Project Submittal Interim Form

Updated September 4, 2020

*Please note: fields marked with a red asterisk * below are required. You will not be able to submit the form until all mandatory questions are answered.*

Project Type: *

- ( ) For the Record Only (Courtesy Copy)
- ( ) New Project
- ( ) Modification/New Project with Existing ID
- (•) More Information Response
- ( ) Other Agency Comments
- ( ) Pre-Application Submittal
- ( ) Re-Issuance\Renewal Request
- ( ) Stream or Buffer Appeal

Pre-Filing Meeting Date Request was submitted on:

4/29/2022

Is this supplemental information that needs to be sent to the Corps? *

(•) Yes ( ) No

Project Contact Information

Name: Deanna Riffey

Who is submitting the information?

Email Address: * driffey@ncdot.gov

Project Information

Existing ID #: *

20221000

20170001 (no dashes)

Existing Version: *

1

1

Project Name: * Replacement of Bridge #29 on US 64 Alternate over the Tar River

Is this a public transportation project? *

(•) Yes
( ) No

Is this a DOT project? *

(•) Yes
( ) No

Is the project located within a NC DCM Area of Environmental Concern (AEC)? *

( ) Yes (•) No ( ) Unknown

TIP#:

B-5670

WBS#:

45625.3.1

(Applies to DOT projects only)

County (ies) *

Nash

Please upload all files that need to be submited.

Click the upload button or drag and drop files here to attach document

B-5670 Wetland_Stream_Impact_Permits.pdf 5.82MB

Only pdf or kmz files are accepted.

Describe the attachments or add comments:

The USACE pointed out that revisions were needed to allow drainage from the JS channel adjacent to the road to flow into the Tar River. The attached revised permit drawings reflect that change.

* ☑ By checking the box and signing box below, I certify that:

- I, the project proponent, hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief.
- I, the project proponent, hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.
- I agree that submission of this online form is a “transaction” subject to Chapter 66, Article 40 of the NC General Statutes (the “Uniform Electronic Transactions Act”);
- I agree to conduct this transaction by electronic means pursuant to Chapter 66, Article 40 of the NC General Statutes (the “Uniform Electronic Transactions Act”);
- I understand that an electronic signature has the same legal effect and can be enforced in the same way as a written signature; AND
- I intend to electronically sign and submit the online form.

Signature: * Mack C Riverbank, III

Submittal Date: 8/12/2022

Is filled in automatically once submitted.

Submitted 8/12/2022

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element:	45625.1.1	TIP/Proj No:	B-5670	County(ies):	Nash

General Project Information

WBS Element:	45625.1.1	TIP Number:	B-5670	Project Type:	Bridge Replacement	Date:	8/11/2022
NCDOT Contact:	Kristy Alford			Contractor / Designer:	Leah Young, PE		
Address:	1000 Birch Ridge Dr Raleigh, NC 27610			Address:	4505 Falls of Neuse Road Suite 400 Raleigh, NC 27609		
Phone:	(919) 707-6488			Phone:	(919) 783-9214		
Email:	kalford@ncdot.gov			Email:	Leah.Young@kci.com		
City/Town:	None			County(ies):	Nash		
River Basin(s):	Tar-Pamlico			CAMA County?	No		
Wetlands within Project Limits?	No						

Project Description

Project Length (lin. miles or feet):	0.22	Surrounding Land Use:	Woods/rural residential

	Proposed Project		Existing Site	
Project Built-Upon Area (ac.)	1.0	ac.	0.8	ac.
Typical Cross Section Description:	12' TRAVEL LANES WITH 6' PAVED SHOULDER AT BRIDGE; 39.25' OUT TO OUT		APPROXIMATE 12' TRAVEL LANES WITH 2' PAVED SHOULDER	

Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	3200	Year: 2040	Existing:	2591	Year:	2020

General Project Narrative: (Description of Minimization of Water Quality Impacts)

This project will replace Nash County Bridge #0029 and its approaches. The proposed replacement is 325' long witth a clear roadway width of 36'. This structure provides 2-12' travel lanes with a 6' paved shoulder. The proposed bridge will have 1.5:1 sloping riprap abutments and 4' caps at the end bents. Placement and construction of the proposed bridge, end bents, caps, and associated roadway fill will not result in any permanent jurisdictional stream or similar environmental impacts, although there will be 0.21 ac and 104 LF of temporary stream impact for temporary causeway construction. There will be no permanent channel changes due to the bent removal and causeway construction. There will be 0.03 ac and 62 LF of permanent stream impacts due to bank stabilization. There are no wetlands present within the proposed limits of construction.

The temporary causeway shall be constructed by others. Allowable stream impacts shown in the plans assume a temporary rock causeway using 2:1 side slopes to achieve an elevation of 145.0' for the line-back side of the bridge (labeled as phase I) and an elevation of 145.0' for the line-ahead side of the bridge (labeled as phase II). This results a 30 LF workpad to facilitate existing bridge removal and proposed bridge installation. Phase I allows for removal of existing bents #1, 2, 3, & 4 and the installation of proposed bents #1 & 2. Phase II allows for the remocal of existing bents #5, 6, 7, & 8 and the installation of proposed bents #3, 4, & 5. No more than 50% of the main channel flow area may be blocked during any phase.

