



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

December 11, 2018

Greg Daisey
NC Department of Environmental Quality
Division of Coastal Management
401 S. Griffin St., Suite 300
Elizabeth City, NC 27909

Subject: **Supplemental Information for the CAMA Major Development Permit Application** for US 17 Business / NC 37 from Hertford to north of NC 37; including replacement of Bridge No. 8 in Perquimans, TIP Number R-4467

Dear Mr. Daisey:

The North Carolina Department of Transportation (NCDOT) has received your August 31, 2018 request for additional information with regards to the August 6, 2018 permit application for the Subject project. The information is provided as an itemized list in conjunction with your August 31, 2018 request.

1. (1) Pivot and Resting Piers Power Cable Installation

Directional bores need to start and end on firm ground where the equipment can rest. Since the power cable will enter the water along the first rest pier traveling from the Hertford side, and then resurface at both the pivot pier and second rest pier, this is not possible. The Team considered a cut and cover trench using a barge mounted clam shell, but in the Teams experience (and via agency input on a recent job in Florida), this method caused as much, if not more, turbidity than the diver jetted method. As such, we are proposing the most inobtrusive installation method of which we are aware. It will be installed outside of the February 15 – June 30 moratorium.

1. (2) Removal of Existing Causeway

The causeway of the existing roadway will be removed once the new roadway and bridge are open to the public. As much of the existing roadway and underlying causeway will be removed as possible without resulting in excessive damage to the surrounding wetlands. The causeway will then be backfilled where required such that there are not depressional areas lower than the adjacent wetlands. The objective is to leave the area as

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: NCDOT.GOV

LOCATION:
CENTURY CENTER, BUILDING B
1000 BIRCH RIDGE DRIVE
RALEIGH NC, 27610-4328

close to a natural state as possible with a mix of upland areas to act as wildlife refugia while also restoring wetlands. This was discussed and agreed to during the Merger Process. Turbidity will be controlled in accordance with NCDOT required BMPs, which will include a combination of silt fences and/or turbidity curtains.

The amount, depth, and composition of the fill material is unknown. As noted in the 4C Merger Meeting, the decision as to what and how much should be removed will be made once the removal process begins. When construction is approximately 1-month from commencing removal of the roadway, NCDOT will notify agency personnel so they can schedule to observe the material removal and offer opinions as to when continued removal is no longer reasonable.

1. (3) Temporary Boat Landing and Barge Mooring

The purpose of the temporary boat landing is to provide a gangway to access the barges and small boats needed to relay equipment. An 18-inch pile will be used to hold the gangway in place. The barges will be moored in temporary mooring locations shown in Figure A-1 in Appendix A. A schematic of the mooring locations is also included in Figure A-1. The location of the gangway is shown on Permit Drawings 2 and 3 of 17. A picture of an example gangway (Figure A-2) used on a recent project is attached in Appendix A.

1. (4) Cofferdam

The proposed cofferdam will be constructed of steel sheet pile surrounding the existing pivot pier installed with a vibratory hammer. The sheet pile cofferdam will be used to contain demolition debris from the existing pivot pier and to provide a means of dewatering if necessary. The current schedule shows the cofferdam being installed 10/15/20 and being removed 1/5/21.

1. (5) Observation Deck

Included in the design for the new bridge are two 6'x 10' observation decks. These decks were added to replicate and enhance the scenic aspects of the Perquimans River for the pedestrian public that were available on the original bridge. These decks are located on the downstream side of the bridge at Bent #5 (-L- 32+71.00) and Bent #12 (-L- 38+87.00), which overlooks the turtle log. They are a part of the deck superstructure and will be accessed by the 5.5' sidewalk along the downstream side of the bridge. No additional in-water support is needed for these observation decks.

1. (6) Existing Bridge Demolition

The pivot pier and the existing deck will be wire sawed into manageable pieces for removal by crane. Following removal of the deck, girders, and bent caps, piles will be extracted with vibratory hammers. If the existing piles are so deteriorated that they break apart during vibratory extraction, piles will be removed to a depth of 4 feet below existing mudline.

1. (7) Project History and Commitments

Project History

- The Project History through January 2018 can be found in Section III of the State Finding of No Significant Impact (SFONSI).
- This project was removed from the NCDOT NEPA/404 Merger Process in January 2015 at the merger team's request.
- Informal 4B and 4C meeting were held on 4/19/18 and 6/13/18 respectively.
- Public hearing to address concerns by affected residents was held on 8/23/18.

Project Commitments

Project commitments detailed in the SFONSI will be adhered to, when applicable, during all phases of the project's duration.

1. (8) Chain Link Fence

As agreed to with adjacent landowners when the project was in the Merger Process, chain link fences are part of the two retaining walls and bulkhead that are being constructed as part of this project. The fences will be 5' tall, black vinyl coated, placed just in front of the retaining walls and bulkhead, and installed in accordance with the NCDOT standards included in Appendix B. The fences were requested to stop/discourage people from accessing the river (primarily to fish) via private property.

2. Form DCM-MP-5

The navigational clearance of the existing bridge when the swing span is not open has been entered into Section 1, Section e (Appendix C).

3. Work Plans or Drawings

The following items have been provided:

- Date of plan original submittal and date of revision(s).
- Cross sections of the temporary boat landing are included in Appendix A (Figure A-3).
- Cross sections of the cofferdam with respect to navigable waters in Appendix A (Figure A-3.)
- The pivot and resting pier power cable has been added to the appropriate drawings. A separate cross-sectional drawing is provided in Appendix D (Permit Drawing Sheet 4 of 17) that shows the installation of the power cable.
- A drawing of the location of mooring buoys is provided in Appendix A (Figure A-1).

4. State Historic Preservation Documentation

The memorandum of agreement between the USCG, USACE, NCDOT, NCSHPO and ACHP regarding R-4467 is attached (Appendix E).

5. Work Trestles

All work trestles required to construct this project are shown and accounted for in the provided drawings.

We believe this correspondence provides the information requested in your August 31, 2018 letter. If you have any questions or need additional information, please contact Jason Dilday at either jldilday@ncdot.gov or (919) 707-6111.

PLAN SHEET CHANGES

Below is the list of changes that have occurred to the permit drawings (revisions attached) since the initial submittal of the permit application.

- Reconfigured right-of-way and driveway access from -L- 24+65 to 28+00 left. Affects parcel 1 (Hollowell), parcel 2 (Kennedy), parcel 3 (WVM LLC), parcel 4 (Jaklic), parcel 5 (Madre) and 6 (Vayda)(Permit Drawings Sheet 2 and 3 of 17).
- Reconfigured right-of-way, removed retaining wall, reconfigured driveway, revised bridge tender parking from -L- 26+50 to 28+50 right. Affects parcel 7 (Smith), parcel 8 (Malott), parcel 9 (Jaklic), parcel 10 (Winslow) and parcel 11 (Waddell)(Permit Drawings 2 and 3 of 17).
- Added curb and gutter to minimize utility impacts from -L- 60+16 to 67+30 left. Impacts parcel 16 (Underwood), parcel 22 (Lane), parcel 23 and 24 (McDonald), parcel 25 (Towe) and parcel 26 (Lewis)(Permit Drawings 12 and 13 of 17) .

Sincerely,

DocuSigned by:

Mack Christopher Rivenbark, III

AAAD1248B309416...

for

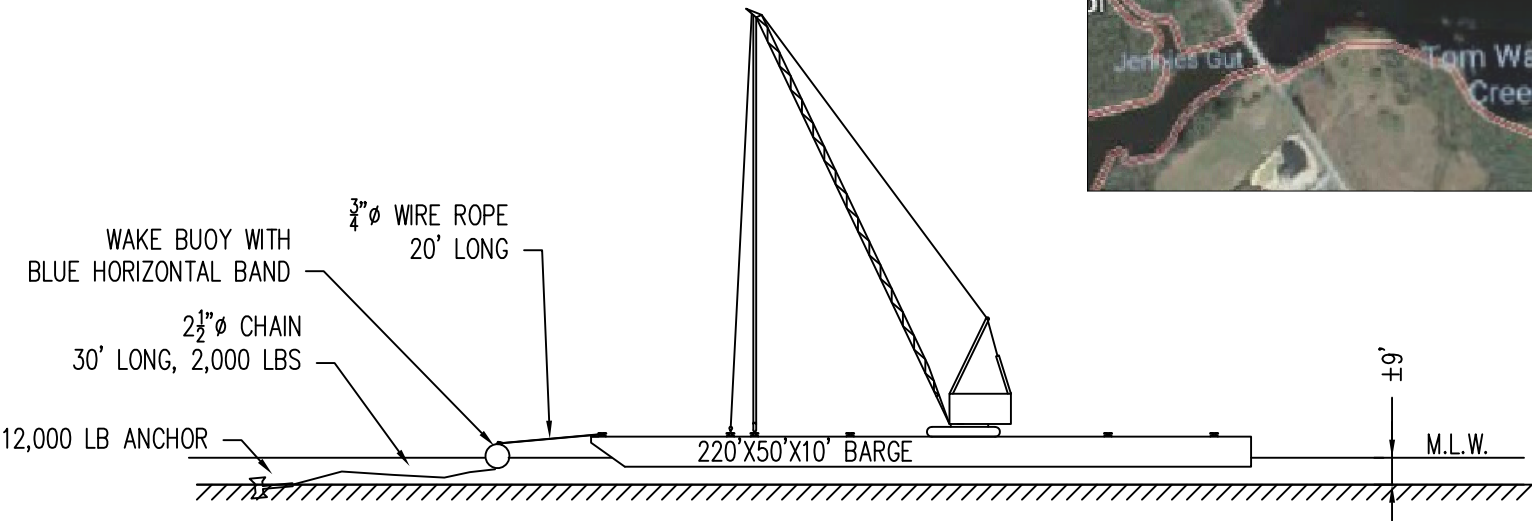
Philip S. Harris, III, P.E., C.P.M.
Environmental Analysis Unit Head

Figure A-1

NOTES:
MOORING #1: 36° 11.631 N 76° 27.538 W
MOORING #2: 36° 11.516 N 76° 27.501 W
MOORING #3: 36° 11.229 N 76° 26.977 W
MOORING #4: 36° 11.195 N 76° 26.836 W
SWING RADIUS = 30' +20' +220' = 270'
ALL BARGES AND BUOYS WILL BE MARKED WITH FLASHING LIGHTS



MOORING LOCATION MAP
SCALE: N.T.S.



