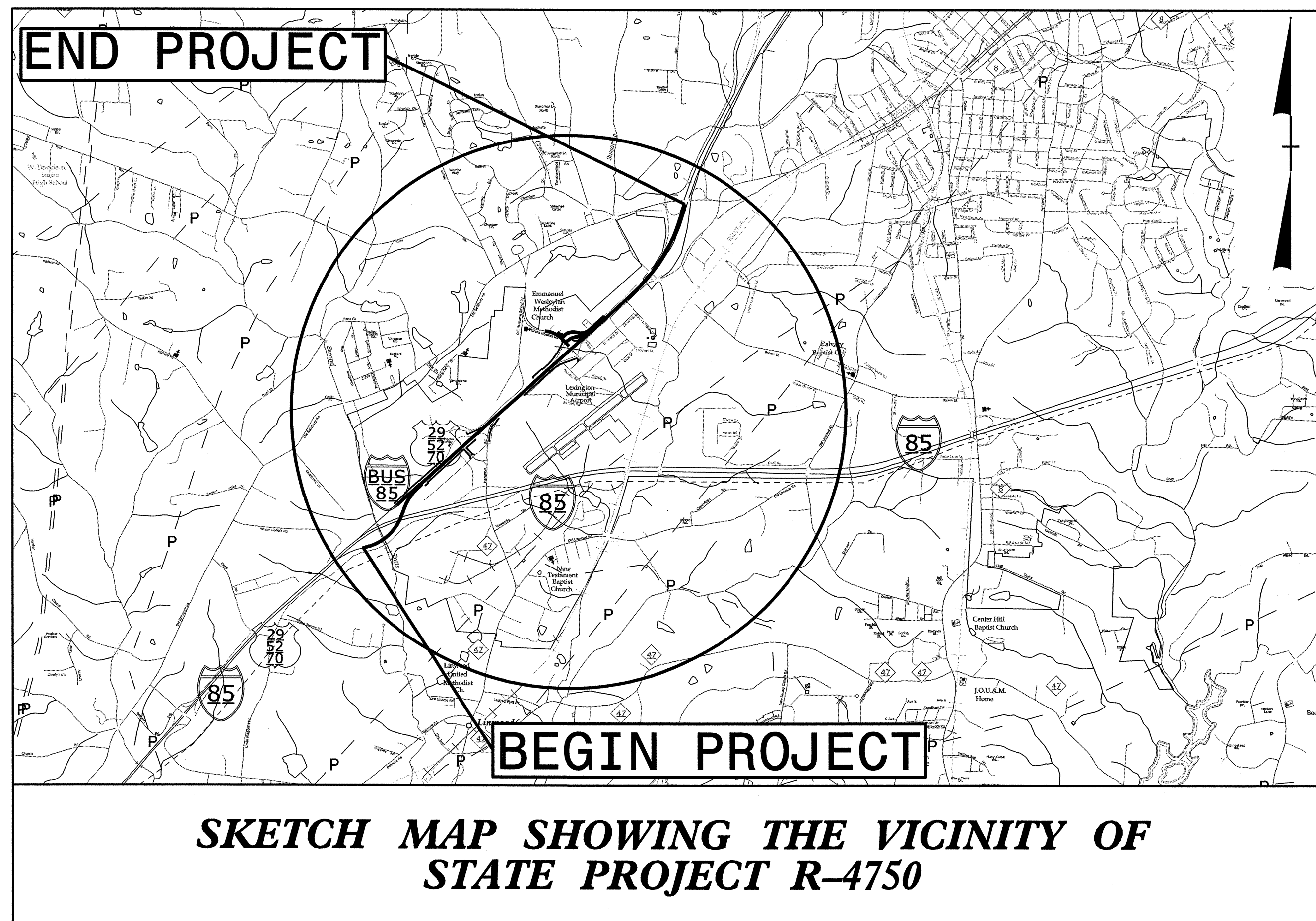
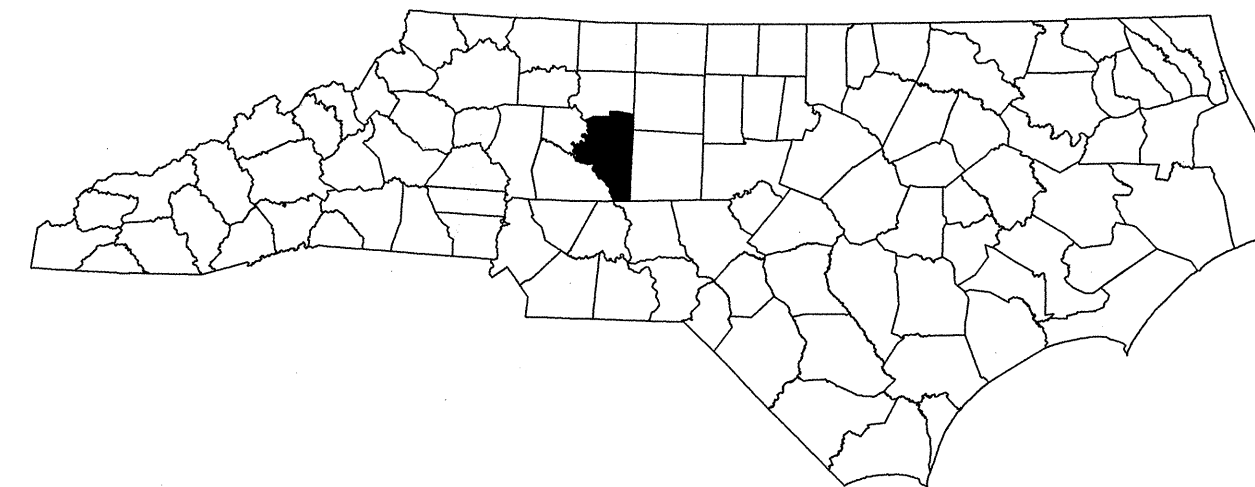


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

DAVIDSON COUNTY

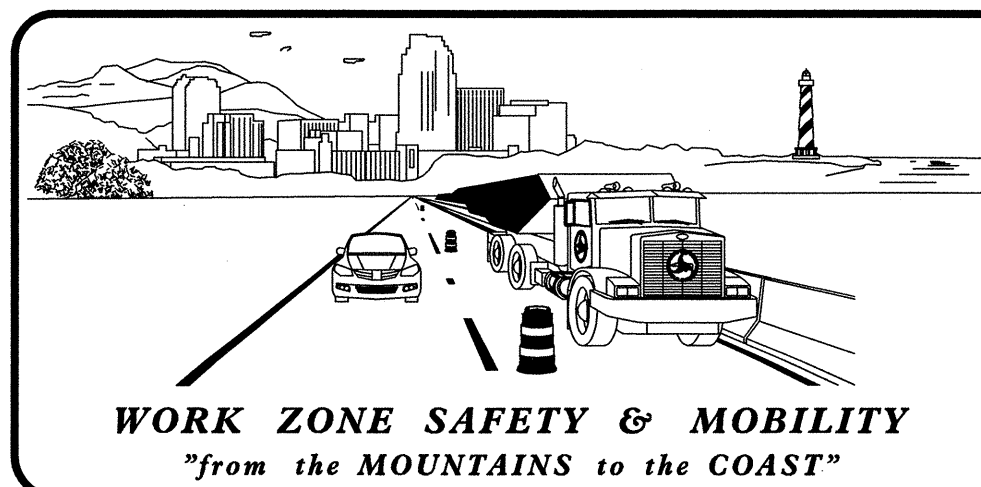


INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	GENERAL NOTES
TMP-2	WORK ZONE TYPICAL SECTIONS - ROADWAY
TMP-2A	WORK ZONE TYPICAL SECTIONS - BRIDGE REHAB
TMP-2B	LANE CLOSURES FOR RAMPS - STANDARD DETAILS
TMP-2C	NB WORK ZONE APPROACH OVERVIEW
TMP-2D	NB WORK ZONE APPROACH LANE CLOSURE DETAIL
TMP-2E	SB WORK ZONE APPROACH OVERVIEW
TMP-2F	SB WORK ZONE APPROACH LANE CLOSURE DETAIL
TMP-2G	SIGN DESIGN
TMP-3	I-85 BUSINESS PHASING
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE I OVERVIEW
TMP-5	GREEN NEEDLES RD. OFF RAMP PHASING
TMP-5A	GREEN NEEDLES RD. OFF RAMP PHASE A
TMP-5B	GREEN NEEDLES RD. OFF RAMP PHASE B
TMP-5C	GREEN NEEDLES RD. OFF RAMP PHASE C
TMP-5D	GREEN NEEDLES RD. OFF RAMP PHASE D
TMP-6	TEMPORARY TRAFFIC CONTROL PHASE II OVERVIEW
TMP-7	TEMPORARY TRAFFIC CONTROL PHASE III OVERVIEW

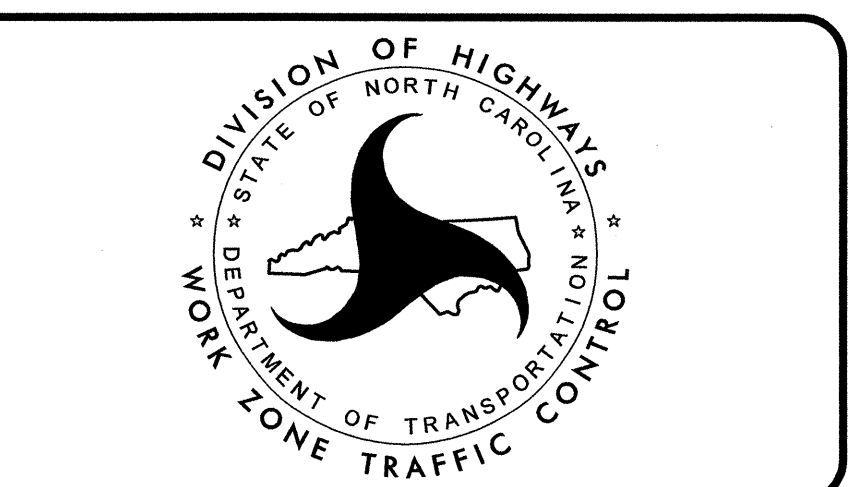
7/9/13 DATE SUBMITTED
SUBMITTAL:
 STAGING CONCEPT
 MIDPOINT
 PRE-FINAL
 FINAL

9:47:00 AM C:\TrafficControl\TC\PAR-4750_TC_TMP_tsh.dgn Hildebrand



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
 PHONE: (919) 773-2800 FAX: (919) 771-2745

J.S. BOURNE, PE STATE TRAFFIC MANAGEMENT ENGINEER
 K.J. VAN METRE, PE TRAFFIC CONTROL PROJECT ENGINEER
 T.E. HILDEBRAND, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER
 N.N. HILL TRAFFIC CONTROL DESIGNER



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 701 Corporate Center Drive
 Suite 475 Raleigh, NC 27607
 Phone: 919-854-6200

APPROVED: *Kevin J. Van Metre*
 DATE: 7/9/13

SEAL

R-4750

TIP PROJECT:

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMP
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)



SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

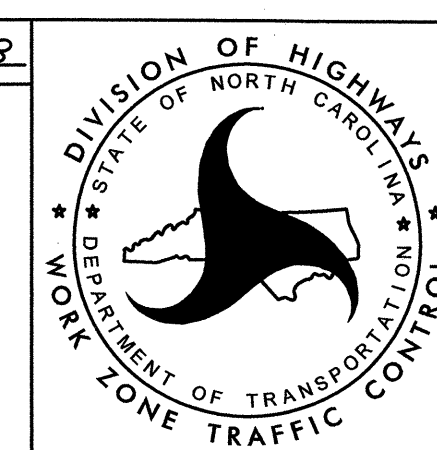
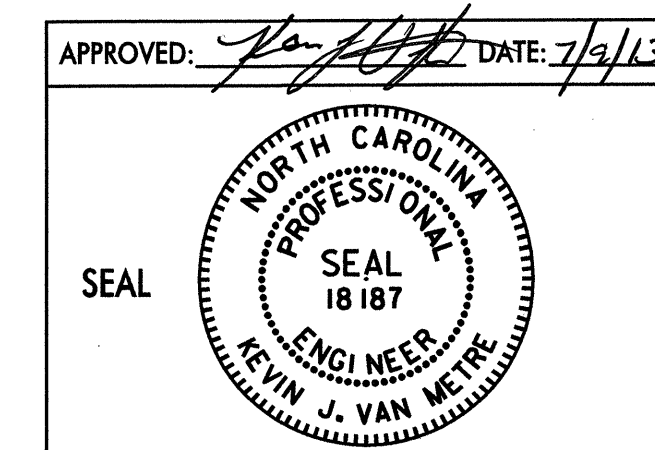
- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

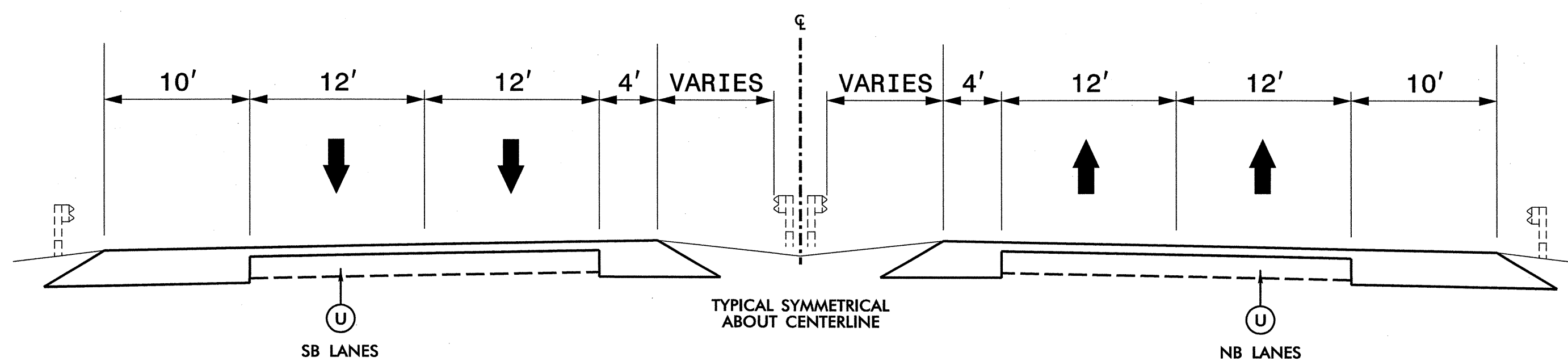
PAINT (4") - SERVICE RD.		
YELLOW DOUBLE CENTER (2X)	2,100 LF	
WHITE EDGE LINE (2X)	2,100 LF	
		TOTAL 4,200 LF
PAINT (6") - I-85		
WHITE EDGE LINE (2X)	49,650 LF	
YELLOW EDGE LINE (2X)	49,650 LF	
		TOTAL 99,300 LF
		SAY 105,000 LF
PAINT (12") - I-85 RAMP		
WHITE GORE LINE (2X)	2,500 LF	
		TOTAL 2,500 LF
PAINT (24") - SERVICE RD.		
WHITE STOP BAR (2X)	50 LF	
		TOTAL 50 LF

9/17/02 AM TrafficControl\TCP\R-4750_TC_TMP_tsh.dgn

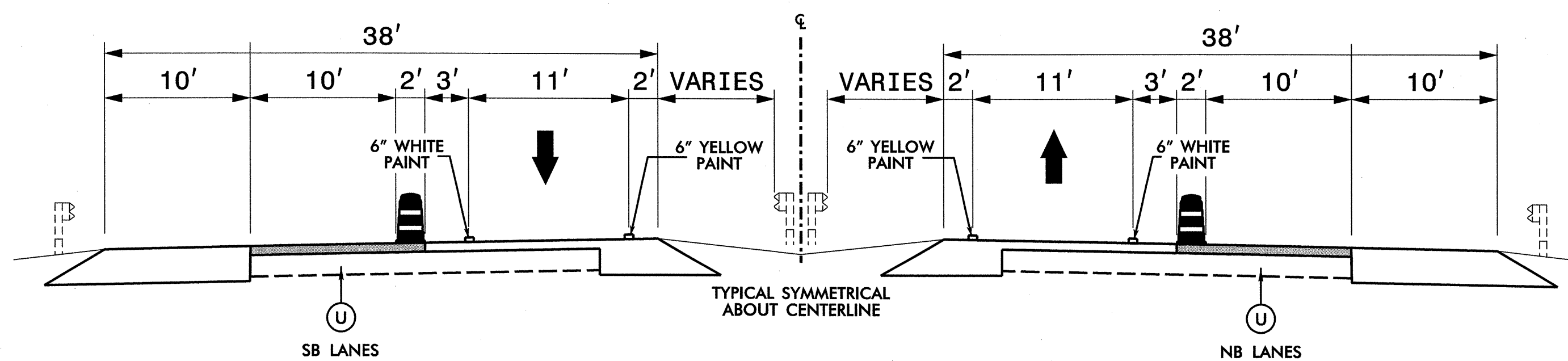
AECOM
 NC Firm License No.: F-0342
 701 Corporate Center Drive
 Suite 475 Raleigh, NC 27607
 Phone: 919-854-6200