There are 30' and 50' buffer zones present outside the existing stream. There are no wetland impacts within buffer zones. There is a proposed ditch within buffer zone 1 due to existing erosion and instability. Sheet flow was not feasible at this location. The proposed ditch stabilizies the flow area and does not change existing flow patterns. Please refer to the "Swales" tab for more information.

STORMWATER CONTROLS: The proposed bridge does not require deck drains. The runoff from the bridge discharges through pipe/inlet systems on the eastern quadrant of the bridge outside of the jurisdictional stream at non-erosive velocities. In all bridge quadrants, roadway runoff is treated via vegetated roadway shoulders and existing/proposed vegetated/riprap swales prior to entering the stream. Dissipator pads were used outside buffer zones when possible to promote sheet flow to buffer zones.

Submitted 8/12/2022

North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element:	45625.1.1	TIP/Proj No.:	B-5670	County(ies):	Nash	Page	2	of	4

General Project Information

Waterbody Information

Surface Water Body (1):	Tar River		**NCDWR Stream Index No.:**	28-(24.7)b		
NCDWR Surface Water Classification for Water Body		**Primary Classification:**	Water Supply V (WS-V)			
		Supplemental Classification:	(NSW)			
Other Stream Classification:	None					
Impairments:	None					
Aquatic T&E Species?	No	Comments:				
NRTR Stream ID:	N/A			**Buffer Rules in Effect:**	Tar-Pamlico	
Project Includes Bridge Spanning Water Body?	Yes	**Deck Drains Discharge Over Buffer?**	No	**Dissipator Pads Provided in Buffer?**	N/A	
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)						

Surface Water Body (2):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**Dissipator Pads Provided in Buffer?**		
Deck Drains Discharge Over Water Body?		(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)						

Surface Water Body (3):			**NCDWR Stream Index No.:**			
NCDWR Surface Water Classification for Water Body		**Primary Classification:**				
		Supplemental Classification:				
Other Stream Classification:						
Impairments:						
Aquatic T&E Species?		Comments:				
NRTR Stream ID:				**Buffer Rules in Effect:**		
Project Includes Bridge Spanning Water Body?		**Deck Drains Discharge Over Buffer?**		**Dissipator Pads Provided in Buffer?**		
Deck Drains Discharge Over Water Body?		(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)						

Submitted 8/12/2022

North Carolina Department of Transportation

Highway Stormwater Program

STORMWATER MANAGEMENT PLAN

FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element: 45625.1.1 **TIP/Proj No.:** B-5670 **County(ies):** Nash

Swale

Sheet No.	Line	Station	Location (LT,RT,CL)	Latitude	Longitude	Surface Water Body	Base Width (ft)	Front Slope (H:1)	Back Slope (H:1)	Drainage Area (ac)	Recommended Treatm't Length (ft)	Actual Length (ft)	Longitudinal Slope (%)	Q2 (cfs)	V2 (fps)	Q10 (cfs)	V10 (fps)	Rock Checks Used	BMP Associated w/ Buffer Rules?
4	-L-	16+14.2	RT	35.925673	-78.145887	(1)Tar River	7.0	1.5	1.5	4.0	400	64	1.00%	7.4	1.8	9.7	2.0	Yes	Yes

Additional Comments

Submitted 8/12/2022

North Carolina Department of Transportation
Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 3.00; Released August 2021)

WBS Element: | TIP/Proj No.: B-5670 | County(ies): Nash | Page 4 of 4

Preformed Scour Holes and Energy Dissipators

Sheet No.	Line	Station	Location (LT,RT,CL)	Latitude	Longitude	Surface Water Body	Energy Dissipator Type	Riprap Type	Drainage Area (ac)	Conveyance Structure	Pipe (in) / Structure Dimensions (ft)	Q10 (cfs)	V10 (fps)	BMP Associated w/ Buffer Rules?
4	-L-	18+85	LT	35.926611	-78.14552	(1)Tar River	Riprap Pad at Outlet	Class 'B'	0.2	Pipe	15	0.8	1.8	Yes
4	-L-	18+85	RT	35.926122	-78.145025	(1)Tar River	Riprap Pad at Outlet	Class 'B'	0.2	Pipe	15	0.8	1.8	Yes

Additional Comments

Both riprap pads are outside of buffer zone 2. Dissipator pad promotes sheet flow into buffer zones.

* Refer to the NCDOT Best Management Practices Toolbox (2014), NCDOT Standards, the Federal Highway Administration (FHWA) Hydraulic Engineering Circular No. 14 (HEC-14), Third Edition, Hydraulic Design of Energy Dissipators for Culverts and Channels (July 2006), as applicable, for design guidance and criteria.

