

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-3538	TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
WAYNE COUNTY**

B-3538

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"- PROJECT SERVICES UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, FINAL PAVEMENT MARKING SCHEDULE AND INDEX OF SHEETS
TCP-2	PROJECT NOTES
TCP-3	PHASING AND TEMPORARY PAVEMENT MARKING SCHEDULE
TCP-4	DETAIL 1 & 2
TCP-5	DETAILS 3A & 3B
TCP-6	DETAIL 4
TCP-7	DETOUR ROUTE
TCP-8	DETOUR SIGN DESIGN
TCP-9	DETAILS 5A & 5B
TCP-10	FINAL PAVEMENT MARKINGS
TCP-11	ADVANCED WORK ZONE WARNING SIGNS

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - CONE
 - DRUM SKINNY DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - WARNING FLAGS
 - CRASH CUSHION
 - CHANGEABLE MESSAGE SIGN
 - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - POLICE
 - FLAGGER
- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
 - YELLOW/YELLOW PAVEMENT MARKER
 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM	QUANTITY BREAKDOWN	TOTAL QUANTITY
PAVEMENT MARKING LINES				
PAINT (4")				
PA	WHITE EDGELINE (2X)		4000 LF	8000 LF
PI	YELLOW DOUBLE CENTER LINE (2X)		2000 LF	8000 LF
			TOTAL:	16000 LF
PAINT (24")				
P4	WHITE STOPBAR (2X)		10 LF	20 LF
PERMANENT RAISED PAVEMENT MARKERS				
MA	YELLOW & YELLOW		30 EA	30 EA
NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, 1X IMPLIES A SINGLE APPLICATION, 2X IMPLIES TWO APPLICATIONS AND 3X IMPLIES THREE APPLICATIONS.				

APPROVED:	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
DATE: 2/26/07	
SEAL	J. STUART BOURNE, P.E. - TRAFFIC CONTROL ENGINEER
	JOSEPH ISHAK, P.E. - TRAFFIC CONTROL PROJECT ENGINEER
	J. PORTANOVA, P.E. - TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	ALLA LYUDMIRSKAYA - TRAFFIC CONTROL DESIGN ENGINEER

TIP PROJECT:

PROJECT NOTES

CHANGES MAY REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING RSD 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE INSTALLED.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- E) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS A DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

- G) DO NOT EXCEED A DIFFERENCE OF 2.0 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 200 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

- H) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- I) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- J) PROVIDE PERMANENT SIGNING.
- K) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- L) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN DETOUR IS NOT IN OPERATION.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- N) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

- O) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- P) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- Q) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 200 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- R) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
1. SR 1122 (BRYAN BLVD.)	PAINT	PERM. RAISED
2. SR 1247 (BUCKHORN RD.)	PAINT	PERM. RAISED

- S) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
1. SR 1122 (BRYAN RD.)	PAINT	TEMP. RAISED

- T) PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATIONS OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.

- U) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

- V) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

- W) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

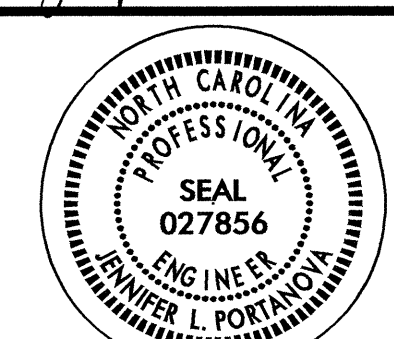
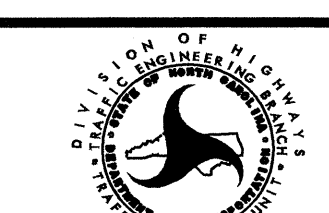
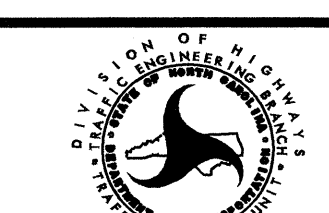
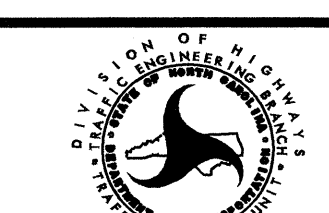
TEMPORARY SIGNALS

