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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

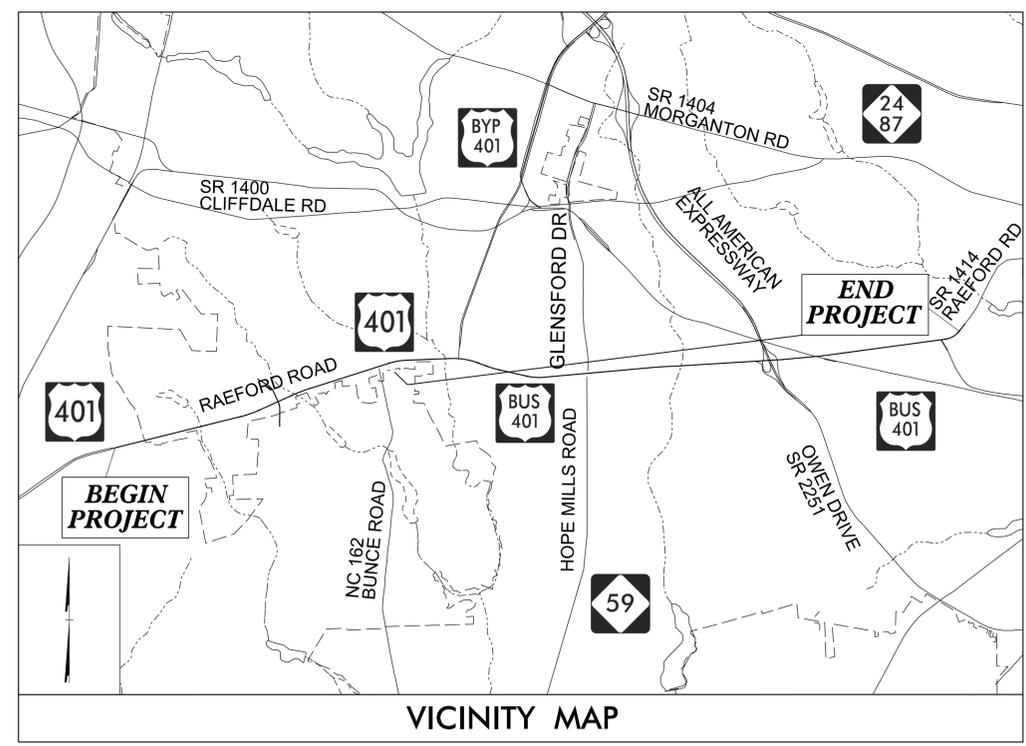
TRANSPORTATION MANAGEMENT PLAN

CUMBERLAND COUNTY

DIVISION 6



**US 401 FROM OLD RAEFORD ROAD TO EAST OF
NC 162 (BUNCE RD) IN FAYETTEVILLE**



VICINITY MAP

| SHEET NO. | TITLE |
|------------|---|
| TMP-1 | TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS |
| TMP-1A | LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND |
| TMP-1B, 1C | GENERAL NOTES |
| TMP-2 | TEMPORARY SHORING NOTES |
| TMP-3 | TEMPORARY TRAFFIC CONTROL PHASING |
| TMP-4 | SIDEWALK CLOSURE DETAIL |
| TMP-5 | PHASE I & II OUTSIDE WIDENING CONSTRUCTION DETAILS |
| TMP-6 | PHASE I & II OUTSIDE WIDENING CONSTRUCTION TYPICAL DRAWING |
| TMP-7 | PHASE I & II OUTSIDE WIDENING INTERSECTION CONSTRUCTION TYPICAL DRAWING |
| TMP-8 | PHASE III MEDIAN CONSTRUCTION DETAILS |
| TMP-9 | PHASE III MEDIAN CONSTRUCTION TYPICAL DRAWING |
| TMP-10 | PHASE III MEDIAN INTERSECTION CONSTRUCTION TYPICAL DRAWING |
| TMP-11 | US 401 -L- AT -Y5- PHASE III INTERSECTION DETAIL |
| TMP-12 | US 401 -L- AT -Y7- PHASE III INTERSECTION DETAIL |

SHEET NO.
TMP-1

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9/10/2021

TIP PROJECT: U-4405A

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 UNDESIRE 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 TRAVEL LANE AS FOLLOWS:

| ROAD NAME | DAY AND TIME RESTRICTIONS |
|---|---|
| SB US 401 NB US 401 FROM STA. 95+00 -L1- TO STA. 95+00 -L- | 6:00 A.M. TO 7:00 P.M. MONDAY THRU SUNDAY |

DO NOT CLOSE OR NARROW TWO (2) TRAVEL LANES AS FOLLOWS:

| ROAD NAME | DAY AND TIME RESTRICTIONS |
|--|---|
| NB US 401 FROM STA. 95+00 -L- TO STA. 110+00 -L- | 6:00 A.M. TO 7:00 P.M. MONDAY THRU SUNDAY |

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

| ROAD NAME |
|--|
| -L-, -Y50-, -Y51-, -Y52-, -Y1-, -Y2-, -Y3-, -Y4-, -Y5-, -Y6-, -Y7- AND -Y53- |

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 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 |
|-----------|--|---------------------------|
| ALL ROADS | 6:00 AM TO 7:00 PM MONDAY THRU SUNDAY | 15 MINUTES TRAFFIC SHIFTS |

D) DO NOT CONDUCT SINGLE OR MULTIPLE VEHICLE HAULING AS FOLLOWS:

| ROAD NAME | DAY AND TIME RESTRICTIONS |
|-----------|--|
| -L- | 6:00 AM TO 7:00 PM MONDAY THRU SUNDAY |

LANE AND SHOULDER CLOSURE REQUIREMENTS

E) 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.

F) 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.

G) 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.

H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.

I) 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.

J) DO NOT INSTALL MORE THAN 0.5 MILES OF LANE CLOSURE ON RAEFORD RD (-L-) MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

K) DO NOT INSTALL MORE THAN 2 SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON RAEFORD RD (-L-).

L) PROVIDE A MINIMUM OF 1 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE BEGINNING OF THE MERGE TAPER OF THE NEXT LANE CLOSURE.

M) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

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

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

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

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

O) 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 ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

Q) 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.

R) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

AND

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

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

T) 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 CONTROL DEVICES

U) 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.

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

W) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES, OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (500 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

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GENERAL NOTES

PAVEMENT MARKINGS AND MARKERS

X) INSTALL TEMPORARY PAVEMENT MARKINGS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

| ROAD NAME | MARKING |
|-----------|---------|
| ALL ROADS | PAINT |

Y) 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.

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

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

BB) TRACE THE (EXISTING AND/OR PROPOSED) MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO (REMOVAL AND/OR INSTALLATION). PLACE (DRUMS, CONES, OR TUBULAR MARKERS) TO DELINEATE ANY (EXISTING AND/OR PROPOSED) MONOLITHIC ISLANDS (AFTER REMOVAL AND/OR BEFORE INSTALLATION).

MISCELLANEOUS

CC) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR DIRECTED BY THE ENGINEER.

DD) 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.

EE) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

FF) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.

GG) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

HH) USE LAW ENFORCEMENT TO DIRECT TRAFFIC AND ENFORCE ROAD CLOSURES. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.

II) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.

JJ) COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

KK) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 662-4320 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

LL) MAINTAIN EXISTING GUARDRAIL UNTIL PROPOSED FILL SLOPES ARE COMPLETED TO THE POINT THAT FIELD CONDITIONS NO LONGER MEET GUARDRAIL WARRANTS AS DIRECTED BY THE ENGINEER.

