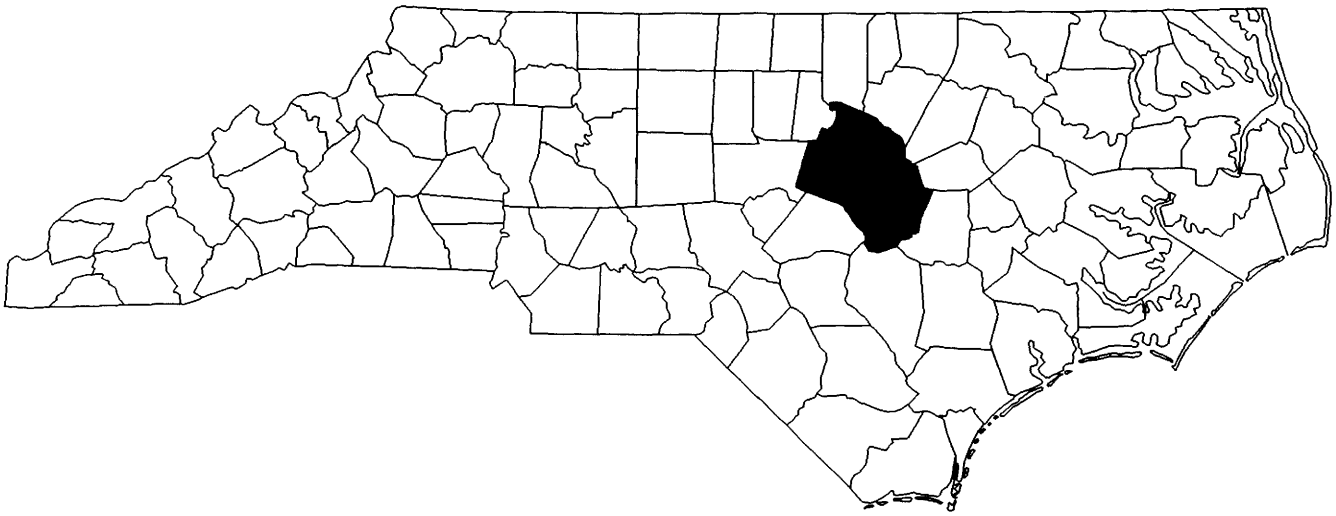
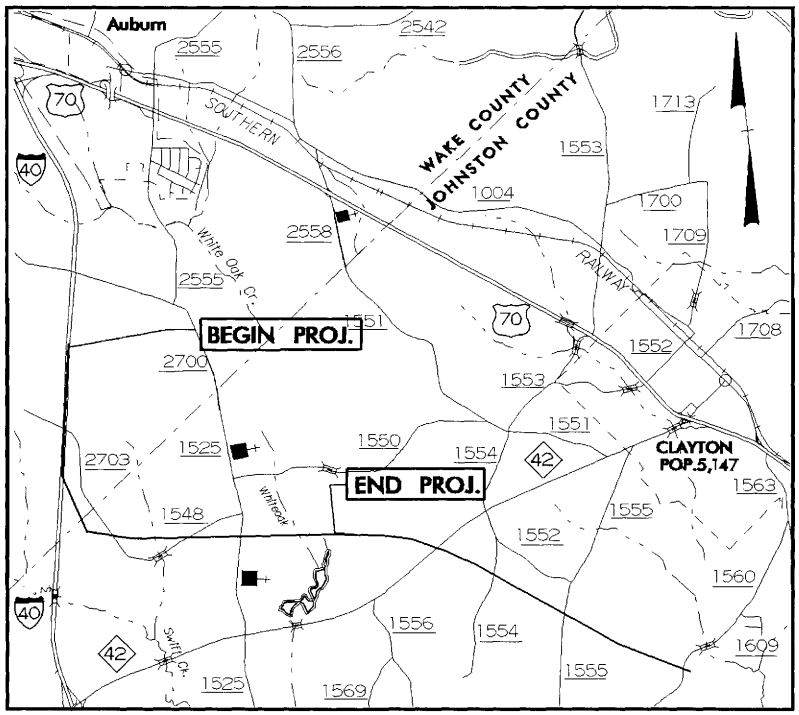
NORTH CAROLINA





NEUSE RIVER BUFFER

VICINITY MAP

NCDOT

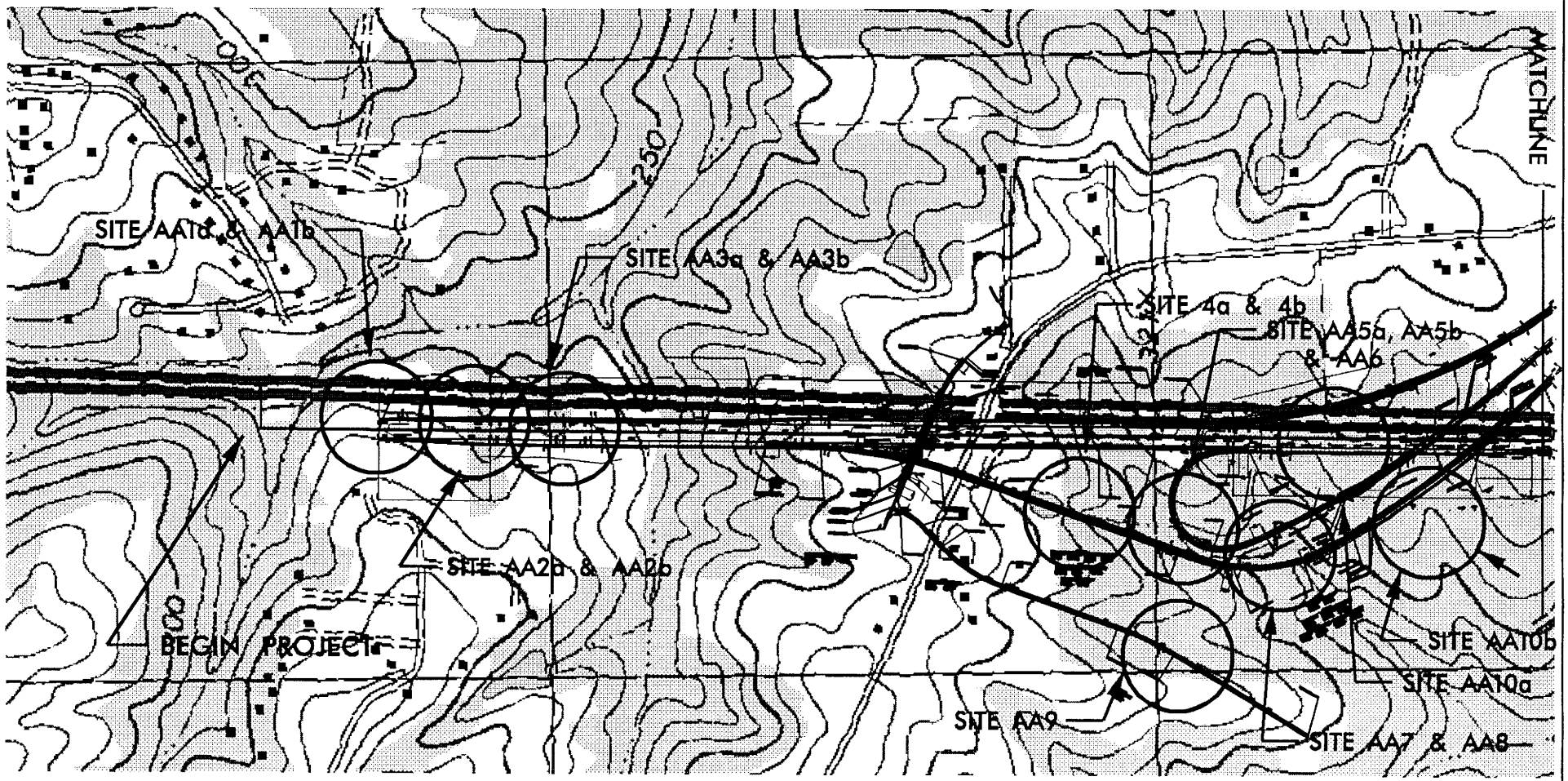
DIVISION OF HIGHWAYS

JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

SHEET 1 OF 15 10/01/04



SITE MAP

NCDOT

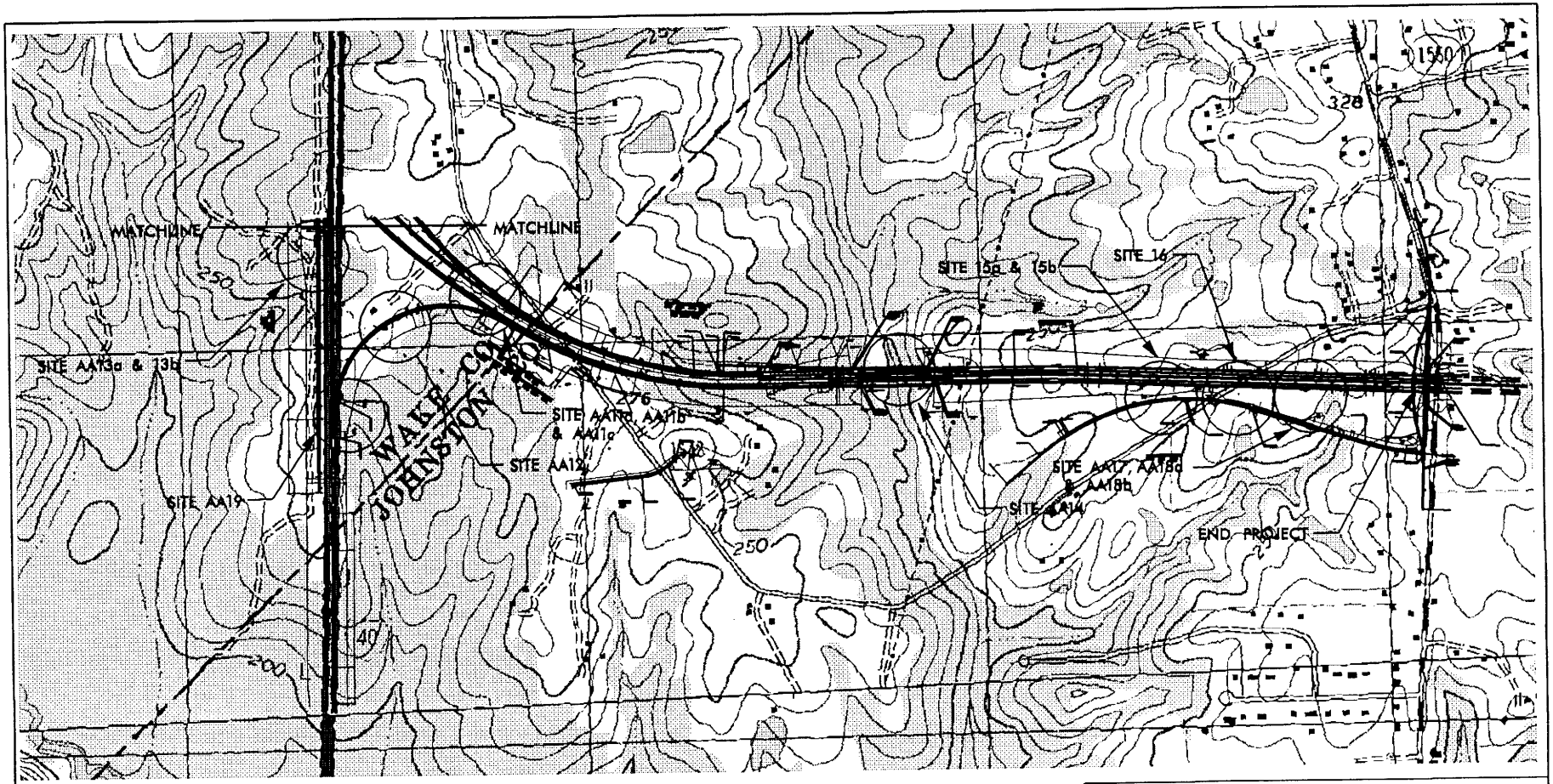
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 34459.1.1 (R-252AA)

US 70 CLAYTON BYPASS

SHEET _ OF 18 **10 / 01 / 04**



SITE MAP

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 34459.1.1 (R-252AA)

US 70 CLAYTON BYPASS

SHEET 3 OF 18 10/01/04

BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT TYPE: ROAD CROSSING	IMPACT TYPE: PARALLEL IMPACT	ALLOWABLE: ZONE 1 (ft^2)	ALLOWABLE: ZONE 2 (ft^2)	ALLOWABLE: TOTAL (ft^2)	MITIGABLE: ZONE 1 (ft^2)	MITIGABLE: ZONE 2 (ft^2)	MITIGABLE: TOTAL (ft^2)	BUFFER REPLACEMENT: ZONE 1 (ft^2)	BUFFER REPLACEMENT: ZONE 2 (ft^2)
AA1a	600 RCP	I1Y1 10+90	X		430.56	2611.00	3041.56					
AA1b	600 RCP	I1Y1 10+90	X		2124.80	1765.28	3890.08					
AA3a	1350 CSP	I1Y1 13+70	X		3717.85	4049.38	7767.23					
AA3b	1350 CSP	I1Y1 13+70	X		4111.81	4391.68	8503.49					
AA4a	750 RCP	I1Y1 20+90	X					11348.39	8144.73	19493.12		
AA4b	900 RCP	FLYLEREV 29+50	X					8830.17	6469.65	15299.82		
AA5a	750 RCP	LPB 21+90	X					41580.88	32338.05	73918.93		
AA5b	900 RCP	FLYLEREV 28+20	X					0.00	10.76	10.76		
AA10a	800 CSP	FLYLWREV 23+20	X					11797.25	9601.41	21398.66		
AA10b	BRIDGE	FLYLEREV 24+45	X					18155.59	14593.60	32749.19		
TOTAL:					10385.02	12817.34	23202.36	91712.28	71158.20	162870.48		

NOTE : WETLAND IMPACT IN BUFFER ZONES

SITE	1	2
1b	107.60	0.00
4b	107.60	0.00
5b	193.68	107.60
6	107.60	322.80
10a	215.20	0.00
10b	538.00	107.60

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY
PROJECT # - WBS 34459.1.1 (R2552AA)
US 70 - CLAYTON BYPASS

38278
SHEET 7 OF 18

BUFFER IMPACTS SUMMARY

SITE NO.	STRUCTURE SIZE / TYPE	STATION (FROM/TO)	IMPACT								BUFFER REPLACEMENT	
			TYPE		ALLOWABLE			MITIGABLE				
			ROAD CROSSING	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)
AA11b	1500 RCP	FLYLEREV 18+00	X					46633.03	32446.41	79079.44		
AA11c	450 RCP	FLYLEREV 18+40 LT	X					SEE AA11b FOR SITE TOTAL				
AA13	600 RCP	I1Y1 30+80	X		3719.82	5908.53	9628.35					
AA14	BRIDGE	LREV 14+50	X					18513.82	15333.94	33847.76		
AA15a	1050 RCP\	L 21+10	X		5571.94	4047.45	9619.39					
AA15b	1050 RCP	Y2B 12+70	X					6284.08	8147.74	14431.82		
AA16	750 RCP	L 23+00	X					27648.93	19748.98	47397.91		
AA18a	1200 RCP	L 25+80	X					28645.56	18336.32	46981.88		
AA18b	1350 RCP	Y2B 16+00	X					8818.38	6898.70	15717.08		
AA19	750 RCP	I1Y1 33+90 LT	X		2164.73	1921.68	4086.41					
TOTAL:					11456.49	11877.66	23334.15	136543.80	100912.09	237455.89		
PROJECT TOTALS					**21841.51**	**24695.00**	**46536.51**	**228256.08**	**172070.29**	**400326.37**		

NOTE : WETLAND IMPACT IN BUFFER ZONES

		1	2
SITE	**11**	39338.56	15193.12
	14	17775.52	11975.88
	16	2690.00	0.00

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY
PROJECT # - WBS 34459.1.1 (R2552AA)
US 70 - CLAYTON BYPASS

10/18/04
SHEET 5 OF 18

RIGHT OF WAY REVISION 9/2/04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	4
R/W SHEET NO.	4,5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R/W REV.	

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83

EVA M. WALTERS

20.659 COR TO COR
N04°32'24"W

4.492 COR TO COR
N02°20'25"W

BZ 1
BZ 2

BEGIN CONSTRUCTION
-IIY1- POT STA. 10+40.000

BEGIN EXPRESSWAY GUTTER
-IIY1- STA 10+80.655

SITE AA1a

PSH
Q10 - .17 cms
da - .14 ha
v - 1.54 m/s

MITIGATABLE IMPACTS ZONE 1
MITIGATABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

SITE AA2a

PSH
Q10 - .17 cms
da - 0.7 ha
v - 1.54 m/s

SITE AA3a

-IIY1- +50.000
42.706m
(140.11')
48.000m
(157.48')

CHANNEL OUTLET PROTECTION
CLASS "I" RIP-RAP
EST. 43.5 MTNS

CLASS "B" RIP-RAP
EST. 1.8 MTNS
FILTER FABRIC
EST. 5.9 SM

1550 mm WW & ISBW

EXISTING R/W

PSH - 1.2 X 1.2m

COLLAR AND EXT.
375 RCP
COLLAR & EXT.
1650 mm CSP

GRADE TO DRAIN

RETAIN

-WB-

-EB-

-IIY1- S 3°18'51.3"W

11+00
12+00
13+00

3.0 CONC
7.3 CONC
12 CONC

2GI

375

450mm CONC

400mm CSP
w/ELBOWS

SITE AA1b

SITE AA2b

CLASS "B" RIP-RAP
EST. 0.9 MTNS
FILTER PABRIC
EST. 4.2 SM

GRASS SWALE
Sta - 11+60 -Y1- RT
L - 90m
s - 0.006 m/m
da - .29 ha
Q2 - 06 cms
v2 - .34 m/s
d2 - .15 m
Q10 - .08 cms
v10 - .37 m/s
d10- .17 m

RETAIN HDWL

-Y1- +04.544 =
-IIY1- +04.544
41.550m
(136.32')

-Y1- +11.544 =
-IIY1- +11.544
41.550m
(136.32')

BEGIN EXPRESSWAY GUTTER
-IIY1- STA 13+30.240

PSH - 1.2 x 1.2m

PSH
Q10 - .05 cms
da - 0.09 ha
v - 0.45 m/s

EVA M. WALTERS

NOTE:
(1) SEE SHEET 17 FOR -IIY1- PROFILE

MATCHLINE TO SHEET 5 -IIY1- STA. 13+60.000

$$$$$$SYSTIME$$$$$$
$$$$$$

RIGHT OF WAY REVISION 92104

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	5
	R/W SHEET NO.	5,6
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R/W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

MATCHLINE TO SHEET 4 –IIY1– STA. 13+60.000

MATCHLINE TO SHEET 6 –IIY1– STA. 17+20.000

GRASS SWALE
Sta – 14+40 –Y1– LT
L – 130m
s – 0.018 m/m
da – 1.24 ha
Q2 – .17 cms
v2 – .49 m/s
d2 – .25 m
Q10 – .51 cms
v10 – .27 m/s
d10– .21 m

NAD 83

MITIGATABLE IMPACTS ZONE 1
MITIGATABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

1 THOMAS H. PENNY

2 THOMAS H. PENNY

3 GEORGE J. PENNY, ET UX

0.6 m LATERAL GRASS SWALE

–Y1– +80.000 = –IIY1– +80.000
50.000m (164.04')

–Y1– +10.000 = –IIY1– +10.000
52.000m (170.60')

–Y1– +40.000 = –IIY1– +40.000
49.000m (160.76'), EX. R\W

RETAIN EXISTING DITCH AND RIP-RAP PAD

CL "B" RIP-RAP EST. 2.7 MTNS FILTER FABRIC EST. 8.4 SM

END EXPRESSWAY GUTTER –IIY1– STA 15+51.190

PROP. R/W 1st TAKING

1550 mm WW & ISBW

EXISTING R/W

RIPRAP

COLLAR & EXT., 450mm

450mm CONC

3.0 CONC

7.3 CONC

–WB–

RETAIN

14+00

15+00

16+00

17+00

S 3°18'51.3"W

–IIY1–

1.8 CONC

1.2 CONC

2.9 CONC

I-40 WBL 7.4 CONC

–EB–

END EXPRESSWAY GUTTER –IIY1– STA 14+69.305

450mm CONC

PLUG

REMOVE

I-40 EBL 7.3 CONC

35+00

2.8 CONC

1650mm MTL

REMOVE HDWL

RETAIN DITCH

2GI

TYPE A

450mm MTL

CONC BERM

EXISTING R/W

400mm CSP w/ELBOW

BDO

STD. BERM DITCH

OUTLET
Q10 – 0.40 cms
da – 1.47 ha
s – 0.08 m/m
v – 0.24 m/s

OUTLET
Q10 – 0.40 cms
da – 1.76 ha
s – 0.015 m/m
v – 0.88 m/s

–Y1– +33.144 = –IIY1– +33.144
42.739m

CLASS "B" RIP-RAP EST. 4.5 TONS FILTER FABRIC EST.11.7 SM

1.5m LATERAL BASE DITCH

CLASS "B" RIP-RAP EST. .64 TONS FILTER FABRIC EST.160 SM

–Y1– +00.000 = –IIY1– +00.000
50.000m (164.04')

–Y1– +55.064 = –IIY1– +55.064
45.737m

–Y1– +00.000 = –IIY1– +00.000
55.000m (180.45')

–Y1– +00.000 = –IIY1– +00.000
43.564m (142.93')

COLLAR AND EXT. 1650mm CSP W/HDWL

SITE AA3b

GRASS SWALE
Sta – 15+00 –Y1– RT
L – 130m
s – 0.007 m/m
da – .51 ha
Q2 – .11 cms
v2 – .43 m/s
d2 – .19 m
Q10 – .14 cms
v10 – .46 m/s
d10– .21 m

GRASS SWALE
Sta – 17+00 –Y1– RT
L – 162m
s – 0.007 m/m
da – .67 ha
Q2 – .14 cms
v2 – .46 m/s
d2 – .22 m
Q10 – .18 cms
v10 – .49 m/s
d10– .24 m

TRAFFIC DIAGRAM
2005 ADT
2025 ADT
CLAYTON BYPASS
I-40 EBL 7.3 CONC
I-40 WBL 7.4 CONC

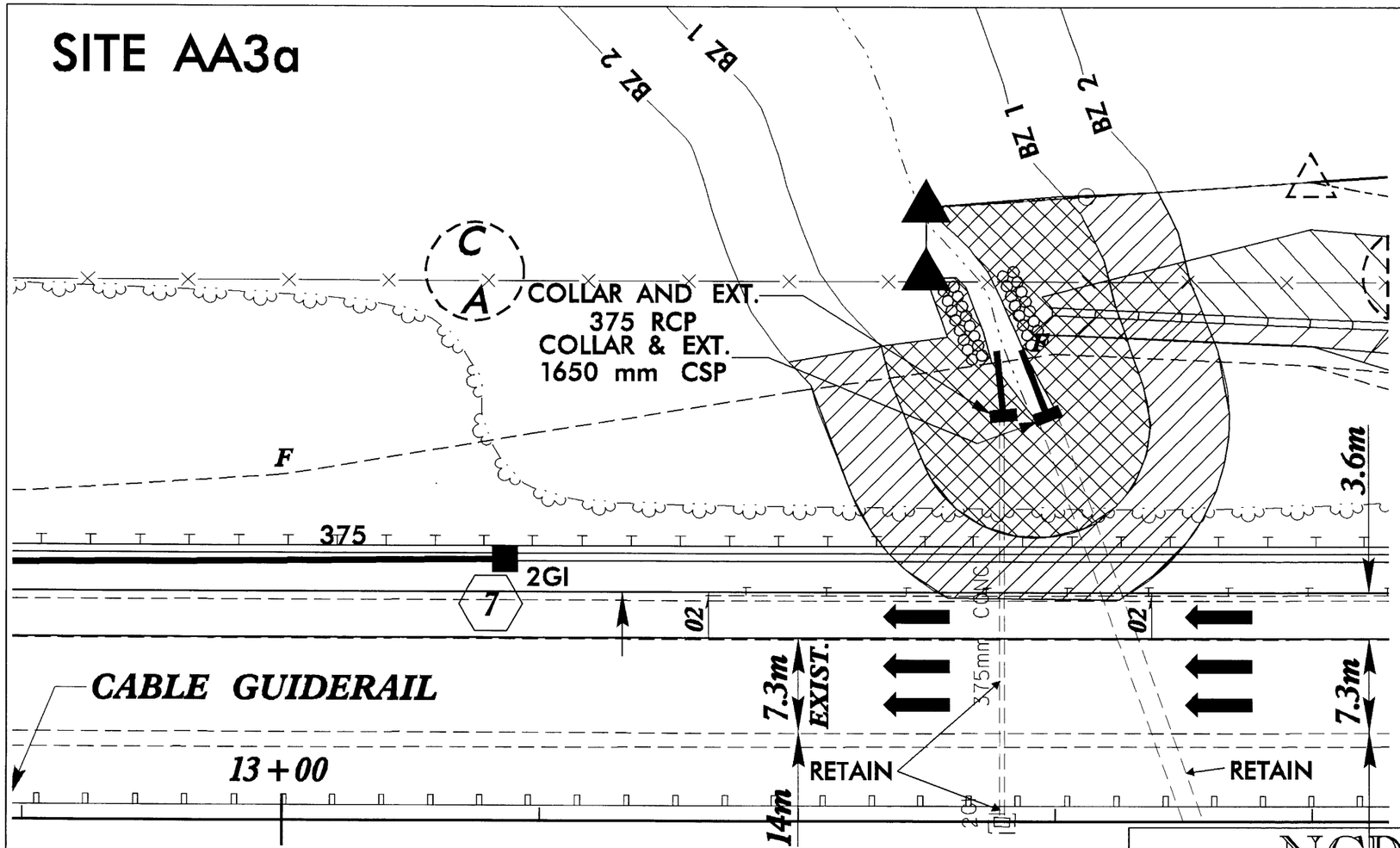
–FLYLEREV–
PIs Sta 34+54.180
Δs = 2°56'47.9"
Ls = 90.000
LT = 60.008
ST = 30.008

–FLYLEREV– STSta. 35+14.173 = –IIY1– POTSta. 16+68.075 (17.9m RT.)

NOTE:
(1) SEE SHEET 18 FOR –IIY1– PROFILE
(2) SEE SHEET 30 FOR –FLYLEREV– PROFILE

$$$$USERNAME$$$$
$$$$DGN$$$$
$$$$USERNAME$$$$
$$$$SYSTIME$$$$

SITE AA3a



NCDOT

DIVISION OF HIGHWAYS

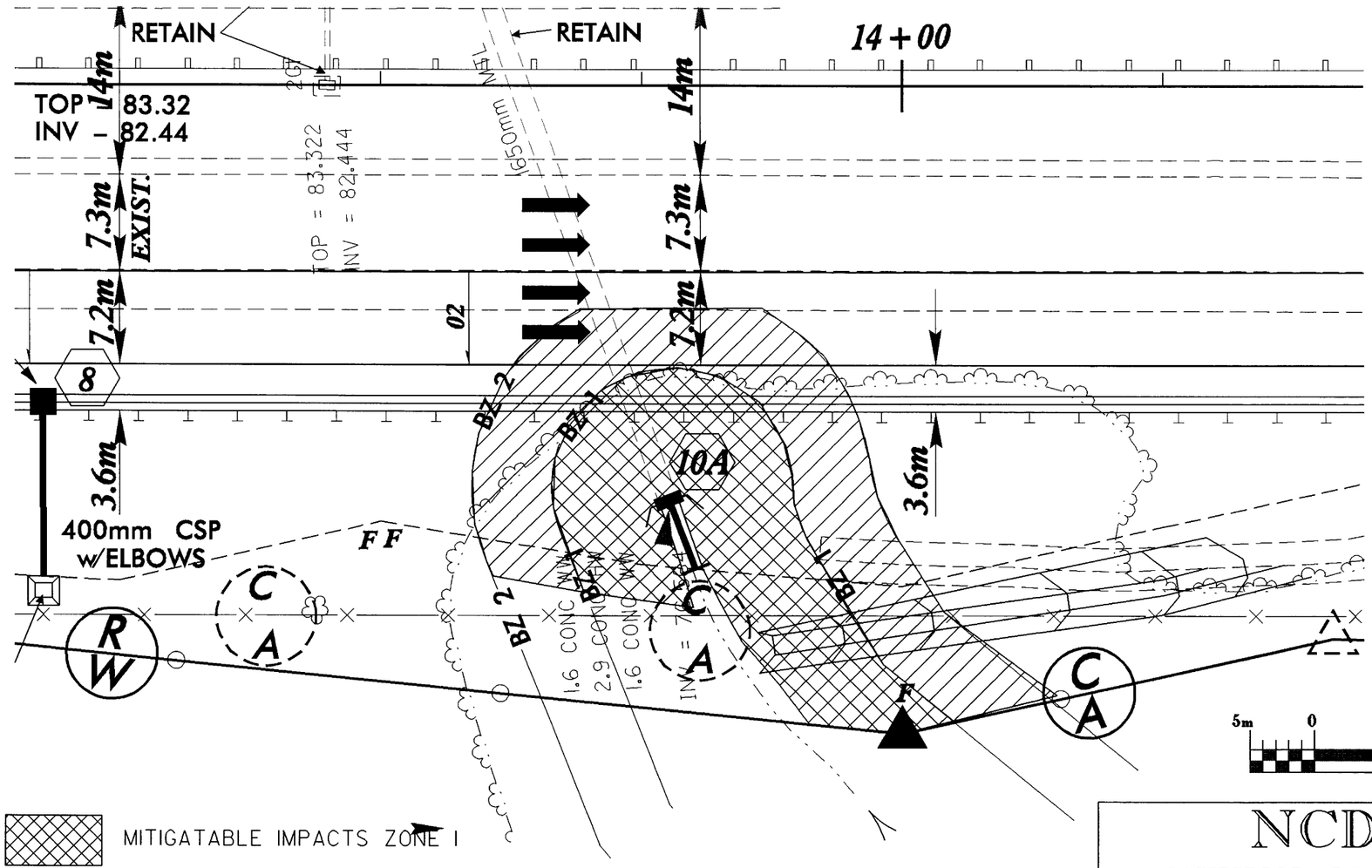
WAKE / JOHNSTON COUNTY

PROJECT: WBS - 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 6 OF 17 10/01/04



MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

SITE AA3b

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS - 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 7 OF 17 8/4/04

REVISIONS

RIGHT OF WAY REVISION 9/2/04

TRAFFIC DIAGRAM

CLAYTON BYPASS

PRELIMINARY PLANS

MATCHLINE TO SHEET 5 -HV- STA 17+20.000

MATCHLINE TO SHEET 7 -HV- STA 24+40.000

SITE AA4a

SITE AA4b

SITE AA5a

SITE AA5b

MITIGATABLE IMPACTS ZONE 1

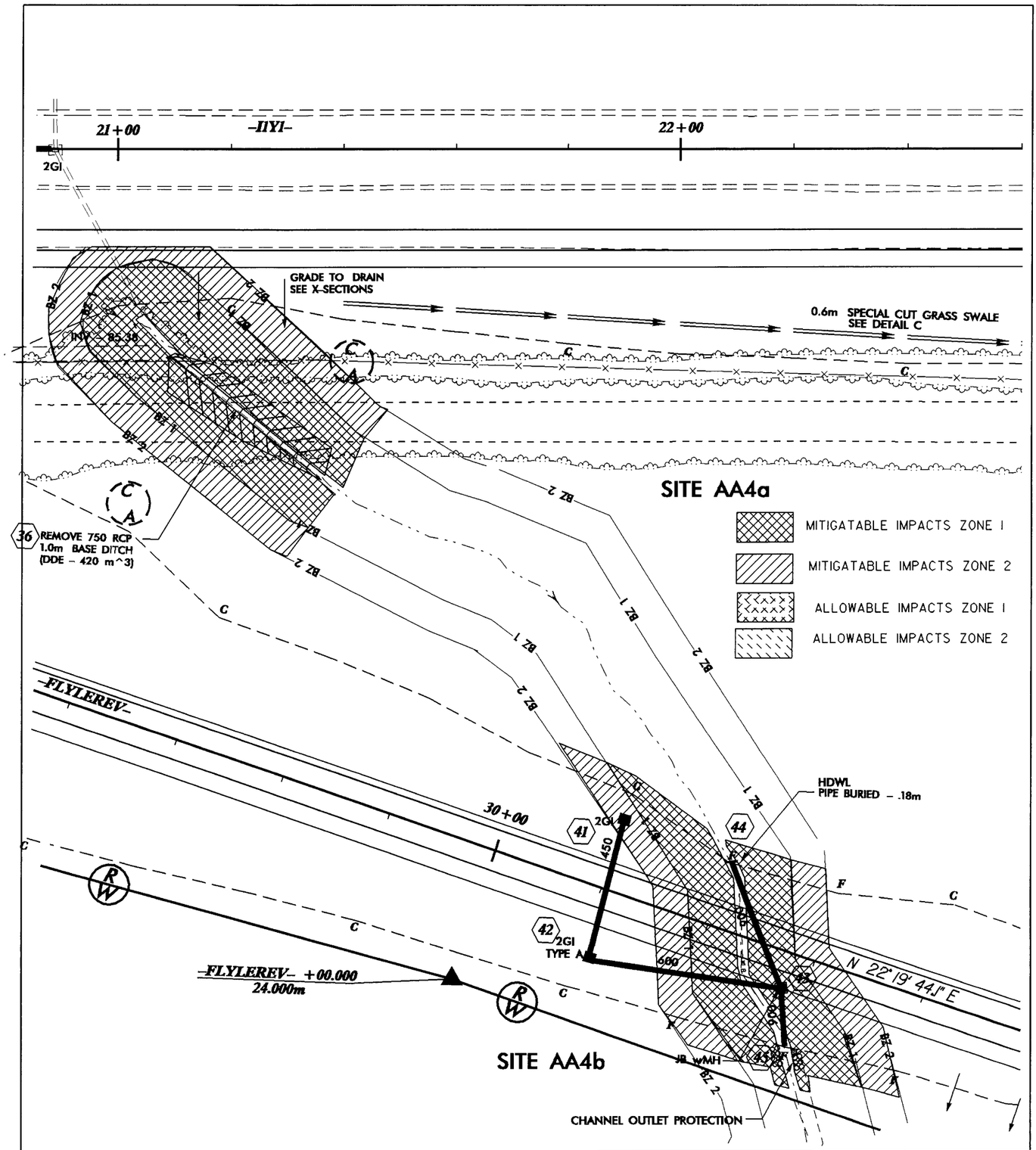
MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

NOTE:
(1) SEE SHEETS 19 & 20 FOR -H7- PROFILE
(2) SEE SHEET 40 FOR -V2- PROFILE
(3) SEE SHEETS 29 & 30 FOR -FLYLWREV- PROFILE
(4) SEE SHEET 34 FOR -LPB- PROFILE
(5) SEE SHEET 32 FOR -FLYLWREV- PROFILE
(6) SEE SHEET 36 FOR -VREV- PROFILE
(7) SEE GRADE SECTIONS AND ROADWAY STANDARD DRAWING RDWY NO.2 SHEET 1 FOR SPECIAL DITCH DETAILS
(8) REMOVE STONE ONLY AND RESEED

(9) 600 mm CMP PIPE ON -V2- BRIDGE IS STRUCTURE FILE 112604



SITES AA4a & AA4b

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

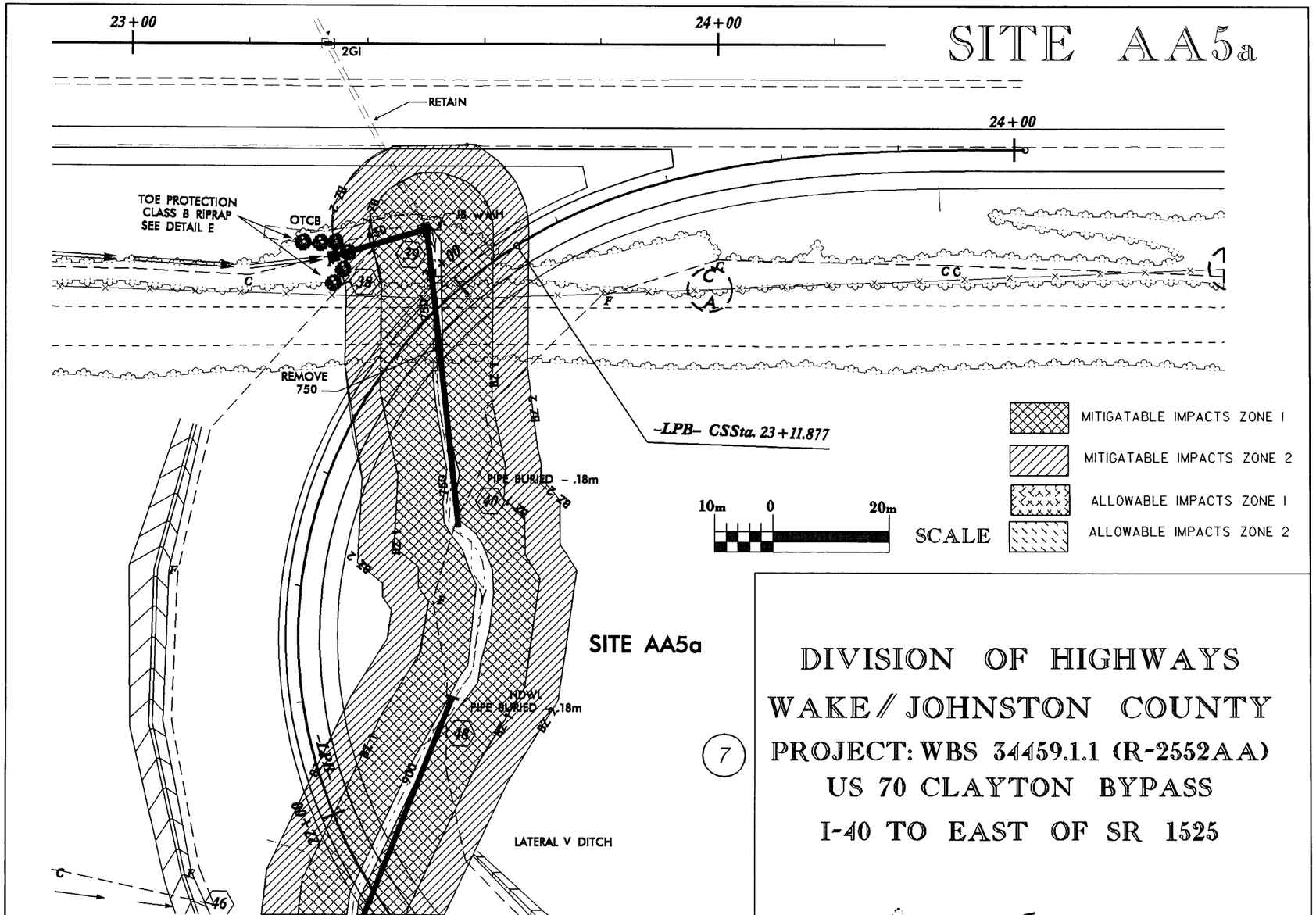
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 8 OF 17 10 / 01 / 04

SITE AA5a



7

DIVISION OF HIGHWAYS

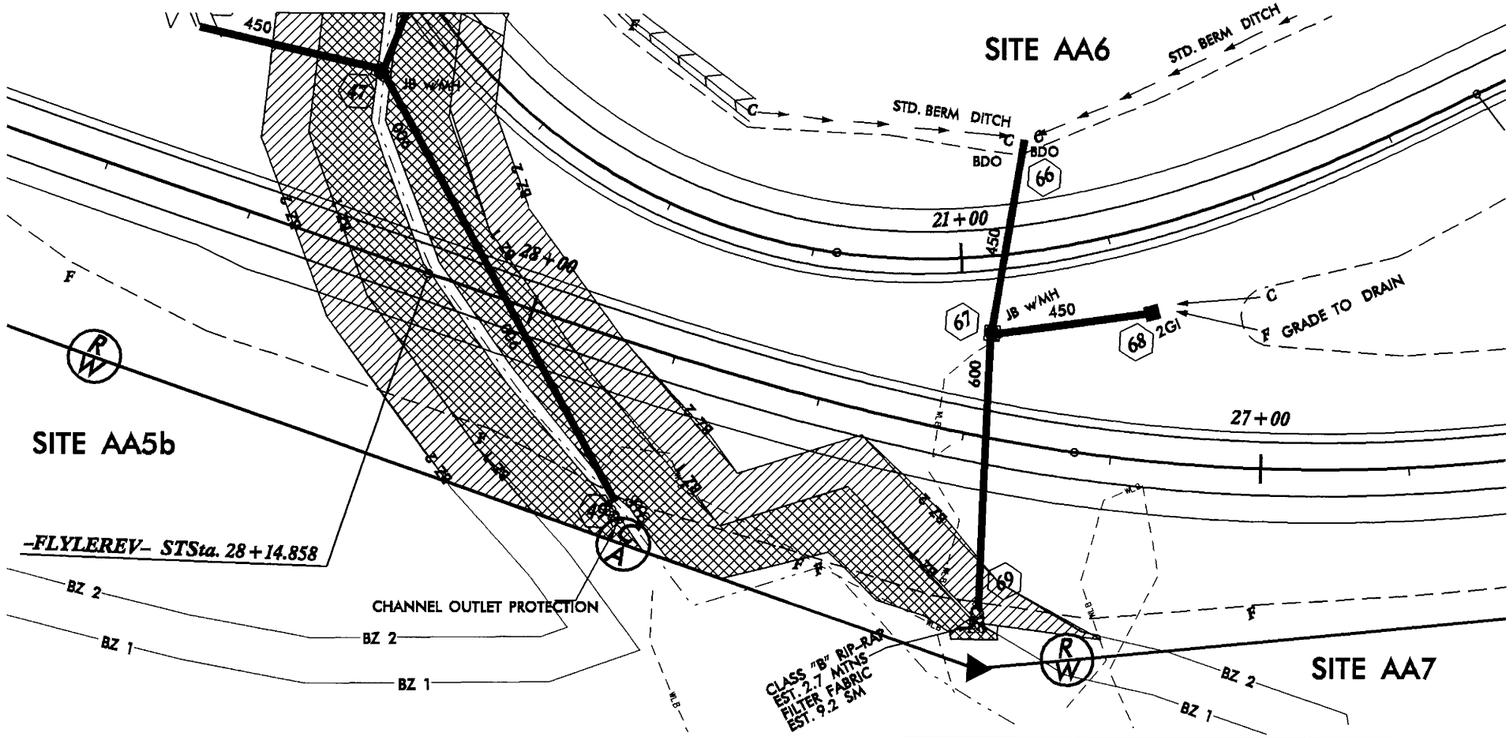
WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 9 OF 18 10 / 01 / 04



SITES AA5b, AA6 & AA7

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)
US 70 CLAYTON BYPASS
I-40 TO EAST OF SR 1525

SHEET 10 OF 17 10/01/04

REVISIONS
RIGHT OF WAY REVISION 9/3/04

METRIC

PRELIMINARY PLANS
NO SCALE ON ALL CONVERSIONS

CONSTRN.
R/W REV.

