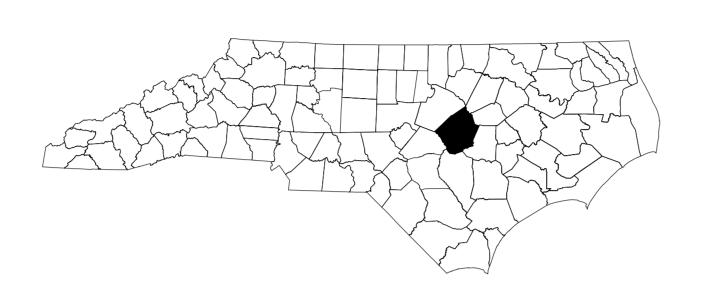
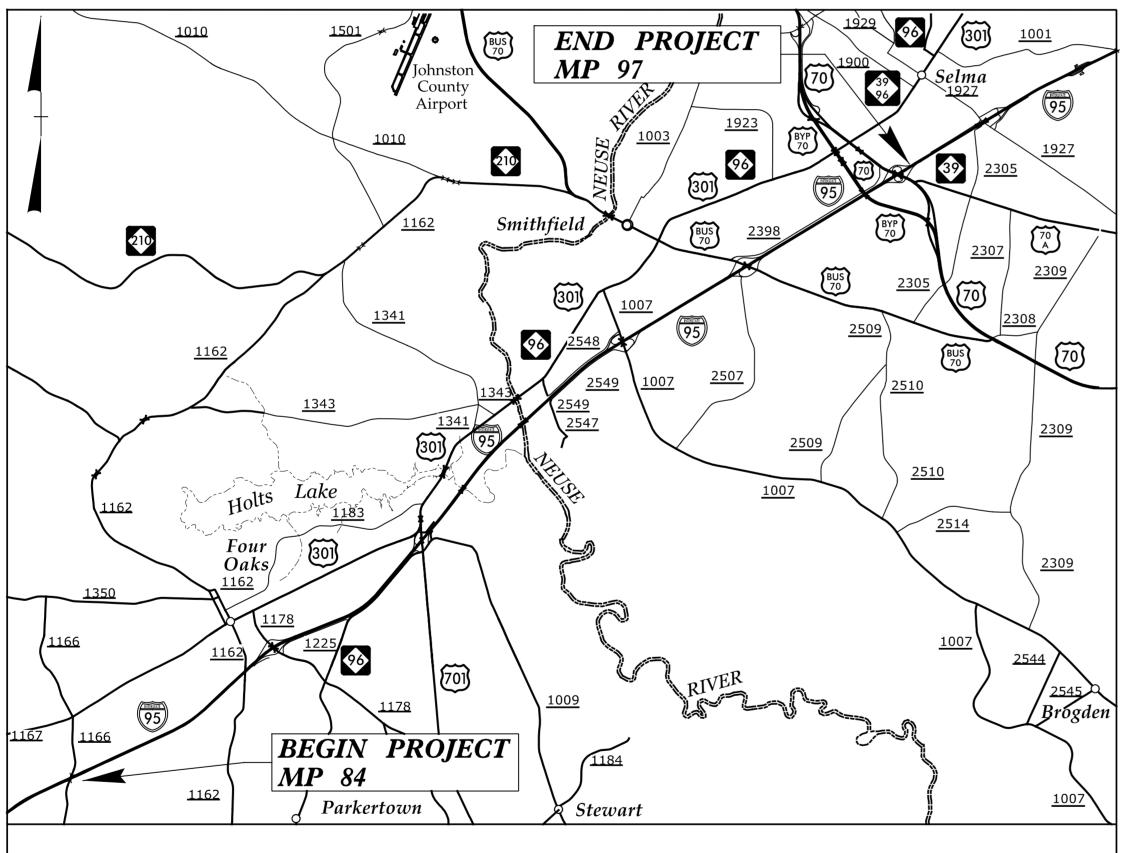
TRANSPORTATION MANAGEMENT PLAN

JOHNSTON COUNTY





SKETCH MAP SHOWING THE VICINITY OF STATE PROJECT I-5784

TEMPORARY PAVEMENT MARKING

PAINT (6")

3 FT/9 FT WHITE MINISKIP

PAINT (12") WHITE GORELINE WHITE SOLID LANE LINE

PAINT (24") WHITE STOP BAR

SYMBOLS & CHARACTERS

RIGHT TURN ARROW LEFT TURN ARROW COMBO STRAIGHT/RIGHT ARROW COMBO STRAIGHT/LEFT ARROW MERGE ARROW

TEMPORARY RAISED MARKERS

CRYSTAL & RED

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III) LAW ENFORCEMENT

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

PORTABLE SIGN

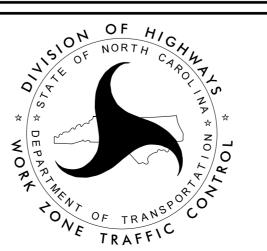
WORK ZONE SAFETY & MOBILITY

"from the MOUNTAINS to the COAST"

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 J.S. KITE, PE TRAFFIC CONTROL PROJECT ENGINEER D.A. PARKER TRAFFIC CONTROL PROJECT DESIGN ENGINEER

S.B. JENNINGS TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

TMP-14

TMP-15

TMP-16

TMP - 17

TMP-18

SHEET	NO.	<u>TITLE</u>
TMP - 1		TITLE SHEET, VICINITY MAP, INDEX OF SHEETS,
		LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS
		AND TEMPORARY PAVEMENT MARKINGS AND MARKERS
TMP-1A		TRANSPORTATION OPERATION PLAN (GENERAL NOTES,
& 1B		MANAGEMENT STRATEGIES, WZTC GENERAL REQUIREMENTS
		AND WZTC NARRATIVE)
TMP-2A		WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION
TMP-2B		TYPICAL SIGNAL LOOP LOCATIONS
TMP-3		DETOUR FOR EXIT 90 I-95 NB TO US 701
TMP-4		DETOUR FOR EXIT 90 US 701 TO I-95 NB
TMP-5		DETOURS FOR EXIT 90 (OFF-RAMP) I-95 SB TO US 701
TMP-6		DETOUR FOR EXIT 90 (ON-RAMP) US 701 TO I-95 SB
TMP-7		DETOUR FOR US 301 SB & I-95 NB ON-RAMP
TMP-8		DETOUR FOR EXIT 93 I-95 NB TO BROGDEN RD (SR 1007)
TMP-9		DETOUR FOR EXIT 93 BROGDEN RD (SR 1007) TO I-95 NB
TMP - 10		DETOUR FOR EXIT 93 I-95 SB TO BROGDEN RD (SR 1007)
TMP-11		DETOUR FOR EXIT 93 BROGDEN RD (SR 1007) TO I-95 SB
TMP-12		DETOUR FOR EXIT 95 I-95 NB TO E. MARKET ST(US 70 BUS)
TMP-13		DETOUR FOR EXIT 95 E. MARKET ST (US 70 BUS) TO I-95 N

ROADWAY STANDARD DRAWINGS

DETOUR FOR EXIT 97 US 70 E TO I-95 NB

DETOUR FOR EXIT 97 US 70 W TO I-95 SB

DETOUR FOR EXIT 95 E. MARKET ST (US 70 BUS) TO I-95 NB

DETOUR FOR EXIT 95 E. MARKET ST (US 70 BUS) TO I-95 SB

DETOUR FOR EXIT 95 I-95 SB TO E. MARKET ST (US 70 BUS)

THE FOLLOWING ROADWAY STANDARDS AS APPEAR 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:

TITLE STD. NO.

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	DRUM
1135.01	CONES
1145.01	BARRICADES

1101.01 WORK ZONE ADVANCE WARNING SIGNS

1165.01 WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION 1180.01 SKINNY-DRUM PAVEMENT MARKINGS - LINE TYPES AND OFFSETS

PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES RAISED PAVEMENT MARKERS - INSTALLATION SPACING

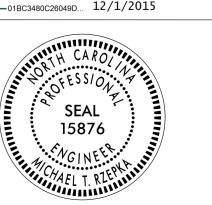
RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



APPROVED: Michael T. Ryepha DATE:_____01BC3480C26049D...__12/1/2015

SEAL



SHEET NO.

MANAGEMENT STRATEGIES

SURFACES ON I-95 AND SOME RAMPS USING LANE CLOSURES, AND OFFSITE

THIS PROJECT CONSISTS OF MILLING AND PAVING EXISTING

DETOURS FOR RAMP AND LOOP CLOSURES. SEE SHEET TMP-1B

NARRATIVE FOR DETAILS.

SHEET NO. PROJ. REFERENCE NO. -5784 TMP-1A

CHANGES MAY BE 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.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

I-95

MONDAY TO THURSDAY, 7:00AM TO 8:00PM FRIDAY TO SUNDAY, 7:00AM TO 10:00PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL **EVENTS AS FOLLOWS:**

ROAD NAME

I-95 & I-95 RAMPS & LOOPS

HOLIDAY

- 1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30 A.M. DECEMBER 31st TO 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY. SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 6:30 A.M. THURSDAY AND 8:00 P.M. TUESDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY TO 8:00 P.M. WEDNESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF INDEPENDENCE DAY AND 8:00 P.M. THE FOLLOWING MONDAY AFTER THE WEEK OF INDEPENDENCE DAY.
- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:30 A.M. FRIDAY AND 8:00 P.M. WEDNESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) DO NOT CLOSE RAMPS/LOOPS FOR NON-ISLAND WORK AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

MONDAY TO THURSDAY, 7:00AM TO 8:00PM US 301, US 701 BROGDEN RD., US 70 BUS, FRIDAY TO SUNDAY, 7:00AM TO 10:00PM US 70 (LOOPS ONLY)

D) DO NOT CLOSE RAMPS/LOOPS FOR ISLAND WORK AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

US 701 (INCL. SEGMENTS OF US 301, NC 98 AND DEVILS RACETRACK RD.) BROGDEN ROAD US 70 BUS (IN QUADRANTS SOUTH OF US 70 BUS. ONLY)

FRIDAY 12:00PM (NOON) TO SUNDAY 10:00PM

OPERATE EQUIPMENT AND CONDUCT OPERATIONS IN THE SAME DIRECTION AS THE FLOW OF TRAFFIC. MAINTAIN VEHICULAR ACCESS IN ACCORDANCE WITH ARTICLE 1101.05 OF THE 2012 STANDARD SPECIFICATIONS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

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.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 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.

- 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.
- 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.
- DO NOT INSTALL MORE THAN FIVE (5) MILES OF LANE CLOSURE ON I-95 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON I-95.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- N) 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.
- PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

R) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

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

MARKER ROAD NAME MARKING I-95 & PAINT TEMPORARY RAISED I-95 RAMPS & LOOPS

- T) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- U) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- V) TRACE THE EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION, PLACE DRUMS TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION

MISCELLANEOUS

W) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

UNLESS ALL SIGNATURES COMPLETED

APPROVED: Michael T. Rzepka DATE: 3/9/2016 15876

TRANSPORTATION **OPERATIONS** PLAN

DOCUMENT NOT CONSIDERED FINAL

SEAL

5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC License No: F-0258

PROJ. REFERENCE NO. SHEET NO. TMP-1B

WORK ZONE TRAFFIC CONTROL GENERAL REQUIREMENTS

TEMPORARY TRAFFIC CONTROL (TTC)

- MAINTAIN TRAFFIC IN ACCORDANCE WITH DIVISION 10, 11, AND 12 OF THE 2012 STANDARD SPECIFICATIONS AND THE FOLLOWING PROVISIONS:
- INSTALL WORK ZONE ADVANCE WARNING SIGN IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1101.01, SHEET 1 OF 3, PRIOR TO BEGINNING ANY OTHER WORK.
- WHEN UTILIZING A SLOW-MOVING OPERATION FOR SUCH ITEMS AS PAVEMENT MARKING AND MARKER PLACEMENT, AS A MINIMUM THE SLOW MOVING OPERATION CARAVAN SHALL CONSIST OF THE VEHICLES AND DEVICES SHOWN ON THE MOVING OPERATION CARAVAN DETAILS ACCORDING TO THE ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 13 OF THE 2012 ROADWAY STANDARD DRAWINGS. TRAFFIC CONES MAY BE USED WHEN NECESSARY TO PROVIDE ADDITIONAL PROTECTION OF WET PAVEMENT MARKINGS. BALLAST ALL TRAFFIC CONES SO THEY WILL NOT BE BLOWN OVER BY TRAFFIC.