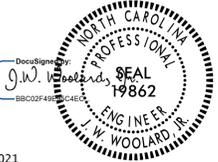
MM) MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES. DURING RELOCATION OF STOP SIGNS PROVIDE FLAGGERS WITH "FLAGGER AHEAD" (W20-7a) AND "BE PREPARED TO STOP" (W3-4) SIGNS AS NECESSARY TO MAINTAIN INTERSECTION TRAFFIC.

NN) ANY SIGNAL PUT IN FLASH MODE MUST HAVE LAW ENFORCEMENT PRESENT TO DIRECT TRAFFIC.

LOCAL NOTES

1) CONTRACTOR MAY PLACE TEMPORARY MARKINGS IN THE FINAL PATTERN AS ALLOWED BY THE ENGINEER. MAKE ADJUSTMENTS AS NEEDED TO MAINTAIN LANE CONTINUITY AS DIRECTED BY THE ENGINEER.

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TEMPORARY SHORING LOCATION NO. 01 ESTIMATED QUANTITY = 715.0 SF

-L- STA. 67+17.82, 43.94' RT TO -L- STA. 67.66.02, 37.17' RT
 LENGTH= 48.20' AVERAGE HEIGHT = 6.5 FT MAXIMUM HEIGHT = 10.8 FT
 SHORING TYPE = TRENCH

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING NO. 1, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING NO. 1 IS REQUIRED FOR UTILITY INSTALLATION.

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

DESIGN TEMPORARY SHORING NO. 1 FOR THE FOLLOWING ASSUMED SOIL PARAMETERS:
 UNIT WEIGHT, (γ) = 120 LB/CF
 FRICTION ANGLE, (ϕ) = 30 DEGREES
 COHESION, c = 0 LB/SF
 GROUNDWATER ELEVATION = VARIES, REFER TO BORINGS

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING NO. 1.

TEMPORARY SHORING LOCATION NO. 03 ESTIMATED QUANTITY = 270.0 SF

-L- STA. 98+92.49, 221.06' LT TO -L- STA. 99+11.68, 226.64' LT
 LENGTH= 19.19' AVERAGE HEIGHT = 6.8 FT MAXIMUM HEIGHT = 6.8 FT
 SHORING TYPE = BORE

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING NO. 3, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING NO. 3 IS REQUIRED FOR UTILITY INSTALLATION.

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

DESIGN TEMPORARY SHORING NO. 3 FOR THE FOLLOWING ASSUMED SOIL PARAMETERS:
 UNIT WEIGHT, (γ) = 120 LB/CF
 FRICTION ANGLE, (ϕ) = 30 DEGREES
 COHESION, c = 0 LB/SF
 GROUNDWATER ELEVATION = VARIES, REFER TO BORINGS

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING NO. 3.

TEMPORARY SHORING LOCATION NO. 02 ESTIMATED QUANTITY = 286.5 SF

-L- STA. 76+01.08, 182.28' LT TO -L- STA. 76+10.56, 181.02' LT
 LENGTH= 9.48' AVERAGE HEIGHT = 9.6 FT MAXIMUM HEIGHT = 9.7 FT
 SHORING TYPE = TRENCH

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING NO. 2, SEE PLANS AND TEMPORARY SHORING PROVISION.

TEMPORARY SHORING NO. 2 IS REQUIRED FOR UTILITY INSTALLATION.

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

DESIGN TEMPORARY SHORING NO. 2 FOR THE FOLLOWING ASSUMED SOIL PARAMETERS:
 UNIT WEIGHT, (γ) = 120 LB/CF
 FRICTION ANGLE, (ϕ) = 30 DEGREES
 COHESION, c = 0 LB/SF
 GROUNDWATER ELEVATION = VARIES, REFER TO BORINGS

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING NO. 2.

SEE UTILITY CONSTRUCTION (UC) PLANS FOR TEMPORARY SHORING DETAILS.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENT WAS SUBMITTED TO STANTEC CONSULTING ON (JUNE 14, 2018) AND SEALED BY A PROFESSIONAL ENGINEER, (THEIN TUN ZAN), LICENSE #030943.



TEMPORARY SHORING NOTES

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PHASE I

PHASE II

PHASE III

STEP 1:

USING RSD 1101.01 INSTALL ADVANCE WARNING SIGNS ON -L-, -L1- AND ALL -Y- LINES.

CHANGE SPEED LIMIT SIGNS TO 45 MPH AT THE BEGINNING OF THE PROJECT AS SHOWN IN THE SIGNING PLANS.

STEP 2:

A)USING TEMPORARY LANE CLOSURES, THE DETAILS ON SHEET TMP-5, 6 & 7, AND RSD 1101.02, CONSTRUCT THE FOLLOWING FROM BEGINNING OF PROJECT TO STA. 110+00 -L-:

-RIGHT SIDE OF -L-, INCLUDING WATER AND SEWER LINES, DRAINAGE, CURB & GUTTER, SIDEWALK, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ADJUST ANY SIGNALS AS NEEDED (SEE SIGNAL PLANS). WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMMODATE DRAINAGE. (SEE LOCAL NOTE 1)

USING FLAGGERS AND RSD 1101.02, CONSTRUCT ALL DRIVEWAY TIE-INS, INCLUDING DRAINAGE, IN A CONTINUOUS MANNER WHILE MAINTAINING ACCESS AT ALL TIMES.

--Y2- AND -Y3-, SOUTH SIDE OF -Y4-, THE SOUTH SIDE OF -Y5- -Y6-, AND THE SOUTH SIDE OF -Y7- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMMODATE DRAINAGE.

-USING LANE CLOSURES, RSD 1101.02 AND LAW ENFORCEMENT AS NEEDED, CONSTRUCT 54" PIPE ACROSS -Y4-.

-ALL CROSS-PIPES 36" OR LESS IN HALF SECTIONS USING LANE CLOSURES AS NEEDED BETWEEN THE FOLLOWING HOURS:
MONDAY - THURSDAY 9:00PM TO 5:00AM
FRIDAY AT 9:00PM TO MONDAY AT 5:00AM

-USING THE DETAIL ON TMP-6, CLOSE EXISTING SIDEWALK AND DETOUR PEDESTRIANS TO THE SIDEWALK ON THE OTHER SIDE OF -L-.

NOTE: -SR1-, -SR2-, AND -SR3- MUST BE CONSTRUCTED DURING SUMMER MONTHS, AND CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THESE SERVICE ROADS WITH SCHOOL OFFICIALS. [SEE PROJECT SPECIAL PROVISIONS]

B) USING FLAGGERS AND RSD 1101.02 AS NEEDED, BEGIN CONSTRUCTION OF -SR1-, -SR2-, AND -SR3-

NOTE: CONSTRUCT PHASE I, STEP 2C IN 58 CONSECUTIVE HOURS (9:00 PM FRIDAY TO 5:00 AM MONDAY) [SEE PROJECT SPECIAL PROVISIONS]

C)CONSTRUCT RIGHT SIDE OF 66" RCP AT STA. 46+71+/- TO THE MEDIUM IN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.

NOTE: CONSTRUCT PHASE I, STEP 2D IN 58 CONSECUTIVE HOURS (9:00 PM FRIDAY TO 5:00 AM MONDAY) [SEE PROJECT SPECIAL PROVISIONS]

D)CONSTRUCT RIGHT SIDE OF 42" RCP AT STA. 78+25+/- TO THE MEDIUM IN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.

STEP 1:

A)USING TEMPORARY LANE CLOSURES, THE DETAILS ON SHEETS TMP-5,6 & 7, AND RSD 1101.02, CONSTRUCT THE FOLLOWING FROM BEGINNING OF PROJECT TO STA. 110+00 -L-:

-LEFT SIDE OF -L-, INCLUDING WATER AND SEWER LINES, DRAINAGE, CURB & GUTTER, SIDEWALK, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ADJUST ANY SIGNALS AS NEEDED (SEE SIGNAL PLANS). WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMMODATE DRAINAGE. (SEE LOCAL NOTE 1)

-USING FLAGGERS AND RSD 1101.02, CONSTRUCT ALL DRIVEWAY TIE-INS, INCLUDING DRAINAGE, IN A CONTINUOUS MANNER WHILE MAINTAINING ACCESS AT ALL TIMES.

