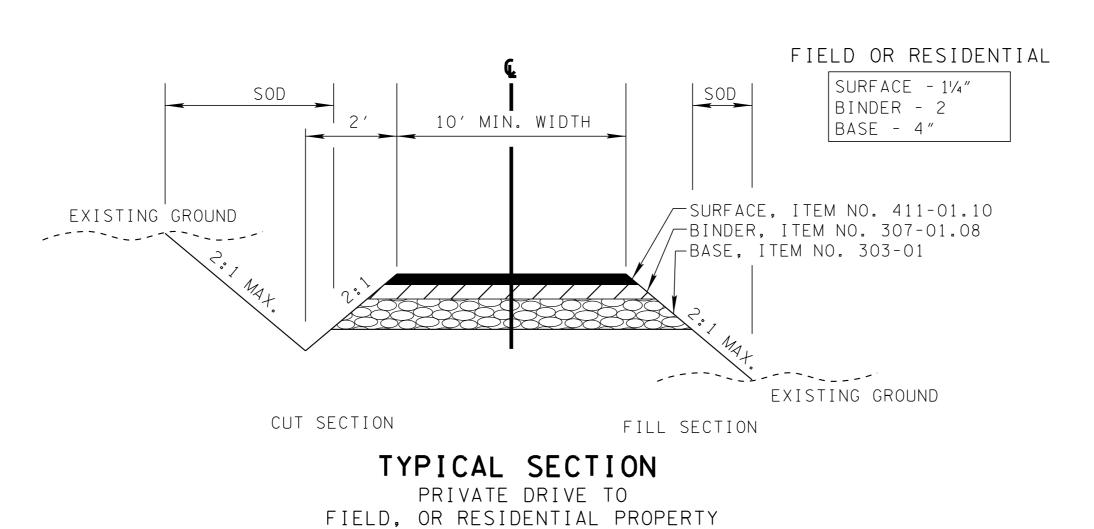
STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

ESTIMATED
ROADWAY
QUANTITIES

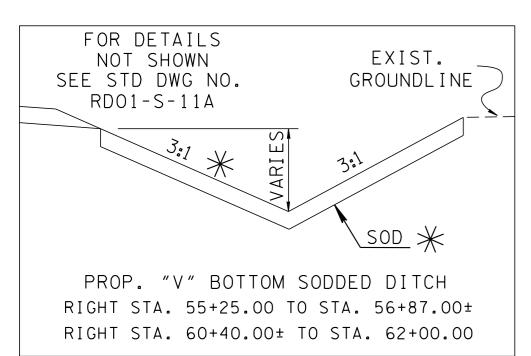


LANE & SHLD. TRANS. FROM STA. 53+00 TO STA. 53+50 & STA. 63+00 TO 63+50 WILL BE OVERLAYED ONLY.

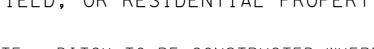


** SIDE SLOPES VARY - SEE STD. DWG. RD01-S-11 (CASE II)
OR ROADWAY CROSS -SECTIONS FOR SLOPES.
VARIABLE SLOPE RATIO BASED ON HEIGHT ("H")
FILL SLOPES HT. OF FILL
4:1 0'-6'
3:1 8'-12'

CUT SLOPES HT. OF FILL
4:1 0'-6'
3:1 8'-8'
2:1 8'-12'



2:1 F.S. FROM 56+17 TO 56+87.
STABILIZE F.S. & B.S. WITH CLASS "C" RIP-RAP
AND TYPE 4 GEOTEXTILE MATERIAL.



NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SHEET NO.

PROJECT NO.

BRZ-2700(56)

BRZ-2700(56)

YEAR

REV. 06-30-15: CHANGED STD. DWG. TO RD01-TS-1;

ADDED VARIABLE SLOPES TABLE. ADDED & REVISED

SPECIAL DITCH TYPICALS TO REFLECT 3:1 SLOPE

REV.11-03-15: ADDED PAVEMENT SCHEDULE & REVISED TYPICAL DRAWINGS.

TYPE

R.O.W.

CONST.

CONDITIONS.

TYPICAL
SECTIONS
AND
PAVEMENT
SCHEDULE

PROPOSED PAVEMENT SCHEDULE			
1 MINERAL AGGREGATE 8" + THICK FOR BASE (11.25" + @ SHOULDER) ITEM 303-01 MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" 3 TACK COAT (TC) ITEM 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.07 GAL./S.Y.)			
PRIME COAT (PC) ITEM 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC)(AT 0.30-0.35 GAL./S.Y.) ITEM 402-02 AGGREGATE FOR COVER MATERIAL (PC)(AT 8-12 LBS./S.Y.)	BITUMINOUS COURSE (BINDER) @ 2"± THICK (APPROX. 226 LBS./S.Y.) ITEM 307-01.08 ASPHALT CONCRETE MIX (PG64-22)(BPMB-HM) GRADING "B-M2"		
	(5) ASPHALTIC CONCRETE SURFACE (ACS) @ 1.25" + THICK (APPROX. 132.50 LBS./S.Y.)		

ITEM 411-01.10 ACS MIX (PG64-22) GRADING "D"

GENERAL NOTES

GRADING

- 1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- 2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL. STATE OR LOCAL AGENCY.

SEEDING AND SODDING

- (1) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEMS 203-04 AND/OR 203-07. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.
- (2) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.
- (3) ITEM NO. 803-01 SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.

GUARDRAIL

- (1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.
- (3) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.
- (4) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

- (1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (3) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).
- (6) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

MISCELLANEOUS

- THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

ROAD CLOSURE

NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE, AND (6) LOCAL ROAD SUPERINTENDENT.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

FINAL PAVEMENT MARKING IF REFLECTORIZED PAINT IS USED

14) PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01 PAINTED PAVEMENT MARKING (4IN LINE), L.M.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- 3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
-) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

(8) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

- (1) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- (2) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.
- (3) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- 4) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.
- (5) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL. AND MINIMIZE SOIL COMPACTION.
- 6) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEDIMENT CONTROL

- 7) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. 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 OFF-SITE 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). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

UNOFFICIAL SET

TYPE

CONST.

PROJECT NO.

BRZ-2700(56)

NOT FOR BIDDING

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

GENERAL

GENERAL NOTES CONTINUED

- WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (10) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- (11) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.
- (12) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED. IF POSSIBLE.
- (13) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- (14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

- (15) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
- (16) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- (17) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.
- (18) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.
- (19) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

- STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION
- (21) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.
- (22) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

INSPECTION, MAINTENANCE AND REPAIR

- (24) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (25) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
- (26) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- (27) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED. OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE. ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.
- (28) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.
- (29) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

- (30) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
- (31) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

PERMITS, PLANS AND RECORDS

- (33) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
- (34) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROADWAY DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.
- (36) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.
- (37) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (38) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.
- (39) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	BRZ-2700(56)	2D

UNOFFICIAL SET NOT FOR BIDDING

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

GENERAL NOTES CONTINUED

- 40) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.
- PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE AND PETROLEUM

- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

GRADING

- (1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.
- (4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- (5) EARTHWORK IS PAID FOR UNDER ITEM 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

EROSION PREVENTION AND SEDIMENT CONTROL NPDES

(1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 7, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPREHENSIVE INSPECTION OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

ECOLOGY

- (2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONCERNING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR DESIGNATED CONSULTANT WILL NEED TO BE ON-SITE FOR WORK BEING DONE WHICH COULD AFFECT THE STREAM OR SPECIES.
- (3) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED BRIDGE WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS WHICH MUST BE FOLLOWED.
- (4) ALL BRIDGE PROJECTS WITH THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT IDENTIFIED MUST HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER THE STREAM.

PROJECT COMMITMENTS

- (5) SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.
- 6) BRIDGE MATERIAL WILL BE THE PROPERTY OF GIBSON COUNTY.

DEMOLITION, REPAIR, OR REHABILATION OF BRIDGES

(3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT, DEMOLITION, OR MAJOR REPAIR INVOLVING THE REMOVAL/REPLACEMENT OF A STRUCTURAL COMPONENT.

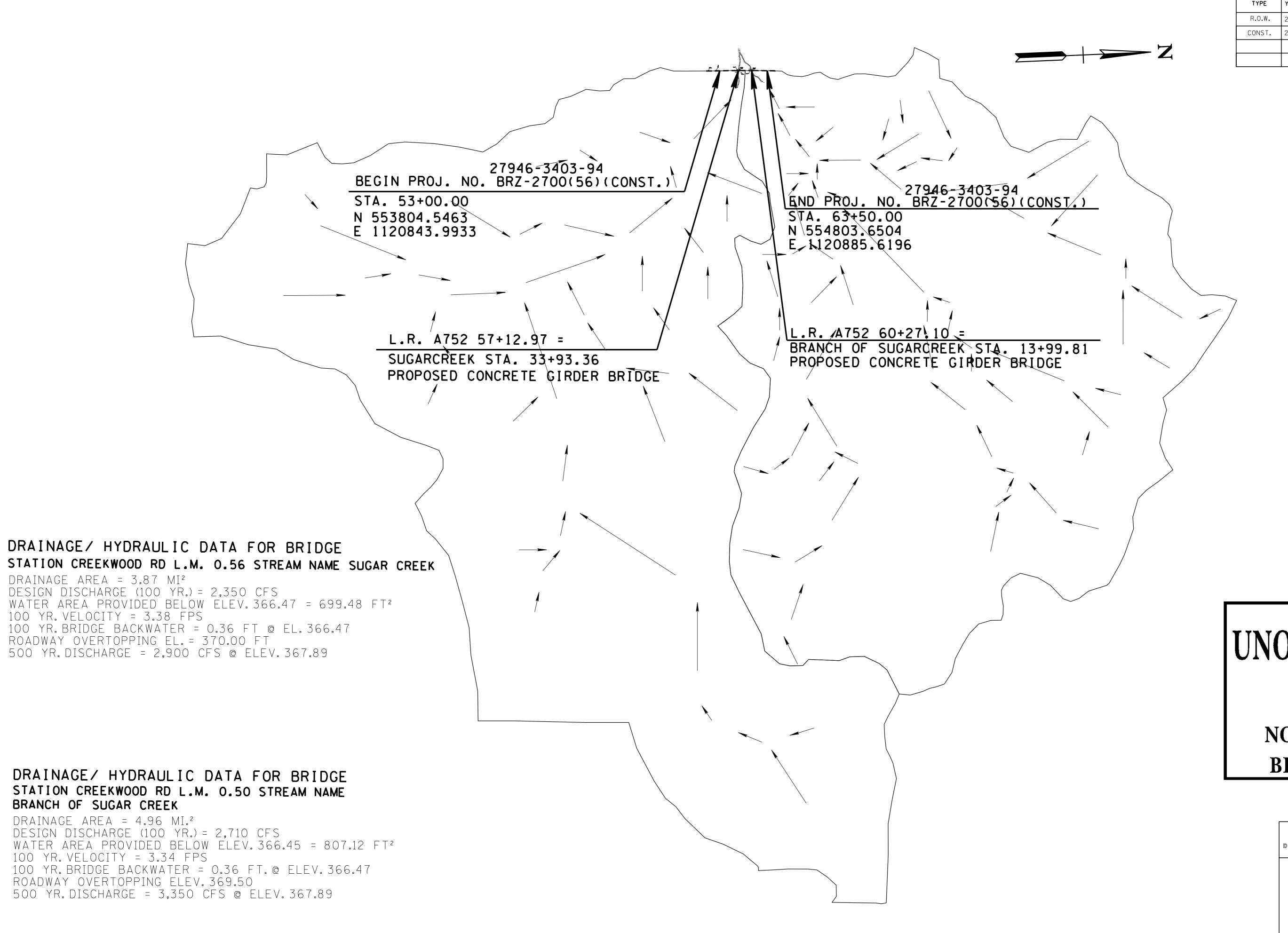
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	BRZ-2700(56)	2E

UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2015
 BRZ-2700(56)
 6

 CONST.
 2016
 BRZ-2700(56)
 6

UNOFFICIAL SET

NOT FOR BIDDING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTAT

DRAINAGE MAP

STA.50+00 TO STA.65+50 SCALE: 1"=1000'

EROSION PREVENTION AND SEDIMENT CONTROL

STREAM/WETLAND

- 1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW). UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.
- 2) A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 30 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 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

KNOWN EXCEPTIONAL TENNESSEE WATERS

- 3) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE, THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.
- 4) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE 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 30 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED. ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

- 5) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS. INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES. HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.
- 6) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.
- 7) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:
 - A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
- 8) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION 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-RUN WILL NOT BE CONSIDERED A NON-**ERODIBLE SURFACE.**
- 9) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 10) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.
- 11) EXCEPT AS OTHERWISE SPECIFIED. THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

	EROSION PREVENTION AND SEDIMENT CONTROL LEGEND									
	SYMBOL	ITEM	STD. DWG.							
		CULVERT PROTECTION (TYPE 1)	EC-STR-11							
*	TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25							
		TEMPORARY ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A							
*	* SFB * SFB *	TEMPORARY SEDIMENT FILTER BAG	EC-STR-2							
₩	* SF * SF * SF *	TEMPORARY SILT FENCE	EC-STR-3B							
* *	* SFB * SFB * SFB*	TEMPORARY SILT FENCE WITH WIRE BACKING	EC-STR-3C							
*	** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37							
		TEMPORARY ROCK CHECK DAM (V-DITCH)	EC-STR-6							
	* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1							

FOOTNOTES

- 1)23 TONS FOR CULVERT TYPE 1 PROTECTION & FOR SEDIMENT FILTER BAGS. 708 TONS FOR BRIDGE ABUTMENTS.
- (2) FOR TEMP. CONST. EXITS.
- (3) INCLUDES 54 S.Y. FOR CULVERT TYPE 1 PROTECTION; INCLUDES 172 S.Y. FOR TEMP. CONST. EXITS.

ALL FPSC ITEMS ARE TO BE USED AS DIRECTED BY THE TDOT ENGINEER.

	ESTIMATED ROADWAY QUANTITIES	S		
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	15	UNOFFICIAL
209-05	SEDIMENT REMOVAL	C.Y.	62	
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	1425	CTT
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	1200	SET
209-08.07	ROCK CHECK DAM PER	EACH	3	
209-08.08	ENHANCED ROCK CHECK DAM	EACH	6	
209-09.04	SEDIMENT FILTER BAG(15' X 10')	EACH	2	NOT FOR
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	1000	
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	11	BIDDING
621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	36	
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	940	
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	100	
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	731	STATE OF TENNESSEE
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	318	DEPARTMENT OF TRANSPORTATION
740-11.02	TEMPORARY SEDIMENT TUBE 12IN (EROSION CONTROL)	L.F.	100	
801-03	WATER (SEEDING & SODDING)	M.G.	32	EROSION
803-01	SODDING (NEW SOD)	S.Y.	2908	
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	27	PREVENTION AND SEDIMENT
				CONTROL PLAN

TYPE

R.O.W.

CONST.

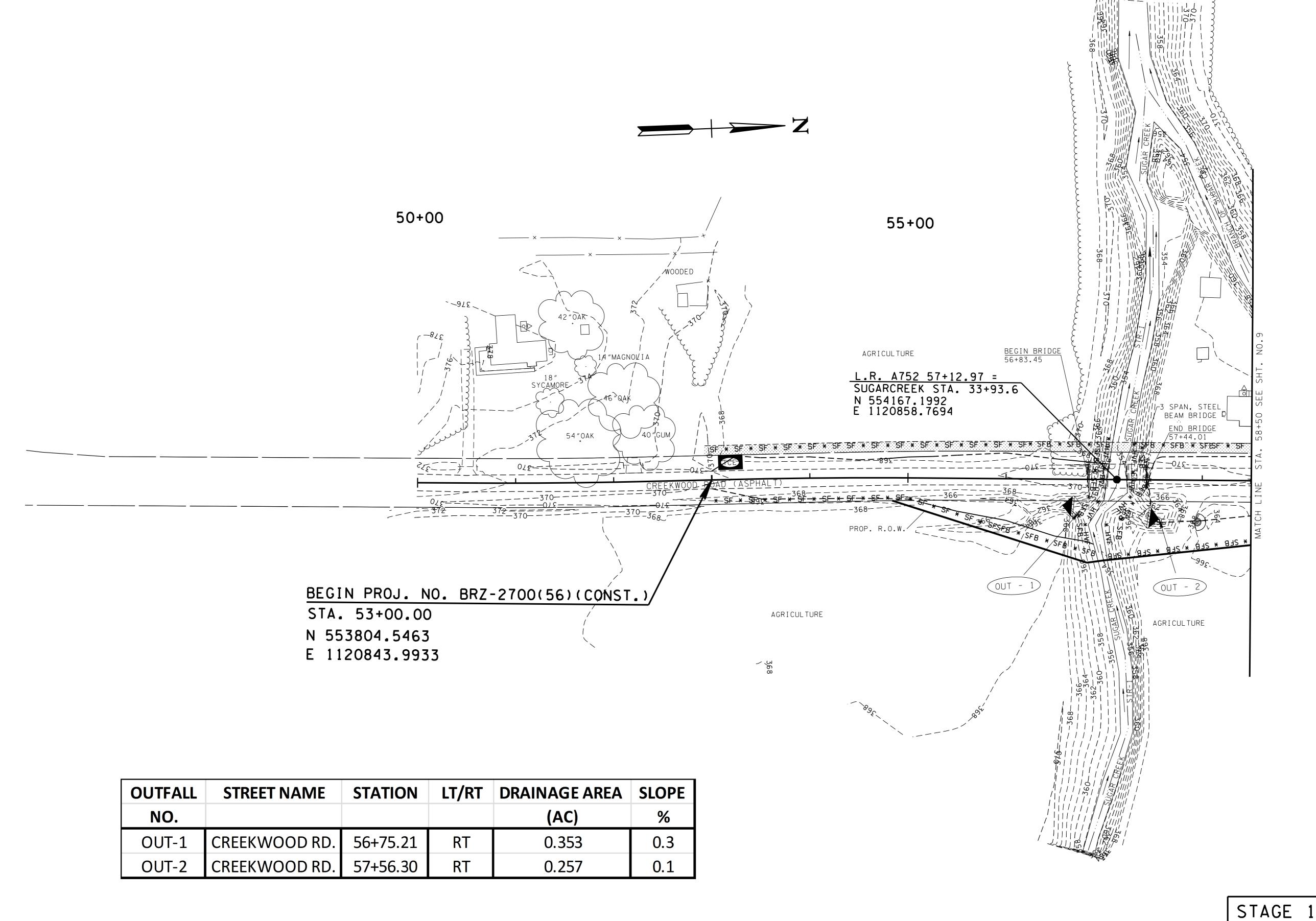
PROJECT NO.

BRZ-2700(56)

BRZ-2700(56)

* PLACEMENT TO BE DIRECTED BY TDOT ENGINEER.

* * PROVIDE "J" HOOKS WHEN NOT PARALLEL TO CONTOURS.



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	BRZ-2700(56)	8
CONST.	2016	BRZ-2700(56)	8

REV. 06-30-15: UPDATED SLOPE LINES, PROP. R.O.W. LINES, & CONST. EASEMENT LINES.

UNOFFICIAL SET NOT FOR

BIDDING

COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT

CONTROL PLAN
STA.53+00 TO STA.58+50
SCALE: 1"=50'

EXISTING CONTOURS

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CREEKWOOD RD.

CREEKWOOD RD.

60+34.54

60+25.38

RT

0.374

0.626

0.7

0.4

TYPE YEAR PROJECT NO. SHEET NO.

R.O.W. 2015 BRZ-2700(56) 9

CONST. 2016 BRZ-2700(56) 9

REV. 03-31-15: ADDED THIS SHEET TO PLANS.

REV. 06-30-15: UPDATED SLOPE, PROP. R.O.W. & CONST. EASEMENT LINES.

	60+00			65+	00						
		ଧ ନ 8									
		·	AGR I CUL TURE								
		3 SPAN, STEEL BEAM BRIDGE									
	BEGIN EXIST. BRIDGE 59+74.57 61.09' OUT - 4	L.R. A752 60+07.1 BRSUGARCREEK STA N 554461.0071 E 1120872.5508			1						
8 V		END EXIST. BRIDG 60+35.66 61.09'	<u>) </u>								
SHT.		7015 -310 = 3687 = 372 = 370		372370		J. J. J. J					
SF SF B * SF B O CR			370	CREEKWOOD ROAD (AS	PHALT)						
10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	370	364 88 88	======================================		01531						
* SF * SF * SF	SFR NEW YEAR SE	B * SFB * 35 * 35 * 35 * 35 * 35 * 35 * 35 * 3			OJ. NO. BRZ	-2700(56) (CONS	ST.)			
≥ OUT AGRICULTURE		TR 2 356 358 369 896		STA. 6 N 5548	3+50.00 03.6504 885.6196						
•		Sold BELL STR-STILL	370					ALL EPSC ITEM	IS SHALL	BE PLACED	INSIDE TCE.
	/856/ / /	A CONTRACTOR OF THE PARTY OF TH									
	/		i Co								
				OUTFALL	STREET NAME	STATION	LT/RT	DRAINAGE AREA			
				NO.				(AC)	%		STACE 1

UNOFFICIAL SET
NOT FOR
BIDDING

STAGE 1

EXISTING CONTOURS

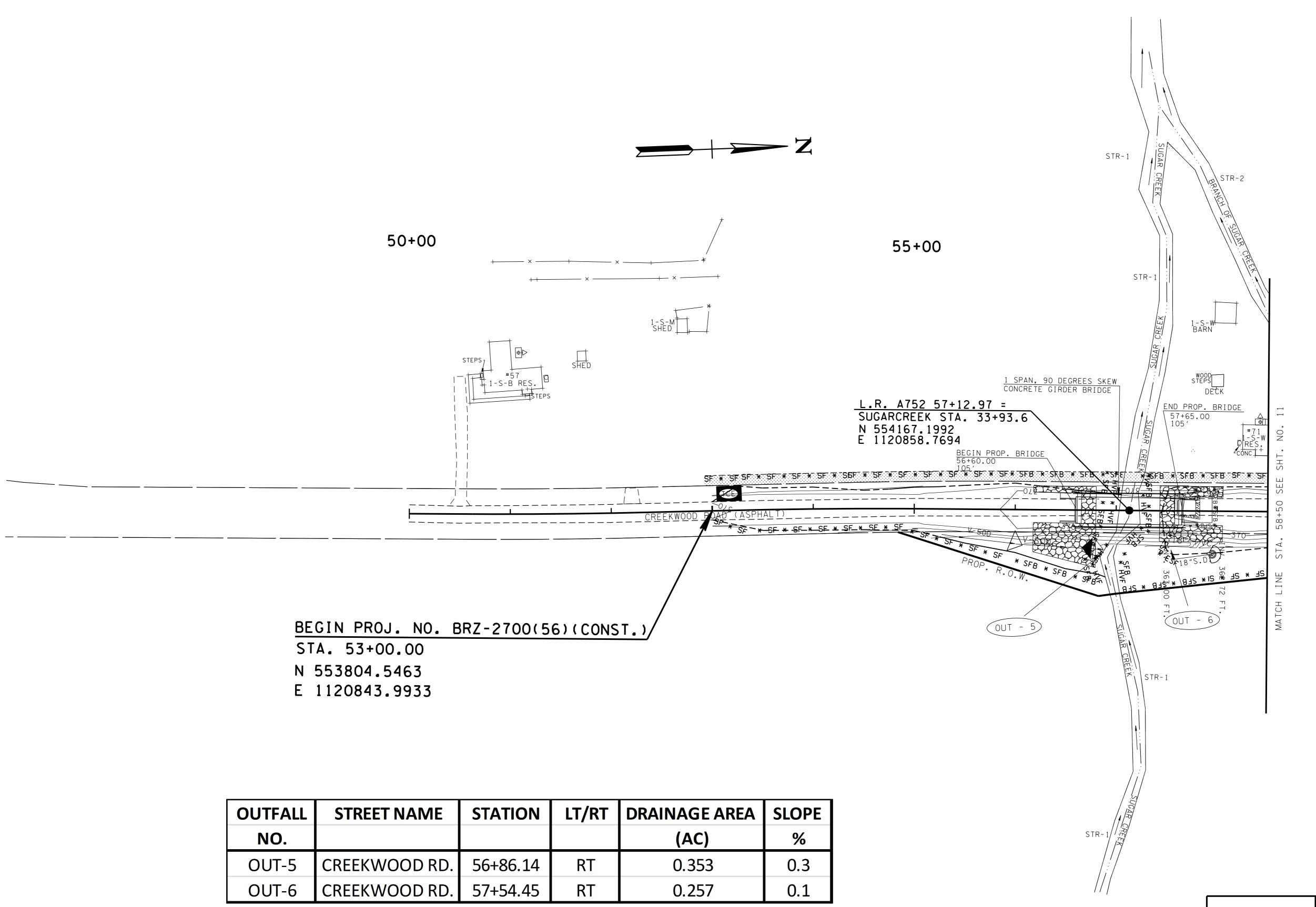
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STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA.58+50 TO STA.65+50 SCALE: 1"=50'



STAGE 2

PROPOSED CONTOURS

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2015	BRZ-2700(56)	10
CONST.	2016	BRZ-2700(56)	10

REV. 06-30-15: UPDATED SLOPE LINES, PROP. R.O.W. LINES, & CONST. EASEMENT LINES.

REV. 11-20-15: ADDED PROP. RIP-RAP AROUND BRIDGE ABUTMENTS.

UNOFFICIAL SET NOT FOR

BIDDING

COORDINATES ARE NAD/83(1995),
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REFERENCED TO THE NAVD 1988.

State of tennessee

DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.50+00 TO STA.58+50 SCALE: 1"=50'

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65+00

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2015
 BRZ-2700(56)
 11

 CONST.
 2016
 BRZ-2700(56)
 11

REV. 06-30-15: UPDATED PROP. R.O.W. LINES & SLOPE LINES, & CONST. EASEMENT LINES.

REV. 11-20-15: ADDED PROP. RIP-RAP AROUND BRIDGE ABUTMENTS.

BR. ATS2 60-07, 10 = BRSDOARCREEK STA. 13-99.81
N 554461.0071.0 = STA. 63-50.00
N 554481.0071.0 = STA. 63-50.00
N 554803.6504
E 1120885.6196

ALL EPSC ITEMS SHALL BE PLACED INSIDE TCE.

