STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. SHEET NO. TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

GUILFORD COUNTY

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"ROADWAY DESIGN 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.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES, TYPE III
1150.01	FLAGGERS
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

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TCP-4 AND TCP-5	PHASE I DETAILS
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TCP-8	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS
PM-1	PAVEMENT MARKING SCHEDULE AND PAVEMENT MARKING PLAN

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW

NORTH ARROW

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

PROPOSED CONSTRUCTION

REMOVAL OF EXISTING PAVEMENT AND BRIDGE

TRAFFIC CONTROL DEVICES

T TYPE I BARRICADE

TYPE III BARRICADE

▲ CONE

DRUM

FLASHING ARROW PANEL (TYPE C)

TYPE 'B' WARNING LIGHT

- STATIONARY SIGN

PORTABLE SIGN

STATIONARY OR PORTABLE SIGN

WARNING FLAGS

CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

FLAGGER

PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

♦ YELLOW/YELLOW PAVEMENT MARKER

CRYSTAL/RED PAVEMENT MARKER

PAVEMENT MARKING SYMBOLS

PLAN REVIEWED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT	DATE: 10-17-07	PLAN PREPARED FOR N.C.D.O.T. BY:	KO & ASSOCIATES, P.C. Consulting Engineers 1011 SCHAUB DR., SUITE #202 RALEIGH, N.C. 27606
J. S. BOURNE, P.E. WORK ZONE TRAFFIC CONTROL ENGINEER TRAFFIC CONTROL PROJECT ENGINEER TRAFFIC CONTROL PROJ. DESIGN ENGINEER TRAFFIC CONTROL DESIGN ENGINEER TRAFFIC CONTROL DESIGN TECHNICIAN	OFESSION A MILE	M. T. RZEPKA, P.E. B. L. MARIOTTE B. L. MARIOTTE	PROJECT ENGINEER DESIGN ENGINEER DESIGN TECHNICIAN

TIP PROJECT:

B-4130 SHEET NO.

Plans prepared by:

Plans prepared by: KO & ASSOCIATES, P.C. Consulting Engineers 1011 SCHAUB DR., SUITE #202 RALEIGH, N.C. 27606 For Division of Highways

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.

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 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.
- C) 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.
- 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 WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- F) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON SR 3045. MOUNT HOPE CHURCH RD..
- 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 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 WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

I) 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

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 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 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 ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- P) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

CHURCH RD.

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

ROAD NAME MARKING MARKER

1. SR 3045, MOUNT HOPE PAINT PERMANENT RAISED

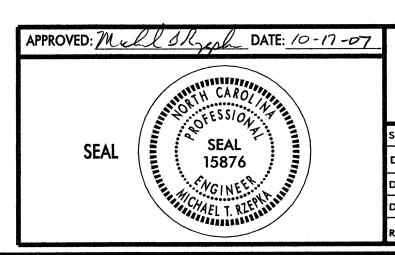
R) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME		MARKING	MARKER
1.	SR 3045, MOUNT HOPE	PAINT	TEMPORARY RAISED

- S) PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.
- T) 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.
- U) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- V) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

W) MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.

