



Pre-Construction Notification (PCN) Form

For Nationwide Permits and Regional General Permits

(along with corresponding Water Quality Certifications)

June 28, 2017 Ver 1.8

*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.*

Below is a link to the DRAFT online help file.

<http://edocs.deq.nc.gov/WaterResources/0/doc/549884/Page1.aspx>

A. Processing Information

County (or Counties) where the project is located:*

Robeson

Is this project a public transportation project?*

Yes No

Is this a NCDOT Project?*

Yes No

(NCDOT only) T.I.P. or state project number:

B-4620

WBS #

38438.1.2

(for NCDOT use only)

1a. Type(s) of approval sought from the Corps:*

- Section 404 Permit (wetlands, streams and waters, Clean Water Act)
 Section 10 Permit (navigable waters, tidal waters, Rivers and Harbors Act)

1b. What type(s) of permit(s) do you wish to seek authorization?*

- Nationwide Permit (NWP)
 Regional General Permit (RGP)

Nationwide Permit (NWP) Number: 03 - Maintenance

Nationwide Permit (NWP) Number: 12 - Utility Lines

NWP Number Other:

List all NW numbers you are applying for not on the drop down list.

1c. Type(s) of approval sought from the DWR:*

check all that apply

- 401 Water Quality Certification - Regular
 Non-404 Jurisdictional General Permit

- 401 Water Quality Certification - Express
 Riparian Buffer Authorization

**1d. Is this notification solely for the record because
written approval is not required?**

For the record only for DWR 401 Certification: Yes No

For the record only for Corps Permit: Yes No

1e. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts?

If so, attach the acceptance letter from mitigation bank or in-lieu fee program.

Yes No

1f. Is the project located in any of NC's twenty coastal counties? *

Yes No

B. Applicant Information

1a. Who is the Primary Contact? *

Gordon Cashin

1b. Primary Contact Email: *

gcashin@ncdot.gov

1c. Primary Contact Phone: *

(xxx)xxx-xxxx

(919)707-6107

1d. Who is applying for the permit?

Owner Applicant (other than owner) Agent/Consultant

(Check all that apply)

2. Owner Information

2a. Name(s) on recorded deed:

2b. Deed book and page no.:

2c. Responsible party:

(for Corporations)

2d. Address

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

2e. Telephone Number:

(xxx)xxx-xxxx

2f. Fax Number:

(xxx)xxx-xxxx

2g. Email Address: *

pharris@ncdot.gov

C. Project Information and Prior Project History

1. Project Information

1a. Name of project:*

B-4620 Bridges 121 & 123 over Ashpole Swamp on SR 2455 (White Pond Road)

1b. Subdivision name:

(if appropriate)

1c. Nearest municipality / town:*

Fairmont

1d. Driving directions*

If it is a new project and can not easily be found in a GPS mapping system. Please provide directions.

Bridges 121 & 123 over Ashpole Swamp on SR 2455 (White Pond Road)

2. Project Identification

2a. Property Identification Number:

(tax PIN or parcel ID)

2b. Property size:

(in acres)

2c. Project Address

Street Address

Address Line 2

City

State / Province / Region

Postal / Zip Code

Country

2d. Site coordinates in decimal degrees

Please collect site coordinates in decimal degrees. Use between 4-6 digits (unless you are using a survey-grade GPS device) after the decimal place as appropriate, based on how the location was determined. (For example, most mobile phones with GPS provide locational precision in decimal degrees to map coordinates to 5 or 6 digits after the decimal place.)

Latitude:*

34.447442

ex: 34.208504

Longitude:*

-79.165344

-77.796371

3. Surface Waters

3a. Name of the nearest body of water to proposed project:*

Ashpole Swamp

3b. Water Resources Classification of nearest receiving water:*

C; Sw

[Surface Water Lookup](#)

3c. What river basin(s) is your project located in?*

Lumber

4. Project Description

4a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: *

Rural residential, agriculture, fragmented forestland along stream corridors and floodplains.

4b. Attach an 8 1/2 X 11 excerpt from the most recent version of the USGS topographic map indicating the location of the project site. (for DWR)

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

File type must be pdf

4c. Attach an 8 1/2 X 11 excerpt from the most recent version of the published County NRCS Soil Survey map depicting the project site. (for DWR)

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

File type must be pdf

4d. List the total estimated acreage of all existing wetlands on the property:

7.3

4e. List the total estimated linear feet of all existing streams on the property:

(intermittent and perennial)

479

4f. Explain the purpose of the proposed project:

Replace Bridges 121 and 123 in Robeson County

4g. Describe the overall project in detail, including the type of equipment to be used:

The NCDOT proposes to replace Bridges 121 and 123 on SR 2455 (White Pond Road) over Ashpole Swamp in Robeson County, North Carolina. Standard roadway construction methods and equipment will be used. The proposed review date is 1/30/2018, and proposed let date is 3/20/2018.

4h. Please upload project drawings for the proposed project.

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

B-4620 attachments.pdf

4.39MB

File type must be pdf

5. Jurisdictional Determinations

5a. Have the wetlands or streams been delineated on the property or proposed impact areas? *

Yes

No

Unknown

Comments:

5b. If the Corps made a jurisdictional determination, what type of determination was made? *

Preliminary

Approved

Unknown

Corps AID Number:

Example: SAW-2017-99999

SAW-2013-00016

5c. If 5a is yes, who delineated the jurisdictional areas?

Name (if known):

Robert Turnbull

Agency/Consultant Company:

Environmental Services, Inc.

Other:

5d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.

8/6/2013

5d1. Jurisdictional determination upload

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

B-4620 JD.pdf

3.13MB

File type must be PDF

6. Project History

6a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past? *

Yes

No

Unknown

7. Future Project Plans

7a. Is this a phased project? *

Yes

No

Are any other NWP(s), regional general permit(s), or individual permits(s) used, or intended to be used, to authorize any part of the proposed project or related activity? This includes other separate and distant crossing for linear projects that require Department of the Army authorization but don't require pre-construction notification.

D. Proposed Impacts Inventory

1. Impacts Summary

1a. Where are the impacts associated with your project? (check all that apply):

Wetlands

Streams-tributaries

Buffers

Open Waters

Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Site # - Reason for impact	2b. Impact type *	2c. Type of wetland	2d. Wetland name	2e. Forested	2f. Jurisdiction area type	2g. Impact area
Bridge #121 Map label (e.g. Road Crossing 1)	P Permanent (P) or Temporary (T)	Riverine Swamp Forest	Site 1	Yes	Both (404, 10) or DWR (401, other)	0.010 (acres)
Roadway fill between bridges Map label (e.g. Road Crossing 1)	P Permanent (P) or Temporary (T)	Riverine Swamp Forest	Site 1/2	Yes	Both (404, 10) or DWR (401, other)	0.080 (acres)

2g. Temporary Wetland Impact

0.000

2g. Permanent Wetland Impact

0.090

2g. Total Wetland Impact

0.090

2h. Comments:

Bridge and roadway fill construction will involve 0.09 acre of handclearing, and there will also be 0.21 acre of handclearing for utilities. Installation of erosion control measures will involve 0.03 acre of temporary fill in wetlands in the hand clearing areas for the installation of erosion control measures, including temporary silt fence and/or special sediment control fence.

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

** All Perennial or Intermittent streams must be verified by DWR or delegated local government.

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Site # - Reason for impact	4b. Impact type	4c. Name of waterbody	4d. Activity type	4e. Waterbody type	4f. Impact area
Bridge #121 Map label (e.g. Road Crossing 1)	T Permanent (P) or Temporary (T)	Ashpole Swamp (if applicable)	Bridge	Tributary	0.01 (acres)
Bridge #123 Map label (e.g. Road Crossing 1)	T Permanent (P) or Temporary (T)	Ashpole Swamp (if applicable)	Bridge	Tributary	0.01 (acres)

4g. Total temporary open water Impacts:

0.02

4g. Total permanent open water impacts:

0.00

4g. Total open water impacts:

0.02

4h. Comments:

impact at each site is >0.01 however 0.01 has to be entered

5. Pond or Lake Construction

If pond or lake construction is proposed, then complete the chart below.

6. Buffer Impacts (for DWR)

If project will impact a protected riparian buffer, then complete the chart below. Individually list all buffer impacts below.

