# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO. R-4434 TCP-1

# PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

# EDGECOMBE COUNTY

### ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	<u>TITLE</u>
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)

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### SHEET NO.

### TITLE

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TCP-4, TCP-4A PHASE I

PHASE II

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TCP-6

WORK ZONE WARNING SIGNS

PAVEMENT MARKING SCHEDULE

PM-2 THRU PM-5 FINAL PAVEMENT MARKING PLAN

# **LEGEND**

### **GENERAL**

DIRECTION OF TRAFFIC FLOW

NORTH ARROW

PROPOSED PVMT. ----- EXIST. PVMT.

**WORK AREA** 

REMOVAL OF EXISTING PAVEMENT

### TRAFFIC CONTROL DEVICES

TYPE III BARRICADE

CONE

SKINNY DRUM

FLASHING ARROW PANEL (TYPE C)

— STATIONARY SIGN

PORTABLE SIGN

STATIONARY OR PORTABLE SIGN

WARNING FLAGS

-~ CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

- FLAGGER

### PAVEMENT MARKINGS

PAVEMENT MARKING SYMBOLS

APPROVED; PLAN PREPARED BY: N.C.D.O.T. TRAFFIC CONTROL, MARKING & DATE: 8 MAY Uh **DELINEATION UNIT** S. Bourne, PE TRAFFIC CONTROL ENGINEER L. Gettier, PE TRAFFIC CONTROL PROJECT ENGINEER SEAL TRAFFIC CONTROL PROJECT DESIGN ENGINEER Ken Broadwell TRAFFIC CONTROL DESIGN ENGINEER

# PROJECT NOTES

PROJ. REFERENCE NO. SHEET NO.
R-4434
TCP-2

MARKER

### GENERAL NOTES

ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

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.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) 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.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 40 FT (12m) 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.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT (1.5m) 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 (3m) 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.

- D) 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.
- E) DO NOT WORK SIMULTANEOUSLY, ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION, ON A TWO-LANE, TWO-WAY ROAD.
- F) DO NOT PERFORM WORK INVOLVING HEAVY EQUIPMENT WITHIN 15 FT (5m) OF THE EDGE OF TRAVELWAY WHEN WORK IS BEING PERFORMED BEHIND A LANE CLOSURE ON THE OPPOSITE SIDE OF THE TRAVELWAY.
- G) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

H) 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 A DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES (50mm) ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES (75mm) 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.

I) DO NOT EXCEED A DIFFERENCE OF 1.5 INCHES (40mm) IN ELEVATION
BETWEEN OPEN LANES OF TRAFFIC. INSTALL ADVANCE WARNING "UNEVEN
LANES" SIGNS (W8-11) 500 FT (150m) IN ADVANCE AND A MINIMUM OF ONCE
EVERY MILE THROUGHOUT THE UNEVEN AREA.

#### TRAFFIC PATTERN ALTERATIONS

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

#### SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 100 FT (31m) FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE WARNING SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE DEPARTMENT.

- L) PROVIDE PERMANENT SIGNING.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

#### TRAFFIC CONTROL DEVICES

- N) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT (3m) ON-CENTER IN RADII, AND 3 FT (1m) OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2
  ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY. STAGGER OR
  OVERLAP BARRICADES TO ALLOW FOR INGRESS OR EGRESS.
- P) PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT (150m) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.

#### PAVEMENT MARKINGS AND MARKERS

ROAD NAME

Q) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME MARKING MARKER

ALL ROADS THERMOPLASTIC PERMANENT RAISED

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

ALL ROADS PAINT TEMPORARY RAISED

MARKING

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

T) REPLACE ANY PAVEMENT MARKINGS THAT HAVE BEEN DAMAGED BY THE END OF EACH DAY'S OPERATION.

U) REMOVE ALL CONFLICTING PAVEMENT MARKINGS BY THE END OF EACH DAY'S OPERATIONS

V) PLACE AT LEAST TWO APPLICATIONS OF PAINT ON NEW ASPHALT WITH TEMPORARY TRAFFIC PATTERNS WHICH WILL REMAIN IN PLACE OVER THREE (3) MONTHS. PLACE ADDITIONAL APPLICATIONS OF PAINT UPON SUFFICIENT DRYING TIME, AS DETERMINED BY THE ENGINEER.

#### TEMPORARY/FINAL SIGNALS

W) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

#### MISCELLANEOUS

X) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH INTERSECTIONS.