OUTFALL	STREET NAME	STATION	LT/RT	DRAINAGE AREA	SLOPE
NO.				(AC)	%
OUT-7	CREEKWOOD RD.	60+33.60	RT	0.374	0.7
OUT-8	CREEKWOOD RD.	60+25.38	LT	0.626	0.4

STAGE 2

PROPOSED CONTOURS

UNOFFICIAL SET NOT FOR BIDDING

COORDINATES ARE NAD/83(1995),
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FACTOR OF 1.00006 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA.58+50 TO STA.65+50

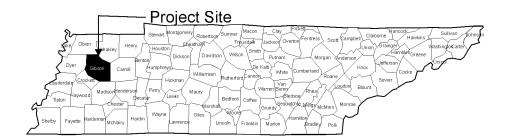


Documentation and Permits Binder

Project Name: Creekwood Road over Branch

of Sugar Creek at L.M. 0.50 and Sugar Creek at L.M. 0.56 Project No.: 27946-1403-94 PIN: 116956.00

Gibson County, Tennessee



Prepared for:
Tennessee Department of Transportation – TDOT

Prepared by:



Consultant Reference No.: 12158.014

Content Checklist



DOCUMENTS AND PERMITS BINDER

CHECKLIST

PROJECT NAME: Creekwood Road Over Branch of Sugar Creek at L.M. 0.50 and Sugar Creek at L.M. 0.56
PIN: 116956.00 PROJECT NO.: 27946-1403-94 COUNTY: Gibson County, Tennessee
1. ⊠ INDEX OF REVISIONS
2. RAINFALL RECORD SHEETS
3. ☑ EPSC INSPECTION REPORTS
4. ⊠ NOI AND □ NOC
5. ⊠ BLANK NOT
6. ⊠ CONSTRUCTION GENERAL PERMIT (CGP)
 7. ENVIRONMENTAL PERMITS 7.1 PERMIT APPLICATION LETTER 7.2 PERMITS a. DEC ARAP b. CORPS OF ENGINEERS (COE) c. TVA 26A d. OTHER
8. ⊠ ECOLOGY REPORT
9. TRAINING CERTIFICATIONS
TDEC LEVEL I a. □ EPSC INSPECTOR b. □ TDOT PROJECT SUPERVISOR c. □ TDOT PROJECT SUPERVISOR MANAGER d. □ CONTRACTOR PROJECT SUPERVISOR
TDEC LEVEL II e. □ TDOT PROJECT SUPERVISOR MANAGER
10. TMDL INFORMATION REQUIRED
a. □Yes



b. ⊠ No

1. Index of Revisions



Index of SWPPP Revisions								
			Revision on		Signature of TDOT Project			
Revision #	Date	Revision Description	EC Sheet #	Signature of Contractor	Signature of TDOT Project Supervisor			

2. Rainfall Record Sheets



CIRCULAR LETTER

SECTION: 209-01 NUMBER: 209.01-02

SUBJECT: EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION REPORT

DATE: OCTOBER 2, 2015

The inspection report and monthly rain gauge log identified in the Tennessee Department of Transportation Erosion Prevention Sediment Control (EPSC) Inspection Manual, November 14 2014 or most current version, located on the TDOT Construction Division website, shall be utilized as the standard statewide report for the evaluation of EPSC measures on all Department projects that are subject to the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities (CGP). This report should also be used to document Contractor compliance with EPSC requirements in conformance with ARAP, Corps of Engineers, and/or TVA permits. The report shall be completed according to guidance provided by the Tennessee Department of Transportation EPSC Inspection Manual, November 2014 or most current version.



Monthly Rainfall Log

Month: State/US Route or Road Name:

Construction #	Contract #·	

Rainfall Gauge 6 (in)	nfall ge 6 n) Durat (hr)	Rainfall Gauge 6 (in)	l Ra	Rainfall Gauge 5 (in)	Rainfall Gauge 4 (in)	Rainfall Gauge 3 (in)	Rainfall Gauge 2 (in)	Rainfall Gauge 1 (in)	Predicted Precipitation (%) ²	Day of Week ¹	Date
			\top								
			\top								
			+								
			+								
			_								
			\perp								
			\perp								

Day of Week= Su,M,Tu,W,Th,F,Sa
Predicted Precipitation Source:
Reference site source:



NOAA Atlas 14, Volume 2, Version 3 Location name: Humboldt, Tennessee, US* Latitude: 35.8224°, Longitude: -88.8599° Elevation: 369 ft*

* source: Google Maps

POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

FD.	o-naseu p	s-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹ Average recurrence interval (years)									
Duration	1	2	5	10	ge recurren 25	50	years)	200	500	1000	
5-min	0.406 (0.376-0.442)	0.476 (0.440-0.520)	0.545 (0.503-0.593)	0.597 (0.550-0.649)	0.661 (0.606-0.719)	0.708 (0.646-0.769)	0.754 (0.685-0.820)	0.797 (0.722-0.867)	0.851 (0.766-0.928)	0.893 (0.798-0.974	
10-min	0.649 (0.600-0.706)	0.761 (0.703-0.831)	0.873 (0.805-0.950)	0.955 (0.879-1.04)	1.05 (0.966-1.15)	1.13 (1.03-1.22)	1.20 (1.09-1.30)	1.26 (1.14-1.38)	1.35 (1.21-1.47)	1.41 (1.26-1.53)	
15-min	0.811 (0.750-0.883)	0.957 (0.884-1.04)	1.10 (1.02-1.20)	1.21 (1.11-1.31)	1.34 (1.22-1.45)	1.43 (1.30-1.55)	1.51 (1.38-1.65)	1.59 (1.44-1.73)	1.70 (1.52-1.85)	1.76 (1.58-1.93)	
30-min	1.11 (1.03-1.21)	1.32 (1.22-1.44)	1.57 (1.45-1.71)	1.75 (1.61-1.90)	1.98 (1.81-2.15)	2.15 (1.96-2.33)	2.32 (2.11-2.52)	2.48 (2.25-2.70)	2.70 (2.43-2.94)	2.86 (2.55-3.12)	
60-min	1.39 (1.28-1.51)	1.66 (1.53-1.81)	2.01 (1.85-2.19)	2.28 (2.10-2.48)	2.63 (2.42-2.86)	2.91 (2.66-3.16)	3.19 (2.90-3.47)	3.48 (3.15-3.79)	3.87 (3.48-4.22)	4.17 (3.73-4.55)	
2-hr	1.61 (1.49-1.76)	1.93 (1.77-2.10)	2.35 (2.16-2.57)	2.69 (2.47-2.94)	3.16 (2.89-3.44)	3.55 (3.23-3.87)	3.94 (3.57-4.29)	4.36 (3.93-4.75)	4.93 (4.41-5.39)	5.40 (4.79-5.91)	
3-hr	1.75 (1.60-1.92)	2.08 (1.91-2.29)	2.54 (2.33-2.80)	2.92 (2.67-3.21)	3.44 (3.14-3.78)	3.87 (3.51-4.25)	4.32 (3.89-4.74)	4.79 (4.29-5.26)	5.45 (4.84-6.00)	5.99 (5.28-6.61)	
6-hr	2.17 (1.97-2.42)	2.60 (2.35-2.90)	3.16 (2.86-3.53)	3.63 (3.28-4.05)	4.29 (3.85-4.78)	4.82 (4.32-5.38)	5.39 (4.80-6.02)	5.99 (5.30-6.69)	6.84 (5.99-7.63)	7.53 (6.55-8.42)	
12-hr	2.65 (2.39-2.96)	3.17 (2.86-3.54)	3.89 (3.50-4.34)	4.48 (4.03-5.00)	5.31 (4.75-5.92)	5.98 (5.33-6.66)	6.70 (5.93-7.46)	7.45 (6.56-8.30)	8.52 (7.44-9.50)	9.39 (8.15-10.5)	
24-hr	3.17 (2.93-3.46)	3.80 (3.52-4.15)	4.70 (4.34-5.13)	5.42 (5.00-5.90)	6.43 (5.90-6.99)	7.25 (6.63-7.89)	8.12 (7.38-8.83)	9.03 (8.16-9.83)	10.3 (9.23-11.2)	11.4 (10.1-12.4)	
2-day	3.83 (3.55-4.16)	4.59 (4.25-4.98)	5.63 (5.20-6.11)	6.45 (5.95-6.98)	7.57 (6.96-8.21)	8.47 (7.75-9.19)	9.40 (8.55-10.2)	10.4 (9.37-11.3)	11.7 (10.5-12.8)	12.7 (11.3-14.0)	
3-day	4.07 (3.77-4.41)	4.88 (4.52-5.28)	5.97 (5.53-6.47)	6.83 (6.31-7.39)	8.00 (7.36-8.66)	8.94 (8.19-9.66)	9.89 (9.02-10.7)	10.9 (9.85-11.8)	12.2 (11.0-13.3)	13.3 (11.8-14.5)	
4-day	4.31 (4.00-4.66)	5.17 (4.79-5.58)	6.32 (5.86-6.82)	7.21 (6.67-7.80)	8.43 (7.77-9.11)	9.40 (8.63-10.1)	10.4 (9.48-11.2)	11.4 (10.3-12.3)	12.7 (11.5-13.9)	13.8 (12.3-15.1)	
7-day	5.12 (4.75-5.53)	6.14 (5.69-6.63)	7.50 (6.95-8.10)	8.57 (7.92-9.24)	10.0 (9.22-10.8)	11.2 (10.2-12.1)	12.4 (11.3-13.4)	13.6 (12.3-14.7)	15.2 (13.7-16.5)	16.5 (14.7-18.0)	
10-day	5.79 (5.39-6.21)	6.92 (6.44-7.42)	8.39 (7.80-8.98)	9.51 (8.82-10.2)	11.0 (10.2-11.8)	12.2 (11.2-13.0)	13.3 (12.3-14.3)	14.5 (13.2-15.6)	16.0 (14.6-17.3)	17.2 (15.5-18.7)	
20-day	7.82 (7.32-8.32)	9.29 (8.71-9.90)	11.0 (10.3-11.8)	12.3 (11.5-13.1)	14.0 (13.1-14.9)	15.3 (14.2-16.3)	16.5 (15.3-17.6)	17.7 (16.3-18.9)	19.2 (17.6-20.5)	20.3 (18.6-21.8)	
30-day	9.51 (8.93-10.1)	11.3 (10.6-12.0)	13.3 (12.5-14.1)	14.8 (13.9-15.7)	16.7 (15.6-17.7)	18.2 (16.9-19.3)	19.6 (18.2-20.8)	20.9 (19.4-22.2)	22.6 (20.9-24.1)	23.9 (22.0-25.5)	
45-day	11.9 (11.2-12.6)	14.1 (13.3-15.0)	16.5 (15.5-17.5)	18.3 (17.2-19.4)	20.5 (19.2-21.7)	22.1 (20.7-23.5)	23.7 (22.2-25.2)	25.2 (23.5-26.8)	27.0 (25.1-28.8)	28.4 (26.3-30.3)	
60-day	14.2 (13.3-15.0)	16.8 (15.8-17.8)	19.5 (18.4-20.7)	21.5 (20.2-22.7)	24.0 (22.5-25.3)	25.8 (24.2-27.3)	27.5 (25.7-29.1)	29.0 (27.1-30.8)	31.0 (28.8-33.0)	32.4 (30.0-34.5)	

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

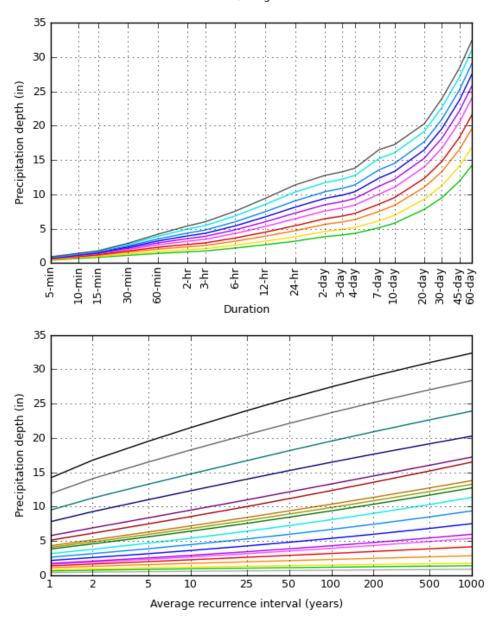
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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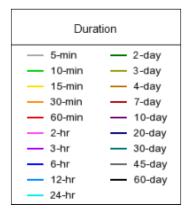
PF graphical

PDS-based depth-duration-frequency (DDF) curves Latitude: 35.8224°, Longitude: -88.8599°



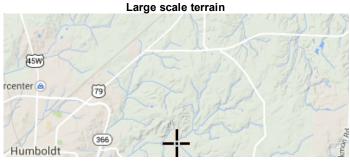
NOAA Atlas 14, Volume 2, Version 3

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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Hydrologic Development
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

<u>Disclaimer</u>

3. EPSC Inspection Reports





CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY

In accordance with Section 7.7.3 (Duly Authorized Re	epresentative) of the Tennessee General NPDES Permit for
Discharges of Stormwater Associated with Construction	n Activities, I
(print name of TDOT project supervisor), delegate t	he reporting responsibility of coordination with the erosion
prevention and sediment control (EPSC) inspection se	rvices consultant for TDOT contract #
to:	
Name:	(print name of TDOT delegate)
Title:	
Address:	
Phone No.:	
Email Address:	
I am providing delegation of authority as stated above	and confirm that the TDOT delegate stated above has direct
knowledge of the subject project and the ability to disci	uss the reports and recommendations from the EPSC
inspection services consultant on the subject project di	rectly to the contractor.
(sign	ature of TDOT Project Supervisor)
(sign	
(date)	
	o the local TDEC WPC Environmental Field Office (EFO)

The EPSC Delegation of Authority shall be submitted to the local TDEC WPC Environmental Field Office (EFO) address (see table below) for record keeping. A copy shall be placed within the on-site SWPPP Documentation and Permits Binder.

Tennessee Department of Environment and Conservation Division of Water Pollution Control, Permit Section Attn: EPSC Delegation of Authority Processing William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

CIRCULAR LETTER

SECTION: 209-01 Number: 209.01-02

SUBJECT: EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION REPORT

DATE: OCTOBER 2, 2015

The inspection report and monthly rain gauge log identified in the Tennessee Department of Transportation Erosion Prevention Sediment Control (EPSC) Inspection Manual, November 14 2014 or most current version, located on the TDOT Construction Division website, shall be utilized as the standard statewide report for the evaluation of EPSC measures on all Department projects that are subject to the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities (CGP). This report should also be used to document Contractor compliance with EPSC requirements in conformance with ARAP, Corps of Engineers, and/or TVA permits. The report shall be completed according to guidance provided by the Tennessee Department of Transportation EPSC Inspection Manual, November 2014 or most current version.

	EPSC Chronological Log Sheet – Qu	arter 1 2 3 4 (Circle One)
Date and Time	Type of Visit (Rainfall Event Visit, Weekly Inspection, QA/QC meeting, Construction meeting etc.)	Representative of EPSC inspection services consultant	TDOT Project Supervisor (or designee)

TN TD	OT	State/US Route	or Road Name	:						Inspec	tion Date:			
Depa Tran	artment of sportation	Contract #:	_		PIN:		County:				TNR#			
EPSC Inspo Repor			the contractor accompany the EPSC inspector on the inspection as required by SP107FP? Yes No Nu								Number of Corrective Actions Number of Recurring Corr. Acts.			
							on the attached TDEC form tten comments that detail their dis			- ? -				_
		res 🔝 No 🔝	If no, it is the respo	onsibly of the cor	itractor to pr	ovide wri	tten comments that detail their dis	sagreement v	with the noted findings.		Number o	f Sedin	nent Releas	es
		Contractor's Sign	ature:				Date:							
Outfall # / STR or WTL #	Entry Type	App. Station # From/To	Date Last Disturbed	Stabilizatior Type T = Temp P= Perma	e orary	Action Code		Action R	equired / Clarification				Object. Color Contrast (Y)	Sed. Release (Y)
E	ntry Type	e Codes	1	1			Actio	on Codes						
RCA Re FM Fu	ture Maint	orrective Action	CL Clean of CO Outfall CW Install of DC Implem	construction entout measure is closed concrete washo ent dust contro	out I	DIV HV I LIT PS	Install diversion Install high visibility fence Install measure Pick up litter/debris Permanently stabilize area	R REM SR TRAC TS	Repair/Replace mea Remove measure Clean up sediment re Clean off tracking fro Temporarily stabilize	elease* m road	W 		de measure et to work	
							Daga of				D 0 = ED 0 0 1		D (D	

Page ___ of ___



Contract #:	SR/US Road Name:	County:	Inspection Date:	
_			TND#	

Outfall # / STR or WTL #	Entry Type	App. Station # From/To	Date Last Disturbed	Stabilization Type T = Temp P= Perma	orary	Action Code	Action Required / Clarification	Object. Color Contrast (Y)	Sed. Release (Y)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

Construction Stormwater Inspection Certification (Twice-Weekly Inspections)

Site or Project Name:			NPDES Tracking Num	ber: TNR	
Primary Permittee Name:			Date of Inspection:		
Current approximate disturbed acreage:	Has rainfall been checked/odaily? Yes No		Name of Inspector:		
Current weather conditions:			Inspector's Training Certification Number:		
Please check the box if the following	ng items are on-site:	·			
Notice of Coverage (NOC)	Stormwater Pollution Preve	ention Plan (SWPP	P) Twice-weekly	y inspection do	ocumentation
Site contact information	Rain Gage Off-site Re	eference Rain Gage	e Location:		
Best Management Practices (BMPs	s):				
Are the Erosion Prevention and Se		unctioning correc	tly: If "No," describe belo	ow in Commen	t Section
Are all applicable EPSCs instal				``	res No
Are EPSCs functioning correctl				\	res No
Are EPSCs functioning correctly contrast in the receiving stream	n, and no other water quality i	mpacts per section	5.3.2?		res No
Are EPSCs functioning correctl	, , , , , , , , , , , , , , , , , , , 				res No
5. If applicable, have discharges f section 4.1.4? If "No," describe	below the measures to be in	plemented to addr	ress deficiencies.		res No
6. If construction activity at any lodays per section 3.5.3.2? If "No					res No
7. pollutants from equipment and "No," describe below the meas	vehicle washing, wheel wash ures to be implemented to ad	water, and other volumes deficiencies	wash waters per section .		res No
8. If a concrete washout facility is If "No," describe below the mea	asures to be implemented to a	address deficiencie	es.		res No
9. Have all previous deficiencies by Check if deficiencies/correct	been addressed? If "No," des tive measures have been rep	•		ection.	res No
Comment Section. If the answer is "N Otherwise, describe any pertinent ob		se describe the pro	blem and corrective active	ons to be take	n.
Certification and Signature (must be					
I certify under penalty of law that this submitted information is to the best penalties for submitting false information. Annotated Section 39-16-702(a)(4), t	of my knowledge and belief, mation, including the possib	true, accurate, an ility of fine and in	d complete. I am aware mprisonment. As spec	e that there ar	e significant
Inspector Name and Title:		Signature:		Date:	
Primary Permittee Name and Title:		Signature:		Date:	

Construction Stormwater Inspection Certification Form (Twice-Weekly Inspections)

Purpose of this form/ Instructions

An inspection, as described in section 3.5.8.2. of the General Permit for Stormwater Discharges from Construction Activities ("Permit"), shall be performed at least twice every calendar week and documented on this form. 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.

As described in section 3.5.8.1 of the Permit, inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course (http://www.tnepsc.org/). Twice weekly inspections can also be performed by: a licensed professional engineer or landscape architect; a Certified Professional in Erosion and Sediment Control (CPESC) or a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course. A copy of the certification or training record for inspector certification should be kept on site.

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.

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 site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site and/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.

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.

Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 of the Permit and pollution prevention measures identified in the SWPPP in accordance with section 3.5.2 of the 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.

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request.

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

CIRCULAR LETTER

SECTION: 209-01 Number: 209.01-03

SUBJECT: CONSTRUCTION RELATED SEDIMENT REMOVAL

DATE: JULY 1, 2015

This Circular Letter establishes the procedures for removal and/or stabilization of sediment discharges caused by active construction projects to non-jurisdictional areas (e.g., grassed or treed areas, wet weather conveyances, etc.), as well as jurisdictional areas (e.g., streams (including ephemeral streams), wetlands, sinkholes, etc.), within or beyond the project construction limits. Sediment caused by active construction projects must be removed and/or stabilized when it has accumulated beyond the last Erosion Prevention Sediment Control (EPSC) measure on the construction site before leaving the construction limits. Any sediment beyond the TDOT project right-of-way (ROW) is considered sediment discharge regardless of whether or not it is in a jurisdictional area. The District Operations Supervisor shall notify the Regional Environmental Coordinator (EC) immediately after it is discovered that a sediment release has occurred. The District Operations Supervisor or his/her designee shall complete all applicable information on the attached "Sediment Release Form". The District Operations Supervisor or his designee shall email the completed "Sediment Release Form" to the Regional EC, who will determine the appropriate course of action.

The Regions will only apply for activities included in the <u>TDEC General Aquatic Resources Alteration Permit (ARAP) for Sediment Removal and Stream Remediation</u>. This general permit authorizes certain stream remediation activities that serve the purpose of removing recently deposited sediment from stream beds, stream banks and riparian lands that result from construction related sediment releases from construction sites. These deposits shall be confined within areas that can be readily accessed and removed (stream restored or repaired) without additional harm to the shape or stability of the stream channel. Also, refer to standard specifications **Subsection 107.08 (Protection of Streams, Lakes and Reservoirs)** for additional information. The Nashville USACE District does not require notification of these activities since they do not regulate the removal of material from Waters of the U.S. The Memphis USACE District does not require notification prior to sediment removal activities. If TDOT sends a follow-up notification to TDEC after the sediment is removed, the Memphis USACE District would like to be copied on the notification letter. TVA does not need notification of these activities.

Attached are the Standard Operating Procedure (SOP), permit requirements, and sediment release form to use for this activity. The issuance of a permit does not authorize trespassing or discharges of storm water or non-stormwater across private property.

Work shall not commence in jurisdictional areas until TDOT has been notified by TDEC that the proposed activities may proceed under a general permit or that an individual permit has been issued. Email or verbal communication is an acceptable form of notification, if necessary.

Time is of the essence so that the extent of sediment migration is minimized and little or no delay is caused in construction progress.

Standard Operating Procedures (SOP) for Sediment Removal for Stream Remediation

Non-jurisdictional areas and waters:

Action to prevent the potential for additional discharges of sediment beyond the EPSC measures shall be started immediately. The removal and/or stabilization process for a sediment discharge in non-jurisdictional areas shall be started within twenty-four (24) hours after discovery. Since these accumulations of sediment have not yet reached a jurisdictional area, approval from the regulatory agencies is not necessary, but the terms and conditions of the <u>TDEC General ARAP</u> for the Alteration of Wet Weather Conveyances shall be followed. Removal of this sediment is the preferred method. The Regional Environmental Coordinator must approve the sediment cleanup activities if the contractor desires to stabilize and leave in place the sediment discharge. However, there cannot be a potential for the sediment to migrate into jurisdictional areas or for any other negative impact from leaving the sediment in place,

Attempts to remove and/or stabilize any off-site sediment discharges to non-jurisdictional areas outside of the ROW will require permission of the landowner. Arrangements concerning removal or stabilization of sediment on adjoining property must be settled by the contractor with the adjoining landowner before removal or stabilization can occur. If permission is not allowed, the EPSC inspector shall document the effort to remove and/or stabilize the sediment discharge in the EPSC inspection report, and the District Operation Supervisor shall contact the Regional Director of Operations, TDOT HQ Construction Office, the Regional Environmental Coordiator and the Compliance and Field Servicesof this effort.

For sediment releases beyond the last measure and off ROW, the District Operations Supervisor or designee shall complete the TDOT Sediment Release Form attached to this circular.

Jurisdictional waters:

The Regional Environmental Coordinator shall call the TDEC Environmental Field Office to report the release and go through the plan to remove and stabilize or clean up the area. Once verbal or written approval from TDEC has been given, the sediment can be removed and the area stabilized, as agreed upon with TDEC. Immediately following the sediment release and removal, the District Operations Supervisor or Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular for all sediment releases to streams and/or wetlands.

Actions to prevent the potential for additional discharges of sediment beyond the EPSC measures and into the stream or wetland shall be taken immediately. The removal and/or stabilization process of a sediment discharge in jurisdictional areas shall be started as soon as approval is received from the appropriate regulatory agencies. The Regional Environmental Coordinator shall be notified immediately after it is discovered that sediment has discharged to a

jurisdictional area. Approval by the regulatory agencies will be required for removal of all construction related sediment discharges to jurisdictional waters.

For situations where the General ARAP is not authorized for coverage, the sediment removal and/or stabilization activity must be covered by an Individual ARAP.

General ARAP:

For sediment releases covered by the TDEC General ARAP for Sediment Removal and Stream Remediation, the Regional Environmental Coordinator shall receive approval to proceed before removing the sediment deposits as well as prepare and submit an application package to the appropriate regulatory agencies. The District Operations Supervisor (or designee) or Regional Environmental Coordinator must also complete the TDOT Sediment Release Form attached to this circular.

In the event sediment releases are covered under the <u>TDEC General ARAP for Sediment</u> Removal and Stream Remediation, the following steps shall occur.

- 1. The Regional Environmental Coordinator shall be the single point of contact for this activity and shall coordinate with all regulatory agencies and TDOT personnel.
- 2. The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator and the Regional Director of Operations of all sediment releases with the locations of sediment release identified on site sketches or plans, an explanation why the discharge occurred, a topographic map of location(s), a completed TDEC Form CN-1091 (located on TDEC's website), a summary of the impacts, and description of what will be done to prevent the further or continued loss of sediment from the site.
- **3.** The Regional Environmental Coordinator shall notify the TDOT HQ Construction Office, the Regional Director of Operations, and the Compliance and Field Services with the information received from the District Operations Supervisor (or their designee) and the coordination efforts proposed with the regulatory agencies.
- **4.** The Regional Environmental Coordinator shall contact the TDEC Environmental Field Office to report the release and discuss removal and remediation. Once TDEC has given verbal or written approval of the removal and remediation plan, sediment removal can begin. The Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular and include all necessary information. The package of information shall then be sent to TDEC with a copy to the Compliance and Field Services.
- 5. If necessary, the Regional Environmental Coordinator may request an on-site field visit with the appropriate regulatory agencies and the District Operations Supervisor (or their designee) to determine the appropriate course of action. If, after the on-site visit, TDEC requires a more detailed plan than proposed by the Regional Environmental Coordinator or requires an Individual Permit, the Regional Environmental Coordinator shall provide the sediment release and site visit information to the TDOT Natural Resources Office for further action. A more detailed plan is known as a Sediment Assessment and Remediation Plan

- (SARP) which will be prepared, submitted to the regulatory agencies and overseen by the TDOT Natural Resources Office. In the case an Individual ARAP is required, instead of the Regions, the TDOT Natural Resources Office will be responsible for the next steps (#6 & #7 below). The TDOT Natural Resources Office shall provide this application package and regulatory approval to the Regional Environmental Coordinator in order to continue the next process step (#8).
- **6.** The District Operations Supervisor (or their designee) shall submit to the Regional Environmental Coordinator the application package, including the materials required within this Circular Letter, for each sediment release off ROW or into a jurisdictional area. These include the following items: completed TDOT Sediment Release Form, completed TDEC CN-1091 form, and the items listed in the "Permit Information Required With General ARAP Application" section below.
- 7. The Regional Environmental Coordinator shall review the application package to ensure all required information necessary for the permit acquisition is accurate and complete. The Regional Environmental Coordinator shall submit the application package to the appropriate TDEC Environmental Field Office.
- **8.** Once approval is received (either written or verbal with written follow-up) from TDEC, the Regional Environmental Coordinator shall distribute all applicable permits/approvals to the HQ Construction Office, the Compliance and Field Services and the District Operations Supervisor (or their designee).
- **9.** The District Operations Supervisor (or their designee) shall oversee the sediment removal and/or stabilization activities of the contractor until complete. If a SARP is processed by the TDOT Natural Resources Office on this project, the TDOT Natural Resources Office and the Memphis USACE shall also be involved with the coordination of this activity.
- **10.** The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator within two (2) calendar days after the sediment removal and /or stabilization is complete.
- **11.** At this time, the Regional Environmental Coordinator shall visit the locations identified in the application and provide written and photographic documentation of the location where removal and/or stabilization was performed. This shall also be included in the EPSC inspection report.
- 12. Within seven (7) calendar days after the completion of each activity, the Regional Environmental Coordinator shall submit the documentation above, electronic color copy via email, to the regulatory agencies, TDOT HQ Construction Office and TDOT Compliance and Field Services. An electronic color copy (e.g. .pdf) shall be sent via email and one color copy shall be mailed to TDEC. Please be aware that TDEC may impose a fee (Natural Resource Damage Assessment) to cover the damages to the affected jurisdictional area if a significant amount of damage was done to the area and total recovery of the sediment was not achieved. This fee shall only be imposed following a SARP conducted by the TDOT Natural Resources Office, in conjunction with, or approved by, TDEC.