PAVEMENT MARKERS

- REMOVE EXISTING SNOWPLOWABLE PAVEMENT MARKERS IN PREPARATION FOR PAVING. REPAIR ANY PAVEMENT DAMAGE DUE TO EXISTING PAVEMENT MARKER REMOVAL PRIOR TO THE END OF THE WORK DAY. DISPOSE OF EXISTING PAVEMENT MARKERS AS DIRECTED BY THE ENGINEER. NO DIRECT PAVEMENT WILL BE MADE FOR THIS WORK AS IT WILL BE INCIDENTAL TO THE PAVING OPERATION.
- INSTALL PERMANENT PAVEMENT MARKERS WITHIN 60 CALENDAR DAYS AFTER COMPLETING THE RESURFACING. PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH DRAWINGS 1250.01 THROUGH 1253.01 OF THE 2012 ROADWAY STANDARD DRAWINGS AND SECTIONS 1250 THROUGH 1253 OF THE 2012 STANDARD SPECIFICATIONS.

CONSTRUCTION OPERATIONS

- CONTRACTOR SHALL MILL AND PAVE LANES IN ORDER SUCH THAT WATER SHALL NOT ACCUMULATE.
- MESSAGES ON CHANGEABLE MESSAGE SIGNS ARE AS SHOWN ON SHEETS TMP-3 THROUGH TMP-18, OR AS DIRECTED BY THE ENGINEER.
- DELINEATE REMOVED ISLANDS WITH APPROPRIATE PAVEMENT MARKINGS AND DRUMS PRIOR TO INSTALLING PROPOSED ISLAND.
- WORK WITHIN THE MEDIAN SHALL REQUIRE MEDIAN LANE CLOSURES UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- WORK ON DRAINAGE ITEMS IN A CONTINUOUS MANNER OR SECURE THE WORK AREA AT THE END OF EACH DAY'S OPERATION, SO THAT UNATTENDED WORK AREA IS NOT LEFT IN AN UNSAFE MANNER BETWEEN WORK PERIODS.
- WORK ON GUARDRAIL IN A CONTINUOUS MANNER, SO AS TO NOT LEAVE UNPROTECTED GAPS IN GUARDRAIL AT THE END OF EACH DAY'S OPERATIONS OR UPON REMOVAL OF LANE CLOSURES.
- ALL EXISTING MEDIAN GUARDRAIL SHALL REMAIN IN PLACE UNTIL NEW GUARDRAIL OR GUIDERAIL IS INSTALLED AS REQUIRED BY THE CONTRACT. MEDIAN PROTECTION SHALL REMAIN IN PLACE AND IN COMPLIANCE WITH DEPARTMENT POLICIES.

WORK ZONE TRAFFIC CONTROL NARRATIVE

1) MILLING AND RESURFACING I-95 NB AND SB (MP 84 TO MP 97)

FOR MILLING AND RESURFACING OF I-95 NB AND SB, USE WORK ZONE "VARIABLE SPEED LIMIT REDUCTION" (TMP-2A) AND RSD 1101.02 SHEETS 4, 9 AND 10. MILL 1" AND PAVE BACK 1.5" ASPHALT SURFACE COURSE AND PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY MARKERS BY THE END OF EACH WORK DAY. REMOVE LANE CLOSURE AND REOPEN TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD. (SEE INTERMEDIATE CONTRACT TIME FOR ALLOWABLE LANE CLOSURE TIMES).

2) REMOVAL OF EXISTING CONCRETE SLABS ON I-95

FOR REMOVAL OF EXISTING CONCRETE SLABS, USE WORK ZONE "VARIABLE SPEED LIMIT REDUCTION" (TMP-2A) AND RSD 1101.02 SHEET 4, 9 AND 10. WORK IN A CONTINUOUS MANNER BEHIND A LANE CLOSURE UNTIL THE SLAB IS REMOVED AND PAVED BACK THROUGH THE 1.5" ASPHALT SURFACE COURSE AND PLACE TEMPORARY PAVEMENT MARKINGS AND TEMPORARY MARKERS (SEE INTERMEDIATE CONTRACT TIME FOR ALLOWABLE LANE CLOSURE TIMES).

3) MILLING AND RESURFACING OF RAMPS AT THE FOLLOWING I-95 INTERCHANGES:

KEEN ROAD

US 70 (EXCLUDING LOOPS)

FOR MILLING AND RESURFACING OF RAMPS, USE WORK ZONE "VARIABLE SPEED LIMIT REDUCTION" (TMP-2A) AND RSD 1101.02, SHEETS 3, 4, 9 AND 10. MILL 1" AND PAVE BACK 1.5" ASPHALT SURFACE COURSE AND PLACE TEMPORARY PAVEMENT MARKINGS BY THE END OF EACH WORK DAY. REMOVE LANE CLOSURE AND REOPEN TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD. INSTALL NEW INDUCTIVE LOOPS AT US 70 OFF-RAMPS WITHIN SEVEN (7) CONSECUTIVE DAYS FROM THE DATE WHEN EXISTING INDUCTIVE LOOPS ARE DISTURBED.. (SEE TMP-2B AND INTERMEDIATE CONTRACT TIME FOR ALLOWABLE LANE CLOSURE TIMES AND REPLACEMENT OF INDUCTIVE SIGNAL LOOPS).

4) REMOVAL AND REPLACEMENT OF EXISTING CONCRETE ISLANDS AT THE FOLLOWING I-95 INTERCHANGES:

US 701 (INCLUDES ROAD SEGMENTS OF US 301, NC 96 AND DEVILS RACETRACK ROAD) BROGDEN ROAD

US 70 BUSINESS (IN QUADRANTS SOUTH OF US 70 BUSINESS ONLY)

FOR REMOVAL AND REPLACEMENT OF EXISTING CONCRETE ISLANDS, USE RSD 1101.02, SHEETS 9 AND 10 TO NARROW RAMP/LOOP, OR CLOSE RAMP/LOOP AND USE THE ASSOCIATED OFFSITE DETOUR DETAIL (SEE SHEETS TMP-3 THRU TMP-13 AND TMP-15), AS DRIECTED BY THE ENGINEER. REMOVE EXISTING ISLAND AND REPLACE WITH CONCRETE ISLAND.

REMOVE LANE CLOSURE AND REOPEN TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD. CONCRETE ISLAND REMOVAL AND REPLACEMENT MUST BE COMPLETED PRIOR TO MILLING AND/OR REPAVING ADJACENT RAMP/LOOP (SEE INTERMEDIATE CONTRACT TIMES FOR ALLOWABLE LANE AND RAMP CLOSURE TIMES AND FOR REMOVAL/REPLACEMENT OF ISLANDS).

AN INTERMEDIATE CONTRACT TIME WILL BE REQUIRED TO COMPLETE THE WORK AT EACH ISLAND LOCATION IN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS AND WILL BEGIN WHEN EXISTING ISLAND IS REMOVED AND END AT THE COMPLETION OF PROPOSED ISLAND INSTALLATION.

5) MILLING (ASPHALT)/ SEALING (CONCRETE) AND RESURFACING OF RAMPS/LOOPS AT THE FOLLOWING I-95 INTERCHANGES:

US 701 (INCLUDES ROAD SEGMENTS OF US 301, NC 96 AND DEVILS RACETRACK ROAD)
BROGDEN ROAD
US 70 BUSINESS

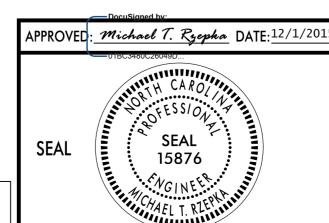
US 70 (LOOPS ONLY)

FOR MILLING/SEALING AND RESURFACING OF RAMPS/LOOPS, USE WORK ZONE "VARIABLE SPEED LIMIT REDUCTION" (TMP-2A). CLOSE RAMP/LOOP AND USE THE ASSOCIATED OFFSITE DETOUR DETAIL (SEE SHEETS TMP-3 THRU TMP-17). MILL 1" (ASPHALT) OR SEAL (CONCRETE) AND PAVE BACK 1.5" ASPHALT SURFACE COURSE AND PLACE TEMPORARY PAVEMENT MARKINGS BY THE END OF EACH WORK DAY. REMOVE ROAD CLOSURE AND REOPEN TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD. RAMP/LOOP MILLING/SEALING AND PAVING MUST BE PERFORMED AFTER ADJACENT ISLAND REMOVAL AND REPLACEMENT (SEE INTERMEDIATE CONTRACT TIME FOR ALLOWABLE LANE AND RAMP CLOSURE TIMES).

6) DRAINAGE AND GUARDRAIL REPAIR/IMPROVEMENTS ON I-95:

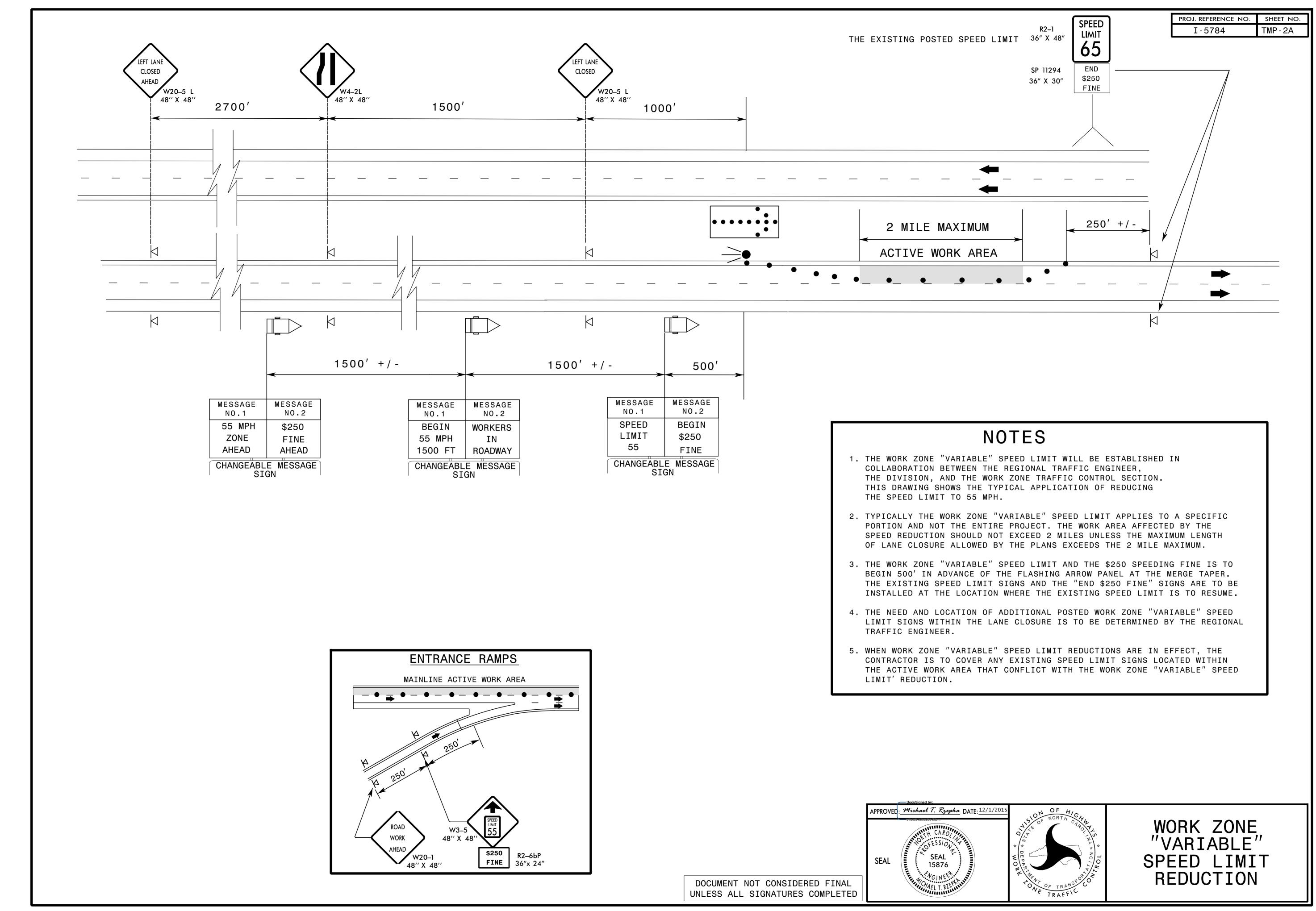
FOR REPAIR AND IMPROVEMENTS TO DRAINAGE ITEMS AND GUARDRAIL IN ALONG I-95 SHOULDERS AND MEDIAN, USE RSD 1101.04, OR WORK ZONE "VARIABLE SPEED LIMIT REDUCTION" (TMP-2A) AND RSD 1101.02, SHEET 4, AS DIRECTED BY THE ENGINEEER. REPAIR/IMPROVE DRAINAGE ITEMS AND GUARDRAIL AS DIRECTED BY THE ENGINEER (SEE INTERMEDIATE CONTRACT TIME FOR ALLOWABLE LANE CLOSURE TIMES)..

