



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

August 10, 2005

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

N. C. Dept. of Environment and Natural Resources
Division of Coastal Management
151-B NC Highway 24
Hestron Plaza II
Morehead City, NC 28557

ATTN: Mr. William J. Biddlecome
NCDOT Coordinator
Regulatory Permits Manager

ATTN: Mr. Bill Arrington

Subject: **Application for Modifications to CWA Section 404 and 401 permits and CAMA Major permit for the NC 55 Widening. NC 55 Widening From US 17 in Bridgeton to NC 304 in Bayboro. Craven and Pamlico Counties. State Project No. 8.1170901. Federal Aid Project STP-55(1). TIP No. R-2539B. Debit \$475 from WBS Element 34452.1.2**

Reference:

Original permits:

CWA Section 404 Individual Permit, USACE Action ID # 199303531, dated May 27, 2003.
CWA Section 401 Major WQC No. 021232 and Buffer Certification, dated March 17, 2003
CAMA Major Permit No. 55-03, dated April 22, 2003.

Modifications for Section B:

Modification to CWA Section 404 Individual Permit, dated October 1, 2003
Modification to CWA Section 401 Major WQC No. 021232, dated October 27, 2003
Major Modification to CAMA Major Permit No. 55-03, dated October 31, 2003

Dear Sirs:

The North Carolina Department of Transportation (NCDOT), Division of Highways, in consultation with the Federal Highway Administration (FHWA) is in the process of widening NC 55 in Craven and Pamlico Counties, from 0.7 miles east of US 17 in Bridgeton to NC 304 in Bayboro. The project is approximately 14.2 miles in length, and will provide a five-lane, 60-foot roadway, with four-foot paved shoulders throughout the majority of the project.

The purpose of this submittal is to request a modification to the Section 404 permit and Section 401 Water Quality Certification and refinement to the CAMA Permit, specifically for Section B. The NCDOT proposes to revise a drainage system east of an unnamed tributary to Black Creek in order to accommodate removal of 3 preformed scour holes (PSH). The PSHs were originally proposed as on-site water quality treatment. However, during construction, the 3-foot and 4.5-foot hole depths required to

MAILING ADDRESS:

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

TELEPHONE: 919-715-1500
FAX: 919-715-1501

WEBSITE: WWW.NCDOT.ORG

LOCATION:

2728 CAPITAL BLVD.
PARKER LINCOLN BUILDING, SUITE 168
RALEIGH NC 27604

drain the upstream systems were determined to be ineffective due to probable sedimentation and subsequent outlet pipe blockage. Onsite water quality treatment will be accomplished by directing drainage into 2 grassed swales east of the UT to Black Creek. The proposed modification will result in a decrease in mechanized clearing in wetlands (0.04 acres) and a slight increase in wetland excavation (<0.01 acres), reducing overall wetland impacts by approximately 0.03 acres.

There will be no changes outside of the existing permitted impacts to the Neuse Buffers or within CAMA AECs. Please refer to the attached revised permit drawings (Sites 7, 8, 9, and 10) and the summary memo of proposed actions, dated April 25, 2005. The proposed revised design does not compromise NCDOT's compliance with the existing permit conditions

In summary, the proposed revisions are:

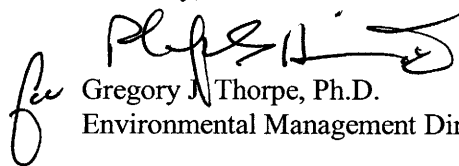
- Wetland impacts reduced by removing design for 3 PSHs at Stations 111+31 left, 113+42 left, and 113+58 left
- Within a non-jurisdictional area - eliminate cross pipe at Station 110+50 (under pavement)
- Within an already permitted wetland impact area - install special cut ditch and driveway pipes from Stations 109+20 to 112+75 right (crosses tip of small wetland; alternative would have been to install ditch on left side of road, which would have affected a much larger wetland system)
- Within an already permitted wetland impact area - redesign drainage system of pipes from Stations 112+80 to 121+10 left to outlet into grassed swales at Station 113+20 right.

Regulatory Approvals

Application is hereby made for the modification of the Section 404 Permit from the USACE, Section 401 Water Quality Certification from the NCDENR-DWQ, and the CAMA Major Permit from NCDENR-DCM. In compliance with Section 143-215.3D(e) of the NCAA we have provided a method of debiting \$475, as noted in the subject line of this application, as payment for processing the Section 401 Water Quality Certification and CAMA modifications applications. We are providing seven copies of this application to NCDENR-DWQ, for processing. Please note that a pre-application meeting was held on April 12, 2005 with the NCDWQ to review buffer and water quality issues. Nicole Thomson and John Hennessy were in attendance and agreed to the proposed revisions.

If you have any questions or need additional information, please call Elizabeth L. Lusk at (919) 715-1444.

Sincerely,



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

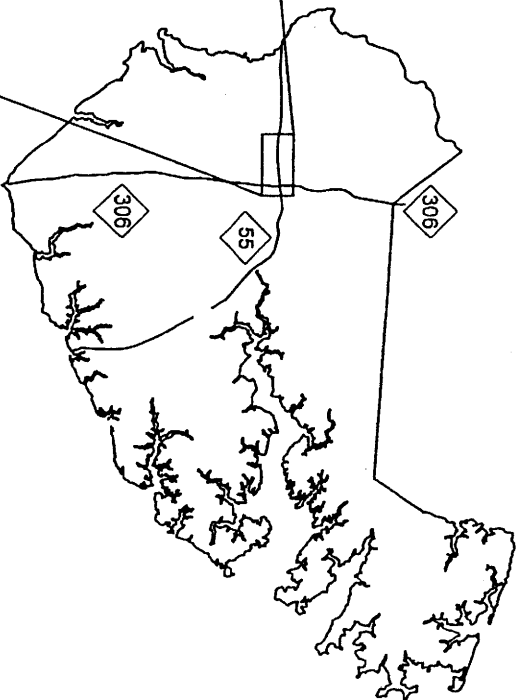
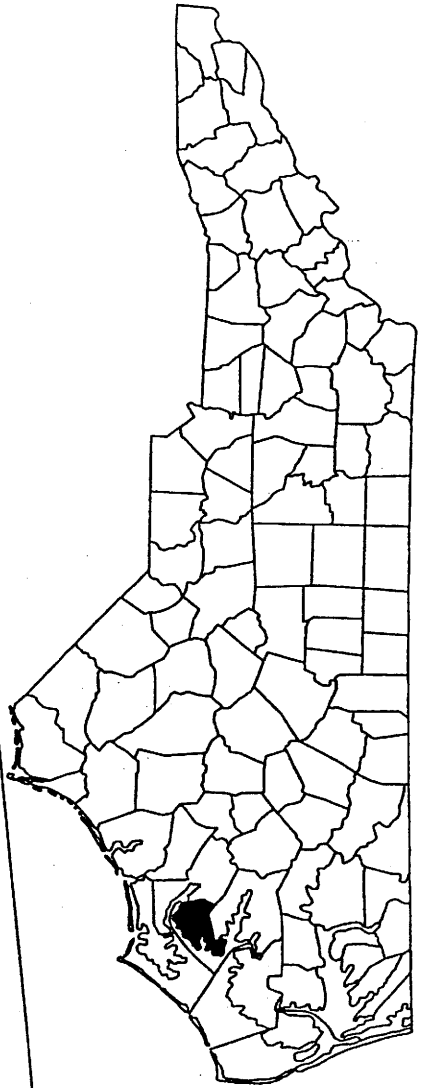
Attachments: Revised permit drawings (Sites 7, 8, 9, & 10)
Conceptual plans reviewed in April 12, 2005 meeting with NCDWQ
Memos (2) of proposed revisions from MA Engineering Consultants, Inc.

