



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 6, 2009

US Army Corps of Engineers
Wilmington Regulatory Office
69 Darlington Avenue
Wilmington, NC 28402

Attn: Ms. Kim Garvey
NCDOT Coordinator, Division 8

Dear Ms Garvey:

Subject: Application for Modification to Section 404 and Section 401 permits for the US 421/NC 87 (Sanford Bypass) from east of NC 42 to NC 87 near SR 1138 in Lee County, Division 8. Federal Aid Project No. STPNHF-421(2), State Project No. 8.T540402, WBS Element No. 34431.1.6, TIP No. R-2417C.

References: Section 404 Individual Permit Modification, issued March 25, 2009, USACE Action ID 2002-2-0899.
Section 401 Individual Water Quality Certification (Sixth modification), issued January 21, 2009, NCDENR-DWQ Water Quality Certification Project No. 001432.
Section 404 Individual Permit, issued May 28, 2002, USACE Action ID 2002-2-0899.
Section 401 Individual Water Quality Certification, issued April 10, 2002, Project No. 001432.

The North Carolina Department of Transportation (NCDOT) proposes to construct a four-lane median divided freeway with full control access, on new location to serve as a US 421/NC 87 bypass of Sanford, North Carolina. The purpose of this submittal is to request another modification to the Section 404 permit and Section 401 Water Quality Certification for R-2417C. Please see the enclosed copies of the revised permit drawing sheets 20 - 23 of 31, revised summary tables (revised permit drawing sheets 4-8 of 31), and a copy of the EEP letter for the above-referenced project.

The revised design does not compromise NCDOT's compliance with the existing permit conditions. The revision has been evaluated for compliance with the avoidance/minimization criteria and is in compliance with all previous issues, including the following:

- Protected Species
- Aquatic Life passage
- FEMA compliance
- Cultural Resources

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

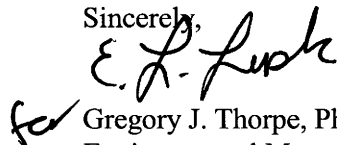
TELEPHONE: 919-431-2000
FAX: 919-431-2002
WEBSITE: WWW.NCDOT.ORG

LOCATION:
4701 ATLANTIC AVE.
SUITE 116
RALEIGH NC 27604

Changes in impacts are due to the proposed service road extension since the permit modification issued March 25, 2009 (see enclosed revised permit drawings). The proposed service road is to be extended from permit drawing sheet 20 of 31 (cul-de-sac in March 25, 2009 permit modification) and end at revised permit drawing sheet 22 of 31 near the pond at Site 10. The reason for the service road extension is to provide access to a large parcel of land (Thomas property) as a result of recent right-of-way negotiations.

Changes in impacts occur at Site 9 resulting in an increase of 0.04 acres of permanent wetland (riparian) fill (totaling 0.15 acres) compared to the permit modification issued March 25, 2009 (0.11 acres). Please refer to the enclosed revised summary tables for details.

A copy of the permit modification with these revisions will be posted on the NCDOT website at: <http://www.ncdot.org/doh/preconstruct/pe/>. If you have any questions or need additional information, please call Greg Price at (919) 431-1587.

Sincerely,

Gregory J. Thorpe, Ph.D.
Environmental Management Director, PDEA

cc: w/attachment
Mr. Brian Wrenn, NCDWQ (5 Copies)
Ms. Kathy Matthews, USEPA

w/o attachment
Dr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. Greg Perfetti, P.E., Structure Design
Mr. Jay Bennett, P.E., Roadway Design
Mr. Tim Johnson, P.E., Division 8 Engineer
Mr. Jay McInnis, P.E., PDEA Project Planning Engineer
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Art King, Division 8 Environmental Officer
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Mr. Travis Wilson, NCWRC
Mr. Gary Jordan, USFWS
Ms. Beth Harmon, EEP
Mr. Todd Jones, NCDOT External Audit Branch
Mr. Drew Joyner, PE, Human Environment Unit Head
Mr. Clarence W. Coleman, P.E., FHWA



