



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS



(Version 2.08; Released April 2018)

WBS Element: 17BP.2.R.90 TIP No.: B-4569 County(ies): Lenoir Page 1 of 1

General Project Information

WBS Element:	17BP.2.R.90	TIP Number:	B-4569	Project Type:	Bridge Replacement	Date:	6/9/2021
NCDOT Contact:	Michael Aman		Contractor / Designer:	Jason Patskoski, P.E., PhD			
Address:	Project Development Unit 1037 W.H. Smith Blvd. Greenville, NC 27835		Address:	Summit Design and Engineering Services 100 East Six Forks Road, Suite 300 Raleigh, NC 27609			
	Phone:	(252) 439-2812		Phone:	(919) 322-0115		
	Email:	mcaman@ncdot.gov		Email:	jason.patskoski@summitde.net		
City/Town:	La Grange		County(ies):	Lenoir			
River Basin(s):	Neuse		CAMA County?	No			
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	0.099 Miles	Surrounding Land Use:	Rural Area with Agricultural or Residential Land Uses					
	Proposed Project		Existing Site					
Project Built-Upon Area (ac.)	0.3	ac.	0.2	ac.				
Typical Cross Section Description:	2 lane road with 10' travel lanes and 4' unpaved graded shoulders. The total bridge length is 70' with an out to out width of 30'.			2 lane road with 10' travel lane and 1' paved shoulders. The total bridge length is 60' and width is 25'-10".				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	1600	Year:	2040	Existing:	660	Year:	2015
General Project Narrative: (Description of Minimization of Water Quality Impacts)	<p>State Project involves the replacement of NCDOT Bridge 530068 over Groundnut Creek on SR 1515 in Lenoir County. The existing structure is a 60 feet long, 2 span (2@30') prestressed concrete channel bridge with a sufficient rating of 29.3. The proposed structure will be a single span (1@70') 24 inch girder bridge with an out to out deck width of 30 feet. The existing bridge has deck drains. The proposed bridge collects bridge runoff with four TB 2GIs without deck drains and outlets the runoff outside BZ-2. Rip-rap pads will be utilized at each outlet to dissipate flow and minimize erosion. The proposed bridge maintains the existing level of service with a single span bridge, so no bents will be placed in the water. The bridge utilizes 4.0' caps, so the rip-rap key in ties in outside the existing top of bank under the bridge. Grassy 3:1 fill slopes are utilized with a low roadway profile to minimize impacts to the wetland areas.</p>							

Waterbody Information

Surface Water Body (2):	Groundnut Creek		NCDWR Stream Index No.:	27-77-2-2				
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C						
	Supplemental Classification:	Swamp Waters (Sw)		(NSW)				
Other Stream Classification:	None							
Impairments:	None							
Aquatic T&E Species?	No	Comments:						
NRTR Stream ID:	Groundnut Creek		Buffer Rules in Effect:	Neuse				
Project Includes Bridge Spanning Water Body?	Yes	Deck Drains Discharge Over Buffer?	No	Dissipator Pads Provided in Buffer?				No
Deck Drains Discharge Over Water Body?	No	(If yes, provide justification in the General Project Narrative)		(If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)				
(If yes, provide justification in the General Project Narrative)								

09.08.2019

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols
See Sheet 1C-1 For Survey Control Sheet

