STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

January 18, 2023

MEMORANDUM TO: Division Environmental and Construction Units

FROM: Michael A. Turchy, ECAP Group Leader
Environmental Analysis Unit

SUBJECT: Environmental Permit for the Replacement of Bridge 15 on SR 1505 over Wildcat Swamp, Northampton, County, Division .,
TIP: 17BP.1.R.90/ B-4920.

Please find enclosed the following permit for this project:

Agency	Permit Type	Permit Expiration
US Army Corps of Engineers Section 404 Clean Water Act Permit	Nationwide 3 [non-notifying]	March 14, 2026
NC Division of Water Resources Section 401 Water Quality Certification	General Certification No. 4236 [NW3] [non-notifying]	March 14, 2026

Work is authorized by the above referenced permit provided it is accomplished in strict accordance with the permitted plans.

The Environmental Coordination and Permitting Group or the Division Environmental Office must be consulted if any deviation from the permit(s) is required.

The General Conditions and Certifications for Nationwide and Regional Permits can be referenced at: https://xfer.services.ncdot.gov/pdea/PermIssued/_General_Conditions_and_Certifications/

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

PROJECT COMMITMENTS

T.I.P Project No. 17BP.1.R.90
Bridge No. 650015 on SR 1505 (NCHS East Road)
Over Wildcat Swamp
Northampton County
WBS Element No. 17BP.1.R.90

COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

NCDOT Division 1 – Emergency Services

Contact Northampton County emergency services at (252) 534-6811 at least one month prior to the beginning of construction.

NCDOT Division 1 – Northampton County Schools

Contact Northampton County School System at (252) 534-1371 at least one month prior to the beginning of construction.

NCDOT Division 1 – Access

Access will be maintained throughout construction for local traffic as well as for farms and active fields that are located near both ends of the bridge. Early coordination efforts will be implemented with farmers to minimize impact on operations and avoid project delays.

NCDOT Hydraulics Unit – FEMA Coordination

The Hydraulics Unit will coordinate with the NC Floodplain Mapping Program (FMP), to determine status of project with regard to applicability of NCDOT'S Memorandum of Agreement, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR). This project involves construction activities on or adjacent to FEMA-regulated stream(s). Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying that the drainage structure(s) and roadway embankment that are located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

COMMITMENTS FROM PERMITTING

No special commitments were made during permitting

North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS

(Version 2.08; Released April 2018)

WBS Element:	17BP1R90	TIP No.:	17BP1R90	County(ies):	Northampton	Page	1	of	1

General Project Information

WBS Element:	17BP1R90	**TIP Number:**	17BP1R90	**Project Type:**	Bridge Replacement	**Date:**	1/3/2019
NCDOT Contact:	David Stutts, PE	**Contractor / Designer:**	Kisinger Campo & Associates				
Address:	1000 Birch Ridge Drive Raleigh, North Carolina 27610			**Address:**	301 Fayettville St., Suite 1500 Raleigh, NC 27604		
Phone:	(919) 707-6400			**Phone:**	(919) 822-7839		
Email:	dstutts@ncdot.gov			**Email:**	jmcnulty@kcaeng.com		
City/Town:	Conway	**County(ies):**	Northampton				
River Basin(s):	Chowan	**CAMA County?**	No				
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	913 ft	**Surrounding Land Use:**	Mostly aggricultural, with sparse residential buildings around the area
	Proposed Project		**Existing Site**
Project Built-Upon Area (ac.)	0.9 ac.		0.9 ac.
Typical Cross Section Description:	The proposed typical section on either side of the bridge will be normal crown with cross slope of 0.025, and consist of two 11' lanes with 4' paved shoulder The bridge typical section will be 0.025 normal crown, and consist of two 11' lanes with 4'-5" shoulder.		Existing roadways consists of two 11' lanes, with 3' unpaved shoulders.
Annual Avg Daily Traffic (veh/hr/day):	Design/Future: 900 Year: 2015		Existing: 900 Year: 2015
General Project Narrative: (Description of Minimization of Water Quality Impacts)	State project 17BR.1.R.90 will consist of replacing the structurally deficient NCDOT bridge #650015 between SR 1500 and US HWY 158 over Wildcat Swamp. The proposed replacement structure is a 2-span (1@55'-0", 1@50'-0") 21" Cored Slab with 4.0' caps with an out-to-out deck width of 33' which will replace the existing 2-span (2@30'-3). Roadway fill slopes throughout the project will vary between 2.5:1 and 6:1. Side slopes outside of wetland boundaries are flatter (4:1-6:1) to encourage a diffuse flow pattern and passive stormwater treatment. Fill slopes in close proximity to wetlands are steeper (3:1) to minimize permanent fill impacts in wetlands. Stormwater runoff from the bridge and roadway will be collected by traffic bearing grated inlets where it will be outlet at dissipator rip rap pads. Dissipator rip rap pads are used to minimize the velocity of water into surrounding wetlands. 1 ditch, located at the SouthEast corner of the project will be used to maintain existing drainage patterns. No deck drains will be used for this project.		

