



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

February 5, 2010

Mr. Tom Steffens
U. S. Army Corps of Engineers
Regulatory Field Office
Post Office Box 1000
Washington, NC 27889-1000

Mr. Stephen Lane
N. C. Dept. of Environment and Natural Resources
Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Subject: **Revised Permit and Buffer Drawings to the Application for Section 404 Individual Permit, Section 401 Water Quality Certification, Tar-Pamlico Buffer Authorization, and CAMA Major Development Permit** for the Replacement of Bridge No. 77 on NC 99 over Pantego Creek in Beaufort County. Federal Aid Project No. BRSTP-99(3), TIP No. B-3611, WBS Element 33162.1.1.

Dear Sirs:

Reference: Application for Section 404 Individual Permit, Section 401 Water Quality Certification, Tar-Pamlico Buffer Authorization, and CAMA Major Development Permit dated November 4, 2009.

Please see the enclosed revised permit drawings and buffer drawings for the above referenced project. Further design considerations have indicated the need for additional fingers on the temporary work bridge to facility construction. Temporary impacts to surface water or wetlands due to work bridge bents will increase by less than 0.01 acre (see Additional Impact Notes on permit drawing sheet 16 of 17). No additional impacts to buffers will result from this change.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Tyler Stanton at tstanton@ncdot.gov or (919) 431-6748.

Sincerely,

for Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch

W/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)
Ms. Jennifer Derby, USEPA
Mr. Steve Sollod, NCDCM

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 AVENUE
SUITE 116
RALEIGH NC 27604

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. C. E. Lassiter, P.E., Division Engineer
Mr. Jay Johnson, Division Environmental Officer
Mr. Scott McLendon, USACE, Wilmington
Mr. Gary Jordan, USFWS
Mr. Travis Wilson, NCWRC
Mr. Ron Sechler, NMFS
Ms. Anne Deaton, NCDMF
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P.E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Ms. Beth Harmon, EEP
Mr. Phillip Ayscue, NCDOT External Audit Branch
Ms. Natalie Lockhart, PDEA
Mr. Drew Joyner, P.E., Human Environment Unit Head
Mr. Clarence W. Coleman, P.E., FHWA

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)	Natural Stream Desigr. (ft)	
1	-L- 11+50 to 17+71 LT.		0.01					0.03	<0.01*		15		
2	-L- 17+39 to 31+59 RT.		0.19	0.27	0.69			0.31	0.58	0.50	973	722	
3	-L- 30+79 to 36+70 LT.	TEMP. BRIDGE						0.34					
4	-L- 59+26 to 62+04	BRIDGE	0.04		<0.01*			0.04	0.13		137		
5	-L- 62+36 to 70+33 LT.		0.06		<0.01*			0.04	0.37		764		
6	-L- 64+98 to 66+54 RT.		<0.01*					0.01					
7	-L- 66+95 to 71+45 RT.		0.01					0.04	<0.01*		48		
TOTALS:			0.31	0.27	0.69	0.00	0.81	1.08	0.50	1937	722	0	

*The sum of "less thans" does not total more than 0.01 acre.

Additional Impacts Notes:

Permanent impacts due to bents in water or wetlands: 630 sq. ft. (0.01 acres)
 Temporary impacts due to temporary work bridge bents in water or wetlands: 8100 sq. ft. (0.19 acres)
 0.02 acres of temporary fill in wetlands in the hand clearing areas of the 404 wetlands for erosion control measures
 0.01 acres of temporary fill in wetlands in the hand clearing areas of the CAM wetlands for erosion control measures

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

BEAUFORT COUNTY
 WBS - 33162.1.1 (B-3611)

ATM Revised 3/31/05

Sheet

REV. 1/28/2010

Permit Drawing
 Sheet 16 of 17

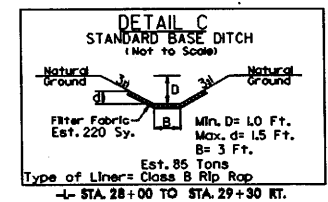
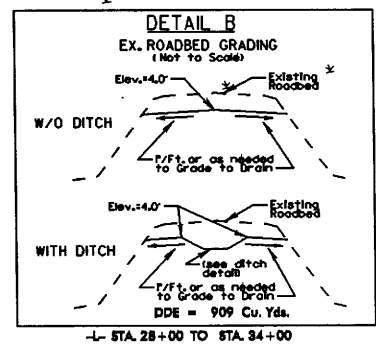
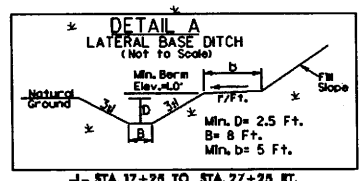
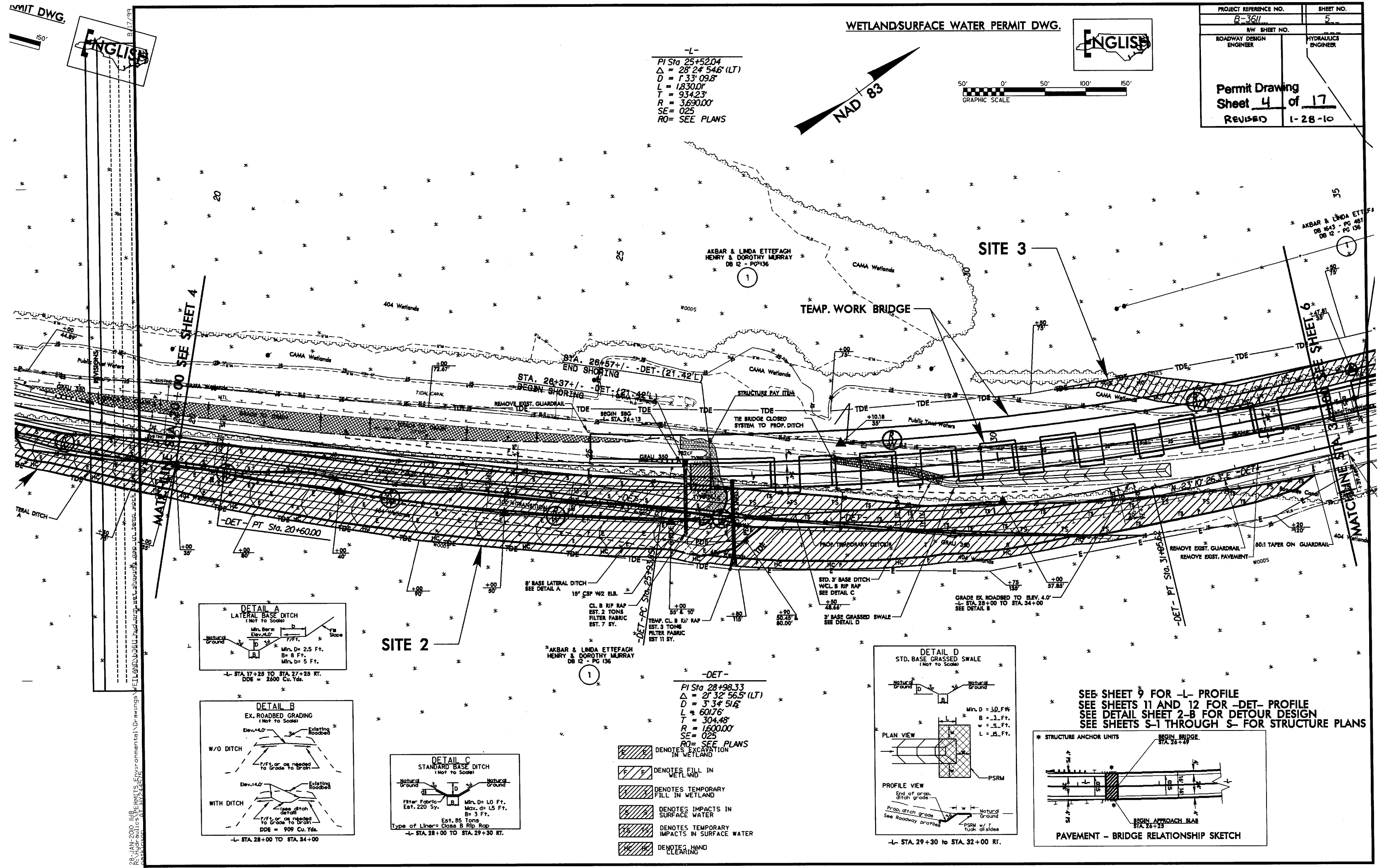
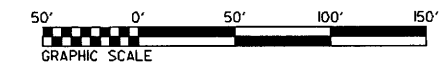
PROJECT REFERENCE NO. B-3611	SHEET NO. 5
RDW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