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LENOIR COUNTY

**LOCATION: BRIDGE NO. 530068 ON SR 1515 (ALDRIDGE STORE RD)
OVER GROUNDNUT CREEK**

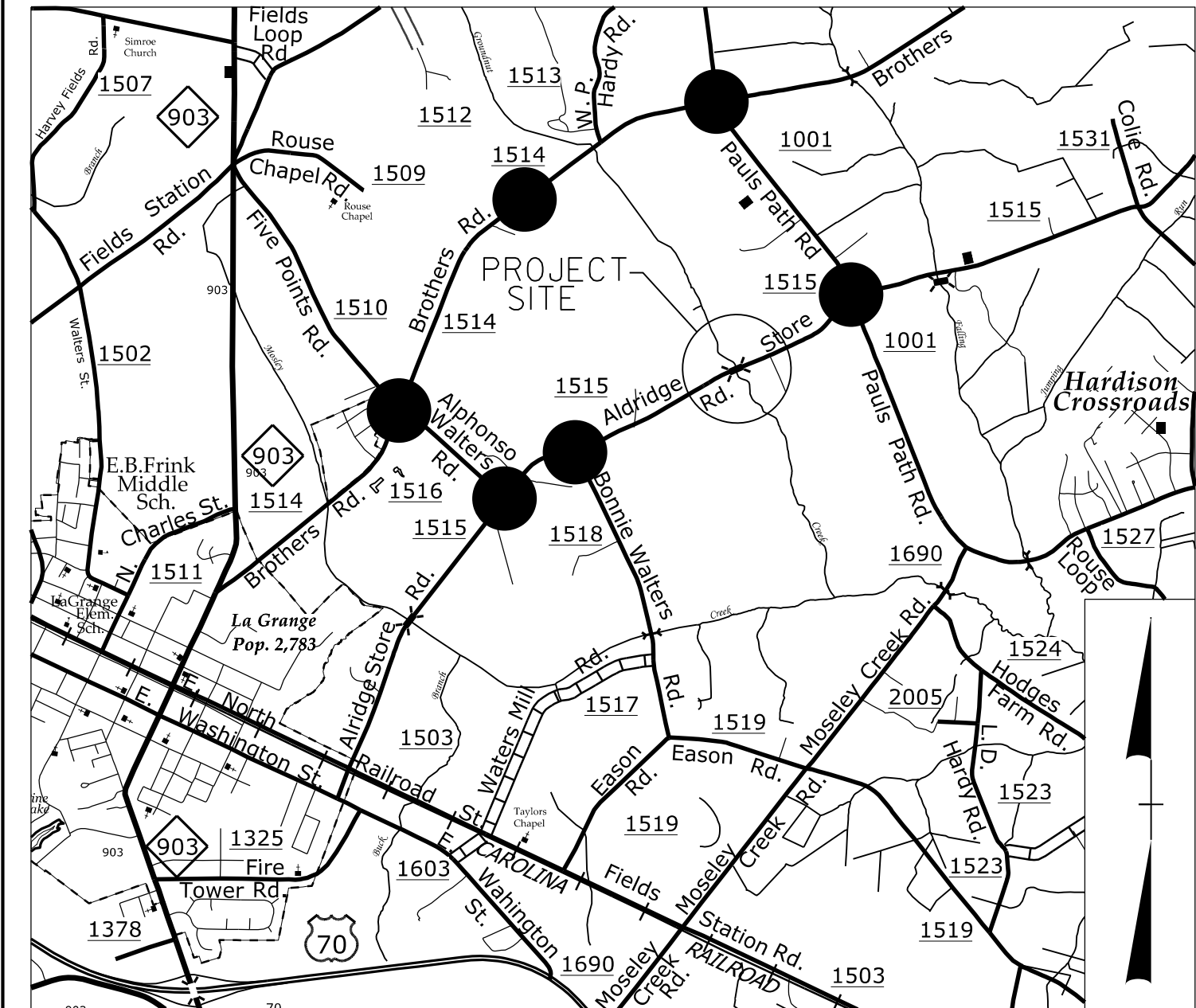
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURE

**PERMIT DRAWING
SHEET 1 OF 7**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.2.R.90	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
17BP.2.PE.90		PE	
17BP.2.R.90		ROW & UTL	
17BP.2.R.90		CONST	

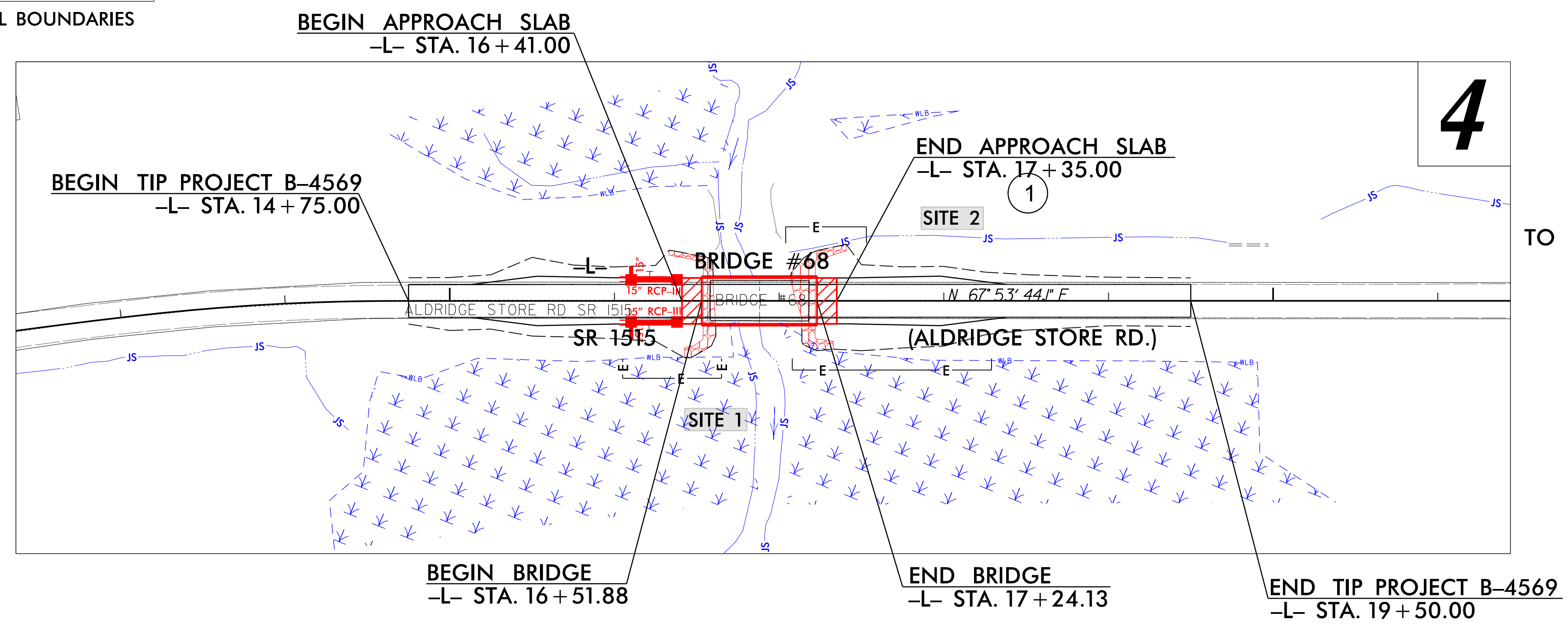
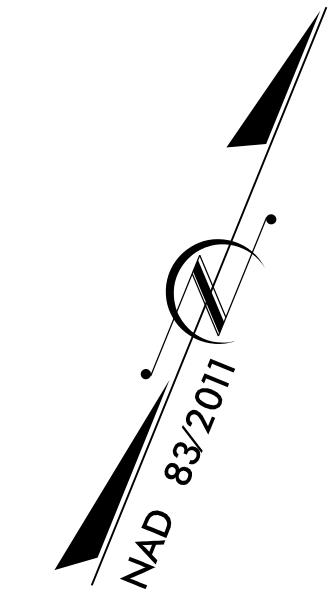
ROW PLANS

