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

January 9, 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 # 26150-1201-14, PIN 105769.00
Construct SR-50 in Winchester to SR-15
Franklin 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).

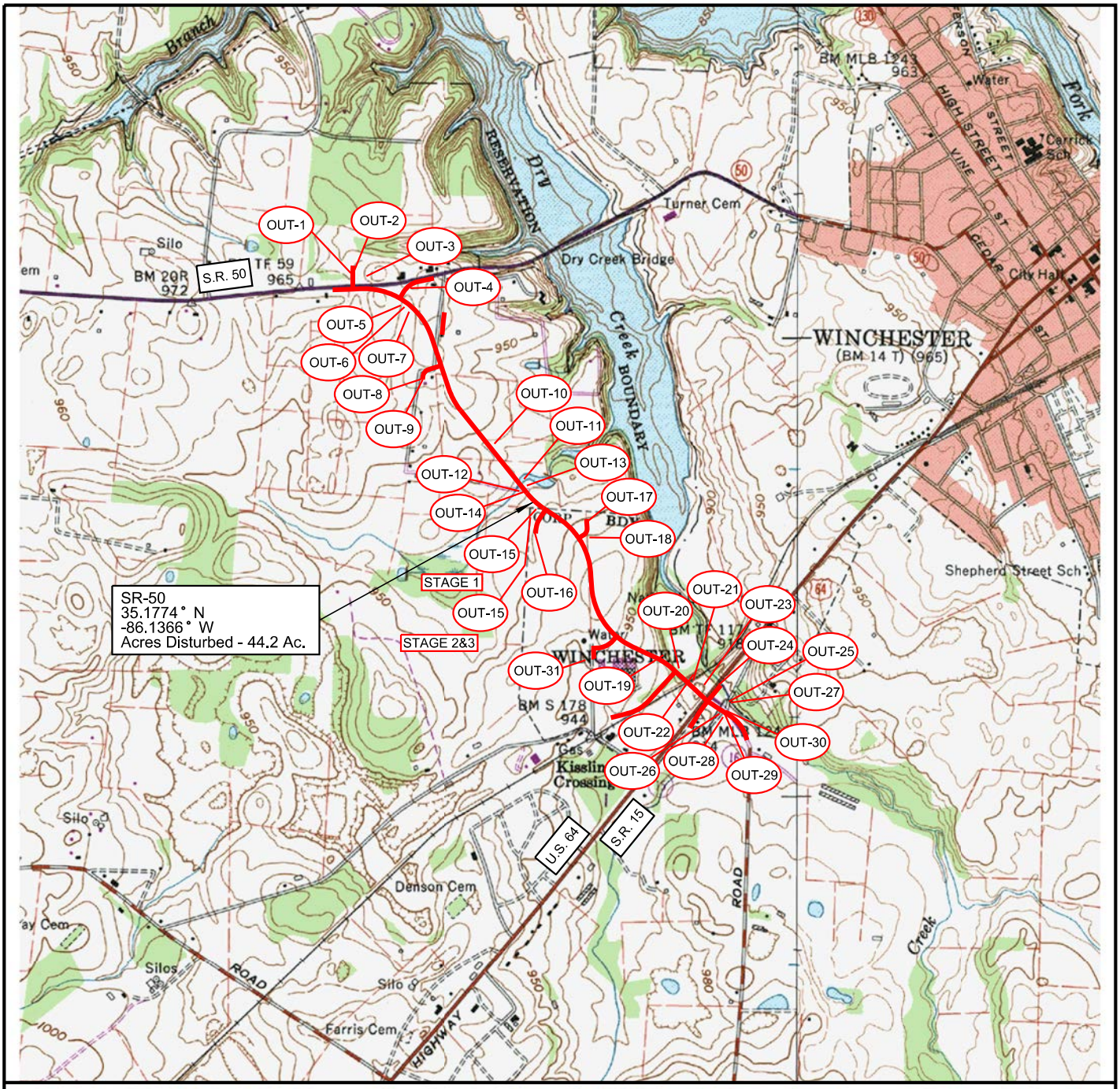
Please forward our office the Notice of Coverage (NOC) for this project as soon as it becomes available. Please contact me at (615)253-2545 if I can be of any assistance.

Sincerely,

Andrew Wisniewski
Environmental Permits Section

Enclosures

APW:
Enclosures for:
cc: Mr. Ken Flynn, Region 2 Construction (CD)
Reading File, NPDES File



TOPOGRAPHIC MAP

N

OUT-1 Approximate Outfall Location

0 2000 4000

SCALE FEET

SOURCE: USGS Quad Map, U.S. Geological Survey 7.5 Minute Topographic Map, Winchester (87 NE), Belvidere (87 NW) Tennessee Quadrangles

TDOT

Tennessee Department of Transportation

Nashville, Tennessee

Stormwater Pollution Prevention Plan

SR-50

SR-50 in Winchester to SR-15 (US-64)

Franklin County, Tennessee

Drawn By:	Checked By:
DAH	JBL
TDOT P.E. No.	TDOT PIN
26150-3201-14	105769.00
FED. No.	Figure
STP-50(31)	1

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-50(31)	S-1
P.E.	2014	26150-1201-14	

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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: SR-50 IN WINCHESTER TO SR-15 (US-64)
COUNTY: FRANKLIN
PIN: 105769.00
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) 18-18G, DRAINAGE MAP SHEET(S) 15, 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): 45.8 ACRES
2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 44.2 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: 2M. TREES GREATER THAN 5" SHALL NOT BE CUT FROM MARCH 31 THROUGH OCTOBER 15. NO DISTURBANCE OF CLIFF SWALLOW AND BARN SWALLOW NESTS, EGGS, OR BIRDS IS PERMITTED DURING APRIL 15 THROUGH JULY 31.
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)
Bh - BAXTER CHERTY SILT LOAM	B	5	0.28
Du - DEWEY SILTY CLAY	B	2	0.28
Dw - DEWEY SILTY CLAY LOAM	B	29	0.28
Dx - DEWEY SILTY CLAY LOAM	B	9	0.28
Dz - DICKSON SILT LOAM	C	1	0.43
Ec - EMORY SILT LOAM	B	6	0.37
Gd - GUTHRIE SILT LOAM	D	1	0.43
Lb - LINDSIDE FINE SANDY LOAM	C	11	0.28
Lc - LINDSIDE SILT LOAM	C	1	0.43
Mg - MOUNTVIEW SILT LOAM	B	25	0.43
Mh - MOUNTVIEW SILT LOAM	B	7	0.43
Oa - OOLTEWAH SILT LOAM	B	2	0.32
Sa - SEQUATCHIE FINE SANDY LOAM	B	1	0.32

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	5.1	11	98	
PERVIOUS (GRASS, FORESTS, ETC.)	40.7	89	62	
WEIGHTED CURVE NUMBER =			66	

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS

AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	13.2	29	98	
PERVIOUS (GRASS, FORESTS, ETC.)	32.6	71	71	
WEIGHTED CURVE NUMBER =			79	

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

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS 2K)
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.)
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 ☐

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-50(31)	S-2
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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 TRIB. TO DRY CREEK	NO	NO	YES	
STR-2	UNNAMED TRIB. TO DRY CREEK	YES	NO	NO	YES

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) 17

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)
WTL-1	19+90 LT	21+20 RT	0.045	0.213

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. 17ZC

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 SHEETS 2-2A 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 SHEETS 2-2A (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 S-5. 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").

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).

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN

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

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CONST.	2014	STP-50(31)	S-3
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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): RIP-RAP USED FOR OUTLET PROTECTION AND SIDE SLOPE STABILIZATION.

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

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ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL PH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING, AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

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,

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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;

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

01-14-2015
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

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	STP-50(31)	S-6
P.E.	2014	26150-1201-14	

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
1-3	OUT-1		601+00 RT COUTTA CIRCLE	3.63	0.20	0.20	0.20			
1-3	OUT-2		601+00 LT COUTTA CIRCLE	1.63	0.20	0.20	0.20			
1-3	OUT-3		14+50 LT	1.90	5.00	5.00	5.00			
1,3	OUT-4		203+45 LT OLD S.R. 50	1.50	0.05		0.05		WTL-1	
1-3	OUT-5		19+95 RT	5.00	1.19	1.19	1.19		WTL-1	
2	OUT-6		20+50 RT	3.33		6.00			WTL-1	
1-3	OUT-7		21+40 RT	2.46	0.65	0.65	0.65		WTL-1	
2,3	OUT-8		303+37 RT DRY CREEK ROAD	2.00		0.05	0.05			
2,3	OUT-9		303+37 LT DRY CREEK ROAD	2.00		0.15	0.15			
1	OUT-10		42+75 LT	8.42	1.58					
1-3	OUT-11		49+00 LT	2.46	1.00	1.00	1.00		PND-1	
2,3	OUT-12		49+55 LT	9.00		3.60	3.60		PND-1	
1-3	OUT-13		49+80 LT	0.95	0.63	0.63	0.63		PND-1	
1-3	OUT-14		50+25 RT	8.69	0.44	0.44	0.44		STR-1	
1	OUT-15		53+00 RT	4.00	2.01					
2-3	OUT-15		502+00 RT WILTON CIRCLE 1	4.00		2.01	2.01			
2,3	OUT-16		503+25 RT WILTON CIRCLE 1	3.33		0.05	0.05			
1,2	OUT-17		206+00 RT WILTON CIRCLE 2	3.63	0.63	0.14				
1-3	OUT-18		207+40 LT WILTON CIRCLE 2	2.17	1.30	1.30	1.30			
1-3	OUT-19		80+65 LT	3.74	7.42	7.42	7.42			
1	OUT-20		83+25 LT	6.00	2.50					
3	OUT-21		85+80 LT	13.00			0.08			
1	OUT-22		85+25 LT	3.44	6.88				WWC-2	
1-3	OUT-23		87+25 LT	3.40	9.50	9.50	9.50		DRY CREEK	
1	OUT-24		700+20 RT DAVID CROCKETT HWY	25.00	0.02				DRY CREEK	
1-3	OUT-25		10+40 RT S.R. 16	8.00	0.20	0.20	0.20		STR-2	
2,3	OUT-26		10+50 LT S.R. 16	8.00		0.05	0.05		STR-2	
1-3	OUT-27		10+10 RT S.R. 16	13.00	0.06	0.06	0.06		STR-2	
1-3	OUT-28		10+00 LT S.R. 16	2.20	0.25	0.25	0.25		STR-2	
2,3	OUT-29		10+10 LT S.R. 16	2.00		0.07	0.07		STR-2	
2,3	OUT-30		10+10 RT S.T. 16	2.00		0.07	0.07		STR-2	

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
1-3	OUT-31		105+00 RT WILTON CIRCLE 3	3.08	3.58	3.58	3.58			

* 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

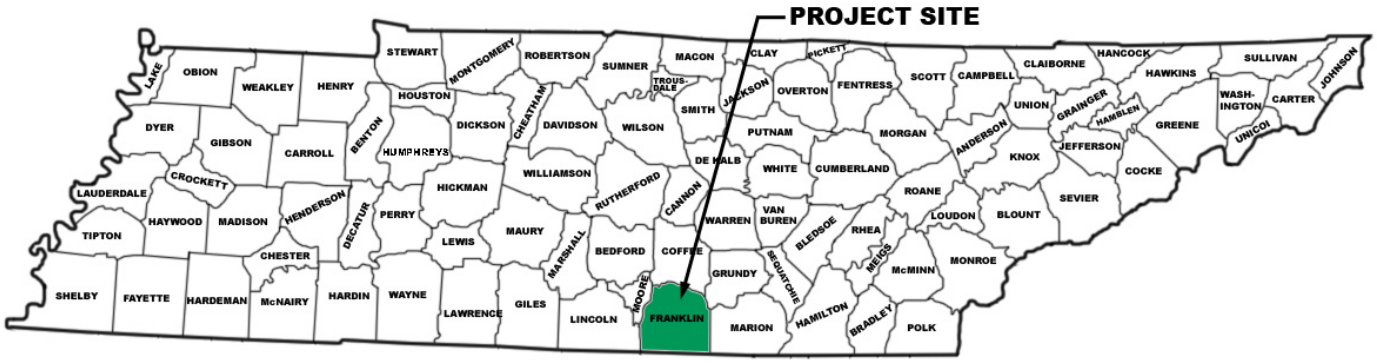
Documentation and Permits Binder

Project Name: SR-50 in Winchester to SR-15 (US-64)

Project No.: 26150-1201-14; STP-50(31)

PIN: 105769.00

Franklin County, Tennessee



Prepared for:
Tennessee Department of Transportation – TDOT

Prepared by:
Palmer Engineering Company

Consultant Reference No.: 10658.33

Content Checklist

DOCUMENTS AND PERMITS BINDER

CHECKLIST

PROJECT NAME: SR-50 IN WINCHESTER TO SR-15 (US-64)
PIN: 105769.00
PROJECT NO. : 26150-1201-14; STP-50(31)
COUNTY: FRANKLIN

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

1. Index of Revisions

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

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

2. Rainfall Record Sheets

State Route (SR) / US Route or Road Name:_____TDOT Construction No.:_____ TDOT Contract No.: _____

TDOT EPSC Inspection Monthly Rainfall Data Log

Month _____ **Year**_____

Date	Day of Week[1]	Predicted Precipitation (%)[2]	Rainfall Gage 1 (in)	Rainfall Gage 2 (in)	Rainfall Gage 3 (in)	Rainfall Gage 4 (in)	Rainfall Gage 5 (in)	Duration (hr)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

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

[2] Predicted Precipitation Source: _____

NOAA Atlas 14, Volume 2, Version 3
Location name: Winchester, Tennessee, US*
Latitude: 35.1774°, Longitude: -86.1366°
Elevation: 934 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	0.409 (0.374-0.451)	0.483 (0.442-0.533)	0.572 (0.522-0.630)	0.646 (0.588-0.710)	0.750 (0.677-0.822)	0.833 (0.749-0.911)	0.922 (0.823-1.01)	1.01 (0.897-1.11)	1.14 (0.997-1.25)	1.25 (1.08-1.37)
10-min	0.653 (0.597-0.721)	0.773 (0.706-0.853)	0.916 (0.836-1.01)	1.03 (0.940-1.14)	1.20 (1.08-1.31)	1.33 (1.19-1.45)	1.47 (1.31-1.60)	1.61 (1.42-1.75)	1.81 (1.58-1.97)	1.97 (1.70-2.15)
15-min	0.817 (0.746-0.901)	0.972 (0.888-1.07)	1.16 (1.06-1.28)	1.31 (1.19-1.44)	1.51 (1.37-1.66)	1.68 (1.51-1.84)	1.85 (1.65-2.02)	2.03 (1.79-2.21)	2.28 (1.99-2.49)	2.47 (2.13-2.70)
30-min	1.12 (1.02-1.24)	1.34 (1.23-1.48)	1.65 (1.50-1.81)	1.90 (1.72-2.08)	2.24 (2.03-2.46)	2.53 (2.27-2.77)	2.84 (2.53-3.10)	3.16 (2.79-3.45)	3.62 (3.16-3.95)	4.01 (3.45-4.37)
60-min	1.40 (1.28-1.54)	1.68 (1.54-1.86)	2.11 (1.93-2.33)	2.47 (2.24-2.71)	2.99 (2.70-3.28)	3.43 (3.08-3.75)	3.91 (3.49-4.27)	4.43 (3.92-4.83)	5.20 (4.53-5.67)	5.85 (5.03-6.39)
2-hr	1.64 (1.49-1.81)	1.97 (1.80-2.18)	2.47 (2.25-2.72)	2.89 (2.62-3.18)	3.51 (3.16-3.85)	4.04 (3.62-4.43)	4.62 (4.10-5.05)	5.26 (4.62-5.74)	6.21 (5.38-6.77)	7.02 (6.00-7.66)
3-hr	1.77 (1.62-1.95)	2.14 (1.95-2.35)	2.65 (2.42-2.92)	3.09 (2.81-3.39)	3.74 (3.38-4.09)	4.28 (3.84-4.68)	4.87 (4.34-5.31)	5.52 (4.87-6.02)	6.47 (5.64-7.06)	7.28 (6.26-7.94)
6-hr	2.20 (2.02-2.42)	2.63 (2.41-2.89)	3.23 (2.95-3.54)	3.73 (3.40-4.10)	4.47 (4.04-4.89)	5.08 (4.58-5.55)	5.75 (5.14-6.27)	6.46 (5.73-7.04)	7.50 (6.57-8.19)	8.37 (7.25-9.14)
12-hr	2.70 (2.46-2.96)	3.22 (2.93-3.54)	3.93 (3.58-4.31)	4.53 (4.12-4.96)	5.38 (4.86-5.88)	6.08 (5.47-6.64)	6.83 (6.11-7.46)	7.63 (6.78-8.33)	8.77 (7.70-9.59)	9.71 (8.44-10.6)
24-hr	3.28 (3.03-3.56)	3.93 (3.63-4.26)	4.78 (4.42-5.18)	5.46 (5.03-5.91)	6.39 (5.87-6.90)	7.12 (6.53-7.68)	7.88 (7.20-8.49)	8.65 (7.87-9.31)	9.70 (8.78-10.5)	10.5 (9.48-11.4)
2-day	3.92 (3.64-4.23)	4.70 (4.35-5.07)	5.72 (5.30-6.17)	6.53 (6.05-7.04)	7.63 (7.04-8.21)	8.50 (7.83-9.13)	9.39 (8.62-10.1)	10.3 (9.42-11.0)	11.5 (10.5-12.4)	12.5 (11.3-13.4)
3-day	4.17 (3.89-4.48)	4.99 (4.66-5.36)	6.06 (5.65-6.50)	6.89 (6.41-7.38)	7.99 (7.42-8.56)	8.85 (8.21-9.47)	9.71 (8.98-10.4)	10.6 (9.76-11.3)	11.7 (10.8-12.6)	12.6 (11.5-13.5)
4-day	4.43 (4.15-4.73)	5.29 (4.96-5.66)	6.40 (5.99-6.84)	7.24 (6.78-7.73)	8.35 (7.81-8.91)	9.20 (8.59-9.81)	10.0 (9.35-10.7)	10.9 (10.1-11.6)	11.9 (11.1-12.7)	12.8 (11.8-13.6)
7-day	5.26 (4.95-5.59)	6.27 (5.90-6.68)	7.51 (7.07-8.00)	8.44 (7.93-8.98)	9.64 (9.05-10.3)	10.6 (9.88-11.2)	11.4 (10.7-12.1)	12.3 (11.5-13.1)	13.4 (12.5-14.2)	14.2 (13.2-15.1)
10-day	5.98 (5.64-6.34)	7.10 (6.69-7.53)	8.44 (7.94-8.94)	9.45 (8.89-10.0)	10.8 (10.1-11.4)	11.8 (11.0-12.5)	12.8 (11.9-13.5)	13.7 (12.8-14.5)	15.0 (13.9-15.9)	15.9 (14.7-16.9)
20-day	8.22 (7.79-8.67)	9.70 (9.20-10.2)	11.3 (10.7-11.9)	12.4 (11.7-13.1)	13.8 (13.1-14.6)	14.8 (14.0-15.6)	15.8 (14.9-16.6)	16.6 (15.7-17.5)	17.7 (16.7-18.7)	18.5 (17.3-19.5)
30-day	10.1 (9.65-10.6)	11.9 (11.3-12.5)	13.6 (13.0-14.3)	14.9 (14.1-15.6)	16.4 (15.5-17.1)	17.4 (16.5-18.3)	18.4 (17.5-19.3)	19.3 (18.3-20.2)	20.3 (19.2-21.3)	21.0 (19.9-22.1)
45-day	12.7 (12.2-13.3)	14.9 (14.2-15.6)	16.9 (16.1-17.7)	18.3 (17.5-19.2)	20.0 (19.1-21.0)	21.3 (20.3-22.2)	22.4 (21.3-23.4)	23.4 (22.2-24.4)	24.5 (23.3-25.7)	25.3 (24.1-26.5)
60-day	15.4 (14.7-16.1)	18.0 (17.2-18.8)	20.3 (19.4-21.3)	22.0 (21.0-23.0)	23.9 (22.8-25.1)	25.3 (24.2-26.6)	26.6 (25.3-27.9)	27.7 (26.4-29.0)	29.0 (27.6-30.4)	29.9 (28.4-31.4)

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

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

Please refer to NOAA Atlas 14 document for more information.

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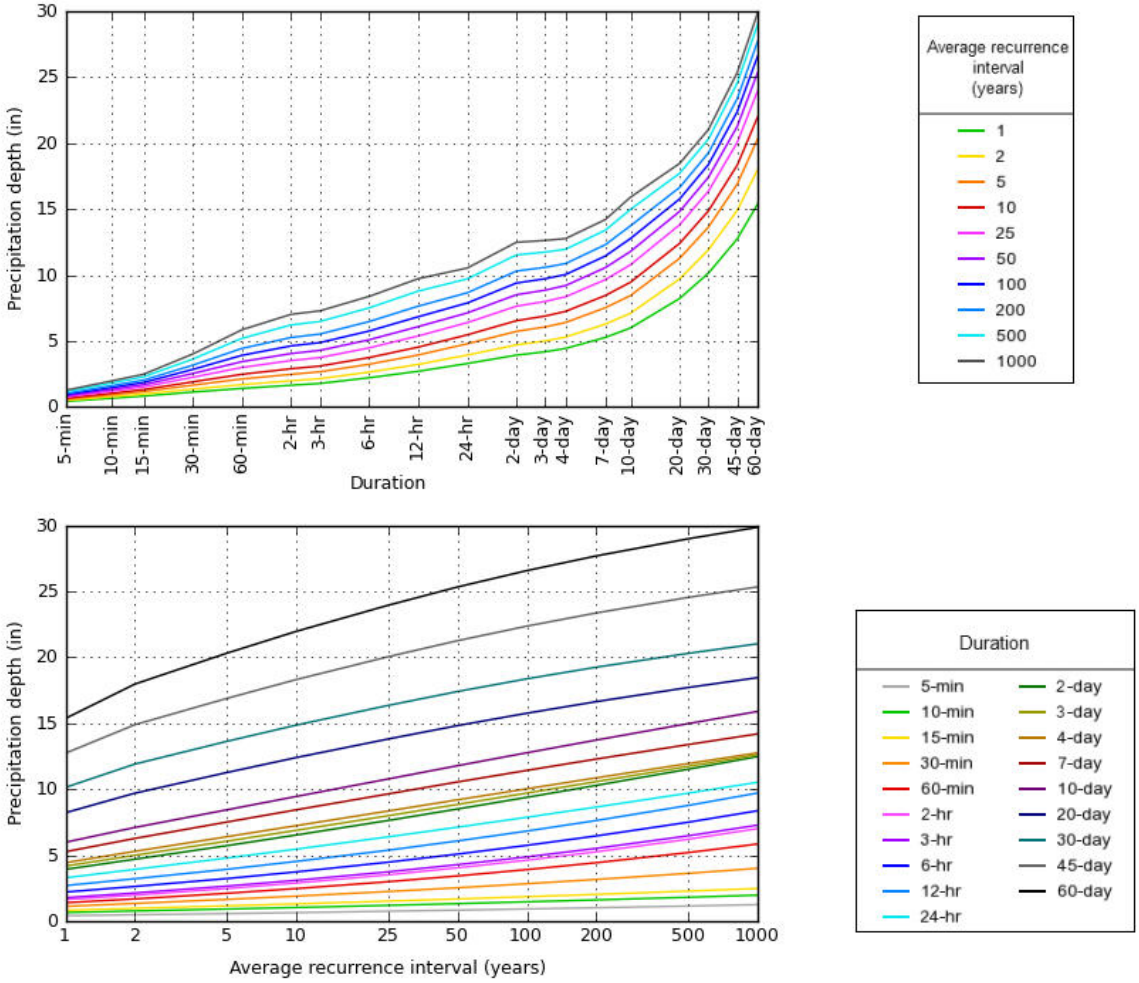
PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 35.1774°, Longitude: -86.1366°



NOAA Atlas 14, Volume 2, Version 3

Created (GMT): Wed Nov 5 18:15:59 2014

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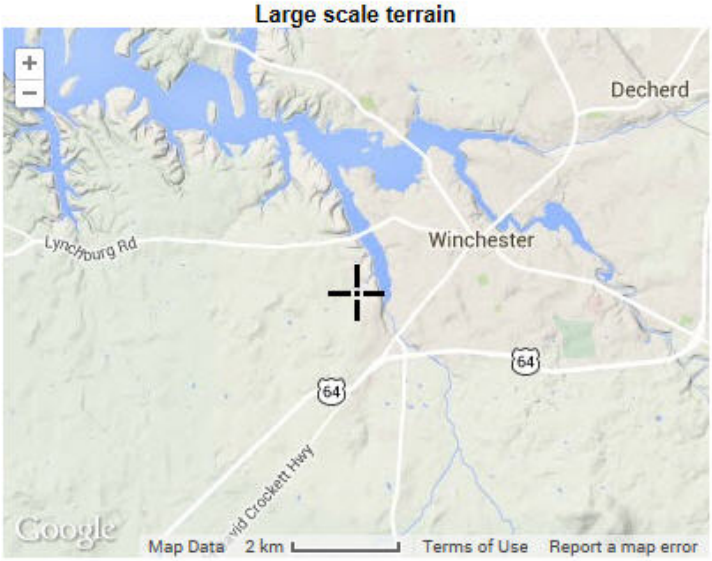
Maps & aerials

Small scale terrain

Large scale terrain



Large scale map

Large scale aerial

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3. EPSC Inspection Reports

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

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

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 Number: 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 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	(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 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 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 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.	EPSC Inspector Name, Title and Company (print or type): TN EPSC Certification No.:	Signature:	Date:
	Contractor (Secondary Permittee) Name and Title (print or type):	Signature:	Date:
	TDOT Project Supervisor or Designee (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 Gauge 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

1. Temporary Silt Fence
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

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

4. NOI & NOC

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave., 11th Floor, Nashville, TN 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:	**PIN 105769.00; PROJECT # 26150-1201-14; STP-50(31)**	**Existing NPDES Tracking Number: TNR**	
Street Address or Location:	SR-50 in Winchester	Start date:	Jan 2015
		Estimated end date:	Jan 2020
Site Activity Description:	Construction of 1.46 miles of SR-50 from SR-50 in Winchester to SR-15 (US-64) consisting of grading, drainage, and structures.	Latitude (dd.dddd):	35.1774º N
		Longitude (dd.dddd):	-86.1366º W
County(ies):	Franklin	Acres Disturbed:	44.2
MS4 Jurisdiction:	TDOT	Total Acres:	45.8

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.: NRS13.010

Receiving waters: Tims Ford Misc. Tribs. and Unnamed Trib. to Dry Creek within the Upper Elk Watershed

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 Tranportation

Site Owner/Developer Signatory (V.P. level/higher - signs certification below): (individual responsible for site): Jim Ozment		Signatory's Title or Position (V.P. level/higher - signs certification below): Director - Environmental Division	
Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street		City: Nashville	State:TN Zip:37243-0334
Phone: (615) 741-5373	Fax: (615) 741-1098	E-mail: Environmental.NPDES.TDOT@tn.gov	

Optional Contact: Khalid Ahmed		Title or Position: Senior Transportation Project Specialist	
Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street		City: Nashville	State:TN Zip: 37243-0334
Phone: (615) 253-0021	Fax: (615) 741-1098	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:

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. 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.

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 fee (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites). There is no fee for sites less than 1 acre.

Acres Disturbed	= or > 150 acres	= or > 50 < 150 acres	= or > 5 < 50 acres	= or > 1 < 5 acres
Fee	$7,500	$4,000	$1,000	$250

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.

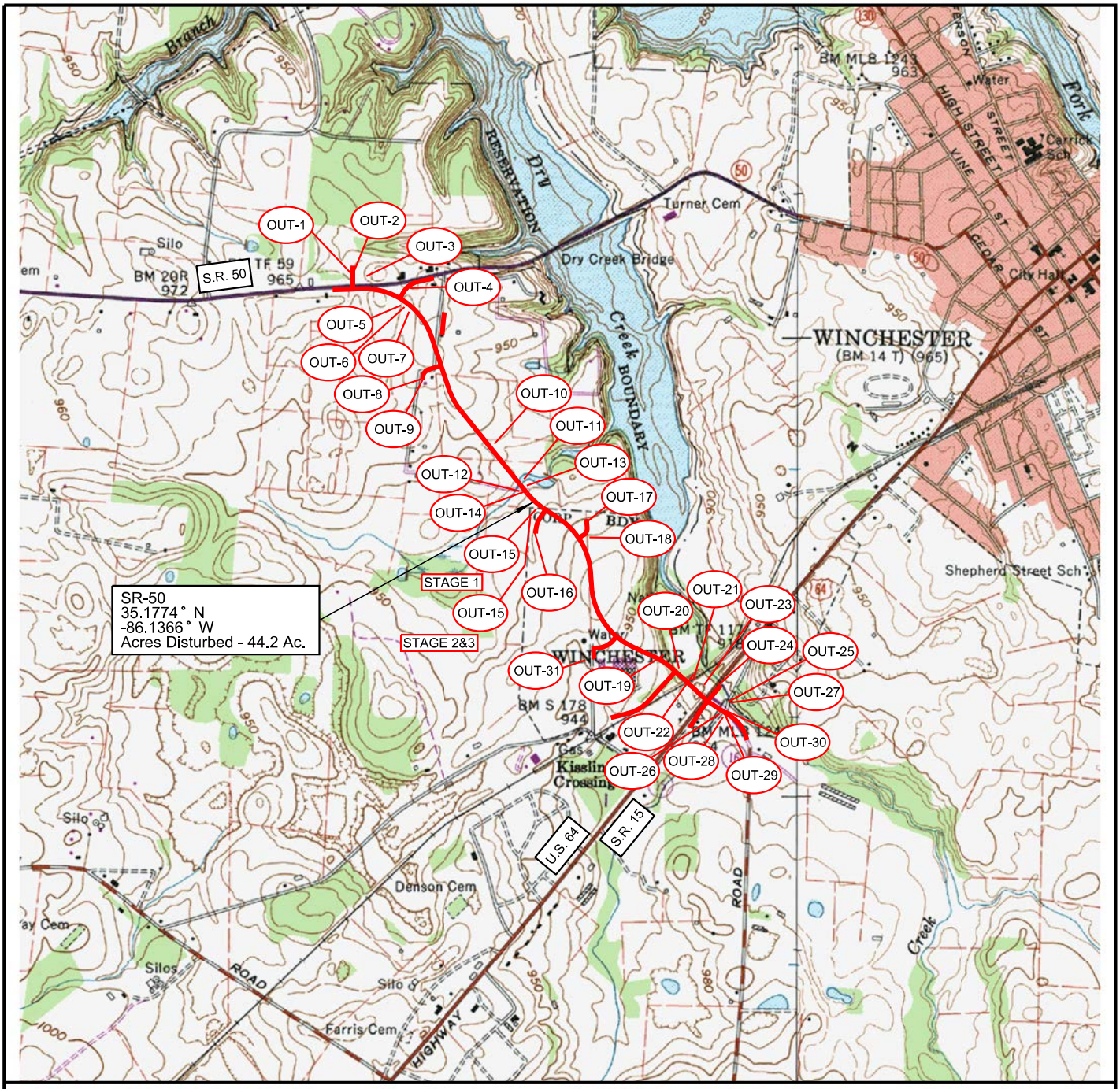
MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.tn.gov/environment/wpc/stormh2o/docs/MS4s_Jan2012.pdf

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 TDEC Nashville, TN address below, addressed to **Attention: Stormwater NOI Processing**.

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



TOPOGRAPHIC MAP

N

OUT-1 Approximate Outfall Location

0 2000 4000

SCALE FEET

SOURCE: USGS Quad Map, U.S. Geological Survey 7.5 Minute Topographic Map, Winchester (87 NE), Belvidere (87 NW) Tennessee Quadrangles

TDOT

Tennessee Department of Transportation

Nashville, Tennessee

Stormwater Pollution Prevention Plan

SR-50

SR-50 in Winchester to SR-15 (US-64)

Franklin County, Tennessee

Drawn By:	Checked By:
DAH	JBL
TDOT P.E. No.	TDOT PIN
26150-3201-14	105769.00
FED. No.	Figure
STP-50(31)	1

5. **Blank NOT**

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

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

6. Construction General Permit

GENERAL NPDES PERMIT
FOR DISCHARGES OF STORMWATER
ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PERMIT NO. TNR100000

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.) and the Water Quality Act of 1987, P.L. 100-4, including special requirements as provided in part 5.4 (Discharges into 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

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APPENDIX C – Inspection Report Form
APPENDIX D – Stormwater Monitoring Report Form

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

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

1.2. Discharges Covered by this Permit

1.2.1. 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 docume*nt, 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 Pollution Control
6th Floor Annex, L&C Tower, 401 Church Street, 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:		**NPDES Tracking Number: TNR**
Street Address or Location:		Construction Start Date:
		Estimated End Date:
Site Description:		Latitude (dd.dddd):
		Longitude (-dd.dddd):
County(ies):	MS4 Jurisdiction:	Acres Disturbed:
		Total Acres:

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 Number:

Receiving waters:

Attach the SWPPP with the NOI ☐ SWPPP Attached	Attach a site location map ☐ Map Attached

Name of Site Owner or Developer (Site-Wide Permittee): (person, company, or legal entity that has operational or design control over construction plans and specifications)

Site Owner or Developer Contact Name: (individual responsible for site)		Title or Position: (the party who signs the certification below):		
Mailing Address:		City:	State:	Zip:
Phone: ( )	Fax: ( )	E-mail:		

Optional Contact:		Title or Position:		
Mailing Address:		City:	State:	Zip:
Phone: ( )	Fax: ( )	E-mail:		

Owner 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 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.

Owner or Developer Name: (print or type)	Signature:	Date:

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. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.

Primary contractor name and address: (print or type)	Signature:	Date:
Other contractor name and address: (print or type)	Signature:	Date:
Other contractor name and address: (print or type)	Signature:	Date:

OFFICIAL STATE USE ONLY

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

APPENDIX A

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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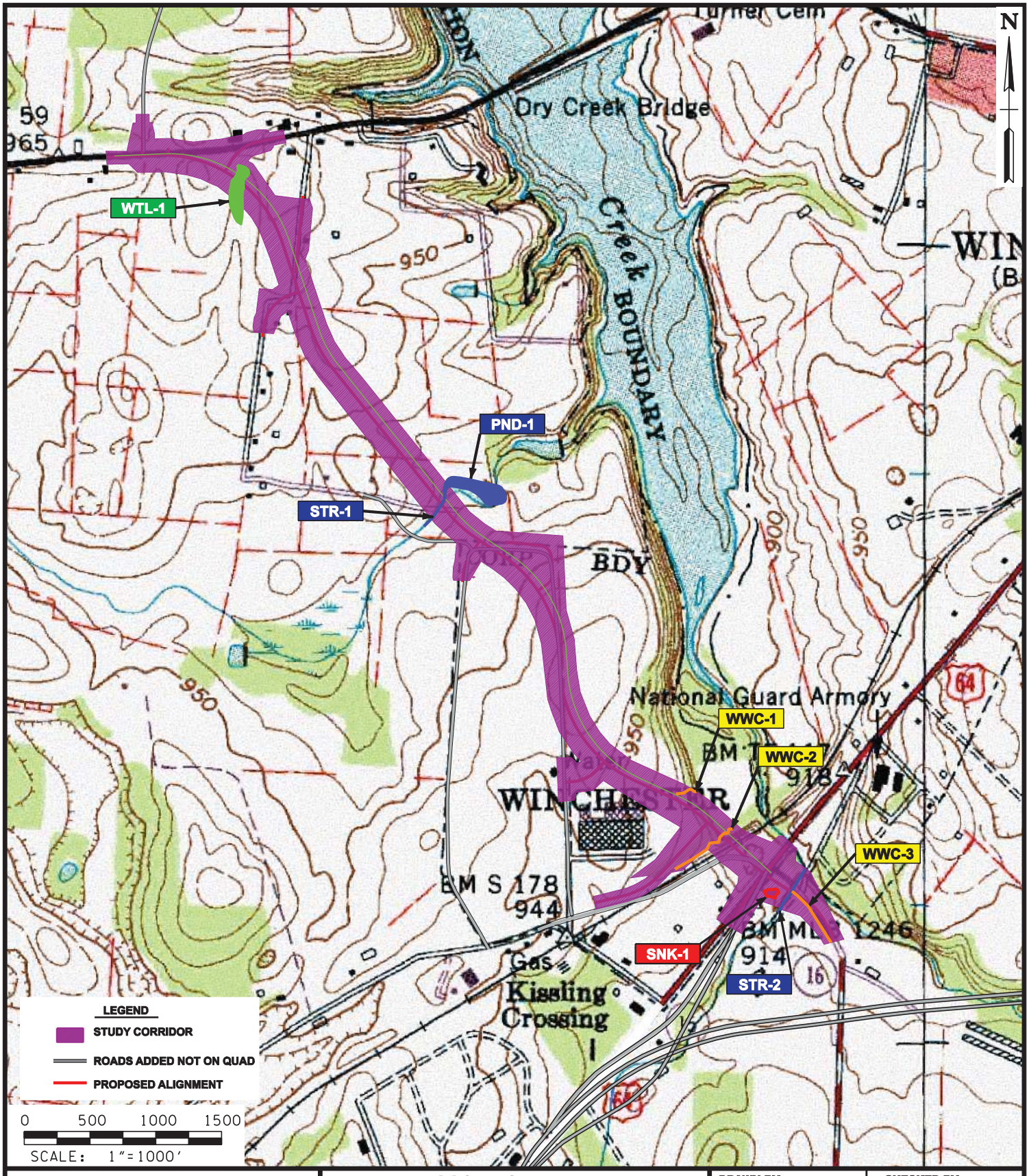
7. Environmental Permits

8. Ecology Report



FEATURE DESIGNATOR LEGEND

- STR-X - STREAMS
- WWC-X - WET WEATHER CONVEYANCE
- PND-X - PONDS
- WTL-X - WETLANDS
- SNK-X - SINK HOLE

SCOPE G MAP

SR-50 IN WINCHESTER TO SR-15 (US-64)
FRANKLIN COUNTY, TN
BELVIDERE AND WINCHESTER
USGS QUADRANGLE MAPS

TDOT

DRAWN BY:	CHECKED BY:
TJC	T BECKTOLD

DATE OF SURVEY: 12/05/2011 AND 12/29/2011

TDOT PIN: 105769.00

P.E. NUMBER: 26150-1201-14

FIGURE 1

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: SR-50 in Winchester to SR-15 (US-64) City/County: Winchester/Franklin Sampling Date: 12/5/2011

Applicant/Owner: TDOT State: TN Sampling Point: WTL-1

Investigator(s): T. Becktold / A. Massey Section, Township, Range:

Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): <1%

Subregion (LRR or MLRA): LRR Lat: 35.1844564074N Long: -86.1423208534W Datum: NAD 83

Soil Map Unit Name: Gd - Guthrie silt loam NWI classification: PFO1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** **Yes ✔** **No _____**
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks: Wetland is located around station 20+50. Photo numbers: 3 & 4

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ✔ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ✔ Oxidized Rhizospheres on Living Roots (C3)
- ✔ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ✔ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ✔	No _____	Depth (inches): up to 6 in.
Water Table Present?	Yes ✔	No _____	Depth (inches): 8 in.
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 2 in.

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Identified as PFO1A on NWI map. Also, boundaries depicted on ROW plans (although slightly different from recently flagged boundaries).

Remarks:

VEGETATION (Five Strata) – Use scientific names of plants. Sampling Point: WTL-1

Tree Stratum (Plot size: 30-ft-radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer saccharinum	70%	Yes	FACW
2. Acer rubrum	10%	Yes	FAC
3. Platanus occidentalis	15%	Yes	FACW-
4. Juniperus virginiana	5%	No	FACU-
5.			
6.			
7.			
	75%	= Total Cover	

Sapling Stratum (Plot size: 30-ft-radius)			
1. Acer saccharinum	65%	Yes	FACW
2. Acer rubrum	10%	No	FAC
3. Juniperus virginiana	10%	No	FACU-
4. Platanus occidentalis	15%	No	FACW-
5.			
6.			
7.			
	10%	= Total Cover	

Shrub Stratum (Plot size: 30-ft-radius)			
1. Ligustrum sinense	85%	Yes	FAC
2. Rosa multiflora	15%	No	UPL
3.			
4.			
5.			
6.			
7.			
	15%	= Total Cover	

Herb Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✔ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Five Vegetation Strata:

Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).

Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.

Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.

Herb – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine – All woody vines, regardless of height.

Hydrophytic Vegetation Present? Yes ✔ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Plant community is hydrophytic by Indicator 2 (Dominance Test).

Photo numbers: 3 and 4.

SOIL

Sampling Point: WTL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6 in.	2.5Y 5/2	100%					Silty Clay	
6-18 in.	2.5Y 6/3	70%	10YR 6/6	30%	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Gleyed Matrix (F2)
- ✔ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 136, 122)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** _____

Remarks:

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

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/29/2011 & 03/22/2012 **Biologist** T. Becktold **Affiliation** ARCADIS

1-Station: from plans	49+85
2-Map label and name	STR-1, Unnamed tributary to Dry Creek; PND-1 (approximately 1 acre)
3-Latitude/Longitude	35.1779068987N / -86.1373010661W
4-Potential impact	Crossing / encapsulation
5-Feature description:	
what is it	Stream
blue-line on topo? (y/n)	Y
defined channel (y/n)	Y
straight or meandering	Straight
channel bottom width	3 ft.
top of bank width	8-12 ft.
bank height and slope ratio	1-2 ft.; 3:1
avg. gradient of stream (%)	1%
substratum	Grass / silt
riffle/run/pool	100% run
width of buffer zone	LB: 0 ft. RB: 0 ft.
water flow	Y
water depth	4 in.
water width	3 ft.
general water quality	Poor
OHWM indicators	N/A
groundwater connection	Unknown
bank stability: LB, RB	Stable
dominant species: LB, RB	Fescue, smartweed
overhead canopy (%)	0%
benthos	None observed
fish	None observed
algae or other aquatic life	Green algae
habitat assessment score	40 – Poor
photo number (s)	5, 6, and 7
rainfall information	3.18 for week prior to 12/29 and 0.4 during week of 3/22/12
6- HUC code & name (12-digit)	060300030302 – Boiling Fork Creek
7-Confirmed by:	
8-Mitigation	No__x___ Yes_____ : (include on Form J)
9-ETW	No__x___ Yes_____
10-303 (d) List	No __x___ Yes_____: Habitat_____ Siltation_____
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 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm Flows into PND-1. Located within active livestock pasture. Hydrologic Determination Form was completed and feature scored a 10.5 (due to significant historical impacts). However, discussions with landowner indicated that feature likely flows for greater than 7 days after a rainfall event (Primary Indicator #8). Therefore, re-evaluation of this feature beyond a 7 day rain-free period was conducted on 03/22/12, which confirmed that the feature meets Primary Indicator #8.

