



DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343

May 3, 2024

Regulatory Division

Action ID. SAW-2016-01337, NCDOT U-5760 Kernersville Southern Loop, Big Mill Farm Road Widening and Extension, Forsyth County, Modification #2

Ms. Amy Euliss, Division 9 Environmental Officer
North Carolina Department of Transportation
375 Silas Creek Parkway
Winston-Salem, North Carolina 27127
aeuliss@ncdot.gov

Dear Ms. Euliss:

Reference the Department of the Army (DA) permit issued on August 10, 2020, for the discharge fill material with 0.11 acre permanent wetland impacts, 1,372 linear feet of permanent stream impacts, and 266 linear feet of temporary stream impacts. These impacts are associated with the construction of TIP U-5760, widening and extension of Big Mill Farm Road, and widening of Hopkins Road, from the north end of Harmon Creek Road, to north of West Mountain Street, west of downtown Kernersville, in Forsyth County, North Carolina.

On June 12, 2023, the Corps authorized modification (modification #1) of this permit to include an additional 123 linear feet (lf) of permanent stream impacts at Sites #1B & # 4A. Specifically, an increase to proposed enclosure length via extension (88 lf) at Site #1B, additional stream channel improvements (13 lf) at Site #1B and additional stream channel improvements at Site #4A (22 lf). In addition, the Corps authorized a time extension to this existing permit of five additional years (revised expiration date December 31, 2030).

On April 22, 2024, NCDOT requested a modification (Modification #2) to modify an existing permit special condition developed from the US Fish and Wildlife Service (USFWS) recommended conservation measures from the Corps Section 7 conferencing related to project impacts to Tricolored bat (*Perimyotis subflavus*). Specifically, the modification of the existing permit special condition that would limit NCDOT clearing for this project to occur between October 16 and March 31. NCDOT request that this special condition be modified to reflect that the tree clearing moratorium should be contingent effective with the listing of the Tricolored bat. The Corps consulted with the USFWS on this proposed conservation measure (special condition) modification and on April 24, 2024. At that time, the USFWS indicated that the modification to the conservation measure (special condition) related to limiting tree clearing between

October 16 and March 31 should be effective with the listing of Tricolored bat (*Perimyotis subflavus*).


The Corps has determined that the proposed project modifications described above are not contrary to the public interest and are consistent with the 404 (B) (1) Guidelines and therefore, the DA permit is hereby modified. The authorized work shall be completed in accordance with the enclosed revised drawings. Please be aware that all other conditions of the original permit remain applicable, with the following General/Special conditions from the original authorization which have been revised;

Modified Special Conditions: See enclosed Special Conditions Modification #2 dated May 3, 2024, as part of the Department of Army Authorization for this project. This includes all special conditions from the existing permit dated August 10, 2020, and revisions as required as part of Modification #1 dated June 12, 2023. In addition to the original Special Condition language, the project's revised special conditions include original language that has been either crossed out and/or the includes additional language which is highlighted.

Please be advised that this letter of modification to permit special conditions will supersede the modification authorization letter issued to you on June 12, 2023. Also, please be aware that the terms of the Department of the Army permit dated August 10, 2020, and modified June 12, 2023, related to impacts, mitigation and expiration date shall remain in effect.

This approved modification should be attached to the original permit and will be utilized for future compliance reviews of the project. If you have questions, please contact Stephen Brumagin of the Charlotte Regulatory Field Office, at telephone (704) 798-6471 or via e-mail at Stephen.A.Brumagin@usace.army.mil.

FOR THE DISTRICT ENGINEER

 2024.05.03
08:34:31 -04'00'

Monte K. Matthews
Chief, WRDA/Transportation Branch
Wilmington District

Enclosures:

Special Conditions for Modification #2 revised May 2, 2024
NCDOT U-5760 Permit plans 2-20-23 & 401 WQC 4-20-23

Copies Furnished with enclosures (electronic):

Matthew W. Jones, P.E NCDOT
mwjones2@ncdot.gov

Amy Chapman, NC DEQ
amy.chapman@ncdenr.gov

Ms. Holland Youngman, USFWS
Holland_youngman@fws.gov

Mr. David McHenry, NC WRC
david.mchenry@ncwildlife.org

**WILMINGTON DISTRICT REGULATORY DIVISION
PERMIT SPECIAL CONDITIONS
DA# SAW-2016-01337**

**U-5760 Big Mill Farm Road Widening/Extension,
Modification #2, Dated May 3, 2024**

1. **Work Limits:** All work authorized by this permit shall be performed in strict compliance with the **attached** permit plans (WETLAND AND STREAM DRAFT PERMIT PACKAGE, dated MAY 4, 2020) **and attached Modified Plans dated February 20, 2023**, which are a part of this permit. The Permittee shall ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Any modification to the attached permit plans must be approved by the US Army Corps of Engineers prior to any active construction in waters or wetlands.

2. **Unauthorized Dredge or Fill:** Except as authorized by this permit or any U.S. Army Corps of Engineers approved modification to this permit, no excavation, fill, or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands, or shall any activities take place that cause the degradation of waters or wetlands. There shall be no excavation from, waste disposal into, or degradation of, jurisdictional wetlands or waters associated with this permit without appropriate modification of this permit, including appropriate compensatory mitigation. This prohibition applies to all borrow and waste activities connected with this project. In addition, except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within, into, or out of waters or wetlands or to reduce the reach of waters or wetlands.

3. **Permit Distribution:** The Permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, drawings and attachments shall be available at the project site during the construction and maintenance of this project.

4. **Pre-Construction Meeting:** The Permittee shall schedule and attend a preconstruction meeting between its representatives, the contractors representatives, and the U.S. Army Corps of Engineers, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all the terms and conditions contained with this Department of Army Permit. The Permittee shall provide the Corps, NCDOT Project Manager, with a copy of the final permit plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The Permittee shall schedule the preconstruction meeting for a time frame when the Corps and NCDWR Project Managers can attend. The Permittee shall invite the Corps and NCDWR Project

Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting. The thirty (30) day requirement can be waived with the concurrence of the Corps.

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5. Notification of Construction Commencement and Completion: The Permittee shall notify the U.S. Army Corps of Engineers in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.

6. Reporting Address: All reports, documentation, and correspondence required by the conditions of this permit shall be submitted to the following: U.S. Army Corps of Engineers, Wilmington District Raleigh Regulatory Field Office, Attn: Eric Alsmeyer, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 or eric.c.alsmeyer@usace.army.mil. The Permittee shall reference the following permit number, SAW-2016-01337, on all submittals.

7. Permit Revocation: The Permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

8. Reporting Violations: Violation of these permit conditions or violation of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act shall be reported to the Corps in writing and by telephone at: 919-554-4844, ext. 23, within 24 hours of the Permittee's discovery of the violation.

9. Clean Fill: The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, construction debris, metal and plastic products, and concrete block with exposed reinforcement bars. Soils used for fill shall not be contaminated with any toxic substance in concentrations governed by Section 307 of the Clean Water Act. Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source.

10. Culverts:

1) Unless otherwise requested in the application and depicted on the approved permit plans, culverts greater than 48 inches in diameter shall be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter and less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain existing channel slope. The bottom of the culvert shall be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Culverts shall be designed and constructed in a manner that minimizes destabilization and head cutting.

2) Measures shall be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening shall be such as to pass the average historical low flow and spring flow without adversely

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**U-5760 Big Mill Farm Road Widening/Extension,
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altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

3) The Permittee shall implement all reasonable and practicable measures to ensure that equipment, structures, fill pads, work, and operations associated with this project do not adversely affect upstream and/or downstream reaches. Adverse effects include, but are not limited to, channel instability, flooding, and/or stream bank erosion. The Permittee shall routinely monitor for these effects, cease all work when detected, take initial corrective measures to correct actively eroding areas, and notify this office immediately. Permanent corrective measures may require additional authorization by the U.S. Army Corps of Engineers.

4) Culverts placed within wetlands must be installed in a manner that does not restrict the flows and circulation patterns of waters of the United States. Culverts placed across wetland fills purely for the purposes of equalizing surface water shall not be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

11. Sediment and Erosion Control:

1) During the clearing phase of the project, heavy equipment shall not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

2) No fill or excavation impacts for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless the impacts are included on the plan drawings and specifically authorized by this permit. This includes, but is not limited to, sediment control fences and other barriers intended to catch sediment losses.

3) The Permittee shall remove all sediment and erosion control measures placed in waters and/or wetlands, and shall restore natural grades on those areas, prior to project completion.

4) The Permittee shall use appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" to ensure compliance with the appropriate turbidity water quality standard. Erosion and sediment control practices shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to ensure compliance with the appropriate turbidity water quality standards. This shall include, but is not limited to, the immediate installation of silt fencing or similar

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appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project shall remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A, Article 4).

Adequate sedimentation and erosion control measures shall be implemented prior to any ground disturbing activities to minimize impacts to downstream aquatic resources. These measures shall be inspected and maintained regularly, especially following rainfall events. All fill material shall be adequately stabilized at the earliest practicable date to prevent sediment from entering into adjacent waters or wetlands.

12. **Borrow and Waste:** To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent waters and wetlands, except as authorized by this permit, the Permittee shall require its contractors and/or agents to identify all areas to be used as borrow and/or waste sites associated with this project. The Permittee shall provide the U.S. Army Corps of Engineers with appropriate maps indicating the locations of proposed borrow and/or waste sites as soon as such information is available. The Permittee shall submit to the Corps site-specific information needed to ensure that borrow and/or waste sites comply with all applicable Federal requirements, to include compliance with the Endangered Species Act and the National Historic Preservation Act, such as surveys or correspondence with agencies (e.g., the USFWS, the NC-HPO, etc.). The required information shall also include the location of all aquatic features, if any, out to a distance of 400 feet beyond the nearest boundary of the site. The Permittee shall not approve any borrow and/or waste sites before receiving written confirmation from the Corps that the proposed site meets all Federal requirements, whether or not waters of the U.S., including wetlands, are located in the proposed borrow and/or waste site. All delineations of aquatic sites on borrow and/or waste sites shall be verified by the U.S. Army Corps of Engineers and shown on the approved reclamation plans. The Permittee shall ensure that all borrow and/or waste sites comply with Special Condition 2. of this permit. Additionally, the Permittee shall produce and maintain documentation of all borrow and waste sites associated with this project. This documentation will include data regarding soils, vegetation, hydrology, any delineation(s) of aquatic sites, and any jurisdictional determinations made by the Corps to clearly demonstrate compliance with Special Condition 2. All information will be available to the U.S. Army Corps of Engineers upon request. The Permittee shall require its contractors to complete and execute reclamation plans for each borrow and/or waste site and provide written documentation that the reclamation plans have been implemented and all work is completed. This documentation will be provided to the U.S. Army Corps of Engineers within 30 days of the completion of the reclamation work.

13. **Compensatory Mitigation:** In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit.

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14. **Endangered Species Act:** The Permittees shall implement all necessary measures to ensure the authorized activity does not kill, injure, capture, harass, or otherwise harm any federally-listed threatened or endangered species. While accomplishing the authorized work, if the Permittees discover or observe an injured or dead threatened or endangered species, the U.S. Army Corps of Engineers, Wilmington District Raleigh Field Office, Attn: Stephen Brumagin at (704) 798-6471 or Stephen.A.Brumagin@usace.army.mil will be immediately notified to initiate the required Federal coordination.

The permittee will implement the following conservation measures to ensure the authorized activity does not kill, injure, capture, harass or otherwise harm the proposed for listing Tricolored bat (*Perimyotis subflavus*):

- 1) Tree clearing will occur between October 16 and March 31, tree clearing will occur between October 16 and March 31 effective with the listing of the Tricolored bat (*Perimyotis subflavus*).
- 2) Tree clearing will be minimized to the maximum extent practicable.
- 3) Clearing limits will be clearly marked for the contractors.
- 4) Project culverts equal to and greater than three feet in diameter and greater than 60 linear feet in length will be re-surveyed to confirm absence of bats and signs of bat use in 2024.
- 5) Lighting for night work will be downward facing and contained to the work area [with the exception of the Salem Parkway/US 421/NC150/Business 40 section of the action area].
- 6) The replacement of existing streetlighting will be downcast.
- 7) Blast mats will be utilized for any blasting. No mass blasting will occur.
- 8) Blasting and pile driving will occur after tree clearing has occurred in the work areas immediately around and adjacent to these activities.

15. **Maintain Flows and Circulation Patterns of Waters:** Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters and/or wetlands.

16. **Temporary Fills:** Within thirty (30) days of the date of completing the authorized work, the Permittee shall remove all temporary fills in waters of the United States and restore the affected areas to pre-construction contours and elevations. The affected areas shall be re-vegetated with native, non-invasive vegetation as necessary to minimize erosion and ensure site stability.

17. **Water Contamination:** All mechanized equipment shall be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the Permittees shall immediately report it to the N.C.

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Division of Water Resources at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act shall be followed.

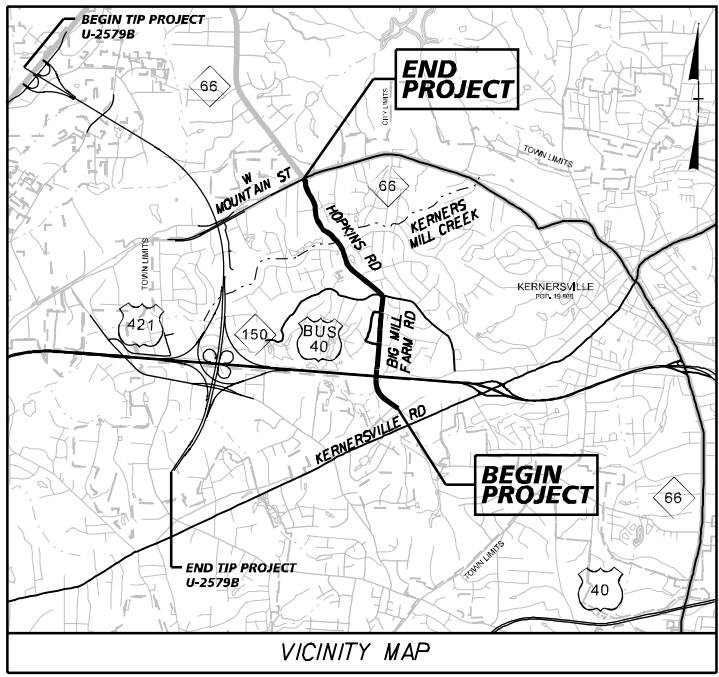
18. Aquatic Life Movement: No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. All discharges of dredged or fill material within waters of the United States shall be designed and constructed, except as authorized as indirect impacts, to maintain low flows to sustain the movement of aquatic species.

19. Prohibitions on Concrete: The Permittees shall take measures necessary to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with any water in or entering waters of the United States. Water inside coffer dams or casings that has been in contact with concrete shall only be returned to waters of the United States when it no longer poses a threat to aquatic organisms (concrete is set and cured).

09/28/2019

TIP PROJECT: U-5760

See Sheet IB For Conventional Plan Sheet Symbols



PERMIT DRAWING SHEET 1 OF 28

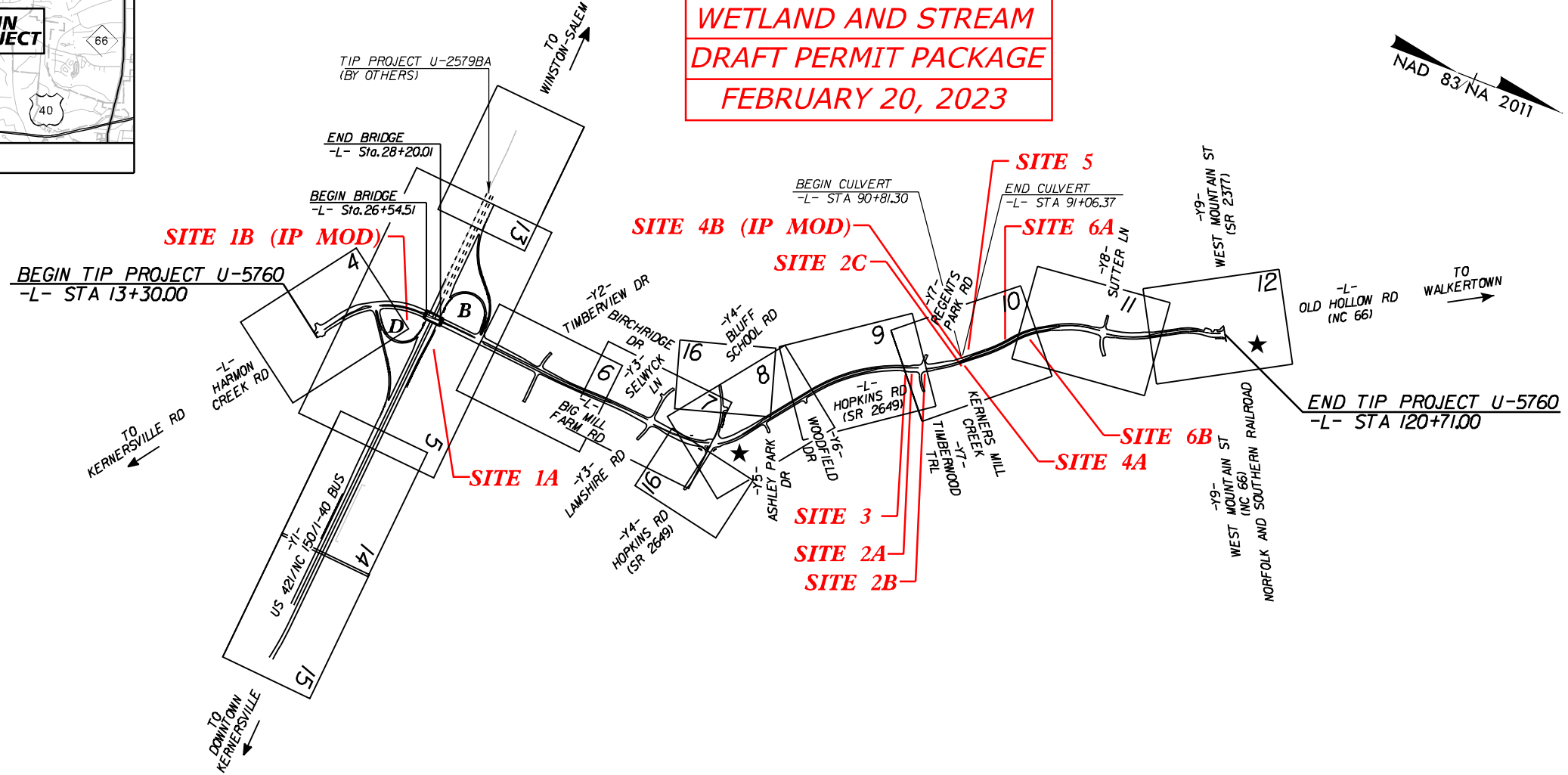
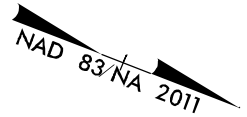
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

FORSYTH COUNTY

LOCATION: HOPKINS ROAD/BIG MILL FARM ROAD IN KERNERSVILLE FROM SOUTH OF US 421/40 BUS/NC 150 TO NC 66 (W MOUNTAIN ST) TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, CULVERTS, RETAINING WALLS, AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5760	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
46381.1.1		P.E.	
46381.2.1		R/W	
46381.2.1		UTL	
46381.3.1		CONST.	