TIP PROJECT: 17BP.2.R.90



VICINITY MAP

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
● DETOUR ROUTE



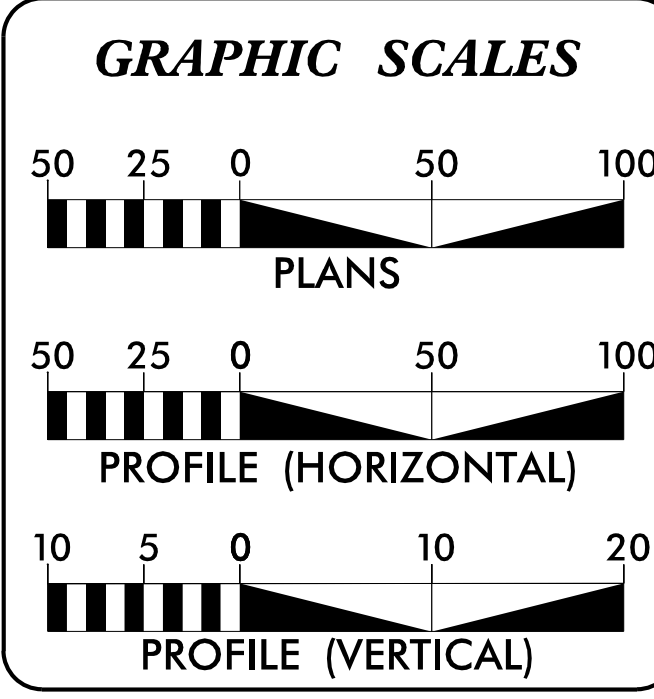
TO LA GRANGE

TO PAULS PATH RD (SR 1001)

CLEARING ON THIS PROJECT SHALL BE PREFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

ADT 2020 =	1000
ADT 2040 =	1600
V =	60 MPH
FUNC CLASS =	LOCAL
SUB REGIONAL TIER	

PROJECT LENGTH

LENGTH ROADWAY PROJECT =	0.086 MILES
LENGTH STRUCTURES PROJECT =	0.013 MILES
TOTAL LENGTH PROJECT =	0.099 MILES

NCDOT CONTACT: MICHAEL AMAN, PE
PROJECT ENGINEER - DIVISION 2

Prepared in the Office of:

SUMMIT
DESIGN AND ENGINEERING SERVICES
FIRM NO. P-4339

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	OCTOBER 9, 2019
LETTING DATE:	MARCH 25, 2020

JEFFREY P. MUHLBAUER, PE
PROJECT ENGINEER

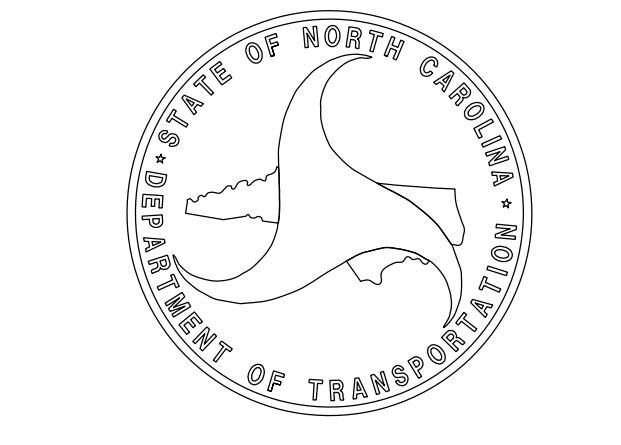
FAITH E. JAHNKE, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER


SIGNATURE: _____ P.E.

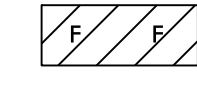
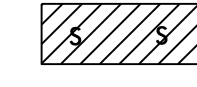