Submitted 8/12/2022

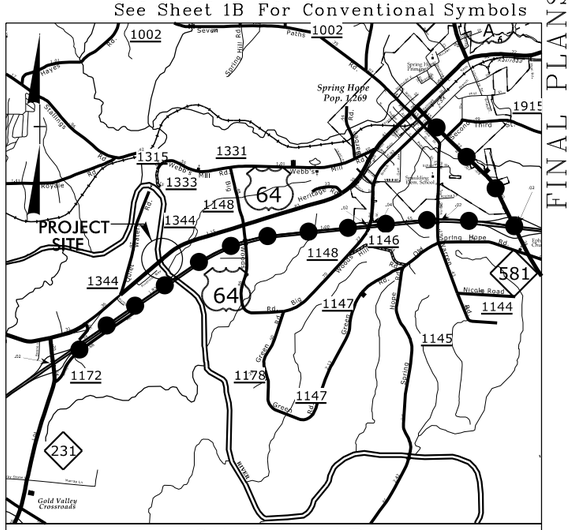
09/08/99

TIP PROJECT: B-5670

CONTRACT: C204478

See Sheet 1A For Index of Sheets
See Sheet 1B For Conventional Symbols

FINAL PLANS



VICINITY MAP
DETOUR ROUTE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

NASH COUNTY

LOCATION: REPLACE BRIDGE NO. 29 OVER TAR RIVER ON US 64 ALT

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

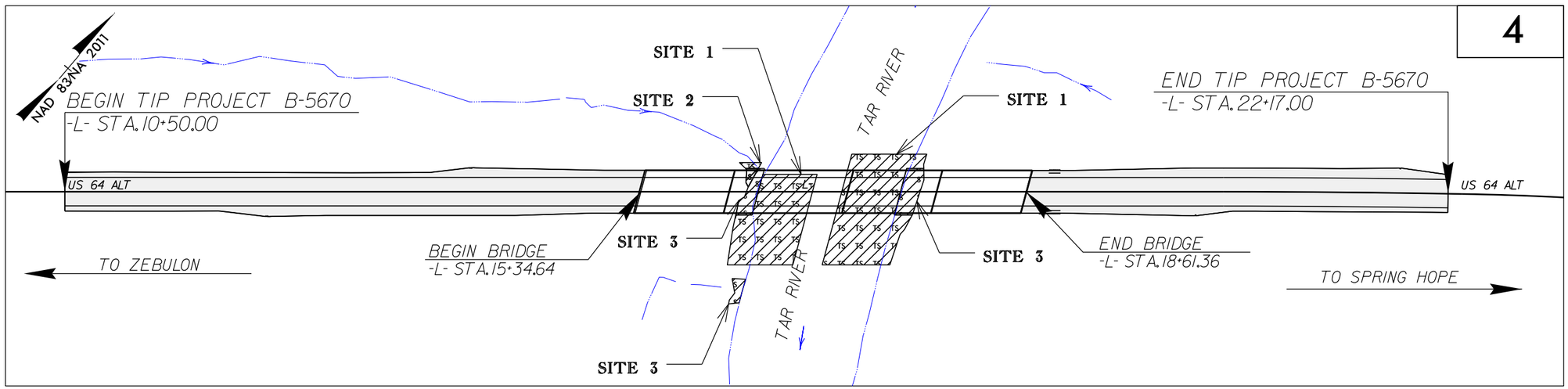
PERMIT DRAWING
SHEET 1 OF 6

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5670	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
45625.1.1		P.E.
45625.2.1		ROW/UTIL
45625.3.1		CONSTR.

WETLAND AND STREAM IMPACTS

4



A DESIGN EXCEPTION WILL BE REQUIRED FOR MAXIMUM GRADE.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

PLANS: 50 25 0 50 100

PROFILE (HORIZONTAL): 50 25 0 50 100

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2022 = 2652
ADT 2042 = 3261
K = 8 %
D = 55 %
T = 6 % *
V = 60 MPH
* TTST =2% DUAL= 4%
MAJOR COLLECTOR

REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY TIP PROJECT B-5670 = .159 MILES
LENGTH OF STRUCTURE TIP PROJECT B-5670 = .062 MILES
TOTAL LENGTH OF TIP PROJECT B-5670 = .221 MILES

Prepared in the Office of:
KCI Associates of N.C., P.A.
4505 Falls of Neuse Road, Suite 400
Raleigh, NC 27609
Phone (919) 783-9214
Fax (919) 783-9266

Plans Prepared For:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr.
Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: DEC. 21, 2021

LETTING DATE: NOV. 15, 2022

DEWAYNE L. SYKES, P.E.
PROJECT ENGINEER

BRYAN E. HOUGH, P.E.
PROJECT DESIGN ENGINEER

NCDOT CONTACT: KRISTY ALFORD, P.E.
STRUCTURES MANAGEMENT UNIT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

8/9/2022
M:\2018\25180945.23 B-5670\Hydraulics\PERMITS_Environmental\Wetland Impacts\Drawings\B-5670_prm_tsh.dgn
Mary.Kegelman

PERMIT DRAWING
SHEET 2 OF 6

PROJECT REFERENCE NO.	SHEET NO.
B-5670	PRM-2
R/W SHEET NO.	4

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 036853 ENGINEER BRYAN E. HAIGH

