



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT L. MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

February 10, 2015

US Army Corps of Engineers
Regulatory Field Office
2407 West 5th Street
Washington, NC 27889

NC Division of Coastal Management
400 Commerce Avenue
Morehead City, NC 28557

Attention: Mr. Tom Steffens
NCDOT Coordinator

Mr. Stephen Lane
NCDOT Coordinator

Dear Sirs:

Subject: **Application Modification Request for USACE Individual Permit, Section 401 Water Quality Certification, Neuse Riparian Buffer Authorization and CAMA Major Development Permit** for the proposed improvement of US 17 from south of Belgrade at SR 1330/SR 1439 to the New Bern Bypass, in Onslow, Jones and Craven Counties. TIP No. R-2514 B, C & D.

References: NCDOT permit application dated November 14, 2014
NCDWR On Hold letter dated January 27, 2015

As you are aware, the North Carolina Department of Transportation (NCDOT), Division of Highways, proposes to improve US 17 from SR 1330/SR 1439 south of Belgrade to the New Bern Bypass. Permit applications for this project were submitted to the regulatory agencies on November 14, 2014. The purpose of this letter is to provide additional information requested by the agencies and provide updated application materials where changes in project plans have occurred. Unless provided with this revised application, all other information included in our original application has not changed.

1.0 Agency Comments on the Permit Application

1.1 N.C. Division of Water Resources

In an e-mail dated January 5, 2015, David Wainwright of the N.C. Division of Water Resources (DWR) requested a listing of which impacted stream resources are perennial and which are intermittent.

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

TELEPHONE: 919-707-6100
FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:
CENTURY CENTER, BUILDING B
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Stream Status

R-2514B: Permit Sites 6 and 16 are perennial, Site 13 is intermittent

R-2514C: All sites are intermittent

R-2514D: Only Permit Site 3 is perennial. This site is a tributary to Trent River, and is identified as stream T15 in the EIS and other documentation (mistakenly listed as 131 in the permit application's Table 2.)

Most of these stream calls are identified in Table 2 from the Wetland and Stream Delineation Reevaluation and Neuse River Buffer Reassessment (ESI, Oct. 3, 2007). Sites G2 and W22 aren't specifically listed in the 2007 table; the status of these sites was confirmed with Matt Smith of Environmental Services, Inc., who conducted the fieldwork.

The DWR submitted a comment letter on January 27, 2015 requesting additional information and placing the permit application on hold until the information was provided. This letter specifically mentioned six areas in which the application was deficient. These comments and their responses are listed below.

Comment 1: *Section B – At Site 14, it appears as if the fill impact and excavation impact numbers are reversed; please verify if the presented impacts are correct.*

Response: The calculations for these impact areas have been reviewed and verified.

Comment 2: *In the application, Table 1, R-2514B, the stated subtotal of permanent wetland impacts (9.63 acres) do not total the sum of the impacts presented nor the impacts summary sheet (9.59 acres). Please verify.*

Response: NCDOT has re-checked the totals and the impact summary sheet should be 9.61 acres. The remaining difference is due to rounding, and the difference in how significant figures were handled in the summary table versus the cover letter tables. The table entries for R-2514 C have been changed to reflect impact revisions and to be consistent with the proposed impact data that was provided in the R-2514 B and D sections.

Comment 3: *Section C – The Stormwater Management Plan states that approximately 2/3rds of the project are in the Neuse River Basin, which is a riparian buffer basin. However, the plan does not include a swale summary table as does Section D. Please forward a summary table for this area.*

Response: A swale summary table for Section C is attached.

Comment 4: *Section C – There are two sets of impacts for power lines; one has impact sites 1-5 and the other has impacts sites 1-27. Please resolve this discrepancy.*

Response: The permit drawings depicting utility impacts for section C have been consolidated into a single set of drawings depicting all sites. The new drawings are attached.

Comments 5 and 6: *Section D – At Utility Site 1 there appear to be power pole/line relocations.*

The amount of hand clearing requested seems to be excessive for the proposed activity. Please explain why this amount of clearing is necessary. At Utility Site 2 the amount of hand clearing requested seems excessive for the proposed utility relocation. Please explain why this amount of clearing is necessary.

Responses to Comments 5 & 6:

Further coordination with the utility companies has reduced the clearing impacts in this area of the project. However, this review revealed an error in the permit application at these impact sites. Specifically, the summary sheet incorrectly lists the impacts at Site 1 and 2 as 0.01 and 0.60 acres respectively, and showed the total impacts as 0.61 acres in the permit application. Utility Permit Drawings Sheet 2 correctly showed that Site 1 impacted 1.259533 acres and Site 2 0.5993 acre, a total of 1.86 acres. The Utility Permit Drawing data was incorrectly transferred to the summary sheet.

The revised drawings included in this submittal show a much reduced footprint; with Sites 1 and 2 impacting 0.35 and 0.40 acre due to hand clearing. This reduced the impacts from 1.86 acres to 0.75 acre.

1.2 Corps of Engineers Comments

In an email dated January 22, 2015 from Tom Steffens with the US Army Corps of Engineers (USACE) to Gordon Cashin with NCDOT, the USACE expressed concerns about a road paving “detour” project recently proposed near R-2514. This paving project will not be associated with R-2514. Furthermore, other than the onsite temporary detour described below, the NCDOT is not aware of any other elements in the works for R-2514, and believes the current permit drawings reflect the extent of the project’s impacts.

The revised drawings now include a temporary onsite detour associated with Section C of the project. The additional impacts for this detour are depicted in an attached set of drawings. The Site 1D shown in these drawings is an extension of Site 1 on Sheet 58 of 62 of the permit drawings. The Site 2D in the detour drawings is an extension of Site 2 shown on Sheet 7 of 62 of the permit drawings.

During phase I of construction, the proposed north bound lanes will be constructed while traffic is maintained on the existing alignment. During phase II, the temporary onsite detour will be utilized to carry traffic from the existing alignment to the newly constructed north bound lanes so the proposed southbound lanes, which follow the existing alignment, can be constructed. The additional temporary impacts are provided later in the revised impact tables.

2.0 Updates to the Permit Application

3.0 Summary of Impacts

Permanent Impacts: Proposed permanent impacts for R-2514 B, C & D include fill, excavation, and mechanized clearing in 46.86 acres of wetlands, including 6.77 acres of riparian wetlands, and 40.09 acres of non-riparian wetlands. Proposed permanent impacts to jurisdictional streams

are 4,281 linear feet, including 279 feet of bank stabilization. Impacts due to utility work involve minimal fill in wetlands.

Temporary Impacts: Proposed temporary impacts for R-2514 B, C & D include temporary fill, temporary excavation, in 0.59 acre of wetlands, including 0.13 acre of riparian wetlands, and 0.46 acre of non-riparian wetlands. There will be 397 linear feet of temporary impacts to jurisdictional streams including 112 feet of temporary impacts due to bank stabilization. There will also be 0.01 acre of temporary fill in wetlands in the hand clearing areas for erosion control measures

Hand-Clearing: There will be 6.55 acres of hand-clearing in jurisdictional wetlands due to project construction and 2.59 acres of hand-clearing for utility relocations.

4.0 Summary of Mitigation

The proposed construction of R-2514 B, C & D will impact 6.77 acres of riparian wetlands and 40.15 acres of non-riparian wetlands that will require mitigation (includes 0.06 acre of wetlands counted as a total take which will be mitigated at a 1:1 ratio). The project will impact 4,002 linear feet of jurisdictional stream that will require mitigation. In addition, the project will have unavoidable mitigable impacts to 148,206 square feet of riparian buffers, including 86,156 sq. ft. in Zone 1 and 62,050 sq. ft. in Zone 2 in the Neuse River Basin.

7.4 Impacts to Jurisdictional Resources

Impacts to jurisdictional wetlands, surface waters and riparian buffers for R-2514 B, C & D were summarized in Tables 1, 2 and 3 respectively in the permit application. Tables 1 and 2 have been revised below to reflect the impact revisions resulting from: minor changes in design, presenting proposed impact data for all three sections consistent, and duplicate entries. The table entries that have changed are highlighted in gray. Totals may not match the sum of individual impacts provided on the attached impact summary sheets due to rounding.

Table 1. R-2514 B, C & D Wetland Impacts

Permit Drawing Site Number	Map Label in FEIS (2011)	Type	Permanent Impacts (ac.)	Temporary Impacts (ac.)	Mitigation Required*** (2:1)
R-2514B					
1	241	Non-riparian	0.4		Yes
2	242	Non-riparian	0.19		Yes
3	32	Non-riparian	<0.01		Yes
4	31	Non-riparian	0.01		Yes
5	27	Non-riparian	2.31		Yes
6	26	Riparian	1.2		Yes
7	24	Non-riparian	0.14		Yes
8	22	Non-riparian	0.07		Yes
9	245	Agricultural ditch	0.03		No
10	44, 45, W9	Riparian	3.70	0.06	Yes
11	42	Riparian	0.19		Yes
12	W8, 46	Riparian	0.01	0.01	Yes
14	48	Non-riparian	0.06		Yes
15	49	Non-riparian	1.22		Yes
16	W22, 250	Riparian	0.06		Yes
R-2514B Riparian:			5.16	0.07	
R-2514B Non-riparian:			4.43	0.0	
R-2514B Subtotal:			9.59	0.07	
R-2514C					
1	49 & 65	Non-riparian	4.07	0.22	Yes
2	49 & 65	Non-riparian	0.13		Yes
2D	65	Non-riparian		0.08	No
3	49	Non-riparian	0.06	0.01	Yes
4	67 (west side), 65, 68 & 75 (east)	Non-riparian	8.25	<0.01	Yes
5	69 & 70	Non-riparian	0.25		Yes
6	71 & 72	Non-riparian	0.03	<0.01	Yes
7*	74	Non-riparian	0.35	0.01	Yes*
8	75	Non-riparian	0.73		Yes
9	77 west, 76 east	Non-riparian	1.06	0.01	Yes
10	79 & 80	Non-riparian	1.10		Yes
11	78	Non-riparian	0.03		Yes
12	82 & 83	Non-riparian	0.50		Yes
13	west 85 & 86, east 84	Non-riparian	0.45	0.02	Yes
14	88	Non-riparian	1.93		Yes
15	89, 90, 91	Non-riparian	0.29	0.02	Yes
16	west 92, east 93	Non-riparian	0.73	0.09	Yes
17	94, G1	Riparian	0.01		Yes

Table 1 continued. R-2514 B, C & D Wetland Impacts

Permit Drawing Site Number	Map Label in FEIS (2011)	Type	Permanent Impacts (ac.)	Temporary Impacts (ac.)	Mitigation Required*** (2:1)
20	100	Non-riparian	1.78		Yes
21	98	Non-riparian	0.25		Yes
23	65 & 63	Non-riparian	0.03		Yes
R-2514C Riparian:			0.01	0.0	
R-2514C Non-riparian:			22.02	0.46	
R-2514C Subtotal:			22.03	0.46	
R-2514D					
2	114	Non-riparian	2.54		Yes
3	131	Riparian	0.18	<0.01	Yes
4	132 & 135	Riparian	0.74	0.06	Yes
4	141	Non-riparian	0.20		Yes
5	166	Non-riparian	0.91		Yes
6	167	Non-riparian	1.73		Yes
7	175	Non-riparian	0.02		Yes
8	177	Non-riparian	0.25		Yes
9	181	Riparian	0.60		Yes
10	182	Non-riparian	0.40		Yes
11	184	Non-riparian	1.05		Yes
12	186	Non-riparian	0.37		Yes
13	246	Riparian	0.02		Yes
14	196	Non-riparian	0.34		Yes
15	229	Non-riparian	0.05		Yes
17	201	Non-riparian	1.55		Yes
18	202	Non-riparian	0.68		Yes
19	226	Non-riparian	1.55		Yes
20	225	Non-riparian	0.36		Yes
21	211	Non-riparian	1.62		Yes
22	See note**	Non-riparian	0.02		Yes
23	D1, 217	Riparian	0.06		Yes
R-2415D Riparian:			1.6	0.06	
R-2514D Non-riparian:			13.64		
R-2514D Subtotal:			15.24	0.06	
R-2514 B, C & D Total		Riparian:	6.77	0.13	
		Non-riparian:	40.09	0.46	
		Grand Total:	46.86	0.59	

* R-2514C Site 7 includes an additional 0.06 acre of un-impacted wetlands counted as a total take, not included in the table above. This will be mitigated at a 1:1 ratio.

** Site 22 is a non-riparian wetland site identified during construction of R-2301A (New Bern Bypass) that had not been accounted for during the permit for that project. It was decided to include this site on the permit application for R-2514B, C & D to obtain after-the-fact authorization and provide mitigation.

***For permanent impacts

Table 2. R-2514 Surface Water Impacts

Permit Drawing Site Number	Waterbody Labeled in FEIS	Permanent (ft)	Permanent (ac.)	Temporary (ft)	Temporary (ac.)	USACE Mitigation Required (2:1)
R-2514B						
6	W5	130	0.02	6	<0.01	Yes
6	W5	356	0.07	14	<0.01	Yes
6*	W5	25	<0.01	10	<0.01	No
6*	W5	25	<0.01	10	<0.01	No
13	W21	1151	0.60	60	0.04	Yes
13*	W21	27	0.01	7	<0.01	No
13*	W21	29	0.01	7	<0.01	No
13*	W21	87	0.05			No
16	W22	120	0.04	25	0.01	Yes
R-2514B Total:		1,950	0.80	139	0.05	
R-2514C						
17	G1	109	0.01			Yes
18	G1	132	0.02			Yes
18*	G1			20	<0.01	No
19	G2	106	0.01			Yes
19*	G2			58	<0.01	No
22	W21	32	0.02			Yes
22	W21			10	0.01	No
R-2514C Total:		379	0.06	88	0.01	
R-2514D						
1	B5	218	0.01	31	<0.01	Yes
1*	B5	16				No
3	131	5	<0.01	50	0.01	Yes
6	167		0.03			No
9	S18	196	0.05	20	<0.01	Yes
9*	S18	18				No
13	S14	230	0.01	21	<0.01	Yes
13*	S14	12				No
15	S9	292	0.06	27	<0.01	Yes
15*	S9	26				No
16	S17	282	0.01	21	<0.01	Yes
16*	S17	14				No
21	D2	644	0.06			Yes
R-2514 D Total:		1,953	0.23	170	0.01	
R-2514B, C & D Total		4,282	1.1	397	0.09	

*Denotes bank stabilization; when necessary, mitigation required by the USACE exceeds the amount required by NCDWR. The table includes 279 feet of permanent impacts and 112 feet of temporary impacts due to bank stabilization.

11.2 Compensation

Table 5 breaks down the proposed permanent wetland impacts by HUC. The table entries that have changed are highlighted in gray.

Table 5. Wetland Impacts by HUC

Project Section	Impact Sites	HUC 03020106		HUC 03020204	
		Riparian	Non-riparian	Riparian	Non-riparian
R-2514 B	All sites	5.16	4.43		
R-2514 C	Sites 1-13, 22 & 23		17.04*		
	Site 14		1.31		0.62
	Site 15		0.17		0.12
	Sites 16 - 21			0.01	2.76
R-2514 D	All sites			1.6	13.64
Total impacts by HUC		5.16	22.95	1.61	17.14

* R-2514C Site 7 includes an additional 0.06 acre of wetlands counted as a total take, not included in the table above. This will be mitigated at a 1:1 ratio.

NCDOT has received an acceptance letter dated November 14, 2014 from EEP providing wetland and stream mitigation from the Croatan Wetland Mitigation Bank. Though impacts have been revised, it appears that this letter still adequately covers compensatory mitigation for this project and in fact, may exceed actual mitigation needs. If necessary, NCDOT will request that EEP reduce mitigation credits after permits are obtained.

A copy of this revised permit application and its distribution list will be posted on the NCDOT website at: <https://connect.ncdot.gov/resources/Environmental/>

If you have any questions or need additional information, please contact Gordon Cashin at 919-707-6107 or gcashin@ncdot.gov.

Sincerely,



RW Richard W. Hancock, P.E., Manager
Project Development and Environmental Analysis Unit

cc:

NCDOT Permit Application Standard Distribution List.



Page 2 of 2

☒ YES ☐ NO Have minimum design criteria, as presented in the NCDOT Best Management Practices Toolbox, Version 1 (March 2008), been met and verified? If No, provide further explanation of why design criteria was not met.

Additional Comments

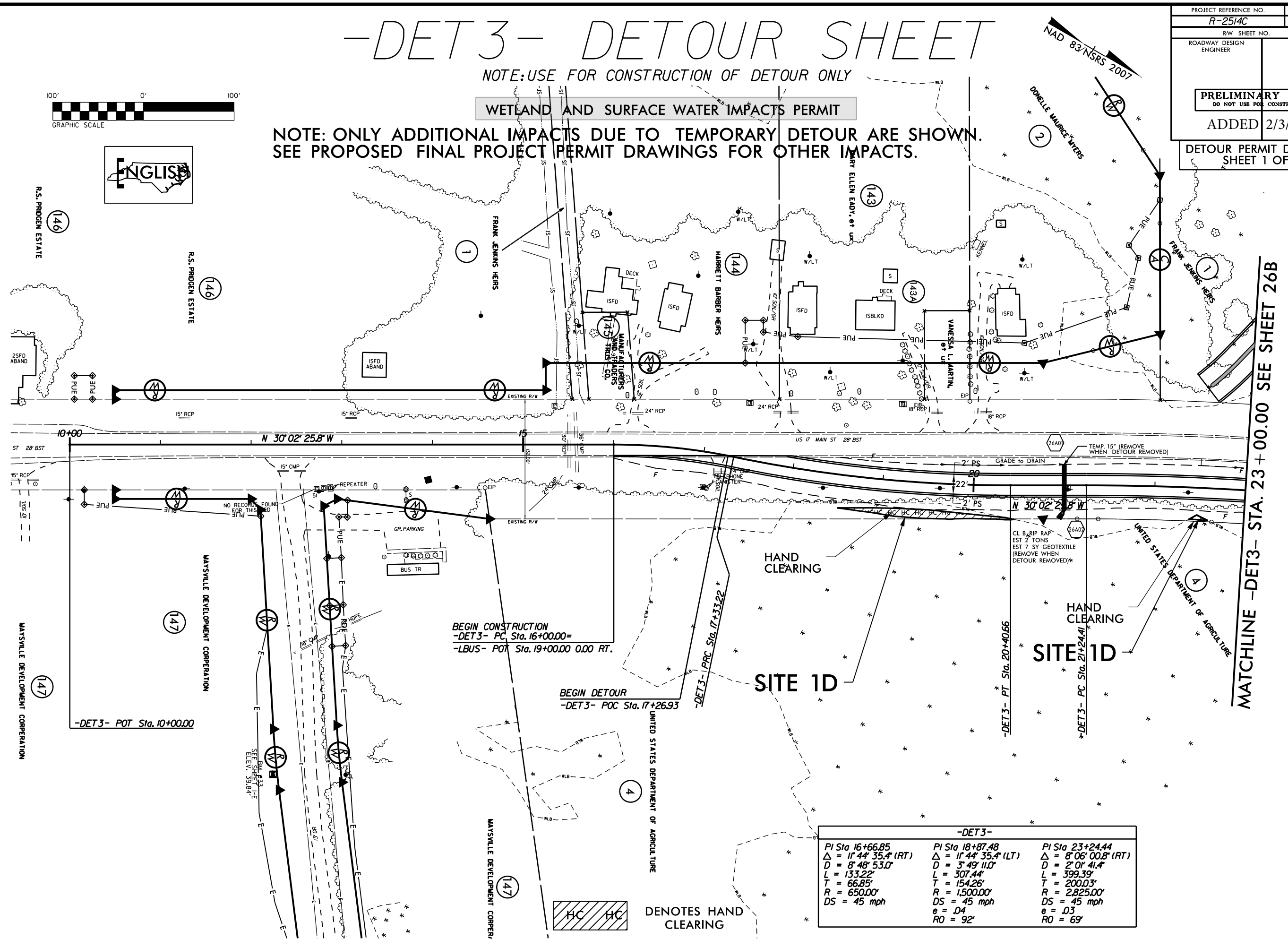
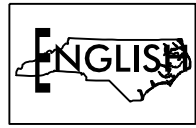
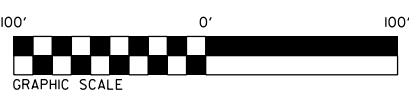
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NOTE: USE FOR CONSTRUCTION OF DETOUR ONLY

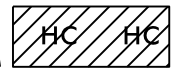
WETLAND AND SURFACE WATER IMPACTS PERMIT

NOTE: ONLY ADDITIONAL IMPACTS DUE TO TEMPORARY DETOUR ARE SHOWN.
SEE PROPOSED FINAL PROJECT PERMIT DRAWINGS FOR OTHER IMPACTS.