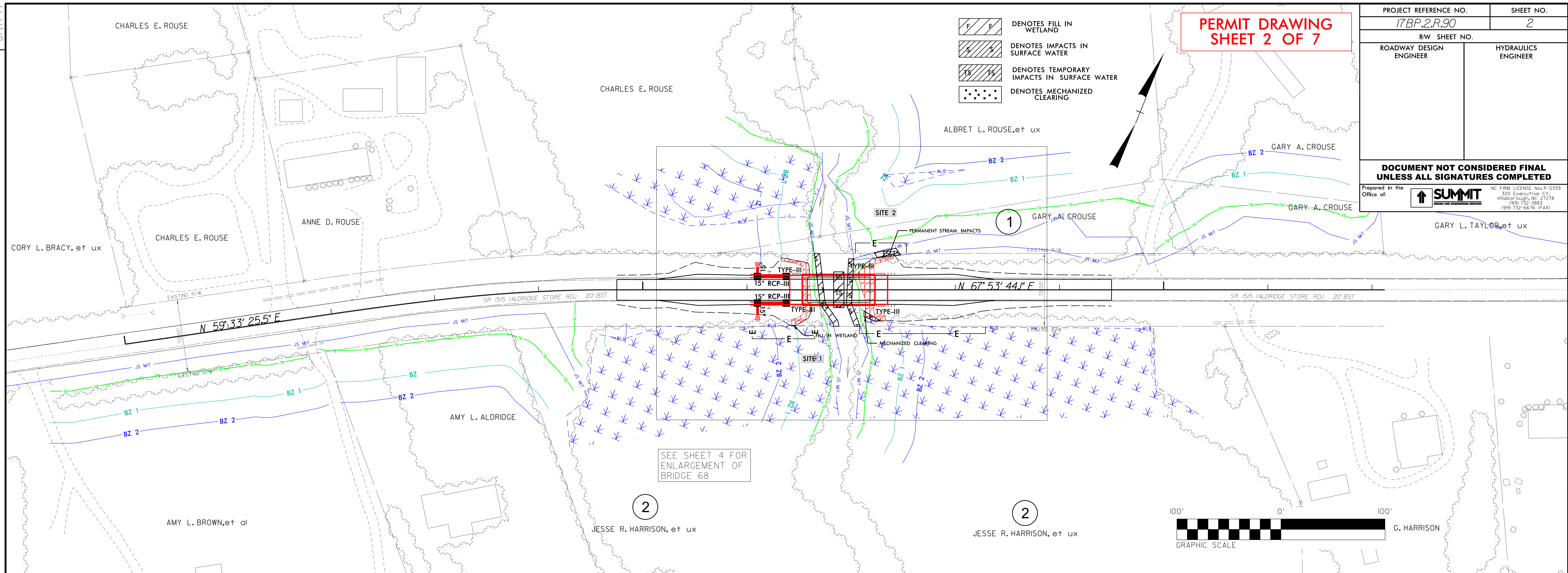
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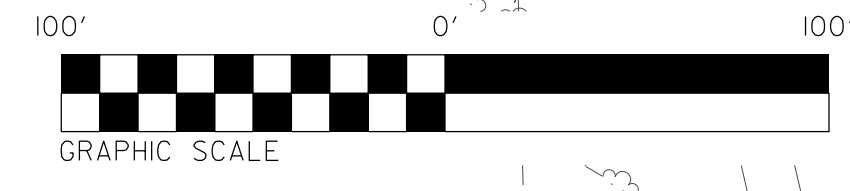
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SHEET 2 OF 7**

PROJECT REFERENCE NO. 17BP.2.R.90	SHEET NO. 2
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared in the Office of: 	NC FIRM LICENSE NO: P-0339 300 EXECUTIVE CT. HILLSBOROUGH, NC 27278 (919) 332-3883 (919) 732-6676 (FAX)

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

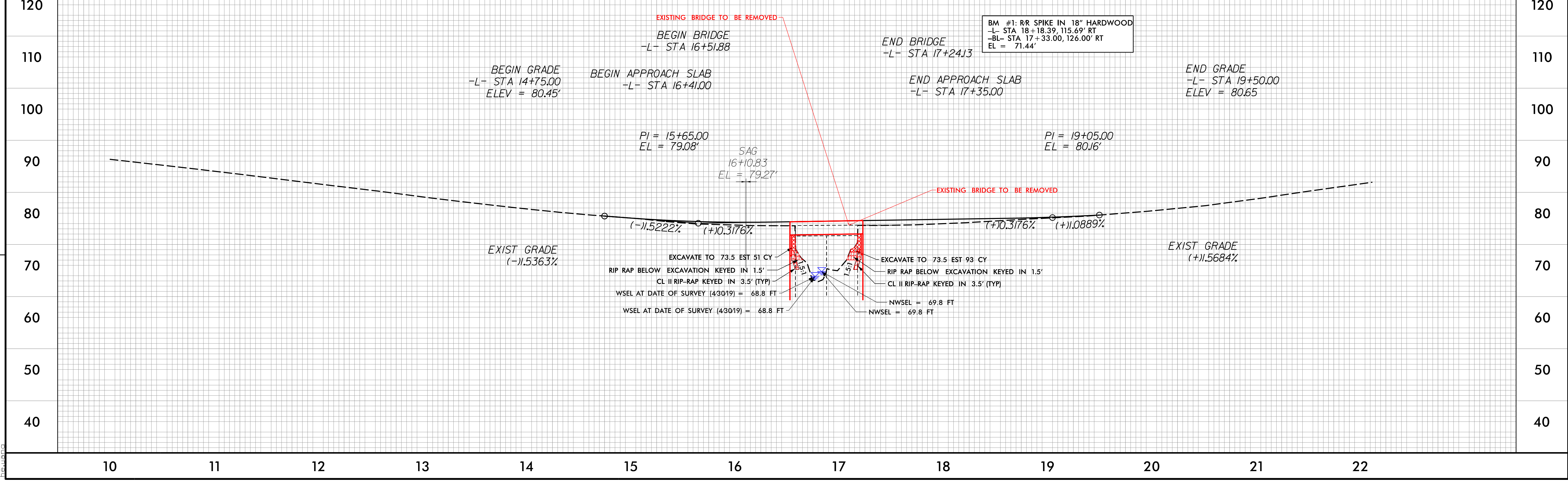


SEE SHEET 4 FOR ENLARGEMENT OF BRIDGE 68



REVISIONS

-L- SR 1515 (ALDRIDGE STORE RD.)

