

Index Of Sheets
SEE SHEET NO. 4-1A



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

DAVIDSON COUNTY

INTERSTATE 440 (WIDENING)
FROM INTERSTATE 40
TO INTERSTATE 24

READY FOR CONSTRUCTION PACKAGE #4

GRADING, DRAINAGE, BRIDGES, PAVING, SIGNS, STRIPING, RETAINING WALL, ITS, STRUCTURE REPAIR

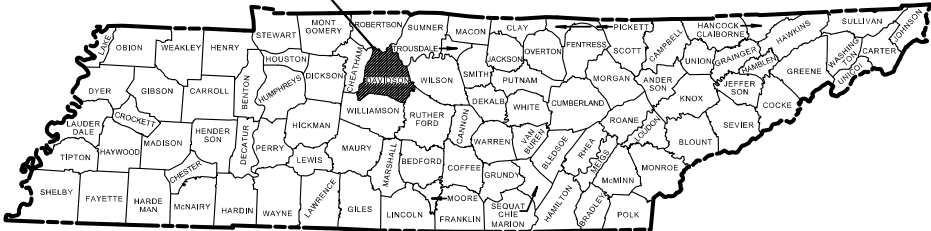
STATE HIGHWAY NO. I-440 F.A.H.S. NO. I-440

TENN.	YEAR	SHEET NO.
	2019	4-1
FED. AID PROJ. NO.	NH-I-440-4(84)	
STATE PROJ. NO.	19014-3171-44	

DESIGN-BUILD PROJECT

PROJECT LOCATION

STATE PROJ. I.D. # 19014-3171-44



NO EXCLUSIONS

EQUATIONS

DESCRIPTION	NET EFFECT ON NUMERATION
STA. 13007+21.96 BK. = STA. 1000+00.00 AH.	+ 1,200,721.96



BEGIN PROJECT NO. NH-I-440-4(84)
19014-3171-44

RAMP I-40 WB TO I-440 EB STA. 13003+89.38
N 663853.9563 E 1725682.6990

RAMP I-440 WB TO I-40 WB STA. 12006+81.41=
RAMP I-40 WB TO I-440 EB STA. 13007+21.96=
I-440 STA. 1000+00.00

BEGIN PACKAGE 4
I-440 STA. 1164+00.00

BEGIN PACKAGE 5
I-440 STA. 1226+00.00
(PACKAGE 5 INCLUDED IN
PACKAGE 4 FOR REFERENCE ONLY)

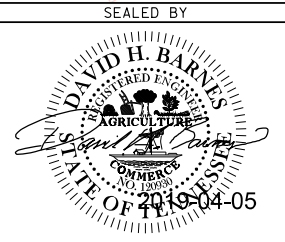
	DB 1701	Pkg. 4
ROADWAY LENGTH	6.955 MILES	2.023 MILES
BRIDGE LENGTH	0.237 MILES	0.042 MILES
BOX BRIDGE LENGTH ▲	0.00 MILES	0.000 MILES
PROJECT LENGTH	7.192 MILES	2.065 MILES

▲ Not included in the project length.

SURVEY 5-4-2016	TRAFFIC DATA
	ADT (2021) 103,000
	ADT (2041) 123,720
	DHV (2041) 13,610
	D 55 - 45
	T (ADT) 7 %
	T (DHV) 5 %
	V 60 MPH

COORDINATE VALUES ARE NAD/83 (1995), AND ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006, AND ARE TIED TO THE TENNESSEE GEODETIC REFERENCE
NETWORK. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

Digitally signed by David Barnes
Date: 2019.04.05 20:08:13 -04'00'



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

DATE: _____

APPROVED: Clay Bright
CLAY BRIGHT, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

SPECIAL NOTES

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 C.E. MANAGER: SHANE HESTER, P.E., PROJECT DEVELOPMENT DIRECTOR

DESIGNED BY: WSP USA

DESIGNER: DAVID H. BARNES, P.E. CHECKED BY LARRY RIDLEN, P.E.

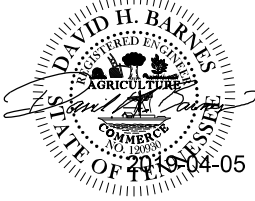
P.E. NO. 19014-1174-44 (DESIGN)

PIN NO. 125325.00

4/4/2019 6:51:48 AM
\\prdpwics02\pics_workingdir\3012\305979_131\4-001B.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-1B

SEALED BY



2019-04-05

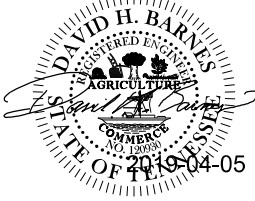
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROJECT
COMMITMENTS

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDAC001	ENVIRONMENTAL DIVISION, ARCHEOLOGICAL	Avoid all construction activities behind (outside of) the sound wall and/or control fences at the properties in all four (northwest, southwest, northeast, and southeast) quadrants of the intersection of Granny White Pike and Gale Lane on the north side of I-440, in the areas marked "Sensitive Environmental Area". Construction activities to avoid in this area include all earthmoving and ground disturbing activities, staging of heavy equipment, excavation of borrow materials, and vegetation removal.	All four quadrants of the Granny White Pike/Gale Lane intersection.
EDAC002	ENVIRONMENTAL DIVISION, ARCHEOLOGICAL	The Cherokee Nation has requested that TDOT archaeologists monitor portions of the project in the vicinity of Granny White Pike, Gale Lane, and Battlefield Drive to ensure that all construction activities are confined to previously disturbed existing right-of-way. TDOT Archaeology will monitor the construction schedule, make bi-monthly site inspections throughout construction, and provide written reports and photographs to The Cherokee Nation documenting avoidance of archaeological sites abutting I-440.	I-440 at Granny White Pike, Granny White Pike at Gale Lane and Battlefield Drive
EDHZ004	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	Asbestos Containing Material (ACM) surveys were conducted on the following bridges. No ACM was detected on any bridge. See Note EDHZ001 Bridge No. 19I04400015, Sharondale Dr over I-440 LM 2.09 (19-0F107-00.44) Bridge No. 19I04400017, Woodlawn Dr over I-440 LM 2.36 (19-04891-01.93) Bridge No. 19I04400019, SR-106 (Hillsboro Pike) over I-440 LM 2.85 (19-SR106-06.37) Bridge No. 19I04400021, Brightwood Ave over I-440 LM 3.33 (19-0F007-00.44) Bridge No. 19I04400023, Belmont Blvd over I-440 LM 3.53 (19-04883-01.44) Bridge No. 19I04400025, Granny White Pike over I-440 LM 3.90 (19-03248-05.55)	Corridor
EDPL001	ENVIRONMENTAL DIVISION, PLANNING	A portion of the I-440 Greenway, which is currently under construction, is located under the I-440 bridges adjacent to the CSXT Railroad approximately 1,900 feet south of Charlotte Avenue. If it is necessary to close the greenway as part of the I-440 transportation project, the TDOT Contractor would notify Metropolitan Nashville and Davidson County's Parks and Recreation Department regarding any temporary closures to the I-440 Greenway. If construction of the greenway is complete at the time of construction work on the I-440 bridges, the Contractor shall be responsible for installing and removing greenway closure signs at each trail-head and along the greenway. Once any construction activities around the greenway are completed, the TDOT Contractor shall restore the area to pre-construction conditions.	Greenway under I-440 bridges adjacent to the CSXT RR approximately 1,900 ft south of Charlotte Ave.
EDHZ001	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	No special accommodations for demolition and waste disposal are anticipated for these structures and the material can be deposited in a C&D landfill. Prior to the demolition or rehabilitation of any structure (bridge or building), the contractor is required to submit the National Emission Standards for Hazardous Air Pollutants standard 10-day notice of demolition to the TDEC Division of Air Pollution Control (per TDOT Standard Specifications for Road and Bridge Construction (January 1, 2015) Sections 107.08 D and 202.03).	Project corridor

4/4/2019 6:51:40 AM
\\prdpwics02\pics_workingdir\3012\305979_130\4-001B1.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-1B1

SEALED BY

2019-04-05

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

PROJECT
COMMITMENTS

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION
EDHZ002	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	Asbestos Containing Material (ACM) surveys were conducted on the following bridges, no asbestos was detected. See Note EDHZ001. Bridge No. 19I04400027, EB I-440 over Lealand Lane, LM 4.17 (19-I0440-04.17R) Bridge No. 19I04400028, WB I-440 over Lealand Lane, LM 4.17 (19-I0440-04.17L) Bridge No. 19I04400029, EB I-440 over Craig Ave, LM 4.36 (19-I0440-04.36R) Bridge No. 19I04400030, WB I-440 over Craig Ave, LM 4.36 (19-I0440-04.36L) Bridge No. 19I04400041, I-440 over Bransford Ave, LM 5.44 (19-I0440-05.44)	Bridges 19I04400027, 19I04400028, 19I04400029, 19I04400030, 19I04400041
EDHZ003	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	Bridge 19I04400027 (EB I-440 over Lealand Lane) and Bridge 19I04400029 (EB I-440 over Craig Avenue) both have electrical conduits attached to each bridge. The bridge reports were revised to identify and discuss the conduits. The conduits were not identified as metal or plastic and are therefore suspect materials and must be sampled prior to utility work or removal. These conduits were not sampled due to safety concerns with live electrical lines. Electrical conduits have not been checked for ACM and must be sampled prior to working with these conduits.	Bridge 19I04400027, 19I04400029
EDHZ007	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	This note corrects the list in commitment EDHZ005. Asbestos Containing Material (ACM) surveys were conducted on the following bridges. No ACM was detected on any bridge. See Commitment EDHZ001. Bridge No. 19I044000001, EB I-440 over Charlotte Ave, LM 0.36 (19-I0440-00.36R) Bridge No. 19I044000002, WB I-440 over Charlotte Ave, LM 0.36 (19-I0440-00.36L) Bridge No. 19I044000004, WB I-440 over CSXT RR, LM 0.72 (19-I0440-00.72L) Bridge No. 19I044000005, Acklen Park Dr over I-440 LM 1.05 (19-0F314-00.39) Bridge No. 19I044000007, Murphy Rd over I-440 LM 1.29 (19-03255-01.92) Bridge No. 19I044000009, SR-1 (West End Ave) over I-440 LM 1.50 (19-SR001-14.84) Bridge No. 19I044000013, Richardson Ave over I-440 LM 1.77 (19-0F109-00.27) Bridge No. 19I044000053, EB I-440 over Glenrose Ave and CSXT RR, LM 7.04 (19-I0440-07.04R)	Corridor
EDHZ008	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	This note corrects the list in commitment EDHZ006. Asbestos Containing Material (ACM) surveys were conducted on the following bridges and although no ACM was detected, suspect live utility conduit that was not sampled due to safety concerns still remains. If this conduit is to be disturbed in the future, an asbestos sample must be collected. Bridge No. 19I044000003, EB I-440 over CSXT RR, LM 0.72 (19-I0440-00.72R) Bridge No. 19I044000011, SR-1 Ramp over I-440 LM 1.61 (19-SR001-14.88) Bridge No. 19I044000054, WB I-440 over Glenrose Ave and CSXT RR, LM 7.04 (19-I0440-07.04L)	Corridor
EDHZ009	ENVIRONMENTAL DIVISION, HAZARDOUS MATERIALS	Asbestos Containing Material (ACM) surveys were conducted on the following bridges. No ACM was detected on any bridge. See Commitment EDHZ001. Bridge No. 19I044000039, SR-11 (Nolensville Pike) over I-440 LM 6.32 (19-SR011-10.34) Bridge No. 19I044000043, Winford Ave over I-440 LM 6.05 (19-0F482-00.21) Bridge No. 19I044000047, CSXT RR over I-440 LM 6.40 (19-I0440-06.40) Bridge No. 19I044000049, Pedestrian Crosswalk over I-440 LM 6.62 (19-I0440-06.62) Bridge No. 19I044000051, Foster Ave over I-440 LM 6.82 (19-04165-00.92) Bridge No. 19I044000055, Lyle Ave over I-440 LM 7.30 (19-0F573-00.06) Bridge No. 19I044000057, CSXT RR over I-440 Ramp LM 6.45 (19-I0440-06.45) Bridge No. 19I002400093, I-440 Ramp G over I-24 LM 7.59 (19-I0440-07.59) Bridge No. 19I002400095, I-24 Ramp C over I-24 LM 17.19 (19-I00240-17.19) Bridge No. 19I002400097, I-24 Ramp F over Lafayette LM 17.08 (19-I00240-17.08)	Corridor

4/4/2019 6:56:46 AM
\\prdpwics02\ics_workingdir\3012\305979_223\4-002D.sht

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- (3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (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

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

GUARDRAIL

- (1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD.
- (2) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE "A" LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END.
- (3) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

- (1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN.
- (2) ALL EXISTING PIPES AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER THAT ARE TO BE LEFT IN PLACE AND ABANDONED MUST BE BACKFILLED AND PLUGGED.

MISCELLANEOUS

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

ROAD CLOSURE

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

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKINGS ON INTERMEDIATE LAYERS

- (1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED.

FINAL PAVEMENT MARKING

- (1) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. 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.
- (2) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. 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.
- (3) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. 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.

DETOURS, LANE SHIFTS AND MEDIAN CROSS-OVERS

- (1) THE PAVEMENT MARKING ON THE DETOURS FOR LANE LINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT.
- (2) BEFORE OPENING THE DETOURS TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESE TRANSITIONAL MARKINGS SHALL BE OBLITERATED AND ALL EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED TO ELIMINATE CONFLICTING MARKINGS

PAVING

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

SIGNING

- (1) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.
- (2) 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 CROSS-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 DIVISION, SIGNING SECTION, TELEPHONE NO. (615)-741-0802. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ORDERING MATERIAL.
- (3) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- (4) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.
- (5) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS 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 REGIONAL SIGN DESIGNER FOR REVIEW.
- (6) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND BECOME THE PROPERTY OF THE CONTRACTOR.
- (7) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.
- (8) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.
- (9) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-2D

SEALED BY



DAVID H. BARNES
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
2019-04-05

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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

4/4/2019 6:47:19 AM
\\prdpwics02\pics_workingdir\3012\305979_224\4-002D1.sht

TRAFFIC CONTROL DIRECTIONAL SIGNING

- (1)

ON ALL ACCESS CONTROLLED AND INTERSTATE RECONSTRUCTION AND NEW CONSTRUCTION PROJECTS, THE CONTRACTOR SHALL UTILIZE ALL EXISTING DIRECTIONAL SIGNING FOR AS LONG AS POSSIBLE. THESE EXISTING SIGNS CAN BE MOVED USING TEMPORARY SUPPORTS AS NEEDED. AS SOON AS THESE EXISTING DIRECTIONAL SIGNS COME DOWN PERMANENTLY, THE CONTRACTOR SHALL HAVE UP AT LEAST ONE NEW TEMPORARY "ADVANCE GUIDE SIGN" AND ONE NEW TEMPORARY "EXIT DIRECTIONAL SIGN" AT ALL EXIT RAMPs. THESE SIGNS ARE TO BE MAINTAINED WITHIN CLEAR VIEW OF THE PUBLIC ON THE RIGHT SIDE OF THE HIGHWAY AND SHALL BE REPLACED IF DAMAGED, DURING ALL PHASES OF CONSTRUCTION, AS DIRECTED BY THE ENGINEER.
- (2)

THE SIZE OF THESE NEW TEMPORARY SIGNS WILL BE DETERMINED BY THE MESSAGE. THE MESSAGE SHALL BE THE SAME AS THE EXISTING SIGN THAT THESE NEW TEMPORARY SIGNS WILL BE REPLACING. THE LETTER SIZE SHALL BE A MINIMUM OF 8 INCH, "D" UPPER CASE LETTER. THE DIRECTIONAL ARROW WILL BE A "B" ARROW AT A 45 DEGREE ANGLE (SAME ANGLE AS THE EXISTING ARROW). THE MATERIAL SHALL BE 0.100 INCH SHEET ALUMINUM; THE COLOR SHALL BE A REFLECTIVE GREEN BACKGROUND WITH REFLECTIVE WHITE COPY.
- (3)

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.
- (4)

ALL EXISTING "EMERGENCY REFERENCE MARKERS" AND "HOSPITAL SIGNS" SHALL BE MAINTAINED WITHIN FULL VIEW OF THE MOTORING PUBLIC THROUGHOUT ALL PHASES OF CONSTRUCTION.
- (5)

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.

SIGNALIZATION

- (1)

EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL PROVISIONS REGARDING SECTION 730N-TRAFFIC SIGNALS."

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1)

ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (2)

IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER.
- (3)

A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (4)

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5)

USE OF BARRICADES, PORTABLE BARRIER RAILS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (6)

THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR
- ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF 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 OR ON THE OUTSIDE OF A HORIZONTAL CURVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (7)

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

(8)

ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED, AND FLEXIBLE DRUMS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC
- LIGHTING
- (1)

INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 1, 2015 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.

(2)

ALL WIRING SHALL BE CONCEALED UNDERGROUND IN 2-INCH SCHEDULE 40 PVC RIGID CONDUIT.

(3)

THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES, SHALL BE COLORED GREEN AND HAVE THW INSULATION.

(4)

EXISTING FOUNDATIONS TO BE REMOVED A MINIMUM OF SIX INCHES BELOW GRADE.

(5)

ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.

(6)

LIGHT STANDARDS SHALL BE ROUND 40' TAPERED POLES.

(7)

STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

(8)

LIGHTING POLES SHALL BE DESIGNED FOR 80-MPH WIND PRESSURE AND SHALL SUPPORT A 21-POUND LUMINAIRE POST TOP MOUNTED. POLE MANUFACTURER TO CONFIRM WITH POLE CALCULATIONS.

(9)

ALL NEW ROADWAY LIGHTING POLES SHALL BE MOUNTED ON BASES WITH ACCESS DOOR. TRANSFORMER BASES SHALL MEET AASHTO SPECIFICATIONS AND HAVE FHWA APPROVAL. STANDARDS SHALL BE ALUMINUM WITH TRANSFORMER BASES.
- EROSION PREVENTION AND SEDIMENT CONTROL
- NATURAL RESOURCES
- (1)

SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL BE MAINTAINED THROUJGHOUT 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.

(2)

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

(3)

INSTREAM EPSC DEVICES REQUIRE THE TDOT ENVIRONMENTAL DIVISION, PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN WATER QUALITY PERMITS.

(4)

THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- (5)

THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.

(6)

STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM 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.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(7)

HEAVY EQUIPMENT WORKING IN WETLANDS WITH PERMITTED 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 BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.

(8)

WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.

(9)

THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY 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
- (1)

NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA.

(2)

SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (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).

(3)

IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREAST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY.
- | | | | |
|------|------|--------------|-----------|
| TYPE | YEAR | PROJECT NO. | SHEET NO. |
| RFC | 2019 | NH-440-4(84) | 4-2D1 |
| | | | |
| | | | |

SEALED BY



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

GENERAL
NOTES
2 OF 3

4/4/2019 6:47:17 AM
\\prdpwics02\ics_workingdir\3012\305979_225\4-002D2.sht

INSPECTION, MAINTENANCE & REPAIR

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

PERMITS, PLANS & RECORDS

- (1) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY 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).
- (2) 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 PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (3) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, 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.
- (4) 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 PARTY TO COMMENCE PERMIT RENEWAL PROCESS.
- (5) 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 ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL 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 POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

- (1) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS SHALL BE REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFFSITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EPSC SHALL BE REMOVED FROM THE SITE.
- (2) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (3) 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 PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (4) 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 OR STORMWATER TREATMENT SYSTEM.

- (5) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.
- (6) 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 USE AND DISPOSAL.
- (7) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.
- (8) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.
- (9) ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S RESPONSIBLE PARTY SHALL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.
- (10) 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.
- (11) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.
- (12) 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 PERMITS TO DISPOSE OF WASTE MATERIALS.

SUPPORT ACTIVITIES

- (1) 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 COMMENCE PERMIT RENEWAL PROCESS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-202

SEALED BY



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

GENERAL
NOTES
3 OF 3

4/4/2019 6:58:25 AM
\\prdpw\pics02\pics_workingdir\3012\305979_222\4-002E.sh

SPECIAL NOTES

GRADING

- (1) 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.
- (2) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.

SEEDING AND SODDING

- (1) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, AND SODDED.

PAVEMENT

RESURFACING

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

EROSION PREVENTION AND SEDIMENT CONTROL

ENVIRONMENTAL

- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE SHALL BE INVITED TO ALL PRE-CONSTRUCTION MEETINGS.

ECOLOGY

- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR A DESIGNATED CONSULTANT WILL NEED TO BE ONSITE FOR WORK BEING DONE WHICH COULD AFFECT WATERS OF THE STATE/U.S. OR SPECIES.
- (2) 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 TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S

PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS THAT MUST BE FOLLOWED.

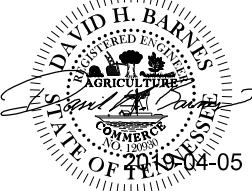
- (3) ALL PROJECTS WITH LEGALLY PROTECTED SPECIES OR CRITICAL HABITAT IDENTIFIED SHALL HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER WATERS OF THE STATE/U.S.

PROJECT COMMITMENTS

- (1) SEE PROJECT COMMITMENTS, SHEET 4-1B AND 4-1B1 FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-2E

SEALED BY



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

SPECIAL
NOTES

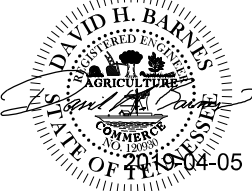
4/4/2019 6:50:24 AM
\\prdpw\ics02\ics_working\dir\3012\305979_374\4-002E1.sht

TRAFFIC CONTROL NOTES

- (1) FOR PHASE 1 TRAFFIC CONTROL DETAILS, TAPERS AND LANE SHIFTS SEE PACKAGE E6 – PHASE 1 TRAFFIC CONTROL.
- (2) FOR PHASE 2 TRAFFIC CONTROL DETAILS, TAPERS AND LANE SHIFTS SEE PACKAGE 8 – PHASE 2 TRAFFIC CONTROL.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-2E1

SEALED BY



DAVID H. BARNES
REGISTERED ENGINEER
AGRICULTURE
STATE OF TENNESSEE
2019-04-05

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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

TRAFFIC
CONTROL
NOTES

4/5/2019 4:54:58 PM
\\prdpw\ics01\ics_workingdir\7855\305979_128\4-ES01.sht

EROSION PREVENTION AND SEDIMENT CONTROL (E.P.S.C.) NOTES

PACKAGE #4 (FIBER-DEPENDENT WIDENING)
ESTIMATED DISTURBED AREA: 25 ACRES

ORDER OF CONSTRUCTION ACTIVITIES

STAGE I (CLEARING AND GRUBBING)

- (1) STAGE I CONSISTS OF CLEARING AND GRUBBING ACTIVITIES CONDUCTED PRIOR TO LAND GRADING OPERATIONS.
- (2) CONTRACTOR SHALL LIMIT INITIAL CLEARING AND GRUBBING TO THAT NECESSARY TO INSTALL ALL APPLICABLE E.P.S.C. DEVICES IN ACCORDANCE WITH STAGE I E.P.S.C. PLANS.
- (3) CONTRACTOR SHALL NOT COMMENCE ADDITIONAL GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK BEFORE E.P.S.C. DEVICES ARE IN PLACE.

STAGE II (INTERMEDIATE GRADING — TRAFFIC CONTROL PHASE I)

- (1) STAGE II CONSISTS OF MASS GRADING AND CONSTRUCTION OF SITE FEATURES INSIDE PHASE LINES WHILE TRAFFIC IS MAINTAINED OUTSIDE PHASE LINES ON EXISTING ROADWAY AS SHOWN IN PHASE I TRAFFIC CONTROL PLANS.
- (2) STAGE II INCLUDES CONSTRUCTION OF ALL PROPOSED STORMWATER INLETS, CATCH BASINS, JUNCTION BOXES, MANHOLES, CULVERTS, AND ENDWALLS, AS WELL AS MODIFICATION OR ABANDONMENT OF EXISTING STRUCTURES AND CULVERTS, LOCATED INSIDE PHASE LINES AS SHOWN IN PHASE I TRAFFIC CONTROL PLANS.

STAGE III (INTERMEDIATE GRADING — TRAFFIC CONTROL PHASE II)

- (1) STAGE III CONSISTS OF MASS GRADING AND CONSTRUCTION OF SITE FEATURES OUTSIDE PHASE LINES WHILE TRAFFIC IS MAINTAINED INSIDE PHASE LINES ON NEW ROADWAY AS SHOWN IN PHASE II TRAFFIC CONTROL PLANS.
- (2) STAGE III INCLUDES CONSTRUCTION OF ALL PROPOSED STORMWATER INLETS, CATCH BASINS, JUNCTION BOXES, MANHOLES, CULVERTS, AND ENDWALLS, AS WELL AS MODIFICATION OR ABANDONMENT OF EXISTING STRUCTURES AND CULVERTS, LOCATED OUTSIDE PHASE LINES AS SHOWN IN PHASE II TRAFFIC CONTROL PLANS.

STAGE IV (FINAL CONSTRUCTION)

- (1) STAGE IV CONSISTS OF ACTIVITIES NECESSARY TO ACHIEVE FINAL GRADING AND PERMANENTLY STABILIZE REMAINING DISTURBED AREAS.
- (2) CONTRACTOR SHALL INSTALL PERMANENT E.P.S.C. DEVICES WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING.

STREAMS, WETLANDS & BUFFER ZONES

- (1) CONTRACTOR SHALL NOT PERFORM ANY WORK WITHIN STREAM CHANNELS OR BANKS.

