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

March 29, 2015

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. Enclosed is the Notice of Intent (NOI) for Construction Activity – Storm Water Discharges and one hard copy and one electronic copy on CD of the site-specific Storm Water Pollution Prevention Plan (SWPPP).

Project # 71952-1544-04, PIN 120463.00
SIA, Bennett Road, Serving Project Victor
Putnam County

By copy of this letter, we are sending three hard copies of the permits 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)253-2545 if I can be of any assistance.

Sincerely,

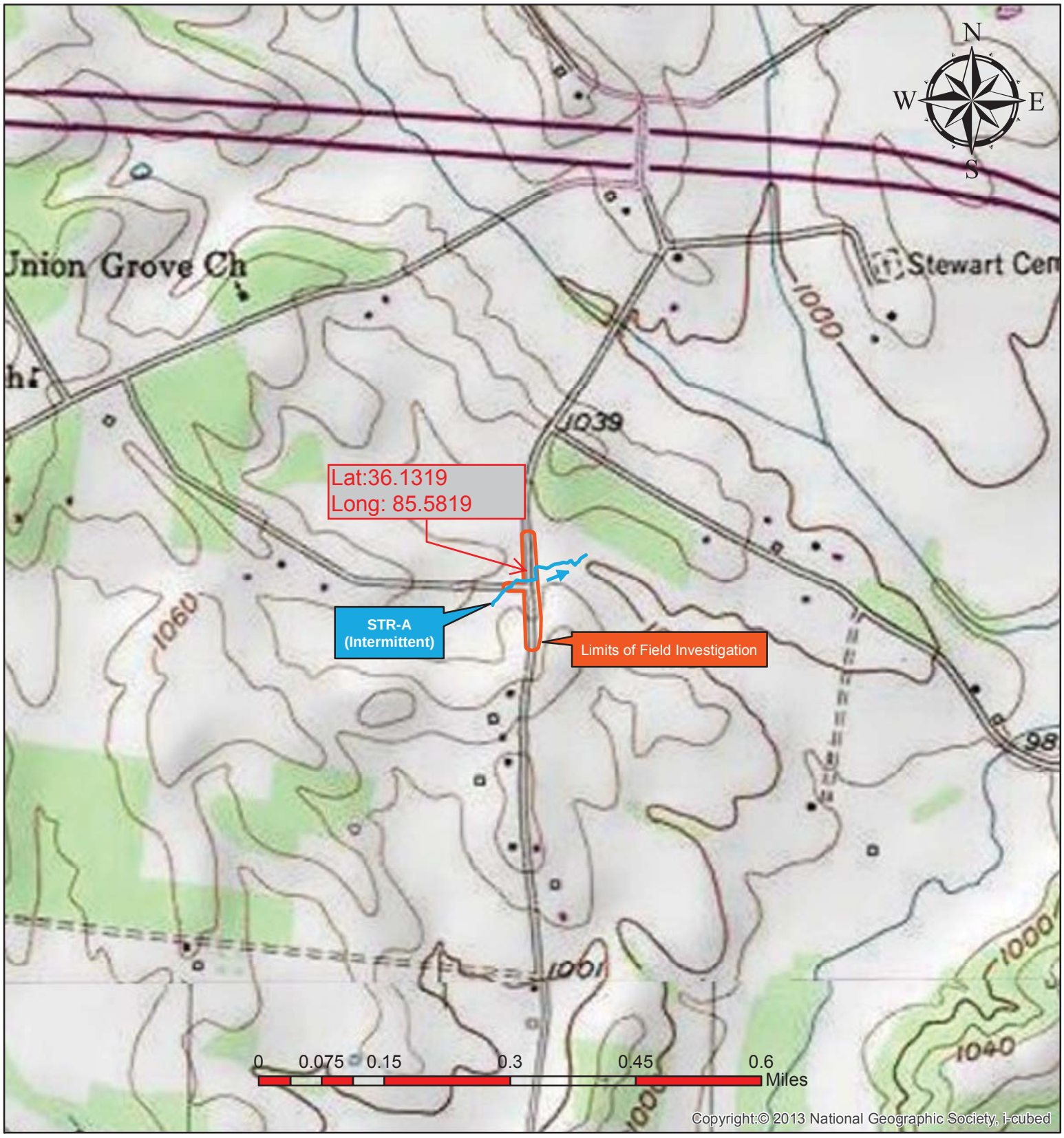
Andrew Wisniewski
Environmental Permits Section

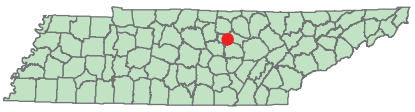
Enclosures

JLH: KMA:

Enclosures for:
cc: Mr. Ken Flynn, Region 2 Construction (CD)

Reading File, NPDES File



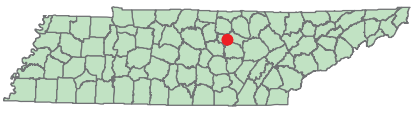


Water Resources Topographic Map
Putnam County, SIA Serving Project Victor (Bennett Road)

Cookeville-West, TN Quadrangle (326-NE)
11.14.2014

PE 71952-1544-04
PIN 120463.00

TDOT



Water Resources Aerial Map
Putnam County, SIA Serving Project Victor (Bennett Road)

Cookeville-West, TN Quadrangle (326-NE)
11.14.2014

PE 71952-1544-04
PIN 120463.00

TDOT

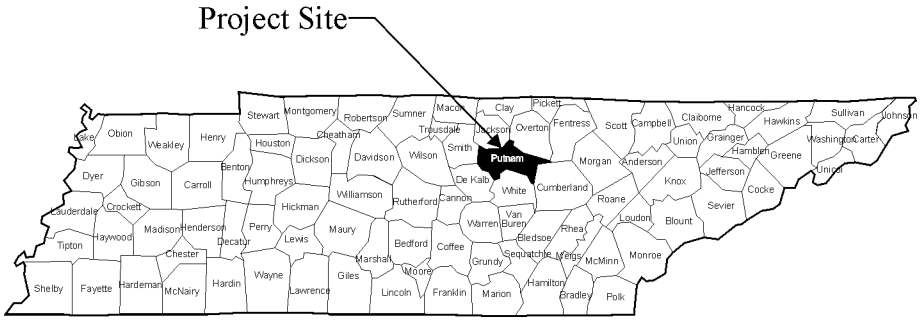
Documentation and Permits Binder

Project Name: **Bennett Road: Industrial Access Road**

Serving Project Victor

Project No.: 71952-1544-04
PIN: 120463.00

Putnam County, Tennessee



Prepared for:
Tennessee Department of Transportation – TDOT

Prepared by:

NEEL-SCHAFFER
Solutions you can build upon

Consultant Reference No.: 12158.011

DOCUMENTS AND PERMITS BINDER

CHECKLIST

PROJECT NAME: Bennett Road, Industrial Access Road
Serving Project Victor in Putnam Co
PIN: 120463.00
PROJECT NO.:
COUNTY: Roane & Morgan Counties, 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. ☐ TDEC 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

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

State/US Route or Road Name: _____

TDOT Construction No.: _____ TDOT Contract No.: _____

TDOT EPSC Inspection Monthly Rainfall Data Log – _____

Date	Day of Week[1]	Predicted Precipitation (%)[2]	Rainfall Gauge 1 (in)	Rainfall Gauge 2 (in)	Rainfall Gauge 3 (in)	Rainfall Gauge 4 (in)	Rainfall Gauge 5 (in)	Rainfall Gauge 6 (in)	Duration (hr)

[1] Day of Week= Su,M,Tu,W,Th,F,Sa

[2] Predicted Precipitation Source: _____
Southern Regional Climate Center (SRCC); R = Gauge Removed

NOAA Atlas 14, Volume 2, Version 3 COOKEVILLE
Station ID: 40-2009
Location name: Cookeville, Tennessee, US*
Latitude: 36.1075°, Longitude: -85.5033°
Elevation:
Elevation (station metadata): 1090 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

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.381** (0.349-0.418)	**0.450** (0.413-0.494)	**0.528** (0.484-0.578)	**0.595** (0.543-0.650)	**0.684** (0.619-0.746)	**0.754** (0.679-0.822)	**0.829** (0.741-0.903)	**0.905** (0.802-0.987)	**1.01** (0.883-1.10)	**1.10** (0.947-1.20)
10-min	**0.609** (0.557-0.668)	**0.720** (0.660-0.789)	**0.846** (0.776-0.926)	**0.952** (0.869-1.04)	**1.09** (0.987-1.19)	**1.20** (1.08-1.31)	**1.32** (1.18-1.44)	**1.44** (1.27-1.56)	**1.60** (1.40-1.74)	**1.73** (1.49-1.89)
15-min	**0.761** (0.697-0.835)	**0.905** (0.830-0.992)	**1.07** (0.981-1.17)	**1.20** (1.10-1.31)	**1.38** (1.25-1.51)	**1.52** (1.37-1.66)	**1.67** (1.49-1.81)	**1.81** (1.60-1.97)	**2.01** (1.76-2.19)	**2.17** (1.87-2.37)
30-min	**1.04** (0.955-1.14)	**1.25** (1.15-1.37)	**1.52** (1.39-1.67)	**1.74** (1.59-1.91)	**2.05** (1.85-2.23)	**2.29** (2.06-2.50)	**2.55** (2.28-2.78)	**2.82** (2.50-3.07)	**3.20** (2.80-3.49)	**3.51** (3.03-3.83)
60-min	**1.30** (1.19-1.43)	**1.57** (1.44-1.72)	**1.95** (1.79-2.13)	**2.27** (2.07-2.48)	**2.72** (2.47-2.97)	**3.10** (2.79-3.38)	**3.51** (3.14-3.83)	**3.95** (3.50-4.31)	**4.59** (4.01-5.00)	**5.12** (4.43-5.59)
2-hr	**1.53** (1.40-1.68)	**1.83** (1.68-2.02)	**2.28** (2.08-2.51)	**2.65** (2.40-2.91)	**3.18** (2.87-3.49)	**3.63** (3.25-3.98)	**4.11** (3.65-4.50)	**4.63** (4.08-5.07)	**5.38** (4.67-5.90)	**6.02** (5.16-6.60)
3-hr	**1.67** (1.53-1.83)	**2.00** (1.83-2.21)	**2.47** (2.25-2.72)	**2.86** (2.61-3.15)	**3.43** (3.10-3.76)	**3.90** (3.51-4.27)	**4.41** (3.93-4.82)	**4.96** (4.38-5.43)	**5.75** (5.01-6.30)	**6.41** (5.51-7.04)
6-hr	**2.04** (1.87-2.25)	**2.43** (2.23-2.69)	**2.97** (2.71-3.28)	**3.43** (3.12-3.78)	**4.08** (3.69-4.49)	**4.63** (4.16-5.09)	**5.21** (4.64-5.72)	**5.83** (5.15-6.40)	**6.72** (5.85-7.38)	**7.45** (6.41-8.19)
12-hr	**2.48** (2.29-2.70)	**2.95** (2.72-3.22)	**3.59** (3.31-3.92)	**4.13** (3.80-4.51)	**4.89** (4.47-5.33)	**5.52** (5.01-6.00)	**6.18** (5.58-6.72)	**6.88** (6.15-7.48)	**7.87** (6.95-8.57)	**8.68** (7.57-9.47)
24-hr	**3.07** (2.88-3.28)	**3.66** (3.45-3.92)	**4.47** (4.20-4.78)	**5.10** (4.78-5.45)	**5.97** (5.59-6.37)	**6.67** (6.22-7.10)	**7.38** (6.86-7.86)	**8.11** (7.50-8.63)	**9.12** (8.38-9.69)	**9.90** (9.05-10.5)
2-day	**3.73** (3.51-3.97)	**4.45** (4.19-4.75)	**5.43** (5.11-5.79)	**6.21** (5.84-6.62)	**7.27** (6.82-7.75)	**8.13** (7.59-8.66)	**9.00** (8.38-9.59)	**9.91** (9.18-10.6)	**11.1** (10.3-11.9)	**12.1** (11.1-12.9)
3-day	**3.97** (3.73-4.22)	**4.74** (4.47-5.06)	**5.76** (5.42-6.14)	**6.57** (6.17-6.99)	**7.65** (7.17-8.14)	**8.50** (7.95-9.04)	**9.37** (8.72-9.96)	**10.3** (9.51-10.9)	**11.4** (10.6-12.2)	**12.4** (11.3-13.2)
4-day	**4.21** (3.96-4.48)	**5.04** (4.74-5.37)	**6.10** (5.74-6.50)	**6.92** (6.50-7.36)	**8.02** (7.52-8.52)	**8.88** (8.30-9.42)	**9.73** (9.07-10.3)	**10.6** (9.84-11.2)	**11.7** (10.8-12.5)	**12.6** (11.6-13.4)
7-day	**5.07** (4.77-5.39)	**6.05** (5.69-6.44)	**7.28** (6.85-7.74)	**8.23** (7.73-8.74)	**9.47** (8.89-10.1)	**10.4** (9.77-11.1)	**11.4** (10.6-12.1)	**12.4** (11.5-13.1)	**13.7** (12.6-14.5)	**14.6** (13.5-15.6)
10-day	**5.78** (5.45-6.13)	**6.86** (6.48-7.29)	**8.19** (7.73-8.69)	**9.21** (8.68-9.77)	**10.6** (9.94-11.2)	**11.6** (10.9-12.3)	**12.6** (11.8-13.4)	**13.6** (12.7-14.5)	**15.0** (13.9-15.9)	**16.0** (14.8-17.0)
20-day	**7.94** (7.52-8.38)	**9.38** (8.89-9.90)	**10.9** (10.4-11.5)	**12.1** (11.4-12.7)	**13.5** (12.8-14.3)	**14.6** (13.8-15.4)	**15.6** (14.7-16.4)	**16.6** (15.6-17.5)	**17.7** (16.6-18.7)	**18.6** (17.4-19.6)
30-day	**9.79** (9.34-10.3)	**11.5** (11.0-12.1)	**13.2** (12.6-13.9)	**14.5** (13.8-15.2)	**16.1** (15.3-16.9)	**17.2** (16.4-18.1)	**18.3** (17.4-19.2)	**19.3** (18.3-20.3)	**20.5** (19.4-21.6)	**21.4** (20.2-22.5)
45-day	**12.4** (11.9-13.0)	**14.5** (13.9-15.2)	**16.6** (15.8-17.3)	**18.0** (17.2-18.9)	**19.9** (18.9-20.8)	**21.2** (20.2-22.2)	**22.4** (21.3-23.5)	**23.5** (22.3-24.6)	**24.9** (23.6-26.1)	**25.8** (24.4-27.1)
60-day	**14.9** (14.3-15.6)	**17.5** (16.7-18.3)	**19.8** (19.0-20.8)	**21.5** (20.6-22.5)	**23.6** (22.5-24.7)	**25.0** (23.9-26.2)	**26.4** (25.1-27.6)	**27.6** (26.2-28.9)	**29.0** (27.5-30.4)	**30.0** (28.4-31.5)

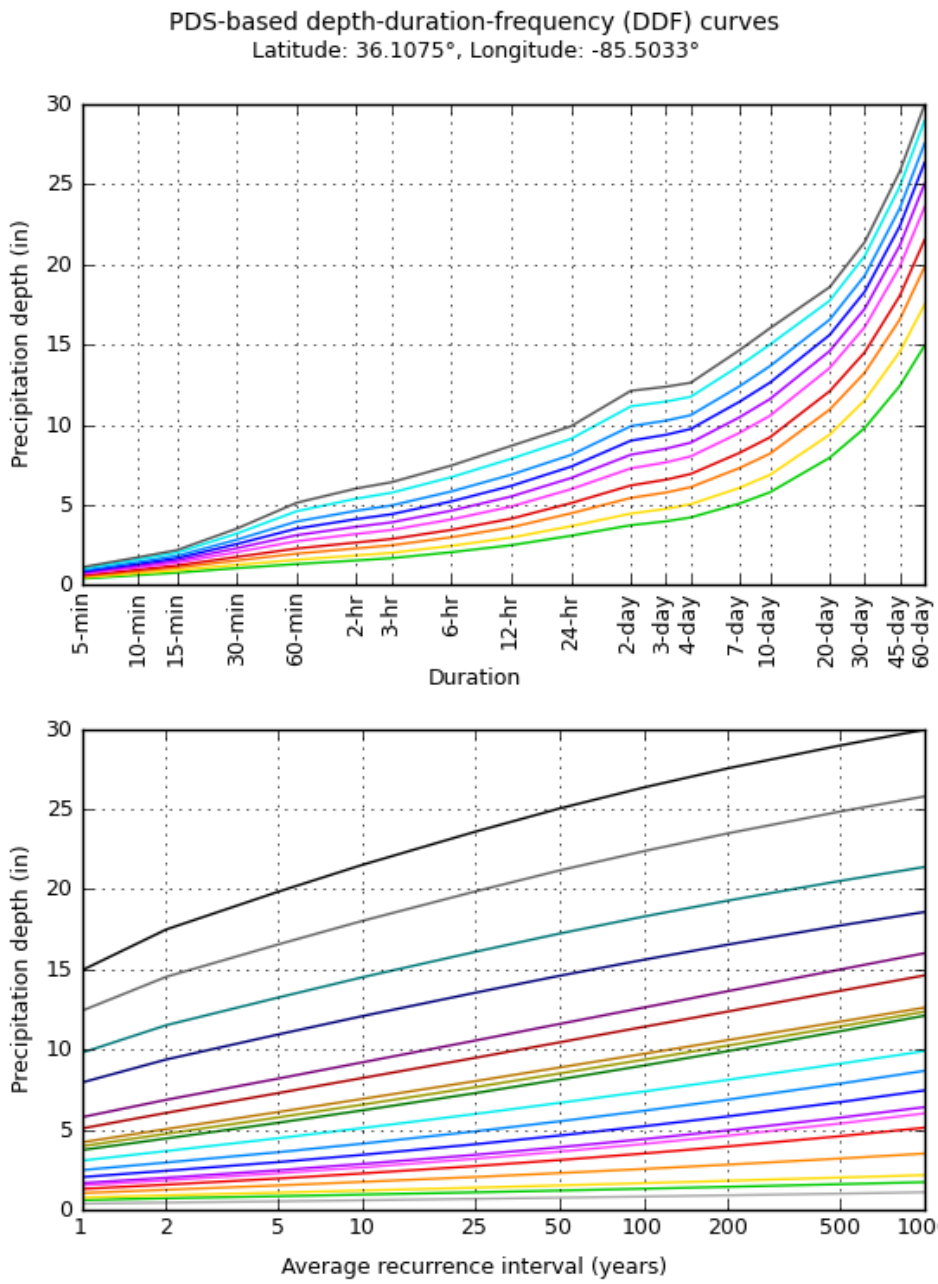
[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

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.

Back to Top

PF graphical



NOAA Atlas 14, Volume 2, Version 3

Created (GMT): Wed Mar 18 15:09:55 2015

Duration

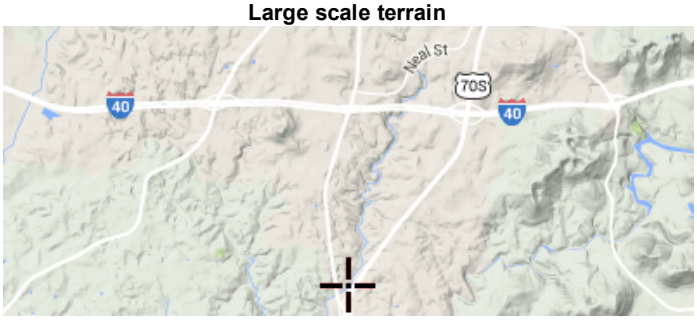
5-min, 10-min, 15-min, 30-min, 60-min, 2-hr, 3-hr, 6-hr, 12-hr, 24-hr, 2-day, 3-day, 4-day, 7-day, 10-day, 20-day, 30-day, 45-day, 60-day

Back to Top

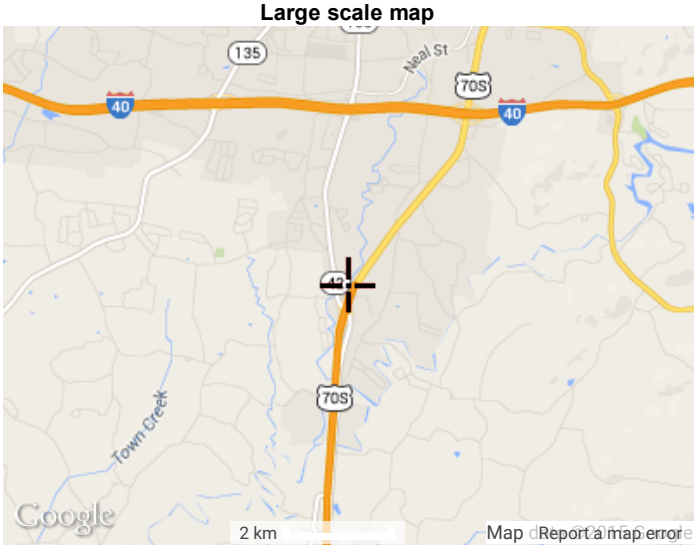
Maps & aerials

Small scale terrain

Large scale terrain



Large scale map



Large scale aerial

Back to Top

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

Disclaimer

CONSTRUCTION DIVISION
EPSC DELEGATION OF AUTHORITY

In accordance with Section 7.7.3 (Duly Authorized Representative) of the *Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities*, I _____ (print name of TDOT project supervisor), delegate the reporting responsibility of coordination with the erosion prevention and sediment control (EPSC) inspection services 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 discuss the reports and recommendations from the EPSC inspection services consultant on the subject project directly to the contractor.

_____ (signature of TDOT Project Supervisor)

_____ (signature of TDOT delegate)

_____ (date)

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.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305	Chattanooga	540 McCallie Avenue STE 550	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

CIRCULAR LETTER

SECTION: **209-01**
NUMBER: **209.01-02**
SUBJECT: **EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION REPORT**
DATE: **MAY 1, 2012**

The attached inspection report and monthly rain gauge log in the appendices shall be utilized as the standard statewide report for the evaluation of erosion prevention and sediment control (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 the attached instructions.

Erosion Prevention and Sediment Control (EPSC)
Inspection Procedures on TDOT Projects

Detailed instructions on performing an EPSC inspection, documenting rainfall, and completing the EPSC Inspection Report are outlined below. Any deviations from these procedures require written authorization prior to implementation.

EPSC inspections are required on all TDOT projects covered by the TN Construction General Permit. These EPSC inspections will be performed by one of the following entities: a TDOT EPSC inspector, a consultant EPSC inspector or a Construction Engineering Inspection (CEI) EPSC inspector. Except as noted below, the requirements of this circular apply to TDOT, consultant, and CEI EPSC inspectors. All EPSC inspectors are required to have and maintain the TDEC Fundamentals of Erosion Prevention and Sediment Control Level I certification.

I. Basic requirements

The information provided in this section must be verified and documented by the EPSC inspector during each twice weekly inspection. Any deviations from the requirements set forth below may result in a non-conformance on a project.

A. General requirements of the Construction General Permit (CGP)

1. The Notice of Coverage (NOC) shall be posted on-site for the duration of the project.

2. The Storm Water Pollution Prevention Plan (SWPPP) and all other applicable permits shall be kept onsite at all times. The location of the SWPPP along with an individual contact name, company name, phone number and email address (if applicable) shall be posted on-site.

3. EPSC inspections shall be performed twice weekly, at least 72 hours apart. TDOT weeks are considered from Sunday to Saturday.

4. EPSC measures are to be in place before grading operations begin on each section of the project. This applies to all areas covered by the Construction contract, including newly disturbed areas as construction progresses into new areas and utility installations associated with the project's contract.

5. No more than 50 acres of active soil disturbance is allowed at any time during the construction project, unless approval has been obtained in advance and in writing from the TDOT Environmental Division.

6. Clearing and grubbing of pre-construction vegetation may only occur 15 days prior to beginning construction unless the area is seeded and/or mulched or other temporary cover is installed.

7. Off-site sediment tracking and dust generation shall be minimized.

8. Stabilization measures must be implemented on disturbed areas within 14 days of achieving final grade or on areas that will remain idle for 14 days that are not yet at final grade. Stabilization can be accomplished with temporary or permanent cover.

9. Steep slopes, those that are 35% grade or greater, shall be temporarily stabilized not later than 7 days after construction activity on the slope has temporarily or permanently ceased.

10. Sediment shall be removed from EPSC measures when design capacity is reduced by 50% or when the EPSC measure is half full.

11. Litter, construction debris, and chemicals exposed to stormwater shall be picked up prior to anticipated storm events.

12. Temporary EPSC measures shall be removed once the area they are serving has been permanently stabilized and prior to the submittal of the Notice of Termination.

13. An undisturbed buffer zone, or equivalent measure, is required on all streams. For streams that are not impaired or Exceptional Tennessee Waters, the average buffer width must be at least 30 feet, with a minimum width of 15 feet at any one point. For impaired or Exceptional Tennessee Waters, the average buffer width required is 60 feet, with a minimum width of 30 feet at any one point.

    a. Buffer zones shall be marked in the field with high visibility marking prior to beginning construction.

    b. Buffer zones shall be measured from the stream's top of bank.

14. Sediment basins or equivalent measures are required at outfalls if either of the following conditions apply:

    a. 10 acres or more drain to one outfall.

    b. 5 acres or more drain to one outfall for impaired or Exceptional Tennessee Waters.

B. Rainfall Monitoring

1. For sites that do not discharge to impaired or exceptional Tennessee waters, EPSC measures have been designed for the 2-year, 24-hour storm event or equivalent intensity. For those sites discharging to impaired or exceptional Tennessee waters, measures have been designed for the 5-year, 24-hour storm or equivalent intensity. To document rainfall depth and equivalent intensity, rainfall gauges shall be read and emptied daily at generally the same time of day and recorded on the monthly rainfall log (see the appendices). Each rain event's rainfall depth and approximate duration shall be documented.

2. A fence post type rain gauge shall be used to measure rainfall. A typical fence post gauge is a wedge-shaped gauge that measures up to 6 inches (150 mm) of rainfall. An English scale is provided on one face with a metric scale on the other face. Graduations are 0.01 inches and 0.01 mm.

3. At least one rain gauge shall be installed for each linear mile or portion of a mile, as measured along the project's center line. Rain gauges are required for all project areas where there is active clearing, grubbing, excavation, grading, cutting, or filling, or in areas that have not yet been permanently stabilized. The rain gauge(s) may be removed in areas that have reached final stabilization..

4. The rain gauge(s) shall be located at or along the project site in an open area where the measurement will not be influenced by interference such as overhangs, trees, gutters, etc.

5. The approximate location of each rain gauge and the start and end dates of the gauge's use at a given location shall be noted in the SWPPP.

6. Rainfall monitoring shall start when clearing, grubbing, excavation, grading, cutting, or filling begins on that portion of the project.

7. The rain gauge shall be read and checked for operational soundness daily (during normal business hours). Gauges shall be repaired or replaced on the same day if found to be damaged, not working, or missing.

8. In lieu of reading project site rain gauges on weekends and on state holidays, the gauges can be read and emptied the next business day and the project can use a reference site for rainfall data on non-business days. The reference site shall be the closest gauge within proximity to the project and shall be operated by a recognized source, such as the National Oceanic and Atmospheric Administration (NOAA) or the Tennessee Valley Authority (TVA). Local news station rainfall information can also be used as a reference site. The reference site gauge information (location, dates, source, etc.) shall be recorded on the monthly rainfall log.

9. In the event that the rainfall is still in progress at the daily recording time, the gauge shall be emptied and the rainfall log shall indicate that the storm event was still in progress.

II. Conducting an EPSC Inspection

A. Prior to initiation of construction, a baseline inspection shall be performed to identify pre-existing conditions and document the conditions of all receiving streams and wetlands. Outfalls, waters of the state, and any pre-existing disturbance on or adjacent to the

proposed work area shall be inspected and photographed to document any pre-existing sediment discharges or unstabilized areas. If an area exhibiting stream or wetland characteristics is observed at a location not previously identified as waters of the State, notify the TDOT Project Supervisor or designee immediately. A baseline inspection report including photographs of the aforementioned items will be prepared by the inspector who performs the baseline inspection. This report will include observations or findings discovered during the baseline inspection including existing erosion, sediment deposits, etc., and will be provided to the TDOT Project Supervisor. If possible, the baseline inspection should be conducted prior to the pre-construction and environmental pre-construction meetings, and the inspection's observations or findings should be discussed with all parties during the pre-construction and environmental pre-construction meetings.

B. The Contractor or the Contractor's representative shall be present during the EPSC baseline inspection.

C. The EPSC inspector shall verify that all environmentally sensitive areas, ARAP impact area boundaries, and stream buffers have been marked in the field with high visibility marking prior to initiating construction activities.

D. Preparing for the inspection

1. Begin each EPSC inspection by reviewing previous inspection reports, the SWPPP, all applicable permits, rainfall data, and dates of disturbance.

2. Record rainfall monitoring information on the monthly rainfall monitoring log.

3. Review ARAP locations and conditions and compare with the SWPPP.

4. Review the EPSC plans in the SWPPP noting the location of outfalls, buffers, and other major EPSC measures. On larger projects, photocopies of the erosion control plan sheets may be used for written notes from the field inspection.

5. Review the dates of disturbance to identify inactive disturbed areas nearing the end of the required stabilization timeframes. Steep slope project areas where construction activity has temporarily or permanently ceased must have temporary or permanent stabilization installed within seven (7) days after construction activity ceases. Other project areas that do not include steep slopes where construction activity has temporarily or permanently ceased must have temporary or permanent stabilization installed within 14 days after construction activity ceases. Cleared and grubbed areas where construction activity has temporarily ceased must have temporary stabilization installed within 15 days after clearing and grubbing activities cease.

E. Inspect all disturbed areas, steep slopes, recently stabilized areas, laydown areas, parking areas, EPSC measures and outfalls on the project. The inspection shall also include support areas, including those support areas that are exclusive to the TDOT project and

may be located off the project's right-of-way. Examples of support areas include storage areas, parking areas, concrete batch plants, etc. Any Waste and Borrow sites shall be inspected as outlined in the "Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects" Manual.

1. If possible, perform the EPSC inspection with the Contractor's EPSC representative. The EPSC inspector (TDOT EPSC inspector, consultant EPSC inspector or CEI inspector) and the Contractor's EPSC representative should make every effort to conduct joint EPSC inspections to avoid conflicting EPSC inspection reports.

2. Coordinate with the Contractor's representative regarding construction progress and proposed construction activities. The Contractor's construction progress and proposed construction activities may affect the EPSC inspection recommended action items.

3. The EPSC inspector (TDOT EPSC inspector, consultant EPSC inspector or CEI inspector) and the Contractor's EPSC representative should jointly determine how to inspect the project site in an orderly fashion to ensure that all applicable project areas are inspected. EPSC inspections may naturally start at one end of the project and proceed to the other end of the project. If it is beneficial and applicable, the EPSC inspection may start with inspection of disturbed project areas and then proceed to inspection of stabilized project areas later in the inspection.

4. Inspect all EPSC measures to ensure that they are installed per TDOT standards.

    a. All measures shall be installed per the TDOT standard drawings (or as otherwise specified in the plans), per Specification 209.07. If measures have been installed incorrectly, they should be clearly identified by station number and offset in the EPSC inspection report, and a recommendation shall be made to install them correctly.

    b. If measures have not been installed per the TDOT standard drawing, coordinate with the TDOT Construction Inspector or TDOT-designated project representative (CEI) responsible for approving pay items to consider pay item reduction or withholding.

    c. If measures have not been maintained per the standard drawing or cleaned out when the sediment storage area is 50% full, the measures shall be clearly identified by station number and offset and a recommendation shall be made to maintain the measures. Note that the Contractor has 24 hours to complete the recommended maintenance or a non-conformance will be issued. The 24-hour maintenance timeframe for items recommended in the EPSC inspection begins once the inspection is completed. Wet site conditions may delay EPSC measure maintenance only if the recommended maintenance cannot be

performed under current site conditions or if performing the maintenance would cause additional EPSC problems. If EPSC measure maintenance will be delayed due to wet site conditions, the wet site conditions must be documented in the EPSC inspection report, and the EPSC measure maintenance must be performed as soon as practicable as site conditions improve. If wet site conditions persist until the subsequent EPSC inspection, the EPSC inspector (TDOT EPSC inspector, consultant EPSC inspector or CEI inspector) should document the previously recommended action as a repeat occurrence (recurring item), the cause of the persistent wet site conditions and any efforts the Contractor has made to try to address the previously recommended maintenance. In wet conditions, the EPSC inspector should recommend any additional measures that could be taken to prevent future measure failures or off-site sedimentation damage, such as seeding or mulching, adding additional upstream measures, or diverting runoff away from the area.

5. Determine if EPSC measures are installed as shown on the SWPPP.

    a. If the EPSC measures specified in the SWPPP have not been installed but other measures have and they appear to be functioning correctly, note the change in the inspection report , the SWPPP revision index sheet and on the field SWPPP's EPSC sheets.

    b. If the EPSC measures are not installed per the SWPPP and are not functional, make recommendations for a corrective action to install appropriate EPSC measures and document in the EPSC inspection report. The Contractor has 24 hours to install the measures or a non-conformance will be issued. The 24-hour maintenance timeframe for items recommended in the EPSC inspection begins once the inspection is completed. Additional EPSC measures may be necessary. If this is the case, the SWPPP shall be modified to reflect these changes, the SWPPP revision shall be recorded on the SWPPP revision index sheet, and additional measures shall be installed in the field within 24 hours.

6. If an EPSC measure has failed, determine the cause of the failure (incorrectly installed, not maintained, watershed changed, rain event greater than design storm, vandalism, wrong measure for the area, etc.) and make recommendations for corrective actions to replace, upgrade, or add additional EPSC measures. Modify the SWPPP to reflect these changes and document the corrective actions in the EPSC inspection report.

7. If EPSC measures are found to be damaged, ineffective, or absent, written recommendations for a corrective action shall be made in the EPSC inspection report, and communicated to the TDOT Project Supervisor or designee and Contractor. The Contractor shall have 24 hours to complete corrective actions or a non-conformance will be issued. The 24-hour maintenance timeframe for items

recommended in the EPSC inspection begins once the inspection is completed. For wet site conditions, see item 4.c. above.

8. If concentrated stormwater is observed at a location not identified as an outfall, recommend applicable EPSC measures. Add the outfall to the SWPPP. All revisions shall be recorded on the SWPPP revision index sheet. Include the outfall information in the EPSC inspection report.

9. If an area exhibiting stream or wetland characteristics is observed at a location not previously identified as waters of the State, notify the TDOT Project Supervisor or designee immediately.

10. The following additional areas shall be inspected:

    a. Inspect service and construction areas for trash and litter, fuel, oil spills, and other potential pollutants.

    b. Inspect fuel storage facilities and grease/oil trailers for proper containment berms and good housekeeping measures.

    c. The inspection shall also include Contractor-operated support areas, including those support areas that are exclusive to the TDOT project and may be located off the project's right-of-way. Examples of support areas include storage areas, parking areas, concrete batch plants, etc. Waste and Borrow sites shall be inspected consistent with the requirements outlined in the "Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects" manual.

    d. Make recommendations for corrective actions if deficiencies are observed and document in the EPSC inspection report. The Contractor shall have 24 hours to complete corrective actions or a non-conformance will be issued.

11. If there are any off-project disturbances nearby, record the disturbance type and location within the EPSC inspection report. If possible, take a photograph of the off-project disturbances in the event of future issues with the adjacent land disturbing activity.

12. Sediment Releases. Any sediment beyond the last EPSC measure on the construction site is considered a sediment release regardless of whether or not it is in a jurisdictional area. Circular 290.01-03 contains the sediment release procedures and forms to be completed whenever a sediment release is observed.

    a. If sediment from the construction project site or support area (exclusive borrow or waste area) is observed beyond the last EPSC measure but the sediment has not impacted a stream, a sediment release form must be

completed. The sediment can be cleaned and measures repaired immediately without obtaining any additional permits from TDEC.

b. If sediment from the construction project site or support area is observed in a stream or wetland, the Environmental Coordinator shall be contacted. The Environmental Coordinator will contact the TDEC Field Office to report the release and discuss clean up measures and will then complete and submit the sediment release form. No work can be completed in the stream or wetland until permission has been given (in writing or verbally) by the EC or TDEC. However, corrective actions can be taken to prevent additional sediment releases.

c. The sediment release and any recommended corrective actions must be documented in the inspection report.

d. If either deposits or objectionable color contrast are observed discharging from the project site into streams or wetlands, it is considered a release and shall be self-reported in accordance with TDOT Construction Circular 209.01-03. Sediment releases and recommendations made to correct them should be documented in the EPSC inspection report.

13. Inspect areas for compliance with any other permits issued for the site (e.g. ARAP, Class V injection, etc). If the work does not comply with said permits, note the issues on the EPSC inspection report and inform the TDOT Project Supervisor or designee.

14. Take photographs of all outfalls, waters of the state, and any areas where recommendations for a corrective action are made. The photographs shall be included with the EPSC inspection report and posted to the TDOT VPN site.

    a. TDOT EPSC inspectors will post to the TDOT VPN site by the last day of every month.

    b. Consultant and CEI EPSC inspectors will post to the TDOT VPN site within 2 working days following the EPSC inspection.

    c. When posting reports on the VPN site, find the Region folder for your project. Once the Region folder has been found, open and then find the county folder for your project. Add a folder with the contract number and description of the project. Save all reports under this contract folder. The name of the file should be the date of the report. Pictures taken during the inspection should be saved in a document with descriptions of the picture (see below). Convert the document to PDF format and save in the same location as the inspection report.

d. Number each photo and include a detailed description of what is being photographed.

e. Label roadway station location with offset and other key features within the photo (e.g. road names, outfall locations, streams, etc).

f. Flow direction should be indicated with a directional arrow.

15. If required by the TDOT Project Supervisor or designee, consultants will email the EPSC report to designated recipients.

16. The EPSC inspector shall notify the TDOT Project Supervisor or designee of the EPSC inspection's results as soon as possible following the inspection's conclusion, preferably while the EPSC inspector is still on the project site on the day of the inspection. The 24-hour maintenance timeframe for items recommended in the EPSC inspection begins once the inspection is completed. If requested by the TDOT Project Supervisor or designee, Consultant EPSC inspectors will complete the EPSC inspection form on-site and leave a signed copy with the TDOT Project Supervisor or designee. The hand-written report will be scanned and saved as a PDF file along with the completed EPSC inspection report. The report will then be emailed to the TDOT Project Supervisor or designees and uploaded to the TDOT VPN site.

III. Reduction of EPSC inspection frequency

A. When the required written notification is submitted to TDEC, inspection frequency may be reduced to once a month for areas of a project which have achieved final stabilization. "Final stabilization" means

1. That a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the (preferably) native vegetative cover for the area 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, or

2. 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, or

3. 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.

B. As stated in the CGP, Section 3.5.8.2a, "written notification of intent to conduct only monthly inspections and the justification for such request must be submitted to…the division's Nashville Central Office…" Once definable areas have reached final

stabilization, the EPSC inspector (either consultant or TDOT inspector) will submit a letter to the TDOT Project Supervisor or designee requesting that inspection frequency be reduced. The TDOT Project Supervisor or designee will then proceed with the following:

1. Mark the areas of final stabilization on the project SWPPP.

2. Draft a letter to the TDOT Regional Construction Supervisor indicating that inspection frequency can be reduced to monthly, specifying areas at final stabilization with a description (i.e. Sta. 3+150 to Sta 5+180 slopes have permanent cover, roadways have been paved, and there is to be no additional disturbance). The letter should also include the Project Name, Project Description, County, TDOT PIN, NPDES tracking number, TDOT Construction number, TDOT Contract number, and Contractor. Photographs of the stabilized areas should be included with the letter.

3. The TDOT Regional Construction Supervisor will review the letter and forward it to TDEC's Nashville Central Office.

IV. Contractor Waste and Borrow Areas and EPSC Inspector's Role

The EPSC Inspector will also be responsible for specific responsibilities regarding Contractor-operated waste and borrow sites. Waste and Borrow Sites shall be inspected and permitted in accordance with the "Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects" manual. The TDOT EPSC inspector will evaluate the contractor's EPSC inspection reports and other documentation provided by the contractor pertaining to exclusive waste and borrow sites. The inspector will complete the TDOT Construction Waste/Borrow Site EPSC Inspection Review Report (Circular 209.01-04) weekly as part of their review. The EPSC Inspector is not required to perform an on-site EPSC inspection. However, the EPSC Inspector **may** conduct an on-site evaluation if they determine it is necessary. .

V. Filling out the inspection report form – refer to the attached blank and example inspection reports for more information.

Page 1

A. Circle 1st weekly or 2nd weekly for the EPSC Inspection Schedule.

B. Enter the date of the inspection.

C. In the top table:
   1. Fill out the Project Description, County, TDOT PIN, NPDES Tracking Number, TDOT Project Number, TDOT Contract Number, and Contractor boxes. (These sections may be completed in the office and copies made for field use.)
   2. If there are no new or recurring corrective actions, put "No" in the box. If there are new or recurring corrective actions, put "Yes" in the box.
   3. Enter the current approximate disturbed acreage calculated during the EPSC inspection.

4. Number of New Corrective Actions/Deficiencies – this is the number of corrective actions to be repaired (not including future maintenance) identified during the current inspection.
5. Number of Recurring Corrective Actions/Deficiencies – this is the number of corrective actions that have not been corrected since the previous EPSC inspection.
6. Number of New Sediment Releases – this is the number of sediment releases found during the current inspection. (Sediment releases include sediment that has made it past the last EPSC measure, any sediment that was discharged into waters of the state, or any sediment that was deposited off of the TDOT project ROW.)
7. Number of Un-Corrected Sediment Releases – this is the number of previously identified sediment releases that have not been corrected.

D. For the check boxes below the top table:
   1. Check the site for the Notice of Coverage, Stormwater Pollution Prevention Plan, twice weekly inspection documentation, site contact information, and rain gauge(s) or off-site reference rain gauge location. If these are present, check the boxes. If any of these are absent, do not check the box. Communicate to the TDOT representative that items are missing and ensure that they are placed on-site.
   2. For all projects, the location of the SWPPP along with an individual contact name, company name, phone number, and email address (if applicable) shall be posted on-site. When the SWPPP and other documentation cannot be maintained on the project, the location where they can be found must be posted on the TDOT project board.
   3. Ensure that daily rainfall has been documented on the TDOT Monthly Rainfall Log. If it has, check "Yes." If it has not, check "No." Attach and include the TDOT Monthly Rainfall Log as part of the EPSC Inspection report.
   4. In lieu of reading project site rain gauges on weekends and on state holidays, the gauges can be read and emptied the next business day and the project can use a reference site for rainfall data on non-business days. The reference site shall be the closest gauge within proximity to the project and shall be operated by a recognized source, such as the National Oceanic and Atmospheric Administration (NOAA) or the Tennessee Valley Authority (TVA). Local news station rainfall information can also be used as a reference site. The reference site gauge information (location, dates, source, etc.) shall be recorded on the monthly rainfall log.

E. In the middle table: Best Management Practices (BMPs)
   1. If all applicable EPSC measures are installed and maintained per the SWPPP, check "Yes." If not, check "No." Document the deficiencies and make recommendations for corrective action on the attached pages
   2. If all EPSC measures are functioning correctly at disturbed areas/material storage areas, check "Yes." If not, check "No." Document the deficiencies and make recommendations for corrective action on the attached pages
   3. If there is no objectionable color contrast being discharged from the construction project or support area into the receiving streams or wetlands and no other water quality impacts on site, check "Yes." If the TDOT EPSC inspector or consultant inspector observe a color contrast or other water quality impairments in a receiving

stream, check "No." A color contrast is a sediment release and must be documented and self-reported in accordance with TDOT Construction Circular 209.01-03.

