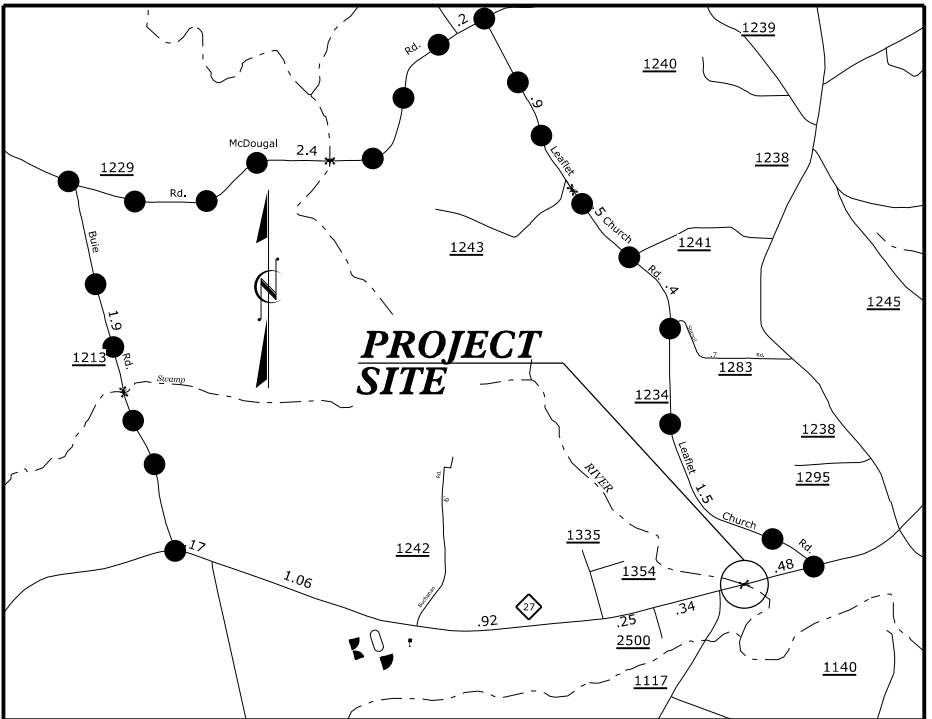


09/08/99

See Sheet 1A For Index of Sheets
 See Sheet 1B For Conventional Symbols
 See Sheet RW02C-1 TO RW02C-3 For Survey Control Sheets



VICINITY MAP

OFF-SITE DETOUR

PROJECT: BR-0082

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

HARNETT COUNTY

**LOCATION: STRUCTURE NO. 420056 OVER UPPER
 LITTLE RIVER ON NC 27**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING
 & STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0082	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67082.1.1		PE	
67082.2.1		UTIL., RW	
67082.3.1		CONST.	



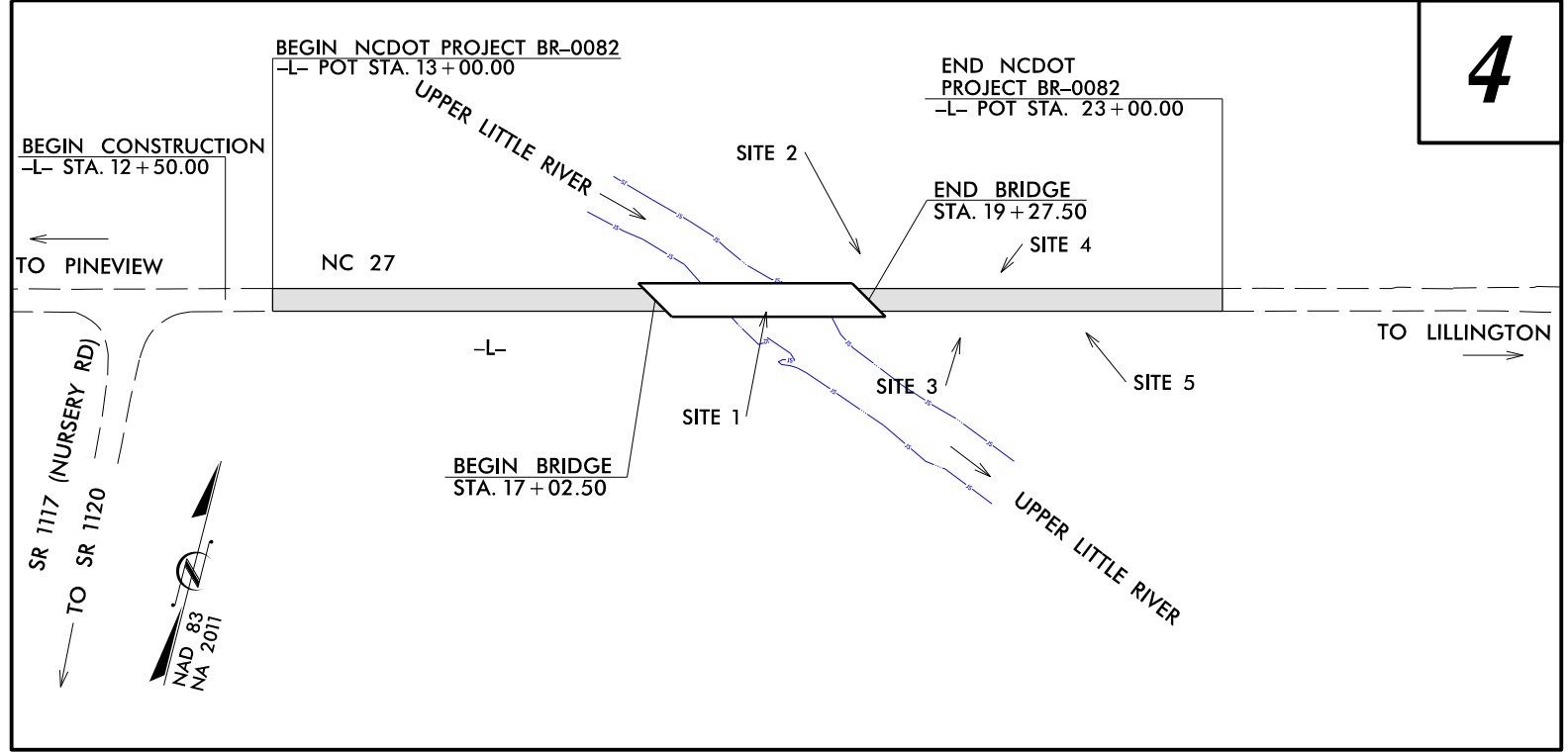
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