- X) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

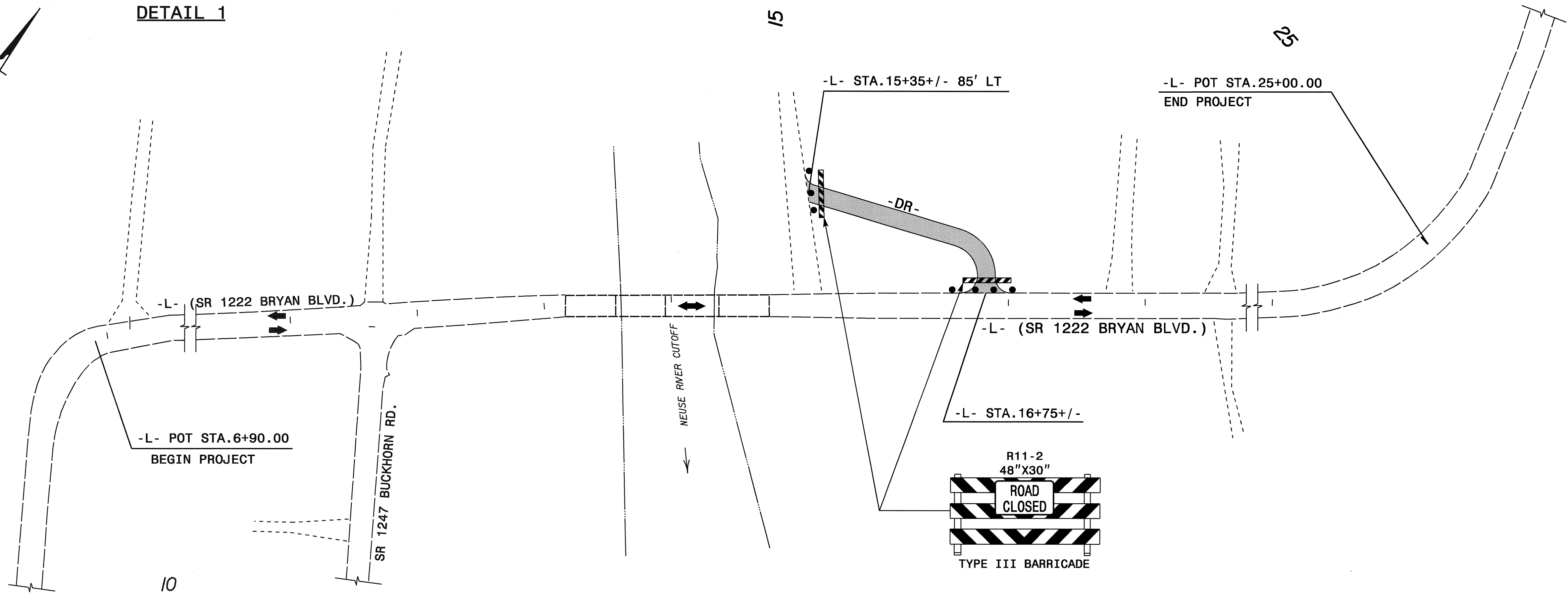
MISCELLANEOUS

- Y) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 200 FT AND 400 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

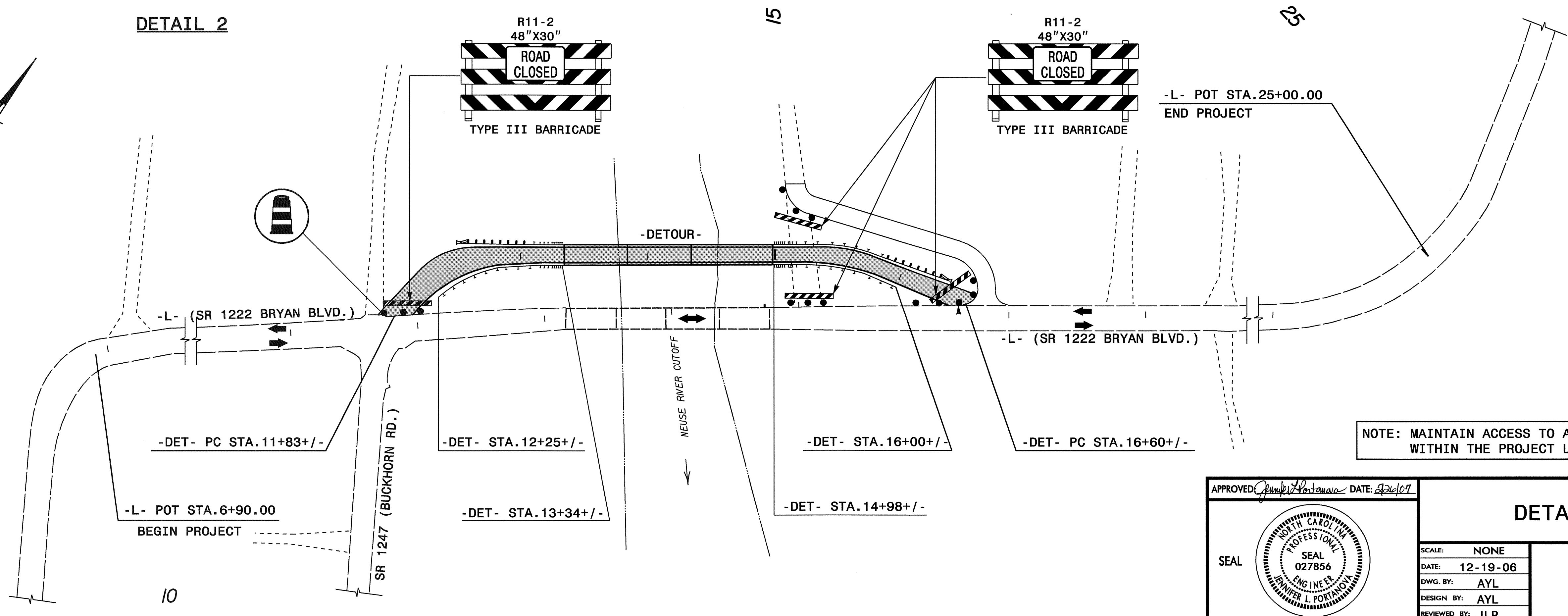
26-FEB-2007 09:56 \\dot\dfs\proj\proj\trafficcontrol\top\B-3538.TC.TCP-2.dgn