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 033860 ENGINEER SEAN M. YOUNG

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Raleigh, NC 27609
Phone (919) 783-9214 • Fax (919) 783-9266

REVISIONS 8/17/99

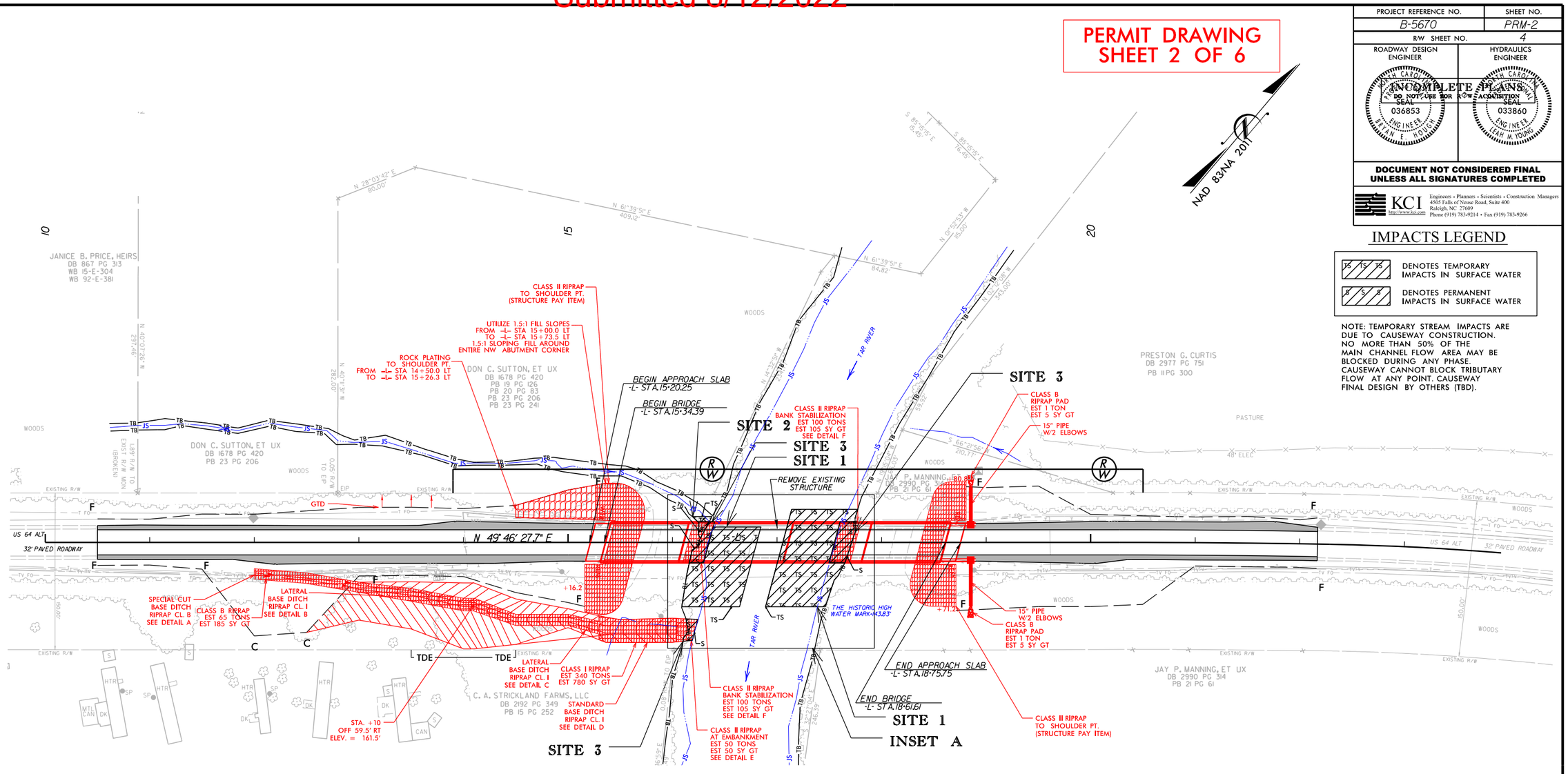
NAD 83/NA 2011

IMPACTS LEGEND

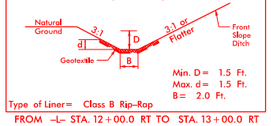
JS TS JS — DENOTES TEMPORARY IMPACTS IN SURFACE WATER

S S S — DENOTES PERMANENT IMPACTS IN SURFACE WATER

NOTE: TEMPORARY STREAM IMPACTS ARE DUE TO CAUSEWAY CONSTRUCTION. NO MORE THAN 50% OF THE MAIN CHANNEL FLOW AREA MAY BE BLOCKED DURING ANY PHASE. CAUSEWAY CANNOT BLOCK TRIBUTARY FLOW AT ANY POINT. CAUSEWAY FINAL DESIGN BY OTHERS (TBD).

