



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS



(Version 2.07; Released October 2016)

WBS Element: SF-530023 TIP No.: 17BP.2.R.74 County(ies): Lenoir Page 1 of 1

General Project Information

| | | | | | | | |
|---------------------------------|--|------------------|-------------|------------------------|--|------------------------|-----------|
| WBS Element: | SF-530023 | TIP Number: | 17BP.2.R.74 | Project Type: | Bridge Replacement | Date: | 5/15/2017 |
| NCDOT Contact: | Hon Yeung | | | Contractor / Designer: | Richard A. Moore, PE, McKim & Creed | | |
| Address: | PO Box 1587 105 Pictolus Highway Grenville, NC 27835 | | | Address: | 243 North Front Street Wilmington, NC 28401 | | |
| | Phone: | 252-439-2800 | | | Phone: | 910-343-1048 | |
| | Email: | hfyung@ncdot.gov | | | Email: | ramoore@mckimcreed.com | |
| City/Town: | Kinston, NC | | | County(ies): | Lenoir | | |
| River Basin(s): | Neuse | | | CAMA County? | No | | |
| Wetlands within Project Limits? | Yes | | | | | | |

Project Description

| | | | | | | | |
|--|--|-----------------------|--|---|--|--|--|
| Project Length (lin. miles or feet): | 600 feet | Surrounding Land Use: | Residential, Agricultural, Undeveloped | | | | |
| | Proposed Project | | | Existing Site | | | |
| Project Built-Upon Area (ac.) | 0.4 | ac. | 0.4 | ac. | | | |
| Typical Cross Section Description: | The bridge replacement is proposed to be a two (2) span 21" cored slab bridge: 1 @ 45' and 1 @ 55'. The replacement will be along the current existing roadway alignment in the same location. 33'-0" bridge width with 30'-10" clear roadway. 2-11' lanes 2% slope with 4.5' shoulder. | | | The existing bridge has a concrete wearing surface on three (3) spans: 1 @ 15'-7", 1 @ 15'-3", and 1 @ 15'-6". The bridge deck is reinforced concrete on timber joists on timber caps and timber piles. The existing clear roadway width is approximately 30 feet with a deck width of 31.5 feet. 2-10.5' lanes with 5.5' shoulder. | | | |
| Annual Avg Daily Traffic (veh/hr/day): | Design/Future: | N/A | | Year: | | | |
| Existing: | 530 | | Year: | 2012 | | | |
| General Project Narrative: (Description of Minimization of Water Quality Impacts) | This bridge replacement project is located to the southeast of Kinston, NC and is in the Neuse River Basin. The total project length is 600 feet along the existing SR1905 roadway alignment. The project is located within a 4.7 square mile Strawberry Branch drainage area which has a classification of C;Sw,NSW. The project's drainage system consists of two (2) proposed catch basins that direct runoff to the wetlands through a pipe network to an outfall. A rip rap pad is proposed at the pipe outlet to provide diffuse flow before runoff enters Buffer Zone 2. The outfall and rip rap pad are located on the down slope side of the bridge and outside of the wetlands limits. | | | | | | |

Waterbody Information

| | | | | | | | |
|--|------------------------------|--|-------------------------|--|-------|--|--|
| Surface Water Body (1): | Strawberry Branch | | NCDWR Stream Index No.: | 27-80-7 | | | |
| 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: | N/A | | | 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) | | | | | | | |

RIPARAIN BUFFER IMPACTS SUMMARY

| | | | IMPACT | | | | | | | | | BUFFER REPLACEMENT | |
|---------------|-----------------------|-------------------|---------------|--------|-----------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| SITE NO. | STRUCTURE SIZE / TYPE | STATION (FROM/TO) | TYPE | | | ALLOWABLE | | | MITIGABLE | | | ZONE 1 (ft ²) | ZONE 2 (ft ²) |
| | | | ROAD CROSSING | BRIDGE | PARALLEL IMPACT | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | ZONE 1 (ft ²) | ZONE 2 (ft ²) | TOTAL (ft ²) | | |
| 1 | 21" CORED SLAB BRIDGE | 14+30 TO 15+70 | 0 | 0 | 0 | 4216.0 | 839.0 | 5055.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
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| TOTAL: | | | 0 | 0 | 0 | 4216.0 | 839.0 | 5055.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 LENOIR COUNTY
 PROJECT: 17BP.R.2.74 (SF-530023)

 DATE 06/01/2017
 SHEET 1 OF 2

WETLANDS IN BUFFER IMPACTS SUMMARY

| SITE NO. | STATION (FROM/TO) | WETLANDS IN BUFFERS | |
|---------------|----------------------|------------------------------|------------------------------|
| | | ZONE 1 (ft ²) | ZONE 2 (ft ²) |
| 1 | 14+30 TO 15+70 | 4216 | 839 |
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| TOTAL: | | 4216 | 839 |