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	26A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
ADDED 2/3/15	
DETOUR PERMIT DRAWING SHEET 1 OF 6	



-DET3-		
PI Sta 16+66.85 $\Delta = 11' 44' 35.4''$ (RT) $D = 8' 48' 53.0''$ $L = 133.22'$ $T = 66.85'$ $R = 650.00'$ $DS = 45$ mph	PI Sta 18+87.48 $\Delta = 11' 44' 35.4''$ (LT) $D = 3' 49' 11.0''$ $L = 307.44'$ $T = 154.26'$ $R = 1,500.00'$ $DS = 45$ mph $e = .04$ $RO = 92'$	PI Sta 23+24.44 $\Delta = 8' 06' 00.8''$ (RT) $D = 2' 01' 41.4''$ $L = 399.39'$ $T = 200.03'$ $R = 2,825.00'$ $DS = 45$ mph $e = .03$ $RO = 69'$



HC HC
DENOTES HAND
CLEARING

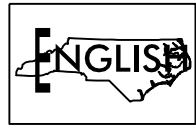
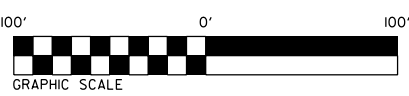
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-DET3- DETOUR SHEET

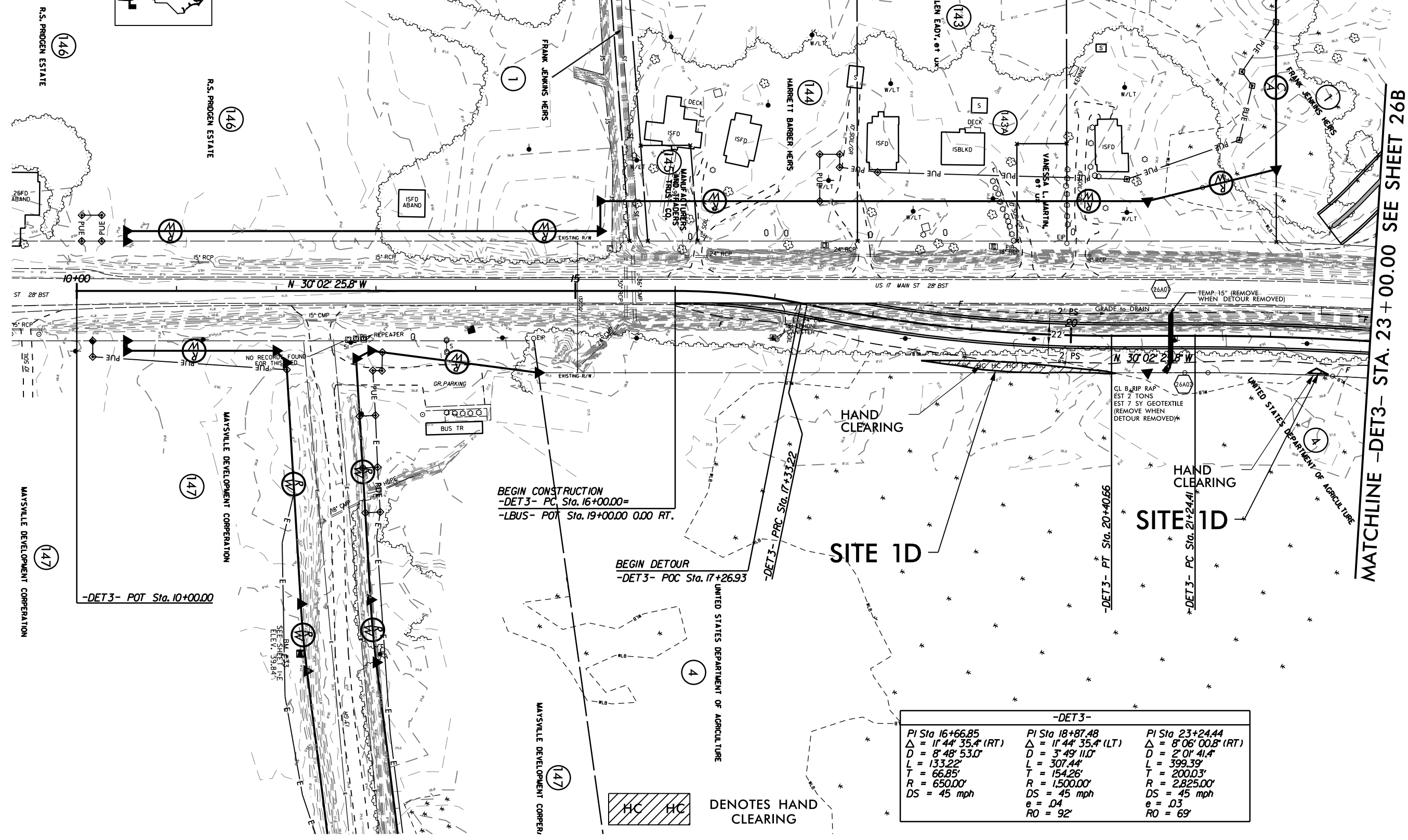
NOTE: USE FOR CONSTRUCTION OF DETOUR ONLY

WETLAND AND SURFACE WATER IMPACTS PERMIT

NOTE: ONLY ADDITIONAL IMPACTS DUE TO TEMPORARY DETOUR ARE SHOWN.
SEE PROPOSED FINAL PROJECT PERMIT DRAWINGS FOR OTHER IMPACTS.



PROJECT REFERENCE NO.	SHEET NO.
R-2514C	26A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
ADDED	2/3/15
DETOUR PERMIT DRAWING SHEET 2 OF 6	



-DET3-		
PI Sta 16+66.85 Δ = 11° 44' 35.4" (RT) D = 8° 48' 53.0" L = 133.22' T = 66.85' R = 650.00' DS = 45 mph	PI Sta 18+87.48 Δ = 11° 44' 35.4" (LT) D = 3° 49' 11.0" L = 307.44' T = 154.26' R = 1,500.00' DS = 45 mph e = .04 RO = 92'	PI Sta 23+24.44 Δ = 8° 06' 00.8" (RT) D = 2° 01' 41.4" L = 399.39' T = 200.03' R = 2,825.00' DS = 45 mph e = .03 RO = 69'

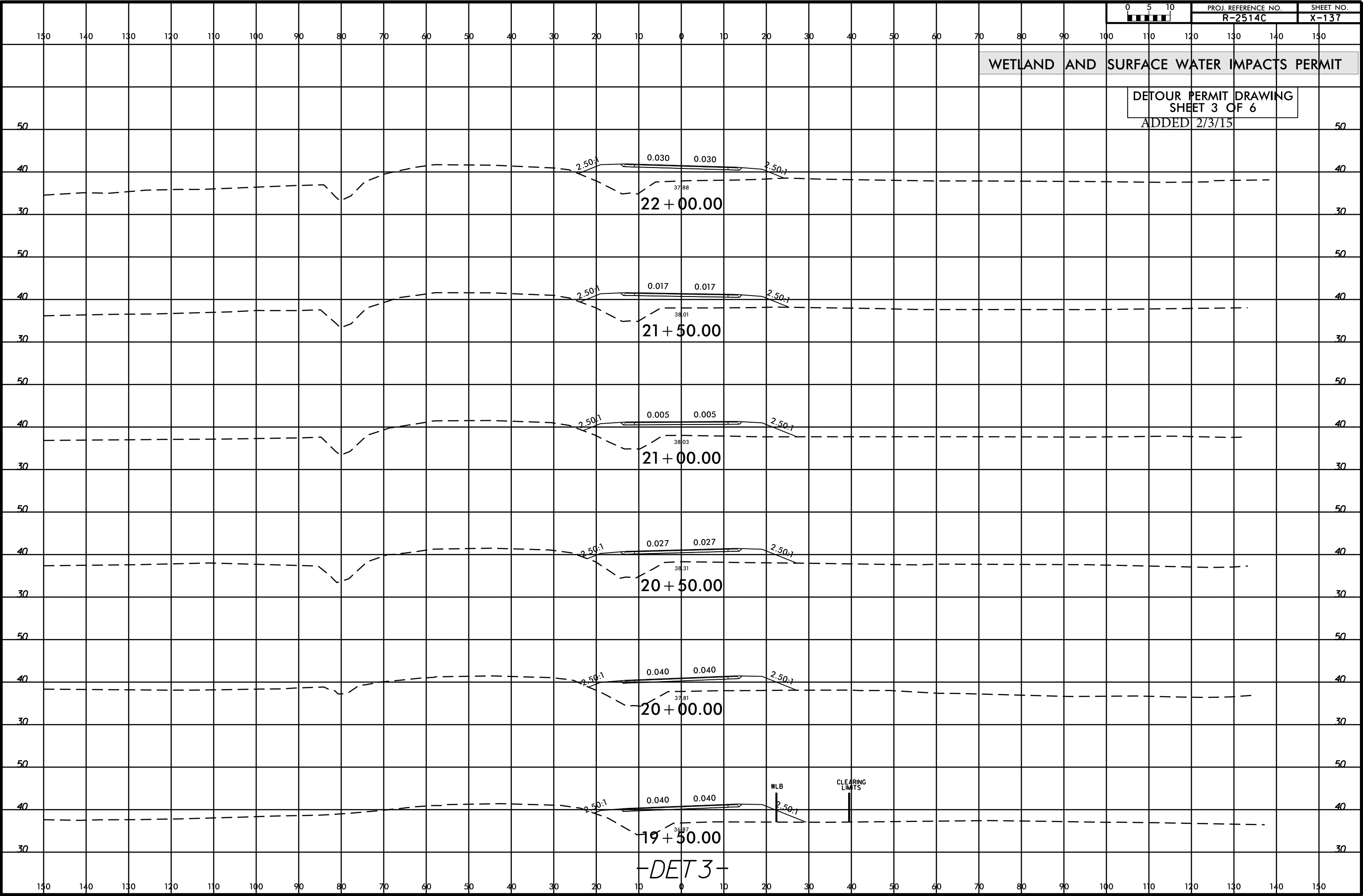
HC HC
DENOTES HAND
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8/23/99

WETLAND AND SURFACE WATER IMPACTS PERMIT

DETOUR PERMIT DRAWING
SHEET 3 OF 6

ADDED 2/3/15



DET 3

8/17/99

REVISIONS

SYTIME
DESIGN
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FIRM

-DET3- DETOUR SHEET

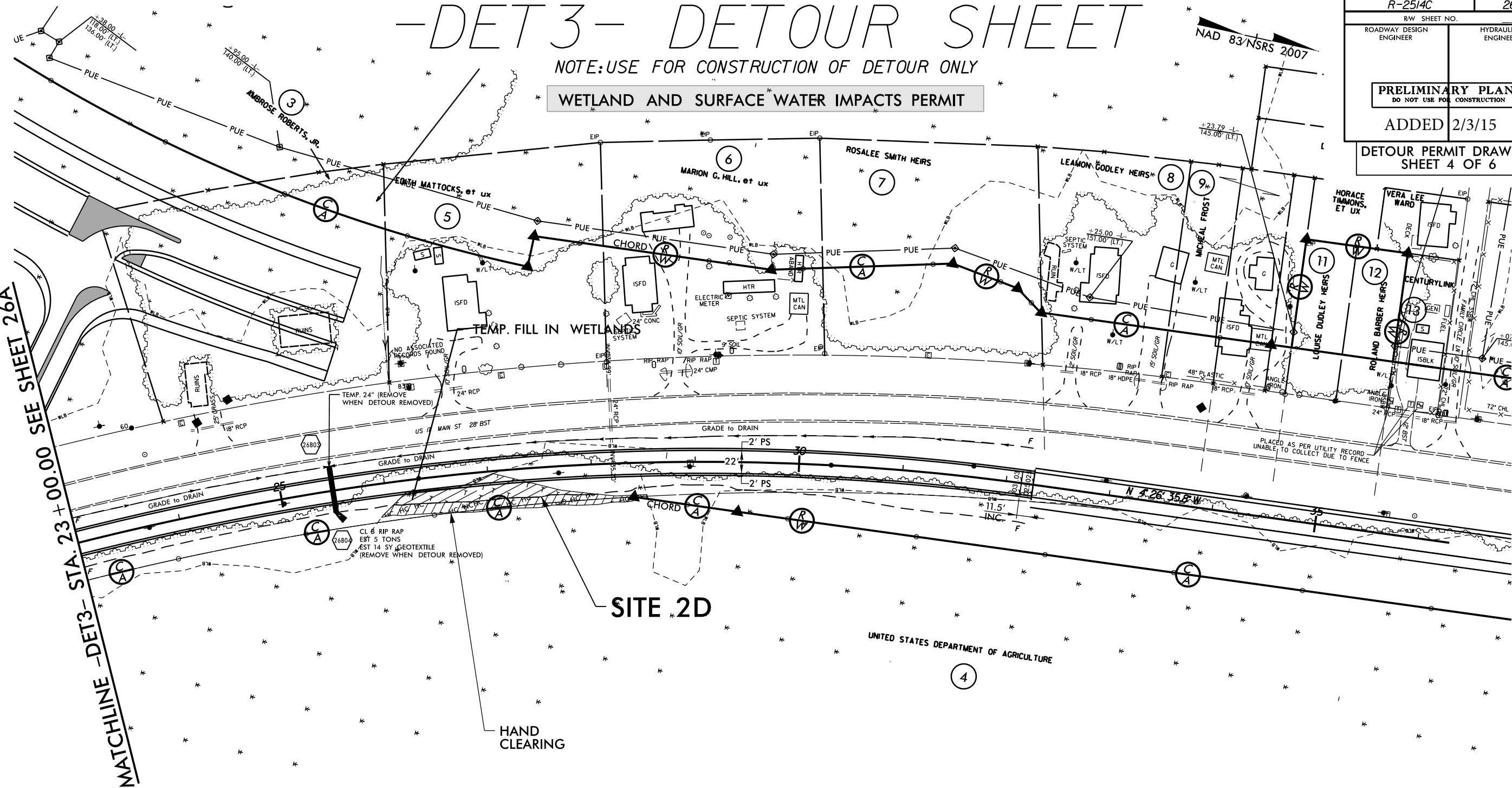
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WETLAND AND SURFACE WATER IMPACTS PERMIT

NAD 83/NSRS 2007

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	26B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
ADDED 2/3/15	
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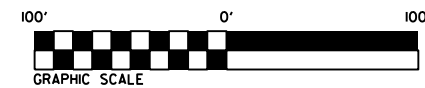


DENOTES HAND
CLEARING



DENOTES TEMPORARY
FILL IN WETLAND

-DET3-	
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$D = 2^{\circ}01'41.4''$	$D = 2^{\circ}29'28.0''$
$L = 399.39'$	$L = 702.37'$
$T = 200.03'$	$T = 353.94'$
$R = 2825.00'$	$R = 2300.00'$
$DS = 45$ mph	$DS = 45$ mph
$e = .03$	$e = .03$
$RO = 69'$	$RO = 69'$



SEE SHEET 44 FOR -DET3- PROFILE

8/17/99

REVISIONS

SYTIME
DESIGN
LAW
FIRM

-DET3- DETOUR SHEET

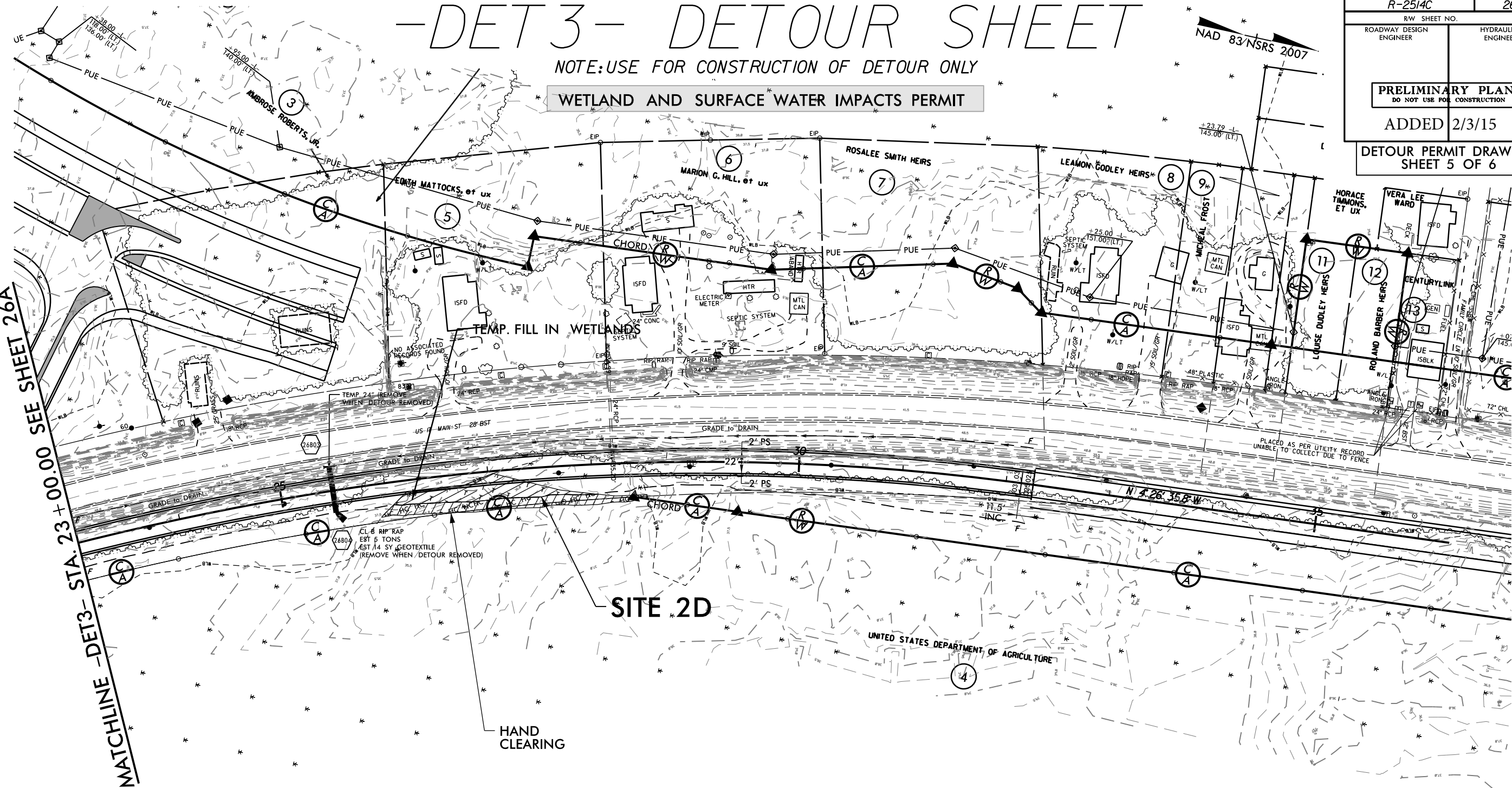
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WETLAND AND SURFACE WATER IMPACTS PERMIT

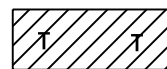
NAD 83/NSRS 2007

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	26B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
ADDED 2/3/15	
DETOUR PERMIT DRAWING SHEET 5 OF 6	

MATCHLINE -DET3- STA. 23+00.00 SEE SHEET 26A



DENOTES HAND CLEARING

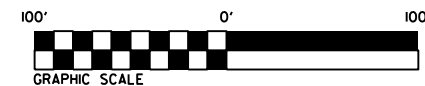


DENOTES TEMPORARY FILL IN WETLAND

SITE 2D

-DET3-

PI Sta 23+24.44	PI Sta 28+77.74
$\Delta = 8^{\circ}06'00.8''$ (RT)	$\Delta = 17^{\circ}29'49.2''$ (RT)
$D = 2^{\circ}01'41.4''$	$D = 2^{\circ}29'28.0''$
$L = 399.39'$	$L = 702.37'$
$T = 200.03'$	$T = 353.94'$
$R = 2825.00'$	$R = 2300.00'$
$DS = 45$ mph	$DS = 45$ mph
$e = .03$	$e = .03$
$RO = 69'$	$RO = 69'$



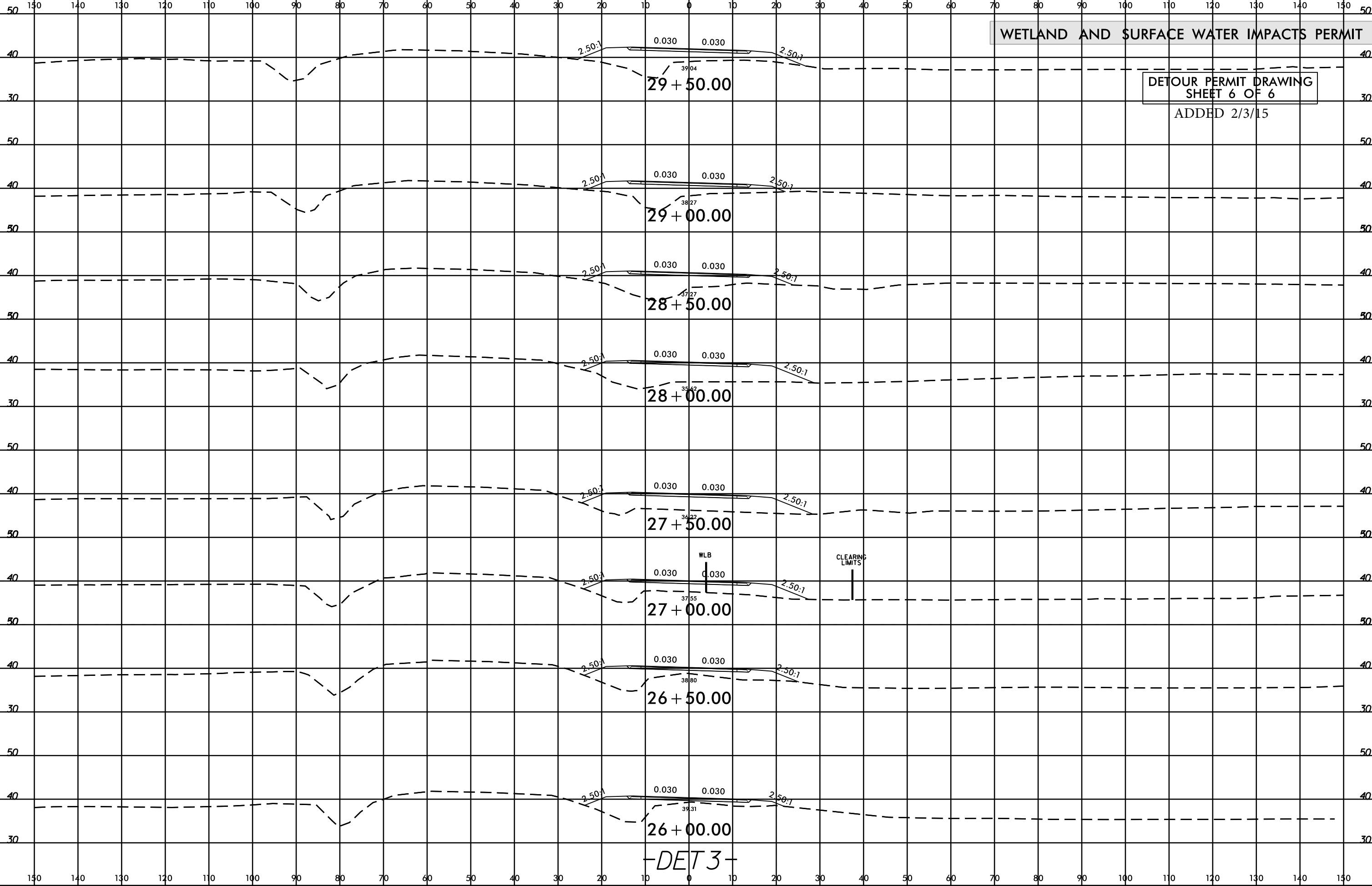
SEE SHEET 44 FOR -DET3- PROFILE

8/23/99

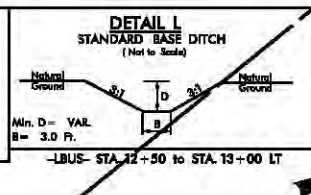
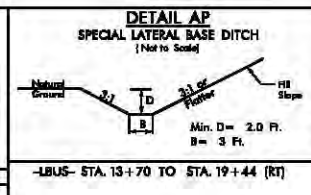
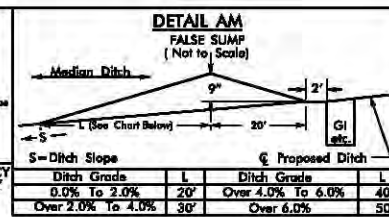
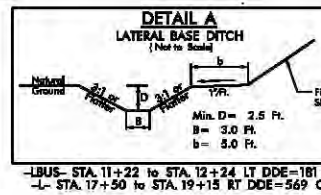
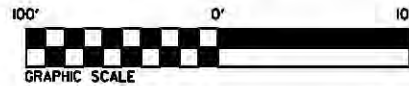
WETLAND AND SURFACE WATER IMPACTS PERMIT