WETLAND AND SURFACE WATER IMPACTS PERMIT

STRUCTURE #420056

PERMIT DRAWING
 SHEET 1 OF 7

65% PLANS

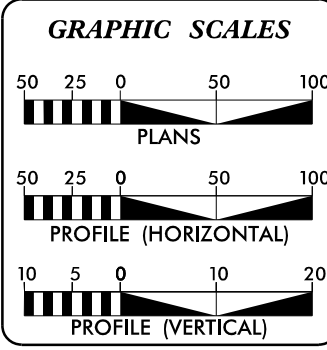


4

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:



DESIGN DATA
 ADT 2021 = 5740
 ADT 2041 = 10370
 T = 7 % *
 V = 60 MPH
 * (TTST = 3% + DUAL = 4%)
 FUNC CLASS =
 MAJOR COLLECTOR
 REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY PROJECT BR-0082 =	0.146 MILES
LENGTH STRUCTURE PROJECT BR-0082 =	0.043 MILES
TOTAL LENGTH PROJECT BR-0082 =	0.189 MILES

NCDOT CONTACT: CHRISTY HUFF, PE
 DIVISION 6 PROJECT MANAGER

Prepared for:
**DIVISION OF HIGHWAYS
 DIVISION SIX**
 558 GILLESPIE STREET, FAYETTEVILLE NC, 28301

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: EDWARD G. WETHERILL, PE
 PROJECT ENGINEER
 MARCH 2, 2020

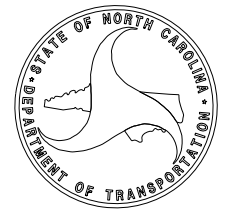
LETTING DATE: GREG S. PURVIS, PE
 PROJECT DESIGN ENGINEER
 FEBRUARY 17, 2021

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

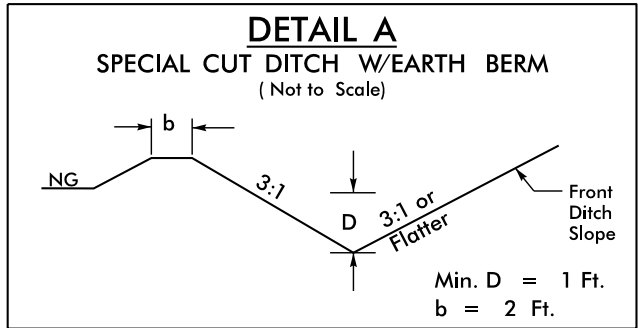
SIGNATURE: _____ P.E.