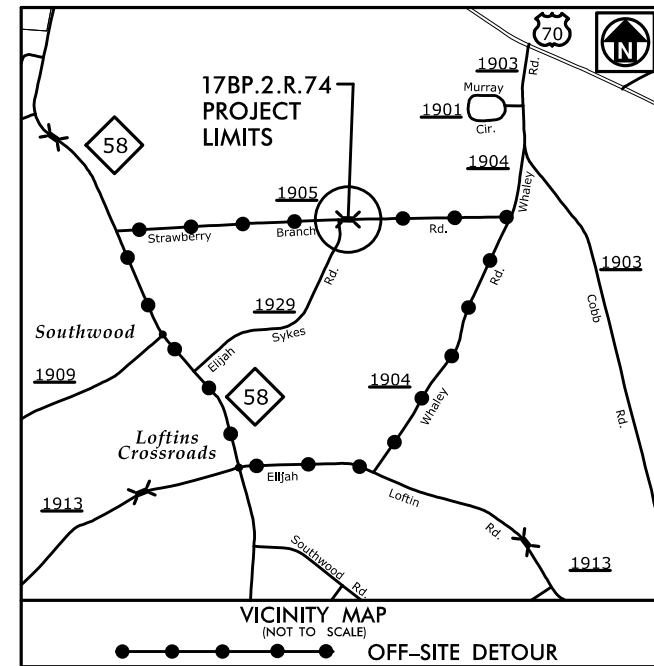
N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 LENOIR COUNTY
 PROJECT: 17BP.R.2.74 (SF-530023)

 DATE 06/01/2017
 SHEET 2 OF 2

CONTRACT: TIP PROJECT: 17BP.2.R.74

CONTRACT:



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
LENOIR COUNTY

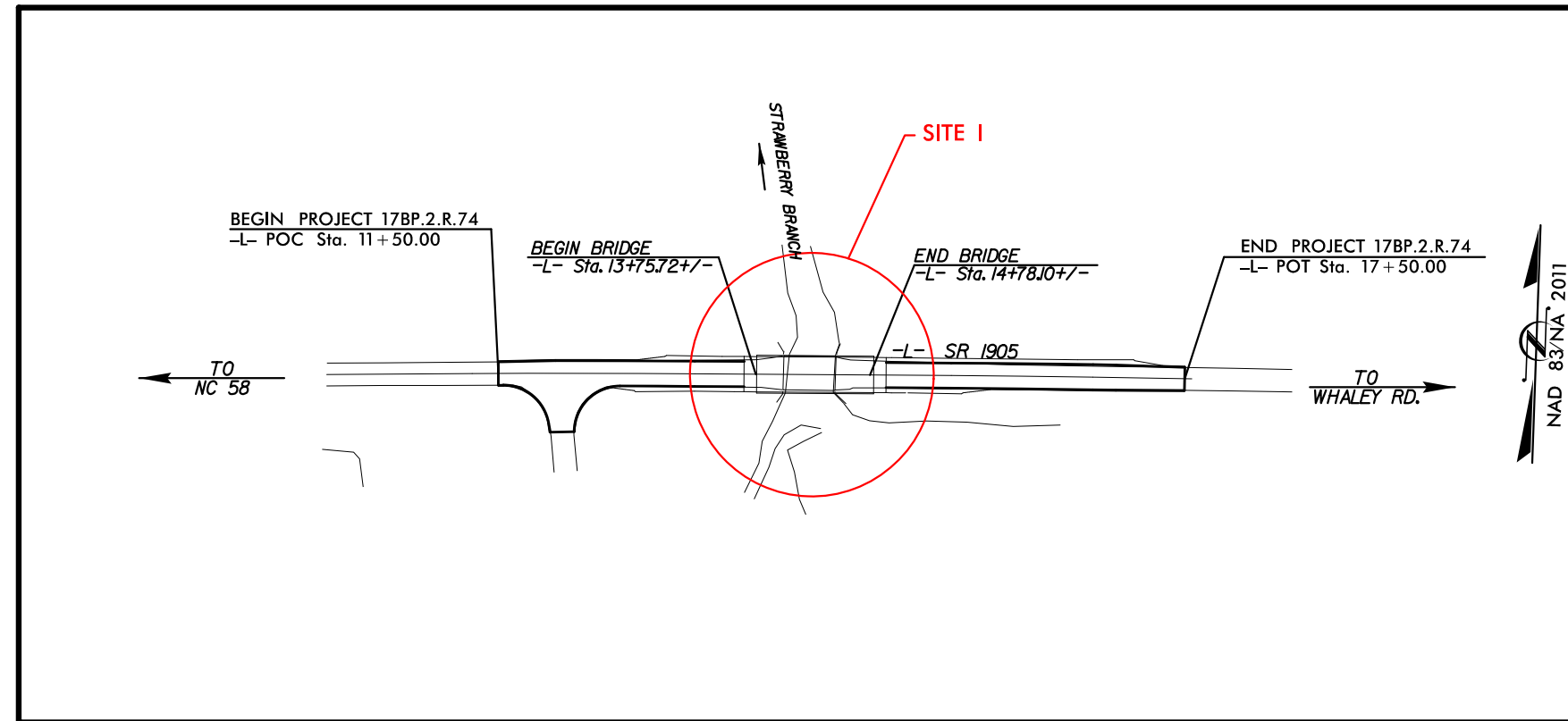
LOCATION: BRIDGE NO. 23 OVER STRAWBERRY BRANCH ON SR 1905 (STRAWBERRY BRANCH ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE

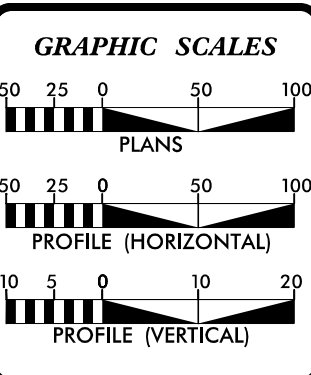
BUFFER IMPACTS PERMIT

| | | | |
|-------------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | 17BP.2.R.74 | 1 | |
| STATE PROJECT NO. | P.A. PROJ. NO. | DESCRIPTION | |
| 17BP.2.R.74 | | P.E. | |
| | | | |
| | | | |
| | | | |
| | | | |

**BUFFER DRAWING
SHEET 1 OF 8**



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



DESIGN DATA

ADT 2012 = 530

ADT 2025 = ?