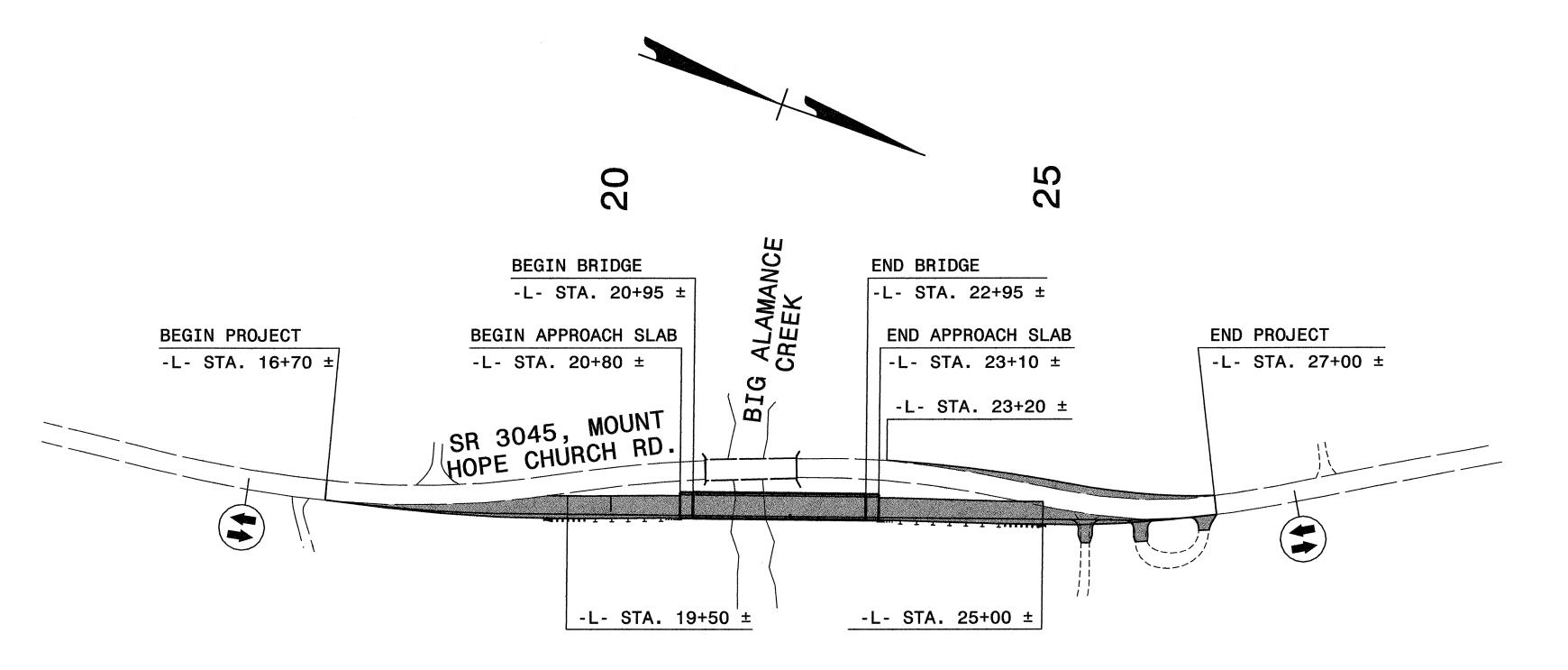


PROJECT NOTES

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TCP-3



PHASE I

- STEP 1: INSTALL WORK ZONE WARNING SIGNS (SEE SHEET TCP-8).
 - BEGIN CONSTRUCTION OF PROPOSED STRUCTURE FROM -L- STA. 20+80 ± TO -L-STA. 23+10 ± (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9) (SEE SHEET TCP-4 AND STRUCTURE PLANS).
- STEP 2: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9, CONSTRUCT TEMPORARY WIDENING UP TO THE EXISTING EDGE AND ELEVATION ON THE LEFT SIDE OF EXISTING SR 3045, MOUNT HOPE CHURCH RD. FROM -L- STA. 23+20 ± TO -L- STA. 27+00 ± (SEE SHEET TCP-4 AND SECTION A-A).

WORKING IN A CONTINUOUS MANNER COMPLETE THE FOLLOWING WORK IN PHASE 1, STEP 3 USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9.

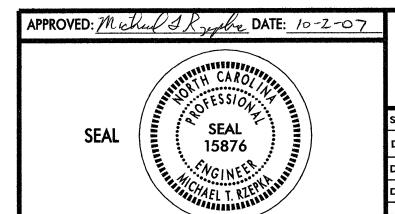
- STEP 3: PLACE CHANGEABLE MESSAGE SIGNS (CMS's) AT EACH END OF THE PROJECT (SEE SHEET TCP-5).
 - PLACE TRAFFIC IN A ONE-LANE TWO-WAY PATTERN IN THE EXISTING NORTHBOUND LANE OF SR 3045, MOUNT HOPE CHURCH RD.. PLACE WHITE EDGELINE AND YELLOW DOUBLE CENTERLINE (PAINT) AND MARKERS (TEMPORARY RAISED) IN THE TEMPORARY 10' (FOOT) SOUTHBOUND LANE (SEE SHEET TCP-5 AND SECTION B-B).
 - PLACE TRAFFIC IN A ONE-LANE TWO-WAY PATTERN IN THE TEMPORARY SOUTHBOUND LANE OF SR 3045, MOUNT HOPE CHURCH RD. PLACE WHITE EDGELINE (PAINT) IN THE TEMPORARY 10' (FOOT) NORTHBOUND LANE.
 - PLACE TRAFFIC IN THE TEMPORARY TWO-LANE TWO-WAY PATTERN (SEE SHEET TCP-5 AND SECTION B-B)

COMPLETE THE FOLLOWING WORK IN PHASE I STEP 4 USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9.

