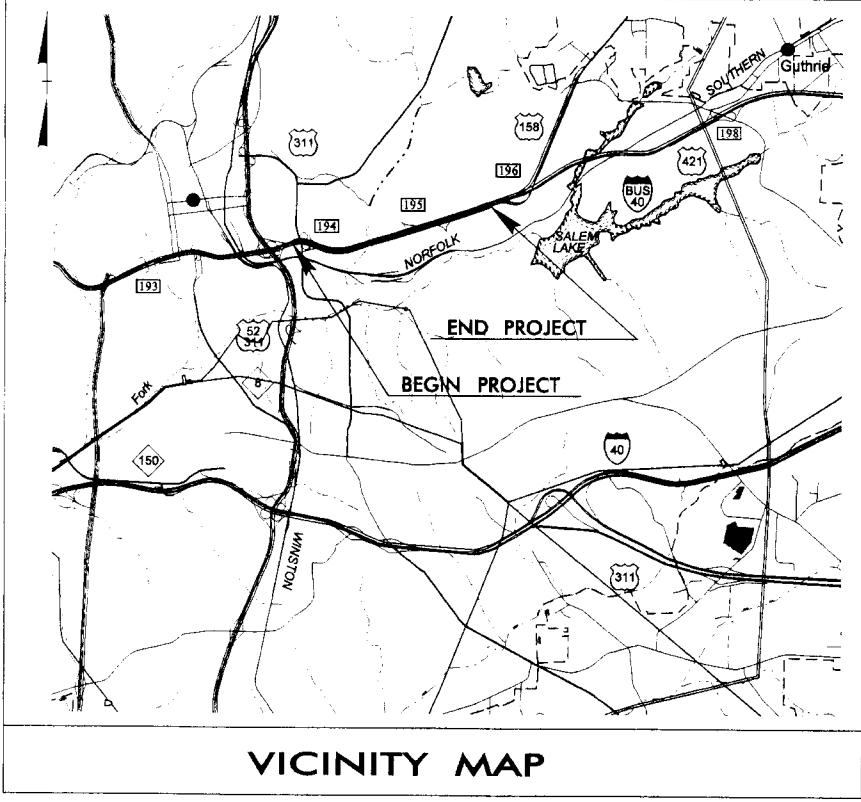


FORSYTH COUNTY
PRESENTED & RECORDED
JULIE C. BOON REGISTERED PROFESSIONAL ENGINEER
07-1-0771-0777

U-2827C

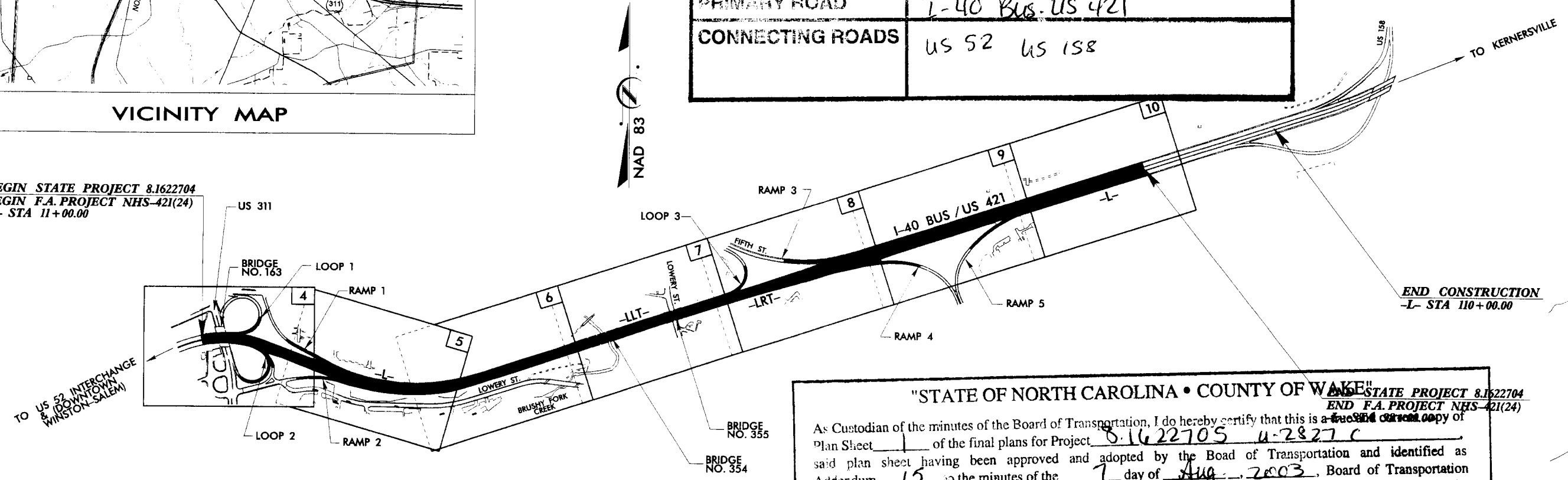
PROJECT: 8.1622704

See Sheet 1-A For Index of Sheets



VICINITY MAP

BEGIN STATE PROJECT 8.1622704
BEGIN F.A. PROJECT NHS-421(24)
-L- STA 11+00.00



THIS IS A CONTROLLED-ACCESS PROJECT,
WITH ACCESS BEING LIMITED TO INTERSECTIONS.