V = 55 MPH

FUNCTIONAL CLASS. = LOCAL SUB REGIONAL TIER

PROJECT LENGTH

| | | |
|------------------------------|---|-------------|
| LENGTH ROADWAY TIP PROJECT | = | 0.095 MILES |
| LENGTH STRUCTURE TIP PROJECT | = | 0.019 MILES |
| TOTAL LENGTH TIP PROJECT | = | 0.114 MILES |

Prepared In the Office of Mott MacDonald for
DIVISION 2
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
NOVEMBER 23, 2016

LETTING DATE:
MAY 24, 2017

| |
|--|
| DAVID C. WALLER, PE PROJECT ENGINEER |
| RICHARD MOORE, PE HYDRAULIC ENGINEER |
| HON YEUNG, PE NCDOT BRIDGE PROGRAM MANAGER |

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

PLANS PREPARED BY:

M M
MOTT
MACDONALD

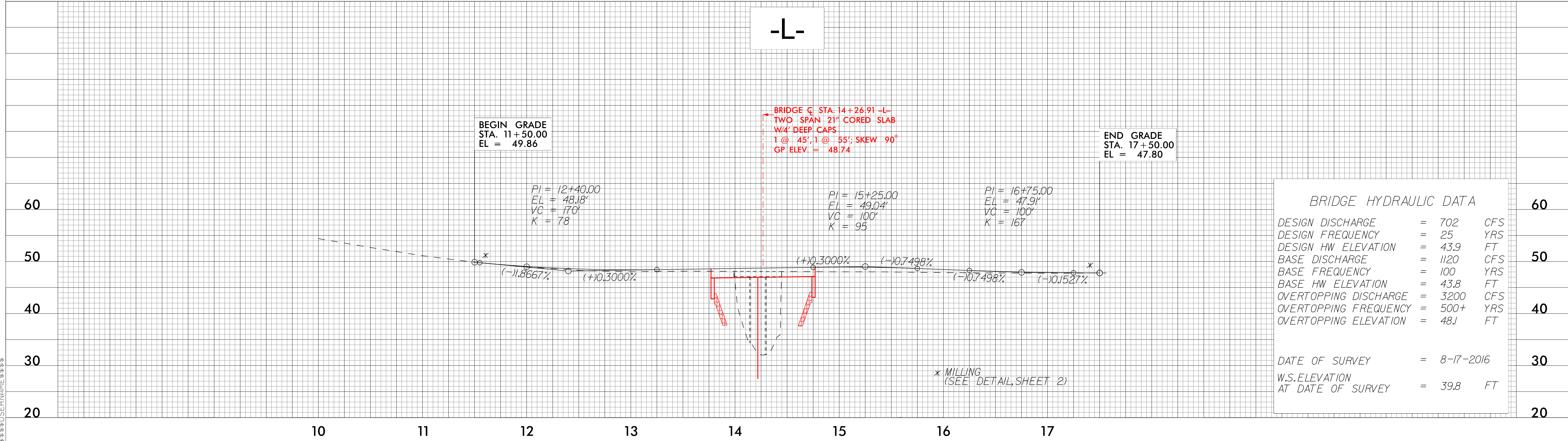
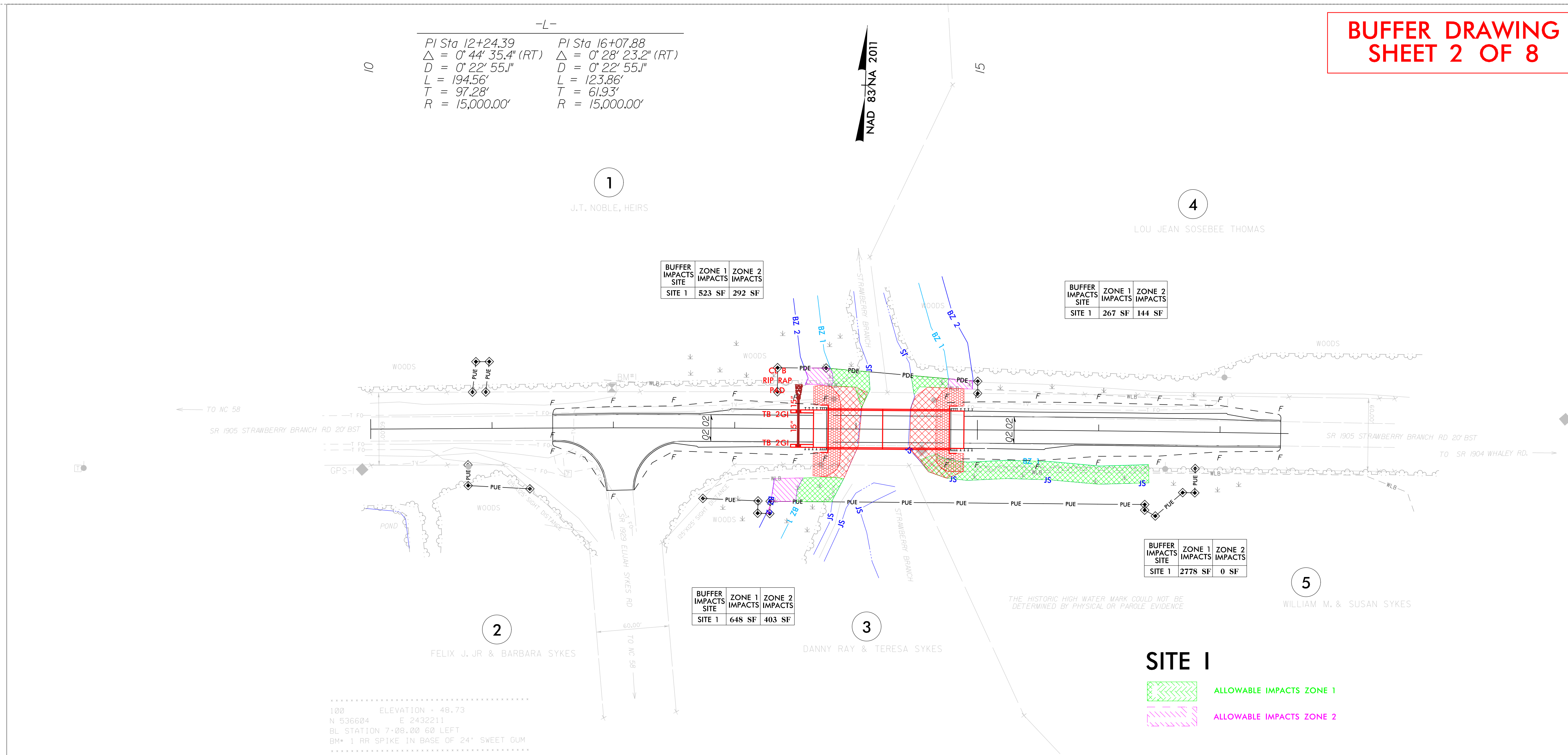
PO Box 700
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(919) 552-2254 (Fax)
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LICENSE NO. F-0669

