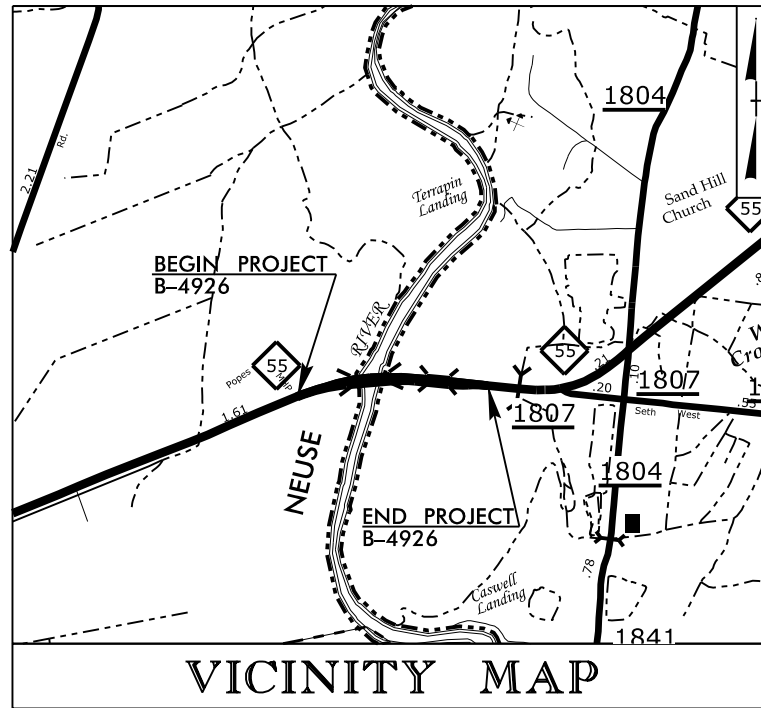


09/08/2019

TIP PROJECT: B-4926

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Plan Sheet Symbols
See Sheets RW-1 Thru RW-? For RW Plan Sheets



VICINITY MAP

75% PLANS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
LENOIR COUNTY

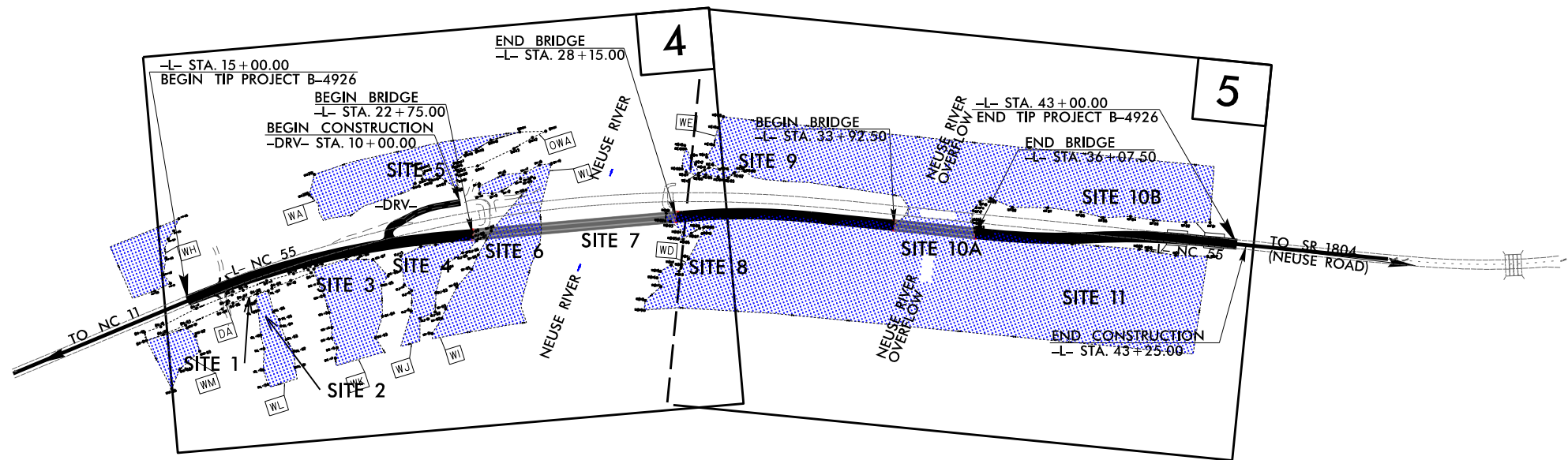
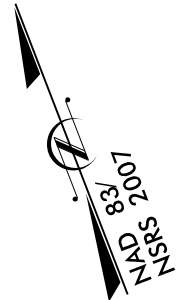
LOCATION: BRIDGE NO. 20 AND BRIDGE NO. 34 ON NC 55
OVER THE NEUSE RIVER AND NEUSE RIVER OVERFLOW

TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

WETLAND AND SURFACE WATER IMPACTS PERMIT

**PERMIT DRAWING
SHEET 1 OF 35**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4926	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40163.1.2	N/A	PE	
40163.2.1	N/A	R/W & UTILITIES	
40163.3.1	N/A	CONST.	