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
FORSYTH COUNTY

LOCATION: WINSTON-SALEM I-40 BUSINESS / US 421
FROM WEST OF US 311 TO WEST OF US 158

TYPE OF WORK: PAVEMENT REHABILITATION, SAFETY
IMPROVEMENTS, SIGNING, LIGHTING

PROJECT	8.1622704 U-2827C
PRIMARY ROAD	I-40 Bus. US 421
CONNECTING ROADS	US 52 US 158

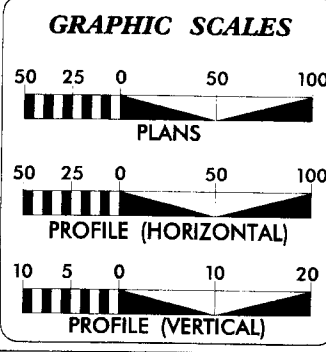
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2827C	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
8.1622701	NHF-421(5)	PE	
8.1622704	NHS-421(24)	CONST.	
34872.2.3	NHS-421(24)	RW, UTIL	



"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
Plan Sheet 1 of the final plans for Project 8.1622705 U-2827C
said plan sheet having been approved and adopted by the Board of Transportation and identified as
Addendum 15 to the minutes of the 7 day of Aug, 2003, Board of Transportation
meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
21 day of Aug, 2003.

Sherry C. Brew
Secretary to Board of Transportation



DESIGN DATA

ADT 2003 = 66070-72630
ADT 2020 = 85600-93600
DHV = 9 %
D = 58 %
T = 8 % *
V = 60 MPH
* TTST 5 % DUAL 3 %

PROJECT LENGTH

LENGTH ROADWAY F.A. PROJECT NHS-421(24) = 1.648 Miles
TOTAL LENGTH ROADWAY STATE PROJECT 8.1622704 = 1.648 Miles

Prepared in the Office of:

DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh, NC 27610

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: May 19, 2003	G.E. BREW, PE PROJECT ENGINEER
LETTING DATE: July 15, 2003	D. WILLIAMS PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

Randall C. Henson
SIGNATURE

ROADWAY DESIGN ENGINEER

Sherry C. Brew
SIGNATURE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

D.M. Barbour
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.
U-2827C

SHEET NO.
1-B

*S.U.E = SUBSURFACE UTILITY ENGINEER

ROADS & RELATED ITEMS

Edge of Pavement	---
Curb	---
Prop. Slope Stakes Cut	C
Prop. Slope Stakes Fill	F
Prop. Woven Wire Fence	○
Prop. Chain Link Fence	□
Prop. Barbed Wire Fence	◇
Prop. Wheelchair Ramp	WCR
Curb Cut for Future Wheelchair Ramp	CCR
Exist. Guardrail	---
Prop. Guardrail	---
Equality Symbol	⊕
Pavement Removal	XXXX

RIGHT OF WAY

Baseline Control Point	◆
Existing Right of Way Marker	△
Exist. Right of Way Line w/Marker	---
Prop. Right of Way Line with Proposed	---
R/W Marker (Iron Pin & Cap)	▲
Prop. Right of Way Line with Proposed	---
(Concrete or Granite) R/W Marker	●
Exist. Control of Access Line	⊙
Prop. Control of Access Line	⊙
Exist. Easement Line	---
Prop. Temp. Construction Easement Line	---
Prop. Temp. Drainage Easement Line	---
Prop. Perm. Drainage Easement Line	---

HYDROLOGY

Stream or Body of Water	---
River Basin Buffer	BZ
Flow Arrow	→
Disappearing Stream	---
Spring	○
Swamp Marsh	---
Shoreline	---
Falls, Rapids	---
Prop Lateral, Tail, Head Ditches	---

STRUCTURES

MAJOR	
Bridge, Tunnel, or Box Culvert	CONC
Bridge Wing Wall, Head Wall	
and End Wall	CONC WW

MINOR

Head & End Wall	CONC HW
Pipe Culvert	---
Footbridge	---
Drainage Boxes	CB
Paved Ditch Gutter	---