Permit Drawing
Sheet 4 of 17
REVISED 1-28-10

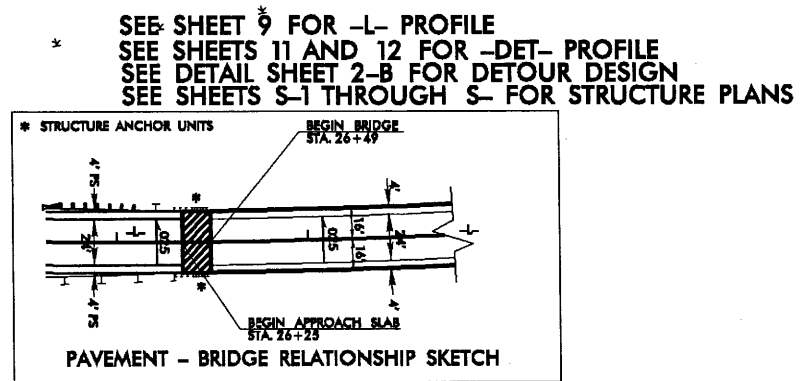
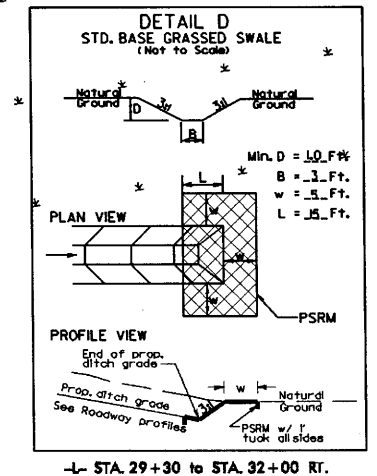


-L-
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 $\Delta = 28^\circ 24' 54.6''$ (LT)
 $D = 1' 33.098''$
 $L = 18300'$
 $T = 934.23'$
 $R = 3,690.00'$
 $SE = 025$
 $RO = \text{SEE PLANS}$

NAD 83



- DET-
- PI Sta 28+98.33
 $\Delta = 2^\circ 32' 56.5''$ (LT)
 $D = 3' 34.516''$
 $L = 60176'$
 $T = 304.48'$
 $R = 1600.00'$
 $SE = 025$
 $RO = \text{SEE PLANS}$
- [Hatched Box] DENOTES EXCAVATION IN WETLAND
 - [Hatched Box] DENOTES FILL IN WETLAND
 - [Hatched Box] DENOTES TEMPORARY FILL IN WETLAND
 - [Hatched Box] DENOTES IMPACTS IN SURFACE WATER
 - [Hatched Box] DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - [Hatched Box] DENOTES HAND CLEARING



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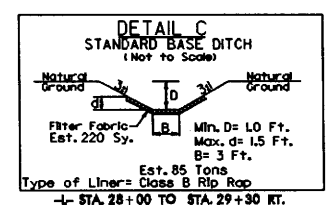
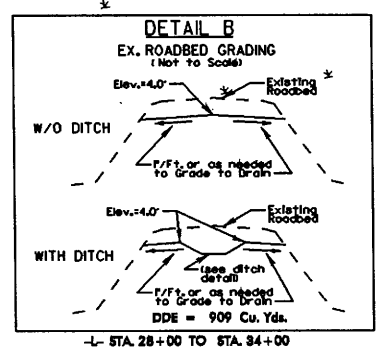
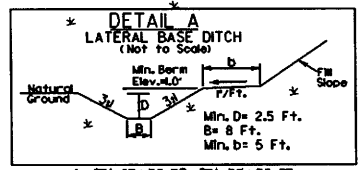
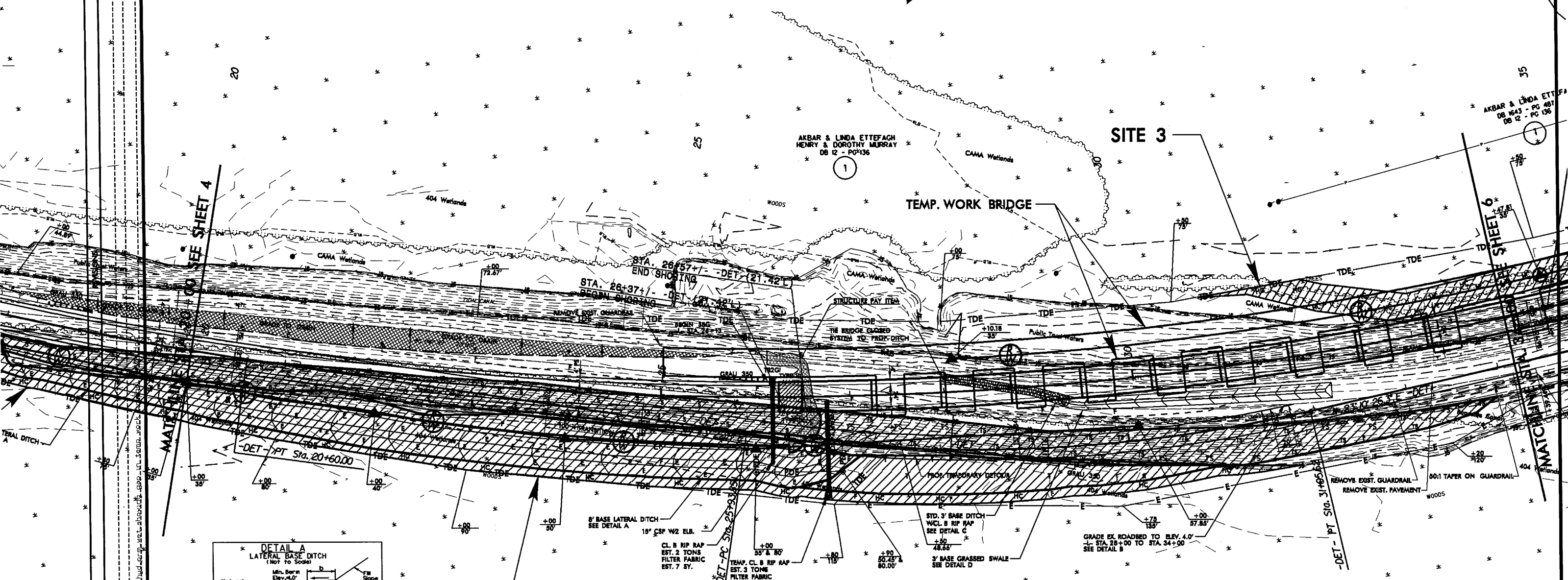
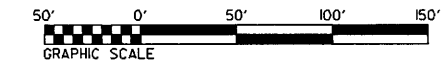
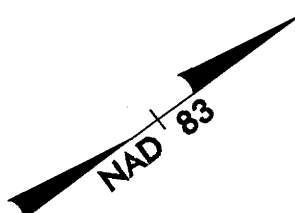
ENGLISH

WETLANDS/SURFACE WATER PERMIT DWG.