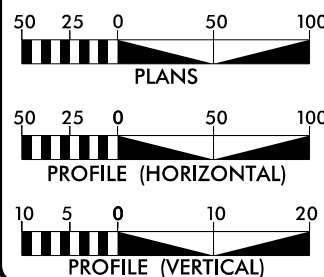


DESIGN EXCEPTION REQUIRED FOR SUPERELEVATION.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT:

GRAPHIC SCALES



DESIGN DATA

ADT 2023 = 3152
ADT 2040 = 3900
K = 9 %
D = 60 %
T = 8 % *
V = 60 MPH
* TTST=3% DUAL=5%
FUNC CLASS =
MAJOR COLLECTOR
"REGIONAL TIER"

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4926 = 0.387 MILES
LENGTH STRUCTURES TIP PROJECT B-4926 = 0.143 MILES
TOTAL LENGTH OF TIP PROJECT B-4926 = 0.530 MILES

Prepared In the Office of:

SEPI
Engineering & Construction, Inc.
1 Glenwood Avenue
Raleigh, NC 27603
Tel: 919.789.9977
Fax: 919.789.9991
License: C-2197

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
SEPTEMBER 16, 2022

LETTING DATE:
SEPTEMBER 19, 2023

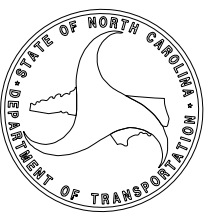
RAJIT RAMKUMAR, PE
PROJECT ENGINEER
DANIEL W. GARDNER, JR., PE
PROJECT DESIGN ENGINEER
CASEY K. WHITLEY, PE, PLS
NCDOT CONTACT

HYDRAULICS ENGINEER

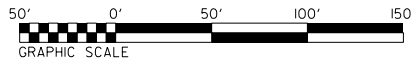
SIGNATURE: _____ P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: _____ P.E.



2/21/2023
B-4926_hyd-prm_wet_tsh.dgn
USER: towerby



PERMIT DRAWING
SHEET 2 OF 35

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- TEMPORARY IMPACTS IN SURFACE WATER
- SURFACE WATER IMPACTS POND

SEPI
Engineering & Construction, Inc.

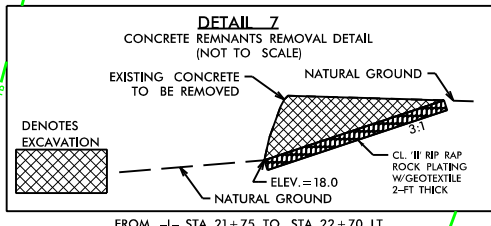
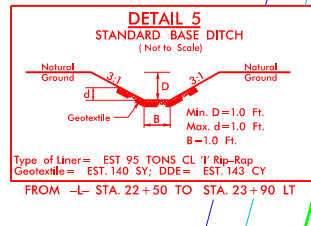
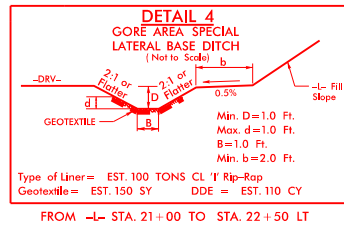
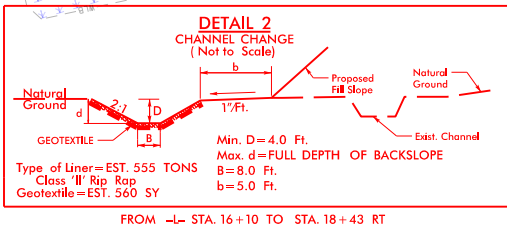
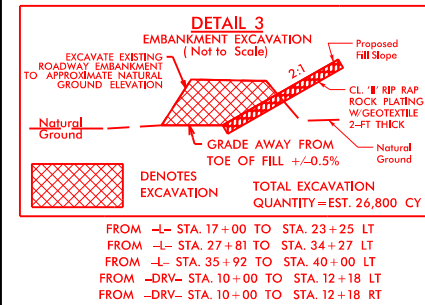
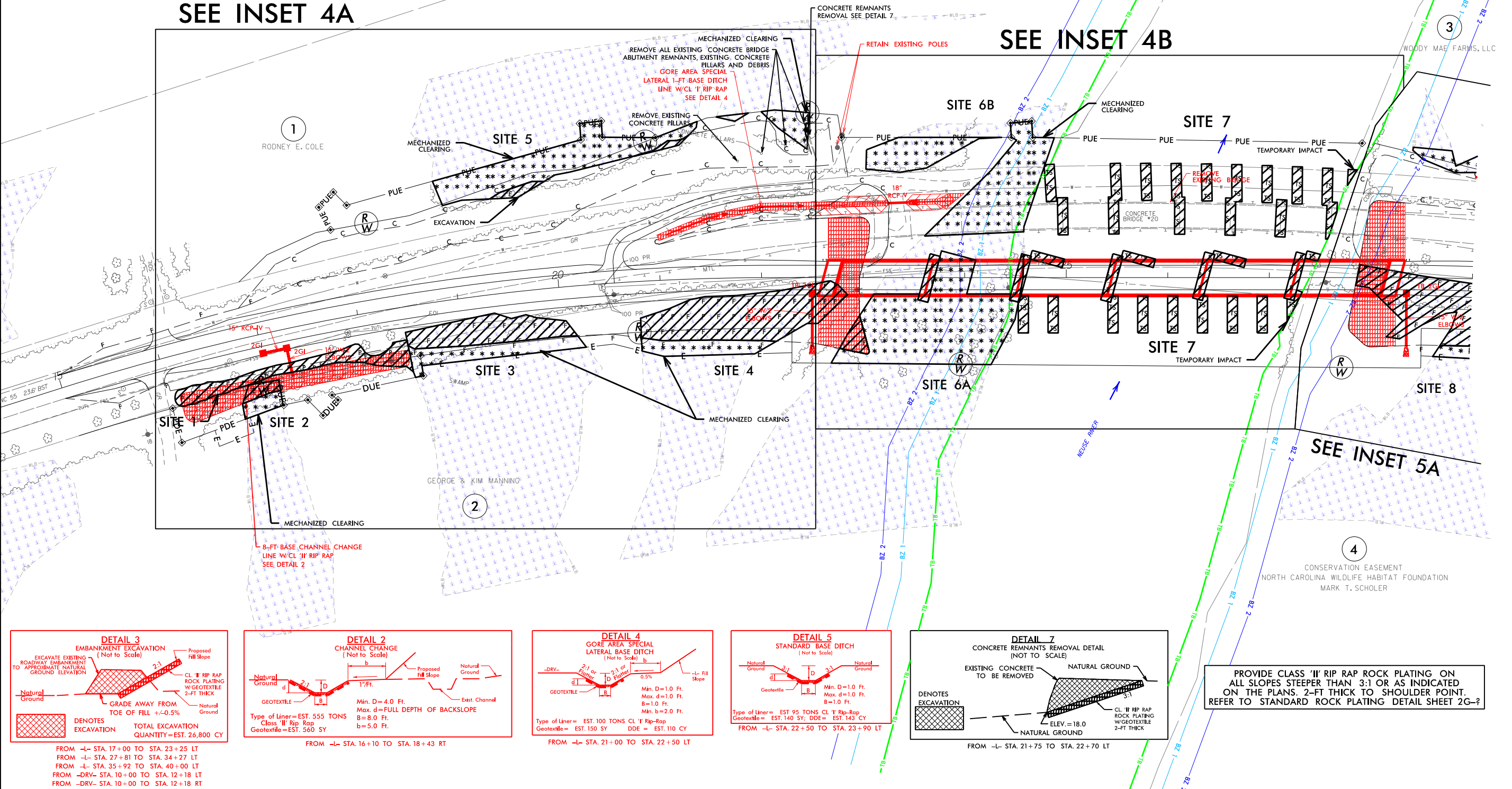
1 Glenwood Avenue
Raleigh, NC 27603
Tel: 919.789.9977
Fax: 919.789.9591
License: C-2197