Exist. Pole	
Exist. Power Pole	
Prop. Power Pole	
Exist. Telephone Pole	
Prop. Telephone Pole	
Exist. Joint Use Pole	
Prop. Joint Use Pole	
Telephone Pedestal	
U/G Telephone Cable Hand Hole	
Cable TV Pedestal	
U/G TV Cable Hand Hole	
U/G Power Cable Hand Hole	
Hydrant	
Satellite Dish	
Exist. Water Valve	
Sewer Clean Out	
Power Manhole	
Telephone Booth	
Cellular Telephone Tower	
Water Manhole	

Light Pole	
H-Frame Pole	
Power Line Tower	
Pole with Base	
Gas Valve	
Gas Meter	
Telephone Manhole	
Power Transformer	
Sanitary Sewer Manhole	
Storm Sewer Manhole	
Tank; Water, Gas, Oil	
Water Tank With Leg	

Traffic Signal Junction Box	
Fiber Optic Splice Box	
Television or Radio Tower	
Utility Power Line Connects to Traffic	
Signal Lines Cut Into the Pavement	TS

UTILITIES

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of the minutes of the final plans for Project U-2827C, as approved and adopted by the Board of Transportation and identified as such in the minutes of the day of AUG 2003. Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF I have hereunto set my hand this 21 day of AUG 2003.

Secretary to Board of Transportation

Recorded Water Line

Designated Water Line (S.U.E.*)	---
Sanitary Sewer	---
Recorded Sanitary Sewer Force Main	---
Designated Sanitary Sewer Force Main(S.U.E.*)	---
Recorded Gas Line	---
Designated Gas Line (S.U.E.*)	---
Storm Sewer	---
Recorded Power Line	---
Designated Power Line (S.U.E.*)	---
Recorded Telephone Cable	---
Designated Telephone Cable (S.U.E.*)	---
Recorded U/G Telephone Conduit	---
Designated U/G Telephone Conduit (S.U.E.*)	---
Unknown Utility (S.U.E.*)	---
Recorded Television Cable	---
Designated Television Cable (S.U.E.*)	---
Recorded Fiber Optics Cable	---
Designated Fiber Optics Cable (S.U.E.*)	---
Exist. Water Meter	⊙
U/G Test Hole (S.U.E.*)	⊙
Abandoned According to U/G Record	ATTUR
End of Information	E.O.I.

BOUNDARIES & PROPERTIES

State Line	---
County Line	---
Township Line	---
City Line	---
Reservation Line	---
Property Line	---
Property Line Symbol	⊙
Exist. Iron Pin	⊙
Property Corner	⊙
Property Monument	⊙
Property Number	⊙
Parcel Number	⊙
Fence Line	---
Existing Wetland Boundaries	---
High Quality Wetland Boundary	---
Medium Quality Wetland Boundaries	---
Low Quality Wetland Boundaries	---
Proposed Wetland Boundaries	---
Existing Endangered Animal Boundaries	---
Existing Endangered Plant Boundaries	---

BUILDINGS & OTHER CULTURE

Buildings	---
Foundations	---
Area Outline	---
Gate	---
Gas Pump Vent or U/G Tank Cap	---
Church	---
School	---
Park	---
Cemetery	---
Dam	---
Sign	---
Well	---
Small Mine	---
Swimming Pool	---

TOPOGRAPHY

Loose Surface	---
Hard Surface	---
Change in Road Surface	---
Curb	---
Right of Way Symbol	R/W
Guard Post	⊙
Paved Walk	---
Bridge	---
Box Culvert or Tunnel	---
Ferry	---
Culvert	---
Footbridge	---
Trail, Footpath	---
Light House	---

VEGETATION

Single Tree	---
Single Shrub	---
Hedge	---
Woods Line	---
Orchard	---
Vineyard	---

RAILROADS

Standard Gauge	---
RR Signal Milepost	---
Switch	---

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	5	CITY OF WINSTON SALEM
2	5	CITY OF WINSTON SALEM
3	5,6	WILLIAM H. WHITEHART
4	6,7	CITY OF WINSTON SALEM
5	7,8	UNKNOWN
6	8,9,10	UNKNOWN

PARCEL No.	SHEET No.	PROPERTY OWNER NAME

"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 3-2 of the final plans for Project 8 1622705 U-2827C said plan sheet, having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003

