

**This electronic collection of documents is provided  
for the convenience of the user  
and is Not a Certified Document –**

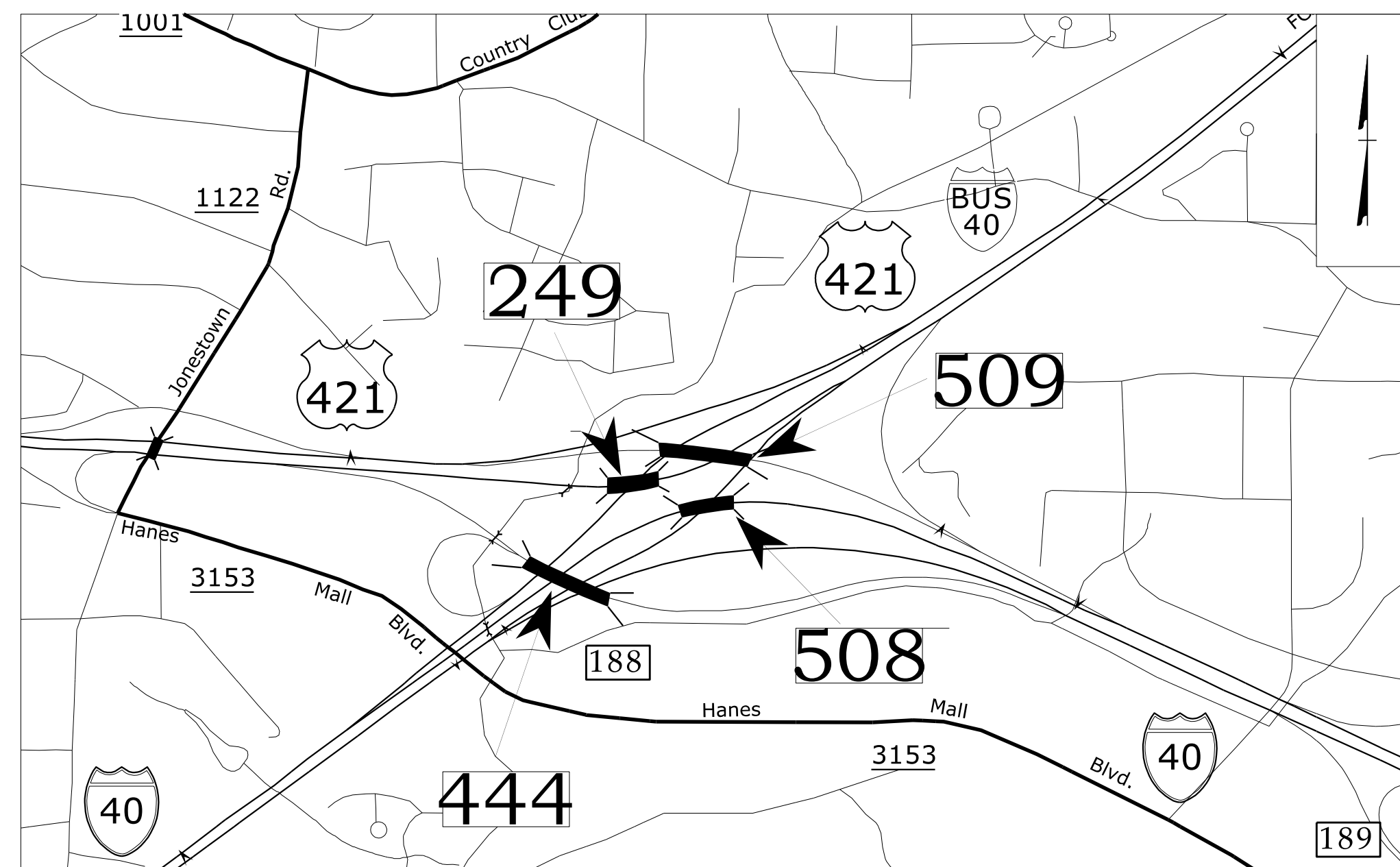
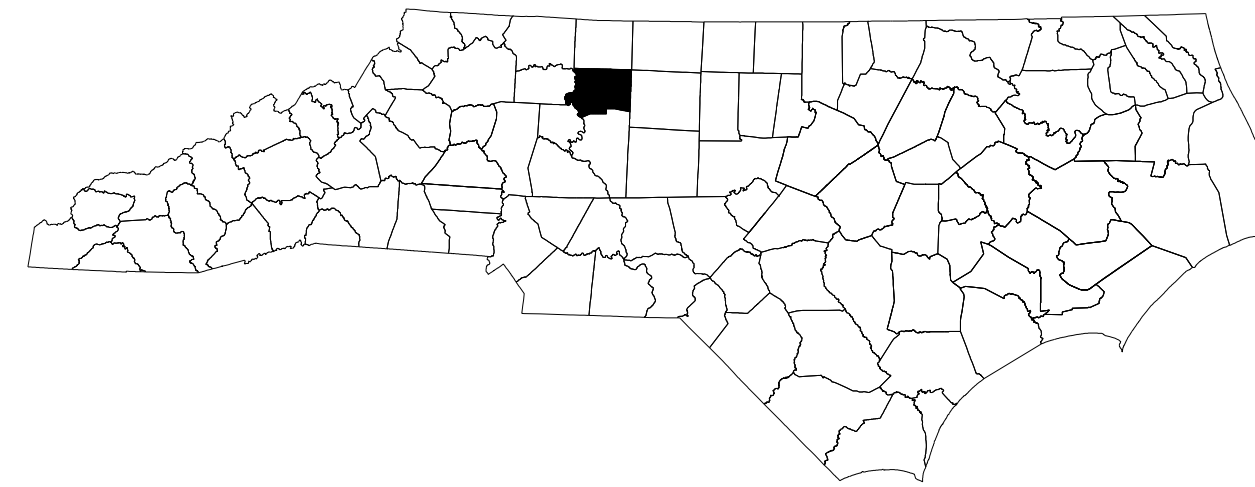
**The documents contained herein were originally issued  
and sealed by the individuals whose names and license  
numbers appear on each page, on the dates appearing  
with their signature on that page.**

**This file or an individual page  
shall not be considered a certified document.**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

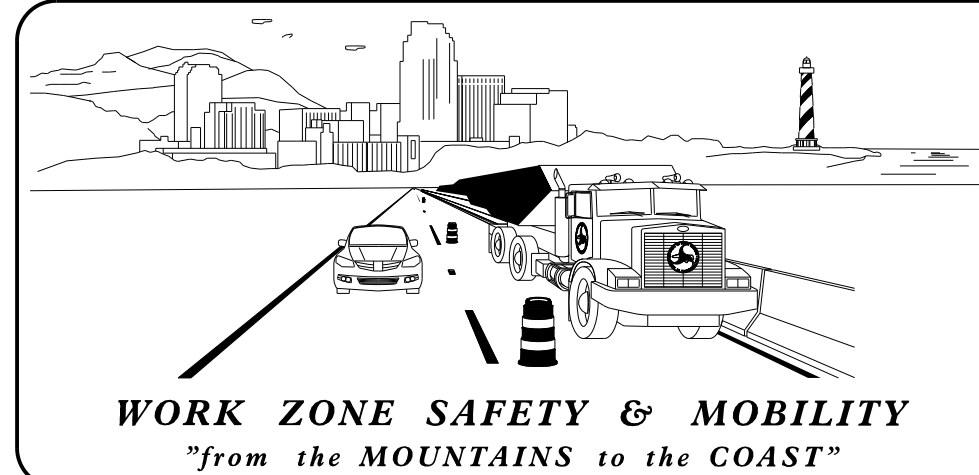
**FORSYTH COUNTY**



**LOCATION:** **I-40:**  
**STRUCTURE REHABILITATION:**  
-FROM I-40 BRIDGES (#161 & #162) OVER MUDDY CREEK TO HWY 66  
BRIDGE (#439) OVER I-40 (SEE STRUCTURE PLANS FOR LOCATIONS & DETAILS)

**PAVEMENT REHABILITATION:**  
-FROM 0.3 MI EAST OF SR 3153 (STRATFORD ROAD) TO GUILFORD COUNTY LINE

**TYPE OF WORK:** **STRUCTURE REHABILITATION, PAVEMENT REHABILITATION**  
(SEE STRUCTURE PLANS FOR DETAILS)



PLANS PREPARED BY:

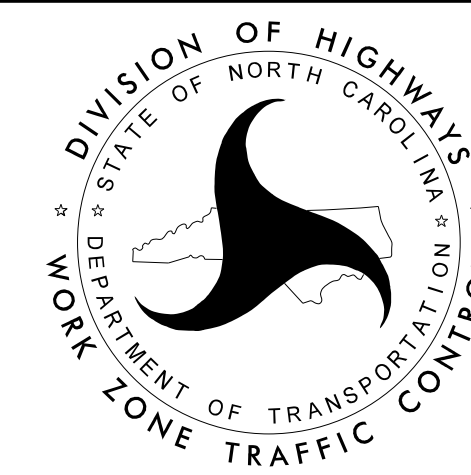
TADEAUS M. KELLY, EIT

JUSTIN D. BEAVER, P.E.

NCDOT CONTACTS:

KENNETH C. THORNEWELL, P.E.  
PROJECT ENGINEER

JUSTIN D. BEAVER, P.E.  
PROJECT DESIGN ENGINEER

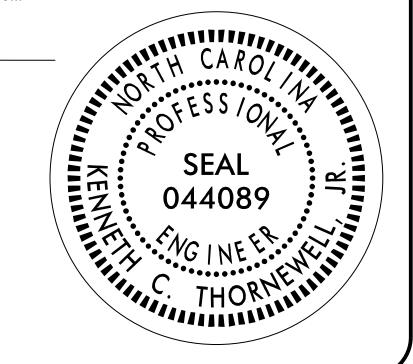


DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

APPROVED: *Kenneth C. Thornevell Jr., P.E.*  
1E901EF27373405

DATE: 7/24/2020

SEAL



**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-2	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-2A	OFF SITE DETOUR - I-40 EAST
TMP-2B	TYPICAL RAMP DETOUR
TMP-2C	WORK ZONE VARIABLE SPEED LIMIT REDUCTION
TMP-3	PHASING
TMP-4	RIGHT LANE CLOSURE DETAIL STRUCTURE 444
TMP-5	RIGHT LANE CLOSURE DETAIL STRUCTURE 444
TMP-6	LEFT LANE CLOSURE DETAIL STRUCTURE 444
TMP-7	LEFT LANE CLOSURE DETAIL STRUCTURE 444
TMP-8	RIGHT LANE CLOSURE DETAIL STRUCTURE 508
TMP-9	RIGHT LANE CLOSURE DETAIL STRUCTURE 508
TMP-10	RIGHT LANE CLOSURE DETAIL STRUCTURE 508
TMP-11	RIGHT LANE CLOSURE DETAIL STRUCTURE 508
TMP-12	LEFT LANE CLOSURE DETAIL STRUCTURE 508
TMP-13	LEFT LANE CLOSURE DETAIL STRUCTURE 508
TMP-14	LEFT LANE CLOSURE DETAIL STRUCTURE 508
TMP-15	LEFT LANE CLOSURE DETAIL STRUCTURE 508
TMP-16	RIGHT LANE CLOSURE DETAIL STRUCTURE 509
TMP-17	RIGHT LANE CLOSURE DETAIL STRUCTURE 509
TMP-18	LEFT LANE CLOSURE DETAIL STRUCTURE 509
TMP-19	LEFT LANE CLOSURE DETAIL STRUCTURE 509

SHEET NO.  
TMP-1

I-5795

TIP PROJECT:

# ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 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
1101.06	WARNING SIGNS FOR BLASTING ZONES
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	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
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
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

# LEGEND

## GENERAL

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

## 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

6/26/2020 \\dot\dfsroot\01NProj\Store\Div\Proj\Division09\5795\TrafficControl\TCP\I-5795\_TC\_TMP\_IA\_RSD\_ Legend.dgn User:tmkelyl

APPROVED: DATE: 7/24/2020  SEAL			<b>ROADWAY STANDARD DRAWINGS &amp; LEGEND</b>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

## GENERAL NOTES

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 A LANE OF TRAFFIC, INCLUDING ALL RAMPS AND LOOPS, ON THE FOLLOWING ROADS DURING THE FOLLOWING RESTRICTIONS:

ROAD NAME	DAY AND TIME RESTRICTIONS
STRATFORD RD	MONDAY THROUGH SUNDAY
PETER'S CREEK PKWY	6:00 AM TO 10:00 PM
NC-66	
UNION CROSS RD	

- B) EXCEPT AS ALLOWED THROUGH ANOTHER ICT, DO NOT CLOSE OR NARROW A LANE OF TRAFFIC ON ALL OTHER ROADS DURING THE FOLLOWING RESTRICTIONS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL OTHER ROADS	MONDAY THROUGH SUNDAY 5:00 AM TO 8:00 PM

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

ROAD NAME	HOLIDAY
I-40, INCLUDING ALL RAMPS & LOOPS	<ol style="list-style-type: none"> <li>FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.</li> <li>FOR NEW YEAR'S, BETWEEN THE HOURS OF 5:00 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.</li> <li>FOR EASTER, BETWEEN THE HOURS OF 5:00 A.M. THURSDAY AND 8:00 P.M. MONDAY.</li> <li>FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY TO 8:00 P.M. TUESDAY.</li> <li>FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE DAY AFTER INDEPENDENCE DAY.  IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 5:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.</li> <li>FOR LABOR DAY, BETWEEN THE HOURS OF 5:00 A.M. FRIDAY AND 8:00 P.M. TUESDAY.</li> <li>FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:00 A.M. TUESDAY TO 8:00 P.M. MONDAY.</li> <li>FOR CHRISTMAS, BETWEEN THE HOURS OF 5:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.</li> </ol>

### SPECIAL EVENTS

- FOR WAKE FOREST UNIVERSITY FOOTBALL GAMES OCCURING AT GROVES STADIUM, BETWEEN FOUR (4) HOURS BEFORE THE START AND FOUR (4) HOURS AFTER THE END OF THE GAMES.
- FOR DIXIE CLASSIC FAIR IN WINSTON-SALEM BETWEEN THE HOURS OF 5:00 A.M. THE DAY BEFORE THE START OF THE FAIR AND 8:00 P.M. THE DAY AFTER THE END OF THE FAIR.
- FOR CAR RACES, OCCURING AT BOWMAN GRAY STADIUM, BETWEEN FOUR (4) HOURS BEFORE THE START AND FOUR (4) HOURS AFTER THE END OF THE RACES.
- FOR FOOTBALL GAMES AND OTHER SPECIAL EVENTS AT WINSTON-SALEM STATE UNIVERSITY, BETWEEN FOUR (4) HOURS BEFORE THE START AND FOUR (4) HOURS AFTER THE END OF THE EVENT.

