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#### SWPPP INDEX OF SHEETS

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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 LICENSING AND/OR CERTIFICATIONS (3.1.1)?
  - YES (CHECK ALL THAT APPLY BELOW) OR
    - CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
    - □ A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
    - HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE
- 1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (3.1.1)? YES □ NO ⊠

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? YES NO

- 1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)? ☐ YES (CHECK ALL THAT APPLY BELOW) ☐ NO
  - WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION OR HABITAT ALTERATION)
  - ☑ EXCEPTIONAL TENNESSEE WATERS

IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.4.1.b)?

- YES (CHECK ALL THAT APPLY BELOW) NO
  - CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
  - □ A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
- HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

#### 2. SITE DESCRIPTION (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.h): REFER TO TITLE SHEET
- 2.2. PROJECT DESCRIPTION (3.5.1.a):
  - TITLE: Interstate 24 at Hickory Hollow Parkway Interchange Modification COUNTY: Davidson PIN: 123055.00
- 2.3. SITE MAP(S) (2.6.2.): REFER TO TITLE SHEET
- 2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 43, 43A, 43B, 43C, 43D, 43E, 43F, 43G, 43H, <u>& 43J.</u> DRAINAGE MAP SHEET(S) <u>36</u>, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.3.
- 2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):

CLEARING AND GRUBBING **EXCAVATION** 

#### CUTTING AND FILLING ☑ FINAL GRADING AND SHAPING ☐ UTILITIES

OTHER (DESCRIBE):

- 2.6. TOTAL PROJECT AREA (3.5.1.c): 65.312 ACRES
- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 42.022 ACRES
- 2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.
- 2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? IF YES, LIST THE CORRESPONDING PLAN SHEET:
- 2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?

□ YES (DATE) 🛛 NO IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS

CONSIDERED A PRE-APPROVED SITE (4.1.2.2) 2.11. SOIL PROPERTIES (3.5.1.f) (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)		
Ar – Arrington silt loam	В	2.2	0.37		
BbD – Barfield-Rock outcrop complex	D	2.4	0.28		
HmC – Hampshire silt loam	С	6.4	0.37		
HmD – Hampshire silt loam	С	50.9	0.37		
StC – Stiversville loam	А	9.2	0.28		
TbC – Talbott silt loam	С	5.0	0.43		
TrC – Talbott-Rock outcrop complex	С	23.8	0.43		

- 2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE
  - 2.12.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? YES NO; AND
  - 2.12.2. 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/À (TDOT SP107L WILL BE APPLIED)

2.13. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1.g).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS					
AREA TYPE AREA (AC) AREA (%)			RUNOFF CN	C FACTOR	
IMPERVIOUS (ROADS, SHOULDERS, ETC.)	25.86	38.9	98		
PERVIOUS – A (WOODS-GRASS COMBINATION)	3.72	5.5	43		
PERVIOUS – B (WOODS-GRASS COMBINATION)	1.17	1.7	65		
PERVIOUS – C (WOODS-GRASS COMBINATION)	34.83	52.4	76		
PERVIOUS – D (MEADOW)	0.97	1.5	78		
WEIGHTED CURVE N	IUMBER OR C	C-FACTOR =	82.6		

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS

AREA TYPE	AREA (AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS (ROADS, SHOULDERS, ETC.)	34.30	51.7	98	
PERVIOUS - A (OPEN SPACE)	2.95	4.4	68	
PERVIOUS - B (OPEN SPACE)	0.70	1.1	79	
PERVIOUS - C (OPEN SPACE)	27.56	41.6	86	
PERVIOUS - D (OPEN SPACE)	0.77	1.2	89	
WEIGHTED CURVE N	UMBER OR C	C-FACTOR =	81.4	

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

- THE SITE.
- PRACTICES BELOW.).
- 3.6. REMOVE AND STORE TOPSOIL.
- STAGE AND/OR PHASE OF ACTIVITY.
- STRUCTURES

- CONTROL BLANKET, SOD, ETC.)

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

QUALITY PERMITS.

412 THAT APPLY):

303d WITH UNAVAILABLE PARAMETERS FOR SILTATION

1	TYPE	YEAR	PROJECT NO.	SHEET NO.
P.E	Ε.	2017	19002-1191-04	
со	ONST.	2018	NH-I-24-9(79)	S-1

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

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS N/A)

3.2. INSTALL STABILIZED CONSTRUCTION EXITS.

3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM

3.4. INSTALL INITIAL EPSC MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.

3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION

3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY

3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE

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

3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER

3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

4.1. STREAM INFORMATION (3.5.1.j, 3.5.1.k)

4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? ☐ YES ☐ NO

> IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER

> HAVE ANY OF THE RECEIVING STATE WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL



POLLUTION PREVENTION PLAN

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#### ☑ 303d WITH UNAVAILABLE PARAMETERS FOR HABITAT AI TERATION

#### ☑ EXCEPTIONAL TENNESSEE WATERS (ETW)

4.1.3. RECEIVING WATERS OF THE STATE (3.5.1.k)

RECEIVING WATERS OF THE STATE INFORMATION							
TDOT STATE WATER LABEL FROM EBR	NAME OF RECEIVING STATE WATER	303d WITH UNAVAILABLE PARAMETERS ETW FOR (YES SILTATION OR OR HABITAT NO) ALTERATION (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	COLLINS CREEK	YES	YES	YES	YES		
STR-2	UT TO COLLINS CREEK	NO	NO	YES	YES		
STR-3/SPG-1	UT TO COLLINS CREEK	NO	YES	YES	YES		
STR-4	UT TO COLLINS CREEK	NO	YES	YES	YES		

4.1.4. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (4.1.2, 5.4.2)

#### ⊠ YES ∏ NO

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

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 43, 43C, 43G, 44, 44C, 44G, 45, 45C, & 45G.

- IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFFR
- ☑ 60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

□ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

- 4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP? (9.0) □YES ⊠ NO
- ARE THERE WATER QUALITY RIPARIAN BUFFER ZONE 4.1.6. EXEMPTIONS? (4.1.2.1) ☐ YES ⊠ NO IF YES, EXISTING CONDITIONS DESCRIPTION:

- 4.1.7. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (5.4.2.)
- 4.1.8. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.
- 4.1.9. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. RECEIVING WATERS OF THE UNITED STATES (WOTUS) (EPHEMERAL)

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WOTUS (EPHEMERAL)? ☐ YES ☐ NO

RECEIVING WOTUS (EPHEMERAL) INFORMATION					
TDOT WOTUS LABEL	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN 15-FT OF THE PROJECT LIMITS (YES OR NO)			
WWC-2/EPH-1	YES	YES			
WWC-3/EPH-2	YES	YES			
WWC-4/EPH-3	YES	YES			
WWC-5/EPH-4	YES	YES			

4.2.1. ARE WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WOTUS (4.1.2)? ☐ YES ☐ NO

> IF YES, A 15 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING EPHEMERAL STREAM IDENTIFIED AS A WOTUS (EPHEMERAL) BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) OR THE ENVIRONMENTAL PROTECTION AGENCY SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE.

> IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 43D, 43G, 44D, 44G, 45D, & 45G,

- 4.2.2. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR WOTUS (EPHEMERAL) DUE TO A USACE PERMIT? ⊠ YES □ NO
- 4.3. OUTFALL INFORMATION
  - 4.3.1. OUTFALL TABLE (3.5.1.e). SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.
  - 4.3.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.h)? X YES NO
  - HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC 4.3.3. MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)? ⊠YES □ NO
  - WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED 4.3.4. AROUND OR THROUGH THE PROJECT TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA? □YES □NO ⊠N/A
  - 4.3.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? ☐ YES ☐ NO ☑ N/A
  - A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE 436 PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. 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. (3.5.3.3)

IN BOTH INSTANCES, THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

4.4. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS?  $\Box$  YES  $\boxtimes$  NO

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

WETLAND INFORMATION						
TDOT WETLAND LABEL	FROM STATION LT OR RT	TO STATION LT OR RT	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)		
WTL-1	261+75 RT	262+75 RT	N/A	N/A		

- HABITAT ALTERATION? □YES ⊠ NO □ YES □ NO □ YES □ NO SUBMITTED/RECEIVED? □ YES □ NO
- 4.6. ECOLOGY INFORMATION (3.5.5.e)

□ YES ⊠ NO

4.7. ENVIRONMENTAL COMMITMENTS YES NO

- MINIMIZE EROSION (4.1.1).
- BANKS. (4.1.1)

TYPE	YEAR	PROJECT NO.	SHEET NO.
P.E.	2017	19002-1191-04	
CONST.	2018	NH-I-24-9(79)	S-2

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. 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. (5.4.1.g).

4.5. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

4.5.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND

4.5.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?

4.5.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?

4.5.4. IF YES, HAS A SUMMARY OF THE CONSULTATION LETTER BEEN

DOES THE TDOT ENVIRONMENTAL BOUNDARIES REPORT SPECIFY SPECIAL NOTES TO BE ADDED TO THE PLAN SHEETS?

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

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?

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

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

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



STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

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- 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.h)?  $\boxtimes$  YES  $\square$  NO
- 5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- 5.7. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES OR ROW/ EASEMENT LINE, WHICHEVER IS LESSER.
- 5.8. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- 5.9. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)? YES ⊠ NO □ (IF YES, CHECK ONE BELOW)
  - 5.9.1. DROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)
  - 5.9.2. X PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)
- 5.10. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES 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
- 5.11. 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.j). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET S-<u>7</u>. ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.
- 5.12. THE EPSC CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEETS <u>2A, 2A1, 2A2, & 42A</u> HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).
- 5.13. EPSC MEASURES SHALL BE INSTALLED PER TDOT STANDARDS (i.e. STANDARD DRAWINGS) AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
- 5.14. EPSC MEASURES WILL NOT BE INSTALLED WITHIN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.
- 5.15. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.
- 5.16. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.
- 5.17. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE FROM TDOT ENVIRONMENTAL PERSONNEL.
- 5.18. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE

PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

- 5.19. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET <u>2A, 2A1, 2A2, & 42A</u> (3.5.3.1.n).
- 5.20. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.4).
- 5.21. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER 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.
- 5.22. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. (4.1.7).
- 5.23. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.
- 5.24. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.
- 5.25. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WOTUS (EPHEMERAL), WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.
- 5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 14 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (3.5.3.1.h).
- 5.27. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (3.5.3.2).
- 5.28. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE
- 5.29. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- 5.30. A SOIL ANALYSIS SHALL BE PERFORMED PRIOR TO THE APPLICATION OF FERTILIZERS TO ANY PORTION OF THE STE. SOILS SHOULD BE ANALYZED FOR pH, BUFFER VALUE, PHOSPHOROUS, POTASSIUM, CALCIUM AND MAGNESIUM. SOIL SAMPLES SHOULD BE REPRESENTATIVE OF THE AREA FOR WHICH FERTILIZER WILL BE APPLIED. SAMPLE TYPE SHOULD BE COLLECTED AND ANALYZED IN ACCORDANCE WITH THE UT EXTENSION "SOIL TESTING" BROCHURE PB1061. (4.1.5.)
- 5.31. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED FROM THE ANALYSES. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- 5.32. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. (3.5.3.2).
- 6. FLOCCULANTS (3.5.3.1.b)

IS ADDITIONAL PHYSICAL RUNOFF NECESSARY (5.4.1

- IF YES, THE FOLLOWING NO
- 6.1. POLYACRYLAMIDES (F CHARGED TYPE ONLY

6.1.1. CATIONIC PAM FISH AND AQUA

6.1.2. ANIONIC AND I AND FDA ACRY THAN 0.05% BY

6.1.3. ANIONIC AND N OF 10% TO 55% 24 MG/MOLES.

6.1.4. PAM MIXTURES

6.1.5. PAM SHALL ADDITIVES.

6.2. ALL PHYSICAL AND/O APPLIED IN ACCORE FULLY DESCRIBED ON

- 6.3. FLOCCULANTS SHAL OCCUPATIONAL SAFE SAFETY DATA SHEET ACCORDANCE WITH THE SPECIFIED USE O LAWS, RULES AND RE
- 6.4. ALL VENDORS AND SI SUPPLY A WRITTEN TO TOXICITY TESTS WHI ACCEPTABLE TOXICITY REQUIREMENTS FOR STANDARDS. WHOLE REQUIREMENT AS PR POTENTIALS HAVE BEE
- 6.5. DO NOT APPLY FLOC ANY STREAMS, WETL LOCATED ON OR AD APPLY FLOCCULANTS SEDIMENT PONDS OR INTO A STREAM, WETL NOT APPLY FLOCCUL WHERE RUNOFF LEAV
- 6.6. BEFORE FLOCCULANT SITE-SPECIFIC SOIL S MANUFACTURER OR OPTIMUM FLOCCULA FLOCCULANT EFFICA SAMPLES WILL NEED WILL BE ACCESSED I APPLIED ON A CON MANUFACTURE'S RI APPLIED ON A CON MANUFACTURE'S RI APPLICATION METHOD TARGET AREA. DO N DIRECTLY TO STORM OTHER WATER RESOL
- 6.7. FLOCCULANT POWDE MECHANICAL SPREA FLOCCULANT MAY BE OR OTHER SOIL AME MAY ALSO BE APPLIE SEEDING. APPLICATI TO THE TARGET AREA
- 6.8. MANUFACTURER'S GU AND SOCK SPACING O USED ON A CONSTR MUST BE OBTAINED REPRESENTATIVE, TO APPLICATION RATE. DEPENDENT ON SOIL FROM EACH SOIL EXCAVATION. FLOCCU SITE IN ACCORDANC APPLICATION OR DOS

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	P.E.	2017	19002-1191-04	
	CONST.	2018	NH-I-24-9(79)	S-3
AL OR CHEMICAL TREATMENT OF STORMWATE .1.a)? ☐ YES ⊠ NO	ΞR			
NOTES APPLY:				
(PAM) SHALL BE OF THE ANIONIC OR NEUTRAL Y. PAM REQUIREMENTS ARE AS FOLLOWS:	LY			
AM IS NOT ALLOWED BECAUSE OF ITS TOXICITY T QUATIC LIFE.	ГО			
D NEUTRALLY CHARGED PAM SHALL MEET THE EI RYLAMIDE MONOMER LIMITS OF EQUAL TO OR LES BY WEIGHT ACRYLAMIDE MONOMER.				
D NEUTRALLY CHARGED PAM SHALL HAVE A DENSI 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 T S.				
ES SHALL BE NON-COMBUSTIBLE.				
. CONTAIN ONLY MANUFACTURER-RECOMMENDE	ΞD			
/OR CHEMICAL TREATMENT WILL BE RESEARCHE RDANCE WITH MANUFACTURE'S GUIDELINES AN DN THE EPSC PLANS (3.5.3.1.b).				
ALL BE HANDLED IN ACCORDANCE WITH A TETY AND HEALTH ADMINISTRATION (OSHA) MATERI T (MSDS) REQUIREMENTS AND SHALL BE APPLIED THE MANUFACTURER'S RECOMMENDATIONS FO CONFORMING TO ALL FEDERAL, STATE AND LOC REGULATIONS.	AL IN DR			
SUPPLIERS OF FLOCCULANTS SHALL PRESENT OF TOXICITY REPORT FOR BOTH ACUTE AND CHRONIC HICH VERIFIES THAT THE FLOCCULANT EXHIBITS ITY PARAMETERS WHICH MEET OR EXCEED THE EP OR THE STATE AND FEDERAL WATER QUALIT LE EFFLUENT TESTING DOES NOT MEET THIS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC EEEN REDUCED.	C S A Y S			
DECULANTS DIRECTLY TO, OR WITHIN 60 FEET, OU TLANDS, OR OTHER NATURAL WATER RESOURCE ADJACENT TO THE CONSTRUCTION SITE. DO NO TS DIRECTLY INTO WATERS CONTAINED WITHIN DR TO SLOPES THAT PRODUCE RUNOFF DIRECTL' TLAND, OR OTHER NATURAL WATER RESOURCE. DO JLANTS IMMEDIATELY AT A STORMWATER OUTFAL AVES THE PROJECT LIMITS.	E T N Y O			
NTS CAN BE USED ON A CONSTRUCTION PROJECT SAMPLES MUST BE OBTAINED AND TESTED BY THI OR THEIR REPRESENTATIVE, TO IDENTIFY THI LANT TYPE AND APPLICATION RATE. SINCI SACY IS HIGHLY DEPENDENT ON SOIL TYPE, SOI D TO BE OBTAINED FROM EACH SOIL HORIZON THAT D DURING EXCAVATION. FLOCCULANTS SHOULD BI DNSTRUCTION SITE IN ACCORDANCE WITH THI RECOMMENDED APPLICATION OR DOSAGE RATE OD SHALL ENSURE UNIFORM COVERAGE TO THI NOT APPLY EMULSION FORMS OF FLOCCULANTS MWATER RUNOFF OR TO STREAMS, WETLANDS, OF DURCES DUE TO SURFACTANT TOXICITY.	E E E L T E E E S			
DER MAY BE APPLIED BY A HAND SPREADER OR A ADER. IF APPROVED BY THE MANUFACTURER E MIXED WITH DRY SILICA SAND, FERTILIZER, SEED MENDMENTS TO AID IN SPREADING. FLOCCULANTS IED WITH A WATER TRUCK OR AS PART OF HYDRC TION METHOD SHALL ENSURE UNIFORM COVERAGI A.	R, ), S )-			
GUIDANCE SHOULD BE FOLLOWED FOR BLOCK, LOG CONFIGURATIONS. BEFORE FLOCCULANTS CAN BI RUCTION PROJECT, SITE-SPECIFIC SOIL SAMPLES AND TESTED BY THE MANUFACTURER OR THEIR TO IDENTIFY THE OPTIMUM FLOCCULANT TYPE AND E. SINCE FLOCCULANT EFFICACY IS HIGHL	E S R D Y	1	STATE OF TENNESSEE	
IL TYPE, SOIL SAMPLES WILL NEED TO BE OBTAINED HORIZON THAT WILL BE ACCESSED DURING	G	DEF	PARTMENT OF TRANSPORTAT	IION
CULANTS SHOULD BE APPLIED ON A CONSTRUCTION ICE WITH THE MANUFACTURER'S RECOMMENDED ISAGE RATE.			TORMWATE POLLUTION PREVENTION PLAN	

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ARE UTILITIES INCLUDED IN THE CONTRACT? ☐ YES ⊠ NO

IF YES, THE FOLLOWING APPLY:

- 7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE
- 7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED AND STABILIZED BY THE END OF THE WORK DAY.
- 7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
- 7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE EPSC MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME, SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.
- 7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN FOURTEEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT 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 THE TRENCH IS BACKFILLED.
- 7.6. IN REGARDS TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.
- 7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.
- 7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER
- 7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.
- 7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT ENGINEER BEFORE COMMENCING WORK.
- 7.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:
  - 7.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.
  - 7.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAI
  - 7.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE TDOT PROJECT ENGINEER AND THE TDOT ENVIRONMENTAL DIVISION PERMITS AND/OR COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW AND APPROVAL

#### 8. MAINTENANCE AND INSPECTION

- 8.1. INSPECTION PRACTICES (3.5.8)
  - 8.1.1. PROJECT EPSC INSPECTORS AND ENGINEERS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE. AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (3.5.8.1.):
    - 8.1.1.1. SUCCESSFULLY COMPLETED THE TDOT EPSC INSPECTIONS TRAINING AND ANY RECERTIFICATION COURSE AS REQUIRED.
    - 8.1.1.2. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I -FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.
    - 8.1.1.3. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER **OR LANDSCAPE ARCHITECT**
    - 8.1.1.4. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).
    - 8.1.1.5. SUCCESSFULLY COMPLETED TDEC "LEVEL II DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED
  - 8.1.2. THE TDOT CONSTRUCTION ENGINEER (OR THEIR DULY AUTHORIZED REPRESENTATIVE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.
  - 8.1.3. 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") (3.5.1.0).
  - 8.1.4. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM
  - 8.1.5. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
  - 8.1.6. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (3.5.8.2.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE INSPECTIONS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE.
  - 8.1.7. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME WITH WRITTEN NOTIFICATION BY THE TDOT REGIONAL ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (3.5.8.2.a).
  - 8.1.8. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (3.5.8.2.b).
  - 8.1.9. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC

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		P.E.	2017	19002-1191-04	
		CONST.	2018	NH-I-24-9(79)	S-4
	ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FC CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE ( "INSPECTOR").				
	THE SWPPP WILL BE REVISED AS NECESSARY BASED ON TH RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDE WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL E IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION (3.5.8.2.e AN 3.5.8.2.f).	ED BE			
•	DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SIT IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WI BE SUBMITTED TO THE TDOT PROJECT ENGINEER PER TH CONTRACT.	LL			
-	THESE INSPECTION REQUIREMENTS DO NOT APPLY T DEFINABLE AREAS OF THE SITE THAT HAVE MET FINA STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN TH SWPPP.	AL			
•	TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTIO TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTIO RECORDS OR OTHER DOCUMENTATION OR FAILURE T COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACT OR RULES (3.5.8.2.h).	DN TO A			
A	UTHORIZED REPRESENTATIVE (7.7.3)				
	ROJECT ENGINEER MAY DELEGATE AN INDIVIDUAL AND/C LTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYIN 'ORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, TH CT ENGINEER AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTIN NSIBILITY MUST COMPLETE AND SIGN THE TDOT CONSTRUCTION N EPSC DELEGATION OF AUTHORITY.	ig He Ig			
ГΕ	NANCE PRACTICES (3.5.3.1 AND 3.5.7)				
	ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIV OPERATING ORDER AND IN ACCORDANCE WITH TDOT STANDAR DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)				
	MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILIT OF THE CONTRACTOR.	ΓY			
	UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURE FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, O MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT NO CASE, MORE THAN 24 HOURS AFTER THE INSPECTION O WHEN THE CONDITION IS IDENTIFIED. IF THE REPAI REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN TH 24-HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED E THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AN EPSC INSPECTION REPORT. AN ESTIMATED REPAI REPLACEMENT OR MODIFICATION SCHEDULE SHALL E DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATIO (3.5.8.2.e).	)r In )r r, 1e 3y ID r, 3e			
	SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTRO STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASIN OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HA BEEN REDUCED BY FIFTY PERCENT (50%). (3.5.3.1.e).	S,			
	DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAP STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPS MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.	SC IF			
	CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMEN WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF ( $\!$				
	SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURE SHALL BE PLACED AND TREATED IN A MANNER SO THAT TH SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOE NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NO MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATEF OF THE STATE/U.S.	HE ES DT			
	LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AN REMOVED FROM STORMWATER EXPOSURE PRIOR T ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMIN A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTE	ND TO FF NG	1919	STATE OF TENNESSEE ARTMENT OF TRANSPORTA	8952) 895
				POLLUTION	

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THE CONSU SIGNA PROJE RESPO DIVISI

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USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (3.5.3.1.f).

8.3.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

#### 9. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE GUIDELINES.

#### 10. STORMWATER MANAGEMENT (3.5.4)

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

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

☑ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES

#### CONCRETE WASHOUT

PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)

MINERAL AGGREGATES, ASPHALT

🖾 EARTH

☑ LIQUID TRAFFIC STRIPING MATERIALS, PAINT

ROCK

CURING COMPOUND

EXPLOSIVES

OTHER \_\_\_\_\_\_

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

#### 10.4. WASTE MATERIALS (3.5.5.b)

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

10.5. 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 ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

10.6. 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 ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.7. OTHER MATERIALS

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

FERTILIZERS AND LIME

PESTICIDES AND/OR HERBICIDES DIESEL AND GASOLINE

MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

#### 11. NON-STORMWATER DISCHARGES (3.5.9)

- 11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE CONSTRUCTION OF THIS PROJECT (CHECK ALL THAT APPLY):
  - DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER.
  - ☑ WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE.
  - ☑ WATER USED TO CONTROL DUST. (3.5.3.1.n)
  - DOTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE.
  - ☑ UNCONTAMINATED GROUNDWATER OR SPRING WATER.
  - ☑ FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS.

OTHER:

- 11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS
- 11.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT
- 11.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- 11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.i)?

□ YES ☑ NO

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

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

- 12.1. SPILL PREVENTION (3.5.5.c)
  - 12.1.1. CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.
  - 12.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY TDOT SPECIAL PROVISION 107FP (REGARDING WATER QUALITY AND STORM WATER PERMITS) AND THE LAW
  - 12.1.3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE TDOT CONSTRUCTION ENGINEER.

#### 12.2. MATERIAL MANAGEMENT

12.2.1. HOUSEKEEPING

ONLY NEEDED PRODUCTS WILL BE STORED ON-SITE BY THE CONTRACTOR. EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER

USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

#### 12.2.2. HAZARDOUS MATERIALS

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

12.3. PRODUCT SPECIFIC PRACTICES

#### 12.4. SPILL MANAGEMENT

IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY:

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12.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

12.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE SOIL ANALYSIS OR TDOT. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

12.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF PER THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS

12.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.

12.4.1. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

12.4.2. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.

12.4.3. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

12.4.4. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR

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HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND **CLEANUP** 

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

12.5. SPILL NOTIFICATION (5.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

- 12.5.1. THE TDOT PROJECT ENGINEER IS RESPONSIBLE FOR NOTIFYING THE REGIONAL PROJECT DEVELOPMENT OFFICE (E.G. TRANSPORTATION ENVIRONMENTAL STUDIES SPECIALIST) AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.
- 12.5.2. THE TDOT REGIONAL PROJECT DEVELOPMENT OFFICE WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.
- 12.5.3. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.
- 12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE. CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

#### 13. RECORD-KEEPING

13.1. REQUIRED RECORDS

TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (4.1.5.) (6.2.1):

- 13.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.
- 13.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE
- 13.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED
- 13.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.
- 13.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS.

13.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING

- 13.1.7. COPY OF REQUIRED SOIL ANALYSIS
- 13.1.8. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.
- 13.2. RAINFALL MONITORING PLAN (3.5.3.1.0):
  - 13.2.1. EQUIPMENT AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

13.2.2. LOCATION

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

13.2.3. METHODS

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

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

13.3. KEEPING PLANS CURRENT (3.4)

13.3.1. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.

13.3.3.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA:

13.3.3.5. 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.

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

13.3.3.7. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

13.4. MAKING PLANS ACCESSIBLE

13.4.1. 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).

13.4.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):

13.4.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

13.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT

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13.3.2. THE STAGES DEPICTED WITHIN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

THE TDOT EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

13.3.3.1. 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;

13.3.3.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;

13.3.3.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;

13.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND



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#### 13.4.2.4. THE LOCATION OF THE SWPPP.

13.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCAL BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

13.5. NOTICE OF TERMINATION (8.0)

- 13.5.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE TDOT REGIONAL ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.
- 13.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE
  - 13.5.2.1. 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
  - 13.5.2.2. 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
  - 13.5.2.3. 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
  - 13.5.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
  - 13.5.2.5. 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
  - 13.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
  - 13.5.2.7. 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.

13.6. 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.

#### 14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)

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.

Anthony Myers Date: 2018.04.16 15:38:45 -05'00'

AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

Anthony R. Myers

PRINTED NAME

Transportation Manager 2

04-16-2018

DATE

TITLE

#### 15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ONSITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

#### 16. ENVIRONMENTAL PERMITS (9.0)

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

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

\*THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

TYPE YEAR PROJECT	NO. SHEET NO.
P.E. 2017 19002-1191-	04
CONST. 2018 NH-I-24-9(79	) S-7

PSC STAGE	OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 DRAINAGE AREA (AC)	STAGE 2 DRAINAGE AREA (AC)	STAGE 3 DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING RESOURCE (TDOT EBR LABEL) OR OTHER	COMMENTS
1, 2, 3	OUT-1		222+85 RT I-24	3.42/3.33/4.33	1.728	1.685	1.558	N/A	Off project limits	Average slope differs between EPSC stages.
1, 2, 3	OUT-2		223+55 LT I-24	2.57/2.51/3.26	1.382	1.347	1.246	N/A	Off project limits	Average slope differs between EPSC stages.
1, 2	OUT-3		229+00 RT I-24	4.22/4.11	2.305	2.247		N/A	WWC-2/EPH-1	
1, 2	OUT-4		226+95 LT I-24	4.96/4.84	0.975	0.951		N/A	STR-2	
1, 2, 3	OUT-5		242+05 LT I-24	1.27/1.24/5.35	4.228	4.122	2.079	N/A	Off project limits	Average slope differs between EPSC stages.
2, 3		OUT-5A	248+65 RT I-24	1.24/3.61		4.122	1.501	N/A	Off project limits	Average slope differs between EPSC stages.
1, 2	OUT-6		261+50 RT I-24	4.27/3.42	0.071	0.658		N/A	WTL-1/STR-3	Average slope differs between EPSC stages.
1, 2, 3	OUT-7		262+60 RT I-24	3.91/3.81/6.29	2.449	2.388	0.879	N/A	WTL-1/STR-3	Average slope differs between EPSC stages.
1, 2, 3	OUT-8		169+90 RT I-24	2.15/2.10/1.61	1.809	1.764	3.813	N/A	STR-4	Average slope differs between EPSC stages.
1, 2, 3	OUT-9		277+80 RT Hickory Hollow Pkwy	5.35/5.22/2.15	1.357	1.323	0.315	N/A	STR-1 (Collins Creek)	Average slope differs between EPSC stages.
2, 3		OUT-9A	277+50 RT Hickory Hollow Pkwy	2.00		1.189	0.955	N/A	STR-1 (Collins Creek)	
1, 2, 3	OUT-10		279+00 RT Hickory Hollow Pkwy	6.29/6.13/3.55	0.879	0.857	0.464	N/A	STR-1 (Collins Creek)	Average slope differs between EPSC stages.
2, 3		OUT-10A	280+50 RT Hickory Hollow Pkwy	3.18/2.12		1.224	2.321	N/A	STR-1 (Collins Creek)	Average slope differs between EPSC stages.
1, 2, 3	OUT-11		280+45 LT Hickory Hollow Pkwy	4.33/4.22/7.97	1.558	1.519	1.589	N/A	STR-1 (Collins Creek)	Average slope differs between EPSC stages.
2, 3	OUT-12		140+00 RT IKEA Ramp EB	2.00/4.96		1.189	2.209	N/A	Off project limits	Average slope differs between EPSC stages.
2, 3	OUT-13		120+00 LT IKEA Ramp WB	2.00/2.73		1.224	1.631	N/A	Off project limits	Average slope differs between EPSC stages.
2, 3	OUT-14		279+00 LT Hickory Hollow Pkwy	3.95		0.760	0.755	N/A	Off project limits	
2, 3	OUT-15		229+50 RT I-24	5.30/2.42		0.742	1.589	N/A	WWC-2/EPH-1	Average slope differs between EPSC stages.
2, 3		OUT-15A	164+00 LT Hickory Hollow Pkwy	2.15/2.18		2.292	2.289	N/A	WWC-2/EPH-1	Average slope differs between EPSC stages.
3	OUT-16		228+85 LT I-24	3.65			1.315	N/A	Off project limits	

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

TENNESSEE D.O.T. DESIGN DIVISION

FILE NO.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
P.E.	2017	19002-1191-04	
Const.	2018	NH-I-24-9(79)	S-8

# Index Of Sheets

TITLE SHEET	1
TYPICAL SECTIONS	2, 2A, 2A1 - 2A16
RIGHT-OF-WAY NOTES, UTILITY NOTES and UTILITY OWNERS	3
PROPERTY MAP AND RIGHT-OF-WAY ACQUISITION TABLE	3A
GEOMETRIC LAYOUT & PROJECT CURVE DATA SHEETS	3B, 3C, 3C1
PRESENT LAYOUT(S)	4 - 13
PROPOSED LAYOUT(S)	4A – 13A
DRAINAGE LAYOUT(S)	10B, 11B
RIGHT OF WAY DETAIL	10C
RAMP PROFILE(S)	14 - 25
SIDE ROADS PROFILE(S)	
DRAINAGE MAP	35
CULVERT CROSS SECTIONS	36, 36A, 36A1- 36A3
EPSC NOTES	
EPSC LEGEND AND TABULATION	37A
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS	38, 38A - 40J
RAMP CROSS SECTIONS	50 - 143
SIDE ROAD CROSS SECTIONS	144 - 173

SHEETS 41 – 49 NOT USED

THE ALPHABETICAL LETTERS "I", "O", AND "Q" AR NOT USED IN NUMBERING OF SHEETS

# BEGIN PROJECT NO. 19002-2191-04 (R.O.W.)

I-24 STA. 226+44.67 N 622370.5409 E 1775884.4018

END PROJECT NO. 19002-2191-04 (R.O.W.) I-24 STA. 260+00.00 N 620107.9526 E 1778342.6780 SPECIAL NOTES PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE. THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT. TDOT REGION 3 CE MANAGER 2 SHANE HESTER, P.E. OF PROJECT DEVELOPMENT : BARGE, WAGGONER, SUMNER & CANNON, INC. **DESIGNED BY :** MICHAEL W. TAPP, P.E. **DESIGNER**:

19002-1191-04 (DESIGN)

123055.00

 $\Box$  $\sim$ 5639 /3

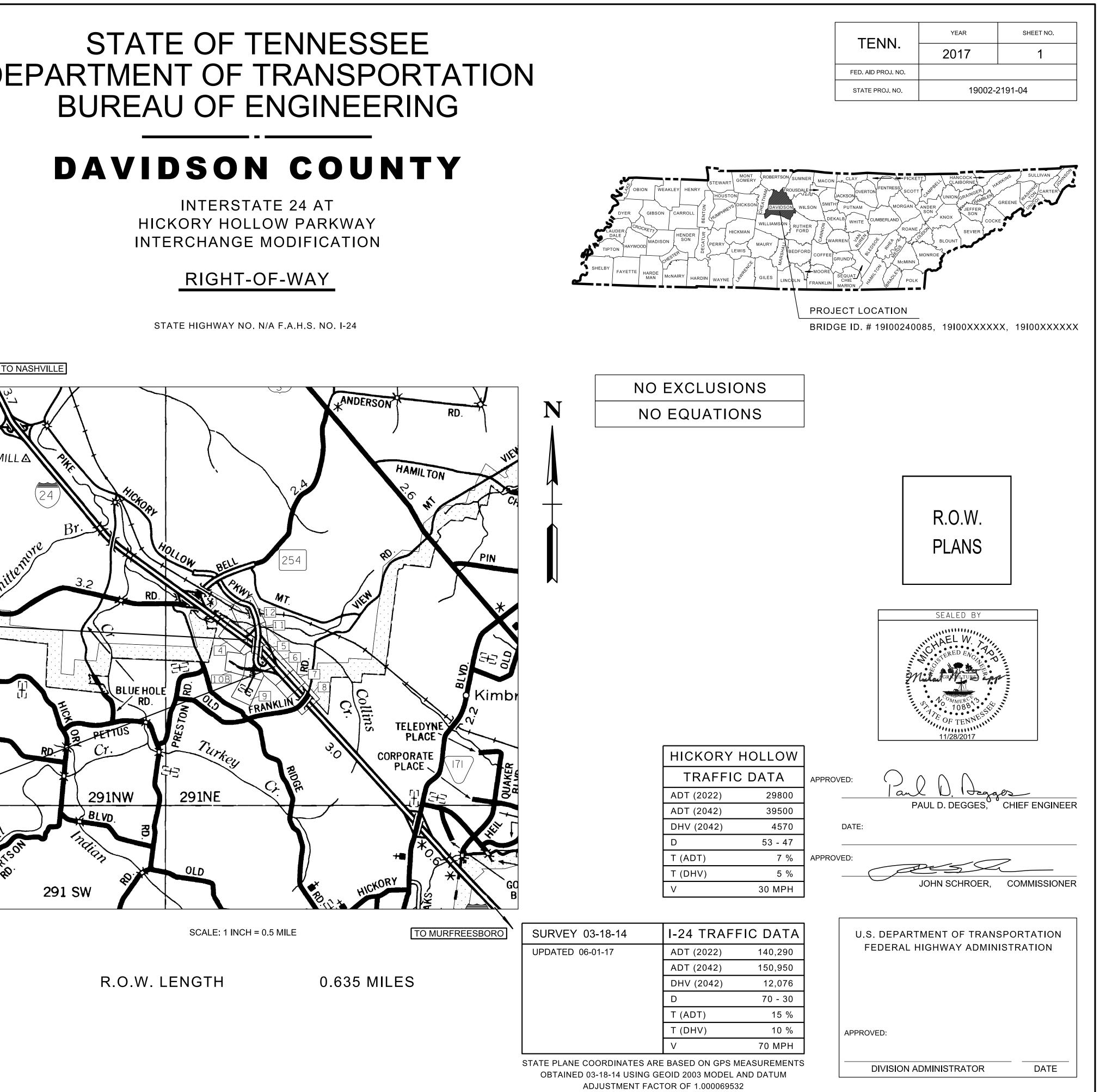


P.E. NO.