- STEP 4: CONSTRUCT 26' WIDTH OF PROPOSED -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA. 19+50 ± TO -L- STA. 25+00 ±, INCLUDING GUARDRAILS RIGHT OF PROPOSED -L- (SEE SHEET TCP-5, SECTION B-B AND ROADWAY PLANS).
 - CONSTRUCT PROPOSED -L- UP TO THE EXISTING EDGE AND ELEVATION OF SR 3045, MOUNT HOPE CHURCH RD. AT THE FOLLOWING LOCATIONS INCLUDING PROPOSED DRIVEWAYS RIGHT OF -L- (SEE SHEET TCP-5 AND ROADWAY PLANS):
 - -L- STA. 16+70 ± TO -L- STA. 19+50 ± -L- STA. 25+00 ± TO -L- STA. 27+00 ±
 - COMPLETE CONSTRUCTION OF PROPOSED STRUCTURE FROM -L- STA. 20+80 ± TO -L- STA. 23+10 ± (SEE SHEET TCP-5 AND STRUCTURE PLANS).
 - PLACE PORTABLE CONCRETE BARRIER (ANCHORED) LEFT OF -L- FROM -L- STA. 20+00 ± TO -L- STA. 24+50 ±, KEEPING ENDS PROTECTED WITH EITHER T.M.I.A's. OR TEMPORARY CRASH CUSHIONS. (SEE SHEET TCP-5).

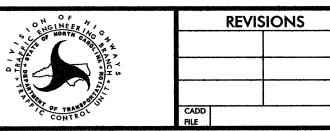
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PROPOSED CONSTRUCTION



PHASE I OVERVIEW AND PHASING

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TCP-4

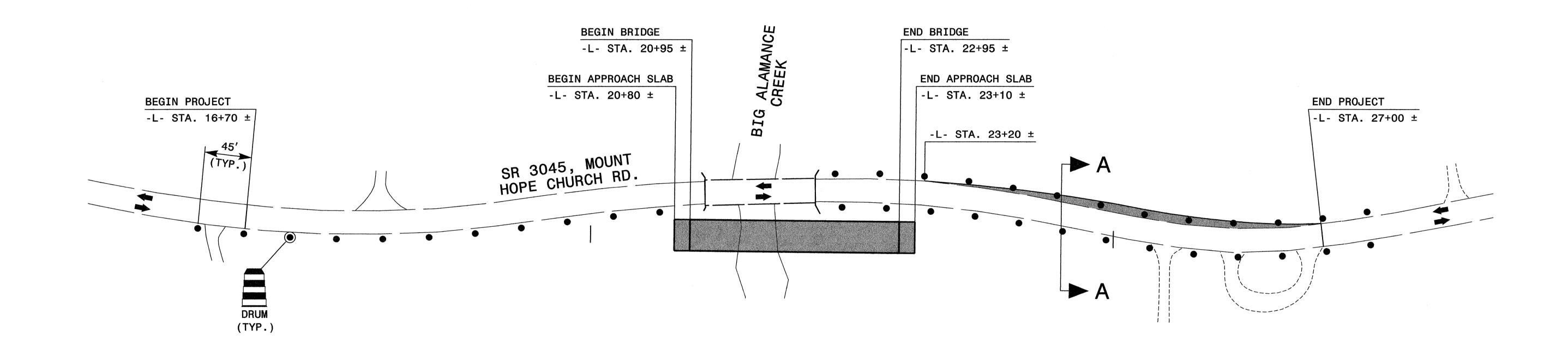
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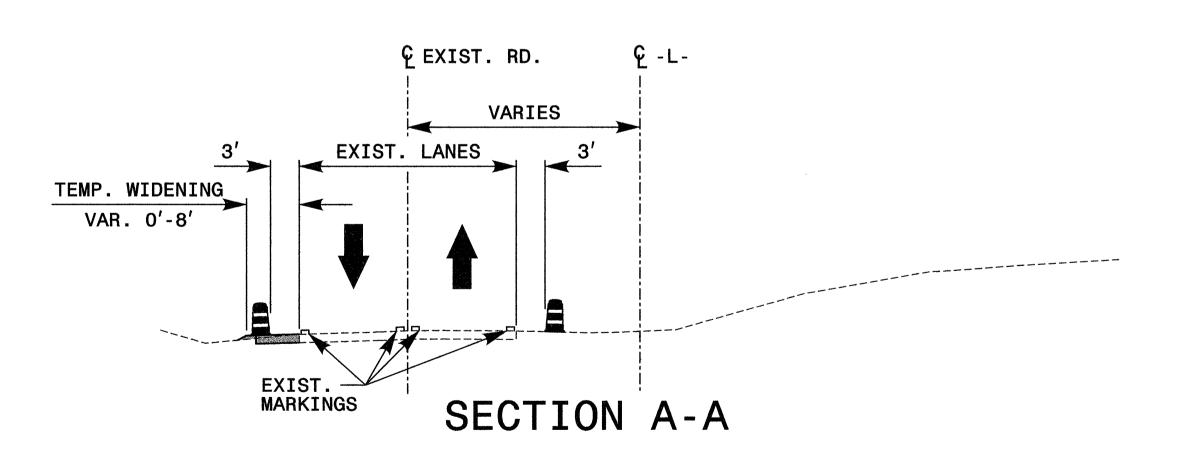
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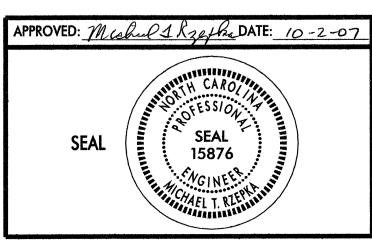
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LEGEND