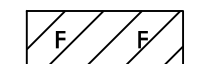





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8.17.19

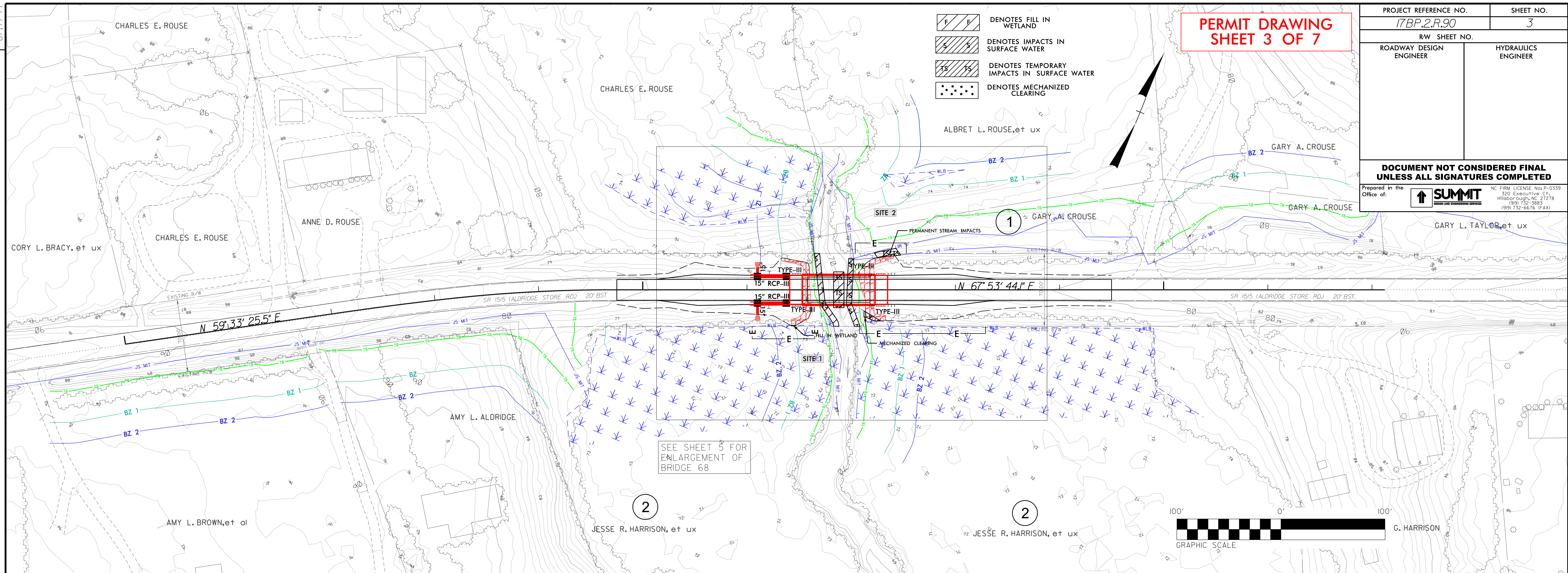
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ROADWAY DESIGN ENGINEER	

**PERMIT DRAWING
SHEET 3 OF 7**

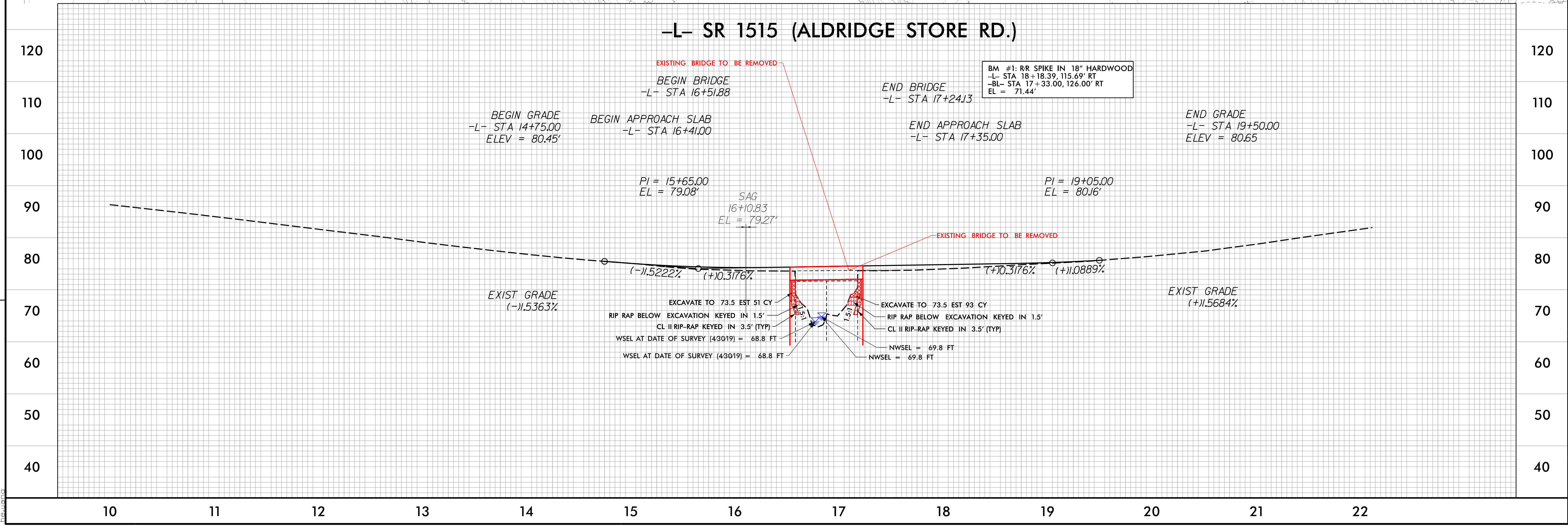
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-  DENOTES MECHANIZED CLEARING