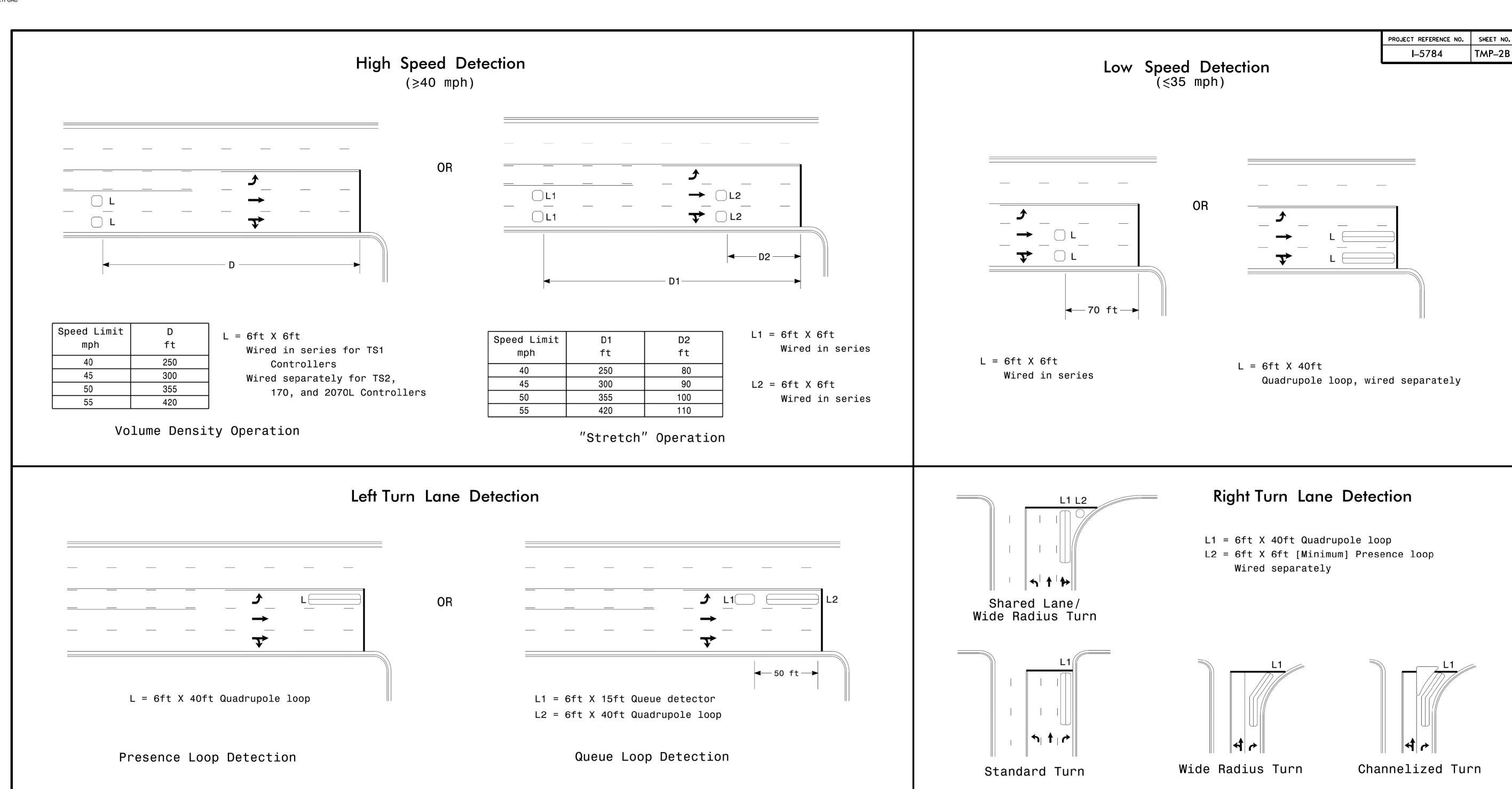
7) PLACEMENT OF OPEN GRADED FRICTION COURSE, FINAL PAVEMENT MARKINGS AND FINAL MARKERS IS A SEPARATE OPERATION TO BE COMPLETED AFTER MILLING, SLAB REPLACEMENT AND THE 1.5" OF ASPHALT SURFACE COURSE. USE RSD 1101.02, SHEETS 4, 9, 10 & 13, FOR PLACEMENT OF THE OPEN GRADED FRICTION COURSE, FINAL PAVEMENT MARKINGS AND FINAL MARKERS.





TRANSPORTATION OPERATIONS PLAN







L = 6ft X 40ftQuadrupole loop Wired to separate detectors/channels 4 4

Presence Loop Placement at Stop Lines

Locate loop slightly behind leading edge of stop line --- Inductive Loop

Note: Loop may be located in advance of stop line under any of the following conditions:

- 1) stop line is greater than 15' from edge of intersecting roadway
- 2) loop detects a permissive or protected/permissive left turn
- 3) for an exclusive right turn lane

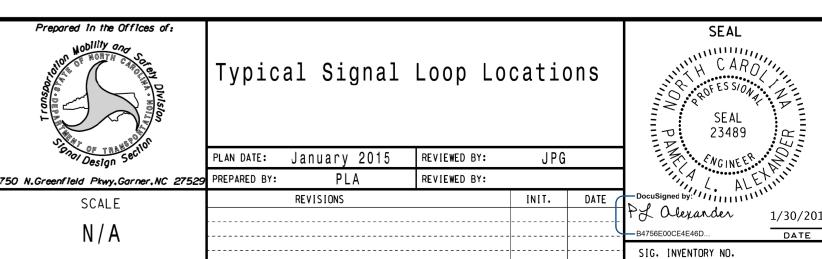
Recommended Number of Turns

Single 6' X 6' loop (when wired separately):

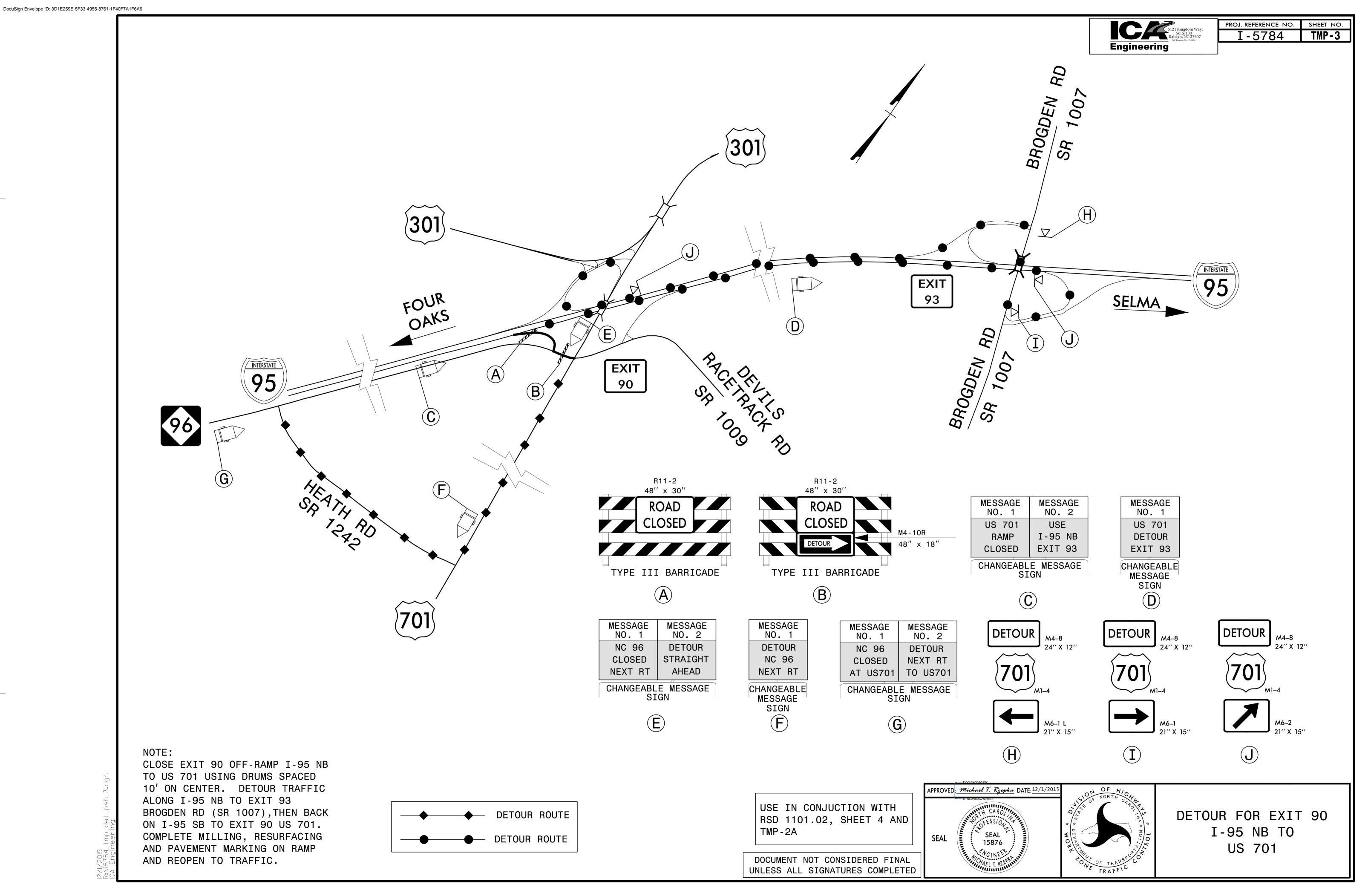
Length of Lead-in ft	Number of Turns	
< 250	3	
250-375	4	
375-525	5	
> 525	6	

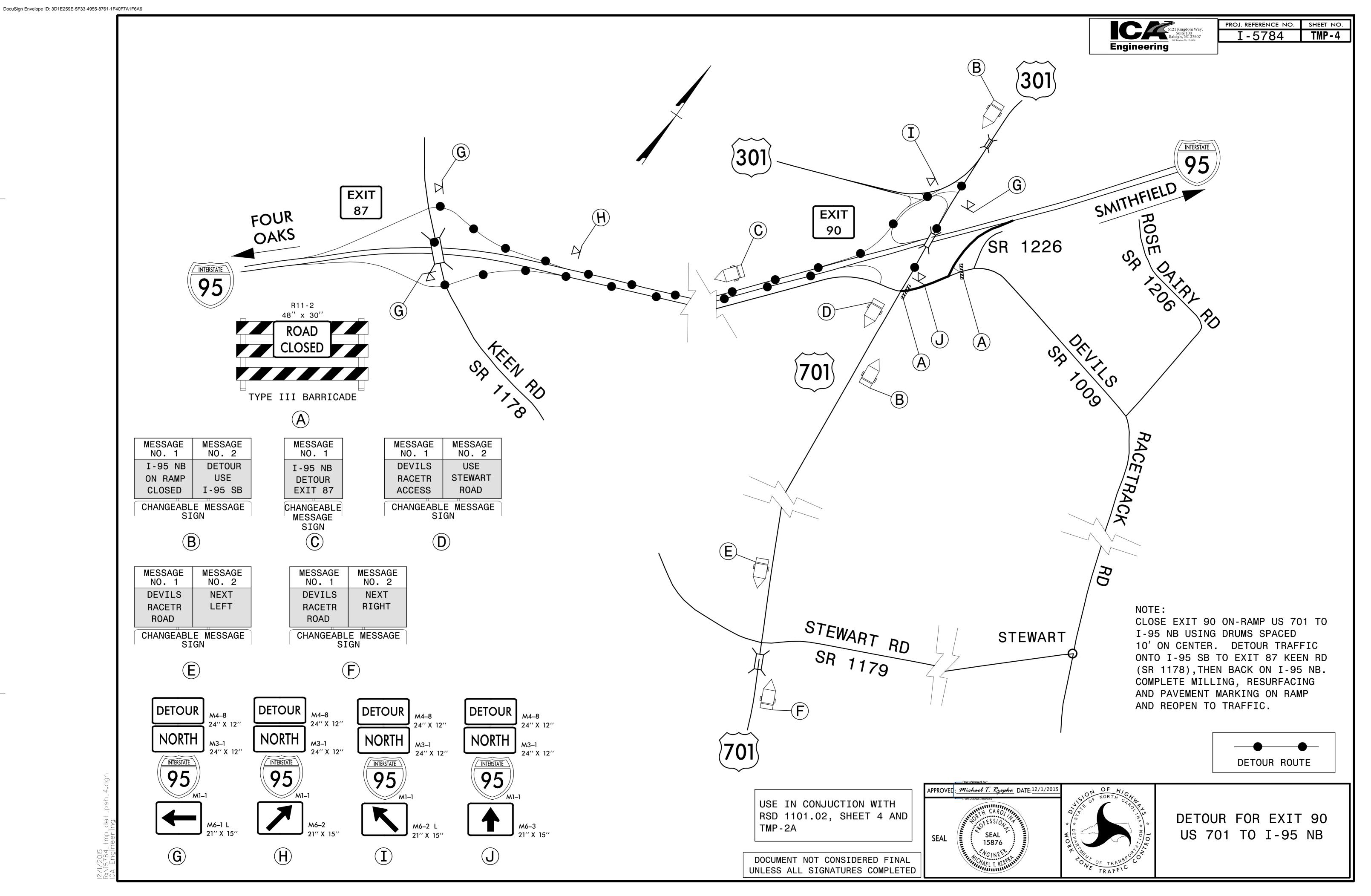
Quadrupole loops: Use 2-4-2 turns 6' X 15' Loops:

