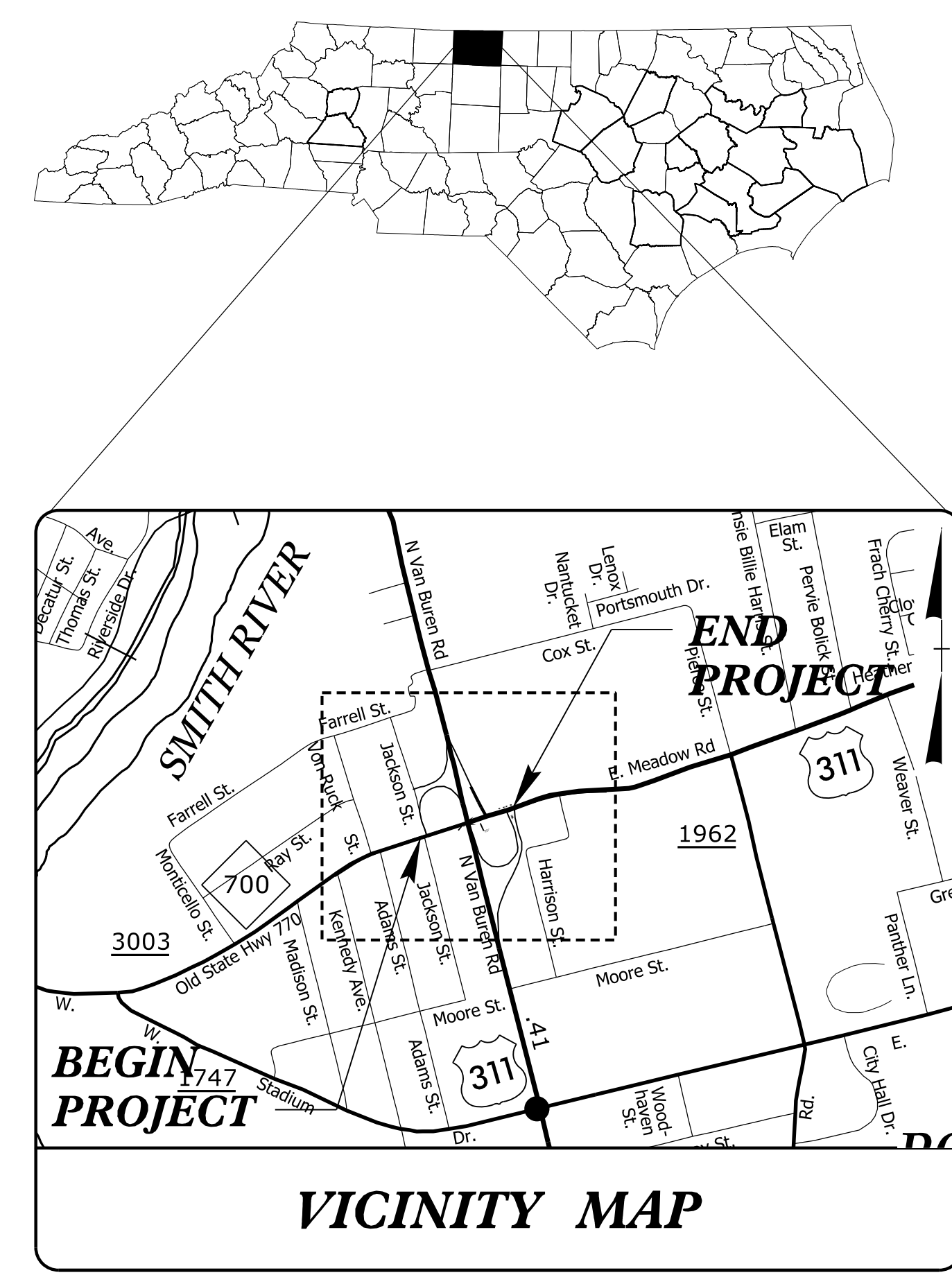


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ROCKINGHAM COUNTY

**LOCATION: US 311/NC 700/NC 770, SR 3003 (W. MEADOW RD)
FROM WEST OF JACKSON ST TO WEST OF HARRISON ST**



INDEX OF SHEETS

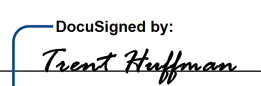
<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND TRAFFIC MANAGEMENT STRATEGY
TMP-1B	GENERAL NOTES AND LOCAL NOTES
TMP-1C	TRAFFIC CONTROL PHASING
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATION
TMP-2A THRU TMP-2B	TEMPORARY SHORING NOTES
TMP-3	DETOUR SIGN DESIGN
TMP-3A	TRANSPORTATION OPERATIONS PLAN
TMP-4 THRU TMP-5	PHASE 1 DETAILS
TMP-6 THRU TMP-7	PHASE 2 DETAILS
TMP-8 THRU TMP-10	PHASE 3 DETAILS

SHEET NO.
TMP-1

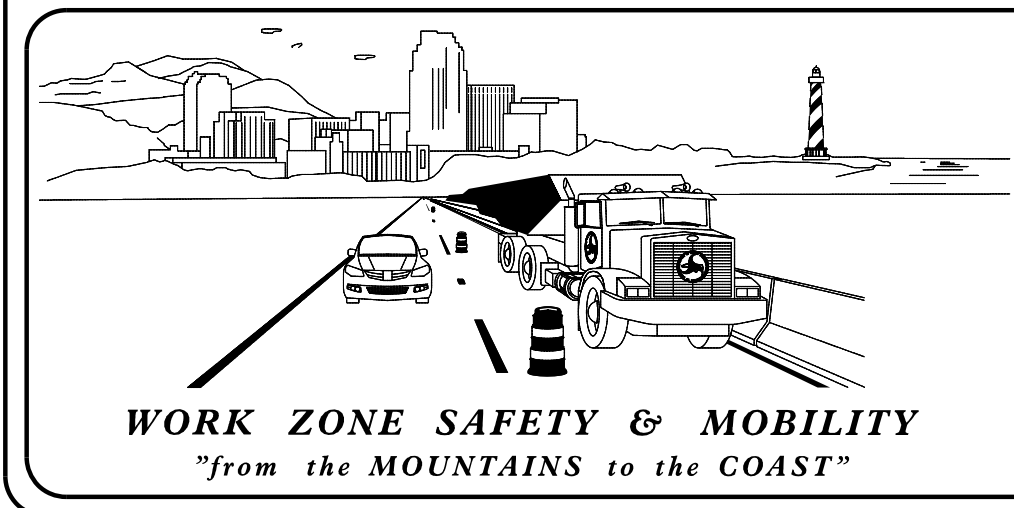
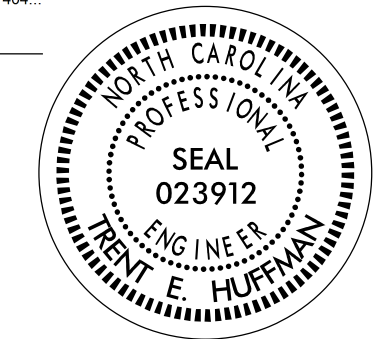
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TIP PROJECT:

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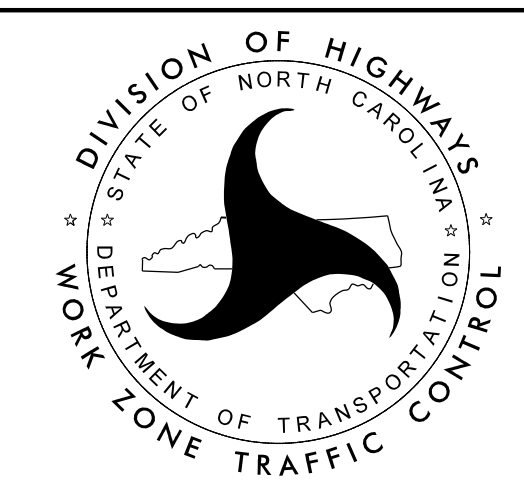
APPROVED: 
DATE: 1/12/2022

SEAL



PLANS PREPARED BY:
**moffatt & nichol**
4700 FALLS OF NEUSE ROAD, SUITE 300
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NC License NO.: F-0105

NCDOT CONTACTS:
KEN THORNEWELL, PE
PROJECT ENGINEER
JUSTIN BEAVER, PE
PROJECT DESIGN ENGINEER



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 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD 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
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 MULTI-LANE ROADWAYS
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
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.

- WORK AREA
- PAVEMENT WEDGING
- REMOVAL

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TEMPORARY PAVEMENT MARKING

- PA WHITE EDGELINE (PAINT 4")
- PI YELLOW DOUBLE CENTER (PAINT 4")
- P2 STOPBAR (PAINT 24")

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- DRUM
- FLASHING ARROW BOARD
- CHANGEABLE MESSAGE SIGN
- TEMPORARY CRASH CUSHION

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN

PAVEMENT MARKERS

- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

- ONLY PAVEMENT MARKING SYMBOLS

TRAFFIC MANAGEMENT STRATEGY

- TRAFFIC MANAGEMENT STRATEGIES:
 - LANE SHIFTS OR CLOSURES
 - ON-SITE DETOURS
- WORK ZONE SAFETY & MOBILITY STRATEGIES:
 - SPEED LIMIT REDUCTION
 - WORK ZONE PERFORMANCE PAVEMENT MARKINGS
- TRAFFIC / INCIDENT MANAGEMENT & SPEED ENFORCEMENT STRATEGIES:
 - LOCAL DETOUR ROUTES

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 NC License NO.: F-0105

APPROVED:
DocuSigned by: Trent E. Huffman
0C8C516E4527404

DATE: 1/12/2022

SEAL

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

ROADWAY STANDARD DRAWINGS, LEGEND & TRAFFIC MANAGEMENT STRATEGY

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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 UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

GENERAL NOTES / LOCAL NOTES

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
SR 3003 W. MEADOW RD (-L-) N VAN BUREN RD (US 311/NC 700/NC 770)	MONDAY THRU FRIDAY 7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.

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

ROAD NAME
SR 3003 W. MEADOW RD (-L-) N VAN BUREN RD (US 311 / NC 700 / NC 770) LPB / LPD

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
N VAN BUREN RD (US 311/NC 700/NC 770) LPB/LPD	SUNDAY THRU SATURDAY 6:00 A.M. - 11:00 P.M.	30 MINUTES FOR GIRDER PLACEMENT AND REMOVAL

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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

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

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

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

J) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 ft IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

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) 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.