E. Impact Justification and Mitigation

1. Avoidance and Minimization

1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing the project: *

Replacement on existing alignment with an offsite detour. Rip rap pads will be used at all ditch outlets to reduce flow into wetlands. The proposed improvements will not require deck drains. 3:1 slopes will be used in jurisdictional areas.

1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques: *

Replacement on existing alignment with an offsite detour. BMP's for Construction and Maintenance Activities will be adhered to.

2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State

2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?

Yes

No

2b. If this project DOES NOT require Compensatory Mitigation, explain why:

Due to minimal impacts to wetlands and surface waters no compensatory mitigation is proposed.

F. Stormwater Management and Diffuse Flow Plan (required by DWR)

1a. Does this project require a Stormwater Management Plan?

Yes No

1b. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan:

See attached permit drawings

1c. What is the overall percent imperviousness of this project?

%

1d. Who will be responsible for the review of the Stormwater Management Plan? *

Certified Local Government DEMLR Stormwater Review
 DWR 401 & Buffer Permitting Branch DWR Transportation Permitting Branch

2. Diffuse Flow Plan

2a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?

Yes No

If no, explain why:

5. DWR 401 Stormwater Review

5a. Is the Stormwater Management Plan (including BMP Supplemental Forms and Operation and Maintenance Agreements) attached?

Yes No

Stormwater Management Plan Upload

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

file type must be pdf

G. Supplementary Information

1. Environmental Documentation

1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? *

Yes No

1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)? *

Yes No

1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) *

Yes No

NEPA or SEPA Final Approval Letter

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

FILE TYPE MUST BE PDF

2. Violations (DWR Requirement)

2a. Is the site in violation of DWR Water Quality Certification Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), or DWR Surface Water or Wetland Standards or Riparian Buffer Rules (15A NCAC 2B .0200)? *

Yes No

2b. Is this an after-the-fact permit application? *

Yes No

2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):

3. Cumulative Impacts (DWR Requirement)

3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? *

Yes No

3b. If you answered "no," provide a short narrative description.

Due to the minimal transportation impact resulting from this bridge replacement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.

4. Sewage Disposal (DWR Requirement)

4a. Describe, in detail, the treatment methods and dispositions (non-discharge or discharge) of wastewater generated from the proposed project. If the wastewater will be treated at a treatment plant, list the capacity available at that plant.

5. Endangered Species and Designated Critical Habitat (Corps Requirement)

5a. Will this project occur in or near an area with federally protected species or habitat? *

Yes No

5b. Have you checked with the USFWS concerning Endangered Species Act impacts? *

Yes No

5c. If yes, indicate the USFWS Field Office you have contacted.

5d. Is this a DOT project located within Division's 1-8? *

Yes

No

5i. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? *

Field surveys, NHP data, USFWS and NMFS websites

6. Essential Fish Habitat (Corps Requirement)

6a. Will this project occur in or near an area designated as an Essential Fish Habitat? *

Yes No

6b. What data sources did you use to determine whether your site would impact an Essential Fish Habitat? *

NMFS

7. Historic or Prehistoric Cultural Resources (Corps Requirement)

Link to the State Historic Preservation Office Historic Properties Map (does not include archaeological data: <http://gis.ncdcr.gov/hpoweb/>)

7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)? *

Yes No

7b. What data sources did you use to determine whether your site would impact historic or archeological resources? *

NEPA documentation

7c. Historic or Prehistoric Information Upload

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

File must be PDF

8. Flood Zone Designation (Corps Requirement)

Link to the FEMA Floodplain Maps: <https://msc.fema.gov/portal/search>

8a. Will this project occur in a FEMA-designated 100-year floodplain? *

Yes No

8b. If yes, explain how project meets FEMA requirements:

NCDOT Hydraulics Unit coordination with FEMA

8c. What source(s) did you use to make the floodplain determination? *

FEMA maps

Miscellaneous attachments not previously requested.

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

File must be PDF

Signature

*

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

- I have given true, accurate, and complete information on this form;
- I agree that submission of this PCN 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 PCN form.

Full Name: *

Colin Mellor

Signature

Colin Mellor



North Carolina Department of Transportation

Highway Stormwater Program
STORMWATER MANAGEMENT PLAN
FOR NCDOT PROJECTS



(Version 2.06; Released June 2016)

WBS Element: 38438.1.2 TIP No.: B-4620 County(ies): Robeson Page 1 of 2

General Project Information

WBS Element:	38438.1.2	TIP Number:	B-4620	Project Type:	Bridge Replacement	Date:	9/22/2017
NCDOT Contact:	Paul Atkinson		Contractor / Designer:	Rajender Gaddam, PE, CFM Will Weathersbee, PE			
Address:	1020 Birch Ridge Rd. Raleigh, NC 27610		Address:	1520 South Blvd, Suite 200 Charlotte, NC 28203			
	Phone:	919-707-6707		Phone:	704-940-4785		
	Email:	patkinson@ncdot.gov		Email:	rajender.gaddam@rsandh.com will.weathersbee@rsandh.com		
City/Town:			County(ies):	Robeson			
River Basin(s):	Lumber		CAMA County?	No			
Wetlands within Project Limits?	Yes						

Project Description

Project Length (lin. miles or feet):	930'	Surrounding Land Use:	Woods, Residential, Agricultural					
Project Built-Upon Area (ac.)		Proposed Project		Existing Site				
0.5 ac.				0.4 ac.				
Typical Cross Section Description:	Two 11' lanes with 2' shoulders on the approach, and two 11' lanes with 4'-5" shoulders on the bridge			Two 10' lanes with no shoulder on the approach, and two 10' lanes with 2' shoulders on the bridge.				
Annual Avg Daily Traffic (veh/hr/day):	Design/Future:	1582	Year:	2038	Existing:	1036	Year:	2018
General Project Narrative: (Description of Minimization of Water Quality Impacts)	<p>This is a bridge replacement project. Existing bridge 121 has a span arrangement of 1 span @ 20'-4", 1 span @ 20', 1 span @ 19'-8", and 1 span @ 20'-8", with a reinforced concrete floor on I-Beams. The endbents and interior bents have reinforced concrete caps and timber piles with crutch bents. The proposed bridge will go in the existing location. Proposed bridge 121 is a 1 span @ 45', 1 span @ 55', and 1 span @ 45', 21" cored slab bridge with 4' end bent caps. The proposed improvements will not require deck drains. The bridge will have 1 drop inlet at the downslope end of the approach slab to collect deck drainage with a single outlet to the downstream side of the bridge. Rip rap pads will be used at all ditch outlets to reduce flow into wetlands.</p> <p>Existing bridge 123 has a span arrangement of 1 span @ 20'-6", 2 spans @ 20', 1 span @ 20'-3" with a reinforced concrete floor on I-Beams. The endbents and interior bents have reinforced concrete caps and timber piles with crutch bents. The proposed bridge will go in the existing location. Proposed bridge 123 is a 1 span @ 35', 1 span @ 55', and 1 span @ 40', 21" cored slab bridge with 4' end bent caps. The proposed improvements will not require deck drains. The bridge will have 1 drop inlet at the downslope end of the approach slab to collect deck drainage with a single outlet to the downstream side of the bridge. Rip rap pads will be used at all ditch outlets to reduce flow into wetlands.</p> <p>The proposed bridges will provide an increase in flow area and take bents out the the channel.</p>							

Waterbody Information

Surface Water Body (1):	Ashpole Swamp		NCDWR Stream Index No.:	14-30		
NCDWR Surface Water Classification for Water Body	Primary Classification:	Class C				
	Supplemental Classification:	Swamp Waters (Sw)				
Other Stream Classification:	None					
Impairments:	None					
Aquatic T&E Species?	Yes	Comments: American alligator (no effect)				
NRTR Stream ID:	SA			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)						

Revised 11/15/2017

Revised 11/15/2017

		North Carolina Department of Transportation Highway Stormwater Program STORMWATER MANAGEMENT PLAN FOR NCDOT PROJECTS					
(Version 2.06; Released June 2016)							
WBS Element: 38438.1.2		TIP No.: B-4620		County(ies): Robeson		Page 2 of 2	
Additional Waterbody Information							
Surface Water Body (2):		Ashpole Swamp		NCDWR Stream Index No.:		14-30	
NCDWR Surface Water Classification for Water Body		Primary Classification:		Class C			
		Supplemental Classification:		Swamp Waters (Sw)			
Other Stream Classification:		None					
Impairments:		None					
Aquatic T&E Species?		Yes		Comments: American alligator (no effect)			
NRTR Stream ID:		SB		Buffer Rules in Effect:		N/A	
Project Includes Bridge Spanning Water Body?		Yes		Deck Drains Discharge Over Buffer?		No	
Deck Drains Discharge Over Water Body?		No		(If yes, provide justification in the General Project Narrative)		Dissipator Pads Provided in Buffer? (If yes, describe in the General Project Narrative; if no, justify in the General Project Narrative)	