APPROVED: <i>[Signature]</i> DATE: 2/26/07 	<h2 style="margin: 0;">PROJECT NOTES</h2>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>SCALE: NONE</td> <td rowspan="4" style="text-align: center;">  </td> </tr> <tr> <td>DATE: 01-31-07</td> </tr> <tr> <td>DWG. BY: AYL</td> </tr> <tr> <td>DESIGN BY: AYL</td> </tr> <tr> <td>REVIEWED BY: JLP</td> <td></td> </tr> </table>	SCALE: NONE		DATE: 01-31-07	DWG. BY: AYL	DESIGN BY: AYL	REVIEWED BY: JLP	
SCALE: NONE									
DATE: 01-31-07									
DWG. BY: AYL									
DESIGN BY: AYL									
REVIEWED BY: JLP									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">REVISIONS</th> <th style="width: 50%;"> </th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>		REVISIONS						CADD FILE	
REVISIONS									

DETAIL 1



DETAIL 2

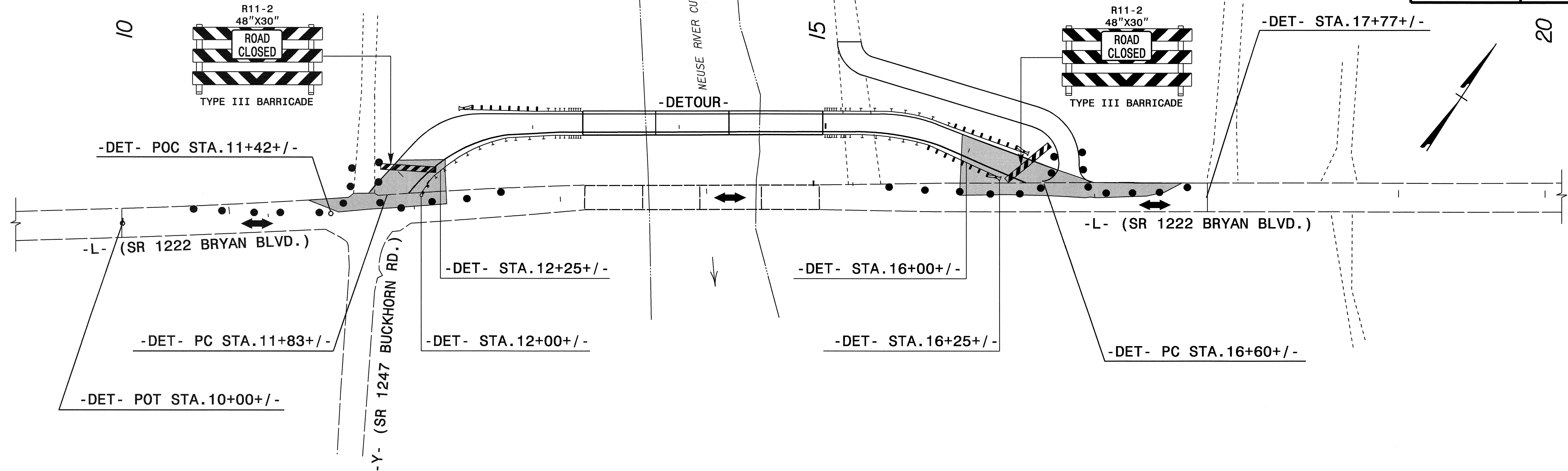


NOTE: MAINTAIN ACCESS TO ALL RESIDENCES WITHIN THE PROJECT LIMITS

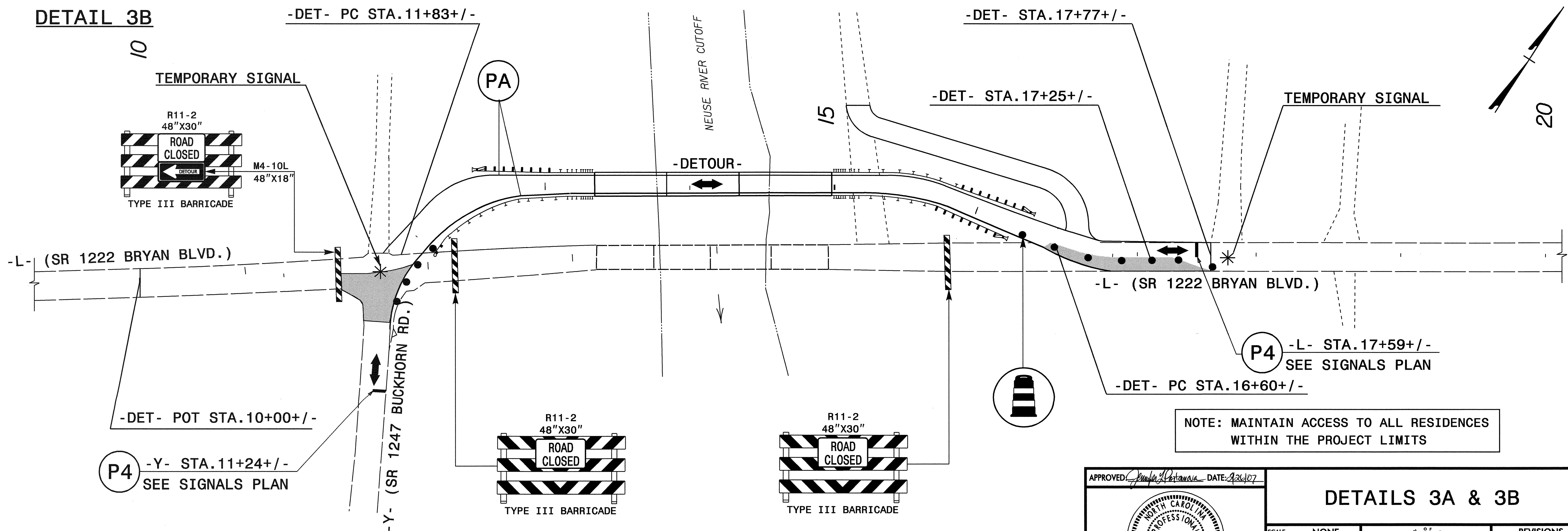
APPROVED: <i>[Signature]</i> DATE: 2/2/07	DETAILS 1 & 2	
	SCALE: NONE	
	DATE: 12-19-06	
	DWG. BY: AYL	
	DESIGN BY: AYL	
REVIEWED BY: JLP	REVISIONS	