Individual ARAP:

If the sediment release to jurisdictional waters meets one of the exceptions to the General ARAP coverage listed above, the Regional EC shall provide sediment release information to the TDOT Natural Resources Office for the application for an Individual Permit. The District Operations Supervisor or designee will also complete the TDOT Sediment Release Form attached to this circular for submittal to the Regional Environmental Coordinator.

PERMIT INFORMATION REQUIRED WITHARAP APPLICATIONS

- Cover Letter Description of the basic nature and scope of the project, including events that lead to the discharge, the characteristics of the discharge and the proposed method of sediment removal/stabilization. This application letter and any forms shall be signed by the Regional Construction Supervisor (or their designee).
- 7½-minute USGS Topographic Quadrangle Map Located in the appendix of the Storm Water Pollution Prevention Plan (SWPPP)* as the Vicinity Map or within the Water Quality Permit Application.
- **Permit Identification Numbers** Located on the NPDES Notice of Coverage (NOC), the USACE, TDEC and TVA permits.
- **Latitude/Longitude In**-stream location of sediment accumulation. This can be found on the internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. In the form of (Latitude XX.XXXX N, Longitude XX.XXXX W)
- Receiving Stream Located within the text of the SWPPP* or in the Ecology information within the Appendix of the SWPPP* or within the Water Quality Permit Application.
- Threatened or Endangered Species Located in the Ecology information within the appendix of the SWPPP* or within the Water Quality Permit Application.
- **Photos** Before sediment removal work (to submit with the application) and, once the work has been completed, after sediment cleanup (to submit after completion of the activity) representative photos.
- Plan sheets and/or sketches –Use Erosion Prevention and Sediment Control (EPSC) Sheet from within the Appendix of the SWPPP* to show EPSC methods being maintained. Provide sketch showing the approximate dimensions of the sediment deposit, the proposed diversion methods and any additional EPSC measures needed for sediment removal, if appropriate.
- Provide copies of the TDOT Standard Drawings, as appropriate
- **Proposed Commencement Date** Upon issuance of permit
- **Proposed Completion Date** (e.g., 30 days) from issuance of permit. The permit will state the expiration date based upon the proposed completion date. If additional time is needed after the stated expiration date within the permit, the Regional EC shall contact the regulatory agencies at least one week before the expiration date with a request for time extension and the amount of time requested.
- **Identify if the stream is listed as one of the following waters** This information is available on TDEC's website.

National Wild and Scenic Rivers in TN Tennessee's Designated State Scenic Rivers Outstanding National Resource Waters

*A SWPPP will not be provided on all projects. A SWPPP is only provided on construction projects that disturb one (1) acre or more of land.

TENNESSEE DEPARTMENT OF TRANSPORTATION EROSION PREVENTION/SEDIMENT CONTROL SEDIMENT RELEASE FORM FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

State Route (SR) / US Route or Road Name and Description:					
County(ies):	TDOT PIN	:	NPDES Permit (NOC) #:		
Other Applicable Permits (ARAP, TV	A, etc.)				
TDOT Contract No.:		Contractor:			
Date of Sediment Release:		wetland? Yes/No	re the ROW or discharge into a stream or If No, no further documentation beyond ion report is required.		
TDOT/Consultant EPSC Inspector:					
Form Completed By: (TDOT Project S	Supervisor/D	Designee)	Date		
Received and Reviewed By: (Regional	al Environme	ental Coordinator)	Date		
Forwarded to Local TDEC EFO (if ap	plicable)		(Initial and Date)		
Forwarded back to Local TDOT Cons	struction Office	ce	(Initial and Date)		
			proximate stationing, which side of centerline ent release to Clear Creek at Outfall 2, Sta.		
BMPs in area and if they were installed A 1.25" rain event (three hour duration working condition and installed per th	ed per the si n) occurred e updated e 0% capacity.	ite erosion control p on October 1, 2009 rosion control plans . Sediment-laden ri	ase. Include relative rainfall totals, installed lan and SWPPP requirements, etc. Example: Sediment trap above Outfall 2 was in in the SWPPP; however, 3 rock check dams unoff from active cut slope exceeded check iment release into Clear Creek]		

TENNESSEE DEPARTMENT OF TRANSPORTATION EROSION PREVENTION/SEDIMENT CONTROL SEDIMENT RELEASE FORM FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

Environmental Impacts of Sediment Release: [Describe the environmental impacts of the sediment release including impacts to habitat (i.e. fish kills), dimensions of the sediment impacts, and potential impacts to Threatened and Endangered Species list in the Ecology Report and SWPPP. State if any jurisdictional waters were impacted by sediment. Example: A sediment release impacted permitted stream of Clear Creek (STR-3). The observed impacts are sediment deposition approximately 750 ft downstream and approximately 2 ft wide, culminating at log weir. Average sediment depth was 3", ranging from 12" to ½" thick. No endangered species are noted in the area and no signs of aquatic life was impacted]
Plans to Remove off-ROW Sediment: [Describe how TDOT plans on removing sediment and who will be involved in removal. Example: TDOT notified TDEC Environmental Field Office on October 2, 2009 about sediment release to Clear Creek. TDOT plans to install a sandbag cofferdam upstream of sediment release and pipe stream flow around impacted area, discharging back into stream below log weir. Sediment will be removed from stream with hand tools and disposed of per requirements outlined in project SWPPP. Once sediment is removed, sandbag cofferdam will be removed; returning flow to stream. The contractor will perform sediment removal under supervision of Region Environmental Coordinator.]
Plans to Prevent Future Impacts: [Describe additional EPSC measure or change in drainage planned (or completed) to prevent repetitive sediment release in this location. Example: EPSC measures will be increased at and above Outfall 2. Two additional rock check dams have been constructed in ditch leading to Outfall 2 and sediment trap storage capacity has been increased. In addition, seed and erosion control blanket are scheduled to be installed on the cut slope at the end of the week.] Attach Additional Information: such as Photographs and Erosion Control Plans indicating location of sediment
release. For sediment releases to jurisdictional waters that qualify for coverage under <u>General ARAP for Sediment Removal and Stream Remediation</u> , the TDEC CN-1091 form must also be completed.

CIRCULAR LETTER

SECTION: 209.01 Number: 209.01-04

SUBJECT: TDOT INSPECTION OF CONTRACTOR WASTE & BORROW SITES

DATE: OCTOBER 2, 2015

Effective with the June 18, 2010 Letting, Waste & Borrow Sites for TDOT projects will be subject to the requirements of the <u>Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects</u>.

After the contractor has secured approval for use of a waste and/or borrow site, he/she is responsible for performing twice weekly EPSC Inspections of that site, if applicable. The contractor must have a certified EPSC inspector as required by the TDEC Construction General Permit (CGP). The certified EPSC inspector must document the inspections on the inspection form in the CGP or on TDOT's inspection report (see CL 209.01-02).

All aspects of the oversight and inspection of Waste and Borrow sites associated with TDOT construction projects shall follow the terms and conditions of the Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects dated June 2012, or most current version.

TDOT Construction Exclusive Waste/Borrow Site Weekly EPSC Inspection Review Report

Date of Review:	County:			
TDOT Project Description:				
TDOT Contract Number: Contractor:				
Contractor's Waste/Borrow Area Name/Description:				
Waste/Borrow NPDES Number:				
Contractor's Certified EPSC Inspector:	Inspector's Certification Number:			
Location of Contractor's Waste/Borrow Area Permits:				
Dates of Contractor's EPSC inspections (since last review):				
Name of TDOT Representative Completing Documentation Review:				

Instructions: This checklist covers the basic erosion prevention and sediment control and other stormwater construction requirements for Exclusive Waste/Borrow Areas used for TDOT projects. This report shall be completed weekly by the TDOT EPSC Representative verifying the documentation of the contractor's previous week's twice weekly EPSC inspection reports. Questions that are not applicable for the site must be marked as "N/A". Checks placed under the "No" column that indicate a deficiency requires a written explanation and/or a written corrective action and required completion date in the "TDOT EPSC Representative's Comments and Corrective Actions" section of this form. Both the TDOT EPSC Representative and the Contractor's Certified EPSC Inspector should sign the form immediately following each review.

General Information – Only need to complete during first review unless there are changes to report at subsequent reviews

	Yes	No	N/A	
1.				Is the waste/borrow area exclusive to the above referenced TDOT project? (If not exclusive or if exempt
				exclusive, do not complete or answer any other questions.)
2.				Is the NOC posted on site?
3.				Are the SWPPP and other required CGP information available on site?
4.				Are rain gages present and installed per requirements?
5.				Are Streams/Wetlands/Sinkholes present on site?
6.				If 5 is "Yes", have the applicable permits been obtained for the impacts (ARAP, USACE, TVA)?
7.				If 5 is "Yes", are Streams/Wetlands/Sinkholes shown in the SWPPP with appropriate buffers noted?
8.				Do the EPSC measures shown in the SWPPP and installed in the field appear adequate for the site?
9.				Are outfall locations shown in the SWPPP? Are there outfalls in the field that aren't included in the SWPPP?
10.				Are on-site outfall drainage areas included in the SWPPP?
11.				Is a sediment basin required at any on-site outfalls per the TN CGP?
12.				If 11 is "Yes", are a sediment basin and its calculations included in the SWPPP?
13.				Does the SWPPP limit the disturbed area of the Waste/Borrow site to less than 50 acres at one time?
14.				Does the SWPPP include at least two separate EPSC plan sheets (sites disturbing < 5 acres) or at least 3
				separate EPSC plan sheets (sites disturbing > 5 acres) as required by TN CGP?

W&B Inspection Review Checklist May 2012 1

Site Specific Information - Complete during each review Yes No N/A 15. \square Have EPSC inspections been documented twice weekly and at least 72 hours apart? 16. □ □ □ Do the EPSC inspection reports document daily rainfall for the site? 17. 🗌 🗎 🔲 Do the EPSC inspection reports document that the project outfalls have been inspected? 18. \Box \Box Did the EPSC inspection report document sediment deposits off the permitted area? 19. \square If 18 is "Yes", did the EPSC inspection report the sediment release was into a Stream or Wetland? 20. If 19 is "Yes", did the EPSC inspection report document that contractor self-reported the sediment release to TDEC EFO? 21. \square If 19 is "No", did the EPSC inspection report document that the off site sediment was removed or stabilized? 22. Have any new project outfalls been added according to the EPSC inspection reports? 23. 🔲 🔲 🔲 If 22 is "Yes", have new project outfalls been updated in the SWPPP? 24. 🔲 🔲 🔲 Do the EPSC inspection reports document that EPSC measures have been installed per the SWPPP in all active areas? 25. \square \square Do the EPSC inspection reports document that the installed EPSC measures appear to be adequate for the 26. 🔲 🔲 🔲 Do the EPSC inspection reports document that the EPSC measures are being maintained according to the SWPPP and the CGP? 27. Do the EPSC inspection reports document any new EPSC measures being installed? 28. □ □ □ If 27 is "Yes", has the SWPPP been updated to reflect the new EPSC measures? Have the dates of major grading activities been documented in accordance with the SWPPP? 29. \square 30. 🗌 🗎 🗎 Have the dates when construction activities temporarily or permanently ceased been documented in accordance with the SWPPP? 31. \square \square Do the EPSC inspection reports document that disturbed areas idle for more than 14 days have been temporarily or permanently stabilized? 32. 🔲 🔲 🔲 Do the EPSC inspection reports document that temporary stabilization has been applied to any areas of the site? 33. 🔲 🔲 🔲 Do the EPSC inspection reports document that permanent stabilization has been applied to any areas of the site? 34. \square Do the EPSC inspection reports document that steep slope areas have been stabilized in 7 days? 35. \square \square Do the inspection reports document the total disturbed acreage, including haul roads, stockpile areas, and other disturbances?

TDOT EPSC Representative's Comments and Corrective Actions

TDOT EPSC Representative's Signature I certify that any EPSC deficiency noted in the twice-weekly inspection report will be addressed in conformance with the requirements of the TN CGP. I also agree that items listed above are accurate and that any discrepancies to this report are listed below in the comments section. Contractor's Certified Inspector Signature Date Contractor's Certified Inspector's Comments

Signatures - Complete during each review

CIRCULAR LETTER

SECTION: 209.01 PROJECT EROSION AND SILTATION CONTROL

Number: 209.01-05

SUBJECT: UTILITIES AND ENVIRONMENTAL CONSTRUCTION PERMITS

DATE: OCTOBER 2, 2015

This circular letter addresses utility work within or adjacent to the TDOT right-of-way (ROW) and the associated environmental construction permits. The "Guidebook for Utility Relocation Related to TDOT Construction Projects" produced by the TDOT ROW Division Utilities Office contains additional information related to oversight of utility work on TDOT ROW or in TDOT Construction projects. Utilities are responsible for obtaining any needed easements or right-of-way for utility construction that extends beyond the TDOT ROW. All utility work that occurs within or adjacent to TDOT's ROW may be classified in one of the two following categories:

- 1. In Contract Moves: Utility work included in a TDOT Construction contract; or
- 2. Prior to Moves: Utility work not included in a TDOT Construction contract, including utility relocations performed by the utility prior to the beginning of a TDOT Construction contract.

The Project Supervisor should coordinate with the TDOT Regional Utility Office to determine which of these categories applies to each type of associated utility work and to obtain contact names and information for each utility. The Project Supervisor should discuss In-Contract Moves at the pre-construction meeting and at the environmental pre-construction meeting. This discussion should address areas where In-Contract Moves and Prior-To Moves extend outside the TDOT ROW. In addition, the Project Supervisor may direct the TDOT EPSC Inspector to conduct a pre-disturbance EPSC inspection before the utility work begins.

In-Contract Moves

For In-Contract Moves, the Prime Contractor for the construction project will coordinate all construction work activities (including utility work) for the contract. The utility work will be performed by either the Prime Contractor's forces or a subcontractor's forces. Any issues related to the utility construction process need to be brought to the Project Supervisor's and the Prime Contractor's attention immediately to allow for corrective action.

For In-Contract Moves, the TDOT Environmental Division's Natural Resources Office (NRO) obtains the environmental construction permits for the construction project, including the utility construction or installation work. Utility companies remain responsible for obtaining their own railroad permits, TDEC water or sewer approval permits or other operational permits for the utility facilities. The utility completes and signs the "Memorandum of Understanding (For Environmental Permits Required by Utility Construction)" (Form 2011-19) for the TDOT Right-of-Way Division. If the utility construction or installation work extends off the TDOT ROW, the utility is responsible for obtaining easements or additional right-of-way for areas adjacent to the TDOT ROW. In addition, the utility supplies the needed permit submittal information for all

utility construction or installation work to the Regional Utility Office and/or the Project Supervisor, who then provides the permit information to the TDOT NRO. Any environmental construction permit modifications or changes for In-Contract Moves should be coordinated with the TDOT NRO. The TDOT NRO will work with the regulatory agencies to obtain the permit modifications or changes.

For In-Contract Moves, the utility work cannot begin until the following steps are completed:

- (1) the TDOT project's pre-construction meeting has been completed and
- (2) notice has been given by the Prime Contractor to the TDOT Project Supervisor that utility work will commence and the Project Supervisor has approved the commencement. This notification process allows the Project Supervisor to arrange for personnel to conduct the required EPSC inspections.

The Prime Contractor will be responsible for installing the EPSC measures based on the TDOT EPSC plans and before construction starts. If the utility construction and installation extends outside the TDOT ROW, the Prime Contractor shall also be responsible for installing EPSC measures for the utility construction and installation. The TDOT EPSC plans for roadway construction may or may not be suitable or sufficient for the utility construction and installation. If installing the roadway construction EPSC measures at the time of utility relocation is not practical or suitable, the Prime Contractor may develop and submit an EPSC plan specifically for the utility relocation. Where an EPSC plan is developed specifically for utility relocation, the Prime Contractor must submit this EPSC plan to the TDOT District Operations Supervisor, or their designee, for acceptance. This specific EPSC plan for utility relocation should address utility construction and installation areas within the TDOT ROW and outside of the TDOT ROW. The cost for additional EPSC measures for specific EPSC plans for utility relocations shall be paid as increases in TDOT's roadway construction EPSC items.

EPSC inspections and Quality Assurance (QA) Audits shall include utilities in their routine inspections and assessments where the utilities are included in the Construction contract or where utility work is being performed at the same time as the construction project. The project's EPSC Inspector will be responsible for inspecting all areas included in the TDOT Construction contract. This includes roadway construction within the TDOT ROW and utility work on and off TDOT ROW. All EPSC recommendations related to utility work will be communicated to the Prime Contractor as directed by the TDOT District Operations Supervisor, or their designee, The QA Audit Team should include all areas included in the environmental construction permits in the QA Audit, including off-ROW utility work performed on utility easements or ROW. If the QA Auditor observes an issue related to the utility construction or installation work, the issue will be identified as a field observation or as a nonconformance according to the QA Audit procedures. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Prime Contractor, utility if performing the work, and/or the Regional Field Services Specialist to resolve the issue

Following construction completion, TDOT will terminate environmental construction permit coverage using TDOT's standard procedures. The utility is required to promptly complete Form DT-1716 following work completion and to submit the completed form to the Project Supervisor.

Prior-To Moves and Other Utility Work Not Included in a TDOT Construction Contract

When utility work is not included in a TDOT Construction contract, the Utility will perform the utility work separately from the construction project, but within or adjacent to TDOT's ROW. For these activities, the work will be performed by the Utility's contractor or work forces. The "Guidebook for Utility Relocation Related to TDOT Construction Projects" produced by the TDOT ROW Division Utilities Office instructs Utilities to notify TDOT Construction no less than three (3) days before beginning utility construction.

The Utility will be responsible for obtaining and complying with all environmental construction permits for Prior-To Moves and other utility work. The Utility will submit a completed and signed "Environmental Agreement for Utility Projects" form to the TDOT Right-of-Way Division prior to being released by TDOT to begin utility work on TDOT's ROW. The Utility will be responsible for installing EPSC measures and for performing EPSC inspections and other permit compliance items relative to its environmental construction permits. These projects are divided into two groups based on the following: (1) project disturbing more than one acre and (2) disturbed acreage less than one acre.

- (1) rojects disturbing more than one acre the Utility must submit a copy of the TDEC Notice of Coverage (NOC), SWPPP, any applicable water quality/resource alteration permits, and the completed "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.
- (2) Projects disturbing less than one acre the Utility must submit the "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.

If the utility relocation work is ongoing when the TDOT construction project begins construction, the TDOT EPSC Inspector will inspect all areas within TDOT's ROW (including utility work areas), but excluding any utility work areas that are outside the TDOT ROW. If directed by the TDOT District Operations Supervisor, or designee, and if the Utility is in agreement, the TDOT EPSC Inspector will attempt to conduct joint EPSC inspections with the Utility's EPSC Inspector. If the TDOT EPSC inspector's observations note an EPSC issue or other permit issue related to the utility work, the TDOT EPSC inspector will notify the TDOT District Operations Supervisor, or their designee, will coordinate with the Regional Utility Office and the Regional Field Services Specialist. The utility will be required to coordinate erosion control measures with the Project Supervisor in order that the Prime Contractors' erosion control and the Utility's erosion control are not disturbed, duplicated, or compromised by activities of the other.

The project's QA Auditor will begin QA Audits after the Prime Contractor starts TDOT project construction work using the QA Audit procedures. The QA Auditor will assess all areas within TDOT's ROW, but will not assess off-ROW utility work areas. If the QA Auditor observes an issue related to the utility construction or installation work at the QA Audit, the issue will be identified as a field observation or as a nonconformance according to the QA Auditor. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Right-of-Way Division Utilities Coordinator and/or the Regional Field Services Specialist to resolve the issue.

Following construction completion, the utility will be responsible for following the permit conditions to terminate the environmental construction permit coverage.

4. NOI & NOC



AGRICULTURE OF

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

Site or Project Name:	No. 27946-1403-94, F	NPDES Tracking Number: TNR						
Street Address	ood Road over Branc		Sugar Creek	Construction Start Date: October 2016 Estimated End Date: October 2021				
		_						
Site Description: Grade, Dr	ain, Base & Surface, S	Structure, Guardrail &	Pvmt. Markings	Latitude (dd.dddd Longitude (-dd.dd	,			
0 1 (2 1)		MS4 Jurisdiction,	D O T	Acres Disturbed:	1.795			
County(ies): Gibson		(if applicable):	D.O.T.	Total Acres:	2.0			
Check the appropriate box(s) if there are streams and/or wetlands on or adjacent to the construction site: Streams Wetlands If wetlands are located on-site and may be impacted, attach wetlands delineation report. If an Aquatic Resource Alteration Permit (ARAP) has been obtained for this site, what is the permit number? NRS15.126 Receiving waters: Sugar Creek and unnamed branch of Sugar Creek								
Attach the SWPPP with t	the NOI:	SWPPP Attached	Attach a site location i	map: 🔽 Map At	tached			
Site Owner/Developer Entity (Primary Permittee): (person, company, or legal entity that has operational or design control over construction plans and specifications): Tennessee Department of Transportation								
For corporate entities onl	y, provide the Tennesse	e Secretary of State (SC	OS) Control Number:					
Site Owner or Developer Jim Ozment	Contact Name: (individu	ial responsible for site)	Title or Position: (the party who signs the certification below): Director - Environmental Division					
Mailing Address: 900 Jan	mes K. Polk Building,	505 Deaderick St.	City: Nashville	State: TN	Zip: 37243-0334			
Phone: (615)741-5373	Fax: ()		E-mail: TDOT.Env.NPDES@tn.gov					
Optional Contact: Khalid	Ahmed		Title or Position: Senior Transportation Project Specialist					
Mailing Address: 900 Ja	mes K. Polk Building,	505 Deaderick St.	City: Nashville	State: TN	Zip: 37243-0334			
Phone: (615) 253-002	1 Fax: ()		E-mail: Khalid.Ahmed@tn.gov					
Owner or Developer Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)								
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.								
Owner or Developer Name: (print or type) Jim Ozment Signature: Date: 10/3/2016								
Contractor(s) Certificat	ion: (must be signed by	president, vice-presider	nt or equivalent, or ran	king elected officia	I) (Secondary Permittee)			
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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury. Contractor name, address, and SOS control number (if applicable): Signature: Date:								
Contractor name, addres	s, and SOS control num	ber (if applicable):	Signature: Date:		Date:			
OFFICIAL STATE USE ONLY								
Received Date:	Reviewer:	Field Office:	Permit Number: TNR	Ex	ceptional TN Water:			
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable P	Parameters: No	otice of Coverage Date:			

CONSTRUCTION GENERAL PERMIT - NOTICE OF INTENT (NOI) - INSTRUCTIONS

A completed NOI must be submitted to obtain coverage under the CGP. 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. CGP coverage is required for stormwater (SW) 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.

The application fee 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, etc.). A separate annual maintenance fee is also required for activities that exceed 1 year under CGP coverage. See TN Rules, Chapter 0400-40-11-.02(b)(12)).

Acres	= or > 150	= or > 50 < 150	= or > 20 < 50	= or > 5 < 20	= or > 1 < 5	Subsequent
Disturbed	acres	acres	acres	acres	acres	coverage
Fee	\$10,000	\$6,000	\$3,000	\$1,000	\$250	\$100

Who must submit the NOI form? All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of SW associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) 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 (e.g., subsequent builder), or the person that is the current land owner of the construction site, and is considered the primary permittee; or (2) 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 primary permittee, and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 of the permit and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage. Artificial entities (e.g., corporations or partnerships) must submit the Tennessee Secretary of State, Division of Business Services, control number. The division reserves the right to deny coverage to artificial entities that are not properly registered and in good standing with the Tennessee Secretary of State.

<u>Notice of Coverage:</u> The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). SW discharge from the construction site is authorized as of the effective date of the NOC.

<u>Complete the form:</u> Type or print clearly. Answer each item or enter "NA," for not applicable. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.**

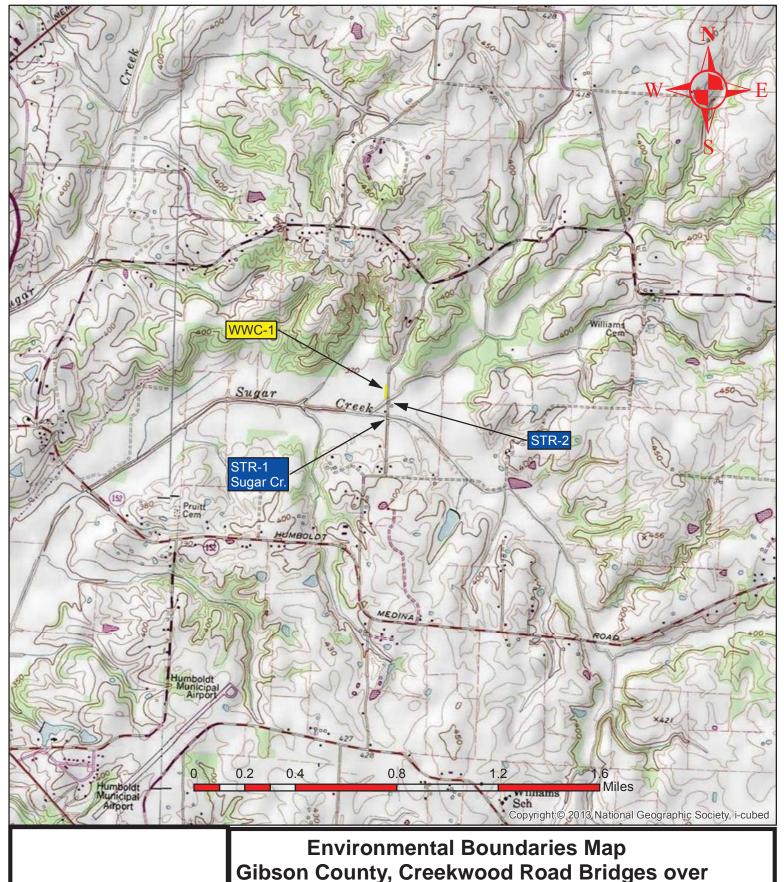
<u>Describe</u> and <u>locate the project</u>: Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate information available to describe the location (reference to adjacent highways, roads and structures; e.g., intersection of state highways 70 and 100). Latitude and longitude (in decimal degrees) can be found at numerous other web sites. Attach a copy of a 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, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

<u>Name of the receiving waters:</u> Trace the route of SW runoff from the site and determine the name of the water course(s) into which the stormwater 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 that the unnamed tributary enters.

An ARAP 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, contact your local Field Office (EFO).

<u>Submitting the form and obtaining more information:</u> 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: Stormwater NOI Processing**.