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS

STREAM NAME Unnamed trib to Dry Creek	LOCATION SR-50 in Winchester to SR-15 (US-64)	
STATION # 49+85, LT REACH ID# STR-1	STREAM CLASS Intermittent	
UTM N 35.17790689 UTM E 86.1373010661	RIVER BASIN Boiling Fork Creek - HUC 060300030302	
STORET #	AGENCY	
INVESTIGATORS T. Becktold		
FORM COMPLETED BY T. Becktold	DATE 12/29/11 TIME 10:15 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 1	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 0	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 1	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 5	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 11	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 1	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 5	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 7 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 7 (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 1 (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
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 0 (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

Total Score 40

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

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/05/2011 **Biologist** T. Becktold / A. Massey **Affiliation** ARCADIS

1-Station: from plans	80+00, LT
2-Map label and name	WWC-1
3-Latitude/Longitude	35.1718623822N / -86.1310803848W
4-Potential impact	Crossing / encapsulation
5-Feature description:	
what is it	Wet weather conveyance
blue-line on topo? (y/n)	N
defined channel (y/n)	Y
straight or meandering	Straight
channel bottom width	2-3 ft.
top of bank width	10-12 ft.
bank height and slope ratio	1-10 ft.
avg. gradient of stream (%)	2%
substratum	Cobble 30% Silt 70%
riffle/run/pool	40/40/20
width of buffer zone	LB: >100 ft. RB: >100 ft.
water flow	N
water depth	N/A
water width	N/A
general water quality	N/A
OHWM indicators	Defined bed and bank
groundwater connection	N
bank stability: LB, RB	Eroding / sloughing
dominant species: LB, RB	Chinese privet, hackberry
overhead canopy (%)	70%
benthos	None observed
fish	None observed
algae or other aquatic life	Green algae
habitat assessment score	N/A
photo number (s)	8 and 9
rainfall information	3.18" in past 7 days
6- HUC code & name (12-digit)	060300030302 – Boiling Fork Creek
7-Confirmed by:	
8-Mitigation	No__x___ Yes_____ : (include on Form J)
9-ETW	No__x___ Yes_____
10-303 (d) List	No __x___ Yes_____: Habitat_____ Siltation_____
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 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm Hydrologic determination form was completed for WWC-1 – Score 7.5. Feature carries drainage / runoff from up-gradient, abandoned industrial factory property. Highly eroded / scoured banks.

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

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/29/2011 **Biologist** T. Becktold **Affiliation** ARCADIS

1-Station: from plans	84+00 – 85+20
2-Map label and name	WWC-2
3-Latitude/Longitude	35.1708342193N / -86.1301808797W
4-Potential impact	Crossing / encapsulation
5-Feature description:	
what is it	Wet Weather Conveyance
blue-line on topo? (y/n)	N
defined channel (y/n)	Y
straight or meandering	Straight
channel bottom width	1-2.5 ft.
top of bank width	2-5 ft.
bank height and slope ratio	1-5 ft.; 1:1 to 3:1
avg. gradient of stream (%)	1-2%
substratum	Silt 30%; Cobble 40%; Pebble 30%
riffle/run/pool	45/45/10
width of buffer zone	LB: 10-100 ft. RB: 10-60 ft.
water flow	Y
water depth	1-3 in.
water width	1-2.5 ft.
general water quality	Fair
OHWM indicators	Defined bed and bank
groundwater connection	Unknown
bank stability: LB, RB	Eroding / scoured
dominant species: LB, RB	Chinese privet; hackberry; Osage orange
overhead canopy (%)	70%
benthos	None observed
fish	None observed
algae or other aquatic life	None observed
habitat assessment score	N/A
photo number (s)	10 and 11
rainfall information	3.18" in past 7 days
6- HUC code & name (12-digit)	060300030302 – Boiling Fork Creek
7-Confirmed by:	
8-Mitigation	No__x___ Yes_____ : (include on Form J)
9-ETW	No__x___ Yes_____
10-303 (d) List	No __x___ Yes_____: Habitat_____ Siltation_____
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 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm Feature begins as roadside ditch along Joyce Lane, eroding and becoming scoured as the grade steepens, and gradually looses channel definition as the grade flattens out (likely due to sedimentation coming from the up-gradient, scoured section). Hydrologic Determination Form was completed and feature scored a 10.5.

Ecology Field Data Sheet: **Other Resource Features** Form G
(Caves/Rock Houses; Sinkholes; Specialized Habitats; Other)

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/29/2011 **Biologist** T. Becktold **Affiliation** ARCADIS

1-Station: from plans	STA. 10+50 to 11+50, LT, SR-16 (near end of project limits)	
2-Map label	SNK-1	
3- Lat/Long	35.1698474915N / -86.128814781W	
4-Potential impact	Fill	
5-Feature name		
6-Feature description:		
what is it	Depression / potential sinkhole	
portion affected	Approximately ¾ of the depression	
approximate size	Approximately 100 x 100 feet.	
photo number	12 and 13	
other	Several soil plugs taken within depression – non-hydric (10YR 3/4). 6-8 inches to solid surface below (unsure if rock, old foundation, etc.?).	No open throat observed within the depression.
7- HUC code & name (8 & 12-digit)	060300030302 – Boiling Fork Creek	
8-Determination: TDOT/ consultant	Sink / Depression	
9-Determination: Confirmed? By?		
10-Mitigation: to be included in design		
11-Notes	Rainfall: 3.18” for previous 7 days	Rainfall Data Reference: Gage ID 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm

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

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/29/2011 **Biologist** T. Becktold **Affiliation** ARCADIS

1-Station: from plans	10+15, SR-16 (near end of project limits)
2-Map label and name	STR-2, Unnamed tributary to Dry Creek
3-Latitude/Longitude	35.1697342702N / -86.1283916361W
4-Potential impact	Crossing / encapsulation
5-Feature description:	
what is it	stream
blue-line on topo? (y/n)	Y
defined channel (y/n)	Y
straight or meandering	Straight
channel bottom width	6-10 ft.
top of bank width	10-12 ft.
bank height and slope ratio	1-2 ft.; 2:1
avg. gradient of stream (%)	1%
substratum	Cobble / riprap 50%; pebble / gravel 20%; silt 30%
riffle/run/pool	40/40/20
width of buffer zone	LB: 20-100 ft. RB: 15-30 ft.
water flow	Y
water depth	2-6 in.
water width	6-8 ft.
general water quality	Fair
OHWM indicators	Defined bed and bank; wrack lines
groundwater connection	Unknown
bank stability: LB, RB	Stable
dominant species: LB, RB	LB/RB: hackberry, privet, box elder, sycamore
overhead canopy (%)	70%
benthos	None observed
fish	None observed
algae or other aquatic life	Green algae
habitat assessment score	96 – Marginal
photo number (s)	14, 15, and 16
rainfall information	3.18" in past 7 days
6- HUC code & name (12-digit)	060300030302 – Boiling Fork 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_____ 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 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm Stream flows through existing RCBC beneath SR-16 and then converges with Dry Creek within approximately 100 feet of the RCBC outlet. Channel appears to have been historically channelized (straightened) to accommodate the surrounding industries and roadways. Hydrologic Determination Form was completed for STR-2 (score of 19).

HABITAT ASSESSMENT FIELD DATA SHEET—LOW GRADIENT STREAMS

STREAM NAME Unnamed trib to Dry Creek	LOCATION SR-50 in Winchester to SR-15 (US-64)	
STATION # 49+85, LT REACH ID# STR-1	STREAM CLASS Intermittent	
UTM N 35.17790689 UTM E 86.1373010661	RIVER BASIN Boiling Fork Creek - HUC 060300030302	
STORET #	AGENCY	
INVESTIGATORS T. Becktold		
FORM COMPLETED BY T. Becktold	DATE 12/29/11 TIME 10:15 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 1	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 0	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 1	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 5	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 11	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 1	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 5	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 7 (LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0
SCORE 7 (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 1 (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
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 0 (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

Total Score 40

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

County: Franklin **Route:** SR-50 **LM:** N/A **PE No.:** 26150-1201-14 **PIN:** 105769.00
Project Description: SR-50 in Winchester to SR-15 (US-64)
Date of survey 12/29/2011 **Biologist** T. Becktold **Affiliation** ARCADIS

1-Station: from plans	6+00 to 10+00, LT, SR-16
2-Map label and name	WWC-3
3-Latitude/Longitude	35.1695055789N / -86.1279062439W
4-Potential impact	Cut / eliminate
5-Feature description:	
what is it	Wet Weather Conveyance
blue-line on topo? (y/n)	N
defined channel (y/n)	Y
straight or meandering	Straight
channel bottom width	1 ft.
top of bank width	8-10 ft.
bank height and slope ratio	4 ft.; 2:1
avg. gradient of stream (%)	1%
substratum	Rip rap 100%
riffle/run/pool	100% run
width of buffer zone	LB: 0 ft. RB: 0 ft.
water flow	N
water depth	N/A
water width	N/A
general water quality	N/A
OHWM indicators	N/A
groundwater connection	N
bank stability: LB, RB	Stable
dominant species: LB, RB	Fescue
overhead canopy (%)	0%
benthos	None observed
fish	None observed
algae or other aquatic life	None observed
habitat assessment score	N/A
photo number (s)	15 and 17
rainfall information	3.18" in past 7 days
6- HUC code & name (12-digit)	060300030302 – Boiling Fork Creek
7-Confirmed by:	
8-Mitigation	No__x___ Yes_____ : (include on Form J)
9-ETW	No__x___ Yes_____
10-303 (d) List	No __x___ Yes_____: Habitat_____ Siltation_____
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 0827: Tim Fords Dam, TN (TVA): http://www.tva.gov/river/lakeinfo/precip.htm WWC-3 is a riprap-lined roadside ditch along SR-16. Discharges into STR-2 near the existing RCBC inlet beneath SR-16. Less than 48 hours since previous rain event and no flow was present at the time of the study. Hydrologic Determination Form was completed for WWC-3 (score of 8.5).

ARCADIS

Project Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 1

Beginning of Project
STA. 14+50, RT.

Receiving Waters: Dry Creek.

View looking northwest.

Note: Photo depicts the existing SR-50 alignment near the beginning of the project limits. The intersection with Coutta Circle is depicted in the background.

Photograph No. 2

STA. 204+00, RT. Old SR-50.

Receiving Waters: Dry Creek.

View looking northeast.

Note: Photo depicts the existing SR-50 alignment near the beginning of the project limits. Dry Creek Café is in the upper left.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 3

WTL-1
STA. 20+00 to 22+00, RT.

Receiving Waters: Dry Creek.

View looking southwest.

Note: Photo depicts WTL-1. Portions of the wetland were inundated at the time of the assessment.

Photograph No. 4

WTL-1
STA. 20+00 to 22+00, RT.

Receiving Waters: Dry Creek.

View looking southeast.

Note: Photo depicts another view of WTL-1. The transition into upland areas is depicted in the far background of the photo. Photos of WTL-1 were taken on 12/05/2011.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 5

STR-1
STA. 49+85

Receiving Waters: Unnamed tributary to Dry Creek (STR-1).

View looking southwest.

Note: Photo depicts an upstream view of STR-1, as taken from the approximate location of the proposed culvert. A re-evaluation of this stream was conducted on March 22, 2012, to determine if this feature flows beyond a 7-day period without rain (Primary Indicator #8 on HD Form). As depicted, flow was present and the feature was determined to be a stream. STR-1 connects a large wetland (upstream and outside of proposed ROW) to PND-1 (downstream - see Photo 6 and 7).

Photograph No. 6

STR-1
STA. 49+85

Receiving Waters: Unnamed tributary to Dry Creek (STR-1).

View looking northeast.

Note: Photo depicts a downstream view of STR-1. STR-1 is located within an active livestock pasture. Historic channelization of this stream is evident. STR-1 flows into PND-1 in the background of the photo (also see Photo 7). Photos of STR-1 taken on 03/22/2012.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 7

PND-1
STA. 49+00 to 53+00, LT.

Receiving Waters: Unnamed tributary to Dry Creek (STR-1).

View looking east.

Note: Photo depicts PND-1, as taken near the location where STR-1 enters the pond (right foreground). PND-1 is located within an active livestock pasture.

Photograph No. 8

WWC-1
STA. 80+00, LT.

Receiving Waters: Dry Creek.

View looking west.

Note: Photo depicts an up-gradient view of the eroding channel for WWC-1. Carries drainage / runoff from abandoned industrial factory property.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 9

WWC-1
STA. 80+00, LT.

Receiving Waters: Dry Creek.

View looking east.

Note: Photo depicts a down-gradient view of WWC-1. No flow was observed within WWC-1. Photo taken on 12/05/2011.

Photograph No. 10

WWC-2
STA. 84+50, RT.

Receiving Waters: Dry Creek.

View looking northeast.

Note: Photo depicts a down-gradient view of WWC-2. WWC-2 begins as a roadside ditch adjacent to the existing Joyce Lane alignment.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 11

WWC-2
STA. 84+50.

Receiving Waters: Dry Creek.

View looking southwest.

Note: Photo depicts an up-gradient view of WWC-2. Channel definition diminishes just down-gradient of this location.

Photograph No. 12

SNK-1
STA. 10+50 to 11+50, LT, SR-16.

Receiving Waters: Dry Creek.

View looking northwest.

Note: Photo depicts a sinkhole / depression located near the existing intersection of SR-15 with SR-16 (near location of proposed roundabout). STR-2 is located approximately 50-100 feet to the east of SNK-1. Multiple soil plugs were taken and were determined to be non-hydric (10YR 3/4). No open throat was observed within SNK-1.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 13

SNK-1
STA. 10+50 to 11+50, LT, SR-16.

Receiving Waters: Dry Creek.

View looking northeast.

Note: Photo depicts another view of the sinkhole / depression located near the existing intersection of SR-15 with SR-16 (near location of proposed roundabout). Soil auger hit solid surface approximately 6-8 inches down (unsure if rock, old foundation, etc.?).

Photograph No. 14

STR-2
STA. 10+15, SR-16.

Receiving Waters: Unnamed tributary to Dry Creek, STR-2.

View looking northeast.

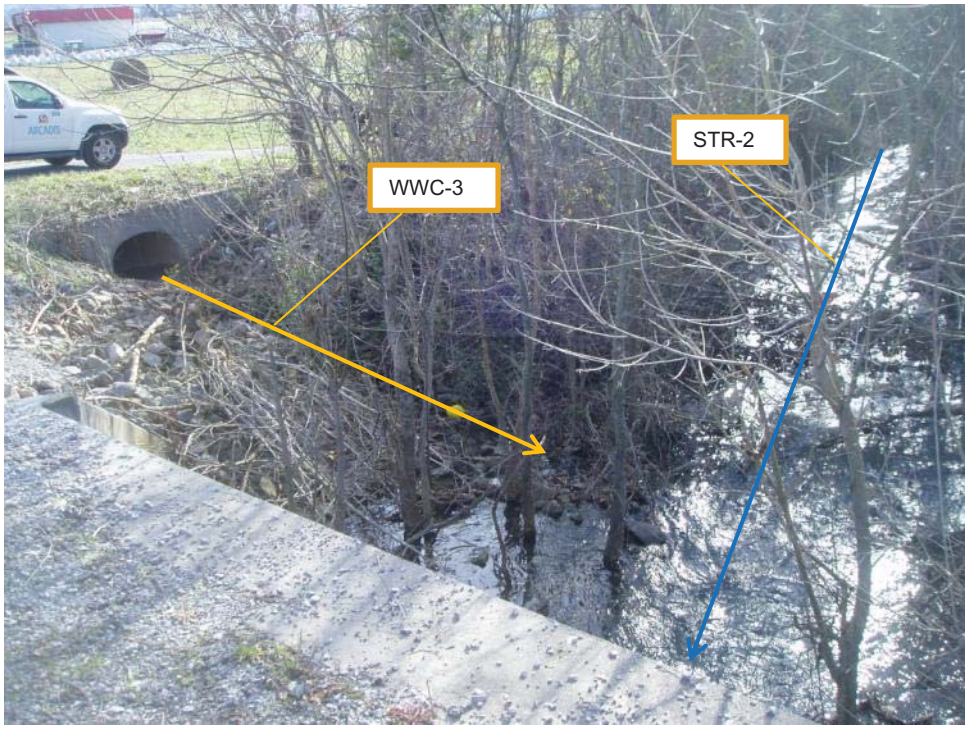
Note: Photo depicts a downstream view of STR-2, as taken approximately 150 feet upstream of the existing RCBC inlet beneath SR-16. High flow conditions were present within STR-2 at the time of the assessment due frequent rainfall activity during the month of December 2011. Photos of STR-2 were taken on December 29, 2011.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012



Photograph No. 15

STR-2 and WWC-3
STA. 10+15, SR-16.

Receiving Waters: Unnamed tributary to Dry Creek, STR-2.

View looking south.

Note: Photo depicts an upstream view of STR-2, as taken from the existing RCBC inlet beneath SR-16. WWC-3 (center and upper left) converges with STR-2 near the RCBC inlet. The proposed RCBC inlet will be extended approximately 125 feet upstream from this location.

Photograph No. 16

STR-2
STA. 10+15, RT, SR-16.

Receiving Waters: Unnamed tributary to Dry Creek, STR-2.

View looking northeast.

Note: Photo depicts a downstream view of STR-2, as taken from the existing RCBC outlet beneath SR-16. The confluence of STR-2 with Dry Creek is vaguely depicted in the background of the photo (approximately 100 feet downstream of this location). The RCBC outlet is not proposed to be extended in this location.

ARCADIS

Scope G Photos

SR-50 in Winchester to SR-15 (US-64)
Franklin County, Tennessee
PIN 105769.00
Project No. 26150-1201-14

December 05 and 29, 2011, and March 22, 2012

Photograph No. 17

WWC-3
STA. 6+00 to 10+00, LT, SR-16.

Receiving Waters: Unnamed tributary to Dry Creek, STR-2.

View looking southeast.

Note: Photo depicts an up-gradient view of WWC-3, as taken from an existing driveway tile inlet. The section of WWC-3 from the driveway tile outlet to STR-2 is depicted in Photo 15. The wet weather conveyance parallels the existing SR-16 alignment.

Natural Resources Mitigation Sketches/Information

County: Franklin **Route: SR-50** **PE No: 26150-1201-14** **PIN: 105769.00**
Project Description: From SR-50 in Winchester to SR-15 (US-64)
Date of survey: 12-29-2011/03-22-2012 **Biologist: T. Becktold** **Affiliation: ARCADIS**

Station	Map label	Attachments: Marked-up plans sheet (A); notes (B); mitigation plan (C) attached	Calculate permanent & temporary wetland impacts & provide to (name of regional biologist) and John Hewitt ("X")	Apply "standard" stream relocation configuration & instructions ("X")	Survey boundaries as flagged in field ("X")	General notes and/or specific changes requested
20+50	WTL-1	A, B, C	X		X	Wetland is within the Coffee County Mitigation Bank service area. Mitigate permanent impacts at a ratio of 2:1. Mitigate temporary impacts as specified on attachment. Plant trees that are listed.
49+85	STR-1	B				Stream impact is <200' so no mitigation is necessary, however do not over-widen stream at crossing. Stream should run through center box.
10+15	STR-2	B				Stream impact is <200' so no mitigation is necessary, however do not over-widen stream at crossing.

Standard On-site Mitigation for Temporary Wetland Impact Areas (if required)

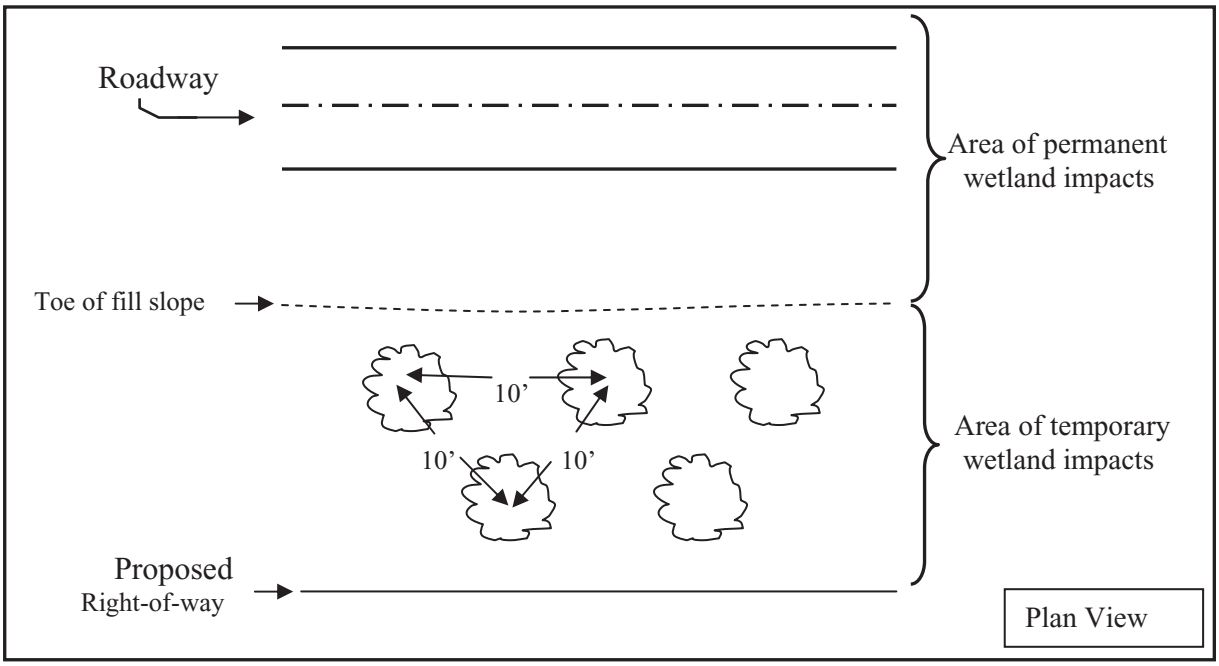
Apply these measures to all applicable temporary wetland impact areas listed in Form J. For temporary wetland impact areas, remove the top 12" of topsoil and stockpile it until construction is complete. Once construction activities are completed, restore all temporary wetland impact areas to pre-construction conditions. This includes removing haul roads (if applicable), restoring the site to the original (pre-construction) elevation and spreading stockpiled topsoil back over the wetland site. The area of temporary impacts will be stabilized according to standard practices. Planting will be based on notes provided by Ecology. Wetland areas located outside of proposed right-of-way and construction easements are to be clearly marked and not disturbed.

Tree species for temporary wetland impacts:

Item #	Description	Unit
802-12.03	ACER SACCHARINUM (SILVER MAPLE SEEDLNG B.R.)	EACH
802-12.02	ACER RUBRUM (RED MAPLE SEEDLNG B.R.)	Each
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	Each
802-12.20	NYSSA AQUATICA (SWAMP TUPELO SEEDLNG B.R.)	Each
802-12.38	QUERCUS PHELLOS (WILLOW OAK SEEDLNG B.R.)	Each

Ht = Height, BR = Bare Root

Tree planting scheme for temporary wetland impact areas



Please place the following notes in the Special Notes section of the plans:

Topsoil is to be removed from all areas of temporary wetland impacts and stockpiled prior to construction.

Upon completion of construction activities, temporary haul roads are to be removed. Excavated material from the haul roads is to be disposed of as directed by the engineer.

Plans Notes

Please add the following information verbatim to the Final Plans:

TREES

No substitutions of tree species or sizes shall be allowed without the written approval of TDOT Environmental Division. Trees shall be of 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 Environmental Division.

The contractor should arrange several months ahead of time to obtain the correct tree species, as some may require some time to locate.

All trees planted shall be wrapped as per section 802.07 of TDOT standard specifications for the road and bridge construction.

Trees shall be watered as required through the period of establishment to ensure survival.

CHANNEL RELOCATION SEQUENCE AND IMPLEMENTATION NOTES FOR RELOCATED STREAM CHANNELS (IGNORE REFERENCES TO ITEMS NOT SPECIFIED)

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. 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.

2. CHANNEL RELOCATION SEQUENCE
   a. Flag edge of the new channel top 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.
   b. Excavate the new channel "in the dry" by leaving areas of undisturbed earth (diversion berms) in place at both ends.
   c. Shape channel to specifications shown. Remove loose soils and debris.
   d. Place topsoil, erosion control blanket. seed, sod, or other material as specified.
   e. 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.
   f. Install trees according to standard specifications section 802.
3. 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.
4. Requests by any agency that would require the modification of channels, ditches, 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 coordination with all involved agencies and TDOT divisions. Tennessee Department of Environment and Conservation may make recommendations concerning erosion control via the engineer without such referral.

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

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-2G	TYPICAL SECTIONS (8 SHEETS)
3	R.O.W NOTES & UTILITY OWNERS
3A-3B	R.O.W ACQUISITION TABLES
3C	PROPERTY MAPS
3D	TVA PROPERTY MAPS
4-11	PRESENT LAYOUTS (8 SHEETS)
4A-11A	R.O.W. DETAILS (8 SHEETS)
4B-11B	PROPOSED LAYOUTS (8 SHEETS)
4C-10C	PROFILES (7 SHEETS)
10D	ROUNDABOUT ALIGNMENT DETAIL
10E	ROUNDABOUT DETAILS
12-12A	CONTROL POINTS (2 SHEETS)
13-13I	SIDE ROAD PROFILES (7 SHEETS)
14-14D	PROFILE OF PRIVATE DRIVES (5 SHEETS)
15	DRAINAGE MAPS
16-16D	CULVERT CROSS-SECTIONS (5 SHEETS)
16E	PROFILE OF SPECIAL DITCHES
17-17Y	EROSION PREVENTION AND SEDIMENT CONTROL PLANS (26 SHEETS)
18-18G	EXISTING CONTOURS (8 SHEETS)
19-19G	PROPOSED CONTOURS (8 SHEETS)
20-66	ROADWAY CROSS-SECTIONS (47 SHEETS)
67-68	SIDE ROAD (COUTTA CIRCLE) CROSS-SECTIONS (2 SHEETS)
69-71	SIDE ROAD (OLD SR-50) CROSS-SECTIONS (3 SHEETS)
72-74	SIDE ROAD (DRY CREEK ROAD 1) CROSS-SECTIONS (3 SHEETS)
75-78	SIDE ROAD (DRY CREEK ROAD) CROSS-SECTIONS (4 SHEETS)
79-81	SIDE ROAD (WILTON CIRCLE 1) CROSS-SECTIONS (3 SHEETS)
82-85	SIDE ROAD (WILTON CIRCLE 2) CROSS-SECTIONS (4 SHEETS)
86-87	SIDE ROAD (WILTON CIRCLE 3) CROSS-SECTIONS (2 SHEETS)
88-95	SIDE ROAD (JOYCE LANE) CROSS-SECTIONS (8 SHEETS)
96-97	SIDE ROAD (SR-15) CROSS-SECTIONS (2 SHEETS)
98-99	SIDE ROAD (SR-15SOUTH) CROSS-SECTIONS (2 SHEETS)
100-103	SIDE ROAD (SR-16) CROSS-SECTIONS (4 SHEETS)
104-107	ROUNDABOUT CROSS-SECTIONS (4 SHEETS)
108-112	ROUNDABOUT RADIUS SR-50 NORTH WEST (5 SHEETS)
113-117	ROUNDABOUT RADIUS SR-50 SOUTH WEST (5 SHEETS)
118-121	ROUNDABOUT RADIUS SR-15 NORTH WEST (4 SHEETS)
122-124	ROUNDABOUT RADIUS SR-15 NORTH EAST (3 SHEETS)
125-128	ROUNDABOUT RADIUS SR-15SOUTH SOUTH WEST (4 SHEETS)
129-132	ROUNDABOUT RADIUS SR-15SOUTH SOUTH EAST (4 SHEETS)
133-136	ROUNDABOUT RADIUS SR-16 NORTH EAST (4 SHEETS)
137-141	ROUNDABOUT RADIUS SR-16 SOUTH EAST (5 SHEETS)
142-143	SR-50 STA. 14+65 SPECIAL DITCH CROSS-SECTIONS (2 SHEETS)
144-145	DRY CREEK RD 1 SPECIAL DITCH CROSS-SECTIONS (2 SHEETS)
146-147	WILTON CIRCLE 3 SPECIAL DITCH 1 CROSS-SECTIONS (2 SHEETS)
148	WILTON CIRCLE 3 SPECIAL DITCH 2 CROSS-SECTIONS
149-150	WILTON CIRCLE 3 SPECIAL DITCH 3 CROSS-SECTIONS (2 SHEETS)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

FRANKLIN COUNTY

STATE ROUTE 50

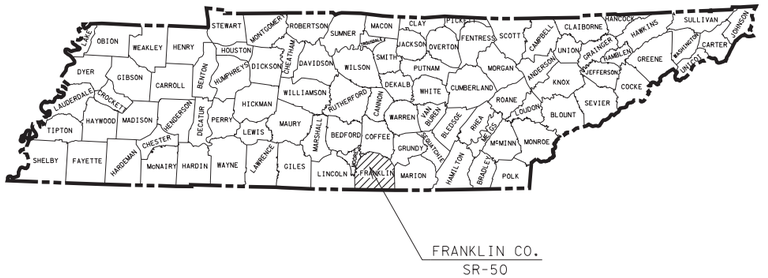
SR-50 IN WINCHESTER TO SR-15(US-64)

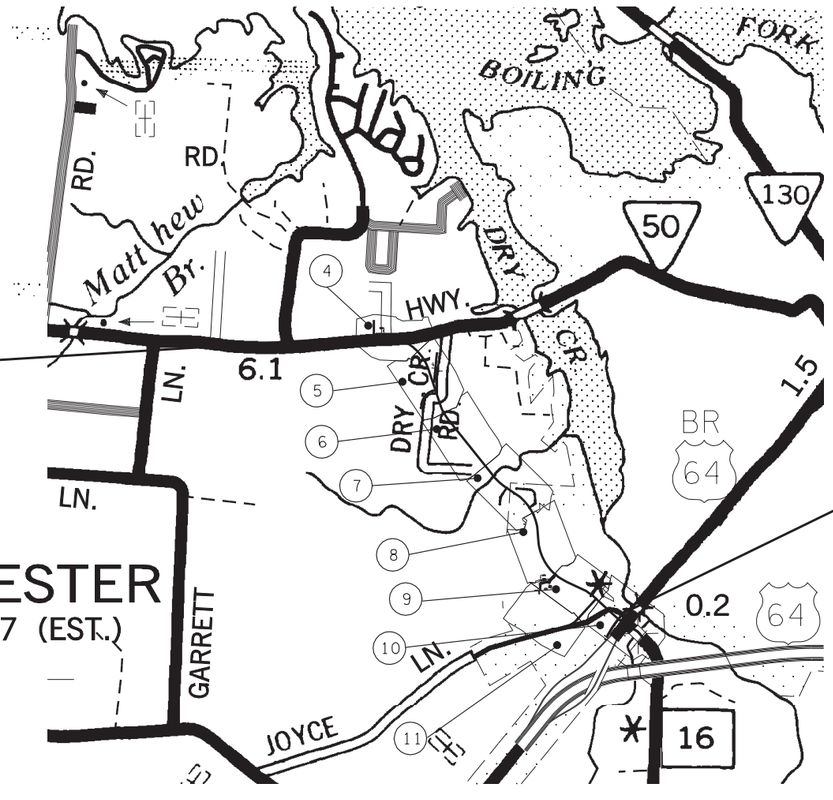
GRADE, DRAIN, BASE, PAVE, GUARDRAIL, PAVEMENT MARKINGS AND STRUCTURES

Right-of-Way

STATE HIGHWAY NO. 50 F.A.H.S. NO. 50

TENN.	YEAR	SHEET NO.
	2012	1
FED. AID PROJ. NO.	STP-50(31)	
STATE PROJ. NO.	26150-2201-14	





N

NO EXCLUSIONS
NO EQUATIONS

BEGIN PROJ. NO. STP-50(31)
STA. 12+00.00

END PROJ. NO. STP-50(31)
STA. 89+10.28

R.O.W. FIELD REVIEW

SCALE: 1"= ± 1500'

0 1500' 3000' 4500'

ROADWAY LENGTH	1.450 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.010 MILES
PROJECT LENGTH	1.460 MILES

TRAFFIC DATA	
ADT (2013)	2270
ADT (2033)	2950
DHV (2033)	295
D	65 - 35
T (ADT)	2 %
T (DHV)	1 %
V	50 MPH

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

SPECIAL NOTES

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

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

TDOT C.E. MANAGER 1 James A. Johnston, P.E.
TDOT ROAD SP. SV. 2 Mr. Robert W. Rodgers, P.E.
DESIGNER Jason M. Ingram, E.I.T. CHECKED BY

P.E. NO. 26150-1201-14

PIN NO. 105769.00

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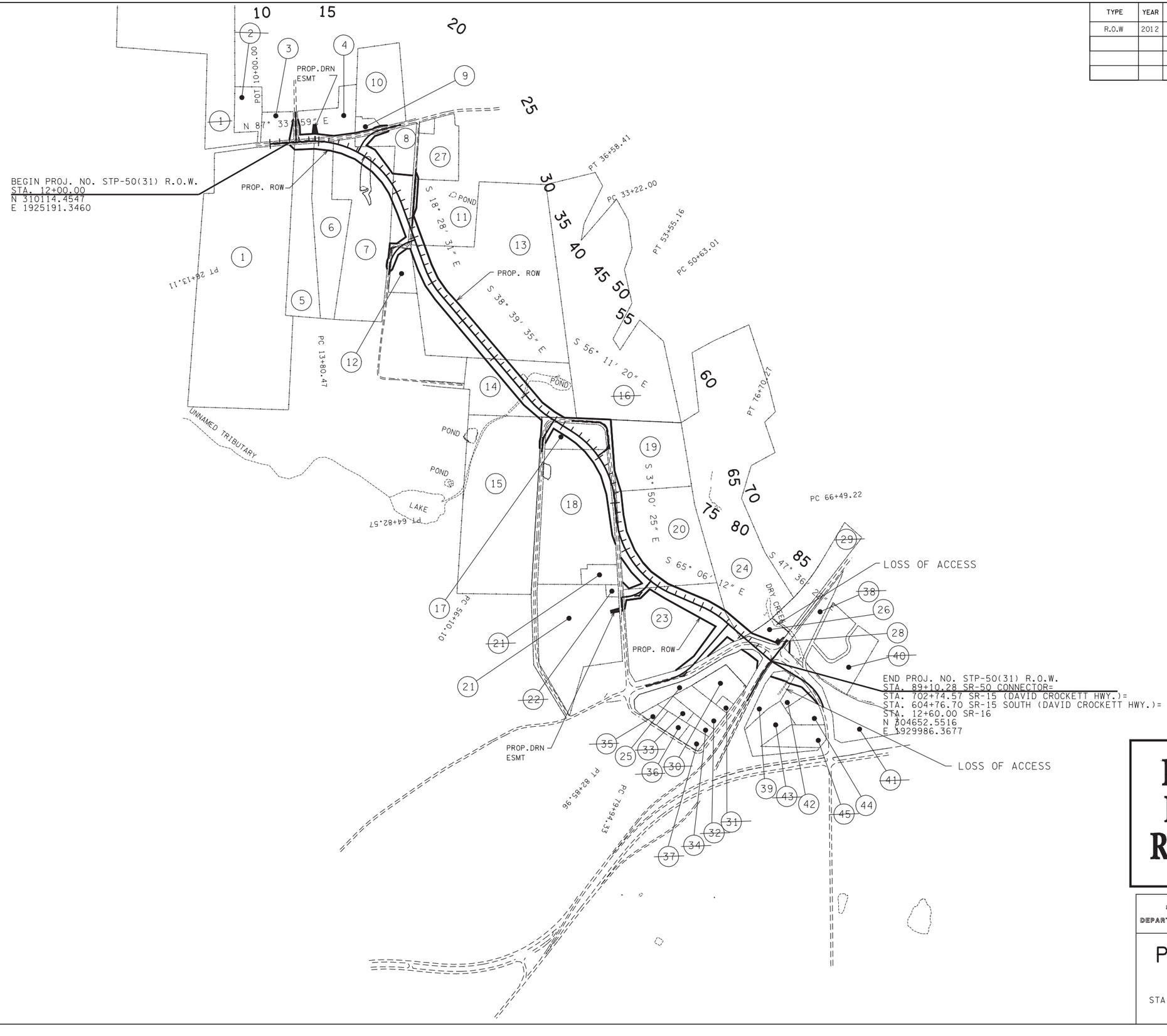
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	3C



R.O.W. FIELD REVIEW

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY MAP

STA.10+00 TO STA.90+10

SCALE: 1"=500'

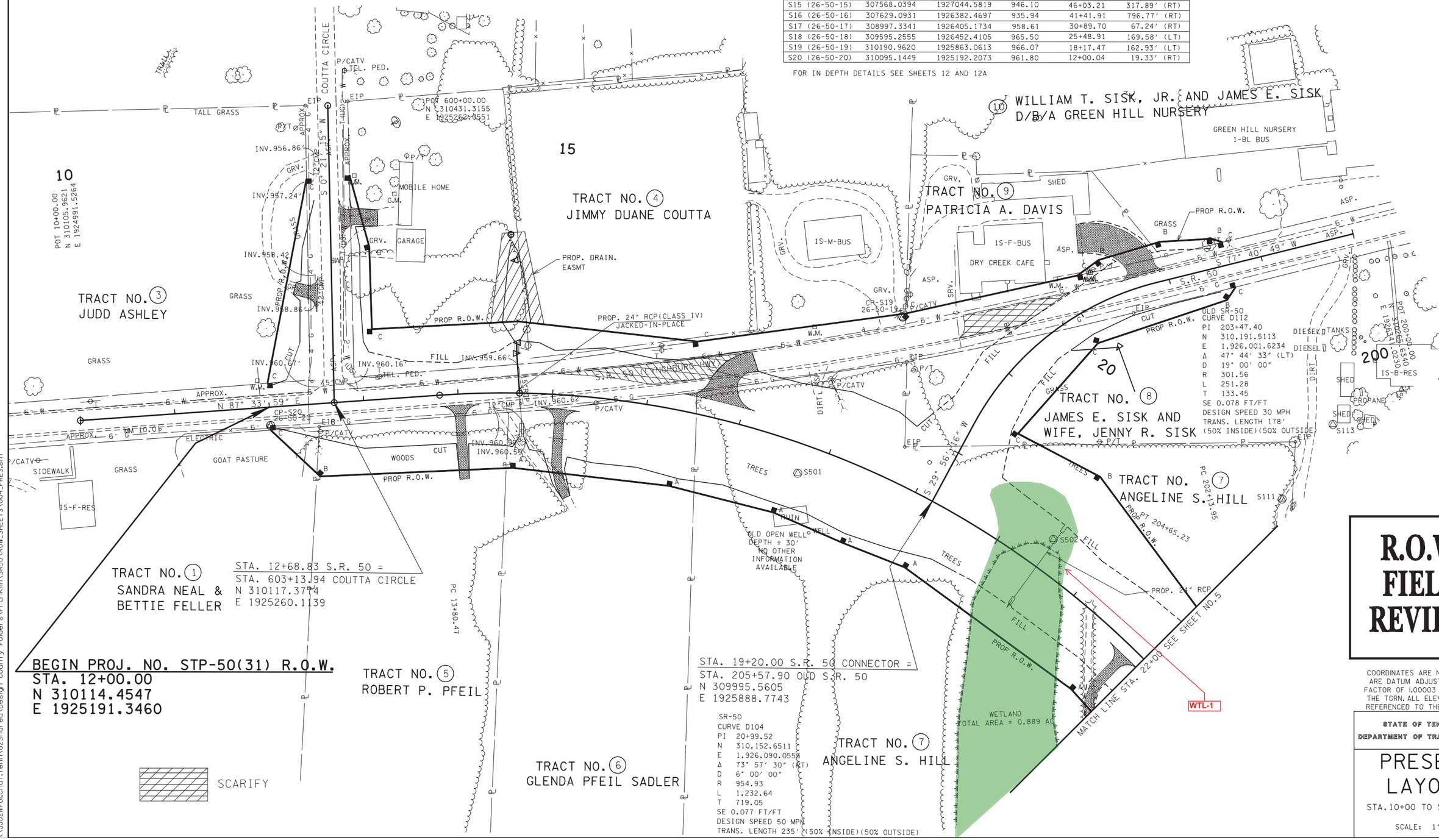
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	4

CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S45 (26-15-45)	303712.5760	1930648.8418	916.05	-	-
S5 (26-50-05)	304315.8372	1930475.0035	908.32	-	-
S6 (26-50-06)	304836.3178	1929895.3620	907.18	87+25.22	17.59' (LT)
S7 (26-50-07)	304776.5266	1929518.7443	924.58	84+59.53	255.95' (RT)
S8 (26-50-08)	304589.9144	1929103.6519	934.69	82+36.40	654.08' (RT)
S9 (26-50-09)	304343.9694	1928583.6323	945.19	77+34.41	1102.33' (RT)
S10 (26-50-10)	304967.0384	1928463.9259	944.80	74+82.81	617.76' (RT)
S11 (26-50-11)	305675.5373	1928426.3308	963.49	70+88.36	161.71' (RT)
S12 (26-50-12)	306264.9291	1928414.8607	970.48	65+55.98	17.67' (RT)
S13 (26-50-13)	306719.6087	1928425.9453	960.38	61+29.35	94.84' (LT)
S14 (26-50-14)	306941.8156	1927713.8939	935.08	54+37.93	268.17' (RT)
S15 (26-50-15)	307568.0394	1927044.5819	946.10	46+03.21	317.89' (RT)
S16 (26-50-16)	307629.0931	1926382.4697	935.94	41+41.91	796.77' (RT)
S17 (26-50-17)	308997.3341	1926405.1734	958.61	30+89.70	67.24' (RT)
S18 (26-50-18)	309595.2555	1926452.4105	965.50	25+48.91	169.58' (LT)
S19 (26-50-19)	310190.9620	1925863.0613	966.07	18+17.47	162.93' (LT)
S20 (26-50-20)	310095.1449	1925192.2073	961.80	12+00.04	19.33' (RT)

FOR IN DEPTH DETAILS SEE SHEETS 12 AND 12A



R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 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'