MOORING SCHEMATIC
SCALE: 1/64" = 1'-0"


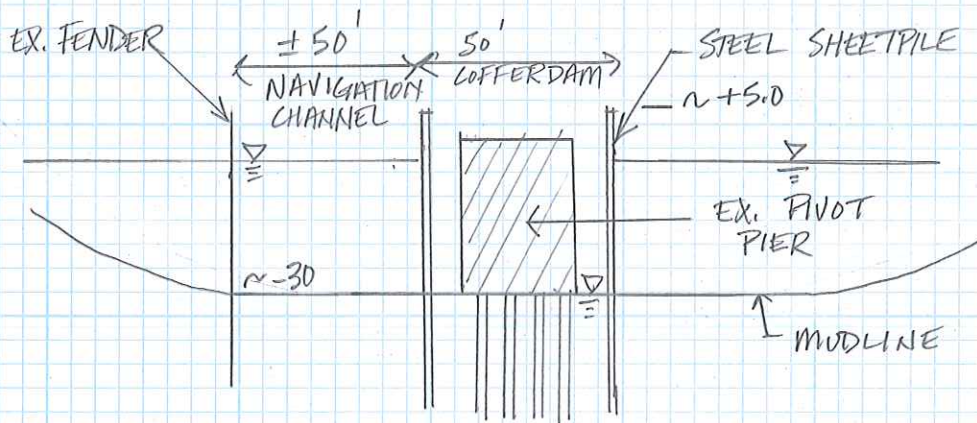
BARGE MOORINGS			
		6700 McLEAN WAY GLEN BURNIE, MD 21060 TEL. 410-553-6700 FAX 410-553-6718 www.mdeancont.com	
JOB NO.:	M-5850	DATE:	6/21/18
CLIENT:	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
PROJECT:	R-4467 PERQUIMANS RIVER BRIDGE		
LOCATION:	HERTFORD, NC		
BY:	JW	SHEET NO.	1 OF 1

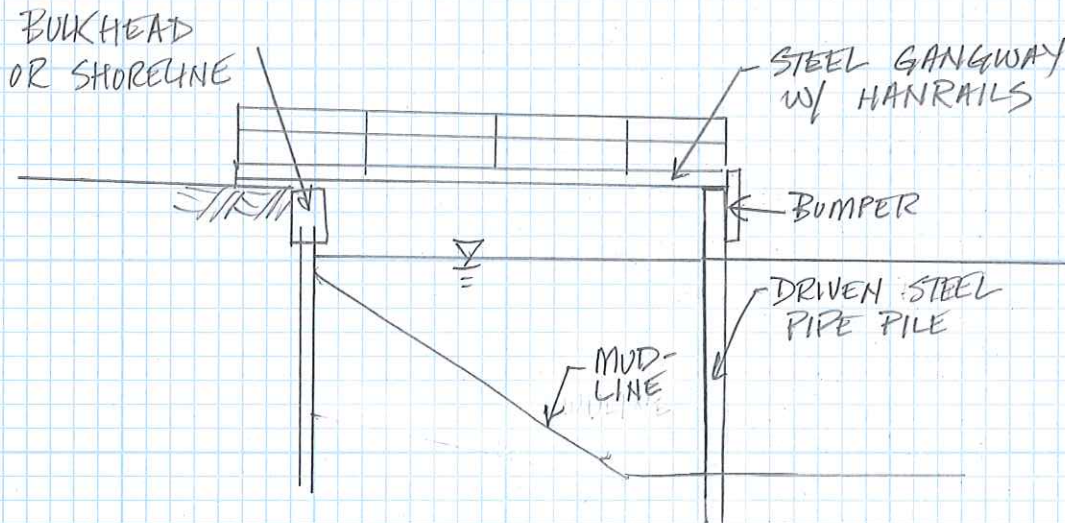
Figure A-2



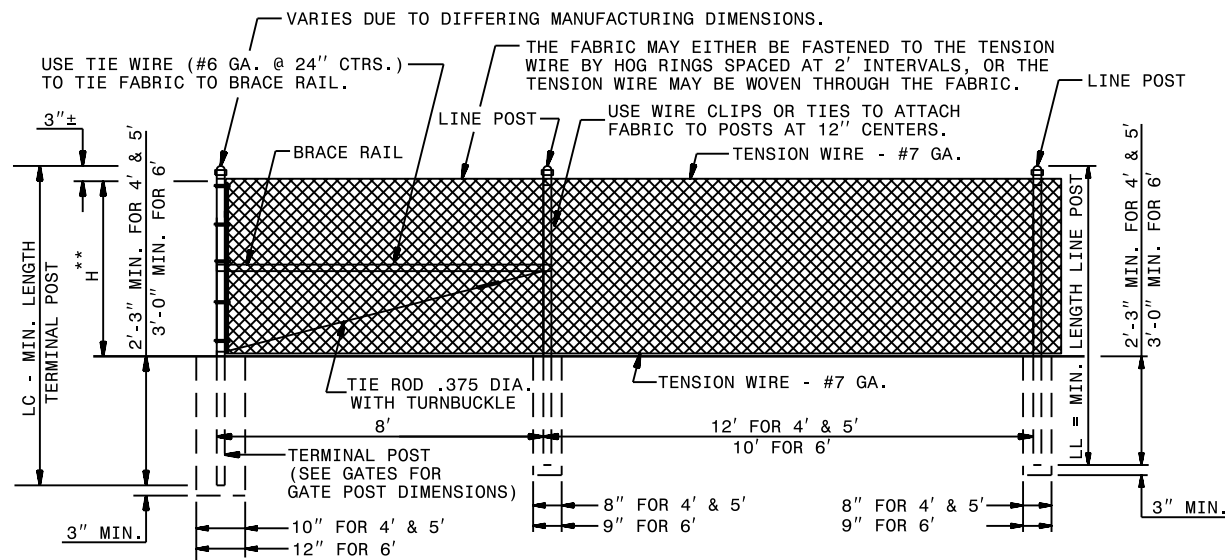
Figure A-3



SKETCH - PIVOT PIER
DEMO COFFERDAM
N.T.S.

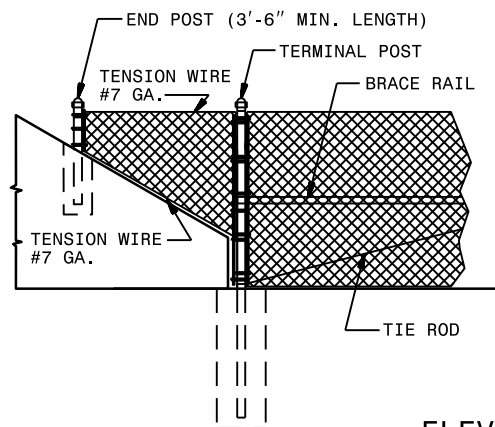


BOAT LANDING / CREW ACCESS
N.T.S.



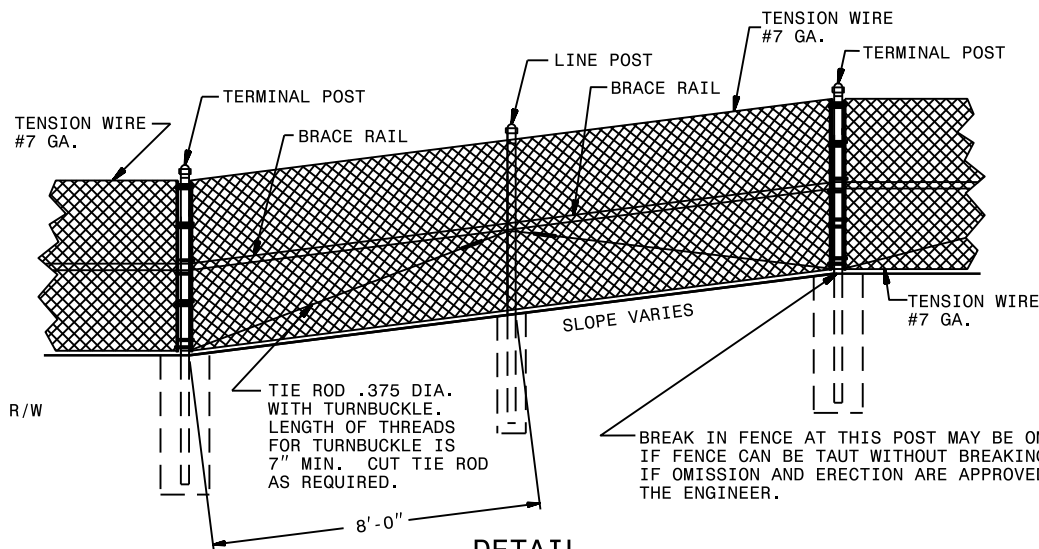
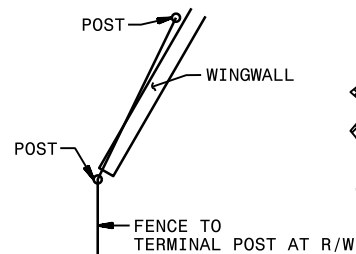
**"H" IS THE HEIGHT OF FENCE. SEE PAY ITEM DESCRIPTION FOR REQ'D HEIGHT FOR PROJECT.

NOTE: ROLL FORMED LINE POST MAY BE DRIVEN TO A MINIMUM OF 3'-0" IN LIEU OF CONCRETE ANCHOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