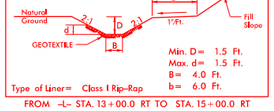


DETAIL A
SPECIAL CUT BASE DITCH
(Not to Scale)



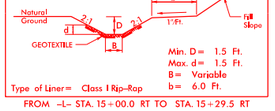
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 2.0 Ft.
Type of Liner= Class B Rip-Rap
FROM -L- STA. 12+00.0 RT TO STA. 13+00.0 RT

DETAIL B
LATERAL BASE DITCH
(Not to Scale)



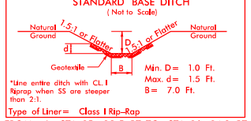
Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= 4.0 Ft.
b= 6.0 Ft.
Type of Liner= Class I Rip-Rap
FROM -L- STA. 13+00.0 RT TO STA. 15+00.0 RT

DETAIL C
LATERAL BASE DITCH
(Not to Scale)



Min. D= 1.5 Ft.
Max. d= 1.5 Ft.
B= Variable
b= 6.0 Ft.
Type of Liner= Class I Rip-Rap
FROM -L- STA. 15+00.0 RT TO STA. 15+29.5 RT

DETAIL D
STANDARD BASE DITCH
(Not to Scale)



Min. D= 1.0 Ft.
Max. d= 1.5 Ft.
B= 7.0 Ft.
*Line entire ditch with CL I Riprap when SS are steeper than 2:1.
Type of Liner= Class I Rip-Rap
FROM -L- STA. 15+29.5 RT TO STA. 16+14.2 RT

DETAIL E
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner= CL 'II' Rip-Rap
FROM -L- STA. 16+04.2 RT TO STA. 16+24.5 RT

DETAIL F
BANK STABILIZATION
(Not to Scale)

Type of Liner= CL 'II' Rip-Rap
FROM -L- STA. 16+09.7 CL TO STA. 16+40.3 CL
FROM -L- STA. 17+49.7 CL TO STA. 17+80.3 CL

FOR -L- PROFILE SEE SHEET 5
FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-?

8/11/2022
8/11/2022 8:25:18 AM
B-5670\Hydraulics\PERMITS\Environmental\Wetland Impacts\Drawings\B-5670_prm_psh.dgn
MarkKeselman

Submitted 8/12/2022

PERMIT DRAWING
SHEET 3 OF 6

PROJECT REFERENCE NO.	SHEET NO.
B-5670	PRM-3
R/W SHEET NO.	4

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 036853 ENGINEER BRYAN E. HOUGH

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL SEAL 033860 ENGINEER SEAN M. YOUNG

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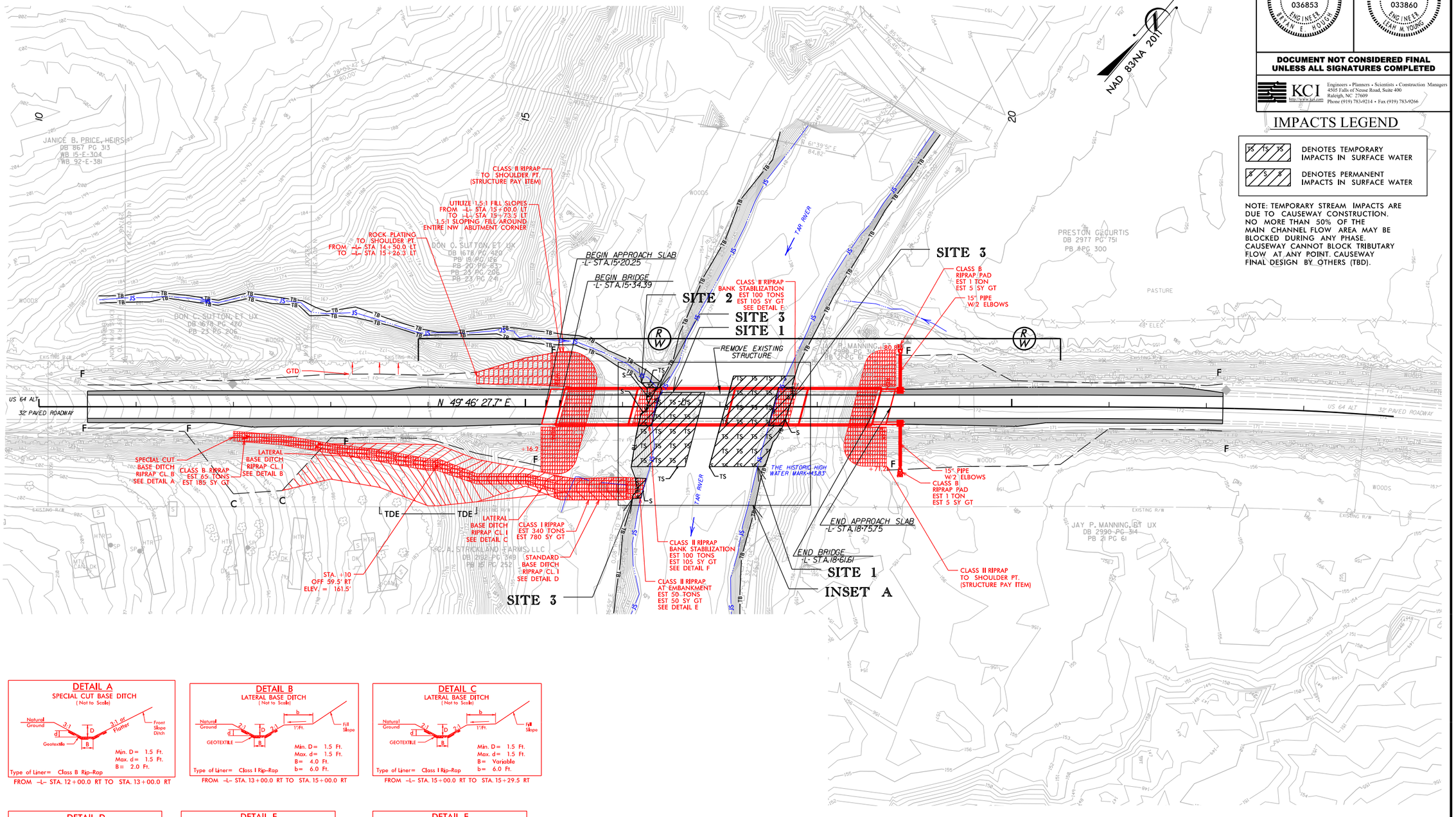
NAD 83NA 2011