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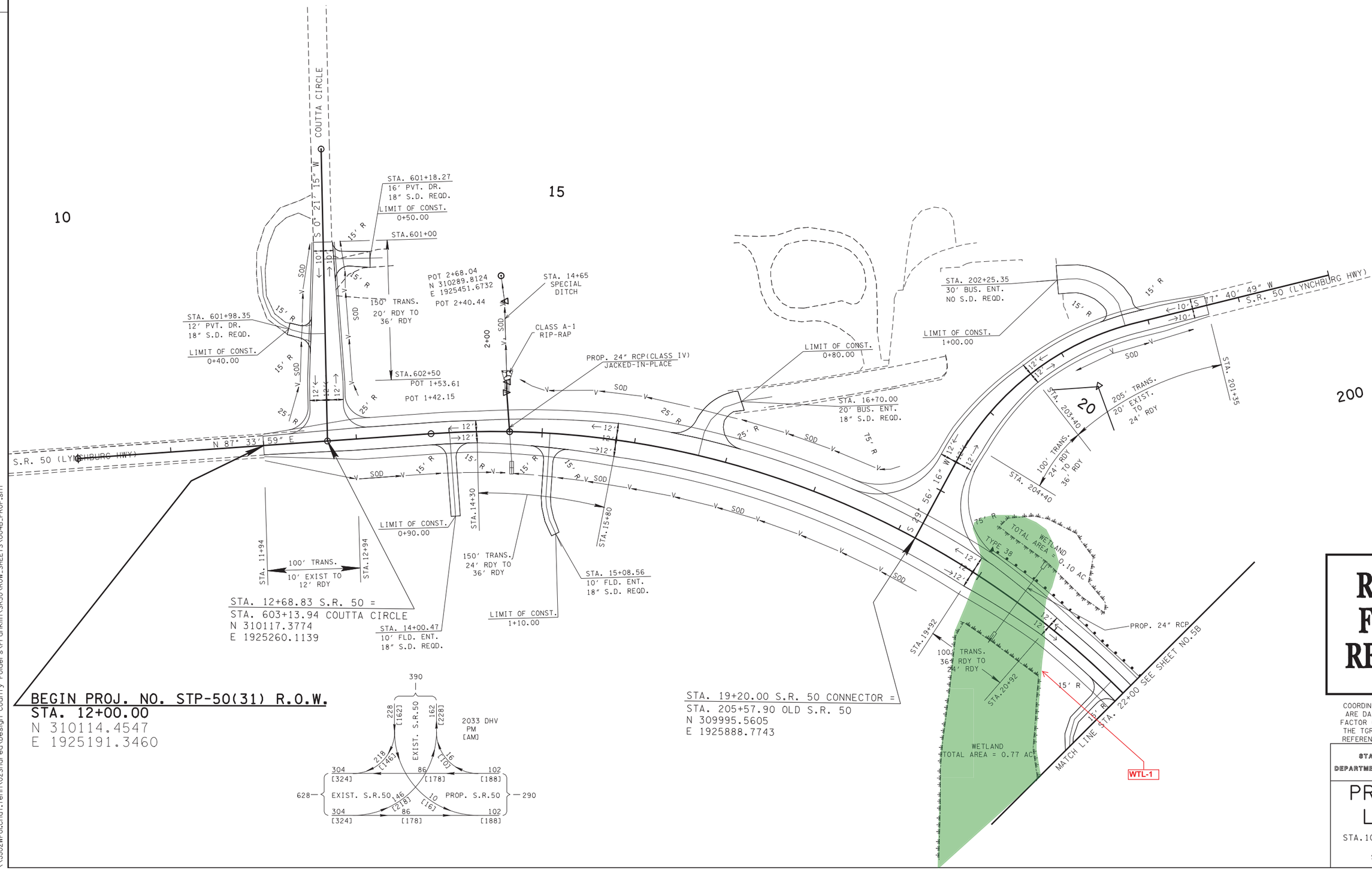
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	4B

10

15



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N

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 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'

03-OCT-2011 13:33
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	5

TRACT NO. (27)
FIELD
CHARLES WAYNE REAGIN
AND WIFE MARY ALICE

TRACT NO. (11)
MICKEY BAXTER
AND WIFE, CATHY BAXTER

TRACT NO. (8)
JAMES E. SISK AND
WIFE, JENNY R. SISK

STA. 30+25.00 S.R. 50 CONNECTOR =
STA. 300+00.00 DRY CREEK ROAD
N 309080.0056
E 1926448.4451

SR-50
CURVE D103
PI 34+91.97
N 308,637.1060
E 1,926,596.4257
Δ 20° 11′ 04″ (LT)
D 6° 00′ 00″
R 954.93
L 336.41
T 169.96
SE 0.077 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 235′
(50% INSIDE)(50% OUTSIDE)

TRACT NO. (13)
MIKE P. LYNCH

TRACT NO. (12)
CHARLES E. BROWN
AND WIFE CLAUDIA BROWN

DRY CREEK RD
CURVE D115
PI 302+55.20
N 308,999.1345
E 1,926,206.4012
Δ 64° 27′ 19″ (LT)
D 19° 00′ 00″
R 301.56
L 339.24
T 190.10
SE 0.078 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 178′
(50% INSIDE)(50% OUTSIDE)

TRACT NO. (8)
JAMES E. SISK AND
WIFE, JENNY R. SISK

TRACT NO. (7)
ANGELINE S. HILL

TRACT NO. (6)
GLENDA PFEIL SADLER

POND
EL. = 957.2

WETLAND
TOTAL AREA = 0.889 AC

WTL-1

SCARIFY

MATCH LINE STA. 22+00 SEE SHEET NO.4

MATCH LINE STA. 35+00 SEE SHEET NO.6

DRY CREEK ROAD

DUCK RIVER ELECTRIC SERVICE

DUCK RIVER FIELD ROAD

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 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.35+00

SCALE: 1"=50'

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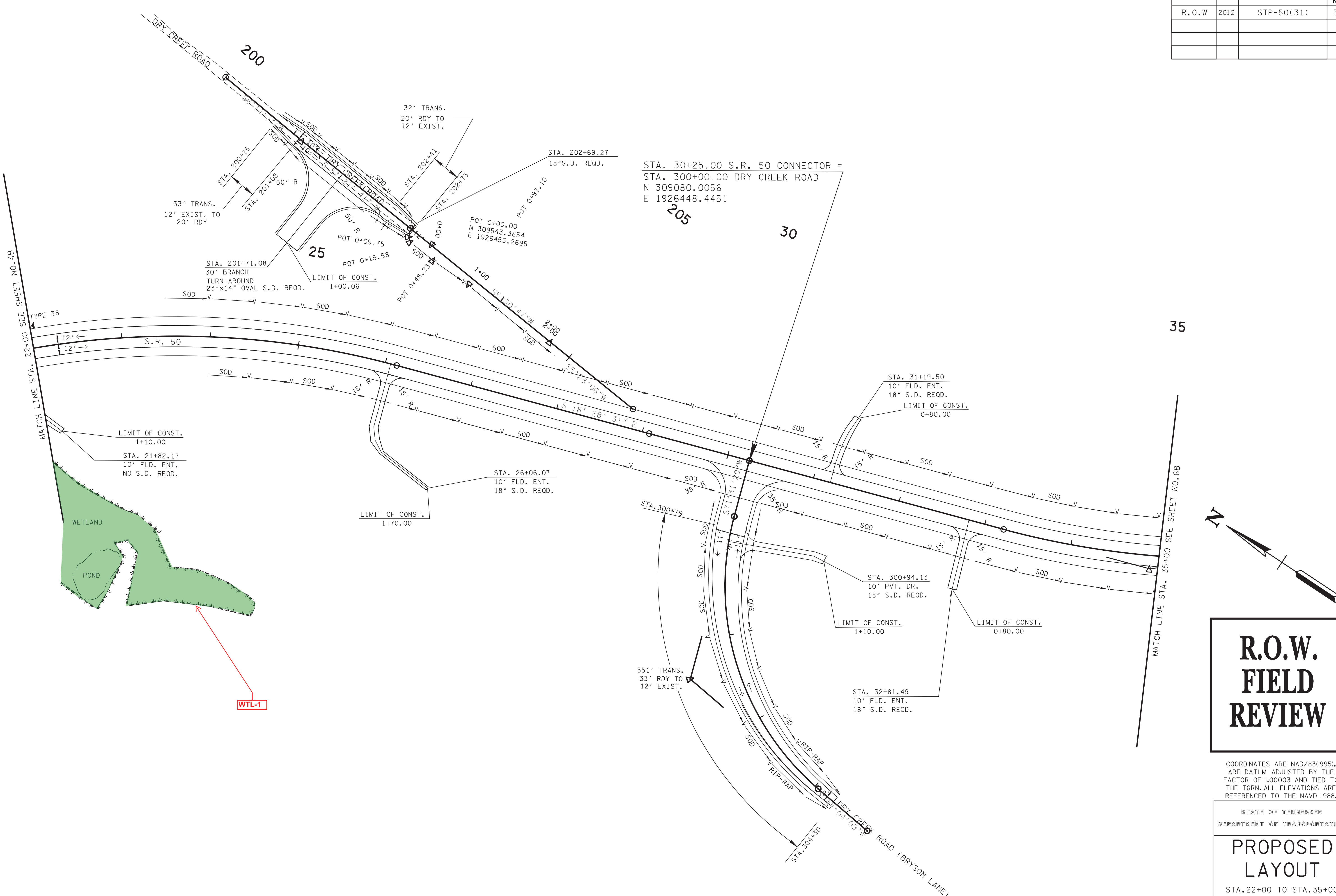
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	5B



DRY CREEK ROAD
200
205
25
30
35
32' TRANS.
20' RDY TO
12' EXIST.
STA. 202+41
STA. 202+73
STA. 202+69.27
18"S.D. REQD.
STA. 30+25.00 S.R. 50 CONNECTOR =
STA. 300+00.00 DRY CREEK ROAD
N 309080.0056
E 1926448.4451
STA. 200+75
STA. 201+08
50' R
33' TRANS.
12' EXIST. TO
20' RDY
POT 0+97.10
POT 0+00.00
N 309543.3854
E 1926455.2695
POT 0+09.75
POT 0+15.58
POT 0+48.23
1+00
2+00
STA. 201+71.08
30' BRANCH
TURN-AROUND
23"x14" OVAL S.D. REQD.
LIMIT OF CONST.
1+00.06
SOD
TYPE 38
12'
S.R. 50
S 18° 28' 31" E
MATCH LINE STA. 22+00 SEE SHEET NO.4B
LIMIT OF CONST.
1+10.00
STA. 21+82.17
10' FLD. ENT.
NO S.D. REQD.
15' R
STA. 26+06.07
10' FLD. ENT.
18" S.D. REQD.
LIMIT OF CONST.
1+70.00
STA. 31+19.50
10' FLD. ENT.
18" S.D. REQD.
LIMIT OF CONST.
0+80.00
MATCH LINE STA. 35+00 SEE SHEET NO.6B
35' R
STA.300+79
11'
STA. 300+94.13
10' PVT. DR.
18" S.D. REQD.
LIMIT OF CONST.
1+10.00
LIMIT OF CONST.
0+80.00
WETLAND
POND
WTL-1
351' TRANS.
33' RDY TO
12' EXIST.
STA. 32+81.49
10' FLD. ENT.
18" S.D. REQD.
RIP-RAP
DRY CREEK ROAD (BRYSON LANE)
STA. 304+30
N

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.22+00 TO STA.35+00

SCALE: 1"=50'

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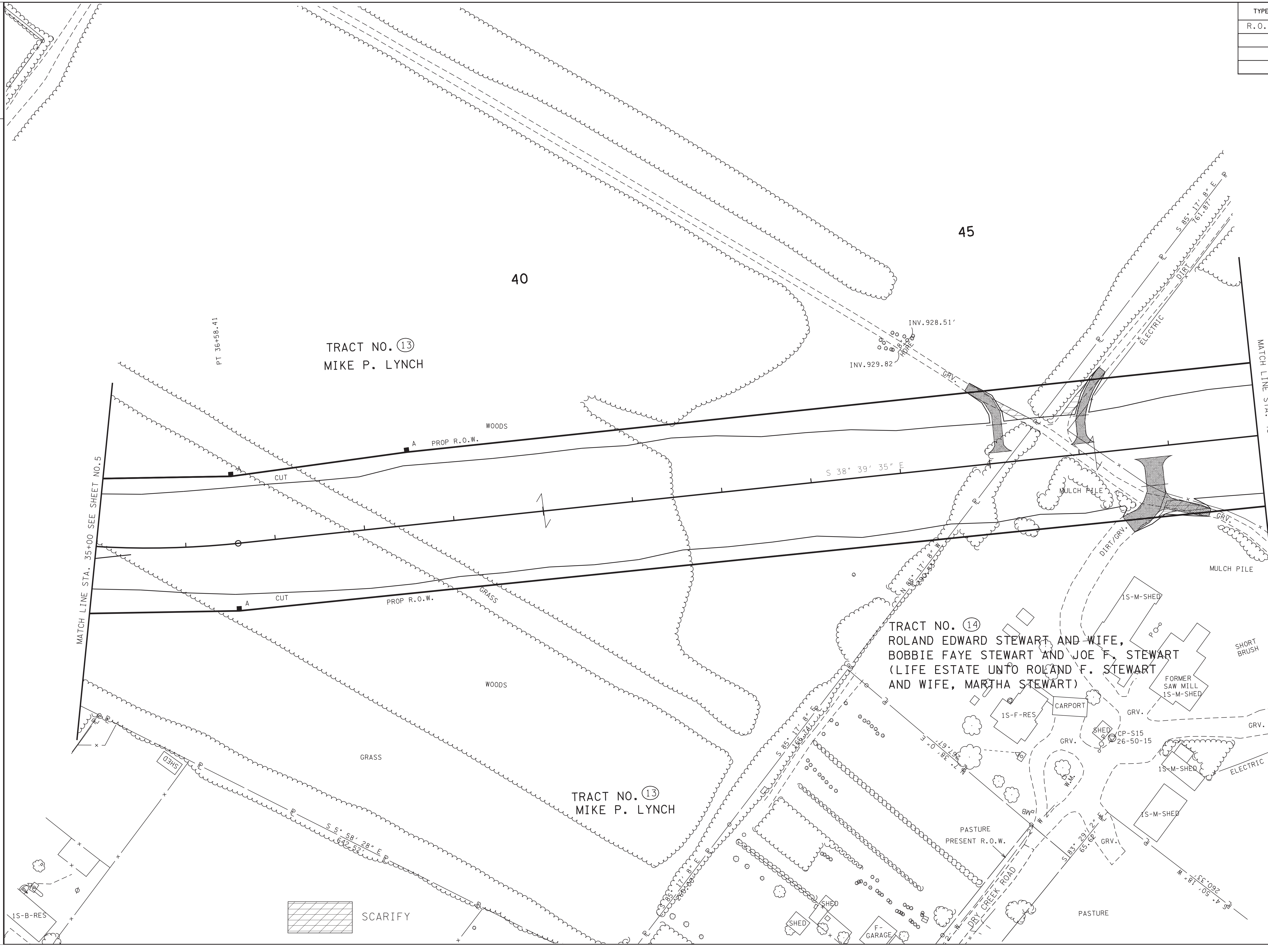
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	6



TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.
40
45
TRACT NO. 13
MIKE P. LYNCH
PT 36+58.41
WOODS
PROP R.O.W.
CUT
S 38° 39' 35" E
INV.928.51'
INV.929.82
ELECTRIC
MULCH PILE
MATCH LINE STA. 35+00 SEE SHEET NO.5
MATCH LINE STA. 48+00 SEE SHEET NO.7
TRACT NO. 14
ROLAND EDWARD STEWART AND WIFE,
BOBBIE FAYE STEWART AND JOE F. STEWART
(LIFE ESTATE UNTO ROLAND F. STEWART
AND WIFE, MARTHA STEWART)
1S-M-SHED
FORMER SAW MILL 1S-M-SHED
SHORT BRUSH
CARPORT
1S-F-RES
CP-S15
26-50-15
GRASS
TRACT NO. 13
MIKE P. LYNCH
S 5° 58' 28" E
PASTURE
PRESENT R.O.W.
DRY CREEK ROAD
1S-B-RES
SHED
F-GARAGE
SCARIFY

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.35+00 TO STA.48+00

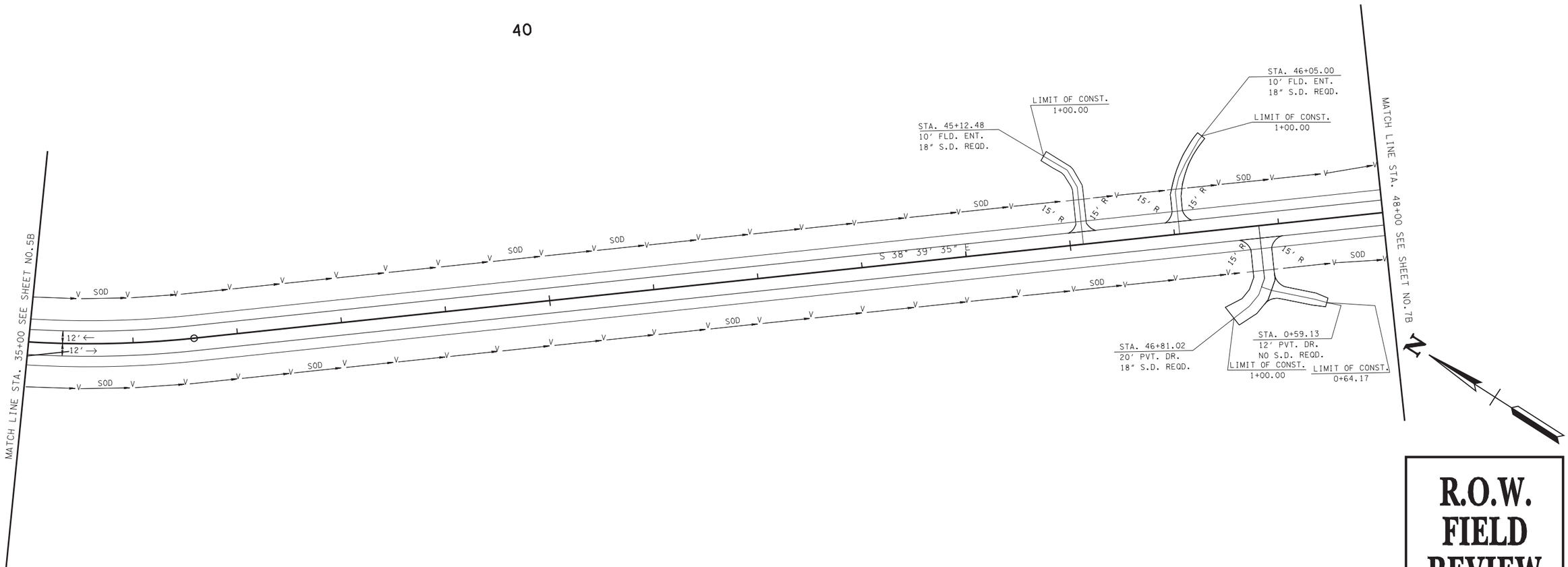
SCALE: 1"=50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	6B

40

45



R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.35+00 TO STA.48+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	2012	STP-50(31)	7

SR-50
CURVE D106
PI 52+10.24
N 307,292.6104
E 1,927,672.0223
Δ 17° 31′ 44″ (LT)
D 6° 00′ 00″
R 954.93
L 292.15
T 147.23
SE 0.077 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 235′

WILTON CIRCLE 2
CURVE D133
PI 204+79.99
N 307,147.2567
E 1,928,363.9005
Δ 80° 51′ 36″ (RT)
D 57° 17′ 45″
R 100.00
L 141.13
T 85.20
SE EXISTING

TRACT NO. (16)
JOHN ROBINSON SCARBOROUGH
AND NANCY H. SCARBOROUGH

POT 203+36.68
N 307159.8438
E 1928221.1435

POT 202+74.32
N 307165.7691
E 1928159.0655

POT 201+32.41
N 307177.0226
E 1928017.5971

TRACT NO. (19)
FRANKLIN COUNTY, TENNESSEE

SR-50
CURVE D102
PI 60+79.45
N 306,807.6513
E 1,928,396.1392
Δ 52° 20′ 54″ (RT)
D 6° 00′ 00″
R 954.93
L 872.47
T 469.35
SE 0.077 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 235′

WILTON CIRCLE 2
CURVE D131
PI 207+11.52
N 306,887.1248
E 1,928,382.5524
Δ 60° 07′ 33″ (RT)
D 54° 34′ 03″
R 105.00
L 110.19
T 60.78
SE NC
DESIGN SPEED 15 MPH

PND-1

TRACT NO. (14)
ROLAND EDWARD STEWART AND WIFE,
BOBBIE FAYE STEWART AND JOE F. STEWART
(LIFE ESTATE UNTO ROLAND F. STEWART
AND WIFE, MARTHA STEWART)

STA. 53+95.00 S.R. 50 CONNECTOR =
STA. 500+00.00 WILTON CIRCLE 1
N 307188.5185
E 1927827.4470

STA. 59+80.32 S.R. 50 CONNECTOR =
STA. 208+39.87 WILTON CIRCLE 2
N 306809.0475
E 1928266.6909

TRACT NO. (15)
LORRAINE E. LYNCH

TRACT NO. (17)
CITY OF WINCHESTER,
TENNESSEE

TRACT NO. (18)
STATE OF TENNESSEE,
MILITARY DEPARTMENT

WILTON CIRCLE 1
CURVE D121
PI 502+15.35
N 307,009.5874
E 1,927,707.6124
Δ 27° 58′ 49″ (LT)
D 19° 00′ 00″
R 301.56
L 147.27
T 75.13
SE 0.078 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 178′

WETLAND
TOTAL AREA = 0.253 AC

Wetland outside of ROW

STR-1

SCARIFY

MATCH LINE STA. 48+00 SEE SHEET NO. 6

MATCH LINE STA. 61+00 SEE SHEET NO. 8

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.48+00 TO STA.61+00

SCALE: 1"=50′

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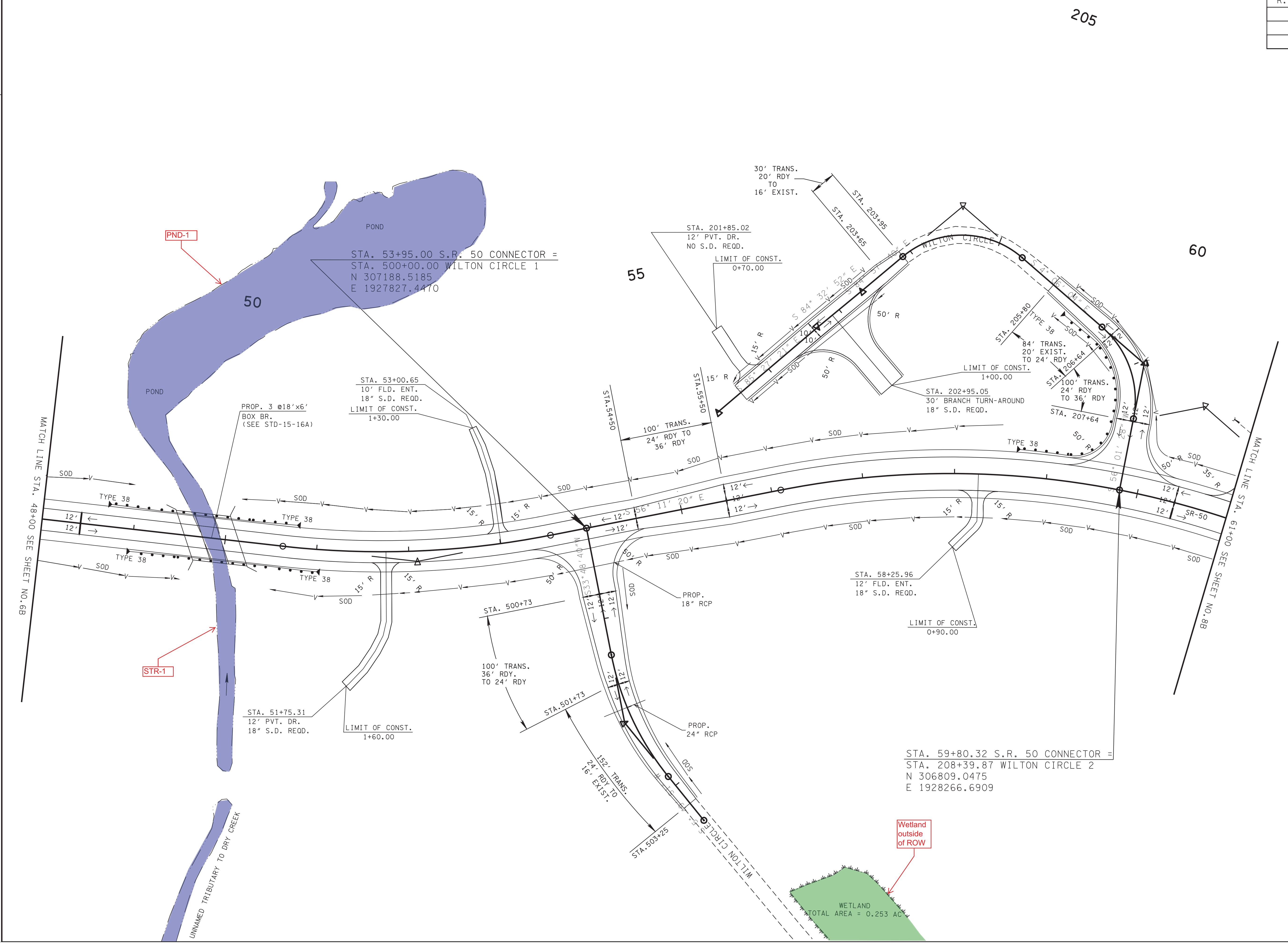
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	7B



205
60
55
50
PND-1
POND
STR-1
UNNAMED TRIBUTARY TO DRY CREEK
STA. 53+95.00 S.R. 50 CONNECTOR =
STA. 500+00.00 WILTON CIRCLE 1
N 307188.5185
E 1927827.4470
30' TRANS.
20' RDY
TO
16' EXIST.
STA. 203+95
STA. 203+65
STA. 201+85.02
12' PVT. DR.
NO S.D. REQD.
LIMIT OF CONST.
0+70.00
WILTON CIRCLE
50' R
15' R
STA. 205+80
TYPE 38
84' TRANS.
20' EXIST.
TO 24' RDY
STA. 206+64
100' TRANS.
24' RDY
TO 36' RDY
STA. 207+64
LIMIT OF CONST.
1+00.00
STA. 202+95.05
30' BRANCH TURN-AROUND
18" S.D. REQD.
STA. 53+00.65
10' FLD. ENT.
18" S.D. REQD.
LIMIT OF CONST.
1+30.00
PROP. 3 @18'x6'
BOX BR.
(SEE STD-15-16A)
STA. 54+50
STA. 55+50
100' TRANS.
24' RDY TO
36' RDY
SOD
TYPE 38
MATCH LINE STA. 48+00 SEE SHEET NO. 6B
MATCH LINE STA. 61+00 SEE SHEET NO. 8B
S 56° 11' 20" E
SR-50
STA. 500+73
100' TRANS.
36' RDY.
TO 24' RDY
STA. 501+73
152' TRANS.
24' RDY TO
16' EXIST.
STA. 503+25
PROP.
18" RCP
PROP.
24" RCP
STA. 51+75.31
12' PVT. DR.
18" S.D. REQD.
LIMIT OF CONST.
1+60.00
STA. 58+25.96
12' FLD. ENT.
18" S.D. REQD.
LIMIT OF CONST.
0+90.00
STA. 59+80.32 S.R. 50 CONNECTOR =
STA. 208+39.87 WILTON CIRCLE 2
N 306809.0475
E 1928266.6909
Wetland outside of ROW
WETLAND
TOTAL AREA = 0.253 AC

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 48+00 TO STA. 61+00

SCALE: 1"=50'

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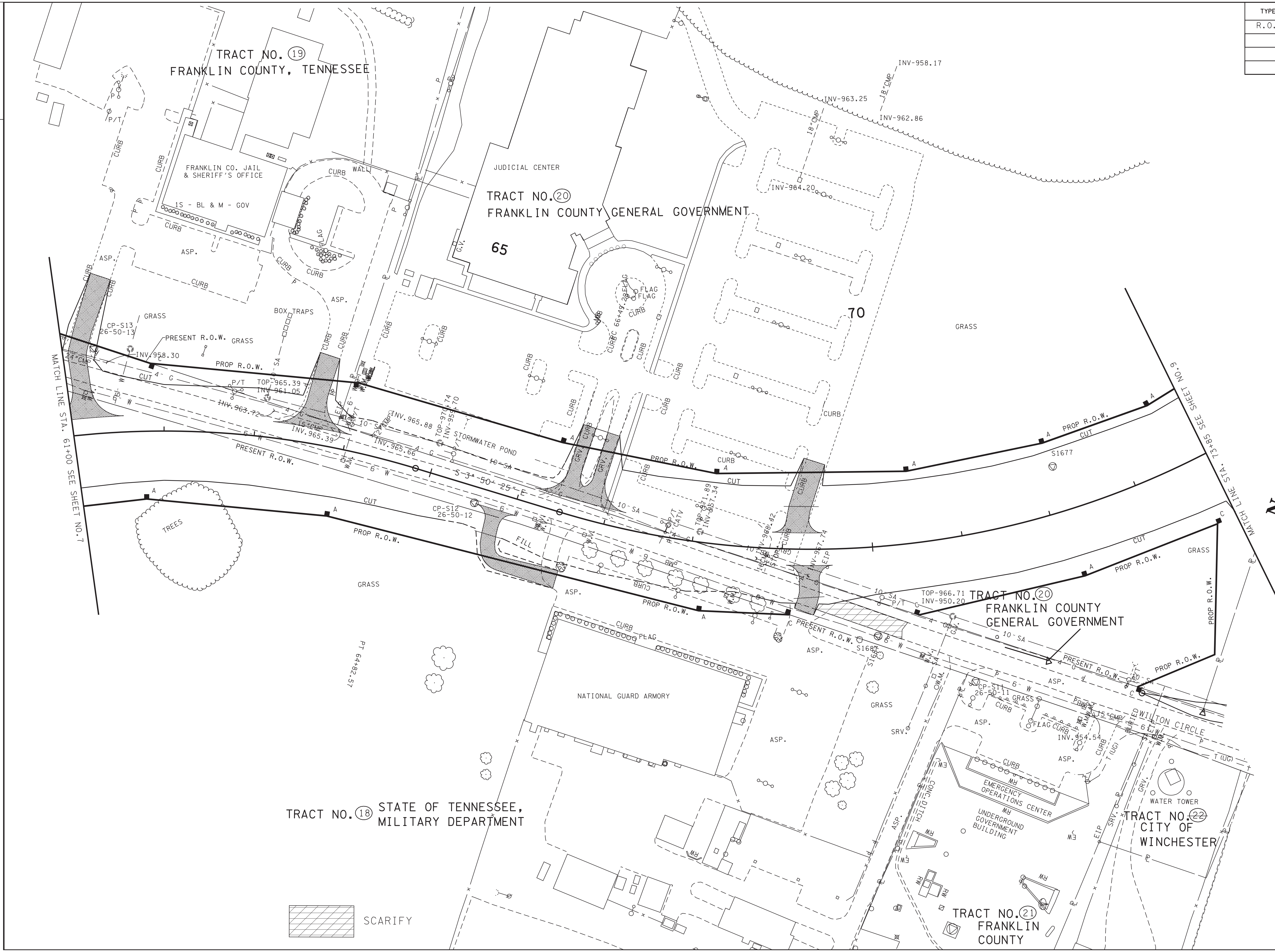
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	8


TRACT NO. 19
FRANKLIN COUNTY, TENNESSEE
FRANKLIN CO. JAIL & SHERIFF'S OFFICE
1S - BL & M - GOV
JUDICIAL CENTER
TRACT NO. 20
FRANKLIN COUNTY GENERAL GOVERNMENT
65
70
STORMWATER POND
PRESENT R.O.W.
PROP R.O.W.
MATCH LINE STA. 61+00 SEE SHEET NO.7
MATCH LINE STA. 73+85 SEE SHEET NO. 9
S 3° 50' 25" E
CP-S13 26-50-13
CP-S12 26-50-12
CP-S11 26-50-11
TRACT NO. 20
FRANKLIN COUNTY
GENERAL GOVERNMENT
NATIONAL GUARD ARMORY
TRACT NO. 18 STATE OF TENNESSEE, MILITARY DEPARTMENT
WILTON CIRCLE
EMERGENCY OPERATIONS CENTER
UNDERGROUND GOVERNMENT BUILDING
WATER TOWER
TRACT NO. 22 CITY OF WINCHESTER
TRACT NO. 21 FRANKLIN COUNTY
PT 64+82.57
GRASS
ASP.
TREES
SCARIFY

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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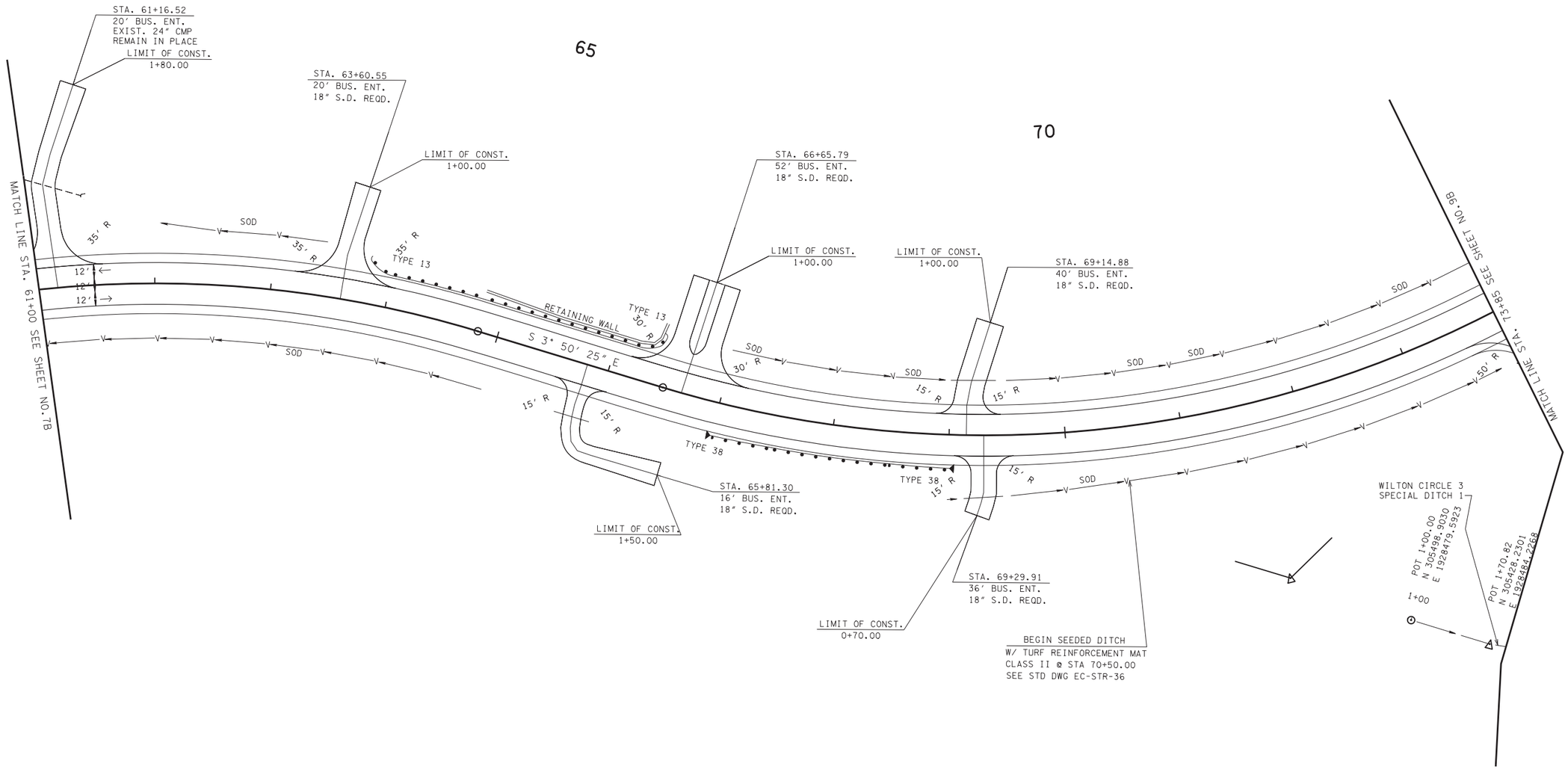
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	8B

65

70



R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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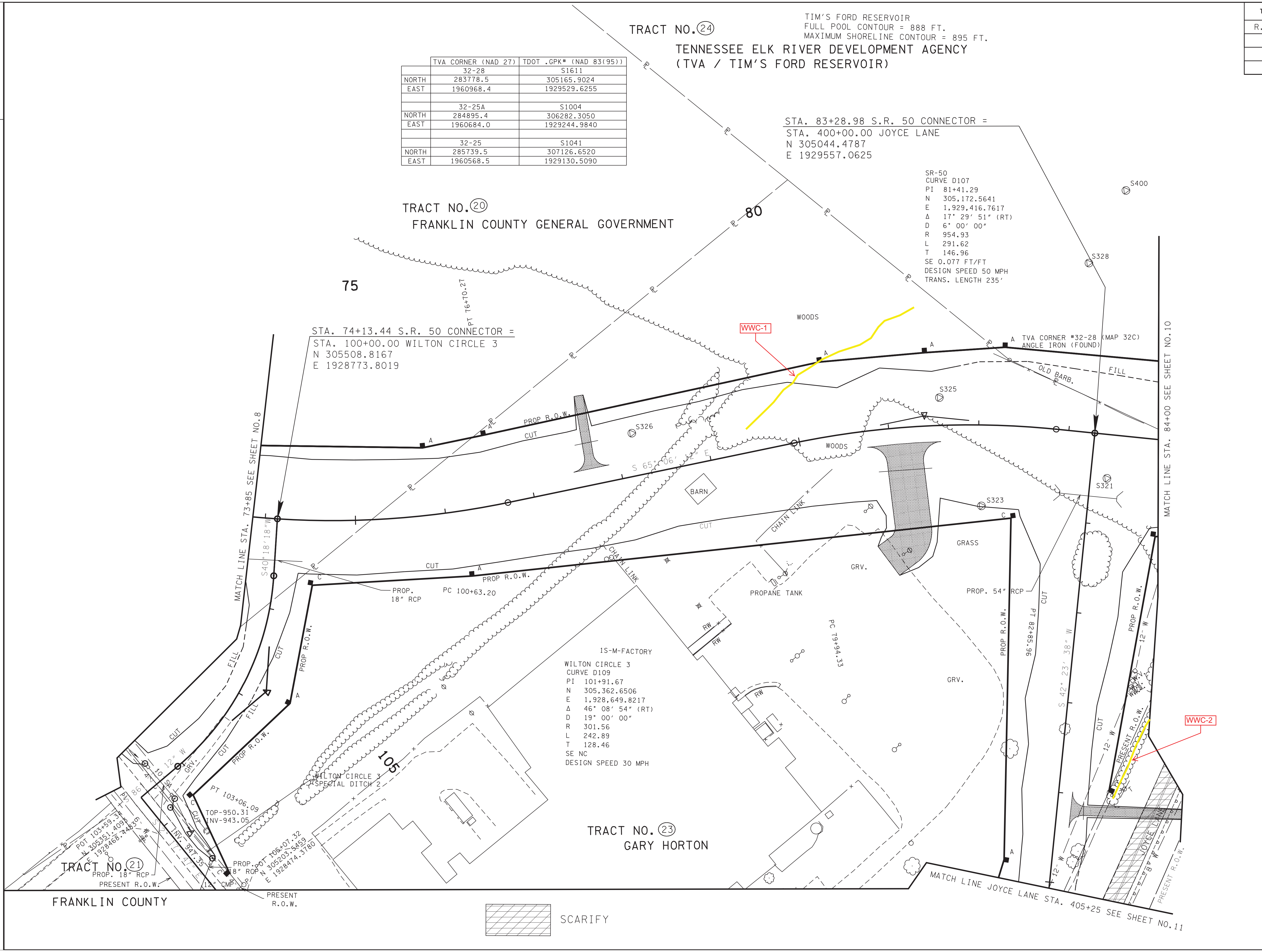
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	9

	TVA CORNER (NAD 27)	TDOT .GPK# (NAD 83(95))
	32-28	S1611
NORTH	283778.5	305165.9024
EAST	1960968.4	1929529.6255
	32-25A	S1004
NORTH	284895.4	306282.3050
EAST	1960684.0	1929244.9840
	32-25	S1041
NORTH	285739.5	307126.6520
EAST	1960568.5	1929130.5090



TRACT NO. 24
TENNESSEE ELK RIVER DEVELOPMENT AGENCY
(TVA / TIM'S FORD RESERVOIR)
TIM'S FORD RESERVOIR
FULL POOL CONTOUR = 888 FT.
MAXIMUM SHORELINE CONTOUR = 895 FT.
STA. 83+28.98 S.R. 50 CONNECTOR =
STA. 400+00.00 JOYCE LANE
N 305044.4787
E 1929557.0625
SR-50
CURVE D107
PI 81+41.29
N 305,172.5641
E 1,929,416.7617
Δ 17° 29' 51" (RT)
D 6° 00' 00"
R 954.93
L 291.62
T 146.96
SE 0.077 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 235'
TRACT NO. 20
FRANKLIN COUNTY GENERAL GOVERNMENT
80
75
PT 76+70.27
STA. 74+13.44 S.R. 50 CONNECTOR =
STA. 100+00.00 WILTON CIRCLE 3
N 305508.8167
E 1928773.8019
WWC-1
WOODS
TVA CORNER #32-28 (MAP 32C)
ANGLE IRON (FOUND)
OLD BARB.
FILL
S400
S328
S325
S326
S321
S323
PROP R.O.W.
CUT
BARN
CHAIN LINK
PROP. 18" RCP
PC 100+63.20
PROPANE TANK
GRASS
GRV.
PROP. 54" RCP
PT 82+85.96
PC 79+94.33
MATCH LINE STA. 84+00 SEE SHEET NO.10
MATCH LINE STA. 73+85 SEE SHEET NO.8
IS-M-FACTORY
WILTON CIRCLE 3
CURVE D109
PI 101+91.67
N 305,362.6506
E 1,928,649.8217
Δ 46° 08' 54" (RT)
D 19° 00' 00"
R 301.56
L 242.89
T 128.46
SE NC
DESIGN SPEED 30 MPH
105
WILTON CIRCLE 3
SPECIAL DITCH 2
PT 103+06.09
TOP-950.31
INV-943.05
POT 103+59.34
POT 105+07.32
TRACT NO. 23
GARY HORTON
TRACT NO. 21
PROP. 18" RCP
PRESENT R.O.W.
12" CMP
FRANKLIN COUNTY
WWC-2
JOYCE LANE
MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.11
SCARIFY
N

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.73+85 TO STA.84+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	2012	STP-50(31)	9B

STA. 83+28.98 S.R. 50 CONNECTOR =
STA. 400+00.00 JOYCE LANE
N 305044.4787
E 1929557.0625

80

75

STA. 74+13.44 S.R. 50 CONNECTOR =
STA. 100+00.00 WILTON CIRCLE 3
N 305508.8167
E 1928773.8019

STA. 77+67.29
10' FLD. ENT.
18" S.D. REQD.

LIMIT OF CONST.
1+00.00

WWC-1

TYPE 38

MATCH LINE STA. 84+00 SEE SHEET NO.10B

MATCH LINE STA. 73+85 SEE SHEET NO.8B

SOD

15' R

S 65° 06' 12" E

12'

20' R

CLASS A-1 RIP-RAP

75' R

END SEEDED DITCH
W/ TURF REINFORCEMENT MAT
CLASS II @ STA 80+80.00
SEE STD DWG EC-STR-36

LIMIT OF CONST.
1+60.00

STA. 81+14.05
40' BUS. ENT.
18" S.D. REQD.

