



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

EUGENE A. CONTI, JR.  
SECRETARY

July 13, 2009

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

Attn: Mr. William Wescott  
NCDOT Coordinator

Dear Sir:

**Subject: Request for Modification to Individual Section 404 and 401 permits and Neuse Riparian Buffer Authorization** for construction of the SR 1923 Extension (Booker Dairy Road) from US 70 Business to US 301 in Johnston County. Federal Aid Project No. STP-1923(2). State Project No. 8.2312101. TIP No. U-3334. Debit \$570.00 from WBS 34929.1.1.

**References:** Section 404 Individual Permit issued March 17, 2009 (SAW 2008-02482);  
Section 401 Water Quality Certification and Neuse Riparian Buffer Authorization issued November 4, 2008 (DWQ No.20081106).

The purpose of this letter is to request modification to an U.S. Army Corps of Engineers (USACE) Section 404 Individual Permit, as well as a N. C. Division of Water Quality (NCDWQ) Section 401 Water Quality Certification and Neuse Riparian Buffer Authorization. In addition to the cover letter, this modification request also includes revised permit drawings, buffer drawings, roadway plans, and the most recent EEP acceptance letter. As the amount of impacts has changed slightly since June, a new EEP acceptance letter is forthcoming.

In summary, there will be 0.07 acre of additional permanent wetland impacts and 9 additional linear feet of permanent stream impacts required to construct this project. In addition, a small amount of permanent wetland fill is anticipated at two of these sites, but the impacts over both sites do not exceed 0.01 acre. Specific changes are detailed for the sites that follow:

- Wetland site 1: a base ditch (station 35+00 RT) is shown extending beyond the fill line as permitted by the USACE and NCDWQ. NCDOT is proposing to move the inlet of the 36" RCP at this station to eliminate the unpermitted impact associated with the ditch. On the opposite end of this ditch (station 35+00 LT), a Class B Outlet Protection dissipation pad is shown extending approximately 25 feet outside the permitted fill line. NCDOT is requesting <0.01 acre of permanent fill for the pad and an additional 0.02 acre of mechanized clearing to install this device. In addition, the impacts associated with the sewer pipe being replaced east of this ditch

did not account for temporary ground disturbance around the pipe itself outside the permitted fill line. However, NCDOT is proposing that the work area required for the installation of the sewer line be confined to the existing sewer easement for the Town of Smithfield. Given that this easement is 20' wide and maintained in an herbaceous state, the maximum amount of hand-clearing, if needed, would be 0.04 acre. Finally, there are 4 equalizer pipes at wetland site 1 that extend into hand-clearing areas outside the fill slope. Division 4 has asked that 0.03 acre of hand-clearing originally permitted be replaced with mechanized clearing in these areas to perform the pipe installation. With these changes, permanent wetland impacts at this site now total 1.96 acres.

- Wetland site 2, a Class B Outlet Protection dissipation pad is to be installed in an area only permitted for hand-clearing by the plans. Therefore, NCDOT is requesting <0.01 acre of permanent fill for the pad and an additional 0.02 acre of mechanized clearing at this site to perform the needed work. Therefore, the total amount of permanent wetland impacts at this site is now 0.07 acre.
- Wetland site 5: NCDOT is requesting an additional 9 linear feet of stream impacts due to a miscalculation in the original permit application. The total amount of permanent impacts at this site should be 78 ft.
- Buffer site 3: a 42" RCP is replacing the 36" RCP that was originally permitted. This change does not result in any additional buffer impacts.

### **13.0 Regulatory Approvals**

Section 404: We are, therefore, requesting the modification of the USACE Individual 404 Permit issued March 17, 2009 (SAW 2008-02482), for the above-described activities.

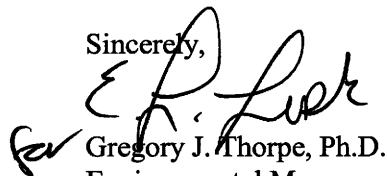
Section 401: We are hereby requesting a modification to the 401 Water Quality Certification from the NCDWQ issued November 4, 2008 (20081106). In compliance with Section 143-215.3D(e) of the NCAC, we will provide \$570.00 to act as payment for processing the Section 401 permit modification. We are providing five (5) copies of this modification request to the NCDWQ, for their approval.

Neuse Riparian Buffer Authorization: This modification does not propose any changes to permitted buffer impacts for this project.

A copy of this modification request will be posted on the NCDOT website at:  
<http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>

If you have any questions or need additional information, please contact Amy James at 919-431-6756 or [aejames@ncdot.gov](mailto:aejames@ncdot.gov).

Sincerely,

  
Gregory J. Thorpe, Ph.D.

Environmental Management Director, PDEA Branch

**cc List:**

w/attachment

Mr. Brian Wrenn, NCDWQ (5 copies)

Ms. Kathy Matthews, USEPA

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

Mr. Mark Staley, Roadside Environmental

Mr. Richard E. Greene, P.E. Div. 4 Engineer

Mr. Chad Coggins, Div. 4 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 & TIP

Mr. Art McMillan, P.E., Highway Design

Ms. Jameelah El-Amin, Project Planning Engineer

Mr. Drew Joyner, P.E., HEU

Mr. Clarence W. Coleman, P.E., FHWA

Ms. Beth Harmon, EEP

Mr. Todd Jones, NCDOT External Audit Branch



June 15, 2009

Mr. Gregory J. Thorpe, Ph.D.  
Environmental Management Director  
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:

U-3334A, SR 1923 (Booker Dairy Road Extension) from US 70 to SR 1003  
(Buffalo Road), Johnston County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory wetland mitigation for the subject project. Based on the information supplied by you on June 11, 2009, the impacts are located in CU 03020201 of the Neuse River Basin in the Northern Inner Coastal Plain (NICP) Eco-Region, and are as follows:

Riparian Wetland:	0.33 acre
Nonriparian Wetland:	2.05 acres

**This mitigation acceptance letter replaces the mitigation acceptance letters issued on July 14, 2008 and May 18, 2009.** EEP commits to implementing sufficient compensatory wetland mitigation 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,

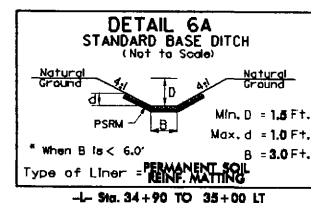
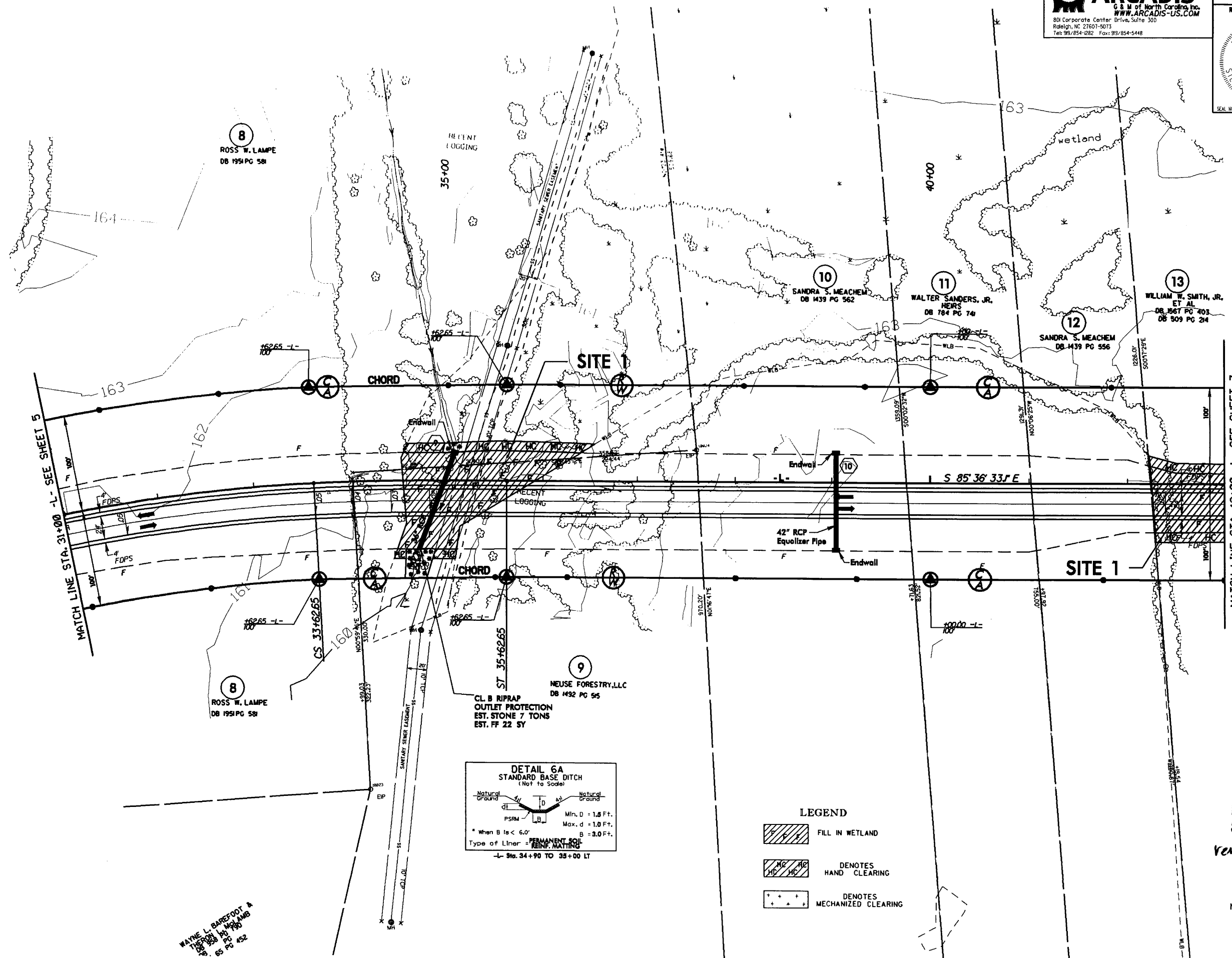
A handwritten signature in black ink that reads "James B. Stampfel for".