WETLAND AND STREAM DRAFT PERMIT PACKAGE FEBRUARY 20, 2023

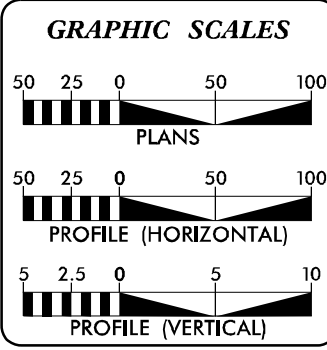


★ TRAFFIC SIGNAL

THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS LIMITED TO POINTS AS SHOWN ON THE PLANS CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF KERNERSVILLE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:



DESIGN DATA

AADT 2023 =	10,700
AADT 2040 =	14,900
K =	10%
D =	60%
T =	3%*
V =	50 MPH

* (TTST 1% + DUAL 2%)

FUNCTIONAL CLASSIFICATION:
URBAN COLLECTOR
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-5760	=	1.998 MILES
LENGTH STRUCTURES TIP PROJECT U-5760	=	0.036 MILES
TOTAL LENGTH TIP PROJECT U-5760	=	2.034 MILES

PLANS PREPARED FOR THE NCDOT BY: **Kimley Horn**

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: APRIL 15, 2022

LETTING DATE: APRIL 15, 2025

JEFFREY W. MOORE, P.E. PROJECT ENGINEER

EVERETT J. LOVING, P.E. PROJECT DESIGN ENGINEER

W. AL BLANTON, P.E., P.L.S. PROJECT TEAM LEAD NCDOT DIVISION 9

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

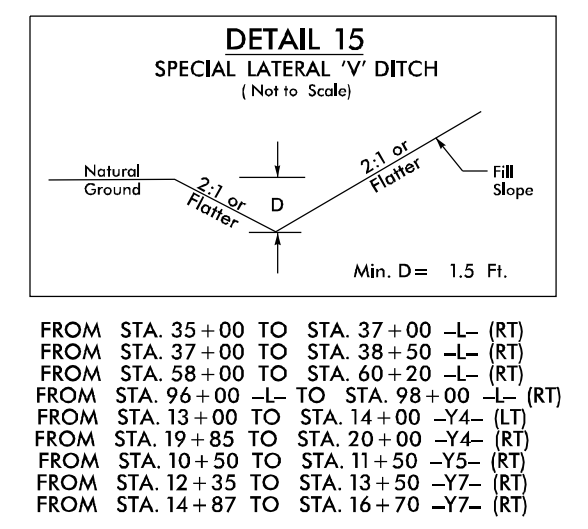
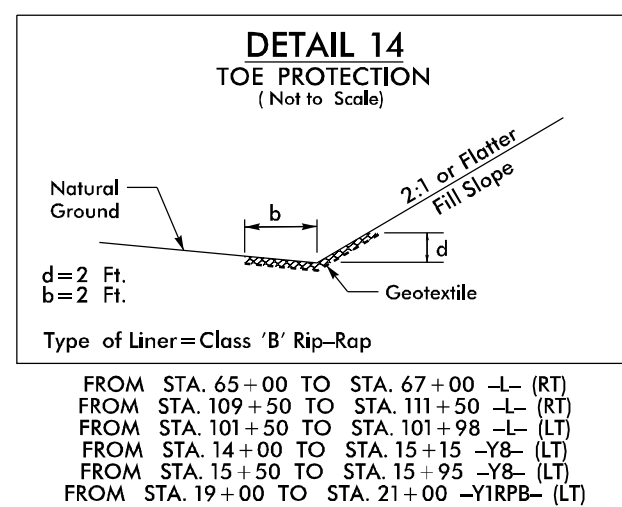
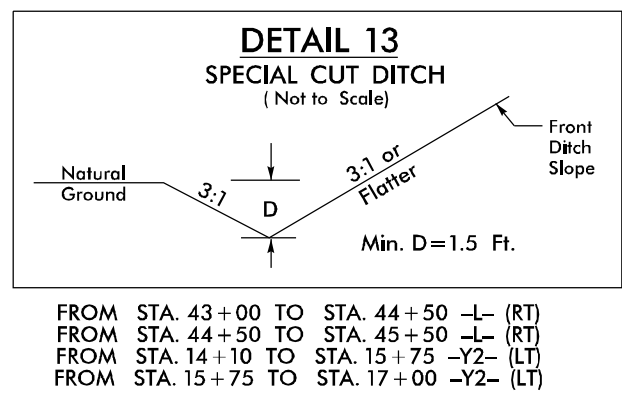
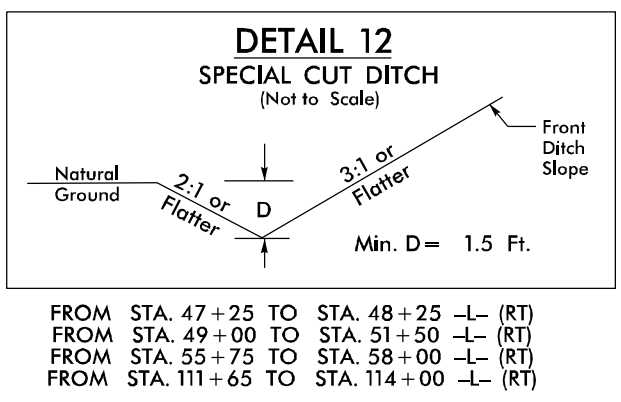
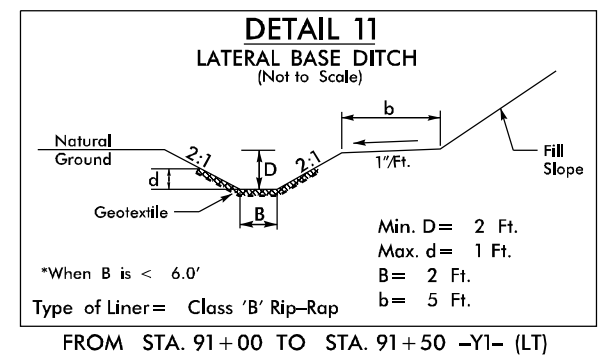
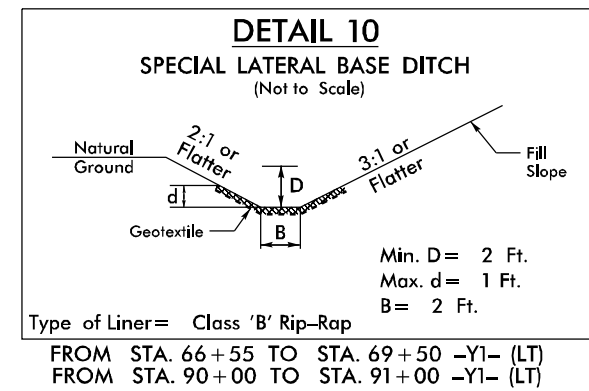
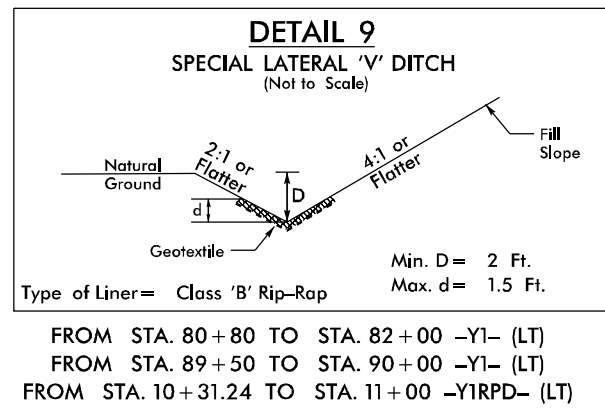
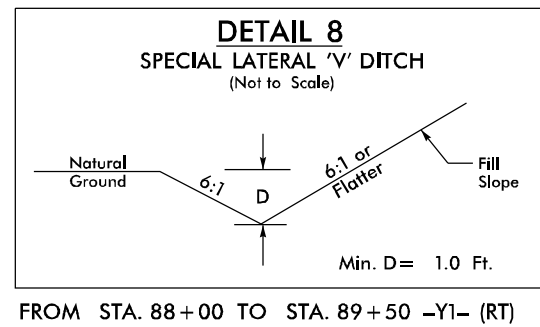
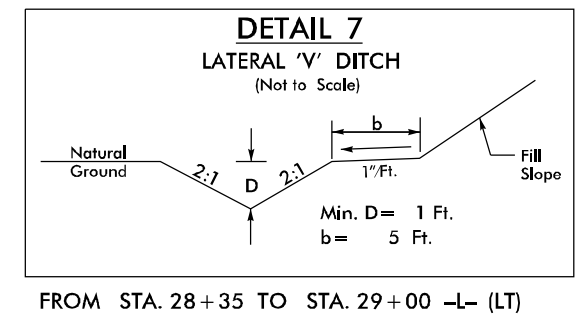
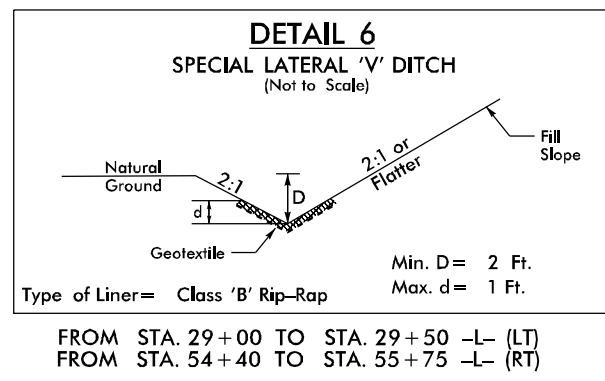
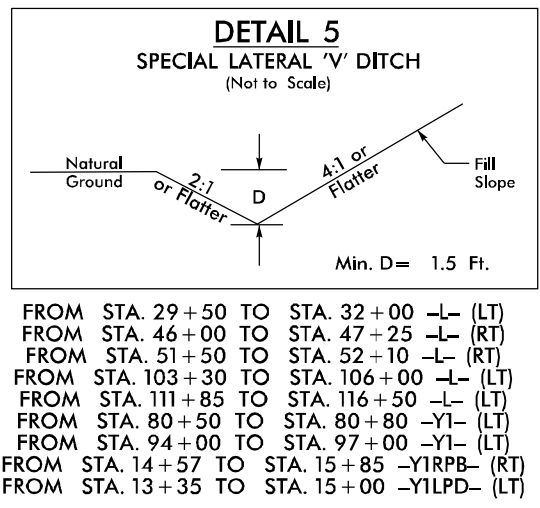
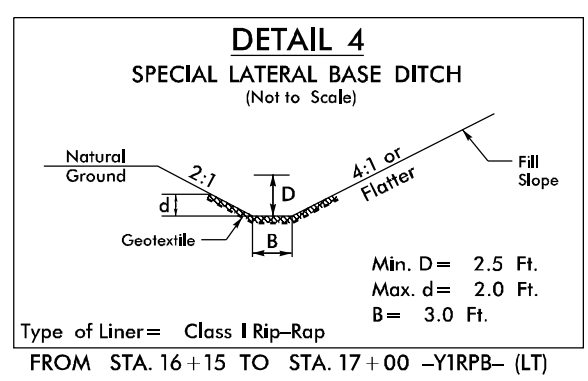
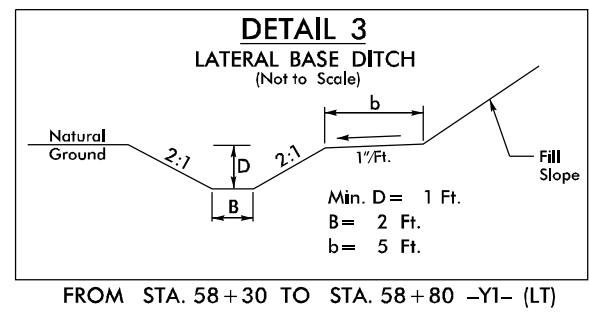
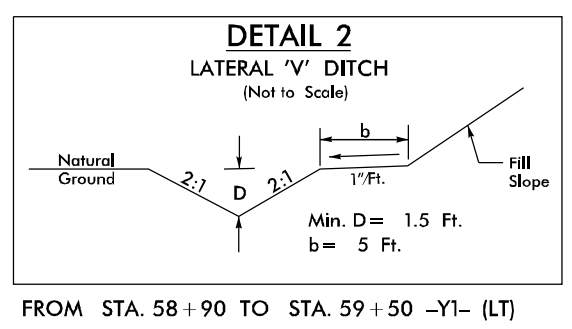
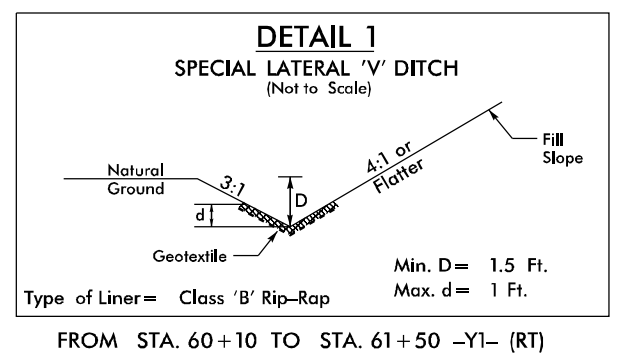
SIGNATURE: _____ P.E.



\$DATE\$ \$FILE\$

5/14/99

PROJECT REFERENCE NO. U-5760	SHEET NO. 2D-1
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER
PERMIT DRAWING SHEET 2 OF 28	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



REVISIONS

\$DATE\$

5/14/99

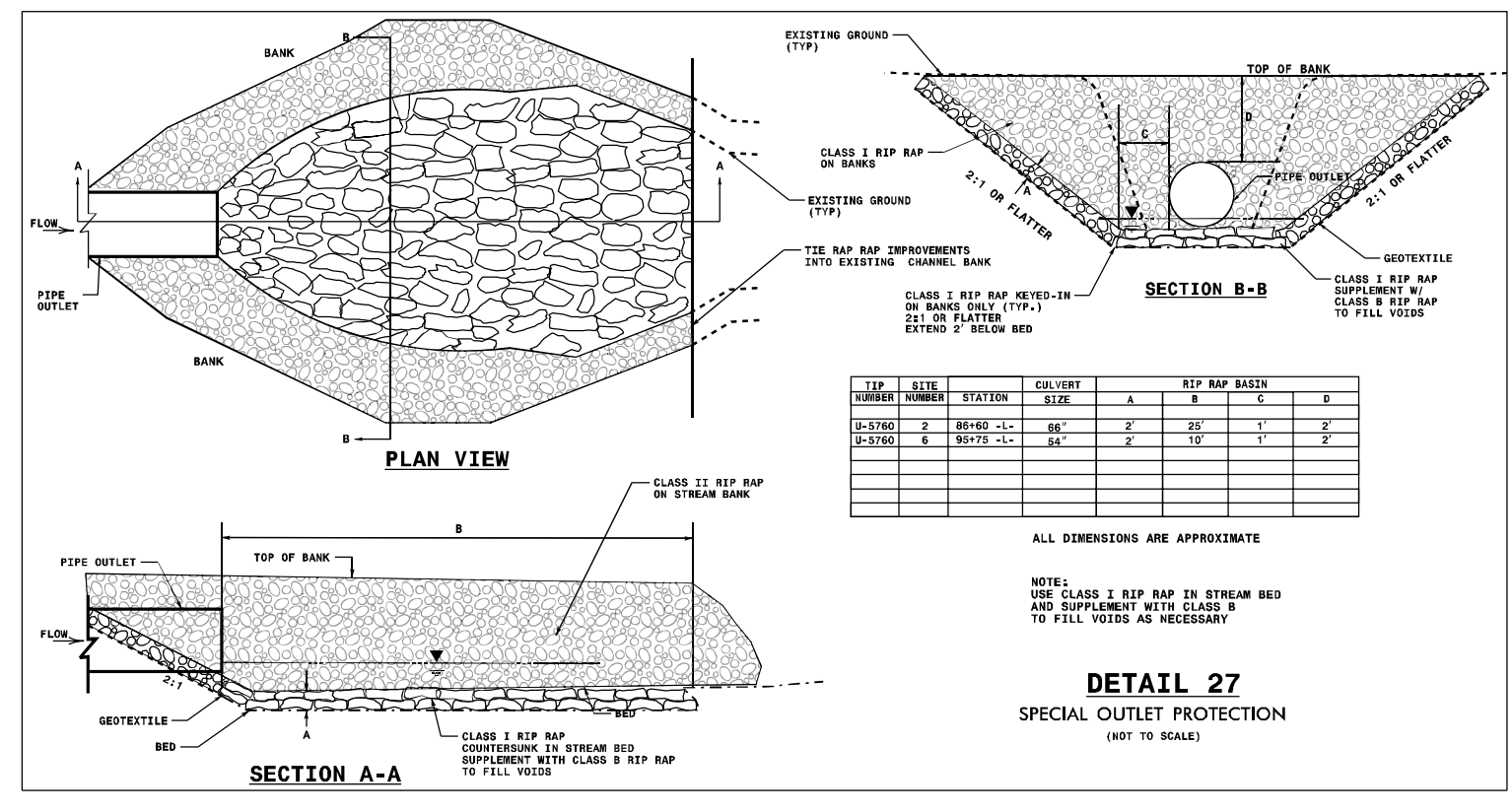
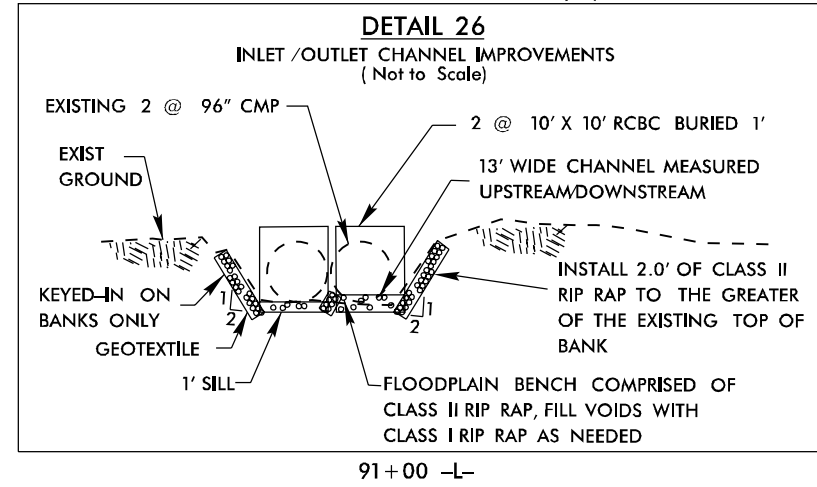
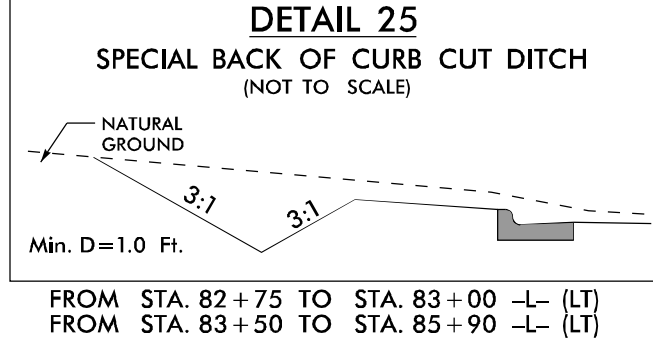
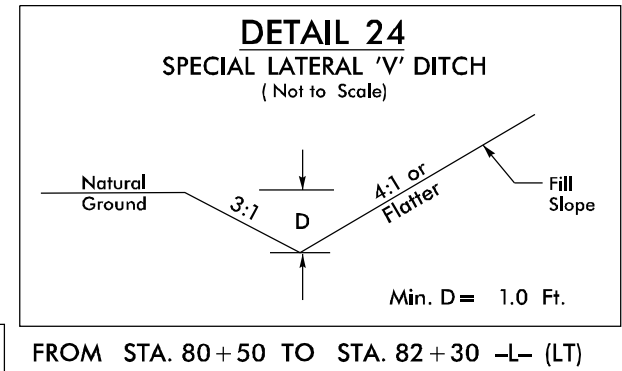
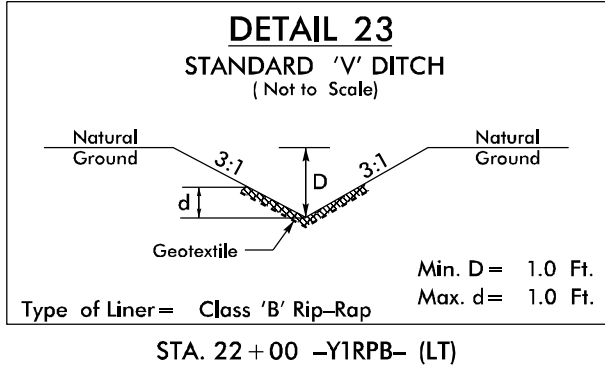
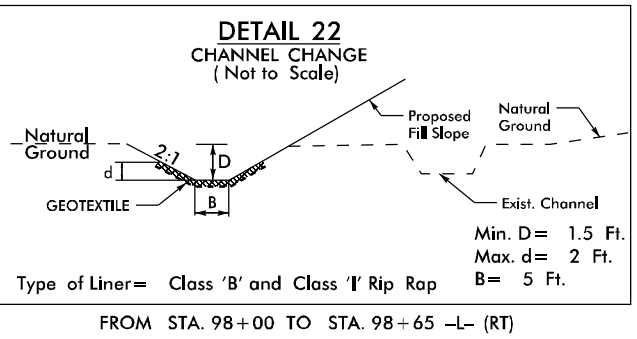
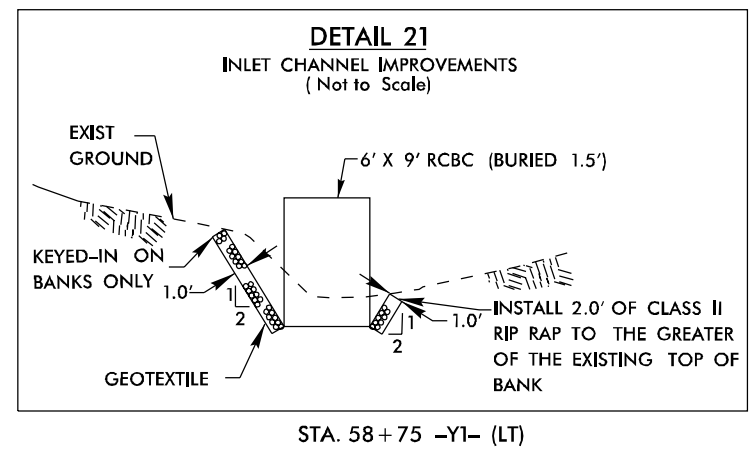
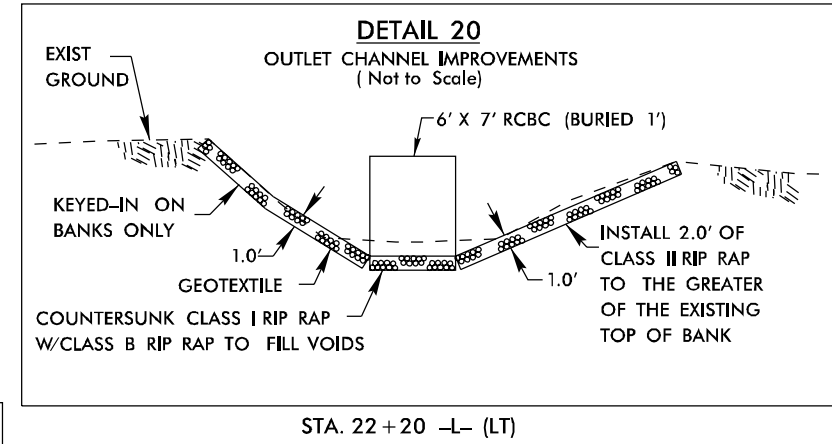
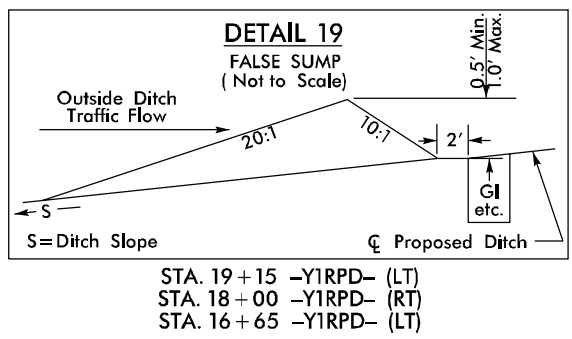
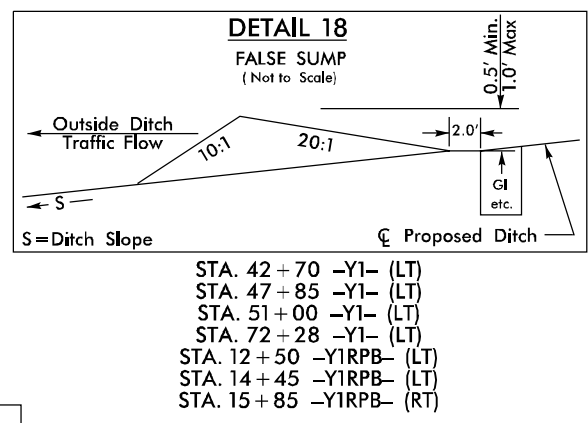
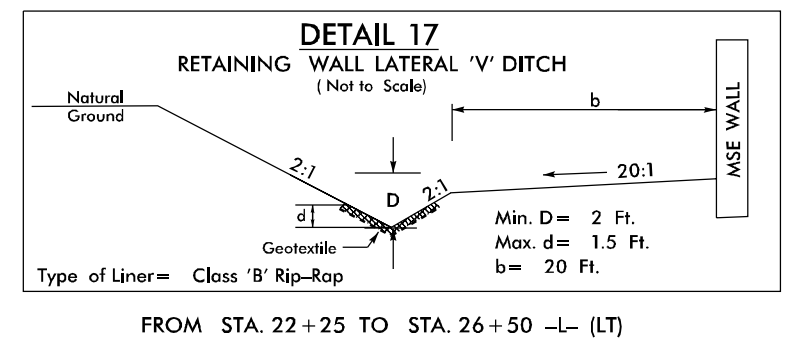
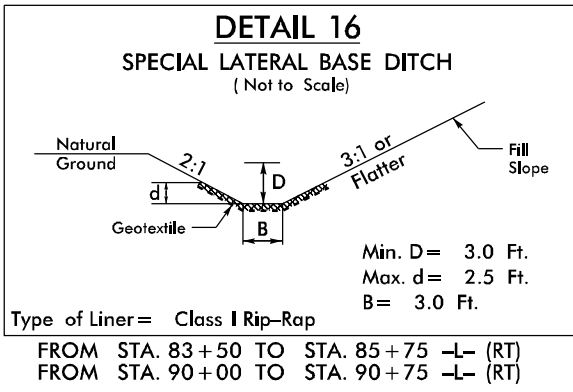
Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