PROPOSED CONSTRUCTION



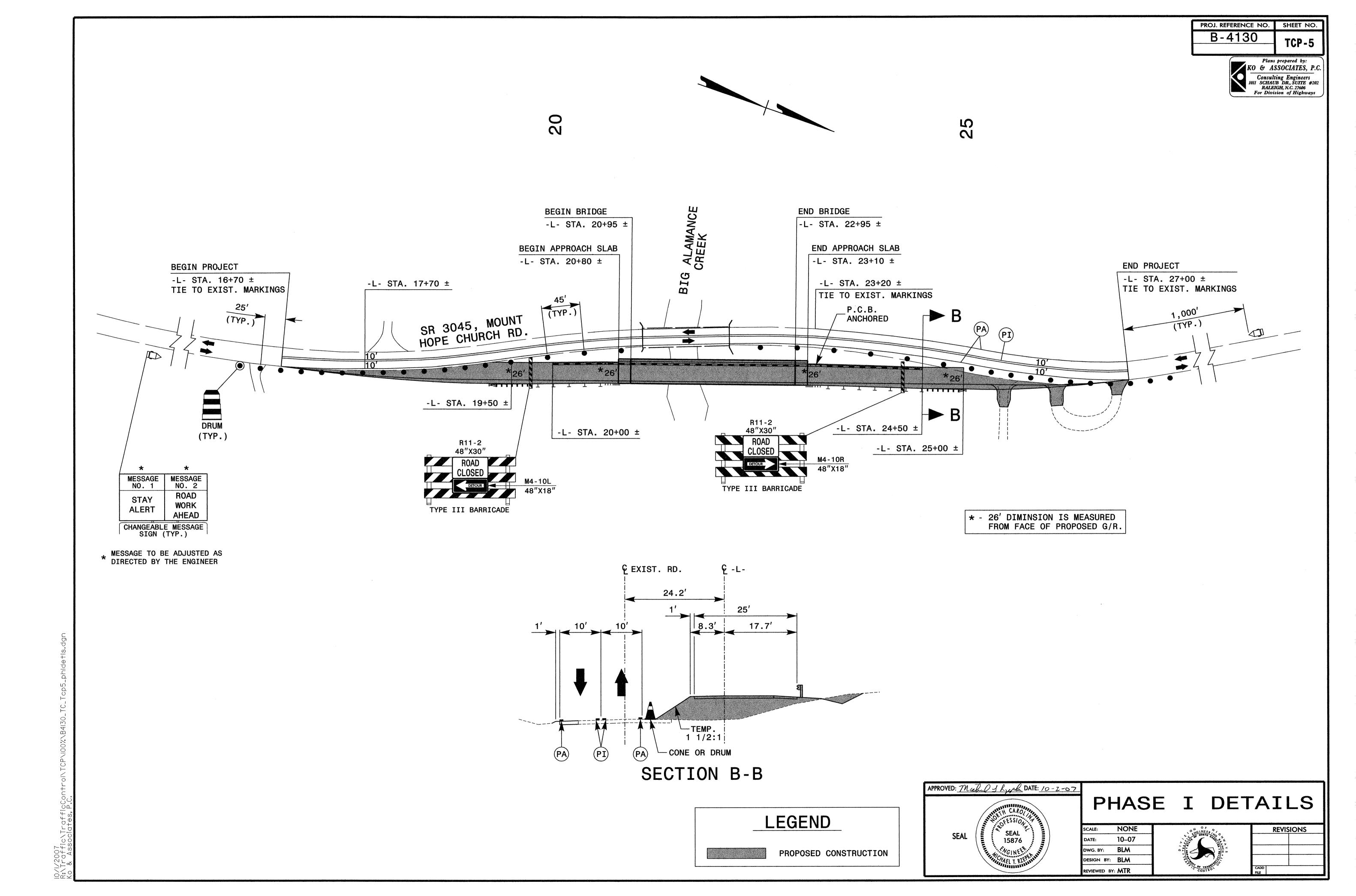
PHASE I DETAILS

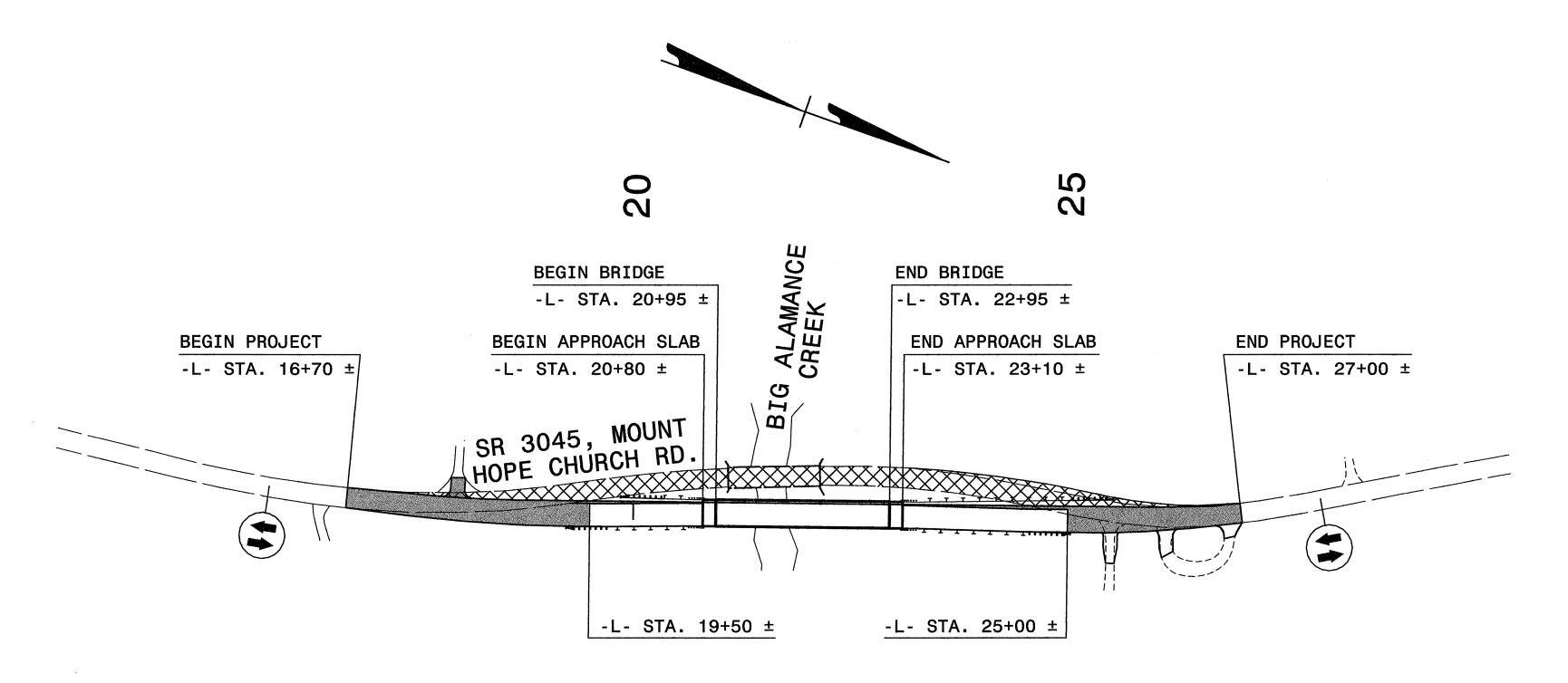
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PHASE II

USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 AND WORKING IN A CONTINUOUS MANNER COMPLETE THE FOLLOWING WORK IN PHASE II STEP 1.