26-FEB-2007 09:55
 \\dot\dfsroot\proj\Tipp\projects-b\3538\trafficontr\top\B-3538_TC_TCP-4.dgn
 alyudmi AT WZTC2423g

DETAIL 3A



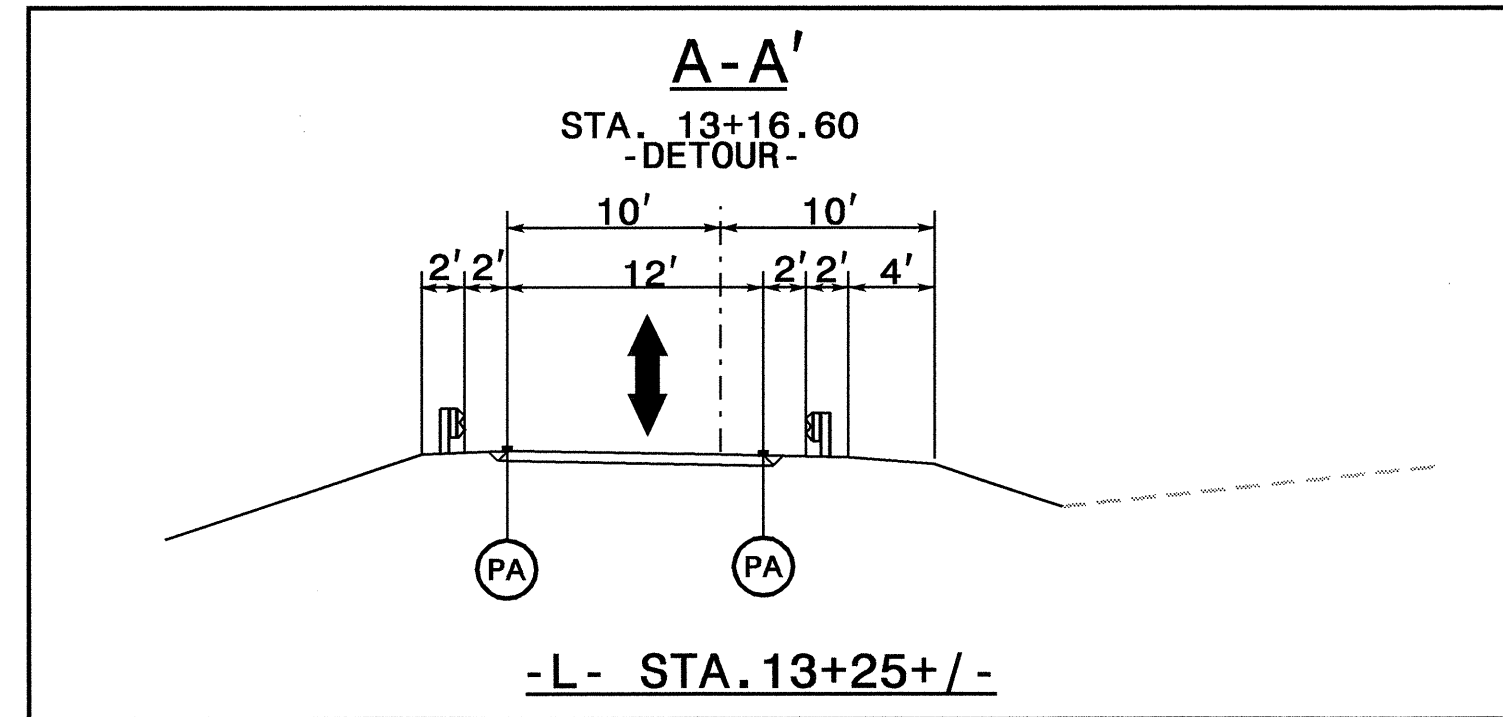
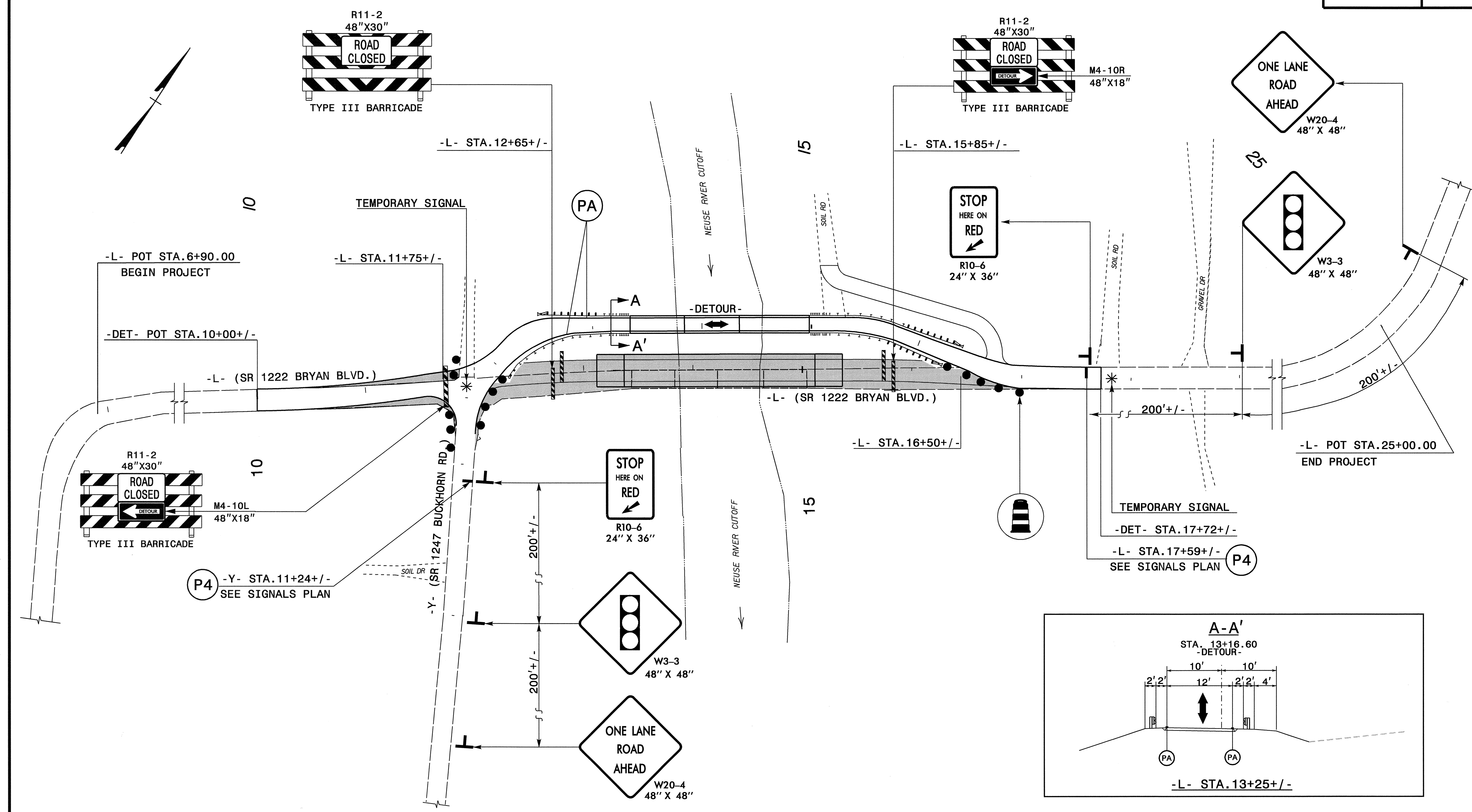
DETAIL 3B