William D. Gilmore, P.E.  
EEP Director

cc: Mr. William Wescott, USACE – Washington Regulatory Field Office  
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit  
File: U-3334A Revised

*Restoring... Enhancing... Protecting Our State*



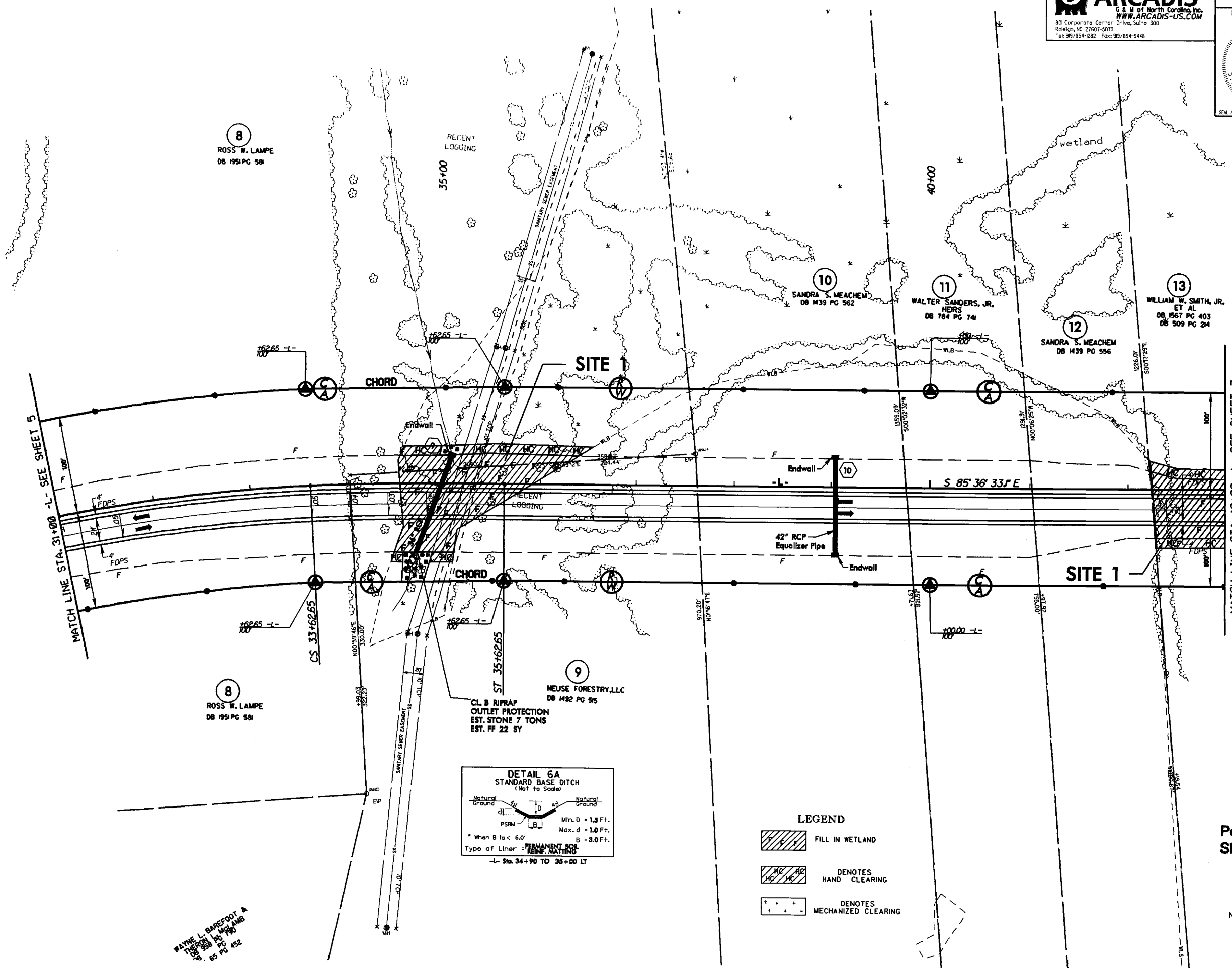


- LEGEND**
- FILL IN WETLAND
  - DENOTES HAND CLEARING
  - DENOTES MECHANIZED CLEARING

**Permit Drawing**  
**Sheet 9 of 26**  
revised 7/6/09

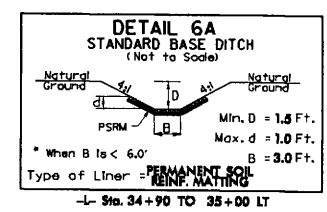
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