November 3, 2009

Ms. Kimberly Garvey
 U. S. Army Corps of Engineers
 Wilmington Regulatory Field Office
 Post Office Box 1890
 Wilmington, North Carolina 28402-1890

Dear Ms. Garvey:

Subject: EEP Mitigation Acceptance Letter:

R-2417C, US 421/NC 87 (Sanford Bypass) from east of NC 42 to near SR 1138, Lee County; Cape Fear River Basin (Cataloging Unit 03030004); Southern Piedmont (SP) Eco-Region

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory riparian wetland mitigation for the unavoidable impact associated with the above referenced project. Based on the information supplied by the NCDOT on November 3, 2009, the impacts are located in CU 03030004 of the Cape Fear River Basin in the Southern Piedmont (SP) Eco-Region, and the anticipated mitigation credits needed to offset the impacts are as follows:

Cape Fear 03030004 SP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	0	0.04	0	0	0	0
Mitigation Units (Credits-up to 2:1)	0	0	0	0.08	0	0	0	0

Mitigation associated with this project will be provided in accordance with Section X of Amendment No. 2 to the Memorandum of Agreement between the N. C. Department of Environment and Natural Resources, the N. C. Department of Transportation, and the U. S. Army Corps of Engineers fully executed on March 8, 2007 (Tri-Party MOA). EEP commits to implement sufficient compensatory riparian wetland mitigation in the appropriate cataloging unit in the amount listed in the above table to offset the impacts associated with this project by the end of the MOA year in which this project is permitted. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.
 EEP Director

cc: Mr. Gregory J. Thorpe, Ph.D., NCDOT-PDEA
 Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
 File: R-2417C - 2

Restoring... Enhancing... Protecting Our State





November 3, 2009

Mr. Gregory J. Thorpe, Ph.D.
 Manager, Project Development and Environmental Analysis Branch
 North Carolina Department of Transportation
 1548 Mail Service Center
 Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

R-2417C, US 421/NC 87 (Sanford Bypass) from east of NC 42 to near SR 1138, Lee County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory riparian wetland mitigation for the subject project. Based on the information supplied by you on November 3, 2009, the impacts are located in CU 03030004 of the Cape Fear River Basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Cape Fear 03030004 SP	Stream			Wetlands			Buffer (Sq. Ft.)	
	Cold	Cool	Warm	Riparian	Non-Riparian	Coastal Marsh	Zone 1	Zone 2
Impacts (feet/acres)	0	0	0	0.04	0	0	0	0
Mitigation Units (Credits-up to 2:1)	0	0	0	0.08	0	0	0	0

EEP commits to implementing sufficient compensatory riparian wetland mitigation credits to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, fully executed on March 8, 2007. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.
 EEP Director

cc: Ms. Kimberly Garvey, USACE – Wilmington Regulatory Field Office
 Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
 File: R-2417C - 2

Restoring... Enhancing... Protecting Our State



WETLAND PERMIT IMPACT 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)	Relocated Channel (ft)			
1	YRPC	ROADWAY FILL	0.41			0.02									
	10+97LT To 12+71RT														
2	13+00 +/- -YRPC-	2 @ 9'x9' RCBC								0.05	<.01	312			
	612+27 +/- -LREV	2 @ 9'x9' RCBC								0.10		540			
3	613+00 +/- -LREV-	ROADWAY FILL	0.06												
	26+64 +/- -Y- to 22+35 +/- -Y- LT.	ROADWAY FILL	0.43												
4	18+20-YRPB-LT	ROADWAY FILL									0.01		80		
	19+84-YRPB-LT	2 @ 6'x6' RCBC									0.01		42		
5	20+20 +/- -Y- RT.	ROADWAY FILL	0.03	0.01											
	19+18 +/- -YRPB-	2 @ 9'x9' RCBC								0.04		252			
	19+58-YRPB-	2 @ 9'x9' RCBC								0.01		143			
	19+94 +/- -Y-LT	2 @ 6'x6' RCBC								0.04	0.02	175	117		
6	10+50 -YRPD-	ROADWAY FILL & 48" & 60" RCP								0.04	<.01	393	33		
	6+25 -YRPA-	ROADWAY FILL & 60" RCP								0.03		305			
SHEET TOTALS:			0.93	0.01		0.02			0.31	0.04	0.04	2120	272		