NOTE: MAINTAIN ACCESS TO ALL RESIDENCES WITHIN THE PROJECT LIMITS

APPROVED: <i>[Signature]</i> DATE: 12/20/07	DETAILS 3A & 3B	
SCALE: NONE	REVISIONS	
DATE: 12-20-06		
DWG. BY: AYL		
DESIGN BY: AYL		
REVIEWED BY: JLP		

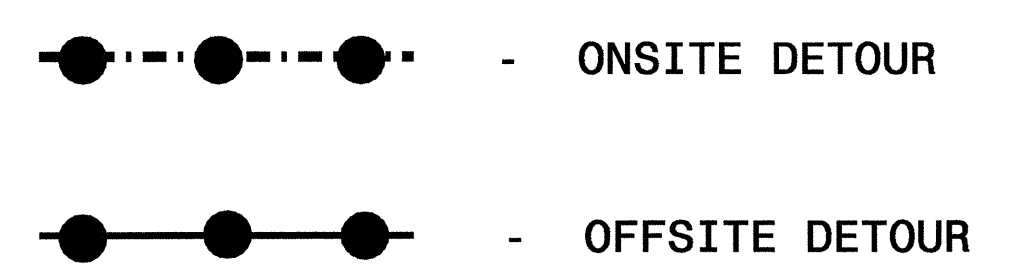
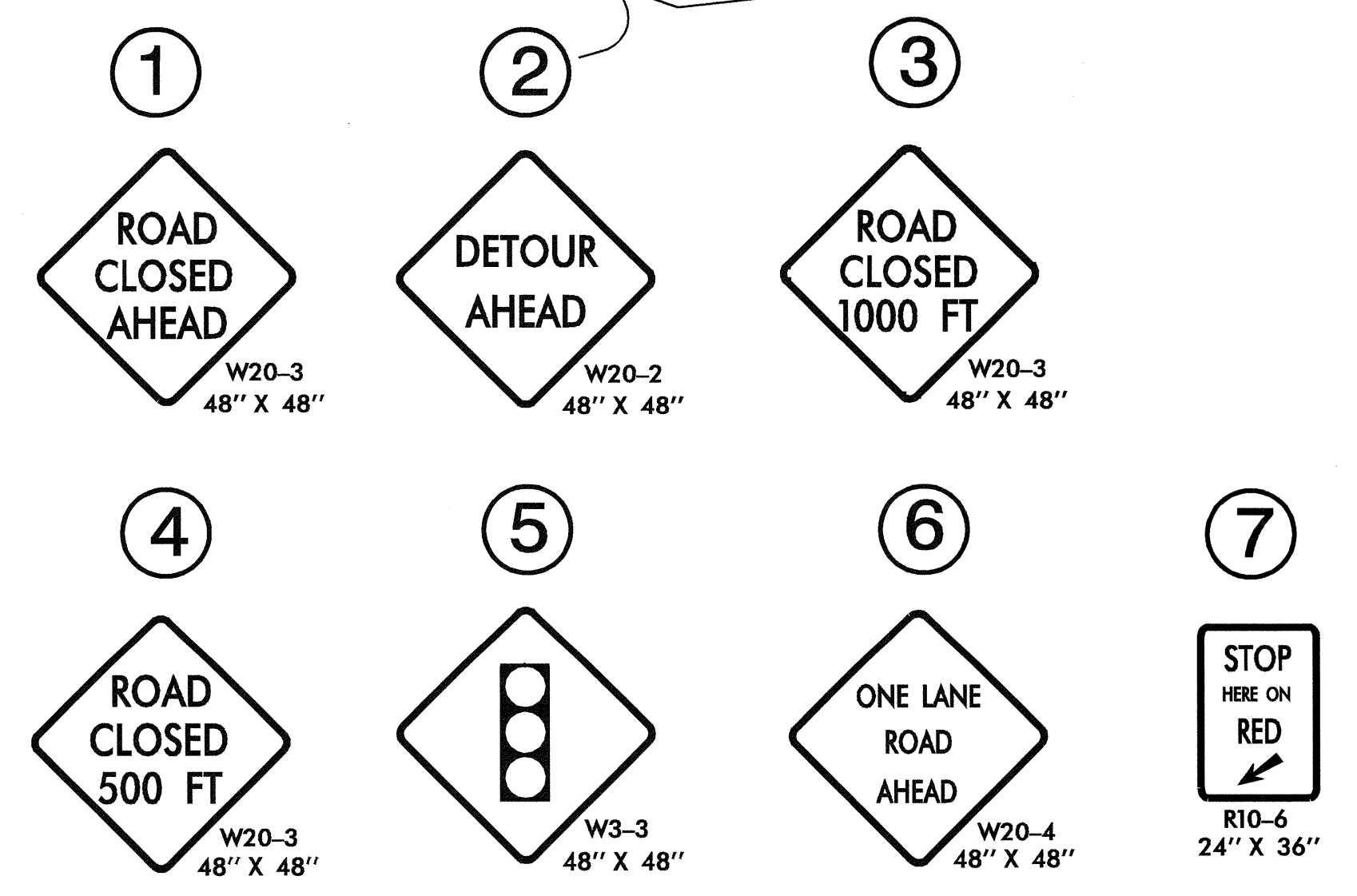
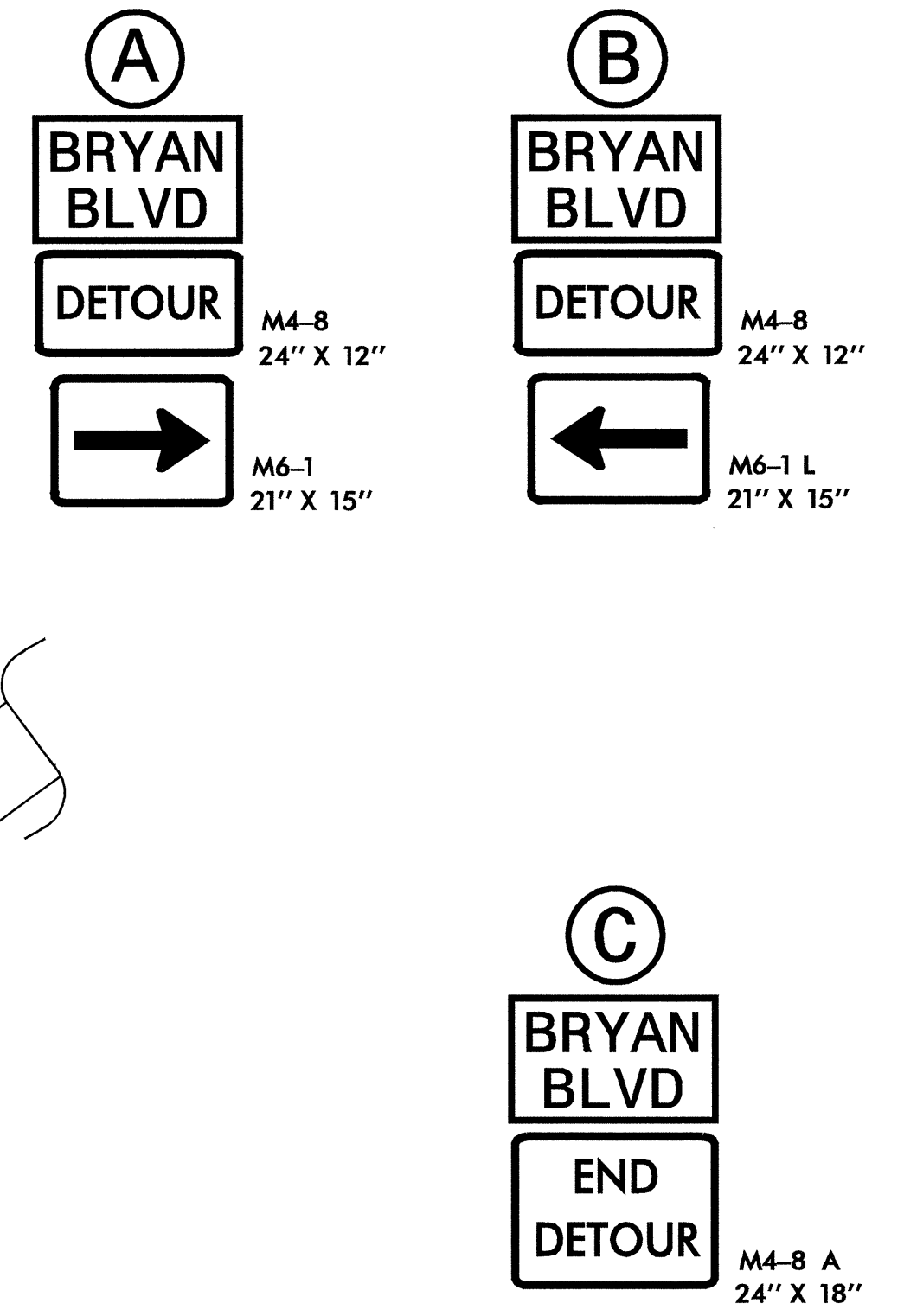