MCKIM & CREED
NC LICENSE #F-1222
243 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TEL: (910) 343-1048 FAX: (910) 790-6282

BUFFER DRAWING SHEET 2 OF 8

| | |
|---|-----------------------------------|
| PROJECT REFERENCE 17BP.2.R.74 - LENOIR 23 | SHEET NO. 4 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| MOTT MACDONALD I & E, LLC LICENSE NO. F-06697 | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |
| Prepared in the Office of: M MOTT MACDONALD | |
| PO Box 700 Fuquay-Varina, NC 27526 www.mottmac.com/americas | |
| MCKIM & CREED 243 NORTH FRONT STREET WILMINGTON, NORTH CAROLINA 28401 TEL: (910) 343-1048 FAX: (910) 706-2282 | |
| VERTICAL SCALE 5' 0 5' 10' | HORIZONTAL SCALE 25' 0 25' 50' |



SDATES
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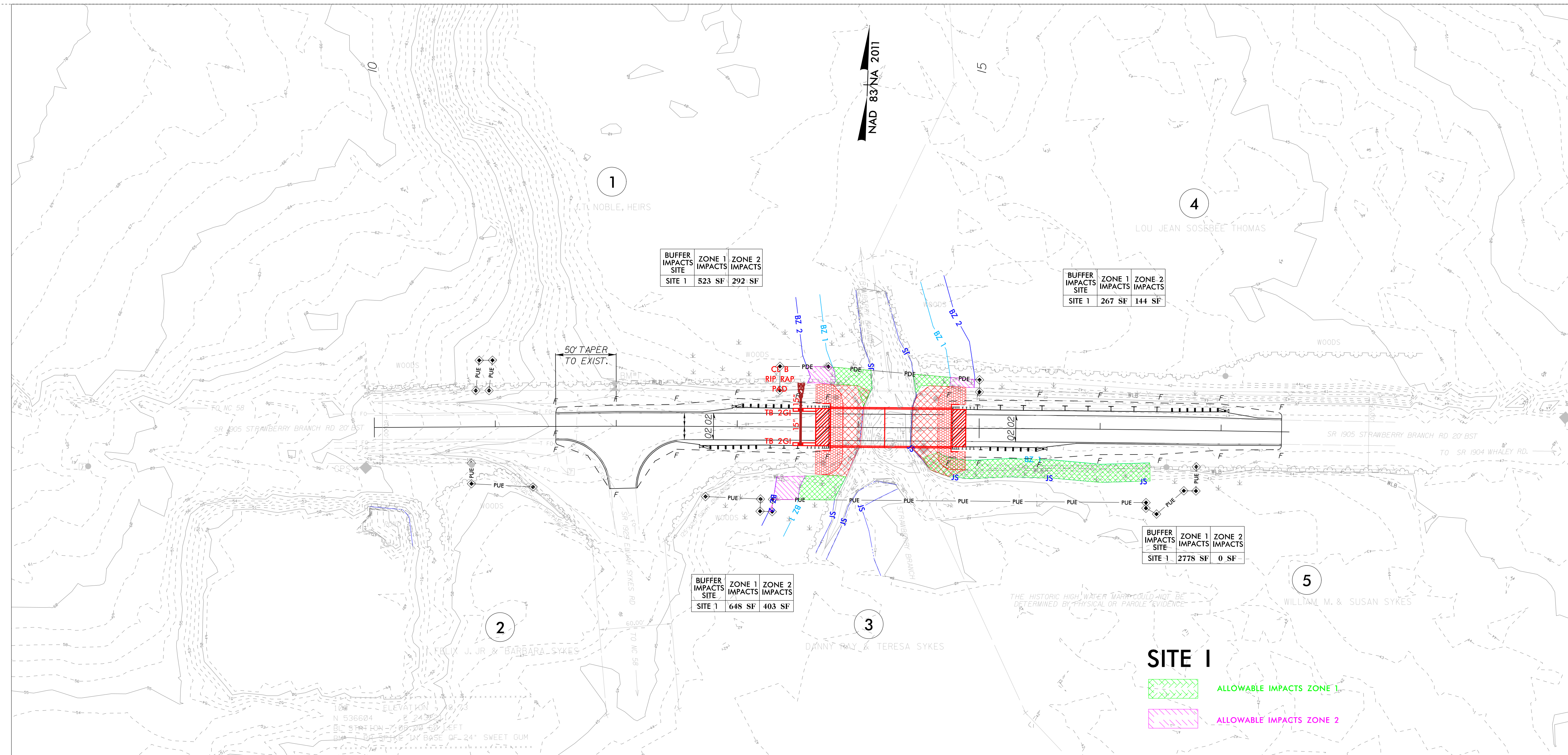
| | |
|--|---------------------|
| PROJECT REFERENCE 17BP.2.R.74 - LENOIR 23 | SHEET NO. 4 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| MOTT MACDONALD 18 E. LLC LICENSE NO. F-0669 | |
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MCKIM & CREED
INCORPORATED
242 NORTH FRONT STREET
WILMINGTON, NORTH CAROLINA 28401
TEL: (910) 363-0988 FAX: (910) 363-0989