Revised 11/15/2017

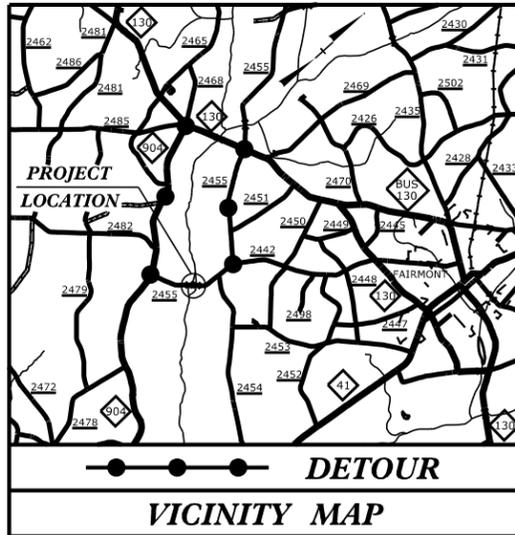
09/28/19

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4620	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
38438.1.2	BRZ-2455 (3)	PE	

TIP PROJECT: B-4620



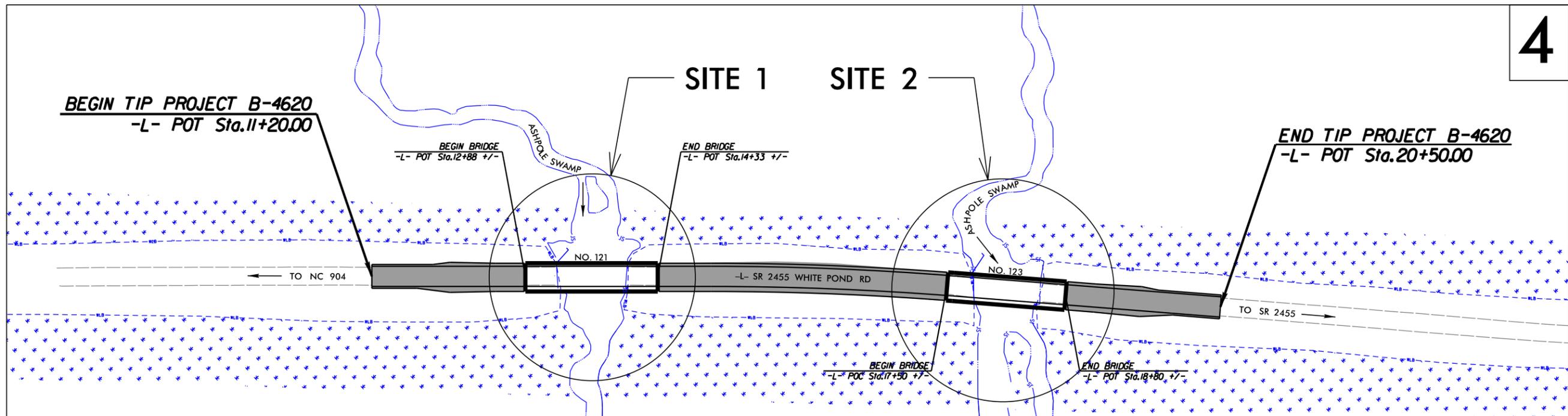
ROBESON COUNTY

LOCATION: REPLACE BRIDGES 121 AND 123 OVER
ASHPOLE SWAMP ON SR 2455
(WHITE POND ROAD)

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

WETLAND AND SURFACE WATER IMPACTS PERMIT

PERMIT DRAWING
SHEET 1 OF 8

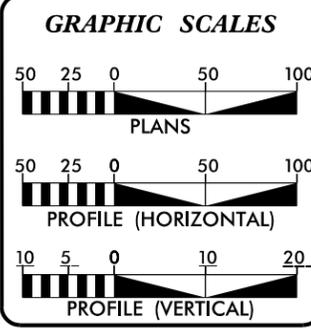


4

THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ___.

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

CONTRACT:



DESIGN DATA

ADT 2018 =	1,036
ADT 2038 =	1,582
K =	10 %
D =	55 %
T =	8 % *
V =	60 MPH
*(TTST=2% + DUAL=6%)	
FUNC CLASS = MINOR	
COLLECTOR SUB-REGIONAL	
TIER	

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4620	=	0.124 MILES
LENGTH STRUCTURE TIP PROJECT B-4620	=	0.052 MILES
TOTAL LENGTH TIP PROJECT B-4620	=	0.176 MILES

PLANS PREPARED BY:

RS&H 8601 SIX FORKS RD, SUITE 260
RALEIGH, NC 27615
919-926-4100

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
MARCH 17, 2017

LETTING DATE:
MARCH 20, 2018

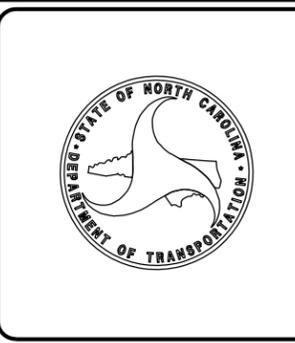
JENNIFER FARINO, PE PROJECT ENGINEER
JARED BOND, PE PROJECT DESIGN ENGINEER
GARY LOVERING, PE NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



9/22/2017
R:\HydroQuals\PERMITS_Environmental\Drawings\B4620_Hyd_perm.tsh_l.dgn
3:00:04 PM

Revised 11/15/2017

8/17/99

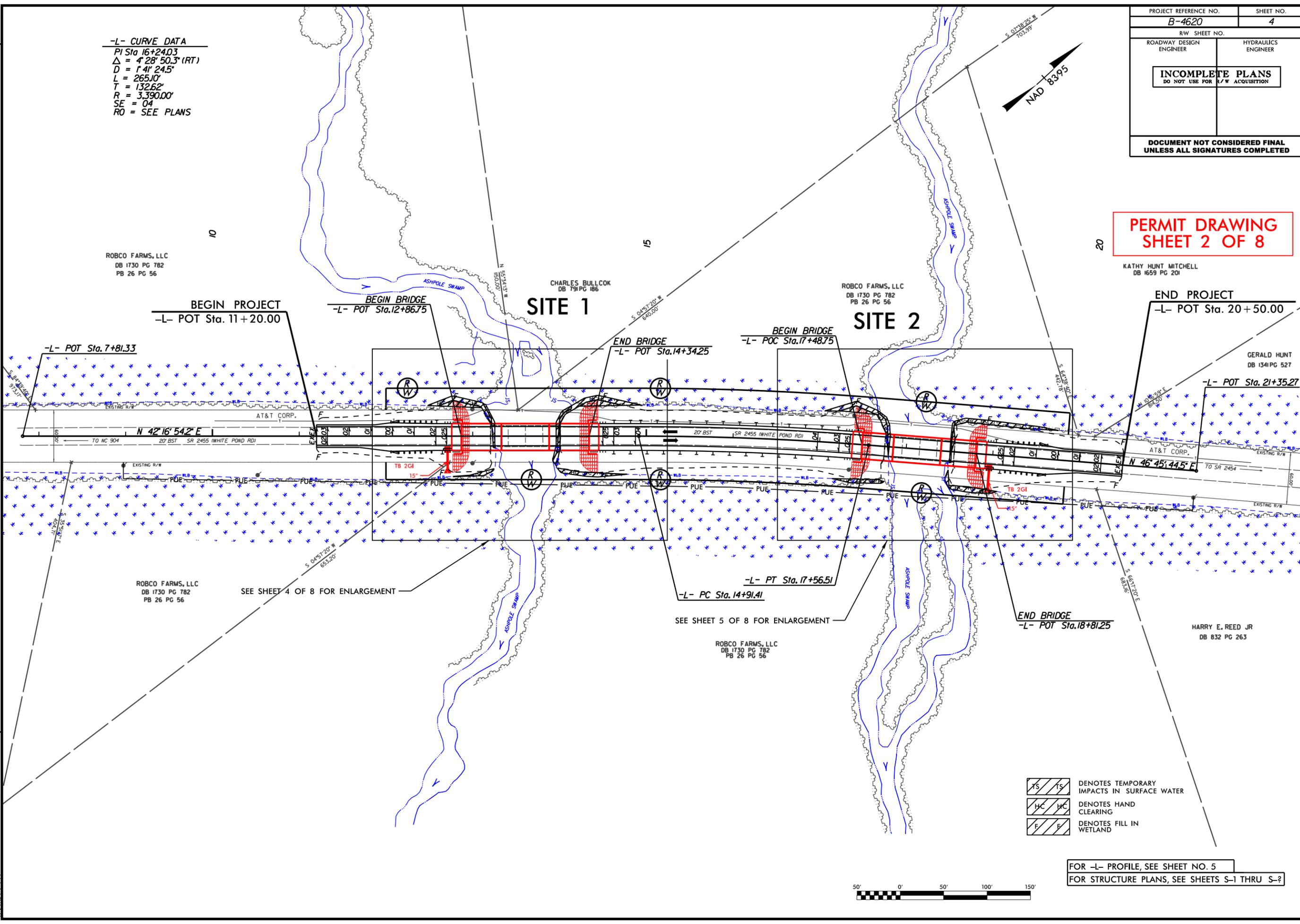
-L- CURVE DATA
 PI Sta 16+24.03
 $\Delta = 4^\circ 28' 50.3" (RT)$
 $D = 141' 24.5"$
 $L = 265.10'$
 $T = 132.62'$
 $R = 3,390.00'$
 $SE = 04$
 $RO = SEE PLANS$