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) 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.
- E) 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.
- F) 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.

- G) 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.
- H) 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.
- I) DO NOT INSTALL MORE THAN 3 MILES OF LANE CLOSURE ON I-40 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- J) FOR SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON ANY ROAD WITHIN THE PROJECT LIMITS, A MINIMUM OF THREE (3) MILES SHALL BE PROVIDED BETWEEN LANE CLOSURES. THE DISTANCE BETWEEN LANE CLOSURES SHALL BE MEASURED FROM THE END OF ONE CLOSURE TO THE BEGINNING OF THE TAPER OF THE NEXT LANE CLOSURE.

### TRAFFIC PATTERN ALTERATIONS

- K) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- L) 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.
- M) 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.

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

### TRAFFIC CONTROL DEVICES

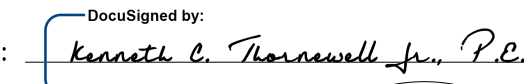
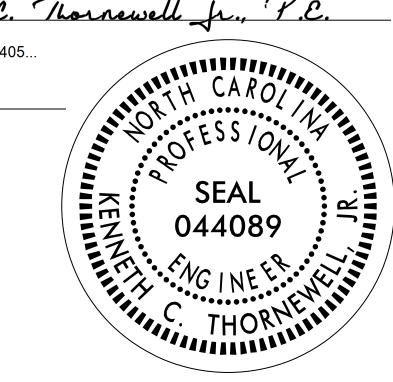
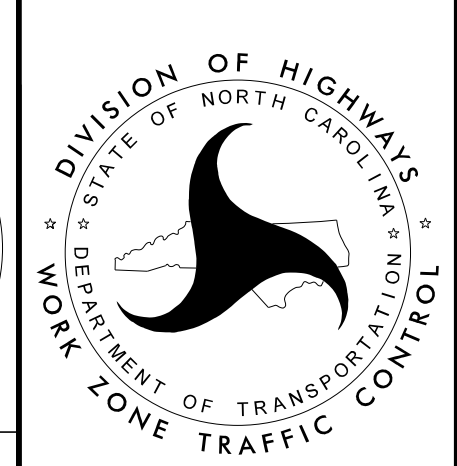
- O) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- 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 PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

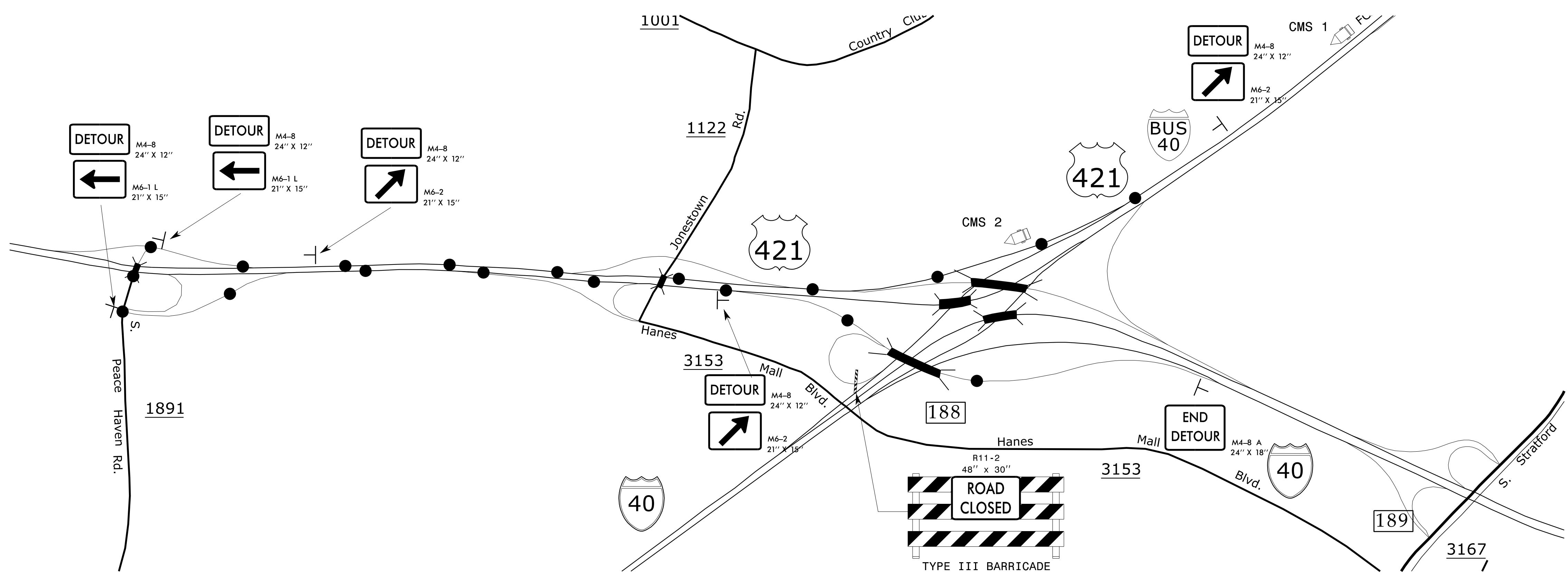
## MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

### RECOMMENDED STRATEGIES:

- LANE SHIFTS OR CLOSURES
- RAMP CLOSURES / RELOCATION
- OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES

APPROVED:  <small>DocuSigned by: Kenneth C. Thornwell, Jr., P.E. 1E9B1E627373405</small> DATE: 7/24/2020			<h3 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h3>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			



**CMS 1**

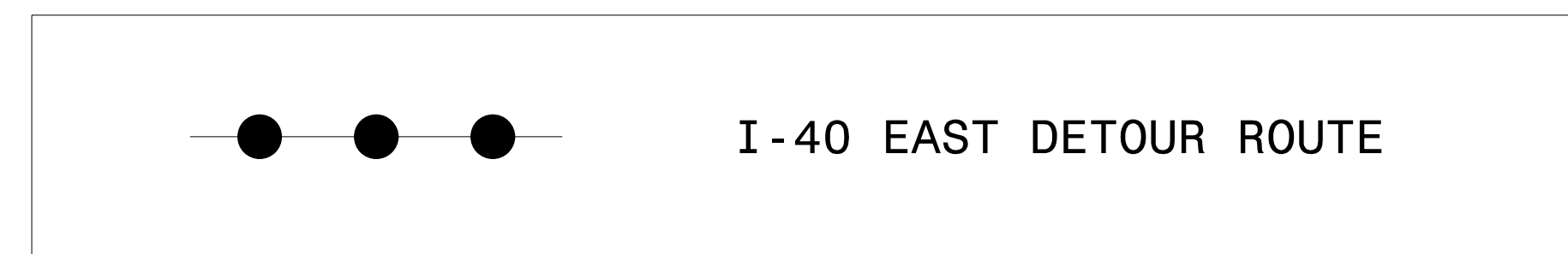
MESSAGE NO. 1	MESSAGE NO. 2
EXIT TO I-40 E CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

**CMS 2**

MESSAGE NO. 1	MESSAGE NO. 2
DETOUR TO I-40 E	USE EXIT 240

CHANGEABLE MESSAGE SIGN

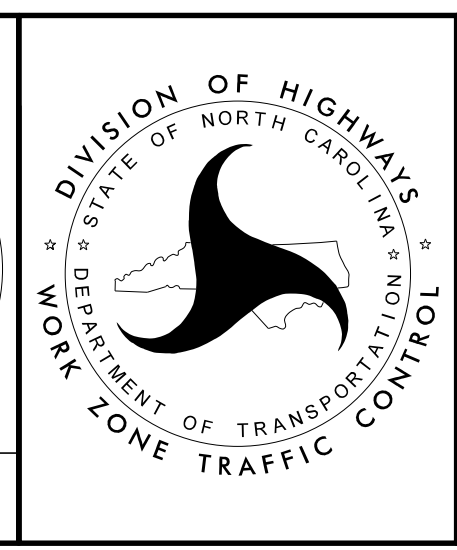


7/13/2020  
 \\dot\dfsroot\01\Proj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_2A\_OffsiteDetour.dgn  
 User:tmkelly

APPROVED: *Kenneth C. Thornevell, Jr., P.E.*  
 DATE: 7/24/2020

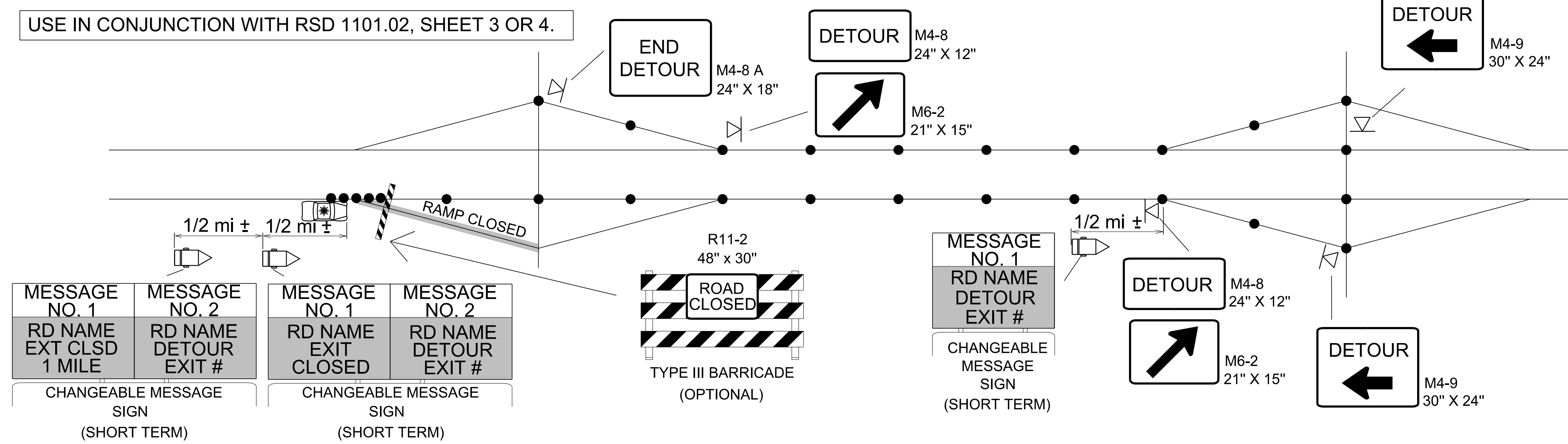
SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

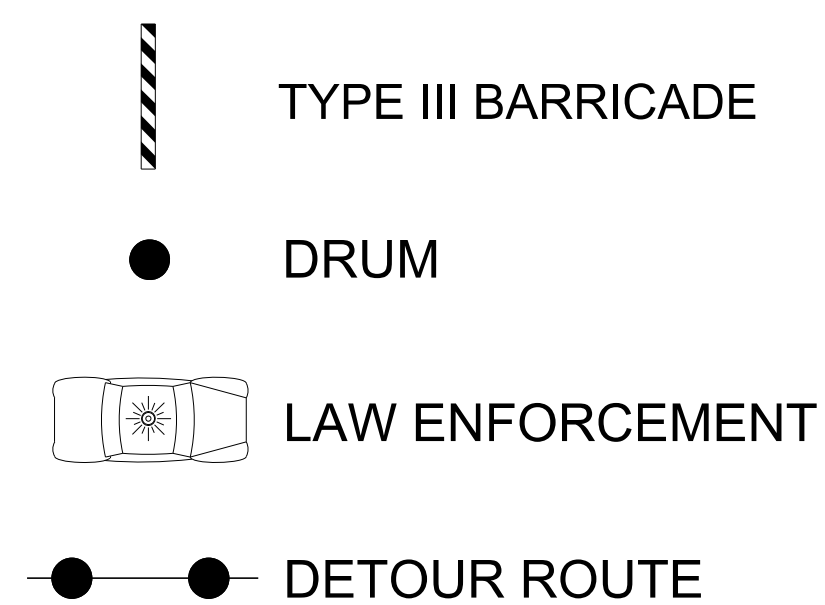
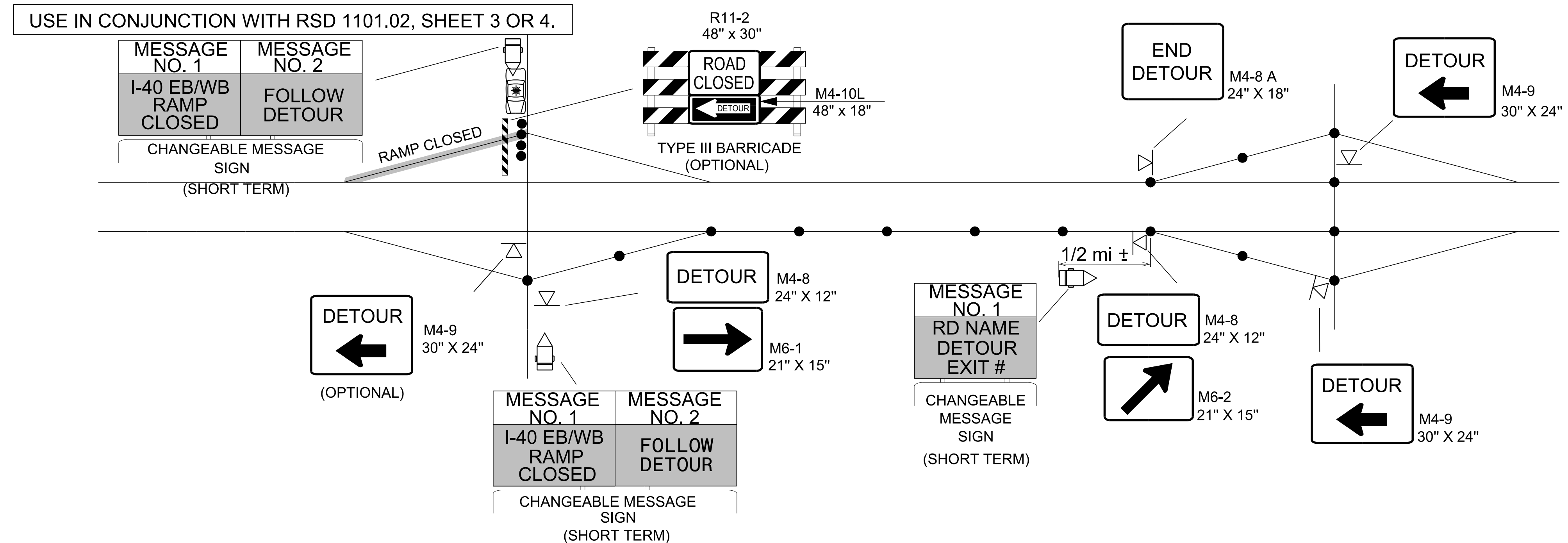