VERTICAL SCALE
0 5' 10'

HORIZONTAL SCALE
0 25' 50'

BUFFER DRAWING SHEET 3 OF 8



| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 523 SF | 292 SF |

| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 267 SF | 144 SF |

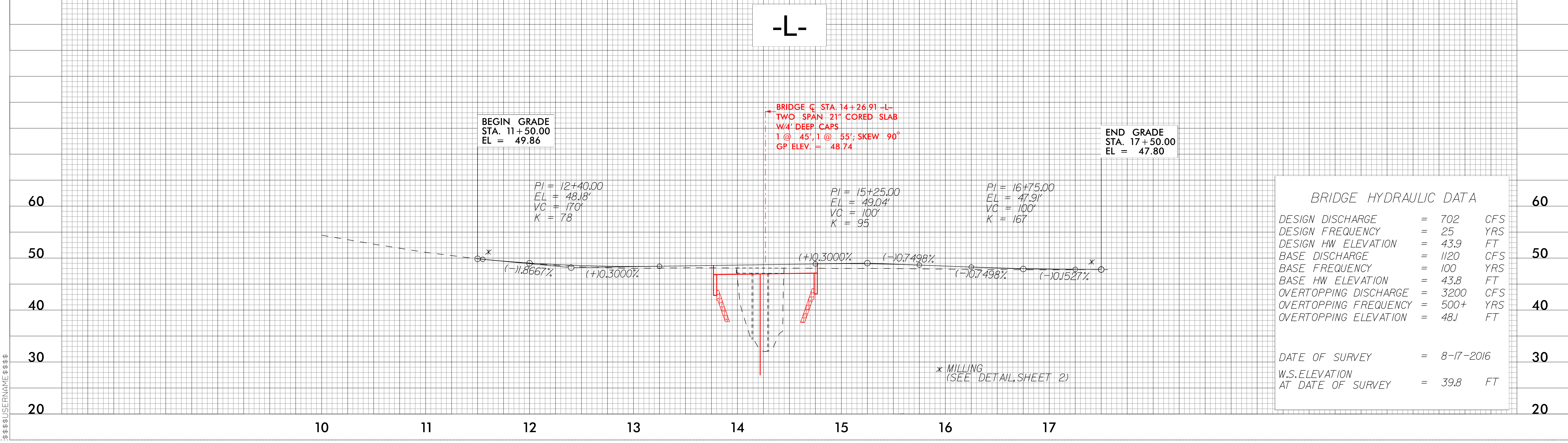
| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 648 SF | 403 SF |

| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 2778 SF | 0 SF |

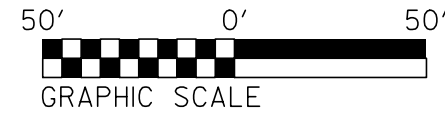
SITE 1

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2



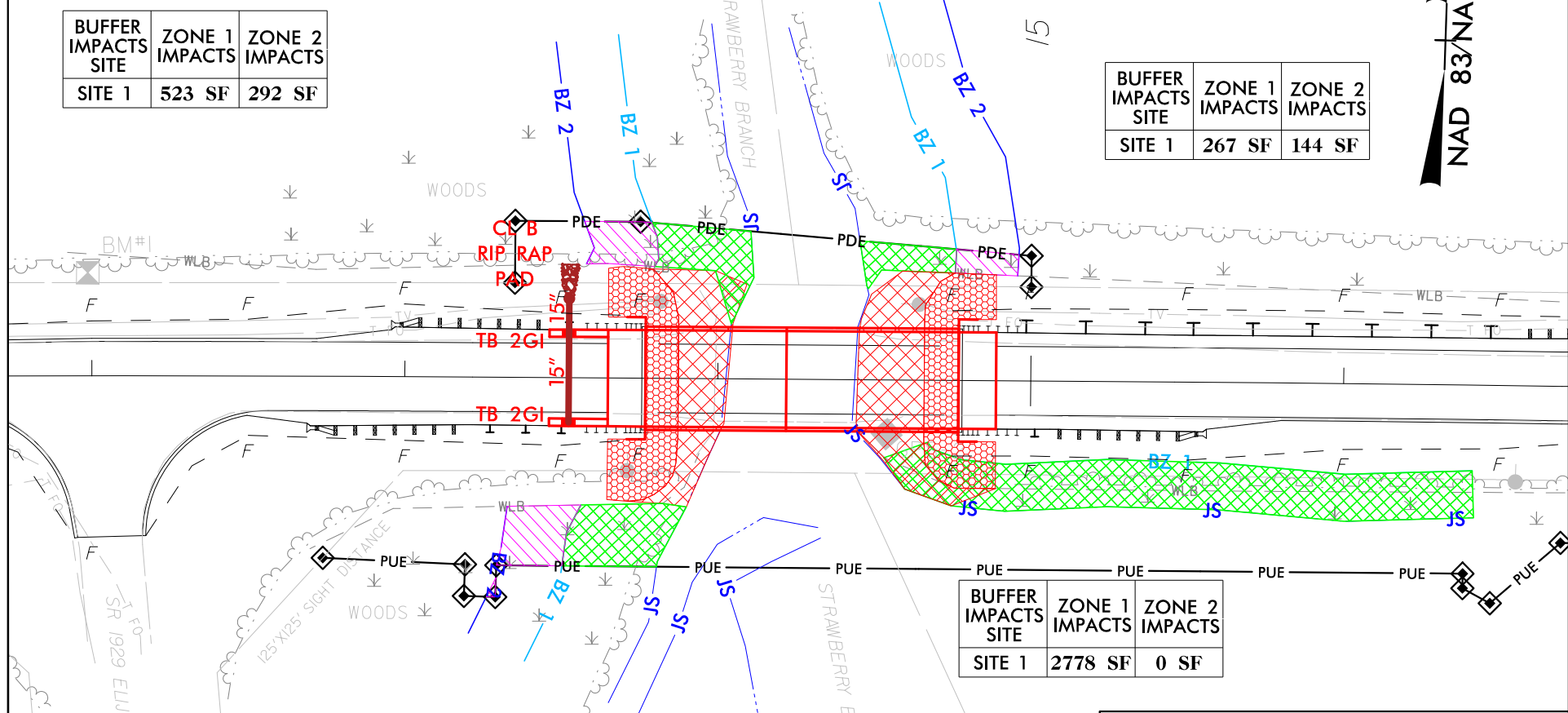
**BUFFER DRAWING
SHEET 4 OF 8**



NAD 83/NA 2011

| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 523 SF | 292 SF |

| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 267 SF | 144 SF |



| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 2778 SF | 0 SF |

**PLAN VIEW
SITE 1**

| BUFFER IMPACTS SITE | ZONE 1 IMPACTS | ZONE 2 IMPACTS |
|---------------------|----------------|----------------|
| SITE 1 | 648 SF | 403 SF |

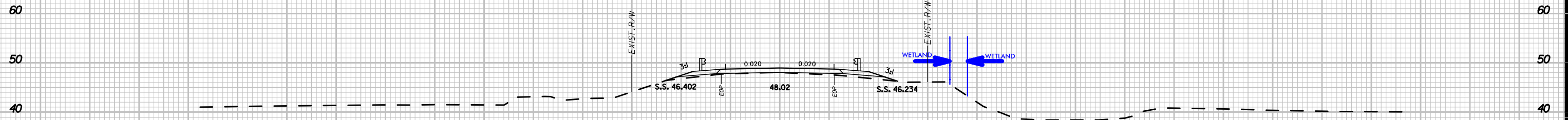
- ALLOWABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2

NCDOT
DIVISION OF HIGHWAYS
LENOIR COUNTY
PROJECT: 17BP.2.R.74 (SF-530023)
REPLACE BRIDGE #023
ON SR 1905 OVER
STRAWBERRY BRANCH
 5/15/01