PROJECT REFERENCE NO.	SHEET NO.
B-4926	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

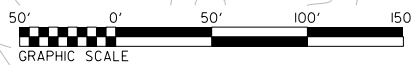
SEE INSET 4A

SEE INSET 4B

SEE INSET 5A



PROVIDE CLASS 'II' RIP RAP ROCK PLATING ON ALL SLOPES STEEPER THAN 3:1 OR AS INDICATED ON THE PLANS. 2-FT THICK TO SHOULDER POINT. REFER TO STANDARD ROCK PLATING DETAIL SHEET 2G-2



PERMIT DRAWING
SHEET 3 OF 35

- DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- TEMPORARY IMPACTS IN SURFACE WATER
- SURFACE WATER IMPACTS POND

SEPI
Engineering & Construction, Inc.

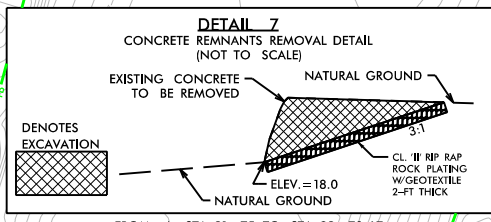
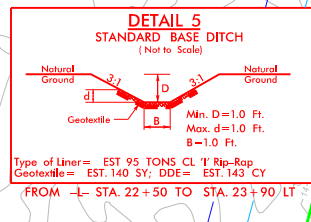
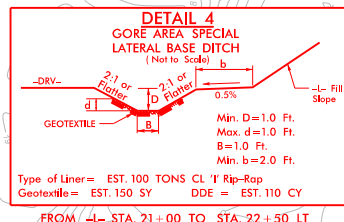
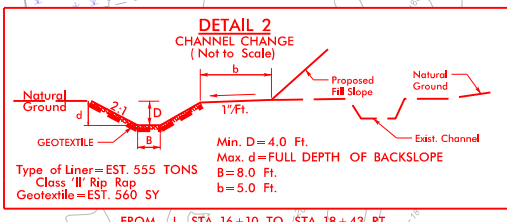
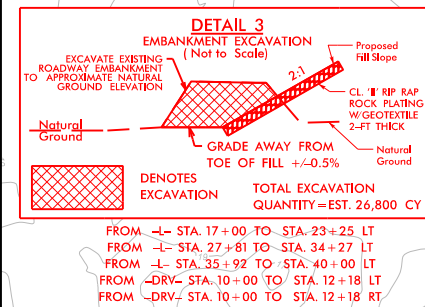
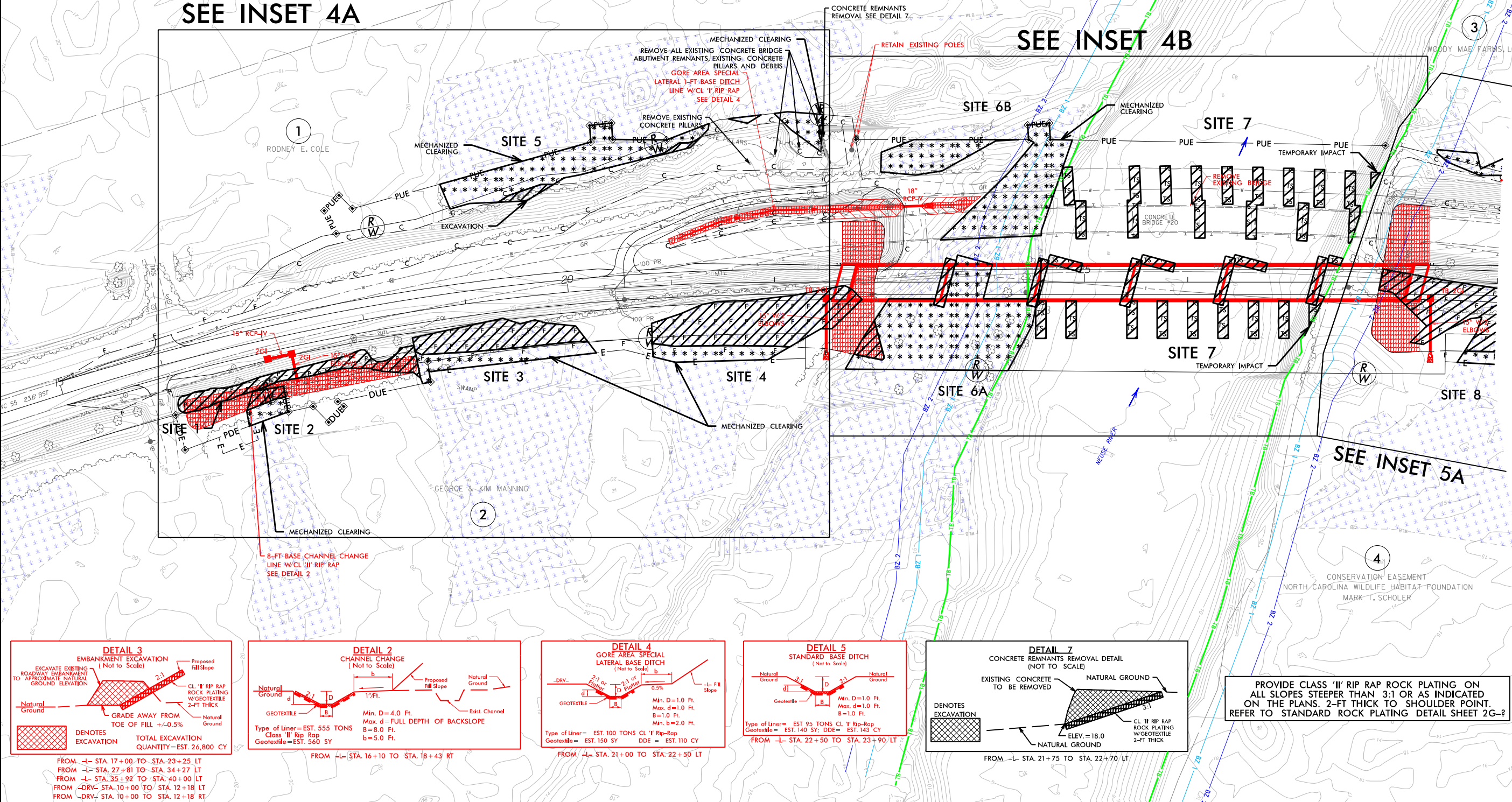
1 Glenwood Avenue
Raleigh, NC 27603
Tel: 919.789.9977
Fax: 919.789.9591
License: C-2197