SEAL SEAL 8973

# PROJECT NOTES

DATE: APR. 2006
DWG. BY: KPB
DESIGN BY: KPB
REVIEWED BY: JWG



REVISIONS

roadwell AT WZTC224240

PROJ. REFERENCE NO. SHEET NO.
R-4434
TCP-3

# PHASE I

STEP 1: - CONTRACTOR SHALL PLACE ADVANCE WORK ZONE WARNING SIGNS ALONG EXISTING NC 122 (-Y-), NC 111 (-Y-) AND US 258 (-Y1-) LINES AS SHOWN ON SHEET TCP-6.

STEP 2: - THE FOLLOWING NOTES ARE APPLICABLE FOR PHASE I, STEP 2.

NOTE: CONTRACTOR SHALL PLACE TRAFFIC BACK INTO THE EXISTING PATTERN AT THE END OF EACH WORK PERIOD.

NOTE: CONTRACTOR SHALL PLACE DRUMS ALONG LINES -L- AND -Y- TO KEEP PROPOSED WIDENING CLOSED TO TRAFFIC.

NOTE: CONTRACTOR SHALL PLACE TYPE III BARRICADES WITH "ROAD CLOSED" (SEE SHEET TCP-4 FOR LOCATIONS).

- CONTRACTOR SHALL, USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 9:

-- CONSTRUCT THE PROPOSED -L- (INCLUDING THE PROPOSED DRAINAGE) FROM STA 17+75+/- -L- TO STA. 84+00+/- -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND DRIVEWAY TO TARBORO COMMONS, LLC (SEE CONSTRUCTION PLANS AND SHEET TCP-4).

-- PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) AND TEMPORARY RAISED PAVEMENT MARKERS, ON NEWLY COMPLETED PROPOSED PAVEMENT OF SR 1344 (-L-) FROM STA. 17+75 +/- -L- TO STA. 84+00 +/- -L- (SEE SHEETS TCP-5).

-- BEGIN CONSTRUCTION OF THE PROPOSED WIDENING UTILIZING PAVING & WEDGING OPERATIONS ACROSS EXISTING PAVEMENT AS REQUIRED OF SR 1344 (-L-), NC 111/122 (-Y-) AND PROPOSED DRIVEWAYS, INCLUDING PROPOSED DRAINAGE & CURB & GUTTER, UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS AND SHEETS TCP-4 & TCP-4A) FROM:

STA. 92+50 +/- -L- TO END OF PROJECT STA. 9+99.11 -Y- TO STA. 26+39.15 -Y-

-- BEGIN INSTALLATION OF PROPOSED SIGNALS AT THE INTERSECTION OF -L- AND NC 111/122 (-Y-) AND -L- AND US 258 (-Y1-).

# PHASE II

NOTE: PRIOR OF CLOSING -L- BETWEEN STA. 84+00+/- -L- TO STA. 92+50+/- -L-, THE ENGINEER WILL NOTIFY TARBORO COMMONS, LLC OF THE PROPOSED ROAD CLOSURE. ACCESS TO THEIR BUSINESS WILL BE VIA NC 111/122 TO THEIR DRIVEWAY.

STEP 1: - CONTRACTOR SHALL, PLACE TYPE III BARRICADES AT STA. 84+00+/AND STA. 92+00+/- -L- AND DRUMS TO CLOSE EXISTING SR 1344

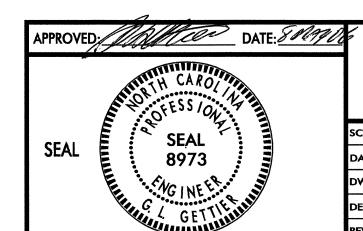
(-L-) TO TRAFFIC AND CONSTRUCT -L- FROM STA. 84+00+/- -L- TO
STA 92+50+/- -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF
SURFACE COURSE (SEE CONSTRUCTION PLANS AND SHEET TCP-5).

- CONTRACTOR SHALL, USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 9 COMPLETE CONSTRUCTION OF PROPOSED SR 1344 (-L-) FROM STA. 92+50+/- -L- TO END OF PROJECT AND NC 111/122 (-Y-) FROM STA. 9+99.11 -Y- TO STA. 26+39.15 -Y- BEGUN IN PHASE I, STEP 2 .