--Y50-, -Y51-, -Y52-, -Y53-, -Y1-, NORTH SIDE OF -Y4-, THE NORTH SIDE OF -Y5-, AND THE NORTH SIDE OF -Y7- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. WEDGE EXISTING PAVEMENT AS NECESSARY TO MAINTAIN TRAFFIC AND ACCOMMODATE DRAINAGE. (SEE LOCAL NOTE 1)

-USING LANE CLOSURES, RSD 1101.02 AND LAW ENFORCEMENT AS NEEDED, CONSTRUCT 54" PIPE ACROSS NORTH SIDE OF -Y5-.

-USING FLAGGERS AND RSD 1101.02 AS NEEDED, CLOSE ONE SIDE OF ENTRANCE TO OAK FOREST DRIVE AT A TIME TO CONSTRUCT 48" PIPE ACROSS OAK FOREST DRIVE.

-ALL CROSS-PIPES 36" OR LESS IN HALF SECTIONS USING LANE CLOSURES AS NEEDED BETWEEN THE FOLLOWING HOURS:
MONDAY - THURSDAY 9:00PM TO 5:00AM
FRIDAY AT 9:00PM TO MONDAY AT 5:00AM

-USING THE DETAIL ON TMP-6 AS NEEDED, CLOSE EXISTING SIDEWALK AND DETOUR PEDESTRIANS TO THE SIDEWALK ON THE OTHER SIDE OF -L-.

NOTE: -SR1-, -SR2-, AND -SR3- MUST BE CONSTRUCTED DURING SUMMER MONTHS, AND CONTRACTOR SHALL COORDINATE CONSTRUCTION OF THESE SERVICES ROADS WITH SCHOOL OFFICIALS. [SEE PROJECT SPECIAL PROVISIONS]

B)USING FLAGGERS AND RSD 1101.02 AS NEEDED, COMPLETE CONSTRUCTION OF -SR1-, -SR2-, AND -SR3- STARTED IN PHASE I STEP 2.

NOTE: CONSTRUCT PHASE II, STEP 1C IN 58 CONSECUTIVE HOURS (9:00 PM FRIDAY TO 5:00 AM MONDAY) [SEE PROJECT SPECIAL PROVISIONS]

C)CONSTRUCT LEFT SIDE OF 66" RCP AT STA. 46+71+/- TO THE MEDIUM IN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.

NOTE: CONSTRUCT PHASE II, STEP 1D IN 58 CONSECUTIVE HOURS (9:00 PM FRIDAY TO 5:00 AM MONDAY) [SEE PROJECT SPECIAL PROVISIONS]

D)CONSTRUCT LEFT SIDE OF 42" RCP AT STA. 78+25+/- TO THE MEDIUM IN A CONTINUOUS OPERATION USING LANE CLOSURES AND RSD 1101.02.

STEP 1:

CONTRACTOR MAY BEGIN THE FOLLOWING:

USING RSD 1101.02 (SHEETS 3 AND 7 OF 15) PLACE TEMPORARY PAVEMENT MARKINGS IN FINAL PATTERN (SEE PMP) (SEE TMP-11, 12)

USING RSD 1101.02 (SHEETS 3 AND 7 OF 15) AND THE DETAILS ON TMP-8,9 & 10, CLOSE THE INSIDE LANE IN EACH DIRECTION AND CONSTRUCT:

(NOTE: PLACE TRAFFIC BACK IN THE ORIGINAL TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.)

-1'-6" CURB & GUTTER OR MONOLITHIC CONCRETE ISLANDS AND PROPOSED DRAINAGE AS SHOWN IN THE CONSTRUCTION PLANS FROM:
-BEGINNING OF PROJECT TO STA. 110+00+/- -L-

STEP 2:

USING RSD 1101.02 (SHEETS 3 AND 7 OF 15), PLACE THE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND PAVEMENT MARKERS ON -L-, -L1- AND ALL -Y- LINES THROUGHOUT THE PROJECT. MAKE ANY FINAL ADJUSTMENTS NEEDED TO THE PROPOSED SIGNALS.

STEP 3:

REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN THE PROJECT TO THE FINAL TRAFFIC PATTERN.

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J. W. Woolard
7/30/2021 11:00 AM



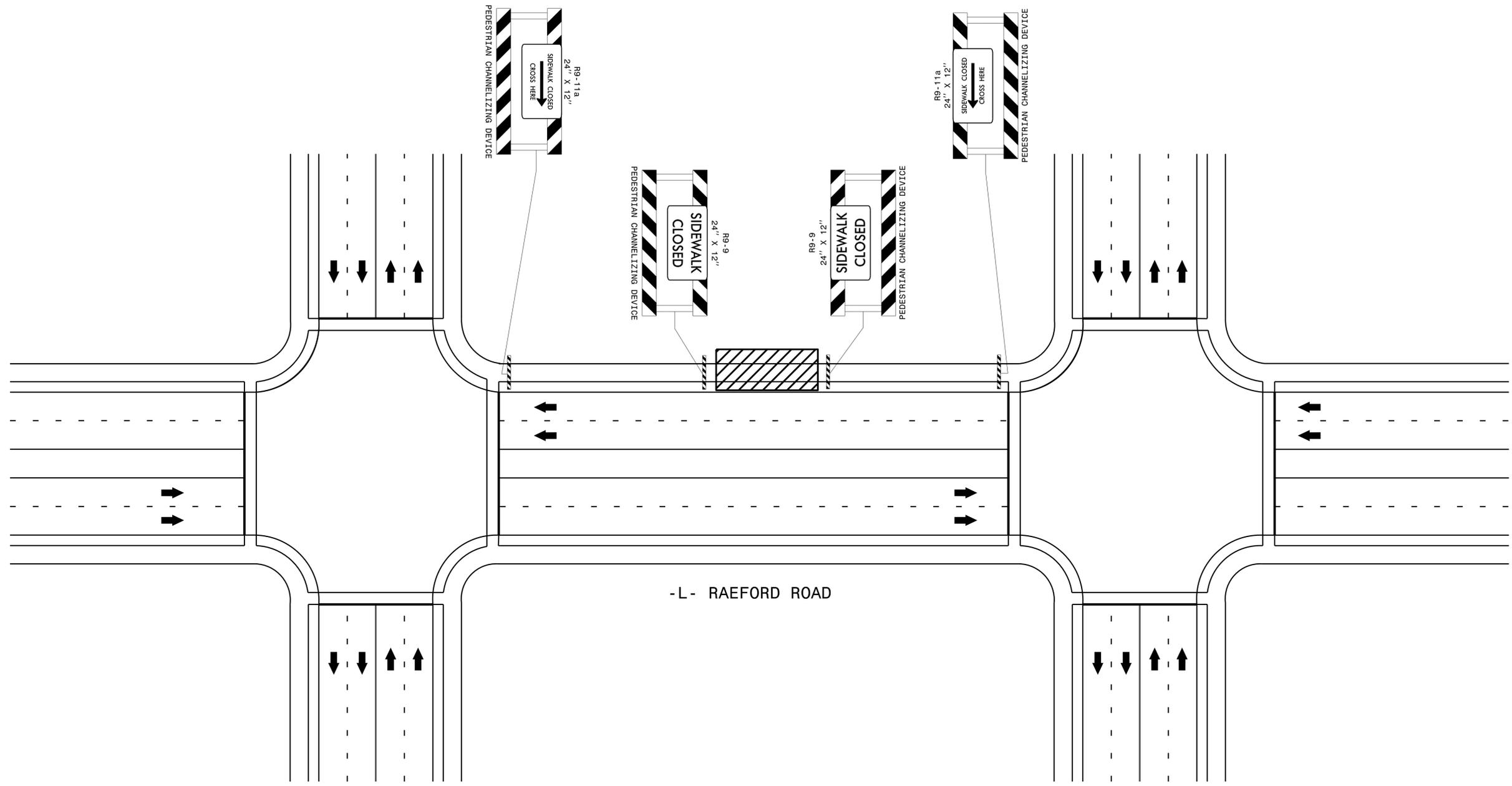
SEAL
19862
ENGINEER
J. W. WOOLARD, R.