W/attachment

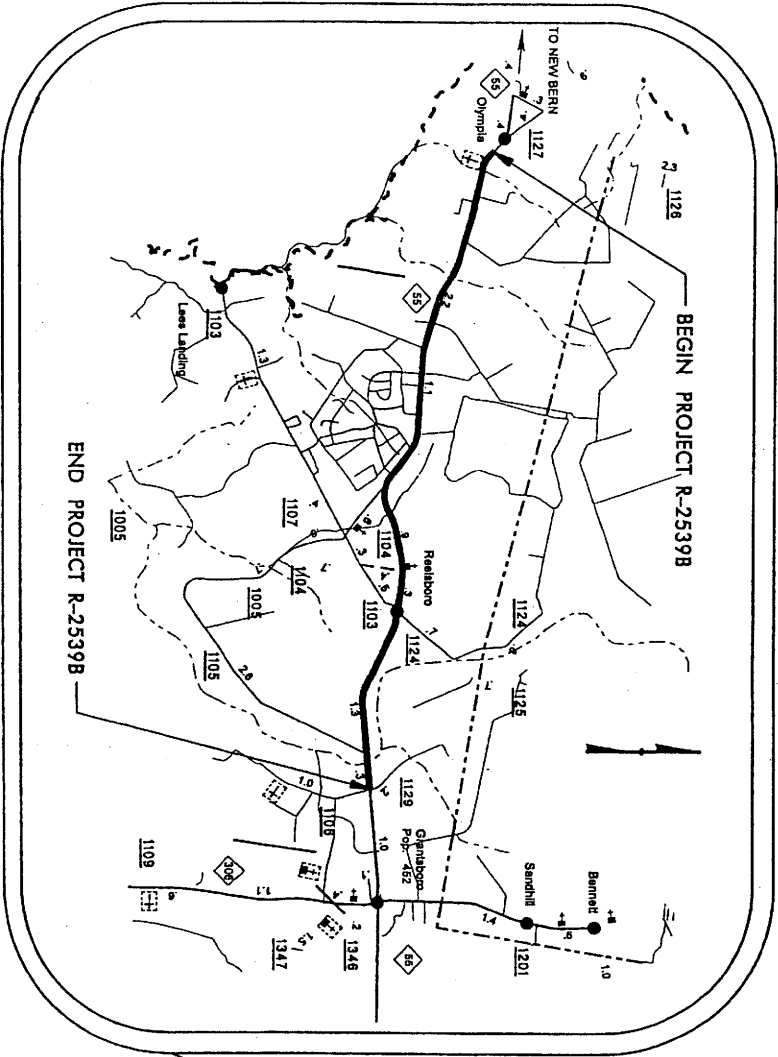
Mr. John Hennessy, NCDWQ (7 Copies)
Mr. Travis Wilson, NCWRC
Ms. Becky Fox, USEPA – Whittier, NC
Mr. Ronald Mikulak, USEPA – Atlanta, GA
Mr. Clarence W. Coleman, P.E., FHWA
Mr. Gary Jordan, USFWS
Mr. Ron Sechler, NMFS
Mr. Michael Street, NCDMF
Ms. Steve Sollod, NCDCM
Mr. Bill Arrington, NCDCM

W/o attachment

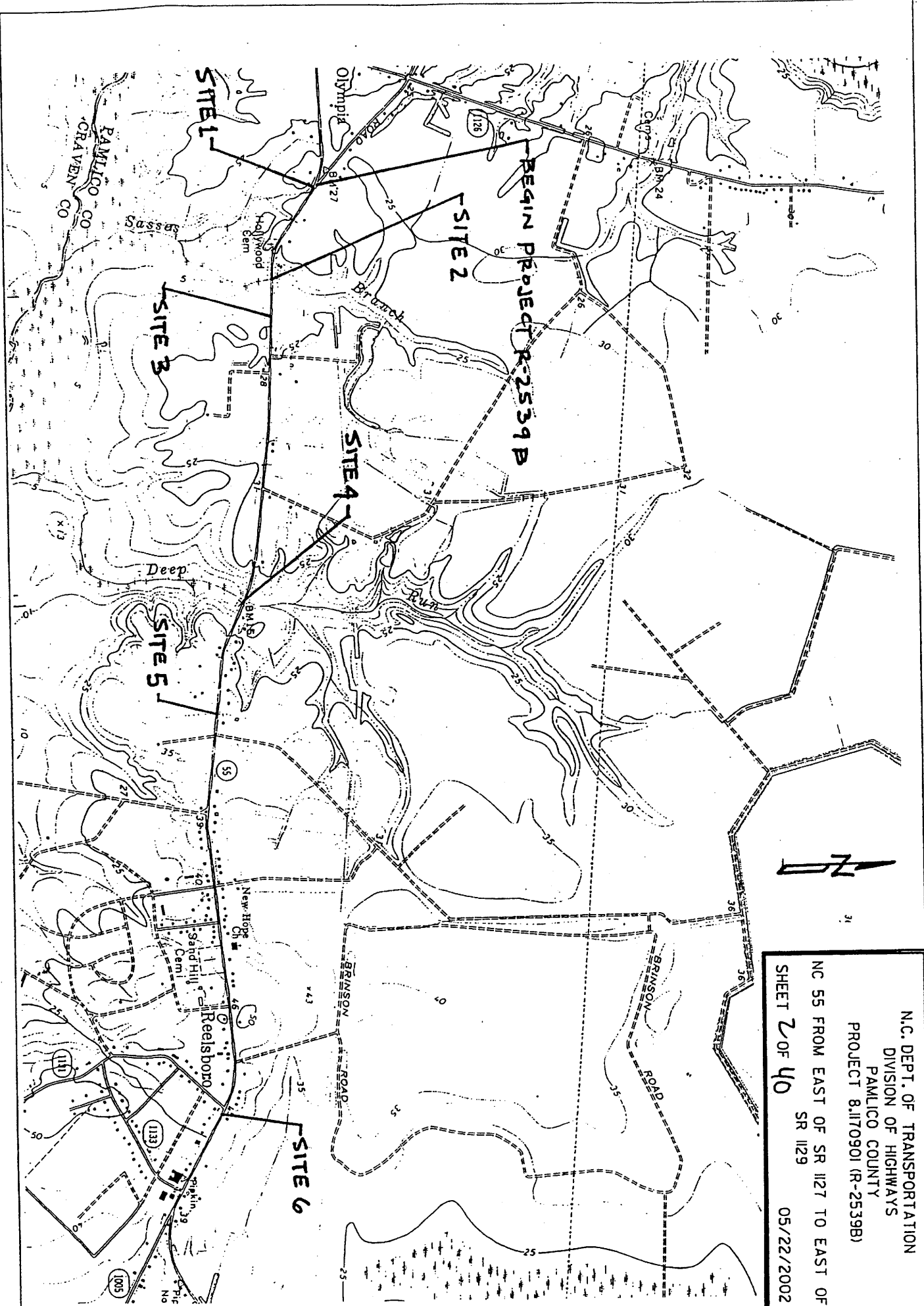
Mr. Scott McLendon, USACE, Wilmington (Cover Letter Only)