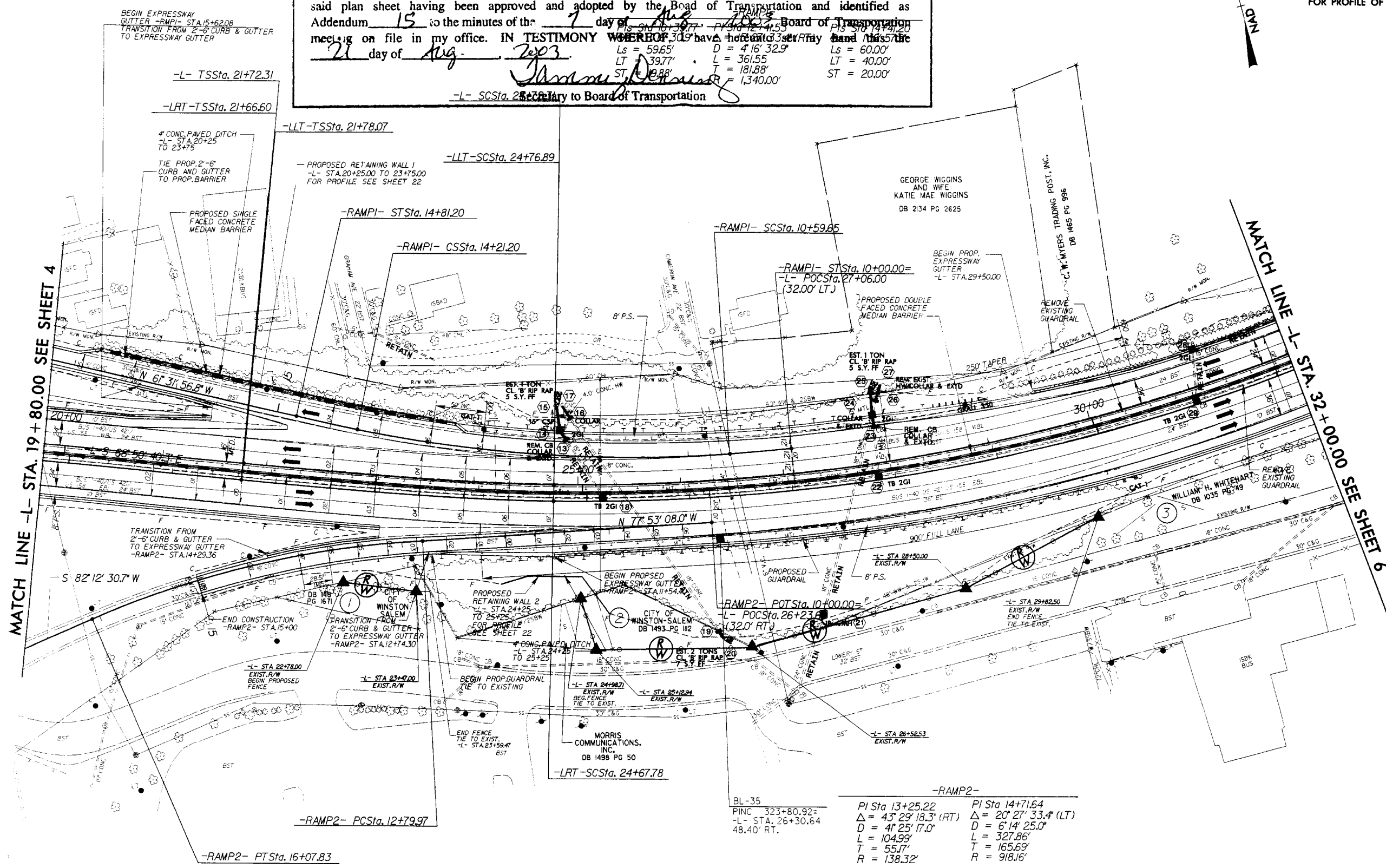
Charmy Dennis
Secretary to Board of Transportation

REVISIONS	
1/22/99	

ACKNOWLEDGMENTS

FOR PROFILE OF -LLT- SEE SHEET 11
FOR PROFILE OF -LRT- SEE SHEET 15
FOR PROFILE OF -RAMP1- SEE SHEET 19
FOR PROFILE OF -RAMP2- SEE SHEET 19

LLT-TSSsta. 21+78.07



NOTE: REMOVAL OF EXISTING CONCRETE BARRIER RAIL WILL NOT BE A SEPERATE PAY ITEM

-LLT-

Pls Sta 35+70.71
 $\theta_s = 4^\circ 30' 00.9''$
 $L_s = 298.76'$
 $LT = 199.24'$
 $ST = 99.65'$

PI Sta 40+13.81	PI Sta 41+65.38
$\Delta = 0^\circ 22' 42.9''$ (RT)	$\Delta = 0^\circ 22' 42.5''$ (LT)
$D = 0^\circ 15' 00.0''$	$D = 0^\circ 14' 58.1''$
$L = 151.44'$	$L = 151.71'$
$T = 75.72'$	$T = 75.86'$
$R = 22,918.31'$	$R = 22,967.71'$

-LRT-

<i>Pls Sta</i> 35+70.80	<i>Pl Sta</i> 40+69.90	<i>Pl Sta</i> 43+32.17
$\Theta S = 4^{\circ} 29' 59.6''$	$\Delta = 0^{\circ} 39' 20.2''$ (LT)	$\Delta = 0^{\circ} 39' 20.0''$ (RT)
<i>Ls</i> = 3'21.25'	<i>D</i> = 0'15'.00'	<i>D</i> = 0'14'.59'
<i>LT</i> = 200.90'	<i>L</i> = 262.25'	<i>L</i> = 262.31'
<i>ST</i> = 100.48'	<i>T</i> = 131.12'	<i>T</i> = 131.15'
	<i>R</i> = 22,918.31'	<i>R</i> = 22,926.10'

U-2827C

6

RW SHEET NO.