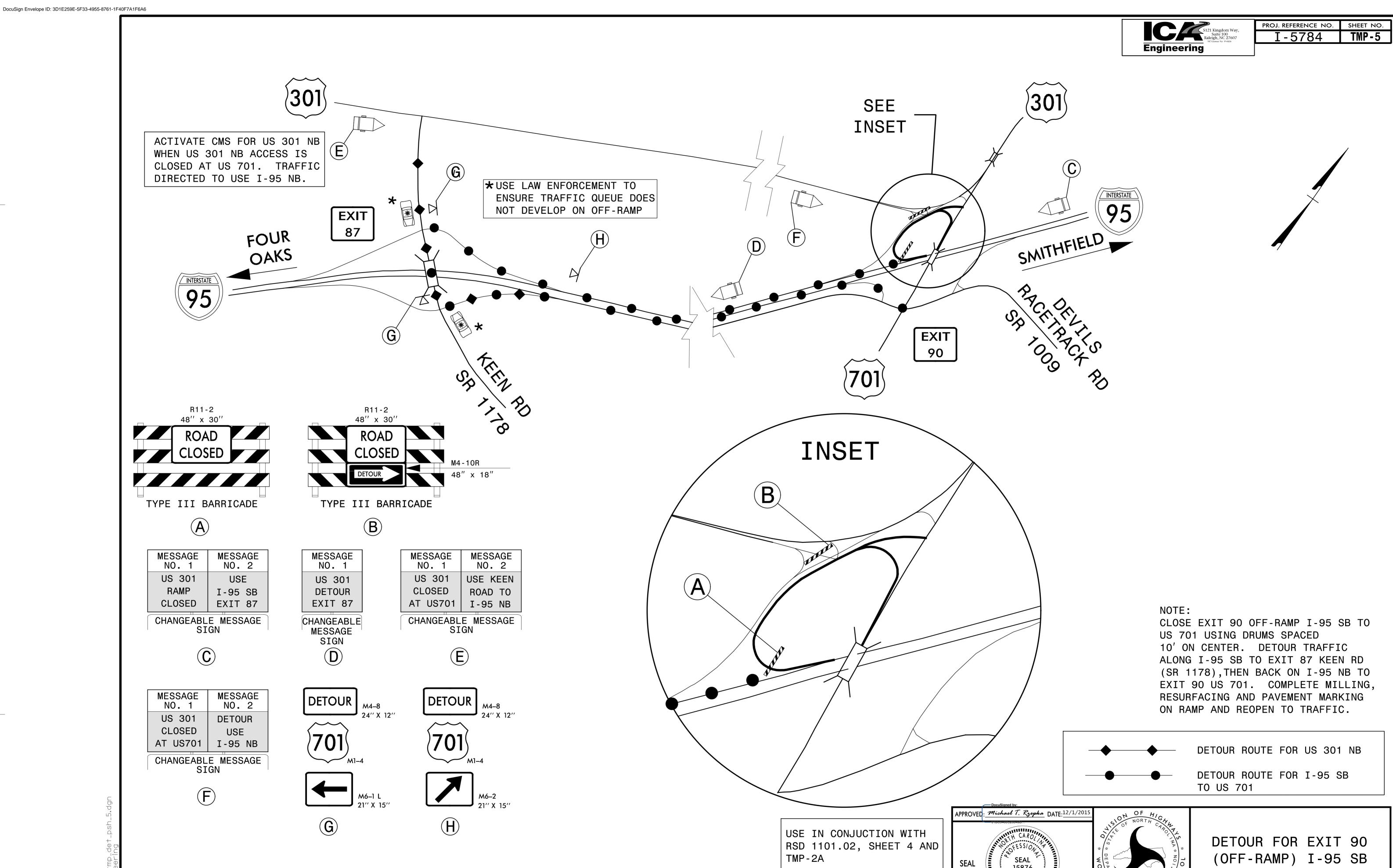
Lead-in < 150', use 2 turns Lead-in > 150', use 3 turns



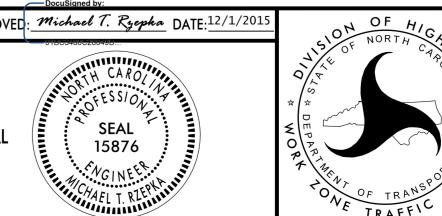
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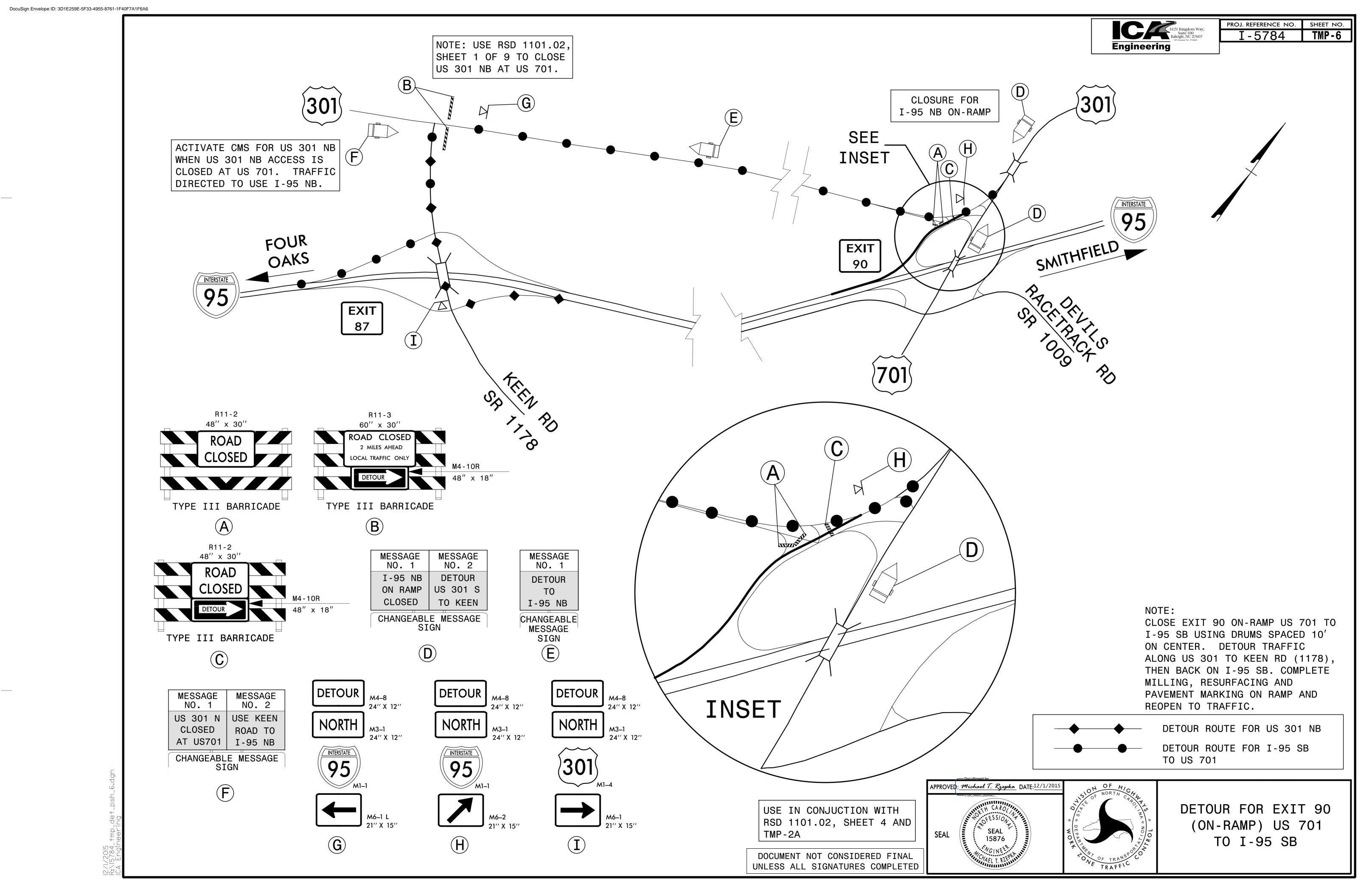




DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



(OFF-RAMP) I-95 SB TO US 701



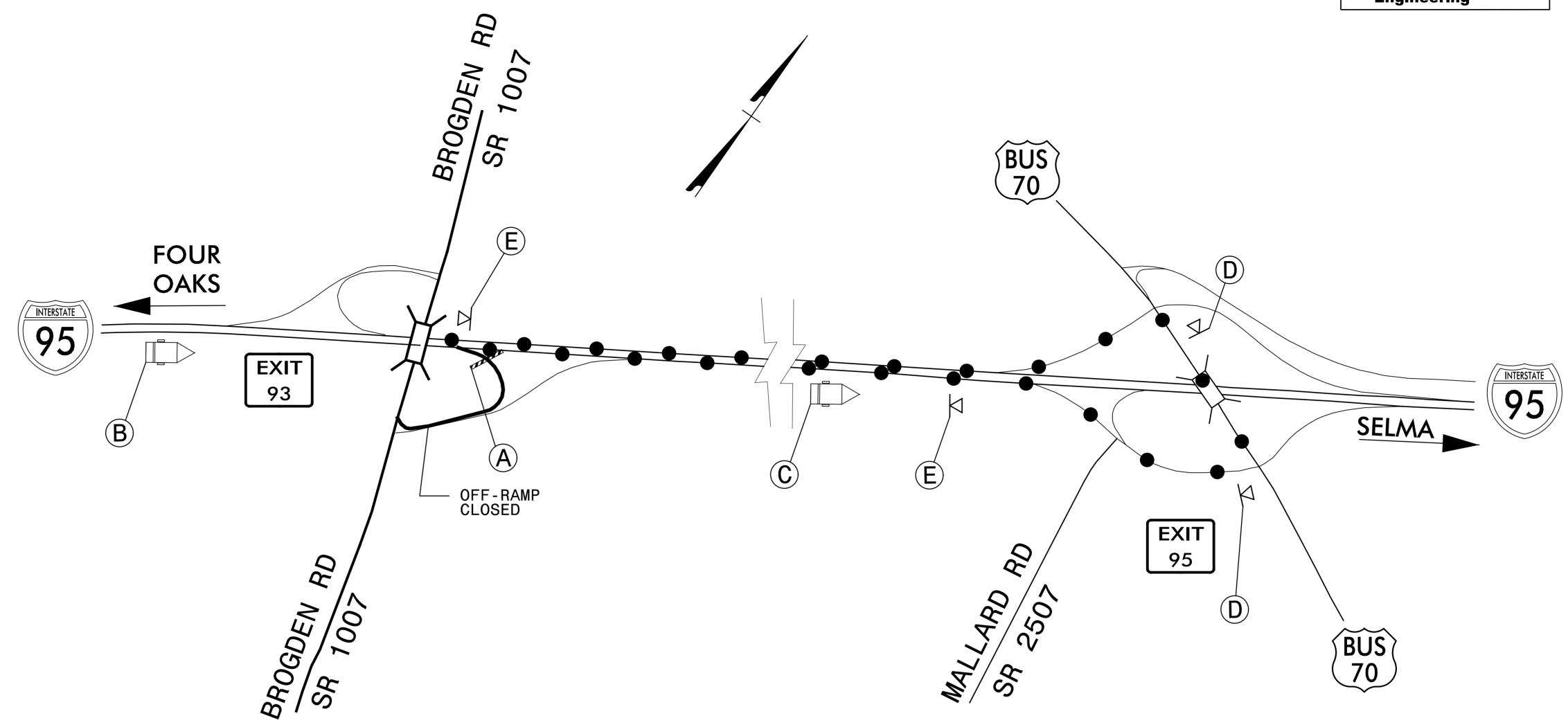
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED I-95 NB ON-RAMP

(K)