4. If there is no evidence of "track out" (sediment, fines, or other materials tracked off the construction project onto private property or a public roadway) at construction exits, check "Yes." If there is evidence of "track out," check "No." Document the deficiencies and make recommendations for corrective action on the attached pages.
5. If there are disturbed areas where construction activity has permanently or temporarily ceased, check to ensure that they have been stabilized within 14 days. If they have, check "Yes." If they have not, check "No." Document the location of deficiencies and identify measures taken to stabilize the areas on the attached pages. To determine stabilization is occurring within the 14 day requirement, document where construction activities have temporarily or permanently ceased on the second and subsequent pages of the report.
6. If there are areas where wash water from equipment and/or vehicles is discharged, check to ensure that pollution prevention measures have been installed and are effectively minimizing the discharge of pollutants. If such measures have been installed and maintained, check "Yes." If not, check "No." Document the deficiencies and make recommendations for corrective action on the attached pages.
7. If dewatering activities are occurring on the project, ensure that appropriate controls have been utilized, such as the installation of dewatering pits, use of vegetative filters, filter bags, etc. The discharge from dewatering activities should be clear before leaving the project or entering a stream. If discharges from dewatering activities are clear and not causing a water quality issue, check "Yes." If not, check "No," document deficiencies, and make recommendations for corrective action on the attached pages. If there are no dewatering activities on site, check "N/A."
8. If there is a concrete washout facility located on site, ensure that it is clearly identified and maintained. If it is, check "Yes." If it is not, check "No," document deficiencies, and make recommendations for corrective action on the attached pages. Identify the location of the concrete washout area on the inspection report by station number and record on the SWPPP index sheet and EPSC plans. If there is no concrete washout, check "N/A."

F. In the TDOT/Contractor Agrees box, if there is agreement between the EPSC inspector and the TDOT/Contractor regarding the Inspection report, circle "Yes." If there is disagreement between the EPSC inspector and the TDOT/Contractor regarding the Inspection report, circle "No" and explain the disagreement in the box provided. Additional pages may be attached, if necessary. However, if the Contractor disagrees with the findings of the inspection, it should be discussed and addressed on-site, if possible.

G. The TDOT and/or consultant EPSC Inspector should print name and TN EPSC Certification number (Level 1 Inspector certification) and then sign the form. The Contractor or his representative should also print name and title, and then sign the form. Finally, the TDOT Project Supervisor or designee should print name and title, and then sign the form. The Project Supervisor's designee must be authorized in writing using the

Construction Division EPSC Delegation of Authority form. If the EPSC Inspector is also the TDOT Designee, he or she may sign as both on the inspection form.

Page 2 (and any subsequent pages needed to document site conditions)

A. Outfall Name or Station Number – indicates the outfall name and/or Station Number to which the item being addressed drains. Each outfall must have a main entry in one row. In the example report, the 3rd completed row contains "Outfall 2, Sta. 10+50". This row is completed for the entire outfall, so Existing EPSC Control Measures Codes contain codes for all measure located in the areas draining to that outfall. Subsequent rows directly under the Outfall 2 row should contain descriptions of stabilization information, findings and/or correction actions for areas within the Outfall.

B. Rain Gauge Number – indicates the number of the nearest rain gauge that corresponds to that outfall.

C. Approx Station Number From/To – leave this blank if the line is only describing an outfall (see Outfall 1, Sta. 5+25 in the attached example report). Otherwise, indicate the station of the observance (deficiency that corresponds to the corrective action, the stabilization location of the dates of the last disturbance in the area). If the observance covers a station range, list the appropriate station for the area (e.g. Sta. 1+05 – 2+10).

D. LT, RT, or CL – leave this blank if the line is only describing an outfall. Otherwise, indicate whether the observance is to the right or left of centerline. If the observance is located in the alignment, indicate centerline.

E. Date Last Disturbed – if describing an outfall, this indicates the date of when the outfall's drainage area was last disturbed. This column is used in two ways: to track the stabilization timeframe and to highlight the initial date corrective actions were noted.
   1. To track stabilization timeframes: Note the date last disturbed in the column. Any areas where construction has temporarily or permanently ceased must be stabilized within 7 days for steep slope areas or within 14 days for other project areas. Following the date of last disturbance, if stabilization has not occurred within 7 days for steep slope areas or within 14 days for other project areas, the date should include "Noted:" with it to indicate the date that the corrective action of stabilization was identified. Then additional information must be included in the Corrective Actions or Comments column to support the stabilization required. The inspector should not wait until the end of the stabilization timeframe but should be reminding the contractor about stabilization requirements on inactive areas.
   2. To highlight the initial date corrective actions were noted, insert "Noted:" with the date of the observation of the corrective actions for the area. This should correspond with the Current Condition Codes and possibly the Objectionable Color Contrast Discharge to Receiving Stream or Other Water Quality Impacts column. Again, enter a description of the corrective actions in the Corrective Actions or Comments column.

F. Date of Stabilization and Code T=Temporary, P=Permanent – This column should be used to indicate the date that an area was stabilized. Enter P or T depending on whether the stabilization is temporary, permanent or both temporary and permanent.

G. Existing EPSC Control Measures Codes*- If the row is describing an outfall, indicate all EPSC measures that are installed in the drainage area for the outfall. If corrective actions are required, use the code that corresponds with the code for the item that needs to be corrected. The code numbers are referenced in the Erosion and Sediment Control Measure Codes list at the bottom left side of the form.

H. Current Condition Codes*- If the row is describing an outfall, indicate the overall condition of the outfall. If corrective action(s) are required in the area noted, include the code(s) for the corrective action(s) needed. The code letters are referenced in the Condition Codes list at the bottom right side of the form and should be interpreted as follows:
    1. U – Upgrade Needed (Failure Noted) – Enter this code if the installed EPSC measure has failed and a more adequate EPSC measures needs to be installed (e.g. temporary silt fence needs to be upgraded to silt fence with backing). This code can also be used where measures need to be upgraded though no failure has occurred. If this is the situation, include details in the Corrective Actions or Comments column.
    2. R – Repair and/or Replace – Enter this code if the installed EPSC measure has been damaged by rain, general degradation, or equipment and needs to be repaired or replaced with the same EPSC measure.
    3. FM – Future Maintenance – Enter this code if the EPSC measure will require attention in the very near future (e.g. a rock check dam is not yet at 50% capacity, but may require attention prior to the next rain event, or the stabilization deadline is approaching).
    4. C – Cleaning Needed – Enter this code if the EPSC measure needs to have sediment or debris removed
    5. I – Increase Measures – Enter this code if additional EPSC measures need to be installed (e.g. phase of EPSC plan identifies inadequate EPSC measures for outfall location, additional EPSC measures needed.)
    6. W – Too Wet to Work Conditions – This code should be used if corrective actions are needed but wet site conditions prevent work from occurring (e.g. A sediment trap requires maintenance, but attempts to clean it in wet conditions will disturb stabilized areas or cause additional damage.) TDOT project personnel are to determine if site conditions are considered too wet to complete corrective actions. Even when the site conditions are too wet to complete the necessary corrective actions, work with the Contractor and Project Supervisor to complete interim steps to avoid or lessen failure of measures.
    7. RO – Repeat Occurrence – This code should be used when a corrective action was noted on a previous inspection report and it hasn't been corrected based upon the current inspection findings.
    8. SR – Sediment Release – Enter this code if sediment has made it past the last EPSC measure, any sediment was discharged into waters of the state, or sediment

was deposited off of the TDOT project ROW. When a sediment release has occurred, Circular 209.01-03 must be followed.

9. FS – Final Stabilization – Enter this code when an area has reached final stabilization and no additional disturbance is expected. Note the definition of final stabilization included previously in this circular.
10. S – Stable (No Action Needed) – Enter this code if no corrective actions are required for a particular outfall or area.
11. Other – enter this code for items that do not fall under the given Condition Codes (e.g. A – Active – indicating that active disturbance is occurring in an outfall drainage area, however no corrective action is currently needed.)

I. Objectionable Color Contrast Discharge to Receiving Stream or other Water Quality Impacts– if an objectionable color contrast is observed discharging from the construction project or exclusive borrow and waste area into the receiving stream or wetland downstream of an outfall, or a sediment deposit or other water quality impact is observed, enter "Y" for yes and notify the TDOT Project Supervisor or designee. If there is no objectionable color contrast or other water quality impact, enter "N" for no. If there are no streams or wetlands on the site, enter "N/A" for not applicable.

Final Page of the Inspection Report – Rainfall Log

Example and blank monthly rainfall logs are attached to this circular. On-site personnel reading the rain gauges will record the rain in a rain log kept with the SWPPP on site. Transfer that information to a log and include it with your inspection report.

A. TDOT Monthly Rainfall Log
   1. The first two columns are self explanatory. Enter the days of the month and the corresponding day of the week.
   2. Insert the rainfall prediction in the third column. Rainfall prediction shall be based upon a website reporting weather forecasts from NOAA or National Weather Service (NWS), or other local news station. Enter the predicted rainfall for the days since the last inspection and the next two days after the current inspection. For example, if the first weekly EPSC inspection is on Monday, record predicted rainfall forecasts for Monday (day of inspection), Tuesday and Wednesday. If the second weekly EPSC inspection is on Thursday, record predicted rainfall forecasts for Thursday (day of inspection), Friday, Saturday and Sunday. All of the rainfall predictions should be from the same source (i.e., do not change rainfall prediction sources during the month).
   3. Record rainfall for each rain gauge on the day it was read. If gauge 1 reads 0.5" on Tuesday at 8 a.m., record 0.5" for Tuesday. Do not "back date" the data.
   4. The person reading the rain gauge on a daily basis should also record the duration of the rain event in hours. The duration may be estimated by tracking or estimating start and end times for the rain event. If the rain fell during the night, the person's best judgment should be used or a website reporting weather data from NOAA or NWS should be used to estimate the duration.

5. TDOT permits the use of data from a reference site operated by a recognized source for recording rainfall on weekends and TDOT holidays. The reference site shall be the closest gauge within proximity to the project and shall be operated by a recognized source, such as the National Oceanic and Atmospheric Administration (NOAA) or the Tennessee Valley Authority (TVA). Local news station rainfall information can also be used as a reference site. The reference site gauge information (location, dates, source, etc.) shall be recorded on the monthly rainfall log.

Appendices:

Example Inspection Form
Blank Inspection Form
Example Monthly Rainfall Data Log
Blank Monthly Rainfall Data Log

TENNESSEE DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) INSPECTION REPORT

EPSC Inspection Schedule (circle one): 1st Weekly or 2nd Weekly Date of Inspection:_____

Site or Project Name (State Route (SR) / US Route or Road Name and Description): SR-12, Realignment from George Thomas Road to 3m west of Salem			Are corrective actions required by this inspection report (Yes /No): Yes			Current approximate disturbed acreage: 12
County(ies): Cocke	TDOT PIN: 103125.01	NPDES Tracking No. (TNR): TNR190000	Number of New Corrective Actions/Deficiencies:	Number of Recurring Corrective Actions/Deficiencies:	Number of New Sediment Releases:	Number of Un-Corrected Sediment Releases:
TDOT Project No.: 15009-2222-04	TDOT Contract No.: CND581	Contractor: John Smith Contractor	1	1	1	0

Page 1, D.3. Attach and include monthly rainfall log as part of EPSC report

Please check the box if the following items are on-site:

☒ Notice of Coverage (NOC) ☒ Stormwater Pollution Prevention Plan (SWPPP) ☒ Twice Weekly Inspection Documentation ☒ Site Contact Information ☐ Rain Gauge(s)

☐ Off-site Reference Rain Gauge Location:_____ Has daily rainfall been checked/documented on the TDOT Monthly Rainfall Log? ☒Yes ☐No

Best Management Practices (BMPs) **Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly:** If "No" see attached page(s) for description.					TDOT/Contractor Agrees with EPSC Inspection Report: NO or YES. If No, Explain and initial comment:
1.	Are all applicable (EPSCs) installed and maintained per the SWPPP?		☐Yes	☒No	
2.	Are EPSC's functioning correctly at all disturbed areas/material storage areas per section 4.1.5 of the CGP?		☐Yes	☒No	
3.	Are EPSC's functioning correctly at outfall/discharge points such that there is no objectionable color contrast in the receiving stream, and no other water quality impacts per section 5.3.2 of the CGP?		☐Yes	☒No	
4.	Are EPSC's functioning correctly at ingress/egress points such that there is no evidence of track out?		☒Yes	☐No	
5.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days per section 3.5.3.2 of the CGP? If, "No", refer to the attached page(s) for each location and measures taken to stabilize the area(s).		☒Yes	☐No	
6.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from equipment and vehicle washing, wheel and wash water and other wash waters per section 4.1.5 of the CGP? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.		☒Yes	☐No	
7.	If applicable, have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the CGP? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.	☒N/A	☐Yes	☐No	
8.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.	☐N/A	☒Yes	☐No	

Page 1, E. If contractor disagrees, it should be discussed and addressed on site, if possible.

Page 1, E. Enter detailed explanation for any question answered "No" on the following page(s).

(Additional pages may be attached, if needed)

Certification and Signature (must be signed by the certified inspector and the permittees per Sections 3.5.8.2 (g) and 7.7.2 of the CGP)

This document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated information presented. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, I certify that inspections of storm water discharge points (outfalls) and of erosion and sediment controls have been performed and recorded. I certify that erosion and sediment controls in the drainage area of the identified outfall were installed as planned and designed in working order as recorded in the table above. 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	EPSC Inspector Name, Title and Company (print or type): TN EPSC Certification No.:	Signature:	Date:
	Contractor (Operator/Secondary Permittee) Name and Title (print or type):	Signature:	Date:
	TDOT Project Supervisor or Designee (Owner/Primary Permittee) Name and Title (print or type):	Signature:	Date:

Page 1, G. If the TDOT EPSC Inspector is the Project Supervisor's Designee, he or she may sign both areas.

Page 1, G. Designee must be authorized in writing using the Construction Division EPSC Delegation of Authority.

State/US Route or Road Name: _____ TDOT Project No.: _____ TDOT Contract No.: _____ Date of Inspection: _____

Outfall Name or Station No.	Rain Gauge No.	Approx. Station	LT, RT, or CL	Date Last Disturbed	Date of Stabilization and Code T=Temporary P=Permanent	Existing EPSC Control Measures Codes *	Current Condition Codes *	Objectionable Color Contrast Discharge to Receiving Stream or Other Water Quality Impacts? Y, N, N/A	Corrective Action(s) or Comment(s)
Outfall 1 Sta. 5+25	1			7/25/11	7/25/11 T	1, 4, 9, 16	S	N	Enter a description of outfall conditions.
Outfall 2 Sta. 10+50	1			12/6/11			A	N	Enter a description of outfall conditions.
		10+50	RT	Noted: 12/6/11		4	C	N/A	Enter a description of corrective action "Noted".
Outfall 3 Sta. 30+00	1			12/6/11		4, 26, 27, 33	A	Y	Enter a description of outfall conditions.
		30+00	LT	Noted: 12/6/11		33	SR	N/A	Enter a description of the sediment release, identify affected water features, note whether TDOT Environmental Coordinator was notified, and detail actions recommended to prevent future release.
Outfall 4 Sta. 45+50	2			12/6/11		4, 9	A	N	Enter a description of outfall conditions.
		45+50	RT	Noted: 12/2/11		9	C, RO	N/A	Enter a description of maintenance item and date the recommendation was made.

Page 2, A. One header line per outfall and suboutfall

Page 2, G. All EPSC measures that are installed within the outfall's drainage area

Row highlighted to show corrective action needed

Page 2, E. Date the corrective action was first noted

Page 2, C. Location of corrective action

Page 2, H. Code of corrective action

EROSION AND SEDIMENT CONTROL MEASURE CODES

1. Temporary Silt Fence / Filter Barrier
2. Temporary Diversion Berm or Ditch
3. Temporary Slope Drain
4. Rock Check Dams
5. Brush Barrier
6. Sediment Removal
7. Rock Filter Ring / Rock Ring
8. Sand Bags
9. Sediment Trap / Basin
10. Temporary Sediment Filter Bag / Dewatering
11. Polyethylene Sheeting
12. Machined Rip Rap
13. Geotextile
14. Permanent Seeding with Mulch or Sod
15. Temporary Seeding with Mulch
16. Temporary Mulching
17. Erosion Control Blanket
18. Flexible Channel Liner
19. Catch Basin / Storm Inlet Protection
20. Riprap Outlet Structure
21. Riprap Energy / Velocity Dissipater
22. Curb, Gutter, or Storm Sewer Protection
23. Temporary Construction Exit / Entrance
24. Temporary Stream Crossing
25. Turbidity Barrier / Silt Boom
26. Temporary Stream Diversion
27. Preserve Natural Resource / Buffer Zone
28. Mineral Aggregate Base on Subgrade
29. Excess Dirt Removed from Rdwy. Daily
30. Haul Roads Dampened for Dust Control
31. Ditch Liner
32. Rock Silt Screen
33. Temporary Silt Fence with Backing
34. Enhanced Silt Fence
35. Sediment Tube
36. Sediment Dam
37. Concrete Washout, other pollution issues
38. Berm (soil, riprap, rock)
39. Gabion
40. Sheet Piling
41.
42.

CONDITION CODES

U Upgrade Needed (Failure Noted)
R Repair and/or Replace
FM Future Maintenance
C Cleaning Needed
I Increase Measures
W Too Wet to Work Conditions
RO Repeat Occurrence
SR Sediment Release
FS Final Stabilized
S Stable (No Action Needed)
Other (#1): _____
Other (#2): _____
Other (#3): _____

State/US Route or Road Name: _____ TDOT Project No.: _____ TDOT Contract No.: _____ Date of Inspection: _____

Outfall Name or Station No.	Rain Gauge No.	Approx. Station	LT, RT,	Date Last Disturbed	Date of Stabilization and Code T=Temporary P=Permanent	Existing EPSC Control Measures Codes *	Current Condition Codes *	Objectionable Color Contrast Discharge to Receiving Stream or Other Water Quality Impacts? Y, N, N/A	Corrective Action(s) or Comment(s)
Outfall 5 Sta. 50+50	2			12/6/11		3, 4, 9	A	N	Enter a description of outfall conditions.
		50+25	RT	Noted: 12/2/11		9	N/A	N/A	Enter the date the corrective action was completed and description of performed activities.

Page 2, A. One header line per outfall and suboutfall

Page 2, G. EPSC measure that requires corrective action

Note: It is possible to have "Upgrade Needed," but not have any failure noted

EROSION AND SEDIMENT CONTROL MEASURE CODES

1. Temporary Silt Fence / Filter Barrier
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3. Temporary Slope Drain
4. Rock Check Dams
5. Brush Barrier
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7. Rock Filter Ring / Rock Ring
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FM Future Maintenance
C Cleaning Needed
I Increase Measures
W Too Wet to Work Conditions
RO Repeat Occurrence
SR Sediment Release
FS Final Stabilized
S Stable (No Action Needed)
Other (#1): _____
Other (#2): _____
Other (#3): _____

TENNESSEE DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) INSPECTION REPORT

EPSC Inspection Schedule (circle one): 1st Weekly or 2nd Weekly Date of Inspection:_____

Site or Project Name (State Route (SR) / US Route or Road Name and Description):			Are corrective actions required by this inspection report (Yes /No):			Current approximate disturbed acreage:
County(ies):	TDOT PIN:	NPDES Tracking No. (TNR):	Number of New Corrective Actions/Deficiencies:	Number of Recurring Corrective Actions/Deficiencies:	Number of New Sediment Releases:	Number of Un-Corrected Sediment Releases:
TDOT Project No.:	TDOT Contract No.:	Contractor:				

Please check the box if the following items are on-site:

☐ Notice of Coverage (NOC) ☐ Stormwater Pollution Prevention Plan (SWPPP) ☐ Twice Weekly Inspection Documentation ☐ Site Contact Information ☐ Rain Gage(s)

☐ Off-site Reference Rain Gage Location:_____ Has daily rainfall been checked/documented on the TDOT Monthly Rainfall Log? ☐Yes ☐No

Best Management Practices (BMPs) **Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly:** If "No" see attached pages for description.				TDOT/Contractor Agrees with EPSC Inspection Report: NO or YES. If No, Explain and initial comment:
1.	Are all applicable (EPSCs) installed and maintained per the SWPPP?	☐Yes	☐No	
2.	Are EPSC's functioning correctly at all disturbed areas/material storage areas per section 4.1.5 of the CGP?	☐Yes	☐No	
3.	Are EPSC's functioning correctly at outfall/discharge points such that there is no objectionable color contrast in the receiving stream, and no other water quality impacts per section 5.3.2 of the CGP?	☐Yes	☐No	
4.	Are EPSC's functioning correctly at ingress/egress points such that there is no evidence of track out?	☐Yes	☐No	
5.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days per section 3.5.3.2 of the CGP? If, "No", refer to the attached page(s) for each location and measures taken to stabilize the area(s).	☐Yes	☐No	
6.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from equipment and vehicle washing, wheel and wash water and other wash waters per section 4.1.5 of the CGP? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.	☐Yes	☐No	
7.	If applicable, have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the CGP? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.	☐N/A ☐Yes	☐No	
8.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No", refer to the attached page(s) for measures to be implemented to address deficiencies.	☐N/A ☐Yes	☐No	(Additional pages may be attached, if needed)

Certification and Signature (must be signed by the certified inspector and the permittee per Sections 3.5.8.2 (g) and 7.7.2 of the CGP)

This document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated information presented. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, I certify that inspections of storm water discharge points (outfalls) and of erosion and sediment controls have been performed and recorded. I certify that erosion and sediment controls in the drainage area of the identified outfall were installed as planned and designed in working order as recorded in the table above. 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	EPSC Inspector Name, Title and Company (print or type): TN EPSC Certification No.:	Signature:	Date:
	Contractor (Operator/Secondary Permittee) Name and Title (print or type):	Signature:	Date:
	TDOT Project Supervisor or Designee (Owner/Primary Permittee) Name and Title (print or type):	Signature:	Date:

State/US Route or Road Name: _____ TDOT Project No.: _____ TDOT Contract No.: _____ Date of Inspection: _____

Outfall Name or Station No.	Rain Gage No.	Approx. Station No. From/To	LT, RT, or CL	Date Last Disturbed	Date of Stabilization and Code T=Temporary P=Permanent	Existing EPSC Control Measures Codes *	Current Condition Codes *	Objectionable Color Contrast Discharge to Receiving Stream or Other Water Quality Impacts? Y, N, N/A	Corrective Action(s) or Comment(s)

EROSION PREVENTION AND SEDIMENT CONTROL MEASURE CODES

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CONDITION CODES

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R Repair and/or Replace
FM Future Maintenance
C Cleaning Needed
I Increase Measures
W Too Wet to Work Conditions
RO Repeat Occurrence
SR Sediment Release
FS Final Stabilized
S Stable (No Action Needed)
Other (#1): _____
Other (#2): _____
Other (#3): _____

State/US Route or Road Name: _____

TDOT Construction No.: _____ TDOT Contract No.: _____

TDOT EPSC Inspection Monthly Rainfall Data Log – December 2011

Date	Day of Week[1]	Predicted Precipitation (%)[2]	Rainfall Gauge 1 (in)	Rainfall Gauge 2 (in)	Rainfall Gauge 3 (in)	Rainfall Gauge 4 (in)	Rainfall Gauge 5 (in)	Rainfall Gauge 6 (in)	Duration (hr)
12/01/11	Th	0	0.00	0.00					
12/02/11	F	0	0.00	0.00					
12/03/11	Sa	0	0.00	0.00					
12/04/11	Su	50	1.20	1.15					6
12/05/11	M	20	0.00	0.00					
12/06/11	Tu	10							
12/07/11	W								
12/08/11	Th								
12/09/11	F								
12/10/11	Sa								
12/11/11	Su								
12/12/11	M								
12/13/11	Tu								
12/14/11	W								
12/15/11	Th								
12/16/11	F								
12/17/11	Sa								
12/18/11	Su								
12/19/11	M								
12/20/11	Tu								
12/21/11	W								
12/22/11	Th								
12/23/11	F								
12/24/11	Sa								
12/25/11	Su								
12/26/11	M								
12/27/11	Tu								
12/28/11	W								
12/29/11	Th								
12/30/11	F								
12/31/11	Sa								

[1] Day of Week= Su,M,Tu,W,Th,F,Sa

[2] Predicted Precipitation Source: www.NOAA.com
Southern Regional Climate Center (SRCC); R = Gauge Removed

State/US Route or Road Name: _____

TDOT Construction No.: _____ TDOT Contract No.: _____

TDOT EPSC Inspection Monthly Rainfall Data Log – _____

Date	Day of Week[1]	Predicted Precipitation (%)[2]	Rainfall Gauge 1 (in)	Rainfall Gauge 2 (in)	Rainfall Gauge 3 (in)	Rainfall Gauge 4 (in)	Rainfall Gauge 5 (in)	Rainfall Gauge 6 (in)	Duration (hr)

[1] Day of Week= Su,M,Tu,W,Th,F,Sa

[2] Predicted Precipitation Source: _____
Southern Regional Climate Center (SRCC); R = Gauge Removed

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: Bennett Road Industrial Access Road serving Proj. Victor	**Existing NPDES Tracking Number: TNR**
Street Address or Location: Cookeville, TN	Start date: April 2015
	Estimated end date: April 2020
Site Activity Description: 0.488 miles of SIA Serving Project Victor (PIN 120463.00)	Latitude (dd.dddd): N 36.1363
	Longitude (dd.dddd): W 85.5796
County(ies): Putnam — MS4 Jurisdiction: T.D.O.T.	Acres Disturbed: 13.7
	Total Acres: 11.1

Does a topographic map show dotted or solid blue lines ☒ and/or wetlands ☐ on or adjacent to the construction site?
If wetlands are located on-site and may be impacted, attach wetlands delineation report.
If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.: Pending

Receiving waters: Unnamed tributaries to Cane Creek

Attach the SWPPP with the NOI ☒ SWPPP Attached — Attach a site location map ☒ Map Attached

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

Site Owner/Developer Signatory (V.P. level/higher - individual responsible for site - signs certification below): Jim Ozment		Signatory's Title or Position (V.P. level/higher - signs certification below): Director- Environmental Division	
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN — Zip: 37243-0334
Phone: (615) 741-5373	Fax: N/A	E-mail: Environmental.NPDES TDOT@tn.gov	
Optional Contact: Khalid Ahmed		Title or Position: Senior Transportation Project Specialist	
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN — Zip: 37243-0334
Phone: (615) 253-0021	Fax: N/A	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: February

Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (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.

Contractor company name (print or type):			
Contractor signatory (print/type): (V.P. level or higher)		Signature:	Date:
Mailing Address:		City: — State:	Zip:
Phone:	Fax:	E-mail:	

Other Contractor company name (print or type):			
Other Contractor signatory (print/type): (V.P. level or higher)		Signature:	Date:
Mailing Address:		City: — State:	Zip:
Phone:	Fax:	E-mail:	

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Number **TNR**	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora and Fauna:		Impaired Receiving Stream:	Notice of Coverage Date:

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

Purpose of this form: A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activity (permit). **Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions.** This permit is required for stormwater discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

Permit application fee: (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites).

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

*Subsequent Primary Operators seeking coverage under an actively covered larger common plan of development or sale

Who must submit the NOI form: Per Section 2 of the permit, 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: (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. This person 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.

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

Complete the form: Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.**

Describe and locate the project: Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at the USGS World Wide Web site: http://www.usgs.gov/; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.state.tn.us/environment/water/water-quality_storm-water.shtml

Give name of the receiving waters: Trace the route of stormwater runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the 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.

ARAP permit may be required: **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information: Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Stormwater NOI Processing**.

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	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave., 11th Floor, Nashville, TN 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 TDEC Nashville, TN address depicted below. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

Type or print clearly, using ink.

Site or Project Name: **SR-29 (US-27) Near Harriman in Roane Co to South of Whetstone Road in Morgan Co. PIN 101411.04 Proj. #65001-1256-14, 73008-1237-14**	**NPDES Tracking Number: TNR**
Street Address or Location: Harriman, TN	County(ies): Roane and Morgan Counties

Name of Permittee Requesting Termination of Coverage: Tennessee Department of Transportation			
Permittee Contact Name:	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone: ( )	E-mail:		

Check the reason(s) for termination of permit coverage:

☐	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.
☐	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected official)

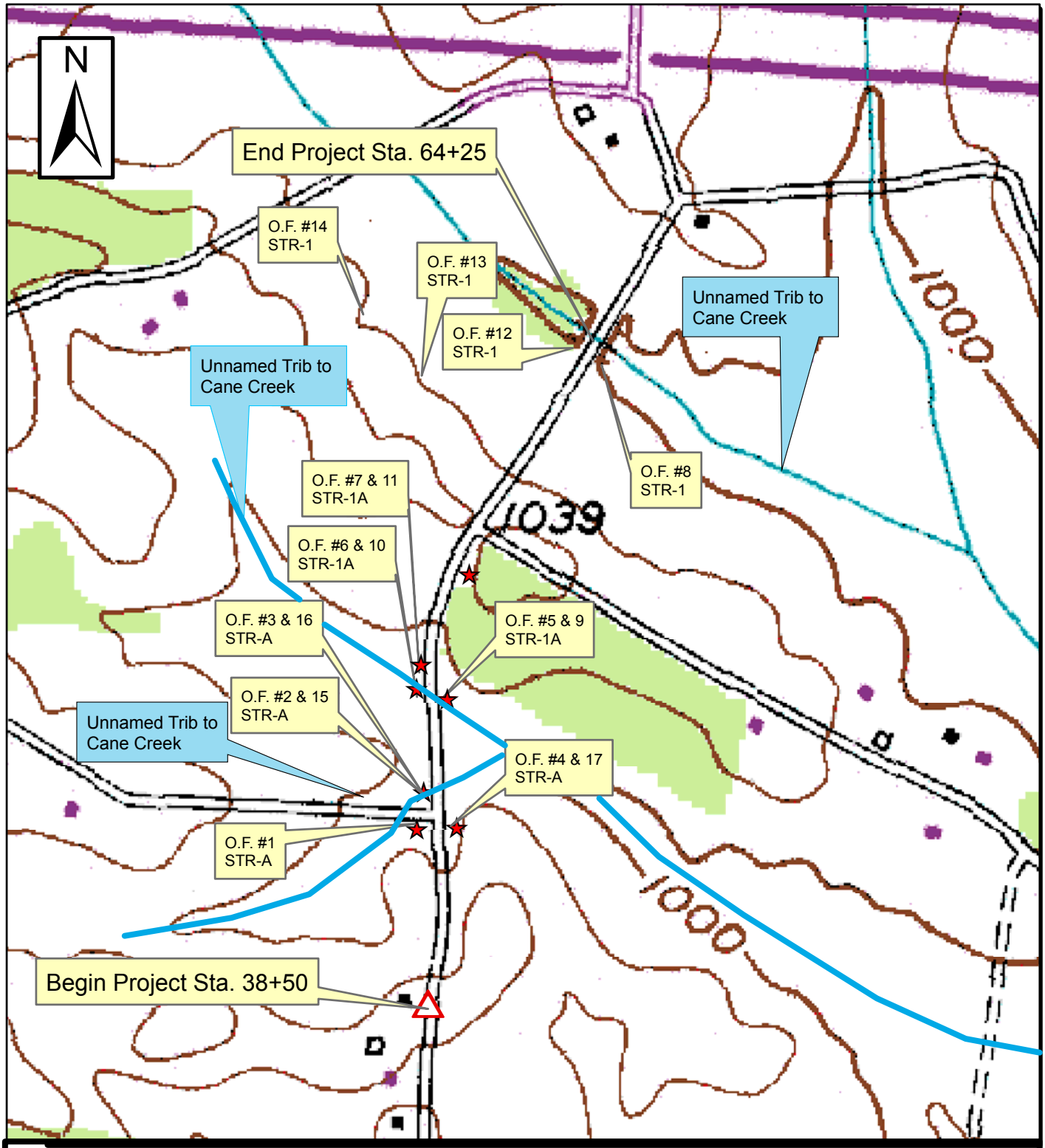
I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting 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.

Permittee name (print or type):	Signature:	Date:

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



Approx. Outfall Location

USGS TOPOGRAPHIC MAP

0 500 1,000 2,000 Feet

GRAPHIC SCALE

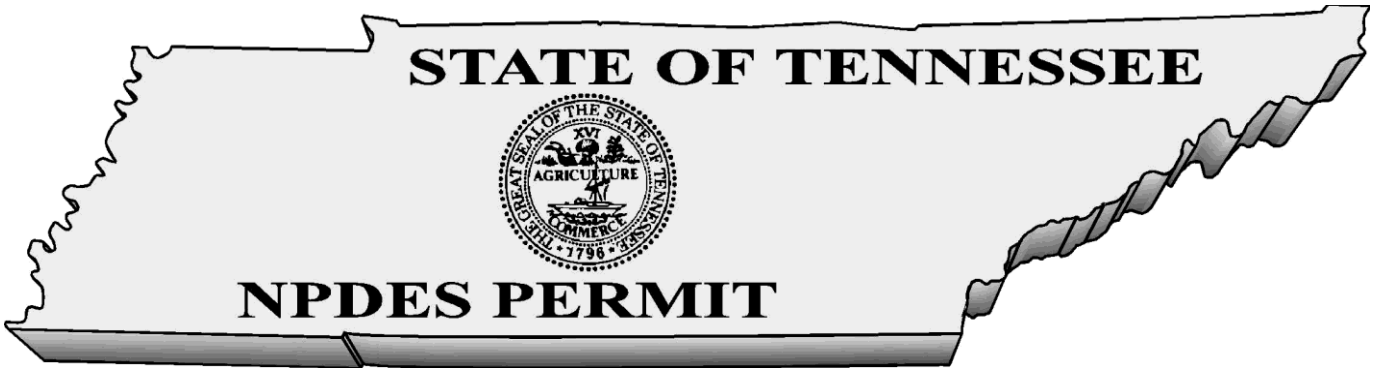
Source:
USGS Topographic Maps
Cookeville West, Tennessee Quadrangle Map (1985)

TDOT

Stormwater Pollution Prevention Plan
Bennett Road
Industrial Access Road Serving Project Victor
Putnam County, Tennessee

Proj. No. 71952-1544-04
PIN 120463.00

Figure 1



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 Impaired 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: **May 23, 2011**

This permit is effective on: **May 24, 2011**

This permit expires on: **May 23, 2016**

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

CN-0759 RDAs 2352 and 2366

Tennessee General Permit No. TNR100000
Stormwater Discharges Associated with Construction Activities

Table of Contents

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

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

1.2. Discharges Covered by this Permit

1.2.1. Stormwater discharges associated with construction activities

This permit authorizes point source discharges of stormwater from construction activities including clearing, grading, filling and excavating (including borrow pits and stockpile/material storage areas containing erodible material), or other similar construction activities that result in the disturbance of one acre or more of total land area. Projects or developments of less than one acre of land disturbance are required to obtain authorization under this permit if the construction activities at the site are part of a larger common plan of development or sale that comprise at least one acre of land disturbance. One or more site operators must maintain coverage under this permit for all portions of a site that have not been finally stabilized.

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

a) the director has determined that the 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.

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

1.2.2. Stormwater discharges associated with construction support activities

This permit also authorizes stormwater discharges from support activities associated with a permitted construction site (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided all of the following are met:

a) the support activity is primarily related to a construction site that is covered under this general permit;
b) the operator of the support activity is the same as the operator of the construction site;
c) the support activity is not a commercial operation serving multiple unrelated construction projects by different operators;
d) the support activity does not operate beyond the completion of the construction activity of the last construction project it supports; and

e) support activities are identified in 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 Manual per the Statewide Stormwater Management Plan (SSWMP). 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 work areas of collected stormwater and ground water (filtering or chemical treatment may be necessary prior to discharge);
b) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;
c) water used to control dust in accordance with section 3.5.5 below;
d) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;
e) routine external building washdown that does not use detergents or other chemicals;
f) uncontaminated groundwater or spring water; and
g) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.).

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

1.2.4. Other NPDES-permitted discharges

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

1.3. Limitations on Coverage

Except for discharges from support activities, as described in section 1.2.2 above and certain non-stormwater discharges listed in section 1.2.3 above, all discharges covered by this permit shall be composed entirely of stormwater. This permit does not authorize the following discharges:

a) Post-Construction Discharges (Permanent Stormwater Management) - Stormwater discharges associated with construction activity that originate from the construction site

after construction activities have been completed, the site has undergone final stabilization, and the coverage under this permit has been terminated.

b) Discharges Mixed with Non-Stormwater - Discharges that are mixed with sources of non-stormwater, other than discharges which are identified in section 1.2.4 above (*Other NPDES-permitted discharges*) and in compliance with section 3.5.9 below (*Pollution prevention measures for non-stormwater discharges*) of this permit.

c) Discharges Covered by Another Permit - Stormwater discharges associated with construction activity that have been issued an individual permit in accordance with subpart 7.12 below (*Requiring an Individual Permit*).

d) Discharges Threatening Water Quality - Stormwater discharges from construction sites, that the director determines will cause, have the reasonable potential to cause, or contribute to violations of water quality standards. Where such determination has been made, the discharger will be notified by the director in writing that an individual permit application is necessary as described in subpart 7.12 below (*Requiring an Individual Permit*). However, the division may authorize coverage under this permit after appropriate controls and implementation procedures have been included in the SWPPP that are designed to bring the discharge into compliance with water quality standards.

e) Discharges into Impaired Streams – This permit does not authorize discharges that would add loadings of a pollutant that is identified as causing or contributing to the impairment of a water body on the list of impaired waters. Impaired waters means any segment of surface waters that has been identified by the division as failing to support its designated classified uses. Compliance with the additional requirements set forth in sub-part 5.4 is not considered as contributing to loadings to impaired waters or degradation unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in paragraph d) above and the SWPPP cannot be modified to bring the site into compliance.

f) Discharges into Outstanding National Resource Waters - The director shall not grant coverage under this permit for discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRWs). Designation of ONRWs are made according to TDEC Rules, Chapter 1200-4-3-.06.

g) Discharges into Exceptional Quality Waters - The director shall not grant coverage under this permit for potential discharges of pollutants which would cause degradation to waters designated by TDEC as exceptional quality waters (see sub-part 5.4 (Discharges into Impaired or Exceptional Tennessee Waters for additional permit requirements). Compliance with the additional requirements set forth in sub-part 5.4 is not considered as contributing to loadings to exceptional quality waters or degradation unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in paragraph d) above and the SWPPP cannot be modified to bring the site into compliance. Identification of exceptional quality waters is made according to TDEC Rules, Chapter 1200-4-3-.06.

h) Discharges Not Protective of Federal or State listed Threatened and Endangered Species, Species Deemed in Need of Management or Special Concern Species - Stormwater discharges and stormwater discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna or flora (or species proposed for such protection) in the receiving stream(s); or discharges or activities that would result in a "take" of a state or federal listed endangered or threatened aquatic or wildlife species deemed in need of management or special concern species, or such species' habitat. If the division finds that stormwater discharges or stormwater related activities are likely to result in any of the above effects, the director will deny the

coverage under this general permit unless and until project plans are changed to adequately protect the species.

i) Discharges from a New or Proposed Mining Operation - This permit does not cover discharges from a new or proposed mining operation.

j) Discharges Negatively Affecting a Property on the National Historic Register - Stormwater discharges that would negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.

k) Discharging into Receiving Waters With an Approved Total Maximum Daily Load Analysis - Discharges of pollutants of concern to waters for which there is an EPA-approved total maximum daily load (TMDL) for the same pollutant are not covered by this permit unless measures or controls that are consistent with the assumptions and requirements of such TMDL are incorporated into the SWPPP. If a specific wasteload allocation has been established that would apply to the discharge, that allocation must be incorporated into the SWPPP and steps necessary to meet that allocation must be implemented. In a situation where an EPA-approved or established TMDL has specified a general wasteload allocation applicable to construction 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 EPA-approved 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 generally 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

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

a) issue a notice of coverage (NOC) to the operator identified as a primary permittee on the NOI form (see subpart 1.5 below - *Effective Date of Coverage*); or
b) notify the applicant of needed changes to their NOI submittal (see section 2.6.3 below - *Application completeness*); or
c) deny coverage under this general permit (see subpart 7.12 below - *Requiring an Individual Permit*).

1.4.1. Notice of Intent (NOI)

Operators wishing to obtain coverage under this permit must submit a completed NOI in accordance with requirements of part 2 below, using the NOI form provided in Appendix A of this permit (or a copy thereof). The division will review NOIs for completeness and accuracy and, when 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 develop and submit a site-specific SWPPP with the NOI. The initial, comprehensive SWPPP, developed and submitted by the site-wide permittee (typically owner/developer who applied for coverage at project commencement[1]), should address all construction-related activities from the date construction commences to the date of termination of permit coverage, to the maximum extent practicable. The SWPPP must be developed, implemented and updated according to the requirements in part 3 below (*SWPPP Requirements*) and subpart 2.3 below (*Responsibilities of Operators*). The SWPPP must be implemented prior to commencement of construction activities.

If the initial, comprehensive 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 comprehensive 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 a 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.

1.4.3. Permit application fees

The permit application fee should accompany the site-wide permittee's NOI form. The fee is based on the total acreage planned to be disturbed by an entire construction project for which the site-wide permittee is requesting coverage, including any associated construction support activities (see section 1.2.2 above). *The 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 and/or in the construction of roadways, sewers and water utilities, stormwater drainage structures, etc., to make the property marketable. The site-wide owner/developer may present documentation of common areas in the project that will not be subject to disturbance at anytime during the life of the project and have these areas excluded from the fee calculation.

The application fees shall be as specified in the TDEC Rules, Chapter 1200-4-11. 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." There is no additional fee for subsequent owner/operator to obtain permit coverage (see section 2.4.3 below - *New operator*), as long as the site-wide primary permittee has active permit coverage at the time of receipt of the subsequent operator's application, because the site-wide primary permittee paid the appropriate fee for the entire area of site disturbance. 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.

[1] See sub-part 2.1 on page 7 for a definition of an site-wide permittee.

1.4.4. Submittal of a copy of the NOC and NOT to the local MS4

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 courtesy copy of the notice of coverage (NOC), and at project completion, a copy of the signed notice of termination (NOT) to the MS4 upon their 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 the division's DataViewer web site[2].

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 Municipal Separate Storm Sewer System (MS4) program. A qualifying local program (QLP) is a municipal stormwater program 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: http://tn.gov/environment/wpc/stormh2o/qlp.shtml.

If a construction site is within the jurisdiction of and has obtained a notice of coverage from a QLP, the operator of the construction activity is authorized to discharge stormwater associated with construction activity under this general permit without the submittal of an NOI to the division. The permittee is also not required to submit a SWPPP, a notice of termination or a permit fee to the division. At the time of issuance of this permit, there were no qualifying local erosion prevention and sediment control MS4 programs in Tennessee. Permitting of stormwater runoff from construction sites from federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT) and Tennessee Valley Authority (TVA)) and the local MS4 program itself will remain solely under the authority of TDEC.

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

1.5. Effective Date of Coverage

1.5.1. Notice of Coverage (NOC)

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

Assigning a permit tracking number by the division to a proposed discharge from a construction site does not confirm or imply an authorization to discharge under this permit. Correspondence

[2] http://www.tn.gov/environment/wpc/dataviewer/

with the permittee is maintained through the Site Owner or Developer listed in the NOI, not the optional contact or the secondary permittee.

If any Aquatic Resource Alteration Permits (ARAP) are required for a site in areas proposed for active construction, the NOC will not be issued until ARAP application(s) are submitted and deemed by TDEC to be complete. The treatment and disposal of wastewater (including, but not limited to sanitary wastewater) generated during and after the construction must be also addressed. The issuance of 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 that is the current land owner of the construction site. This person is considered the primary permittee; or
b) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the 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. Typical Construction Site Operators

2.2.1. Owner/Developer

An owner or developer(s) 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. An owner 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 an owner/developer (site-wide permittee) for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility, etc.) and has design or operational control over construction plans and specifications is a primary permittee for that portion of the site. A commercial builder may also be hired by the end user (e.g., 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 those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., contractor is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

A contractor may be, but is not limited to a general contractor, grading contractor, erosion control contractor, sub-contractor responsible for any land disturbing activities and/or erosion prevention and sediment control (EPSC) implementation/maintenance, commercial builder hired by the owner/developer, etc. The contractor 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. Permittee(s) with design control (owner/developer)

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

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

2.3.2. Permittee(s) with day-to-day operational control (contractor – secondary permittee)

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

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

An operator presently permitted under the 2005 construction general permit shall be granted coverage under this new general permit. There will be no additional fees associated with an extension of coverage for existing sites under the new permit. The division may, at its discretion, require permittees to confirm their intent to be covered under this new general permit following its effective date through submission of an updated NOI. Should the confirmation be required and is not received, coverage under the new general permit will be terminated. Should a site with terminated coverage be unstable or construction continues, a new NOI, SWPPP and an appropriate fee must be submitted.