PROJECT REFERENCE NO. B-4620	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 2 OF 8

KATHY HUNT MITCHELL
DB 1659 PG 201

REVISIONS



ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

CHARLES BULLCOK
DB 791 PG 186

ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

GERALD HUNT
DB 1341 PG 527

HARRY E. REED JR
DB 832 PG 263

SEE SHEET 4 OF 8 FOR ENLARGEMENT

SEE SHEET 5 OF 8 FOR ENLARGEMENT

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

FOR -L- PROFILE, SEE SHEET NO. 5
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-?



I:\IT\2017
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 2/24/15 PX

Revised 11/15/2017

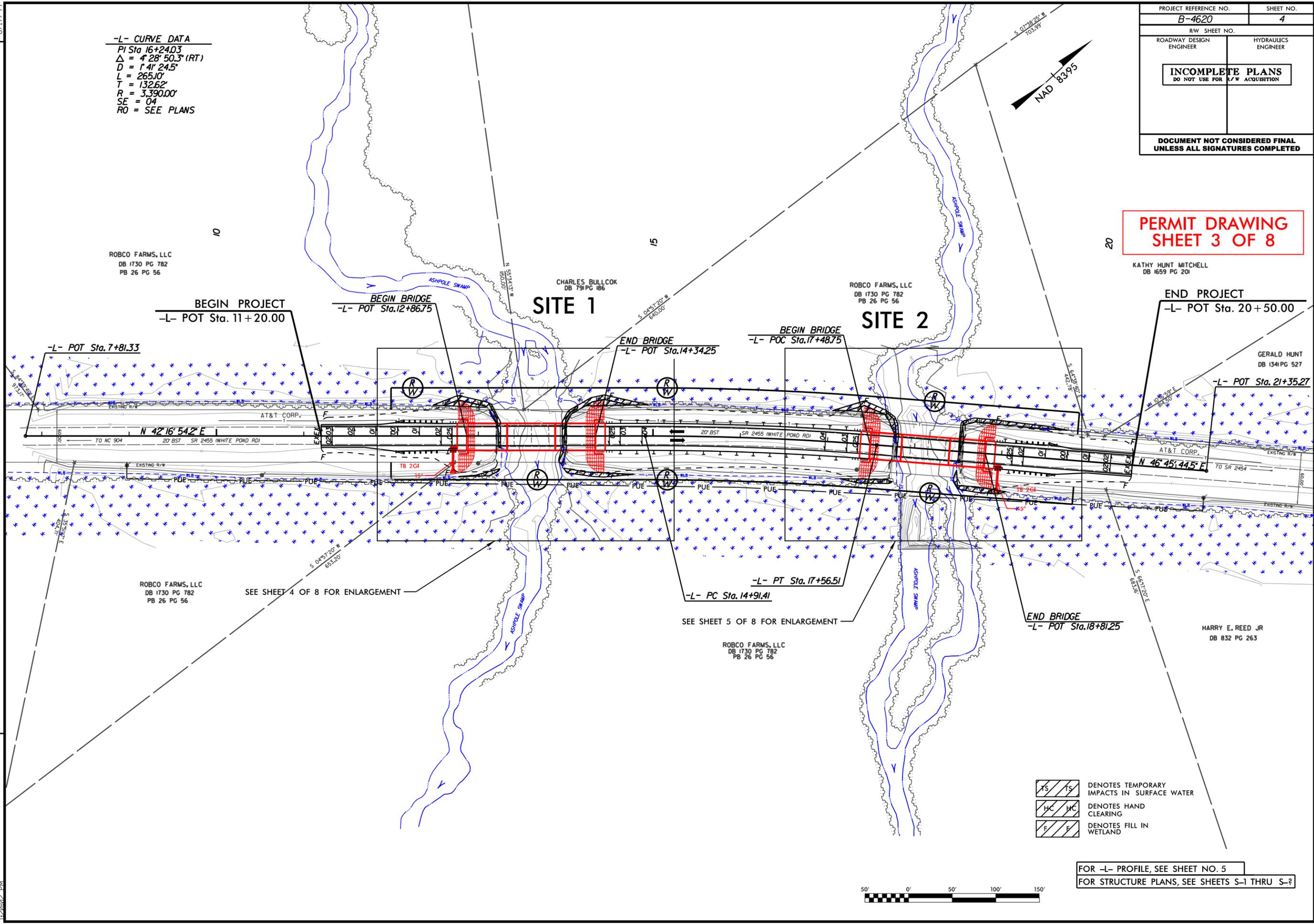
8/17/99
REVISIONS
11/17/2017
R:\Hunt\Projects\PERMITS\Environmental\Drawings\B4620_Hyd.prm_psh_3_con.dgn
1:20=AS

-L- CURVE DATA
PI Sta 16+24.03
 $\Delta = 4^{\circ} 28' 50.3" (RT)$
D = 1' 41" 24.5"
L = 265.10'
T = 132.62'
R = 3,390.00'
SE = 04
RO = SEE PLANS

PROJECT REFERENCE NO. B-4620	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 3 OF 8

KATHY HUNT MITCHELL
DB 1659 PG 201

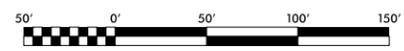


SEE SHEET 4 OF 8 FOR ENLARGEMENT

SEE SHEET 5 OF 8 FOR ENLARGEMENT

- TS TS DENOTES TEMPORARY IMPACTS IN SURFACE WATER
- HC HC DENOTES HAND CLEARING
- E E DENOTES FILL IN WETLAND

FOR -L- PROFILE, SEE SHEET NO. 5
FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-2

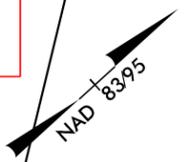


Revised 11/15/2017

8/17/99

PROJECT REFERENCE NO. B-4620	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 4 OF 8



SITE 1

R
W

R
W

R
W

TB 2GI
15"

PUE

PUE

PUE

PUE

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

FOR -L- PROFILE, SEE SHEET NO. 5
FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-?