**SEE SHEETS 15 AND 16 -L- PROFILE**



NAD 83

REVISIONS



- LEGEND**
-  FILL IN WETLAND
  -  DENOTES HAND CLEARING
  -  DENOTES MECHANIZED CLEARING

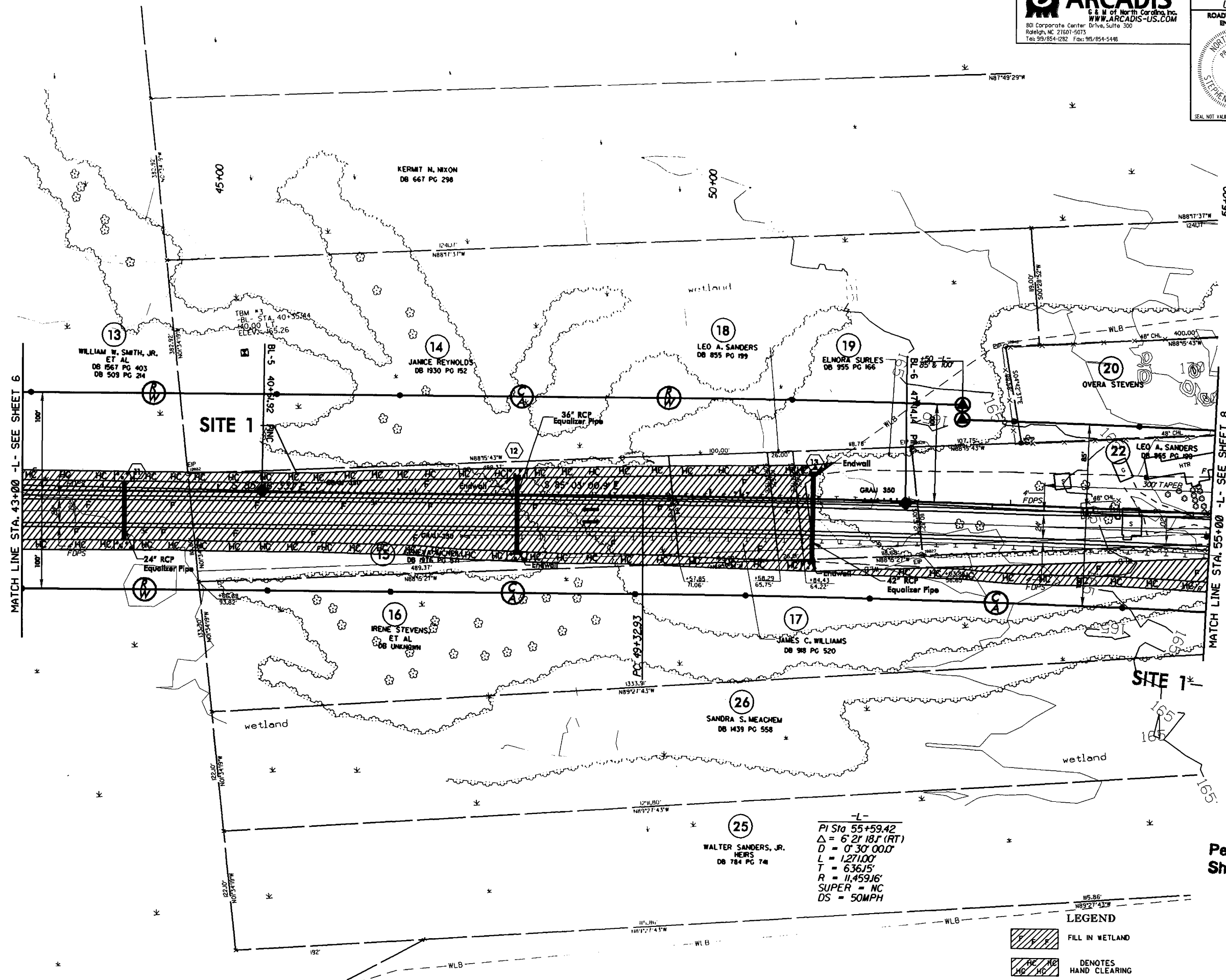
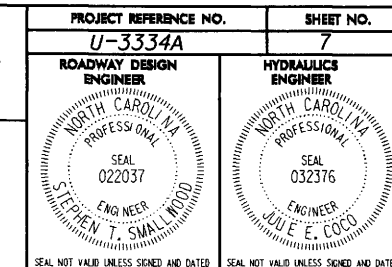
Permit Drawing  
 Sheet 10 of 26  
 revised 7/6/09

NOTE:  
 A FUTURE ACCESS POINT IS DESIGNATED AT LEFT AND RIGHT OF -L- Sta. 35+90 FOR PLACEMENT OF A ROAD AS DETERMINED BY THE CITY OF SMITHFIELD.

SEE SHEETS 15 AND 16 -L- PROFILE

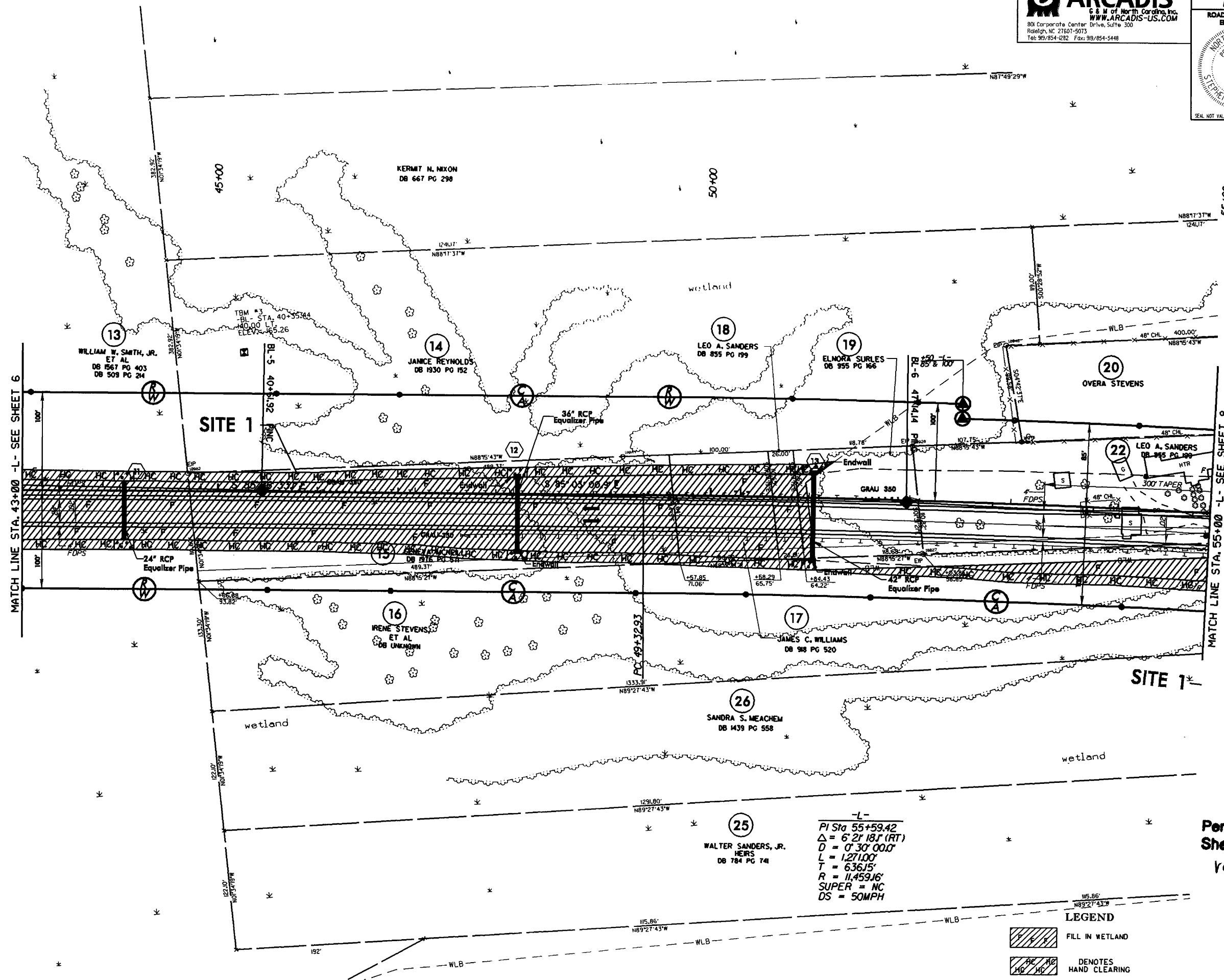
OSCAR CHAN  
 DOREN WATERS  
 TANNER  
 7/1/09

WAYNE L. BAREFOOT &  
 THOMAS L. LAMOND  
 DB 55 PG 280  
 65 PG 452



Permit Drawing  
Sheet 11 of 26  
Revised 7/6/09

**SEE SHEET 16 FOR -L- PROFILE**



-L-  
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 $L = 1271.00'$   
 $T = 636.15'$   
 $R = 11,459.16'$   
 $SUPER = NC$   
 $DS = 50MPH$