BEGIN SEEDED DITCH
W/ TURF REINFORCEMENT MAT
CLASS II @ STA 401+00.00
SEE STD DWG EC-STR-36

PROP. 54" RCP

STA. 401+00

STA. 402+00

100' TRANS. 24' RDY TO 36' RDY

S 42° 23' 38" W

JOYCE LANE

TYPE 38

WWC-2

S 40° 18' 18" W

50' R

STA. 100+75.00

PROP. 18" RCP

100' TRANS. 24' RDY TO 36' RDY

STA. 101+75.00

POT 2+21.19
N 305378.8956
E 1928494.3571

S 86° 2

35' R

STA. 102+50

STA. 103+00

50' TRANS. 20' RDY TO 22' RDY

POT 2+00.00
N 305328.0355
E 1928497.5710
POT 2+41.69
N 305287.0761
E 1928489.7736

WILTON CIRCLE 3
SPECIAL DITCH 2

POT 2+78.70
N 305250.1111
E 1928491.5993

S 0° 17' 41" E

CLASS A-1 RIP-RAP

PROP. 18" RCP

PROP. 18" RCP

105

	93 [192]		78 [168]		106 [211]			
290 —	PROP. S.R.20	15 [24]		28 [45]	PROP. S.R.20	— 322		
	199 [96]				218 [109]			
		24 [15]	175 [81]	43 [28]				
		52 [58]	JOYCE LANE	58 [52]				
			110					

2033 DHV
PM
[AM]

MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.11B

N

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.73+85 TO STA.84+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	2012	STP-50(31)	10

END PROJ. NO. STP-50(31) R.O.W.
STA. 89+10.28 S.R. 50 CONNECTOR =
STA. 702+74.57 S.R.15(DAVID CROCKETT HWY)=
STA. 12+60.00 S.R.16
STA. 604+76.70 S.R.15 SOUTH(DAVID CROCKETT HWY)=
N 304652.5516
E 1929986.3677

TRACT NO. 24
TENNESSEE ELK RIVER DEVELOPMENT AGENCY
(TVA / TIM'S FORD RESERVOIR)

TRACT NO. 38
FRANKLIN COUNTY

SCARIFY

BRIDGE DESCRIPTION:
BRIDGE ID. 26SR0150011
3 SPAN CONC. BRIDGE WITH 3.0' CONC. RAILS.
1.3' ASPHALT & CAST IN PLACE CONC. DECKS
BRIDGE 27.6'W X 128.9'L.

Dry Creek

LOSS OF ACCESS

TRACT NO. 26
BERTIE RUTH STANLEY

TRACT NO. 28
CITY OF WINCHESTER

TRACT NO. 40
FRANCES E. PISTOLE

TRACT NO. 41
W. F. YARBROUGH INC.
C/O FRANK VUKELICH

TRACT NO. 25
BERTIE RUTH STANLEY

TRACT NO. 30
PHILLIP C. STANLEY

TRACT NO. 39
ALTON M. GRIFFIN
AND WIFE WILMA

TRACT NO. 42
DELBERT REED
AND WIFE DEBORAH

TRACT NO. 43
WINCHESTER HOLLINESS CHURCH
C/O JOHNNY TIDWELL

TRACT NO. 44
ALLGAS INC. OF TN.

TRACT NO. 45
WINCHESTER
HOLLINESS
CHURCH
C/O MARK TEET

S.R. 15 / DAVID CROCKETT HWY
S.R. 15
BRIDGE
TVA BM FT-14
909.88' (NAVD 88)

TWO @ 10' X 8' BOX CULVERTS.
SKEW 75°
FLOWS RIGHT
D.A. 707 ac.
ROLLING
H.W. 900.0'

SR-16
CURVE D302
PI 7+25.36
N 304,355.7263
E 1,930,447.7182
Δ 39° 44' 55" (LT)
D 12° 00' 42"
R 477.00
L 330.92
T 172.43
SE 0.065 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 155'

SR15SOUTH PC 603+02.55
CURVE D126
PI 603+89.67
N 304,564.2089
E 1,929,932.3406
Δ 4° 32' 08" (RT)
D 2° 36' 16"
R 2,200.00
L 174.15
T 87.12
SE NC
DESIGN SPEED 20 MPH

SNK-1
PROP. 2 @ 14' X 8' BOX BR. (SEE STD-15-RBA)

STR-2

WWC-2

WWC-3

NOTE: SEE SHEET 10D AND 10E FOR ROUNDABOUT DETAILS.

MATCH LINE STA. 84+00 SEE SHEET NO.9

MATCH LINE STA. 84+00 SEE SHEET NO.9

R.O.W. FIELD REVIEW

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.84+00 TO STA.90+10

SCALE: 1"=50'

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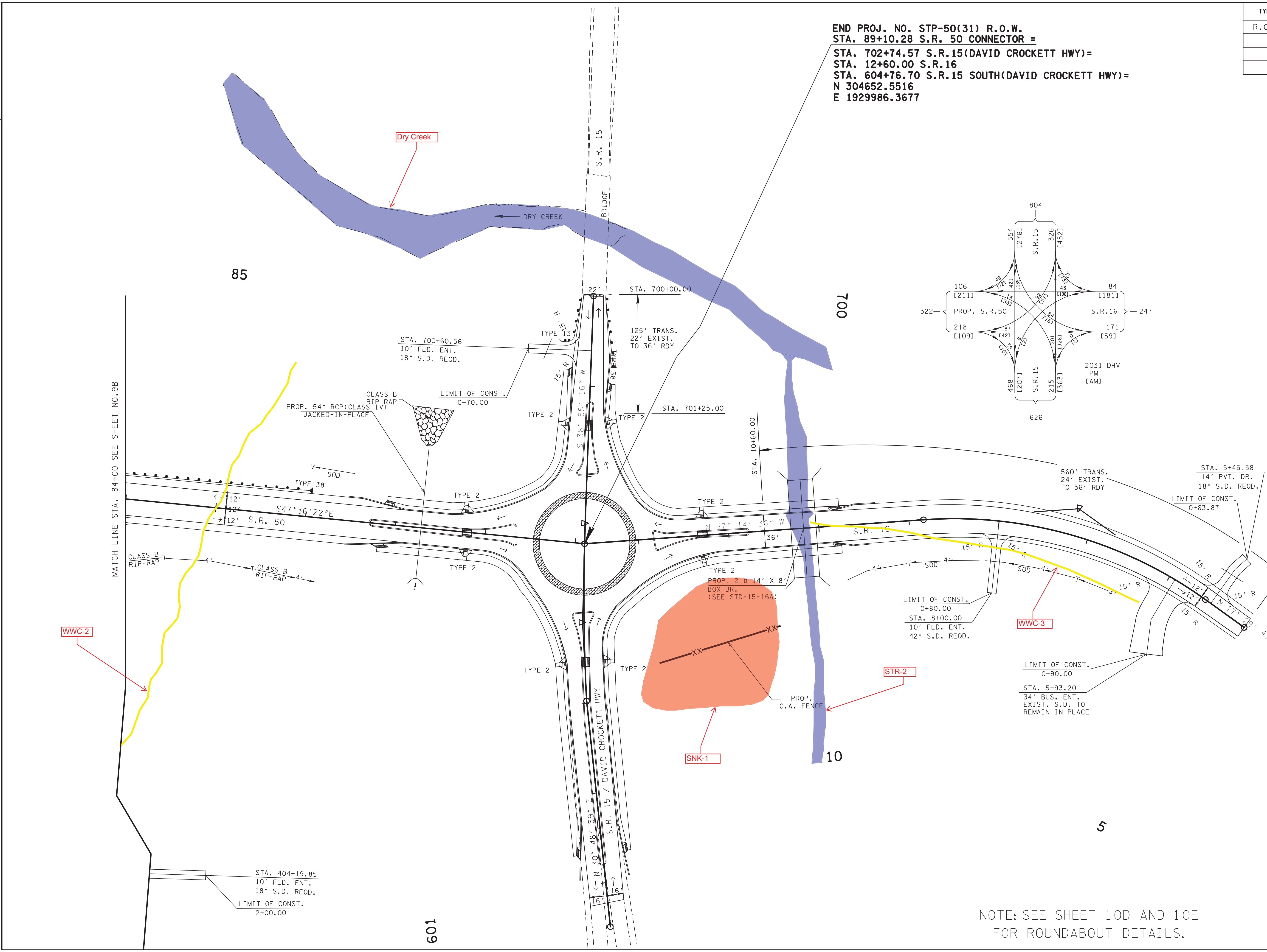
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	10B

END PROJ. NO. STP-50(31) R.O.W.
STA. 89+10.28 S.R. 50 CONNECTOR =
STA. 702+74.57 S.R.15(DAVID CROCKETT HWY)=
STA. 12+60.00 S.R.16
STA. 604+76.70 S.R.15 SOUTH(DAVID CROCKETT HWY)=
N 304652.5516
E 1929986.3677



Dry Creek
DRY CREEK
S.R. 15
BRIDGE
85
700
STA. 700+00.00
125′ TRANS.
22′ EXIST.
TO 36′ RDY
STA. 700+60.56
10′ FLD. ENT.
18″ S.D. REQD.
LIMIT OF CONST.
0+70.00
CLASS B
RIP-RAP
PROP. 54″ RCP(CLASS IV)
JACKED-IN-PLACE
STA. 701+25.00
STA. 10+60.00
TYPE 2
TYPE 13
TYPE 38
S 38° 55′ 16″ W
S47°36′22″E
S.R. 50
N 57° 14′ 36″ W
S.R. 16
SOD
MATCH LINE STA. 84+00 SEE SHEET NO.9B
CLASS B
RIP-RAP
WWC-2
PROP. 2 @ 14′ X 8′
BOX BR.
(SEE STD-15-16A)
PROP.
C.A. FENCE
SNK-1
STR-2
10
WWC-3
LIMIT OF CONST.
0+80.00
STA. 8+00.00
10′ FLD. ENT.
42″ S.D. REQD.
560′ TRANS.
24′ EXIST.
TO 36′ RDY
STA. 5+45.58
14′ PVT. DR.
18″ S.D. REQD.
LIMIT OF CONST.
0+63.87
STA. 4+99.98
LIMIT OF CONST.
0+90.00
STA. 5+93.20
34′ BUS. ENT.
EXIST. S.D. TO
REMAIN IN PLACE
N
S.R. 15 / DAVID CROCKETT HWY
N 30° 48′ 59″ E
STA. 404+19.85
10′ FLD. ENT.
18″ S.D. REQD.
LIMIT OF CONST.
2+00.00
601
5
804
S.R.15
PROP. S.R.50
S.R.16
322
247
626
2031 DHV
PM
[AM]

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA.84+00 TO STA.89+10.28

SCALE: 1″=50′

NOTE: SEE SHEET 10D AND 10E FOR ROUNDABOUT DETAILS.

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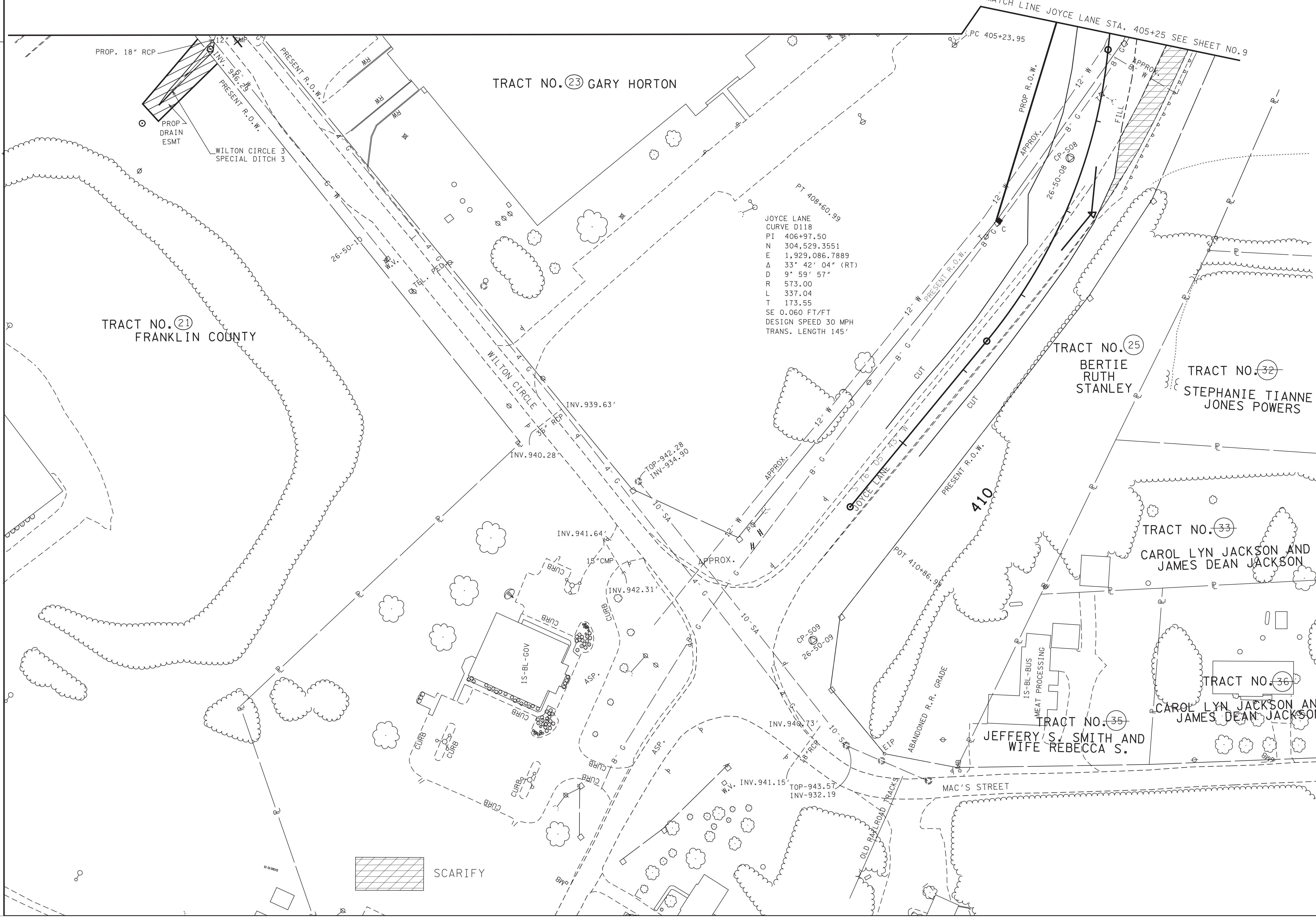
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	11

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



MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.9
TRACT NO. 23 GARY HORTON
TRACT NO. 21 FRANKLIN COUNTY
TRACT NO. 25 BERTIE RUTH STANLEY
TRACT NO. 32 STEPHANIE TIANNE JONES POWERS
TRACT NO. 33 CAROL LYN JACKSON AND JAMES DEAN JACKSON
TRACT NO. 36 CAROL LYN JACKSON AND JAMES DEAN JACKSON
TRACT NO. 35 JEFFERY S. SMITH AND WIFE REBECCA S.
JOYCE LANE
CURVE D118
PI 406+97.50
N 304,529.3551
E 1,929,086.7889
Δ 33° 42' 04" (RT)
D 9° 59' 57"
R 573.00
L 337.04
T 173.55
SE 0.060 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 145'
PROP. 18" RCP
PROP DRAIN ESMT
WILTON CIRCLE 3 SPECIAL DITCH 3
WILTON CIRCLE
MAC'S STREET
OLD RAILROAD TRACKS
ABANDONED R.R. GRADE
PRESENT R.O.W.
PROP R.O.W.
PC 405+23.95
PT 408+60.99
POT 410+86.95
410
INV.939.63'
INV.940.28'
TOP-942.28
INV-934.90
INV.941.64'
INV.942.31'
INV.940.73'
INV.941.15'
TOP-943.57
INV-932.19
15"CMP
CP-S08 26-50-08
CP-S09 26-50-09
26-50-10
IS-BL-GOV
IS-BL-BUS MEAT PROCESSING
SCARIFY
CUT
FILL
APPROX.
N

R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

JOYCE LANE
STA. 405+25 TO STA. 413+52

SCALE: 1"=50'

03-OCT-2011 13:37
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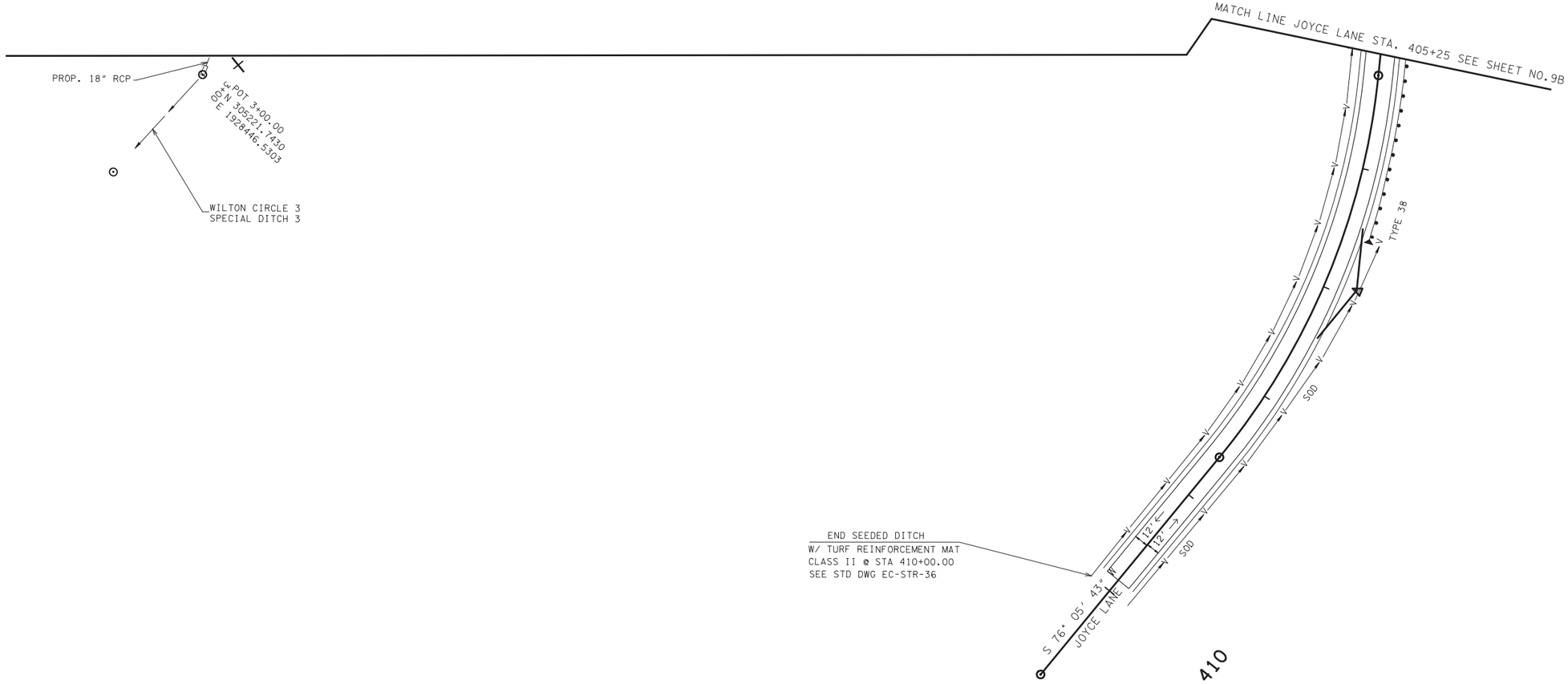
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	11B



R.O.W. FIELD REVIEW

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00003 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

JOYCE LANE
STA.405+25 TO STA.413+52

SCALE: 1"=50'

03-OCT-2011 13:37
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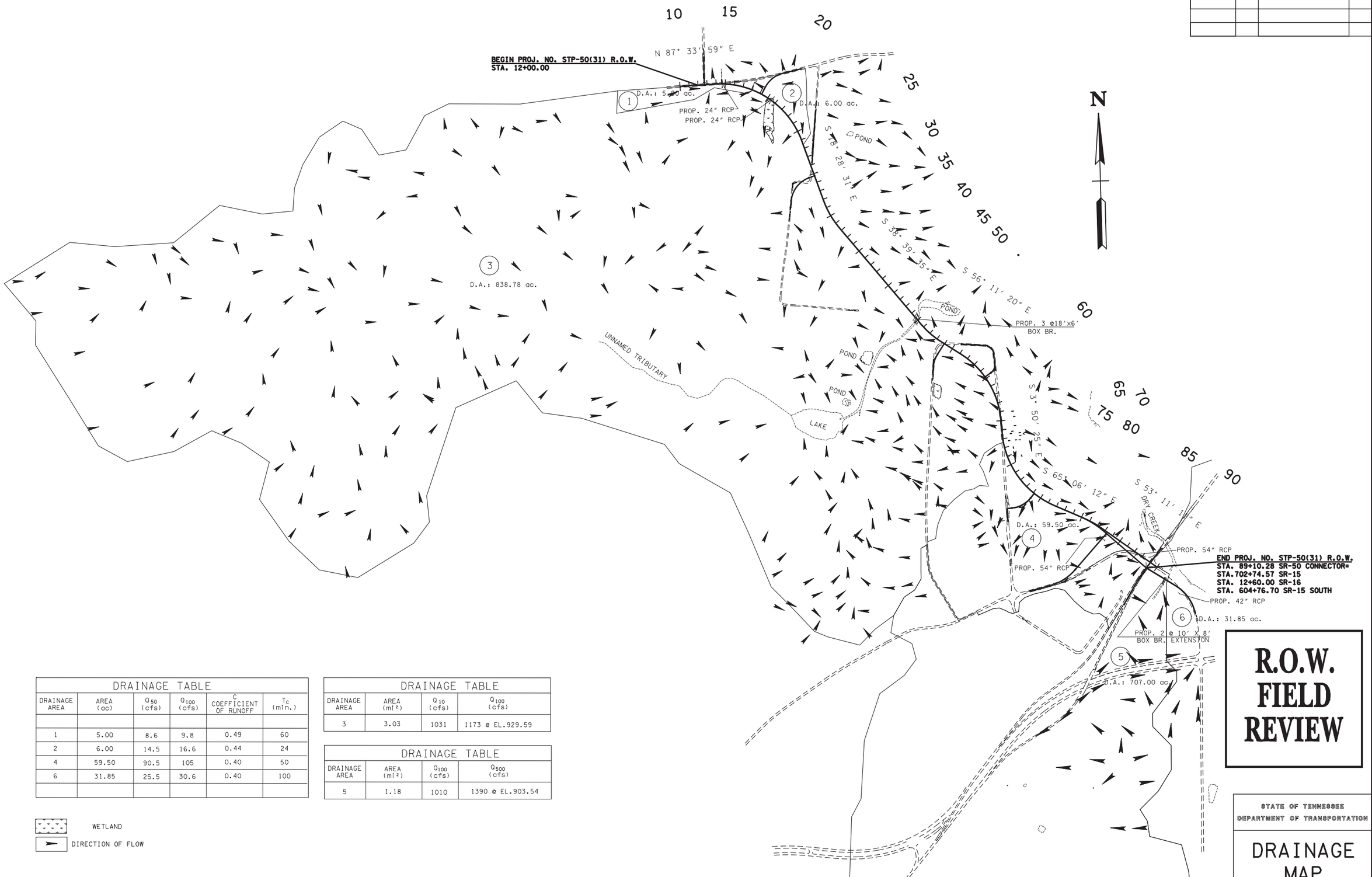
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	15



DRAINAGE TABLE					
DRAINAGE AREA	AREA (ac)	Q_{50} (cfs)	Q_{100} (cfs)	C COEFFICIENT OF RUNOFF	T_c (min.)
1	5.00	8.6	9.8	0.49	60
2	6.00	14.5	16.6	0.44	24
4	59.50	90.5	105	0.40	50
6	31.85	25.5	30.6	0.40	100

DRAINAGE TABLE			
DRAINAGE AREA	AREA (mi^2)	Q_{10} (cfs)	Q_{100} (cfs)
3	3.03	1031	1173 @ EL.929.59

DRAINAGE TABLE			
DRAINAGE AREA	AREA (mi^2)	Q_{100} (cfs)	Q_{500} (cfs)
5	1.18	1010	1390 @ EL.903.54

WETLAND

DIRECTION OF FLOW

R.O.W. FIELD REVIEW

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA.12+00 TO STA.89+10.28

SCALE: 1"=500'

03-OCT-2011 13:39
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9. Training Certifications

10. TMDL Information

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

December 18, 2014

Mr. Vojin Janjić
Manager, Permit Section
Tennessee Department of Environment and Conservation - Division of Water Pollution Control
6th Floor L&C Annex
401 Church Street
Nashville, Tennessee 37243-1534

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

Project Reference: TDOT # 26150-3201-14; STP-50(31), PIN 105769.00, SR-50 in Winchester to SR-15 (US-64), Franklin County
Latitude: 35.1774, Longitude: 86.1366

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 **Upper Elk Watershed (HUC 06030003).**

On the subject project, TDOT is proposing **the construction of 1.46 miles of SR-50 from SR-50 in Winchester to SR-15(US-64), which consists of grading, drainage, and structures** (Figure 1 attached). This project will require approximately **44** acres of land disturbance.

During our SWPPP preparation process on the subject project, TDOT determined that the project will discharge to the **Upper Elk** watershed, which has an approved TMDL for siltation. More specifically, it will discharge to **Unnamed Trib. to Dry Creek (WATERBODY ID: TN-06030003026_1000)** which is within the sub-watershed boundary **0403**. **Unnamed Trib. to Dry Creek** is listed as not supporting. Sub-watershed **0403** 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.**3.2** of the final TMDL will apply to the subject project as **Unnamed Trib. to Dry Creek** in **Franklin** County is listed for siltation on the 20**10** 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:KA:pc

cc: Mr. Jim McAdoo, TDEC WPC
Project File
Reading file

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

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-2G	TYPICAL SECTIONS (8 SHEETS)
3	R.O.W NOTES & UTILITY OWNERS
3A-3B	R.O.W ACQUISITION TABLES
3C	PROPERTY MAPS
3D	TVA PROPERTY MAPS
4-11	PRESENT LAYOUTS (8 SHEETS)
4A-11A	R.O.W. DETAILS (8 SHEETS)
4B-11B	PROPOSED LAYOUTS (8 SHEETS)
4C-10C	PROFILES (7 SHEETS)
10D	ROUNDABOUT ALIGNMENT DETAIL
10E-10G	ROUNDABOUT DETAILS (3 SHEETS)
12-12A	CONTROL POINTS (2 SHEETS)
13-13I	SIDE ROAD PROFILES (7 SHEETS)
14-14D	PROFILE OF PRIVATE DRIVES (5 SHEETS)
15	DRAINAGE MAPS
16-16F	CULVERT CROSS-SECTIONS (6 SHEETS)
16G	PROFILE OF SPECIAL DITCHES
17-17Y	EROSION PREVENTION AND SEDIMENT CONTROL PLANS (26 SHEETS)
17Z	STREAM AND WETLAND MITIGATION PLAN
18-18G	EXISTING CONTOURS (8 SHEETS)
19-19G	PROPOSED CONTOURS (8 SHEETS)
20-64	ROADWAY CROSS-SECTIONS (45 SHEETS)
65-99	SIDE ROAD CROSS-SECTIONS (35 SHEETS)
100-135	ROUNDABOUT CROSS-SECTIONS (36 SHEETS)
136-146	SPECIAL DITCH CROSS-SECTIONS (11 SHEETS)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

FRANKLIN COUNTY

STATE ROUTE 50

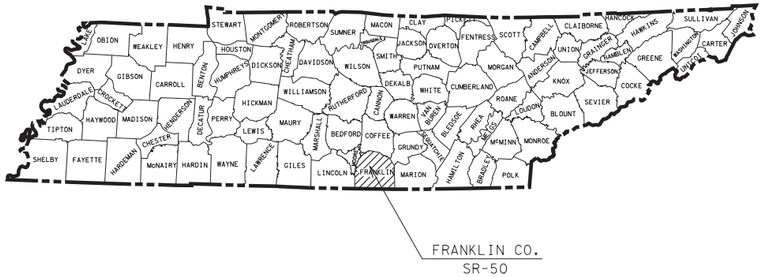
SR-50 IN WINCHESTER TO SR-15(US-64)

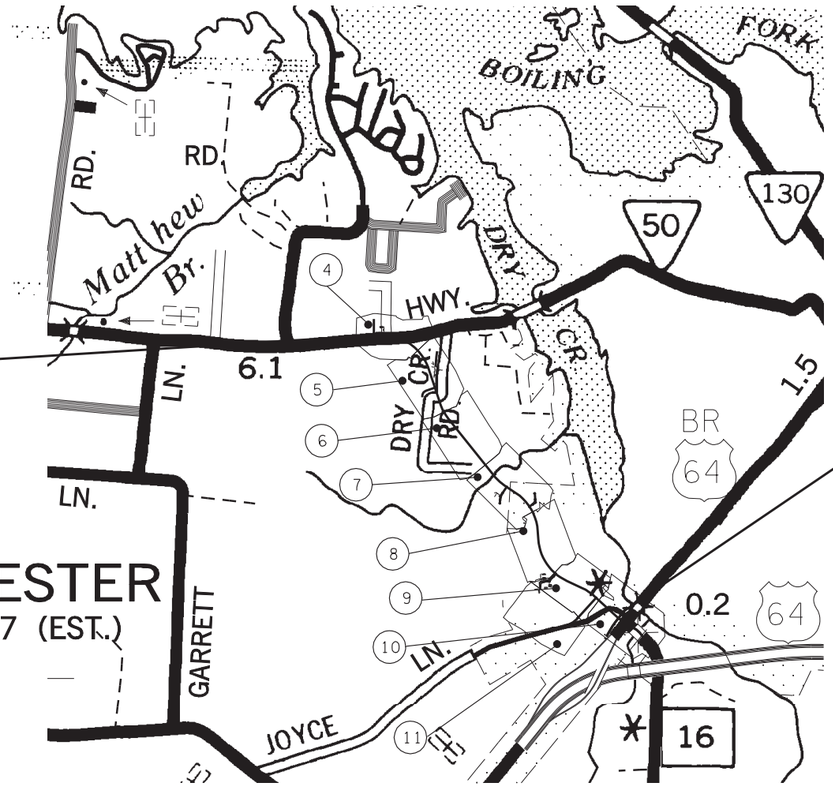
GRADE, DRAIN, BASE, PAVE, GUARDRAIL, PAVEMENT MARKINGS AND STRUCTURES

Right-of-Way

STATE HIGHWAY NO. 50 F.A.H.S. NO. 50

TENN.	YEAR	SHEET NO.
	2012	1
FED. AID PROJ. NO.	STP-50(31)	
STATE PROJ. NO.	26150-2201-14	





SCALE: 1"= ± 1500'

0 1500' 3000' 4500'

N

NO EXCLUSIONS
NO EQUATIONS

BEGIN PROJ. NO. STP-50(31)
STA. 12+00.00

END PROJ. NO. STP-50(31)
STA. 89+10.28

SEALED BY

R.O.W. PLANS

SPECIAL NOTES

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

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

TDOT C.E. MANAGER 1 James A. Johnston, P.E.

TDOT ROAD SP. SV. 2 Mr. Robert W. Rodgers, P.E.

DESIGNER Jason M. Ingram, E.I.T. CHECKED BY DIANE EVITT

P.E. NO. 26150-1201-14

PIN NO. 105769.00

ROADWAY LENGTH	1.450 MILES
BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.010 MILES
PROJECT LENGTH	1.460 MILES

TRAFFIC DATA	
ADT (2013)	2270
ADT (2033)	2950
DHV (2033)	295
D	65 - 35
T (ADT)	2 %
T (DHV)	1 %
V	50 MPH

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

07-JUN-2012 15:0
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets

SEE SHEET NO. 1A FOR INDEX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

FRANKLIN COUNTY

STATE ROUTE 50

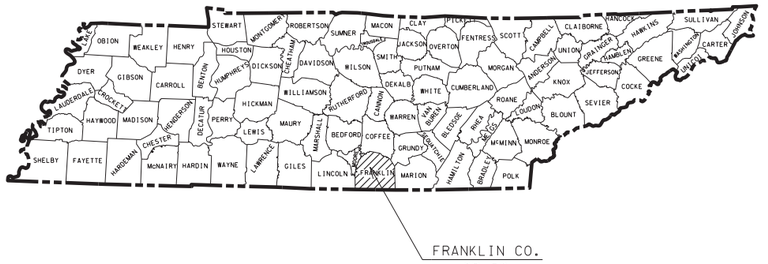
SR-50 IN WINCHESTER TO SR-15(US-64)

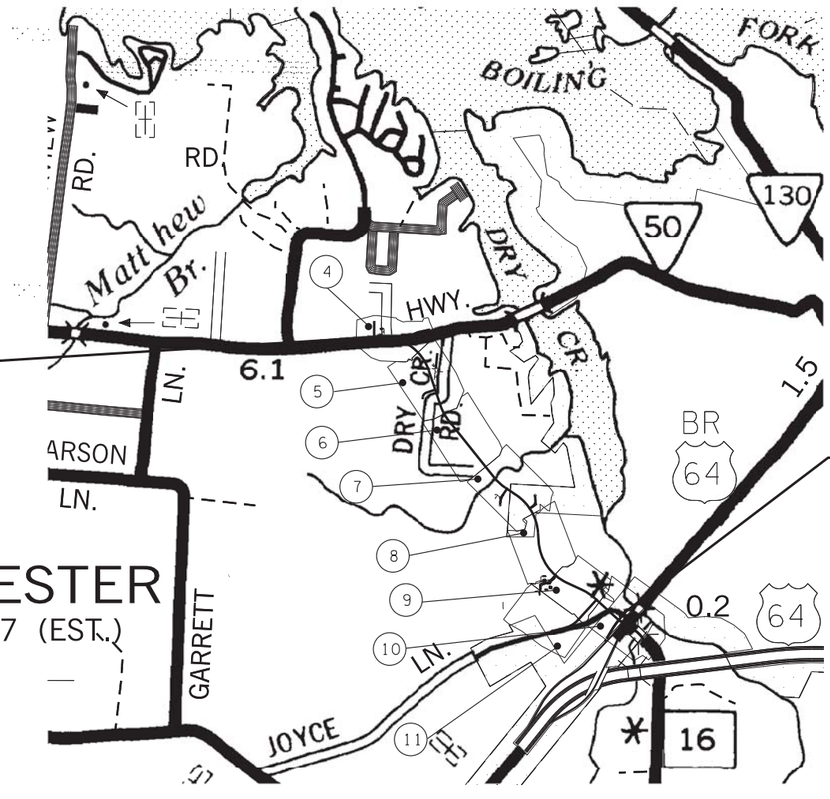
GRADE, DRAIN, BASE, PAVE, GUARDRAIL, PAVEMENT MARKINGS AND STRUCTURES

CONSTRUCTION

STATE HIGHWAY NO. 50 F.A.H.S. NO. 64

TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.	STP-50(31)	
STATE PROJ. NO.	26150-3201-14	





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NO EXCLUSIONS
NO EQUATIONS

26150-3201-14
BEGIN PROJ. NO. STP-50(31)
STA. 12+00.00 (CONST.)

26150-3201-14
END PROJ. NO. STP-50(31)
STA. 89+10.28 (CONST.)

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 0002220
STATE OF TENNESSEE

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:
JOHN SCHROER, COMMISSIONER

SCALE: 1"= ± 1500'

0 1500' 3000' 4500'

ROADWAY LENGTH	1.450 MILES
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V	50 MPH

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

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TDOT C.E. MANAGER 1 Robert W. Rodgers, P.E.

DESIGNER Jason M. Ingram, P.E. CHECKED BY Gregory Taylor, P.E.

P.E. NO. 26150-1201-14

PIN NO. 105769.00

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	1A

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ESTIMATED UTILITIES QUANTITIES	2A2
TYPICAL SECTIONS AND PAVING SCHEDULE (10 SHEETS)	2B – 2H, 2H1, 2H2, 2H3
GENERAL NOTES AND SPECIAL NOTES (4 SHEETS)	2J–2M
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NO PROJECT COMMITMENTS

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
STANDARD BRIDGE DRAWINGS		
DWG. NO.	REV.	DESCRIPTION
BRIDGE APPURTENANCES ENGLISH (LRFD BOX CULVERTS)		
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17		BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-20		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-23		SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24		WARPED SLOPE DETAIL
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-80		BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-105		BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
ROADWAY DESIGN STANDARDS		
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-UD-3	09-05-96	UNDERDRAIN DETAILS
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS

DWG. NO	REV.	DESCRIPTION
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-1A		DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS (ADT<=400)
RD01-TS-2	10-15-02	DESIGN STANDARDS FOR COLLECTOR ROADS AND STREETS
RD01-TS-3	10-15-02	DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS
RD01-TS-6A	07-31-13	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER
RD01-TS-8	06-15-12	SHARED USE PATH TYPICAL SECTIONS
RD01-TS-9	06-15-12	DESIGN STANDARDS FOR SINGLE LANE URBAN AND RURAL ROUNDABOUTS
DRAINAGE - CULVERTS AND ENDWALL		
D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PE-1	02-12-76	TYPE "A" CONCRETE ENDWALL 2:1 SLOPE, 36" TO 78"
D-PE-18A	06-14-13	18" CONCRETE ENDWALL CROSS DRAIN
D-PE-18B		18" CONCRETE ENDWALL CROSS DRAIN
D-PE-24A	06-14-13	24" CONCRRETE ENDWALL CROSS DRAIN
D-PE-24B		24" CONCRETE ENDWALL CROSS DRAIN
D-PE-36A	06-14-13	36" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-36B		36" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-48A	06-14-13	48" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-48B		48" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PO-1	05-27-01	STANDARD OVAL & FLAT BASE CONCRETE CULVERT PIPE
DRAINAGE-CATCH BASINS AND MANHOLES		
D-CB-12LP	08-01-12	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN
D-CB-12P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12RA	03-11-14	STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RB	03-11-14	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RC	03-11-14	STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12S	03-11-14	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12SB	03-11-14	STANDARD 4' X 4' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SC	03-11-14	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SD	03-11-14	STANDARD 7' X 7' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX AND STANDARD DRAWINGS

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	1B

D-CB-39RB	03-11-14	STANDARD PRECAST CIRCULAR NO. 39 CATCH BASIN
D-CB-39S	08-01-12	STANDARD 4' X 4' SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SC	03-11-14	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SD	03-11-14	STANDARD 7' X 7' SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 39 CATCH BASIN
D-JBS-2	08-01-12	STANDARD 4' X 4' SQUARE CONCRETE NO. 2 JUNCTION BOX

ROADWAY AND PAVEMENT APPURTENANCES

RP-D-15	07-15-08	DETAILS OF STANDARD CONCRETE DRIVEWAYS
RP-D-16	07-15-08	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
RP-H-3	06-04-13	HANDICAP RAMP AND TRUNCATED DOME SURFACE DETAIL
RP-H-4	06-04-13	PERPENDICULAR CURB RAMP
RP-H-6	04-13-11	MEDIAN CROSSING
RP-H-8	06-04-13	PERPENDICULAR CURB RAMP TYPE 2
RP-J-1	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING
RP-J-3	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING
RP-J-5	07-01-01	TYPICAL ACCELERATION AND DECELERATION LANE JOINT TYPES AND SPACING FOR CONCRETE RAMPS
RP-J-7	01-30-12	CONCRETE RAMP JOINT TYPES AND SPACING
RP-J-9	02-02-12	CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT
RP-J-11	07-29-96	3/4" AND 1-3/4" EXPANSION AND EDGE PAVEMENT JOINTS
RP-J-13	03-20-91	3/4" AND 1-3/4" ELASTOMERIC COMPRESSION JOINT SEALS
RP-J-15	01-19-02	LONGITUDINAL CONTRACTION AND CONSTRUCTION JOINTS
RP-J-17	02-02-12	DOWEL ASSEMBLY DEVICES
RP-J-18	02-02-12	DOWEL ASSEMBLY DEVICES
RP-J-19	02-02-12	DOWEL ASSEMBLY DEVICES
RP-MC-1	02-28-02	STANDARD 4" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS
RP-R-2		STANDARD CONSTRUCTION DETAILS FOR ROUNDABOUTS
RP-S-7	06-04-13	DETAILS FOR STANDARD CONCRETE SIDEWALKS

SAFETY APPURTENANCES AND FENCE

S-F-1	05-24-12	HIGH VISIBILITY FENCE
S-F-10	06-01-09	STANDARD RIGHT-OF-WAY STOCK FENCE
S-F-10B	05-14-10	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-RP-2	01-19-99	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
S-CZ-1		CLEAR ZONE CRITERIA
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS
S-PL-2		SAFETY PLAN AT SIDE ROADS OR PRIVATE DRIVES
S-PL-3		SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS
S-GR31-1		W-BEAM GUARDRAIL
S-GR31-2		MEDIAN DIVIDER GUARDRAIL
S-GRS-1		SPECIAL CASE LONG SPAN GUARDRAIL, ONE SPAN OMITTED
S-GRS-2		SPECIAL CASE: GUARDRAIL ATTACHMENT TO CONCRETE DECKS
S-GRC-1		GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL
S-GRC-2	04-11-14	GUARDRAIL CONNECTION TO BRIDGE ENDS FOR LOW-VOLUME LOCAL ROADS (ADT<= 400)
S-GRC-3		MEDIAN DIVIDER GUARDRAIL TRANSITION TO CONCRETE MEDIAN BARRIER
S-GRT-3D		TYPE 21 GUARDRAIL TERMINAL (DETAILS)
S-GRT-4		TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 12, 13 AND IN-LINE TERMINALS
S-GRT-2	06-30-14	TYPE 38 GUARDRAIL TERMINAL
S-GRT-2P		EARTH PAD FOR TYPE 38 TERMINAL
S-GRT-2R		EARTH PAD FOR TYPE 38 TERMINAL (RETROFIT)