Tennessee Department of Environment and Conservation Division of Water Pollution Control, Permit Section Attn: Storm Water NOI Processing William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

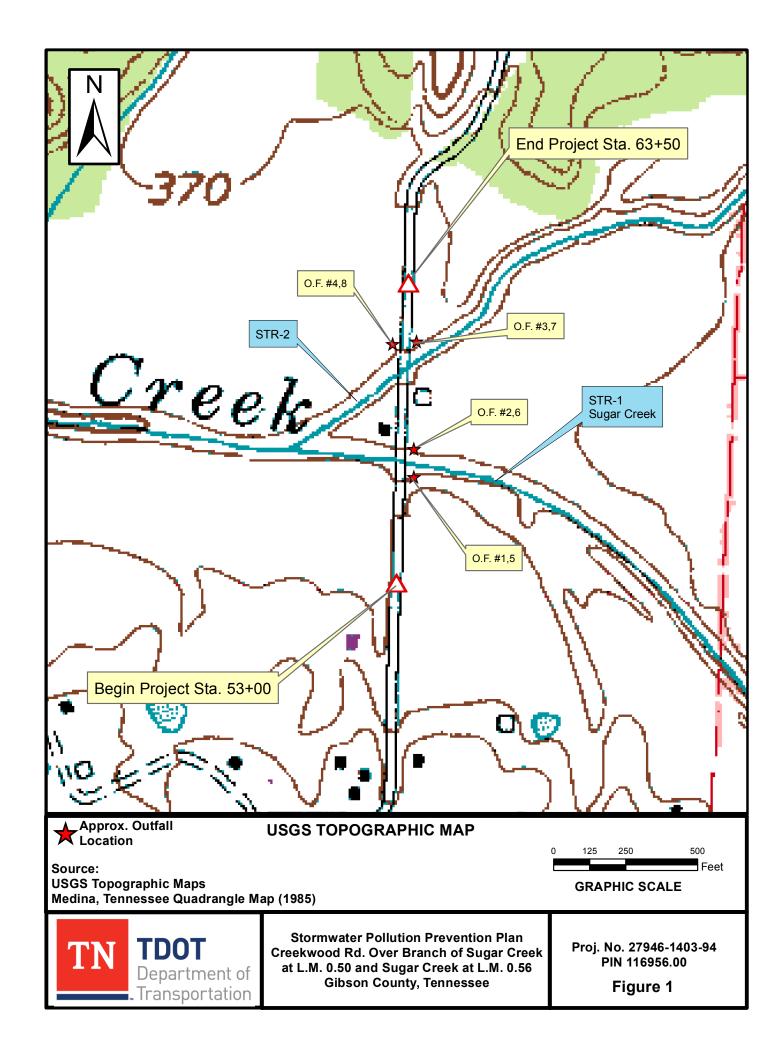




Gibson County, Creekwood Road Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56

P.E. 27946-0403-94 PIN 116956.00





5. Blank NOT





TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-TDEC (8332)

Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator 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 DWR Environmental Field Office (EFO) address (see table below). For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

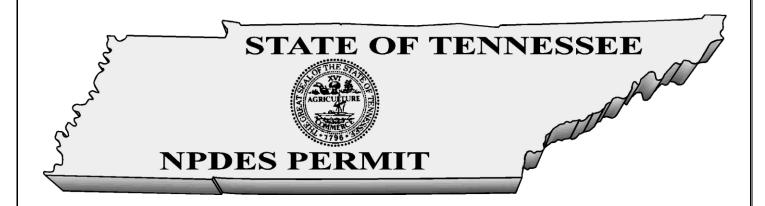
Type or print clearly, using ink.

NPDES Tracking Number: TNR							
County(ies):							
Name of Permittee Requesting Termination of Coverage:							
Title or Position:							
State:	Zip:						
E-mail:							
Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.							
mittee coverage	e).						
official)							
I certify under penalty of law that either: (a) all stormwater 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 stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater 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 stormwater discharges associated with construction activity means that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have been eliminated from the portion of the construction site where the operator had control. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control.							
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.							
Date:							
Tennessee Department of Environment and Conservation							
Attn: Storm Water NOT Processing							
William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor							
Nashville, TN 37243							
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CN-1175 (Rev. 12-14) RDA 2366

6. Construction General Permit





GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER 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, including special requirements as provided in part 5.4 (Discharges into Waters with Unavailable Parameters or Exceptional Tennessee Waters) of this general permit, operators of point source discharges of stormwater associated with construction activities into waters of the State of Tennessee, are authorized to discharge stormwater 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 10 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: **September 30, 2016**

This permit is effective on: October 1, 2016

This permit expires on: September 30, 2021

for Tisha Calabrese Benton

Director

CN-0759 RDA 2366

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1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

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

1.2. Discharges Covered by this Permit

1.2.1. Stormwater discharges associated with construction activities

This permit authorizes point source discharges of stormwater from construction activities that result in soil disturbances of one or more acres. Soil disturbances of less than one acre are required to obtain authorization under this permit if construction activities are part of a larger common plan of development or sale that comprises at least one acre of cumulative land disturbance. Construction activities include clearing, grading, filling and excavating. One or more site operators must maintain coverage under this permit for all portions of a site that have not been permanently stabilized.

Projects 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 stormwater 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 stormwater 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 that are not part of a larger common plan of development or sale to obtain a stormwater permit.

Any discharge of stormwater, or other fluid, to an improved sinkhole or injection well must be authorized by permit or rule as a Class V underground injection well under the provisions of Tennessee Rules, Chapter <u>0400-45-06</u>.

1.2.2. Stormwater discharges associated with construction support activities

This permit also authorizes stormwater discharges from support activities associated with a permitted construction site. Support activities may include concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas and borrow areas. Support activities are authorized provided all of the following conditions are met:

- a) The support activity is 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.
- e) Support activities are identified in the Notice of Intent (NOI) and the Stormwater Pollution Prevention Plan (SWPPP). The appropriate erosion prevention and sediment

controls and measures applicable to the support activity shall be described in a comprehensive SWPPP covering the discharges from the support activity areas.

TDOT projects shall be addressed in the Waste and Borrow Policy. Stormwater 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-stormwater discharges authorized by this permit

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

- a) Dewatering of collected stormwater and ground water.
- b) Waters used to wash dust and soils from vehicles where detergents are not used and detention and/or filtering is provided before the water leaves site. Wash removal of process materials such as oil, asphalt or concrete is not authorized.
- 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 that does not use detergents or other chemicals.
- f) Uncontaminated groundwater or spring water.
- g) Foundation or footing drains where flows are not contaminated with pollutants (e.g., process materials such as solvents, heavy metals, etc.).

All non-stormwater discharges authorized by this permit must be free of sediment and other solids, must not cause erosion of soils, and must not result in sediment impacts to receiving streams.

1.2.4. Other NPDES-permitted discharges

Discharges of stormwater or wastewater authorized by and in compliance with a different NPDES 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 and non-stormwater discharges listed in Section 1.2.3, all discharges covered by this permit shall be composed entirely of stormwater. This permit does not authorize the following discharges:

- a) Post-construction discharges Stormwater discharges associated with permanent stormwater management structures after construction activities have been completed, the site has undergone final stabilization and the coverage under this permit has been terminated.
- b) <u>Discharges mixed with non-stormwater</u> Discharges that are mixed with sources of non-stormwater, other than discharges which are identified in Section 1.2.4 (*Other NPDES-permitted discharges*) and in compliance with Section 3.5.9 (*Pollution prevention measures for non-stormwater discharges*) of this permit.

- c) <u>Discharges covered by another permit</u> Discharges associated with construction activities that have been issued an individual permit in accordance with Subpart 7.12 (*Individual Permit*).
- d) <u>Discharges threatening water quality</u> Discharges from construction sites that the director determines will cause, or has the reasonable potential to cause or contribute to, violations of water quality standards. Where such a determination has been made, the division will notify the discharger in writing that an individual permit application is necessary as described in Subpart 7.12 (*Individual Permit*). 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) <u>Discharges into waters with unavailable parameters</u> Discharges to waters with unavailable parameters that would cause <u>measurable degradation</u> of water quality for the parameter that is unavailable; or that would cause additional loadings of unavailable parameters that are bioaccumulative or that have criteria below method detection levels. Waters with unavailable parameters means any segment of surface waters that has been identified by the division as failing to support its designated classified uses. A discharge that complies with the additional requirements set forth in Subpart 5.4 is not considered to cause <u>measurable degradation</u> of waters with unavailable parameters, unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in Subpart 1.3(d) above and the SWPPP cannot be modified to bring the site into compliance.
- f) <u>Discharges into Outstanding National Resource Waters</u> Discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW) pursuant to Tennessee Rules, Chapter <u>0400-40-03-.06(5)</u>.
- g) <u>Discharges into Exceptional Tennessee Waters</u> Discharges that would cause more than de minimis degradation of water quality for any available parameter in waters designated by TDEC as Exceptional Tennessee Waters. A discharge that complies with the additional requirements set forth in Subpart 5.4 is not considered to cause more than de minimis degradation of available parameters unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in Subpart 1.3(d) above and the SWPPP cannot be modified to bring the site into compliance.
- h) <u>Discharges not protective of aquatic threatened and endangered species, species deemed in need of management or special concern species</u> Discharges or discharge-related activities that are likely to jeopardize the continued existence of listed or proposed threatened or endangered aquatic species, or their critical habitat, under the Endangered Species Act (ESA), or other applicable state law or rule.
 - Discharges or conducting discharge related activities that will cause a prohibited take of federally listed aquatic species (as defined under Section 3 of the ESA and 50 CFR §17.3), unless such take is authorized under Sections 7 or 10 of the ESA.
 - Discharges or conducting discharge-related activities that will cause a prohibited "take" of state listed aquatic species (as defined in the Tennessee Wildlife Resources Commission Proclamation, Endangered or Threatened Aquatic Species, and in the Tennessee Wildlife Resources Commission Proclamation, Wildlife in Need of Management), unless such take is authorized under the provisions of T.C.A. § 70-8-106(e).
- i) <u>Discharges from a new or proposed mining operation</u> Discharges from new or proposed mining operations are not authorized.

- j) <u>Discharges negatively affecting a property on the National Historic Register</u> Discharges that would negatively affect a property that is listed or is eligible for listing in the <u>National Historic Register</u> maintained by the Secretary of Interior.
- k) Discharges into waters with an approved Total Maximum Daily Load Discharges of a pollutant to waters for which there is an EPA-approved or established total maximum daily load (TMDL) for that pollutant, unless the SWPPP incorporates measures or controls consistent with the assumptions and requirements of the TMDL. 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. If an EPA-approved or established TMDL has specified a general wasteload allocation applicable to construction stormwater 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 EPAapproved or established TMDL has not specified a wasteload allocation applicable to construction stormwater discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of the CGP will be assumed to be consistent with the approved TMDL. If the EPA-approved or established TMDL specifically precludes construction stormwater discharges, the operator is not eligible for coverage under the CGP.

1.4. Obtaining Permit Coverage

A complete NOI, SWPPP and application fee are required to obtain coverage under this general permit. Requesting coverage under this permit means that an applicant has examined a copy of this permit and thereby acknowledged the applicant's claim of ability to comply with permit terms and conditions. Upon completing NOI review, the division will:

- a) issue an NOC to the operator identified as the initial site-wide primary permittee on the NOI form (see Subpart 1.5 below *Effective Date of Coverage*),
- b) publish new operators' supplemental NOI information on TDEC's dataviewer.
- c) notify the applicant of needed changes to their NOI submittal (see Section 2.6.3 below *Application completeness*), or
- d) deny coverage under this general permit (see Subpart 7.12 below *Individual Permit*).

1.4.1. Notice of Intent

Operators wishing to obtain coverage under this permit must submit a complete NOI in accordance with Part 2 below, using the NOI form provided in Appendix A of this permit. The division will review NOIs for completeness and accuracy and, when deemed necessary, investigate the proposed project for potential impacts to the waters of the state.

1.4.2. Stormwater Pollution Prevention Plan (SWPPP)

Operators wishing to obtain coverage under this permit must submit a site-specific SWPPP with the NOI. The SWPPP, developed and submitted by the site-wide permittee (typically the owner/developer who applies for coverage prior to project commencement¹), 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 address the total acreage

¹ See Subpart 2.1 on page 7 for a definition of a site-wide permittee.

planned to be disturbed (see definition for "disturbed area" in part 10), including any associated construction support activities (see Section 1.2.2 above). 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.

If the initial SWPPP does not address all activities until final stabilization of the site, an updated SWPPP or addendums to the plan addressing all aspects of current site disturbance must be prepared. An active, updated SWPPP must be in place for all disturbed portions of a site until each portion has been completed and finally stabilized.

Preparation and implementation of the SWPPP may be a cooperative effort with all operators at a site. New operators with design and operational control of their portion of the construction site are expected to adopt, modify, update and implement the comprehensive SWPPP. Primary permittees at the site may develop a SWPPP addressing only their portion of the project, as long as the proposed Best Management Practices (BMPs) are compatible with the comprehensive SWPPP and complying with conditions of this general permit.

Site operators who are building single family residential houses on at-grade lots (see Section 2.2.2 below) and who are submitting an application for coverage under this permit, may complete and submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This SWPPP template is available at http://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1249. Form CN-1249 is not appropriate if significant grading of the lot or lots is necessary.

1.4.3. Permit application fee

The permit application fee should accompany the applicant's NOI form. The fee is based on the total acreage planned to be disturbed (see definition of "disturbed area" in Part 10) by an entire construction project for which the applicant is requesting coverage, including any associated construction support activities (see Section 1.2.2 above). The applicant may present documentation of common areas in the project that will not be subject to disturbance at any time during the life of the project and have these areas excluded from the fee calculation.

The application fees shall be as specified in Tennessee Rules, Chapter <u>0400-40-11</u>. The application will be deemed incomplete until the appropriate application fee is paid in full. Checks for the appropriate fee should be made payable to "Treasurer, State of Tennessee." Electronic payment methods, if made available by the State of Tennessee, are deemed acceptable. The following conditions apply:

- If a project was previously permitted, but permit coverage was terminated (see Section 8.1.1 below Termination process for primary permittees), and subsequent site disturbance or re-development occurs, the new operator must obtain coverage and pay the appropriate fee for the disturbed acreage.
- New primary operators must pay the fee applicable to projects seeking subsequent coverage under an actively covered larger common plan of development or sale.
- Areas not covered by the original application shall be covered under a separate tracking number and a new application fee shall be paid based on the new acreage to be covered.
- Please note that in addition to the application fee, an annual maintenance fee applies per Rule 0400-40-11-.02(12)(i).

1.4.4. Submittal of a documents to local municipalities

Permittees who discharge stormwater through an NPDES-permitted municipal separate storm sewer system (MS4) who are not exempted in section 1.4.5 below (*Permit coverage through Qualifying Local Program*) must submit a copy of the notice of coverage NOC, and at project completion, a copy of the signed NOT to the MS4 upon its request. Permitting status of all permittees covered, or previously covered, under this general permit as well as the most current list of all MS4 permits is available at http://tn.gov/environment/article/tdec-dataviewers.

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 prevention and sediment control MS4 program. A Qualifying Local Program (QLP) is a municipal stormwater program implemented by an MS4 for stormwater discharges associated with construction activity that has been formally approved by the division. More information about Tennessee's QLP program and MS4 participants can be found at: https://www.tn.gov/environment/article/tennessee-qualifying-local-program.

If a construction site is within the jurisdiction of, and has obtained a notice of coverage from, a QLP, the operator is authorized to discharge stormwater associated with construction activity under this general permit without the submittal of an NOI, SWPPP or application fee to the division. Permitting of stormwater runoff from construction sites from federal or state agencies (e.g., Tennessee Department of Transportation and Tennessee Valley Authority) and the local MS4 program itself will remain solely under the authority of TDEC.

The division may require any 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

The NOC is a notice from the division to the initial site-wide primary permittee informing the applicant that the NOI, the SWPPP, and the application fee were received and accepted, and stormwater discharges from a specified area of a construction activity have been approved under this general permit. The initial site-wide primary permittee is authorized to discharge stormwater associated with construction activity as of the effective date listed on the NOC.

For new operators seeking subsequent coverage under an existing tracking number, the division will not issue an NOC. New operators are covered under the permit when their permit record is published on TDEC's dataviewer as "active" and with an effective date.

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. The division reserves the right to deny coverage to artificial entities (e.g., corporations or partnerships, excluding entities not required to register with the Tennessee Secretary of State) that are not properly registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division also reserves the right

to issue permit coverage in the correct legal name of the individual or entity seeking coverage, including each general partner of a general partnership in addition to the general partnership.

If an Aquatic Resource Alteration Permit (ARAP) is required for a site proposed for active construction, the NOC will not be issued until an ARAP application is submitted and deemed complete by the division. The treatment and disposal of wastewater (e.g., sanitary wastewater) generated during and after the construction must be also addressed prior to issuance of the NOC. The NOC may be delayed until adequate wastewater treatment and accompanying permits are issued.

1.5.2. Permit tracking numbers

Construction sites covered under this permit will be assigned permit tracking numbers in the sequence TNR100001, TNR100002, etc. An operator presently permitted under a previous construction general permit shall be granted coverage under this new general permit. Permit tracking numbers assigned under a previous construction general permit will be retained (see section 2.4.1 below). An operator receiving new permit coverage will be assigned a new permit tracking number (see section 2.4.2 below).

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 stormwater 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 (e.g., subsequent builder), or the person who is the current owner of the construction site. This person is considered the primary permittee.
- b) The person has day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions. This person is typically a contractor or a commercial builder hired by the primary permittee, and is considered a secondary permittee.

The site-wide permittee is the first primary permittee to apply for coverage at the site. There may be other primary permittees for a project, but there is only one site-wide permittee. Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. Once covered by a permit, all such operators are to be considered as co-permittees if their involvement in the construction activities affects the same project site, and are held jointly and severally responsible for complying with the permit.

2.2. Construction Site Operators

2.2.1. Owner/Developer

An owner or developer of a project is a primary 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, homebuilder, etc. and may be an individual, a corporate entity, or a governmental entity. An owner's or developer's responsibility to comply with requirements of this permit extends until permit coverage is terminated in accordance with requirements of Part 8 below.

2.2.2. Commercial builders

A commercial builder can be a primary or secondary permittee at a construction site.

A commercial builder who purchases one or more lots from a site-wide permittee for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility); and has design or operational control over construction plans and specifications is a primary permittee for that portion of the site. A commercial builder may also be hired by an end user, such as a lot owner who may not be a permittee. In either case, 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 primary permittee or a lot owner to build a structure. In this case, the commercial builder signs the primary permittee's NOI and SWPPP 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 the activities necessary to ensure compliance with the SWPPP or other permit conditions (e.g., the 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 may be: a general contractor, a grading contractor, an erosion control contractor, a sub-contractor responsible for land disturbing activities or EPSC implementation and maintenance, or a commercial builder hired by the primary permittee. The contractor may need to include in their contract with the party that hired them specific details for the contractor's responsibilities concerning EPSC measures. This includes the ability of the contractor to make EPSC modifications. The contractor should sign the NOI and SWPPP associated with the construction project at which they will be an operator.

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. Permittees with design control

Permittees 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, must:

- a) ensure the project specifications they develop meet the minimum requirements of Part 3 below (stormwater pollution prevention plan - SWPPP) and all other applicable conditions;
- ensure the SWPPP indicates the areas of the project where they have design control and ensure all other permittees implementing and maintaining 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 BMPs (i.e., sediment treatment basin and drainage structures) 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, unless permit coverage has been obtained and responsibility has been taken over by a new primary permittee; and
- d) ensure that all operators on the site have permit coverage, if required, and are complying with the SWPPP.

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 a supplemental NOI is submitted identifying the new operators (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.

2.3.2. Permittees with day-to-day operational control

Permittees with day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions must:

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

Permittees with operational control over only a portion of a larger construction project 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. All permittees must implement their portions of a comprehensive SWPPP.

2.4. NOI Submittal

2.4.1. Existing sites

An operator presently permitted under the 2011 construction general permit shall be granted coverage under this new general permit.² 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 through submission of an updated NOI. If the confirmation is required but not received by the division, coverage under the new general permit will be terminated. If a site with terminated coverage is unstable or if construction continues, a new NOI, SWPPP, and application fee must be submitted.

2.4.2. New sites or New Phases of Existing Sites

Except as provided in Section 2.4.3 below, operators must submit a complete NOI, SWPPP and an application 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 permittee is authorized to discharge stormwater associated with construction activity as of the effective date listed on the NOC. 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 operators

A supplemental NOI should be submitted as soon as practicable before a new operator commences work at a site with existing coverage. The supplemental NOI must reference the project name and tracking number assigned to the primary permittee's NOI.

A new operator working as a residential home builder may submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This form may be found at http://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1249 (see Section 1.4.2 above).

The NOI may not need to be submitted immediately upon assuming operational control if the portion of the site controlled by the new operator is inactive and all of the previously disturbed areas are stabilized. However, the division should be notified if a new operator obtains operational control at a site, but commencement of construction under the direction of the operator at the site is going to be delayed.

If the primary permittee's company name has changed (but not the site ownership or authorized signators), an updated NOI should be submitted to the division within 30 days of the name change, along with documentation that the name change has been properly registered with the Tennessee Secretary of State, Division of Business Services. If the new operator agrees to comply

² If the existing permittee is an artificial person (e.g., a partnership or corporation, excluding entities not required to register with the Tennessee Secretary of State), the division reserves the right to deny coverage under this new general permit if the permittee is not registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division further reserves the right to convert permit coverage to the correct legal name of the permittee and to name each general partner of a general partnership in addition to the general partnership.

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.

If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (e.g., a lending institution) must obtain permit coverage if the property is inactive, but is not stabilized sufficiently. If the property is sufficiently stabilized permit coverage may not be necessary, unless and until construction activity at the site resumes.

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 7.1.2 below.

2.5. Who Must Sign the NOI?

All construction site operators as defined in Subpart 2.2 above (*Construction Site Operators*) must sign the NOI form. Signatory requirements for a NOI are described in Section 7.7.1 below. All signatures must be original. An NOI that does not bear an original signature will be deemed incomplete.

2.6. NOI Form

2.6.1. Contents of the NOI form

The NOI for construction projects shall be submitted on the form provided in Appendix A of this permit. 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.

Owners, developers and contractors that meet the definition of the operator in Subpart 2.2 above (*Construction Site Operators*) shall apply for permit coverage on the same NOI, if possible. 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 primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The SWPPP shall be prepared in accordance with Part 3 below, and must be submitted with the NOI unless the NOI is only being submitted to add a secondary permittee to an existing coverage.

2.6.2. Construction site map

An excerpt (8 ½" by 11" or 11" by 17") from the appropriate 7.5 minute <u>United States Geological Survey</u> (USGS) topographic map, a city map, or a county map with the proposed construction site centered, must be included with the NOI. The entire proposed construction area must be outlined in red on the map. The total acreage to be disturbed should be included on the map. All outfalls discharging runoff from the property should be identified. Streams receiving the discharge and storm sewer systems conveying the discharge from outfalls should be clearly identified and marked on the map. NOIs for <u>linear projects</u> must specify the location of each end of the construction area and all areas to be disturbed. Commercial builders that develop separate

SWPPPs that cover only their portion of the project shall also submit a site or plat map that clearly indicates the lots for which they are applying for permit coverage, and the location of EPSCs that will be used at each lot (see Section 1.4.2 above).

2.6.3. <u>Application completeness</u>

The division recommends that all applicants use the Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist (see Appendix D) to check the completeness of their submittal.

Based on a review of the NOI and other available information, the division shall, within 30 days:

- a) issue an NOC to the initial site-wide primary operator for the construction site (see Subpart 1.5 above),
- b) publish new operators' supplemental NOI information on TDEC's dataviewer,
- c) prepare a deficiency letter stating additional information must be provided before the NOC can be issued, or
- d) deny coverage under this general permit and require the discharger to obtain coverage under an individual NPDES permit (see Subpart 7.12 below).

2.7. Where to Submit the NOI, SWPPP and Application Fee

The applicant shall submit the NOI, SWPPP, and application fee to the appropriate TDEC Environmental Field Office (EFO) for the county where the construction activity is located and where stormwater discharges enters waters of the state. If a site straddles a county line of counties that are in different EFO service areas, the operators shall send the NOI and the application fee 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 (e.g., TDOT, TVA and the local MS4 programs).

2.8. List of the TDEC Environmental Field Offices (EFOs) and Corresponding Counties

EFO Name	List of Counties
<u>Chattanooga</u>	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie
<u>Columbia</u>	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury,
	Moore, Perry, Wayne
<u>Cookeville</u>	Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon, Overton, Pickett,
	Putnam, Smith, Van Buren, Warren, White
<u>Jackson</u>	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
<u>Memphis</u>	Fayette, Shelby, Tipton
<u>Nashville</u>	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. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

3.1. The General Purpose of the SWPPP

A SWPPP must be prepared and submitted along with the NOI as required in Section 1.4.2 above. The primary 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 8 below.

A site-specific SWPPP must be developed for each construction project or site covered by this permit. The design, inspection and maintenance of Best Management Practices (BMPs) described in the SWPPP must be prepared in accordance with good engineering practices. At a minimum, BMPs shall be consistent with the requirements and recommendations contained in the current edition of the Tennessee Erosion and Sediment Control Handbook (the handbook). The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation and maintenance of BMPs. This permit allows the use of innovative or alternative BMPs, whose performance has been documented to be equivalent or superior to conventional BMPs as certified by the SWPPP designer.

Once a definable area has been finally stabilized, the permittee may identify this area on the SWPPP. 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 BMPs a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is expected. Primary permittees at a site may 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 stormwater 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 primary permittee must assign responsibilities to secondary permittees 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 shall be prepared by an individual who has a working knowledge of erosion prevention and sediment controls, such as (but not limited to) a Certified Professional in Erosion and Sediment Control (CPESC) or a person that successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

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 shall be prepared by a licensed professional engineer or landscape architect and

stamped and certified in accordance with the <u>Tennessee Code Annotated</u>, Title 62, Chapter 2 (see Part 10 below) and the rules of the <u>Tennessee Board of Architectural and Engineering Examiners</u>. Engineering design of sediment basins and other sediment controls must be included in <u>SWPPPs</u> for construction sites involving drainage to an outfall totaling 10 or more acres (see Subsection 3.5.3.3 below) or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.1 below).

3.1.2. Site assessment

Quality assurance of erosion prevention and sediment controls (EPSCs) shall be done by performing site assessments. The site assessment shall be conducted at each outfall draining 10 or more acres (see Subsection 3.5.3.3 below) or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.1 below). Site assessments shall cover the entire disturbed area and occur within 30 days of construction commencing at each portion of the site that drains the qualifying acreage. The site assessment shall be performed by individuals with one or more of the following qualifications:

- a) A licensed professional engineer or landscape architect.
- b) A Certified Professional in Erosion and Sediment Control (CPESC).
- c) A person who has successfully completed the "<u>Level II Design Principles for Erosion</u> Prevention and Sediment Control for Construction Sites" course.

At a minimum, site assessments should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. If structural BMPs (or equivalent EPSC measures) are not constructed or construction is in progress at the time of the site assessment, a follow-up monthly assessment(s) are required until the BMPs are constructed per the SWPPP. The site assessment should be performed with the inspector (as defined in Part 10 below) and should include a review and update (if applicable) of the SWPPP. Modifications 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 shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see Part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners.

The site assessment findings shall be documented and the documentation kept with the field SWPPP at the site. At a minimum, the documentation shall include information required in the inspection form provided in Appendix C of this permit, an assessment of any failing or unmaintained EPSCs, causes of failure and any action necessary to bring the site into compliance with this permit. The documented quality assurance site assessments shall also indicate if all EPSCs have been installed as designed in the submitted SWPPP and EPSC plans; and, if not, measures that need to be taken so those EPSCs meet the design specifications in the field SWPPP and EPSC plans. The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

"I certify under penalty of law that this report and all attachments are, 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

The site assessment can take the place of one of the twice weekly inspections required in Subsection 3.5.8.2 below if the entire site is inspected during the assessment.