RAILROAD ENVIRONMENTAL

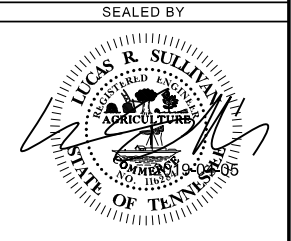
- (1) THE CONTRACTOR SHALL MAINTAIN A COMPLETE AND COMPREHENSIVE EPSC PLAN AND SWPPP TO PREVENT ROADWAY AND/OR CONSTRUCTION SEDIMENT OR DEBRIS AND ANY PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, PAINTS OR COATINGS ETC. FROM FALLING ONTO THE RAILROAD'S RIGHT-OF-WAY AND/OR FROM ENTERING THE DRAINAGE 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 CSXT 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES1

Digitally signed by Lucas R. Sullivan
DN: c=US, st=Tennessee, l=Nashville,
o=WSP USA, cn=Lucas R. Sullivan,
email=luke.sullivan@wsp.com
Date: 2019.04.05 18:19:22 -05'00'



STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

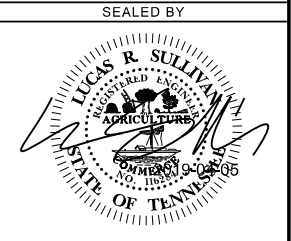
EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) NOTES

4/5/2019 4:54:49 PM
\\prdpwics01\pics_workingdir\7855\305979_129\4-ES02.sht

TABULATED EROSION PREVENTION AND SEDIMENT CONTROL (E.P.S.C.) QUANTITIES							
ITEM NO.	DESCRIPTION	UNIT	STAGE I QUANTITY	STAGE II QUANTITY	STAGE III QUANTITY	STAGE IV QUANTITY	QUANTITY TOTAL
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	105	0	0	0	105
209-05	SEDIMENT REMOVAL	C.Y.	106	106	107	106	425
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	2,176	2,176	2,176	2,176	8,704
209-08.07	ROCK CHECK DAM PER	EACH	26	26	26	26	104
209-08.08	ENHANCED ROCK CHECK DAM	EACH	2	2	2	2	8
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	23	23	96	23	165
209-40.30	CATCH BASIN PROTECTION (TYPE A)	EACH	3	3	3	3	12
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	77	26	0	36	139
209-40.41	CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EACH	0	92	62	0	154
209-40.42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EACH	0	13	0	0	13
209-40.43	CATCH BASIN FILTER ASSEMBLY (TYPE 3)	EACH	0	2	0	0	2
209-40.44	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EACH	0	12	0	0	12
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	183	0	0	0	183
740-10.03	GEOTEXTILE (TYPE III) (EROSION CONTROL)	S.Y.	315	0	0	0	315
740-11.01	TEMPORARY SEDIMENT TUBE 8 IN	L.F.	188	188	188	188	752
740-11.04	TEMPORARY SEDIMENT TUBE 20 IN	L.F.	236	236	236	236	944
801-01	SEEDING (WITH MULCH)	UNIT	0	0	0	1,225	1,225
801-03	WATER (SEEDING & SODDING)	M.G.	0	0	0	134	134
803-01	SODDING (NEW SOD)	S.Y.	0	0	0	12,100	12,100

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES2

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	CATCH BASIN PROTECTION (TYPE A)	EC-STR-19
	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	SEDIMENT TUBE	EC-STR-37
	SILT FENCE	EC-STR-3B
	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A
	CATCH BASIN FILTER ASSEMBLY (TYPE 1)	EC-STR-41
	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
	CATCH BASIN FILTER ASSEMBLY (TYPE 3)	EC-STR-43
	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EC-STR-44



STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) LEGEND &
TABULATION

4/5/2019 4:54:54 PM
\\prdpwics01\pics_workingdir\78551305979_20314-ES03.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES3

STORMWATER DISCHARGE OUTFALL POINTS – PACKAGE #4 (FIBER-DEPENDENT WIDENING)																						
NO.	ROADWAY	STATION	OFFSET (FT.)	SIDE	SUB-OUTFALLS	DESCRIPTION	IMPACTED DRAINAGE FEATURE	STAGE 1 DISTURBED DRAINAGE AREA (AC.)	STAGE 1 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 1 TOTAL DRAINAGE AREA (AC.)	STAGE 2 DISTURBED DRAINAGE AREA (AC.)	STAGE 2 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 2 TOTAL DRAINAGE AREA (AC.)	STAGE 3 DISTURBED DRAINAGE AREA (AC.)	STAGE 3 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 3 TOTAL DRAINAGE AREA (AC.)	STAGE 4 DISTURBED DRAINAGE AREA (AC.)	STAGE 4 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 4 TOTAL DRAINAGE AREA (AC.)	SEDIMENT BASIN OR EQUIVALENT MEASURE	ESTIMATED PERCENT SLOPE WITHIN R.O.W.	COMMENTS
349	I0440	1164+59	83	LT.	#N/A	EX. C.B. (STRUC. NO. H22)	SYSTEM	0.610	0.000	0.610	0.610	0.000	0.610	0.610	0.000	0.610	0.610	0.000	0.610	#N/A	4.00%	#N/A
350	I0440	1164+60	15	LT.	#N/A	EX. C.B. (STRUC. NO. H21)	SYSTEM	0.290	0.000	0.290	0.290	0.000	0.290	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.00%	#N/A
351	I0440	1164+60	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H20)	SYSTEM	#N/A	#N/A	#N/A	0.460	0.000	0.460	0.460	0.000	0.460	0.460	0.000	0.460	#N/A	4.00%	#N/A
352	I0440	1164+60	0	#N/A	#N/A	EX. C.B.	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	4.00%	#N/A
353	I0440	1164+60	78	RT.	#N/A	NO. 41 C.B. (STRUC. NO. H23)	SYSTEM	0.120	0.000	0.120	0.120	0.000	0.120	0.120	0.000	0.120	0.120	0.000	0.120	#N/A	4.00%	#N/A
354	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
355	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
356	I0440	1165+83	76	LT.	#N/A	NO. 4 JCT. BOX (STRUC. NO. H25)	SYSTEM	0.180	0.000	0.180	0.180	0.000	0.180	0.180	0.000	0.180	0.180	0.000	0.180	#N/A	4.00%	#N/A
357	I0440	1166+65	17	LT.	#N/A	EX. C.B. (STRUC. NO. H24)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	1.00%	#N/A
358	I0440	1165+83	76	LT.	#N/A	NO. 41 C.B. (STRUC. NO. H78)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	4.00%	#N/A
359	I0440	1168+09	0	#N/A	#N/A	NO. 4 JCT. BOX (STRUC. NO. H24A)	SYSTEM	0.400	0.000	0.400	0.400	0.000	0.400	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.00%	#N/A
360	I0440	1168+07	16	RT.	#N/A	EX. C.B.	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.00%	#N/A
361	I0440	1169+10	84	LT.	#N/A	EX. C.B. (STRUC. NO. H30)	SYSTEM	0.560	0.000	0.560	0.560	0.000	0.560	0.560	0.000	0.560	0.560	0.000	0.560	#N/A	1.00%	#N/A
362	I0440	1169+10	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H28)	SYSTEM	#N/A	#N/A	#N/A	0.420	0.000	0.420	0.420	0.000	0.420	0.420	0.000	0.420	#N/A	1.00%	#N/A
363	I0440	1169+10	0	#N/A	#N/A	EX. C.B. (STRUC. NO. H79)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.00%	#N/A
364	I0440	1169+11	79	RT.	#N/A	NO. 10M C.B. (STRUC. NO. H29)	SYSTEM	#N/A	#N/A	#N/A	0.290	0.000	0.290	0.290	0.000	0.290	0.290	0.000	0.290	#N/A	0.75%	#N/A
365	I0440	1169+84	17	RT.	#N/A	EX. C.B.	SYSTEM	0.370	0.000	0.370	0.370	0.000	0.370	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
366	I0440	1170+08	71	RT.	#N/A	EX. C.B.	SYSTEM	0.360	0.000	0.360	0.360	0.000	0.360	0.360	0.000	0.360	#N/A	#N/A	#N/A	#N/A	0.50%	#N/A
367	I0440	1171+40	70	LT.	#N/A	NO. 10M C.B. (STRUC. NO. H34)	SYSTEM	0.360	0.000	0.360	0.360	0.000	0.360	0.360	0.000	0.360	0.360	0.000	0.360	#N/A	0.75%	#N/A
368	I0440	1171+36	15	LT.	#N/A	EX. C.B. (STRUC. NO. H33)	SYSTEM	0.140	0.000	0.140	0.140	0.000	0.140	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
369	I0440	1171+36	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H31)	SYSTEM	#N/A	#N/A	#N/A	0.420	0.000	0.420	0.420	0.000	0.420	0.420	0.000	0.420	#N/A	0.75%	#N/A
370	I0440	1171+34	13	RT.	#N/A	NO. 41 C.B. (STRUC. NO. H33B)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
371	I0440	1171+07	79	RT.	#N/A	NO. 10M C.B. (STRUC. NO. H32)	SYSTEM	0.180	0.000	0.180	0.180	0.000	0.180	0.180	0.000	0.180	0.180	0.000	0.180	#N/A	0.50%	#N/A
372	I0440	1171+30	0	#N/A	#N/A	NO. 41 C.B. (STRUC. NO. H33A)	SYSTEM	0.190	0.000	0.190	0.190	0.000	0.190	0.190	0.000	0.190	0.190	0.000	0.190	#N/A	0.75%	#N/A
373	I0440	1171+60	84	LT.	#N/A	EX. C.B. (STRUC. NO. H38)	SYSTEM	0.590	0.000	0.590	0.590	0.000	0.590	0.590	0.000	0.590	0.590	0.000	0.590	#N/A	0.75%	#N/A
374	I0440	1174+59	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H36)	SYSTEM	0.560	0.000	0.560	0.560	0.000	0.560	0.560	0.000	0.560	0.560	0.000	0.560	#N/A	0.75%	#N/A
375	I0440	1173+84	84	LT.	#N/A	EX. C.B.	SYSTEM	0.710	0.000	0.710	0.710	0.000	0.710	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
376	I0440	1173+84	16	RT.	#N/A	NO. 31 C.B. (STRUC. NO. H36)	SYSTEM	0.380	0.000	0.380	0.380	0.000	0.380	0.380	0.000	0.380	0.380	0.000	0.380	#N/A	0.75%	#N/A
377	I0440	1174+57	84	RT.	#N/A	EX. C.B. (STRUC. NO. H37)	SYSTEM	0.520	0.000	0.520	0.520	0.000	0.520	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
378	I0440	1176+74	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H39)	SYSTEM	#N/A	#N/A	#N/A	0.270	0.000	0.270	#N/A	#N/A	#N/A	0.270	0.000	0.270	#N/A	0.75%	#N/A
379	I0440	1179+33	70	LT.	#N/A	NO. 10M C.B. (STRUC. NO. H41)	SYSTEM	0.720	0.000	0.720	0.720	0.000	0.720	0.720	0.000	0.720	0.720	0.000	0.720	#N/A	0.75%	#N/A
380	I0440	1179+34	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H40)	SYSTEM	#N/A	#N/A	#N/A	0.270	0.000	0.270	0.270	0.000	0.270	0.270	0.000	0.270	#N/A	0.75%	#N/A
381	I0440	1179+34	15	RT.	#N/A	EX. C.B. (STRUC. NO. H42)	SYSTEM	0.140	0.000	0.140	0.140	0.000	0.140	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
382	I0440	1179+34	70	RT.	#N/A	NO. 10M C.B. (STRUC. NO. H43)	SYSTEM	0.950	0.000	0.950	0.950	0.000	0.950	0.950	0.000	0.950	0.950	0.000	0.950	#N/A	0.75%	#N/A
383	I0440	1182+35	70	LT.	#N/A	NO. 10M C.B. (STRUC. NO. H46)	SYSTEM	0.470	0.000	0.470	0.470	0.000	0.470	0.470	0.000	0.470	0.470	0.000	0.470	#N/A	1.00%	#N/A
384	I0440	1182+35	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H44)	SYSTEM	#N/A	#N/A	#N/A	0.320	0.000	0.320	0.320	0.000	0.320	0.320	0.000	0.320	#N/A	1.00%	#N/A
385	I0440	1182+33	70	RT.	#N/A	NO. 10M C.B. (STRUC. NO. H45)	SYSTEM	0.650	0.000	0.650	0.650	0.000	0.650	0.650	0.000	0.650	0.650	0.000	0.650	#N/A	0.75%	#N/A
386	I0440	1183+70	16	LT.	#N/A	EX. M.H. (STRUC. NO. H44A)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
387	I0440	1184+08	16	LT.	#N/A	EX. M.H. (STRUC. NO. H47)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.00%	#N/A
388	I0440	1184+84	70	RT.	#N/A	NO. 10M C.B. (STRUC. NO. H52)	SYSTEM	0.690	0.000	0.690	0.690	0.000	0.690	0.690	0.000	0.690	0.690	0.000	0.690	#N/A	0.50%	#N/A
389	I0440	1185+92	86	LT.	#N/A	EX. C.B. (STRUC. NO. H49)	SYSTEM	0.540	0.000	0.540	0.540	0.000	0.540	0.540	0.000	0.540	0.540	0.000	0.540	#N/A	0.75%	#N/A
390	I0440	1185+58	17	LT.	#N/A	EX. C.B. (STRUC. NO. H4																

4/5/2019 4:54:51 PM
\\prdpwics01\ics_workingdir\78551305979_20414-ES03A.sht

STORMWATER DISCHARGE OUTFALL POINTS – PACKAGE #4 (FIBER-DEPENDENT WIDENING)																						
NO.	ROADWAY	STATION	OFFSET (FT.)	SIDE	SUB-OUTFALLS	DESCRIPTION	IMPACTED DRAINAGE FEATURE	STAGE 1 DISTURBED DRAINAGE AREA (AC.)	STAGE 1 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 1 TOTAL DRAINAGE AREA (AC.)	STAGE 2 DISTURBED DRAINAGE AREA (AC.)	STAGE 2 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 2 TOTAL DRAINAGE AREA (AC.)	STAGE 3 DISTURBED DRAINAGE AREA (AC.)	STAGE 3 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 3 TOTAL DRAINAGE AREA (AC.)	STAGE 4 DISTURBED DRAINAGE AREA (AC.)	STAGE 4 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 4 TOTAL DRAINAGE AREA (AC.)	SEDIMENT BASIN OR EQUIVALENT MEASURE	ESTIMATED PERCENT SLOPE WITHIN R.O.W.	COMMENTS
410	I0440	1196+08	78	LT.	#N/A	NO. 41 C.B. (STRUC. NO. H67)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.390	0.000	0.390	0.390	0.000	0.390	#N/A	0.50%	#N/A
411	I0440	1196+06	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. I105)	SYSTEM	#N/A	#N/A	#N/A	0.420	0.000	0.420	#N/A	#N/A	#N/A	0.420	0.000	0.420	#N/A	0.50%	#N/A
412	I0440	1196+04	77	RT.	#N/A	NO. 41 C.B. (STRUC. NO. H66)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.400	0.000	0.400	0.400	0.000	0.400	#N/A	0.50%	#N/A
413	I0440	1197+31	16	LT.	#N/A	EX. C.B.	SYSTEM	0.260	0.000	0.260	0.260	0.000	0.260	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.50%	#N/A
414	I0440	1197+32	16	RT.	#N/A	EX. C.B.	SYSTEM	0.250	0.000	0.250	0.250	0.000	0.250	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.50%	#N/A
415	I0440	1200+06	68	LT.	#N/A	NO. 31 C.B. (STRUC. NO. H68)	SYSTEM	0.200	0.000	0.200	#N/A	#N/A	#N/A	0.200	0.000	0.200	0.200	0.000	0.200	#N/A	0.75%	#N/A
416	I0440	1200+06	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H69)	SYSTEM	#N/A	#N/A	#N/A	0.190	0.000	0.190	0.190	0.000	0.190	0.190	0.000	0.190	#N/A	0.75%	#N/A
417	I0440	1200+06	70	RT.	#N/A	NO. 41 C.B. (STRUC. NO. H70)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.370	0.000	0.370	0.370	0.000	0.370	#N/A	0.75%	#N/A
418	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
419	I0440	1201+85	67	LT.	#N/A	NO. 41 C.B. (STRUC. NO. H68A)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.240	0.000	0.240	0.240	0.000	0.240	#N/A	0.75%	#N/A
420	I0440	1201+85	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. H69A)	SYSTEM	#N/A	#N/A	#N/A	0.240	0.000	0.240	0.240	0.000	0.240	0.240	0.000	0.240	#N/A	0.75%	#N/A
421	I0440	1201+85	69	RT.	#N/A	NO. 41 C.B. (STRUC. NO. H70A)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.230	0.000	0.230	0.230	0.000	0.230	#N/A	0.75%	#N/A
422	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
423	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
424	I0440	1203+83	16	LT.	#N/A	EX. C.B.	SYSTEM	0.410	0.000	0.410	0.410	0.000	0.410	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
425	I0440	1203+82	16	RT.	#N/A	EX. C.B.	SYSTEM	0.401	0.000	0.401	0.401	0.000	0.401	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.75%	#N/A
426	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
427	I0440	1207+91	16	LT.	#N/A	EX. C.B. (STRUC. NO. I5)	SYSTEM	0.420	0.000	0.420	0.420	0.000	0.420	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.25%	#N/A
428	I0440	1207+91	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. I1)	SYSTEM	#N/A	#N/A	#N/A	0.410	0.000	0.410	0.410	0.000	0.410	0.410	0.000	0.410	#N/A	2.25%	#N/A
429	I0440	1207+91	16	RT.	#N/A	EX. C.B.	SYSTEM	0.390	0.000	0.390	0.390	0.000	0.390	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.25%	#N/A
430	I0440	1207+91	59	RT.	#N/A	NO. 31 C.B. (STRUC. NO. I2)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.470	0.000	0.470	0.470	0.000	0.470	#N/A	2.25%	#N/A
431	I0440	1210+05	68	LT.	#N/A	NO. 41 C.B. (STRUC. NO. J3)	SYSTEM	0.250	0.000	0.250	0.250	0.000	0.250	0.250	0.000	0.250	0.250	0.000	0.250	#N/A	2.25%	#N/A
432	I0440	1210+05	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. J1)	SYSTEM	0.230	0.000	0.230	0.230	0.000	0.230	0.230	0.000	0.230	0.230	0.000	0.230	#N/A	2.25%	#N/A
433	I0440	1210+05	68	RT.	#N/A	NO. 41 C.B. (STRUC. NO. J2)	SYSTEM	0.250	0.000	0.250	0.250	0.000	0.250	0.250	0.000	0.250	0.250	0.000	0.250	#N/A	2.25%	#N/A
434	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
435	I0440	1213+93	54	RT.	#N/A	NO. 41 C.B. (STRUC. NO. K3)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.290	0.000	0.290	0.290	0.000	0.290	#N/A	2.25%	#N/A
436	I0440	1213+93	16	LT.	#N/A	EX. C.B.	SYSTEM	0.480	0.000	0.480	0.480	0.000	0.480	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.25%	#N/A
437	I0440	1213+94	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. K2)	SYSTEM	#N/A	#N/A	#N/A	0.410	0.000	0.410	#N/A	#N/A	#N/A	0.410	0.000	0.410	#N/A	2.25%	#N/A
438	I0440	1213+93	16	RT.	#N/A	EX. C.B.	SYSTEM	0.490	0.000	0.490	0.490	0.000	0.490	0.490	0.000	0.490	#N/A	#N/A	#N/A	#N/A	2.25%	#N/A
439	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
440	I0440	1213+93	58	RT.	#N/A	NO. 41 C.B. (STRUC. NO. K1)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.280	0.000	0.280	0.280	0.000	0.280	#N/A	2.25%	#N/A
441	I0440	1215+99	78	LT.	#N/A	NO. 41 C.B. (STRUC. NO. S1)	SYSTEM	0.280	0.000	0.280	0.280	0.000	0.280	0.280	0.000	0.280	0.280	0.000	0.280	#N/A	2.25%	#N/A
442	I0440	1216+62	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. L1)	SYSTEM	#N/A	#N/A	#N/A	0.280	0.000	0.280	0.280	0.000	0.280	0.280	0.000	0.280	#N/A	2.25%	#N/A
443	I0440	1218+22	97	RT.	#N/A	NO. 45 C.B. (STRUC. NO. U1)	SYSTEM	0.680	0.000	0.680	0.680	0.000	0.680	0.680	0.000	0.680	0.680	0.000	0.680	#N/A	2.50%	#N/A
444	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
445	I0440	1218+56	82	LT.	#N/A	NO. 41 C.B. (STRUC. NO. T1)	SYSTEM	0.370	0.000	0.370	0.370	0.000	0.370	0.370	0.000	0.370	0.370	0.000	0.370	#N/A	2.50%	#N/A
446	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
447	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	NOT USED THIS PACKAGE.
448	I0440	1219+73	16	LT.	#N/A	EX. C.B. (STRUC. NO. L4)	SYSTEM	0.380	0.000	0.380	0.380	0.000	0.380	#N/A	#N/A	#N/A	0.380	0.000	0.380	#N/A	2.25%	#N/A
449	I0440	1219+73	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. L2)	SYSTEM	#N/A	#N/A	#N/A	0.330	0.000	0.330	0.330	0.000	0.330	0.330	0.000	0.330	#N/A	2.25%	#N/A
450	I0440	1219+73	16	RT.	#N/A	EX. C.B.	SYSTEM	0.340	0.000	0.340	0.340	0.000	0.340	#N/A	#N/A	#N/A	0.340	0.000	0.340	#N/A	2.25%	#N/A
451	I0440	1220+50	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. M1)	SYSTEM	#N/A	#N/A	#N/A	0.160	0.000	0.160	0.160	0.000	0.160	0.160	0.000	0.160	#N/A	2.25%	#N/A
452	I0440	1220+57	16	LT.	#N/A	EX. C.B.	SYSTEM	0.080	0.000	0.080	0.080	0.000										

SEALED BY

LUCAS R. SULLIVAN
REGISTERED ENGINEER
"AGRICULTURE"
COMMONWEALTH
NO. 1166
STATE OF TENNESSEE
9-2-05

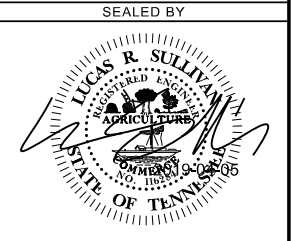
4/5/2019 4:55:03 PM
\\prdpwics01\ics_workingdir\7855\305979_205\4-ES03B.sht

4/5/2019 4:55:03 PM

4/5/2019 4:55:01 PM
\\prdpwics01\lics_workingdir\78551305979_206\4-ES03C.sht

STORMWATER DISCHARGE OUTFALL POINTS – PACKAGE #4 (FIBER-DEPENDENT WIDENING)																						
NO.	ROADWAY	STATION	OFFSET (FT.)	SIDE	SUB-OUTFALLS	DESCRIPTION	IMPACTED DRAINAGE FEATURE	STAGE 1 DISTURBED DRAINAGE AREA (AC.)	STAGE 1 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 1 TOTAL DRAINAGE AREA (AC.)	STAGE 2 DISTURBED DRAINAGE AREA (AC.)	STAGE 2 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 2 TOTAL DRAINAGE AREA (AC.)	STAGE 3 DISTURBED DRAINAGE AREA (AC.)	STAGE 3 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 3 TOTAL DRAINAGE AREA (AC.)	STAGE 4 DISTURBED DRAINAGE AREA (AC.)	STAGE 4 UNDISTURBED DRAINAGE AREA (AC.)	STAGE 4 TOTAL DRAINAGE AREA (AC.)	SEDIMENT BASIN OR EQUIVALENT MEASURE	ESTIMATED PERCENT SLOPE WITHIN R.O.W.	COMMENTS
534	I0440	1264+69	62	RT.	#N/A	NO. 41 C.B. (STRUC. NO. Z3)	SYSTEM	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0.130	0.000	0.130	0.130	0.000	0.130	#N/A	1.25%	#N/A
535	I0440	1266+56	67	RT.	#N/A	EX. C.B. (STRUC. NO. Z3A)	SYSTEM	0.390	0.000	0.390	0.390	0.000	0.390	0.390	0.000	0.390	0.390	0.000	0.390	#N/A	1.25%	#N/A
536	I0440	1273+82	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. AA1)	SYSTEM	#N/A	#N/A	#N/A	0.860	0.000	0.860	0.860	0.000	0.860	0.860	0.000	0.860	#N/A	1.25%	#N/A
537	I0440	1275+07	16	LT.	#N/A	EX. C.B.	SYSTEM	1.730	0.000	1.730	1.730	0.000	1.730	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
538	I0440	1275+07	17	RT.	#N/A	EX. C.B. (STRUC. NO. AA2)	SYSTEM	0.240	0.000	0.240	0.240	0.000	0.240	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
539	I0440	1275+67	1	LT.	#N/A	NO. 31 C.B. (STRUC. NO. AA16)	SYSTEM	#N/A	#N/A	#N/A	0.370	0.000	0.370	0.370	0.000	0.370	0.370	0.000	0.370	#N/A	1.25%	#N/A
540	I0440	1275+82	140	LT.	#N/A	NO. 31 C.B. (STRUC. NO. AA3A)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	0.010	0.000	0.010	0.010	0.000	0.010	#N/A	1.25%	#N/A
541	I0440	1278+32	15	RT.	#N/A	EX. CONC. DITCH	DITCH	1.230	0.000	1.230	1.230	0.000	1.230	1.230	0.000	1.230	1.230	0.000	1.230	#N/A	1.25%	#N/A
542	I0440	1276+64	0	#N/A	#N/A	EX. C.B.	SYSTEM	0.690	0.000	0.690	0.690	0.000	0.690	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
543	I0440	1277+02	16	LT.	#N/A	NO. 45 C.B. (STRUC. NO. AA3)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	0.010	0.000	0.010	0.010	0.000	0.010	#N/A	1.25%	#N/A
544	I0440	1277+01	0	#N/A	#N/A	NO. 2 JCT. BOX (STRUC. NO. AA5)	SYSTEM	0.800	0.000	0.800	0.800	0.000	0.800	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
545	I0440	1277+02	7	RT.	#N/A	NO. 31 C.B. (STRUC. NO. AA3B)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	0.010	0.000	0.010	0.010	0.000	0.010	#N/A	1.25%	#N/A
546	I0440	1277+32	0	#N/A	#N/A	EX. C.B. (STRUC. NO. AA4A)	SYSTEM	0.120	0.000	0.120	0.120	0.000	0.120	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
547	I0440	1279+30	17	LT.	#N/A	EX. C.B.	SYSTEM	0.240	0.000	0.240	0.240	0.000	0.240	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
548	I0440	1280+00	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. AA4)	SYSTEM	#N/A	#N/A	#N/A	0.480	0.000	0.480	0.480	0.000	0.480	0.480	0.000	0.480	#N/A	3.00%	#N/A
549	I0440	1280+81	7	RT.	#N/A	EX. C.B.	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
550	I0440	1280+81	15	RT.	#N/A	EX. C.B.	SYSTEM	0.300	0.000	0.300	0.300	0.000	0.300	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
551	I0440	1281+80	14	RT.	#N/A	EX. C.B.	SYSTEM	0.900	0.000	0.900	0.900	0.000	0.900	0.900	0.000	0.900	0.900	0.000	0.900	#N/A	3.00%	#N/A
552	I0440	1282+10	68	RT.	#N/A	EX. DITCH	DITCH	0.740	0.000	0.740	0.740	0.000	0.740	0.740	0.000	0.740	0.740	0.000	0.740	#N/A	3.00%	#N/A
553	I0440	1282+80	15	RT.	#N/A	EX. C.B.	SYSTEM	0.230	0.000	0.230	0.230	0.000	0.230	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
554	I0440	1282+81	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. AA6)	SYSTEM	#N/A	#N/A	#N/A	0.730	0.000	0.730	0.730	0.000	0.730	0.730	0.000	0.730	#N/A	3.00%	#N/A
555	I0440	1282+81	17	LT.	#N/A	EX. C.B.	SYSTEM	0.370	0.000	0.370	0.370	0.000	0.370	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
556	I0440	1285+30	15	RT.	#N/A	EX. C.B.	SYSTEM	0.320	0.000	0.320	0.320	0.000	0.320	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
557	I0440	1285+79	88	LT.	#N/A	EX. C.B. (STRUC. NO. AA8)	SYSTEM	0.510	0.000	0.510	0.510	0.000	0.510	0.510	0.000	0.510	0.510	0.000	0.510	#N/A	18.75%	#N/A
558	I0440	1286+81	12	RT.	#N/A	NO. 2 JCT. BOX (STRUC. NO. AA7)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
559	I0440	1286+81	0	#N/A	#N/A	NO. 2 JCT. BOX (STRUC. NO. AA18)	SYSTEM	#N/A	#N/A	#N/A	0.400	0.000	0.400	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
560	I0440	1287+79	16	LT.	#N/A	NO. 31 C.B. (STRUC. NO. AA9)	SYSTEM	0.490	0.000	0.490	0.490	0.000	0.490	0.490	0.000	0.490	0.490	0.000	0.490	#N/A	3.00%	#N/A
561	I0440	1287+79	15	RT.	#N/A	EX. C.B.	SYSTEM	0.200	0.000	0.200	0.200	0.000	0.200	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3.00%	#N/A
562	I0440	1290+81	0	#N/A	#N/A	EX. C.B.	SYSTEM	#N/A	#N/A	#N/A	0.350	0.000	0.350	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.50%	#N/A
563	I0440	1290+81	13	RT.	#N/A	EX. JCT. BOX (STRUC. NO. AA18A)	SYSTEM	#N/A	#N/A	#N/A	0.080	0.000	0.080	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.50%	#N/A
564	I0440	1294+00	0	#N/A	#N/A	NO. 31 C.B. (STRUC. NO. AA10)	SYSTEM	#N/A	#N/A	#N/A	0.670	0.000	0.670	0.670	0.000	0.670	0.670	0.000	0.670	#N/A	2.50%	#N/A
565	I0440	1293+81	17	RT.	#N/A	NO. 2 JCT. BOX (STRUC. NO. AA17)	SYSTEM	#N/A	#N/A	#N/A	0.010	0.000	0.010	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2.50%	#N/A
566	I0440	1296+32	18	LT.	#N/A	NO. 31 C.B. (STRUC. NO. AA12)	SYSTEM	1.060	0.000	1.060	1.060	0.000	1.060	1.060	0.000	1.060	1.060	0.000	1.060	#N/A	1.25%	#N/A
567	I0440	1297+30	18	RT.	#N/A	EX. C.B. (STRUC. NO. AA11)	SYSTEM	0.720	0.000	0.720	0.720	0.000	0.720	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
568	I0440	1297+47	0	#N/A	#N/A	EX. C.B.	SYSTEM	#N/A	#N/A	#N/A	1.090	0.000	1.090	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.25%	#N/A
569	I0440	1304+75	85	RT.	#N/A	EX. C.B. (STRUC. NO. AA13)	SYSTEM	0.690	0.000	0.690	0.690	0.000	0.690	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	1.75%	#N/A
570	I0440	1305+00	89	RT.	#N/A	NO. 31 C.B. (STRUC. NO. AA14)	SYSTEM	1.790	0.000	1.790	1.790	0.000	1.790	1.790	0.000	1.790	1.790	0.000	1.790	#N/A	1.75%	#N/A
TOTAL								#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A		#N/A	