PROJECT REFERENCE NO. <i>U-5760</i>	SHEET NO. <i>2D-2</i>
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PERMIT DRAWING SHEET **3** OF **28**

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



REVISIONS

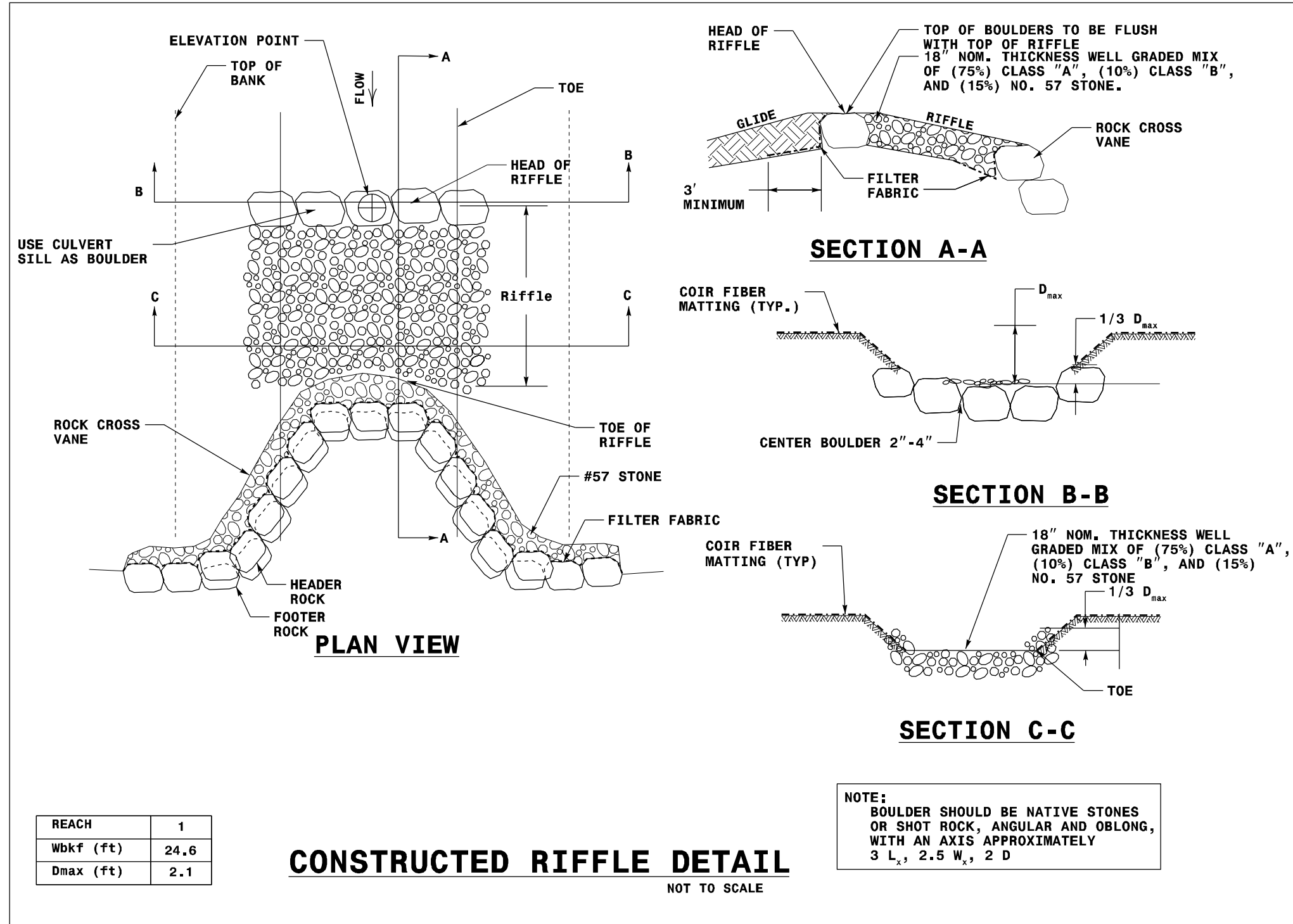
\$DATE\$

PROJECT REFERENCE NO. U-5760	SHEET NO. 2D-3
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PERMIT DRAWING
 SHEET 4 OF 28

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

REVISIONS



REACH	1
Wbkf (ft)	24.6
Dmax (ft)	2.1

CONSTRUCTED RIFFLE DETAIL
 NOT TO SCALE

NOTE:
 BOULDER SHOULD BE NATIVE STONES
 OR SHOT ROCK, ANGULAR AND OBLONG,
 WITH AN AXIS APPROXIMATELY
 3 L_x, 2.5 W_x, 2 D

LEGEND

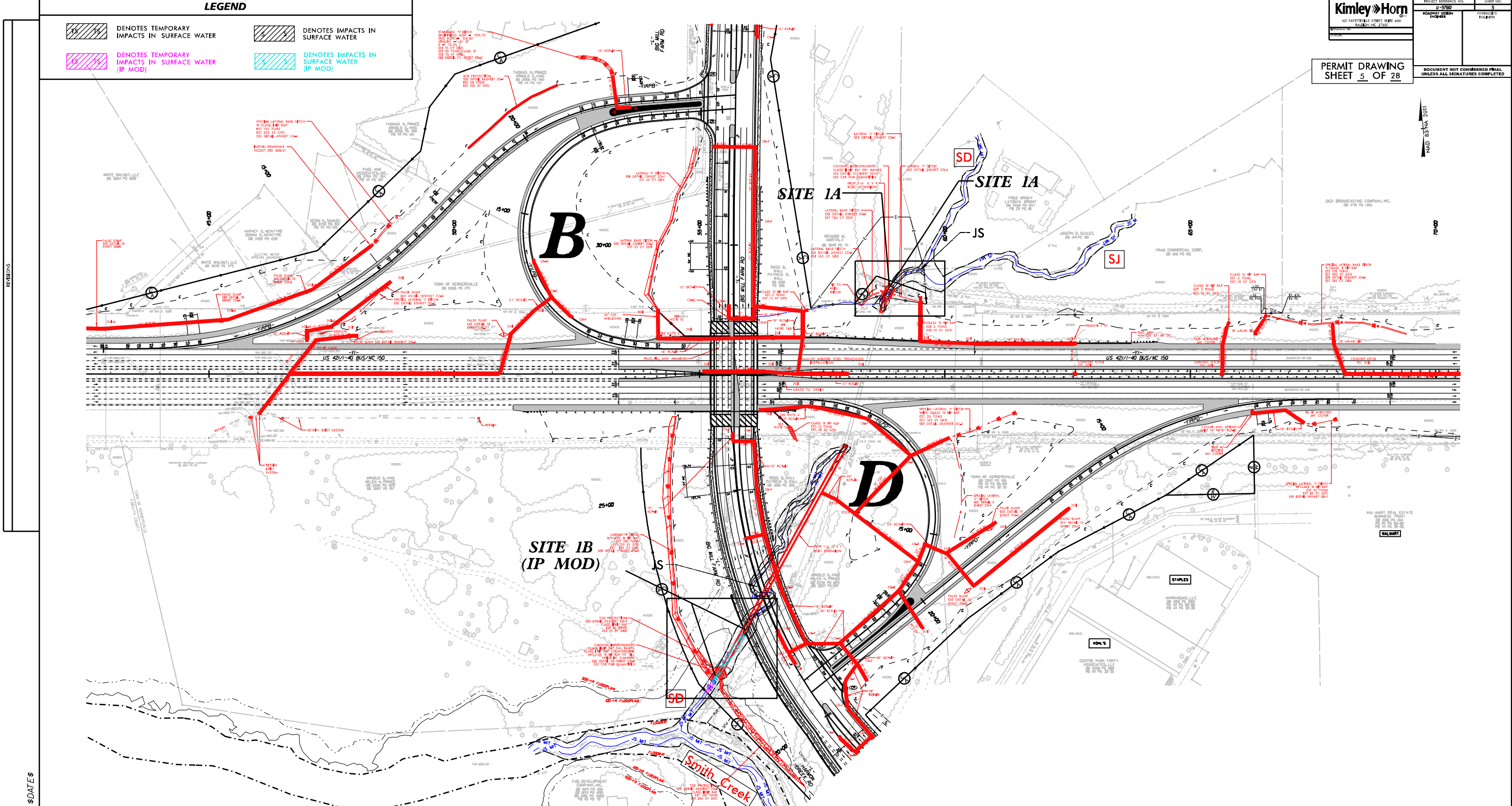
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)
-  DENOTES IMPACTS IN SURFACE WATER (IP MOD)

Kimley-Horn
421 FAYETTEVILLE STREET SUITE 400
RICHMOND, VA 23220
PHONE: (804) 771-1100
WWW.KIMLEY-HORN.COM

PROJECT REFERENCE NO.	SHEET NO.
U-5702	5
ROADWAY DESIGN ENGINEER	DRAWING ENGINEER





PERMIT DRAWING
SHEET 5 OF 28

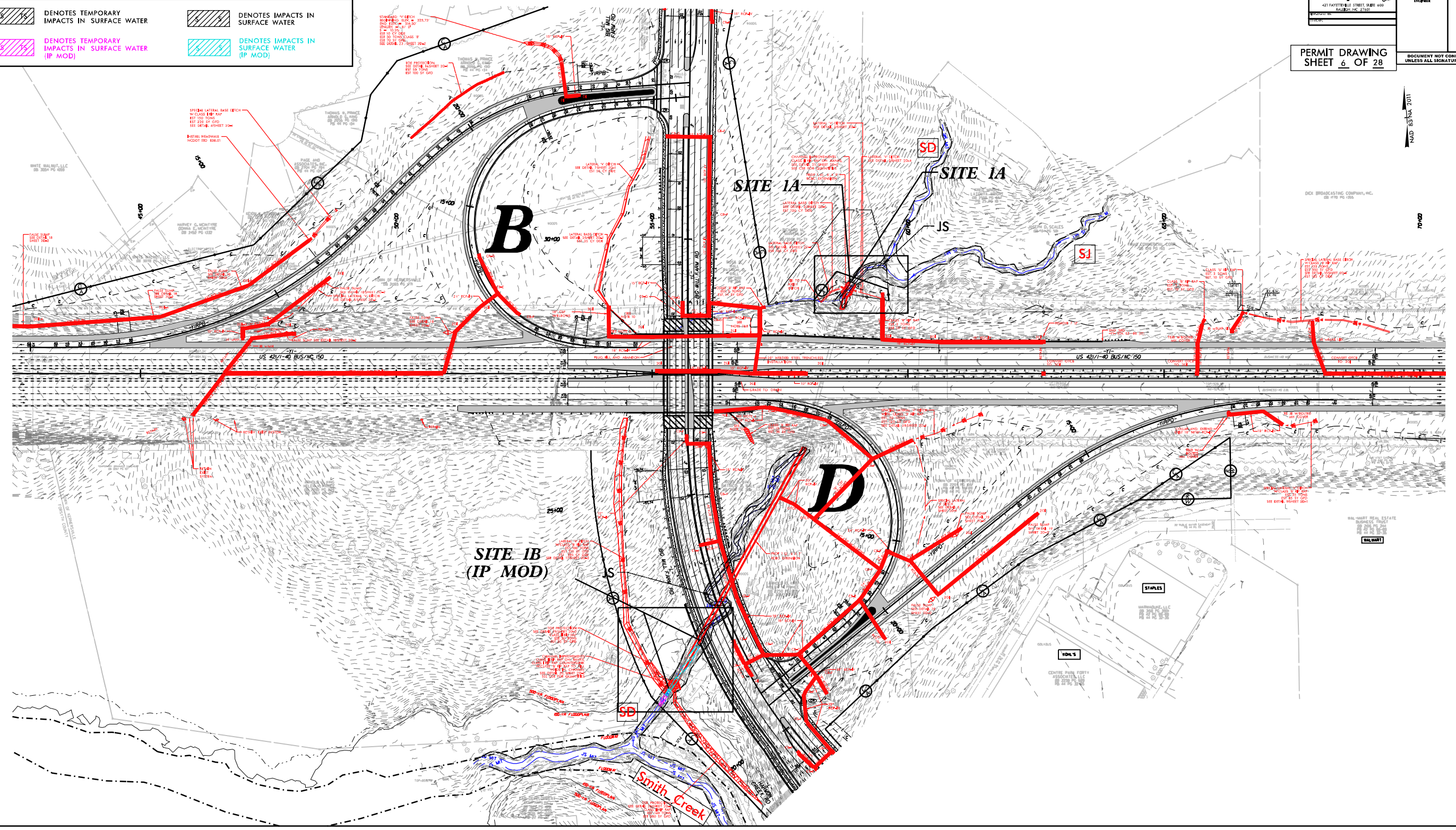
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



\$DATE\$

LEGEND

	DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)		DENOTES IMPACTS IN SURFACE WATER
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)		DENOTES IMPACTS IN SURFACE WATER (IP MOD)



NAD 83/NA 2011
70+00

\$DATE\$

5/14/99

LEGEND



DENOTES TEMPORARY IMPACTS IN SURFACE WATER



DENOTES IMPACTS IN SURFACE WATER

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

5A

ROADWAY DESIGN ENGINEER

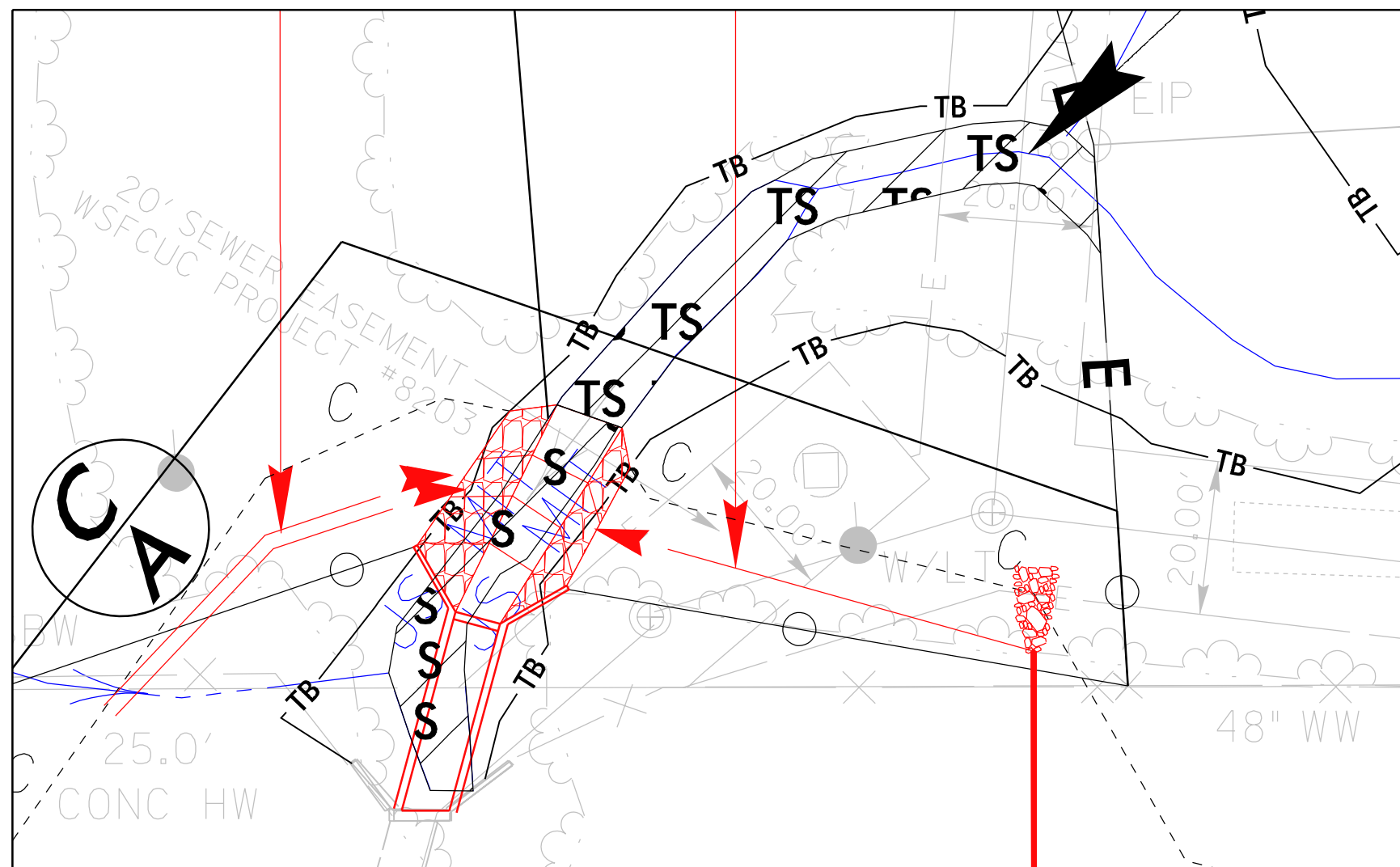
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 7 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE IMPACT ZOOM: 1" = 20'