PAMLICO COUNTY



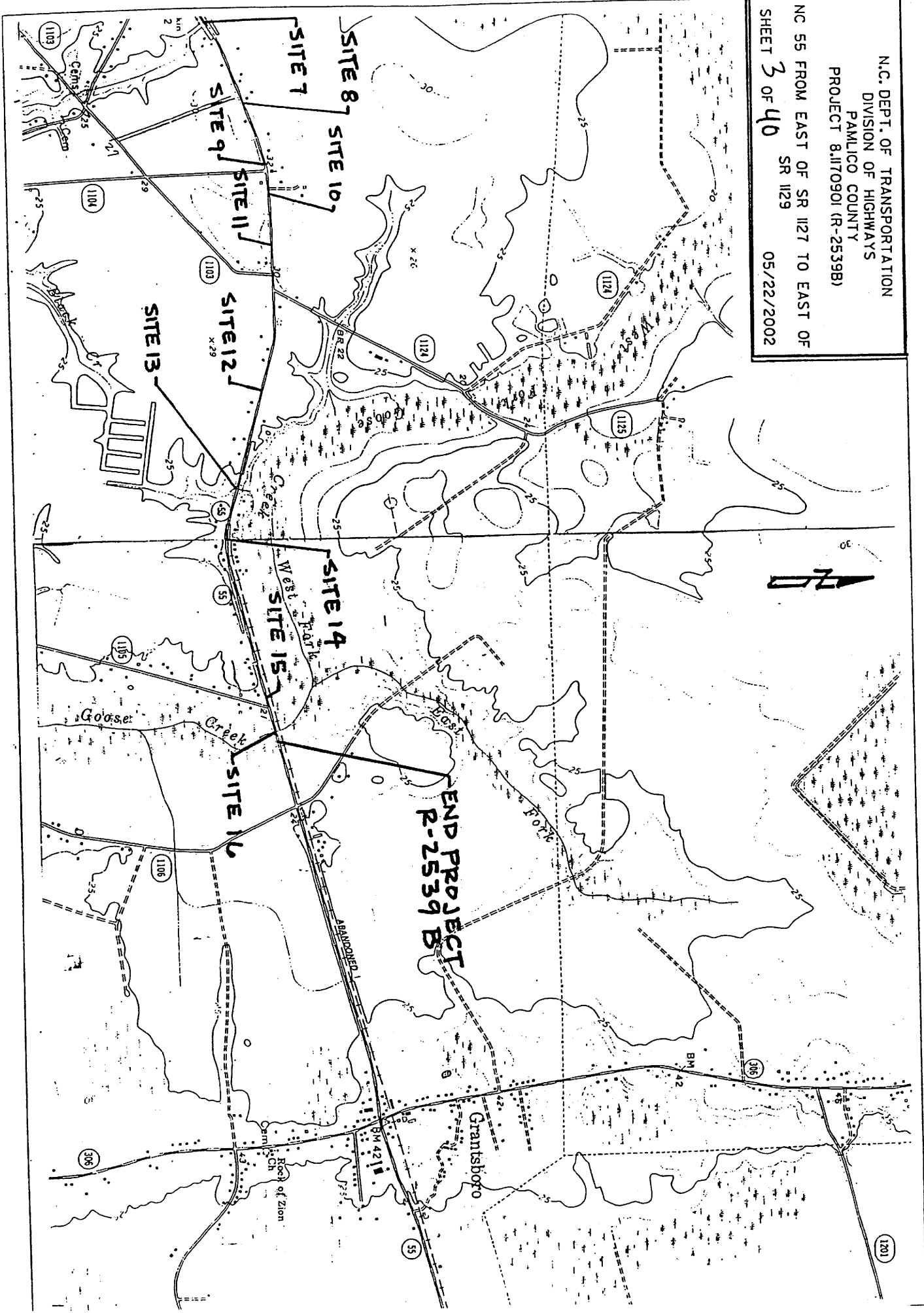
N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT 8,1170901 (R-25398B)
 NC 55 FROM EAST OF SR 1127 TO EAST OF
 SHEET 1 OF 40 SR 1129 05/22/2002



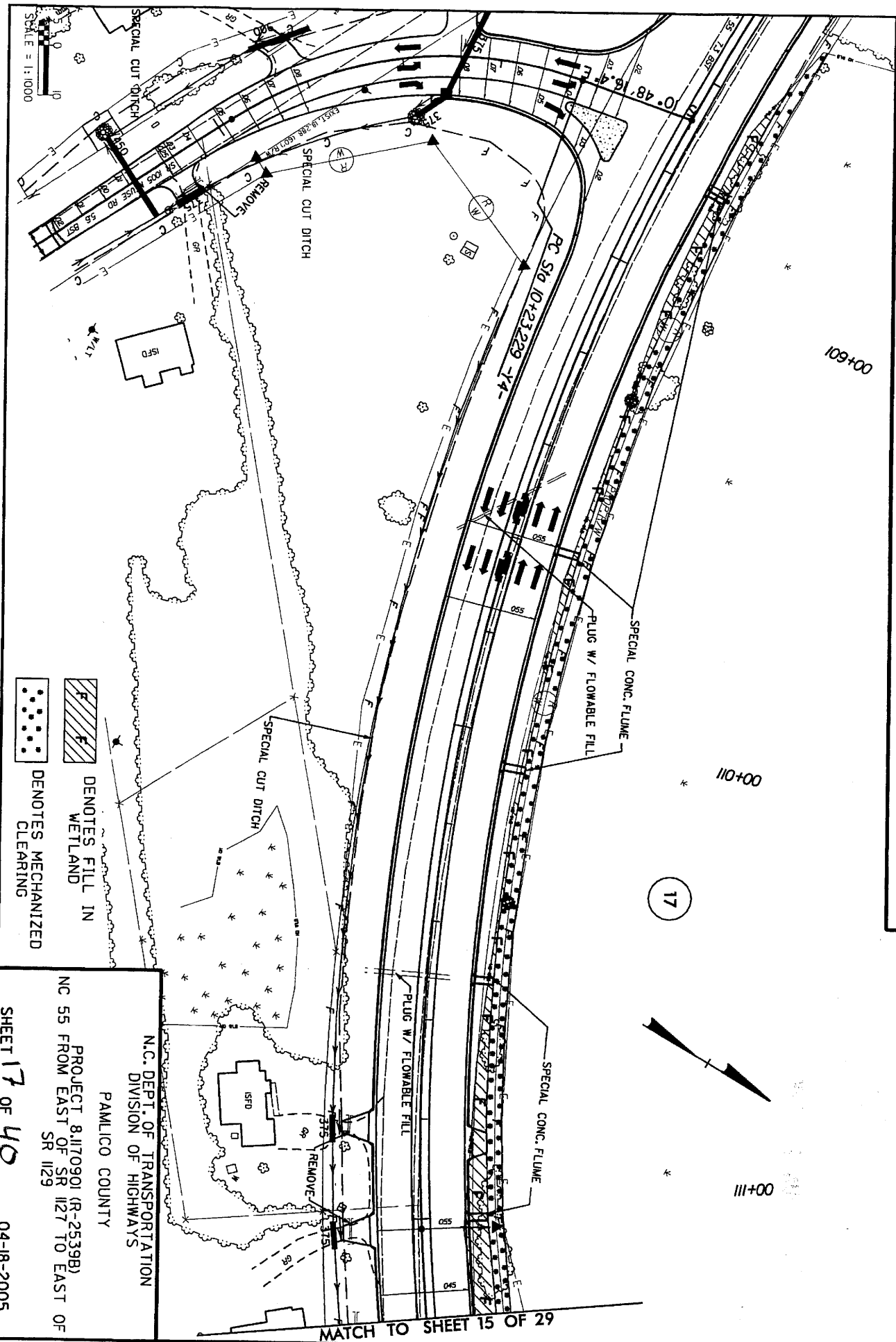
N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT 8.1170901 (R-2539B)
 SR 1129
 05/22/2002
 NC 55 FROM EAST OF SR 1127 TO EAST OF
 SHEET 2 OF 40