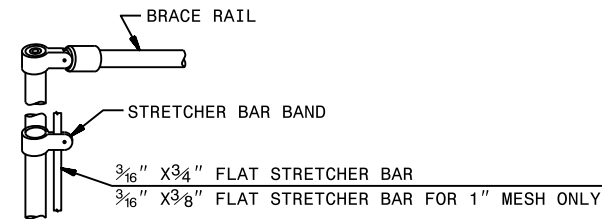
ELEVATION

METHOD OF TYING FENCE TO ENDWALL

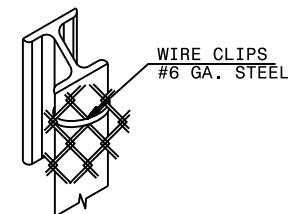


DETAIL

METHOD OF CONSTRUCTING FENCE ON SHARP BREAK IN GRADE

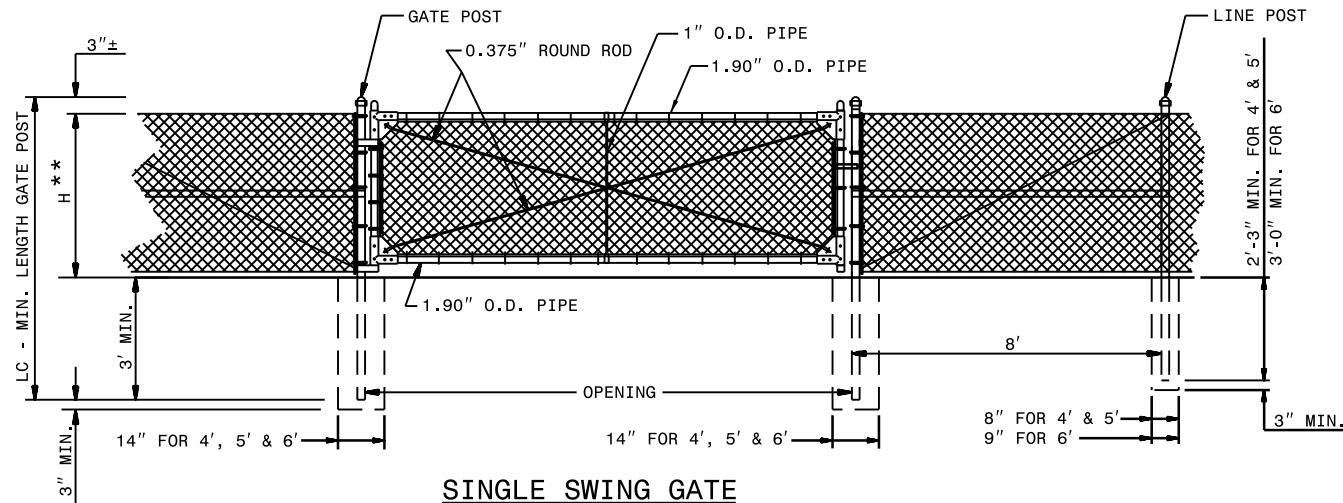


GATE OR TERMINAL POST WITH STRETCHER BAR ATTACHMENT



METHOD OF TYING FABRIC TO "H" POST

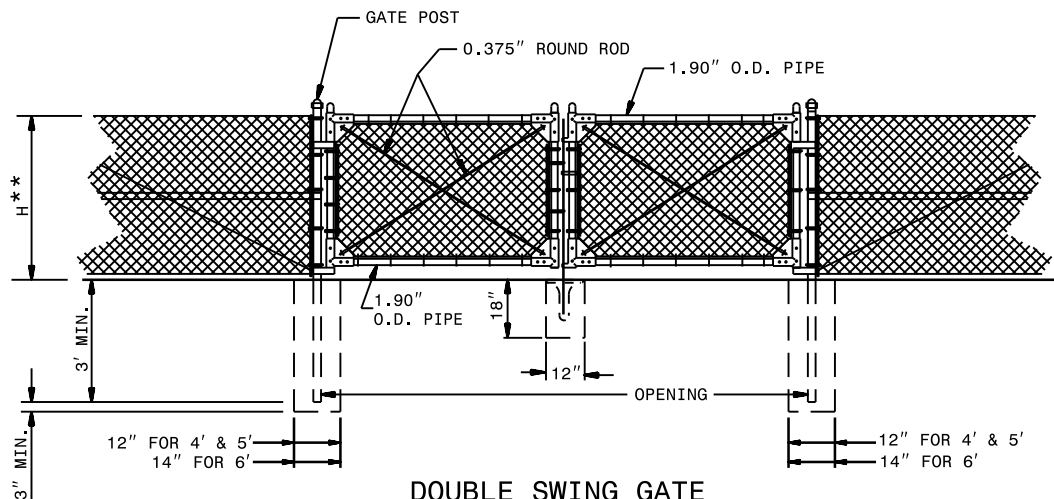
NOTES:
CAPS ARE REQUIRED ON PIPE POST. CAPS ARE NOT REQUIRED ON "H" POST OR ROLL FORMED POST. INSTALL FENCE FABRIC ON THE SIDE FARTHEST FROM THE HIGHWAY EXCEPT THAT ON HORIZONTAL CURVES GREATER THAN THREE DEGREES, INSTALL THE FENCE TO PULL AGAINST LINE POST. CONSIDER ALL CHANGES IN DIRECTION OF FENCE LINE OF 30° OR MORE AS CORNERS.



SINGLE SWING GATE

**"H" IS THE HEIGHT OF FENCE. SEE PAY ITEM DESCRIPTION FOR REQ'D HEIGHT FOR PROJECT.

NOTE: ROLL FORMED LINE POST MAY BE DRIVEN TO A MINIMUM OF 3'-0" IN LIEU OF CONCRETE ANCHOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

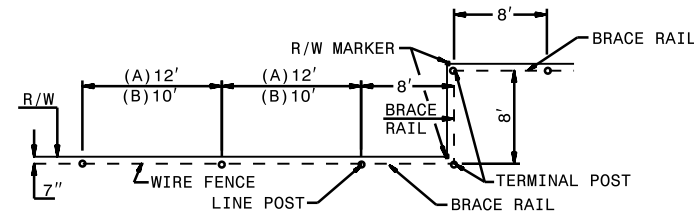
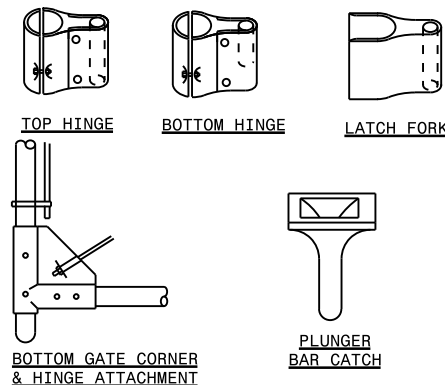


DOUBLE SWING GATE

USE WHERE SWINGING CLEARANCE IS LIMITED

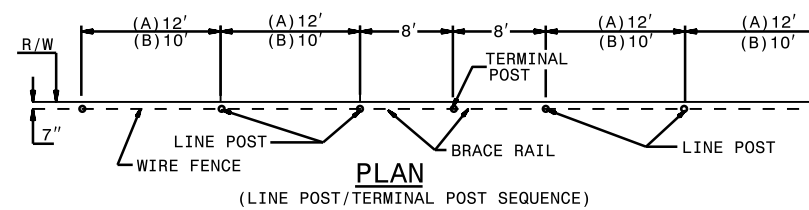
MAXIMUM WIRE SPACING TO BE 6".
MAXIMUM CLEARANCE BETWEEN LOWEST STRAND AND GROUND TO BE 6".
ERECT BRACE RAILS BETWEEN TERMINAL OR GATE POSTS AT INTERVALS NOT EXCEEDING 700' ON TANGENTS OR 350' ON SHORT RADIUS CURVES.
ERECT ADDITIONAL TERMINAL POSTS IF DIRECTED BY THE ENGINEER.
BRACE TERMINAL POSTS FROM BOTH SIDES OF POST.

NOTE:
FENCE HARDWARE VARIES DUE TO
DIFFERING MANUFACTURES SUPPLIES.



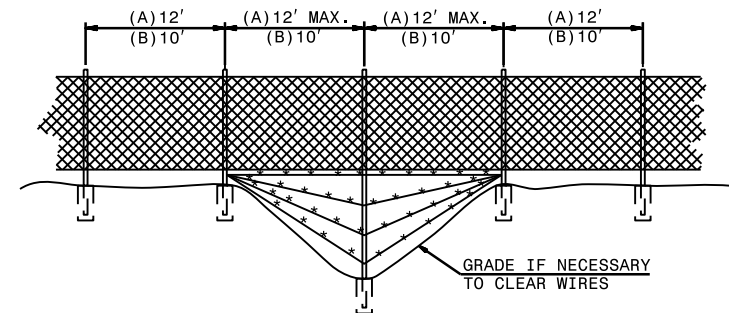
PLAN

PLACEMENT OF FENCE ALONG RIGHT OF WAY
(BRACE ALL TERMINAL POSTS AS SHOWN ABOVE)



PLAN

(LINE POST/TERMINAL POST SEQUENCE)



DETAIL OF DITCH CROSSING

ROADWAY STANDARD DRAWING FOR

CHAIN LINK FENCE

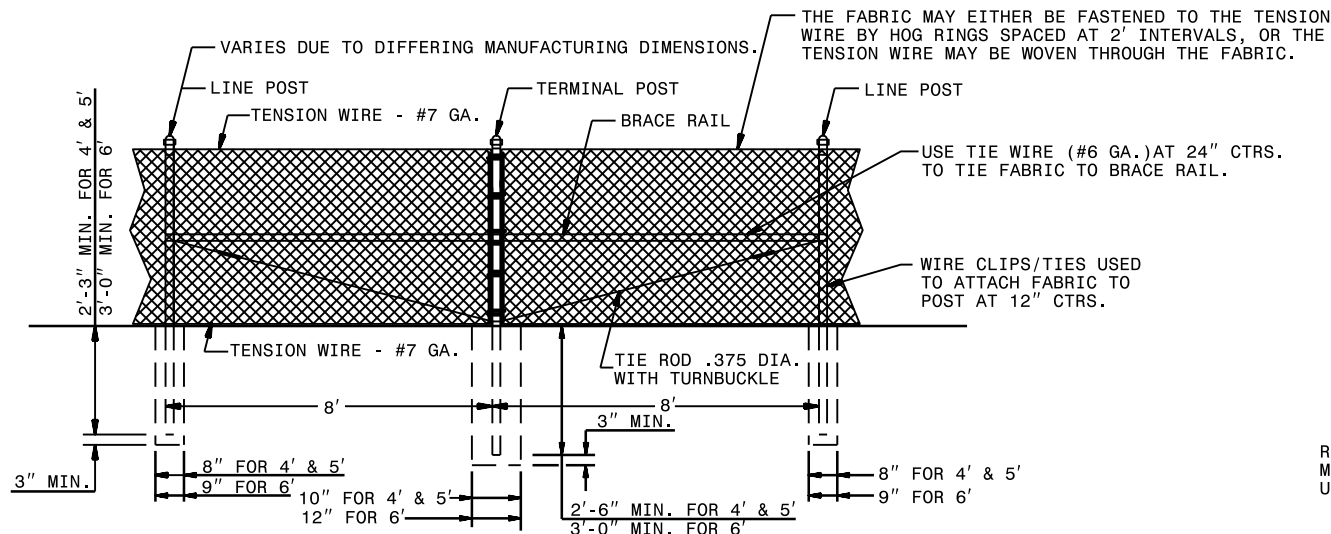
4', 5' AND 6' HIGH FENCE

1-18

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

SHEET 2 OF 3

866.01

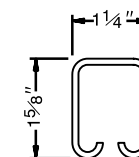


LINE BRACE DETAIL

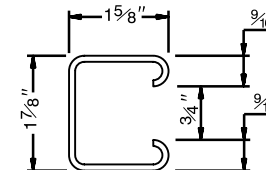
**"H" IS THE HEIGHT OF FENCE. SEE PAY ITEM DESCRIPTION FOR REQ'D HEIGHT FOR PROJECT.