ENGLISH

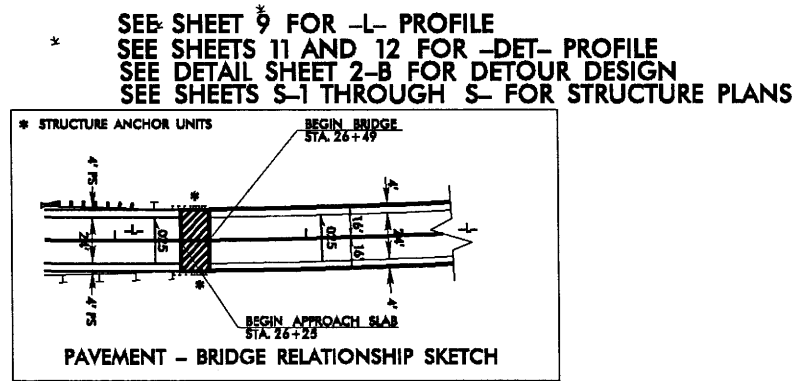
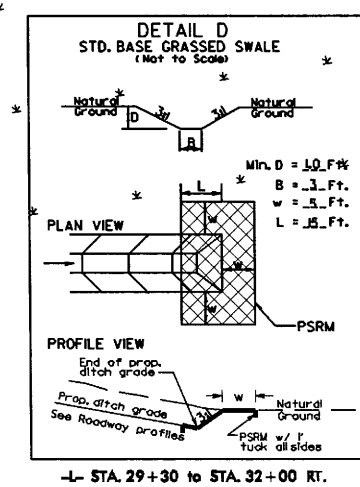
PROJECT REFERENCE NO. B-3611	SHEET NO. 5
RDW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Permit Drawing Sheet 5 of 17	
Revised 1-28-10	

-L-
 PI Sta 25+52.04
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 $D = 1' 33.098"$
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 $T = 934.23'$
 $R = 3,690.00'$
 $SE = 025$
 $RO = \text{SEE PLANS}$



AKBAR & LINDA ETTEFAGH
 HENRY & DOROTHY MURRAY
 DB 12 - PG 136

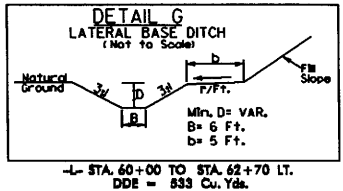
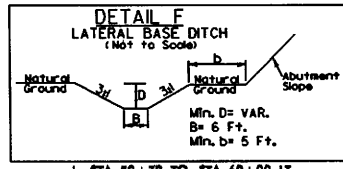
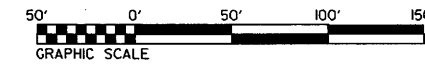
- DET-
- PI Sta 28+98.33
 $\Delta = 2^\circ 32' 56.5"$ (LT)
 $D = 3' 34.516"$
 $L = 601.76'$
 $T = 304.48'$
 $R = 1600.00'$
 $SE = 025$
 $RO = \text{SEE PLANS}$
- DENOTES EXCAVATION IN WETLAND
 - DENOTES FILL IN WETLAND
 - DENOTES TEMPORARY FILL IN WETLAND
 - DENOTES IMPACTS IN SURFACE WATER
 - DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 - DENOTES HAND CLEARING



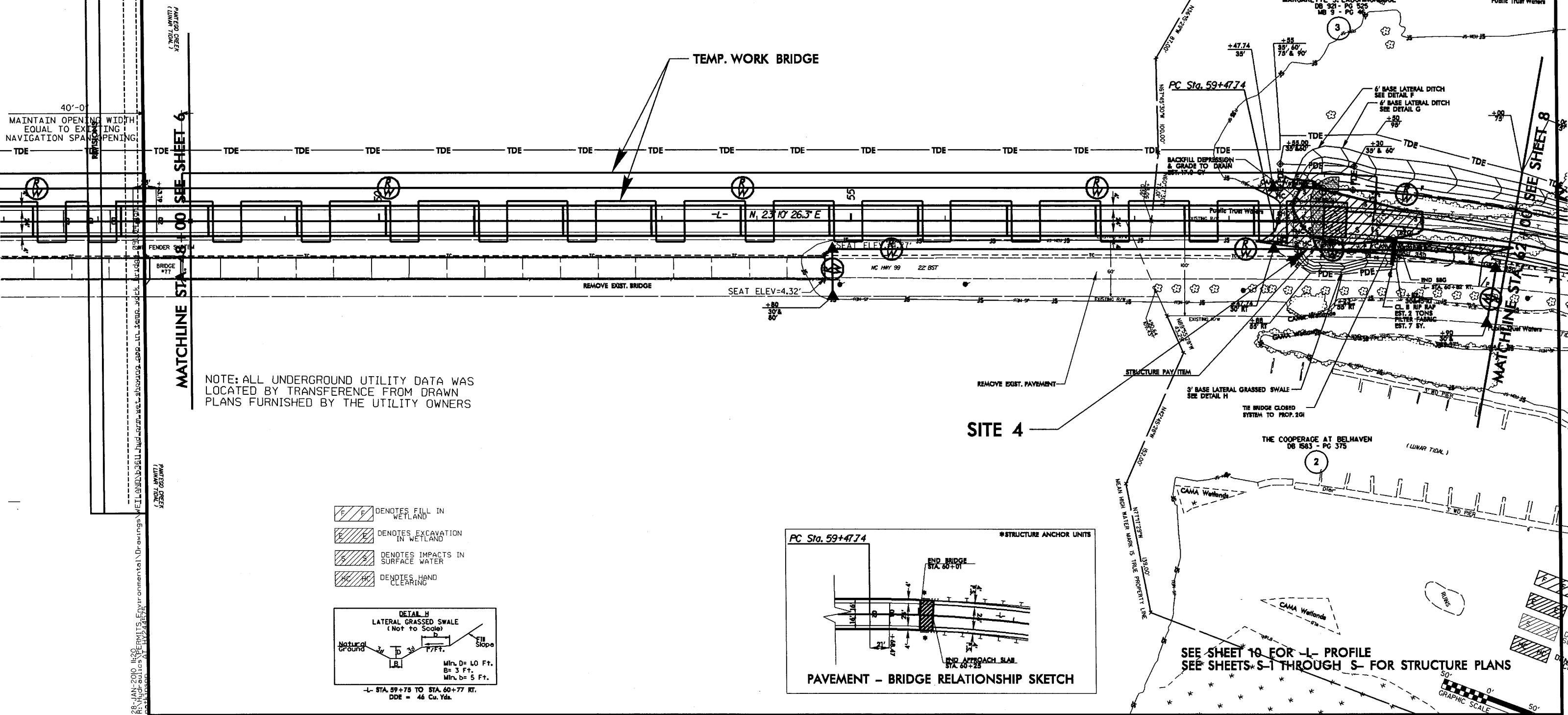
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PROJECT REFERENCE NO. B-3611	SHEET NO. 7
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Permit Drawing Sheet 8 of 17	
Revised 1-29-10	

WETLANDS/SURFACE WATER PERMIT DWG.