NOTES:

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LEE COUNTY
WBS - 34431.1.1 (R-2417C)

Revised SHEET 4 of 31

WETLAND PERMIT IMPACT 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)	Relocated Channel (ft)		
7	13+62 -FRONT-	2 @ 10'x10' RCBC								0.04	0.01	121	117	
8	643+75 -LREV- RT.	ROADWAY FILL	0.09			<0.01				0.02	<.01	442	32	
9	649+80 -LREV-	ROADWAY FILL	0.15			<0.01								
10	26+50 -I9FLY-	ROADWAY FILL	0.23							0.01	0.01	120	105	
	665+00 -LREV-	POND								2.83				
	20+00 -I9FLY-	ROADWAY FILL	0.02											
11	19+68 -I9FLY-	ROADWAY FILL								0.06		700		
	678+00 -LREV- LT.	72" RCP & ROADWAY FILL								0.06	<.01	690	15	
12	680+00 -LREV- LT.	POND								0.03				
13	690+00 -LREV- LT.	ROADWAY FILL								0.01		266		
14	45+25-Y-RT	ROADWAY FILL								0.01	<.01	107	43	47
SHEET TOTALS:			0.49	0.00		<0.01				3.07	0.02	2446	312	47

NOTES:

SITE 9 0.003ac OF SW IMPACTS INSIDE THE WETLAND HAVE BEEN SUBTRACTED OUT OF WETLAND IMPACTS.

SITE 12 DOES NOT HAVE A STREAM IMPACT AS ORIGINALLY SHOWN BECAUSE THE STREAM IS NOW FILLED WITH RIP-RAP.

SITES 13 & 14 ARE NEW SITES THAT REQUIRES NO MITIGATION.

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LEE COUNTY
WBS - 34431.1.1 (R-2417C)

Revised SHEET 5 of 31 11/3/2009

WETLAND PERMIT IMPACT 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)	Relocated Channel (ft)					
15	LREV RT 574+76 To 583+84	ROADWAY FILL	2.18			0.23											
16	LREV RT 589+17 To 593+67	ROADWAY FILL	0.11			0.01			0.03	<.01	566	11					
Sheet Totals:			2.29			0.24			0.03	<.01	566	11					
GRAND TOTALS:			3.71	0.01		0.26		3.41	0.06	5132	595	47					

NOTES:

SITES 15 AND 16 WERE ORIGINALLY ACCOUNTED FOR ON PERMIT DRAWINGS FOR R-2417BB BUT ARE A PART OF R-2417C. IMPACTS HAVE CHANGED DUE TO SLOPE STAKE CHANGE FROM 2:1 TO 3:1.

SITE 16: FILL IN WETLAND IMPACTS WERE REDUCED BY SURFACE WATER IMPACTS WITHIN WETLANDS.

Revised *6 of 31*

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LEE COUNTY
WBS - 34431.1.1 (R-2417C)

WETLAND PERMIT IMPACT SUMMARY

Site No.	ORIGINAL PERMIT IMPACTS					REVISED IMPACTS						
	Fill In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Existing Channel Impacted (ft)	Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)
1	0.22					0.41		0.02				
2			0.13		781				0.15		852	
2**			0.01		200							
3	0.48					0.49						
4			0.02		177					0.02		122
5	0.05		0.11		774	0.03			0.09	0.02	427	117
5**			0.00		115				<.01		143	
6			0.07		394				0.07	<.01	698	33
7			0.01		82				0.04	0.01	121	117
8	0.12		0.02		371	0.09		<.01	0.02	<.01	442	32
9	0.23					0.15		<.01				
TOTALS:	1.10		0.38		2894	1.17		0.02	0.37	0.05	2683	421

NOTES:

PROJECT FILL SLOPES CHANGED FROM 2:1 TO 3:1 (ORIGINAL VS REV) DUE TO SOIL INSTABILITY ISSUES.

"2**" IS NO LONGER A STREAM.