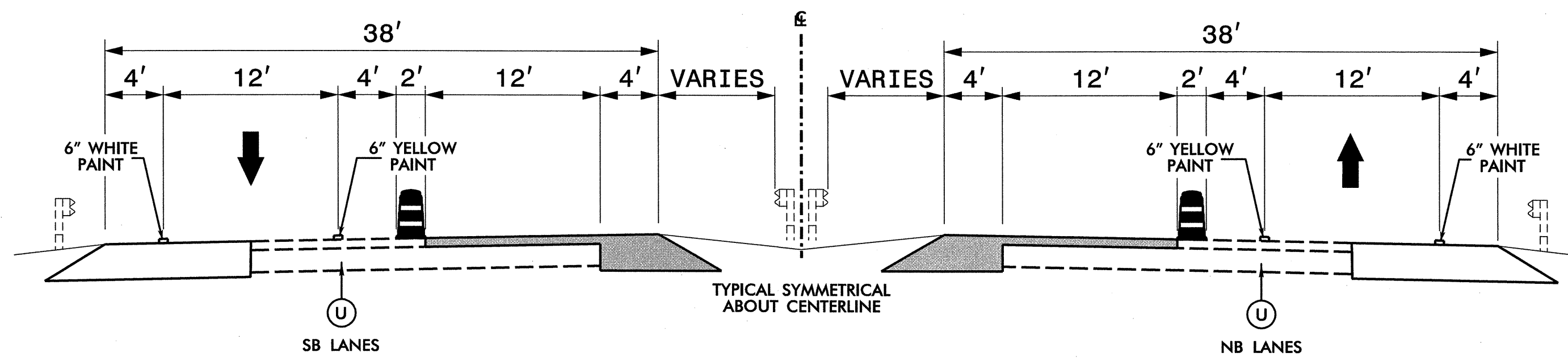
ROADWAY STANDARD
DRAWINGS & LEGEND



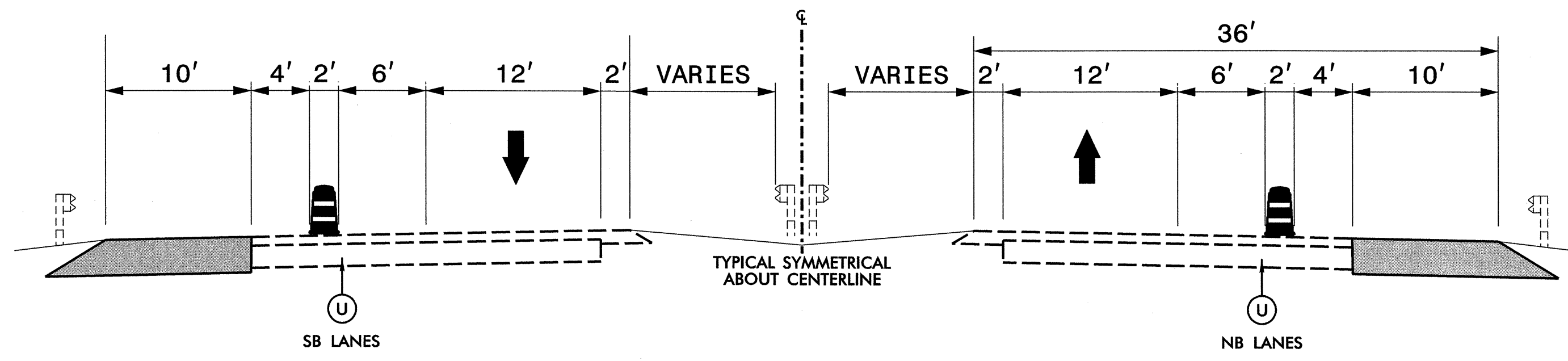
FINAL TRAFFIC CONFIGURATION



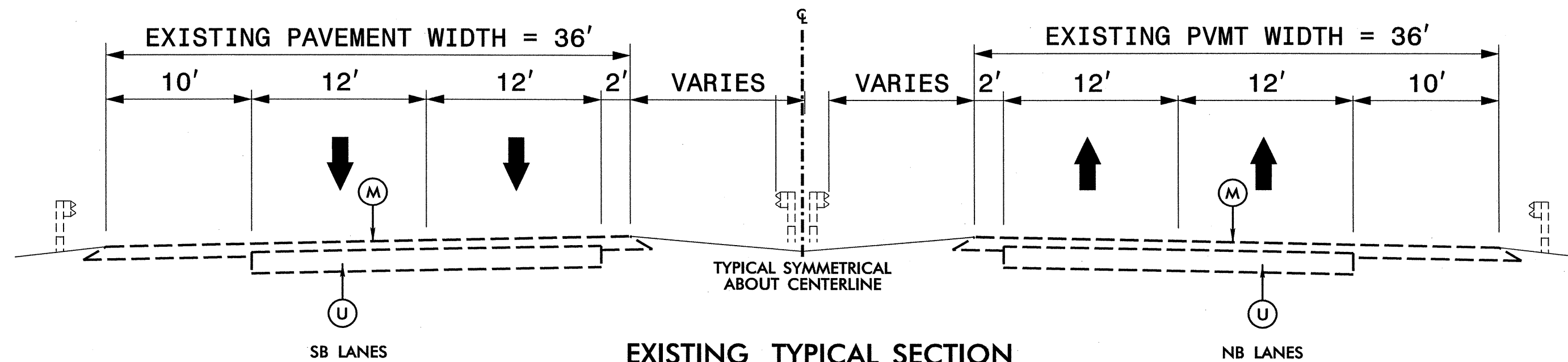
PHASE III - 1 LANE NB AND SB
- MILL AND RESURFACE OUTSIDE TRAVEL LANE



PHASE II - 1 LANE NB AND SB
- CONSTRUCT 4' FULL DEPTH INSIDE SHOULDERS
- MILL AND RESURFACE INSIDE TRAVEL LANE



PHASE I - 1 LANE NB AND SB
- CONSTRUCT 10' FULL DEPTH OUTSIDE SHOULDERS

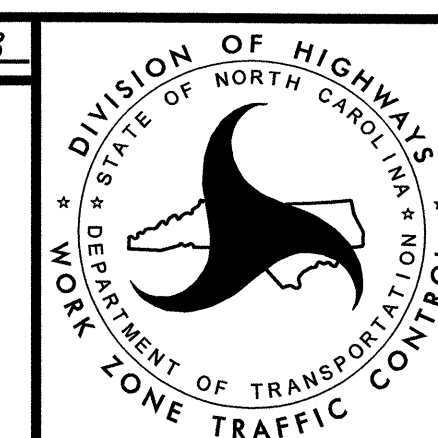
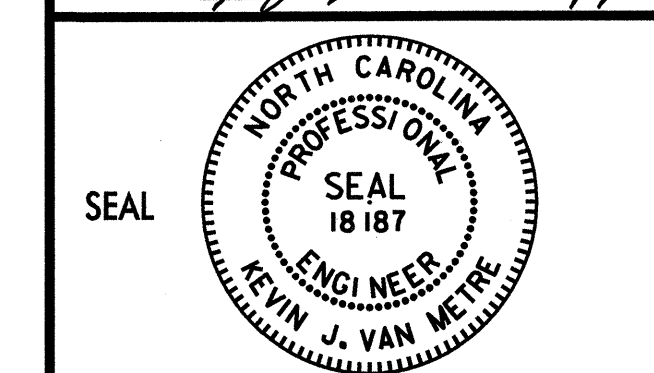


EXISTING TRAFFIC CONFIGURATION

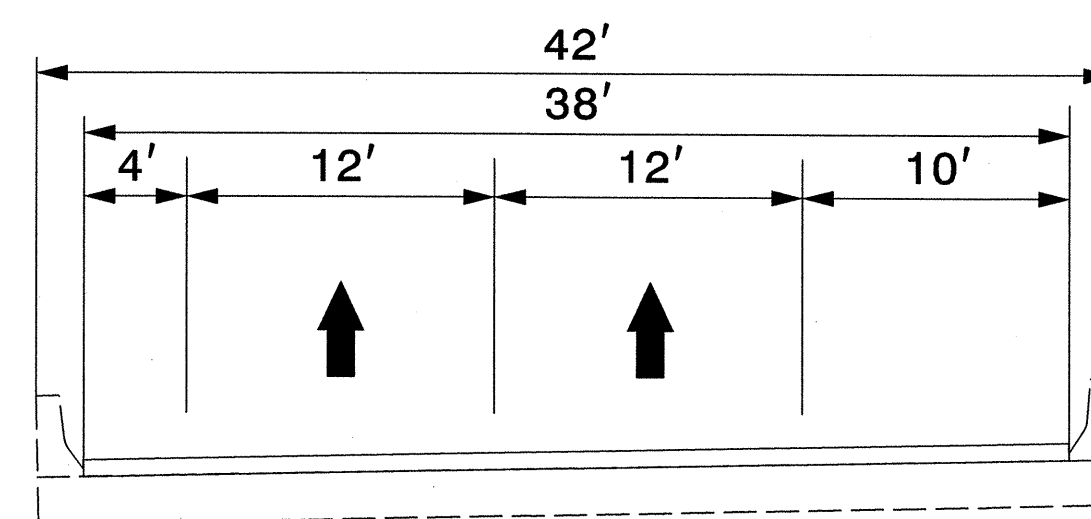
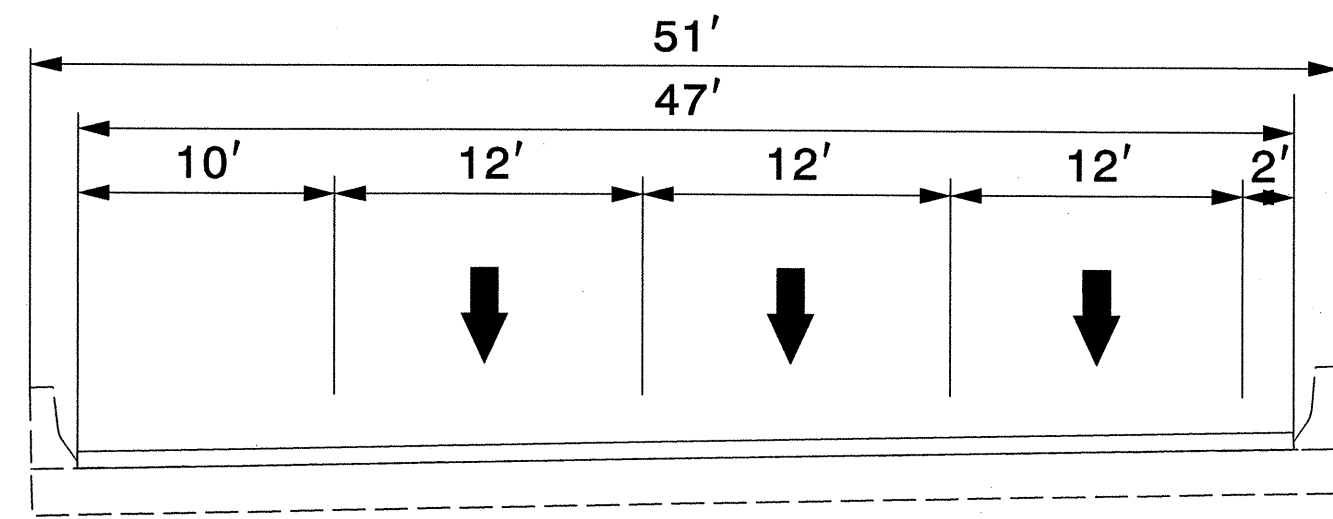
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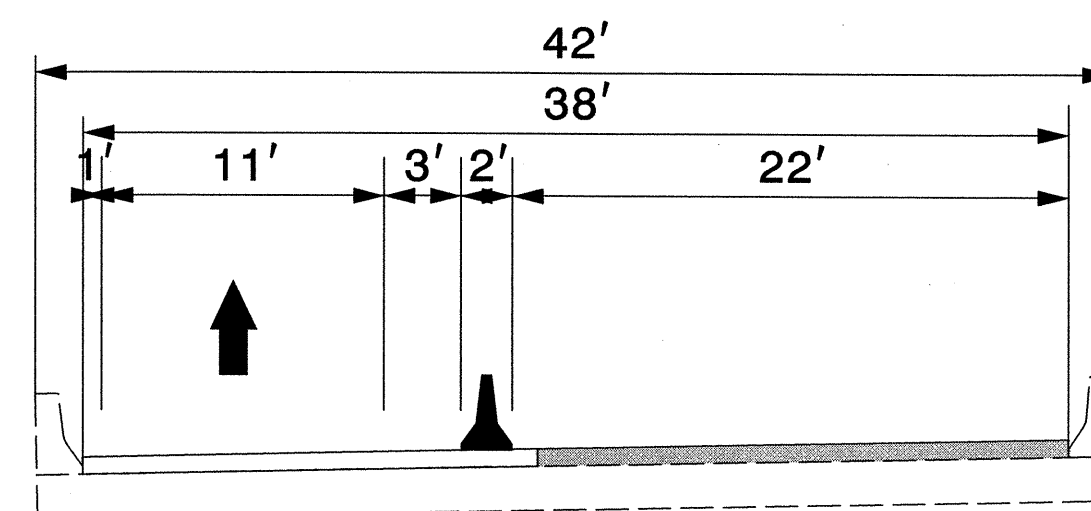
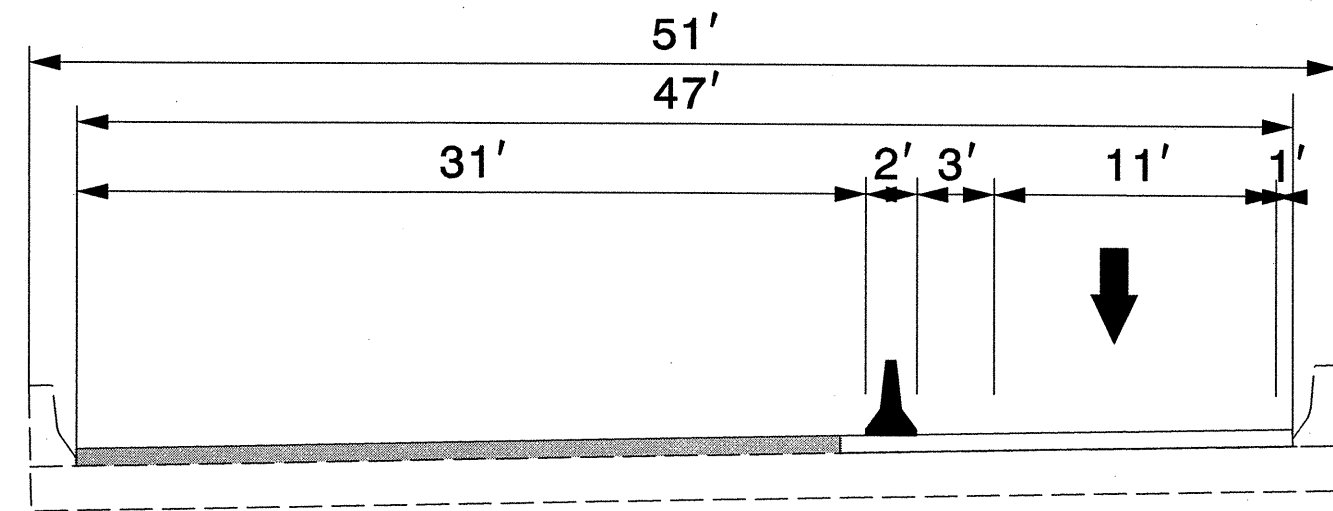
APPROVED: *[Signature]* DATE: 7/13



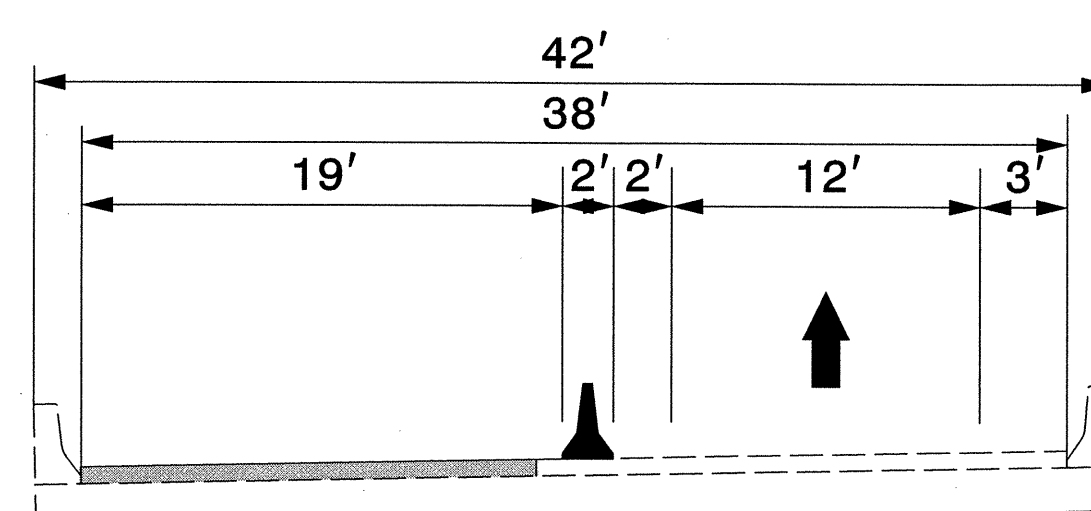
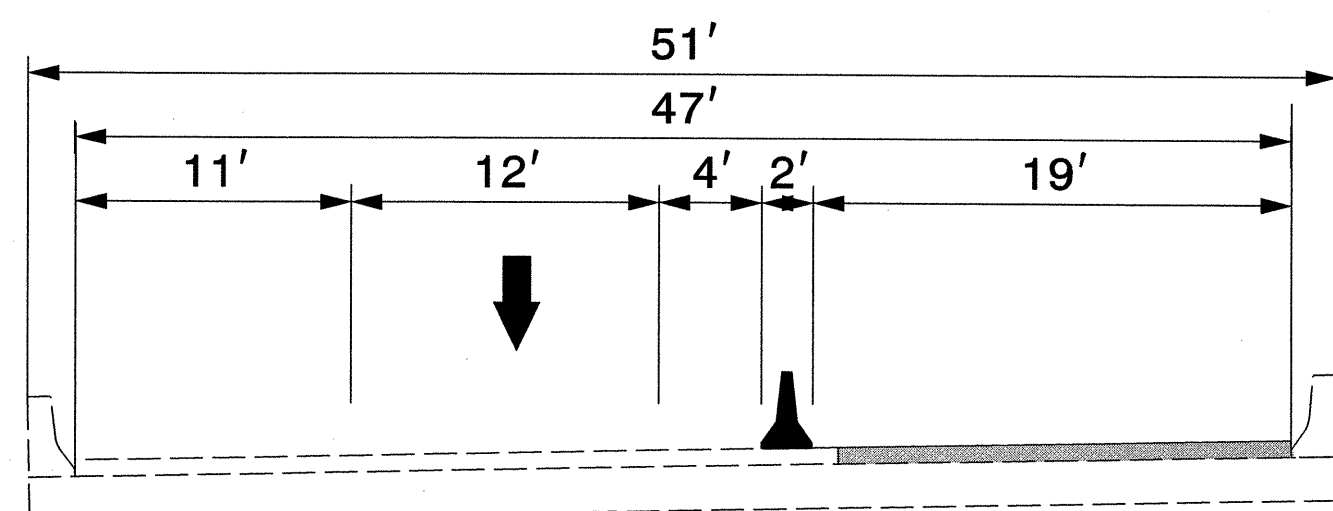
**WORK ZONE
 TYPICAL SECTIONS
 (ROADWAY)**



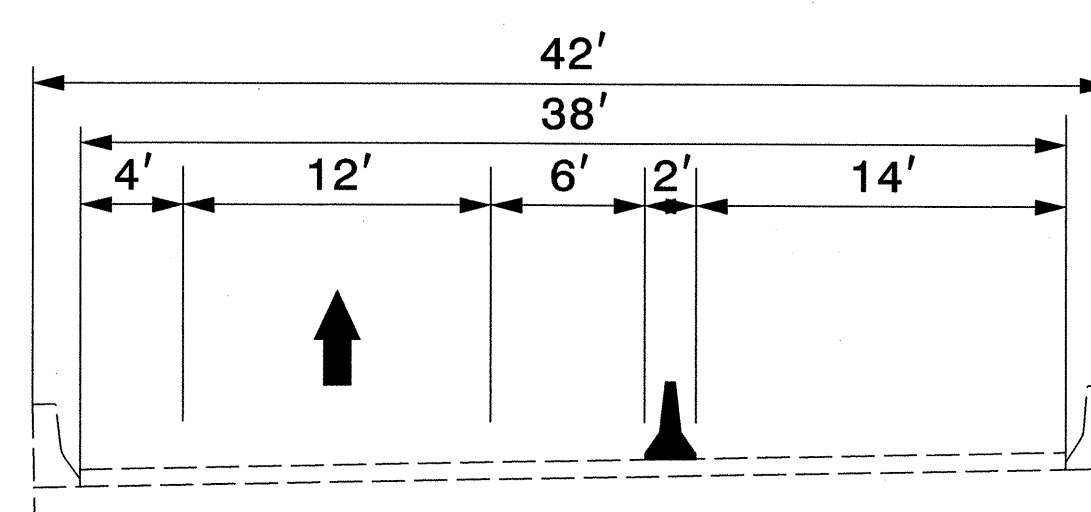
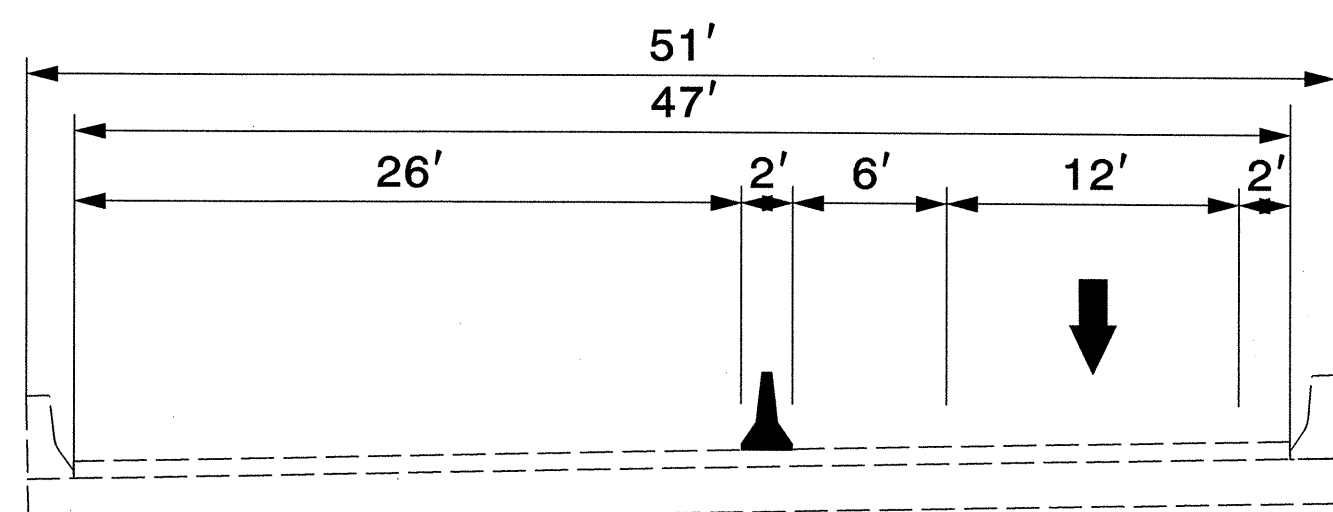
FINAL TRAFFIC CONFIGURATION