Engineering

PROJ. REFERENCE NO. SHEET NO. [-5784





MESSAGE MESSAGE NO. 1 NO. 2 USE EXIT 93 I-95 NB BROGDEN CLOSED | EXIT 95 CHANGEABLE MESSAGE SIGN

 \bigcirc

MESSAGE NO. 1 BROGDEN DETOUR EXIT 95

 \bigcirc



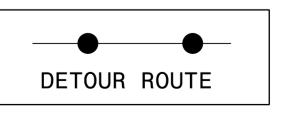
CHANGEABLE MESSAGE SIGN (C)



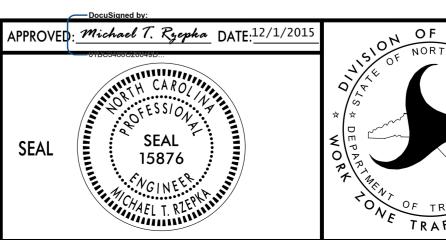
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USE IN CONJUCTION WITH RSD 1101.02, SHEET 4 AND TMP-2A

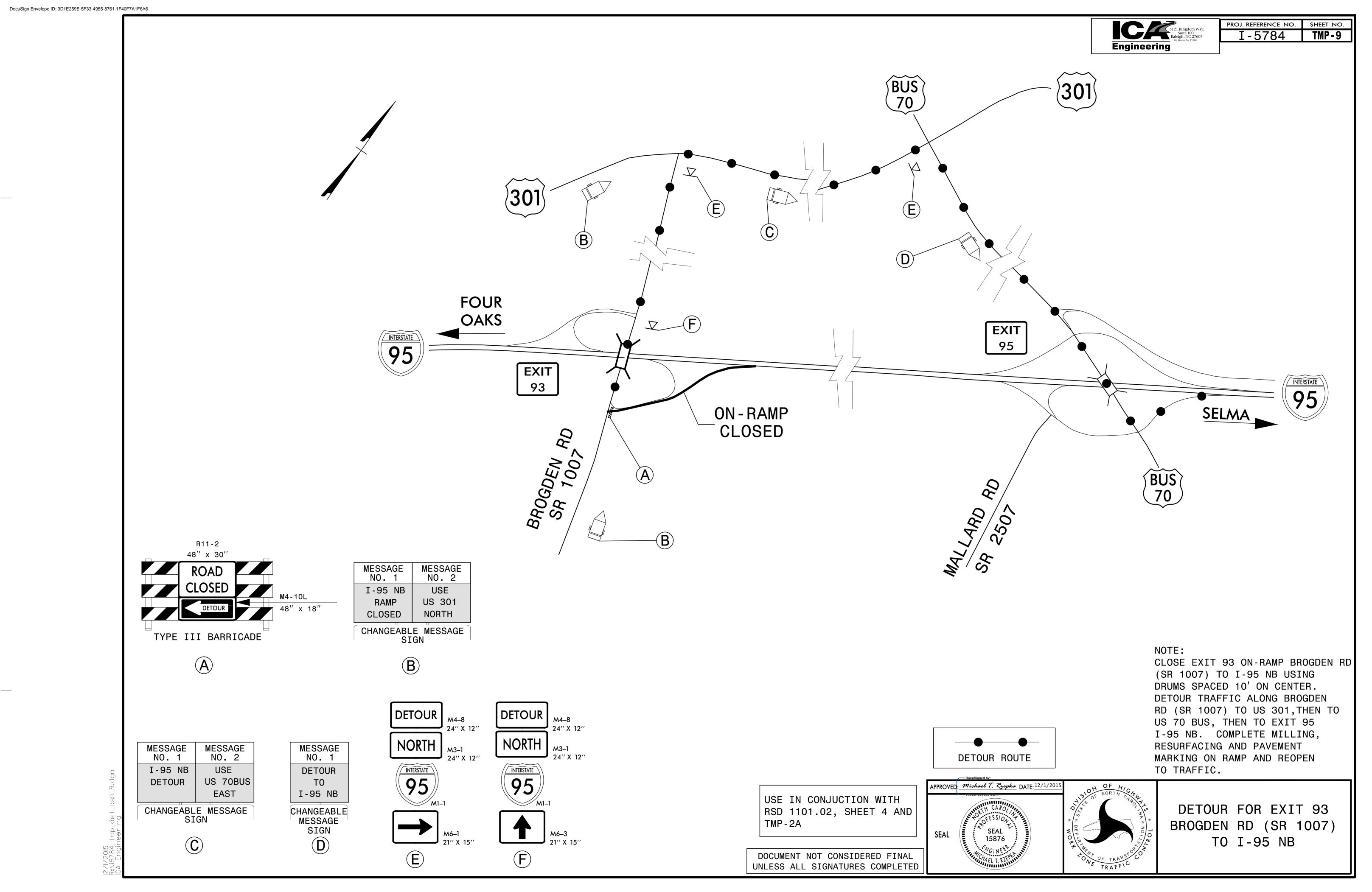
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

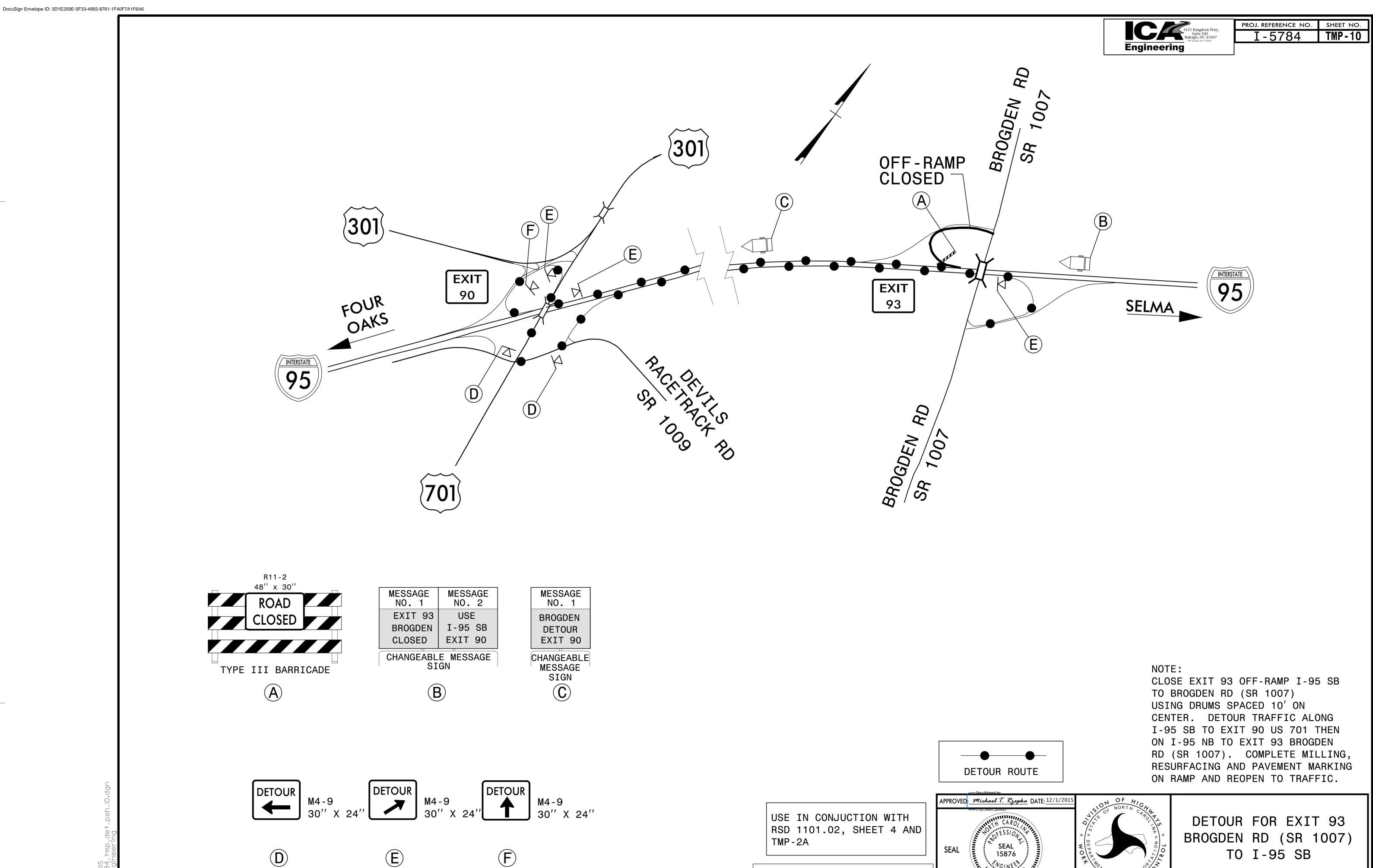


NOTE: CLOSE EXIT 93 OFF-RAMP I-95 NB TO BROGDEN RD (SR 1007) USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ALONG I-95 NB TO EXIT 95 US 70 BUS, THEN ON I-95 SB TO EXIT 93 BROGDEN RD (SR 1007). COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

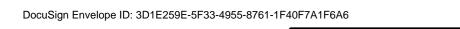


DETOUR FOR EXIT 93 I-95 NB TO BROGDEN RD (SR 1007)



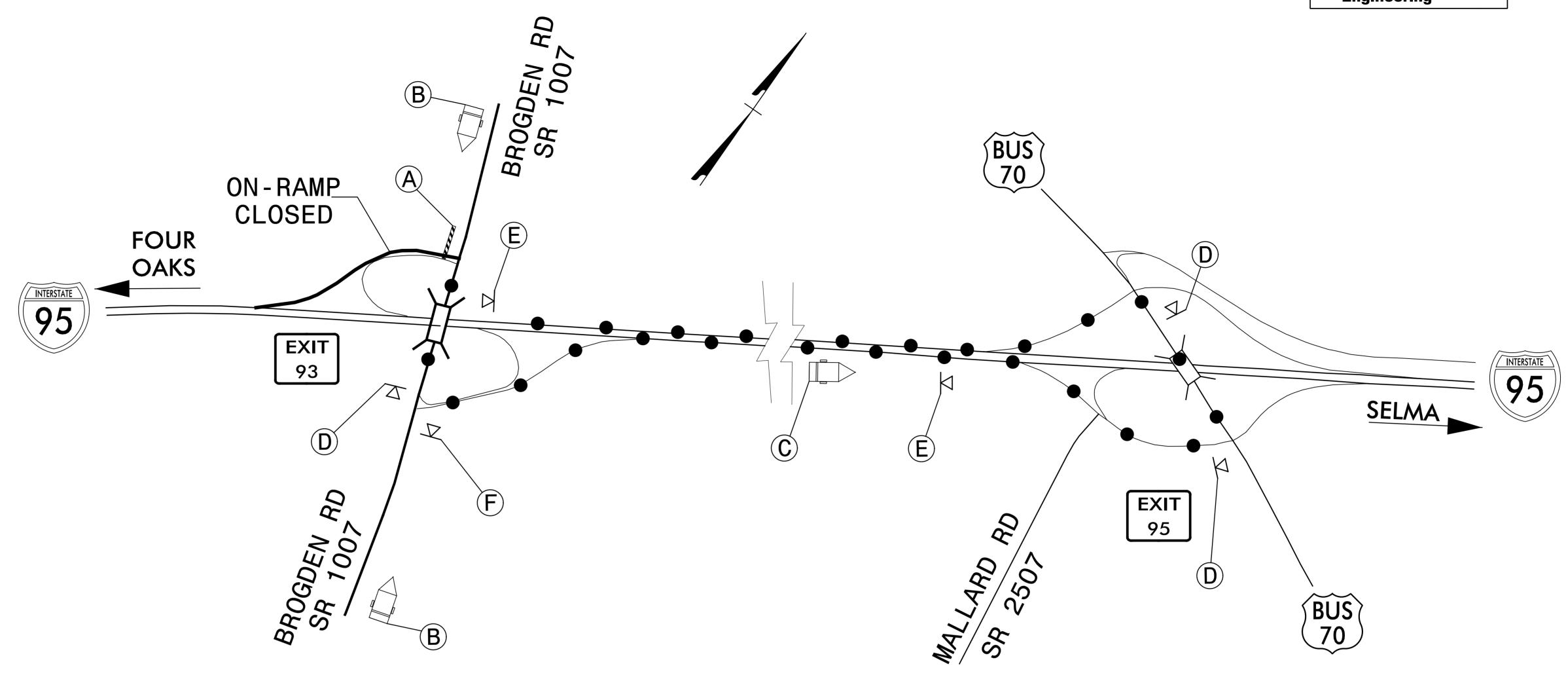


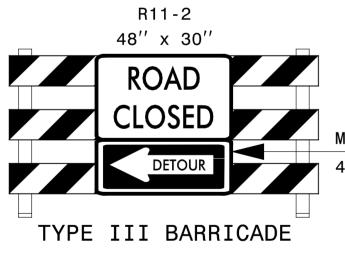
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