DETAIL SHEET FOR SITE 1A

NAD 83/NA 2011

REVISIONS

\$DATE\$

5/14/99

LEGEND



DENOTES TEMPORARY IMPACTS IN SURFACE WATER



DENOTES IMPACTS IN SURFACE WATER

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

ROADWAY DESIGN ENGINEER

CONSTR. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

5A

ROADWAY DESIGN ENGINEER

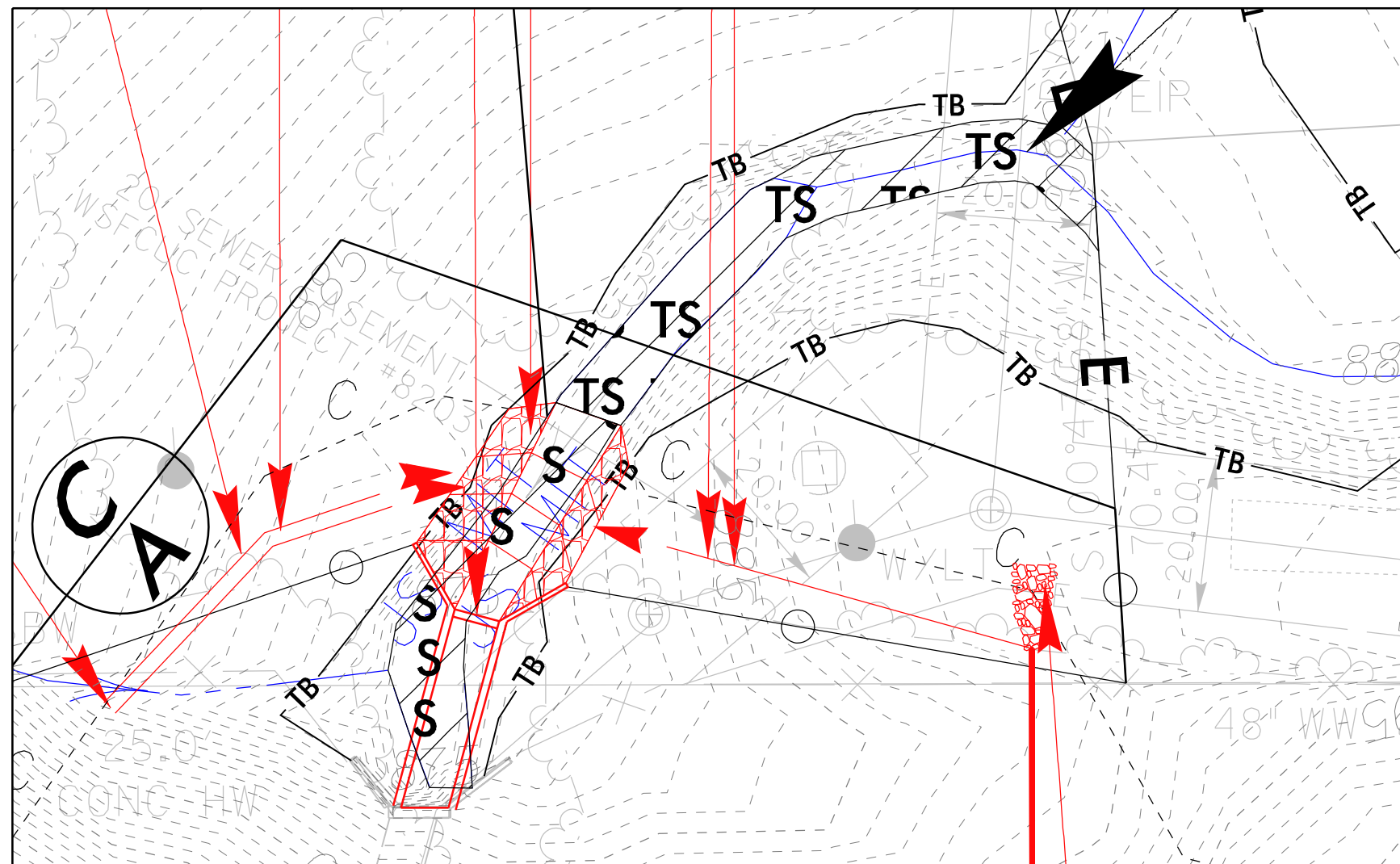
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR A/W ACQUISITION

PERMIT DRAWING
SHEET 8 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE IMPACT ZOOM: 1" = 20'



DETAIL SHEET FOR SITE 1A

REVISIONS

\$DATE\$

NAD 83/NA 2011

5/14/99

LEGEND

-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)
-  DENOTES IMPACTS IN SURFACE WATER (IP MOD)

Kimley»Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

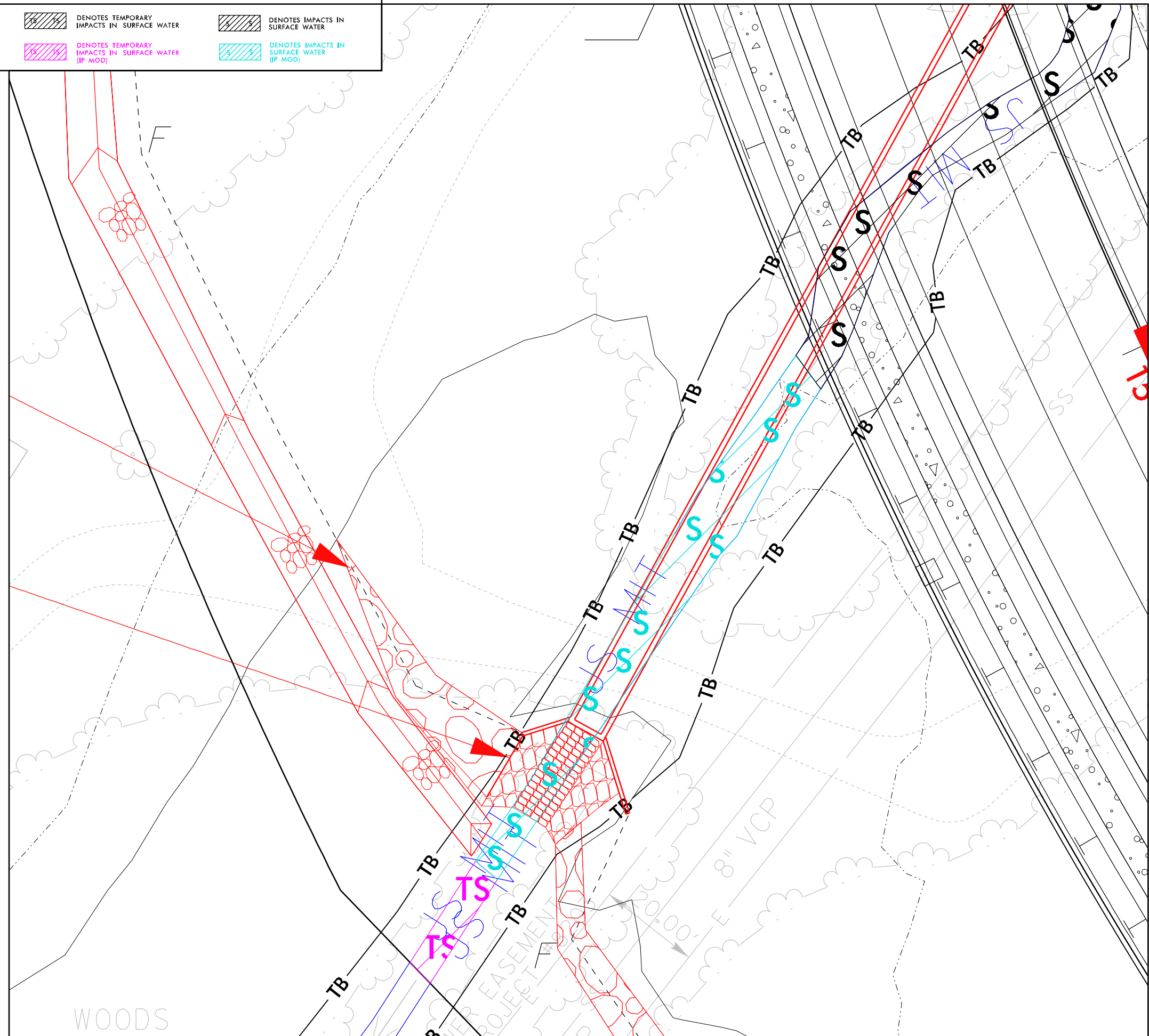
PROJECT REFERENCE NO. U-5760	SHEET NO. 5B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 9 OF 28

NAD 83/NA 2011

REVISIONS

\$DATE\$



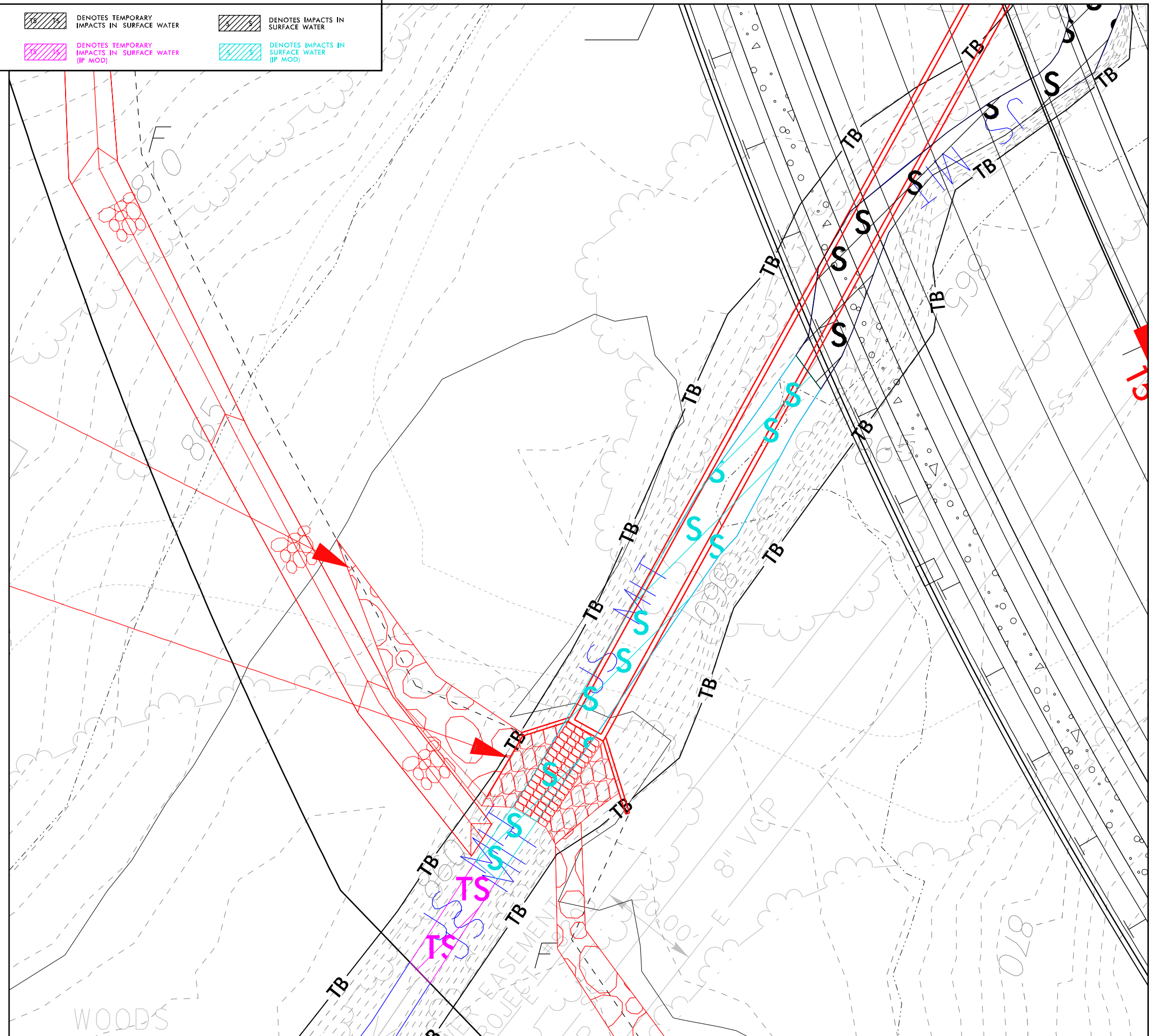
SITE IMPACT
ZOOM: 1" = 20'

DETAIL SHEET
FOR SITE 1B
(IP MOD)

5/14/99

LEGEND

-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)
-  DENOTES IMPACTS IN SURFACE WATER (IP MOD)



REVISIONS

\$DATE\$

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PROJECT REFERENCE NO. U-5760	SHEET NO. 5B
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 10 OF 28

NAD 83/NA 2011

SITE IMPACT

ZOOM: 1" = 20'

DETAIL SHEET

FOR SITE 1B

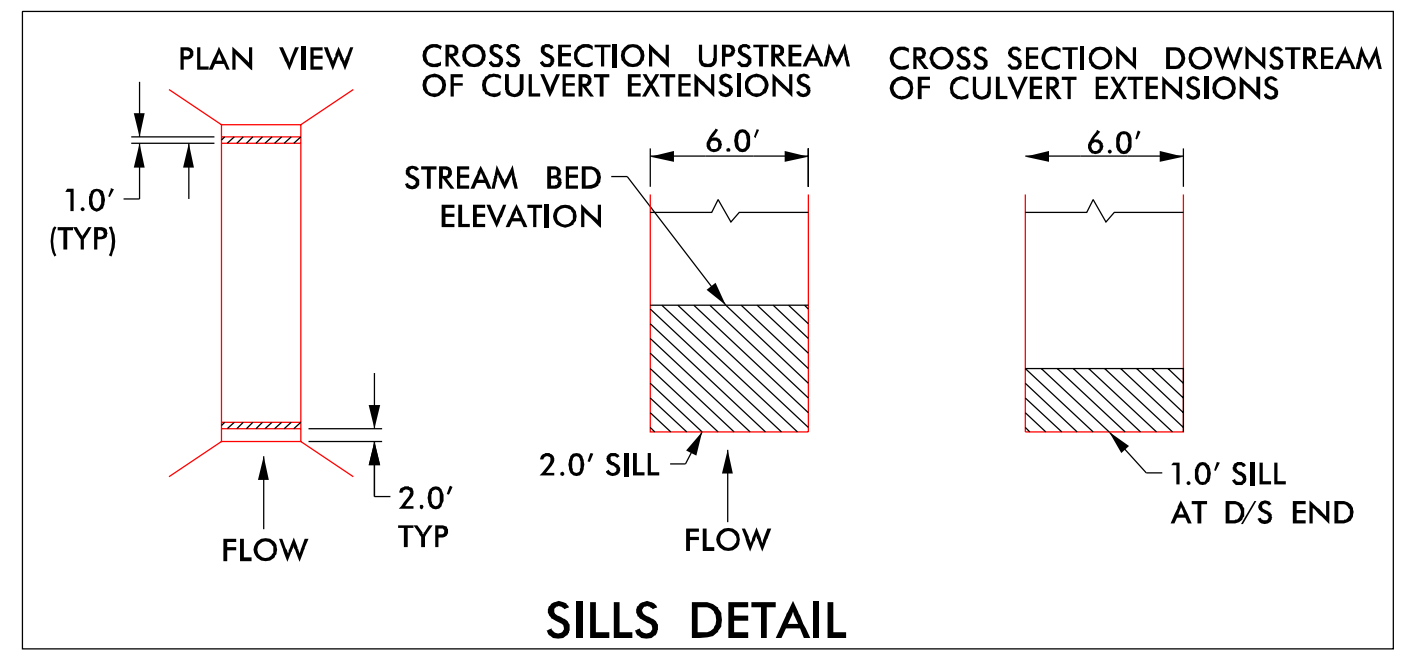
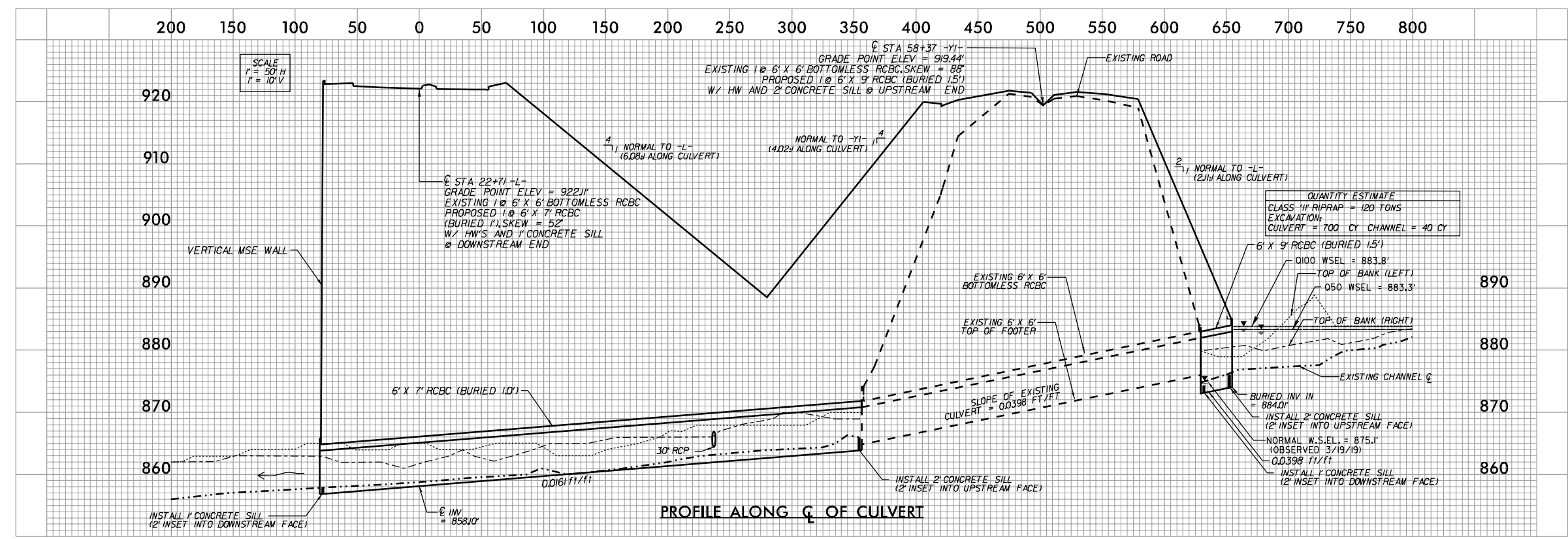
(IP MOD)

5/14/99

PROJECT REFERENCE NO. U-5760	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PERMIT DRAWING SHEET 11 OF 28	

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE 1A /1B – CULVERT EXTENSION