IMPACTS LEGEND

JS JS JS — DENOTES TEMPORARY IMPACTS IN SURFACE WATER

S S S — DENOTES PERMANENT IMPACTS IN SURFACE WATER

NOTE: TEMPORARY STREAM IMPACTS ARE DUE TO CAUSEWAY CONSTRUCTION. NO MORE THAN 50% OF THE MAIN CHANNEL FLOW AREA MAY BE BLOCKED DURING ANY PHASE. CAUSEWAY CANNOT BLOCK TRIBUTARY FLOW AT ANY POINT. CAUSEWAY FINAL DESIGN BY OTHERS (TBD).



DETAIL A
SPECIAL CUT BASE DITCH
(Not to Scale)

Min. D = 1.5 Ft.
Max. d = 1.5 Ft.
B = 2.0 Ft.

Type of Liner= Class B Rip-Rap

FROM -L- STA. 12+00.0 RT TO STA. 13+00.0 RT

DETAIL B
LATERAL BASE DITCH
(Not to Scale)

Min. D = 1.5 Ft.
Max. d = 1.5 Ft.
B = 4.0 Ft.
b = 6.0 Ft.

Type of Liner= Class I Rip-Rap

FROM -L- STA. 13+00.0 RT TO STA. 15+00.0 RT

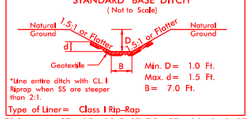
DETAIL C
LATERAL BASE DITCH
(Not to Scale)

Min. D = 1.5 Ft.
Max. d = 1.5 Ft.
B = Variable
b = 6.0 Ft.

Type of Liner= Class I Rip-Rap

FROM -L- STA. 15+00.0 RT TO STA. 15+29.5 RT

DETAIL D
STANDARD BASE DITCH
(Not to Scale)



Min. D = 1.0 Ft.
Max. d = 1.5 Ft.
B = 7.0 Ft.

*Use entire ditch with CL I Riprap when SS are steeper than 2:1.

Type of Liner= Class I Rip-Rap

FROM -L- STA. 15+29.5 RT TO STA. 16+14.2 RT

DETAIL E
RIP RAP AT EMBANKMENT
(Not to Scale)

Type of Liner= CL II Rip-Rap

FROM -L- STA. 16+04.2 RT TO STA. 16+24.5 RT

DETAIL F
BANK STABILIZATION
(Not to Scale)

Type of Liner= CL II Rip-Rap

FROM -L- STA. 16+09.7 CL TO STA. 16+40.3 CL
FROM -L- STA. 17+49.7 CL TO STA. 17+80.3 CL

FOR -L- PROFILE SEE SHEET 5
FOR STRUCTURE PLANS SEE SHEETS S-1 THRU S-?

REVISIONS 8/17/99

8/11/2022
8:41:25 AM
B-5670\Hydraulics\PERMITS\Environmental\Wetland Impacts\Drawings\B-5670_prm_psh_con.dgn
Mark.Kegelman