- LEGEND**
- FILL IN WETLAND
  - DENOTES HAND CLEARING
  - DENOTES MECHANIZED CLEARING

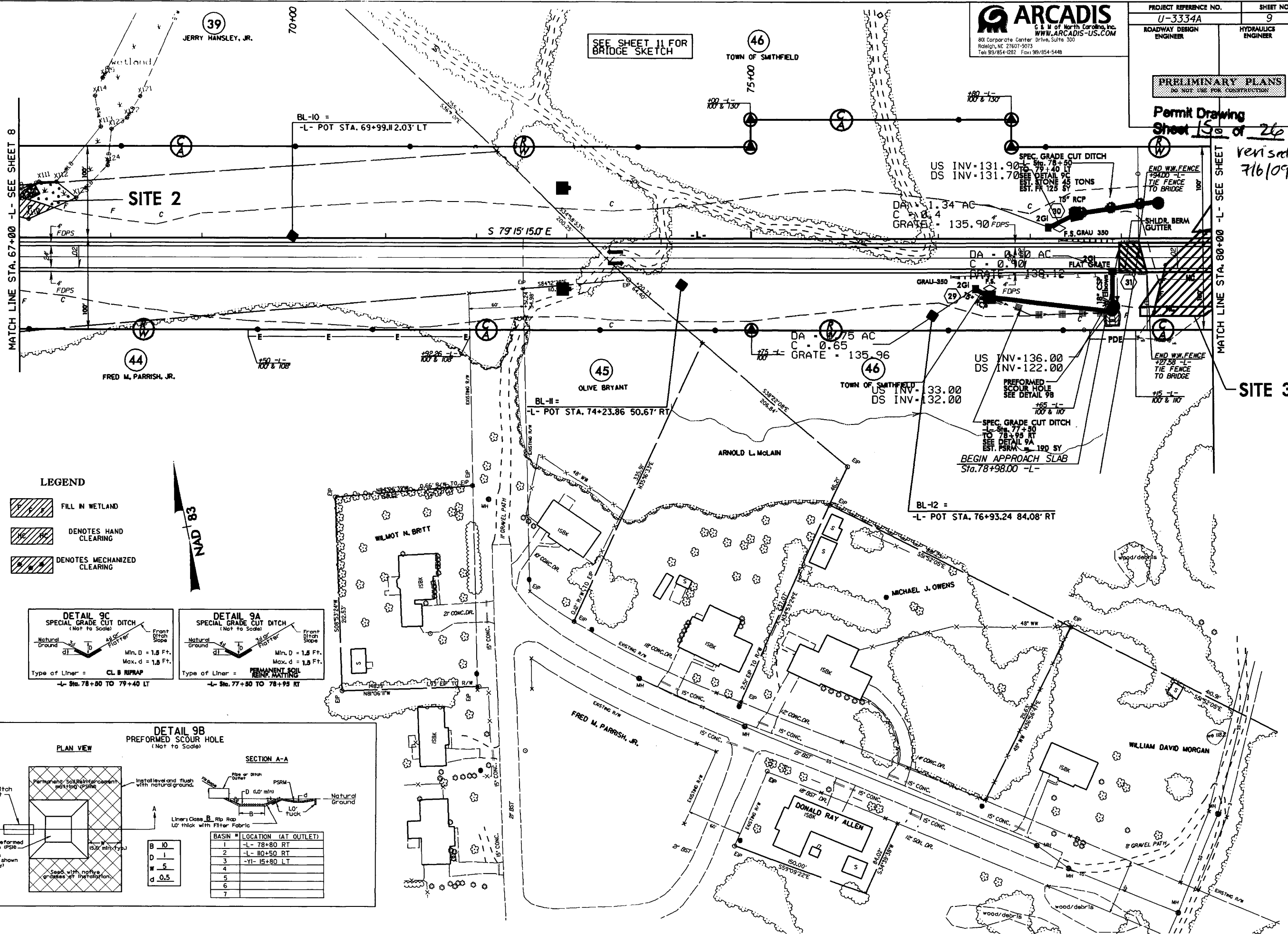
Permit Drawing  
 Sheet 12 of 26  
 revised 7/6/09

SEE SHEET 16 FOR -L- PROFILE

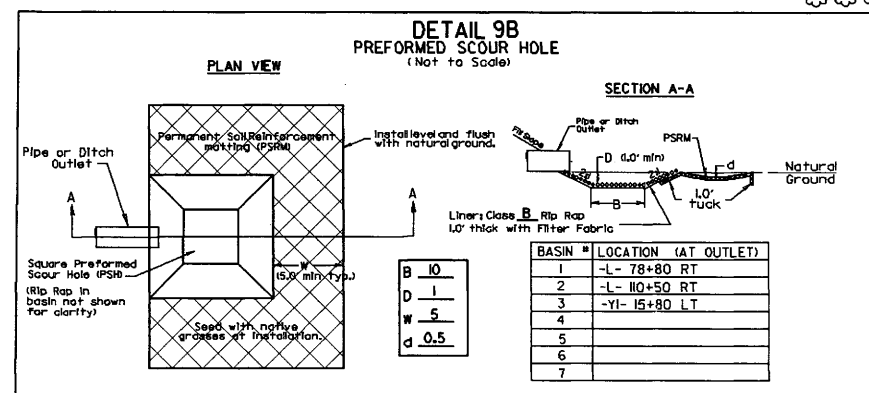
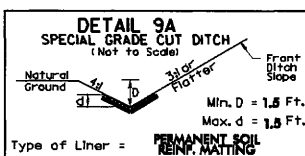
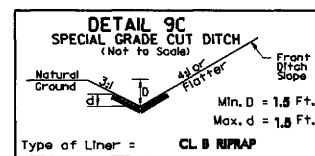