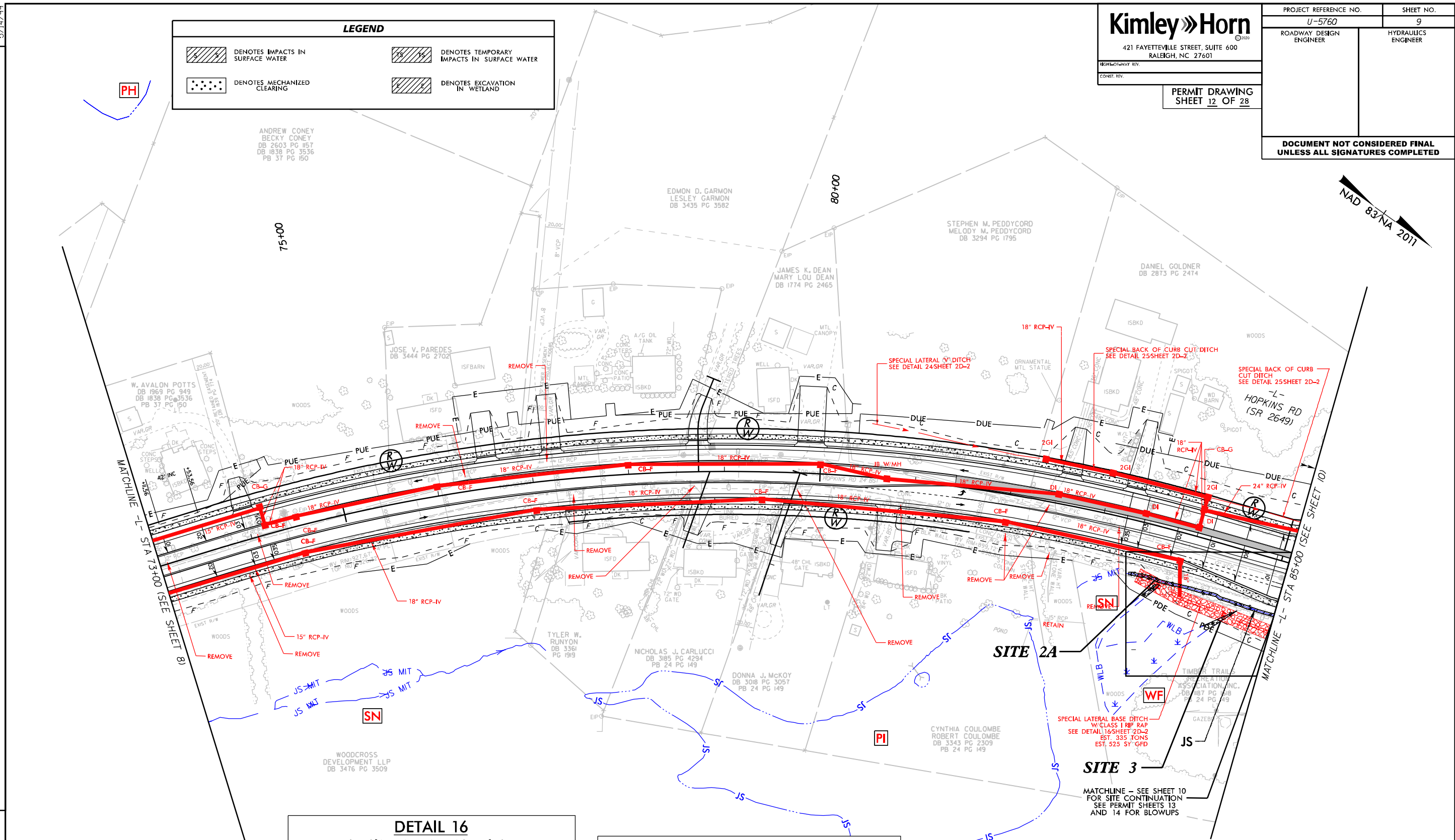
NOTE: NATIVE BED MATERIAL SHALL BE PLACED IN THE PROPOSED CULVERT EXTENSIONS BETWEEN SILLS. NATIVE MATERIALS CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED OR FLOODPLAIN AT THE PROJECT SITE DURING CULVERT CONSTRUCTION. RIP RAP MAY BE USED TO SUPPLEMENT THE NATIVE MATERIAL. IF RIP RAP IS USED, THE NATIVE MATERIAL SHOULD BE PLACED ON TOP TO FACILITATE ANIMAL PASSAGE. THE TOP SURFACE OF THE NATURAL STREAM BED MATERIAL SHALL BE PLACED AND LEVELED TO A FLAT SURFACE TO ALLOW FOR ANIMAL PASSAGE. NATIVE MATERIAL AND RIP RAP ARE SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

REVISIONS

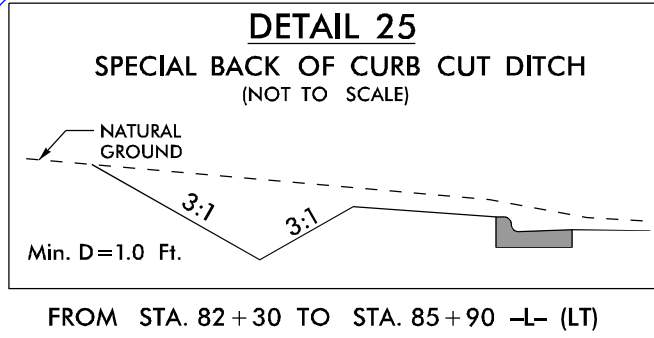
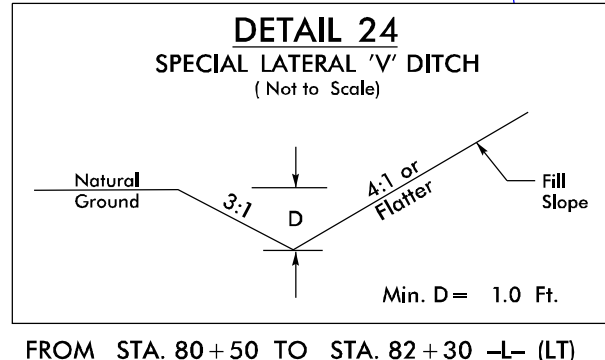
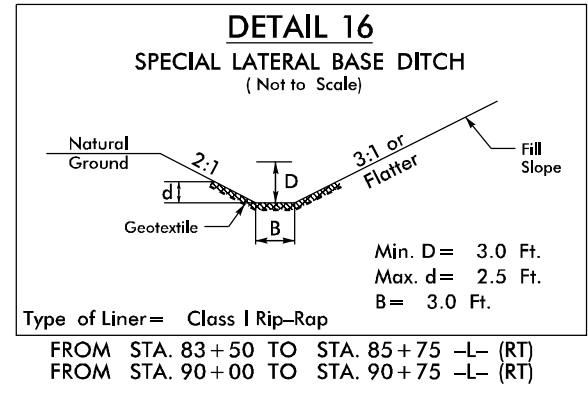
DATE\$

LEGEND

 DENOTES IMPACTS IN SURFACE WATER	 DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 DENOTES MECHANIZED CLEARING	 DENOTES EXCAVATION IN WETLAND



REVISIONS
 ROW REV. - 5/12/22 - ADJUSTED PUE ON PARCELS 40, 42, 43, 44, 46, 48 AND 50. - JWM
 ROW REV. - 8/11/22 - EXPANDED TCE ON PARCEL 43. - JWM



44 HUNTER P. COFER
DB 3333 PG 2638

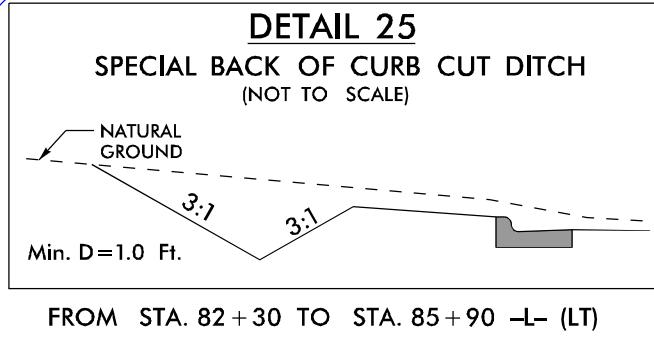
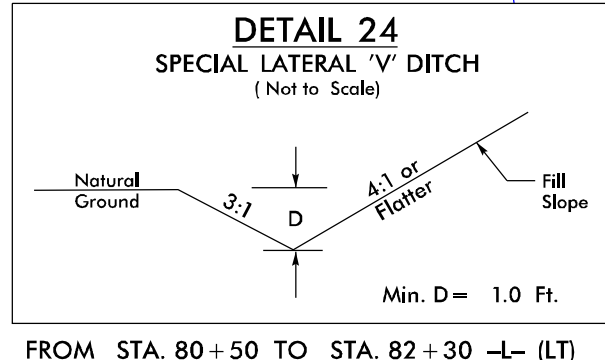
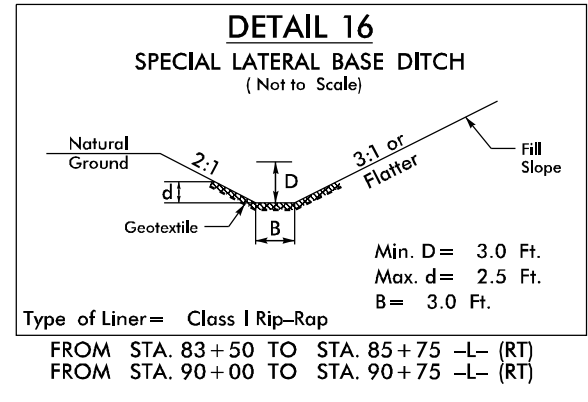
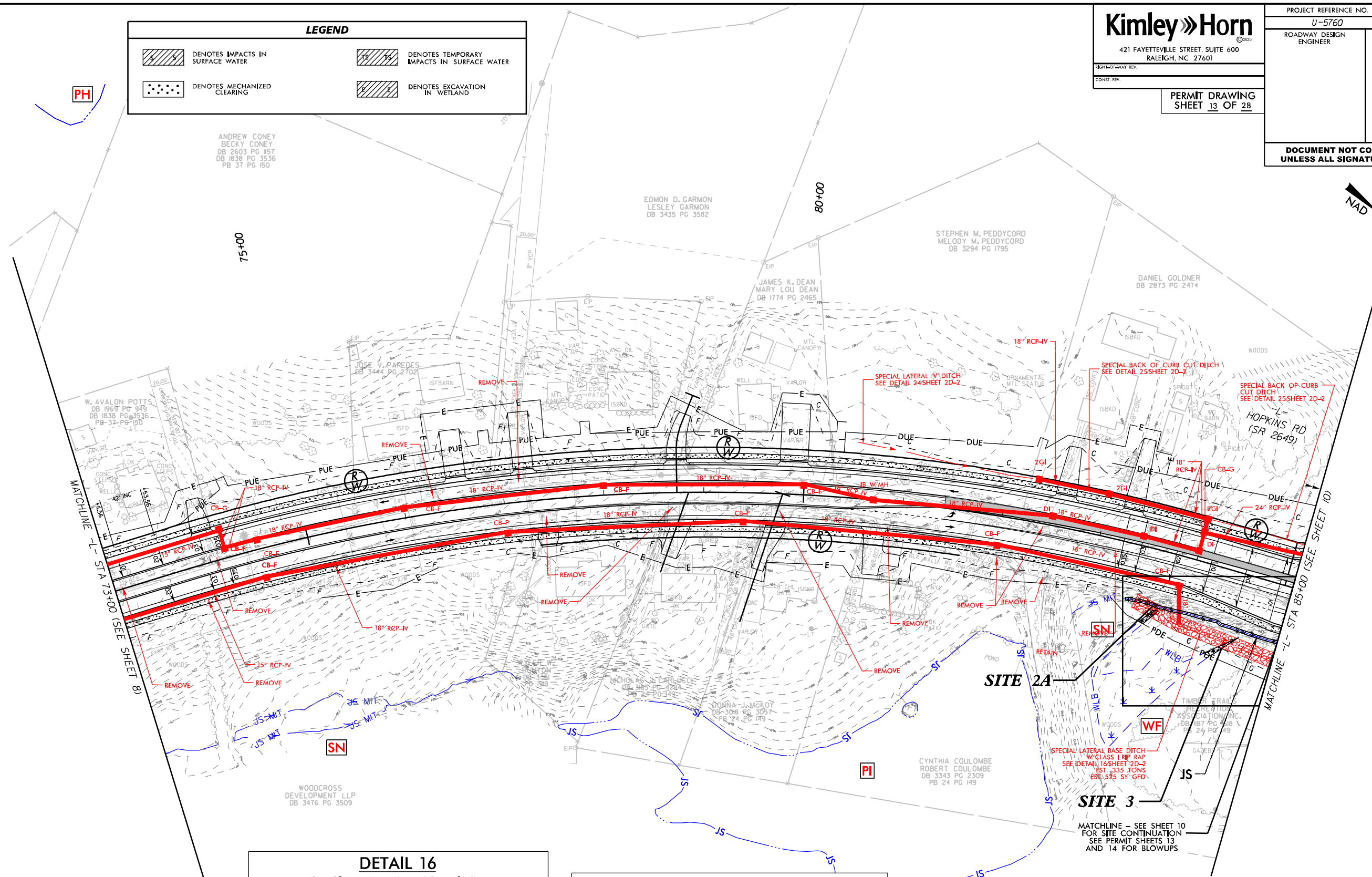
SEE SHEET 19 FOR -L- PROFILE
SEE SHEET 29 FOR -DRW2-, -DRW3-
AND -DRW4- PROFILES

LEGEND			
	DENOTES IMPACTS IN SURFACE WATER		DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES MECHANIZED CLEARING		DENOTES EXCAVATION IN WETLAND

5/14/99

REVISIONS
ROW REV - 5/12/22 - ADJUSTED PUE ON PARCELS 40, 42, 43, 44, 46, 48 AND 50. - JWM
ROW REV - 8/11/22 - EXPANDED TCE ON PARCEL 43. - JWM

\$DATE\$




44 HUNTER P. COFER
DB 3333 PG 2638

SEE SHEET 19 FOR -L- PROFILE
SEE SHEET 29 FOR -DRW2-, -DRW3-
AND -DRW4- PROFILES

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES MECHANIZED CLEARING

 DENOTES EXCAVATION IN WETLAND

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.
CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

9A

ROADWAY DESIGN ENGINEER

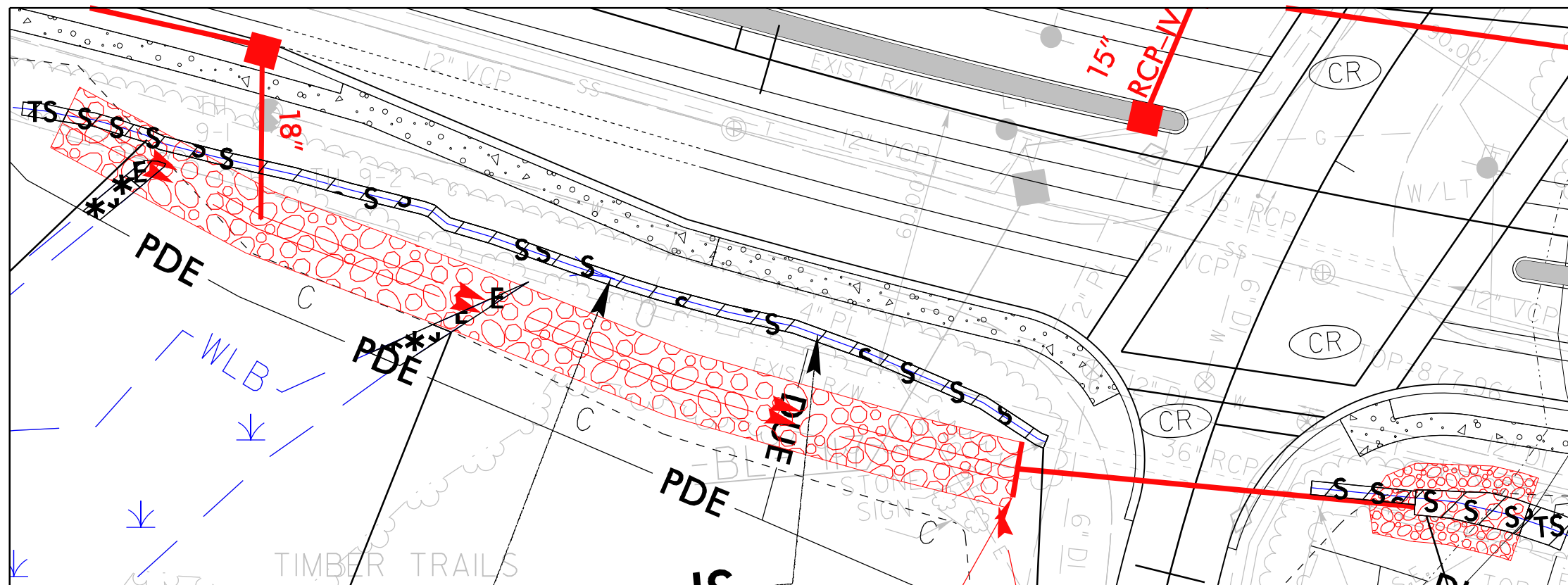
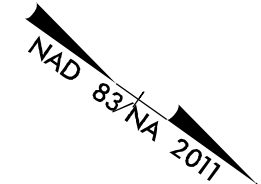
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 14 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE IMPACT ZOOM: 1"=30'



DETAIL SHEET FOR SITES 2A, 2B, 3

REVISIONS


\$DATE\$

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES MECHANIZED CLEARING

 DENOTES EXCAVATION IN WETLAND

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

9A

ROADWAY DESIGN ENGINEER

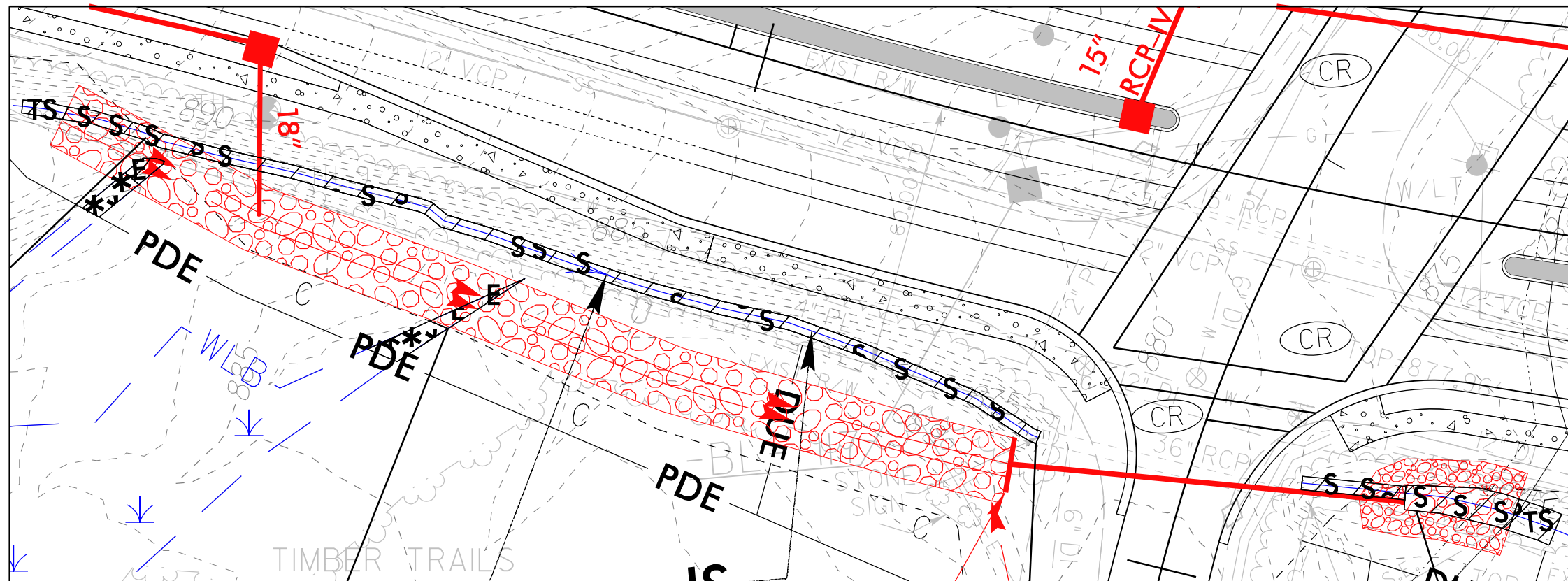
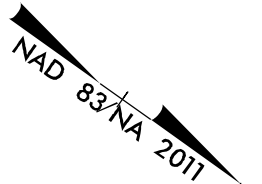
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 15 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE IMPACT ZOOM: 1"=30'