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

TEMPORARY TRAFFIC CONTROL PHASING



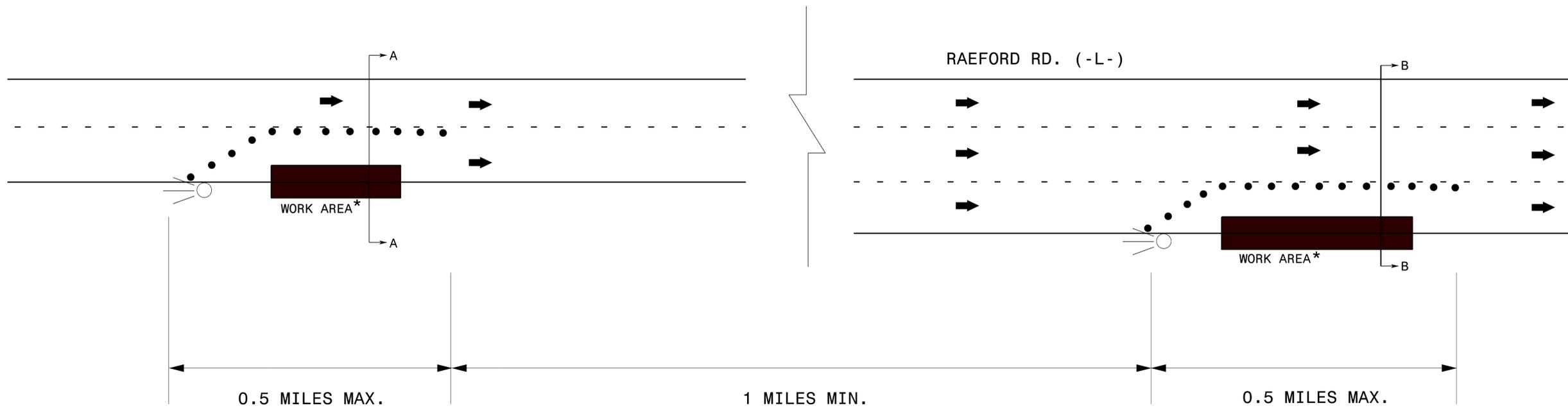
-L- RAEFORD ROAD

NOTES

1. USE MIRROR IMAGE IF SIDEWALK ON THE OTHER SIDE OF -L- (RAEFORD RD.) IS CLOSED

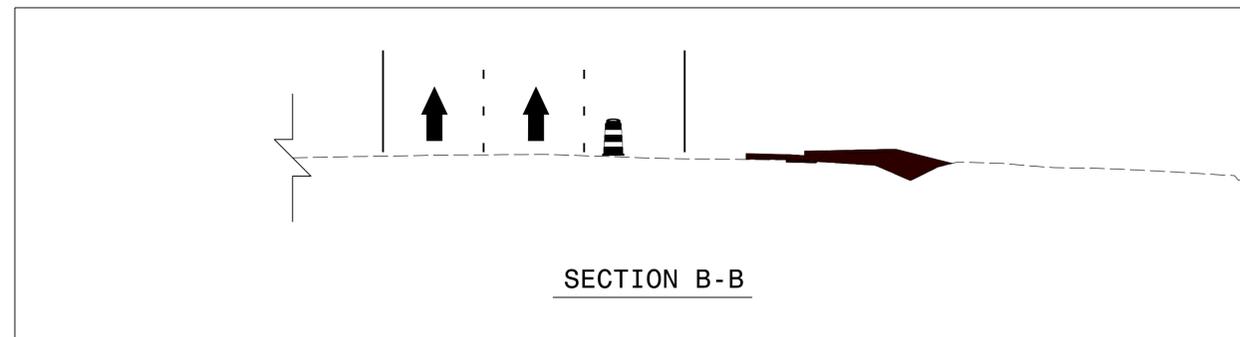
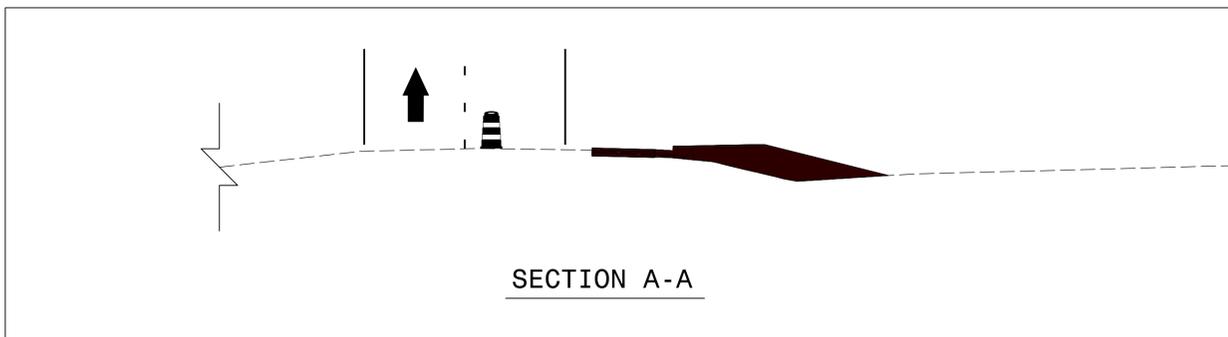
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|--|---|--|---------------------------------------|



NOTES

1. INSTALL ALL LANE CLOSURE PER RSD 1101.02 (SHEET 3 OF 15).
2. MAXIMUM LENGTH OF EACH LANE CLOSURE IS 0.5 MILES.
3. MINIMUM LENGTH BETWEEN LANE CLOSURES IS 1 MILE.
4. MAXIMUM NUMBER OF LANE CLOSURES IN ONE DIRECTION IS 2.
5. CONSTRUCT PROPOSED DRAINAGE, PAVEMENT, CURB & GUTTER, AND SIDEWALK IN EACH WORK AREA .