2.4.2. Application for new permit coverage

Except as provided in section 2.4.3 below, operators must submit a complete NOI, SWPPP and an appropriate fee in accordance with the requirements described in subpart 1.4 above. The complete application should be submitted at least 30 days prior to commencement of construction activities. The 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 operator

For stormwater discharges from construction sites or portions of the sites where the operator changes (new owner), or projects where an operator is added (new contractor) after the initial NOI and comprehensive SWPPP have been submitted, the supplemental (submitted by a new contractor) or additional (submitted by a new owner) NOI should be submitted as soon as practicable, and always before the new operator commences work at the site. The supplemental NOI must reference the project name and tracking number assigned to the primary permittee's NOI.

If the site under the control of the new owner is inactive and all areas disturbed are completely stabilized, the NOI may not need to be submitted immediately upon assuming operational control. 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 upon the sale or transfer of the site's ownership does not change the signatory requirements for the NOI (see section 7.7.1 below), but the site's owner or developer's company name has changed, a new, updated NOI should be submitted to the division within 30 days of the name change. If the new operator agrees to comply with an existing comprehensive SWPPP already implemented at the site, a copy of the supplemental or modified SWPPP does not have to be submitted with the NOI. There will be no additional fees associated with the sale or transfer of ownership for existing permitted sites.

If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (including but not limited to 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 subsection 2.2 above (*Typical 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. The division recommends that signatures be in blue ink.

2.6. NOI Form

2.6.1. Contents of the NOI form

NOI for construction projects shall be submitted on the form provided in Appendix A of this permit, or on a copy thereof. This form and its instructions set forth the required content of the NOI. The NOI form must be filled in completely. If sections of the NOI are left blank, a narrative explaining the omission must be provided as an attachment.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 above (*Typical Construction Site Operators*) shall apply for permit coverage on the same NOI, insofar as possible. The NOI is designed for more than one contractor (secondary permittee). 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 comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 below, and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (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 United States Geological Survey (USGS) topographic map, with the proposed construction site centered, must be included with the NOI. The entire proposed construction area must be clearly identified (outlined) on this map. The total area to be disturbed (in acres) should be included on the map. The map should outline the boundaries of projects, developments and the construction site in relation to major roads, streams or other landmarks. All outfalls where runoff will leave the property should be identified. Stream(s) receiving the discharge, and storm sewer system(s)

conveying the discharge from all site outfalls should be clearly identified and marked on the map. The map should also list and indicate the location of EPSCs that will be used at the construction site. NOIs for linear projects 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 which they purchased and for which they are applying for permit coverage and the location of EPSCs that will be used at each lot.

2.6.3. Application completeness

Based on a review of the NOI or other available information, the division shall:

1. prepare a notice of coverage (NOC) for the construction site (see subpart 1.5 above); or
2. prepare a deficiency letter stating additional information must be provided before the NOC can be issued; or
3. deny coverage under this general permit and require the discharger to obtain coverage under an individual NPDES permit (see subpart 7.12 below).

2.7. Where to Submit the NOI, SWPPP and Permitting Fee?

The applicant shall submit the NOI, SWPPP and permitting fee to the appropriate TDEC Environmental Field Office (EFO) for the county(ies) 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 areas of different EFOs, the operators shall send NOIs to each EFO. The permitting fee should be submitted to the EFO that provides coverage for the majority of the proposed construction activity.

A list of counties and the corresponding EFOs is provided in subpart 2.8 below. The division's Nashville Central Office will serve as a processing office for NOIs submitted by federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT), Tennessee Valley Authority (TVA) and the local MS4 programs).

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

EFO Name	List of Counties
Chattanooga	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie
Columbia	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry, Wayne
Cookeville	Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon, Overton, Pickett, Putnam, Smith, Van Buren, Warren, White
Jackson	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Gibson, Hardeman, Hardin, Haywood, Henderson, Henry, Lake, Lauderdale, Madison, McNairy, Obion, Weakley
Johnson City	Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, Washington
Knoxville	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union
Memphis	Fayette, Shelby, Tipton
Nashville	Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, Robertson, Rutherford, Stewart, Sumner, Trousdale, Williamson, Wilson

TDEC may be reached by telephone at the toll-free number 1-888-891-8332 (TDEC). Local EFOs may be reached directly when calling this number from the construction site, using a land line.

3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

3.1. The General Purpose of the SWPPP

A comprehensive 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 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 site-specific 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 subsequent (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 may be prepared by an individual that has a working knowledge of erosion prevention and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC) 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 Tennessee Code Annotated, Title 62, Chapter 2 (see part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners. Engineering design of sediment basins and other sediment controls must be included in SWPPPs 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 an impaired or exceptional quality waters (see subsection 5.4.1 below).

3.1.2. Site Assessment

Quality assurance of erosion prevention and sediment controls shall be done by performing site assessment at a construction site. The site assessment shall be conducted at each outfall involving drainage totaling 10 or more acres (see subsection 3.5.3.3 below) or 5 or more acres if draining to an impaired or exceptional quality waters (see subsection 5.4.1 below), within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment shall be performed by individuals with following qualifications:

- a licensed professional engineer or landscape architect;
- 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.

As a minimum, site assessment should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the inspector (as defined in part 10 below – Definitions), 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 SWPPP at the site. At a minimum, the documentation shall include information included in the inspection form provided in Appendix C of this permit. 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."*

The site assessment can take the place of one of the twice weekly inspections requirement from subsection 3.5.8.2 below.

The division may require additional site assessment(s) to be performed if site inspection by division's personnel reveals site conditions that have potential of causing pollution to the waters of the state.

3.2. SWPPP Preparation and Compliance

3.2.1. Existing site

Operator(s) of an existing site presently permitted under the division's previous construction general permit shall maintain full compliance with the current SWPPP. The current SWPPP should be modified, if necessary, to meet requirements of this new general permit, and the SWPPP changes implemented no later than 12 months following the new permit effective date (**Error! Reference source not found.**), excluding the buffer zone requirements as stated in section 4.1.2 below. The permittee shall make the updated SWPPP available for the division's review upon request.

3.2.2. New site

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, Plan Review and Making Plans Available

3.3.1. Signature Requirements for a SWPPP

The SWPPP shall be signed by the operator(s) in accordance with subpart 7.7 below, and if applicable, certified according to requirements in section 3.1.1 above. All signatures must be original. A SWPPP that does not bear an original signature will be deemed incomplete. The division recommends that signatures be in blue ink.

3.3.2. SWPPP Review

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

3.3.3. Making plans available

A copy 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 offsite, 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 are met:

a) whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the SWPPP. 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, local, state or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from sources identified under section 3.5.2 below of this permit, or is otherwise not achieving the general objectives of controlling pollutants in 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) to identify any new operator (typically contractor and/or subcontractor) as needed to reflect operational or design control that will implement a measure of the SWPPP (see subparts 2.1 and 2.2 above for further description of which operators must be identified); and
d) to include measures necessary to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection – 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; and
e) a TMDL is developed for the receiving waters for a pollutant of concern (siltation and/or habitat alteration).

3.5. Components of the SWPPP

The SWPPP shall include the following items, as described in sections 3.5.1 to 3.5.10 below: site description, description of stormwater runoff controls, erosion prevention and sediment controls, stormwater management, description of other items needing control, approved local government sediment and erosion control requirements, maintenance, inspections, 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 pollution which are 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 plan shall provide a description of pollutant sources and other information as indicated below:

a) a description of all construction activities at the site (not just grading and street construction);
b) the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.);
c) estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling, or other construction activities;
d) a description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on the site; such estimation should be on a basis of a drainage area serving each outfall, rather than an entire project;
e) any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and how the soil may affect the expected quality of runoff from the site;
f) an estimate of the runoff coefficient of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream, as well as the estimate of the percentage of impervious area before and after construction;
g) an erosion prevention and sediment control plan of the site with the proposed construction area clearly outlined. The plan should indicate the boundaries of the permitted area, drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, the location of areas where stabilization practices are expected to occur, surface waters including wetlands, sinkholes, and careful identification on the site plan of outfall points intended for coverage under the general permit for stormwater discharges from the site. The erosion control plan must meet requirements stated in section 3.5.2 below;
h) 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;
i) identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or the tracking number of the Aquatic Resources Alteration Permit (ARAP) or Section 401 Certification issued for the alteration;
j) the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site;
k) if applicable, clearly identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project;
l) some construction projects, such as residential or commercial subdivisions and/or developments or industrial parks are subdivided. Subdivided lots are sometimes sold to new owners prior to completion of construction. The site-wide developer/owner must describe EPSC measures implemented at those lots. Once the property is sold, the new operator must obtain coverage under this permit;
m) for projects of more than 50 acres, the construction phases must be described (see subsection 3.5.3.1 below); and
n) if only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed, i.e., caution fence, stream side buffer zones, etc. Limits of disturbance shall be clearly marked in the

SWPPP and areas to be undisturbed clearly marked in the field before construction activities begin.

3.5.2. Description of stormwater runoff controls

The SWPPP shall include a description of appropriate erosion prevention and sediment controls and other Best Management Practices (BMPs) that will be implemented at the construction site. The SWPPP must clearly describe each major activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.):

a) appropriate control measures and the general timing for the measures to be implemented during construction activities; and
b) which permittee is responsible for implementation of which controls.

The SWPPP must include erosion prevention and sediment control (EPSC) plans showing the approximate location of each control measure along with a description of the timing during the construction process for implementing each measure (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The different stages of construction (initial/major grading, installation of infrastructure, final contours, etc.) and the erosion preventions and sediment control measures that will be utilized during each stage should be depicted on multiple plan sheets (see paragraphs below). Half sheets are acceptable. One sheet showing all EPSCs that will be used during the life of the multi-phase project implementing different EPSC controls at each stage will not be considered complete.

For site disturbances less than 5 acres, at least two separate EPSC plan sheets shall be developed. At least two stages shall be identified, with associated EPSC measures addressed. The plan stages shall be addressed separately in plan sheets, with each stage reflecting the conditions and EPSC measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance (initial grading) and the conditions and EPSC measures necessary to manage stormwater, erosion and sediment at final grading.

For site disturbances more than 5 acres, at least 3 separate EPSC plan sheets shall be developed. Three stages shall be identified. The first plan sheet should reflect the conditions and EPSC measures necessary to manage stormwater runoff, during the initial land disturbance (initial grading). The second plan sheet shall reflect the conditions and the EPSC measures necessary to manage stormwater runoff from interim land disturbance activities. The third plan sheet shall reflect the conditions and EPSC measures necessary to manage stormwater runoff, erosion and sediment at final grading.

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 controls

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 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 and/or fine particle soils are present at the site, additional physical or chemical treatment of stormwater runoff may be required. Proposed physical and/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 for relevant site situations.

c) If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be discussed in the SWPPP. Planning for planting cover vegetation during winter months or dry months should be avoided.

d) If sediment escapes the permitted area, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation/restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.

e) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as recommended in the Tennessee Erosion and Sediment Control Handbook, and 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 anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control (such as silt fence) should be removed or otherwise prevented from becoming a pollutant source for stormwater discharges.

g) Erodible material storage areas (including but not limited to overburden and stockpiles of soil etc.) and borrow pits used primarily for the permitted project and which 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 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.

i) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. 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 required on all projects regardless of size as a major 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 15 days (see subsection 3.5.3.2 below). No more than 50 acres of active soil disturbance is allowed at any time during the construction project. This includes off-site borrow or disposal areas that meet the conditions of section 1.2.2 above of this general permit.

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

   - Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance have distinct receiving waters; or
   - Where contiguous disturbances amount to greater than 50 acres, but no one distinct water is receiving run off from more than 50 disturbed acres; or
   - With the department's written concurrence, where more than 50 acres of disturbance is to occur and where one receiving water will receive run-off from more than 50 acres; or
   - 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.

l) Erosion prevention and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday.
m) The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records.
n) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be described and implemented, as needed, to reduce the tracking of mud and dirt onto public roads by construction vehicles.
o) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

3.5.3.2. Stabilization practices

The SWPPP shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Site plans should comply with buffer zone requirements (see sections 4.1.2

and 5.4.2 below), if applicable, in which construction activities, borrow and/or fill are prohibited. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization, erosion prevention and sediment control measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resources Alteration Permit (ARAP), if such permits are required and appropriate.

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed no later than 15 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

a) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
b) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 15 days.

Steep slopes shall be temporarily stabilized not later than 7 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).

Erosion prevention and sediment control measures must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. In addition, erosion prevention and sediment controls 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. When clay and other fine particle soils are present at the construction site, chemical treatment may be used to minimize amount of sediment being discharged.

For an on-site outfall which 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 both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified 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 or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

3.5.4. 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 after construction operations have been completed.

For projects discharging to waters considered impaired by sediment or habitat alteration due to in-channel erosion, the SWPPP shall include a description of measures that will be installed during the construction process to control pollutants and any increase in the volume of stormwater discharges that will occur after construction operations have been completed. For steep slope sites, the SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the 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 installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff, if not required by local building regulations or local MS4 program requirements, in order 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 (e.g., 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 and/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 Aquatic Resources Alteration Permit (ARAP)(see part 9 below).
b) For installation of any waste disposal systems on site, or sanitary sewer or septic system, the SWPPP shall identify these systems and provide for the necessary EPSC controls. Permittees must also comply with applicable state and/or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent these are located within the permitted area.
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 pollutants from materials stored on site, including storage practices to minimize exposure of the materials to stormwater, and 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/or critical habitat (if applicable). The permittee must describe and implement such measures to maintain eligibility for coverage under this permit.

3.5.6. Approved local government sediment and erosion control requirements

Permittees must comply with any additional erosion prevention, sediment controls 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 and sediment control measures, buffer zones, and other protective measures identified in the site plan are kept in good and effective operating condition. Maintenance needs identified in inspections or by other means shall be accomplished before the next storm event, but in no case more than 7 days after the need is identified.

3.5.8. Inspections

3.5.8.1. Inspector training and certification

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. A copy of the certification or training record for inspector certification should be kept on site.

3.5.8.2. Schedule of inspections

a) Inspections described in paragraphs b, c and d below, shall be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice) or due to extreme drought, such inspection only has to be conducted once per month until thawing or precipitation results in runoff or 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 section 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. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.
d) 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.
e) Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event, but in no case more than 7 days after the need is identified.
f) Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 above 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 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.
g) 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 (Appendix C) 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. If the division requests the Construction Stormwater Inspection Certification form to be submitted, the submitted form must contain the printed name and

signature of the trained certified inspector and the person who meets the signatory requirements of section 7.7.2 below of this permit.

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 operator(s) (primary permittees) who have obtained coverage under this permit should conduct twice weekly inspections, unless their portion(s) of the site has been temporarily stabilized, or 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 conduct inspections of 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

Sources of non-stormwater listed in section 1.2.3 above of this permit that are combined with stormwater discharges associated with construction activity must be identified in the SWPPP. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Any non-stormwater must be discharged through stable discharge structures. Estimated volume of the non-stormwater component(s) 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) identification of 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 consultation 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 prevention 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 within the site to minimize soil erosion;
(2) Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
(3) Minimize the amount of soil exposed during construction activity;
(4) Minimize the disturbance of steep slopes;
(5) Eliminate (or minimize if complete elimination is not possible) sediment discharges from the site. The design, installation and maintenance of erosion prevention and sediment controls must address factors such as the design storm (see sub-section 3.5.3.3 above) and soil characteristics, including the range of soil particle sizes expected to be present on the site;
(6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible (see section 4.1.2 below); and
(7) Minimize soil compaction and, unless infeasible, preserve topsoil.

4.1.2. Buffer zone requirements

Buffer zone requirements in this section apply to all streams adjacent to construction sites, with an exception for streams designated as impaired or Exceptional Tennessee waters (see section 5.4.2 below). A 30-foot natural riparian buffer zone adjacent to all streams at the construction site shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites, as described in section 2.4.2 above.

The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 30-feet 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 should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in protecting the receiving stream from effects of stormwater runoff as a natural riparian zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction,

roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc.

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

4.1.2.1. Buffer zone exemption based on existing uses

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

1. 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 shall include, but not be limited to, 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.

2. 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 have been pre-approved before February 1, 2010, are 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 dated, written 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. Soil stabilization (temporary or permanent) of those of disturbed areas must be completed as soon as possible, but not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures (such as, but not limited to: properly anchored mulch, soil binders, matting) must be employed.

4.1.4. Dewatering

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls include, but are not limited to: weir tank, dewatering tank, gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter 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:

(1) 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;
(2) 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
(3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

4.1.6. Prohibited discharges

The following discharges are prohibited:

(1) Wastewater from washout of concrete, unless managed by an appropriate control;
(2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
(3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
(4) Soaps or solvents used in vehicle and equipment washing.

4.1.7. Surface outlets

When discharging from basins and impoundments, 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 discharge(s) 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 40 CFR 117 and 40 CFR 302. Where a release containing a hazardous substance in an amount

equal to or in excess of a reportable quantity established under either 40 CFR 117 or 40 CFR 302 occurs during a 24 hour period:

a) the permittee is required to notify the National Response Center (NRC) (800-424-8802) and the Tennessee Emergency Management Agency (emergencies: 800-262-3300; non-emergencies: 800-262-3400) in accordance with the requirements of 40 CFR 117 or 40 CFR 302 as soon as he or she has knowledge of the discharge;
b) the permittee shall submit, within 14 days of knowledge of the release, a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, what actions were taken to mitigate effects of the release, and steps to be taken to minimize the chance of future occurrences, to the appropriate Environmental Field Office (see subpart 2.8 above); and
c) the SWPPP required under part 3 above of this permit must be 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 on-site 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 result in a violation of a state water quality standard (the TDEC Rules, Chapters 1200-4-3, 1200-4-4). Such discharges constitute a violation of this permit.

Where a discharge is already authorized under this permit and the division determines the discharge to cause or contribute to the violation of applicable state water quality standards, the division will notify the operator of such violation(s). The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and shall document these actions in the SWPPP.

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 TDEC Rules, Chapter 1200-4-3-.03. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated for that water body by TDEC Rules, Chapter 1200-4-4. Construction activity carried out in the manner required by this permit shall be considered compliance with the TDEC Rules, Chapter 1200-4-3-.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 Impaired or Exceptional Tennessee Waters

5.4.1. Additional SWPPP/BMP Requirements for discharges into impaired or exceptional TN Waters

Discharges that would add loadings of a pollutant that is identified as causing or contributing to an impairment of a water body on the list of impaired waters, or which would cause degradation to waters designated by TDEC as 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 impaired by siltation (or discharges upstream of such waters and because of the proximity to the impaired segment and the nature of the discharge is likely to contribute pollutants of concern in amounts measurable in the impaired segment that may affect the impaired waters) and for discharges to waters identified by TDEC as 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 contribute pollutants of concern in amounts measurable in the exceptional segment that may affect the Exceptional Tennessee waters):

a) The SWPPP must certify that erosion prevention and sediment controls used at the site are designed to control storm runoff generated by a 5-year, 24-hour storm event (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. When clay and other fine particle soils are found on sites, additional physical or chemical treatment of stormwater runoff may be used.
b) The SWPPP must be prepared by a person who, at a minimum, has completed the department’s Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites course. This requirement goes in effect 24 months following the new permit effective date. A copy of the certification or training record for inspector certification should be included with the SWPPP.

c) 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.
d) The permittee must certify on the form provided in Appendix C of this permit whether or not all planned and designed erosion prevention and sediment controls 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 of this permit. 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.
e) In the event the division finds that a discharger is complying with the SWPPP, but contributing to the impairment of receiving stream, then the discharger will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the necessary changes designed to eliminate further impairment of the receiving stream. If the permittee does not implement the SWPPP changes within 7 days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit (see subpart 7.12 below). To obtain the individual permit, the operator must file an individual permit application (EPA Forms 1 and 2F). The project must be stabilized immediately 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.
f) For an on-site outfall in a drainage area of a total of 5 or more acres, a minimum temporary (or permanent) 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. A drainage area of 5 or more acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin and, if so, can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included and a marker installed signifying a cleanout need.
g) 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. Buffer zone requirements for discharges into impaired or exceptional TN waters

For sites that contain and/or are adjacent to a receiving stream designated as impaired or Exceptional Tennessee waters a 60-foot natural riparian buffer zone adjacent to the receiving stream shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals , TN Rules Chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of

protection of the waters of the state. The buffer zone requirement only applies to new construction sites, as described in section 2.4.2 above.

The natural buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-feet 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 should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in protecting the receiving stream from effects of stormwater runoff as a natural 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 include, but are not limited to: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc.

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

5.4.2.1. Buffer zone exemption based on existing uses

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

1. 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 shall include, but not be limited to, 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.

2. 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. Pre-Approved sites

Construction activity at sites that have been pre-approved before June 16, 2005, are exempt from the design storm requirements of section 5.4.1 a) and e) above and 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 stormwater pollution prevention plans and all reports required by this permit, and records of all data used to complete the NOI and the NOT to be covered by this permit, for a period of at least three years from the date the notice of termination 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 required by this permit (including a copy of the permit) at the construction site (or other local location accessible to the director and the public) from the date construction commences to the date of termination of permit coverage. Permittees with day-to-day operational control over pollution prevention plan implementation shall have a copy of the SWPPP available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. Once coverage is terminated, the permittee shall maintain a copy of all records for a period of three years.

6.2.1. Posting information at the construction site

The permittee shall post a notice near the main entrance of the construction site accessible to the public with the following information:

a) a copy of the NOC with the NPDES permit tracking number for the construction project;
b) name, company name, E-mail address (if available), telephone number and address of the project site owner/operator or a local contact person;
c) a brief description of the project; and
d) the location of the SWPPP (see section 3.3.3 above).

The notice must be maintained in a legible condition. If posting this information near a main entrance is infeasible due to safety concerns, or not accessible to the public, the notice shall be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site. This permit does not require that permittees allow members of the public access to a construction site.

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

a) a rain gauge;
b) a copy of twice weekly inspection reports;
c) a documentation of quality assurance site assessments, if applicable (see section 3.1.2 above); and
d) a copy of the site inspector's Fundamentals of Erosion Prevention and Sediment Control Level 1 certification.

6.3. Electronic Submission of NOIs, NOTs and Reports

If the division notifies dischargers (directly by mail or E-mail, by public notice, or by making information available on the world wide web) of electronic forms or other report options that become available at a later date (e.g., electronic submission of forms), the operators may take advantage of those options to satisfy the NOI, NOT and other report notification requirements.

7. STANDARD PERMIT CONDITIONS

7.1. Duty to Comply

7.1.1. Permittee's duty to comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Tennessee Water Quality Control Act (TWQCA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

7.1.2. Penalties for violations of permit conditions

Pursuant to T.C.A. § 69-3-115 of The Tennessee Water Quality Control Act of 1977, as amended:

a) any person who violates an effluent standard or limitation or a water quality standard established under this part (T.C.A. § 69-3-101, et. seq.); violates the terms or conditions of this permit; fails to complete a filing requirement; fails to allow or perform an entry, inspection, monitoring or reporting requirement; violates a final determination or order of the board, panel or commissioner; or violates any other provision of this part or any rule or regulation promulgated by the board, is subject to a civil penalty of up to ten thousand dollars ($10,000) per day for each day during which the act or omission continues or occurs;
b) any person unlawfully polluting the waters of the state or violating or failing, neglecting, or refusing to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class C misdemeanor. Each day upon which such violation occurs constitutes a separate offense;
c) any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data required by the board or the commissioner, or who willfully and knowingly pollutes the waters of the state, or willfully fails, neglects or refuses to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class E felony and shall be punished by a fine of not more than twenty-five thousand dollars ($25,000) or incarceration, or both.

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 2005 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 Notices of Intent (NOIs), stormwater pollution prevention plans (SWPPPs), requests for termination of permit coverage (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 and/or any other information either submitted to the division, or that this permit requires be maintained by the permittee, shall be signed as described in sections 7.7.1 and 7.7.2 below and dated.

7.7.1. Signatory requirements for a Notice of Intent (NOI)[3]

NOI shall be signed as follows:

a) For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
(ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated site including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate officers. The division will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

[3] 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]

c) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) the chief executive officer of the agency, or
(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

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 SWPPP:

> "*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.*"

7.7.6. Signatory requirements for secondary permittees

Secondary permittees (typically construction contractors) required to sign an NOI and SWPPP because they meet the definition of an operator but who are not primarily responsible for preparing an NOI and SWPPP, shall sign the following certification statement on the NOI and SWPPP:

> *"I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements."*

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 Section 309 of the Clean Water Act and in T.C.A. §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, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. The issuance of this permit does not authorize trespassing or discharges of 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. Requiring an Individual Permit

7.12.1. Director can require a site to obtain an individual permit

The director may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit in order to obtain adequate protection of designated uses of a receiving stream. Any interested person may petition the director in writing to take action under this paragraph, but must include in their petition the justification for such an action. Where the director requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the director shall notify the discharger in writing that 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 of this permit. The director may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the director under this paragraph, then the applicability of this permit to the discharger will be terminated at the end of the day specified by the director for application submittal.

If the decision to require an individual NPDES permit precedes the issuance of coverage under this general permit, earth disturbing activities cannot begin until the individual permit is issued.

7.12.2. Permittee may request individual permit instead of coverage under this general permit

Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. 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. Individual permit terminates general permit

When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the discharger is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is terminated on the date of such denial, unless otherwise specified by the director. Coverage under the Tennessee Multi-Sector General Permit for the Discharge of 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 T.C.A. § 69-3-108. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

8.1.1. Termination of builder and contractor coverage

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 notice of termination (NOT) form, provided in Appendix B of this permit (or copy thereof). Primary permittees who abandon the site and fail to submit the NOT will be in violation of this permit. 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 in items 1, 2 or 3 below occur at the site:

1. All earth-disturbing activities at the site are completed and, if applicable, construction support activities permitted under section 1.2.2 above, and the following requirements are met:

   (a) For any areas that
   - were disturbed during construction,
   - are not covered over by permanent structures, and
   - over which the permittee had control during the construction activities

   the requirements for final vegetative or non-vegetative stabilization described in sub-section 3.5.3.2 above are met;

   (b) The permittee has removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following termination of permit coverage;

   (c) 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;

(d) The permittee has removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following termination of permit coverage; and

(e) The permittee must identify who is responsible for ongoing maintenance of any stormwater controls left on the site for long-term use following termination of permit coverage; or

2. 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, etc.) under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or

3. The permittee obtains coverage under an individual or alternative general NPDES permit.

8.1.2. NOT review

The division will review NOTs for completeness and accuracy and, when necessary, investigate the proposed site for which the NOT was submitted. Upon completing the NOT review, the division will:

1) prepare and transmit a notification that a NOT form was received;
2) notify the applicant of needed changes to their NOT submittal; or
3) deny a request for termination of coverage under this general permit.

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the 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 (builders/contractors) 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 a Notice of Coverage. 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."*

8.4. Where to Submit a Notice of Termination (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 (ARAP)

Alterations to channels or waterbodies (stream, wetland 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/permits/arap.shtml). It is the responsibility of the developer to provide a determination of the water's status[4]. This determination must be conducted using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals , TN Rules Chapter 0400-40-17). 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:

[4] 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)

http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. Other data sources may be acceptable with prior written approval by TDEC Water Pollution Control.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Borrow Pit" is an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this permit.

"**Buffer Zone**" is a strip of dense undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when stormwater runoff is flowing into and through the buffer zone as shallow sheet flow, rather than in concentrated form such as in channels, gullies, or wet weather conveyances. Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in 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 planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal 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, or excavating activities or other construction activities.

"Common plan of development or sale" is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

"Control measure" As used in this permit, refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.

"CWA" means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)

"**Department**" means the Department of Environment and Conservation.

"Director" means the director, or authorized representative, of the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

"Discharge of 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, etc.), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material etc.) are located.

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

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

a. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the (preferably) native vegetative cover for the area 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, or

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, or

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.

"Exceptional Tennessee waters" are surface waters of the State of Tennessee that satisfy characteristics of exceptional Tennessee waters as listed Chapter 1200-4-3-.06 of the official compilation - Rules and Regulations of the State of Tennessee. Characteristics include waters designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW); waters that provide habitat for ecologically significant populations of certain aquatic or semi-aquatic plants or animals; waters that provide specialized recreational opportunities; waters that possess outstanding scenic or geologic values; or waters where existing conditions are better than water quality standards.

"**Impaired waters**" (unavailable conditions waters) 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. 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, impaired waters. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (http://tnmap.tn.gov/wpc/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of impaired waters, can be found at http://tn.gov/environment/wpc.

"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 that has successfully completed (has a valid certification from) the "Fundamentals of Erosion Prevention and Sediment Control Level I" course or equivalent 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 Aquatic Resources Alteration Permit (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; and
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 a residential and/or commercial subdivision or high-rise structures is not considered a linear project.

"Monthly" refers to calendar months.

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

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, 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;

2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

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

"NOT" means notice of termination (see part 8 above of this permit).

"**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; or

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

It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of "operator."

"Point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include introduction of pollutants from non point-source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, and 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):

(i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
(ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
(iii) Requirements for construction site operators to develop and implement a 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); and
(iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

"**Quality Assurance Site Assessment**" means 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 and drawings; and details for erosion prevention, sediment control and stormwater management.

"**Registered Engineer**" and "**Registered Landscape Architect**" An engineer or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, Tennessee Code Annotated, to practice in Tennessee.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is NOT absorbed by the surface to the total amount of water that falls during a rainstorm.

"**Sediment**" means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported, or has been moved from the site of origin by wind, water, gravity, or ice as a product of erosion.

"Sediment basin" A temporary basin consisting of an embankment constructed across a wet weather conveyance, or 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., impaired, HQ, or unimpaired).

"**Sedimentation**" means the action or process of forming or depositing sediment.

"**Significant contributor of pollutants to waters of the state**" means any discharge containing pollutants that are reasonably expected to cause or contribute to an impairment of receiving stream water quality or designated uses.

"**Soil**" means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.

"**Steep Slope**" 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 non-erosively around or over a steep slope. In addition, site managers should focus on erosion prevention on the slope(s) and stabilize the slope(s) as soon as practicable to prevent slope failure and/or sediment discharges from the project.

"Stormwater" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater associated with industrial activity" is defined at 40 CFR 122.26(b)(14) and incorporated here by reference. Most relevant to this permit is 40 CFR 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities (including borrow pits containing erodible material). Disturbance of soil for the purpose of crop production is exempted from permit requirements, but stormwater discharges from agriculture-

related activities which involve construction of structures (e.g., barn construction, road construction, pond construction, etc.) are considered associated with industrial activity. Maintenance performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility, e.g. re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair, and repaving of an existing road, is not considered a construction activity for the purpose of this permit.

"Stormwater discharge-related activities" include: activities which cause, contribute to, or result in point source stormwater pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control stormwater including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent stormwater pollution.

"**Stormwater Pollution Prevention Plan"**(SWPPP): A written plan required by this permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

"Take" of an endangered species means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.

"**Temporary stabilization**" is achieved when vegetation and/or a non-erodible surface have been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease. However, if future construction activity is planned, permit coverage continues.

"**Total maximum daily load**" (TMDL) The sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(I)). TMDL is a study that: quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant, and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. Some of the actions that might be taken are:

1.) Re-allocation of limits on the sources of pollutants documented as impacting streams. It might be necessary to lower the amount of pollutants being discharged under NPDES permits or to require the installation of other control measures, if necessary, to ensure that water quality standards will be met.
2.) For sources over which the division does not have regulatory authority, such as ordinary agricultural or forestry activities, provide information and technical assistance to other state and federal agencies that work directly with these groups to install appropriate Best Management Practices (BMPs).

Even for impacted streams, TMDL development is not considered appropriate for all bodies of water: if enforcement has already been taken and a compliance schedule has been developed; or if best management practices have already been installed for non-regulated activities, the TMDL is considered not applicable. In cases involving pollution sources in other states, the recommendation may be that another state or EPA perform the TMDL . TMDLs can also be described by the following equation:

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 cab found at our web site: http://tn.gov/environment/wpc/tmdl/approved.shtml

"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.

"**Waters**" or "**waters of the state**" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

"**Waste site**" is an area where material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.

"**Wet weather conveyances**" are man-made or natural watercourses, including natural watercourses that have been modified by channelization that flow only in direct response to precipitation runoff in their immediate locality; whose channels are at all times above the ground water table; that are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phage of at least two months. (Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.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
NOC	Notice of Coverage
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
ONRW	Outstanding National Resource Waters

POTW	Publicly Owned Treatment Works
SWPPP	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: Bennett Road Industrial Access Road serving Proj. Victor	**Existing NPDES Tracking Number: TNR**
Street Address or Location: Cookeville, TN	Start date: June 2015
	Estimated end date: June 2020
Site Activity Description: 0.488 miles of SIA Serving Project Victor (PIN 120463.00)	Latitude (dd.dddd): N 36.1363
	Longitude (dd.dddd): W 85.5796
County(ies): Putnam — MS4 Jurisdiction: T.D.O.T.	Acres Disturbed: 13.7
	Total Acres: 11.1

Does a topographic map show dotted or solid blue lines ☒ and/or wetlands ☐ on or adjacent to the construction site?
If wetlands are located on-site and may be impacted, attach wetlands delineation report.
If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.: Pending

Receiving waters: Unnamed tributaries to Cane Creek

Attach the SWPPP with the NOI ☒ SWPPP Attached — Attach a site location map ☒ Map Attached

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

Site Owner/Developer Signatory (V.P. level/higher - individual responsible for site - signs certification below): Jim Ozment		Signatory's Title or Position (V.P. level/higher - signs certification below): Director- Environmental Division	
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN — Zip: 37243-0334
Phone: (615) 741-5373	Fax: N/A	E-mail: Environmental.NPDES TDOT@tn.gov	
Optional Contact: Khalid Ahmed		Title or Position: Senior Transportation Project Specialist	
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN — Zip: 37243-0334
Phone: (615) 253-0021	Fax: N/A	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: 03-30-2015

Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (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.

Contractor company name (print or type):			
Contractor signatory (print/type): (V.P. level or higher)		Signature:	Date:
Mailing Address:		City: — State:	Zip:
Phone:	Fax:	E-mail:	

Other Contractor company name (print or type):			
Other Contractor signatory (print/type): (V.P. level or higher)		Signature:	Date:
Mailing Address:		City: — State:	Zip:
Phone:	Fax:	E-mail:	

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Number **TNR**	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora and Fauna:		Impaired Receiving Stream:	Notice of Coverage Date:

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

Purpose of this form: A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activity (permit). **Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions.** This permit is required for stormwater discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

Permit application fee: (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites).

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

*Subsequent Primary Operators seeking coverage under an actively covered larger common plan of development or sale

Who must submit the NOI form: Per Section 2 of the permit, 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: (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. This person 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.

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

Complete the form: Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.**

Describe and locate the project: Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at the USGS World Wide Web site: http://www.usgs.gov/; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.state.tn.us/environment/water/water-quality_storm-water.shtml

Give name of the receiving waters: Trace the route of stormwater runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the 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.

ARAP permit may be required: **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information: Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Stormwater NOI Processing**.

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	540 McCallie Avenue STE 550	37402-2013
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 Pollution Control (WPC)
6th Floor Annex, L&C Tower, 401 Church Street, 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 WPC 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 and not markers or pencil.

Site or Project Name:	**NPDES Tracking Number: TNR**
Street Address or Location:	County(ies):

Name of Permittee Requesting Termination of Coverage:			
Permittee Contact Name :	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone: ( )	E-mail:		

Check the reason(s) for termination of permit coverage:

☐	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.
☐	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected 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 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 the site or portions of the site have obtained permit coverage by subsequent operators or that 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.

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	540 McCallie Avenue STE 550	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 C – Twice-Weekly Inspection Report Form
(next page)

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
Division of Water Pollution Control (WPC)
6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

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

CGP Inspection Worksheet for Twice-Weekly Inspections of Erosion Prevention and Sediment Controls

Site or Project Name:		**NPDES Tracking Number: TNR**
Primary Permittee Name:		Date of Inspection:
Current approximate disturbed acreage:	Has daily rainfall been documented? ☐Yes ☐ No	Name of Inspector:
Current weather/site conditions:		Inspector's TNEPSC Certification Number:

Please check the box if the following items are on-site:

☐ Notice of Coverage (NOC) ☐ Stormwater Pollution Prevention Plan (SWPPP) ☐ Twice weekly inspection documentation

☐ Site contact information ☐ Rain Gage ☐ Off-site Reference Rain Gage Location: _____

Best Management Practices (BMPs):

Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly in the following locations:			
1.	Disturbed areas/material storage areas	☐Yes	☐No
2.	Outfall points (or nearest accessible downstream point if an outfall is inaccessible)	☐Yes	☐No
3.	Construction ingress/egress points	☐Yes	☐No

If the answer is "No" for any of the above, please describe the problem and corrective actions to be taken. Otherwise, describe any pertinent observations:

4.	Are (EPSCs) installed and maintained in the field per SWPPP? If "No", describe below.	☐Yes	☐No
5.	Have site discharges caused an objectionable color contrast in the receiving stream (Permit section 5.3.2)? If "Yes", describe below the measures implemented to eliminate contrast.	☐Yes	☐No
6.	Have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the Permit? If "No", describe below the measures to be implemented to achieve compliance.	☐Yes	☐No
7.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 15 days per Section 3.5.3.2? If, "No", describe below each location and measures taken to stabilize the area(s).	☐Yes	☐No
8.	Are non-stormwater discharges (per Section 1.2.3) and housekeeping measures such as storing chemicals, construction related debris litter, oils, fuels, building products, truck wash (per Section 3.5.3.1 (f) and (g)) being properly managed? If "No", describe below the measures to be implemented to achieve compliance.	☐Yes	☐No
9.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No", describe below the measures to be implemented to achieve compliance. ☐ N/A	☐Yes	☐No
10.	Have all previous deficiencies been addressed? If not, describe the remaining deficiencies. ☐ Check if deficiencies/corrective measures have been reported on a previous form.	☐Yes	☐No

Certification and Signature (must be signed by the certified inspector and the permittee per Sections 3.5.8.2 (g) and 7.7.2 of the CGP)

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.

Inspector Name and Title (print or type):	Signature:	Date:
Permittee Name and Title (print or type):	Signature:	Date:

CGP Inspection Worksheet for Twice-Weekly Inspections of Erosion Prevention and Sediment Controls

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.

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/). A copy of the certification or training record for inspector certification should be kept on site.

Qualified personnel, as defined in section 3.5.8.1 of the Permit (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. If the division requests the Construction Stormwater Inspection Certification form to be submitted, the submitted form must contain the printed name and signature of the trained certified inspector and the person who meets the signatory requirements of section 7.7.2 of the Permit.

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.

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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

February 2, 2015

Mr. Robert Wayne
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 71952-1544-04
PIN 120463.00
State Industrial Access Road
Bennett Road Serving "Project Victor"
Putnam County

Dear Mr. Wayne:

The Tennessee Department of Transportation is proposing to provide industrial access road and realign Bennett Road for proposed industry (west of Cookeville) in Putnam County. The project involves the alignment of Bennett Road shifted to the west, beginning 465' north of the intersection of existing Bennett Road and Old Stewart Road. The new alignment will result in the construction of two (2) 12 ft. lanes with 4 ft. wide shoulders with access to the existing Lee Seminary Road for residential access, and the industrial access that consist of two (2) 12 ft. travel lanes and 4 ft. shoulders. Also included within the project scope is the crossing/impact of one (1) stream. The project scope also includes all associated drainage improvements. The total proposed length of roadway construction and improvements equals 0.73 miles. In accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091 identifying where permits may be needed.

The primary purpose of the proposed project is to provide adequate access to the location of the new facility. The new industry will be served by approximately 150 trucks per day. The existing roadway is not suitable for the estimated truck traffic. An efficient and safe roadway is needed to address the large amount of predicted truck traffic.

In addition, and in accordance with the notification requirements of the U.S. Army Corps of Engineers, we are submitting this pre-construction notification and requesting concurrence that

stream location, as described within the enclosed feature impact tables, meet the criteria of the nationwide permit identified

Please refer to the enclosed feature impact and summary tables for detailed information regarding environmental feature locations, proposed environmental feature impacts, required environmental permits, FEMA floodplain designations, etc.

As mitigation for 30 ft. (30 ft. x 1.0) of stream [encapsulation] [length losses], we propose a payment of $7,200. As mitigation for 104 ft. (139 ft. x 0.75) of rip-rap, we propose a payment of $ 24,960. A total payment of $32,160 is proposed to the In-Lieu Fee Stream Mitigation Program.

Efforts were made during the planning and design phases of this project to avoid impacts to waters of the U.S. and waters of the State to the extent practicable, and to minimize impacts that were not avoidable. Mitigation for these impacts has been proposed on the project site, where practicable.

A letter was sent from TDOT to the United States Fish and Wildlife Service (USFWS) on November 07, 2014, requesting information on species that may be present in the vicinity of the proposed project. In a response correspondence dated November 07, 2014, the USFWS concluded that no federally listed, proposed species or designated critical habitat is known to exist within the project impact.

A search of the TDEC Division of Natural Areas, endangered species database, was conducted on November 17, 2014. This database search, paired with the findings from a site visit conducted on October 29, 2014, identified no protected species within one mile and two (2) protected species within four miles of the proposed site.

An email was sent from TDOT to the TWRA on October 28, 2014, requesting information on species that may be present in the vicinity of the proposed project. In a response email dated November 12, 2014 (enclosed), the TWRA stated no occurrences of listed species within two miles of the project location. The implementation of standard TDOT BMPs would be sufficient to satisfy the needs of TWRA.

In a letter dated November 19, 2014, the TN-SHPO state that the area of potential effect for the subject project contains no cultural resources eligible for listing in the National Register of Historic Places. In a letter dated December 22, 2014, the TN-SHPO state that the area of potential effect for the subject project contains no archaeological resources eligible for listing in the National Register of Historic Places.

In addition to the impacts referenced above, we are requesting that the Tennessee Department of Environment and Conservation and the Corp of Engineers include approval for all proposed outfall structures (ditches, pipes, etc.) associated with the proposed project in your permits.

It is the opinion of this office that all other aspects of the project not specifically mentioned in this letter meet the criteria for the General Permit for Wet Weather Conveyances. Please refer to the enclosed Form G for more information.

By copy of this letter, we are also requesting that the TDEC and Corp of Engineers please include approval of a potential temporary stream crossing 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 March 15, 2015 turn-in. We would greatly appreciate your initial review and request for additional information needed, or issuance of the public notice, within 15 days of receipt of our application; and issuance of the permits as soon as possible.

If you have any questions or we can be of further assistance please contact me at (615) 253-0021 or Andrew Wisniewski at (615) 253-2545.