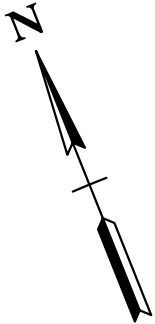
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES3C



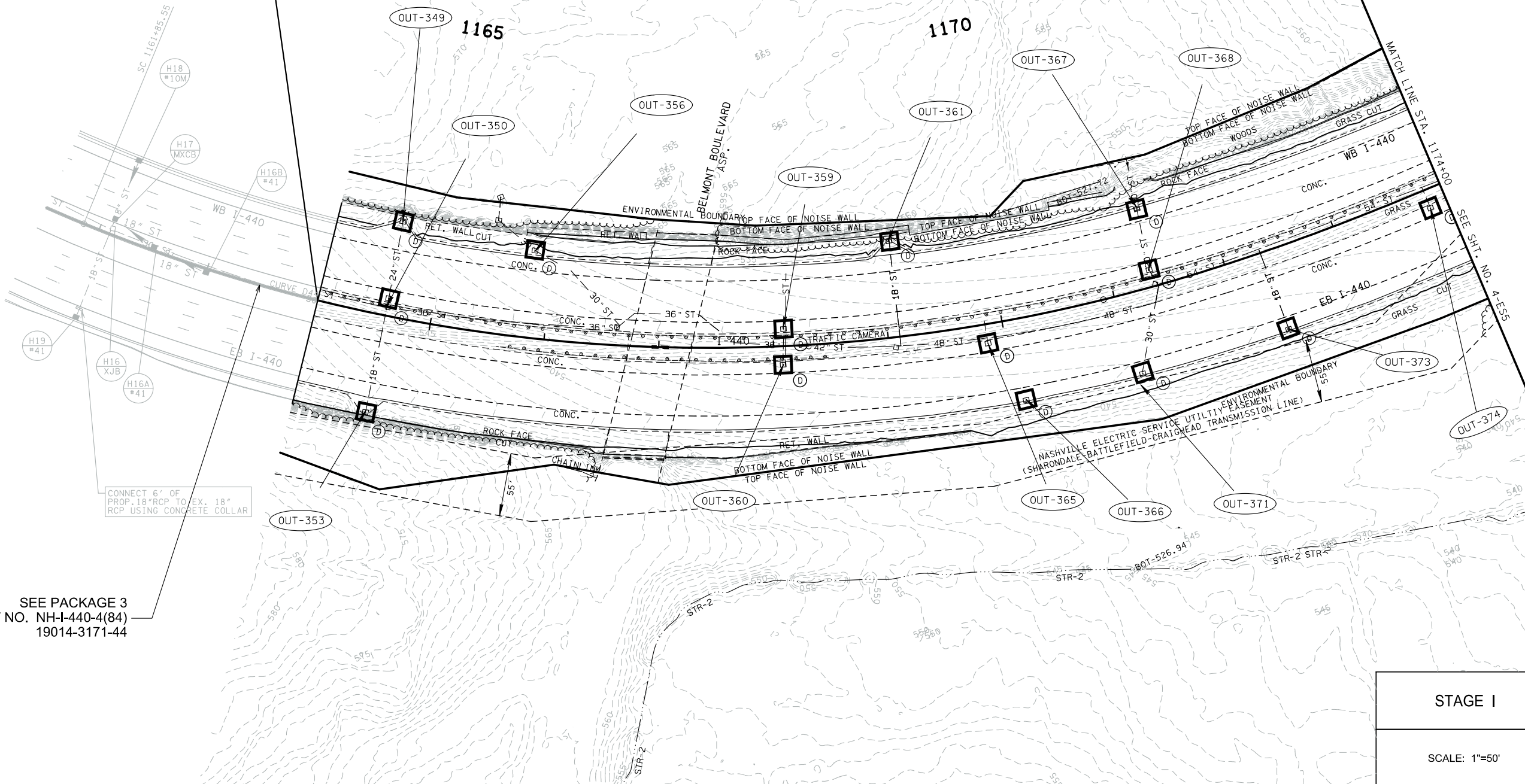
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STORMWATER
DISCHARGE
OUTFALL
POINTS

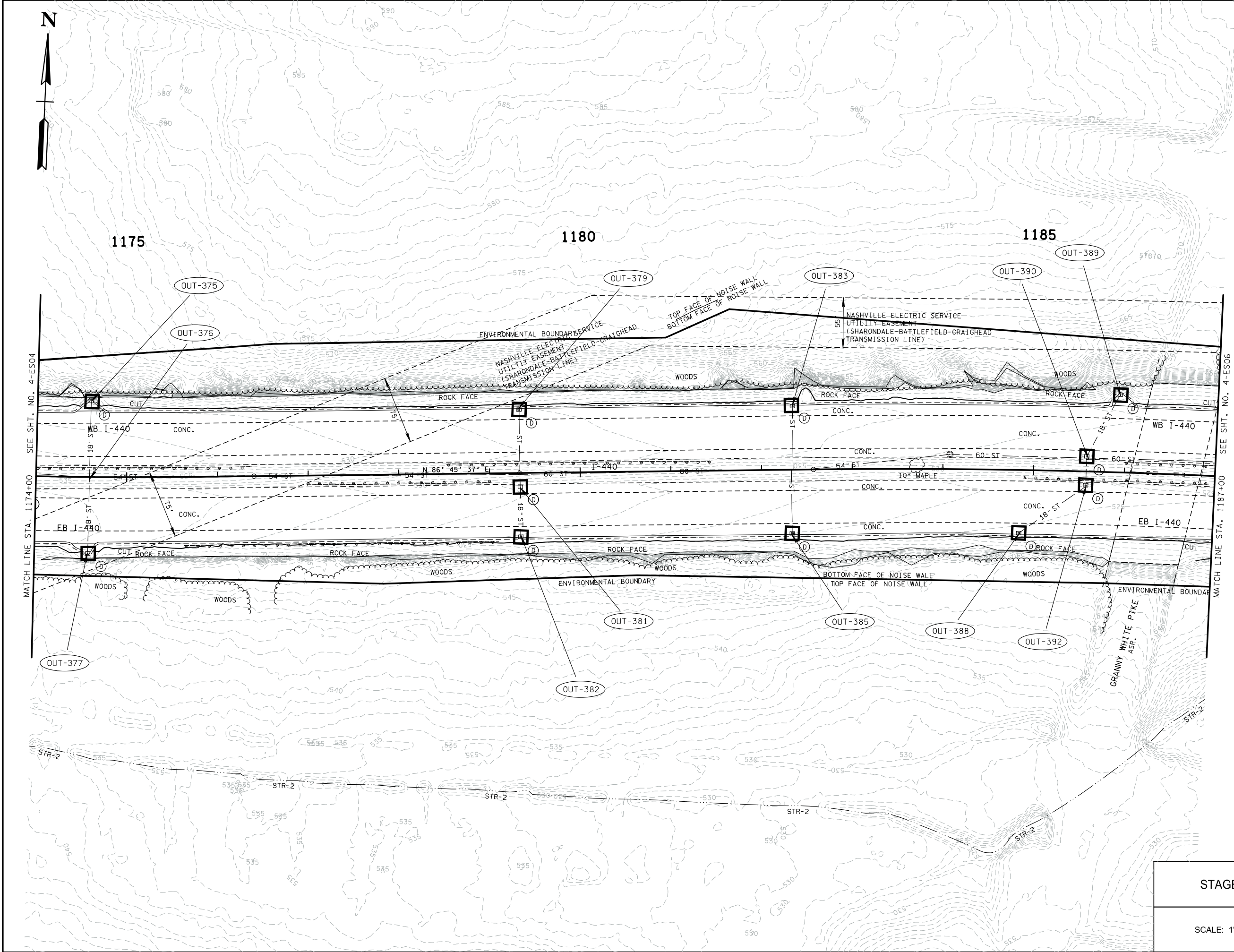
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES4



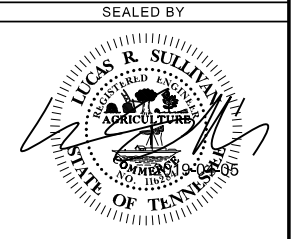
BEGIN PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44
STA. 1164+00.00 I-440 CENTERLINE



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES5



4/5/2019 4:52:49 PM
\\prdpwics01\ics_workingdir\78551305979_7814-ES05.sht



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

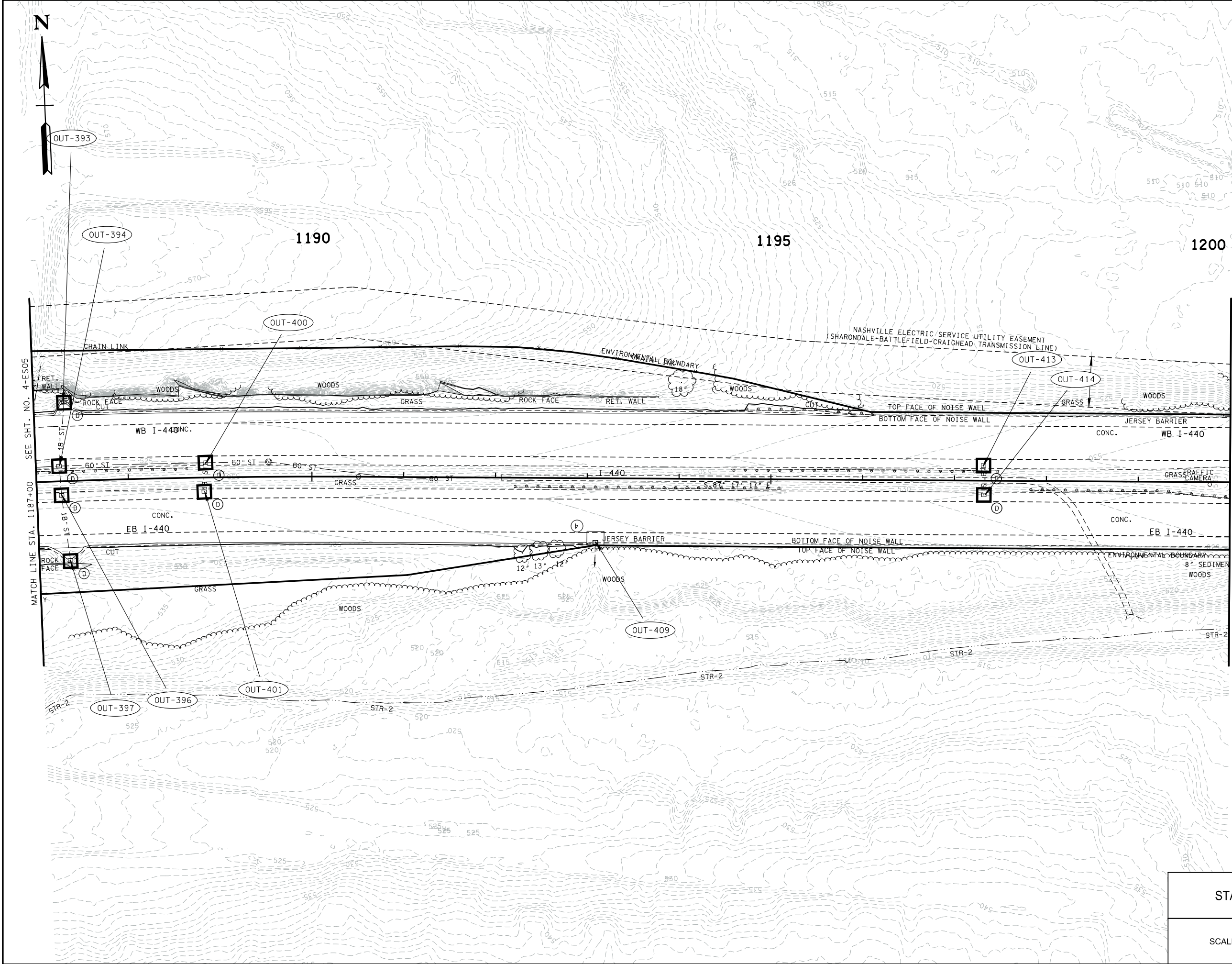
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

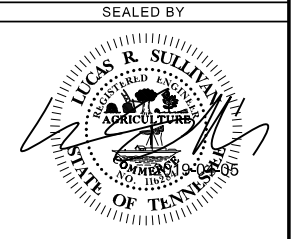
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES6



4/5/2019 4:52:53 PM
\\prdpwics01\ics_workingdir\78551305979_7914-ES06.sht



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

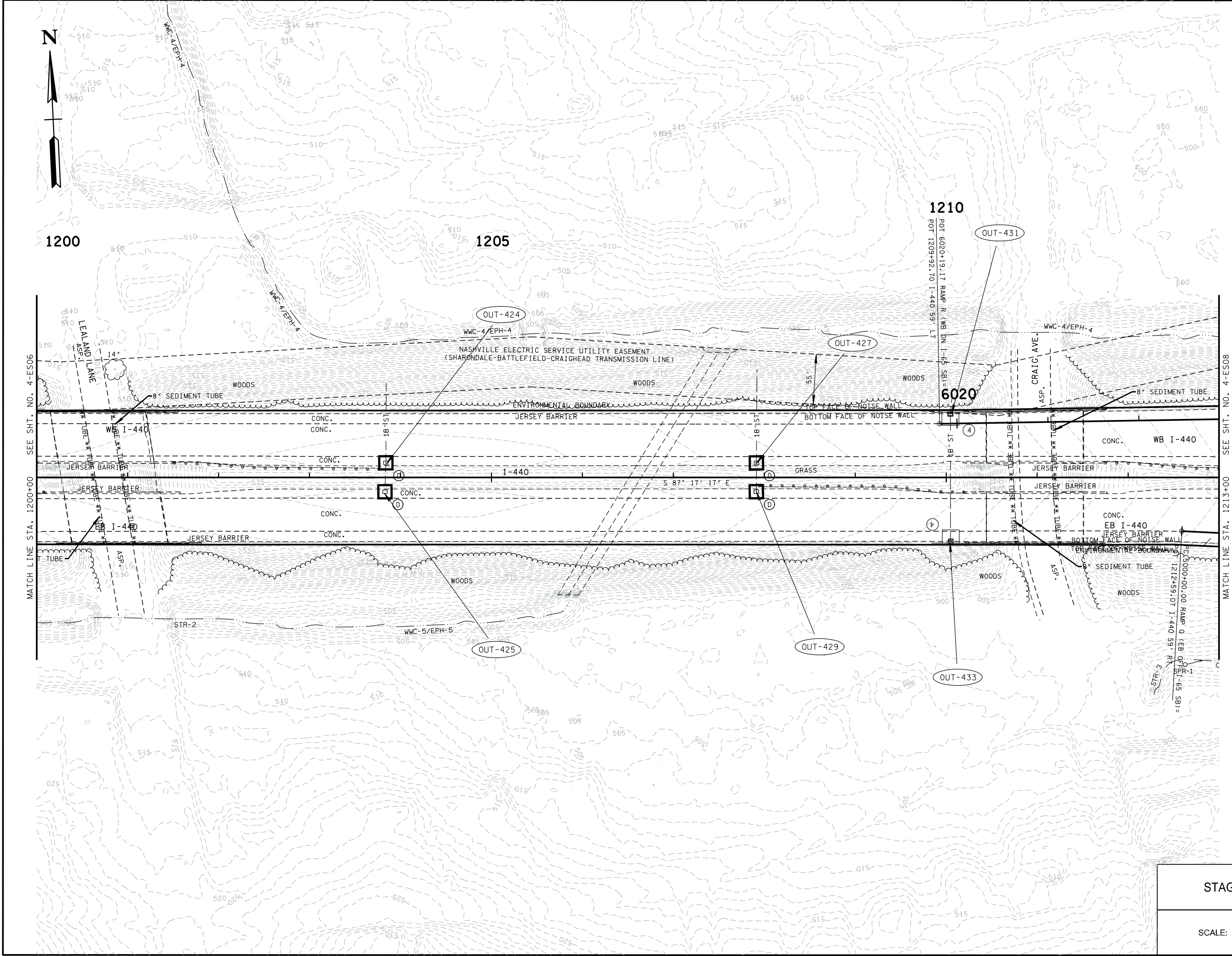
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

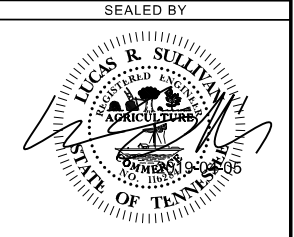
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES7



4/5/2019 4:52:51 PM
\\prdpwics01\pics_workingdir\78551305979_8014-ES07.sht



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

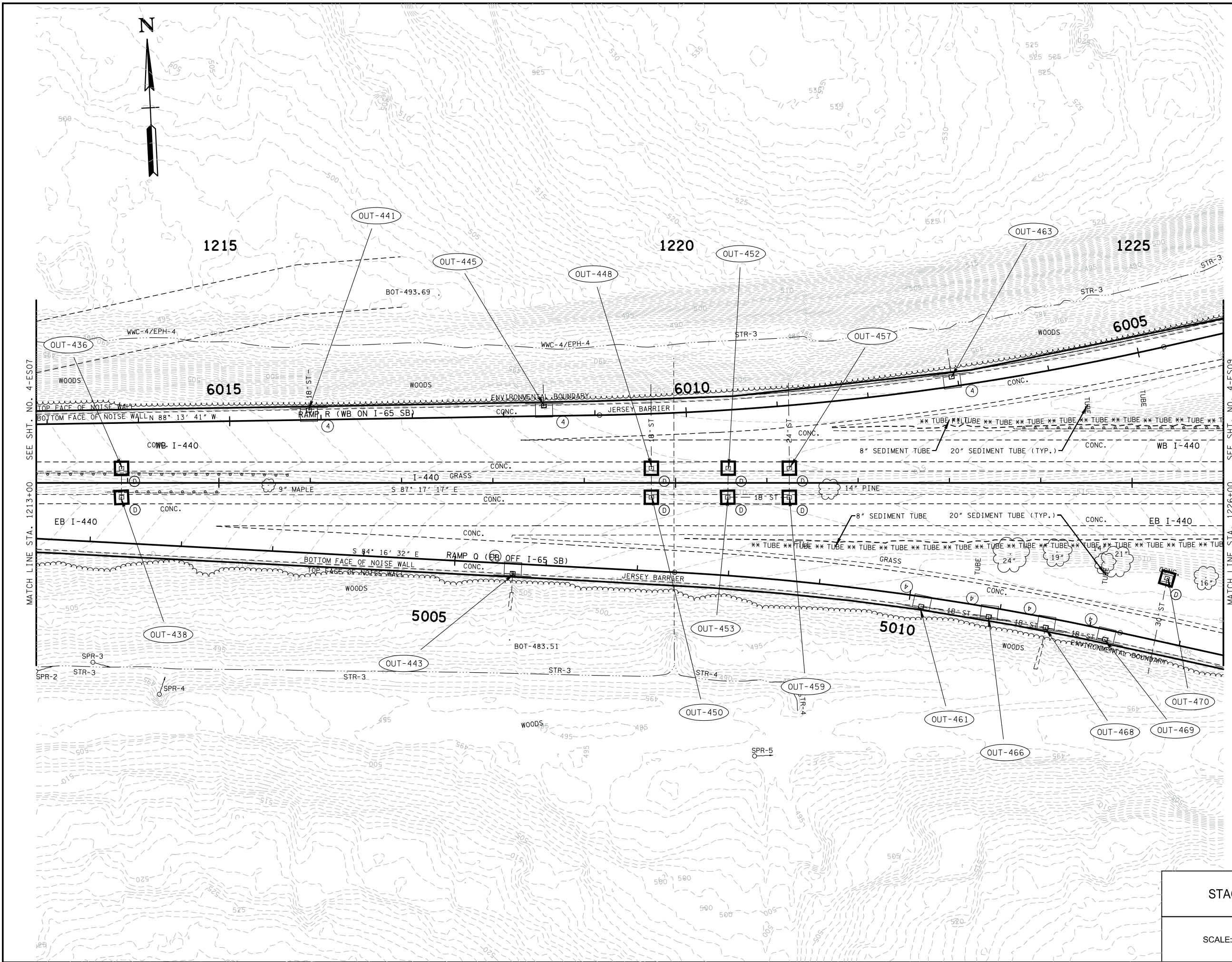
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

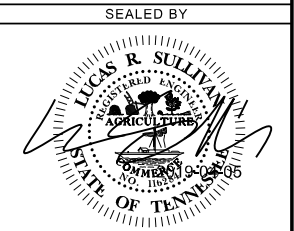
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:52:52 PM
\\prdpwics01\ics_workingdir\78551305979_8114-ES08.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES8



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

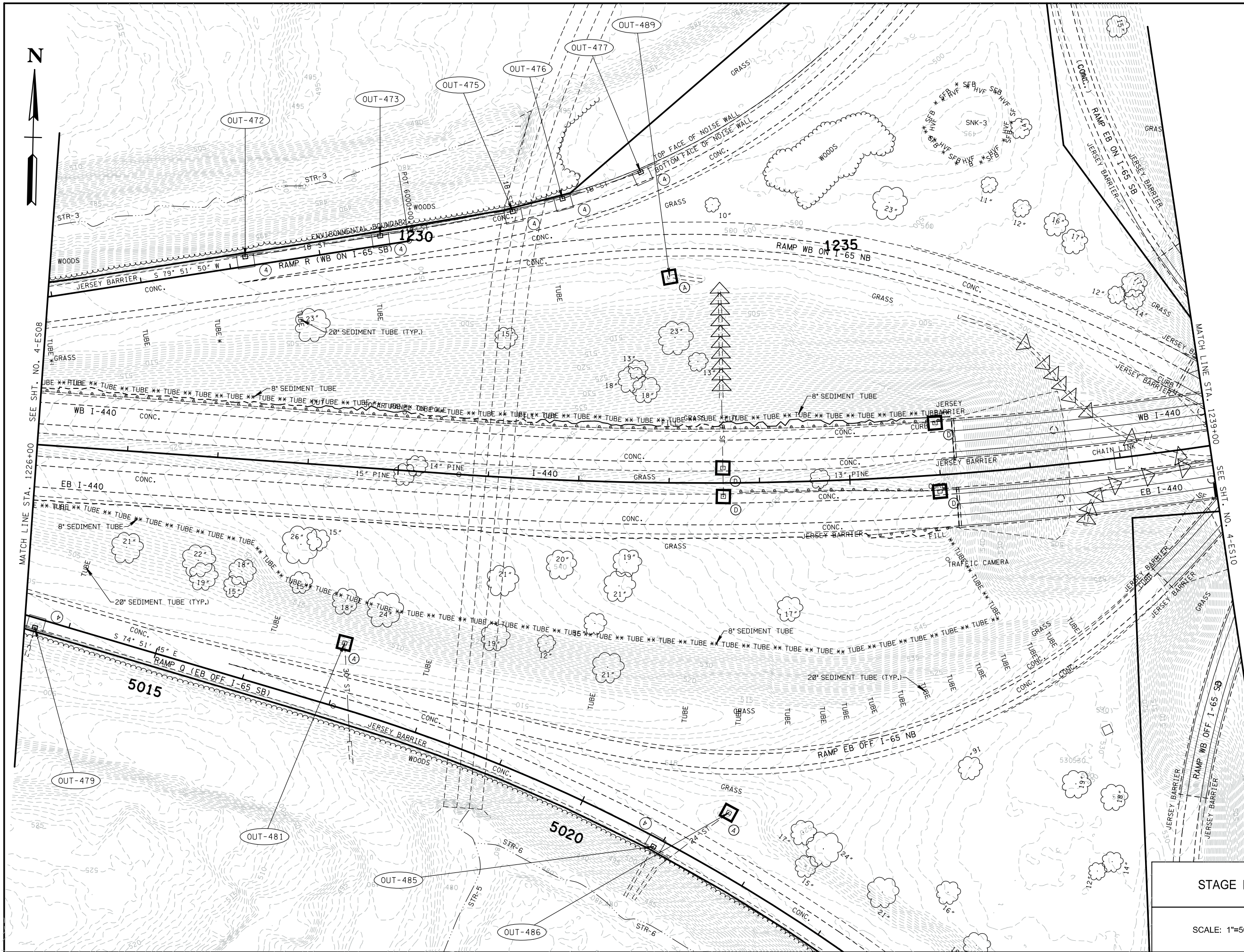
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:52:54 PM
\\prdpwics01\ics_workingdir\78551305979_8214-ES09.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES9