TRAFFIC DIAGRAM
3665 ADT
2015 ADT
5% TRUCKING
CLAYTON BYPASS
406
371
325
340
75
71
1-40
1-40
1060
1100
693
671

NOTE:
(1) SEE SHEETS 21 & 22 FOR -ITY- PROFILE
(2) SEE SHEET 22 FOR -FLYLWREY- PROFILE
(3) SEE SHEETS 33 & 34 FOR -LFB- PROFILE
(4) SEE SHEETS 36 & 38 FOR -FLYLREEY- PROFILE
(5) SEE CROSS SECTIONS AND ROADWAY STANDARD DRAWINGS FOR DETAILS OF SLOPES, DITCHES AND SPECIAL GRADING ELEMENTS
(6) REMOVE STONE ONLY AND RESEED
(7) 600 mm CMP CUT OFF ON -FLYLEREY- BRIDGE IS STRUCTURE KEY ITEM

MATCHLINE TO SHEET 6 -ITY- STA. 24+88.000

MATCHLINE TO SHEET 8 -ITY- STA. 24+88.000

MATCHLINE TO SHEET 14 -ITY- STA. 29+88.000

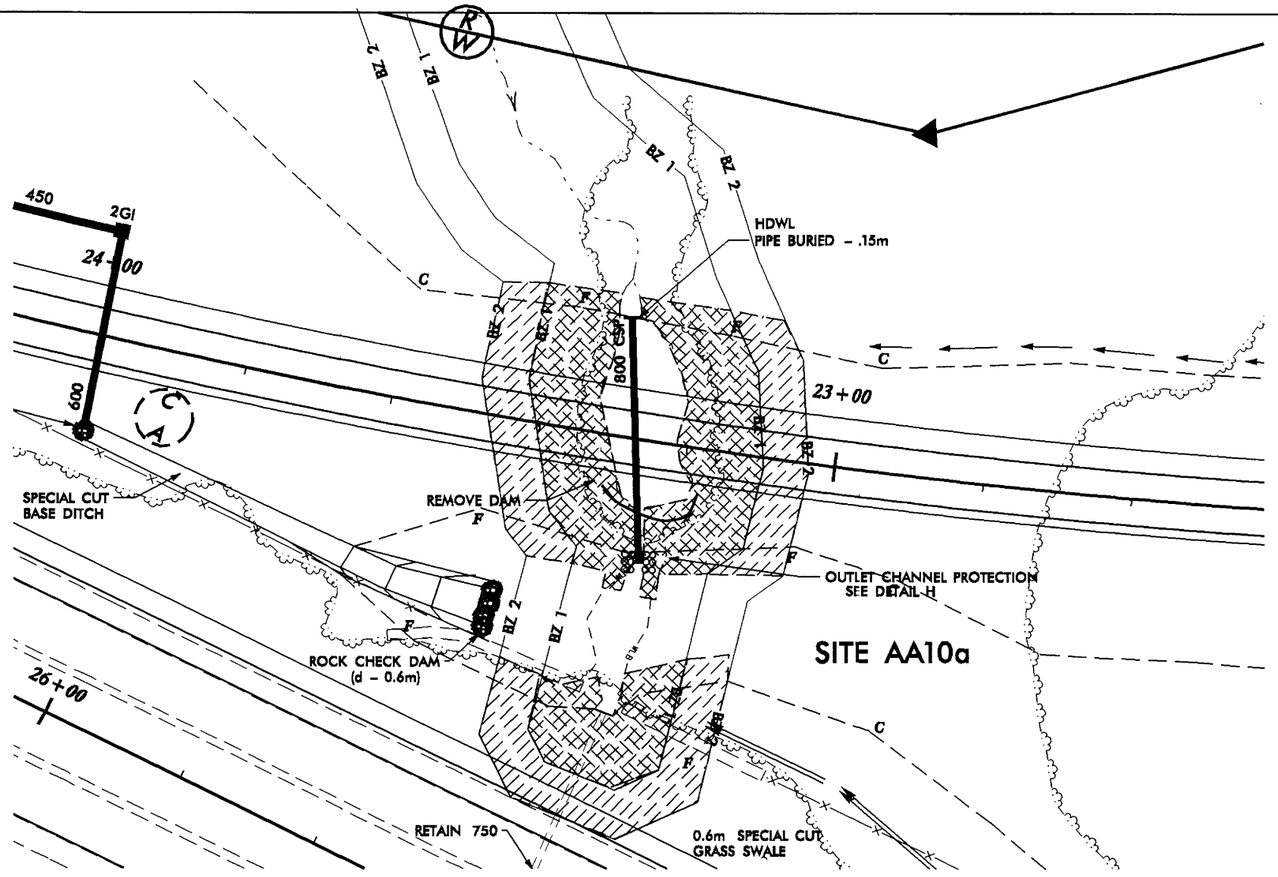
MATCHLINE TO SHEET 14

SITE AA6
SITE AA8
SITE AA7
SITE AA10a
SITE AA10b

MITIGATABLE IMPACTS ZONE 1
MITIGATABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

-FLYLWREY- +53.944
-FLYLWREY- +61.944
-FLYLWREY- +33.488
-FLYLEREY- +20.000
-FLYLEREY- +11.606
-ITY- +35.577
-ITY- +51.524

LOCATIONS
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:



SITE AA10a

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

10m 0 20m SCALE

NCDOT

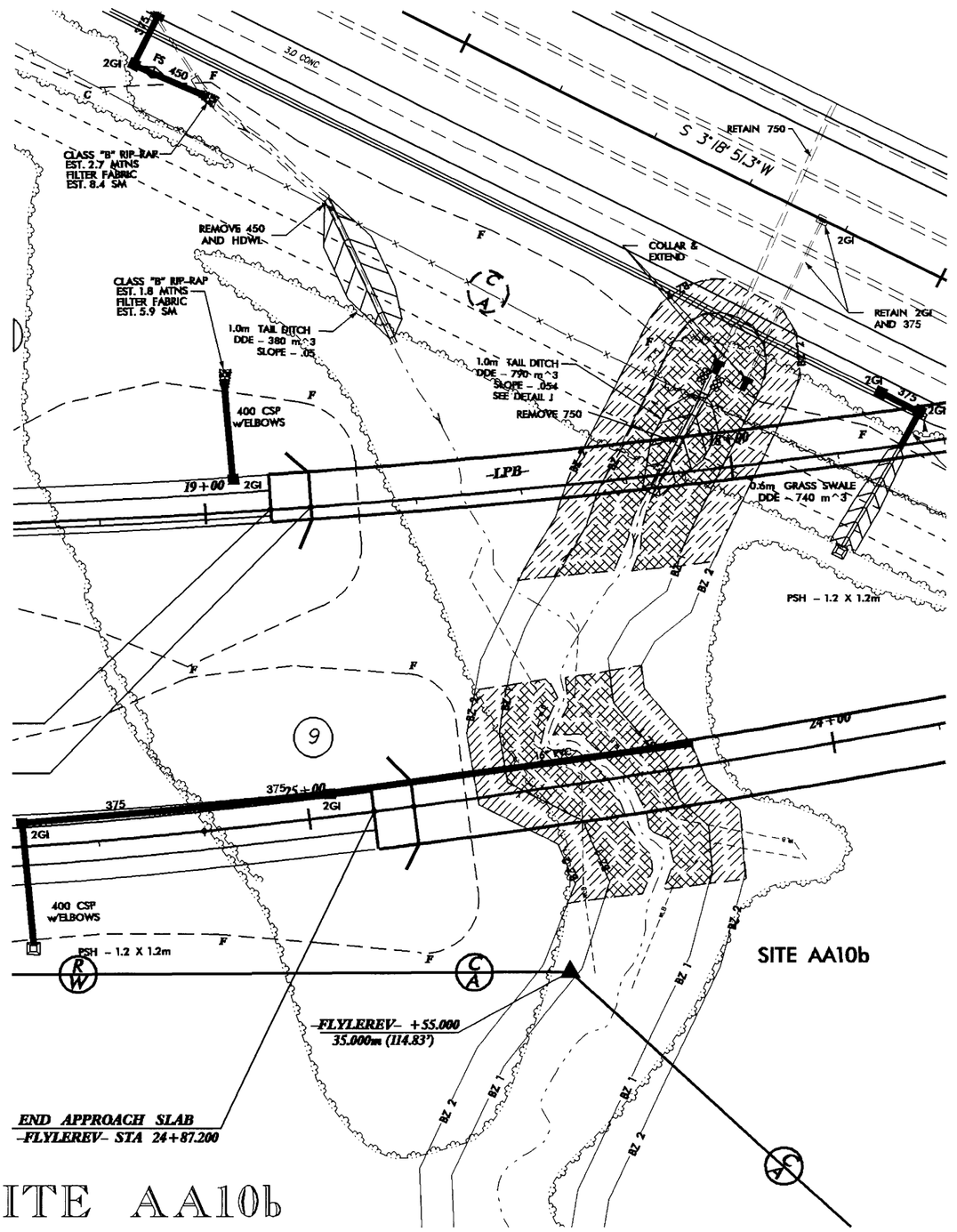
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

SHEET 11 OF 18 10/01/04



SITE AA10b

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

SHEET 12 OF 18 10 / 01 / 04

MATCHLINE TO SHEET 8-A

MATCHLINE TO SHEET 7 -LPS- STA 15+00.000

MATCHLINE TO SHEET 9 -FLYLWRSV- STA 14+42.000

MATCHLINE TO SHEET 15-A

SITE AA11a

SITE AA11b

SITE AA11c

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

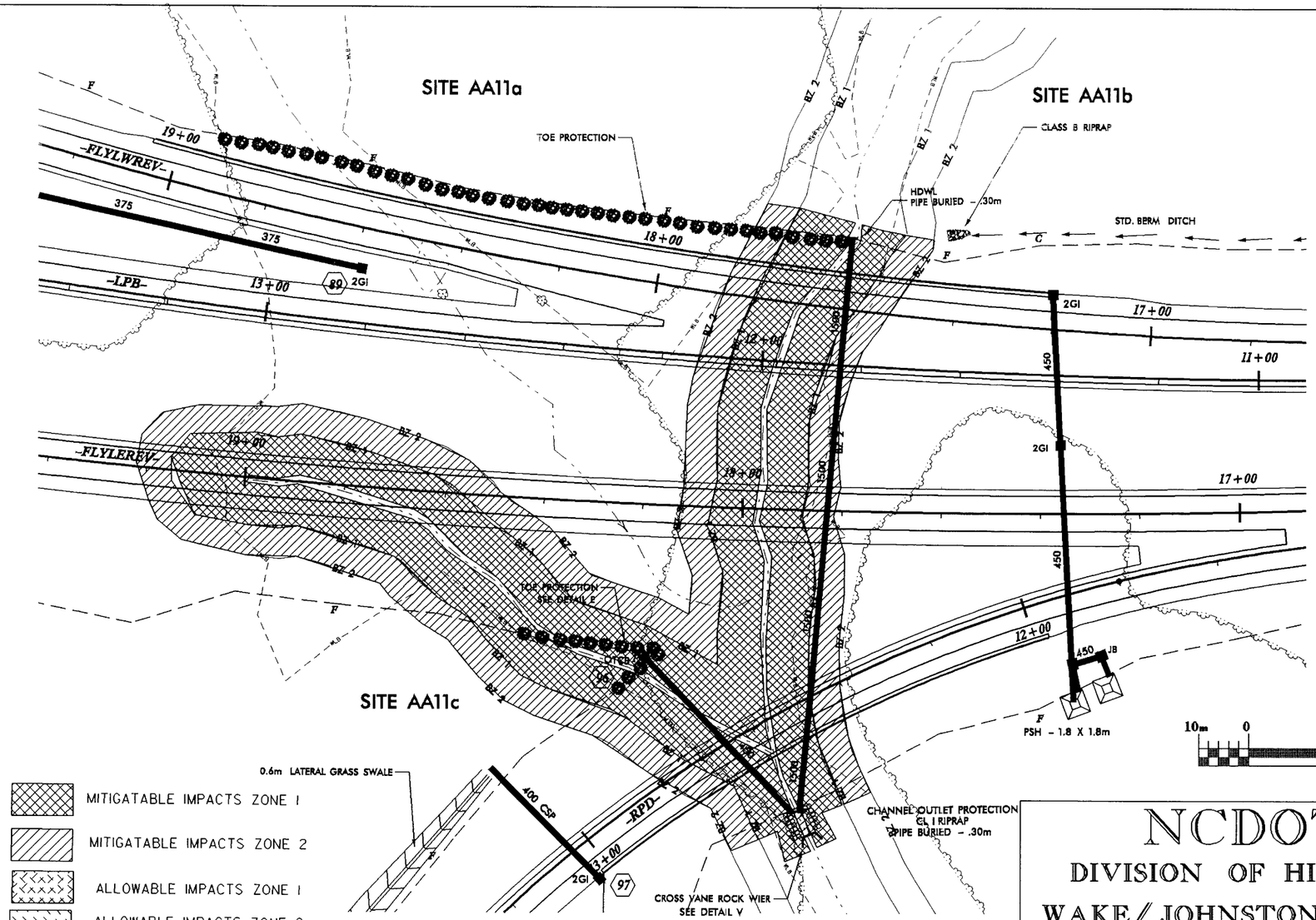
ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

TRAFFIC DIAGRAM

NOTE:
(1) SEE SHEETS 27 & 28 FOR -FLYLWRSV- PROFILE
(2) SEE SHEET 33 FOR -LPS- PROFILE
(3) SEE SHEET 33 FOR -FLYLWRSV- PROFILE
(4) SEE SHEET 33 FOR -RPD- PROFILE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION



SITE AA11a , AA11b & AA11c

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 16 OF 18 10 / 01 / 04

REVISIONS
RIGHT OF WAY REVISION 9/21/04

MATCHLINE TO SHEET 9-B

MATCHLINE TO SHEET 9 -LREV- STA 13+00.000

MATCHLINE TO SHEET 11 -L- STA 19+40.000

NAD 83

-LREV- PTSta. 18+99.765 BK =
-L- PTSta. 18+99.765 AH

-LREV-
PI Sta. 18+21.10
Δ = 5°24'33" (RT)
D = 5°30'00"
T = 94.64
L = 189.05
R = 1,042.000
S.E. = NC

-LREV- PCSta. 17+43.646

BEGIN APPROACH SLAB
-LREV- STA. 13+27.500

BEGIN BRIDGE
-LREV- STA. 13+31.500

END BRIDGE
-LREV- STA. 15+17.500

END APPROACH SLAB
-LREV- STA. 15+24.700

-L- +13.000
73.000m
(239.32')

-L- +19.600
52.500m
(183.79')

-L- +24.600
60.000m
(196.85')

-L- +65.000
180.000m
(636.89')

-L- +45.800
302.000m
(662.73')

-L- +00.000
150.000m
(511.81')

-L- +55.000
58.000m
(190.29') FEMA

-L- +60.000
58.000m
(164.84')

-Y2B- PCSta. 18+31.225

-Y2B- PTSta. 19+07.487

-Y2B- +31.276
9.144m
(30.00')

-Y2B- +23.325
18.500m
(59.90')

-Y2B- +00.000
8.200m
(26.77')

-Y2B- ON R/W
ROUTE MONUMENT

PCSta. 19+31.276 -Y2B-

S 85°05'54.8" E

S 67°57'29.2" E

S 69°18'30.0" E

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

SITE AA14

NOTE:
(1) SEE SHEETS 36 & 37 FOR -LREV- PROFILE
(2) SEE SHEET 37 FOR -L- PROFILE
(3) SEE 46 FOR -Y2B- PROFILE
(4) SEE CROSS-SECTIONS AND ROADWAY STANDARD DRAWINGS, RTL NO. 863.01, SHEET 2 FOR SPECIAL MEDIAN GRADING

DAVID C. HINTON, ET UX

WILLIS C. WHITEAD

ALAN A. HARPER JR. ET AL

WILFREY F. GRANT, JR.

MCCOY FORMERLY DAVID C. HINTON, ET UX

METRIC

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST. REV.

R/W REV.

PROJECT REFERENCE NO. B-5015AA
R/W SHEET NO. 10
ROADWAY DESIGN ENGINEER

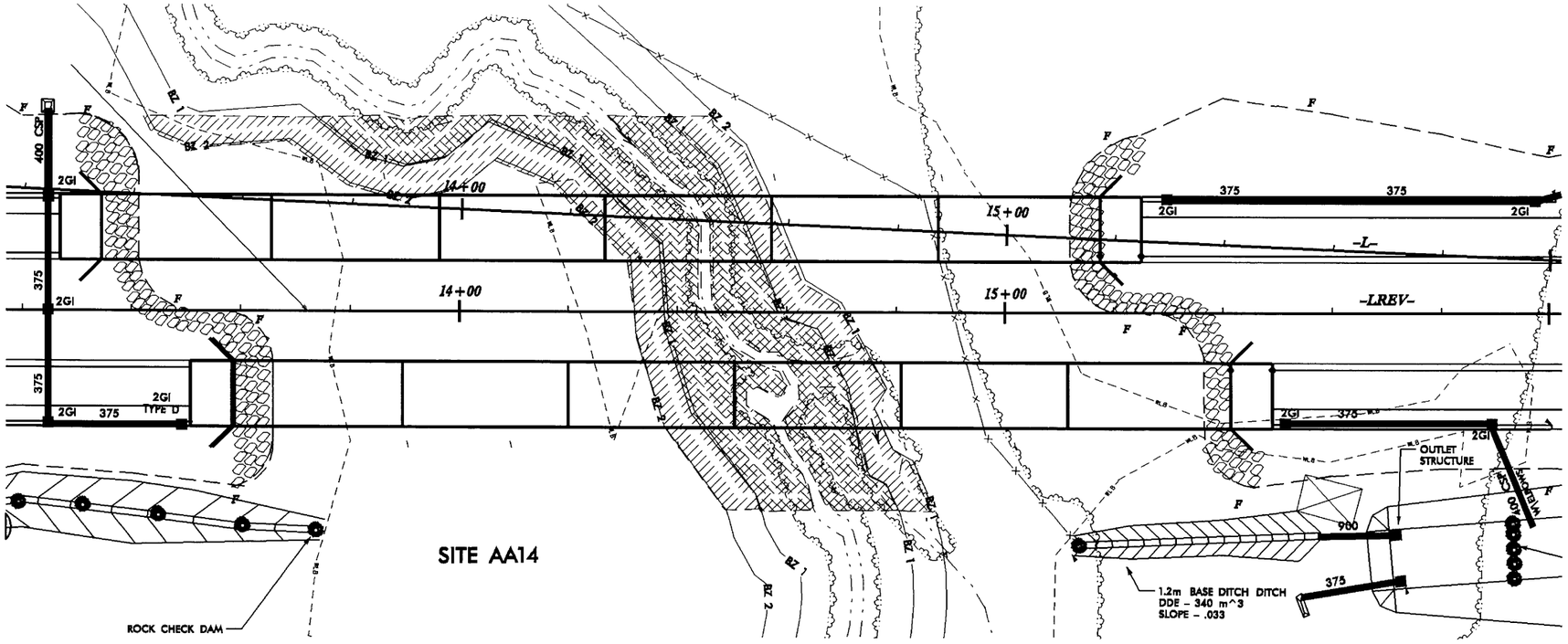
SHEET NO. 10
WILLIAMS ENGINEERS

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:



SITE AA14

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2551AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 14 OF 18 10 / 01 / 04

REVISIONS
RIGHT OF WAY REVISION 9/3/04

MITIGATABLE IMPACTS ZONE 1
MITIGATABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

METRIC

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.DRN.
R/W DRN.

PROJECT SUPERVISOR NO. | SHEET NO.
R-3421A
R/W SHEET NO. | TOTAL SHEETS
HIGHWAY DISTRICT ENGINEER | HYDRAULICS ENGINEER

SITE AA15a
SITE AA15b
SITE AA16
SITE AA17
SITE AA18a
SITE AA18b

MATCHLINE TO SHEET 11 -L- STA 19+40.000

MATCHLINE TO SHEET 12 -L- STA 26+28.000

NAD 83

WILLIS C. WINSTEAD

JEFFREY B. HALL, ET UX

JERRY L. WILSON, ET UX

CHARLES N. LEE, ET UX

JESSE M. MASTIN

NOTE:
(1) SEE SHEETS 37 & 38 FOR -L- PROFILE
(2) SEE SHEETS 40 & 41 FOR -Y2B- PROFILE
(3) SEE SHEET 39 FOR -DR3- PROFILE
(4) SEE CROSS SECTIONS AND ROADWAY TYPICAL SECTIONS FOR WIDTH OF MEDIAN TYPE BARRIER MEDIAN GRADING

-Y2B-
PI Sta 6+48.43
D = 6° 00' 00" (RT)
T = 100.00
L = 199.91
R = 954.930

-Y2B-
PI Sta 8+77.80
D = 4° 30' 00" (RT)
T = 150.00
L = 299.81
R = 1,273.239
e = 0.06
RA = NC
RA = A2

-Y2B-
PI Sta 11+43.68
D = 9° 00' 00" (LT)
T = 200.00
L = 399.65
R = 636.620
e = 0.06
RA = NC
RA = A2

LOCATIONS
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

METRIC

PROJECT REFERENCE NO. B-2552AA
F.A.P. NO.
STATE PROJECT NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST. DIV.
R/W DIV.

SHEET NO. 11
TOTAL SHEETS 76

MATCHLINE TO SHEET 11 -L- STA. 26+78.000

MATCHLINE TO SHEET 11 -L- STA. 33+10.000

BEGIN CONSTRUCTION
-Y4- STA. 12+50.000

-Y4DET- PRC Sta. 16+86.434

-Y4DET- PTC Sta. 11+76.932

SITE AA18a

-Y4DET- PRC Sta. 13+20.669

-Y4DET- PRC Sta. 12+41.311

-Y2B- PI Sta. 10+56.00
-Y2B- PRC Sta. 11+40.000
-Y2B- PTC Sta. 11+85.309
-Y2B- PRC Sta. 11+39.127
-Y4- POT Sta. 16+18.898
-Y2B- R/W
-Y2B- PT Sta. 11+56.000

-Y4- POT Sta. 17+61.628
-Y4- POT Sta. 14+61.721

-Y4DET- PT Sta. 14+18.344

END CONSTRUCTION
-Y4- STA. 16+50.000

BEGIN APPROACH SLAB
-Y4- STA. 14+85.335

BEGIN BRIDGE
-Y4- STA. 14+96.335

TCE TO REMAIN IN FORCE THROUGH B-2552AA AND B-2552AB

END BRIDGE
-Y4- STA. 17+11.335

END APPROACH SLAB
-Y4- STA. 17+27.335

WILLIE C. REAMS
(32)
(33)
(34)

S 85°03'54.8" E

S 79°39'32.5" E

ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

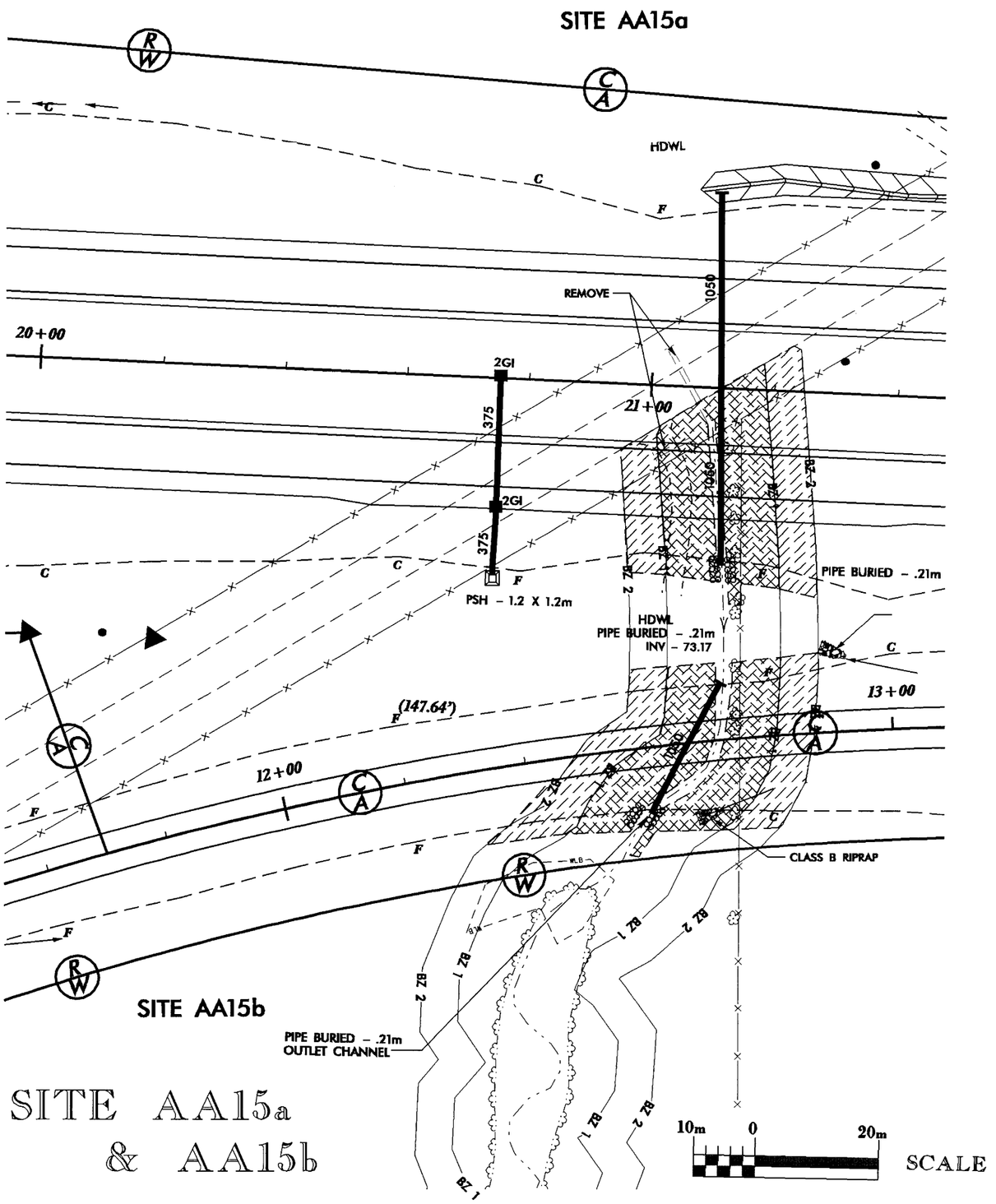
-Y2B-
PI Sta. 10+56.00
Δ = 94°36'23.5" (LT)
D = 4.00°
T = 70.00
L = 165.500
R = 1500.00
Sec. = 025
RDWY = W3

-Y4DET-

PI Sta. 0+44.00	PI Sta. 1+43.00	PI Sta. 2+42.00	PI Sta. 13+41.00
Δ = 94°36'23.5" (RT)	Δ = 94°36'23.5" (LT)	Δ = 94°36'23.5" (LT)	Δ = 94°36'23.5" (RT)
D = 4.00°	D = 4.00°	D = 4.00°	D = 4.00°
T = 70.00	T = 70.00	T = 70.00	T = 70.00
L = 165.500	L = 165.500	L = 165.500	L = 165.500
R = 1500.00	R = 1500.00	R = 1500.00	R = 1500.00

NOTE:
(1) SEE SHEET 16 FOR -L- PROFILE
(2) SEE SHEET 42 FOR -Y4- PROFILE
(3) SEE SHEET 61 FOR -Y2B- PROFILE
(4) SEE SHEETS 2-R & 2-L FOR -Y4DET- PLAN
(5) SEE CROSS SECTIONS AND ROADWAY STANDARD DRAWING 560.01 ON SHEET 7 FOR SPECIAL SHOULDER GRADING

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:



SITE AA15a & AA15b

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

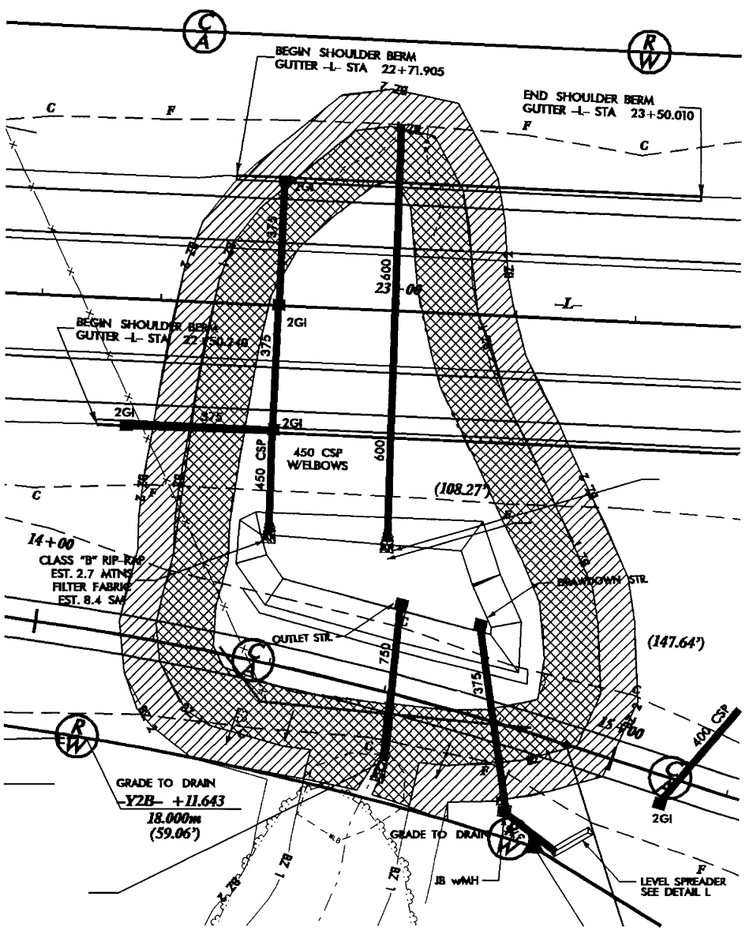
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 15 **OF** 18 **10 / 01 / 04**

SITE AA16



SITE AA16

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

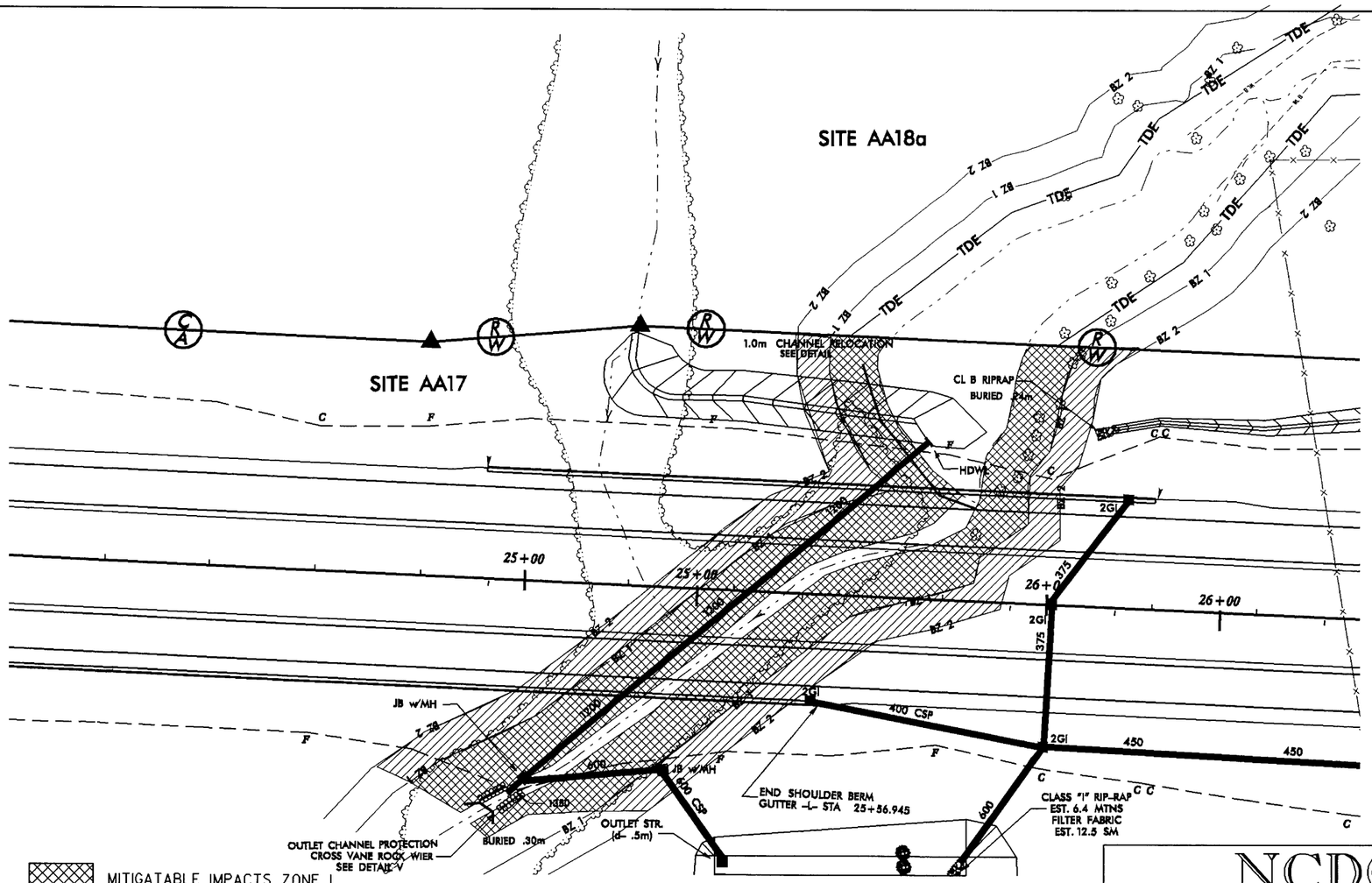
WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 16 OF 18 **10/01/04**



SITE AA17 & AA18a

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

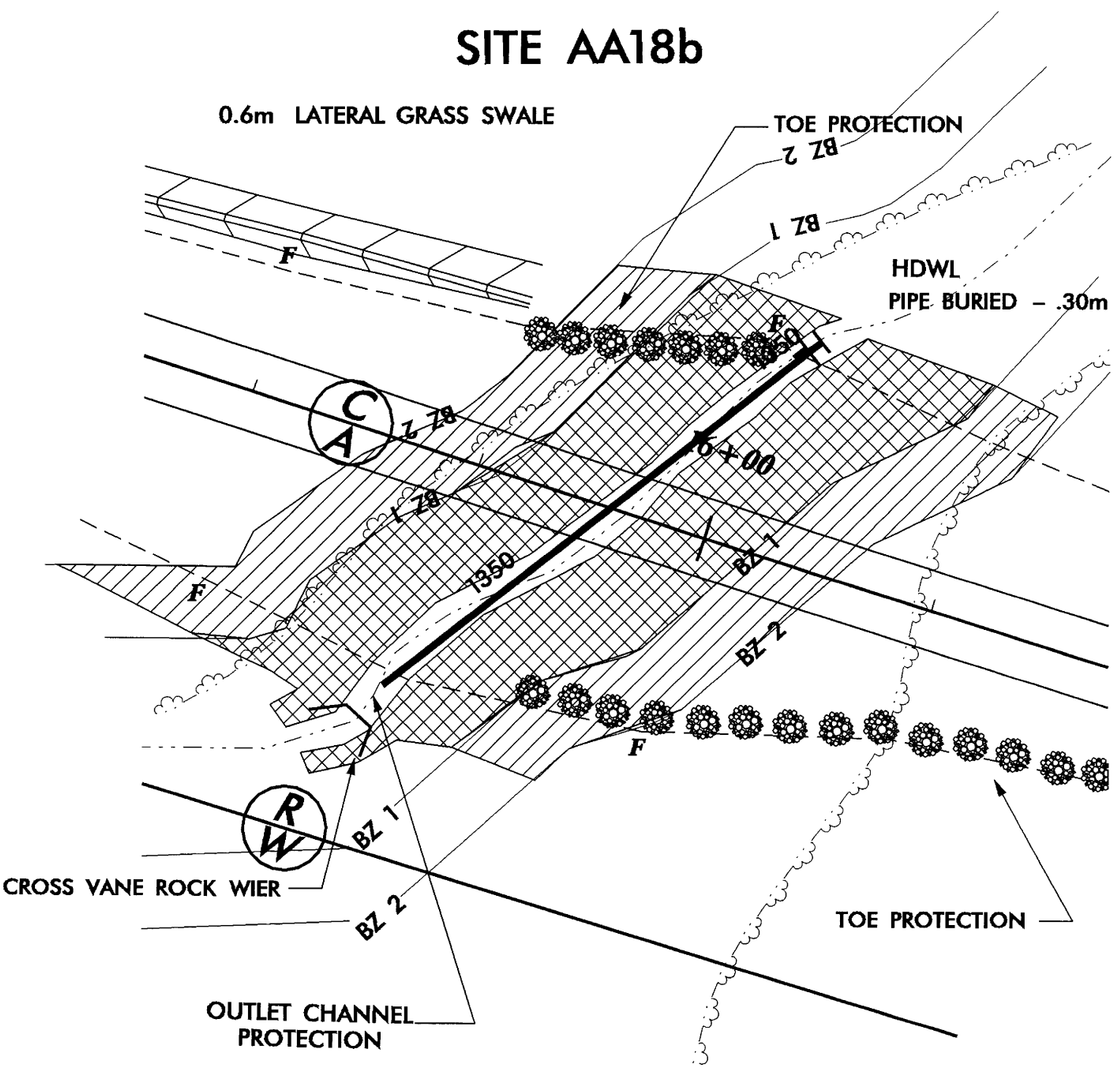
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 17 OF 17 **10 / 01 / 04**

SITE AA18b



SITE AA18b

MITIGATABLE IMPACTS ZONE 1

MITIGATABLE IMPACTS ZONE 2

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

10m 0 20m

SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 8.2661601 (R-2246C)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 18 OF 18 10 / 01 / 04

REVISIONS

RIGHT OF WAY REVISION 9/21/01

MATCHLINE TO SHEET 15-A

MATCHLINE TO SHEET 15-A

MATCHLINE TO SHEET 7

MATCHLINE TO SHEET 14-A

TRAFFIC DIAGRAM

2005 ADT
2025 ADT
5 Percent

CLAYTON BYPASS

SITE AA12

SITE AA13a

SITE AA13b

SITE AA19

B. T. HENDERSON II, ET AL

SPRATLEN COUNTY LINE COUNTY

-RPD- STA. 13+50.000

-RPD- STA. 29+88.699

-RPD- STA. 36+10.000

-HY- STA. 29+88.699

-HY- STA. 36+10.000

-RPD- CSSm. 36+79.457

-HY- POTSm. 35+83.576 =
-RPD- STSm. 37+60.433
(77.2m LT.)

-RPD-
PI Sta. E=48.973
Δ = 101°54'15.5" (LT)
D = 1°30'00"
T = 400.00'
L = 1,529.75'
R = 3820.00'

PC Sta. E=00126
PT = 1°30'00"
LC = 400.00'
LT = 400.00'
SE = 0.04'

NOTE:
(1) SEE SHEETS 33,33 & 34 FOR -HY- PROFILE
(2) SEE SHEET 35 FOR -RPD- PROFILE
(3) SEE CROSS-SECTIONS AND ROADWAY DESIGN NOTES ON SHEET 1 FOR SPECIAL SUBGRADE GRADING

MITIGATABLE IMPACTS ZONE 1
MITIGATABLE IMPACTS ZONE 2
ALLOWABLE IMPACTS ZONE 1
ALLOWABLE IMPACTS ZONE 2

HAZARDOUS SPILL BASIN CAPACITY = 350m^3 FLOOR EL. = 74.70m

HAZARDOUS SPILL BASIN CAPACITY = 350m^3 FLOOR EL. = 77.20m

HAZARDOUS SPILL BASIN CAPACITY = 350m^3 FLOOR EL. = 74.80m

-WB-

-EB-

-HY-

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

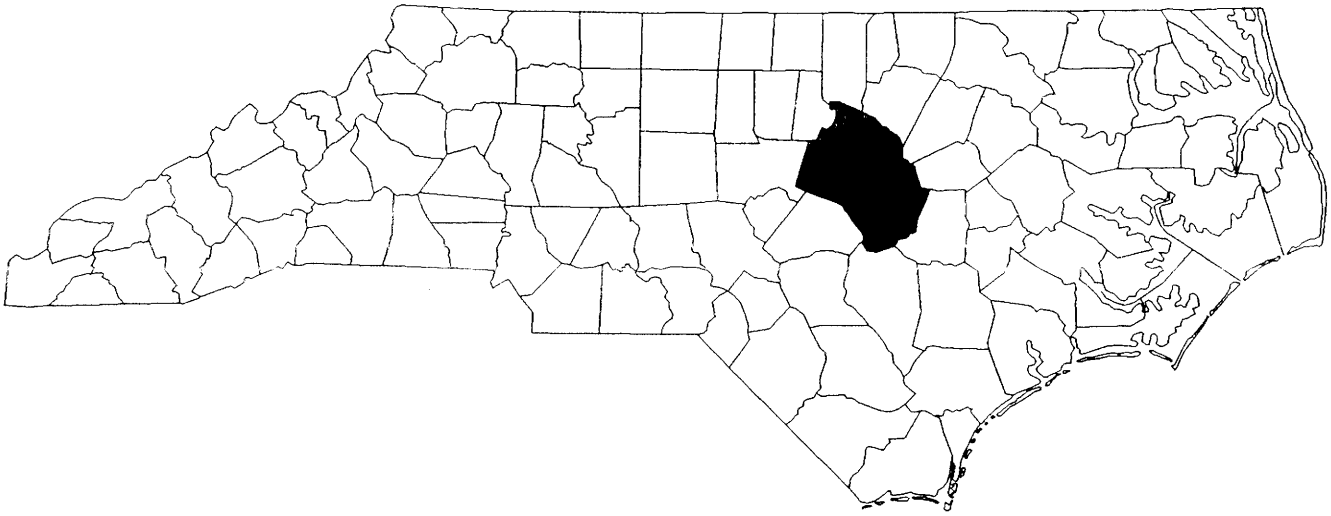
LOCATION

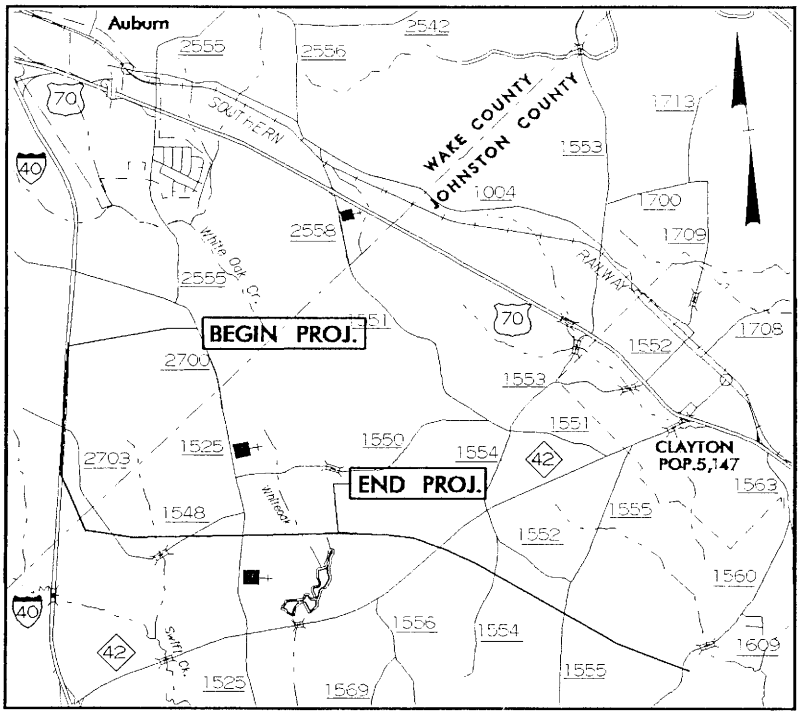
TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATED:

NORTH CAROLINA





VICINITY MAP

NCDOT

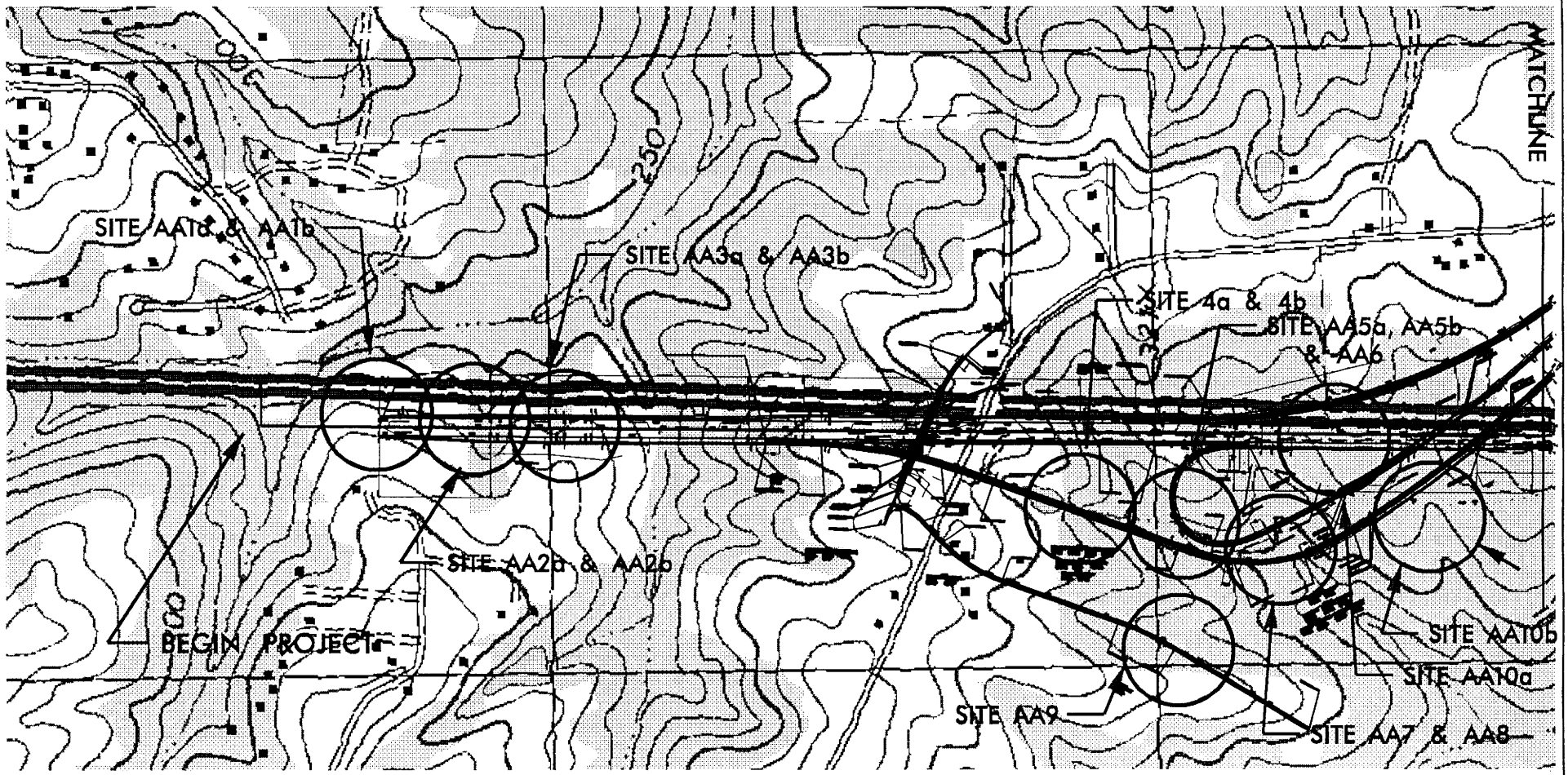
DIVISION OF HIGHWAYS

JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

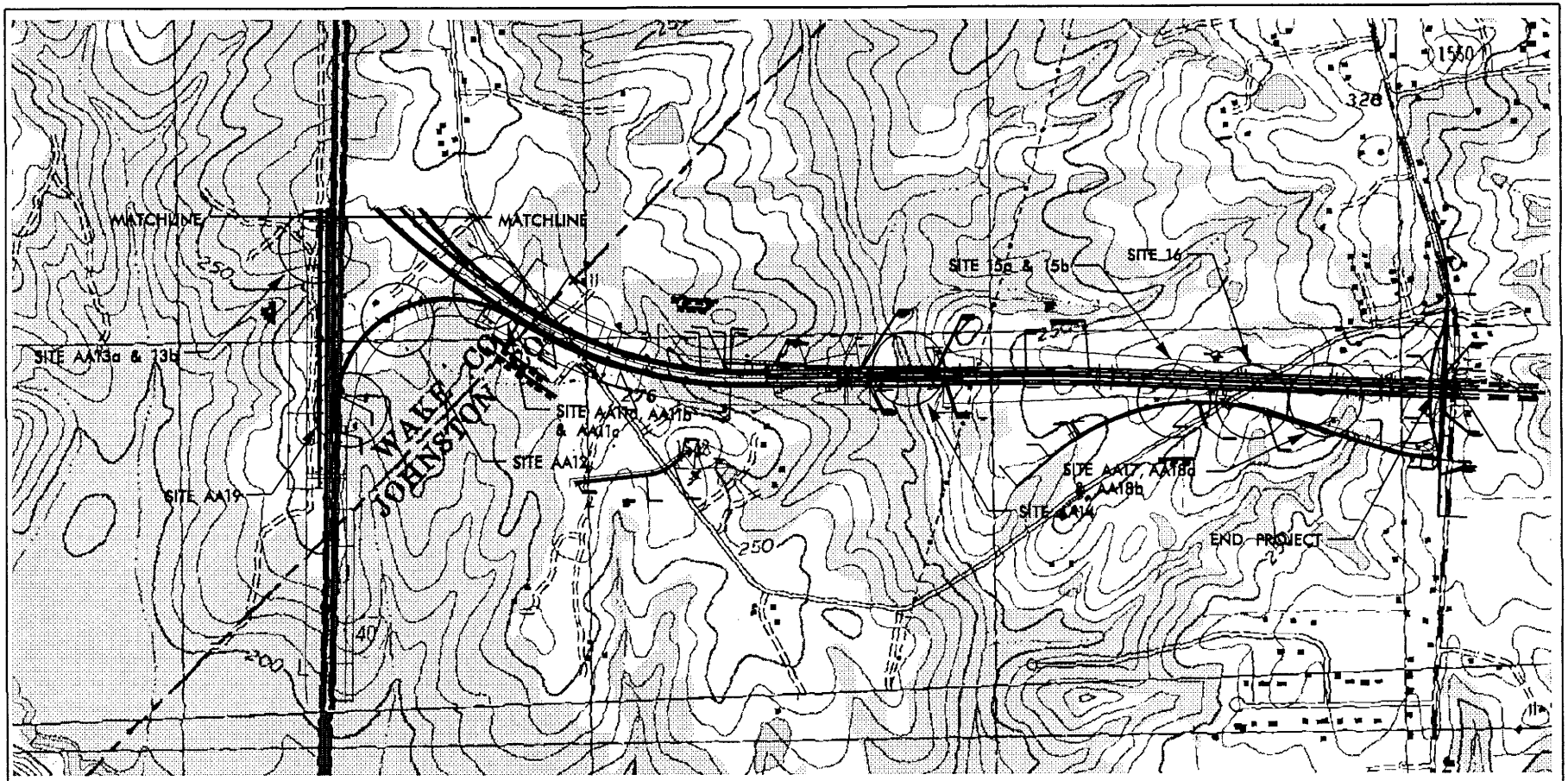
SHEET 1 **OF** 50 10/01/04



SITE MAP

NCDOT
DIVISION OF HIGHWAYS
WAKE / JOHNSTON COUNTY
PROJECT: 34459.1.1 (R-252AA)
US 70 CLAYTON BYPASS

SHEET 2 OF 50 **10 / 01 / 04**



SITE MAP

NCDOT

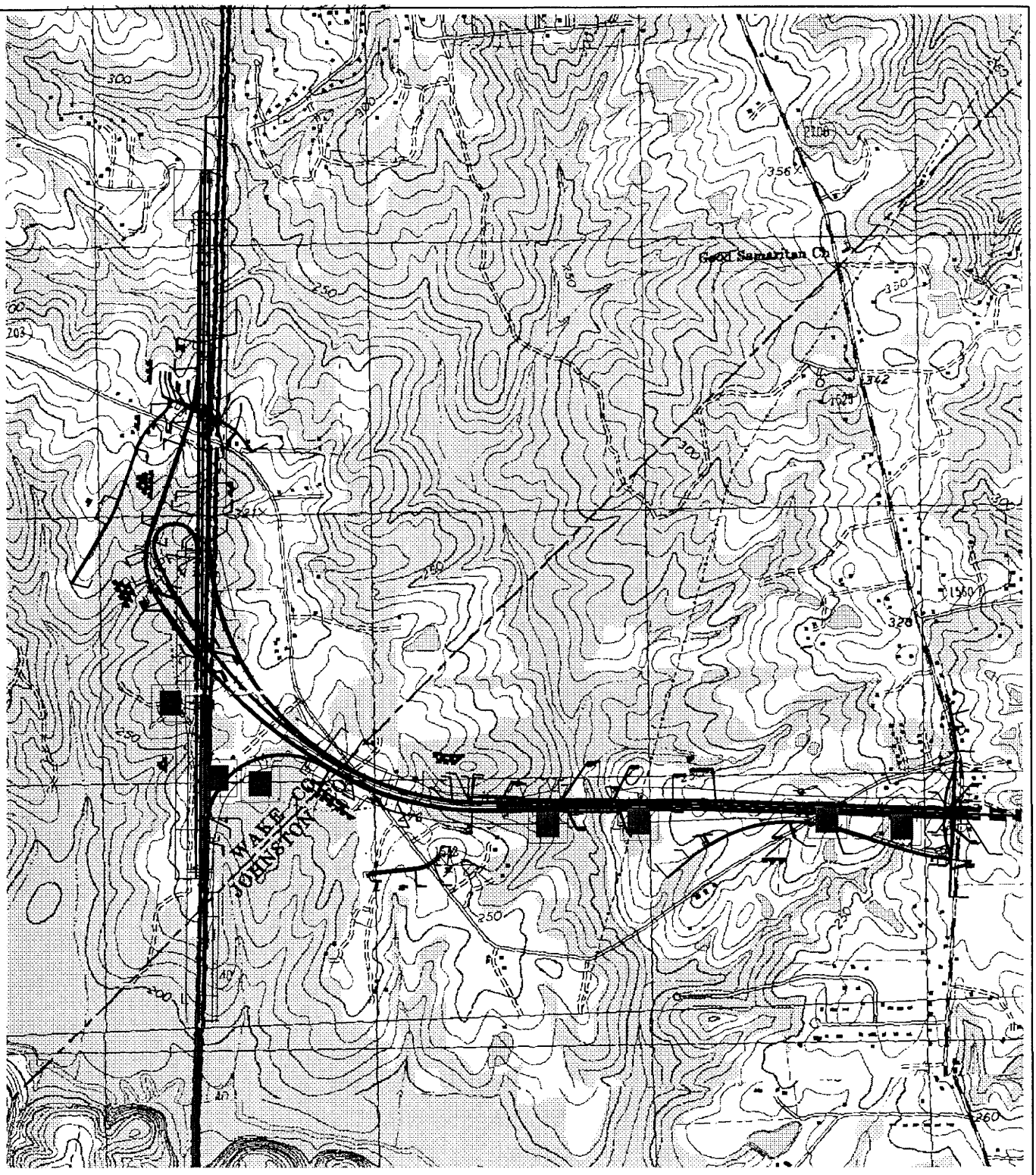
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 34459.1.1 (R-252AA)