The division may require additional site assessments to be performed if site inspections by division personnel reveal site conditions that have potential of causing pollution to waters of the state.

3.2. SWPPP Preparation and Compliance

3.2.1. Existing sites

Operators of an existing site presently permitted under the division's 2011 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. The permittee shall make the updated SWPPP available for the division's review upon request.

3.2.2. New sites or New Phases of Existing Sites

For construction stormwater discharges not authorized under an NPDES permit as of the effective date of this permit, a SWPPP that meets the requirements of Subpart 3.5 below of this permit shall be prepared and submitted along with the NOI and an appropriate fee for coverage under this permit.

3.3. Signature Requirements, SWPPP Review and Making Plans Available

3.3.1. <u>Signature requirements</u>

The SWPPP shall be signed by the operators in accordance with Subpart 7.7 below, and if applicable, certified according to requirements in Section 3.1.1 above. All signatures must be original. Electronic signatures are deemed equivalent to original signatures. A SWPPP that does not bear an original signature or an electronic signature will be deemed incomplete.

3.3.2. SWPPP review

The permittee shall make updated plans and inspection reports available upon request to the director; the local agency approving erosion prevention and sediment control plans, grading plans, land disturbance plans or stormwater management plans; or the operator of an MS4.

3.3.3. Making plans available

A copy of the current version of the SWPPP shall be retained on-site at the location which generates the stormwater discharge in accordance with Part 6 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 off-site, reasonable local access to the plan, during normal working hours, must be provided.

3.4. Keeping Plans Current

3.4.1. SWPPP modifications

The permittee must modify and update the SWPPP if any of the following conditions apply:

- a) Whenever there is a change in the scope of the project that 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. If applicable, the SWPPP must be modified or updated whenever there is a change in chemical treatment methods, including the use of different treatment chemical, different dosage or application rate or different area of application.
- b) Whenever inspections or investigations by site operators; or 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, or is otherwise not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity. Where local, state or federal officials determine that the SWPPP is ineffective in eliminating or significantly minimizing pollutant sources, a copy of any correspondence to that effect must be retained in the SWPPP.
- c) Whenever any new operator (typically a secondary permittee) who will implement a measure of the SWPPP must be identified (see Subparts 2.1 and 2.2 above for further description of which operators must be identified).
- d) Whenever it is necessary to include measures intended to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection see Subpart 1.3 above). Amendments to the SWPPP may be reviewed by the division, a local MS4, the EPA, or an authorized regulatory agency.
- e) Whenever a TMDL is developed for the receiving waters for a pollutant of concern (e.g., siltation and habitat alterations due to in-channel erosion).

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: a site description; a description of stormwater runoff controls, erosion prevention and sediment control measures, stormwater management measures, and a description of any other items needing control; approved local government sediment and erosion control requirements; maintenance and inspection requirements; pollution prevention measures for non-stormwater discharges and documentation of permit eligibility related to Total Maximum Daily Loads (TMDL). The SWPPP must:

- a) identify all potential sources of pollutants likely to affect the quality of stormwater discharges from the construction site,
- b) describe practices to be used to reduce pollutants in stormwater discharges from the construction site, and
- c) assure compliance with the terms and conditions of this permit.

3.5.1. Site description

Each SWPPP 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 activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation).
- 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 percent slope and the variation in percent slope found on the site. The estimate should be on a basis of a drainage area serving each outfall, rather than an entire project.
- e) An estimate of drainage area (acres) serving each outfall.
- f) Data describing the soil, how the soil type will dictate the needed control measures and how the soil may affect the expected quality of runoff from the site. The data may be referenced or summarized.
- g) An estimate of the runoff coefficient of the site after construction activities are completed and a description of how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream. The estimate of the percentage of impervious area before and after construction must also be provided.
- h) An erosion prevention and sediment control plan with the proposed construction area clearly outlined. The plan should indicate the boundaries of the permitted area, drainage patterns, 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 and sinkholes, and identification on the erosion control plan of outfall points intended for coverage. The erosion control plan must meet requirements stated in Section 3.5.2 below.
- i) A description of any discharge associated with industrial activity other than construction stormwater that originates on site and the location of that activity and its permit number.
- j) 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 <u>Aquatic Resources Alteration Permit</u> (ARAP) or Section 401 Certification issued for the alteration.
- k) The name of the receiving waters and identification if those receiving waters have unavailable parameters for siltation and habitat alterations due to in-channel erosion or are Exceptional Tennessee Waters.
- 1) If applicable, clearly identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project.
- m) A description of lot-level EPSC measures to be implemented when a lot, or lots, at a subdivided construction project is sold to a new owner prior to the completion of construction. Subdivided construction projects may include residential or commercial subdivisions and industrial parks. The new operator must obtain coverage under this permit once the property is sold.
- n) A description of the construction phasing for projects of more than 50 acres (see Subsection 3.5.3.1 below).
- o) A description of the protections (e.g., caution fencing or stream side buffer zones) employed to limit the disturbance if only a portion of the total acreage of the construction site is to be disturbed. The limits of disturbance shall be clearly identified in the SWPPP and the areas to be undisturbed clearly marked in the field before construction activities begin.

3.5.2. <u>Description of stormwater runoff controls</u>

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 activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation). The SWPPP must also describe:

- 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 EPSC plans showing the approximate location of each control measure and a description of when the measure will be implemented during the construction process (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The different stages of construction and the EPSC measures that will be utilized during each stage should be depicted on multiple plan sheets as described below. Half sheets are acceptable. One sheet showing the combined EPSCs that will be used during the life of a multi-phase project will not be considered complete.

At least two separate EPSC plan sheets shall be developed for site disturbances less than five acres. The first plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance, or grading, stage. The second plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the final grading stage.

At least three separate EPSC plan sheets shall be developed for site disturbances of five or more acres. In addition to the two plan sheets described above, a third plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during any interim grading stages.

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 5.3.2 below.

3.5.3. Erosion prevention and sediment control

3.5.3.1. General criteria and requirements

- a) The construction-phase erosion prevention controls shall be designed to eliminate (or minimize if complete elimination is not possible) the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site to the maximum extent practicable.
- b) The design, inspection and maintenance of Best Management Practices (BMPs) described in the SWPPP must be prepared in accordance with good engineering practices and, at a minimum, shall be consistent with the requirements and recommendations contained in the current edition of the Tennessee Erosion and Sediment Control Handbook. In addition, all control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications, where applicable. All control measures selected must be able to slow runoff so that rill and gully formation is prevented. When steep slopes or fine particle soils are present at the site, additional

physical or chemical treatment of stormwater runoff may be required. Proposed physical or chemical treatment must be researched and applied according to the manufacturer's guidelines and fully described in the SWPPP. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control.

Chemicals used for treating stormwater runoff must be shown to be non-toxic to sensitive aquatic species through a 48-hour or 96-hour acute toxicity test as reported in the product's Material Safety Data Sheets. The chemical feed rate shall be such that the effluent concentration of the product is lower than the LC50 toxicity value for sensitive aquatic species as reported in the products Material Safety Data Sheets. Calculations used to determine the chemical feed rate so that runoff or effluent is not toxic to sensitive aquatic species shall also be included in the SWPPP. Chemicals used for treating stormwater runoff shall be applied in accordance with manufacturer specifications and securely stored on-site in the contractor's staging and storage area if not stored off-site or provided by others. Chemicals shall not be applied directly to any stream.

- c) The timing of the planting of the vegetation cover must be discussed in the SWPPP if permanent or temporary vegetation is to be used as a control measure. Planting cover vegetation during winter months or dry months should be avoided.
- d) If sediment escapes the permitted area, off-site accumulations that have not reached a stream must be removed at a frequency sufficient to minimize off-site impacts (e.g., sediment that has escaped a construction site and collected in a street must be removed so that it does not subsequently wash into storm sewers and streams during the next rain or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation or restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning the removal of sediment on adjoining property must be settled by the permittee and the adjoining landowner.
- e) Sediment should be removed from sediment traps, silt fences, sedimentation basins and other sediment controls as recommended in the <u>Tennessee Erosion and Sediment Control Handbook</u>. Sediment must be removed when design capacity has been reduced by 50%.
- f) Litter, construction debris and construction chemicals exposed to stormwater shall be picked up prior to storm events or before being carried off of the site by wind so that they do not become a pollutant source for stormwater discharges. Erosion prevention and sediment control materials (e.g., silt fence) should be removed or otherwise prevented from becoming a pollutant source for stormwater discharges.
- g) Erodible material storage areas (e.g., overburden and stockpiles of soil) and borrow pits that are used primarily for the permitted project and are contiguous to the site are considered a part of the site and shall be identified on the NOI, addressed in the SWPPP and included in the fee calculation. TDOT projects shall be addressed in the Waste and Borrow Manual per the Statewide Stormwater Management Plan (SSWMP).
- h) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 14 days prior to grading or earth moving activities unless the area is subsequently temporarily or permanently stabilized.
- i) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site should be preserved to the maximum extent practicable.
- j) Construction must be sequenced to minimize the exposure time of graded or denuded areas.

k) Construction phasing is recommended on all projects regardless of size as an effective practice for minimizing erosion and limiting sedimentation. Construction must be phased to keep the total disturbed area less than 50 acres at any one time. Areas of the completed phase must be stabilized within 14 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. This includes off-site borrow or disposal areas that meet the conditions of Section 1.2.2 above.

The 50 acre limitation does not apply to linear construction projects (e.g., roadway, pipeline and other infrastructure construction activities) if the following conditions are met:

- i. Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance have separate receiving waterbodies.
- ii. Where contiguous disturbances amount to greater than 50 acres, but no single waterbody is receiving runoff from more than 50 disturbed acres.
- iii. With the department's written concurrence, where more than 50 acres of disturbance is to occur and where a single waterbody will receive runoff from more than 50 acres.
- iv. Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance are more than 5 miles apart.

In order for a linear project to take advantage of the 50 acre rule exemption outlined in this paragraph, the contractor shall conduct monthly site assessments as described in Section 3.1.2 above until the site is permanently stabilized.

- EPSC 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 the 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) Off-site vehicle tracking of sediment and the generation of dust shall be minimized. A stabilized construction access shall be described and implemented, as needed, to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- o) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily precipitation.

3.5.3.2. Stabilization practices

The SWPPP shall include a description of temporary and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved when possible Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees and the preservation of mature vegetation.. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization control measures or EPSC measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resources 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 must be completed no later than 14 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.
- b) Where construction activity on a portion of the site is temporarily ceased, but soil disturbing activities will resume within 14 days.

Steep slopes shall be stabilized no later than seven days after construction activity on the slope has temporarily or permanently ceased.

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 Resources Alteration Permit (ARAP).

EPSC measures must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. In addition, EPSC measures shall be designed to minimize erosion and maximize sediment removal resulting from a 2-year, 24-hour storm (the design storm – see part 10 below: "2-year and 5-year design storm depths and intensities"), as a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. Chemical treatment of the stormwater

runoff may be necessary to minimize the amount of sediment being discharged when clay and other fine particle soils or highly erodible soils are present at the construction site.

For an on-site outfall that receives drainage from 10 or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 2 year, 24 hour storm and runoff from each acre drained, or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook, shall be provided until final stabilization of the site. A drainage area of 10 or more acres includes disturbed and undisturbed portions of the site and areas adjacent to the site, all draining through the common outfall. Where an equivalent control

³ Two principal objectives in sediment basin design should be recognized: (a) lower wet and dry sediment treatment storage with a permanent pool, with a total minimum volume below the principal spillway riser crest of 134 yd³/acre (b) upper hydrologic storage (i.e., 2-yr or 5-yr and 25-yr, 24-hr storms) for designing hydraulic controls such as principal and emergency spillways.

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.

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, filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, 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. Stormwater management

The SWPPP shall include a description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur <u>after</u> construction operations have been completed, including a brief description of applicable State or local erosion and sediment control requirements.

For projects discharging to waters with unavailable parameters for siltation and habitat alterations 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 the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge. The SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the stormwater runoff to pre-development levels.

This permit only addresses the installation of stormwater 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 operation and maintenance of stormwater management measures prior to final stabilization of the site and permit coverage being terminated. Permittees are not responsible for maintenance after permitted stormwater discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff voluntarily, if not required by local building regulations or local MS4 program requirements, to minimize in-stream channel erosion in the receiving stream.

Construction stormwater runoff management practices may include: stormwater detention structures, including ponds with a permanent pool; stormwater 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 the receiving stream so that the natural physical and biological characteristics and functions of the stream are maintained and protected (i.e.,, there should be 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 velocity dissipation devices to control pollution where flows exceed pre-development levels. The Tennessee Erosion and Sediment Control Handbook provides measures that can be incorporated into the design or implemented on site to decrease erosive velocities. An Aquatic

Resources Alteration Permit (ARAP) may be required if such velocity dissipation devices installed would alter the receiving stream or its banks.

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 <u>Aquatic Resources Alteration Permit</u> (ARAP) (see Part 9 below).
- b) The SWPPP shall identify and provide the necessary EPSC measures for the installation of any waste disposal system, sanitary sewer or septic system. Permittees must also comply with applicable state and local waste disposal, sanitary sewer or septic system regulations as necessary.
- c) The SWPPP shall include a description of construction and waste materials expected to be stored on-site. The SWPPP shall also include a description of controls used to reduce pollution from materials stored on site. Controls may include storage practices to minimize exposure of the materials to stormwater or spill prevention and response.
- d) A description of stormwater sources from areas other than construction and a description of controls and measures that will be implemented at those sites.
- e) A description of measures necessary to prevent "taking" of legally protected state or federal listed threatened or endangered aquatic fauna and 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 must comply with any additional erosion prevention, sediment control and stormwater management measures required by a local municipality or permitted MS4 program.

3.5.7. Maintenance

The SWPPP shall describe procedures to ensure that vegetation, erosion prevention and sediment control measures, buffer zones and other protective measures 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. <u>Inspections</u>

3.5.8.1. Inspector training and certification

Twice weekly inspections can be performed by:

- a) a person with a valid certification from the "<u>Fundamentals of Erosion Prevention and</u> Sediment Control Level I" course,
- b) a licensed professional engineer or landscape architect,
- c) a Certified Professional in Erosion an Sediment Control (CPESC), or
- d) a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

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 portions of construction sites have been temporarily stabilized, inspections only have to be conducted once per month until construction activity resumes. Inspection 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 change the inspection frequency 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). Should the division discover that monthly inspections of the site are not appropriate due to insufficient stabilization measures or otherwise, twice weekly inspections shall resume. The division may inspect the site to confirm or deny the notification to conduct monthly inspections.
- b) Qualified personnel, as defined in Subsection 3.5.8.1 above (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 site's drainage system. EPSC measures shall be observed to ensure that they are operating correctly.
- d) Outfall points shall be inspected to determine whether EPSC measures are effectively preventing 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, modified or repaired as necessary, before the next rain event; but in no case more than seven 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 and pollution prevention measures identified in the SWPPP in accordance with Section 3.5.2 above shall be revised as appropriate, but in no case later than seven 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) All inspections shall be documented on the Construction Stormwater Inspection Certification form provided in Appendix C of this permit for all construction sites. An alternative inspection form may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. The form must contain the printed name and signature of the inspector and the certification must be executed by a person who meets the signatory requirements of Section 7.7.2 below. Inspection documentation will be maintained on-site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request. If the division requests the Construction Stormwater Inspection Certification form to be submitted, a copy of the signed original must be submitted.

- h) Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records, or other documentation; or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.
- i) Subsequent primary permittees who have obtained coverage under this permit should conduct twice weekly inspections, unless their portions of the site have been temporarily stabilized, runoff is unlikely due to winter conditions or due to extreme drought as stated in paragraph a) above. The primary permittee (such as a developer) is no longer required to inspect portions of the site that are covered by a subsequent primary permittee (such as a home builder).

3.5.9. Pollution prevention measures for non-stormwater discharges

The SWPPP must identify the source of any non-stormwater discharge listed in Section 1.2.3 above if it is to be combined with stormwater discharges associated with construction activity. The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater components of the discharge. Any non-stormwater must be discharged through stable discharge structures. Estimated volume of the non-stormwater components of the discharge must be included in the design of all impacted control measures.

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) whether the discharge is identified, either specifically or generally, in an approved TMDL and any associated wasteload allocations, site-specific requirements and assumptions identified for the construction stormwater discharge;
- b) summaries of consultations with the division on consistency of SWPPP conditions with the approved TMDL, and
- c) measures taken to ensure that the discharge of TMDL identified 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 construction stormwater discharge.

4. CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES

4.1. Non-Numeric Effluent Limitations

Any point source authorized by this general permit must achieve, at a minimum, the effluent limitations representing the degree of effluent reduction attainable by application of best practicable control technology (BPT) currently available and is described in Sections 4.1.1 through 4.1.7 below.

4.1.1. Erosion prevention and sediment controls

Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

- 1.) Control stormwater volume and velocity to minimize soil erosion in order to minimize pollutant discharges;
- 2.) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
- 3.) Minimize the amount of soil exposed during construction activity;
- 4.) Minimize the disturbance of steep slopes;
- 5.) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
- 6.) Provide and maintain natural buffers as described in Section 4.1.2 below, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
- 7.) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
- 8.) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

4.1.2. Water quality riparian buffer zone requirements

Water quality riparian buffer zone requirements in this section apply to all streams adjacent to construction sites except for streams with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.2 below). A 30-foot natural water quality riparian buffer adjacent to all streams at a construction site shall be preserved, to the maximum extent practicable, during construction activities. The water quality riparian buffer is required to protect waters of the state that are not wet weather conveyances (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using Tennessee's standard operating procedures for hydrologic determinations set forth in Rule 0400-40-03-.05(9). Because of heavy sediment load associated with construction site runoff, water quality riparian buffers are not primary sediment control measures and should not be relied on as such. However, the primary purpose of water quality riparian buffers is additional pollutant removal. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, to improve its effectiveness in protecting waters of the state.

The water quality riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 30-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 15 feet at any measured location. If the construction site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

⁴ If obtaining permit coverage for the first time following the effective date of this permit, 15-foot buffers are also required for any wet weather conveyance identified as waters of the United States by the U.S. Army Corps of Engineers or the Environmental Protection Agency.

Every attempt should be made for construction activities to not take place within the water quality riparian buffer zone and for existing forested areas to be preserved. Where it is not practicable to maintain a full water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used at a construction site. Equivalent BMPs shall be designed to be as effective in protecting the receiving stream from the impacts of stormwater runoff as a natural water quality riparian buffer. 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 may include sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure.

This requirement does not apply to any valid <u>Aquatic Resources Alteration Permit</u> (ARAP), or equivalent permits issued by federal authorities. Additional <u>buffer zone</u> requirements may be established by the local <u>MS4</u> program.

4.1.2.1. Water quality riparian buffer zone exemption based on existing uses

Water quality riparian buffer zones as described in Section 4.1.2 above shall not be required in portions of the buffer where certain land uses exist and are to remain in place according to the following:

- a) A use shall be considered existing if it was present within the buffer zone as of the date of the Notice of Intent for coverage under the CGP. Existing uses may include buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the buffer zone that contains the footprint of the existing land use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the buffer zone.
- b) If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

4.1.2.2. Pre-approved sites

Construction activity at sites that were pre-approved prior to February 1, 2010, is exempt from the buffer requirements of Section 4.1.2 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 written and dated approval by the local, state or federal agency with authority to approve such design drawings for construction.

4.1.3. Soil stabilization

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as, properly anchored mulch, soil binders or matting must be employed.

4.1.4. <u>Dewatering</u>

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls may include weir tanks, dewatering tanks, gravity bag filters, sand media particulate filters, pressurized bag filters, cartridge filters or other control units providing the level of treatment necessary to comply with permit requirements.

4.1.5. Pollution prevention measures

The permittee must design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- a) minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- b) minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- c) minimize the discharge of pollutants from spills and leaks, and implement chemical spill and leak prevention and response procedures.

Soil analysis shall be performed prior to the application of fertilizer to any portion of the site. Soil analysis shall include parameters included in the Basic Test by the UT Agriculture Extension for developing and maintaining fertilizer programs (e.g., soil pH, buffer value, phosphorus, potassium, calcium, magnesium). Soil samples should be representative of the area for which fertilizer will be applied. Sample type should be composite and should be collected in accordance with the guidance provided in the University of Tennessee Extension "Soil Testing" brochure PB1061, available at: http://utextension.tennessee.edu/publications/Documents/PB1061.pdf. Soil analysis results shall be used to determine correct fertilizer application rates to prevent the overapplication of fertilizer to the site. Documentation of required soil analysis be maintained onsite with the SWPPP.

4.1.6. Prohibited discharges

The following discharges are prohibited:

- a) Wastewater from washout of concrete, unless managed by an appropriate control.
- b) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
- c) Fuels, oils or other potential pollutants used in vehicle and equipment operation and maintenance.
- d) Soaps or solvents used in vehicle and equipment washing.

4.1.7. Surface outlets

Discharges from basins and impoundments shall utilize outlet structures that only withdraw water from near the surface of the basin or impoundment, unless infeasible.

5. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

5.1. Releases in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharges from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of <u>40 CFR 117</u> and <u>40 CFR 302</u>. Where a release containing a hazardous substance in an amount equal to or in excess of a reportable quantity established under either <u>40 CFR 117</u> or <u>40 CFR 302</u> occurs during a 24 hour period:

- a) the permittee is required to notify the National Response Center (NRC) (800-424-8802), the Tennessee Emergency Management Agency (emergencies: 800-262-3300; non-emergencies: 800-262-3400) and the local emergency planning office (where applicable) 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) in addition to any follow up notifications required by federal law, 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 updated 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. This can be accomplished by including a copy of a written description of the release as described in the paragraph b) above. 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.

5.2. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill.

5.3. Discharge Compliance with State Water Quality Standards

5.3.1. Violation of water quality standards

This permit does not authorize stormwater or other discharges that would cause or contribute to a violation of a state water quality standard (Tennessee Rules, Chapters <u>0400-40-03</u>, <u>0400-40-04</u>). 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 division will notify the operator of such violations. 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.

5.3.2. 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 Tennessee Rules, Chapter 0400-40-03-.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 impair the usefulness of waters of the state for any of the uses designated for that water body by Tennessee Rules, Chapter 0400-40-04. Construction activity carried out in the manner required by this permit shall be considered in compliance with the Tennessee Rules, Chapter 0400-40-03-.03.
- b) There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge.
- c) The stormwater discharge must not cause an objectionable color contrast in the receiving stream.
- d) The stormwater 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.

5.4. Discharges into Waters with Unavailable Parameters or Exceptional Tennessee Waters

5.4.1. SWPPP/BMP requirements

Discharges that would cause <u>measurable degradation</u> of waters with unavailable parameters or that would cause more than de minimis degradation of Exceptional Tennessee 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 with unavailable parameters for siltation and habitat alterations due to in-channel erosion (or discharges upstream of such waters and because of the proximity to the segment with unavailable parameters and the nature of the discharge is likely to contribute sediment in amounts measurable in the waters with unavailable parameters) and for discharges to Exceptional Tennessee Waters (or discharges upstream of such waters and because of the proximity to the exceptional segment and the nature of the discharge is likely to cause more than de minimis degradation in the exceptional segment):

- a) The SWPPP must certify that EPSC measures used at the site are designed to control stormwater runoff generated by a 5-year, 24-hour storm event (the design storm see Part 10 below: "2-year and 5-year design storm depths and intensities"), at a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. Additional physical or chemical treatment of stormwater runoff, such as use of treatment chemicals, may be necessary to minimize the amount of sediment being discharged when clay and other fine particle soils are found on sites.
- b) The SWPPP must be prepared by individuals with one or more of the following qualifications:

- A licensed professional engineer or landscape architect.
- A Certified Professional in Erosion and Sediment Control (CPESC).
- A person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.
- c) A copy of the certification or training record for inspector certification should be included with the field SWPPP.
- d) 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.
- e) The permittee must certify on the form provided in Appendix C of this permit whether or not all planned and designed EPSC measures are installed and in working order. The form must contain the printed name and signature of the inspector and the certification must be executed by a person who meets the signatory requirements of Section 7.7.2 below. The record of inspections must be kept at the construction site with a copy of the SWPPP. For record retention requirements, see Part 6 below.
- f) If the division finds that an operator is contributing to the impairment of a receiving stream despite complying with the SWPPP, The operator will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The operator may update the SWPPP and implement the necessary changes designed to eliminate further impairment of the receiving stream. If the permittee does not implement the SWPPP changes within seven days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit (see Subpart 7.12 below). To obtain the individual permit, the operator must file an individual permit application (U.S. EPA NPDES Forms 1 and 2F). The project must be stabilized immediately and remain stable until the SWPPP is updated and the individual permit is issued. Only discharges from earth disturbing activities necessary for stabilization are authorized to continue until the individual permit is issued.
- g) For an on-site outfall in a drainage area totaling five or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 5 year, 24 hour storm and runoff from each acre drained; or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook, shall be provided until final stabilization of the site. The drainage area includes both disturbed and undisturbed portions of the site and areas adjacent to the site, all draining through a common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified in the SWPPP narrative. 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 when sediment accumulation has reduced the wet storage volume by 50%. In a case that sediment marker is damaged by the volume of water or sediment, a best professional judgement should be used in evaluating sediment basin capacity.
- h) For an on-site outfall in a drainage area totaling 3.5 4.9 acres, a minimum sediment trap volume that will provide treatment for a calculated volume of runoff from a 5-year, 24-hour storm and runoff from each acre drained, is recommended until final stabilization of the site. A drainage area of 3.5 4.9 acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment trap. Diverted runoff can be omitted from the volume calculation. Sediment

- storage expected from the disturbed areas must be included and a marker installed signifying when sediment accumulation has reduced the wet storage volume by 50%.
- i) 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.

5.4.2. Water quality riparian buffer zone requirements

Sites that contain, or are adjacent to, receiving waters with unavailable parameters or Exceptional Tennessee Waters shall preserve a 60-foot natural water quality riparian buffer zone adjacent to the receiving stream. The buffer zone shall be preserved to the maximum extent practicable during construction activities at the site. The water quality riparian buffer is required to protect waters of the state, as identified using Tennessee's standard operating procedures for hydrologic determinations set forth in Rule 0400-40-03-.05(9), located within, or immediately adjacent to, the boundaries of the project. Because of heavy sediment load associated with construction site runoff, water quality riparian buffers are not primary sediment control measures and should not be relied on as such. The primary purpose of water quality riparian buffers is additional pollutant removal. Stormwater discharges must enter the water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow. Rehabilitation and enhancement of a natural water quality riparian buffer zone is allowed, if necessary, to improve its effectiveness in protecting waters of the state.

The natural water quality riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 60-foot criterion for the width of the buffer can be established on an average width basis at a project, as long as the minimum width of the buffer is more than 30 feet at any measured location. If the construction site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

Every attempt should be made for construction activities not to take place within the water quality riparian buffer zone and for existing forested areas to be preserved. Where it is not practicable to maintain a full water quality riparian buffer, or if the construction site is located in an MS4 jurisdiction and would qualify for a smaller permanent water quality riparian buffer due to the size of the drainage area, then BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Equivalent BMPs shall be designed to be as effective in protecting the receiving stream from the impacts of stormwater runoff as a natural water quality riparian buffer 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 may include: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure.