TRAFFIC CONTROL APPURTENANCES

T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	07-24-14	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-10	06-15-12	SIGNING AND PAVEMENT MARKINGS FOR SHARED-USE PATHS
T-M-11	10-24-13	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AND ROUTES ON RURAL ROADS
T-M-12	10-10-13	SIGNING AND PAVEMENT MARKINGS FOR URBAN BICYCLE LANES
T-M-13		SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES
T-M-14	11-01-11	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AT INTERSECTIONS
T-M-15A	11-01-11	ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-M-16	11-01-11	ASPHALT SHOULDER RUMBLE STRIPE INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	11-01-11	DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
T-S-6	02-12-91	STANDARD MOUNTING DETAILS - BOLTED EXTRUDED PANELS
T-S-8	07-15-91	HIGHWAY SHIELDS USED ON STATE NUMBERED ROUTES AND ARROWS
T-S-9	11-01-11	STANDARD LAYOUT GROUND MOUNTED SIGNS
T-S-10	04-04-12	STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN
T-S-13	07-20-12	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, I-BEAMS
T-S-14	08-17-12	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, WF-BEAMS
T-S-16	06-15-14	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A	11-01-11	GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-18	02-14-14	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-23A	07-19-13	MULTI-DIRECTIONAL SLIP BASE BREAKAWAY SQUARE TUBE SIGN SUPPORT
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-36	04-02-12	LANE CLOSURE ON LOW-VOLUME 2-LANE HIGHWAY
T-WZ-40	04-02-12	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
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-11	08-01-12	CULVERT PROCTECTION TYPE 1
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-30A		INSTREAM DIVERSION (WITH TRAFFIC)
EC-STR-32	08-01-12	TEMPORARY DIVERSION CULVERTS
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4
EC-STR-40		CATCH BASIN FILTER ASSEMBLY FOR CIRCULAR STRUCTURES
EC-STR-42		CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A		CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS
EC-STR-46		CATCH BASIN FILTER ASSEMBLY (TYPE 6)
EC-STR-46A		CATCH BASIN FILTER ASSEMBLY (TYPE 6) SLIPCOVER DETAILS
EL-W-2	05-27-01	STANDARD GRAVITY-TYPE RETAINING WALLS

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INDEX AND STANDARD DRAWINGS

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	2

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
	201-01	CLEARING AND GRUBBING	LS	1
2), 13)	202-04.50	REMOVAL OF STRUCTURES (2@10'x8' CONCR. BOX CULV.(75 SKEW, SR-16 STA.10+17)	LS	1
	202-13	WATER WELL ABANDONMENT	EACH	1
3)	203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	83760
	203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	23955
	203-03.51	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	29963
29)	203-04	PLACING AND SPREADING TOPSOIL	C.Y.	1739
	203-05	UNDERCUTTING	C.Y.	16845
	203-06	WATER	M.G.	606
	204-08	FOUNDATION FILL MATERIAL	C.Y.	127
4)	209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	208
14)	209-05	SEDIMENT REMOVAL	C.Y.	1433
4)	209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	25939
4)	209-08.07	ROCK CHECK DAM PER	EACH	196
4)	209-08.08	ENHANCED ROCK CHECK DAM	EACH	70
4), 5)	209-09.01	SANDBAGS	BAG	934
4),10)	209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	7
4)	209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	4
4)	209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	102
4)	209-40.32	CATCH BASIN PROTECTION (TYPE D)	EACH	1
4)	209-40.42	CATCH BASIN FILTER ASSEMBLY(TYPE 2)	EACH	1
4)	209-40.46	CATCH BASIN FILTER ASSEMBLY(TYPE 6)	EACH	4
4)	209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	74
	303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	366
1)	303-01.03	GRANULAR BACKFILL (RETAINING WALLS)	TON	99
21)	303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	5
1)	303-10.03	MINERAL AGGREGATE (SIZE 68)	TON	97
19), 20)	303-20	PEA GRAVEL	TON	24
16)	411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	2
1),30)	604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	197
	604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	723
	604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	96107
	604-15.01	PORTLAND CEMENT GROUT	C.Y.	100
	607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	173
	607-03.05	18" CONCRETE PIPE CULVERT(CLASS IV)JACKED-IN-PLACE	L.F.	55
	607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	208
	607-05.05	24" CONCRETE PIPE CULVERT(CLASS IV)JACKED-IN-PLACE	L.F.	230
	607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	50
	607-09.02	48" CONCRETE PIPE CULVERT (CLASS III)	L.F.	166
	607-16.01	23"X 14" HORIZONTAL OVAL CONCRETE PIPE CULVERT	L.F.	90
	607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	748
	607-39.06	42" PIPE CULVERT (SIDE DRAIN)	L.F.	24
	611-02.11	JUNCTION BOX, TYPE 2	EACH	1
	611-07.31	18IN ENDWALL (SIDE DRAIN)	EACH	4
	611-07.54	18IN ENDWALL (CROSS DRAIN) 3:1	EACH	5
	611-07.55	18IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.56	18IN ENDWALL (CROSS DRAIN) 6:1	EACH	1
	611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	3
	611-07.58	24IN ENDWALL (CROSS DRAIN) 4:1	EACH	4
	611-07.63	36IN ENDWALL (CROSS DRAIN) 3:1	EACH	2
	611-07.69	48IN ENDWALL (CROSS DRAIN) 3:1	EACH	1
	611-07.70	48IN ENDWALL (CROSS DRAIN) 4:1	EACH	1
	611-07.71	48IN ENDWALL (CROSS DRAIN) 6:1	EACH	2
	611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	2
	611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	2
	611-39.02	CATCH BASINS, TYPE 39, > 4' - 8' DEPTH	EACH	1

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	104
	621-03.06	42" TEMPORARY DRAINAGE PIPE	L.F.	302
30)	701-01.01	CONCRETE SIDEWALK (4 ")	S.F.	12889
30)	701-02.03	CONCRETE HANDICAP RAMP	S.F.	1400
30)	701-03	CONCRETE MEDIAN PAVEMENT	C.Y.	60
30)	702-01	CONCRETE CURB	C.Y.	14
30)	702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	253
	705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	25
	705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	1462
	705-04.03	GUARDRAIL TERMINAL (TYPE 13)	EACH	8
	705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	16
	707-01.01	CHAIN-LINK FENCE (4-FOOT)	L.F.	140
	707-01.02	END & CORNER POST ASSEMBLY(CHAIN-LINK FENCE 4')	EACH	2
	707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1387
	708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	102
4)	709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	907
4),15)	709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	715
	709-05.08	MACHINED RIP-RAP (CLASS B)	TON	173
23)	709-05.09	MACHINED RIP-RAP (CLASS C)	TON	105
	710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	360
	712-01	TRAFFIC CONTROL	LS	1
	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	1771
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	125
	712-05.03	WARNING LIGHTS (TYPE C)	EACH	2
	712-06	SIGNS (CONSTRUCTION)	S.F.	478
24)	712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	240
	712-08.03	ARROW BOARD (TYPE C)	EACH	1
	713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	3
	713-01.02	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS)	LB.	914
	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORT	LB.	3056
	713-11.01	"U" SECTION STEEL POSTS	LB.	394
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	2147
	713-11.21	P POST SLIP BASE	EACH	34
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	539
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	171
	713-14	EXTRUDED ALUMINUM PANEL SIGNS	S.F.	558
18)	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	2
	713-16.07	END OF ROADWAY SIGN AND SUPPORT	EACH	2
8), 9)	716-01.11	RAISED PVMT MARKERS (BI-DIRECTIONAL) (1 COLOR LENS)	EACH	47
	716-01.21	SNWPLWBLE PVMT MRKRS (BI-DIR)(1 COLOR)	EACH	250
	716-01.22	SNWPLWBLE PVMT MRKRS (MONO-DIR)(1 COLOR)	EACH	8
17)	716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	119
17)	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	263
17)	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	19
17)	716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	324
17)	716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	281
17)	716-03.09	PLASTIC WORD PAVEMENT MARKING (YIELD)	EACH	4
17)	716-04.01	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW)	EACH	8
17)	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	27
	716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	1.0
17)	716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	146
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	10.19
	716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.F.	114
	716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	94

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ESTIMATED ROADWAY QUANTITIES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	2A

ESTIMATED ROADWAY QUANTITIES

	ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	716-12.08	ENHANCED FLAT LINE THERMO (12IN BARRIER LINE)	L.F.	39
	717-01	MOBILIZATION	LS	1
	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	2307
22)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	112449
	740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	49286
31),32)	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	6927
33)	801-01	SEEDING (WITH MULCH)	UNIT	103
31)	801-02	SEEDING (WITHOUT MULCH)	UNIT	4162
11)	801-03	WATER (SEEDING & SODDING)	M.G.	823
	801-07	SEED (SUPPLEMENTAL APPLICATION)	LB.	23
	801-08	FERTILIZER (SUPPLEMENTAL APPLICATION)	TON	1
19)	802-03.01	SHRUBS (YUCCA FILAMENTOS)	EACH	3
19)	802-03.02	SHRUBS (BUXUS MICROPHILLA)	EACH	64
19)	802-04.70	GROUND COVER (JUNIPERUS HORIZONTALIS)	EACH	300
7)	802-12.02	ACER RUBRUM (RED MAPLE SEEDLNG B.R.)	EACH	9
7)	802-12.03	ACER SACCHARINUM (SILVER MAPLE SEEDLNG B.R.)	EACH	8
7)	802-12.20	NYSSA AQUATICA (SWAMP TUPELO SEEDLNG B.R.)	EACH	8
7)	802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	EACH	8
7)	802-12.38	QUERCUS PHELLOS (WILLOW OAK SEEDLNG B.R.)	EACH	8
	803-01	SODDING (NEW SOD)	S.Y.	67594
	805-01.02	TURF REINFORCEMENT MAT (CLASS II)	S.Y.	842
34)	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	1253
12)	806-02.03	PROJECT MOWING	CYCL	6
		ALTERNATE AA1		
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	60305
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	5096
	307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	291
	307-02.02	ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S	TON	7
	307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	220
	307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	190
6)	309-01.01	MINERAL AGGREGATE (A-CBC)	TON	63
25)	309-01.02	PORTLAND CEMENT (A-CBC)	TON	2
	309-02	BITUMINOUS MATERIAL (A-CBC)	TON	1
	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	73
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	84
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	73
	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	473
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	3090
	411-02.10	ACS MIX(PG70-22) GRADING D	TON	19
		ALTERNATE AA2		
	303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	60117
	307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	4976
	307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	291
	307-02.02	ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S	TON	7
	307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	220
	307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	190
6)	313-03	TREATED PERMEABLE BASE	S.Y.	940
26)	402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	72
	402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	83
	403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	71
	411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	473
	411-01.10	ACS MIX(PG64-22) GRADING D	TON	3028
	411-02.10	ACS MIX(PG70-22) GRADING D	TON	19
	501-01	PORTLAND CEMENT CONCRETE PAVEMENT(REPLACEMENT)	S.Y.	940

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	ALTERNATE AA3		
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	39717
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	5096
307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	291
307-02.02	ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S	TON	7
307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	220
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	190
6) 309-01.01	MINERAL AGGREGATE (A-CBC)	TON	7805
27) 309-01.02	PORTLAND CEMENT (A-CBC)	TON	301
309-02	BITUMINOUS MATERIAL (A-CBC)	TON	21
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	73
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	84
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	73
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	473
411-01.10	ACS MIX(PG64-22) GRADING D	TON	3090
411-02.10	ACS MIX(PG70-22) GRADING D	TON	19
	ALTERNATE AA4		
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	39529
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	4976
307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	291
307-02.02	ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S	TON	7
307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	220
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	190
309-01.01	MINERAL AGGREGATE (A-CBC)	TON	7742
6) 309-01.02	PORTLAND CEMENT (A-CBC)	TON	299
28) 309-02	BITUMINOUS MATERIAL (A-CBC)	TON	21
313-03	TREATED PERMEABLE BASE	S.Y.	940
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	72
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	83
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	71
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	473
411-01.10	ACS MIX(PG64-22) GRADING D	TON	3028
411-02.10	ACS MIX(PG70-22) GRADING D	TON	19
501-01	PORTLAND CEMENT CONCRETE PAVEMENT(REPLACEMENT)	S.Y.	940

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 00022690
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	2A1

FOOTNOTES

1) QUANTITIES INCLUDED FOR RETAINING WALLS.
2) INCLUDES BUT IS NOT LIMITED TO THE REMOVAL OF PIPE, ENDWALLS, WINGWALLS, AND GUARDRAIL.
3) INCLUDES 460 C.Y. FOR EROSION PREVENTION AND SEDIMENT CONTROL.
4) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
5) SANDBAGS OF APPROXIMATELY ONE CUBIC FOOT CAPACITY SHALL BE FILLED APPROXIMATELY 3/4 FULL WITH A MIXTURE OF SAND AND GRAVEL. SACKS SHALL BE OF EITHER COTTON OR JUTE, STANDARD GRADE OF CLOTH. SANDBAGS SHALL BE SECURED BY HOG RINGS, SEWING OR OTHER SUITABLE METHODS.
6) QUANTITIES INCLUDED FOR ALTERNATIVES SEE TABULATED QUANTITIES ON SHT 2P .
7) TO BE USED AT WTL-1. SEE WETLAND MITIGATION PLAN ON SHEET 17Z.
8) MISSING RAISED PAVEMENT MARKERS SHALL BE REPLACED: A) AT LEAST MONTHLY OR B) AT THE INSTRUCTION OF THE ENGINEER.
9) ALL RAISED PAVEMENT MARKERS SHALL BE REMOVED BEFORE PLACEMENT OF THE FINAL PAVEMENT SURFACE. THE COST OF REMOVAL SHALL BE INCLUDED IN THE PRICE BID FOR RAISED PAVEMENT MARKERS.
10) INCLUDES ASSEMBLY.
11) INCLUDES 139 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.
12) ITEM INCLUDES LITTER AND TRASH REMOVAL. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE COST OF ITEM NO.806-02.03, PROJECT MOWING, CYCL.
13) THE REMOVAL ITEMS SHALL BECOME THE PROPERY OF THE CONTRACTOR.
14) INCLUDES 350 C.Y. FOR EROSION PREVENTION AND SEDIMENT CONTROL.
15) INCLUDES 310 TONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.
16) SEE SPECIAL PROVISION NO.411D.
17) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
18) REMOVE SIGN & SUPPORT (NO FOOTINGS ON THESE SIGNS) ON APPROXIMATELY TEN SIGNS WITHIN THE GRADING LIMITS OR AS DIRECTED BY THE ENGINEER.
19) QUANTITIES INCLUDED FOR CENTRAL LANDSCAPING AREA OF ROUNDABOUT.
20) QUANTITY CALCULATED FROM (507 C.F. X 96 LBS/C.F.) / (2000 LBS/TON).
QUANTITY INCLUDES 680 S.Y. WEED BLOCK FABRIC.
21) QUANTITY INCLUDES 5 TONS FOR SINKHOLE TREATMENT.
22) QUANTITY INCLUDES 45653 S.Y. FOR SINKHOLE TREATMENT.
23) QUANTITY INCLUDES 15 TONS FOR SINKHOLE TREATMENT.
24) QUANTITY INCLUDED WILL BE USED FOR PHASE 1 AND PHASE 2 OF TRAFFIC CONTROL.
25) QUANTITIES INCLUDED WILL INCLUDE SR-50 "ALT A",ROUNDABOUT "ALT C",SR-15,SR-16, AND SIDE ROADS.
26) QUANTITIES INCLUDED WILL INCLUDE SR-50 "ALT A",ROUNDABOUT "ALT D",SR-15,SR-16, AND SIDE ROADS.
27) QUANTITIES INCLUDED WILL INCLUDE SR-50 "ALT B",ROUNDABOUT "ALT C",SR-15,SR-16, AND SIDE ROADS.
28) QUANTITIES INCLUDED WILL INCLUDE SR-50 "ALT B",ROUNDABOUT "ALT D",SR-15,SR-16, AND SIDE ROADS.
29) QUANTITY INCLUDED FOR THE COVERING OF BORROW AND WASTE MATERIALS.
30) FOR ROUNDABOUT DETAILS AND TABULATED QUANTITIES SEE SHEET 2S AND SHEET 10E.
31) QUANTITIES INCLUDES FOR SEEDING OF DISTURBED AREAS.
32) QUANTITY INCLUDES 2765 UNITS FOR EPSC QUANTITIES.
33) QUANTITY INCLUDES 9.5 UNITS FOR TURF REINFORCEMENT MAT AND 93.5 UNITS FOR EXCESS MATERIAL TO BE WASTED AND BORROW MATERIAL.
34) QUANTITY USED FOR SEEDING OF SLOPES AROUND MULTI-BARREL BOX CULVERT FOR EPSC PHASE 1 AND 2.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	2J

GENERAL NOTES

GRADING

(1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE 0F THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

(2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.

(3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

(1) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

GUARDRAIL

(1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.

(2) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.

(3) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

(1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(2) EXCAVATION FOR PIPE CULVERTS AND STORM SEWERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.

(3) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

(4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

(5) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.

(6) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

(1) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.

(2) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

(3) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.

(4) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

(5) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

FENCING

(1) LOCATION OF THE FENCE SHALL BE ONE FOOT INSIDE THE RIGHT-OF-WAY EXCEPT WHERE SHOWN ON THE PLANS.

(2) FENCES SHALL BE TURNED IN AT DRAINAGE STRUCTURES, STOCK PASSES AND BRIDGES WHERE DIRECTED BY THE ENGINEER SO AS TO ABUT WINGWALLS AND/OR ABUTMENTS.

(3) THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.

(4) THE CONTRACTOR SHALL BE REQUIRED TO INSTALL ACCESS CONTROL FENCES PRIOR TO CUTTING EXISTING STOCK FENCES IN AREAS UTILIZED BY DOMESTIC LIVESTOCK OR OTHER AREAS AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS

(1) ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.

(2) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

(3) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

ROAD CLOSURE

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

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

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

(2) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT

FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

(3) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

FINAL PAVEMENT MARKING IF 8" ENHANCED FLATLINE THERMOPLASTIC IS USED

(4) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.03, ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE), L.F. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

(5) BEFORE OPENING THE LANE SHIFTS/DETOURS TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS AND RAISED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

PAVEMENT

PAVING

(1) THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES

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

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(2) THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

GRADED SOLID ROCK

(1) THE ROCK FILL (GRADED SOLID ROCK) MATERIAL SHALL CONSIST OF SOUND, NON-DEGRADABLE LIMESTONE OR SANDSTONE WITH A MAXIMUM SIZE OF 3'-0". AT LEAST 50% (BY WEIGHT) OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1'-0" AND 3'-0" IN DIAMETER, AND NO GREATER THAN 10% (BY WEIGHT) SHALL BE LESS THAN 2' IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUIDIMENSIONAL; THIN, SLABBY MATERIALS WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL MEANS (A SCREENING PROCESS CAPABLE OF PRODUCING THE REQUIRED GRADATION). THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

(2) THIS GRADED SOLID ROCK MATERIAL SHALL BE PLACED IN LAYERS NOT EXCEEDING FIVE FEET IN DEPTH.

SIGNING

(1) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.

(2) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

(3) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS (3 SETS) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. THE LAYOUT DRAWINGS SHALL BE SENT TO THE ROADWAY DESIGN DIVISION, SIGNING AND MARKING SECTION, SUITE 1300, J. K. POLK BUILDING, NASHVILLE, TN 37243-1402.

(4) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

(5) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

TRAFFIC CONTROL DIRECTIONAL SIGNING

(1) ON ALL ACCESS CONTROLLED AND INTERSTATE RECONSTRUCTION AND NEW CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL UTILIZE ALL EXISTING DIRECTIONAL SIGNING FOR AS LONG AS POSSIBLE. THESE EXISTING SIGNS CAN BE MOVED USING TEMPORARY SUPPORTS AS NEEDED. AS SOON AS THESE EXISTING DIRECTIONAL SIGNS COME DOWN PERMANENTLY, THE CONTRACTOR SHALL HAVE UP AT LEAST ONE NEW TEMPORARY "ADVANCE GUIDE SIGN" AND ONE NEW TEMPORARY "EXIT DIRECTIONAL SIGN" AT ALL EXIT RAMPS. THESE SIGNS ARE TO BE MAINTAINED WITHIN CLEAR VIEW OF THE PUBLIC ON THE RIGHT SIDE OF THE HIGHWAY AND SHALL BE REPLACED IF DAMAGED, DURING ALL PHASES OF CONSTRUCTION, AS DIRECTED BY THE ENGINEER.

(2) THE SIZE OF THESE NEW TEMPORARY SIGNS WILL BE DETERMINED BY THE MESSAGE. THE MESSAGE SHALL BE THE SAME AS THE EXISTING SIGN THAT THESE NEW TEMPORARY SIGNS WILL BE REPLACING. THE LETTER SIZE SHALL BE A MINIMUM OF 8 INCH, "D" UPPER CASE LETTER. THE DIRECTIONAL ARROW WILL BE A "B" ARROW AT A 45 DEGREE ANGLE (SAME ANGLE AS THE EXISTING ARROW). THE MATERIAL SHALL BE 0.100 INCH SHEET ALUMINUM; THE COLOR SHALL BE A REFLECTIVE GREEN BACKGROUND WITH REFLECTIVE WHITE COPY.

(3) ALL WORK AND MATERIAL TO MAKE THESE NEW TEMPORARY DIRECTIONAL SIGNS ALONG WITH ADEQUATE SUPPORTS AND TO MOVE THEM AS NEEDED DURING EACH PHASE OF CONSTRUCTION WILL BE PAID FOR UNDER ITEM NO.712-01 TRAFFIC CONTROL, LUMP SUM, AS DIRECTED BY THE ENGINEER.

(4) SOME OF THESE DIRECTIONAL SIGNS WILL NEED AN INTERSTATE, U.S., OR A STATE HIGHWAY SHIELD, A CARDINAL DIRECTION, AND A DIRECTION ARROW TO ACCOMPANY THE DIRECTIONAL SIGN. THESE SIGNS SHALL BE MOUNTED BELOW THE DIRECTIONAL SIGN.

(5) ALL EXISTING "EMERGENCY REFERENCE MARKERS" AND "HOSPITAL SIGNS" SHALL BE MAINTAINED WITHIN FULL VIEW OF THE MOTORING PUBLIC THROUGHOUT ALL PHASES OF CONSTRUCTION. ALL WORK IN MOVING AND TEMPORARY SUPPORTS SHALL BE PAID FOR UNDER ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM.

(6) WHEN "LOGO" SIGNS ARE ON ACCESS CONTROLLED AND INTERSTATE RECONSTRUCTION AND NEW CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE SIGNS IN FULL VIEW TO THE MOTORING PUBLIC DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE TO THE DEPARTMENT FOR THE REIMBURSEMENT OF THE SIGN FACE IF IT IS DAMAGED. ALL WORK IN MOVING THESE "LOGO" SIGNS AND THE TEMPORARY SUPPORTS ARE TO BE PAID FOR UNDER ITEM NO. 712-01 TRAFFIC CONTROL, LUMP SUM, AS DIRECTED BY THE ENGINEER. THE SUPPORTS FOR THE FINAL LOCATION OF THESE SIGNS WILL BE PAID FOR UNDER OTHER ITEMS OF CONSTRUCTION.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

(1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

(2) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.

(3) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

(4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

(5) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK. THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(6) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

(7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

(1) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

(2) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.

(3) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(4) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.

(5) CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION PROJECT, UNLESS APPROVED IN WRITING BY THE ENVIRONMENTAL DIVISION.

(6) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEALED BY

ROBERT W. RODGERS
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COMMISSION NO. 0002999
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST	2015	STP-50(31)	2L

SEDIMENT CONTROL

(7) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

(8) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(9) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

(10) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.

(11) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(12) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

(13) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

(14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

(15) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(16) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(17) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.

(18) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN. AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

(19) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

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

(21) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.

(22) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

(23) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

(24) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.

(25) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

(26) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.

(27) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.

(28) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.

(29) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

(30) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

(31) THE TDOT PROJECT SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

MATERIALS

(32) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

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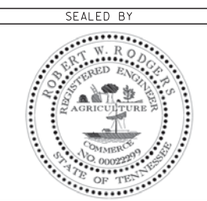

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
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SWPPP, PERMITS, PLANS, RECORDS

(33) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.

(34) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, ROOADWAY DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(35) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS. PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.

(36) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

(37) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROOADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(38) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

(39) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.

(40) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.

(41) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(42) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.

(43) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

GRADING

(1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.

(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.

SEEDING AND SODDING

(1) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, AND SODDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. SODDING, IN ACCORDANCE WITH SECTION 803 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 803-01.

RETAINING WALLS

(1) THE (RIGHT-OF-WAY/EASEMENT) BETWEEN STATION 64+50 AND STATION 68+00 SHALL REMAIN CLEAR FOR THE CONSTRUCTION OF THE RETAINING WALL. NO UTILITY LINES MAY BE PLACED HERE WITHOUT APPROVAL FROM STRUCTURES DIVISION.

(2) THE OPTIONS FOR RETAINING WALL TYPES SHALL BE LIMITED TO THE APPROVED ALTERNATIVES AS SPECIFIED ON SHEET 2H2.

(3) VALUE ENGINEERING CHANGE PROPOSALS WILL NOT BE ACCEPTED FOR RETAINING WALLS. (ITEM NUMBER:604-01.01)

(4) ALL COST OF BUILDING, INSTALLING AND BACKFILLING THE RETAINING WALL SHALL BE INCLUDED IN THE COST OF THE RETAINING WALL.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

(5) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 17, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

(1) TREES THAT HAVE A DIAMETER BREAST (DBH) >5" SHALL NOT BE CUT FROM MARCH 31 THROUGH OCTOBER 15.

(2) A FISH SWEEP MUST BE CONDUCTED BEFORE ANY WORK WITHIN A STREAM BEGINS.

(3) THE CONTRACTOR WILL CONTACT THE REGIONAL BIOLOGIST TWO WEEKS BEFORE ANY IN STREAM WORK BEGINS.

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

(4) 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.

SPECIES

(1) NO DISTURBANCE OF CLIFF SWALLOW AND BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG OR ADULTS) IS PERMITTED DURING APRIL 15 THROUGH JULY 31. NEST REMOVAL OR DESTRUCTION AND THE IMPLEMENTATION OF MEASURES PREVENTING FUTURE NEST BUILDING (E.G., OBSTRUCTING A STRUCTURE USING NETTING) ARE PERMITTED DURING AUGUST 1 THROUGH APRIL 14. EXCEPTIONS ARE AS FOLLOWS:

1. TDOT MAY REMOVE OR DESTROY NESTS AND PREVENT NEST BUILDING PROVIDED NO EGGS ARE PRESENT PRIOR TO APRIL 15. ABSENCE OF EGGS MUST BE DOCUMENTED USING APPROPRIATE MEANS FOR DETERMINATION, INCLUDING SITE VISITS AND PHOTOGRAPHS.
2. TDOT MAY REMOVE OR DESTROY NESTS PROVIDED NO BIRDS (YOUNG OR ADULTS) ARE PRESENT IN ANY NESTS PRIOR TO JULY 31. ABSENCE OF BIRDS MUST BE DOCUMENTED USING APPROPRIATE MEANS FOR DETERMINATION, INCLUDING SITE VISITS, PHOTOGRAPHS, AND OBSERVATIONS OF NO BIRDS USING NESTS.

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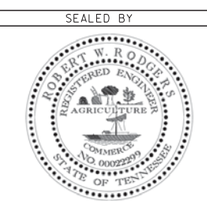

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES

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

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 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 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 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 SWPPP.

(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.

UTILITY RELOCATION

(12) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.

(13) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY

(14) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).

(15) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR INSTALLER TO PROTECT FROM EROSION EXPOSED EARTH RESULTING FROM THEIR OPERATIONS AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

(16) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.

(17) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT, THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.

(18) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.

(19) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.

(20) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).

(21) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

SPECIAL NOTES (REFERENCED FROM SHEET 2M)

ENVIRONMENTAL

(1) TREES THAT HAVE A DIAMETER BREAST (DBH) >5" SHALL NOT BE CUT FROM MARCH 31 THROUGH OCTOBER 15.

(2) A FISH SWEEP MUST BE CONDUCTED BEFORE ANY WORK WITHIN A STREAM BEGINS.

(3) THE CONTRACTOR WILL CONTACT THE REGIONAL BIOLOGIST TWO WEEKS BEFORE ANY IN STREAM WORK BEGINS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17
CONST	2015	STP-50(31)	17

REV 07-29-14-UPDATED NOTES
REV 10-17-14-UPDATED NOTES

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

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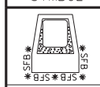
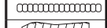
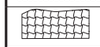
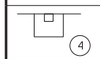
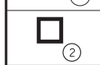
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17A
CONST	2015	STP-50(31)	17A

REVISED 07-29-14- UPDATED SHEET.
REV 10-17-14- UPDATED SHEET.

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
	SEDIMENT FILTER BAG	EC-STR-2
✱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
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY SLOPE DRAIN	EC-STR-27
	RIPRAP	EC-STR-27
ππππππππ	TEMPORARY BERM	EC-STR-27
═IN═ DIV ═	INSTREAM DIVERSION	EC-STR-30 EC-STR-30A
	TEMPORARY DIVERSION CULVERT (DESCRIBE NUMBER AND SIZE OF PIPES)	EC-STR-32
	SAND BAG BERM	EC-STR-33
	EROSION CONTROL BLANKET	EC-STR-34
✱✱ TUBE ✱✱ TUBE ✱✱	SEDIMENT TUBE	EC-STR-37
	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A
	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
	CATCH BASIN FILTER ASSEMBLY (TYPE 6)	EC-STR-46
✱ HVF ✱ HVF	HIGH VISIBILITY FENCE	S-F-1

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QTY
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	1032
209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	208
209-05	SEDIMENT REMOVAL	C.Y.	350
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	25939
209-08.07	ROCK CHECK DAM PER	EACH	196
209-08.08	ENHANCED ROCK CHECK DAM	EACH	70
209-09.01	SANDBAGS	BAG	934
209-09.03	SEDIMENT FILTER BAG(15' X 15')	EACH	7
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	4
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	102
209-40.32	CATCH BASIN PROTECTION (TYPE D)	EACH	1
209-40.42	CATCH BASIN FILTER ASSEMBLY(TYPE 2)	EACH	1
209-40.46	CATCH BASIN FILTER ASSEMBLY(TYPE 6)	EACH	4
209-65.04	TEMPORARY IN STREAM DIVERSION	L.F.	74
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	106.2
621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	104
621-03.06	42" TEMPORARY DRAINAGE PIPE	L.F.	302
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1387
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	907
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	380
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	2307
740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	49286
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	2765
801-03	WATER (SEEDING & SODDING)	UNIT	277
805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	1253

FOOTNOTE

** SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.

EROSION PREVENTION SEDIMENT CONTROL QUANTITIES

LOCATION	PAY ITEMS																					
	203-01 (C.Y.) RD DRAIN EXEC.	209-02.07 (L.F.) 18" TEMP SLOPE DRAIN	209-05 (C.Y.) SEDIMENT REMOVAL	209-08.02 (L.F.) TEMP SFB	209-08.07 (EACH) RCD	209-08.08 (EACH) ERCD	*209-09.01 (BAGS) SANDBAGS	209-09.03 (EACH) 15' x 15' SFB	209-09.43 (EACH) TYPE 4 CURB INLET	*209-20.03 (S.Y.) POLY SHEET	209-40.32 (EACH) TYPE C CB PROTECT	209-40.42 (EACH) TYPE 2 CB FILTER	209-40.46 (EACH) TYPE 6 CB FILTER	209-65.04 (L.F.) IN-STREAM DIVERSION	303-10.01 (TON) 57 STONE	621-03.03 (L.F.) 24" TEMP DRAIN CULV	*621-03.06 (L.F.) 42" TEMP DRAIN CULV	707-08.11 (L.F.) HVF	709-05.05 (TON) CLASS A-3 RIP RAP	709-05.06 (TON) CLASS A-1 RIP RAP	740-10.03 (S.Y.) TYPE 3 GEO FAB	740-11.03 (L.F.) 18" SED TUBE	805-12.02 (S.Y.) EC BLANKET TYPE 2
STAGE ONE	217	130	135	10343	20	24	934	4		102					55.4	104	302	1387	680.4	118.5	1444	17393	620
STAGE TWO	789	78	188	8967	176	28	934	2		102		1	4	74	46.6		302		226.8	238.9	785	14186	633
STAGE THREE	27		27	6629		18		1	4		1				4.2					22.7	79	17707	
TOTALS	1032	208	350	25939	196	70	934	7	4	102	1	1	4	74	106.2	104	302	1387	907.2	380.1	2307	49286	1253

*QTY IN STAGE ONE TO BE USED IN STAGE ONE AND TWO.

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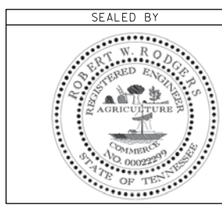


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

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

SPECIAL NOTES

TOPSOIL IS TO BE REMOVED FROM ALL AREAS OF TEMPORARY WETLAND IMPACTS AND STOCK PILED PRIOR TO CONSTRUCTION.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES, TEMPORARY HAUL ROADS ARE TO BE REMOVED. EXCAVATED MATERIAL FROM THE HAUL ROADS IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLANDS WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

EPSC MEASURES FROM PREVIOUS PHASES ARE TO BE LEFT IN PLACE UNTIL NO LONGER NECESSARY.

ESTABLISH WTL-1 NOTES

1. PLACE HV-FENCE LOCATING BOTH WTL-1 AND ESTABLISH WTL-1.
2. REMOVE PERMANENT IMPACT WTL-1 AREA TO ESTABLISH WTL-1 AREA.
3. PLACE PROP. 24" PIPE.

STAGE NOTES

1. PLACE EPSC MEASURES.
2. REPLACE EXIST. PIPE AT STA 14+65 WITH PROP. 24" RCP(CLASS IV) JACKED IN PLACE IN ONE DAY.
2. ESTABLISH WTL-1.
3. CLEAR AND GRUB, PLACE PROP. PIPES, AND BUILD PROP. DITCHES.

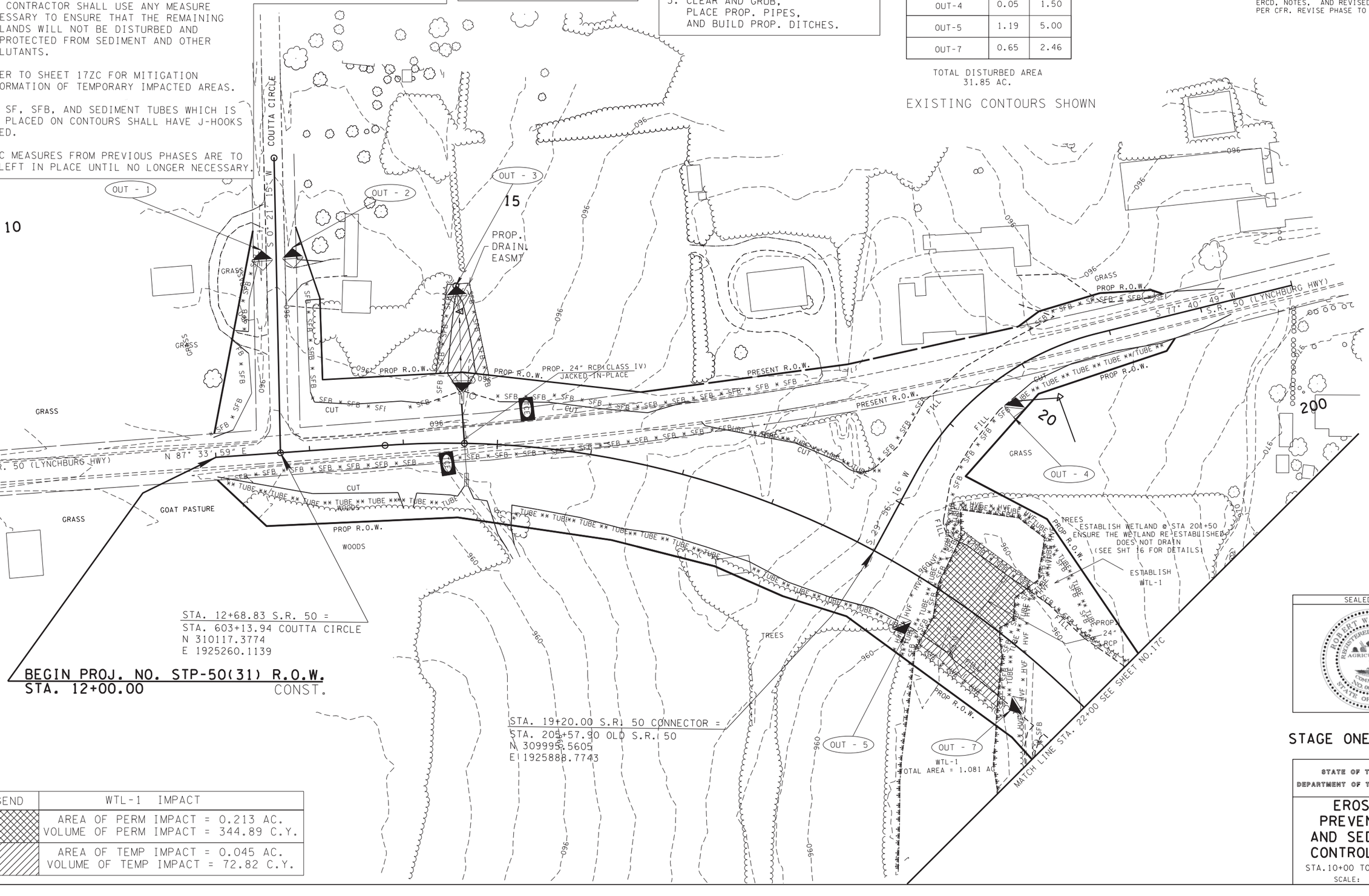
OUTFALL	AREA (AC.)	SLOPE (%)
OUT-1	0.20	3.63
OUT-2	0.20	1.63
OUT-3	5.00	1.90
OUT-4	0.05	1.50
OUT-5	1.19	5.00
OUT-7	0.65	2.46

TOTAL DISTURBED AREA
31.85 AC.

EXISTING CONTOURS SHOWN

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17B
CONST	2015	STP-50(31)	17B

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-ADDED OUTFALLS, SLOPE, ERCD, NOTES, AND REVISED REF SHT PER CFR. REVISE PHASE TO STAGE.



STA. 12+68.83 S.R. 50 =
STA. 603+13.94 COUTTA CIRCLE
N 310117.3774
E 1925260.1139

BEGIN PROJ. NO. STP-50(31) R.O.W.
STA. 12+00.00 CONST.

STA. 19+20.00 S.R. 50 CONNECTOR =
STA. 205+57.90 OLD S.R. 50
N 309995.5605
E 1925888.7743

LEGEND	WTL-1 IMPACT
	AREA OF PERM IMPACT = 0.213 AC. VOLUME OF PERM IMPACT = 344.89 C.Y.
	AREA OF TEMP IMPACT = 0.045 AC. VOLUME OF TEMP IMPACT = 72.82 C.Y.

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ROBERT W. RODGERS
REGISTERED ENGINEER
OF AGRICULTURE
COMMERCE
AND ECONOMIC
DEVELOPMENT
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.10+00 TO STA.22+00
SCALE: 1"=50'

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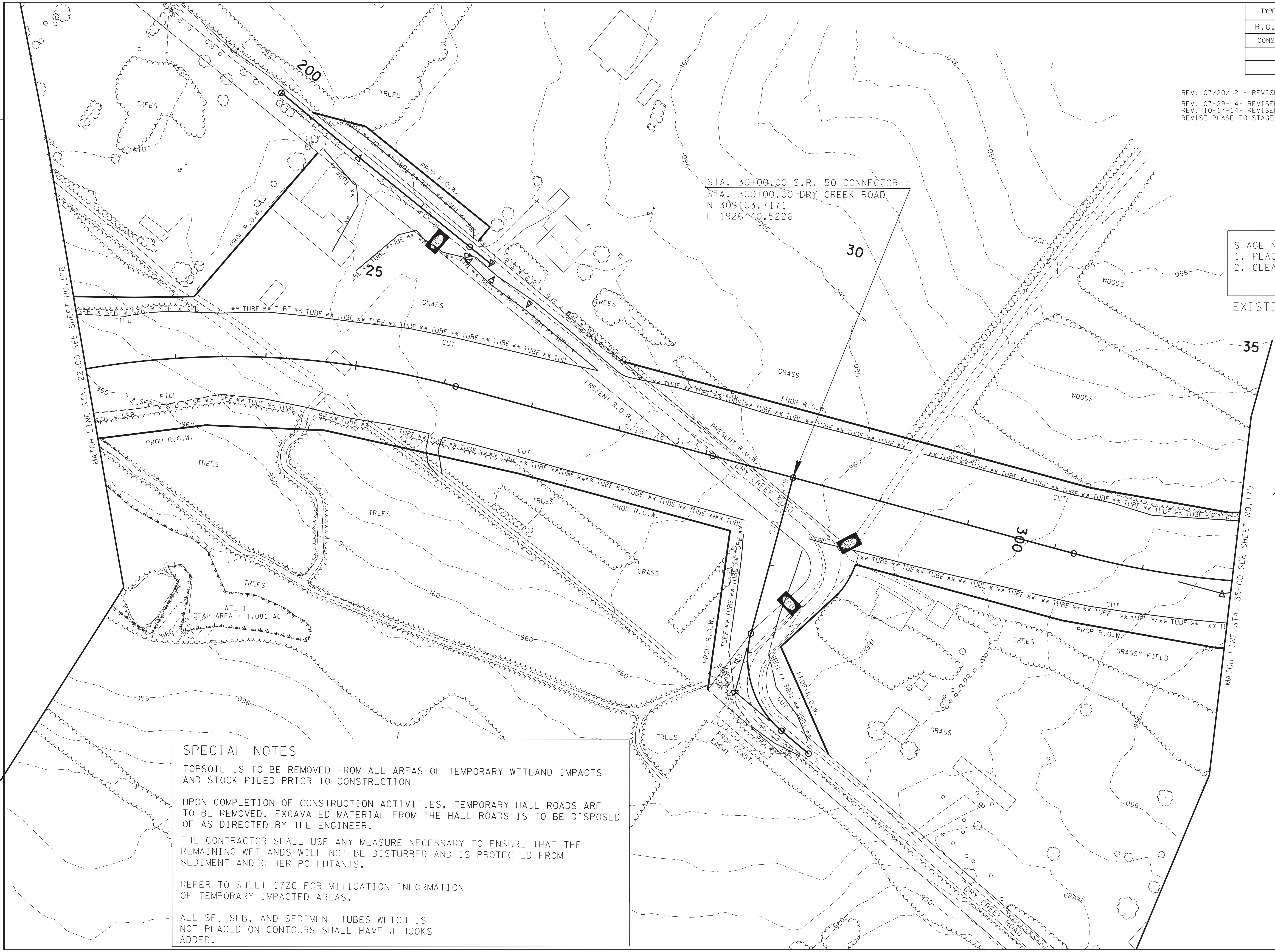
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17C
CONST	2015	STP-50(31)	17C

REV. 07/20/12 - REVISED PROP. R.OW. AT STA. 26+00 LT.
REV. 07-29-14- REVISED EPSC PLANS.
REV. 10-17-14- REVISED NOTES PER CFR.
REVISE PHASE TO STAGE.



STAGE NOTES:
1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB.