Submitted 8/12/2022

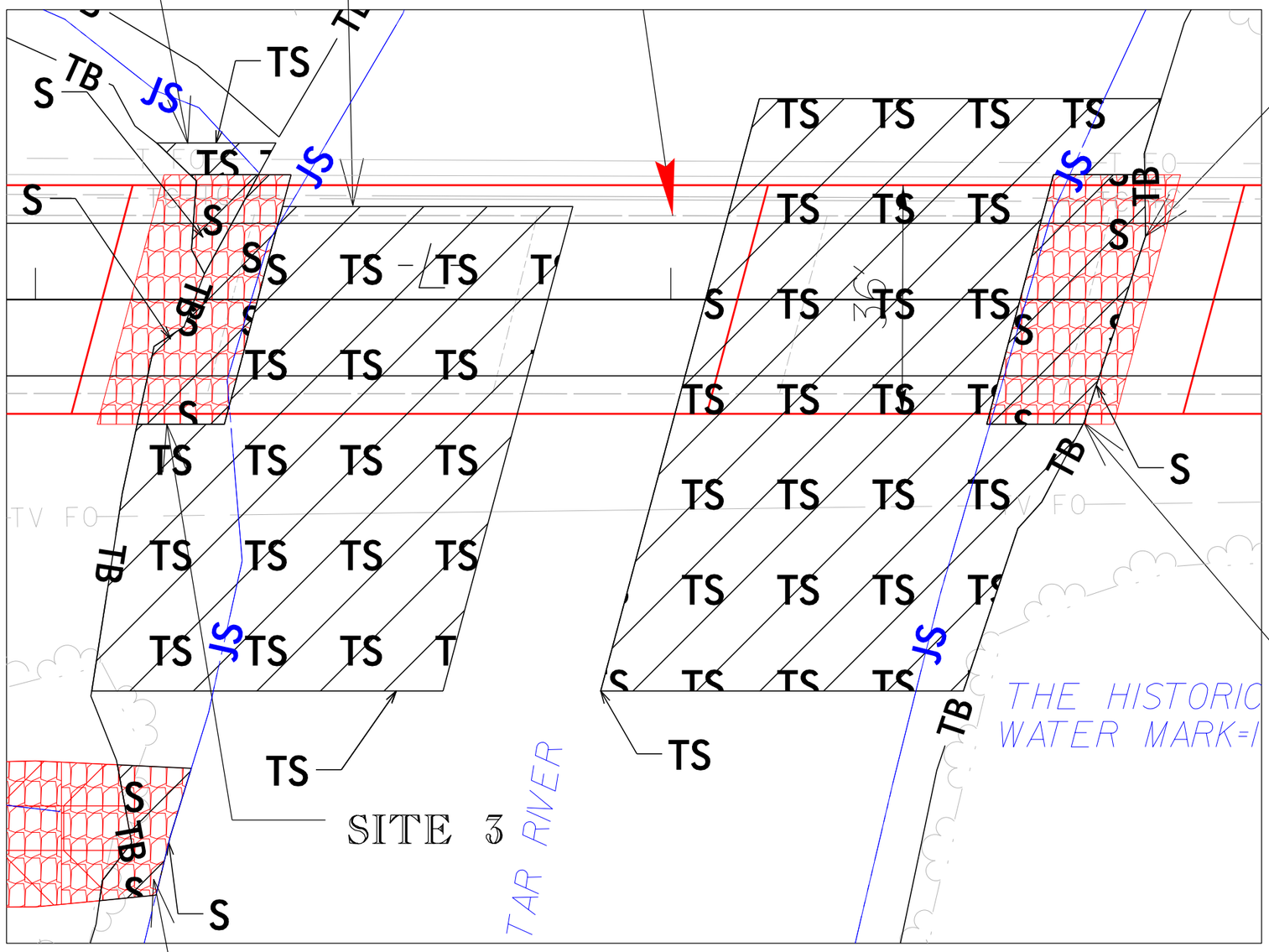
PROJECT REFERENCE NO.	SHEET NO.
B-5670	PRM-4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR ROW ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 4 OF 6

INSET A



NAD 83/2011

NOTE: TEMPORARY STREAM IMPACTS ARE DUE TO CAUSEWAY CONSTRUCTION. NO MORE THAN 50% OF THE MAIN CHANNEL FLOW AREA MAY BE BLOCKED DURING ANY PHASE. CAUSEWAY CANNOT BLOCK TRIBUTARY FLOW AT ANY POINT. CAUSEWAY FINAL DESIGN BY OTHERS (TBD).

IMPACTS LEGEND

TS TS TS	DENOTES TEMPORARY IMPACTS IN SURFACE WATER
S S S	DENOTES PERMANENT IMPACTS IN SURFACE WATER

10' 0' 10' 20'
5'

8/17/22
8/11/2022
R:\2018\2518019145.23 B-5670\Hydraulics\PERMITS_Environmental\Wetland Impacts\Drawings\B-5670_prm_Inset_A.dgn
Mark.Kegelman

ROADWAY DESIGN ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036853 BRIAN E. HOUGH

HYDRAULICS ENGINEER — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033860 LEAH M. YOUNG