REVISIONS

01

02

025

025

03

004

JS

JS

WLB

WLB

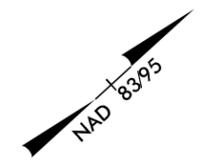
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Revised 11/15/2017

8/17/99

PROJECT REFERENCE NO. B-4620	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

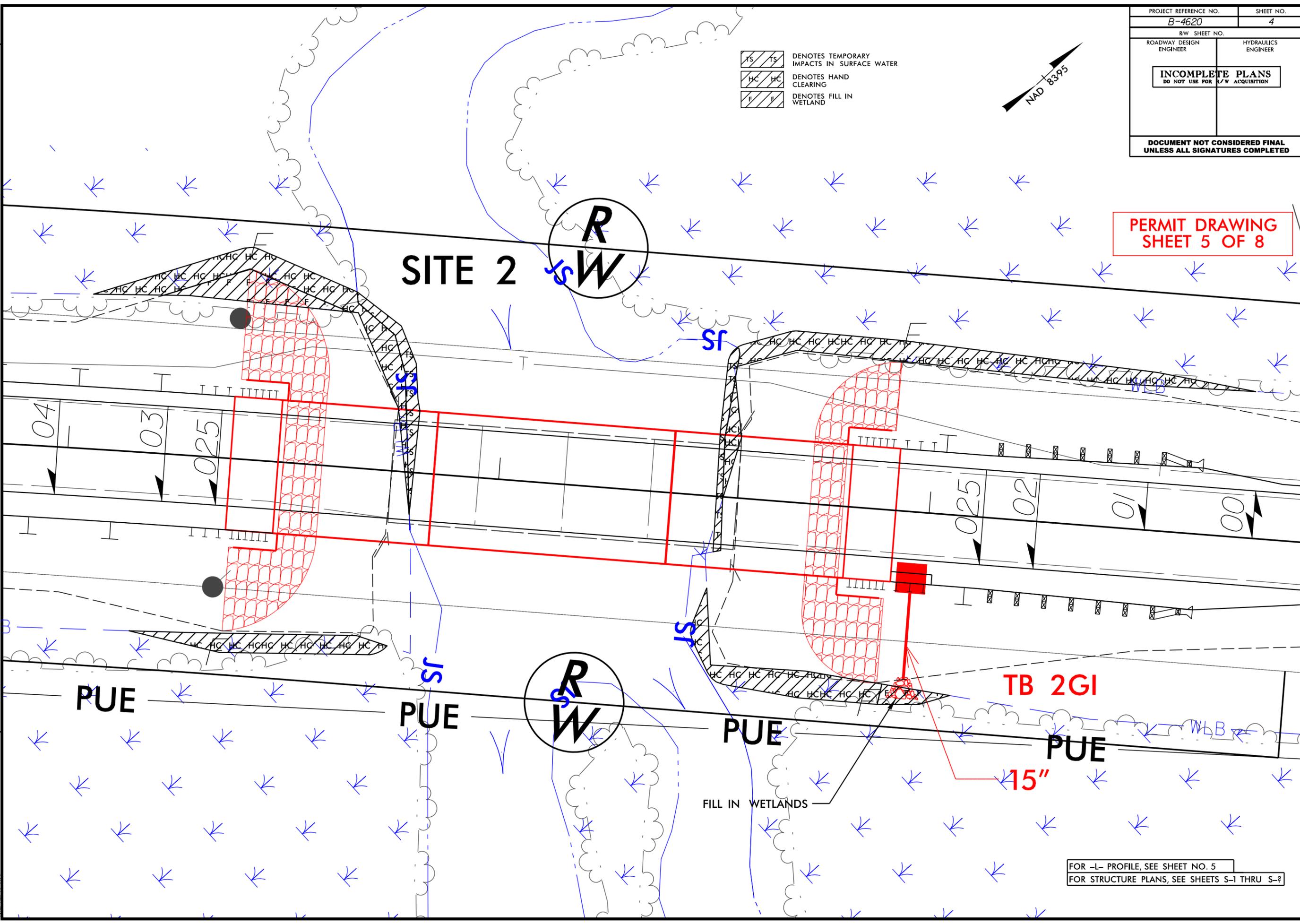
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES HAND CLEARING
-  DENOTES FILL IN WETLAND



PERMIT DRAWING
SHEET 5 OF 8

REVISIONS

11/15/2017
 H:\Hyd_eulcs\PERMITS_Environmental\Drawings\B4620_Hyd_prm_psh_5_enlarge_two.dgn
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FOR -L- PROFILE, SEE SHEET NO. 5
 FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-?

Revised 11/15/2017

5/14/99
22-SEP-2017 16:48
R:\H:\PERMITS_Environmental\Drawings\B4620_Hyd.prm.pfl_6.dgn
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PROJECT REFERENCE NO. B-4620	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



PERMIT DRAWING
SHEET 6 OF 8

STRUCTURE HYDRAULIC DATA

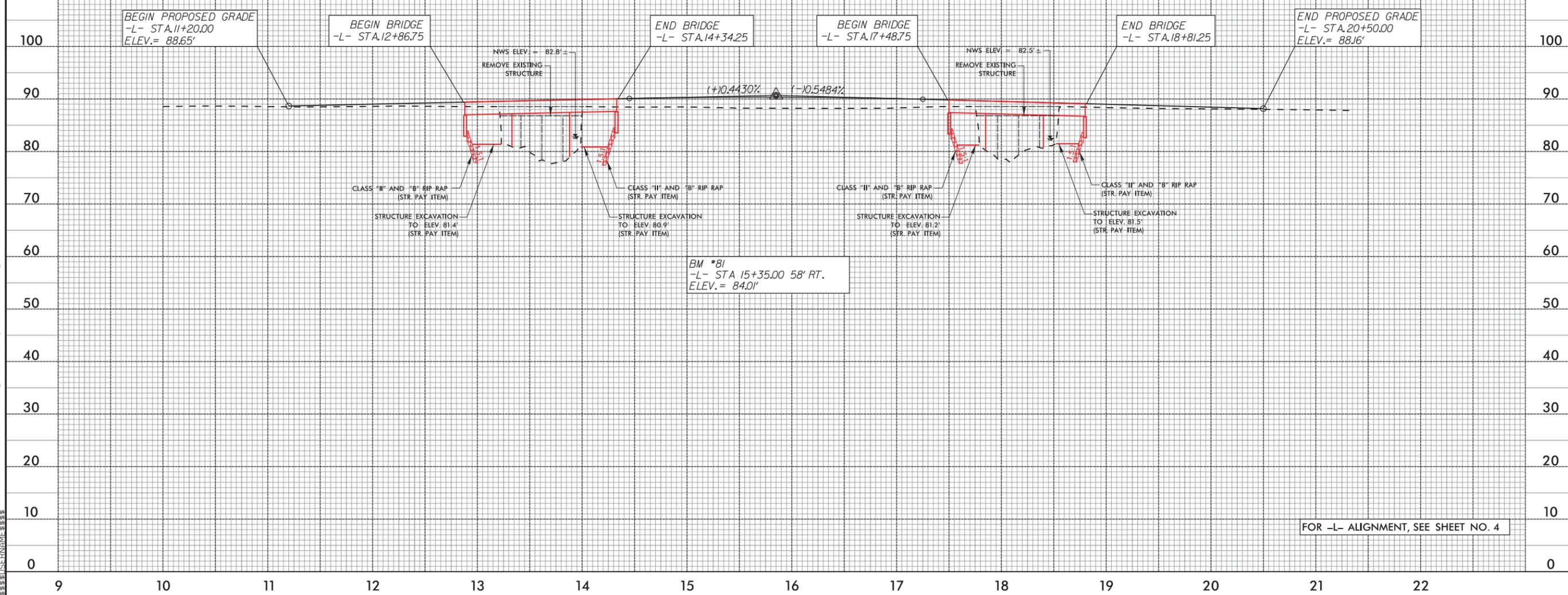
DRAINAGE AREA	= 76.5	SQ.MI.
DESIGN DISCHARGE	= 3400	CFS
DESIGN FREQUENCY	= 25	YRS
DESIGN HW ELEVATION	= 85.9	FT
BASE DISCHARGE	= 5000	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 86.8	FT
OVERTOPPING DISCHARGE	= 8630	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 88.2	FT
ESTIMATED NORMAL WATER SURFACE ELEVATION	= 82.8 +/-	FT
DATE OF SURVEY	= 12/9/15	
W.S. ELEV. AT DATE OF SURVEY	= 82.8 +/-	FT

STRUCTURE HYDRAULIC DATA

DRAINAGE AREA	= 76.5	SQ.MI.
DESIGN DISCHARGE	= 3400	CFS
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OVERTOPPING ELEVATION	= 88.2	FT
ESTIMATED NORMAL WATER SURFACE ELEVATION	= 82.5 +/-	FT
DATE OF SURVEY	= 12/9/15	
W.S. ELEV. AT DATE OF SURVEY	= 82.5 +/-	FT