-L-
 PI Sta 61+97.52
 Δ = 20° 39' 57.2" (RT)
 D = 4' 10" 55.8"
 L = 494.14'
 T = 249.79'
 R = 1,370.00'
 SE = 03
 RO = SEE PLANS



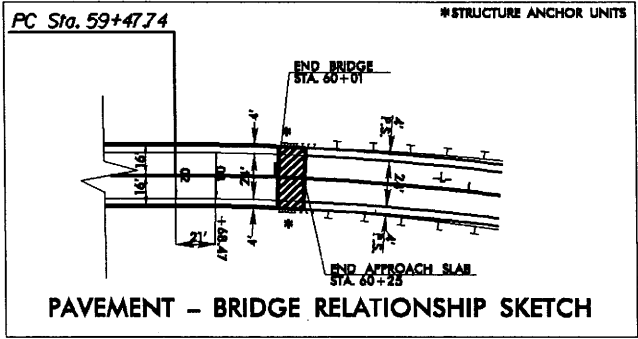
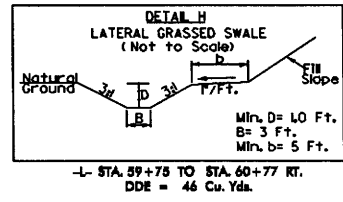
40'-0"
 MAINTAIN OPENING WIDTH
 EQUAL TO EXISTING
 NAVIGATION SPAN OPENING.

MATCHLINE STA. 8+00 SEE SHEET 6

MATCHLINE STA. 60+70 SEE SHEET 8

NOTE: ALL UNDERGROUND UTILITY DATA WAS
 LOCATED BY TRANSFERENCE FROM DRAWN
 PLANS FURNISHED BY THE UTILITY OWNERS

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



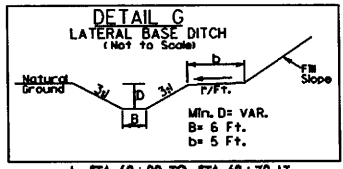
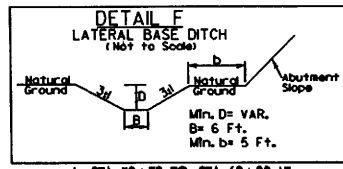
SEE SHEET 10 FOR -L- PROFILE
 SEE SHEETS S-1 THROUGH S- FOR STRUCTURE PLANS



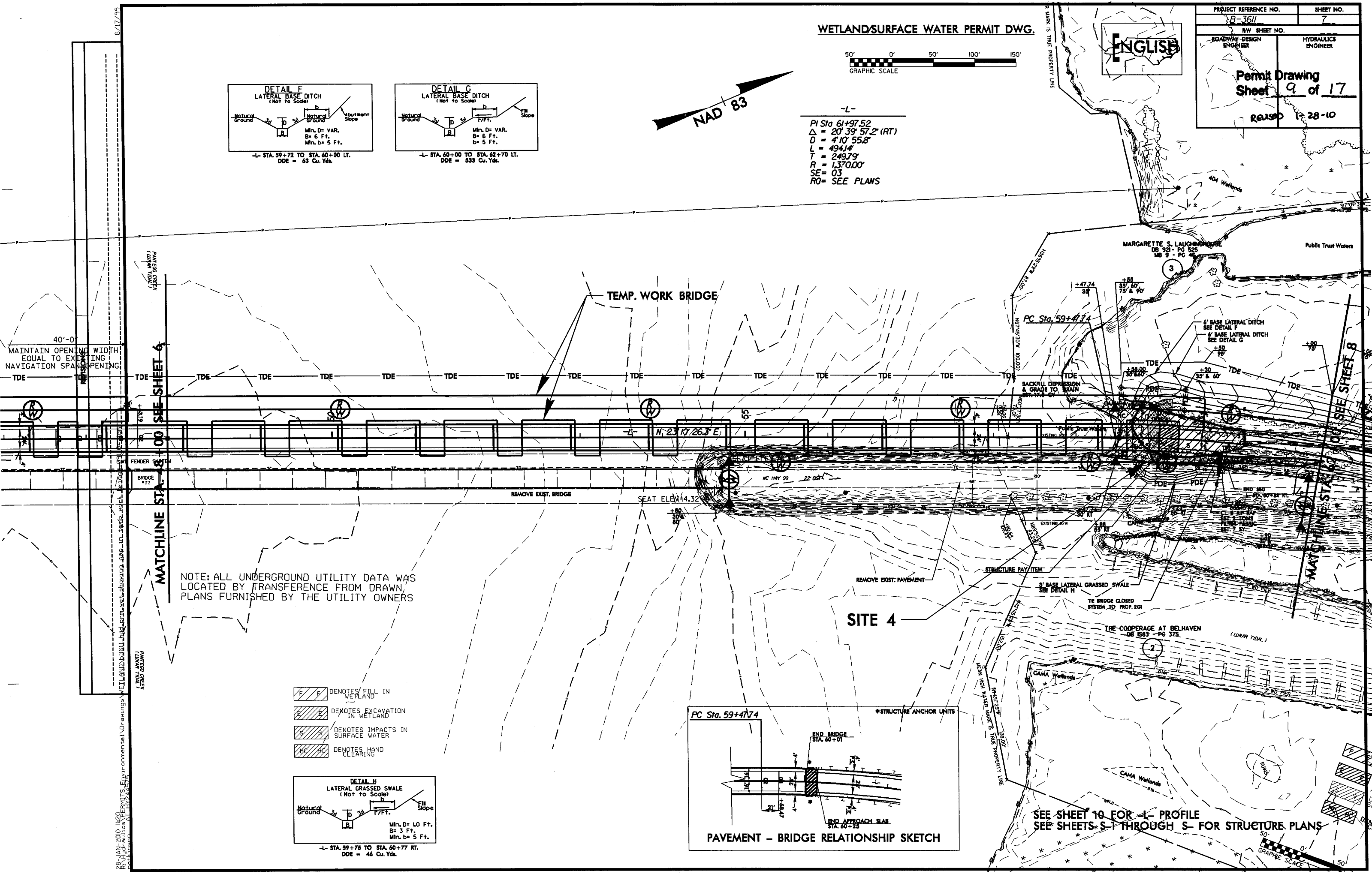
WETLAND/SURFACE WATER PERMIT DWG.