**PRELIMINARY PLANS**  
DO NOT USE FOR CONSTRUCTION

**Permit Drawing**  
Sheet **15** of **26**  
revised  
7/6/09

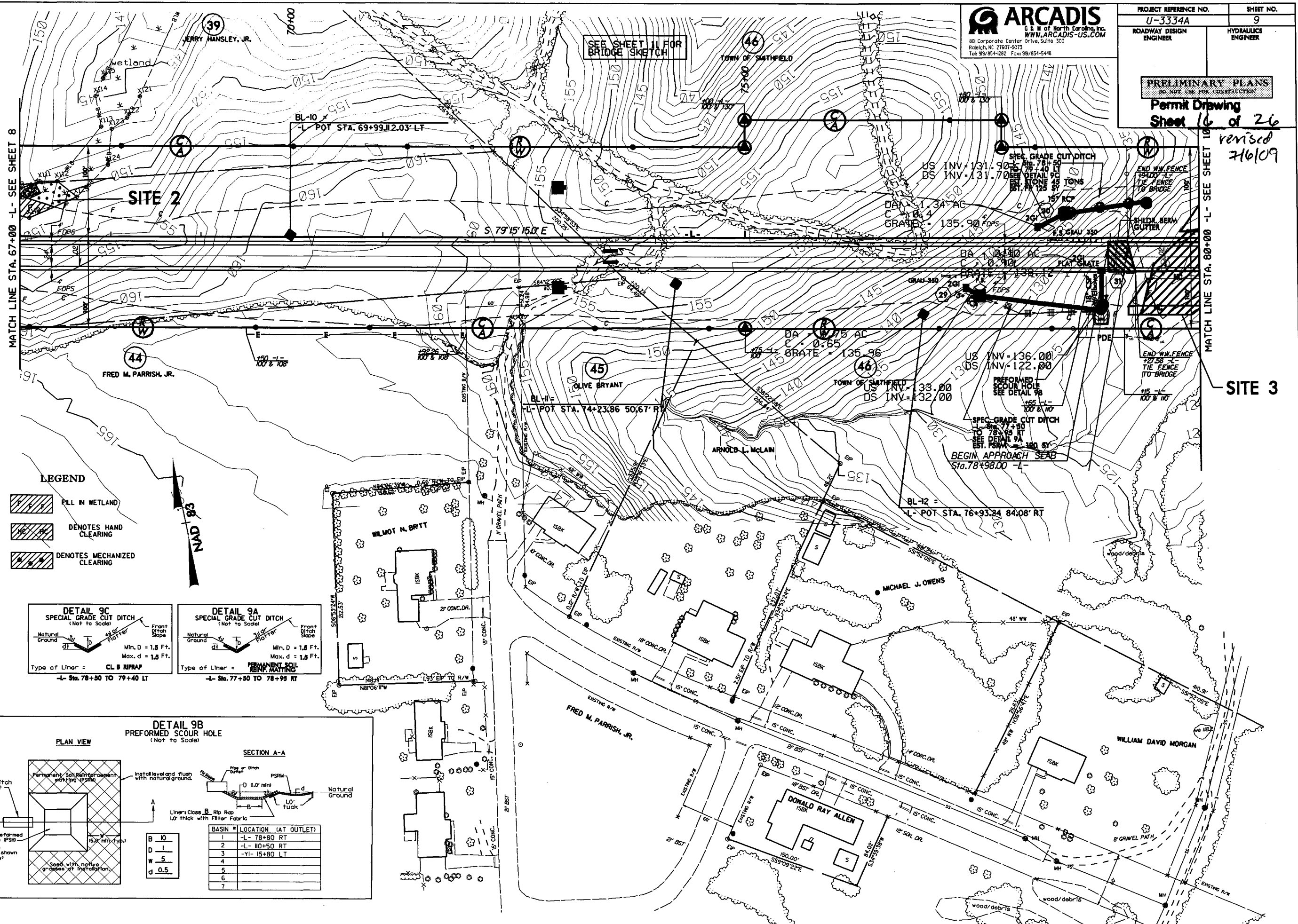


- LEGEND**
- FILL IN WETLAND
  - DENOTES HAND CLEARING
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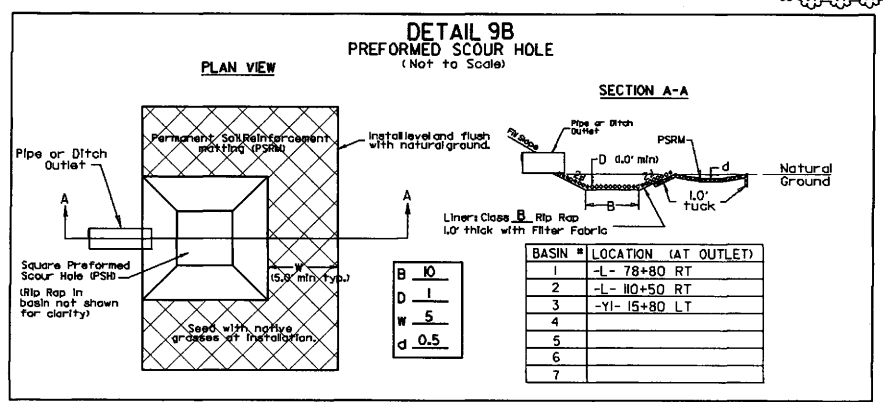
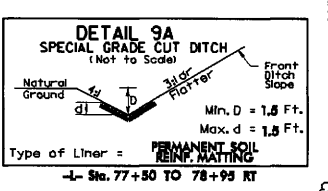
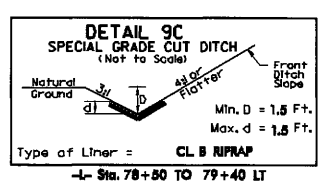


SEE STRUCTURE SHEETS S-1 THRU S- FOR STRUCTURE PLANS

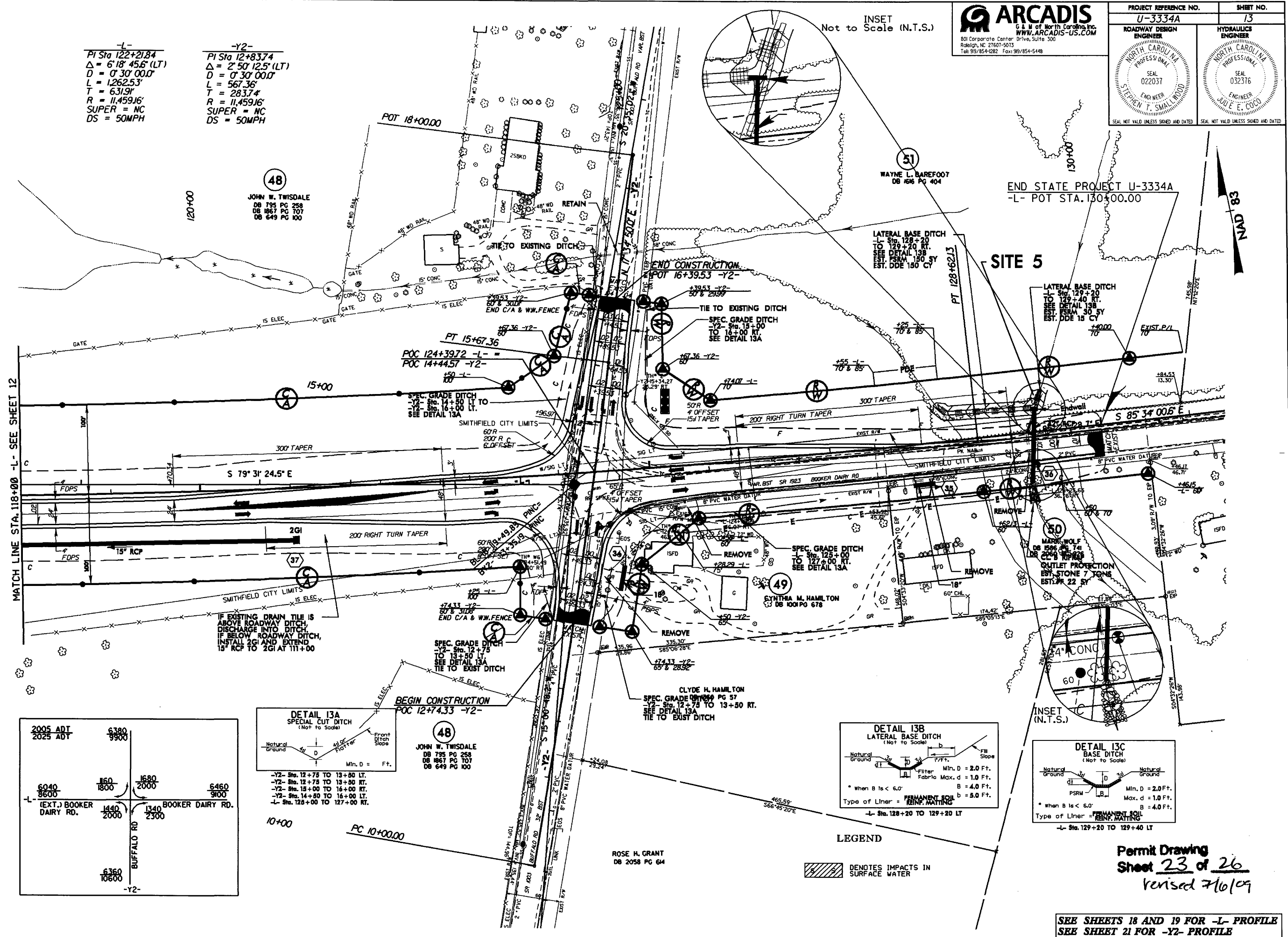
SEE SHEET 17 FOR -L- PROFILE



- LEGEND**
- FILL IN WETLAND
  - DENOTES HAND CLEARING
  - DENOTES MECHANIZED CLEARING

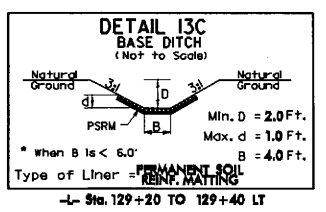
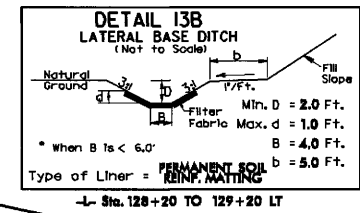
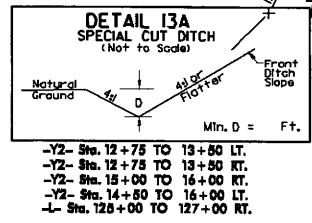
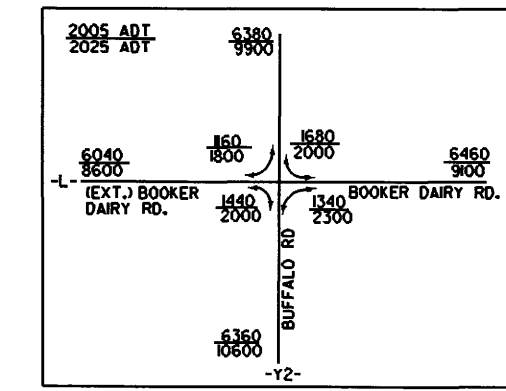


SEE STRUCTURE SHEETS S-1 THRU S- FOR STRUCTURE PLANS SEE SHEET 17 FOR -L- PROFILE



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T = 631.91'  
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SUPER = NC  
DS = 50MPH