PROJECT REFERENCE NO.		SHEET NO.	
B-4926		4	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

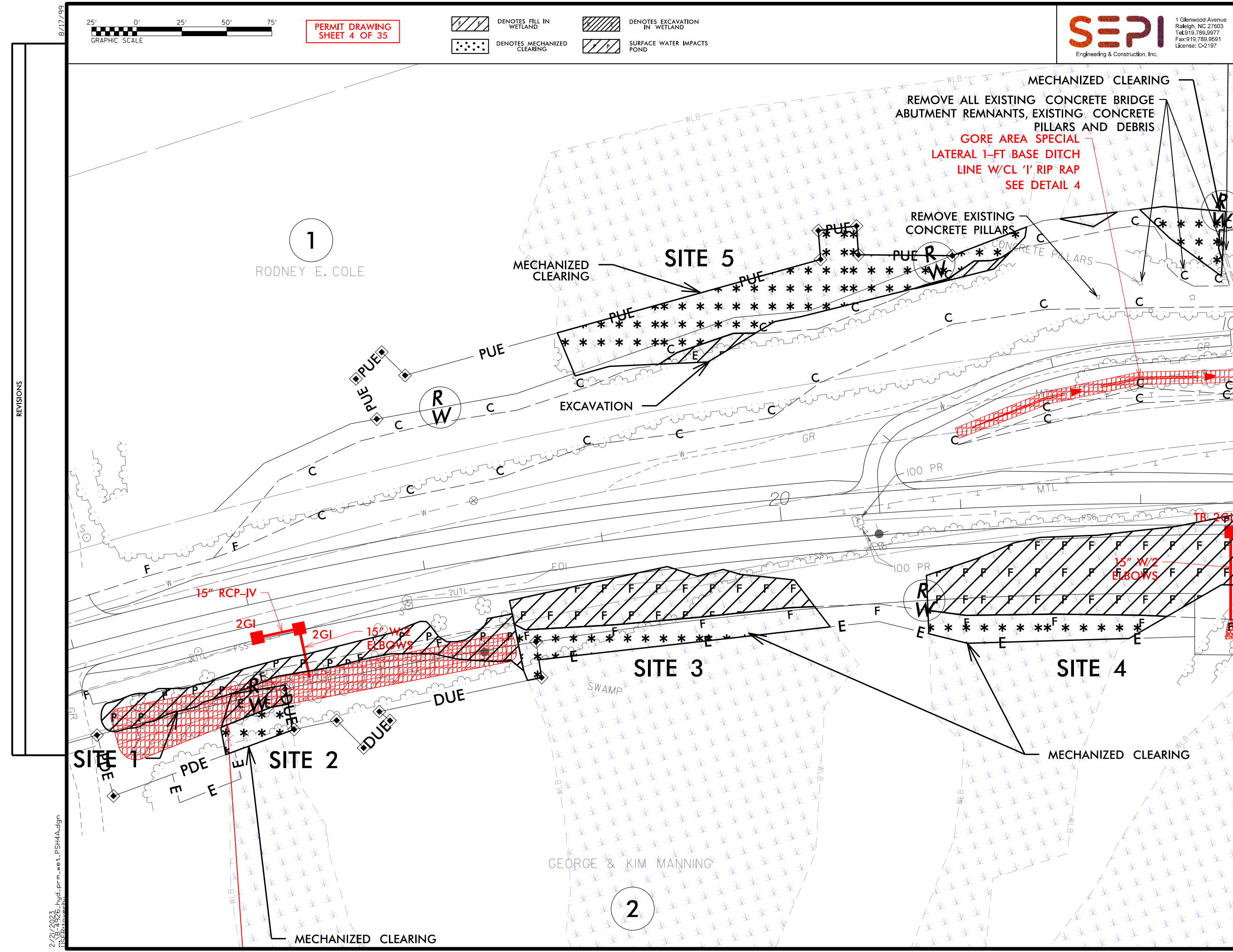
SEE INSET 4A

SEE INSET 4B

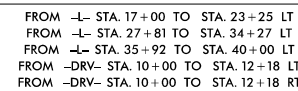
SEE INSET 5A