US 70 CLAYTON BYPASS

SHEET 5 OF 50 **10 / 01 / 04**



HAZARDOUS SPILL BASIN

HAZARDOUS SPILL BASIN LOCATION SITE MAP

NCDOT
DIVISION OF HIGHWAYS
WAKE / JOHNSTON COUNTY
PROJECT: 34459.1.1 (R-252AA)
US 70 CLAYTON BYPASS

SHEET 1 OF 50 10/01/04

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS: Fill In Wetlands Permanent (ac)	WETLAND IMPACTS: Fill In Wetlands Temporary (ac)	WETLAND IMPACTS: Excavation In Wetlands (ac)	WETLAND IMPACTS: Mechanized Clearing (Method III) (ac)	SURFACE WATER IMPACTS: Fill In SW (Natural) Permanent (ac)	SURFACE WATER IMPACTS: Fill In SW (Natural) Temporary (ac)	SURFACE WATER IMPACTS: Existing Channel Impacted Permanent (ft)	SURFACE WATER IMPACTS: Existing Channel Impacted Temporary (ft)	SURFACE WATER IMPACTS: Natural Stream Design (ft)
AA1b	I1Y1 10+90 RT	600 RCP				0.01				10	
AA2b	I1Y1 12+10 RT	450 RCP	0.01			0.01					
AA3a	I1Y1 13+70 LT	1650 CSP					0.01		26	13	
AA3b	I1Y1 13+70 LT	1650 CSP					0.01		13	10	
AA4b	FLYLEREV 29+50	900 RCP				0.01	0.02		128	30	
AA5a	LPB 23+00	750 RCP					0.01		236		
AA5b	LPB 21+90	900 RCP	0.03			0.02	0.05		391	10	
AA6	FLYLEREV 27+40	600 RCP	0.03			0.01					
AA7	FLYLEREV 27+20	N/A	0.03			0.01					
AA8	FLYLEREV 26+20	450 RCP	0.05			0.02					
AA9	YREV 15+30	1050 RCP	0.01			0.01					
AA10a	FLYLWREV 23+20		0.01			0.01	0.06		30	20	
SHEET TOTALS:			0.17			0.11	0.16		824	93	

SITES INCLUDE SW FILL (POND) AA10a .06 ac

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
WAKE / JOHNSTON COUNTY
PROJECT # - WBS 34459.1.1 (R2552AA)
US 70 - CLAYTON BYPASS

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS: Fill In Wetlands Permanent (ac)	WETLAND IMPACTS: Fill In Wetlands Temporary (ac)	WETLAND IMPACTS: Excavation In Wetlands (ac)	WETLAND IMPACTS: Mechanized Clearing (Method III) (ac)	SURFACE WATER IMPACTS: Fill In SW (Natural) Permanent (ac)	SURFACE WATER IMPACTS: Fill In SW (Natural) Temporary (ac)	SURFACE WATER IMPACTS: Existing Channel Impacted Permanent (ft)	SURFACE WATER IMPACTS: Existing Channel Impacted Temporary (ft)	SURFACE WATER IMPACTS: Natural Stream Design (ft)
AA10b	FLYLEREV 24+45	BRIDGE				*			10	10	
AA11a	FLYLWREV 18+50	N/A	2.26			0.07	0.05		437		
AA11b	FLYLEREV 18+00	1500 RCP		SEE SITE AA11a FOR DATA			0.04		417	30	
AA11c	FLYLEREV 18+40 LT	450 RCP		SEE SITE AA11a FOR DATA			0.04		407		
AA12	RPD 13+90	900 RCP	0.01								
AA14	LREV 14+50	BRIDGE	0.15			*					
AA15a	L 21+10	1050 RCP					0.01		85	10	
AA15b	Y2B 12+70	1050 RCP					0.01		98	20	
AA16	L 23+00	750 RCP	0.04			0.02	0.79		10	10	
AA17	L 25+20	N/A					0.06		240		
AA18a	L 25+80	1200 RCP					0.10		355	10	
AA18b	Y2B 16+00	1350 RCP					0.03		167	20	
SHEET TOTALS:			2.46			0.09	1.13		2226	110	
PROJECT TOTALS			**2.63**			**0.20**	**1.29**		**3050**	**203**	

* DENOTES HAND CLEARING IN WETLANDS
SITE AA10b - 0.12 ac
AA14 - 1.47 ac

SITES INCLUDE SW FILL (POND) AA16 .78 ac
AA18A .37 ac

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
WAKE / JOHSTON COUNTY
PROJECT # - WBS 34459.1.1 (R2552AA)
US 70 - CLAYTON BYPASS

SHEET 6 OF 50 10/15/04

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
1	EVA WALTERS	RR 6 BOX 11 FUQUAY-VARINA, NC 27526
2	THOMAS PENNY	RR 3 BOX 194 GARNER, NC 27529
7	MARY POWELL WARD WHITE	920 WELLINGTON RD. WINSTON SALEM, NC 27106
8	B. T. HENDERSON	P. O. BOX 31627 RALEIGH, NC 27622
9	J. PEELE JOHNSON	5160 NC 42 WEST CLAYTON, NC 27520
16	ALAN A. HARPER	410 PINE KNOLL DR. KINSTON, NC 28504
17	ALAN A. HARPER	410 PINE KNOLL DR. KINSTON, NC 28504

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552 AA)

US 70 CLAYTON BYPASS

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
26	WILFREY F. GRANT	205 RED FIELD ST. CARY, NC 27513
28	WILLIS UMSTEAD	6580 CORNWALLIS RD. GARNER, NC 27529
30	CHARLES A. LEE	719 NEW BETHEL CURCH RD. GARNER, NC 27529
31	JERRY I. WILSON	251 NEW BETHEL CURCH RD. GARNER, NC 27529
32	WILLIS C. UMSTEAD	6580 CORNWALLIS RD. GARNER, NC 27529

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552 AA)

US 70 CLAYTON BYPASS

RIGHT OF WAY REVISION 9/2/04

METRIC	PROJECT REFERENCE NO.	SHEET NO.
		9
	R /W SHEET NO.	
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

L 20.659 COR TO COR N04°32'24"W

L 41.492 COR TO COR N02°20'25"W

EVA M. WALTERS

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

BEGIN CONSTRUCTION
-11Y1- POT STA. 10+40.000

BEGIN EXPRESSWAY GUTTER
-11Y1- STA 10+80.655

SITE AA1a

SITE AA2a

SITE AA3a

-11Y1- +50.000
42.706m
(140.11')
48.000m
(157.48')

CHANNEL OUTLET PROTECTION
CLASS "I" RIP-RAP
EST. 43.5 MTNS

CLASS "B" RIP-RAP
EST. 1.8 MTNS
FILTER FABRIC
EST. 5.9 SM

COLLAR AND EXT.
375 RCP
COLLAR & EXT.
1650 mm CSP

1550 mm WW & ISBW

EXISTING R/W

PSH - 1.2 X 1.2m

GRADE TO DRAIN

RETAIN

-WB-

-EB-

-11Y1- S 3°18'51.3"W

11+00

12+00

13+00

3.0 CONC

7.3 CONC

12 CONC

2GI

375mm CONC

450mm CONC

1200mm CONC

2.6 CONC HW

TC 375

RETAIN HDWL

-Y1- +04.544 =
-11Y1- +04.544
41.550m
(136.32')

-Y1- +11.544 =
-11Y1- +11.544
41.550m
(136.32')

400mm CSP
W/ELBOWS

BEGIN EXPRESSWAY GUTTER
-11Y1- STA 13+30.240

SITE AA1b

CLASS "B" RIP-RAP
EST. 0.9 MTNS
FILTER FABRIC
EST. 4.2 SM

SITE AA2b

EVA M. WALTERS

BZ 1
BZ 2

RIGHT OF WAY REVISION 92/04

8/17/93

METRIC

PROJECT REFERENCE NO.	SHEET NO.
	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

20.659 COR TO COR N04°32'24"W

41.492 COR TO COR N01°20'25"W

BZ 1

BZ 2

BEGIN CONSTRUCTION
-11Y1- POT STA. 10+40.000

BEGIN EXPRESSWAY GUTTER
-11Y1- STA 10+80.655

SITE AA1a

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES CHANNEL IMPACT (PERM)

DENOTES CHANNEL IMPACTS (TEMP)

EVA M. WALTERS

SITE AA2a

SITE AA3a

-11Y1- +50.000
42.706m
(140.11')
48.000m
(157.48')
CHANNEL OUTLET PROTECTION

CLASS 'I' RIP-RAP
EST. 43.5 MTNS

CLASS 'B' RIP-RAP
EST. 1.8 MTNS
FILTER FABRIC
EST. 5.9 SM

COLLAR AND EXT.
375 RCP
COLLAR & EXT.
1650 mm CSP

1550 mm WW & ISBW

EXISTING R/W

PSH - 1.2 X 1.2m

GRADE TO DRAIN

RETAIN

-WB-

-EB-

-11Y1- S 3°18'51.3"W

11+00

12+00

13+00

SITE AA1b

SITE AA2b

CLASS 'B' RIP-RAP
EST. 0.9 MTNS
FILTER FABRIC
EST. 4.2 SM

RETAIN HDWL

-Y1- +04.544 =
-11Y1- +04.544
41.550m
(136.32')

-Y1- +11.544 =
-11Y1- +11.544
41.550m
(136.32')

400mm CSP
w/ELBOWS

BEGIN EXPRESSWAY GUTTER
-11Y1- STA 13+30.240

EVA M. WALTERS

RIGHT OF WAY REVISION 9/2/04

METRIC

PROJECT REFERENCE NO.	SHEET NO.
	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R/W REV.	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83

123.139 COR TO COR S07°03'23"W

18.892 COR TO COR S30°08'37"E

70.004 COR TO COR S40°57'23"W

18.892 COR TO COR S57°51'23"W

35.178 COR TO COR N60°35'23"E

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

THOMAS H. PENNY (1)

THOMAS H. PENNY (2)

3 GEORGE J. PENNY, ET UX

0.6 m LATERAL GRASS SWALE

-YI- +80.000 = -IIYI- +80.000
50.000m (164.04')

-YI- +10.000 = -IIYI- +10.000
52.000m (170.60')

-YI- +40.000 = -IIYI- +40.000
49.000m (160.76'), EX. R\W

-YI- +00.000 = -IIYI- +00.000
43.564m (142.93')

RETAIN EXISTING DITCH AND RIP-RAP PAD

CL "B" RIP-RAP EST. 2.7 MTNS FILTER FABRIC EST. 8.4 SM

END EXPRESSWAY GUTTER -IIYI- STA 15+51.190

PROP. R/W 1st TAKING

1550 mm WW & ISBW

EXISTING R/W

RIPRAP

COLLAR & EXT., 450mm

450mm CONC

-WB-

-EB-

RETAIN

14+00

15+00

16+00

17+00

S 3°18'51.3" W

-IIYI-

3.0 CONC
7.3 CONC
1.8 CONC
1.2 CONC
2.9 CONC
I-40 WBL 7.4 CONC
I-40 EBL 7.3 CONC
2.8 CONC

TOP = 84.187
INV = 83.293
INV = 83.245
INV = 84.447
INV = 83.533
INV = 83.554

END EXPRESSWAY GUTTER -IIYI- STA 14+69.305

PLUG

REMOVE

1650mm MTL

REMOVE HDWL

RETAIN DITCH

2Gi TYPE A

450mm MTL

400mm CSP W/ELBOW

BDO

CONC BERM

STD. BERM DITCH

-YI- +33.144 = -IIYI- +33.144
42.739m

CLASS "B" RIP-RAP EST. 4.5 TONS FILTER FABRIC EST.11.7 SM

1.5m LATERAL BASE DITCH

CLASS "B" RIP-RAP EST. 64 TONS FILTER FABRIC EST.160 SM

-YI- +00.000 = -IIYI- +00.000
50.000m (164.04')

COLLAR AND EXT. 1650mm CSP W/HDWL

-YI- +55.064 = -IIYI- +55.064
45.737m

-YI- +00.000 = -IIYI- +00.000
55.000m (180.45')

-FLYLEREV-
PIs Sta. 34+54.180
Θs = 2°56'47.9"
Ls = 90.000
LT = 60.008
ST = 30.008

-FLYLEREV- STSta. 35+14.173 = -IIYI- POTSta. 16+68.075 (17.9m RT.)

TRAFFIC DIAGRAM
2005 ADT
2025 ADT
CLAYTON BYPASS
406 347
388 158
20 17
I-40 I-40
1064 1268
672 807

NOTE:
(1) SEE SHEET 18 FOR -IIYI- PROFILE
(2) SEE SHEET 30 FOR -FLYLEREV- PROFILE

SITE AA3b

RIGHT OF WAY REVISION 9/2/04

METRIC

PROJECT REFERENCE NO.	SHEET NO.
	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	
CONST.REV.	
R/W REV.	

NAD 83

123.09 COR TO COR S07°03'23"W

19.482' COR TO COR S80°49'37"E

3.72' COR TO COR N09°55'52"E

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES CHANNEL IMPACT (PERM)

DENOTES CHANNEL IMPACTS (TEMP)

1 THOMAS H. PENNY

2 THOMAS H. PENNY

3 GEORGE J. PENNY, ET UX

-YI- +80.000 = -IIYI- +80.000
50.000m (164.04')

0.6 m LATERAL GRASS SWALE

-YI- +10.000 = -IIYI- +10.000
52.000m (170.60')

-YI- +40.000 = -IIYI- +40.000
49.000m (160.76'), EX. R\W

RETAIN EXISTING DITCH AND RIP-RAP PAD

CL "B" RIP-RAP EST. 2.7 MTNS FILTER FABRIC EST. 8.4 SM

END EXPRESSWAY GUTTER -IIYI- STA 15+51.190

-YI- +00.000 = -IIYI- +43.564
43.564m (142.93')

PROP. R/W 1st TAKING

1550 mm WW & ISBW

EXISTING R/W

COLLAR & EXT., 450mm

RIPRAP

450mm CONC

-WB-

-EB-

-IIYI-

14+00 15+00 16+00 17+00 35+00

S 3°18'51.3"W

RETAIN

REMOVE

PLUG

END EXPRESSWAY GUTTER -IIYI- STA 14+69.305

RETAIN DITCH

REMOVE-HDWL

1650mm MTL

450mm MTL

2GI

TYPE A

CONC BERM

400mm CSP W/ELBOW

BDO

STD. BERM DITCH

-YI- +33.144 = -IIYI- +33.144
42.739m

CLASS "B" RIP-RAP EST. 4.5 TONS FILTER FABRIC EST.11.7 SM

1.5m LATERAL BASE DITCH

CLASS "B" RIP-RAP EST. 64 TONS FILTER FABRIC EST.160 SM

-YI- +00.000 = -IIYI- +00.000
50.000m (164.04')

-YI- +55.064 = -IIYI- +55.064
45.737m

-YI- +00.000 = -IIYI- +00.000
55.000m (180.45')

COLLAR AND EXT. 1650mm CSP W/HDWL

12.566' COR TO COR S80°55'23"E

12.566' COR TO COR N80°55'23"W

SITE AA3b

TRAFFIC DIAGRAM

2005 ADT 2025 ADT

CLAYTON BYPASS

I-40 WBL 7.4 CONC

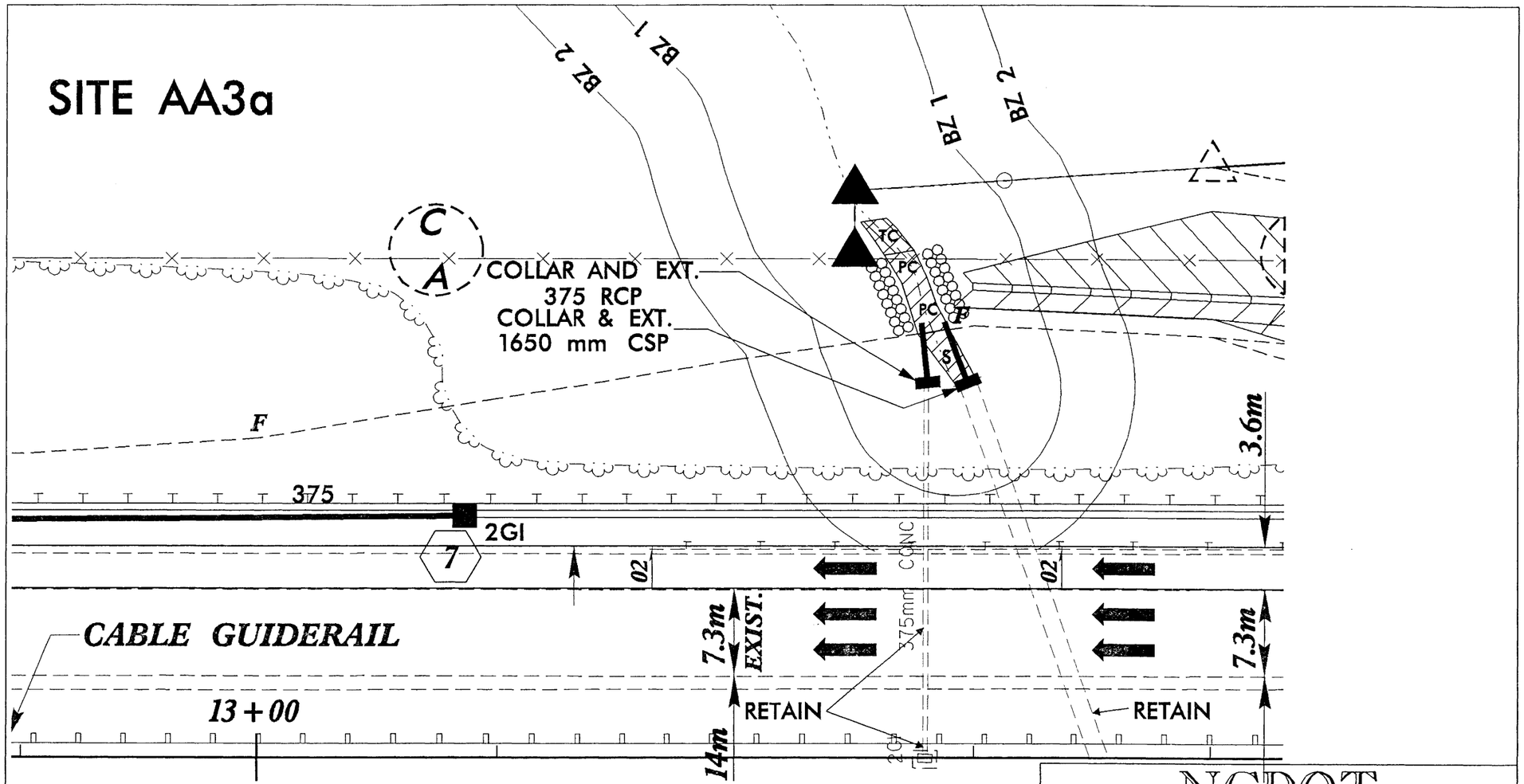
I-40 EBL 7.3 CONC

-FLYLEREV-
PIs Sta 34+54.180
θs = 2°56'47.9"
Ls = 90.000
LT = 60.008
ST = 30.008

-FLYLEREV- STSta. 35+14.173 = -IIYI- POTSta. 16+68.075 (17.9m RT.)

NOTE:
(1) SEE SHEET 18 FOR -IIYI- PROFILE
(2) SEE SHEET 30 FOR -FLYLEREV- PROFILE

SITE AA3a



S S DENOTES FILL IN SURFACE WATER

F F DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

PC PC DENOTES CHANNEL IMPACT (PERM)

TC TC DENOTES CHANNEL IMPACTS (TEMP)

5m 0 10m SCALE

NCDOT

DIVISION OF HIGHWAYS

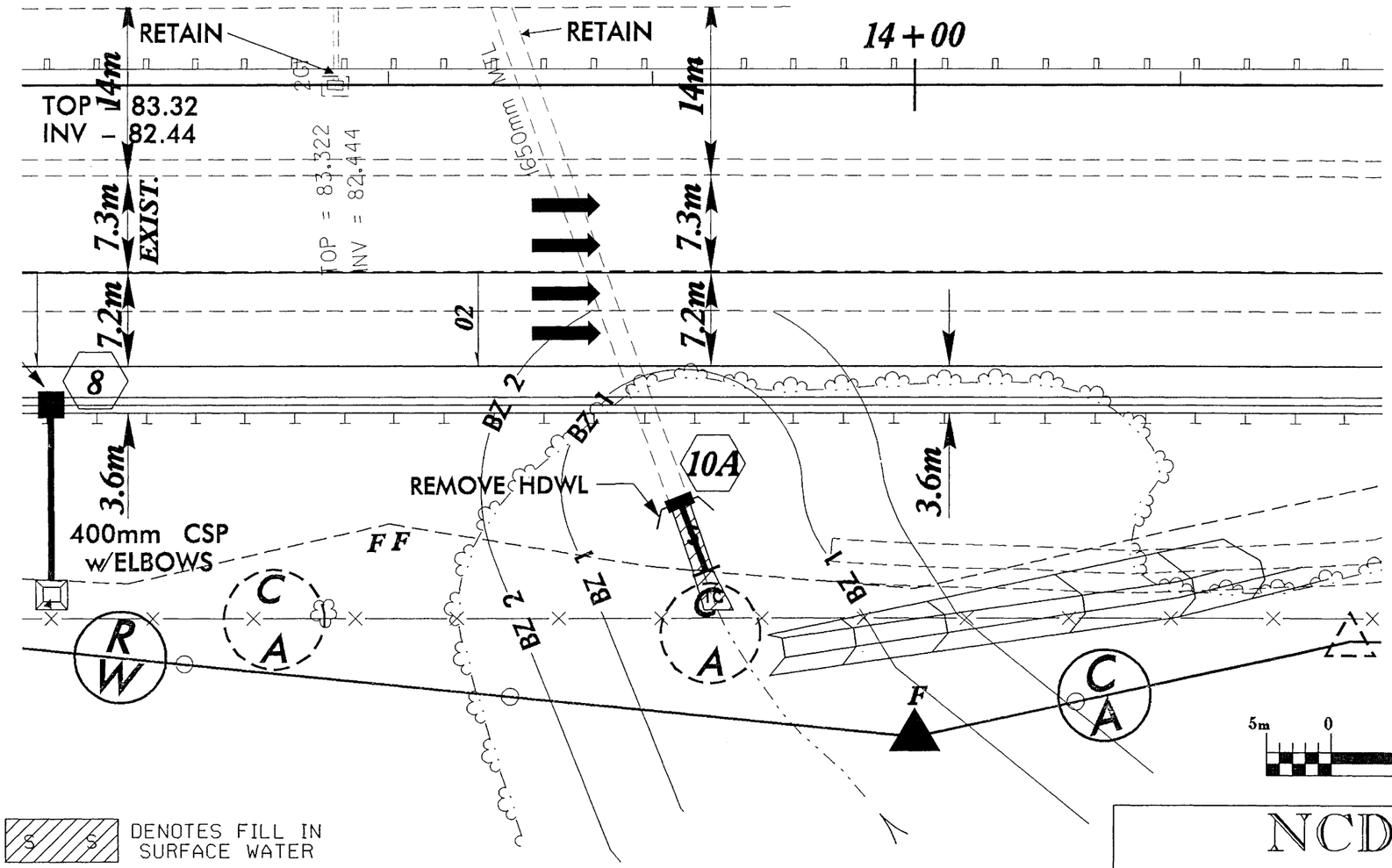
WAKE / JOHNSTON COUNTY

PROJECT: WBS - 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 13 OF 50 10/01/04



S S DENOTES FILL IN SURFACE WATER

F F DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

PC PC DENOTES CHANNEL IMPACT (PERM)

TC TC DENOTES CHANNEL IMPACTS (TEMP)

SITE AA3b

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS - 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 14 OF 50 10/01/04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	X-1

5 0 5 10

METRIC

SITE AAlb

11+00.000

10+80.000

10+60.000

10+40.000

10+20.000

0.020

80.889

80.633

"QUANTITIES ARE APPROXIMATE ONLY. THE RESIDENT ENGINEER WILL RECROSS-SECTION THE WORK ACCURATELY WHEN THE PROJECT IS STAKED OUT. THESE CROSS-SECTION NOTES WILL BE USED IN COMPUTING THE FINAL QUANTITIES FOR WHICH THE CONTRACTOR WILL BE PAID."

WETLANDS

-I-I-Y-I-

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	X-2

5 0 5 10

METRIC

SITE AA2b

WETLANDS

12+00.000

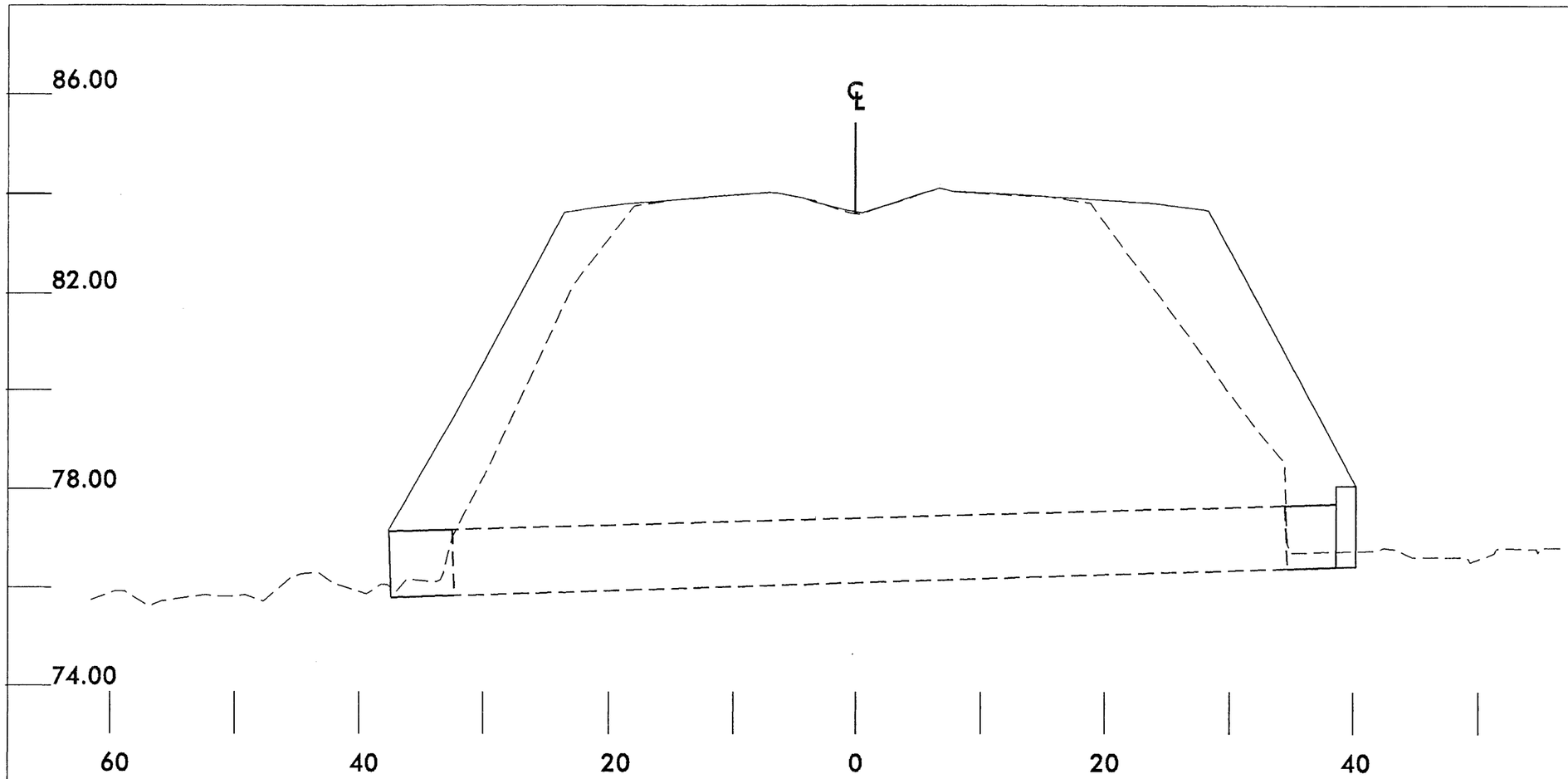
11+80.000

11+60.000

11+40.000

11+20.000

-11Y1-



CROSS SECTION - Y1 STA 13+70
1650mm CSP

NCDOT
DIVISION OF HIGHWAYS
WAKE / JOHNSTON COUNTY
PROJECT: WBS - 34459.1.1 (R-2552AA)
US 70 CLAYTON BYPASS
I-40 TO EAST OF SR 1525

SHEET 15 OF 50 10/01/04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

CONST.REV.

R/W REV.

5 0 10

LEFT DITCH — · — · —

RIGHT DITCH - - - - - -

-IIY1- (WB)

SITE AA3

★BM # BY1-102 EL 84.062
1.432m RT -IIY1- STA 14+32.772

★BM # BY1-103 EL 86.033
1.458m RT -IIY1- STA 16+96.298

BEGIN LT DITCH GRADE
STA 13+60.000 -IIY1-
EL. = 76.000

END LT DITCH GRADE
STA 14+20.000 -IIY1-
EL. = 77.250

76.000

77.250

(+) 2.0833%

1650 CSP

NOTE:
SEE SHEET 5 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

96 94 92 90 88 86 84 82 80 78 76 74

-IIY1- (EB)

★BM # BY1-102 EL 84.062
1.432m RT -IIY1- STA 14+32.772

★BM # BY1-103 EL 86.033
1.458m RT -IIY1- STA 16+96.298

BEGIN RT DITCH GRADE
STA 14+05.000 -IIY1-
EL. = 77.500

77.500

(+) 1.0667%

78.000

END RT DITCH GRADE
STA 14+20.000 -IIY1-
EL. = 78.000

NOTE:
SEE SHEET 5 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

96 94 92 90 88 86 84 82 80 78 76 74

30-SEP-2004 08:33
h:\projects\proj\aa3\aa3_wb.dgn
jmdavis

REVISIONS

RIGHT OF WAY REVISION 9/2/04

TRAFFIC DIAGRAM

2005 ADT
2025 ADT

CLAYTON BYPASS

400
337

588
546

36
17

1-48
1668
7398

1-48
692
807

END CONSTRUCTION
-Y2- POTSta. 13 + 80.000

-Y2- + 80.000
-Y1Y- + 80.000
50.800m
(166.67)

REVISIONS

RIGHT OF WAY REVISION 9/3/04

TRAFFIC DIAGRAM

2005 ADT
2025 ADT
K = 0.100
D = 0.60/0.40

CLAYTON BYPASS

486 / 287		
288 / 198		26 / 47
1-66		1-66
1868 / 1308		492 / 807

METRIC

PROJECT IDENTIFIED NO. | STATE SYM.
S.H. / SHEET NO. | 13
ELEVATION DATUM SHOWN | HORIZONTAL DATUM SHOWN

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONSTRUCTION
S.H. NO.

END CONSTRUCTION
-Y2- POTSta. 13 + 80.000

-Y2- + 80.000 = -Y1- + 00.000
50.000m (164.047)

-Y2- + 36.968 = -Y1- + 36.968
50.000m (164.047)

-Y2- + 56.000
15.000m (49.212)

-Y2- PCSta. 12 + 72.798

-Y2- + 87.124
8.683m

-Y2- + 81.124
1.067m

-Y2- PCSta. 12 + 81.314

S 44° 02' 03.9" E

-Y2- PTSta. 13 + 81.538

-Y2- + 80.000
(46.221)

-Y2- + 26.889
8.462m

-Y2- + 28.889
8.324m

-Y2- + 50.000
15.000m (49.212)

-Y2- + 65.000
15.000m (49.212)

-Y2- + 80.000
15.000m (49.212)

-Y2- + 95.000
15.000m (49.212)

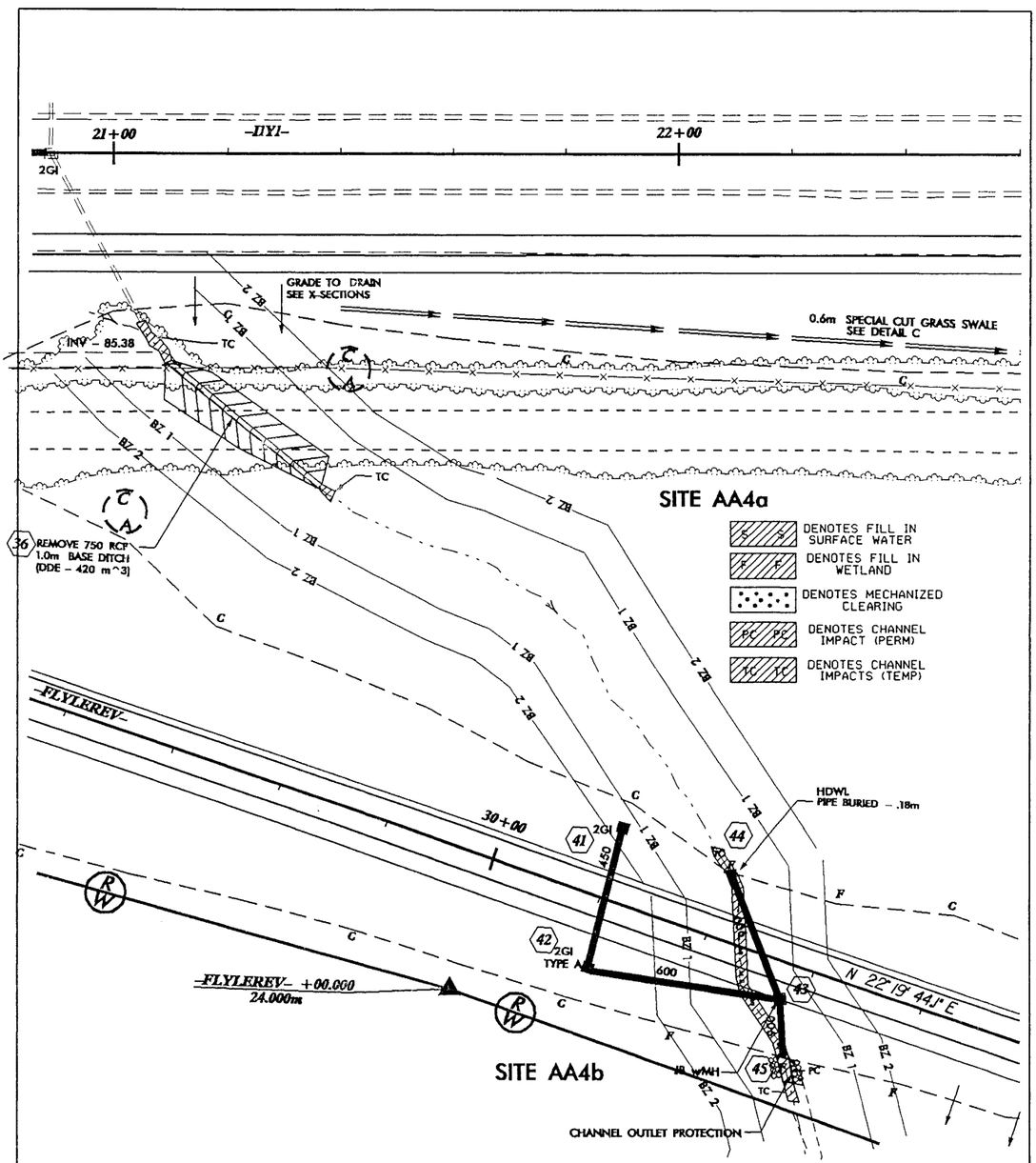
-Y2- + 110.000
15.000m (49.212)

-Y2- + 125.000
15.000m (49.212)

-Y2- + 140.000
15.000m (49.212)

-Y2- + 155.000
15.000m (49.212)

-Y2- +



SITES AA4a & AA4b

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

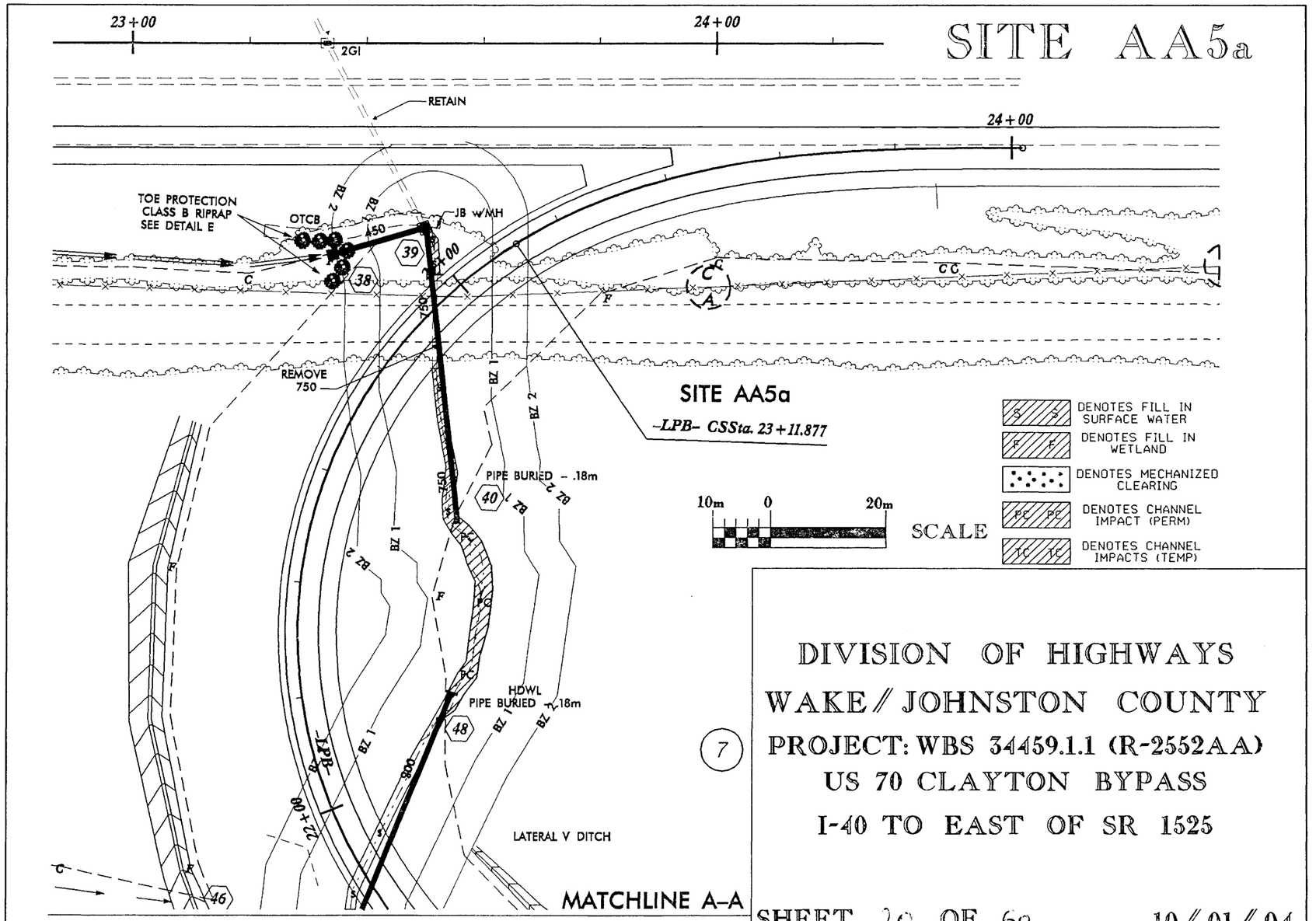
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 19 OF 50 10/01/04

SITE AA5a



7

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

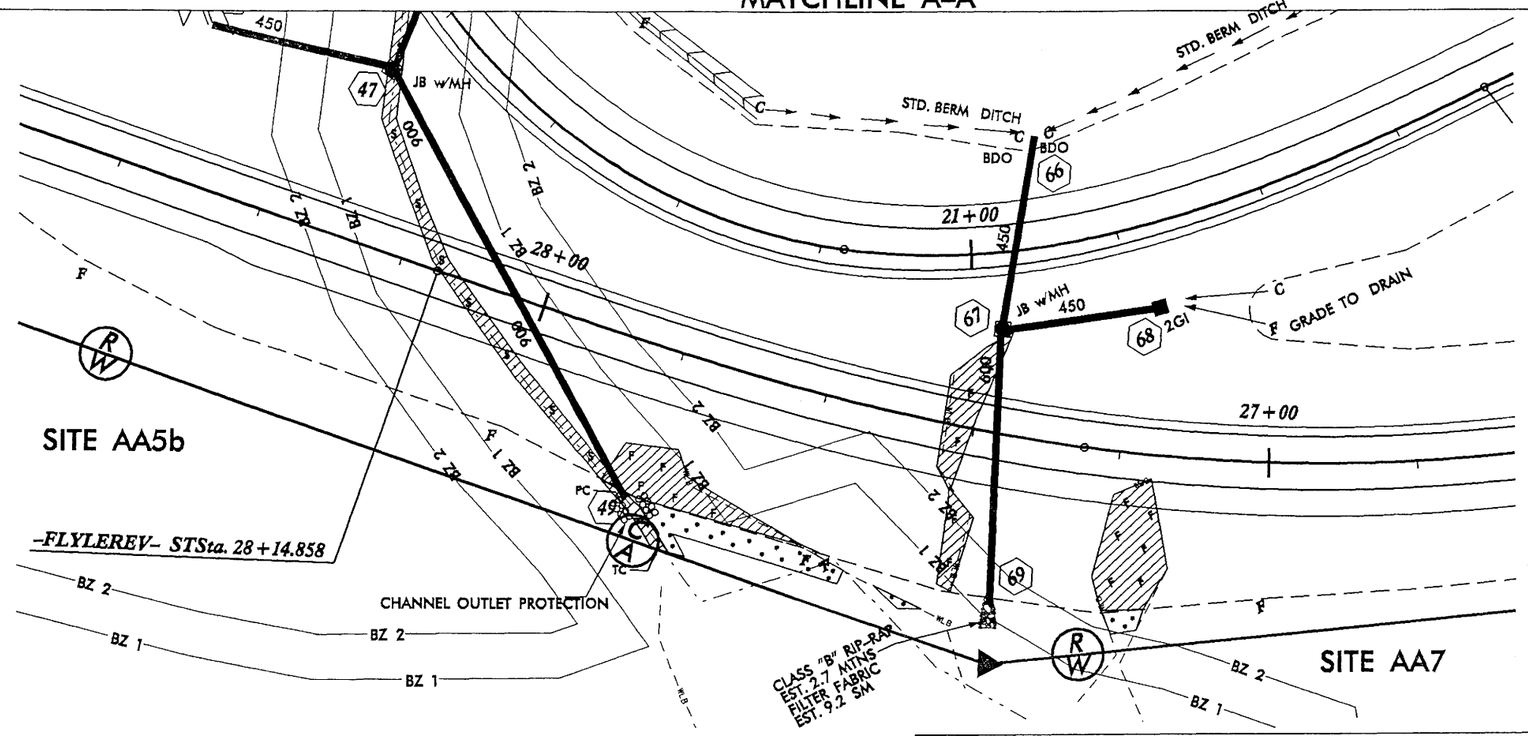
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 20 OF 50 10 / 01 / 04

MATCHLINE A–A



10m 0 20m

SCALE

S S DENOTES FILL IN SURFACE WATER

F F DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

PC PC DENOTES CHANNEL IMPACT (PERM)

TC TC DENOTES CHANNEL IMPACTS (TEMP)

SITES AA5b, AA6 & AA7

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

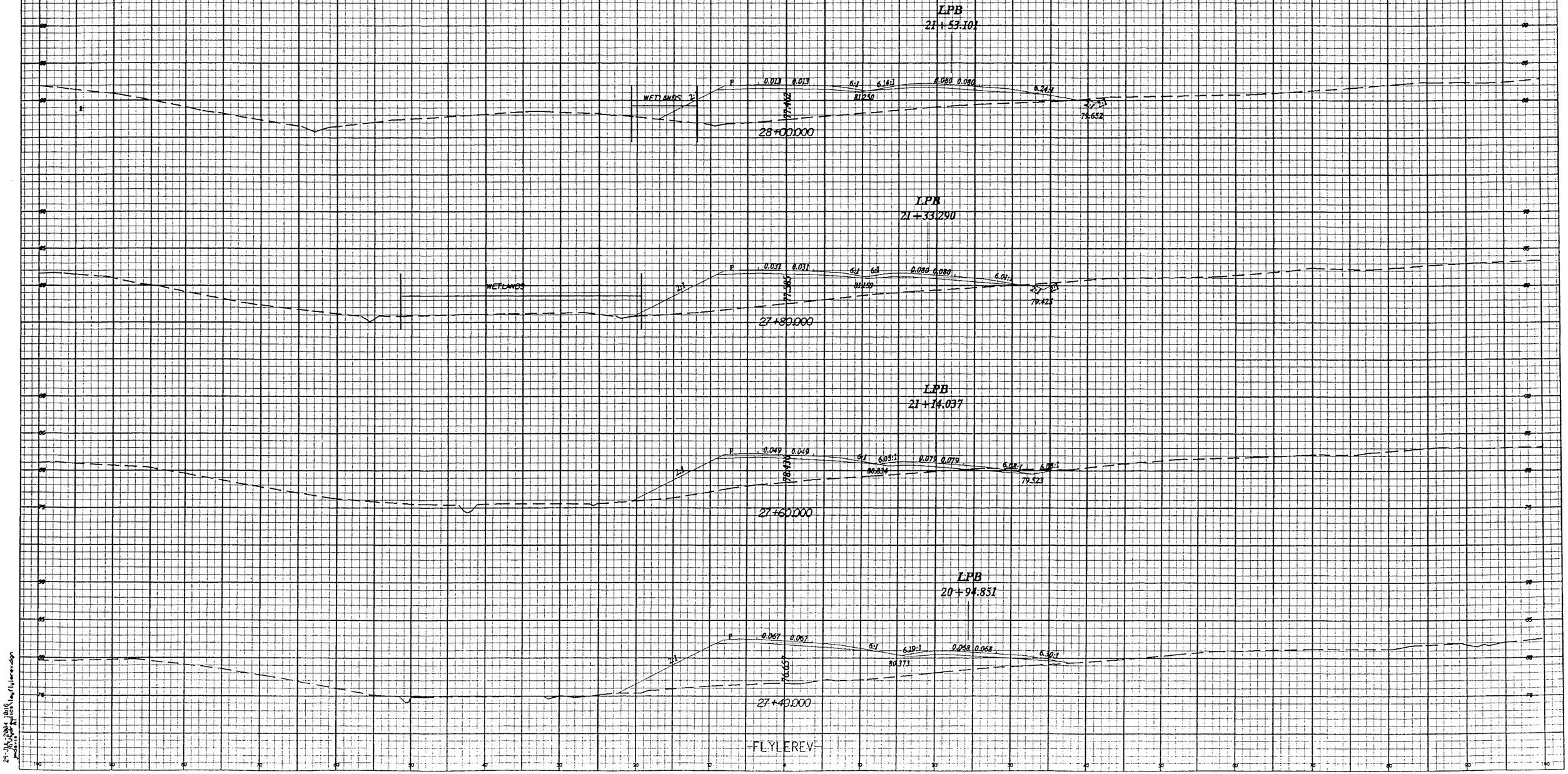
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 21 OF 50 10/01/04

SITE AA5b


LPB
21+53.101
WETLANDS
F
0.013
0.013
6:1
6.14:1
0.080
0.080
6.24:1
R1250
77.402
28+00.000
79.652
LPB
21+33.290
WETLANDS
F
0.031
0.031
6:1
6:1
0.080
0.080
6.01:1
81.159
77.365
27+80.000
79.625
LPB
21+14.037
F
0.049
0.048
6:1
6.05:1
0.079
0.079
6.04:1
6.05:1
78.439
80.834
27+60.000
79.523
LPB
20+94.851
F
0.067
0.067
6:1
6.19:1
0.068
0.068
6.30:1
76.057
80.373
27+40.000
FLYLEREV

RIGHT OF WAY REVISION 9/2/04

9/17/99

METRIC

PROJECT REFERENCE NO.	SHEET NO.
	23
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
CONST.REV.	
R /W REV.	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83

7

-YREV- +22.398
15.000m
(49.21')

-YREV- +28.000
21.000m (68.90'),
15.000m (49.21')

-YREV- +24.328
15.000m
(49.21')

TOE PROTECTION
CLASS B RIPRAP
EST. 40 MTNS
FILTER FABRIC
EST. 82 SM

CLASS "I" RIP-RAP
EST. 11.8 MTNS
FILTER FABRIC
EST. 26.1 SM

-YREV- +35.000
21.000m (68.90'),
15.000m (49.21')

PDE
PDE

15+00

-YREV-

1050

S 34° 06' 21.9" W

NOTE: PIPE BURIED 0.20m

HDWL

14+00

13+00

S 22° 25' 32.7" W

SITE AA9

-YREV- +24.328
15.000m
(49.21')

-YREV- +22.398
15.000m
(49.21')

-YREV- PTSta. 15+24.328

-YREV- PCSta. 14+22.398

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

7

-YREV-
PI Sta 14+73.540
Δ = 11° 40' 49.2" (RT)
L = 101.930
T = 51.142
R = 500.000
S.E. = 0.03

500.0M

705

$$$$$SYSTIME$$$$$
$$$$$USERNAME$$$$$
$$$$$USERPROFILE$$$$$

RIGHT OF WAY REVISION 9/2/04

8/17/05

METRIC

PROJECT REFERENCE NO.	SHEET NO.
	24
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

NAD 83

-YREV- +22.398
15.000m
(49.21')

-YREV- +28.000
21.000m (68.90'),
15.000m (49.21')

-YREV- +24.328
15.000m
(49.21')

TOE PROTECTION
CLASS II RIPRAP
EST. 40 MTNS
FILTER FABRIC
EST. 82 SM

CLASS "I" RIP-RAP
EST. 11.8 MTNS
FILTER FABRIC
EST. 26.1 SM

-YREV- +35.000
21.000m (68.90'),
15.000m (49.21')

PDE
PDE
PDE

15+00

-YREV-

14+00

13+00

S 22° 25' 32.7" W

S 34° 06' 21.9" W

1150

NOTE: PIPE BURIED 0.20m

HDWL

SITE AA9

-YREV- +24.328
15.000m
(49.21')

-YREV- +22.398
15.000m
(49.21')

-YREV- PTSta. 15+24.328

-YREV- PCSta. 14+22.398

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

-YREV-
PI Sta 14+73.540
Δ = 11° 40' 49.2" (RT)
L = 101.930
T = 51.142
R = 500.000
S.E. = 0.03

500m

705

$$$$$SYSTIME$$$$$
$$$$$FILENAME$$$$$

REVISIONS
RIGHT OF WAY REVISION 9/3/04

METRIC
PRELIMINARY PLANS

TRAFFIC DIAGRAM
2045 ADT
3825 ADT
CLAYTON BYPASS

SITE AA6
SITE AA8
SITE AA7
SITE AA10a
SITE AA10b

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES HAND CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

LOCATION
DESIGNED BY: DATE
CHECKED BY: DATE

REVISIONS

RIGHT OF WAY REVISION 9/2/04

METRIC

CONST.ENV.