**OFF SITE  
DETOUR  
I-40 EAST**

### SHORT TERM CLOSURE AND DETOUR OF OFF-RAMP TO ADJACENT INTERCHANGE



### SHORT TERM CLOSURE AND DETOUR OF ON-RAMP TO ADJACENT INTERCHANGE



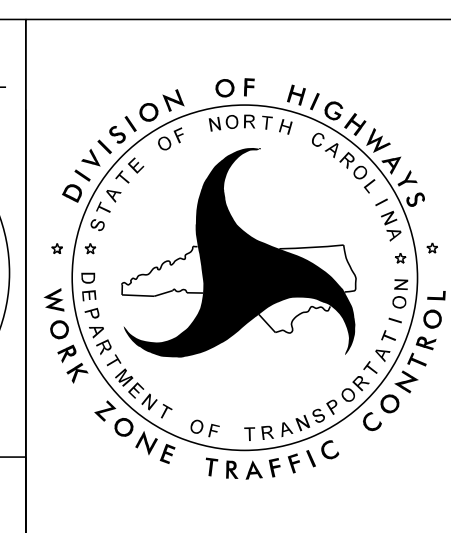
#### NOTES

1. THIS DRAWING IS INTENDED FOR USE DURING SHORT TERM CLOSURES OF INTERSTATE AND FREEWAY RAMPS.
2. RAMP CLOSURES SHALL BE APPROVED BY THE ENGINEER.
3. IF RAMP CLOSURE RESTRICTIONS APPLY, SEE SPECIAL PROVISION, "INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES".

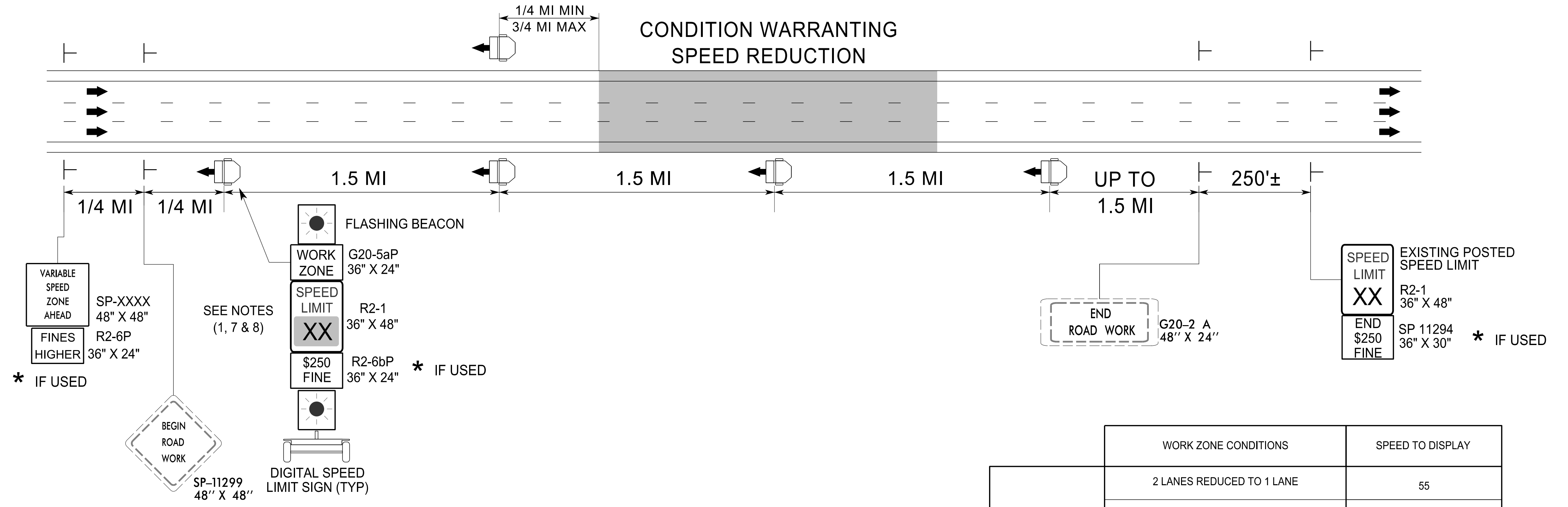
APPROVED: *Kenneth L. Thornwell, Jr., P.E.*  
DATE: 7/24/2020

SEAL

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



TYPICAL RAMP DETOUR



**NOTES**

- WITHIN 1/4 TO 3/4 MILE UPSTREAM OF CONDITION WARRANTING A SPEED REDUCTION, PLACE A DIGITAL SPEED LIMIT SIGN ON BOTH THE INSIDE AND OUTSIDE SHOULDERS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER. AT ALL OTHER LOCATIONS DOWNSTREAM, PLACE A SINGLE DIGITAL SPEED LIMIT SIGN ON THE OUTSIDE SHOULDER.  
  
IF SIGNS ARE NOT HIGHLY VISIBLE TO ALL MOTORISTS, SUPPLEMENTAL DIGITAL SPEED LIMIT SIGNS ARE PERMITTED TO BE INSTALLED ON THE MEDIAN SHOULDER.
- THE DIGITAL SPEED LIMIT SIGNS TAKE PRECEDENCE OVER EXISTING SPEED LIMIT SIGNS AND REMAIN UPRIGHT AND VISIBLE AT ALL TIMES. ALL EXISTING SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED FOR DURATION OF THE PROJECT.
- THE DIGITAL SPEED LIMITS SIGNS WILL BE INSTALLED (TRAILER MOUNTED OR STATIONARY MOUNTED) IN ADVANCE AND SPACED APPROXIMATELY 1.5 MILES THROUGHOUT THE ACTIVE WORK AREA, UNLESS DIRECTED OTHERWISE.
- NCDOT HAS SOLE AUTHORITY OF THE SPEED LIMITS DISPLAYED ON THE DIGITAL SPEED LIMIT SIGNS.
- THE WORK ZONE VARIABLE SPEED LIMIT AND THE \$250 SPEEDING PENALTY ARE SEPARATE ORDINANCES THAT MUST BE SIGNED BY THE STATE TRAFFIC ENGINEER TO BE VALID AND ENFORCEABLE. WITHOUT A SIGNED ORDINANCE, THE SPEED LIMIT ON A FACILITY SHALL REMAIN UNCHANGED.
- THE SPEED DISPLAYED SHALL BE THE LOWER OF THE EXISTING SPEED LIMIT OR THE SPEED IN THE WORK ZONE CONDITION CHART.
- THE SPEED LIMIT SHALL ONLY BE REDUCED IN AREAS MEETING WORK ZONE CONDITION WARRANTS. THE EXISTING SPEED LIMIT SHALL BE DISPLAYED ON ALL OTHER DIGITAL SPEED LIMIT SIGNS.
- THE BEACONS ON THE DIGITAL SPEED LIMIT SIGNS SHALL ONLY FLASH DURING TIMES THE SPEED IS REDUCED, AND REMAIN OFF AT ALL OTHER TIMES.

	WORK ZONE CONDITIONS	SPEED TO DISPLAY
LANE CLOSURES	2 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 1 LANE	55
	3 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 1 LANE	55
	4 LANES REDUCED TO 2 LANES	60
	4 LANES REDUCED TO 3 LANES	65
CONTINUOUS BARRIER (LENGTH OF BARRIER GREATER THAN 1 MILE)	1 OPEN LANE WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	55
	1 OPEN LANE WITH CONTINUOUS BARRIER ON 1 SHOULDER	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON BOTH SHOULDERS	60
	3 OR 2 OPEN LANES WITH CONTINUOUS BARRIER ON 1 SHOULDER	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON BOTH SHOULDERS	65
	4 OPEN LANES WITH BARRIER CONTINUOUS ON 1 SHOULDER	EXISTING
	UNEVEN LANES	60

\* SEE NOTE 6

APPROVED: <i>Kenneth E. Thornwell, Jr., P.E.</i> DATE: 7/24/2020 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			<b>WORK ZONE VARIABLE SPEED LIMIT REDUCTION</b>
--	--	--	---

6/26/2020  
 \\dot\dfsroot\01NProj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_2C\_WZVSLR\_DSLS.dgn  
 User:tmkelly

## PHASING

BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES. FIELD VERIFY LOCATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.

BRIDGE REHABS MAY BE COMPLETED IN ANY ORDER, ONE AT A TIME OR AS DIRECTED BY THE ENGINEER.

SEE STRUCTURE PLANS FOR PROPOSED REHABILITATION IMPROVEMENTS.

### BRIDGE STRUCTURE #444

THE CONTRACTOR SHALL COMPLETE THE WORK ON STRUCTURE #444, STEP 1 THROUGH STEP 4, IN 21 CONSECUTIVE DAYS USING LONG-TERM LANE CLOSURES. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

#### STEP 1:

USING RSD 1101.01, SHEET 1 OF 3, INSTALL ADVANCE WARNING SIGNS ON US-421 SOUTH. INSTALL DETOUR SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO TMP-2 THRU TMP-7. USING TMP-5, CLOSE LOOP RAMP TO I-40 EAST ON I-40 WEST FOR DURATION OF WORK.

#### STEP 2:

USING TMP-4 THRU TMP-5 AND RSD 1101.02, SHEET 4 OF 14, INSTALL LONG-TERM LANE CLOSURE ON RIGHT SIDE OF THE ROADWAY IN ORDER TO BEGIN REHABILITATION WORK.

#### STEP 3:

SHIFT TRAFFIC CONTROL DEVICES TO OPPOSITE SIDE OF ROADWAY UNDER LONG-TERM LANE CLOSURE TO COMPLETE REMAINDER OF STRUCTURE REHABILITATION IMPROVEMENTS.

#### STEP 4:

UPON COMPLETION OF REHABILITATION WORK, REMOVE TRAFFIC CONTROL DEVICES, OPEN LOOP TO I-40 EAST AND RESTORE TRAFFIC TO NORMAL PATTERN.

### BRIDGE STRUCTURE #508

#### STEP 1:

USING RSD 1101.01, SHEET 1 OF 3, INSTALL ADVANCE WARNING SIGNS ON I-40 WEST.

#### STEP 2:

USING TMP-8 THRU TMP-11 AND RSD 1101.02, SHEET 8 OF 14, INSTALL DOUBLE LANE CLOSURE ALONG I-40 WEST DURING ALLOWABLE WORK HOURS. SHIFT TRAFFIC TO LEFT SIDE OF BRIDGE AND BEGIN REHABILITATION IMPROVEMENTS.

#### STEP 3:

USING TMP-12 THRU TMP-15, SHIFT TRAFFIC CONTROL DEVICES TO OPPOSITE SIDE OF ROADWAY DURING ALLOWABLE WORK HOURS TO COMPLETE REMAINDER OF STRUCTURE REHABILITATION IMPROVEMENTS.

#### STEP 4:

UPON COMPLETION OF REHABILITATION WORK, REMOVE TRAFFIC CONTROL DEVICES AND RESTORE TRAFFIC TO NORMAL PATTERN.

### BRIDGE STRUCTURE #509

THE CONTRACTOR SHALL COMPLETE THE WORK ON STRUCTURE #509, STEP 1 THROUGH STEP 4, IN 21 CONSECUTIVE DAYS USING LONG-TERM LANE CLOSURES. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

#### STEP 1:

USING RSD 1101.01, SHEET 1 OF 3, INSTALL ADVANCE WARNING SIGNS ON I-40 WEST.

#### STEP 2:

USING TMP-16 THRU TMP-17 AND RSD 1101.02, SHEET 4 OF 14, INSTALL LONG-TERM LANE CLOSURE ON RIGHT SIDE OF ROADWAY AND BEGIN REHABILITATION IMPROVEMENTS.

#### STEP 3:

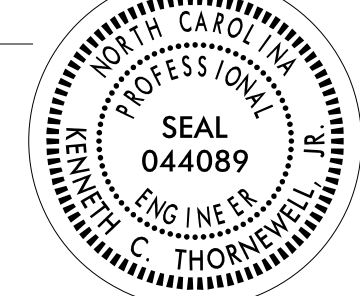

USING TMP-18 THRU TMP-19, SHIFT TRAFFIC CONTROL DEVICES TO OPPOSITE SIDE OF ROADWAY USING LONG-TERM LANE CLOSURE TO COMPLETE REMAINDER OF STRUCTURE REHABILITATION IMPROVEMENTS.