P.I.N.

# STATE OF TENNESSEE **DEPARTMENT OF TRANSPORTATION** BUREAU OF ENGINEERING

**INTERSTATE 24 AT** 





# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION **BUREAU OF ENGINEERING**

# **DAVIDSON COUNTY**

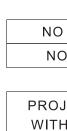
**INTERSTATE 24 AT** HICKORY HOLLOW PARKWAY INTERCHANGE MODIFICATION

# CONSTRUCTION

GRADE, DRAIN, BASE, PAVE, SIGN & MARKING

STATE HIGHWAY NO. N/A F.A.H.S. NO. I-24





DES APF 1) RAMP "A" GRADE EX 2) RAMP "EE' GRADE EX

3) RAMP "FF" ÉENTRY GR

			<b>1</b>   r
	24 10 10 10 10 10 10 10 10 10 10	*ANDERSON RD. HAMILTON	
19002-3191-44 BEGIN PROJECT NO. NH-I-24-9(79) (CONST.)	hillenure Br. 25 RD RD Pr. 25	4 NET PIN	
I-24 STA. 222+84.19 N 622581.9469 E 1775592.4278			
BEGIN PROJECT NO. 19002-2191-04 (R.O.W.)			1) RAMP GRAD
I-24 STA. 226+44.67 N 622370.5409 E 1775884.4018		CONTRACTOR	
END PROJECT NO. 19002-2191-04 (R.O.W.)	PETTUS	TELEDYNE CV PLACE	3) RAMF ENTR
I-24 STA. 260+35.00 N 620081.8786 E 1778366.0263	arken arken	CORPORATE PLACE	4
19002-3191-44 END PROJECT NO. NH-I-24-9(79) (CONST.)	291NW 291NE		
I-24 STA. 277+50.00 N 618800.6613 E 1779513.3101	ALSON THREE B		
SPECIAL NOTES	291 SW 01D	HICKORY	a
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	SCALE: 1 INCH = 0.5 MILE	TO MURFREESBORO	SURVEY 03-18-14
THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS	ROADWAY LENGTH	1.035 MILES	UPDATED 06-01-17 UPDATED 02-07-18
AND IN THE PROPOSAL CONTRACT.	BRIDGE LENGTH	0.098 MILES*	
TDOT REGION 3 DIRECTOR OF PROJECT DEVELOPMENT : SHANE HESTER, P.E.	BOX BRIDGE LENGTH	0.000 MILES	
DESIGNED BY : BARGE DESIGN SOLUTIONS, INC.	PROJECT LENGTH	1.035 MILES	
DESIGNER : MICHAEL W. TAPP, P.E. CHECKED BY: JONATHAN HAYCRAFT, P.E.	*NOT INCLUDED IN THE PRO		
P.E. NO. <u>19002-1191-04 (DESIGN)</u> P.I.N. 123055.00		JEGT LENGTH	STATE PLANE COORDINATE OBTAINED 03-18-14 USI ADJUSTMENT

TO NASHVILLE

COORDINATES ARI 03-18-14 USING G ADJUSTMENT FAC

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	TENN.	YEAR	SHEET NO.
		2018	1
	FED. AID PROJ. NO. STATE PROJ. NO.		24 <b>-</b> 9(79) -3191-44
	GIATE PROJ. NO.	19002-	
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APP ADT (2022) 29800 ADT (2042) 4570 D 53 - 47	lant PA	AEL W.	chief engineer
APP ADT (2022) 29800 ADT (2042) 4570 D 53 - 47	DATE:	ALL W. THE FACTOR AND A THE FACTOR ATTENDED ATTENDE	2
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APP ADT (2022) 29800 ADT (2042) 4570 D 53 - 47 T (ADT) 7 % T (DHV) 5 %	DATE:	ALL W. THE FACTOR AND A THE FACTOR ATTENDED ATTENDE	COMMISSIONER
SIGN EXCEPTION         PROVED 1-26-18         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN ADE         PROVED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN ADE         ADE EXCEEDED.         ADT (2022)       29800         ADT (2042)       39500         DHV (2042)       4570         D       53 - 47         T (ADT)       7 %         T (DHV)       5 %         V       30 MPH	DATE: PROVED:	UL D. DEGGES,	
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SIGN EXCEPTION         PROVED 1-26-18         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN         ADT (2022)         29800         ADT (2022)         29800         ADT (2022)         29800         D         53 - 47         T (ADT)         7 %         V         30 MPH	DATE: PROVED:	VELL W.	
SIGN EXCEPTION         PROVED 1-26-18         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN         ADT (2022)         29800         ADT (2022)         29800         D         53 - 47         T (ADT)         7 %         V         30 MPH	DATE: PROVED:	VELL W.	
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SIGN EXCEPTION         PROVED 1-26-18         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN EXIT         CEEDED.         RECOMMEDED DESIGN         ADT (2022)         29800         ADT (2022)         29800         ADT (2042)         39500         DHV (2042)         4570         D         53 - 47         T (ADT)         7 %         V         30 MPH             I-24 TRAFFIC DATA         ADT (2022)       140,290         ADT (2022)       12,076         D       70 - 30         T (ADT)       15 %	DATE: PROVED:	VELL W.	

# **ROADWAY INDEX**

# STANDARD ROADWAY DRAWINGS

SHEET NAME	SHEET NO.	DWG.	REV.	DESCRIPTION		DWG.	REV.	DESCRIPTION
TITLE SHEET	1	PROPOSED I	IGHTING LA	YOUTS	68 – 78	RD-UD-6	12-18-94	LATERAL UNDERDI SLOPES
ROADWAY INDEX AND STANDARD ROADWAY DRAWINGS	1A	BORE LOCAT	TONS AND L	0GS	79, 79A – 79B	RD-UD-7	12-18-94	LATERAL UNDERD
STANDARD ROADWAY DRAWINGS	1A1 – 1A2	FOUNDATION	N DETAILS		80	ND-0D-1	12-10-34	SLOPES
STANDARD TRAFFIC OPERATIONS DRAWINGS	1A3	ITS NOTES A	ND DETAILS		81, 81A – 81G	RD-UD-8		LATERAL UNDERDI
STANDARD STRUCTURE DRAWINGS				3		RD-UD-9	12-18-94	LATERAL UNDERDI
PROJECT COMMITMENTS				IG SHEETS BREMOVED FROMPLAN SET.	85 – 91*	KD-0D-9	12-10-94	SLOPES
ESTIMATED BRIDGE QUANTITIES AND BRIDGE INDEX	2				02 TUDU 02 24	PIPE CUL	VERTS AN	D ENDWALLS
ESTIMATED ROADWAY QUANTITIES				<u></u>		D-PB-1	03-16-17	STANDARD DETAIL
ESTIMATED SIGNAL QUANTITIES	2A3			ONS				INSTALLATION
ESTIMATED LIGHTING QUANTITIES AND SPECIAL NOTES	2A4			IONS		D-PB-3		INDUCED TRENCH
TYPICAL SECTIONS AND PAVEMENT SCHEDULE	2B – 2B19			S REMOVED FROM PLAN SET.	R-1 THRU R-41*	D-PO-1	05 27 01	STANDARD OVAL 8
GENERAL NOTES	2C – 2C3			ON PREVENTION PLAN (SWPPP) INDE	(S-1	D-PO-1	05-27-01	PIPE
SPECIAL NOTES	2D					D-PE-18A	01-06-15	18" CONCRETE ENI
TABULATED QUANTITIES	2E – 2E4			CAL LETTERS "I", "O" & "Q" ARE NOT				6:1 SLOPES)
REMOVED FROM PLAN SET	2F – 2F1		IBERING OF			D-PE-18B		18" CONCRETE ENI 6:1 SLOPES)
SPECIAL DITCH DETAILS						D-PE-24A	07-05-17	24" CONCRETE ENI
MITIGATION DETAILS AND NOTES	2F3	ROADWAY	Y DESIGN	STANDARDS				6:1 SLOPES)
RIGHT-OF-WAY NOTES, UTILITY NOTES AND UTILITY OWNERS	3	RD-A-1	12-18-99	STANDARD ABBREVIATIONS		D-PE-24B		24" CONCRETE ENI 6:1 SLOPES)
PROPERTY MAP AND R.O.W. ACQJISITION TABLE	3A	RD-L-1	10-26-94	STANDARD LEGEND		D-PE-36A	06-14-13	36" CONCRETE ENI
GEOMETRIC LAYOUT AND PROJECT CURVE DATA	3B – 3C1	RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY IN	ISTALLATIONS			PIPE GRATE (FOR 3
PRESENT LAYOUTS	4 – 13	RD-L-3	03-16-17	STANDARD LEGEND FOR SIGNALIZ	ATION AND	D-PE-36B		36" CONCRETE ENI PIPE GRATE (FOR 3
PROPOSED LAYOUTS	4A – 13A			LIGHTING		D-PE-99	11-01-13	PIPE GRATE & SKE
DRAINAGE LAYOUTS	10B – 11B	RD-L-4	03-16-17	STANDARD LEGEND FOR SIGNALIZ	ATION AND	D-FE-99	11-01-13	ENDWALLS (FOR 3
RIGHT-OF-WAY DETAILS	10C	RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION	PREVENTION AND	D-SEW-12D	06-14-13	CONCRETE ENDW
RAMP PROFILES	14 – 25	ND L 0	00 01 00	SEDIMENT CONTROL				GRATE FOR 15" AN
SIDE ROAD FROFILES	26 – 34	RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION	PREVENTION AND	D-PE-1	02-12-76	TYPE "A" CONCRET
CEMETERY ENTRANCE PROFILE	35	0017	05 04 40		DDEVENTION AND	D-PE-4	10-10-16	STRAIGHT CONCRI
DRAINAGE MAP	36	RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION SEDIMENT CONTROL	PREVENTION AND	CATCH B/	ASINS ANI	D MANHOLES
CULVERT SECTIONS	37 – 41	RD01-TS-4	07-23-13	DESIGN STANDARDS 1 AND 2 LANE	RAMPS	D-CB-12LP	08-01-12	LOW PROFILE 32" > CATCH BASIN (FOR
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) NOTES	42	RD01-TS-5B	10-15-02	DESIGN STANDARDS FREEWAYS W	ITH MEDIAN			CURB)
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) LEGEND & TABULATION			10.10.10	BARRIER		D-CB-12P	03-11-14	STANDARD PRECA NO.12 CATCH BASI
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS		RD01-TS-6	10-10-16	TYPICAL CURE AND GUTTER SECTI SHOULDER	ONS WITH	D-CB-12RA	03-11-14	STANDARD PRECA
PAVEMENT EDGE DROP-OFF NOTES FOR TRAFFIC CONTROL		RD01-TS-6A	07-31-13	TYPICAL CURE AND GUTTER SECTI	ONS WITHOUT			BASIN (FOR USE W
TRAFFIC CONTROL PHASING NOTES, LEGEND & TABULATION	46A	DD04 T0 0	02 40 17	SHOULDER		D-CB-12RB	03-11-14	STANDARD PRECA CATCH BASIN (FOR
TRAFFIC CONTROL PHASING LAYOUT	46B – 46D	RD01-TS-8	03-16-17	SHARED USE PATH TYPICAL SECTION	JNS			CURB)
TRAFFIC CONTROL PLANS	47, 47A – 49J	RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS		D-CB-12RC	03-11-14	STANDARD PRECA CATCH BASIN (FOR
SIGNING AND PAVEMENT MARKING PLANS	50-59	RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETA SLOPE DEVELOPMENT	ILS FOR ROADSIDE			CURB)
SIGN SCHEDULE SHEETS	60 THRU 60-6	RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DES	SIGN AND	D-CB-12S	03-11-14	STANDARD RECTA
MISCELLANEOUS SIGNING DETAILS	61 THRU 61-4			CONSTRUCTION				BASIN
PROPOSED SIGNAL LAYOUTS	62 – 64	RD01-S-11B	10-15-02	DESIGN AND CONSTRUCTION DETA SLOPE AND CATCHMENT	ILS FOR ROCK CUT	D-CB-12SB	03-11-14	STANDARD 4' X 4' S BASIN
TRAFFIC SIGNAL DETAILS	62A – 64A	RD01-SA-1	10-15-02	SAFETY APPR0ACH TO UNDERPAS	SES GRADING	D-CB-12SC	03-11-14	STANDARD 5' 2" X 5
TRAFFIC SIGNAL SPECIAL NOTES	65		439920 527360 732578	DESIGN AND SLOPE PROTECTION				CATCH BASIN
TRAFFIC SIGNAL COMMUNICATIONS	66	RD-UD-3	09-05-96	UNDERDRAIN DETAILS		D-CB-12SD	03-11-14	STANDARD 7' X 7' S BASIN
LIGHTING NOTES AND DETAILS	67, 67A – 67B	RD-UD-4	01-25-16	UNDERDRAIN LATERAL DETAILS				5.1011

TYPE	YEAR	PROJECT NO.	SHEET NO.			
CONST.	2018	NH-I-24-9(79)	1A			
REV. 3-21-18: REMOVED SHEET NOS. 2F, 2F1, 87, 88, R-26 TO R-35 AND R-38 FROM INDEX; ADDED SHEET NO.						

## N

RDRAIN ENDWALL DETAIL FOR 1:1 & 2:1 61-4 TO THE INDEX.

RDRAIN ENDWALL DETAIL FOR 3:1 & 4:1

RDRAIN ENDWALL DETAIL FOR 5:1

RDRAIN ENDWALL DETAIL FOR 6:1

AILS FOR CONCRETE PIPE

CH SOIL EMBANKMENT FOR PIPE LLATION

L & FLAT BASE CONCRETE CULVERT

ENDWALL CROSS DRAIN (FOR 3:1, 4:1 &

ENDWALL CROSS DRAIN WITH STEEL R 3:1, 4:1 & 6:1 SLOPES)

ENDWALL CROSS DRAIN WITH STEEL R 3:1, 4:1 & 6:1 SLOPES)

KEWED CONNECTION DETAILS FOR "U" R 3:1, 41 & 6:1 SLOPES)

WALL TYPE "SD" WITH STEEL PIPE AND 18" PIPES 12:1 SLOPE

RETE ENDWALL 2:1 SLOPE. 36" TO 78"

CRETEENDWALL

" X 32' SQUARE CONCRETE NO. 12LP OR USE WITH 6" NON-MOUNTABLE

CAST RECTANGULAR CONCRETE ASIN

CAST 48" CIRCULAR NO. 12 CATCH WITH6" NONMOUNTABLE CURB)

CAST 60" AND 72" CIRCULAR NO. 12 OR USE WITH 6" NONMOUNTABLE

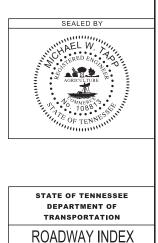
CAST 84" THRU 120" CIRCULAR NO. 12 OR USE WITH 6" NONMOUNTABLE

TANGULAR CONCRETE NO. 12 CATCH

4' SQUARE CONCRETE NO. 12 CATCH

X 5' 2" SQUARE CONCRETE NO. 12

7' SQUARE CONCRETE NO. 12 CATCH



AND

STANDARD

ROADWAY DRAWINGS

ſ				
	D-CB-12SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN	D-CBB-12/
	D-CB-14P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CA⊺CH BASIN	D-CBB-31
	D-CB-14RB	03-11-14	STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN	D-CBB-42
	D-CB-14S	03-11-14	STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN	D-JBS-1
	D-CB-14SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 14 CATCH BASIN	D-JBS-2
	D-CB-31R	03-11-14	STANDARD PRECAS CIRCULAR NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-JBS-3
	D-CB-31SD	03-11-14	STANDARD 7' X 7' SUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-JBS-4
	D-CB-31SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-JBS-5
	D-CB-41LP	08-01-12	LOW FROFILE 32" X 32" SQUARE CONCRETE NO. 41LP	D-MH-2
	D OD TIL	00 01 12	CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN	D-MH-3
	D 0D 44D			D-MH-4
	D-CB-41P	03-11-14	STANDARD 4' X 3' PRECAST RECTANGULAR CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-MH-5
	D-CB-41RB	03-11-14	STANDARD PRECAST CIRCULAR NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-MH-6 D-MH-7
	D-CB-41S	03-11-14	STANDARD 4' X 3' RECTANGULAR CONCRETE NO. 41	D-RF-1
			CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	D-TD-1
	D-CB-41SB	03-11-14	STANDARD 4' X 4' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	ROADW
	D-CB-41SC	03-11-14	STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	RP-J-1
	D-CB-41SD	03-11-14	STANDARD 7' X 7' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	RP-J-5 RP-J-7
gs).sht	D-CB-41SE	03-11-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	RP-J-9
Drawings	D-CB-42RB	03-11-14	STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN	RP-J-11
Std. Dra	D-CB-42S	08-01-12	STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN	RP-J-13
	D-CB-42SB	03-11-14	STANDARD 4' X 4' SQUARE CONCRETE NO. 42 CATCH BASIN	RP-J-15
- 001A2 (Index and Drawing	D-CB-42SC	03-11-14	STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 42 CATCH BASIN	RP-J-17
ndex a	D-CB-42SD	03-11-14	STANDARD 7' X 7' SQUARE CONCRETE NO. 42 CATCH BASIN	RP-J-18 RP-J-19
A2 (	D-CB-43R	03-11-14	STANDARD PRECAST CIRCULAR NO. 43R CATCH BASIN	RP-J-25
001	D-CB-43SB	03-11-14	STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 43SB	RP-D-15
			CATCH BASIN	RP-MC-2
RNS/0	D-CB-43SC	03-11-14	STANDARD 8' X 5' 2" RECTANGULAR CONCRETE NO. 43SC CATCH BASIN	RP-NMC-1
CAD\TRNS\001A	D-CB-45S	03-11-14	STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 45 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)	RP-H-3
\04	D-CB-99	05-20-14	MISCELLANEOUS DETAILS FOR RECTANGULAR	RP-H-4
3921			STRUCTURES	RP-H-7
3563	D-CB-99R	03-11-14	MISCELLANEOUS DETAILS FOR ROUND STRUCTURES	RP-H-8
639/	D-CB-99RA	03-19-14	BILL OF STEEL FOR ROUND CATCH BASIN LIDS	
\35\35639\3563921\04	D-CB-99RB		ROUND JUNCTION BOX SPRING DRAIN BOX	RP-S-7

12A	05-27-01	TYPE 'B' CAST IRON FRAME, GRATE &	RP-S-9		ALTERNATE DE
		NONMOUNTAELE INLET DETAILS FOR NOS. 10, 12, 14, 16 & 17 TYPE CATCH BASINS	W-CIP-1		ROADWAY FEAT WALL
31	05-27-01	TYPE 'B' CAST IRON FRAME, GRATE & INLET DETAILS FOR NOS. 31, 41, 45, 46, & 51 TYPE CATCH BASINS	W-SG-1		STANDARD GRA
42	05-27-01	CAST IRON GRATE DETAILS FOR NOS. 42, 43 & 44 TYPE CATCH BASINS	SAFETY	DESIGN AN	D FENCES
1	08-01-12	STANDARD 32' X 32" SQUARE CONCRETE NO. 1 JUNCTION BOX	S-CZ-1		CLEAR ZONE CF
2	08-01-12	STANDARD 4' X 4' SQUARE CONCRETE NO. 2	S-PL-3	10-10-16	SAFETY PLAN: N
<u>-</u>	00-01-12	JUNCTION BOX	0120	10 10 10	ENDS
3	08-01-12	STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 3 JUNCTION BOX	S-PL-6	10-10-16	SAFETY PLAN S OUTSIDE EDGE
4	08-01-12	STANDARD 7' X 7' SQUARE CONCRETE NO. 4 JUNCTION BOX	S-GR31-1	03-28-17	W-BEAM GUARD
-	00.01.10		S-GR31-1A		W-BEAM BARRIE
0	08-01-12	STANDARD 9' X 9' SQUARE CONCRETE NO. 5 JUNCTION BOX	S-GRS-2	07-05-17	SPECIAL CASE ( CONCRETEDEC
	02-02-16	STANDARD MASONRY & PRECAST NO. 3 MANHOLE	S-GRS-4	03-16-17	SPECIAL CASE (
	04-21-14	TYPICAL DESIGN OF LIDS FOR NO. 3 MANHOLE	0.000.4	10 10 10	DETAIL
	08-01-12	STANDARD NO. 3 MANHOLE CASTINGS AND STEPS	S-GRC-1	10-10-16	GUARDRAIL COI BARRIER WALL
	04-01-14	STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 3 MANHOLE	S-GRT-2	03-28-17	TYPE 38 GUARD
	04-01-14	STANDARD 7' X 7' SQUARE CONCRETE NO. 3 MANHOLE	S-GRT-2P	07-05-17	EARTH PAD FOR
	04-01-14	STANDARD 9' X 9' SQUARE CONCRETE NO. 3 MANHOLE	S-GRT-3	03-28-17	TYPE 21 GUARD
	02-02-16	STANDARD PRECAST RISER	S-GRA-3	07-05-17	TYPE 13 GUARD
		TRENCH DRAIN	S-SSMB-2	08-19-13	51" SINGLE SLOI
			S-SSMB-3	07-16-13	51" HALF SIZE S WALL
WAY	AND PAV	EMENT APPURTENANCES	S-SSMB-4	04-12-16	FLARED SINGLE
	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SFACING	S-SSMB-5		WALL (VERTICAL SINGLE SLOPE I
	07-01-01	TYPICAL ACCELERATION AND DECELERATION LANE	0-00100-0		DETAIL
		JOINT TYPES AND SPACING FOR CONCRETE RAMPS	S-SSMB-6	10-10-16	GUARDRAIL ATT
	07-14-14	CONCRETE RAMP JOINT TYPES AND SPACING	0.00MD 0	05 00 44	CONCRETE BAR
	02-02-12	CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT	S-SSMB-8	05-20-14	FOOTING DETAI 51" MEDIAN BAR
	07-29-96	3/4" AND 1 3/4" EXPANSION AND EDGE PAVEMENT JOINTS	S-SSMB-9	07-16-13	SINGLE SLOPE E SEPARATED ME
3	03-20-91	3/4" AND 1 3/4" ELASTOMERIC COMPRESSION JCINT	S-F-1	05-24-12	HIGH VISIBILITY
	04 40 40	SEALS	S-F-10B	11-15-17	STANDARD RIGH
•	01-19-02	LONGITUDINAL CONTRACTION AND CONSTRUCTION JOINTS	S-RP-2	02-08-16	STANDARD CON
	02-02-12		DESIGN	TRAFFIC C	
3	02-02-12	DOWEL ASSEMBLY DEVICES	T-M-1	07-05-17	
)	02-02-12		1-101-1	07-05-17	CONVENTIONAL
-	05-27-01	CONCRETE PAVEMENT JOINT REPAIR DETAILS			ABBREVIATIONS
5	04-08-16	DETAILS OF STANDARD CONCRETE DRIVEWAYS	T-M-2	07-05-17	DETAILS OF PAV CONVENTIONAL
-2	02-28-02	STANDARD 6" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS	T-M-3	07-24-14	MARKING STANI MEDIANS & PAV
C-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS	T-M-4	10-10-16	ROADS STANDARD INTE
	10-10-16	CURB RAMP AND TRUNCATED DOME SURFACE DETAIL	T-M-4	04-23-13	MARKING DETAI
	10-10-16	PERPENDICULAR CURB RAMP			
	10-10-16	PERPENDICULAR CURB RAMP IN CURVE	T-M-6	06-22-12	MARKING DETAI
	10-10-16	PERPENDICULAR CURB RAMP PLACED OUTSIDE CURVE	T-M-7	01-12-12	GORE MARKING FREEWAY INTER
	07-05-17	DETAILS FOR CONCRETE SIDEWALKS			

### DETAILS FOR PEDESTRIAN FACILITIES EATURES AT CAST IN PLACE RETAINING

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2018	NH-I-24-9(79)	1A1

RAVITY-TYPE RETAINING WALLS

#### CRITERIA

N: MINIMUM INSTALLATION AT BRIDGE

N SAFETY HARDWARE PLACEMENT ON GE

RDRAIL

RIER FASTENING HARDWARE

E GUARDRAIL ATTACHMENT TO ECKS

E GUARDRAIL HEIGHT TRANSITION

CONNECTION TO BRIDGE ENDS OR LL

RDRAIL TERMINAL

OR TYPE 38 AND TYPE 21 TERMINAL

RDRAIL END TERMINAL

RDRAIL ANCHOR

LOPE CONCRETE BARRIER WALL

E SINGLE SLOPE CONCRETE BARRIER

GLE SLOPE CONCRETE MEDIAN BARRIER CAL BACK)

PE MEDIAN BARRIER WALL CATCH BASIN

ATTACHMENT TO SINGLE SLOPE BARRIER WALL

TAILS FOR OVERHEAD SIGN STRUCTURE BARRIER WALL

PE BARRIER WALL FOR GRADE MEDIAN

TY FENCE

IGHT-OF-WAY CHAIN LINK FENCE

ONCRETE RIGHT-OF-WAY MARKERS

PAVEMENT MARKINGS FOR IAL ROADS AND MARKING DNS

PAVEMENT MARKINGS FOR IAL ROADS

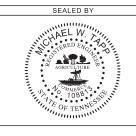
ANDARDS FOR TRAFFIC ISLANDS, AVED SHOULDERS ON CONVENTIONAL

NTERSECTION PAVEMENT MARKINGS

TAILS FOR EXPRESSWAYS & FREEWAYS

TAIL FOR EXPRESSWAY & FREEWAY SES

NG DETAILS FOR EXPRESSWAY & TERCHANGES

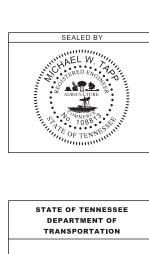


STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

## STANDARD ROADWAY DRAWINGS

T-M-15		ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-PBR-1	03-16-17	INTERCONNECTED PORTABLE BARRIER RAIL
T-PBR-2	03-16-17	DETAIL FOR FLEXIBLE DELINEATORS
T-WZ-10	04-02-12	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-05-17	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-16	03-05-17	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	03-05-17	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-21	03-05-17	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
EROSION	PREVENT	ION AND SEDIMENT CONTROL
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-6	05-06-16	ROCK CHECK DAM
EC-STR-6A	05-06-16	ENHANCED ROCK CHECK DAM
EC-STR-11	03-16-17	CULVERT PROTECTION TYPE 1
EC-STR-11A	08-01-12	CULVERT PROTECTION TYPE 2
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4
EC-STR-40		CATCH BASIN FILTER ASSEMBLY FOR CIRCULAR STRUCTURES
EC-STR-41		CATCH BASIN FILTER ASSEMBLY (TYPE 1)
EC-STR-41A		CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS
EC-STR-42		CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A		CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS
EC-STR-47		CATCH BASIN FILTER ASSEMBLY (TYPE 7)
EC-STR-48		CATCH BASIN FILTER ASSEMBLY (TYPE 8)
EC-STR-48A		CATCH BASIN FILTER ASSEMBLY (TYPE 8) SLIPCOVER DETAILS

	TYPE	YEAR	PROJECT NO.	SHEET NO.			
	CONST.	2018	NH-I-24-9(79)	1A2			
REV. 3-21-18: ADDED EC-STR-39A TO STANDARD DRAWING INDEX.							