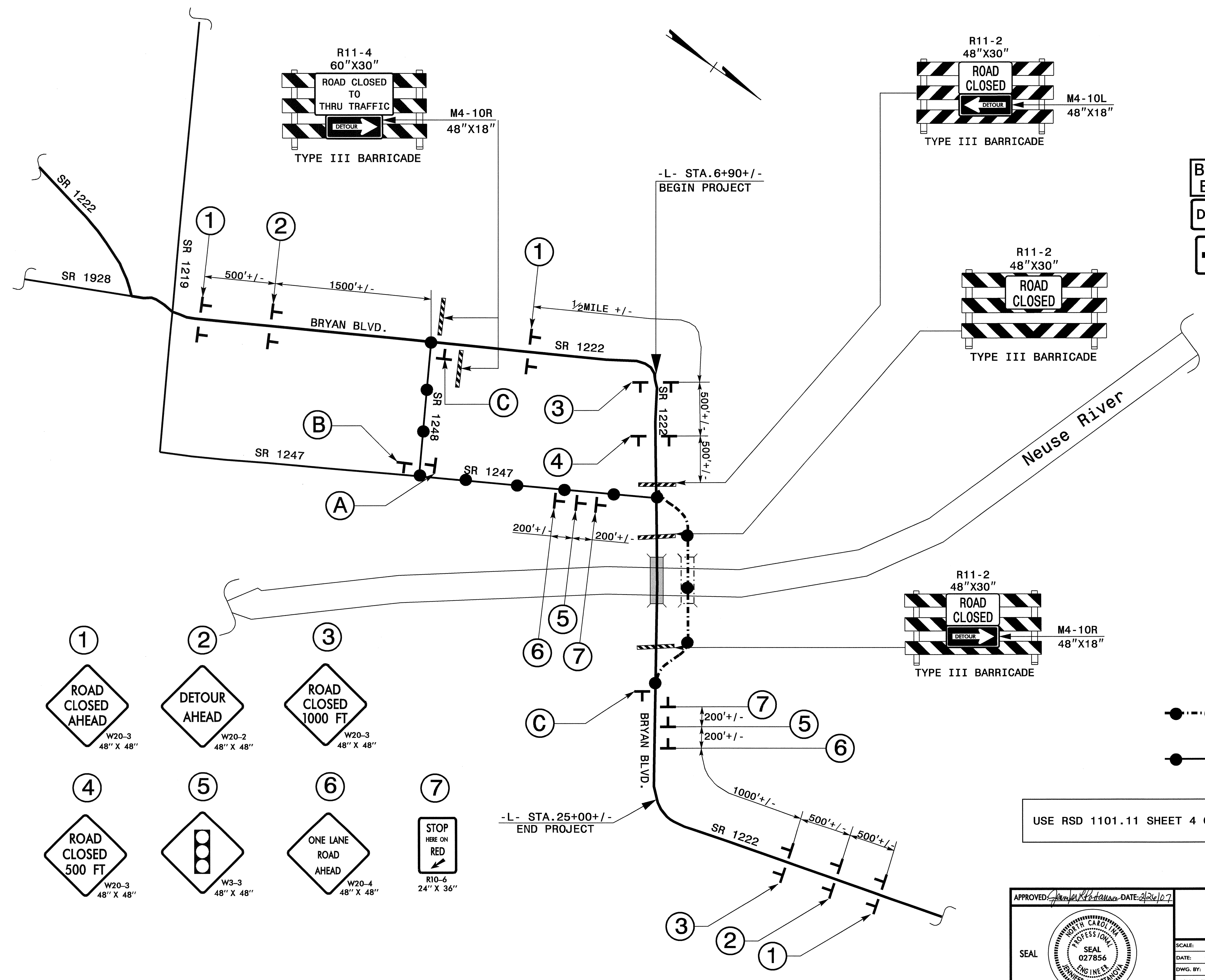
26-FEB-2007 09:55
 \\dot\dfsroot\proj\tip\projects\b3538\traffic\control\top\AB-3538_TC_TCP-5.dgn
 dlyudml AT W71222423g