-L-

PI = 15+85.00
EL = 90.71'
VC = 280'
K = 282



FOR -L- ALIGNMENT, SEE SHEET NO. 4

Revised 11/15/2017

5/14/99
REVISIONS
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220 200 180 160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160 180 200 220

WETLAND IMPACTS

PROJECT REFERENCE NO. B-4620	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

SITE 1

WETLANDS

WETLANDS

-L- 12 + 87

SITE 2

WETLANDS

WETLANDS

-L- 17 + 49

**PERMIT DRAWING
SHEET 7 OF 8**

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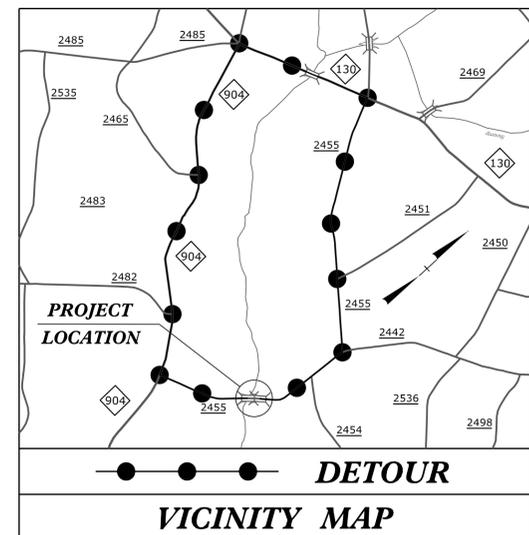
09/08/99

TIP PROJECT: B-4620

CONTRACT:

T.I.P. NO.	SHEET NO.
B-4620	UE-1

PERMIT DRAWING
SHEET 1 OF 2
UTILITIES



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

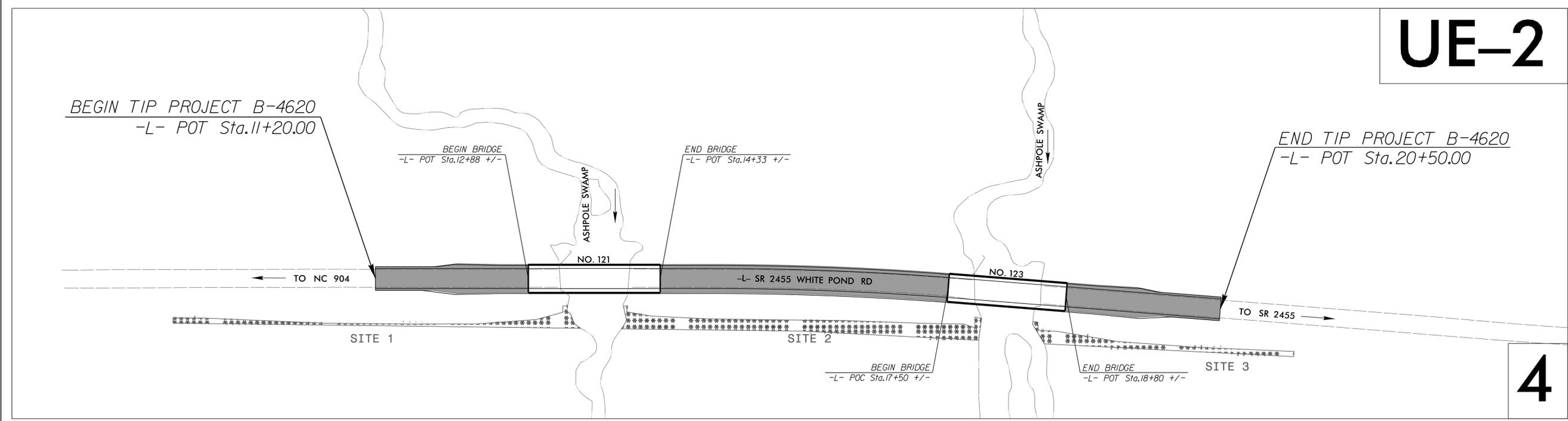
UTILITY PERMIT DRAWINGS
ROBESON COUNTY

**LOCATION: REPLACE BRIDGES 121 AND 123 OVER
ASHPOLE SWAMP ON SR 2455 (WHITE POND ROAD)**

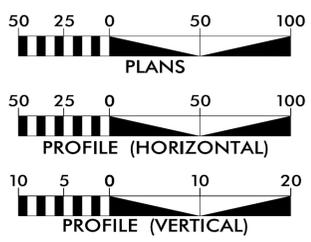
WETLAND IMPACTS



UE-2



GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UE-1	TITLE SHEET
UE-2	UTILITY WETLAND IMPACTS

UTILITY OWNERS WITH CONFLICTS

- (A) POWER - DUKE ENERGY
- (B) COMMUNICATIONS - AT&T

PREPARED IN THE OFFICE OF:

1223 Jones Franklin Road
Raleigh, N.C. 27606
License No. F-0377
Bus: 919 851 8077
Fax: 919 851 8107

TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

John D. Schriener, PLS PROJECT UTILITY COORDINATOR

**DIVISION OF HIGHWAYS
UTILITIES UNIT**
1555 MAIL SERVICES CENTER
RALEIGH, NC 27699-1555
PHONE: (919) 707-6690
FAX: (919) 250-4151

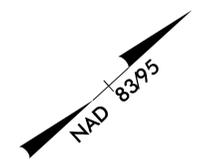
Bo Hemphill, PE UTILITIES REGIONAL ENGINEER
Kifah Kamil UTILITIES ENGINEER
Ed Reams UTILITIES AREA COORDINATOR
Larry James UTILITIES COORDINATOR

\$\$\$\$\$ SYSTEMS \$\$\$
\$\$\$\$\$ DGN \$\$\$
\$\$\$\$\$ USERNAMES \$\$\$

UTILITY WETLAND IMPACTS

PERMIT DRAWING
SHEET 2 OF 2
UTILITIES

HC HC DENOTES HAND CLEARING
HAND CLEARING ON ALL UTILITY IMPACTS



ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

1

TIED TO EXISTING U/G TELEPHONE

BEGIN TIP PROJECT B-4620
-L- POT Sta. 11+20.00

TIED TO EXISTING POWER POLE

2

CHARLES BULLCOK
DB 791 PG 186

PROPOSED U/G TELEPHONE
2' INSIDE PROPOSED R/W (TYP)

ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

3

PROPOSED TELEPHONE HANDHOLE
SET FLUSH WITH EXISTING GROUND

PROPOSED POWER GUY POLE

KATHY HUNT MITCHELL
DB 1659 PG 201

END TIP PROJECT B-4620
-L- POT Sta. 20+50.00

TIED TO EXISTING U/G TELEPHONE

GERALD HUNT
DB 1341 PG 527

TIED TO EXISTING POWER POLE

PROPOSED POWER POLE
4

ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

SITE 1
0.0492 ACRES HAND CLEARING

PROPOSED POWER POLE

PROPOSED POWER POLES

PROPOSED POWER POLE

SITE 2
0.1167 ACRES HAND CLEARING

ROBCO FARMS, LLC
DB 1730 PG 782
PB 26 PG 56

5

PROPOSED POWER POLE

SITE 3
0.0407 ACRES HAND CLEARING

HARRY E. REX, RWR
DB 832 PG 202

6

REVISIONS

5/14/99

Engineering\NE\Projects\Plans and Narrative\B4620.ut_r\d4_UE2_psh.dgn

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER 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)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	8+97 to 13+40 RT	Power Lines					0.05					
2	13+92 to 17+90 RT	Power Lines					0.12					
3	18+45 to 21+35 RT	Power Lines					0.04					
TOTALS:							0.21					

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

 ROBESON COUNTY
 B-4620

 SHEET 1 OF 1 19/Oct/17

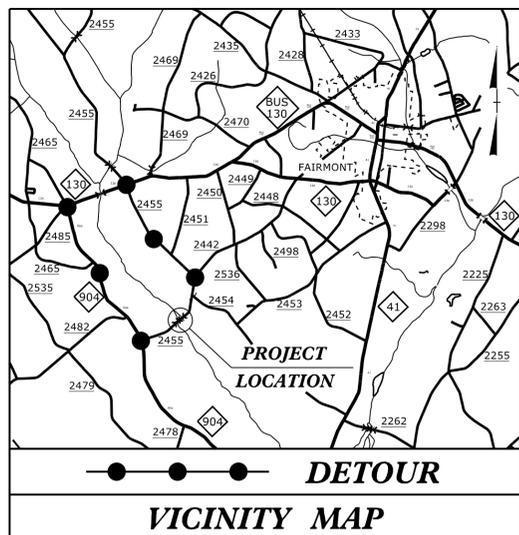
09/08/19

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

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4620	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
38438.1.2	BRZ-2455(3)	PE	
38438.2.1	N/A	RW, UTIL	