"5**" INTERMITTENT STREAM REQUIRING NO MITIGATION

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LEE COUNTY
WBS - 34431.1.1 (R-2417C)

Revised 7 of 31

WETLAND PERMIT IMPACT SUMMARY

Site No.	ORIGINAL PERMIT IMPACTS						REVISED IMPACTS					
	Fill In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Existing Channel Impacted (ft)	Permanent Fill In Wetlands (ac)	Temp Fill In Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)
10	0.02			2.84		0.25			2.84	0.01	120	105
11			0.10		1329				0.12	<.01	1390	15
12			0.01		79				0.03			
13									0.01		266	
14									0.01	<.01	107	43
15	1.86	0.17				2.18		0.23				
16	0.06	0.01	0.04		430	0.11		0.01	0.03	<.01	566	11
SHT 1												
TOTALS:	1.10		0.38		2894	1.17	0.01	0.02	0.37	0.05	2683	421
GRAND TOTALS:	3.04	0.18	0.49	2.84	4732	3.71	0.01	0.26	3.41	0.06	5132	595

NOTES:

SITE 12 DOES NOT HAVE A STREAM IMPACT AS ORIGINALLY SHOWN BECAUSE THE STREAM IS NOW FILLED WITH RIP-RAP.

SITE 13 & 14 ARE NEW SITES.

SITES 15 & 16 ARE INCLUDED IN PROJ. R-2417BB BUT ARE NOW A PART OF R-2417C.

Revised SHEET **8 of 31**

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

LEE COUNTY
WBS - 34431.1.1 (R-2417C)

8/17/99

HOMESTEAD INC.
DB 532 PG 324
PLAT SLIDE 8-62C
(30)

NAD 83

-FRONT- PT Sta. 38+00.00

(33)
W. C. WILSON JR.
DB 699 PG 350
TOE PROTECTION
SEE DETAIL 39
CL "H" RR-134 TNS
PF-266ay

(34)
ALBERT WOMBLE EST.
DB 89 PG 132
CL "B" RR- 5 TNS
PF-16ay

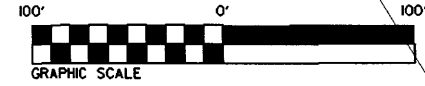
**SITE 8
UT6**

SITE 9

MATCH LINE TO SHEET 7 STA 639+00.00 -LREV-

MATCH LINE TO SHEET 9 STA 44+31.8 -FRONT-

- LEGEND**
- DENOTES FILL IN WETLAND
 - DENOTES IMPACTS IN SURFACE WATER
 - DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - DENOTES MECHANIZED CLEARING
 - DENOTES TEMPORARY FILL IN WETLAND