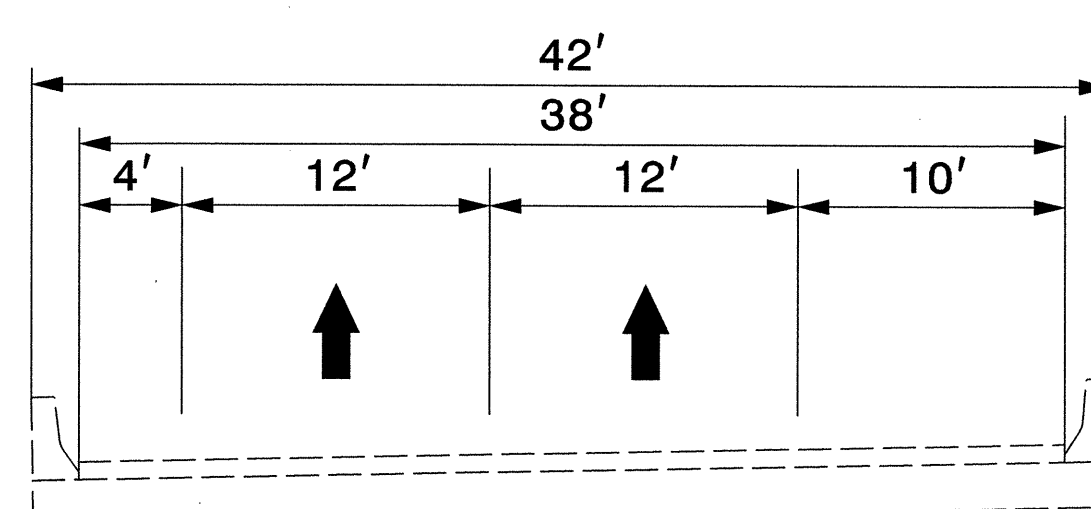
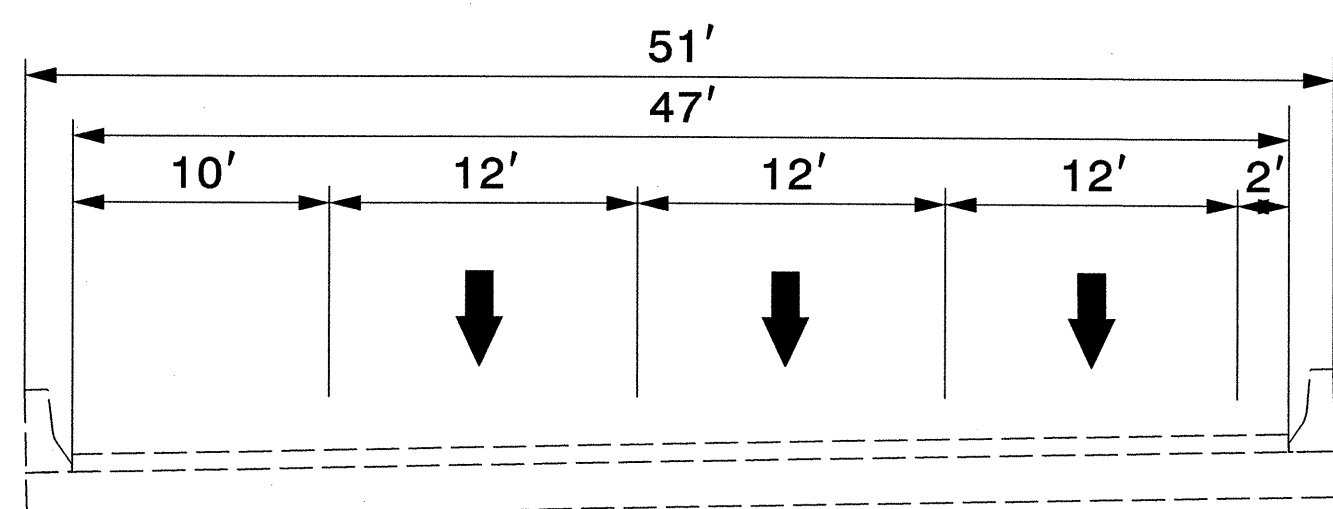
PHASE III - 1 LANE NB AND SB
- MILL EXISTING ASPHALT
- OVERLAY WITH CONCRETE



PHASE II - 1 LANE NB AND SB
- MILL EXISTING ASPHALT
- OVERLAY WITH CONCRETE



PHASE I - 1 LANE NB AND SB
- SHIFT TRAFFIC TO INSIDE TRAVEL LANE



EXISTING TRAFFIC CONFIGURATION

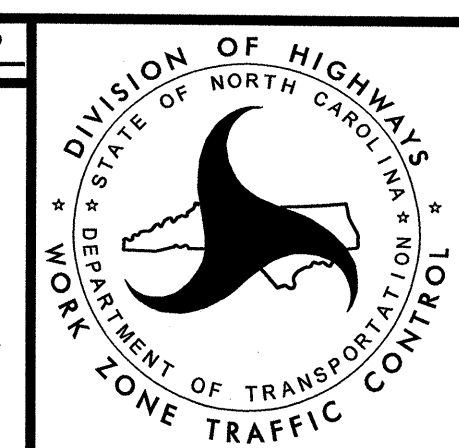
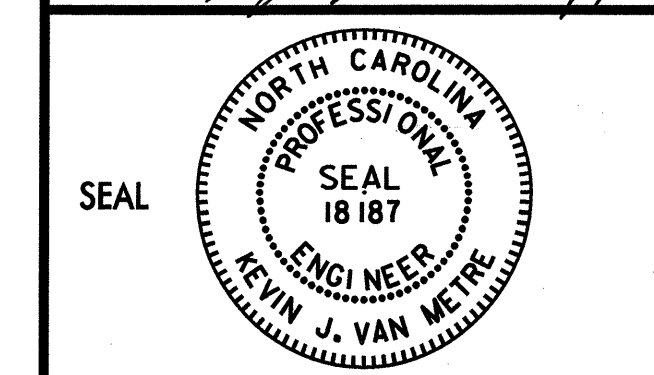
BRIDGE 525

BRIDGE 43

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 hildebrandt

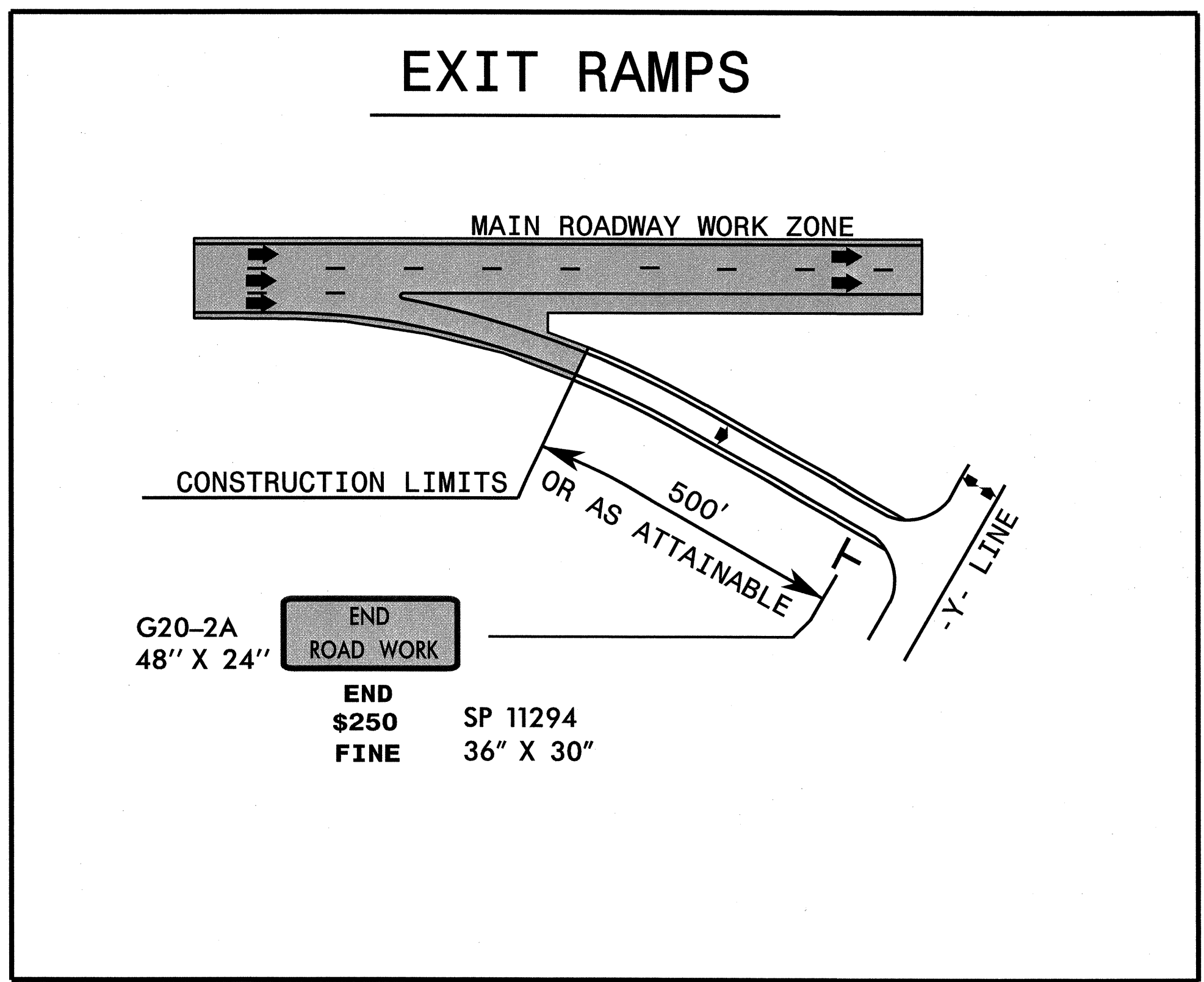
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 Suite 475 Raleigh, NC 27607
 Phone: 919-854-6200

APPROVED: *[Signature]* DATE: 7/1/12



**WORK ZONE
 TYPICAL SECTIONS
 (BRIDGE REHAB)**

EXIT RAMPS



THE FOLLOWING DETAILS, NOTES, AND GUIDELINES ARE TO BE USED IN CONJUNCTION WITH ROADWAY STANDARD DRAWING 1101.02, SHEETS 9 & 10 OF 15.

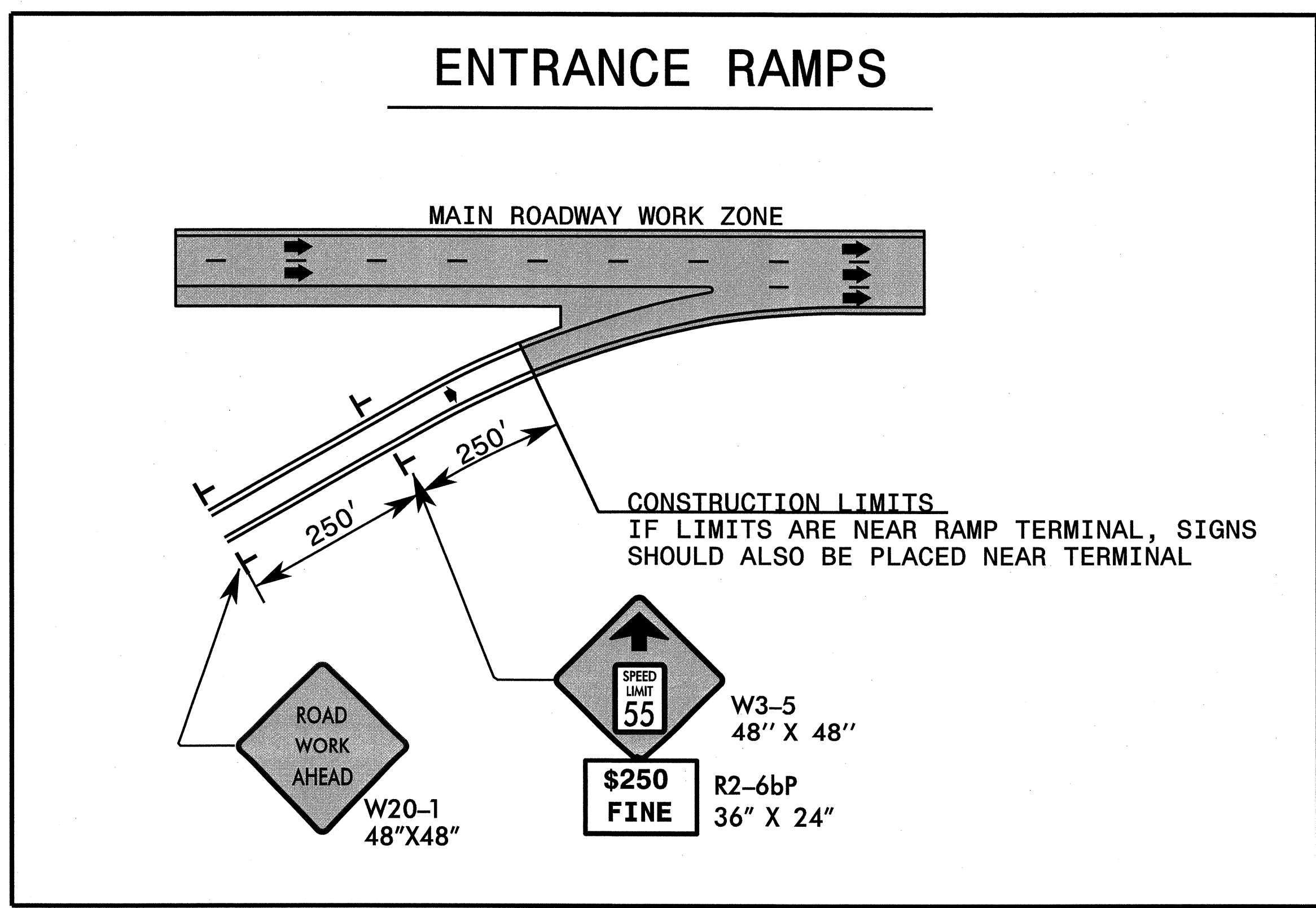
NOTES

- 1) THE WORK ZONE SPEED LIMIT WILL BE ESTABLISHED IN COLLABORATION BETWEEN THE REGIONAL TRAFFIC ENGINEER, THE DIVISION AND THE WORK ZONE TRAFFIC CONTROL SECTION. THIS DRAWING SHOWS THE TYPICAL APPLICATION OF REDUCING THE "WORK ZONE SPEED LIMIT" TO 55 MPH.
- 2) IF THE "WORK ZONE SPEED LIMIT" ONLY APPLIES TO A SPECIFIC PORTION AND NOT THE ENTIRE PROJECT, THE EXISTING SPEED LIMIT IS TO BE REESTABLISHED INSIDE THE PROJECT LIMITS. THE EXISTING SPEED LIMIT SIGNS AND THE "END \$250 FINE" SIGNS ARE TO BE INSTALLED AT THE LOCATION WHERE THE EXISTING SPEED LIMIT IS TO RESUME. (SEE GUIDELINE- D)
- 3) THE WORK ZONE SPEED LIMIT SIGNS ARE TO BE MOUNTED FROM 7' ABOVE EDGE OF PAVEMENT ELEVATION.
- 4) THIS DRAWING SHALL APPLY ON STATIONARY WORK ZONES WHEN TEMPORARY LANE CLOSURES ARE INSTALLED AT THE BEGINNING OF THE PROJECT LIMITS.
- 5) THE NEED AND LOCATION OF ADDITIONAL POSTED "WORK ZONE SPEED LIMIT" SIGNS WITHIN THE WORK AREA IS TO BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER.
- 6) A CHANGEABLE MESSAGE SIGN (CMS) SHALL BE PLACED AHEAD OF THE LANE CLOSURE PER ROADWAY STANDARD DRAWING 1101.02.

GUIDELINES

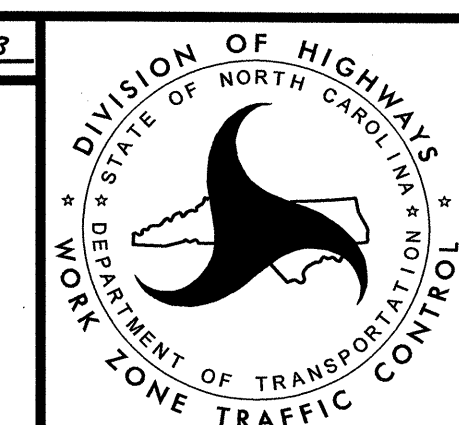
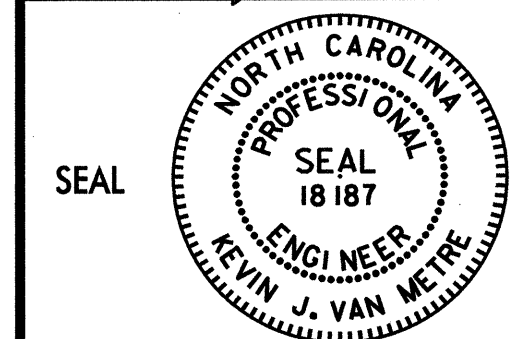
- A) THIS DRAWING IS FOR USE ONLY AFTER AN ENGINEERING INVESTIGATION AND CRITERIA REVIEW HAS BEEN PERFORMED BY THE REGIONAL TRAFFIC ENGINEER AND THE WORK ZONE TRAFFIC CONTROL SECTION. THE WORK ZONE SPEED LIMIT REDUCTION IS INTENDED FOR USE ON FREENWAYS WITH SPEED LIMITS 65 MPH OR GREATER. SEE WORK ZONE SPEED LIMIT GUIDELINES FOR CRITERIA.
- B) THE STATE TRAFFIC ENGINEER HAS TO ORDINANCE THE SPEED LIMIT REDUCTION IN ORDER FOR THE REDUCTION TO BE VALID AND ENFORCEABLE. NO SPEED LIMIT SIGNS SHALL BE INSTALLED PRIOR TO RECEIVING A SIGNED ORDINANCE. IN ADDITION, THE \$250 SPEEDING FINE ALSO REQUIRES A SEPARATE SIGNED ORDINANCE BY THE STATE TRAFFIC ENGINEER.
- C) EACH DIRECTION OF THE PROJECT IS TO BE EVALUATED FOR THE "WORK ZONE" SPEED LIMIT REDUCTION. THIS DRAWING INTENTIONALLY HAS 1 DIRECTION SIGNED AS A REMINDER TO CAREFULLY CONSIDER WHETHER BOTH DIRECTIONS OF THE PROJECT NEED TO HAVE THE SPEED LIMIT REDUCED.
- D) FOR PROJECTS THAT EXCEED 2 MILES IN LENGTH, AN EVALUATION IS TO BE MADE TO DETERMINE IF THE "WORK ZONE" SPEED LIMIT REDUCTION APPLIES TO THE ENTIRE PROJECT LENGTH OR IF ONLY A PORTION OF THE PROJECT LENGTH. THE "WORK ZONE" SPEED LIMIT REDUCTION MAY TERMINATE BEFORE THE END OF THE PROJECT LIMITS. THE DRAWING IS TO BE MODIFIED AS NEEDED TO REFLECT THESE CONDITIONS.
- E) THE \$250 SPEEDING FINE APPLIES FOR ALL PROJECTS THAT QUALIFY FOR A "WORK ZONE" SPEED LIMIT REDUCTION.
- F) ALL "WORK ZONE" SPEED LIMIT REDUCTION SIGNAGE SHALL BE REMOVED WHEN THE CONDITION/S THAT WARRANTED THE REDUCTION AND FINE IS REMOVED. THE REGIONAL TRAFFIC ENGINEER WILL BE NOTIFIED BY THE RESIDENT ENGINEER AT THIS TIME TO RESCIND THE ORDINANCES AND RETURN THE EXISTING POSTED SPEED LIMIT. THIS SHOULD TAKE PLACE BEFORE THE PROJECT IS 100% COMPLETE AND ACCEPTED FOR MAINTENANCE.