TIP PROJECT: B-4620

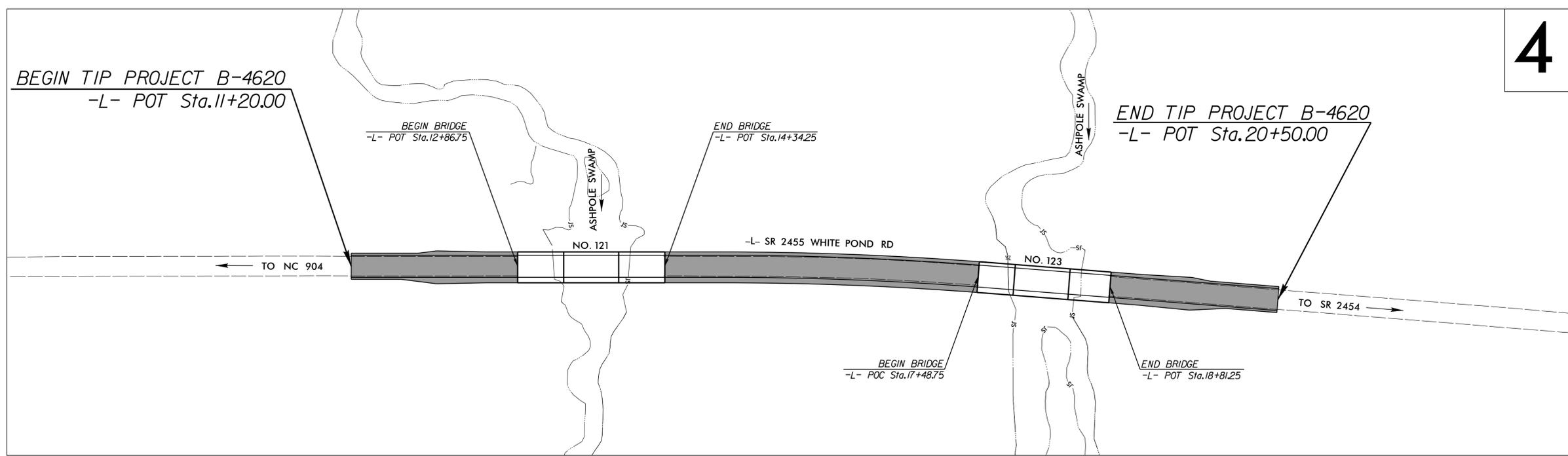


ROW PLANS

ROBESON COUNTY

**LOCATION: REPLACE BRIDGES 121 AND 123 OVER
 ASHPOLE SWAMP ON SR 2455
 (WHITE POND ROAD)**

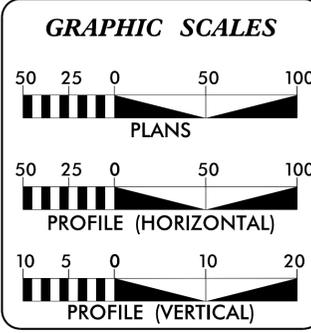
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
 THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
 CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

CONTRACT:



DESIGN DATA

ADT 2018	=	1,036
ADT 2038	=	1,582
K	=	10 %
D	=	55 %
T	=	8 % *
V	=	60 MPH
*(TTST=2% + DUAL=6%)		
FUNC CLASS = MINOR		
COLLECTOR SUB-REGIONAL		
TIER		

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4620	=	0.123 MILES
LENGTH STRUCTURES TIP PROJECT B-4620	=	0.053 MILES
TOTAL LENGTH TIP PROJECT B-4620	=	0.176 MILES

PLANS PREPARED BY:

RS&H RS&H Architects-Engineers-Planners, Inc.
 8601 SIX FORKS RD, SUITE 260
 RALEIGH, NC 27615
 919-926-4100

FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 MARCH 22, 2017

LETTING DATE:
 MARCH 20, 2018

JENNIFER FARINO, PE
 PROJECT ENGINEER

JARED BOND, PE
 PROJECT DESIGN ENGINEER

GARY LOVERING, PE
 NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.



22-MAR-2017 09:02 R:\Roadway\Proj\B4620_Rdy - tsh.dgn \$\$\$USERNAME\$\$\$

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale *S.U.E. = *Subsurface Utility Engineering*

04/06/15

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ EIP
Property Corner	-----
Property Monument	□ ECM
Parcel/Sequence Number	①23
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	--- WLB ---
Proposed Wetland Boundary	--- WLB ---
Existing Endangered Animal Boundary	--- EAB ---
Existing Endangered Plant Boundary	--- EPB ---
Existing Historic Property Boundary	--- HPB ---
Known Contamination Area: Soil	☠ ☠
Potential Contamination Area: Soil	?? ??
Known Contamination Area: Water	☠ ☠
Potential Contamination Area: Water	?? ??
Contaminated Site: Known or Potential	☠ ?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	✕
Foundation	□
Area Outline	□
Cemetery	□ †
Building	□
School	□
Church	□
Dam	▬

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	--- JS ---
Buffer Zone 1	--- BZ 1 ---
Buffer Zone 2	--- BZ 2 ---
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	--- WLB ---
Proposed Lateral, Tail, Head Ditch	▬
False Sump	▽

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	○ R/W
Proposed Right of Way Line with Iron Pin and Cap Marker	○ R/W ▲
Proposed Right of Way Line with Concrete or Granite RW Marker	▲ R/W
Proposed Control of Access Line with Concrete C/A Marker	○ C/A
Existing Control of Access	○ C/A
Proposed Control of Access	○ C/A
Existing Easement Line	--- E ---
Proposed Temporary Construction Easement	--- E ---
Proposed Temporary Drainage Easement	--- TDE ---
Proposed Permanent Drainage Easement	--- PDE ---
Proposed Permanent Drainage / Utility Easement	--- DUE ---
Proposed Permanent Utility Easement	--- PUE ---
Proposed Temporary Utility Easement	--- TUE ---
Proposed Aerial Utility Easement	--- AUE ---
Proposed Permanent Easement with Iron Pin and Cap Marker	◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	--- C ---
Proposed Slope Stakes Fill	--- F ---
Proposed Curb Ramp	○ CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	▨

VEGETATION:

Single Tree	☀
Single Shrub	☀
Hedge	-----
Woods Line	-----

Orchard	☀ ☀ ☀ ☀
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	▬ CONC
Bridge Wing Wall, Head Wall and End Wall	▬ CONC WW ▬
MINOR:	
Head and End Wall	▬ CONC HW ▬
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	○ S
Storm Sewer	--- S ---

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	○ P
Power Line Tower	□
Power Transformer	▣
U/G Power Cable Hand Hole	○
H-Frame Pole	●
U/G Power Line LOS B (S.U.E.*)	--- P ---
U/G Power Line LOS C (S.U.E.*)	--- P ---
U/G Power Line LOS D (S.U.E.*)	--- P ---

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	○ T
Telephone Pedestal	□
Telephone Cell Tower	⌋
U/G Telephone Cable Hand Hole	○ TH
U/G Telephone Cable LOS B (S.U.E.*)	--- T ---
U/G Telephone Cable LOS C (S.U.E.*)	--- T ---
U/G Telephone Cable LOS D (S.U.E.*)	--- T ---
U/G Telephone Conduit LOS B (S.U.E.*)	--- TC ---
U/G Telephone Conduit LOS C (S.U.E.*)	--- TC ---
U/G Telephone Conduit LOS D (S.U.E.*)	--- TC ---
U/G Fiber Optics Cable LOS B (S.U.E.*)	--- T FO ---
U/G Fiber Optics Cable LOS C (S.U.E.*)	--- T FO ---
U/G Fiber Optics Cable LOS D (S.U.E.*)	--- T FO ---

WATER:

Water Manhole	○ W
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line LOS B (S.U.E.*)	--- W ---
U/G Water Line LOS C (S.U.E.*)	--- W ---
U/G Water Line LOS D (S.U.E.*)	--- W ---
Above Ground Water Line	--- A/G Water ---