EXISTING CONTOURS SHOWN

SPECIAL NOTES

TOPSOIL IS TO BE REMOVED FROM ALL AREAS OF TEMPORARY WETLAND IMPACTS AND STOCK PILED PRIOR TO CONSTRUCTION.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES, TEMPORARY HAUL ROADS ARE TO BE REMOVED. EXCAVATED MATERIAL FROM THE HAUL ROADS IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLANDS WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

SEALED BY

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.22+00 TO STA.35+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	2012	STP-50(31)	17D
CONST	2015	STP-50(31)	17D

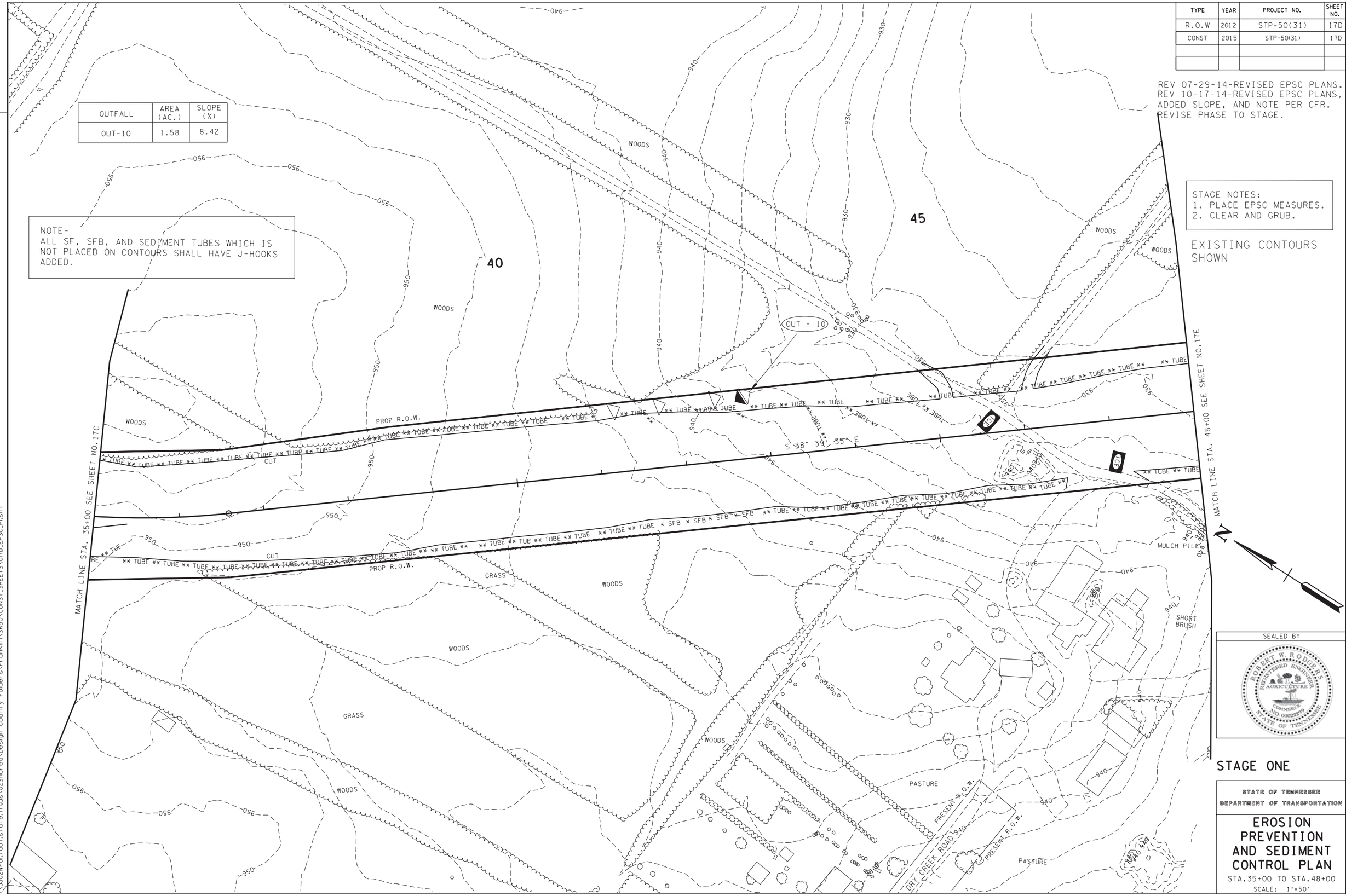
REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS, ADDED SLOPE, AND NOTE PER CFR.
REVISE PHASE TO STAGE.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-10	1.58	8.42

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

STAGE NOTES:
1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB.

EXISTING CONTOURS SHOWN



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ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 000222??
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.35+00 TO STA.48+00
SCALE: 1"=50'

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

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-1 AND PND-1 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17E
CONST	2015	STP-50(31)	17E

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-ADDED NOTE, SEDIMENT FILTER BAG, AND ADDED SLOPE PER CFR. REVISE PHASE TO STAGE.

STA. 53+95.00 S.R. 50 CONNECTOR =
STA. 500+00.00 WILTON CIRCLE 1
N 307188.5185
E 1927827.4470

STA. 59+80.32 S.R. 50 CONNECTOR =
STA. 208+39.87 WILTON CIRCLE 2
N 306809.0475
E 1928266.6909

MATCH LINE STA. 48+00 SEE SHEET NO. 17D

MATCH LINE STA. 61+00 SEE SHEET NO. 17F

OUT - 11 · OUT - 13 · OUT - 14 · OUT - 15 · OUT - 17 · OUT - 18

PND-1 EL.= 923.1'

57' OF PROP. 3 -18'x6' BOX CULV. (SEE STD-17-20)

PROP. 3-6'D x34'L TEMP CULVERTS

PROP. CONST. EASMT · PROP. DRAIN. EASMT

PRESENT R.O.W. · PROP R.O.W.

WOODS · TREES & BRUSH · BRUSH · PASTURE · GOAT PASTURE · GRASS

AREA TO BE SCARIFIED AND OBLITERATED

STAGE NOTES:
1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB,
3. BUILD BOX CULVERT (SEE DETAIL A & B)

DETAIL A
(SEE EC-STR-30)
1.) BUILD IN-STREAM DIVERSION FOR STR-1
2.) BUILD WEST & EAST BARREL.

DETAIL B
(SEE EC-STR-30)
1.) USE IN-STREAM DIVERSION TO DIVERT STR-1 TO EAST BARREL.
2.) BUILD CENTER BARREL.

EXISTING CONTOURS SHOWN

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-11	1.00	2.46
OUT-13	0.63	0.95
OUT-14	0.44	8.69
OUT-15	2.01	4.00
OUT-17	0.63	3.63
OUT-18	1.30	2.17

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AGRICULTURE
COMMERCE
NO. 000222909
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.48+00 TO STA.61+00

SCALE: 1"=50'

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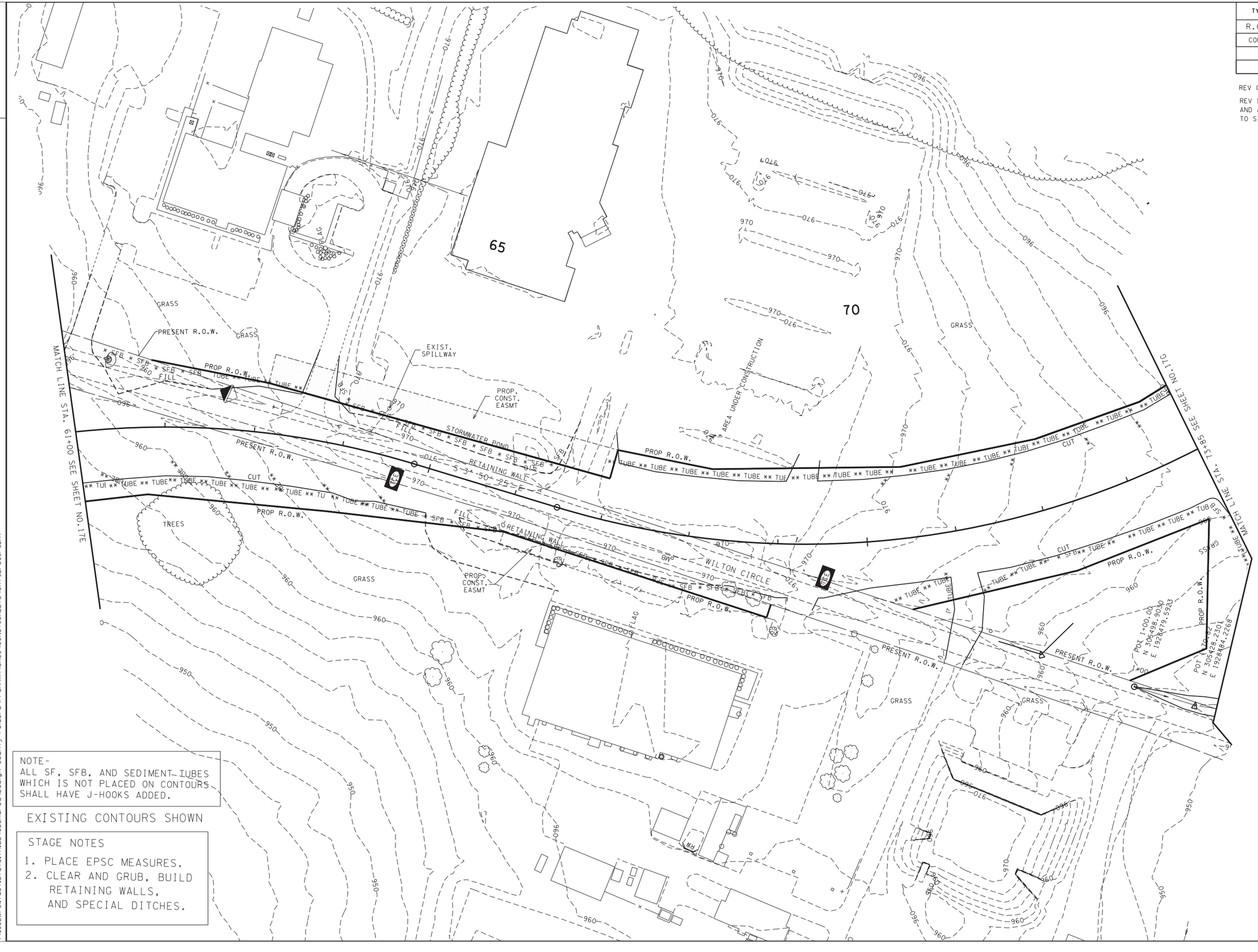
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17F
CONST	2015	STP-50(31)	17F

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-REVISED SEDIMENT TUBES AND ADDED NOTE PER CFR. REVISE PHASE TO STAGE.



NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

EXISTING CONTOURS SHOWN

STAGE NOTES

1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB, BUILD RETAINING WALLS, AND SPECIAL DITCHES.

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REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 000222?0
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-19	7.42	3.74
OUT-20	2.50	6.00

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

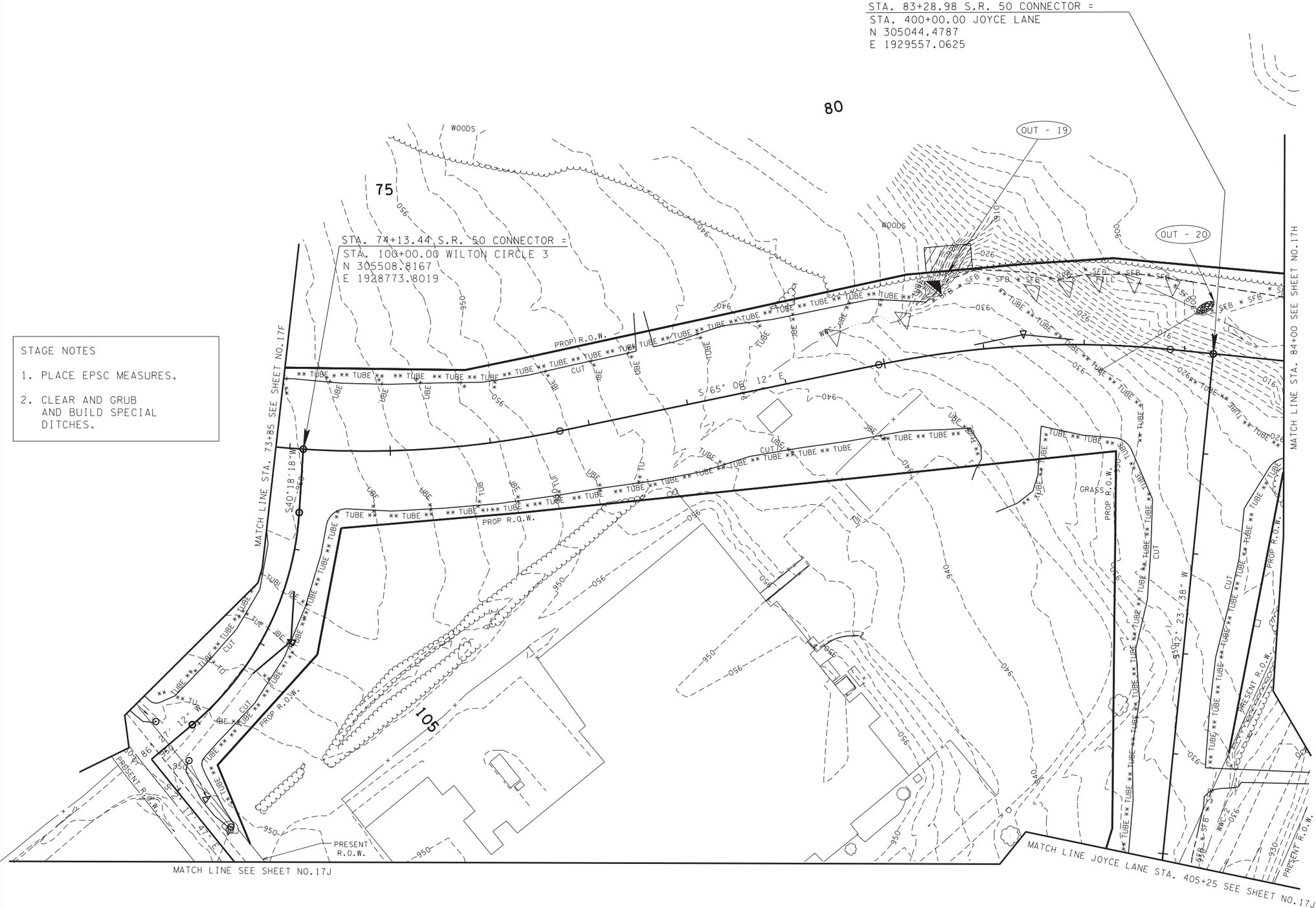
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17G
CONST	2015	STP-50(31)	17G

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-REVISED SEDIMENT TUBES AND ADDED NOTE AND SLOPES PER CFR. REVISE PHASE TO STAGE.

STAGE NOTES

1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB AND BUILD SPECIAL DITCHES.



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AGRICULTURE
COMMERCE
NO. 0002269
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.73+85 TO STA.84+00

SCALE: 1"=50'

EXISTING CONTOURS SHOWN

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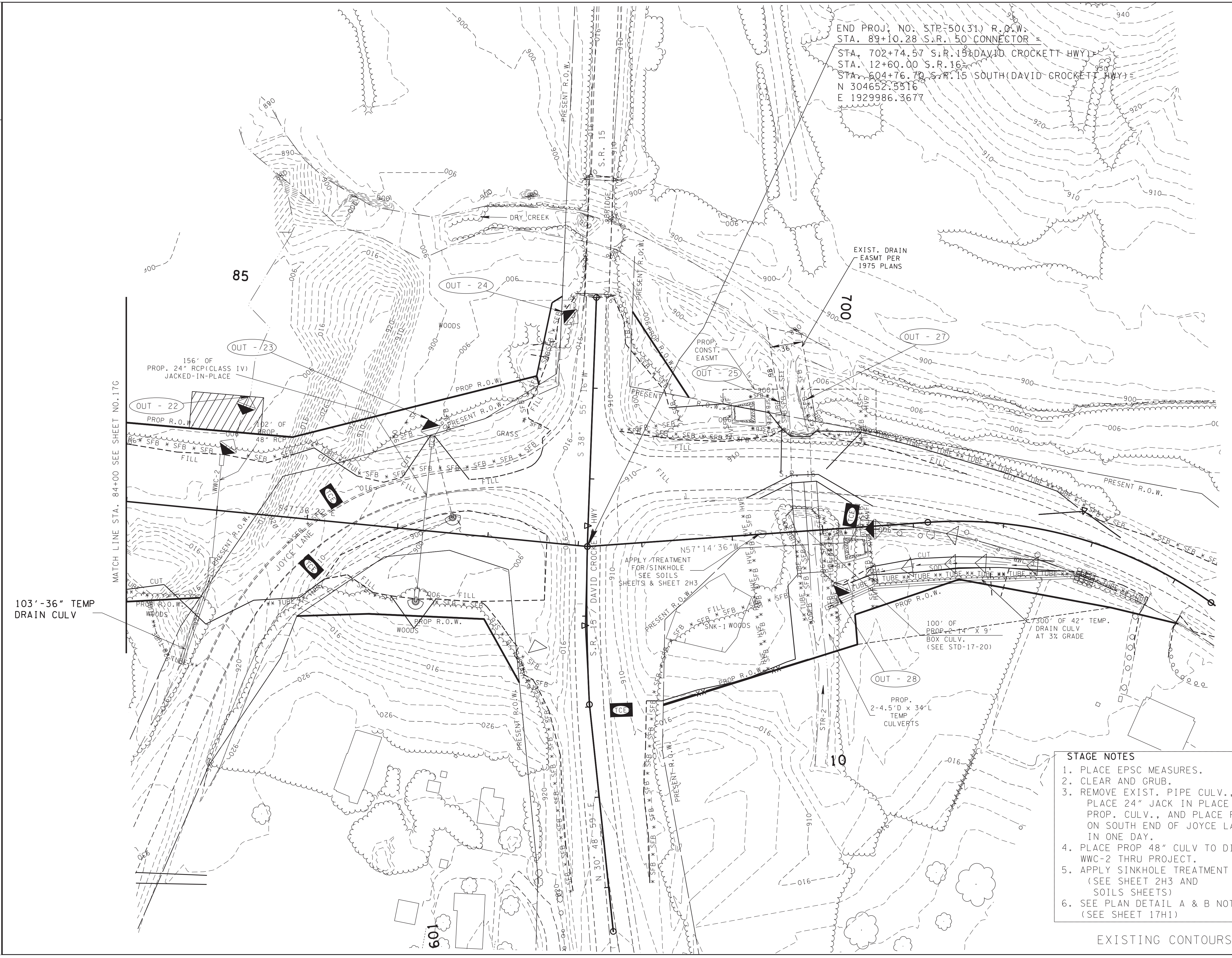
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17H
CONST	2015	STP-50(31)	17H

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-UPDATED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.



OUTFALL	AREA (AC.)	SLOPE (%)
OUT-22	6.88	3.44
OUT-23	9.50	3.40
OUT-24	0.02	25.00
OUT-25	0.20	8.00
OUT-27	0.06	13.00
OUT-28	0.25	2.20

STAGE NOTES

1. PLACE EPSC MEASURES.
2. CLEAR AND GRUB.
3. REMOVE EXIST. PIPE CULV., PLACE 24" JACK IN PLACE PROP. CULV., AND PLACE FILL ON SOUTH END OF JOYCE LANE IN ONE DAY.
4. PLACE PROP 48" CULV TO DIVERT WWC-2 THRU PROJECT.
5. APPLY SINKHOLE TREATMENT (SEE SHEET 2H3 AND SOILS SHEETS)
6. SEE PLAN DETAIL A & B NOTES (SEE SHEET 17H1)

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ROBERT W. RODGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 00022999 STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.84+00 TO STA.91+10
SCALE: 1"=50'

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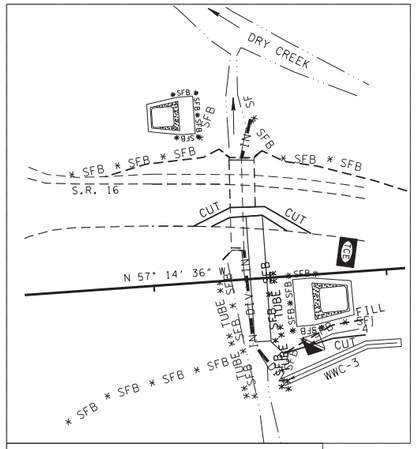
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
ROW	2014	STP-50(31)	17H1
CONST	2015	STP-50(31)	17H1

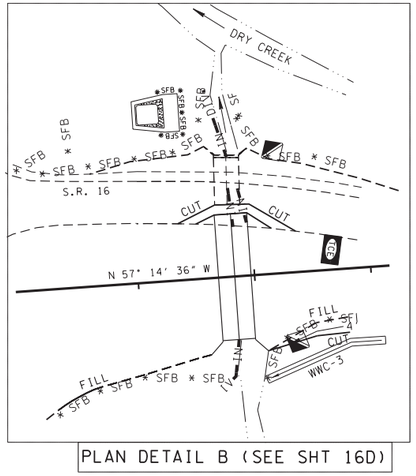
REV 07-29-14-ADDED SHEET.

REV 10-17-14-ADDED SEDIMENT FILTER BAG PER CFR.REVISE PHASE TO STAGE.



PLAN DETAIL A (SEE SHT 16D)

PLAN DETAIL A (SEE SHT 16D)
1. PLACE EPSC MEASURES.
2. PLACE TEMP. DRAIN PIPE AND SANDBAGS FOR WWC-3.
2. DIVERT WWC-3 INTO TEMP DRAIN PIPE.
2. CONSTRUCT ROAD ON NORTH END & 4'-TRAPEZOIDAL DITCH ON SOUTH END AND PLACE EPSC MEASURES FOR STABILIZATION OF DITCH.
3. DETOUR TRAFFIC.
4. USE STD. DWG EC-STR-30A FOR IN-STREAM DIVERSION INTO EXISTING WEST BARREL CULVERT.
5. REMOVE 38' OF EXISTING EAST BARREL CULVERT.
6. BUILD PROPOSED EAST BARREL CULVERT.



PLAN DETAIL B (SEE SHT 16D)

PLAN DETAIL B (SEE SHT 16D)
1. PLACE EPSC MEASURES.
2. USE STD. DWG EC-STR-30A FOR IN-STREAM DIVERSION INTO PROPOSED EAST BARREL AND EXISTING EAST BARREL CULVERT.
3. REMOVE 38' OF EXISTING WEST BARREL CULVERT.
4. BUILD PROPOSED WEST BARREL CULVERT.

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-2 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

FILL SHOULD BE PLACED ON SOUTH END OF JOYCE LANE WITH PROPOSED SLOPE LINE FOR WATER TO DRAIN INTO INLET END OF PROP 24" RCP(CLASS IV) AFTER PIPE HAS BEEN PLACED.

SEALED BY

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.84+00 TO STA.91+10

SCALE: 1"=50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17I
CONST	2015	STP-50(31)	17J

REVISED 07-29-14- REVISED EPSC PLANS.
REV 10-17-14: REVISED EPSC PLANS PER CFR.
REVISE PHASE TO STAGE.

MATCH LINE SEE SHEET NO.17G

MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.17G

OUT - 31

PROP. DRAIN. EASMT

PRESENT R.O.W.

WILTON CIRCLE

PROP R.O.W.

JOYCE LANE

CUT

FILL

410

MAC S STREET

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-31	3.58	3.08

STAGE NOTES
1. PLACE EPSC MEASURES.
2. PLACE TEMP CULV CROSSING FOR WWC-2.
3. CLEAR AND GRUB, BUILD SPECIAL DITCH, AND PLACE PROP. PIPE.

EXISTING CONTOURS SHOWN

N

SEALED BY

ROBERT W. ROGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 00022509
STATE OF TENNESSEE

STAGE ONE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

JOYCE LANE
STA.405+25 TO STA.413+52
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17J
CONST	2015	STP-50(31)	17K

REV 07-29-14-REVISED EPSC PLANS.
REV 08-20-14-ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

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

SPECIAL NOTES

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLAND WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

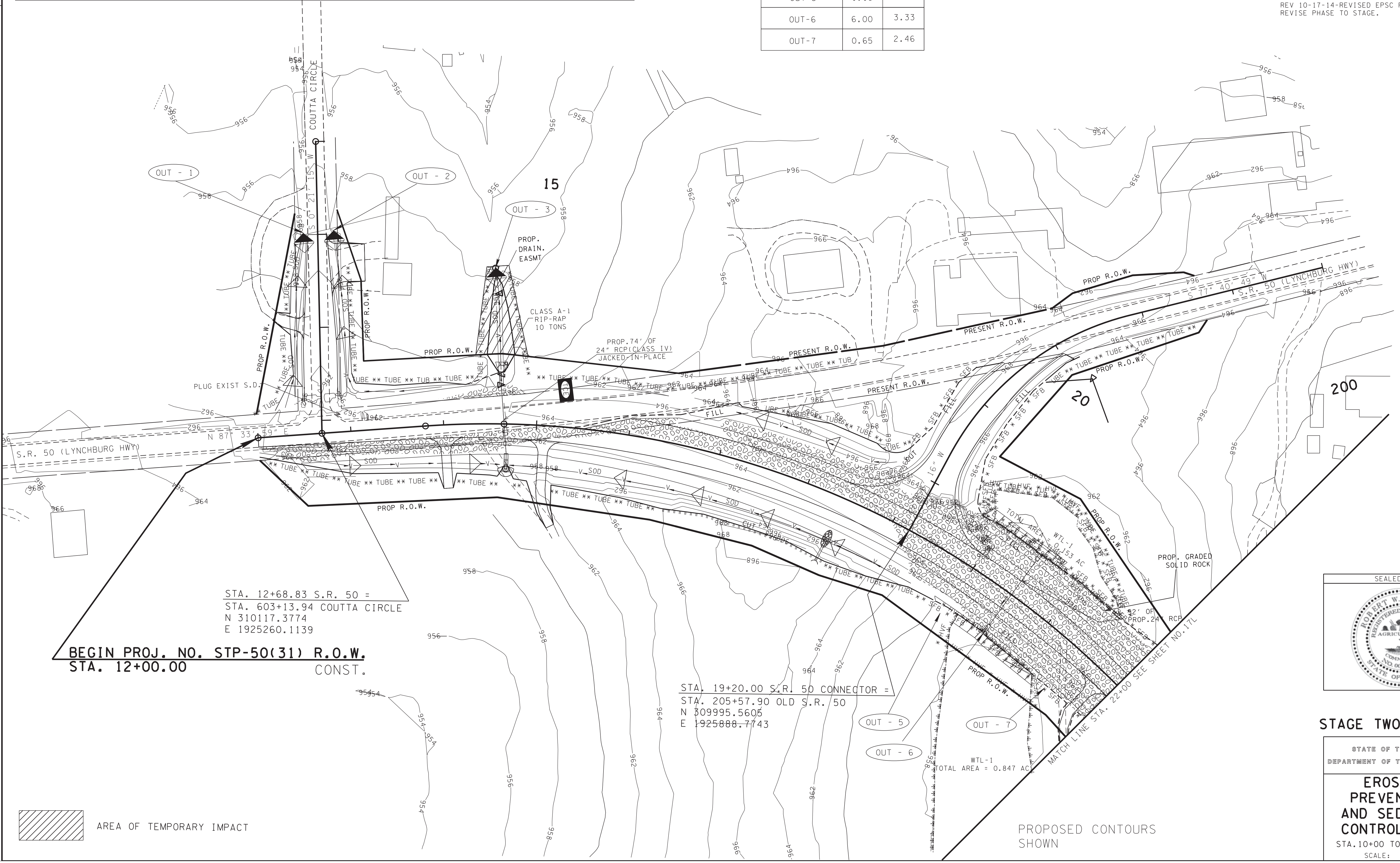
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

EPSC MEASURES FROM PREVIOUS PHASES ARE TO BE LEFT IN PLACE UNTIL NO LONGER NECESSARY.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-1	0.20	3.63
OUT-2	0.20	1.63
OUT-3	5.00	1.90
OUT-5	1.19	5.00
OUT-6	6.00	3.33
OUT-7	0.65	2.46

STAGE NOTES

1. PLACE EPSC MEASURES.
2. PLACE EPSC MEASURES TO STABILIZE DITCHES.
3. BUILD ROAD AND DITCHES.



AREA OF TEMPORARY IMPACT

PROPOSED CONTOURS SHOWN

SEALED BY

ROBERT W. RODGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 00022959 STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.10+00 TO STA.22+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	2012	STP-50(31)	17K
CONST	2015	STP-50(31)	17L

REV. 07/20/12 - REVISED PROP. ROW AT STA. 26+00 LT
REV. 07-29-14- REVISED EPSC PLANS.
REV. 08-14-14- ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV. 08-20-14- ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV. 10-17-14- REVISED EPSC NOTES PER CFR.
REVISE PHASE TO STAGE.

STA. 30+00.00 S.R. 50 CONNECTOR =
STA. 300+00.00 DRY CREEK ROAD
N 309103.7171
E 1926440.5226

26' OF PROP. 18" RCP

PROP. 18" RCP

47' OF PROP. 18" RCP

STAGE NOTES

1. PLACE EPSC MEASURES.
2. PLACE EPSC MEASURES TO STABILIZE DITCHES.
3. BUILD ROAD AND DITCHES.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-8	0.05	2.00
OUT-9	0.15	2.00

MATCH LINE STA. 22+00 SEE SHEET NO.17K

MATCH LINE STA. 35+00 SEE SHEET NO.17M

SPECIAL NOTES

TOPSOIL IS TO BE REMOVED FROM ALL AREAS OF TEMPORARY WETLAND IMPACTS AND STOCK PILED PRIOR TO CONSTRUCTION.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES, TEMPORARY HAUL ROADS ARE TO BE REMOVED. EXCAVATED MATERIAL FROM THE HAUL ROADS IS TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLANDS WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

AREA TO BE SCARIFIED AND OBLITERATED

PROPOSED CONTOURS SHOWN

SEALED BY

ROBERT W. RUDDELL
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 000222[illegible]
STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.22+00 TO STA.35+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	2012	STP-50(31)	17L
CONST	2015	STP-50(31)	17M

REV 07-29-14-REVISED EPSC PLANS.
REV 08-14-14-ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV 10-17-14-ADDED NOTE PER CFR. REVISE PHASE TO STAGE.

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

STAGE NOTES

1. PLACE EPSC MEASURES.
2. BUILD ROAD AND DITCHES.
3. PLACE EPSC MEASURES TO STABILIZE DITCHES.

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 00022299
STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.35+00 TO STA.48+00

SCALE: 1"=50'

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

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-1 AND PND-1 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

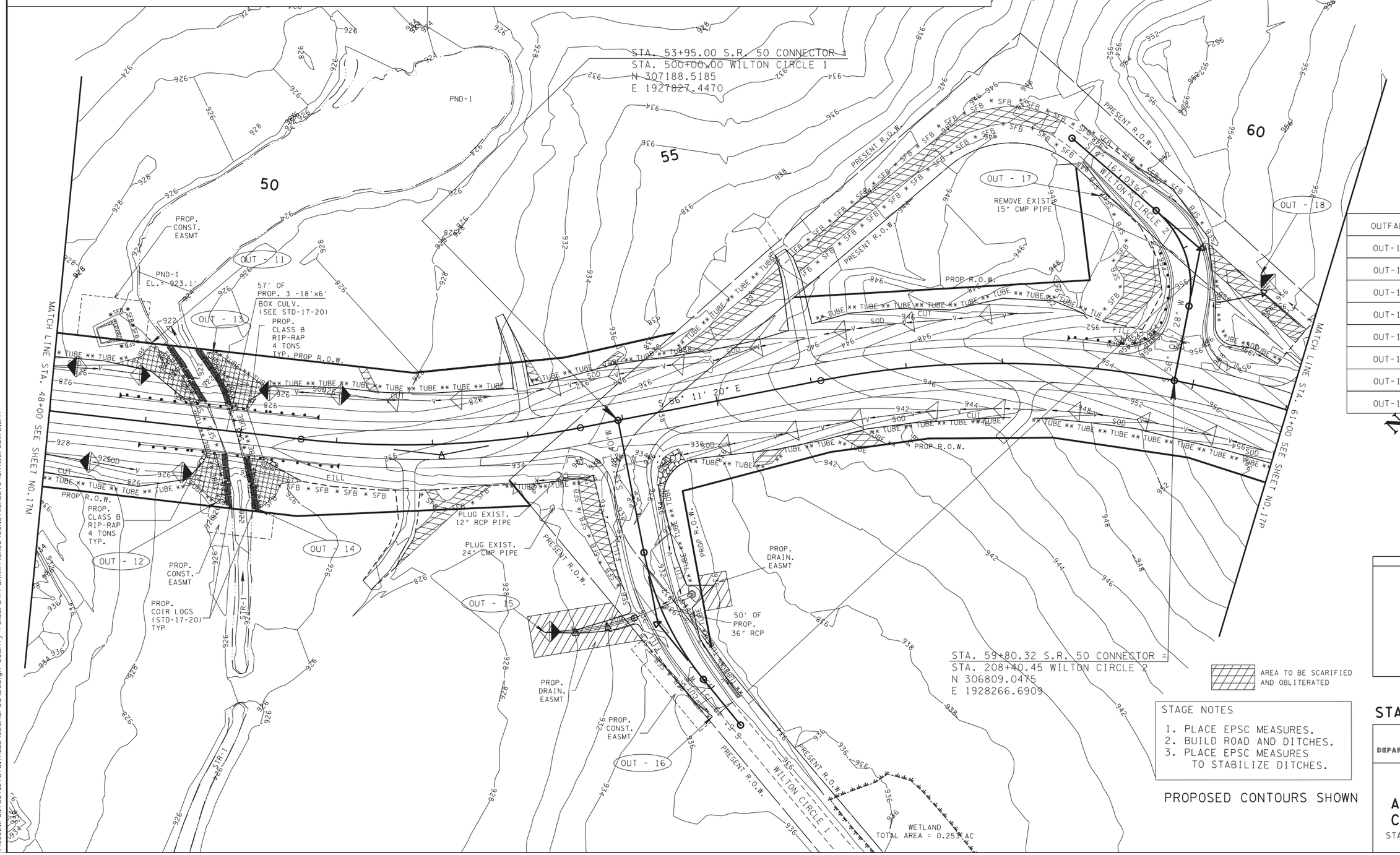
REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17M
CONST	2015	STP-50(31)	17N

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-REVISED EPSC PLANS PER CFR REVISE PHASE TO STAGE.



OUTFALL	AREA (AC.)	SLOPE (%)
OUT-11	1.00	2.46
OUT-12	3.60	9.00
OUT-13	0.63	0.95
OUT-14	0.44	8.69
OUT-15	2.01	4.00
OUT-16	0.05	3.33
OUT-17	0.14	3.63
OUT-18	1.30	2.17

AREA TO BE SCARIFIED AND OBLITERATED

STAGE NOTES

1. PLACE EPSC MEASURES.
2. BUILD ROAD AND DITCHES.
3. PLACE EPSC MEASURES TO STABILIZE DITCHES.

PROPOSED CONTOURS SHOWN

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 0000000
STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.48+00 TO STA.61+00

SCALE: 1"=50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17N
CONST	2015	STP-50(31)	17P

REV 07-29-14-REVISED EPSC PLANS.

REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

MATCH LINE STA. 61+00 SEE SHEET NO.17N

MATCH LINE STA. 73+85 SEE SHEET NO.17N

65

70

EXIST. CMP TO REMAIN IN PLACE

REMOVE EXIST. 15" CMP PIPE AFTER PROP CROSS DRAIN COMPLETED

PRESENT R.O.W.

PROP R.O.W.

EXIST.12" CMP TO REMAIN IN PLACE IN. EL. 965.66 OUT. EL. 960.16

A-2 JB

PROP. CONST. EASMT

EXIST. SPILLWAY TO REMAIN IN PLACE

RETAINING WALL

S 3° 50' 25" E

55' OF PROP. 18" RCP(CLASS IV) JACKED-IN-PLACE

OUT.EL. 965.01

A-1 FES

PROP. CONST. EASMT

EXIST. 18" CMP TO REMAIN IN PLACE

BEGIN SEEDED DITCH W/ TURF REINFORCEMENT MAT @ STA 70+50.00 SEE STD DWG EC-STR-36

WILTON CIRCLE 3 SPECIAL DITCH 1

WILTON CIRCLE

PRESENT R.O.W.

PROP R.O.W.

CUT

FILL

PROPOSED CONTOURS SHOWN

AREA TO BE SCARIFIED AND OBLITERATED

STAGE NOTES

1. PLACE EPSC MEASURES.
2. BUILD ROAD AND DITCHES.
3. PLACE EPSC MEASURES TO STABILIZE DITCHES.

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO 0002220
STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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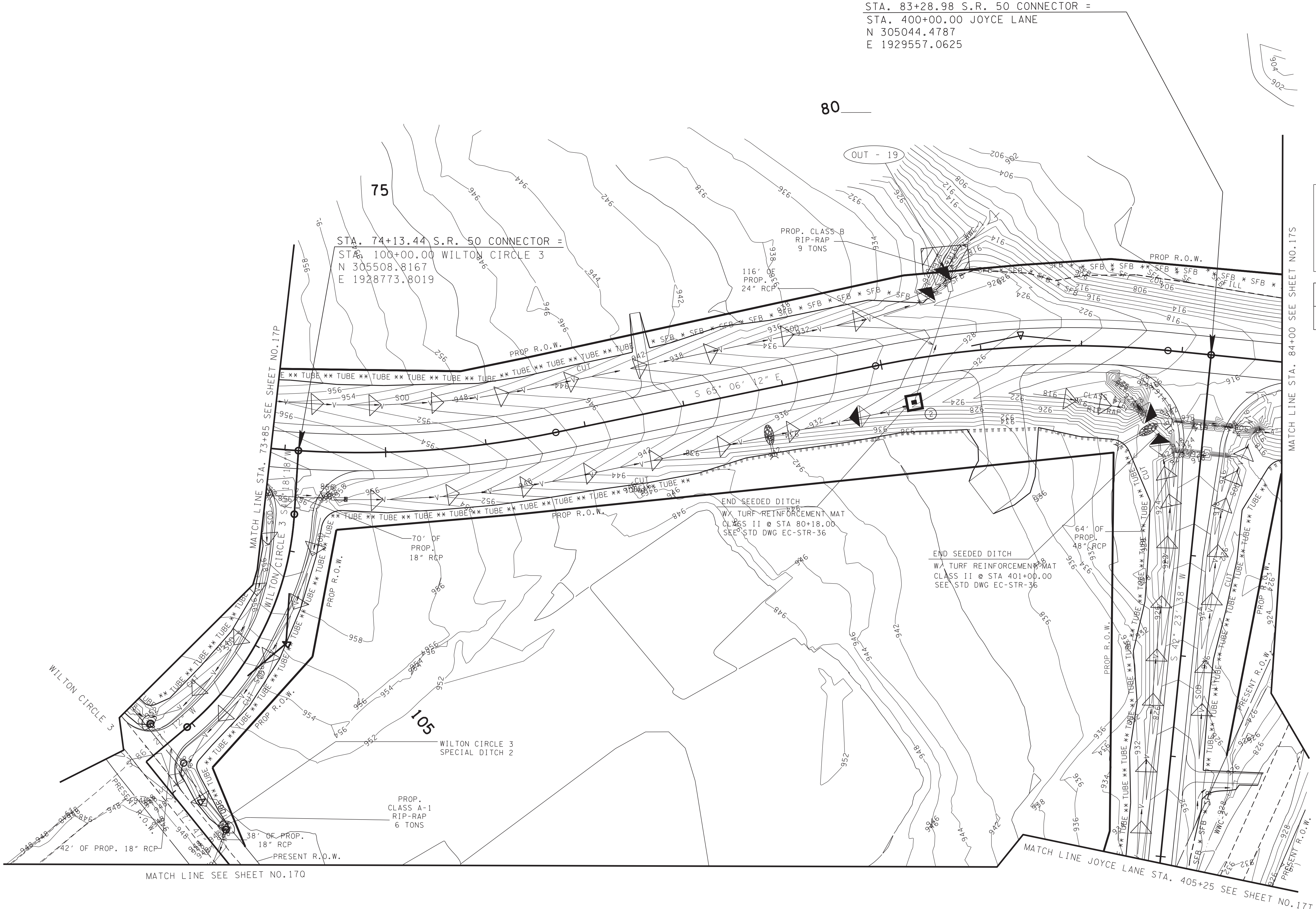
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17Q
CONST	2015	STP-50(31)	17R

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.



STAGE NOTES
1. PLACE EPSC MEASURES.
2. BUILD ROAD, RIP-RAP APRONS, AND DITCHES.
3. PLACE EPSC MEASURES TO STABILIZE DITCHES.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-19	7.42	3.74

PROPOSED CONTOURS SHOWN

SEALED BY

ROBERT W. RODGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 0002299 STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.73+85 TO STA.84+00
SCALE: 1"=50'

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

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

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

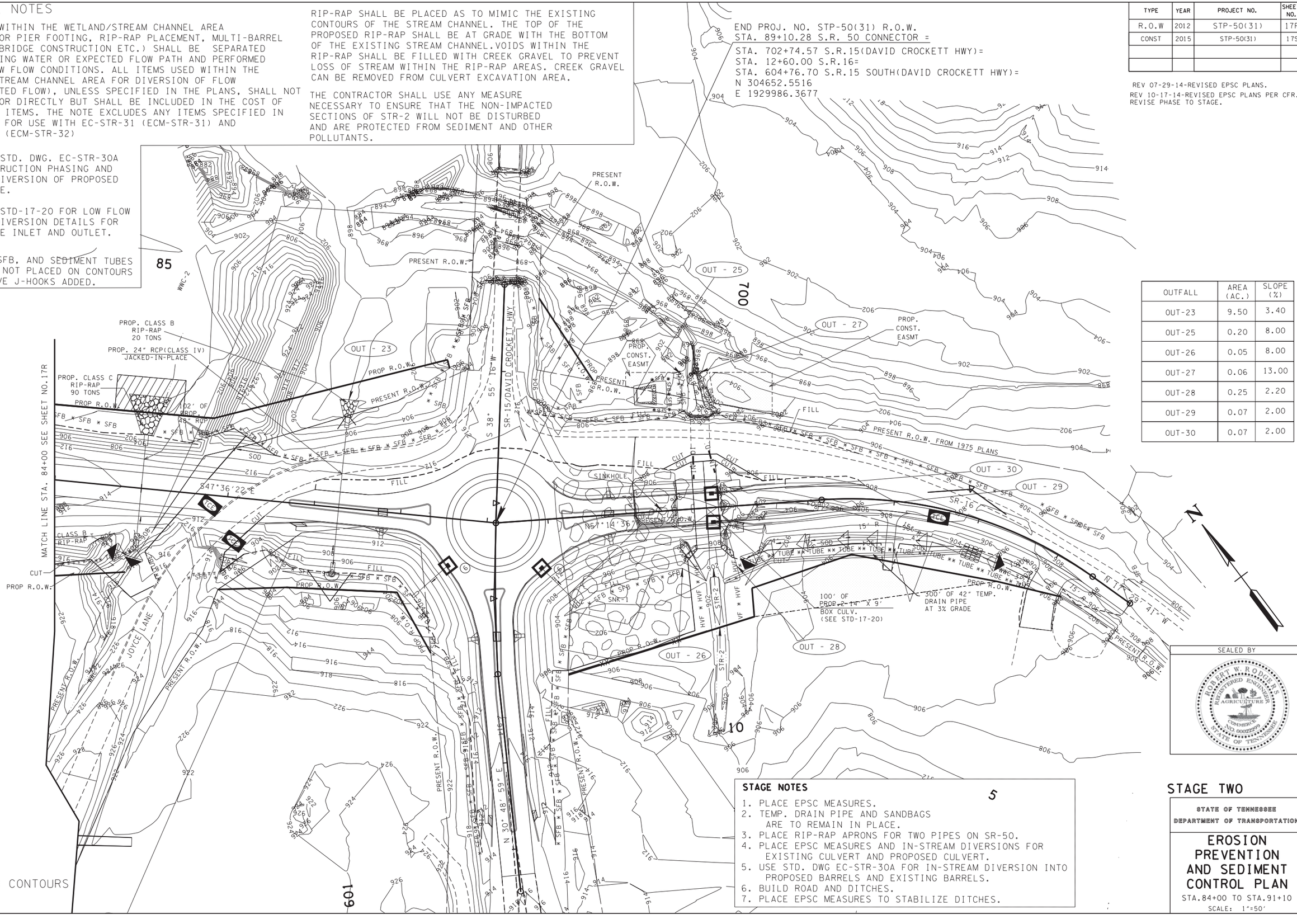
THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-2 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

END PROJ. NO. STP-50(31) R.O.W.
STA. 89+10.28 S.R. 50 CONNECTOR =
STA. 702+74.57 S.R.15(DAVID CROCKETT HWY)=
STA. 12+60.00 S.R.16=
STA. 604+76.70 S.R.15 SOUTH(DAVID CROCKETT HWY)=
N 304652.5516
E 1929986.3677

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17P
CONST	2015	STP-50(31)	17S

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-23	9.50	3.40
OUT-25	0.20	8.00
OUT-26	0.05	8.00
OUT-27	0.06	13.00
OUT-28	0.25	2.20
OUT-29	0.07	2.00
OUT-30	0.07	2.00



PROPOSED CONTOURS SHOWN

STAGE NOTES 5

1. PLACE EPSC MEASURES.
2. TEMP. DRAIN PIPE AND SANDBAGS ARE TO REMAIN IN PLACE.
3. PLACE RIP-RAP APRONS FOR TWO PIPES ON SR-50.
4. PLACE EPSC MEASURES AND IN-STREAM DIVERSIONS FOR EXISTING CULVERT AND PROPOSED CULVERT.
5. USE STD. DWG EC-STR-30A FOR IN-STREAM DIVERSION INTO PROPOSED BARRELS AND EXISTING BARRELS.
6. BUILD ROAD AND DITCHES.
7. PLACE EPSC MEASURES TO STABILIZE DITCHES.