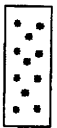
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
PAMLICO COUNTY
PROJECT 8.1170901 (R-2539B)

NC 55 FROM EAST OF SR 1127 TO EAST OF
SHEET 3 OF 40 SR 1129 05/22/2002



SITE 7 -L- STA. 108 + 50 TO 114 + 00 RT & LT



 DENOTES FILL IN WETLAND
 DENOTES MECHANIZED CLEARING

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT 8/1170901 (R-2539B)
 NC 55 FROM EAST OF SR 1127 TO EAST OF
 SR 1129
 SHEET **17** OF **40**
 04-18-2005

SITE 7 -L- STA. 108 + 50 TO 114 + 00 RT & LT

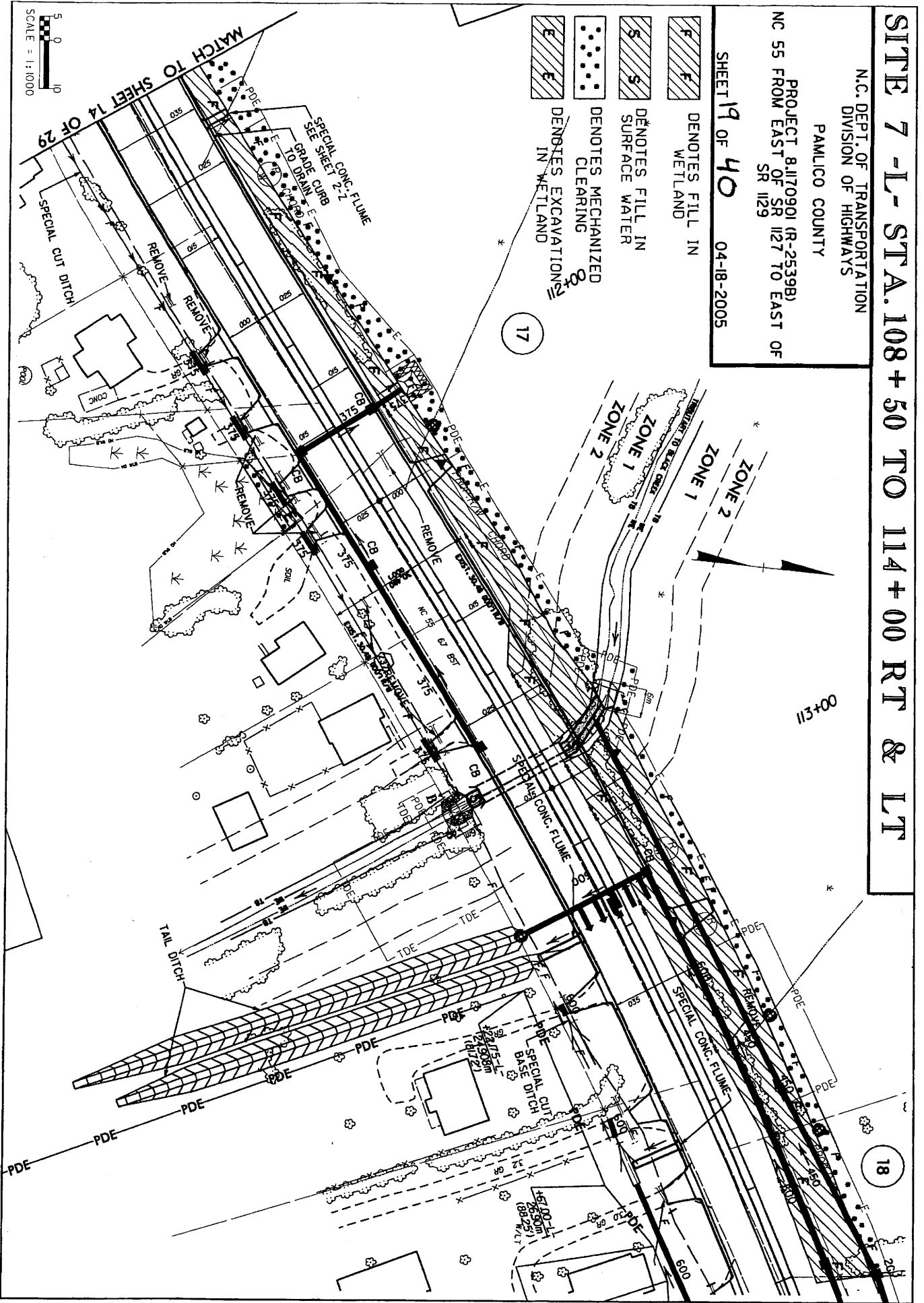
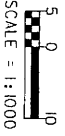
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