R/W ENV.

PROJECT REFERENCE NO. | SHEET NO.

R/W SHEET NO.

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

TRAFFIC DIAGRAM

3665 ADT
3957 ADT
IN PROGRESS

CLAYTON BYPASS

498
327
348
349
36
77
I-40
I-40
2868
2368
633
527

SITE AA6

SITE AA7

SITE AA8

SITE AA10a

SITE AA10b

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES HAND CLEARING

DENOTES CHANNEL IMPACT (PERM)

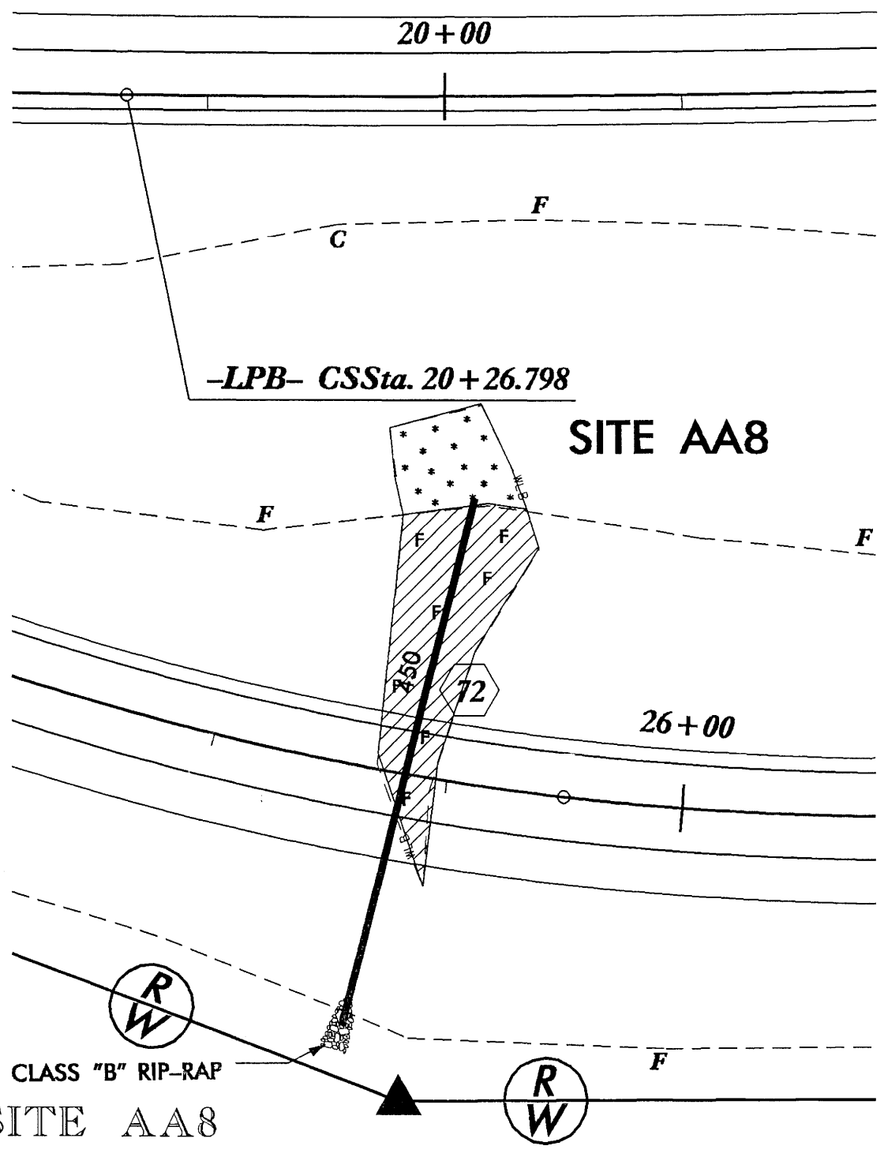
DENOTES CHANNEL IMPACTS (TEMP)

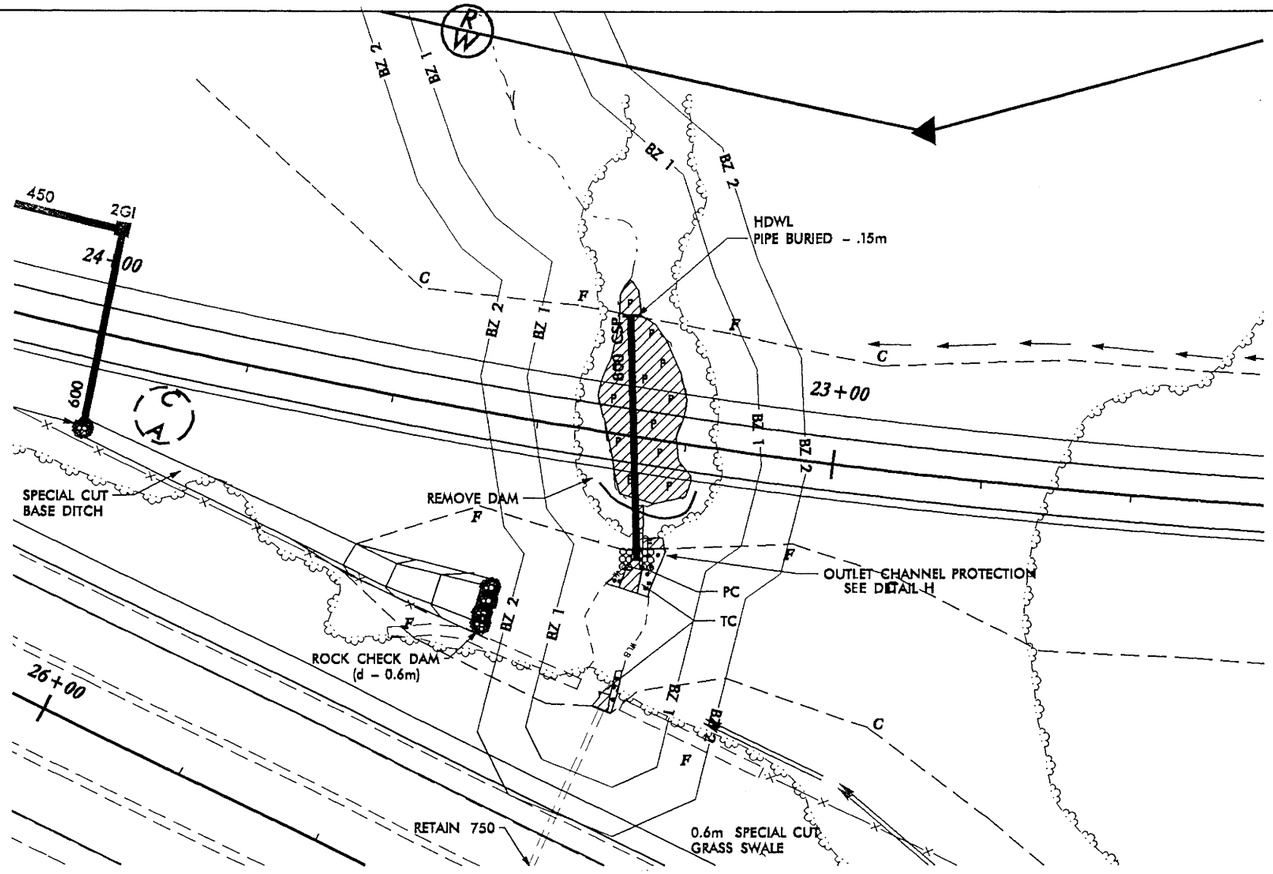
LOCATION:

TIP NO.: | COUNTY:

DESIGNED BY: | DATE:

CHECKED BY: | DATE:


20+00
F
C
-LPB- CSSta. 20+26.798
SITE AA8
F
F
F



SITE AA10a

- S S — DENOTES FILL IN SURFACE WATER
- F F — DENOTES FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- H — DENOTES HAND CLEARING
- PC PC — DENOTES CHANNEL IMPACT (PERM)
- TC TC — DENOTES CHANNEL IMPACTS (TEMP)

10m 0 20m SCALE

NCDOT

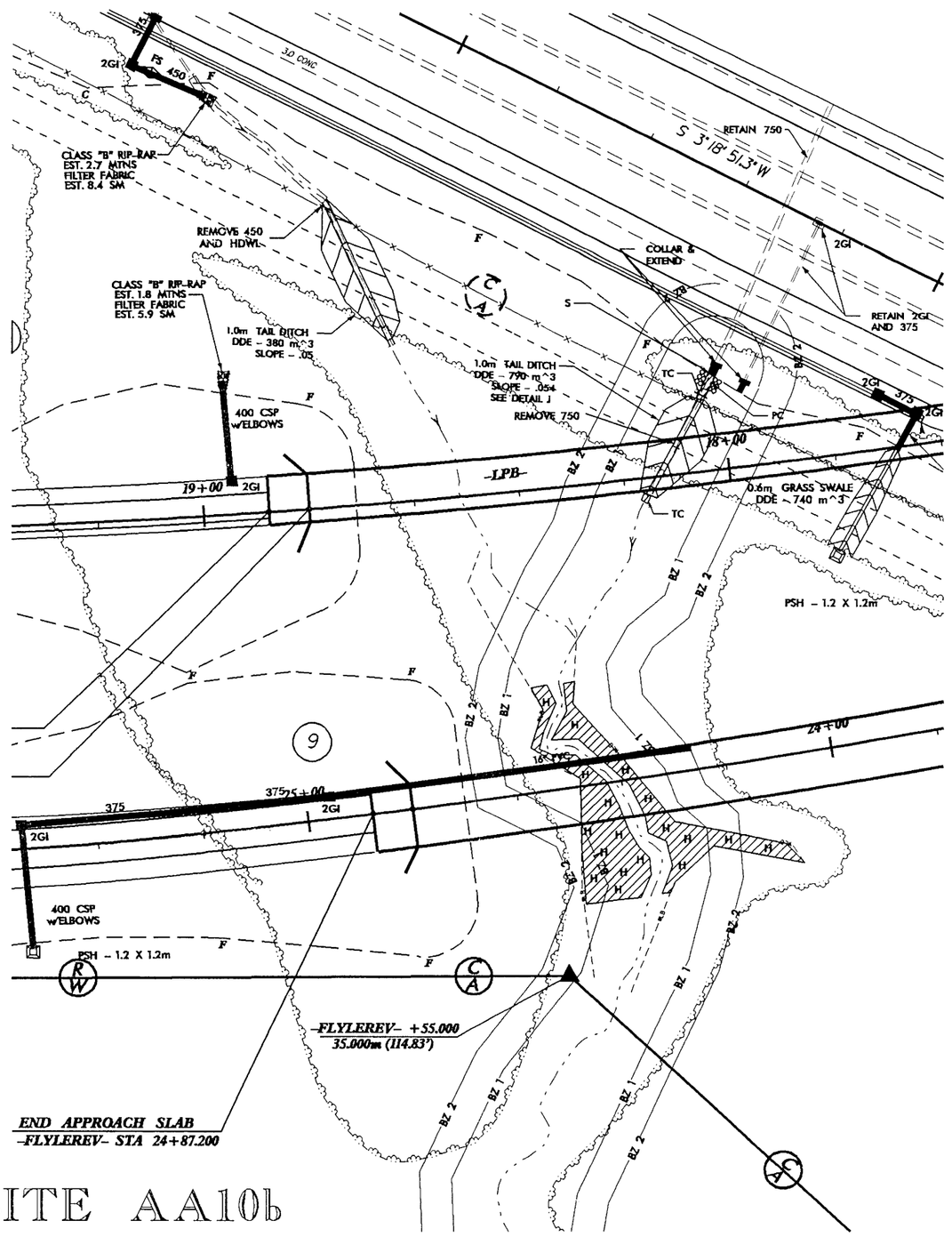
DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

SHEET 27 OF 50 10 / 01 / 04



SITE AA10b

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES MECHANIZED CLEARING

DENOTES HAND CLEARING

DENOTES CHANNEL IMPACT (PERM)

DENOTES CHANNEL IMPACTS (TEMP)

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)
US 70 CLAYTON BYPASS

SHEET 29 OF 60 10 / 01 / 04

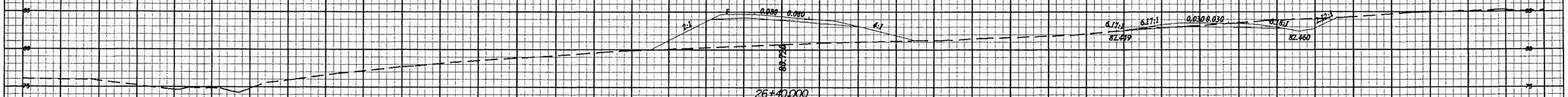
PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	30

5 0 5 10

METRIC

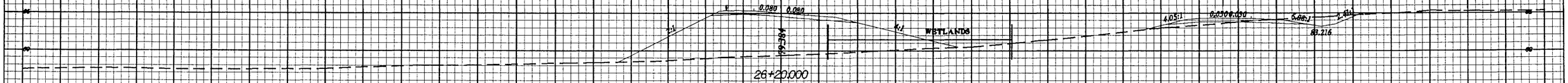
SITE AA8

LPB
20+06.486



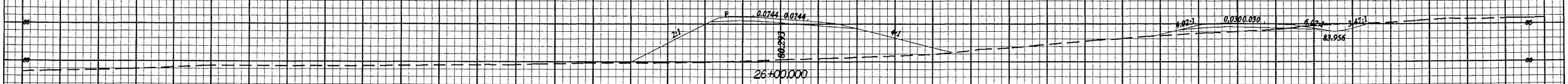
26+40.000

LPB
19+90.989



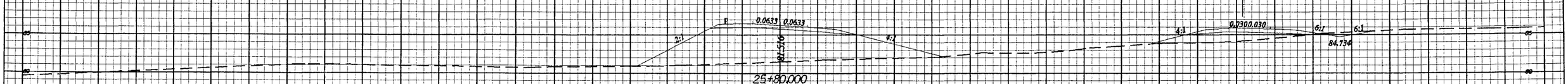
26+20.000

LPB
19+75.774



26+00.000

LPB
19+59.891



25+80.000

-FLYLEREV-

28-SEP-2004 09:28
jmcavoy
K:\tics\ag\flylerev.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	X-16

5 0 5 10

METRIC

SITE AA10a

27+00.000

FLYLWREV
23+00.080

26+80.000

FLYLWREV
23+21.161

WETLANDS

26+60.000

FLYLWREV
23+42.100

26+40.000

FLYLWREV
23+62.909

26+20.000

REVISIONS
RIGHT OF WAY REVISION 5/31/01

METRIC

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

SITE AA11a
SITE AA11b
SITE AA11c

TRAFFIC DIAGRAM
I-40
CLAYTON BYPASS

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/3/04

METRIC

PRELIMINARY PLANS

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

SITE AA11a

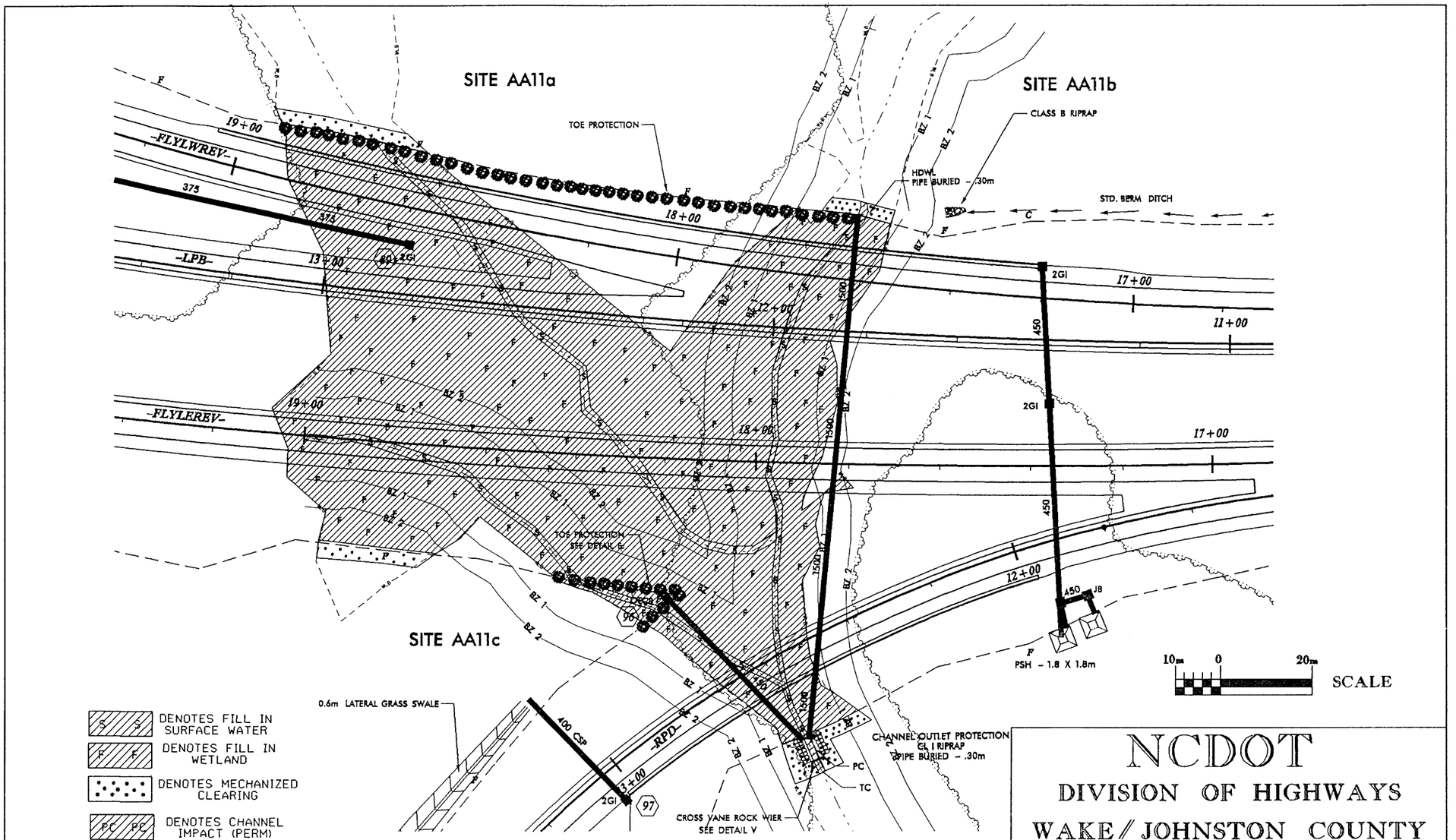
SITE AA11b

SITE AA11c

TRAFFIC DIAGRAM

CLAYTON BYPASS

LOCATION
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:



SITE AA11a , AA11b & AA11c

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 33 OF 50 10 / 01 / 04

5 0 5 10

SITE AA11 (a & b)

LPB
13+20.891

FLYLWREV
18+98.940

19+20.000

LPB
13+01.246

FLYLWREV
18+79.327

19+00.000

LPB
12+81.593

FLYLWREV
18+59.769

18+80.000

LPB
12+61.933

FLYLWREV
18+40.081

18+60.000

WETLANDS

END 137' RT

-FLYLEREV-

10/25/98
28-SEP-2004 15:01
R:\hqw\projects\flylerev.dgn
jwalker

5 0 5 10

METRIC

SITE AA11 (a & b)

LPB
12+42.265

FLYLWREV
18+20.457

WETLANDS 4:1 0.030 0.030 8:1 8:1 0.0300.030 WETLANDS 0.050 0.050 2:1

98.534

18+40.000

LPB
12+22.590

FLYLWREV
18+60.823

WETLANDS 4:1 0.030 0.030 8:1 8:1 0.0300.030 WETLANDS 0.050 0.050 2:1

97.980

18+20.000

LPB
12+02.908

FLYLWREV
17+81.185

WETLANDS 4:1 0.030 0.030 8:1 8:1 0.0300.030 WETLANDS 0.050 0.050 2:1

96.436 80.865

18+00.000

RPD
12+40.456

LPB
11+83.218

FLYLWREV
17+61.543

2.5:1 0.080 0.080 6.5:1 6:1 0.030 0.030 8:1 8:1 0.0300.030 0.050 0.050 2:1

94.936 80.557

17+80.000

FLYLEREV

28-SEP-2004 15:01
jwatson
R:\projects\2552aa\flylerev.dgn

REVISIONS
RIGHT OF WAY REVISION 9/21/04

METRICS

PROJECT REFERENCE NO. | SHEET NO.
R/W SHEET NO.
RESIDENT ENGINEER | INITIALS
CONST. REV.
R/W REV.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

-LREV- PTSta. 18+99.765 BK =
-L- PTSta. 18+99.765 AH

-LREV- PCSta. 17+63.646

-LREV-
PI Sta. 19+53.59
Δ = 5°47'54" (RT)
D = 2°00'00"
T = 101.04
L = 202.05
R = 2,865.000
S.E. = NC

S 85°09'54.8" E

-Y2B- PCSta. 18+33.335

N 61°18'30.0" E

-Y2B- PTSta. 18+67.157

SITE AA14

BEGIN BRIDGE
-LREV- STA 13+32.508
BEGIN APPROACH SLAB
-LREV- STA 13+32.508

END BRIDGE
-LREV- STA 13+77.508
END APPROACH SLAB
-LREV- STA 13+78.708

BEGIN APPROACH SLAB
-LREV- STA 13+77.508
BEGIN BRIDGE
-LREV- STA 13+78.508

END APPROACH SLAB
-LREV- STA 13+41.708
END BRIDGE
-LREV- STA 13+42.508

TEMP WORK BRIDGE
DENOTES FILL IN WETLAND
DENOTES HAND CLEARING

WILLIS C. LINSTEAD
WILLIAM F. SCHMIDT, JR.
ALAN A. HARPER JR. ET AL
NCDOT FORMERLY, Bishop C. Horton, ET UX
CHARLES W. LEE, ET UX
BK 906 PG.300
PB 24 PG.296

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 5/21/04

METRIC

PROJECT REFERENCE NO. | SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER | STRUCTURES ENGINEER
PRELIMINARY PLANS
CONST. REV.
R/W REV.

-LREV- PTSta. 18+99.765 BK =
-L- PTSta. 18+99.765 AH

-LREV-
N 50,491,474.6
E 1,420,437 (IFT.)
L = 4,200
T = 2,100
R = 2,865.000
S.E. = WC

-LREV- PCSta. 17+63.665

-Y2B- PCSta. 14+33.335

-Y2B- PTSta. 13+97.587

S 85°03'54.8" E

N 68°18'30.9" E

SITE AA14

BEGIN APPROACH SLAB -LREV- STA. 17+77.309
BEGIN BRIDGE -LREV- STA. 17+93.309
END BRIDGE -LREV- STA. 18+17.509
END APPROACH SLAB -LREV- STA. 18+34.709

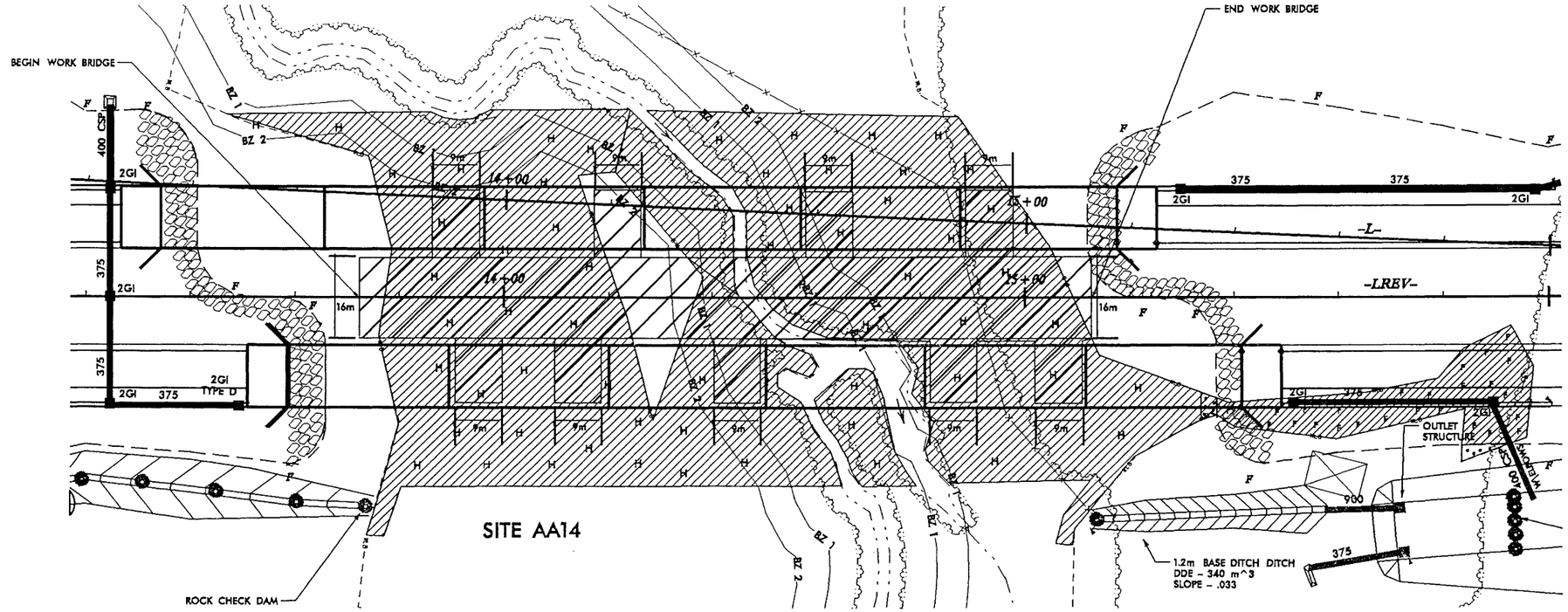
BEGIN APPROACH SLAB -LREV- STA. 13+11.309
BEGIN BRIDGE -LREV- STA. 13+27.309
END BRIDGE -LREV- STA. 13+51.509
END APPROACH SLAB -LREV- STA. 13+68.709

TEMP WORK BRIDGE
DENOTES FILL IN WETLAND
DENOTES HAND CLEARING

WILLIS C. WHITEAD
MCCOY FORMERLY, DAVID C. MARSH, ET UX
CHARLES R. FOX, ET UX DB 996 PG. 309/ PB 24 PG. 219

EXCEPTIONS

ST. MAINT. | COUNTY:
DESIGNED BY: | DATE:
CHECKED BY: | DATE:



SITE AA14

TEMP WORK BRIDGE

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES HAND CLEARING IN WETLANDS

DENOTES MECHANIZED CLEARING IN WETLANDS

DENOTES CHANNEL IMPACT (PERM)

DENOTES CHANNEL IMPACTS (TEMP)

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2551AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 37 OF 50 10 / 01 / 04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

5 0 10

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

LEFT DITCH — - - —

RIGHT DITCH - - - - - -

-LREV-

EASTBOUND

★BM # BL-712 EL 70.991
37.304m LT -LREV- STA 11+17.511

★BM # BL-713 EL 68.144
28.596m LT -LREV- STA 12+23.597

★BM # BL-714 EL 62.956
25.439m LT -LREV- STA 13+64.775

BEGIN GRADE -LREV-
STA 11+04.621 EL = 71.060

-0.4092%

1.5:1 CLASS I RIPRAP

BEGIN RT DITCH GRADE
STA 12+82.000 -LREV-
EL = 66.468

BEGIN RT DITCH GRADE
STA 13+74.000 -LREV-
EL = 61.206

LOW SIDE - w/SUPERELEVATION DROP

NOTE:
SEE SHEET 9 & 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

11 +20 +40 +60 +80 12 +20 +40 +60 +80 13 +20 +40 +60 +80 14 +20 +40 +60

82 80 78 76 74 72 70 68 66 64 62 60 58

-LREV-

★BM # BL-715 EL 62.894
26.127m LT -LREV- STA 14+93.234

★BM # BL-716 EL 74.038
10.687m LT -LREV- STA 16+90.232

★BM # BL- 717 EL 77.036
7.481m LT -LREV- STA 17+81.546

PI = 17+00.000
EL = 68.624 m
VC = 300 m
K = 122

-0.4092%

+2.043%

1.5:1 CLASS I RIPRAP

(+) 3.260%

END RT DITCH GRADE
STA 15+37.000 -LREV-
EL = 63.500

BEGIN RT DITCH GRADE
STA 15+11.000 -LREV-
EL = 62.000

NOTE:
SEE SHEET 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20 +40 +60 +80 18 +20

82 80 78 76 74 72 70 68 66 64 62 60 58

10/26/04

28-SEP-2004 8:52
C:\Projects\Work Area\mdavis\Interchange.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

LEFT DITCH — - - — -

RIGHT DITCH - - - - - - -

-LREV-
WESTBOUND

★BM # BL-712 EL 70.991
37.304m LT -LREV- STA 11+17.511

BEGIN GRADE -LREV-
STA 11+04.621 EL = 71.060

-0.4092%

★BM # BL-713 EL 68.144
28.596m LT -LREV- STA 12+23.597

BEGIN RT DITCH GRADE
STA 12+62.000 -LREV-
EL = 66.860

1.0:1 CLASS RIPRAP

-2.4702%

★BM # BL-714 EL 62.956
25.439m LT -LREV- STA 13+64.775

LOW STEEL w/SUPERELEVATION DROP
BEGIN RT DITCH GRADE
STA 13+74.000 -LREV-
EL = 61.200

NOTE:
SEE SHEET 9 & 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # BL-715 EL 62.894
26.127m LT -LREV- STA 14+93.234

BEGIN RT DITCH GRADE
STA 15+11.000 -LREV-
EL = 62.000

1.0:1 CLASS RIPRAP

(+) 3.260%

END RT DITCH GRADE
STA 15+57.000 -LREV-
EL = 63.500

-LREV-

PI = 17+00.000
EL = 68.624 m
VC = 300 m
K = 122

★BM # BL-716 EL 74.038
10.687m LT -LREV- STA 16+90.232

-0.4092%

+2.043%

★BM # BL-717 EL 77.036
7.481m LT -LREV- STA 17+81.546

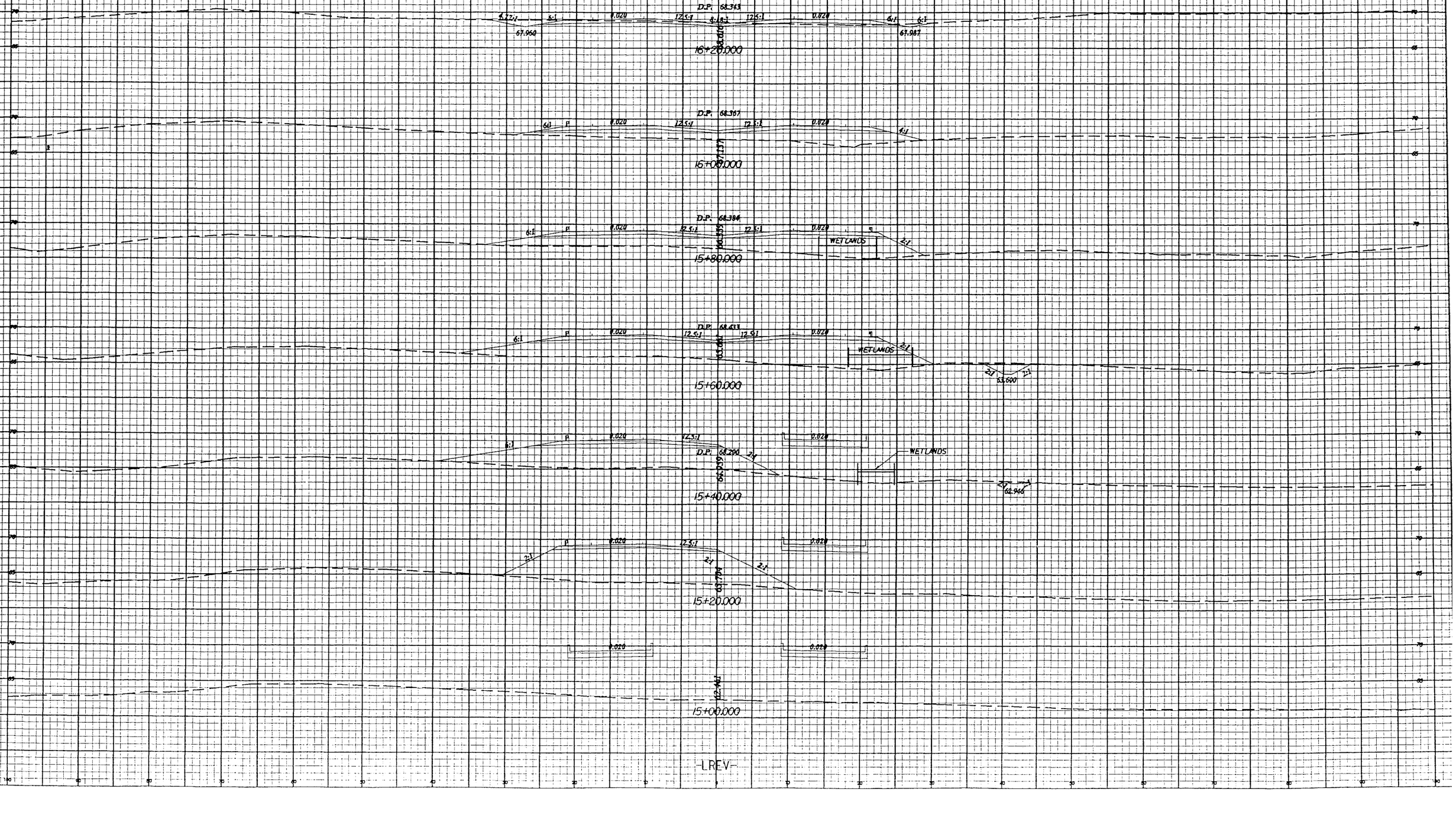
NOTE:
SEE SHEET 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

28-SEP-2004 15:53
R:\2004 Projects\Intermodal\

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	X-62

5 0 5 10

SITE 14



82-X4C-2004 10:24
pwdarts
N:\Projects\layouts\layout.dgn

REVISIONS
RIGHT OF WAY REVISION 9/21/01

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

METRIC

PROJECT REFERENCE NO. | SHEET NO.
F.A.P. ROUTE NO. | DESCRIPTION
ROADWAY DESIGN ENGINEER
CONST. ENGR.
R/W ENGR.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SITE AA15a
SITE AA15b
SITE AA16
SITE AA17
SITE AA18a
SITE AA18b

NOTE:
(1) SEE SHEETS 37 & 38 FOR -L- PROFILE
(2) SEE SHEETS 40 & 41 FOR -Y1B- PROFILE
(3) SEE SHEET 39 FOR -DR2- PROFILE
(4) SEE CROSS SECTIONS AND ROADWAY STANDARDS SHEETS FOR SLOPE, REMOVAL AND UNSUITABLE MATERIAL

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

ENVIRON
RIGHT OF WAY REVISION 9/3/04

METRIC

PRELIMINARY PLANS
NOT FOR BID OR CONSTRUCTION

CONSTRUCTION
R/W REV.

SITE AA18a

BEGIN CONSTRUCTION
-Y4- STA. 12+50.808

BEGIN APPROACH SLAB
-Y4- STA. 14+82.560

BEGIN BRIDGE
-Y4- STA. 14+93.808

TCR TO REMAIN IN FORCE THROUGH B-25-13AA AND B-25-13AB

DENOTES FILL IN SURFACE WATER (POND)

END BRIDGE
-Y4- STA. 19+10.558

END APPROACH SLAB
-Y4- STA. 19+17.808

END CONSTRUCTION
-Y4- STA. 21+50.808

NAD 83

S 85° 03' 54.8" E

S 5° 29' 58.0" W

S 79° 39' 32.8" E

WILLIE C. REAMS (33)

WILLIE C. LINSTEAD (32)

JANE A. CUNNINGHAM (34)

-Y2B-
PI Sta. 61+27.59
Δ = 9° 06' 25.8" (LT)
D = 9°00'00"
T = 50.000
L = 100.000
R = 636.620
S.E. = 0.05
Rdx. = 57.5

-Y4DET-

PI Sta. 0+44.78	PI Sta. 8+13.99	PI Sta. 16+96.09	PI Sta. 19+74.04
Δ = 90° 00' 00.0" (RT)	Δ = 90° 00' 00.0" (LT)	Δ = 90° 00' 00.0" (LT)	Δ = 90° 00' 00.0" (RT)
D = 22°55'56"	D = 22°55'56"	D = 22°55'56"	D = 22°55'56"
T = 44.78	T = 44.78	T = 44.78	T = 44.78
L = 78.540	L = 78.540	L = 78.540	L = 78.540
R = 250.000	R = 250.000	R = 250.000	R = 250.000

LOCATION:
FP NO.: COUNTY:
DRAWING BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

DENOTES FILL IN SURFACE WATER
DENOTES FILL IN WETLAND
DENOTES MECHANIZED CLEARING
DENOTES CHANNEL IMPACT (PERM)
DENOTES CHANNEL IMPACTS (TEMP)

SITE AA15a
SITE AA15b
SITE AA16
SITE AA17
SITE AA18a
SITE AA18b

NOTE:
(1) SEE SHEETS 37 & 38 FOR -L- PROFILE
(2) SEE SHEETS 40 & 41 FOR -Y2B- PROFILE
(3) SEE SHEET 39 FOR -DR3- PROFILE
(4) SEE CROSS SECTIONS AND ROADWAY TEMPLATES FOR SUPERELEVATION, GUTTER, DITCH & SPECIAL MEDIAN GRADING

-Y2B-
N Sta. 6+00.43
Δ = 9° 16' 22.5" (RT)
D = 4°00'
T = 162.17
L = 321.56
N Sta. 15+72.00
Δ = 9° 16' 22.5" (RT)
D = 4°00'
T = 162.17
L = 321.56
SE = .06
RA = 4
N Sta. 27+23.56
Δ = 9° 16' 22.5" (LT)
D = 4°00'
T = 162.17
L = 321.56
SE = .06
RA = 3.5

METRIC
CONST.SEN.
R/W SEN.

PROJECT IDENTIFICATION NO. | SHEET NO.
R/W SHEET NO.
ROADWAY DESIGN ENGINEER | HYDRAULIC ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/21/01

METRIC

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

REGION CONSTRUCTION
-Y- STA. 22+50.000

REGION APPROACH R.I.A.B
-Y- STA. 11+82.500

REGION BRIDGE
-Y- STA. 24+17.500

TCH TO REMAIN IN FORCE THROUGH R-2452AA AND R-2452AB

SITE AA18a

DENOTES FILL IN SURFACE WATER (POND)

NAD 83

END BRIDGE
-Y- STA. 14+90.000

END APPROACH R.I.A.B
-Y- STA. 17+97.525

END CONSTRUCTION
-Y- STA. 26+50.000

S 85° 03' 54.8" E

S 79° 39' 32.5" E

S 72° 58' 56" W

S 25° 58' W

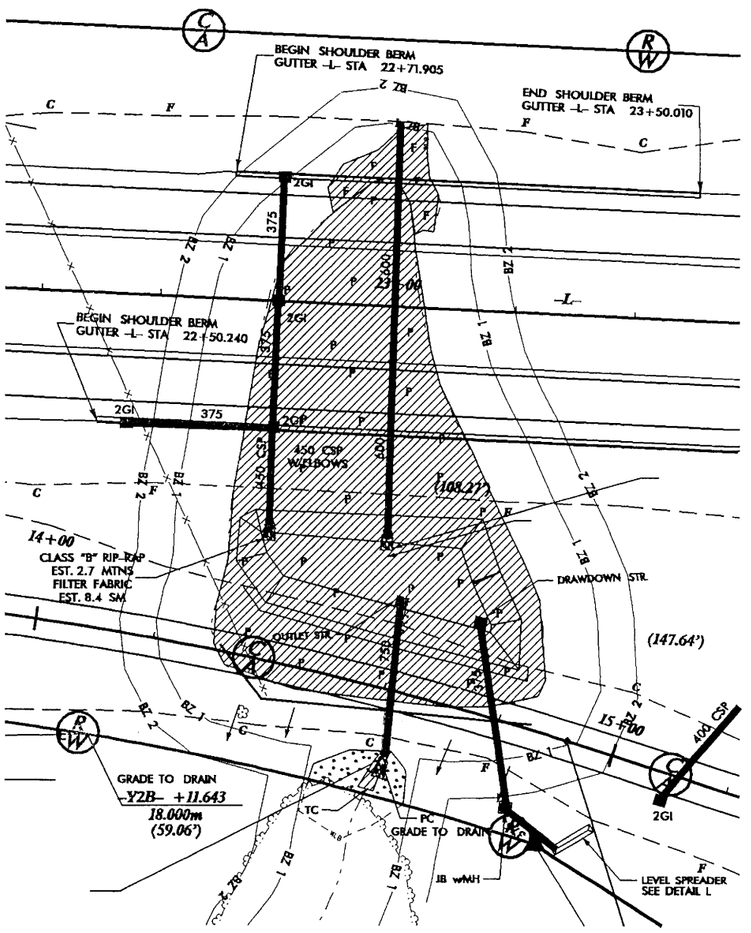
-Y2B-
PI Sta. 61+24.68
Δ = 5° 30' 27.5" (LT)
D = 3.00°
R = 1910.08
A = 200.00
S.E. = 0.0
REL. = 37.5

-Y4DET-

PI Sta. 17+43.76	PI Sta. 19+43.93	PI Sta. 19+89.09	PI Sta. 11+97.50
Δ = 90° 00' 54.0" (RT)	Δ = 90° 00' 54.0" (LT)	Δ = 90° 00' 54.0" (LT)	Δ = 90° 00' 53.0" (RT)
L = 88.69	L = 88.69	L = 88.69	L = 88.69
T = 44.76	T = 44.76	T = 44.76	T = 44.76
R = 2500.00	R = 2500.00	R = 2500.00	R = 2500.00

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

SITE AA16



SITE AA16

S S DENOTES FILL IN SURFACE WATER

F F DENOTES FILL IN WETLAND

DENOTES FILL IN SURFACE WATER (POND)

DENOTES MECHANIZED CLEARING IN WETLANDS

PC PC DENOTES CHANNEL IMPACT (PERM)

TC TC DENOTES CHANNEL IMPACTS (TEMP)

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

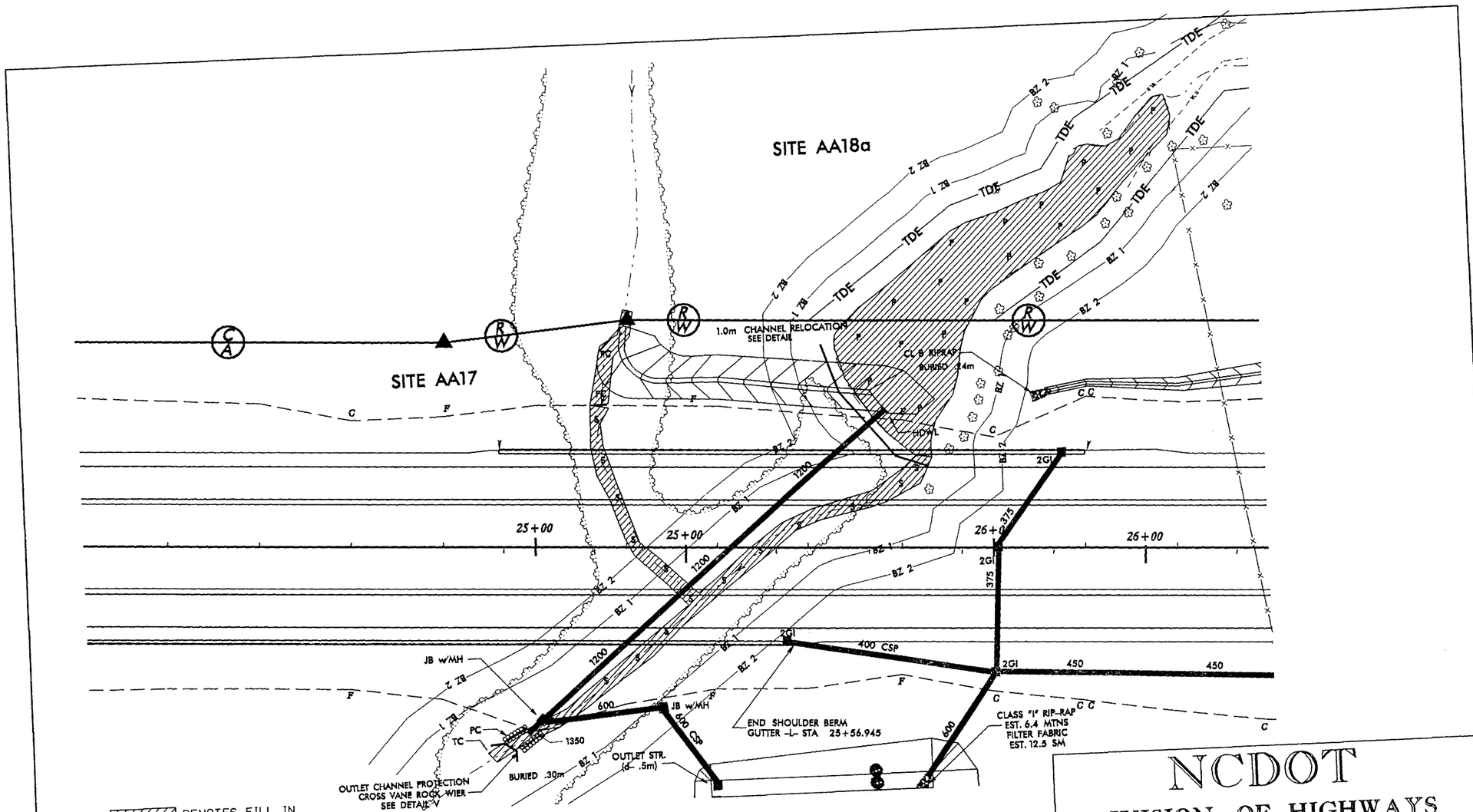
WAKE / JOHNSTON COUNTY

PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 75 OF 80 **10 / 01 / 04**



SITE AA17 & AA18a

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

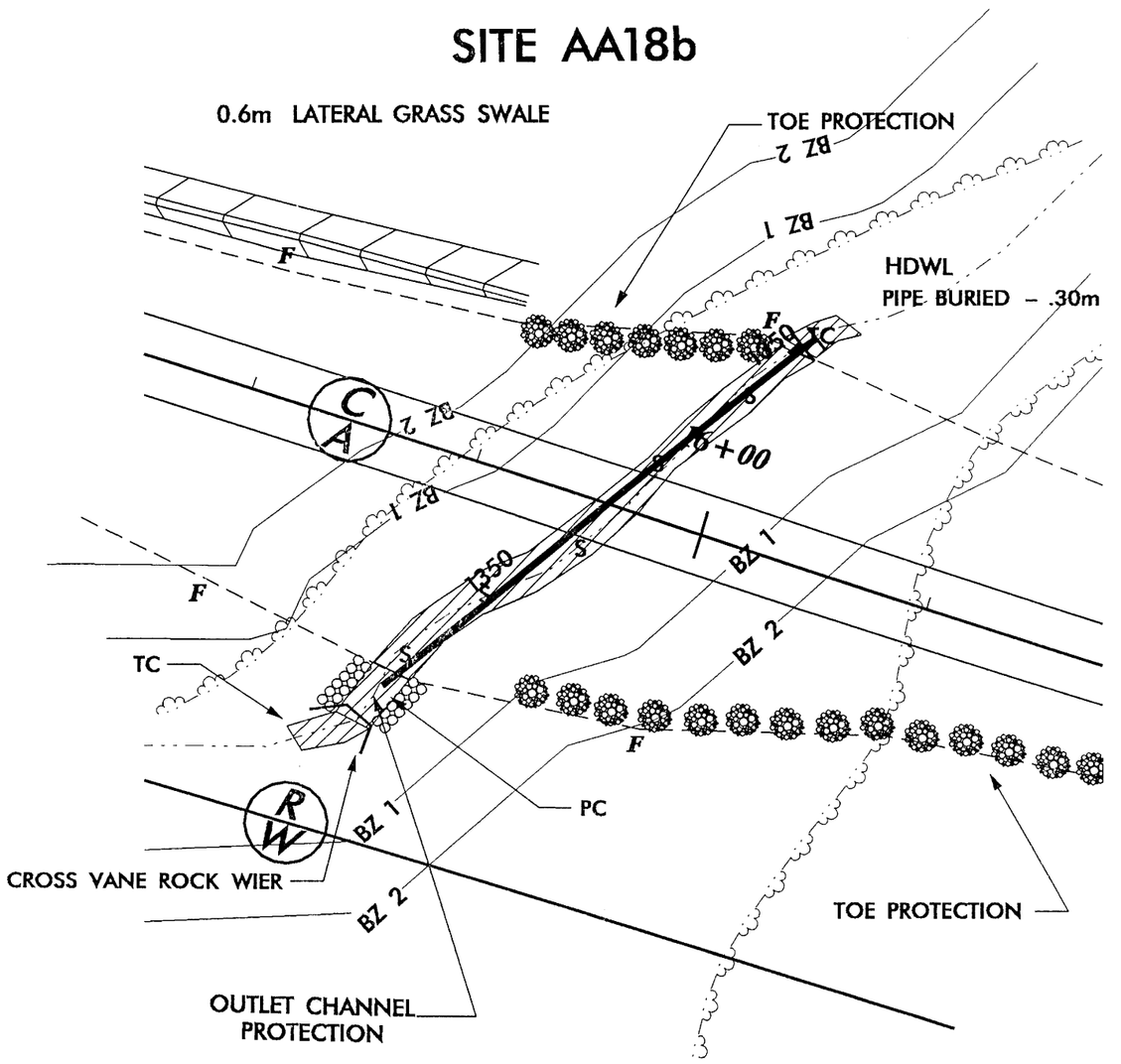
PROJECT: WBS 34459.1.1 (R-2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

SHEET 46 OF 50 10/01/04

SITE AA18b



SITE AA18b

S S	DENOTES FILL IN SURFACE WATER
F F	DENOTES FILL IN WETLAND
H H	DENOTES HAND CLEARING IN WETLANDS
	DENOTES MECHANIZED CLEARING IN WETLANDS
PC PC	DENOTES CHANNEL IMPACT (PERM)
TC TC	DENOTES CHANNEL IMPACTS (TEMP)

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 8.2661601 (R-~~2246C~~ 2552A4)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

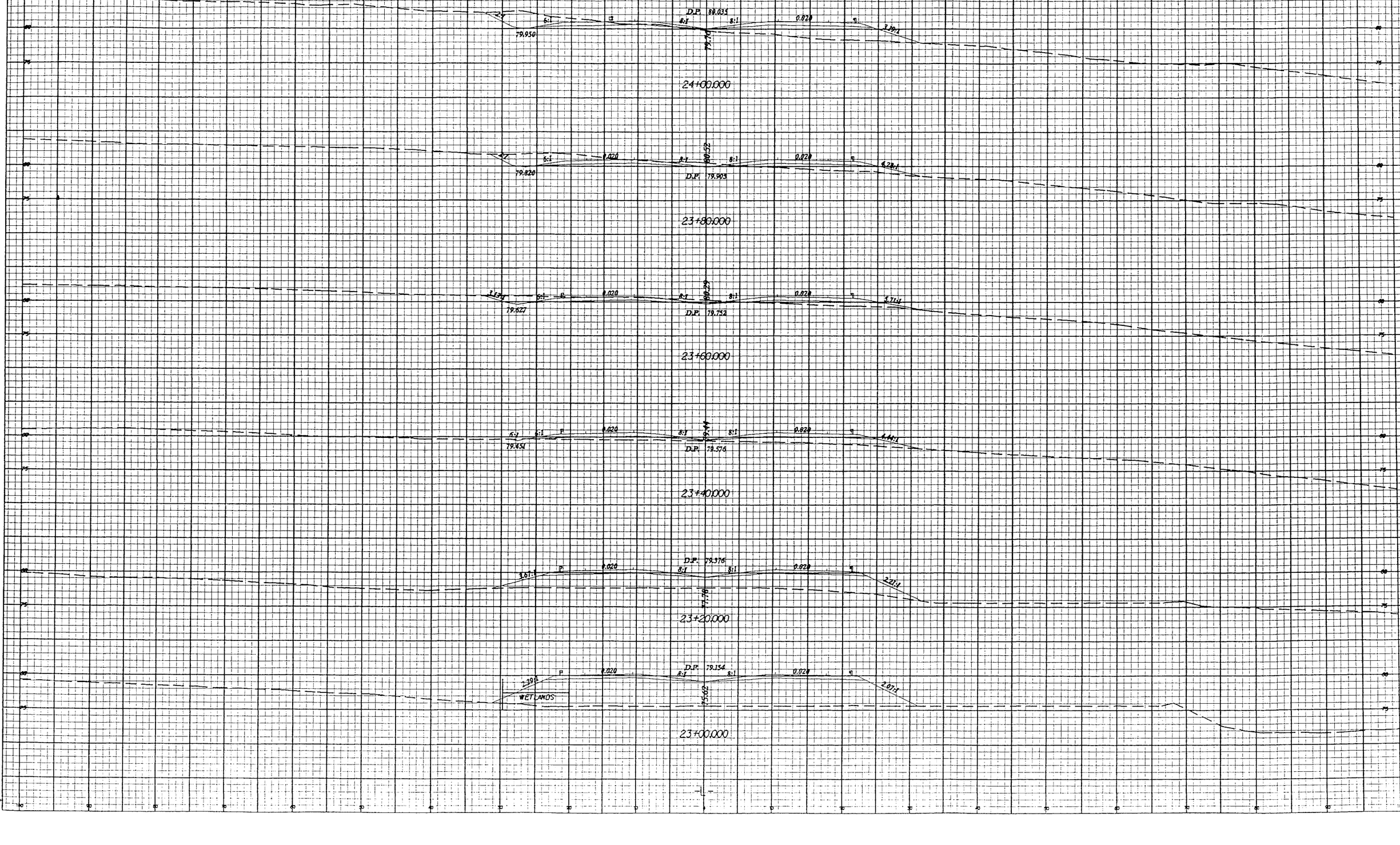
SHEET 47 OF 50 10 / 01 / 04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	X-69

5 0 5 10

METRIC

SITE 16



REVISIONS
RIGHT OF WAY REVISION 9/2/04

METRIC	PROJECT REFERENCE NO.	SHEET NO.
	S.P. & R. PROJECT NO.	
	REGIONAL ENGINEER	PROVINCIAL ENGINEER
CONSTRUCTION	PRELIMINARY PLANS	
R/W REVISION	NOT FOR CONSTRUCTION	

TRAFFIC DIAGRAM

2006 ADT
2026 ADT
% T.A.D.T.

CLAYTON BYPASS

448 345			
386 540		26 47	
I-40			I-40
3966 7508			4012 7597

SITE AA12

SITE AA13a

SITE AA13b

SITE AA19

B. T. HENDERSON & ET AL

-WB-

-EB-

-SYLVA-

-XPD-
PI Sta. 6+48.072
Δ = 102°24'30.0" (LOS-LT)
D = 40.00°
T = 70.00
L = 2500.00

-XPD-
PI Sta. 9+00.126
Δ = 7°06'39.0"
D = 6.00°
T = 60.00
L = 1000.00
R = 955.37

-SYLVA- 4+25.000
(147.64')
-SYLVA- 4+86.864
ON ML

-XPD- CS Sta. 14+79.642

-SYLVA- POT Sta. 16+93.774 =
-XPD- ST Sta. 17+64.642
(17.2m L.T.)