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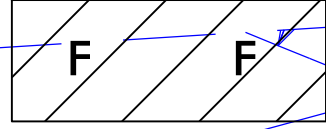
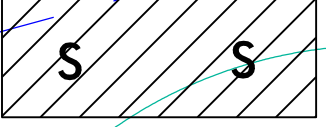
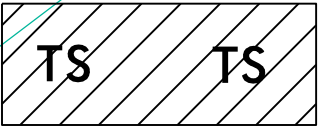
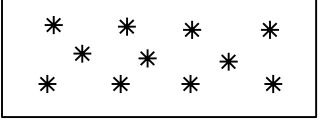
REVISIONS



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PERMIT DRAWING
SHEET 4 OF 7

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

1

SITE 2

SITE 1

PERMANENT STREAM IMPACTS

MECHANIZED CLEARING

FILL IN WETLAND

15" RCP-III
TYPE-III

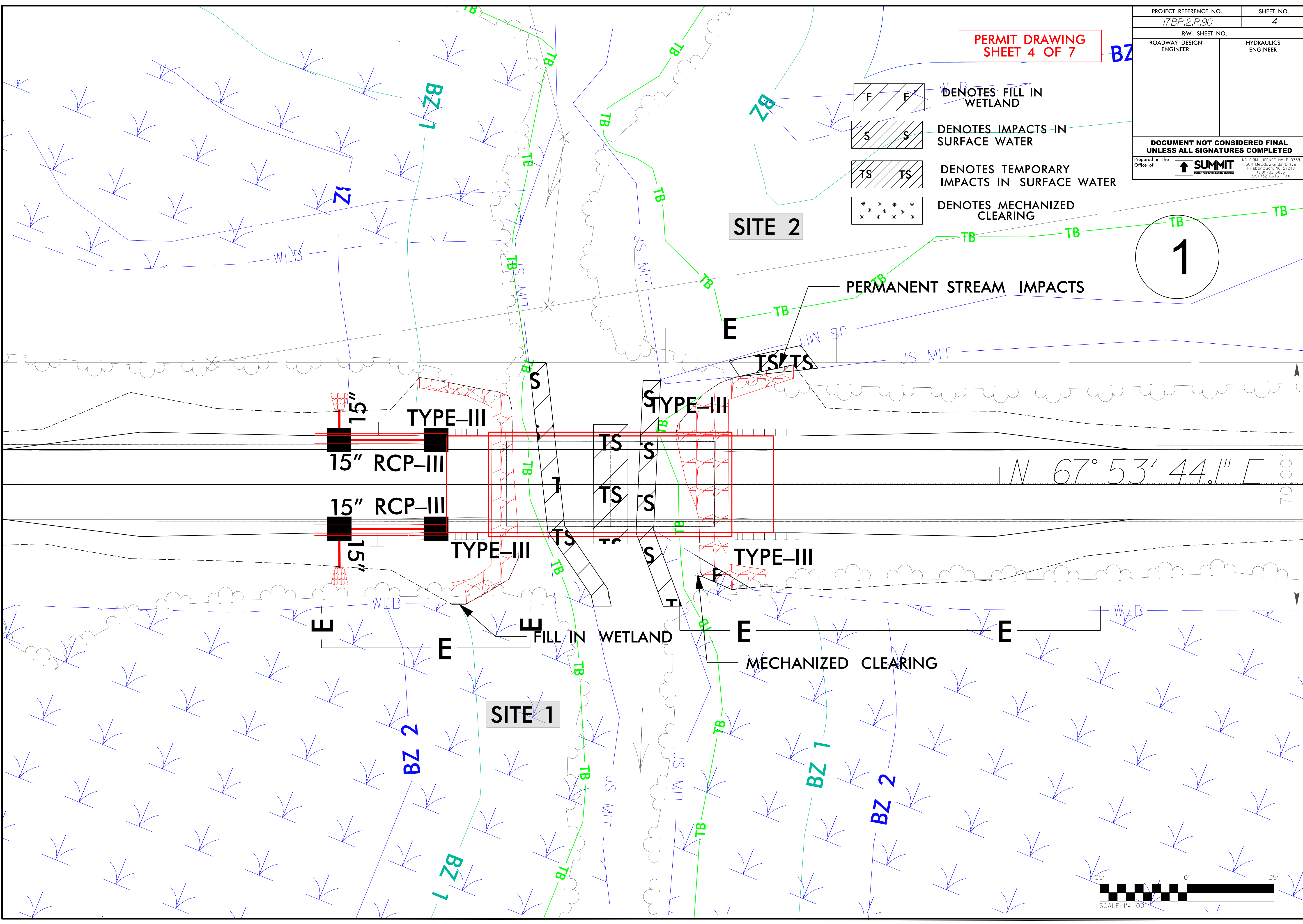
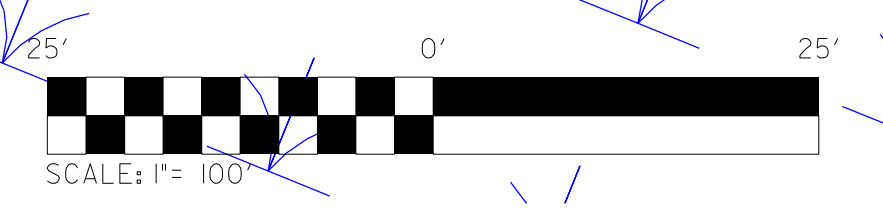
15" RCP-III
TYPE-III