PAMLICO COUNTY

PROJECT 8.1170901 (R-2539B)
NC 55 FROM EAST OF SR 1127 TO EAST OF SR 1129

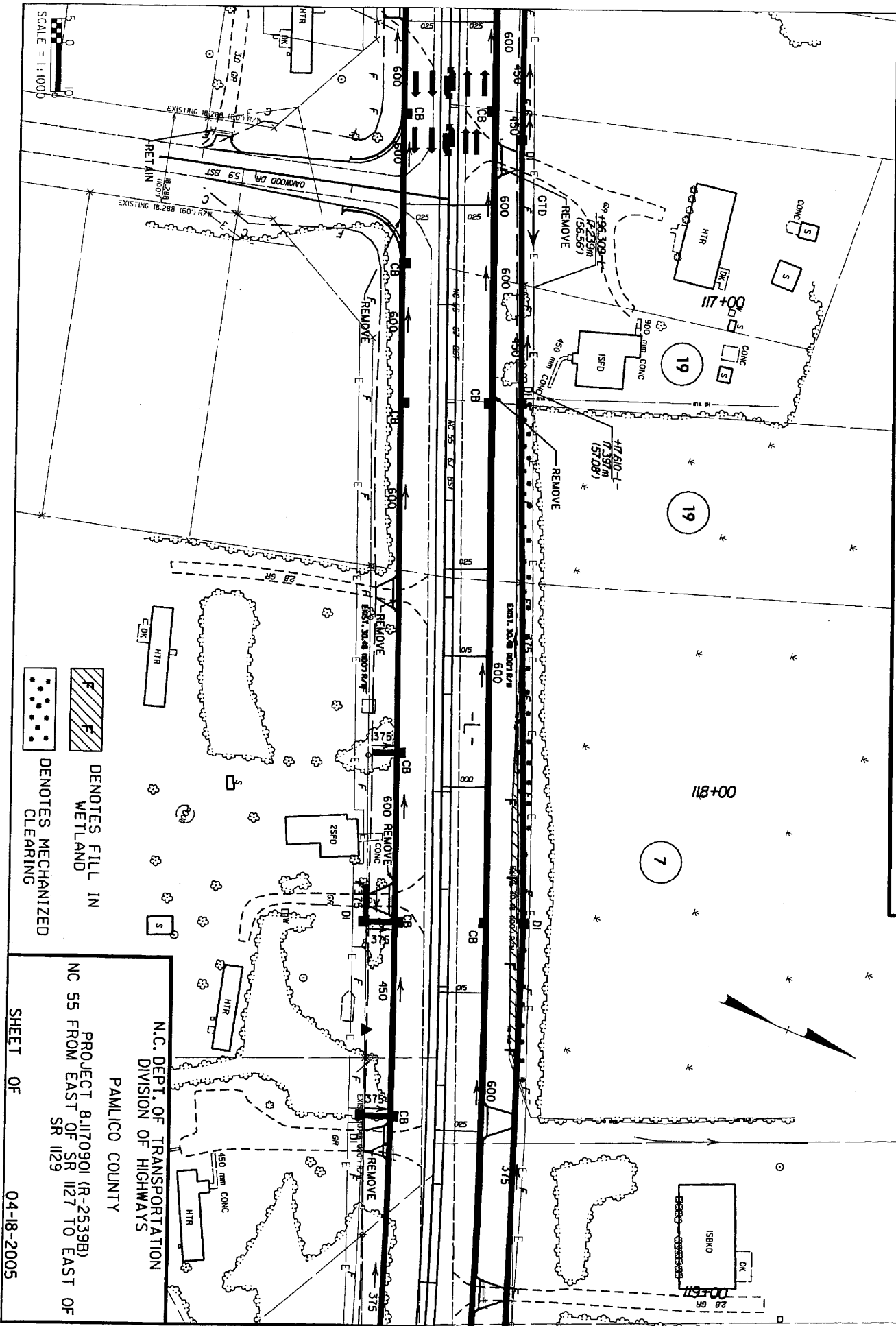
SHEET 19 OF 40 04-18-2005


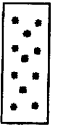
- DENOTES FILL IN WETLAND
- DENOTES FILL IN SURFACE WATER
- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND



18

SITE 8 - L- STA. 117 + 20 TO 118 + 60 LT

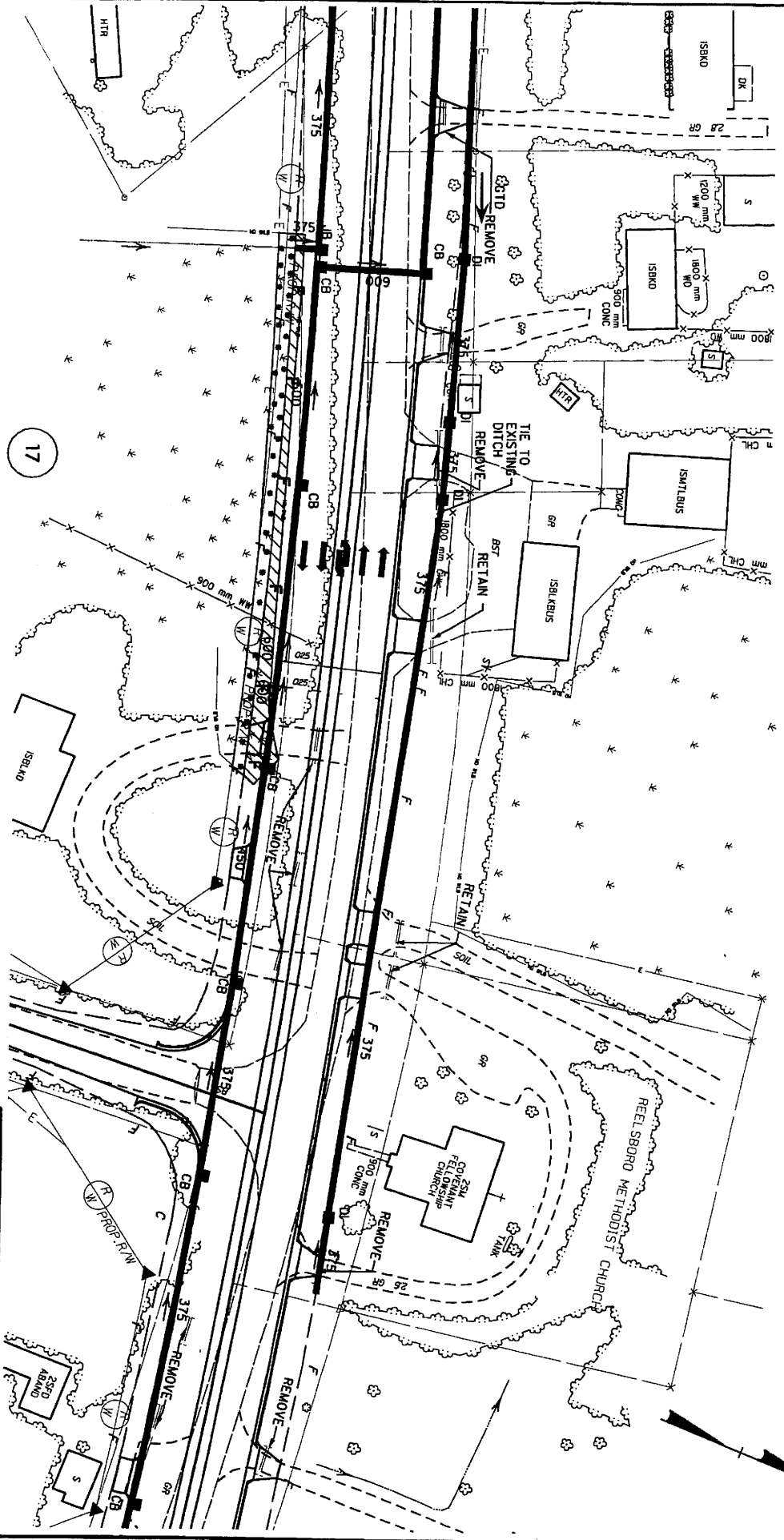




 DENOTES FILL IN WETLAND
 DENOTES MECHANIZED CLEARING

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT 8.1170901 (R-2539B)
 NC 55 FROM EAST OF SR 1127 TO EAST OF SR 1129
 SHEET OF 04-18-2005