ROADWAY DESIGN

HYDRAULICS

ENGINEER

ENGINEER

ORTH CAROLINA

NORTH CAROLINA



NOVA SCOTIA
OFFICE

SEAL

PRC
SEAL

MS
18903
GR

18257



Professional Engineer Seal



Professional Engineer Seal

100-443887-100

RY M. SNEA

S-29-03
OR PROFILE OF 1

SHEETS 11 2 1

OR PROFILE OF -L

SHEETS 11 & 12
SHEETS 15 & 16

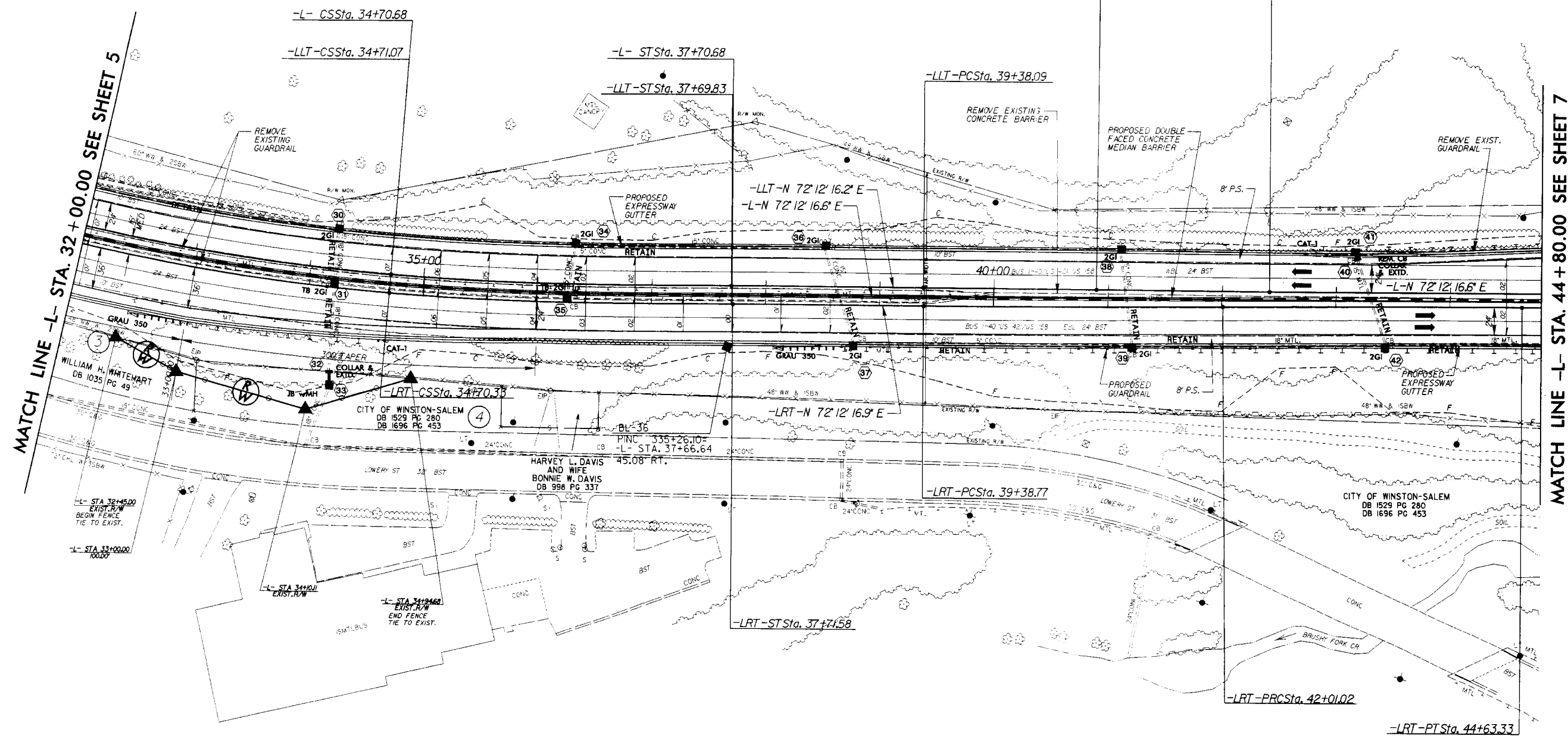
"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 6 of the final plans for Project 88888 81622705 U-2827 C said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003. Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003.