**-Y2-**  
PI Sta 12+83.74  
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D = 0' 30" 00.0"  
L = 567.36'  
T = 283.74'  
R = 11,459.16'  
SUPER = NC  
DS = 50MPH



**LEGEND**  
DENOTES IMPACTS IN SURFACE WATER

Permit Drawing  
Sheet 23 of 26  
revised 7/6/09

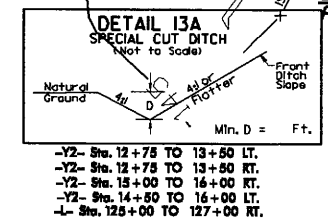
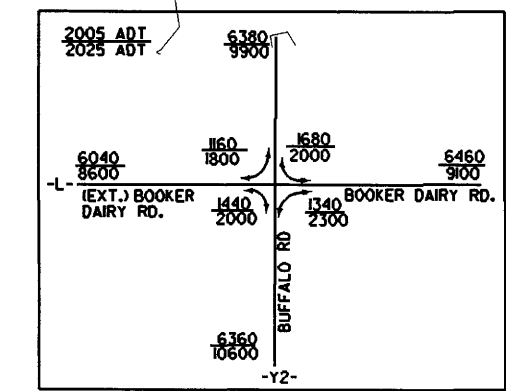
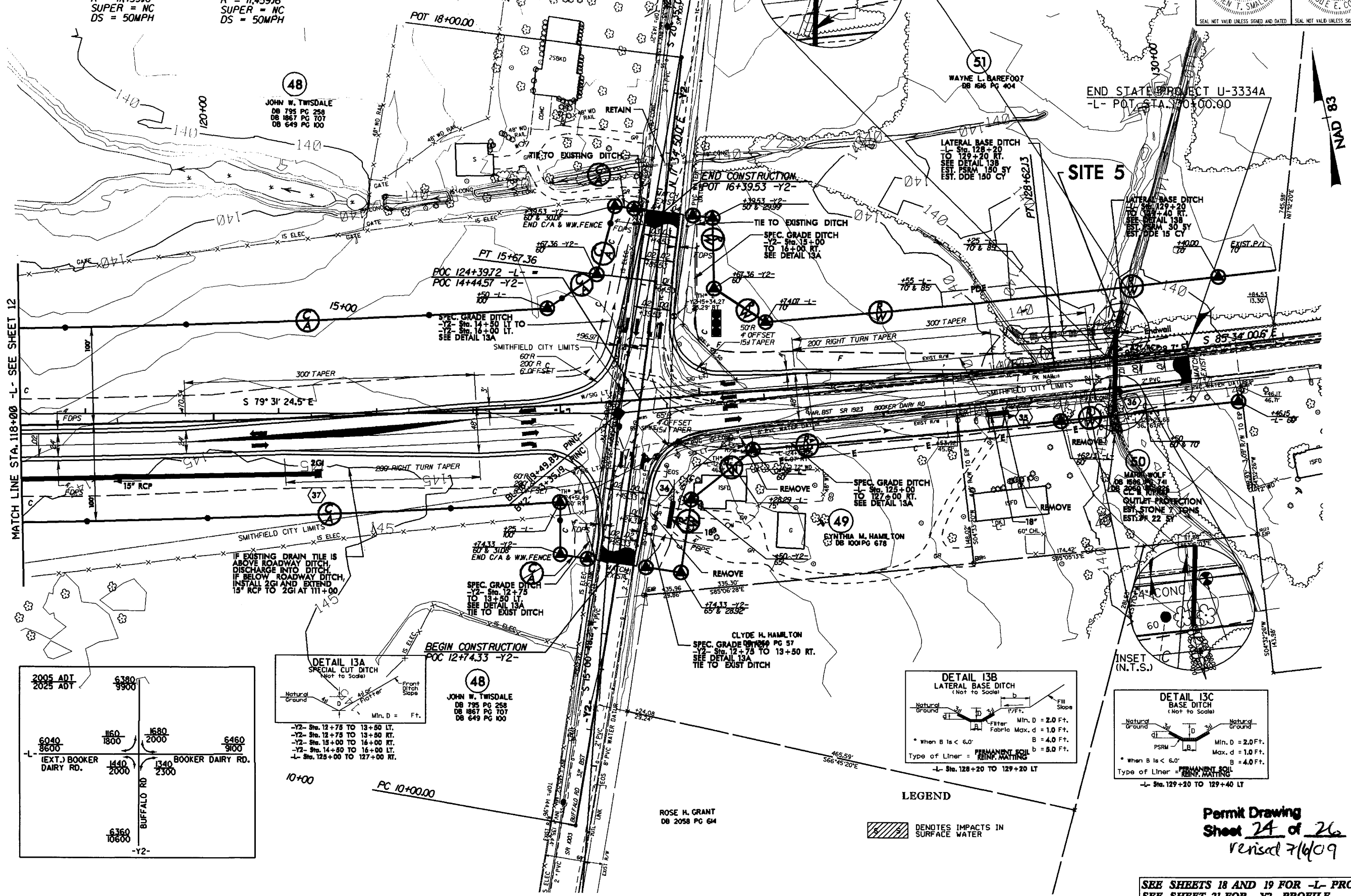
SEE SHEETS 18 AND 19 FOR -L- PROFILE  
SEE SHEET 21 FOR -Y2- PROFILE

REVISIONS

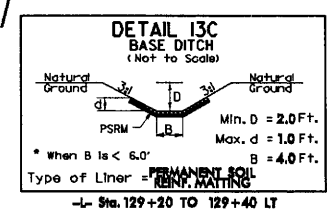
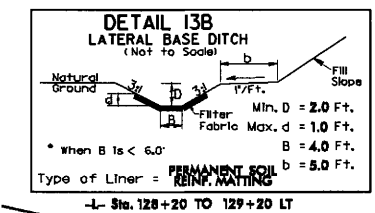
ARCADIS G&M  
PROJECT NO. U-3334A  
SHEET NO. 13

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 DS = 50MPH

**-Y2-**  
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 $D = 0' 30' 00.0'$   
 $L = 567.36'$   
 $T = 283.74'$   
 $R = 11,459.6'$   
 SUPER = NC  
 DS = 50MPH



**48**  
 JOHN W. TWISDALE  
 DB 795 PG 258  
 DB 1867 PG 707  
 DB 649 PG 100



**Permit Drawing**  
**Sheet 24 of 26**  
 revised 7/6/09

**SEE SHEETS 18 AND 19 FOR -L- PROFILE**  
**SEE SHEET 21 FOR -Y2- PROFILE**

REVISIONS

ARCADIS G&M  
 DATE: 07/14/09  
 TIME: 10:00 AM  
 FILE: U-3334A-13.dwg

## WETLAND PERMIT IMPACT SUMMARY

			WETLAND IMPACTS					SURFACE WATER IMPACTS				
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	-L- 35+20 to 57+20	1@ 24", 1@36" and 1@42" RCP	1.91			0.05	0.55					
2	-L- 65+75 to 68+00	30" RCP	0.05			0.02						
3	-L- 79+40 to 102+00	Bridge	<.01		0.02	0.31	6.15	<0.01		18*		
4	-L- 107+00	Bridge				0.03	0.30					
5	-L- 128+20	42" RCP						<0.01		78		

\* Pier impacts to the Neuse River = 4 drilled shafts at 4.5' diameter each = 64 sf or 0.001 ac or < 0.01 ac or 18 LF

**0.20 acres of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures**

**<0.01 acre of permanent fill in wetlands at sites 1 & 2 for Class B outlet dissipation pads**

NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

JOHNSTONCOUNTY  
PROJECT: 8.2312101 (U-3334A)