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

P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 ft IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

Q) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

R) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

S) 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.

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

U) 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.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING PAINT	MARKER
SR 3003 W. MEADOW RD/ US 311/NC 700/NC 770 (-L-)		NONE

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

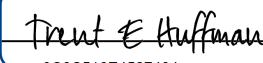
X) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

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

MISCELLANEOUS

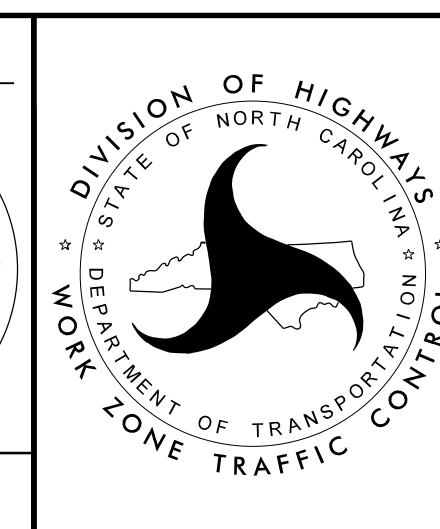
Z) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 ft AND 100 ft RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

AA) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

APPROVED:  DATE: 1/19/2022

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**GENERAL NOTES
AND
LOCAL NOTES**



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PROJ. REFERENCE NO.	SHEET NO.
B-5737	TMP-1C

TRAFFIC CONTROL PHASING

PHASE I

STEP 1

INSTALL OFFSITE DETOUR SIGNING ON -L-, N PIERCE ST, OLD STATE HWY 770 AND STADIUM DR (SR 1747) USING RSD 1101.2 (3 OF 14). MAINTAIN RAMP A OFFSITE DETOUR FOR DURATION OF PROJECT.

STEP 2

USING RSD NO. 1101.01 (3 OF 3) INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -L- (SR 3003/W. MEADOW RD, US-311/NC 700/NC 770/ E. MEADOW RD).
-L- OUTSIDE EASTBOUND LANE TEMPORARY CLOSURE.
CONSTRUCT FROM -DET- STA 19+10 +/- TO -DET- STA 22+50 +/- .
AND CONSTRUCT DETOUR BRIDGE

STEP 3

MAINTAIN THE TEMPORARY CLOSURE FOR -L- OUTSIDE EASTBOUND LANE.
CONSTRUCT FROM -DET- STA 17+68 +/- TO -DET- STA 19+10 +/- .
CONSTRUCT FROM -DET- STA 22+50 +/- TO -DET- STA 24+18 +/- .
PROVIDE A SOOMTH SURFACE BETWEEN EXISTING AND NEW PAVEMENT

PHASE II

STEP 1

PLACE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AND REDUCE TRAVEL LANES FROM TWO TO ONE IN EACH DIRECTION.
USE RSD 1101.03 (3 OF 9) TO SHIFT TRAFFIC TO NEWLY CONSTRUCTED -DET-. MAINTAIN TRAFFIC IN TWO WAY TWO LANE PATTERN ON -DET-.
CONSTRUCT -RPA- FROM STA 10+00 +/- TO STA 12+30 +/- . INSTALL NEW PAVEMENT LAYER UP TO FINAL PAVEMENT LAYER ON -RPA-.
CONSTRUCT FROM -L- STA 19+20 +/- TO -L- STA 22+30 +/- AND CONSTRUCT NEW BRIDGE.

STEP 2

MAINTAIN TRAFFIC IN TWO LANE TWO WAY PATTERN ON -DET-.
CONSTRUCT WESTBOUND -L- FROM -L- STA 17+00 +/- TO -L- STA 19+20 +/-
CONSTRUCT WESTBOUND -L- FROM -L- STA 22+30 +/- TO -L- STA 25+00 +/-
USE PAVEMENT WEDGING TO MAINTAIN ACCESS TO EXISTING JACKSON ST.
INSTALL NEW PAVEMENT UP TO FINAL PAVEMENT LAYER.

PHASE III

STEP 1

SHIFT TRAFFIC ON -DET- TO THE NEWLY CONSTRUCTED WESTBOUND -L-. MAINTAIN THE -L- OUTSIDE EASTBOUND LANE TEMPORARY CLOSURE.
DEMOLISH -DET- STA 18+80 +/- TO -DET- STA 22+86 +/- .
AND DEMOLISH DETOUR BRIDGE.

STEP 2

USING RSD 1101.2 (3 OF 14) PLACE WARNING SIGNS AND TRAFFIC CONTROL DEVICES ON -L- AND REDUCE THE TRAVEL LANES FROM TWO TO ONE IN EACH DIRECTION. USING RSD 1101.2 (1 OF 14) PLACE WARNING SIGNS AND TRAFFIC CONTROL DEVICES -L- AND REDUCE ONE MORE TRAVEL LANE.
CONSTRUCT EASTBOUND -L- FROM -L- STA 18+00 +/- TO -L- STA 19+20 +/-
CONSTRUCT EASTBOUND -L- FROM -L- STA 22+30 +/- TO -L- STA 23+50 +/-

STEP 3

MAINTAIN THE -L- OUTSIDE EASTBOUND LANE TEMPORARY CLOSURE.
USE PAVEMENT WEDGING TO MAINTAIN ACCESS TO EXISTING JACKSON ST, LOOP D AND RAMP D.
CONSTRUCT EASTBOUND -L- FROM -L- STA 17+00 +/- TO -L- STA 18+00 +/-
CONSTRUCT EASTBOUND -L- FROM -L- STA 23+50 +/- TO -L- STA 25+00 +/-

PHASE IV

STEP 1

PLACE FINAL PAVEMENT LAYER AND FINAL PAVEMET MARKINGS

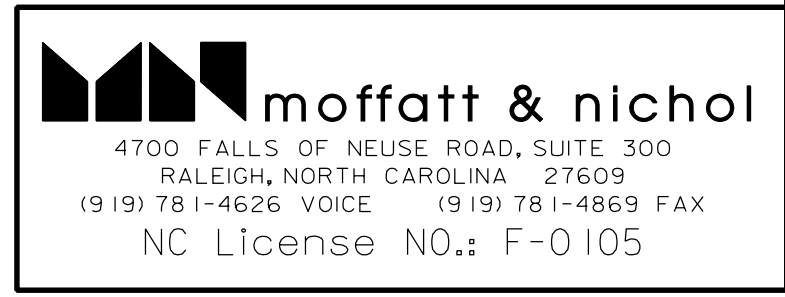
STEP 2

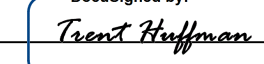
PLACE TRAFFIC INTO FINAL TRAFFIC PATTERN AND OPEN ALL LANES TO TRAFFIC.

STEP 3

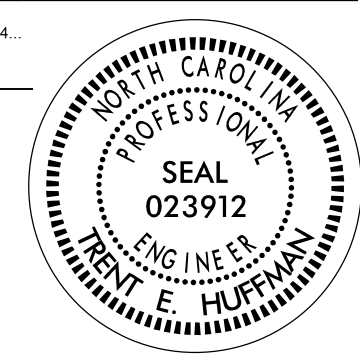
REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES AND SIGNING.

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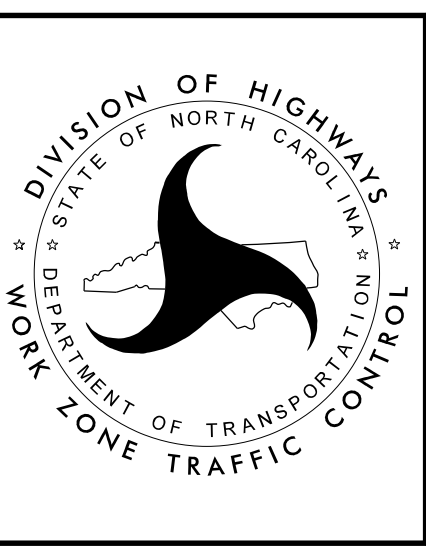


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TEMPORARY TRAFFIC CONTROL PHASING