SWITCH COUNTY
SAN COUNTY

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	DATE:
CHECKED BY:	DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

METRIC	PROJECT IDENTIFICATION	SHEET NO.
	R/W SHEET NO.	
CONSTRUCTION R/W	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	PRELIMINARY PLANS NOT FOR LAND OR CONSTRUCTION	

TRAFFIC DIAGRAM

2006 ADT
2025 ADT
K = 0.10
D = 60/40

CLAYTON BYPASS

498 347		
588 340		36 17
I-40		I-40
3064 2308		602 387

SITE AA12

SITE AA13a

SITE AA13b

SITE AA19

B. T. HENDERSON II, ET AL

JOHNSTON COUNTY
WAKE COUNTY

-WB-

-EB-

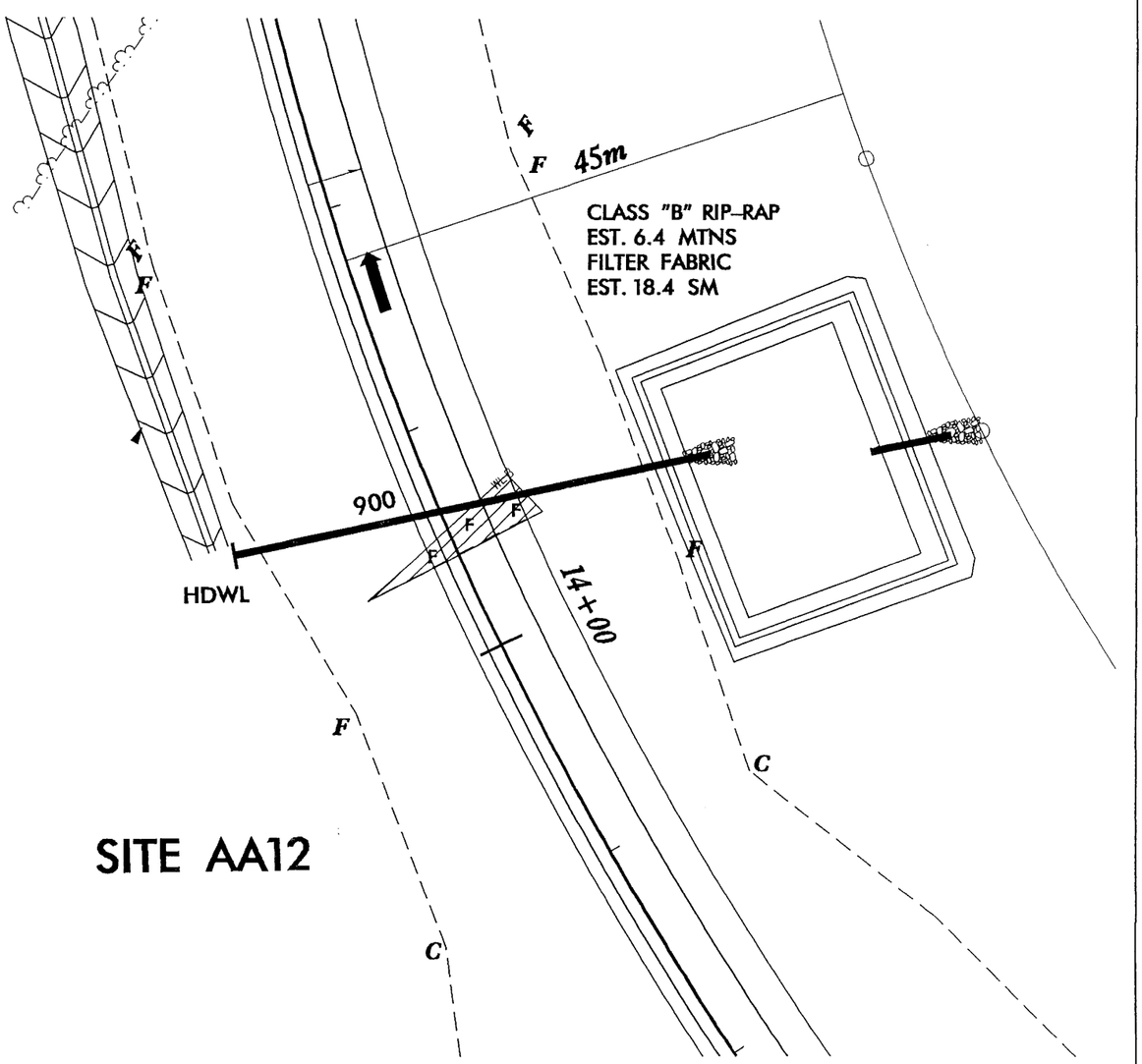
-RPD- -CL Sta 36+78.652

-TTY- POT Sta 35+65.576 ±
-RPD- Sta 35+64.658
(17.9m LT.)

-TTY- Sta 37+77.000
(42.3m LT.)

-TTY- Sta 38+88.000
ON PL

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	DATE:
CHECKED BY:	DATE:



SITE AA12

F F DENOTES FILL IN WETLAND

10m 0 20m SCALE

NCDOT

DIVISION OF HIGHWAYS

WAKE / JOHNSTON COUNTY

PROJECT: 8.2661601 (R-~~2246C~~ 2552AA)

US 70 CLAYTON BYPASS

I-40 TO EAST OF SR 1525

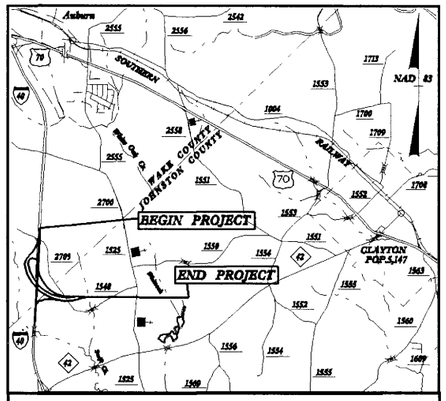
SHEET 50 OF 50 10 / 01 / 04

9/09/99

TIP PROJECT: R-2552AA

CONTRACT: C201226

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE–JOHNSTON COUNTY

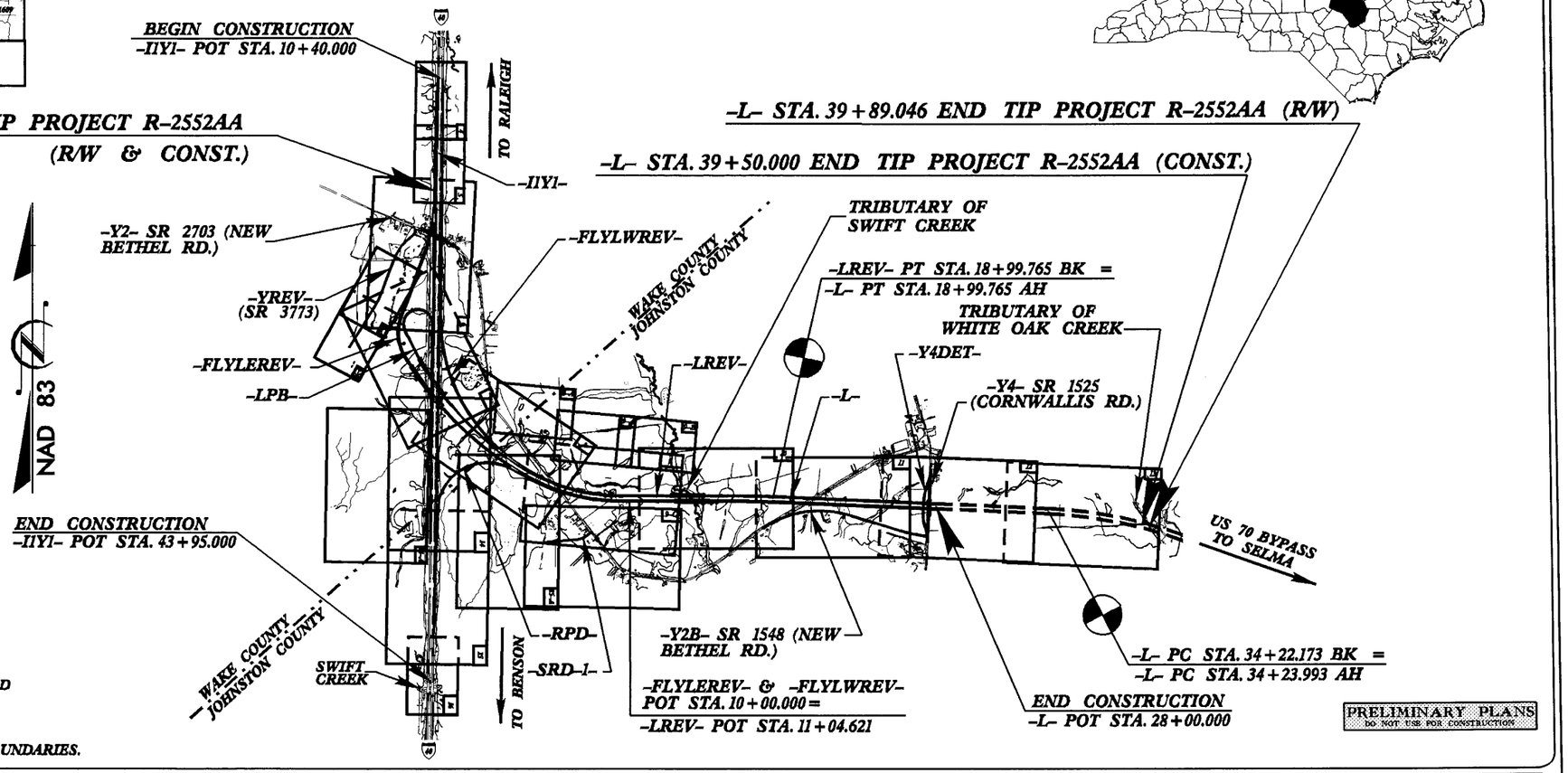
LOCATION: US 70 CLAYTON BYPASS FROM I-40 IN WAKE COUNTY TO EAST OF SR 1525 (CORNWALLIS RD.)

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURES.

ALL DIMENSIONS IN THESE PLANS ARE IN METERS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2552AA	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
34459.1.1	NHF-60-1(9)	P.E.
34459.2.3		R\W, UTIL.
34459.3.7	NHF-60-1(16)	CONST.



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
NOTE: THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS LIMITED TO INTERCHANGES.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

GRAPHIC SCALES

PLANS 5 0 10
PROFILE (HORIZONTAL) 5 0 10
PROFILE (VERTICAL) 1 0 2

DESIGN DATA

ADT 2005 = 40,800
ADT 2025 = 58,700
DHV = 10 %
D = 65 %
*T = 16 %
V = 110 km/h
*(TTST 10% + DUAL 6 %)
FUNC. CLASS. = FREEWAY

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2552AA =
LENGTH STRUCTURE TIP PROJECT R-2552AA =
TOTAL LENGTH OF TIP PROJECT R-2552AA = 5.397 km

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh, NC 27610

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JUNE 30, 2000

LETTING DATE: MAY 17, 2005

GLENN W. MUMFORD, P.E.
PROJECT ENGINEER

JEFFREY L. TEAGUE, E.I.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
STATE DESIGN ENGINEER P.E.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

30-SEP-2004 15:51
R:\projlvm\r-2552aa_interlmaa.tsh
lmdavis AT HY206434

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJ. REFERENCE NO.	SHEET NO.
R-2552AA	1 - B

*S.U.E = SUBSURFACE UTILITY ENGINEER

CONVENTIONAL SYMBOLS

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 (CCFR)
- Exist. Guardrail
- Prop. Guardrail
- Exist. Cable Guiderail
- Prop. Cable Guiderail
- Equality Symbol
- Pavement Removal and Reseeding

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 (CA)
- Prop. Control of Access Line (CA)
- Exist. Easement Line (E)
- Prop. Temp. Construction Easement Line (E)
- Prop. Temp. Drainage Easement Line (TDE)
- Prop. Perm. Drainage Easement Line (PDE)

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 (FLOW)

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

UTILITIES

- Exist. Pole
- Exist. Power Pole
- Prop. Power Pole
- Exist. Telephone Pole
- Prop. Telephone Pole
- Exist. Joint Use Pole
- Prop. Joint Use Pole
- Telephone Pedestal (T)
- Cable TV Pedestal (C)
- Hydrant
- Satellite Dish
- Exist. Water Valve
- Sewer Clean Out
- Power Manhole (P)
- Telephone Booth
- Water Manhole (W)
- Light Pole
- H-Frame Pole
- Power Line Tower
- Pole with Base
- Gas Valve
- Gas Meter
- Telephone Manhole (T)
- Power Transformer
- Sanitary Sewer Manhole
- Storm Sewer Manhole (S)
- Tank; Water, Gas, Oil
- Water Tank With Legs
- Traffic Signal Junction Box (S)
- Fiber Optic Splice Box (F)
- Television or Radio Tower
- Utility Power Line Connects to Traffic Signal Lines Cut Into the Pavement (TS)

- Recorded Water Line (W)
- Designated Water Line (S.U.E.*) (W)
- Sanitary Sewer (SS)
- Recorded Sanitary Sewer Force Main (FSS)
- Designated Sanitary Sewer Force Main(S.U.E.*) (FSS)
- Recorded Gas Line (G)
- Designated Gas Line (S.U.E.*) (G)
- Storm Sewer (S)
- Recorded Power Line (P)
- Designated Power Line (S.U.E.*) (P)
- Recorded Telephone Cable (T)
- Designated Telephone Cable (S.U.E.*) (T)
- Recorded U/G Telephone Conduit (TC)
- Designated U/G Telephone Conduit (S.U.E.*) (TC)
- Unknown Utility (S.U.E.*) (?UTL)
- Recorded Television Cable (TV)
- Designated Television Cable (S.U.E.*) (TV)
- Recorded Fiber Optics Cable (FO)
- Designated Fiber Optics Cable (S.U.E.*) (FO)
- 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 (PL)
- Exist. Iron Pin (EIP)
- Property Corner
- Property Monument (ECM)
- Property Number (123)
- Parcel Number (6)
- Fence Line (WW & ISBW)
- Existing Wetland Boundaries (WLB)
- Proposed Wetland Boundaries (WLB)
- Existing Endangered Animal Boundaries (EAB)
- Existing Endangered Plant Boundaries (EPB)

BUILDINGS & OTHER CULTURE

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

TOPOGRAPHY

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

VEGETATION

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard (VINEYARD)

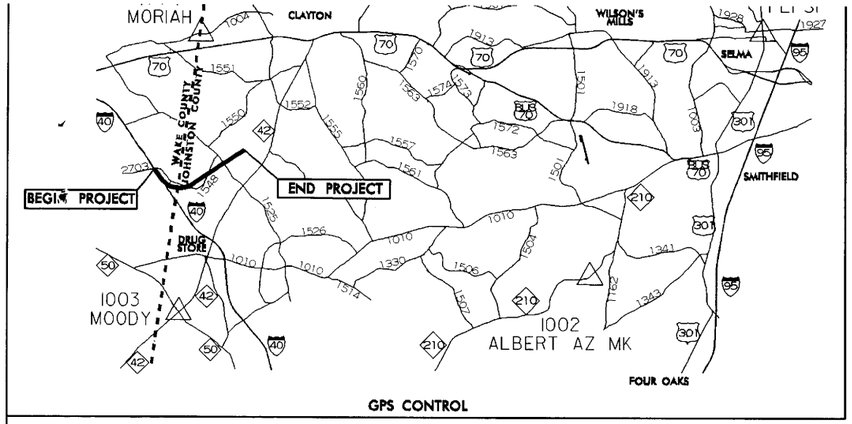
RAILROADS

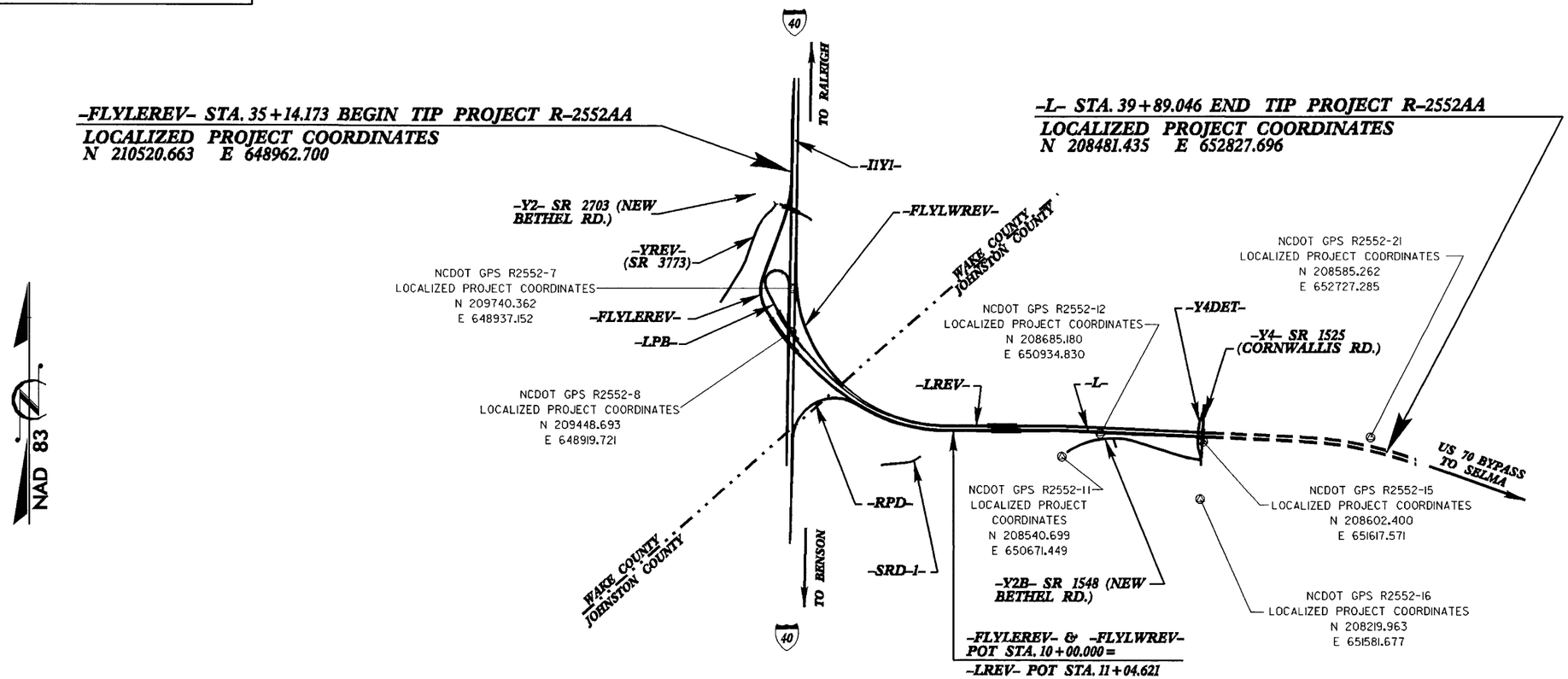
- Standard Gauge (CSX TRANSPORTATION)
- RR Signal Milepost (MILEPOST 35)
- Switch (SWITCH)

revised 2/25/97

30-SEP-2004 15:52
R:\prog\Interim\interimaa.tsh
jmavis AT HY206434

SURVEY CONTROL SHEET R2552AA





DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "LAKE DAM" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 222085.5690(m) EASTING: 636096.3610(m) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999893375 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "LAKE DAM" TO -FLYLEREV- STATION 35+14.173 IS S 48°02'57.1871 E 17.2999922m ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 29

NOTES:

THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
HTTP:\WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT
FILE : R2552AA_LS_CONTROL_040811.TXT

△ *INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.*

PROJECT CONTROL ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEM.
CONTROL NETWORK ESTABLISHED USING STATIC GPS FROM EXISTING NCGS MONUMENTATION.
SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT.
IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

NOTE: DRAWING NOT TO SCALE

SURVEY CONTROL SHEET R2552AA

CONTROL DATA

BL

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
BA8	GPS R2552-8	209448.6930	648919.7210	84.103	OUTSIDE PROJECT LIMITS	
B701	BL-701	209421.8250	648958.1760	87.384	OUTSIDE PROJECT LIMITS	
B703	BL-703	209263.8150	649188.5920	84.782	OUTSIDE PROJECT LIMITS	
BA206	BY2-206	209252.7150	649259.0730	84.341	OUTSIDE PROJECT LIMITS	
B705	BL-705	209182.8330	649351.6510	82.261	OUTSIDE PROJECT LIMITS	
B706	BL-706	209068.6770	649506.4530	82.457	OUTSIDE PROJECT LIMITS	
B707	BL-707	209034.4430	649604.5540	81.763	OUTSIDE PROJECT LIMITS	
B708	BL-708	208975.0580	649701.4060	79.517	OUTSIDE PROJECT LIMITS	
B709	BL-709	208903.5330	649782.8040	78.653	OUTSIDE PROJECT LIMITS	
B710	BL-710	208820.4880	649844.7350	74.752	OUTSIDE PROJECT LIMITS	
B711	BL-711	208807.0110	649893.6910	74.776	10+31.291	8.396 LT
B712	BL-712	208797.1140	649978.3840	78.991	11+16.522	5.821 LT
B713	BL-713	208784.0160	650084.0180	68.144	12+22.891	1.858 LT
B714	BL-714	208775.0110	650224.9440	62.956	13+64.069	5.009 LT
B715	BL-715	208770.3740	650353.3210	62.894	14+92.369	11.433 LT
B716	BL-716	208746.7820	650549.5090	74.038	16+89.860	4.805 LT
B717	BL-717	208739.5850	650640.6840	77.036	17+81.316	5.477 LT
B718	BL-718	208692.8260	650815.9830	76.316	19+59.987	26.029 RT
BA12	GPS R-2552-12	208685.1800	650934.8300	74.826	20+79.051	23.423 RT
B720	BL-720	208680.0830	651084.2980	79.117	22+28.404	15.644 RT
B721	BL-721	208669.3110	651231.2960	79.764	23+75.784	13.731 RT
B722	BL-722	208666.9000	651368.4960	76.161	25+12.682	4.331 RT
B723	BL-723	208636.0520	651498.6801	83.504	26+45.037	23.866 RT
BB15	GPS R2552-15	208602.4000	651617.5710	87.156	27+66.382	47.166 RT
B725	BL-725	208630.5380	651779.9210	88.493	29+25.710	5.166 RT
B726	BL-726	208590.6990	652048.1350	81.102	31+96.357	21.785 RT
B727	BL-727	208581.3390	652281.8340	74.022	34+31.849	10.995 RT
B728	BL-728	208569.4720	652511.5410	68.118	36+61.268	8.218 LT
B21	GPS R2552-21	208585.2620	652727.2850	64.746	38+65.077	71.134 LT

BY1

POINT	DESC.	NORTH	EAST	ELEVATION	I1Y1 STATION	OFFSET
B101	BY1-101	211134.1270	649014.5620	81.353	10+52.639	1.590 RT
B102	BY1-102	210754.6210	648992.7440	84.062	14+32.772	1.432 RT
B103	BY1-103	210491.5370	648977.4830	86.033	16+96.298	1.458 RT
B104	BY1-104	210237.1100	648962.1400	87.610	19+51.187	2.066 RT
B105	BY1-105	209975.7020	648947.3200	87.038	22+13.014	1.749 RT
B7	GPS R2552-7	209740.3620	648937.1520	85.746	24+48.548	1.706 LT
B8	GPS R2552-8	209448.6930	648919.7210	84.103	27+40.737	1.166 LT
B108	BY1-108	209202.7530	648902.7810	82.705	29+87.245	1.527 RT
B109	BY1-109	208971.5590	648889.8750	79.456	32+18.799	1.046 RT
B110	BY1-110	208707.3430	648874.2710	74.230	34+83.475	1.349 RT
B111	BY1-111	208464.1560	648860.0900	69.354	37+27.075	1.447 RT
B112	BY1-112	208217.6480	648845.6910	64.398	39+74.003	1.571 RT
B113	BY1-113	207790.9600	648821.1970	63.367	44+01.394	1.356 RT
B114	BY1-114	207555.2380	648807.3790	70.006	46+37.520	1.523 RT
B115	BY1-115	207332.9610	648794.4990	76.658	48+60.170	1.531 RT
B116	BY1-116	207104.2670	648793.0570	83.502	50+88.833	1.684 RT
B117	BY1-117	206863.4630	648823.5560	90.590	53+31.478	2.307 RT
B118	BY1-118	206580.5530	648904.5900	94.974	56+25.722	2.676 RT
B119	BY1-119	206330.2760	648994.8070	94.035	58+91.758	1.171 RT

BY2

POINT	DESC.	NORTH	EAST	ELEVATION	I1Y1 STATION	OFFSET
B201	BY2-201	210273.7890	648932.6190	94.595	19+16.276	33.658 RT
B202	BY2-202	210190.4260	649093.1020	94.633	19+90.221	131.376 LT
B203	BY2-203	209978.4980	649193.6520	95.377	21+95.982	244.010 LT

BY2

POINT	DESC.	NORTH	EAST	ELEVATION	FLYLWREV STATION	OFFSET
B204	BY2-204	209705.9020	649192.1550	93.163	24+83.670	227.938 RT
B205	BY2-205	209441.6380	649206.2000	90.044	21+57.572	174.494 RT
B206	BY2-206	209252.7150	649259.0730	84.341	19+33.932	124.563 RT
B207	BY2-207	209026.5850	649414.1820	82.931	16+34.059	72.426 RT
B208	BY2-208	208803.9550	649572.8500	81.653	13+83.564	46.514 LT
B209	BY2-209	208555.4450	649754.0950	77.219	11+71.524	237.785 LT
B210	BY2-210	208348.3000	649919.9841	77.470	10+25.333	427.677 LT

BY2

POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
B211	BY2-211	208284.9880	650268.2880	71.463	14+49.405	479.469 RT
B212	BY2-212	208391.9560	650460.7920	61.296	16+31.994	356.338 RT
B11	GPS R2552-11	208540.6990	650671.4490	74.576	18+29.075	190.025 RT
B12	GPS R2552-12	208685.1800	650934.8300	74.826	20+79.051	23.423 RT
B215	BY2-215	208828.2110	651193.9450	81.211	23+24.902	141.367 LT
B216	BY2-216	208920.8400	651353.1330	89.507	24+75.532	247.347 LT
B217	BY2-217	208947.0210	651497.0830	91.431	26+16.696	285.813 LT
BA402	BY4-402	208971.2600	651642.5080	89.060	27+59.497	322.472 LT

BY3

POINT	DESC.	NORTH	EAST	ELEVATION	I1Y1 STATION	OFFSET
B301	BY3-301	211163.0740	650824.3030	97.495	9+19.115	1803.450 LT
B302	BY3-302	211050.6220	650817.1640	94.844	10+31.792	1802.824 LT
B303	BY3-303	210927.4170	650812.3730	90.945	11+55.068	1805.164 LT
B304	BY3-304	210811.7340	650807.2090	96.020	12+70.856	1806.697 LT
B305	BY3-305	210758.3310	650759.6690	93.929	13+26.918	1762.323 LT
B306	BY3-306	210709.5890	650811.3550	96.068	13+72.591	1816.741 LT
B307	BY3-307	210609.0010	650794.2250	90.470	14+74.001	1805.455 LT
B308	BY3-308	210527.5700	650787.0780	95.870	15+55.709	1803.027 LT
B309	BY3-309	210419.2330	650769.1170	98.041	16+64.903	1791.360 LT
B310	BY3-310	210322.6040	650752.8160	99.624	17+62.313	1780.672 LT
B311	BY3-311	210211.4400	650730.0840	94.069	18+74.605	1764.405 LT
B312	BY3-312	210062.9800	650689.9410	88.586	20+25.129	1732.911 LT
B313	BY3-313	209995.8930	650664.0340	87.513	20+93.610	1710.927 LT
B314	BY3-314	209881.7770	650617.0640	81.444	22+10.250	1670.633 LT
B315	BY3-315	209800.5180	650575.9050	80.281	22+93.753	1634.240 LT
B316	BY3-316	209699.0000	650517.2590	75.922	23+98.492	1581.561 LT
B317	BY3-317	209620.0670	650466.1080	75.600	24+80.250	1535.059 LT
B318	BY3-318	209525.6190	650397.6060	74.750	25+78.500	1472.132 LT
B319	BY3-319	209453.2600	650333.8220	71.890	26+54.426	1412.638 LT
B320	BY3-320	209366.3960	650253.4850	68.229	27+45.789	1337.457 LT
B321	BY3-321	209324.8390	650208.7930	65.041	27+89.860	1295.242 LT
B322	BY3-322	209244.0750	650113.9190	65.644	28+75.974	1205.196 LT
B323	BY3-323	209175.3640	650021.1050	69.385	29+49.936	1116.510 LT
B324	BY3-324	209091.4180	649882.2121	77.433	30+41.771	982.702 LT
B325	BY3-325	209025.0830	649768.2570	83.168	31+14.583	872.773 LT
BA708	BL-708	BY3-326	208975.0580	649701.4060	79.517	31+68.389	808.925 LT
B327	BY3-327	208939.3420	649604.5670	81.576	32+09.644	714.313 LT
B328	BY3-328	208926.0430	649509.9290	80.852	32+28.392	620.602 LT
B329	BY3-329	208906.3760	649394.1261	80.458	32+54.721	506.130 LT
B330	BY3-330	208886.0300	649275.4680	77.550	32+81.893	388.847 LT
B331	BY3-331	208870.8550	649148.8360	75.503	33+04.362	263.304 LT
B332	BY3-332	208870.3870	649089.8371	76.719	33+08.241	204.431 LT
B333	BY3-333	208868.2320	649018.9950	75.938	33+14.488	133.832 LT
B334	BY3-334	208835.3220	648904.4340	76.324	33+53.966	21.365 LT
B335	BY3-335	208865.0200	648797.1840	77.961	33+38.518	87.423 RT
B336	BY3-336	208877.3200	648725.0370	73.398	33+22.410	160.160 RT
B337	BY3-337	208859.3520	648645.7400	69.629	33+44.932	238.286 RT
B338	BY3-338	208863.5380	648559.7230	66.320	33+45.726	324.401 RT
B339	BY3-339	208860.3340	648459.4710	63.249	33+54.720	424.300 RT
B340	BY3-340	208864.6010	648354.9320	69.073	33+56.504	528.911 RT
B341	BY3-341	208865.1570	648254.0710	63.684	33+61.780	629.635 RT
B342	BY3-342	208845.3240	648142.6560	73.015	33+88.021	739.717 RT
B343	BY3-343	208830.6940	648042.1650	78.268	34+08.436	839.194 RT
B344	BY3-344	208831.6510	647925.7930	80.039	34+14.209	955.427 RT
B345	BY3-345	208818.2040	647868.5190	78.432	34+30.944	1011.828 RT
B346	BY3-346	208806.3090	647815.2930	67.513	34+45.896	1064.277 RT
B347	BY3-347	208800.7110	647785.4540	75.606	34+53.210	1093.743 RT
B348	BY3-348	208788.6830	647730.2080	72.648	34+68.412	1148.201 RT
B349	BY3-349	208770.5890	647664.5210	67.299	34+90.273	1212.732 RT
B350	BY3-350	208755.4800	647616.1830	76.536	35+08.151	1260.116 RT
B351	BY3-351	208740.9380	647573.7660	77.374	35+25.121	1301.621 RT
B352	BY3-352	208716.4770	647501.3020	68.816	35+53.731	1372.550 RT
B353	BY3-353	208696.8330	647448.5300	74.976	35+76.393	1424.098 RT
B354	BY3-354	208665.1800	647348.4610	68.108	36+13.778	1522.169 RT

BY4

POINT	DESC.	NORTH	EAST	ELEVATION	Y4 STATION	OFFSET
B401	BY4-401	209244.9680	651569.7200	94.236	OUTSIDE PROJECT LIMITS	
B402	BY4-402	208971.2600	651642.5080	89.060	11+19.159	5.578 LT
B15	GPS R2552-15	208602.4000	651617.5710	87.156	14+88.238	5.765 LT
B16	GPS R2552-16	208219.9630	651581.6770	83.376	OUTSIDE PROJECT LIMITS	
B17	GPS R2552-17	207873.9550	651537.4031	79.862	OUTSIDE PROJECT LIMITS	

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "LAKE DAM" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 222085.5690(m) EASTING: 636096.3610(m) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999893375 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "LAKE DAM" TO -FLYLEREV- STATION 35+14.173 IS S 48°02'57.187" E 17,299.9922m ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 29

NOTES:

THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
HTTP:\WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT
FILE : R2552AA_LS_CONTROL_040811.TXT

△ INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.

PROJECT CONTROL ESTABLISHED UTILIZING GLOBAL POSITIONING SYSTEM.

CONTROL NETWORK ESTABLISHED USING STATIC GPS FROM EXISTING NCGS MONUMENTATION.

SITE CALIBRATION INFORMATION HAS NOT BEEN PROVIDED FOR THIS PROJECT.

IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	I-E
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CENTERLINE COORDINATE LIST

Disclaimer: This coordinate list is provided for the convenience of interested contractors and is intended for use during the project bidding process only. Coordinates are localized to this particular project and any conversion to state grid coordinates or other formats will be the responsibility of the recipient. While every effort has been made to provide up-to-date, accurateinformation, NCDOT makes no express guarantee as to the validity or potential for revision of this information prior to project letting.

Point #	Chain	Station	Northing(Y)	Easting(X)
1	flylerev	10+00.0001	208746.2882	649963.3740
2	flylerev	10+40.0000	208748.0589	649923.4133
3	flylerev	10+80.0000	208750.5057	649883.4893
4	flylerev	11+20.0000	208754.2553	649843.6678
5	flylerev	11+60.0000	208759.5171	649804.0179
6	flylerev	12+00.0000	208766.2852	649764.5971
7	flylerev	12+40.0000	208774.5498	649725.4626
8	flylerev	12+80.0000	208784.2988	649686.6713
9	flylerev	13+20.0000	208795.5181	649648.2795
10	flylerev	13+60.0000	208808.1915	649610.3428
11	flylerev	14+00.0000	208822.3006	649572.9164
12	flylerev	14+40.0000	208837.8249	649536.0544
13	flylerev	14+80.0000	208854.7418	649499.8105
14	flylerev	15+20.0000	208873.0268	649464.2371
15	flylerev	15+60.0001	208892.6523	649429.3853
16	flylerev	16+00.0001	208913.5029	649395.2515
17	flylerev	16+40.0001	208935.3215	649361.7273
18	flylerev	16+80.0001	208957.8949	649328.7065
19	flylerev	17+20.0001	208981.1769	649296.1813
20	flylerev	17+60.0001	209005.1567	649264.1671
21	flylerev	18+00.0001	209029.8231	649232.6789
22	flylerev	18+40.0001	209055.1644	649201.7313
23	flylerev	18+80.0001	209081.1689	649171.3388
24	flylerev	19+20.0001	209107.8244	649141.5156
25	flylerev	19+60.0001	209135.1185	649112.2757
26	flylerev	20+00.0001	209163.0383	649083.6327
27	flylerev	20+40.0001	209191.5709	649055.6001
28	flylerev	20+80.0001	209220.7028	649028.1908
29	flylerev	21+20.0001	209250.4206	649001.4178
30	flylerev	21+60.0001	209280.7102	648975.2936
31	flylerev	22+00.0001	209311.5576	648949.8303
32	flylerev	22+40.0001	209342.9482	648925.0399
33	flylerev	22+80.0001	209374.8675	648900.9340
34	flylerev	23+20.0001	209407.3005	648877.5237
35	flylerev	23+60.0001	209440.2320	648854.8202
36	flylerev	24+00.0001	209473.6467	648832.8339
37	flylerev	24+40.0001	209507.5290	648811.5752
38	flylerev	24+80.0001	209541.8629	648791.0540
39	flylerev	25+20.0001	209576.6324	648771.2799
40	flylerev	25+60.0001	209612.0245	648752.6521
41	flylerev	26+00.0001	209648.8934	648737.2009
42	flylerev	26+40.0001	209687.6252	648727.4014
43	flylerev	26+80.0001	209727.4561	648724.2976
44	flylerev	27+20.0001	209767.2373	648727.9857
45	flylerev	27+60.0000	209805.9204	648738.0326
46	flylerev	28+00.0001	209843.3796	648752.0399
47	flylerev	28+40.0001	209880.3901	648767.2129
48	flylerev	28+80.0001	209917.3909	648782.4099
49	flylerev	29+20.0001	209954.3916	648797.6068
50	flylerev	29+60.0001	209991.3923	648812.8037
51	flylerev	30+00.0001	210028.3930	648828.0006
52	flylerev	30+40.0001	210065.3938	648843.1976
53	flylerev	30+80.0001	210102.3945	648858.3945
54	flylerev	31+20.0001	210139.3952	648873.5914
55	flylerev	31+60.0000	210176.4104	648888.7531
56	flylerev	32+00.0001	210213.6253	648903.4150
57	flylerev	32+40.0001	210251.3072	648916.8252
58	flylerev	32+80.0001	210289.5538	648928.5264
59	flylerev	33+20.0001	210328.2952	648938.4676
60	flylerev	33+60.0001	210367.4503	648946.6280
61	flylerev	34+00.0001	210406.9376	648952.9905
62	flylerev	34+40.0001	210446.6735	648957.5503
63	flylerev	34+80.0002	210486.5528	648960.6401
64	flylerev	35+14.1725	210520.6630	648962.7000

Point #	Chain	Station	Northing(Y)	Easting(X)
1	flytwrev	10+00.0001	208774.4640	649964.5428
2	flytwrev	10+40.0000	208776.2403	649924.5823
3	flytwrev	10+80.0000	208778.7266	649884.6609
4	flytwrev	11+20.0000	208782.5805	649844.8496
5	flytwrev	11+60.0000	208788.0216	649805.2241
6	flytwrev	12+00.0000	208795.0429	649765.8479
7	flytwrev	12+40.0000	208803.6332	649726.7839
8	flytwrev	12+80.0000	208813.7788	649688.0947
9	flytwrev	13+20.0000	208825.4634	649649.8422
10	flytwrev	13+60.0000	208838.6684	649612.0875
11	flytwrev	14+00.0000	208853.3726	649574.8911
12	flytwrev	14+40.0000	208869.5525	649538.3125
13	flytwrev	14+80.0000	208887.1822	649502.4101
14	flytwrev	15+20.0000	208906.2336	649467.2415
15	flytwrev	15+60.0000	208926.6760	649432.8628
16	flytwrev	16+00.0000	208948.4769	649399.3291
17	flytwrev	16+40.0000	208971.6013	649366.6940
18	flytwrev	16+80.0000	208996.0123	649335.0098
19	flytwrev	17+20.0000	209021.6708	649304.3271
20	flytwrev	17+60.0000	209048.5358	649274.6950
21	flytwrev	18+00.0000	209076.5642	649246.1609
22	flytwrev	18+40.0000	209105.7113	649218.7705
23	flytwrev	18+80.0000	209135.9303	649192.5676
24	flytwrev	19+20.0000	209167.1731	649167.5941
25	flytwrev	19+60.0000	209199.3895	649143.8899
26	flytwrev	20+00.0000	209232.5281	649121.4930
27	flytwrev	20+40.0000	209266.5358	649100.4392
28	flytwrev	20+80.0000	209301.3582	649080.7621
29	flytwrev	21+20.0000	209336.9397	649062.4934
30	flytwrev	21+60.0000	209373.2232	649045.6621
31	flytwrev	22+00.0000	209410.1508	649030.2953
32	flytwrev	22+40.0000	209447.6634	649016.4174
33	flytwrev	22+80.0000	209485.7009	649004.0508
34	flytwrev	23+20.0000	209524.2025	648993.2152
35	flytwrev	23+60.0000	209563.1067	648983.9278
36	flytwrev	24+00.0000	209602.3511	648976.2037
37	flytwrev	24+40.0000	209641.8730	648970.0551
38	flytwrev	24+80.0000	209681.6092	648965.4918
39	flytwrev	25+20.0000	209721.4960	648962.5213
40	flytwrev	25+60.0000	209761.4698	648961.1481
41	flytwrev	26+00.0001	209801.4666	648961.3707
42	flytwrev	26+40.0001	209841.4352	648962.9278
43	flytwrev	26+77.1821	209878.5603	648964.9823

Point #	Chain	Station	Northing(Y)	Easting(X)
1	lpb	10+00.0000	208930.7475	649413.0248
2	lpb	10+40.0000	208953.1311	649379.8767
3	lpb	10+80.0000	208976.5715	649347.4662
4	lpb	11+20.0000	209000.8232	649315.6576
5	lpb	11+60.0000	209025.7962	649284.4121
6	lpb	12+00.0000	209051.4767	649253.7455
7	lpb	12+40.0000	209077.8515	649223.6739
8	lpb	12+80.0000	209104.9066	649194.2129
9	lpb	13+20.0000	209132.6281	649165.3780
10	lpb	13+60.0000	209161.0013	649137.1841
11	lpb	14+00.0000	209190.0114	649109.6462
12	lpb	14+40.0000	209219.6434	649082.7784
13	lpb	14+80.0000	209249.8817	649056.5949
14	lpb	15+20.0000	209280.7105	649031.1094
15	lpb	15+60.0000	209312.1138	649006.3351
16	lpb	16+00.0000	209344.0751	648982.2850
17	lpb	16+40.0000	209376.5777	648958.9716
18	lpb	16+80.0000	209409.6046	648936.4072
19	lpb	17+20.0000	209443.1386	648914.6035
20	lpb	17+60.0000	209477.1622	648893.5720
21	lpb	18+00.0000	209511.6576	648873.3236
22	lpb	18+40.0000	209546.6067	648853.8688
23	lpb	18+80.0000	209581.9914	648835.2179
24	lpb	19+20.0000	209617.7931	648817.3806
25	lpb	19+60.0000	209653.9931	648800.3662
26	lpb	20+00.0000	209690.5725	648784.1836
27	lpb	20+40.0001	209727.5311	648768.8884
28	lpb	20+80.0001	209765.8089	648757.5109
29	lpb	21+20.0001	209805.5219	648758.1441
30	lpb	21+60.0001	209840.4771	648776.7203
31	lpb	22+00.0001	209862.2472	648809.7809
32	lpb	22+40.0001	209865.5023	648849.2315
33	lpb	22+80.0001	209849.4452	648885.4131
34	lpb	23+20.0001	209818.0125	648909.4787
35	lpb	23+60.0001	209779.1462	648918.0584
36	lpb	24+00.0002	209739.1769	648917.4446
37	lpb	24+01.8770	209737.3031	648917.3363

Point #	Chain	Station	Northing(Y)	Easting(X)
1	rpd	10+00.0000	208882.2414	649440.1791
2	rpd	10+40.0000	208902.6090	649405.7546
3	rpd	10+80.0000	208923.6987	649371.7663
4	rpd	11+20.0001	208944.8202	649337.7981
5	rpd	11+60.0001	208964.2917	649302.8694
6	rpd	12+00.0001	208979.8109	649266.0366
7	rpd	12+40.0001	208989.9784	649227.3855
8	rpd	12+80.0001	208994.5396	649187.6807
9	rpd	13+20.0001	208993.4014	649147.7309
10	rpd	13+60.0001	208986.5872	649108.3501
11	rpd	14+00.0001	208974.2356	649070.3406
12	rpd	14+40.0001	208956.5984	649034.4769
13	rpd	14+80.0001	208934.0348	649001.4895
14	rpd	15+20.0001	208907.0047	648972.0505
15	rpd	15+60.0001	208876.0586	648946.7598
16	rpd	16+00.0001	208841.8271	648926.1326
17	rpd	16+40.0001	208805.0075	648910.5891
18	rpd	16+80.0000	208766.3511	648900.4406
19	rpd	17+20.0001	208726.7224	648895.1194
20	rpd	17+60.0001	208686.8193	648892.3637
21	rpd	17+60.6516	208686.1687	648892.3260