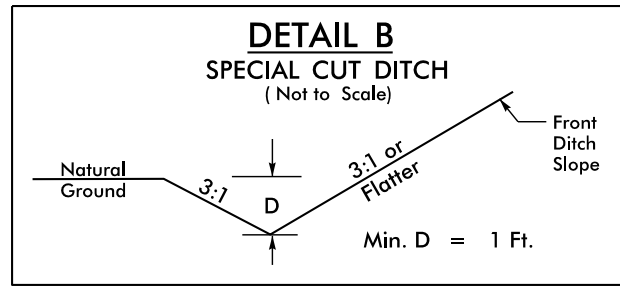
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DETAIL SHEET

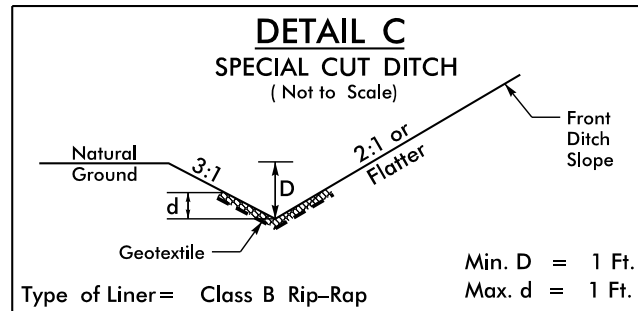
PERMIT DRAWING SHEET 2 OF 7



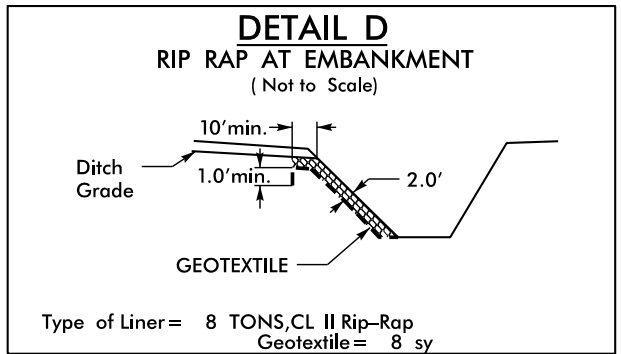
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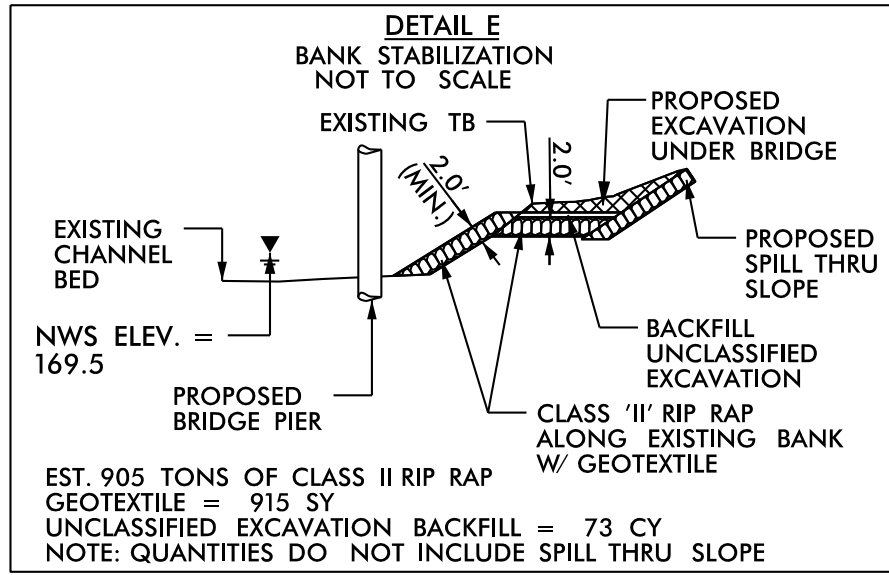
FROM -L- STA. 15+25 TO STA. 16+00 LT



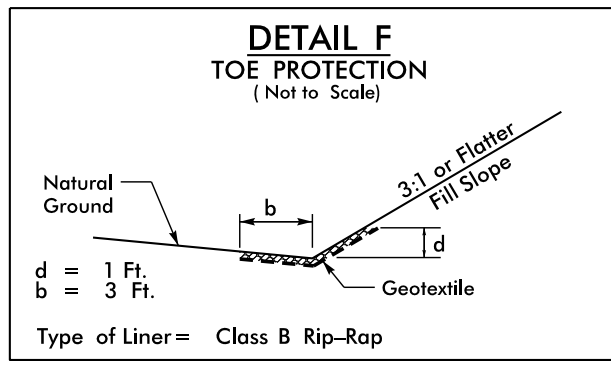
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FROM -L- STA. 16+00 TO STA. 16+90 LT