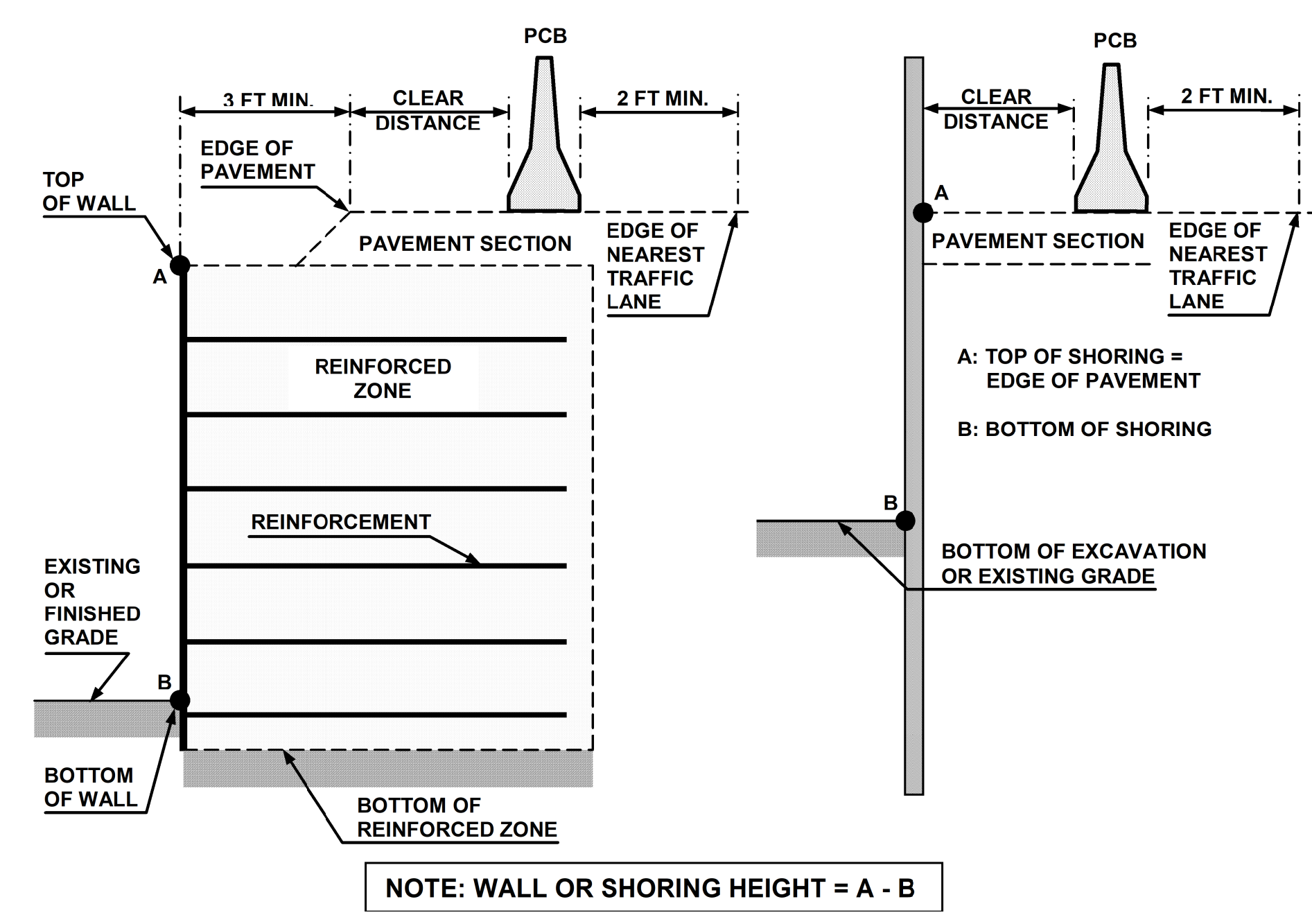


FIGURE A

NOTES

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.
- 9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
	>56	32	36	42	45	47	51	
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
50-56		26	26	28	32	35	38	
>56	26	27	29	32	36	38		
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

* See Figure Below

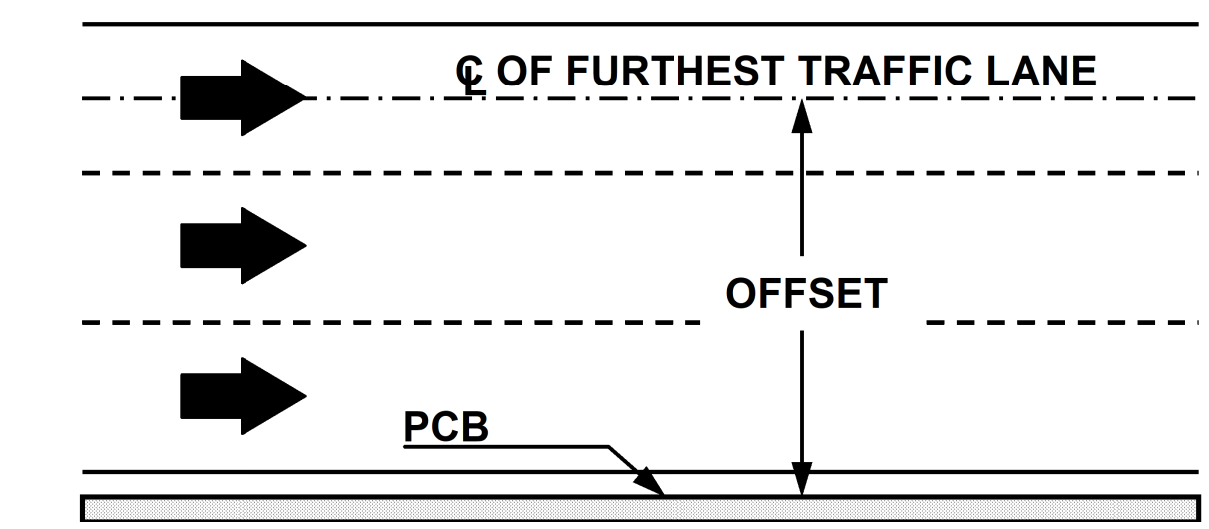


FIGURE B

moffatt & nichol
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APPROVED: *Trent Hoffman*
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DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

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SHORING NOTES

Shoring Location No. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 19+00 +/- -DET-, 17.89 FT. LT. TO STATION 19+56 +/- -DET-, 21 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+00 +/- -DET-, 17.89 FT. LT. TO STATION 19+56 +/- -DET-, 21 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+00 +/- -DET-, 17.89 FT. LT. TO STATION 19+56 +/- -DET-, 21 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 19+56 +/- -DET-, 21 FT. LT. TO STATION 20+00 +/- -DET-, 21 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+56 +/- -DET-, 21 FT. LT. TO STATION 20+00 +/- -DET-, 21 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 19+56 +/- -DET-, 21 FT. LT. TO STATION 20+00 +/- -DET-, 21 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. 3

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 21+86 +/- -DET-, 22 FT. LT. TO STATION 22+09 +/- -DET-, 22 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+86 +/- -DET-, 22 FT. LT. TO STATION 22+09 +/- -DET-, 22 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 21+86 +/- -DET-, 22 FT. LT. TO STATION 22+09 +/- -DET-, 22 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 22+09 +/- -DET-, 22 FT. LT. TO STATION 22+33 +/- -DET-, 22 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

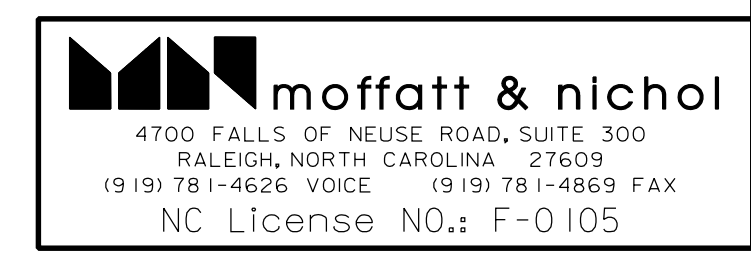
- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 22+09 +/- -DET-, 22 FT. LT. TO STATION 22+33 +/- -DET-, 22 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 22+09 +/- -DET-, 22 FT. LT. TO STATION 22+33 +/- -DET-, 22 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.02 FOR STANDARD TEMPORARY WALLS.

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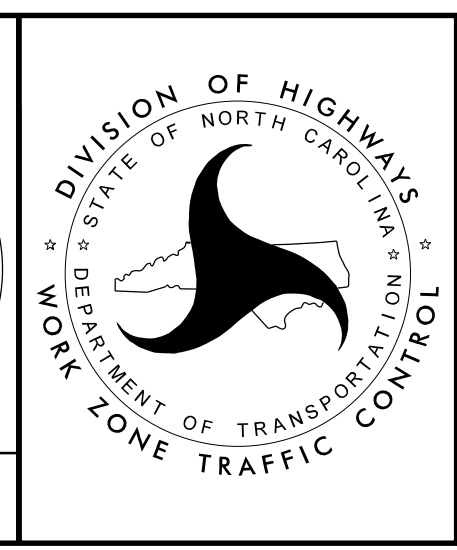


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DocuSigned by: Trist E. Huffman 000C516E427404

DATE: 2/3/2022

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TEMPORARY
SHORING
NOTES

SHORING NOTES

Shoring Location No. 5

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 22+33 +/- -DET-, 22 FT. LT. TO STATION 22+50 +/- -DET-, 19 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 22+33 +/- -DET-, 22 FT. LT. TO STATION 22+50 +/- -DET-, 19 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 22+33 +/- -DET-, 22 FT. LT. TO STATION 22+50 +/- -DET-, 19 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.02 FOR STANDARD TEMPORARY WALLS.

Shoring Location No. 6

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 19+89 +/- -L-, 40 FT. RT. TO STATION 20+35 +/- -L-, 40 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$ (FOR TRIASSIC RESIDUAL SOILS AT ELEVATION 646 OR HIGHER)
- FRICTION ANGLE, $\phi_f = 40$ (FOR TRIASSIC WEATHERED ROCK AT ELEVATION 646 OR LOWER)
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 19+89 +/- -L-, 40 FT. RT. TO STATION 20+35 +/- -L-, 40 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILLING FOR TEMPORARY SHORING FROM STATION 19+89 +/- -L-, 40 FT. RT. TO STATION 20+35 +/- -L-, 40 FT. RT. MAY NOT PENETRATE BELOW ELEVATION 653 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

IT MAY BE PREFERABLE TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 19+89 +/- -L-, 40 FT. RT. TO STATION 20+35 +/- -L-, 40 FT. RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

Shoring Location No. 7

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 21+32 +/- -L-, 40 FT. RT. TO STATION 21+78 +/- -L-, 40 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma_s = 120$ PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
- FRICTION ANGLE, $\phi_f = 30$ (FOR TRIASSIC RESIDUAL SOILS AT ELEVATION 644 OR HIGHER)
- FRICTION ANGLE, $\phi_f = 40$ (FOR TRIASSIC WEATHERED ROCK AT ELEVATION 644 OR LOWER)
- COHESION, $c = 0$ PSF
- GROUNDWATER ELEVATION = N/A

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+32 +/- -L-, 40 FT. RT. TO STATION 21+78 +/- -L-, 40 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILLING FOR TEMPORARY SHORING FROM STATION 21+32 +/- -L-, 40 FT. RT. TO STATION 21+78 +/- -L-, 40 FT. RT. MAY NOT PENETRATE BELOW ELEVATION 650 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

IT MAY BE PREFERABLE TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION 21+32 +/- -L-, 40 FT. RT. TO STATION 21+78 +/- -L-, 40 FT. RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

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

TEMPORARY SHORING NOTES

<p>SIGN NUMBER: Detour TYPE: STATIONARY QUANTITY: SEE PLANS</p> <p>SIGN WIDTH: 4'-0" HEIGHT: 1'-6" TOTAL AREA: 6.0 Sq.Ft.</p> <p>BORDER TYPE: INSET RECESS: 1.00" WIDTH: 1.00" RADII: 1.5"</p> <p>NO. Z BARS: LENGTH:</p>	<p>BACKG COLOR: Fluorescent Orange COPY COLOR: Black</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> <p>MAT'L: 0.080" (2.0 mm) ALUMINUM</p>	SYMBOL	X	Y	WID	HT																																				<p>DESIGN BY: ZL PROJECT ID: B-5737</p> <p>CHECKED BY: LOCATION:</p> <p style="text-align: right;">May 10, 2020 DIV: 07</p>	
SYMBOL	X	Y	WID	HT																																							