Sincerely,

Khalid Ahmed

Khalid Ahmed
Senior Transportation Project Specialist,
Environmental Permits Section

Enclosures

JLH: KMA: APW

cc: Mr. Jimmy Smith, TDEC
Ms. Tammy Turley, USACE, Nashville District

ec:

Ms. Jeanene Woodruff, TDEC
Ms. Amber Thornton, Project Management Office
Mr. Jim Bivens, Design Office
Mr. Ken Flynn, Region 2 Construction Office
Mr. Wesley Hughen, Region 2 Project Development
Mr. Jamie Fitzpatrick, HQ Construction Division
Mr. Tommy Paul, Region 2 Environmental Coordinator
Mr. Rob Howard, Region 2 Ecology Section
Mr. Brandon Chance, Region 2 Ecology Section
Mr. Ben Brown, Ecology Section, Mitigation
Mr. Ronnie Porter, Program Operations Office
Mr. Hugh (Chip) Hannah, TDOT Compliance
Ms. Jennifer Stover, TDOT Compliance
Mr. John Hewitt, Natural Resources Office
Permit File

FEATURE IMPACT TABLE:	Location #1 / STR-1 (UT to Cane Creek)
Location Information	
Location #	Location #1
Feature Name:	STR-1 (UT to Cane Creek)
Latitude:	36.1319°
Longitude:	85.5819°
Stationing:	Sta. 46.67 ± . (Bennett Road)
FEMA Floodplain Designation	Zone X:
Permits Required	
TDEC:	**INDIVIDUAL AQUATIC RESOURCE ALTERATION PERMIT**
Corps:	Pre-Construction Notification- Nationwide #14: Impacts at a special aquatic site; therefore, Pre-Construction Notification is required.
TVA:	N/A
Narrative description of impact	Repalce Existing Culvert
Existing feature characteristics	Existing structure: 36 ft of 30" CMP Existing open stream: 180 ft Total existing length: 216 ft Please refer to the enclosed Environmental Boundaries Report for more information
Proposed feature characteristics	Proposed structure: 47 ft. of 68" x 43" horizontal oval pipe Proposed open stream: 139 ft including rip-rap 10 ft rip-rap at the inlet and 20 ft of rip-rap at the outlet Outfalls: 2 at the inlet of pipe and 1 at the oulet Total proposed length: 186 ft
Impact acreage to waters of the US (acres):	0.016
Alternatives, and Impact minimization	Used steeper than typical 6:1 slide slopes to reduce the structure length. Side slopes are 4:1. It is more economical to use oval pipe culvert over box culvert for such a small crossing. To minimize impact to environment, we propose to mitigate impact through in-lieu fee and planting tree on the banks of the relocated channel with rip-rap, as shown on sheet 4A. No build does not fulfill the purpose and need.
Stream Mitigation	As mitigation for 30 ft. (30 ft. x 1.0) of stream [length losses], we propose a payment of $7,200 As mitigation for 89 ft. (119 ft. x 0.75) of rip-rap, we propose a payment of $ 21,360. A total payment of $28,560 is proposed to the In-Lieu Fee Stream Mitigation Program.
Wetland Mitigation	N/A
Water Resources Degradation (select one)	

FEATURE IMPACT TABLE:	Location #1 / STR-1 (UT to Cane Creek)
My activity, as proposed, will not cause measurable degradation to water quality	
My activity, as proposed, will only cause de minimis degradation to water quality	X
My activity, as proposed, will cause more than de minimis degradation to water quality.	

FEATURE SUMMARY TABLE:

Location Information							Impact Description									Mitigation Description				Comments
Location #	Station	Feature Name	Jurisdictional Determination	Waterbody ID	Latitude	Longitude	Brief Impact Description	Impact Acreage to Waters of the US (ac.)	Corps Notification (Y/N)	Existing Stream (ft.)	Existing Structure	Total Existing Impact Stream Length (ft.)	Proposed Open Stream (ft.)	Proposed Structure (ft.)	Total Proposed Impact Stream Length (ft.)	Encapsul. Length @ 1.0 Ratio (ft.)	Stream Length Losses @ 1.0 Ratio (ft.)	Rip-rap Length @ 0.75 Ratio (ft.)	Total In-Lieu Fee Credits Needed	Location-Specific Miscellaneous Comments
1	46+67	STR-A	Intermittent Stream	Unassessed	36.1319°	85.5819°	Relocate/ Encap	0.016	Y	180	36	216	139	47	186	47	30	89	166	Mitigation includes rip-rap length of new stream and loss
						Project Totals:		**0.016**	**-**			**216**			**186**	**47**	**30**	**89**	**166**	**-**

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)

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

OFFICIAL STATE USE ONLY	Site #:		Permit #:	

Section 1. Applicant Information *(individual responsible for site, signs certification below)*

Applicant Name: Khalid Ahmed				
Company: Tennessee Department of Transportation		Signatory's Title or Position: Sr. Transportation Project Specialist		
Mailing Address: 505 Deaderick Street Suite 900 J.K. Polk Bldg.		City: Nashville	State: TN	Zip: 37243
Phone: (615) 253-0021	Fax: N/A	E-mail: Khalid.Ahmed@tn.gov		

Section 2. Alternate Contact/Consultant Information (*a consultant is not required*)

Alternate Contact Name: Andrew Wisniewskii				
Company: Tennessee Department of Transportation		Title or Position: Graduate Transportation Associate		
Mailing Address: 505 Deaderick Street Suite 900 J.K. Polk Bldg.		City: Nashville	State: TN	Zip: 37243
Phone: (615) 253-2545	Fax: N/A	E-mail: Andrew.Wisniewski@tn.gov		

Section 3. Fee *(check appropriate box and submit requisite fee with application)*

☒ No Fee Submitted ☐ Fee Submitted with Application Amount Submitted: $ _____

Current fee schedules for Aquatic Resource Alteration Permit processing may be found at the Division of Water Resources webpage at http://www.tn.gov/environment/permits/arap.shtml or by calling (615) 532-0625. Make checks payable to "Treasurer, State of Tennessee".

Section 4. Project Details *(fill in information and check appropriate boxes)*

Site or Project Name: Bennett Rd. serving Project Victor		Nearest City, Town or Major Landmark: Cookeville
Street Address or Location: Bennett Road south of I-40		
County(ies): Putname	MS4 Jurisdiction: TDOT	Latitude (dd.dddd): See Feature Summary Tables
		Longitude (dd.dddd): See Feature Summary Tables

Resource Proposed for Alteration: ✓ Stream Wetland Reservoir

Name of Water Resource: Unnamed Tributary to Cane Creek

Brief Project Description (a more detailed description is required under Section 8):

Realigning and widening Bennett Road shifting to the west. Building two accesses one for residential and the other for industry.

Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? ☒ Yes ☐ No

If Yes, provide the permit reference numbers: _____

Is the proposed activity associated with a larger common plan of development? ☐ Yes ☒ No

If Yes, submit site plans and identify the location and overall scope of the common plan of development. Plans attached? ☐ Yes ☒ No

If applicable, indicate any other federal, state, or local permit authorizations that the overall project site (common plan of development) has obtained in the past (i.e. construction general permit coverage and/or other ARAPs):

N/A

Section 5. Project Schedule *(fill in information and check appropriate boxes)*

Start date: 6/4/15	Estimated end date: 6/4/20

Is any portion of the activity complete now? ☐ Yes ☒ No If yes, describe the extent of the completed portion:

N/A

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question in not applicable, state the reason why it is not applicable. Please refer to the enclosed feature impact and summary tables.

Section 6. Project Description		**Attached** Yes	No
6.1	A narrative description of the scope of the project	☒	☐
6.2	USGS topographic map indicating the exact location of the project (*can be a photographic copy*)	☒	☐
6.3	Photographs of the resource(s) proposed for alteration with location description (*photo locations should be noted on map*)	☒	☐
6.4	A narrative description of the **existing** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.5	A narrative description of the **proposed** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	☐	☒
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	☒	☐

Section 7. Project Rationale	**Attached** Yes	No
Describe the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to avoid or minimize impacts to streams or wetlands.	☒	☐

Section 8. Technical Information		**Attached** Yes	No
8.1	Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5.x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions *(e.g., stream cross sections where road crossings are proposed)*	☒	☐
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	☒	☐
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	☒	☐

Section 9. Water Resources Degradation (degree of proposed impact) *Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.*

My activity, as proposed:

Please refer to the enclosed feature impact and summary tables.

a. ☐ Will not cause measurable degradation to water quality
b. ■ Will only cause de minimis degradation to water quality
c. ☐ Will cause more than de minimis degradation to water quality (*Complete additional sections 9-11)*
d. ☐ Unsure/need more information

For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule: https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf. For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at http://www.tn.gov/environment/permits/arap.shtml

If you checked "c." above in Section 9, complete the following 2 sections, 10-11. Please refer to the enclosed feature impact and summary tables.

Section 10. Detailed Alternative Analysis		**Attached** Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	☐	☒
10.2	Discuss the social and economic consequences of each alternative	☐	☒
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area	☐	☒

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

Section 11. Compensatory Mitigation		Attached Yes	Attached No
11.1	A detailed discussion of the proposed compensatory mitigation	☐	☒
11.2	Describe how the compensatory mitigation would result in no net loss of resource value	☐	☒
11.3	Provide a detailed monitoring plan for the compensatory mitigation site	☐	☒
11.4	Describe the long-term protection measures for the compensatory mitigation site *(e.g., deed restrictions, conservation easement)*	☐	☒

Certification and Signature

An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.

"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".

Khalid Ahmed	Sr. Transportation Project Specialist	Khalid Ahmed	02/02/2015
Printed Name	Official Title	Signature	Date

Submitting the form and obtaining more information Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the ARAP activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments (e.g., maps, wetland delineations and narrative portions) to water.permits@tn.gov.

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	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

OFFICIAL STATE USE ONLY

Received Date:	Permit Number:	Reviewer:	Field Office:
Fee amount paid:	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Application Review:
Date:			☐ Deficient Date:
Check #:	Exceptional TN Water:		☐ Complete Date:

U.S. ARMY CORPS OF ENGINEERS

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 31-AUGUST-2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Khalid Middle - Last - Ahmed	First - Middle - Last -
Company - Tennessee Department of Transportation	Company -
E-mail Address - Khalid.Ahmed@tn.gov	E-mail Address -
6. APPLICANT'S ADDRESS:	**9. AGENT'S ADDRESS:**
Address- 505 Deaderick Street Suite 900 J.K. Polk Bldg.	Address-
City - Nashville State - TN Zip - 37243 Country - USA	City - State - Zip - Country -
7. APPLICANT'S PHONE NOs. w/AREA CODE	**10. AGENTS PHONE NOs. w/AREA CODE**
a. Residence b. Business (615) 253-0021 c. Fax	a. Residence b. Business c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

Bennett Road serving "Project Victor"

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable)
Unnamed Tributary to Cane Creek	Address
15. LOCATION OF PROJECT Latitude: °N See impact tables Longitude: °W See impact tables	City - State- Zip-

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID Municipality

Section - Township - Range -

17. DIRECTIONS TO THE SITE

See attached plans for maps.

18. Nature of Activity (Description of project, include all features)

Please see included cover letter, impact tables, and plans.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Please see included cover letter and impact tables.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Please see included cover letter and impact tables.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres Please see impact tables.

or

Linear Feet Please see impact tables.

23. Description of Avoidance, Minimization, and Compensation (see instructions)

Please see impact tables.

24. Is Any Portion of the Work Already Complete? ☐ Yes ☑ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address- Please see attached plans for property owners.

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
TDEC	GARAP	Pending			

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Khalil Ahmed — SIGNATURE OF APPLICANT

2/02/2015 — DATE

SIGNATURE OF AGENT — DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

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 14, 2014

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 # 71001-1195-44
PIN 101577.00
Interstate 40
Interchange at Mine Lick Creek Road & I40
Putnam County

Dear Mr. Smith:

The Tennessee Department of Transportation is proposing to build an interchange at Mine Lick Creek Rd and Interstate (west of Cookeville) in Putnam County. The project involves building a diamond interchange which includes 4 ramps, and improving other various roads. Bennett Road is being upgraded to a four lane road with 12 ft. wide travel lanes and turn lanes for the interchange. The other local roads are being realigned and upgraded to 2-12 ft. wide travel lanes with four foot shoulders. Also included within the project scope is crossing/impact of four (4) streams, impacting of one (1) wet weather conveyance/ephemeral stream, and utility crossings. The project scope also includes all associated drainage improvements. The total proposed length of roadway construction and improvements equals 2.781 miles. In accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091 identifying where permits may be needed.

In addition, and in accordance with the notification requirements of the U.S. Army Corps of Engineers, we are submitting this pre-construction notification and requesting concurrence that the streams as described within the enclosed feature impact tables, meet the criteria of the nationwide permit.

Project Rationale/Purpose and Need (TDEC Section 7)

The Tennessee Department of Transportation has proposed a new highway connecting I-40 and US 70N (SR 24) in Putnam County, just west of the Cookeville City Limits. The proposed route would begin a Mine Lick Creek Road Interchange on I-40 and extend north and east, connecting with US 70N (SR 24). The project is to provide an additional north/south route for continually increasing volumes of traffic around Cookeville. In addition, traffic moving between I-40 and US 70N (SR 24) would be provided with a new, efficient route that would improve access to developable areas of Putnam County. Vehicular traffic moving between I-40 and US 70N is currently served mainly by SR-135, SR-136, and SR-56. The new north south connector will provide a roadway to facilitate sustained growth activities in a western area of Cookeville between the downtown commercial business district and SR-56. While the interchange would improve access to the Highland Business Park

Reasonable Alternatives (TDEC Section 10.1)

The alternatives under consideration in the Environmental Assessment include the "No-Build" alternative and two "Build" alternatives, designated as Alternative A and Alternative B. Please refer to enclosed Environmental Document for more details.

The proposed interchange location was evaluated according to environmental impacts, as well as existing land use. It was determined that the proposed interchange provides the fewest impacts to the environment and homes.

A "No Build" option was considered. The No Build option does not address the purpose and need to improve regional and local accessibility, traffic capacity along SR 56, SR 135, and SR 136, and providing positive economic benefits resulting from the existing and potential business development.

Impact Minimization (TDEC Section 10.1)

The proposed interchange will only disturb only the areas needed for construction. TDOT typically uses 6:1 slopes but over stream crossing slopes steeper than 4:1 were used to minimize impacts. Implementation and maintenance of effective erosion prevention and sediment control (EPSC) measures will minimize water quality impacts. Stream relocation is proposed rather than filling when feasible. The purchase of mitigation credits from TSMP as compensation for offsetting unavoidable impacts will allow the continued restoration, establishment, enhancement, and preservation of aquatic resources.

Supplemental Information

As mitigation for 694 ft. (694 ft. x 1.0) of stream [encapsulation] [length losses], we propose a payment of $166,650. A total payment of $ 166,650 is proposed to the In-Lieu Fee Stream Mitigation Program. Please cite this payment to the TWRF in your permits.

Efforts were made during the planning and design phases of this project to avoid impacts to waters of the U.S. and waters of the State to the extent practicable, and to minimize impacts that were not avoidable. Mitigation for these impacts has been proposed on the project site, where practicable.

Please refer to the enclosed feature impact and summary tables for detailed information regarding environmental feature locations, proposed environmental feature impacts, required environmental permits, FEMA floodplain designations, etc.

An email was sent from TDOT to USFWS on March 5, 2014 requesting a review under section 7 of the Endangered Species Act (ESA) 1973. In a response email dated March 5, 2014, USFWS stated they are unaware of any federally listed species that would be impacted by the project. Therefore, based on the best information available at this time, they believe that the requirements of section 7 of the ESA 1973 are fulfilled.

A search of the TDEC Division of Natural Areas, endangered species database, was conducted on April 25, 2014. This database search identified two (2) listed species within one to four miles of the proposed site.

An email was sent from TDOT to the Tennessee Wildlife resource Agency (TWRA) on August 29, 2014, requesting information on species that may be present in the vicinity of the proposed project. In a response email dated September 18, 2014 (enclosed), TWRA stated that their data shows no occurrence of listed species within two miles of the project location. The implementation of BMPs would be sufficient to satisfy the needs of TWRA,

A letter was sent from TDOT to USFWS dated June 11, 2012, transmitting a habitat suitability assessment for potential impacts to federally endangered Indiana bat (*Myotis sodalis*) as a result of the proposed construction. TDOT has determined “not likely to adversely affect” the Indiana bat because minimal suitable habitat is present onsite. In a response dated July 10, 2012 USFWS concurs with TDOT’s determination of “not likely to adversely affect” for the Indiana bat due to marginal suitability of the habitat. USFWS is unaware of any federal listed or proposed species that could be impacted by this project. USFWS believe that the requirements of section 7 of the endangered Species Act of 1973, as amended, are fulfilled.

TDOT historian has conducted a survey to identify any resources either listed in or potentially eligible in the National Register of Historic Places. TDOT has worked with the State Historic Preservation Office (SHPO) on this survey to determine if any resources are eligible. TDOT historic surveys have been conducted to identify potential sites within project area that meets SHPO Guidelines for Archaeological Resource Management Studies. TDOT did not find any architectural or archaeological sites within the project site.

In coordination letter dated April 9, 2003 the SHPO stated considering available information, they find the proposed project will not adversely affect any architectural property that is eligible for listing in the National Register of Historic Places. In a coordination letter dated February 3, 2004, they also concur that the project area contains no archaeological resources eligible in the National Register of Historic Places. TDOT has complied with section 106 of the National Historic Preservation Act.

In addition to the impacts referenced above, we are requesting that the Tennessee Department of Environment and Conservation and the Corps of Engineers include approval for all proposed outfall structures (ditches, pipes, etc.) associated with the proposed project in your permits.

It is the opinion of this office that all other aspects of the project not specifically mentioned in this letter meet the criteria for the General Permit for Wet Weather Conveyances. Please refer to the enclosed Form G for more information.

By copy of this letter, we are also requesting that TDEC and the Corps of Engineers, please include approval of a potential temporary stream crossing 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 3, 2014 turn-in. We would greatly appreciate your initial review and request for additional information needed, or issuance of the public notice, within 15 days of receipt of our application; and issuance of the permits as soon as possible.

If you have any questions or we can be of further assistance please contact me at (615) 253-0021 or Andrew Wisniewski at (615) 253-2545.

Sincerely,

Khalid Ahmed

Khalid Ahmed
Senior Transportation Project Specialist, Environmental Permits Section

Enclosures

JLH: KMA: APW

cc: Mr. Jimmy Smith, TDEC
Ms. Tammy Turley, USACE, Nashville District

ec:

Region 2
Ms. Jeanene Woodruff, TDEC
Ms. Amber Thornton, Project Management Office
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Mr. Rob Howard, Region 2 Ecology Section
Mr. Ronnie Porter, Program Operations Office
Mr. Hugh (Chip) Hannah, TDOT Compliance
Ms. Jennifer Stover, TDOT Compliance
Mr. John Hewitt, Natural Resources Office
Permit File

FEATURE SUMMARY TABLE:

Location Information								Impact Description										Comments
Location #	Feature Name	Jurisdictional Determination	Feature Name	Latitude	Longitude	Construction Plan Sheet #	Stationing	Brief Impact Description	Impact Acreage to Waters of the US (ac.)	Corps Non-Notification (Y/N)	Existing Open Stream	Existing Structure Length (ft.)	Total Existing Stream Length (ft.)	Proposed Open Stream (ft.)	Proposed Culvert (ft.)	Proposed Rip-rap (ft.)	Total Proposed Stream Length (ft.)		Location-Specific Miscellaneous Comments
1	STR-1	Stream	Unanmed Tributary to Cane Creek	36.1406°	-85.5838°	6 and 6A	25+92 Ramp A	Culvert Extension	0.012	N	65	190	255	50	15	50	255		extending culvert from existing 190 ft of 8x7, 1-outfall at inlet of culvert(EPH-1A)
2	STR-1	Stream	Unanmed Tributary to Cane Creek	36.1383°	-85.5817°	7 and 7A	19+93 Ramp D	Culvert Extension	0.030	N	163	146	309	34	122	34	302		extending culvert from existing 146 ft of 8x7
3	STR-1	Stream	Unanmed Tributary to Cane Creek	36.1396°	-85.5829°	7 and 7A	17+90 Mine Lick Creek Rd.	Remove Pipe	0.007	N	0	40	40	40	0	0	40		Remove existing culvert
4	STR-1	Stream	Unanmed Tributary to Cane Creek	36.1368°	-85.5790°	12 and 12A	28+60 Bennett Rd	Stream Encapsulation	0.044	N	220	21	241	39	148	39	210		removing 21 ft of existing bridge. 1-outfall at inlet and 2-outfalls at outlet of pipe.
5	STR-1A	Stream	Unnamed Tributary	36.1332°	-85.5809°	11 and 11A	14+11 Bennett Rd.	Stream Encapsulation	0.009	Y	130	41	171	61	102	61	163		Difference Stream Segment and less than 200 ft impact. 1-outfall at inlet of pipe
6	STR-2	Stream	Unanmed Tributary to Cane Creek	36.1393°	-85.5829°	7 and 7A	19+00-20+50 Ramp D	Stream Relocation	0.016	N	134	0	134	160	0	160	160		-
7	STR-3	Stream	Unanmed Tributary to Cane Creek	36.1405°	-85.5761°	8 and 8A	21+28 Ramp B	Stream Encapsulation	0.028	N	160	0	203	90	113	47	203		2-outfalls at inlet and 1-outfall at outlet of pipe
7	STR-3	Stream	Unanmed Tributary to Cane Creek	36.1409°	-85.5757°	8 and 8A		Remove Pipe	0.006	N	0	43	43	43	0	0	43		Remove existing culvert
8	STR-3	Stream	Unanmed Tributary to Cane Creek	36.1389°	-85.5760°	9 and 9A	19+09 Ramp C	Stream Encapsulation	0.022	N	159	0	159	43	115	43	158		1-outdfall at inlet(WWC-2) and 2- outfalls at outlet of pipe
9	STR-3	Stream	Unanmed Tributary to Cane Creek	36.1427°	-85.5762°	18 and 18A	31+62 Mine Lick Creek Rd.	Stream Encapsulation	0.021	N	151	0	151	39	112	39	151		2-outfalls at inlet and 2-outfalls at outlet of pipe
								Project Totals:	**0.195**	-			**1,706**				**1,685**		-

FEATURE IMPACT TABLE:	STR-1 (Unnamed Tributary to Cane Creek) and SPG-1
Location Information	
Feature Name:	STR-1 (Unnamed Tributary to Cane Creek) and SPG-1
Latitude:	36.1406°
Longitude:	-85.5838°
Stationing:	Sta. 25+92 ± Rt. Ramp A, 19+93 ± Rt Ramp D, 17+90 Mine Lick Creek Road, and 28+60 Bennett Rd.
FEMA Floodplain Designation (if Zone AE, please enclose No-Rise Certification):	Zone X
Permits Required - TDEC:	ARAP: Does not fit criteria under GARAP because of cumulative impacts. Will cause more than de minimis degradation to water quality at this location.
Permits Required - Corps:	Pre-Construction Notification- Nationwide #14: Cumulative impacts at this site exceed one tenth of an acre; therefore, Pre-Construction Notification is required.
Permits Required - TVA:	N/A
CN-1091 Section 6: Project Description	
6.1: Narrative description of project scope	Extend existing culverts, construct new reinfornced concrete box bridge, remove existing 72" corrugated metal pipe (CMP), and utility relocations
6.2: USGS Topographic Map	Please see enclosed
6.3: Resource photographs	Please refer to photographs 2, 3, 7, 8, 9, 14, 16, and 18 in the enclosed Environmental Boundaries Report
6.4: Existing feature characteristics	STR-1 and SPG-1 Impact at 4 Locations Existing: **Sta. 25+92 (Ramp A),** 190 ft. of 8 ft. X7 ft. box culvert, 65 ft. of open stream, Total existing = 255 ft. **Sta 19+93 (Ramp D),** 146 ft. of 8 ft. X 7 ft. box culvert, 163 ft of open stream, Total existing = 309 ft. **Sta. 17+90 (Mine Lick Creek Road) ,** 40 ft. of 72 in. corrugated metal pipe (CMP), Total Existing = 40 ft. **Sta. 28+60 (Bennett Road.),** 21 ft. of bridge 220 ft. of open stream Total existing = 241 ft. Total existing length at 4 location = 845 ft. Existing SPG-1 Please refer to the enclosed Environmental Boundaries Report for more information

6.5: Proposed feature characteristics	Proposed **Sta. 25+92 (Ramp A),** 15 ft. of 8 ft. X7 ft. box culvert extension, 190 ft. of existing 8 ft. X 7 ft. culvert to remain, 50 ft. of rip-rap at inlet, Total proposed length = 255 ft. **Sta. 19+93 (Ramp D),** 122 ft. of 8 ft. X7 ft. box culvert extension, 146 ft. of existing 8 ft. X 7 ft. culvert to remain, 34 ft. of rip-rap at outlet, Total proposed length = 302 ft. **Sta. 17+90 (Mine Lick Creek Road),** 40 ft. remove existing 72 in. CMP Total proposed = 40 ft. Cookeville Water: Remove or retire line Twin Lakes Telephone: Remove line **Sta. 28+60 (Bennett Road)**, Remove existing 21 ft. bridge, 148 ft. of 2@16 ft. X 9 ft. Reinforned Concrete Box (RCB), 39 ft. of total rip-rap at inlet and outlet (19 ft. at inlet and 20 ft. out outlet), 23 ft. of open channel with rip-rap bank stabilization (12 ft. at inlet and 11 ft. at outlet), Total proposed = 210 ft. Twin Lakes Telephone: Remove and add line Cookeville Water: Remove and add 30" line Total proposed length at 4 loactions = 807 ft. Channel Loss= 38 ft. New Encapsulation = 264 ft. Remove 40 ft. Mitigation Required 264 + 38 - 40 = 262 ft. SPG-1-Rock fill is used in to allow continuation of water flow into STR-1
* Impact acreage to waters of the US (acres):	0.1/Cumulative impact with STR-1, STR-2, and STR-3 = 0.195
6.6: Wetland delineation documentation	N/A
6.7: Water resource hydrologic and jurisdictional determination documentation	Please refer to the enclosed Environmental Boundaries Report for more information.
CN-1091 Section 7: Project Rationale	
Description of the need for the proposed activity, alternatives, and impact minimization	Please refer to the enclosed cover letter for project rationale
CN-1091 Section 8: Technical Information	
8.1: Detailed plans, specifications, etc. included for present conditions and proposed activity	Please see enclosed
8.2: Sequencing of events and construction methods for proposed activity and compensatory mitigation	1. EPSC measures will be installed. Please refer to the enclosed EPSC sheets (46-47, 49-49B, 50-50B, and 55-55B). 2. For the construction method at this location, please refer to the enclosed , present layout (6, 7, and 12), proposed layout (6A, 7A, and 12A), profile layout (20, 25, and 12B), and culvert cross-section (41, 42, and 39)
* Proposed impact mitigation:	As mitigation for 262 ft. (262 ft. x 1.0) of stream [encapsulation] [length losses], we propose a payment of $62,880 to TSMP.
8.3: Depiction and narrative of EPSC measures	Please refer to the enclosed plan set, sheets 49 through 49B, for the EPSC plan sheets
CN-1091 Section 9: Water Resources Degradation (select one)	
My activity, as proposed, will not cause measurable degradation to water quality	
My activity, as proposed, will only cause de minimis degradation to water quality	
My activity, as proposed, will cause more than de minimis degradation to water quality (if selected, must complete Sections 10 and 11 below)	**X**
Unsure / need more information	
CN-1091 Section 10: Detailed Alternative Analysis	

10.1: Analysis of reasonable alternatives	1. A slab culvert (bottomless culvert) was considered for this impact. A bridge would not be cost effective in this instance. Disturbance of riparian vegetation along the stream channel shall be kept to a minimum. To help minimize over widening of the stream channel TDOT standard drawing STD-17-20 (Low Flow Channel Construction Details for Culvert inlet and Outlet) will be utilized during construction. 2. Longer culverts with typical 6:1 side slopes . Steepening the side slopes to 3.7:1 or steeper, allows for a shorter extension for minimal impact. 3. No-Build Option. No-Build does not fit the purpose and need. Refer to application cover letter and Environmental Document for more information.
10.2: Discussion of social and economic consequences	Construction of interchange helps economics development for the industrial park being built nearby. If the interchange is not built, then the area could lose more development. The existing local roads could not support this development without expansion. Current local roads are not designed for truck traffic. This could cause more accidents and congestion.
10.3: Demonstration that degradation from alternative will not violate WQ criteria	Best Management Practices (BMPs) which includes the design, installation, and maintenance of erosion prevention and sediment control measures will be implementated during construction, which will protect the receiving waters. Mitigation through TSMP as compensation for offsetting unavoidable impacts will allow the continued restoration, establishment, enhancement, and preservation fo the aquatic resource.
CN-1091 Section 11: Compensatory Mitigation	
11.1: Detailed discussion of proposed compensatory mitigation	As mitigation for 262 ft. (262 ft. x 1.0) of stream [encapsulation] [length losses], we propose a payment of $62,880 to In-Lieu Fee Stream Mitigation Program. Please cite this payment to TWRF in your permits.
11.2: Description of how compensatory mitig. will result in no net loss of resource value	TDOT has proposed to purchase credits from In-Leiu Fee Stream Mitigation Program for this impact. Therefore, the proposed impacts will result in no net loss of resource value.
11.3: Detailed monitoring plan	Will be provided by TSMP.
11.4: Long-term protection measures for compensatory mitigation site	Will be provided by TSMP.

FEATURE IMPACT TABLE:	STR-1A Unnamed Tributary
Location Information	
Feature Name:	STR-1A Unnamed Tributary
Latitude:	36.1333°
Longitude:	-85.5809°
Stationing:	14+11± Rt Bennett Rd.
FEMA Floodplain Designation (if Zone AE, please enclose No-Rise Certification):	Zone X
Permits Required - TDEC:	ARAP: Meets the General ARAP criteria for the [Construction and removal of Minor Road Crossings]. Will only cause de minimis degradation to water quality.
Permits Required - Corps:	Non-Notification - Nationwide #14: This roadway crossing meets all of the following criteria required for non-notification under Nationwide #14: • Discharge results in the loss of less than a tenth of an acre • Does not affect a special aquatic site • Does not affect federally listed species • Does not affect historic properties All conditions of the Nationwide #14 General Permit will be followed during construction
Permits Required - TVA:	N/A
CN-1091 Section 6: Project Description	
6.1: Narrative description of project scope	Remove existing culvert and place new 2@6'x3' box culvert
6.2: USGS Topographic Map	Please see enclosed
6.3: Resource photographs	Please refer to photographs 19 and 20 in the enclosed Environmental Boundaries Report
6.4: Existing feature characteristics	Existing Structure: 41 ft. of 36" CMP Existing open stream: 130 ft. Total Existing Length: 171 ft. Please refer to the enclosed Environmental Boundaries Report for more information
6.5: Proposed feature characteristics	Proposed Structure: 102 ft. of 2@6'X3' box culvert Proposed open stream: 61 ft. Total proposed length: 163 ft. Cookeville Gas: Install new line, Cookeville Sewer: Install new line, Cookeville Water: Remove or retired existing line and install new line, Twin Lakes Telephone: Remove line existing line and install new line.
* Impact acreage to waters of the US (acres):	0.01
6.6: Wetland delineation documentation	N/A
6.7: Water resource hydrologic and jurisdictional determination documentation	Please refer to the enclosed Environmental Boundaries Report for more information.
CN-1091 Section 7: Project Rationale	
Description of the need for the proposed activity, alternatives, and impact minimization	Please refer to the enclosed cover letter for project rationale
CN-1091 Section 8: Technical Information	
8.1: Detailed plans, specifications, etc. included for present conditions and proposed activity	Please see enclosed
8.2: Sequencing of events and construction methods for proposed activity and compensatory mitigation	1. EPSC measures will be installed. Please refer to the enclosed EPSC sheets (46, 47, and 54-54B). 2. For the construction method at this location, please refer to the enclosed , present layout (11), proposed layout (11A), profile layout (11B), and culvert cross-section (39).
* Proposed impact mitigation:	N/A
8.3: Depiction and narrative of EPSC measures	Please refer to the enclosed plan set, sheets 49 through 49B, for the EPSC plan sheets
CN-1091 Section 9: Water Resources Degradation (select one)	
My activity, as proposed, will not cause measurable degradation to water quality	

My activity, as proposed, will only cause de minimis degradation to water quality	x
My activity, as proposed, will cause more than de minimis degradation to water quality (if selected, must complete Sections 10 and 11 below)	
Unsure / need more information	
CN-1091 Section 10: Detailed Alternative Analysis	
10.1: Analysis of reasonable alternatives	N/A
10.2: Discussion of social and economic consequences	N/A
10.3: Demonstration that degradation from alternative will not violate WQ criteria	N/A
CN-1091 Section 11: Compensatory Mitigation	
11.1: Detailed discussion of proposed compensatory mitigation	N/A
11.2: Description of how compensatory mitig. will result in no net loss of resource value	N/A
11.3: Detailed monitoring plan	N/A
11.4: Long-term protection measures for compensatory mitigation site	N/A

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)

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

OFFICIAL STATE USE ONLY	Site #:		Permit #:	

Section 1. Applicant Information *(individual responsible for site, signs certification below)*

Applicant Name: Khalid Ahmed				
Company: Tennessee Department of Transportation		Signatory's Title or Position: Sr. Transportation Project Specialist		
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN	Zip: 37243-0334
Phone: (615) 741-5373	Fax: N/A	E-mail: Environmental.NPDES TDOT@tn.gov		

Section 2. Alternate Contact/Consultant Information (*a consultant is not required*)

Alternate Contact Name: Andrew Wisniewski				
Company: Tennessee Department of Transportation		Title or Position: Senior Transportation Project Specialist		
Mailing Address: 900 James K. Polk Building 505 Deadrick St		City: Nashville	State: TN	Zip: 37243-0334
Phone: (615) 253-0021	Fax: N/A	E-mail: Khalid.Ahmed@tn.gov		

Section 3. Fee *(check appropriate box and submit requisite fee with application)*

☒ No Fee Submitted ☐ Fee Submitted with Application Amount Submitted: $ _____

Current fee schedules for Aquatic Resource Alteration Permit processing may be found at the Division of Water Resources webpage at http://www.tn.gov/environment/permits/arap.shtml or by calling (615) 532-0625. Make checks payable to "Treasurer, State of Tennessee".

Section 4. Project Details *(fill in information and check appropriate boxes)*

Site or Project Name: Bennett Road Industrial Access Road serving	Nearest City, Town or Major Landmark: Cookeville	
Street Address or Location: Cookeville, TN		
County(ies): Putnam	MS4 Jurisdiction: T.D.O.T.	Latitude (dd.dddd): N 36.1363
		Longitude (dd.dddd): W 85.5796

Resource Proposed for Alteration: ✔ Stream Wetland Reservoir

Name of Water Resource: Unnamed tributaries of Cane Creek and Unnamed Tributary

Brief Project Description (a more detailed description is required under Section 8):

Construct I-40 Interchange at Mine Lick Creek Rd. and realign a few local roads for industrial access

Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? ☒ Yes ☐ No

If Yes, provide the permit reference numbers: x

Is the proposed activity associated with a larger common plan of development? ☐ Yes ☒ No

If Yes, submit site plans and identify the location and overall scope of the common plan of development. Plans attached? ☐ Yes ☒ No

If applicable, indicate any other federal, state, or local permit authorizations that the overall project site (common plan of development) has obtained in the past (i.e. construction general permit coverage and/or other ARAPs):

N/A

Section 5. Project Schedule *(fill in information and check appropriate boxes)*

Start date: April 2015	Estimated end date: April 2020

Is any portion of the activity complete now? ☐ Yes ☒ No If yes, describe the extent of the completed portion:

N/A

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question in not applicable, state the reason why it is not applicable. Please refer to the enclosed feature impact and summary tables.

Section 6. Project Description		**Attached** Yes	No
6.1	A narrative description of the scope of the project	☒	☐
6.2	USGS topographic map indicating the exact location of the project (*can be a photographic copy*)	☒	☐
6.3	Photographs of the resource(s) proposed for alteration with location description (*photo locations should be noted on map*)	☒	☐
6.4	A narrative description of the **existing** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.5	A narrative description of the **proposed** stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	☒	☐
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	☒	☐
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	☐	☒

Section 7. Project Rationale	**Attached** Yes	No
Describe the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to avoid or minimize impacts to streams or wetlands.	☒	☐

Section 8. Technical Information		**Attached** Yes	No
8.1	Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5.x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions *(e.g., stream cross sections where road crossings are proposed)*	☒	☐
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	☒	☐
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	☒	☐

Section 9. Water Resources Degradation (degree of proposed impact) *Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.*

My activity, as proposed:

Please refer to the enclosed feature impact and summary tables.

a. ☐ Will not cause measurable degradation to water quality
b. ☐ Will only cause de minimis degradation to water quality
c. ☒ Will cause more than de minimis degradation to water quality (*Complete additional sections 9-11)*
d. ☐ Unsure/need more information

For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule: https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf. For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at http://www.tn.gov/environment/permits/arap.shtml

If you checked "c." above in Section 9, complete the following 2 sections, 10-11. Please refer to the enclosed feature impact and summary tables.

Section 10. Detailed Alternative Analysis		**Attached** Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	☒	☐
10.2	Discuss the social and economic consequences of each alternative	☒	☐
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area	☒	☐

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

Section 11. Compensatory Mitigation		Attached Yes	Attached No
11.1	A detailed discussion of the proposed compensatory mitigation	☒	☐
11.2	Describe how the compensatory mitigation would result in no net loss of resource value	☒	☐
11.3	Provide a detailed monitoring plan for the compensatory mitigation site	☒	☐
11.4	Describe the long-term protection measures for the compensatory mitigation site *(e.g., deed restrictions, conservation easement)*	☒	☐

Certification and Signature

An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.

"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".

Khalid Ahmed	Sr. Transportation Project Specialist	Khalid Ahmed	10-14-2014
Printed Name	Official Title	Signature	Date

Submitting the form and obtaining more information Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the ARAP activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments (e.g., maps, wetland delineations and narrative portions) to water.permits@tn.gov.

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	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

OFFICIAL STATE USE ONLY

Received Date:	Permit Number:	Reviewer:	Field Office:
Fee amount paid:	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Application Review:
Date:			☐ Deficient Date:
Check #:	Exceptional TN Water:		☐ Complete Date:

U.S. ARMY CORPS OF ENGINEERS

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 31-AUGUST-2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Khalid Middle - Last - Ahmed	First - Middle - Last -
Company - Tennessee Department of Transportation	Company -
E-mail Address - Khalid.Ahmed@tn.gov	E-mail Address -
6. APPLICANT'S ADDRESS:	9. AGENT'S ADDRESS:
Address- 505 Deaderick Street Suite 900 J.K. Polk Bldg.	Address-
City - Nashville State - TN Zip - 37243 Country - US	City - State - Zip - Country -
7. APPLICANT'S PHONE NOs. w/AREA CODE	10. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business (615) 253-0021 c. Fax N/A	a. Residence b. Business c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ _____

SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)

I-40 Interchange at Mine Lick Creek Rd

13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable)
Unnamed Tributaries of Cane Creek and Unnamed Tributary	Address N/A
15. LOCATION OF PROJECT Latitude: °N 36.1395 Longitude: °W -85.5790	City - Cookeville State- TN Zip- 38501

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)

State Tax Parcel ID N/A Municipality N/A

Section - N/A Township - N/A Range - N/A

17. DIRECTIONS TO THE SITE

Travel on I-40 eastbound from Nashville; Take exit 280 and turn right onto Baxter Rd.; Take first left onto Ditty Rd; In 1.4 miles Turn left onto Mine Lick Creek Rd and approximately 2 miles to the site.

18. Nature of Activity (Description of project, include all features)

Construct I-40 Interchange at Mine Lick Creek Rd. and realign local roads for industrial access. To construct the interchange the project will require 4 ramps (Ramp A crosses STR-1,Ramp B crosses STR-3,Ramp C crosses STR-3,and Ramp D crosses STR-1) and requires pipe extensions or new pipes. Ramp D will also require the relocation of STR-2. This project is involves realigning local roads(Mine Lick Creek Rd, Bennett, and Lee Seminary), to accommodate the ramps and the building of Highland Business Park. Some roads will be abandoned, like Mick Lick Creek Rd. will have two pipes removed, one from STR-1 and one from STR-3. Bennett Rd. is being realigned which crosses STR-1A and requires a new pipe.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The purpose of this project is to handle the traffic associated with the building of the new Highland Business Park. See Sheet 12A that shows the widening of Bennett Rd. to accommodate the business park and well it shows the new entrance into the Park. Interchanges nearby would cause traffic issues and all the local roads to the site would have to be widened and reworked.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

N/A

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
N/A	N/A	N/A

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres N/A

or

Linear Feet N/A

23. Description of Avoidance, Minimization, and Compensation (see instructions)

See Cover Letter

24. Is Any Portion of the Work Already Complete? ☐ Yes ☒ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
TDEC	401	NRS14.285	10/14/2014		

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

Khalil Ahmed — SIGNATURE OF APPLICANT

2014-12-15 — DATE

SIGNATURE OF AGENT — DATE

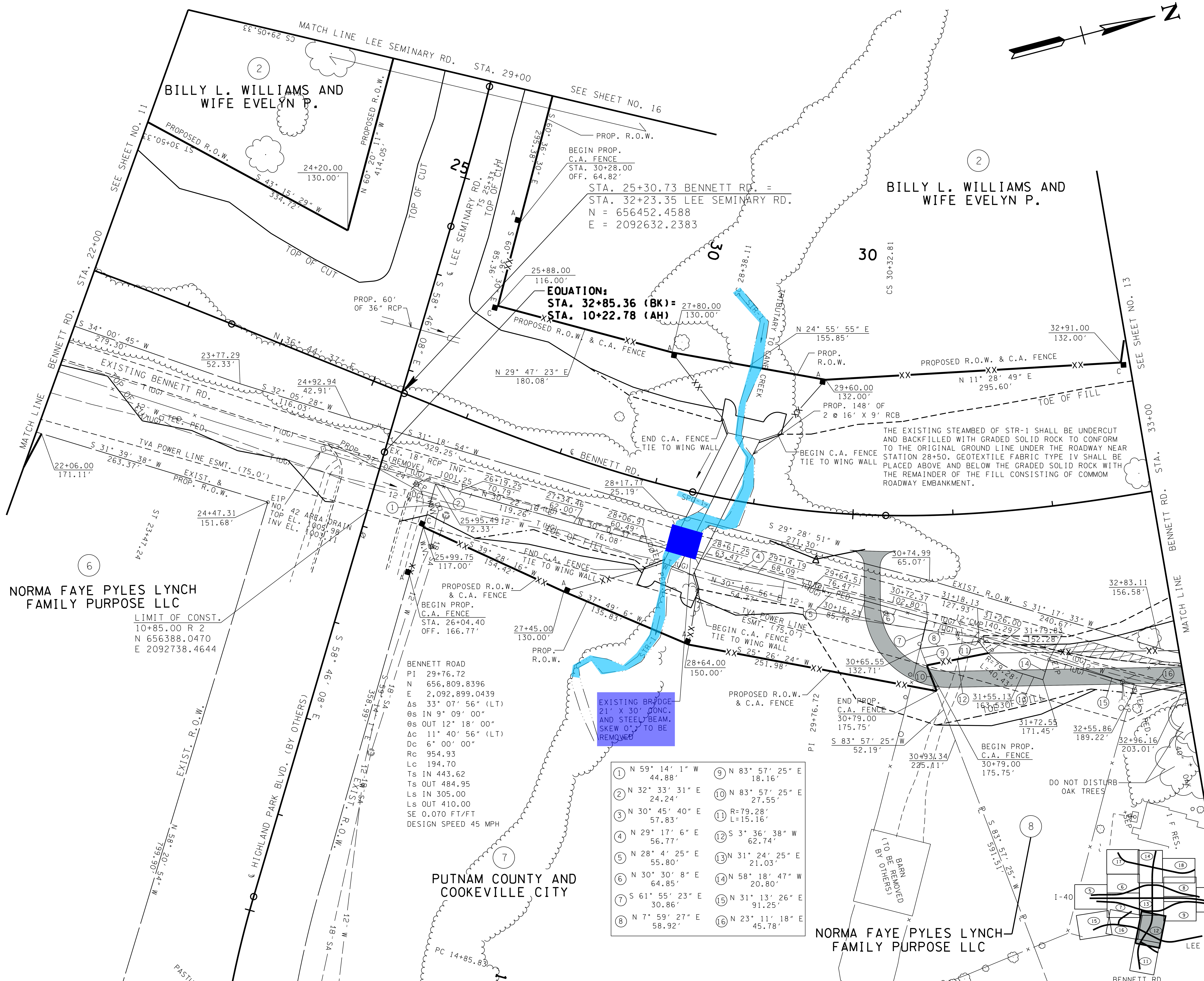
The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	NH-I-40-6(130)	12
CONST.	2014	NH-I-40-6(130)	12

TENNESSEE D.O.T. DESIGN DIVISION

FILE NO.