Secretary to Board of Transportation

-LLT-PRCSta 40+89.53

-11T-PTSta 42+4124



09 MAY 2003 15:52
R:\Project\2827es06.psh
DYPuryear: 01 RM1503D

11/27/94
03 MAY 2003 15:27
D:\P\2003\1527\1527.dwg
D:\P\2003\1527\1527.dwg

REVISIONS

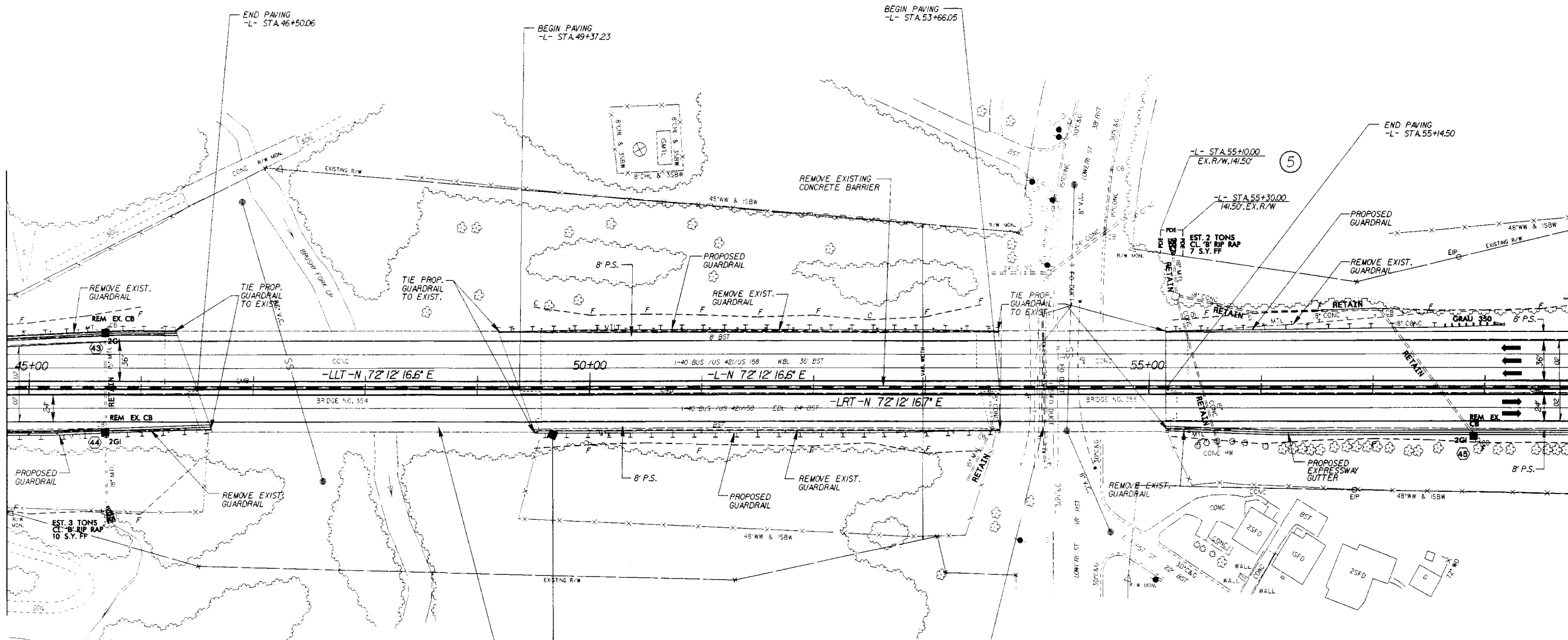
NOTE: REMOVAL OF EXISTING CONCRETE BARRIER RAIL WILL NOT BE A SEPERATE PAY ITEM

NAD 83

PROJECT REFERENCE NO. U-2827C	SHEET NO. 7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER GREGORY E. BREW 5-28-03	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER TERRY M. SWEND 5-19-03
FOR PROFILE OF -LLT- SEE SHEET 12 FOR PROFILE OF -LRT- SEE SHEET 16	

MATCH LINE -L- STA. 44 + 80.00 SEE SHEET 6

MATCH LINE -L- STA. 58 + 80.00 SEE SHEET 8



RETAIN EXISTING
BRIDGE NO. 354

BL-37
PINC 347+26.19=
-L- STA. 49+66.73
40.26' RT.