DETOUR PERMIT DRAWING
SHEET 6 OF 6

ADDED 2/3/15

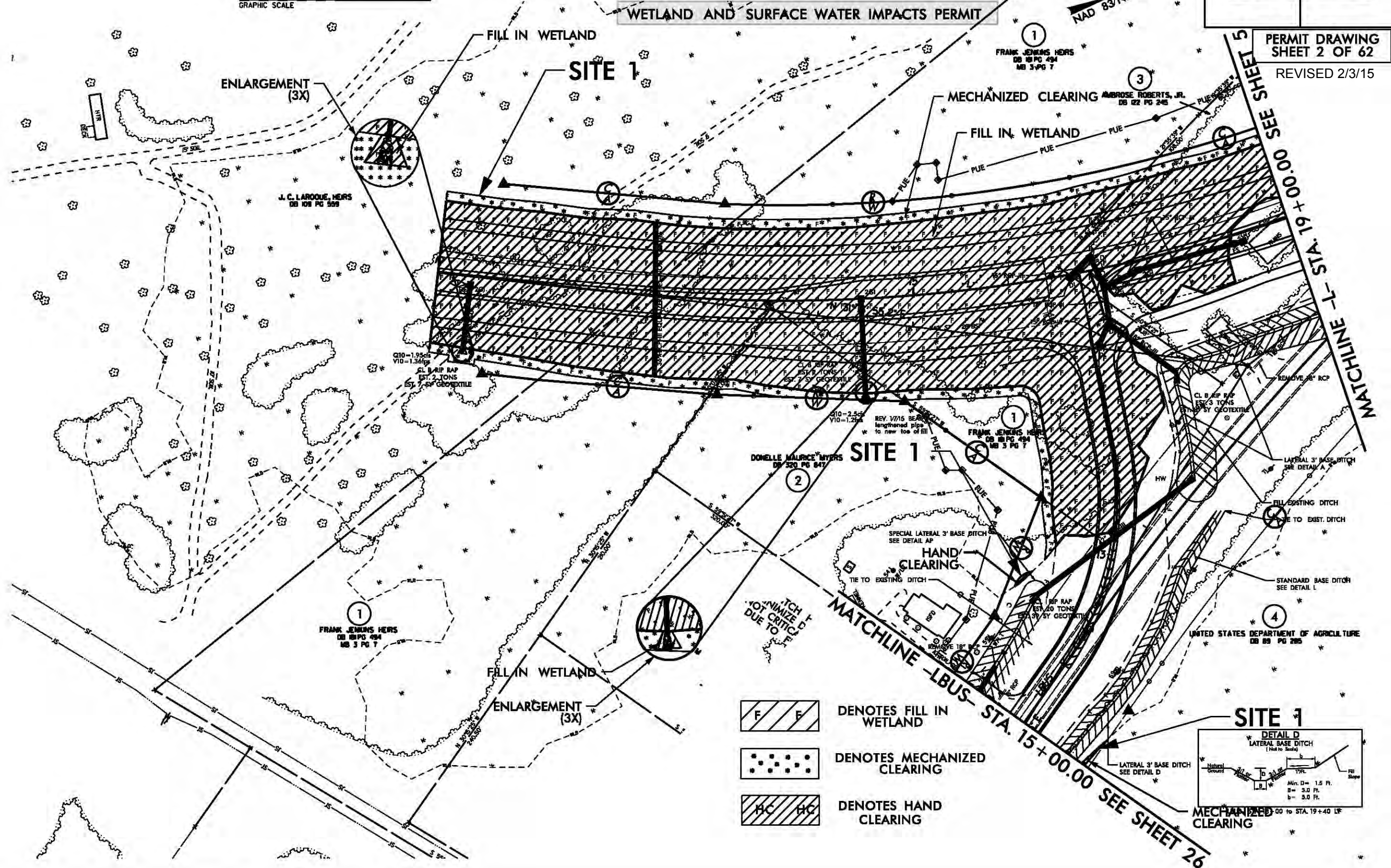


\$\$\$SYTIME\$\$\$
\$\$\$VDON\$\$\$
\$\$\$USRNAME\$\$\$

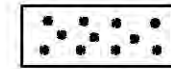


PROJECT REFERENCE NO. R-2514C	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PERMIT DRAWING
SHEET 2 OF 62
REVISED 2/3/15



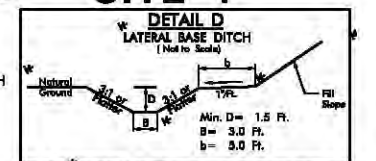
DENOTES FILL IN WETLAND



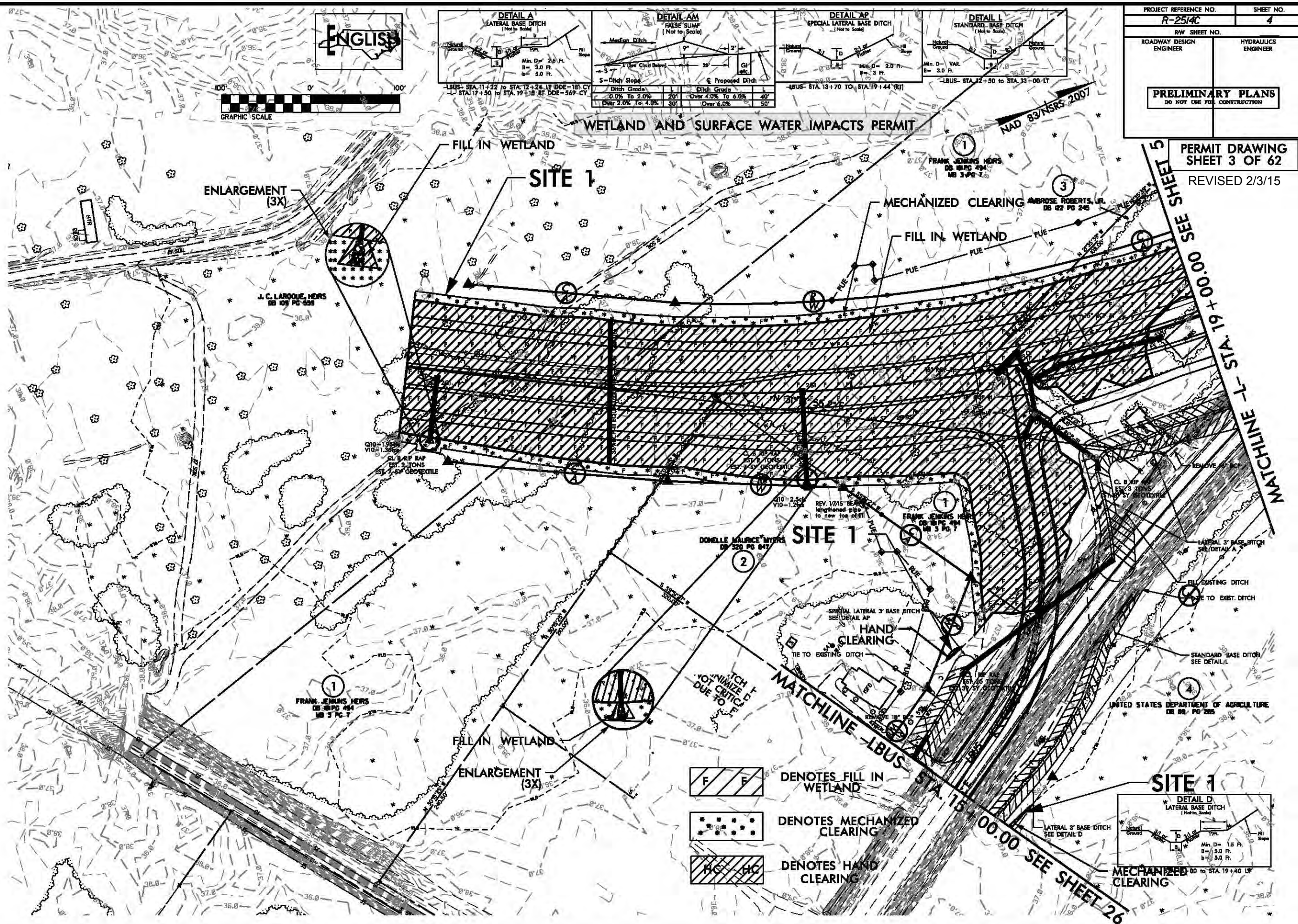
DENOTES MECHANIZED CLEARING



DENOTES HAND CLEARING



MECHANIZED CLEARING



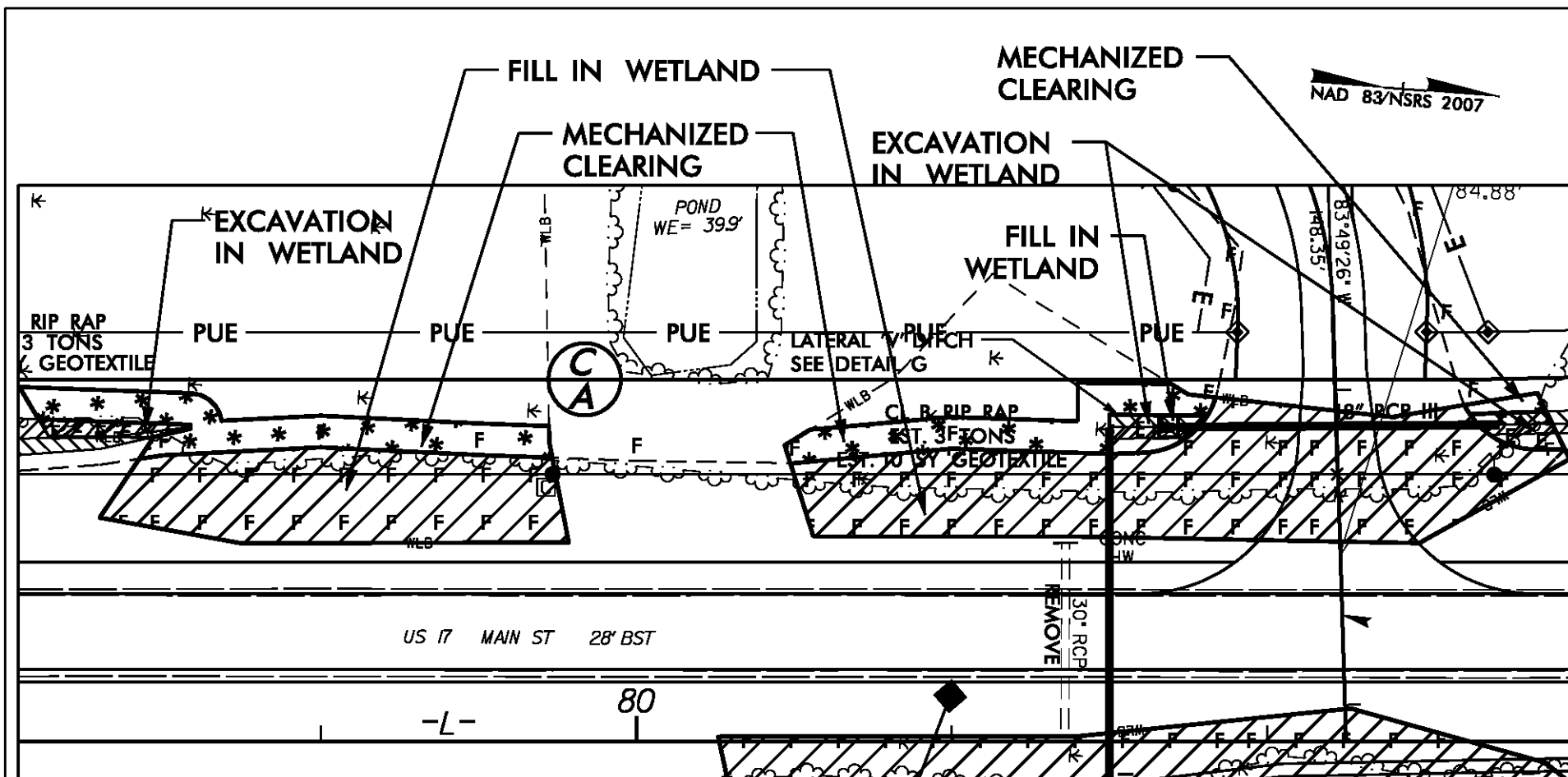
**DENOTES MECHANIZED
CLEARING**



1/30/2015
bearderson
PERMITS Environmental\Drawings\wetland\R-2514C Hyd_prm wet_psh09.dgn

REVISIONS

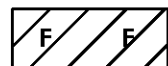
SYSTEMS\$



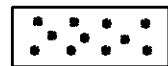
SITE 7 ENLARGEMENT



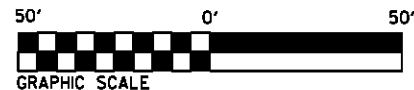
DENOTES EXCAVATION
IN WETLAND



DENOTES FILL IN
WETLAND



DENOTES MECHANIZED
CLEARING



NCDOT

DIVISION OF HIGHWAYS
JONES COUNTY

PROJECT: 34442.1.4 (R-2514C)

US 17 FROM NORTH OF
MAYSVILLE TO SOUTH OF
NC 58 NEAR POLLOCKSVILLE

SHEET 22 OF 62

Revised

1/30/15

WETLAND PERMIT IMPACT SUMMARY													
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS				
			CAMA Permanent Fill In Wetlands (ac)	404 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- STA 10+00 TO -L- STA 19+49	ROADWAY		3.65			0.42	<0.01					
2	-L- STA 21+50 RT	ROADWAY		0.09			0.04						
3	-L- STA 24+00 LT	18" RCP		<0.01		0.04	0.02						
4	-L- STA 22+95 RT TO -L- STA 84+82 RT	ROADWAY		6.82			1.43						
4	-L- STA 30+11 LT	ROADWAY						<0.01					
5	-L- STA 24+30 LT	ROADWAY		0.03		0.11	0.11						
6	-L- STA 62+27 LT TO -L- STA 84+82 LT	ROADWAY				<0.01	0.03	<0.01					
*7	-L- STA 76+79 LT TO -L- STA 82+96 RT	ROADWAY		0.26		0.01	0.08						
8	-L- STA 87+00 RT	ROADWAY		0.64			0.09						
9	-L- STA 90+56 TO -L- STA 97+96	ROADWAY		0.89			0.17						
10	-L- STA 99+50 RT TO -L- STA 105+79 RT	BRIDGE		0.95			0.15						
11	-L- STA 106+50 LT	ROADWAY				<0.01	0.03						
12	-L- STA 118+16 RT TO -L- STA 124+70 RT	ROADWAY		0.45			0.05						
**SUBTOTALS THIS SHEET:			0.00	13.78	0.00	0.17	2.60	<0.01	0.00	0.00	0	0	0

NOTES:

*Site 7 has an additional 0.06ac of unimpacted wetlands that are considered part of a total take but are not included in the impact summary table quantities above.

** Totals may not match sum of individual impacts due to rounding.

N.C.D.O.T.
DIVISION OF HIGHWAYS
JONES COUNTY
PROJECT: 34442.1.4 (R-2514C)
US 17 FROM NORTH OF MAYSVILLE TO
SOUTH OF NC 58 NEAR POLLOCKSVILLE

SHEET 61 OF 62 (REV 1/30/2015)

WETLAND PERMIT IMPACT SUMMARY													
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS				
			CAMA Permanent Fill In Wetlands (ac)	404 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)
13	-L- STA 127+87 TO -L- STA 131+32	ROADWAY		0.34		<0.01	0.11						
14	-L- STA 133+26 RT TO -L- STA 151+44 RT	ROADWAY		1.52			0.41						
15	-L- STA 143+74 LT TO -L- STA 151+54 LT	ROADWAY		0.05		0.15	0.09						
16	-L- STA 159+00 TO -L- STA 164+07	ROADWAY		0.51		0.06	0.16						
17	-L- STA 172+50	54" RCP		0.01		<0.01	<0.01		0.01		109		
18	-L- STA 180+50 LT	ROADWAY							0.02	<0.01	132	20	
19	-L- STA 194+89 -L- STA 195+00	BANK STABILIZATION** 42" RCP							0.01	<0.01**	106	58**	
20	-L- STA 256+16 TO -L- STA 262+25	ROADWAY & 2-30" RCP		1.58			0.20						
21	-L- STA 269+40	ROADWAY		0.23			0.02						
22	-LBUS- STA 19+40 RT	48" RCP							0.02	0.01	32	10	
23	-DRV1- STA 18+60 LT	ROADWAY				0.01	0.02						
***1D	-DET3- STA 18+54 TO -DET3- STA 22+60	DETOUR 3						0.03					
***2D	-DET3- STA 25+93 TO -DET3- STA 28+54	DETOUR 3			0.08			0.05					
*SUBTOTALS THIS SHEET:			0	4.24	0.08	0.23	1.00	0.08	0.06	0.01	379	88	0
*SUBTOTALS SHEET 1:			0	13.78	0.00	0.17	2.60	<0.01	0.00	0.00	0	0	0
*TOTALS:			0	18.02	0.08****	0.40	3.60	0.08****	0.06	0.01	379	88	0

NOTES:
* Totals may not match sum of individual impacts due to rounding.
** Bank Stabilization at Site 19 is due to placement of rip rap on sides of channel where existing retaining wall is removed and more natural geometry restored to channel.
*** Detour impacts shown on separate DETOUR PERMIT DRAWINGS (6 sheets)
****0.01 acre of Temporary Fill in Wetlands in the Hand Clearing areas for erosion control measures

N.C.D.O.T.
DIVISION OF HIGHWAYS
JONES COUNTY
PROJECT: 34442.1.4 (R-2514C)
US 17 FROM NORTH OF MAYSVILLE TO
SOUTH OF NC 58 NEAR POLLOCKSVILLE

SHEET 62 OF 62
(REV 1/30/2015)

1/9/2015
mgberry

R:\Hydraulics\PERMITS\Environmental\Drawings\buffer\B-2514C_Hyd.prm buf psh16.dgn

R/W REVISION 7-28-14 (DWG) - ADDED A SECOND CLAW OF PUE ON PARCEL 98Z JAMES HENRY BRYANT

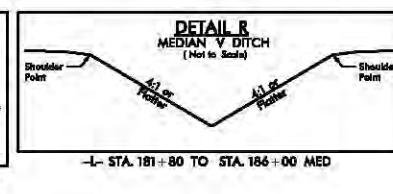
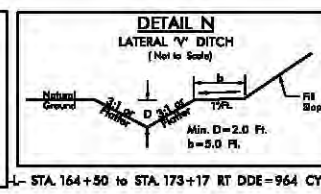
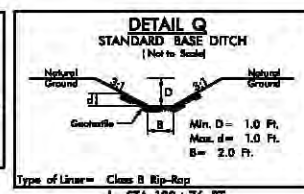
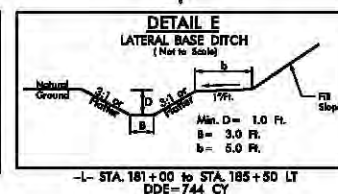
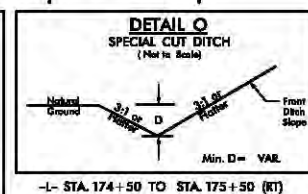
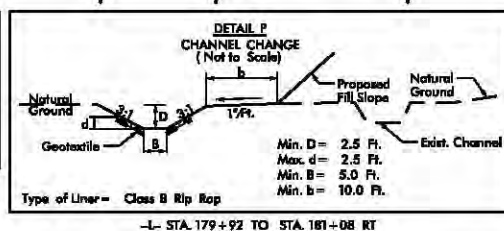
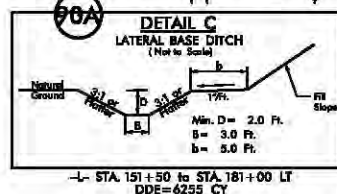
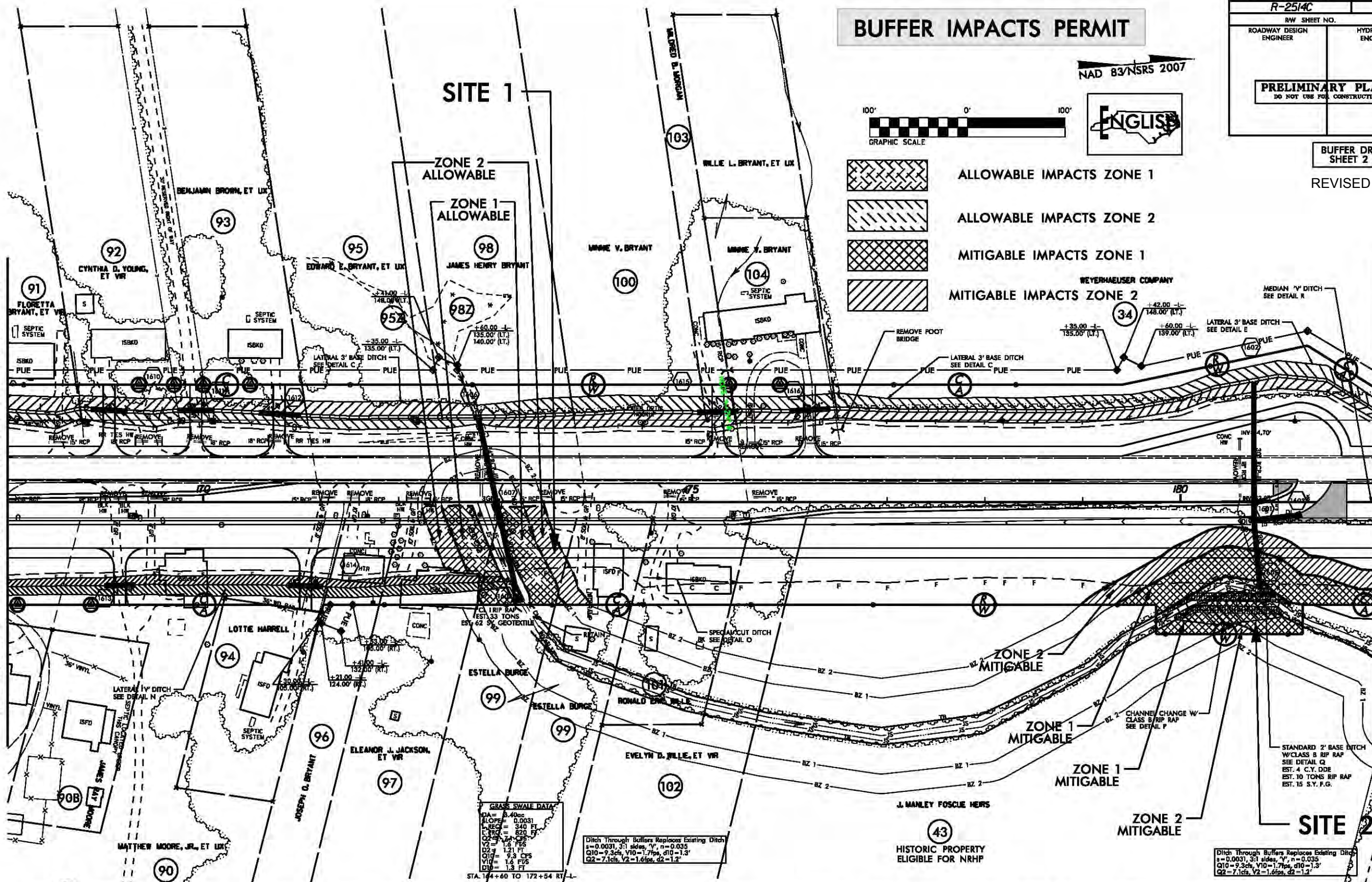
REVISIONS