FABRIC	GALV. STEEL OR ALUMINUM COATED STEEL #11 GAGE			ALUMINUM ALLOY OR ALUMINUM COATED STEEL (#11 GAGE)	
FRAME COMPONENTS	GALVANIZED STEEL #11 GAGE			ALUMINUM ALLOY	
SYSTEM	G1	G2	G3	A1	A2
LINE POST	1.90" O.D. STEEL PIPE	1.625" X 1.875" STEEL H	1.625" X 1.875" STEEL R.F.	2.375" O.D. ALUMINUM PIPE	2.00" X 2.50" ALUMINUM PIPE
TERMINAL POST (END, CORNER, BRACÉS)	2.375" O.D. STEEL PIPE	2.375" O.D. STEEL PIPE	2.375" O.D. STEEL PIPE	2.875" O.D. ALUMINUM PIPE	2.875" O.D. ALUMINUM PIPE
GATE POST UP THRU 6' LEAF	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE	2.875" O.D. ALUMINUM PIPE	2.875" O.D. ALUMINUM PIPE
GATE POST 7' THRU 12' LEAF	4.000" O.D. STEEL PIPE	4.000" O.D. STEEL PIPE	4.000" O.D. STEEL PIPE	4.000" O.D. ALUMINUM PIPE	4.000" O.D. ALUMINUM PIPE
BRACE RAIL	1.660" O.D. STEEL PIPE	1.660" O.D. STEEL PIPE	1.250" X 1.625" STEEL R.F. OR 1.660" O.D. STEEL PIPE	1.660" O.D. ALUMINUM PIPE	1.660" O.D. ALUMINUM PIPE

FOR 4' AND 5' FENCE SYSTEMS



BRACE RAIL
(ROLL FORMED)



LINE POST
(ROLL FORMED)

ROLL FORMED LINE POST MAY BE DRIVEN TO A MINIMUM OF 3'-0" IN LIEU OF CONCRETE ANCHOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

FABRIC	GALV. STEEL OR ALUMINUM COATED STEEL #11 GAGE		
FRAME COMPONENTS	GALVANIZED STEEL		
SYSTEM	G1	G2	G3
LINE POST	2.375" O.D. STEEL PIPE	1.625" X 1.875" STEEL H	1.625" X 1.875" STEEL R.F.
TERMINAL POST (END, CORNER, BRACÉS)	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE
GATE POST UP THRU 6' LEAF	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE	2.875" O.D. STEEL PIPE
GATE POST 7' THRU 12' LEAF	4.000" O.D. STEEL PIPE	4.000" O.D. STEEL PIPE	4.000" O.D. STEEL PIPE
BRACE RAIL	1.660" O.D. STEEL PIPE	1.660" O.D. STEEL PIPE	1.250" X 1.625" STEEL R.F. OR 1.660" O.D. STEEL PIPE

FOR 6' FENCE SYSTEMS

ALLOWABLE COMPONENTS FOR FENCE SYSTEMS

ROADWAY STANDARD DRAWING FOR

CHAIN LINK FENCE

4', 5' AND 6' HIGH FENCE

1-18

STATE OF

NORTH CAROLINA

DEPT. OF TRANSPORTATION

DIVISION OF HIGHWAYS
RALEIGH, N.C.

BRIDGES and CULVERTS

Attach this form to Joint Application for CAMA Major Permit, Form DCM MP-1. Be sure to complete all other sections of the Joint Application that relate to this proposed project. Please include all supplemental information.

1. BRIDGES☐ This section not applicable

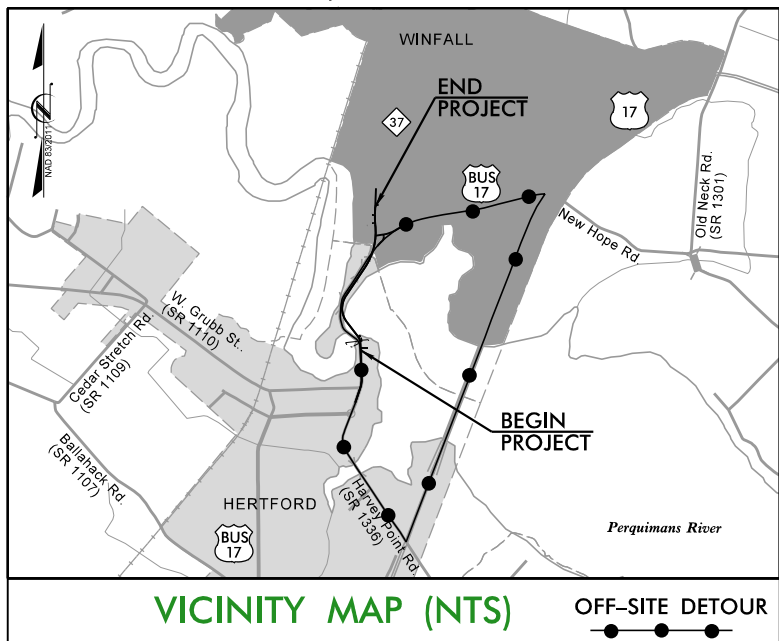
- a. Is the proposed bridge:
☐ Commercial ☒ Public/Government ☐ Private/Community
- b. Water body to be crossed by bridge:
 Perquimans River
- c. Type of bridge (construction material):
 Fixed bridge consists of reinforced concrete deck on prestressed concrete girders. Substructure consists of reinforced concrete caps on prestressed concrete piles. Swing span consists of structural steel truss with reinforced concrete deck and substructure consisting of reinforced concrete caps on prestressed concrete piles.
- d. Water depth at the proposed crossing at NLW or NWL:
 0'-31.5' from NWL
- e. (i) Will proposed bridge replace an existing bridge? ☒ Yes ☐ No
 If yes,
 (ii) Length of existing bridge: 640'
 (iii) Width of existing bridge: 23' 2"
 (iv) Navigation clearance underneath existing bridge:
unlimited when swing span is open, 7 ft when swing span is closed.
 (v) Will all, or a part of, the existing bridge be removed?
 (Explain) Yes, the existing bridge will be removed and replaced with a new bridge on new alignment, immediately downstream of the existing bridge.
- f. (i) Will proposed bridge replace an existing culvert? ☐ Yes ☒ No
 If yes,
 (ii) Length of existing culvert: _____
 (iii) Width of existing culvert: _____
 (iv) Height of the top of the existing culvert above the NHW or NWL: _____
 (v) Will all, or a part of, the existing culvert be removed?
 (Explain)
- g. Length of proposed bridge: 2,691'
- h. Width of proposed bridge: 41'
- i. Will the proposed bridge affect existing water flow? ☐ Yes ☒ No
 If yes, explain:
- j. Will the proposed bridge affect navigation by reducing or increasing the existing navigable opening? ☐ Yes ☒ No
 If yes, explain:
- k. Navigation clearance underneath proposed bridge: Unlimited navigation clearance when swing span is open. When swing span closed 12' navigation clearance.
- l. Have you contacted the U.S. Coast Guard concerning their approval? ☒ Yes ☐ No
 If yes, explain: A USCG permit is being prepared and will be submitted to the USCG. USCG has provided preliminary approval of the single 55' navigation channel.
- m. Will the proposed bridge cross wetlands containing no navigable waters? ☒ Yes ☐ No
 If yes, explain: There are wetlands under the east end of the bridge. They are not navigable, but are adjacent to navigable waters.
- n. Height of proposed bridge above wetlands: 4.0' to 12.4'

09/08/99
11/26/2018
R:\Hydraulics\PERMITS\Environmental\Drawings\4C\R-4467_PRM_wet_tsh.dgn
Kreys

TIP PROJECT: R-4467

CONTRACT: C204003

See Sheet 1-B For Conventional Symbols



VICINITY MAP (NTS)

OFF-SITE DETOUR

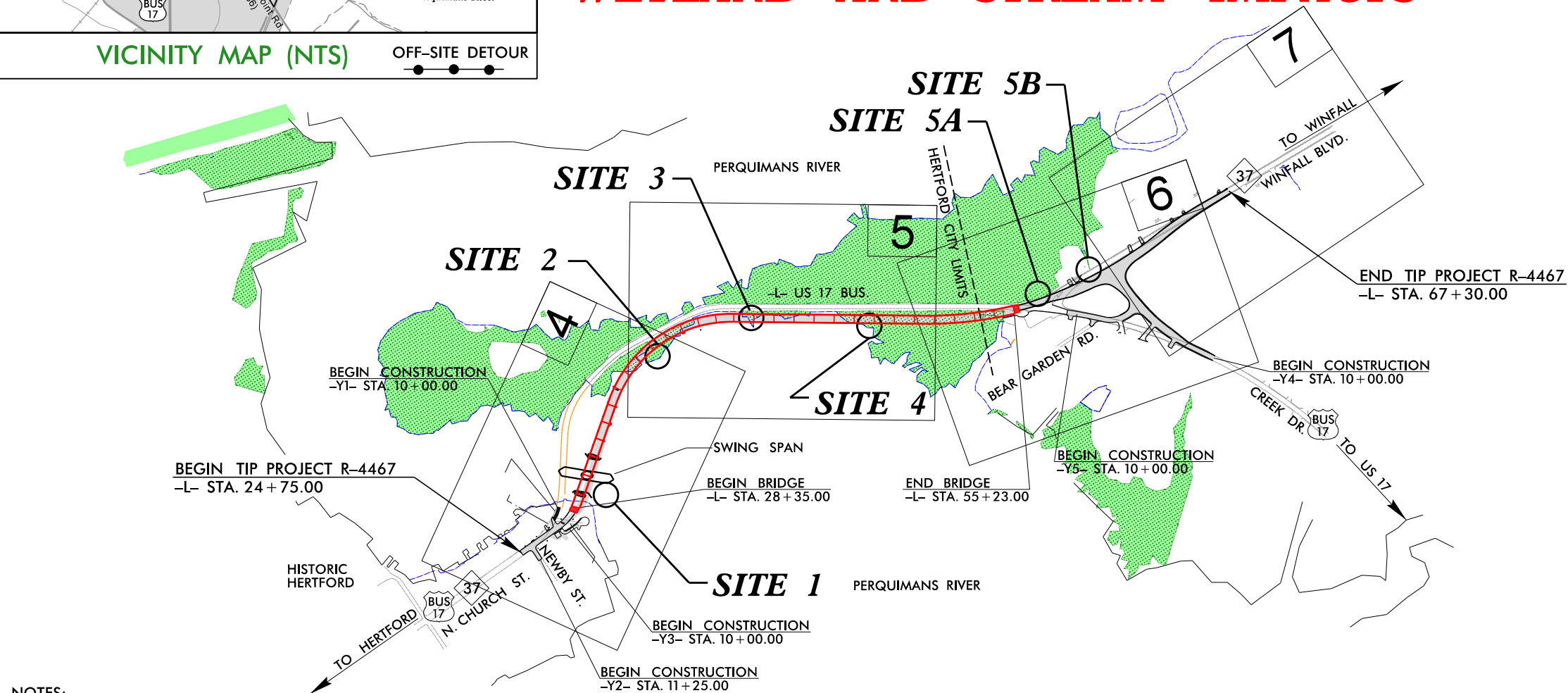
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PERQUIMANS COUNTY

LOCATION: US 17 BUSINESS /NC 37 (NORTH CHURCH STREET)
FROM SOUTH OF THE PERQUIMANS RIVER BRIDGE TO
NORTH OF NC 37 (WINFALL BOULEVARD)

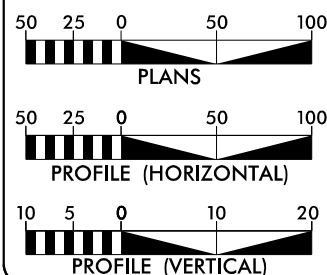
TYPE OF WORK: GRADING, DRAINAGE, PAVING, LIGHTING
SIGNALS, SIGNING, ITS & STRUCTURES

WETLAND AND STREAM IMPACTS



- NOTES:
1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
 2. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF HERTFORD AND THE TOWN OF WINFALL.
 3. DESIGN EXCEPTION REQUIRED FOR HORIZONTAL STOPPING SIGHT DISTANCE AND SUPERELEVATION AT -L- PI STATION 28+26.83.