STATE OF NORTH CAROLINA - COUNTY OF WAKE

RETAIN EXISTING "S" BRIDGE NO. 355

As Chairman of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 7 of the final plans for Project 8-1627705 U-2827C said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003. Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003.

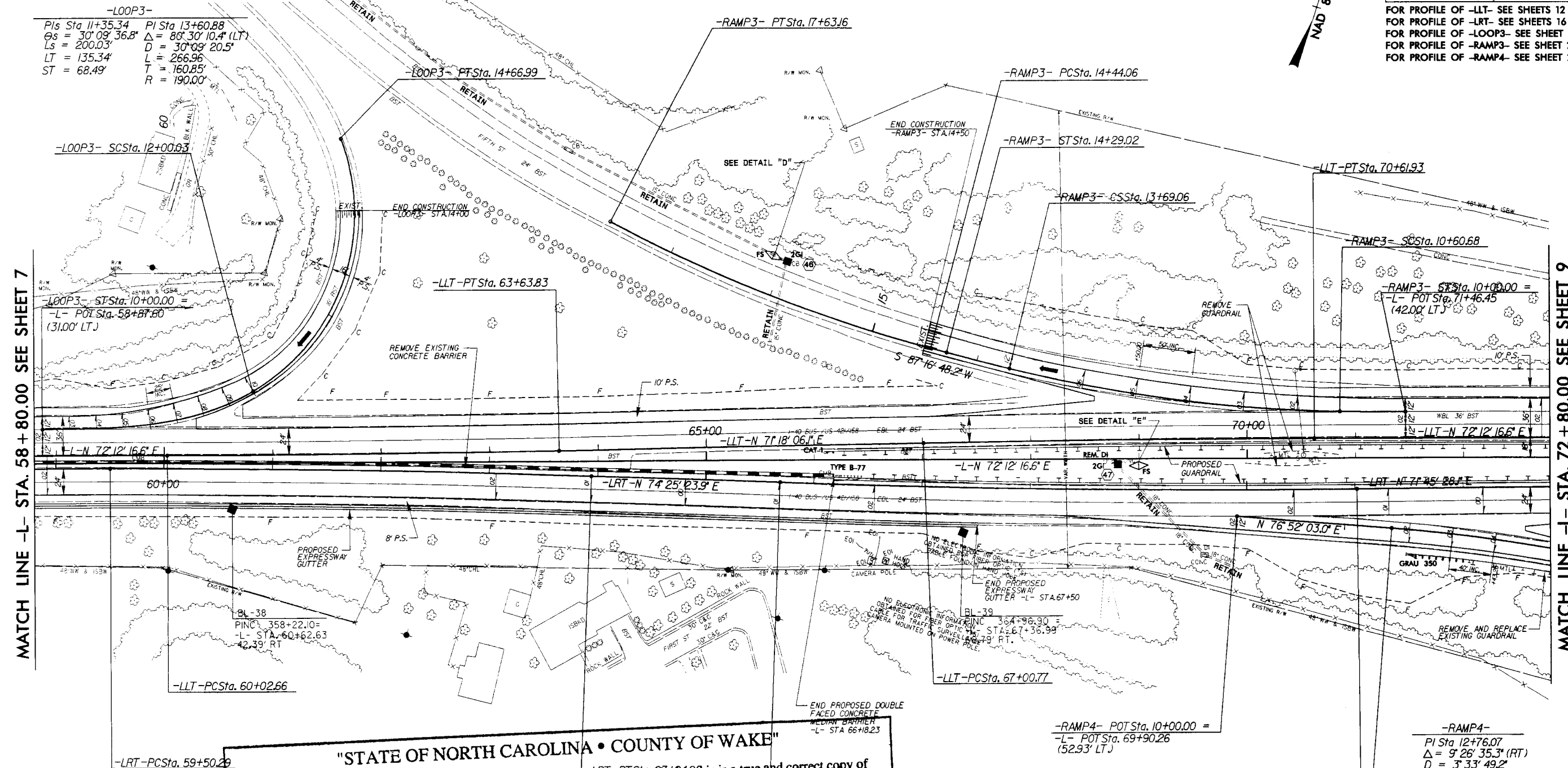
Thomas Jensen
Secretary to Board of Transportation

	REVISIONS
11/22/71	

NOTE: REMOVAL OF EXISTING CONCRETE BARRIER RAIL WILL NOT BE A SEPERATE PAY ITEM

PROJECT REFERENCE NO.	SHEET NO.
U-2827C	8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 NORTH CAROLINA PROFESSIONAL ENGINEER SEALED 18903 GREGORY E. BREW	 NORTH CAROLINA PROFESSIONAL ENGINEER SEALED 11925 TERRY M. SHEAD
S-24-03	S-19