SCALE = 1:1,000

SITE 9 -L- STA. 119 + 20 TO 120 + 20 RT



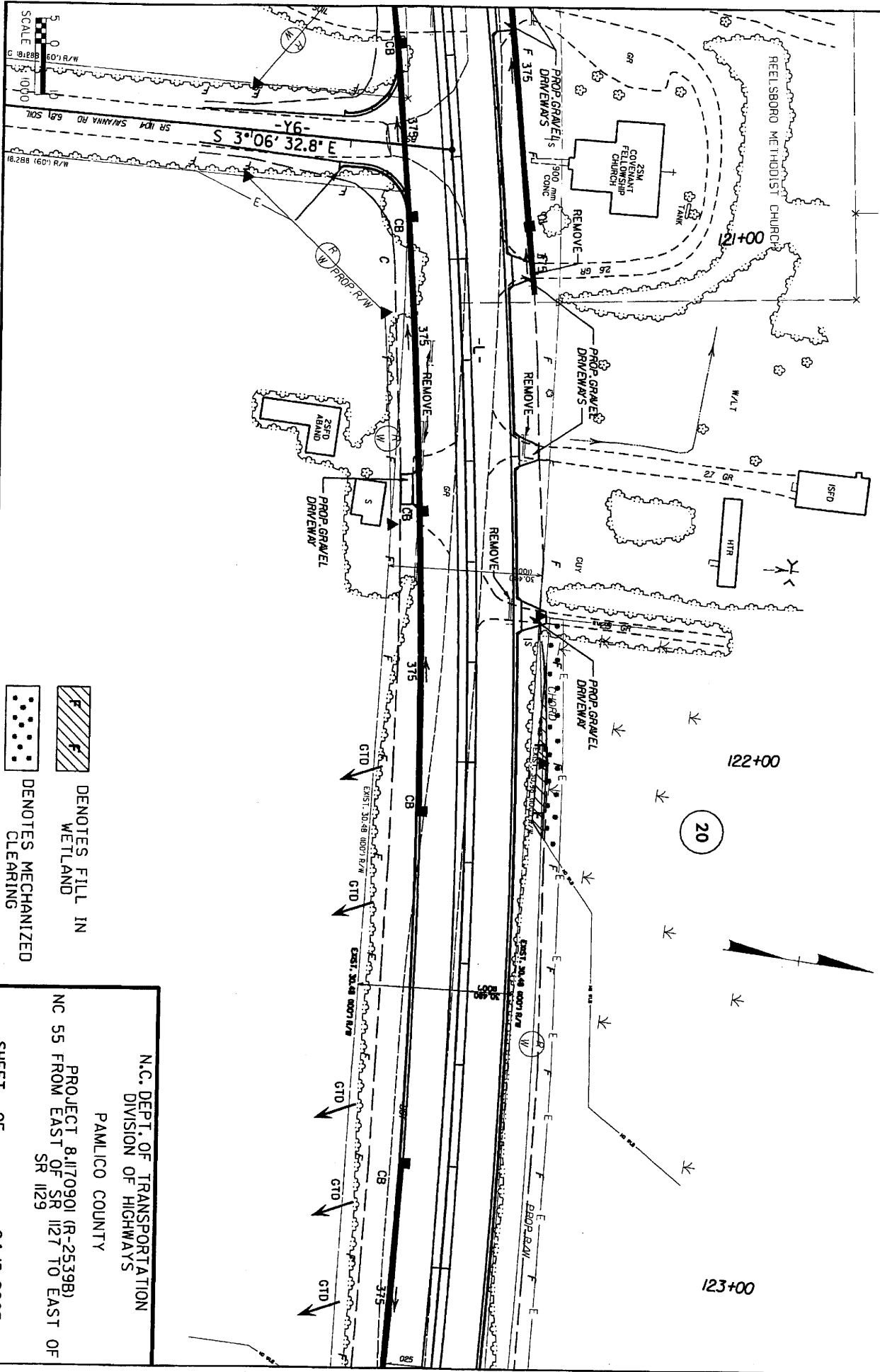
-  DENOTES FILL IN WETLAND
-  DENOTES MECHANIZED CLEARING


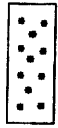

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY

PROJECT 8.1170901 (R-2539B)
 NC 55 FROM EAST OF SR 1127 TO EAST OF SR 1129

SHEET OF 04-18-2005

SITE 10 -L- STA. 121+70 TO 122+20 LT



 DENOTES FILL IN
 DENOTES MECHANIZED CLEARING
 DENOTES FILL IN WETLAND

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PAMLICO COUNTY
 PROJECT 8.II7090I (R-2539B)
 NC 55 FROM EAST OF SR 1127 TO EAST OF SR 1129
 SHEET OF 04-18-2005

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS				SURFACE WATER IMPACTS					
			Fill In Wetlands (ha)	Temp. Fill In Wetlands (ha)	Excavation In Wetlands (ha)	Mechanized Clearing (Method III) (ha)	Fill In SW (Natural) (ha)	Fill In SW (Pond) (ha)	Temp. Fill In SW (ha)	Existing Channel Impacted (m)	Natural Stream Design (m)	
1	56+90 TO 56+55											
2	59+70 TO 61+00	EXTENSION OF 2@ 1650 RCP W/COLLARS	0.051		0.034	0.019	0.004				22	
3	62+25 TO 63+60		0.055			0.010						
*4	74+85 TO 77+40	BRIDGE: 5 SPAN (5@ 20m) = 100m 1143mm PRESTRESSED CONCRETE GIRDERS	0.136	0.003	0.004	0.057						
5	81+85 TO 82+00	EXTENSION OF 1050 RCP W/COLLARS	0.012			0.005	0.001				16	
6	102+35 TO 103+65		0.047			0.038						
7	108+50 TO 114+00	EXTENSION OF 1.8 x 1.2 & 1.2 x 1.2 RCBC (TWO CELLS)	0.286		0.002	0.190	0.003				16	
8	117+20 TO 118+60		0.008			0.038						
9	119+20 TO 120+20		0.020			0.023						
10	121+70 TO 122+20		0.045			0.013						
11	123+75 TO 125+60		0.021			0.017						
13	134+75 TO 137+30	EXTENSION OF 1.8 x 1.2 RCBC	0.027		0.048	0.132	0.006				36	41
14	139+10 TO 139+20		0.017		0.002	0.004						
15	145+35 TO 146+75		0.000			0.035						
**16	148+10 TO 151+40	BRIDGE: 17 SPAN (6@ 13m, 1@ 15m, 10@ 13m) = 223m 533mm CORED SLAB	0.030			0.034						
TOTALS:			0.754	0.003	0.102	0.623	0.014	0.000	0.000	90	41	

* SITE NO. 4 - EXISTING ROAD REMOVED, RECLAIMED WETLAND = 0.234 (ha)

** SITE NO. 16 - EXISTING ROAD AND RAILROAD EMBANKMENT REMOVED, RECLAIMED WETLAND = 0.754 (ha)

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

PROJECT 8.1170901 (R-25398)
NC 55 FROM EAST OF SR 1127 TO EAST OF SR 1129
SHEET OF 3940
04-18-2005

Memorandum of Drainage Revisions

To: Victor Chavez, P.E.