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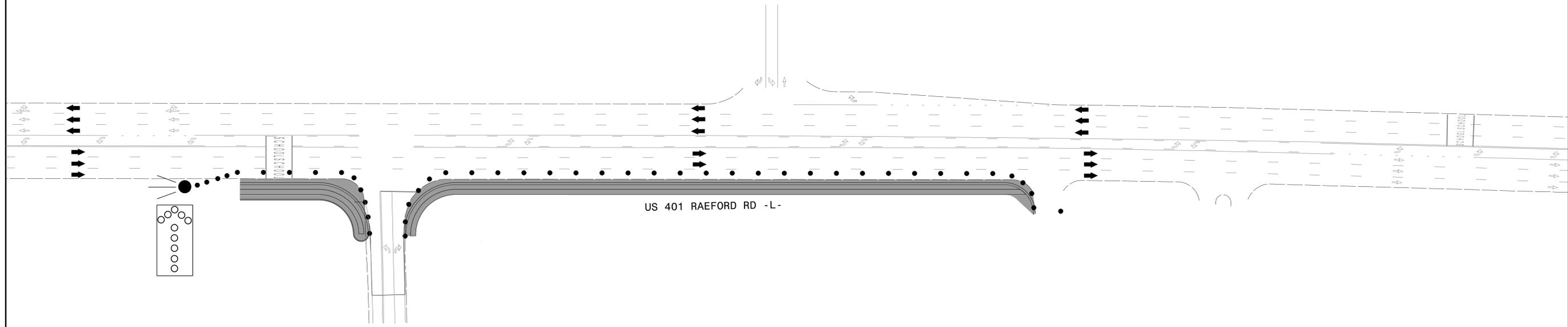
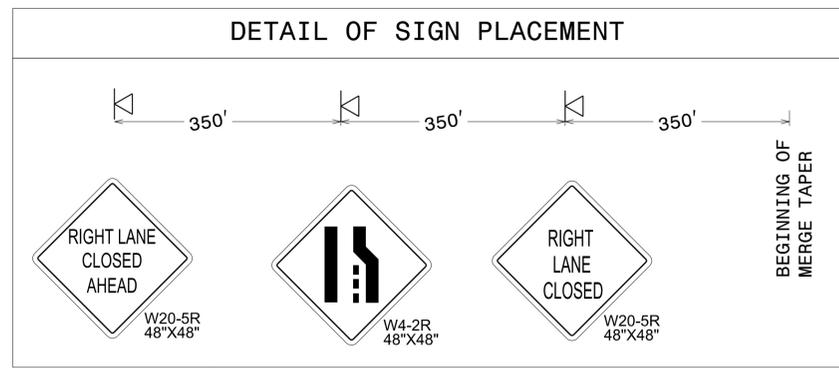
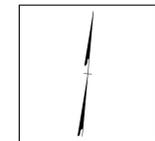
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**PHASE I & II
OUTSIDE WIDENING
CONSTRUCTION DETAILS**

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| PROJ. REFERENCE NO. | SHEET NO. |
| U-4405A | TMP-6 |



NOTES

- INSTALL ALL LANE CLOSURES USING RSD 1101.02 SHEET 3 OF 15
- USE A MERGE TAPER OF 540' BASED ON RSD 1101.11 SHEET 1 OF 4

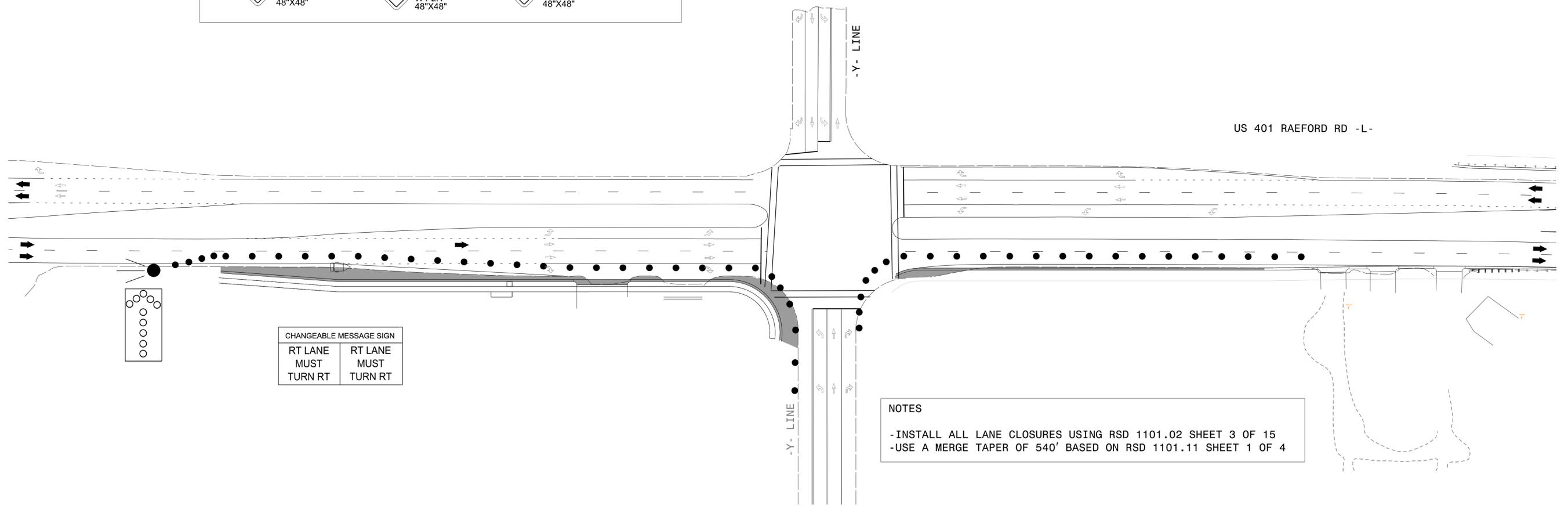
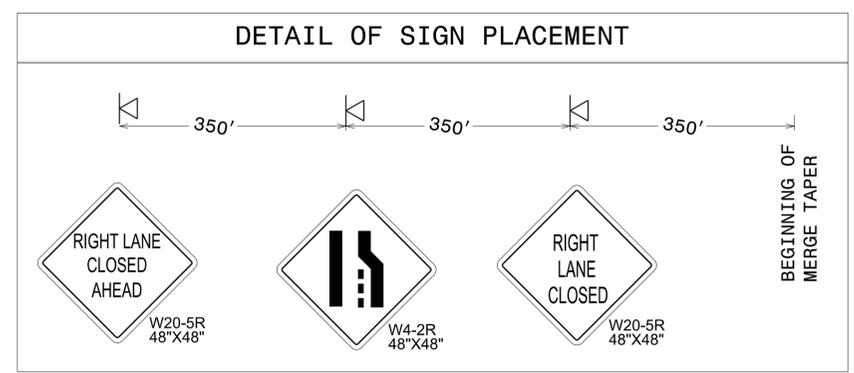
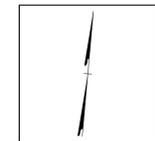
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**PHASE I & II
OUTSIDE WIDENING
CONSTRUCTION
TYPICAL DRAWING**