GRAPHIC SCALES



DESIGN DATA

ADT 2017 = 10,100

ADT 2037 = 16,500

SOUTH APPROACH & BRIDGE

V = 30 MPH
FUNC. CLASS. = URBAN COLLECTOR

NORTH OF BRIDGE

V = 50 MPH
FUNC. CLASS. = RURAL COLLECTOR

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-4467.....0.296 mi
LENGTH STRUCTURE TIP PROJECT R-4467.....0.509 mi
TOTAL LENGTH TIP PROJECT R-4467.....0.805 mi

NCDOT CONTACT

K. Zak Hamidi, P.E.
PROJECT ENGINEER - DESIGN-BUILD GROUP

PLANS PREPARED BY:

RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE, SUITE 350
RALEIGH, NORTH CAROLINA 27609
NC LICENSE NO. P-0112

FOR NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

LETTING DATE:
JANUARY 2, 2018

McLean
CONTRACTING COMPANY

Michael T. Merritt, P.E.
PROJECT ENGINEER

Anthony A. Houser, P.E.
PROJECT DESIGN ENGINEER

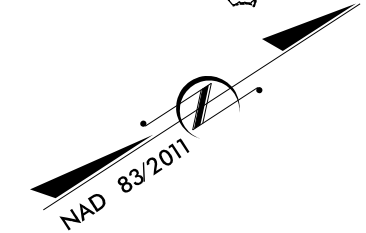
HYDRAULICS
ENGINEER

SIGNATURE: P.E.

ROADWAY
DESIGN
ENGINEER

SIGNATURE: P.E.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4467	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35748.3.2	N/A		

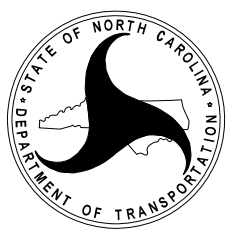


PERMIT DRAWING
SHEET 1 OF 17



PREPARED ON: 7-27-2018
REVISED: 11-26-2018

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



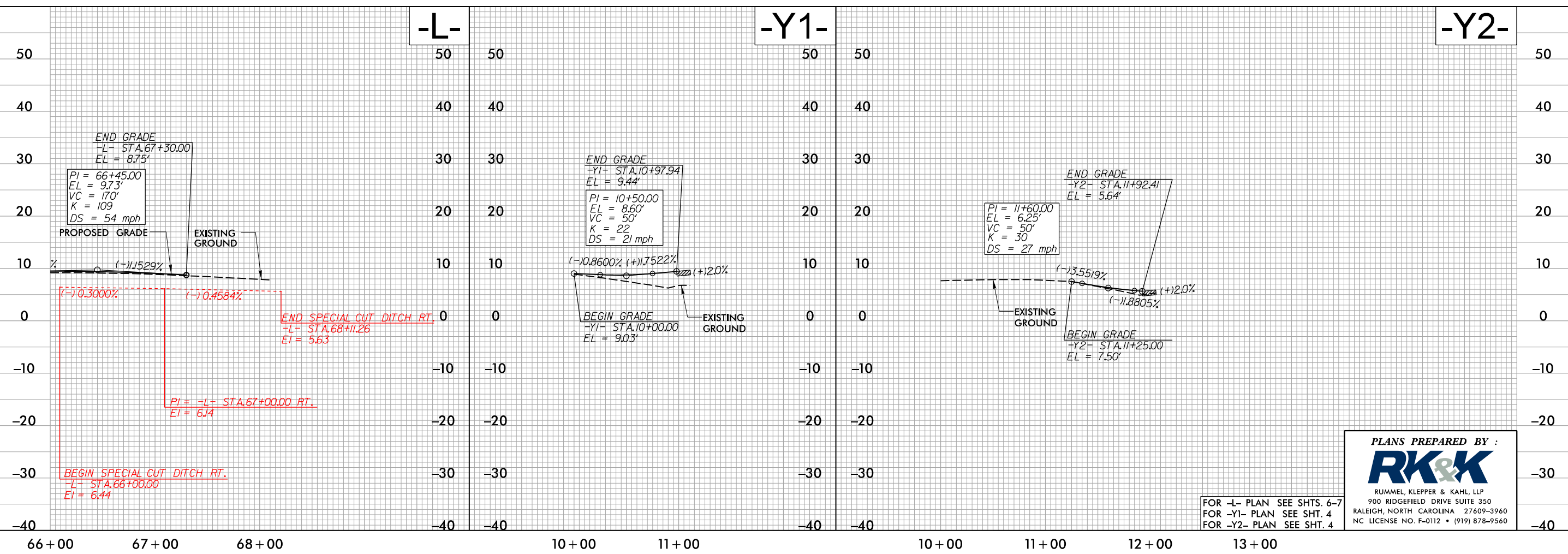
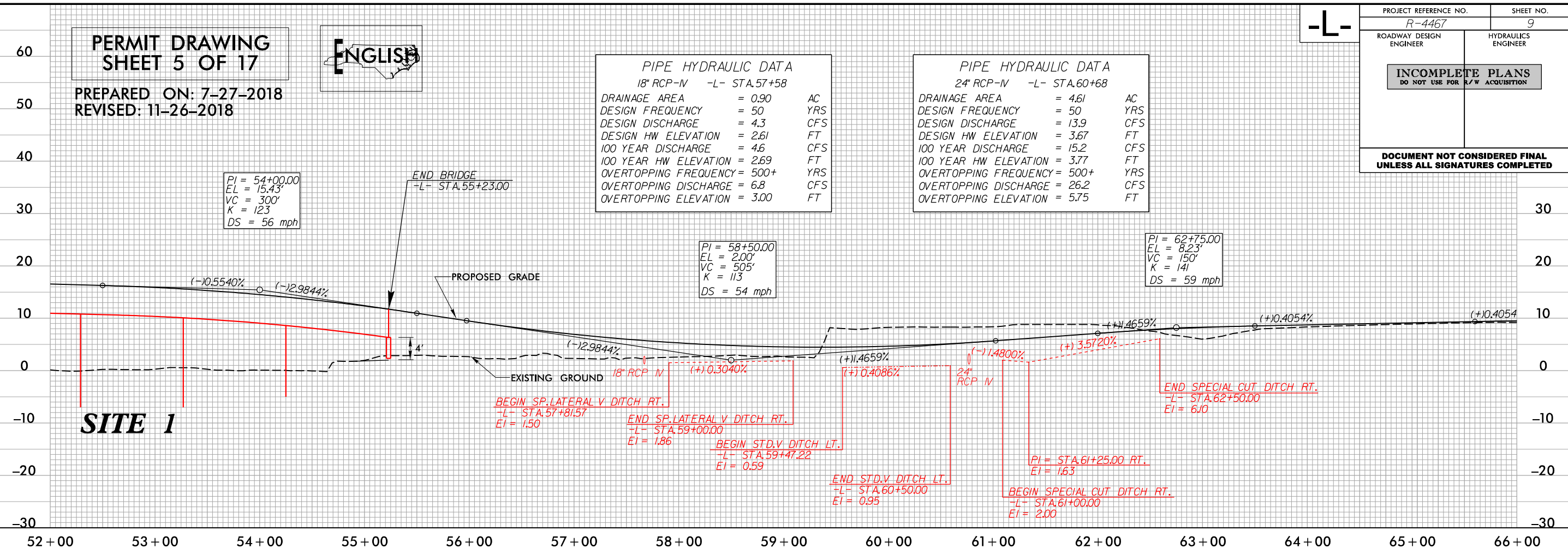
PERMIT DRAWING
SHEET 5 OF 17

PREPARED ON: 7-27-2018
REVISED: 11-26-2018

ENGLISH

PIPE HYDRAULIC DATA		
18" RCP-N -L- STA.57+58		
DRAINAGE AREA	= 0.90	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 4.3	CFS
DESIGN HW ELEVATION	= 2.61	FT
100 YEAR DISCHARGE	= 4.6	CFS
100 YEAR HW ELEVATION	= 2.69	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 6.8	CFS
OVERTOPPING ELEVATION	= 3.00	FT

PIPE HYDRAULIC DATA		
24" RCP-N -L- STA.60+68		
DRAINAGE AREA	= 4.61	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 13.9	CFS
DESIGN HW ELEVATION	= 3.67	FT
100 YEAR DISCHARGE	= 15.2	CFS
100 YEAR HW ELEVATION	= 3.77	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 26.2	CFS
OVERTOPPING ELEVATION	= 5.75	FT



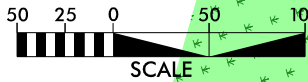
PLANS PREPARED BY :

RK&K

RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

FOR -L- PLAN SEE SHTS. 6-7
FOR -Y1- PLAN SEE SHT. 4
FOR -Y2- PLAN SEE SHT. 4

PERMIT DRAWING
SHEET 12 OF 17



ENGLISH

- HC HC DENOTES HAND CLEARING
- HC HC DENOTES TEMPORARY FILL IN WETLAND
- HC HC DENOTES FILL IN WETLAND
- CAMA WETLAND BOUNDARY
- TEMPORARY STONE CAUSEWAY LIMITS

WF LANE, ROBERT E & CHRISTINE O.

PROJECT REFERENCE NO.	SHEET NO.
R-4467	6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PREPARED ON: 7-27-2018
REVISED: 11-26-2018

NAD 83/2011

MATCHLINE -L- STA. 51+00 SEE SHEET 5

SITE 4

SITE 5A

SITE 5B

INSET B

INSET A

POND A

MATCHLINE -Y4- STA. 9+50
SEE INSET

SEE ROADWAY PLANS
FOR DECK DRAIN SPACING

SEE IMPACT
SUMMARY SHEET
FOR PILE IMPACTS

INSTALL 48" OF
TEMPORARY 18" PIPE
AND 3 TONS
CL B RIPRAP W/
10 SY TEMPORARY
GEOTEXTILE REMOVE
AFTER STONE
CAUSEWAY REMOVAL

PERMANENT FILL IN WETLANDS

HAND CLEARING

PERMANENT FILL IN WETLANDS

REMOVE

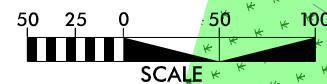
HURDLE, JERALD E. ET AL

PLANS PREPARED BY :
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

R/W Revision 11-20-2018
Parcel 14 Added TCE
Parcel 16 Eliminated PUE
Parcel 22 Eliminated R/W and PUE

11/26/2018 R:\Hydro\Hydro\Environmental\Drawings\4C-R-4467\22-1-1.dwg

PERMIT DRAWING
SHEET 13 OF 17



ENGLISH

13

TOWE, J.H.