Point #	Chain	Station	Northing(Y)	Easting(X)
23	lrev	11+04.6207	208760.3761	649963.9584
24	lrev	11+44.6207	208758.7182	650003.9240
25	lrev	11+84.6207	208757.0604	650043.8897
26	lrev	12+24.6207	208755.4025	650083.8553
27	lrev	12+64.6207	208753.7446	650123.8209
28	lrev	13+04.6207	208752.0867	650163.7865
29	lrev	13+44.6207	208750.4289	650203.7522
30	lrev	13+84.6207	208748.7710	650243.7178
31	lrev	14+24.6207	208747.1131	650283.6834
32	lrev	14+64.6207	208745.4552	650323.6491
33	lrev	15+04.6207	208743.7974	650363.6147
34	lrev	15+44.6207	208742.1395	650403.5803
35	lrev	15+84.6207	208740.4816	650443.5459
36	lrev	16+24.6207	208738.8237	650483.5116
37	lrev	16+64.6207	208737.1659	650523.4772
38	lrev	17+04.6207	208735.5080	650563.4428
39	lrev	17+44.6207	208733.8500	650603.4084
40	lrev	17+84.6207	208731.9523	650643.3632
41	lrev	18+24.6207	208729.5975	650683.2936
42	lrev	18+64.6207	208726.7858	650723.1944
43	lrev	18+99.7655	208723.9387	650758.2235

Point #	Chain	Station	Northing(Y)	Easting(X)
1	L	19+00.0000	208723.9185	650758.4572
2	L	19+40.0000	208720.4776	650798.3090
3	L	19+80.0000	208717.0368	650838.1607
4	L	20+20.0000	208713.5959	650878.0124
5	L	20+60.0000	208710.1550	650917.8642
6	L	21+00.0000	208706.7142	650957.7159
7	L	21+40.0000	208703.2733	650997.5676
8	L	21+80.0000	208699.8324	651037.4194
9	L	22+20.0000	208696.3916	651077.2711
10	L	22+60.0000	208692.9507	651117.1228
11	L	23+00.0000	208689.5098	651156.9745
12	L	23+40.0000	208686.0690	651196.8263
13	L	23+80.0000	208682.6281	651236.6780
14	L	24+20.0000	208679.1872	651276.5297
15	L	24+60.0000	208675.7464	651316.3815
16	L	25+00.0000	208672.3055	651356.2332
17	L	25+40.0000	208668.8646	651396.0849
18	L	25+80.0000	208665.4238	651435.9367
19	L	26+20.0000	208661.9829	651475.7884
20	L	26+60.0000	208658.5420	651515.6401
21	L	27+00.0000	208655.1012	651555.4919
22	L	27+40.0000	208651.6603	651595.3436
23	L	27+80.0000	208648.2194	651635.1953
24	L	28+00.0000	208646.4990	651655.1212

Point #	Chain	Station	Northing(Y)	Easting(X)
1	srd-1	10+00.0000	208533.0535	649481.7239
2	srd-1	10+40.0000	208535.0281	649521.6751
3	srd-1	10+80.0000	208537.0027	649561.6264
4	srd-1	11+20.0000	208538.9773	649601.5776
5	srd-1	11+60.0000	208540.9520	649641.5288
6	srd-1	12+00.0000	208546.0070	649681.0970
7	srd-1	12+40.0000	208562.6975	649717.2608
8	srd-1	12+71.2169	208580.7084	649742.7576

Point #	Chain	Station	Northing(Y)	Easting(X)
25	yrev	10+00.0000	210319.1157	648851.5050
26	yrev	10+40.0000	210284.4800	648831.7760
27	yrev	10+80.0000	210257.3867	648802.4274
28	yrev	11+20.0000	210231.0055	648772.3696
29	yrev	11+60.0000	210200.9792	648746.0066
30	yrev	12+00.0000	210167.1362	648724.7640
31	yrev	12+40.0000	210130.5670	648708.5986
32	yrev	12+80.0000	210093.5920	648693.3392
33	yrev	13+20.0000	210056.6171	648678.0798
34	yrev	13+60.0000	210019.6421	648662.8203
35	yrev	14+00.0000	209982.6671	648647.5609
36	yrev	14+40.0000	209945.8137	648632.0164
37	yrev	14+80.0000	209910.0992	648614.0268
38	yrev	15+20.0000	209875.9366	648593.2407
39	yrev	15+60.0000	209842.8061	648570.8271
40	yrev	16+00.0000	209809.6861	648548.3981
41	yrev	16+40.0000	209776.5661	648525.9690
42	yrev	16+80.0000	209743.4460	648503.5399
43	yrev	17+20.0000	209710.3260	648481.1108
44	yrev	17+60.0000	209677.2060	648458.6817
45	yrev	17+75.3538	209664.4931	648450.0725

Point #	Chain	Station	Northing(Y)	Easting(X)
1	y2b	8+24.4158	208467.3375	650566.6665
2	y2b	8+64.4158	208491.6024	650598.4661
3	y2b	9+04.4158	208515.8674	650630.2657
4	y2b	9+44.4158	208539.9963	650662.1672
5	y2b	9+84.4158	208562.1306	650695.4725
6	y2b	10+24.4158	208581.8264	650730.2822
7	y2b	10+64.4158	208599.7085	650766.0527
8	y2b	11+04.4158	208614.9441	650803.0280
9	y2b	11+44.4158	208627.4526	650841.0126
10	y2b	11+84.4158	208637.1681	650879.8057
11	y2b	12+24.4158	208644.0390	650919.2022
12	y2b	12+64.4158	208648.0290	650958.9939
13	y2b	13+04.4158	208649.1172	650998.9702
14	y2b	13+44.4158	208647.2976	651038.9200
15	y2b	13+84.4158	208642.5800	651078.6320
16	y2b	14+24.4158	208634.9892	651117.8961
17	y2b	14+64.4158	208624.5655	651156.5049
18	y2b	15+04.4158	208611.4952	651194.3034
19	y2b	15+44.4158	208597.7716	651231.8755
20	y2b	15+84.4158	208584.0480	651269.4476
21	y2b	16+24.4158	208570.3245	651307.0197
22	y2b	16+64.4158	208556.6009	651344.5918
23	y2b	17+04.4158	208542.8773	651382.1639
24	y2b	17+44.4158	208529.1537	651419.7360
25	y2b	17+84.4158	208515.4303	651457.3082
26	y2b	18+24.4158	208502.9967	651495.3189
27	y2b	18+64.4158	208493.1230	651534.0735
28	y2b	19+04.4158	208485.5469	651573.3469
29	y2b	19+31.7160	208480.6151	651600.1979

8/17/22

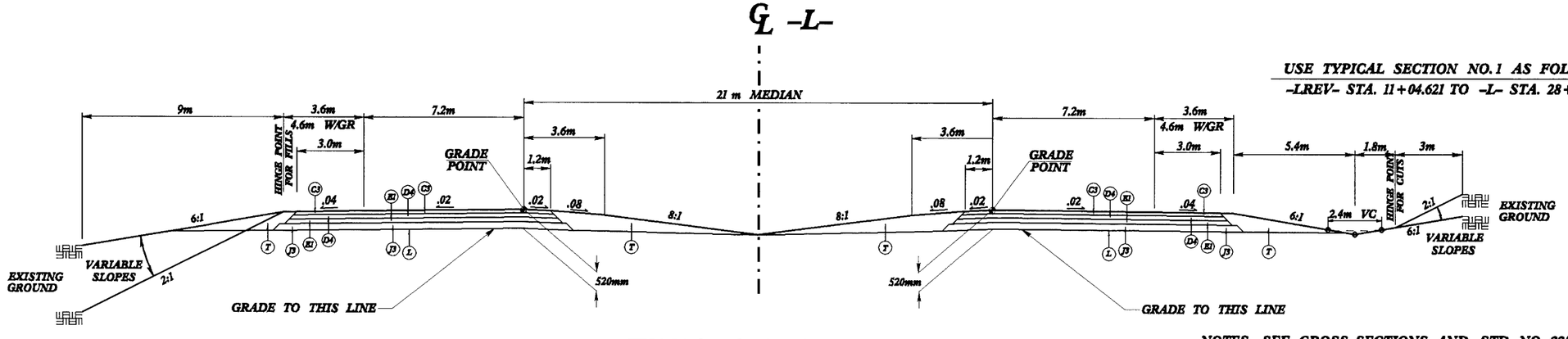
30-SEP-2004 08:52
N:\proj\2552AA\roadway\dgn\coordlist.dgn
$$USER$$
$$$$ REV 11.2.0.0.324

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PRELIMINARY PAVEMENT SCHEDULE

A	300mm PORTLAND CEMENT PAVEMENT JOINTED WITH DOWELS	E2	PROP. APPROX. 130 mm ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 319 kg PER SQ. METER.
C1	PROP. APPROX. 25 mm ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 60 kg PER SQ. METER.	J1	PROP. 150 mm AGGREGATE BASE COURSE.
C2	PROP. APPROX. 60 mm ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 60 kg PER SQ. METER IN EACH OF TWO LAYERS.	J2	PROP. 200 mm AGGREGATE BASE COURSE.
C3	PROP. APPROX. 70 mm ASPHALT CONC. SURFACE COURSE, TYPE S12.5C, AT AN AVERAGE RATE OF 84 kg PER SQ. METER IN EACH OF TWO LAYERS.	J3	PROP. 250 mm AGGREGATE BASE COURSE.
C4	PROP. VAR. DEPTH ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 2.40 kg PER SQ. METER PER 1 mm DEPTH, TO BE PLACED IN LAYERS NOT TO EXCEED 40 mm IN DEPTH.	J4	PROP. VAR. DEPTH AGGREGATE BASE COURSE.
D1	PROP. APPROX. 55 mm ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 135 kg PER SQ. METER.	L	SUBGRADE TO BE STABILIZED WITH 110 TO 220 kg PER SQ. METER OF STABILIZER AGGREGATE MIXED WITH THE TOP 75 mm OF SUBGRADE SOIL AT LOCATIONS DIRECTED BY THE ENGINEER.
D2	PROP. APPROX. 60 mm ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 147 kg PER SQ. METER.	P	PRIME COAT AT THE RATE OF 1.6 L PER SQ. METER.
D3	PROP. APPROX. 75 mm ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 184 kg PER SQ. METER.	R	PRECAST REINFORCED SINGLE FACED CONCRETE BARRIER
D4	PROP. APPROX. 90 mm ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 221 kg PER SQ. METER.	T	EARTH MATERIAL.
D5	PROP. VAR. DEPTH ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 2.45 kg PER SQ. METER PER 1 mm DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 55 mm OR GREATER THAN 110 mm IN DEPTH.	U	EXISTING PAVEMENT.
E1	PROP. APPROX. 110 mm ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 270 kg PER SQ. METER.	W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE STANDARD WEDGING DETAIL SHEET No.)
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.		X	PROP. APPROX. 75 mm PERMEABLE ASPHALT DRAINAGE COURSE, TYPE P-57, AT AN AVERAGE RATE OF 190 kg PER SQ. METER.



TYPICAL SECTION NO. 1

USE TYPICAL SECTION NO. 1 AS FOLLOWS:
–LREV– STA. 11+04.621 TO –L– STA. 28+00.000

NOTES: SEE CROSS–SECTIONS AND STD. NO. 225.09 FOR SLOPE TRANSITIONS UNDER BRIDGES AT THE FOLLOWING LOCATIONS:
–L– STA. 26+00.000 RT. TO STA. 28+00.000 RT. (FUTURE)
–L– STA. 27+20.000 LT. TO STA. 28+00.000 LT. (TRANSITION CONTINUES ON R–2552AB)
SEE CROSS–SECTIONS FOR SPECIAL GRADING AROUND BRIDGE END BENT –L– STA. 27+40.000 RT. STA. 27+80.000 RT.

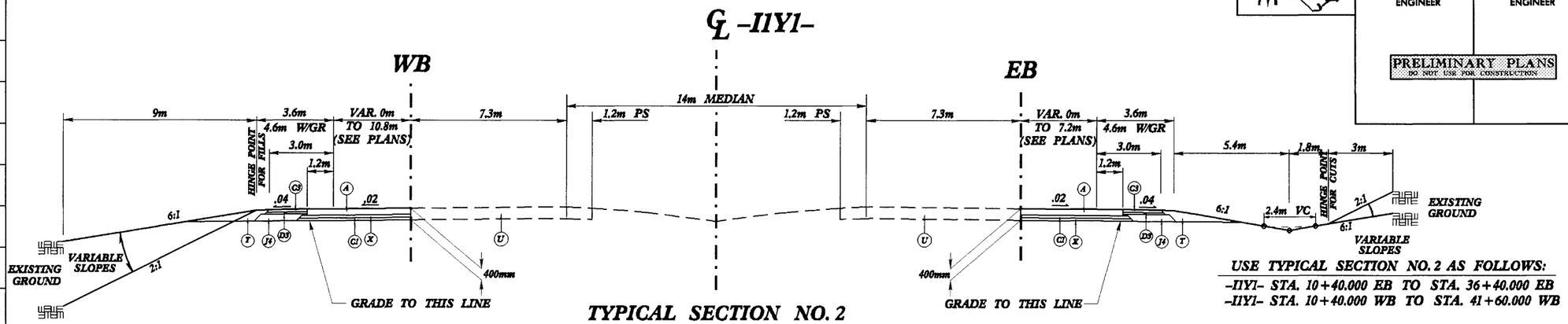
6/16/99
30-SEP-2004 15:52
jwilkerson
M:\projects\R-2552\Intersection.typ

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-A
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE

A	300mm CONCRETE
C1	25 mm TYPE S9.5B
C2	60 mm TYPE S9.5B
C3	70 mm TYPE S12.5C
C4	VAR. DEPTH TYPE S9.5C
D1	55mm TYPE I19.0B
D2	60mm TYPE I19.0C
D3	75 mm TYPE I19.0C
D4	90mm TYPE I19.0C
D5	VAR. DEPTH TYPE I19.0B
E1	110 mm TYPE B25.0C
E2	130 mm TYPE B25.0C
J1	150 mm ABC
J2	200 mm ABC
J3	250 mm ABC
J4	VAR. DEPTH ABC
L	SUBGRADE STABILIZATION
P	PRIME COAT
R	SINGLE FACED BARRIER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING
X	75mm PADC



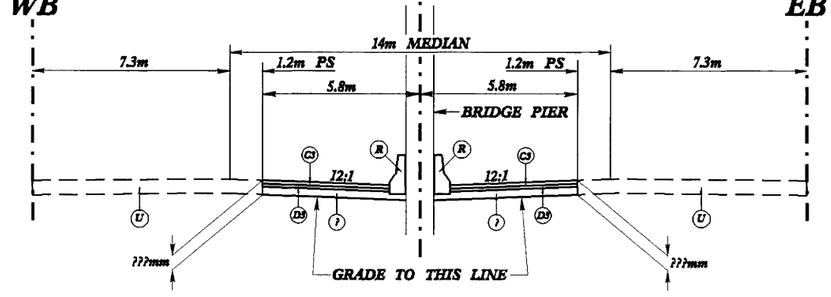
TYPICAL SECTION NO. 2

USE TYPICAL SECTION NO. 2 AS FOLLOWS:

-I1Y1- STA. 10+40.000 EB TO STA. 36+40.000 EB
-I1Y1- STA. 10+40.000 WB TO STA. 41+60.000 WB

NOTES: SEE CROSS-SECTIONS AND STD. NO. 225.09 FOR SLOPE TRANSITION UNDER BRIDGE AT THE FOLLOWING LOCATION:
-I1Y1- STA. 19+00.000 LT. TO STA. 21+00.000 LT.

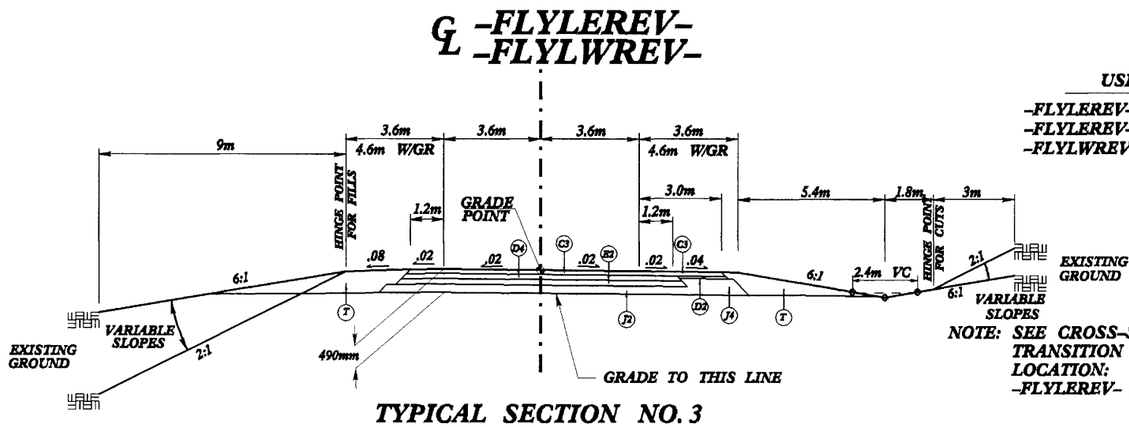
SEE CROSS-SECTIONS AND STD. NO. 225.07 FOR SLOPE TRANSITION UNDER BRIDGE AT THE FOLLOWING LOCATION:
-I1Y1- STA. 27+40.000 LT. TO STA. 30+20.000 LT.



PARTIAL TYPICAL SECTION NO. 2A

USE PARTIAL TYPICAL SECTION NO. 2A AS FOLLOWS:

(SEE STD. NO. 862.01, SHEET 1 OF 11)
-I1Y1- AT -Y2- BRIDGE
-I1Y1- AT -LPB- & -FLYLEREV- BRIDGES



TYPICAL SECTION NO. 3

USE TYPICAL SECTION NO. 3 AS FOLLOWS:

-FLYLEREV- STA. 10+00.000 TO STA. 22+10.000 (BEGIN BRIDGE)
-FLYLEREV- STA. 24+80.000 (END BRIDGE) TO STA. 35+14.173
-FLYLWREV- STA. 10+00.000 TO STA. 26+77.182

NOTE : REVERSE TYPICAL SECTION FOR -FLYLEREV-

NOTE: SEE CROSS-SECTIONS AND STD. NO. 225.09 FOR SLOPE TRANSITION UNDER BRIDGE AT THE FOLLOWING LOCATION:
-FLYLEREV- STA. 32+18.843 LT. TO STA. 34+42.240 LT.

5/15/20
30-SEP-2004 15:52
jedavis
K:\PROJECTS\2552AA\Interchange.dgn

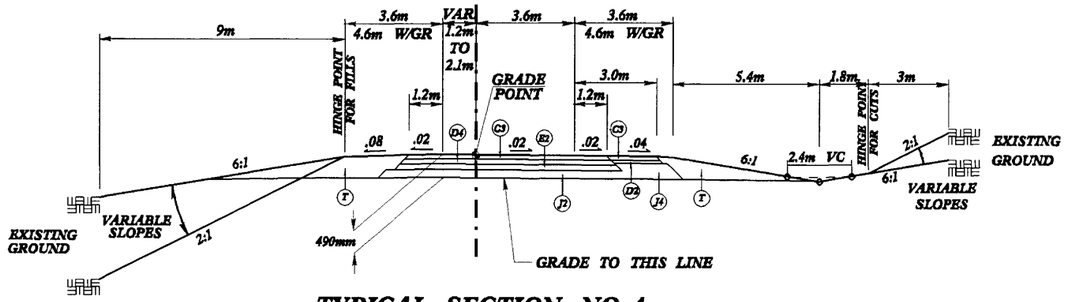
PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-B
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE

A	300mm CONCRETE
C1	25 mm TYPE S9.5B
C2	60 mm TYPE S9.5B
C3	70 mm TYPE S12.5C
C4	VAR. DEPTH TYPE S9.5C
D1	55mm TYPE I19.0B
D2	60mm TYPE I19.0C
D3	75 mm TYPE I19.0C
D4	90mm TYPE I19.0C
D5	VAR. DEPTH TYPE I19.0B
E1	110 mm TYPE B25.0C
E2	130 mm TYPE B25.0C
J1	150 mm ABC
J2	200 mm ABC
J3	250 mm ABC
J4	VAR. DEPTH ABC
L	SUBGRADE STABILIZATION
P	PRIME COAT
R	SINGLE FACED BARRIER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING
X	75mm PADC

℄ -LPB- & -RPD-



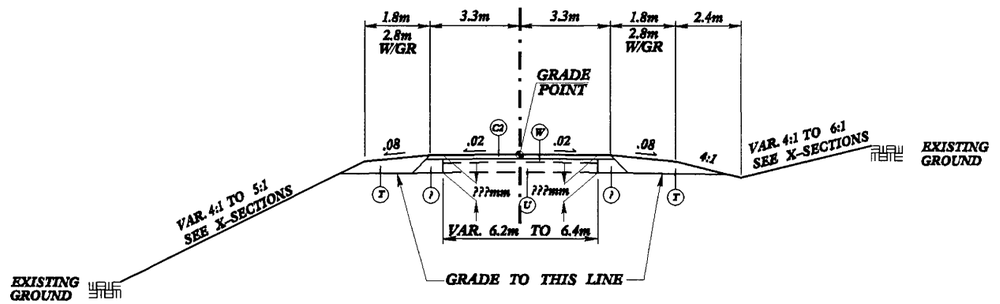
TYPICAL SECTION NO. 4

USE TYPICAL SECTION NO. 4 AS FOLLOWS:

-LPB- STA. 10+00.000 TO STA. 16+60.000 (BEGIN BRIDGE)
-LPB- STA. 18+80.000 (END BRIDGE) TO STA. 24+01.877
-RPD- STA. 10+00.000 TO STA. 17+60.652

NOTE: REVERSE TYPICAL SECTION FOR -RPD-

℄ -Y2- & -Y2B-



TYPICAL SECTION NO. 5

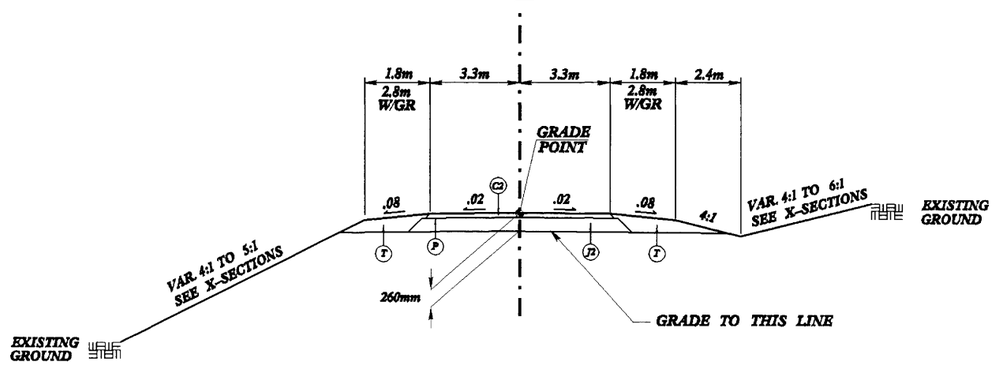
USE TYPICAL SECTION NO. 5 AS FOLLOWS:

-Y2- STA. 10+60.000 TO STA. 10+80.000
TRANSITION FROM EXISTING @ -Y2- STA. 10+40.000 TO TYPICAL SECTION NO. 5 @ STA. 10+60.000

-Y2- STA. 12+60.000 TO STA. 13+00.000
TRANSITION FROM TYPICAL SECTION NO. 5 @ -Y2- STA. 13+00.000 TO EXISTING @ STA. 13+20.000

-Y2B- STA. 10+00.000 TO STA. 10+80.000
TRANSITION FROM EXISTING @ -Y2B- STA. 9+80.000 TO TYPICAL SECTION NO. 5 @ STA. 10+00.000

℄ -Y2- & -Y2B-



TYPICAL SECTION NO. 6

USE TYPICAL SECTION NO. 6 AS FOLLOWS:

-Y2- STA. 10+80.000 TO STA. 11+00.000 (BEGIN BRIDGE)
-Y2- STA. 12+01.000 (END BRIDGE) TO STA. 12+60.000
-Y2B- STA. 10+80.000 TO STA. 19+28.404

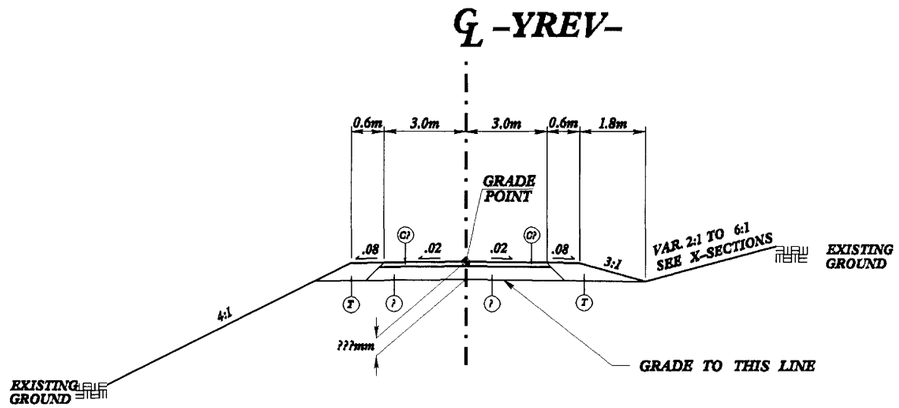
5/16/23
30-SEP-2004 15:52
jedavis
dgn=sheets.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-C
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

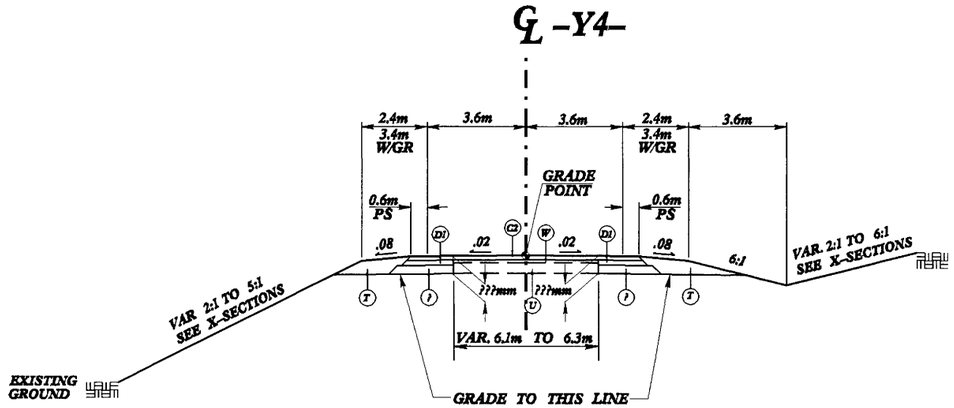
PAVEMENT SCHEDULE

A	300mm CONCRETE
C1	25 mm TYPE S9.5B
C2	60 mm TYPE S9.5B
C3	70 mm TYPE S12.5C
C4	VAR. DEPTH TYPE S9.5C
D1	55mm TYPE I19.0B
D2	60mm TYPE I19.0C
D3	75 mm TYPE I19.0C
D4	90mm TYPE I19.0C
D5	VAR. DEPTH TYPE I19.0B
E1	110 mm TYPE B25.0C
E2	130 mm TYPE B25.0C
J1	150 mm ABC
J2	200 mm ABC
J3	250 mm ABC
J4	VAR. DEPTH ABC
L	SUBGRADE STABILIZATION
P	PRIME COAT
R	SINGLE FACED BARRIER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING
X	75mm PADC



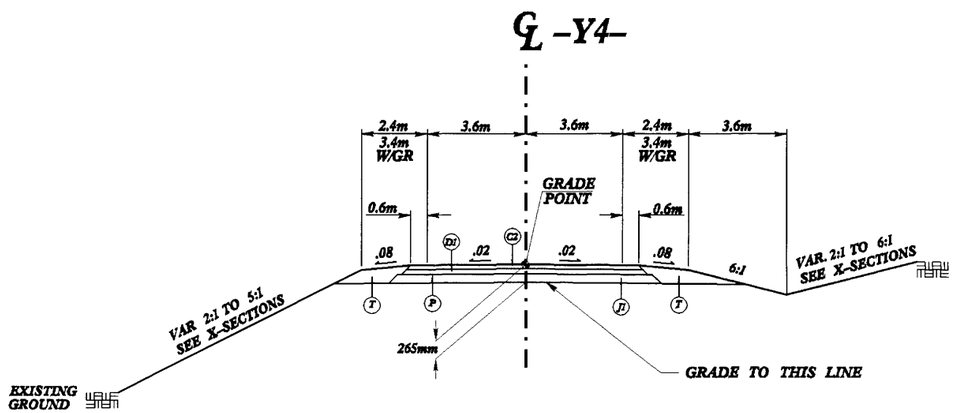
TYPICAL SECTION NO. 7

USE TYPICAL SECTION NO. 7 AS FOLLOWS:
-Y- STA. 10+03.492 TO STA. 17+75.354



TYPICAL SECTION NO. 8

USE TYPICAL SECTION NO. 8 AS FOLLOWS:
-Y4- STA. 12+50.000 TO STA. 13+20.000
TRANSITION FROM EXISTING @ -Y4- STA. 12+30.000
TO TYPICAL SECTION NO. 8 @ STA. 12+50.000
-Y4- STA. 15+10.000 TO STA. 15+95.000
TRANSITION FROM TYPICAL SECTION NO. 8 @
-Y4- STA. 15+95.000 TO EXISTING @ STA. 16+15.000



TYPICAL SECTION NO. 9

USE TYPICAL SECTION NO. 9 AS FOLLOWS:
-Y4- STA. 13+20.000 TO STA. 14+11.000 (BEGIN BRIDGE)
-Y4- STA. 14+90.000 (END BRIDGE) TO STA. 15+10.000

30-SEP-2004 15:52
jmedina N:\PROJECTS\2552AA\Drawings\Universal.dgn

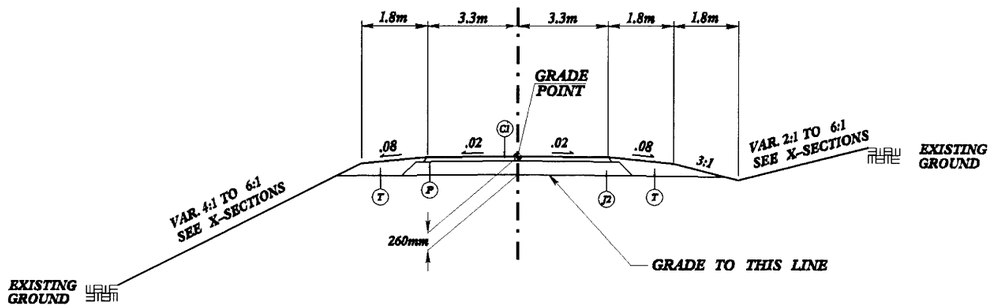
PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-D
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PAVEMENT SCHEDULE

A	300mm CONCRETE
C1	25 mm TYPE S9.5B
C2	60 mm TYPE S9.5B
C3	70 mm TYPE S12.5C
C4	VAR. DEPTH TYPE S9.5C
D1	55mm TYPE I19.0B
D2	60mm TYPE I19.0C
D3	75 mm TYPE I19.0C
D4	90mm TYPE I19.0C
D5	VAR. DEPTH TYPE I19.0B
E1	110 mm TYPE B25.0C
E2	130 mm TYPE B25.0C
J1	150 mm ABC
J2	200 mm ABC
J3	250 mm ABC
J4	VAR. DEPTH ABC
L	SUBGRADE STABILIZATION
P	PRIME COAT
R	SINGLE FACED BARRIER
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING
X	75mm PADC

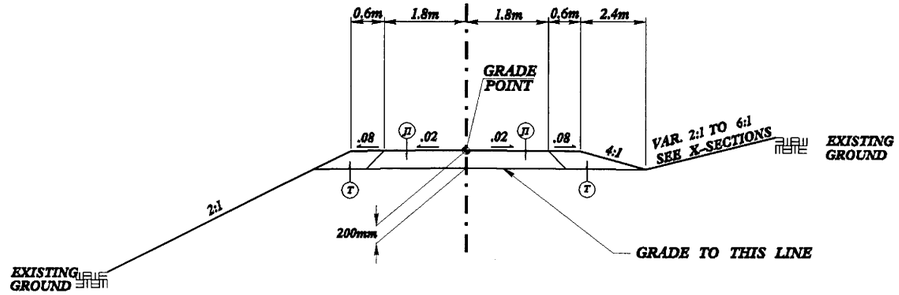
℄ -Y4- DETOUR



TYPICAL SECTION NO. 10

USE TYPICAL SECTION NO. 10 AS FOLLOWS:
-Y4DET- STA. 10+40.000 TO STA. 13+78.000

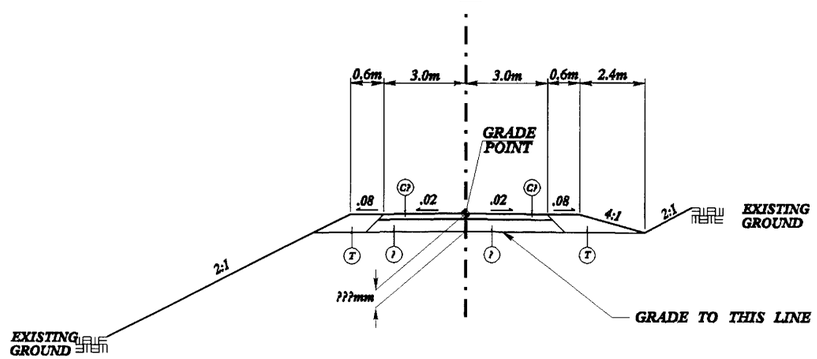
℄ -DR2-



TYPICAL SECTION NO. 11

USE TYPICAL SECTION NO. 11 AS FOLLOWS:
-DR2- STA. 10+03.477 TO STA. 10+64.260

℄ -SRD-1-



TYPICAL SECTION NO. 12

USE TYPICAL SECTION NO. 12 AS FOLLOWS:
-SRD-1- STA. 10+00.000 TO STA. 12+67.294

30-SEP-2004 15:52
jmeyers,NO_SCALE,Y:\Interseg_up
ST_R2552AA\

30-SEP-2004 15:52
R:\pro\kimberlin\roadway\mmm.tmp
mdavis AT HY2864334

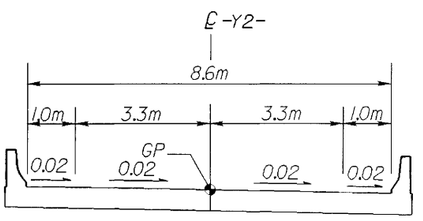
STRUCTURE TYPICAL SECTIONS

-Y2- STRUCTURE

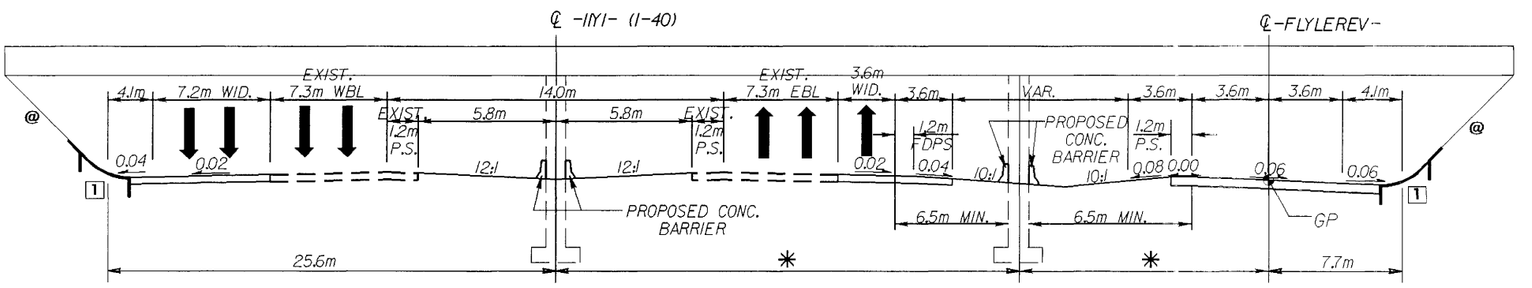
SR 2703 (NEW BETHEL RD.)
OVER I-40

DESIGN DATA -Y2-	
ADT 2005	= 671
ADT 2025	= 981
D	= 60%
DHV	= 10%
TTST	= 2%
DUAL	= 1%
V	= 80 km/h

FUNC CLASS-COLLECTOR
MINIMUM VERTICAL CLEARANCE = 5.1 m
✳ HORIZONTAL DISTANCE TO BE DETERMINED BY STRUCTURE DESIGN UNIT
@ SLOPES DETERMINED BY GEOTECHNICAL ENGINEERING UNIT
[1] SEE STD. 610.03



TYPICAL SECTION ON STRUCTURE



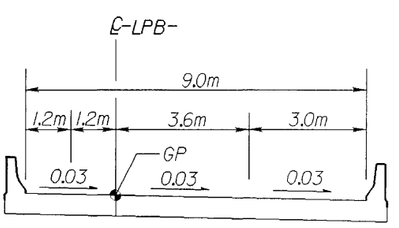
TYPICAL SECTION ON ROADWAY UNDER STRUCTURE

-LPB- STRUCTURE

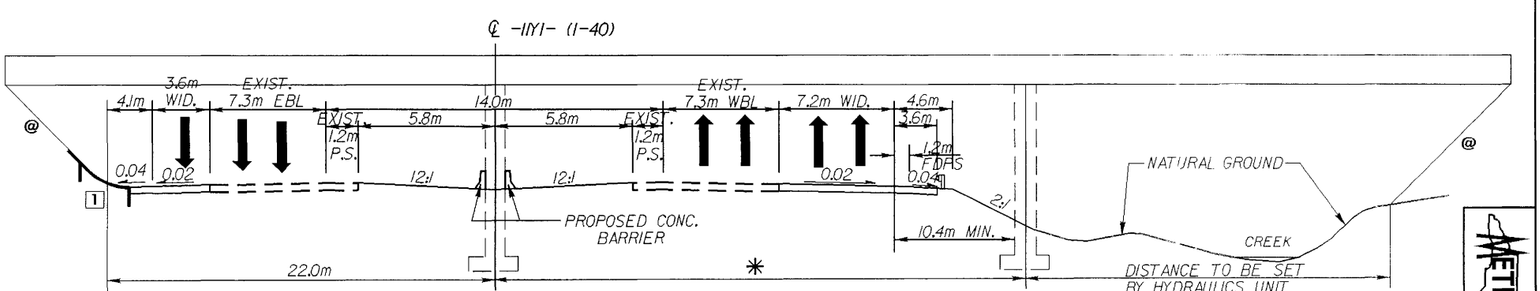
-LPB- OVER I-40

DESIGN DATA -LPB-	
ADT 2005	= 1,000
ADT 2025	= 2,350
D	= 65%
DHV	= 13%
TTST	= 14%
DUAL	= 6%
V	= 100 km/h

FUNC CLASS-RAMP
MINIMUM VERTICAL CLEARANCE = 5.1 m
✳ HORIZONTAL DISTANCE TO BE DETERMINED BY STRUCTURE DESIGN UNIT
@ SLOPES DETERMINED BY GEOTECHNICAL ENGINEERING UNIT
[1] SEE STD. 610.03



TYPICAL SECTION ON STRUCTURE



TYPICAL SECTION ON ROADWAY UNDER STRUCTURE

METRIC

PRELIMINARY PLANS
NOT TO BE USED FOR CONSTRUCTION

ROADWAY DESIGN ENGINEER
R.W. SHEET NO.
HYDRAULICS ENGINEER

PROJECT REFERENCE NO.
R-2552AA
SHEET NO.
2-E

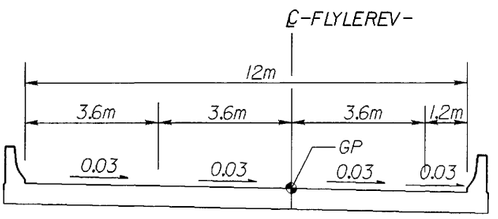
30-SEP-2004 15:52
R:\proj\mmgen\plotmmgen.tbl
mdavis AT HY2B6434

STRUCTURE TYPICAL SECTIONS

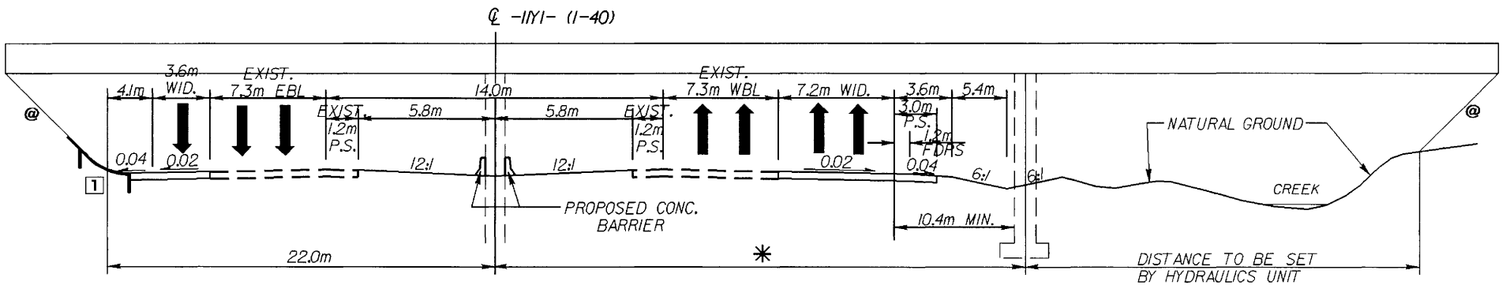
-FLYLEREV- STRUCTURE

-FLYLEREV- OVER I-40

DESIGN DATA -FLYLEREV-	
ADT 2005	= 19,400
ADT 2025	= 27,000
D	= 65%
DHV	= 13%
TTST	= 14%
DUAL	= 6%
V	= 100 km/h
FUNC CLASS-RAMP	
MINIMUM VERTICAL CLEARANCE	= 5.1 m
✳ HORIZONTAL DISTANCE TO BE DETERMINED BY STRUCTURE DESIGN UNIT	
@ SLOPES DETERMINED BY GEOTECHNICAL ENGINEERING UNIT	
[1]	SEE STD. 610.03



TYPICAL SECTION ON STRUCTURE

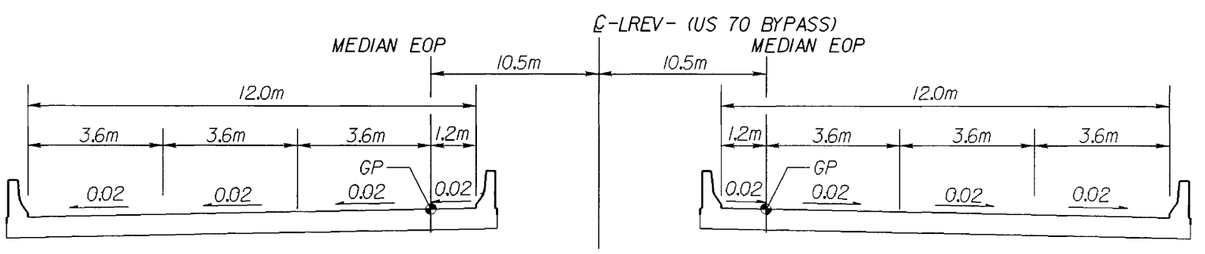


TYPICAL SECTION ON ROADWAY UNDER STRUCTURE

-LREV- STRUCTURES

-LREV- OVER UNNAMED TRIBUTARY TO SWIFT CREEK

DESIGN DATA -LREV-	
ADT 2005	= 40,800
ADT 2025	= 58,700
D	= 65%
DHV	= 10%
TTST	= 10%
DUAL	= 6%
V	= 110 km/h
FUNC CLASS-FREEWAY	

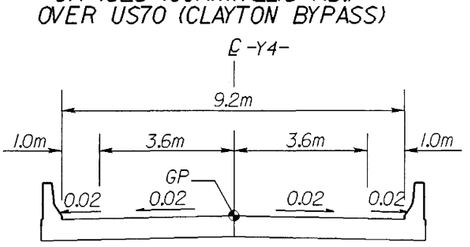


TYPICAL SECTION ON STRUCTURES

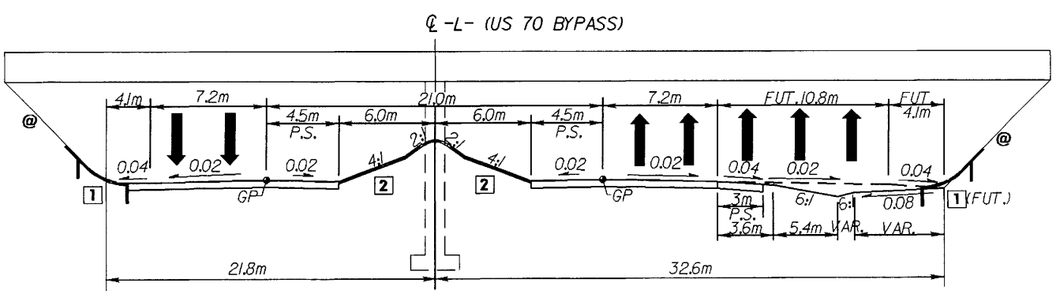
-Y4- STRUCTURE

SR 1525 (CORNWALLIS RD.) OVER US70 (CLAYTON BYPASS)

DESIGN DATA -Y4-	
ADT 2005	= 1,500
ADT 2025	= 3,000
D	= 60%
DHV	= 10%
TTST	= 1%
DUAL	= 1%
V	= 80 km/h
FUNC CLASS-COLLECTOR	
MINIMUM VERTICAL CLEARANCE	= 5.1 m
@ SLOPES DETERMINED BY GEOTECHNICAL ENGINEERING UNIT	
[1]	SEE STD. 610.03
[2]	SEE STD. 225.08



TYPICAL SECTION ON STRUCTURE



TYPICAL SECTION ON ROADWAY UNDER STRUCTURE

METRIC

PRELIMINARY PLANS
NOT TO BE USED FOR CONSTRUCTION

ROADWAY DESIGN ENGINEER

R/W SHEET NO.

HYDRAULICS ENGINEER

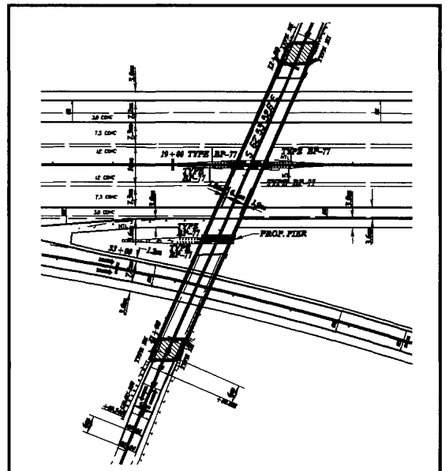
PROJECT REFERENCE NO.
R-2552AA

SHEET NO.
2-F

8/17/99

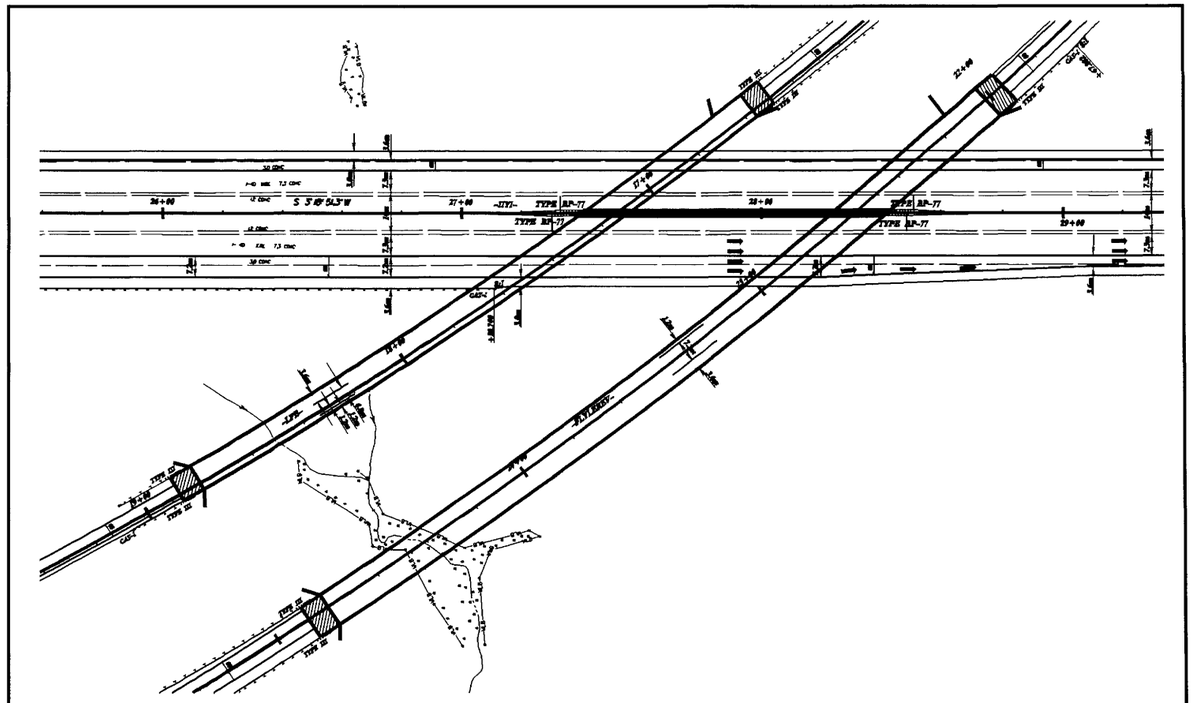
METRIC	PROJECT REFERENCE NO.	SHEET NO.
10 0 20	R-2552AA	2-G
	R /W SHEET NO.	
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

BRIDGE SKETCH DETAILS



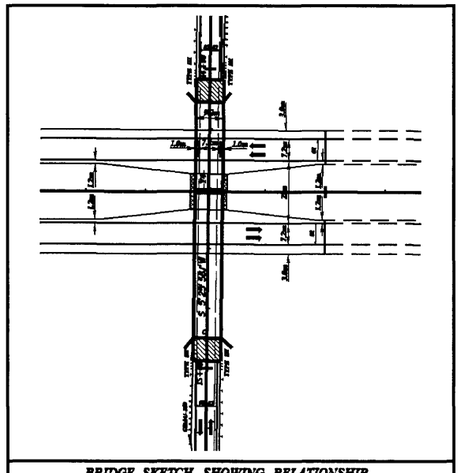
BRIDGE SKETCH SHOWING RELATIONSHIP BETWEEN -L-, -FLYLEREV- & -Y2-

SEE SHEET 6 FOR PLAN VIEW AND SEE SHEETS 29,36 & 40 FOR PROFILES



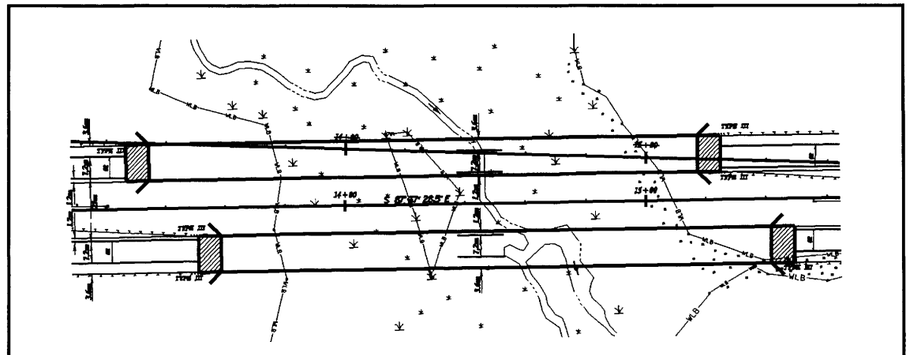
BRIDGE SKETCH SHOWING RELATIONSHIP BETWEEN -L-, -FLYLEREV- & -LPB-

SEE SHEET 7 FOR PLAN VIEW AND SEE SHEETS 32, 33, 35, 39, 53 & 54 FOR PROFILES



BRIDGE SKETCH SHOWING RELATIONSHIP BETWEEN -L- & -Y4-

SEE SHEET 12 FOR PLAN VIEW AND SEE SHEETS 36 & 42 FOR PROFILES



BRIDGE SKETCH SHOWING RELATIONSHIP BETWEEN -L- & UNNAMED TRIBUTARY OF SWIFT CREEK

SEE SHEET 16 FOR PLAN VIEW AND SEE SHEET 37 FOR PROFILE

20-SEP-2004 15:52
R:\proj\2552aa\roadway\sheets\2gsh

REVISIONS

–Y4– DETOUR (CORNWALLIS RD.)