- STEP 1: PLACE TRAFFIC IN A ONE-LANE TWO-WAY PATTERN IN THE SOUTHBOUND LANE OF EXISTING SR 3045, MOUNT HOPE CHURCH RD.. PAVE / WEDGE PROPOSED NORTHBOUND LANE OF PROPOSED -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, AT THE FOLLOWING LOCATIONS (SEE SHEET TCP-7 AND ROADWAY PLANS):
 - -L- STA. 16+70 ± TO -L- STA. 19+50 ±
 - -L- STA. 25+00 ± TO -L- STA. 27+00 ±
 - PLACE PORTABLE CONCRETE BARRIER (ANCHORED) LEFT OF -L- AT THE FOLLOWING LOCATIONS, KEEPING ENDS PROTECTED BY TEMPORARY CRASH CUSHIONS (SEE SHEET TCP-7):
 - -L- STA. 19+50 ± TO -L- STA. 20+00 ±
 - -L- STA. 24+50 ± TO -L- STA. 26+00 ±
 - PLACE WHITE EDGELINE AND YELLOW DOUBLE CENTERLINE (PAINT) AND PAVEMENT MARKERS (TEMPORARY RAISED) RIGHT OF -L- FROM -L- STA. 16+70 ± TO -L- STA. 27+00 ±. PLACE TRAFFIC IN A ONE-LANE TWO-WAY PATTERN IN NORTHBOUND LANE OF PROPOSED -L-. PAVE / WEDGE THE PROPOSED SOUTHBOUND LANE OF PROPOSED -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE , AT THE FOLLOWING LOCATIONS (SEE SHEET TCP-7, SECTION C-C AND ROADWAY PLANS):
 - -L- STA. 16+70 ± TO -L- STA. 19+50 ±.
 - -L- STA. 25+00 ± TO -L- STA. 27+00 ±
 - PLACE WHITE EDGELINE (PAINT) LEFT OF -L- FROM -L- STA. 16+70 ± TO -L- STA. 27+00 ± AND PLACE TRAFFIC IN TEMPORARY TWO-LANE TWO-WAY PATTERN ON -L- FROM -L- STA. 16+70 ± TO -L- STA. 27+00 ± (SEE SHEET TCP-7 AND SECTION C-C).

- STEP 2: AWAY FROM TRAFFIC REMOVE EXISTING SR 3045, MOUNT HOPE CHURCH RD. STRUCTURE (SEE SHEET TCP-9).
 - USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9, REMOVE EXISTING SR 3045, MOUNT HOPE CHURCH RD. FROM STA. 16+70 ± TO STA. 27+00 ± (SEE SHEET TCP-7).

USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9, COMPLETE THE FOLLOWING WORK IN PHASE II STEPS 3 AND 4.

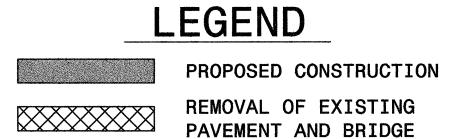
- STEP 3: CONSTRUCT GUARDRAILS AND PROPOSED SHOULDER LEFT OF -L- (SEE SHEET TCP-7 AND ROADWAY PLANS).
 - REMOVE PORTABLE CONCRETE BARRIER

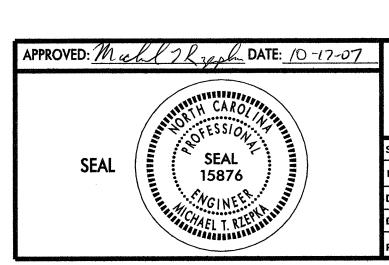
WORKING IN A CONTINUOUS MANNER COMPLETE THE FOLLOWING WORK IN PHASE II STEP 4.

- STEP 4: PLACE THE FINAL LAYER OF SURFACE COURSE FROM -L- STA. 16+70 ± TO -L- SAT. 27+00 ±.

 PLACE PAVEMENT MARKINGS (PAINT) AND MARKERS (PERMANENT RAISED) IN THE FINAL

 PATTERN ON -L- FROM -L- STA. 16+70 ± TO -L- STA. 27+00 ± (SEE SHEET PM-1)
- STEP 5: REMOVE ALL TRAFFIC CONTROL DEVICES.