This requirement does not apply to an area that is being altered under the authorization of a valid <u>Aquatic Resources Alteration Permit</u> (ARAP), or equivalent permits issued by federal authorities. Additional natural <u>buffer zone</u> requirements may be established by the local <u>MS4</u> program.

⁵ If obtaining permit coverage for the first time following the effective date of this permit, 15-foot buffers are also required for any wet weather conveyance identified as waters of the United States by the U.S. Army Corps of Engineers or the Environmental Protection Agency.

5.4.2.1. Water quality riparian buffer zone exemption based on existing uses

Water quality riparian buffer zones as described in Section 5.4.2 above shall not be required in portions of the buffer where certain land uses exist and are to remain in place according to the following:

- a) A use shall be considered existing if it was present within the buffer zone as of the date of the Notice of Intent for coverage under the CGP. Existing uses may include buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the buffer zone that contains the footprint of the existing land use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the buffer zone.
- b) If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

5.4.3. <u>Pre-approved sites</u>

Construction activity at sites that have been pre-approved before February 1, 2010, are exempt from the buffer requirements of Section 5.4.2 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.

6. RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS

6.1. Documents

The permittee shall retain copies of SWPPPs, reports required by this permit, records of all data used to complete the NOI and the NOT for a period of at least three years from the date the NOT is submitted. This period may be extended by written request of the director.

6.2. Accessibility and Retention of Records

The permittee shall retain a copy of the SWPPP and 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 SWPPP 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. The permittee shall maintain a copy of all records for a period of three years once coverage is terminated.

6.2.1. Posting information at the construction site

The initial site-wide 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 NOC with the NPDES permit tracking number for the construction project.

- b) A name or company name; E-mail address (if available); telephone number and address of the project site owner/operator or a local contact person.
- c) A brief description of the project.
- d) The location of the SWPPP (see Section 3.3.3 above).

The notice must be maintained in a legible condition. The notice shall be posted in a local public building if posting this information near a main entrance is infeasible due to safety concerns or not accessible to the public. If the construction project is a linear construction project (e.g., pipeline or highway), 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 permittees to allow members of the public access to a construction site.

The permittee shall also retain following items in an appropriate location on-site:

- a) A rain gauge (or use a reference site for a record of daily precipitation),
- b) A copy of the twice weekly inspection reports,
- c) A documentation of quality assurance site assessments, if applicable (see Section 3.1.2 above).
- d) A copy of the site inspector's certification (e.g., <u>Fundamentals of Erosion Prevention and</u> Sediment Control Level 1 or Level 2, P.E., P.L.A., CPESC).

6.3. Electronic Submission of Documents

If the division notifies dischargers by mail, E-mail, 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.

7. STANDARD PERMIT CONDITIONS

7.1. Duty to Comply

7.1.1. 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 an enforcement action, permit termination, revocation and reissuance, modification; or for denial of a permit renewal application.

7.1.2. Penalties

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.

7.1.3. 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 stormwater 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.

7.1.4. 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.

7.2. Continuation of the Expired General Permit

Permittees shall maintain coverage under this general permit until a new general permit is issued. Permittees who choose not to maintain coverage under the expired general permit, or are required to obtain an individual permit, must submit an application (U.S. EPA NPDES 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.

Operator(s) of an existing site permitted under the division's 2011 construction general permit shall maintain full compliance with the existing SWPPP. The existing 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. The permittee shall make the updated SWPPP available for the division's review upon request.

7.3. 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.

7.4. 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.

7.5. 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.

7.6. 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.

7.7. Signatory Requirements

All NOIs, SWPPPs, NOTs, Construction Stormwater Inspection Certifications, Construction Stormwater Monitoring Report forms, reports, certifications or information either submitted to the director or the operator of a large or medium municipal separate storm sewer system shall be signed as described in Sections 7.7.1 and 7.7.2 below and dated.

7.7.1. Signatory requirements for an NOI⁶

The 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:

- 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

⁶ 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]

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.

- b) For a general partnership, by each general partner in the general partnership,
- c) For a sole proprietorship, by the proprietor,
- d) 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 principle geographic unit of the agency (e.g., Regional Administrators of EPA).

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate or municipal, state, federal, or other public agency officers. The division will presume that these officers have the requisite authority to sign permit applications unless the entity has notified the director to the contrary. Procedures governing authority to sign permit applications may provide for assignment or delegation to applicable positions rather than to specific individuals.

7.7.2. Signatory requirements for reports and other items

SWPPPs, Construction Stormwater Inspection Certification forms, reports, certifications or other information submittals required by the permit and other information requested by the division, including but not limited to Notice of Violation responses, shall be signed by a person described in Section 7.7.1 above, or by a duly authorized representative of that person.

7.7.3. Duly authorized representative

For a purpose of satisfying signatory requirements for reports (see Section 7.7.2 above), a person is a duly authorized representative only if:

- a) the authorization is made in writing by a person described in Section 7.7.1 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 or an appropriate EFO (see Section 2.8 above). The written authorization shall be a written document including the name of the newly authorized person and the contact information (title, mailing address, phone number, fax number and E-mail address) for the authorized person. The written

authorization shall be signed by the newly authorized person accepting responsibility and by the person described in Section 7.7.1 above delegating the authority.

7.7.4. Changes to authorization

If an authorization under Sections 7.7.1 above or 7.7.3 above is no longer accurate because a different individual or position has responsibility as the primary or secondary permittee, but the company name (permittee name) remains the same, a new NOI and SWPPP certification shall be submitted to an appropriate EFO (see Section 2.8 above) and signed by the new party who meets signatory authority satisfying the requirements of Sections 7.7.1 above or 7.7.3 above . The NOI shall include the new individual's information (title, mailing address, phone number, fax number and E-mail address), the existing tracking number and the project name.

7.7.5. Signatory requirements for primary permittees

Primary permittees required to sign an NOI and SWPPP because they meet the definition of an operator (see Subpart 2.2 above) shall sign the following certification statement on the NOI and on the SWPPP:

"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

7.7.6. Signatory requirements for secondary permittees

Secondary permittees 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 on the 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 onsite 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

7.8. 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 <u>Section 309 of the Clean Water Act</u> and in <u>T.C.A.</u> § 69-3-115 of the Tennessee Water Quality Control Act.

7.9. 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).

7.10. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges; nor does it authorize any injury to private property, any invasion of personal rights or any infringement of federal, state or local laws or regulations. The issuance of this permit does not authorize trespassing or discharges of stormwater or non-stormwater across private property.

7.11. 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.

7.12. Individual Permits

7.12.1. Required coverage

The director may require any person covered by this permit to apply for and obtain an individual NPDES permit to ensure 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 an individual 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. Individual permit applications shall be submitted to the appropriate Environmental Field Office of the division as indicated in Subpart 2.8 above. 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.

7.12.2. Permittee requested coverage

Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. Any discharger that knowingly cannot abide by the terms and conditions of this permit must apply 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.

7.12.3. General permit termination

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 Stormwater from an Industrial Activity (TMSP) will not be considered as an alternative general permit under this section without being specified by the director.

7.13. Other, Non-Stormwater, Program Requirements

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

7.14. 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 stormwater pollution prevention plans.

Proper operation and maintenance also includes adequate laboratory quality assurance and quality control 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.

7.15. 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.

7.16. Permit Actions

This permit may be issued, modified, revoked, reissued or terminated for cause in accordance with this permit and the applicable requirements of <u>T.C.A.</u> § 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.

8. REQUIREMENTS FOR TERMINATION OF COVERAGE

8.1. Termination of Developer and Builder Coverage

8.1.1. Termination process for primary permittees

Primary permittees wishing to terminate coverage under this permit must submit a completed NOT form provided in Appendix B of this permit. Primary permittees who abandon a site and fail to submit the NOT will be in violation of this permit. If the NOT was not submitted five years following the "estimated end date" (as identified on the NOI), the division can terminate the CGP coverage. Signs notifying the public of the construction activity shall be in place until the NOT form has been submitted. Primary permittees may terminate permit coverage only if the conditions described below occur at the site:

- a) All earth-disturbing activities and, if applicable, construction support activities permitted under Section 1.2.2 at the site are complete and the following requirements are met:
 - i. For any areas that were disturbed during construction, are not covered by permanent structures and over which the permittee had control during the construction activities; the requirements for final vegetation or non-vegetative stabilization described in Subsection 3.5.3.2 are met.
 - ii. The permittee has removed and properly disposed of all construction materials; and, waste and waste handling devices. The permittee has removed all equipment and vehicles that were used during construction, unless they are intended for long-term use following termination of permit coverage.
 - iii. The permittee has removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following termination of permit coverage.
 - iv. The permittee has identified who is responsible for ongoing maintenance of any stormwater controls left on the site for long-term use following termination of permit coverage.
- b) The permittee has transferred control of all areas of the site for which he is responsible (including, but not limited to, infrastructure, common areas, stormwater drainage structures, sediment control basin) under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit.
- c) The permittee obtains coverage under an individual or alternative general NPDES permit.

8.1.2. NOT review

The division may review NOTs for completeness and accuracy and, when necessary, investigate the proposed site for which the NOT was submitted. Coverage under the permit is terminated when the permit record is published on TDEC's dataviewer as "inactive."

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the local Environmental Field Office 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. When the site meets the termination criteria, the NOT should be re-submitted.

If any permittee files for bankruptcy or the site is foreclosed on by the lender, the permittee should notify the division of the situation so that the division may assess the site to determine if permit coverage should be obtained by any other person or whether other action is needed.

8.2. Termination of Builder and Contractor Coverage

8.2.1. Termination process for secondary permittees

Secondary permittees must request termination of coverage under this permit by submitting an NOT when they are no longer an operator at the construction site. Secondary permittees receive coverage under this permit, but are not normally mailed an NOC. Consequently, the division may, but is not required to, notify secondary permittees that their notice of termination has been received. If the division has reason to believe that the secondary permittee's NOT should not have been submitted, the division will deny the secondary permittee's NOT in writing, with specific reasons as to why the NOT should not have been submitted.

8.3. NOT certification

The NOT and the following certification must be signed in accordance with Subpart 7.7 above (Signatory Requirements) of this permit:

"I certify under penalty of law that either: (a) all stormwater 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 stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

8.4. Where to Submit an NOT

The NOT shall be submitted to the Environmental Field Office (EFO) which issued the NOC to the primary permittee. 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.

9. Aquatic Resource Alteration Permits (ARAPs)

Alterations to channels or waterbodies (streams, wetlands and/or other waters of the state) that are contained on, traverse through or are adjacent to the construction site, may require an Aquatic Resources Alteration Permit (ARAP) (http://www.tn.gov/environment/article/permit-water-aquatic-resource-alteration-permit). It is the responsibility of the developer to provide a determination of the water's status. This determination must be conducted in accordance with Tennessee's standard operating procedures for hydrologic determinations set forth at Rule 0400-40-03.05(9). The permittee can make an assumption that streams/wetlands are present at the site in order to expedite the permit process. In some cases, issuance of coverage under the CGP may be delayed or withheld if the appropriate ARAP has not been obtained. At a minimum, any delay in obtaining an ARAP for water body alteration associated with the proposed project must be adequately addressed in the SWPPP prior to issuance of an NOC. Failure to obtain an ARAP prior to any actual alteration may result in enforcement action for the unauthorized alteration.

10. **DEFINITIONS**

"2-year and 5-year design storm depths and intensities" The estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc.,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee: http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn pfds.html. Other data sources may be acceptable with prior written approval by TDEC Division of Water Resources.

"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, 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" or "Water Quality Riparian Buffer" 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 sediments, nutrients or other pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when stormwater runoff is flowing into and through the buffer zone as shallow sheet

⁷ The EPA considers inventorying a site's natural features is a technique called fingerprinting. More info can be found in EPA's document - EPA's Developing Your SWPPP – A Guide for Construction Sites (EPA-833-R-06-004 May 2007).

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 stormwater runoff flowing into and through the buffer zone as shallow sheet flow. Buffer zones are established for the primary purpose of protecting water quality and maintaining a healthy aquatic ecosystem in receiving waters.

- "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 forestland 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 planning, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater 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, excavating 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) or physical demarcation (including boundary signs, lot stakes, surveyor markings) 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 Resources of the State of Tennessee, Department of Environment and Conservation.
- "Discharge of stormwater associated with construction activity" As used in this permit, refers to stormwater point source discharges from areas where soil disturbing activities (e.g., clearing, grading, excavation), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material) are located.
- **"Disturbed area"** means the total area presented as part of the development (and/or of a larger common plan of development) 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 site-wide owner/developer initially disturbs through the process of various land clearing activities or in the construction of roadways, sewers and water utilities, stormwater drainage structures, etc., to make the property marketable.

"**Division**" means the Division of Water Resources of the State of Tennessee, Department of Environment and Conservation.

"Exceptional Tennessee Waters" are surface waters designated by the division as having the characteristics set forth at Tennessee Rules, Chapter <u>0400-40-03-.06(4)</u>. Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.

"Final Stabilization" means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- a) A perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion.
- b) Equivalent permanent stabilization measures such as the use of riprap; permanent geotextiles; hardened surface materials including concrete, asphalt, gabion baskets or Reno mattresses have been employed.
- c) For construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

"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.

"Inspector" An inspector is a person with following qualifications:

- a) a valid certification from the "<u>Fundamentals of Erosion Prevention and Sediment Control Level I</u>" course,
- b) a licensed professional engineer or landscape architect,
- c) a Certified Professional in Erosion an Sediment Control (CPESC), or
- d) successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

- a) Oversee the requirements of other construction-related permits, such as an <u>Aquatic Resources Alteration Permit</u> (ARAP) or Corps of Engineers permit for construction activities in or around waters of the state.
- b) Update field SWPPPs.

- c) Conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed.
- d) Inform the permit holder of activities that may be necessary to gain or remain in compliance with the CGP and other environmental permits.

"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. Land disturbance specific to the development of residential and commercial subdivisions or high-rise structures is not considered a linear project.

"Measurable Degradation," as used in the context of discharges or withdrawals – Changes in parameters of waters that are of sufficient magnitude to be detectable by the best available instrumentation or laboratory analyses.

(Note: Because analytical techniques change, the Department may consider either the most sensitive detection method needed to comply with state standards or any biological, chemical, physical, or analytical method, conducted in accordance with U.S. EPA approved methods as identified in 40 C.F.R. part 136. Consistent with T.C.A. § 69-3-108, for scenarios involving cumulative, non-measurable activities or parameters that are managed by a narrative criterion, the Department will use mathematical models and ecological indices to ensure no degradation will result from the authorization of such activities, consistent with the state's mixing zone policy.)

"Monthly" refers to calendar months.

"Municipal Separate Storm Sewer System" or "MS4" is defined in 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (e.g., roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) that are:

- a) 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, stormwater, 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;
- b) designed or used for collecting or conveying stormwater;
- c) not a combined sewer; and
- d) not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR §122.2.

"NOI" means notice of intent to be covered by this permit (see Part 2 above)

"NOT" means notice of termination (see Part 8 above).

- "**Operator**" for the purpose of this permit and in the context of stormwater 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.
 - 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 stormwater runoff from orchards, cultivated crops, pastures, range lands, forest lands or return flows from irrigated agriculture or agricultural stormwater runoff.

"Qualifying State, Tribal, or local erosion and sediment control program" is one that includes, as defined in 40 CFR 122.44(s):

- a) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.
- b) 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.
- c) Requirements for construction site operators to develop and implement a stormwater pollution prevention plan. A stormwater 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-stormwater discharges.
- d) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

"Quality Assurance Site Assessment" means a documented site inspection to verify the functionality and performance of the SWPPP and for determining if construction, operation and maintenance accurately comply with permit requirements as presented in the narrative, engineering specifications, maps, plans, drawings and details for EPSC measures and stormwater management.

- "Registered Engineer" and "Registered Landscape Architect" An engineer or landscape architect certified and registered by the <u>State Board of Architectural and Engineer Examiners</u> 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 consisting of an embankment constructed across a wet weather conveyance, an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, impoundment, permanent pool, primary spillway, secondary or emergency spillway and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., waters with unavailable parameters, Exceptional TN Waters, or waters with available parameters).
- "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 a violation of a water quality criteria or receiving stream 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.
- "Steep Slope" means a natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff around or over a steep slope so as not to erode the slope. In addition, site managers should focus on erosion prevention on the slopes and stabilize the slopes as soon as practicable to prevent slope failure or sediment discharges from the project.
- "Stormwater" means rainfall runoff, snow melt runoff, and surface runoff and drainage.
- A "Stream" is a surface water that is not a wet weather conveyance. Therefore, as used in this permit, "stream" includes lakes, wetlands and other non-linear surface waters.
- "Stormwater associated with industrial activity" is defined in 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 exempt from permit requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial activity. Maintenance to the original line and grade, hydraulic capacity; or to the 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.

- "Stormwater discharge-related activities" means activities that cause, contribute to or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; and activities to control stormwater including the siting, construction and operation of best management practices (BMPs).
- "Stormwater Pollution Prevention Plan" (SWPPP) means a written plan required by this permit that includes a site map, a description of construction activities that could introduce pollutants to stormwater runoff 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 or non-erodible surface has 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) means 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. TMDLs can also be described by the following equation:

TMDL = sum of non point sources (LA)+ sum of point sources (WLA)+ margin of safety

A list of completed TMDLs that have been approved by EPA can be found at our web site: http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program.

- "Treatment chemicals" are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are chitosan and anionic PAM.
- "Turbidity" is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.
- "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.

"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.

"Waters with unavailable parameters" means any segment of surface waters that has been identified by the division as failing to support one or more classified uses. For the purpose of this permit, pollutants of concern include, but are not limited to: siltation (silt/sediment) and habitat alterations due to in-channel erosion. Based on the most recent assessment information available to staff, the division will notify applicants and permittees if their discharge is into, or is affecting, waters with unavailable parameters. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (http://tdeconline.tn.gov/dwrwqa/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at http://tn.gov/environment/article/wr-wq-water-quality-reports-publications.

"Wet weather conveyances" are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:

- a) The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
- b) The conveyance's channels are at all times above the ground water table.
- c) The flow carried by the conveyance is not suitable for drinking water supplies.
- d) Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Tennessee Rules, Chapter 0400-40-3-.04(3)).

11. 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

NOCNotice of CoverageNOINotice of IntentNOTNotice of Termination

NPDES National Pollutant Discharge Elimination System

ONRW Outstanding National Resource Waters
POTW Publicly Owned Treatment Works

QLP Qualifying Local Program

SWPPP Stormwater 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 Stormwater 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)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

Site or Project Name:				PDES Tracking Imber: TNR	7		
Street Address				nstruction Sta	art Date:		
or Location:			Es	timated End D	Date:		
Site			La	Latitude (dd.dddd):			
Description:			Lo	ngitude (-dd.d	lddd):		
Country(ion)		MS4 Jurisdiction	Ac	res Disturbed:	:		
County(ies):		(if applicable):	To	tal Acres:			
Check the appropriate bo If wetlands are located or If an Aquatic Resource A	n-site and may be impact	ed, attach wetlands del	ineation report.		าร	Wetlands	
Receiving waters:							
Attach the SWPPP with t	he NOI: SWPPP At	tached	Attach a site location map	: Map A	Attached		
Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications): For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number: (an incorrect SOS control number may delay NOI processing)						I	
Site Owner or Developer Contact Name: (individual responsible for site			Title or Position: (the par	ty who signs t	he certifi	ication below)	
Mailing Address:			City:	State:		Zip:	
Phone: ()	Fax: ()		E-mail:				
Optional Contact:			Title or Position:				
Mailing Address:			City:	State:		Zip:	
Phone: ()	Fax: ()		E-mail:				
Owner/Developer(s) Cer	rtification: (must be sign	ed by president, vice-pre	sident or equivalent, or ran	king elected of	ficial) (Pr	imary Permittee)	
I certify under penalty of law to best of my knowledge and be possibility of fine and imprison	pelief, true, accurate, and co	omplete. I am aware that	there are significant penaltie	s for submitting	false info	ormation, including the	
Owner/Developer Name ((print/type):		Signature:	Date:			
Owner/Developer Name	(print/type):		Signature: Date:				
Contractor Certification	: (must be signed by pre	sident, vice-president o	r equivalent, or ranking e	ected official)	(Second	lary Permittee)	
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. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.							
Contractor name, addres	s, and SOS control number	per (if applicable):	Signature:		Date	:	
OFFICIAL STATE USE ONLY							
Received Date:	Reviewer:	Field Office:	Permit Tracking Number: TNR	E	Exceptional	ITN Water:	
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parar	neters: N	Notice of Co	overage Date:	

CONSTRUCTION GENERAL PERMIT - NOTICE OF INTENT (NOI) - INSTRUCTIONS

A completed NOI must be submitted to obtain coverage under the CGP. 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. CGP coverage is required for stormwater (SW) 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.

The application fee 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, etc.). A separate annual maintenance fee is also required for activities that exceed 1 year under CGP coverage. See TN Rules, Chapter 0400-40-11-.02(b)(12).

Acres	= or > 150	= or > 50 < 150	= or > 20 < 50	= or > 5 < 20	= or > 1 < 5	Subsequent
Disturbed	acres	acres	acres	acres	acres	coverage
Fee	\$10,000	\$6,000	\$3,000	\$1,000	\$250	\$100

Who must submit the NOI form? All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of SW associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) 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 (e.g., subsequent builder), or the person that is the current land owner of the construction site, and is considered the primary permittee; or (2) 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 primary permittee, and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the initial site-wide primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 of the permit and must be submitted with the NOI unless the NOI being submitted is to add a subsequent permittee to an existing coverage. Artificial entities (e.g., corporations or partnerships) must submit the correct Tennessee Secretary of State, Division of Business Services, control number. General partnerships. For general partnerships, the NOI must be signed by each general partner in the general partnership.

The NOI will be considered incomplete without a correct control number, and the division reserves the right to deny coverage to artificial entities that are not properly registered and in good standing with the Tennessee Secretary of State (i.e., listed with an entity status of "active"). The division further reserves the right to issue permit coverage in the correct legal name of the individual or entity seeking coverage and to name each general partner of a general partnership in addition to the general partnership.

<u>Complete the form</u>: Type or print clearly. Answer each item or enter "NA," for not applicable. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee and comprehensive site-specific SWPPP (if applicable).**

<u>Describe and locate the project:</u> Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate information available to describe the location (reference to adjacent highways, roads and structures; eg., intersection of state highways 70 and 100). Latitude and longitude (in decimal degrees) can be found at numerous other web sites. Attach a copy of a 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, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

Name of the receiving waters: Trace the route of SW runoff from the site and determine the name of the water course(s) into which the stormwater 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 waterbody that the unnamed tributary enters.

An ARAP 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, contact your local Field Office (EFO).

<u>Submitting the form and obtaining more information:</u> 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: Stormwater NOI Processing**.

Notice of Coverage: The division will review NOIs for completeness and accuracy and issue an NOC to site-wide primary operators, authorizing SW discharge from the construction site as of the effective date of the NOC. New subsequent operators will not receive an NOC, but are considered covered under the permit when their permit record is published on TDEC's dataviewer as "active" and with an effective date. TDEC Permit Dataviewer can be found at: http://environment-online.tn.gov;8080/pls/enf_reports/f?p=9034:34001:0

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	1301 Riverfront Pkwy, Suite 206	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

APPENDIX B – Notice of Termination (NOT) Form (next page)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-TDEC (8332)

Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator 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 DWR Environmental Field Office (EFO) address (see table below). For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

	1	ype or print c	learly, using ink.				
Site or Project N	lame:			NPDES Tra			
Street Address or	Location:			County(ies):			
Name of Permit	tee Requesting Termination of Covera	ge:					
Permittee Contac	t Name:		Title or Position:				
Mailing Address:			City:		State:	Zip:	
Phone:			E-mail:				
Check the reas	on(s) for termination of permit co	verage:	1				
	discharge associated with construction a over OR has equivalent measures such a					permanent	
You are no	longer the operator at the construction s	ite (i.e., termina	ation of site-wide, p	rimary or secondary pe	ermittee coverage	e).	
Certification a	nd Signature: (must be signed by p	resident, vice-	president or equiv	valent ranking electe	d official)		
I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identification 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 the by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under the general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawfunder the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice termination does not release an operator from liability for any violations of this permit or the Clean Water Act.					understand that vity under this tes is unlawful		
discharges associ from the portion construction site removed, and/or	For the purposes of this certification, elimination of stormwater discharges associated with construction activity means that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have been eliminated from the portion of the construction site where the operator had control. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted						
information is to false information	information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.						
Permittee name (print or type): Signature: Date:							
EFO	Street Address	Zip Code	EFO	Street Address		Zip Code	
Memphis	8383 Wolf Lake Drive, Bartlett, TN	38133	Cookeville	1221 South Willow	Ave.	38506	
Jackson	1625 Hollywood Drive	38305	Chattanooga	1301 Riverfront Park	cway, Ste. 206	37402	
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook P		37921	
Columbia	1421 Hampshire Pike	38401	Johnson City	nson City 2305 Silverdale Road 37601			

CN-1175 (Rev. 12-14) RDA 2366

APPENDIX C – Twice-Weekly Inspection Report Form (next page)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

Construction Stormwater Inspection Certification (Twice-Weekly Inspections)

Site or Project Name:		N	IPDES Tracking Number: TNR		
Primary Permittee Name:		D	Pate of Inspection:		
Current approximate disturbed acreage:	Has rainfall been checked/do daily? Yes No	ocumented N	lame of Inspector:		
Current weather conditions:			nspector's Training Certification Number:		
Please check the box if the following	ng items are on-site:	,			
Notice of Coverage (NOC)	Stormwater Pollution Prever	ntion Plan (SWPPP)	Twice-weekly inspection	n documer	ntation
Site contact information	Rain Gage Off-site Refe	erence Rain Gage L	_ocation:		
Best Management Practices (BMPs	s):				
Are the Erosion Prevention and Se		nctioning correctly	y: If "No," describe below in Com	ment Secti	on
Are all applicable EPSCs instal	led and maintained per the SV	VPPP?		Yes	No
Are EPSCs functioning correctly	y at all disturbed areas/materia	al storage areas per	section 4.1.5?	Yes	No
Are EPSCs functioning correctl contrast in the receiving stream				Yes	No
Are EPSCs functioning correctl	, , , , , , , , , , , , , , , , , , , 			Yes	No
5. If applicable, have discharges f section 4.1.4? If "No," describe	below the measures to be imp	plemented to addres	ss deficiencies.	Yes	No
6. If construction activity at any lood days per section 3.5.3.2? If "No				Yes	No
7. Have pollution prevention meas pollutants from equipment and "No," describe below the meas	vehicle washing, wheel wash	water, and other wa		Yes	No
8. If a concrete washout facility is If "No," describe below the mea				Yes	No
9. Have all previous deficiencies by Check if deficiencies/correct	peen addressed? If "No," desc ive measures have been repo	•		Yes	No
Certification and Signature (must b) I certify under penalty of law that this submitted information is to the best	e signed by the certified inspe	ector and the permitt ts were prepared by	tee per Sections 3.5.8.2 (g) and 7 y me, or under my direction or s	7.7.2 of the upervision.	The
penalties for submitting false informal Annotated Section 39-16-702(a)(4), t	nation, including the possibil	ity of fine and impenalty of perjury.	prisonment. As specified in To		
Inspector Name and Title:		Signature:	Date:		
Primary Permittee Name and Title:		Signature:	Date:		

Construction Stormwater Inspection Certification Form (Twice-Weekly Inspections)

Purpose of this form/ Instructions

An inspection, as described in section 3.5.8.2. of the General Permit for Stormwater Discharges from Construction Activities ("Permit"), shall be performed at least twice every calendar week and documented on this form. 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.