TYPE-III

TYPE-III

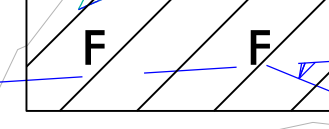
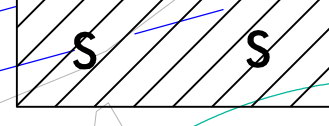
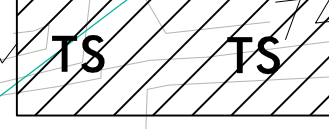
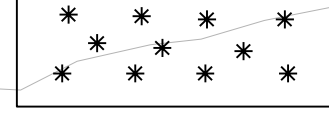
N 67° 53' 44.1" E

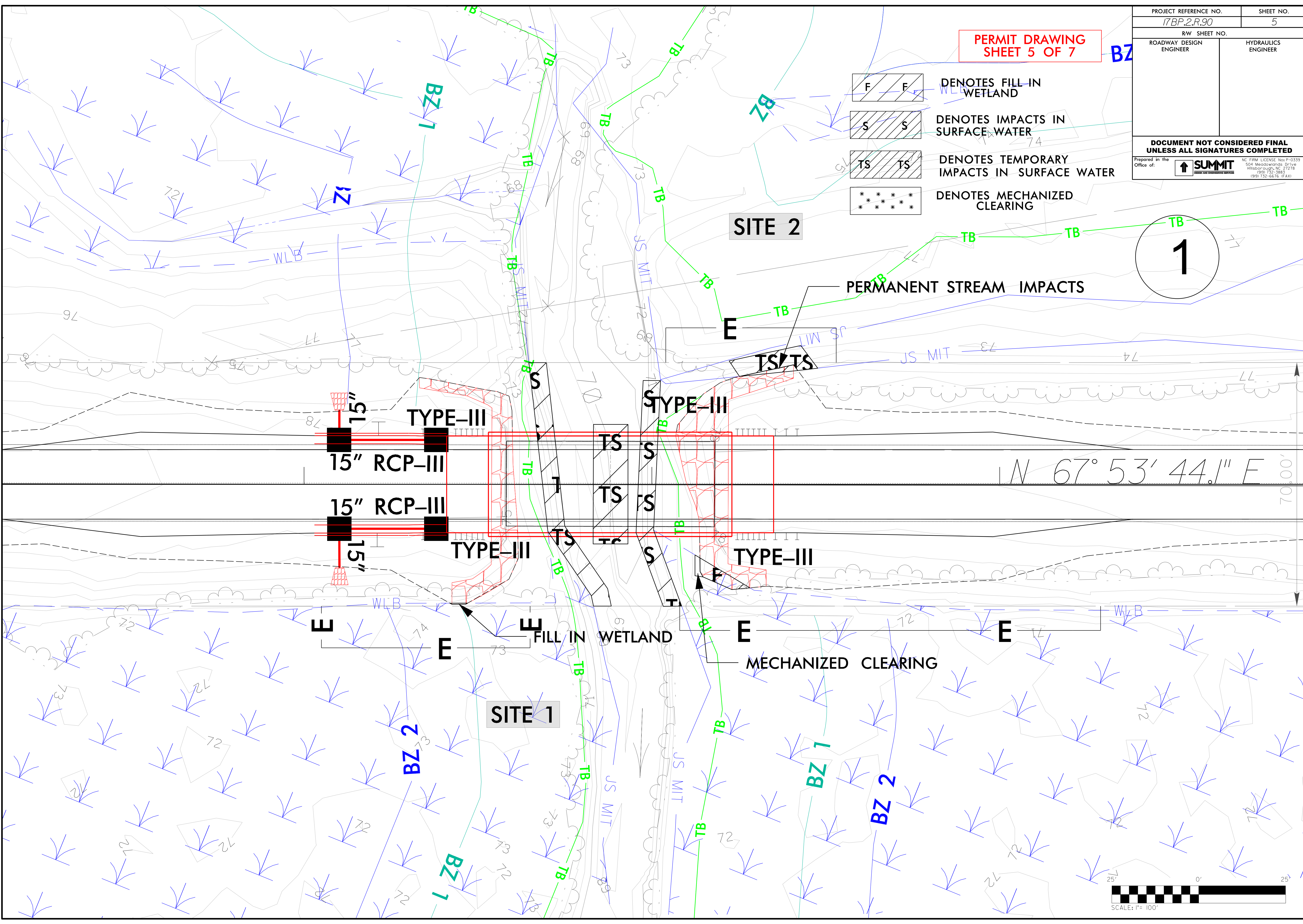
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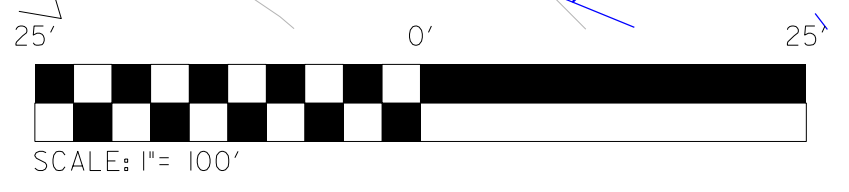
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SHEET 5 OF 7**