BENNETT ROAD
PI 29+76.72
N 656,809.8396
E 2,092,899.0439
Δs 33° 07' 56" (LT)
θs IN 9° 09' 00"
θs OUT 12° 18' 00"
Δc 11° 40' 56" (LT)
Dc 6° 00' 00"
Rc 954.93
Lc 194.70
Ts IN 443.62
Ts OUT 484.95
Ls IN 305.00
Ls OUT 410.00
SE 0.070 FT/FT
DESIGN SPEED 45 MPH

1	N 59° 14' 1" W 44.88'	9	N 83° 57' 25" E 18.16'
2	N 32° 33' 31" E 24.24'	10	N 83° 57' 25" E 27.55'
3	N 30° 45' 40" E 57.83'	11	R=79.28' L=15.16'
4	N 29° 17' 6" E 56.77'	12	S 3° 36' 38" W 62.74'
5	N 28° 4' 25" E 55.80'	13	N 31° 24' 25" E 21.03'
6	N 30° 30' 8" E 64.85'	14	N 58° 18' 47" W 20.80'
7	S 61° 55' 23" E 30.86'	15	N 31° 13' 26" E 91.25'
8	N 7° 59' 27" E 58.92'	16	N 23° 11' 18" E 45.78'

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 22+00 TO STA. 33+00

SCALE: 1"= 50'

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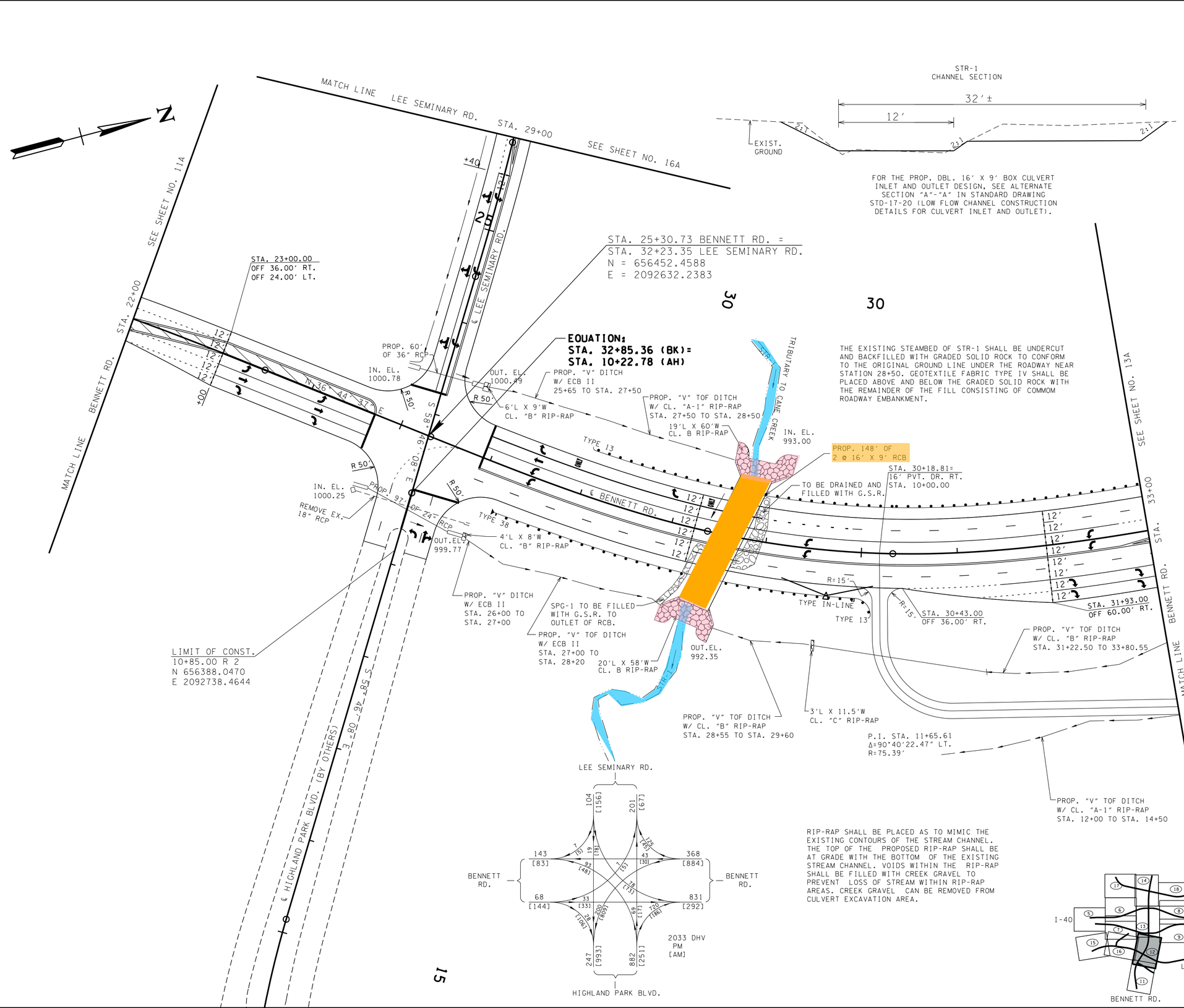
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

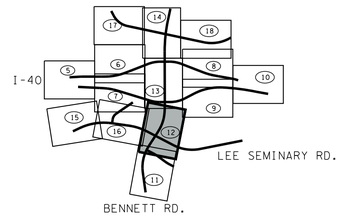
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	NH-I-40-6(130)	12A
CONST.	2014	NH-I-40-6(130)	12A



FOR THE PROP. DBL. 16' X 9' BOX CULVERT INLET AND OUTLET DESIGN, SEE ALTERNATE SECTION "A"-"A" IN STANDARD DRAWING STD-17-20 (LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET).

THE EXISTING STEAMBED OF STR-1 SHALL BE UNDERCUT AND BACKFILLED WITH GRADED SOLID ROCK TO CONFORM TO THE ORIGINAL GROUND LINE UNDER THE ROADWAY NEAR STATION 28+50. GEOTEXTILE FABRIC TYPE IV SHALL BE PLACED ABOVE AND BELOW THE GRADED SOLID ROCK WITH THE REMAINDER OF THE FILL CONSISTING OF COMMOM ROADWAY EMBANKMENT.

RIP-RAP SHALL BE PLACED AS TO MIMIC THE EXISTING CONTOURS OF THE STREAM CHANNEL. THE TOP OF THE PROPOSED RIP-RAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIP-RAP SHALL BE FILLED WITH CREEK GRAVEL TO PREVENT LOSS OF STREAM WITHIN RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 22+00 TO STA. 33+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	NH-I-40-6(130)	11
CONST.	2014	NH-I-40-6(130)	11

BENNETT ROAD
PI 18+72.64
N 655,898.9013
E 2,092,218.9751
Δs 40° 58' 35" (RT)
θs IN 6° 09' 00"
θs OUT 9° 09' 00"
Δc 25° 40' 35" (RT)
Dc 6° 00' 00"
Rc 954.93
Lc 427.94
Ts IN 463.34
Ts OUT 507.31
Ls IN 205.00
Ls OUT 305.00
SE 0.070 FT/FT
DESIGN SPEED 45 MPH

STA. 10+00.00 LEE SEMINARY RD.(2)=
STA. 21+00.00 BENNETT RD.
N 656102.3512
E 2092381.6459

LEE SEMINARY RD. (2)
PI 12+53.62
N 655,972.7441
E 2,092,599.6499
Δ 9° 17' 41" (RT)
D 6° 00' 00"
R 954.93
L 154.91
T 77.63
SE 0.062 FT/FT
DESIGN SPEED 40 MPH
TRANS. LENGTH (SEE X-SECTIONS)

LEE SEMINARY RD. (2)
PI 16+33.33
N 655,728.3146
E 2,092,890.6703
Δ 8° 51' 10" (LT)
D 6° 00' 00"
R 954.93
L 147.54
T 73.92
SE 0.062 FT/FT
DESIGN SPEED 40 MPH
TRANS. LENGTH 175

LIMIT OF CONST.
12+50.00
N = 655277.9613
E = 2092264.9335

LIMIT OF CONST.
18+10.00
N = 655636.7108
E = 2093042.0789

1 VERNON WILSON
BRENDA I. JARED & CHARLES M. JARED
2 BILLY L. WILLIAMS AND WIFE EVELYN P.
3 MIKE OMOUMI & WIFE TERI
4 PAUL R. BYBEE & WIFE, JUDY F.
5 NORMA FAYE PYLES LYNCH FAMILY PURPOSE LLC
6
28 JASON D. THOMAS AND WIFE STACY
61A VERNON WILSON

SEE SHEET 11C FOR LEE SEMINARY(2) TEMPORARY DIVERSION

SEE SHEET NO. 12

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 10+00 TO STA. 22+00

SCALE: 1"= 50'

I-40
LEE SEMINARY RD.
BENNETT RD.

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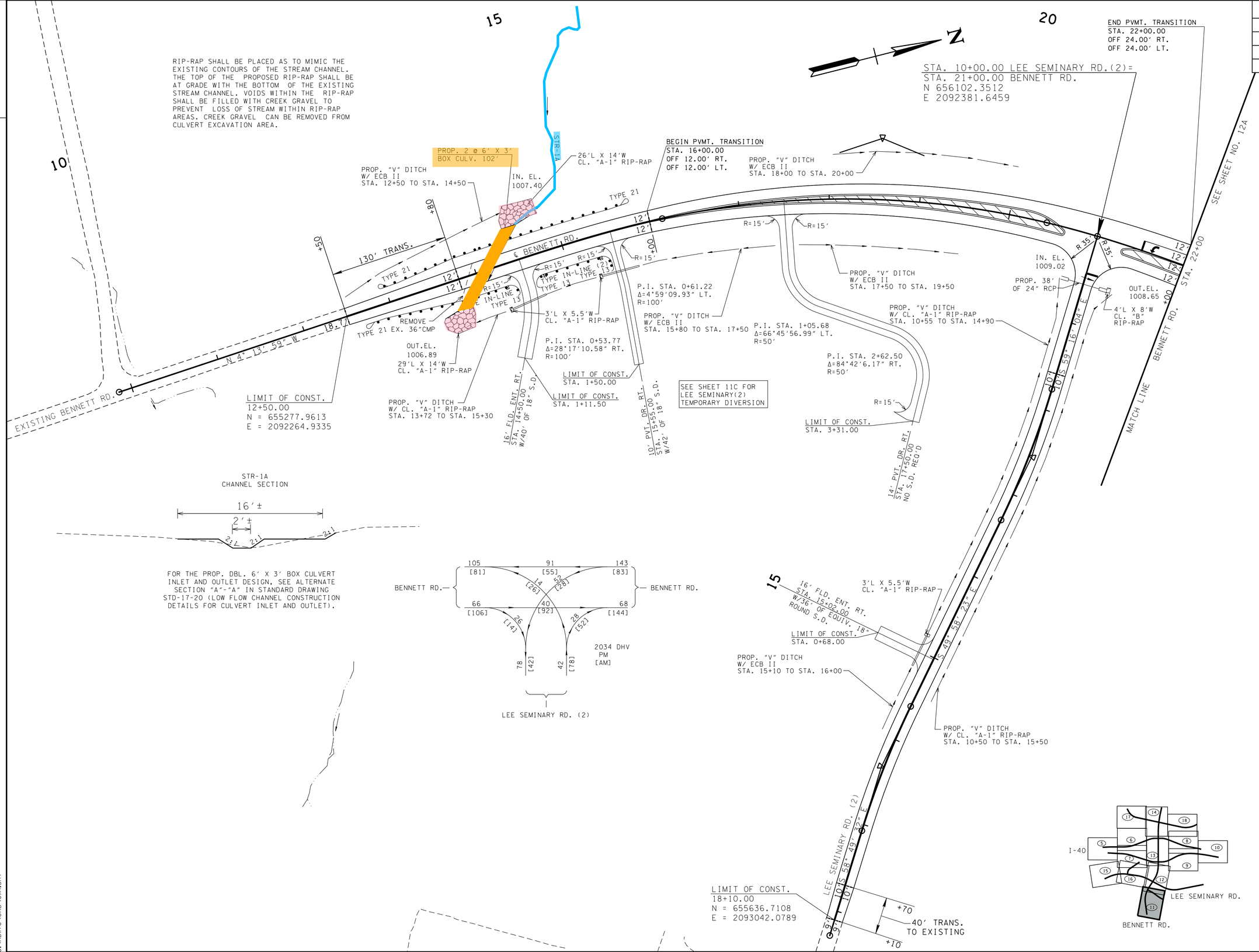
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	NH-I-40-6(130)	11A
CONST.	2014	NH-I-40-6(130)	11A

RIP-RAP SHALL BE PLACED AS TO MIMIC THE EXISTING CONTOURS OF THE STREAM CHANNEL. THE TOP OF THE PROPOSED RIP-RAP SHALL BE AT GRADE WITH THE BOTTOM OF THE EXISTING STREAM CHANNEL. VOIDS WITHIN THE RIP-RAP SHALL BE FILLED WITH CREEK GRAVEL TO PREVENT LOSS OF STREAM WITHIN RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.



FOR THE PROP. DBL. 6' X 3' BOX CULVERT INLET AND OUTLET DESIGN, SEE ALTERNATE SECTION "A"-"A" IN STANDARD DRAWING STD-17-20 (LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET).

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COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 10+00 TO STA. 22+00

SCALE: 1"= 50'

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

To: Jim Bivens, P.E.
TDOT Design

From: Rob Howard
TDOT Ecology

DATE: November 17, 2014

SUBJECT: ENVIRONMENTAL BOUNDARIES REPORT
Putnam County, SIA Serving Project Victor – Bennett Road
P.E. 71952-1544-04, PIN 120463.00

TDOT Ecology staff completed the environmental boundaries field survey for the subject project and submits the following results:

WETLANDS

There are no wetlands within the project limits.

SPRINGS / STREAMS

There is one (1) stream within the project limits. STR-A is an intermittent stream near STA 45+94. The stream flows beneath Old Stewart Road and beneath Bennett Road. The flow path could be relocated to eliminate a significant scour point and possible minimize future maintenance issues. Please refer the photograph summary and marked plan sheet for additional information. STR-1A is depicted on the plans near STA 50+00 but is part of the adjacent project (PIN 101577.00)

PROTECTED SPECIES

There are no protected species within a one (1) mile radius of the project limits and two (2) protected species within the four (4) mile radius of the project limits. There is no suitable habitat

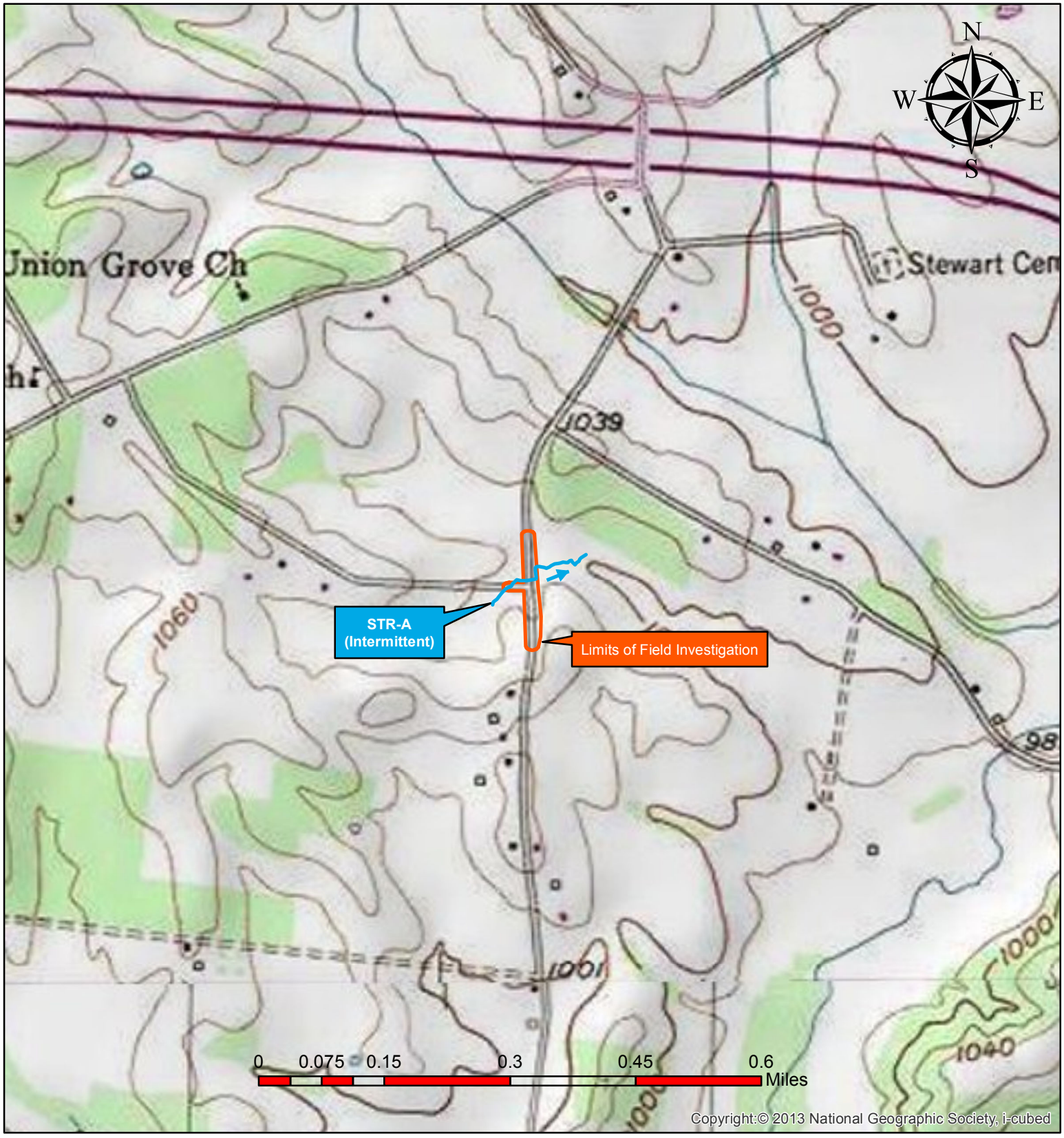
for Indiana bats within the project limits. Response letters from the U.S. Fish and Wildlife and Tennessee Wildlife Resources Agency (TWRA) are provided.

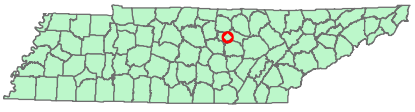
Please refer to the Species Review Form included in the Environmental Boundaries Report for a complete list of protected species.

Please incorporate this information into the project plans as needed. Thank you for your assistance with this project. If you have any questions or comments please contact me at rob.howard@tn.gov or (615) 339-3600.

Attachment – Environmental Boundaries Report:
Memorandum, Water Resources Aerial & Topographic Maps, Water Resource Field Data Sheets, Water Resource Photographs, Plans With Water Resources Identified, Species Review Map, Species Review Form, Species Coordination Correspondence

Copy: Ecology: Matt Richards
NEPA Documentation: Klint Rommel
Permits: John Hewitt, Khalid Ahmed
Project Management – Amber Thornton
Project File: FileNet



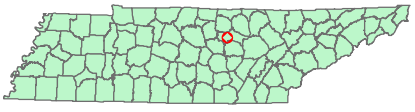


Water Resources Topographic Map
Putnam County, SIA Serving Project Victor (Bennett Road)

Cookeville-West, TN Quadrangle (326-NE)
11.14.2014

P.E. 71952-1543-04
PIN 120460.00

TDOT



Water Resources Aerial Map
Putnam County, SIA Serving Project Victor (Bennett Road)

Cookeville-West, TN Quadrangle (326-NE)
11.14.2014

P.E. 71952-1543-04
PIN 120460.00

TDOT

Ecology Field Data Sheet: **Water Resources**

Project: Putnam Co., SIA Serving Project Victor - Bennett Road, PE 71952-1544-04, PIN 120463.00

Date of survey: 10.29.2014 **Biologist:** R.D. Kathman / R.L. Howard **Affiliation:** CEC

1-Station: from plans	45+50 LT to 46+60 RT
2-Map label and name	STR-A
3-Latitude/Longitude	36.1319°N, -85.5819°W to 36.1322°N, -85.5813°W
4-Potential impact	Runoff / Encapsulation
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	3-4'
top of bank width	6-8'
bank height and slope ratio	2-3'
avg. gradient of stream (%)	5%
substratum	gravel, silt, rip-rap
riffle/run/pool	20/60/20
width of buffer zone	LDB: 0- feature adjacent to Bennett Rd RDB: 0- feature adjacent to grazed pasture
water flow	yes
water depth	6-12"
water width	3-4'
general water quality	poor, turbid, evidence of livestock access
OHWM indicators	scour, lack of vegetation
groundwater connection	unknown
bank stability: LDB, RDB	LDB: Stable ☑ Eroding ☐ Undercutting ☐ Slumping/Sloughing ☐ Roots Exposed ☐ RDB: Stable ☐ Eroding ☑ Undercutting ☑ Slumping/Sloughing ☑ Roots Exposed ☐
dominant species: LDB, RDB	LDB: None - adjacent to Bennett Rd RDB: pasture grasses, fescue, Bermuda grass
overhead canopy (%)	0 - no canapoy
benthos	none observed
fish	none observed
algae or other aquatic life	none observed
habitat assessment score	82
photo number (s)	1-6
rainfall information	The area received 0.93" of precipitation in the seven (7) days before the field studies. NOAA Cookeville, TN station.
6-HUC code & name (12-digit)	Cane Creek - 051301080703
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 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.	STR-A originates beyond the project limits, flows beneath Old Stewart Road, adjacent to Old Stewart Road to intersection with Bennett Road, beneath Bennett Road, turns 90° north and continues beyond the project limits to join STR-1A (characterized in the environmental boundaries report prepared for PIN 101577.00). The reach adjacent to Old Stewart Road is eroding the north shoulder and the reach near STA 46+60 RT is scouring the adjacent field. Scouring could be minimized with a channel relocation. Please review to the marked plans.

HABITAT ASSESSMENT DATA SHEET- HIGH GRADIENT STREAMS (FRONT)

STREAM NAME: STR-A	HABITAT ASSESSED BY: R.D. Kathman
STATION # : 45+50 LT to 46+65 RT	DATE: 10.29.2014 TIME: 1305
LAT 36.1320°N LONG -85.5815°W	ECOREGION: 71g - Eastern Highland Rim
HUC:	QC: CONSENSUS ☐ DUPLICATE ☐
051301080703 - Cane Creek	

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
1. Epifaunal Substrate/Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient)	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the from of newfall, but not yet prepared for colonization (may rate at high end of scale)	20-40% mix of stable habitat; availability less than desirable; substrate frequently disturbed or removed	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking
SCORE 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 **(6)**	5 4 3 2 1
Comments:				
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 76% surrounded by fine sediment.
SCORE 11	20 19 18 17 16	15 14 13 12 **(11)**	10 9 8 7 6	5 4 3 2 1
Comments:				
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow) (Slow is<0.3m/s deep is >0.5m)	Only 3 of the 4 regimes present (if fast-shallow is missing score lower than regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low)	Dominated by 1 velocity/depth regime (usually slow-deep)
SCORE 16	20 19 18 17 **(16)**	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Comments:				
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% (<20% for low – gradient streams) of the bottom affected by sediment deposition	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low-gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased far development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition
SCORE 8	20 19 18 17 16	15 14 13 12 11	10 9 **(8)** 7 6	5 4 3 2 1
Comments:				
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills> 75% of the available channel; or 25 % of channel substrate is exposed.	Waters fills 25-75 % of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE 14	20 19 18 17 16	15 **(14)** 13 12 11	10 9 8 7 6	5 4 3 2 1
Comments:				

HABITAT ASSESSMENT DATA SHEET- HIGH GRADIENT STREAMS (BACK)

STATION # : | DATE: | INITIALS:

Habitat Parameter	Condition Category			
	Optimal	**Suboptimal**	**Marginal**	**Poor**
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present	Channelization may be extensive; embankments or shoring structures, present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE 3	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 **(3)** 2 1
Comments:				
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5-7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >35.
SCORE 16	20 19 18 17 **(16)**	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Comments:				
8. Bank Stability (score each bank) **Note: determine left or right side by facing downstream.**	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60 % of bank in reach has areas of erosion; high erosion potential during floods	Unstable; many eroded area; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars
SCORE 2 **(LB)**	Left Bank 10 9	8 7 6	5 4 3	**(2)** 1 0
SCORE 1 **(RB)**	Right Bank 10 9	8 7 6	5 4 3	2 **(1)** 0
Comments:				
9. Vegetative Protective (score each bank) **Note: determine left or right side by facing downstream**	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height
SCORE 2 **(LB)**	Left Bank 10 9	8 7 6	5 4 3	**(2)** 1 0
SCORE 1 **(RB)**	Right Bank 10 9	8 7 6	5 4 3	2 **(1)** 0
Comments:				
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone > 18 meters; human activities (i.e. parking lots, roadbeds, clear-cuts, lawns or crops) have not impacted zone	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE 2 **(LB)**	Left Bank 10 9	8 7 6	5 4 3	**(2)** 1 0
SCORE 0 **(RB)**	Right Bank 10 9	8 7 6	5 4 3	2 1 **(0)**
Comments:				

TOTAL SCORE: 82 Comparison to Ecoregion Guidelines: ABOVE or (BELOW)

If score is below guidelines, result of (circle): Natural Conditions ☐ or Human Disturbance ☑

Describe:

Adapted from Appendix A-1 Habitat Assessment and Physiochemical Characterization Field Data Sheets – Form

Photo Summary: 10.29.2014 Field Photographs
Project Description: Putnam County, SIA Serving Project Victor – Bennett Road, PIN 120463.00, PE 71952-1544-04

Photograph 1 – DSCN 3571. 36.1319°N, -85.5819°W. View of STR-A facing downstream and northeast toward the existing culvert inlet beyond the project limits on Old Stewart Road.

Photograph 2 – DSCN 3573. 36.1320°N, -85.5817°W. View of STR-A facing downstream and east away from the existing culvert outlet beyond the project limits on Old Stewart Road.

Photograph 3 – DSCN 3574. 36.1320°N, -85.5816°W. View of STR-A facing downstream and east toward Bennett Road intersection beyond the project limits on Old Stewart Road.

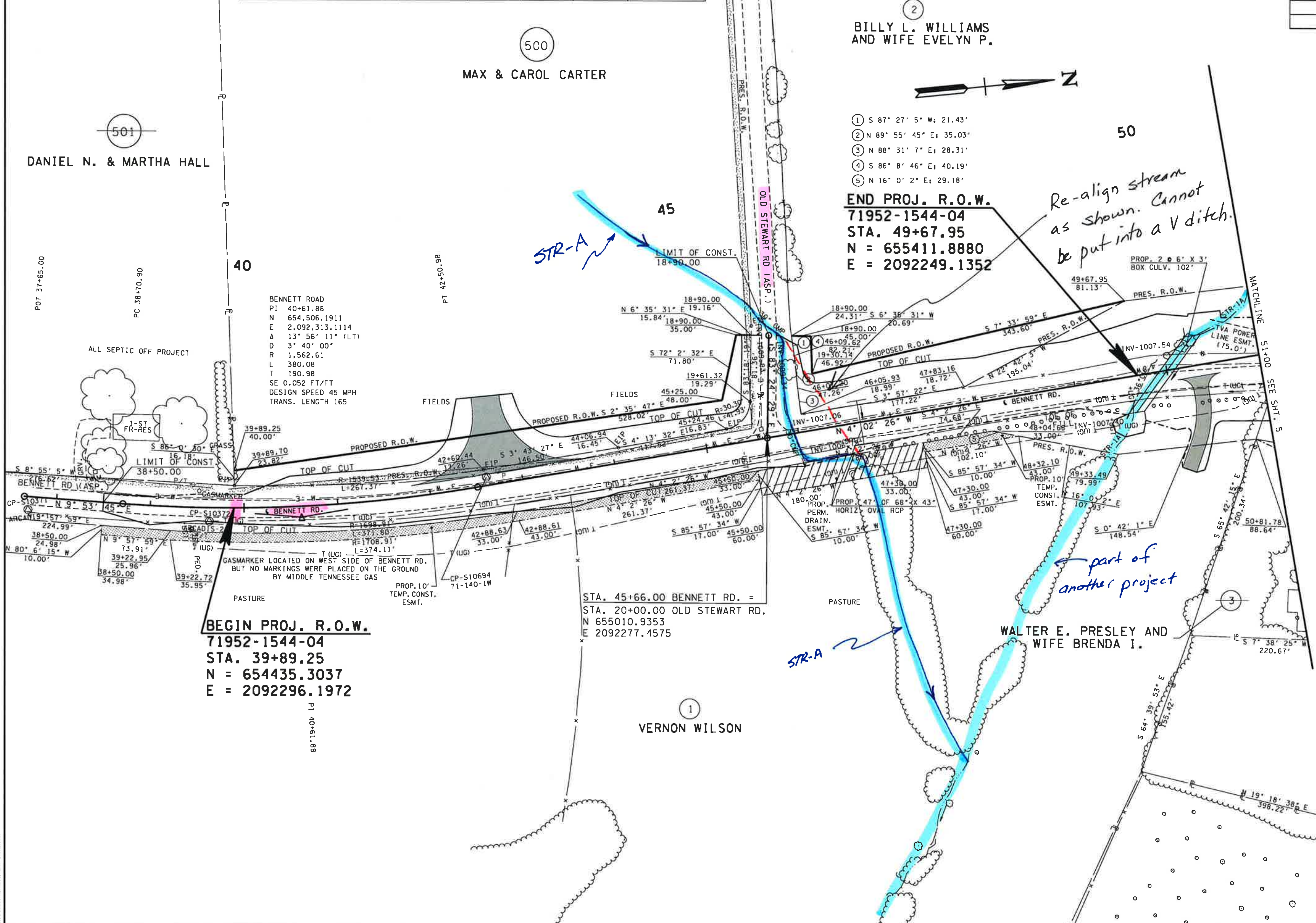
Photograph 4 – DSCN 3575. 36.1320°N, -85.5815°W. View of STR-A facing down gradient and east toward the inlet of existing 30" CMP beneath Bennett Road near STA 45+95 LT.

Photograph 5 – DSCN 3576. 36.1320°N, -85.5813°W. View of STR-A facing down gradient and north from the outlet of existing 30" CMP beneath Bennett Road near STA 46+00 RT.

Photograph 6 – DSCN 3578. 36.1322°N, -85.5813°W. View of STR-A facing down gradient and east from Bennett Road near STA 47+00 RT.

Point	North	East	Elevation	Station	Offset	Feature	Description
S10371	654215.9562	2092276.6910	1037.6300	37+69.70	14.00'RT	XCP	ARCADIS-1
S10372	654407.5040	2092307.9865	1038.6600	39+62.97	14.65'RT	XCP	ARCADIS-2

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-1544-04	4



500
MAX & CAROL CARTER
501
DANIEL N. & MARTHA HALL
2
BILLY L. WILLIAMS
AND WIFE EVELYN P.
1 S 87° 27' 5" W; 21.43'
2 N 89° 55' 45" E; 35.03'
3 N 88° 31' 7" E; 28.31'
4 S 86° 8' 46" E; 40.19'
5 N 16° 0' 2" E; 29.18'
END PROJ. R.O.W.
71952-1544-04
STA. 49+67.95
N = 655411.8880
E = 2092249.1352
Re-align stream as shown. Cannot be put into a V ditch.
STR-A
OLD STEWART RD (ASP.)
BENNETT ROAD
PI 40+61.88
N 654,506.1911
E 2,092,313.1114
Δ 13° 56' 11" (LT)
D 3° 40' 00"
R 1,562.61
L 380.08
T 190.98
SE 0.052 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH 165
ALL SEPTIC OFF PROJECT
FIELDS
PASTURE
PROP. 2 @ 6' X 3' BOX CULV. 102'
GASMARKER LOCATED ON WEST SIDE OF BENNETT RD. BUT NO MARKINGS WERE PLACED ON THE GROUND BY MIDDLE TENNESSEE GAS
BEGIN PROJ. R.O.W.
71952-1544-04
STA. 39+89.25
N = 654435.3037
E = 2092296.1972
STA. 45+66.00 BENNETT RD. = STA. 20+00.00 OLD STEWART RD.
N 655010.9353
E 2092277.4575
part of another project
WALTER E. PRESLEY AND WIFE BRENDA I.
1
VERNON WILSON
MATCHLINE 51+00 SEE SHT. 5

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

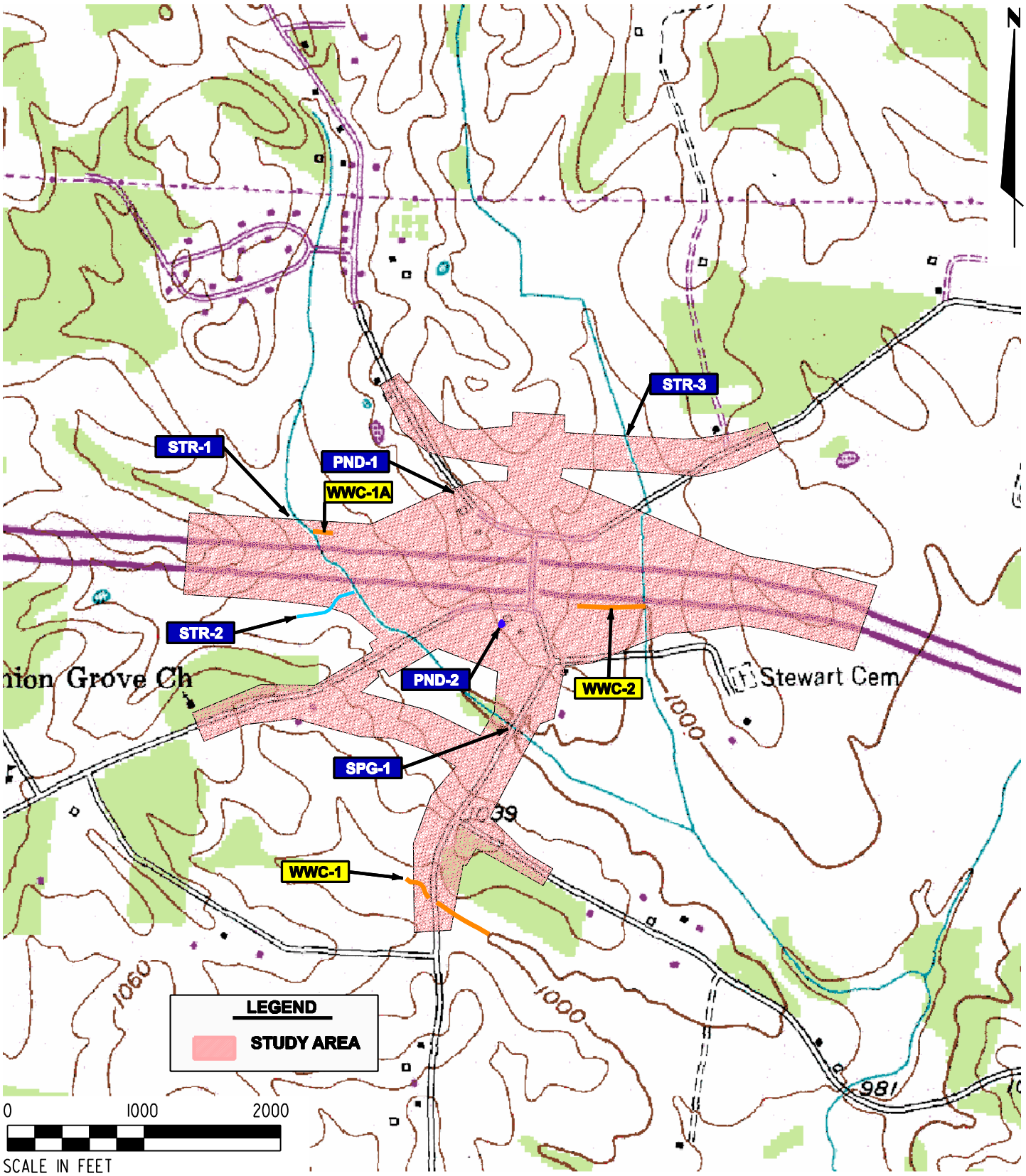
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 38+50 TO STA. 51+00

SCALE: 1"=50'

0/1/2014 12:31:07 PM
G:\H01170.04\CAD\004.SHT



FEATURE DESIGNATOR LEGEND

- STR-X - STREAMS
- WWC-X - WET WEATHER CONVEYANCE
- PND-X - PONDS
- SPG-X - SPRINGS

SCOPE G MAP

I-40 INTERCHANGE AT MINE LICK CREEK ROAD
PUTMAN COUNTY, TENNESSEE

DRAWN BY:	CHECKED BY:
JRC	E SCHMIDT

DATE OF SURVEY: JUNE 4, 2012

TDOT PIN: 101577.00

P.E. No.: 71001-1195-44

FIGURE 1

Ecology Field Data Sheet: **Water Resources** Form G

County: Putnam **Route:** I-40 **LM:** N/A **PE No.:** 71001-1195-44 **PIN:** 101577.00
Project Description: Interchange at Mine Lick Creek Road
Date of survey 06/04/2012 **Biologist** E. Schmidt / T. Hendon **Affiliation** ARCADIS

1-Station: from plans	Sta. 19+50L, Ramp D; Sta. 28+75, Tennessee Ave.
2-Map label and name	STR-1, Unnamed tributary to Cane Creek
3-Latitude/Longitude	36.13931045170N, 85.58342845840W; 36.13660130750N, 85.57943669710W
4-Potential impact	Multiple crossings/encapsulations
5-Feature description:	
what is it	Stream
blue-line on topo? (y/n)	Y
defined channel (y/n)	Y
straight or meandering	Generally straight
channel bottom width	6-8 ft. (channel dimensions are exaggerated at outlet of 8' x 7' RCBC under I-40 and upstream and downstream of 21' x 30' bridge under Tennessee Ave.)
top of bank width	8-10 ft.
bank height and slope ratio	1.5-3 ft.; 2:1 to vertical/undercutting
avg. gradient of stream (%)	0-2
substratum	Near I-40: Silt 30%; gravel 60%; cobble 10%; Near Tennessee Ave.: Cobble 30%, gravel 60%, boulder 10%
riffle/run/pool	20/40/40
width of buffer zone	North/South of I-40, LB/RB: 5-10 ft.; East/West of Tennessee Ave., LB/RB: 20-100 ft.
water flow	Y; absent upstream/downstream of I-40; present as pools up to 200' upstream of Tennessee Ave., then fills bottom of bank width near spring house (SPG-1) just upstream of Tennessee Ave.
water depth	0-12 in.
water width	0-8 ft. (wider at bridge inlet/outlet at Tennessee Ave.)
general water quality	Generally good, spring-fed (SPG-1), but agricultural runoff from adjacent land use
OHWM indicators	Defined bed and bank, wrested vegetation, change in soil characteristics
groundwater connection	Y; SPG-1
bank stability: LB, RB	Generally stable
dominant species: LB, RB	LB/RB: Red maple, Chinese privet, river birch, tulip poplar
overhead canopy (%)	30-60
benthos	Gastropoda, trichoptera, amphipoda
fish	Minnows
algae or other aquatic life	Green algae, frogs
habitat assessment score	114
photo number (s)	2-3, 10-12
rainfall information	0.00 on 05/28; 0.00 on 05/29; 0.00 on 05/30; 0.00 on 05/31; 0.23 on 06/01; 0.00 on 06/02; 0.00 on 06/03; 0.00 on 06/04
6- HUC code & name (12-digit)	0513010809 – Cane Creek
7-Confirmed by:	
8-Mitigation	No_____ Yes__x__ : (include on Form J)
9-ETW	No__x___ Yes_____
10-303 (d) List	No _____ Yes__x___: Habitat__x___ Siltation__x__
11-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form completed	Rainfall Data Reference: Gage ID 0706: Cookeville, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm A TDEC Hydrologic Determination Field Data Sheet was completed for this feature.

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS

STREAM NAME Unnamed trib to Cane Creek	LOCATION I-40 interchange at Mine Lick Creek Road in Putnam Co	
STATION # 19+50 REACH ID# STR-1	STREAM CLASS Stream	
UTM N 36.139310454 UTM E -85.583428458	RIVER BASIN Cane Creek	
STORET #	AGENCY	
INVESTIGATORS E. Schmidt / T. Hendon		
FORM COMPLETED BY E. Schmidt	DATE 06/04/12 TIME _ AM	REASON FOR SURVEY

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
1. Epifaunal Substrate/ Available Cover	Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	30-50% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 10% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE 12	20 19 18 17 16	15 14 13 **(12)** 11	10 9 8 7 6	5 4 3 2 1 0
2. Pool Substrate Characterization	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
SCORE 16	20 19 18 17 **(16)**	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
3. Pool Variability	Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.	Majority of pools large-deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small-shallow or pools absent.
SCORE 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 **(6)**	5 4 3 2 1 0
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than <20% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 20-50% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 50-80% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 80% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE 13	20 19 18 17 16	15 14 **(13)** 12 11	10 9 8 7 6	5 4 3 2 1 0
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
SCORE 8	20 19 18 17 16	15 14 13 12 11	10 9 **(8)** 7 6	5 4 3 2 1 0

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS

Parameters to be evaluated broader than sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE 12	20 19 18 17 16	15 14 13 **(12)** 11	10 9 8 7 6	5 4 3 2 1 0
7. Channel Sinuosity	The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in coastal plains and other low-lying areas. This parameter is not easily rated in these areas.)	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	The bends in the stream increase the stream length 1 to 2 times longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.
SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 **(7)** 6	5 4 3 2 1 0
8. Bank Stability (score each bank)	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE 8 (LB)	Left Bank 10 9	**(8)** 7 6	5 4 3	2 1 0
SCORE 8 (RB)	Right Bank 10 9	**(8)** 7 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank) Note: determine left or right side by facing downstream.	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE 8 (LB)	Left Bank 10 9	**(8)** 7 6	5 4 3	2 1 0
SCORE 8 (RB)	Right Bank 10 9	**(8)** 7 6	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE 4 (LB)	Left Bank 10 9	8 7 6	5 **(4)** 3	2 1 0
SCORE 4 (RB)	Right Bank 10 9	8 7 6	5 **(4)** 3	2 1 0

Total Score 114

Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.4

County: Putnam	Named Waterbody: Unnamed Tributary to Cane Creek	Date/Time: 06/04/2012
Assessors/Affiliation: E. Schmidt, T. Hendon/ ARCADIS		Project ID : STR-1
Site Name/Description: I-40 Interchange at Mine Lick Creek Road		
Site Location: Near Cookeville, TN		
USGS quad: Cookeville West	HUC (12 digit): 0513010809	Lat/Long:
Previous Rainfall (7-days) : 0.00 on 05/28; 0.00 on 05/29; 0.00 on 05/30; 0.00 on 05/31; 0.23 on 06/01; 0.00 on 06/02; 0.00 on 06/03; 0.00 on 06/04		36.13931045170N/ 85.58342845840W
Precipitation this Season vs. Normal : very wet wet average (dry) drought unknown Source of recent & seasonal precip data : Gage ID 0706: Cookeville, TN (TVA)		
Watershed Size : Approx. 678 acres	Photos: (Y) or N (circle) Number : 2-3, 10-12	
Soil Type(s) / Geology : Lindside silt loam (Ln)		Source: NRCS Web Soil Survey
Surrounding Land Use : Forested, roadway facilities, agricultural, residential, utility easements		
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe (Moderate) Slight Absent		

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	WWC
2. Defined bed and bank absent, dominated by upland vegetation / grass	X	WWC
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	N/A	WWC
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	NI	WWC
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase	X	Stream
6. Presence of fish (except *Gambusia*)		(Stream)
7. Presence of naturally occurring ground water table connection		(Stream)
8. Flowing water in channel and 7 days since last precipitation in local watershed	N/A	Stream
9. Evidence watercourse has been used as a supply of drinking water		(Stream)

NOTE : If any Primary Indicators 1-9 = "Yes", then STOP; absent directly contradictory evidence, determination is complete.

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.4*

Overall Hydrologic Determination = Stream

Secondary Indicator Score (if applicable) = N/A

Justification / Notes : Presence of minnows (not *Gambusia*) satisfies primary indicator 6. Presence of surface water across the full width of the channel beginning immediately adjacent to a spring house is evidence for primary indicator 7. Presence of the spring house is evidence for primary indicator 9. Although not identified to the level of genus, multiple macrobenthic invertebrate specimens were observed, including trichoptera, gastropoda, and amphipoda.