8/17/99

*****SYTIME*****
*****DRAWING*****

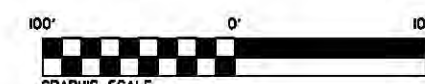
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MATCHLINE -L- STA. 182 + 00.00 SEE SHEET 17



BUFFER IMPACTS PERMIT

NAD 83/NSRS 2007



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

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BUFFER DRAWING
SHEET 2 OF 4

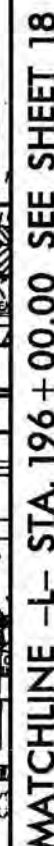
REVISED 2/3/15

SITE 2

GRASS SWALE DATA
DA = 8.40cc
SLOPE = 0.0031
V = 3.0 FT
V2 = 820 FT
Q2 = 7.1cfs
V2 = 1.6 FPS
Q10 = 9.3cfs
V10 = 1.7 FPS
Q2 = 7.1cfs, V2 = 1.6fps, d2 = 1.2'

Ditch Through Buffers Replaces Existing Ditch
s=0.0031, 3:1 sides, 1/4\"/>

Ditch Through Buffers Replaces Existing Ditch
s=0.0031, 3:1 sides, 1/4\"/>



2/3/2015
joanderson
R:\Hydraulics\PERMITS Environmental\Drawings\buffer\R-2514C_Hyd_prm_buf_psh17.dgn

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

UTILITY PERMIT PLANS JONES COUNTY

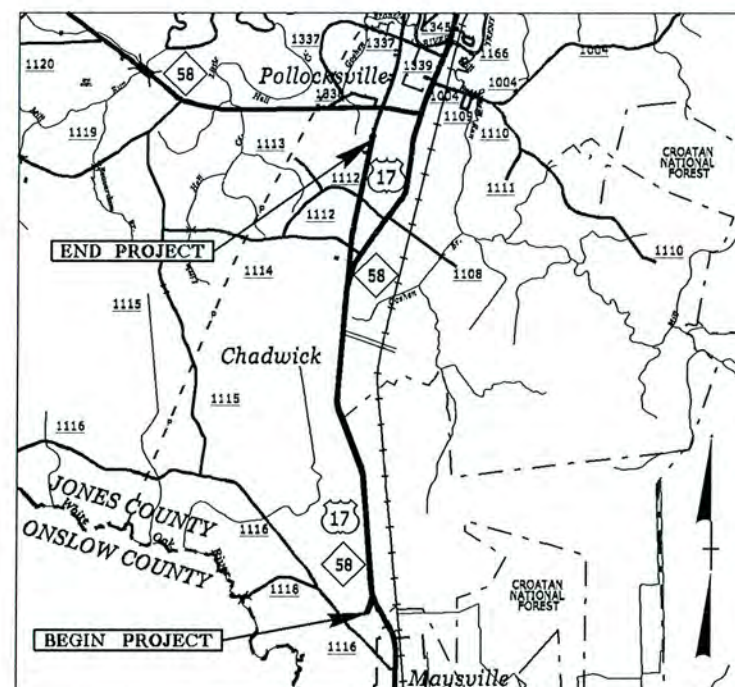
**LOCATION: US 17 FROM NORTH OF MAYSVILLE
TO SOUTH OF NC 58 NEAR POLLOCKSVILLE**

**TYPE OF WORK: RELOCATION OF WATER,
TELEPHONE AND POWER**

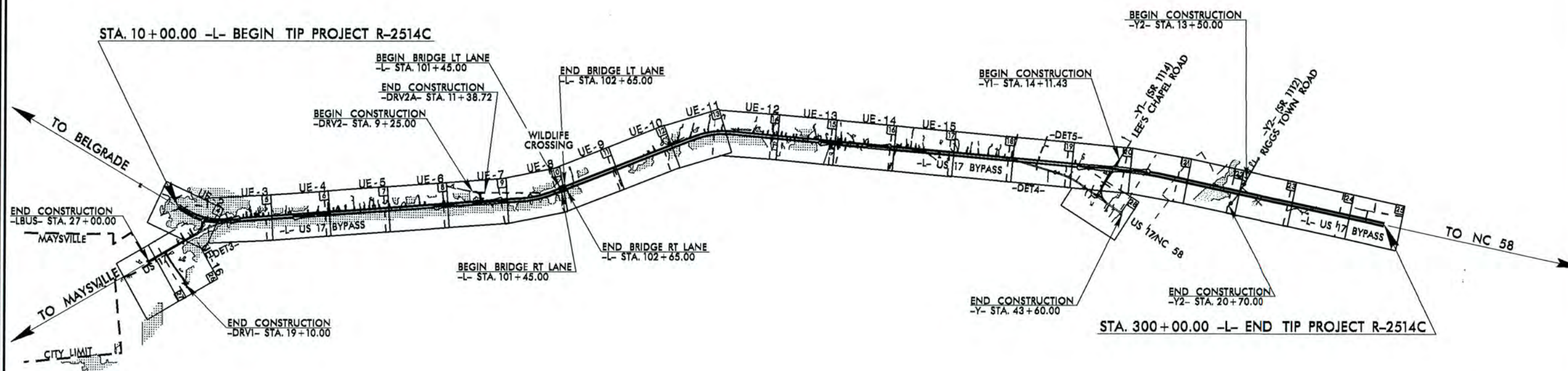
Utility Permit Drawing
Sheet 1 of 20
Revised 1/30/15

NAD 83/
NSRS 2007

TIP PROJECT:



VICINITY MAP

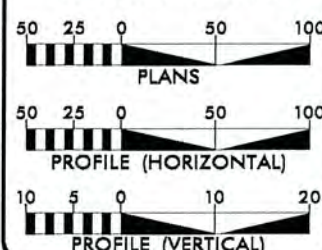


THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.
THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS BEING AT DESIGNATED POINTS ONLY.

SEE SHEET 18-A FOR -DET4- PLAN
SEE SHEET 18-B FOR -DET5- PLAN
SEE SHEETS 26-A & 26-B FOR -DET3- PLAN

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

GRAPHIC SCALES



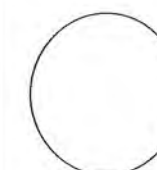
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UE-1	TITLE SHEET
UE-2 THRU UE-16	UTILITY ENGINEERING SHEETS

WATER AND SEWER OWNERS ON PROJECT

- (1) WATER - JONES COUNTY
- (2) FIBER OPTIC - CENTURYLINK
- (3) POWER - DUKE ENERGY PROGRESS

SEAL



PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES UNIT
UTILITIES ENGINEERING

1555 MAIL SERVICES CENTER
RALEIGH NC 27699-1555
PHONE (919) 707-6690
FAX (919) 250-4151

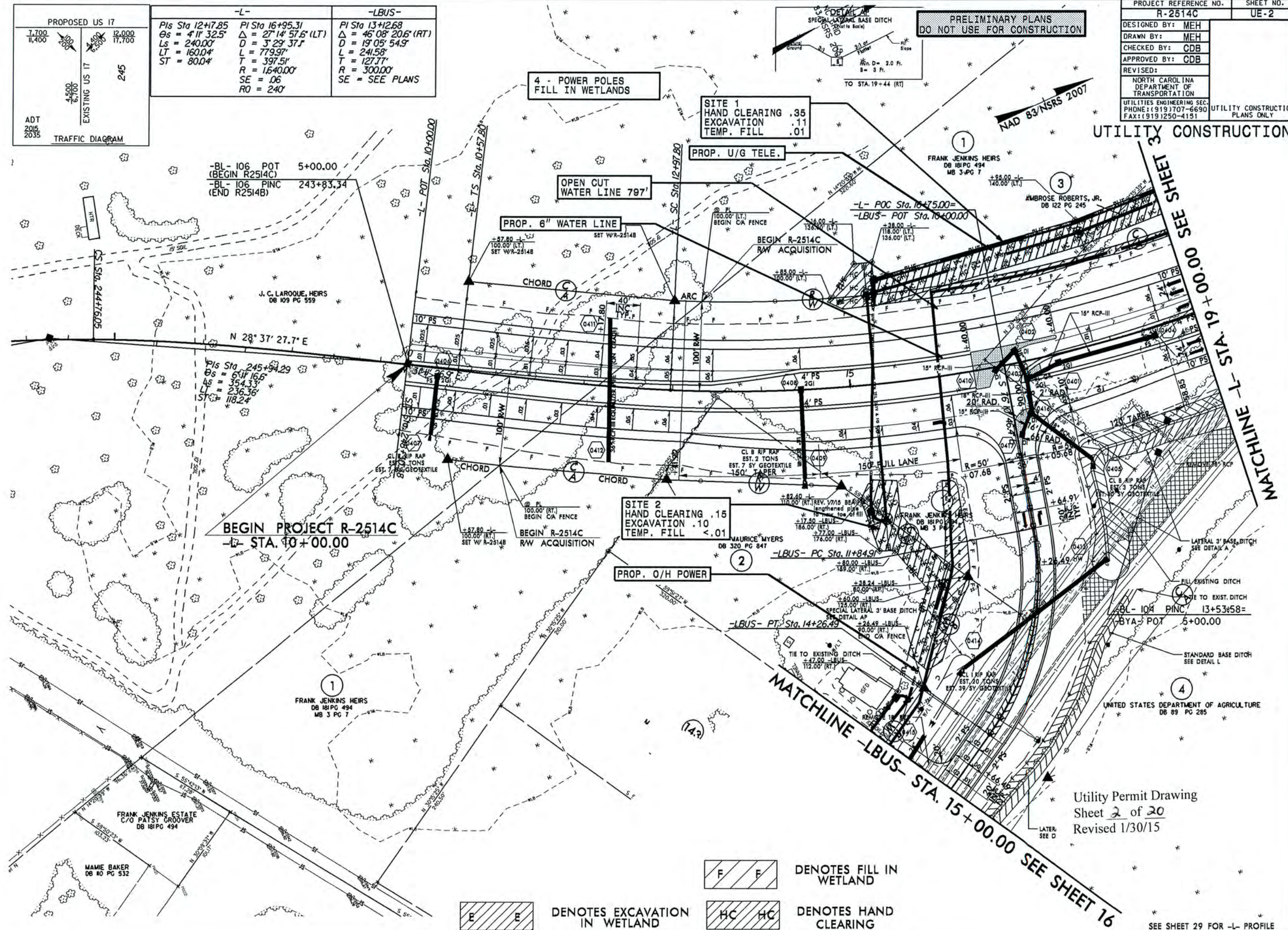
Roger Worthington, P.E. UTILITIES SECTION ENGINEER
Corey Bousquet, P.E. UTILITIES SQUAD LEADER PROJECT ENGINEER
Mariko Hafeez UTILITIES PROJECT DESIGNER

PROPOSED US 17	
1.700 11,400	12.000 17,700
EXISTING US 17	
4.500 6,700	245
TRAFFIC DIAGRAM	
ADT 2015 2035	

-L-		-LBUS-
PI Sta 12+78.5	PI Sta 16+95.31	PI Sta 13+12.68
$\Delta = 41^\circ 32' 5"$	$\Delta = 27^\circ 14' 57.6" (LT)$	$\Delta = 46^\circ 08' 20.6" (RT)$
LS = 240.00'	D = 3' 29' 37.1"	D = 19' 05' 54.9"
LT = 160.04'	L = 779.97'	L = 241.58'
ST = 80.04'	T = 397.51'	T = 127.77'
	R = 1640.00'	R = 300.00'
	SE = .06	SE = SEE PLANS
	RO = 240'	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-2
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY



E E
DENOTES EXCAVATION
IN WETLAND

F F
DENOTES FILL IN
WETLAND

HC HC
DENOTES HAND
CLEARING

Utility Permit Drawing
Sheet 2 of 20
Revised 1/30/15

SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 40 FOR -LBUS- PROFILE

REVISIONS

30-AN-2015 15407
Utility Permit and Narrative (R-2514C) Ut-dj4-UE2.psh.dgn
12/14/2015

5/14/99

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-3
DESIGNED BY:	MEH
DRAWN BY:	MEH
CHECKED BY:	CDB
APPROVED BY:	CDB
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	
UTILITY CONSTRUCTION PLANS ONLY	

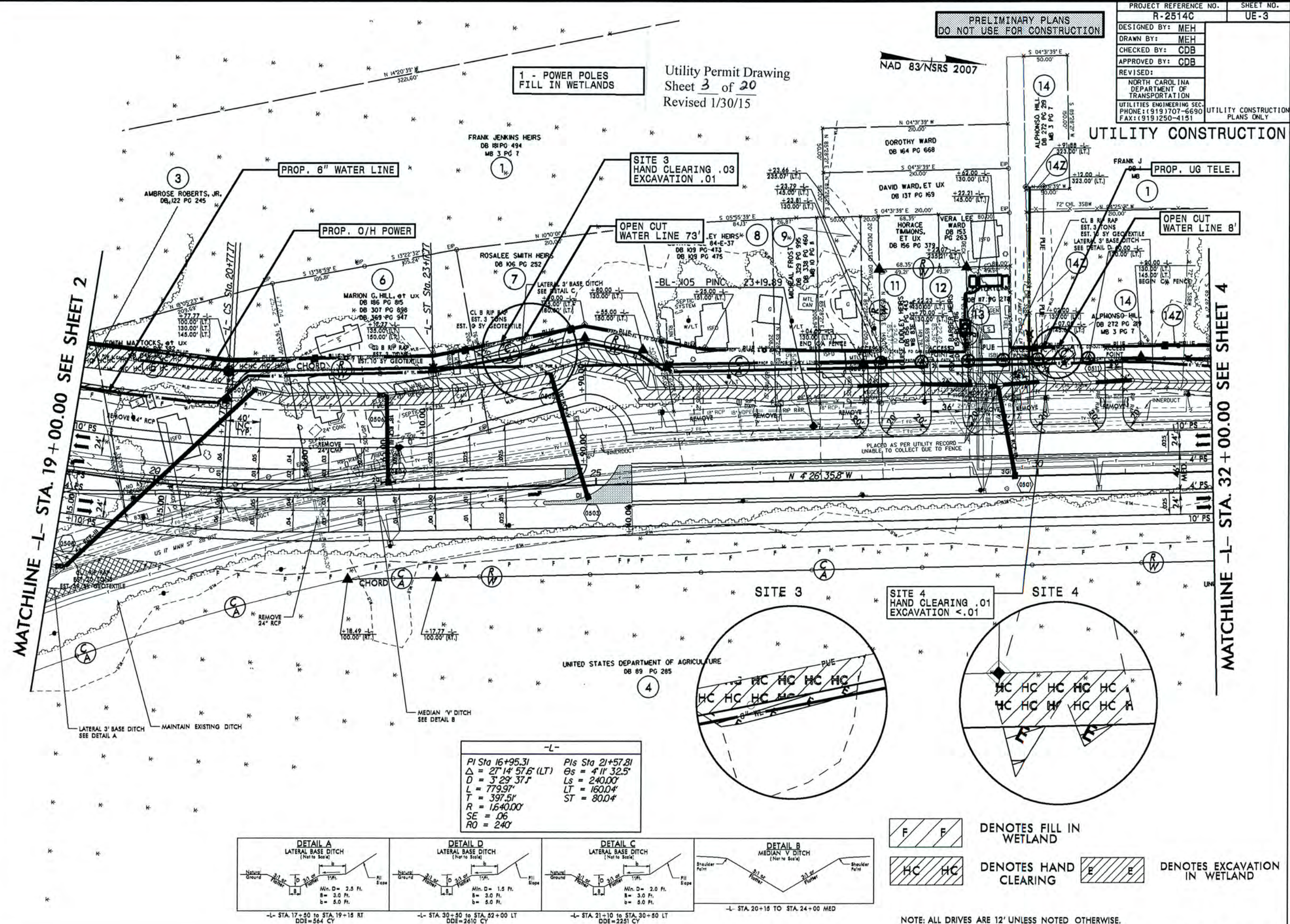
Utility Permit Drawing
Sheet 3 of 20
Revised 1/30/15

NAD 83/NSRS 2007

1 - POWER POLES
FILL IN WETLANDS

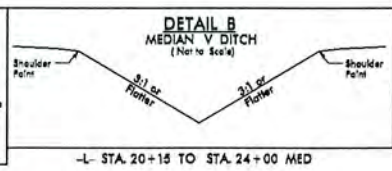
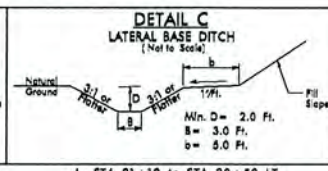
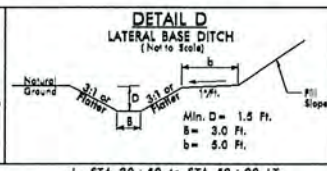
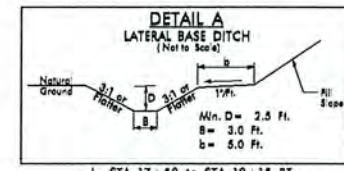
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MATCHLINE -L- STA. 32+00.00 SEE SHEET 4



-L-

PI Sta 16+95.31	PIs Sta 21+57.81
$\Delta = 27^\circ 14' 57.6''$ (LT)	$\Theta s = 4^\circ 11' 32.5''$
$D = 3^\circ 29' 37.7''$	$Ls = 240.00'$
$L = 779.97'$	$LT = 160.04'$
$T = 397.51'$	$ST = 80.04'$
$R = 1,640.00'$	
$SE = .06$	
$RO = 240'$	



DENOTES FILL IN WETLAND

DENOTES HAND CLEARING

DENOTES EXCAVATION IN WETLAND

NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS

REVISIONS

30-MAN-2015 1640
9-NCE-Permit Plans and Narrative R-2514C Ut. rdy5 UE3.psh.dgn
ASSISTANT ENGINEER

5/14/99

REVISIONS

30-14N-2015 1422
and Narrative\R-2514C_Ut.dwg, UE4, psh.dgn
3/23/2015

4 - POWER POLES
FILL IN WETLANDS

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-4
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

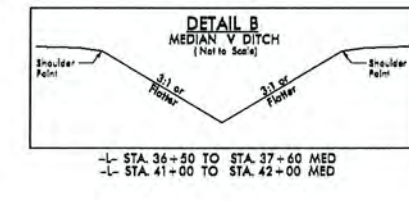
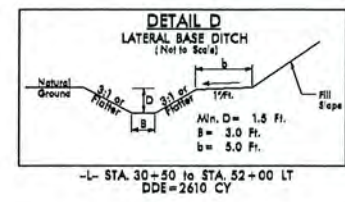
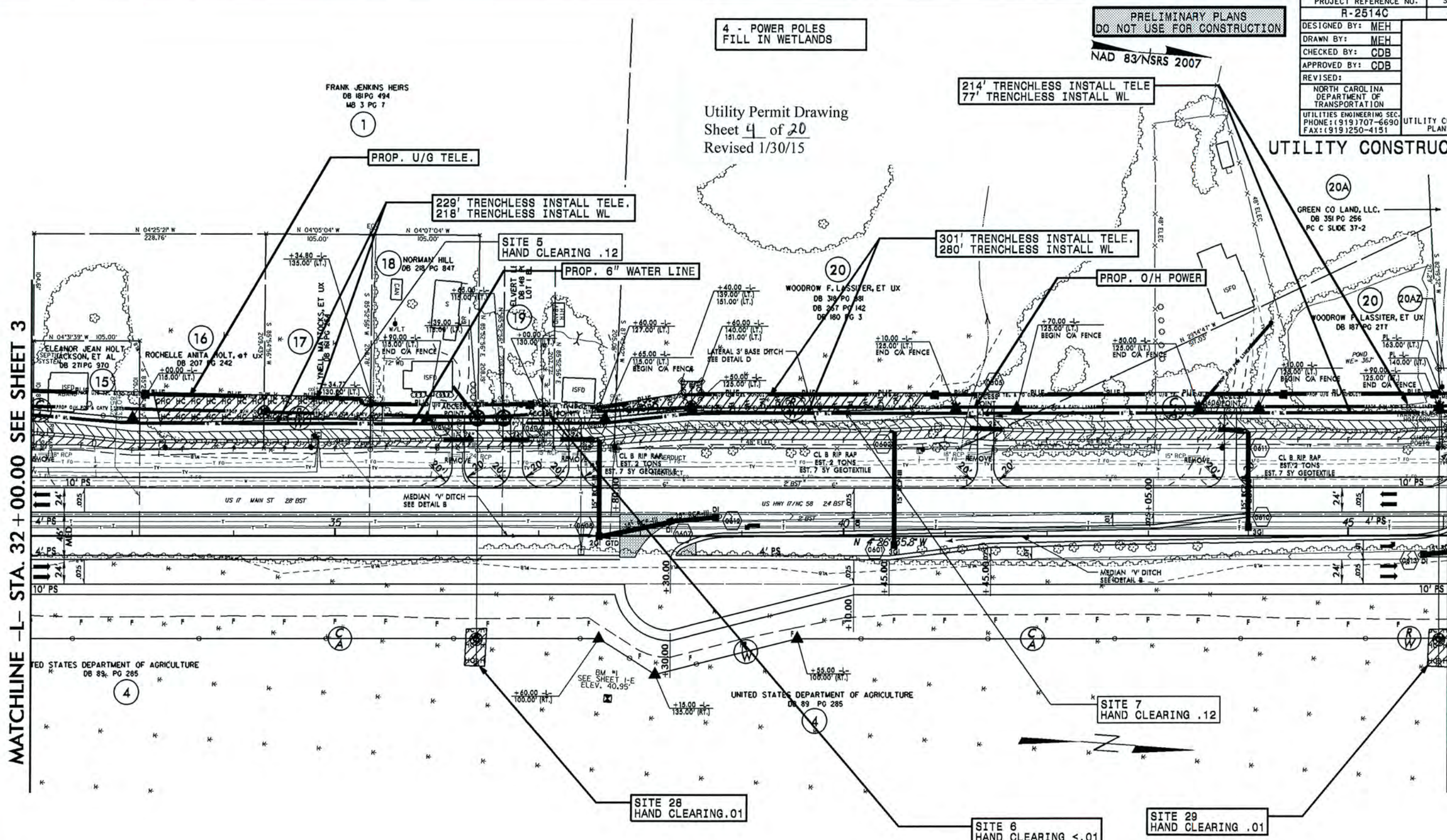
Utility Permit Drawing
Sheet 4 of 20
Revised 1/30/15