SEALED BY

ROBERT W. RODIER
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO 000022909
STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.84+00 TO STA.91+10
SCALE: 1"=50'

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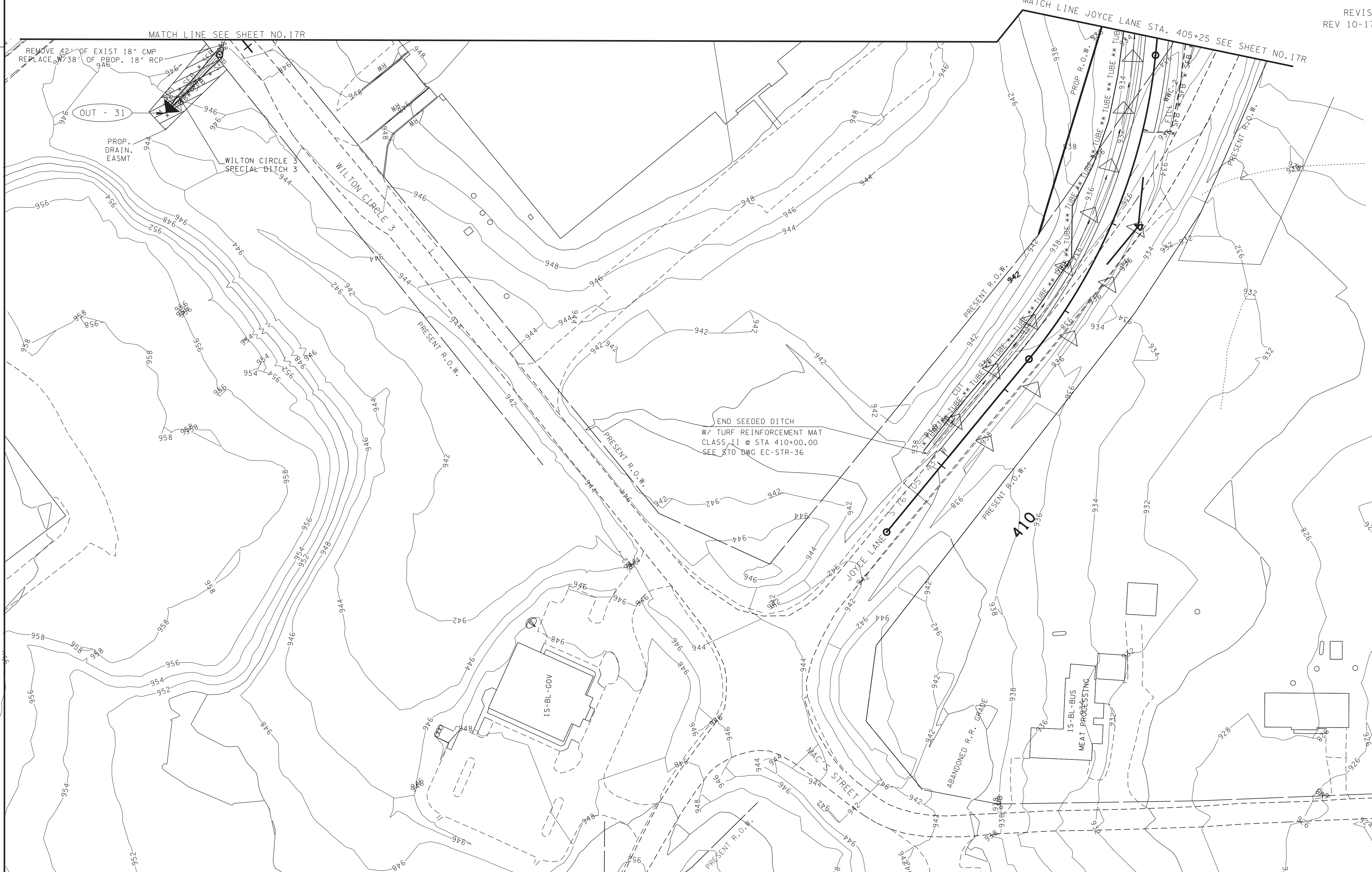
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17Q
CONST	2015	STP-50(31)	17T

REVISED 07-29-14- REVISED EPSC PLANS.
REV 10-17-14- REVISED EPSC PLANS PER CFR.
REVISE PHASE TO STAGE.



OUTFALL	AREA (AC.)	SLOPE (%)
OUT-31	3.58	3.08

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

STAGE NOTES
1. PLACE EPSC MEASURES.
2. BUILD DITCHES AND ROADWAY.
3. PLACE EPSC MEASURES TO STABILIZE DITCHES.

PROPOSED CONTOURS SHOWN

SEALED BY

ROBERT W. RODGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 00022299 STATE OF TENNESSEE

STAGE TWO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

JOYCE LANE
STA.405+25 TO STA.413+52
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17R
CONST	2015	STP-50(31)	17U

REV 07-29-14-REVISED EPSC PLANS.
REV 08-20-14-ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

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

SPECIAL NOTES

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLAND WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

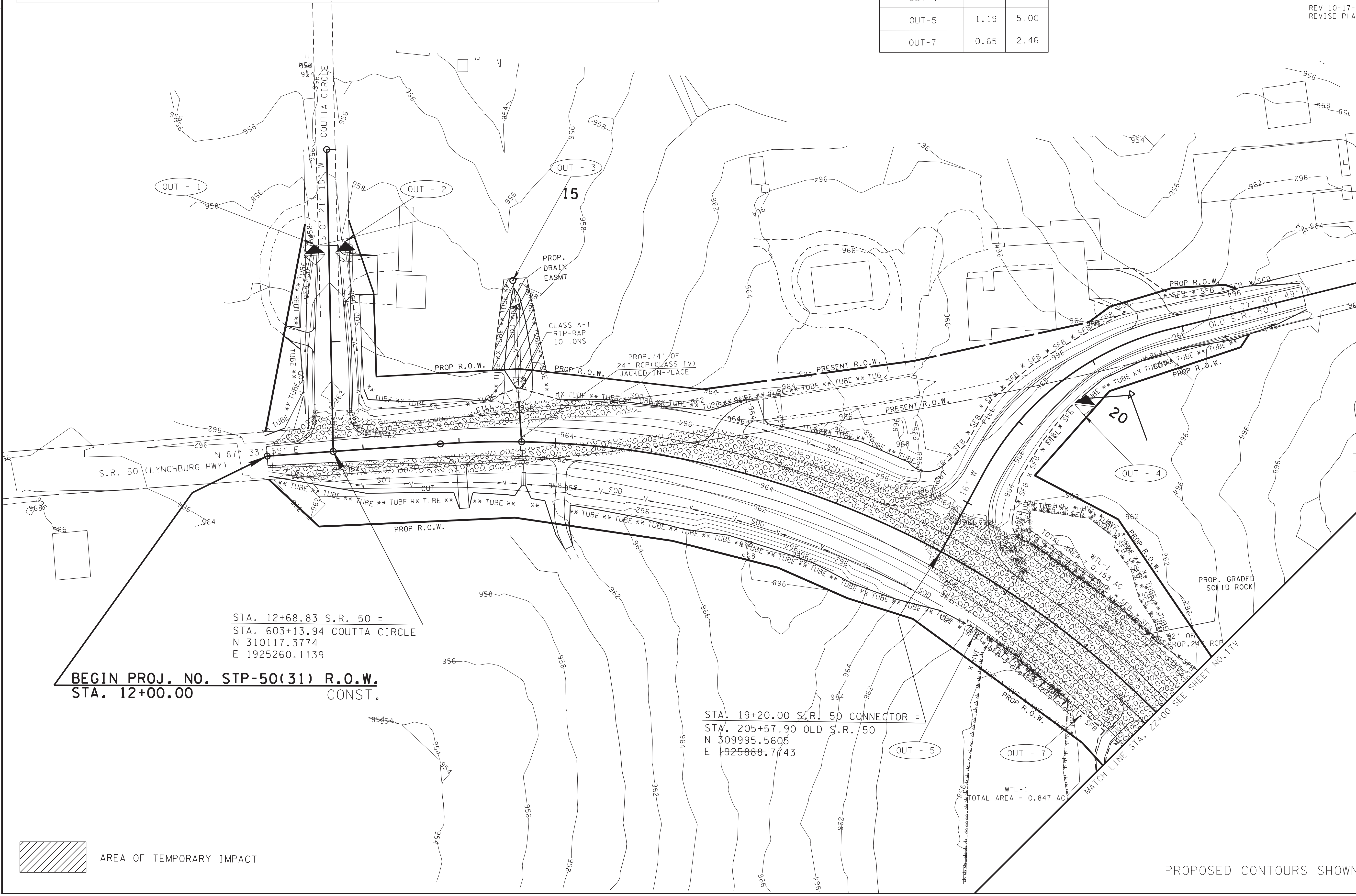
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

EPSC MEASURES FROM PREVIOUS PHASES ARE TO BE LEFT IN PLACE UNTIL NO LONGER NECESSARY.

STAGE NOTES

1. PLACE EPSC MEASURES.
2. FINISH ROAD.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-1	0.20	3.63
OUT-2	0.20	1.63
OUT-3	5.00	1.90
OUT-4	0.05	1.50
OUT-5	1.19	5.00
OUT-7	0.65	2.46



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SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE COMMERCE
NO. 00022399
STATE OF TENNESSEE

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.10+00 TO STA.22+00
SCALE: 1"=50'

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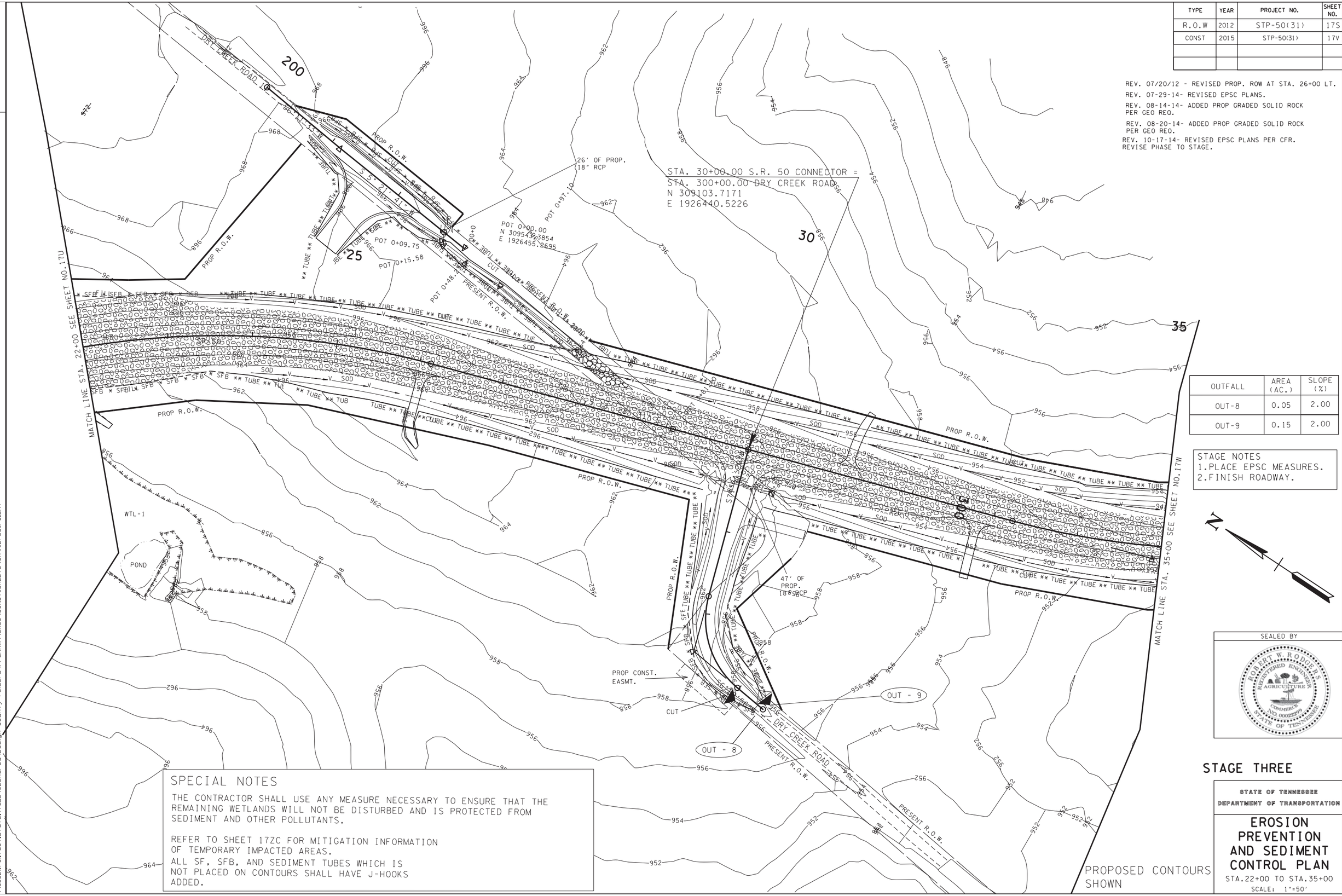
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17S
CONST	2015	STP-50(31)	17V

REV. 07/20/12 - REVISED PROP. ROW AT STA. 26+00 LT.
REV. 07-29-14- REVISED EPSC PLANS.
REV. 08-14-14- ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV. 08-20-14- ADDED PROP GRADED SOLID ROCK PER GEO REQ.
REV. 10-17-14- REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.



OUTFALL	AREA (AC.)	SLOPE (%)
OUT-8	0.05	2.00
OUT-9	0.15	2.00

STAGE NOTES
1.PLACE EPSC MEASURES.
2.FINISH ROADWAY.

SEALED BY

ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 000022609
STATE OF TENNESSEE

SPECIAL NOTES

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE REMAINING WETLANDS WILL NOT BE DISTURBED AND IS PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO SHEET 17ZC FOR MITIGATION INFORMATION OF TEMPORARY IMPACTED AREAS.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

PROPOSED CONTOURS SHOWN

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.22+00 TO STA.35+00
SCALE: 1"=50'

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

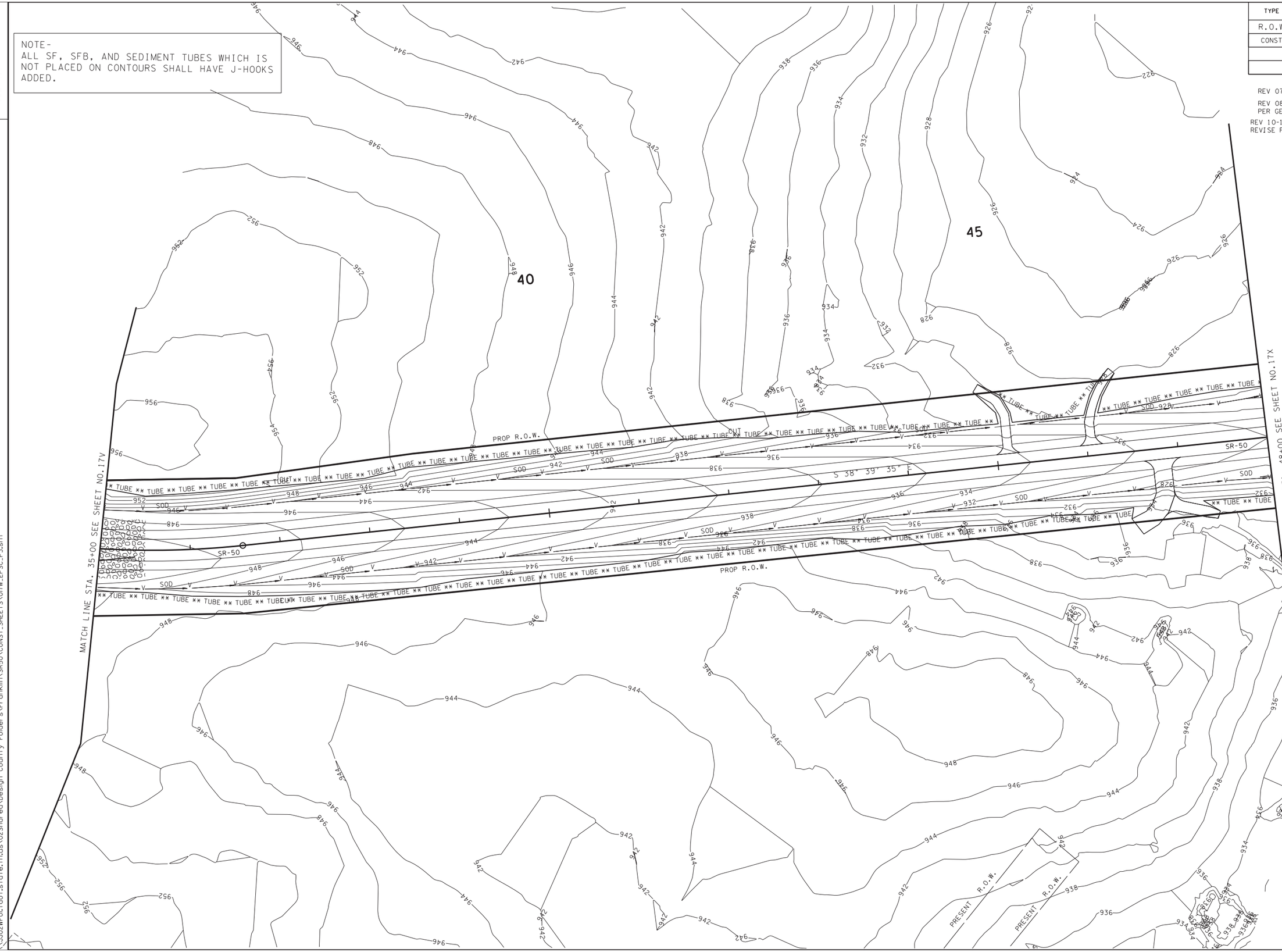
NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17T
CONST	2015	STP-50(31)	17W

REV 07-29-14-REVISED EPSC PLANS.

REV 08-14-14-ADDED PROP GRADED SOLID ROCK PER GEO REQ.

REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.



PROPOSED CONTOURS SHOWN

STAGE NOTES
1.PLACE EPSC MEASURES.
2.FINISH ROADWAY.

SEALED BY

ROBERT W. ROGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 000222??
STATE OF TENNESSEE

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.35+00 TO STA.48+00

SCALE: 1"=50'

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

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-1 AND PND-1 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17U
CONST	2015	STP-50(31)	17X

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR
REVISE PHASE TO STAGE.

STA. 53+95.00 S.R. 50 CONNECTOR =
STA. 500+00.00 WILTON CIRCLE 1
N 307188.5185
E 1927827.4470

STA. 59+80.32 S.R. 50 CONNECTOR =
STA. 208+40.45 WILTON CIRCLE 2
N 306809.0475
E 1928266.6909

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-11	1.00	2.46
OUT-12	3.60	9.00
OUT-13	0.63	0.95
OUT-14	0.44	8.69
OUT-15	2.01	4.00
OUT-16	0.05	3.33
OUT-18	1.30	2.17

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ROBERT W. RODGERS
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 0002259
STATE OF TENNESSEE

STAGE THREE

STAGE NOTES
1.PLACE EPSC MEASURES.
2.FINISH ROADWAY.

PROPOSED CONTOURS SHOWN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.48+00 TO STA.61+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	2012	STP-50(31)	17V
CONST	2015	STP-50(31)	17Y

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

AREA TO BE SCARIFIED AND OBLITERATED

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ROBERT W. RODGERS REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 00022299 STATE OF TENNESSEE

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.61+00 TO STA.73+85
SCALE: 1"=50'

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

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17W
CONST	2015	STP-50(31)	17Z

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

STA. 83+28.98 S.R. 50 CONNECTOR =
STA. 400+00.00 JOYCE LANE
N 305044.4787
E 1929557.0625

STA. 74+13.44 S.R. 50 CONNECTOR =
STA. 100+00.00 WILTON CIRCLE 3
N 305508.8167
E 1928773.8019

OUT - 19

PROP. CLASS B RIP-RAP 9 TONS

116' PROP. 24" RCP

PROP R.O.W.

** TUBE ** TUBE ** TUBE ** TUBE FILL

B-1 EW

B-2 EN. EL. 925.06 *39 IN. EL. 917.33

S 65° 06' 12" E

S 42° 23' 38" W

CLASS A-1 RIP-RAP

END SEEDED DITCH W/ TURF REINFORCEMENT MAT CLASS II @ STA 80+18.00 SEE STD DWG EC-STR-36

END SEEDED DITCH W/ TURF REINFORCEMENT MAT CLASS II @ STA 401+00.00 SEE STD DWG EC-STR-36

64' OF PROP. 48" RCP

70' OF PROP. 18" RCP

42' OF PROP. 18" RCP

38' OF PROP. 18" RCP

PROP. CLASS A-1 RIP-RAP 6 TONS

WILTON CIRCLE 3 SPECIAL DITCH 2

PRESENT R.O.W.

MATCH LINE STA. 73+85 SEE SHEET NO.17Y

MATCH LINE STA. 84+00 SEE SHEET NO.17ZA

MATCH LINE SEE SHEET NO.17ZB

MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.17ZB

AREA TO BE SCARIFIED AND OBLITERATED

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-19	7.42	3.74

STAGE NOTES
1.PLACE EPSC MEASURES.
2.FINISH ROADWAY.

N

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STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.73+85 TO STA.84+00

SCALE: 1"=50'

PROPOSED CONTOURS SHOWN

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

SPECIAL NOTES

ANY WORK WITHIN THE WETLAND/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 WETLAND/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 THE OTHER ITEMS. THE NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR USE WITH EC-STR-31 (ECM-STR-31) AND EC-STR-32 (ECM-STR-32)

REFER TO STD. DWG. EC-STR-30A FOR CONSTRUCTION PHASING AND CHANNEL DIVERSION OF PROPOSED BOX BRIDGE.

REFER TO STD-17-20 FOR LOW FLOW CHANNEL DIVERSION DETAILS FOR BOX BRIDGE INLET AND OUTLET.

ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

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 THE RIP-RAP AREAS. CREEK GRAVEL CAN BE REMOVED FROM CULVERT EXCAVATION AREA.

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT THE NON-IMPACTED SECTIONS OF STR-2 WILL NOT BE DISTURBED AND ARE PROTECTED FROM SEDIMENT AND OTHER POLLUTANTS.

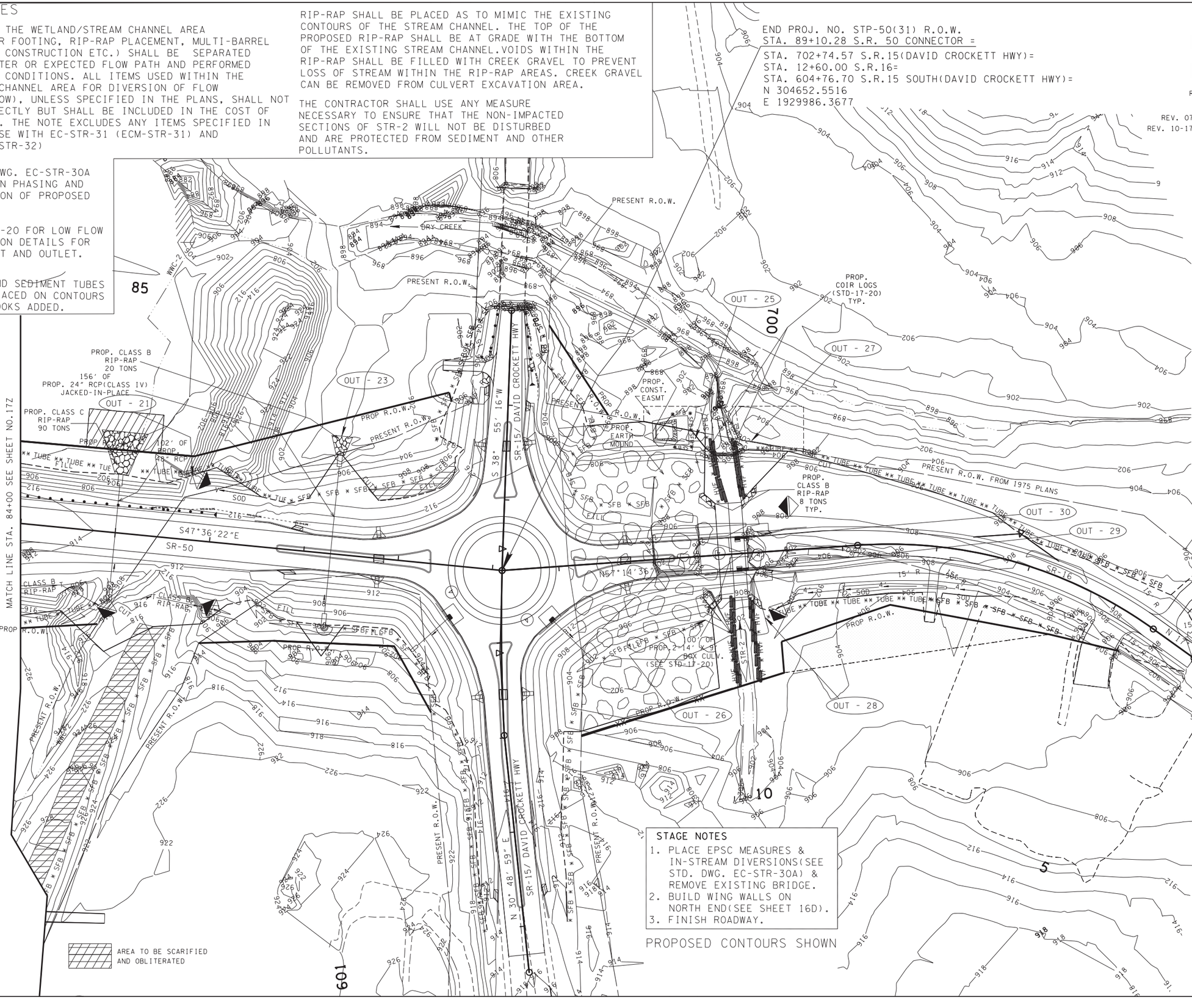
END PROJ. NO. STP-50(31) R.O.W.
STA. 89+10.28 S.R. 50 CONNECTOR =
STA. 702+74.57 S.R.15(DAVID CROCKETT HWY)=
STA. 12+60.00 S.R.16=
STA. 604+76.70 S.R.15 SOUTH(DAVID CROCKETT HWY)=
N 304652.5516
E 1929986.3677

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17X
CONST	2015	STP-50(31)	17ZA

REV. 09-07-12- REMOVED DITCH NORTH OF SR-16

REV. 07-29-14- REVISED EPSC PLANS.
REV. 10-17-14- REVISED EPSC PLANS PER CFR. REVISE PHASE TO STAGE.

OUTFALL	AREA (AC.)	SLOPE (%)
OUT-21	0.08	13.00
OUT-23	9.50	3.40
OUT-25	0.20	8.00
OUT-26	0.05	8.00
OUT-27	0.06	13.00
OUT-28	0.25	2.20
OUT-29	0.07	2.00
OUT-30	0.07	2.00



STAGE NOTES

1. PLACE EPSC MEASURES & IN-STREAM DIVERSIONS(SEE STD. DWG. EC-STR-30A) & REMOVE EXISTING BRIDGE.
2. BUILD WING WALLS ON NORTH END(SEE SHEET 16D).
3. FINISH ROADWAY.

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AGRICULTURE
COMMERCE
NO. 00022259
STATE OF TENNESSEE

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STA.84+00 TO STA.91+10

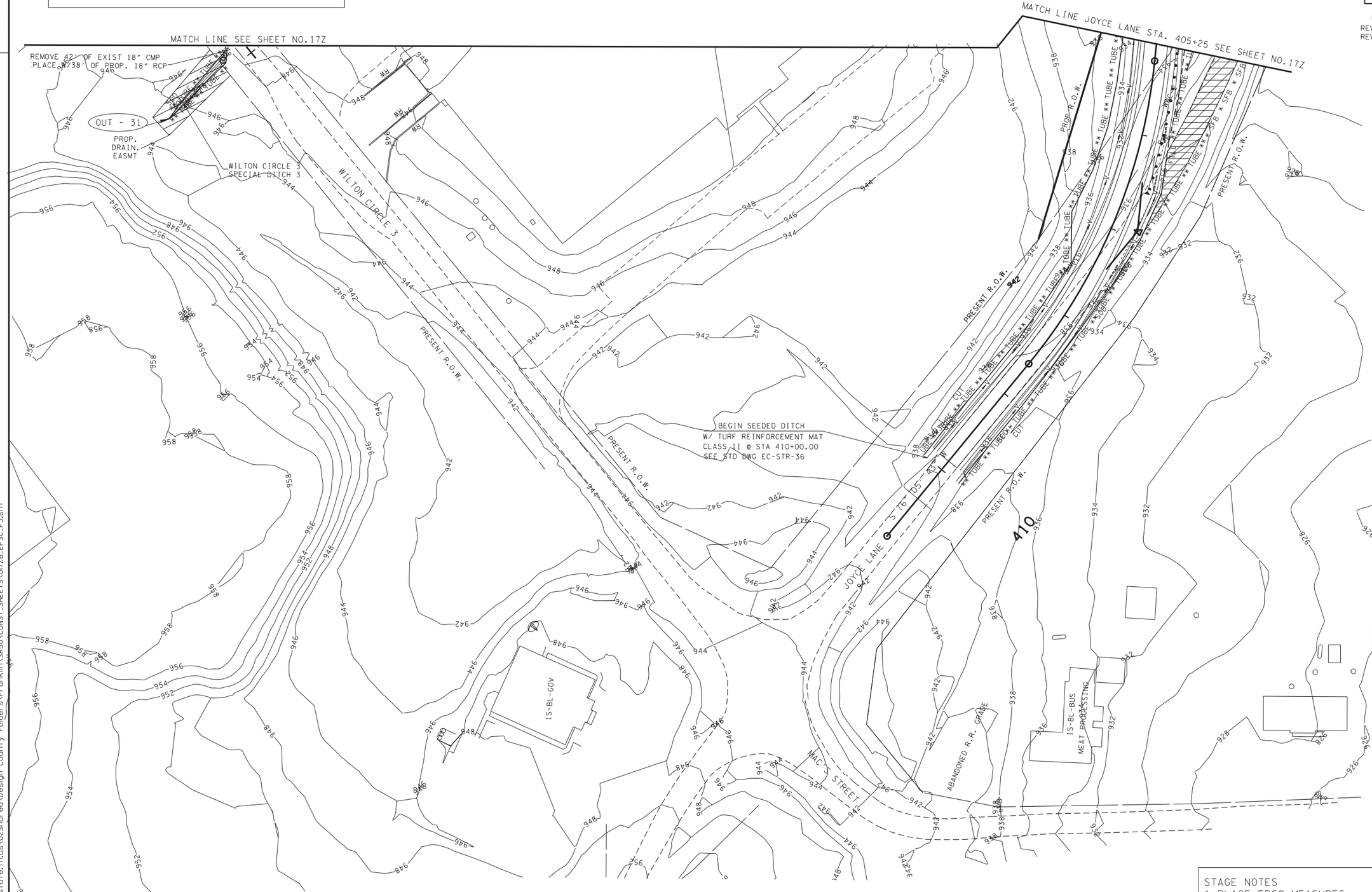
SCALE: 1"=50'

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

NOTE-
ALL SF, SFB, AND SEDIMENT TUBES WHICH IS NOT PLACED ON CONTOURS SHALL HAVE J-HOOKS ADDED.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17Y
CONST	2015	STP-50(31)	17ZB

REV 07-29-14-REVISED EPSC PLANS.
REV 10-17-14-REVISED EPSC PLANS PER CFR.
REVISE PHASE TO STAGE.



OUTFALL	AREA (AC.)	SLOPE (%)
OUT-31	3.58	3.08

STAGE NOTES
1.PLACE EPSC MEASURES.
2.FINISH ROADWAY.

PROPOSED CONTOURS SHOWN

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REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 0002259
STATE OF TENNESSEE

STAGE THREE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

JOYCE LANE
STA.405+25 TO STA.413+52
SCALE: 1"=50'

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

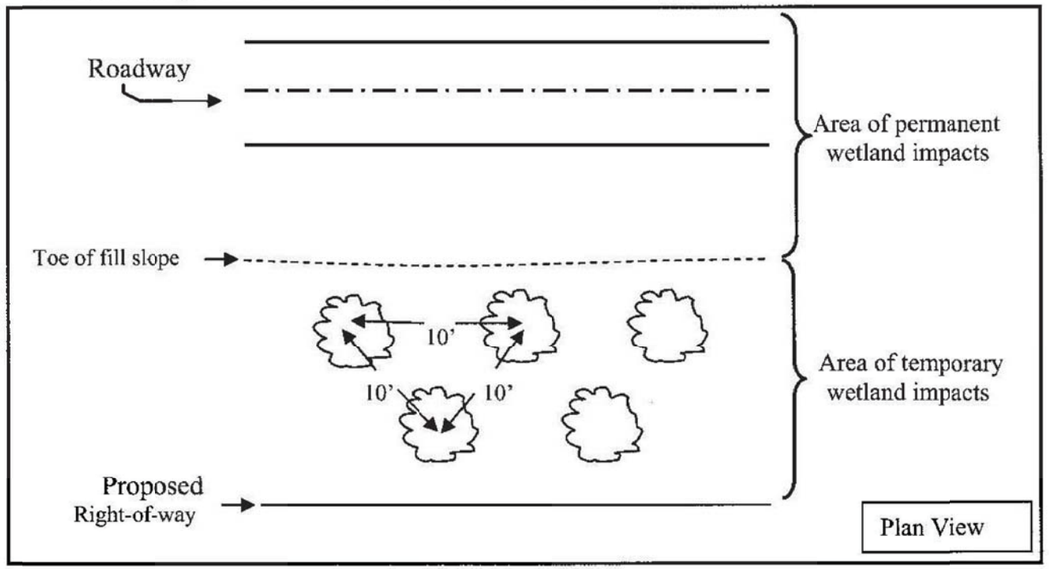
REV. 10-15-12 - ADDED TREE NOTES.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	17Z
CONST	2015	STP-50(31)	17ZC

Standard On-site Mitigation for Temporary Wetland Impact Areas (if required)

Apply these measures to all applicable temporary wetland impact areas listed in Form J. For temporary wetland impact areas, remove the top 12" of topsoil and stockpile it until construction is complete. Once construction activities are completed, restore all temporary wetland impact areas to pre-construction conditions. This includes removing haul roads (if applicable), restoring the site to the original (pre-construction) elevation and spreading stockpiled topsoil back over the wetland site. The area of temporary impacts will be stabilized according to standard practices. Planting will be based on notes provided by Ecology. Wetland areas located outside of proposed right-of-way and construction easements are to be clearly marked and not disturbed.

Tree planting scheme for temporary wetland impact areas



ITEM NO.	DESCRIPTION	UNIT	QUANTITY
802-12.02	ACER RUBRUM (RED MAPLE SEEDLNG B.R.)	EACH	9
802-12.03	ACER SACCHARINUM (SILVER MAPLE SEEDLNG B.R.)	EACH	8
802-12.20	NYSSA AQUATICA (SWAMP TUPELO SEEDLNG B.R.)	EACH	8
802-12.26	PLATANUS OCCIDENTALIS (SYCAMORE SEEDLNG B.R.)	EACH	8
802-12.38	QUERCUS PHELLOS (WILLOW OAK SEEDLNG B.R.)	EACH	8

TREES

No substitutions of tree species or sizes shall be allowed without the written approval of TDOT Environmental Division. Trees shall be of 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 Environmental Division.

The contractor should arrange several months ahead of time to obtain the correct tree species, as some may require some time to locate.

All trees planted shall be wrapped as per section 802.07 of TDOT standard specifications for the road and bridge construction.

Trees shall be watered as required through the period of establishment to ensure survival.

Topsoil is to be removed from all areas of temporary wetland impacts and stockpiled prior to construction.

Upon completion of construction activities, temporary haul roads are to be removed. Excavated material from the haul roads is to be disposed of as directed by the engineer.

CHANNEL RELOCATION SEQUENCE AND IMPLEMENTATION NOTES FOR RELOCATED STREAM CHANNELS (IGNORE REFERENCES TO ITEMS NOT SPECIFIED)

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. 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.
2. CHANNEL RELOCATION SEQUENCE
   a. Flag edge of the new channel top 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.
   b. Excavate the new channel "in the dry" by leaving areas of undisturbed earth (diversion berms) in place at both ends.
   c. Shape channel to specifications shown. Remove loose soils and debris.
   d. Place topsoil, erosion control blanket, seed, sod, or other material as specified.
   e. 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.
   f. Install trees according to standard specifications section 802.
3. 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.
4. Requests by any agency that would require the modification of channels, ditches, 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 coordination with all involved agencies and TDOT divisions. Tennessee Department of Environment and Conservation may make recommendations concerning erosion control via the engineer without such referral.