Waterbody Information

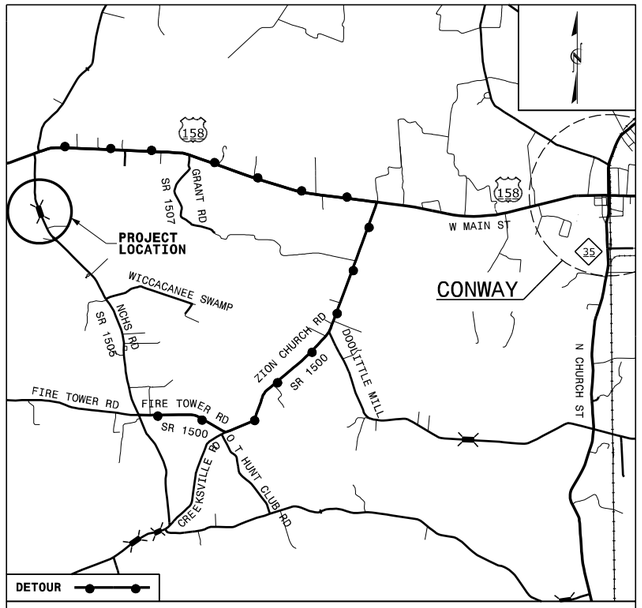
Surface Water Body (1):	Wildcat Swamp	**NCDWR Stream Index No.:**	25-4-8-2		
NCDWR Surface Water Classification for Water Body		**Primary Classification:**	Class C		
		Supplemental Classification:	Nutrient Sensitive Waters (NSW)	None	
Other Stream Classification:					
Impairments:	None				
Aquatic T&E Species?	No Comments:				
NRTR Stream ID:	N/A			**Buffer Rules in Effect:**	N/A
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)					

09/08/99

TIP PROJECT: 17BP.1.R.90

CONTRACT: C204519

See Sheet 1A For Index of Sheets



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

NORTHAMPTON COUNTY

LOCATION: BRIDGE NO. 650015 ON SR 1505 (NCHS ROAD) OVER WILDCAT SWAMP

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

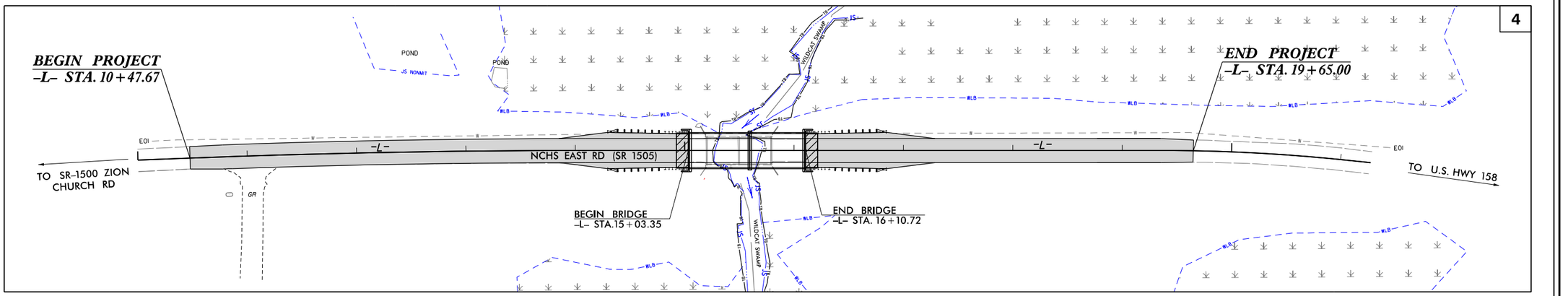
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.1.R.90	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
17BP.1.R.90		PE
17BP.1.R.90		R/W, UTILITIES
17BP.1.R.90		CONSTRUCTION

WETLANDS & STREAM IMPACTS
1/3/2020

PERMIT DRAWING
SHEET 1 OF 8

NAD 83 NC GRID 2011



CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II
THIS PROJECT IS NOT LOCATED WITHIN MUNICIPAL BOUNDARIES.
THIS IS NOT A CONTROL OF ACCESS PROJECT.