SEALED BY

LUCAS R. SULLIVAN
REGISTERED ENGINEER
STATE OF TENNESSEE
LICENSE NO. 19-04205

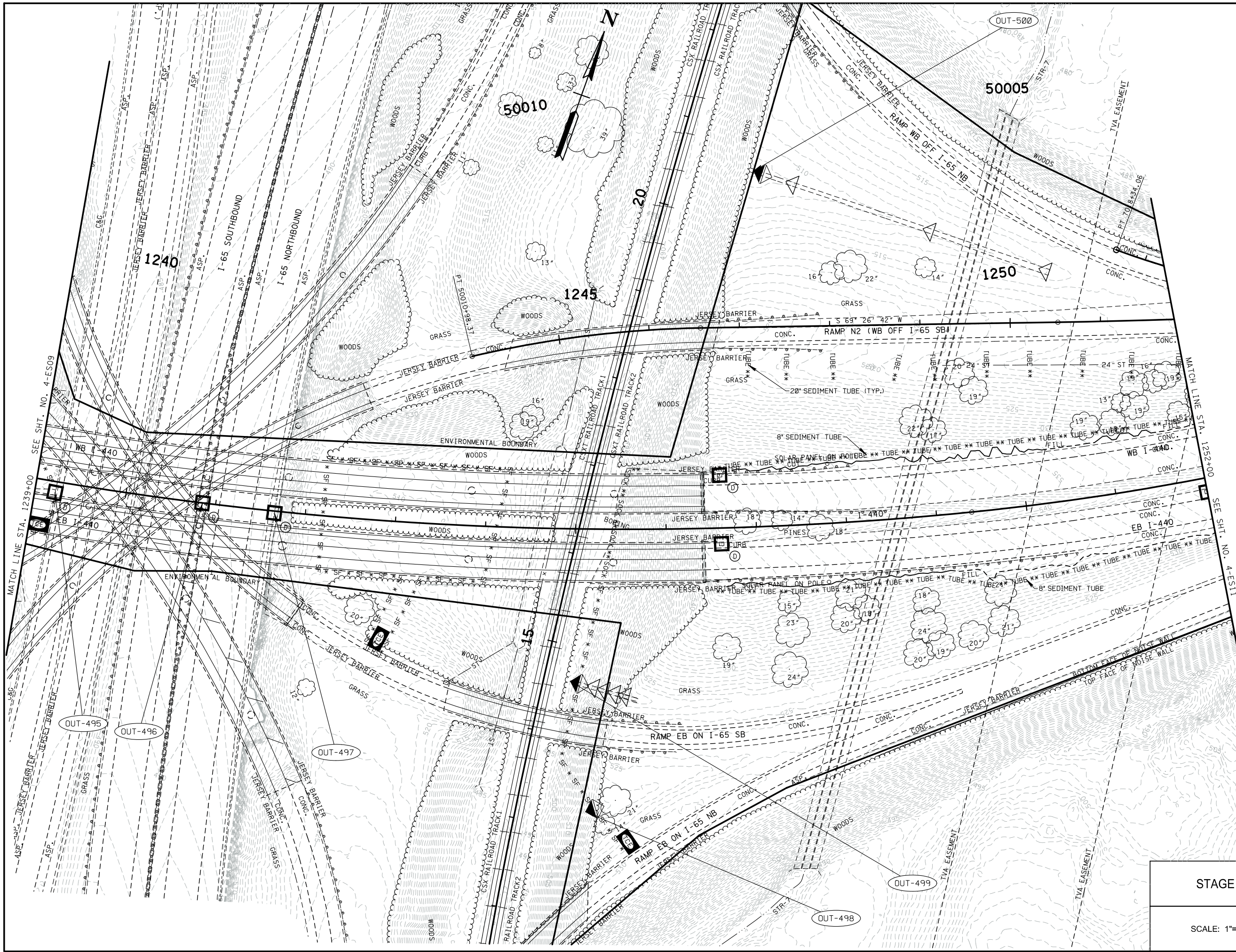
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006, AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES10

STAGE I	
SCALE: 1"=50'	

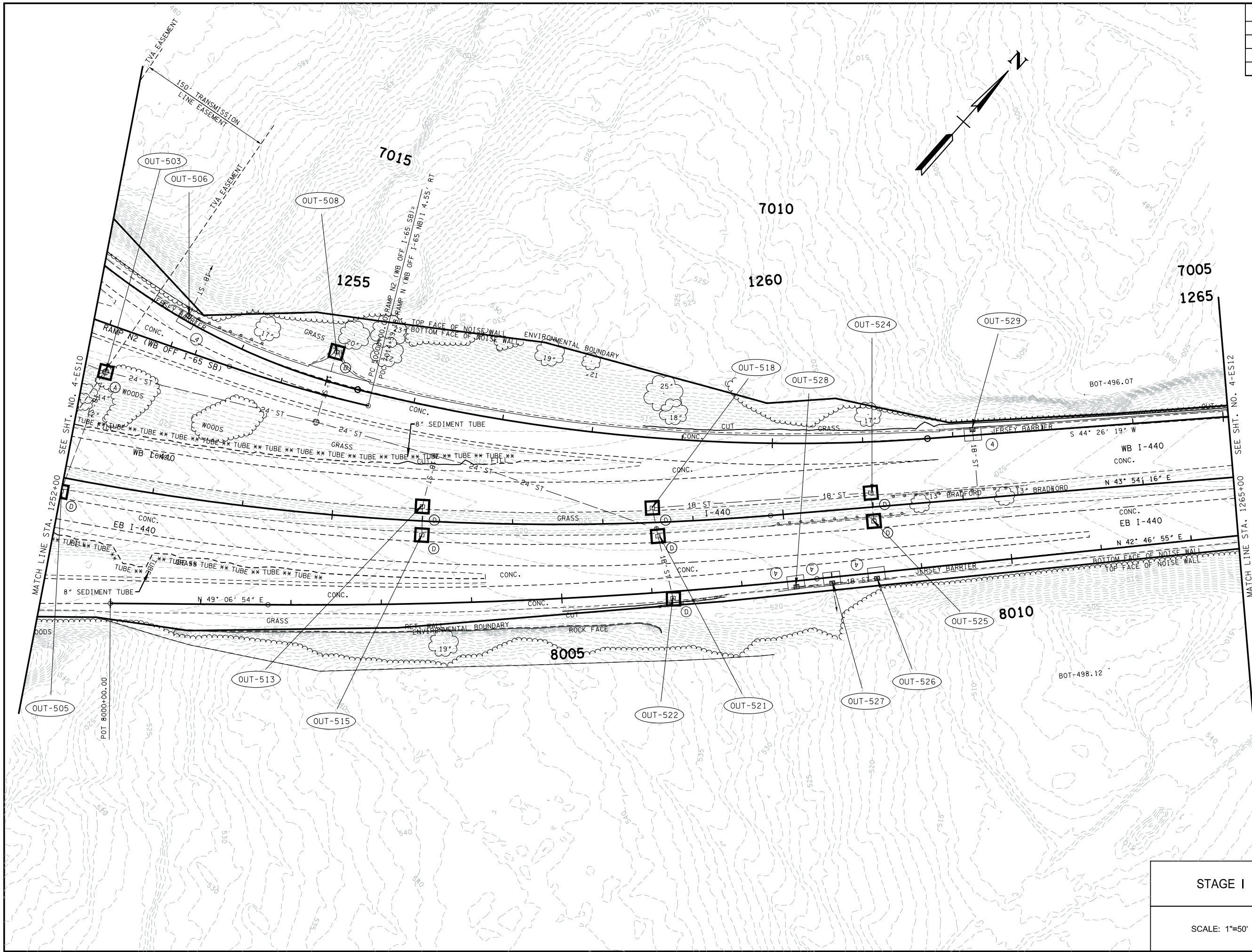
SEALED BY

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

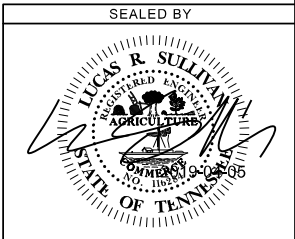
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:14 PM
\\prdpwics01\ics_workingdir\7855\305979_84\4-ES11.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES11



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

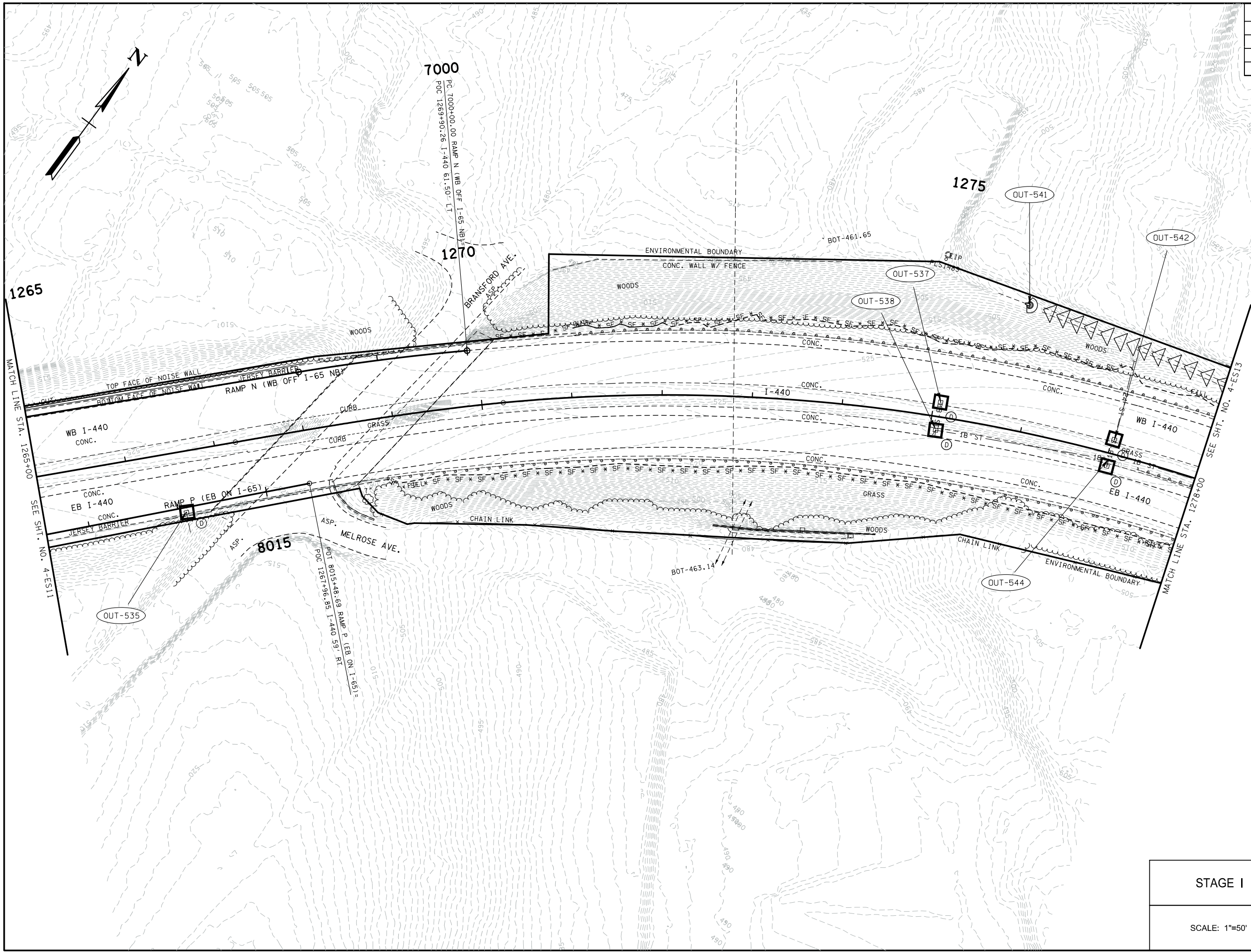
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:52:45 PM
\\prdpwics01\ics_workingdir\78551305979_7414-ES12.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES12

SEALED BY

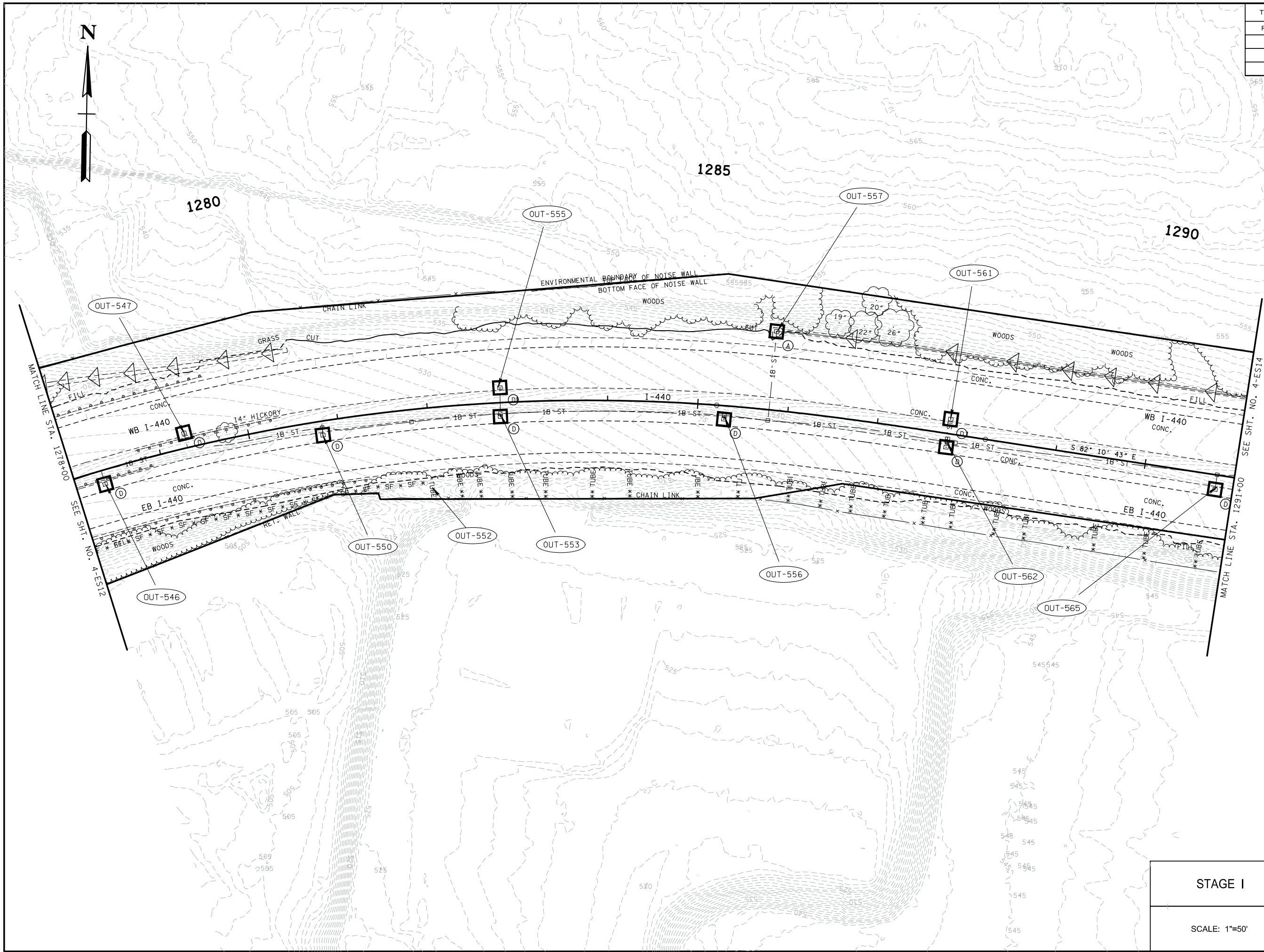
COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006, AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

**EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS**

STAGE I
SCALE: 1"=50'

4/5/2019 4:52:46 PM
\\prdpwics01\ics_workingdir\78551305979_7514-ES13.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES13

SEALED BY

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

**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

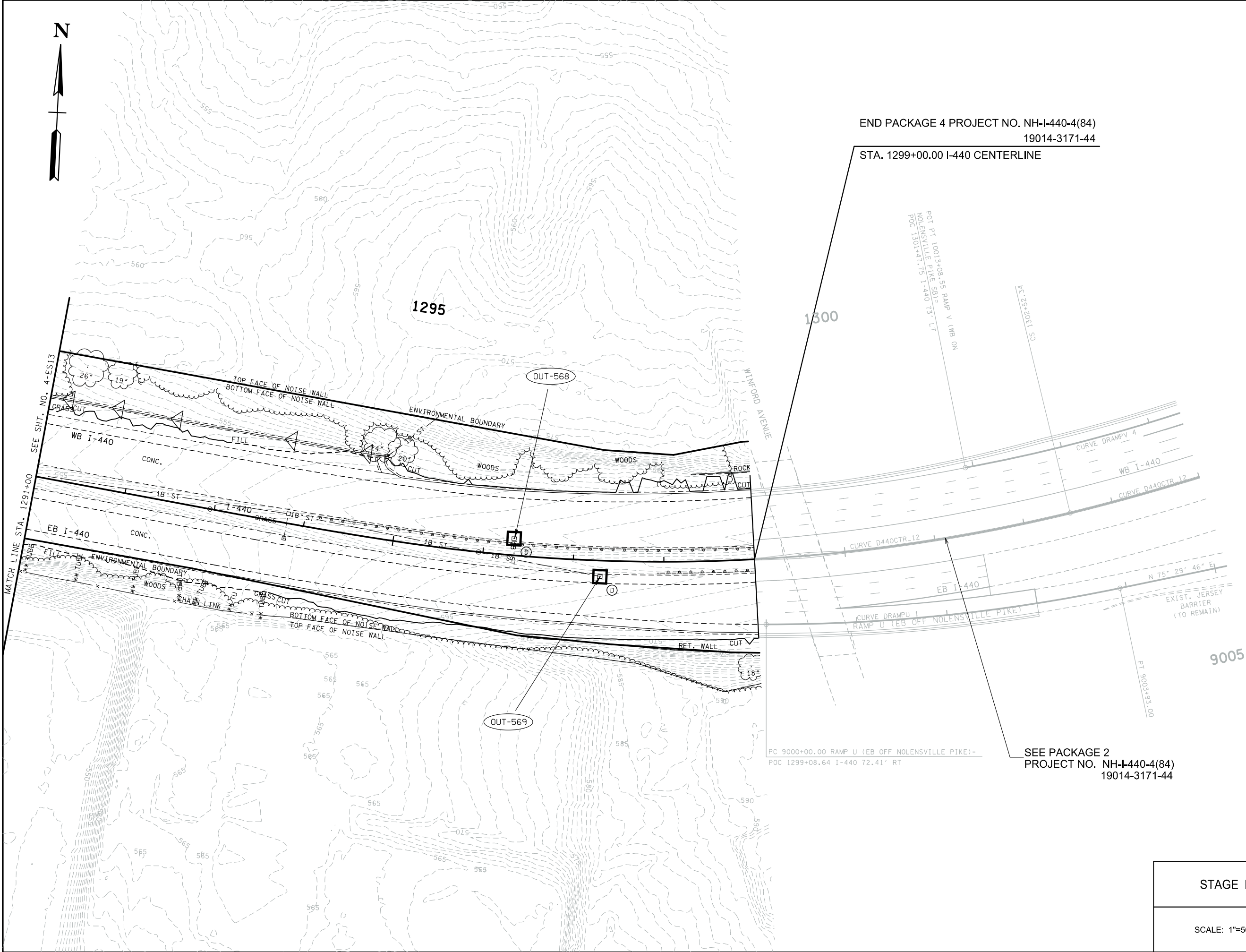
**EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS**

STAGE I
SCALE: 1"=50'

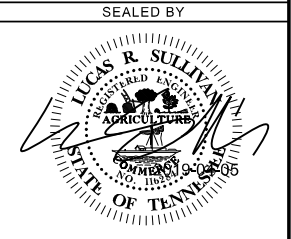
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES14

END PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44

STA. 1299+00.00 I-440 CENTERLINE



SEE PACKAGE 2
PROJECT NO. NH-I-440-4(84)
19014-3171-44



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

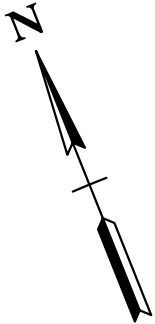
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE I

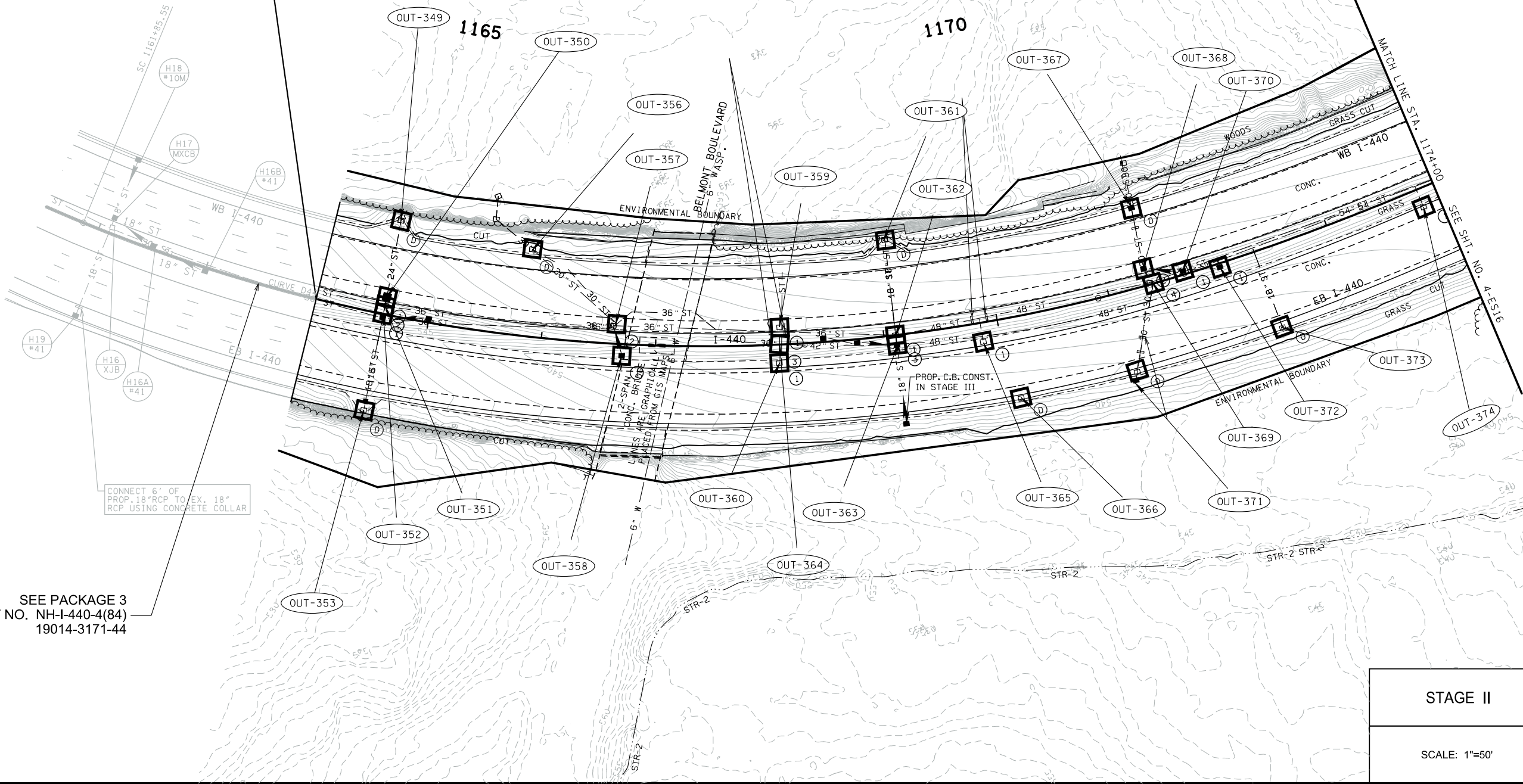
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

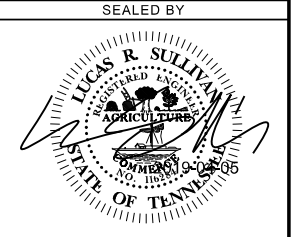
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES15



BEGIN PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44
STA. 1164+00.00 I-440 CENTERLINE



SEE PACKAGE 3
PROJECT NO. NH-I-440-4(84)
19014-3171-44



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

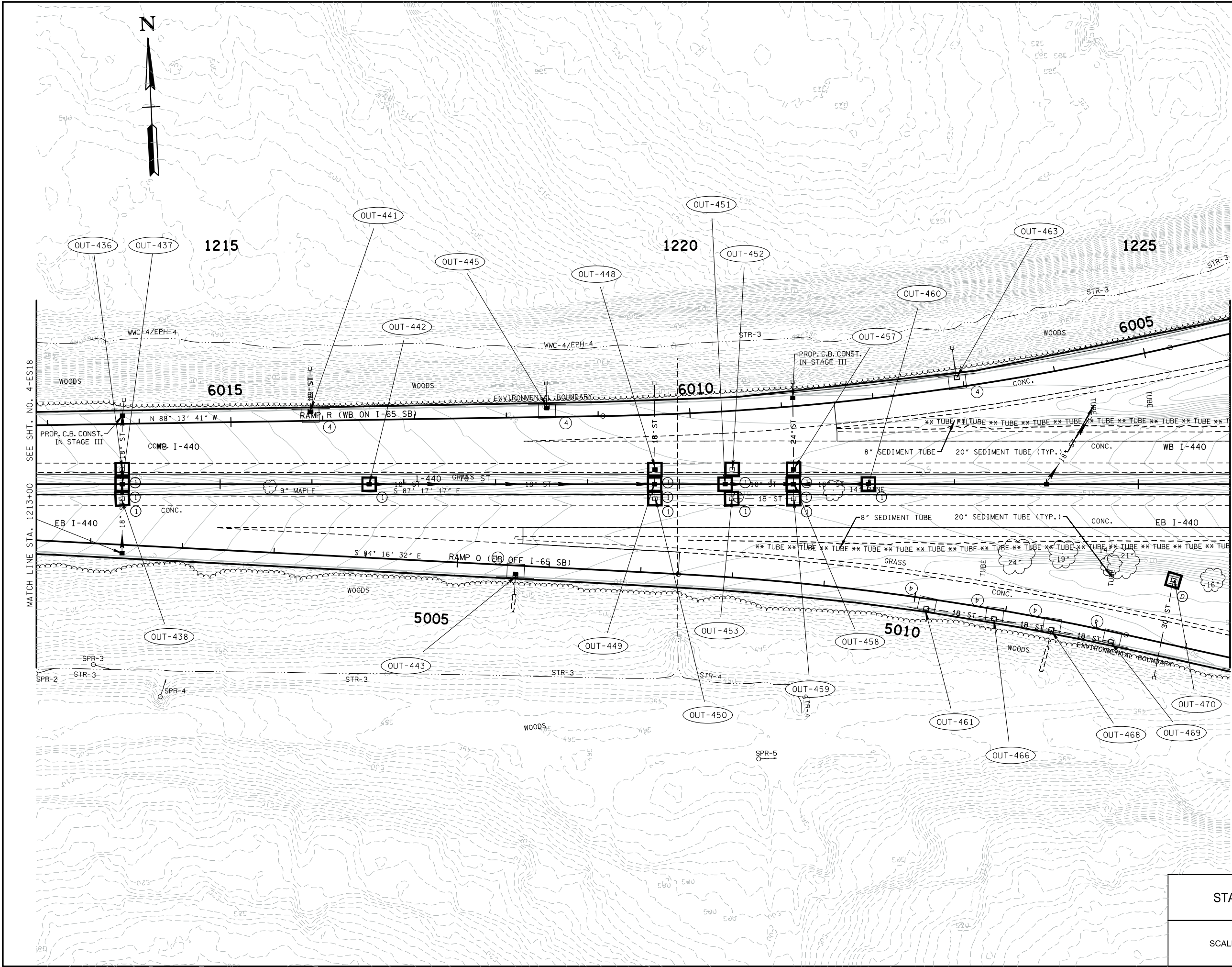
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE II

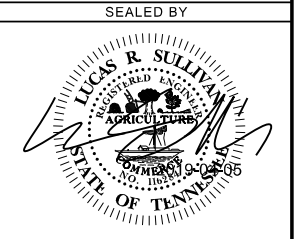
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:39 PM
\\prdpwics01\ics_workingdir\78551305979_101\4-ES19.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES19