PHASE II OVERVIEW AND PHASING

SCALE: NONE

DATE: 10-07

DWG. BY: BLM

DESIGN BY: BLM

REVIEWED BY: MTR

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B-4130 TCP-7

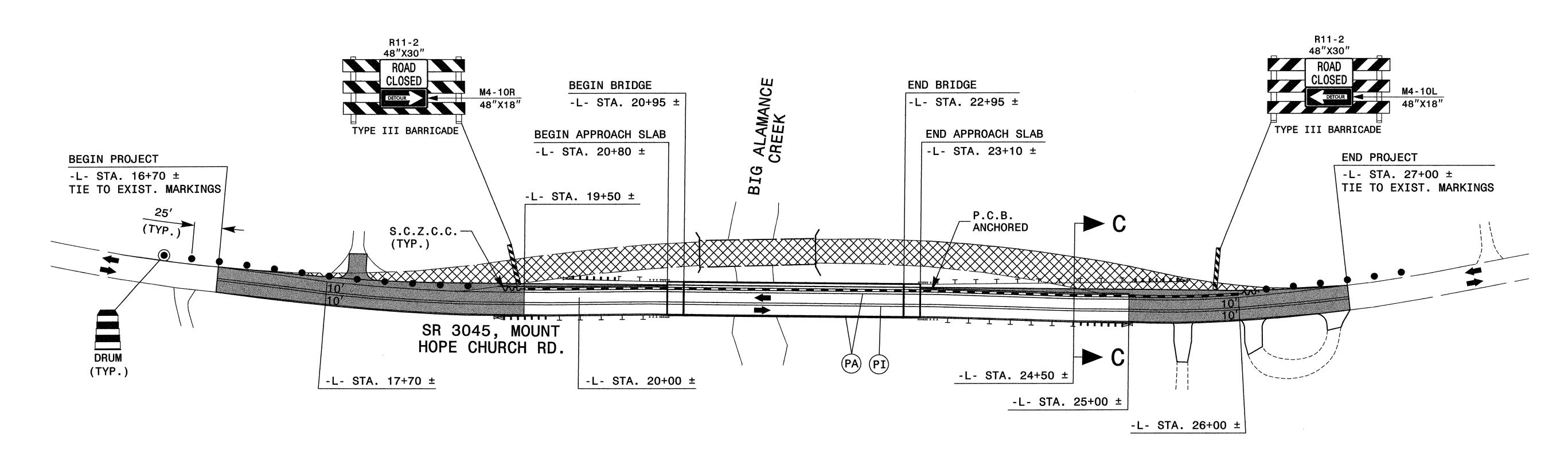
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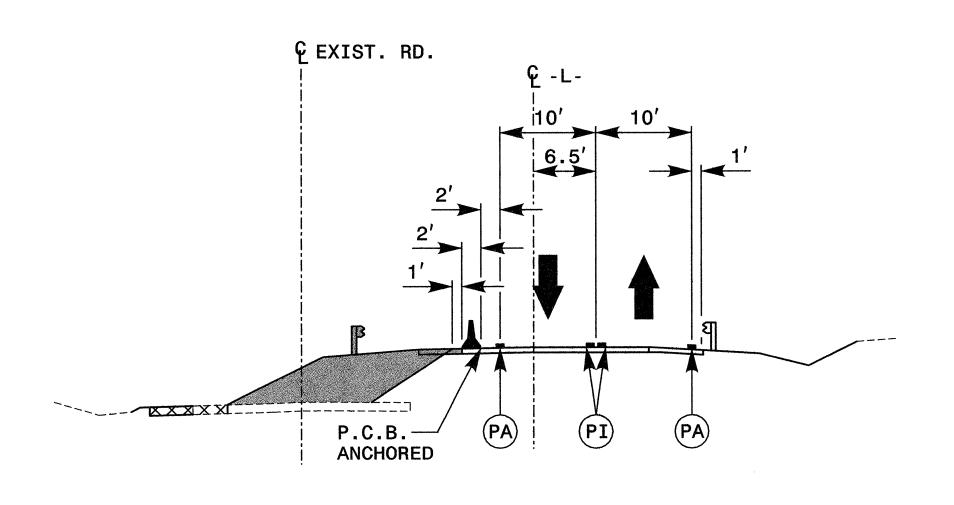
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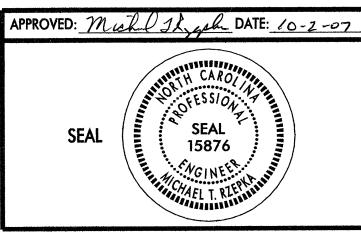