- COMPLETE INSTALLATION OF PROPOSED SIGNALS AT THE INTERSECTION OF -L- AND NC 111/122 (-Y-) AND -L- AND US 258 (-Y1-) BEGUN IN PHASE 1, STEP 2.

STEP 2: - CONTRACTOR SHALL, USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 9, PLACE THE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKINGS (THERMOPLASTIC) AND PERMANENT RAISED PAVEMENT MARKERS ON SR 1344 (-L-) FROM STA. 17+75+/- -L- TO END OF PROJECT AND ON NC 111/122 (-Y-) FROM STA. 9+99.11 -Y- TO STA. 26+39.15 -Y- (SEE CONSTRUCTION PLANS AND SHEETS PM-1 THRU PM-5).

STEP 3: - REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN SR 1344 (-L-) AND NC 111/122 (-Y-) TO THE FINAL TRAFFIC PATTERN.



### PROJECT PHASING

DATE: APR 2006

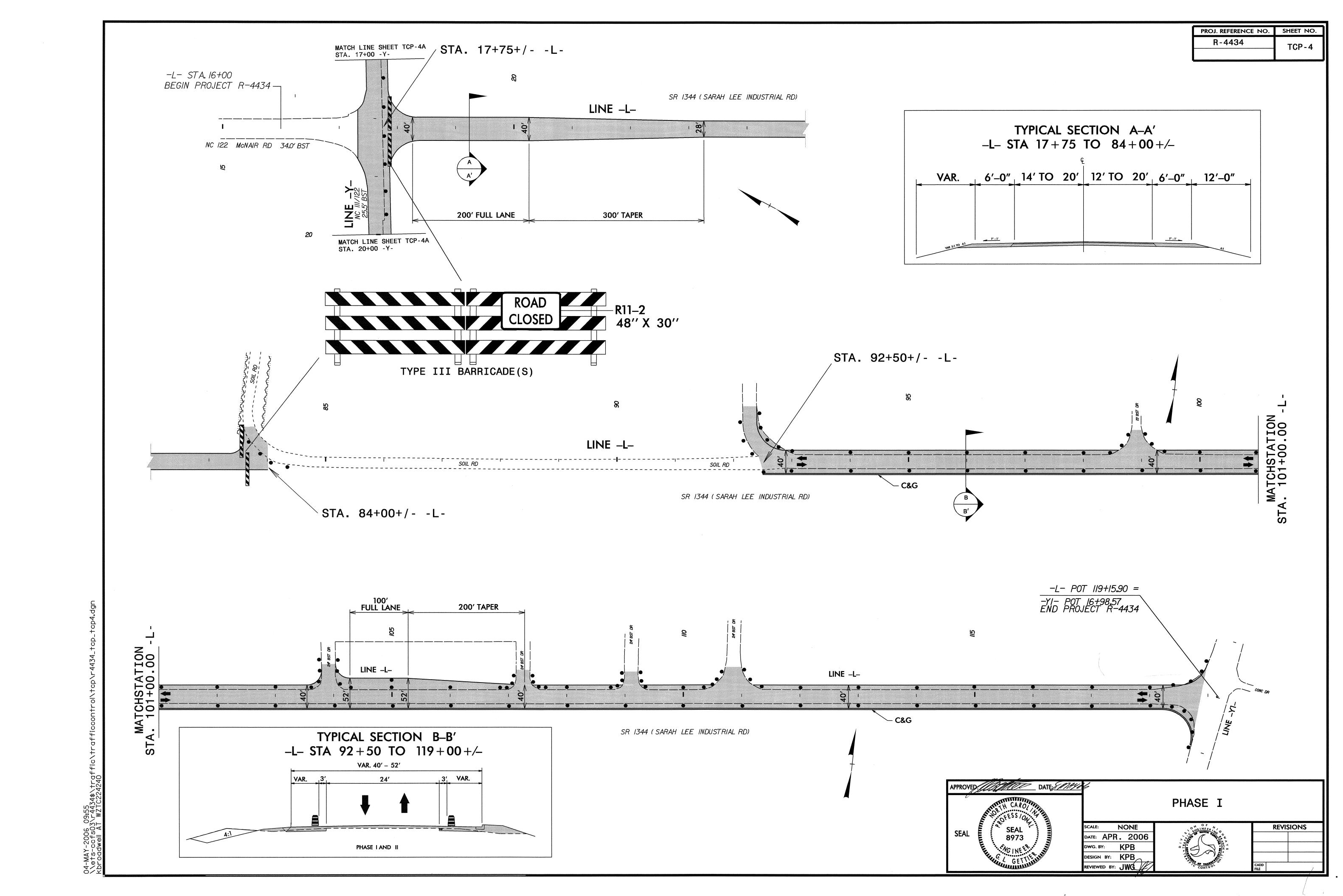
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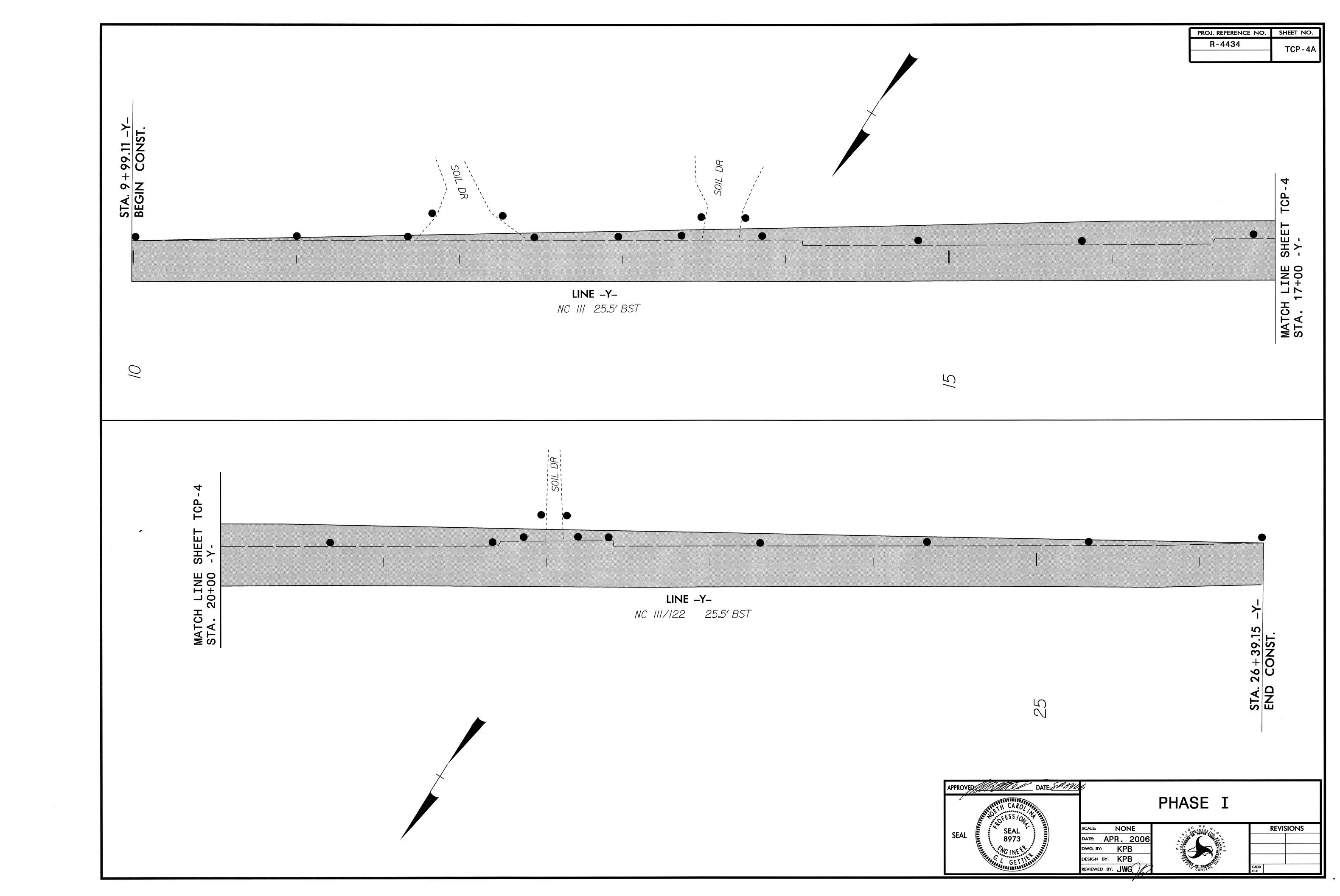
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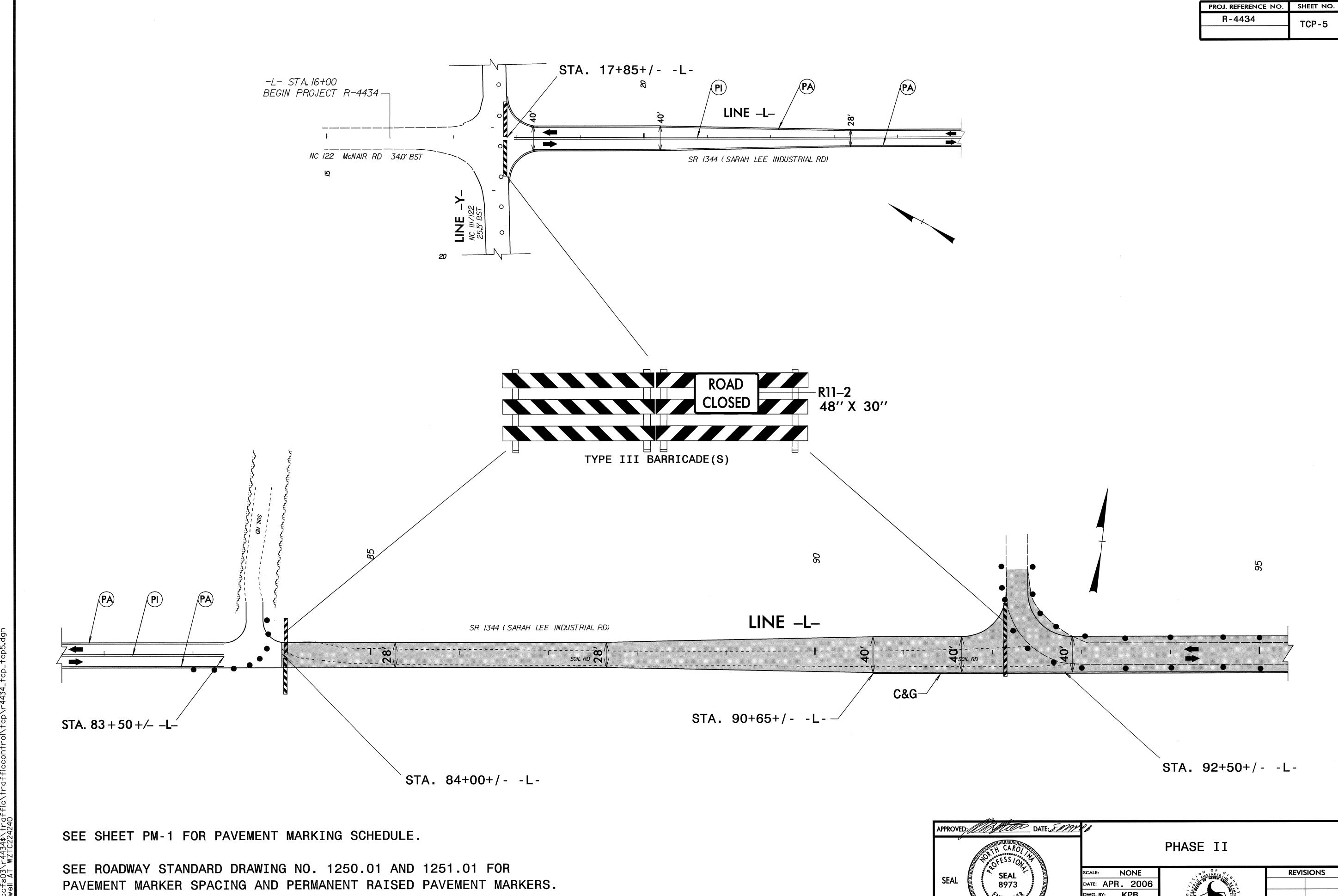
REVIEWED BY: JWG