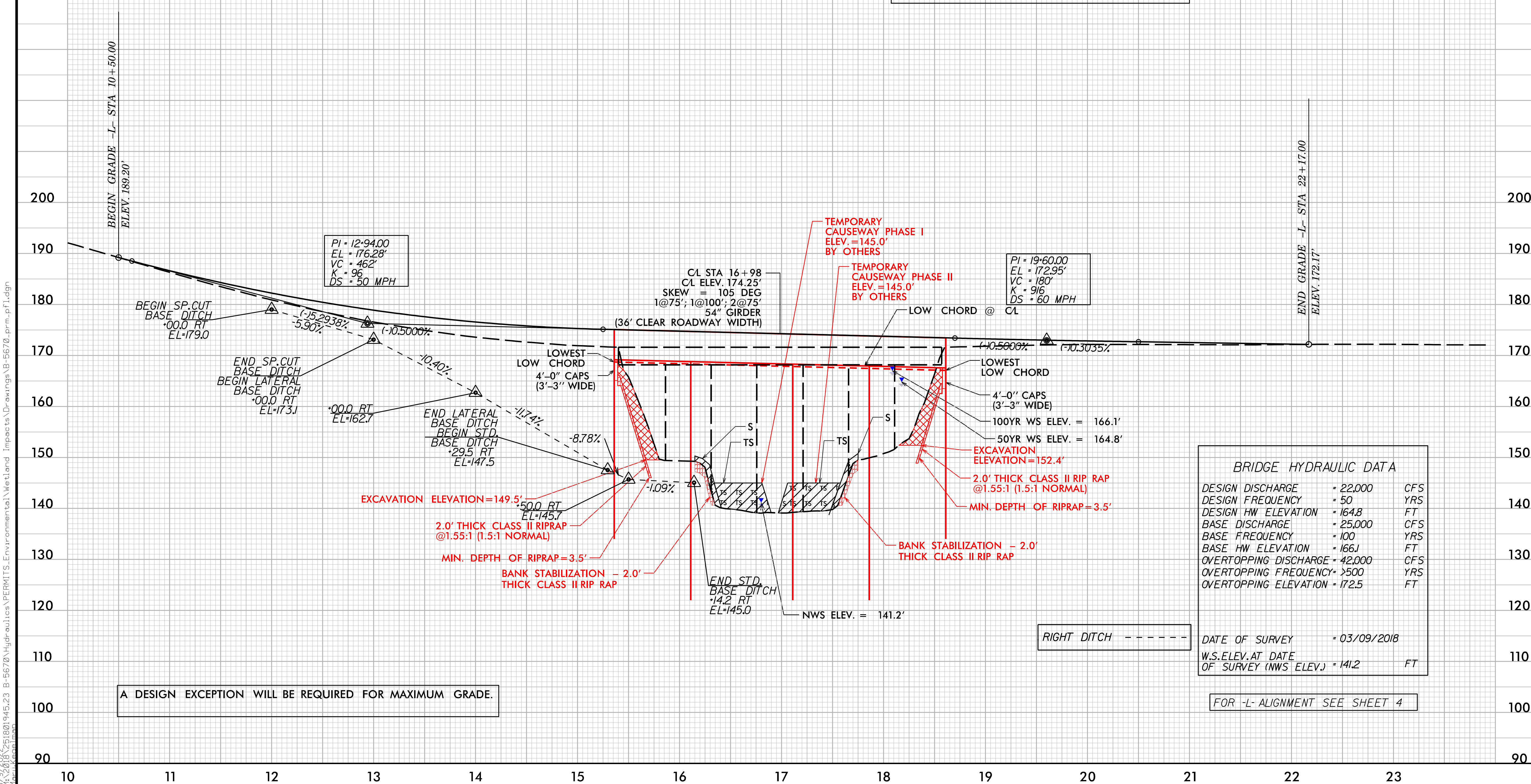
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING
SHEET 5 OF 6

-L-

NOTE: NO MORE THAN 50% OF THE MAIN CHANNEL FLOW AREA MAY BE BLOCKED DURING ANY PHASE. CAUSEWAY CANNOT BLOCK TRIBUTARY FLOW AT ANY POINT. CAUSEWAY FINAL DESIGN BY OTHERS (TBD).

TBM #2 – RR SPIKE IN BASE OF 30" PINE
-L- STA. 18+92.75, 68.36' LT
EL = 158.60'



BRIDGE HYDRAULIC DATA		
DESIGN DISCHARGE	= 22,000	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 164.8	FT
BASE DISCHARGE	= 25,000	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 166.1	FT
OVERTOPPING DISCHARGE	= 42,000	CFS
OVERTOPPING FREQUENCY	= >500	YRS
OVERTOPPING ELEVATION	= 172.5	FT
DATE OF SURVEY	= 03/09/2018	
W.S.ELEV. AT DATE OF SURVEY (NWS ELEV.)	= 141.2	FT

A DESIGN EXCEPTION WILL BE REQUIRED FOR MAXIMUM GRADE.

FOR -L- ALIGNMENT SEE SHEET 4

Submitted 8/12/2022

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND 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)	SURFACE WATER IMPACTS: 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+09	TEMPORARY CAUSEWAY							0.21		97	
	TO 17+75	CONSTRUCTION										
2	-L- 15+96 LT	TEMPORARY CAUSEWAY							< 0.01		7	
	TO 16+38 LT	CONSTRUCTION										
3	-L- 16+16	BANK						0.03		62		
	TO 17+75 &	STABILIZATION										
	-L- 16+10 RT											
	TO- 16+23 RT											
TOTALS*:								0.03	0.21	62	104	0

*Rounded totals are sum of actual impacts

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
August 2022
Nash
B-5670
45625.1.1
SHEET 6 OF 6

Revised September 2014