PROJECT REFERENCE NO. B-3611	SHEET NO. 7
RHW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Permit Drawing Sheet 9 of 17	
REVISION 1-28-10	



-L-
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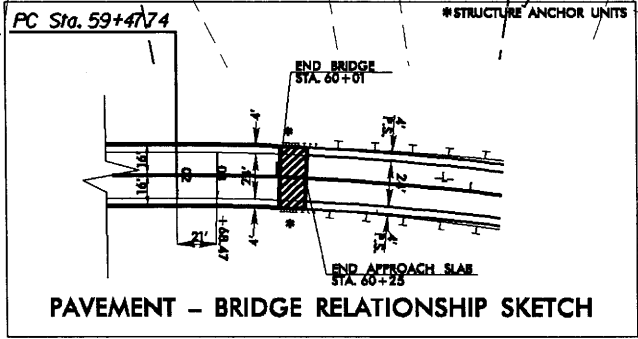
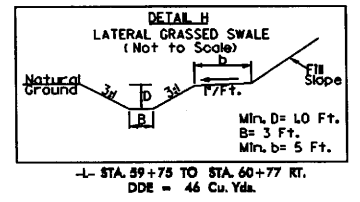


MATCHLINE STA. 8+00 SEE SHEET 6

MATCHLINE STA. 70+00 SEE SHEET 8

NOTE: ALL UNDERGROUND UTILITY DATA WAS LOCATED BY TRANSFERENCE FROM DRAWN PLANS FURNISHED BY THE UTILITY OWNERS

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



SEE SHEET 10 FOR L-PROFILE
SEE SHEETS S-1 THROUGH S-5 FOR STRUCTURE PLANS



ENGLISH

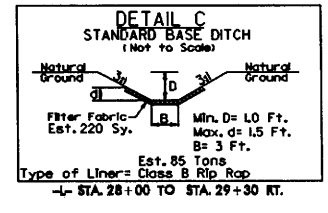
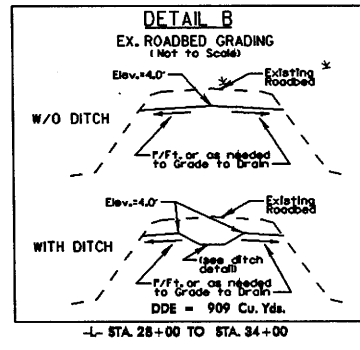
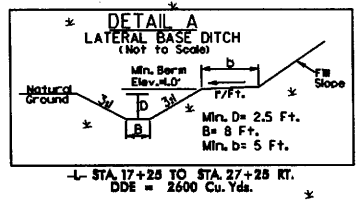
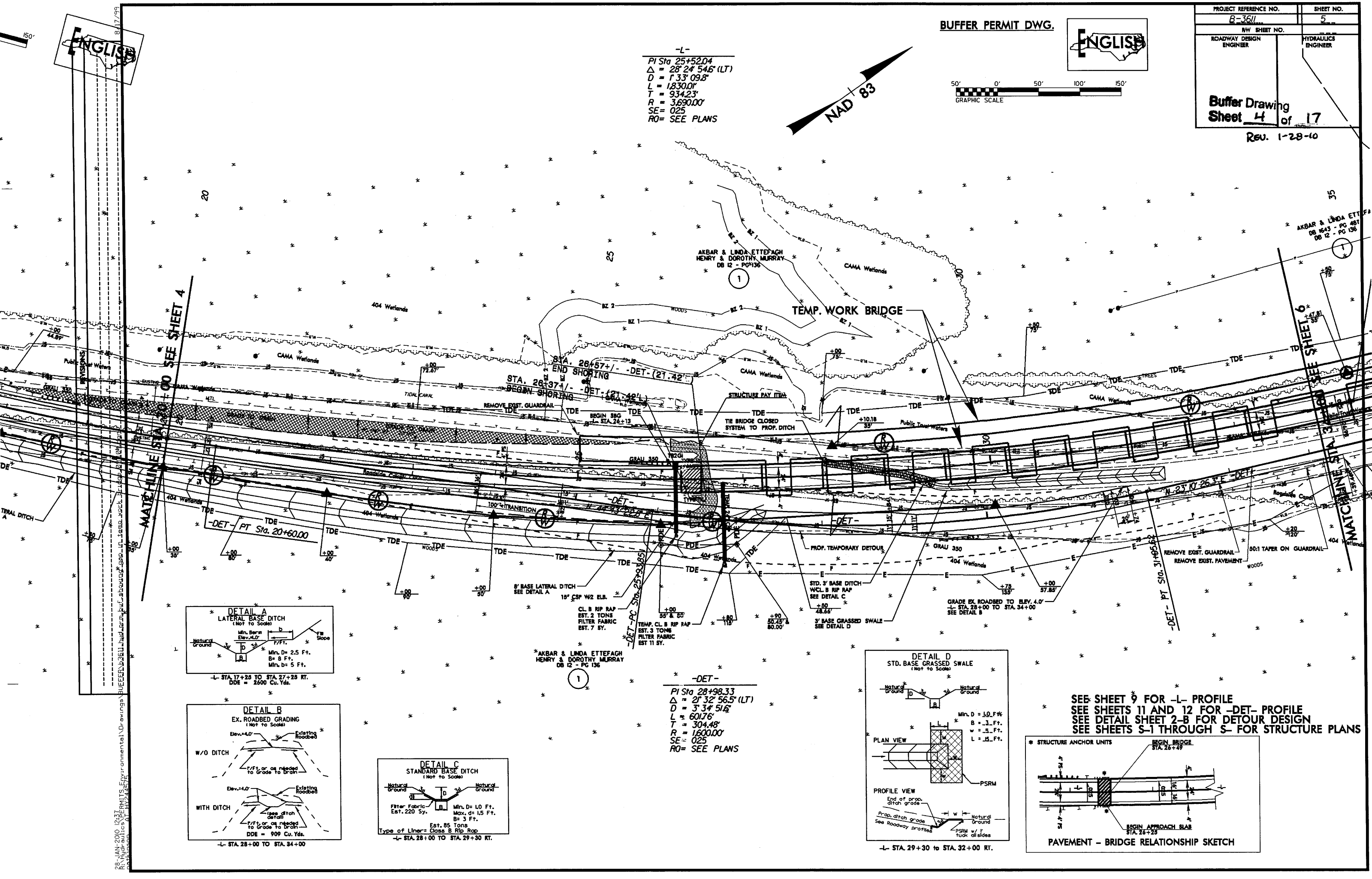
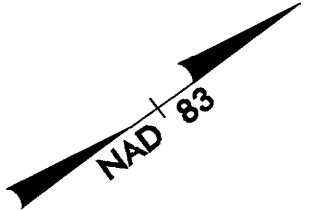
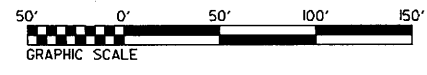
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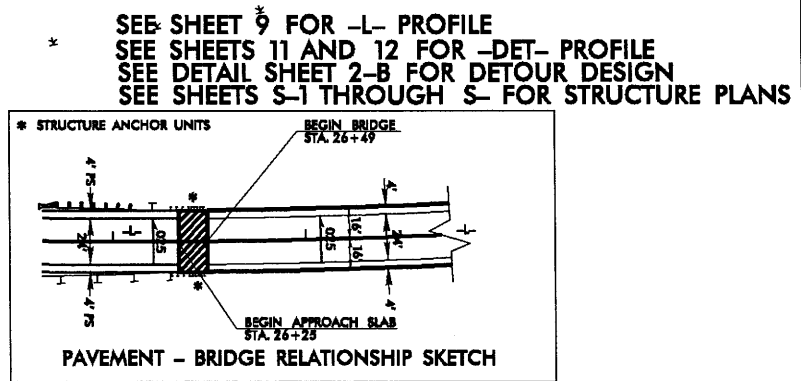
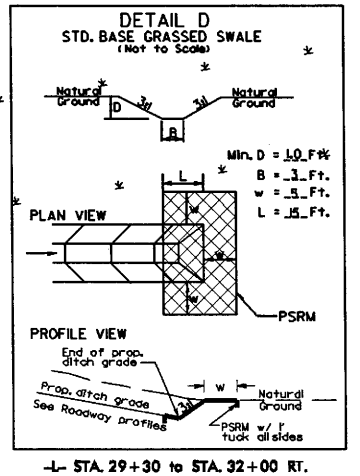
PROJECT REFERENCE NO. B-3611	SHEET NO. 5
RDW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