TV:

TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	○ TH
U/G TV Cable LOS B (S.U.E.*)	--- TV ---
U/G TV Cable LOS C (S.U.E.*)	--- TV ---
U/G TV Cable LOS D (S.U.E.*)	--- TV ---
U/G Fiber Optic Cable LOS B (S.U.E.*)	--- TV FO ---
U/G Fiber Optic Cable LOS C (S.U.E.*)	--- TV FO ---
U/G Fiber Optic Cable LOS D (S.U.E.*)	--- TV FO ---

GAS:

Gas Valve	◇
Gas Meter	⊕
U/G Gas Line LOS B (S.U.E.*)	--- G ---
U/G Gas Line LOS C (S.U.E.*)	--- G ---
U/G Gas Line LOS D (S.U.E.*)	--- G ---
Above Ground Gas Line	--- A/G Gas ---

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	--- SS ---
Above Ground Sanitary Sewer	--- A/G Sanitary Sewer ---
SS Forced Main Line LOS B (S.U.E.*)	--- FSS ---
SS Forced Main Line LOS C (S.U.E.*)	--- FSS ---
SS Forced Main Line LOS D (S.U.E.*)	--- FSS ---

MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	□
Utility Unknown U/G Line LOS B (S.U.E.*)	--- 7UTL ---
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	□ UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole LOS A (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PROJECT REFERENCE NO.	SHEET NO.
B-4620	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



KATHY HUNT MITCHELL
DB 1659 PG 201

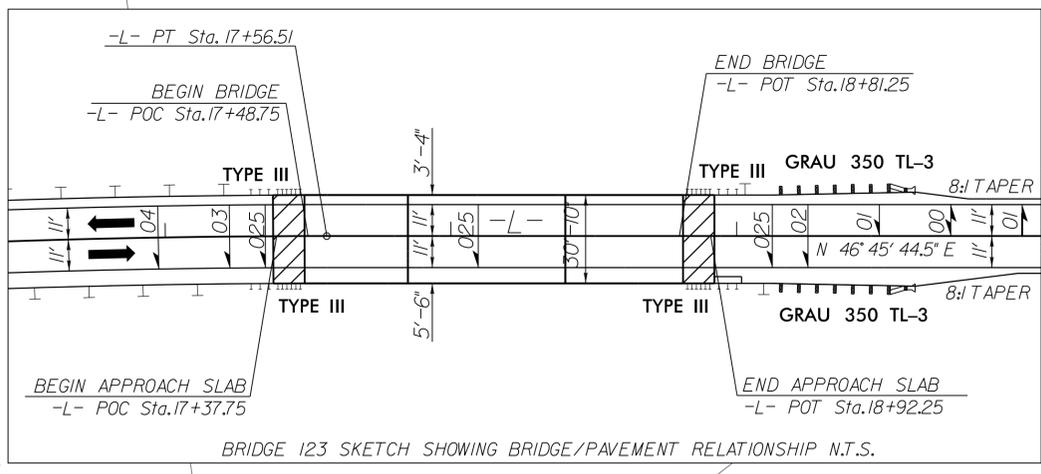
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GERALD HUNT
DB 1341 PG 527

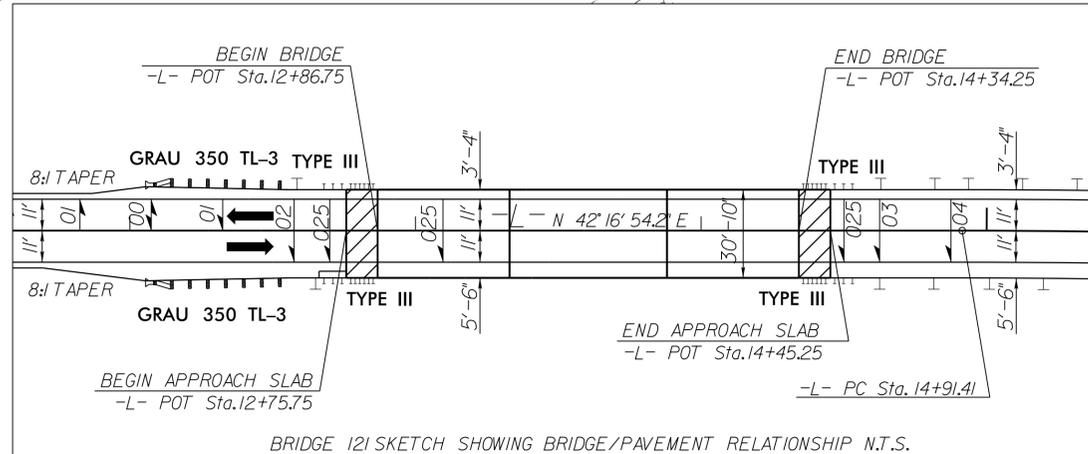
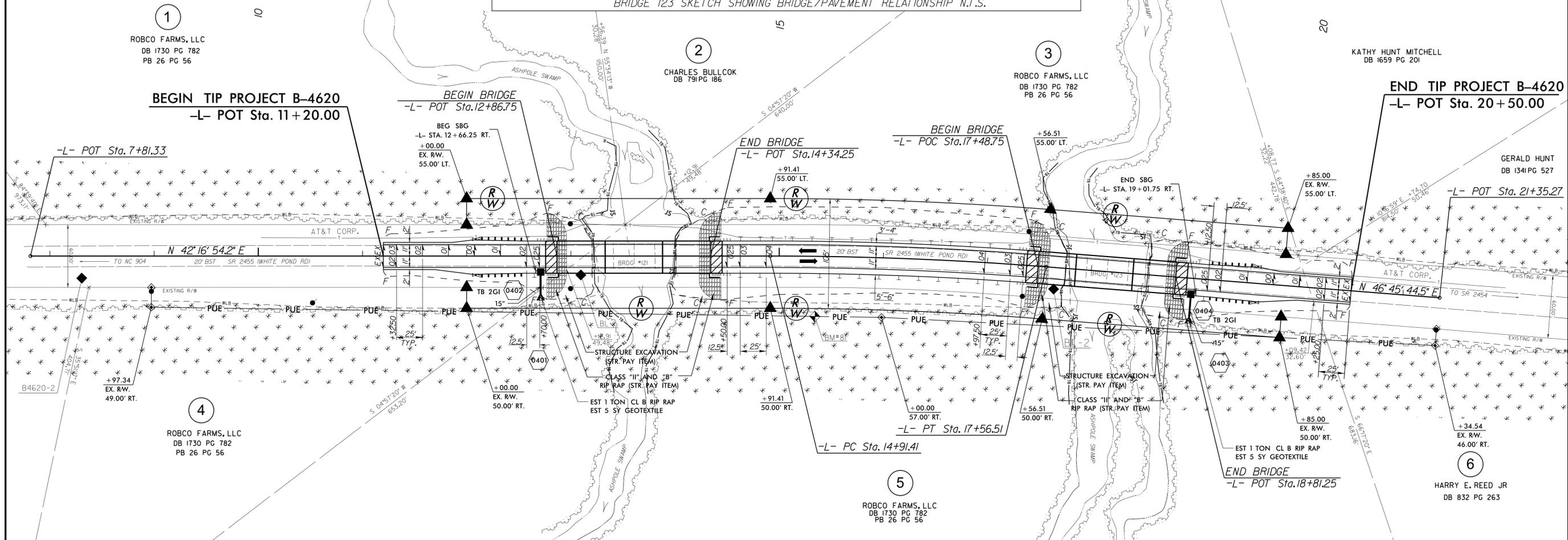
-L- POT Sta. 21 + 35.27

HARRY E. REED JR
DB 832 PG 263

-L- CURVE DATA
PI Sta 16+24.03
 $\Delta = 4^{\circ} 28' 50.3" (RT)$
 $D = 1^{\circ} 41' 24.5"$
 $L = 265.10'$
 $T = 132.62'$
 $R = 3,390.00'$
 $SE = .04$
 $RO = SEE PLANS$



BRIDGE 123 SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP N.T.S.



BRIDGE 121 SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP N.T.S.

FOR -L- PROFILE, SEE SHEET NO. 5
FOR STRUCTURE PLANS, SEE SHEETS S-1 THRU S-2

REVISIONS

8/17/99

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