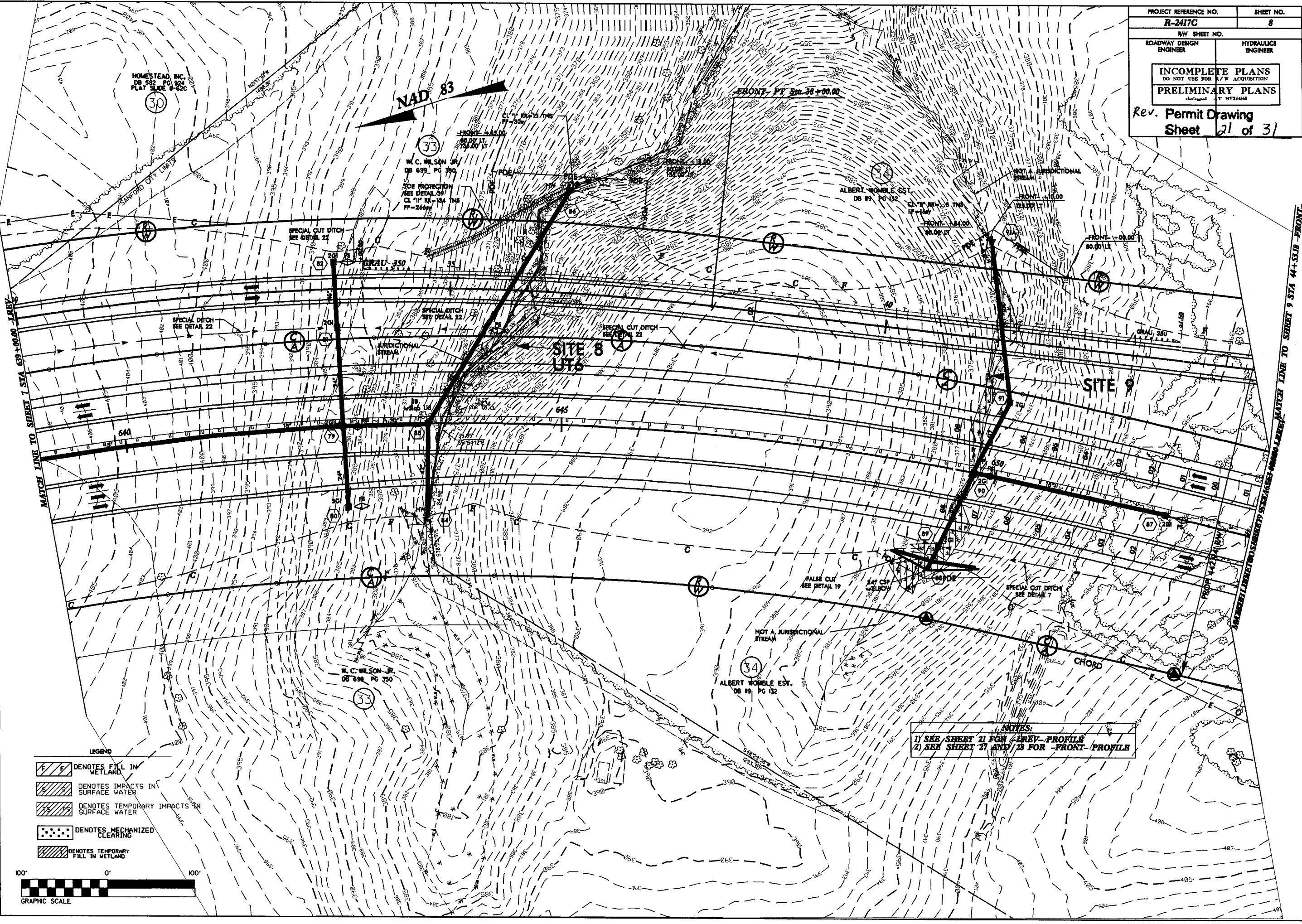
NOTES:
 1) SEE SHEET 21 FOR -LREV- PROFILE
 2) SEE SHEET 27 AND 28 FOR -FRONT- PROFILE

26-OCT-2009 14:49
 R:\hydro\ulises\permits\2417c_hyd_pr.m_wet_psh08.dgn
 ulises
 2417c_H12.dwg

REVISIONS

PROJECT REFERENCE NO. R-2417C	SHEET NO. 8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION PRELIMINARY PLANS <small>As designed IT HY244648</small>	
Rev. Permit Drawing Sheet 21 of 31	

B/17/99

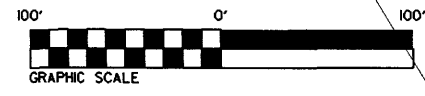


REVISIONS

MATCH LINE TO SHEET 7 STA 639+00.00 - PREV

MATCH LINE TO SHEET 9 STA 44+51.8 - FRONT

- LEGEND**
- DENOTES FILL IN WETLAND
 - DENOTES IMPACTS IN SURFACE WATER
 - DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - DENOTES MECHANIZED CLEARING
 - DENOTES TEMPORARY FILL IN WETLAND