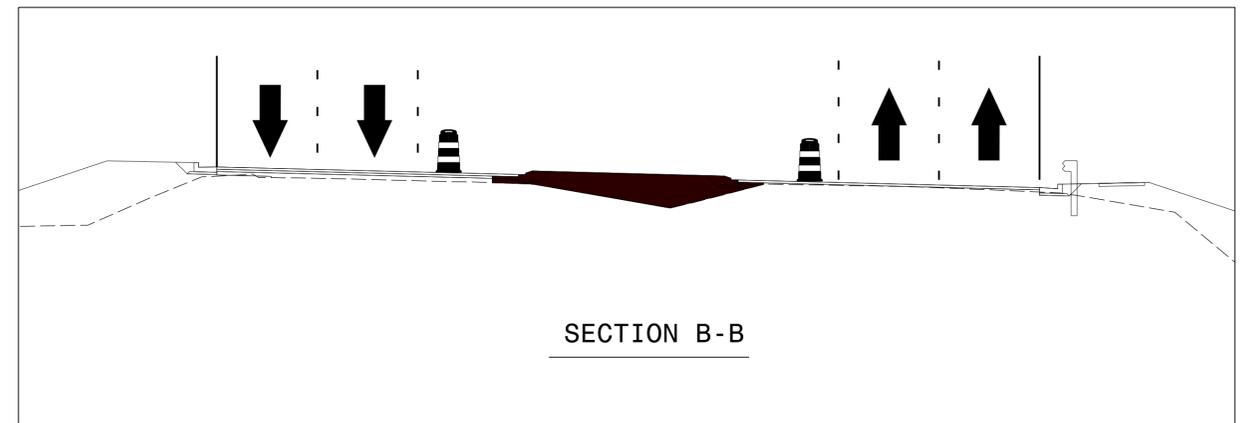
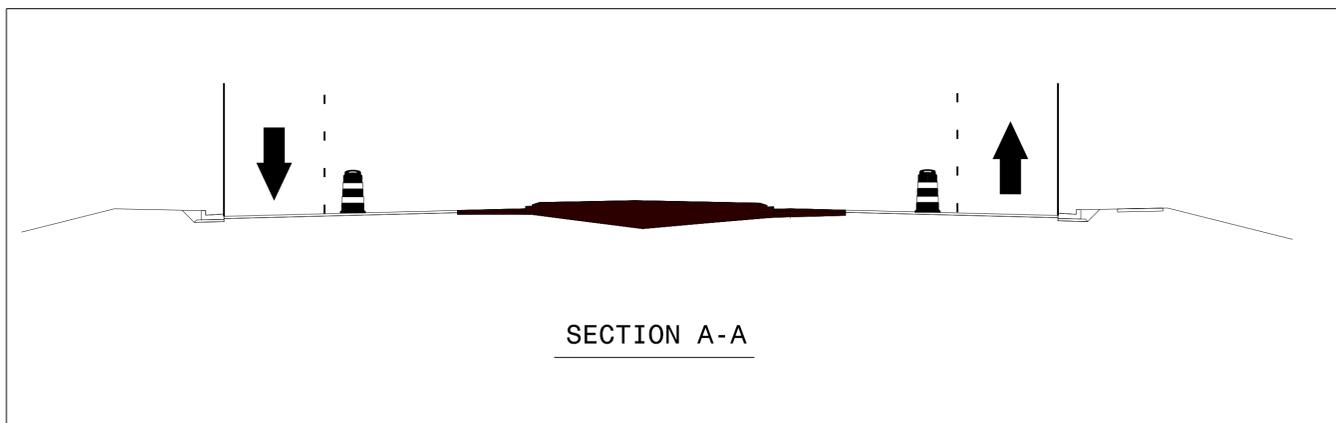
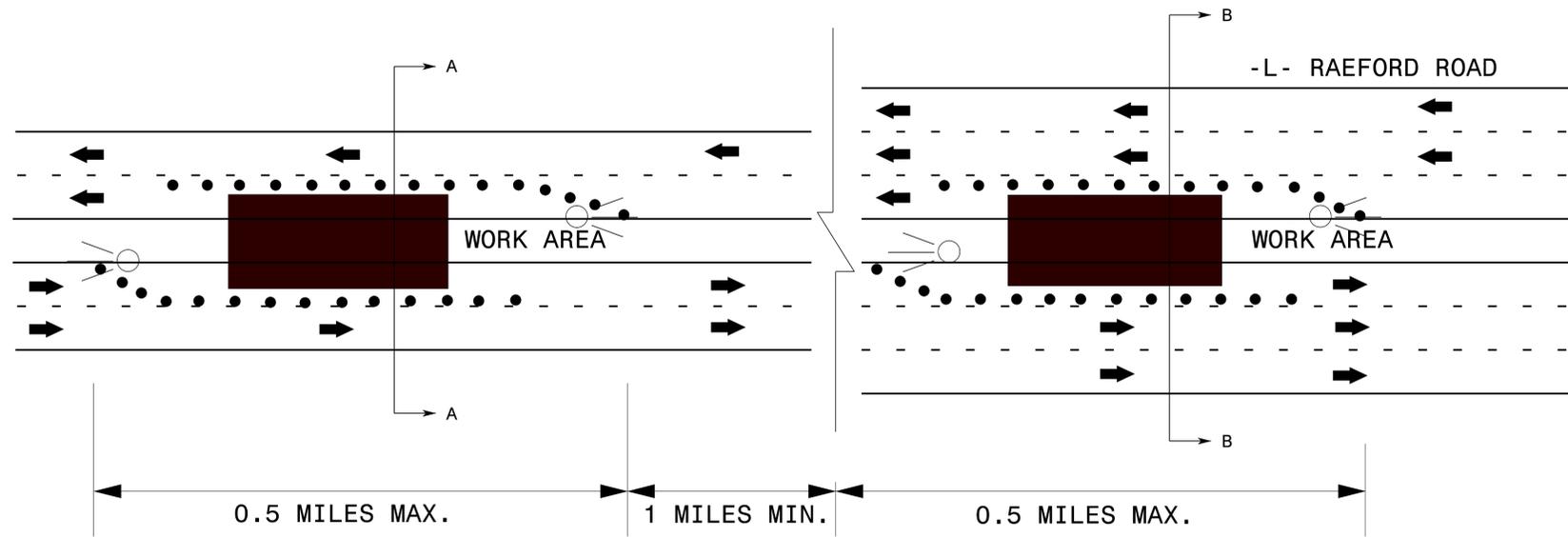
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**PHASE I & II
OUTSIDE WIDENING
INTERSECTION CONSTRUCTION
TYPICAL DRAWING**



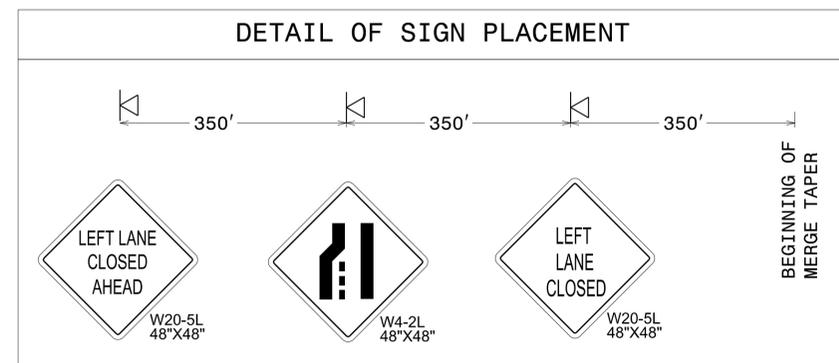
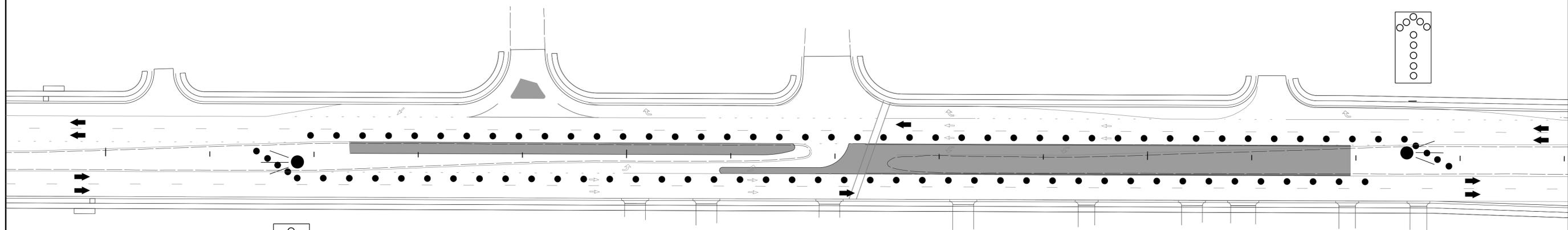
- NOTES**
1. INSTALL ALL LANE CLOSURES USING RSD 1101.02 (SHEET 3 AND 7 OF 15)
 2. MAXIMUM LENGTH OF EACH LANE CLOSURE IS 0.5 MILES
 3. MINIMUM LENGTH BETWEEN LANE CLOSURES IS 1 MILES
 4. MAXIMUM NUMBER OF LANE CLOSURES IN ONE DIRECTION IS 2
 5. CONSTRUCT PROPOSED DRAINAGE, PAVEMENT, CURB & GUTTER AND/OR MONOLITHIC ISLANDS IN EACH WORK AREA