#### STEP 4:

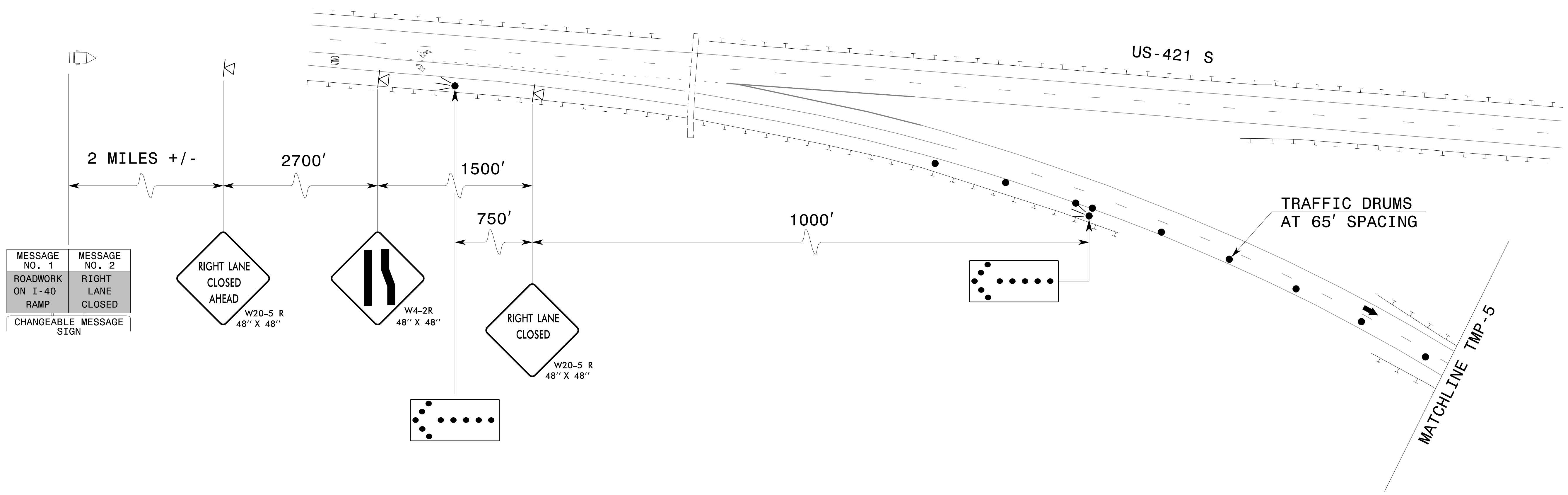
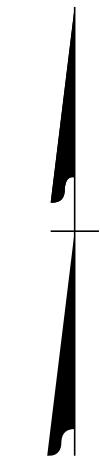
UPON COMPLETION OF REHABILITATION WORK, REMOVE TRAFFIC CONTROL DEVICES AND RESTORE TRAFFIC TO NORMAL PATTERN.

### PAVEMENT REHABILITATION AND ALL OTHER BRIDGE WORK

FOR PAVEMENT REHABILITATION AND ALL OTHER BRIDGE WORK, REFER TO TMP-2B AND THE ROADWAY STANDARD DRAWINGS FOR LANE CLOSURES AND FLAGGING OPERATIONS.

<p>APPROVED: <i>Kenneth L. Thornwell for P.E.</i></p> <p>DATE: 7/24/2020</p> <p style="text-align: center;">SEAL</p>			<h1 style="font-size: 2em;">PHASING</h1>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			





MESSAGE NO. 1	MESSAGE NO. 2
ROADWORK ON I-40 RAMP	RIGHT LANE CLOSED
CHANGEABLE MESSAGE SIGN	

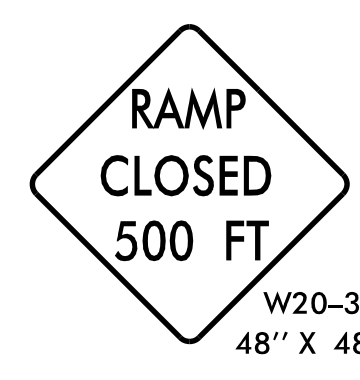
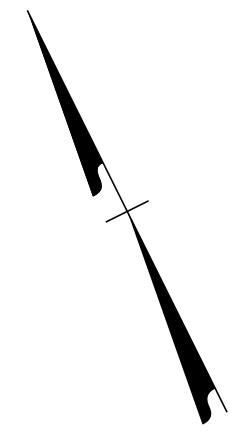
**NOTE:**  
 IN THE EVENT OF QUEUING, DEPLOY ADDITIONAL MESSAGE BOARDS IN ADVANCE OF THE LONGEST EXPECTED QUEUE AS DIRECTED BY THE ENGINEER.

NOT TO SCALE

APPROVED: <i>Kenneth L. Thornwell for P.E.</i> DATE: 7/24/2020 SEAL PROFESSIONAL ENGINEER NORTH CAROLINA 044089 KENNETH L. THORNWELL		RIGHT LANE CLOSURE DETAIL STRUCTURE 444
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		

7/17/2020  
 \\dot\dfsroot\01\Prj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_4\_RLClosure\_Detail\_444.dgn  
 User:tmkelyl

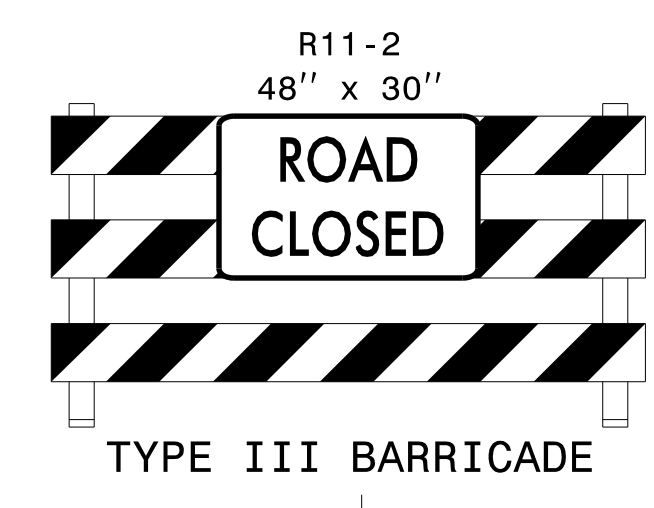
MATCHLINE TMP-4



TRAFFIC DRUMS  
AT 65' SPACING

TRAFFIC DRUMS  
AT 130' SPACING

STRUCTURE #444

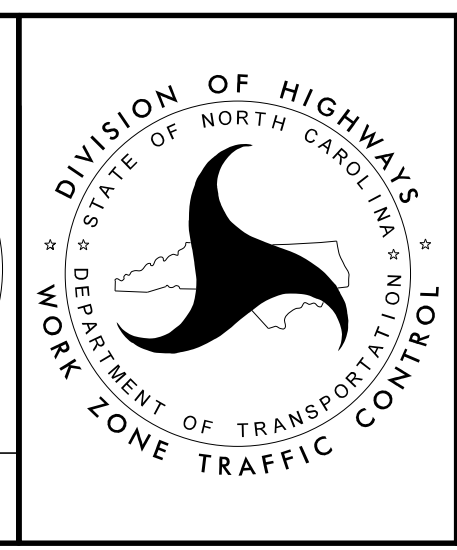


6/26/2020  
 \\dot\dfs\root\01\Proj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_5\_RLClosure\_Detail\_444.dgn  
 User:tmkelyl

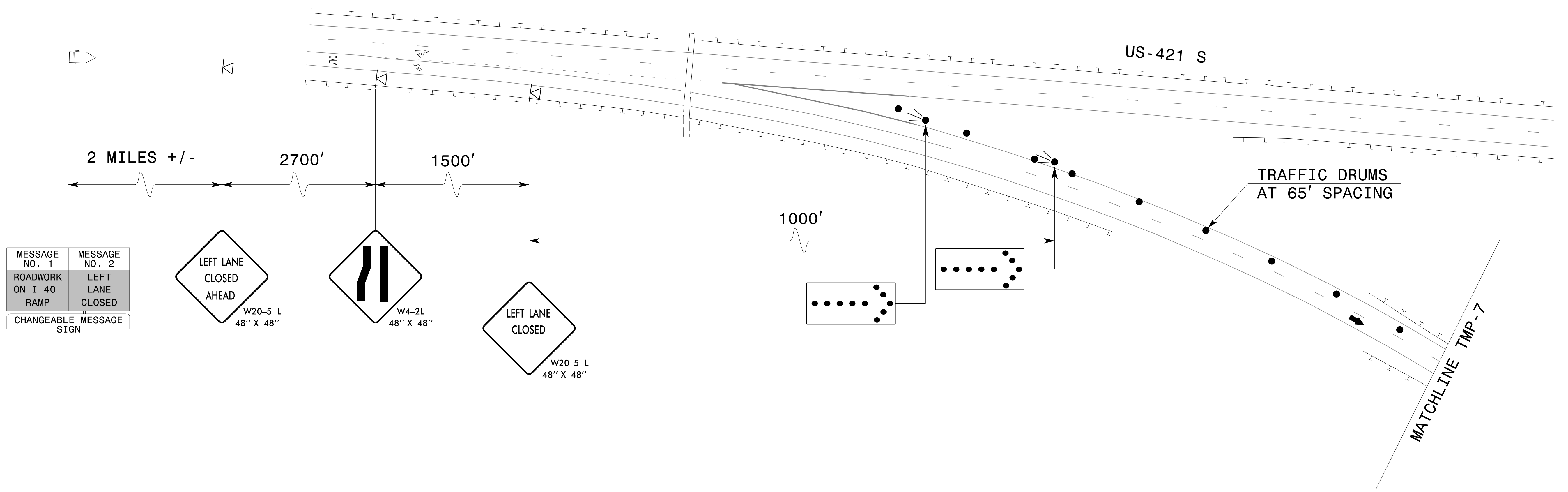
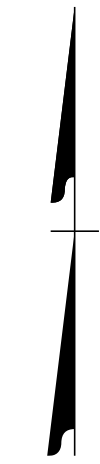
APPROVED: *Kenneth C. Thornwell, Jr., P.E.*  
 DATE: 7/24/2020

SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



**RIGHT LANE  
CLOSURE DETAIL  
STRUCTURE 444**

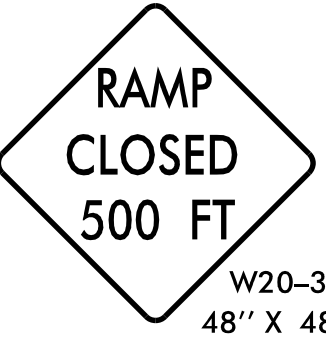
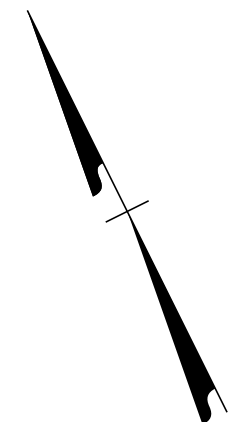


NOT TO SCALE

<p>APPROVED: <i>Kenneth L. Hornevell Jr., P.E.</i>  <small>15061EF27373405</small>          DATE: 7/24/2020</p> <p>SEAL</p>		<p>LEFT LANE          CLOSURE DETAIL          STRUCTURE 444</p>
<p>DOCUMENT NOT CONSIDERED FINAL          UNLESS ALL SIGNATURES COMPLETED</p>		

7/17/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795-TC-TMP-6-LLClosure Det\ail\_444.dgn  
 User:tmkelyl

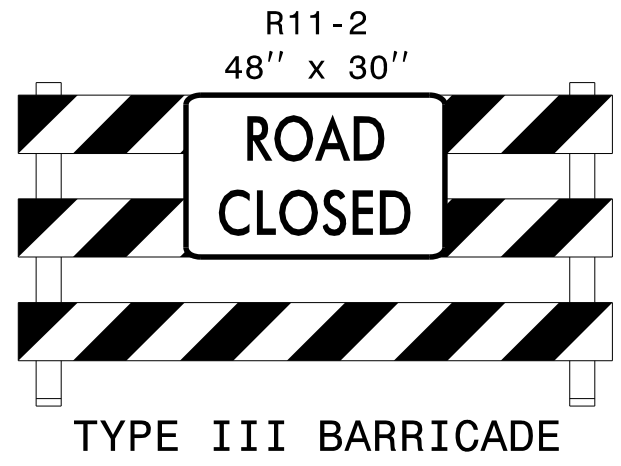
MATCHLINE TMP-6



TRAFFIC DRUMS  
AT 65' SPACING

TRAFFIC DRUMS  
AT 130' SPACING

STRUCTURE #444

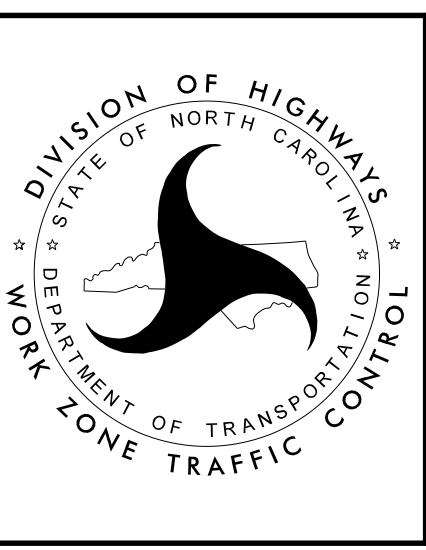


6/26/2020  
 \\dot\dfs\root\01\Proj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_7\_LL\Closure\_Detail\_444.dgn  
 User:tmkelyl