As described in section 3.5.8.1 of the Permit, inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course (http://www.tnepsc.org/). Twice weekly inspections can also be performed by: a licensed professional engineer or landscape architect; a Certified Professional in Erosion and Sediment Control (CPESC) or a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course. A copy of the certification or training record for inspector certification should be kept on site.

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.

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 site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site and/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.

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.

Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 of the Permit and pollution prevention measures identified in the SWPPP in accordance with section 3.5.2 of the 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.

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request.

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

APPENDIX D

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist

(Next Page)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for the General Permit for Discharges of Stormwater Associated with Construction Activities (CGP)

Date Received:	Staff Review Completion Date:	New NPDES Tracking Number:	MS4 Jurisdiction:
Reviewer:	# of Disturbed Acres:	Site/Project Name:	· · · · · · · · · · · · · · · · · · ·
Impaired Waters: Yes No	Exceptional Waters: Yes No	T & E Species: Yes No (Add comments below)	Fee Collected: Yes No

This NOI/SWPPP checklist pertains to the current CGP, and is used during the NOI review process to help determine whether the submittal provides enough information to grant a Notice of Coverage under the permit. This checklist does not specifically address every condition of the permit or preclude the Division from asking for additional information.

Yes	No			NOI Requirements	Yes	No	
		Correct site-wide permittee (Owner/Developer) entity name included					Start/End Dates listed
		Proper signature for the owner/developer provided					Disturbed acreage given
		Receiving waters listed				Latitude/Longitude given and is correct	
		ARAP Required?	ARAP #(s):				County(ies) listed
		Appropriate portion of USGS topo map provided showing the boundaries of the construction site [2.6.2]			County	y(ies):	

Yes	No	N/A	SWPPP Requirements	CGP pg #		
			"Common Plan of Development"/Site Concept Plan has been provided [1.2.1]	1		
			Plans and specs for structural control measures have been prepared and stamped by Professional Engineer or Landscape Architect [3.1.1]	13		
			Includes engineering design of sediment basin/controls for projects 10 acres or greater (5 acres if impaired/exceptional waters) [3.1.1]			
			Includes Quality Assurance Site Assessment requirement criteria if applicable [3.1.2]	14		
			Signed by the operator(s) [3.3.1]	15		
			Includes multi-phase sheets: <5 ac. − 2-phase plan min.; ≥5 ac. − 3-phase plan min. [3.5.2]	18		
			Depicts disturbance limits, buffer zones, watershed drainage patterns/acreage, and proposed contours/slopes [3.5.1.d&g 4.1.1]	17		
			Includes a description of all construction activity (not just grading and street construction) [3.5.1.a]	17		
			Includes a description sequence of major activities (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.) [3.5.1.b]	17		
			Includes estimates of the total site area versus the total area of the site to be disturbed [3.5.1.c]	17		
			Includes a complete inventory of aquatic resources (including any stream, sinkhole or wetland) on or adjacent to the project [3.5.1.i]	17		
			Includes a description of appropriate erosion prevention and sediment controls (EPSCs) and the general timing of implementation [3.5.2]	18		
			Specifies which permittee is responsible for implementation of which EPSC [3.5.2]	18		
			Specifies removal of trapped sediment from sediment controls at or before 50% design capacity [3.5.3.1.e]	19		
			Specifies EPSCs will be implemented before earth-moving begins [3.5.3.1.1]	20		
			Specifies stabilization within 15 days (7 days for ≥35% slopes) on site areas where construction has temporarily/permanently ceased [3.5.3.2]	21		
			Specifies inspections of outfalls/EPSC measures at least twice weekly and at least 72 hours apart [3.5.8.2.a]	24		
			Specifies that vegetation, EPSCs & other protective measures are repaired, replaced, or modified within 7 days [3.5.7; 3.5.8.2.f]	23, 24		
			Depicts the proposed location of all major structural/nonstructural controls and all proposed stabilization practices [3.5.1.g; 3.5.3.3]	18		
			Identifies all outfall locations intended for coverage under the CGP [3.5.1.g]	17		
			Includes the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site [3.5.1.j]	17		
			Identifies construction phasing for activities that will disturb >50 acres [3.5.1.m & 3.5.3.1.k]	20		
			EPSCs have been designed to control the rainfall and runoff from a 2-year, 24-hour return interval storm [3.5.3.3]	21		
			Specifies sediment basins for construction sites with drainage areas >10 acres [3.5.3.3]	22		
			Specifies a 30' natural riparian buffer zone adjacent to all streams, lakes, wetlands on/adjacent to the construction site [4.1.2]	26		

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for the General Permit for Discharges of Stormwater Associated with Construction Activities (CGP)

Yes	No	N/A	Additional SWPPP Requirements for Discharges into Impaired or Exceptional TN Waters	
			Specifies that EPSCs proposed for the site have been designed to control storm runoff generated by a 5-year, 24-hour storm event [5.4.1.a]	30
			Specifies sediment basins for construction sites with drainage areas >5 acres that discharge to impaired or exceptional waters [3.5.3.3] [5.4.1.f]	
			Specifies a 60' natural riparian buffer zone adjacent to all impaired or exceptional waters on/adjacent to the construction site [4.1.2] [5.4.2]	
			SWPPP Requirements for Permanent (Post-Development) Stormwater Management	CGP pg #
			Specifies velocity dissipation devices at discharge locations and along the length of any outfall channel [3.5.4]	22
			Includes technical basis used to select velocity dissipation devices where flows exceed predevelopment levels [3.5.4]	23

Identification indicators of possible streams or wetlands utilizing site information and resources include:

- 1. Contour and stream indicators on USGS TOPO maps
- 2. Drainage area to a defined conveyance (20 acres east TN/40 middle TN/75 west TN),
- 3. Aerial photography identifying a sinuous tree line or grouping of remaining forest in an agricultural setting
- 4. Springhouse/box
- 5. Comparable nearby drainage that has previously been determined to have a stream

- 6. Onsite or adjacent ponds or impoundments
- 7. Check EFO HD GIS for previous determinations
- NRCS soil maps or Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
- Wetlands on National Wetlands Inventory: (http://www.fws.gov/wetlands/data/mapper.HTML)

If sufficient indicators exist, a stream determination may need to be performed. Stream determinations must be performed by a QHP.

Comments

7. Environmental Permits





STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL DIVISION

SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

May 26, 2015

Mr. Jimmy Smith
Natural Resource Section
Tennessee Department of Environment and Conservation
11th Floor William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

Subject: Project # 27946-1403-94

PIN 116956.00

Federal Funding # BRZ-2700(56)
Bridge Replacement, Creekwood Road,
Bridges over Branch of Sugar Creek, LM 0.50

And Sugar Creek, LM 0.56

Gibson County

Permits Needed by December 2, 2015

Dear Mr. Smith:

INTRODUCTION

The Tennessee Department of Transportation (TDOT) is proposing to replace the existing Creekwood Lane, bridge over Branch of Sugar Creek (STR-2) at Log Mile 0.50 and bridge over Sugar Creek (STR-1) at Log Mile 0.56. The existing structure at Log Mile 0.50 consists of a 3-span steel beam bridge, approximately 22 feet wide by 62 feet long. The sufficiency rating for this bridge is 39.8. The existing structure at Log Mile 0.56 consists of a 3-span steel beam bridge, approximately 23 feet wide by 61 feet long. The sufficiency rating for this bridge is 30.2.

The proposed structures at Log Miles 0.50 and 0.56 will be replaced with single span concrete bridges with a total out to out width of approximately 26 feet by 105 feet long and 110 feet long respectively. The structures will contain two 10-foot lanes with 2-foot shoulders. The RD01-TS-1A only requires an 18 foot roadway however; the proposed roadway width will match the existing width of 20 feet. The existing bridges are to remain open during construction. In

Mr. Jimmy Smith May 26, 2015 Page 2

accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091 identifying where permits may be needed.

RATIONALE

The primary purpose of the proposed project is to maintain connectivity along Creekwood Road. This will be obtained by replacing the existing bridge structures. The existing structures do not meet current design and safety standards.

The proposed project alternatives include the "Build Alternative" and the "No Build Alternative." The "No Build Alternative" was not selected as it does not fulfill the purpose and need of the project. The selected "Build Alternative" proposes the replacement of the existing deficient bridge structures with a concrete span bridge.

REQUIRED PERMITS

United States Army Corps of Engineers

According to Nationwide Permit 14, the proposed roadway crossing meets the United States Army Corps of Engineers (USACE) criteria for non-notification, including:

- The proposed discharge results in the loss of less than a tenth of an acre;
- The proposed project will not affect a special aquatic site;
- The proposed project will not affect federally listed species; and
- The proposed project will not affect historic properties.

All terms and conditions of the Nationwide Permit 14 will be followed during construction.

Tennessee Valley Authority

The proposed project is not located within the Tennessee River watershed. Therefore, no Tennessee Valley Authority (TVA) permit is required.

United States Coast Guard

According to Title 33 of the Code of Federal Regulations, Section 2, the proposed project will not impact a navigable waterway, including:

- Territorial seas of the U.S.;
- Internal waters of the U.S. subject to tidal influence;
- Internal waters of the U.S. not subject to tidal influence that:
 - Are not currently, historically, or susceptible for use individually or in connection with other waters for substantial commerce; or
 - Are not capable of improvement at a reasonable cost to provide individually or in connection with other waters for substantial commerce.

Therefore, no United States Coast Guard (USCG) permit is required.

LOCATION

The subject project is not located within Federal lands or easements, wild and scenic river systems, or National Park Service (NPS) lands.

MITIGATION DESCRIPTION

Please refer to the enclosed feature impact and summary tables for detailed information regarding proposed environmental feature impacts, required environmental permits, Federal Emergency Management Agency (FEMA) floodplain designations, etc.

SPECIES REVIEW

United States Fish and Wildlife Service

A letter was sent from TDOT to the United States Fish and Wildlife Service (USFWS) on August 14, 2014 requesting information on species that may be present in the vicinity of the proposed project. In a response letter dated September 18, 2014, the USFWS concluded that no federally listed or proposed endangered or threatened species occur within the impact area of the project.

Tennessee Department of Environment and Conservation

A search of the Tennessee Department of Environment and Conservation (TDEC) Division of Natural Areas endangered species database was conducted on September 17, 2014. This database search revealed no records of threatened or endangered species within a 1-mile radius of the project. No records of threatened or endangered species within a 1- to 4-mile radius of the project were found. Refer to the enclosed Species Review within the Environmental Boundaries and Mitigation Design evaluation for details.

Tennessee Wildlife Resources Agency

An email was sent from TDOT to the Tennessee Wildlife Resources Agency (TWRA) on August 14, 2014 requesting information on species that may be present in the vicinity of the proposed project. In a response email dated September 18, 2014 the TWRA agreed that all applicable BMP's included in the construction plans are adequate.

CULTURAL RESOURCES

In a letter dated September 24, 2014, the Tennessee State Historic Preservation Office (SHPO) stated that the area of potential effect for the subject project contains no cultural resources eligible for listing in the National Register of Historic Places.

CONCLUSION

In addition to the impacts referenced above, TDOT requests that TDEC include approval for all proposed outfall structures (i.e., ditches, pipes, etc.) associated with the proposed project in the appropriate permits.

It is the opinion of this office that all other aspects of the project not specifically mentioned in this letter meet the criteria stipulated in the TDEC General Permit for the Alteration of Wet Weather Conveyances. Please refer to the enclosed Ecology Field Data Sheets within the Environmental Boundaries and Mitigation Design evaluation for details.

By copy of this letter, we are also requesting that the TDEC please include approval of a potential temporary stream crossing at each location in your permits. Temporary crossings will be located within right-of-way or easements. Copies of TDOT Standard Drawings EC-STR-25 (Temporary Road Stabilization and Temporary Culvert Crossing), EC-STR-31 (Temporary Diversion Channels), EC-STR-31A (Temporary Diversion Channel Design), and EC-STR-32 (Temporary Diversion Culverts) are enclosed for your information and use.

This project is currently scheduled for the December 2, 2015 turn-in. We would greatly appreciate your initial review, request for additional information within 15 days of receipt of our application, and issuance of the appropriate permits as soon as possible.

If you have any questions or require further assistance, please contact me at (615) 253-2466.

Mr. Jimmy Smith May 26, 2015 Page 4

Sincerely,

Melanie Bumpus Senior Transportation Project Specialist, Environmental Permits Section

Enclosures

JLH: MBB: pc

ec: Water Permits, TDEC

Mr. Jason Baker, TDOT Regional Director Operations

Ms. Jane Jones, TDOT Regional Director Project Development Ms. Lou Timms, TDOT Region 4 Environmental Coordinator

Mr. Tim Nehus, TDOT Region 4 Ecology Section

Ms. Rita M. Thompson, TDOT Region 4 Ecology Section

Mr. Jim Vuncannon, TDOT Compliance

Mr. John Hewitt, TDOT Natural Resources Office Ms. DJ Wiseman, TDOT Natural Resources Office

Permit File

Melanie Bumpus

From: Melanie Bumpus

Sent: Tuesday, June 16, 2015 6:59 AM

To: Jason Blankenship; Amanda Marrs; Lou Timms; C W. Hampton; Michael Horlacher;

Shawn Allen

Cc: DJ Wiseman; Tim Nehus; Rita M. Thompson; James Vuncannon; Jane Jones

Subject: Permit Distribution, PIN 116956.00

Attachments: NW #14 Permit Conditions.pdf; TDOTNRS15 126PermitIssued.pdf

Water Quality Permit Distribution

PE # 27946-1403-94
PIN 116956.00
Bridge Replacement, Creekwood Road, Bridge over Branch of Sugar Creek, LM 0.50
Gibson County

The Department received the following permit(s):

General Aquatic Resource Alteration Permit (NRS # 15.126)

A copy of the Tennessee Department of Environment and Conservation (TDEC) permit is enclosed for your information and use. Construction forces should be made aware that this permit is applicable to the contract.

Also the following was determined from review of the construction plans:

- The loss of waters of the United States does not exceed 0.10 acre;
- The project will not discharge to a special aquatic site, including wetlands;
- The project will not adversely affect to federal endangered species or historic properties; and
- The project does not contain navigable waterway.

Therefore, written authorization is not required from the U.S. Army Corps of Engineers (USACE). Although the subject project does not meet the pre-construction notification threshold of the Nationwide Permit #14 (Linear Transportation Projects), construction forces should be aware that the terms and conditions for this permit are applicable to the contract.

Please find attached the Nationwide Permit #14 (Linear Transportation Projects) terms and conditions, for reference.

It is our understanding that the TDOT contractors <u>will not</u> be relocating utilities. Therefore, this application does not include utility relocation impacts. If utilities are expected to be relocated by TDOT contractors, please contact the TDOT Environmental Division, Permits Section immediately.

All permits required for this project have been received except the NPDES Notice of Coverage. It will be sent to you as soon as we obtain it.

If you have any questions or we can provide further assistance, please contact me at (615) 253-2466.

Thanks,

Melanie Bumpus

Senior Transportation Project Specialist Tennessee Department of Transportation Environmental Division Permitting Section Suite 900, James K Polk Building Nashville, TN 37243



STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243-1102

June 11, 2015

Ms. Melanie Bumpus Roadway Specialist 3 TDOT - Environmental Division 505 Deaderick St., Ste. 900 Nashville, TN 37243

Subject: General Permit for Construction and Removal of Minor Road Crossings

File # NRS15.126

Tennessee Department of Transportation (TDOT), Project #27946-1403-94 PIN #116956.00 - Bridge Replacement on Creekwood Road Over Branch of Sugar Creek and Sugar Creek, Humboldt, Gibson

County, Tennessee (Lat: 35.82164/Lon: -88.85982)

Dear Ms. Bumpus:

We have reviewed your proposal to replace the existing Creekwood Road bridges over a branch of Sugar Creek and Sugar Creek impacting a total of 183 feet of stream. The attached Notice of Coverage authorizes the work as proposed.

Pursuant to the *Tennessee Water Quality Control Act of 1977* (T.C.A. § 69-3-101 et seq.) and supporting regulations the Division of Water Resources is required to determine whether the activity described in the attached notice of coverage will violate applicable water quality standards. This permit may also serve as a federal §401 water quality certification (pursuant to 40 C.F.R. §121.2).

This activity is governed by the General Permit for Construction and Removal of Minor Road Crossings. The work must be accomplished in conformance with accepted plans and information submitted in support of application NRS15.126 and the limitations and conditions set forth in the General Permit for Construction and Removal of Minor Road Crossings (enclosed). It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understand the permit conditions before the project begins.

Please note that excavation and fill activities associated with the road crossing must be separated from flowing waters. This may be accomplished through the utilization of cofferdams (non-erodible materials), berms or temporary channels. The bottom of the culverts shall be constructed below the stream bed elevation to allow natural substrate to reestablish. Channel widening is expressly prohibited under the terms of the general permit. All box culverts with more than one barrel shall be constructed in a manner which will concentrate baseflow into one barrel. All disturbed areas must be revegetated or otherwise stabilized upon completion of construction.

Annual Maintenance and Coverage Termination

Permittees will be assessed an annual maintenance fee of \$350 for coverages that exceed one year. Please note that this maintenance fee does not grant the right to extend coverage past the expiration date of the General Permit itself. Permittees may terminate coverage prior to the expiration date by submitting a completed notice of termination form (NOT), which is available on the division's webpage at

http://www.tn.gov/environment/permits/arap.shtml. A complete NOT should include photodocumentation of the finished project area. The division will notify the permittee that either the NOT was received and accepted, or that the permit coverage is not eligible for termination (due to existing deficiencies) and has not been terminated.

We appreciate your attention to the terms and conditions of this general permit for aquatic resource alteration. If you have any questions please contact the permit coordinator, Mr. Brian Canada, by e-mail at *Brian.Canada@tn.gov* or by phone at (615) 532-0660.

Sincerely,

Jimmy R. Smith

Manager, Natural Resources Unit

Encl: NOC and copy of general permit

CC: DWR, Jackson Environmental Field Office

Humboldt MS4 Stormwater Manager

U.S. Army Corps of Engineers, Nashville Regulatory Branch

Ms. Deborah (DJ) Wiseman, Roadway Specialist 2, State of Tennessee dj.wiseman@tn.gov

File copy



Under the Aquatic Resource Alteration

General Permit for Construction and Removal of Minor Road Crossings

Tennessee Department of Environment and Conservation Division of Water Resources William R. Snodgrass – Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243

ARAP - NRS15.126

Under authority of the Tennessee Water Quality Control Act of 1977 (TWQCA, T.C.A. 69-3-101 et seq.) the Division of Water Resources has determined the activity described below would not violate applicable water quality standards.

This activity is governed by the *General Permit for Construction and Removal of Minor Road Crossings* (effective July 1, 2010) issued pursuant to the TWQCA. The work must be accomplished in conformance with accepted plans, specifications, data and other information submitted in support of application NRS15.126 and the terms and conditions set forth in the general permit.

PERMITTEE: Tennessee Department of Transportation (TDOT)

AUTHORIZED WORK: Replace the existing Creekwood Road bridges over a branch of Sugar

Creek and Sugar Creek

LOCATION: Creekwood Road bridges at LM 0.50 and LM 0.56, Gibson County

Latitude: 35.82164 Longitude: -88.85982

WATERBODY NAME: Sugar Creek and a Branch of Sugar Creek (TN05130106005T 1100)

EFFECTIVE DATE: 11-JUN-15 EXPIRATION DATE: 06-APR-20

This does not preclude requirements of other federal, state or local laws. In particular, work shall not commence until the applicant has received the federal §404 permit from the U. S. Army Corps of Engineers, a §26a permit from the Tennessee Valley Authority or authorization under a Tennessee NPDES Storm Water Construction Permit where necessary. This permit may also serve as a federal §401 water quality certification (pursuant to 33 U.S.C. §1341) since the planned activity was reviewed and the division has reasonable assurance that the activity will be conducted in a manner that will not violate applicable water quality standards (T.C.A. § 69-3-101 et seq. or of § § 301, 302, 303, 306 or 307 of *The Clean Water Act*).

The state of Tennessee may modify, suspend or revoke this authorization should the state determine that the activity results in more than an insignificant degradation of applicable water quality standards or violation of the TWQCA. Failure to comply with permit terms may result in penalties in accordance with T.C.A. §69-3-115.

CN-0759 RDA 2971

Tennessee Department of Environment and Conservation General Aquatic Resource Alteration Permit for Construction or Removal of Minor Road Crossings



Effective Date: Expiration Date:

April 7, 2015

April 6, 2020

Activities Covered by this Permit

This general permit authorizes the construction and/or removal of minor road crossings of streams, via bridge, culvert, pipe, or fords. This permit also authorizes other similar transportation crossings such as railroads and linear crossings of greenway trails.

Certain activities due to size, location or potential water quality impacts are not covered under this general permit, as described in both the Special and General Conditions sections. Activities not qualifying for authorization under this general permit may be authorized by a standard (individual) permit provided that all requirements of the *Tennessee Water Quality Control Act of 1977* (the *Act*) are met.

Special Conditions

- Road crossings, including transition channels, endwalls, aprons, or rip rap, that either individually or cumulatively exceed a total length of 200 feet of impact in the same Stream Catalog Unit (Waterbody) for the entire project are not covered.
- Crossings or encapsulations associated with non-linear features such as vehicle maintenance or storage buildings, parking lots, cul-de-sacs and turn-arounds are not covered.
- 3. All riprap associated with the road crossings shall be placed as to mimic the existing/proposed contours of the stream channel. Riprap shall be countersunk and placed at the grade with the existing stream substrate. Voids within the riprap shall be filled with suitable substrate to prevent streamflow loss within the riprap areas. Over-excavation or grouting for placement of riprap is not covered.
- 4. Road crossings that may significantly alter the hydraulics of the stream (e.g., under-sizing or over widening the channel) are not covered.
- 5. The bottom of culverts shall be constructed below the stream bed elevation, in a manner that allows natural substrate to reestablish. All box culverts with more than one barrel shall be constructed in a manner which will concentrate baseflow into one barrel and not result in channel over widening.
- 6. The crossing shall be culverted, bridged or otherwise designed to prevent the impoundment of normal or base flows on the upstream side, and not result in a disruption or barrier to the movement of fish or other aquatic life on the downstream side. Base flow is the usual or normal flow of the stream that is supplied primarily by groundwater from springs and seeps, but not affected by rapid runoff during and after rainfall.
- 7. The width of the fill associated with the crossing shall be limited to the minimum necessary for the actual crossing.
- 8. Where a crossing is removed, natural channel characteristics (dimensions, shape, substrate, etc.) shall be replicated and stabilized using clean rock, riprap, anchored trees or other non-erodible materials found in the natural environment.

General Conditions

- 1. All activities must be accomplished in conformance with the approved plans, specifications, data and other information submitted in support of the NOI and the limitations, requirements and conditions set forth herein. Failure to comply with the terms and conditions of this permit is a violation of the *Tennessee Water Quality Control Act of 1977* (the *Act*), and is subject to penalty in accordance with T.C.A. §69-3-115.
- Activities, either individually or cumulatively, that may result in greater than de minimis degradation
 to waters of the state are not covered. This general permit shall not be used incrementally to combine
 with other activities resulting in a net loss of water resource values.
- 3. Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited. Native riparian vegetation must be reestablished after work is completed. Non-native, non-invasive annuals may be used as cover crops until native species are established. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.
- Activities that directly impact wetlands, or impair surface water flow into or out of any wetland areas are not covered.
- Activities located in a component of the National Wild and Scenic River System or waters designated as Outstanding National Resource Waters are not covered.
- 6. Activities occurring in known or likely habitat of state or federally listed threatened, endangered, or a species deemed in need of management may not be authorized without prior coordination with the Tennessee Wildlife Resources Agency (TWRA) and TDEC Division of Natural Areas (DNA) to determine if the proposed activities will or will not likely result in take, harassment, or destruction of the species or render the habitat unsuitable. Adverse effects to federal threatened and endangered species are not permitted without prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act.
- 7. Work shall not commence until the permittee has obtained all necessary authorizations pursuant to applicable provisions of §10 of The Rivers and Harbors Act of 1899; §404 of The Clean Water Act and §26a of The Tennessee Valley Authority Act, as well as any other federal, state or local laws.
- 8. Backfill activities must be accomplished in a manner that stabilizes the streambed and banks to prevent erosion. All contours must be returned to pre-project conditions to the extent practicable and the completed activities may not disrupt or impound stream flow.
- 9. The use of monofilament-type erosion control netting or blanket is prohibited.
- 10. This permit does not authorize impacts to cultural, historic or archaeological features or sites.
- 11. This permit does not authorize access to private property. Arrangements concerning the use of private property shall be made with the landowner.
- 12. Where practicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock (containing no fines or soils), steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be removed upon completion of the work.
- 13. All activities must be carried out in such a manner as will prevent violations of water quality criteria as stated in TDEC Rule 0400-40-03. This includes, but is not limited to, the prevention of any discharge or use of materials that may be harmful to humans, terrestrial or aquatic life, or causes a

condition in which visible solids, bottom deposits or turbidity impairs the designated uses of waters of the state.

- 14. Erosion prevention and sediment control measures must be in place and functional before any land disturbance activities begin, and shall be designed according to the department's *Erosion and Sediment Control Handbook* (www.tn.gov/environment/wpc/sed_ero_controlhandbook/). Permanent vegetative stabilization using native species of all disturbed areas in or near the stream channel must be initiated within 14 days of project completion (see also *Landscaping with Natives* at tneppc.org). Non-native, non-invasive annuals may be used as cover crops until native species are established.
- 15. The permittee is responsible for obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Construction Activities where clearing, grading or excavation results in an area of disturbance of one or more acres, or activities that result in the disturbance of less than one acre if it is part of a larger common plan of development or sale.
- 16. Stream beds shall not be used as linear transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream bank vegetation is disturbed. The crossing shall be constructed so that stream or wetland flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.

Obtaining Permit Coverage

Activities where the total length of disturbance along the stream channel needed to construct or remove a road crossing is less than 25 feet may be done without submittal of an application or written authorization from the division prior to the commencement of work, provided the work is performed in accordance with the permit terms and conditions.

Other proposed minor road crossing activities may obtain coverage by submitting a signed and completed NOI, along with any other required information, to the division. Work shall not commence until a written Notice of Coverage (NOC) from the division is received. As noted above, not all activities may be eligible for coverage under this general permit and coverage may be denied when appropriate.

Each Notice of Coverage under this general permit is valid until the expiration date specified on the NOC. If the expiration date on an NOC extends beyond the date the General Permit is modified, reissued, or revoked, and the permittee has commenced or is under contract to commence this activity before the expiration date, the permittee may have up to twelve (12) months from the date of the modification, reissuance, or revocation of the General Permit to complete the activity under the present terms and conditions of the general permit.

An application fee as established in Rule 0400-40-11-.02 will be assessed to applicants intending to receive an NOC to conduct activities under this general permit. An annual maintenance fee will be assessed to those individuals holding general permit coverage unless a Notice of Termination (NOT) form is received prior to the one-year anniversary of the issuance date of the NOC, or the NOC was issued for less than a one-year term. An NOT form can be downloaded from the division's ARAP webpage (http://www.tn.gov/environment/permits/arap.shtml).