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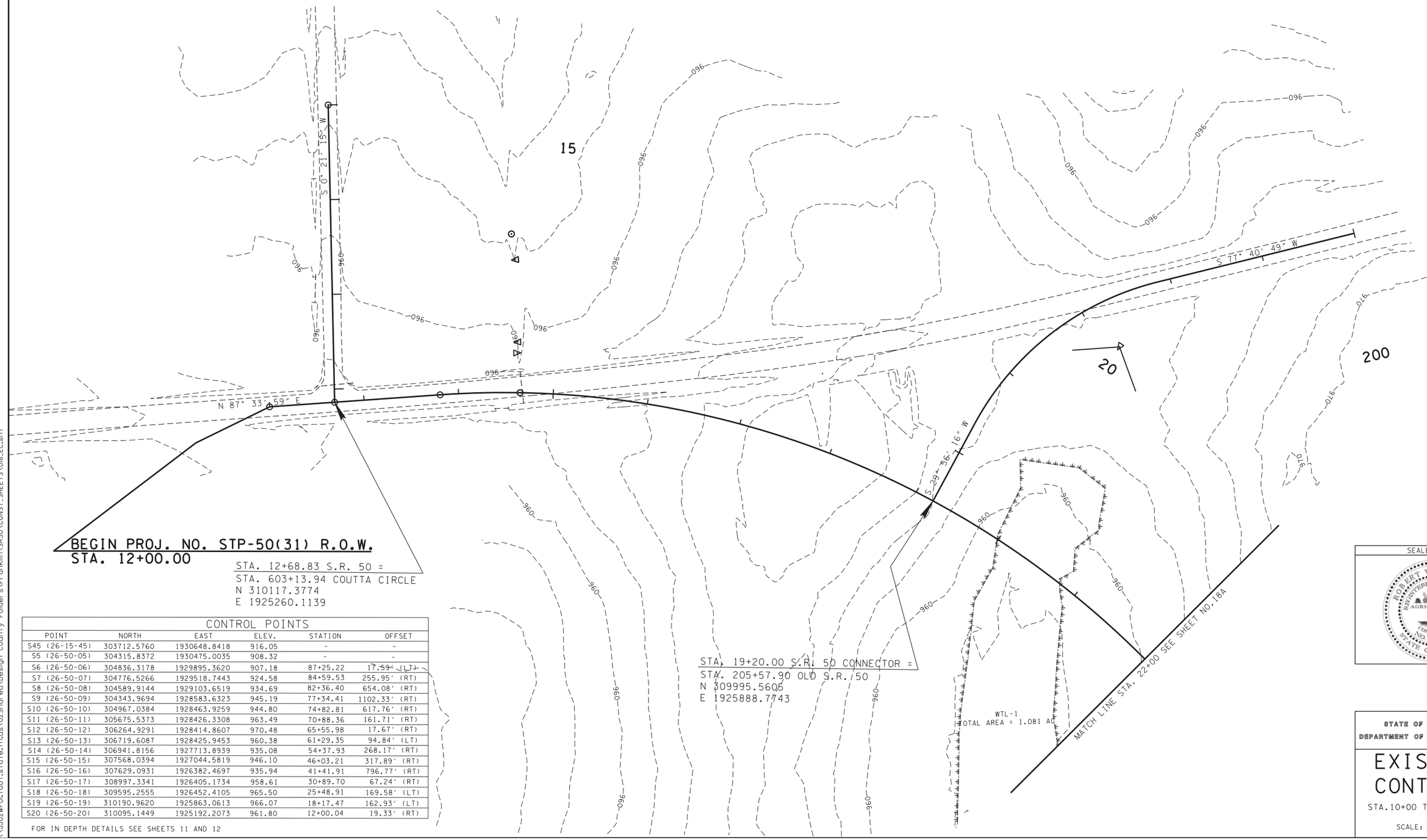
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STREAM & WETLAND MITIGATION PLAN

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2010	STP-50(31)	18
CONST	2015	STP-50(31)	18



CONTROL POINTS

POINT	NORTH	EAST	ELEV.	STATION	OFFSET
S45 (26-15-45)	303712.5760	1930648.8418	916.05	-	-
S5 (26-50-05)	304315.8372	1930475.0035	908.32	-	-
S6 (26-50-06)	304836.3178	1929895.3620	907.18	87+25.22	17.59' (LT)
S7 (26-50-07)	304776.5266	1929518.7443	924.58	84+59.53	255.95' (RT)
S8 (26-50-08)	304589.9144	1929103.6519	934.69	82+36.40	654.08' (RT)
S9 (26-50-09)	304343.9694	1928583.6323	945.19	77+34.41	1102.33' (RT)
S10 (26-50-10)	304967.0384	1928463.9259	944.80	74+82.81	617.76' (RT)
S11 (26-50-11)	305675.5373	1928426.3308	963.49	70+88.36	161.71' (RT)
S12 (26-50-12)	306264.9291	1928414.8607	970.48	65+55.98	17.67' (RT)
S13 (26-50-13)	306719.6087	1928425.9453	960.38	61+29.35	94.84' (LT)
S14 (26-50-14)	306941.8156	1927713.8939	935.08	54+37.93	268.17' (RT)
S15 (26-50-15)	307568.0394	1927044.5819	946.10	46+03.21	317.89' (RT)
S16 (26-50-16)	307629.0931	1926382.4697	935.94	41+41.91	796.77' (RT)
S17 (26-50-17)	308997.3341	1926405.1734	958.61	30+89.70	67.24' (RT)
S18 (26-50-18)	309595.2555	1926452.4105	965.50	25+48.91	169.58' (LT)
S19 (26-50-19)	310190.9620	1925863.0613	966.07	18+17.47	162.93' (LT)
S20 (26-50-20)	310095.1449	1925192.2073	961.80	12+00.04	19.33' (RT)

FOR IN DEPTH DETAILS SEE SHEETS 11 AND 12

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ROBERT W. RODGERS
REGISTERED ENGINEER
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COMMERCE
NO. 00022209
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA.10+00 TO STA.22+00

SCALE: 1"=50'

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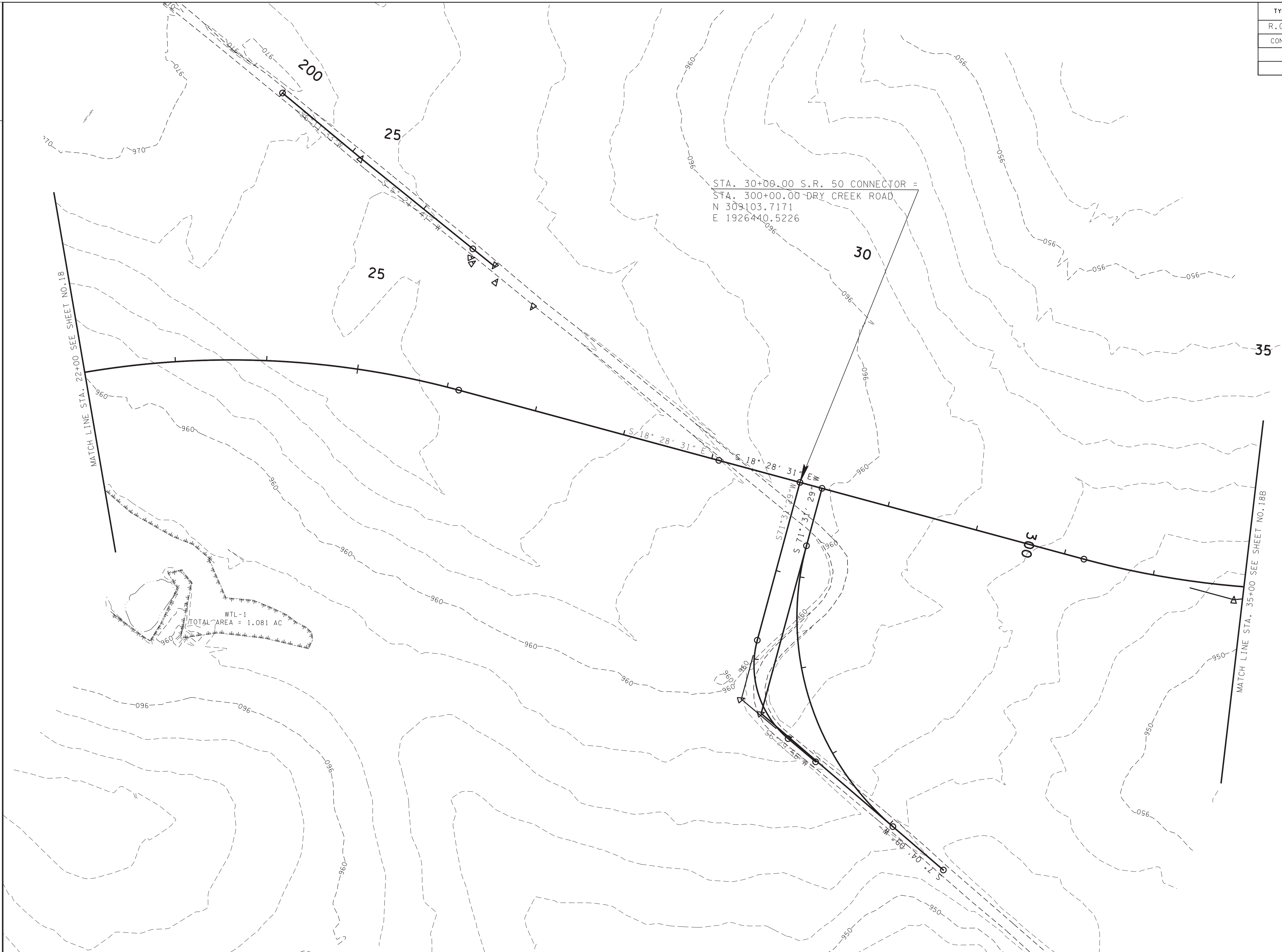
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18A
CONST	2014	STP-50(31)	18A



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AGRICULTURE COMMERCE
NO. 00022299
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA.22+00 TO STA.35+00

SCALE: 1"=50'

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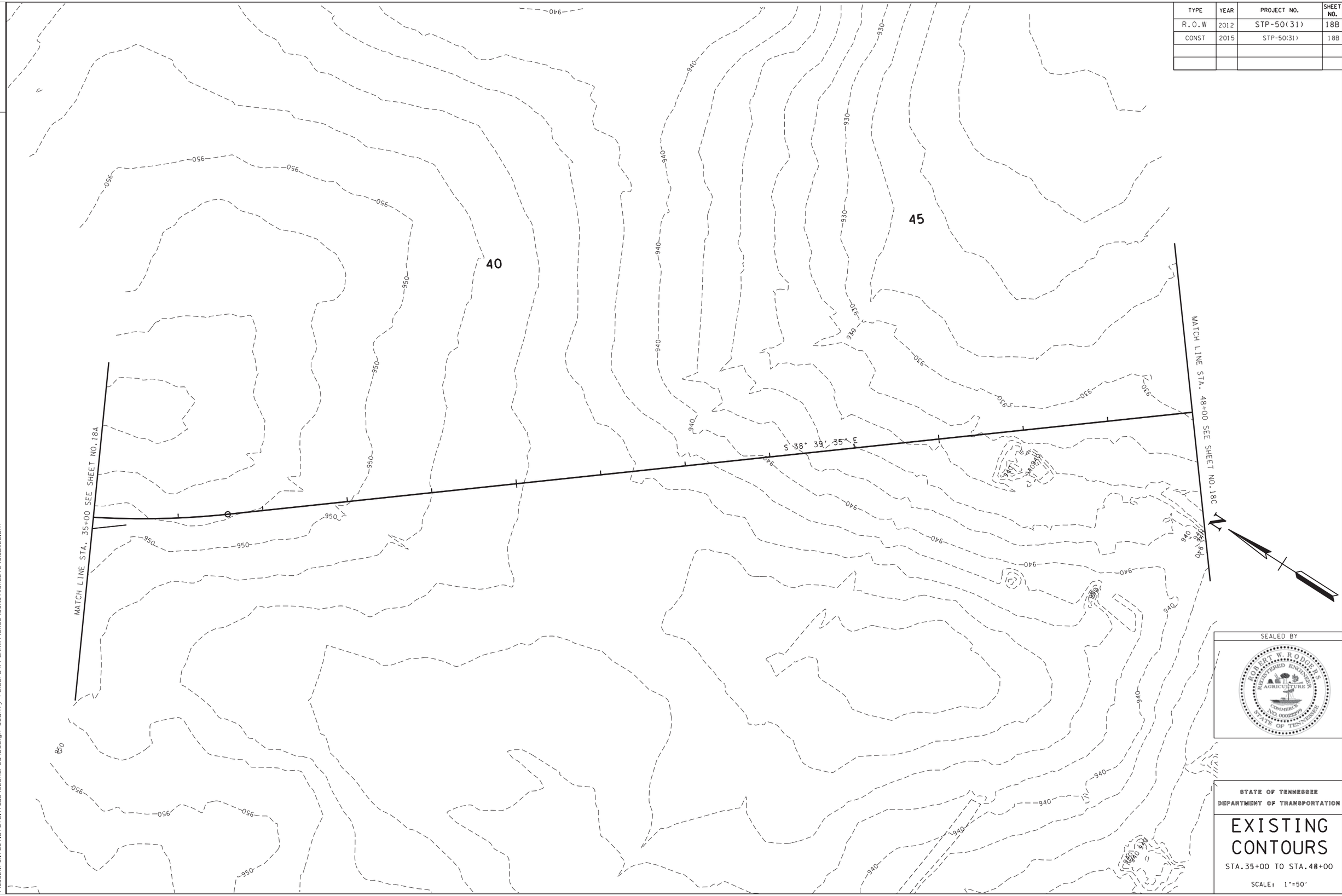
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18B
CONST	2015	STP-50(31)	18B



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NO 000222609
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA. 35+00 TO STA. 48+00

SCALE: 1"=50'

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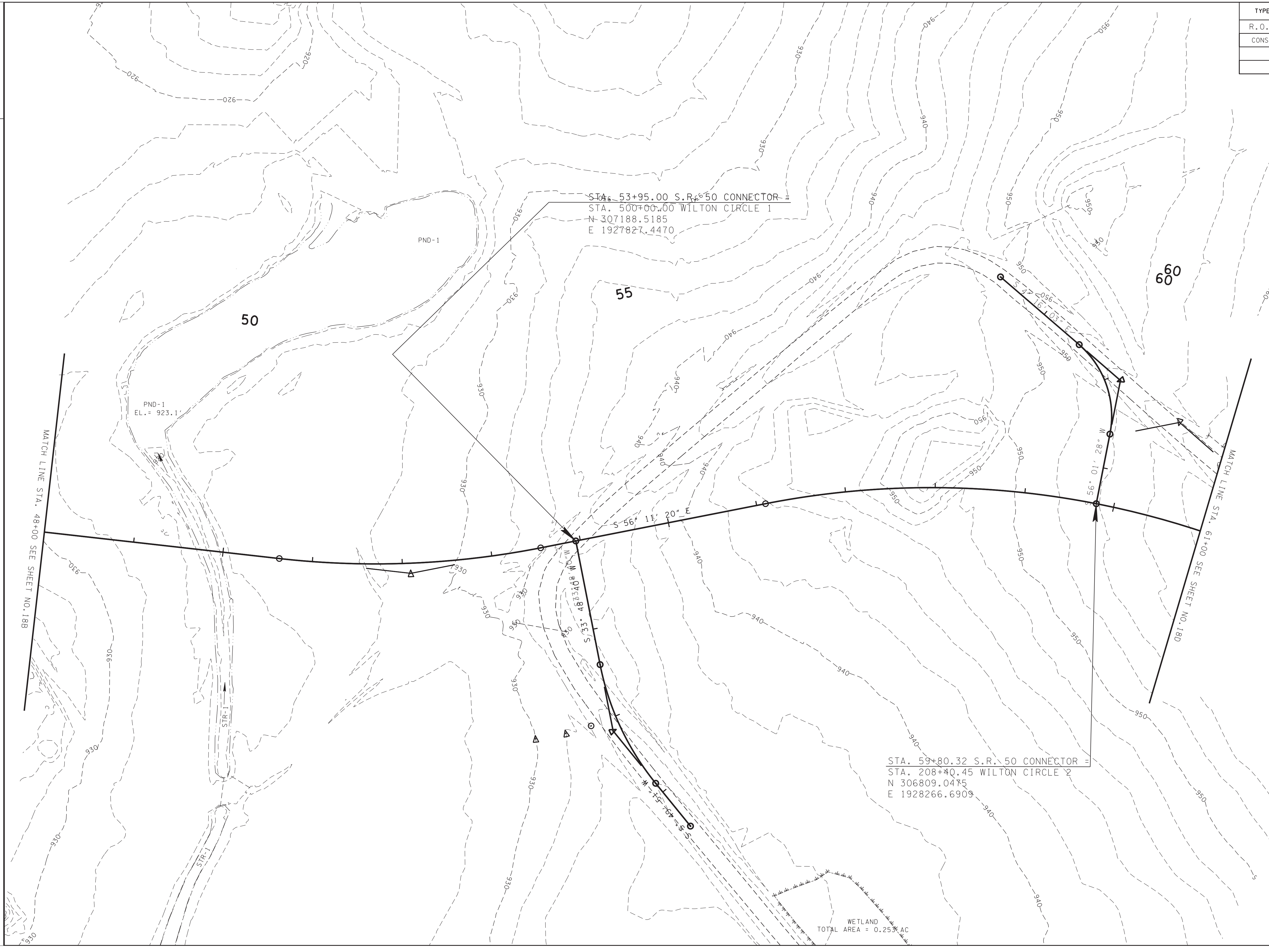
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18C
CONST	2015	STP-50(31)	18C

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



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EXISTING CONTOURS

STA.48+00 TO STA.61+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	2012	STP-50(31)	18D
CONST	2015	STP-50(31)	18D

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AGRICULTURE
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AND
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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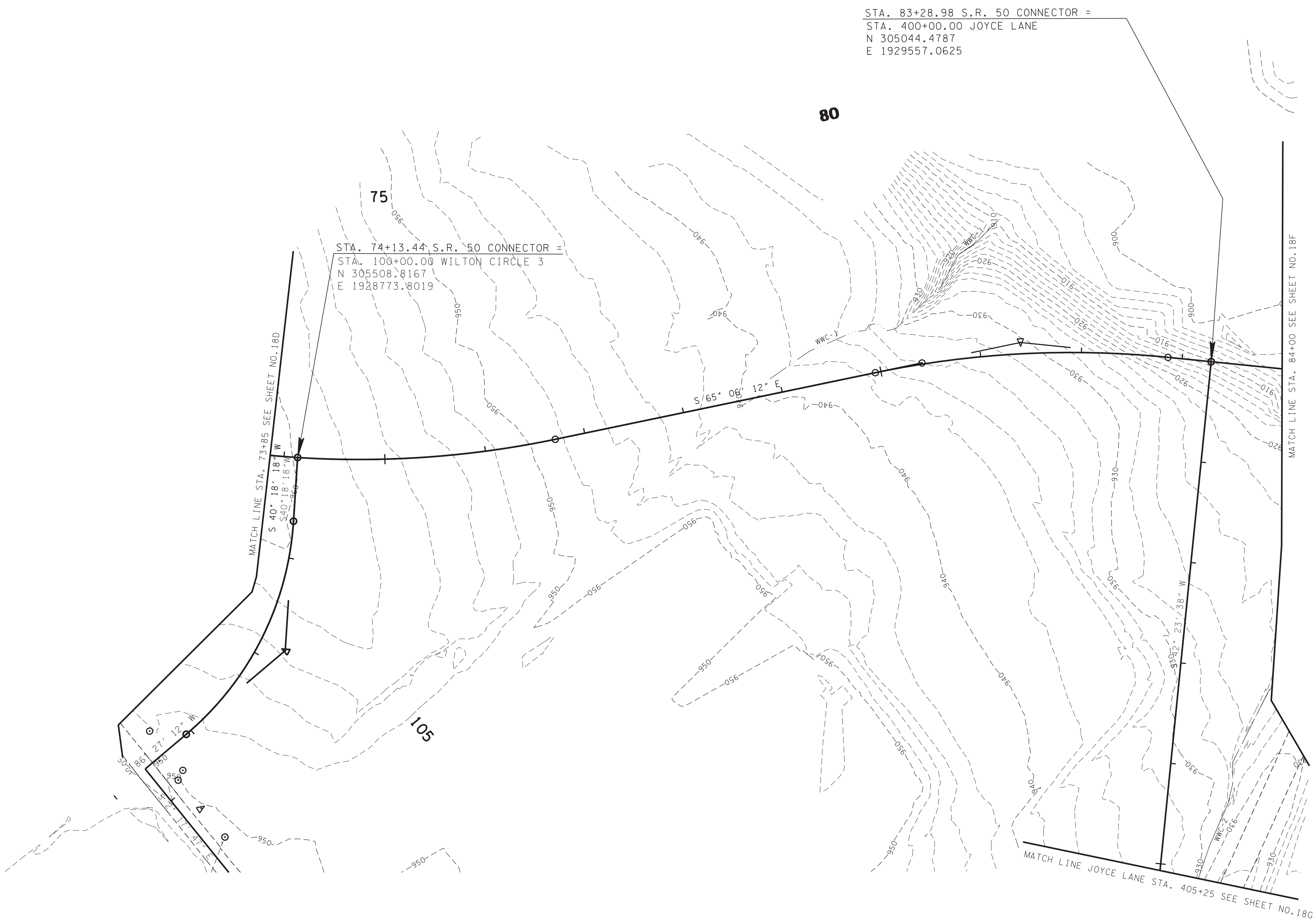
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18E
CONST	2015	STP-50(31)	18E



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AGRICULTURE
COMMERCE
NO. 00022??
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA.73+85 TO STA.84+00

SCALE: 1"=50'

23-OCT-2014 11:48
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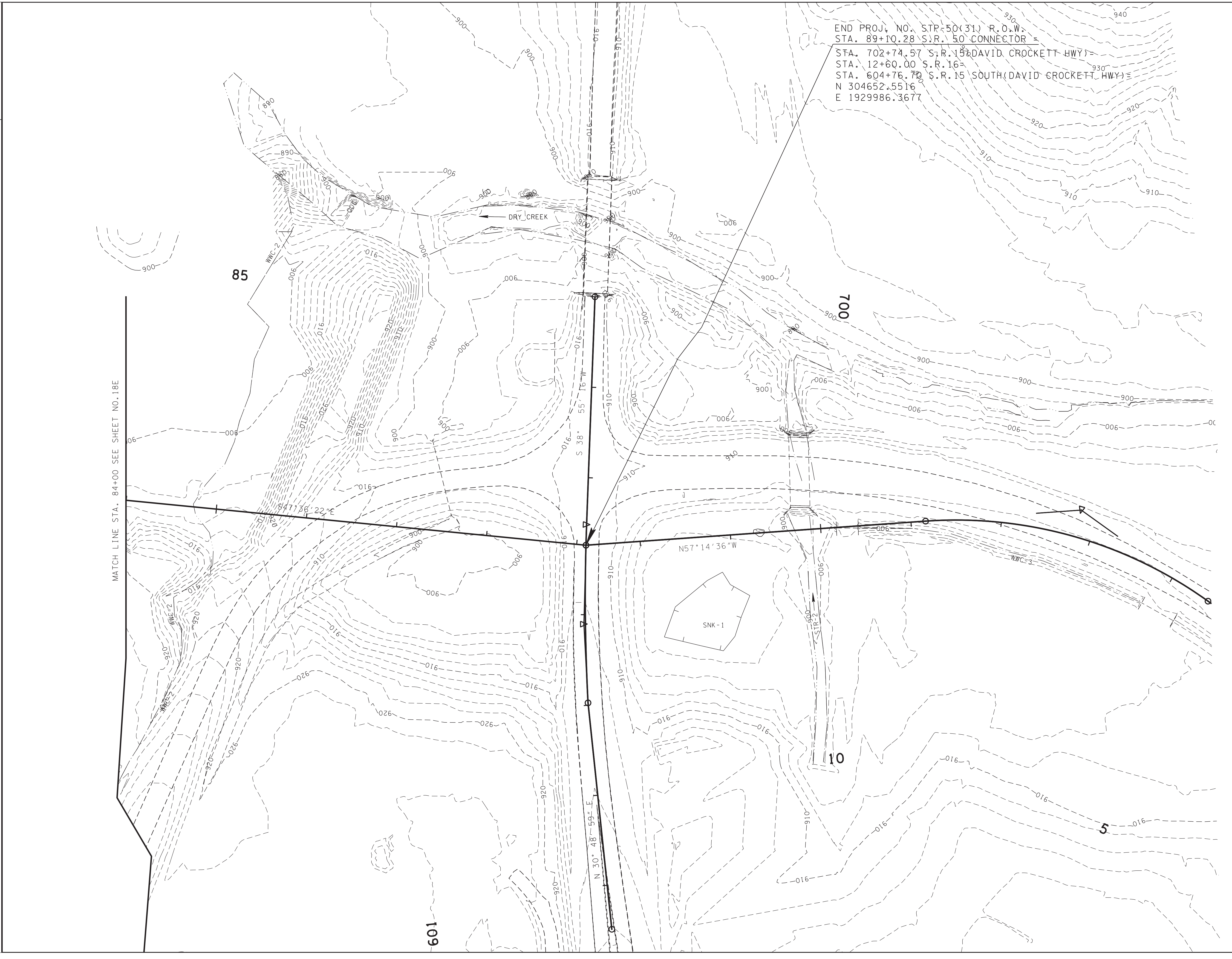
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18F
CONST	2015	STP-50(31)	18F



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NO. 00022299
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

STA.84+00 TO STA.90+10

SCALE: 1"=50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	18G
CONST	2015	STP-50(31)	18G

N

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AGRICULTURE
COMMERCE
NO. 000225209
STATE OF TENNESSEE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EXISTING CONTOURS

JOYCE LANE
STA.405+25 TO STA.413+52

SCALE: 1"=50'

23-OCT-2014 11:48
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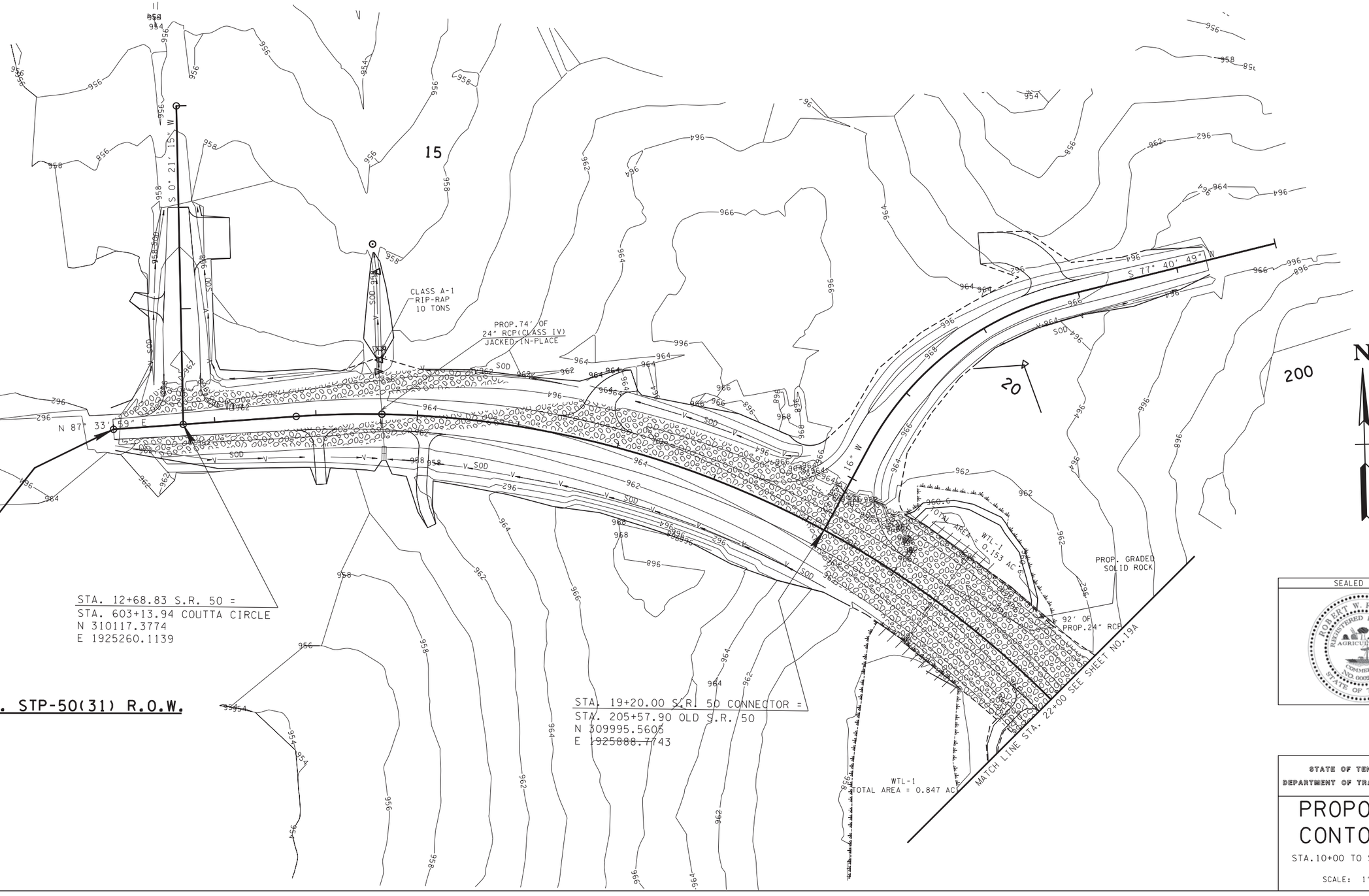
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	19
CONST	2015	STP-50(31)	19

REV 08-20-14-ADDED PROP GRADED SOLID ROCK PER GEO REQ.



STA. 12+68.83 S.R. 50 =
STA. 603+13.94 COUTTA CIRCLE
N 310117.3774
E 1925260.1139

BEGIN PROJ. NO. STP-50(31) R.O.W.
STA. 12+00.00

STA. 19+20.00 S.R. 50 CONNECTOR =
STA. 205+57.90 OLD S.R. 50
N 309995.5605
E ~~1925888.7~~743

MATCH LINE STA. 22+00 SEE SHEET NO.19A

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AGRICULTURE
COMMERCE
NO. 00022209
STATE OF TENNESSEE

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PROPOSED CONTOURS

STA.10+00 TO STA.22+00

SCALE: 1"=50'

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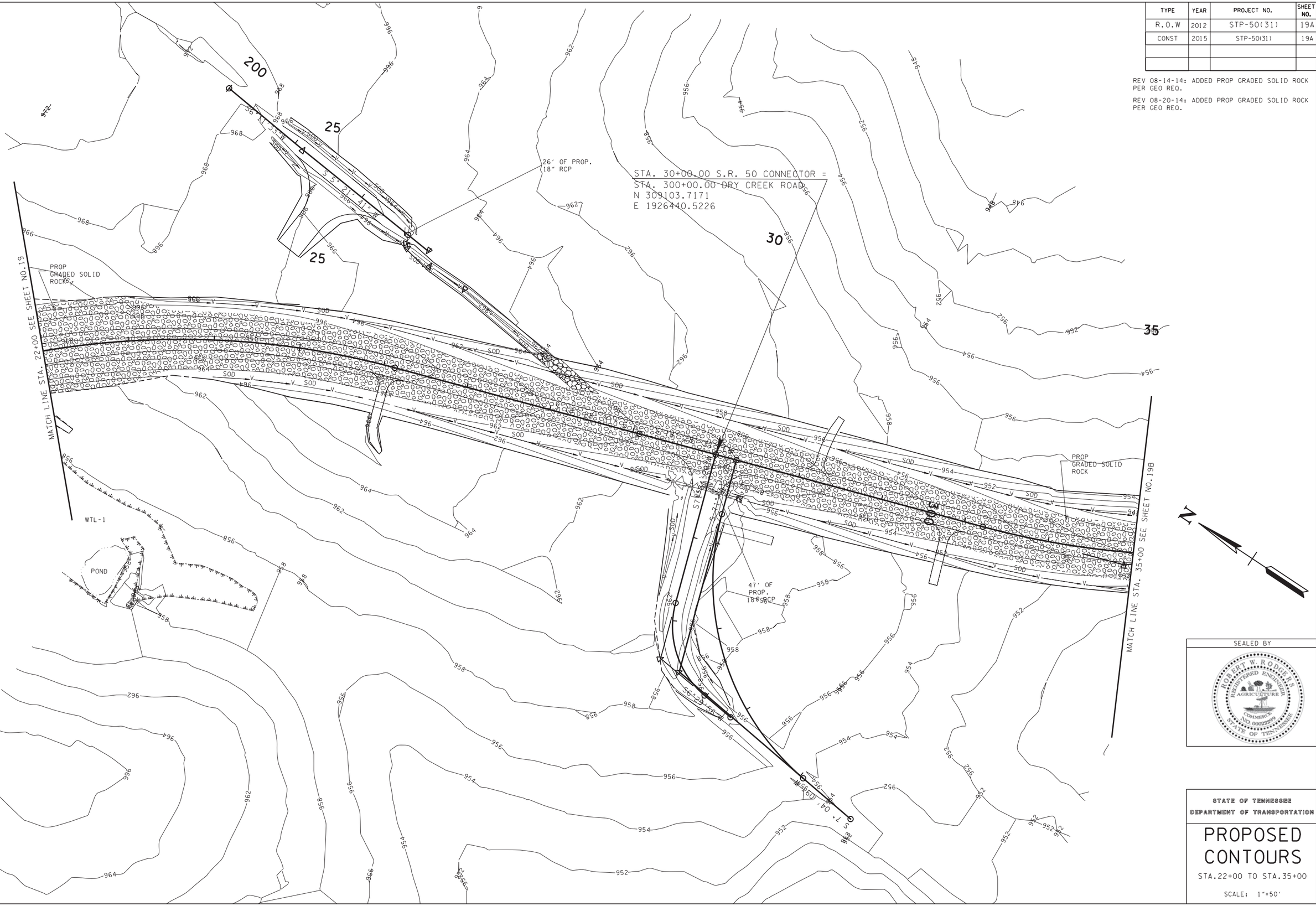
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	19A
CONST	2015	STP-50(31)	19A

REV 08-14-14: ADDED PROP GRADED SOLID ROCK PER GEO REQ.

REV 08-20-14: ADDED PROP GRADED SOLID ROCK PER GEO REQ.



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PROPOSED CONTOURS

STA.22+00 TO STA.35+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	2012	STP-50(31)	19B
CONST	2015	STP-50(31)	19B

REV 08-14-14: ADDED PROP GRADED SOLID ROCK PER GEO REQ.

40

45

MATCH LINE STA. 35+00 SEE SHEET NO.19B

MATCH LINE STA. 48+00 SEE SHEET NO.19C

S 38° 39' 35" E

N

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NO. 0002220
STATE OF TENNESSEE

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DEPARTMENT OF TRANSPORTATION

PROPOSED CONTOURS

STA.35+00 TO STA.48+00

SCALE: 1"=50'

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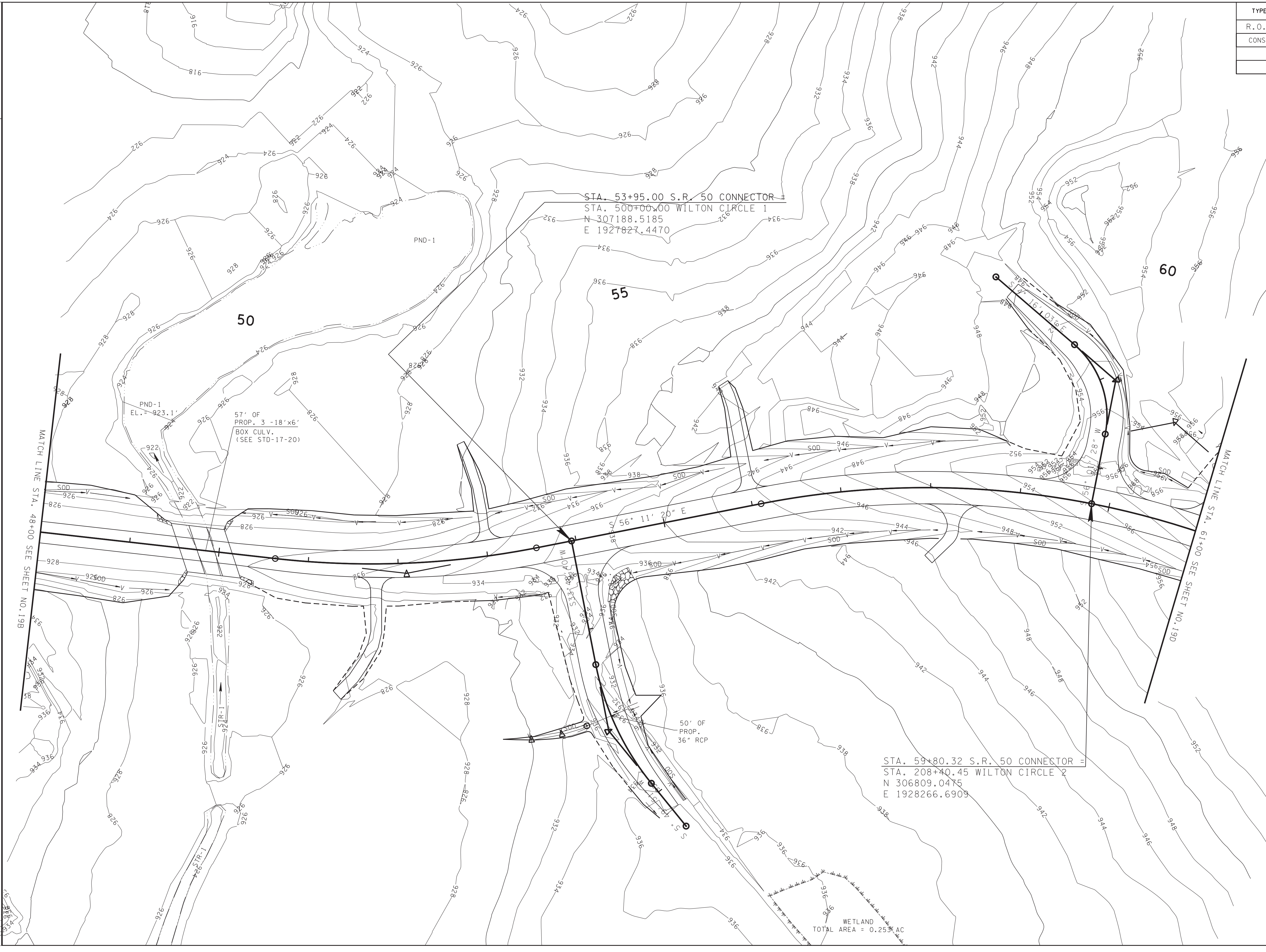
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	19C
CONST	2015	STP-50(31)	19C



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PROPOSED CONTOURS

STA.48+00 TO STA.61+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	2012	STP-50(31)	19D
CONST	2015	STP-50(31)	19D

MATCH LINE STA. 61+00 SEE SHEET NO.19C

MATCH LINE STA. 73+85 SEE SHEET NO.19E

65

70

S 3° 50' 25" E

A-2 JB IN. EL. 965.66 OUT. EL. 965.16

55' OF PROP. 18" RCP(CLASS IV) JACKED-IN-PLACE OUT.EL. 965.01

A-1 NEW

BEGIN SEEDED DITCH W/ TURF REINFORCEMENT MAT CLASS II @ STA 70+50.00 SEE STD DWG EC-STR-36

WILTON CIRCLE 3 SPECIAL DITCH 1

SOD

N

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PROPOSED CONTOURS

STA.61+00 TO STA.73+85

SCALE: 1"=50'

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	19E
CONST	2015	STP-50(31)	19E

STA. 83+28.98 S.R. 50 CONNECTOR =
STA. 400+00.00 JOYCE LANE
N 305044.4787
E 1929557.0625

STA. 74+13.44 S.R. 50 CONNECTOR =
STA. 100+00.00 WILTON CIRCLE 3
N 305508.8167
E 1928773.8019

MATCH LINE STA. 73+85 SEE SHEET NO.19D

MATCH LINE STA. 84+00 SEE SHEET NO.19F

MATCH LINE JOYCE LANE STA. 405+25 SEE SHEET NO.19G

S 65° 06' 12" E

S 49° 23' 38" W

S 86° 21' 12" W

S 41° 18' 18" W

PROP. CLASS B
RIP-RAP
9 TONS

116' PROP. 24" RCP

B-1
EW

B-2
IN. EL. 925.06
IN. EL. 917.33

CLASS A-1
RIP-RAP

END SEEDED DITCH
WX TURF REINFORCEMENT MAT
CLASS II @ STA 80+18.00
SEE STD DWG EC-STR-36

END SEEDED DITCH
WX TURF REINFORCEMENT MAT
CLASS II @ STA 401+00.00
SEE STD DWG EC-STR-36

70' OF PROP. 18" RCP

64' OF PROP. 48" RCP

WILTON CIRCLE 3
SPECIAL DITCH 2

PROP. CLASS A-1
RIP-RAP
6 TONS

38' OF PROP. 18" RCP

42' OF PROP. 18" RCP

SOD

N

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PROPOSED CONTOURS

STA.73+85 TO STA.84+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	2012	STP-50(31)	19F
CONST	2015	STP-50(31)	19F

END PROJ. NO. STP-50(31) R.O.W.
STA. 89+10.28 S.R. 50 CONNECTOR =
STA. 702+74.57 S.R.15(DAVID CROCKETT HWY)=
STA. 12+60.00 S.R.16=
STA. 604+76.70 S.R.15 SOUTH(DAVID CROCKETT HWY)=
N 304652.5516
E 1929986.3677

MATCH LINE STA. 84+00 SEE SHEET NO.19E

PROP. CLASS B RIP-RAP 20 TONS
PROP. 24" RCP(CLASS IV) JACKED-IN-PLACE
PROP. CLASS C RIP-RAP 90 TONS
102' OF PROP. 48" RCP
SOD
S47°36'22"E
S.R. 50
CLASS B RIP-RAP
CLASS B RIP-RAP
DRY CREEK
WNC-2
S 38° 55' 16"W
N 30° 48' 59" E
SR-15/US-64BR
N57°14'36"E
S.R. 16
N 11° 29' 41" W
100' OF PROP.2-14' X 9' BOX CULV. (SEE STD-17-20)
SR-2
A-1 EW
A-1 #12
B-1 #12
C-1 #12
D-1 #12
85
700
601
10
5
6

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PROPOSED CONTOURS

STA.84+00 TO STA.90+10

SCALE: 1"=50'

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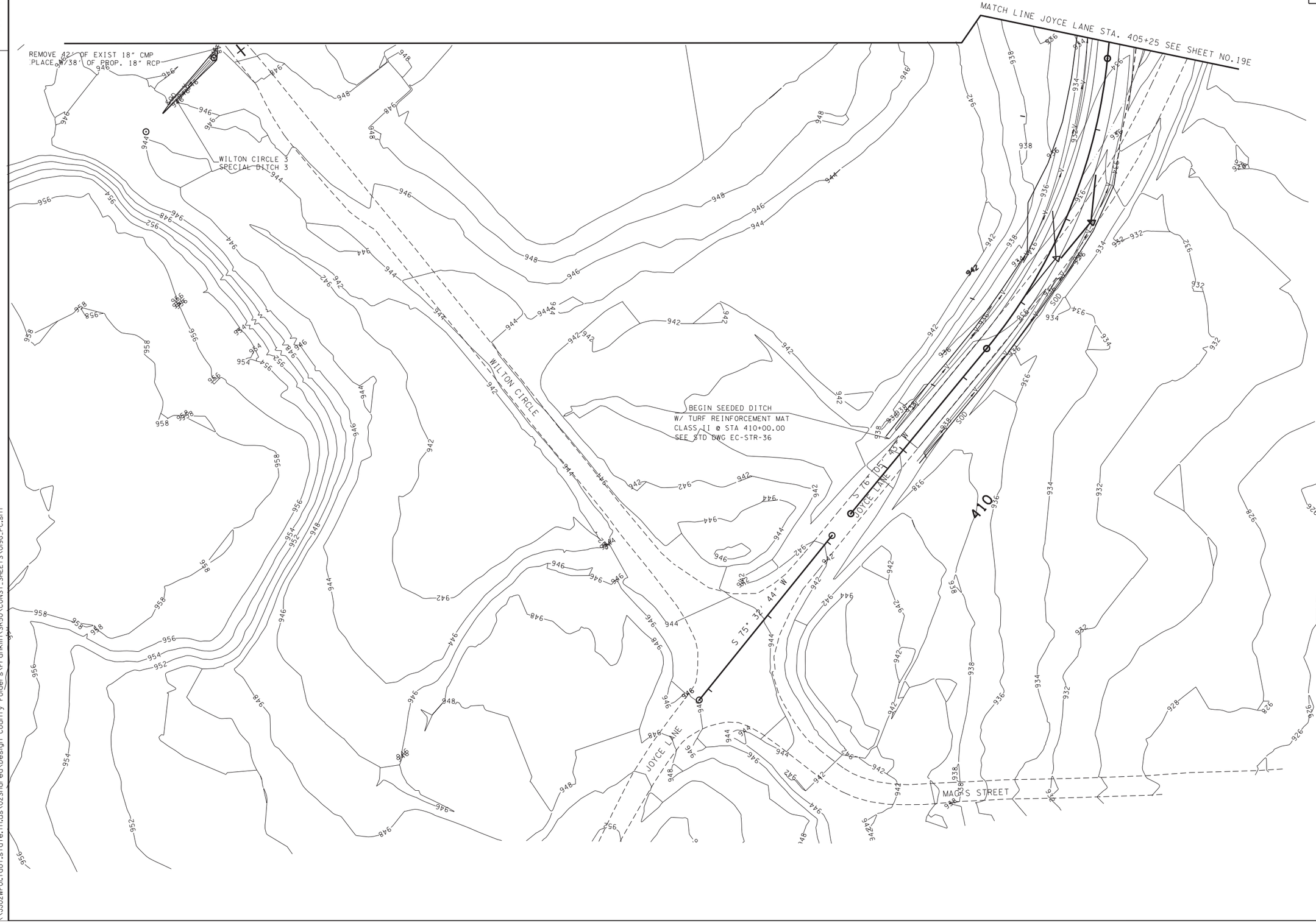
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W	2012	STP-50(31)	19G
CONST	2015	STP-50(31)	19G



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STATE OF TENNESSEE

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PROPOSED CONTOURS

JOYCE LANE
STA.405+25 TO STA.413+52

SCALE: 1"=50'

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