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

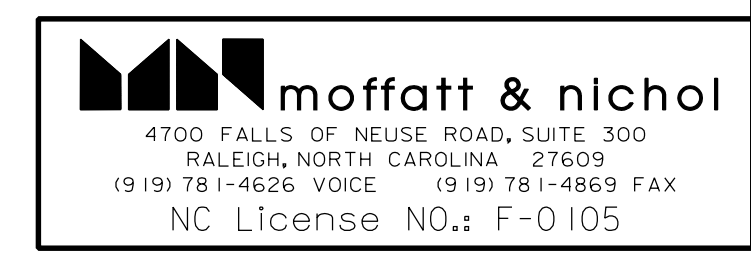
LETTER POSITIONS

Letter spacings are to start of next letter

Letter spacings are to start of next letter												Series/Size
U	S	-	3	1	1	N						Text Length
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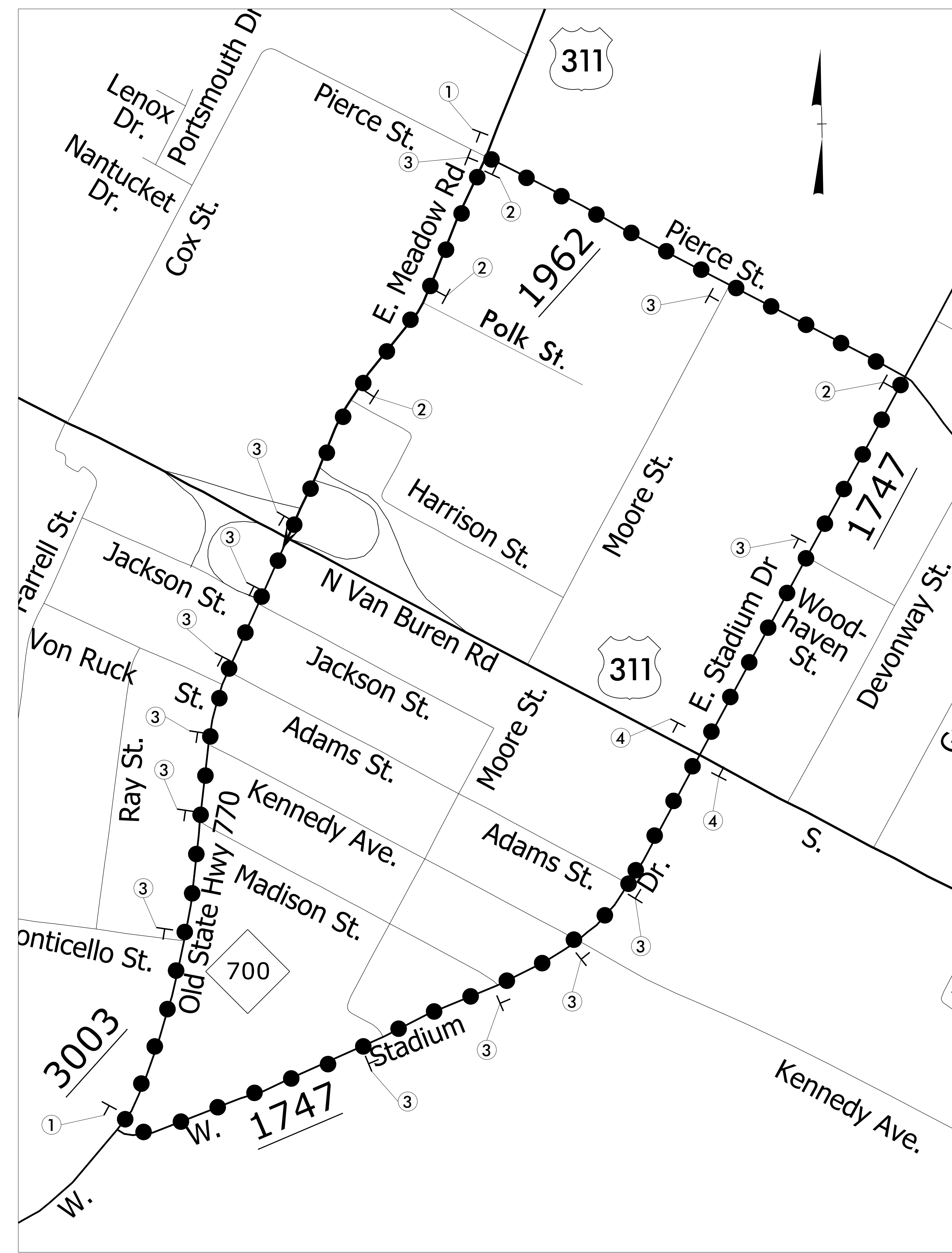
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DETOUR
SIGN DESIGN



PROPOSED DETOUR

DETOUR ROUTE ●—●—●

DETOUR LENGTH 2.42 MI.

US-311 N 48" X 18"

① DETOUR M4-8 24" X 12"

M6-1 L 21" X 15"

US-311 N 48" X 18"

③ DETOUR M4-8 24" X 12"

M6-3 21" X 15"

US-311 N 48" X 18"

② DETOUR M4-8 24" X 12"

M6-1 21" X 15"

US-311 N 48" X 18"

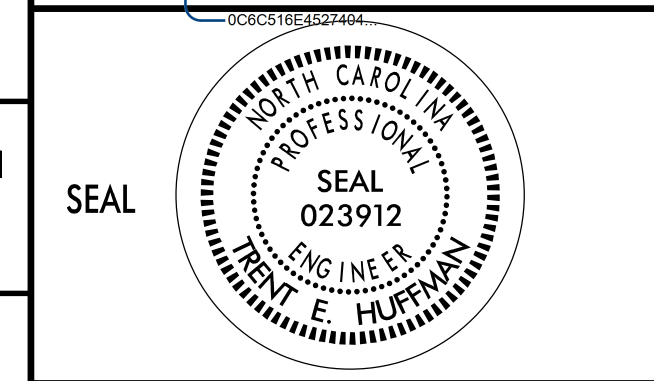
④ END DETOUR M4-8 A 24" X 18"

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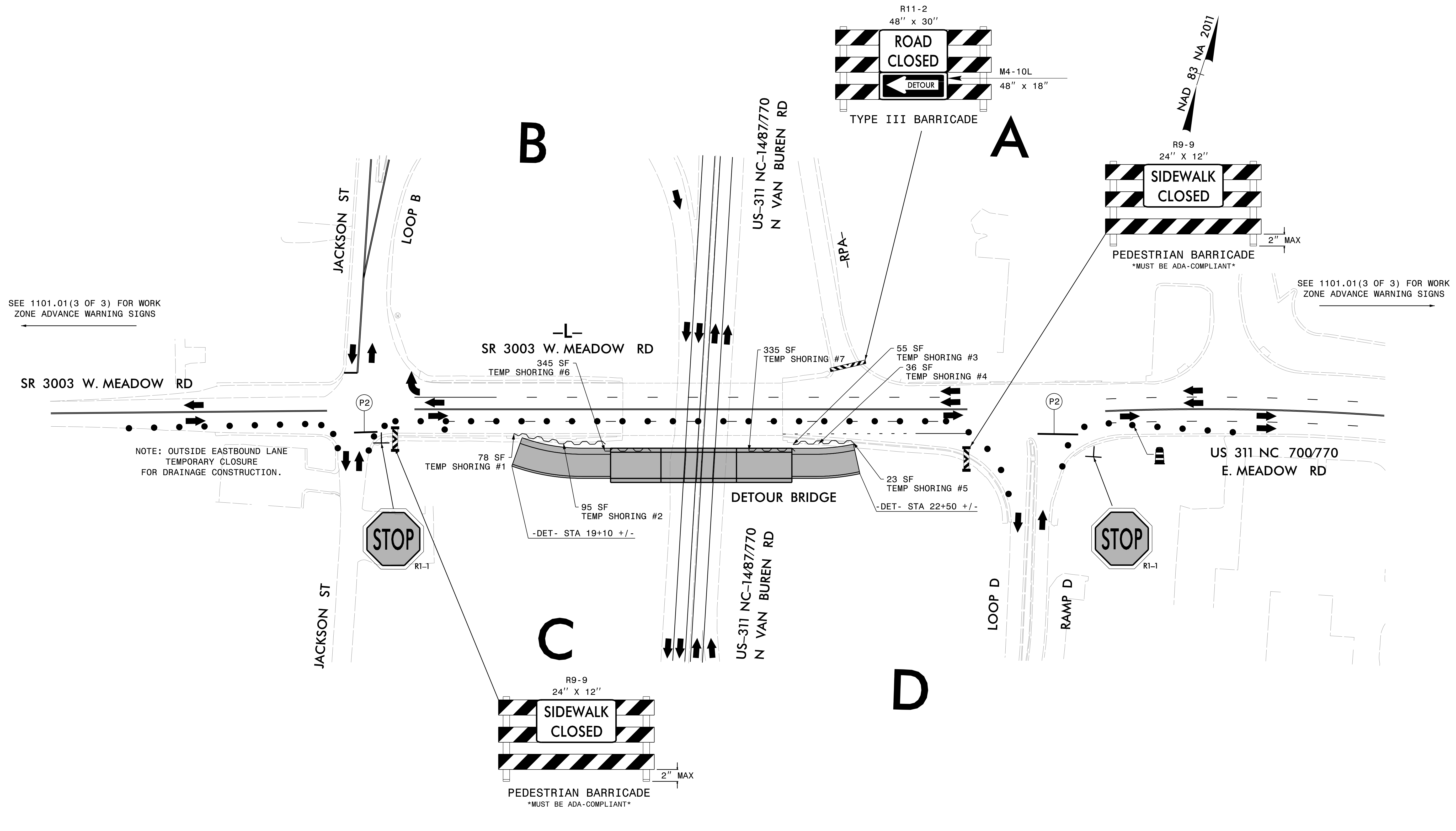
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APPROVED: *Robert Hoffman* DATE: 2/4/2022