DATE: 4/6/15

APPROVED:

Tisha Calabrese Bentoh

Director, Division of Water Resources

8. Ecology Report





STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL DIVISION

SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM GOVERNOR

MEMORAN	DUM
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To: Tabitha Cavaness

Design Division

From: Tim Nehus

Environmental Division

Date: September 18, 2014

X Other: Agency Coordination

Subjec: Environmental Boundaries and Mitigation Design For:

Gibson County; Creekwood Road, Bridges over Branch of Sugar Creek at LM

0.50 and Sugar Creek at LM 0.56; P.E. 27946-0403-94, PIN 116956.00

A ecological evaluation of the subject project has been conducted with the following results:

Wetlands present

X No wetlands identified: No wetlands in the vicinity of either bridge

Streams are present: Two streams were identified (Environmental Boundaries are attached).

No streams present in project impact area

Protected species present:

X No protected species identified in project impact area: See attached agency coordination.

Special haul road provisions needed:

THE FOLLOWING ITEMS ARE ATTACHED FOR YOUR USE:

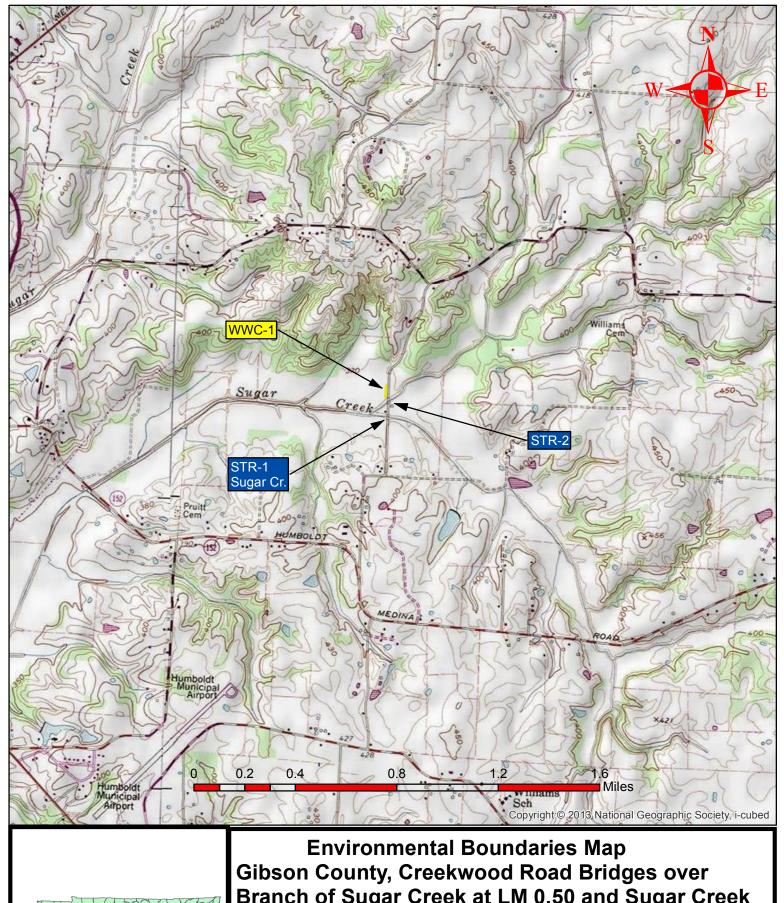
X Environmental Boundaries

Mitigation Design Sketches

Narrative Mitigation Plan

Your assistance is appreciated. If you have any questions or comments, please contact Tim Nehus in the Environmental Division at 615-532-5580 or tim.nehus@tn.gov.

xc: Jennifer Lloyd w/ attachments
Shane Hester w/ attachments
Freddy Miller w/ attachments
John Hewitt w/ attachments
Michael Horlacher w/ attachments
Jon Zirkle w/ attachments
Project File





Branch of Sugar Creek at LM 0.50 and Sugar Creek

P.E. 27946-0403-94 PIN 116956.00







Environmental Boundaries Aerial Gibson County, Creekwood Road Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56

P.E. 27946-0403-94 PIN 116956.00



Ecology Field Data Sheet: Water Resources

Project: Gibson County: Creekwood Road, Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56; P.E. 27946-0403-94, PIN116956.00

Date of survey: 9.16.2014 Biologist: T. Nehus, L. Khoury Affiliation: TDOT

1-Station: from plans	57+10		
2-Map label and name	STR-1 (Sugar Creek)		
3-Latitude/Longitude	N35.82164; W88.85982		
4-Potential impact	Crossing / bridge, runoff		
5-Feature description:			
what is it	Perennial Stream		
blue-line on topo? (y/n)	No Yes 🗸		
defined channel (y/n)	No Yes /		
straight or meandering	Straight Meandering		
channel bottom width	25'		
top of bank width	45'		
bank height and slope ratio	15' - 20'		
avg. gradient of stream (%)			
substratum	Sand / some concrete debris and riprap near bridge		
riffle/run/pool	0 / 40 / 60		
width of buffer zone	LDB: 20' RDB: 20'		
water flow	Yes		
water depth	0.5'		
water width	3' - 4'		
general water quality	Poor		
OHWM indicators	Clear line impressed on bank, wrack lines		
groundwater connection	Yes		
bank stability: LDB, RDB	LDB: Stable		
dominant species: LDB, RDB	LDB: Kudzu, black willow, black walnut, American elm RDB: Kudzu		
overhead canopy (%)	40%		
benthos	Assumed		
fish	Minnows and shiners		
algae or other aquatic life	Filamentous green algae		
habitat assessment score	Not completed		
photo number (s)	1 - d/s, 2 - u/s		
rainfall information	Trace previous 5 days		
6-HUC code & name	080102040105 (Middle Fork Forked Deer River - Moize Creek)		
(12-digit)	Windle Folk Folker - Wolze Oreak)		
7-Confirmed by:	Not Required		
8-Mitigation	No Y Yes (include on Mitigation Form)		
9-ETW	No ✓ Yes		
10-303 (d) List	No		
	Yes Habitat Siltation Other		
11-Assessed	No U Yes 🗸		
12-Notes	Assessed as Not Supporting		
Estimate size (acres) of lake or			
pond if applicable; provide any			
pertinent information needed to			
better describe feature; indicate if hydrologic determination			
form was completed.			

Ecology Field Data Sheet: Water Resources

Project: Gibson County: Creekwood Road, Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56; P.E. 27946-0403-94, PIN116956.00

Date of survey: 9.16.2014 Biologist: T. Nehus, L. Khoury Affiliation: TDOT

1-Station: from plans	60+10		
2-Map label and name	STR-2 (Branch of Sugar Creek)		
3-Latitude/Longitude	N35.82239; W88.85981		
4-Potential impact	Crossing / bridge, runoff		
5-Feature description:			
what is it	Intermittent Stream		
blue-line on topo? (y/n)	No Yes 🗸		
defined channel (y/n)	No Yes /		
straight or meandering	Straight Meandering		
channel bottom width	20'		
top of bank width	40'		
bank height and slope ratio	15' - 20'		
avg. gradient of stream (%)			
substratum	Sand		
riffle/run/pool	N/A		
width of buffer zone	LDB: 30' RDB: 30'		
water flow	No		
water depth	0		
water width	0		
general water quality	Poor		
OHWM indicators	Clear line impressed on bank		
groundwater connection	Unk.		
bank stability: LDB, RDB	LDB: Stable		
dominant species: LDB, RDB	LDB: Kudzu, cottonwood, sycamore RDB: Kudzu, cottonwood, sycamore		
overhead canopy (%)	20%		
benthos	None		
fish	None		
algae or other aquatic life	None		
habitat assessment score	N/A		
photo number (s)	3 - d/s, 4 - u/s		
rainfall information	Trace previous 5 days		
6-HUC code & name			
(12-digit)	080102040105 (Middle Fork Forked Deer River - Moize Creek)		
7-Confirmed by:	Not Required		
8-Mitigation	No Yes (include on Mitigation Form)		
9-ETW	No ✓ Yes		
10-303 (d) List	No		
() =	Yes Habitat Siltation Other		
11-Assessed	No Yes 🗸		
12-Notes	Assessed as Not Supporting		
Estimate size (acres) of lake or			
pond if applicable; provide any			
pertinent information needed to			
better describe feature; indicate if hydrologic determination			
form was completed.			

Ecology Field Data Sheet: Water Resources

Project: Gibson County: Creekwood Road, Bridges over Branch of Sugar Creek at LM 0.50 and Sugar Creek at LM 0.56; P.E. 27946-0403-94, PIN116956.00

Date of survey: 9.16.2014 Biologist: T. Nehus, L. Khoury Affiliation: TDOT

1-Station: from plans	60+00L - 65+00L		
2-Map label and name	WWC-1		
3-Latitude/Longitude	N35.82282; W88.85997		
4-Potential impact	Fill, runoff		
5-Feature description:			
what is it	Wet Weather Conveyance		
blue-line on topo? (y/n)	No ✓ Yes		
defined channel (y/n)	No Yes V		
straight or meandering	Straight Meandering		
channel bottom width	5'		
top of bank width	10'		
bank height and slope ratio	4'		
avg. gradient of stream (%)			
substratum	Soil, leaf litter		
riffle/run/pool	N/A		
width of buffer zone	LDB: 10' - 20' RDB: 30'		
water flow	No		
water depth	N/A		
water width	N/A		
general water quality	N/A		
OHWM indicators	N/A		
groundwater connection	No		
bank stability: LDB, RDB	LDB: Stable		
dominant species: LDB, RDB	LDB: Cottonwood, boxelder, black willow, river cane, kudzu (near STR-2) RDB: Cottonwood, boxelder, black willow, river cane, kudzu (near STR-2)		
overhead canopy (%)	90%		
benthos	N/A		
fish	N/A		
algae or other aquatic life	N/A		
habitat assessment score	N/A		
photo number (s)	5 and 6 up gradient		
rainfall information	Trace previous 5 days		
6-HUC code & name	080102040105 (Middle Fork Forked Deer River - Moize Creek)		
(12-digit)	Windle Folk Folker State Misses Stocky		
7-Confirmed by:	Not Required		
8-Mitigation	No Y Yes (include on Mitigation Form)		
9-ETW	No Y Yes		
10-303 (d) List	No 🗸		
. ,	Yes Habitat Siltation Other		
11-Assessed	No / Yes		
12-Notes	Open kudzu lined channel from confluence with STR-2 up gradient approximately 100'.		
Estimate size (acres) of lake or			
form was completed.			
11-Assessed 12-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination	Yes Habitat Siltation Other No ✓ Yes		

Index Of Sheets

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

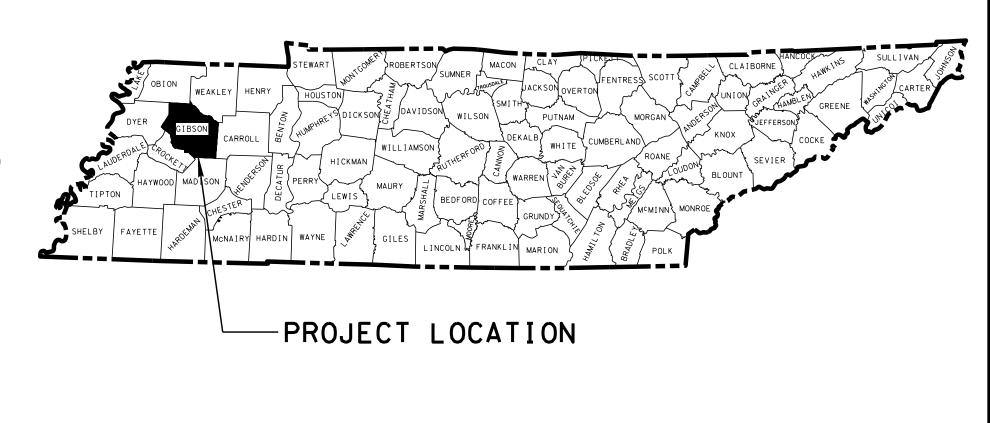
GIBSON COUNTY

CREEKWOOD ROAD

BRIDGE AND APPROACHES OVER BRANCH OF SUGAR CREEK AT L.M. 0.50 AND SUGAR CREEK AT L.M. 0.56.

PRELIMINARY

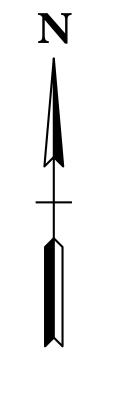
STATE HIGHWAY NO. N.A. F.A.H.S. NO. N.A.



TENN.

FED. AID PROJ. NO

STATE PROJ. NO.



27946-2403-94
PROJECT NO. BRZ-2700 (56) (R.O.W.)
FROM STA. 52+84.00 TO 63+76.00

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

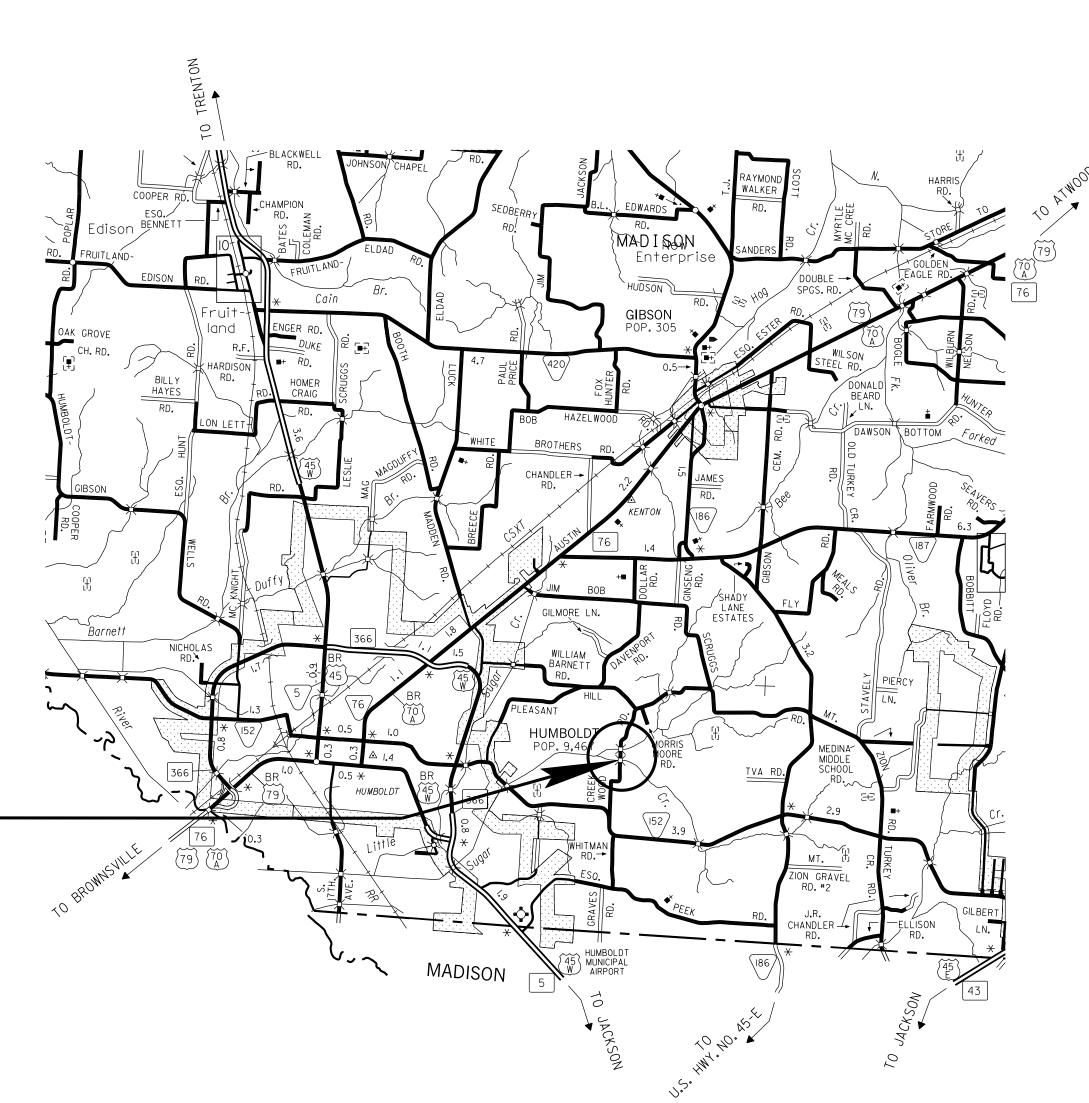
THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1<u>tabitha cavaness, p.e., reg. 4</u>

DESIGNER LARRY BRASHER, REG.4 CHECKED BY WILLIE COLEMAN, REG.4

P.E. NO. <u>27946-0403-94</u>

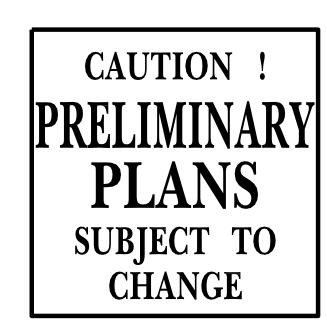
PIN NO. 116956.00



SCALE: 1"= 1 MILE

RIGHT-OF-WAY LENGTH

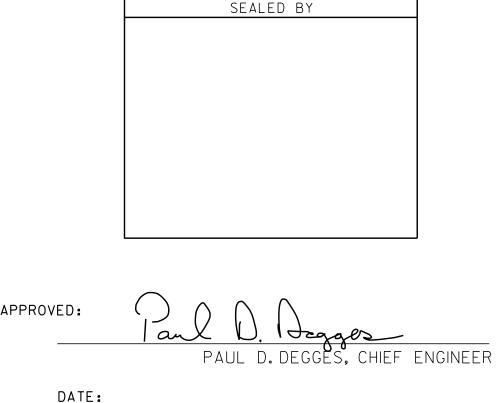
0.207 MILES



NO EXCLUSIONS
NO EQUATIONS

ORIGINAL SURVEY 02-05-14

TRAFFIC	DATA
ADT (2016)	160
ADT (2036)	200
DHV (2036)	28
D	65 - 35
T (ADT)	3 %
T (DHV)	2 %
V	30 MPH



SHEET NO.

2014

BRZ-2700(56)

27946-2403-94

APPROVED:

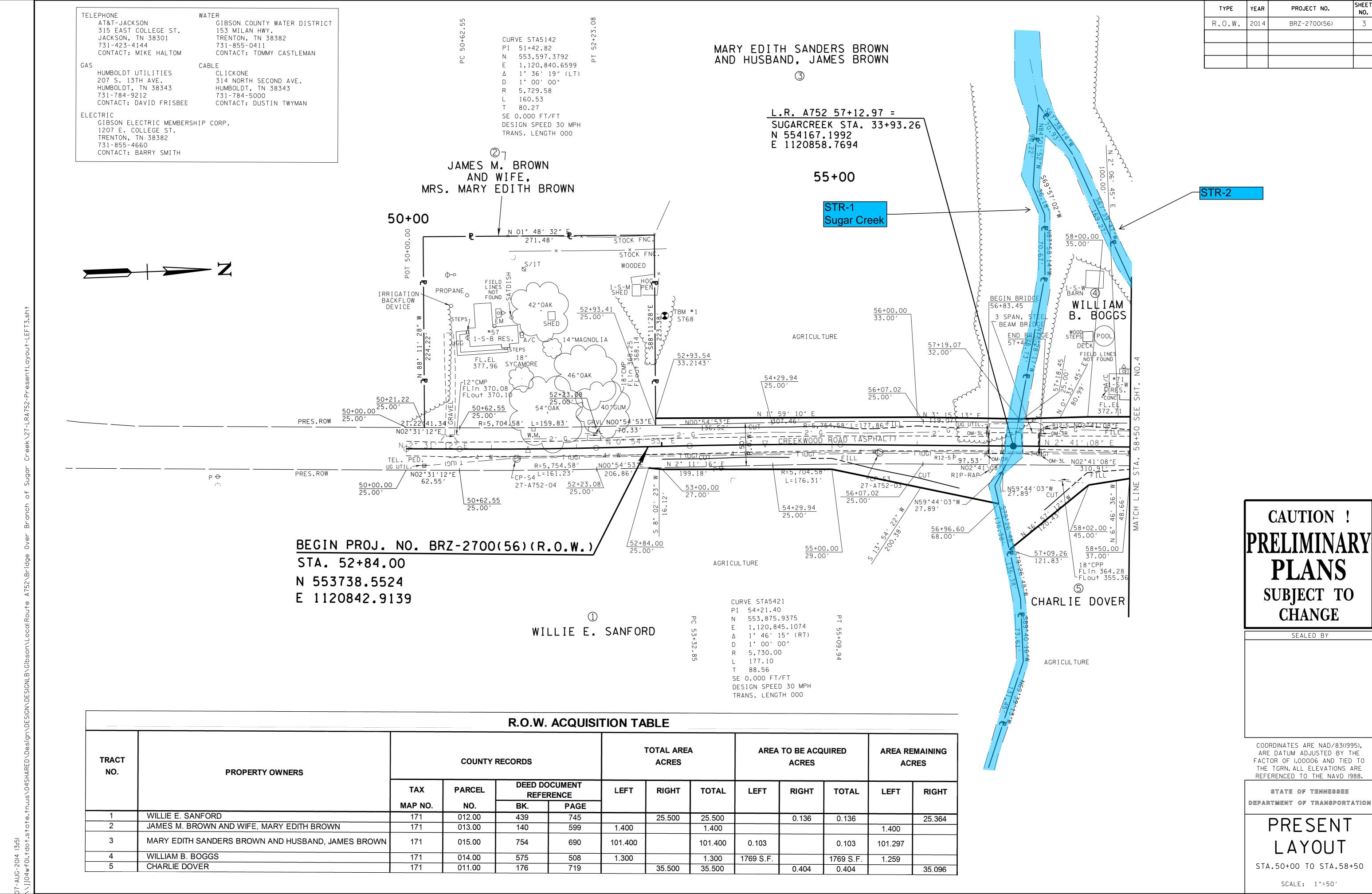
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

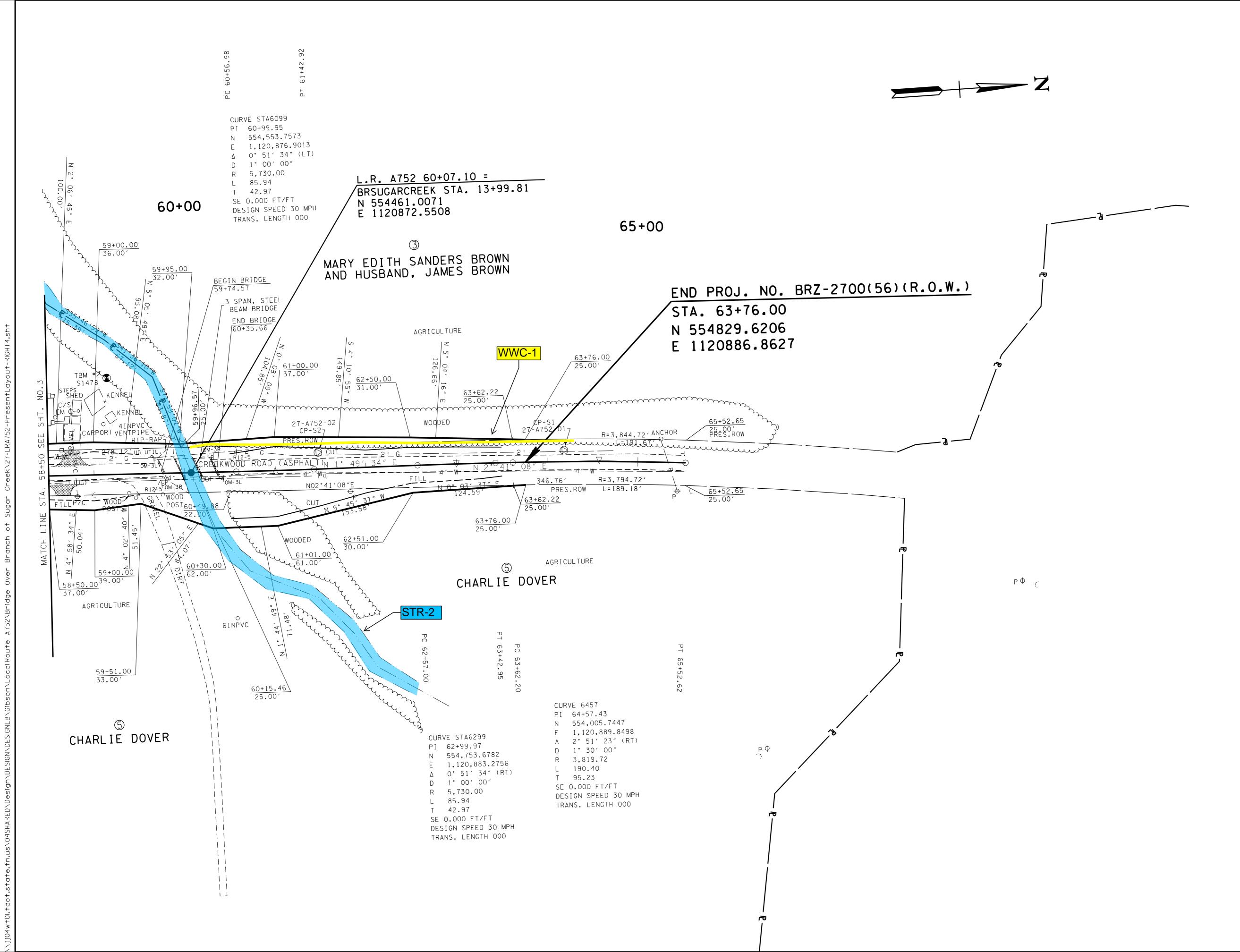
DIVISION ADMINISTRATOR

DATE



PROJECT NO.

SEALED BY



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2014
 BRZ-2700(56)
 4

CAUTION! PRELIMINARY PLANS SUBJECT TO CHANGE

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.58+50 TO STA.65+50

SCALE: 1"=50'



Photo 1. N35.82164; W88.85982 Downstream view of STR-1 (Sugar Creek)



Photo 2. N35.82164; W88.85982 Upstream view of STR-1 (Sugar Creek)

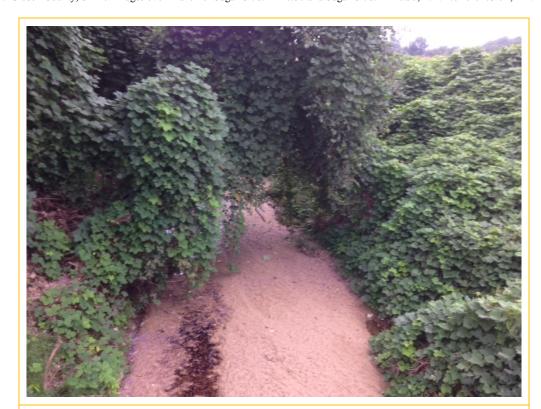


Photo 3. N35.82239; W88.88981 Downstream view of STR-2 (Branch of Sugar Creek)



Photo 4. N35.82239; W88.88981 Upstream view of STR-2 (Branch of Sugar Creek)



Photo 5. N35.82282; W88.85997 Up gradient view of WWC-1 near confluence with STR-2



Photo 6. N35.82282; W88.85997 Up gradient view of WWC-1 within tree line

9. Training Certifications



10. TMDL Information



TMDL NOT REQUIRED