8/23/08

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

**BUFFER DRAWING
SHEET 5 OF 8**

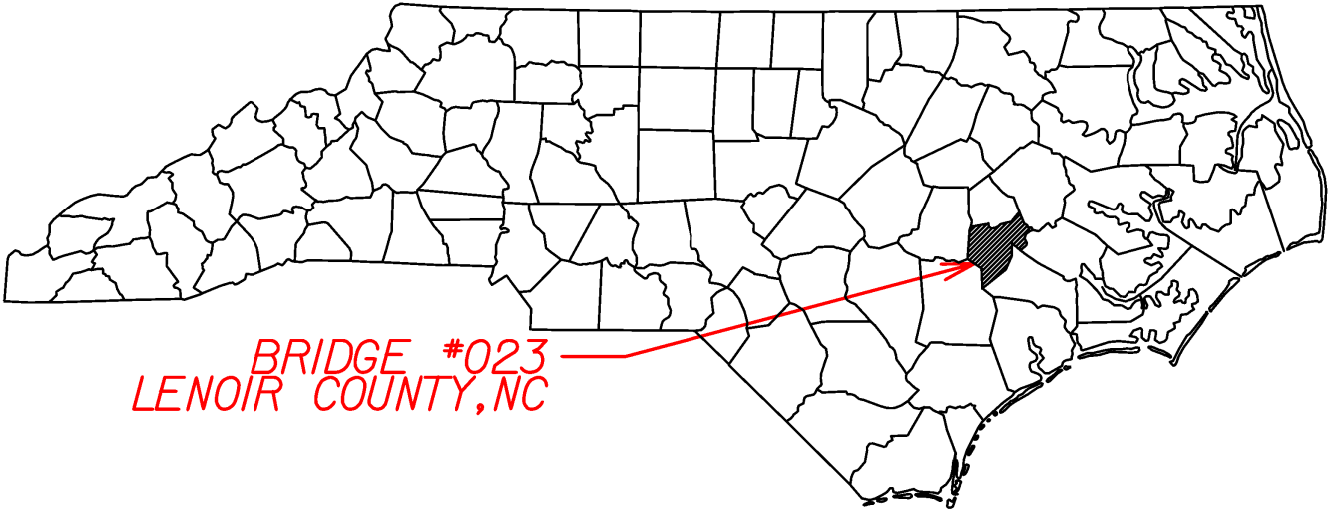


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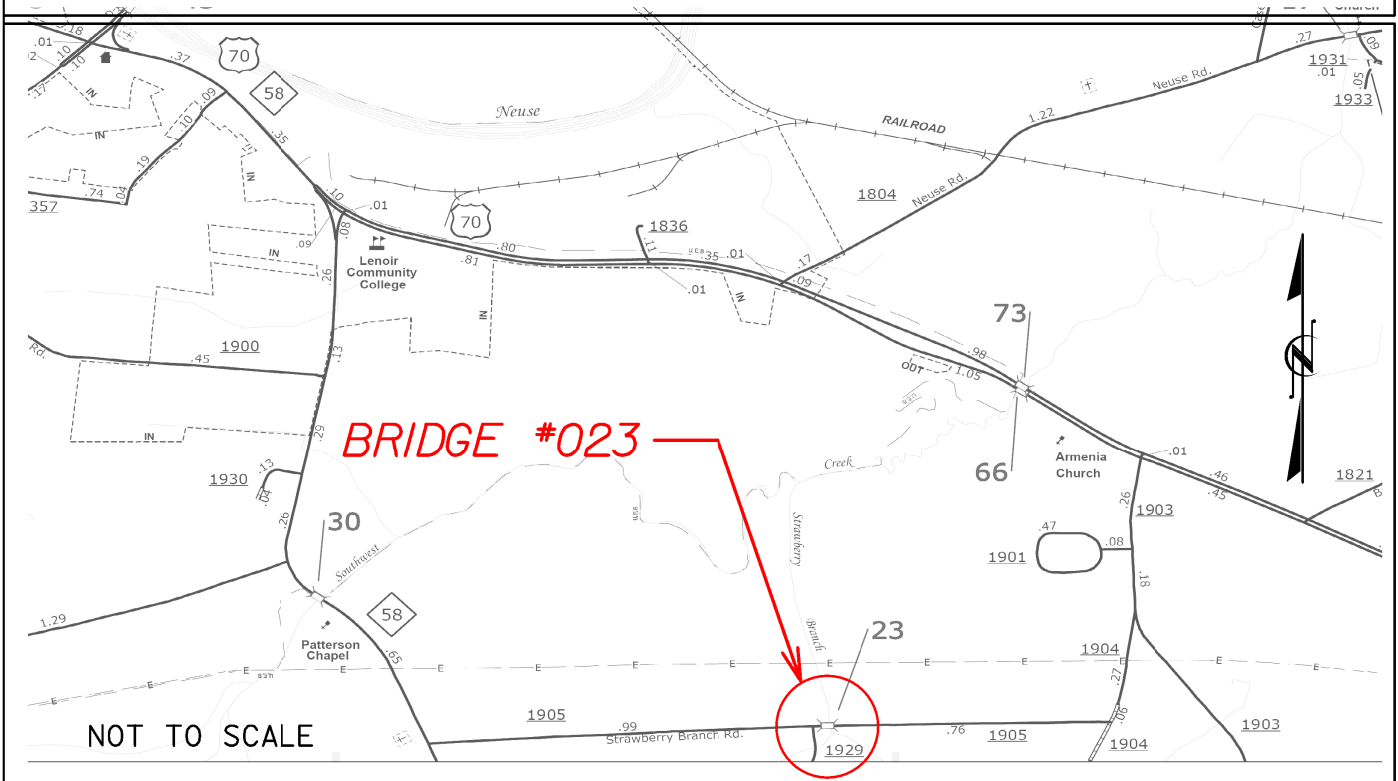
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NORTH CAROLINA