SITE 5A

SITE 5B

SITE 4

INSET B

INSET

POND A

MATCHLINE
-Y4- STA. 9+50
SEE INSET

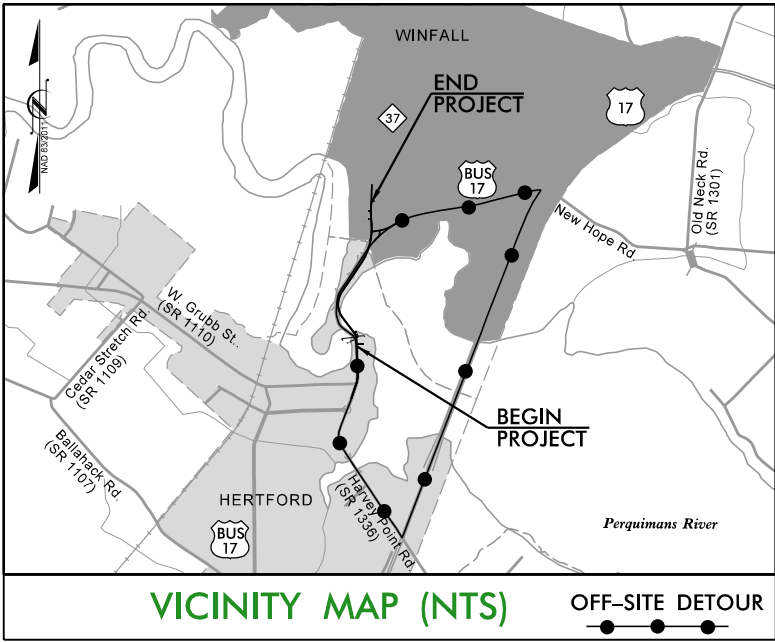
PLANS PREPARED BY :
RK&K
 RUMMEL, KLEPPER & KAHL, LLP
 900 RIDGEFIELD DRIVE SUITE 350
 LEIGH, NORTH CAROLINA 27609-3960
 LICENSE NO. F-0112 • (919) 878-9560

09/28/99
11/26/2018
R:\Hydraulics\PERMITS_Environmental\Drawings\4C\Utilities\R-4467_UTILITY_PRM_wet_tsh.dgn
Kreys

TIP PROJECT: R-4467

CONTRACT: C204003

See Sheet 1-B For Conventional Symbols



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

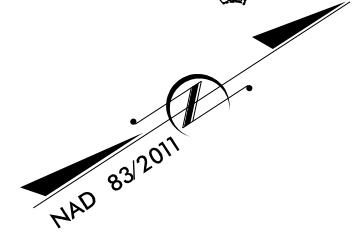
PERQUIMANS COUNTY

LOCATION: US 17 BUSINESS /NC 37 (NORTH CHURCH STREET)
FROM SOUTH OF THE PERQUIMANS RIVER BRIDGE TO
NORTH OF NC 37 (WINFALL BOULEVARD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, LIGHTING
SIGNALS, SIGNING, ITS & STRUCTURES

JURISDICTIONAL IMPACTS
FOR UTILITIES

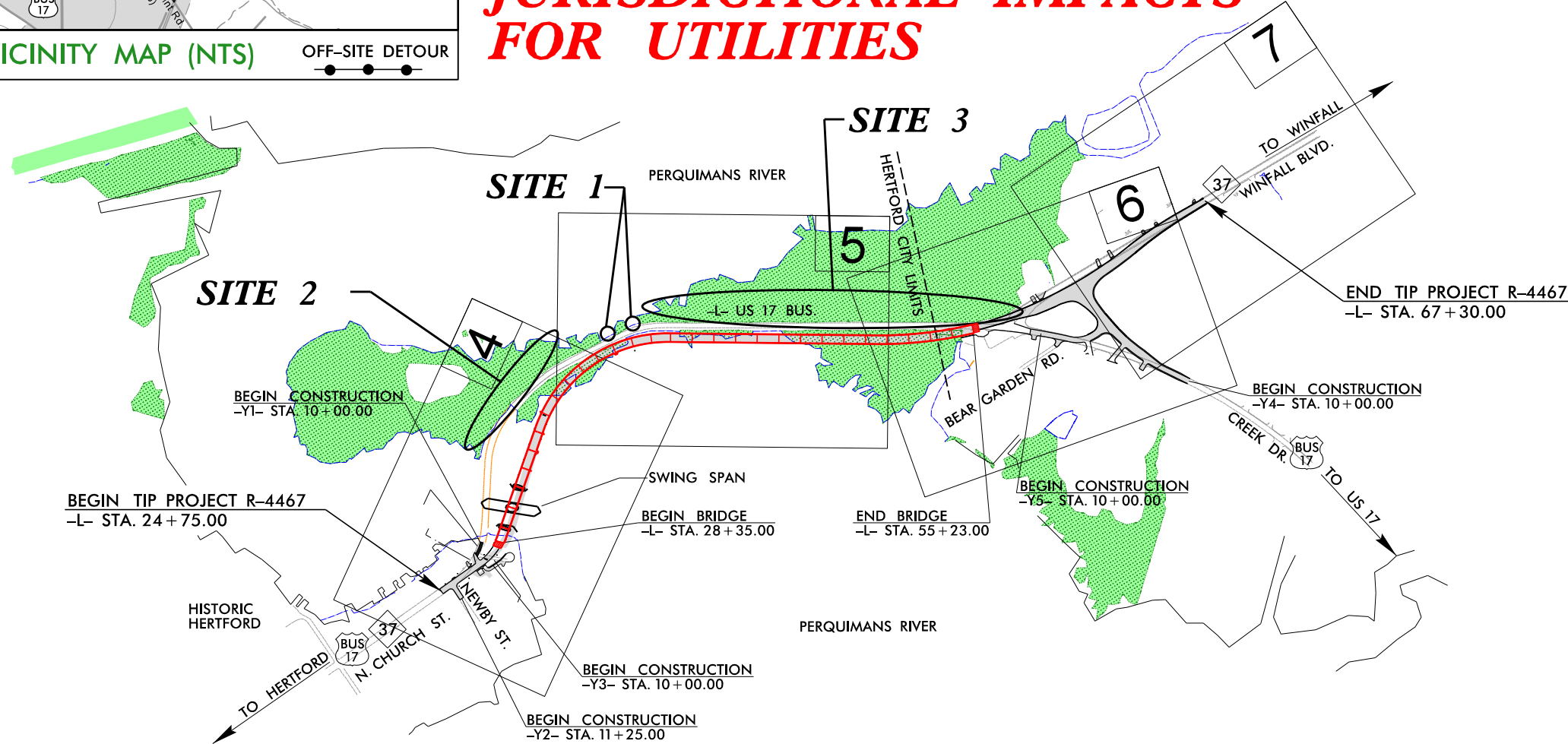
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-4467	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35748.3.2	N/A		



UTILITY
PERMIT DRAWING
SHEET 1 OF 8

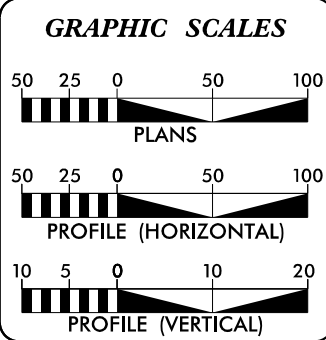


PREPARED ON: 7-27-2018
REVISED: 11-26-2018



- NOTES:
1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.
2. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF HERTFORD AND THE TOWN OF WINFALL.
3. DESIGN EXCEPTION REQUIRED FOR HORIZONTAL STOPPING SIGHT DISTANCE AND SUPERELEVATION AT -L- PI STATION 28+26.83.

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



DESIGN DATA
ADT 2017 = 10,100
ADT 2037 = 16,500
SOUTH APPROACH & BRIDGE
V = 30 MPH
FUNC. CLASS. = URBAN COLLECTOR
NORTH OF BRIDGE
V = 50 MPH
FUNC. CLASS. = RURAL COLLECTOR

PROJECT LENGTH
LENGTH ROADWAY TIP PROJECT R-4467.....0.296 mi
LENGTH STRUCTURE TIP PROJECT R-4467.....0.509 mi
TOTAL LENGTH TIP PROJECT R-4467.....0.805 mi
NCDOT CONTACT
K. Zak Hamidi, P.E.
PROJECT ENGINEER - DESIGN-BUILD GROUP

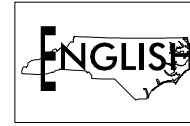
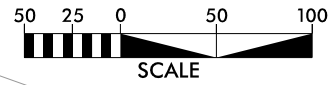
PLANS PREPARED BY:
RK&K RUMMEL, KLEPPER & KAHL, LLP 900 RIDGEFIELD DRIVE, SUITE 950 RALEIGH, NORTH CAROLINA 27609 NC LICENSE NO. P-0112
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2012 STANDARD SPECIFICATIONS
LETTING DATE: JANUARY 2, 2018

McLean CONTRACTING COMPANY
Michael T. Merritt, P.E. PROJECT ENGINEER
Anthony A. Houser, P.E. PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SIGNATURE: _____ P.E.
ROADWAY DESIGN ENGINEER
SIGNATURE: _____ P.E.