# STANDARD ROADWAY DRAWINGS

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	QUANTITY NON- PARTICIPATING	QUANTITY TOTAL
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	0.9	-	0.9
201-01	CLEARING AND GRUBBING	LS	0.9	-	0.9
202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1		1
202-01	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	27730	-	27730
202-04.01	REMOVAL OF STRUCTURES (CANTILEVER SIGN STRUCTURE, 219+10, 90' RT.)	LS	1	-	1
202-04.02	REMOVAL OF STRUCTURES (CANTILEVER SIGN STRUCTURE, 223+09. 88' LT.)	LS	1	-	1
202-04.03	REMOVAL OF STRUCTURES (CANTILEVER SIGN STRUCTURE, 243+45, 104' LT.)	LS	1	-	1
202-04.04	REMOVAL OF STRUCTURES (OVERHEAD SIGN STRUCTURE, 180+25 HHP)	LS	1	-	1
202-03.28	REMOVAL OF MEDIAN BARRIER (SEE FOOTNOTE)	L.F.	3379	-	3379
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	193402		193402
203-01.11	PRESPLITTING OF ROCK EXCAVATION	S.Y.	1975	-	1975
203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	13780	-	13780
203-04	PLACING AND SPREADING TOPSOIL	C.Y.	8430	-	8430
203-06	WATER	M.G.	4710	-	4710
204-03.01	BACKFILL MATERIAL (FLOWABLE FILL)	C.Y.	120	-	120
000.05		C Y	1365		1005
209-05	SEDIMENT REMOVAL TEMPORARY SILT FENCE (WITH BACKING)	C.Y.	1365		1365
209-03.02 209-03.08	ENHANCED ROCK CHECK DAM	EACH	43	•	14051 43
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	50	-	50
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	9		9
209-40.41	CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	36	-	36
209-40.42	CATCH BASIN FILTER ASSEMBLY(TYPE 2)	EACH	10	-	10
209-40.44	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EACH	9	-	9
209-43.46	CATCH BASIN FILTER ASSEMBLY(TYPE 6)	EACH	2	-	2
209-40.47	CATCH BASIN FILTER ASSEMBLY(TYPE 7)	EACH	2	-	2
209-43.48	CATCH BASIN FILTER ASSEMBLY(TYPE 8)	EACH	2	-	2
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	32932		32932
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	783	-	783
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	827		827
307-01.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A-S	TON	3743		3743
307-01.21	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING A-S	TON	1190	-	1190
307-02.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	4781		4781
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	3133	-	3133
307-03.01	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING A	TON	3547	-	3547
307-03.08	ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M2	TON	996		996
307-03.10	ASPHALT CONC MIX (PG76-22)(BPMB-HM) GR CS	TON	4903	-	4903
313-03	TREATED PERMEABLE BASE	S.Y.	29797	-	29797
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	121		121
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	440	-	440
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	23		23
411-01.10	ACS MIX(PG64-22) GRADING D	TON	106		106
411-02.10	ACS MIX (PG70-22) GRADING D	TON	1837	-	1837
411-03.23	ACS MIX (PG76-22) OGFC	TON	4958	-	4958
411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	2.6		2.6
415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	6800	-	6800
501-01.03	PORTLAND CEMENT CONCRETE PAVEMENT (PLAIN) 10"	S.Y.	29797	-	29797
		1 A			

	ESTIMATED ROADWAY QUANTIT
ITEM NO.	DESCRIPTION
604-07.01	RETAINING WALL (WALLNO. 1)
604-07.02	RETAINING WALL (WALL NO. 2)
604-07.03	RETAINING WALL (WALL NO. 3)
604-07.04	RETAINING WALL (WALL NO. 4)
604-07.05	RETAINING WALL (WALL NO. 5)
604-07.06	RETAINING WALL (WALLNO. 6) RETAINING WALL (WALLNO. 7)
604-07.07 604-07.08	RETAINING WALL (WALLING, 7) RETAINING WALL (WALLING, 8)
604-07.08	RETAINING WALL (WALLIND: 8) RETAINING WALL (WALLIND: 13)
004-07.13	RETAINING WALL (WALLING, 15)
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)
607-06.02	30" CONCRETE PIPE CULVERT (CLASS III)
607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)
607-09.02	48" CONCRETE PIPE CULVERT (CLASS III)
610-07.03	18" PIPE DRAIN (BRIDGE DRAIN)
611-01.03	MANHOLES, > 3' - 12' DEPTH
611-02.10	JUNCTION BOX TYPE 1
611-05.01	TRENCH DRAINS
611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)
611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)
611-07.54	18IN ENDWALL (CROSS DRAIN) 3:1
611-07.56	18IN ENDWALL (CROSS DRAIN) 5.1
611-07.58	24IN ENDWALL (CROSS DRAIN) 4:1
611-07.63	36IN ENDWALL (CROSS DRAIN) 3:1
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH
611-12.03	CATCH BASINS, TYPE 12, > 8' - 12' DEPTH
611-12.04	CATCH BASINS, TYPE 12, > 12' - 16' DEPTH
611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH
611-14.04	CATCH BASINS, TYPE 14, > 12' - 16' DEPTH
611-31.03	CATCH BASINS, TYPE 31, > 8' - 12' DEPTH
611-31.04	CATCH BASINS, TYPE 31, > 12' - 16' DEPTH
611 41 00	CATCH BASINS, TYPE 41, > 4' - 8' DEPTH
611-41.02 611-41.03	CATCH BASINS, TYPE 41, > 4 - 8 DEPTH CATCH BASINS, TYPE 41, > 8' - 12' DEPTH
611-41.05	CATCH BASINS, TYPE 41, > 16' - 20' DEPTH
011 11.00	
611-42.02	CATCH BASINS, TYPE 42, > 4' - 8' DEPTH
611-42.03	CATCH BASINS, TYPE 42, > 8' - 12' DEPTH
611-43.02	CATCH BASINS, TYPE 43, > 4' - 8' DEPTH
611-45.02	CATCH BASINS, TYPE 45, > 4' - 8' DEPTH
611-45.03	CATCH BASINS, TYPE 45, > 8' - 12' DEPTH
621-03.02	18" TEMPORARY DRAINAGE PIPE
704 04 04	
701-01.01	CONCRETE SIEEWALK (4 ")
701-02.03	CONCRETE CLIDE DAMP
701-02.03	CONCRETE CURB RAMP
SEE SHEET	2A2 FOR FOOTNOTES

SEE SHEET 2A2 FOR FOOTNOTES

(7)

(30)

(31)

3/29/2018 F:\35\35639\3563921\04\_CAD\TRNS\002A - 002A2 (Estimated Roadway Quantities).sht

IES	QUANTITY	QUANTITY	
UNIT	PARTICIPATING		QUANTIT TOTAL
S.F.	18696		18696
S.F.	5907	-	5907
S.F.	9882		9882
S.F.	\$257	-	5257
S.F.	4619	1.1	4619
S.F.	3729		3729
S.F.	3765		3765
S.F.	5485	-	5485
S.F.	421	-	421
L.F.	3971		3971
L.F.	600	-	600
L.F.	675		675
L.F.	197	-	197
L.F.	62	•	62
L.F.	150		150
	100		100
EACH	1	•	1
FACU			
EACH	1	<u>.</u>	1
L.F.	225		1225
C.Y.	13		13
LB.	342		342
EACH			
EACH	1		1
EACH	1	-	1
EACH	2		2
EACH	1		1
EACH	21		21
		0.355	7
EACH	7	S <del>T</del> i	
EACH	3	3-3	3
EACH	5		5
EACH	5	-	5
EACH	1	-	1
EACH	1	-	1
EACH	1	-	1
EACH	8	•	8
EACH	1	•	1
EACH	1	-	1
EACH	3	-	3
	2		2
EACH	4	•	2
EACH	2		2
EACH	1	-	1
EACH	1		1
1.5	90		90
L.F.	30		90
S.F.	43300		43300
0 -			
S.F.	1400		1400

REV. 3-21-18: ELIMINATED ITEM NOS. 204-08, 303-01.01, 604-01.01, 604-01.02, 612-99.01, 612-99.02, 701-01.09 & 701-01.10; ADDED ITEM NOS. 209-09.43, 209-40.46, 604-07.05, 604-07.06, 604-07.03, 604-07.04, 604-07.05, 604-07.06, 604-07.07, 604-07.08 & 604-07.13; REVISED QUANITTY ON ITEM NOS. 203-01, 203-02.01, 209-60.80, 209-08.08, 209-40.33, 209-40.41, 209-40.44, 607-03.02, 607-05.02, 611-05.01, 611-12.02, 611-12.03, 701-01.01 & 701-02.03; REVISED DESCRIPTION ON ITEM NO. 202-04.02; ELIMINATED REFERENCE TO FOOTNOTE NO. 35 ON ITEM 611-05.01. SEALED BY JAEL W. AL COLTO STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SHEET NO.

2A

PROJECT NO.

NH-I-24-9(79)

TYPE

YEAR CONST. 2018

## ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY PARTICIPATING	QUANTITY NON- PARTICIPATING	QUANTIT TOTAL
701-03	CONCRETE MEDIAN PAVEMENT	C.Y.	151	-	151
702-01	CONCRETE CURB	C.Y.	175	-	175
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	315	-	315
702.04			450	1	150
703-01	CEMENT CONCRETE DITCH PAVING	C.Y.	- 150	-	150
705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	904		904
705-02.10	GUARDRAIL TRANSITION 27IN TO 31IN	EACH	4	-	4
705-02.20	SINGLE GUARDRAIL (TYPE 2) LONG POST (6FT-9FT)	L.F.	500	-	500
705-06.01	W BEAM GR (TYPE 2) MASH TL3	L.F.	3450	-	3450
705-06.10	GR TERMINALTRAILING END (TYPE 13) MASH TL3	EACH	11		11
705-06.20	TANGENT ENERGY ABSORBING TERM MASH TL-3	EACH	12	-	12
705-06.30	GR TERMINAL (TYPE 21) MASH TL2	EACH	1	-	1
705-20.25	TEMPORARY CRASH CUSHION (MASH TL-3)	EACH	7		7
705-20.25		EACH	1	-	/
706-01	GUARDRAIL REMOVED	L.F.	4650	-	4650
707-01.11	CHAIN LINK FENCE (6 FOOT)	L.F.	3200	-	3200
707-01.12	END & CORNER POST ASSEMBLY(CHAIN-LINK FENCE 6')	EACH	25	-	25
707-06.01	REMOVAL OF FENCE (6' CHAIN-LINK)	L.F.	4200		4200
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	13967	-	13967
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	22	-	22
709-01.01	RUBBLE STONE RIP-RAP	C.Y.	8	-	8
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	785	-	785
709-05.08	MACHINED RIP-RAP (CLASS B)	TON	125	-	125
709-05.09	MACHINED RIP-RAP (CLASS C)	TON	91		91
710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	12100	-	12100
710-05	LATERAL UNDERDRAIN	L.F.	730	-	730
710-06.11	LATERAL UNDERDRAIN ENDWALL (2:1)	EACH	1	-	1
710-06.12	LATERAL UNDERDRAIN ENDWALL (3:1)	EACH	1	-	1
710-06.13	LATERAL UNDERDRAIN ENDWALL (4:1)	EACH	1	-	1
710-06.15	LATERAL UNDERDRAIN ENDWALL (6:1)	EACH	60	-	60
711-05.71	51IN SINGLE SLOPE CONCRETE BARRIER WALL	L.F.	3202	-	3202
711-05.72	SINGLE SLOPE HALF CONCRETE BARRIER WALL	L.F.	2351	-	2351
711-05.77	FLARED S/S CONCRETE MEDIAN BARRIER WALL	L.F.	208	-	208
711-05.78	GRADE SEPARATED SINGE SLOPE MEDIAN WALL	L.F.	125	-	125
712-01	TRAFFIC CONTROL	LS	0.9	-	0.9
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	14670	-	14670
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	1123	-	1123
712-04.50	PORTABLE BARRIER RAIL DELINEATOR	EACH	740		740
712-05.01	WARNING LIGHTS (TYPE A)	EACH	350	-	350
712-06	SIGNS (CONSTRUCTION)	S.F.	659	-	659
712-07.03	TEMPORARY EARRICADES (TYPE III)	L.F.	225	-	225
712-08.03	ARROW BOARD (TYPE C)	EACH	2	-	2
712-08.10	MOBILE MESSAGE SIGN UNIT W/ATTENUATOR	HOUR	1200	-	1200
713-01.01	CLASS A CONCRETE (FOUNDATION FOR SIGN SUPPORTS)	C.Y.	3	-	3
713-01.01	STEEL BAR REINFORCEMENT(FOUNDATION FOR SIGN SUPPORTS)	LB.	760	-	760
713-01.02		EACH			
			110	-	110
713-02.15 713-02.21	FLEXIBLE DELINEATOR (YELLOW) SIGN POST DELINEATION ENHANCEMENT	EACH L.F.	80 300		80
115-02.21		L.F.	500		300

							CONST.	2018	NH-I-24-9(79)	
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									3: ELIMINATED ITEM NOS ADDED ITEM NO. 713-09.2	
_		ESTIMATED ROADWAY QUA	NTITIES	_			R	EVISED QL	JANTITY ON ITEM NOS. 70 05-06.30, 707-08.11, 711-05	)5 <b>-</b> 0
-				QUANTITY	QUANTITY	4000000	8	713-16.41;	13-11.02, 713-03.03, 713-14 REVISED DESCRIPTION (	ON
ITEM NO. DESCRIPTION UNIT PARTICIPATING PAGE							AL	OS. 713-09	.01, 713-09.02 & 713-09.03	
	713-02.26	CONCRETE BARRIER/PARAPET DELINEATOR	EACH	450	-	450	0			
	713-06	STEEL I-BEAMS & WF-BEAMS(BREAKAWAY) SIGN SUPPORT	LB.	4550	-	455	iO			
-	713-09.01	STEEL OVERHEAD SIGN STRUCTURE (SPAN 90', OH-2)	EACH	1	-	1				
-	713-09.02	STEEL OVERHEAD SIGN STRUCTURE (SPAN 93', OH-3)	EACH	1	-	1				
-	713-09.03 713-09.20	STEEL OVERHEAD SIGN STRUCTURE (SPAN 188', OH-1) STEEL OVERHEAD SIGN STRUCTURE (OH-4)	EACH EACH	1	-	<u>1</u> 1				
_	713-11.01	"U" SECTION STEEL POSTS PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	2320 2300	-	232				
	713-11.02	PERFORATED/RNOCKOUT SQUARE TUBE PUST	LD.	2300	-	230				
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	220		220	D			
-	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	775		775				
_	713-14 713-15	EXTRUDED ALUMINUM PANEL SIGNS REMOVAL OF SIGNS, POSTS AND FOOTINGS	S.F. LS	2420 0.5	-	242				
	. 10 10			0.0		0.0				
-	713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6	-	6				
-	713-16.41 713-17.30	RELOCATE SIGN MODIFY EXISTING OVERHEAD SIGN STRUCTURE	LS	0.5		0.5				
	713-17.30		1.5	1	-	1				
1	714-08.09	LIGHT STANDARDS (25')	EACH	2	-	2				
	716-01.07	TEMPORARY RAISED PAVEMENT MARKER, YELLOW	EACH	180	-	180				
-	716-01.21	SNWPLWBLE PVMT MRKRS (BI-DIR)(1 COLOR)	EACH	230	-	230				
-	716-01.22 716-01.23	SNWPLWBLE PVMT MRKRS (MONO-DIR)(1 COLOR) SNWPLWBLE PVMT MRKRS (BI-DIR)(2 COLOR)	EACH	460 800	-	460				
-	716-01.30	REMOVAL OF SNOWPLOWABLE REFLECTIVE MARKER	EACH	640	-	640				
-	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	440		44(				
-	716-02.06 716-02.07	PLASTIC PAVEMENT MARKING (TURN LANE ARROW) PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	14 660	-	14				
-	716-02.07	PLASTIC PAVEMENT MARKING (24 DARNER LINE)	L.F.	920	-	920				
-	716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	144	-	144				
-	716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	5	-	5				
1	716-04.01 716-04.02	PLASTIC PAVEMENT MARKING (STRAIGHT-TURN ARROW) PLASTIC PAVEMENT MARKING(DOUBLE TURNING ARROW)	EACH EACH	11 2	-	11				
1	716-04.02	PLASTIC PAVEMENT MARKING(DOUBLE TORNING ARKOW)	L.F.	550	-	550				
	716-04.04	PLASTIC PAVEMENT MARKING (TRANSVERSE SHOULDER)	L.F.	430	-	430				
_	716-04.05	PLASTIC PAVEMENT MARKING (STRAIGHT ARROW)	EACH	36	-	36				
_	716-04.07 716-04.09	PLASTIC PAVEMENT MARKING (EXIT ONLY ARROW) PLASTIC PAVEMENT MARKING (H.O.V. DIAMOND)	EACH	4		4				
	716-04.03	PLASTIC PAVEMENT MARKING (N.O.V. DIAMOND)	S.F.	26	-	26				
-	716-04.14	PLASTIC PAVEMENT MARKING (LANE REDUCTION ARROW)	EACH	4	-	4				
	716-05.01		L.M.	5.6	-	5.6				
	716-05.02 716-05.05	PAINTED PAVEMENT MARKING (8" BARRIER LINE) PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	64680 64	-	6468 64		<b></b>	004100 001	
1								<u> </u>	SEALED BY	
_	716-12.01	ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE)	L.M.	2.7	-	2.7			HAEL W	
-	716-12.02 716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE) ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE)	L.M. L.F.	8.2 3660	-	8.2			A STERED ENGIN D	
-	716-12.03	ENHANCED FLATLINE THERMO PVMT MRKNG (8IN BARRIER LINE) ENHANCED FLATLINE THERMO PVMT MRKNG (4IN DOTTED LINE)	L.F.	550	-	550			AGRICULTURE	1111
-	716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	2150	-	215				· · · · · ·
	716-12.08	ENHANCED FLAT LINE THERMO (12IN BARRIER LINE)	L.F.	4475	-	447		3	J 100 MMERC 3 1088 - 5€	
	716-12.10	ENHANCED FLAT LINE THERMO (12IN DOTTED)	L.F.	720	-	720			OF TENNES	
1	717-01	MOBILIZATION	LS	0.9	· -	0.9				
-	725-20.04 725-20.43	CCTV POLE REMOVE AND RELOCATE PULL BOX (TYPE C)	EACH	1 4	-	1				
	725-20.43	PULL BOX (TYPE C)	EACH	5	-	4 5			TATE OF TENNESS	
-	725-20.45	PULL BOX (TYPE E)	EACH	1	-	1			TATE OF TENNESSE DEPARTMENT OF TRANSPORTATION	
_	SEE SHEET	2A2 FOR FOOTNOTES							ESTIMATED	
									ROADWAY	
									] ]/ \ \ \ \ \ \ \ \ \ \ \ \ \	

#### SEE SHEETS 2A2 FOR FOOTNOTES

3/22/2018 F:\35\35639\3563921\04\_CAD\TRNS\002A - 002A2 (Estimated Roadway Quantities).sht

27:23:034         CABLE (I/C #6 AWG.)         L.F.         25:00            109         25:033         ELECTRICAL CONNECTION (120/240V SINGLE PHASE)         LS         1            107         25:033         ELECTRICAL CONNECTION (120/240V SINGLE PHASE)         LS         1            107         25:134         RADAR DETECTION SYSTEM REMOVE & RELOCATE         EACH         2            108         RADAR DETECTION SYSTEM REMOVE & RELOCATE         EACH         2            1725:123         COMDUIT BANK (MPE 1)         L.F.         50            1725:223         COMDUIT BANK (MPE 4)         L.F.         180            1725:224         COMDUIT BANK (MPE 4)         L.F.         180            1725:227         280 COMDUT FORED         L.F.         180            1725:227         280 COMDUT FORED         L.F.         180            1725:237         280 COMDUT FORED         L.F.         180            1725:237         280 COMDUT FORED         L.F.         180            1725:237         280 COMDUT FORED         L.F.         100            1725:238		ITEM NO.	DESCRIPTION	UNIT	QUANTITY PARTICIPATING	QUANTITY NON- PARTICIPATING	QUANTIT TOTAL
19         78 25:07.3         ELECTRICAL CONNECTION (TEMP SERVICE CCTV)         L6         1           17         725:13.4         REMOVAL & REPLACE TYPE B CABINET         EACH         2           18         725:13.4         RADAR DETECTION SYSTEM REMOVE & RELOCATE         EACH         2           12         725:23         CONDUIT BANK (TYPE 1)         LF,         50         -           1725:22.4         CONDUIT BANK (TYPE 1)         LF,         950         -           1725:22.71         2N CONDUIT BORED (TYPE 4)         LF,         175         -           1725:22.72         2N CONDUIT BORED (TYPE 4)         LF,         130         -           1725:22.73         2N CONDUIT BORED W/ BANK         LF,         130         -           1725:22.71         2N CONDUIT BORED W/ BANK         LF,         130         -           1725:23.02         FIBER OPTIC CABLE (2F - NSTALL ONLY)         LF,         2050         -           1725:32.5         FIBER OPTIC COLSULE (12F )         EACH         1         -           1725:32.6         FIBER OPTIC COLSULE (12F )         EACH         1         -           1725:32.8         FIBER OPTIC COLSULE (12F )         EACH         1         -           125:32.5	t	725-20.54	CABLE (1/C #6 AWG.)	L.F.	2500	-	2500
19)         725:132         REMOVAL & REPLACE TYPE B CABINET         EACH         1         -           2725:134         RADAR DETECTION SYSTEM REMOVE & RELOCATE         EACH         2         -           725:21.95         RADAR DETECTION SYSTEM REMOVE & RELOCATE         EACH         2         -           725:22.34         CONDUIT BANK (TYPE 1)         LF.         50         -           725:22.41         CONDUIT BANK (TYPE 1)         LF.         195         -           725:22.72         2N CONDUIT FORED         LF.         195         -           725:22.71         2N CONDUIT EORED         LF.         195         -           725:22.72         2N CONDUIT EORED WBAK         LF.         190         -           725:23.01         TIS CARD TSSTIMG         LS         1         -           725:23.10         FIBER OPTIC CABLE (72 F - NISTALL ONLY)         LF.         150         -           725:23.25         FIBER OPTIC CABLE (72 F - NISTALL ONLY)         LF.         1         -           725:23.25         FIBER OPTIC CADRUP FANEL (12 F )         EACH         1         -           725:23.25         FIBER OPTIC CADRUP FANEL (12 F )         -         -         -           725:23.15         FI	- [	725-20.72	ELECTRICAL CONNECTION (120/240V SINGLE PHASE)	LS	1	-	1
20)         725:1194         PRADAR DETECTOR         EACH         2           725:125         RADAR DETECTOR         EACH         2         -           725:22:24         CONDUT BANK (TYPE 1)         L.F.         50         -           725:22:24         CONDUT BANK (TYPE 1)         L.F.         950         -           725:22:24         CONDUT BANK (TYPE 4)         L.F.         950         -           725:22:27         2IN CONDUT FORED         L.F.         195         -           725:22:27         2IN CONDUT FORED         L.F.         190         -           725:22:17         2IN CONDUT FORED W/ BANK         L.F.         190         -           725:23:01         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         190         -           725:32:15         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         180         -           725:32:15         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         100         -           725:32:15         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         100         -           725:33:15         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         100         -           725:34:15         SYSTEM INTEGRATON	F						1
725-11 95         RADAR DETECTOR         EACH         2           725-22.23         CONDUT BANK (TYPE 1)         L.F.         960         -           725-22.24         CONDUT BANK (TYPE 4)         L.F.         975         -           725-22.24         CONDUT BANK (TYPE 4)         L.F.         975         -           725-22.17         2IN CONDUT         CORED         L.F.         130         -           725-22.72         2IN CONDUT FORED         L.F.         130         -         -           725-22.73         2IN CONDUT FORED         L.F.         130         -         -           725-23.01         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         160         -           725-23.02         FIBER OPTIC CABLE (72 F)         EACH         1         -           725-23.21         FIBER OPTIC CABLE (72 F)         EACH         1         -           725-23.25         FIBER OPTIC CABLE (72 F)         EACH         1         -           725-23.26         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-23.28         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-24.51         SYSTEM INTEGRATION         LS	· 'F					-	1
725:22.3         CONDUT BANK (TYPE 1)         L.F.         50         -           725:22.34         CONDUT BANK (TYPE 4)         L.F.         950         -           725:22.41         CONDUT BANK BORED (TYPE 4)         L.F.         195         -           725:22.71         2IN CONDUT FORED WI BANK         L.F.         195         -           725:22.73         2IN CONDUT FORED WI BANK         L.F.         190         -           725:32.73         2IN CONDUT FORED WI BANK         L.F.         190         -           725:32.01         FIBER OPTIC CABLE (72 F. INSTALL ONLY)         L.F.         190         -           725:32.11         FIBER OPTIC CABLE (72 F. INSTALL ONLY)         L.F.         150         -           725:32.51         FIBER OPTIC CABLE (72 F. INSTALL ONLY)         L.F.         100         -           725:32.51         FIBER OPTIC CADLE (72 F. INSTALL ONLY)         L.F.         11         -           725:32.51         FIBER OPTIC CADLE (72 F. INSTALL ONLY)         L.F.         100         -           725:43.11         BURN-IN-PERIOD         L.S         1         -           725:43.51         SYSTEM INTEGRATION         L.S         1         -           725:44.51         SYSTEM	20)					-	2
725-22.4         CONDUIT BANK (TYPE 4)         L.F.         990         -           725-22.34         CONDUIT BANK BORED (TYPE 4)         L.F.         195         -           725-22.71         2IN CONDUIT CORED VIEANK         L.F.         190         -           725-22.72         2IN CONDUIT EORED VIEANK         L.F.         190         -           725-22.73         2IN CONDUIT EORED VIEANK         L.F.         190         -           725-22.73         2IN CONDUIT EORED VIEANK         L.F.         190         -           725-30.0         FIBER OPTIC TESTING         L.S         1         -           725-31.0         FIBER OPTIC CADSURE (72 F)         EACH         1         -           725-32.31         FIBER OPTIC SUCSURE (72 F)         EACH         1         -           725-33.15         FIBER OPTIC SUCSURAL (72 F)         EACH         1         -           725-33.15         FIBER OPTIC SUCSURAL (72 F)         EACH         1         -           725-33.15         FIBER OPTIC SUCSURAL (22 F)         EACH         1         -           725-33.5         SYSTEM INTEGRATION         LS         1         -           725-4.55         AS-BUILT PLAINS         LS         1	ł					-	2
725-22.4         CONDUT FANK BORED (TYPE 4)         L.F.         775         -           7255-22.71         2IN CONDUIT         L.F.         195         -           725-22.72         2IN CONDUIT EORED         L.F.         190         -           725-22.73         2IN CONDUIT EORED W/ BANK         L.F.         190         -           725-23.02         FIBER OPTIC TESTING         L.F.         190         -           725-32.11         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         150         -           725-32.11         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         150         -           725-32.25         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-33.31         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-34.41         BURN-IN PERIOD         L.S         1         -           725-44.41         BURN-IN PERIOD         L.S         1         -           725-44.41         BURN-IN PERIOD         L.S         1         -           725-44.41         BURN-IN PERIOD         L.S         1         -           725-44.51         SYSTEM INTEGRATION         L.S         1         -							50 950
725-22.71         2N CONDUIT         L.F.         195         -           725-22.72         2N CONDUIT EORED         L.F.         130         -           725-22.73         2N CONDUIT EORED W/ BANK         L.F.         190         -           725-22.73         2N CONDUIT EORED W/ BANK         L.F.         190         -           725-30.0         FIBER OPTIC TESTING         L.S         1         -           725-31.0         FIBER OPTIC CASURE (72 F)         L.F.         150         -           725-32.1         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-33.25         FIBER OPTIC SUCIE FUSION         EACH         80         -           725-33.31         FIBER OPTIC SUCIE FUSION         EACH         1         -           725-32.81         FIBER OPTIC SUCIE FUSION         EACH         1         -           725-33.15         FIBER OPTIC SPOP PANEL (12 F)         EACH         1         -           725-34.51         SYSTEM INTEGRATION         L.S         1         -           725-45.51         SYSTEM INTEGRATION         LS         1         -           740-0.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S,Y.         400         -	ł						775
725-22.72         2N CONDUT EORED         L.F.         190         -           725-22.73         2N CONDUT EORED W/ BANK         L.F.         190         -           725-22.73         2N CONDUT EORED W/ BANK         EACH         20         -           725-23.01         TIS CABLE MARKER         EACH         20         -           725-33.01         FIBER OPTIC CABLE (12 F - INSTALL ONLY)         L.F.         190         -           725-32.11         FIBER OPTIC CADE (12 F - INSTALL ONLY)         L.F.         190         -           725-32.11         FIBER OPTIC CADE (12 F - INSTALL ONLY)         L.F.         190         -           725-32.31         FIBER OPTIC CADE (12 F - INSTALL ONLY)         EACH         1         -           725-33.31         FIBER OPTIC DROP PAREL (12 F - INSTALL ONLY)         EACH         1         -           725-34.51         SVSTEM INTEGRATION         LS         1         -           725-34.51         SVSTEM INTEGRATION         LS         1         -           725-44.51         SVSTEM INTEGRATION         LS         1         -           726-0         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           740-10.03         GEOTEXTLE ('YPE INJEROS						-	195
725-22.73         21N CONDUTE DORED W/ BANK         L.F.         190         -           725-23.01         TIS CABLE MARKER         EACH         20         -           725-23.02         FIBER OPTIC TESTING         LS         1         -           725-23.02         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         2050         -           725-23.25         FIBER OPTIC CAPD CABLE (72 F )         EACH         1         -           725-23.21         FIBER OPTIC CAPO CABLE (72 F )         EACH         1         -           725-23.25         FIBER OPTIC CAPO PABLE (12 F )         EACH         1         -           725-23.25         FIBER OPTIC CAPO PABLE (12 F )         EACH         1         -           725-23.31         FIBER OPTIC CAPO PABLE (12 F )         EACH         1         -           725-24.55         AS-BUILT PLANS         LS         1         -           725-24.55         AS-BUILT PLANS         LS         1         -           740-10.04         GEOTEXTILE ("YPE III/EROSION CONTROL)         S.Y.         400         -           740-10.05         GEOTEXTILE ("YPE III/EROSION CONTROL)         S.Y.         1070         -           740-10.04         GEOTEXTILE ("YPE III/EROSION	ł					-	130
725-301         ITS CABLE MARKER         EACH         20         -           725-302         FIBER OPTIC TESTING         LS         1         -           725-302         FIBER OPTIC CABLE (?2 F - INSTALL ONLY)         L.F.         2050         -           725-32:1         FIBER OPTIC CABLE (?2 F)         EACH         1         -           725-32:5         FIBER OPTIC COOP CABLE (12 F)         EACH         1         -           725-33:1         FIBER OPTIC COOP PAREL (12 F)         EACH         80         -           725-33:1         FIBER OPTIC COOP PANEL (12 F)         EACH         1         -           725-44:1         BURNIN PERIOD         LS         1         -           730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         LS         1         -           740-10.03         GEOTEXTILE (TYPE IIJ/STABLIZATION)         S.Y.         400         -           740-11.05         TEMPORARY SEDIMG (WTH MULCH)         UNIT         670         - <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>190</td>						-	190
27)         725-33.10         FIBER OPTIC CABLE (72 F - INSTALL ONLY)         L.F.         2050         -           725-32.12         FIBER OPTIC CLOSURC (72 F)         EACH         1         -           725-32.25         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.26         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.31         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.31         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.31         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.31         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-43.51         SYSTEM INTEGRATION         LS         1         -           725-44.55         AS-BUILT PLANS         LS         1         -           740-10.03         GEOTEXTILE (TYPE IN/STABIL2ATION)         S.Y.         400         -           740-10.05         TEMPORARY TRAFFIC SIGNAL SYSTEM         LF.         62864         -           740-11.05         TEMPORARY SEDIMENT TUBE 24IN         LF.         62864         -           740-10.06         SEEDING (WI	1				20	-	20
725-32.1         FIBER OPTIC DROP CABLE (12 F)         L.F.         150         -           725-32.5         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-33.1         FIBER OPTIC SPLICE FUSION         EACH         80         -           725-33.1         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-33.1         FIBER OPTIC SPLICE FUSION         LS         1         -           725-34.1         BURN-IN PERIOD         LS         1         -           725-44.51         SYSTEM INTEGRATION         LS         1         -           725-44.55         AS-BUILT PLANS         LS         1         -           725-44.55         AS-BUILT PLANS         LS         1         -           725-44.50         GEOTEXTILE (TYPE IIN/EROSION CONTROL)         S.Y.         400         -           740-10.04         GEOTEXTILE (TYPE IIN/EROSION CONTROL)         S.Y.         15790         -           740-10.05         TEMPORARY TRAFIC SIGNAL SYSTEM         EACH         1         -           740-10.04         GEOTEXTILE (TYPE IIN/EROSION CONTROL)         S.Y.         15790         -           740-10.05         EEDING (WTH MULCH)         UNIT <td< td=""><td>1</td><td>725-23.02</td><td>FIBER OPTIC TESTING</td><td>LS</td><td>1</td><td>-</td><td>1</td></td<>	1	725-23.02	FIBER OPTIC TESTING	LS	1	-	1
725-33.25         FIBER OPTIC CLOSURE (72 F)         EACH         1         -           725-32.81         FIBER OPTIC SPLICE FUSION         EACH         80         -           725-32.81         FIBER OPTIC SPLICE FUSION         EACH         1         -           725-32.81         FIBER OPTIC SPLICE FUSION         LS         1         -           725-34.41         BURN-IN PERIOD         LS         1         -           725-44.51         SYSTEM INTEGRATION         LS         1         -           725-45.51         SYSTEM INTEGRATION         LS         1         -           725-46.51         AS-BULT PLANS         LS         1         -           725-47.51         SYSTEM INTEGRATION         LS         1         -           725-47.51         AS-BULT PLANS         LS         1         -           727-40.51         TEMPORARY TRAFFIC SIGNAL SYSTEM         LS         1         -           66         740-10.03         GEOTEXTILE (TYPE INJERADIZATION)         S.Y.         4000         -           740-10.04         GEOTEXTILE (TYPE INJERADIZATION)         LF.         62864         -           740-10.05         SEEDING (MITH MULCH)         UNIT         670         -<	27)	725-23.10	FIBER OPTIC CABLE (72 F - INSTALL ONLY)	L.F.	2050		2050
725-33.28         FIBER OPTIC SPLICE FUSION         EACH         80         -           725-23.31         FIBER OPTIC DROP PANEL (12 F)         EACH         1         -           725-24.31         BURN-NPERIOD         LS         1         -           725-24.51         SYSTEM INTEGRATION         LS         1         -           725-24.55         AS-BUILT PLANS         LS         1         -           730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         15790         -           740-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         15790         -           740-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         15790         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           601-61.07         TEMPORARY SEDIMENT TUBE 24IN         UNIT         6270         -           601-61.07         TEMPORARY SEDIMENT TUBE 24IN         UNIT         6270         -           801-61.06         SEE		725-23.21		L.F.	150	-	150
725-23.31         FIBER OPTIC DROP PANEL (12 F)         EACH         1         -           725-23.41         BURN-IN PERIOD         LS         1         -           725-24.41         BURN-IN PERIOD         LS         1         -           725-24.51         SYSTEM INTE GRATION         LS         1         -           725-24.55         AS-BUILT PLANS         LS         1         -           730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.04         GEOTEXTILE (TYPE III)(STABLIZATION)         S.Y.         400         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           740-10.06         SEEDING (WITH MULCH)         UNIT         670         -           801-01         SEEDING (WITH MULCH)         UNIT         1000         -           801-01.06         SEEDING (WITH MULCH)         UNIT         621         -           801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         621         -           801-01.08         SEEDING (WITH MULCH)         UNIT         621		1, 200, 20, 100, 20, 100, 20, 20, 20, 20, 20, 20, 20, 20, 20,				-	1
725-24.41         BURN-IN PERIOD         LS         1           725-24.51         SYSTEM INTEGRATION         LS         1           725-24.55         AS-BUILT PLANS         LS         1           725-24.57         AS-BUILT PLANS         EACH         1           725-24.57         TEMPORARY SEDIMENT TUBE 24IN         LF.         600           801-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         1000         -           2801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT		the second se			77.7	-	80
21)         725-24.51         SYSTEM INTEGRATION         LS         1         -           725-24.55         AS-BUILT PLANS         LS         1         -           29)         730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           (6)         740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           730-40         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         15790         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           722         801-01         SEEDING (WITH MULCH)         UNIT         670         -           780         601-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         1000         -           780         801-01.06         SEEDING (WITH MULCH)         UNIT         670         -           801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         670         -           801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         50         -           801-01.08         SEEDING (SPECIAL MIXTURE) WITH							1
725-24.55         AS-BUILT PLANS         LS         1         -           730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           (6)         740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           730-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           740-11.05         TEMPORARY SEDIMENT TUBE 24IN         UNIT         670         -           740-11.06         SEEDING (WITH MULCH)         UNIT         670         -           801-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         1000         -           801-01.08         SEEDING (SPECIAL MIXTURE)         UNIT         1000         -           801-01.08         SEEDING (SPECIAL MIXTURE)         UNIT         1000         -           801-01.08         SEEDING (SPECIAL MIXTURE)         UNIT         1000         -           801-01.10         REES (AS - ACER SACCHARUM)         EACH         -         6           802-01.11						-	1
29)         730-40         TEMPORARY TRAFFIC SIGNAL SYSTEM         EACH         1         -           (6)         740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.04         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           740-11.05         TEMPORARY SEDIMENT TUBE 24IN         UNIT         670         -           20)         801-61         SEEDING (WITH MULCH)         UNIT         824         -           21)         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           801-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         621         -           801-03         WATER (SEEDING & SODDING)         M.G.         175         -           801-01         WATER (SEEDING & SODDING)         M.G.         175         -           802-01.11         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (LM - LAGERSTROEMIA Y MUSKOGEE')         EACH         -	21)					-	1
(6)         740-10.03         GEOTEXTILE (TYPE III)(EROSION CONTROL)         S.Y.         400         -           33)         740-10.04         GEOTEXTILE (TYPE IV)(STABILIZATION)         S.Y.         15790         -           740-10.04         GEOTEXTILE (TYPE IV)(STABILIZATION)         S.Y.         15790         -           740-10.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           22)         801-01.05         SEEDING (WITH MULCH)         UNIT         670         -           801-01.06         SEEDING (WITH MULCH)         UNIT         824         -           801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         1000         -           801-01.08         SEEDING (WITH MULCH)         UNIT         621         -           801-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           801-03         WATER (SEEDING & SODDING)         M.G.         175         -           (8)         02-01.11         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (M LAGERSTROEMA X'MUSKOGEE')         EACH         -         15           802-03.03         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP') <td></td> <td>725-24.55</td> <td>AS-BUILT PLANS</td> <td>1.5</td> <td>1</td> <td></td> <td>1</td>		725-24.55	AS-BUILT PLANS	1.5	1		1
33         740-10.04         GEOTEXTILE (TYPE IV)(STABILIZATION)         S.Y.         15790         -           740-11.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           22)         801-01         SEEDING (WITH MULCH)         UNIT         670         -           36)         01-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           46)         801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         824         -           37)         801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           3801-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           3801-01.03         WATER (SEEDING & SODDING)         M.G.         175         -           6802-01.12         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (LM - LAGERSTROEMIA X MUSKOGEE')         EACH         -         25           802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         246           802-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         381           802-03.04         SHRUBS (JH	29)	730-40	TEMPORARY TRAFFIC SIGNAL SYSTEM	EACH	1	-	1
740-11.05         TEMPORARY SEDIMENT TUBE 24IN         L.F.         62864         -           22)         801-01         SEEDING (WITH MULCH)         UNIT         670         -           36)         801-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           36)         801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         1000         -           37)         801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           301-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           301-03         WATER (SEEDING & SODDING)         M.G.         175         -           40         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (M - LAGERSTROEMIA X MUSKOGEE')         EACH         -         15           408         02-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         246           402-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -           802-13.08 <td>(6)</td> <td>740-10.03</td> <td>GEOTEXTILE (TYPE III)(EROSION CONTROL)</td> <td>S.Y.</td> <td>400</td> <td>-</td> <td>400</td>	(6)	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	400	-	400
22)         801-01         SEEDING (WITH MULCH)         UNIT         670         -           36)         801-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           (6)         801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         1000         -           37)         801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           301-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           23)         801-03         WATER (SEEDING & SODDING)         M.G.         175         -           401-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -         -           301-03         WATER (SEEDING & SODDING)         M.G.         175         -         -           68         802-01.11         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (AL - AUBERSTROEMIA X 'MUSKOGEE')         EACH         -         25           68         802-01.15         TREES (QL - OUERCUS LYRATA)         EACH         -         246           802-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         246	33)	740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	15790		15790
36)         801-01.06         SEEDING (SPECIAL MIXTURE)         UNIT         824         -           (6)         801-01.07         TEMPORARY SEEDING (WITH MULCH)         UNIT         1000         -           37)         801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           301-02.01         CROWN VETCH MIXTURE) WITH MULCH         UNIT         50         -           3801-03         WATER (SEEDING & SODDING)         M.G.         175         -           401-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           3801-03         WATER (SEEDING & SODDING)         M.G.         175         -           401-02.01         CROWN VETCH MIXTURE) VITH MULCH         UNIT         50         -           401-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           538         MATER (SEEDING & SODDING)         M.G.         175         -           54         MATER (SEEDING & SODDING)         EACH         -         6           802-01.12         TREES (LM - LAGERSTROEMIA X'MUSKOGEE')         EACH         -         25           5802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -		740-11.05	TEMPORARY SEDIMENT TUBE 24IN	L.F.	62864	-	62864
(6)       801-01.07       TEMPORARY SEEDING (WITH MULCH)       UNIT       1000       -         37)       801-01.08       SEEDING (SPECIAL MIXTURE) WITH MULCH       UNIT       621       -         801-02.01       CROWN VETCH MIXTURE (WITHOUT MULCH)       UNIT       50       -         23)       801-03       WATER (SEEDING & SODDING)       M.G.       175       -         (8)       802-01.11       TREES (AS - ACER SACCHARUM)       EACH       -       6         (8)       802-01.12       TREES (LM - LAGERSTROEMIA X MUSKOGEE')       EACH       -       15         (8)       802-01.15       TREES (QL - QUERCUS LYRATA)       EACH       -       15         (8)       802-03.03       SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')       EACH       -       246         (8)       802-03.04       SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')       EACH       -       381         (8)       802-03.04       SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')       EACH       -       381         (8)       802-13.08       ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)       EACH       28       -         802-13.16       CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.       EACH       28       -       -						-	670
37)         801-01.08         SEEDING (SPECIAL MIXTURE) WITH MULCH         UNIT         621         -           801-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           23)         801-03         WATER (SEEDING & SODDING)         M.G.         175         -           23)         801-03         WATER (SEEDING & SODDING)         M.G.         175         -           23)         802-01.11         TREES (AS - ACER SACCHARUM)         EACH         -         6           802-01.12         TREES (LM - LAGERSTROEMIA X MUSKOGEE')         EACH         -         25           802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           7         6         802-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         246           802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -           802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28	1					-	824
801-02.01         CROWN VETCH MIXTURE (WITHOUT MULCH)         UNIT         50         -           23)         801-03         WATER (SEEDING & SODDING)         M.G.         175         -           (8)         802-01.11         TREES (AS - ACER SACCHARUM)         EACH         -         6           (8)         802-01.12         TREES (LM - LAGERSTROEMIA X 'MUSKOGEE')         EACH         -         25           (8)         802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           (8)         802-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         246           (8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         246           (8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           (8)         802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -           802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -         -           803-01 </td <td></td> <td>and the second se</td> <td></td> <td></td> <td></td> <td>-</td> <td>1000</td>		and the second se				-	1000
23)       801-03       WATER (SEEDING & SODDING)       M.G.       175       -         (8)       802-01.11       TREES (AS - ACER SACCHARUM)       EACH       -       6         (8)       802-01.12       TREES (LM - LAGERSTROEMIA X 'MUSKOGEE')       EACH       -       25         (8)       802-01.15       TREES (QL - QUERCUS LYRATA)       EACH       -       15         (8)       802-03.03       SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')       EACH       -       246         (8)       802-03.04       SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')       EACH       -       381         (8)       802-13.05       ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)       EACH       28       -         802-13.06       ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT C.G.       EACH       28       -         802-13.15       PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.       EACH       28       -         802-13.28       AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)       EACH       28       -         803-01       SODDING (NEW SOD)       S.Y.       3800       -         803-12.02       EROSION CONTROL BLANKET (TYPE II)       S.Y.       6100       - <td>3/)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>621 50</td>	3/)						621 50
(8)         802-01.12         TREES (LM - LAGERSTROEMIA X'MUSKOGEE')         EACH         -         25           (8)         802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           (8)         802-03.03         SHRUBS (HSO - HEMEROCALLIS X'STELLA DE ORO')         EACH         -         246           (8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           (8)         802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         -         381           802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -           802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -	23)						175
(8)         802-01.12         TREES (LM - LAGERSTROEMIA X'MUSKOGEE')         EACH         -         25           (8)         802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           (8)         802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           (8)         802-03.03         SHRUBS (HSO - HEMEROCALLIS X'STELLA DE ORO')         EACH         -         246           (8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           (8)         802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -           802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -           802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -	(8)	802-01.11	TREES (AS - ACER SACCHARUM)	EACH		6	6
(8)         802-01.15         TREES (QL - QUERCUS LYRATA)         EACH         -         15           (8)         802-03.03         SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')         EACH         -         246           (8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           (8)         802-13.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           (8)         602-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -           802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -           802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           605-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -	- H				-		25
(8)         802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -         -         381           802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -	(8)	802-01.15	TREES (QL - QUERCUS LYRATA)	EACH	-	15	15
802-03.04         SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')         EACH         -         381           802-13.08         ITEA VIRGINICA (VIRGINIA SWEETSPIRE 2-5FT CNTNR GRWN)         EACH         28         -         802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -         802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -         802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         - <td>(8)</td> <td>802-03.03</td> <td>SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')</td> <td>EACH</td> <td>-</td> <td>246</td> <td>246</td>	(8)	802-03.03	SHRUBS (HSO - HEMEROCALLIS X 'STELLA DE ORO')	EACH	-	246	246
802-13.15         PHYSOCARPUS OPULIFOLIUS (NINEBARK) 2-5FT C.G.         EACH         28         -           802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -	(8)	802-03.04	SHRUBS (JHB - JUNIPERUS HORIZONTALIS 'BLUECHIP')	EACH	-	381	381
802-13.16         CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.         EACH         28         -           802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -		and the second se		and a second		-	28
802-13.28         AMORPHA FRUTICOSA (INDIGOBUSH 2-5 FT CNTNR GRWN)         EACH         28         -           803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -							28
803-01         SODDING (NEW SOD)         S.Y.         3800         -           805-12.02         EROSION CONTROL BLANKET (TYPE II)         S.Y.         6100         -							28
805-12.02 EROSION CONTROL BLANKET (TYPE II) S.Y. 6100 -					20	-	20
		803-01	SODDING (NEW SOD)	S.Y.	3800	-	3800
24) 806-02.03 PROJECT MOWING CYCL 12 -		805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	6100		6100
	24)	806-02.03	PROJECT MOWING	CYCL	12	•	12