PRELIMINARY PLANS — DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS — DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2015 = 900
V = 55 MPH
T = 6%*
(*TTST 3% + DUALS 3%)

FUNC CLASS = LOCAL

SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT 17BP.1.R.90	=	0.153 MILES
LENGTH STRUCTURES TIP PROJECT 17BP.1.R.90	=	0.020 MILES
TOTAL LENGTH TIP PROJECT 17BP.1.R.90	=	0.173 MILES

NCDOT CONTACT: DAVID STUTTS, PE
SMU PROJECT MANAGER

Prepared in the Office of:

KCA KISINGER CAMPO & ASSOCIATES
NC FIRM LICENSE No: C-1506
301 Fayetteville St., Suite 1500
Raleigh, NC 27601
(919)882-7839

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: XX/XX/2019

LETTING DATE: 05/19/2020

DARREN P. BRANDES, PE
PROJECT ENGINEER

JASON DEBONE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

_____ P.E.
SIGNATURE:

ROADWAY DESIGN ENGINEER

_____ P.E.
SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

8/17/99

REVISIONS

F F DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

PROJECT REFERENCE NO.	SHEET NO.
17BP1.R.90	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
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PERMIT DRAWING
SHEET 2 OF 8

STA = 14+83 L RT
Q10 = 0.3 cfs
V10 = 0.5 fps

SITE 1

SITE 2

NAD 83 NC GRID FIPS 2011

POND

JS NONMT

WOODS

4' WIRE FENCE

EXIST R/W

CTLCL-CENTURYLINK-SIZE-TYPE-LIGHT-OWN

650015-2

EOI

NCHS EAST RD (SR 1505) 20' PAVED ROADWAY

N 22° 41' 45.4" W -L- -EL-

N 20° 29' 43.9" W -L- -EL-

N 14° 45' 08.4" W -L-

BL-102

15" RCP

GR

PUE

DUE

E

WLB

JS

ST

-L- SR 1505 (OVER WILDCAT SWAMP)

HYDRAULIC BRIDGE DATA

DESIGN DISCHARGE	= 600	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 91.9	FT
BASE DISCHARGE	= 1077	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 93.1	FT
OVERTOPPING DISCHARGE	= 3000	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 95.8	FT

BMI#1
-BL- STA.17+75.01, 18.12' RT
-L- STA.14+24.40, 30.88' LT
EL.93.18
BENCH TIE NAIL IN 14" OAK

BEGIN GRADE
-L- STA. 10+47.67
EL. 97.39

PI = 11+26.00
EL = 96.69'
VC = 155'
K = 130
DS > 55

PI = 16+72.00
EL = 98.33'
VC = 150'
K = 115
DS > 55

PI = 19+07.00
EL = 95.98'
VC = 112'
K = 117
DS > 55

END GRADE
-L- STA. 19+65.00
EL. 95.96

97.39

95.96

(-)0.8941%

(+)0.3000%

(-)0.7880%

(+)0.3000%

(-)1.0000%

(-)1.0000%

(-)0.0429%

PROPOSED 100YR WSELV = 93.1'
BEGIN DITCH RT STA 13+00 -L- ELEV= 92.88'

PROPOSED 25YR WSELV = 91.9'

END DITCH RT STA 15+00 -L- ELEV= 91.3'

OBSERVED WSEL = 88.0 ON 05-08-19

NWSEL = 88.8'

CLASS II RIP RAP
BENCH EL. 91.0'

100
90
80

10 11 12 13 14 15 16 17 18 19 20 21

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
17BPJR.90	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

F F DENOTES FILL IN WETLAND

* * * DENOTES MECHANIZED CLEARING

SITE ENLARGEMENT

STA = 14+83 L RT
Q10 = 0.3 cfs
V10 = 0.5 fps

PERMIT DRAWING
SHEET 3 OF 8

SITE 1

SITE 2

WOODS

Unknown

EXIST

PUE DUE PUE DUE PUE

UE DUE DUE PUE PUE

WLB

TB JS

SCALE:
1"=20'