ENTRANCE RAMPS

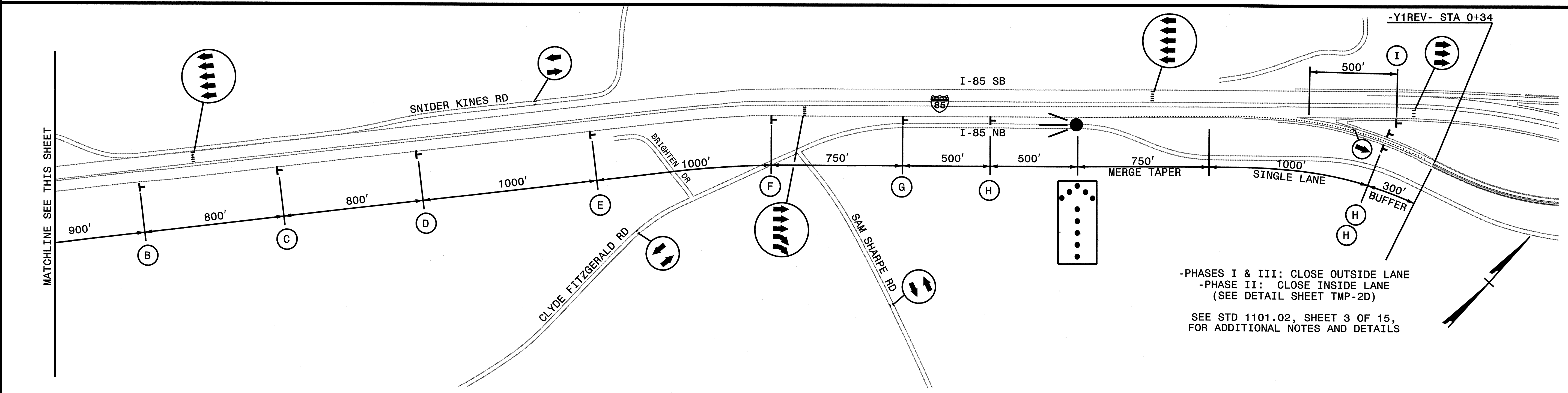
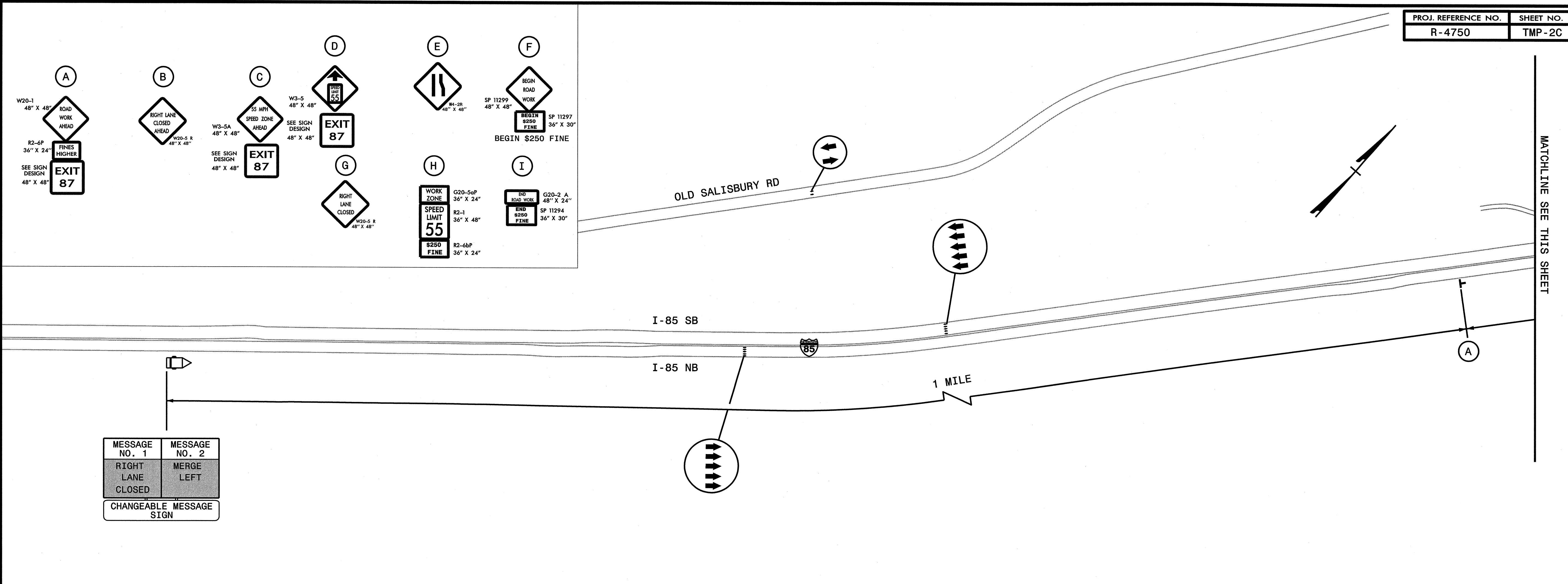
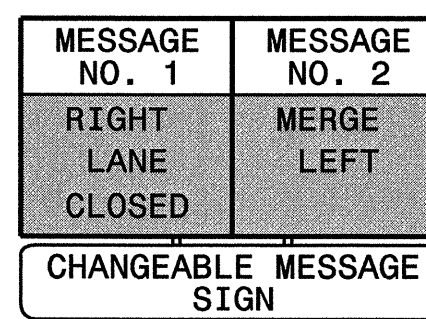
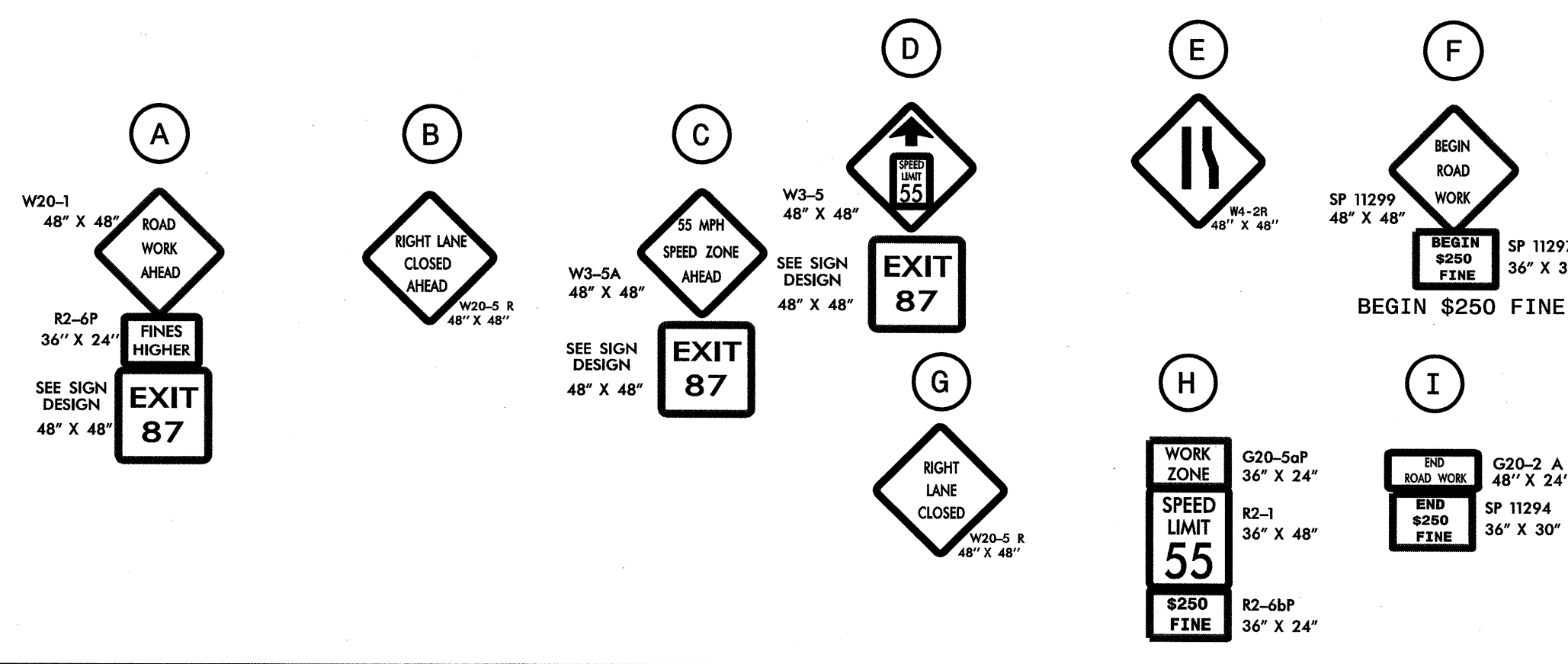


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APPROVED: *[Signature]* DATE: 1/9/13

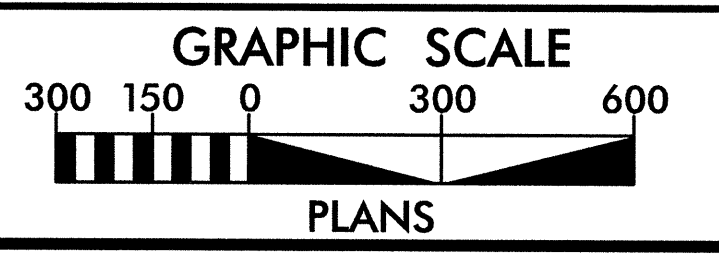
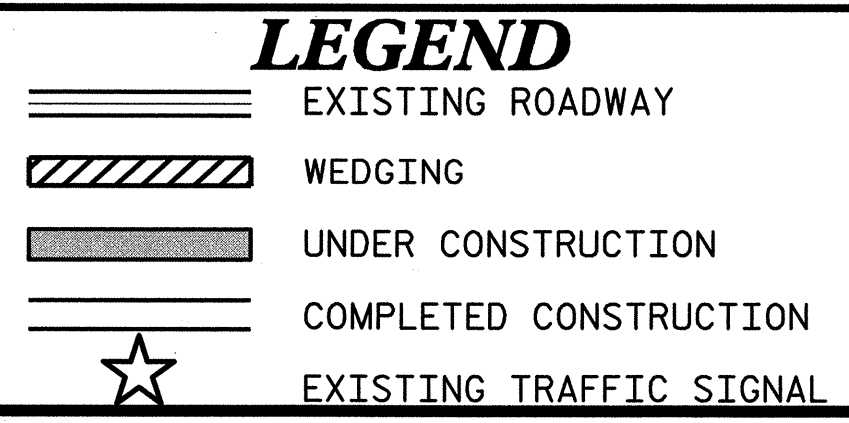


**LANE CLOSURES
FOR RAMPS
STANDARD DETAILS**



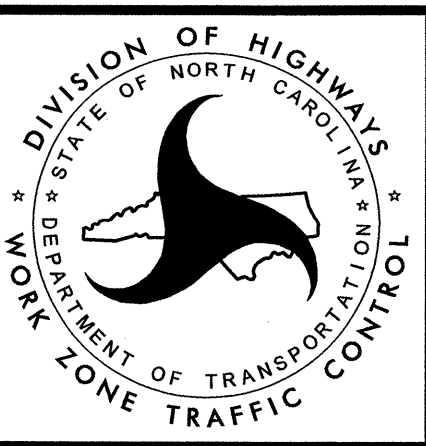
-PHASES I & III: CLOSE OUTSIDE LANE
 -PHASE II: CLOSE INSIDE LANE
 (SEE DETAIL SHEET TMP-2D)
 SEE STD 1101.02, SHEET 3 OF 15,
 FOR ADDITIONAL NOTES AND DETAILS

7/9/2013 03:13:50 AM R:\projects\TrafficControl\TCP\IR-4750.TC_TMP_speedreduction_NB.psh.dgn

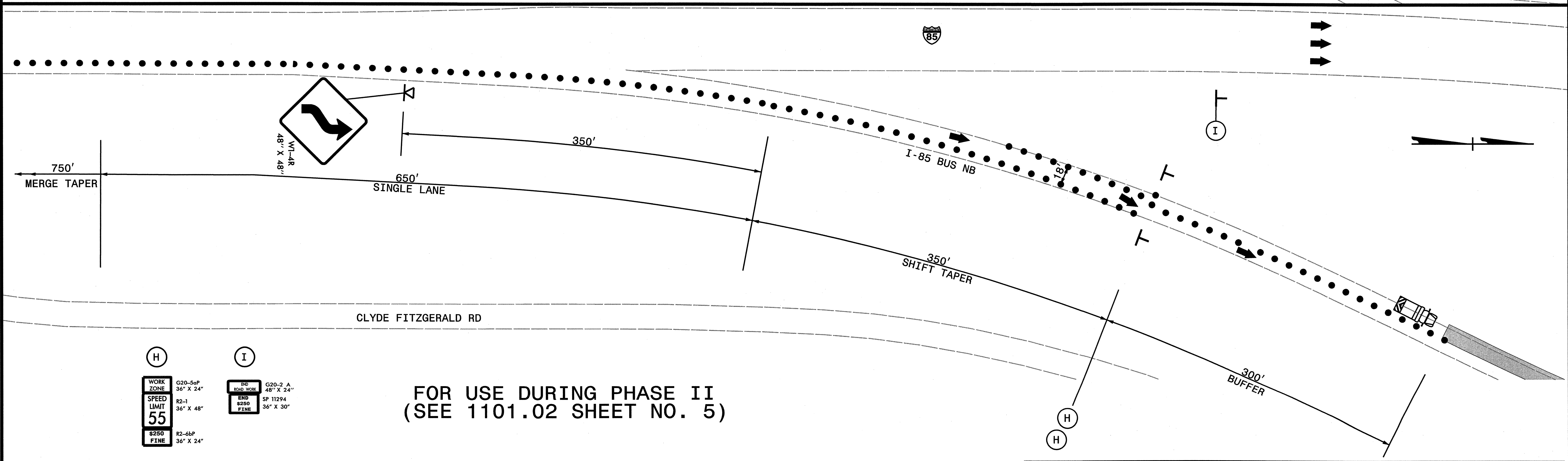
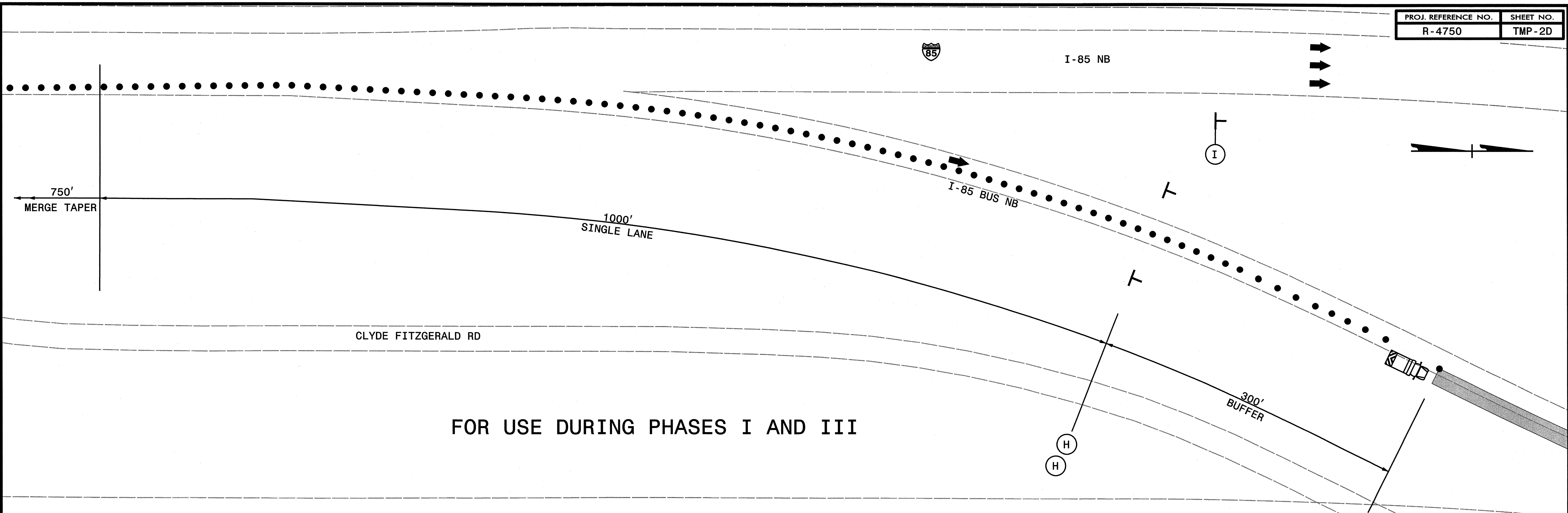


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 Phone: 919-854-6200

APPROVED: *[Signature]* DATE: 7/9/13
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 18187
 KEVIN J. VAN METRE



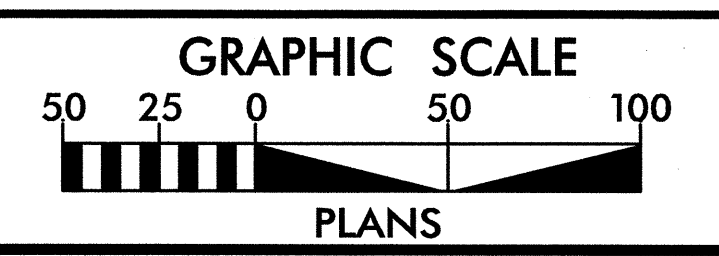
NB WORK ZONE APPROACH OVERVIEW SPEED REDUCTION & LANE CLOSURE



(H)	WORK ZONE G20-5aP 36" X 24"	(I)	END WORK G20-2 A 48" X 24"
	SPEED LIMIT R2-1 36" X 48"		END SP 11294 36" X 30"
	55		
	S250 FINE R2-4bP 36" X 24"		

LEGEND

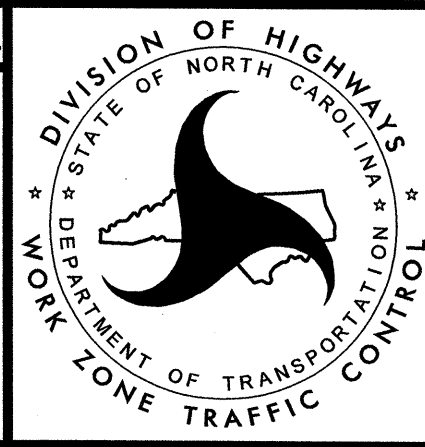
	EXISTING ROADWAY
	WEDGING
	UNDER CONSTRUCTION
	COMPLETED CONSTRUCTION
	EXISTING TRAFFIC SIGNAL