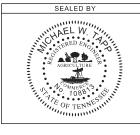
#### SEE SHEET 2A2 FOR FOOTNOTES

#### FOOTNOTES:

- (1) SEE SHEET NO. 2E4 FOR TABULATED QUANTITIES.
- (2) SALVAGED ITEMS SHALL BE COME THE PROPERTY OF THE CONTRACTOR.
- (3) FOR REMOVAL OF EXISTING CONCRETE PAVEMENT.
- (4) INCLUDES 3172 L.F. OF 32" BARRIER WALL ON HICKORY HOLLOW PAFKWAY (INCLUDING 382 L.F. ON THE BRIDGES OVER CSX AND I-24) AND 207 L.F. OF 51" BARRIER WALL NEAR THE EXISTING BRIDGE PIERS ON I-24.
- (5) SEE SPECIAL GRADING NOTES ON SHEET NO. 2D.
- (6) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
- (7) STANDARD DRAWING STD-1-7 (OR STD-1-11) IS TO BE USED FOR BURIAL OF THE OUTLET PIPE AND FOR END TREATMENT DETAILS
- (8) SEE SHEET NOS. 85 91 FOR DETAILS.
- (9) THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF MASH FOR TEST LEVEL 3. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
- (10) INCLUDES 551 TONS FOR BRIDGE SLOPE PROTECTION AND 234 TONS FOR TEMPORARY CONSTRUCTION EXITS.
- (11) FOR OUTLET PROTECTION.
- (12) INCLUDES THE REMOVAL OF ANY SIGNS WITHIN THE PROJECT LIMITS AS DIRECTED BY THE ENGINEER.
- (13) INCLUDES THE INSTALLATION OF SIGN NOS. 102 & 103 ON THE EXISTING SIGN STRUCTURE, REMOVAL OF AN EXISTING SIGN. AND ANY NECESSARY MODIFICATIONS TO THE VERTICAL SUPPORTS.
- (14) THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- (15) FOR TEMPORARY TRAFFIC CONTROL.
- (16) CONTRACTOR SHALL USE THE RIBBON METHOD FOR APPLICATION.
- (17) INCLUDES POLE, CCTV, LOWERING DEVICE, TRANSFORMER, WIRELESS COMMUNICATIONS ANTENNA EQUIPMENT, AND NEW FOUNDATION
- (18) INCLUDES TEMPORARY OVERHEAD 120/240V SERVICE FOR CCT/ DURING CONSTRUCTION. INCLUDES WCOD POLES, ELECTRICAL SERVICE WITH METER BASE, OVERHEAD TRIPLEX #6 WIRING, AND CONDUIT/CABLE TO CCTV POLE.
- (19) INCLUDES CABINET, WIRELESS COMMUNICATIONS EQUIPMENT, AND ALL EQUIPMENT WITHIN THE CABINET TO MAKE THE CCTV FULLY OPERATIONAL.
- (20) INCLUDES RDS CABINET, RADIO, SOLAR PANEL, POWER SUPPLY, AND ALL EQUIPMENT INSIDE CABINET TO MAKE THE RDS FULLY OPERATIONAL
- (21) INCLUDES COORDINATING WITH TDOT TO ASSURE THAT THE EQUIPMENT IS OPERATIONAL PER TDOT STANDARDS.
- (22) INCLUDES 170 UNITS FOR WASTE AREAS.
- (23) INCLUDES 100 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL
- (24) 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
- (25) INCLUDES RELOCATION OF EXISTING INFORMATIONAL SIGN AT 253+95, 100' LT. TO A POINT OUTSIDE OF THE CLEAR ZONE AND RELOCATION OF I-24 ROUTE MARKER AT 721+83, 80' RT. TO A POINT BEHIND THE PROP. GUARDRAIL.
- (26) PROVIDE POLE AND FOUNDATION FOR RDS UNIT.
- (27) PULL EXISTING FIBER OPTIC CABLE BACK TO THE PULL BOXES SHOWN ON THE PLANS AND REINSTALL CABLE IN NEW TYPE **4 CONDUIT BANK**
- (28) INCLUDES 13,514 TONS FOR SOIL IMPROVEMENTS ALONG RETAINING WALL NOS. 1 4 AND 266 TONS FOR SINKHOLE TREATMENT.
- (29) CONTRACTOR SHALL SUBMIT A TEMPORARY SIGNAL PLAN TO TDOT FOR APPROVAL FOR THE INTERSECTION OF HICKORY HOLLOW PARKWAY AND THE TEMPORARY TIE FOR RAMP "A".
- (30) INCLUDES 600 L.F. ON RAMP "C" AND 625 L.F. ON RAMP "D".
- (31) INCLUDES 38,500 S.F. FOR SIDEWALKS AND 376 S.F. FOR THE FLARED SINGLE SLOPE CONCRETE MEDIAN BARRIER WALL UNDER THE I-24 BRIDGE
- (32) INCLUDES 73 TONS FOR THE FLARED SINGLE SLOPE CONCRETE MEDIAN BARRIER WALL UNDER THE I-24 BRIDGE AND 710 TONS FOR FILLING OF EXISTING 12' X 12' BOX CULVERT.
- (33) FOR SINKHOLE TREATMENT.
- (34) FOR THE BACKFILLING AND ABANDONMENT OF EXIST. PIPES AND INLETS.
- (35) ELIMINATED FOOTNOTE.
- (36) FOR DETAILS, SEE SEED MIX 1 IN THE LANDSCAPING SHEETS.
- (37) FOR DETAILS, SEE SEED MIX 2 IN THE LANDSCAPING SHEETS.

TYPE	YEAR	PROJECT NO.	SHEET NO.			
CONST.	2018	NH-I-24-9(79)	2A2			
REV. 3-21-18: ELIMINATED ITEM NOS. 801-99.01, 801-99.02,						

802-01.13, 802-01.14, 802-01.16, 802-03.01, 802-03.02, 802-03.05 & 802-03.06; ADDED ITEM NOS. 801-01.06 & 801-01.08; REVISED QUANTITY ON ITEM NOS. 740-11.05 802-01 11 802-01 12 802-01 15 802-03 03 & 802-03 04 ELIMINATED FOOTNOTE NO. 35; ADDED FOOTNOTE NO. 36 & 37; REVISED FOOTNOTE NOS. 8, 25, 28 & 30.



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION



# **GENERAL NOTES**

#### GRADING

- ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION (1) DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN (2) ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR (3) OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) WITHOUT APPROVAL BY FEMA. 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

- ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED (1) AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS. WILL BE MEASURED AND PAID FOR UNDER ITEMS 203-04 AND/OR 203-07 SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.
- SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO (2) PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES
- ITEM NO. 801-02.01, CROWN VETCH (WITHOUT MULCH), AND EROSION (3) CONTROL BLANKET, SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.
- ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE (4) EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

#### GUARDRAIL

- THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING (1) 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.
- IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL (2) 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 TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS TO DELINEATE GUARDRAIL END AND A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL END TERMINAL
- GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE (3) ROADWAY IS OPENED TO TRAFFIC

#### DRAINAGE

- THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. (1) 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 ALL DRANAGE STRUCTURES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, EUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE ( PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).
- CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR (3) BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

- THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS (4) OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).
- WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION (5) 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.
- ALL EXISTING PIPES AS SHOWN ON PLANS OR AS DIRECTED BY THE (7)ENGINEER THAT ARE TO BE LEFT IN PLACE AND ABANDONED MUST BE BACKFILLED AND PLUGGED. ALL COST FOR THIS WORK SHALL BE INCLUDED IN ITEM NO. 204-08.01, BACKFILL MATERIAL (FLOWABLE FILL), CY

#### FENCING

- LOCATION OF THE FENCE SHALL BE ONE FOOT INSIDE THE RIGHT-OF-WAY (1) EXCEPT WHERE SHOWN ON THE PLANS
- FENCES SHALL BE TURNED IN AT DRAINAGE STRUCTURES, STOCK PASSES (2) AND BRIDGES WHERE DIRECTED BY THE ENGINEER SO AS TO ABUT WINGWALLS AND/OR ABUTMENTS.
- THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS TWO (3) WEEKS NOTICE PRIOR TO CUTTING FENCES.
- THE CONTRACTOR SHALL BE REQUIRED TO INSTALL ACCESS CONTROL (4)FENCES PRIOR TO CUTTING EXISTING STOCK FENCES IN AREAS UTILIZED BY DOMESTIC LIVESTOCK OR OTHER AREAS AS DIRECTED BY THE ENGINEER.

#### MISCELLANEOUS

- ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE (1) CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.
- NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL (2)RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA

#### PAVEMENT MARKINGS

#### TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

#### HICKORY HOLLOW PARKWAY/CENTURY FARMS PARKWAY

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF (1) 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. 716-05.20, PAINTED PAVEMENT MARKING (6" LINE), L.M.

#### **INTERSTATE 24 AND RAMPS**

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF (2) 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. 716-05.02. PAINTED PAVEMENT MARKING (8" BARRIER LINE), L.F.

#### FINAL PAVEMENT MARKING

#### **INTERSTATE 24 AND RAMPS**

PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE (3)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.

#### RAMP GORES

(4) EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE PRICE BID FOR THE PERMANENT MARKINGS.

#### HICKORY HOLLOW PARKWAY/ CENTURY FARMS PARKWAY

(5) EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE PRICE BID FOR THE PERMANENT MARKINGS.

#### DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

BEFORE OPENING THE LANE SHIFTS TO TRAFFIC, THE TRANSITIONAL (6) INCLUDED IN ITEM NO. 712-01, TRAFFIC CONTROL, LUMP SUM.

#### PAVEMENT

#### PAVING

- THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF (1) TRAFFIC.
- (2) DIRECTION OF TRAFFIC.
- (3) PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND 407SE

#### SIGNING

- (1) ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL
- (2) DIVISION, SIGNING SECTION, TELEPHONE NO. (615)-741-0802. THE TO ORDERING MATERIAL.
- (3) GROUND LINE.

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PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF 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 TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE

PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.01, ENHANCED FLATLINE THERMO PVMT MRKNG (4IN 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 TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE

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 RASED PAVEMENT MARKERS WILL NOT BE MEASURED AND PAID FOR DIRECTLY. BUT THE COST WILL BE

THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE

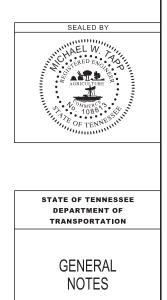
THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENTEDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS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

THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS. 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.

THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE LENGTHS WERE COMPUTED FROM THE CR0SS-SECTIONS CONTAINED IN THE CONSTRUCTION PLANS. IN THE EVENT THE SUPPORT LENGTHS ARE 2 FEET SHORTER OR LONGER THAN SHOWN ON THE PLANS, THE ENGINEER SHALL VERIFY THE SUPPORT TYPE WITH THE TRAFFIC OPERATIONS CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR

THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2018	NH-I-24-9(79)	2C



#### SIGNING (CONT'D)

- AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO (4) ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.
- THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS (5) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. ONE PDF SET OF THE LAYOUT DRAWINGS SHALL BE SENT TO THE TRAFFIC OPERATIONS DIVISION SIGNING SECTION (TDOT.TRAFFICOPS@TN.GOV) FOR REVIEW. ONE PDF SET OF THE LAYOUT DRAWINGS SHALL BE SENT TO THE REGION 3 TRAFFIC ENGINEER, PHIL TRAMMEL (PHIL.TRAMMEL@TN.GOV) FOR REVIEW.
- (6) ALL SIGNS MARKED "TO BEREMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.
- THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND (7) LINE.
- THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES (8) ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.
- THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE (9) ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.
- THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES (10)ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS

#### TRAFFIC CONTROL DIRECTIONAL SIGNING

- ON ALL ACCESS CONTROLLED AND INTERSTATE RECONSTRUCTION AND (1) 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 3E REPLACED IF DAMAGED, DURING ALL PHASES OF CONSTRUCTION, AS DIRECTED BY THE ENGINEER.
- THE SIZE OF THESE NEW TEMPORARY SIGNS WILL BE DETERMINED BY (2) 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 CO\_OR 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. 712-06 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.
- ALL EXISTING "EMERGENCY REFERENCE MARKERS" AND "HOSPITAL (5) 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. 712-06.
- (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.\_712-06 AS DIRECTED BY THE ENGINEER. THE SUPPORTS FOR THE FINAL LOCATION OF THESE SIGNS WILL BE FAID FOR UNDER OTHER ITEMS OF CONSTRUCTION

#### SIGNALIZATION

- EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY (1) WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.
- EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL (2) PROVISIONS REGARDING SECTION 730N-TRAFFIC SIGNALS.
- ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, (3) SHALL BE COMPLETELY COVERED.
- AN ADVANCE FLASH OPERATION PERIOD IS REQUIRED TO MAKE (4)MOTORISTS AWARE OF THE PRESENCE OF NEW SIGNAL HEADS. NEW SIGNAL HEADS SHALL BE PUT IN FLASH OPERATION FOR MINIMUM OF SEVEN (7) CALENDAR DAYS UP TO FOURTEEN (14) CALENDAR DAYS PRIOR TO ACTIVATION OF NORMAL TRAFFIC SIGNAL OPERATION. OTHER FLASH OPERATION TIME PERIODS MAY BE CONSIDERED UPON WRITTEN APPROVAL FROM THE REGIONAL TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL CONTACT CHIP KNAUF OF METRO NASHVILLE (5) PUBLIC WORKS, (615) 880 - 2443, A VINIMUM OF THIRTY (30) DAYS PRIOR TO ACTIVATION OF THE SIGNAL TO OBTAIN THE INITIAL SIGNAL TIMINGS.

#### **CONSTRUCTION WORK ZONE & TRAFFIC CONTROL**

- ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN (1) 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.
- IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER CR (2)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.
- A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER (3)SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED (4) UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING
- USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND (5) 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 OJTSIDE 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.
- THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR (6)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 OF ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF AN 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 OF ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT (7) ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
- (8) PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

#### LIGHTING

- (1) SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED ELECTRIC CODE, NFPA 70.
- (2) 40 PVC RIGID CONDUIT.
- (3)SHALL BE COLORED GREEN AND HAVE THW INSULATION.
- (4) BELOW GRADE
- (5) DETERMINED BY REQUIRED MOUNTING HEIGHT
- ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE (6)ITEMS WHETHER SPECIFICALLY NOTED OR NOT.
- STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH THE (7)REQUIREMENTS OF THE LATEST EDITION OF THE STANDARD LUMINARIES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN
- (8) ALUMINUM WITH TRANSFORMER BASES.

#### **EROSION PREVENTION AND SEDIMENT CONTROL**

#### DISTURBED AREA

- IF DISTURBED ACREAGE IS EQUAL TO ONE ACRE OR MORE, PLEASE (1)AS POSSIBLE BECAUSE AN NPDES PERMIT WILL BE REQUIRED.
- (2)BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- (3) CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES.
- PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE (4) MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS APPLIED.
- CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN (5) INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS FROHIBITED.

#### SEDIMENT CONTROL

- (6) TO INSTALL EPSC MEASURES.
- (7)THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE/DURING A PRECIPITATION EVENT.

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CAD/TRNS

ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL

INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD JANUARY 1, 2015 AND WITH THE LATEST REVISIONS TO THE NATIONAL

ALL WIRING SHALL BE CONCEALED UNDERGROUND IN 2-INCH SCHEDULE

THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES,

EXISTING FOUNDATIONS TO BE REMOVED A MINIMUM OF SIX INCHES

LIGHT STANDARDS SHALL BE ROUND TAPERED POLES. LENGTH SHALL BE

SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714

SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

ALL NEW ROADWAY LIGHT STANDARDS SHALL BE MOUNTED ON BASES WITH ACCESS DOOR. TRANSFORMER BASES SHALL MEET AASHTO SPECIFICATIONS AND HAVE FHWA APPROVAL. STANDARDS SHALL BE

CONTACT TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION AS SOON

AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD

UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT

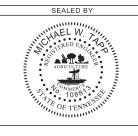
DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 14 CALENDAR DAYS PRIOR TO GRADING OR EARTH

VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION,

EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD EXCEPT AS SUCH WORK MAY BE NECESSARY

TEMPORARY EPSC MEASURES MAY BE RENOVED AT THE BEGINNING OF

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STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION



#### **EROSION PREVENTION AND SEDIMENT CONTROL (CONT'D)**

- THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE (8) METHOD TO PREVENT THE OFFSITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.) INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE 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) ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE NEGOTIATED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF (9) DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- (10)THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS 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 AFEAS 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.

#### NATURAL RESOURCES

- SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE (11)STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL 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 NATURAL RESOURCES IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS WETLANDS OR OTHER NATURAL FEATURES IN ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED
- NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND (12) STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION, (13)PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS.
- (14)THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S. INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS (15)SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING
- STREAM BEDS SHALL NOT 3E USED AS TRANSPORTATION ROUTES FOR (16)CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAN BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL 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 SHALL BE COMPLETELY REMOVED IN

THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FRON 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.

- HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED (17)TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL 3E REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.
- WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR (18)TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.
- THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY (19) CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

#### SPECIES

- NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE (20)SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.
- SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (21)(YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).
- IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (22)(DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION ECOLOGY SECTION IMMEDIATELY.

#### **INSPECTION, MAINTENANCE & REPAIR**

(23)REFER TO THE STORM WATER POLLUTION AND PREVENTION PLAN SHEETS (S-1) FOR SWPPP, PERMITS, AND RECORDS NOTES.

#### PERMITS, PLANS & RECORDS

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY (24) NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO THE USE OF THE PERMITTED AREA(S).
- (25)ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER FERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL
- IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, (26)INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (27) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE FARTY TO COMMENCE PERMIT RENEWAL PROCESS.

ADDRESS OF THE PROJECT SITE OWNER, CPERATOR, OR A LOCAL POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

#### **GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL**

- (29)THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR SHALL BE REMOVED FROM THE SITE.
- (30) PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND AREAS SHALL BE USED.
- (31)PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (32)OR STORMWATER TREATMENT SYSTEM.
- (33) UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (34)USE AND DISPOSAL
- (35)PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.
- (36) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF STATE AND LOCAL REGULATIONS.
- (37)WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE PERMITS TO DISPOSE OF HAZARDOUS MATERIAL
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING
- (39) AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

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(28) ALL WATER QUALITY PERMITS SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND CONTACT PERSON WITH A BRIEF 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

ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, NATERIALS USED FOR EPSC

THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE

CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN

WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM

IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR

ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER

WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE

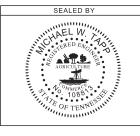
ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE

ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY

(38) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED.

DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS

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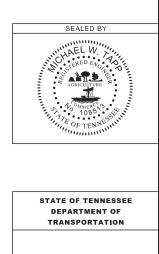
#### EROSION PREVENTION AND SEDIMENT CONTROL (CONT'D)

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

#### SUPPORT ACTIVITIES

(41) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO CCMMENCE PERMIT RENEWAL PROCESS.

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GENERAL NOTES

# SPECIAL NOTES

#### SENSITIVE ENVIRONMENTAL AREA

CONSTRUCTION CONTRACTORS MUST AVOID ALL EARTHMOVING AND (1) OTHER GROUND DISTURBING ACTIVITIES, INCLUDING STAGING OF HEAVY EQUIPMENT, EXCAVATION OF BORROW MATERIALS, AND VEGETATION REMOVAL BELOW THE NATURAL GROUND SURFACE IN THE AREAS DESIGNATED "SENSITIVE ENVIRONMENTAL AREA" ON SHEETS 10 & 10A.

#### GRADING

- (1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REFORTS 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.
- TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION (3) 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.
- THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE (4) 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.
- EARTHWORK IS PAID FOR UNDER ITEM 203-01, ROAD AND DRAINAGE (5) 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.

#### DEMOLITION

#### DEMOLITION, REPAIR, OR REHABILITATION OF BRIDGES

- (1) IF THE CONTRACTOR SHALL VERIFY THAT AN ASBESTOS SURVEY HAS BEEN COMPLETED PRIOR TO ANY DEMCLITION, REPAIR OR REHABILITATIONS ACTIVITIES (NOT INCLUDING ASPHALT MILLING OR OVERLAY).
- ASBESTOS-CONTAINING MATERIALS (ACM) ABATEMENT IS THE (2) RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE COMPLETED PRIOR TO ANY DEMOLITION, REPAIR OR REHABILITATION OF BRIDGE(S) ABATEMENT SHOULD BE ACCOMPLISHED PER SP202ACM SPECIAL PROVISION REGARDING REMOVAL OF ASBESTOS-CONTAINING MATERIALS. STATE OF TENNESSEE ASEESTOS ACCREDITATION REQUIREMENTS (TCA 1200-01-20) MANDATE THAT ACM ABATEMENT WORK BE PERFORMED BY AN ACCREDITED FIRM (CONTRACTOR) USING ACCREDITED ABATEMENT WORKERS AND SUPERVISORS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A NOTICE TO (3) THE TDEC, DIVISION OF AIR POLLUTION CONTROL TEN (10) DAYS IN ADVANCE OF ANY ACM ABATEMENT, DEMOLITION, OR MAJOR REPAIR INVOLVING THE REMOVAL/REPLACEMENT OF A STRUCTURAL COMPONENT.

#### **RETAINING WALLS**

- (1)THE (RIGHT-OF-WAY/EASEMENT WITHIN 30 FEET OF ANY PROPOSED RETAINING WALL SHALL REMAIN CLEAR FOR THE CONSTRUCTION OF THE RETAINING WALL. NO UTILITY LINES MAY BE PLACED THERE WITHOUT APPROVAL FROM STRUCTURES DIVISION
- THE OPTIONS FOR RETAINING WALL TYPES SHALL BE LIMITED TO THE (2) APPROVED ALTERNATIVES AS SPECIFIED ON THE RETAINING WALL SHEET(S).

- VALUE ENGINEERING CHANGE PROPOSALS WILL NOT BE ACCEPTED FOR (3)RETAINING WALLS. (ITEM NUMBER(S): 604-07.01 TO 604-07.12)
- ALL COST OF EUILDING, INSTALLING AND BACKFILLING THE RETAINING (4) WALL, INCLUDING GRANULAR BACKFILL, GEOTEXTILE FABRIC (TYPE IV), LEVELING PAD, AMD MOMENT SLAB, SHALL BE INCLUDED IN THE COST OF THE RETAINING WALL. COSTS FOR EXCAVATION OF THE WALL SHALL BE INCLUDED IN ITEM 203-01, ROAD AND DRAINAGE EXCAVATION PER CUBIC YARD. END AREAS FOR EXCAVATION FOR THE WALL SHALL BE INCLUDED IN END AREA TOTALS ON CROSS-SECTIONS.

#### PAVEMENT

#### RESURFACING

- TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED (1) SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITIONS ONLY:
  - THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE
  - THE SURFACE SHALL BE SWEPT AND CLEANED OF ALL LOOSE b. MATERIALS.
  - THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE c. AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.
  - THE MILLED SURFACE SHALL BE PAVED WITHIN 72 HOURS IF THE d CURRENT ADT IS ≥ 70,000 OR WITHIN 96 HOURS IF THE CURRENT ADT IS < 70.000.
  - RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED e. WITHIN 48 HOURS AFTER MILLING.
  - ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGNS (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS.
  - IF MILLED SURFACE BEGINS TO DETERIORATE, PAVING TO COVER g. UP DETERIORATING MILLED \$URFACES SHOULD OCCUR AS DIRECTED BY THE ENGINEER DURING THE NEXT WORKING DAY. IF SEVERE DISTRESS OCCURS, IMMEDIATE RESPONSE WILL BE REQUIRED
  - ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED h SURFACE AT ONE TIME.