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

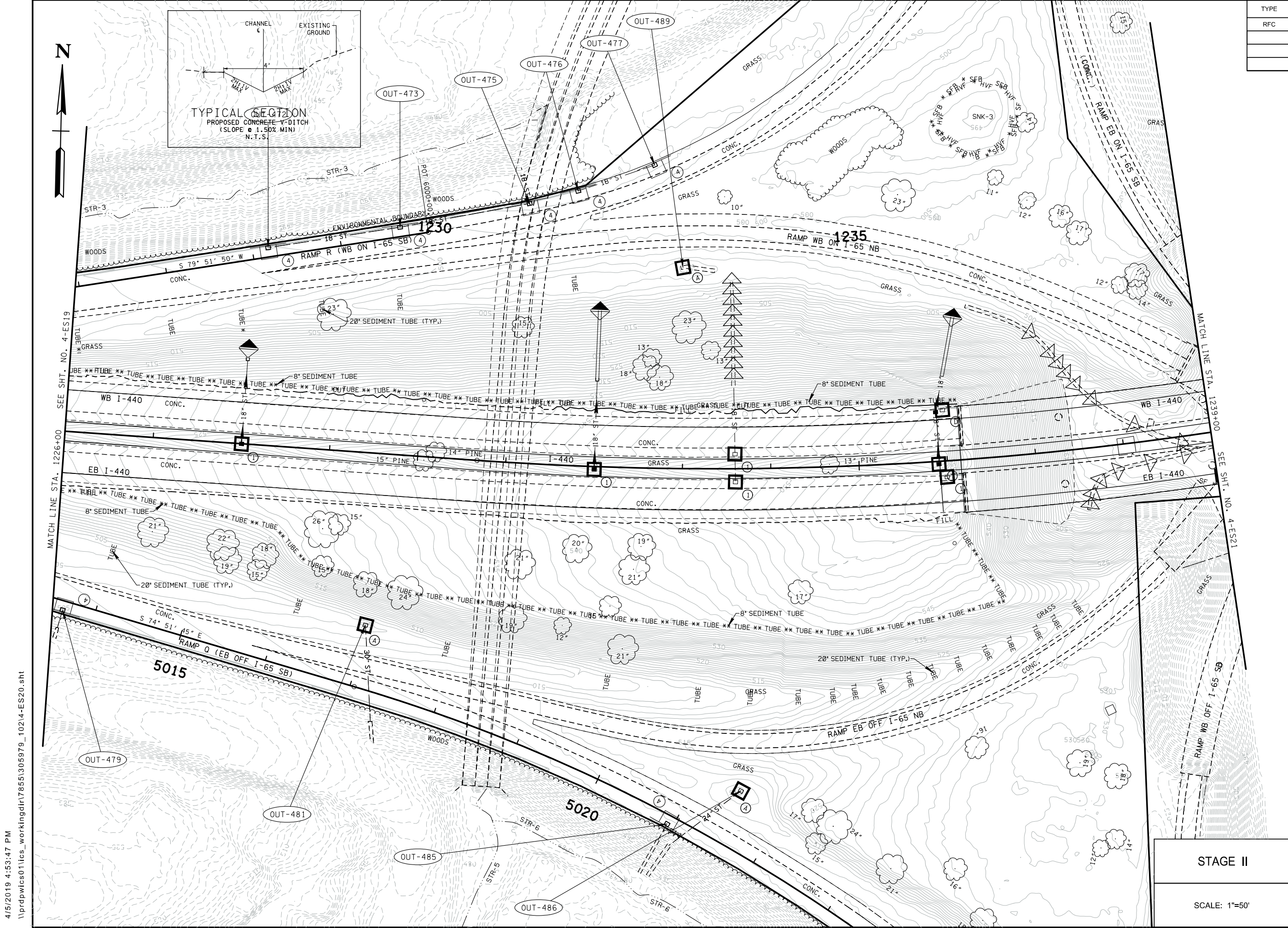
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE II

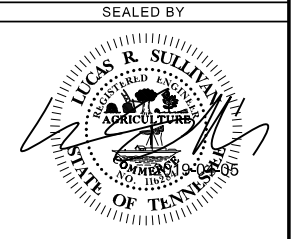
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES20



4/5/2019 4:53:47 PM
\\prdwics01\ics_workingdir\7855\305979_10214-ES20.sht



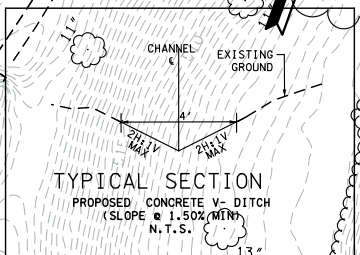
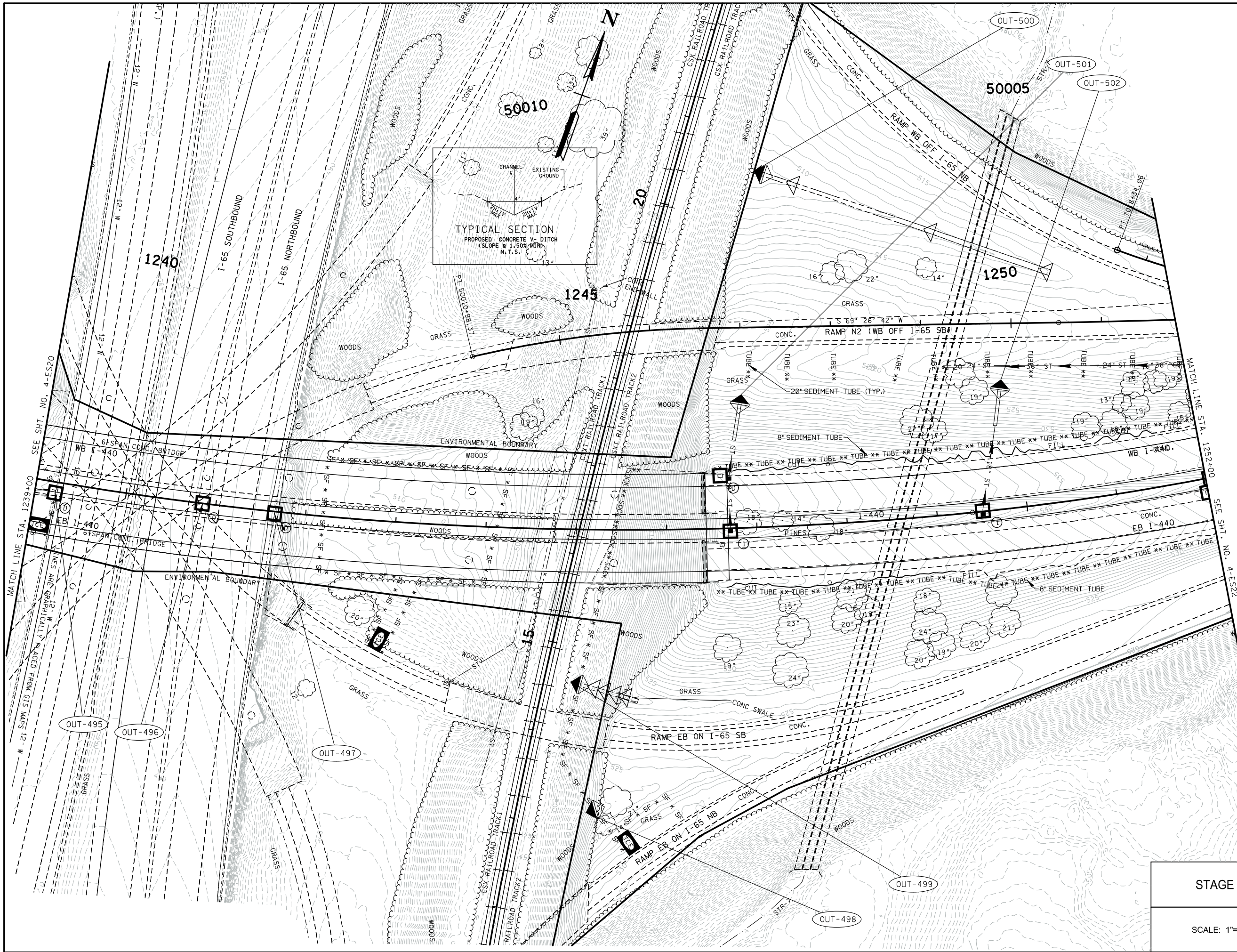
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006, AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE II

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES21

SEE SHT. NO. 4-ES20
MATCH LINE STA. 1239+00

SEE SHT. NO. 4-ES22
MATCH LINE STA. 1252+00

SEALD BY

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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

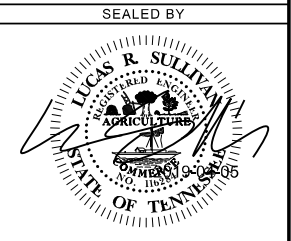
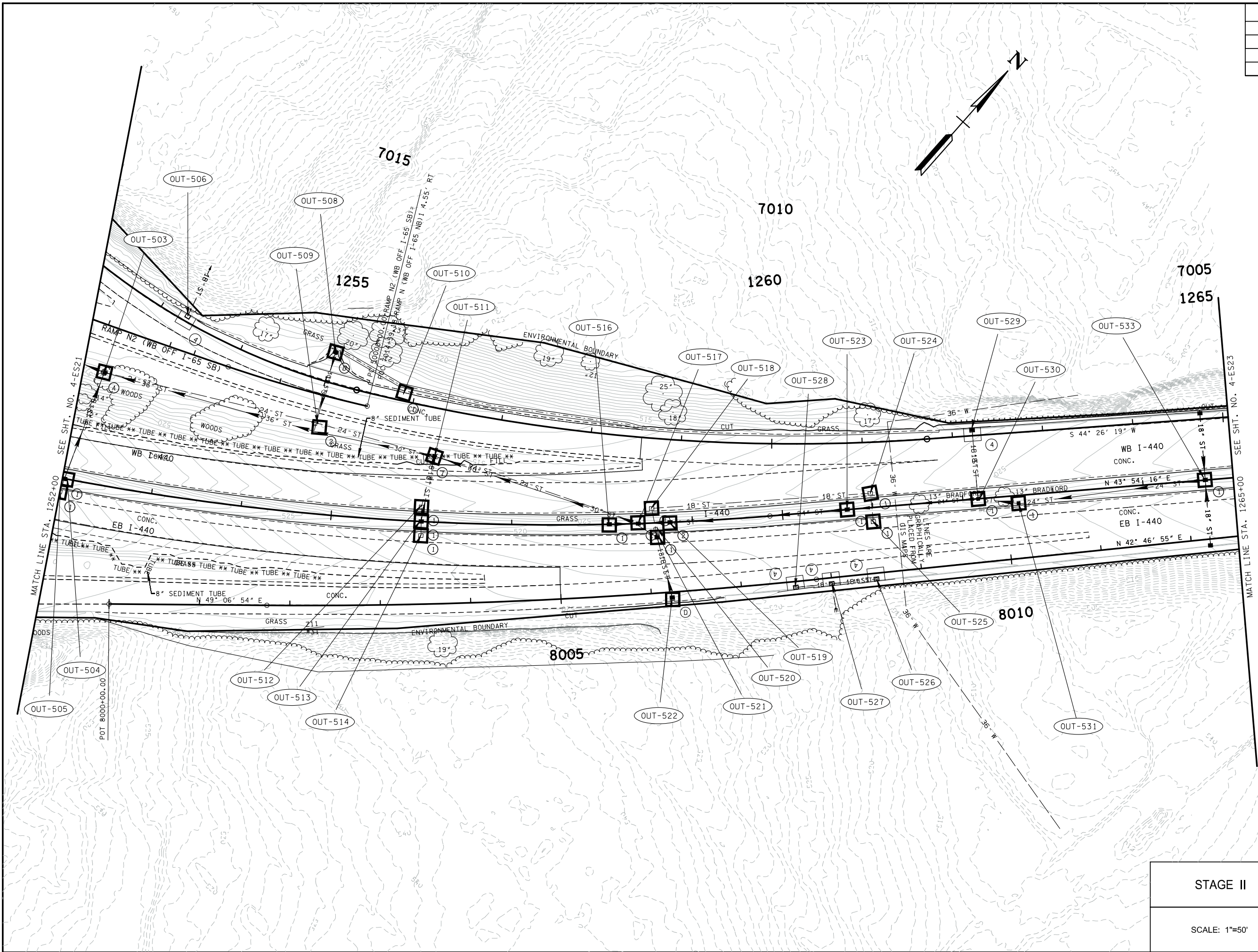
EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

STAGE II

SCALE: 1"=50'

4/5/2019 4:52:45 PM
\\prdpwics01\ics_workingdir\78551305979_10414-ES22.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES22



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

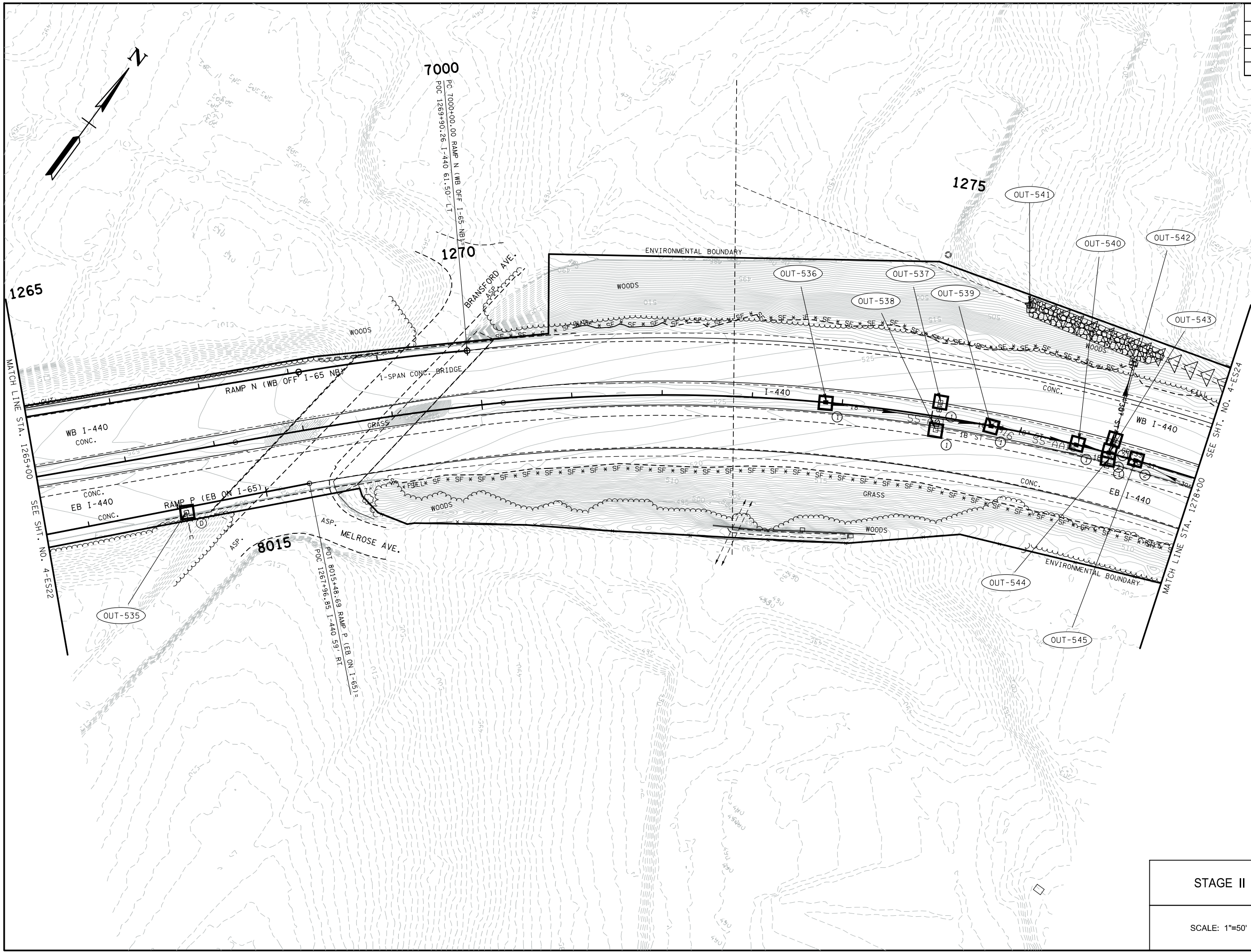
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE II

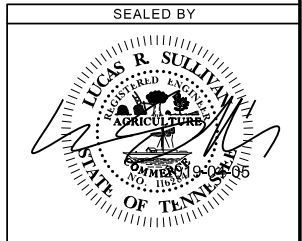
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:13 PM
\\prdpwics01\ics_workingdir\78551305979_9414-ES23.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES23



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

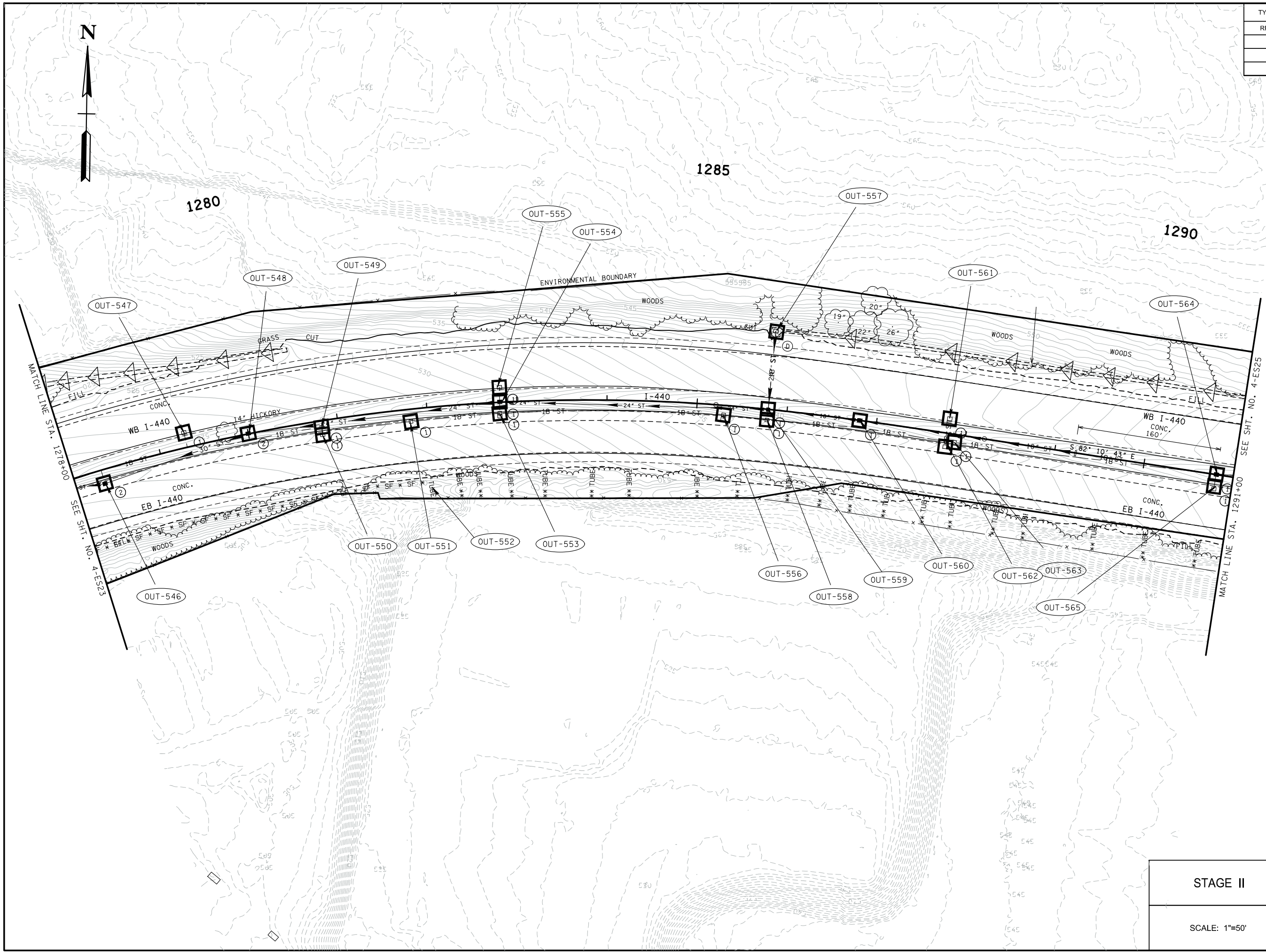
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE II

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:27 PM
\\prdpwics01\ics_workingdir\78551305979_9514-ES24.sht



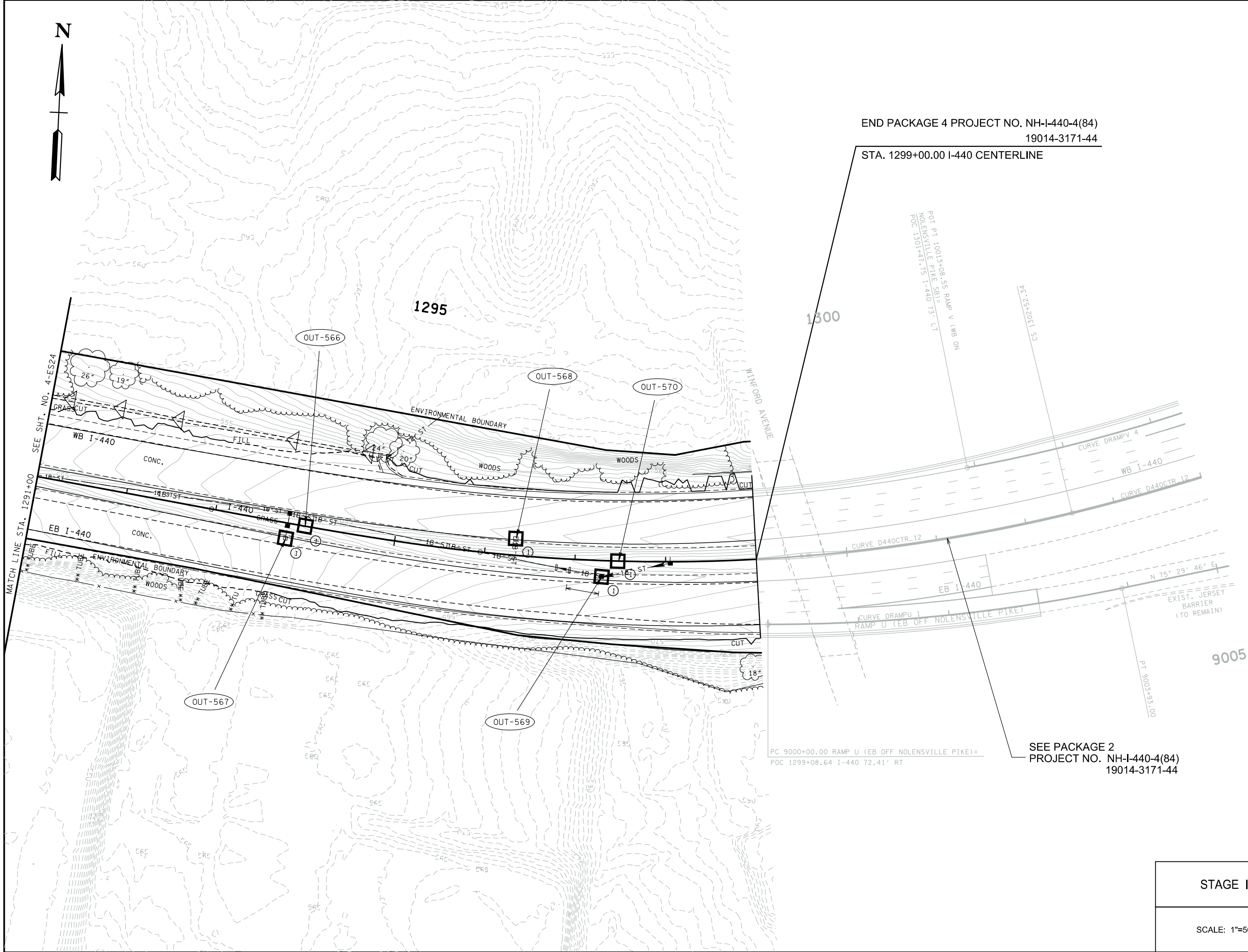
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES24

SEALED BY	
COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006, AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.	
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION	
STAGE II	EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS
SCALE: 1"=50'	

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES25

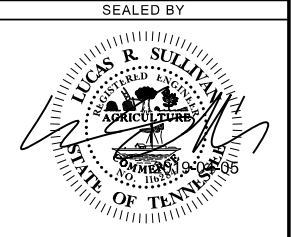
END PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44

STA. 1299+00.00 I-440 CENTERLINE



PC 9000+00.00 RAMP U (EB OFF NOLENSVILLE PIKE)=
POC 1299+08.64 I-440 72.41' RT

SEE PACKAGE 2
PROJECT NO. NH-I-440-4(84)
19014-3171-44



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

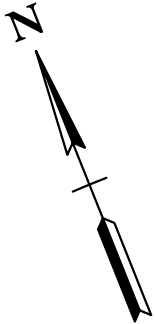
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

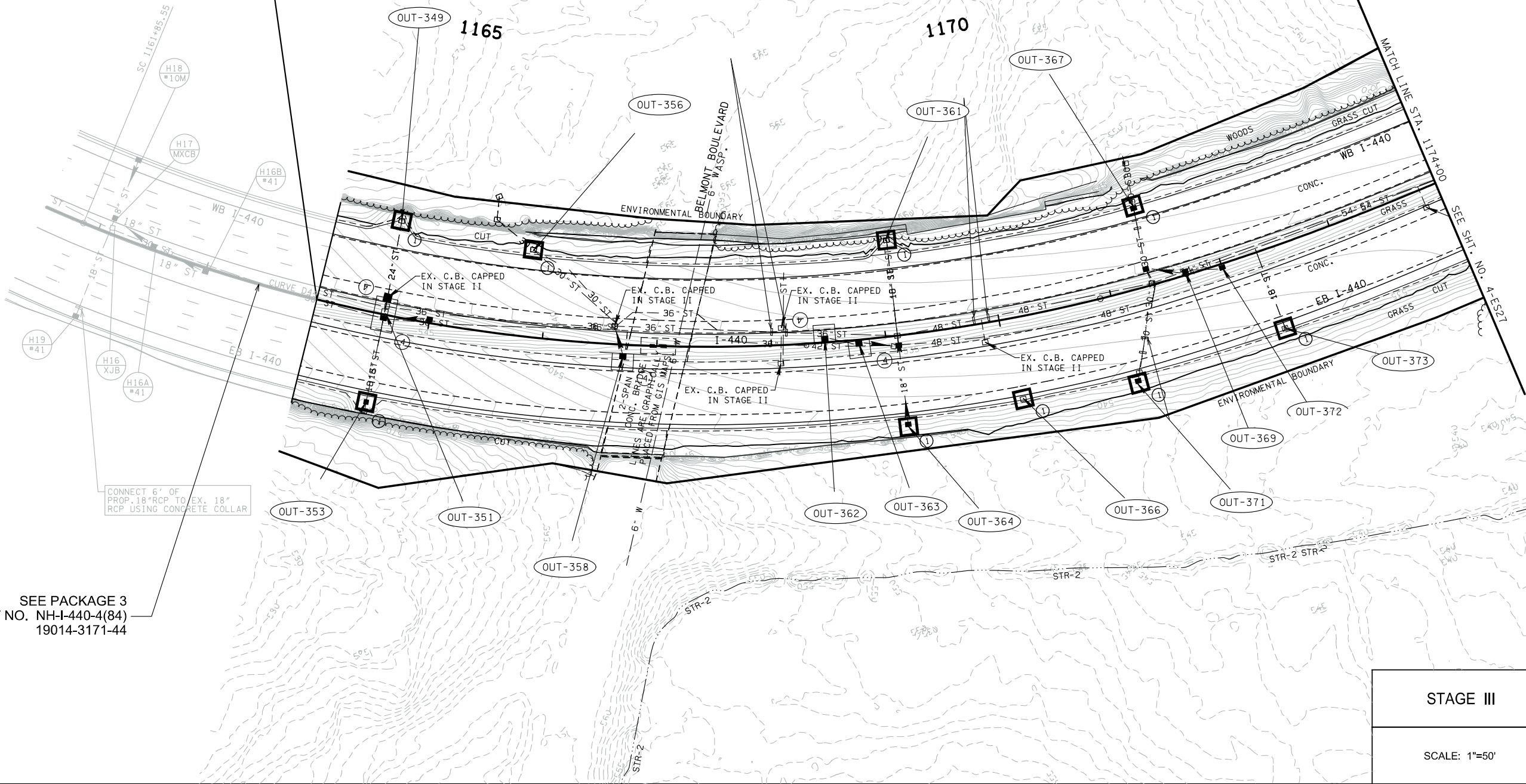
STAGE II

SCALE: 1"=50'