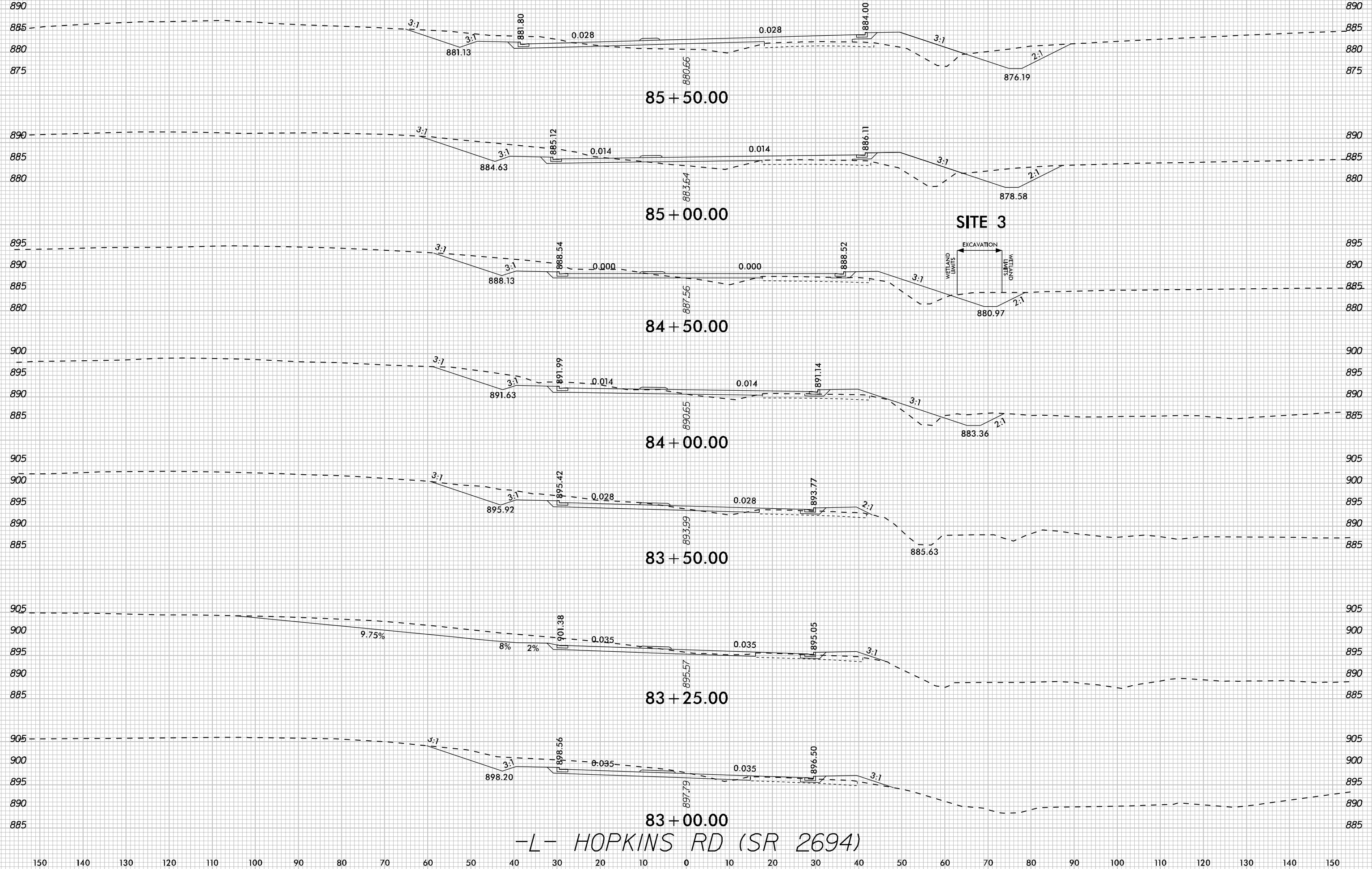


DETAIL SHEET FOR SITES 2A, 2B, 3

REVISIONS

\$DATE\$

8/23/99



-L- HOPKINS RD (SR 2694)

DATE \$ FILE \$

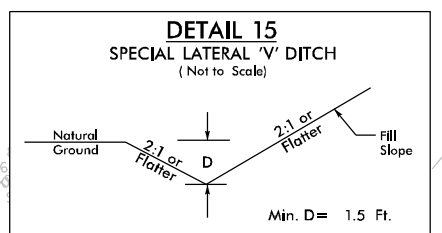
PROJECT REFERENCE NO. U-5760	SHEET NO. 10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PERMIT DRAWING
SHEET 17 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

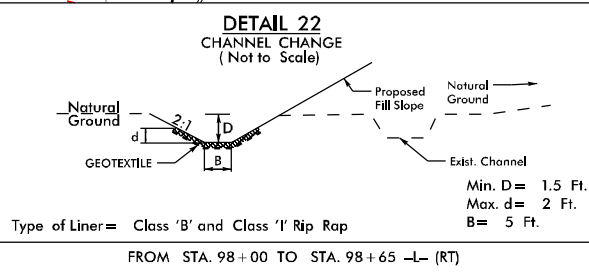
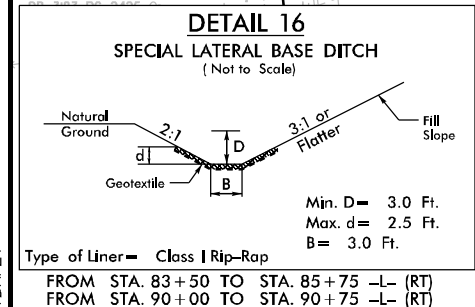
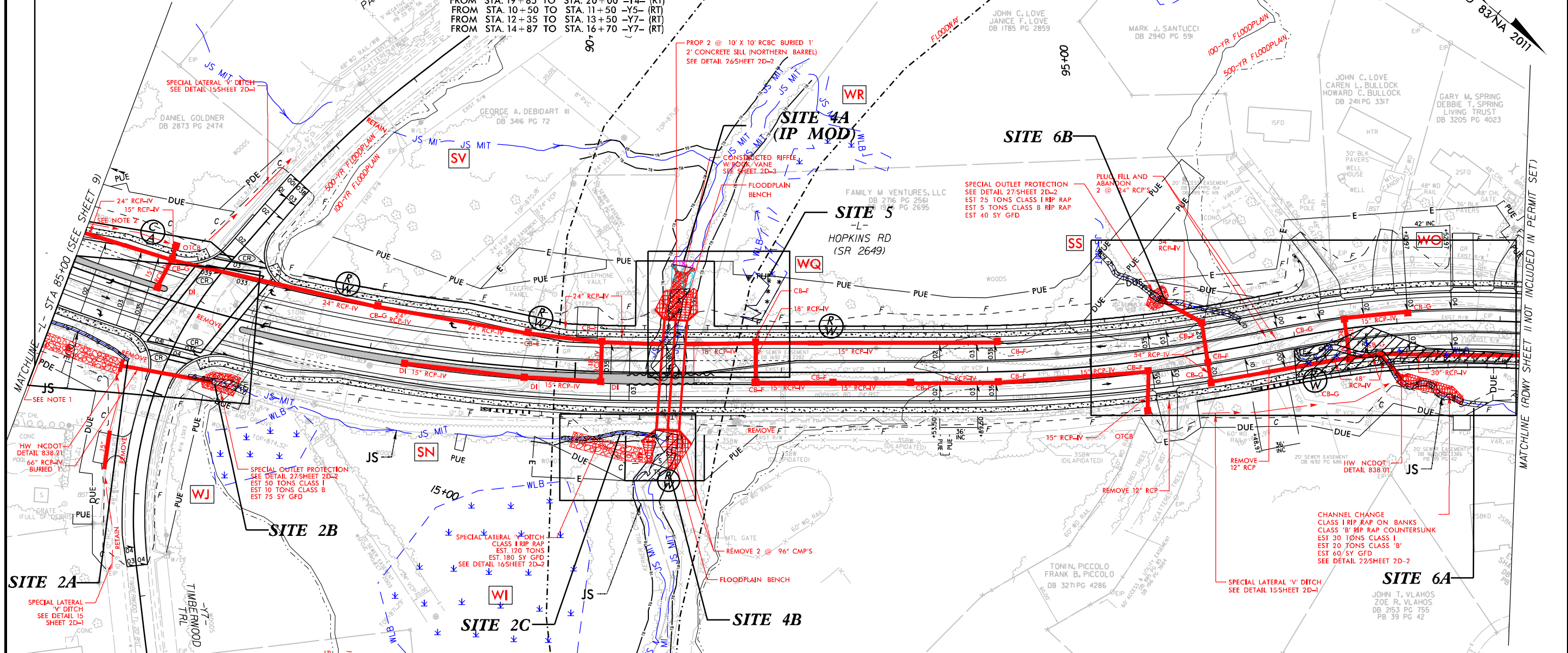
LEGEND

	DENOTES IMPACTS IN SURFACE WATER		DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES FILL IN WETLAND		DENOTES MECHANIZED CLEARING
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)		DENOTES IMPACTS IN SURFACE WATER (IP MOD)



FROM STA. 35+00 TO STA. 37+00 -L- (RT)
FROM STA. 37+00 TO STA. 38+50 -L- (RT)
FROM STA. 58+00 TO STA. 60+20 -L- (RT)
FROM STA. 96+00 -L- TO STA. 98+00 -L- (RT)
FROM STA. 13+00 TO STA. 14+00 -Y4- (LT)
FROM STA. 19+85 TO STA. 20+00 -Y4- (RT)
FROM STA. 10+50 TO STA. 11+50 -Y5- (RT)
FROM STA. 12+35 TO STA. 13+50 -Y7- (RT)
FROM STA. 14+87 TO STA. 16+70 -Y7- (RT)

MATCHLINE - SEE SHEET 9
FOR SITE CONTINUATION
SEE PERMIT SHEETS 13
AND 14 FOR BLOWUPS



NOTES:
1. SPECIAL LATERAL BASE DITCH W/ CLASS I RIP RAP
SEE DETAIL 16, SHEET 2D-2
EST 335 TONS
EST 525 SY GFD
2. SPECIAL BACK OF CURB CUT DITCH
SEE DETAIL 25/SHEET 2D-2
3. TEMPORARY SHORING (SEE TRANSPORTATION MANAGEMENT PLANS)

- (53) TIMBER TRAILS RECREATION ASSOCIATION, INC.
DB 887 PG 168
PB 24 PG 149
- (56) CAROLINA TELEPHONE & TELEGRAPH
DB 1649 PG 4084
- (64) ERIC A. McFARLIN SHAWN R. McFARLIN
DB 2702 PG 174
PB 39 PG 42

SEE SHEET 2B-2 FOR INTERSECTION DETAIL
SEE SHEET 20 FOR -L- PROFILE
SEE SHEET 28 FOR -Y7- PROFILE
SEE SHEETS C-1 THRU C-XX FOR CULVERT PLANS

REVISIONS

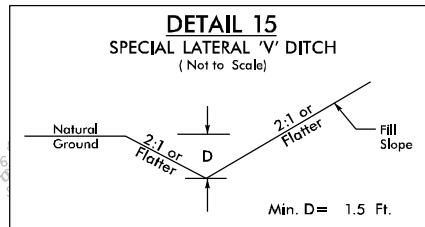
\$DATE\$

MATCHLINE (RDWY SHEET II NOT INCLUDED IN PERMIT SET)

NAD 83/NA 2011

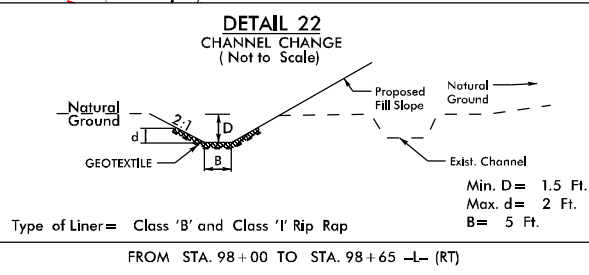
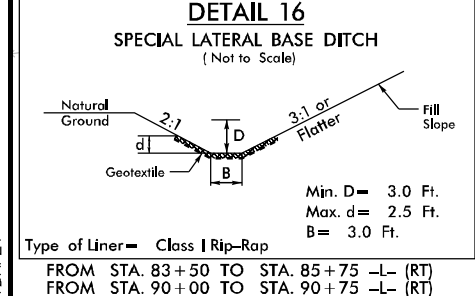
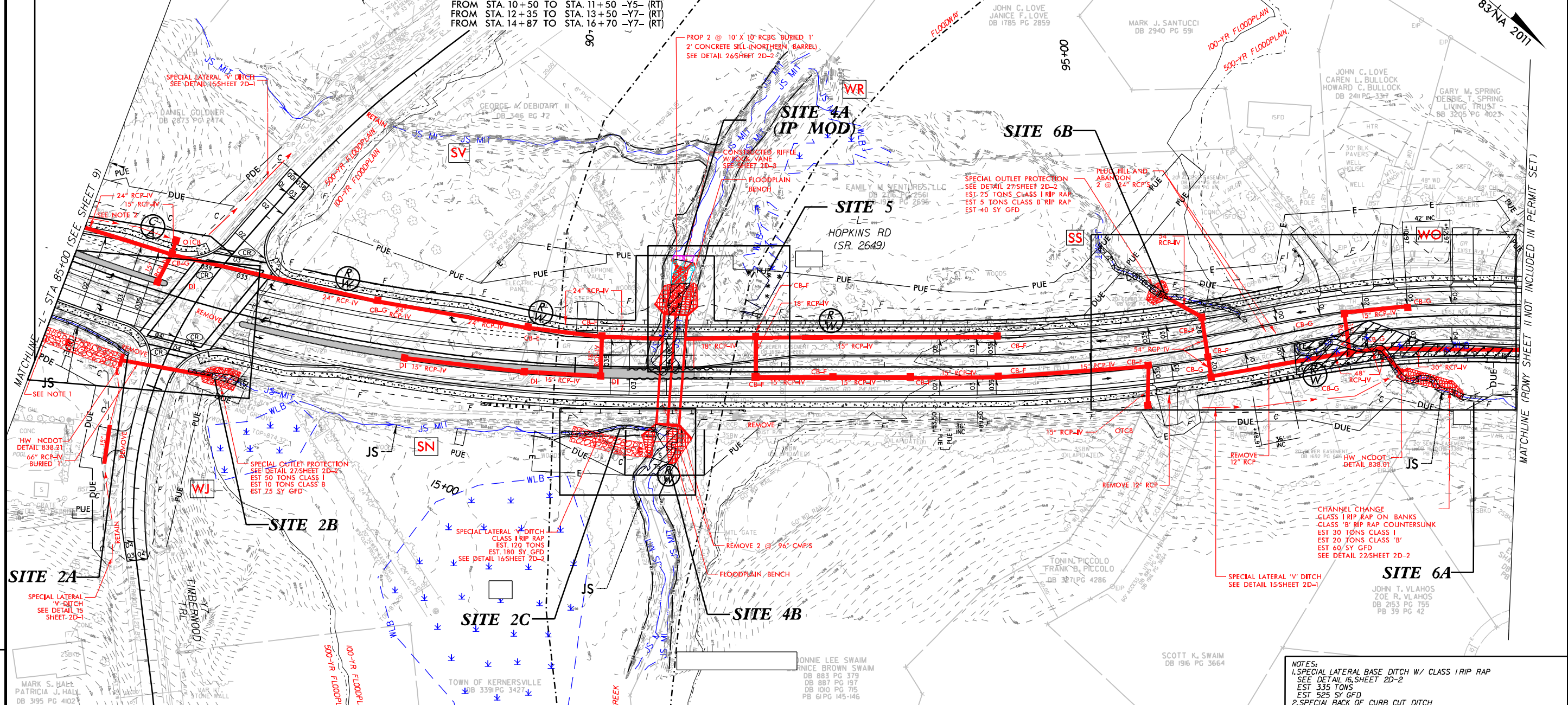
LEGEND

	DENOTES IMPACTS IN SURFACE WATER		DENOTES TEMPORARY IMPACTS IN SURFACE WATER
	DENOTES FILL IN WETLAND		DENOTES MECHANIZED CLEARING
	DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD)		DENOTES IMPACTS IN SURFACE WATER (IP MOD)



FROM STA. 35+00 TO STA. 37+00 -L- (RT)
 FROM STA. 37+00 TO STA. 38+50 -L- (RT)
 FROM STA. 58+00 TO STA. 60+20 -L- (RT)
 FROM STA. 96+00 -L- TO STA. 98+00 -L- (RT)
 FROM STA. 13+00 TO STA. 14+00 -Y4- (LT)
 FROM STA. 19+85 TO STA. 20+00 -Y4- (RT)
 FROM STA. 10+50 TO STA. 11+50 -Y5- (RT)
 FROM STA. 12+35 TO STA. 13+50 -Y7- (RT)
 FROM STA. 14+87 TO STA. 16+70 -Y7- (RT)

MATCHLINE - SEE SHEET 9
 FOR SITE CONTINUATION
 SEE PERMIT SHEETS 13
 AND 14 FOR BLOWUPS



NOTES:
 1. SPECIAL LATERAL BASE DITCH W/ CLASS I RIP RAP
 SEE DETAIL 16, SHEET 2D-2
 EST 335 TONS
 EST 525 SY GFD
 2. SPECIAL BACK OF CURB CUT DITCH
 SEE DETAIL 25/SHEET 2D-2
 3. TEMPORARY SHORING (SEE TRANSPORTATION MANAGEMENT PLANS)

53 TIMBER TRAILS RECREATION ASSOCIATION, INC.
 DB 187 PG 168
 PB 24 PG 149

64 ERIC A. McFARLIN SHAWN R. McFARLIN
 DB 272 PG 174
 PB 39 PG 42

56 CAROLINA TELEPHONE & TELEGRAPH
 DB 1649 PG 4084

SEE SHEET 2B-2 FOR INTERSECTION DETAIL
 SEE SHEET 20 FOR -L- PROFILE
 SEE SHEET 28 FOR -Y7- PROFILE
 SEE SHEETS C-1 THRU C-XX FOR CULVERT PLANS

5/14/99
 REVISIONS
 \$DATE\$

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES FILL IN WETLAND

 DENOTES MECHANIZED CLEARING

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

10A

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

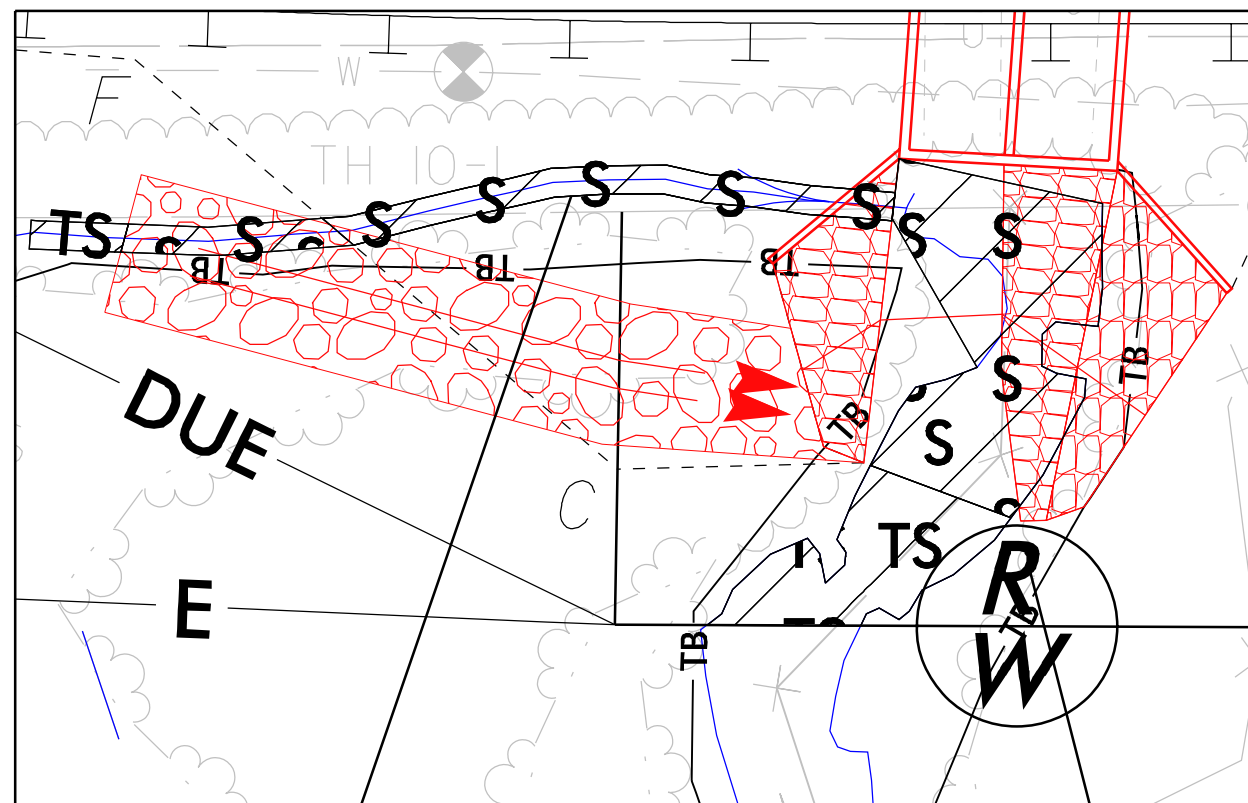
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 19 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