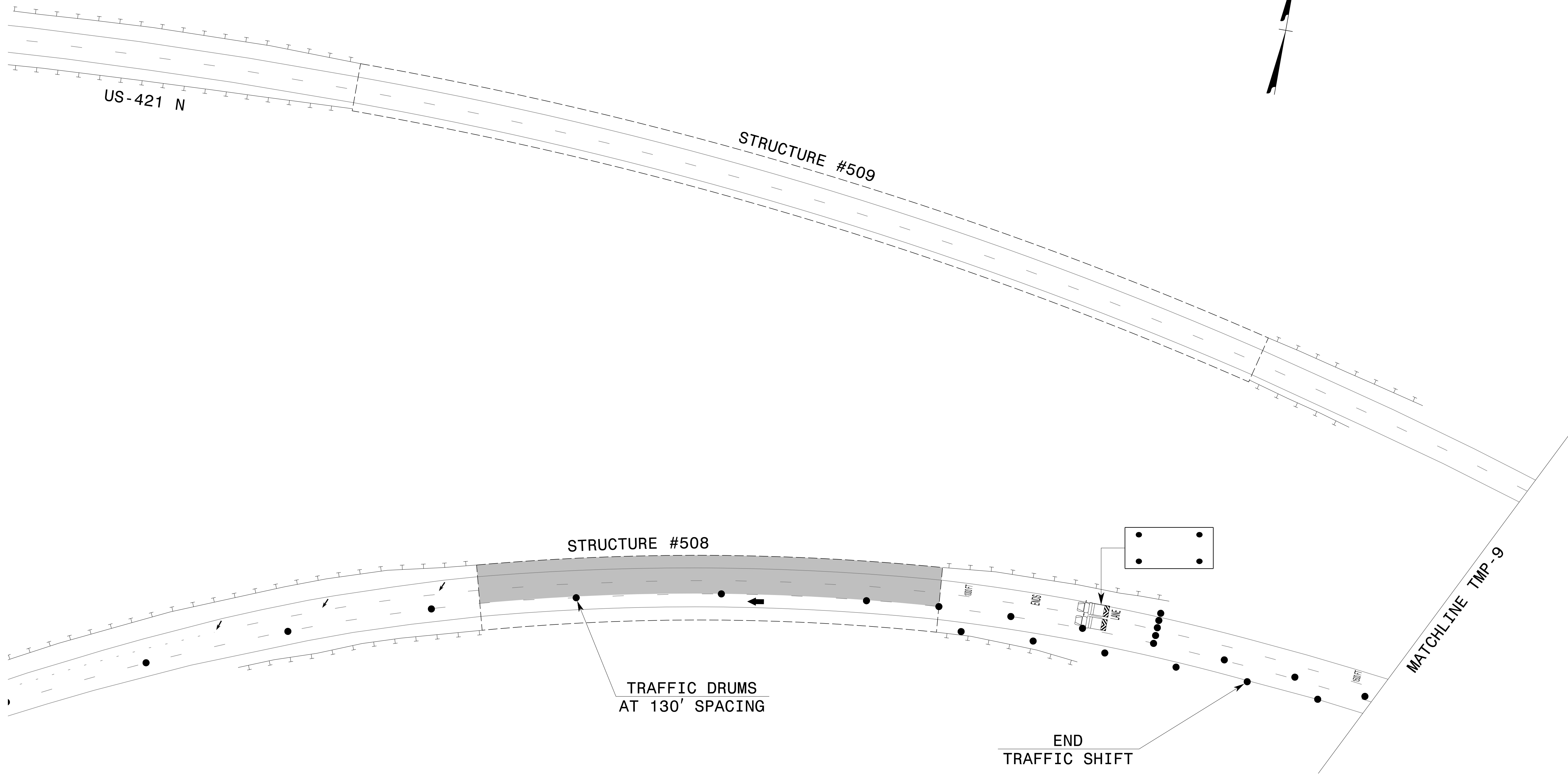
APPROVED: *Kenneth L. Thomassell Jr., P.E.*  
 DATE: 7/24/2020

SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



LEFT LANE  
CLOSURE DETAIL  
STRUCTURE 444

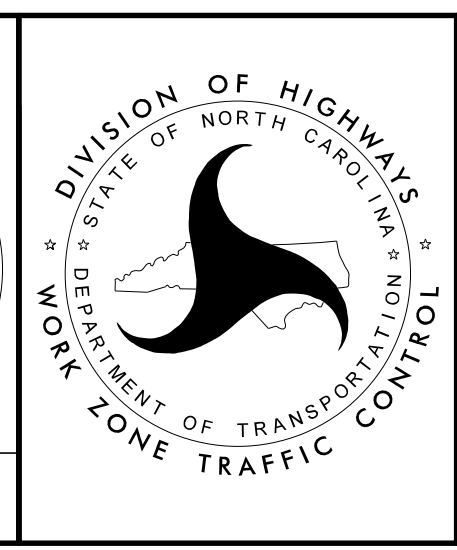


6/26/2020  
 \\dot\dfs\root\01\ProjStore\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_8\_RLClosure\_Detail\_508.dgn  
 User:tmkelyl

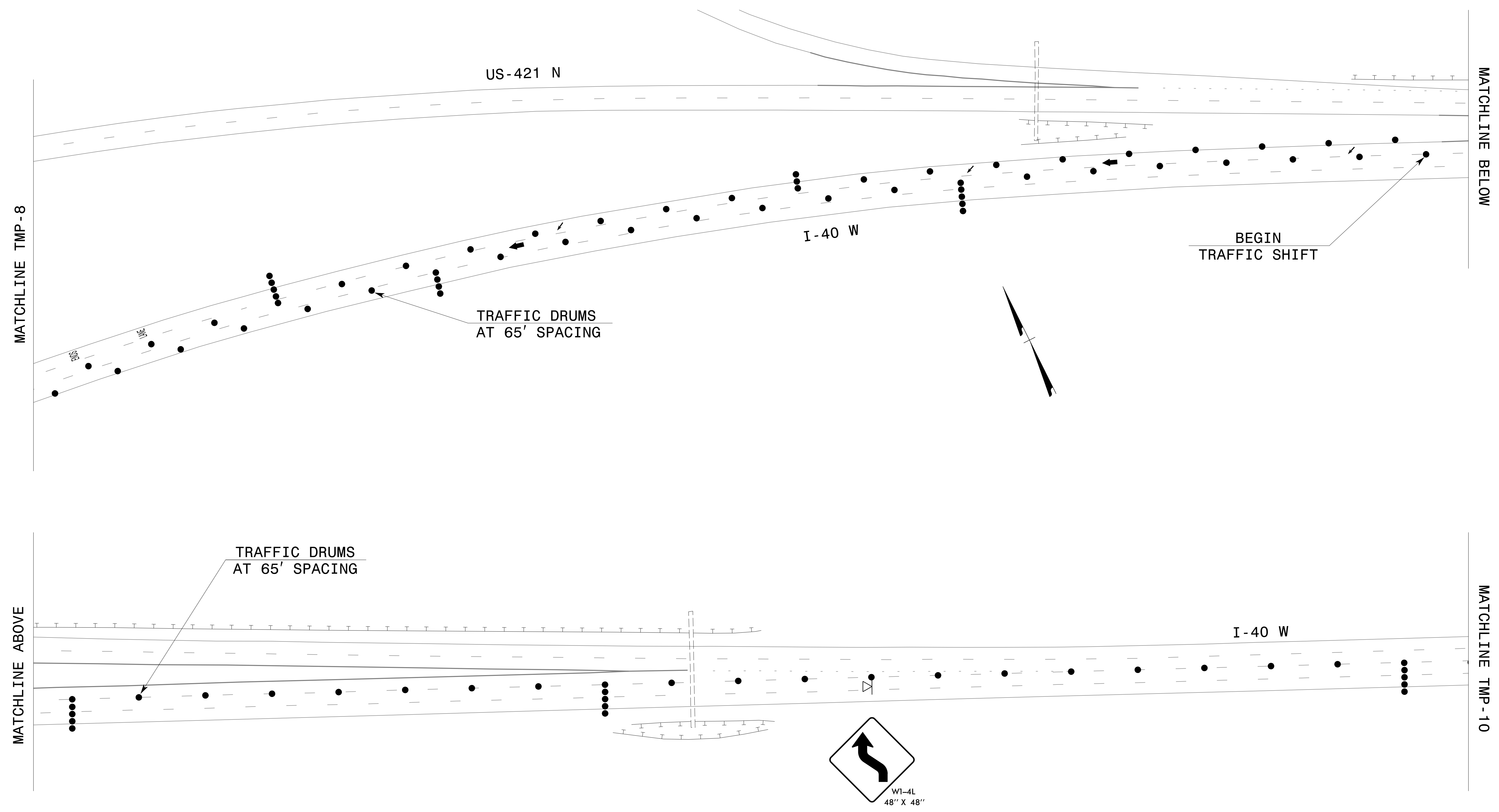
APPROVED: *Kenneth C. Hornswell, Jr., P.E.*  
DocuSigned by: Kenneth C. Hornswell, Jr., P.E. 1E981EF27373405...  
 DATE: 7/24/2020

SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

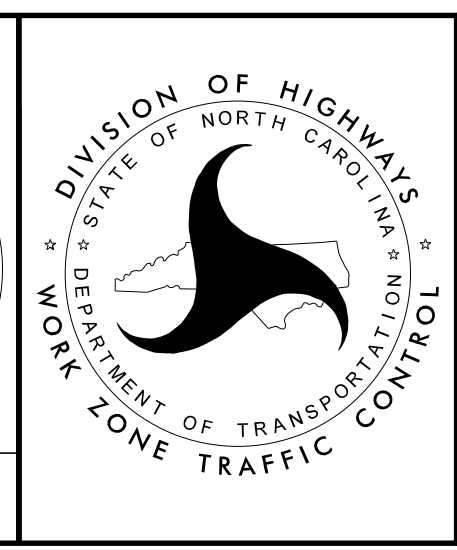


**RIGHT LANE  
CLOSURE DETAIL  
STRUCTURE 508**

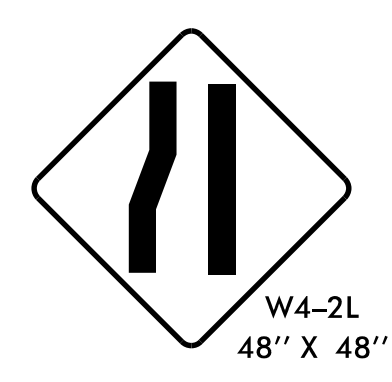
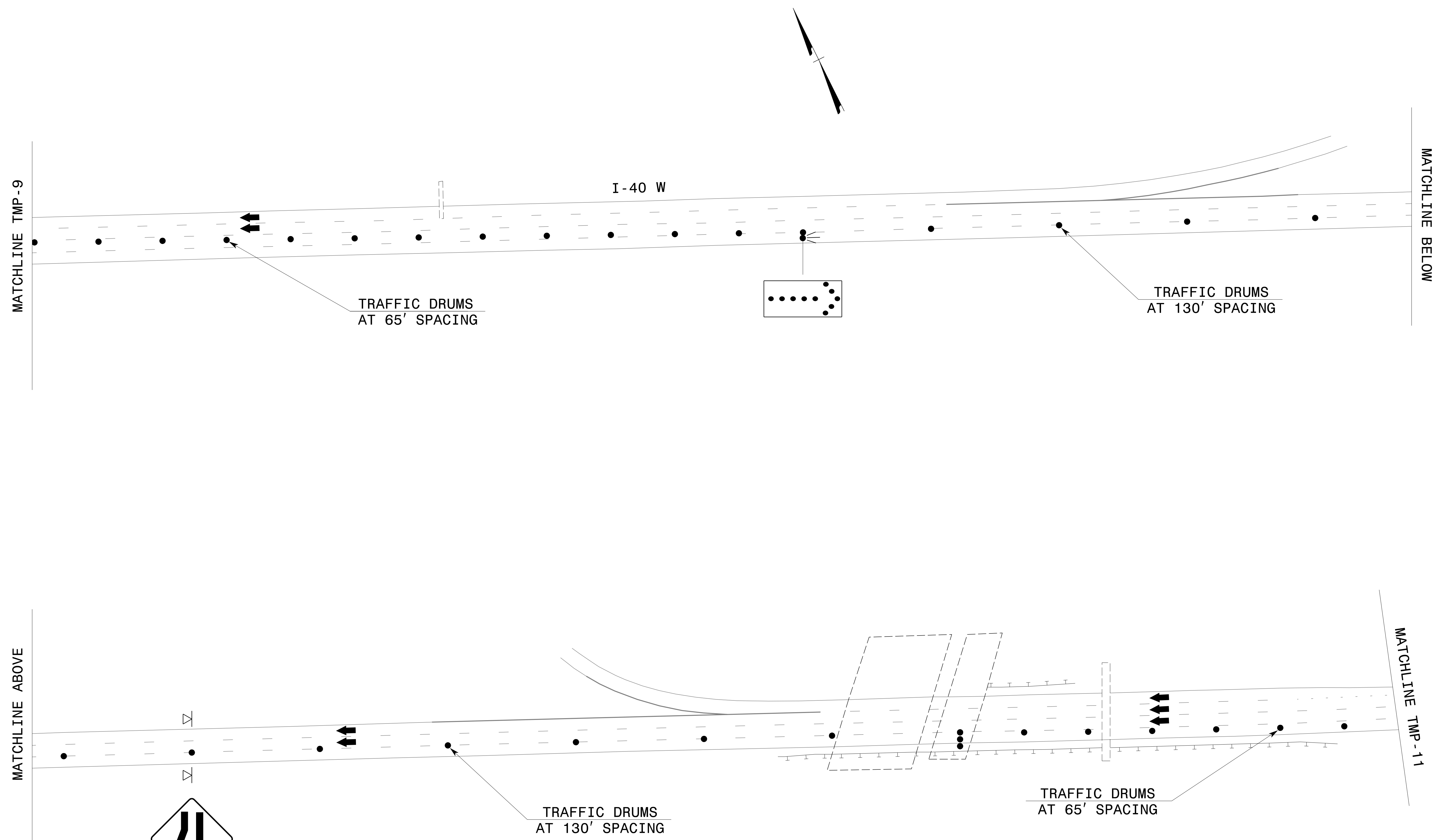


6/26/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_9\_RLClosure\_Detail\_508.dgn  
 User:tmkelyl

APPROVED: *Kenneth C. Thornevell, Jr., P.E.*  
 DATE: 7/24/2020  
 SEAL  
 DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



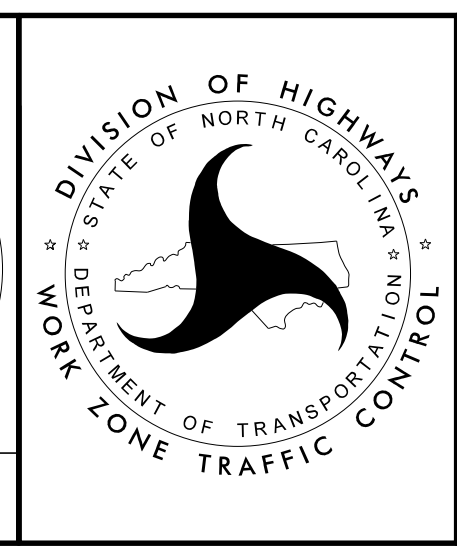
DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL  
 RIGHT LANE  
 CLOSURE DETAIL  
 STRUCTURE 508



APPROVED: *Kenneth C. Thornewell for P.E.*  
DocuSigned by: Kenneth C. Thornewell for P.E. 1E991EF27373405  
 DATE: 7/24/2020

SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



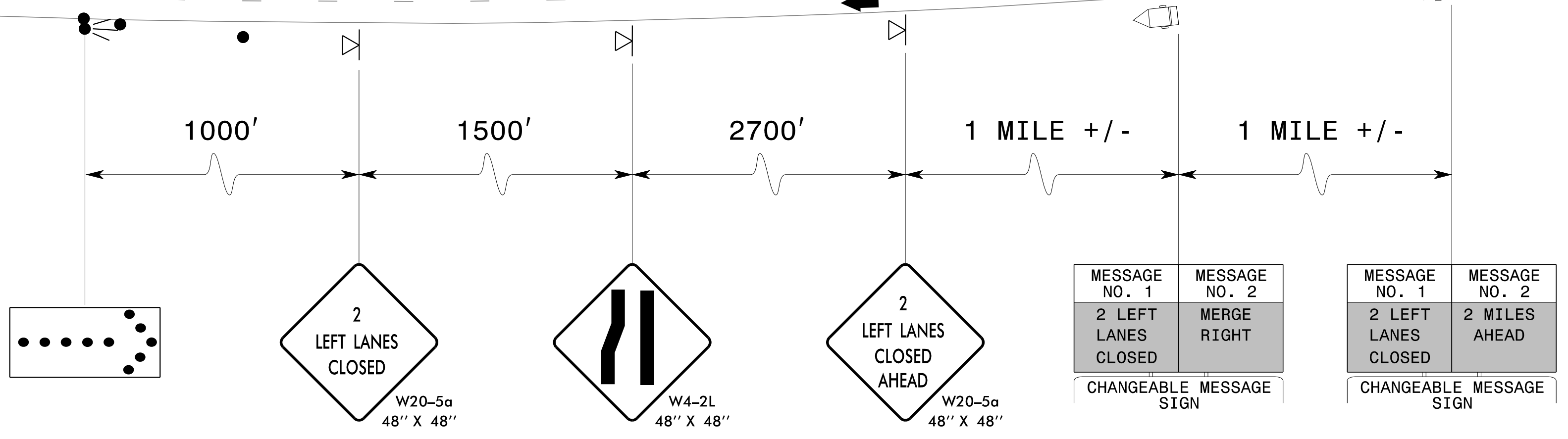
RIGHT LANE  
CLOSURE DETAIL  
STRUCTURE 508

6/26/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_10\_RL\_Closure\_Detail\_508.dgn  
 User:tmkelyl

MATCHLINE TMP-10

TRAFFIC DRUMS  
AT 65' SPACING

I-40 W



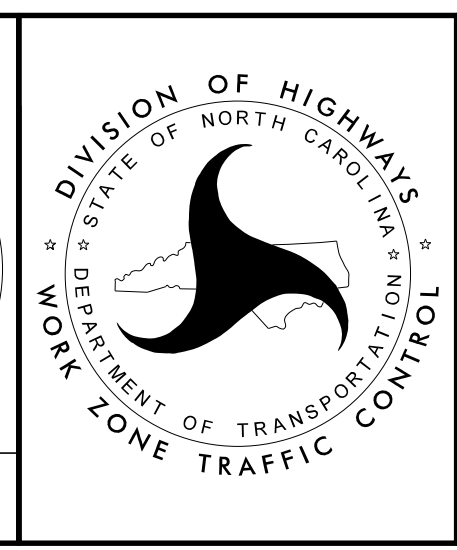
NOT TO SCALE

6/26/2020 \\dot\dfs\root\01\ProjStore\Div\Proj\Division09\5795\TrafficControl\TCP\I-5795\_TC\_TMP\_ILRLClosure\_Detail\_508.dgn User:tmkelly

APPROVED: *Kenneth L. Thomassell Jr., P.E.*  
 DATE: 7/24/2020

SEAL

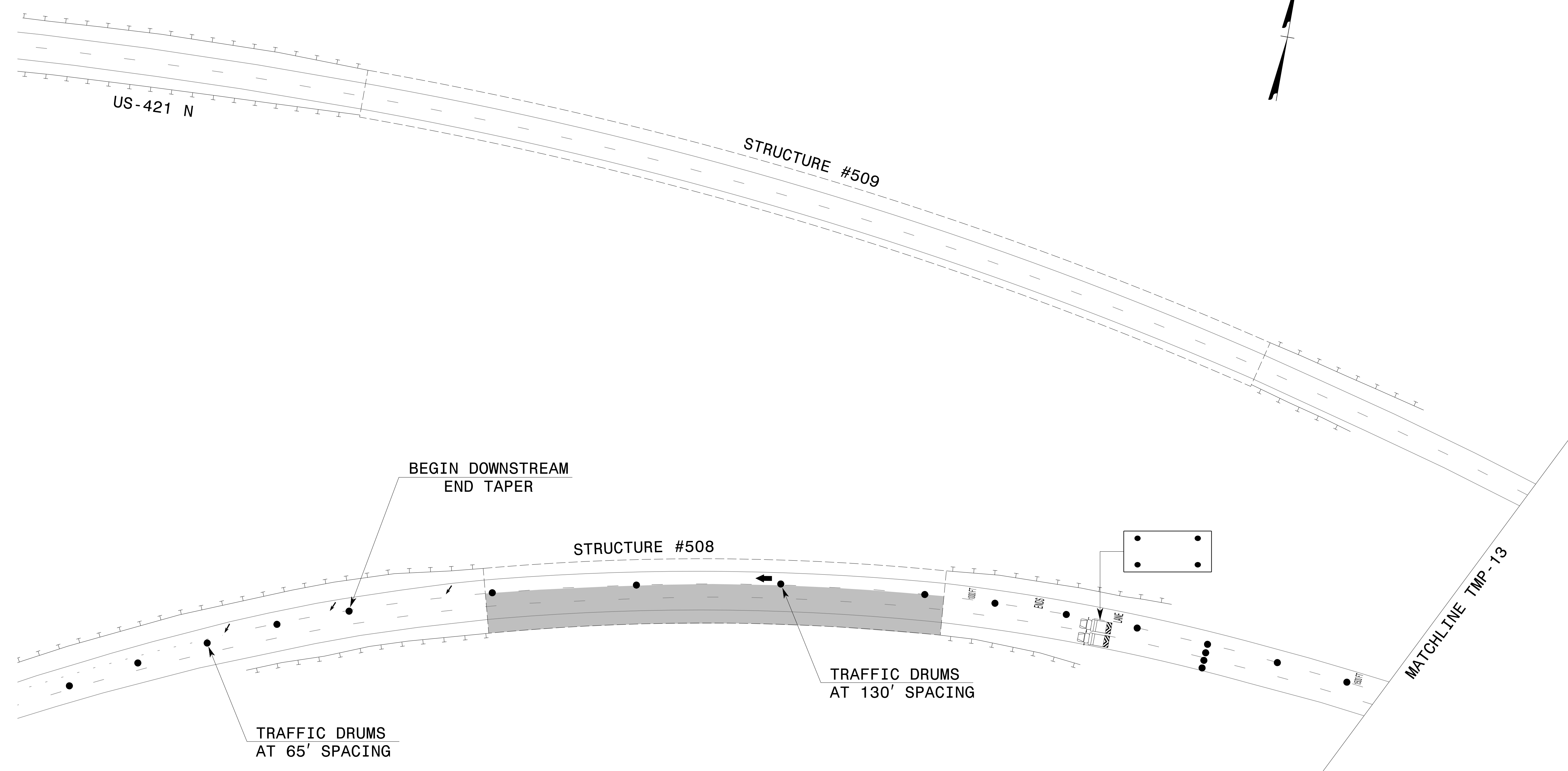
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



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

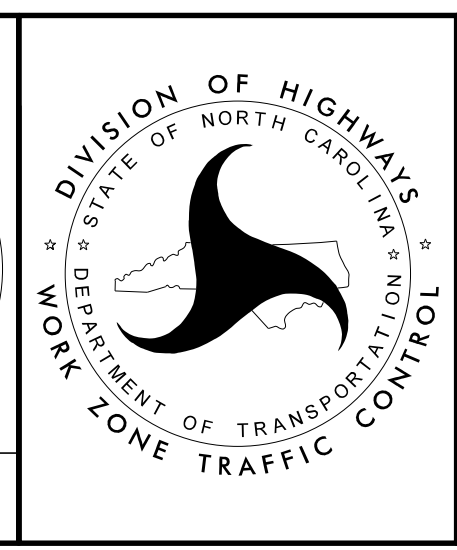
RIGHT LANE  
 CLOSURE DETAIL  
 STRUCTURE 508





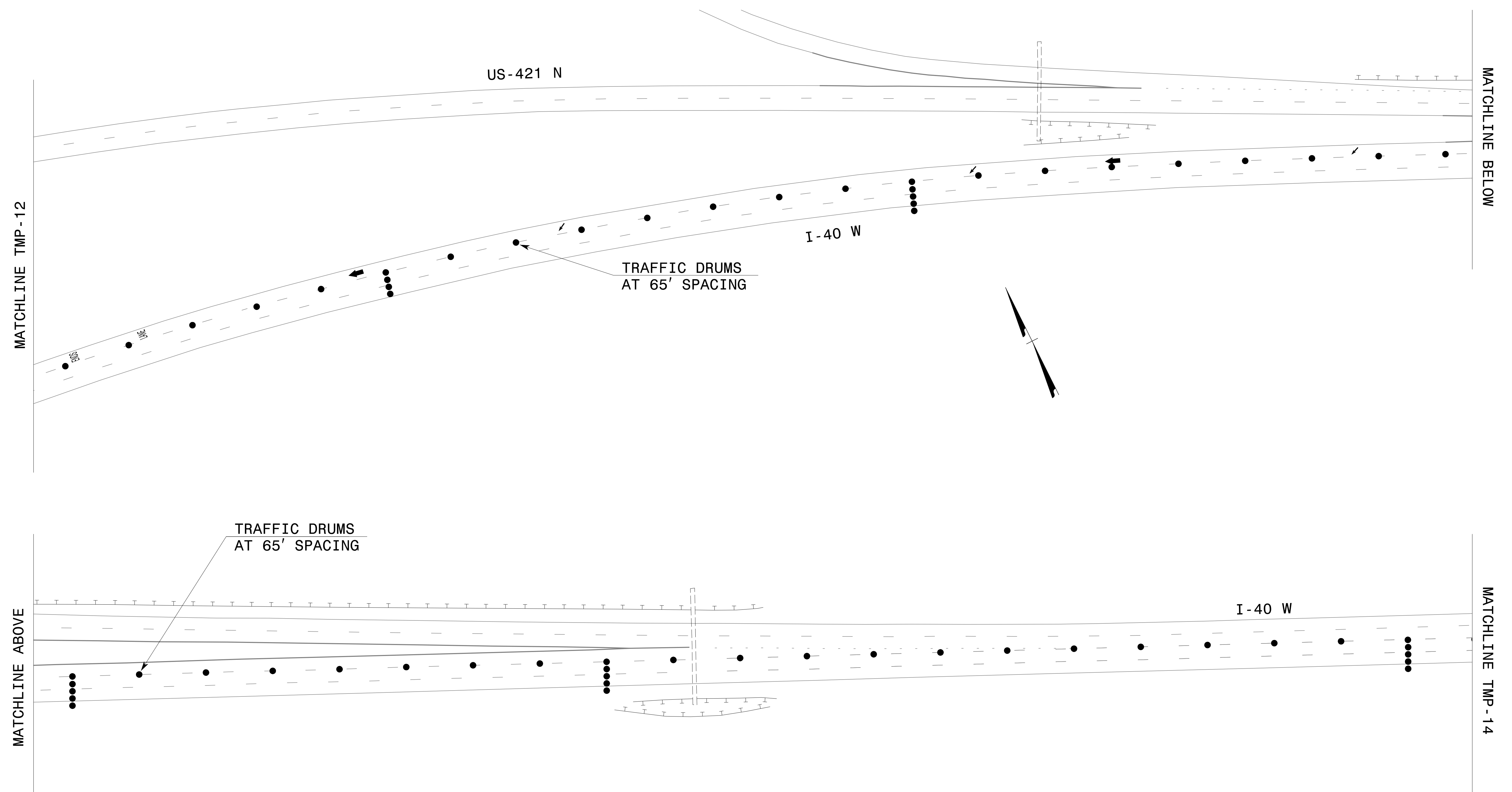
6/26/2020  
 \\dot\dfs\root\01\Proj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_12\_LLClosure\_Detail\_508.dgn  
 User: tmkelyl

APPROVED: *Kenneth C. Thornwell, P.E.*  
 DATE: 7/24/2020  
 SEAL  
 PROFESSIONAL ENGINEER  
 NORTH CAROLINA  
 044089  
 KENNETH C. THORNWELL



**LEFT LANE  
 CLOSURE DETAIL  
 STRUCTURE 508**

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

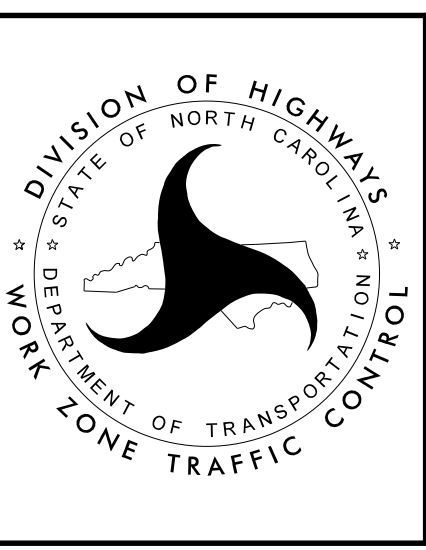


6/26/2020  
 \\dot\dfsroot\01\NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_13\_LLClosure\_Detail\_508.dgn  
 User:tmkelyl