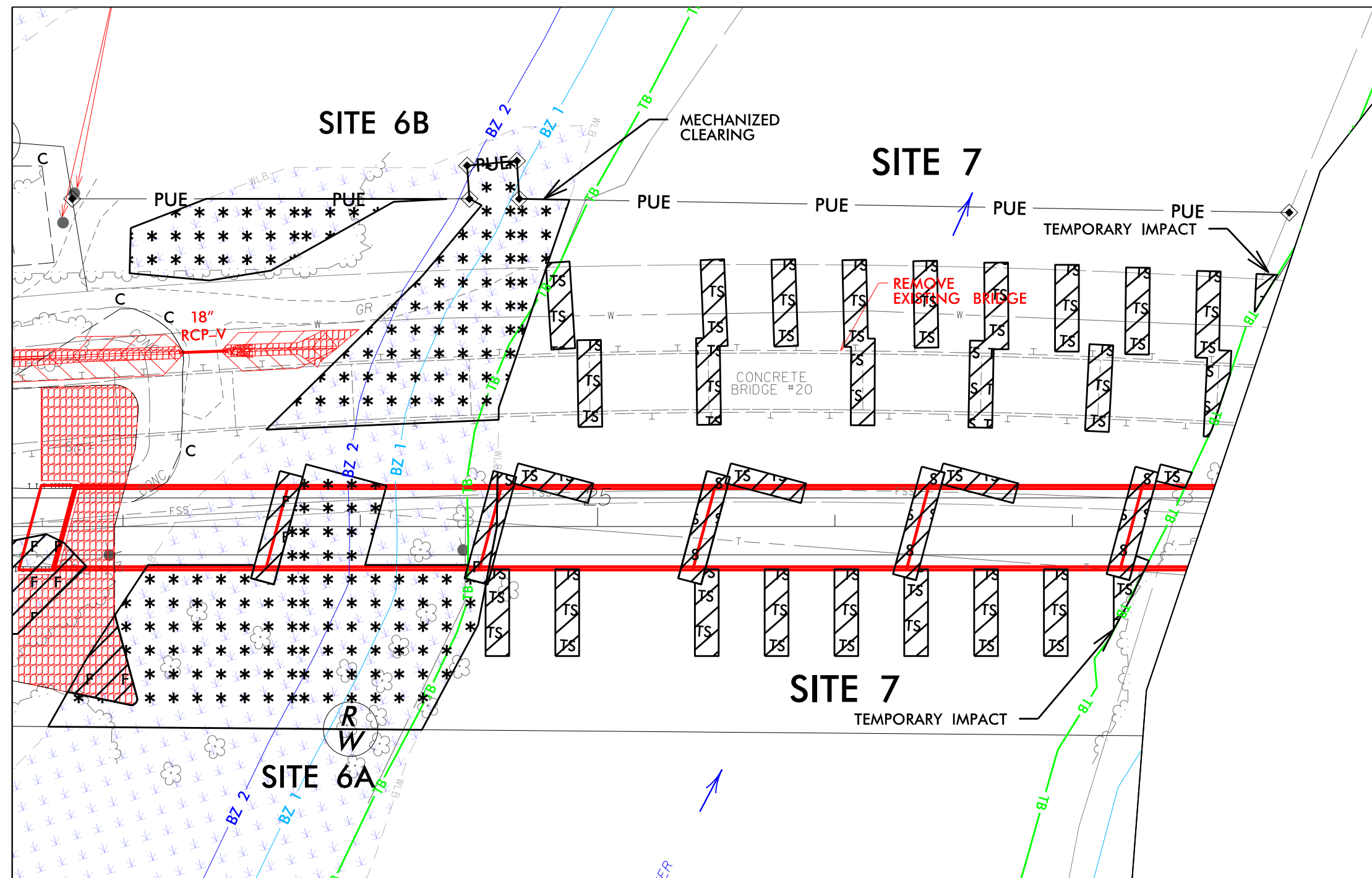
PROVIDE CLASS 'II' RIP RAP ROCK PLATING ON ALL SLOPES STEEPER THAN 3:1 OR AS INDICATED ON THE PLANS. 2-FT THICK TO SHOULDER POINT. REFER TO STANDARD ROCK PLATING DETAIL SHEET 2G-2