#### SIGNALIZATION

- THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN (1) POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.
- THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE DESIGNED IN (2)ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRIES, AND TRAFFIC SIGNALS (CURRENT EDITION WITH ADDENDA). WIND LOADS SHALL BE BASED ON A BASIC WIND SPEED OF 90 MPH WITH A RECURRENCE INTERVAL OF 50 YEARS. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY I. FATIGUE LOADS ARE BASED ON THE REQUIREMENTS OF SECTION 11.7 OF THE SUBJECT AASHTO DOCUMENT AND THE FOLLOWING LOADS
  - GALLOPING NO DESIGN NECESSARY. VIBRATION DAMPENERS a. SHALL BE USED ON ALL CANTILEVERED ARMS THAT ARE 50' OR LONGER
  - b. VORTEX SHEDDING - NOT APPLICABLE ON TRAFFIC SIGNAL SUPPORTS WITH A TAPER OF AT LEAST 0.14 IN/FT.
  - NATURAL WIND GUSTS THE YEARLY MEAN WIND SPEED FOR C. NATURAL WIND GUSTS SHALL BE 11.2 MPH.
- THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE POLES WITH CURVED (2)CANTILEVERED ARM(S) IN ACCORDANCE WITH METRO PUBLIC WORKS. FOR POLE AND ARM DETAILS, CONTACT MIKE HIRTZER AT 615-880-3261

#### MULTIMODAL

THE CONTRACTOR SHALL IDENTIFY LOCATIONS WITHIN THE PROJECT (1) SUPERVISOR THREE WEEKS PRIOR TO THE BEGINNING OF ANY

#### EROSION PREVENTION AND SEDIMENT CONTROL

#### ENVIRONMENTAL

(1) MEETINGS.

#### ECOLOGY

- (2)WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.
- (3) TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.
- (4) NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

#### PROJECT COMMITMENTS

SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO (5)

#### CSXT RAILROAD

- ALL WORK ON, OVER, UNDER OR ADJACENT TO CSXT RIGHT-OF-WAY (1) AND CSXT SPECIAL PROVISIONS.
- (2)RAILROAD:
  - a. CSX TRANSPORTATION, INC. PHONE: (770) 819-2841 FAX: (770) 819-2850 E-MAIL: BILL\_R\_STEWART@CSX.COM
  - b MR. JOHN FORTUNE, DIVISION ENGINEER CSX TRANSPORTATION, INC. - NASHVILLE DIVISION 324 GRASSMERE PARK ROAD, NASHIVLLE, TN 37211 PHONE: (615) 835-6004 FAX: (904) 245-3350 E-MAIL: JOHN\_W\_FORTUNE@CSX.COM
  - MR. RANDY FREDERICK, PROJECT MANAGER C. STV. INC. CONCOURSE III, SUITE 400 5200 BELFORT ROAD, JACKSONVILLE, FL 32256 PHONE: (904) 383-3913 E-MAIL: RANDY.FREDERICK@STVINC.COM
  - MS. VICKI MATTS, PROJECT MANAGER d. STV, INC. 5200 BELFORT ROAD, JACKSONVILLE, FL 32256 PHONE: (904) 383-3919 FAX: (904) 730-7766 E-MAIL: VICTORIA.MATTS@STVINC.COM

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LIMITS WHERE THE TOOT ROADWAY STANDARDS CANNOT BE USED DUE TO SITE LIMITATIONS. A SITE LAYOUT DETAIL SHOWING THE PROPOSED ALTERATIONS AND DEVIATIONS SHALL BE SUBMITTED TO THE PROJECT CONSTRUCTION. THE DEPARTMENT WILL REVIEW AND EVALUATE THE DETAILS FOR PROPER INSTALLATIONS THAT WILL MEET REGULATIONS.

STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION

STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH

STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED WORK. THIS WILL PROVIDE THE OPPORTUNITY

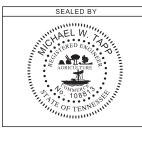
ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE

SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

SHALL BE DONE IN ACCORDANCE WITH THE CSXT SPECIAL PROVISIONS. SEE AGREEMENT/STATE CONTRACT SPECIAL PROVISION 105C REGARDING FLAGGING RULES AND COSTS THEREOF, INSURANCE REQUIREMENTS,

THE CONTRACTOR SHALL CONDUCT THEIR WORK SO AS TO PROTECT THE CSXT TRACK FACILITIES AND PROPERTIES FROM ANY DAMAGE. THE CONTRACTOR SHALL NOTIFY AND COORDINATE THEIR WORK AT THE RAILROAD CROSSING WITH THE FOLLOWING REPRESENTATIVES OF THE

MR. BILL STEWART, DIRECTOR - CONSTRUCTION ENGINEERING 351 THORNTON ROAD, SUITE 125, LITHIA SPRINGS, GA 30122



STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION



# **EPSC NOTES**

#### STREAMS, WETLANDS & BUFFER ZONES

- (1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., PIER FOOTING, RIP-RAP PLACEMENT, 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) ONCE WATER IS DIVERTED INTO A NEWLY CONSTRUCTED AND STABILIZED RELOCATED STREAM / CHANNEL, THE ECOLOGY SECTION SHALL BE NOTIFIED. THE STREAM NAME, STREAM NUMBER, AND DATE THE WATER WAS DIVERTED INTO THE NEWLY CONSTRUCTED STREAM / CHANNEL SHALL BE SUPPLIED WITH THE NOTIFICATION.

#### UTILITY RELOCATION

- (1) STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.
- (2) SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADIENT SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY.
- (3) UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
- (4) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFFSITE 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 OFFSITE AND ENTERING WATERS OF THE STATE/U.S.
- (5) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT 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.
- (6) IN REGARD TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.
- (7) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT RESPONSIBLE PARTY.
- (8) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- (9) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.
- (10) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT RESPONSIBLE PARTY BEFORE COMMENCING WORK.

#### RAILROAD ENVIRONMENTAL

(1) THE CONTRACTOR SHALL MAINTAIN A COMPLETE AND COMPREHENSIVE EPSC PLAN AND SWPPP TO PREVENT ROADWAY AND/OR CONSTRUCTION SEDIMENT OR DEBRIS AND ANY PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, PAINTS OR COATINGS ETC. FROM FALLING ONTO THE RAILROAD'S RIGHT-OF-WAY AND/OR FRCM ENTERING THE DRAINAGE DITCHES OR DRAINAGE STRUCTURES OF THE RAILROAD, AND ANY SEDIMENT OR DEBRIS OR PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, ETC. THAT DO ENTER SUCH DRAINAGE AREAS OF THE RAILROAD'S RIGHT-OF-WAY ARE TO BE REMOVED IN ACCORDANCE WITH RULES SET FORTH BY CSX RAILROAD AND AT THE CONTRACTOR'S EXPENSE.

#### ENVIRONMENTAL

(1) 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.

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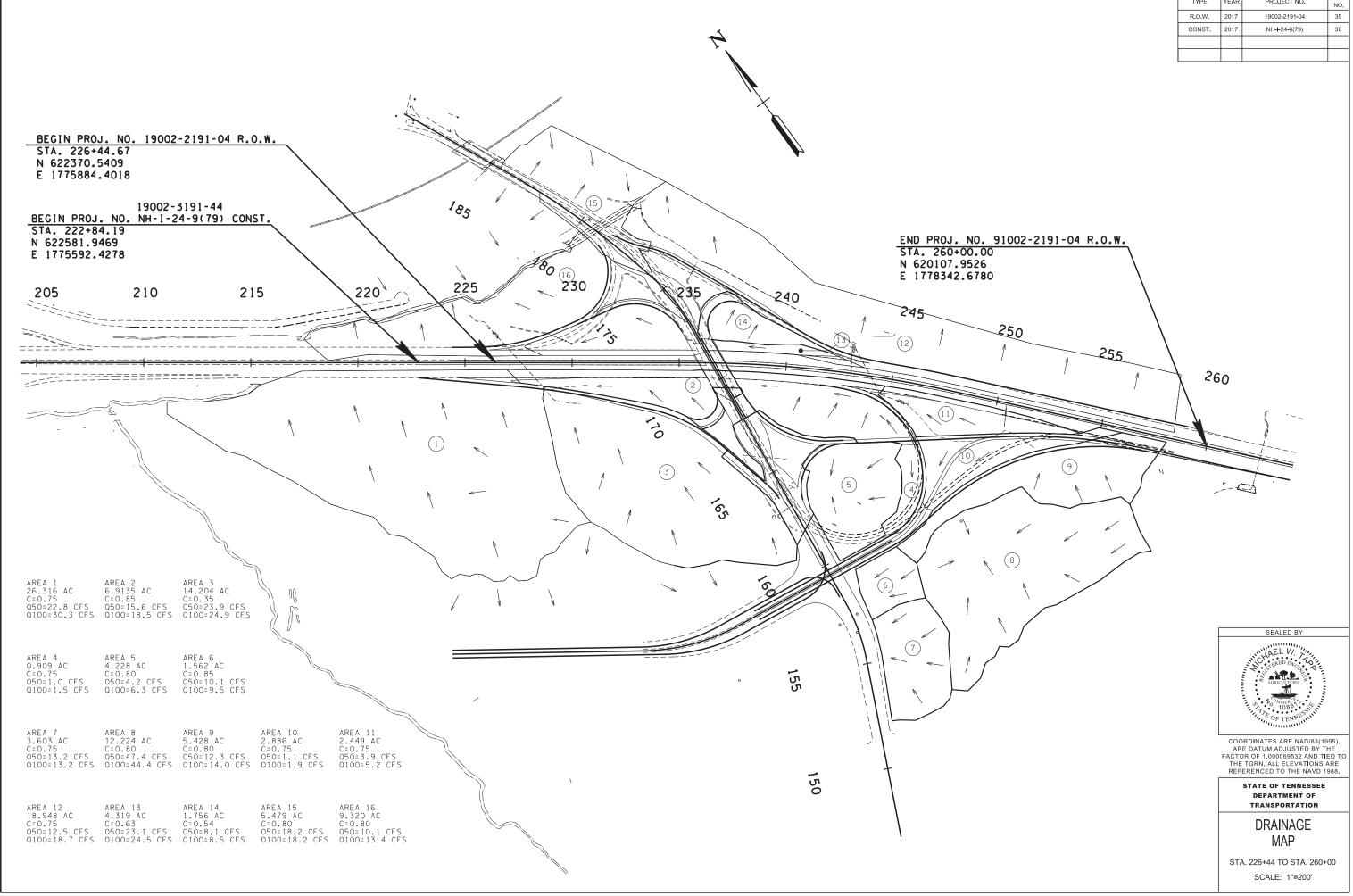
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	SYMBOL	ITEM	STD. DWG.
	*SFB*SFB*SFB*	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	$\square \square$	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	$\square$	ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6
	$\bullet$	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	$\bigcirc$	ENHANCED ROCK CHECK DAM (TRAPEZOIDAL DITCH)	EC-STR-6A
	¢	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	<u>م</u>	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
		CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
* *	œ	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
		EROSION CONTROL BLANKET	EC-STR-34
	4	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A
	** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
		CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EC-STR-41
	2	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
		CATCH BASIN FILTER ASSEMBLY (TYPE 6)	EC-STR-46
		CATCH BASIN FILTER ASSEMBLY (TYPE 7)	EC-STR-47
		CATCH BASIN FILTER ASSEMBLY (TYPE 8)	EC-STR-48
	* HVF * HVF	HIGH VISIBILITY FENCE	S - F - 1

EROSION PREVENTION AN	D	
SEDIMENT CONTROL QUANTI	TIES	
DESCRIPTION	UNIT	QUANTITY
SEDIMENT REMOVAL	C.Y.	1365
TEMPORARY SILT FENCE (WITH BACKING)	L.F.	13351
ENHANCED ROCK CHECK DAM PER	EACH	46
CURB INLET PROTECTION (TYPE 4)	EACH	50
CATCH BASIN PROTECTION (TYPE D)	EACH	9
CATCH BASIN FILTER ASSEMBLY(TYPE 1)	EACH	36
CATCH BASIN FILTER ASSEMBLY(TYPE 2)	EACH	10
CATCH BASIN FILTER ASSEMBLY(TYPE 4)	EACH	9
CATCH BASIN FILTER ASSEMBLY(TYPE 6)	EACH	2
CATCH BASIN FILTER ASSEMBLY(TYPE 7)	EACH	2
CATCH BASIN FILTER ASSEMBLY(TYPE 8)	EACH	2
18" TEMPORARY DRAIN PIPE	L.F.	90
HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	13780
MACHINED RIP-RAP (CLASS A-3)	TON	234
GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	400
TEMPORARY SEDIMENT TUBE 24IN	L.F.	62729
TEMPORARY SEEDING (WITH MULCH)	UNIT	1000
EROSION CONTROL BLANCKET (TYPE II)	S.Y.	6100
	SEDIMENT CONTROL QUANTI DESCRIPTION SEDIMENT REMOVAL TEMPORARY SILT FENCE (WITH BACKING) ENHANCED ROCK CHECK DAM PER CURB INLET PROTECTION (TYPE 4) CATCH BASIN PROTECTION (TYPE 4) CATCH BASIN FILTER ASSEMBLY(TYPE 1) CATCH BASIN FILTER ASSEMBLY(TYPE 2) CATCH BASIN FILTER ASSEMBLY(TYPE 4) CATCH BASIN FILTER ASSEMBLY(TYPE 4) CATCH BASIN FILTER ASSEMBLY(TYPE 6) CATCH BASIN FILTER ASSEMBLY(TYPE 7) CATCH BASIN FILTER ASSEMBLY(TYPE 7) CATCH BASIN FILTER ASSEMBLY(TYPE 8) 18" TEMPORARY DRAIN PIPE HIGH-VISIBILITY CONSTRUCTION FENCE MACHINED RIP-RAP (CLASS A-3) GEOTEXTILE (TYPE III)(EROSION CONTROL) TEMPORARY SEDIMENT TUBE 24IN TEMPORARY SEEDING (WITH MULCH)	SEDIMENT REMOVAL C.Y. TEMPORARY SILT FENCE (WITH BACKING) L.F. ENHANCED ROCK CHECK DAM PER EACH CURB INLET PROTECTION (TYPE 4) EACH CATCH BASIN PROTECTION (TYPE D) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 1) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 2) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 4) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 6) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 6) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 7) EACH CATCH BASIN FILTER ASSEMBLY(TYPE 8) EACH TEMPORARY DRAIN PIPE L.F. TEMPORARY SEDIMENT TUBE 24IN L.F.

\*\* TO BE PLACED AS DIRECTED BY THE ENGINEER.

TYPE	YEAR	PROJECT NO.	SHEET
R.O.W.	2017	19002-2191-04	N0. 37A
CONST.	2018	NH <b>-I-</b> 24-9(79)	42A
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		SEALED BY	
		ATE OF TENNESSE	E
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	TYPE	YEAR	PROJECT NO.	SHEET NO.
	R.O.W.	2017	19002-2191-04	35
	CONST.	2017	NH-I-24-9(79)	36

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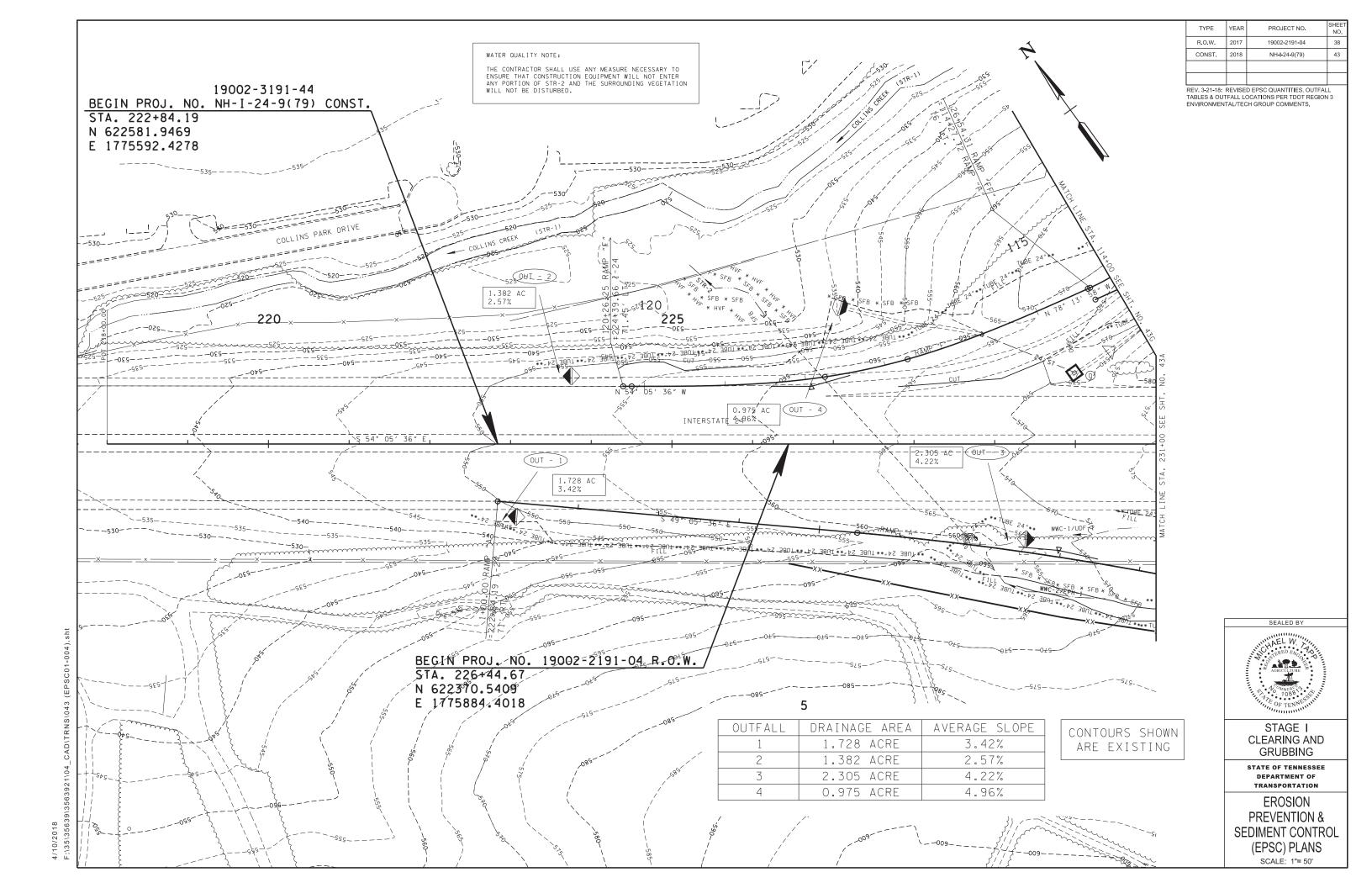
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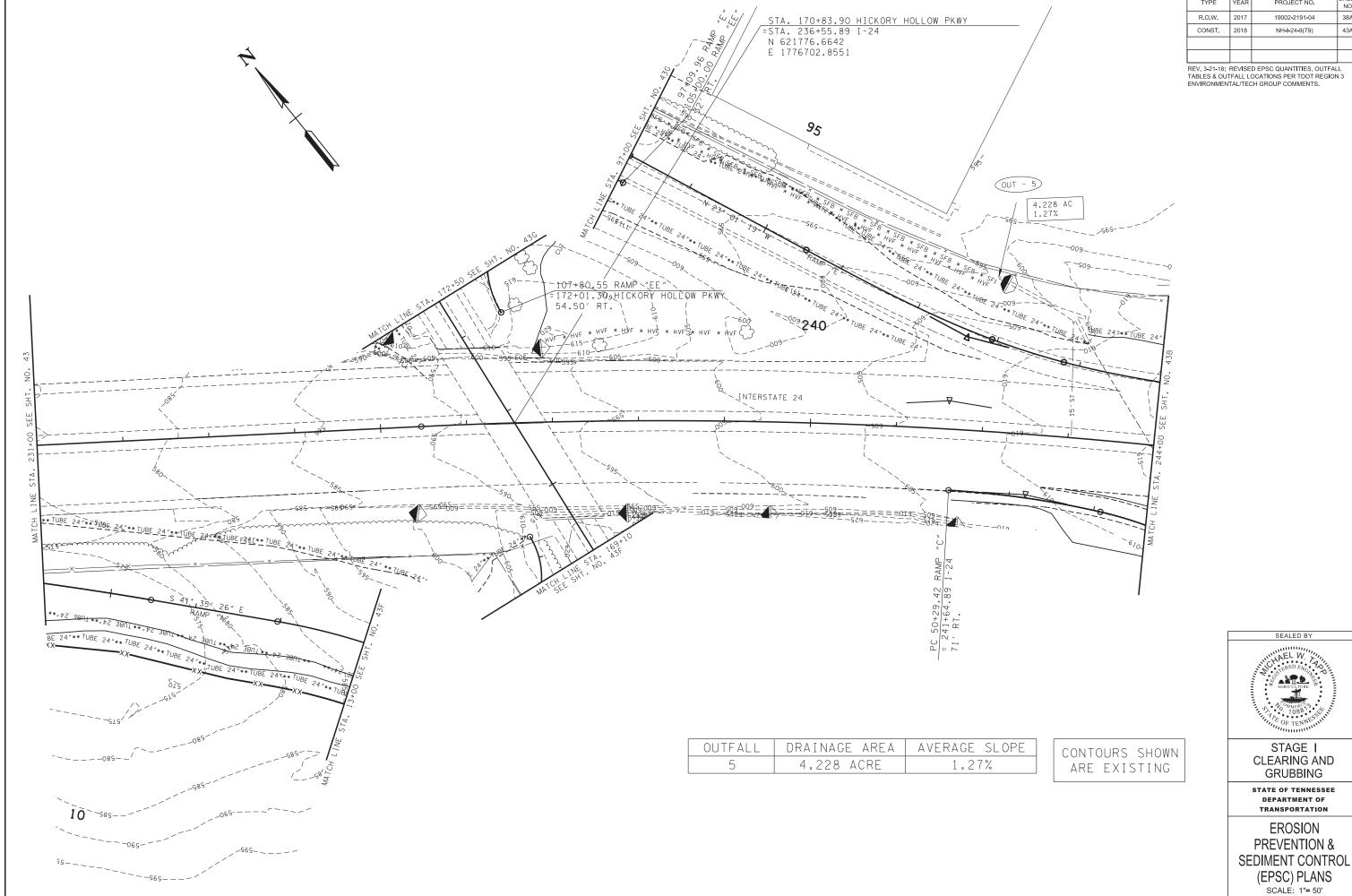
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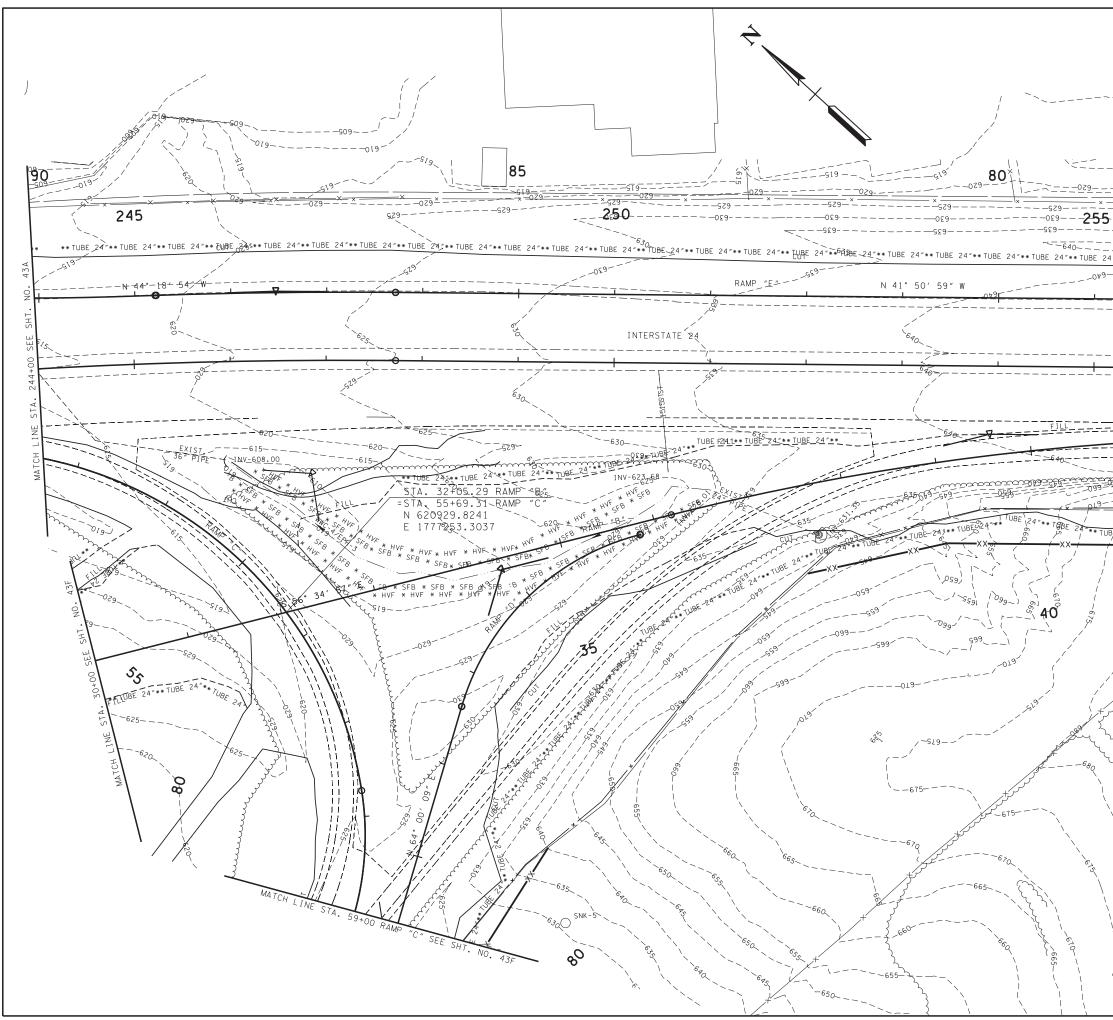




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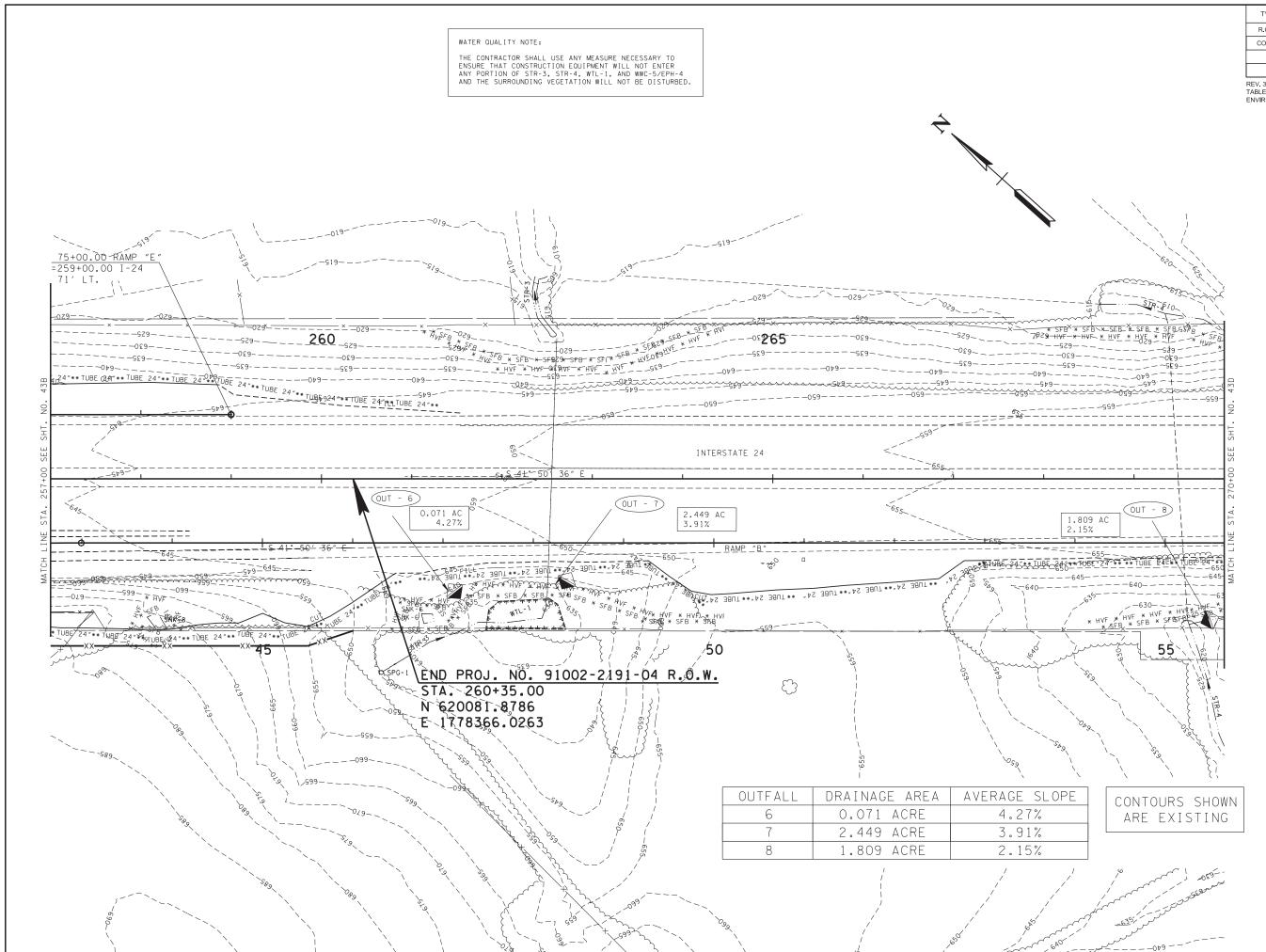
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	38A
CONST.	2018	NH <b>-I-</b> 24-9(79)	43A
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TABLES & OUTFALL LOCATIONS PER TDOT REGION ENVIRONMENTAL/TECH GROUP COMMENTS.



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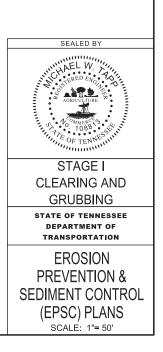
	TYPE	YEAR	PROJECT NO.	SHEE NO.
	R.O.W.	2017	19002-2191-04	38B
	CONST.	2018	NH-I-24-9(79)	43B
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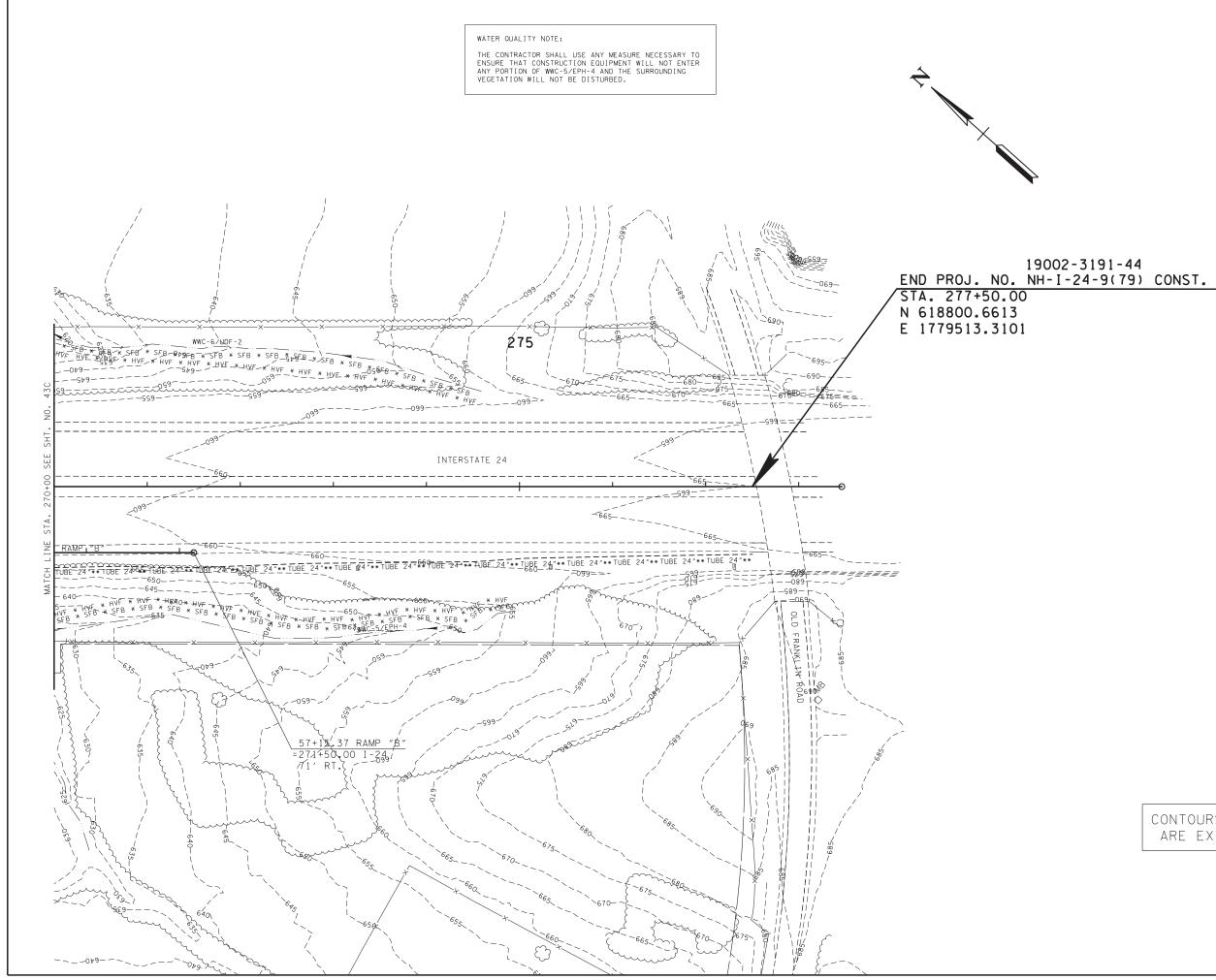


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TYPE	YEAR	PROJECT NO.	SHEET NO.				
R.O.W.	2017	19002-2191-04	38C				
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	43C				
REV. 3-21-18: REVISED EPSC QUANTITIES, OUTFALL TABLES & OUTFALL LOCATIONS PER TDOT REGION 3							

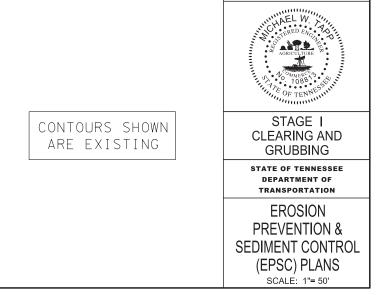
TABLES & OUTFALL LOCATIONS PER TDOT R ENVIRONMENTAL/TECH GROUP COMMENTS.