Engineering

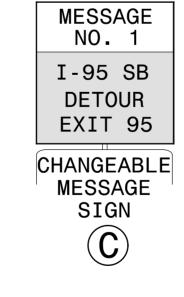
PROJ. REFERENCE NO. SHEET NO. [-5784





MESSAGE NO. 1	MESSAGE NO. 2	
I-95 SB	DETOUR	
DAMD	1105	
RAMP	USE	
OL OOED	T 05 ND	
CLOSED	I-95 NB	
CHANGEABL	E MESSAGE	
SIGN		
31	GIN	

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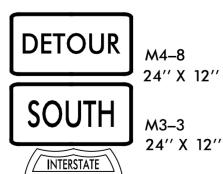
DETOUR | M4-8

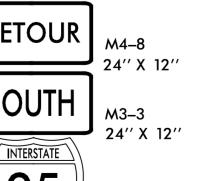
95

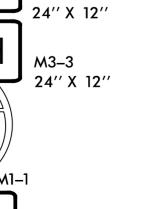
SOUTH M3-3 24" X 12"

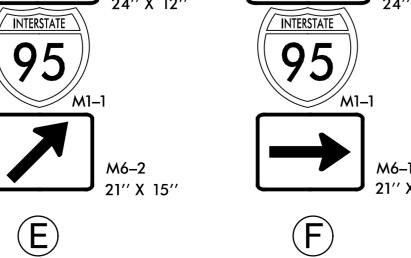


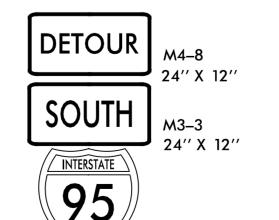
24" X 12"













USE IN CONJUCTION WITH RSD 1101.02, SHEET 4 AND TMP-2A

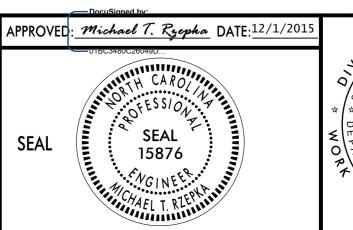
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



RD (SR 1007) TO I-95 SB USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ALONG I-95 NB TO EXIT 95 US 70 BUS, THEN BACK ON I-95 SB. COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

CLOSE EXIT 93 ON-RAMP BROGDEN

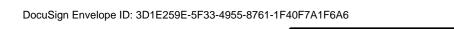
NOTE:



DETOUR ROUTE

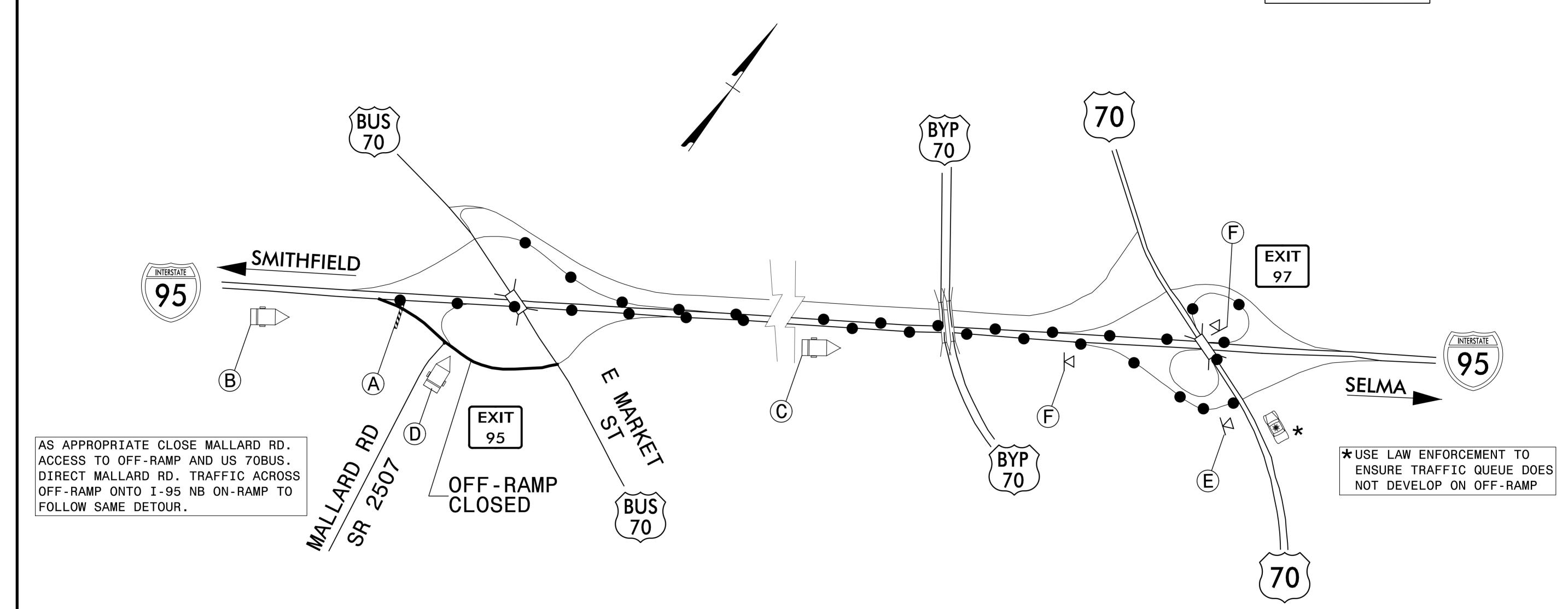


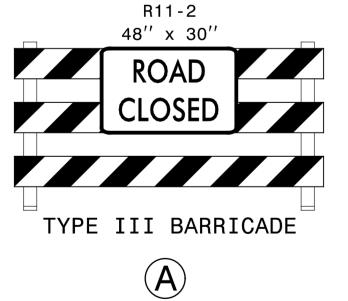
DETOUR FOR EXIT 93 BROGDEN RD (SR 1007) TO I-95 SB

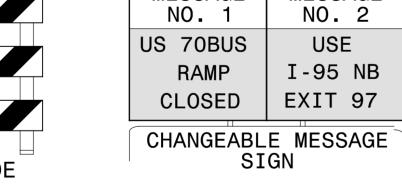




PROJ. REFERENCE NO. SHEET NO. TMP-12







MESSAGE

MESSAGE

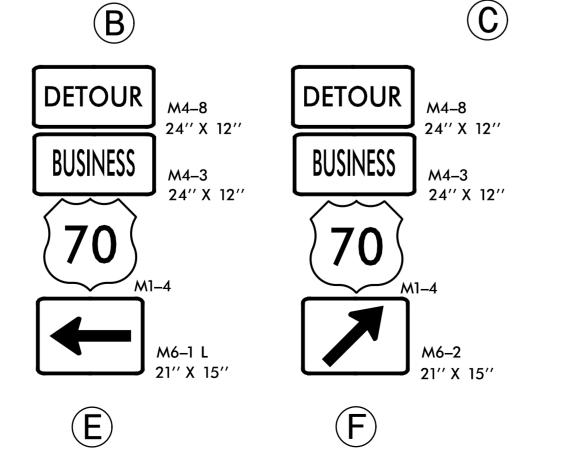
MESSAGE NO. 1
US 70BUS
DETOUR
EXIT 97

CHANGEABLE MESSAGE SIGN

MESSAGE NO. 1	MESSAGE NO. 2
ACCESS	USE
TO US70B	I-95 NB
CLOSED	

CHANGEABLE MESSAGE SIGN

D



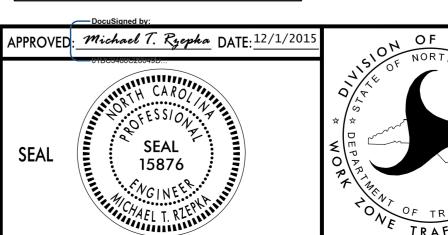
USE IN CONJUCTION WITH RSD 1101.02, SHEET 4 AND TMP-2A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

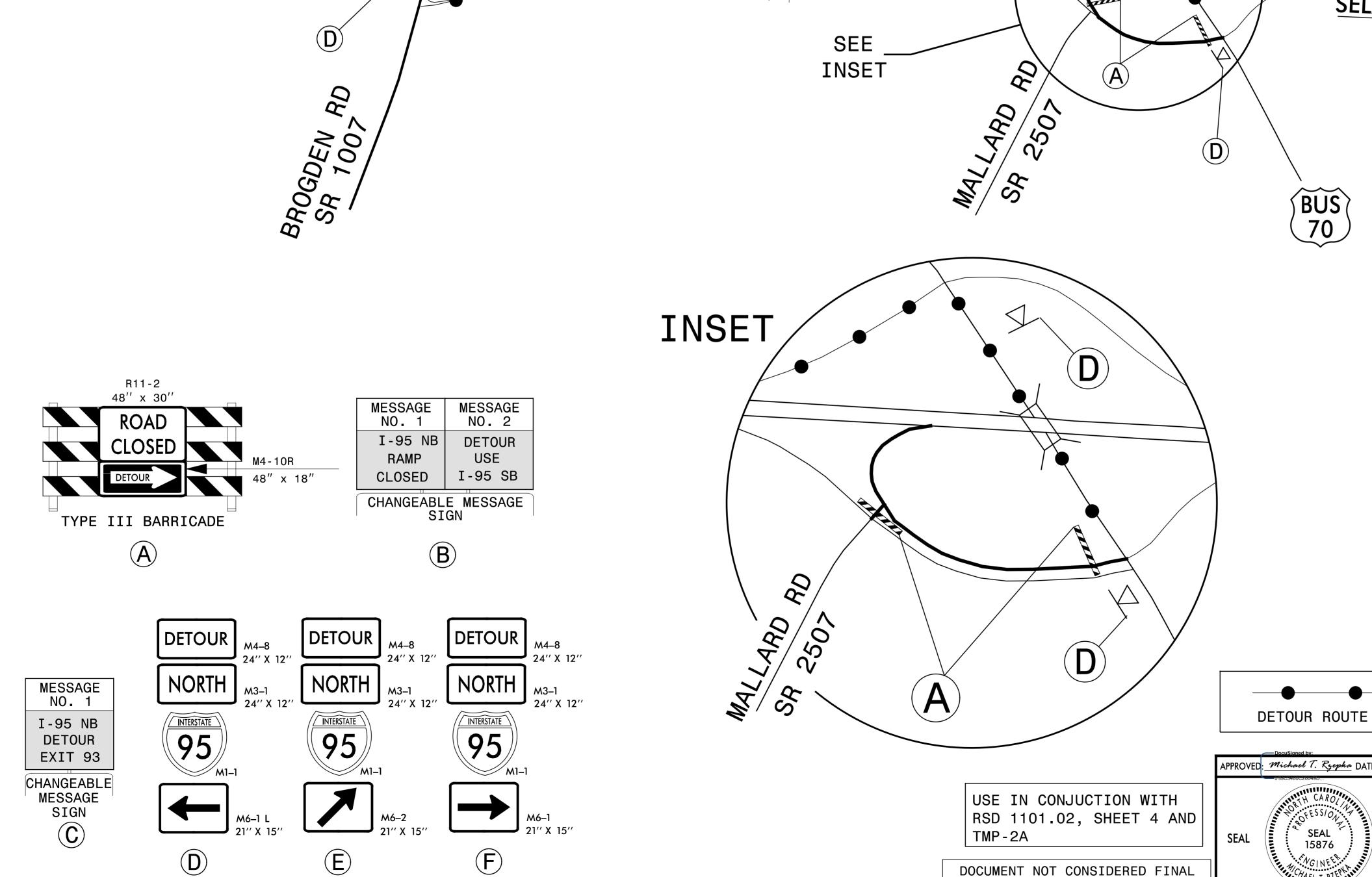


CLOSE EXIT 95 OFF-RAMP I-95 NB TO E. MARKET ST (US 70 BUS) USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ALONG I-95 NB TO EXIT 97 US 70, THEN BACK ON I-95 SB TO EXIT 95. COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

NOTE:



DETOUR FOR EXIT 95
I-95 NB TO
E MARKET ST
(US 70 BUS)



BROGDEN SR 100;

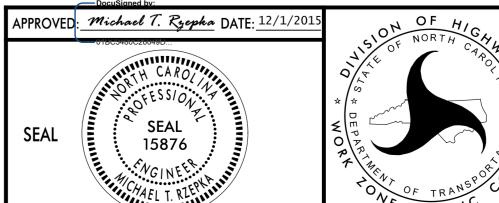
FOUR

OAKS

EXIT

93

I-95 NB. COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.