NAD 83/NSRS 2007

UTILITY CONSTRUCTION

MATCHLINE -L- STA. 32 + 00.00 SEE SHEET 3

MATCHLINE -L- STA. 46 + 00.00 SEE SHEET 5



F F DENOTES FILL IN WETLAND

HC HC DENOTES HAND CLEARING

NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

SEE SHEET 30 FOR -L- PROFILE

5/14/99

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-5
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITY ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

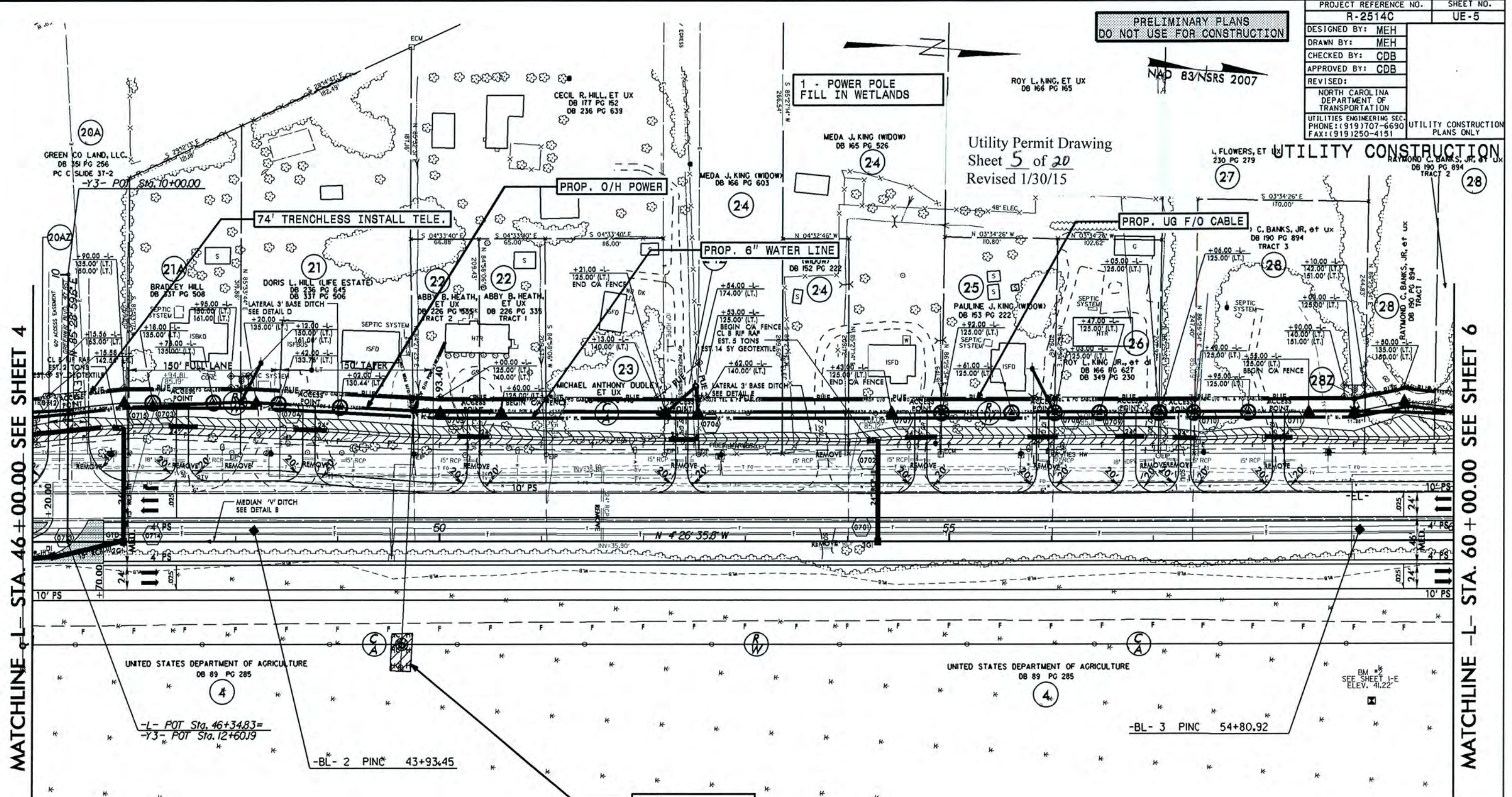
NAD 83/NSRS 2007

Utility Permit Drawing
Sheet 5 of 20
Revised 1/30/15

UTILITY CONSTRUCTION
RAYMOND C. BANKS, JR., ET UX
DB 190 PG 894
TRACT 2

MATCHLINE -L- STA. 46+00.00 SEE SHEET 4

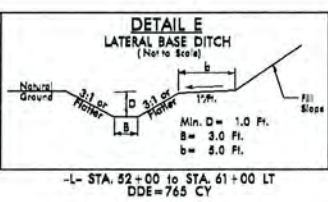
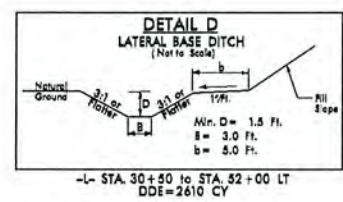
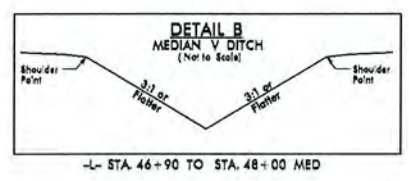
MATCHLINE -L- STA. 60+00.00 SEE SHEET 6



UNITED STATES DEPARTMENT OF AGRICULTURE
DB 89 PG 285

UNITED STATES DEPARTMENT OF AGRICULTURE
DB 89 PG 285

SITE 8
HAND CLEARING .01



F F DENOTES FILL IN WETLAND
HC HC DENOTES HAND CLEARING

NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAYE ALL DRIVES TO BACK OF TURNOUT RADIIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS. SEE SHEET 30 FOR -L- PROFILE

REVISIONS

30 JAN-2015 16:24
and Narrative R-2514C.Ut...dy7 UE5.psh.dgn

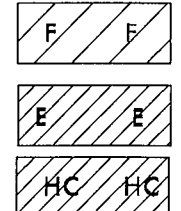
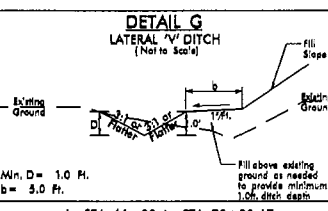
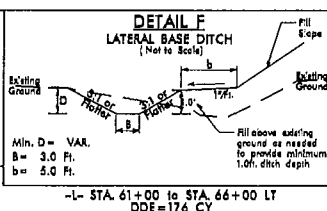
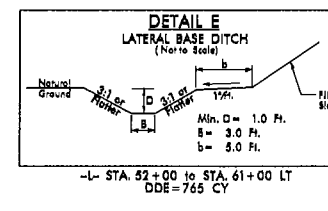
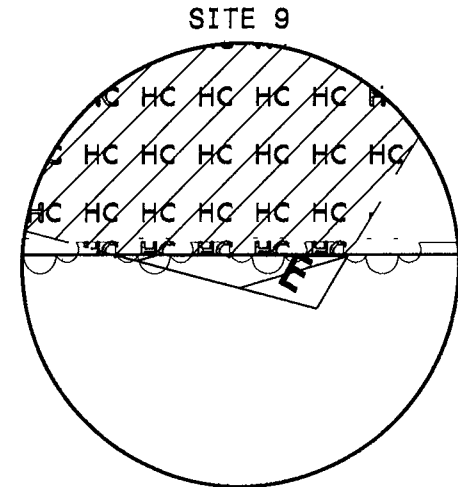
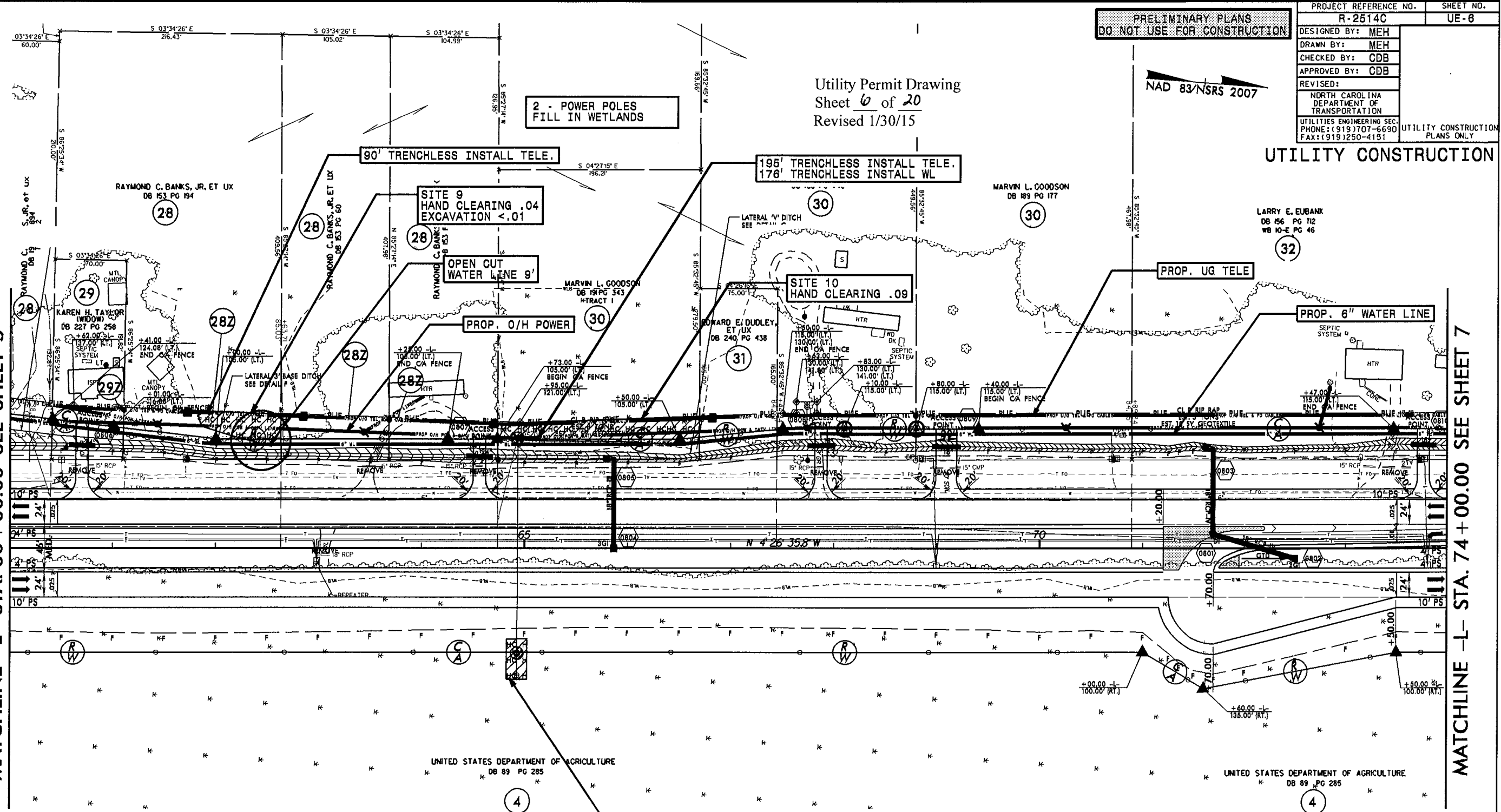
5/14/99

30-JAN-2015 14:29
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REVISIONS

MATCHLINE -L- STA. 60+00.00 SEE SHEET 5

MATCHLINE -L- STA. 74+00.00 SEE SHEET 7



NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.
SEE SHEET 31 FOR -L- PROFILE

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Utility Permit Drawing
Sheet 6 of 20
Revised 1/30/15

NAD 83/NSRS 2007

PROJECT REFERENCE NO.	R-2514C	SHEET NO.	UE-6
DESIGNED BY:	MEH		
DRAWN BY:	MEH		
CHECKED BY:	ODD		
APPROVED BY:	ODD		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

5/14/99

Utility Permit Drawing
Sheet 7 of 20
Revised 1/30/15

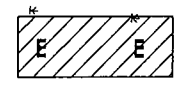
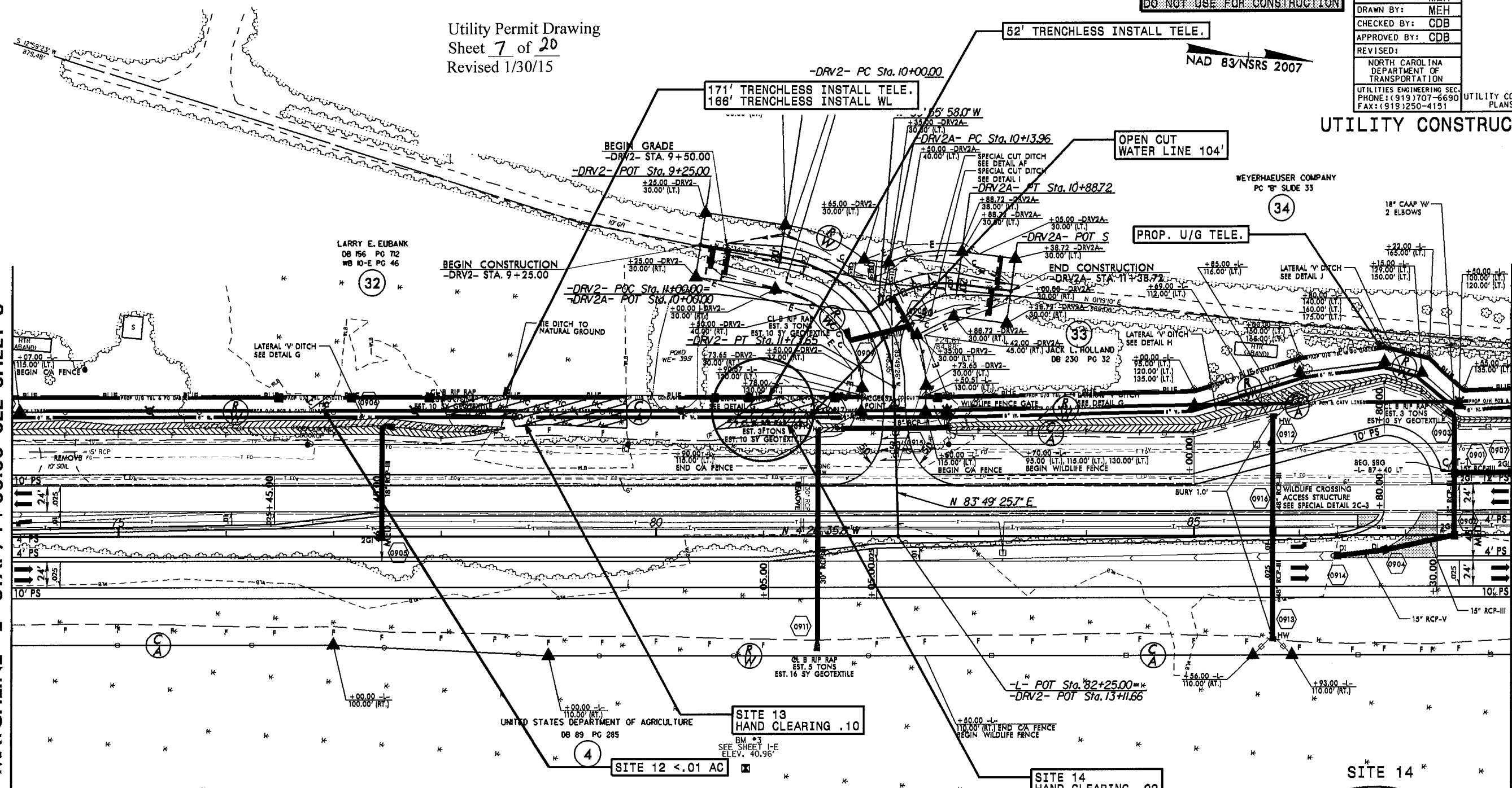
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.	R-2514C	SHEET NO.	UE-7
DESIGNED BY:	MEH		
DRAWN BY:	MEH		
CHECKED BY:	CDB		
APPROVED BY:	CDB		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			UTILITY CONSTRUCTION PLANS ONLY

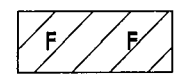
UTILITY CONSTRUCTION

MATCHLINE -L- STA. 74+00.00 SEE SHEET 6

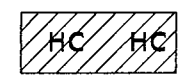
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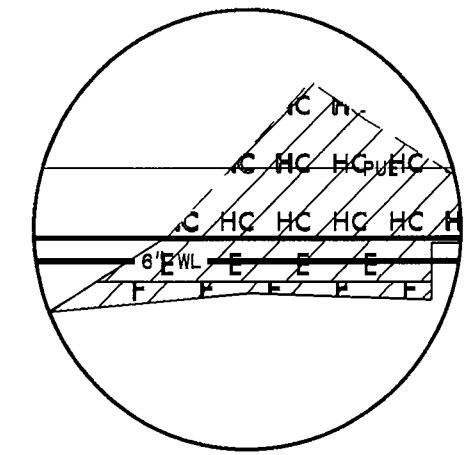
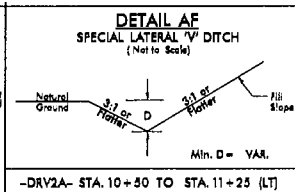
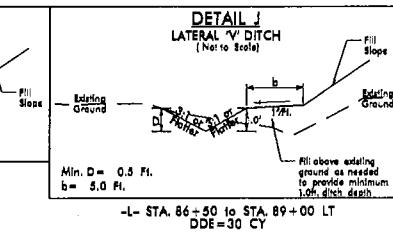
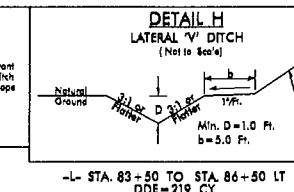
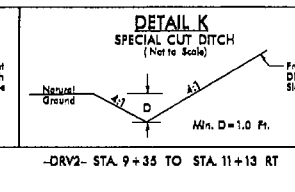
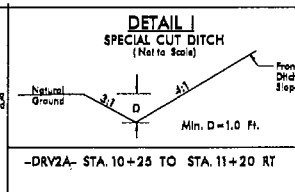
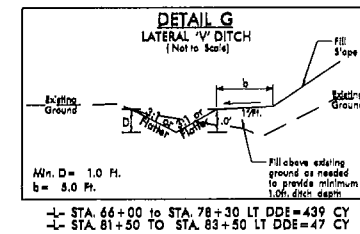
DENOTES EXCAVATION
IN WETLAND



DENOTES FILL IN
WETLAND



DENOTES HAND
CLEARING



NOTE: SBG - "SHOULDER BERM GUTTER"
ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.
SEE SHEET 2C-1 FOR WILDLIFE FENCE DETAIL.