BRIDGE #023
LENOIR COUNTY, NC



BRIDGE #023

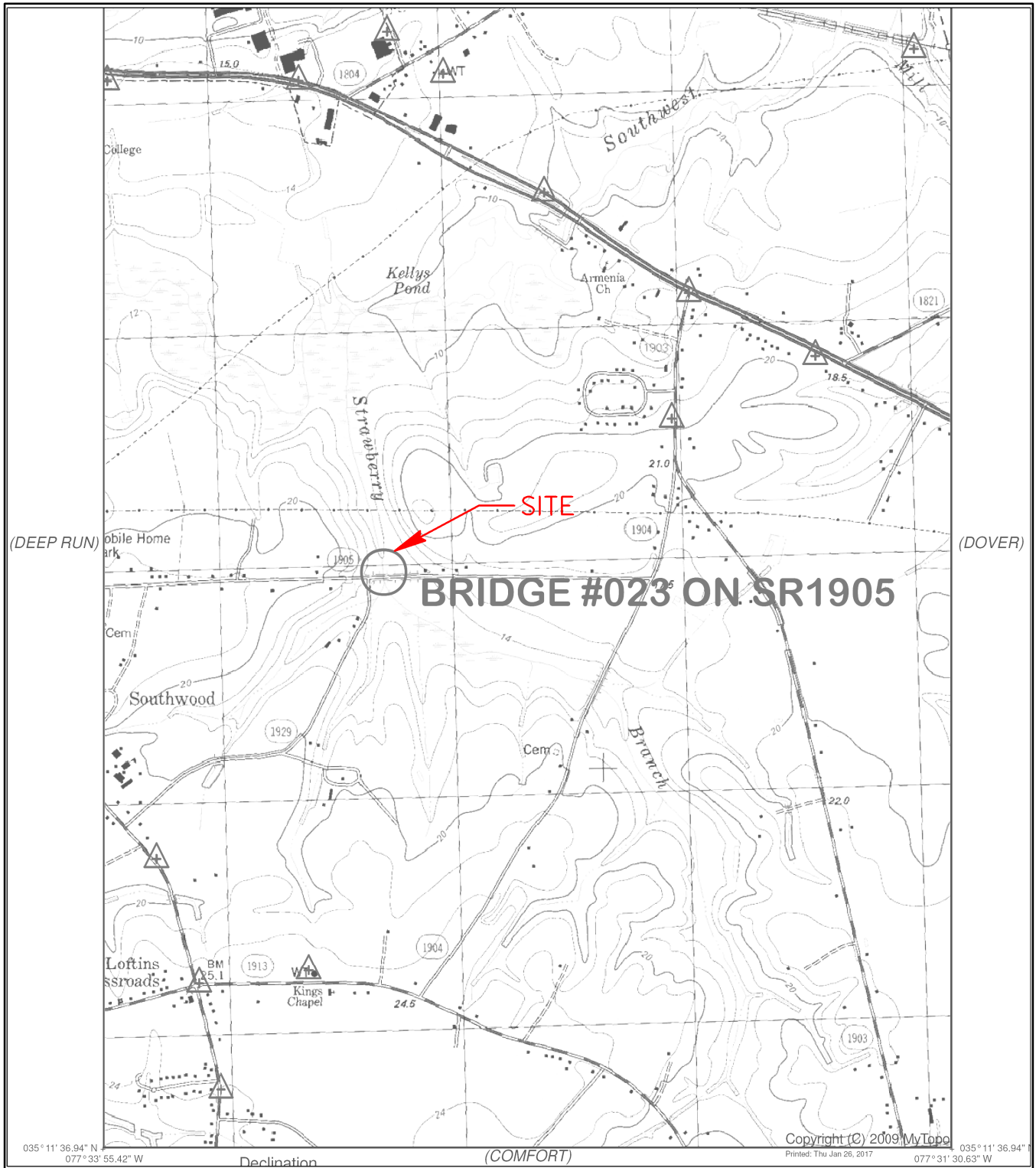
NOT TO SCALE

VICINITY
MAP

NOT TO SCALE

NCDOT
DIVISION OF HIGHWAYS
LENOIR COUNTY
PROJECT: 17BP.2.R.74 (SF-530023)
REPLACE BRIDGE #023
ON SR 1905 OVER
STRAWBERRY BRANCH

5/15/17



**BUFFER DRAWING
SHEET 7 OF 8**

**USGS
MAP**

NOT TO SCALE

**N. C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
LENOIR COUNTY**

PROJECT: 17BP.2.R.74 (SF-530023)

**REPLACE BRIDGE #023
ON SR 1905 OVER
STRAWBERRY BRANCH**

PROPERTY OWNERS
NAMES AND ADDRESSES

| PARCEL NO. | NAMES | ADDRESSES |
|-------------------|-----------------------------|--|
| 1 | J.T. NOBLE, HEIRS | 4037 JOHN S. RABOTEAU WYND, RALEIGH, NC 27612 |
| 2 | FELIX J. JR & BARBARA SYKES | 1549 STRAWBERRY BRANCH RD., KINSTON, NC 28501 |
| 3 | DANNY RAY & TERESA SYKES | 878 ELIJAH SYKES ROAD, KINSTON, NC 28504 |
| 4 | LOU JEAN SOSEBEE THOMAS | 7582 US HWY 76, YOUNG HARRIS, GA 30582 |
| 5 | WILLIAM M. & SUSAN SYKES | 705 ELIJAH SYKES ROAD, KINSON, NC 28501 |

**BUFFER DRAWING
SHEET 8 OF 8**

NCDOT
DIVISION OF HIGHWAYS
LENOIR COUNTY
PROJECT: 17BP.2.R.74 (SF-530023)
REPLACE BRIDGE #023
ON SR 1905 OVER
STRAWBERRY BRANCH

5/15/17