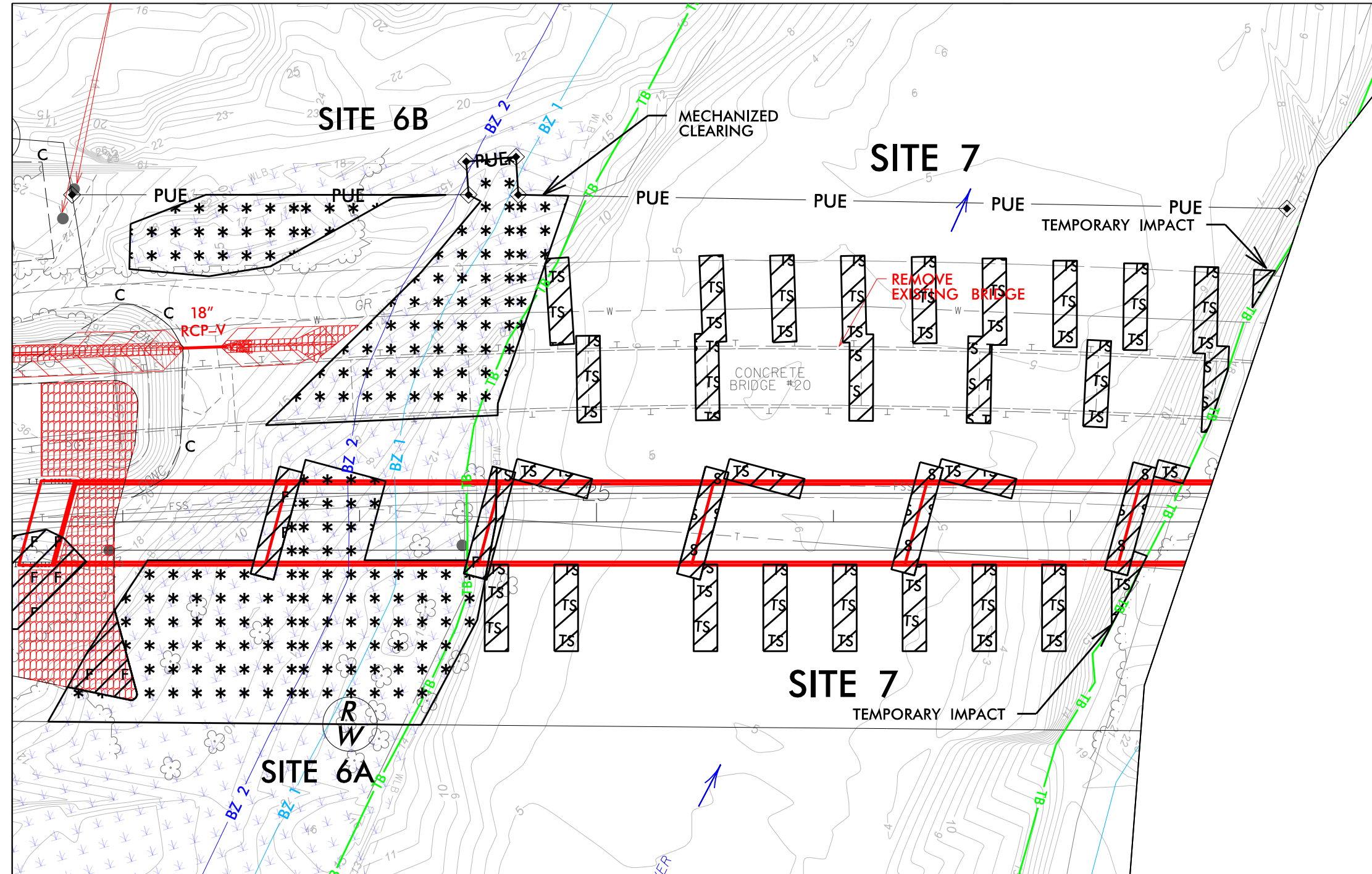






PROJECT REFERENCE NO.		SHEET NO.	
B-4926		4B	
R/W SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			





5/28/99

**MULTIPLE OPENING
BRIDGE HYDRAULIC DATA**

BRIDGE @ CENTERLINE STA.25+45 -L-		
BRIDGE @ CENTERLINE STA.35+00 -L-		
DESIGN DISCHARGE	= 20,700	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 24.8	FT
BASE DISCHARGE	= 44,300	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 30.9	FT
OVERTOPPING DISCHARGE	= 26,000	CFS
OVERTOPPING FREQUENCY	= 10 +/-	YRS
OVERTOPPING ELEVATION	= 26.2	FT
DATE OF SURVEY	= NOV.2017	FT
W.S.ELEVATION AT DATE OF SURVEY	= 14.5 +/-	FT

*Overlapping occurs at low roadway elevation STA.15+00.
Begin Construction for B-4926 Bridge RS 2/1/99 Elevation=26.2

**PERMIT DRAWING
SHEET 8 OF 35**

PROJECT REFERENCE NO. B-4926	SHEET NO. 6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
SEPI Engineering & Construction, Inc.	
1 Glenwood Avenue Raleigh, NC 27603 Tel:919.789.9977 Fax:919.789.9591 License: C-2197	

BEGIN GRADE -L- STA. 15+00.00
ELEV. = 26.22'

PI = 17+75.00
EL = 25.25'
VC = 550'
K = 151
DS = 60 MPH

BEGIN CHANNEL CHANGE
PI STA=16+10 RT
ELEV.=14.76'
PI STA=16+50 RT
ELEV.=14.76'

PI STA=17+50 RT
ELEV.=16.50'
PI STA=17+00 RT
ELEV.=16.04'

BMI ELEVATION = 2478'
N 566125
BL STATION 10+39 28' LEFT
BENCH NAIL SET IN 6" PINE

-L- STA. 20+55.00 =
-DRV- STA. 12+41.88
ELEV. = 34.45'

PI = 25+45.00
EL = 50.55'
VC = 950'
K = 152
DS = 60 MPH

STA. 25+45 -L-
GP ELEV.=43.11'
PROP. 6@90' 54" PRE-STRESSED
CONCRETE GIRDERS ON 4'-0" E.B. CAPS
SKEW=105 DEG.