Buffer Drawing Sheet 4 of 17
Rev. 1-28-10

-L-
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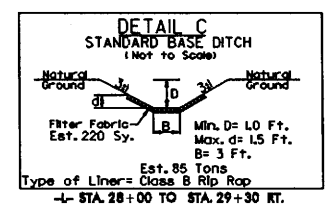
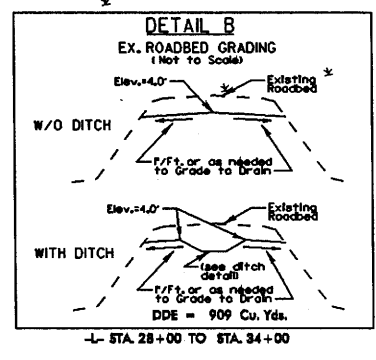
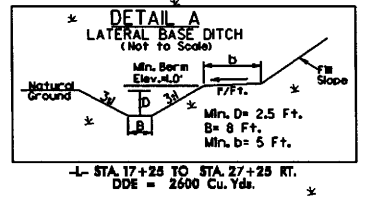
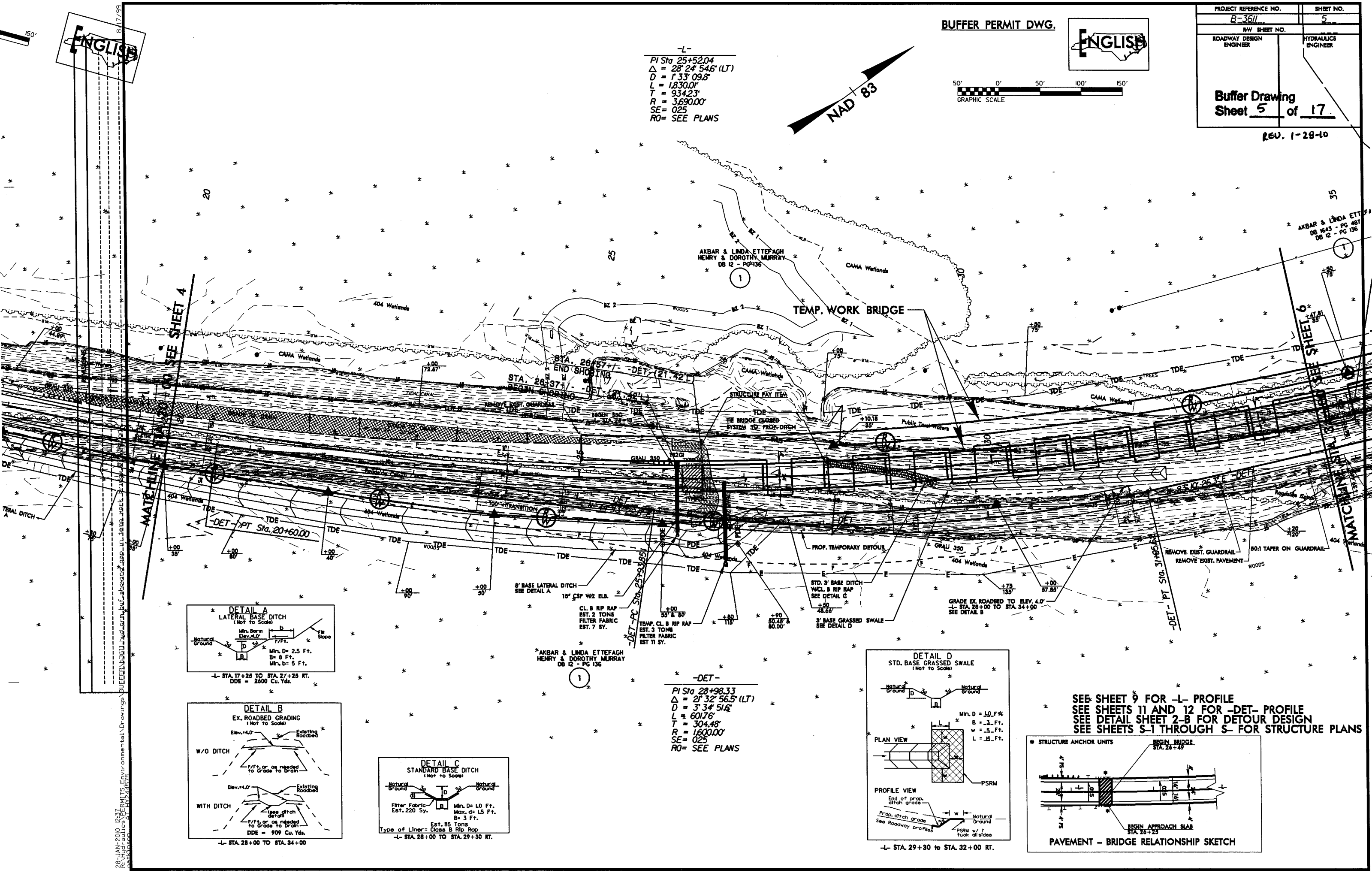
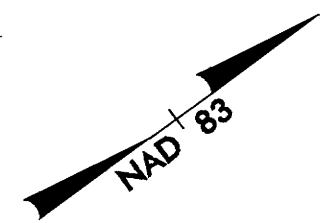
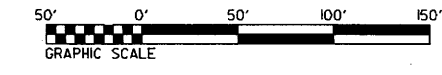
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PROJECT REFERENCE NO.	SHEET NO.
B-3611	5
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	

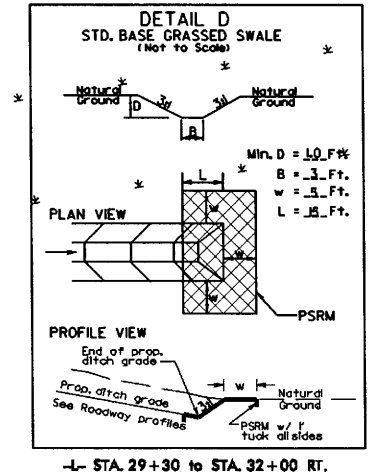
Buffer Drawing
Sheet 5 of 17

REV. 1-28-10

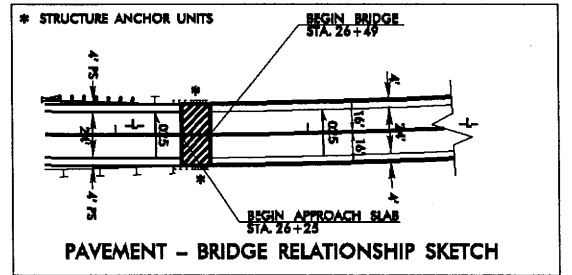
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T = 934.23'
R = 3690.00'
SE = 025
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SE = 025
RO = SEE PLANS

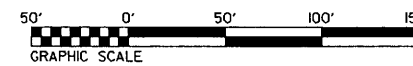


SEE SHEET 9 FOR -L- PROFILE
SEE SHEETS 11 AND 12 FOR -DET- PROFILE
SEE DETAIL SHEET 2-B FOR DETOUR DESIGN
SEE SHEETS S-1 THROUGH S- FOR STRUCTURE PLANS

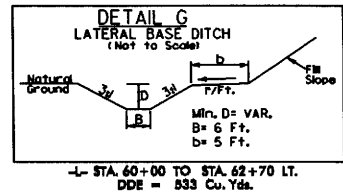
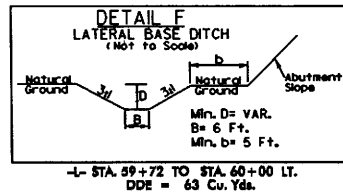


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8/17/99

BUFFER PERMIT DWG.