REVISIONS





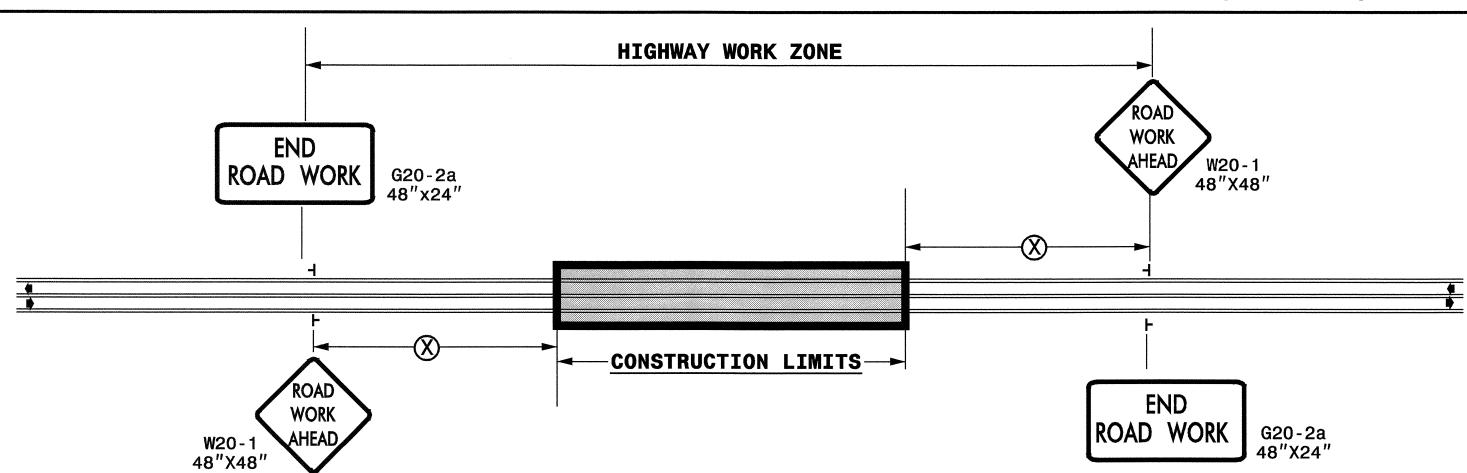


DESIGN BY: KPB

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PROJ. REFERENCE NO. R-4434 TCP-6

TWO-WAY UNDIVIDED \*\* (L-LINES)



	RECOMMENDED MINIMUM SIGN SPACING
POSTED SPEED LIMIT (M.P.H.)	⊗
≤ 50	500′
≥ 55	1000′

TRANSPORTATION **HIGHWAYS** 0F DIVISION 0F DEPT

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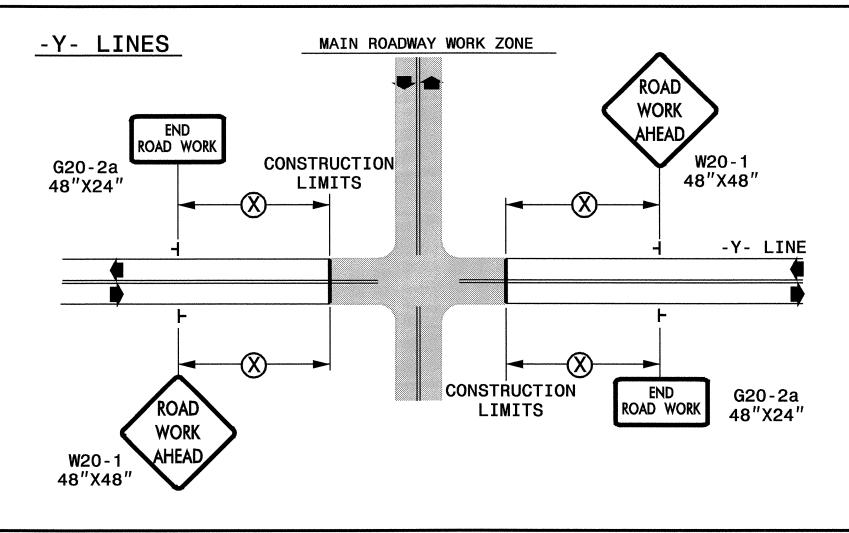
NORTH

**OF** 

Z

RALEIGH,

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



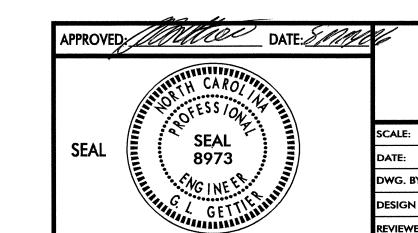
### **GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.



├ STATIONARY SIGN ■ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1



	DETAIL	_ DRAV	VING I	FOR	TWO-V	VAY
	UNDIVID	ED A	ND UR	BAN	FREE	WAYS
	<b>ADVANCED</b>	<b>WORK</b>	ZONE	WAR	NING	SIGNS
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