SEE SHEET 31 FOR -L- PROFILE
SEE SHEET 43 FOR -DRV2- PROFILE
SEE SHEET 43 FOR -DRV2A- PROFILE

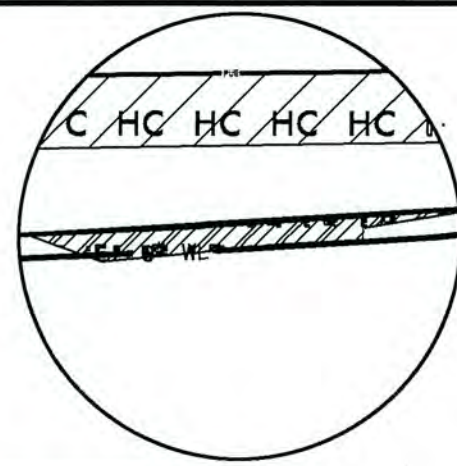
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ASSISTANT ENGINEER

5/14/99

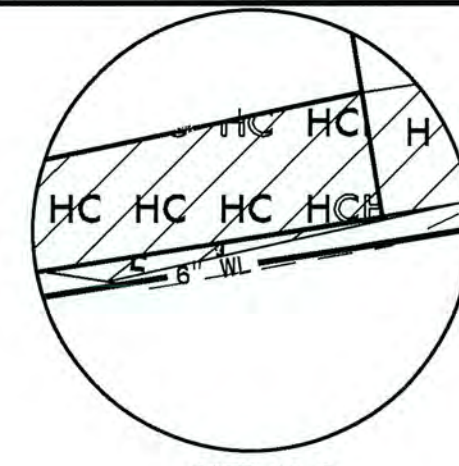
PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-8
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

2- POWER POLE
FILL IN WETLAND



SITE 15-1



SITE 15-2

-L-		
Pls Sta 92+25.52	Pls Sta 95+60.26	Pls Sta 98+92.91
θs = 2°19'44.7"	Δ = 12°26'19.1" (LT)	θs = 2°19'44.7"
Ls = 200.00'	D = 2°19'44.7"	Ls = 200.00'
LT = 133.34'	L = 534.05'	LT = 133.34'
ST = 66.68'	T = 268.08'	ST = 66.68'
	R = 2,460.00'	
	SE = .05	
	RO = 200'	

NAD 83/NSRS 2007

Utility Permit Drawing
Sheet 8 of 20
Revised 1/30/15

PROP. 6" WATER LINE

OPEN CUT
WATER LINE 350'

WEYERHAEUSER COMPANY
PC "B" SLIDE 33

34

WEYERHAEUSER COMPANY
PC "B" SLIDE 33

34

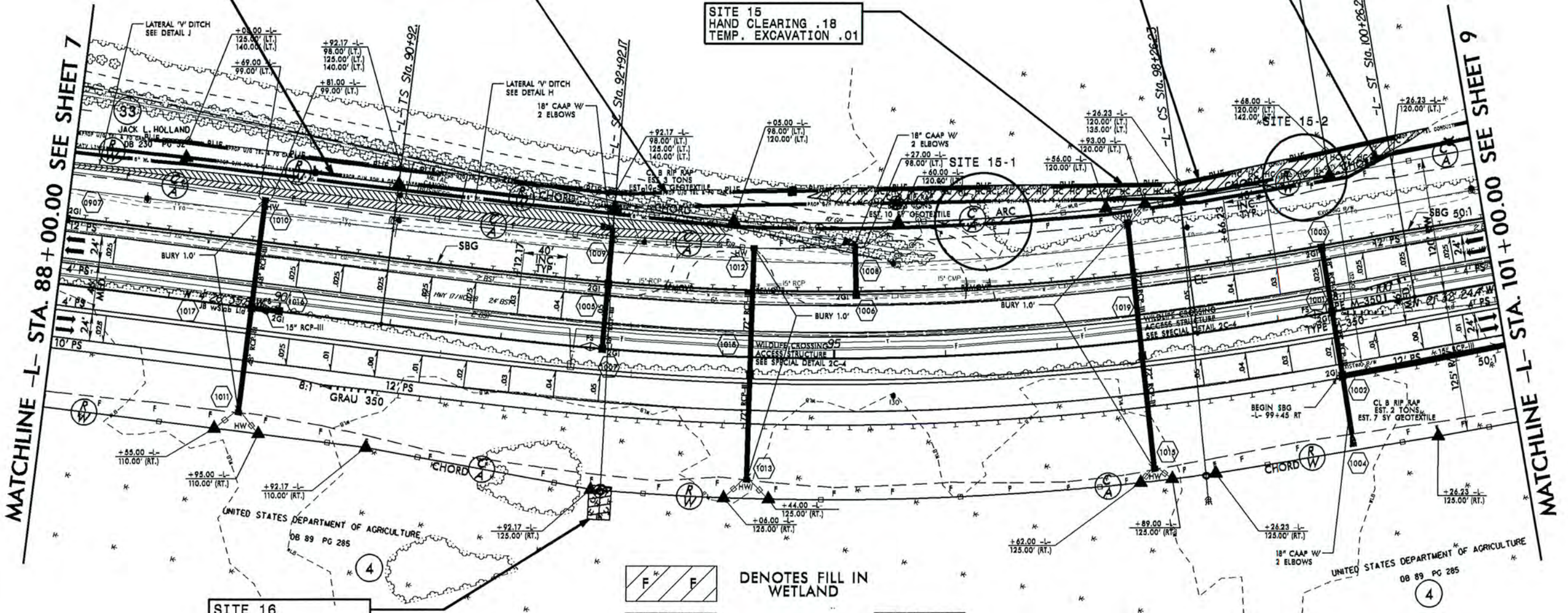
SITE 15
HAND CLEARING .18
TEMP. EXCAVATION .01

PROP. O/H POWER

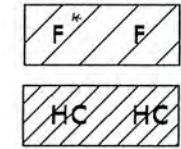
PROP. U/G TELE.

MATCHLINE -L- STA. 88+00.00 SEE SHEET 7

MATCHLINE -L- STA. 101+00.00 SEE SHEET 9



SITE 16
HAND CLEARING .01



DENOTES FILL IN
WETLAND

DENOTES HAND
CLEARING

DENOTES EXCAVATION
IN WETLAND

NOTE: SBG - "SHOULDER BERM, GUTTER"
SEE SHEET 2C-1 FOR WILDLIFE FENCE DETAIL.

SEE SHEET 32 FOR -L- PROFILE

REVISIONS

02-FEB-2015 07:46
PLANES and Narrative R-2514C.Ut-UE8.psh.dgn
C:\Users\psh\Documents\Projects\R-2514C.Ut-UE8.psh.dgn

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-9
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC.	UTILITY CONSTRUCTION PLANS ONLY
PHONE: (919) 707-6690	
FAX: (919) 250-4151	

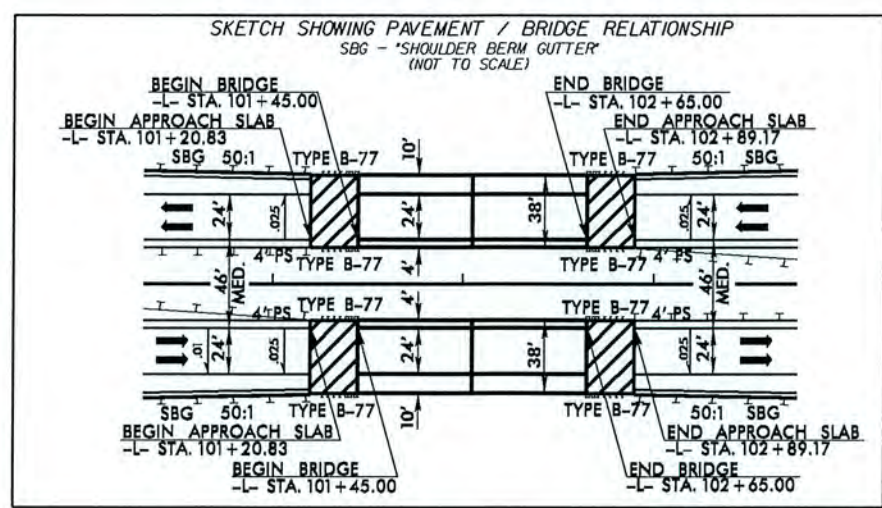
UTILITY CONSTRUCTION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83/NSRS 2007

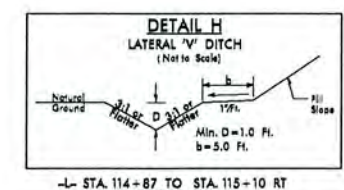
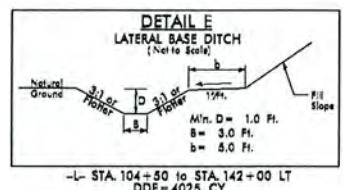
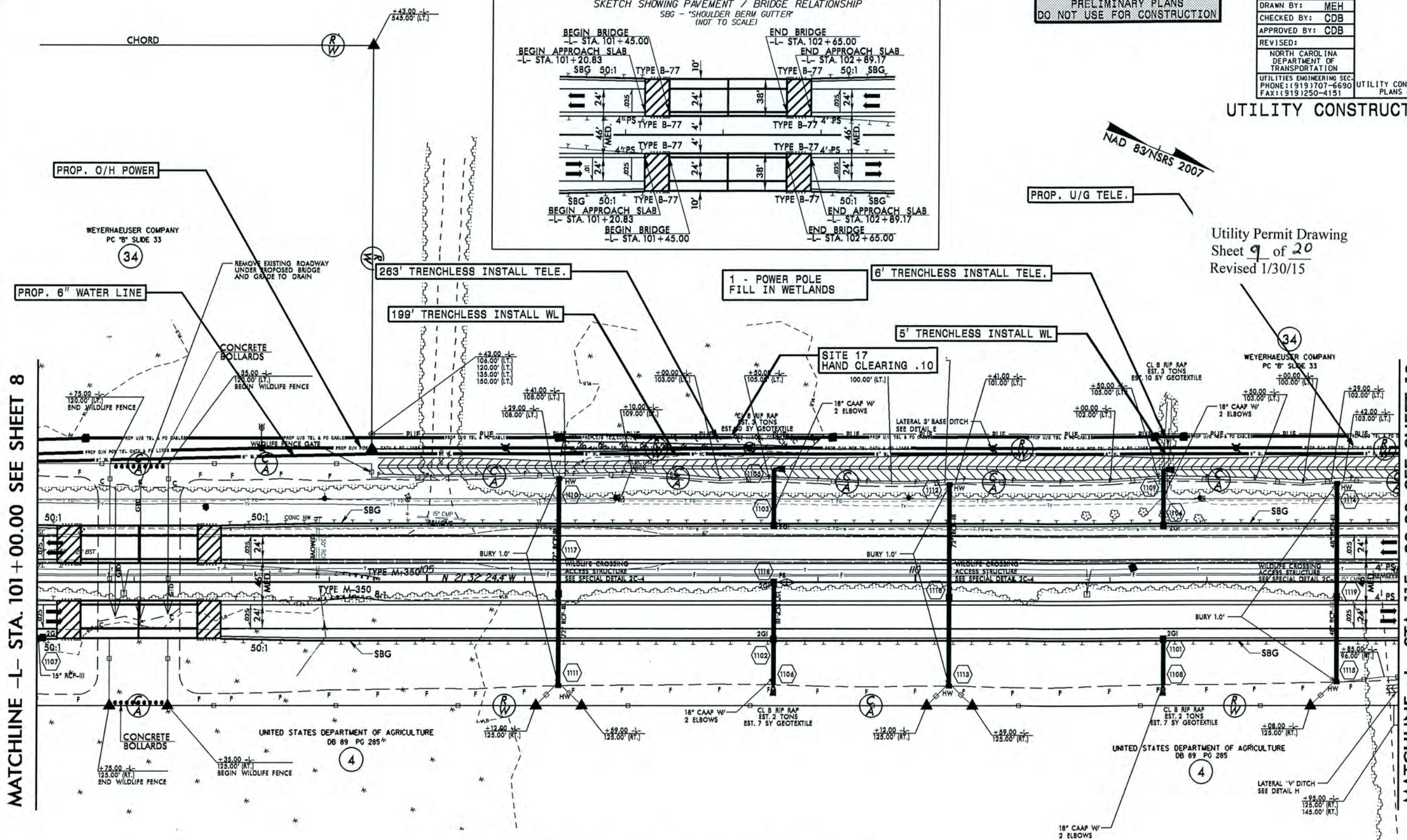
PROP. U/G TELE.

Utility Permit Drawing
Sheet 9 of 20
Revised 1/30/15

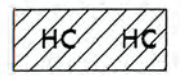


MATCHLINE -L- STA. 101+00.00 SEE SHEET 8

MATCHLINE -L- STA. 115+00.00 SEE SHEET 10



DENOTES FILL IN WETLAND



DENOTES HAND CLEARING

NOTE: SBG - "SHOULDER BERM GUTTER"
SEE SHEET 2C-1 FOR WILDLIFE FENCE DETAIL.
SEE SHEET 32 FOR -L- PROFILE
SEE SHEET 44 FOR -DRV3- PROFILE
SEE SHEETS S-1 THRU S-3 FOR STRUCTURE PLANS

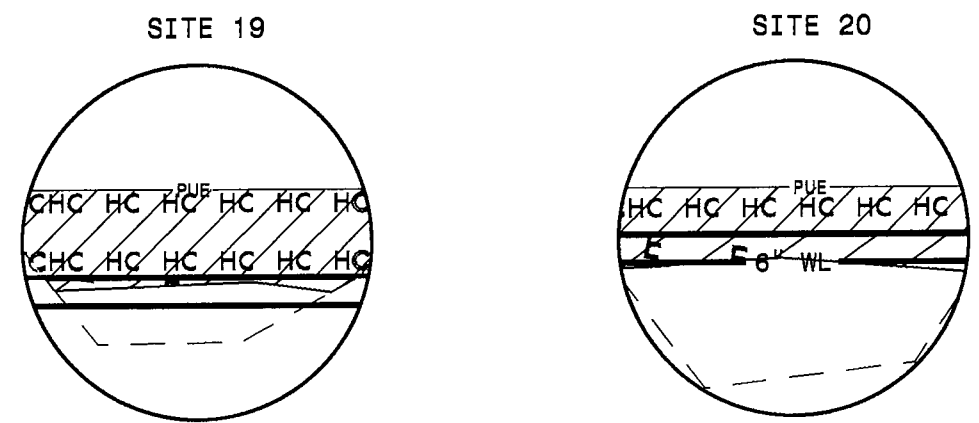
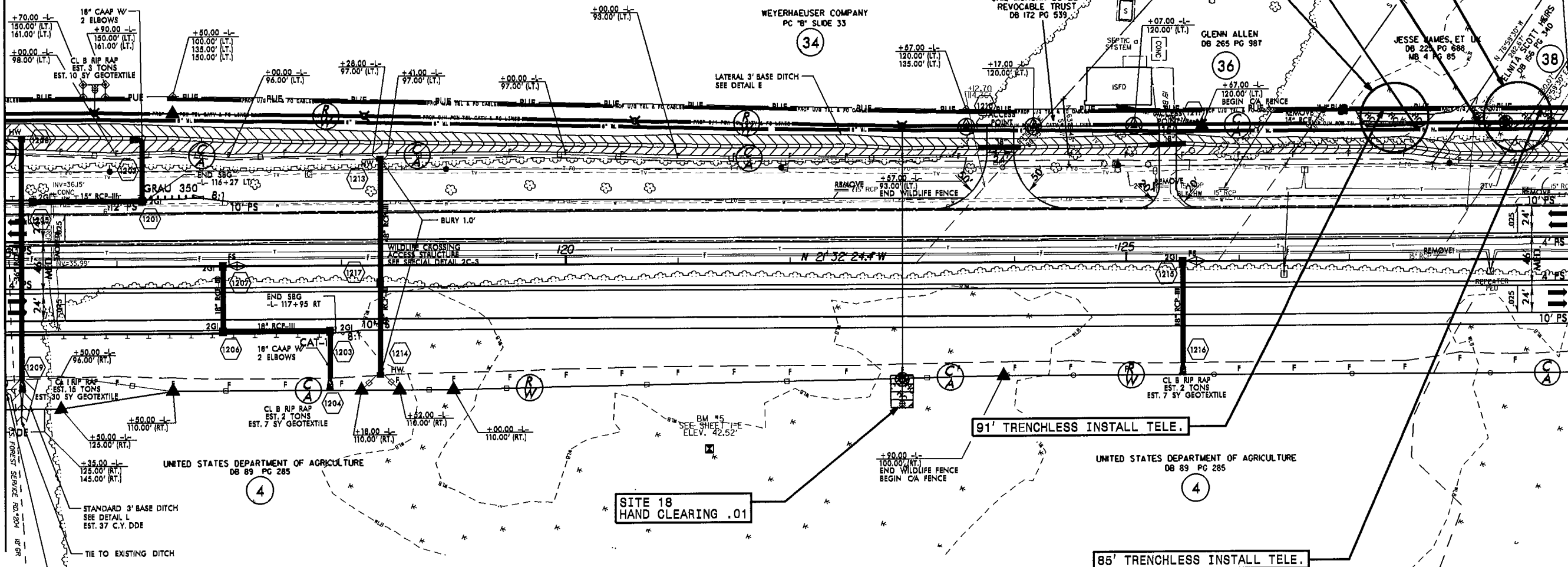
REVISIONS

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5/14/99
30-JAN-2015 14:52
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and Narrative\2514C\Utility\12-UE10.psh.dgn

REVISIONS

MATCHLINE -L- STA. 115+00.00 SEE SHEET 9



- DENOTES FILL IN WETLAND
- DENOTES HAND CLEARING
- DENOTES EXCAVATION IN WETLAND

NOTE: SBG - "SHOULDER BERM GUTTER"
ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS. SEE SHEET 33 FOR -L- PROFILE
SEE SHEET 2C-1 FOR WILDLIFE FENCE DETAIL. SEE SHEET 44 FOR -DRY- PROFILE

2- POWER POLES
FILL IN WETLANDS

Utility Permit Drawing
Sheet 10 of 20
Revised 1/30/15

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

SITE 20
HAND CLEARING .02
EXCAVATION <.01

OPEN CUT
WATER LINE 66'

OPEN CUT
WATER LINE 43'

SITE 19
HAND CLEARING .02
EXCAVATION <.01

CAROLYN M. BLACKMON
CAIL MORGAN BUTLE
REVOCABLE TRUST
DB 172 PG 539

GLENN ALLEN
DB 265 PG 987

JESSE JAMES, ET UX
DB 225 PG 688

LINNA SCOTT HEERS
DB 145 PG 340

JOSEPH L. JACKSON, ET UX
DB 301 PG 137

UTILITY CONSTRUCTION
PLANS ONLY

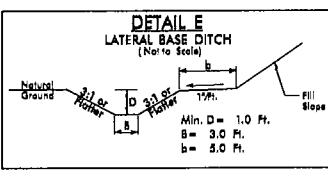
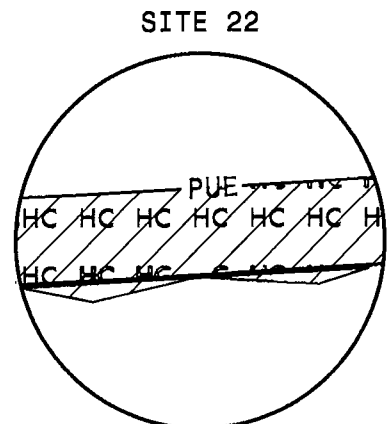
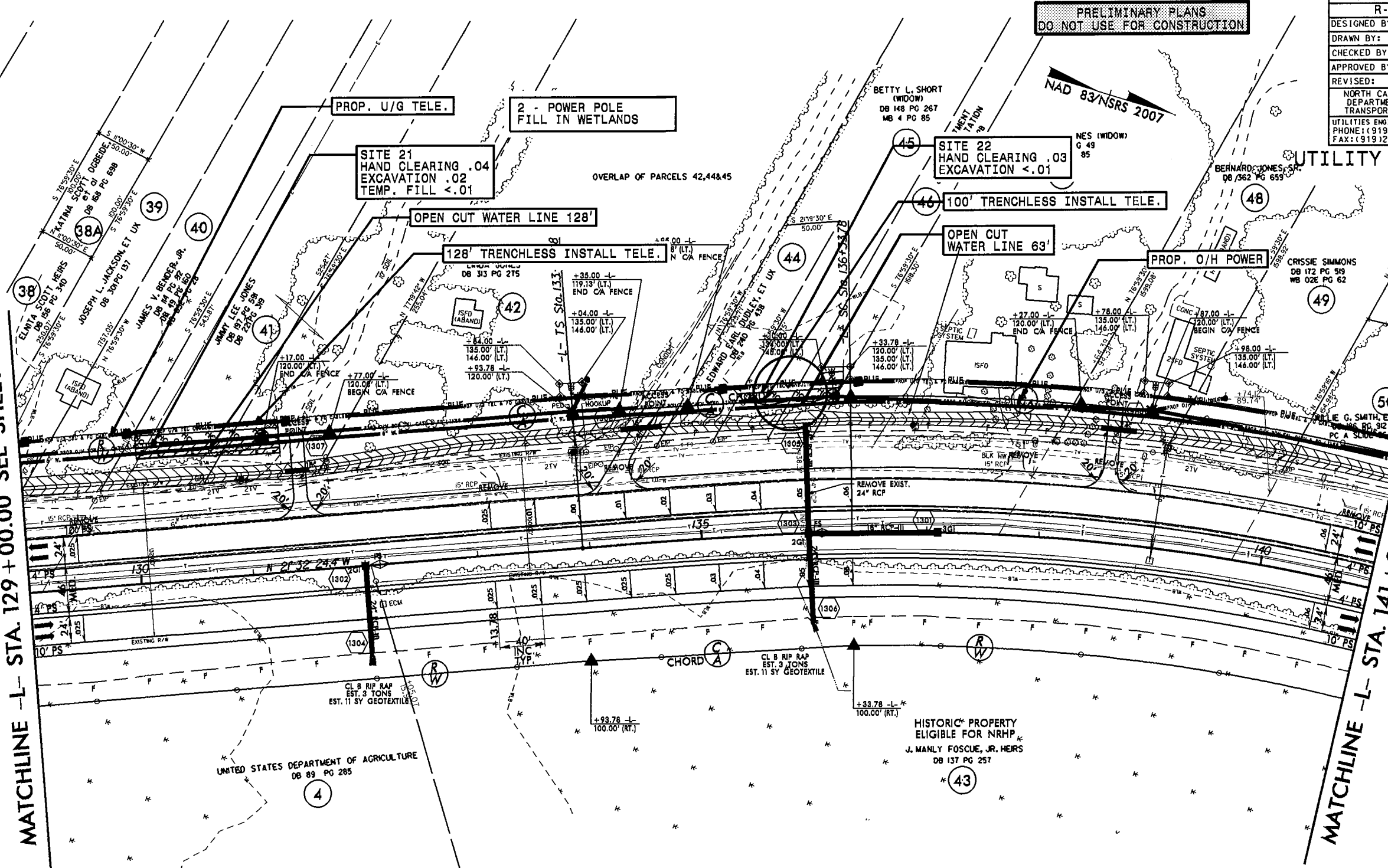
MATCHLINE -L- STA. 129+00.00 SEE SHEET 11

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-11
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

MATCHLINE -L- STA. 129+00.00 SEE SHEET 10

MATCHLINE -L- STA. 141+00.00 SEE SHEET 12



Utility Permit Drawing
Sheet 11 of 20
Revised 1/30/15

-L-	
Pis Sta 135+53.82	Pi Sta 139+50.54
Δs = 3° 38' 50.9"	Δ = 19° 04' 40.6" (RT)
Ls = 240.00'	D = 3° 02' 22.4"
LT = 1600.3'	L = 627.65'
ST = 800.3'	T = 316.76'
	R = 1885.00'
	SE = .06
	RO = 240'