**TRANSPORTATION
 OPERATIONS
 PLAN**



2/2/2022
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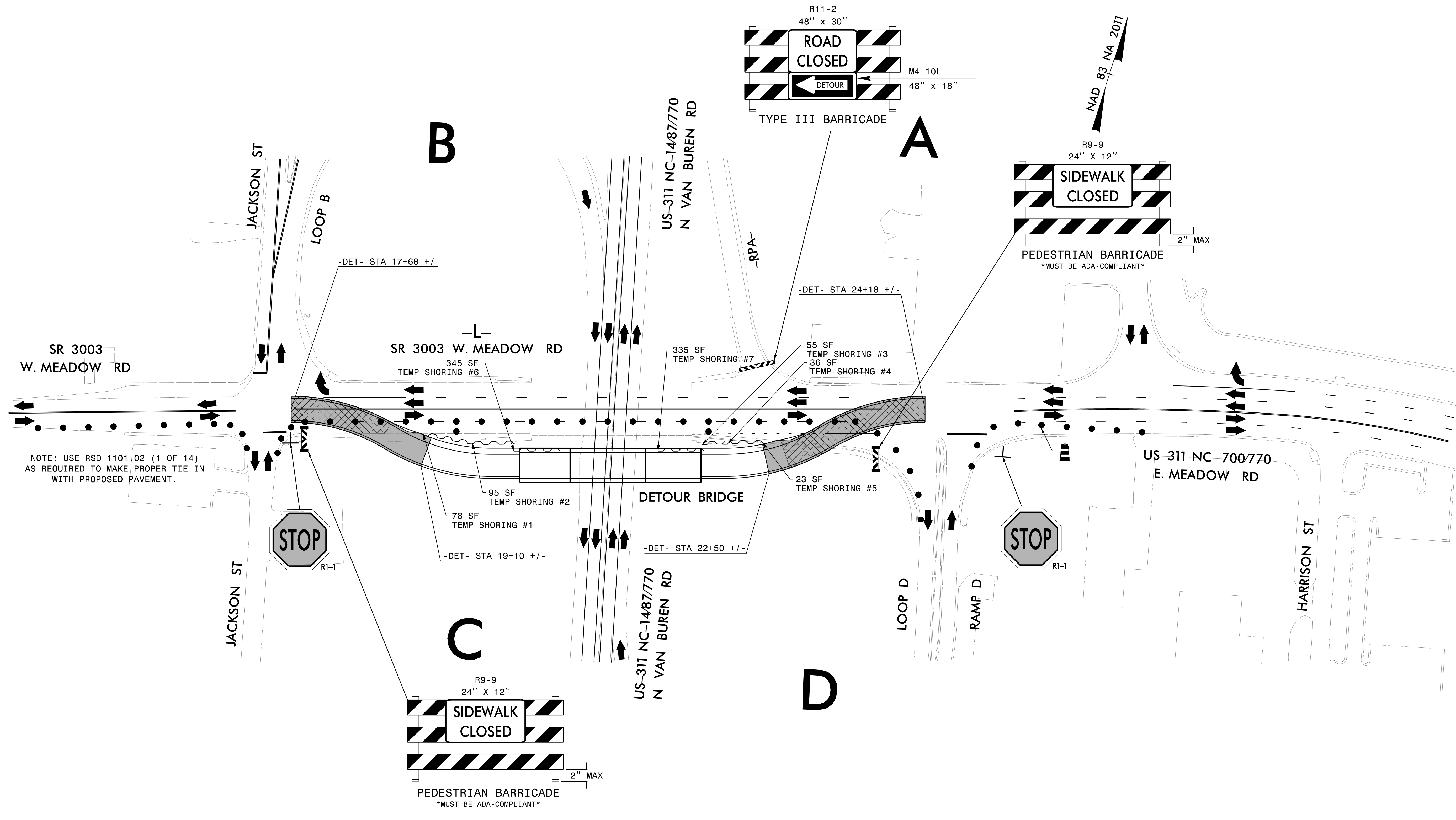
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PHASE 1 STEP 1
 -L-

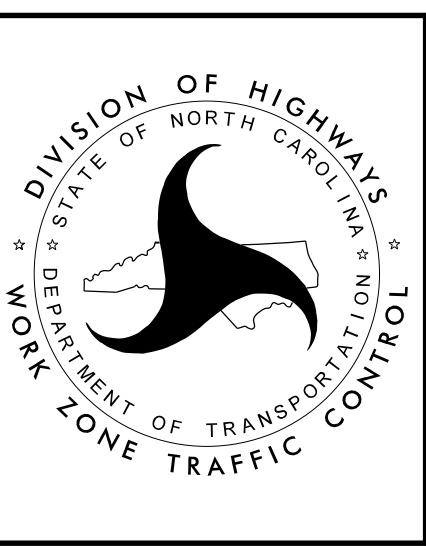


NOTE: USE RSD 1101.02 (1 OF 14) AS REQUIRED TO MAKE PROPER TIE IN WITH PROPOSED PAVEMENT.

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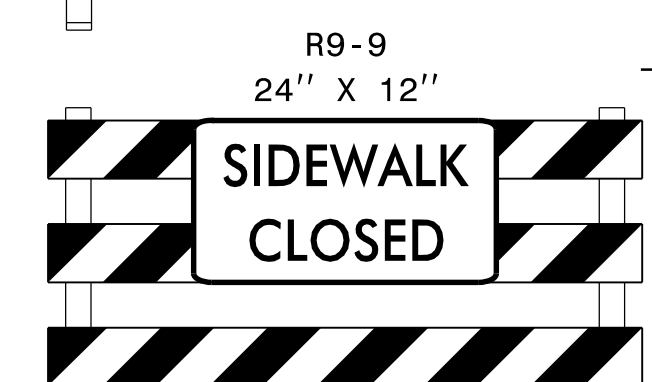
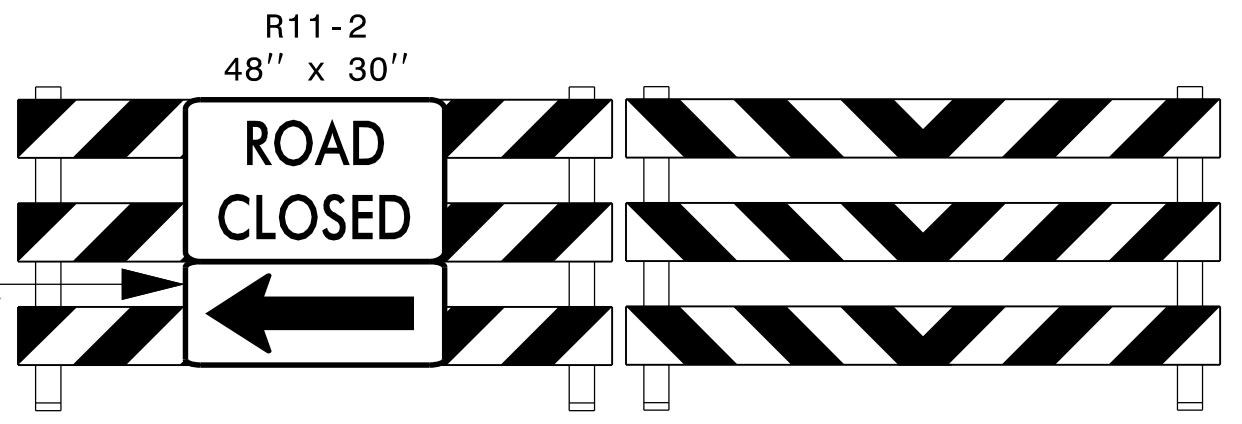
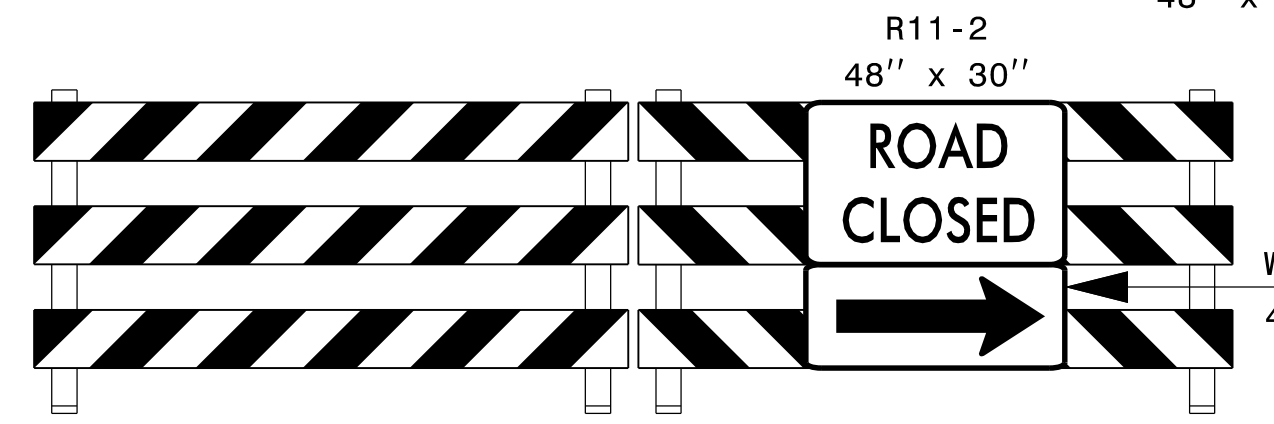
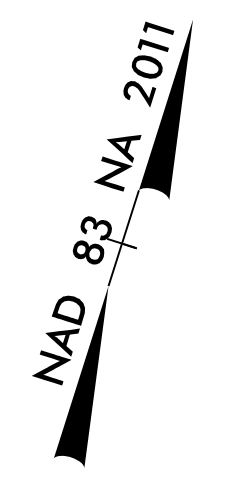
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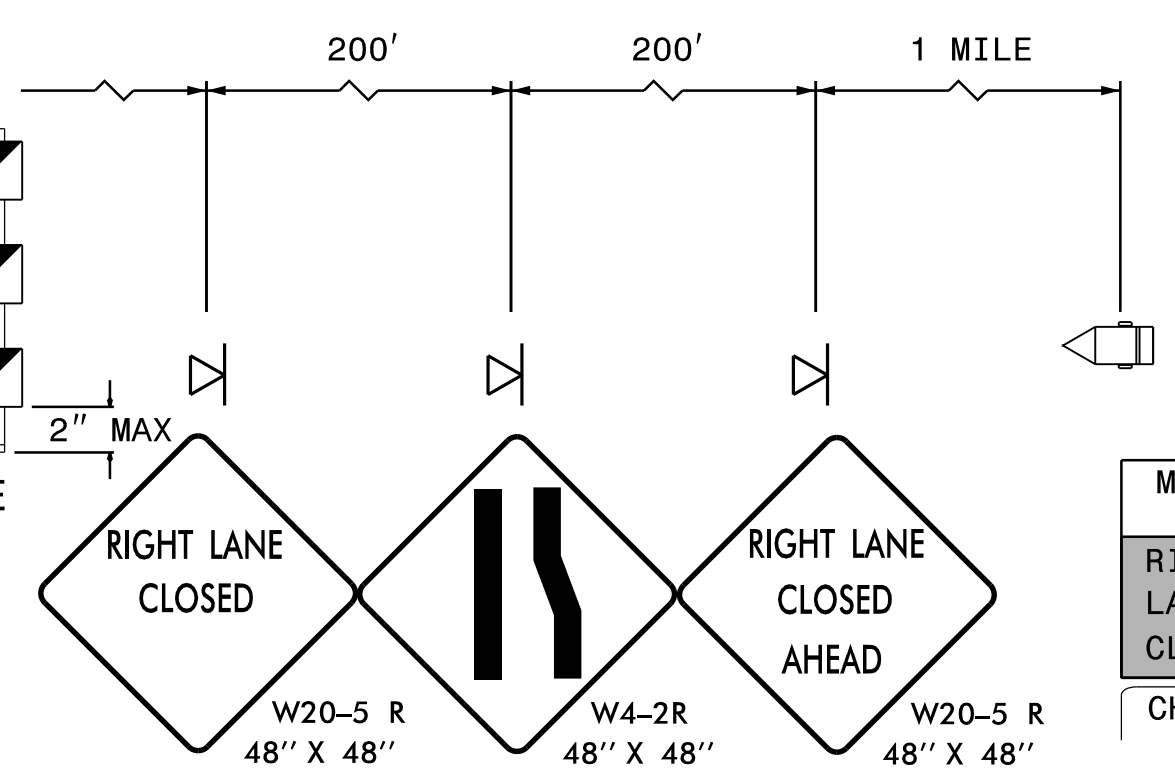