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| PROJ. REFERENCE NO. | SHEET NO. |
| U-4405A | TMP-9 |



NOTES

- INSTALL ALL LANE CLOSURES USING RSD 1101.02 SHEET 7 OF 14
- USE A MERGE TAPER OF 540' BASED ON RSD 1101.11 SHEET 1 OF 4

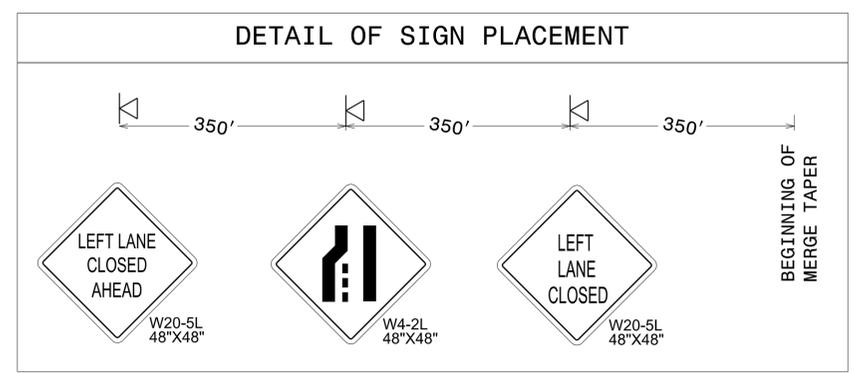
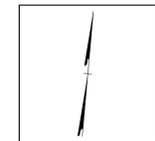
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**PHASE III
 MEDIAN CONSTRUCTION
 TYPICAL DRAWING**

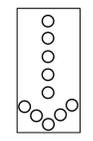
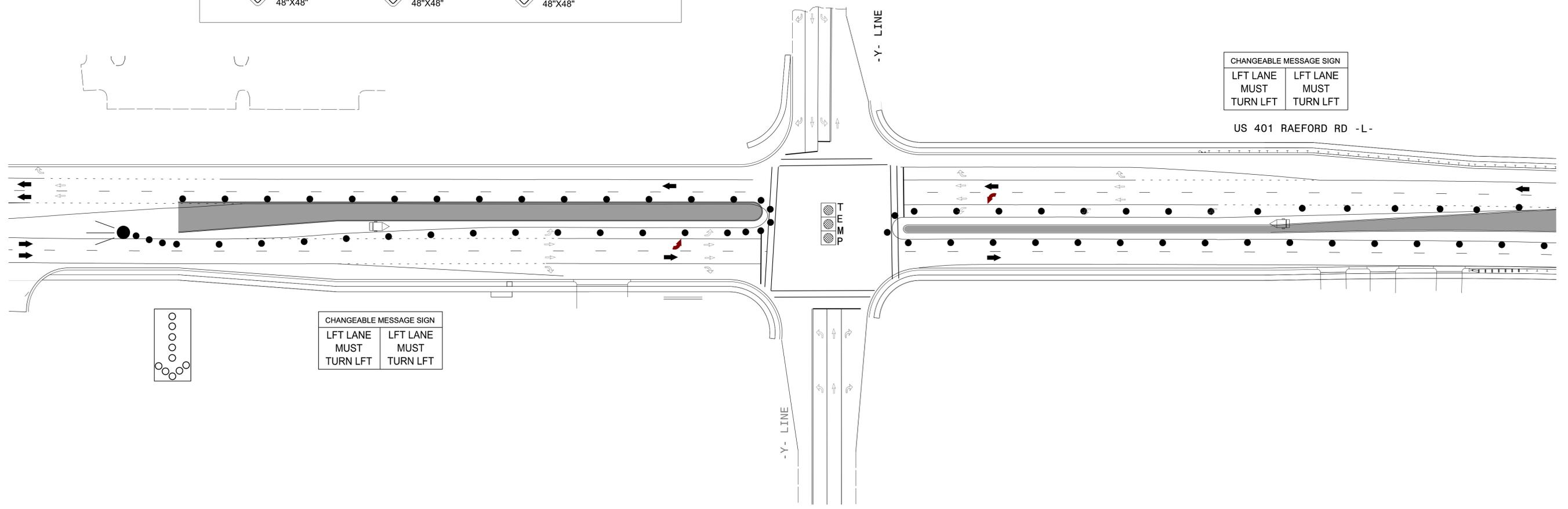


NOTES

- INSTALL ALL LANE CLOSURES USING RSD 1101.02 SHEET 7 OF 14
- USE A MERGE TAPER OF 540' BASED ON RSD 1101.11 SHEET 1 OF 4

| CHANGEABLE MESSAGE SIGN | |
|------------------------------|------------------------------|
| LFT LANE MUST TURN LFT | LFT LANE MUST TURN LFT |

US 401 RAEFORD RD -L-



| CHANGEABLE MESSAGE SIGN | |
|------------------------------|------------------------------|
| LFT LANE MUST TURN LFT | LFT LANE MUST TURN LFT |

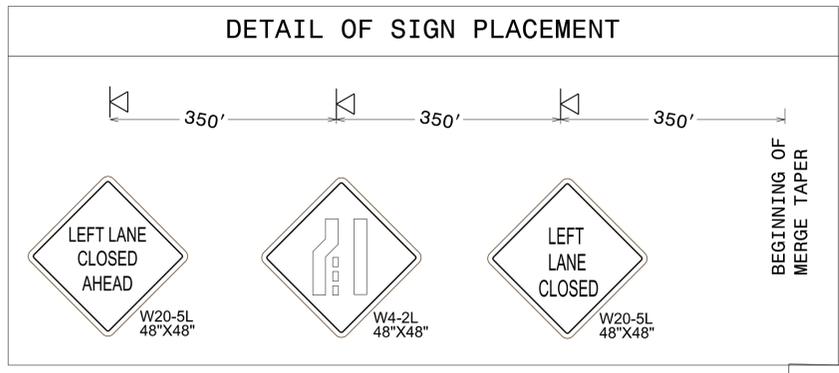
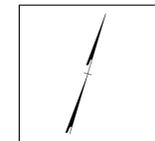
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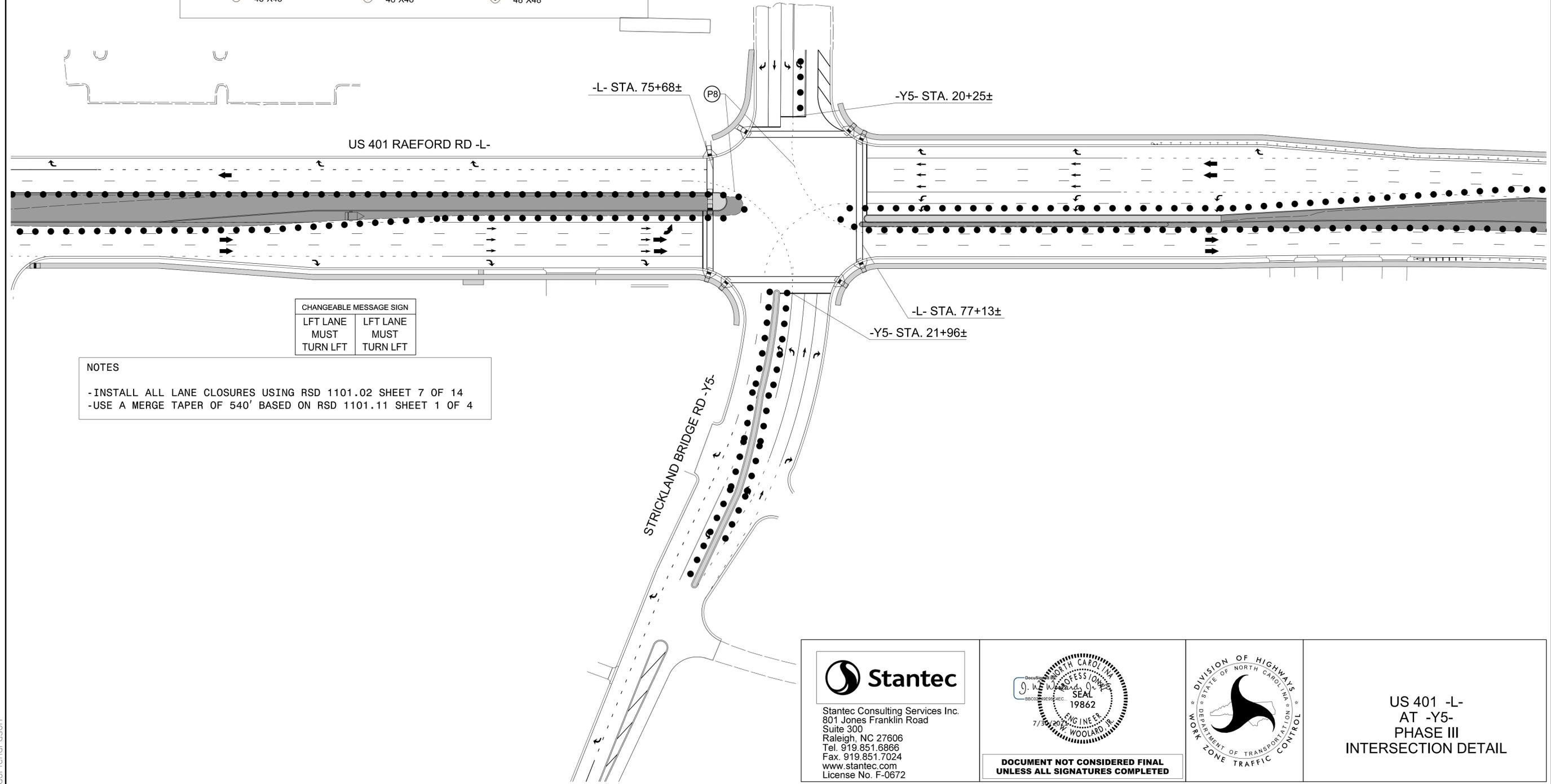
**PHASE III
MEDIAN INTERSECTION
CONSTRUCTION TYPICAL
DRAWING**