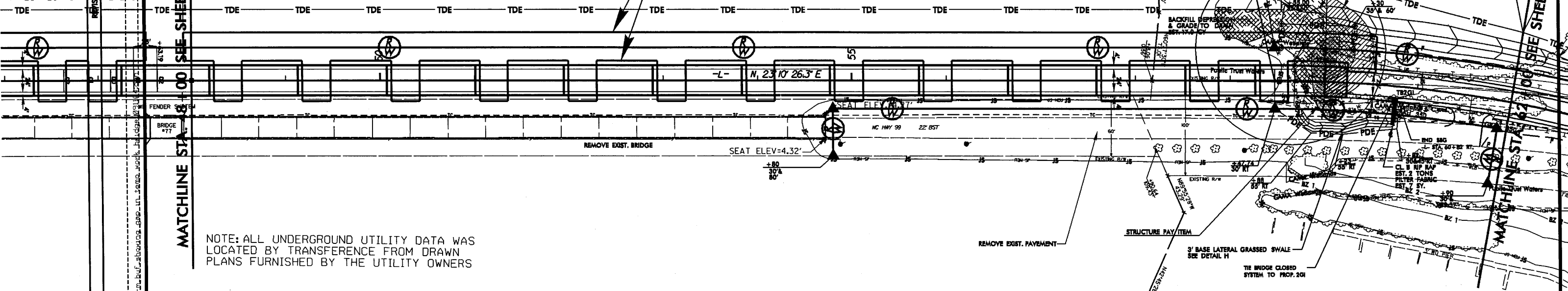
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8/17/99
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 1-28-10

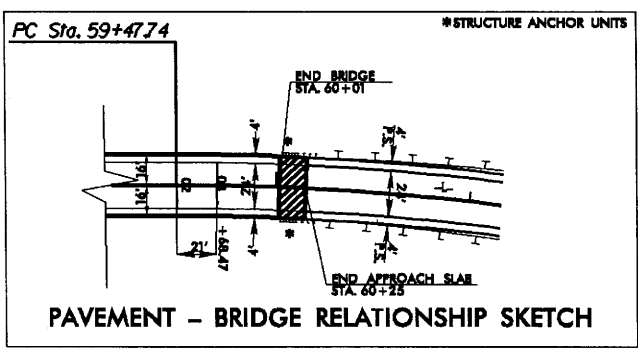
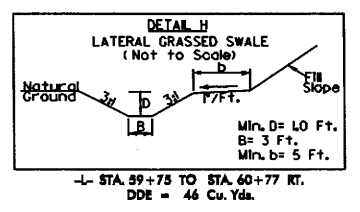
40'-0"
MAINTAIN OPENING WIDTH
EQUAL TO EXISTING
NAVIGATION SPAN OPENING

MATCHLINE STA. 61+00 SEE SHEET 6



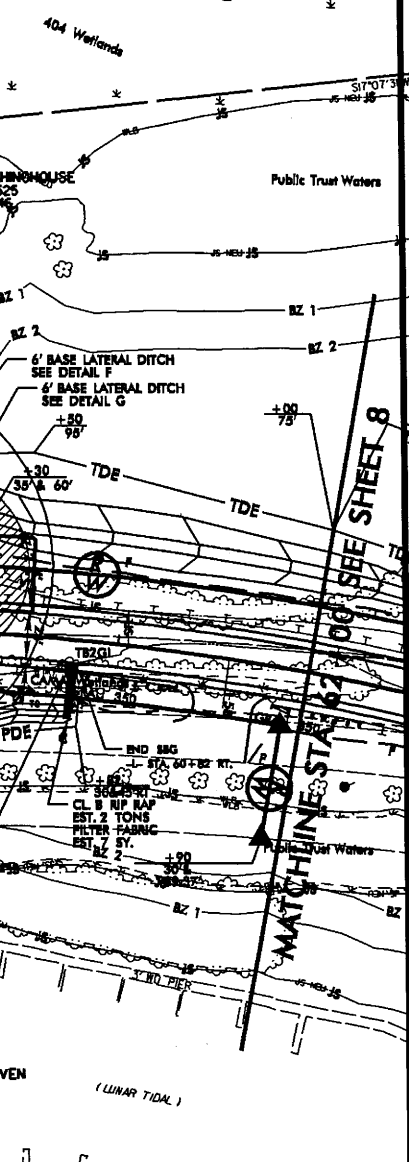
NOTE: ALL UNDERGROUND UTILITY DATA WAS LOCATED BY TRANSFERENCE FROM DRAWN PLANS FURNISHED BY THE UTILITY OWNERS

- ALLOWABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2
- MITIGABLE IMPACTS ZONE 2



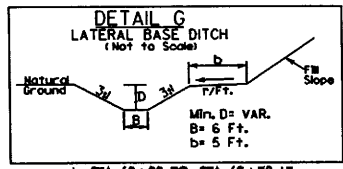
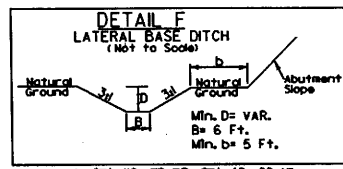
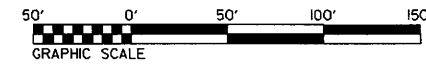
SEE SHEET 10 FOR -L- PROFILE
SEE SHEETS S-1 THROUGH S- FOR STRUCTURE PLANS