- DENOTES FILL IN WETLAND
- DENOTES EXCAVATION IN WETLAND
- DENOTES HAND CLEARING

NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

SEE SHEET 33 FOR -L- PROFILE

REVISIONS

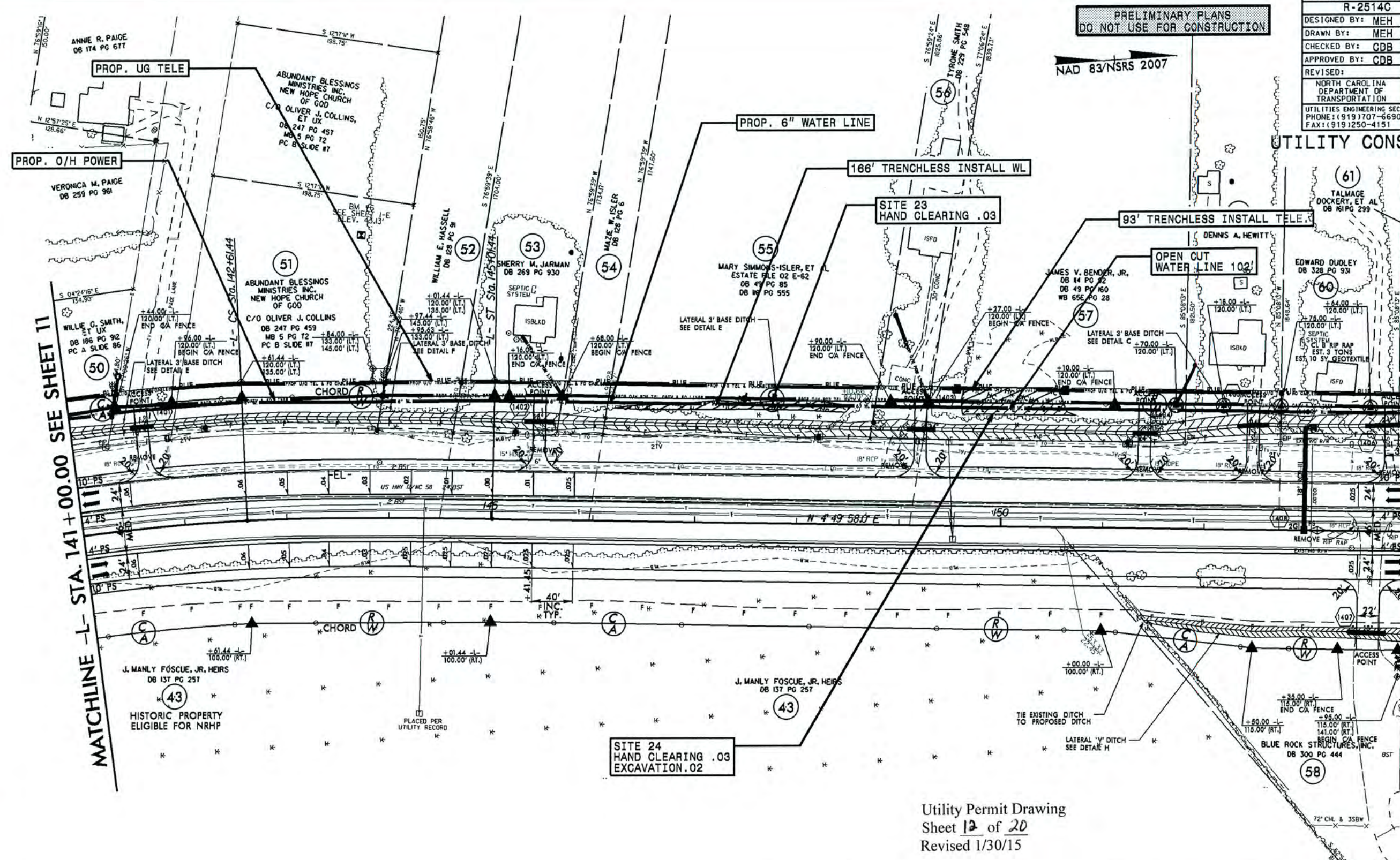
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and Narrative\R-2514C_Ut-F-11.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-12
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SECTION	UTILITY CONSTRUCTION PLANS ONLY
PHONE: (919) 707-6690	
FAX: (919) 250-4151	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83/NSRS 2007

UTILITY CONSTRUCTION

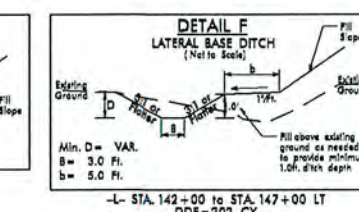
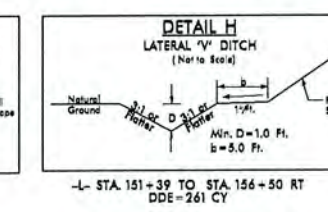
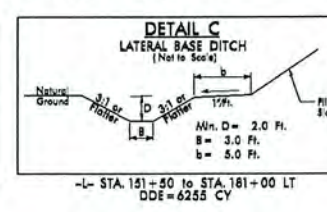
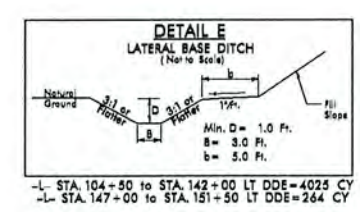


MATCHLINE -L- STA. 141+00.00 SEE SHEET 11

MATCHLINE -L- STA. 154+00.00 SEE SHEET 13

Utility Permit Drawing
Sheet 12 of 20
Revised 1/30/15

-L-	
PI Sta 139+50.54	Pls Sta 143+41.47
$\Delta = 19^{\circ}04'40.6''$ (RT)	$\Theta s = 3^{\circ}38'50.9''$
$D = 3^{\circ}02'22.4''$	$Ls = 240.00'$
$L = 627.65'$	$LT = 160.03'$
$T = 316.76'$	$ST = 80.03'$
$R = 1,885.00'$	
$SE = .06$	
$RO = 240'$	



NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADII.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

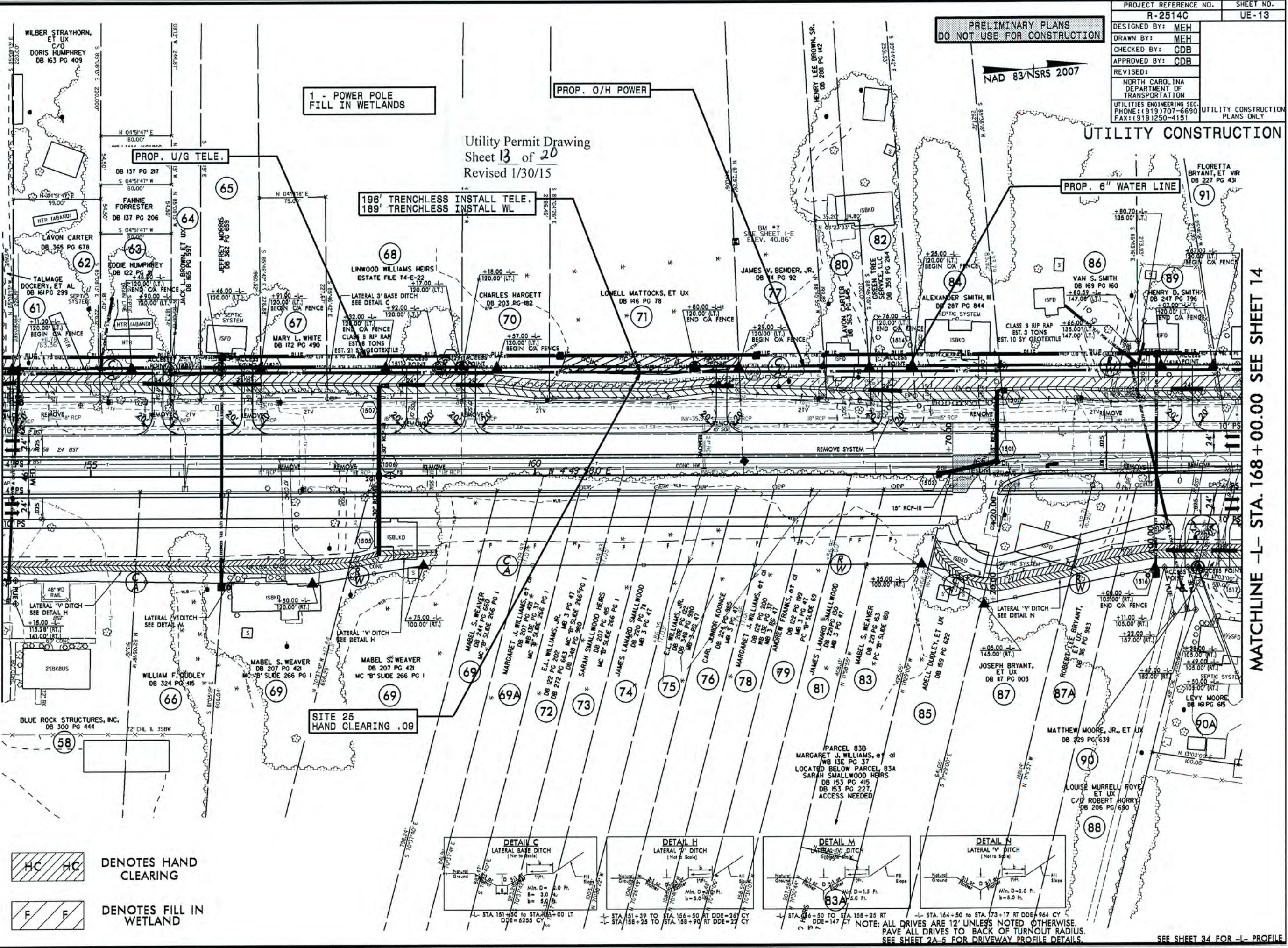
SEE SHEET 34 FOR -L- PROFILE

30-JAN-2015 15:03 and Narrative(R-25)4C.Ut-1115-UE13.psh.dgn

5/14/99

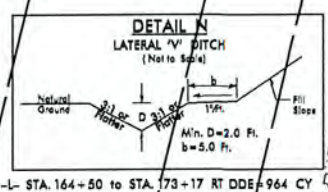
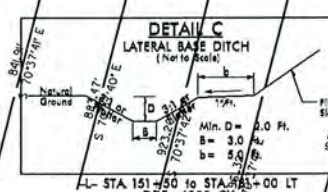
MATCHLINE -L- STA. 154+00.00 SEE SHEET 12

SEE SHEET 34 FOR -L- PROFILE



HC HC
F F

DENOTES HAND
CLEARING
DENOTES FILL IN
WETLAND



DETAIL C LATERAL BASE DITCH (Not to Scale)
DETAIL H LATERAL 'V' DITCH (Not to Scale)
DETAIL M LATERAL 'V' DITCH (Not to Scale)
DETAIL N LATERAL 'V' DITCH (Not to Scale)
L- STA 151+50 TO STA 154+00 LT DDE=6255 CY
L- STA 151+39 TO STA 154+50 RT DDE=261 CY
L- STA 158+25 TO STA 158+90 RT DDE=22 CY
L- STA 154+50 TO STA 158+25 RT DDE=964 CY
L- STA 164+50 TO STA 173+17 RT DDE=964 CY
NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADIUS.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-13
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83/NSRS 2007

UTILITY CONSTRUCTION

MATCHLINE -L- STA. 168+00.00 SEE SHEET 14

PROJECT REFERENCE NO.	R-2514C	SHEET NO.	UE-14
DESIGNED BY:	MEH		
DRAWN BY:	MEH		
CHECKED BY:	CDB		
APPROVED BY:	CDB		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY	
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

NAD 83/NSRS 2007

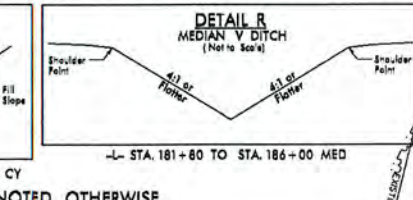
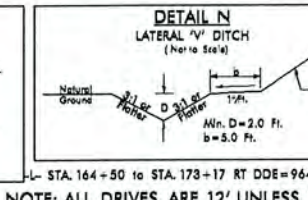
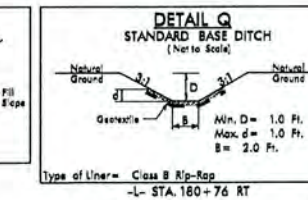
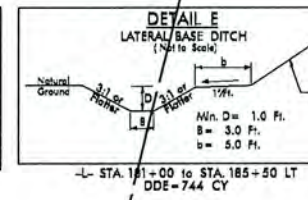
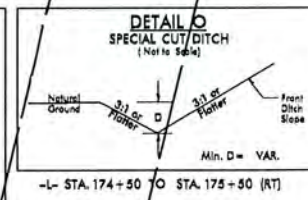
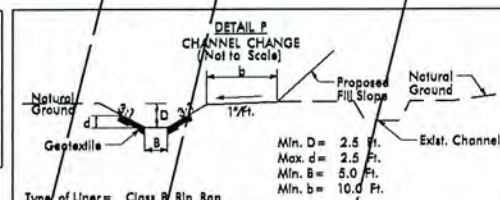
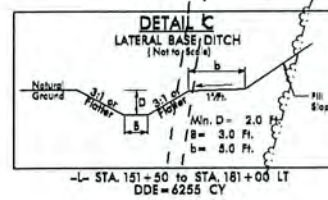
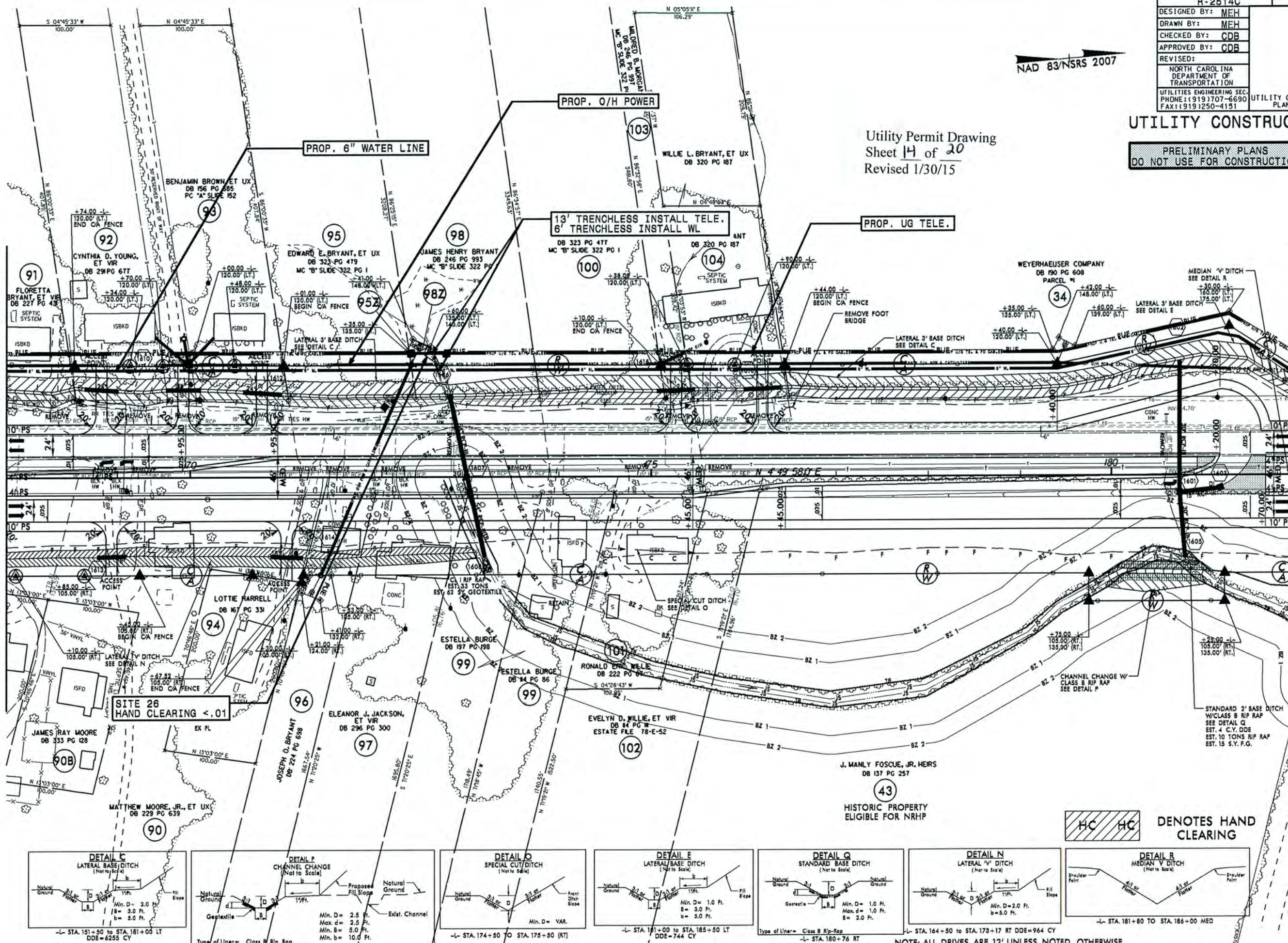
UTILITY CONSTRUCTION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

Utility Permit Drawing
Sheet 14 of 20
Revised 1/30/15

MATCHLINE -L- STA. 168+00.00 SEE SHEET 13

MATCHLINE -L- STA. 182+00.00 SEE SHEET 15



NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAVE ALL DRIVES TO BACK OF TURNOUT RADII.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

SEE SHEET 35 FOR -L- PROFILE

7D:\JAN-2015\350 and Narrative\R-2514C\UE-14.psd.dgn
E:\14\99

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

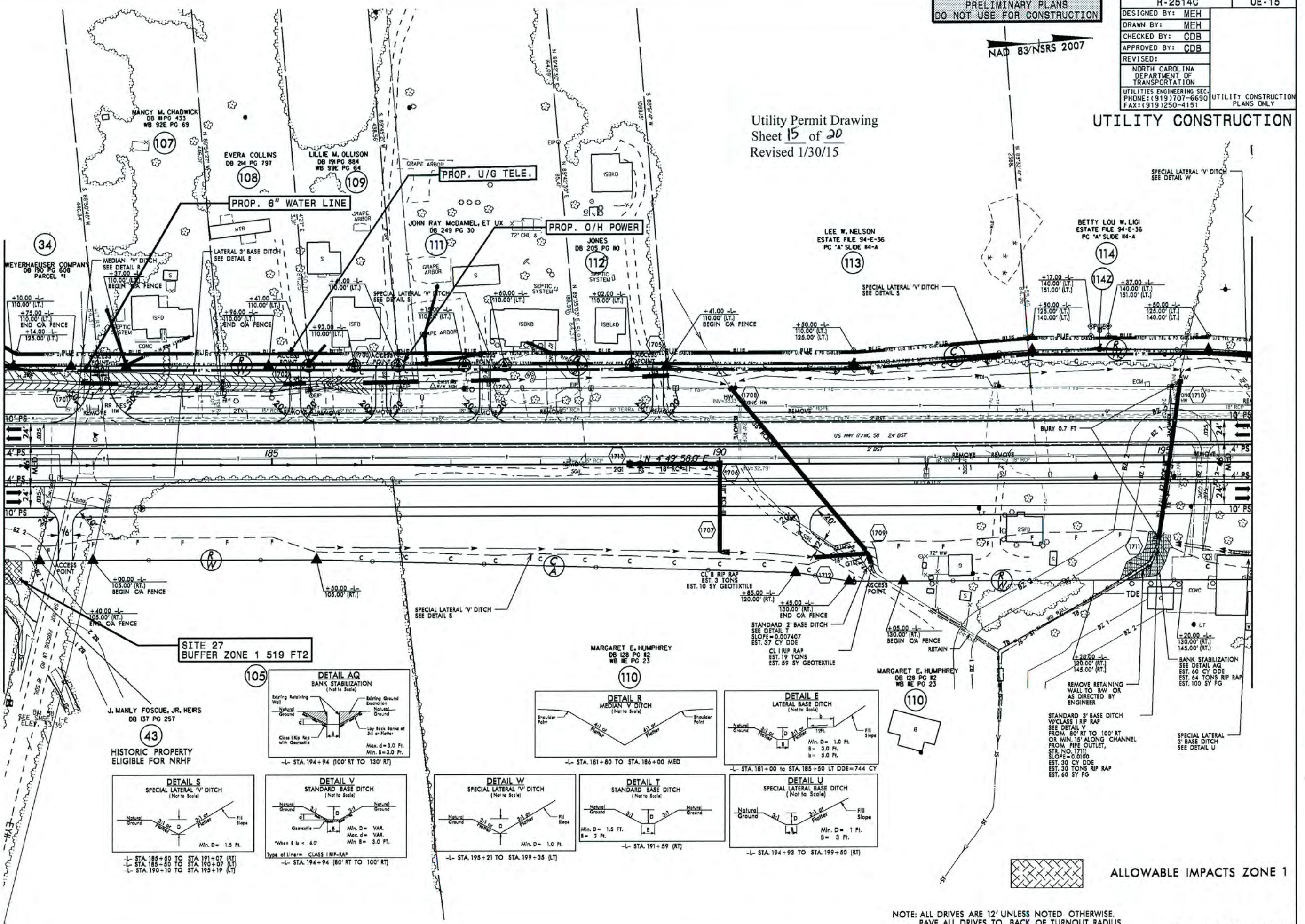
PROJECT REFERENCE NO.	SHEET NO.
R-2514C	UE-15
DESIGNED BY: MEH	
DRAWN BY: MEH	
CHECKED BY: CDB	
APPROVED BY: CDB	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	
UTILITIES ENGINEERING SEC.	UTILITY CONSTRUCTION PLANS ONLY
PHONE: (919) 707-6690	
FAX: (919) 250-4151	

NAD 83/NSRS 2007

Utility Permit Drawing
Sheet 15 of 20
Revised 1/30/15

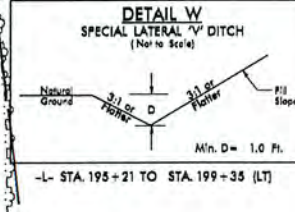
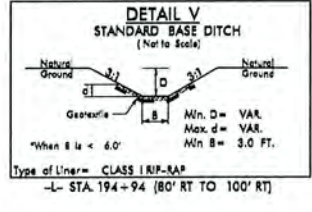
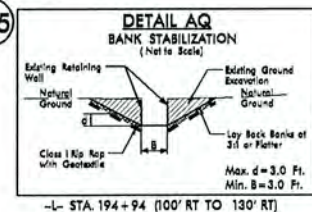
UTILITY CONSTRUCTION

MATCHLINE -L- STA. 182+00.00 SEE SHEET 14

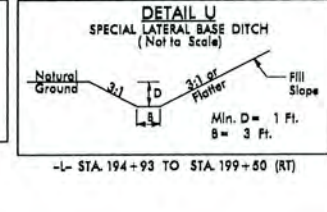
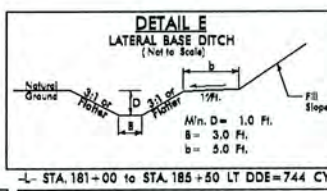
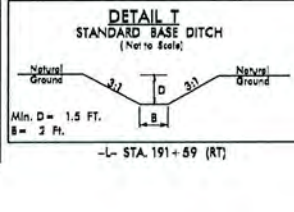
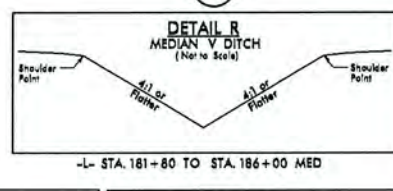


SITE 27
BUFFER ZONE 1 519 FT2

43
HISTORIC PROPERTY
ELIGIBLE FOR NRHP



110
MARGARET E. HUMPHREY
DB 128 PG 82
WB RE PG 23



NOTE: ALL DRIVES ARE 12' UNLESS NOTED OTHERWISE.
PAYE ALL DRIVES TO BACK OF TURNOUT RADII.
SEE SHEET 2A-5 FOR DRIVEWAY PROFILE DETAILS.