PHASE 1 STEP 2
 -L-

INSTALL ADVANCE SIGNING PER RSD 1101.03 (3 OF 9) FOR -L-



SEE RSD 1101.02 (3 OF 14) FOR TEMPORARY LANE CLOSURE

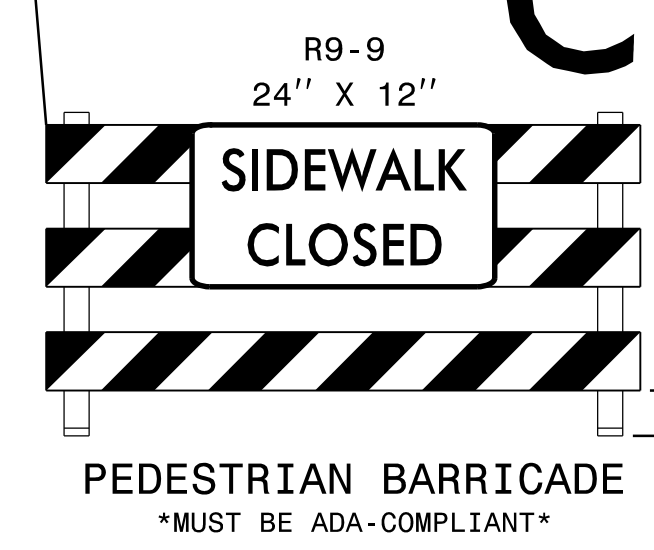
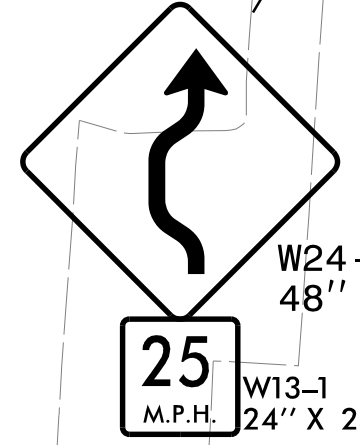
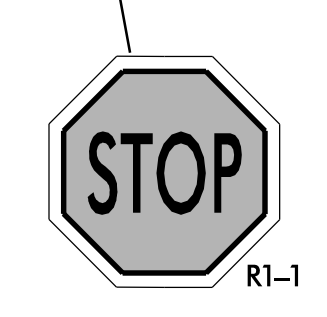
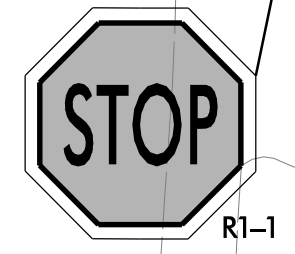
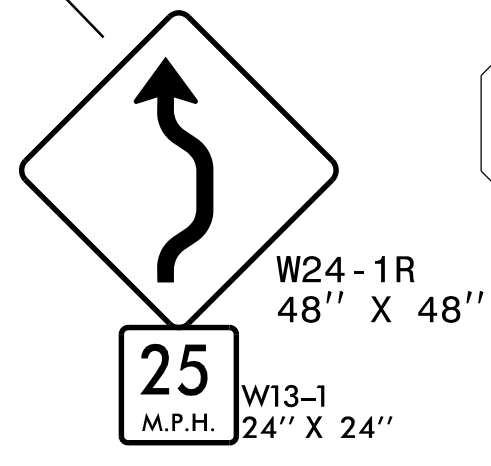
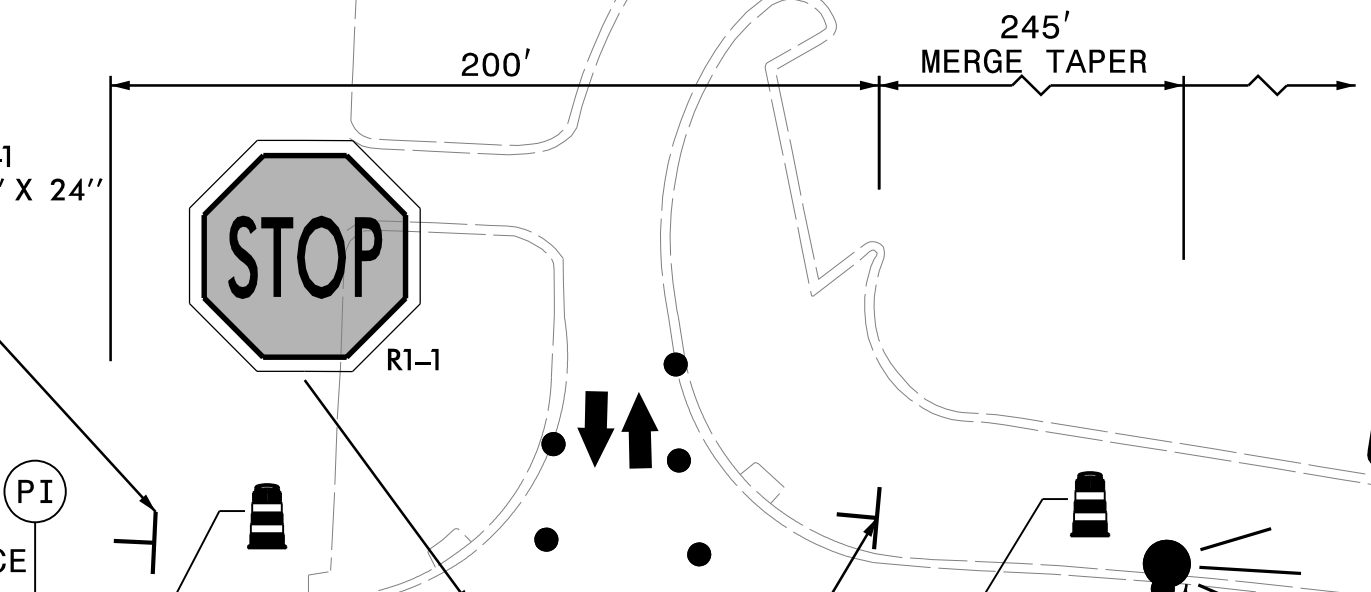
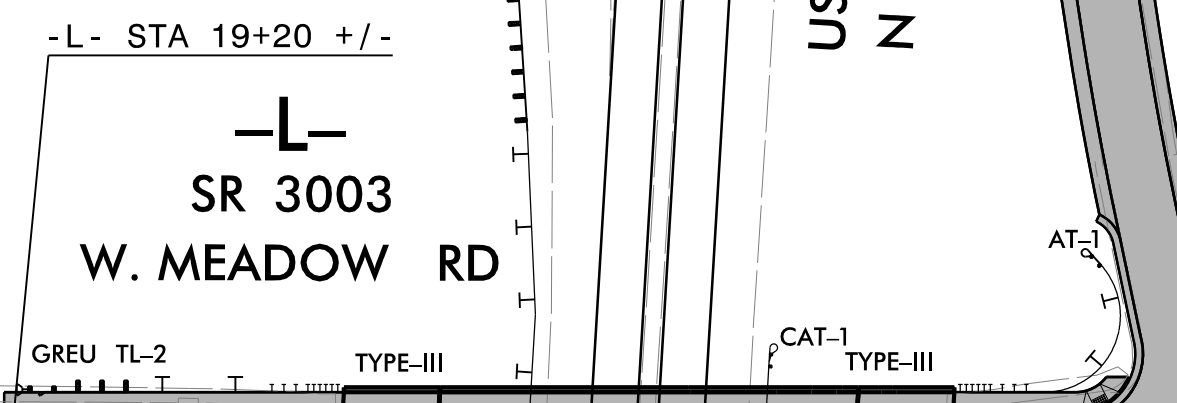
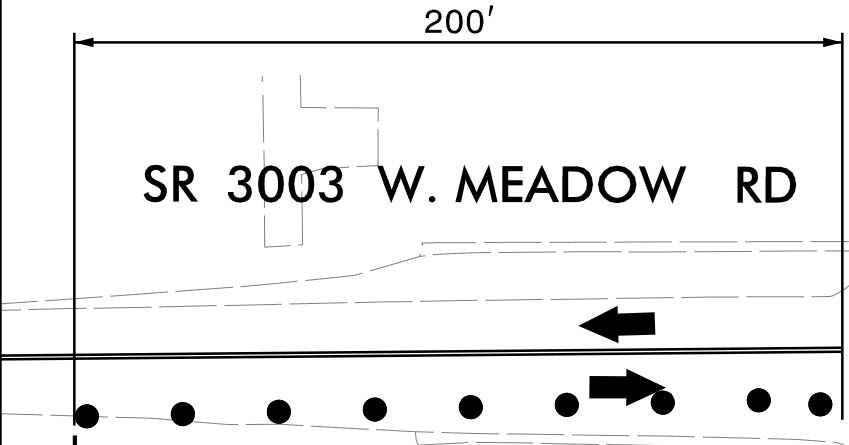