Ecology Field Data Sheet: **Water Resources**

Project: I-40 Interchange at Mine Lick Creek Road; Putnam County, TN; PIN 117577.00

Date of survey: December 17, 201 **Biologist:** E. Schmidt, T. Becktold **Affiliation:** ARCADIS on behalf of TDOT

1-Station: from plans	14+25, Tennessee Ave.
2-Map label and name	STR-1A
3-Latitude/Longitude	36.13306382830N, 85.58146568120W
4-Potential impact	Crossing/encapsulation
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	1-2 ft.
top of bank width	2-3 ft.
bank height and slope ratio	6 in.; 1:1
avg. gradient of stream (%)	1-2
substratum	Silt, gravel
riffle/run/pool	N/A
width of buffer zone	LDB: None (pasture) RDB: None (pasture)
water flow	N
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 ☑ Eroding ☐ Undercutting ☐ Slumping/Sloughing ☐ Roots Exposed ☐ RDB: Stable ☑ Eroding ☐ Undercutting ☐ Slumping/Sloughing ☐ Roots Exposed ☐
dominant species: LDB, RDB	LDB: grasses RDB: grasses; Eastern Cottonwood (2)
overhead canopy (%)	0
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	103 - Marginal; impaired
photo number (s)	19-20
rainfall information	0.16 on 12/10; 0.00 on 12/11; 0.00 on 12/12; 0.00 on 12/13; 0.55 on 12/14; 0.01 on 12/15; 0.00 on 12/16; 0.00 on 12/17
6-HUC code & name (12-digit)	051301080703 - Cane Creek
7-Confirmed by:	USACE (C. Nelson, T. Wiley), 12/17/2013
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 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.	Rainfall Data Reference: Station KTNCOOKE23; http://www.wunderground.com/ STR-1A is a moderately defined stream which originates from a wetland located west of Tennessee Ave. (outside of the project right-of-way) with a poorly-moderately defined channel and livestock access-related impacts down-gradient (east) of Tennessee Ave. This feature was determined by the USACE (C. Nelson, T. Wiley) to be an intermittent stream during a regulatory site confirmation visit performed on 12/17/2013. A TDEC Hydrologic Determination Field Data Sheet was completed for this feature (Score: 19.5).

HABITAT ASSESSMENT FIELD SHEET- MODERATE TO HIGH GRADIENT STREAMS (FRONT)
(See Protocol E for detailed descriptions and rank information)

STATION ID: STR-1A	HABITAT ASSESSED BY: E. Schmidt, T. Becktold
STREAM NAME: Unnamed tributary to Cane Creek	DATE: TIME:
STATION LOCATION: 14+25, Tennessee Ave.	ECOREGION: QC: Consensus Duplicate
WBID/HUC: GROUP:	ASSOCIATED LOG #:

	Optimal	Suboptimal	Marginal	Poor
1. Epifaunal Substrate/ Available Cover	Over 70% of stream reach has natural stable habitat suitable for colonization by fish and/or macroinvertebrates. Four or more productive habitats are present.	Natural stable habitat covers 40-70% of stream reach. Three or more productive habitats present. (If near 70% and more than 3 go to optimal.)	Natural stable habitat covers 20 -40% of stream reach or only 1-2 productive habitats present. (If near 40% and more than 2 go to suboptimal.)	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
SCORE 10	20 19 18 17 16	15 14 13 12 11	(10) 9 8 7 6	5 4 3 2 1
Comments				
2.Embeddedness of Riffles	Gravel, cobble, and boulders 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space. If near 25% drop to suboptimal if riffle not layered cobble.	Gravel, cobble and boulders 25-50% surrounded by fine sediment. Niches in bottom layers of cobble compromised. If near 50% & riffles not layered cobble drop to marginal.	Gravel, cobble, and boulder s are 50-75% surrounded by fine sediment. Niche space in middle layers of cobble is starting to fill with fine sediment.	Gravel, cobble, and boulders are more than 75% surrounded by fine sediment. Niche space is reduced to a single layer or is absent.
SCORE 8	20 19 18 17 16	15 14 13 12 11	10 9 (8) 7 6	5 4 3 2 1
Comments				
3. Velocity/ Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow).	Only 3 of the 4 regimes present (if fast-shallow is missing score lower). If slow-deep missing score 15.	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime. Others regimes too small or infrequent to support aquatic populations.
SCORE 6	20 19 18 17 16	15 14 13 12 11	10 9 8 7 (6)	5 4 3 2 1
Comments				
4. Sediment Deposition	Sediment deposition affects less than 5% of stream bottom in quiet areas. New deposition on islands and point bars is absent or minimal.	Sediment deposition affects 5-30% of stream bottom. Slight deposition in pool or slow areas. Some new deposition on islands and point bars. Move to marginal if build-up approaches 30%.	Sediment deposition affects 30-50% of stream bottom. Sediment deposits at obstruction, constrictions and bends. Moderate pool deposition.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
SCORE 10	20 19 18 17 16	15 14 13 12 11	(10) 9 8 7 6	5 4 3 2 1
Comments				
5. Channel Flow Status. .	Water reaches base of both lower banks and streambed is covered by water throughout reach. Minimal productive habitat is exposed.	Water covers > 75% of streambed or 25% of productive habitat is exposed.	Water covers 25-75% of streambed and/or productive habitat is mostly exposed.	Very little water in channel and mostly present as standing pools. Little or no productive habitat due to lack of water.
SCORE 19	20 (19) 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Comments				

HABITAT ASSESSMENT FIELD SHEET- MODERATE TO HIGH GRADIENT STREAMS (BACK)

Station ID STR-1A Date 12/17/2013 Initials ES/TB

	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization, dredging rock removal or 4-wheel activity (past or present) absent or minimal; natural meander pattern. NO artificial structures in reach. Upstream or downstream structures do not affect reach.	Channelization, dredging or 4-wheel activity up to 40%. Channel has stabilized. If larger reach, channelization is historic and stable. Artificial structures in or out of reach do not affect natural flow patterns.	Channelization, dredging or 4-wheel activity 40-80% (or less that has not stabilized.) Artificial structures in or out of reach may have slight affect.	Over 80% of reach channelized, dredged or affected by 4-wheelers. Instream habitat greatly altered or removed. Artificial structures have greatly affected flow pattern.
SCORE 15	20 19 18 17 16	(15) 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Comments				
7. Frequency of re-oxygenation zones. Use frequency of riffle or bends for category. Rank by quality.	Occurrence of re-oxygenation zones relatively frequent; ratio of distance between areas divided by average stream width <7:1.	Occurrence of re-oxygenation zones infrequent; distance between areas divided by average stream width is 7 - 15.	Occasional re-oxygenation area. The distance between areas divided by average stream width is over 15 and up to 25.	Generally all flat water or flat bedrock; little opportunity for re-oxygenation. Distance between areas divided by average stream width >25.
SCORE 7	20 19 18 17 16	15 14 13 12 11	10 9 8 (7) 6	5 4 3 2 1
Comments				
8. Bank Stability (score each bank) Determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion. If approaching 30% score marginal if banks steep.	Moderately unstable; 30-60 % of bank in reach has areas of erosion; high erosion potential during floods, If approaching 60% score poor if banks steep.	Unstable; many eroded area; raw areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE 6 (LB)	Left Bank 10 9	8 7 (6)	5 4 3	2 1 0
SCORE 6 (RB)	Right Bank 10 9	8 7 (6)	5 4 3	2 1 0
Comments				
9. Vegetative Protective (score each bank) includes vegetation from top of bank to base of bank. Determine left or right side by facing downstream	More than 90% of the bank covered by undisturbed vegetation. All 4 classes (mature trees, understory trees, shrubs, groundcover) are represented and allowed to grow naturally. All plants are native.	70-90% of the bank covered by undisturbed vegetation. One class may not be well represented. Disruption evident but not effecting full plant growth. Non-natives are rare (< 30%)	50-70% of the bank covered by undisturbed vegetation. Two classes of vegetation may not be well represented. Non-native vegetation may be common (30-50%).	Less than 50% of the bank covered by undisturbed vegetation or more than 2 classes are not well represented or most vegetation has been cropped. Non-native vegetation may dominate (> 50%)
SCORE 6 (LB)	Left Bank 10 9	8 7 (6)	5 4 3	2 1 0
SCORE 6 (RB)	Right Bank 10 9	8 7 (6)	5 4 3	2 1 0
Comments				
10. Riparian Vegetative Zone Width (score each bank.) Zone begins at top of bank.	Average width of riparian zone > 18 meters. Unpaved footpaths may score 9 if run-off potential is negligible.	Average width of riparian zone 12-18 meters. Score high if areas < 18 meters are small or are minimally disturbed.	Average width of riparian zone 6-11 meters. Score high if areas less than 12 meters are small or are minimally disturbed.	Average width of riparian zone <6 meters. Score high if areas less than 6 meters are small or are minimally disturbed.
SCORE 2 (LB)	Left Bank 10 9	8 7 6	5 4 3	(2) 1 0
SCORE 2 (RB)	Right Bank 10 9	8 7 6	5 4 3	(2) 1 0
Comments				

Total Score 103 **Comparison to Ecoregion Guidelines (circle): ABOVE or (BELOW)**

If score is below guidelines , result of (circle): Natural Conditions or Human Disturbance

Describe Result of historic human disturbance (channelization, encapsulation), as well as impacts caused by active cattle access.

Photograph # 17

STA. 28+75L, Tennessee Ave.

Lat./Long.: N 36.13660130750
W 85.57943669710

View looking southwest.

Note: Close-up view of the spring house associated with SPG-1 and noted in Photo 16.

Photograph # 18

STA. 28+90L, Tennessee Ave.

Lat./Long.: N 36.13660130750
W 85.57943669710

View looking northwest.

Note: Upstream view of STR-1, approximately 100 feet upstream of SPG-1. Surface is absent upstream of SPG-1 with the exception of standing pools.

Photograph # 19

STA. 14+25L, Tennessee Ave.

Lat./Long.: N 36.13306382830
W 85.58146568120

View looking northwest.

Note: Up-gradient view of WWC-1, just west of Tennessee Ave.

Photograph # 20

STA. 14+25R, Tennessee Ave.

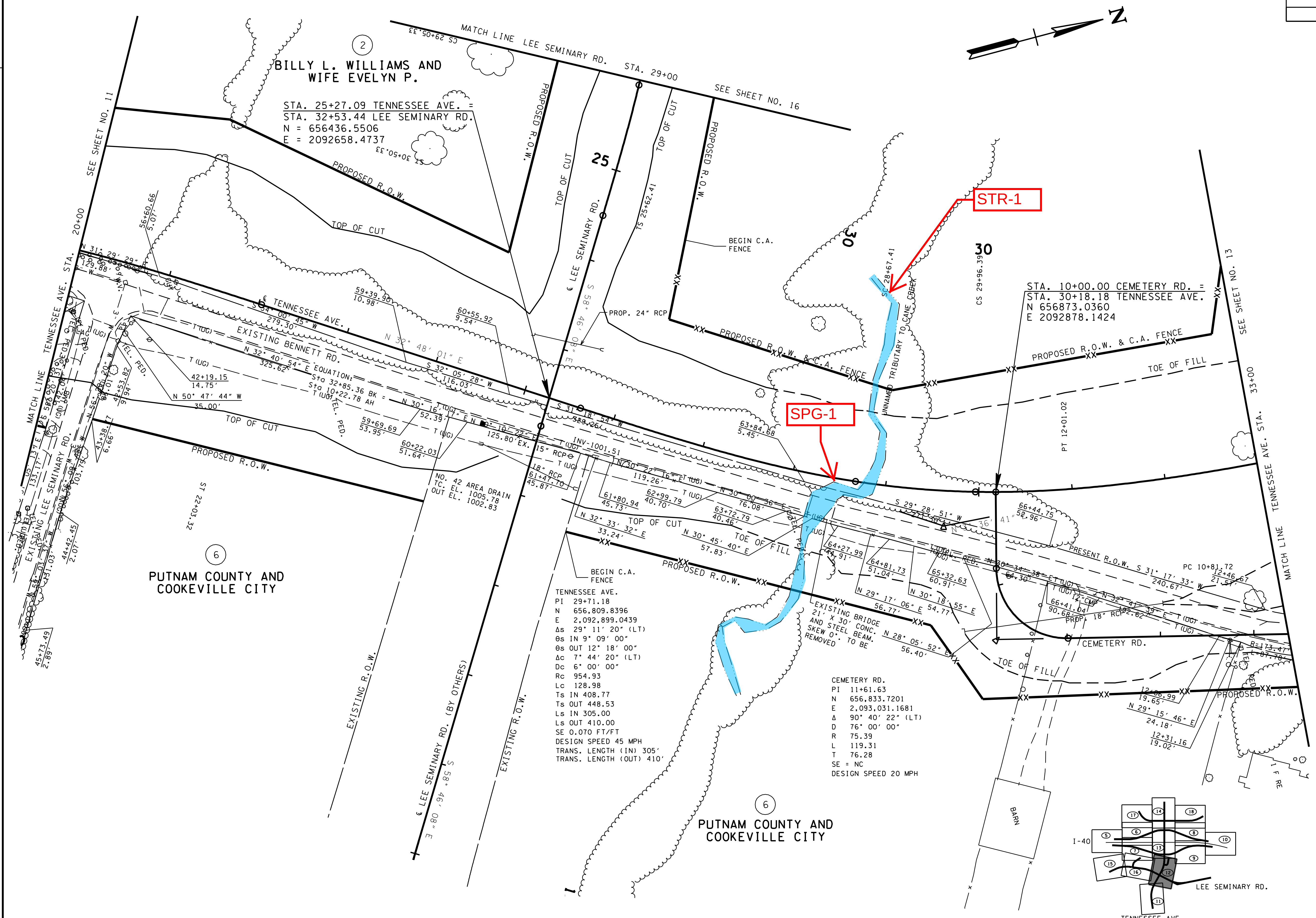
Lat./Long.: N 36.13306382830
W 85.58146568120

View looking southeast.

Note: Down-gradient view of WWC-1, just east of Tennessee Ave.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2012	NH-I-40-6(130)280	12



BILLY L. WILLIAMS AND
WIFE EVELYN P.
STA. 25+27.09 TENNESSEE AVE. =
STA. 32+53.44 LEE SEMINARY RD.
N = 656436.5506
E = 2092658.4737
MATCH LINE LEE SEMINARY RD. STA. 29+00
SEE SHEET NO. 16
SEE SHEET NO. 11
SEE SHEET NO. 13
PROPOSED R.O.W.
TOP OF CUT
BEGIN C.A. FENCE
STR-1
SPG-1
UNNAMED TRIBUTARY TO CANE CREEK
STA. 10+00.00 CEMETERY RD. =
STA. 30+18.18 TENNESSEE AVE.
N 656873.0360
E 2092878.1424
PROPOSED R.O.W. & C.A. FENCE
TOE OF FILL
PROP. 24" RCP
EXISTING BENNETT RD.
EXISTING LEE SEMINARY RD.
MATCH LINE TENNESSEE AVE. STA. 20+00
MATCH LINE TENNESSEE AVE. STA. 33+00
PUTNAM COUNTY AND
COOKEVILLE CITY
NO. 42 AREA DRAIN
EXISTING BRIDGE
21' X 30' CONC. AND STEEL BEAM, SKEW 0°. TO BE REMOVED
TENNESSEE AVE.
PI 29+71.18
N 656,809.8396
E 2,092,899.0439
Δs 29° 11' 20" (LT)
θs IN 9° 09' 00"
θs OUT 12° 18' 00"
Δc 7° 44' 20" (LT)
Dc 6° 00' 00"
Rc 954.93
Lc 128.98
Ts IN 408.77
Ts OUT 448.53
Ls IN 305.00
Ls OUT 410.00
SE 0.070 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH (IN) 305'
TRANS. LENGTH (OUT) 410'
CEMETERY RD.
PI 11+61.63
N 656,833.7201
E 2,093,031.1681
Δ 90° 40' 22" (LT)
D 76° 00' 00"
R 75.39
L 119.31
T 76.28
SE = NC
DESIGN SPEED 20 MPH
CEMETERY RD.
EXISTING R.O.W.
LEE SEMINARY RD. (BY OTHERS)
BARN
I-40
LEE SEMINARY RD.
TENNESSEE AVE.

PRELIMINARY FIELD REVIEW

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 20+00 TO STA. 33+00

SCALE: 1"= 50'

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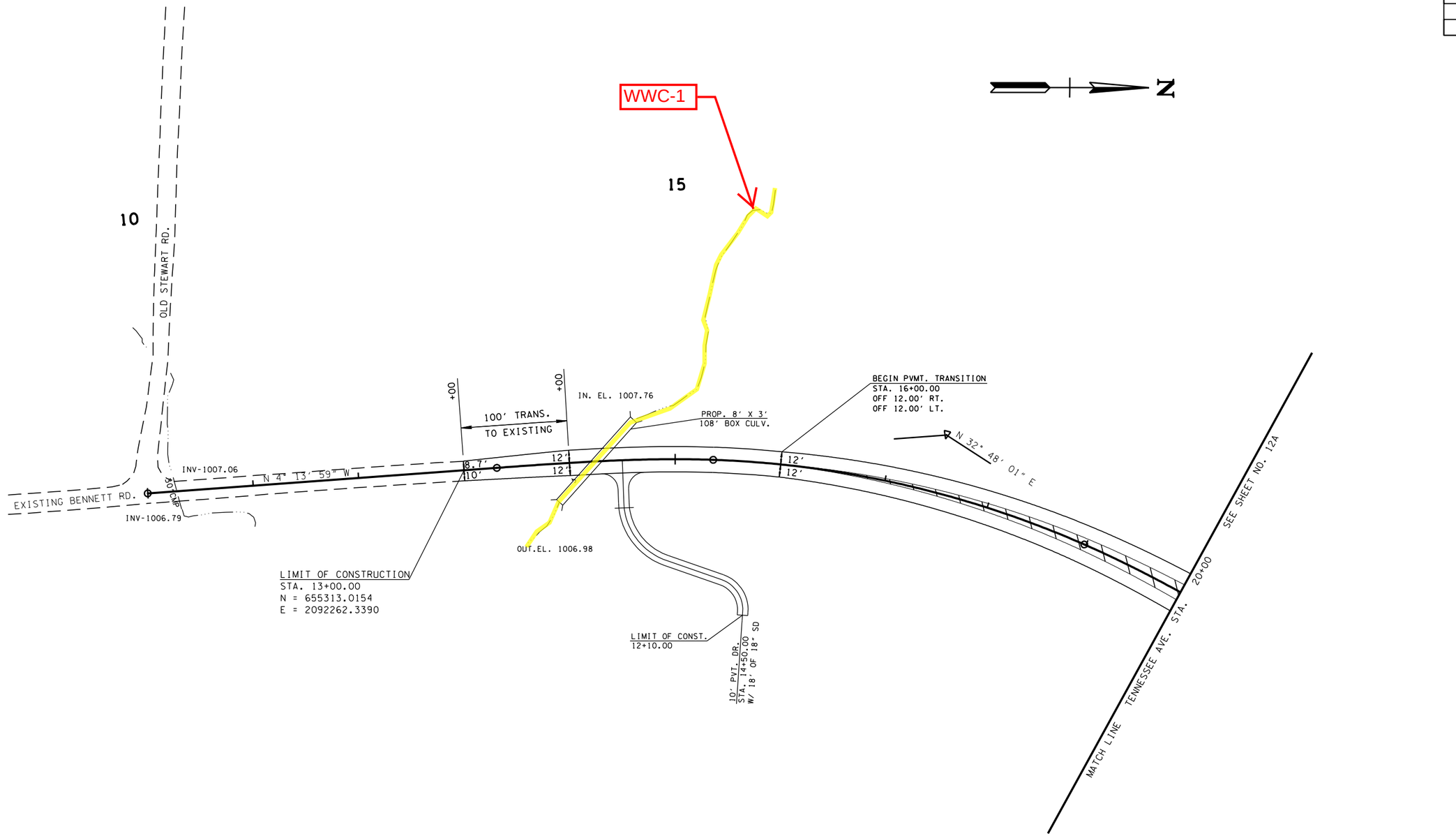
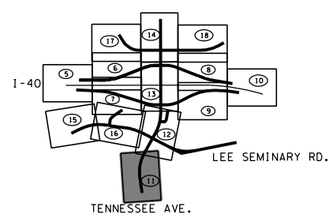
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2012	NH-I-40-6(130)280	11A





PRELIMINARY FIELD REVIEW

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0000749 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 10+00 TO STA. 20+00

SCALE: 1"= 50'

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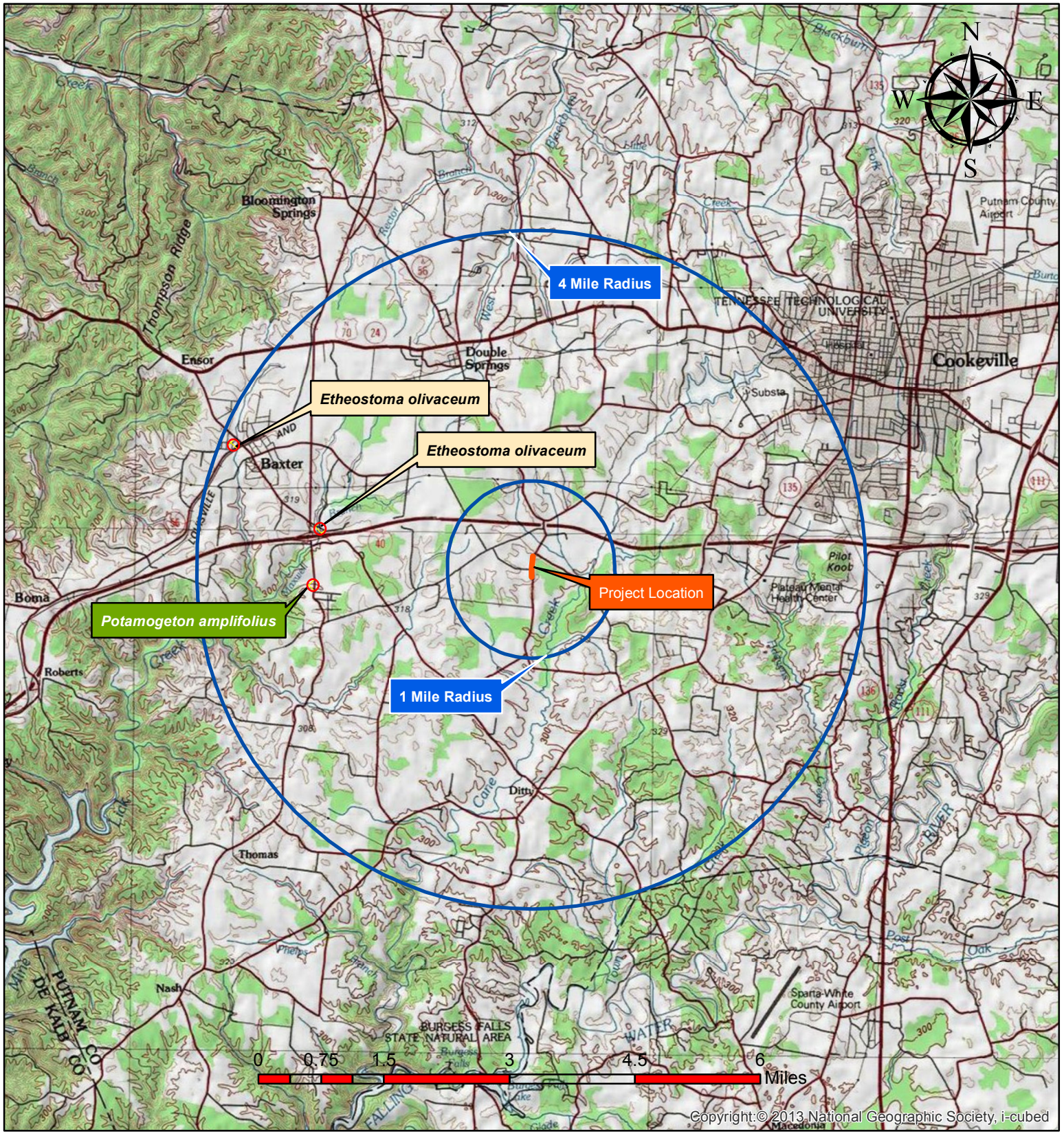

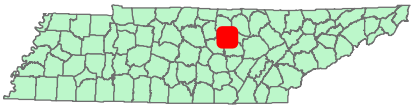

Species Review Topographic Map
Putnam County, SIA Serving Project Victor (Bennett Road)

Cookeville-West, TN Quadrangle (326-NE)
11.14.2014

P.E. 71952-1543-04
PIN 120460.00

TDOT

Project: Putnam County, SIA Serving Project Victor – Bennett Road, PE 71952-1544-04, PIN 120463.00

Date of field study: 10.29.2014 Date TDEC database checked: 11.17.2014 Completed by: R.L. Howard

Species reported within 1 mile radius of project

Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** observed during site visit **(D)** critical habitat present within ROW	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	Accommodations to minimize impacts: **(A)** BMPs are sufficient to protect species **(B)** Special Notes are included on project plans **(C)** Individuals will be impacted. **(D)** Accommodations not practical due to broad habitat description or mobility of species	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
No species reported.							

Project: Putnam County, SIA Serving Project Victor – Bennett Road, PE 71952-1544-04, PIN 120463.00

Species reported within 1-mile to 4-mile radius of project

Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** observed during site visit **(D)** critical habitat present within ROW	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	Accommodations to minimize impacts: **(A)** BMPs are sufficient to protect species **(B)** Special Notes are included on project plans **(C)** Individuals will be impacted. **(D)** Accommodations not practical due to broad habitat description or mobility of species	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
Etheostoma olivaceum **Sooty Darter (A)**	--	D		A	Although suitable habitat is not available within the project limits, BMPs will be installed and maintained throughout the construction project.	*E. olivaceum* (Sooty Darter) occurs in small, low gradient streams with primarily limestone bedrock substrates with adults commonly found in slab rock pools (Etnier and Starnes 1993). Last Observation 03.20.1990.	TDEC Division of Natural Heritage database reports records for the species 2.5 and 3.9 miles from the project limits.
Potamogeton amplifolius Large-leaf Pondweed (P)	--	T		A	Although suitable habitat is not available within the project limits, BMPs will be installed and maintained throughout the construction project.	Large-leaf pondweed found in ponds, lakes and sluggish streams (Radford *et al*, 1968). Last Observation 09.11.1992	TDEC Division of Natural Heritage database reports a record for the species 2.6 from the project limits.

Project: Putnam County, SIA Serving Project Victor – Bennett Road, PE 71952-1544-04, PIN 120463.00

Migratory Birds

List *significant concentrations* of migratory birds encountered within the project area (rookeries, aggregations, nesting areas, *etc*).

Species (Scientific and Common Name)	Approximate No. of Nests (or Individuals)	Location of Nests (or Individuals) (Include Latitude & Longitude)	Nesting Dates and Reference	Photograph #
N/A				

USFWS Species Coordination

Yes ☑ (provided) No ☐

Biological Assessment: Yes ☐(response letter attached; see below) No ☑

Species (scientific and common names)	USFWS conclusion[1]

[1] Choose from “no effect"; "not likely to adversely affect;" "likely to adversely affect;" if “likely to adversely affect” is chosen, indicate "no jeopardy to species and no adverse modification to habitat” or “jeopardy to species, or adverse modification to habitat” based on FWS concurrence letter

Natural Areas, Management Areas, Refuges, or Similar Sites Within or Adjacent to Project Limits

(Provide topographic and aerial maps with pertinent boundaries of area marked)

Area Name	Type of Area	Pertinent Notes
There are no wildlife management areas (WMA), refuges or similar sites within or adjacent to the project limits.		

Indiana Bat Habitat Assessment

(Provide an aerial map depicting assessed areas)

Location (description; lat/long or station number)	Tree Species	Photograph #
There is no suitable habitat within the project limits.		

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

07 November 2014

Ms. Mary Jennings
US Dept. of Interior
Fish and Wildlife Service
446 Neal St.
Cookeville, TN 38501

Subject: Putnam County, SIA Serving Project Victor – Bennett Road
PIN 120463.00, PE 71952-1544-04

Dear Ms. Jennings:

The Tennessee Department of Transportation (TDOT) proposes to construct a state industrial access (SIA) road serving Project Victor in Putnam County, Tennessee. The project includes reconstruction of the existing Bennett Road Creek for a distance of approximately 0.185 miles. Attached, please find project location maps and plan sheets for your review. Your review and comment concerning protected species and habitat in proximity to the project limits is requested.

This request for endangered species information is in compliance with the U.S. Fish and Wildlife Coordination Act of 1958, and the Endangered Species Act of 1973, as amended.

Thank you very much for your assistance with this project. If you have any questions or need additional information, please do not hesitate to contact me at rob.howard@tn.gov or 931.520.2412 (office) or 615.339.3600 (mobile).

Sincerely,

Robert L. Howard

Digitally signed by Robert L. Howard
DN: cn=Robert L. Howard, o=Ecology Section, ou=Tennessee Department of Transportation, email=rob.howard@tn.gov, c=US
Date: 2014.11.07 10:45:09 -06'00'

Robert Howard
Tennessee Department of Transportation
Ecology Section

No federally listed or proposed species, or designated critical habitat are known to exist within the project impact area. We believe the requirements of section 7 of the Endangered Species Act of 1973, as amended, are fulfilled.

Mary E Jennings 11-7-14
Field Supervisor Date
U.S. Fish and Wildlife Service
Cookeville, TN 38501

Rob Howard

From: Vincent Pontello
Sent: Wednesday, November 12, 2014 7:55 PM
To: Rob Howard
Cc: Rob Todd
Subject: RE: Putnam Co, SIA Serving Project Victor (Bennett Road) PIN 120463.00

Rob,

My data shows no occurrences of listed species within two miles of project location. The implementation of standard TDOT BMPs will be sufficient to satisfy the needs of the TWRA. Please contact me if I can be further assistance.

Vincent L. Pontello
Wildlife Biologist
Liaison to Federal Highway Admin. & TDOT
Tennessee Wildlife Resources Agency
Environmental Services Division

From: Rob Howard
Sent: Tuesday, October 28, 2014 10:17 AM
To: Vincent Pontello
Subject: Putnam Co, SIA Serving Project Victor (Bennett Road) PIN 120463.00

Vince,

TDOT proposes to reconstruct approximately 1200' feet of the existing Bennett Road in Putnam County, TN.

Attached, please find the present and proposed plan sheets and project location maps.

I would appreciate your review and comments for protected species.

Thank you very much.

Rob

Rob Howard I *Biologist*
Ecology Section
TENNESSEE DEPARTMENT OF TRANSPORTATION
931.520.2412 – Office
615.339.3600 - Mobile

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

March 3, 2015

Mr. Vojin Janjić
Manager, Permit Section
Tennessee Department of Environment and Conservation
11th Floor William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

Re: Consultation Regarding Adherence to TMDL for Siltation under NPDES Construction General Permit (CGP)

Project Reference: TDOT # 71952-1544-04, PIN 120463.00, Bennett Road Industrial Access Serving Project Victor, Putnam County Latitude: N36.1363, Longitude: W85.5796

Dear Mr. Janjić:

Our office requests consultation with TDEC to confirm adherence to the requirements of the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities (CGP) for an approved TMDL for siltation on the Caney Fork River Watershed (HUC **05130108**).

On the subject project, TDOT is proposing to **construct 0.488 Miles of Industrial Access Road to serve Project Victor** (Figure 1 attached). This project will require approximately **13.7** acres of land disturbance.

During our SWPPP preparation process on the subject project, TDOT determined that the project will discharge to the **Caney Fork River Watershed**, which has an approved TMDL for siltation. More specifically, it will discharge to **Cane Creek (WATERBODY ID: 05130108045_0150)** which is within the sub-watershed boundary **0704**. **Cane Creek** is listed as not supporting or partially supporting in the final TMDL. Sub-watershed **0704** has an approved Waste Load Allocation (WLA); however, the final TMDL states that "The WLAs provided to the NPDES regulated construction activities will be implemented as Best Management Practices (BMPs), as specified in the CGP". Our office submits that the special requirements of section 8.1.3 of the final TMDL will apply to the subject project as Cane Creek in **Putnam** County is listed for siltation on the 2014 303(d) list.

Based on the information above, our offices submits that the potential discharge of siltation under the CGP is specifically identified and approved in the final TMDL provided that BMPs as specified in the CGP are implemented. TDOT respectfully requests that TDEC confirm in writing that a SWPPP for the subject project that meets the requirements of the CGP is consistent with the allowances of the final TMDL. With this confirmation, TDOT will be allowed to obtain a Notice of Coverage for this site under the CGP. This written confirmation will be used in the SWPPP to satisfy the "Documentation of permit eligibility related to TMDL" requirements of section 3.5.10.b) of the CGP.

TDOT appreciates your swift assistance in this matter. Please contact me at (615) 253-0021 or Khalid.Ahmed@tn.gov if you have any questions or need additional information.

Sincerely,

Khalid Ahmed
TDOT Natural Resources Office

JLH:**INT**:pc

cc: Mr. Jim McAdoo, TDEC WPC
Project File

SUMMARY SHEET

CANEY FORK RIVER WATERSHED (HUC 05130108)

Total Maximum Daily Load for Siltation / Habitat Alteration in Waterbodies Identified on the State of Tennessee's 2002 303(d) List

---

Impaired Waterbody Information:

State: Tennessee
Counties: Bledsoe, Cannon, Cumberland, DeKalb, Putnam, Sequatchie, Smith, Van Buren, Warren, White and Wilson
Watershed: Caney Fork River (HUC 05130108)
Watershed Area: 1796.8 mi^2
Constituent of Concern: Siltation / Habitat Alteration (excess loading of sediment produced by erosional processes – see Section 3.0)
Impaired Waterbodies: 2002 303(d) List

Waterbody ID	Waterbody	RM
05130108001_0100	Snow Creek	7.6
05130108001_0200	Ferguson Branch	5.8
05130108001_0400	Rock Springs Branch	8.1
05130108002_2000	Hickman Creek	22.2
05130108024_1000	Rocky River	8.7
05130108025_0400	Hickory Valley Branch	8.2
05130108033_0310	Bradden Creek	10.7
05130108033_1000	Bee Creek	17.5
05130108036_0810	Flynn Creek	2.8
05130108036_3000	Unnamed Tributary to Caney Fork River	3.5
05130108043_0300	Blue Spring Creek	10.1
05130108045_0150	Cane Creek	12.0
05130108045_0300	Hudgens Creek	6.7
05130108045_0400	Pigeon Roost Creek	2.4
05130108045_0450	Pigeon Roost Creek	3.2
05130108045_0500	Post Oak Creek	8.3
05130108045_1000	Falling Water River	8.8
05130108048_1000	Indian Creek	31.0
05130108684_1000	Fall Creek (DeKalb)	9.8
05130108684_2000	Fall Creek (DeKalb)	6.7

Note: There are three waterbodies identified on the 2002 303(d) List as impaired due to other habitat alterations. These waterbodies were determined to be impaired due to causes other than excess sediment loading and are not addressed in this document (ref.: Section 3.0).

TMDL/Allocations

TMDLs, WLAs for MS4s & Construction Storm Water Sites; LAs for Nonpoint Sources:

HUC-12 Subwatershed	Waterbody ID	Waterbody Impaired by Siltation/ Habitat Alteration	Level IV Ecoregion	TMDL (Required Overall Load Reduction)	Required Load Reduction	
					WLA (MS4s & Constr. SW)	LA (Nonpoint Sources)
				[%]	[%]	[%]
0101	05130108036_3000	UT to Caney Fork River	68a	54.5	56.8	56.8
0102	05130108036_0810	Flynn Creek	68a	46.6	49.3	49.3
0104	05130108025_0400	Hickory Valley Branch	68c	46.0	48.7	48.7
0202	05130108033_0310	Bradden Creek	68a	48.9	51.5	51.5
0203	05130108033_1000	Bee Creek	68a	24.3	28.1	28.1
0406	05130108684_1000	Fall Creek (DeKalb)	71g	67.8	69.4	69.4
	05130108684_2000	Fall Creek (DeKalb)				
0503	05130108043_0300	Blue Spring Creek	68c	62.6	64.4	64.4
0602	05130108024_1000	Rocky River	68c	45.7	48.4	48.4
0702	05130108045_0300	Hudgens Creek	71g	13.8	18.1	18.1
	05130108045_0400	Pigeon Roost Creek				
	05130108045_0450	Pigeon Roost Creek				
	05130108045_0500	Post Oak Creek				
0703	05130108045_1000	Falling Water River	71g	26.0	29.7	29.7
0704	05130108045_0150	Cane Creek	71g	48.4	51.0	51.0
0805	05130108001_0200	Ferguson Branch	71h	26.6	31.8	31.8
	05130108001_0400	Rock Springs Branch				
	05130108048_1000	Indian Creek				
0806	05130108001_0100	Snow Creek	71h	62.4	64.3	64.3
0807	05130108002_2000	Hickman Creek	71h	11.3	15.8	15.8

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S1

SWPPP INDEX OF SHEETS

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)
1.1.1. ☒ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
1.1.2. ☒ 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)
1.3.1. ☒ IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
1.3.2. ☐ KNOWN EXCEPTIONAL TENNESSEE WATERS
IF YES TO SECTION 1.3, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? (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 HAS COMPLETED TDEC LEVEL II? (5.4.1.b)
☒YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION)

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: Bennett Road, Industrial Access Road Serving Project Victor
COUNTY: Putnam
PIN: 12463.00
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) 11-12, DRAINAGE MAP SHEET(S) 8, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3 BELOW.
2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
2.5.1. ☒ CLEARING AND GRUBBING
2.5.2. ☒ EXCAVATION
2.5.3. ☒ CUTTING AND FILLING
2.5.4. ☒ FINAL GRADING AND SHAPING
2.5.5. ☐ UTILITIES
2.5.6. ☐ OTHER (DESCRIBE): ____
2.6. TOTAL PROJECT AREA (3.5.1.c): 13.7 ACRES
2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 11.1 ACRES
IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW AND IN THE PLANS (3.5.3.1.k)?
YES ☐ NO ☐ N/A ☒
2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES ☐ NO ☒
IF YES, DESCRIBE AND LIST THE CORRESPONDING PLAN SHEET: ____
2.9. 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)
2.10. ARE UTILITIES INCLUDED IN THE CONTRACT? YES ☐ NO ☒
2.11. 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)
Bewleyville silt loam	B	27.7	0.43
Holston loam	B	28.5	0.32
Landisburg silt loam	C/D	6.6	0.43
Lindell silt loam	B/D	8.8	0.32
Mountview silt loam	B	5.8	0.43
Christian loam	C	12.4	0.37
Imprevious Areas	N/A	10.2	N/A

2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? YES ☐ NO ☒
2.12.1. IF YES TO SECTION 2.12, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐YES ☐ NO; AND
2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? ☐YES ☐ NO ☐ N/A (TDOT SP107L WILL BE APPLIED.)

2.13. 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
IMPERVIOUS	1.4	10.2	98	N/A
Bewleyville silt loam	3.8	27.7	61	N/A
Holston loam	3.9	28.5	61	N/A
Landisburg silt loam	0.9	6.6	77	N/A
Lindell silt loam	1.2	8.8	68	N/A
Mountview silt loam	0.8	5.8	61	N/A
Christian loam	1.7	12.4	74	N/A
WEIGHTED CURVE NUMBER OR C-FACTOR =			68	N/A

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	2.1	15.3	98	N/A
Bewleyville silt loam	3.5	25.5	61	N/A
Holston loam	3.8	27.7	61	N/A
Landisburg silt loam	0.9	6.6	77	N/A
Lindell silt loam	1.1	8.0	68	N/A
Mountview silt loam	0.7	5.1	61	N/A
Christian loam	1.6	11.8	74	N/A
WEIGHTED CURVE NUMBER OR C-FACTOR =			70	N/A

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

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS (N/A)
3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEETS FROM THE SITE.
3.4. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) 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.
3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.
3.9. 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.)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S2

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT 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 ☒ NO ☐

4.1.2. IF NO TO SECTION 4.1.1, WILL THIS PROJECT DISCHARGE INTO STATE WATERS THAT ARE LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS? YES ☐ NO ☐

4.1.3. IF YES TO SECTION 4.1.2, HAVE ANY OF THE RECEIVING WATERS DOWN GRADIENT BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

4.1.3.1. ☒ 303d IMPAIRED FOR SILTATION

4.1.3.2. ☐ 303d IMPAIRED FOR HABITAT ALTERATION

4.1.3.3. ☐ HIGH QUALITY WATERS OR KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)

4.1.4. RECEIVING STREAMS (3.5.1.j).

RECEIVING STREAM INFORMATION

NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	303d IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	HIGH QUALITY OR 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	Unnamed tributary to Cane Creek	YES	NO	NO	YES, just off North end of project
STR-1A	Unnamed tributary to Cane Creek	NO	NO	YES	YES
STR-A	Unnamed tributary to Cane Creek	NO	NO	YES	YES
	Cane Creek	YES	NO	NO	YES (0.9 Miles down stream)

4.1.5. ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? YES ☐ NO ☒
IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) YES
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)
☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET)
IF NO, CHECK THE APPROPRIATE BOX BELOW.
☐ BUFFERS NOT REQUIRED (I.E. NO STREAM, WETLAND, ETC. IMPACTS)
☒ TDEC ARAP APPLIED FOR

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

4.1.6. ARE THERE BUFFER ZONE EXEMPTIONS (4.1.2.1)? YES ☐ NO ☒

IF YES, EXISTING CONDITIONS DESCRIPTION:_____

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 (3.5.3.3) OR

4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS (5.4.1.f).

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

SEE SWPPP SHEET S-6 FOR OUTFALL INFORMATION.

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED THROUGH THE PROJECT SO THAT THE OFF-SITE RUN-ON WILL NOT FLOW OVER DISTURBED AREAS WITHIN THE ROW, THUS SEPARATING NON-PROJECT RUN-OFF FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA TO ANY ONE OUTFALL?
YES ☒ NO ☐ N/A ☐

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? YES ☐ NO ☐ N/A ☒

4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.g, 5.4.1.f)? YES ☒ NO ☐

4.2.7. 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 ARAP PERMIT, 401 OR 404 PERMITS.

WETLAND INFORMATION

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

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

4.4.1. IS THIS PROJECT LOCATED IN A WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION? YES ☒ NO ☐

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A 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 THEY BEEN ADDED TO THE APPROPRIATE PLAN SHEETS?
YES ☐ NO ☐ NO NOTES REQUIRED ☒
IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED.
_____

5. 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)

5.6.1.1. ☐ PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)

5.6.1.2. ☒ 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 AMD FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).

5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO TDOT STANDARDS (E.G. STANDARD DRAWINGS).

5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING US COE SECTION 404, TDEC ARAP, AND TVA PERMITS.

5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY CONTROLS PROVIDING EQUIVALENT LEVEL OF TREATMENT (FILTRATION) (4.14).

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 10A HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT 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 10A (3.5.3.1.n).

5.16. 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).

5.17. 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).

5.18. STEEP SLOPES (3.5.3.2): STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR STEEPER 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.

5.19. 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 SHEET S5. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

6. CONSTRUCTION SUPPORT ACTIVITIES – BORROW AND WASTE AREAS (1.2.2)(3.5.3.1.g)

IF OFFSITE BORROW AND WASTE AREAS BECOME NECESSARY DURING THE LIFE OF THE PROJECT, THIS SUPPORT ACTIVITY SHALL BE ADDRESSED PER THE TDOT *WASTE AND BORROW MANUAL* AS INDICATED IN THE *STATEWIDE STORMWATER MANAGEMENT PLAN (SSWMP).*

7. MAINTENANCE AND INSPECTION

7.1. INSPECTION PRACTICES (3.5.8)

7.1.1. INSPECTORS MUST HAVE SUCCESSFULLY COMPLETED THE TDEC FUNDAMENTALS OF EROSION AND SEDIMENT CONTROL COURSE (TDEC LEVEL I) AND MAINTAIN THE CERTIFICATION. A COPY OF THE INSPECTOR'S CERTIFICATION SHOULD BE KEPT ON SITE (3.5.8.1).

7.1.2. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS A PART (3.5.8.2.a).

7.1.3. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC.) WITH WRITTEN NOTIFICATION 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).

7.1.4. 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).

7.1.5. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, US COE AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S3

7.1.6. 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).

7.1.7. 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).

7.1.8. INSPECTIONS WILL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT (TDEC PRE-APPROVED) AND INCLUDE THE SCOPE OF THE INSPECTION, NAME(S), TITLE AND TN EPSC CERTIFICATION NUMBER OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, CURRENT APPROXIMATE DISTURBED ACREAGE AT TIME OF INSPECTION, CHECKLIST (NOC, SWPPP, RAIN GAUGE, SITE CONTACT INFORMATION, ETC.) AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP (3.5.8.2.g).