SEE SHEET 7 FOR PLAN VIEW

**MULTIPLE OPENING
BRIDGE HYDRAULIC DATA**

BRIDGE @ CENTERLINE STA.25+45 -L-		
BRIDGE @ CENTERLINE STA.35+00 -L-		
DESIGN DISCHARGE	= 20,700	CFS
DESIGN FREQUENCY	= 5	YRS
DESIGN HW ELEVATION	= 24.8	FT
BASE DISCHARGE	= 44,300	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 30.9	FT
OVERTOPPING DISCHARGE	= 26,000	CFS
OVERTOPPING FREQUENCY	= 10 +/-	YRS
OVERTOPPING ELEVATION	= 26.2	FT
DATE OF SURVEY	= NOV.2017	FT
W.S.ELEVATION AT DATE OF SURVEY	= 14.5 +/-	FT

*Overlapping occurs at low roadway elevation STA.15+00.
Begin Construction for B-4926 Bridge RS 2/1/99 Elevation=26.2

PI = 32+40.00
EL = 29.85'
VC = 360'
K = 136
DS = 60 MPH

PI = 38+20.00
EL = 27.93'
VC = 120'
K = 187
DS = 70 MPH

PI = 40+20.00
EL = 28.55'
VC = 150'
K = 318
DS = 75 MPH

END RESURFACING/MILLING -L- STA. 43+00.00
ELEV. = 28.11'

END GRADE -L- STA. 42+00.00
INCLUDES 3" RESURFACING
ELEV. = 28.26'

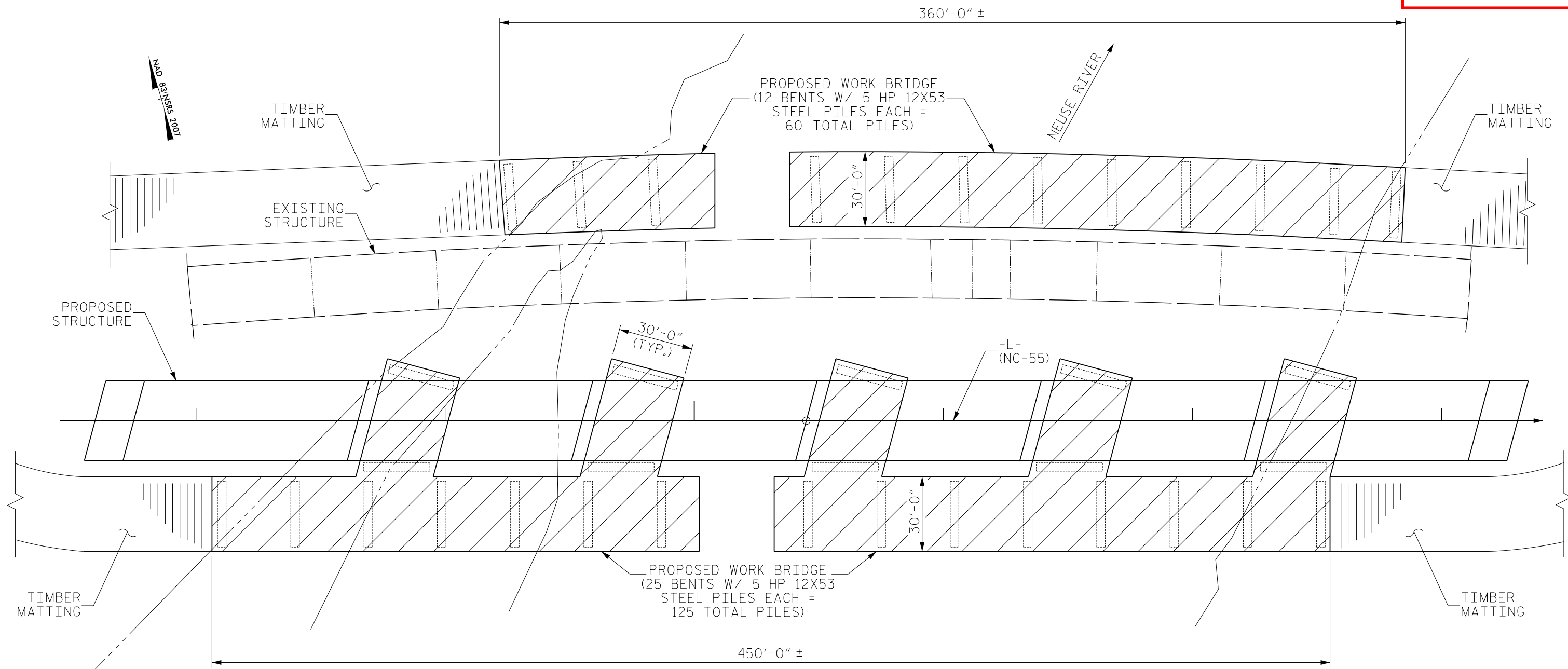
STA. 35+00 -L-
GP ELEV.=28.99'
PROP. 1@70'; 1@75'; 1@70'
45' PRE-STRESSED CONCRETE GIRDERS
ON 4'-0" E.B. CAPS
90 DEGREE SKEW

CLASS 'II' RIP RAP
2-FT THICK
EST. 170 TONS
EST. 172 SYGF

CLASS 'II' RIP RAP
2-FT THICK
EST. 69 TONS
EST. 139 SYGF

DITCH LEGEND
LEFT DITCH - - - - -
RIGHT DITCH - - - - -
SEE SHEET 5 FOR PLAN VIEW

10/13/2022 Rdu.pst6_wet.8.dgn
11:58:06 AM



PLAN

TOTAL HPX53 STEEL PILES
FOR WORK BRIDGE
FOR BRIDGE #20 = 185

PROJECT NO. B-4926
LENOIR COUNTY
STATION: 25+45.00 -L-

BRIDGE #20

V&M
Vaughn & Melton
Consulting Engineers

Asheville,
North Carolina
828-253-2796

Raleigh, NC 919-977-9455
Charlotte, NC 704-357-0488

Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Milledgeboro, KY 606-248-6600
Atlanta, GA 770-627-3509

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PROPOSED TEMPORARY
ACCESS

FOR BRIDGE OVER
NEUSE RIVER ON
NC-55 BETWEEN
SR 1810 AND SR 1804

DWN. BY: WDC
CHKD. BY: TPG
DES. EGR. OF RECORD: PLS

DATE: 3/2019
DATE: 3/2019
DATE: 3/2019

REVISIONS						SHEET NO. S-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 1
2			4			