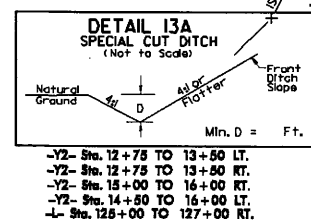
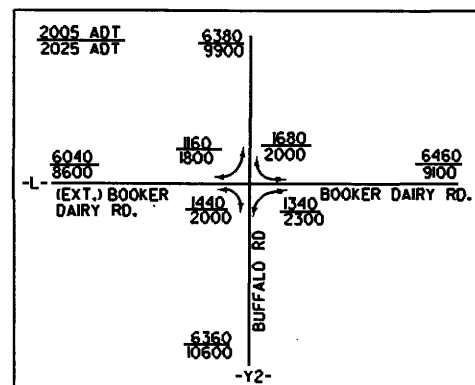
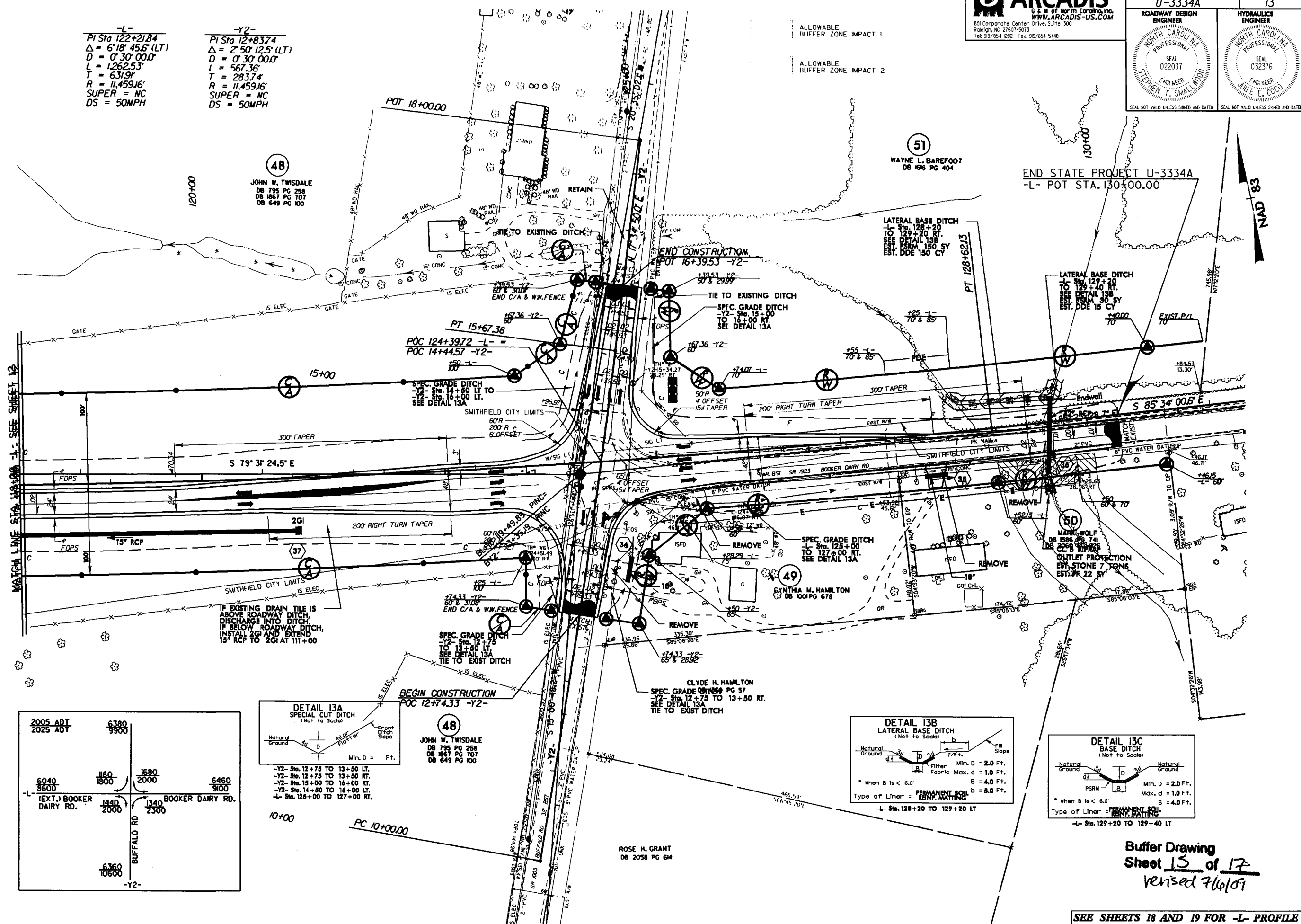
SHEET REVISED 06/08/09

ATN Revised 3/31/05

Permit Drawing  
Sheet 3 of 26

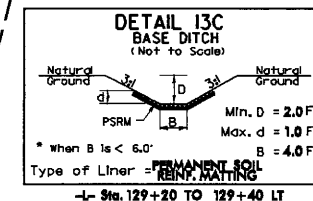
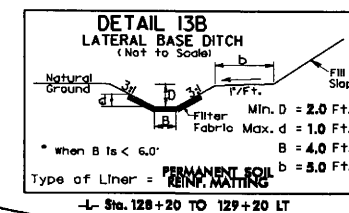


<b>-L-</b>	<b>-Y2-</b>
PI Sta 122+21.84	PI Sta 12+83.74
$\Delta = 6' 18" 45.6" (LT)$	$\Delta = 2' 50" 12.5" (LT)$
$D = 0' 30" 00.0"$	$D = 0' 30" 00.0"$
$L = 1262.53'$	$L = 567.36'$
$T = 631.91'$	$T = 283.74'$
$R = 11,459.16'$	$R = 11,459.16'$
SUPER = NC	SUPER = NC
DS = 50MPH	DS = 50MPH



**BEGIN CONSTRUCTION**  
POC 12+74.33 -Y2-

**JOHN W. TWISDALE**  
DB 735 PG 258  
DB 1867 PG 707  
DB 649 PG 100



**Buffer Drawing**  
Sheet **15** of **17**  
revised 7/6/09

**SEE SHEETS 18 AND 19 FOR -L- PROFILE**  
**SEE SHEET 21 FOR -Y2- PROFILE**

## BUFFER IMPACTS SUMMARY

[illegible]

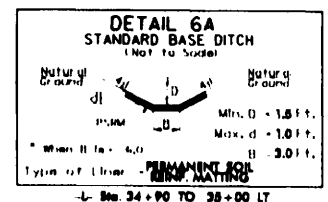
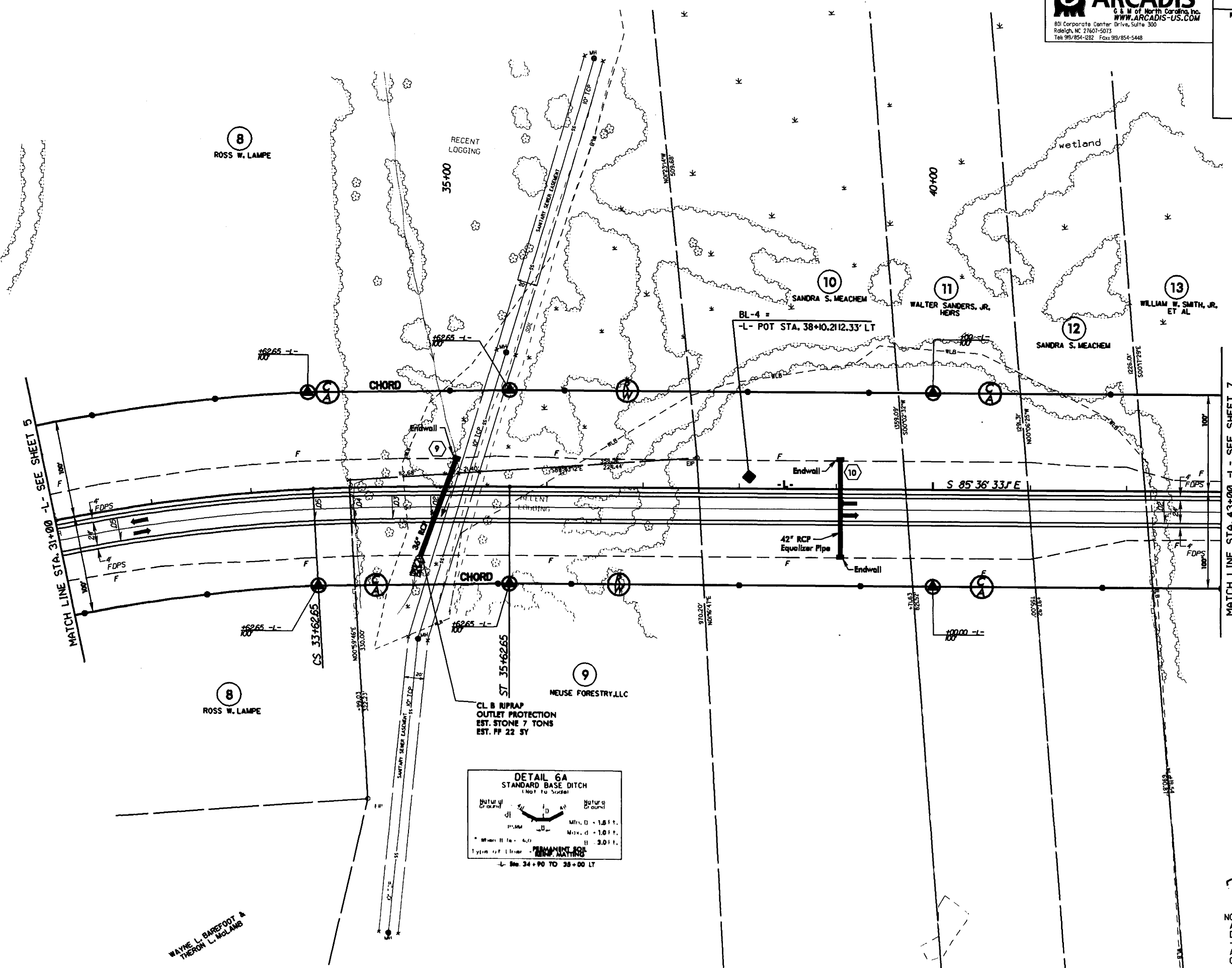
**\*BUFFER 1 IMPACTS INCLUDED IN MECHANIZED CLEARING IN WETLANDS**