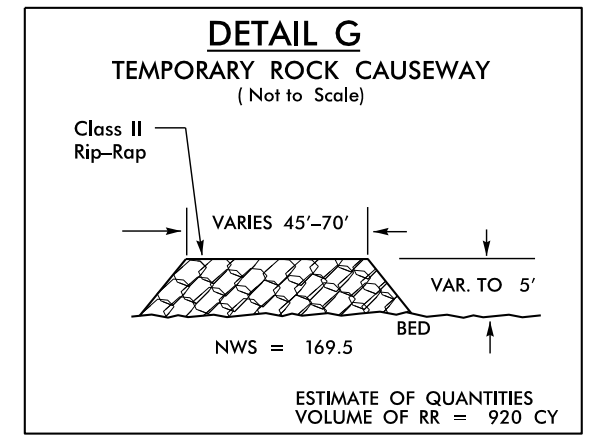
FROM -L- STA. 16+90 TO STA. 17+01 LT



FROM -L- STA. 16+87 TO 17+99
FROM -L- STA. 18+19 TO 19+50



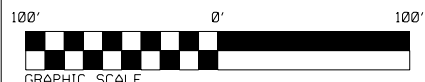
FROM -L- STA. 19+40 TO STA. 20+50 LT
FROM -L- STA. 20+04 TO STA. 21+14 RT
FROM -L- STA. 21+20 TO STA. 21+75 LT



ESTIMATE OF QUANTITIES
VOLUME OF RR = 920 CY
-L- STA. 17+75
-L- STA. 18+50

12/2/2016

**PERMIT DRAWING
SHEET 3 OF 7**



**SHOULDER BERM
GUTTER STATION**
 16+54.00 TO 16+61.50 LT.
 16+80.00 TO 16+93.50 RT.
 19+36.50 TO 20+11.00 LT.
 19+68.50 TO 19+76.00 RT.

WETHERILL ENGINEERING
 1223 Jones Franklin Rd.
 Raleigh, N.C. 27606
 License No. F-0377
 Bus: 919 851 8077
 Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
 CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

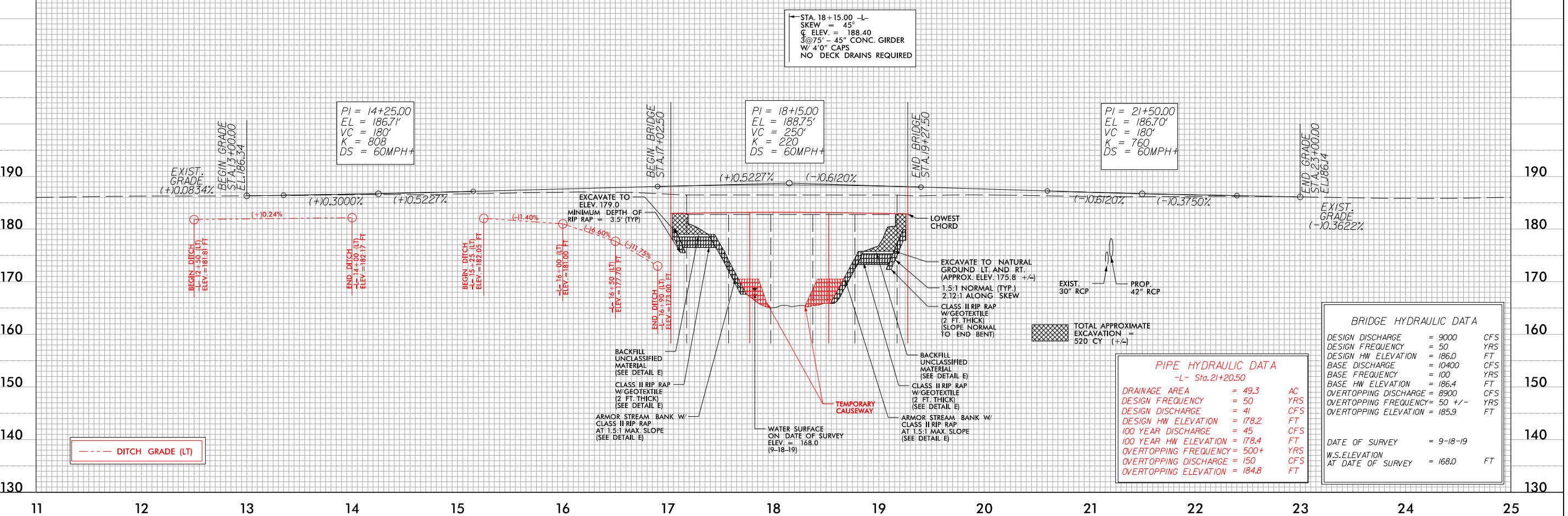
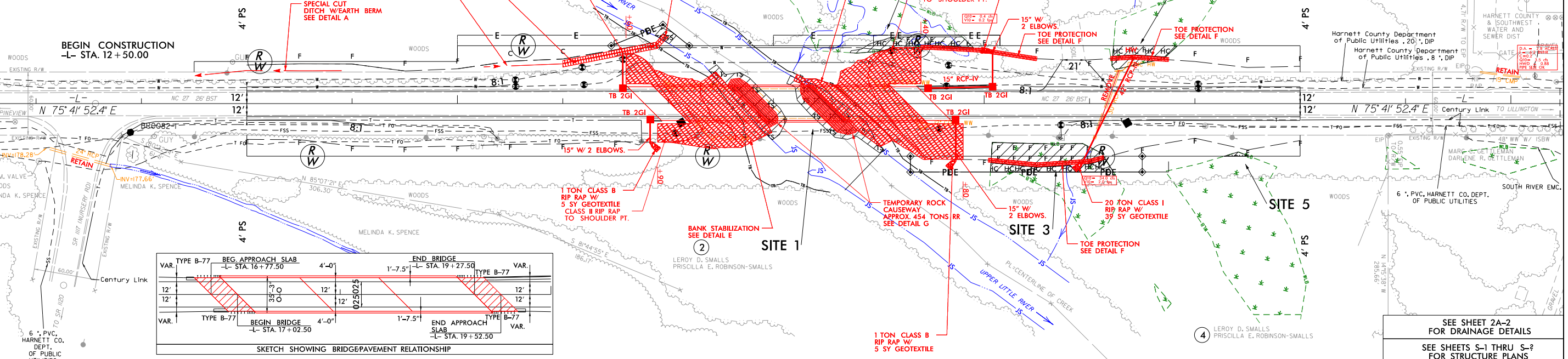
PROJECT REFERENCE NO. BR-0082	SHEET NO. 4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