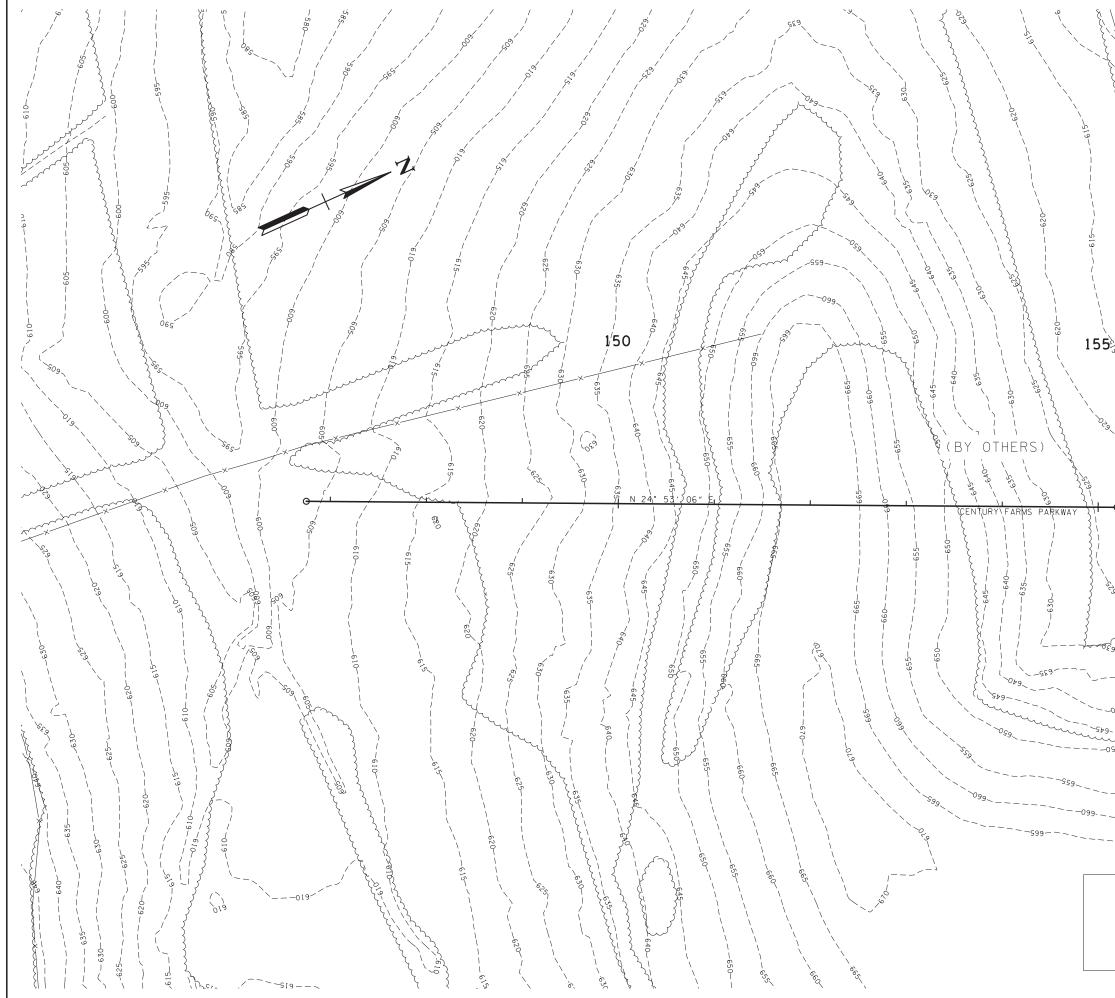


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TYPE	YEAR	PROJECT NO.	SHEET NO.	
R.O.W.	2017	19002-2191-04	38D	
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	43D	
KEV. 3-21-18: 1	REVISE	D EPSC QUANTITIES, OUTFAL	L	
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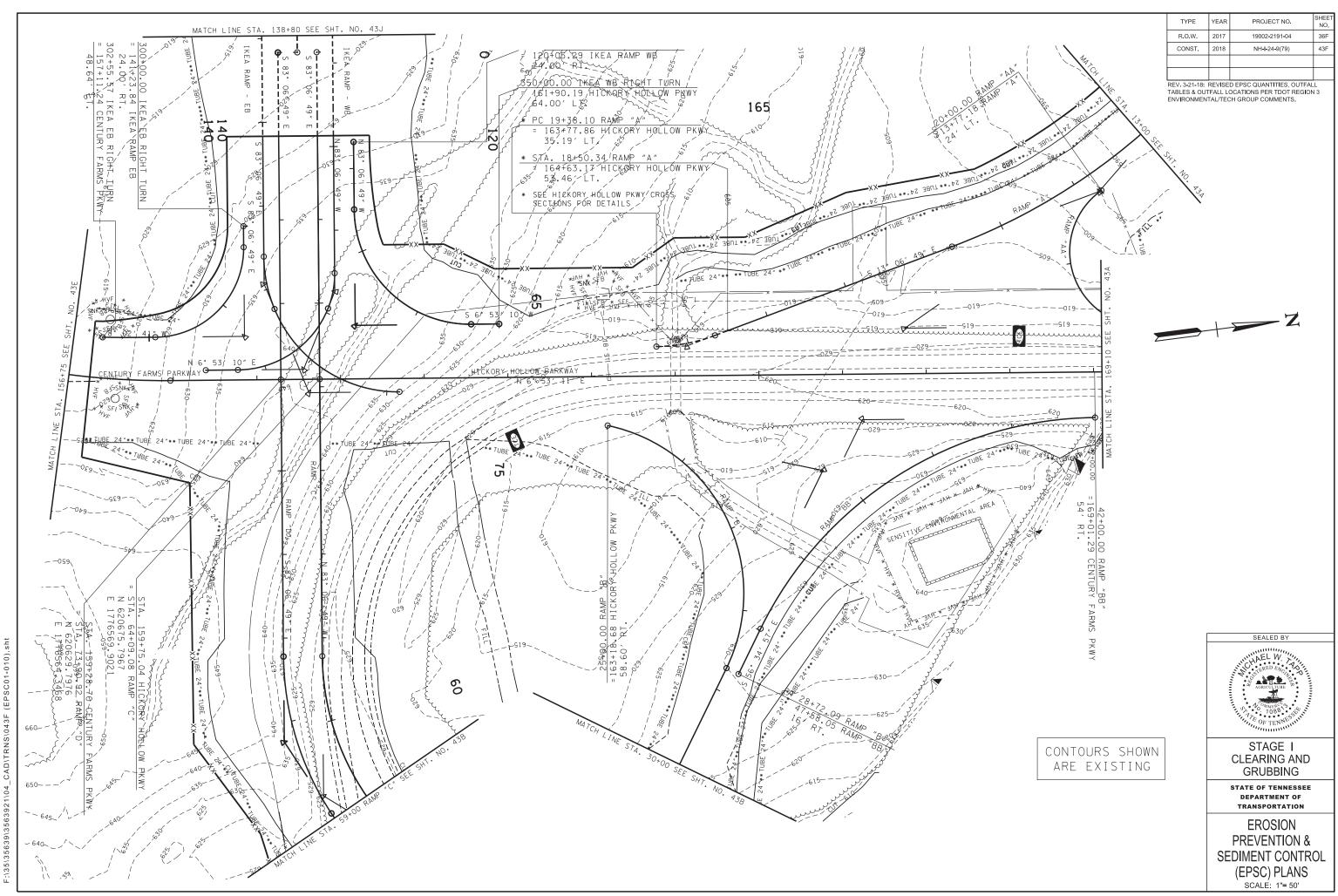


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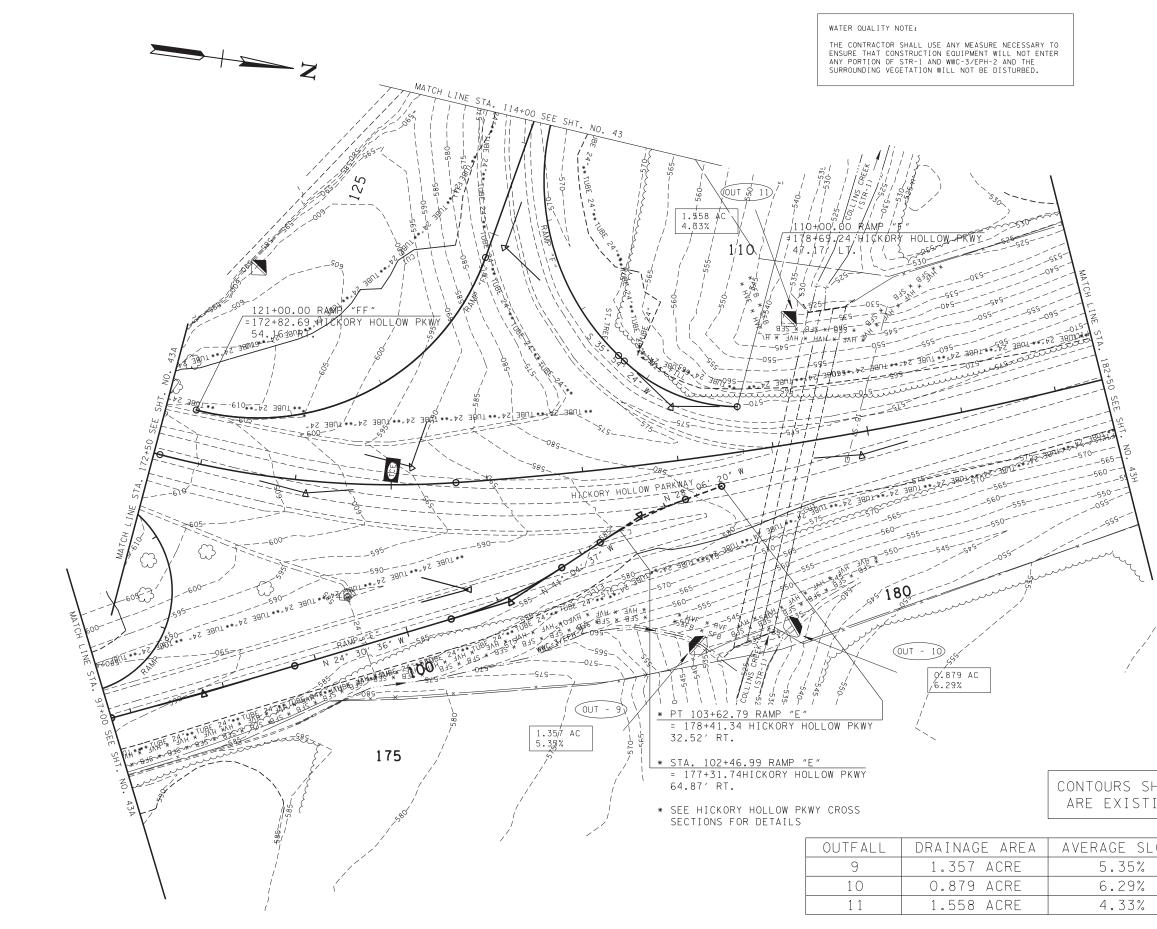


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	TYPE	YEAR	PROJECT NO.	SHEET NO.
<u>\</u>	R.O.W.	2017	19002-2191-04	38E
÷£.	CONST.	2018	NH-I-24-9(79)	43E
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		(	EPSC) PLANS	5



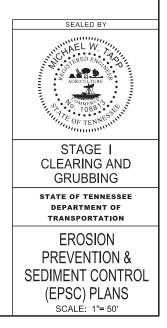
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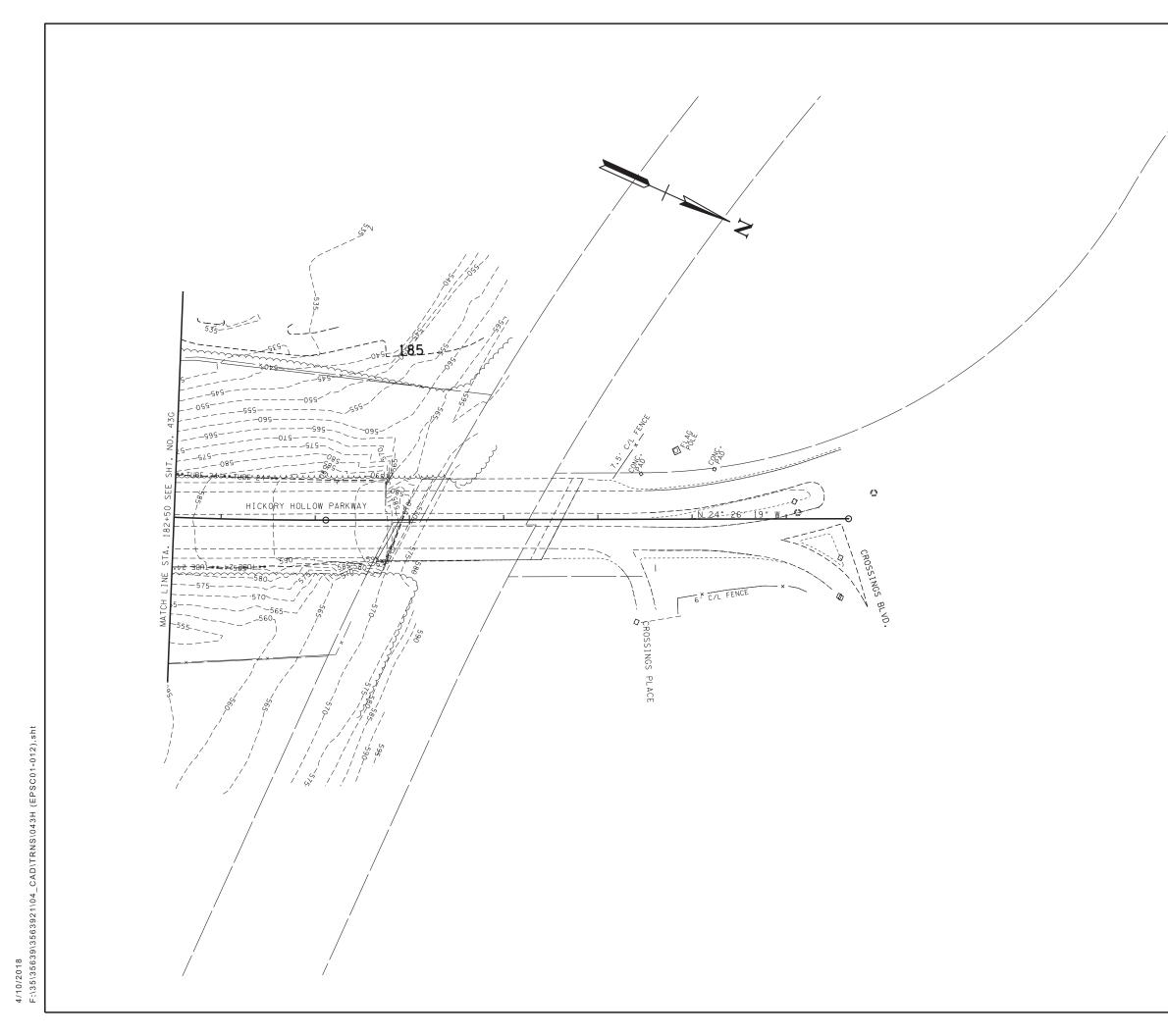


TYPE	YEAR	PROJECT NO.	SHEET NO.	
R.O.W.	2017	19002-2191-04	38G	
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	43G	
REV. 3-21-18: REVISED EPSC QUANTITIES, OUTFALL TABLES & OUTFALL LOCATIONS PER TDO'T REGION 3 ENVIRONMENTAL/TECH GROUP COMMENTS.				

CONTOURS	SHOWN
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e area	AVERAGE SLOPE
ACRE	5.35%
ACRE	6.29%
ACRE	4.33%



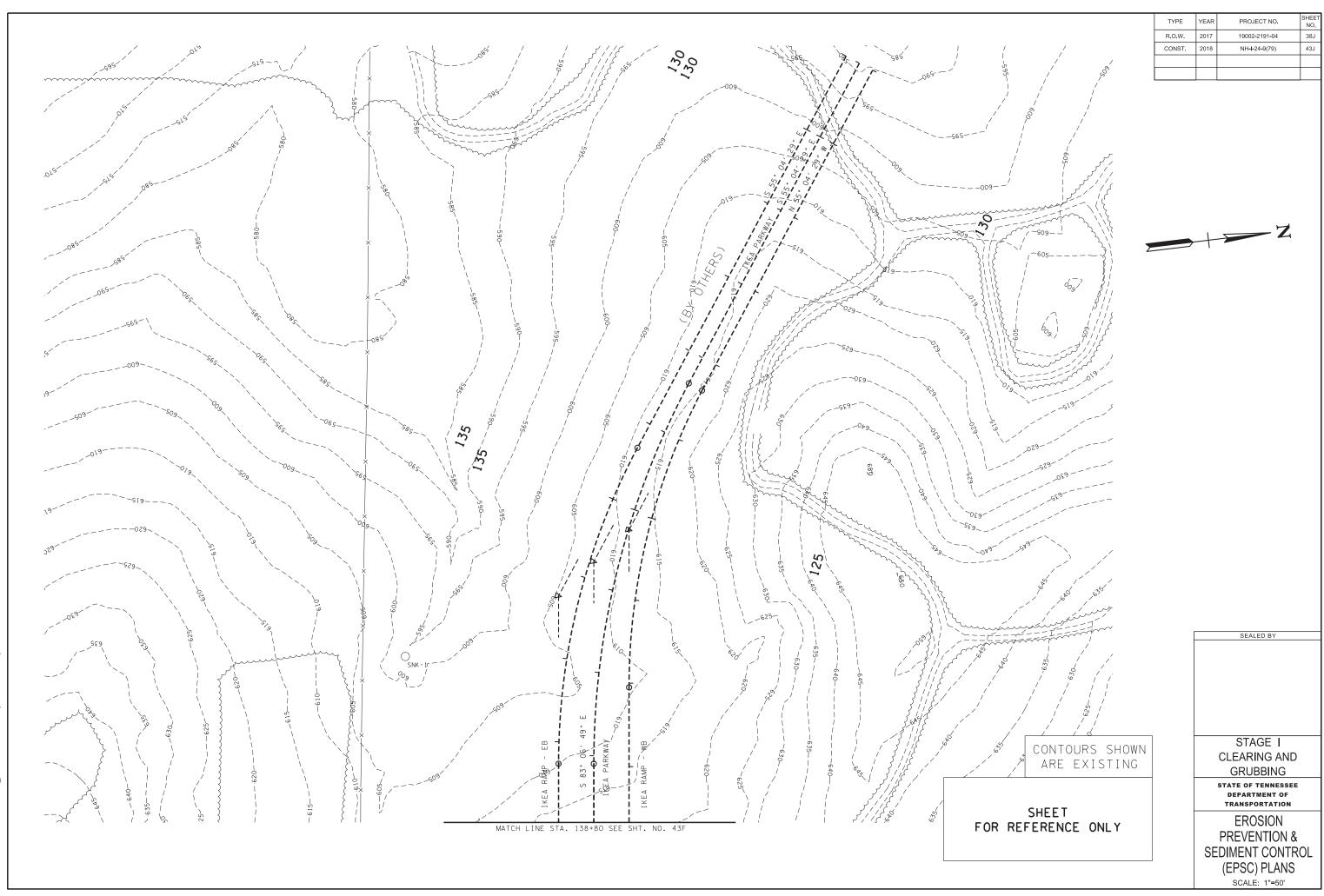


TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	38H
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	43H

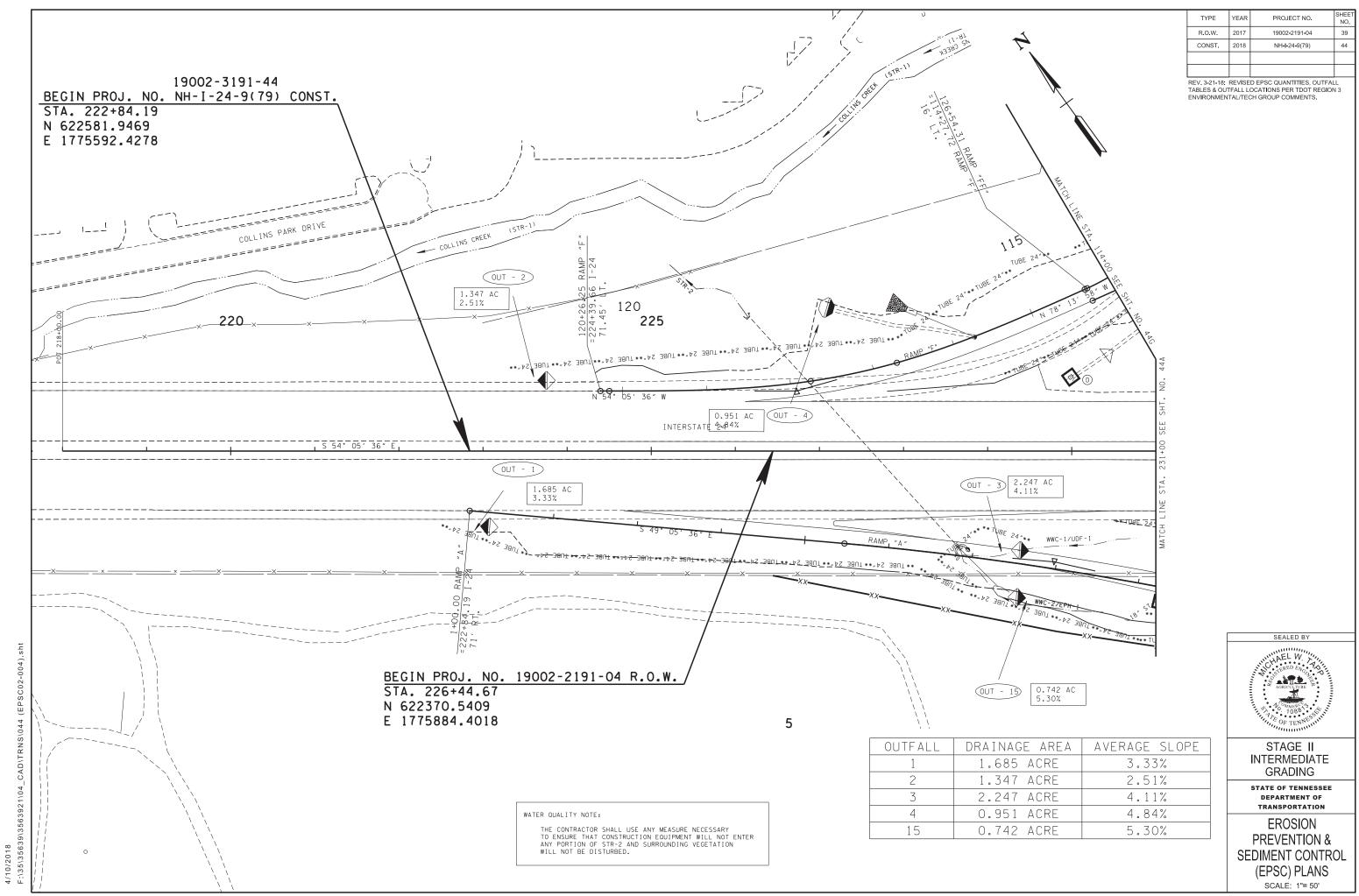
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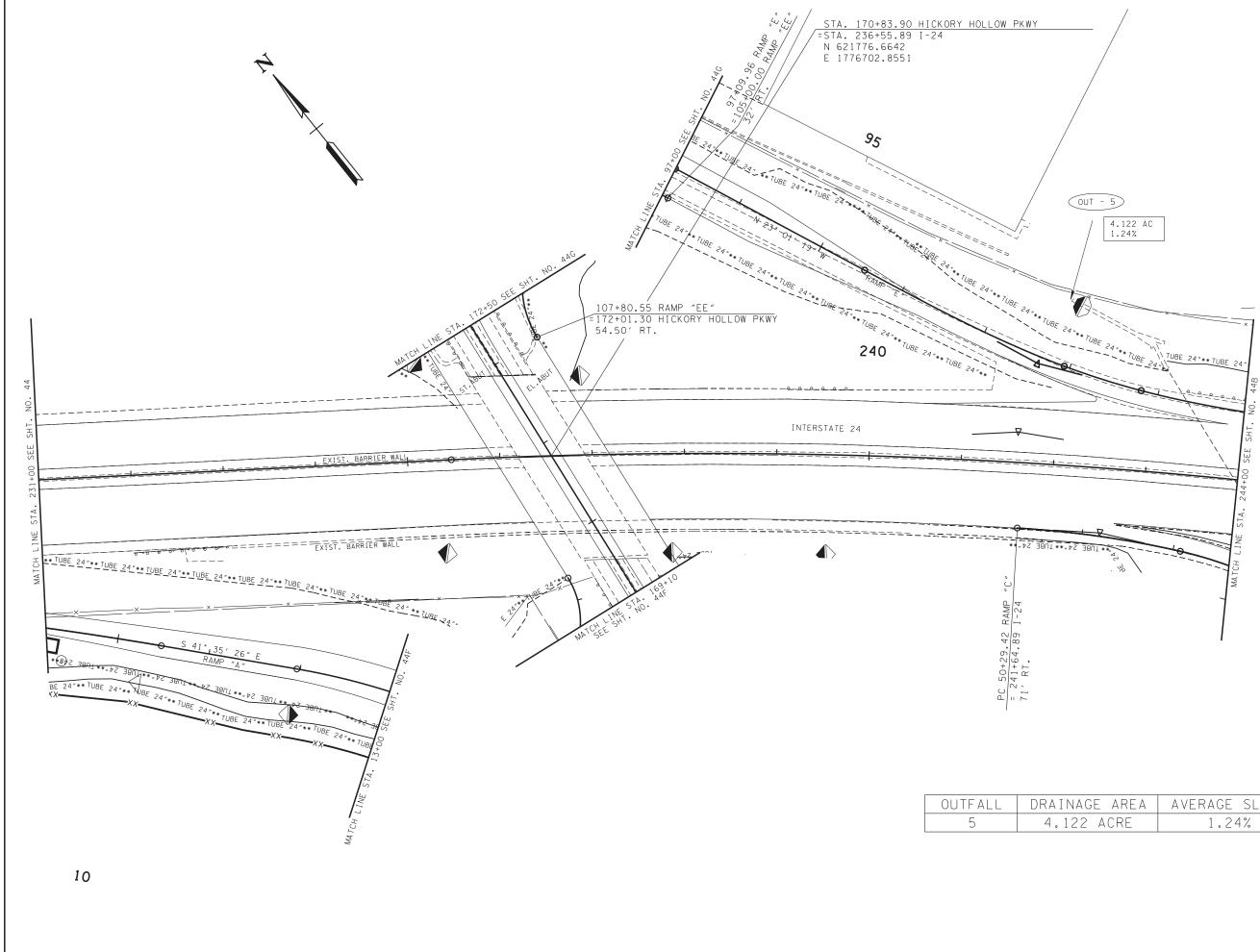
SEDIMENT CONTROL (EPSC) PLANS SCALE: 1"= 50'

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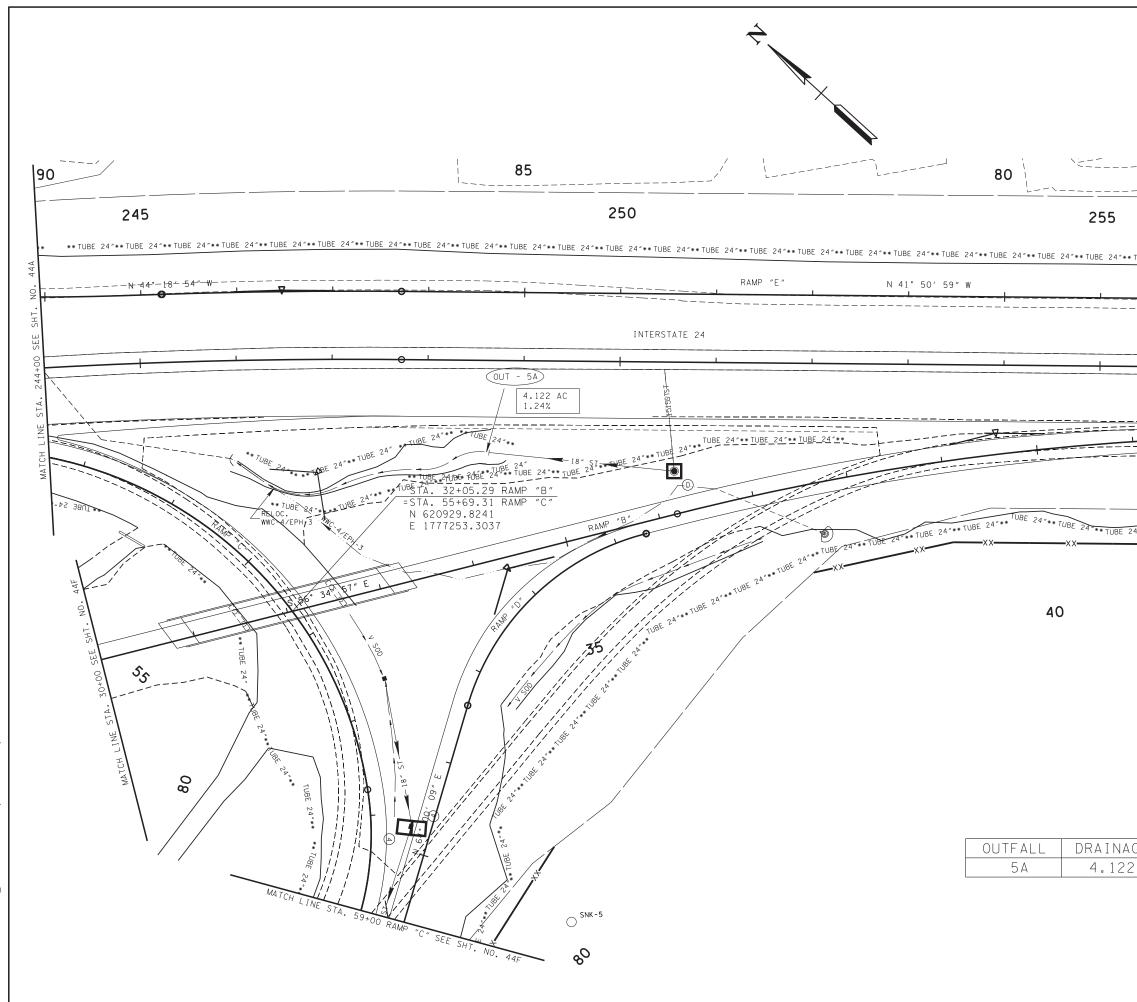




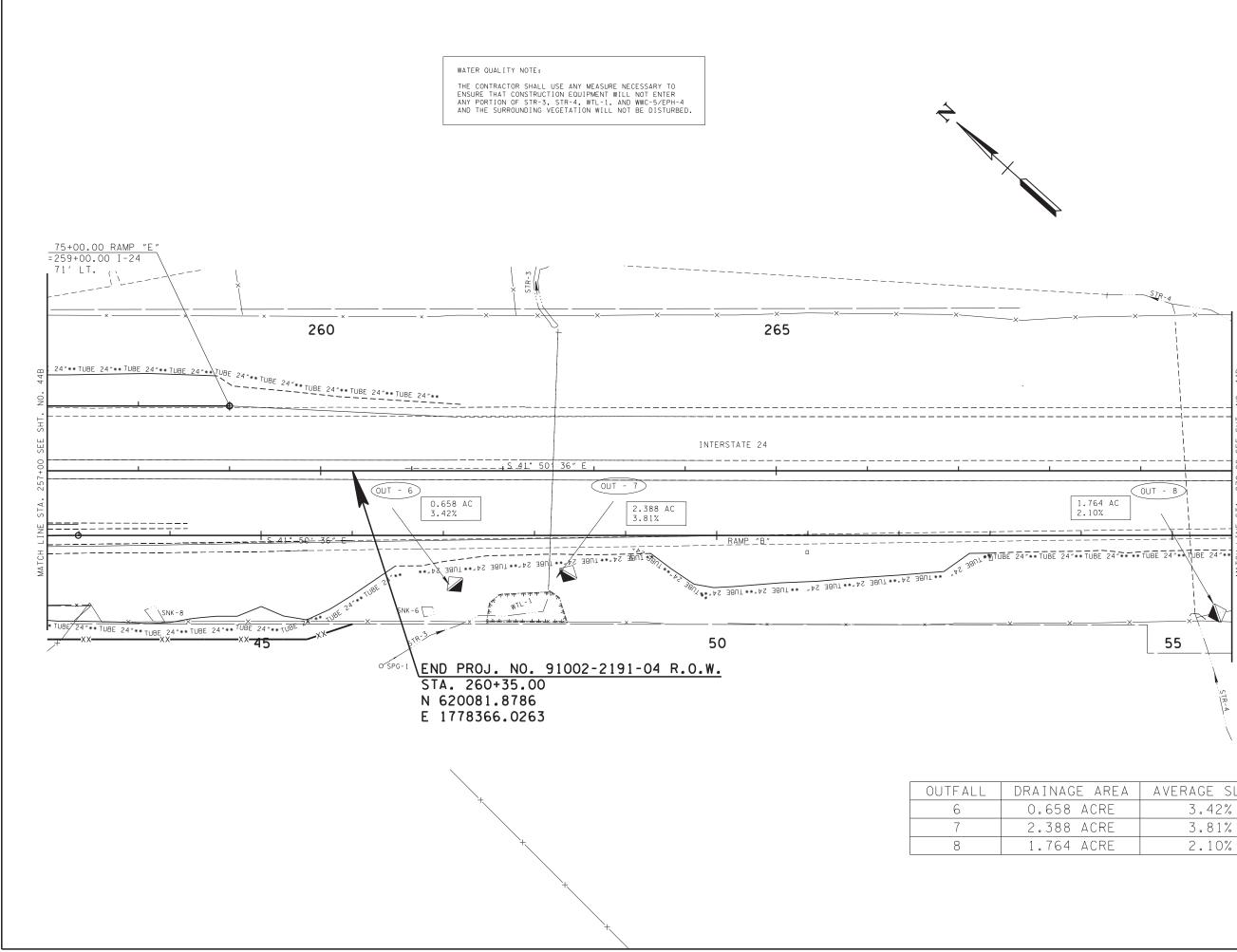
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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	39A
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	44A
TABLES & OUT	FALL L	D EPSC QUANTITIES, OUTFAI OCATIONS PER TDOT REGIOI H GROUP COMMENTS.	