6/23/16



PROJ. REFERENCE NO.
B-4926

SHEET NO.
X-3

PERMIT DRAWING
SHEET 10 OF 35

SITE 5 WETLAND

WETLAND BOUNDARY
EXTENDS BEYOND LIMITS
OF CROSS SECTION

MECHANIZED
CLEARING

EXCAVATION

SITE 5 WETLAND

WETLAND BOUNDARY
EXTENDS BEYOND LIMITS
OF CROSS SECTION

MECHANIZED
CLEARING

SITE 3 WETLAND

WETLAND BOUNDARY
EXTENDS BEYOND LIMITS
OF CROSS SECTION

SITE 3 WETLAND

WETLAND BOUNDARY
EXTENDS BEYOND LIMITS
OF CROSS SECTION

SITE 3 WETLAND

SITE 2 WETLAND

WETLAND BOUNDARY
EXTENDS BEYOND LIMITS
OF CROSS SECTION

END UNDERCUT EXCAVATION - L= STA. 19+75.00

19 + 50.00

19 + 00.00

18 + 50.00

18 + 00.00

17 + 50.00

17 + 00.00

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

CL. 11" RIP RIP
ROCK PLATING

FILL IN WETLAND

FILL IN WETLAND

EXCAVATION

MECHANIZED
CLEARING

MECHANIZED
CLEARING

MECHANIZED
CLEARING

MECHANIZED
CLEARING

UNDERCUT
EXCAVATION

10/13/2022
B-4926_Rdy_XPL.L_wet.dgn
USFrtoverbu

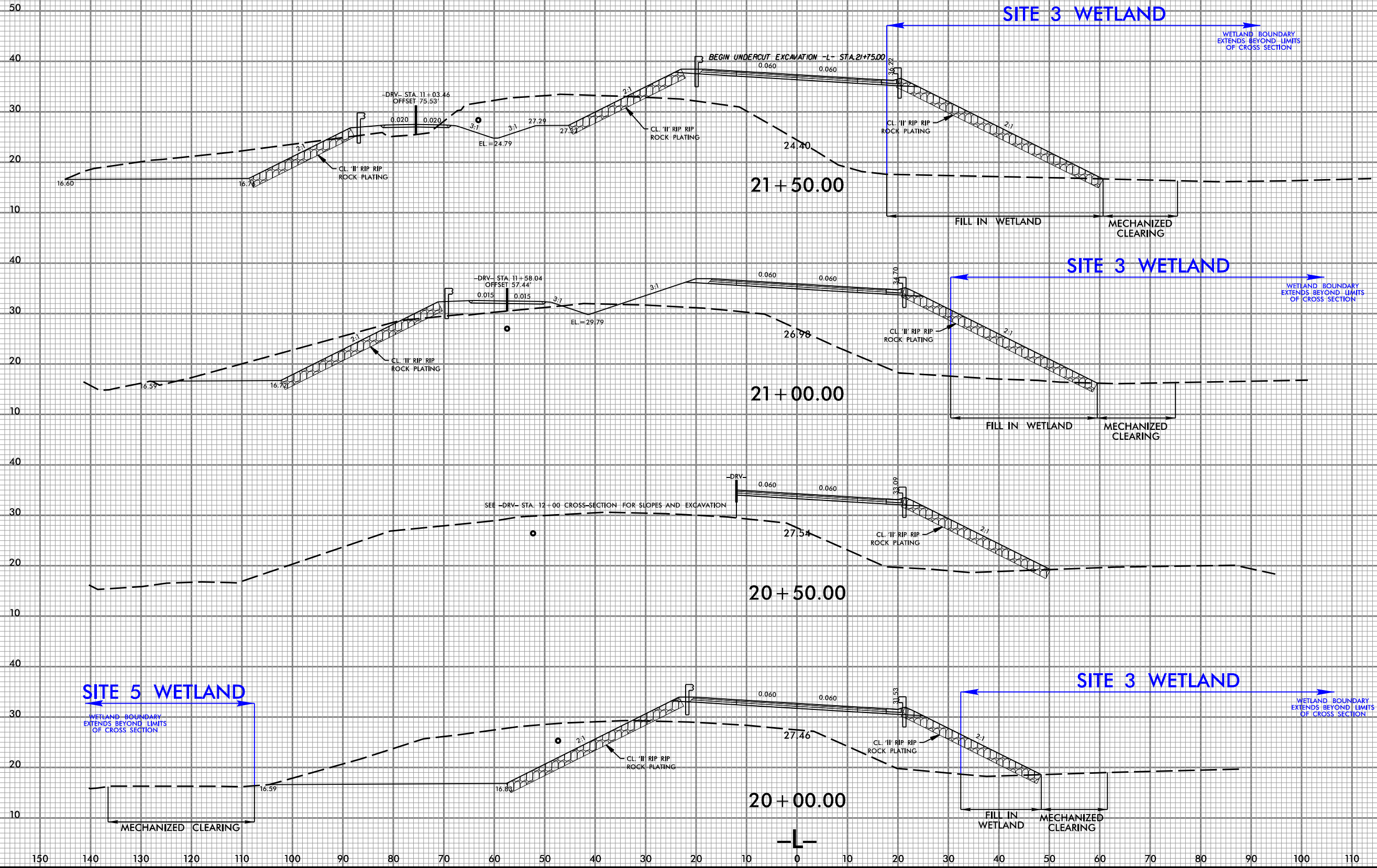
6/23/16



PROJ. REFERENCE NO.
B-4926

SHEET NO.
X-4

PERMIT DRAWING
SHEET 11 OF 35



10/13/2022
B-4926_Rdy_XPL_L_wet.dgn
User:overbu