SITE IMPACT ZOOM: 1"=20'



DETAIL SHEET FOR SITES 2C, 4B

REVISIONS

\$DATE\$

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES FILL IN WETLAND

 DENOTES MECHANIZED CLEARING

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

10A

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

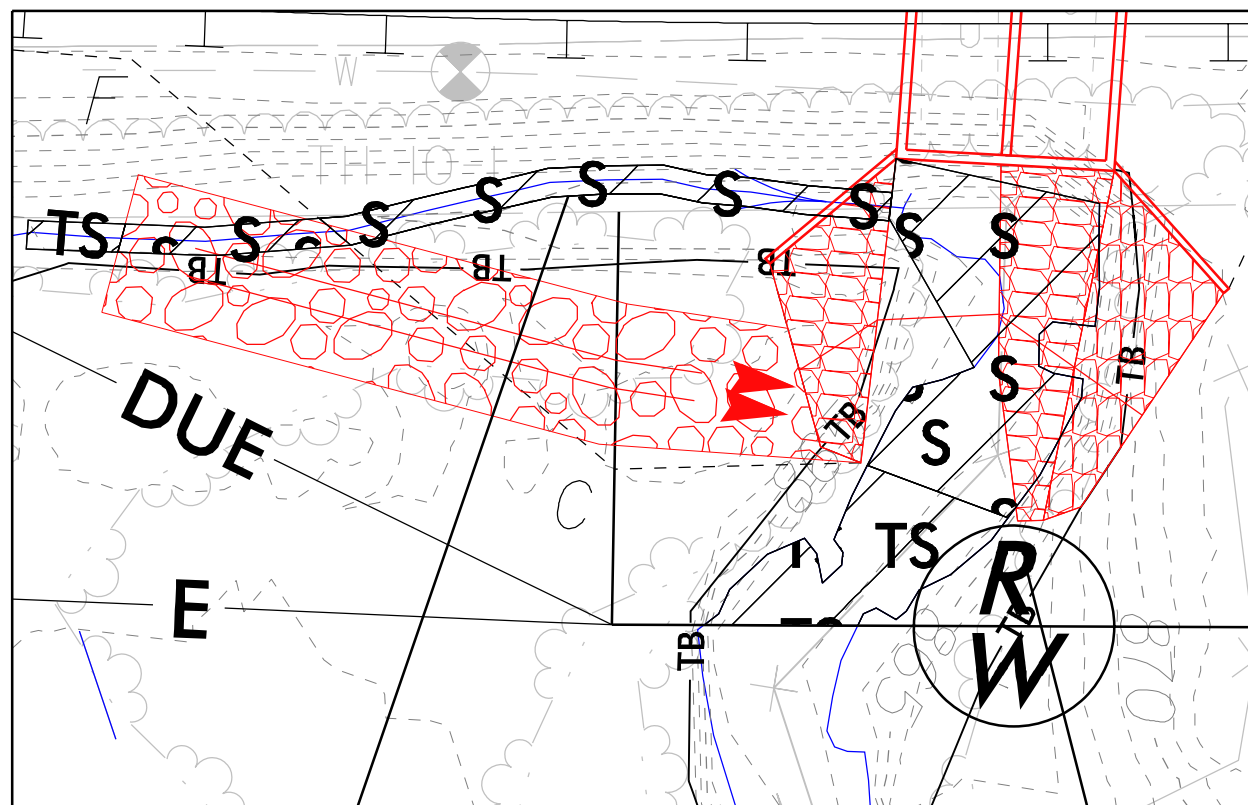
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 20 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

SITE IMPACT ZOOM: 1"=20'









DETAIL SHEET FOR SITES 2C, 4B

REVISIONS

\$DATE\$

5/14/99

LEGEND

- | | |
|---|---|
|  DENOTES IMPACTS IN SURFACE WATER |  DENOTES TEMPORARY IMPACTS IN SURFACE WATER |
|  DENOTES FILL IN WETLAND |  DENOTES MECHANIZED CLEARING |
|  DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD) |  DENOTES IMPACTS IN SURFACE WATER (IP MOD) |

Kimley»Horn
 421 FAYETTEVILLE STREET, SUITE 600
 RALEIGH, NC 27601

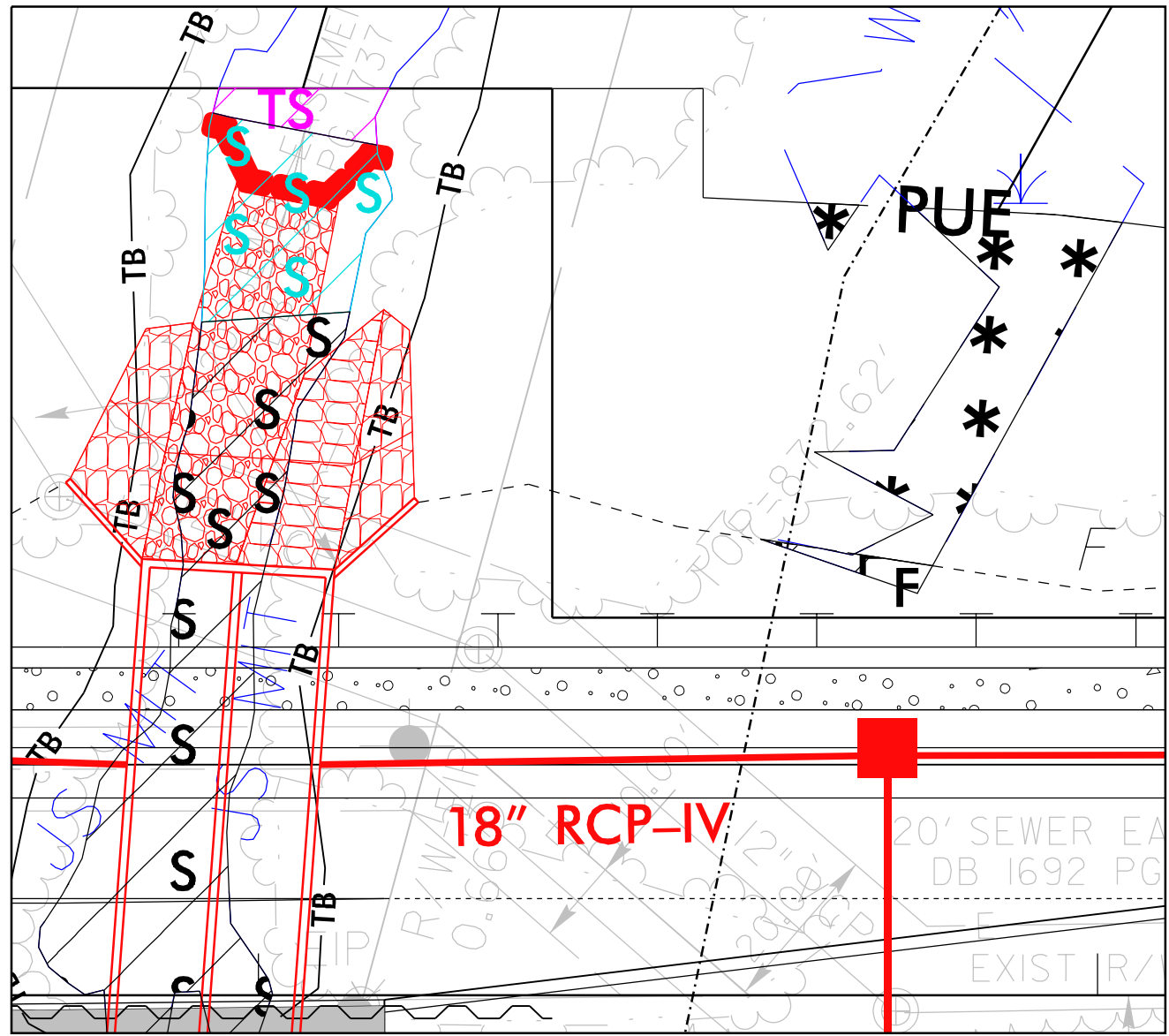
PROJECT REFERENCE NO. U-5760	SHEET NO. 10B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PERMIT DRAWING
SHEET 21 OF 28

SITE IMPACT ZOOM: 1" = 20'



REVISIONS









DETAIL SHEET FOR SITES 4A, 5 (IP MOD)

\$DATE\$

5/14/99

LEGEND

- | | |
|---|---|
|  DENOTES IMPACTS IN SURFACE WATER |  DENOTES TEMPORARY IMPACTS IN SURFACE WATER |
|  DENOTES FILL IN WETLAND |  DENOTES MECHANIZED CLEARING |
|  DENOTES TEMPORARY IMPACTS IN SURFACE WATER (IP MOD) |  DENOTES IMPACTS IN SURFACE WATER (IP MOD) |

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

10B

ROADWAY DESIGN ENGINEER

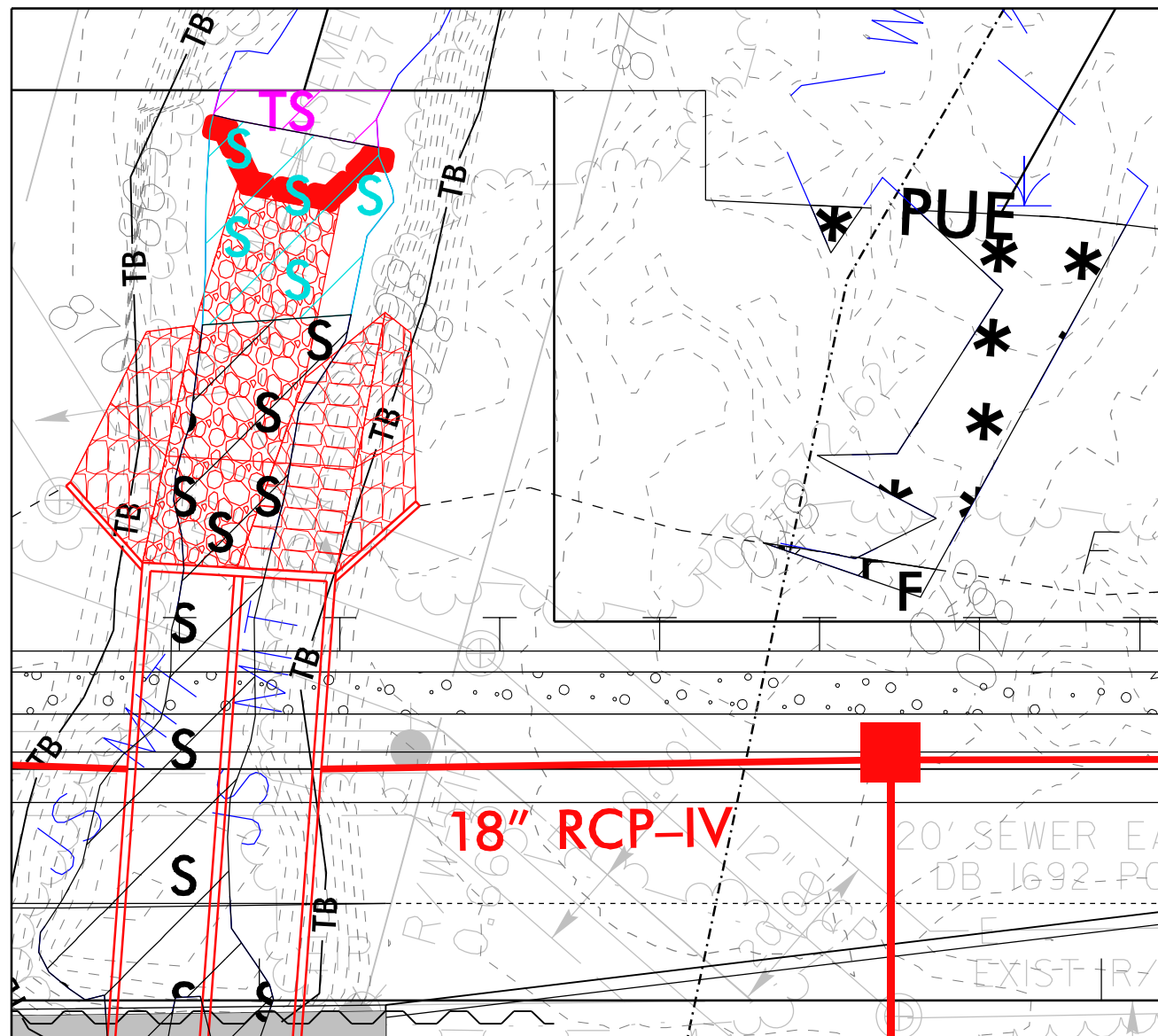
HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR A/W ACQUISITION

PERMIT DRAWING
SHEET 22 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

SITE IMPACT ZOOM: 1"=20'



DETAIL SHEET FOR SITES 4A, 5 (IP MOD)

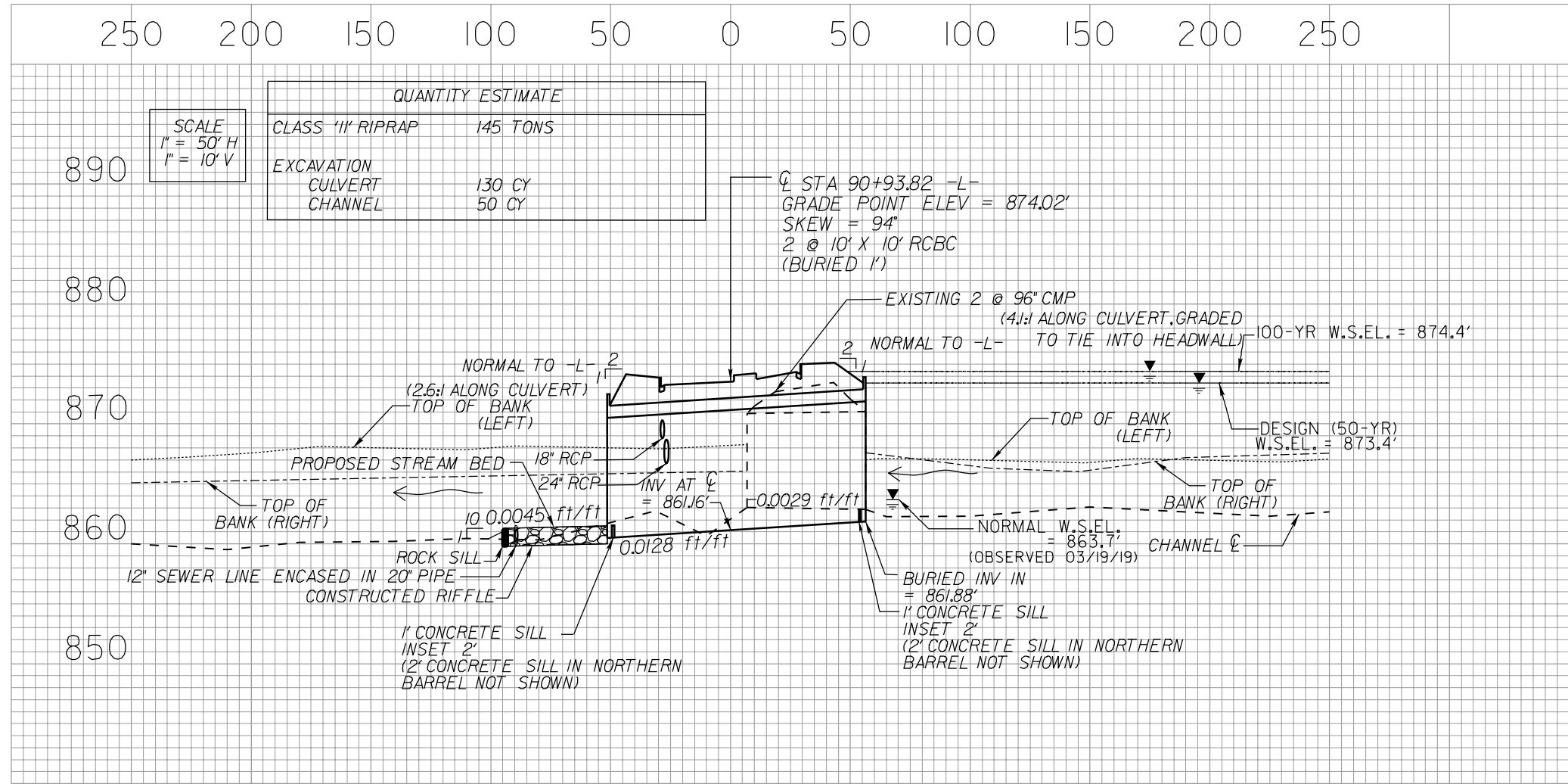
REVISIONS

\$DATE\$

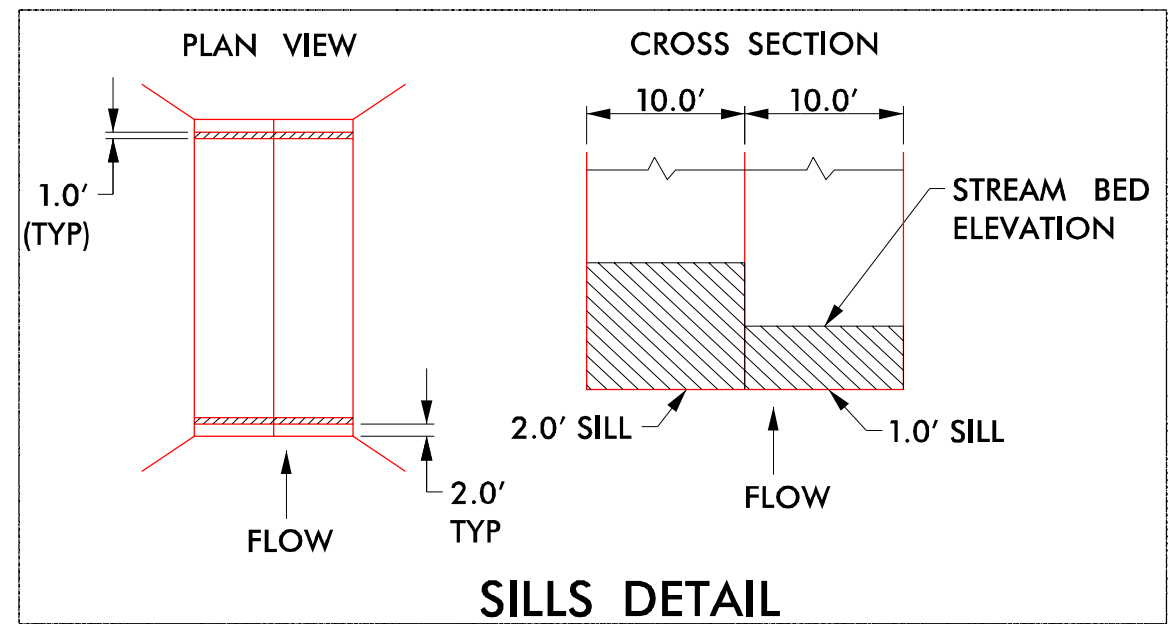
5/14/99

SITE 4A /4B – CULVERT REPLACEMENT

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



REVISIONS



NOTE: FOR CUT CONDITION, USE CLASS II RIP RAP FLOODPLAIN BENCH BORDER WITH NATURAL GROUND COVERED WITH COIR FIBER MAT INSIDE BORDER. IN FILL CONDITION, USE CLASS II RIP RAP FILL THROUGHOUT WITH NATIVE BED MATERIAL FILLING THE VOIDS ON TOP.