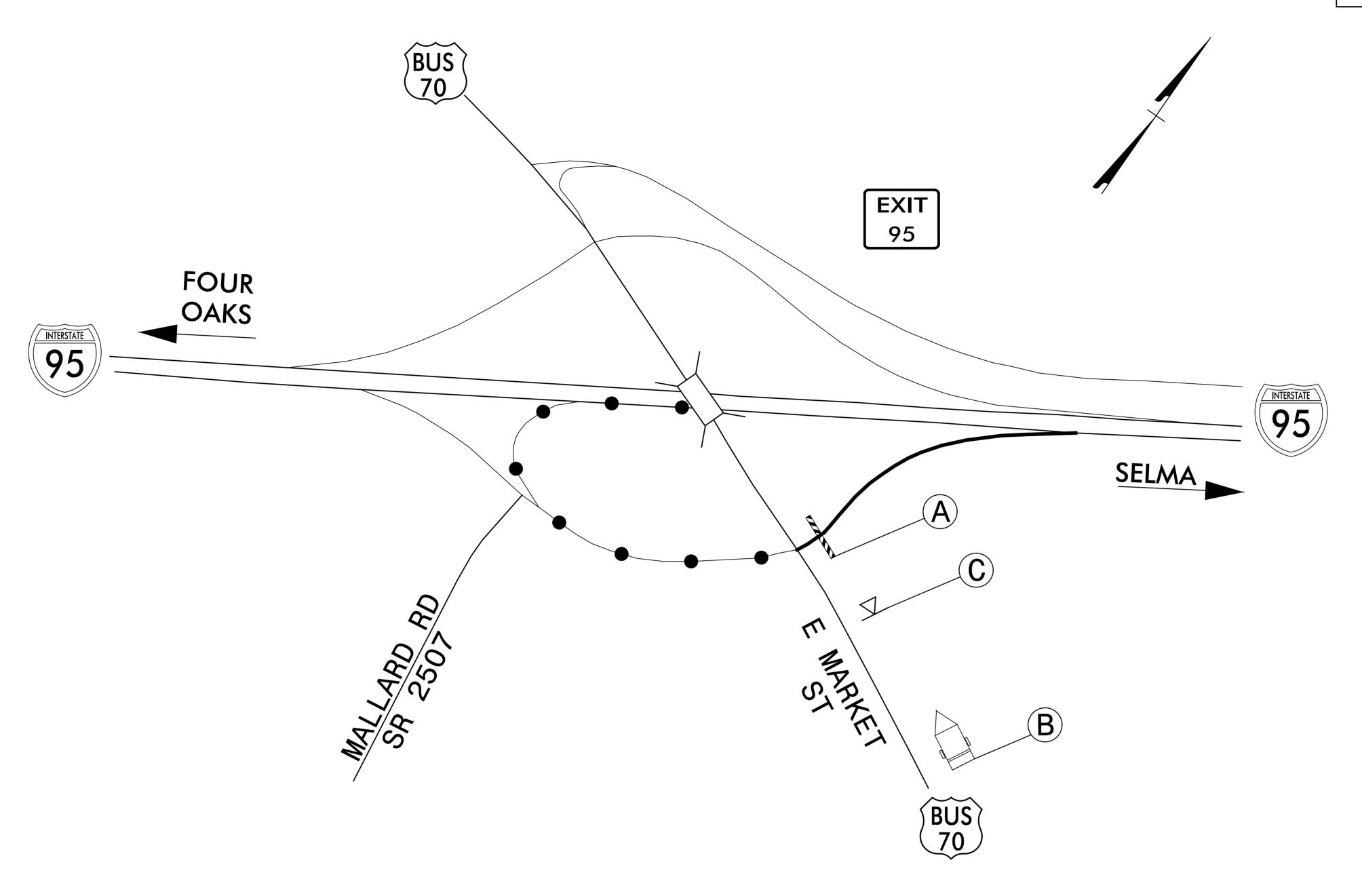
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED EXIT

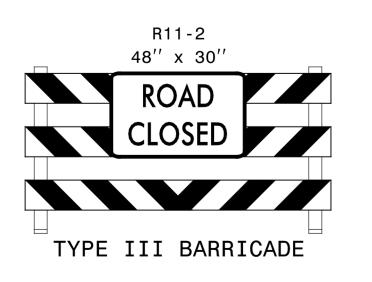
95

DETOUR FOR EXIT 95 E MARKET ST (US 70 BUS) TO I-95 NB

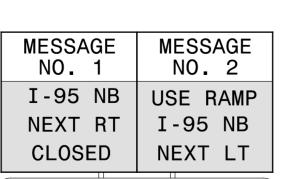
5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC Lienes No: Progss **Engineering**

PROJ. REFERENCE NO. -5784



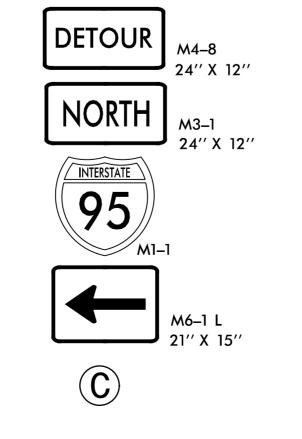


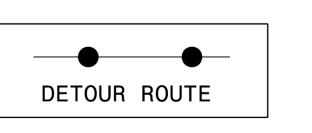
A



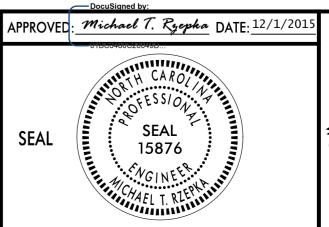
CHANGEABLE MESSAGE SIGN

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NOTE: CLOSE EXIT 95 ON-RAMP E. MARKET ST (US 70 BUS) TO I-95 NB USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ONTO I-95 NB LOOP FROM E. MARKET ST (US 70 BUS). COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

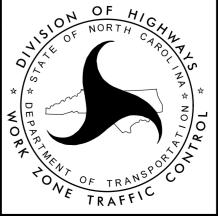


USE IN CONJUCTION WITH

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TMP-2A

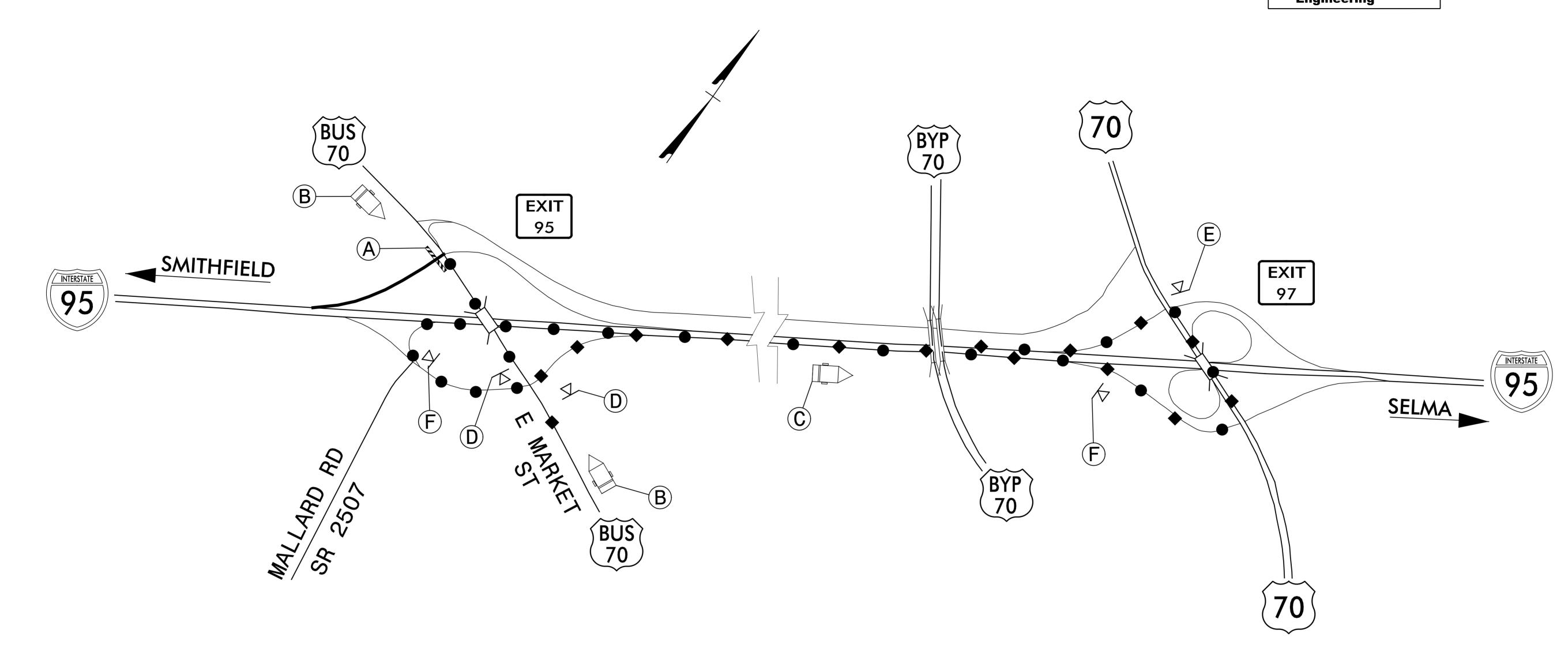
RSD 1101.02, SHEET 4 AND

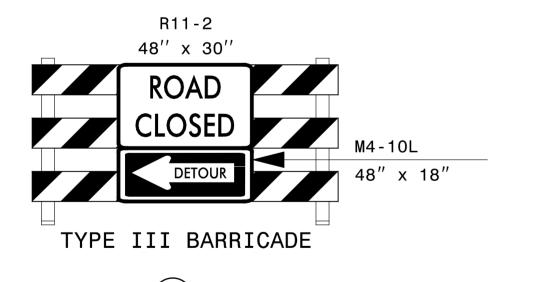


DETOUR FOR EXIT 95 E MARKET ST (US 70 BUS) TO I-95 NB

Engineering

-5784





MESSAGE	MESSAGE	
NO. 1	NO. 2	
I-95 SB	DETOUR	
RAMP	USE	
CLOSED	I-95 NB	
CHANGEABLE MESSAGE SIGN		

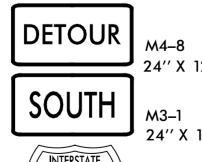
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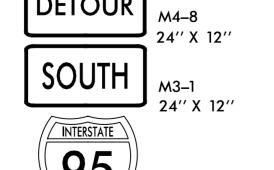
MESSAGE NO. 1 I-95 SB DETOUR EXIT 97 CHANGEABLE MESSAGE SIGN

A DETOUR M4-8 24" X 12"

SOUTH M3-1 24" X 12"

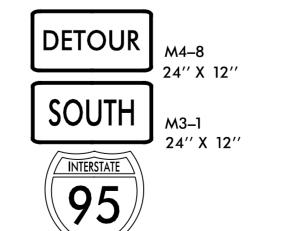
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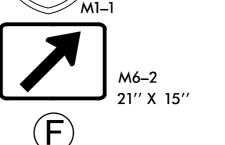






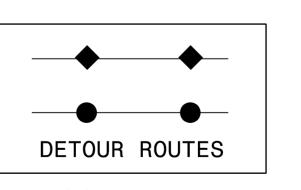
E



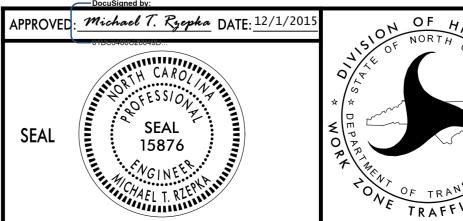


USE IN CONJUCTION WITH RSD 1101.02, SHEET 4 AND TMP-2A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