		AREL W.
NAGE AREA	AVERAGE SLOPE	STAGE II
22 ACRE	1.24%	INTERMEDIATE GRADING
		STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
		EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS SCALE: 1"= 50'



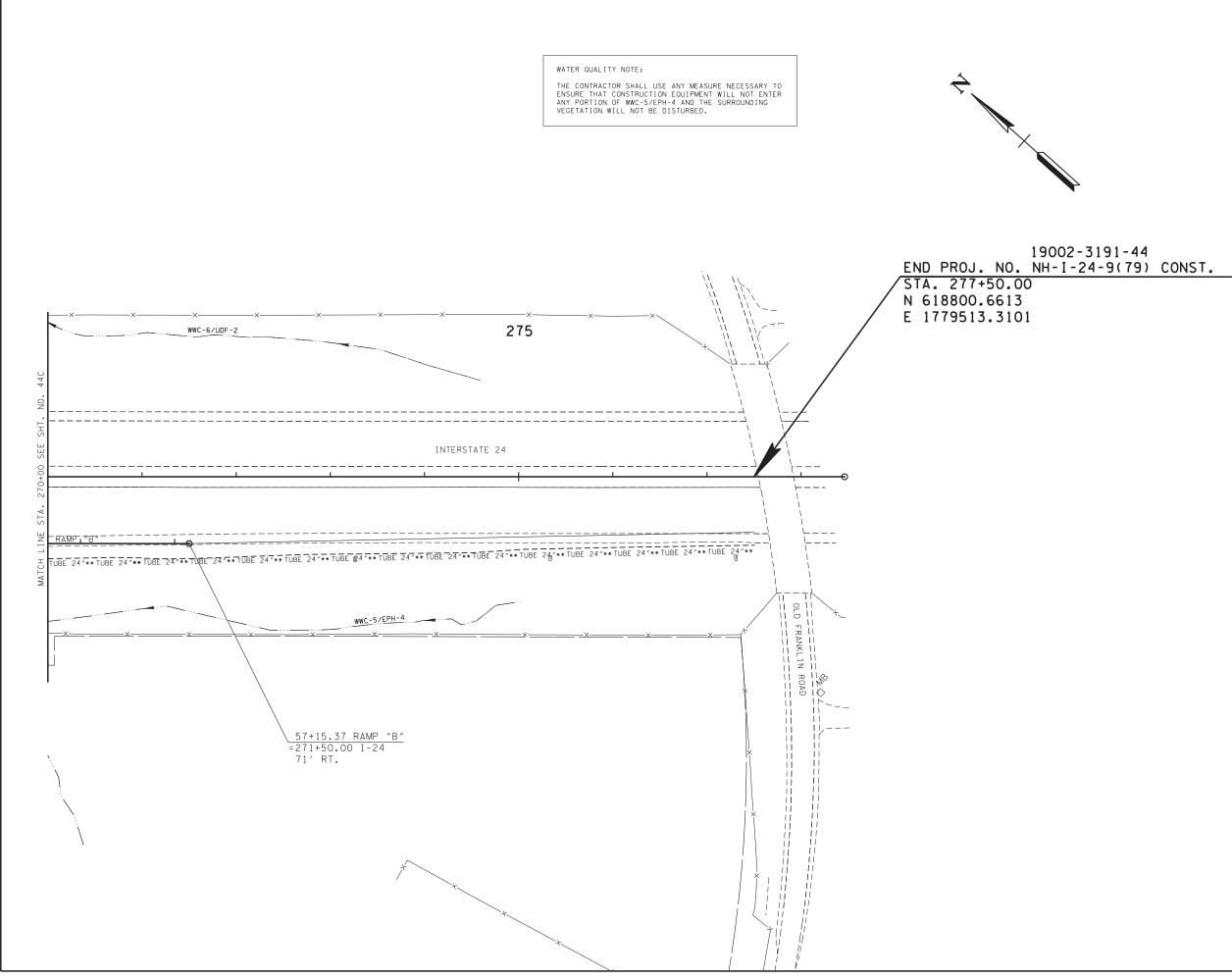
	TYPE	YEAR	PROJECT NO.	SHEET NO.
	R.O.W.	2017	19002-2191-04	39B
	CONST.	2018	NH-I-24-9(79)	44B
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	ENVIRONMEI	NTAL/TECH (	GROUP COMMENTS.	
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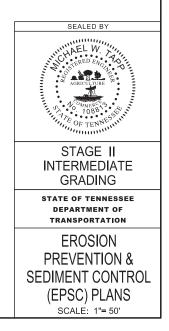
	TYPE	YEAR	PROJECT NO.	SHEE NO.
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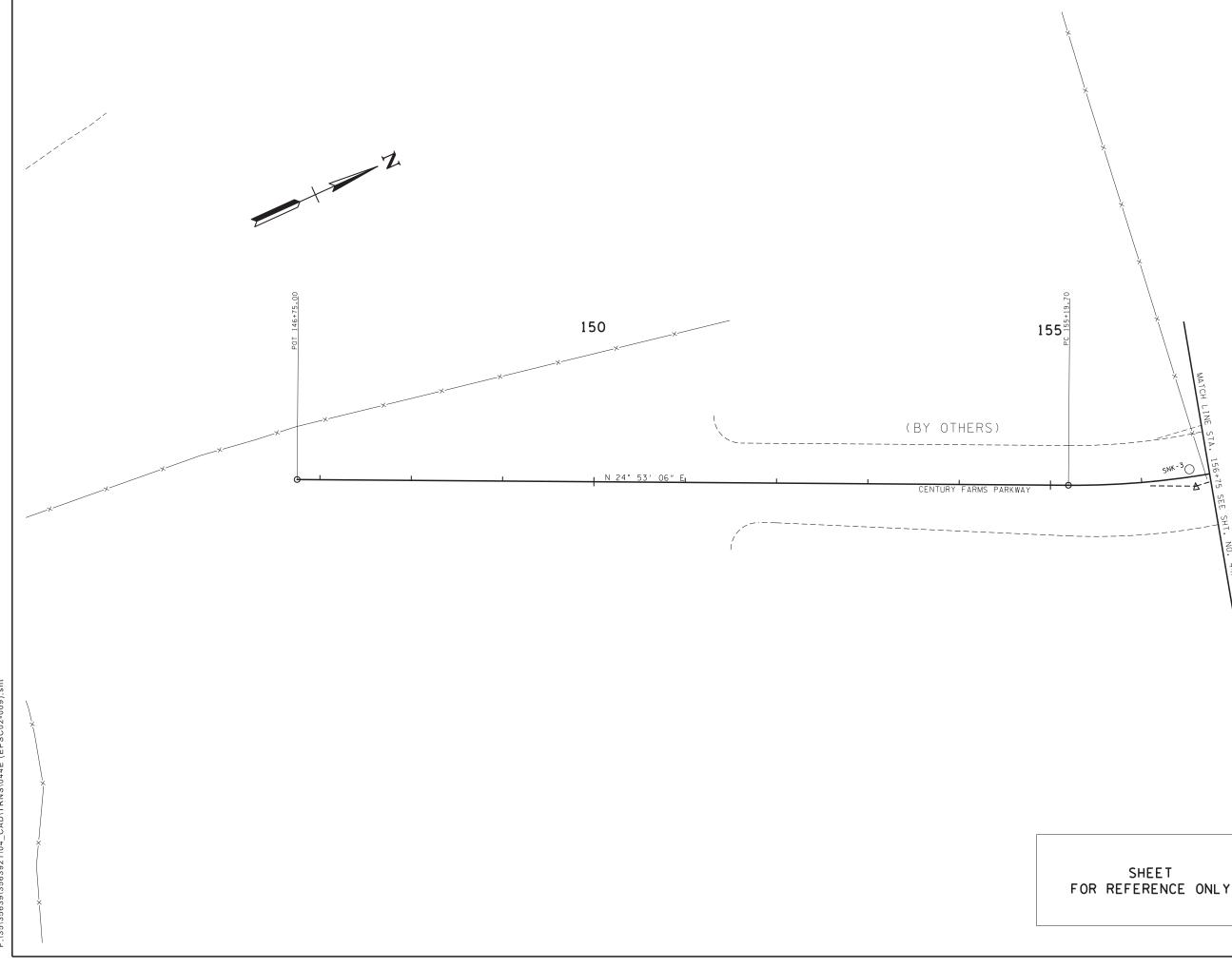
NAGE AREA	AVERAGE SLOPE
58 ACRE	3.42%
388 ACRE	3.81%
64 ACRE	2.10%



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TYPE	YEAR	PROJECT NO.	SHEET NO.		
R.O.W.	2017	19002-2191-04	39D		
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	44D		
REV. 3-21-18: REVISED EPSC QUANTITIES, OUTFALL					
TABLES & OUTFALL LOCATIONS PER TDOT REGION 3 ENVIRONMENTAL/TECH GROUP COMMENTS.					
ENVIRONMENTAL/TECH GROUP COMMENTS.					

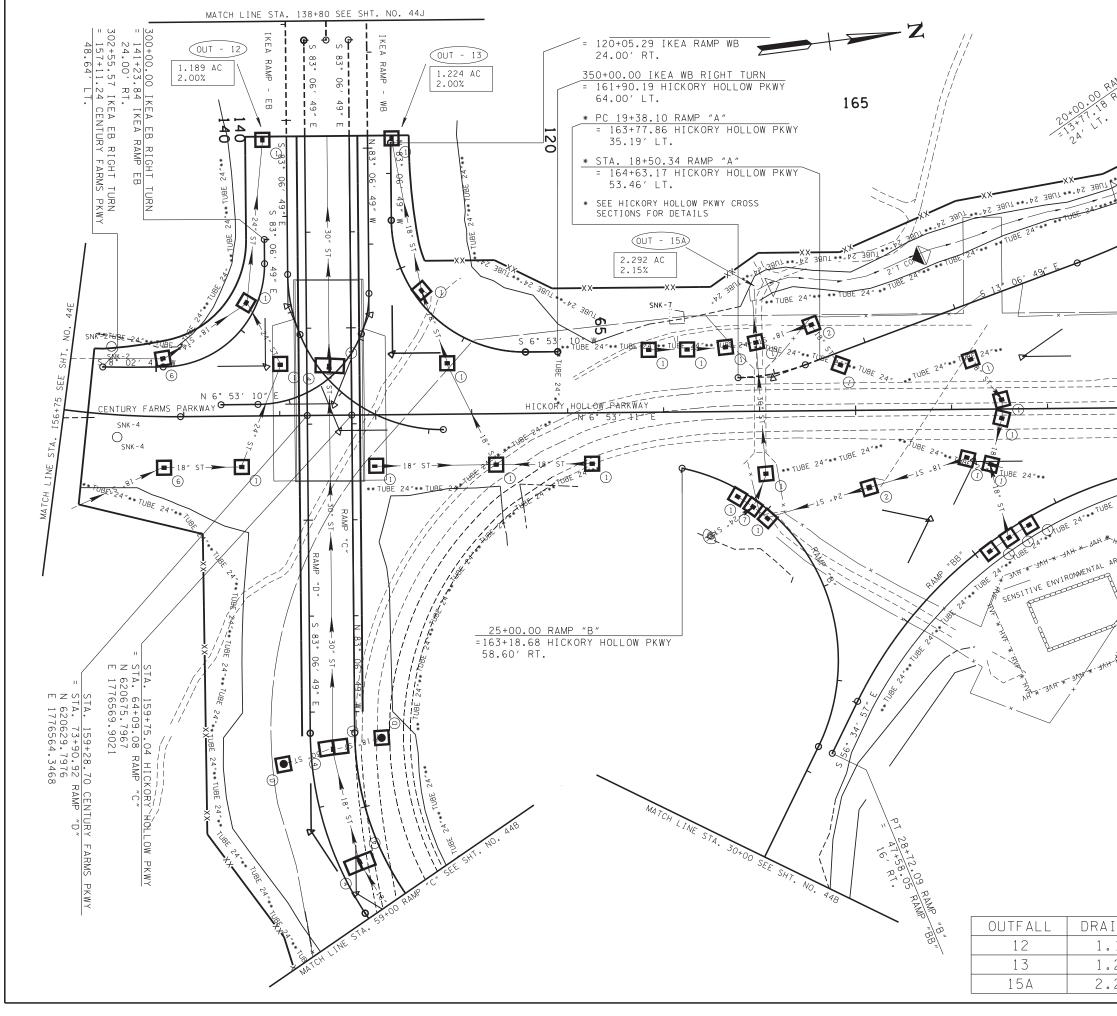




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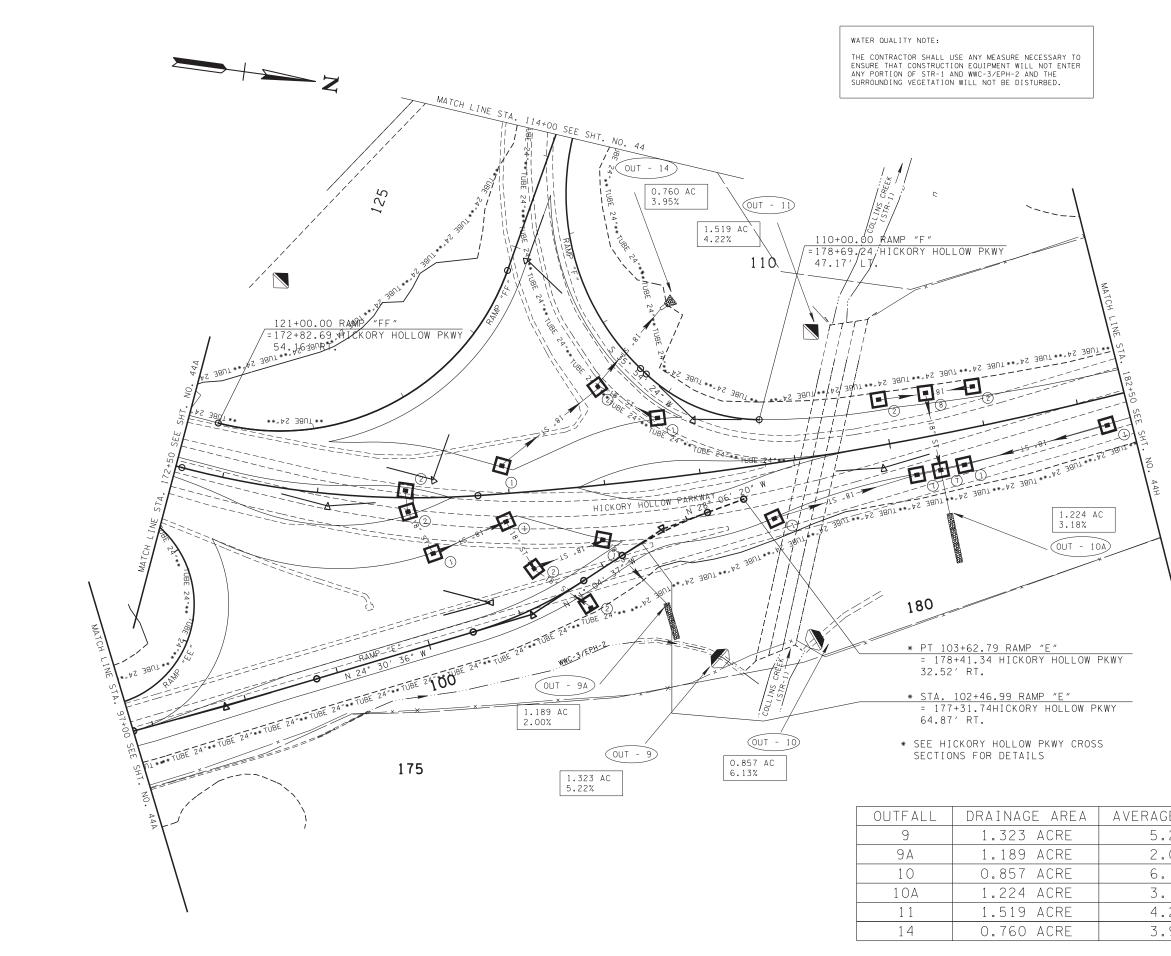
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	39E
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	44E

	STAGE II INTERMEDIATE GRADING
CUEET	STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
SHEET OR REFERENCE ONLY	EROSION PREVENTION & SEDIMENT CONTROL
	(EPSC) PLANS SCALE: 1"= 50'



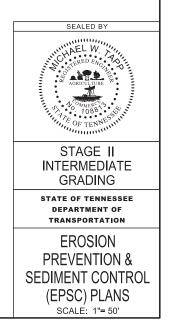
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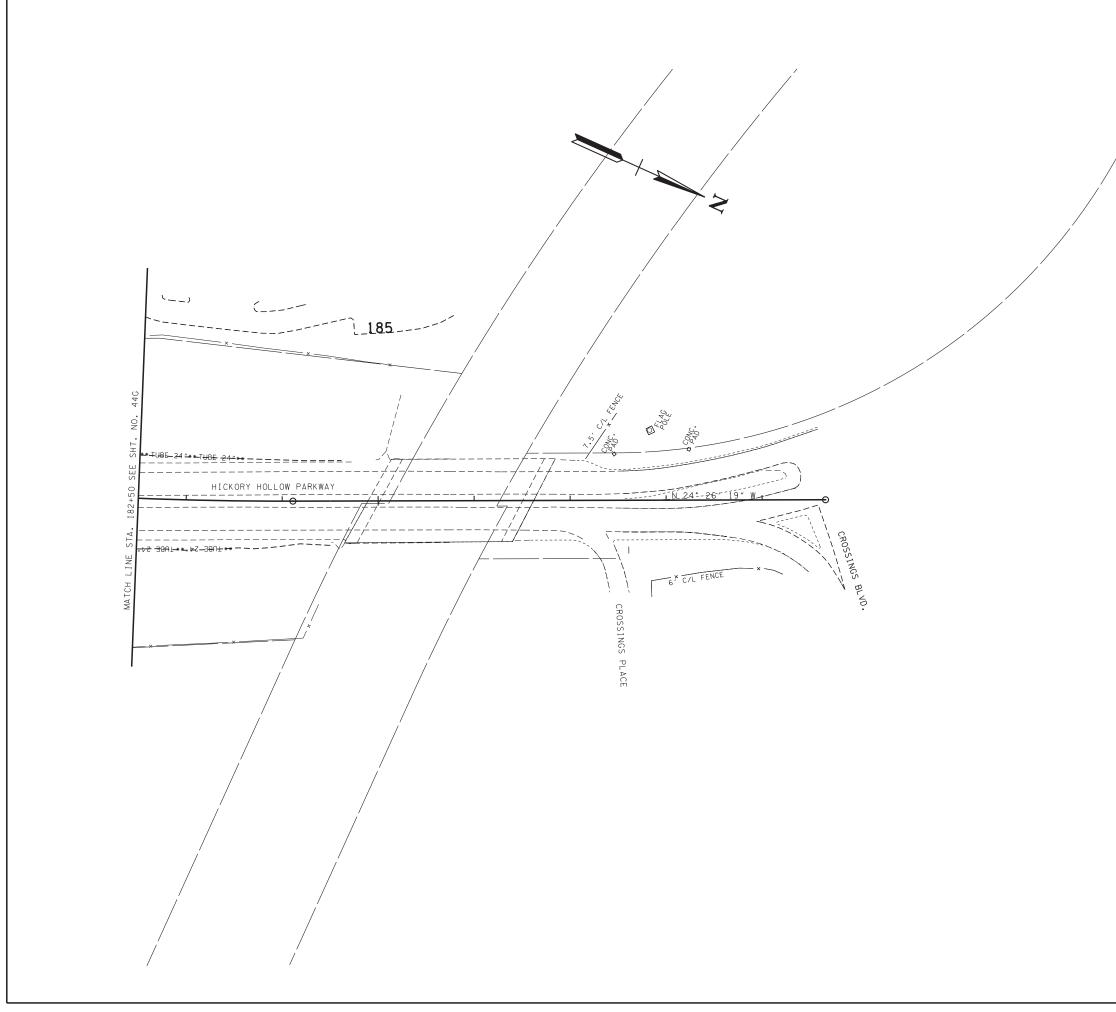
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INAGE       AREA       AVERAGE       SLOPE         INTERMEDIATE       GRADING       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE	14	CONST.	2018	NH-I-24-9(79)	44F
INAGE       AREA       AVERAGE       SLOPE         INTERMEDIATE       GRADING       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE					
INAGE       AREA       AVERAGE       SLOPE         INTERMEDIATE       GRADING       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       SEDIMENT CONTROL         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE       INTERMEDIATE         INTERMEDIATE       INTERMEDIATE	AMP A A A A A A A A A A A A A A A A A A	TABLES & OUT	FALL LO	DCATIONS PER TDOT REGION	
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189 ACRE         2.00%         PREVENTION &           224 ACRE         2.00%         SEDIMENT CONTROL           292 ACRE         2.15%         (EPSC) PLANS					
224 ACRE         2.00%         SEDIMENT CONTROL           292 ACRE         2.15%         (EPSC) PLANS					
292 ACRE 2.15% (EPSC) PLANS			٩F		0
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	2.15%				



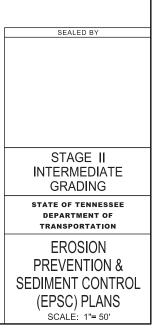
TYPE	YEAR	PROJECT NO.	SHEET NO.	
R.O.W.	2017	19002-2191-04	39G	
CONST.	2018	NH-I-24-9(79)	44G	
REV. 3-21-18: REVISED EPSC QUANTITIES, OUTFALL TABLES & OUTFALL LOCATIONS PER TDOT REGION 3 ENVIRONMENTAL/TECH GROUP COMMENTS.				

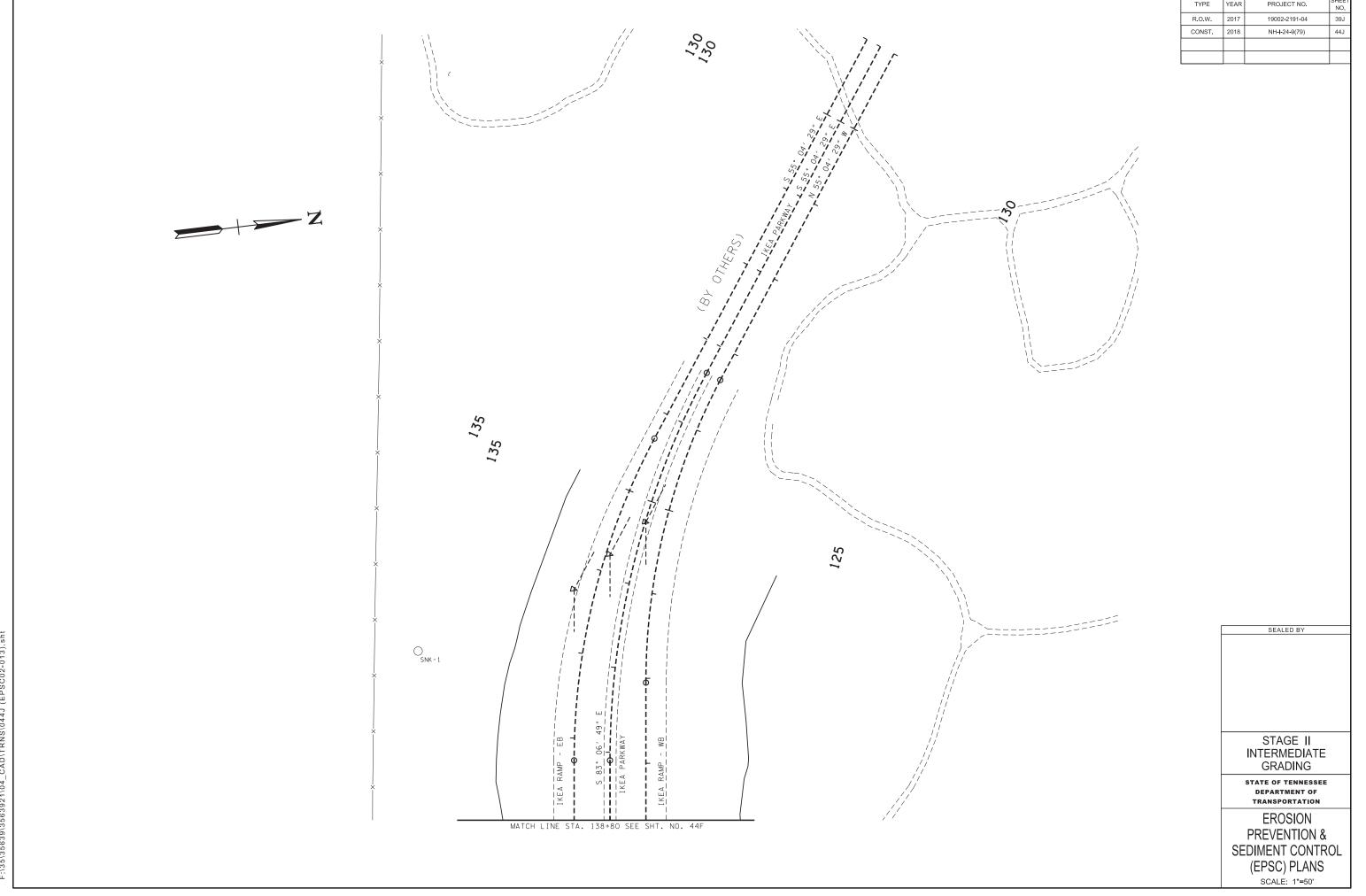
NAGE AREA	AVERAGE SLOPE
23 ACRE	5.22%
89 ACRE	2.00%
57 ACRE	6.13%
24 ACRE	3.18%
19 ACRE	4.22%
'60 ACRE	3.95%





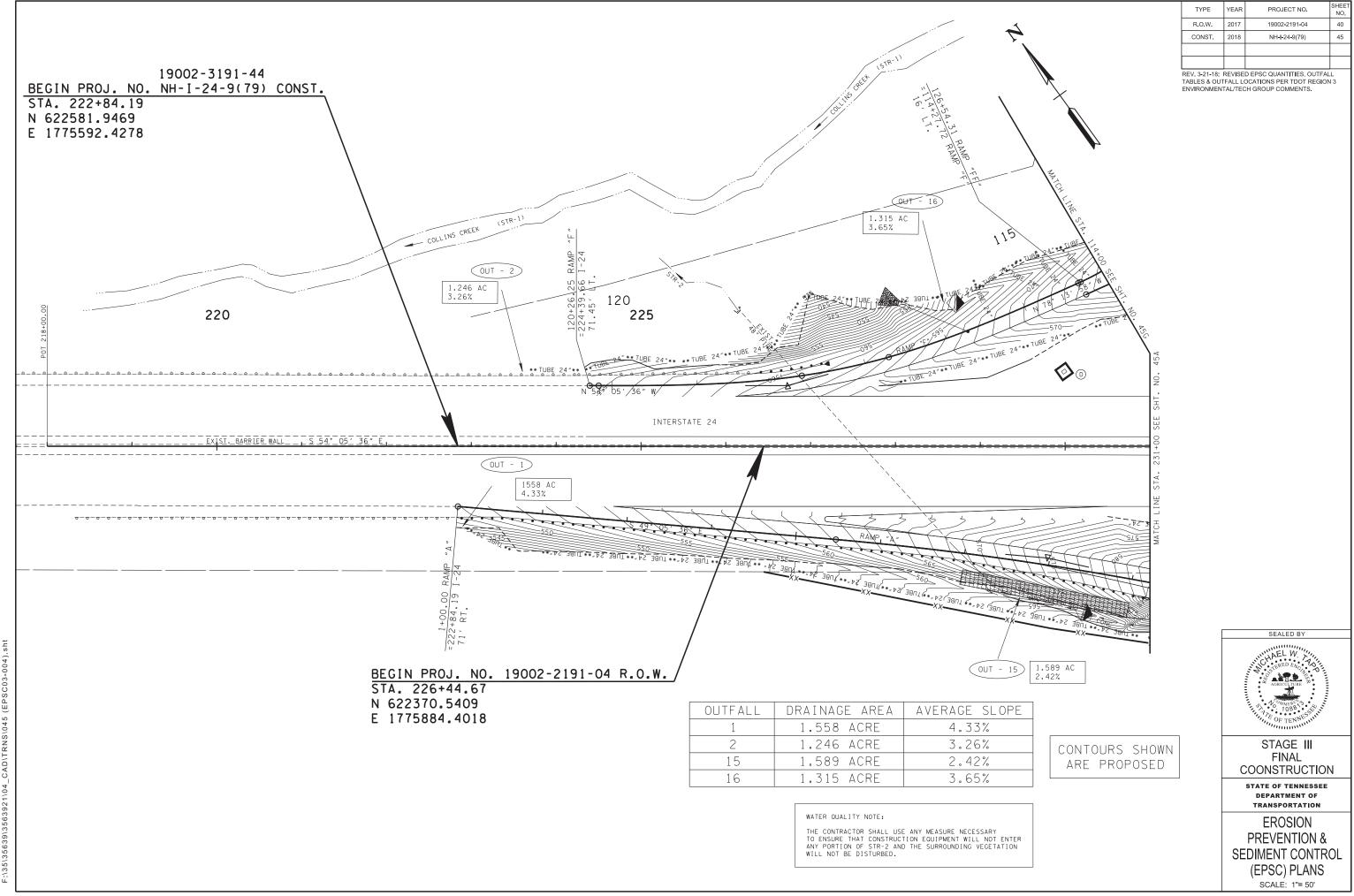
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	39H
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	44H



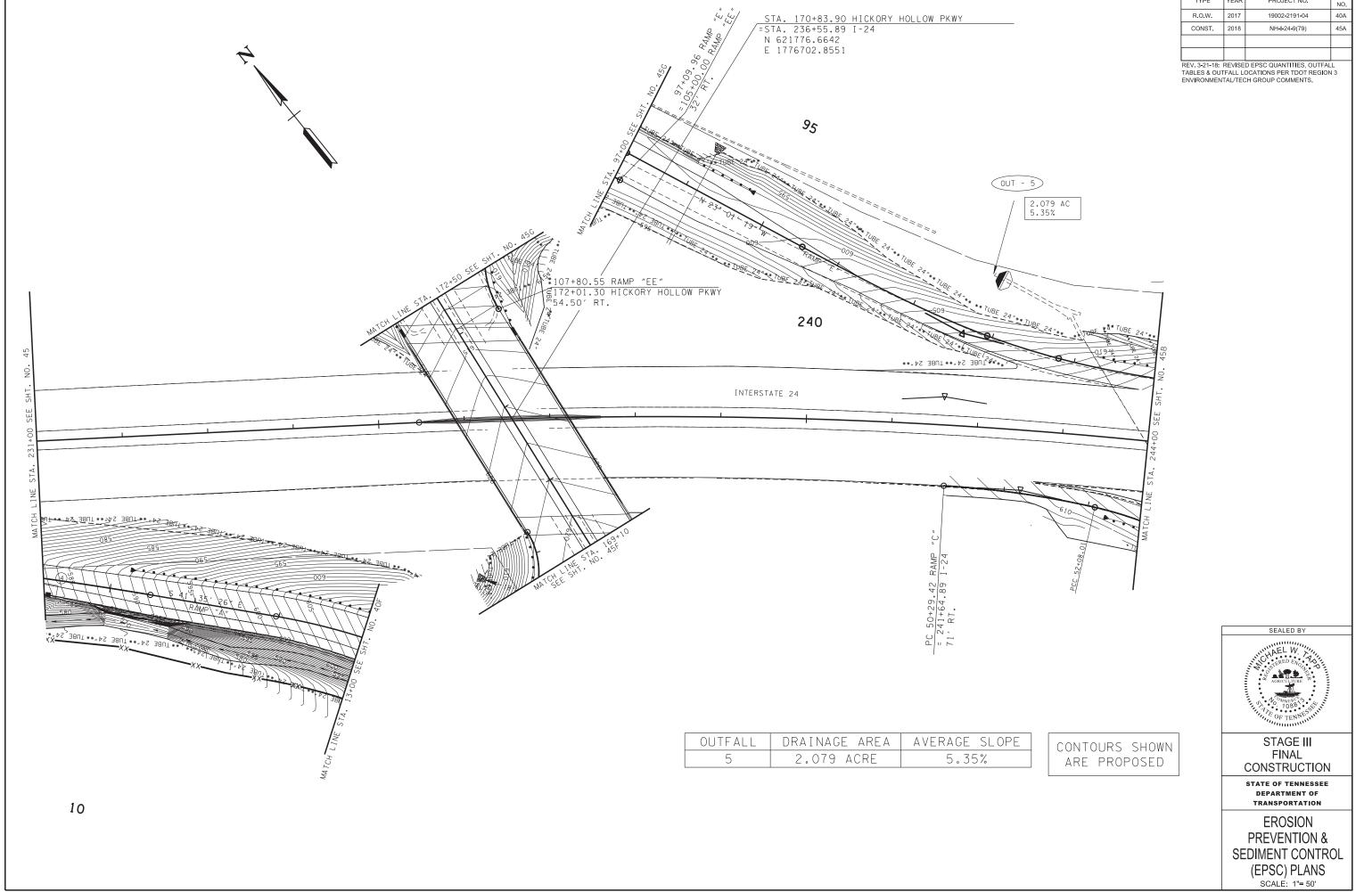


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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	39J
CONST.	2018	NH-I-24-9(79)	44J