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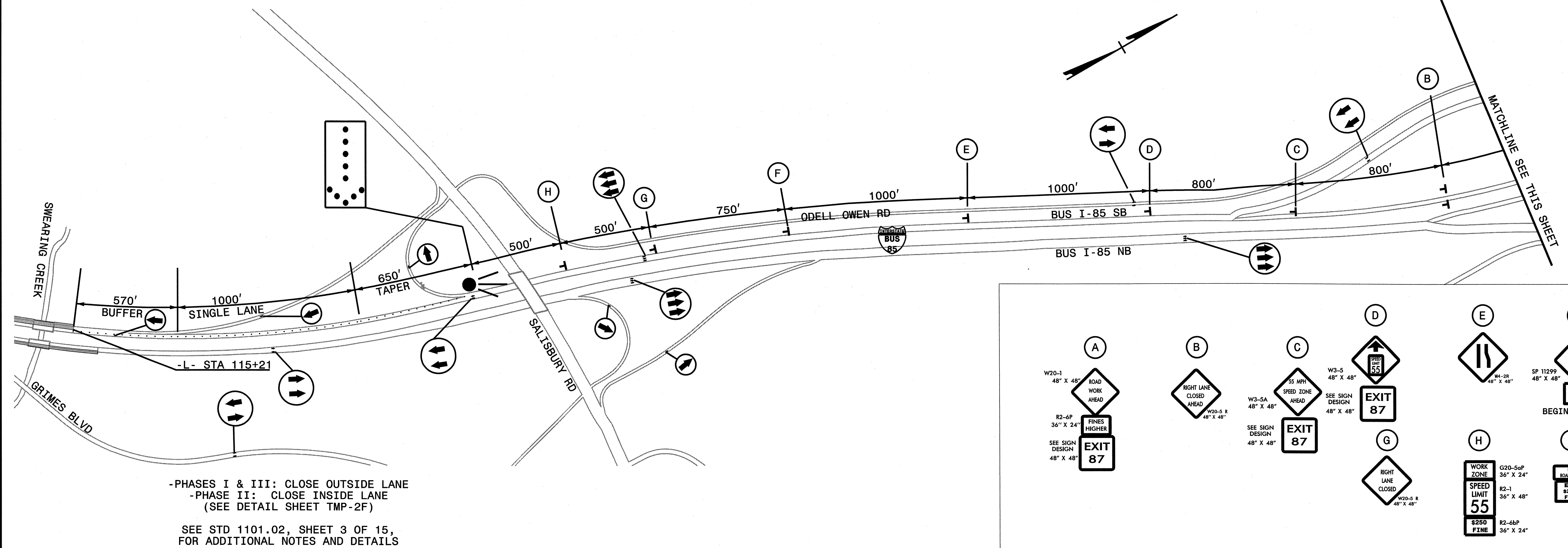
APPROVED: *[Signature]* DATE: 7/6/13

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 KEVIN J. VAN METRE
 18 187



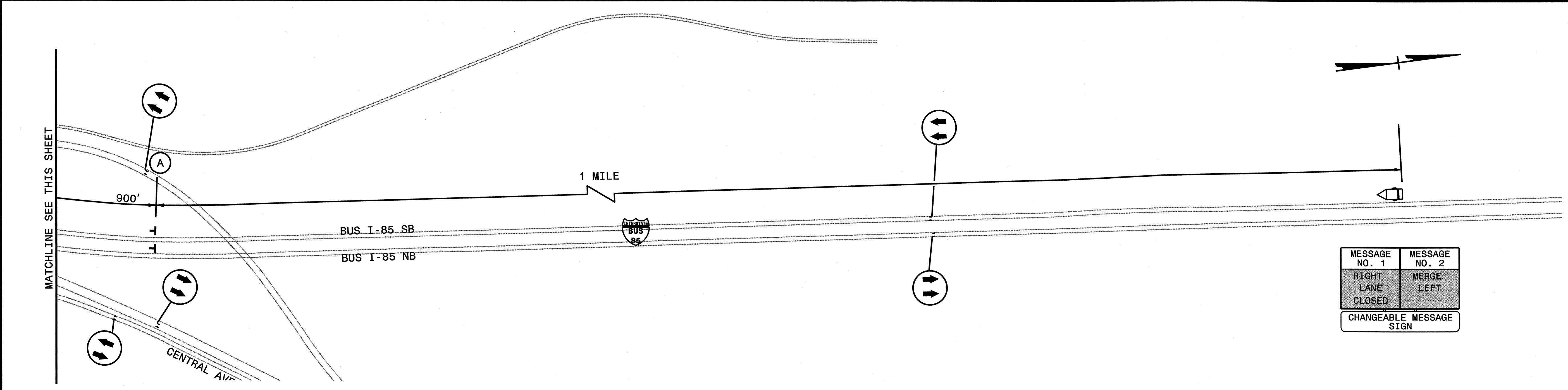
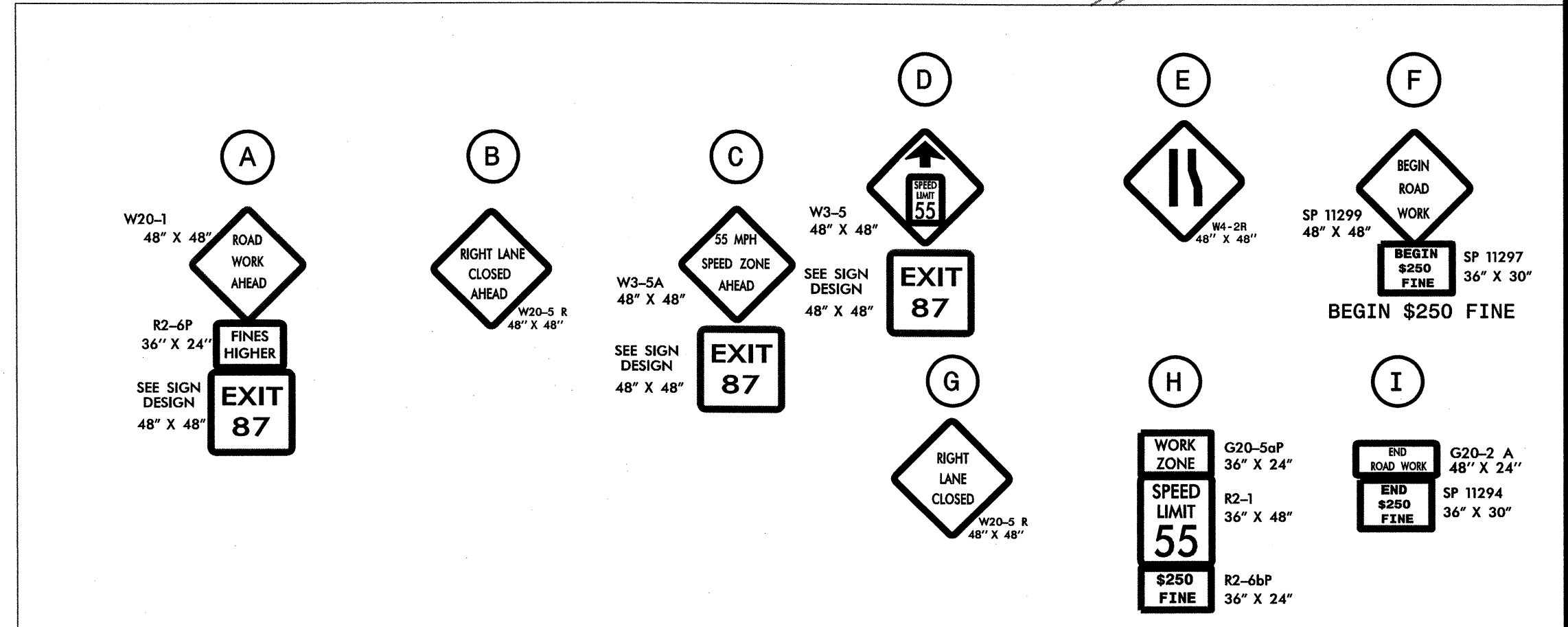
**NB WORK ZONE APPROACH
 LANE CLOSURE DETAIL**

8:47:41 AM R:\TrafficControl\TCP\R-4750_TC_TMP_speedreduction_NB_det.dwg
 hlsdbrant



-PHASES I & III: CLOSE OUTSIDE LANE
 -PHASE II: CLOSE INSIDE LANE
 (SEE DETAIL SHEET TMP-2F)

SEE STD 1101.02, SHEET 3 OF 15,
 FOR ADDITIONAL NOTES AND DETAILS



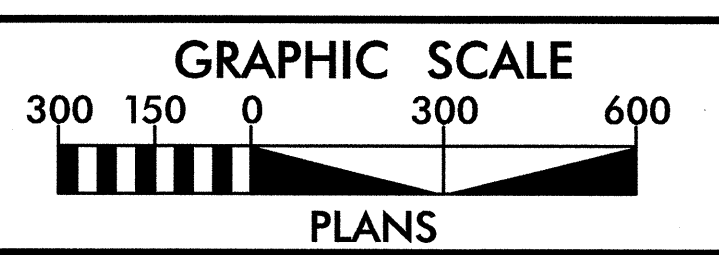
MESSAGE NO. 1 RIGHT LANE CLOSED	MESSAGE NO. 2 MERGE LEFT
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CHANGEABLE MESSAGE SIGN

7/9/2013 10:38:13 AM R:\NTP\TrafficControl\TC\R-4750_TC_TMP_speedreduction_SB.psh.dgn

LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



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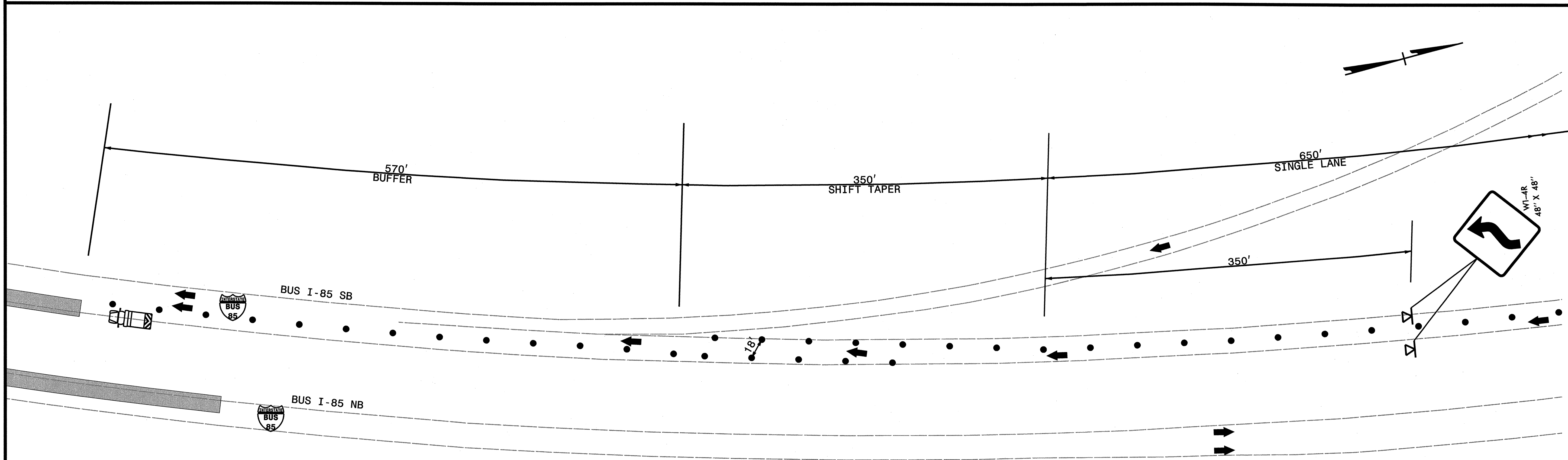
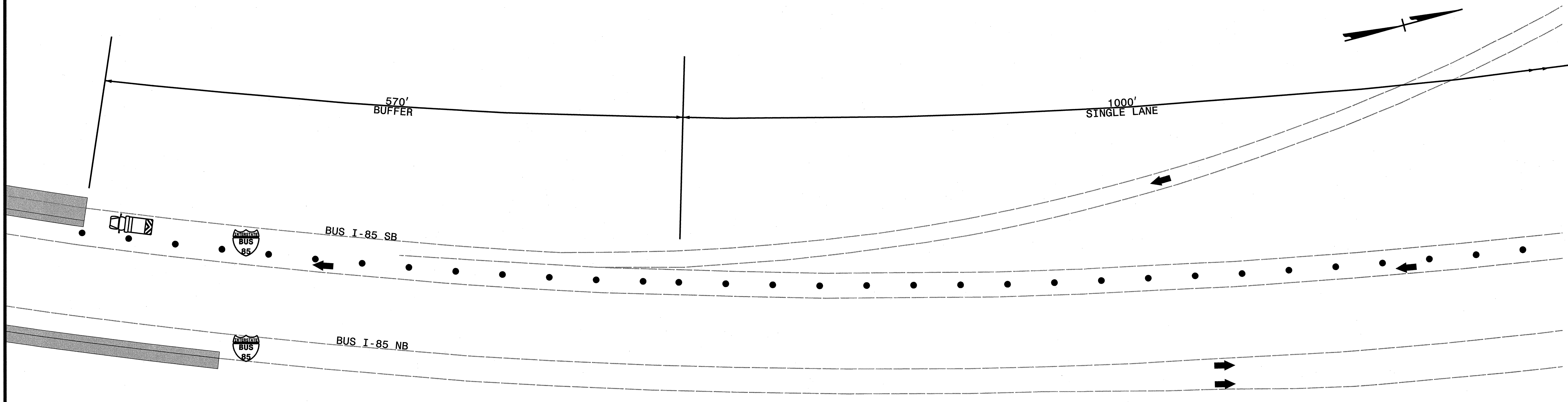
APPROVED: *[Signature]* DATE: 7/9/13

SEAL



**SB WORK ZONE
 APPROACH OVERVIEW
 SPEED REDUCTION & LANE CLOSURE**

FOR USE DURING PHASES I AND III

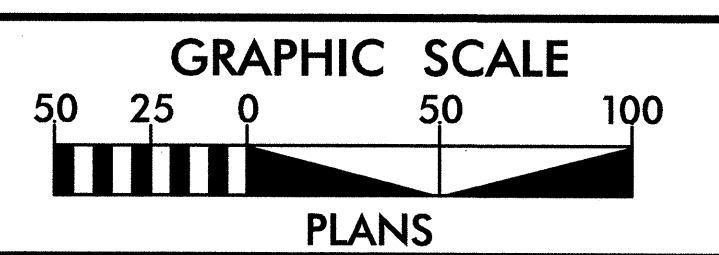


NOTE(S):
SEE STD. 1101.11 AND STD. 1101.02(5)

FOR USE DURING PHASE II

LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



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SB WORK ZONE APPROACH
LANE CLOSURE DETAIL

9:47:44 AM R:\TrafficControl\TCP\N-4750_TC_TMP_speedreduction_SB_details_psh.dgn

SIGN NUMBER: EXIT 87 TYPE: D QUANTITY: 1 SIGN WIDTH: 3'-0" HEIGHT: 3'-6" TOTAL AREA: 10.5 Sq.Ft. BORDER TYPE: FLUSH RECESS: 0.47" WIDTH: 0.63" RADII: 1.5" NO. Z BARS: LENGTH:	BACKG COLOR: Orange COPY COLOR: Black MAJ. COPY SERIES: Ground ROUTE MARKERS: ARROW TYPES: MAT'L: 0.063" ALUMINUM	DESIGN DESIGNED PROJECT ID:	CHECKED BY: CHECKED DIV/DIV	STD #:-STD DATE: Jun 17, 2013																				
<table border="1"> <thead> <tr> <th colspan="4">LETTER POSITIONS</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>X</td> <td>I</td> <td>T</td> </tr> <tr> <td>8</td> <td>13.8</td> <td>20.6</td> <td>23</td> </tr> <tr> <td>8</td> <td>7</td> <td></td> <td></td> </tr> <tr> <td>11.9</td> <td>18.7</td> <td></td> <td>12.2</td> </tr> </tbody> </table> <p>Letter positions are to the lower left corners</p>		LETTER POSITIONS				E	X	I	T	8	13.8	20.6	23	8	7			11.9	18.7		12.2			
LETTER POSITIONS																								
E	X	I	T																					
8	13.8	20.6	23																					
8	7																							
11.9	18.7		12.2																					
USE NOTES: 1,3,4,6 1. Legend and border shall be direct applied encapsulated lens reflective sheeting. 2. Legend and border shall be direct applied enclosed lens reflective sheeting. 3. Shields shall be encapsulated lens reflective sheeting on 0.8mm aluminum and demountable. 4. Background shall be encapsulated lens reflective sheeting. 5. Background shall be enclosed lens reflective sheeting. 6. Center arrows vertically on sign.																								
NORTH CAROLINA D.O.T. SIGN DETAIL																								

9:47:45 AM
 At: \\ncdot\IT\TrafficControl\TCPR-R-4750_TC_TMP-Exit87_psh.dgn
 HIGSD\gnst

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 Suite 475 Raleigh, NC 27607
 Phone: 919-854-6200

APPROVED: <i>[Signature]</i> DATE: 7/5/13			<h1 style="text-align: center;">SIGN DESIGN</h1>
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PROJECT PHASING

I-85 BUSINESS

PHASE I

STEP 1: INSTALL ADVANCE WORK ZONE WARNING SIGNS ON I-85 NORTHBOUND AND ON I-85 BUSINESS SOUTHBOUND AS SHOWN. KEEP SIGNS COVERED UNTIL READY TO IMPLEMENT LANE CLOSURE(S).

THE NORTHBOUND AND SOUTHBOUND LANE CLOSURES ARE INDEPENDENT OF ONE ANOTHER AND ALTHOUGH THEY ARE DEPICTED TOGETHER THROUGHOUT THESE PHASING PLANS, THE TRAFFIC OPERATIONS DO NOT OPERATE IN UNISON.

STEP 2: UNCOVER SIGNS, PLACE TRAFFIC CONTROL DEVICES (DRUMS) AND IMPLEMENT LANE CLOSURE(S).

STEP 3: CONSTRUCT, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, THE OUTSIDE SHOULDERS OF NORTHBOUND AND SOUTHBOUND I-85 BUSINESS AS SHOWN IN THE PHASE I TYPICAL SECTION, SHEET TMP-2 AND CONSTRUCT THE FIRST PHASE OF THE BRIDGE REHABILITATIONS, SEE SHEET TMP-2A. THIS CONSTRUCTION IS FOR THE ENTIRE LENGTH OF THE PROJECT AS FOLLOWS:

NORTHBOUND, -Y1REV-,	STA. 0+34	TO STA. 13+91	
NORTHBOUND, -Y1REV-,	STA. 17+64	TO STA. 29+62	
NORTHBOUND, -L-,	STA. 10+00	TO STA. 112+88	
NORTHBOUND, -L-,	STA. 112+88	TO STA. 114+02	(BRIDGE NO. 43)
NORTHBOUND, -L-,	STA. 114+02	TO STA. 116+65	
SOUTHBOUND, -RP85-,	STA. 10+00	TO STA. 20+62	
SOUTHBOUND, -L-,	STA. 10+00	TO STA. 112+98	
SOUTHBOUND, -L-,	STA. 112+98	TO STA. 114+12	(BRIDGE NO. 525)
SOUTHBOUND, -L-,	STA. 114+12	TO STA. 115+22	

BEGIN CONSTRUCTION OF THE FOLLWING RAMPS USING ROADWAY STANDARD DRAWING 1101.02, SHEETS 9 & 10 OF 15:

NORTHBOUND, I-85 BUS. OFF RAMP TO HARGRAVE RD., EXIT 84
 NORTHBOUND, HARGRAVE RD. ON RAMP TO I-85 BUS. N
 NORTHBOUND, I-85 BUS. OFF RAMP TO GREEN NEEDLES RD., EXIT 85
 NORTHBOUND, GREEN NEEDLES RD. ON RAMP TO I-85 BUS. N
 SOUTHBOUND, I-85 BUS. OFF RAMP TO GREEN NEEDLES RD, EXIT 85
 SOUTHBOUND, GREEN NEEDLES RD. ON RAMP TO I-85 BUS. S
 SOUTHBOUND, I-85 BUS. OFF RAMP TO LEXINGTON PARKWAY, EXIT 84
 SOUTHBOUND, LEXINGTON PARKWAY ON RAMP TO I-85 BUS. S

NOTE: ONLY MILL WHAT CAN BE PAVED BACK TO THE TOLERANCES LISTED IN GENERAL NOTES WITHIN TWENTY-FOUR (24) HOURS, E.G. MILL AT NIGHT, PAVE DURING THE DAY. ANY VARIATION TO THIS REQUIREMENT SHALL BE APPROVED BY AND AS DIRECTED BY THE ENGINEER.