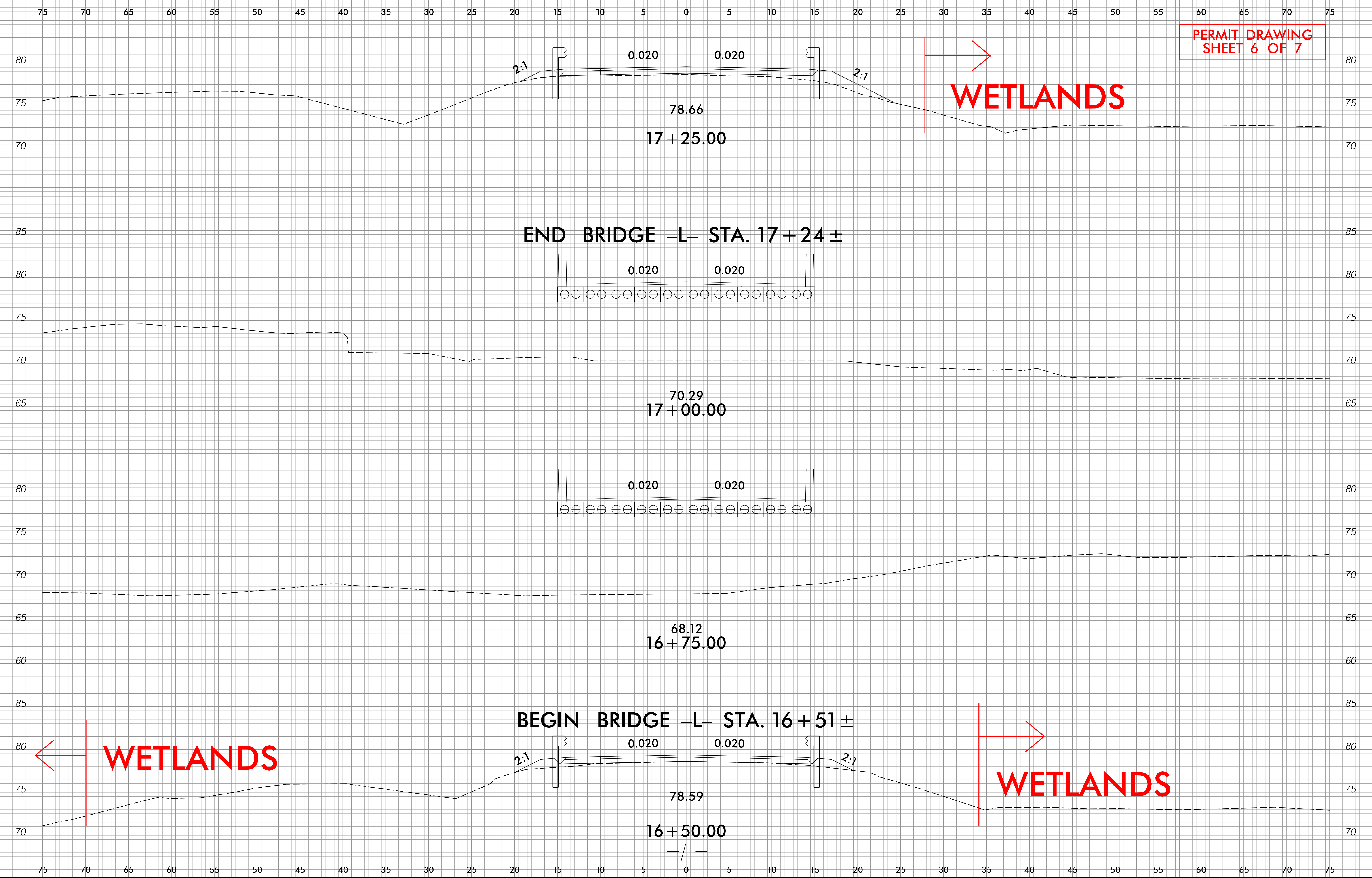
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-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES MECHANIZED CLEARING



1

N 67° 53' 44.1" E





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