F F
DENOTES FILL IN WETLAND

HC HC
DENOTES HAND CLEARING

S S
DENOTES IMPACTS IN SURFACE WATER

TS TS
DENOTES TEMPORARY IMPACTS IN SURFACE WATER

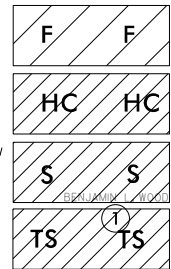
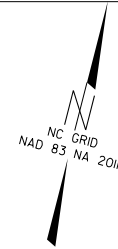
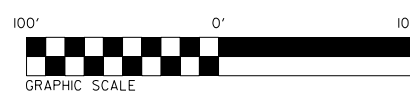


8/17/99
 REVISIONS
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 8/21/2019
 KAL/ldc

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UNLESS ALL SIGNATURES COMPLETED**

SEE SHEET 2A-2 FOR DRAINAGE DETAILS
 SEE SHEETS S-1 THRU S-2 FOR STRUCTURE PLANS

**PERMIT DRAWING
SHEET 4 OF 7**



DENOTES FILL IN WETLAND

DENOTES HAND CLEARING

DENOTES IMPACTS IN SURFACE WATER

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

**SHOULDER BERM
GUTTER STATION**
16+54.00 TO 16+61.50 LT.
16+80.00 TO 16+93.50 RT.
19+36.50 TO 20+11.00 LT.
19+68.50 TO 19+76.00 RT.