NOTE: NATIVE BED MATERIAL SHALL BE PLACED BETWEEN THE SILLS IN THE LOW FLOW CULVERT. NATIVE MATERIALS CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED OR FLOODPLAIN AT THE PROJECT SITE DURING CULVERT CONSTRUCTION. RIP RAP MAY BE USED TO SUPPLEMENT THE NATIVE MATERIAL. IF RIP RAP IS USED, THE NATIVE MATERIAL SHOULD BE PLACED ON TOP TO FACILITATE ANIMAL PASSAGE. THE TOP SURFACE OF THE NATURAL STREAM BED MATERIAL SHALL BE PLACED AND LEVELED TO A FLAT SURFACE TO ALLOW FOR ANIMAL PASSAGE. THE HIGH FLOW BARRELS SHALL BE BACK FILLED WITH NATIVE MATERIAL AND/OR RIP RAP. NATIVE MATERIAL AND RIP RAP ARE SUBJECT TO APPROVAL BY THE ENGINEER AND MAY BE SUBJECT TO PERMIT CONDITIONS.

\$DATE\$

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES FILL IN WETLAND

 DENOTES MECHANIZED CLEARING

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

PROJECT REFERENCE NO.

U-5760

SHEET NO.

10C

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

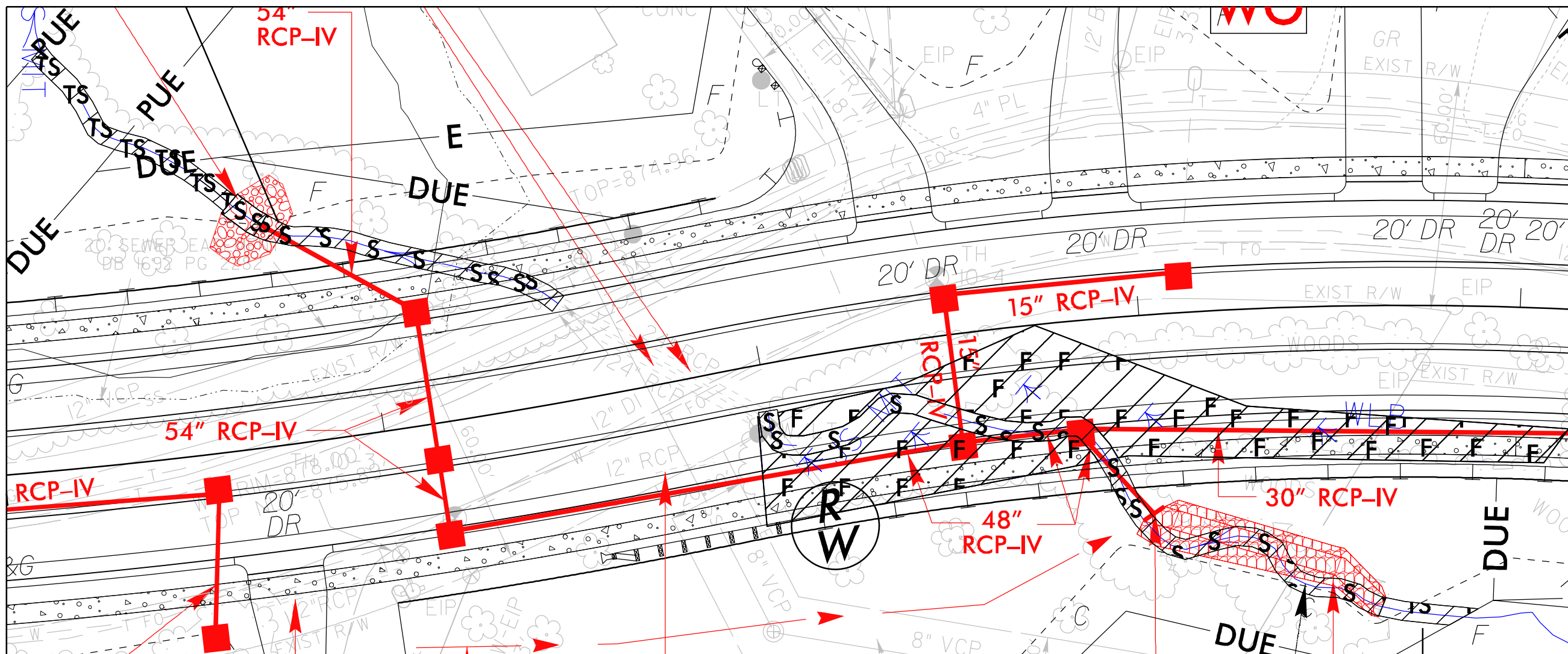
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 24 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



SITE IMPACT ZOOM: 1"=30'



DETAIL SHEET FOR SITES 6A, 6B

REVISIONS

\$DATE\$

5/14/99

LEGEND

 DENOTES IMPACTS IN SURFACE WATER

 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

 DENOTES FILL IN WETLAND

 DENOTES MECHANIZED CLEARING

Kimley»Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, NC 27601

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-5760

SHEET NO.

10C

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

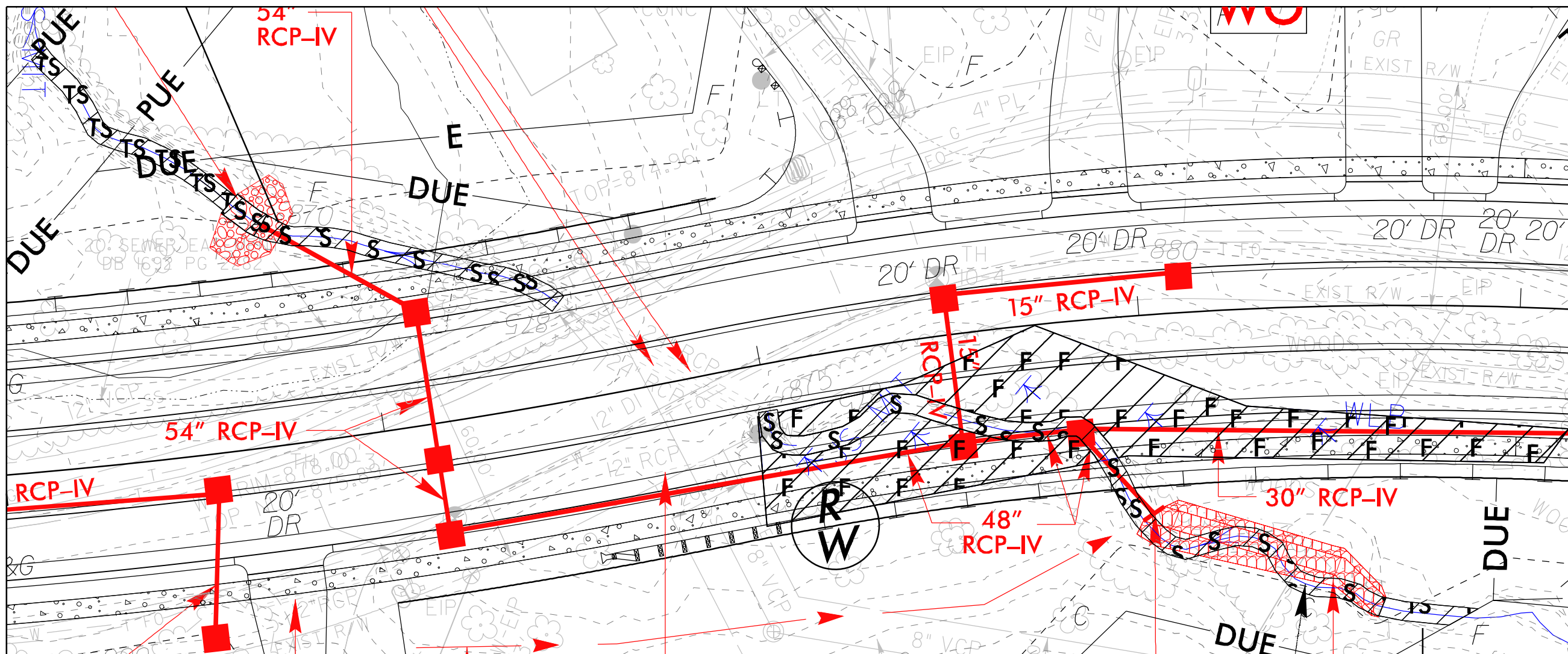
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PERMIT DRAWING
SHEET 25 OF 28

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



SITE IMPACT ZOOM: 1"=30'

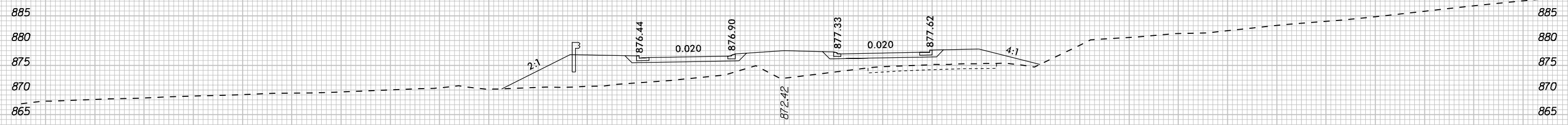
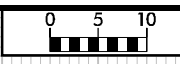


DETAIL SHEET FOR SITES 6A, 6B

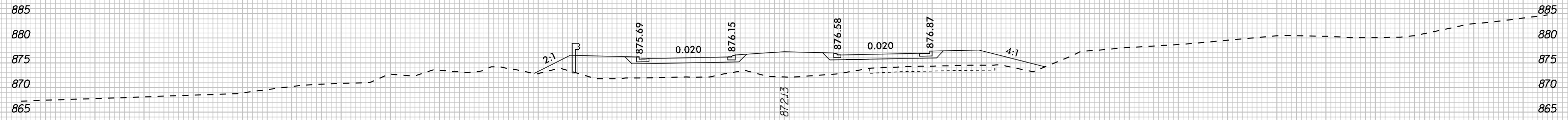
REVISIONS

\$DATE\$

8/23/99



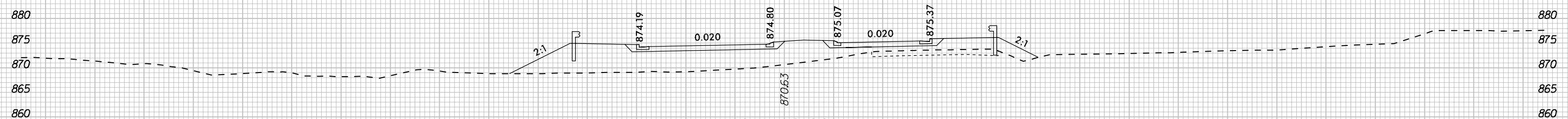
93 + 00.00



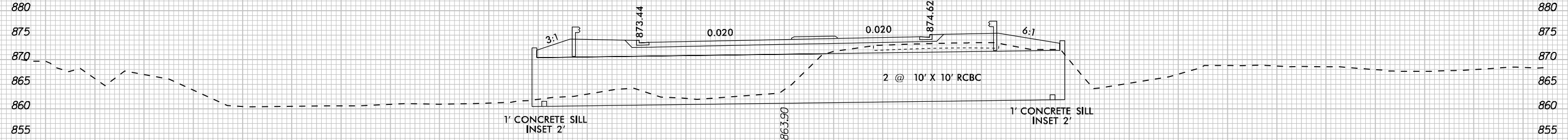
92 + 50.00



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91 + 50.00



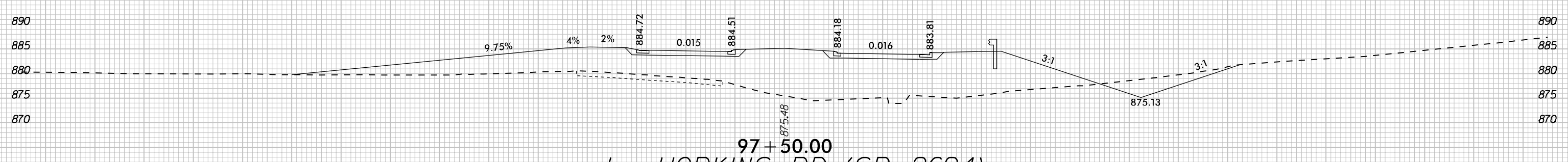
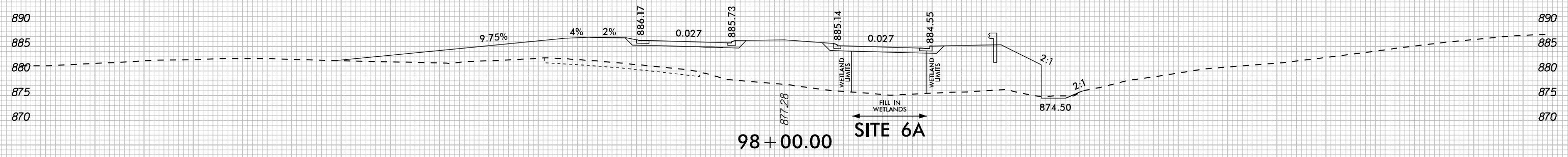
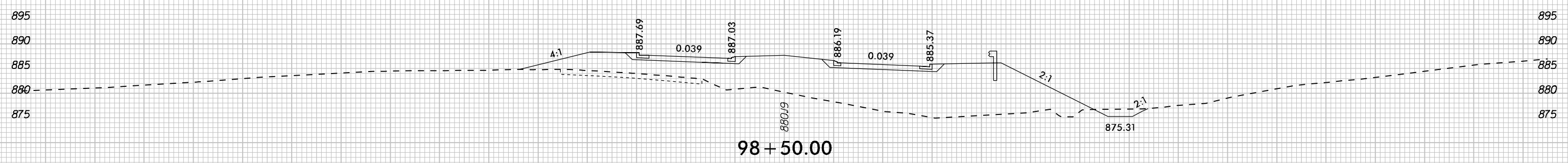
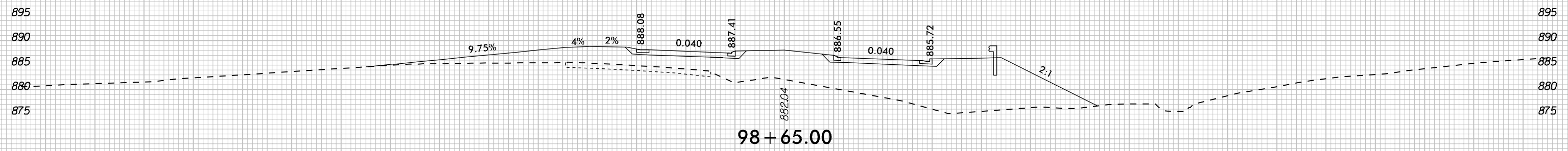
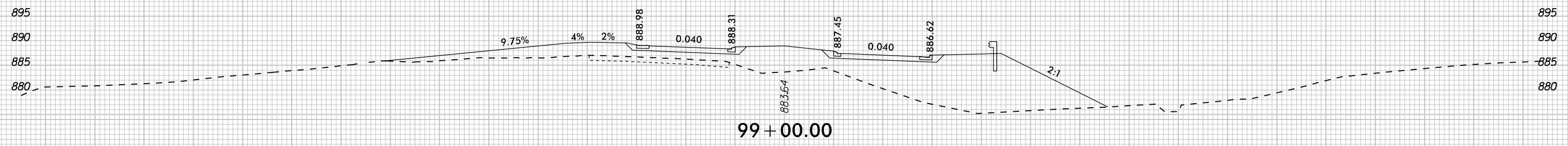
91 + 00.00

-L- HOPKINS RD (SR 2694)

DATE \$

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

8/23/99



-L- HOPKINS RD (SR 2694)

DATE \$

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

WETLAND AND SURFACE WATER IMPACTS SUMMARY

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)	
1A	58+66/59+59 -Y1- (LT)	1 @ 6' x 9' RCBC Extension							< 0.01		25		
	58+66/59+59 -Y1- (LT)	Channel Improvements							< 0.01	0.02	31	82	
1B	21+97/25+90 -L- (RT)	1 @ 6' x 7' RCBC Extension							0.11		610		
	21+97/25+90 -L- (RT)	Channel Improvements							< 0.01	< 0.01	33	24	
2A	83+40/85+80 -L- (RT)	Roadway Fill			< 0.01	< 0.01			0.02	< 0.01	233	10	
2B	86+38/86+80 -L- (RT)	66" RCP							< 0.01		24		
		Channel Improvements							< 0.01	< 0.01	25	10	
2C	89+96/90+79 -L- (RT)	Roadway Fill							< 0.01	< 0.01	82	10	
3	83+60/84+62 -L- (RT)	Roadway Fill			< 0.01	< 0.01							
4A	90+74/91+16 -L- (LT)	2 @ 10' x 10' RCBC							0.02		61		
		Channel Improvements							0.02	< 0.01	52	5	
4B	90+59/91+00 -L- (RT)	Channel Improvements							0.01	< 0.01	35	19	
5	91+60/92+06 -L- (LT)	Roadway Fill	< 0.01			0.01							
6A	96+98/98+87 -L- (RT)	48" RCP							0.01		122		
		Channel Change							< 0.01	< 0.01	70	22	
		Roadway Fill	0.09										
6B	95+22/96+53 -L- (LT)	54" RCP							< 0.01		82		
		Channel Improvements							< 0.01	< 0.01	10	65	
TOTALS*:			0.09		< 0.01	0.01			0.24	0.04	1495	247	0

*Rounded totals are sum of actual impacts

NOTES:

= Impacts affected by IP Mod

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 02/20/2023
 FORSYTH
 U-5760
 46381.1.1
 SHEET 28 OF 28



NORTH CAROLINA
Environmental Quality

April 20, 2023

ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

RICHARD E. ROGERS, JR.

Director

Ms. Amy Euliss
NCDOT, Division 9 PDEA Engineer
375 Silas Creek Parkway
Winston Salem, NC 27127

Subject: Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed widening and extension of Big Mill Farm Road and widening of Hopkins Road from I-40 Business/US 421 to West Mountain Street with a new partial cloverleaf interchange at I-40 Business/US 421 in Forsyth County; STIP No U-5760; WBS Element No. 46381.1.1. NCDWR Project No. 20200628v2; WQ Certification No. 0044231.

Dear Ms. Euliss:

Attached hereto is a modification of Certification No. 0044231 issued to The North Carolina Department of Transportation (NCDOT) originally issued on July 13, 2020.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

DocuSigned by:

Amy Chapman

Richard E. Rogers, Jr., Director
Division of Water Resources

Electronic copy only distribution:

Matt Jones, NCDOT Division 9 (mwjones2@ncdot.gov)
Steve Brumagin, US Army Corps of Engineers, Charlotte Field Office
Amanetta Somerville, US Environmental Protection Agency
Rebekah Reid, US Fish and Wildlife Service
David McHenry, NC Wildlife Resources Commission
Beth Harmon, NC DMS

File Copy



**Modification to the 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to permanently impact an additional 123 linear feet of jurisdictional streams and reduce temporary impacts by 19 linear feet (for the two Sites) in Forsyth County. The project shall be constructed pursuant to the modification received March 17, 2023. The authorized impacts are as described below:

Stream Impacts in the Yadkin Pee Dee River Basin

Site	Permanent Fill in Perennial Stream (linear ft)		Temporary Fill in Perennial Stream (linear ft)	Stream Impacts Requiring Additional Mitigation (linear ft)
	Culvert	Channel Improvements	Fill	
Current impacts at 1B	522	20	20	-
New additional impacts at 1B	88	13	4	101
Current impacts at 4A	61	30	28	
New additional impacts at 4A	No change	22	Reduction of 23	22
Relevant Totals (for this modification)	88	35	4	123

Total Stream Impact (for this modification): 127 linear feet (total includes new temporary impacts)

The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin Pee Dee River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your modification application dated March 17, 2023. All the authorized activities and conditions associated with the original Water Quality Certification originally dated July 13, 2020, still apply except where superseded by this Certification. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 300 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

1. This modification is applicable only to the additional proposed activities and design that you submitted in your request for modification received March 17, 2023. [15A NCAC 02H.0506(b) (1, 2)]



2. All the authorized activities and conditions associated with the original Water Quality Certification dated July 13, 2020, still apply except where superseded by this certification. [15A NCAC 02H.0506(b) (1, 2)]
3. Compensatory mitigation for 123 linear feet of impact to streams is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Division of Mitigation Service (DMS) (formerly NCEEP), and that the DMS has agreed to implement the mitigation for the project. The DMS has indicated in a letter dated February 23, 2023, that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the DMS Mitigation Banking Instrument signed July 28, 2010.

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative Hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center

This the 20th day of April 2023

DIVISION OF WATER RESOURCES

DocuSigned by:

Amy Chapman

Richard E. Rogers, Jr., Director

WQC No. 004231



ROY COOPER

Governor

ELIZABETH S. BISER

Secretary

RICHARD E. ROGERS, JR.

Director



NORTH CAROLINA
Environmental Quality

NCDWR Project No.: _____ County: _____

Applicant: _____

Project Name: _____

Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: _____ Date: _____

Engineer's Certification

_____ Partial _____ Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature _____ Registration No. _____

Date _____