STEP 4: CONSTRUCT THE PROPOSED GREEN NEEDLES ROAD OFF RAMP AND SERVICE ROAD (MARCO BLVD.) AS SHOWN IN SHEETS TMP-5 THROUGH TMP-5D (SEE TMP-5, PHASES A THRU D). THIS WORK SHALL BE DONE WITHIN PHASE I OF THE I-85 BUSINESS SOUTHBOUND, OUTSIDE SHOULDER CONSTRUCTION.

STEP 5: UPON COMPLETION OF STEP 3, PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND MARKERS ON THE NEWLY CONSTRUCTED SHOULDER AND EXISTING PAVEMENT FOR THE PHASE II LANE CONFIGURATION, SEE PHASE II TYPICAL SECTION, SHEET TMP-2. OBLITERATE ANY CONFLICTING MARKINGS.

PHASE II

STEP 1: SWITCH TRAFFIC TO THE OUTSIDE LANES AS SHOWN IN THE PHASE II TYPICAL SECTION, SHEET TMP-2 AS FOLLOWS:

MOVE DRUMS TO MID WAY BETWEEN THE LOCATIONS DEPICTED FOR PHASES I AND II IN TYPICAL SECTIONS. USE A SINGLE (PILOT) VEHICLE AS A ROLLING ROAD BLOCK TO REDUCE VEHICULAR SPEED IN ADVANCE (MIN. 1 MILE) OF THE WORK ZONE. RESET DRUMS AT APPROACH TO THE WORK ZONE AS SHOWN IN DETAIL SHEETS, TMP-2D AND TMP-2F AND PILOT VEHICLE WILL GUIDE TRAFFIC INTO NEW LANE ASSIGNMENT TO COMPLETE THE SHIFT OF TRAFFIC.

STEP 2: CONSTRUCT, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, THE INSIDE SHOULDERS AND INSIDE LANES OF NORTHBOUND AND SOUTHBOUND I-85 BUSINESS AS SHOWN IN THE PHASE II TYPICAL SECTION, SHEET TMP-2 AND CONSTRUCT THE SECOND PHASE OF THE BRIDGE REHABILITATIONS, SEE SHEET TMP-2A. THIS CONSTRUCTION IS FOR SAME STATION RANGES LISTED IN PHASE I, STEP 3.

MAINTAIN ACCESS TO OFF RAMPS AND FOR ON RAMPS THROUGHOUT THE PROJECT USING THE RAMPS DETAILS SHOWN ON SHEET TMP-2B IN CONJUNCTION WITH STD. 1101.02.

THE SAME RESTRICTIONS REGARDING PAVEMENT EDGE DROP OFF REQUIREMENTS LISTED IN THE "NOTE", PHASE I, STEP 3 IS APPLICABLE TO ALL PHASES OF CONSTRUCTION FOR THIS PROJECT.

STEP 3: UPON COMPLETION OF STEP 2, PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND MARKERS ON THE NEWLY CONSTRUCTED SHOULDER AND EXISTING PAVEMENT FOR THE PHASE III LANE CONFIGURATION, SEE PHASE III TYPICAL SECTION, SHEET TMP-2. OBLITERATE ANY CONFLICTING MARKINGS

PHASE III

STEP 1: SWITCH TRAFFIC BACK TO THE INSIDE LANES AS SHOWN IN THE PHASE III TYPICAL SECTION, SHEET TMP-2 USING THE SAME SCENARIO DESCRIBE IN PHASE II, STEP 1.

STEP 2: CONSTRUCT, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, THE OUTSIDE TRAVEL LANES OF NORTHBOUND AND SOUTHBOUND I-85 BUSINESS AS SHOWN IN THE PHASE III TYPICAL SECTION, SHEET TMP-2 AND THE THIRD PHASE OF THE BRIDGE REHABILITATIONS, SEE SHEET TMP-2A. THIS CONSTRUCTION IS FOR SAME STATION RANGES LISTED IN PHASE I, STEP 3.

WHILE MAINTAINING ACCESS THROUGH THE ON AND OFF RAMPS THROUGHOUT THE PROJECT, COMPLETE CONSTRUCTION OF THE ON AND OFF RAMPS LISTED IN PHASE I, STEP 3 USING THE ROADWAY STANDARD DRAWINGS 1101.02, SHEETS 9 & 10 OF 15.

THE SAME RESTRICTIONS REGARDING PAVEMENT EDGE DROP OFF REQUIREMENTS LISTED IN THE "NOTE", PHASE I, STEP 3 IS APPLICABLE TO ALL PHASES OF CONSTRUCTION FOR THIS PROJECT.

PHASE III (CONTINUED)

STEP 3: MAINTAIN THE 55 MPH SPEED LIMIT THROUGH THE PROJECT. CONTINUE MAINTAINING ONE LANE OF TRAFFIC IN EACH DIRECTION AND USING RSD 1101.02, SHEET 3 OF 15, AS NEEDED, PLACE THE FINAL LAYER OF SURFACE COURSE THROUGHOUT THE PROJECT. PLACE FINAL PAVEMENT MARKINGS (THERMOPLASTIC) AND MARKERS ONCE THE FINAL LAYER HAS BEEN PLACED.

PHASE IV (NOT DEPICTED)

STEP 1: USING RSD 1101.02, SHEET 3 OF 15 ASNEEDED, INSTALL THE PROPOSED OVERHEAD SIGN ASSEMBLY AT STA. 141+30 ON THE SOUTHBOUND SIDE. THIS SHALL BE DONE AS DIRECTED BY THE ENGINEER.

STEP 2: REMOVE TRAFFIC CONTROL DEVICES AND OPEN ROADWAY IN THE FINAL TRAFFIC PATTERN.

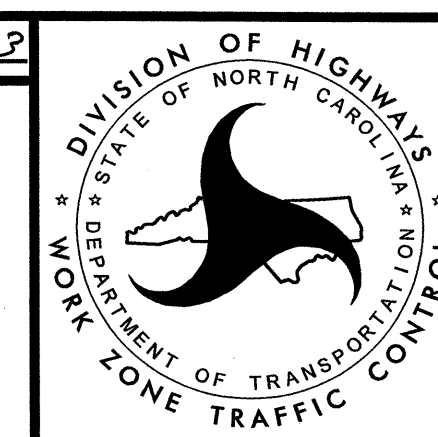
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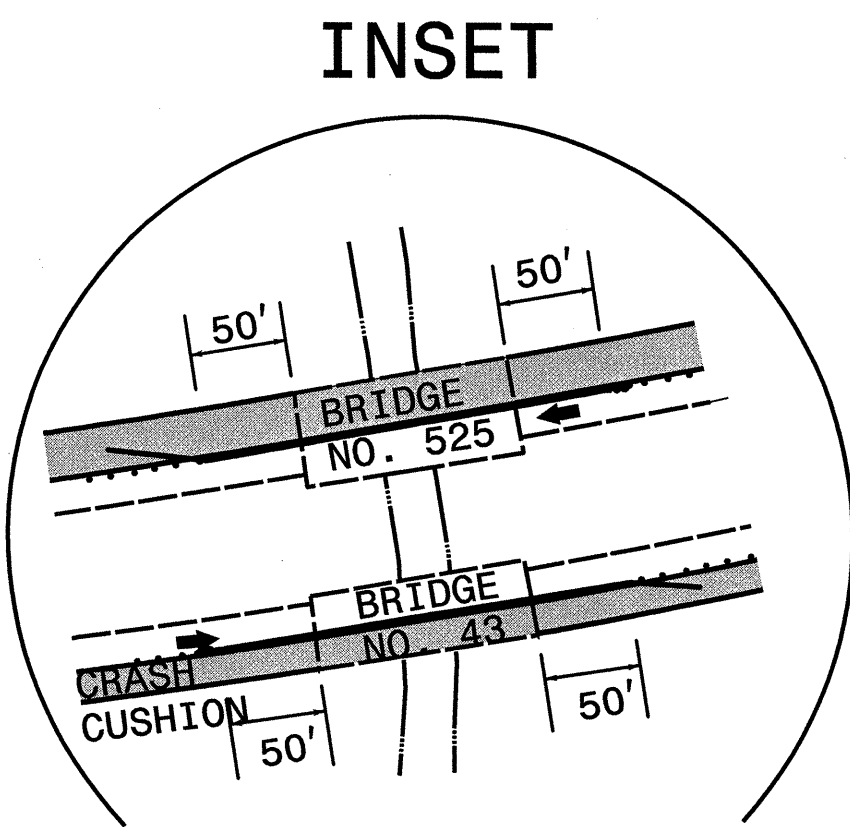
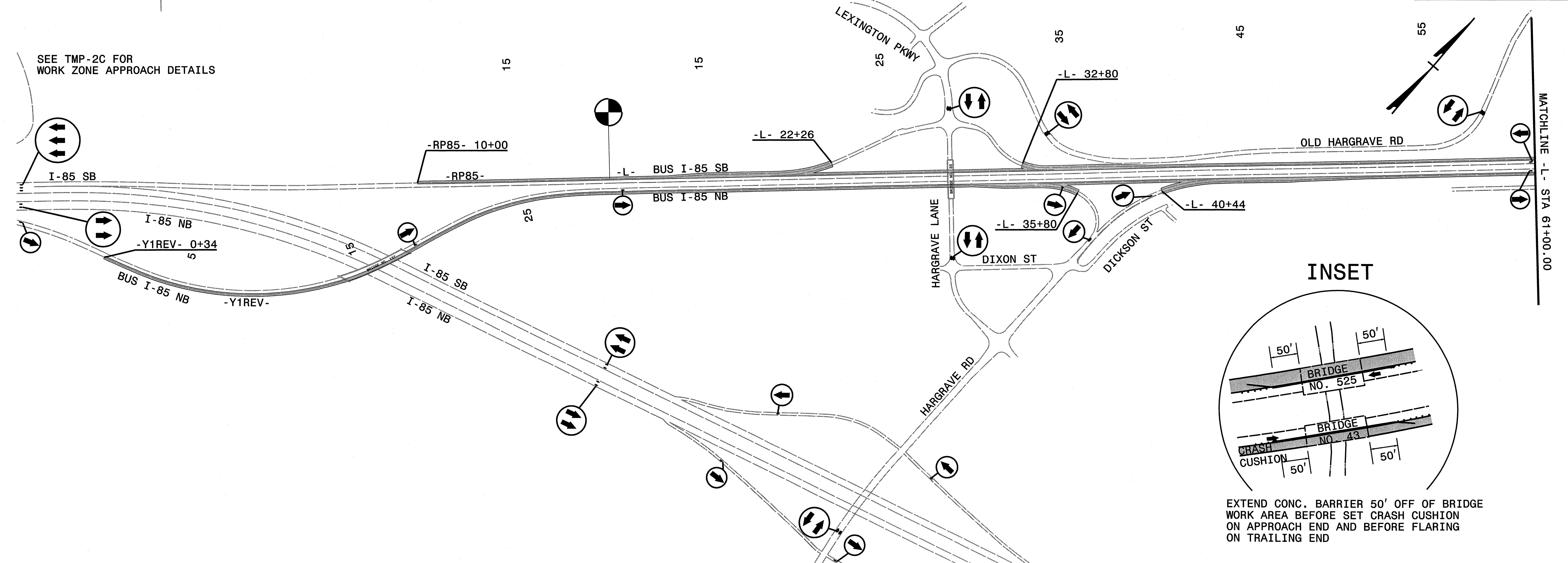
SEAL

NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 KEVIN J. VAN METRE
 18187

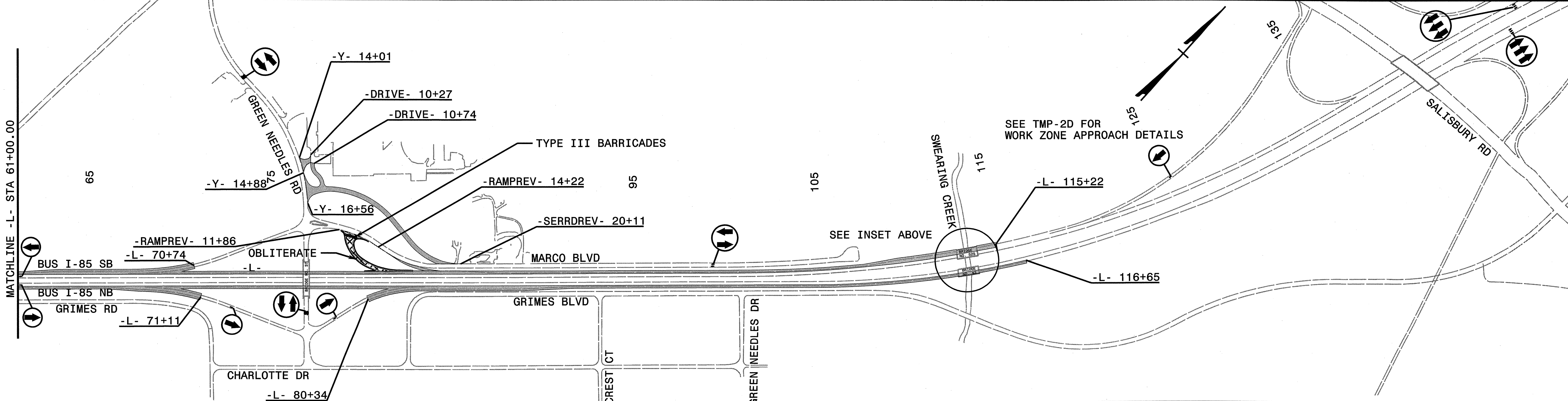


PROJECT PHASING

I-85 BUSINESS

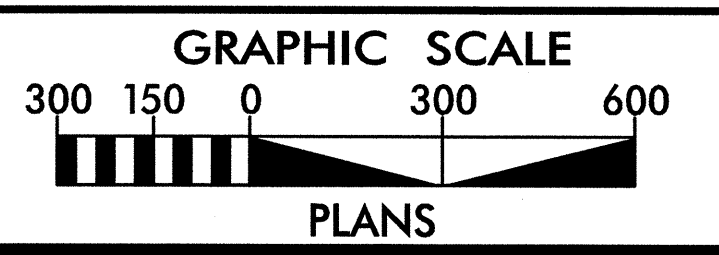


EXTEND CONC. BARRIER 50' OFF OF BRIDGE WORK AREA BEFORE SET CRASH CUSHION ON APPROACH END AND BEFORE FLARING ON TRAILING END



LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



- NOTES:**
- SEE TYPICAL SECTIONS (TMP-2A) FOR DIMENSIONS.
 - SEE STD 1101.01 FOR RAMP CONSTRUCTION.

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DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PHASE I OVERVIEW

7/9/2012 9:47:18 AM I:\TrafficControl\TCP\Phase I\R-4750_TC_TMP_overview_phases.dgn

PROJECT PHASING
GREEN NEEDLES RD.
OFF RAMP AND SERVICE ROAD

PHASE A

STEP 1: MAINTAIN EXISTING TRAFFIC PATTERNS AND PLACE TRAFFIC CONTROL DEVICES AS SHOWN ON TMP-5A. CONSTRUCT THE FOLLOWING PROPOSED ROADS, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, AWAY FROM TRAFFIC AS FOLLOWS (SEE TMP-5A):

-DRIVE- STA 10+72 TO STA 12+33
 -SERVRDREV- STA 10+11 TO STA 18+50

USE RSD 1101.02, SHEET 1 OF 15, AS NECESSARY FOR THE CONSTRUCTION OF THE SERVICE RD. ADJACENT TO GREEN NEEDLES RD. ANY WORK DONE USING RSD 1101.02, SHEET 1 OF 15, SHALL BE DONE IN A CONTINUOUS MANNER.

STEP 2: PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND MARKERS ON THE NEW ROADWAY/DRIVE COMPLETED IN STEP 1.

PHASE B

STEP 1: UPON COMPLETION OF PHASE A, PLACE TYPE III BARRICADES AS SHOWN ON TMP-5B. MAINTAIN EXISTING TRAFFIC PATTERN ON GREEN NEEDLES RD., THE OFF RAMP AND THE SERVICE ROAD WITH THE EXCEPTION OF THE WORK IN STEP 2.

STEP 2: USING RSD 1101.02, SHEET 1 OF 15, SHIFT TRAFFIC INTO A ONE LANE, TWO WAY TRAFFIC PATTERN ALONG THE NORTHBOUND LANE OF THE EXISTING SERVICE ROAD PERFORM THE FOLLOWING:

WORKING IN A CONTINUOUS MANNER, CONSTRUCT THE SOUTHBOUND SIDE OF PROPOSED SERVICE ROAD (SERVRDREV) FROM STA 18+50(LT) TO STA 20+11(LT) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE TMP-5B).

AT THE END OF EACH WORKDAY, REMOVE ANY LANE CLOSURE AND RETURN TRAFFIC TO A TWO-LANE, TWO WAY TRAFFIC PATTERN.

PHASE C

STEP 1: UPON COMPLETION OF PHASE B, STEP 2, SHIFT TRAFFIC ONTO THE NEWLY CONSTRUCTED SERVICE ROAD. PLACE TYPE III BARRICADES AND DO NOT ENTER SIGNS AT THE ENTRANCE OF THE EXISTING SERVICE RD AND OFF RAMP ACCESS TO GREEN NEEDLES. OBLITERATE ANY CONFLICTING PAVEMENT MARKINGS. SEE TMP-5C.

UPON SHIFTING TRAFFIC ONTO THE NEW SERVICE ROAD AND USING RSD 1101.02, SHEET 1 OF 15, MAINTAIN TRAFFIC IN A ONE LANE, TWO WAY TRAFFIC PATTERN ALONG THE SOUTHBOUND LANE OF THE NEW SERVICE ROAD.

CONSTRUCT THE NORTHBOUND SIDE OF PROPOSED SERVICE ROAD (SERVRDREV) FROM STA 18+50 (RT) TO STA 20+11(RT) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE TMP-5C). SEE GENERAL NOTES ON TMP-2 FOR PAVEMENT EDGE DROP OFF REQUIREMENTS.

ALL OF STEP 1 SHALL BE COMPLETED IN A CONTINUOUS MANNER.

NOTES: STEP 2 CONSTRUCTION CAN BE DONE INDEPENDENT OF STEP 1 CONSTRUCTION BUT THE TRAFFIC CONTROL DEVICES DEPICTED ON PHASE C, SHEET TMP-5C, ARE NOT INDEPENDENT AND MUST BE IN PLACE.

STEP 2 CONSTRUCTION MUST TAKE PLACE DURING THE PHASE I CONSTRUCTION OF THE OUTSIDE SHOULDERS OF SOUTHBOUND I-85 BUSINESS.

STEP 2: CONSTRUCT THE NEW SOUTHBOUND OFF RAMP FROM I-85BUS. TO GREEN NEEDLES (-RAMPREV-) FROM STA. 13+69 TO STA. 26+00.