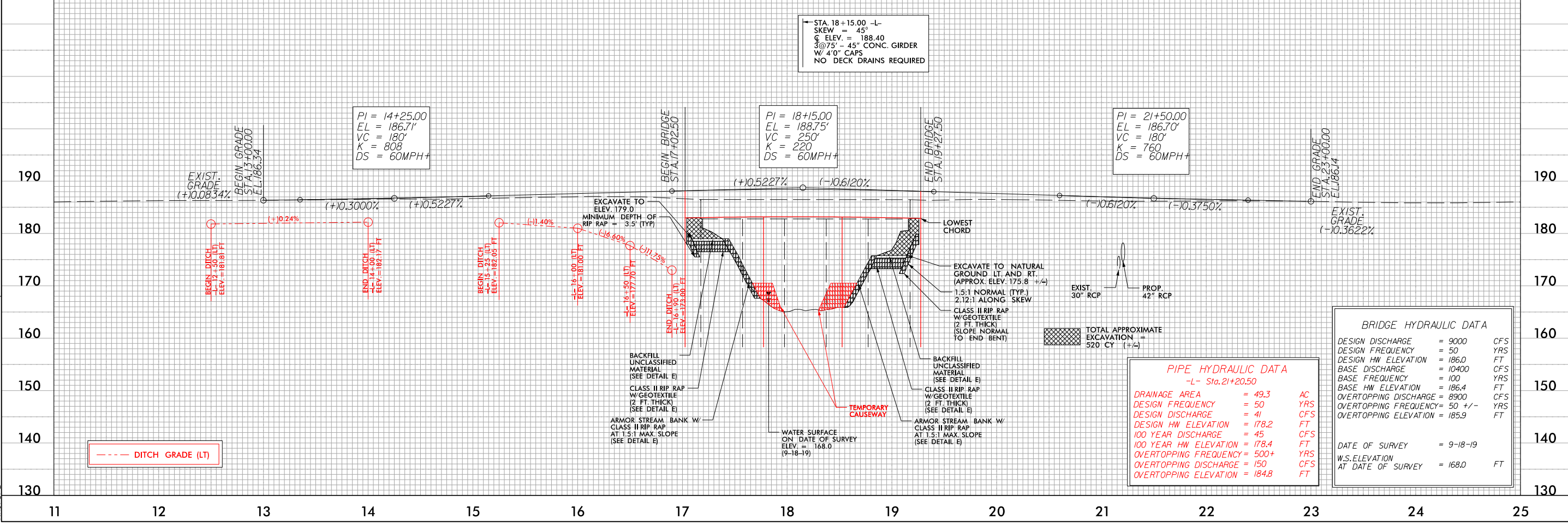
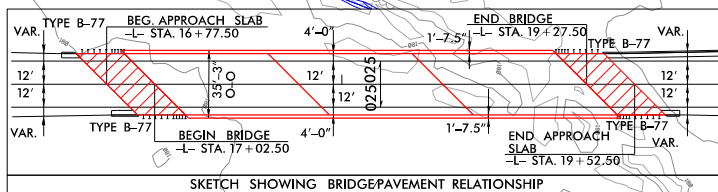
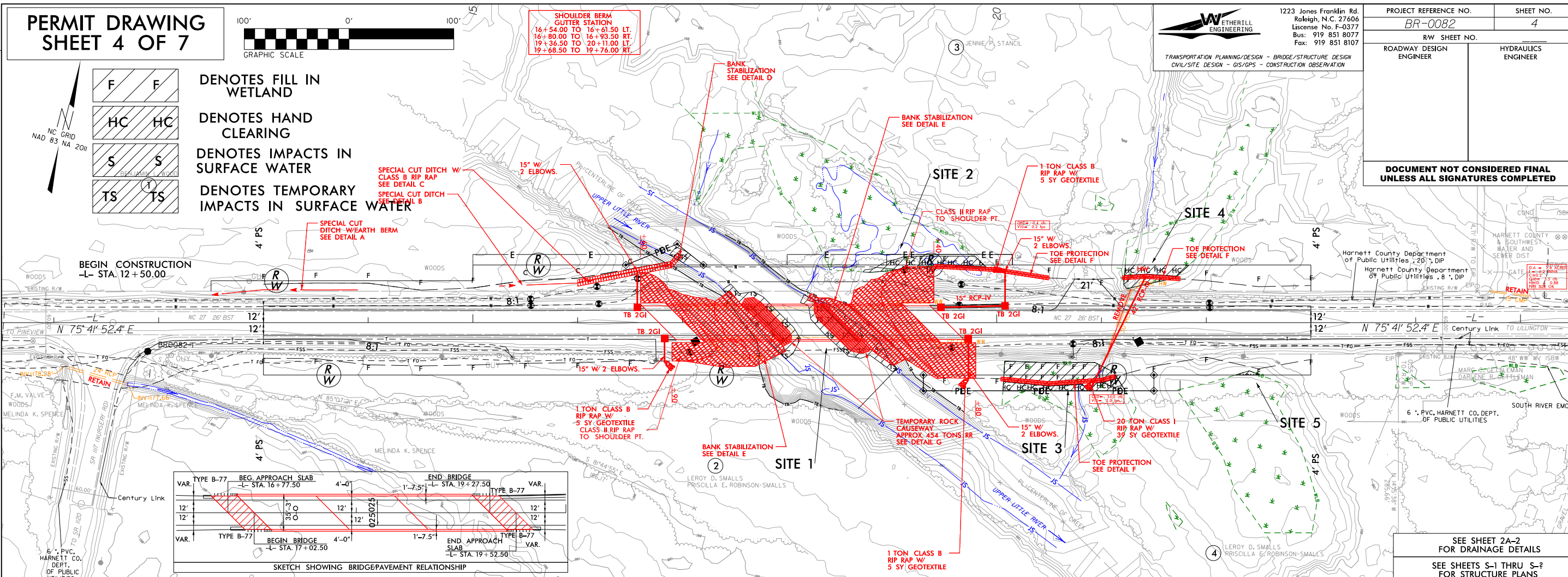


1223 Jones Franklin Rd.
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

PROJECT REFERENCE NO. BR-0082	SHEET NO. 4
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