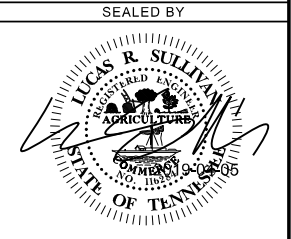
TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES26



BEGIN PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44
STA. 1164+00.00 I-440 CENTERLINE



SEE PACKAGE 3
PROJECT NO. NH-I-440-4(84)
19014-3171-44



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

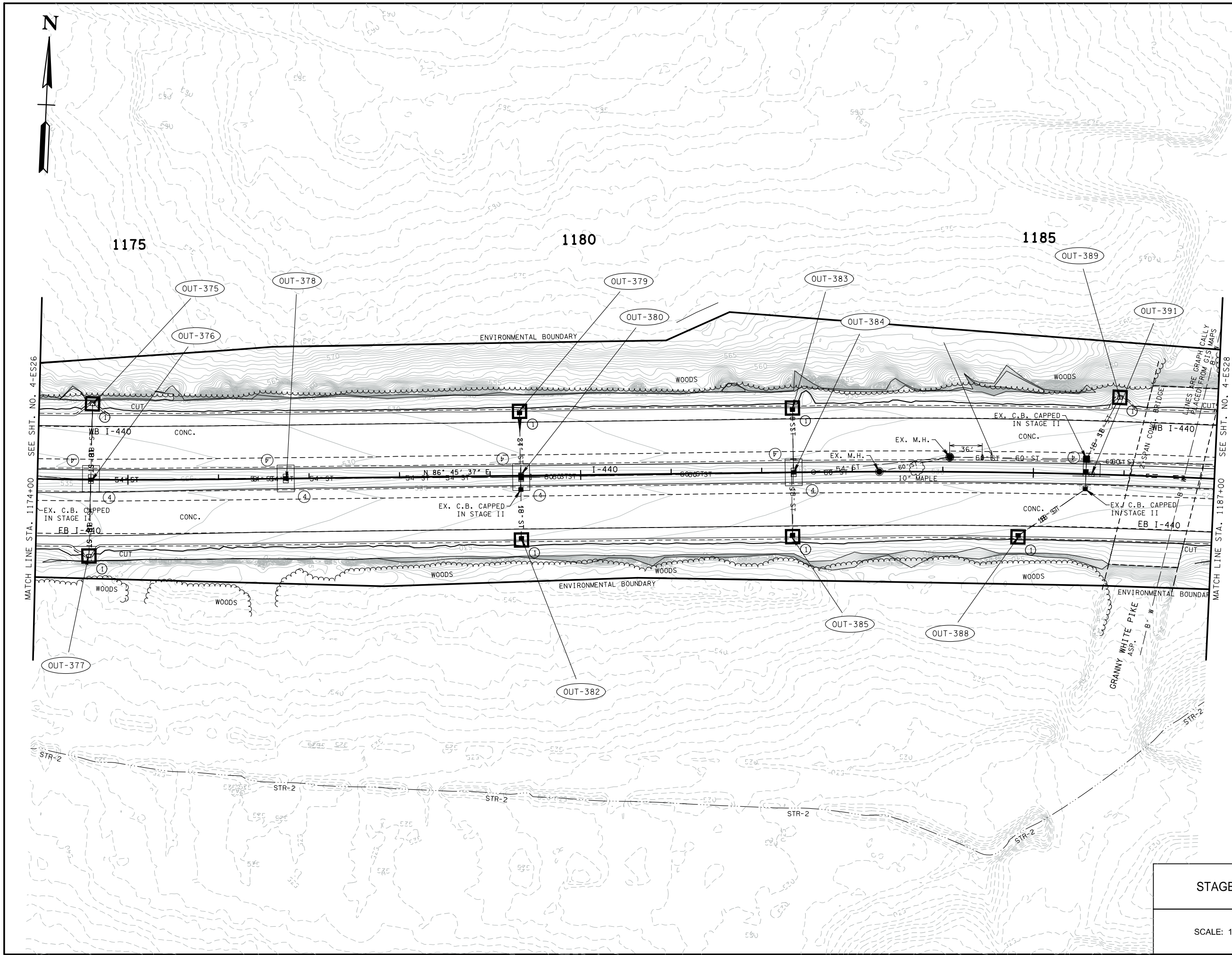
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:05 PM
\\prdpwics01\ics_workingdir\7855\305979_109\4-ES27.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES27

SEAL BY

LUCAS R. SULLIVAN
REGISTERED ENGINEER
NO. 100006
STATE OF TENNESSEE

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

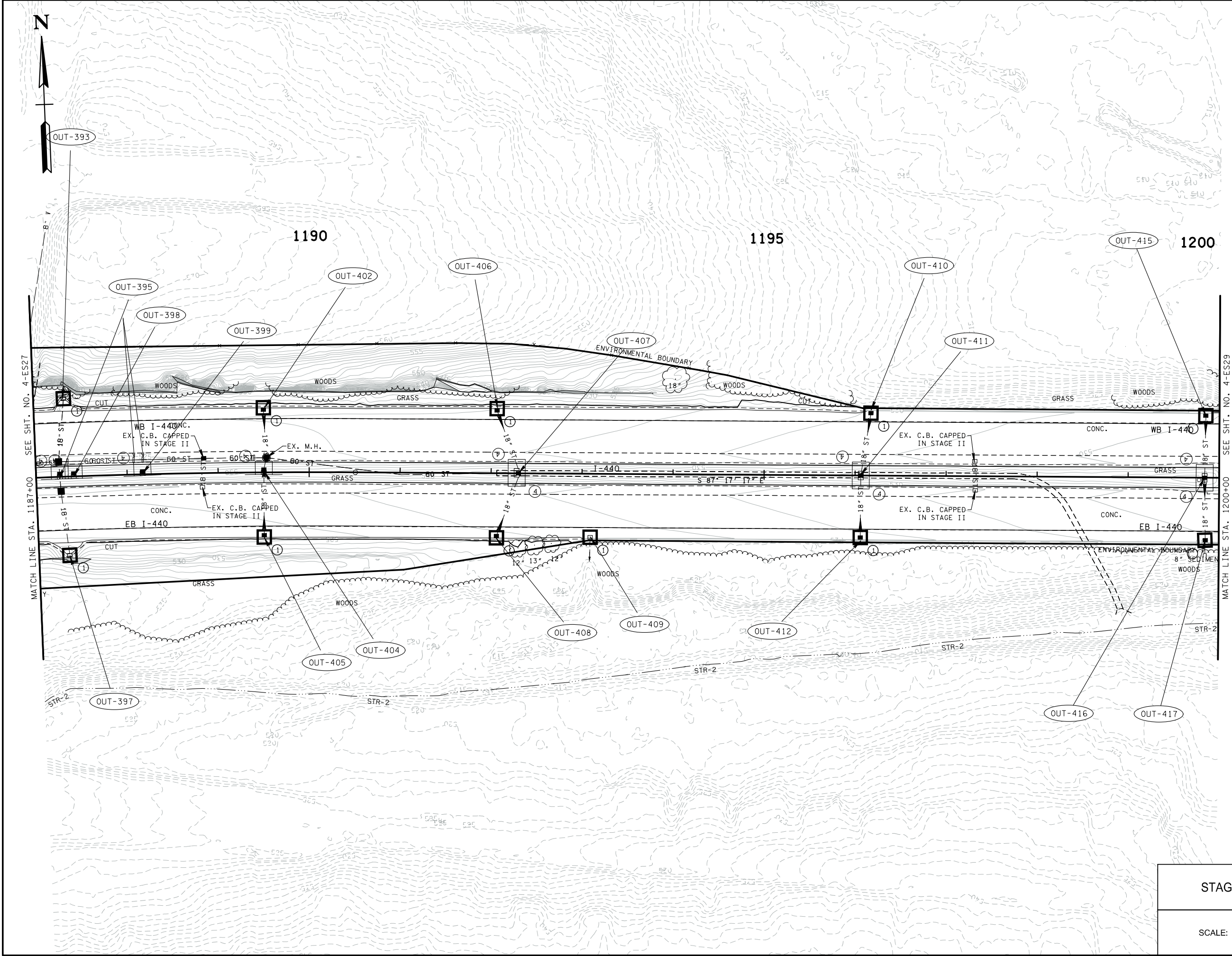
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

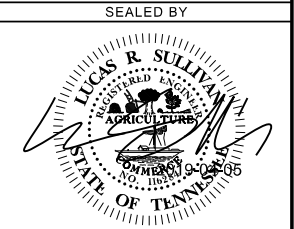
STAGE III

SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES28



4/5/2019 4:54:06 PM
\\prdpwics01\ics_workingdir\7855\305979_110\4-ES28.sht



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

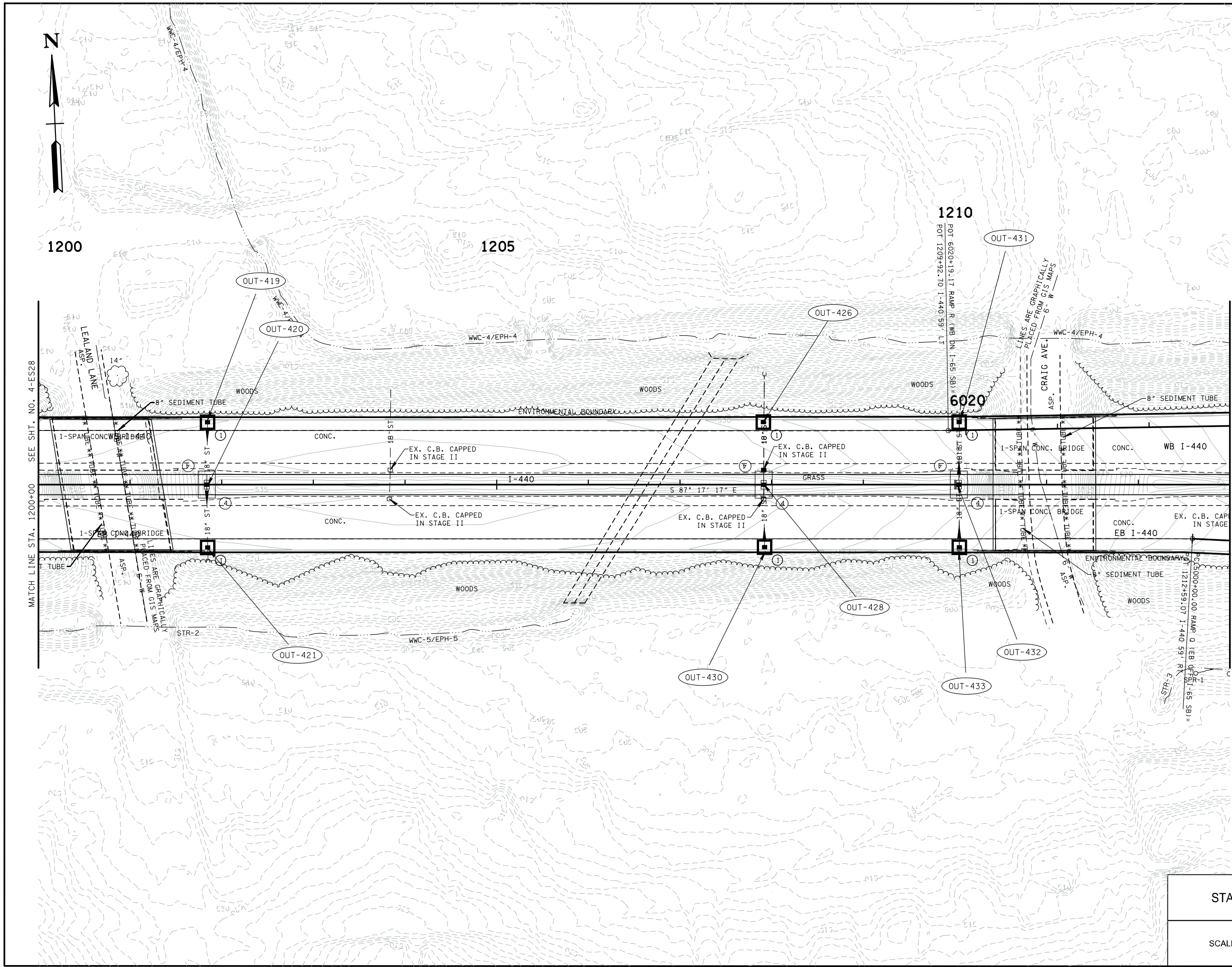
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

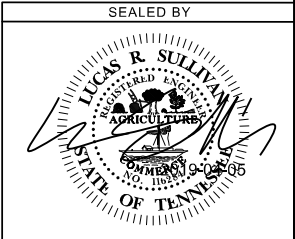
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:17 PM
\\prdpwics01\pics_working\dir\78551305979_1114-ES29.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES29



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

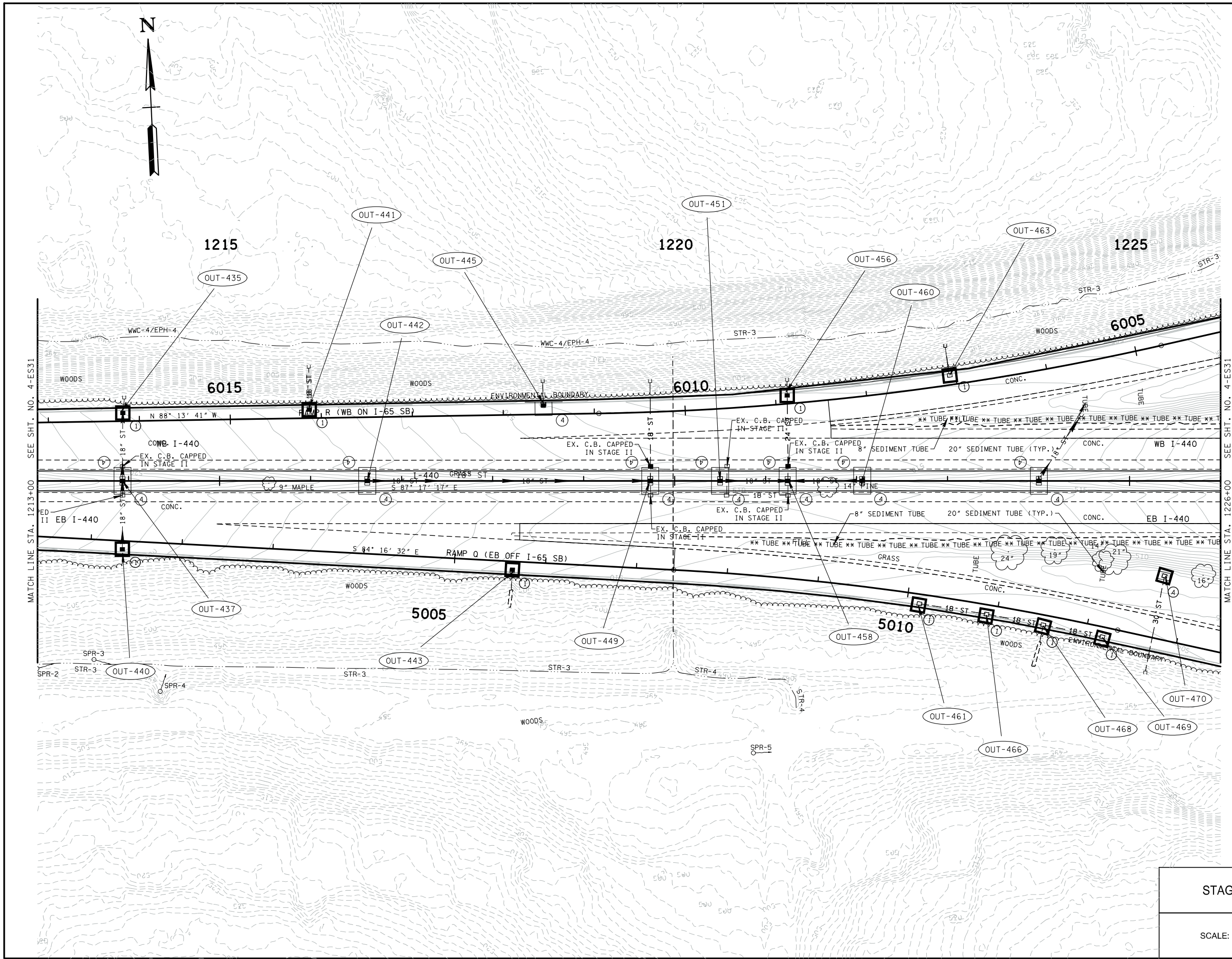
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

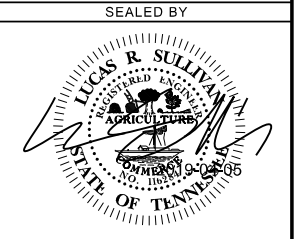
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:09 PM
\\prdpwics01\ics_workingdir\78551305979_11214-ES30.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES30



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

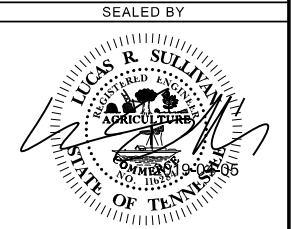
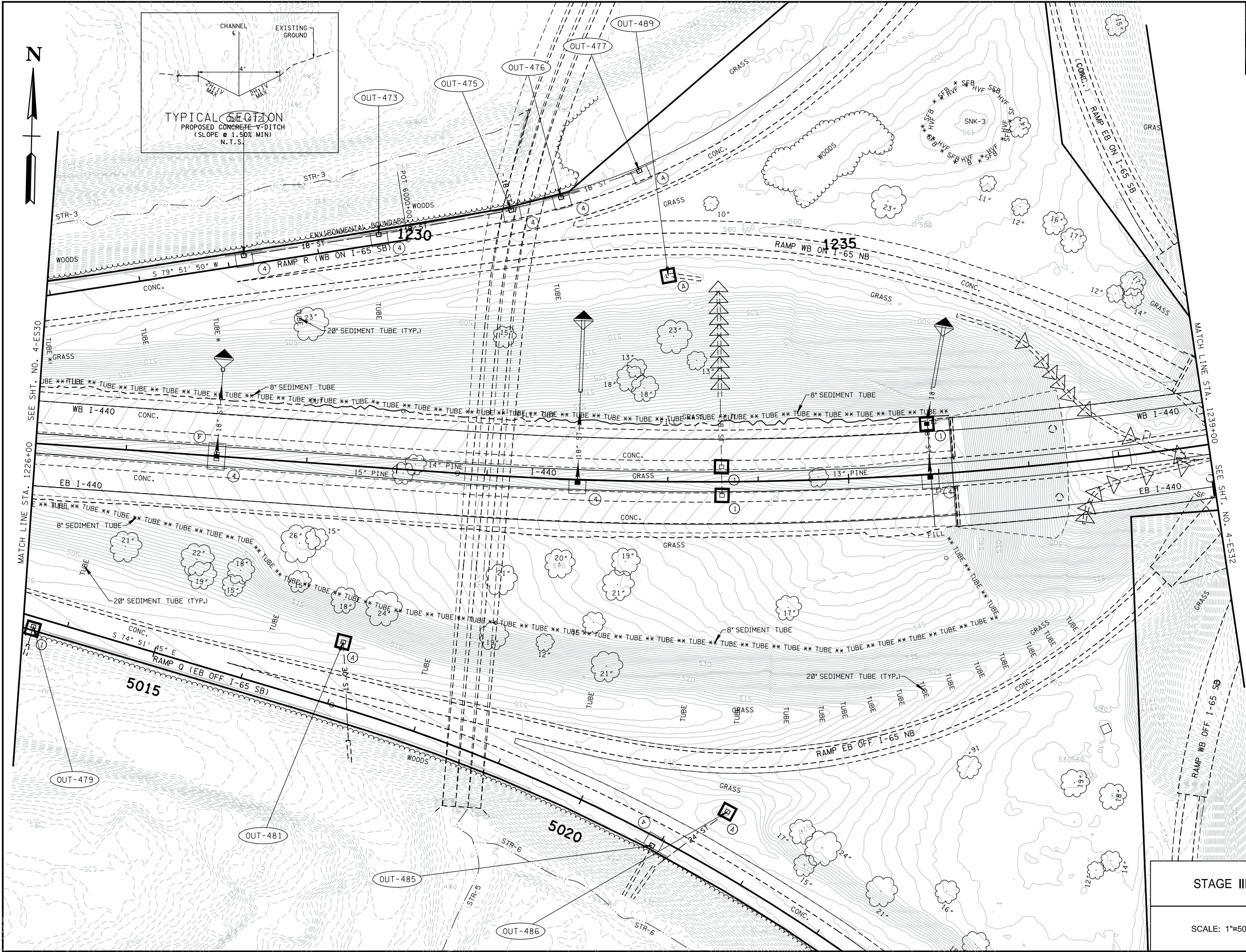
STAGE III

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES31

4/5/2019 4:54:25 PM
\\prdwics01\ics_workingdir\7855\305979_113\4-ES31.sht



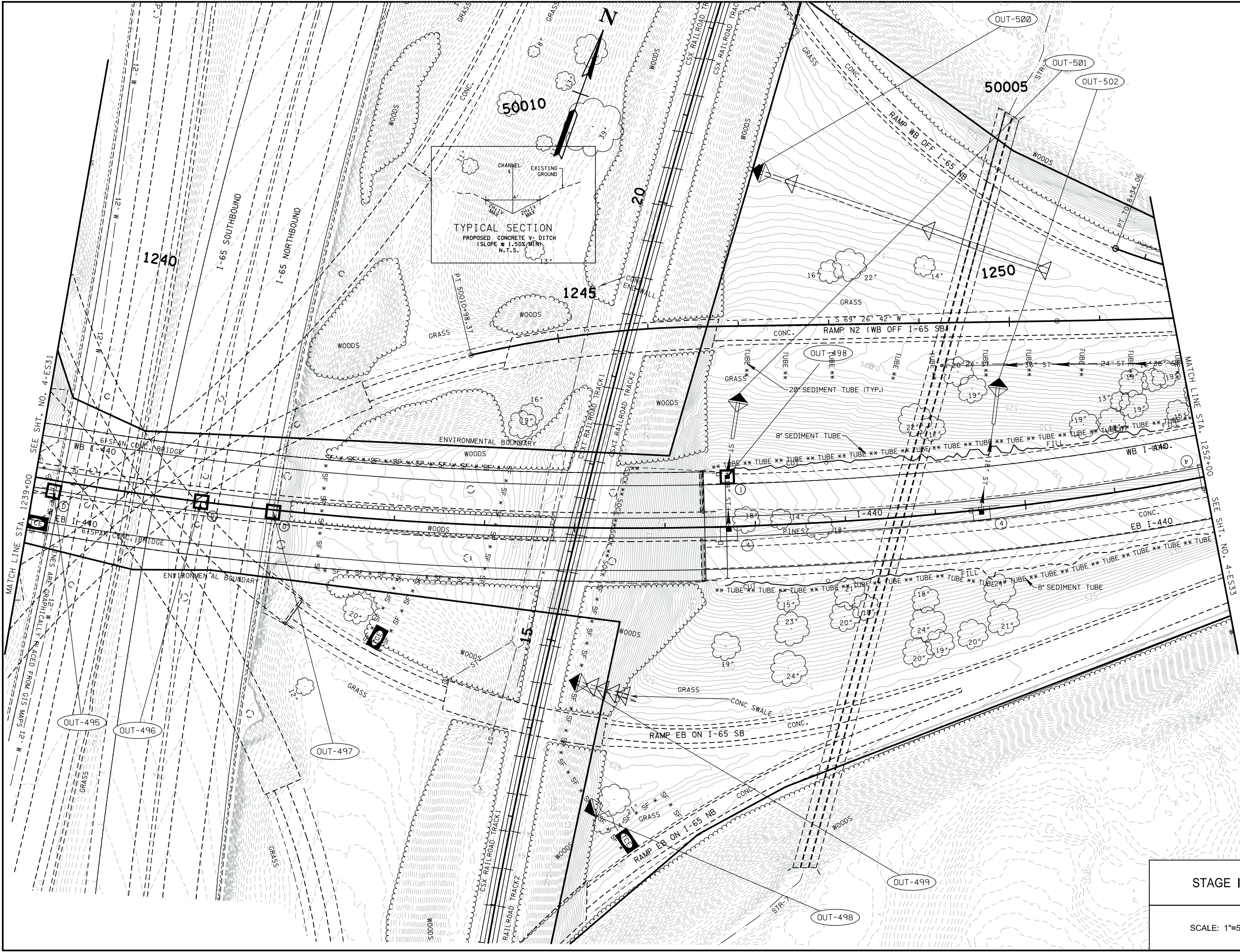
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006, AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

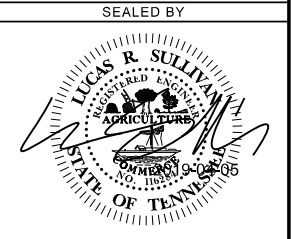
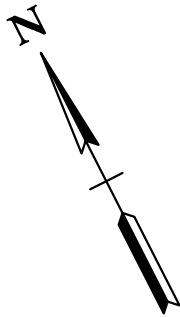
STAGE III

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES32

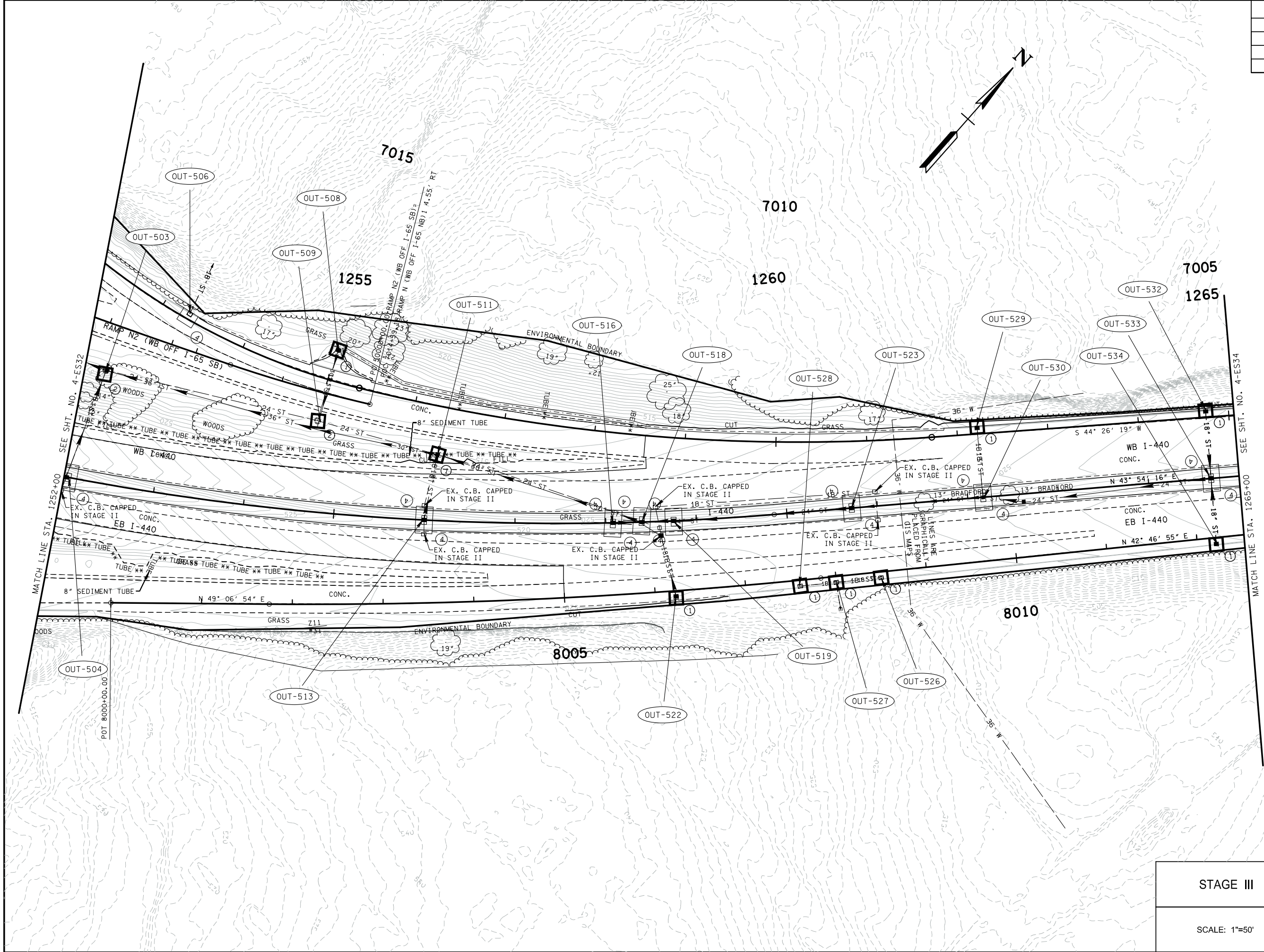


COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00006, AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