NOTE: MAINTAIN ACCESS TO ALL RESIDENCES WITHIN THE PROJECT LIMITS

APPROVED: <i>[Signature]</i> DATE: 2/15/07	DETAIL 4		
	SCALE: NONE		
	DATE: 02-15-07		REVISIONS
	DWG. BY: AYL		
	DESIGN BY: AYL		
REVIEWED BY: JLP			

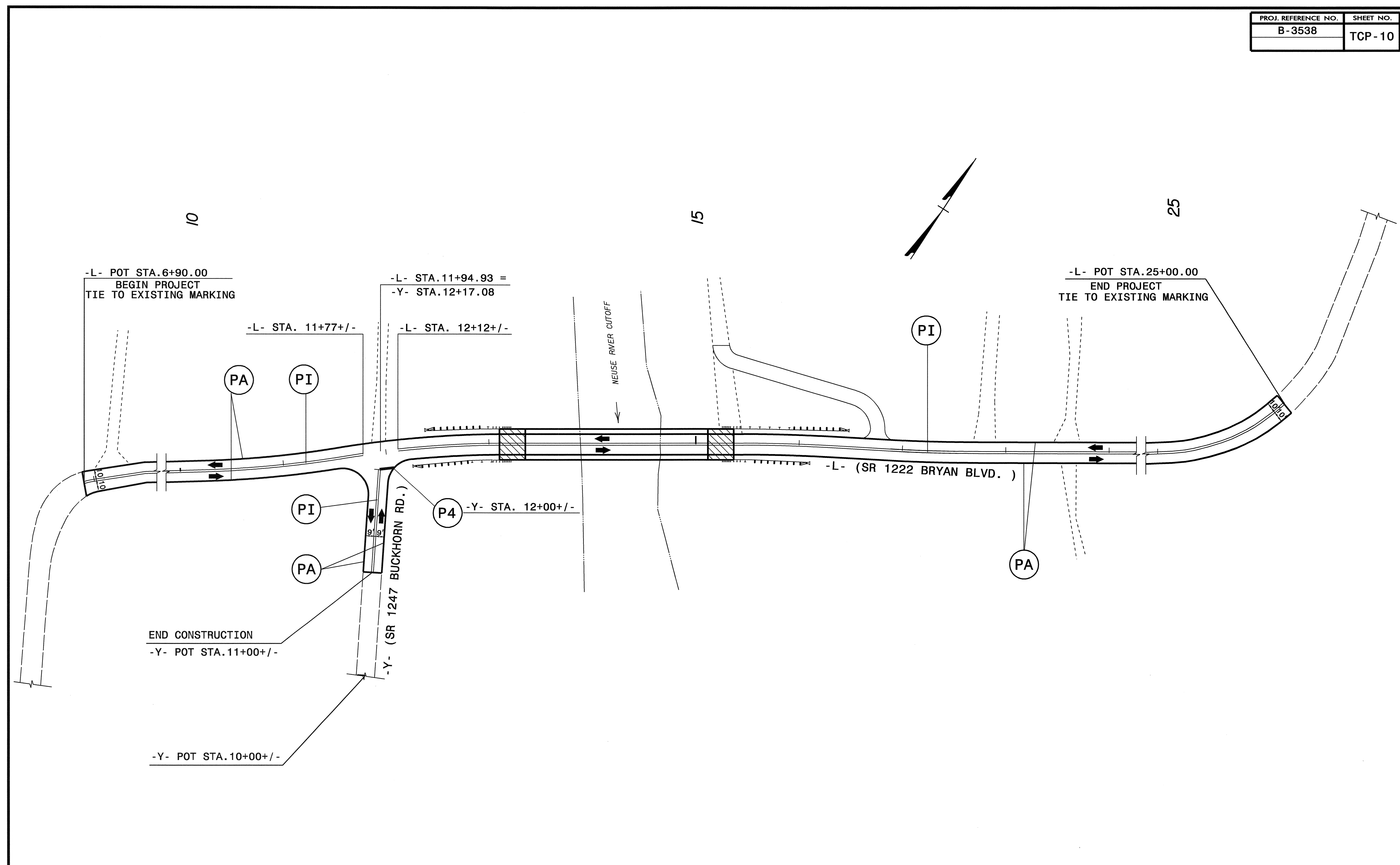
26-FEB-2007 09:54
 \\dot\cfd\proj\proj\traffic\control\top\B-3538_TC_TCP-6.dgn
 dyl\cm AT WTC2423g



USE RSD 1101.11 SHEET 4 OF 4 FOR SIGN SPACING DISTANCES

26-FEB-2007 09:52
 \\sco\h\p\proj\top\trafficcontrol\top\B-3538_TC_TCP-7.dgn
 alycum AT W21022423g

APPROVED: <i>[Signature]</i> DATE: 2/2/07 	DETOUR ROUTE							
	SCALE: NONE DATE: 02-05-07 DWG. BY: AYL DESIGN BY: AYL REVIEWED BY: JLP		REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>					



26-FEB-2007 09:50
 \\dot\dfs\proj\proj\traffic\traffic\projects-b\3538\traffic\traffic\control\top\B-3538_TC_TCP-10.dgn
 ayudmi AT WZTC224239

APPROVED: <i>[Signature]</i> DATE: 2/26/07	FINAL PAVEMENT MARKINGS	
SCALE: NONE		REVISIONS
DATE: 08-03-05		
DWG. BY: AYL		
DESIGN BY: AYL		
REVIEWED BY: JLP		CADD FILE