REVISIONS

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 8/17/19
 8/21/2019
 KAL/ldc

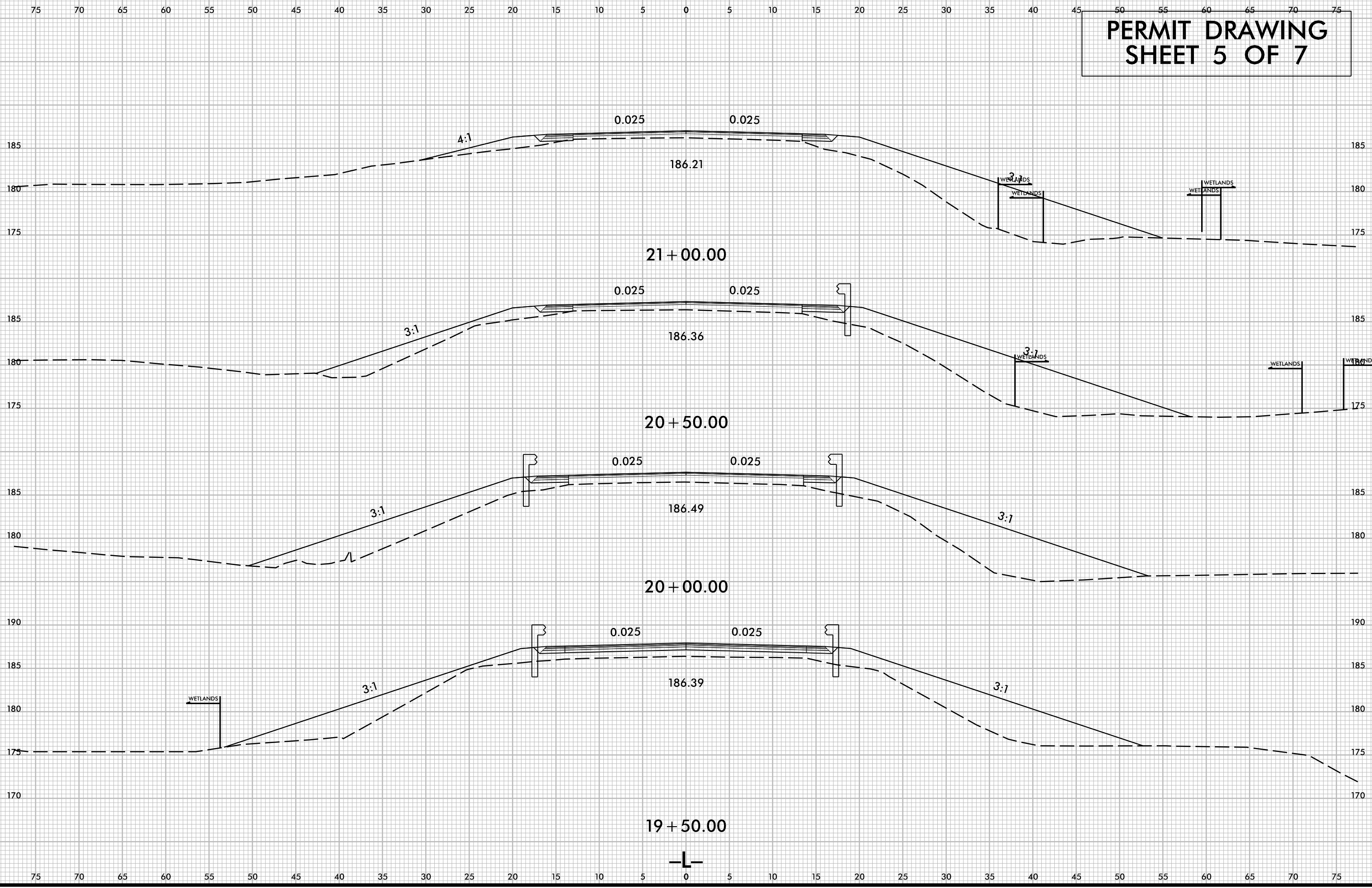
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PROJ. REFERENCE NO.
B-0082