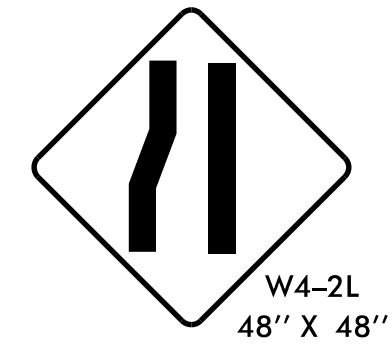
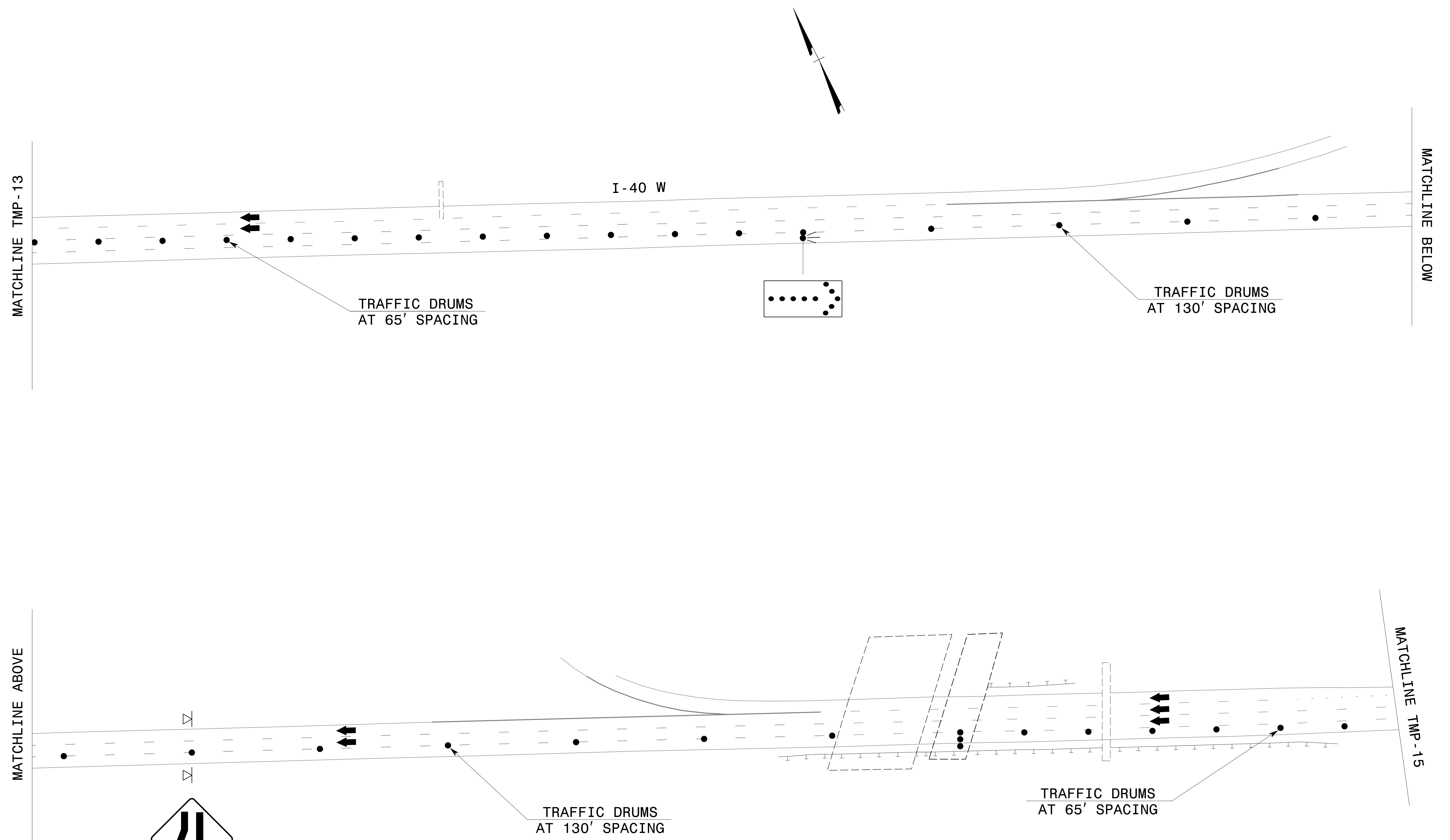
APPROVED: *Kenneth C. Thornevell, Jr., P.E.*  
 DATE: 7/24/2020

SEAL

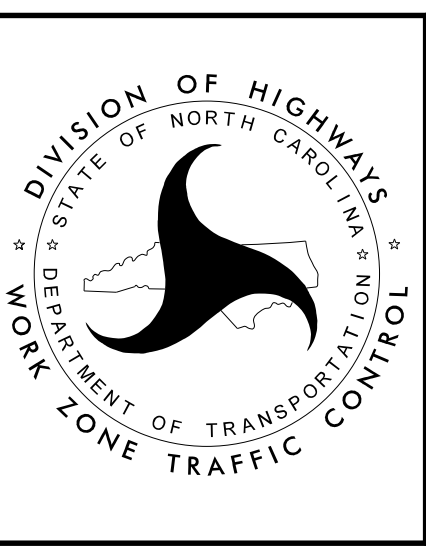
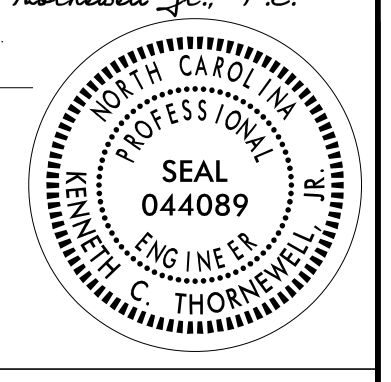
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



**LEFT LANE  
CLOSURE DETAIL  
STRUCTURE 508**



APPROVED: *Kenneth L. Thornwell, Jr., P.E.*  
 DATE: 7/24/2020  
 SEAL



LEFT LANE  
 CLOSURE DETAIL  
 STRUCTURE 508

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

6/26/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_14\_LLClosure\_Detail\_508.dgn  
 User:tmkelyl

MATCHLINE TMP-14

TRAFFIC DRUMS  
AT 65' SPACING

I-40 W

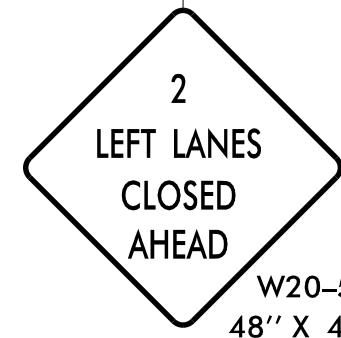
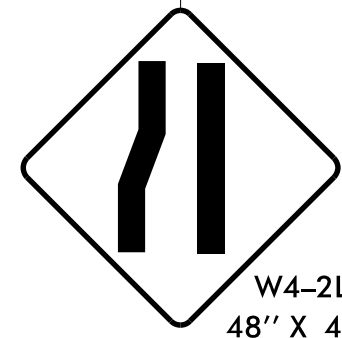
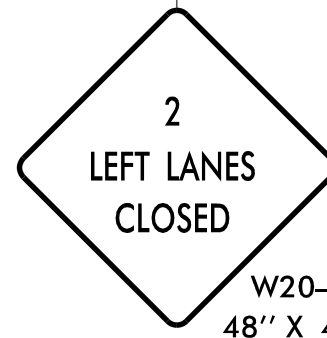
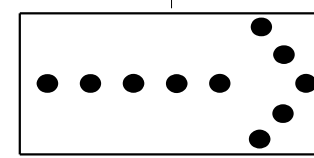
1000'

1500'

2700'

1 MILE +/-

1 MILE +/-



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

MESSAGE NO. 1	MESSAGE NO. 2
2 LEFT LANES CLOSED	2 MILES AHEAD
CHANGEABLE MESSAGE SIGN	

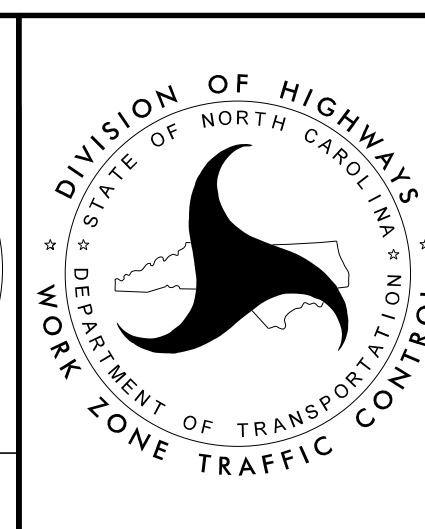
NOT TO SCALE

APPROVED: *Kenneth L. Thornwell for P.E.*  
 DATE: 7/24/2020

SEAL

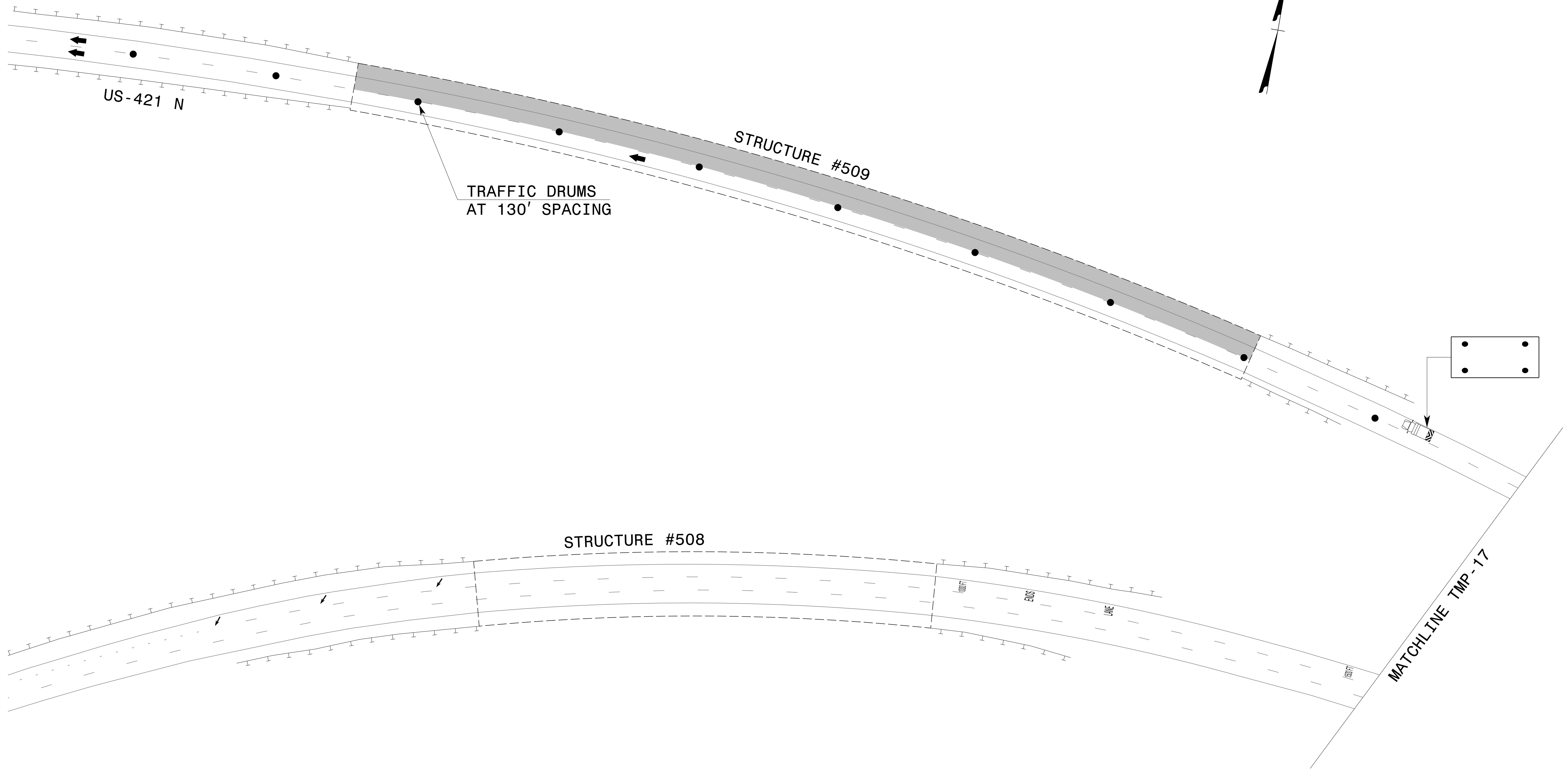
1E091EF27373405...

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



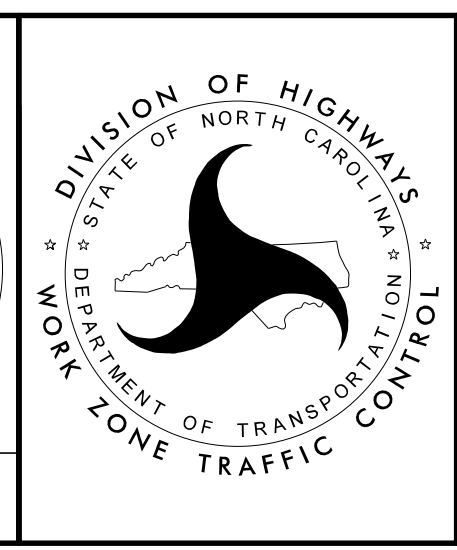
**LEFT LANE  
CLOSURE DETAIL  
STRUCTURE 508**

6/26/2020 \\dot\dfsroot\01\NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_J5\_LLClosure\_Detail\_508.dgn User:tmkelly