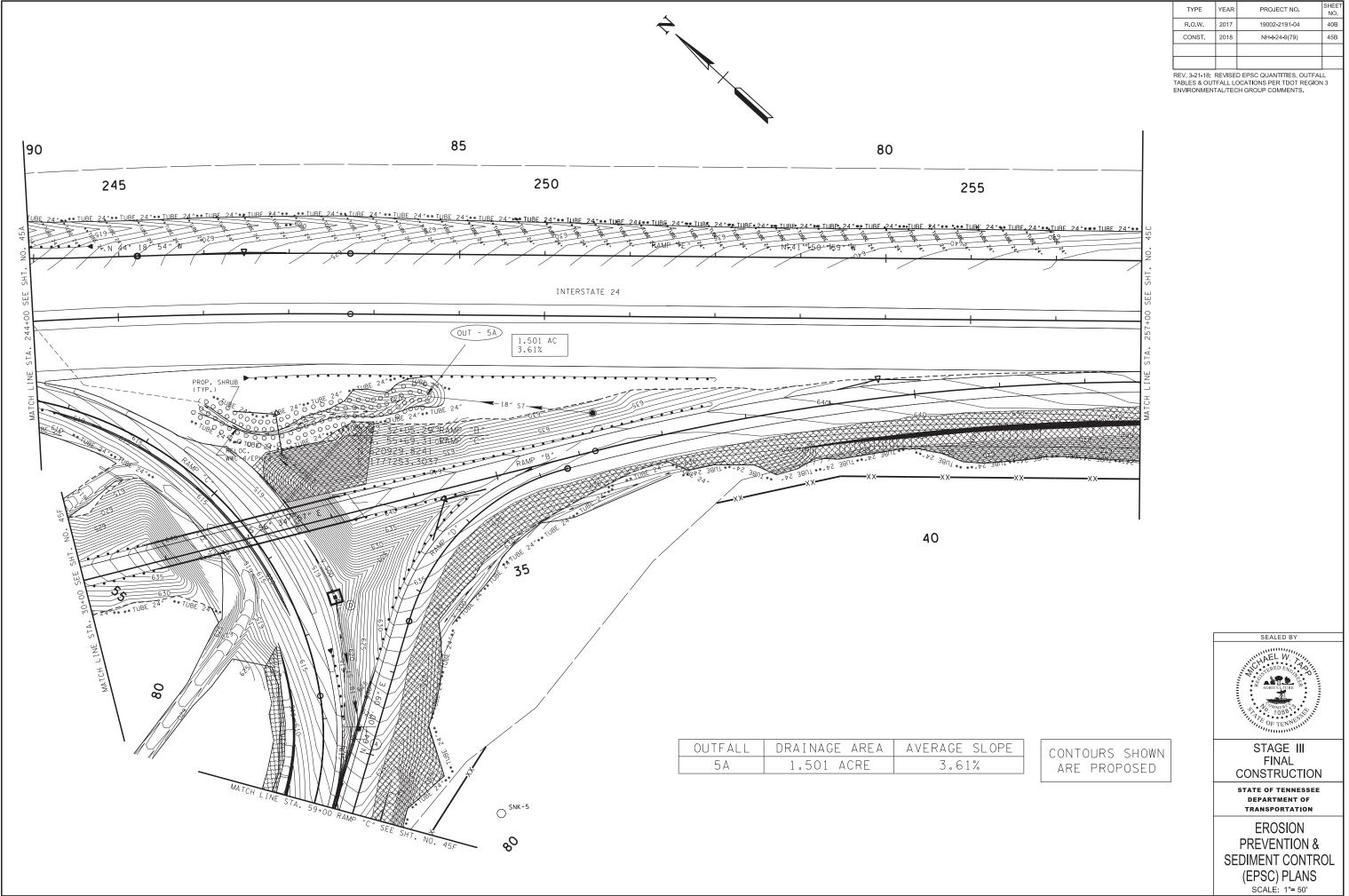


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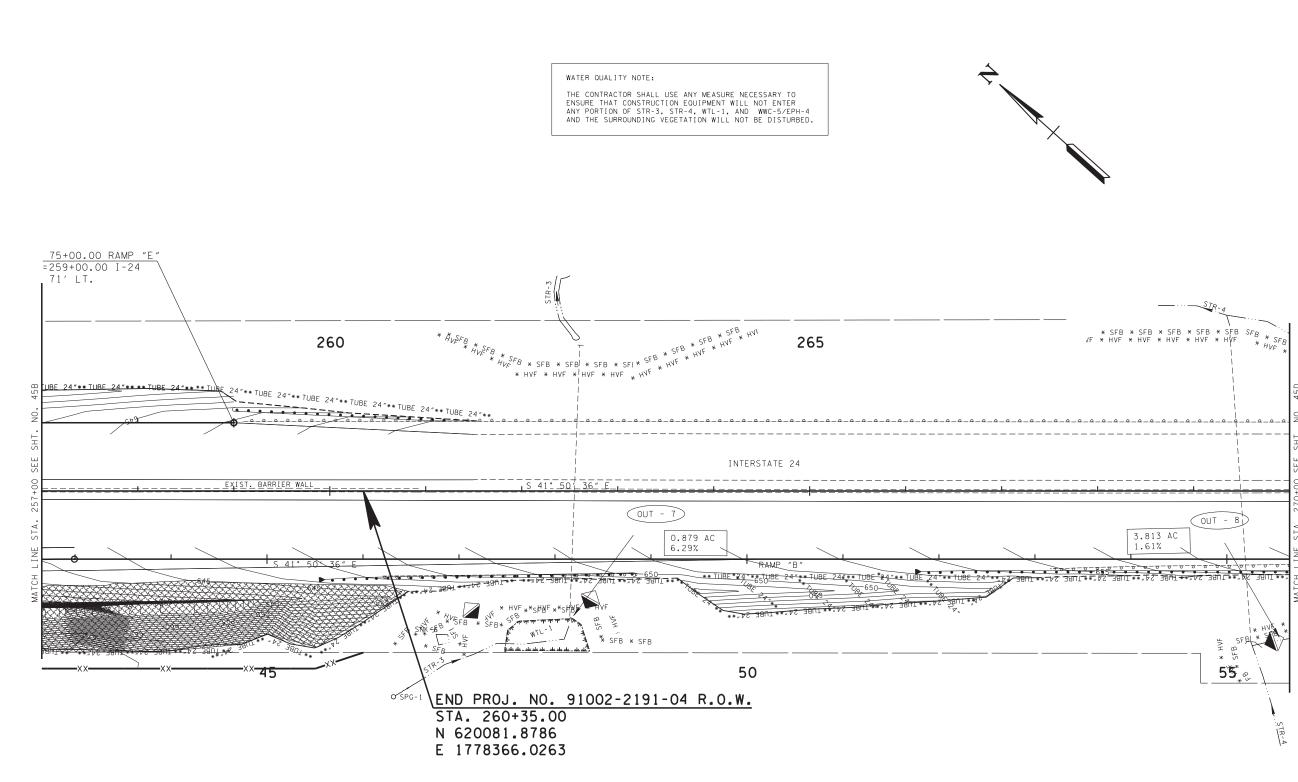


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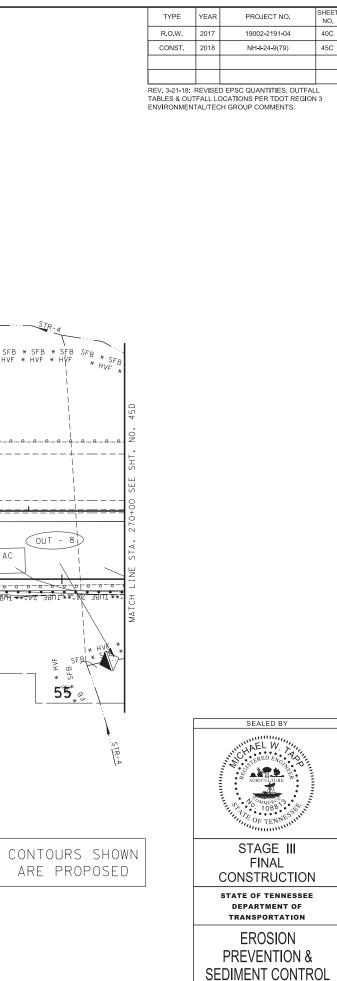
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	40A
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	45A
TABLES & OUT	FALL L	D EPSC QUANTITIES, OUTFAL OCATIONS PER TDOT REGION CH GROUP COMMENTS.	



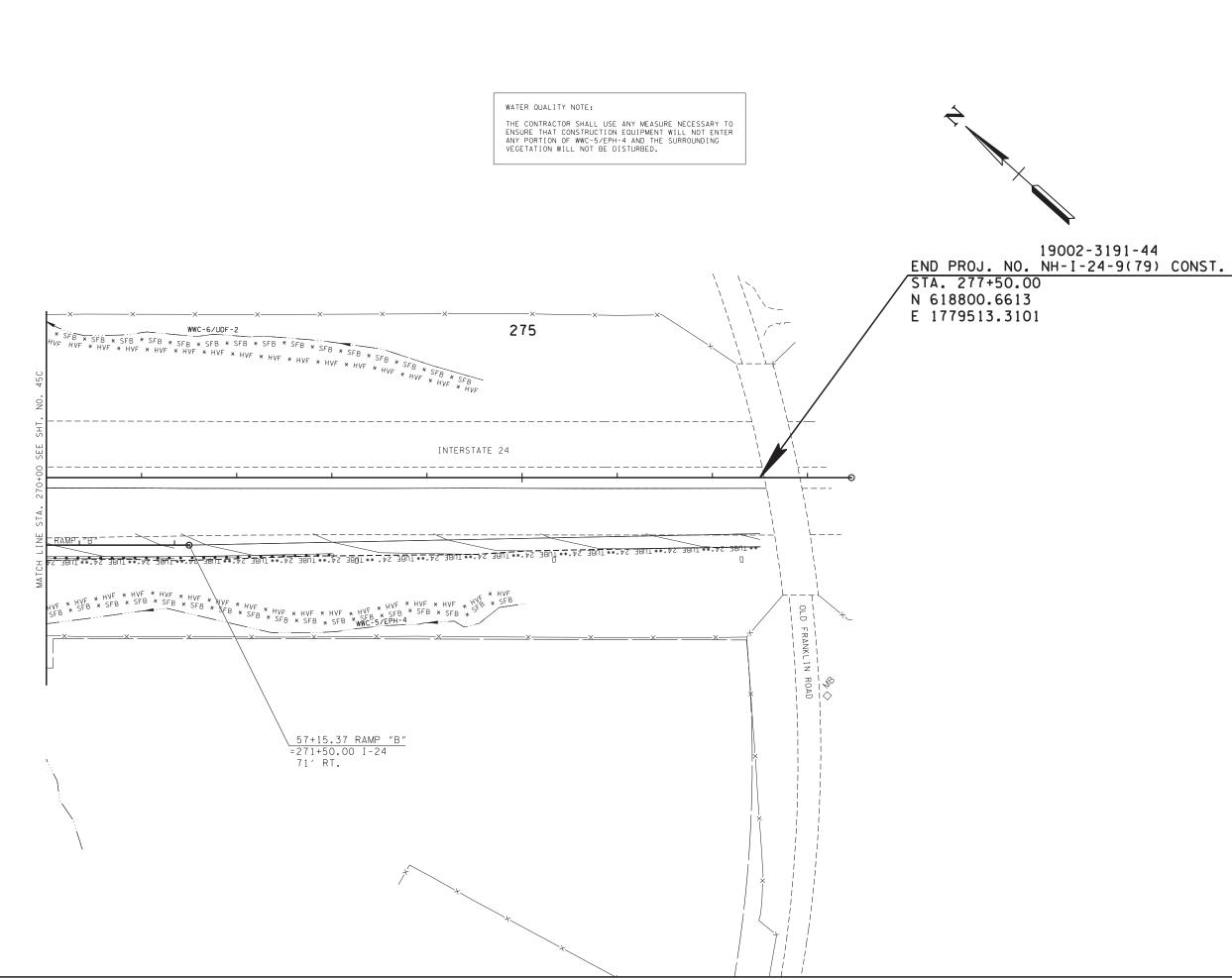
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OUTFALL	DRAINAGE AREA	AVERAGE SLOPE
7	O.879 ACRE	6.29%
8	3.813 ACRE	1.61%

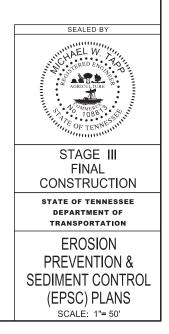


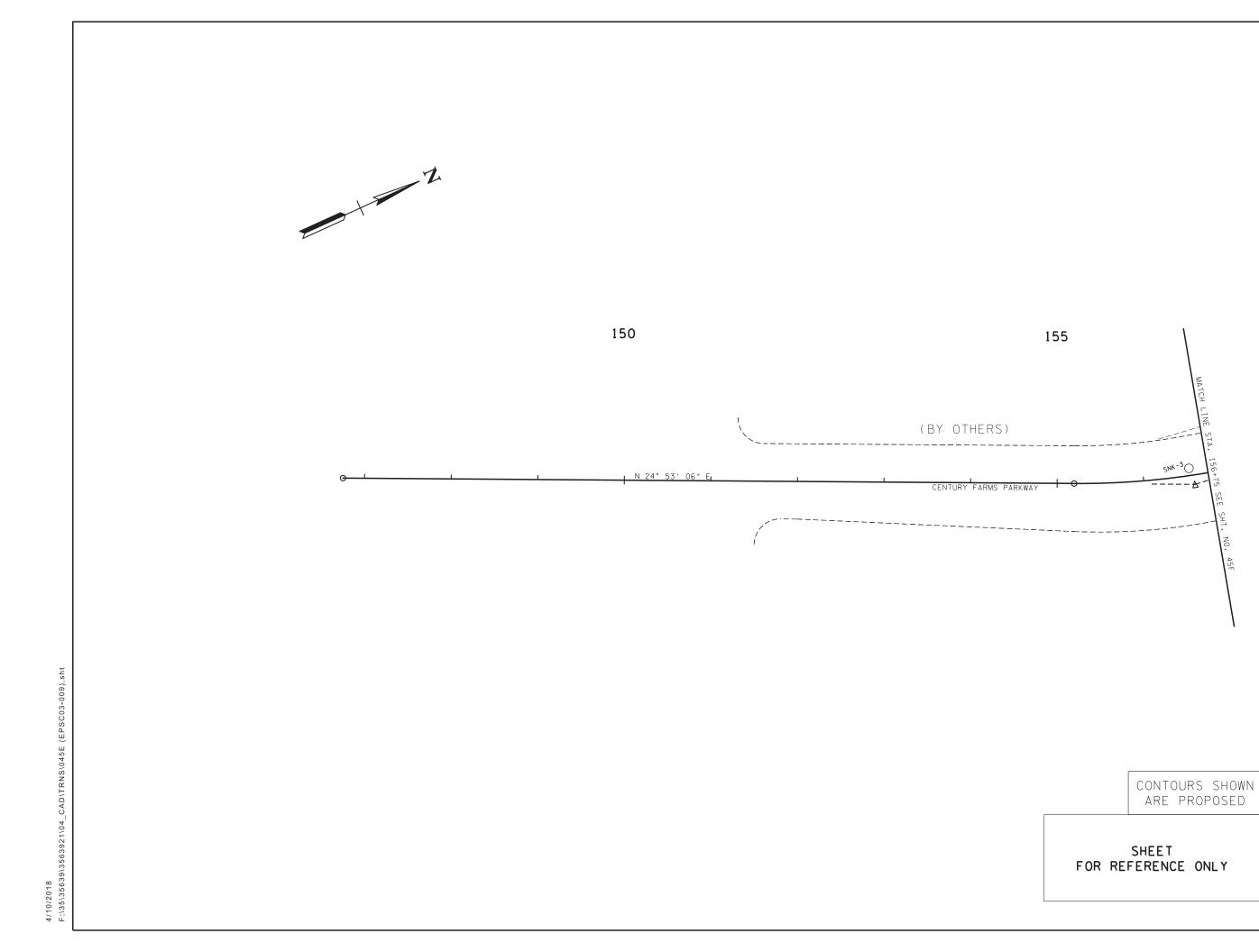
(EPSC) PLANS SCALE: 1"= 50'



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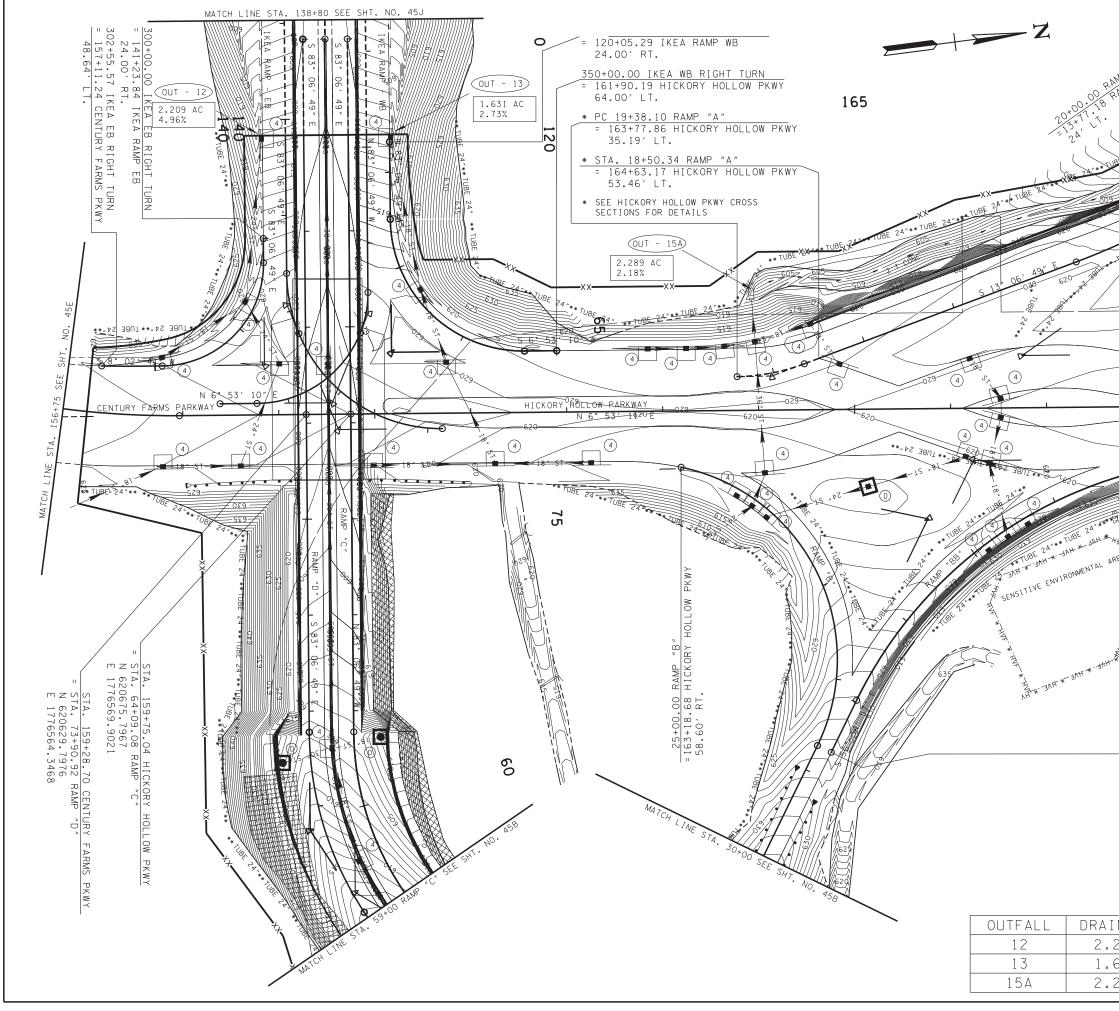
TYPE	YEAR	PROJECT NO.	SHEET NO.	
R.O.W.	2017	19002-2191-04	40D	
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	45D	
REV. 3-21-18: REVISED EPSC QUANTITIES, OUTFALL TABLES & OUTFALL LOCATIONS PER TDOT REGION 3 ENVIRONMENTAL/TECH GROUP COMMENTS.				





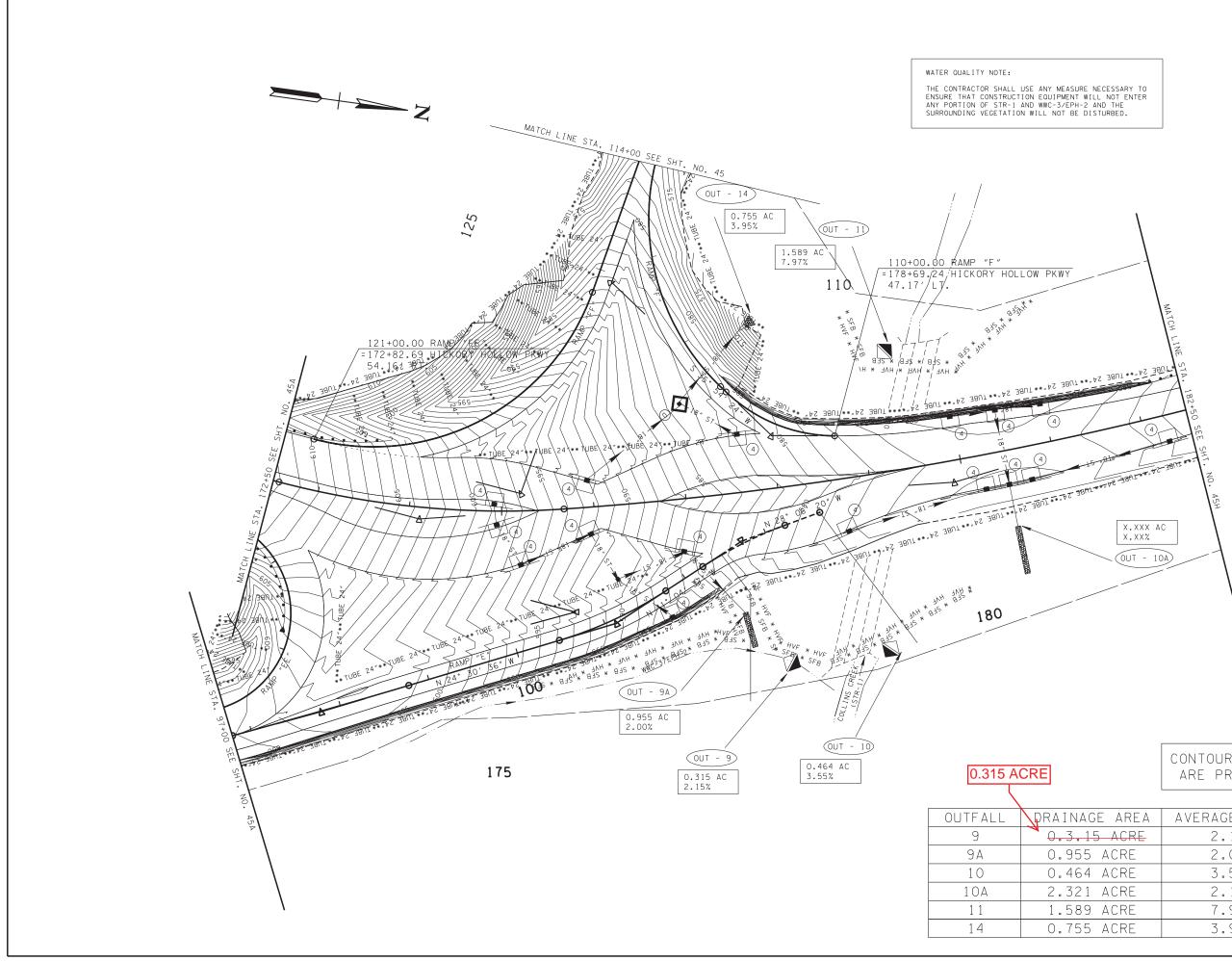
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	40E
CONST.	2018	NH-I-24-9(79)	45E

STAGE III FINAL
CONSTRUCTION
STATE OF TENNESSEE DEPARTMENT OF
TRANSPORTATION
EROSION
<b>PREVENTION &amp;</b>
SEDIMENT CONTROL
(EPSC) PLANS
SCALE: 1"= 50'



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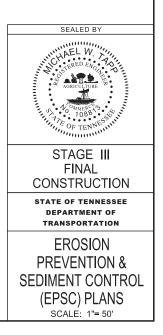
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	TYPE	YEAR	PROJECT NO.	SHEET NO.
	R.O.W.	2017	19002-2191-04	40F
4.	CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	45F
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209 ACRE 4.96%			REVENTION	
			IMENT CONT	KUL
631 ACRE 2.73%				
631 ACRE         2.73%           289 ACRE         2.18%		(	EPSC) PLANS	

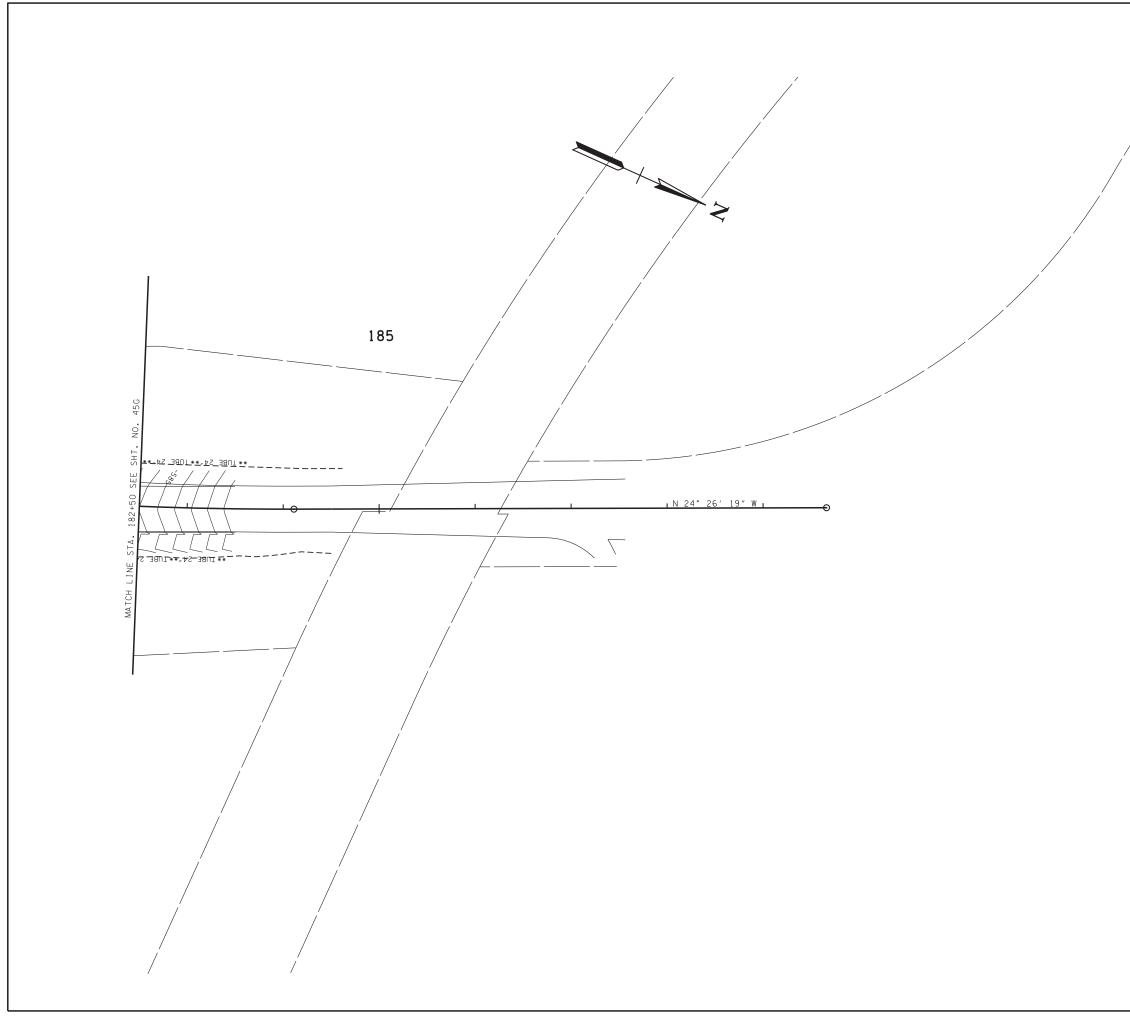


TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	40G
CONST.	2018	NH <b>-I-</b> 24 <b>-</b> 9(79)	45G

CONTO	DURS	SHOWN
ARE	PROF	POSED

NAGE AREA	AVERAGE SLOPE
.15 ACRE	2.15%
55 ACRE	2.00%
64 ACRE	3.55%
21 ACRE	2.12%
89 ACRE	7.97%
55 ACRE	3.95%



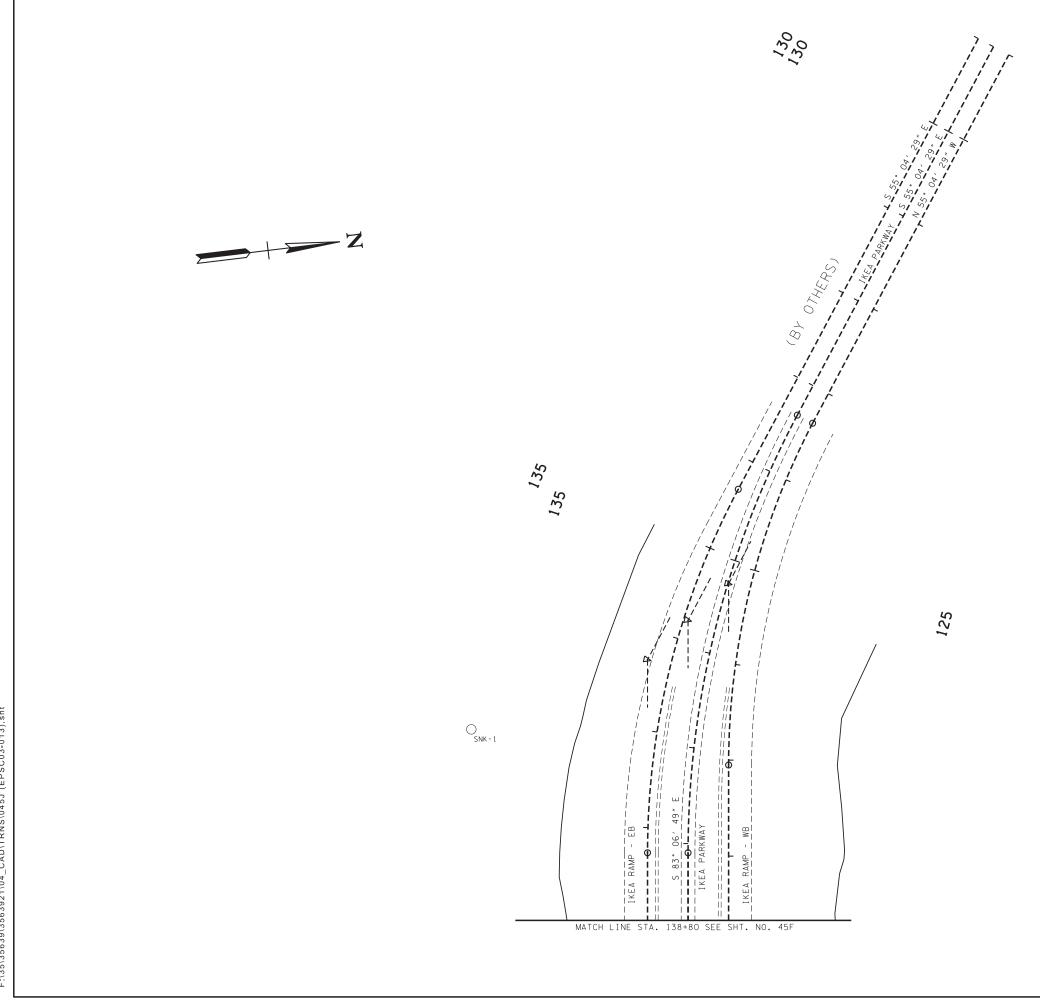


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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2017	19002-2191-04	40H
CONST.	2018	NH-I-24-9(79)	45H

## CONTOURS SHOWN ARE PROPOSED

STAGE III FINAL
CONSTRUCTION
STATE OF TENNESSEE Department of Transportation
EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS
SCALE: 1"= 50'



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	SEALED BY
CONTOURS SHOWN ARE PROPOSED	STAGE III FINAL CONSTRUCTION
CUEET	STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
SHEET FOR REFERENCE ONLY	EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS SCALE: 1"=50'

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