MESSAGE NO. 1	MESSAGE NO. 2
RIGHT LANE CLOSED	MERGE LEFT
CHANGEABLE MESSAGE SIGN	

NOTE: RAMP A CLOSED SEE TMP 3A FOR TEMPORARY DETOUR

NOTE: CONTRACTOR TO UTILIZE THE PEDESTRIAN TRANSPORT SERVICE

NOTE: CONTRACTOR TO UTILIZE THE PEDESTRIAN TRANSPORT SERVICE



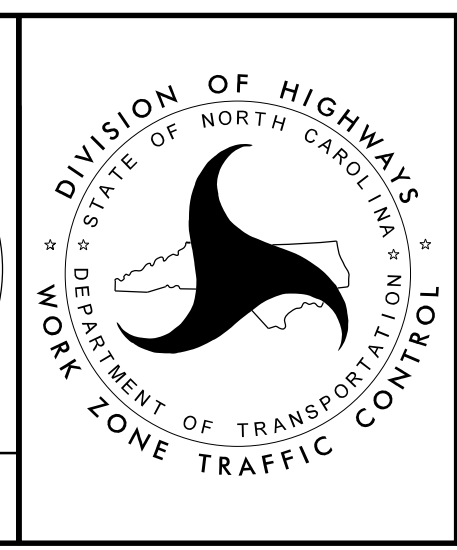
2/2/2022
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NC License NO.: F-0105

APPROVED: *Trent E. Huffman*
DATE: 2/3/2022

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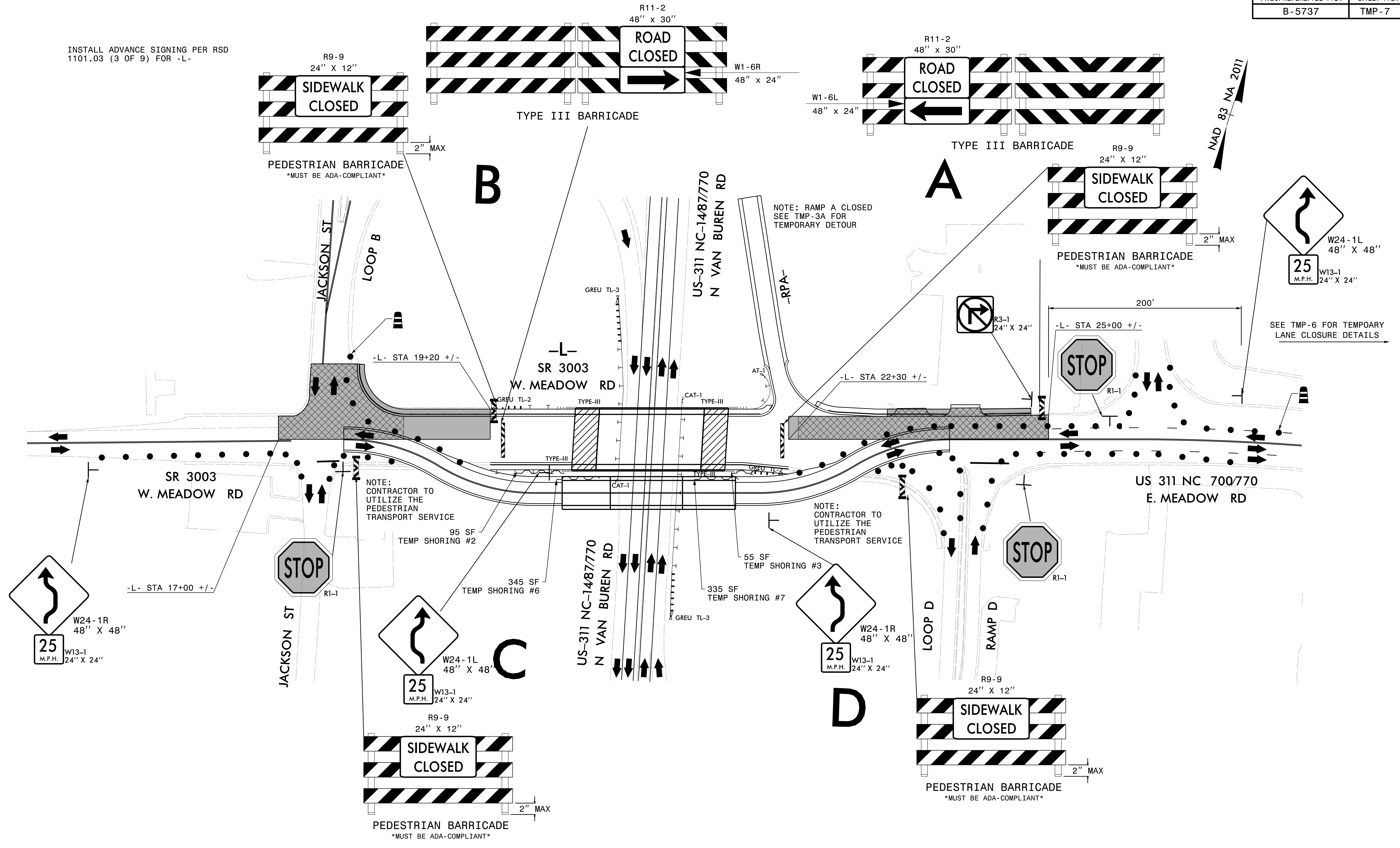
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DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASE 2 STEP 1
-L- AND -RPA-

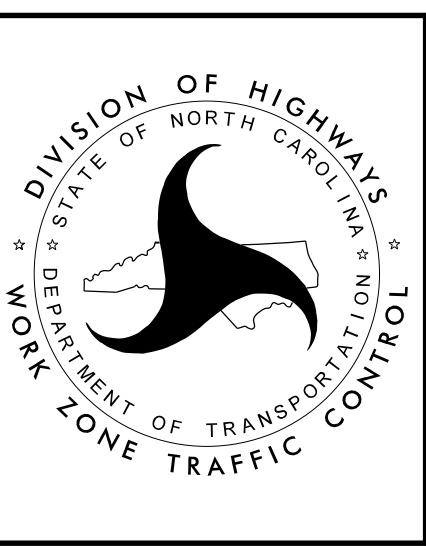
INSTALL ADVANCE SIGNING PER RSD 1101.03 (3 OF 9) FOR -L-



2/2/2022
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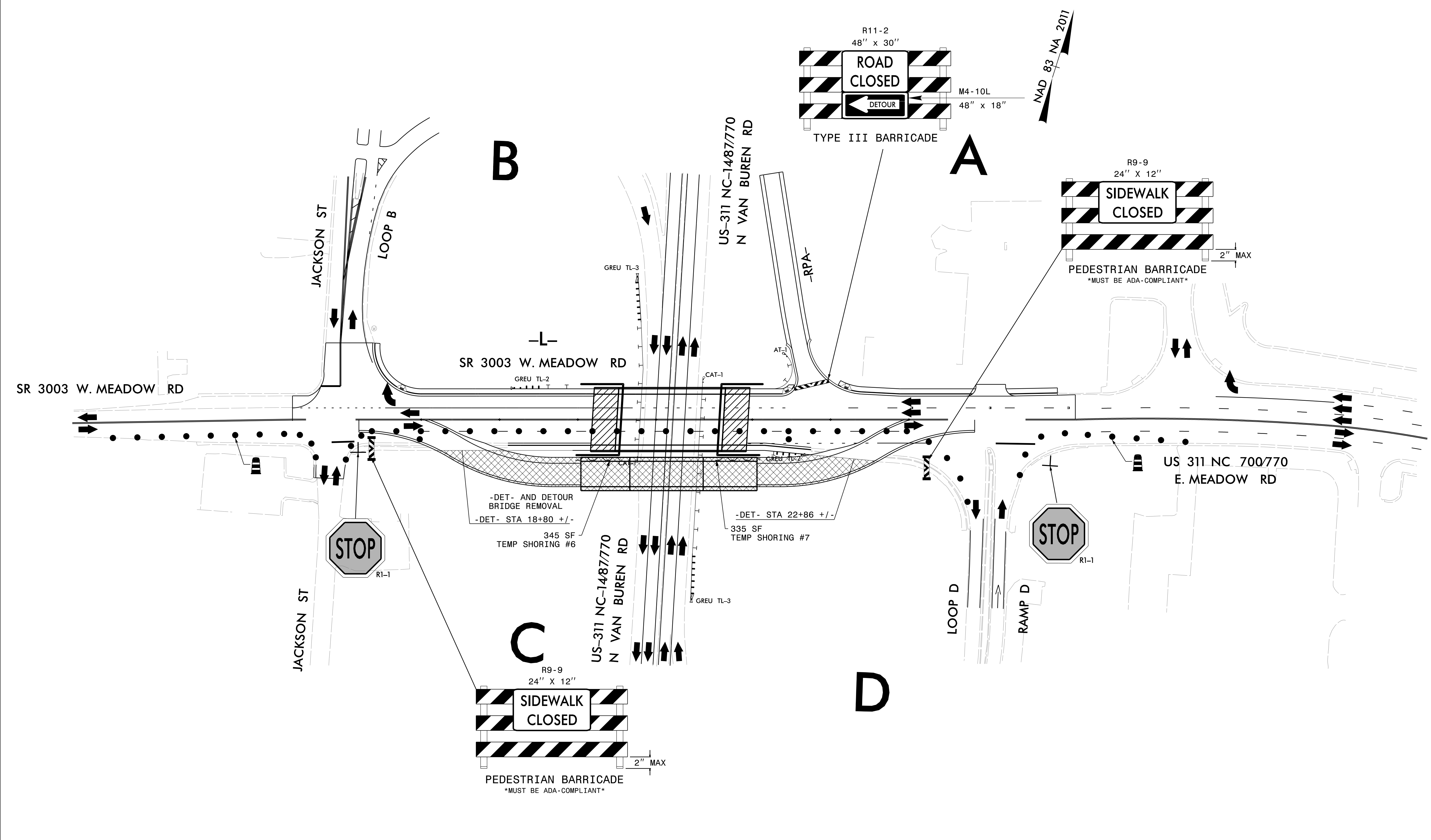
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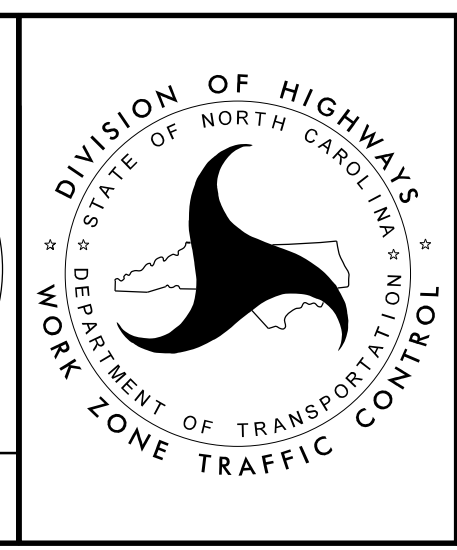
PHASE 2 STEP 2
 -L-