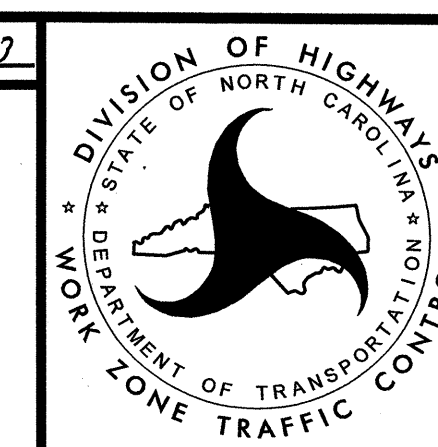
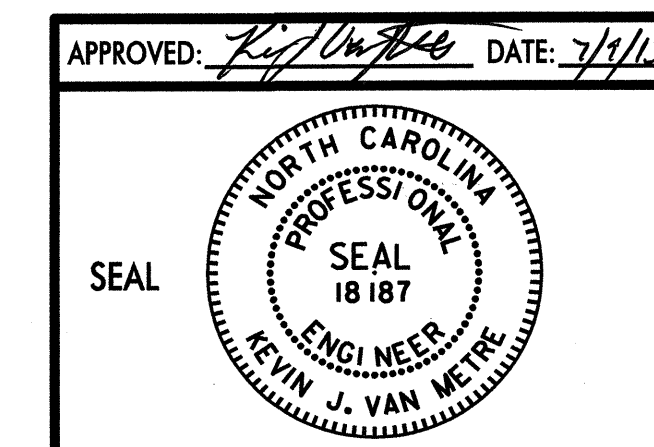
PHASE D

STEP 1: UPON COMPLETION OF PHASE C, SHIFT RAMP TRAFFIC INTO ITS FINAL PATTERN ON TO THE NEW CONSTRUCTED OFF RAMP, - RAMPREV-.

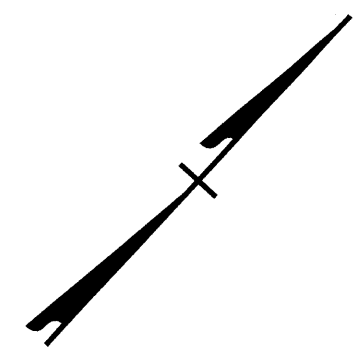
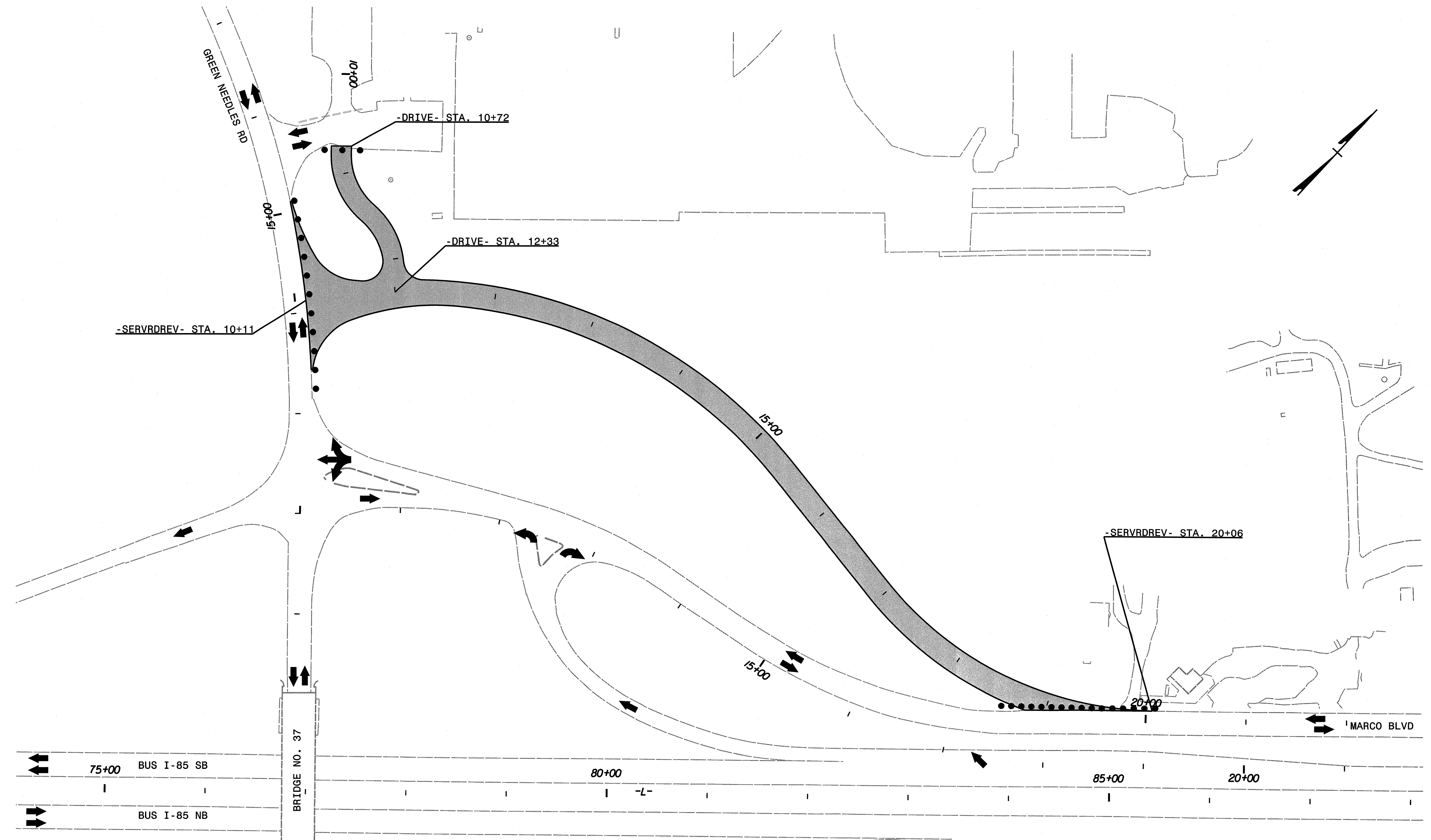
STEP 2: OBLITERATE THE EXISTING OFF RAMP AND REMOVE THE EXISTING CONCRETE ISLAND.

STEP 3: USING RSD 1101.02, SHEET 1 OF 15, AND FLAGGING OPERATIONS AS NECESSARY PLACE THE LAYER OF SURFACE COURSE ON -SERRDREV- AND -RAMPREV-. PLACE FINAL PAVEMENT MARKINGS AND MARKERS ON SAME. STEP 3 SHALL BE DONE IN A CONTINUOUS MANNER AND ALL TRAFFIC RETURNED TO TWO LANE, TWO WAY AT THE END OF EACH WORKDAY FOR -SERRDREV-.

9:47:49 AM
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 hildebrandt

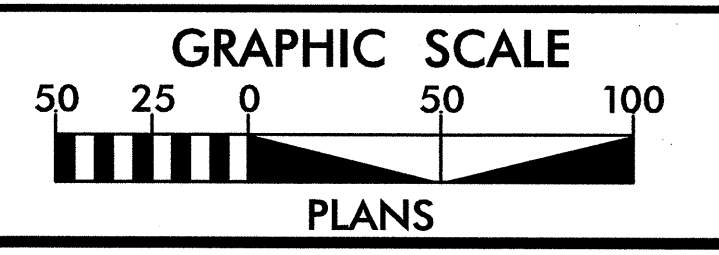


PROJECT PHASING
GREEN NEEDLES RD.
OFF RAMP AND
SERVICE ROAD



NOTE(S):
 1. COMPLETE WIDENING UP TO EXIST. EDGE AND ELEVATION BEFORE MILLING OR WEDGING EXIT.

LEGEND	
	EXISTING ROADWAY
	WEDGING
	UNDER CONSTRUCTION
	COMPLETED CONSTRUCTION
	EXISTING TRAFFIC SIGNAL



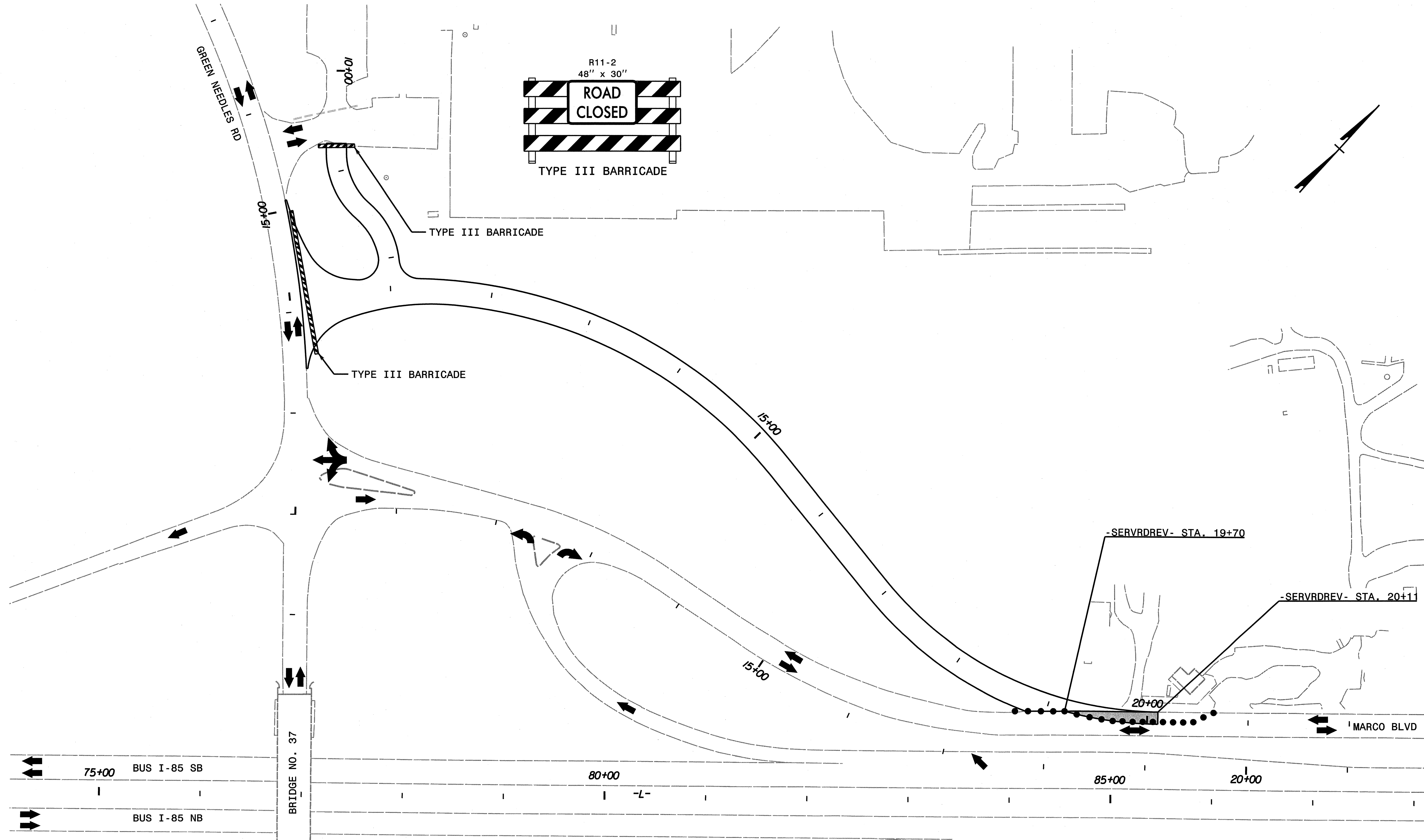
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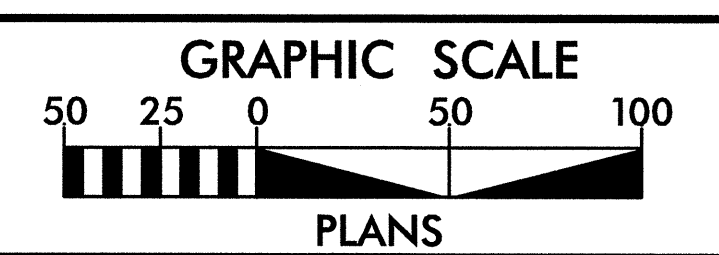
**PHASE A
 DETAIL**



9:47:22 AM
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LEGEND

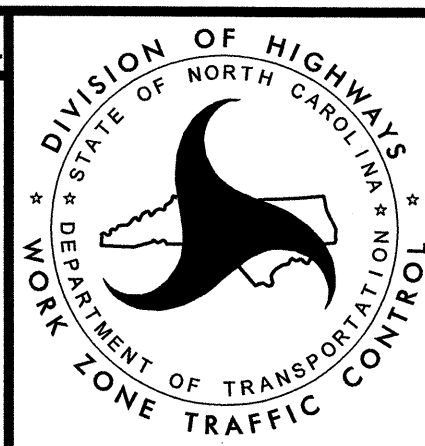
- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



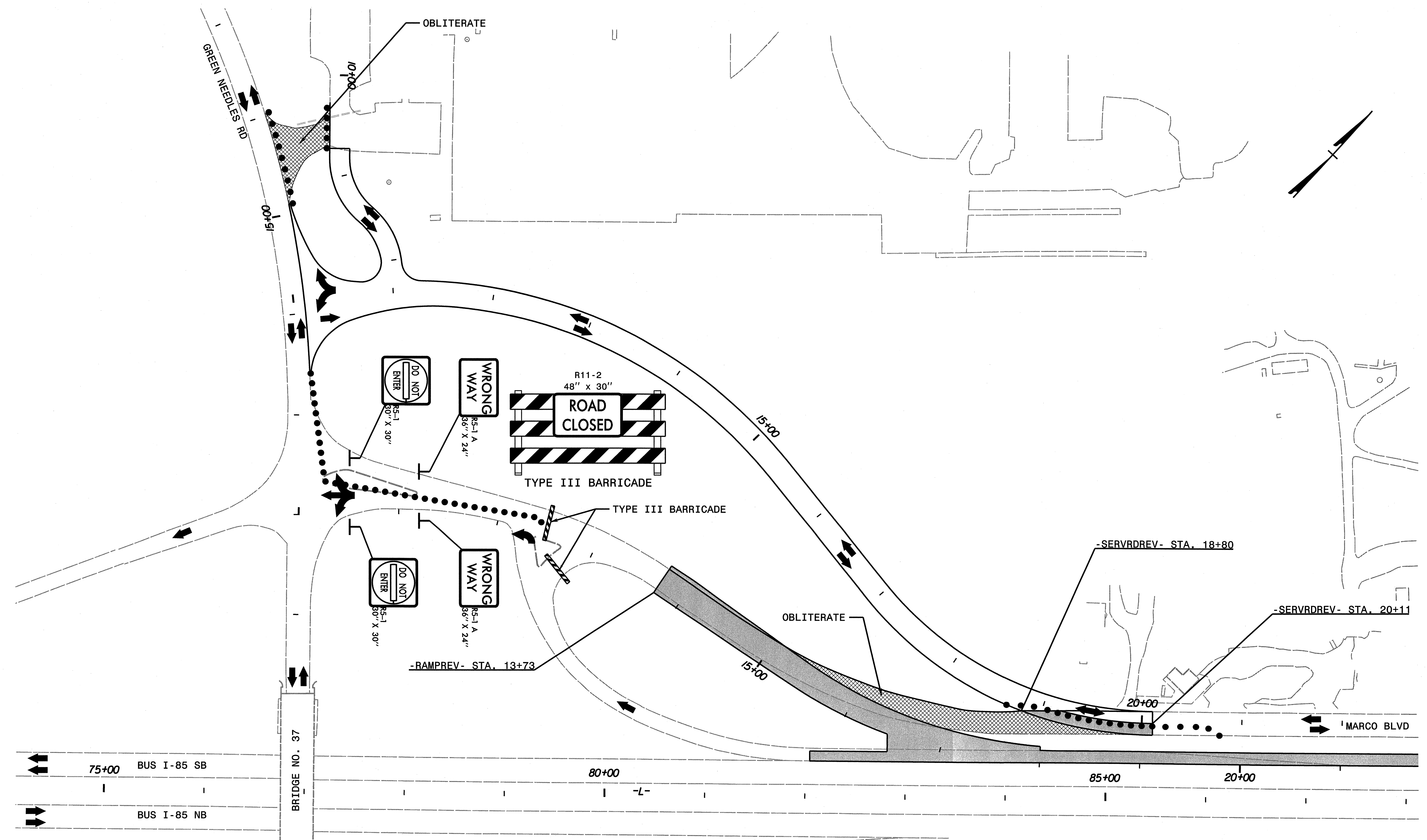
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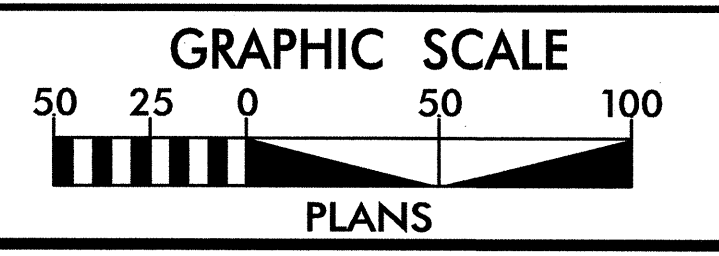
**PHASE B
 DETAIL**



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LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL

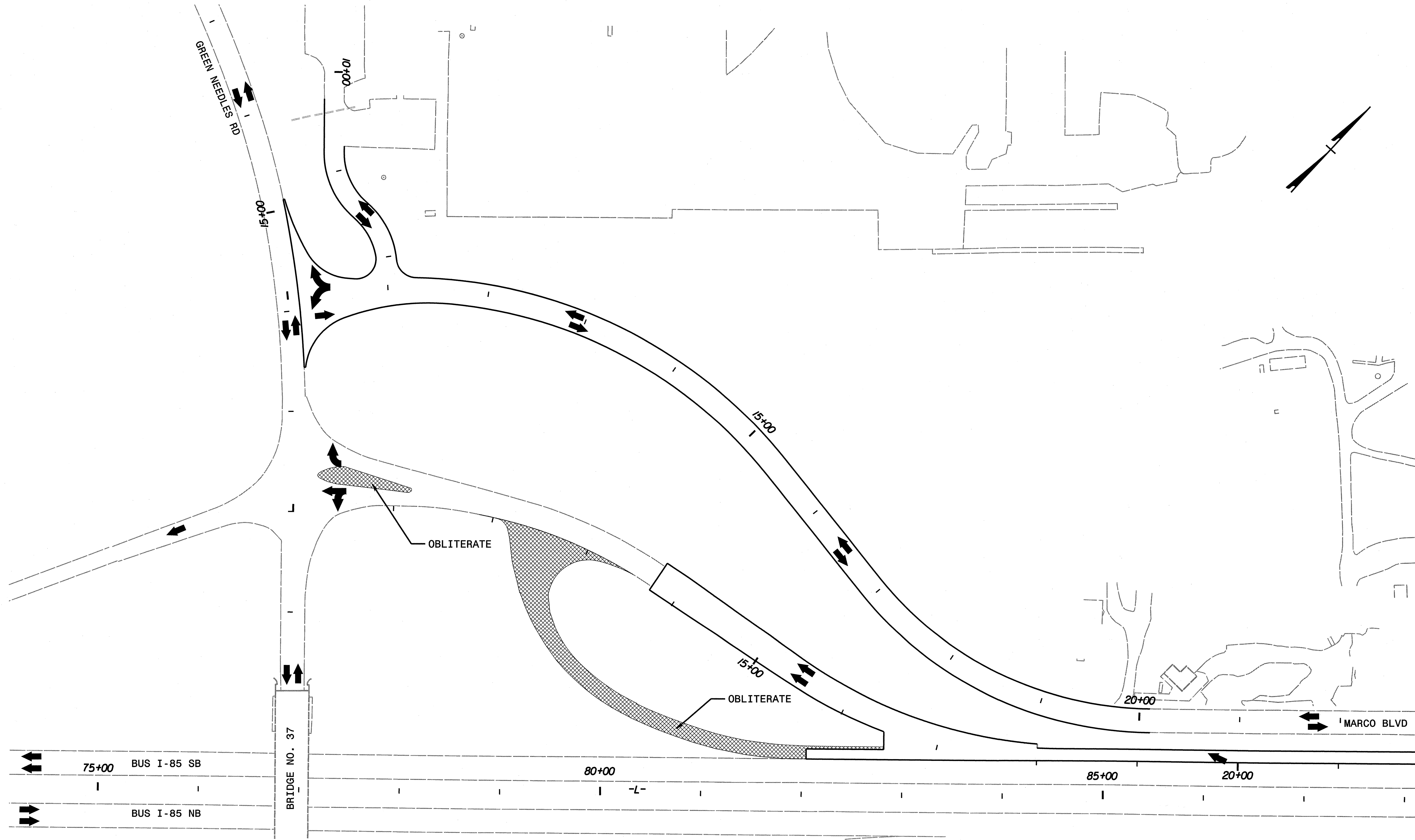


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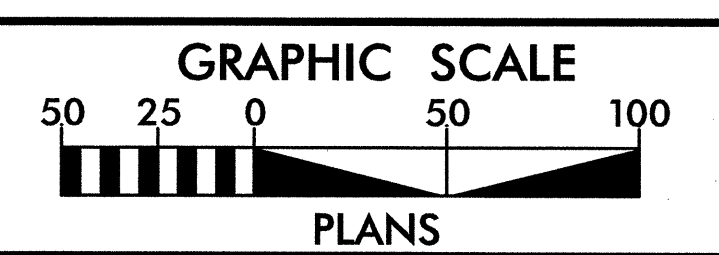
**PHASE C
 DETAIL**