TEMPORARY PAVEMENT MARKING SCHEDULE

| SYMBOL | DESCRIPTION |
|--------|----------------------------------|
| P8 | 4" WHITE 2FT-6FT MINISKIP, PAINT |

NOTE: THE ONLY TEMPORARY PAVEMENT MARKINGS ARE THE MINI-SKIPS FOR LANE CONTINUITY.



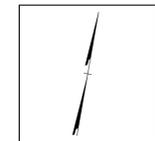
| CHANGEABLE MESSAGE SIGN | |
|-------------------------|------------------------|
| LFT LANE MUST TURN LFT | LFT LANE MUST TURN LFT |

NOTES

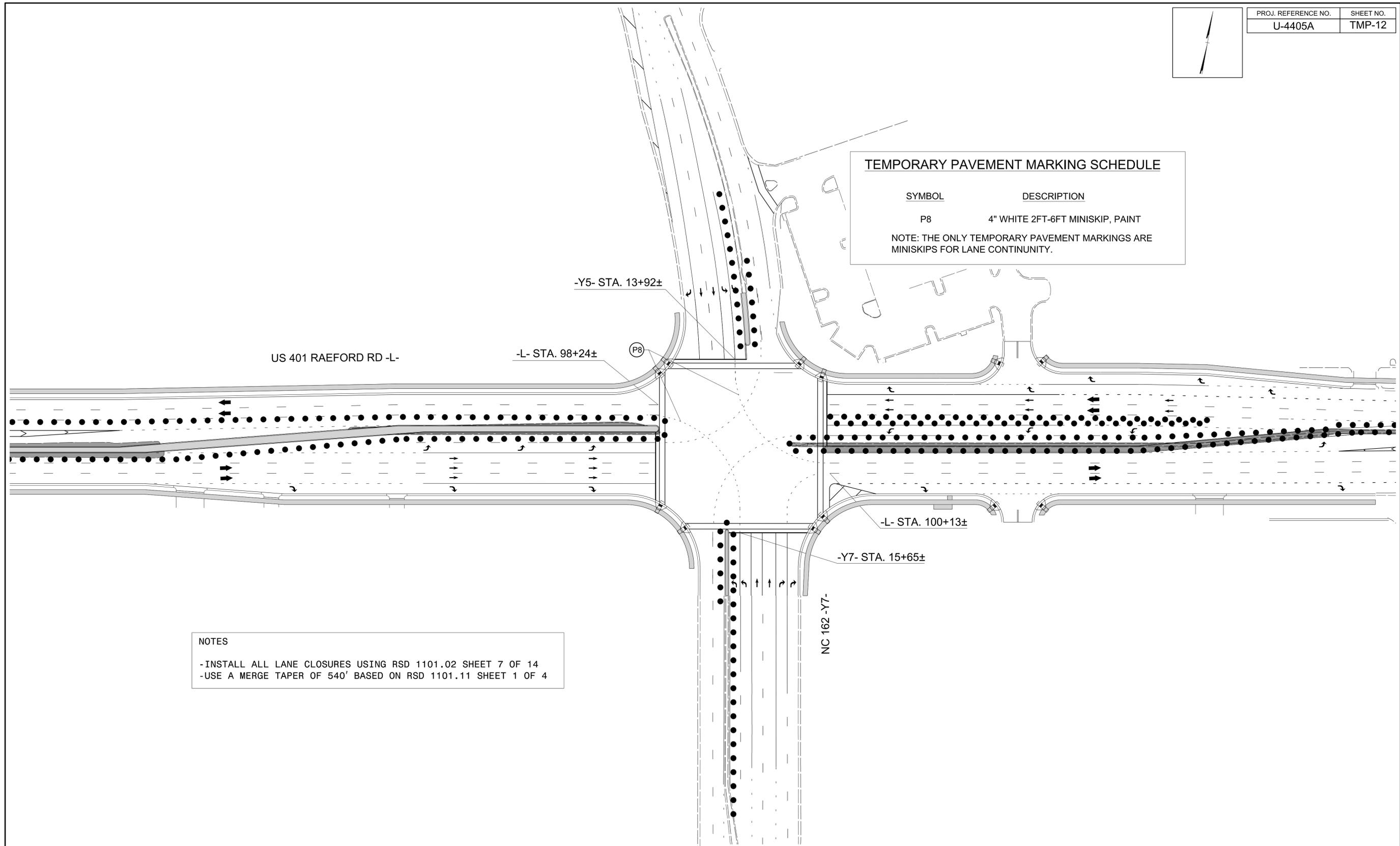
- INSTALL ALL LANE CLOSURES USING RSD 1101.02 SHEET 7 OF 14
- USE A MERGE TAPER OF 540' BASED ON RSD 1101.11 SHEET 1 OF 4

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| TEMPORARY PAVEMENT MARKING SCHEDULE | |
|---|----------------------------------|
| SYMBOL | DESCRIPTION |
| P8 | 4" WHITE 2FT-6FT MINISKIP, PAINT |
| NOTE: THE ONLY TEMPORARY PAVEMENT MARKINGS ARE MINISKIPS FOR LANE CONTINUITY. | |



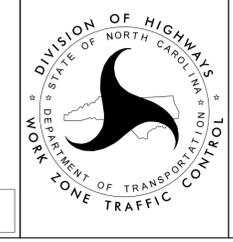
NOTES

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- USE A MERGE TAPER OF 540' BASED ON RSD 1101.11 SHEET 1 OF 4

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 AT -Y7-
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