ALLOWABLE IMPACTS ZONE 1

MATCHLINE -LBUS- STA. 15+00.00 SEE SHEET 2

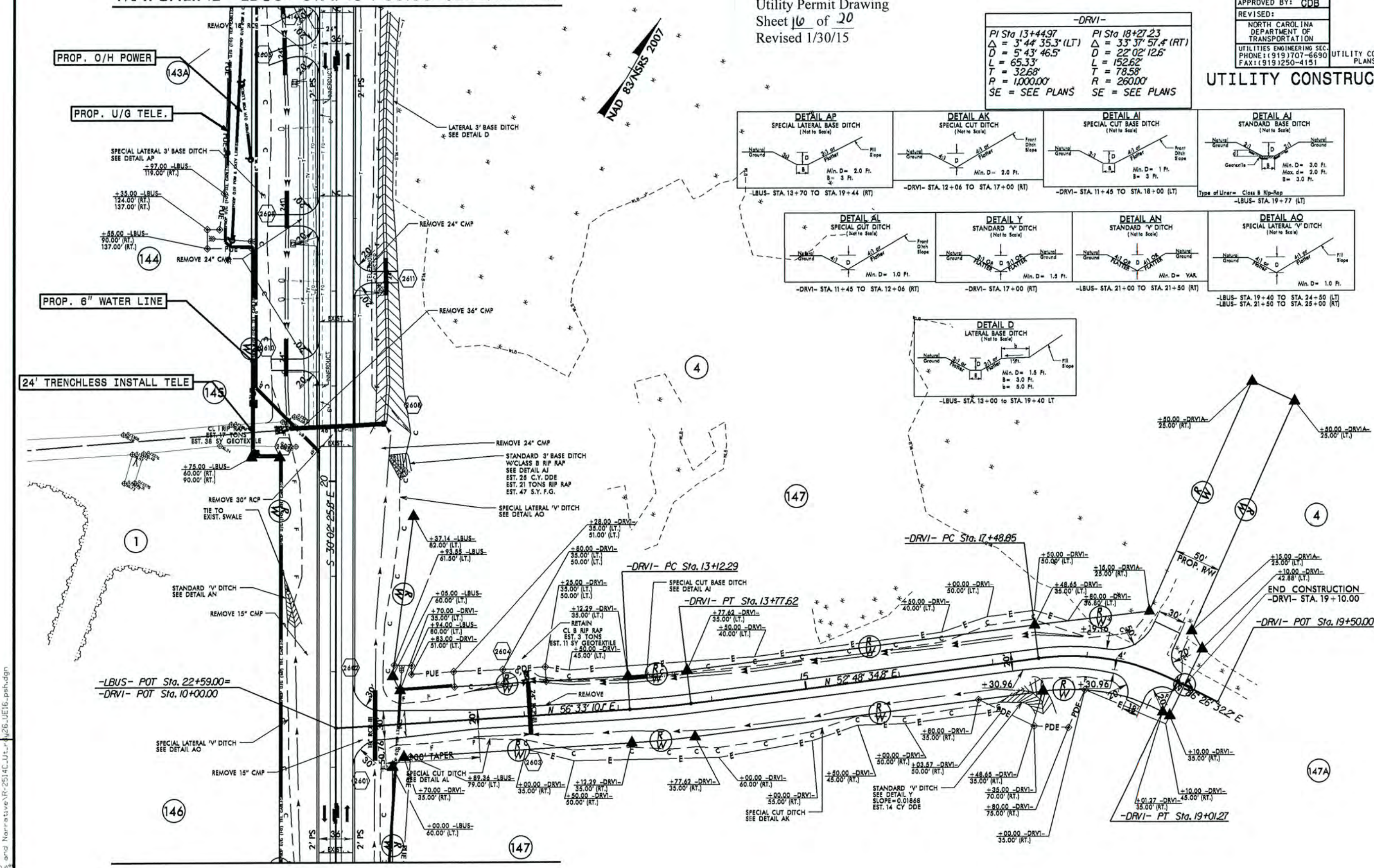
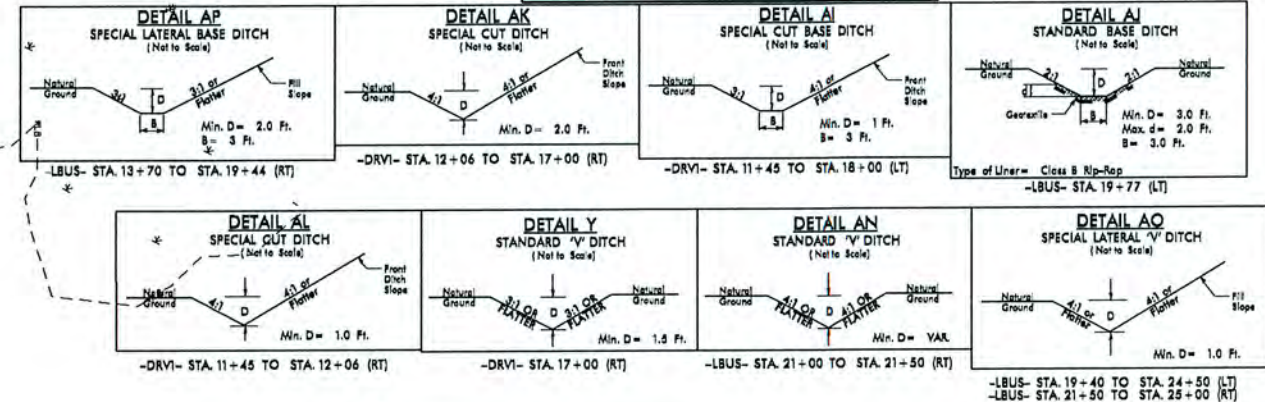
Utility Permit Drawing
Sheet 16 of 20
Revised 1/30/15

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PROJECT REFERENCE NO.		SHEET NO.
R-2514C		UE-16
DESIGNED BY:	MEH	
DRAWN BY:	MEH	
CHECKED BY:	CDB	
APPROVED BY:	CDB	
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		UTILITY CONSTRUCTION PLANS ONLY
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		

UTILITY CONSTRUCTION

-DRVI-	
PI Sta 13+44.97 $\Delta = 3^\circ 44' 35.3" (LT)$ $D = 5^\circ 43' 46.5"$ $L = 65.33'$ $T = 32.68'$ $R = 1,000.00'$ SE = SEE PLANS	PI Sta 18+27.23 $\Delta = 3^\circ 37' 57.4" (RT)$ $D = 22^\circ 02' 12.6"$ $L = 152.62'$ $T = 78.58'$ $R = 260.00'$ SE = SEE PLANS



SEE SHEET 40 FOR -LBUS- PROFILE
SEE SHEET 43 FOR -DRVI- PROFILE

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS				
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands* (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	L 14+85 - 21+27.10	OH Power/ 6" Water Line		0.01	0.11		0.35					
2	LBUS 10+99 - 14+00	OH Power/ 6" Water Line		<.01	0.10		0.15					
3	L 23+82.74 - 24+54.75	6" Water Line			0.01		0.03					
4	L 30+09.12 - 30+33.16	OH Power/ 6" Water Line		<.01			0.01					
5	L 33+24.70 - 35+37	OH Power/ 6" Water Line					0.12					
6	L 37+03.24 - 37+10.52	OH Power/ 6" Water Line					<.01					
7	L 37+79.43 - 40+68.89	OH Power/ 6" Water Line					0.12					
8	L 49+53.15 - 49+73.23	OH Power					0.01					
9	L 61+85.84 - 62+63.94	OH Power/ 6" Water Line			<.01		0.04					
10	L 64+85.68 - 66+69.71	OH Power/ 6" Water Line					0.09					
11	L 64+82.90 - 65+02.91	OH Power					0.01					
12	L 76+79.36 - 76+89.85	OH Power					<.01					
13	L 78+03.15 - 79+72.19	OH Power					0.10					
14	L 80+73.42 - 81+67.23	OH Power/ 6" Water Line		<.01	0.01		0.02					
15	L 95+17.90 - 100+16.87	OH Power/ 6" Water Line		0.01			0.18					
16	L 92+90.92 - 93+10.19	OH Power					0.01					
17	L 106+37.92 - 108+92.00	OH Power					0.10					
18	L 122+89.61 - 123+09.95	OH Power					0.01					
19	L 127+14.66 - 127+70.53	OH Power/ 6" Water Line			<.01		0.02					
20	L 128+15.72 - 128+89.88	OH Power/ 6" Water Line			<.01		0.02					
21	L 130+03.89 - 131+31.42	OH Power/ 6" Water Line		<.01	0.02		0.04					
22	L 135+44.57 - 136+16.23	OH Power/ 6" Water Line			<.01		0.03					
23	L 146+17.42 - 148+52.41	6" Water Line					0.03					
24	L 149+60.12 - 150+62.20	OH Power/ 6" Water Line			0.02		0.03					
25	L 160+31.11 - 162+21.27	OH Power/ 6" Water Line					0.09					
26	L 172+38.67 - 172+69.97	OH Power					<.01					
28	L 36+28.65 - 36+48.73	OH Power					0.01					
29	L 45+80.71 - 46+00	OH Power					0.01					
	20 Poles	Power Poles		0.05								
TOTALS:				0.07	0.27		1.63					

Note: * TEMPORARY FILL AND TEMPORARY EXCAVATION WILL BE USED TO INSTALL THE 6" WATER LINE BY METHOD OF OPEN CUT

Utility Permit Drawing
Sheet 17 of 20
Revised 2/5/15

Revised 02/05/15

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

JONES COUNTY
WBS - 34442.2.4 (R-2514C)

SHEET

1 OF 1

2/5/2015

Merged with Impact Summary Sheet 17 of 20

Utility Permit Drawing
Sheet 18 of 20

Merged with Impact Summary Sheet 17 of 20

BUFFER IMPACTS SUMMARY

			IMPACT									BUFFER REPLACEMENT	
SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	TYPE			ALLOWABLE			MITIGABLE				
			ROAD CROSSING	BRIDGE	PARALLEL IMPACT	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)	TOTAL (ft ²)	ZONE 1 (ft ²)	ZONE 2 (ft ²)
27	POWER POLE	L 182+00 - 182+20				519		519					

Utility Permit Drawing
Sheet 20 of 20
Revised 2/2/15

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

JONES COUNTY
PROJECT: 34442.2.4 (R-2514C)

2/2/2015
SHEET 1 OF

R-2514D NEU Narrative

Utility Owners:

- **Power:** Duke Energy Progress
 Duke Energy Progress (Distribution) – (contact: Sheila Talton, 919-481-6126)
 Duke Energy Progress (Transmission) – (contact: Jamie Loy, 919-546-6034)
 Jones Onslow EMC (Distribution) – (contact- Ken Jones, 1-800-682-1515, ext. 306)
- **Telephone:** Century Link (contact: Jeff Shepard 910-577-9357)
 CenturyLink – (contact: Anthony Melilli, 919-577-9359)
 CenturyLink – (contact: Mack Peel, 252-824-2407)
- **Cable TV:** Time Warner (contact: Vincent Brayboy, 910-219-6615)
- **Water:** Town of Pollocksville – (contact: Johnny Chadwick, 252-224-9831)
 Jones County Water – (contact: Mike Houston, 252-448-8000)
- **Sewer:** Town of Pollocksville – (contact: Johnny Chadwick, 252-224-9831)
- **Gas:** Piedmont Natural Gas (contact: Larry Priest, 919-583-2276)

General Utility Relocation:

All utility lines inside the project limits will be adjusted as necessary or relocated away from construction before project let.

- **Power:** existing power (Distribution) lines to be relocated:
 - Duke Energy Progress
 - L– at Sta 363+00 – 369+00 LT & RT
 - L– at Sta 543+00 – 546+50 LT & RT
 - DRV3– at Sta 16+50 – 20+75 LT & RT
 - Y3– at Sta 13+80 – 38+05 LT
 - Y3– at loop and ramp A and D
 - Y3A– at Sta 13+25 – 15+81 LT
 - Y4– at Sta 23+55 – 30+00 RT
 - Y6– at Sta 10+00 – 19+00 LT & RT
 - Y7– at Sta 13+65 – 21+25 RT
 - Y8– at Sta 24+25 – 31+40 RT, and including part of –Y9–
 At loop and ramp 10

Power lines will be relocated to the proposed locations with no impacts.

- Jones – Onslow EMC
 - Y5- at Sta 10+60 – 15+30 LT & RT

Power lines will be relocated to the proposed locations with no impacts.

- **Power: (transmission)**

- Duke Energy Progress
 - Duke Energy Progress (DEP) Transmission will build two towers within the wet land boundary (WLB) at -L- Sta. 547+35 Rt. and -L- Sta. 552+23 Lt (Hand clearing will be necessary). See attached plan sheet-UE-02.

- **Telephone:** existing telephone lines to be relocated:

- CenturyLink
 - CenturyLink has underground along the -L- at Sta 363+00 – 372+00 LT & RT
 - L- at Sta 517+00 – 525+00 RT
 - Y3- at Sta 14+50 – 38+00 LT & RT
 - Y3- at ramp and loop A
 - Y4- at Sta 23+55 – 30+00 LT & RT
 - DRV3- at Sta 20+00 – 24+75 LT
 - Y5- at Sta 11+00 – 15+00 RT
 - Y6- at Sta 12+30 – 20+50 LT & RT
 - Y7- at Sta 14+50 – 19+00 LT & RT
 - Y8- at Sta 23+50 – 32+50 RT

Telephone lines will be relocated to the proposed locations with no impacts.

- **Water:** Water lines to be relocated

- Jones County Water Dept.
 - Y4- at Sta 26+10 – 29+60 RT
 - Y5- at Sta 11+50 – 14+60 LT
 - Y6- at Sta 12+00 – 19+50 LT
 - Y7- at Sta 15+60 – 18+50 LT

- Town of Pollocksville
 - Y3LPA- at Sta 13+00 – 22+45 LT & RT
 - Y3- at Sta 13+75 – 16+00 LT & RT

Water lines will be relocated to the proposed locations with no impacts.

- **Sewer:**

- Jones County Sewer Dept.

–Y4– at Sta 26+10 – 29+60 LT

- Town of Pollocksville
–Y3– at Sta 22+80 – 35+70 RT

Sewer lines will be relocated to the proposed locations with no impacts.

- **Cable TV:**

- Time Warner
Time Warner has overhead CATV Aerial along the –L– line joint use with Duke Energy Progress and Jones – Onslow EMC.
–Y– Lines the overhead is in joint use and attached with Duke Energy Progress and Jones – Onslow EMC.
The underground is encroaching on the –L– and –Y– lines.

CATV lines will be relocated to the proposed locations with no impacts.

- **Natural Gas:**

- Piedmont Natural Gas
–L– at Sta 521+50 – 532+20 LT
–Y3– at Sta 20+00 – 35+20 LT

Gas lines will be relocated to the proposed locations with no impacts.

8/17/99

05-FEB-2015 11:41
C:\Users\jbl\OneDrive\Engineering\NEU\Permit Plans and Narrative\R25140-ut-rd\22-UE02.psh.dgn

REVISIONS

MATCHLINE -L- STA. 544+00.00 SEE SHEET 21

MATCHLINE -L- STA. 557+00.00 SEE SHEET 23

-L-
PI Sta 571+12.36
 $\Delta = 28^{\circ}45'22.4" (RT)$
 $D = 0^{\circ}33'17.1"$
 $L = 5,183.63'$
 $T = 2,647.63'$
 $R = 10,328.19'$
 $SE = .025$
 $RO = 90^{\circ}$

NEU PERMIT PLANS

Revised (Jan. 23, 2015)

Utility Permit Drawing
Sheet 2 of 3

NAD 83 NRS 2007

PROJECT REFERENCE NO. R-25140	SHEET NO. UE-02
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

HC HC DENOTES HAND
CLEARING
F F DENOTES FILL IN
WETLAND

82
WILLIAM T. BLAND
DB 353 PG 364
PLAT CAB. B SLIDE 350-4

SITE 1
15204.437 SF
0.349 AC

-BL- 66 PINC 266+88.67

-BL- 65 PINC 259+35.51

SITE 2
17488.7514 SF
0.4015 AC

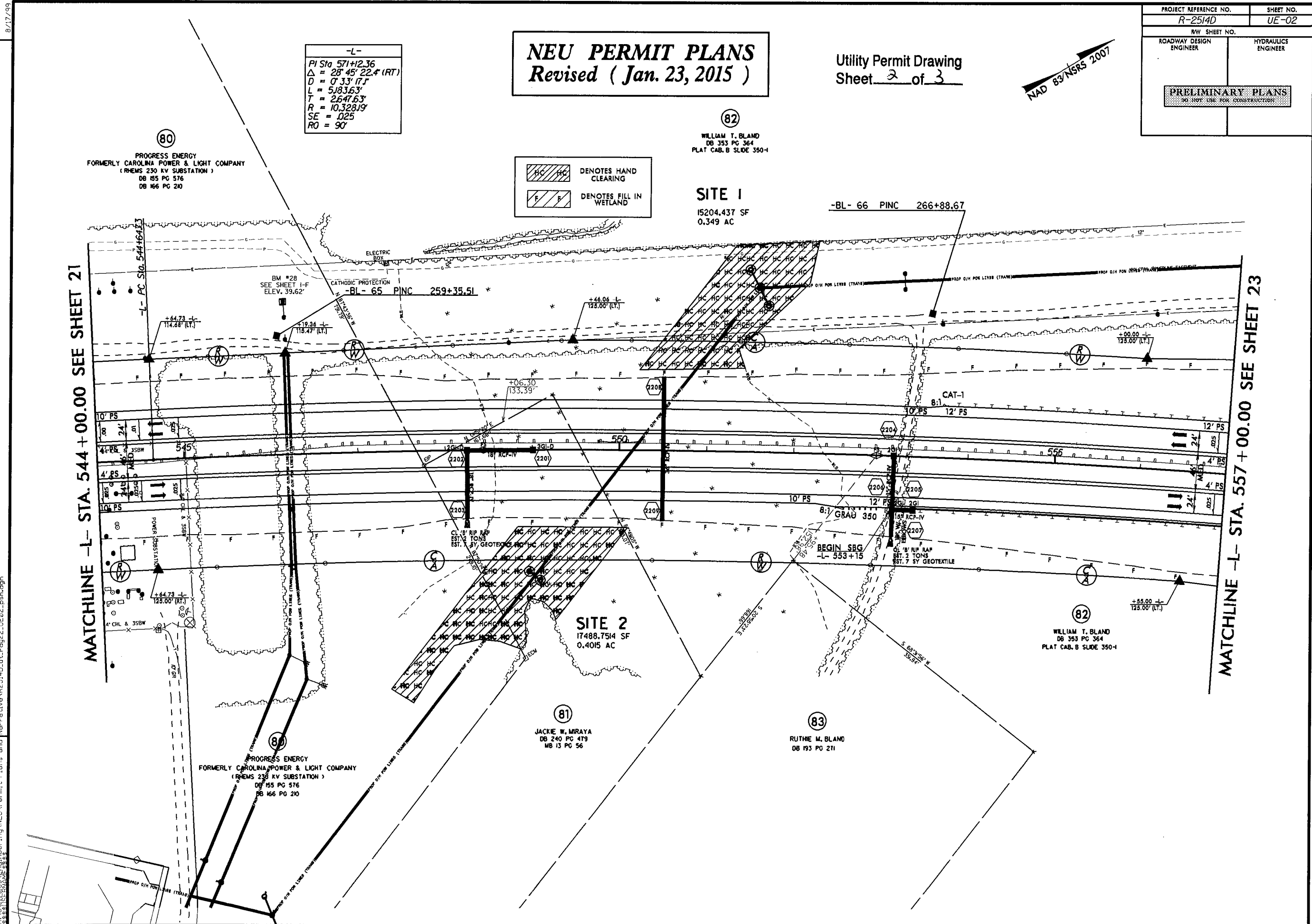
81
JACKIE W. MIRAYA
DB 240 PG 479
MB 13 PG 56

83
RUTHIE M. BLAND
DB 193 PG 211

82
WILLIAM T. BLAND
DB 353 PG 364
PLAT CAB. B SLIDE 350-4

80
PROGRESS ENERGY
FORMERLY CAROLINA POWER & LIGHT COMPANY
(RHEMS 230 KV SUBSTATION)
DB 155 PG 576
DB 166 PG 210

80
PROGRESS ENERGY
FORMERLY CAROLINA POWER & LIGHT COMPANY
(RHEMS 230 KV SUBSTATION)
DB 155 PG 576
DB 166 PG 210



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 Design (ft)
1	-L-550+23 TO 552+23	Aerial Power line (Transmission)					0.35					
2	-L-547+35 TO 550+11	Aerial Power line (Transmission)					0.40					
1	-L-551+57 LT	Power Pole (Transmission)	< 0.01									
2	-L-549+03 RT	Power Pole (Transmission)	< 0.01									
TOTALS:			< 0.01	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00

Note :

Utility Permit Drawing
 Sheet 3 of 3
 Revised 1/23/15

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 JONES & CRAVEN COUNTIES
 TIP PROJECT (R-2514D)