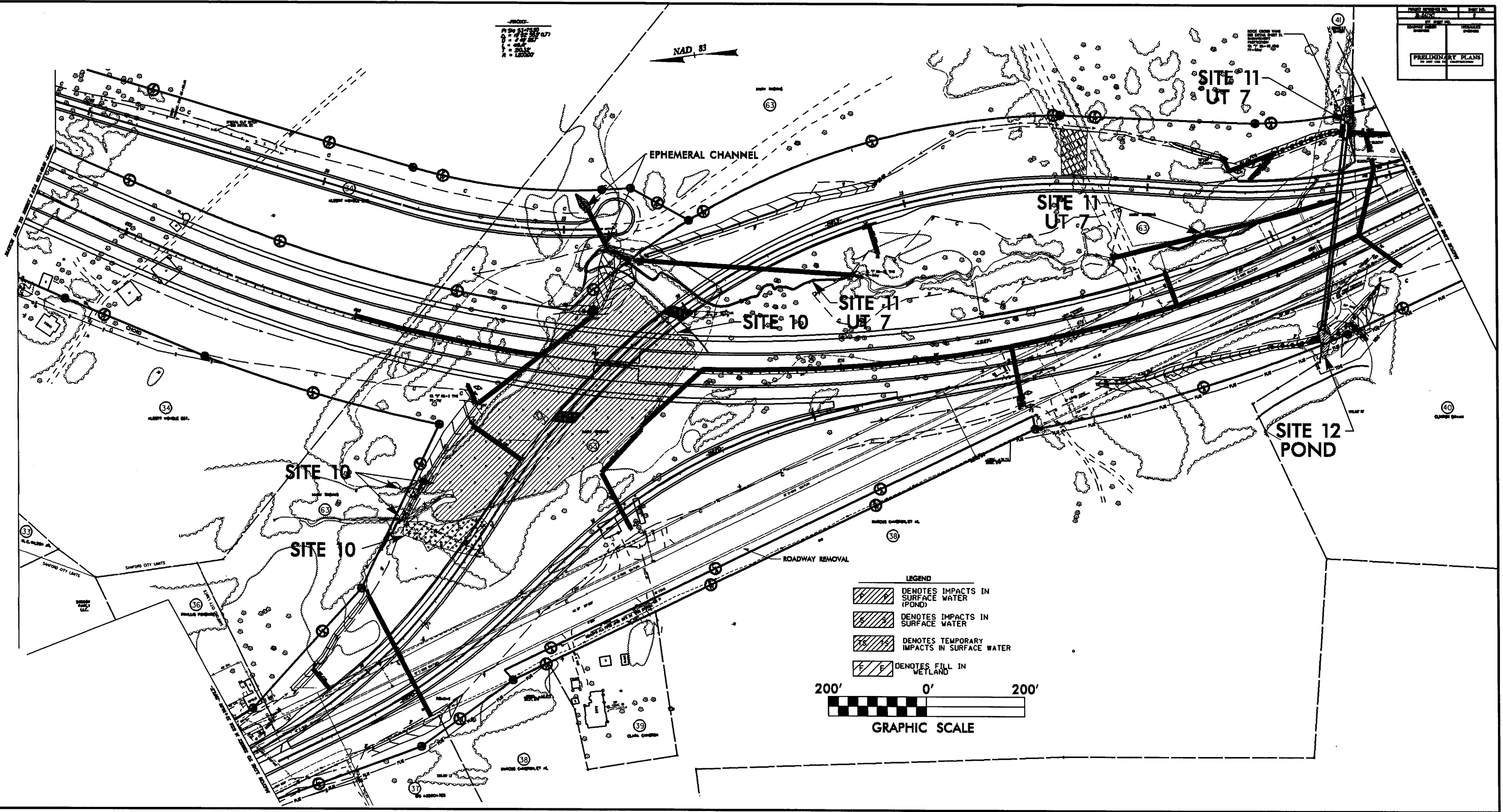
NOTES:
 1) SEE SHEET 21 FOR -PREV-PROFILE
 2) SEE SHEET 27 AND 28 FOR -FRONT-PROFILE

26-OCT-2009 14:22
 F:\hyd-eulics\permits\2417c_hyd_perm_wetland.dgn
 2417c_hyd_perm_wetland.dgn