SHEET NO.
X-5

PERMIT DRAWING SHEET 5 OF 7



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8/23/99

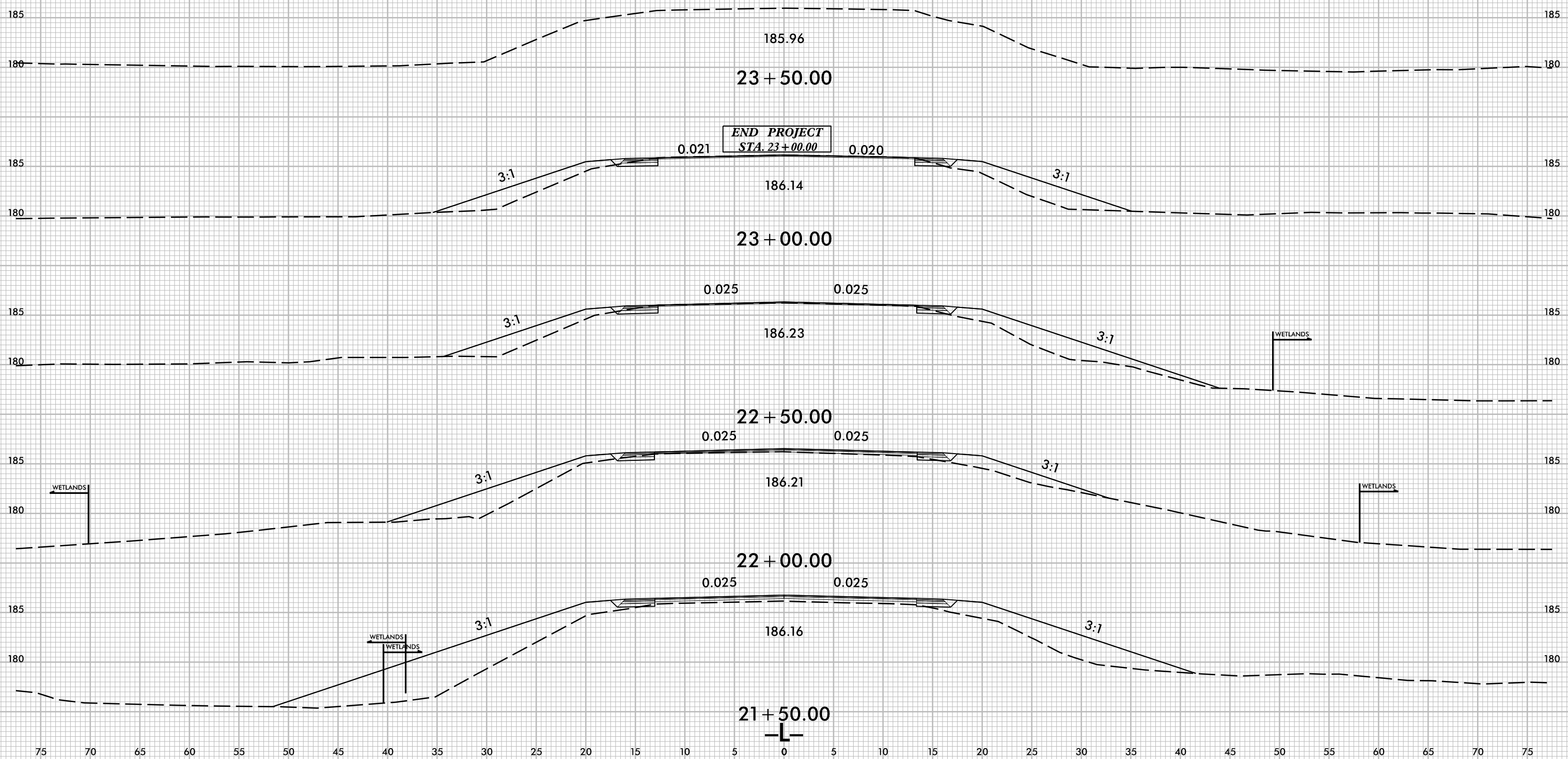


PROJ. REFERENCE NO.
B-0082

SHEET NO.
X-6

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PERMIT DRAWING SHEET 6 OF 7



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USER: Flocks

WETLAND AND SURFACE WATER IMPACTS SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 16+85 to 19+05	Bank Stabilization at Bridge						0.03	0.35	155	175	
2	-L- 18+80 to 19+90	fill slope and toe protection	< 0.01				0.02					
3	-L- 20+05 to 21+23	fill slope and toe protection	0.05				0.02					
4	-L- 21+21 to 21+84	fill slope and toe protection	< 0.01				0.01					
5	-L- 22+28 to 22+50	fill slope					< 0.01					
TOTALS*:			0.06				0.05	0.03	0.35	155	175	0

*Rounded totals are sum of actual impacts

NOTES:
 Site 2 - Permanent fill in wetlands (shown as < 0.01 acres) is the equivalent of 121 square feet.
 Site 4 - Permanent fill in wetlands (shown as < 0.01 acres) is the equivalent of 397 square feet.
 Site 5 - Hand Clearing in wetlands (shown as < 0.01 acres) is the equivalent of 49 square feet.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 1/27/2021
 Harnett Co.
 BR-0082

SHEET 7 OF 7