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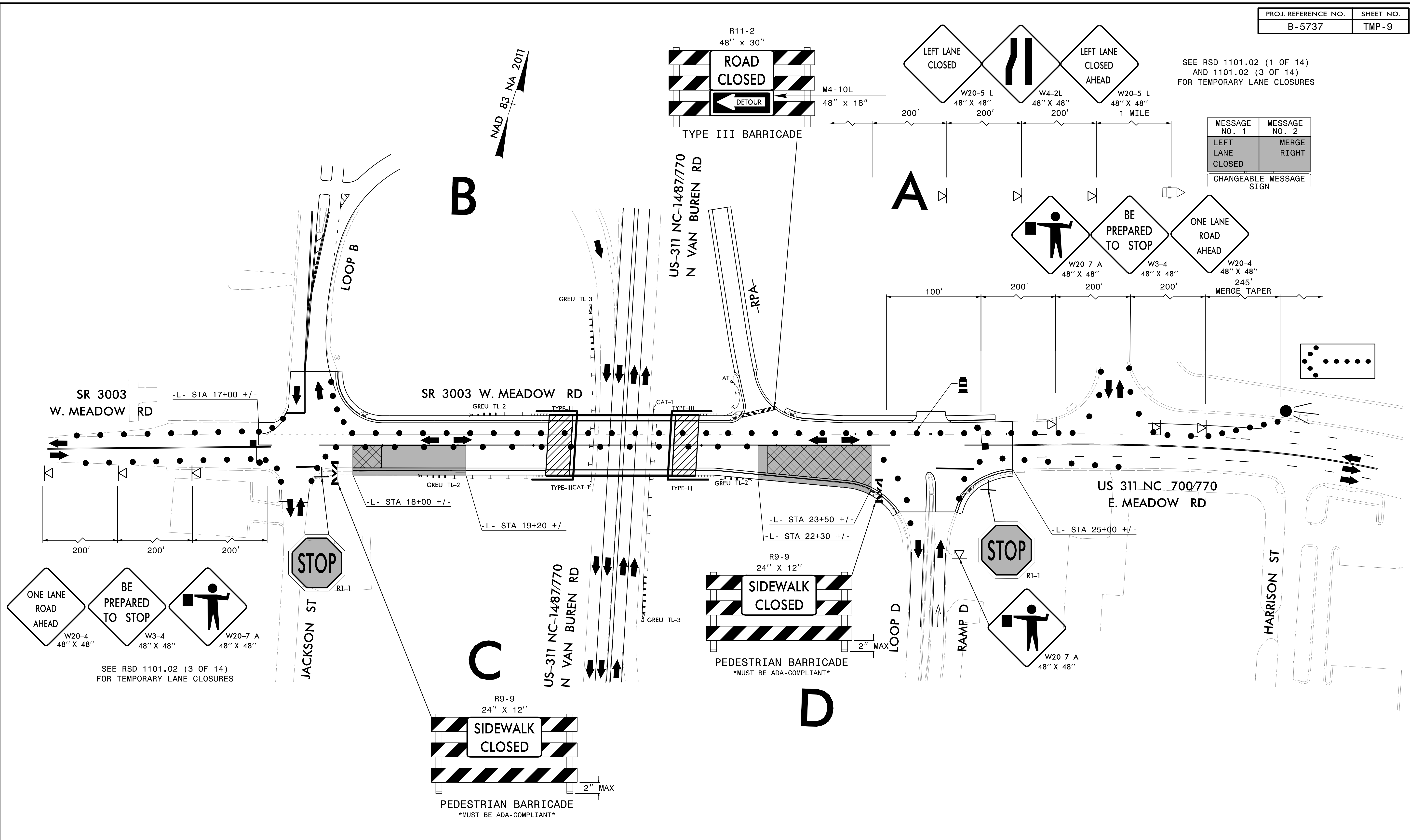
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PHASE 3, STEP 1
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SEE RSD 1101.02 (1 OF 14)
AND 1101.02 (3 OF 14)
FOR TEMPORARY LANE CLOSURES

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



ONE LANE ROAD AHEAD
W20-4 48" X 48"

BE PREPARED TO STOP
W3-4 48" X 48"

STOP SIGN
R1-1

SEE RSD 1101.02 (3 OF 14)
FOR TEMPORARY LANE CLOSURES

R9-9
24" X 12"

SIDEWALK CLOSED

PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

R9-9
24" X 12"

SIDEWALK CLOSED

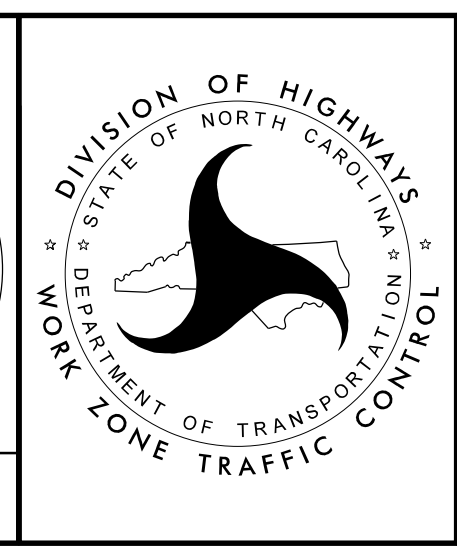
PEDESTRIAN BARRICADE
MUST BE ADA-COMPLIANT

APPROVED: *Trout E. Huffman*

DATE: 2/3/2022

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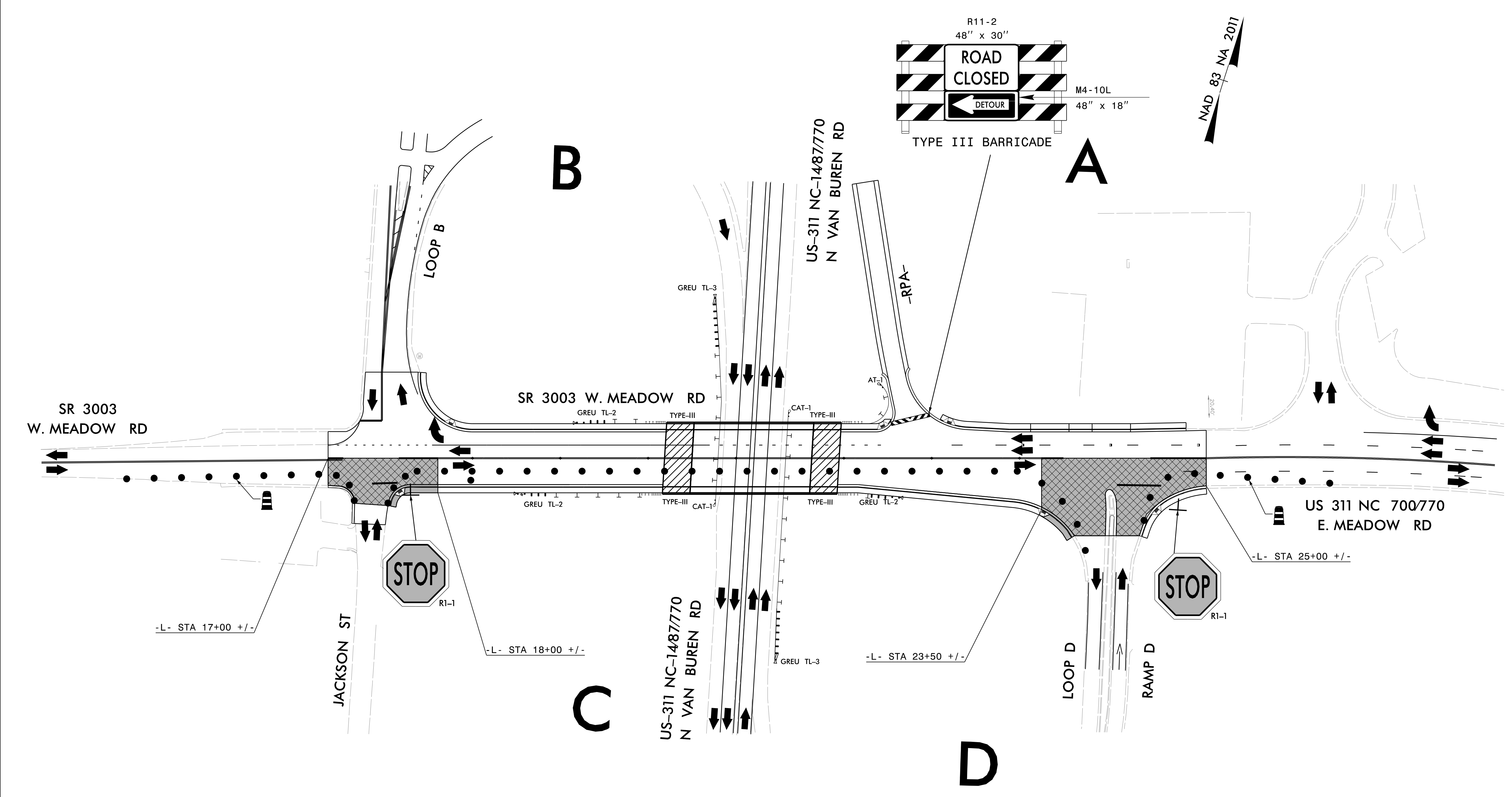


PHASE 3 STEP 2
-L-

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1/6/2022
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PHASE 3 STEP 3
 -L-

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