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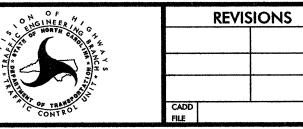


PROPOSED CONSTRUCTION
REMOVAL OF EXISTING
PAVEMENT AND BRIDGE

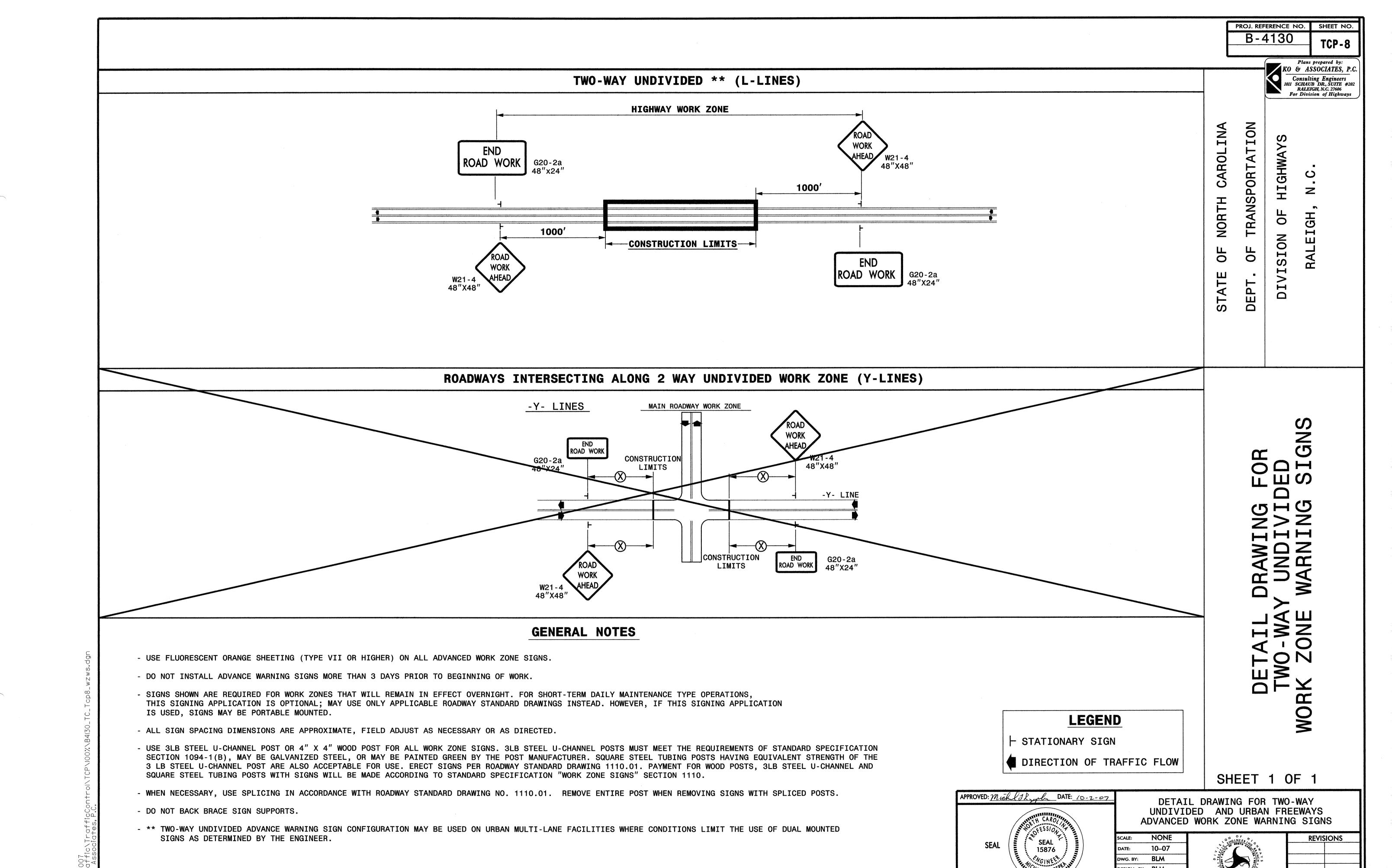


PHASE II DETAILS

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