Buffer Drawing  
Sheet 2 of 17  
revised 6/3/09

N.C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
JOHNSON COUNTY  
PROJECT: 8.23121011 (U-3334A)

6/2/2009 SHEET OF

NAD 83



revised 7/6/09

NOTE:  
A FUTURE ACCESS POINT IS  
DESIGNATED AT LEFT AND RIGHT OF  
-L- Sta. 35+90 FOR PLACEMENT OF  
A ROAD AS DETERMINED BY THE  
CITY OF SMITHFIELD.

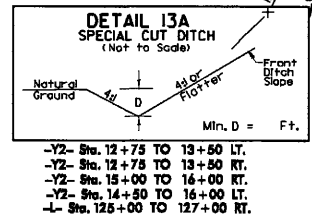
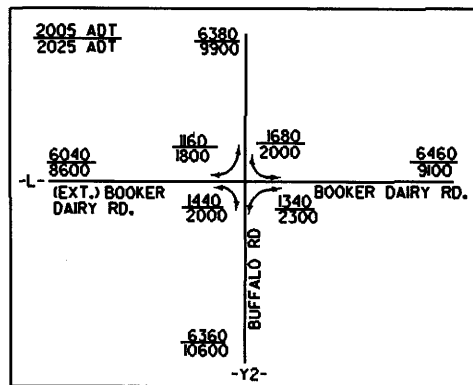
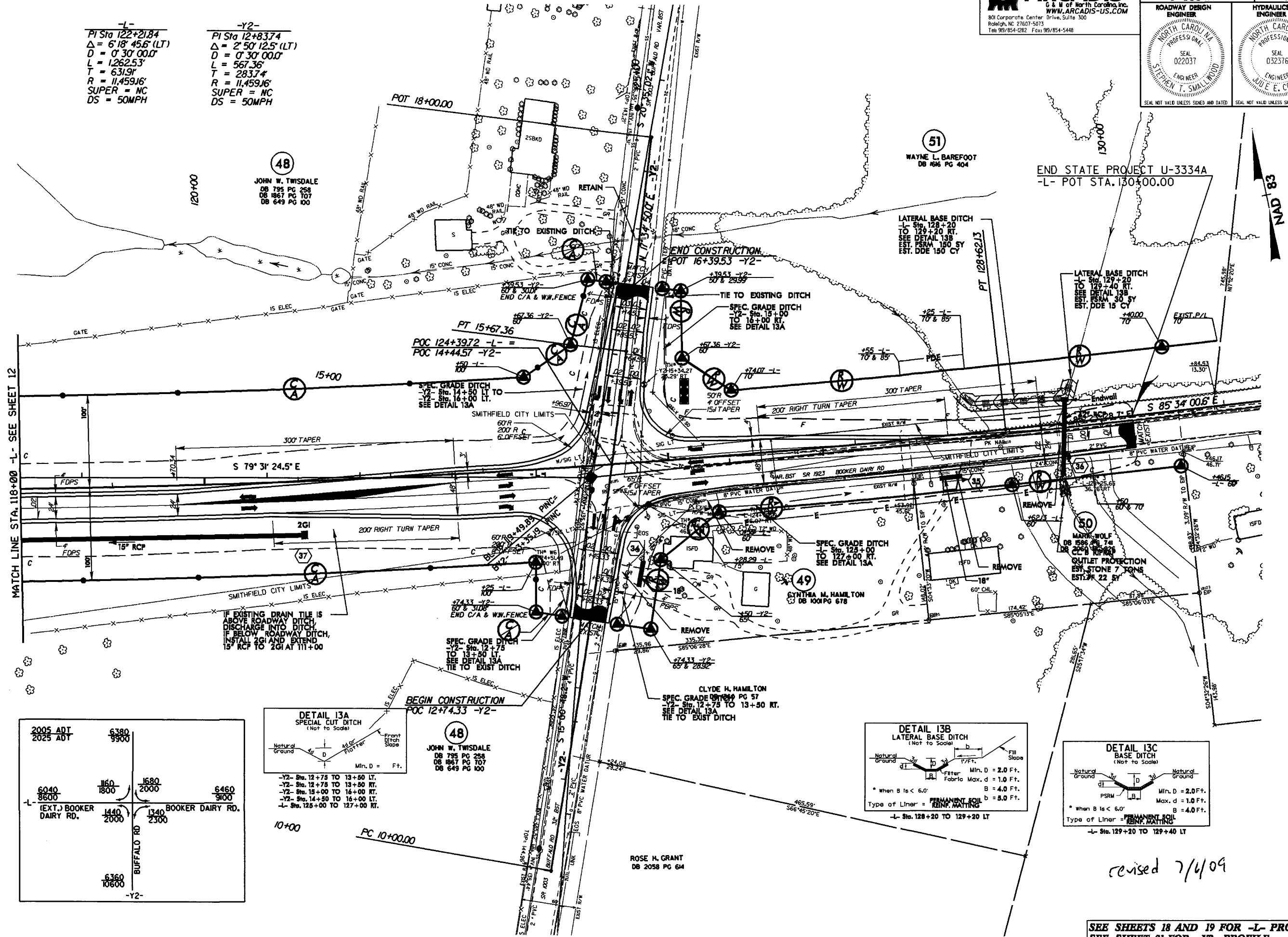
SEE SHEETS 15 AND 16 -L- PROFILE

REVISIONS

ARCADIS GAN  
DATE: 7/6/09  
TIME: 9:15 AM  
FILE: U-3334A-06

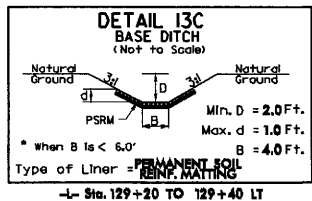
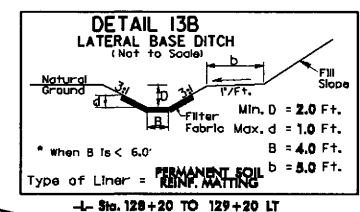
WAYNE L. BAREFOOT &  
THERON L. MCLAMB





**BEGIN CONSTRUCTION**  
POC 12+74.33 -Y2-

**48**  
JOHN W. TWISDALE  
DB 795 PG 258  
DB 867 PG 707  
DB 649 PG 100



revised 7/6/09

SEE SHEETS 18 AND 19 FOR -L- PROFILE  
SEE SHEET 21 FOR -Y2- PROFILE

REVISIONS