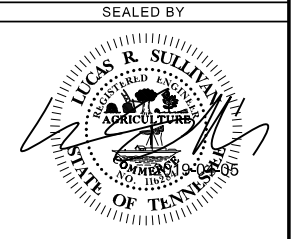
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III	EROSION PREVENTION & SEDIMENT CONTROL (EPSC) PLANS
SCALE: 1"=50'	

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES33



4/5/2019 4:54:22 PM
\\prdwics01\ics_workingdir\78551305979_11514-ES33.sht



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

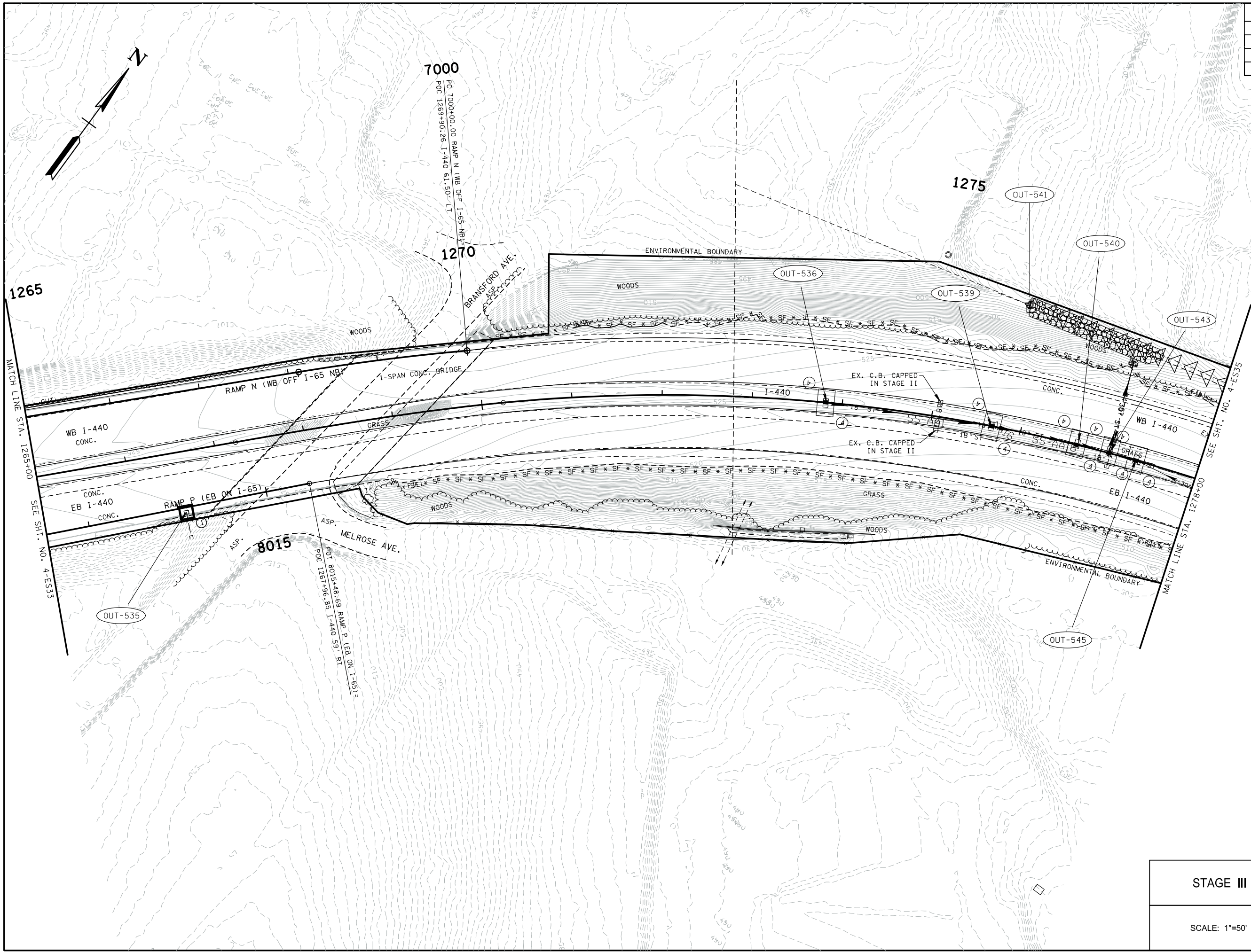
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

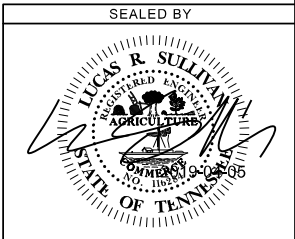
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:45 PM
\\prdpwics01\ics_workingdir\78551305979_10514-ES34.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES34



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

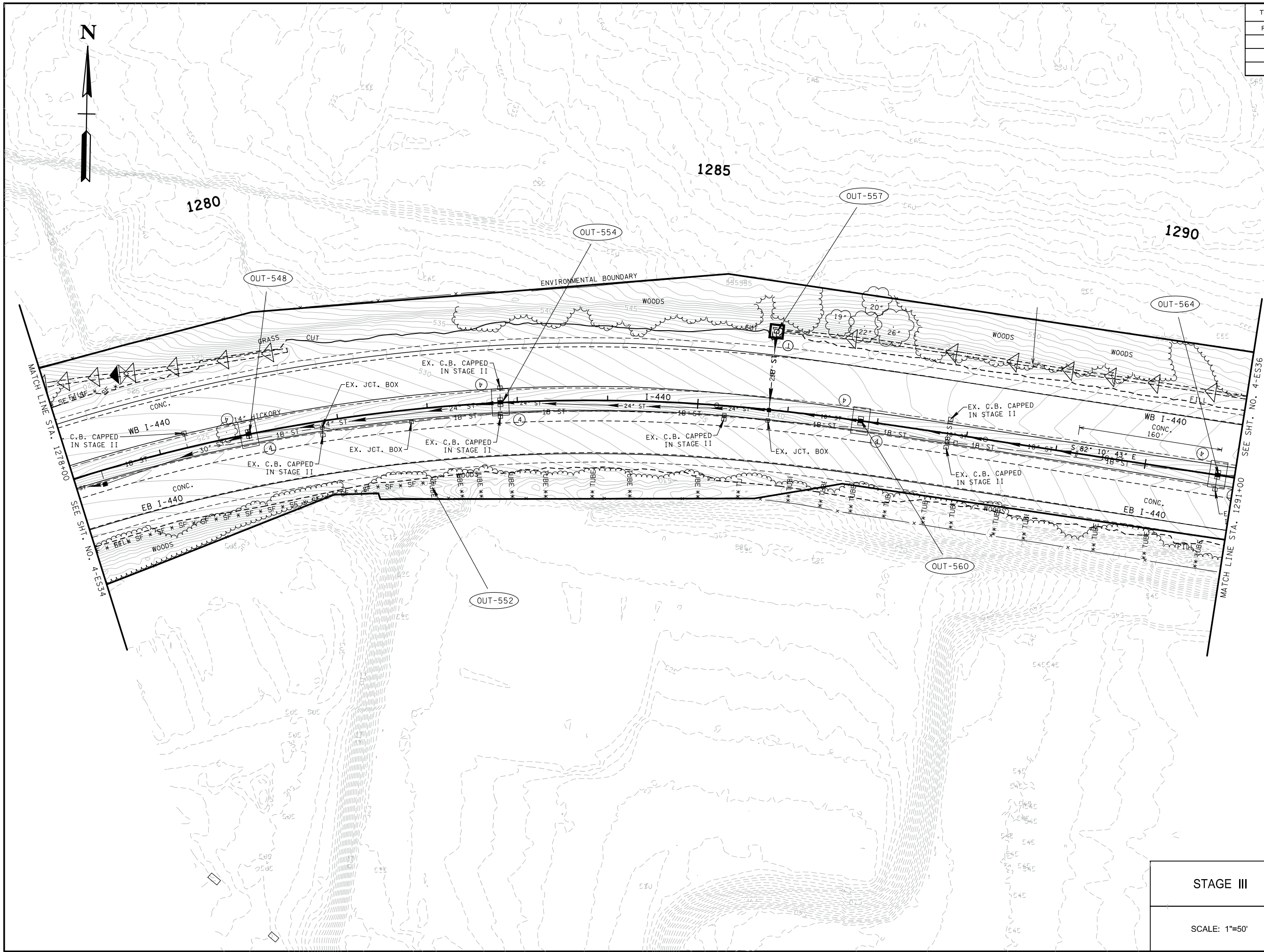
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

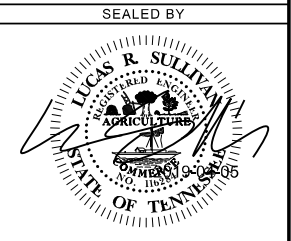
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:53:45 PM
\\prdpwics01\ics_workingdir\78551305979_10614-ES35.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES35



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

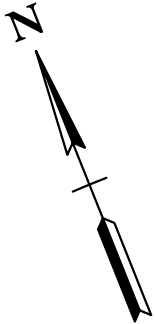
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE III

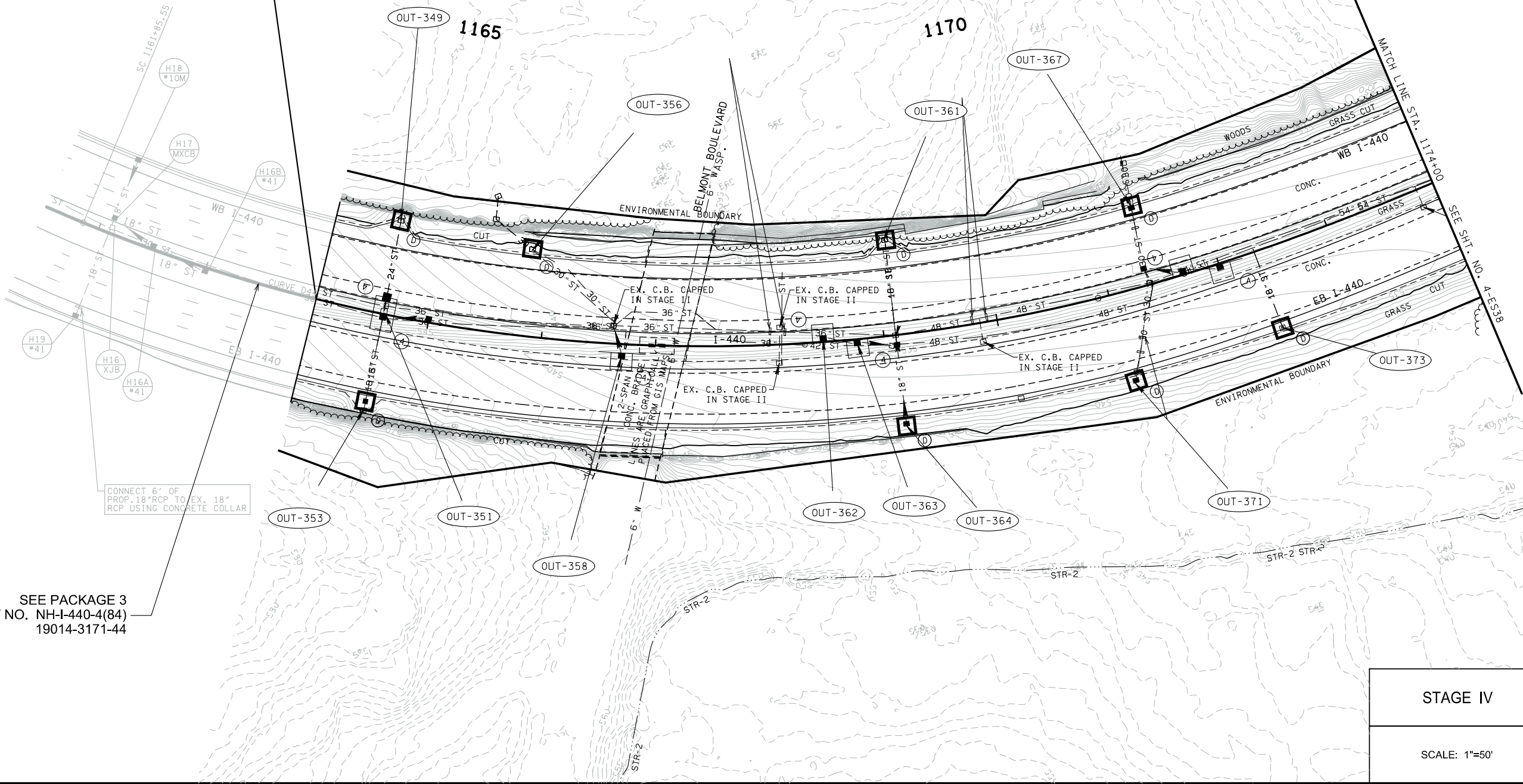
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES37



BEGIN PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44
STA. 1164+00.00 I-440 CENTERLINE



CONNECT 6' OF
PROP. 18" RCP TO EX. 18"
RCP USING CONCRETE COLLAR

SEE PACKAGE 3
PROJECT NO. NH-I-440-4(84)
19014-3171-44

SEALED BY

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

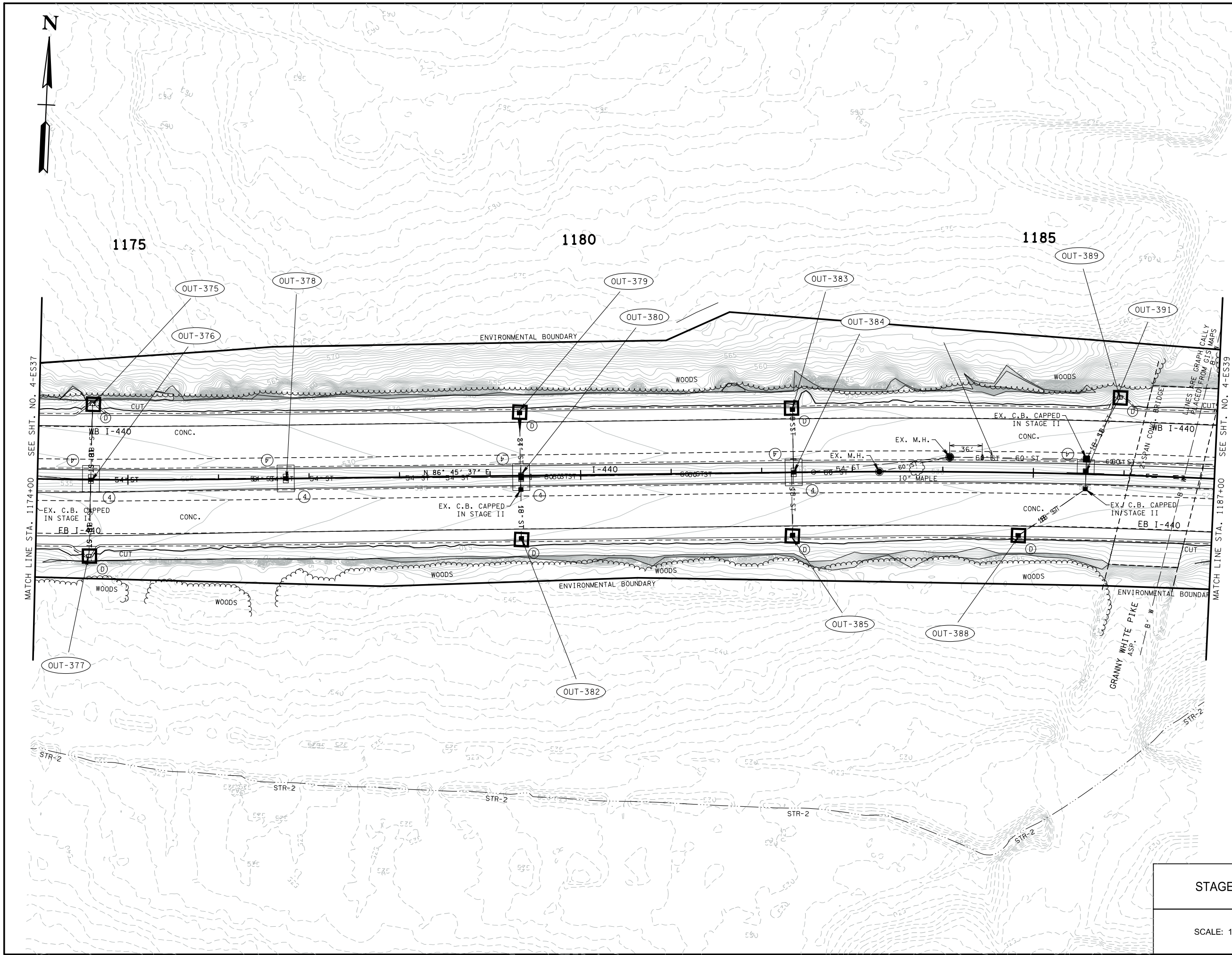
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:35 PM
\\prdpwics01\ics_workingdir\7855\305979_120\4-ES38.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES38

SEALD BY

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

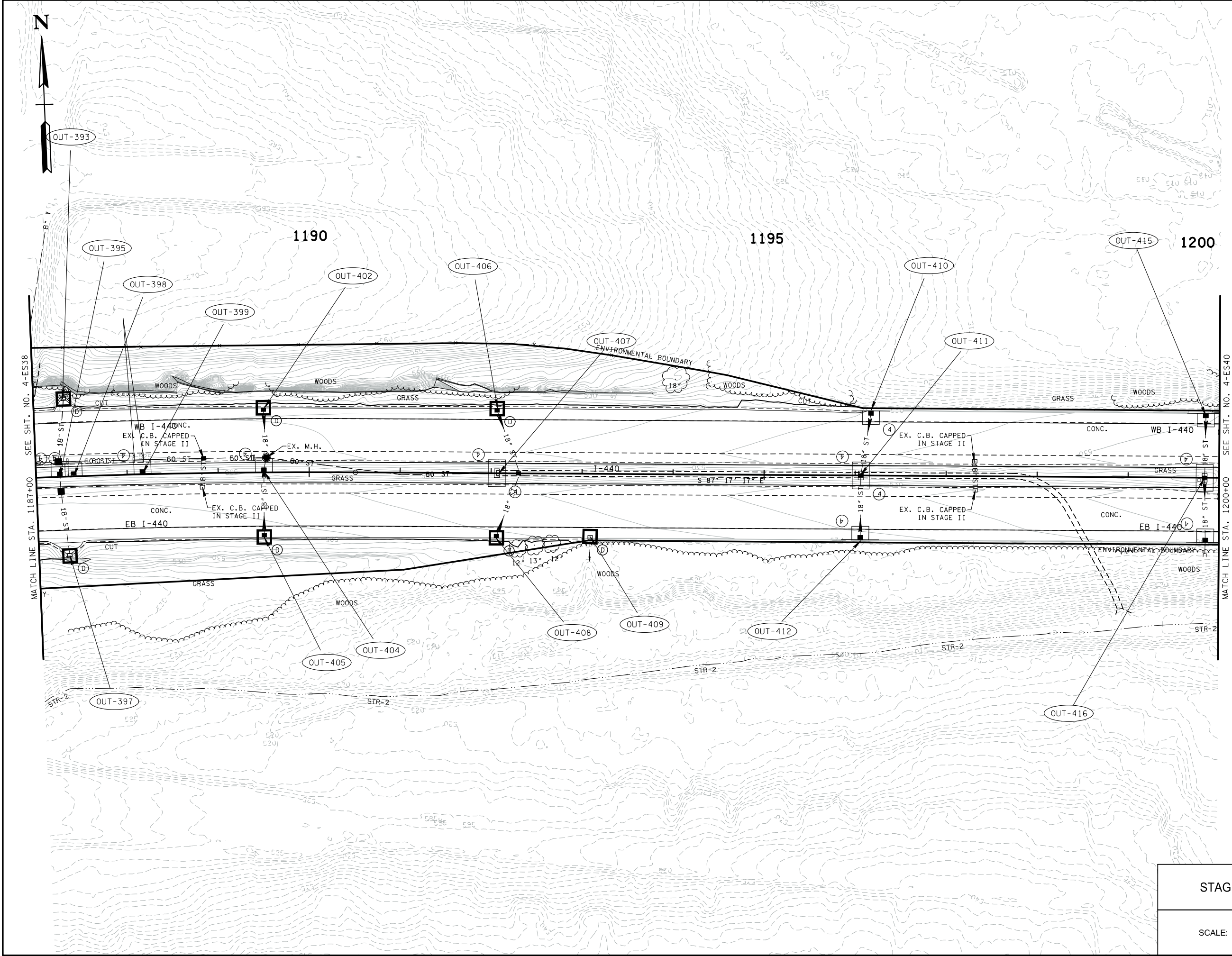
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

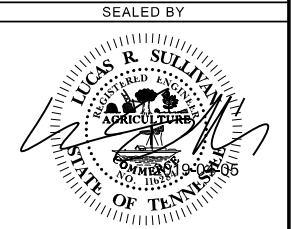
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES39



4/5/2019 4:54:40 PM
\\prdpwics01\pics_workingdir\7855\305979_121\4-ES39.sht



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

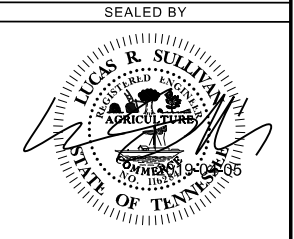
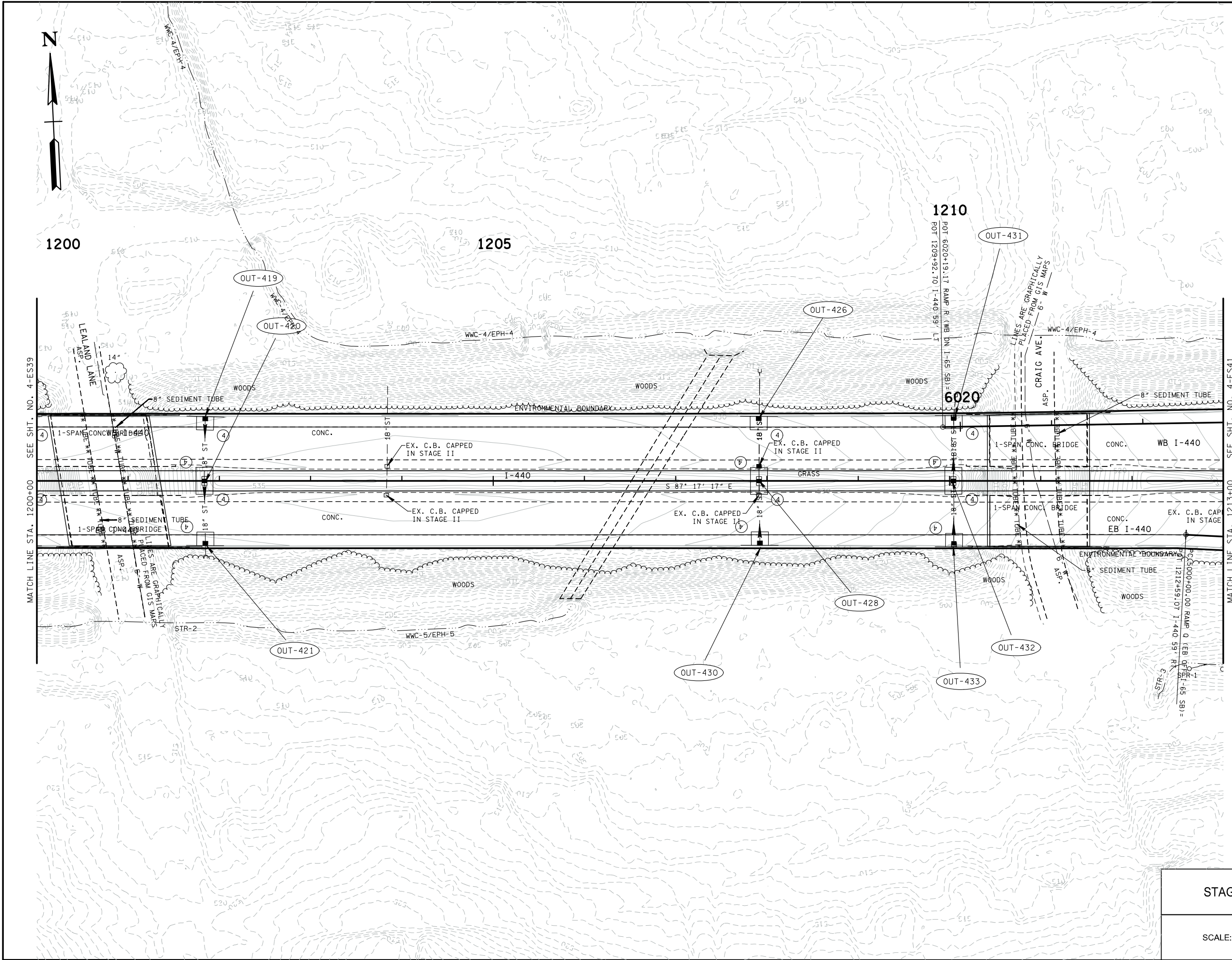
STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES40