NAD 83

METRIC

5 0 10

CONST.REV.

R /W REV.

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-H
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

WILLIS C. UMSTEAD, ET UX
LAND BOOK 6 PG.291
DB 1073 PG.523
DB 433 PG.645
DB 1386 PG.912

WILLIE C. REAMS
DB 674 PG. 565

BEGIN CONSTRUCTION
–Y4– POT Sta. 12+50.000

–Y4– POT Sta. 12+35.687 =
–Y4DET– PC Sta. 10+00.000

BY4-402 7+83.221 =
BY2 46+75.812

PC Sta. 10+75.586

–Y4– PTS Sta. 12+11.064

–Y4– +50.000
9.001m
(29.53')

–Y4– +80.000
20.000m
(65.62')

–L– +35.000
65.000m
(213.25')

–L– +15.000
100.000m
(328.08')

–L– +00.000
65.000m
(213.25')

–Y4– +30.000
20.000m
(65.62')

–Y4– +70.000
20.000m
(65.62')

–Y4– +50.000
9.284m
(30.46')

–Y4– +80.000
20.000m
(65.62')

–Y4– +30.000
20.000m
(65.62')

–L– +07.000
126.000m
(413.39')

–Y4– +65.000
20.000m
(65.62')

–Y4DET– Sta. 10+38.852
BEGIN CONSTRUCTION

–Y4DET– PRC Sta. 10+88.495

–L– +05.000
135.000m
(442.91')

–L– +70.000
102.000m
(334.65')

–L– +50.000
100.000m
(328.08')

–L– +55.000
120.000m
(393.70')

MATCHLINE TO SHEET 2-I –Y4DET– STA. 11+50.000

S 5° 25' 58.1" W
–Y4–

WILLIS C. UMSTEAD
LAND BOOK 6 PG.291
DB 749 PG.11

32

EARL SANDERS
DB 575 PG.531
DB 645 PG.85
DB 124 PG.195
PB 9

JOHN R. HOWELL JR. ET UX
DB 509 PG.139
PB 9 PG.195

UZZLE BARNES, ET UX
DB 1315 PG.165
PB 9 PG.195

SR 1548 NEW BETHEL RD

EXISTING R/W

1000 mm 4SBW

975 mm 4SBW

1300 mm 4SBW

600mm CONC

375 mm CONC

1200 mm WW

500 mm WW

1100 mm 4SBW

1050.284 MON 10 EP
N89°56'27"E 8.995

NOTE:
(1) SEE SHEET 12 FOR –Y4– PLAN
(2) SEE SHEET 42 FOR –Y4DET– PROFILE

–Y4–

PI Sta 11+43.891
Δ = 18° 03' 07.1" (RT)
L = 135.479
T = 68.305
R = 430.000

–Y4DET–

PI Sta 10+44.716
Δ = 20° 16' 53.8" (RT)
L = 88.495
T = 44.716
R = 250.000
Se = 0.04
RO = 30m
V = 80 km/hr

PI Sta 11+33.211
Δ = 20° 16' 53.8" (LT)
L = 88.495
T = 44.716
R = 250.000
Se = 0.04
RO = 30m
V = 80 km/hr

6/10/22

30 NSP-2004 8x52
Nicole Sykes
jsykes on W1\2022\3\sykes\mxsd\2h.mxd

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	2-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC 5 0 10

CONST.REV.

R/W REV.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y4- DETOUR (CORNWALLIS RD.)

NAD 83

WILLIE C. REAMS
DB 674 PG. 565

JANE A. CUNNINGHAM
DB 537 PG.430

GPS R-2552-I5 =
BL 34+28.712 =
BY4 II+52.923
-L- Sta 27+66.382
Offset 47.166 RT
-Y4- Sta I4+88.238
Offset 5.765 LT

-L- POT Sta. 27+61.028
-Y4- POT Sta. 14+41.121

-Y4DET- PC Sta. 12+41.313

-Y4DET- PT Sta. 11+76.991

-Y4- +99.942
8.946m
(29.34')

-L- +80.000
67.000m
(219.82')

-Y4- +00.000
20.000m
(65.62')

-Y4DET- PRC Sta. 13+29.808

END CONSTRUCTION
-Y4- POT Sta. 16+28.000

-Y4- POT Sta. 16+46.645 =
-Y4DET- PT Sta. 14+18.304

MATCH LINE TO SHEET 2-H -Y4DET- STA. 11+50.000

-Y4-
S 5° 25' 58.1" W

S 5° 25' 58.3" W

S 85° 03' 54.8" E

-L- POT Sta. 27+30.027
-Y4DET- POT Sta. 12+09.376

-L- +00.000
50.000m
(164.04')

-Y4DET- Sta. 13+77.635
END CONSTRUCTION

BL-723 33+05.150
-L- Sta 26+45.037
Offset 23.866 RT

32
WILLIS C. UMSTEAD
LAND BOOK 6 PG.291
DB 749 PG.II

-Y4DET-

PI Sta 11+33.211	PI Sta 12+86.029	PI Sta 13+74.524
Δ = 20° 16' 53.8" (LT)	Δ = 20° 16' 53.9" (LT)	Δ = 20° 16' 53.9" (RT)
L = 88.495	L = 88.495	L = 88.495
T = 44.716	T = 44.716	T = 44.716
R = 250.000	R = 250.000	R = 250.000
Se = 0.04	Se = 0.04	Se = 0.04
R0 = 30m	R0 = 30m	R0 = 30m
V = 80 km/hr	V = 80 km/hr	V = 80 km/hr

NOTE:
(1) SEE SHEET 12 FOR -Y4- PLAN
(2) SEE SHEET 42 FOR -Y4DET- PROFILE

-Y2B- R/W
45.201m
(148.30')

-Y2B- +40.000
33.108m
(108.62')

-Y2B- +36.000
PL

JESSE H. AUSTIN JR.
DB 528 PG 261
DB 858 PG 669

SR 1525 CORNWALLIS RD 6.3 BST

EXISTING R/W

1300 mm 4SBW

1000 mm 4SBW

375 mm CONC

600 mm WD RAIL

750 mm WD

POOL

CONC

ISFD

1070 mm BR

BST

15.240 150' ACCESS EASEMENT

42.575 COR TO COR

S09°45'45"W

N80°14'14"W 79.996 COR TO COR

S70°41'55"E 92.140 COR TO COR

N80°14'14"W 78.845 COR TO COR

N80°14'14"W 15.240 COR TO COR

R=15.240 L=23.595

R=15.240 L=23.595

R=15.240 L=13.454

CLASS I RIP RAP

45° CSP

RSS*LP-2 VOY-2CE

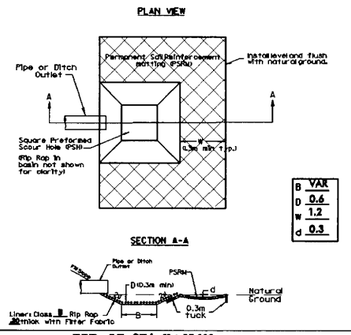
30-REP-2004 15:52
R:\Projects\R-2552AA\Interchange\R2_y4.pah
Jobnis AY #28834

METRIC

PRELIMINARY PLANS
NOT FOR CONSTRUCTION
INCOMPLETE PLANS
P.S.&E. OR R/W APPROVAL

CONSTR.
R/W REV.

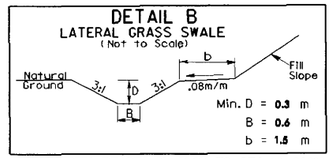
DETAIL A
PREFORMED SCOUR HOLE



B	VAR
D	0.6
W	1.2
d	0.3

-RPD- LT. STA 11+87.000
-RPD- LT. STA 11+95.000
-FLYLREV- LT. STA 19+60.000
-FLYLREV- LT. STA 20+52.000
-FLYLREV- LT. STA 20+58.000
-FLYLREV- LT. STA 25+55.000
-LPB- RT. STA 16+45.000
-L- RT. STA 20+75.000
-LREV- LT. STA 13+25.000
-Y1- LT. STA 11+74.000
-Y1- LT. STA 12+68.000
-Y1- RT. STA 13+34.000
-Y1- RT. STA 27+06.000

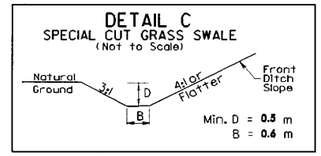
DETAIL B
LATERAL GRASS SWALE
(Not to Scale)



Min. D = 0.3 m
B = 0.6 m
b = 1.5 m

-FLYLWREV- RT. STA 19+70.000 TO STA 20+84.000
-L- LT. STA 21+10.000 TO STA 22+20.000
-LPB- RT. STA 14+75.000 TO STA 16+60.000
-LPB- LT. STA 21+94.000 TO STA 22+60.000
-RPD- RT. STA 13+85.000 TO STA 13+83.000
-Y1- LT. STA 13+60.000 TO STA 14+20.000
-Y1- LT. STA 22+81.000 TO STA 23+13.000
-Y1- LT. STA 39+60.000 TO STA 41+20.000
-Y2B- LT. STA 15+16.000 TO STA 15+83.000
-YREV- RT. STA 10+20.000 TO STA 10+65.000

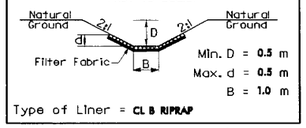
DETAIL C
SPECIAL CUT GRASS SWALE
(Not to Scale)



Min. D = 0.5 m
B = 0.6 m

-Y1- RT. STA 21+40.000 TO STA 23+33.000
-Y1- LT. STA 26+80.000 TO STA 27+40.000
-Y2- RT. STA 10+65.000 TO STA 10+90.000

DETAIL D
STANDARD BASE DITCH
(Not to Scale)

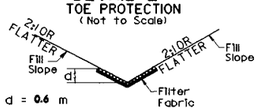


Min. D = 0.5 m
Max. d = 0.5 m
B = 1.0 m

Type of Liner = CL B RIPRAP

-YREV- LT. STA 10+22.000 TO STA 10+38.000

DETAIL E
TOE PROTECTION
(Not to Scale)

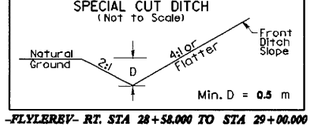


d = 0.6 m

Type of Liner = CL B RIPRAP

-FLYLEREV- LT. STA 15+00.000 TO STA 18+44.000
-FLYLWREV- LT. STA 17+62.000 TO STA 18+93.000
-Y1- RT. STA 23+30.000
-Y2B- RT. STA 15+89.000 TO STA 16+39.000
-YREV- LT. STA 10+40.000 TO STA 10+65.000
-YREV- LT. STA 15+00.000 TO STA 15+27.000

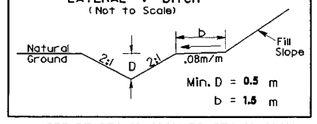
DETAIL F
SPECIAL CUT DITCH
(Not to Scale)



Min. D = 0.5 m

-FLYLEREV- RT. STA 28+58.000 TO STA 29+00.000

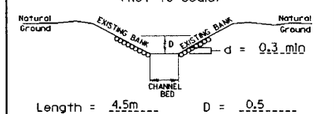
DETAIL G
LATERAL 'V' DITCH
(Not to Scale)



Min. D = 0.5 m
b = 1.5 m

-LPB-RT. STA 21+32.000 TO STA 21+80.000
-V4- LT. STA 13+80.000 TO STA 14+00.000

DETAIL H
PIPE OUTLET CHANNEL
(Not to Scale)



Length = 4.5m D = 0.5
Est = 3.0 Tons of Class 1 RipRap

-FLYLEREV- LT. STA 27+88.000
-FLYLEREV- LT. STA 29+53.000
-FLYLEREV- LT. STA 17+87.000
-LTV1- LT. STA 13+57.000
-LTV1- RT. STA 26+67.000
-L- RT. STA 21+13.000
-L- RT. STA 24+97.000
-Y2B- RT. STA 12+60.000
-Y2B- RT. STA 15+80.000

LOCATION:
SP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

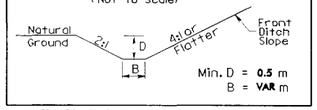
REVISIONS

METRIC

PRELIMINARY PLANS
AS SET OR TO CONSTRUCTION
INCOMPLETE PLANS
AS SET OR TO R/W DISPOSAL

CONST.MIN.
R/W REV.

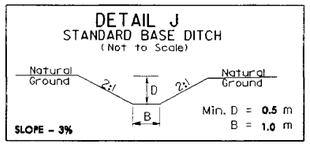
DETAIL I
SPECIAL CUT BASE DITCH
(Not to Scale)



-Y1- LT. STA 25+88.000 TO STA 26+45.000

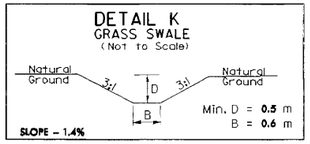
DETENTION RISER DETAIL COMING FROM DES. SERVICES

DETAIL J
STANDARD BASE DITCH
(Not to Scale)



-Y1- RT. STA 21+08.000 TO STA 21+37.000 (SLOPE -3%)
-Y1- RT. STA 25+88.000 TO STA 26+12.000 (SLOPE -5.3%)
-Y1- RT. STA 26+70.000 (SLOPE -5.4%)

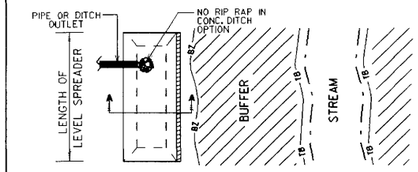
DETAIL K
GRASS SWALE
(Not to Scale)



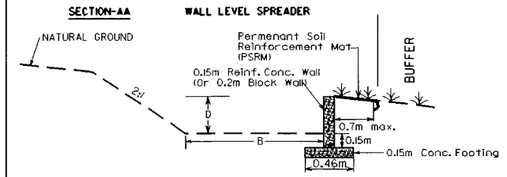
-Y1- RT. STA 27+06.000

DETAIL L
LEVEL SPREADER DETAIL
(NOT TO SCALE)

PLAN VIEW

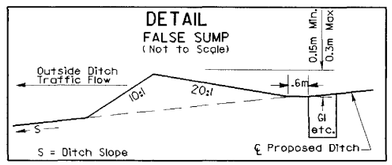


SECTION-AA WALL LEVEL SPREADER

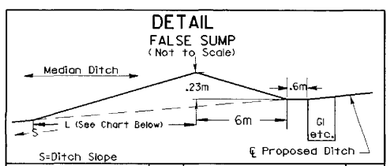


STATION	LENGTH	D	B	TOP ELEV.
-LREV- LT. STA 12+53.000	3.0	.45	1.2	67.05
-LREV- RT. STA 15+55.000	3.0	.45	1.2	64.45
-L- RT. STA 25+11.000	3.0	.45	1.2	77.45
-Y2B- RT. STA 15+02.000	3.0	.45	1.2	73.35
-RPD- LT. STA 17+00.000	32.0	.45	1.2	73.25

DETAIL
FALSE SUMP
(Not to Scale)

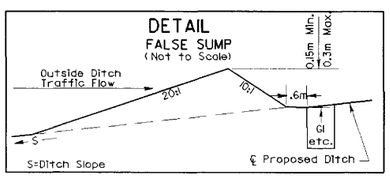


DETAIL
FALSE SUMP
(Not to Scale)

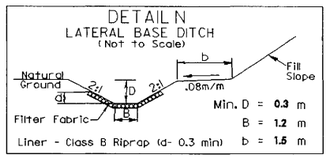


Ditch Grade		Ditch Grade	
0.0% To 2.0%		Over 4.0% To 6.0%	
Over 2.0% To 4.0%		Over 6.0%	

DETAIL
FALSE SUMP
(Not to Scale)

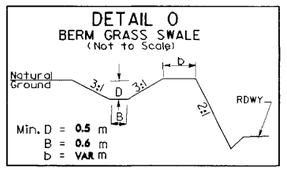


DETAIL N
LATERAL BASE DITCH
(Not to Scale)



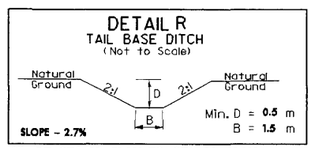
-LREV- RT. STA 12+82.000 TO STA 13+74.000

DETAIL O
BERM GRASS SWALE
(Not to Scale)



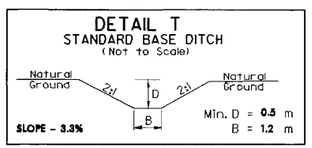
-L- LT. STA 26+08.000 TO STA 27+48.000

DETAIL R
TAIL BASE DITCH
(Not to Scale)



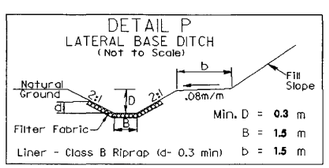
-Y1- LT. STA 33+72.000 TO STA 34+00.000

DETAIL T
STANDARD BASE DITCH
(Not to Scale)



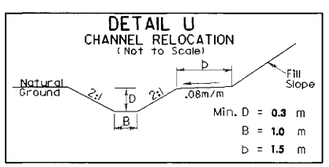
-LREV- RT. STA 15+11.000 TO STA 15+57.000

DETAIL P
LATERAL BASE DITCH
(Not to Scale)



-Y1- RT. STA 14+05.000 TO STA 14+20.000

DETAIL U
CHANNEL RELOCATION
(Not to Scale)



-L- LT. STA 25+18.000 TO STA 25+71.000

LOCATION:
ZIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

RIGHT OF WAY REVISION 9/2/04

8/17/99

METRIC

5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	4
R/W SHEET NO.	4,5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

NAD 83

20.659 COR TO COR
N04°32'24"W

4.492 COR TO COR
N02°20'25"W

BZ 1

BZ 2

180m TAPER

420m FULL LANE

+40.000

+20.000

BEGIN CONSTRUCTION
-IIYI- POT STA. 10+40.000
-IIYI- Sta. 10+52.639 =
BYI-101 5+00.000
Offset 1.590 RT

BEGIN EXPRESSWAY GUTTER
-IIYI- STA 10+80.655

EXISTING R/W

1550 mm WW & ISBW

GRADE TO DRAIN

CAT 1
8:1

3.0m

3.6m

7.3m

2GI

375

3.0 CONC

7.3 CONC

1.2 CONC

CABLE GUIDERAIL

RETAIN

BEGIN GUIDERAIL
STA. 10+40.000

-WB-

-EB-

11+00

12+00

13+00

-IIYI- S 3°18'51.3" W

PSH - 1.2 X 1.2m
SEE DETAIL A

400mm CONC

375mm CONC

COLLAR AND EXT.
375 RCP
COLLAR & EXT.
1650 mm CSP

CLASS "B" RIP-RAP
EST. 1.8 MTNS
FILTER FABRIC
EST. 5.9 SM

CHANNEL OUTLET PROTECTION
CLASS "I" RIP-RAP
EST. 43.5 MTNS

+50.000 - BEGIN WOVEN WIRE FENCE- TIE TO EXIST.

-IIYI- +50.000
42.706m
(140.11')
48.000m
(157.48')

EVA M. WALTERS
DB 1522 PG.306

MATCHLINE TO SHEET 5 -IIYI- STA. 13+60.000

SITE AA1b

2.6 CONC HW

1.9 CONC HW

CLASS "B" RIP-RAP
EST. 0.9 MTNS
FILTER FABRIC
EST. 4.2 SM

RETAIN HDWL

-YI- +04.544 =
-IIYI- +04.544
41.550m
(136.32')
BEGIN WOVEN WIRE FENCE
TIE TO EXIST.

REMOVE EXISTING
CONTROL ACCESS FENCE

-YI- +11.544 =
-IIYI- +11.544
41.550m
(136.32')

GRAU-350 2GI

400mm CSP
W/ELBOWS

BEGIN EXPRESSWAY GUTTER
-IIYI- STA 13+30.240

NOTE:
(1) SEE SHEET 17 FOR -IIYI- PROFILE

30-SEP-2004 15:52

RIGHT OF WAY REVISION 9/2/04

8/17/93

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	5
R/W SHEET NO.	5,6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC 5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

BEGIN TIP PROJECT R-2552AA -FLYLEREV- STA. 35+14.173
(R/W & CONST.)

NAD 83

123.09 COR TO COR S07°03'23"W

19.482 COR TO COR S60°28'31"E

420m FULL LANE

90m TAPER

EVA M. WALTERS
DB 1522 PG.306

1

-YI- +80.000 =
-IIYI- +80.000
50.000m
(164.04')

0.6 m LATERAL GRASS SWALE
SEE DETAIL B

-YI- +10.000 =
-IIYI- +10.000
52.000m
(170.60')

-IIYI- Sta. 14+32.772 =
BYI-102 8+80.133
Offset 1.432 RT

-YI- +40.000 =
-IIYI- +40.000
49.000m (160.76'),
EX. R\W

THOMAS H. PENNY
DB 1493 PG 232

2

RETAIN EXISTING DITCH AND RIP-RAP PAD

+40.000 - END WOVEN WIRE FENCE - TIE TO EXIST.

CL "B" RIP-RAP
EST. 2.7 MTNS
FILTER FABRIC
EST. 8.4 SM

END EXPRESSWAY GUTTER
-IIYI- STA 15+51.190

GEORGE J. PENNY, ET UX
DB 2168 PG.272

3

-YI- +90.000
42.310m
(138.81')
BEGIN WOVEN WIRE FENCE - TIE TO EXIST.

70.104 COR TO COR S44°59'23"W

-YI- +00.000 =
-IIYI- +00.000
43.564m
(142.93')

15.882 COR TO COR S27°03'23"W

PROP. R/W
1st TAKING

EXISTING R/W

1550 mm WW & ISBW

RIPRAP

COLLAR & EXT., 450mm

GRAU-350 9:1

450mm CONC

CABLE GUIDERAIL -WB-

CABLE GUIDERAIL -IIYI-

RETAIN

14+00 15+00 16+00 17+00

S 3° 18' 61.3" W

-EB-

END EXPRESSWAY GUTTER
-IIYI- STA 14+69.305

450mm CONC PLUG

REMOVE

450mm MTL

CAT-I

RETAIN DITCH

REMOVE HDWL

2GI TYPE A

CONC BERM

1-40 EBL 7.3 CONC

1-40 WBL 7.4 CONC

35+00

400mm CSP W/ELBOW

22.5m INC.

STD. BERM DITCH

BDO

-IIYI- Sta. 16+96.298 =
BYI-103 11+43.659
Offset 1.458 RT

REMOVE EXISTING CONTROL ACCESS FENCE

-YI- +33.144 =
-IIYI- +33.144
42.739m

CLASS "B" RIP-RAP
EST. 4.5 TONS
FILTER FABRIC
EST.11.7 SM

1.5m LATERAL BASE DITCH
SEE DETAIL P
CLASS "B" RIP-RAP
EST. 64 TONS
/FILTER FABRIC
EST.160 SM

-YI- +00.000 =
-IIYI- +00.000
50.000m
(164.04')

COLLAR AND EXT. 1650mm CSP W/HDWL
EVA M. WALTERS
DB 1522 PG.306

1

THOMAS H. PENNY
DB 1493 PG 232
DB 1056 PG 647

2

-YI- +55.064 =
-IIYI- +55.064
45.737m

-YI- +00.000 =
-IIYI- +00.000
55.000m
(180.45')

-YI- +14.173

TRAFFIC DIAGRAM
2004 ADT
2025 ADT
in Thousands
CLAYTON BYPASS
I-40
I-40

-FLYLEREV-
PIs Sta. 34+54.180
Δs = 2°56'47.9"
Ls = 90.000
LT = 60.008
ST = 30.008

-FLYLEREV- STSta. 35+14.173 =
-IIYI- POTSta. 16+68.075 (17.9m RT.)

NOTE:
(1) SEE SHEET 18 FOR -IIYI- PROFILE
(2) SEE SHEET 30 FOR -FLYLEREV- PROFILE

MATCHLINE TO SHEET 4 -IIYI- STA. 13+60.000

MATCHLINE TO SHEET 6 -IIYI- STA. 17+20.000

10-SEP-2004 15:52

REVISIONS
RIGHT OF WAY REVISION 9/3/04

TRAFFIC DIAGRAM
2005 ADT
2025 ADT
K = 0.09
CLAYTON BYPASS
406 287
336 346
30 77
1-40 1469 2198
1-40 692 907

METRIC
PROJECT REFERENCE NO. B-3182A
F.A. PROJ. NO. STATE PROJECT NO. 8.17.9
SHEET NO. 6
TOTAL SHEETS 7
PRELIMINARY PLANS
NOT FOR CONSTRUCTION PURPOSES
CONSTRUCTION
R/W REVISIONS

MATCHLINE TO SHEET 5 -DTV- STA 24+20.000

MATCHLINE TO SHEET 7 -DTV- STA 24+40.000

MATCHLINE TO SHEET 7 -YRSV- STA 12+00.000

NOTES:
(5) SEE SHEETS 29 & 30 FOR -DTV- PROFILE
(6) SEE SHEET 48 FOR -Y2- PROFILE
(7) SEE SHEETS 30 & 31 FOR -FLYLWREV- PROFILE
(34) SEE SHEET 34 FOR -LT8- PROFILE
(35) SEE SHEET 32 FOR -FLYLWREV- PROFILE
(36) SEE SHEET 36 FOR -YREV- PROFILE
SEE GRADE SECTIONS AND ROADWAY STANDARD DRAWINGS FOR GRADING, SHOULDER AND DITCH DETAILS
(#) REMOVE STONE ONLY AND RESEED

(9) 600 mm RCP PIPE ON -Y3- BRIDGE 13 STRUCTURE
PAY ITEM

LOCATION:
TIP NO. COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

RIGHT OF WAY REVISION 9/2/04

9/17/99

METRIC

5 0 10

CONST.REV.

R /W REV.

PROJECT REFERENCE NO.	SHEET NO.
R2552AA	6-A
R /W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NAD 83

MARY POWELL WARD WHITE, ET AL
DB 3244 PG.4
7

-YREV- +28.000
21.000m (68.90'),
15.000m (49.21')

-YREV- +24.328
15.000m
(49.21')

CLASS "I" RIP-RAP
EST. 11.8 MTNS
FILTER FABRIC
EST. 26.1 SM

TOE PROTECTION
CLASS B RIPRAP
EST. 40 MTNS
FILTER FABRIC
EST. 82 SM
~~SEE DETAIL E~~

-YREV- +35.000
21.000m (68.90'),
15.000m (49.21')

-YREV- +22.398
15.000m
(49.21')

MATCHLINE TO SHEET 6
-YREV- STA. 12+80.000

MATCHLINE TO SHEET 6B
-YREV- STA. 16+00.000

13+00

14+00

15+00

-YREV-

S 22° 25' 32.7" W

S 34° 06' 21.9" W

NOTE: PIPE BURIED 0.20m

HDWL

-YREV- +22.398
15.000m
(49.21')

-YREV- PCSta. 14+22.398

-YREV- +24.328
15.000m
(49.21')

-YREV- PTSta. 15+24.328

MARY POWELL WARD WHITE, ET AL
DB 3244 PG.4
7

-YREV-
PI Sta 14+73.540
Δ = 11° 40' 49.2" (RT)
L = 101.930
T = 51.142
R = 500.000
S.E. = 0.03

NOTE:
(1) SEE SHEETS 38 & 39 FOR -YREV- PROFILE

20-SEP-2004 8:53

RIGHT OF WAY REVISION 9/2/04

6/17/93

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R2552AA	6-B
	R/W SHEET NO.	
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R/W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

NAD 83

MATCHLINE TO SHEET 64 -YREV- STA. 16+00.000

MARY POWELL WARD WHITE, ET AL
DB 3244 PG.4
7

S 34°06'21.9"W

17+00

-YREV-

-YREV- ON PL
15.000m
(49.21')

-YREV- POTSta. 17+75.354

-YREV- +60.000
15.000m
(49.21')

-YREV- PAST PL
5.000m
(16.40')

73.597 COR
S65°25'

65.142 COR TO COR
S58°45'01"E

B. T. HENDERSON II, ET AL
DB 737 PG 235
DB 2094 PG 611
DB 2098 PG 208
PB 1972 PG 283
8

-YREV- +60.000
15.000m
(49.21')

-YREV- ON PL
15.000m
(49.21')

-YREV- PAST PL
5.000m
(16.40')

MARY POWELL WARD WHITE, ET AL
DB 3244 PG.4
7

73.559 COR TO COR
S60°37'56"E

20R

NOTE:
(1) SEE SHEET 39 FOR -YREV- PROFILE

30-SEP-2004 15:53

REVISIONS

RIGHT OF WAY REVISION 9-2-04

PROJECT REFERENCE NO. R-2552A
F.A.P. SHEET NO.
ROADWAY DESIGN ENGINEER
SHEET NO. 13 TOTAL SHEETS
HYDRAULICS ENGINEER

METRIC

CONSTRUCTION

R/W REVISIONS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

TRAFFIC DIAGRAM

2005 ADT
2025 ADT
X SHADOW

CLAYTON BYPASS

606
357

586
346

36
71

I-40

I-40

2005
1560

2025
1617

NOTE:
(1) SEE SHEETS 21 & 22 FOR -JJY1- PROFILE
(2) SEE SHEET 22 FOR -FLYLWREY- PROFILE
(3) SEE SHEETS 33 & 34 FOR -LFB- PROFILE
(4) SEE SHEETS 28 & 29 FOR -FLYLEREY- PROFILE
(5) SEE CROSS SECTIONS AND ROADWAY STANDARD DRAWINGS FOR NCDOT TYPE I SPECIAL VERGE GRADING
(6) REMOVE STONE ONLY AND DISPOSE
(7) 609 mm [24] STOP OR -FLYLEREY- BRIDGE IS STRUCTURE KEY ITEM

MATCHLINE TO SHEET 6 -JJY- STA 24+40.000

MATCHLINE TO SHEET 8 -JJY- STA 21+40.000

MATCHLINE TO SHEET 14 -JJY- STA 29+50.000

MATCHLINE TO SHEET 14

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:

MATCHLINE TO SHEET 8-A

MATCHLINE TO SHEET 7-LPR STA 17+98.000

MATCHLINE TO SHEET 9 -RPD- STA 13+98.000

MATCHLINE TO SHEET 15-A

MATCHLINE TO SHEET 9 -FLYLWREV- STA 12+52.274

WAKE COUNTY
JOHNSTON COUNTY

CLAYTON BYPASS

CLAYTON ROAD
FORMERLY,
FRANCIS E. GOSNEY
DB 364 PG.130
PB 35 PG.205

DANIEL Y. ROBINSON
DB 4004 PG.483

TRAFFIC DIAGRAM

2-40

2004 ADT
2025 ADT
4 GARAGES

CLAYTON BYPASS

2-40

NOTE:
(1) SEE SHEETS 21 & 26 FOR -FLYLWREV- PROFILE
(2) SEE SHEET 23 FOR -LPR- PROFILE
(3) SEE SHEET 21 FOR -FLYLWREV- PROFILE
(4) SEE SHEET 25 FOR -RPD- PROFILE

-FLYLWREV- +80.000
45.000m
(147.64')

-FLYLWREV- +40.000
91.000m
(298.82')

-FLYLWREV- +76.492
176.000m
(577.43')

-FLYLWREV- +27.425
168.428m
(526.44')

-FLYLWREV- +88.596
R/W

-FLYLWREV- +61.572
173.546m
(577.36')

-FLYLWREV- +58.790
R/W

-FLYLWREV- +88.600
45.000m
(147.64')

-FLYLWREV- STA 19+88.000

-FLYLWREV- STA 17+30.340

-FLYLWREV- STA 15+48.160

-FLYLWREV- +46.467
56.000m
(364.84')

-RPD- +98.000
43.000m
(141.44')

-RPD- SCSta. 11+86.000

-RPD- SCSta. 14+14.165

-RPD- SCSta. 16+98.000

-RPD- +98.000
43.000m
(141.44')

-FLYLWREV- SCSta. 15+48.160

-FLYLWREV- SCSta. 19+46.467

-LPR- SCSta. 17+98.000

154m TRANSITION

STD. SWALE DITCH

STD. SWALE DITCH

CABLE GUIDERAIL

BRIDGE GUIDERAIL
STA. 19+31.000

CABLE GUIDERAIL

CROSS PIPE SCHEDULE
SEE DETAIL V

CHANNEL OUTLET PROTECTION
CLASS I RIPRAP
PIPE BUNDLE - 30m
SEE DETAIL H

TOE PROTECTION
CLASS "B" RIPRAP
WT. 50 LB/SY
FILTER FABRIC
SEE DETAIL I

RIGHT OF WAY REVISION 9/21/01

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

PROJECT REFERENCE NO. R-3329AA
SHEET NO. 8
F.A. PROJECT NO. (CLAYTON)
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
CONSTRUCTION ENGINEER
R/W BRANCH

LOCATION:
TIP NO.
COUNTY:
DESIGNED BY:
DATE:
CHECKED BY:
DATE:

RIGHT OF WAY REVISION 9/2/04

8/17/99

METRIC

5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	8-A
R /W SHEET NO.	14,26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

NAD 83

WAKE COUNTY
JOHNSTON COUNTY

-FLYLWREV- +28.533
239.138m
(784.57')

-FLYLWREV- +29.442
379.947m
(1246.55')

-FLYLWREV- +76.91
407.894m
(1338.24')

-FLYLWREV- +63.897
PL

-FLYLWREV- PL
PL

-FLYLWREV- +93.243
PL

-FLYLWREV- +77.715
358.753m
(1177.01')

MATCHLINE TO SHEET 8

MATCHLINE TO SHEET 9A

9
J. PEELE JOHNSON, HEIRS
C/O GLENN NIXON, EXEC.
DB 630 PG.592

9
J. PEELE JOHNSON, HEIRS
C/O GLENN NIXON, EXEC.
DB 630 PG.592

130.697 EIP TO CGR
N22°21'11"W

ROBERT A. BRYAN, ET UX
DB 2110 PG 627
35

1000 min 458M

903
NCDOT
FORMERLY:
FRANCIS E. SOROKO
DB 954 PG.39
PB 25 PG.205

60.960 CGR TO EIP
S77°07'44"E

DANIEL Y. ROBINSON
DB 1004 PG.153
13

305.42 EIP TO EIP
S02°21'11"E

EIP

EIP

EIP

EIP

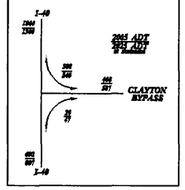
20-SEP-2004 8:53

REVISIONS
RIGHT OF WAY REVISION 9/2/04

METRIC	PROJECT REFERENCE NO.	SHEET NO.
	R-2633A	9
	F.A.P. SHEET NO.	TOTAL SHEETS
		13
CONST.DIV.	RESIDENT ENGINEER	PROJECT ENGINEER
R / W DIV.		

PRELIMINARY PLANS
NO FULL TIME R/W CONSTRUCTION

TRAFFIC DIAGRAM



MATCHLINE TO SHEET 9-A

MATCHLINE TO SHEET 9-B

MATCHLINE TO SHEET 9-C

MATCHLINE TO SHEET 9-C

MATCHLINE TO SHEET 9-C

MATCHLINE TO SHEET 154

-FLYLWREV- Pt Sta 0+00.000 PI Sta 0+29.719 Δ= 34°39'00.0" (RT) D= 5.73° D Arc= 60.000 R= 1000.000 T= 30.000 L= 59.379 SE= .06

-FLYLWREV- Pt Sta 0+00.000 PI Sta 0+44.858 Δ= 74°46'00.0" (RT) D= 5.73° D Arc= 60.000 R= 1000.000 T= 45.000 L= 78.263 SE= .025

-FLYLS- Pt Sta 0+00.000 PI Sta 0+44.858 Δ= 74°46'00.0" (LT) D= 5.73° D Arc= 60.000 R= 1000.000 T= 45.000 L= 78.263

-FLYLWREV- +99.000 43.000m (141.08')

-FLYLWREV- +99.000 30.000m (98.43')

-FLYLWREV- +99.000 30.000m (98.43')

-FLYLWREV- +99.000 30.000m (98.43')

-FLYLWREV- +99.000 30.000m (98.43')

-LREV- +94.631 65.000m (213.32')

-LREV- +99.000 35.000m (114.83')

-LREV- +99.009 35.000m (114.83')

-L- +34.000 234.000m (764.37')

-L- +35.000 242.000m (793.96')

-FLYLWREV- STAm 11 + 94.631 to -FLYLWREV- STAm 12 + 00.000 (14.1m LT.)

-FLYLWREV- STAm 12 + 00.000 (14.1m RT.)

-FLYLWREV- POTSm 11 + 94.631 to

-FLYLWREV- SCSm 12 + 94.000

-FLYLWREV- SCSm 12 + 94.000

-FLYLWREV- SCSm 12 + 00.000

-FLYLWREV- SCSm 12 + 00.000

-FLYLWREV- SCSm 12 + 00

RIGHT OF WAY REVISION 9/2004

9/17/99

MATCHLINE TO SHEET 8A

METRIC

5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	9-A
R/W SHEET NO.	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

NAD 83

ROBERT A. BRYAN, ET UX
DB 2110 PG 627
35

-FLYLWREV- +73.687
347.118m
(1138.84')

-FLYLWREV- +58.815
PL

ROBERT A. BRYAN, ET UX
DB 2110 PG 627
35

MBSP 1985-5/16X 577.351 EIP TO EIP

1000 mm 4SBW

-FLYLWREV- Sta. 11+18.224 =
BY3-324 29+45.713
Offset 311.086 RT

13
DANIEL Y. ROBINSON
DB 1004 PG.153

13
DANIEL Y. ROBINSON
DB 1004 PG.153

EZ 2
EZ 1
EZ 2
EZ 1
EZ 2
178
EZ 2

-FLYLWREV- Sta. 12+54.913 =
BY3-325 30+77.570
Offset 224.917 RT

14
GERALD W. COCHRAN, ET UX
DB 813 PG.698

MATCHLINE TO SHEET 9B

MATCHLINE TO SHEET 9

30-SEP-2004 15:53
R:\proj\2552aa\roadway\sheets\9a.ai

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	9-B
	R/W SHEET NO.	26,28
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R/W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

RIGHT OF WAY REVISION 9/2/04

8/17/99

-LREV- Sta. 11+44.518 =
BY3-323 27+83.423
Offset 417.000 LT

1000 mm 45SW

-L- +50.000
PL

-L- +47.006
379.344m
(1244.57')

-L- +37.000
348.000m
(1141.73')

NAD 83

(13)
DANIEL Y. ROBINSON
DB 1004 PG.153

686.01EP TO COR
S56°45'43"W

-L- +46.000
260.000m
(853.02')

(14)
GERALD W. COCHRAN, ET UX
DB 813 PG.698

-L- +89.000
187.000m
(613.52')

620.37TO COR
S56°45'43"W

NCDOT
FORMERLY:
DAVID C. HINTON, ET UX
DB 809 PG.696

(901)

MATCHLINE TO SHEET 9A

MATCHLINE TO SHEET 9

S39°59'12"E
45.682 EIP TO EIP

S37°39'16"E
15.240 COR TO EIP

S17°17'12"E
45.140 COR TO COR

S64°48'43"W
34.900 COR TO

DOUGLAS ALLEN, ET UX
DB 580 PG.616
DB 801 PG.756

900 mm 35BW

S41°10'08"E
34.154 EIP TO COR

S64°48'43"W
18.189 EIP TO COR

S05°53'17"E
45.140 COR TO

(28)
WILLIS C. UMSTEAD
LAND BOOK 6 PG.291
DB 749 PG.11

MATCHLINE TO SHEET 10

30-SEP-2004 15:54
C:\Projects\2552AA\Design\Roadway\Plans\2552AA_RW_Plan_Sheet_9.dgn

REVISIONS
RIGHT OF WAY REVISION 9/21/04

MATCHLINE TO SHEET 9

MATCHLINE TO SHEET 9

MATCHLINE TO SHEET 9

MATCHLINE TO SHEET 15-A

MATCHLINE TO SHEET 15-A

NAD 83

NOTES
(1) SEE SHEET 43 FOR -SRD-/- PROFILE

METRIC

PROJECT NUMBERING NO. | SHEET NO.
R-5821A | 8-C
R/W SHEET NO. | 17
ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

CONTR.ID#:
R/W BRY.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

LOCATION:
TIP NO.: | COUNTY:
DESIGNED BY: | DATE:
CHECKED BY: | DATE:

REVISIONS

RIGHT OF WAY REVISION 3/21/04

METRIC

PROJECT REFERENCE NO. 8-259414

F.A.P. SHEET NO.

SHEET NO. 10

STATE HIGHWAY ENGINEER

HIGHWAYS ENGINEER

CONST.ENG.

R/W ENG.

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

MATCHLINE TO SHEET 9 -LREV- STA. 13+00.000

MATCHLINE TO SHEET 11 -L- STA. 19+40.000

MATCHLINE TO SHEET 9-B

-LREV- PTSta. 18+99.765 BK =
-L- PTSta. 18+99.765 AH

NOTE:
(1) SEE SHEETS 36 & 37 FOR -LREV- PROFILE
(2) SEE SHEET 37 FOR -L- PROFILE
(3) SEE 40 FOR -Y2B- PROFILE
(4) SEE CROSS-SECTIONS AND ROADWAY STANDARD DRAWINGS, STD. NO. 862.01, SHEET 2 FOR SPECIAL MEDIAN GRADING

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:

REVISIONS

RIGHT OF WAY REVISION 9/21/04

METRIC

PROJECT REFERENCE NO. | SHEET NO.

R-3601AA | 1

F.A. RTE. | SHEET NO. | TOTAL SHEETS

SECONDARY DIVISION ENGINEER | PRODUCTION ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION, BIDDING OR RECORDING

CONST. SEN.

R/W SEN.

MATCHLINE TO SHEET 10 -L- STA. 12+40.000

MATCHLINE TO SHEET 12 -L- STA. 26+20.000

NAD 83

WILLIS C. WHITEAD
LAND BOOK 6 PG.29
DB 149 PG.5

JERRY L. WILSON, ET UX
DB 1033 PG.192

CHARLES PEELER, ET UX
DB 996 PG.300
PG 26 PG.298

CABLE GUIDERAIL

S 85°08'54" E

NOTE:
(1) SEE SHEETS 37 & 38 FOR -L- PROFILE
(2) SEE SHEETS 40 & 41 FOR -Y2B- PROFILE
(3) SEE SHEET 39 FOR -DR2- PROFILE
(4) SEE CROSS SECTIONS AND ROADWAY STANDARD DRAWINGS FOR ADDITIONAL DETAILS FOR SPECIAL BORROW GRADING

-Y2B-
PI Sta. 14+00.000
Δ = 9° 53' 53.5" (RT)
D = 4.775°
T = 77.672
L = 154.958
R = 359.658

-Y2B-
PI Sta. 17+77.592
Δ = 9° 53' 53.5" (RT)
D = 2.865°
T = 46.615
L = 92.966
R = 599.000
SE = 0%
RA = 42

PI Sta. 17+77.592
Δ = 9° 53' 53.5" (LT)
D = 2.865°
T = 46.615
L = 92.966
R = 599.000
SE = 0%
RA = 42

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

METRIC

PROJECT REFERENCE NO. R-2552AA
SHEET NO. 11
TOTAL SHEETS 63
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST.ENV.
R/W ENV.

MATCHLINE TO SHEET 11 -L- STA. 26+28.000

MATCHLINE TO SHEET 13 -L- STA. 31+10.000

BEGIN CONSTRUCTION
-V4- STA. 12+58.000

-V4- +58.000
8.550m
(28.048')

-V4- +88.000
28.000m
(91.863')

-V4- +85.000
28.000m
(91.863')

-V4DET- PRCSta. 11+88.431

GRADE TO DRAIN

WILLIE C. WHITEHEAD
LAND BOOK 6 PG.251
DB 748 PG.?
32

-L- +85.000
7.500m
(24.607')

-L- +55.000
7.500m
(24.607')

-L- +27.000
7.500m
(24.607')

-L- +78.000
7.500m
(255.907')

-L- +48.000
7.500m
(157.480')

-L- +20.000
7.500m
(65.617')

-V4- +65.000
28.000m
(91.863')

-L- +23.000
17.500m
(57.415')

-V4DET- PTSta. 11+76.951

-L- +85.000
16.500m
(54.134')

-L- +85.000
7.500m
(24.607')

END SHOULDER BERM
BUTTER -L- STA. 26+19.760

3.0m RIPRAP GRADE SWALE
SEE DETAIL G

END WOVEN WIRE FENCE
TIE TO BRIDGE

END GUIDERAIL
STA. 26+84.947

-L- CONC. SLOPE PROTECTION
SEE DETAIL

S 5°23'50.0" W

BEGIN WOVEN WIRE FENCE
TIE TO BRIDGE

-L- +85.000
28.000m
(91.863')

END WOVEN WIRE FENCE

-V4DET- PCSta. 12+41.111

-V4- +90.000
28.000m
(91.863')

+36.694

END WOVEN WIRE FENCE
TIE TO BRIDGE

WILLIE C. WHITEHEAD
LAND BOOK 6 PG.251
DB 748 PG.?
32

-L- +85.000
7.500m
(24.607')

END BENTBENT
-V4- STA. 14+00.000

END APPROACH SLAB
-V4- STA. 14+17.500

-V4DET- PRCSta. 13+20.000

-V4- +85.000
75.000m
(82.347')

-V4- +85.000
11.000m
(49.217')

R=1450

N 79°39'32.8" E
79+00

-V4- +80.000
28.000m
(91.863')

-V4- +80.000
8.500m
(29.397')

-V4- POTSta. 14+11.121
-Y2B- POTSta. 13+11.772

-Y2B- +36.000
PI.

-Y2B- +48.000
53.700m
(186.657')

-Y2B- PTSta. 13+85.385

-Y2B- PTSta. 13+20.117
-V4- POTSta. 14+18.898

-Y2B- R/W
42.365m
(148.39')

-Y4DET- PTSta. 14+18.364

END CONSTRUCTION
-V4- STA. 14+50.000

WILLIE C. MEANS
DB 674 PG.566
33

JANE A. CUNNINGHAM
DB 537 PG.430
34

-L- STA. 26+28.000 =
-L- STA. 31+10.000
Offset 5.000 RT

-L- +15.000
167.000m
(228.347')

-L- +76.000
28.000m
(91.863')

-L- +85.000
61.000m
(200.131')

-L- +34.000
42.000m
(137.795')

-L- +18.000
42.000m
(137.795')

-L- +85.000
42.000m
(137.795')

-L- +85.000
42.000m
(137.795')

-L- +28.000
10.500m
(34.449')

-L- +65.000
47.000m
(154.199')
71.000m
(232.940')

-L- +65.000
47.000m
(154.199')
71.000m
(232.940')

-L- +60.000
47.000m
(154.199')

-L- +88.000
42.000m
(137.795')

-L- +88.000
42.000m
(137.795')

-L- +55.000
42.000m
(137.795')

-L- +18.000
47.000m
(154.199')

-L- +55.000
42.000m
(137.795')

-L- +28.000
42.000m
(137.795')

-L- +25.000
42.000m
(137.795')

-L- STA. 31+10.000 =
-L- STA. 26+28.000
Offset 5.000 RT

TCE TO REMAIN IN FORCE THROUGH R-2552AA AND R-2552AB

TO BE CONSTRUCTED UNDER R-2552AB

TO BE CONSTRUCTED UNDER R-2552AB

S 85°03'54.8" E

NAD 83

-Y2B-
PI Sta. 13+11.772
Δ = 5°56'20.8" (LT)
D = 5.00°
L = 207.000
R = 1145.900
Tangent = 103.667
SE = 0.05
RC = 573

-Y4DET-
PI Sta. 12+41.111 | PI Sta. 13+11.772 | PI Sta. 13+85.385 | PI Sta. 13+20.117
Δ = 56°16'33.5" (RT) | Δ = 56°16'33.5" (LT) | Δ = 56°16'33.5" (LT) | Δ = 56°16'33.5" (RT)
D = 22.92° | D = 22.92° | D = 22.92° | D = 22.92°
L = 245.500 | L = 245.500 | L = 245.500 | L = 245.500
R = 250.000 | R = 250.000 | R = 250.000 | R = 250.000

NOTE:
(1) SEE SHEET 36 FOR -L- PROFILE
(2) SEE SHEET 42 FOR -V4- PROFILE
(3) SEE SHEET 41 FOR -Y2B- PROFILE
(4) SEE SHEETS 3-E & 3-I FOR -Y4DET- PLAN
(5) FOR CROSS SECTIONS AND ROADWAY TEMPORARY DRAINAGE, SEE THE SHEET 7 FOR SPECIAL MEDIAN GRADING

LOCATION:
TIP NO.: COUNTY:
DESIGNED BY: DATE:
CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/29/04

METRIC

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	11
T.I.P. SHEET NO.	TOTAL SHEETS
39.11.22	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST.REV.
R/W REV.