From: Chad H. Critcher, P.E.

Re: NC 55 WIDENING FROM EAST OF SR1127 TO EAST OF SR1129
TIP# - R2539B
PAMLICO COUNTY

Date: April 25, 2005

Drainage items revised in association with removal of the Preformed Scour Holes at -L- Stations 111+31 left, 113+42 left and 113+58 left include the following:

1. Drainage system from 109+50 to 111+30 left has been eliminated through use of flumes in place of catch basins. Sheet 2-Z will be added to the plans to detail this special flume construction.
2. Cross pipe at 110+50 has been eliminated. A special cut ditch and driveway pipes have been designed from 109+20 to 112+75 right to carry drainage to culvert site. The back slope of the ditch will tie very close to the existing easement / right of way and therefore, no additional easement is proposed.
3. A drainage system has been designed from 112+80 to 121+10 left to carry the off-site "clean water" directly to the Black Creek Tributary. Additional easement is required from the DeVillo property at 115+95 to 116+31 left and the Goodwin property at 116+96 to 117+18 left.
4. The on-site "dirty water" has been divided into a left and right system and discharged into swales of sufficient length for on-site treatment. Construction of the swales will require additional easement from the Harper, Burnette, Walter and Taylor properties from 112+80 to 114+85 right.





M A Engineering Consultants, Inc.

April 25, 2005

Mr. Victor Chavez, P.E.
Parsons
One Harrison Park, Suite 200
401 Harrison Oaks Boulevard
Cary, NC 27513

RE: R-2539B
Drainage Design Revisions
Plan Sheets 19-23

Dear Mr. Chavez:

Attached is a memo outlining drainage items revised in association with removal of the Preformed Scour Holes at -L- Stations 111+31 left, 113+42 left and 113+58 left for the referenced project. These Preformed Scour Holes were originally proposed as on-site water quality treatment. During construction, the 3' to 4.5' hole depths required to drain the upstream systems were determined to be ineffective due to probable sedimentation and subsequent outlet pipe blockage.

In lieu of the scour holes, the revised plans will achieve water quality through construction of a parallel pipe system from -L- Station 112+80 to 121+10 left that intercepts off site water and discharges this "clean water" directly into the Black Creek Tributary. Also, the on-site "dirty water" will be collected in systems on the left and right and discharged into proposed swales. These swales are of sufficient length for treatment prior to discharge into the Creek.

If you should have any questions or need additional information, please call me at (704) 896-5250.

Sincerely,

M A ENGINEERING CONSULTANTS, INC.

Chad H. Critcher, P.E.
Senior Associate

16415-A Northcross Drive
Huntersville, NC 28078

v 704.896.5250
f 704.896.5239
www.maec.com

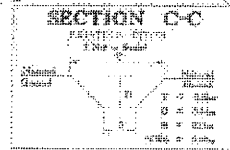
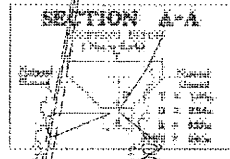
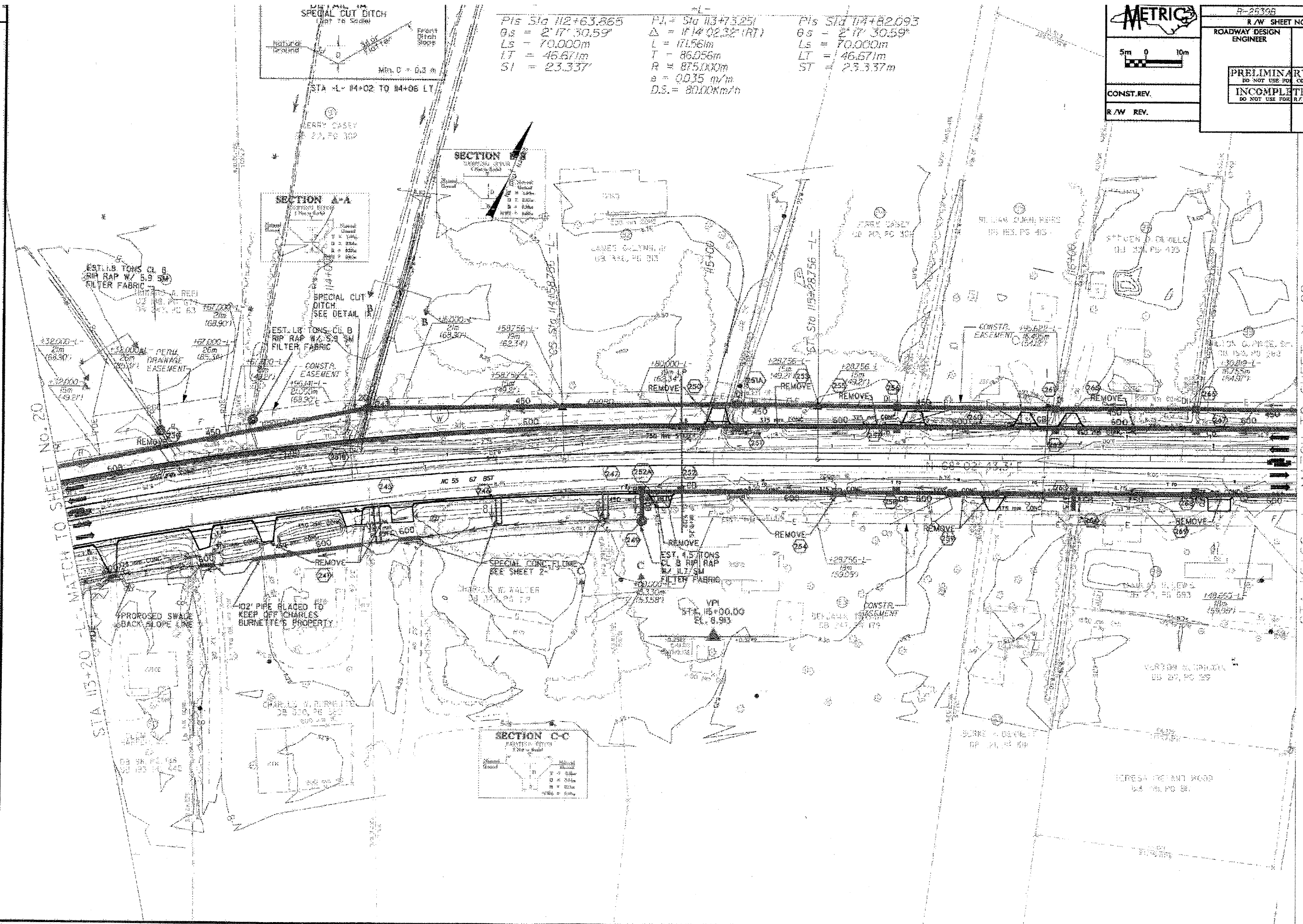
Raleigh, NC
Charlotte, NC
Washington, DC



R-2539B	
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRI ENC
PRELIMINARY PL DO NOT USE FOR CONSTRUCTION	
INCOMPLETE PL DO NOT USE FOR R/W ACQUISITION	
CONST. REV.	
R/W REV.	