PROJECT NO.	DATE
BY	PROJECT
CHECKED	DATE
PRELIMINARY PLANS	

PROJECT:
P. 200 21-1-100
S. 100 21-1-100
T. 100 21-1-100
R. 100 21-1-100

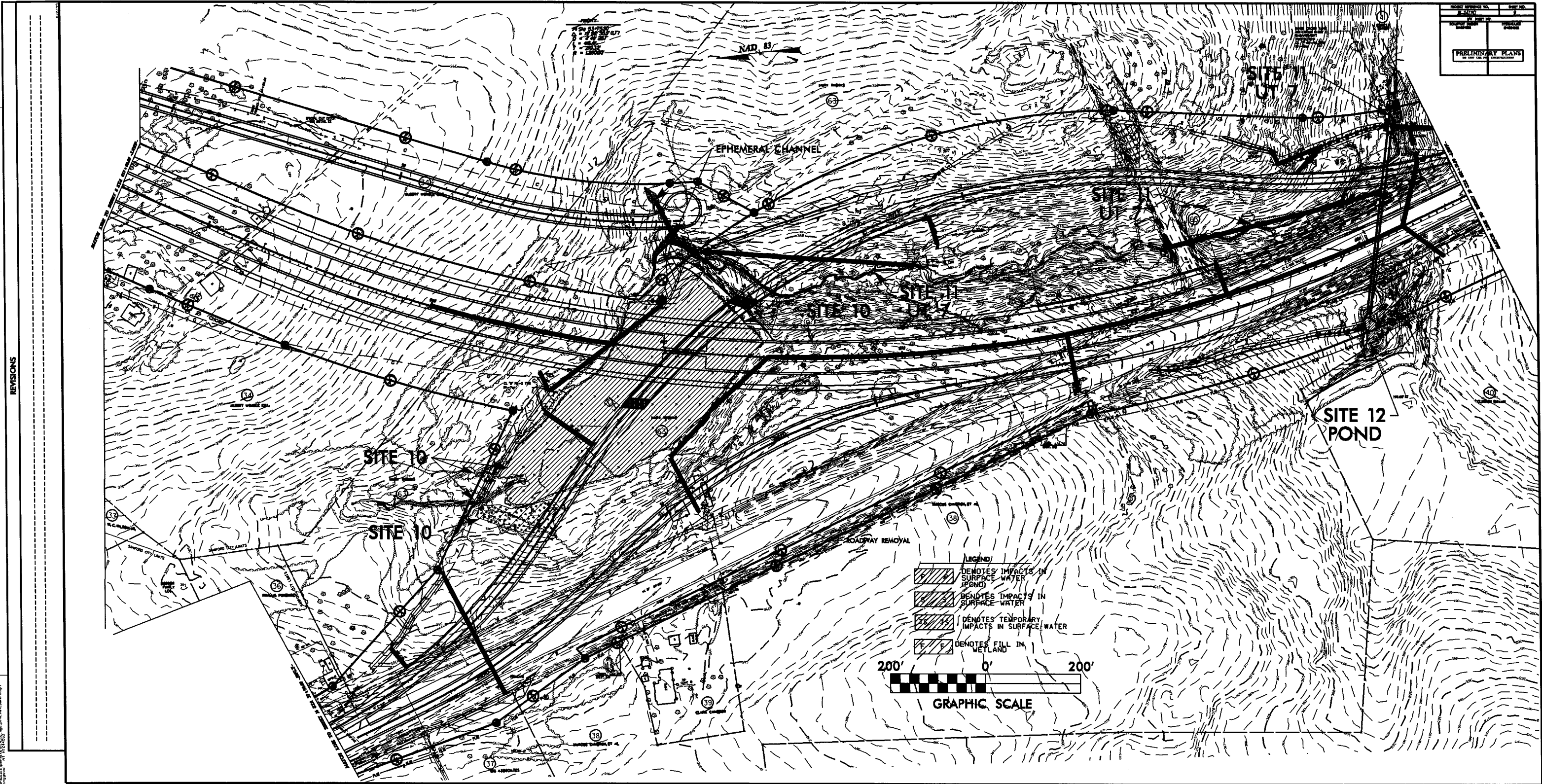
NAD 83



REVISIONS

DATE: 01/15/2020 10:00 AM
DRAWN BY: [unreadable]
CHECKED BY: [unreadable]

PROJECT NUMBER NO.	SHEET NO.
DATE	OF SHEET NO.
ISSUED FOR	PROJECT
PRELIMINARY PLANS	



2025 RELEASE UNDER E.O. 14176