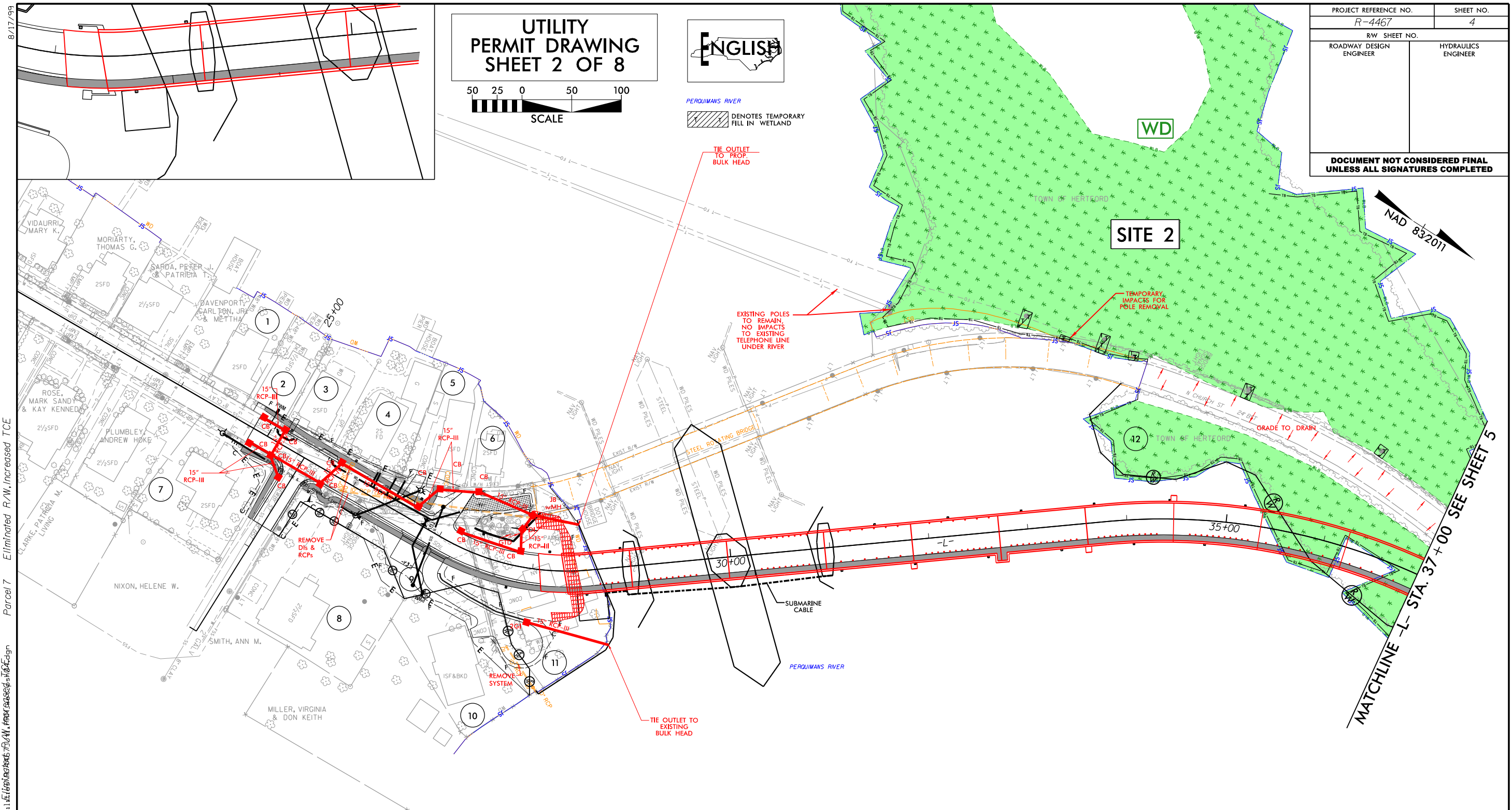


UTILITY
PERMIT DRAWING
SHEET 2 OF 8



PERQUIMANS RIVER

 DENOTES TEMPORARY
FILL IN WETLAND



PARCEL NUMBERS AND PROPERTY OWNERS

- | | | | |
|---|--|----|--|
| 1 | HOLLOWELL, BRENDA
DB 312, PG 717 | 7 | SMITH, RICHARD W. & JEAN P.
DB 164 PG 545 |
| 2 | KENNEDY, CHARLES R.
DB 120, PG 594 | 8 | MALOTT, BRETT DARRYL & MARY M.
DB 165 PG 746 |
| 3 | W.V.M., LLC
DB 204, PG 251 | 9 | JAKLIC, FRANK A. & CONSTANCE L.
DB 204 PG 251 |
| 4 | JAKLIC, FRANK A. & CONSTANCE L.
DB 204 PG 251 | 10 | WINSLOW, SARA E. & ANNE W.
DB 120 PG 585 |
| 5 | MADRE, EDWARD LEE & ANN F.
DB 166 PG 201 | 11 | WADDELL, RUSSELL LEE &
NANCY LYNNE THEODORE
DB 153 PG 50 |
| 6 | VAYDA, MARGARET M.
DB 97 PG 507 | | |

PREPARED ON: 7-27-2018
REVISED: 11-26-2018

SEE ROADWAY PLANS
FOR DECK DRAIN SPACING

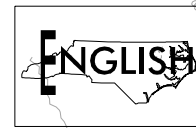
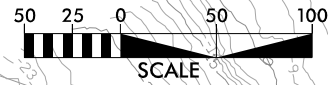
PLANS PREPARED BY :



RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

	R/W Revision 11-20-2018	R/W Revision 11-20-2018	R/W Revision 11-20-2018
Parcel 2	Eliminated R/W, Added TCE	Parcel 5	Eliminated R/W, Increased TCE
Parcel 3	Eliminated R/W, Added PUE & TCE	Parcel 6	Eliminated R/W, Eliminated TCE, Eliminated Claim
Parcel 4	Eliminated R/W, Added PUE & TCE	Parcel 7	Eliminated R/W, Increased TCE
Parcel 8	Decreased R/W, Decreased TCE	Parcel 10	Decreased R/W, Decreased TCE, Eliminated PDE

UTILITY PERMIT DRAWING SHEET 3 OF 8



PERQUIMANS RIVER

 DENOTES TEMPORARY
FILL IN WETLAND

**TIE OUTLET
TO PROP.
BULK HEAD**

EXISTING POLES —
TO REMAIN,
NO IMPACTS
TO EXISTING
TELEPHONE LINE
UNDER RIVER

SITE 2



**TEMPORARY
IMPACTS FOR
POLE REMOVAL**

GRADE TO DRAIN

PARCEL NUMBERS AND PROPERTY OWNERS

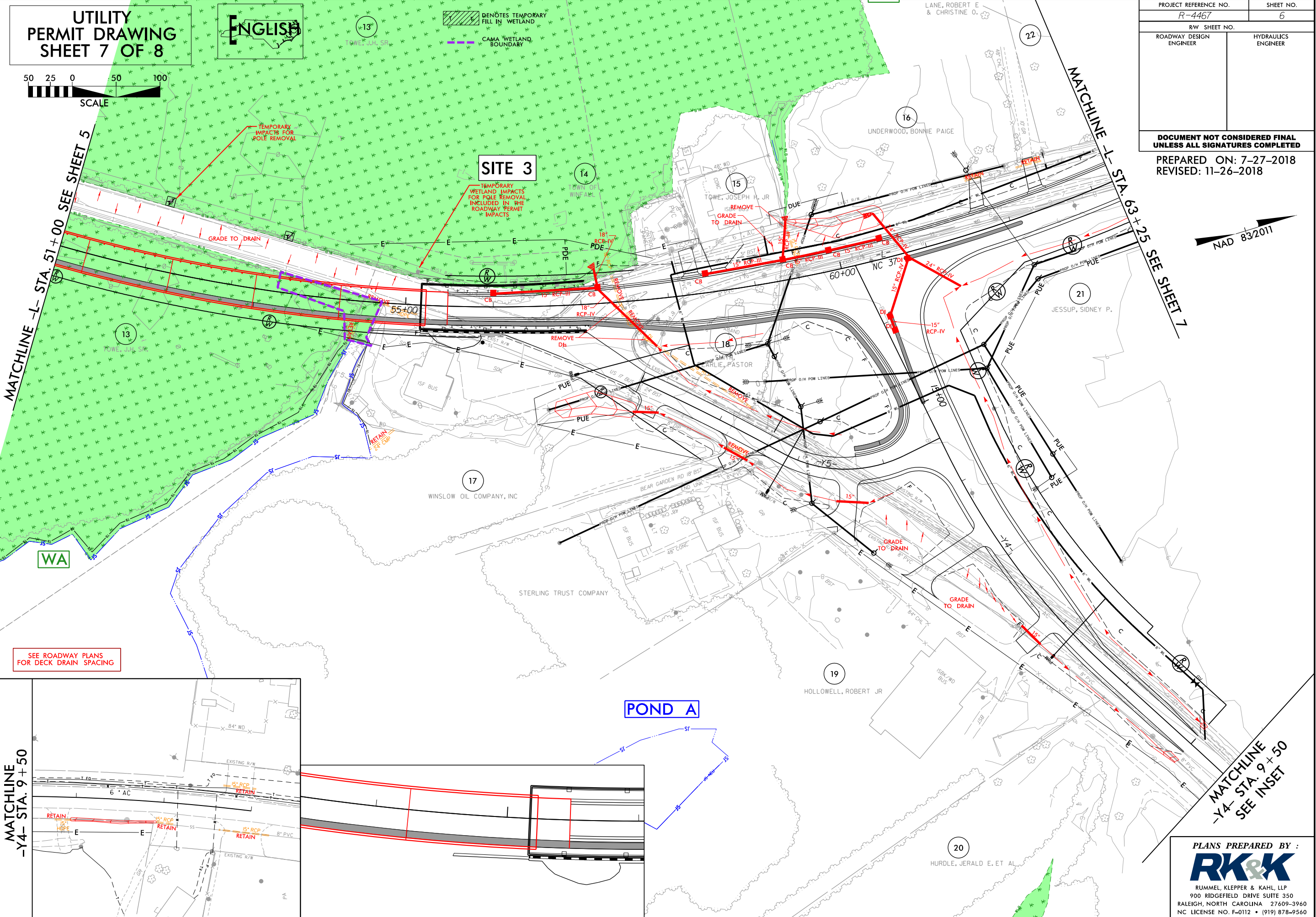
- | | | | |
|---|--|----|---|
| 1 | HOLLOWELL, BRENDA
DB 312, PG 717 | 7 | SMITH, RICHARD W. & JEAN P.
DB 164 PG 545 |
| 2 | KENNEDY, CHARLES
DB 120, PG 494 | 8 | MALOTT, BRETT DARRYL & MARY M.
DB 165 PG 746 |
| 3 | W.V.M., LLC
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| 4 | JAKLIC, FRANK A. & CONSTANCE L.
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| 5 | MADRE, EDWARD LEE & ANN F.
DB 166 PG 201 | 11 | WADDELL, RUSSELL LEE & NANCY LYNNE THEODORE
DB 153 PG 50 |
| 6 | VAYDA, MARGARET M.
DB 97 PG 507 | | |

PREPARED ON: 7-27-2018
REVISED: 11-26-2018

SEE ROADWAY PLANS
FOR DECK DRAIN SPACING

PLANS PREPARED BY :
RK&K
RUMMEL, KLEPPER & KAHL, LLP
900 RIDGEFIELD DRIVE SUITE 350
RALEIGH, NORTH CAROLINA 27609-3960
NC LICENSE NO. F-0112 • (919) 878-9560

MATCHLINE
-Y4- STA. 9+50
SEE INSET



**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET TO NC 37
INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS
RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467**

WHEREAS, the United States Coast Guard (USCG) is the federal agency responsible for the processing of a federal bridge permit application for the Improvements to US 17 Business from Church Street to NC 37 including the replacement of Bridge Number 8 over the Perquimans River in Hertford, Perquimans County, North Carolina (the Undertaking) pursuant to the General Bridge Act of 1946 (33 U.S.C. §§ 525-533) and the Coast Guard bridge regulations (33 CFR. Subchapter J)[]; and

WHEREAS, the United States Army Corps of Engineers (USACE), intends to issue a Nationwide Permit, pursuant to 33 CFR 330, and to rely upon the findings and consultation process of the USCG, as the lead federal agency for the Undertaking; and

WHEREAS, the USCG has determined that the Undertaking will have an adverse effect upon the Hertford Historic District and Perquimans Bridge Number 8, properties listed in the National Register of Historic Places (NRHP); and

WHEREAS, the USCG has consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (54 U.S.C. 300101 et seq.); and

WHEREAS, the USCG has notified the Advisory Council on Historic Preservation (Council) of the adverse effect and the Council participated in the consultation; and

WHEREAS, NCDOT has participated in the consultation and has been invited by the USCG and SHPO to be a signatory to this Memorandum of Agreement (MOA); and

WHEREAS, the Town of Hertford (Town), the Citizens for the Preservation and Growth of Hertford, represented by Sara E. Winslow, and Hertford citizens Nancy Theodore, Frank and Connie Jaklic, Penny Byrd, Robert E. Halter, Virginia Miller, Don Keith, Leslie E. Piercy, Rhonda Waters, and Margaret and Charles Lindsay have participated in the consultation and have been invited by the USCG and SHPO to be concurring parties to this MOA;

NOW, THEREFORE, the USCG, USACE, NCDOT, SHPO and Council agree that the Undertaking shall be implemented in accordance with the following stipulations to take into account the effects of the Undertaking on the historic properties and that these stipulations shall govern the Undertaking and all of its parts unless this MOA expires or is terminated.

STIPULATIONS

The USCG shall ensure that the following measures are carried out:

I. Photographic Recordation

Prior to the initiation of construction, NCDOT will record the existing conditions of the properties and landscapes in the Hertford Historic District, including Perquimans Bridge Number 8 that are located adjacent to or affected by the project in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A).

The results of the photographic recordation will be submitted to the SHPO in advance of any work taking place. The SHPO shall have fifteen (15) days from receipt of the materials to review and comment. If no comments are received by NCDOT after the 15 days, work may commence.