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LEGEND

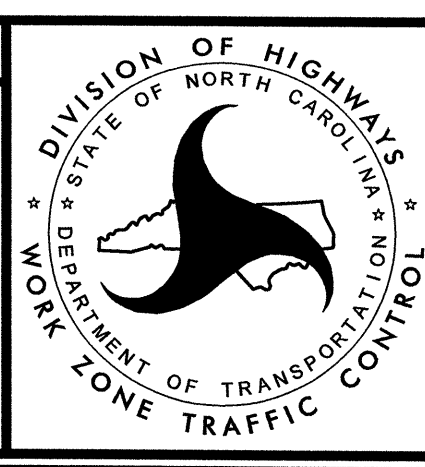
- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



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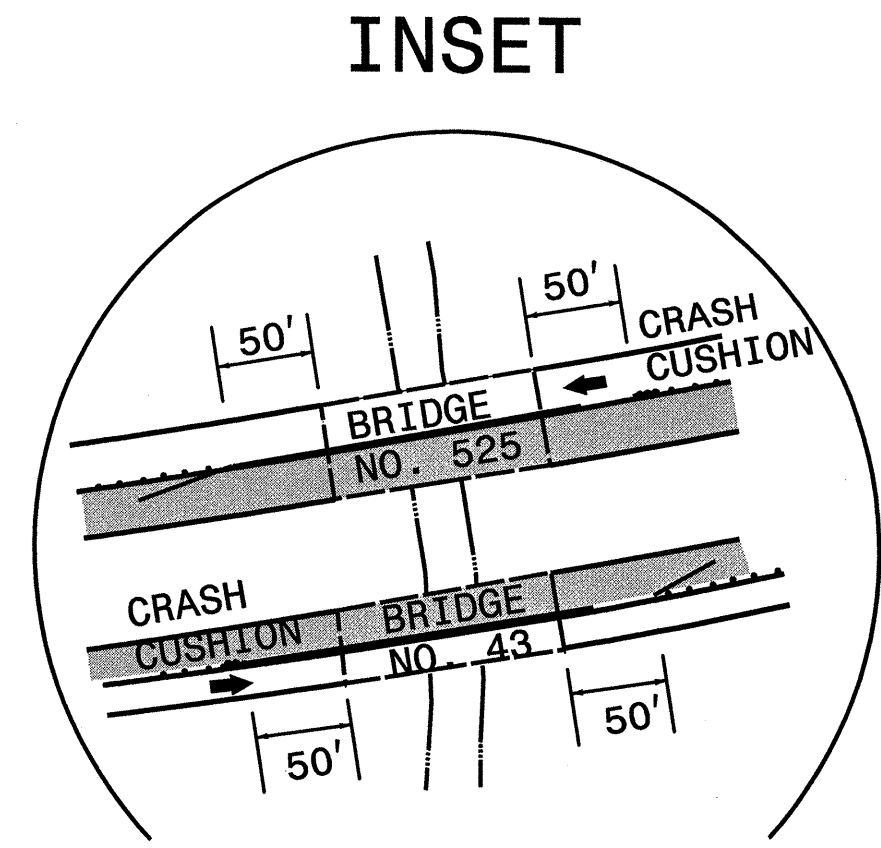
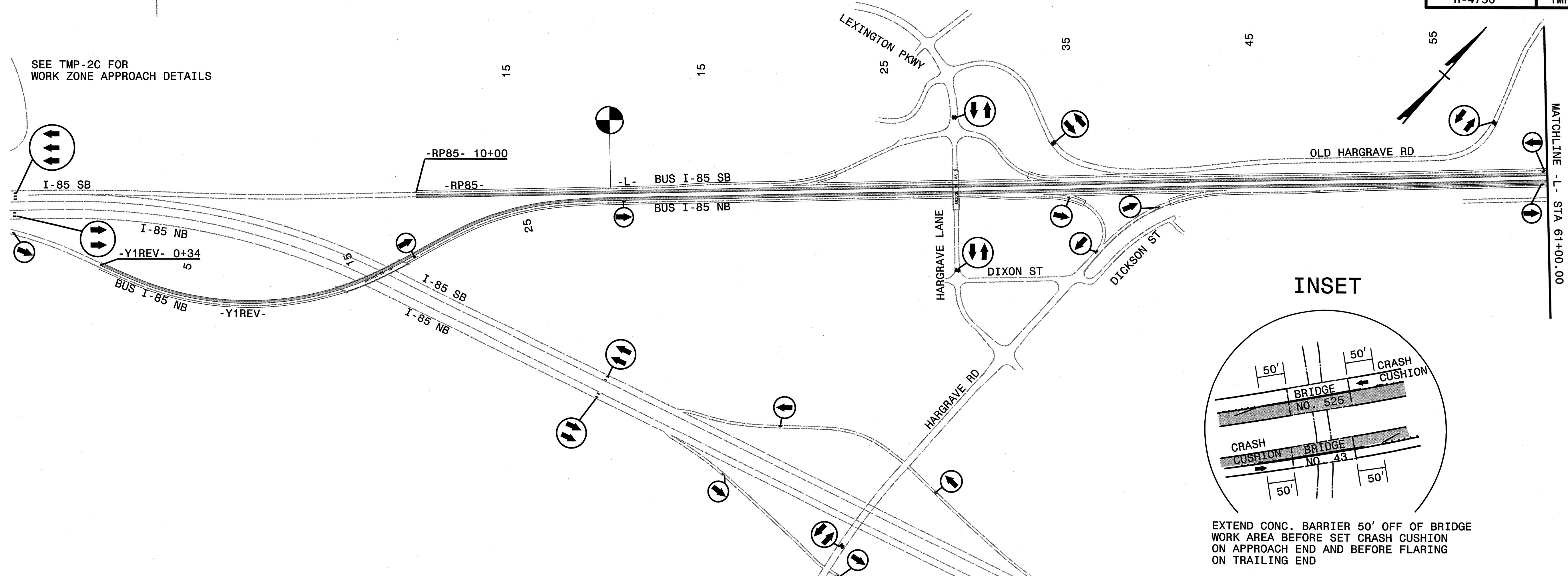
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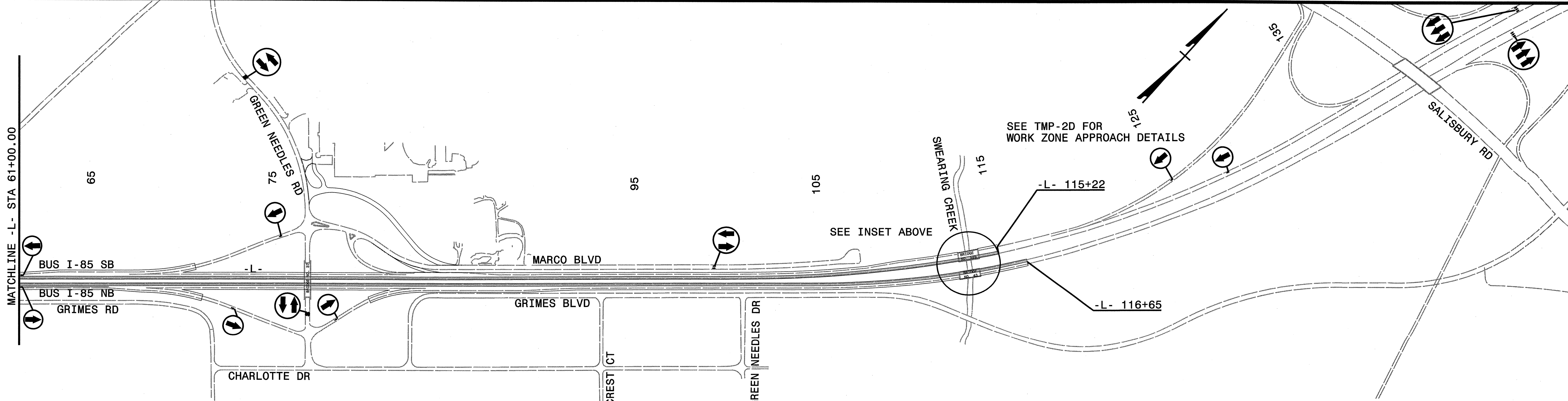


**PHASE D
 DETAIL**

SEE TMP-2C FOR
WORK ZONE APPROACH DETAILS



EXTEND CONC. BARRIER 50' OFF OF BRIDGE
WORK AREA BEFORE SET CRASH CUSHION
ON APPROACH END AND BEFORE FLARING
ON TRAILING END



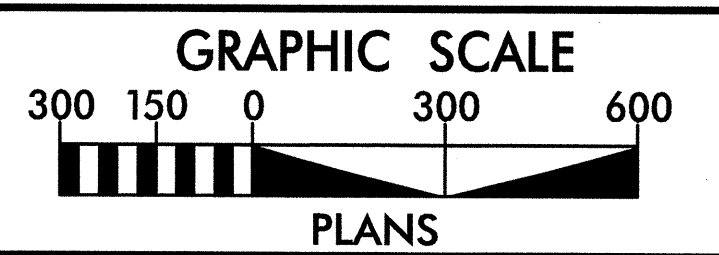
MATCHLINE -L- STA 61+00.00

SEE TMP-2D FOR
WORK ZONE APPROACH DETAILS

SEE INSET ABOVE

LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL



NOTE(S):
1. SEE TYPICAL SECTIONS (TMP-2A) FOR DIMENSIONS.

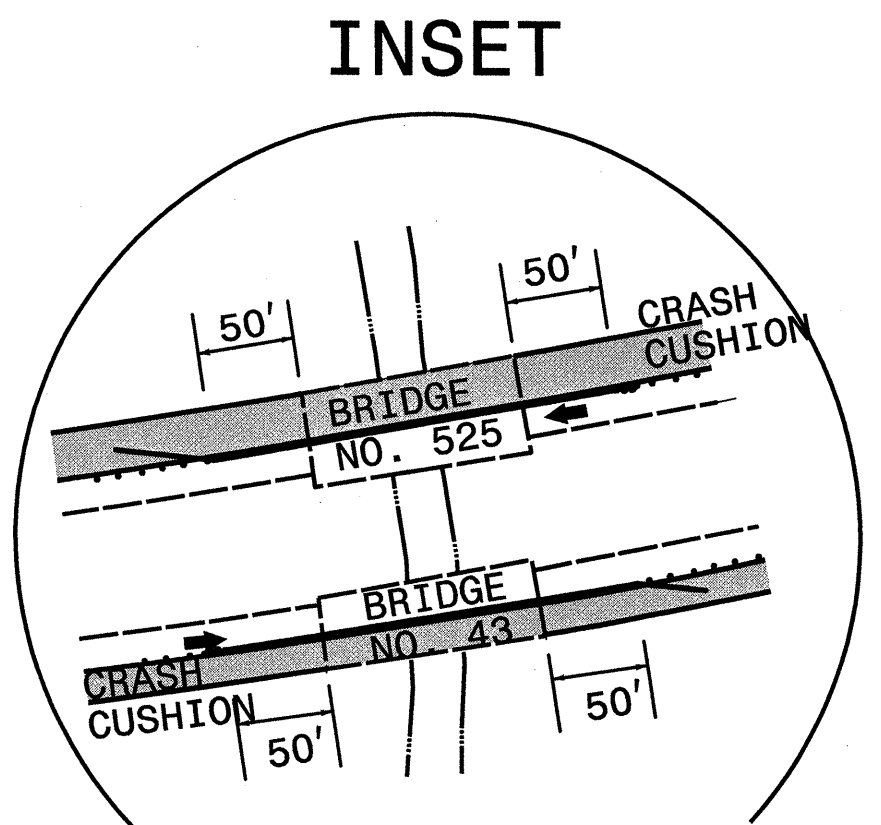
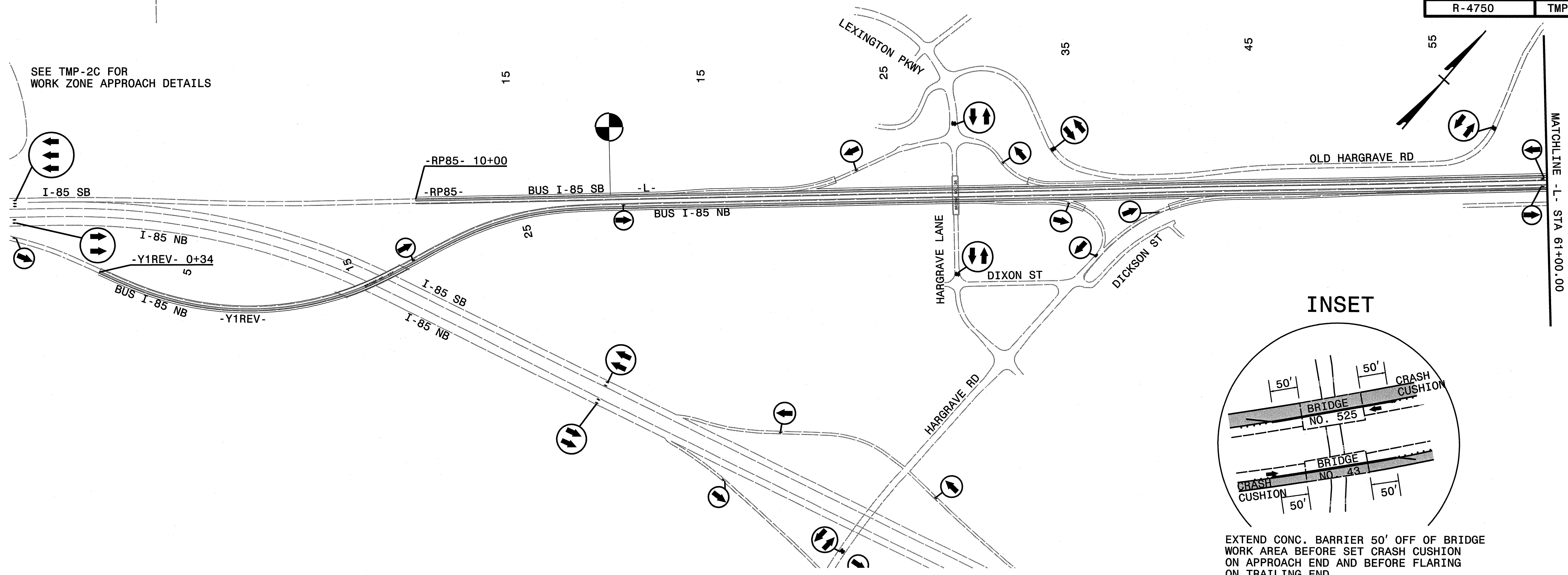
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Phone: 919-854-6200

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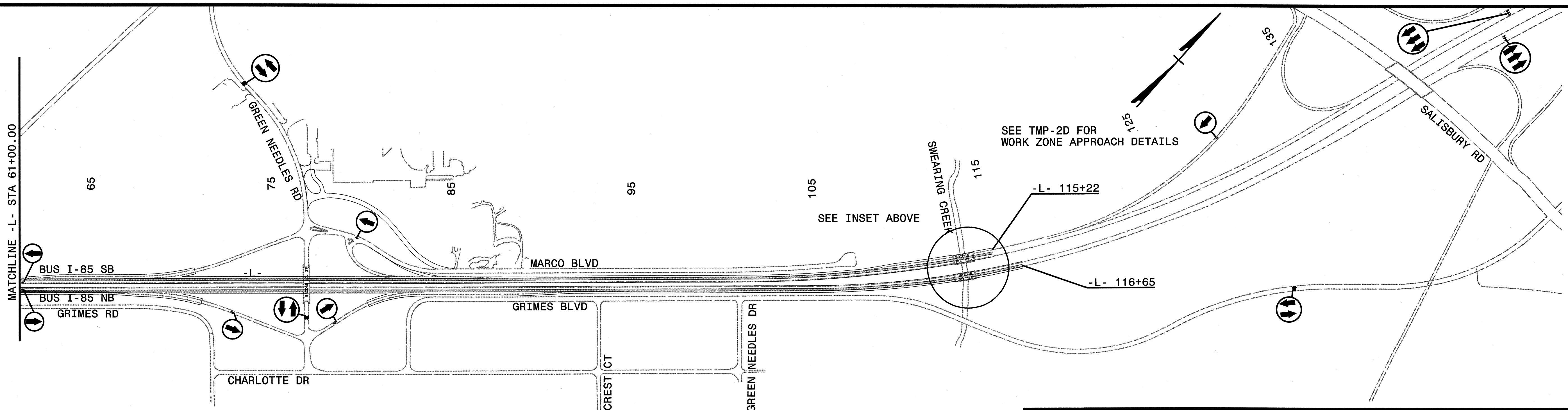
SEAL

**PHASE II
OVERVIEW**

7/9/2013 9:47:21 AM R:\TrafficControl\TCP\Phase I\R-4750_TC_TMP_overview_phasell.psh.dgn

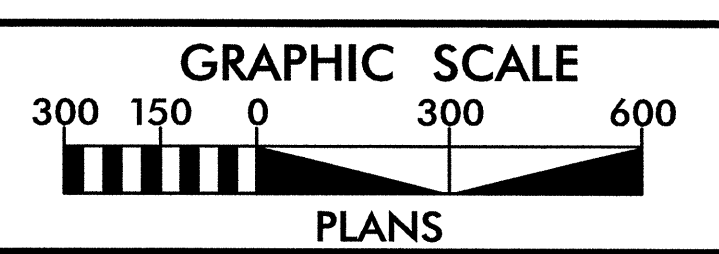


EXTEND CONC. BARRIER 50' OFF OF BRIDGE WORK AREA BEFORE SET CRASH CUSHION ON APPROACH END AND BEFORE FLARING ON TRAILING END



LEGEND

- EXISTING ROADWAY
- WEDGING
- UNDER CONSTRUCTION
- COMPLETED CONSTRUCTION
- EXISTING TRAFFIC SIGNAL

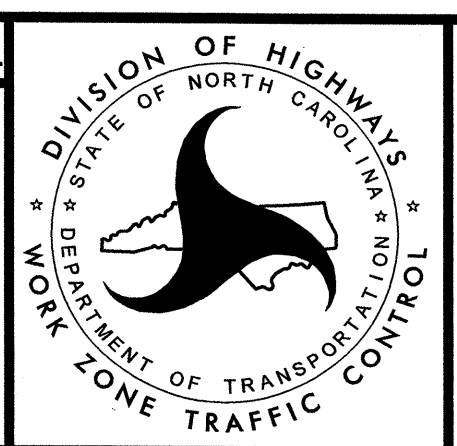


NOTE(S):
1. SEE TYPICAL SECTIONS (TMP-2A) FOR DIMENSIONS.

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APPROVED: *[Signature]* DATE: 7/8/13

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PHASE III OVERVIEW

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