7.1.9. 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.

7.1.10. 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.

7.1.11. 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 (3.8.5.2.h).

7.2. 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:

7.2.1. COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.

7.2.2. SUBMIT THE EPSC DELEGATION OF AUTHORITY TO THE LOCAL TDEC EFO.

7.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)

7.3.1. 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).

7.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)

7.3.3. 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).

7.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

7.3.5. 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).

7.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

7.3.7. 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.

8. 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.

9. STORMWATER MANAGEMENT (3.5.4)

9.1. 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.

9.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.F, 3.5.4): N/A

9.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

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

9.3.1.1. ☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
9.3.1.2. ☒ CONCRETE WASHOUT
9.3.1.3. ☒ CONCRETE AND CORRUGATED METAL PIPES
9.3.1.4. ☒ MINERAL AGGREGATES, ASPHALT
9.3.1.5. ☒ EARTH
9.3.1.6. ☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
9.3.1.7. ☒ ROCK
9.3.1.8. ☒ CURING COMPOUND
9.3.1.9. ☒ EXPLOSIVES
9.3.1.10. ☐ OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2. 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. 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.

9.3.3. 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.

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

9.3.5. OTHER MATERIALS

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

9.3.5.1. ☒ FERTILIZERS AND LIME
9.3.5.2. ☒ PESTICIDES AND/OR HERBICIDES
9.3.5.3. ☒ DIESEL AND GASOLINE
9.3.5.4. ☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED THIS SWPPP.

10. NON-STORMWATER DISCHARGES (3.5.9)

10.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT (CHECK ALL THAT APPLY):

10.1.1. ☒ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER
10.1.2. ☒ 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 SITE
10.1.3. ☒ WATER USED TO CONTROL DUST (3.5.3.1.n)
10.1.4. ☒ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE
10.1.5. ☒ UNCONTAMINATED GROUNDWATER OR SPRING WATER
10.1.6. ☒ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS
10.1.7. ☐ OTHER:

10.2. 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.

10.3. 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.

10.4. 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.

10.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.h)?

YES ☐ NO ☒ IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER.

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

11.1. SPILL PREVENTION (3.5.5.c)

11.1.1. MATERIAL MANAGEMENT

11.1.1.1. 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.

11.1.1.2. 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

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S4

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.

11.1.1.3. PRODUCT SPECIFIC PRACTICES

11.1.1.3.1. 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.

11.1.1.3.2. 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.

11.1.1.3.3. 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.

11.1.1.3.4. 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.

11.2. SPILL MANAGEMENT

11.2.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.

11.2.2. 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.

11.2.3. 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.

11.2.4. 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.

11.2.5. THE CONTRACTOR'S SITE SUPERINTENDENT 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.

11.2.6. 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.

11.2.7. IF 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.

11.2.8. IF A SPILL OCCURS THE SUPERINTENDENT OR THE SUPERINTENDENT'S DESIGNEE WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT SUPERVISOR.

11.2.9. SPILL RESPONSE EQUIPMENT WILL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

11.3. 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:

11.3.1. 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.

11.3.2. 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.

11.3.3. 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.

11.3.4. 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.

12. RECORD-KEEPING

12.1. 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):

12.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR

12.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE

12.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED

12.1.4. RECORDS OF TWICE WEEKLY EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES

12.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS

12.1.6. COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION

12.1.7. RAINFALL MONITORING PLAN (3.5.3.1.o):

12.1.7.1. 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.

12.1.7.2. 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.

12.1.7.3. METHODS

12.1.7.3.1. 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.

12.1.7.3.2. 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.

12.1.7.3.3. 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 TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

12.1.7.3.4. 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.

12.1.7.3.5. 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.

12.2. KEEPING PLANS CURRENT (3.4)

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

12.2.1. 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;

12.2.2. 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;

12.2.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S5

12.2.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

12.2.5. 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; OR

12.2.6. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION)

12.3. MAKING PLANS ACCESSIBLE

12.3.1. 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).

12.3.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND 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):

12.3.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

12.3.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

12.3.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

12.3.2.4. THE LOCATION OF THE SWPPP.

12.3.3. 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.

12.4. NOTICE OF TERMINATION (8.0)

12.4.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, TDOT WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.

12.4.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:

12.4.2.1. 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

12.4.2.2. 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

12.4.2.3. 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; AND

12.4.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND

12.4.2.5. 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

12.4.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND

12.4.2.7. 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.

12.5. 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.

13. <u>SITE WIDE/PRIMARY PERMITTEE CERTIFICATION</u> (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 TDOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT
PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR
TITLE

DATE

14. <u>SECONDARY PERMITTEE (OPERATOR) CERTIFICATION</u> (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

15. <u>ENVIRONMENTAL PERMITS (9.0)</u>

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 (COE)			
TVA 26A			
TDEC CGP			
OTHER:			

*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S6

4.2.3 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
1,2,3	1		45+60 LT	1	0.428	0.428	0.428	N/A	STR-A	
1,2	2		45+85 LT	5	0.603	0.603		N/A	STR-A	
1,2	3		45+90 LT	8	0.300	0.300		N/A	STR-A	
1,2	4		45+95 RT	6	1.373	1.373		N/A	STR-A	
1	5		49+60 RT	6	8.547			N/A	STR-1A	1.890ac disturbed, remainder to be diverted through site.
1	6		49+80 LT	6	6.408			N/A	STR-1A	0.046ac disturbed, remainder to be diverted through site.
1	7		49+95 LT	4	1.768			N/A	STR-1A	
1,2,3	8		64+25 RT	14	0.639	0.612	3.232	N/A	STR-1	
2,3	9		49+55 RT	3		2.018	2.535	N/A	STR-A	
2,3	10		50+40 LT	1		4.726	4.731	N/A	STR-A	
2,3	11		50+90 LT	4		0.597	0.326	N/A	STR-A	
2,3	12		64+25 LT	4		0.306	1.520	N/A	STR-1	
2,3	13		61+30 LT	5		3.492	3.340	N/A	STR-1	
2,3	14		60+20 LT	5		2.283	2.300	N/A	STR-1	
3	15		46+60 LT	3			0.957	N/A	STR-A	
3	16		46+70 LT	1			0.723	N/A	STR-A	
3	17		46+60 RT	6			1.757	N/A	STR-A	

* SEE COMMENTS SECTION FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AREA.

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

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S1

SWPPP INDEX OF SHEETS

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)
1.1.1. ☒ CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
1.1.2. ☒ 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)
1.3.1. ☒ IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
1.3.2. ☐ KNOWN EXCEPTIONAL TENNESSEE WATERS
IF YES TO SECTION 1.3, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? (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 HAS COMPLETED TDEC LEVEL II? (5.4.1.b)
☒YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION)

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: Bennett Road, Industrial Access Road Serving Project Victor
COUNTY: Putnam
PIN: 12463.00
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) 11-12, DRAINAGE MAP SHEET(S) 8, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3 BELOW.
2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
2.5.1. ☒ CLEARING AND GRUBBING
2.5.2. ☒ EXCAVATION
2.5.3. ☒ CUTTING AND FILLING
2.5.4. ☒ FINAL GRADING AND SHAPING
2.5.5. ☐ UTILITIES
2.5.6. ☐ OTHER (DESCRIBE): ____
2.6. TOTAL PROJECT AREA (3.5.1.c): 13.7 ACRES
2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 11.1 ACRES
IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW AND IN THE PLANS (3.5.3.1.k)?
YES ☐ NO ☐ N/A ☒
2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES ☐ NO ☒
IF YES, DESCRIBE AND LIST THE CORRESPONDING PLAN SHEET: ____
2.9. 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)
2.10. ARE UTILITIES INCLUDED IN THE CONTRACT? YES ☐ NO ☒
2.11. 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)
Bewleyville silt loam	B	27.7	0.43
Holston loam	B	28.5	0.32
Landisburg silt loam	C/D	6.6	0.43
Lindell silt loam	B/D	8.8	0.32
Mountview silt loam	B	5.8	0.43
Christian loam	C	12.4	0.37
Imprevious Areas	N/A	10.2	N/A

2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? YES ☐ NO ☒
2.12.1. IF YES TO SECTION 2.12, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐YES ☐ NO; AND
2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? ☐YES ☐ NO ☐ N/A (TDOT SP107L WILL BE APPLIED.)

2.13. 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
IMPERVIOUS	1.4	10.2	98	N/A
Bewleyville silt loam	3.8	27.7	61	N/A
Holston loam	3.9	28.5	61	N/A
Landisburg silt loam	0.9	6.6	77	N/A
Lindell silt loam	1.2	8.8	68	N/A
Mountview silt loam	0.8	5.8	61	N/A
Christian loam	1.7	12.4	74	N/A
WEIGHTED CURVE NUMBER OR C-FACTOR =			68	N/A

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	2.1	15.3	98	N/A
Bewleyville silt loam	3.5	25.5	61	N/A
Holston loam	3.8	27.7	61	N/A
Landisburg silt loam	0.9	6.6	77	N/A
Lindell silt loam	1.1	8.0	68	N/A
Mountview silt loam	0.7	5.1	61	N/A
Christian loam	1.6	11.8	74	N/A
WEIGHTED CURVE NUMBER OR C-FACTOR =			70	N/A

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

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS (N/A)
3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEETS FROM THE SITE.
3.4. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) 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.
3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.
3.9. 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.)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S2

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT 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 ☒ NO ☐

4.1.2. IF NO TO SECTION 4.1.1, WILL THIS PROJECT DISCHARGE INTO STATE WATERS THAT ARE LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS? YES ☐ NO ☐

4.1.3. IF YES TO SECTION 4.1.2, HAVE ANY OF THE RECEIVING WATERS DOWN GRADIENT BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):

4.1.3.1. ☒ 303d IMPAIRED FOR SILTATION

4.1.3.2. ☐ 303d IMPAIRED FOR HABITAT ALTERATION

4.1.3.3. ☐ HIGH QUALITY WATERS OR KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)

4.1.4. RECEIVING STREAMS (3.5.1.j).

RECEIVING STREAM INFORMATION

NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	303d IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	HIGH QUALITY OR 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	Unnamed tributary to Cane Creek	YES	NO	NO	YES, just off North end of project
STR-1A	Unnamed tributary to Cane Creek	NO	NO	YES	YES
STR-A	Unnamed tributary to Cane Creek	NO	NO	YES	YES
	Cane Creek	YES	NO	NO	YES (0.9 Miles down srteam)

4.1.5. ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? YES ☐ NO ☒
IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) YES
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)
☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET)
IF NO, CHECK THE APPROPRIATE BOX BELOW.
☐ BUFFERS NOT REQUIRED (I.E. NO STREAM, WETLAND, ETC. IMPACTS)
☒ TDEC ARAP APPLIED FOR

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

4.1.6. ARE THERE BUFFER ZONE EXEMPTIONS (4.1.2.1)? YES ☐ NO ☒
IF YES, EXISTING CONDITIONS DESCRIPTION:_____

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 (3.5.3.3) OR

4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS (5.4.1.f).

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

SEE SWPPP SHEET S-6 FOR OUTFALL INFORMATION.

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED THROUGH THE PROJECT SO THAT THE OFF-SITE RUN-ON WILL NOT FLOW OVER DISTURBED AREAS WITHIN THE ROW, THUS SEPARATING NON-PROJECT RUN-OFF FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA TO ANY ONE OUTFALL?
YES ☒ NO ☐ N/A ☐

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? YES ☐ NO ☐ N/A ☒

4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.g, 5.4.1.f)? YES ☒ NO ☐

4.2.7. 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 ARAP PERMIT, 401 OR 404 PERMITS.

WETLAND INFORMATION

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

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

4.4.1. IS THIS PROJECT LOCATED IN A WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION? YES ☒ NO ☐

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A 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 THEY BEEN ADDED TO THE APPROPRIATE PLAN SHEETS?
YES ☐ NO ☐ NO NOTES REQUIRED ☒
IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED.
_____

5. 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)

5.6.1.1. ☐ PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)

5.6.1.2. ☒ 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 AMD FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).

5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO TDOT STANDARDS (E.G. STANDARD DRAWINGS).

5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING US COE SECTION 404, TDEC ARAP, AND TVA PERMITS.

5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY CONTROLS PROVIDING EQUIVALENT LEVEL OF TREATMENT (FILTRATION) (4.14).

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 10A HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT 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 10A (3.5.3.1.n).

5.16. 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).

5.17. 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).

5.18. STEEP SLOPES (3.5.3.2): STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR STEEPER 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.

5.19. 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 SHEET S5. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

6. CONSTRUCTION SUPPORT ACTIVITIES – BORROW AND WASTE AREAS (1.2.2)(3.5.3.1.g)

IF OFFSITE BORROW AND WASTE AREAS BECOME NECESSARY DURING THE LIFE OF THE PROJECT, THIS SUPPORT ACTIVITY SHALL BE ADDRESSED PER THE TDOT *WASTE AND BORROW MANUAL* AS INDICATED IN THE *STATEWIDE STORMWATER MANAGEMENT PLAN (SSWMP).*

7. MAINTENANCE AND INSPECTION

7.1. INSPECTION PRACTICES (3.5.8)

7.1.1. INSPECTORS MUST HAVE SUCCESSFULLY COMPLETED THE TDEC FUNDAMENTALS OF EROSION AND SEDIMENT CONTROL COURSE (TDEC LEVEL I) AND MAINTAIN THE CERTIFICATION. A COPY OF THE INSPECTOR'S CERTIFICATION SHOULD BE KEPT ON SITE (3.5.8.1).

7.1.2. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS A PART (3.5.8.2.a).

7.1.3. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC.) WITH WRITTEN NOTIFICATION 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).

7.1.4. 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).

7.1.5. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, US COE AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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TENNESSEE D.O.T.	DESIGN DIVISION	FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S3

7.1.6. 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).

7.1.7. 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).

7.1.8. INSPECTIONS WILL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT (TDEC PRE-APPROVED) AND INCLUDE THE SCOPE OF THE INSPECTION, NAME(S), TITLE AND TN EPSC CERTIFICATION NUMBER OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, CURRENT APPROXIMATE DISTURBED ACREAGE AT TIME OF INSPECTION, CHECKLIST (NOC, SWPPP, RAIN GAUGE, SITE CONTACT INFORMATION, ETC.) AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP (3.5.8.2.g).

7.1.9. 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.

7.1.10. 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.

7.1.11. 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 (3.8.5.2.h).

7.2. 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:

7.2.1. COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.

7.2.2. SUBMIT THE EPSC DELEGATION OF AUTHORITY TO THE LOCAL TDEC EFO.

7.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)

7.3.1. 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).

7.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)

7.3.3. 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).

7.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.

7.3.5. 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).

7.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

7.3.7. 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.

8. 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.

9. STORMWATER MANAGEMENT (3.5.4)

9.1. 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.

9.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.F, 3.5.4): N/A

9.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

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

9.3.1.1. ☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
9.3.1.2. ☒ CONCRETE WASHOUT
9.3.1.3. ☒ CONCRETE AND CORRUGATED METAL PIPES
9.3.1.4. ☒ MINERAL AGGREGATES, ASPHALT
9.3.1.5. ☒ EARTH
9.3.1.6. ☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT
9.3.1.7. ☒ ROCK
9.3.1.8. ☒ CURING COMPOUND
9.3.1.9. ☒ EXPLOSIVES
9.3.1.10. ☐ OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2. 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. 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.

9.3.3. 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.

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

9.3.5. OTHER MATERIALS

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

9.3.5.1. ☒ FERTILIZERS AND LIME
9.3.5.2. ☒ PESTICIDES AND/OR HERBICIDES
9.3.5.3. ☒ DIESEL AND GASOLINE
9.3.5.4. ☒ MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED THIS SWPPP.

10. NON-STORMWATER DISCHARGES (3.5.9)

10.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT (CHECK ALL THAT APPLY):

10.1.1. ☒ DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER
10.1.2. ☒ 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 SITE
10.1.3. ☒ WATER USED TO CONTROL DUST (3.5.3.1.n)
10.1.4. ☒ POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE
10.1.5. ☒ UNCONTAMINATED GROUNDWATER OR SPRING WATER
10.1.6. ☒ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS
10.1.7. ☐ OTHER:

10.2. 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.

10.3. 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.

10.4. 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.

10.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.h)?
YES ☐ NO ☒ IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER.

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

11.1. SPILL PREVENTION (3.5.5.c)

11.1.1. MATERIAL MANAGEMENT

11.1.1.1. 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.

11.1.1.2. 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

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S4

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.

11.1.1.3. PRODUCT SPECIFIC PRACTICES

11.1.1.3.1. 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.

11.1.1.3.2. 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.

11.1.1.3.3. 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.

11.1.1.3.4. 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.

11.2. SPILL MANAGEMENT

11.2.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.

11.2.2. 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.

11.2.3. 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.

11.2.4. 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.

11.2.5. THE CONTRACTOR'S SITE SUPERINTENDENT 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.

11.2.6. 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.

11.2.7. IF 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.

11.2.8. IF A SPILL OCCURS THE SUPERINTENDENT OR THE SUPERINTENDENT'S DESIGNEE WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT SUPERVISOR.

11.2.9. SPILL RESPONSE EQUIPMENT WILL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

11.3. 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:

11.3.1. 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.

11.3.2. 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.

11.3.3. 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.

11.3.4. 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.

12. RECORD-KEEPING

12.1. 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):

12.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR

12.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE

12.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED

12.1.4. RECORDS OF TWICE WEEKLY EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES

12.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS

12.1.6. COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION

12.1.7. RAINFALL MONITORING PLAN (3.5.3.1.o):

12.1.7.1. 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.

12.1.7.2. 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.

12.1.7.3. METHODS

12.1.7.3.1. 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.

12.1.7.3.2. 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.

12.1.7.3.3. 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 TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.

12.1.7.3.4. 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.

12.1.7.3.5. 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.

12.2. KEEPING PLANS CURRENT (3.4)

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

12.2.1. 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;

12.2.2. 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;

12.2.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TENNESSEE D.O.T.	DESIGN DIVISION	FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S5

12.2.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

12.2.5. 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; OR

12.2.6. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION)

12.3. MAKING PLANS ACCESSIBLE

12.3.1. 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).

12.3.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND 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):

12.3.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

12.3.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

12.3.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

12.3.2.4. THE LOCATION OF THE SWPPP.

12.3.3. 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.

12.4. NOTICE OF TERMINATION (8.0)

12.4.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, TDOT WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.

12.4.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:

12.4.2.1. 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

12.4.2.2. 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

12.4.2.3. 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; AND

12.4.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND

12.4.2.5. 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

12.4.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND

12.4.2.7. 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.

12.5. 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.

13. 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 TDOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT
PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR
TITLE

03-30-2015
DATE

14. 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

15. 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 (COE)			
TVA 26A			
TDEC CGP			
OTHER:			

*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
SWPPP	2015	71952-1544-04	S6

4.2.3 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
1,2,3	1		45+60 LT	1	0.428	0.428	0.428	N/A	STR-A	
1,2	2		45+85 LT	5	0.603	0.603		N/A	STR-A	
1,2	3		45+90 LT	8	0.300	0.300		N/A	STR-A	
1,2	4		45+95 RT	6	1.373	1.373		N/A	STR-A	
1	5		49+60 RT	6	8.547			N/A	STR-1A	1.890ac disturbed, remainder to be diverted through site.
1	6		49+80 LT	6	6.408			N/A	STR-1A	0.046ac disturbed, remainder to be diverted through site.
1	7		49+95 LT	4	1.768			N/A	STR-1A	
1,2,3	8		64+25 RT	14	0.639	0.612	3.232	N/A	STR-1	
2,3	9		49+55 RT	3		2.018	2.535	N/A	STR-A	
2,3	10		50+40 LT	1		4.726	4.731	N/A	STR-A	
2,3	11		50+90 LT	4		0.597	0.326	N/A	STR-A	
2,3	12		64+25 LT	4		0.306	1.520	N/A	STR-1	
2,3	13		61+30 LT	5		3.492	3.340	N/A	STR-1	
2,3	14		60+20 LT	5		2.283	2.300	N/A	STR-1	
3	15		46+60 LT	3			0.957	N/A	STR-A	
3	16		46+70 LT	1			0.723	N/A	STR-A	
3	17		46+60 RT	6			1.757	N/A	STR-A	

* SEE COMMENTS SECTION FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AREA.

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

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

SEE SHEET NO. IA FOR INDEX

TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	71952-3544-04	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

PUTNAM COUNTY

BENNETT RD.

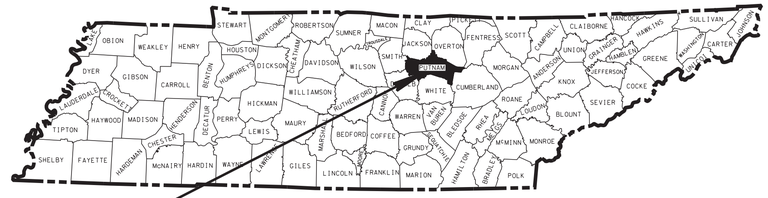
INDUSTRIAL ACCESS ROAD (BENNETT RD.)
SERVING PROJECT VICTOR

THE CONTRACTOR SHALL COORDINATE CONTRUCTION OPERATIONS WITH THE INTERCHANGE PROJECT (NH-I-40-6(130)) AND THE MINE LICK CREEK RD. SIA PROJECT (71952-3543-04). NO LANE CLOSURES WILL BE ALLOWED ON THE INTERCHANGE OR MINE LICK CREEK RD. PROJECTS UNTIL 2 LANES OF THE PROPOSED BENNETT RD. SIA PROJECT (71952-3544-04) ARE FULLY OPERATIONAL BETWEEN THE ACADEMY SPORTS TRUCK ENTRANCE AND HIGHLAND PARK BLVD.

CONSTRUCTION

GRADE, DRAIN, PAVE & SIGN

STATE HWY. NO.:NONE F.A.H.S. NO.:NONE



BEG. ADJACENT PROJ. (CONST.)
NH-I-40-6(130);71100-3118-44

END PROJ. CONST.
71952-3544-04
STA. 64+25.00
N = 656672.2546
E = 2092837.1128

SCALE: 1"= 2640'

0 0.5 1 1.5 MILES

N

NO EXCLUSIONS
NO EQUATIONS

BEGIN PROJ. CONST.
71952-3544-04
STA. 38+50.00
N = 654297.4636
E = 2092276.6986

SEALED BY
WESLEY R. MATTINGLY
REGISTERED ENGINEER
No. 110649
STATE OF TENNESSEE
02/26/2015

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

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.

TDOT TRANSPORTATION SPECIALIST SUPERVISOR II JIM BIVENS

DESIGNER WESLEY MATTINGLY, P.E. DESIGNED BY HMB PROFESSIONAL ENGINEERS, INC.

P.E. NO. 71952-1544-04

PIN NO. 120463.00

ROADWAY LENGTH	0.488 MILES (BENNETT RD.)
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES
PROJECT LENGTH	0.488 MILES

TRAFFIC DATA	
ADT (2015)(BENNETT ROAD)	1790
ADT (2035)(BENNETT ROAD)	1940
DHV (2035)(BENNETT ROAD)	220
D	50 - 50
T (ADT)	11 %
T (DHV)	7 %
V (BENNETT ROAD)	45 MPH

TRAFFIC UPDATE	7/2014
ORIG. SURVEY DATE	7/2014
SURVEY UPDATE	10/2014

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	71952-3544-04	1B

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-7	08-01-12	SEDIMENT TRAP WITH CHECK DAM
EC-STR-11	08-01-12	CULVERT PROCTECTION TYPE 1
EC-STR-11A	08-01-12	CULVERT PROCTECTION TYPE 2
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-30A		INSTREAM DIVERSION (WITH TRAFFIC)
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-31	08-01-12	TEMPORARY DIVERSION CHANNEL
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-33	08-01-12	SUSPENDED PIPE DIVERSON (DOWNSTREAM)
EC-STR-33A	08-01-12	SUSPENDED PIPE DIVERSON (UPSTREAM)
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-37	06-10-14	SEDIMENT TUBE

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	71952-3544-04	2A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
(1)	201-01	CLEARING AND GRUBBING	LS	1
(2)	202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
(3)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	61435
(4)	203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	9283
	203-04	PLACING AND SPREADING TOPSOIL	C.Y.	4055
(5)	203-05	UNDERCUTTING	C.Y.	4927
(6)	203-06	WATER	M.G.	475
(7)	204-06.01	FLOWABLE FILL (GENERAL)	C.Y.	24
	204-08	FOUNDATION FILL MATERIAL	C.Y.	34
(8)	209-02.03	8" TEMPORARY SLOPE DRAIN	L.F.	31
(8)	209-05	SEDIMENT REMOVAL	C.Y.	362
(8)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	9194
(8)	209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	3345
(8)	209-08.07	ROCK CHECK DAM PER	EACH	152
(8)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	42
(8)(9)	209-09.01	SANDBAGS	BAG	2400
(8)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	1
(10)	209-09.22	POLYACRYLAMIDE POWDER	LB.	432
(8)	209-10.20	TEMPORARY SEDIMENT TRAP	C.Y.	676
(8)(9)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	133
(8)	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	106
(11)	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	12926
(8)(12)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	267
	307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	1467
	307-01.02	ASPHALT CEMENT (PG64-22) (BPMB-HM) GRADING A-S	TON	37
	307-01.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	1067
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	1522
(33)	307-01.15	ASC MIX (PG64-22) (BPMLC-HM) GRADING CS	TON	211
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	20
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	79
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	9
	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	62
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	265
	415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	700
	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	118
	604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	27131
	607-03.30	18" PIPE CULVERT	L.F.	83
	607-05.30	24" PIPE CULVERT	L.F.	127
	607-16.10	68"X 43" HORIZONTAL OVAL CONCRETE PIPE CULVERT	L.F.	47
	607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	180
	611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	8
	611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	470
	611-07.54	18IN ENDWALL (CROSS DRAIN) 3:1	EACH	4
	611-07.58	24IN ENDWALL (CROSS DRAIN) 4:1	EACH	2
	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	150
	621-03.05	36" TEMPORARY DRAINAGE PIPE	L.F.	50
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	1106
	705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	1
	705-04.05	GUARDRAIL TERMINAL (TYPE-IN-LINE)	EACH	2
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	2
(13)(34)(35)	705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	2
(8)(15)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	2545

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
(8)(16)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	400
(8)(17)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	4548
(8)(18)	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	679
(8)(19)	709-05.09	MACHINED RIP-RAP (CLASS C)	TON	95
	710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	1800
	710-05	LATERAL UNDERDRAIN	L.F.	132
	710-06.12	LATERAL UNDERDRAIN ENDWALL (3:1)	EACH	1
	710-06.13	LATERAL UNDERDRAIN ENDWALL (4:1)	EACH	8
	710-06.15	LATERAL UNDERDRAIN ENDWALL (6:1)	EACH	1
	712-01	TRAFFIC CONTROL	LS	1
(14)(34)(35)	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	1160
(14)(34)	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	100
(14)(34)	712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	58
(14)	712-05.01	WARNING LIGHTS (TYPE A)	EACH	8
(14)(34)	712-06	SIGNS (CONSTRUCTION)	S.F.	534
(14)	712-06.01	VERTICAL PANELS	S.F.	80
(14)	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	48
(14)	712-08.03	ARROW BOARD (TYPE C)	EACH	2
	712-09.01	REMOVABLE PAVEMENT MARKING LINE	L.F.	4600
	712-09.04	REMOVABLE PAVEMENT MARKING (STOP LINE)	L.F.	48
	713-11.01	"U" SECTION STEEL POSTS	LB.	293
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	353
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	93
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	72
(20)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-15.04	INSTALLATION OF LETTERS & ARROWS	LS	1
(21)	713-15.35	METAL BARRICADE (TYPE III)	EACH	4
(14)(34)	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	4
(21)	713-16.07	END OF ROADWAY SIGN AND SUPPORT	EACH	4
(22)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
(23)	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	4.92
	716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	2190
(24)	716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	167
	716-13.01	SPRAY THERMO PVMT MARKNG (60 mil) (4IN LINE)	L.M.	1.98
	717-01	MOBILIZATION	LS	1
(25)	730-40.02	TEMPORARY TRAFFIC SIGNAL SYSTEM	LS	1
(8)(26)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	7339
(8)(27)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	865
(8)	740-11.03	TEMPORARY SEDIMENT TUBE (18IN)	L.F.	12914
(10)(28)	801-01	SEEDING (WITH MULCH)	UNIT	113
(8)(10)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	351
(29)	801-02	SEEDING (WITHOUT MULCH)	UNIT	146
(16)	801-03	WATER (SEEDING & SODDING)	M.G.	118
(10)	801-07	SEED (SUPPLEMENTAL APPLICATION)	LB.	58
(10)	801-08	FERTILIZER (SUPPLEMENTAL APPLICATION)	TON	1
	802-11.12	CORNUS FLORIDA (FLOWERING DOGWOOD 2-5FT CNTNR GRWN)	EACH	6
	802-11.14	DIOSPYROS VIRGINIANA (PERSIMMON 2-5FT CNTNR GRWN)	EACH	6
	802-11.26	PLATANUS OCCIDENTALIS (SYCAMORE 2-5FT CNTNR GRWN)	EACH	5
	802-13.14	CALLICARPA AMERICANA (AMRCN BEAUTYBERRY) 2-5FT C.G.	EACH	20
(30)	803-01	SODDING (NEW SOD)	S.Y.	6000
(31)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	15985
(32)	806-02.03	PROJECT MOWING	CYCL	4

FOOTNOTES

(1) CLEARING AND GRUBBING AREA IS APPROX. 10.6 ACRES.

(2) INCLUDES REMOVAL OF 36' OF 12" CMP, 36' OF 30" CMP, 120' OF 18" RCP, ONE NO. 42 AREA DRAIN, AND EXISTING SIDE DRAINS AS INDICATED ON THE PLANS.

(3) 229 C.Y. FOR CONSTRUCTION EXITS, & 498 C.Y. FOR EARTH BERMS. SEE SPECIAL NOTES SHEET 2K.

(4) INCLUDES 297 TONS FOR FILLING STR-A & 8986 TONS FOR UNDERCUTTING ALONG BENNETT RD.

(5) SEE CROSS SECTIONS FOR LOCATIONS OF UNDERCUTTING AS DIRECTED BY THE ENGINEER.

(6) INCLUDES 19 M.G. FOR EMBANKMENT AND 456 M.G. FOR AGGREGATE BASE MATERIAL.

(7) FOR FILLING THE EXISTING 36" CMP ON BENNETT RD. AT STA. 49+78.53 AFTER CONSTRUCTION OF THE BOX CULVERT AT STA. 50+00.49 IS COMPLETE.

(8) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

(9) FOR USE WITH TEMPORARY DIVERSION CHANNEL & SANDBAG BERMS.

(10) TO BE USED AS DIRECTED BY PROJECT ENGINEER.

(11) INCLUDES 500 TONS FOR TRAFFIC CONTROL AS DIRECTED BY THE ENGINEER.

(12) INCLUDES 67 TONS FOR EPSC AND 200 TONS TO BE USED AS DIRECTED BY THE ENGINEER.

(13) THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING. PAID ONLY ONCE, RELOCATION INCLUDED.

(14) FOR TRAFFIC CONTROL; USE AS DIRECTED.

(15) INCLUDES 2295 L.F. FOR BUFFER PROTECTION AND 250 FT TO BE USED AS DIRECTED BY PROJECT ENGINEER.

(16) TO BE USED FOR EROSION PREVENTION AND SEDIMENT CONTROL.

(17) INCLUDES 4109 TONS FOR DITCHES, 356 TONS FOR EPSC, 6 TONS FOR SIDE DRAINS, 2 TONS FOR CROSS DRAINS, AND 75 TONS FOR CULVERTS.

(18) INCLUDES 429 TONS FOR DITCHES, 26 TONS FOR CROSS DRAINS, AND 224 TONS FOR RELOCATED STR-A.

(19) FOR THE CROSS DRAIN ON BENNETT RD. AT STA. 46+67.

(20) INCLUDES REMOVAL OF ANY CONFLICTING SIGN WITHIN THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER.

(21) TO BE USED AT THE INTERSECTION OF LEE SEMINARY DIVERSION & EXIST. LEE SEMINARY RD.

(22) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.

(23) 0.63 L.M. FOR SIDE ROADS, AND 4.29 L.M. FOR TEMPORARY TRAFFIC CONTROL MARKINGS.

(24) INCLUDES 48 L.F. FOR USE ON INTERMEDIATE PAVEMENT LAYERS.

(25) TO BE USED ALONG BENNETT ROAD AS DETAILED IN THE TRAFFIC CONTROL PLANS. INCLUDES PORTABLE STRUCTURE, OR WOOD POLES, GUYING DEVICES, LOOP WIRE OR OTHER VEHICLE DETECTION, SPAN WIRE, 3 SIGNAL HEADS WITH BACKPLATES, CONDUIT RISERS, CONTROLLERS AND CONTROLLER CABINET AND ANY OTHER SIGNAL EQUIPMENT REQUIRED TO HAVE A FULLY OPERATIONAL TRAFFIC SIGNAL SYSTEM. BID PRICE TO INCLUDE ELECTRICAL SERVICE CONNECTION IF NEEDED, OPERATION AND MAINTENANCE THROUGH ALL CONSTRUCTION PHASES, MOVING SIGNALS AS NEEDED, AND THE REMOVAL OF ALL TEMPORARY TRAFFIC SIGNAL SYSTEM AS DIRECTED BY THE ENGINEER.

(26) INCLUDES 1379 S.Y. FOR EPSC, 5741 S.Y. FOR RIP-RAP DITCHES, 6 S.Y. FOR RIP-RAP AT SIDE DRAIN OUTLET, 108 S.Y. FOR CROSS DRAINS, AND 105 S.Y. FOR BOX CULVERT.

(27) INCLUDES 320 S.Y. FOR FILLING EXISTING STR-A ON OLD STEWART RD., 289 S.Y. FOR FILLING EXISTING STR-A ON BENNETT RD., AND 256 S.Y. FOR RELOCATED STR-A.

(28) INCLUDES 13 UNITS FOR SCARIFIED AREAS.

(29) TO BE USED WITH EROSION CONTROL BLANKET TYPE II.

(30) 5666 SY TO BE USED ON PERMANENT SLOPES FROM STA. 38+50 TO 52+00 AND 334 SY AS DIRECTED BY THE ENGINEER.

(31) 12958 S.Y. OF ECB II FOR EPSC, AND 3027 S.Y. FOR DITCHES.

(32) SHALL INCLUDE LITTER AND DEBRIS PICK UP.

(33) TO PROTECT THE BINDER SHOULD IT BE EXPOSED FOR A LONG PERIOD OF TIME OR OVER THE WINTER MONTHS. TO BE USED AS DIRECTED BY PROJECT ENGINEER.

(34) TOTAL QUANTITY FOR ITEM INCLUDES ONLY THE MAXIMUM REQUIRED FOR ANY ONE PHASE. INCLUDES RELOCATION.

(35) 1160 LF OF PORTABLE BARRIER RAIL AND 2 ATTENUATORS SHALL BE LEFT IN PLACE AS SHOWN ON SHEET 5A. THIS PORTABLE BARRIER RAIL AND ATTENUATORS WILL BECOME THE PROPERTY OF THE CONTRACTOR AWARDED THE I-40 INTERCHANGE PROJECT @ MINE LICK CREEK RD.

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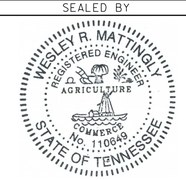


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	71952-3544-04	2L

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.

(2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.

(3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION, DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.

(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.

PAVEMENT

RESURFACING

(1) TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITIONS ONLY:

A. THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE.

B. THE SURFACE SHALL BE SWEPT AND CLEANED OF ALL LOOSE MATERIALS.

C. THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.

D. THE MILLED SURFACE SHALL BE PAVED WITHIN 48 HOURS.

E. RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.

F. ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGNS (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS.

G. IF RAVELING OR DETERIORATION OF THE MILLED SURFACE IS OCCURRING WHILE TRAFFIC IS DRIVING ON THE MILLED SURFACE, THEN THIS PRACTICE WILL NOT BE ALLOWED AND PAVING SHALL BE COMPLETED IMMEDIATELY AFTER MILLING.

H. ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

(1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 10, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

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

ECOLOGY

(1) 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.

(2) 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.

(3) 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.

STREAM RELOCATION

(1) ONCE WATER IS DIVERTED INTO A NEWLY CONSTRUCTED AND STABILIZED RELOCATED STREAM / CHANNEL THE ECOLOGY SECTION MUST BE NOTIFIED. THE STREAM NAME, STREAM NUMBER, AND DATE THE WATER WAS DIVERTED INTO THE STREAM / CHANNEL IS TO BE SUPPLIED WITH THE NOTIFICATION.

STANDARD STREAM MITIGATION

(1) IF THE RELOCATED CHANNEL FLOWS INTO A PROPOSED CULVERT, THE NEW CHANNEL SHALL BE RELOCATED PRIOR TO INSTALLATION OF THE CULVERT TO ENSURE CORRECT ELEVATION LEVELS ARE SET FOR THE INLET. THE NEW CHANNEL SHALL BE EXCAVATED AND STABILIZED DURING A LOW WATER PERIOD. RIP-RAP (ONLY AS SHOWN ON PLANS), SEEDING AND/OR SOD SHALL BE INSTALLED IMMEDIATELY FOLLOWING CHANNEL COMPLETION. TREES SHALL BE INSTALLED IN THE FIRST PLANTING SEASON FOLLOWING CHANNEL EXCAVATION. PLANTING SEASON IS CONSIDERED TO BE BETWEEN NOVEMBER 1 AND MARCH 31. WATER SHALL BE DIVERTED INTO THE NEW CHANNEL ONLY AFTER IT IS COMPLETELY STABILIZED, AND ONLY DURING A LOW WATER PERIOD. STABILIZED MEANS THAT ALL SPECIFIED ROCK, EROSION CONTROL BLANKETS, SEEDING, SOD, OR MATERIALS ARE IN PLACE AND ESTABLISHED. NOTIFY THE REGIONAL BIOLOGIST WHEN WATER IS DIVERTED INTO EACH NEW CHANNEL.

CHANNEL RELOCATION SEQUENCE

(1) FLAG EDGE OF THE NEW CHANNEL TOP OF BANK PRIOR TO CLEARING. DO NOT CLEAR LARGE TREES IN POSITION TO SHADE THE NEW CHANNEL. LEAVE AS MANY TREES AND SHRUBS AS POSSIBLE BETWEEN TOE OF THE NEW HIGHWAY SLOPE AND THE STREAM.

(2) EXCAVATE THE NEW CHANNEL "IN THE DRY" BY LEAVING AREAS OF UNDISTURBED EARTH (DIVERSION BERMS) IN PLACE AT BOTH ENDS.

(3) SHAPE CHANNEL TO SPECIFICATIONS SHOWN. REMOVE LOOSE SOILS AND DEBRIS.

(4) PLACE TOPSOIL, EROSION CONTROL BLANKET, SEED, SOD, OR OTHER MATERIAL AS SPECIFIED.

(5) REMOVE DIVERSION BERMS, BEGINNING WITH THE MOST DOWNSTREAM; BANKS AND BOTTOM ELEVATION OF THE OLD CHANNEL SHOULD TRANSITION SMOOTHLY INTO THE NEW CHANNEL. THE ELEVATIONS OF THE NEW CHANNEL BOTTOM AT EACH END OF THE RELOCATION SEQUENCE SHOULD MATCH THE ELEVATIONS OF THE EXISTING CHANNEL, AND A STEADY PERCENT SLOPE SHOULD BE MAINTAINED THROUGHOUT THE RELOCATED CHANNEL CENTERLINE OR AS SPECIFIED.

(6) INSTALL TREES ACCORDING TO STANDARD SPECIFICATIONS SECTION 802. PLANT TWO ALTERNATING ROWS OF TREE OR SHRUB SPECIES ON BOTH SIDES OF THE NEW CHANNELS; THE FIRST ROW SHALL BE SHRUBS THAT ARE PLANTED ON THE CHANNEL SLOPE 10' APART, CENTERED ON THE MIDPOINT OF THE SLOPE, BUT NOT WITHIN ONE FOOT FROM THE PROPOSED RIP-RAP. ALONG TOP OF BANK, TWO- TO FIVE-FOOT (2-5 FT) CONTAINER GROWN TREES ARE TO BE PLANTED WITHIN ONE FOOT OF THE TOP OF BANK, ALTERNATING THE IDENTIFIED SPECIES AND 10' APART. PLEASE REFER TO THE PROVIDED SKETCHES.

(7) ONLY RIP-RAP SHOWN ON PLANS SHOULD BE USED IN THE RELOCATED CHANNEL REACH. ANY OTHER PROPOSED RIP-RAP SHOULD BE COORDINATED WITH THE ENVIRONMENTAL DIVISION THROUGH THE TDOT CONSTRUCTION OFFICE.

(8) REQUESTS BY ANY AGENCY THAT WOULD REQUIRE THE MODIFICATION OF CHANNELS, ELEVATIONS, RIP-RAP OR ANY OTHER STREAM MITIGATION ITEMS ASSOCIATED WITH THE CHANNEL RELOCATIONS SHALL BE REFERRED TO THE TDOT ENVIRONMENTAL DIVISION VIA THE HEADQUARTERS CONSTRUCTION OFFICE FOR THE COORDINATION WITH ALL AGENCIES AND TDOT DIVISIONS. THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION MAY MAKE RECOMMENDATIONS CONCERNING EROSION CONTROL VIA THE ENGINEER WITHOUT SUCH REFERRAL.

TREES

(1) NO SUBSTITUTIONS OF TREE SPECIES OR SIZES SHALL BE ALLOWED WITHOUT THE WRITTEN APPROVAL OF TDOT ENVIRONMENTAL DIVISION. TREES SHALL BE THE VARIETY REQUESTED, BETWEEN 2 AND 5 FEET IN HEIGHT, CONTAINERIZED, AND FIRST QUALITY. BARE ROOT TREES SHALL BE OF THE VARIETY REQUESTED, WELL BRANCHED, AND FIRST QUALITY. BARE ROOTS MUST BE KEPT MOIST AT ALL TIMES. NO CLONES OR CULTIVARS WILL BE ACCEPTED. ANY FOUND TO BE INCORRECT SPECIES, OR IMPROPERLY PLANTED, AT ANY TIME PRIOR TO TERMINATION OF THE CONTRACT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. STAKES AND WIRES SHALL BE REMOVED IMMEDIATELY PRIOR TO CONTRACT TERMINATION, UNLESS OTHERWISE DIRECTED BY THE ENVIRONMENTAL DIVISION.

(2) THE CONTRACTOR SHOULD ARRANGE SEVERAL MONTHS AHEAD OF TIME TO OBTAIN THE CORRECT TREE SPECIES, AS SOME MAY REQUIRE SOME TIME TO LOCATE.

(3) TREES SHALL BE WATERED AS REQUIRED THROUGH THE PERIOD OF ESTABLISHMENT TO INSURE SURVIVAL.

SEEDING AND SODDING

(1) ITEM NO. 801-02.01 SHALL BE USED ON SLOPES 2.5:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.

(2) ITEM NO. 803-01, SODDING (NEW SOD) SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS AS WELL AS LOCATIONS DIRECTED BY THE ENGINEER.