Copies of the documentation will be deposited in the files of the SHPO, NCDOT Historic Architecture Group, and the Town and be made available to other signatories to this MOA.

II. Design of Replacement Bridge

NCDOT has worked with the primary signatories and concurring parties on the plans for the replacement bridge and associated retaining walls to develop a unified design that incorporates context sensitive design principles and follows NCDOT's aesthetic guidelines. These design elements include:

- A. Truss swing span;
- B. Oregon rails;
- C. Decorative pedestrian lights which match the streetlights throughout the town;
- D. Safety standard vertical lift gates;
- E. Two observational bump-outs on the bridge;
- F. Sidewalks on the east side of the bridge;
- G. Reuse current bridge plaque on new bridge and add a second bridge plaque for the new bridge;
- H. Retaining walls of stamped concrete within the historic district;
- I. Signs on NCDOT property stating authorized vehicles and personnel only;
- J. Flag pole with US and NC flags lit dusk to dawn;
- K. Fenders composed of artificial timber and includes lights and signs.

III. Design of the Tender House

NCDOT, in consultation with the primary signatories and concurring parties, shall develop

plans for the tender house and parking spaces designated for use by the bridge operator and bridge maintenance crew to develop a unified design that incorporates context sensitive design principles and follows NCDOT's aesthetic guidelines. These design elements include:

- A. A two-story structure above the bridge deck with the generator housed inside the tender house;
- B. Hipped roof structure with fiber cement siding;
- C. Multi-light windows with pedimented arches;
- D. A three-foot wide walkway around the second story;
- E. An escape ladder on the east side of the tender house.

IV. Landscape Plan

NCDOT, in consultation with the primary signatories and concurring parties, shall develop a landscape plan for the south side of the bridge within the Hertford Historic District contained within the NCDOT right-of-way.

V. Vibration Monitoring

To minimize vibration effects on the historic district in the vicinity of the bridge, a vibration monitoring and enforcement program shall be implemented by NCDOT as part of the construction contract. The Design-Build Team shall employ a vibration monitoring firm from NCDOT's list of approved firms to perform pre and post construction inventories and vibration monitoring of buildings located within 200 feet of the mainline project limits in the historic district. The inventories will require the appointed firm has access to the interior of buildings in the area being monitored.

If vibration levels rise above the prescribed thresholds that could cause structural damage to any building the contractor, or the property owners shall immediately contact the Resident Engineer. If structural damages are discovered during this period, work in that area of the project shall immediately cease and NCDOT shall contact SHPO and the property owners immediately to determine what steps should be taken to address the damage. After completion of all vibration inducing construction activities, vibration monitoring equipment may be discontinued. If vibration monitoring is to be discontinued prior to completion of the Undertaking, property owners will be notified by NCDOT.

VI. Unanticipated Discovery

In accordance with 36 CFR 800.11(a), if NCDOT identifies additional cultural resource(s) during construction and determines them to be eligible for the NRHP, all work will be halted within the limits of the NRHP-eligible resource(s) and the USCG and North Carolina SHPO contacted within 48 hours. If after consultation with the Signatory Parties and additional mitigation is determined necessary, the NCDOT, in consultation with the Signatory Parties, will develop and implement appropriate protection/mitigation measures for the resource(s). NCDOT will notify the SHPO and USCG of any findings of additional cultural resources that are determined to not be eligible for NRHP listing.

Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

VII. Dispute Resolution

Should any of the Signatory or Concurring Parties object within (30) days to any plans or documentation provided for review pursuant to this MOA, the USCG shall consult with the objecting party(ies) to resolve the objection. If the USCG or the objecting party(ies) determines that the objection cannot be resolved, the USCG will forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide the USCG with recommendations, which the USCG will take into account in reaching a final decision regarding the dispute, or
- B. Notify the USCG that it will comment pursuant to 36 CFR 800.7(c). Any Council comment provided in response to such a request will be taken into account by the USCG in accordance with 36 CFR 800.7(c) (4) with reference to the subject of the dispute. Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USCG and NCDOT's responsibility to carry out all of the actions under this agreement that are not the subject of the dispute will remain unchanged.

VIII. Amendments

Should any of the Signatory or Concurring Parties to this MOA believe that its terms cannot be carried out or that an amendment to the terms must be made, that party(ies) shall immediately consult with the other party(ies) to develop amendments in accordance with 36 CFR 800.6(c)(7). If an amendment cannot be agreed upon, the dispute resolution process set forth in Stipulation VII will be followed.

IX. Termination

Any of the Signatory Party (ies) may terminate the MOA by providing 30 days written notice to the other parties, provided that the signatories will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. Termination of this MOA will require compliance with 36 CFR 800. This MOA may be terminated by the execution of a subsequent MOA that explicitly terminates or supersedes its terms.

X. Duration

Unless terminated pursuant to Stipulation IX above, this MOA will be in effect until December 31, 2027. Prior to such time, the USCG may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance to the dispute resolution process set forth in Stipulation VII.

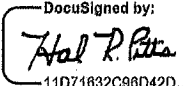
XI. Other Provisions

- A. Nothing in this MOA is intended to conflict with current law or regulation or the directives of the USCG or Department of Homeland Security. If this MOA is inconsistent with such authority, then that term shall be invalid, but the remaining terms and conditions of this agreement shall remain in full force and effect.
- B. This MOA is not an agreement by the United States, USCG to indemnify any party, nor is it an agreement by the United States, USCG to assume financial, legal, or any other liabilities.
- C. Nothing in this MOA shall constitute an obligation of funds of the United States in advance of an appropriation of those funds.

XII. Effective Date

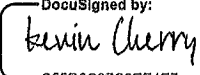
The terms of this MOA will become effective upon issuance of the Coast Guard bridge permit.

AGREED:

By:  DocuSigned by:
11D71832C98D42D...

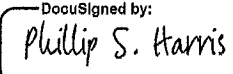
Mr. Hal R. Pitts
District Bridge Manager
Fifth Coast Guard District

Date: 12/8/2017

By:  DocuSigned by:
C65D8C37C9EE4E7...

Kevin Cherry, Ph.D.
North Carolina State Historic Preservation Officer
North Carolina Department of Cultural Resources

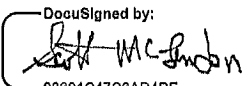
Date: 12/5/2017

By:  DocuSigned by:
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Philip S. Harris III, P.E., C.P.M.
Environmental Analysis Unit Head
North Carolina Department of Transportation

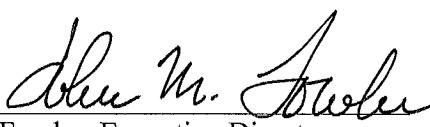
Date: 12/5/2017

for

By:  DocuSigned by:
28691C47C6AD4DF...

Robert J. Clark
Colonel, U.S. Army
District Commander
US Army Corps of Engineers

Date: 12/6/2017

By: 
John M. Fowler, Executive Director
Advisory Council on Historic Preservation

Date: 1/10/18

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET TO NC 37
INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS
RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467**

Execution of this MOA by USCG, USACE, NCDOT, ACHP, and the North Carolina SHPO, and implementation of its terms, evidence that the USCG, as the lead federal agency, has afforded the Council an opportunity to comment on the Undertaking.

CONCUR:

Brandon S. Shoaf
Town Manager, Town of Hertford

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH
STREET TO NC 37 INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER
THE PERQUIMANS RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH
CAROLINA
TIP NO. R-4467**

Execution of this MOA by USCG, USACE, NCDOT, ACHP, and the North Carolina SHPO, and implementation of its terms, evidence that the USCG, as the lead federal agency, has afforded the Council an opportunity to comment on the Undertaking.

CONCUR:

Sara. E Winslow
Citizens for the Preservation and Growth of Hertford

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
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Execution of this MOA by USCG, USACE, NCDOT, ACHP, and the North Carolina SHPO, and implementation of its terms, evidence that the USCG, as the lead federal agency, has afforded the Council an opportunity to comment on the Undertaking.

CONCUR:

Nancy Theodore
103 Phelps Street
Hertford, NC 27944

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE
IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET TO NC 37
INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS
RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467**

Execution of this MOA by USCG, USACE, NCDOT, ACHP, and the North Carolina SHPO, and implementation of its terms, evidence that the USCG, as the lead federal agency, has afforded the Council an opportunity to comment on the Undertaking.

CONCUR:

Frank Jaklic
401 N Church Street
Hertford, NC 27944

Date: _____

Connie Jaklic
401 N Church Street
Hertford, NC 27944

Date: _____

**MEMORANDUM OF AGREEMENT
AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE IMPROVEMENTS TO US 17 BUSINESS FROM CHURCH STREET
TO NC 37 INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE
PERQUIMANS RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH
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TIP NO. R-4467**

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CONCUR:

Virginia Miller
405 North Front Street
Hertford, NC 27944

Date: _____

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CONCUR:

Don Keith
405 North Front Street
Hertford, NC 27944

Date: _____

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UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
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CONCUR:

Penny Byrd
137 Broad River Drive
Hertford, NC 27944

Date: _____

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AMONG THE UNITED STATES COAST GUARD,
UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
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CONCUR:

Robert E. Halter
105 Little River Circle
Hertford, NC 27944

Date: _____

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UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
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INCLUDING THE REPLACEMENT OF BRIDGE NO. 8 OVER THE PERQUIMANS
RIVER IN HERTFORD, PERQUIMANS COUNTY, NORTH CAROLINA
TIP NO. R-4467**

CONCUR:

Leslie E. Piercy
202 Front Street
Hertford, NC 27944

Date: _____

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UNITED STATES ARMY CORPS OF ENGINEERS,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
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CONCUR:

Rhonda Waters
217 North Church Street
Hertford, NC 27944

Date: _____

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CONCUR:

Margaret Lindsay
306 N Front Street
Hertford, NC 27944

Date: _____

Charles Lindsay
306 N Front Street
Hertford, NC 27944

Date: _____

APPENDIX A

Historic Structures and Landscape Recordation Plan For Improvements to US 17 Business from Church Street to NC 37 including the Replacement of Bridge No. 8 over the Perquimans River in Hertford, Perquimans County, North Carolina TIP No. R-4467

Photographic Requirements

- Elevations and oblique views of the properties affected by the R-4467 project within the Hertford Downtown Historic District, including Perquimans Bridge Number 8.
- Representative street/landscapes within the affected areas of historic district.

Photographic Format

- Color digital images (all views). Images are to be shot on a SLR digital camera with a minimum resolution of 6 megabyte pixels, at a high quality (preferably RAW) setting, to be saved in TIF format as the archival masters and labeled according to the State Historic Preservation Office standards.
- Images provided to the Town will be in JPEG format.
- All processing to be done to archival standards.
- Labeled map with a key to the shots and photographs
- The accompanying printed inventory of the images – including subject, location, date, and photographer information for each image – is to be completed according to the State Historic Preservation Office standards.

Copies and Curation

- One (1) set of all above mentioned photographic documentation, including a compact disc of labeled images, will be deposited with the North Carolina Office of Archives and History/Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.
- One (1) contact sheet shall be deposited in the files of the Historic Architecture Group of NCDOT.