FOR PROFILE OF -LLT- SEE SHEETS 12 & 13
FOR PROFILE OF -LRT- SEE SHEETS 16 & 17
FOR PROFILE OF -LOOP3- SEE SHEET 21
FOR PROFILE OF -RAMP3- SEE SHEET 20
FOR PROFILE OF -RAMP4- SEE SHEET 20



"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

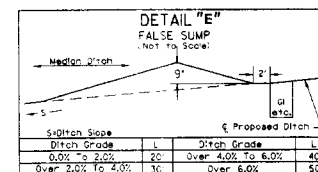
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 8 of the final plans for Project 8-162703-02827C said plan sheet having been approved and adopted by the Board of Transportation and identified as such in the minutes of the 7 day of Aug. 2003. Board of Transportation

-LRT-

PI Sta 61+72.18
 $\Delta = 2^\circ 13' 07.2''$ (RT)
 $D = 0^\circ 30' 00.0''$
 $L = 443.73'$
 $T = 221.89'$
 $R = 11,459.16'$

PI S = 68° 35' 44"
 $\Delta = 2^\circ 39' 55.8''$ (LT)
 $D = 0^\circ 30' 00.0''$
 $L = 533.10'$
 $T = 266.60'$
 $R = 11,459.16'$

TESTIMONY WHEREOF,
2003.
James A. ...
Secretary to Board of Transportation



NAD 83

-LRT-

$\Delta = 0^{\circ} 26' 48.6''$ (RT)
 $D = 0^{\circ} 15' 00.0''$
 $L = 178.73'$
 $R = 229.83''$

Thomas D. Blanton
Secretary to Board of Transportation

BL-40
PINC 375+97.56=
-L- 78+36.02
6.84' RT.

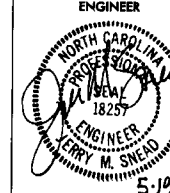
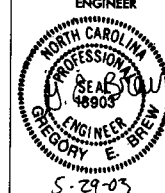
U-2827C

6

RW SHEET NO

ROADWAY DESIGN

HYDRAULICS



FOR PROFILE OF -LLT- SEE SHEET 16
FOR PROFILE OF -LRT- SEE SHEET 17
FOR PROFILE OF -RAMP4- SEE SHEET 20
FOR PROFILE OF -RAMP5- SEE SHEET 21

MATCH LINE -L- STA. 72+80.00 SEE SHEET 8

MATCH LINE -L- STA. 86+80.00 SEE SHEET 10

-RAMP4-

$PI Sta 15+30.33$
 $\Delta = 17^\circ 42' 00.0'' (RT)$
 $D = 7^\circ 18' 30.0''$
 $L = 242.19'$
 $T = 122.07'$
 $R = 783.98'$

-RAMP4- PCCSta. 14+08.27

-RAMP4- PT Sta. 16+50.45

-RAMP5-

-RAMP5-

Pls Sta 13+97.48	Pls Sta 10+66.78
$\Delta = 27^{\circ} 49' 54.5''$ (LT)	$\Theta_s = 2^{\circ} 23' 28.1''$
$D = 4^{\circ} 46' 28.7''$	$L_s = 100.16'$
$L = 582.9'$	$LT = 66.78'$
$T = 297.32'$	$ST = 33.39'$
$R = 1,200.00'$	

Pls Sta 10+66.78
 $\theta_s = 2^\circ 23' 28''$
 $L_s = 100.16'$
 $LT = 66.78'$
 $ST = 33.39'$

"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 10 of the final plans for Project 81622205 U-7927C, said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003, Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003.

Secretary to Board of Transportation

PROJECT REFERENCE NO.	SHEET NO.
U-2827C	10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

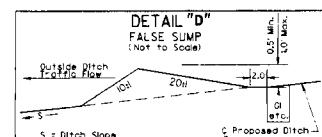


5-29-03

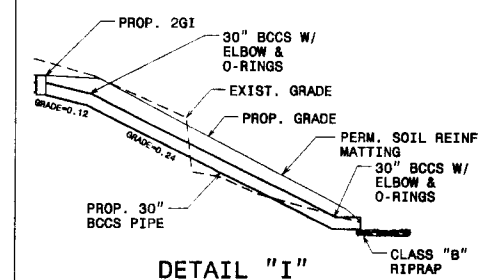


5-29-03

FOR PROFILE OF -LLT- SEE SHEETS 13 & 14
FOR PROFILE OF -LRT- SEE SHEETS 17 & 18
FOR PROFILE OF -RAMP5- SEE SHEET 21



Ditch Grade		Ditch Grade	
L	T	L	T
0.0%	2.0%	Over 4.0%	5.0%
Over 3.0%	4.0%	5.0%	



END PROJECT U-2827C

-L- STA. 98+00.00 =

-LLT- STA. 97+99.85 (18' LEFT)

-LRT- STA. 98+00.68 (18' RIGHT)