-L-

PIs Sta 112+63.865	PJ = Sta 113+73.251	PIs Sta 114+82.093
Os = 2°17'30.59"	Δ = 1°14'02.32" (RT)	Os = 2°17'30.59"
Ls = 70.000m	L = 171.561m	Ls = 70.000m
LT = 45.671m	T = 86.056m	LT = 46.671m
SI = 23.337'	R = 875.000m	ST = 23.337m
	e = 0.035 m/m	
	D.S. = 80.000m/h	

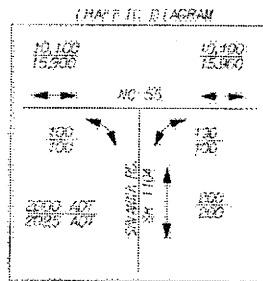


REVISIONS

STA 113+20 -L- MATCH TO SHEET NO. 20

STA 116+60 -L- MATCH TO SHEET NO. 22

DATE: 01/15/01
DRAWN BY: J. B. BROWN
CHECKED BY: J. B. BROWN



10+00
15+00
NO. 55

WALK B. JONES, EST.
70 10 15 199
NO. 02, PC 124

Pls Sta 118+45.799 P.I. = Sta 120+96.158 Pls Sta 123+43.099
 $\theta_s = 120^\circ 12.85'$ $\Delta = 17^\circ 12' 46.64''$ (RT) $\theta_s = 120^\circ 12.85'$
 $L_s = 70.000m$ $L = 45016.34m$ $L_s = 70.000m$
 $LT = 46.668m$ $T = 227.027m$ $LT = 46.668m$
 $ST = 23.335m$ $R = 1500.000m$ $ST = 23.335m$
 $e = 0.025 m/m$
 $O.S. = 80.000m/n$



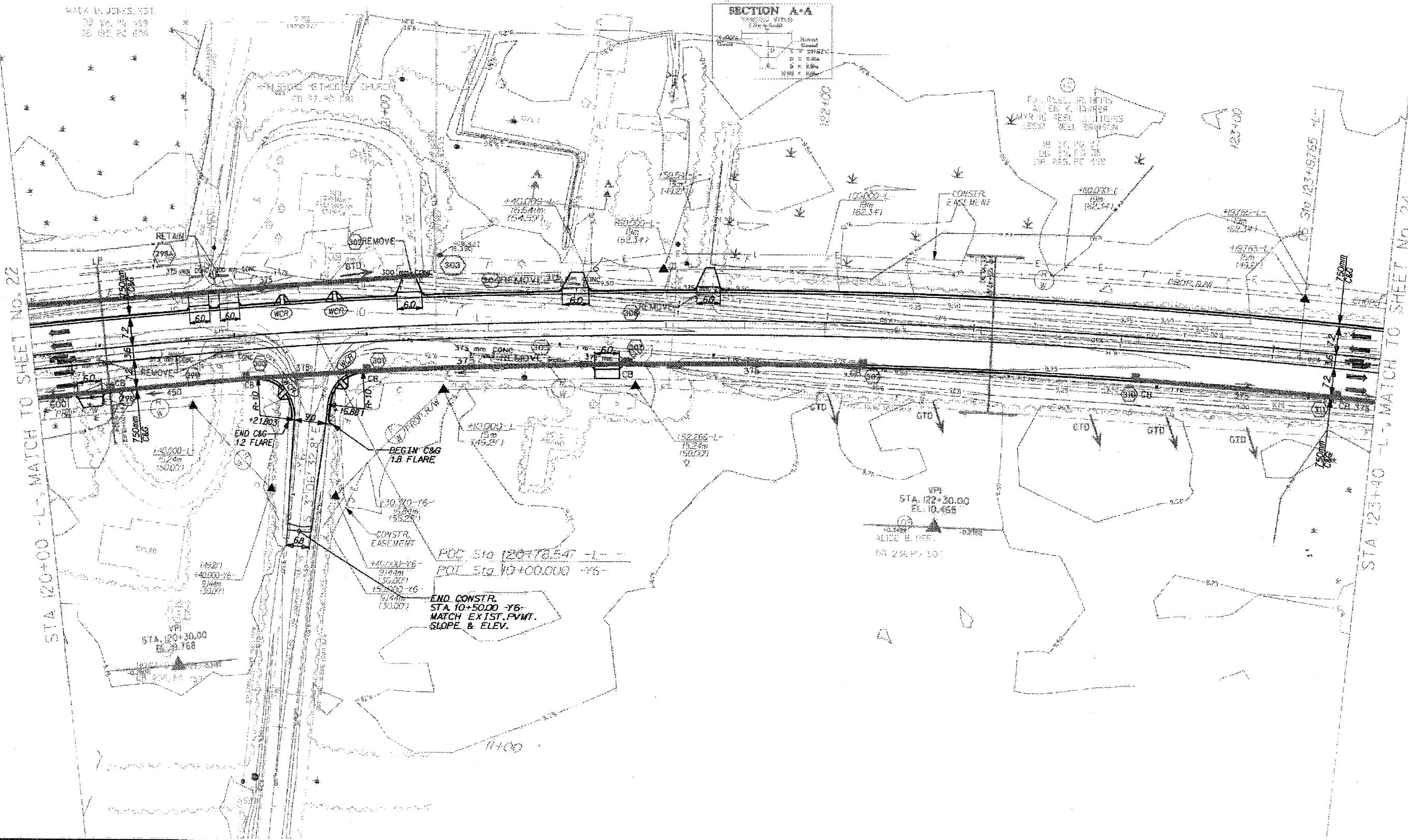
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R-25398	
R/W SHEET NO.	
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PRELIMINARY PL DO NOT USE FOR CONSTRUCTION	
INCOMPLETE PL DO NOT USE FOR R/W ACQU.	
CONST. REV.	
R/W REV.	

REVISIONS

STA 120+00 -L- MATCH TO SHEET NO. 22

STA 123+40 -L- MATCH TO SHEET NO. 24



24/06/2024
 10:25:10 AM
 10:25:10 AM
 10:25:10 AM