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PERMIT DRAWING
SHEET 4 OF 8

F F DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

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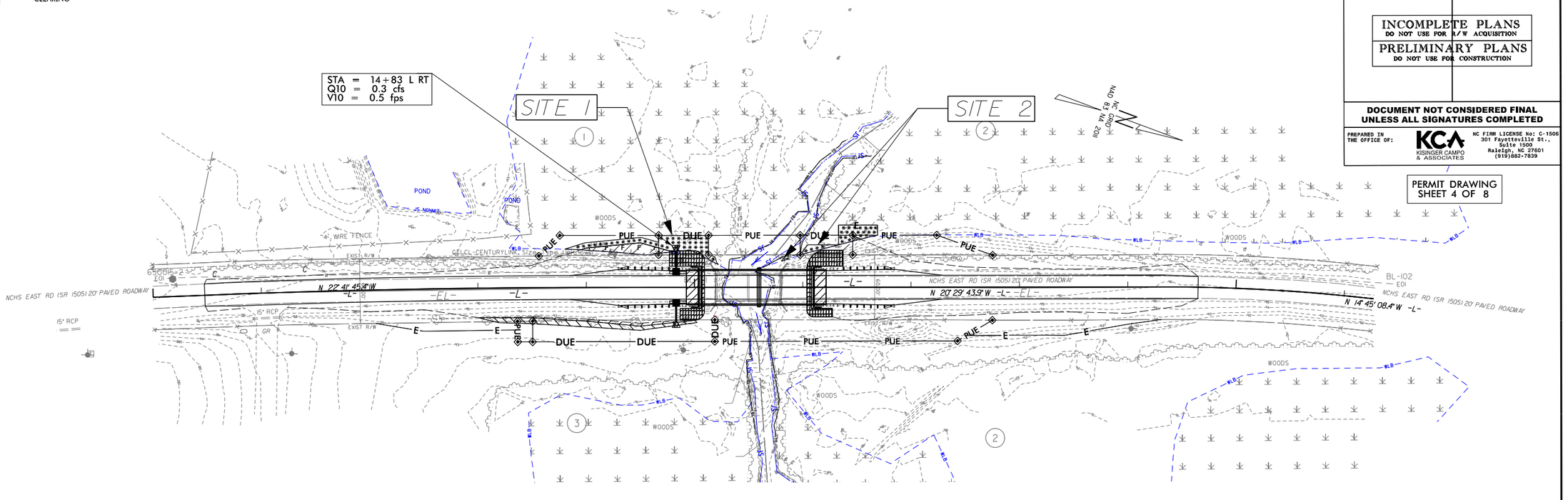
SITE 1

SITE 2

NAD 83 NC GRID FIPS 2301



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BENCH EL. 91.0

100
90
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REVISIONS

8/17/99

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
17BPJR.90	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

F F DENOTES FILL IN WETLAND

* * * DENOTES MECHANIZED CLEARING

SITE ENLARGEMENT

STA = 14+83 L RT
Q10 = 0.3 cfs
V10 = 0.5 fps

PERMIT DRAWING
SHEET 5 OF 8

SITE 1

SITE 2

PUE DUE PUE DUE

DUE PUE PUE

WOODS

Unknown

WLB

EXIST

SCALE:
1"=20'

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imcmullu AT KYA078

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NC FIRM LICENSE No: C-1506
301 Fayetteville Street, Suite 1600
Raleigh, NC 27601
(919)882-7529
0 2.5 5
PROJ. REFERENCE NO. 17BP.1.R.90
SHEET NO. X-3

PERMIT DRAWING SHEET 6 OF 8

14+50.00

PUE | EXIST. ROW | 0.08 | 0.025 | 0.025 | 0.08 | EXIST. ROW | DUE

3:1 | 3:1 | 96.63 | 91.69

14+00.00

PUE | EXIST. ROW | 0.08 | 0.025 | 0.025 | 0.08 | EXIST. ROW | DUE

3:1 | 3:1 | 96.67 | 92.09

13+50.00

EXIST. ROW | 0.08 | 0.025 | 0.025 | 0.08 | EXIST. ROW | PUE

3:1 | 3:1 | 96.71 | 92.48

6/23/16

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(919)882-7500

0 2.5 5

PROJ. REFERENCE NO.	SHEET NO.
17BP.1.R.90	X-5

PERMIT DRAWING
SHEET 7 OF 8

75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

110 105 100 95 90 85

PUE | EXIST. ROW | EXIST. ROW | PUE

3:1 | 0.08 | 0.025 | 0.025 | 0.08 | 4:1

96.34

17+50.00

PUE | EXIST. ROW | EXIST. ROW | PUE

3:1 | 0.08 | 0.025 | 0.025 | 0.08 | 4:1

96.49

17+00.00

E | PUE | EXIST. ROW | EXIST. ROW | PUE

3:1 | 0.08 | 0.025 | 0.025 | 0.08 | 3:1

96.62

16+50.00

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jmcnulty AT KCA078)

WETLAND AND SURACE WATER IMPACTS SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	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	13+80 / 15+31	Proposed (Begin Bridge) End Bent	0.01			0.03						
2	15+59.54	Proposed Bent						< 0.01				
2	15+69 / 16+61	Proposed (End Bridge) End Bent	< 0.01			0.01						
TOTALS*:			0.01			0.04		< 0.01		0	0	0

*Rounded totals are sum of actual impacts

NOTES:
Site 2:

Permanent Fill in Wetlands (sq ft): 9

Permanent SW Impacts for permanent piles:
8 piles at 0.15 sq. ft./piles = 1.2 sq. ft

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
1/3/2019
Northampton
17BP1R90
-
SHEET 8 OF 8