4/5/2019 4:54:45 PM
\\prdpwics01\pics_workingdir\78551305979_12214-ES40.sht



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

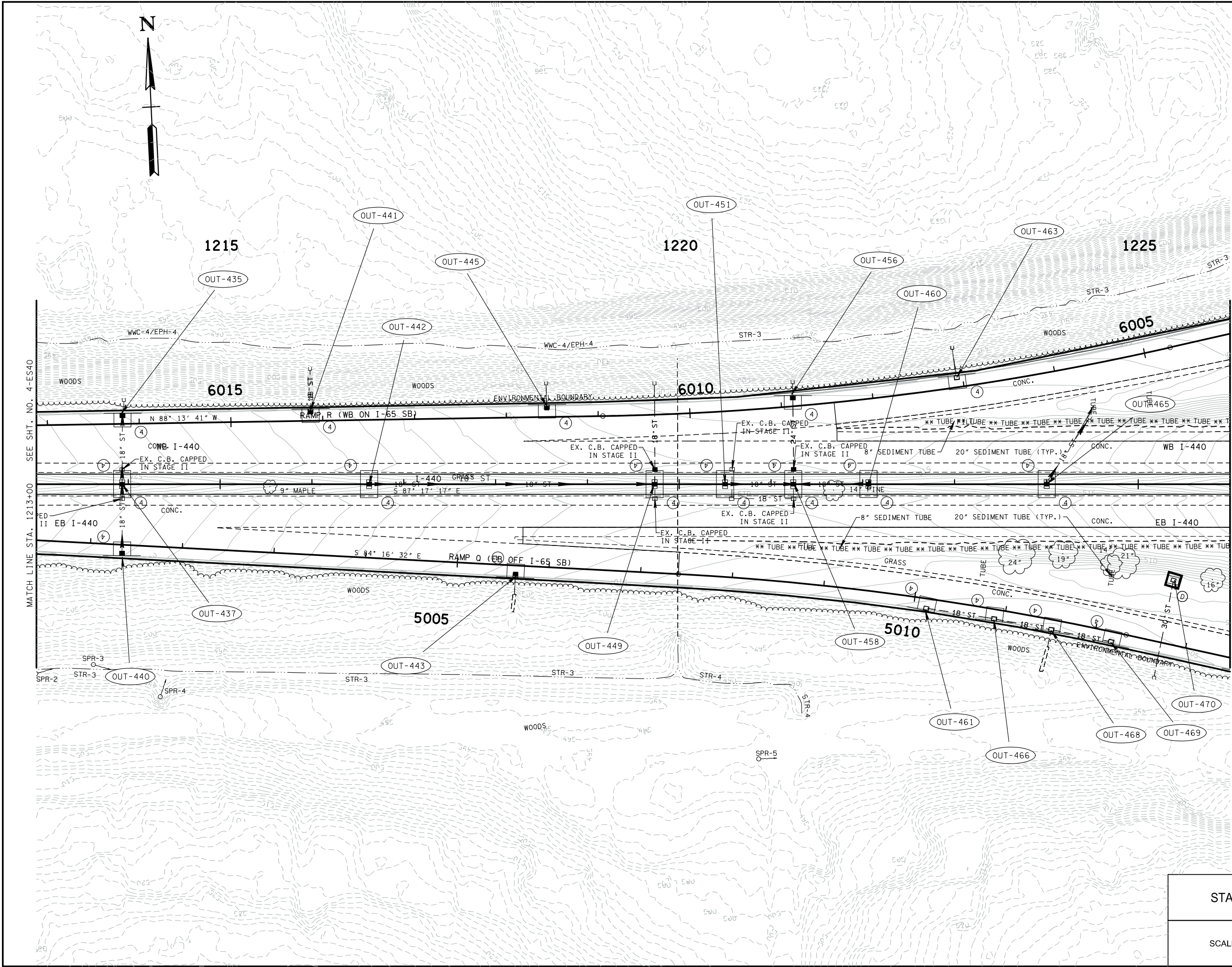
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

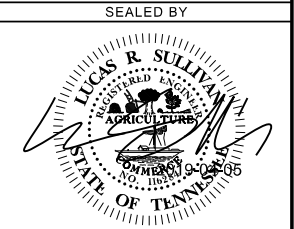
SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:48 PM
\\prdpwics01\ics_workingdir\78551305979_12314-ES41.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES41



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

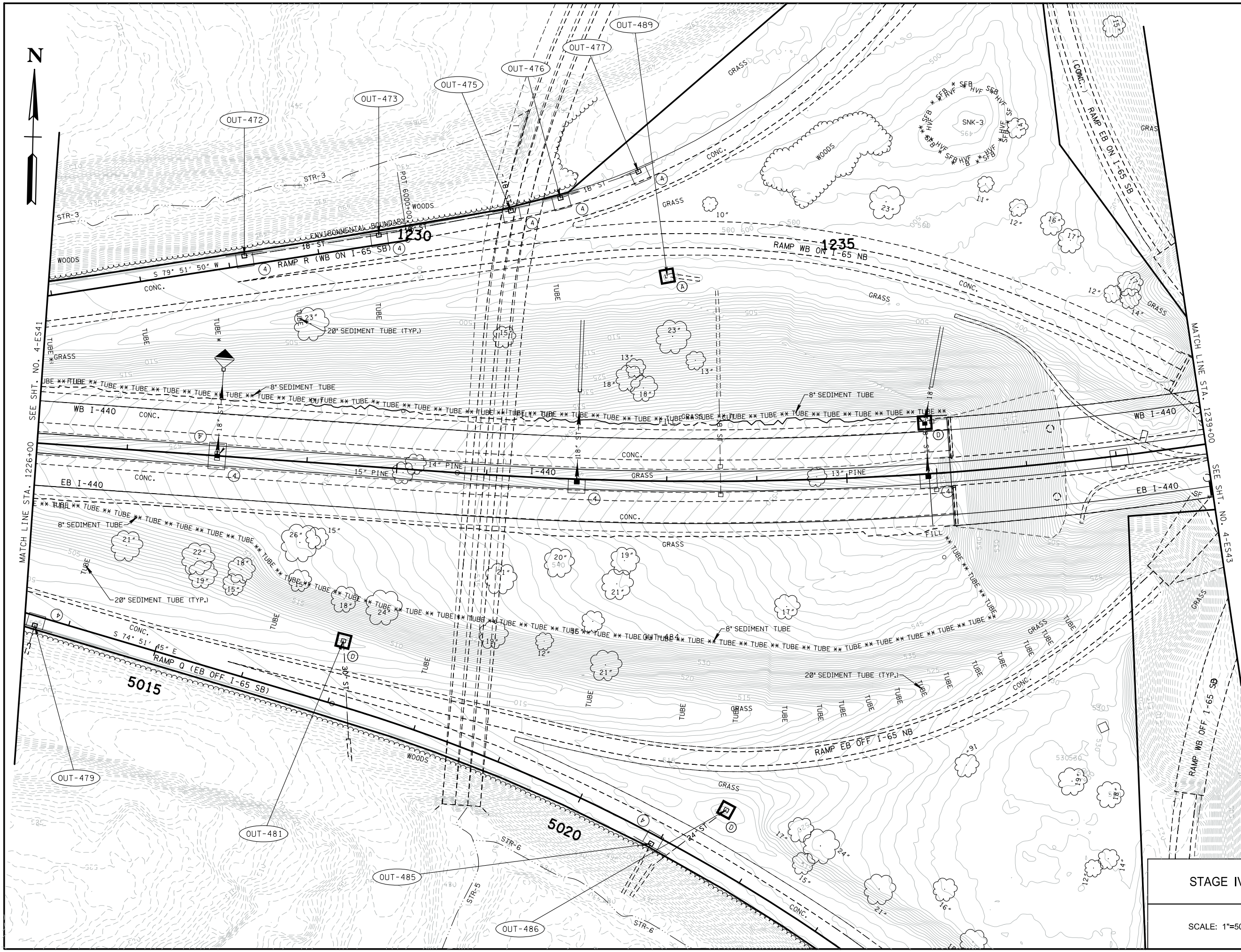
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:57 PM
\\prdwics01\ics_workingdir\7855\305979_124\4-ES42.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES42

SEALED BY

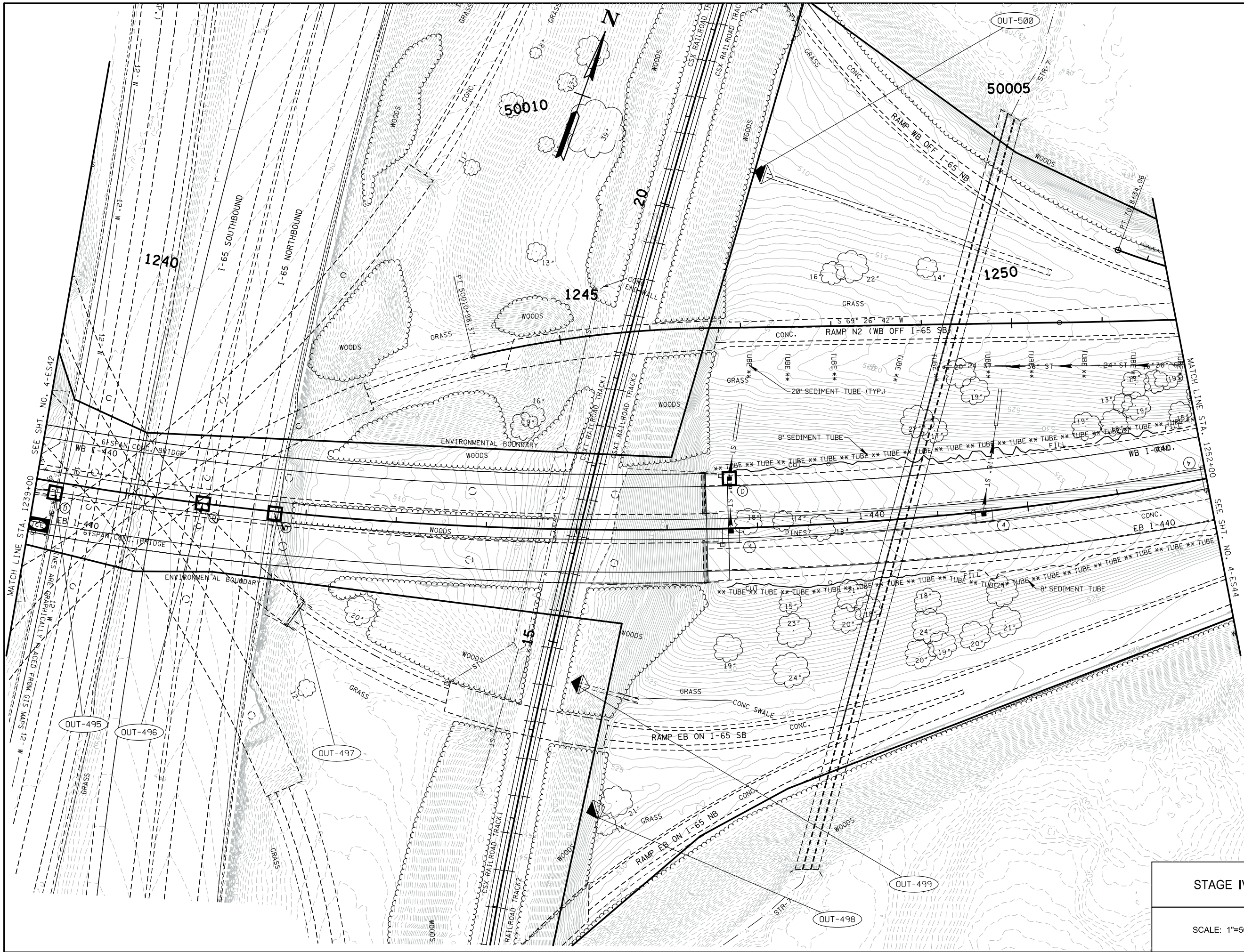
COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006, AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

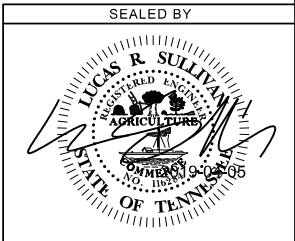
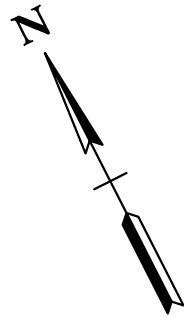
STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES43



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

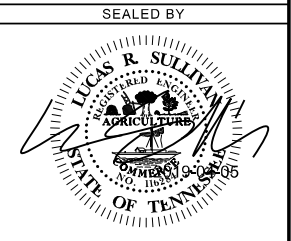
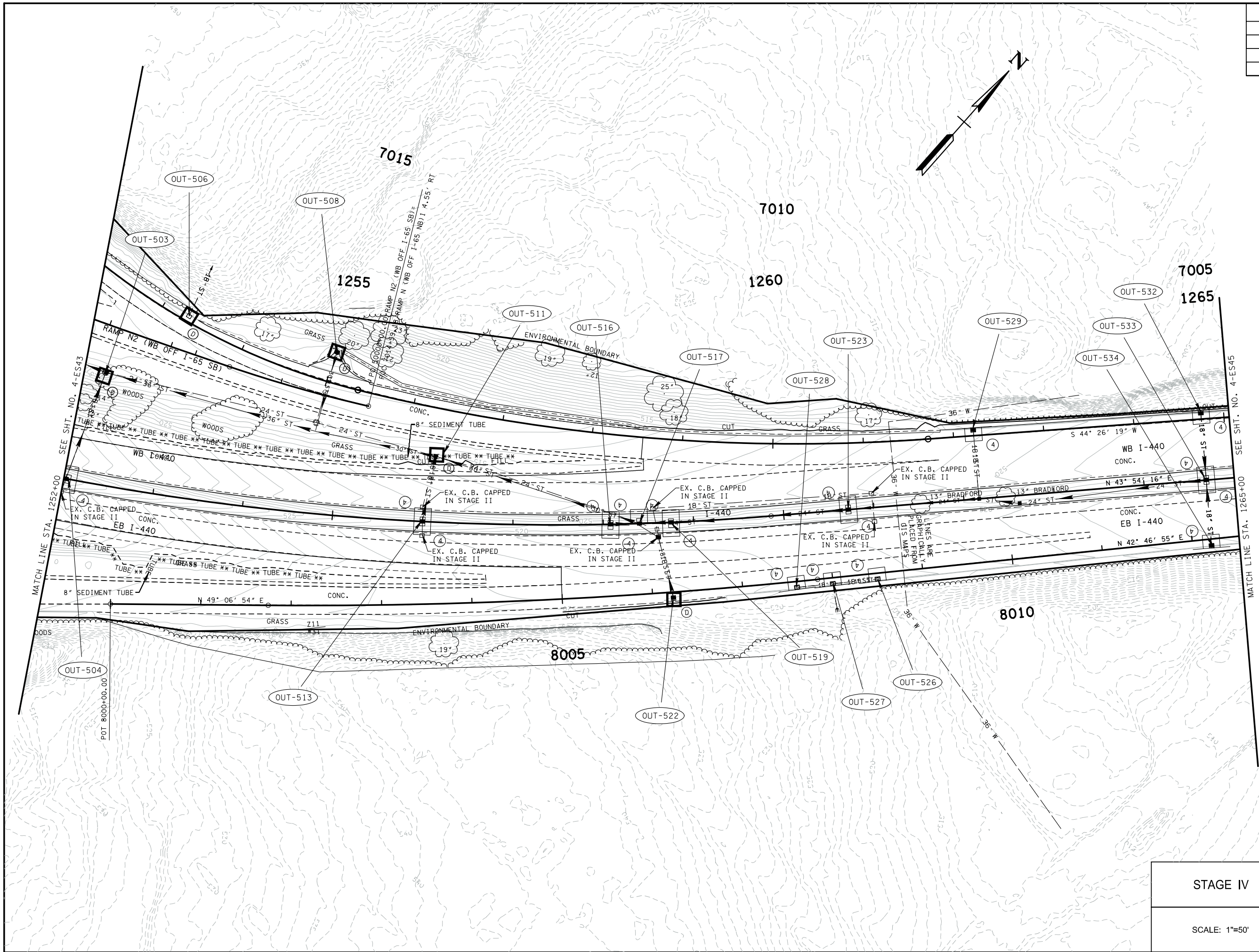
EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

STAGE IV

SCALE: 1"=50'

4/5/2019 4:54:59 PM
\\prdwics01\ics_workingdir\78551305979_12614-ES44.sht

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES44



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

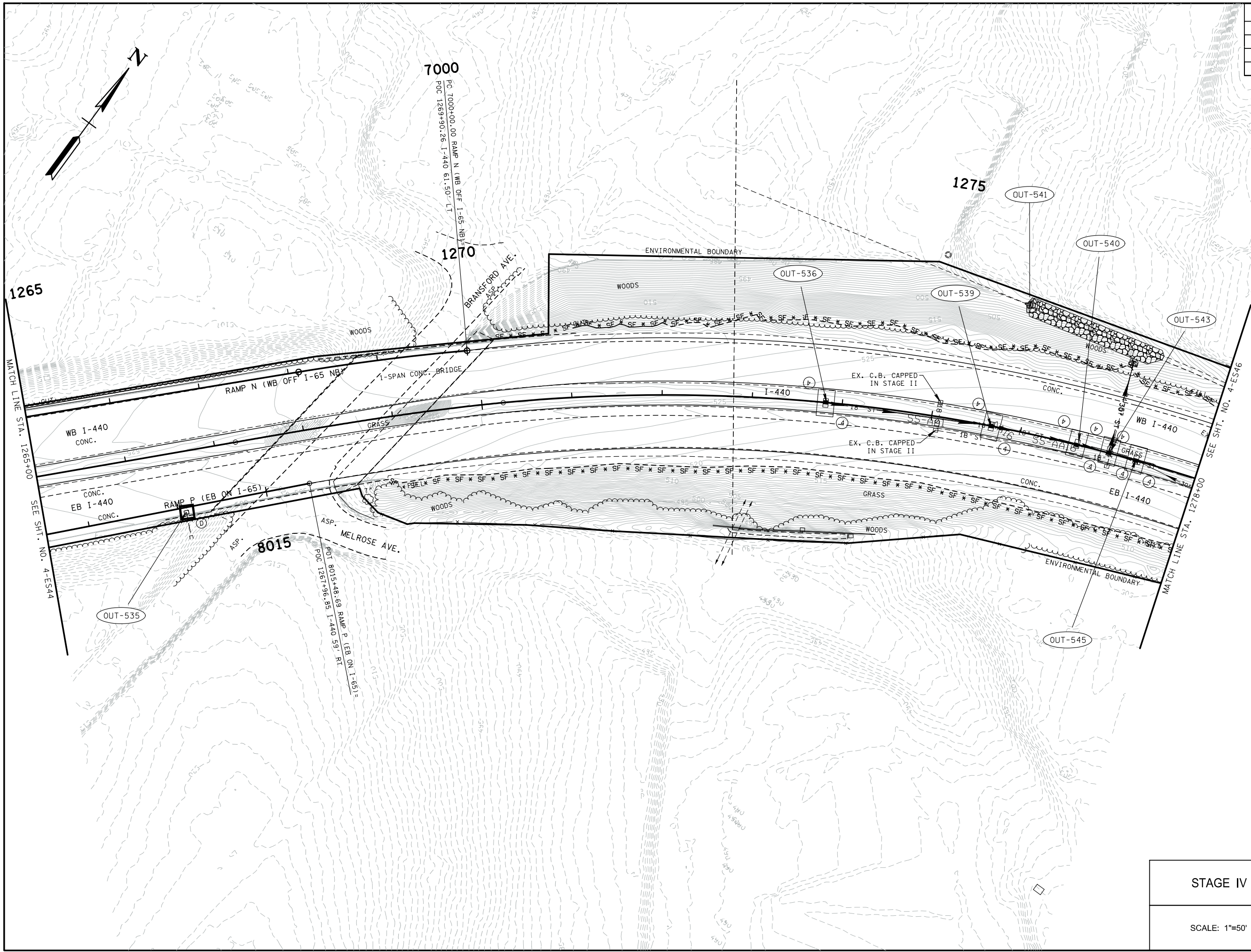
STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS

4/5/2019 4:54:23 PM
\\prdpwics01\ics_workingdir\7855\305979_116\4-ES45.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-440-4(84)	4-ES45

SEAL BY

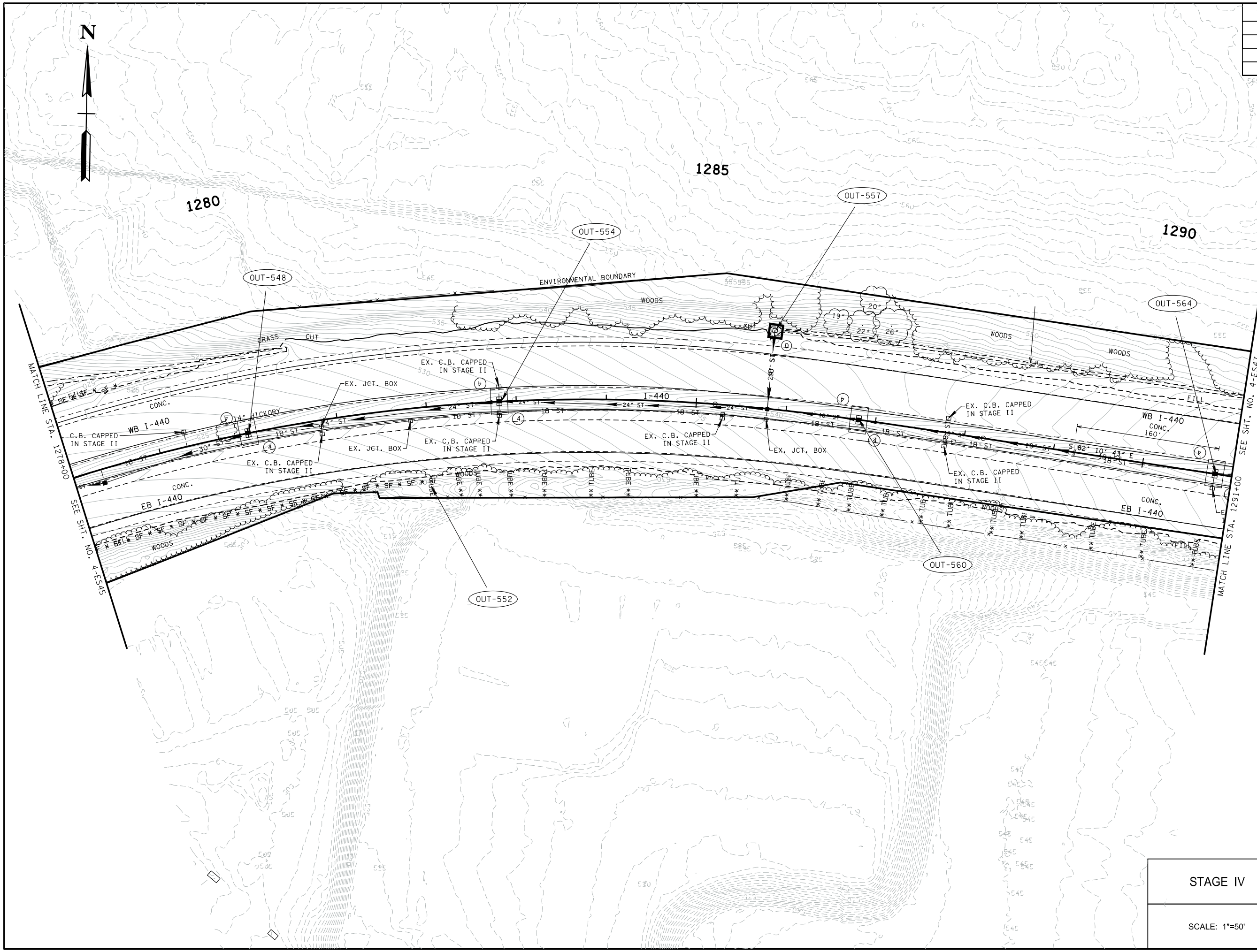
COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00006, AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

**EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS**

STAGE IV
SCALE: 1"=50'

4/5/2019 4:54:28 PM
\\prdpwics01\ics_workingdir\78551305979_11714-ES46.sht



TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH4-440-4(84)	4-ES46

SEALD BY

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

**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

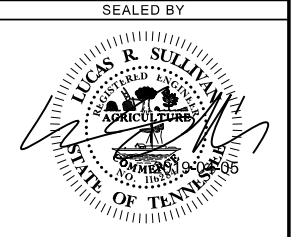
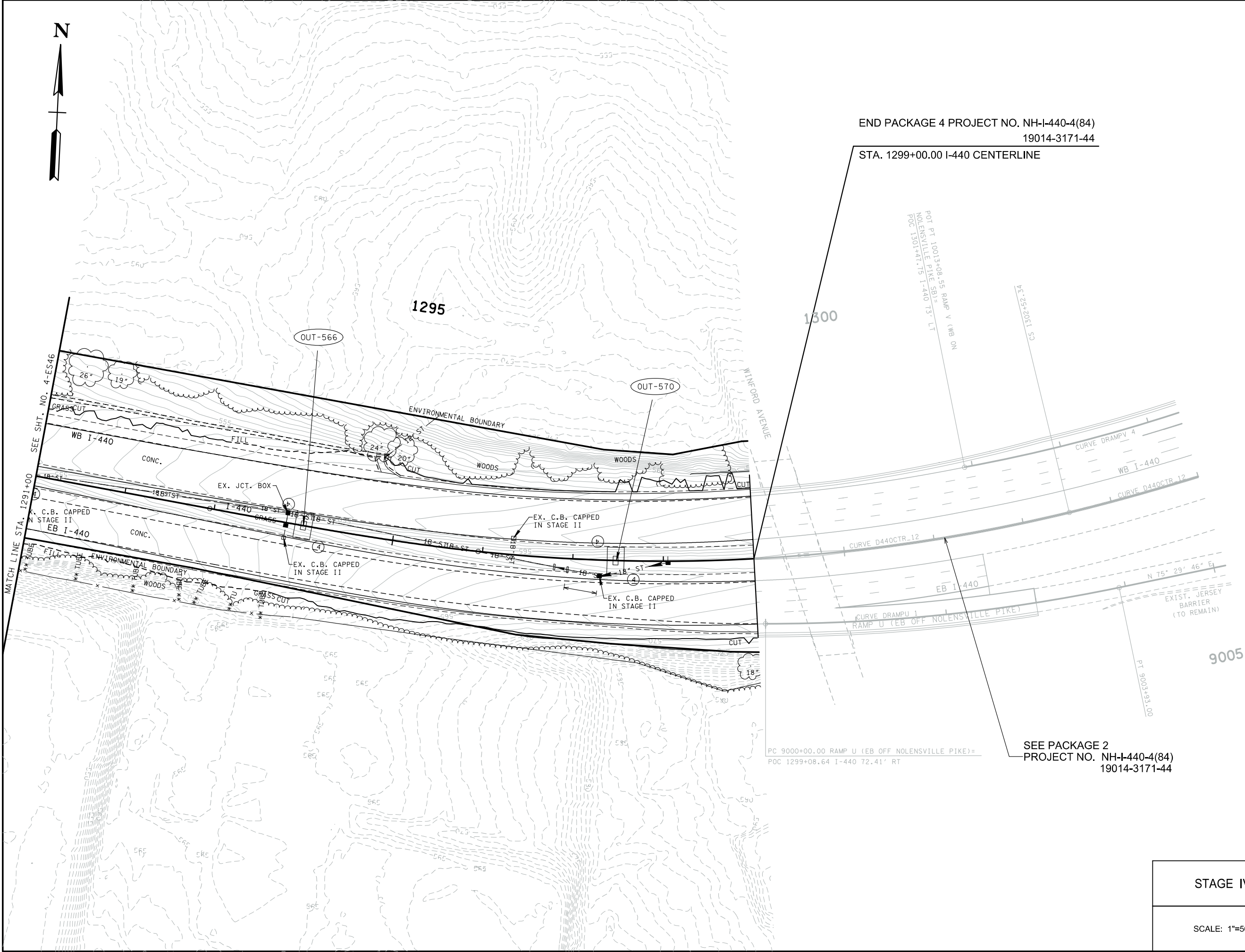
**EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS**

STAGE IV
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
RFC	2019	NH-I-440-4(84)	4-ES47

END PACKAGE 4 PROJECT NO. NH-I-440-4(84)
19014-3171-44

STA. 1299+00.00 I-440 CENTERLINE



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

STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION

STAGE IV

SCALE: 1"=50'

EROSION
PREVENTION &
SEDIMENT CONTROL
(EPSC) PLANS