MATCHLINE STA. 62+70 SEE SHEET 8



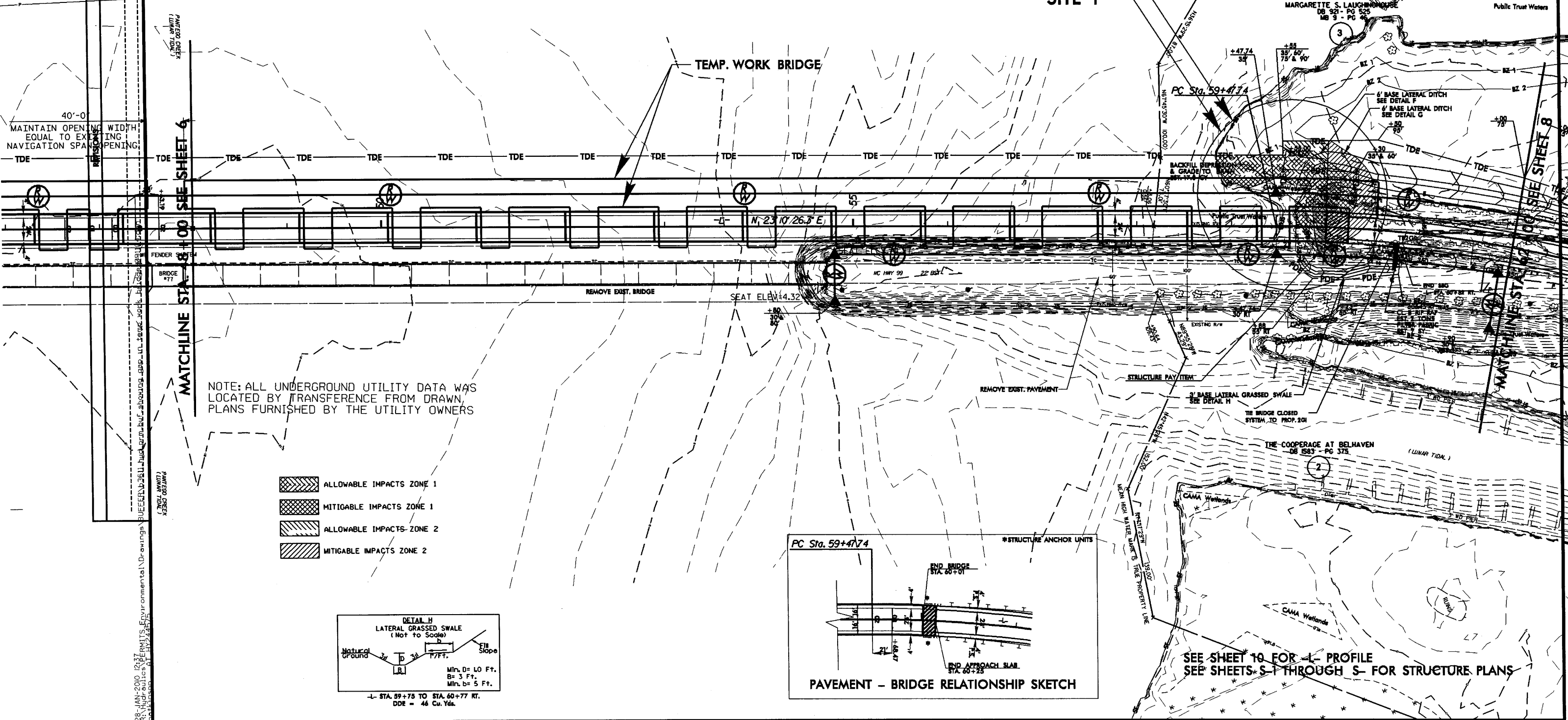
PROJECT REFERENCE NO. B-3611	SHEET NO. 7
RDW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Buffer Drawing Sheet 9 of 17	
REV. 1-28-10	

BUFFER PERMIT DWG.



-L-
 PI Sta 61+97.52
 $\Delta = 20^\circ 39' 57.2''$ (RT)
 $D = 410' 55.8''$
 $L = 4941.4'$
 $T = 249.79'$
 $R = 1370.00'$
 $SE = 03$
 $RO = \text{SEE PLANS}$

SEE ENLARGEMENT SITE 1



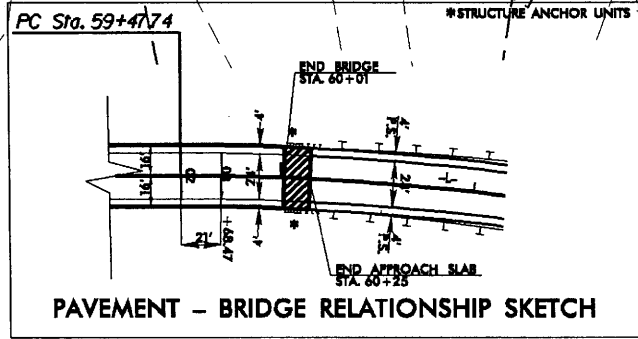
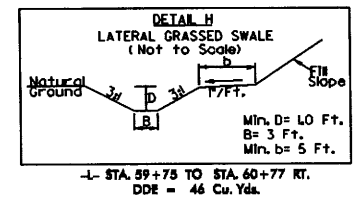
40'-0"
 MAINTAIN OPENING WIDTH
 EQUAL TO EXISTING
 NAVIGATION SPAN OPENING

MATCHLINE STA. 8+00 SEE SHEET 6

MATCHLINE STA. 10+00 SEE SHEET 8

NOTE: ALL UNDERGROUND UTILITY DATA WAS
 LOCATED BY TRANSFERENCE FROM DRAWN
 PLANS FURNISHED BY THE UTILITY OWNERS

- ALLOWABLE IMPACTS ZONE 1
- MITIGABLE IMPACTS ZONE 1
- ALLOWABLE IMPACTS ZONE 2
- MITIGABLE IMPACTS ZONE 2



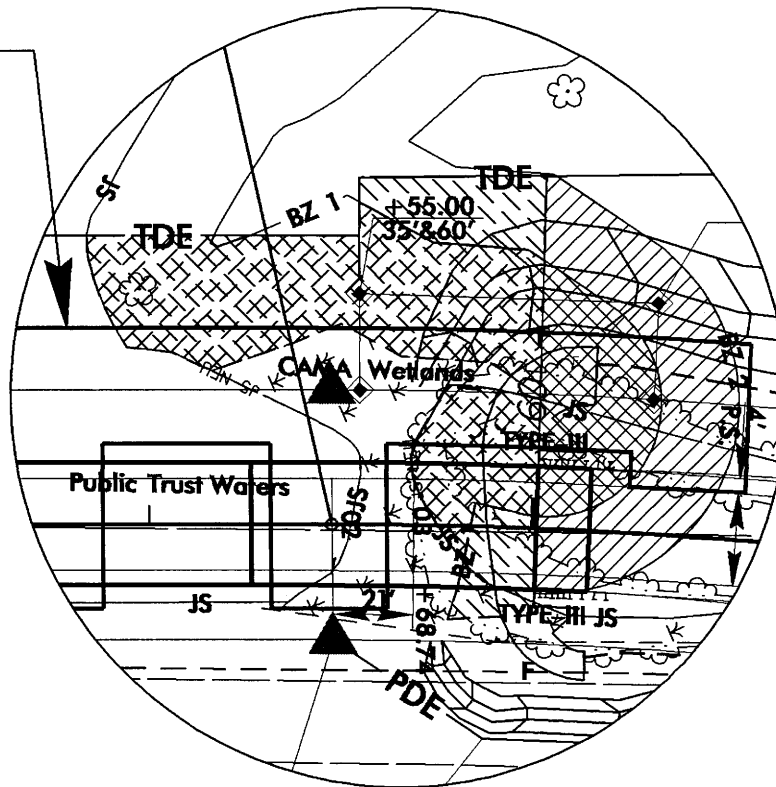
**SEE SHEET 10 FOR L- PROFILE
 SEE SHEETS S-1 THROUGH S- FOR STRUCTURE PLANS**

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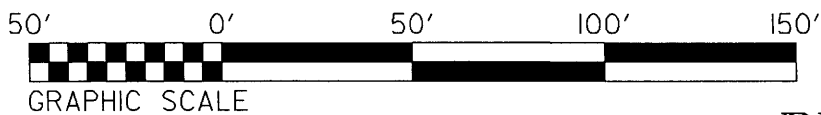
ENLARGEMENT

SITE 1



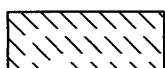
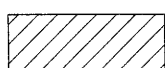
TEMP.
WORK BRIDGE



NOTE: ABUTMENT RIP RAP SYMBOLS & APPROACH SLAB HATCHING OMITTED FOR CLARITY



PLAN VIEW

-  ALLOWABLE IMPACTS ZONE 1
-  MITIGABLE IMPACTS ZONE 1
-  ALLOWABLE IMPACTS ZONE 2
-  MITIGABLE IMPACTS ZONE 2

N. C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BEAUFORT COUNTY

PROJECT: 33162.1.1 (B-3611)
 BRIDGE NO. 77 OVER
 PANTEGO CREEK ON NC 99

REV. 1/28/10
 Buffer Drawing

SHEET OF Sheet 12 of 17