SEALED BY

WESLEY R. MATTINGLY
REGISTERED ENGINEER
AGRICULTURE
NO. 110649
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

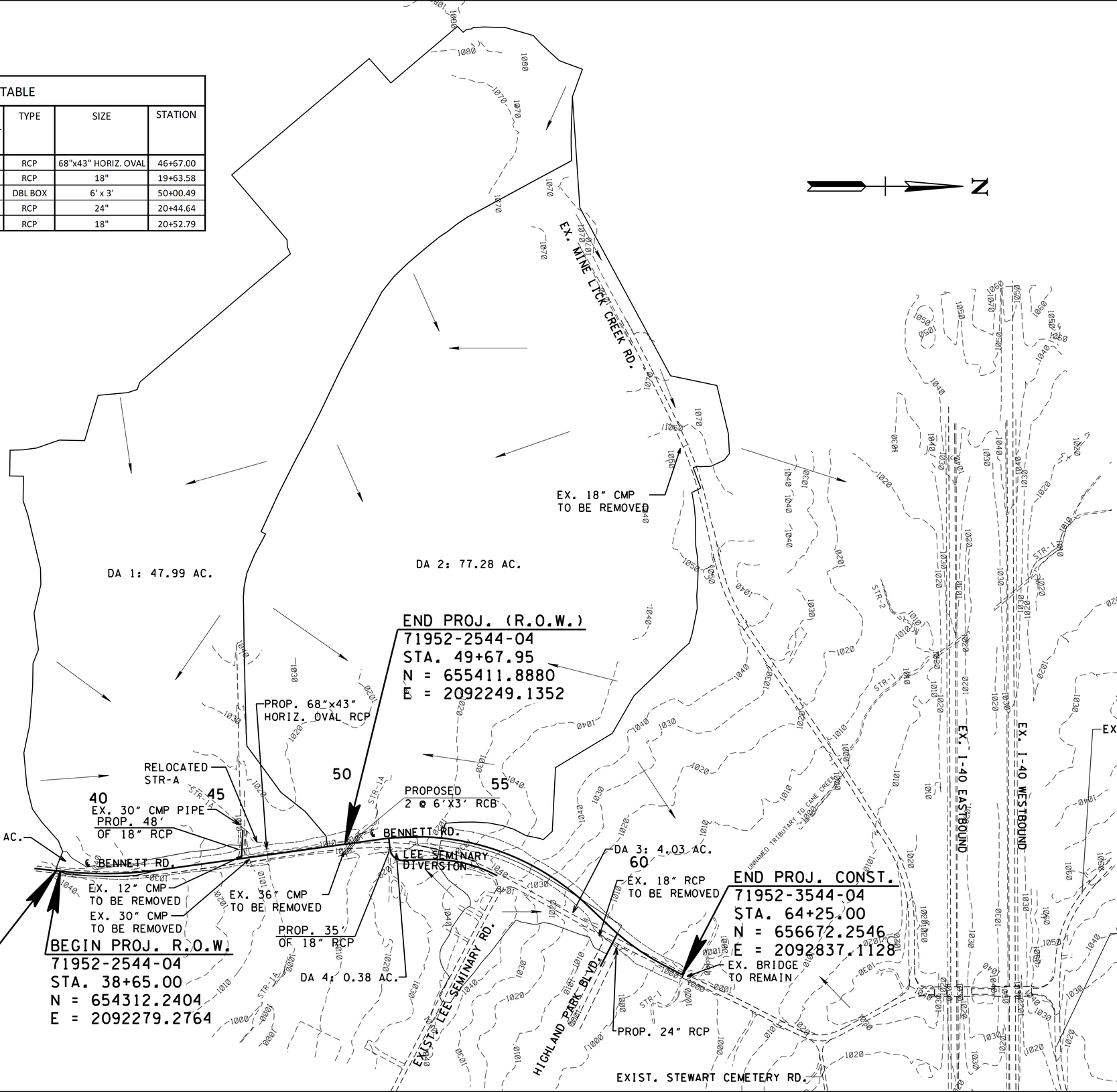
GENERAL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	8
CONST.	2015	71952-3544-04	8

DRAINAGE TABLE

DRAINAGE AREA	AREA* (Ac.)	Q_{50} (CFS)	Q_{100} (CFS)	C COEFFICIENT OF RUNOFF	TYPE	SIZE	STATION
1	62.16	152.43	167.68	0.46	RCP	68"x43" HORIZ. OVAL	46+67.00
1A	0.81	3.67	4.01	0.57	RCP	18"	19+63.58
2	74.87	142.90	160.58	0.30	DBL BOX	6' x 3'	50+00.49
3	4.03	18.30	20.08	0.51	RCP	24"	20+44.64
4	0.38	2.31	2.54	0.68	RCP	18"	20+52.79

*CULVERT'S TOTAL CUMULATIVE DRAINAGE AREA.



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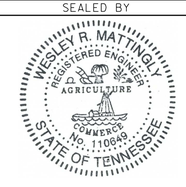


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

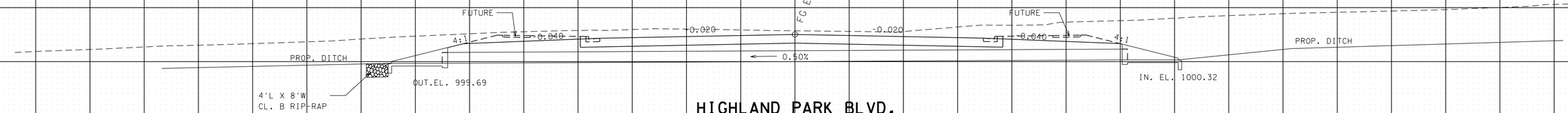
DRAINAGE MAP

STA.38+50 TO STA.64+25

SCALE: 1"=200'

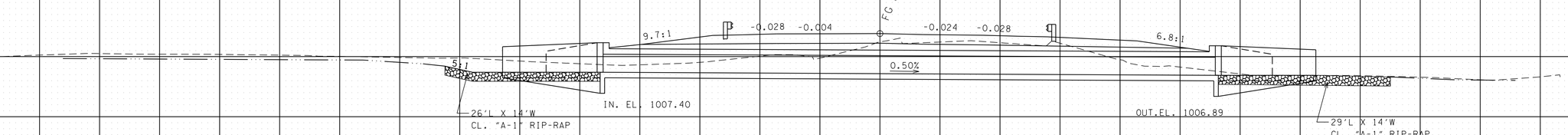
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	9
CONST.	2015	71952-3544-04	9

STATION	20+44.64
STRUCTURE	127' OF 24" RCP
SKEW	12°18'59" RT.
DRAINAGE AREA	4.03 AC.
DESIGN DISCHARGE (Q50)	18.30 CFS
DESIGN DISCHARGE (Q100)	20.08 CFS
OVERTOPPING ELEV.	1005.50
ALLOWABLE HEADWATER ELEV.	1004.50
Q50 HEADWATER ELEV.	1003.00
Q100 HEADWATER ELEV.	1003.27
VELOCITY (Q50)	7.06 FT/S
INLET ELEVATION	1000.32
OUTLET ELEVATION	999.69
INLET DRAWING NUMBERS	D-PE-24A, D-PE-24B
OUTLET DRAWING NUMBERS	D-PE-24A, D-PE-24B



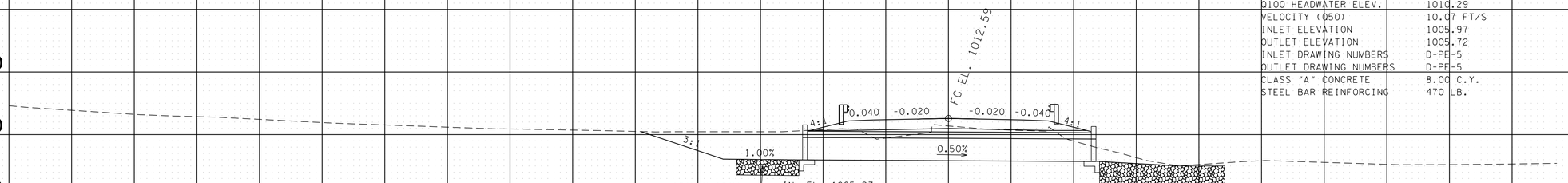
HIGHLAND PARK BLVD.
STA 20+44.64

STATION	50+00.49
STRUCTURE	102' OF 2 @ 6' X 3' CONC. BOX CULV.
SKEW	45°46'44" RT.
DRAINAGE AREA	74.87 AC.
DESIGN DISCHARGE (Q50)	140.07 CFS
DESIGN DISCHARGE (Q100)	157.60 CFS
OVERTOPPING ELEV.	1011.74
ALLOWABLE HEADWATER ELEV.	1009.66
Q50 HEADWATER ELEV.	1009.95
Q100 HEADWATER ELEV.	1010.16
VELOCITY (Q50)	8.35 FT/S
INLET ELEVATION	1007.40
OUTLET ELEVATION	1006.89
STANDARD DRAWING NUMBERS	STD-17-71
CLASS "A" CONCRETE	118 C.Y.
STEEL BAR REINFORCING	27131 LB.
FOUNDATION FILL MATERIAL	34 C.Y.



BENNETT RD.
STA 50+00.49

STATION	46+67.00
STRUCTURE	47' OF 68"X43" HORIZ. OVAL RCP
SKEW	90°00'00"
DRAINAGE AREA	62.16 AC.
DESIGN DISCHARGE (Q50)	152.43 CFS
DESIGN DISCHARGE (Q100)	167.68 CFS
OVERTOPPING ELEV.	1008.05
ALLOWABLE HEADWATER ELEV.	1009.66
Q50 HEADWATER ELEV.	1010.05
Q100 HEADWATER ELEV.	1010.29
VELOCITY (Q50)	10.07 FT/S
INLET ELEVATION	1005.97
OUTLET ELEVATION	1005.72
INLET DRAWING NUMBERS	D-PE-5
OUTLET DRAWING NUMBERS	D-PE-5
CLASS "A" CONCRETE	8.00 C.Y.
STEEL BAR REINFORCING	470 LB.



BENNETT RD.
STA 46+67.00

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CULVERT CROSS-SECTIONS

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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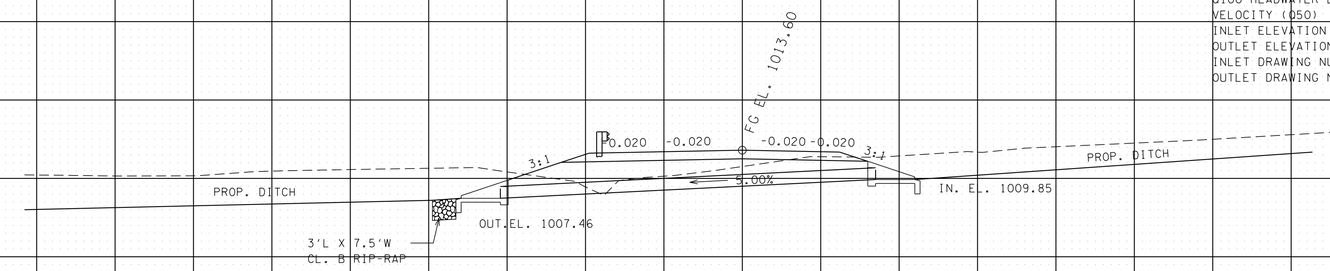
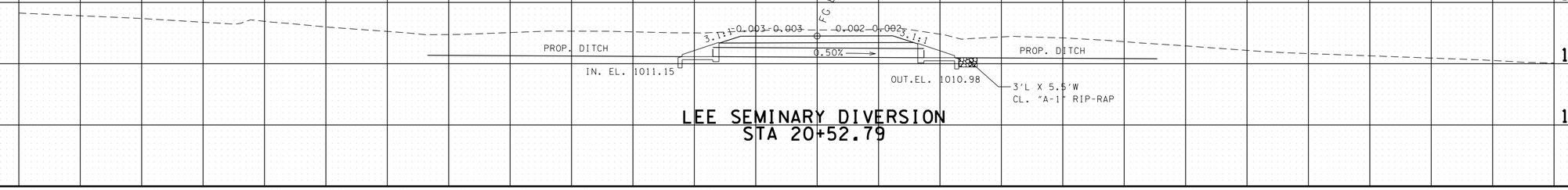
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	9A
CONST.	2015	71952-3544-04	9A

STATION	19+63.58
STRUCTURE	48' OF 18" RCP
SKEW	80°00'00" RT.
DRAINAGE AREA	0.81 AC.
DESIGN DISCHARGE (Q50)	3.67 CFS
DESIGN DISCHARGE (Q100)	4.01 CFS
OVERTOPPING ELEV.	1011.00
ALLOWABLE HEADWATER ELEV.	1011.35
Q50 HEADWATER ELEV.	1010.89
Q100 HEADWATER ELEV.	1010.95
VELOCITY (Q50)	9.71 FT/S
INLET ELEVATION	1009.85
OUTLET ELEVATION	1007.46
INLET DRAWING NUMBERS	D-PE-18A, D-PE-18B
OUTLET DRAWING NUMBERS	D-PE-18A, D-PE-18B



OLD STEWART RD.
STA 19+63.58

STATION	20+52.79
STRUCTURE	35' OF 18" RCP
SKEW	14°17'00" RT.
DRAINAGE AREA	0.38 AC.
DESIGN DISCHARGE (Q50)	2.31 CFS
DESIGN DISCHARGE (Q100)	2.54 CFS
OVERTOPPING ELEV.	1015.21
ALLOWABLE HEADWATER ELEV.	1012.50
Q50 HEADWATER ELEV.	1011.95
Q100 HEADWATER ELEV.	1012.00
VELOCITY (Q50)	3.98 FT/S
INLET ELEVATION	1011.15
OUTLET ELEVATION	1010.98
INLET DRAWING NUMBERS	D-PE-18A, D-PE-18B
OUTLET DRAWING NUMBERS	D-PE-18A, D-PE-18B



LEE SEMINARY DIVERSION
STA 20+52.79

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CULVERT CROSS-SECTIONS

SCALE: 1"=10 ' HORIZ.
1"=10' VERT.

-140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	10
CONST.	2015	71952-3544-04	10

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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.

POLYACRYLAMIDE

(1) ENSURE POLYACRYLAMIDE (PAM) EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE AND MEET THE FOLLOWING REQUIREMENTS:

(2) MEETS THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER.

(3) HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE.

(4) MIXTURE IS NON-COMBUSTIBLE.

(5) CONTAINS ONLY MANUFACTURER'S RECOMMENDED ADDITIVES.

(6) PAM SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET (MSDS) REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USES CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.

(7) ALL VENDERS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES THAT THE PAM, PAM MIX, PAM BLEND EXHIBITS 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 FOR UNDER THIS GUIDELINE DUE TO THEIR HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. PAM EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUR TO SURFACTANT TOXICITY. CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DESIGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR USE ON THIS PROJECT.

(8) 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.

(9) EMULSION BATCHES SHALL BE MIXED FOLLOWING RECOMMENDATIONS OF A 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.

(10) PAM POWDER MAY BE APPLIED BY A HAND SPREADER OR A MECHANICAL SPREADER. MIXING PAM POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.

(11) 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.

(12) 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.

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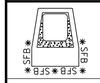
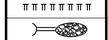
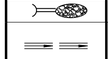
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	10A
CONST.	2015	71952-3544-04	10A

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
	SEDIMENT FILTER BAG	EC-STR-2
✱ SF ✱ SF ✱ SF ✱	SILT FENCE	EC-STR-3B
✱ SFB ✱ SFB ✱ SFB ✱	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	SEDIMENT TRAP WITH ENHANCED ROCK CHECK DAM	EC-STR-7
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY BERM	EC-STR-27
	TEMPORARY SLOPE DRAIN	EC-STR-27
	TEMPORARY DIVERSION CHANNEL (3' F.B. - A-1 RIP RAP)	EC-STR-31
	SAND BAG BERM	EC-STR-31
✱✱ TUBE ✱✱ TUBE ✱✱	SEDIMENT TUBE	EC-STR-37
✱ HVF ✱ HVF	HIGH VISIBILITY FENCE	S-F-1
	SEDIMENT TUBE INLET PROTECTION	EC-STR-37

EROSION CONTROL QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	PHASE 1 QUANTITY	PHASE 2 QUANTITY	PHASE 3 QUANTITY	TOTAL
(1)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	658		69	727
	209-02.03	8" TEMPORARY SLOPE DRAIN	L.F.			31	31
	209-05	SEDIMENT REMOVAL	C.Y.			362	362
(2)	209-08.02	TEMPORARY SILT FENCE (W/ BACKING)	L.F.	7113	2081		9194
	209-08.03	TEMPORARY SILT FENCE (W/O BACKING)	L.F.	1554	428	1363	3345
	209-08.07	ROCK CHECK DAM PER	EACH	76		76	152
(15)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	16		26	42
(3)	209-09.01	SANDBAGS	BAGS		2400		2400
	209-09.03	SEDIMENT FILTER BAGS (15' X 15')	EACH		1		1
(4)	209-09.22	POLYACRYLAMIDE POWDER	LB.			432	432
	209-10.20	TEMPORARY SEDIMENT TRAP	C.Y.			676	676
(3)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.		133		133
	209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.		106		106
(5)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	13	22	32	67
(6)	621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	150			150
	621-03.05	36" TEMPORARY DRAINAGE PIPE	L.F.		50		50
(7)	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	2295			2545
(8)	709-05.05	MACHINED RIPRAP (CLASS A-3)	TON	400			400
(9)	709-05.06	MACHINED RIPRAP (CLASS A-1)	TON	23	214	119	356
(10)	740-10.03	GEOTEXTILE TYPE III (EROSION CONTROL)	S.Y.	687	368	324	1379
	740-11.03	SEDIMENT TUBE (18")	L.F.	640	0	12274	12914
(11)	801-01	SEEDING (WITH MULCH)	UNIT			113	113
(4)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	117	117	117	351
(12)	801-02	SEEDING (WITHOUT MULCH)	UNIT			146	146
	801-03	WATER (SEEDING & SODDING)	M.G.			118	118
(4)	801-07	SEED (SUPPLEMENTAL APPLICATION)	LB.			58	58
(4)	801-08	FERTILIZER (SUPPLEMENTAL APPLICATION)	TON			1	1
(16)	803-01	SODDING (NEW SOD)	S.Y.			6000	6000
(14)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.			12958	12958

(1) 229 C.Y. FOR CONSTRUCTION EXITS, AND 498 C.Y. FOR EARTH BERMS.
(2) 102 L.F. FOR SEDIMENT FILTER BAGS.
(3) FOR USE WITH TEMPORARY DIVERSION CHANNEL & SANDBAG BERMS.
(4) TO BE USED AS DIRECTED BY PROJECT ENGINEER.
(5) 45 TONS FOR CULVERT PROTECTION AND 22 TONS FOR SEDIMENT FILTER BAGS.
(6) 150 L.F. FOR CONSTRUCTION EXITS.
(7) INCLUDES 2295 L.F. FOR BUFFER PROTECTECTION AND 250 FT TO BE USED AS DIRECTED BY PROJECT ENGINEER.
(8) FOR TEMPORARY CONSTRUCTION EXITS.
(9) 136 TON FOR CULVERT PROTECTION, 214 TONS DIVERSION CHANNELS, AND 6 TONS TEMPORARY SLOPE DRAINS.
(10) INCLUDES 589 S.Y. FOR T.C.E., 111 S.Y. FOR SED. FILTER BAGS, 257 S.Y. FOR TEMP. DIV. CHANNELS, 422 S.Y. FOR CULVERT PROTECTION.
(11) FOR USE ON SCARIFIED AREAS.
(12) TO BE USED WITH EROSION CONTROL BLANKET TYPE II.
(13) TO BE USED ON ALL SLOPES 2.5:1 OR STEEPER.
(14) TO BE USED FOR FINAL STABILIZATION OF ALL SLOPES.
(15) INCLUDES 5 EACH TO BE USED FOR SEDIMENT TRAP WITH CHECK DAM.
(16) 5666 SY TO BE USED ON PERMANENT SLOPES FROM STA. 38+50 TO 52+00 AND 334 SY AS DIRECTED BY

SEDIMENT TRAP WITH CHECK DAM

SHEET NO.	LOCATION	STATION	PHASE	LT/RT	DESCRIPTION	TEMPORARY SEDIMENT TRAP 209-10.20 (C.Y.)	MACHINED RIP-RAP (CLASS A-1) (1) (TON)	GEOTEXTILE (TYPE III) (EROSION CONTROL) (1) (S.Y.)	ENHANCED ROCK CHECK DAM (EACH) 209-08.08 (S.Y.) (2)
11B	BENNETT RD.	46+15	3	RT	34 X 17 X 4	125.9	68.4	106.3	1
11B	BENNETT RD.	49+85	3	RT	44 X 22 X 4	195.6	78.8	122.4	1
12B	BENNETT RD.	51+90	3	LT	15 X 7.5 X 2.5	17.4	14.2	41.8	1
12B	BENNETT RD.	63+50	3	RT	46 X 23 X 4	211.3	80.9	125.7	1
12B	BENNETT RD.	64+00	3	LT	34 X 17 X 4	125.9	68.4	106.3	1
TOTALS						**676**	**311**	**503**	**5**

(1) QUANTITY AND COST TO BE INCLUDED IN ITEM 209-10.20
(2) QUANTITY INCLUDED IN EROSION CONTROL QUANTITIES TAB, THIS SHEET

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DEPARTMENT OF TRANSPORTATION

EPSC QUANTITIES

DETAILS & LEGEND

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	11
CONST.	2015	71952-3544-04	11

STORM WATER OUTFALL DRAINAGE AREAS

STAGE 1

OUTFALL	AREA (AC.)	DIST. AREA (AC.)	SLOPE (FT/FT)
1	0.428	0.194	0.01
2	0.603	0.576	0.05
3	0.300	0.107	0.08
4	1.373	0.604	0.06
5	8.547	1.890	0.06
6	6.408	0.046	0.06
7	1.768	1.634	0.04
8	0.639	0.490	0.14

BEGIN PROJ. CONST.
71952-3544-04
STA. 38+50.00
N = 654297.4636
E = 2092276.6986

END PROJ. R.O.W.
71952-2544-04
STA. 49+67.95
N = 655411.8880
E = 2092249.1352

BEGIN PROJ. R.O.W.
71952-2544-04
STA. 38+65.00
N = 654312.2404
E = 2092279.2764

STA. 45+66.00 BENNETT RD. =
STA. 20+00.00 OLD STEWART RD.
N 655010.9353
E 2092277.4575

ALL SILT FENCE AND SILT FENCE WITH BACKING NOT SHOWN ALONG A CONTOUR SHALL HAVE J-HOOKS ADDED ALONG CONTOURS.

ALL SEPTIC OFF PROJECT

GASMARKER LOCATED ON WEST SIDE OF BENNETT RD. BUT NO MARKINGS WERE PLACED ON THE GROUND BY MIDDLE TENNESSEE GAS

OLD STEWART RD (ASP.)

BENNETT RD (ASP.)

LIMIT OF CONST. 18+90.00

EXIST. 30" OF 30" CMP TO REMAIN

OUT - 1 · OUT - 2 · OUT - 3 · OUT - 4 · OUT - 5 · OUT - 6 · OUT - 7

VEGETATED BUFFER ZONE · HIGH VISIBILITY FENCE

PROPOSED R.O.W. · PRES. R.O.W. · TOP OF CUT

PROP. SLOPE ESMT. · PROP. CONST. ESMT. · PROP. PERM. DRAIN. ESMT.

MATCHLINE 51+00 SEE SHT. 12

STR-A

SEALED BY

WESLEY R. MATTINGLY
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 110649
STATE OF TENNESSEE

STAGE I
CLEARING & GRUBBING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.38+50 TO STA.51+00

SCALE: 1"=50'

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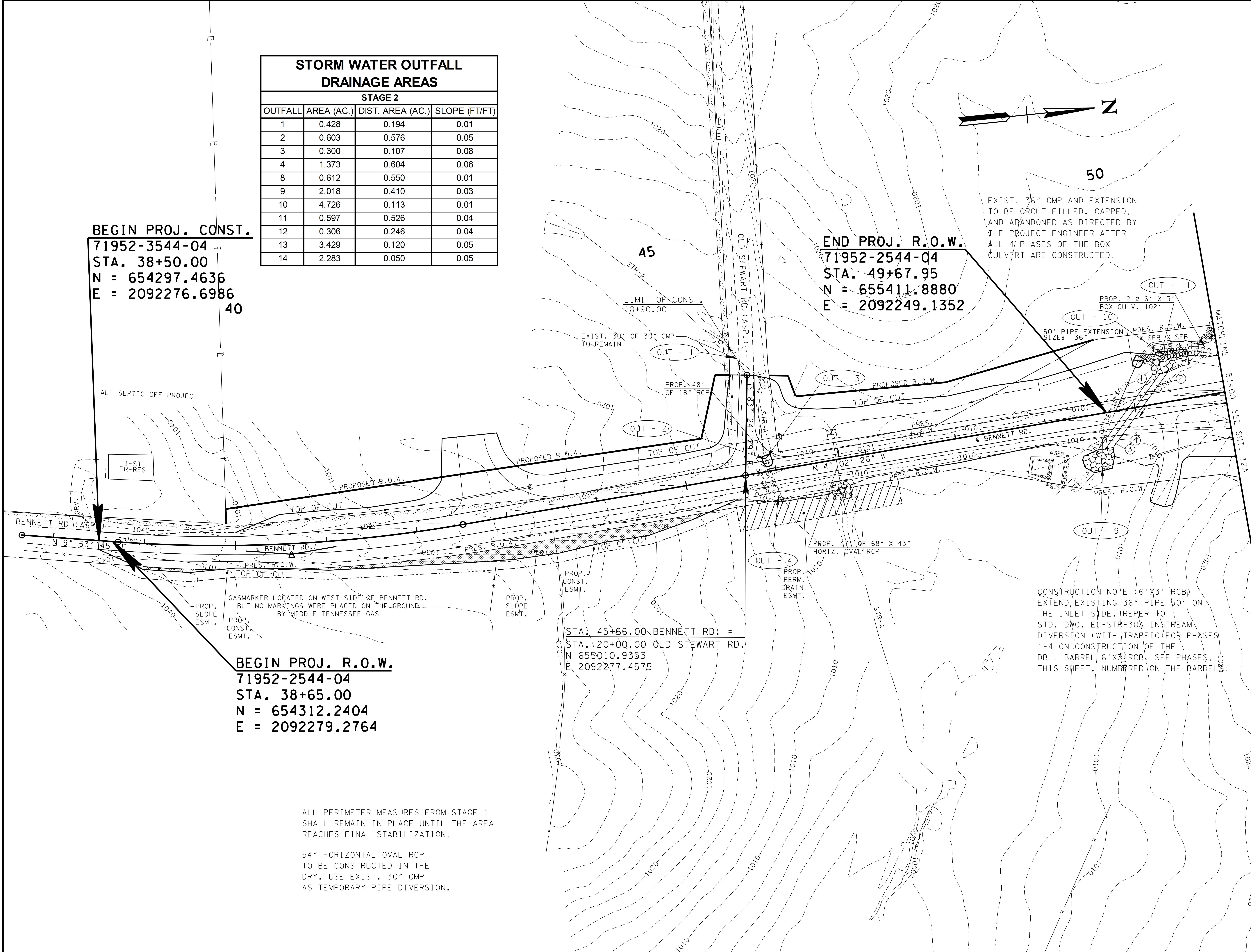
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	11A
CONST.	2015	71952-3544-04	11A

STORM WATER OUTFALL DRAINAGE AREAS

STAGE 2

OUTFALL	AREA (AC.)	DIST. AREA (AC.)	SLOPE (FT/FT)
1	0.428	0.194	0.01
2	0.603	0.576	0.05
3	0.300	0.107	0.08
4	1.373	0.604	0.06
8	0.612	0.550	0.01
9	2.018	0.410	0.03
10	4.726	0.113	0.01
11	0.597	0.526	0.04
12	0.306	0.246	0.04
13	3.429	0.120	0.05
14	2.283	0.050	0.05



BEGIN PROJ. CONST.
71952-3544-04
STA. 38+50.00
N = 654297.4636
E = 2092276.6986
40
45
50
N
ALL SEPTIC OFF PROJECT
1-ST FR-RES
BENNETT RD (ASP)
N 9° 53' 45" E
℄ BENNETT RD.
PRES. R.O.W.
TOP OF CUT
PROPOSED R.O.W.
PROP. SLOPE ESMT.
PROP. CONST. ESMT.
GASMARKER LOCATED ON WEST SIDE OF BENNETT RD. BUT NO MARKINGS WERE PLACED ON THE GROUND BY MIDDLE TENNESSEE GAS
BEGIN PROJ. R.O.W.
71952-2544-04
STA. 38+65.00
N = 654312.2404
E = 2092279.2764
LIMIT OF CONST. 18+90.00
EXIST. 30' OF 30" CMP TO REMAIN
OUT - 1
OUT - 2
OUT - 3
OUT - 4
OUT - 9
OUT - 10
OUT - 11
PROP. 48' OF 18" RCP
OLD STEWART RD. (ASP.)
S 83° 24' 29" E
N 4° 02' 26" W
STA. 45+66.00 BENNETT RD. =
STA. 20+00.00 OLD STEWART RD.
N 655010.9353
E 2092277.4575
PROP. 47' OF 68" X 43" HORIZ. OVAL RCP
PROP. PERM. DRAIN. ESMT.
END PROJ. R.O.W.
71952-2544-04
STA. 49+67.95
N = 655411.8880
E = 2092249.1352
EXIST. 36" CMP AND EXTENSION TO BE GROUT FILLED, CAPPED, AND ABANDONED AS DIRECTED BY THE PROJECT ENGINEER AFTER ALL 4 PHASES OF THE BOX CULVERT ARE CONSTRUCTED.
PROP. 2 @ 6' X 3' BOX CULV. 102'
50' PIPE EXTENSION SIZE: 36"
PRES. R.O.W.
SFB
STR-A
MATCHLINE 51+00 SEE SHT. 12A
CONSTRUCTION NOTE (6'X3' RCB) EXTEND EXISTING 36" PIPE 50' ON THE INLET SIDE. REFER TO STD. DWG. EC-STR-30A INSTREAM DIVERSION (WITH TRAFFIC) FOR PHASES 1-4 ON CONSTRUCTION OF THE DBL. BARREL 6'X3' RCB. SEE PHASES, THIS SHEET, NUMBERED ON THE BARRELS.
1010
1020
1030
1040

ALL PERIMETER MEASURES FROM STAGE 1 SHALL REMAIN IN PLACE UNTIL THE AREA REACHES FINAL STABILIZATION.

54" HORIZONTAL OVAL RCP TO BE CONSTRUCTED IN THE DRY. USE EXIST. 30" CMP AS TEMPORARY PIPE DIVERSION.

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WESLEY R. MATTINGLY
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110649
STATE OF TENNESSEE

STAGE 2
INTERMEDIATE GRADING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.38+50 TO STA.51+00

SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	11B
CONST.	2015	71952-3544-04	11B

STORM WATER OUTFALL DRAINAGE AREAS

STAGE 3

OUTFALL	AREA (AC.)	DIST. AREA (AC.)	SLOPE (FT/FT)
1	0.428	0.194	0.01
8	3.232	2.470	0.01
9	2.535	0.550	0.03
10	4.731	0.0946	0.01
11	0.326	0.2396	0.04
12	1.520	1.211	0.04
13	3.340	0.130	0.05
14	2.3003	0.08	0.05
15	0.957	0.878	0.03
16	0.723	0.359	0.01
17	1.757	0.783	0.06

BEGIN PROJ. CONST.
71952-3544-04
STA. 38+50.00
N = 654297.4636
E = 2092276.6986

BEGIN PROJ. R.O.W.
71952-2544-04
STA. 38+65.00
N = 654312.2404
E = 2092279.2764

END PROJ. R.O.W.
71952-2544-04
STA. 49+67.95
N = 655411.8880
E = 2092249.1352

STA. 45+66.00 BENNETT RD. =
STA. 20+00.00 OLD STEWART RD.
N 655010.9353
E 2092277.4575

ITEM NO. 803-01 SODDING (NEW SOD) SHALL BE PLACED WITHIN THE SLOPE LIMITS BETWEEN STA. 38+50 TO STA. 52+00.

ITEM NO. 801-02 SEEDING (WITHOUT MULCH) & ITEM NO. 805-12.02 EROSION CONTROL BLANKET (TYPE II) SHALL BE PLACED WITHIN THE SLOPE LIMITS BETWEEN STA. 52+00 TO STA. 64+25.

ALL PERIMETER MEASURES FROM STAGE 1 SHALL REMAIN IN PLACE UNTIL THE AREA REACHES FINAL STABILIZATION.

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DEPT. OF COMMERCE
No. 110649
STATE OF TENNESSEE

STAGE 3
FINAL STABILIZATION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL
PROPOSED CONTOURS

STA.38+50 TO STA.51+00
SCALE: 1"= 50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	12
CONST.	2015	71952-3544-04	12

ALL SILT FENCE AND SILT FENCE WITH BACKING NOT SHOWN ALONG A CONTOUR SHALL HAVE J-HOOKS ADDED ALONG CONTOURS.

STA. 51+38.00 BENNETT RD. =
STA. 20+00.00 LEE SEMINARY DIVERSION
N 655581.5396
E 2092237.5238

STA. 61+28.85 BENNETT RD. =
STA. 20+00.00 HIGHLAND PARK BLVD.
N 656434.1854
E 2092662.4958

END PROJ. CONST.
71952-3544-04
STA. 64+25.00
N = 656672.2546
E = 2092837.1128

VEGETATED BUFFER ZONE
HIGH VISIBILITY FENCE
MATCHLINE 51+00 SEE SHT. 11
EXISTING BENNETT RD.
PRES. R.O.W.
TVA POWER LINE ESMT. (75.0')
℄ BENNETT RD.
℄ LEE SEMINARY DIVERSION
EXIST. CONST. ESMT
TOP OF CUT
LIMIT OF CONST. 24+85.00
EXISTING LEE SEMINARY RD.
1 F RES
LIMIT OF CONST. 20+65.98
OUT - 8
EXISTING BRIDGE 21' X 30' CONC. AND STEEL BEAM. SKEW 0°
TRIBUTARY TO CANE CREEK
55
60
N 1° 38' 23" E
N 20° 23' 21" E
N 47° 30' 46" E
S 58° 43' 11" E
N 37° 03' 38" E

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DEPARTMENT OF AGRICULTURE
WMR&S
No. 110649
STATE OF TENNESSEE

STAGE I
CLEARING & GRUBBING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.51+00 TO STA.64+25
SCALE: 1"=50'

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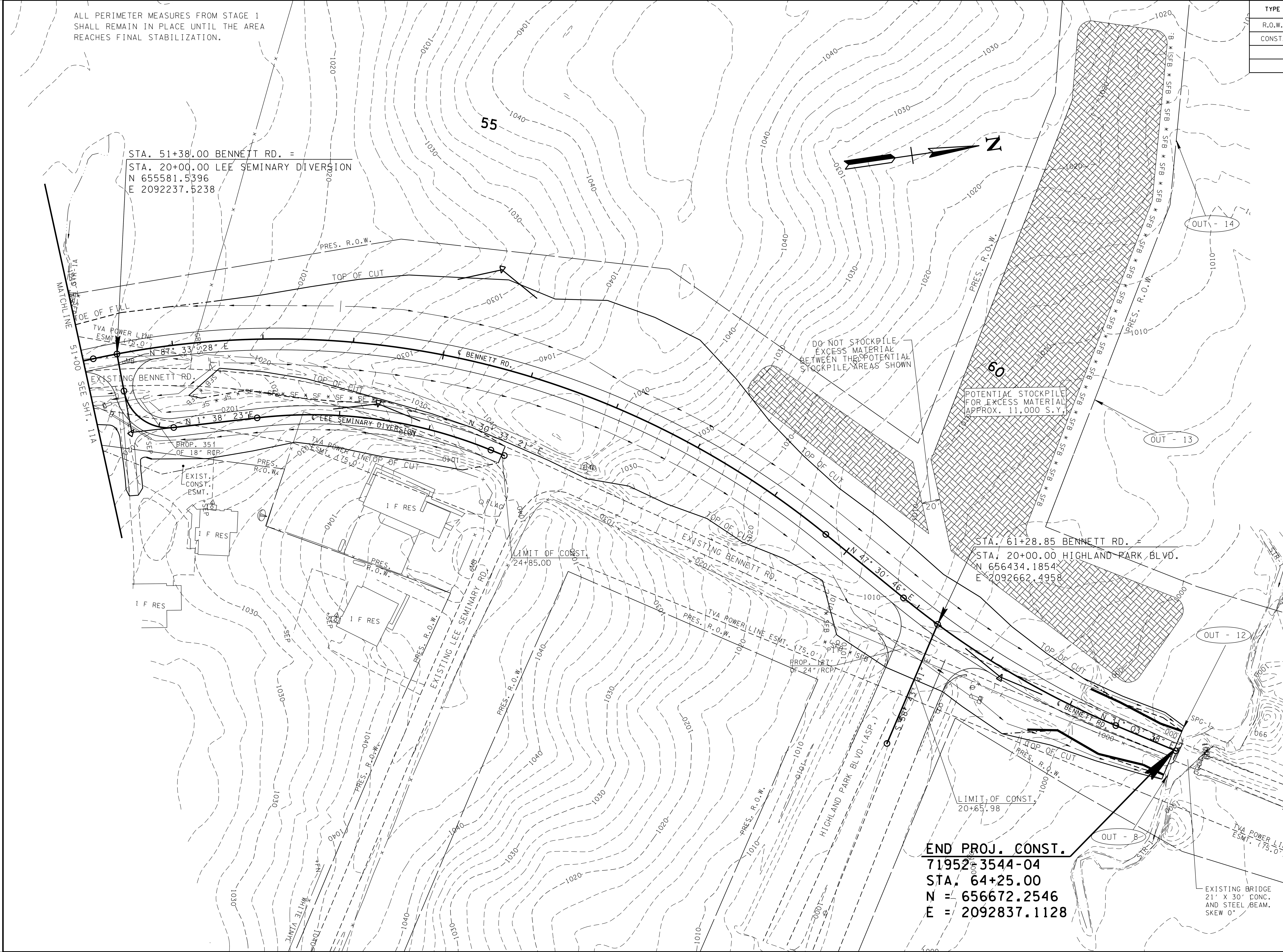
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	12A
CONST.	2015	71952-3544-04	12A


ALL PERIMETER MEASURES FROM STAGE 1 SHALL REMAIN IN PLACE UNTIL THE AREA REACHES FINAL STABILIZATION.
STA. 51+38.00 BENNETT RD. =
STA. 20+00.00 LEE SEMINARY DIVERSION
N 655581.5396
E 2092237.5238
MATCHLINE 51+00 SEE SHT. 11A
TOP OF CUT
TOE OF FILL
PRES. R.O.W.
TVA POWER LINE ESMT. (75.0')
N 87° 33' 28" E
EXISTING BENNETT RD.
N 1° 38' 23" E
LEE SEMINARY DIVERSION
N 30° 33' 21" E
BENNETT RD.
PROP. 35' OF 18" RCP
EXIST. CONST. ESMT.
I F RES
LIMIT OF CONST. 24+85.00
EXISTING LEE SEMINARY RD.
DO NOT STOCKPILE EXCESS MATERIAL BETWEEN THE POTENTIAL STOCKPILE AREAS SHOWN
POTENTIAL STOCKPILE FOR EXCESS MATERIAL APPROX. 11,000 S.Y.
OUT - 14
OUT - 13
OUT - 12
OUT - 8
55
60
N 47° 30' 46" E
STA. 61+28.85 BENNETT RD. =
STA. 20+00.00 HIGHLAND PARK BLVD.
N 656434.1854
E 2092662.4958
PROP. 127' OF 24" RCP
HIGHLAND PARK BLVD. (ASP.)
TRIBUTARY TO CANE CREEK
LIMIT OF CONST. 20+65.98
END PROJ. CONST.
71952-3544-04
STA. 64+25.00
N = 656672.2546
E = 2092837.1128
EXISTING BRIDGE 21' X 30' CONC. AND STEEL BEAM. SKEW 0°
WHITE VINYL

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WESLEY R. MATTINGLY
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 110649
STATE OF TENNESSEE

STAGE 2
INTERMEDIATE GRADING

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.51+00 TO STA.64+25
SCALE: 1"=50'

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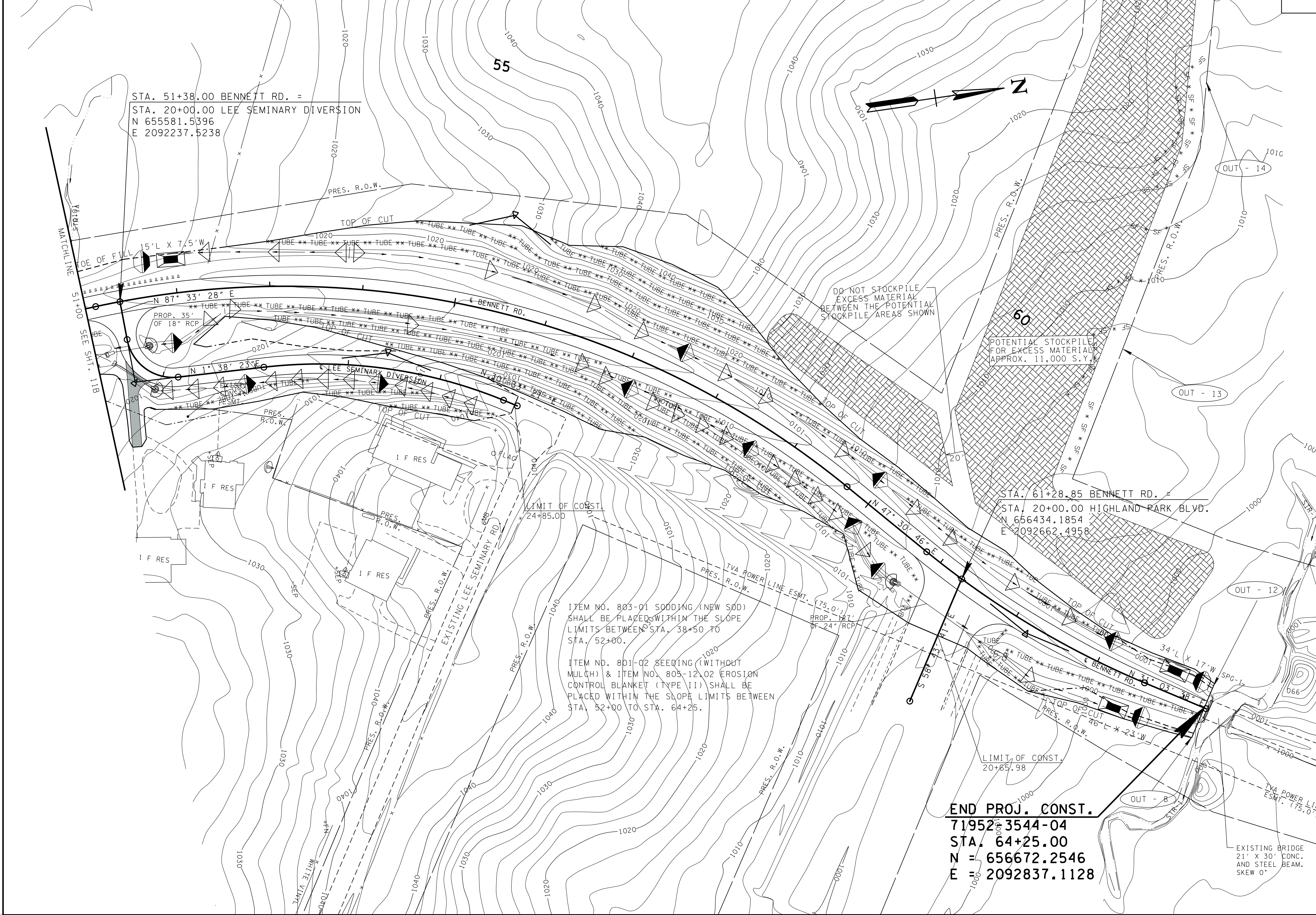
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	71952-2544-04	12B
CONST.	2015	71952-3544-04	12B

ALL PERIMETER MEASURES FROM STAGE 1 SHALL REMAIN IN PLACE UNTIL THE AREA REACHES FINAL STABILIZATION.



ITEM NO. 803-01 SODDING (NEW SOD) SHALL BE PLACED WITHIN THE SLOPE LIMITS BETWEEN STA. 38+50 TO STA. 52+00.

ITEM NO. 801-02 SEEDING (WITHOUT MULCH) & ITEM NO. 805-12.02 EROSION CONTROL BLANKET (TYPE II) SHALL BE PLACED WITHIN THE SLOPE LIMITS BETWEEN STA. 52+00 TO STA. 64+25.

END PROJ. CONST.
71952-3544-04
STA. 64+25.00
N = 656672.2546
E = 2092837.1128

SEALED BY
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STAGE 3
FINAL STABILIZATION

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PROPOSED CONTOURS

STA.51+00 TO STA.64+25
SCALE: 1"= 50'

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