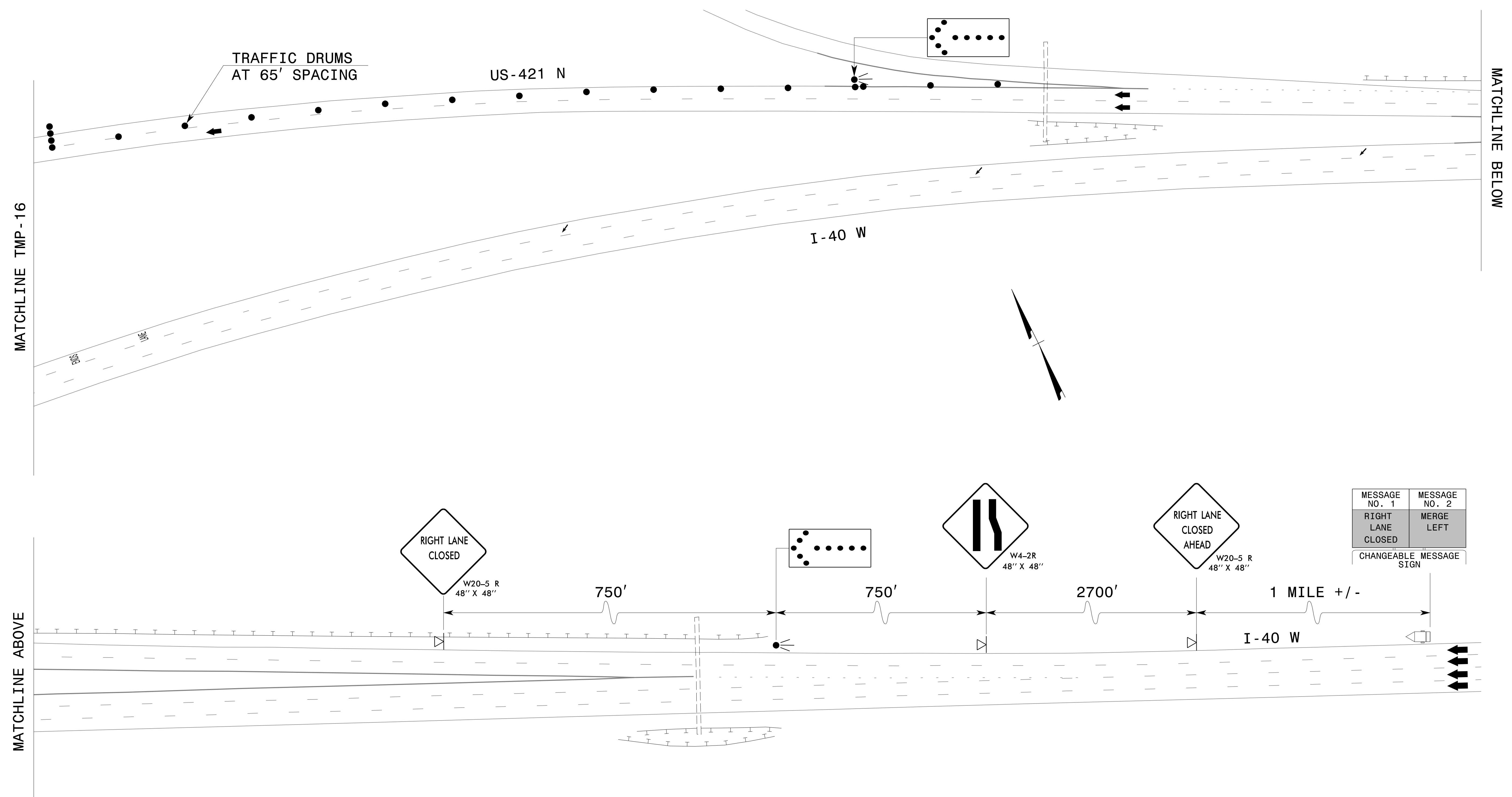
6/26/2020  
 \\dot\dfsroot\01\Proj\Store\Div\Proj\Division09\5795\TrafficControl\TCP\I-5795\_TC\_TMP\_16\_RL\Closure\_Detail\_509.dgn  
 User: tmkelyl

APPROVED: *Kenneth L. Thornwell Jr., P.E.*  
 DATE: 7/24/2020  
 SEAL  
 DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



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

**RIGHT LANE  
 CLOSURE DETAIL  
 STRUCTURE 509**



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

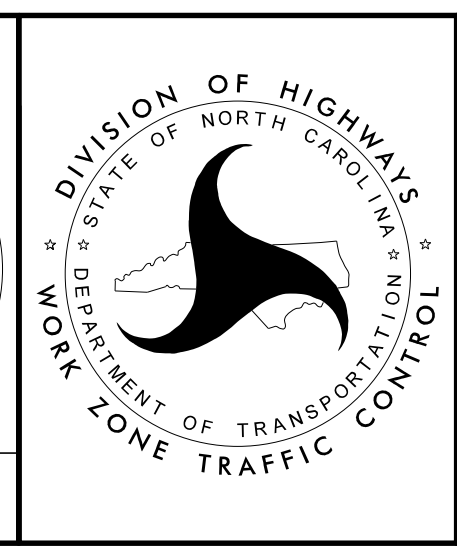
NOT TO SCALE

6/26/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP-17\_RLClosure\_Detail-509.dgn  
 User:tmkelyl

APPROVED: *Kenneth C. Thornevell for P.E.*  
 DATE: 7/24/2020

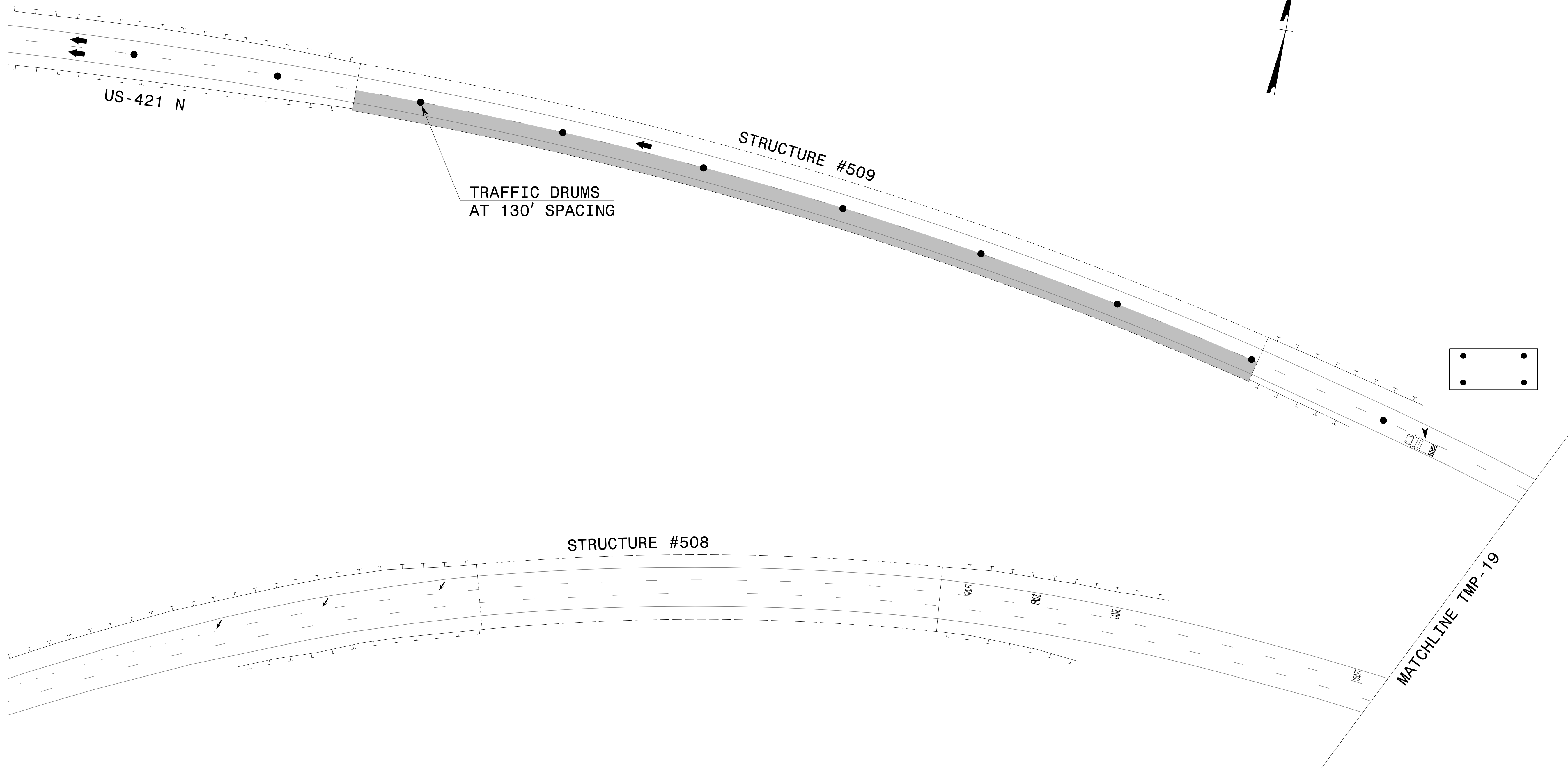
SEAL

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



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

RIGHT LANE  
 CLOSURE DETAIL  
 STRUCTURE 509

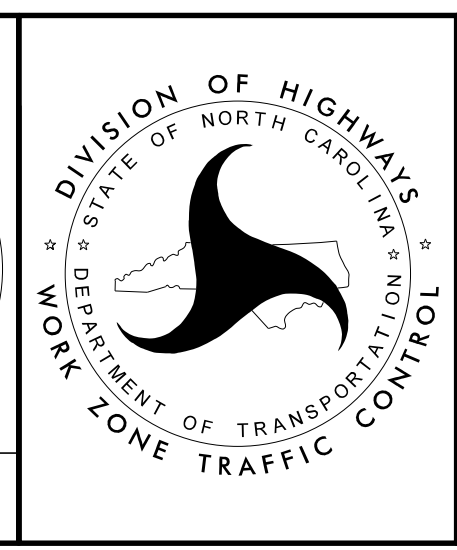


6/26/2020  
 \\dot\dfsroot\01\Proj\Store\Div\Proj\Division09\5795\TrafficControl\TCP\I-5795\_TC\_TMP\_18\_LLClosure\_Detail\_509.dgn  
 User: tmkelyl

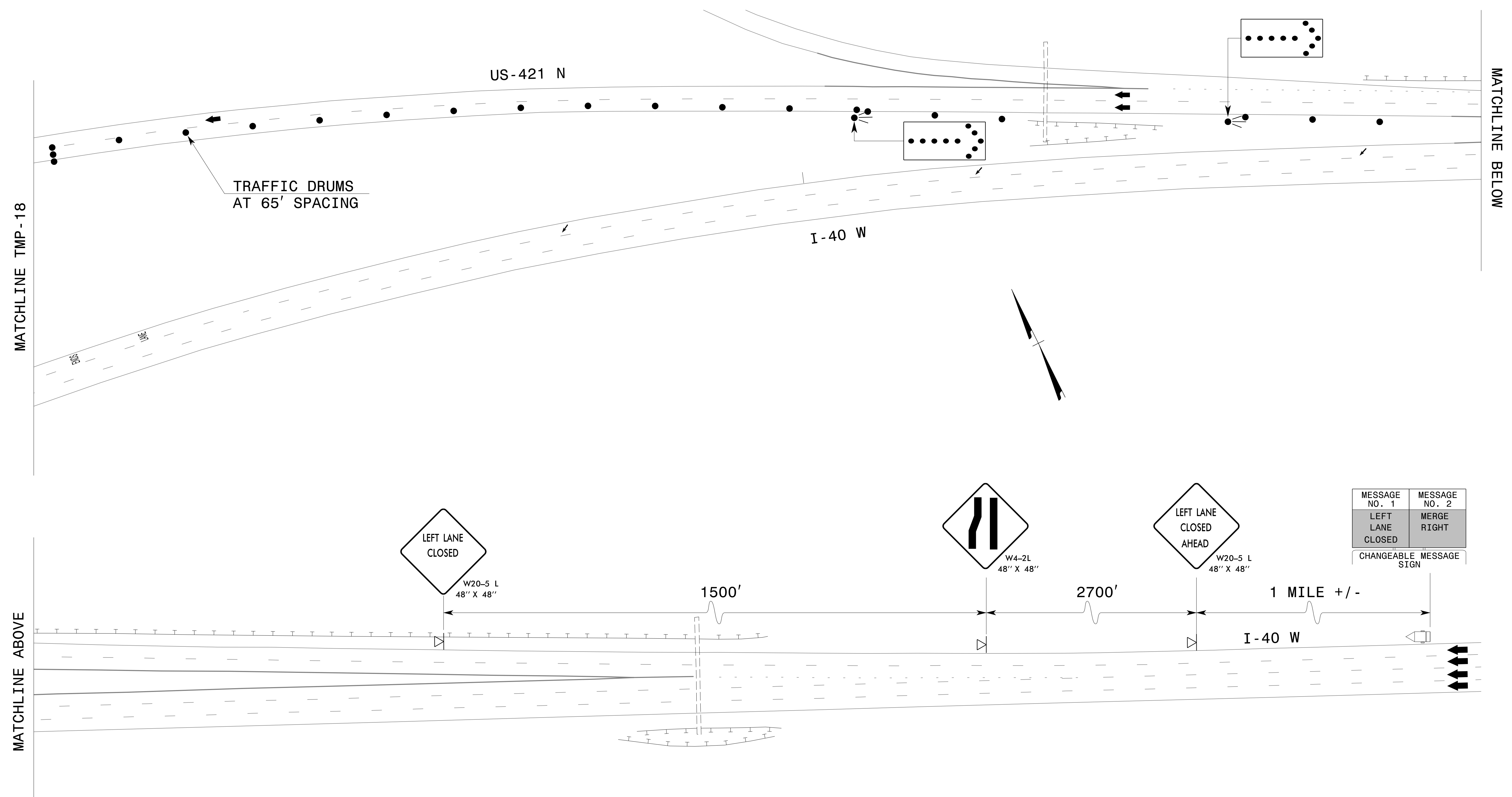
APPROVED: *Kenneth L. Thornewell, Jr., P.E.*  
1E991EF27373405  
 DATE: 7/24/2020

SEAL

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



**LEFT LANE  
CLOSURE DETAIL  
STRUCTURE 509**



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

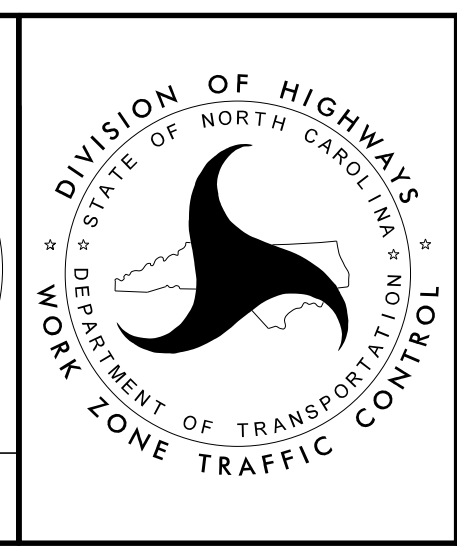
NOT TO SCALE

6/26/2020  
 \\dot\dfsroot\01NPrj\Store\Div\Proj\Division09\5795\Traffic\TrafficControl\TCP\I-5795\_TC\_TMP\_I9\_LLClosure\_Detail\_509.dgn  
 User:tmkelyl

APPROVED: *Kenneth L. Thomwell Jr., P.E.*  
 DATE: 7/24/2020

SEAL

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



DIVISION OF HIGHWAYS  
 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL

LEFT LANE  
 CLOSURE DETAIL  
 STRUCTURE 509