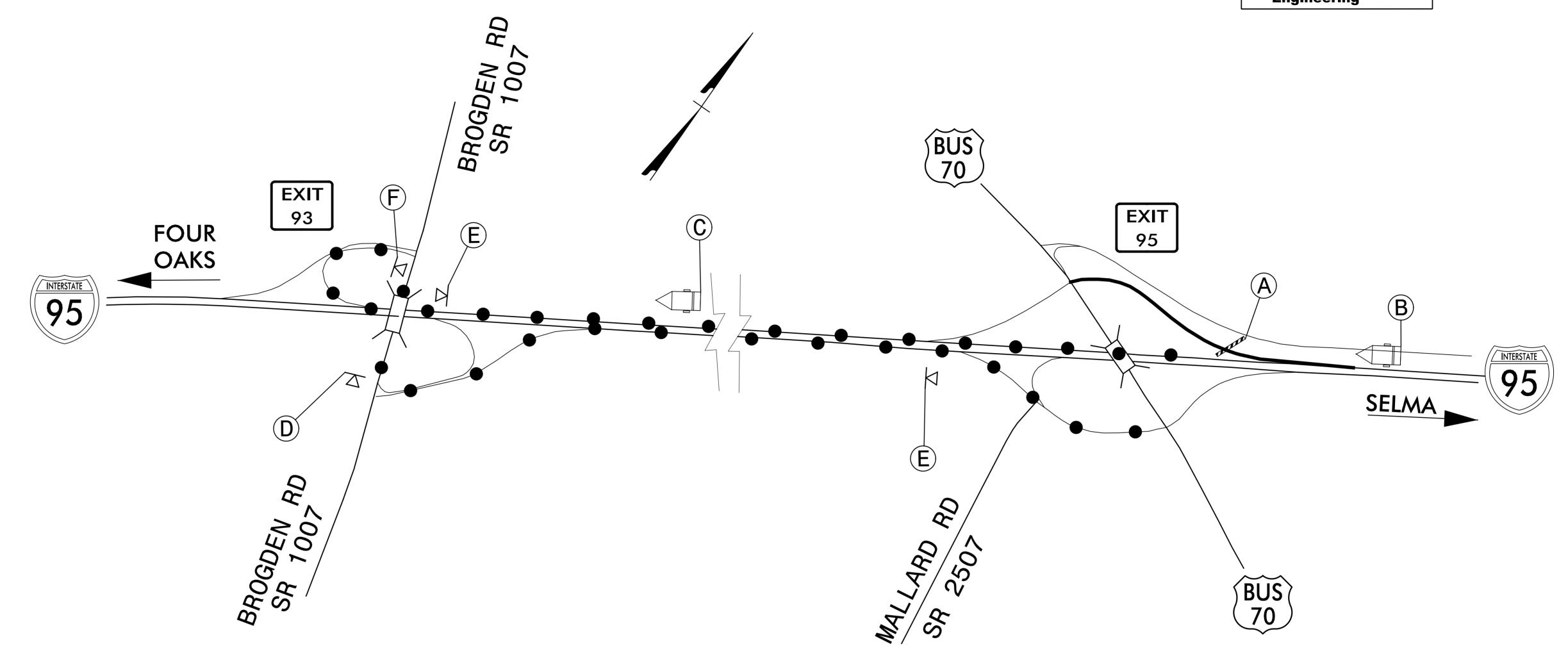
NOTE: CLOSE EXIT 95 ON-RAMP E. MARKET ST. (US 70 BUS) TO I-95 SB USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ALONG I-95 NB TO EXIT 97 US 70, THEN BACK ON I-95 SB. COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

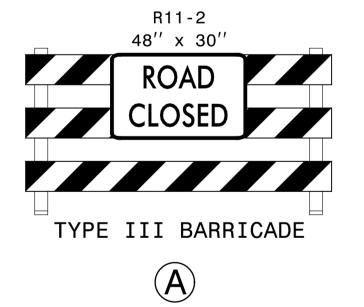


DETOUR FOR EXIT 97 E MARKET ST (US 70 BUS) TO I-95 SB

S121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC Literate Not F-0258

I - 5784 TMP - 16



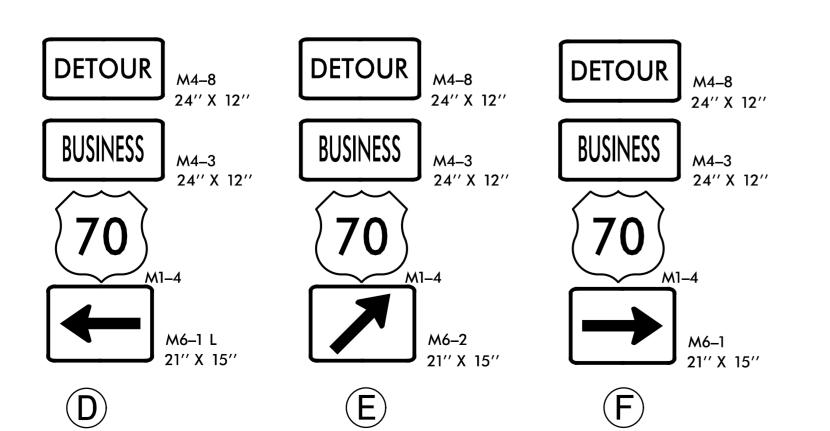


MESSAGE	MESSAGE	
NO. 1	NO. 2	
US 70BUS	USE	
RAMP	I-95 SB	
CLOSED	EXIT 93	
CHANGEABLE MESSAGE SIGN		

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MESSAGE
NO. 1
US 70BUS
DETOUR
EXIT 93

CHANGEABLE
MESSAGE
SIGN
C

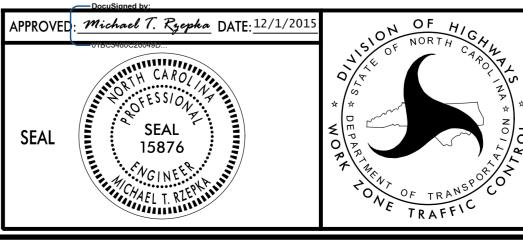


DETOUR ROUTE

NOTE:
CLOSE EXIT 95 OFF-RAMP I-95 SB
TO E. MARKET ST (US 70 BUS)
USING DRUMS SPACED 10' ON
CENTER. DETOUR TRAFFIC
ALONG I-95 SB TO EXIT 93
BROGDEN RD (SR 1007), THEN
ON I-95 NB TO EXIT 95.
COMPLETE MILLING, RESURFACING
AND PAVEMENT MARKING ON RAMP
AND REOPEN TO TRAFFIC.

USE IN CONJUCTION WITH RSD 1101.02, SHEET 4 AND TMP-2A

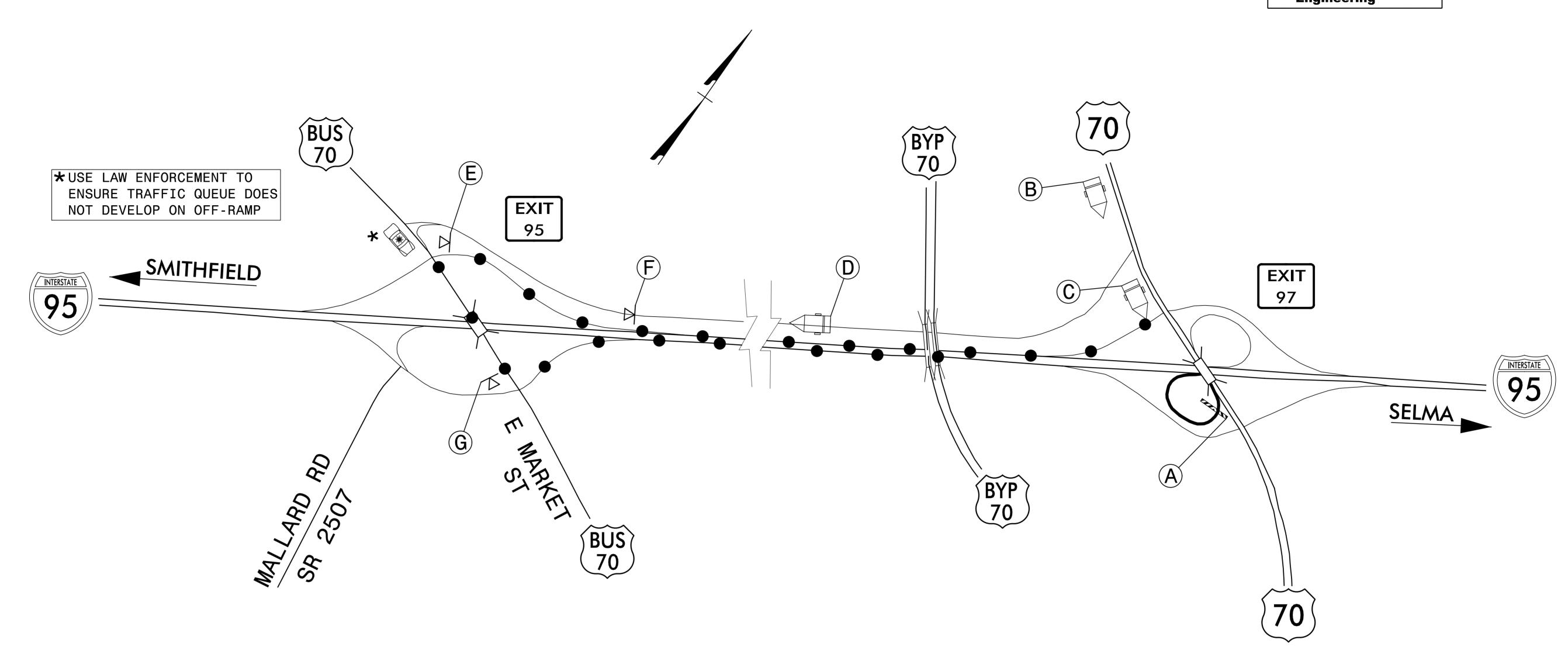
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

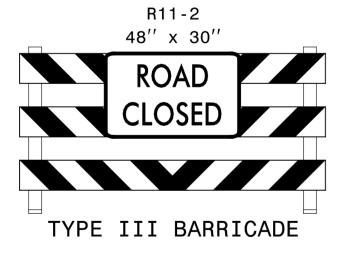


I-95 SB TO
E MARKET ST
(US 70 BUS)

5121 Kingdom Way, Suite 100 Raleigh, NC 27607 NC Liberate Not: P1988 **Engineering**

PROJ. REFERENCE NO. -5784 TMP-17





MESSAGE	MESSAGE	
NO. 1	NO. 2	
I-95 NB	DETOUR	
RAMP	USE	
CLOSED	I-95 SB	
CHANGEABLE MESSAGE SIGN		

MESSAGE	MESSAGE	
NO. 1	NO. 2	
I-95 NB	I-95 NB	
RAMP	DETOUR	
CLOSED	NEXT RT	
CHANGEABLE MESSAGE SIGN		

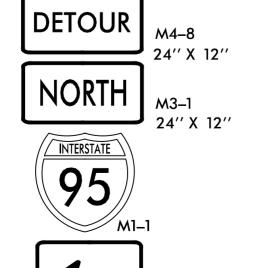
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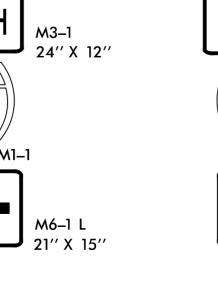
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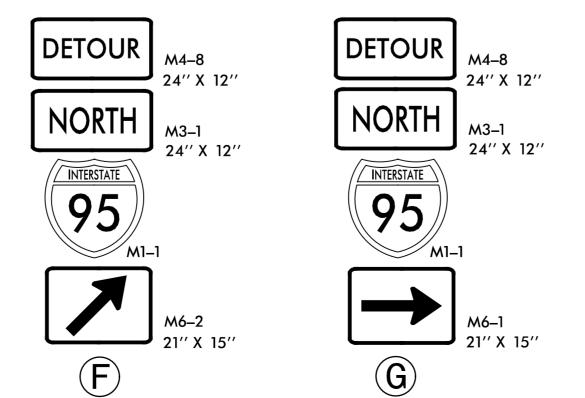
MESSAGE NO. 1 I-95 NB DETOUR EXIT 95 CHANGEABLE MESSAGE SIGN

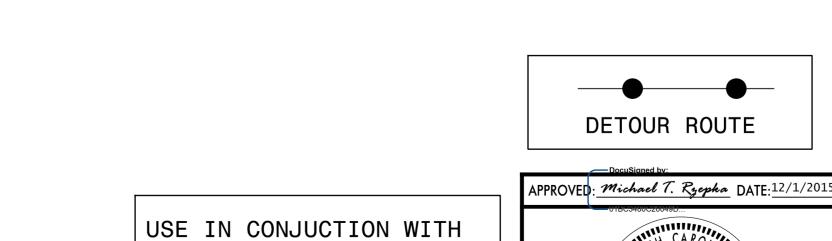
(D)







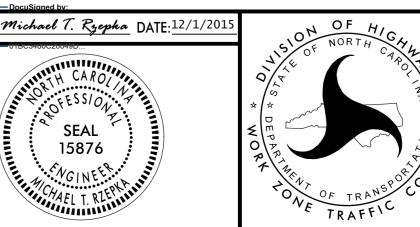




TMP-2A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

RSD 1101.02, SHEET 4 AND SEAL



NOTE: CLOSE EXIT 97 FROM US 70 TO I-95 NB USING DRUMS SPACED 10' ON CENTER. DETOUR TRAFFIC ALONG I-95 SB TO EXIT 95 E. MARKET ST (US 70 BUS), THEN BACK ON I-95 NB. COMPLETE MILLING, RESURFACING AND PAVEMENT MARKING ON RAMP AND REOPEN TO TRAFFIC.

DETOUR FOR EXIT 97 US 70 E TO I-95 NB

SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

D

E