PI Sta 38+04.83
Δ = 90°44'37.5" (RT)
D = 30.00°
T = 29.40
R = 190.986

END TIP PROJECT R-2552AA -L- STA. 39+50.000 (CONST.)

-L- PC Sta 34+22.173 BK =
-L- PC Sta 34+23.993 AH

MATCHLINE TO SHEET 12 -L- STA. 33+10.000

TO BE CONSTRUCTED UNDER R-2552AB

TO BE CONSTRUCTED UNDER R-2552AB

S 85°03'54.8" E

WILLIE C. REAMS
DB 674 PG. 665
33

WILLIE C. REAMS
DB 674 PG. 666
33

WILLIE C. REAMS
DB 674 PG. 505
33

JAMIE A. CUMMINGS
DB 532 PG. 430
34

JAMIE A. CUMMINGS
DB 531 PG. 430
34

WILLIE A. REAMS
DB 668 PG. 76
33

-L- +22.173
45.000m
(147.64')

-L- +55.000
45.000m
(147.64')
60.000m
(196.85')

-L- +76.999
45.000m
(147.64')
60.000m
(196.85')

-L- +98.999
45.000m
(147.64')
63.000m
(206.69')

-L- +53.000
45.000m
(147.64')
63.000m
(206.69')

-L- +65.000
45.000m
(147.64')

-L- +60.000
45.000m
(147.64')

-L- PT
45.000m
(147.64')

-L- PT
45.000m
(147.64')

FDE

34+00

35+00

36+00

37+00

38+00

39+00

END TIP PROJECT R-2552AA -L- STA. 39+89.046 (R/W)

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/3/04

METRIC	PROJECT REFERENCE NO.	SHEET NO.
	R-2554A	14
	F.A. PROJ. NO.	TOTAL SHEETS
	STATE PROJECT NO.	
CONST ENGR.	R/W ENGINEER	UTILITIES ENGINEER
R/W ENGR.	PRELIMINARY PLANS	
	NOT FOR CONSTRUCTION	

MATCHLINE TO SHEET 15-A

MATCHLINE TO SHEET 15-A -SYL- STA. 36+74.000

MATCHLINE TO SHEET 7 -SYL- STA. 29+38.000

MATCHLINE TO SHEET 7

MATCHLINE TO SHEET 14-A

TRAFFIC DIAGRAM

2005 ADT
2025 ADT
D = 2.5%/DH

CLAYTON BYPASS

	406 397		
388 340		35 41	
I-40			I-40
3960 7280			870 397

JOHNSTON COUNTY
WAKE COUNTY

-RPD- CESlope 14+78.452

-SYL- PI Sta 32+49.078 =
-RPD- PI Sta 17+66.033
(77.0m LT.)

-SYL- +65.579
(64.0m)

-SYL- +24.000
(24.0m)

-SYL- +56.000
ON PL

-RPD-
PI Sta 8+46.07
D = 101.97 DEGS (LT)
T = 100.07m
L = 178.27m
R = 56.000

-SYL-
PI Sta 27+42.467
D = 45.00 DEGS (RT)
T = 69.46m
L = 78.54m
R = 100.000

NOTE:
(1) SEE SHEETS 22,23 & 24 FOR -SYL- PROFILE
(2) SEE SHEET 25 FOR -RPD- PROFILE
(3) SEE CROSS-SECTIONS AND ROADWAY EXPLANATION SHEETS FOR DETAILS.
MARKET TYPE SPECIAL MEDIAN GRADING

B. T. HENDERSON & ET AL
DB 737 PG 226
DB 2084 PG 58
DB 2088 PG 208
PB 872 PG 283

Z. EDDIE JOHNSON, HEIRS
C/O W. GLENN KNIGHT, EXEC.
DB 840, PG.282

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	DATE:
CHECKED BY:	DATE:

REVISIONS

RIGHT OF WAY REVISION 9/3/04

METRIC

PROJECT REFERENCE NO. | SHEET NO.
R-2633AA | 17-A
F.A. NO. | SHEET NO.
STATE | 17-A

ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST. DIV.

D / M DIV.

MATCHLINE TO SHEET 14

MATCHLINE TO SHEET 15

JOHNSTON COUNTY
WAKE COUNTY

8
B. T. HENDERSON & ET AL
DB 737 PG 236
DB 2084 PG 66
DB 2088 PG 206
PB 6172 PG 283

-ITV1- +72.669
-ITV1- +51.669
-ITV1- +25.669
-ITV1- +05.396
-ITV1- PT
-ITV1- +72.669

LOCATION:

TIP NO.: COUNTY:

DESIGNED BY: DATE:

CHECKED BY: DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

PROJECT REFERENCE NO.	SHEET NO.
R-3329AA	14
F.A.P. SHEET NO.	TOTAL SHEETS
ESTIMATING ENGINEER	MAINTENANCE ENGINEER
PRELIMINARY PLANS NOT FOR CONSTRUCTION	
CONSTR. ENGR.	
R/W ENGR.	

MATCHLINE TO SHEET 14-A

-ITY1- +74.000
30.480m
(74.139')

-ITY1- +44.000
30.480m
(144.84')

-ITY1- +29.494
30.663m

-ITY1- +15.000
42.926m
(137.167')

-ITY1- +74.000
(43.307')

-ITY1- +29.000
(283.47')

-Y1- +46.000
(151.72')

B
B. T. HENDERSON & ET AL
DB 737 PG 235
DB 2084 PG 86
DB 2088 PG 208
PB 8912 PG 283

450m FULL LANE

90m TAPER

REMOVE EXISTING CONTROL ACCESS FENCE

0.6m LATERAL GRADE SWALE SEE DETAIL 5

REMOVE 305 AND COLLAR /EOT.

CABLE GUIDERAIL

-WB-

-RB-

-ITY1-

S 3°49'53"W

97+00

98+00

99+00

41+00

42+00

42+86

MATCHLINE TO SHEET 14-A -ITY1- STA 36+18.000

MATCHLINE TO SHEET 16 -ITY1- STA 42+40.000

NOTE:
(1) SEE SHEETS 23,24 & 25 FOR -ITY1- PROFILE

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	DATE:
CHECKED BY:	DATE:

REVISIONS
RIGHT OF WAY REVISION 9/2/04

PROJECT REFERENCE NO.	SHEET NO.
R-2607AA	9C
I/M SHEET NO.	TOTAL SHEETS
1(44)97	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

CONST. ENV.

R/W ENV.

MATCHLINE TO SHEET 9

MATCHLINE TO SHEET 9C

MATCHLINE TO SHEET 9C

MATCHLINE TO SHEET 8

MATCHLINE TO SHEET 14

MATCHLINE TO SHEET 15

(9) J. PEELE JOHNSON, HEIRS C/O GLENN HOWE, EXEC. DB 630 PG.526

(37) OTHA JONES DB 900 PG.364 PB 5 PG.9 PB 23 PG.83

C. P. TROTTER, ET AL DB 926 PG.633 PB 5 PG.9 PB 23 PG.83 (12)

(11) MARIE G. JOHNSON, ET VIR DB 1071 PG.409 PB 5 PG.9

(10) CHARLIE JOHNSON DB 1076 PG.622 PB 5 PG.9

(6) B. T. HENDERSON & ET AL DB 737 PG. 256 DB 2004 PG 86 DB 2005 PG 256 PB 5072 PG 283

-TY1- +/- 31.000 330.000m (824.27')

-TY1- +/- 79.999 265.000m (869.42')

-TY1- +/- 75.000 257.000m (953.87')

-TY1- +/- 15.000 261.000m (902.76')

LOCATION:	
TIP NO.:	COUNTY:
DESIGNED BY:	DATE:
CHECKED BY:	DATE:

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	16
	R/W SHEET NO.	13
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R/W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

RIGHT OF WAY REVISION 9/2/04

8/17/99

MATCHLINE TO SHEET 15 -IIYI- STA. 42+40.000

END CONSTRUCTION
-IIYI- POT STA. 43+95.000

NAD 83

N02°04'08"E
80.294 COR TO COR

46.181 COR TO COR
N78°23'31"E

8
B. T. HENDERSON II, ET AL
DB 737 PG 235
DB 2094 PG 611
DB 2098 PG 208
PB 1972 PG 283

-IIYI- +80.000
50.000m
(164.04')

-IIYI- +95.000
EX. R/W
END WOVEN WIRE FENCE

140-42 ASSOCIATES
DB 1083 PG 728

64.748 COR TO COR
S53°35'57"W

13.774 COR TO COR
S16°49'05"W

73.179 COR TO COR
S29°59'32"E

38.143 COR TO COR
S05°24'39"W

8
B. T. HENDERSON II, ET AL
DB 737 PG 235
DB 2094 PG 611
DB 2098 PG 208
PB 1972 PG 283

34.892 COR TO COR
N08°19'38"W

SWIFT CREEK

EXISTING R/W

1550 mm WW & ISBW

RIPRAP

MTL

BZ 1
BZ 2

30 CONC

1500mm CONC

I-40 WBL 7.3 CONC

I-40 EBL 7.3 CONC

12 CONC

6.1m

43+00

44+00

45+00

-IIYI-

-WB-

-EB-

S 3°18'51.3"W

END GUIDERAIL
STA. 43+52.325

-IIYI- Sta. 44+01.394 =
BYI-13 38+48.797
Offset 1.356 RT

8
B. T. HENDERSON II, ET AL
DB 737 PG 235
DB 2094 PG 611
DB 2098 PG 208
PB 1972 PG 283

8
B. T. HENDERSON II, ET AL
DB 737 PG 235
DB 2094 PG 611
DB 2098 PG 208
PB 1972 PG 283

SWIFT CREEK

186.347
+31.386

87.283
+62.563

S 55°38'47"E
21.382 COR TO COR

48.052 COR TO COR
S38°41'08"W

54.598 COR TO COR
N83°27'37"E

38.362 COR TO COR
S02°00'56"W

19.757 COR TO COR
S22°43'23"E

14.512 COR TO COR
S25°48'19"E

30.276 COR TO COR
S39°17'48"E

87.935
+106.625

SON-LAN DEVELOPMENT CO. INC.
DB 1542 PG 327
PB 48 PG 249

NOTE:
(1) SEE SHEET 26 FOR -IIYI- PROFILE

30-SEP-2004 8:55
R:\Survey\Projects\R2552AA\Design\Sheets\R2552AA_SHEET_16.dgn

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	17
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-I1Y1- (WB)

★BM # BY1-101 EL 81.353
1.590m RT -I1Y1- STA 10+52.639

BEGIN WIDENING
-I1Y1- STA 10+40.000 (WB)

NOTE:
SEE SHEET 4 FOR -I1Y1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

10 +20 +40 +60 +80 11 +20 +40 +60 +80 12 +20 +40 +60 +80 13 +20 +40 +60

-I1Y1- (EB)

★BM # BY1-101 EL 81.353
1.590m RT -I1Y1- STA 10+52.639

BEGIN WIDENING
-I1Y1- STA 10+40.000 (EB)

NOTE:
SEE SHEET 4 FOR -I1Y1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

10 +20 +40 +60 +80 11 +20 +40 +60 +80 12 +20 +40 +60 +80 13 +20 +40 +60

10/25/28

30-SEP-2008 8:55
R:\U-2552AA\Roadway\Design\Plans\Sheets\I1Y1_WB_EB_Sheet.dgn

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — · — · —

RIGHT DITCH - - - - - -

-I1Y1- (WB)

★BM # BY1-102 EL 84.062
1.432m RT -I1Y1- STA 14+32.772

★BM # BY1-103 EL 86.033
1.458m RT -I1Y1- STA 16+96.298

BEGIN LT DITCH GRADE
STA 13+60.000 -I1Y1-
EL. = 76.000

END LT DITCH GRADE
STA 14+20.000 -I1Y1-
EL. = 77.214

76.000

77.200

(+) 2.0833%

NOTE:
SEE SHEET 5 FOR -I1Y1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

96 94 92 90 88 86 84 82 80 78 76 74

-I1Y1- (EB)

★BM # BY1-102 EL 84.062
1.432m RT -I1Y1- STA 14+32.772

★BM # BY1-103 EL 86.033
1.458m RT -I1Y1- STA 16+96.298

BEGIN RT DITCH GRADE
STA 14+05.000 -I1Y1-
EL. = 77.500

77.500

(-) 2.1429%

78.000

END RT DITCH GRADE
STA 14+20.000 -I1Y1-
EL. = 78.000

NOTE:
SEE SHEET 5 FOR -I1Y1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

96 94 92 90 88 86 84 82 80 78 76 74

30-SEP-2004 8:55
jpdavis N:\projects\interchange\I

METRIC

5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

★BM # BY1-104 EL 87.610
2.066m RT -I1Y1- STA 19+51.187

-I1Y1- (WB)

NOTE:
SEE SHEET 6 FOR -I1Y1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

+20 +40 +60 +80 18 +20 +40 +60 +80 19 +20 +40 +60 +80 20 +20 +40 +60 +80

★BM # BY1-104 EL 87.610
2.066m RT -I1Y1- STA 19+51.187

-I1Y1- (EB)

NOTE:
SEE SHEET 6 FOR -I1Y1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

+20 +40 +60 +80 18 +20 +40 +60 +80 19 +20 +40 +60 +80 20 +20 +40 +60 +80

30-SEP-2004 15:55
jmdavis
K:\PROJECTS\2552AA\intermed\I1Y1_WB.dgn

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	20
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — - - — - -

RIGHT DITCH - - - - - - - -

-IIY1- (WB)

★BM # BYI-105 EL 87.038
1.749m RT -IIY1- STA 22+13.014

96 94 92 90 88 86 84 82 80 78 76 74

+80 21 +20 +40 +60 +80 22 +20 +40 +60 +80 23 +20 +40 +60 +80 24 +20 +40

86.00

(-) 1.581%

84.00

BEGIN LT DITCH GRADE
STA 22+81.000 -IIY1-
EL = 85.560

END LT DITCH GRADE
STA 23+13.000 -IIY1-
EL = 85.100

NOTE:
SEE SHEET 6 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-IIY1- (EB)

★BM # BYI-105 EL 87.038
1.749m RT -IIY1- STA 22+13.014

96 94 92 90 88 86 84 82 80 78 76 74

+80 21 +20 +40 +60 +80 22 +20 +40 +60 +80 23 +20 +40 +60 +80 24 +20 +40

86.00

(+) 1.538%

84.00

BEGIN RT DITCH GRADE
STA 21+49.000 -IIY1-
EL = 86.570

END RT DITCH GRADE
STA 23+33.000 -IIY1-
EL = 83.600

NOTE:
SEE SHEET 6 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

10/25/38

30-SEP-2004 15:55
K:\TPD\R\2552AA\intersect.prf

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

CONST.REV.

R /W REV.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEFT DITCH — · — · —

RIGHT DITCH - - - - - -

-I1Y1- (WB)

★BM # R-2552-7 EL 85.746
1.706m LT -I1Y1- STA 24+48.548

★BM # R-2552-8 EL 84.103
1.166m LT -I1Y1- STA 27+40.737

BEGIN LT DITCH GRADE
STA 25+88.000 -I1Y1-
EL = 82.300

END LT DITCH GRADE
STA 26+45.000 -I1Y1-
EL = 82.000

BEGIN LT DITCH GRADE
STA 26+86.009 -I1Y1-
EL = 81.000

END LT DITCH GRADE
STA 27+40.000 -I1Y1-
EL = 83.340

(-) 0.526%

(+) 1.900%

NOTE:
SEE SHEET 7 FOR -I1Y1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-I1Y1- (EB)

★BM # R-2552-7 EL 85.746
1.706m LT -I1Y1- STA 24+48.548

★BM # R-2552-8 EL 84.103
1.166m LT -I1Y1- STA 27+40.737

NOTE:
SEE SHEET 7 FOR -I1Y1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

+40 +60 +80 25 +20 +40 +60 +80 26 +20 +40 +60 +80 27 +20 +40 +60 +80 28

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	22
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

★BM # BY1-108 EL 82.705
1.527m RT -IIY1- STA 29+87.245

-IIY1- (WB)

NOTE:
SEE SHEETS 7 & 14 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

28 +20 +40 +60 +80 29 +20 +40 +60 +80 30 +20 +40 +60 +80 31 +20 +40 +60

★BM # BY1-108 EL 82.705
1.527m RT -IIY1- STA 29+87.245

-IIY1- (EB)

NOTE:
SEE SHEETS 7 & 14 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

96 94 92 90 88 86 84 82 80 78 76 74

28 +20 +40 +60 +80 29 +20 +40 +60 +80 30 +20 +40 +60 +80 31 +20 +40 +60

10/25/2007 11:55:28 AM C:\Documents and Settings\...

10/26/38

★BM # BY1-109 EL 79.456
1.046m RT -IIY1- STA 32+18.799

★BM # BY3-334 EL 76.324
21.365m LT -IIY1- STA 33+53.966

-IIY1- (WB)

LEFT DITCH — - - — - -
RIGHT DITCH - - - - - - - -

METRIC
5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.
R /W REV.

★BM # BY1-110 EL 74.230
1.349m RT -IIY1- STA 34+83.475

BEGIN LT DITCH GRADE
STA 33+72.000 -IIY1-
EL = 74.000

-2.00%

-2.00%

END LT DITCH GRADE
STA 34+00.000 -IIY1-
EL = 73.360

NOTE:
SEE SHEETS 7 & 14 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

88 86 84 82 80 78 76 74 72 70 68 66 64

+60 +80 32 +20 +40 +60 +80 33 +20 +40 +60 +80 34 +20 +40 +60 +80 35 +20

★BM # BY1-109 EL 79.456
1.046m RT -IIY1- STA 32+18.799

★BM # BY3-334 EL 76.324
21.365m LT -IIY1- STA 33+53.966

★BM # BY1-110 EL 74.230
1.349m RT -IIY1- STA 34+83.475

-IIY1- (EB)

NOTE:
SEE SHEETS 7 & 14 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2004 15:55
jpdavis N:\roadway\intermap\[

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

★BM # BY1-111 EL 69.354
1.447m RT -IIY1- STA 37+27.075

-IIY1- (WB)

NOTE:
SEE SHEETS 14 & 15 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

80 78 76 74 72 70 68 66 64 62 60 58 56

+20 +40 +60 +80 36 +20 +40 +60 +80 37 +20 +40 +60 +80 38 +20 +40 +60 +80

★BM # BY1-111 EL 69.354
1.447m RT -IIY1- STA 37+27.075

-IIY1- (EB)

END WIDENING
-IIY1- STA 36+40.000 (EB)

NOTE:
SEE SHEETS 14 & 15 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

80 78 76 74 72 70 68 66 64 62 60 58 56

+20 +40 +60 +80 36 +20 +40 +60 +80 37 +20 +40 +60 +80 38 +20 +40 +60 +80

30-SEP-2004 8:55
jaderris \\Ncdot1\projects\STIP\R-2552AA\interchange\1

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — - - — - -

RIGHT DITCH - - - - - - - -

-IIY1- (WB)

★BM # BY1-112 EL 64.398
1.571m RT -IIY1- STA 39+74.003

BEGIN LT DITCH GRADE
STA 39+68.000 -IIY1-
EL = 69.330

(-) 3.746%

(-) 1.710%

(-) 0.538%

END LT DITCH GRADE
STA 41+38.000 -IIY1-
EL = 60.000

END WIDENING
-IIY1- STA 41+60.000 (WB)

NOTE:
SEE SHEET 15 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

80 78 76 74 72 70 68 66 64 62 60 58 56

+80 39 +20 +40 +60 +80 40 +20 +40 +60 +80 41 +20 +40 +60 +80 42 +20 +40

-IIY1- (EB)

★BM # BY1-112 EL 64.398
1.571m RT -IIY1- STA 39+74.003

NOTE:
SEE SHEET 15 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

80 78 76 74 72 70 68 66 64 62 60 58 56

+80 39 +20 +40 +60 +80 40 +20 +40 +60 +80 41 +20 +40 +60 +80 42 +20 +40

10-26-05
30-SEP-2004 15:55
jpeters

10/26/04

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

★BM # BY1-113 EL 63.367
1.356m RT -IIY1- STA 44+01.394

-IIY1- (WB)

80 78 76 74 72 70 68 66 64 62 60 58 56

+40 +60 +80 43 +20 +40 +60 +80 44

NOTE:
SEE SHEET 16 FOR -IIY1- (WB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # BY1-113 EL 63.367
1.356m RT -IIY1- STA 44+01.394

-IIY1- (EB)

80 78 76 74 72 70 68 66 64 62 60 58 56

+40 +60 +80 43 +20 +40 +60 +80 44

NOTE:
SEE SHEET 16 FOR -IIY1- (EB) ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2004 15:55
jeaves

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

CONST.REV.

R /W REV.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-FLYLEREV-

★BM # BL-711 EL 74.776
28.875m RT -FLYLWREV- STA 10+73.001

★BM # BL-710 EL 74.752
37.627m RT -FLYLWREV- STA 11+24.695

BEGIN GRADE -FLYLEREV-
STA 10+00.000 EL = 71.060

PI = 11+50.000
EL = 71.674 m
VC = 60 m
K = 50

-0.4692%

+1.6162%

NOTE:
SEE SHEET 9 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

88 86 84 82 80 78 76 74 72 70 68 66 64

10 +20 +40 +60 +80 11 +20 +40 +60 +80 12 +20 +40 +60 +80 13 +20 +40 +60

-FLYLEREV-

★BM # BY2-208 EL 81.653
17.086m LT -FLYLEREV- STA 13+93.372

★BM # BY3-328 EL 80.852
37.917m RT -FLYLWREV- STA 14+91.581

★BM # BY3-329 EL 80.458
6.628m LT -FLYLEREV- STA 15+97.156

+1.6162%

NOTE:
SEE SHEET 8 & 9 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

88 86 84 82 80 78 76 74 72 70 68 66 64

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

30-SEP-2004 8:55
jsharris N:\Projects\R2552AA\Design\Interim\sheet.dgn

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	28
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-FLYLEREV-

★BM # BL-703 EL 87.782
73.275m RT -FLYLWREV- STA 19+89.008

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO. 90

DRAINAGE AREA	= 13.35	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 2.88	CMS
DESIGN HW ELEVATION	= 78.32	M
100 YEAR DISCHARGE	= 3.03	CMS
100 YEAR HW ELEVATION	= 78.38	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 8.85	CMS
OVERTOPPING ELEVATION	= 79.00	M

PI = 20+20.000
EL = 85.733 m
VC = 100 m
K = 69

-1.635%
★1.065%
87.575
80.456
1500mm

NOTE:
SEE SHEET 8 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+20 +40 +60 +80 18 +20 +40 +60 +80 19 +20 +40 +60 +80 20 +20 +40 +60 +80

-FLYLEREV-

PI = 23+10.000
EL = 94.633 m
VC = 300 m
K = 49

★BM # R-2552-8 EL 84.103
1.166m LT -IIYI- STA 27+40.737

BEGIN BRIDGE -FLYLEREV- STA 22+02.032

★3.069%
-3.099%
88.456
87.575

NOTE:
SEE SHEETS 7 & 8 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+80 21 +20 +40 +60 +80 22 +20 +40 +60 +80 23 +20 +40 +60 +80 24 +20 +40

98 96 94 92 90 88 86 84 82 80 78 76 74

30-SEP-2004 8:55
K:\TIP\R-2552AA\Intermap\
jroberts

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

LEFT DITCH — — — —

RIGHT DITCH - - - - - - -

-FLYLEREV-

END BRIDGE -FLYLEREV- STA 24+80.000

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 72

DRAINAGE AREA	= 0.58	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.15	CMS
DESIGN HW ELEVATION	= 80.67	M
100 YEAR DISCHARGE	= 0.16	CMS
100 YEAR HW ELEVATION	= 80.68	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 8.85	CMS
OVERTOPPING ELEVATION	= 79.00	M

PI = 27+40.000
EL = 81.307 m
VC = 190 m
K = 46

-1.025%

+1.025%

NOTE:
SEE SHEETS 6 & 7 FOR -FLYLEREV- ALIGNMENT

-FLYLEREV-

★BM # BY1-105 EL 87.038
1.749m RT -1Y1- STA 22+13.014

+1.023%

(+) 4.581%

BEGIN RT DITCH GRADE
STA 28+50.000 -FLYLEREV-
EL. = 79.700

END RT DITCH GRADE
STA 29+00.000 -FLYLEREV-
EL. = 81.600

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 45

DRAINAGE AREA	= 3.92	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.95	CMS
DESIGN HW ELEVATION	= 81.93	M
100 YEAR DISCHARGE	= 1.00	CMS
100 YEAR HW ELEVATION	= 81.96	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 0.94	CMS
OVERTOPPING ELEVATION	= 78.50	M

NOTE:
SEE SHEET 6 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

-FLYLEREV-

★BM # BY1-104 EL 87.610
2.066m RT -11Y1- STA 19+51.187

★BM # BY2-201 EL 94.595
4.790m RT -Y2- STA 11+29.454

PI = 33+00.000
EL = 87.052 m
VC = 75 m
K = 59

PI = 34+58.000
EL = 86.485 m
VC = 110 m
K = 302

★BM # BY1-103 EL 86.033
1.458m RT -11Y1- STA 16+96.298

85.646

+1.1025%

-0.3782%

-0.3782%

-0.7430%

86.008

END GRADE -FLYLEREV-
STA 35+14.173 EL = 86.008

NOTE:
SEE SHEETS 5 & 6 FOR -FLYLEREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-FLYLWREV-

★BM # BL-711 EL 74.776
28.875m RT -FLYLWREV- STA 10+73.001

★BM # BL-710 EL 74.752
37.627m RT -FLYLWREV- STA 11+24.695

BEGIN GRADE -FLYLWREV-
STA 10+00.000 EL = 70.988

PI = 11+50.000
EL = 71.602 m
VC = 60 m
K = 50

70.988

-0.4092%

+1.0150%

76.008

NOTE:
SEE SHEET 9 FOR -FLYLWREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2004 15:55
jpeters
N:\Projects\R-2552AA\Interchange\[

★BM # BY2-208 EL 81.653
17.086m LT -FLYLEREV- STA 13+93.372

★BM # BY3-328 EL 80.852
37.917m RT -FLYLWREV- STA 14+91.581

★BM # BY3-329 EL 80.458
6.628m LT -FLYLEREV- STA 15+97.156

LEFT DITCH — - - — - -

RIGHT DITCH - - - - - - - -

-FLYLWREV-

METRIC

5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	31
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

94 92 90 88 86 84 82 80 78 76 74 72 70

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

BEGIN

+1.616%

END

NOTE:
SEE SHEETS 8 & 9 FOR -FLYLWREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-FLYLWREV-

★BM # BL-703 EL 87.782
73.275m RT -FLYLWREV- STA 19+89.008

BEGIN

+1.616%

END

BEGIN RT DITCH GRADE
STA 19+20.000 -FLYLWREV-
EL. = 82.506

END RT DITCH GRADE
STA 20+34.000 -FLYLWREV-
EL. = 84.816

NOTE:
SEE SHEETS 7 & 8 FOR -FLYLWREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

94 92 90 88 86 84 82 80 78 76 74 72 70

+20 +40 +60 +80 18 +20 +40 +60 +80 19 +20 +40 +60 +80 20 +20 +40 +60 +80

10/26/2004
30-SEP-2004 8:55

METRIC	PROJECT REFERENCE NO.	SHEET NO.
5 0 10	R-2552AA	32
CONST.REV.	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
R /W REV.	PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

★BM # R-2552-8 EL 84.103
1.166m LT -IIY1- STA 27+40.737

-FLYLWREV-

PI = 21+45.000
EL = 87.681 m
VC = 150 m
K = 53

PI = 24+00.000
EL = 84.582 m
VC = 100 m
K = 50

+1.516%
-1.215%
-1.215%
+1.784%

PIPE HYDRAULIC DATA		
DRAINAGE STRUCTURE NO. 65		
DRAINAGE AREA	= 5.75	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 1.34	CMS
DESIGN HW ELEVATION	= 83.54	M
100 YEAR DISCHARGE	= 1.46	CMS
100 YEAR HW ELEVATION	= 83.60	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 1.60	CMS
OVERTOPPING ELEVATION	= 84.5	M

NOTE:
SEE SHEET 7 FOR -FLYLWREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # R-2552-7 EL 85.746
1.706m LT -IIY1- STA 24+48.548

-FLYLWREV-

PI = 25+70.000
EL = 85.920 m
VC = 80 m
K = 642

-0.786%
+0.661%

END GRADE -FLYLWREV-
STA 26+77.182 EL = 86.629

NOTE:
SEE SHEET 6 & 7 FOR -FLYLWREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2008 8:55
J:\projects\R-2552AA\roadway\intersect\FLYLWREV.dgn

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	33
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — — — —

RIGHT DITCH - - - - - - -

-LPB-

★BM # BY3-329 EL 80.458
6.628m LT -FLYLEREV- STA 15+97.356

BEGIN GRADE -LPB-
STA 10+00.000 RL = 78.892

PI = 11+40.000
EL = 81.034 m
VC = 200 m
K = 387

+1.530%

+2.640%

NOTE:
SEE SHEET 8 FOR -LPB- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # BL-703 EL 87.782
73.275m RT -FLYLWREV- STA 19+89.008

★BM # R-2552-8 EL 84.103
1.166m LT -JIYI- STA 27+40.737

BEGIN BRIDGE -LPB- STA 16+56.898

+2.065%

(+) 0.340%

BEGIN RT DITCH GRADE
STA 16+79.000 -LPB-
EL = 84.000

END RT DITCH GRADE
STA 16+00.000 -LPB-
EL = 84.417

NOTE:
SEE SHEETS 7 & 8 FOR -LPB- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2004 15:55
jwilkins
R:\projects\interchange\
RT_R2552_33

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	34
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — - - — - -

RIGHT DITCH - - - - - - - -

-LPB-

PI = 17+90.000
EL = 94.336 m
VC = 195 m
K = 28

+2.946%

-4.882%

END BRIDGE -LPB- STA 18+80.000

PI = 20+80.000
EL = 79.879 m
VC = 100 m
K = 13

-4.882%

NOTE:
SEE SHEET 7 FOR -LPB- ALIGNMENT

-LPB-

★BM # R-2552-7 EL 85.746
1.706m LT -PVI- STA 24+48.548

END GRADE -LPB-
STA 24+01.877 EL = 85.911

PI = 23+00.000
EL = 86.480 m
VC = 170 m
K = 48

+3.000%

-4.559%

PI = 20+80.000
EL = 79.879 m
VC = 100 m
K = 13

+3.000%

-1.445%

(+) 3.655%

BEGIN RT DITCH GRADE
STA 21+92.000 -LPB-
EL = 79.436

END RT DITCH GRADE
STA 21+86.000 -LPB-
EL = 79.066

BEGIN LT DITCH GRADE
STA 21+94.000 -LPB-
EL = 79.700

END LT DITCH GRADE
STA 22+60.000 -LPB-
EL = 82.200

NOTE:
SEE SHEET 6 & 7 FOR -LPB- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	35
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

LEFT DITCH

RIGHT DITCH

-RPD-

★BM # BY3-329 EL 80.458
6.628m LT -FLYLEREV- STA 15+97.156

BEGIN GRADE -RPD-
STA 10+00.000 EL = 78.245

PI = 11+60.000
EL = 80.704 m
VC = 60 m
K = 195

PI = 12+50.000
EL = 81.811 m
VC = 120 m
K = 42

-1.5571%
-1.2300%
-1.2300%
-2.7946%
-1.1282%
78.245
79.132
77.452

BEGIN RT DITCH GRADE
STA 13+65.000 -RPD-
EL = 78.300

78.300
450mmØ

NOTE:
SEE SHEETS 8 & 14 FOR -RPD- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 96

DRAINAGE AREA	= 0.70	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.16	CMS
DESIGN HW ELEVATION	= 76.52	M
100 YEAR DISCHARGE	= 0.17	CMS
100 YEAR HW ELEVATION	= 76.53	M
OVERTOPPING FREQUENCY	=	YRS
OVERTOPPING DISCHARGE	=	CMS
OVERTOPPING ELEVATION	= 78.30	M

-RPD-

★BM # BY3-333 EL 75.938
60.715m LT -RPD- STA 15+14.853

★BM # BY3-334 EL 76.324
21.365m LT -IIYI- STA 33+53.966

END GRADE -RPD-
STA 17+60.652 EL = 74.055

PI = 15+70.000
EL = 76.693 m
VC = 60 m
K = 83

PI = 16+80.000
EL = 75.731 m
VC = 160 m
K = 133

-4.5986%
-0.8746%
-0.8746%
-4.8000%
79.132
77.454
900mm
74.653

END RT DITCH GRADE
STA 13+83.009 -RPD-
EL = 77.428

NOTE:
SEE SHEET 14 FOR -RPD- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 189

DRAINAGE AREA	= 5.73	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 1.33	CMS
DESIGN HW ELEVATION	= 78.59	M
100 YEAR DISCHARGE	= 1.4	CMS
100 YEAR HW ELEVATION	= 78.65	M
OVERTOPPING FREQUENCY	=	YRS
OVERTOPPING DISCHARGE	=	CMS
OVERTOPPING ELEVATION	= 79.00	M

30-SEP-2004 15:55
jpdavis
N:\RDWAY\PROJ\2552AA\Intersect\rpd1

-LREV-

LEFT DITCH — · — · —

RIGHT DITCH - - - - - -

★BM # BL-712 EL 70.991
37.304m LT -LREV- STA 11+17.511

★BM # BL-713 EL 68.144
28.596m LT -LREV- STA 12+23.597

★BM # BL-714 EL 62.956
25.439m LT -LREV- STA 13+64.775

BEGIN GRADE -LREV-
STA 11+04.621 EL = 71.060

BEGIN BRIDGE -LREV- LT STA 13+34.500

BEGIN BRIDGE -LREV- RT STA 13+58.500

-0.492%

BEGIN RT DITCH GRADE
STA 12+62.000 -LREV-
EL = 66.460

BEGIN RT DITCH GRADE
STA 13+71.069 -LREV-
EL = 61.200

NOTE:
SEE SHEET 9 & 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # BL-715 EL 62.894
26.127m LT -LREV- STA 14+93.234

★BM # BL-716 EL 74.038
10.687m LT -LREV- STA 16+90.232

★BM # BL- 717 EL 77.036
7.481m LT -LREV- STA 17+81.546

PI = 17+00.000
EL = 68.624 m
VC = 300 m
K = 122

END BRIDGE -LREV- LT STA 15+24.700

END BRIDGE -LREV- RT STA 15+41.500

+2.043%

END RT DITCH GRADE
STA 15+31.000 -LREV-
EL = 63.100

BEGIN RT DITCH GRADE
STA 15+41.000 -LREV-
EL = 62.000

NOTE:
SEE SHEET 10 FOR -LREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	37
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

CONST.REV.

R /W REV.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

LEFT DITCH — - — - —

RIGHT DITCH - - - - - - - -

-LREV-

-LREV- STA 18+99.765 - BK =
-L- STA 18+99.765 - AH =
EL = 72.706

NOTE:
SEE SHEET 10 FOR -LREV- ALIGNMENT

-L-

★BM # BL-718 EL 76.316
26.029m RT -L- STA 19+59.987

BEGIN GRADE -L-
STA 18+99.765 EL = 72.706

★BM # R-2552-12 EL 74.826
23.423m RT -L- STA 20+79.051

BEGIN LT DITCH GRADE
STA 21+16.000 -L-
EL = 76.400

NOTE:
SEE SHEETS 10 & 11 FOR -L- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO. 140

DRAINAGE AREA	= 13.05	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 2.95	CMS
DESIGN HW ELEVATION	= 76.16	M
100 YEAR DISCHARGE	= 3.11	CMS
100 YEAR HW ELEVATION	= 76.20	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 1.00	CMS
OVERTOPPING ELEVATION	= 76.48	M

★BM # BL-720 EL 79.117
15.644m RT -L- STA 22+28.404

★BM # BL-721 EL 79.764
13.731m RT -L- STA 23+75.784

-L-

PI = 24+00.000
EL = 82.930 m
VC = 500 m
K = 172

END LT DITCH GRADE
STA 22+20.000 -L-
EL = 77.400

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO. 146

DRAINAGE AREA	= 2.10	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.5	CMS
DESIGN HW ELEVATION	= 76.73	M
100 YEAR DISCHARGE	= 0.52	CMS
100 YEAR HW ELEVATION	= 76.76	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 1.80	CMS
OVERTOPPING ELEVATION	= 79.00	M

NOTE:
SEE SHEET 11 FOR -L- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

10/26/38

30-JAN-2004 15:55
M:\projects\R2552AA\Design\Interchange\Plans\R2552AA_37.dgn

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	38
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — · — · —

RIGHT DITCH - - - - - -

★BM # BL-722 EL 76.161
4.331m RT -L- STA 25+12.682

★BM # BL-723 EL 83.504
23.866m RT -L- STA 26+45.037

★BM # R-2552-I5 EL 87.156
47.166m RT -L- STA 27+66.382

-L-

PIPE HYDRAULIC DATA

DRAINAGE STRUCTURE NO. 148

DRAINAGE AREA	=	8.05	HA
DESIGN FREQUENCY	=	50	YRS
DESIGN DISCHARGE	=	1.78	CMS
DESIGN HW ELEVATION	=	76.62	M
100 YEAR DISCHARGE	=	1.87	CMS
100 YEAR HW ELEVATION	=	76.70	M
OVERTOPPING FREQUENCY	=	100+	YRS
OVERTOPPING DISCHARGE	=	2.00	CMS
OVERTOPPING ELEVATION	=	80.10	M

BEGIN LT DITCH GRADE
STA 25+10.000 -L-
EL. = 75.300

END LT DITCH GRADE
STA 25+71.000 -L-
EL. = 77.460

BEGIN LT BERM DITCH GRADE
STA 26+08.000 -L-
EL. = 80.140

END LT BERM DITCH GRADE
STA 27+48.000 -L-
EL. = 84.504

END GRADE -L-
STA 28+00.000 EL = 79.482

NOTE:
SEE SHEETS 11 & 12 FOR -L- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

★BM # BY2-201 EL 94.595
4.790m RT -Y2- STA 11+29.454

★BM # BY1-104 EL 87.610
2.066m RT -Y1- STA 19+51.187

-YREV-

BEGIN GRADE -YREV-
STA 10+03.492 EL = 95.256

BEGIN LT DITCH GRADE
STA 10+22.000 -L-
EL. = 93.740

BEGIN RT DITCH GRADE
STA 10+20.000 -YREV-
EL. = 92.800

END RT DITCH GRADE
STA 10+65.000 -YREV-
EL. = 90.679

END LT DITCH GRADE
STA 10+38.000 -YREV-
EL. = 91.140

NOTE:
SEE SHEETS 6 & 6A FOR -YREV- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-NOV-2004 15:53
jmorris
N:\Projects\Intermediate\

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	39
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

-YREV-

PI = 15+00.000
EL = 80.254 m
VC = 80 m
K = 40

-9.0125%

-1.0000%

1050mm

1800mm

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 51

DRAINAGE AREA	= 6.95	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 1.52	CMS
DESIGN HW ELEVATION	= 79.31	M
100 YEAR DISCHARGE	= 1.65	CMS
100 YEAR HW ELEVATION	= 79.36	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 0.94	CMS
OVERTOPPING ELEVATION	= 78.50	M

NOTE:
SEE SHEETS 6A & 6BA FOR -YREV- ALIGNMENT

-YREV-

END GRADE -YREV-
STA 17+75.354 EL = 77.500

79.842

-1.0000%

77.500

NOTE:
SEE SHEET 6B FOR -YREV- ALIGNMENT

-DR2-

★BM # BL-720 EL 79.117
15.644m RT -L- STA 22+28.404

PI = 10+08.477
EL = 73.884 m
VC = 10 m
K = 1

PI = 10+59.260
EL = 77.728 m
VC = 10 m
K = 1

BEGIN GRADE -DR2-
STA 10+03.477 EL = 74.184

74.184

+6.9959%

77.728

-6.9959%

NOTE:
SEE SHEET 11 FOR -DR2- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

END GRADE -DR2-
STA 10+64.260 EL = 77.728

10/26/38

30-APR-2004 15:55
jgreenwood\projects\

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	40
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — · — · —

RIGHT DITCH - - - - - - - -

-Y2-

★BM # R-2552-11 EL 74.576
4.806m RT -Y2B- STA 19+52.426

★BM # BY2-201 EL 94.595
4.790m RT -Y2- STA 11+29.454

★BM # BY2-202 EL 94.633
8.345m LT -Y2- STA 13+09.194

BEGIN GRADE -Y2-
STA 10+60.000 EL = 95.206

BEGIN BRIDGE -Y2- STA 11+00.000

END BRIDGE -Y2- STA 12+01.000

END GRADE -Y2-
STA 13+08.000 EL = 95.147

PI = 10+90.000
EL = 94.849 m
VC = 50 m
K = 30

PI = 11+65.000
EL = 95.200 m
VC = 75 m
K = 68

PI = 12+60.000
EL = 94.599 m
VC = 60 m
K = 30

-1.1902%

-1.6720%

+1.6980%

-0.6326%

-0.6321%

+1.3699%

95.206

95.000

95.000

95.147

BEGIN RT DITCH GRADE
STA 10+45.000 -Y2-
EL = 95.800

END RT DITCH GRADE
STA 10+90.000 -Y2-
EL = 95.800

NOTE:
SEE SHEET 6 FOR -Y2- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-Y2B-

★BM # BL-717 EL 77.036
7.481m LT -LREV- STA 17+81.546

★BM # BL-718 EL 76.316
26.029m RT -L- STA 19+59.987

★BM # R-2552-12 EL 74.826
23.423m RT -L- STA 20+79.051

BEGIN GRADE -Y2B-
STA 10+00.000 EL = 75.660

PI = 11+00.000
EL = 77.151 m
VC = 200 m
K = 53

PI = 12+50.000
EL = 75.750 m
VC = 100 m
K = 32

+1.4918%

-2.2673%

-2.2673%

+0.6290%

75.660

74.826

1650mm

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 156

DRAINAGE AREA	= 13.8	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 3.15	CMS
DESIGN HW ELEVATION	= 74.77	M
100 YEAR DISCHARGE	= 3.32	CMS
100 YEAR HW ELEVATION	= 74.80	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 0.92	CMS
OVERTOPPING ELEVATION	= 74.28	M

NOTE:
SEE SHEETS 10 & 11 FOR -Y2B- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

30-SEP-2004 14:46
jpederse
N:\Projects\R2552AA\Intersect\[

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	41
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — - — - —

RIGHT DITCH - - - - - - - -

-Y2B-

★BM # BL-720 EL 79.117
15.644m RT -L- STA 22+28.404

★BM # BL-721 EL 79.764
13.731m RT -L- STA 23+75.784

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 158

DRAINAGE AREA	= 2.70	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 0.68	CMS
DESIGN HW ELEVATION	= 75.59	M
100 YEAR DISCHARGE	= 0.72	CMS
100 YEAR HW ELEVATION	= 75.62	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 1.50	CMS
OVERTOPPING ELEVATION	= 75.60	M

PI = 15+00.000
EL = 75.800 m
VC = 60 m
K = 46

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO. 164

DRAINAGE AREA	= 12.57	HA
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 2.94	CMS
DESIGN HW ELEVATION	= ????	M
100 YEAR DISCHARGE	= 3.09	CMS
100 YEAR HW ELEVATION	= 72.09	M
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 7.00	CMS
OVERTOPPING ELEVATION	= 77.5	M

★BM # BL-722 EL 76.161
4.331m RT -L- STA 25+12.682

74.500
+0.820%
750mm
74.500
+1.547%
(-) 0.744%
74.000
1350mm
86.967

BEGIN LT DITCH GRADE
STA 15+16.000 -Y2B-
EL = 74.500

END LT DITCH GRADE
STA 17+83.500 -Y2B-
EL = 76.000

NOTE:
SEE SHEET 11 FOR -Y2B- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+60 +80 14 +20 +40 +60 +80 15 +20 +40 +60 +80 16 +20 +40 +60 +80 17 +20

92 90 88 86 84 82 80 78 76 74 72 70 68

-Y2B-

★BM # BL-723 EL 83.504
23.866m RT -L- STA 26+45.037

★BM # R-2552-15 EL 87.156
47.166m RT -L- STA 27+66.382

PI = 18+20.000
EL = 82.631 m
VC = 75 m
K = 40

82.800
+2.540%
+3.998%
86.967

END GRADE -Y2B-
STA 19+28.404 EL = 86.967

NOTE:
SEE SHEETS 11 & 12 FOR -Y2B- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

+20 +40 +60 +80 18 +20 +40 +60 +80 19 +20

98 96 94 92 90 88 86 84 82 80 78 76 74

30-SEP-2004 15:55
jpedrick
N:\roadway\r2552aa\intersect\

10/26/98

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	42
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

METRIC

5 0 10

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R /W REV.

LEFT DITCH — - - — - -

RIGHT DITCH - - - - - - - -

-Y4-

★BM # BL-723 EL 83.504
23.866m RT -L- STA 26+45.037

★BM # R-2552-15 EL 87.156
47.166m RT -L- STA 27+66.382

BEGIN GRADE -Y4-
STA 12+50.000 EL = 86.996

PI = 13+05.000
EL = 86.098 m
VC = 110 m
K = 43

BEGIN BRIDGE -Y4- STA 14+11.000

END BRIDGE -Y4- STA 14+90.000

PI = 15+35.000
EL = 88.259 m
VC = 90 m
K = 37

86.996

-1.623%

-1.959%

(+) 1.000%

85.300

85.300

BEGIN LT DITCH GRADE
STA 13+80.000 -Y4-
EL = 85.300

END LT DITCH GRADE
STA 14+60.000 -Y4-
EL = 85.300

+4.959%

+2.475%

87.373

END GRADE -Y4-
STA 15+95.000 EL = 87.373

NOTE:
SEE SHEET 12 FOR -Y4- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

-Y4DET-

★BM # BL-723 EL 83.504
23.866m RT -L- STA 26+45.037

★BM # R-2552-15 EL 87.156
47.166m RT -L- STA 27+66.382

BEGIN GRADE -Y4DET-
STA 10+48.000 EL = 86.487

END GRADE -Y4DET-
STA 13+78.000 EL = 87.137

PI = 10+75.000
EL = 86.160 m
VC = 50 m
K = 49

PI = 11+60.000
EL = 84.500 m
VC = 115 m
K = 28

PI = 13+00.000
EL = 87.570 m
VC = 140 m
K = 51

86.487

-0.933%

-1.952%

-0.925%

+2.192%

+2.792%

-0.533%

87.137

NOTE:
SEE SHEET 12 FOR -Y4DET- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

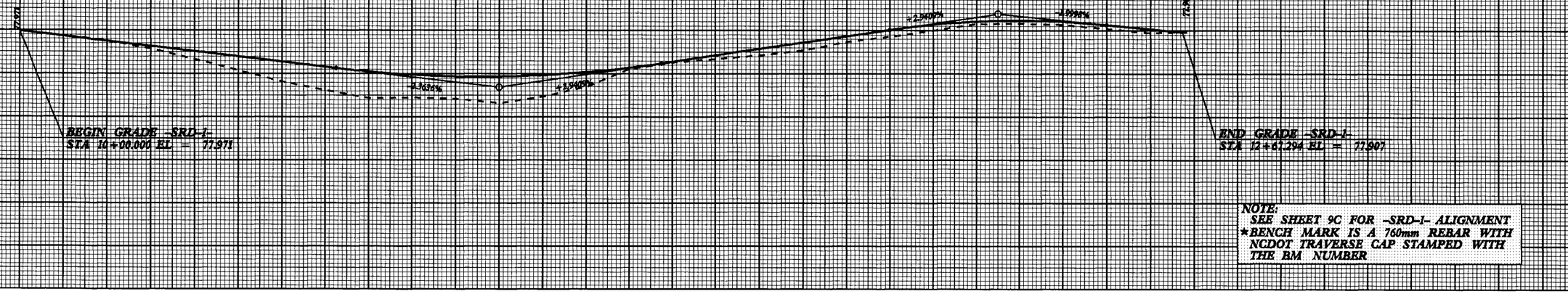
30-SEP-2004 8:56
%%U
jmjones
S:\Projects\R2552AA\Design\Roadway\Plans\Sheets\R2552AA_Y4_Y4DET_PROF.dgn

-SRD-I-

★BM # BY2-209 EL 77.219
27.170m RT -SRD-I- STA 12+65.870

PI = 12+25.000
EL = 78.753 m
VC = 50 m
K = 10

PI = 11+10.000
EL = 75.371 m
VC = 75 m
K = 14



NOTE:
SEE SHEET 9C FOR -SRD-I- ALIGNMENT
★BENCH MARK IS A 760mm REBAR WITH NCDOT TRAVERSE CAP STAMPED WITH THE BM NUMBER

METRIC
5 0 10

PROJECT REFERENCE NO.	SHEET NO.
R-2552AA	43
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONST.REV.

R/W REV.

10/26/98
30-SEP-2004 8:56
jwdavis