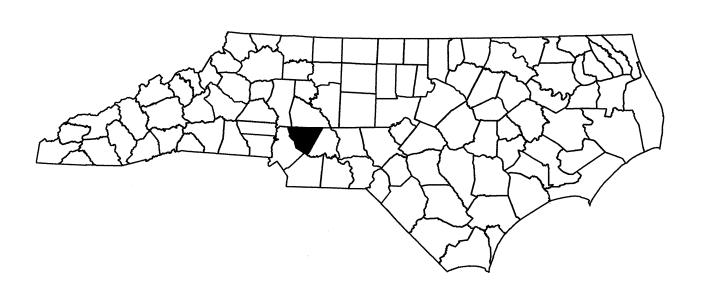
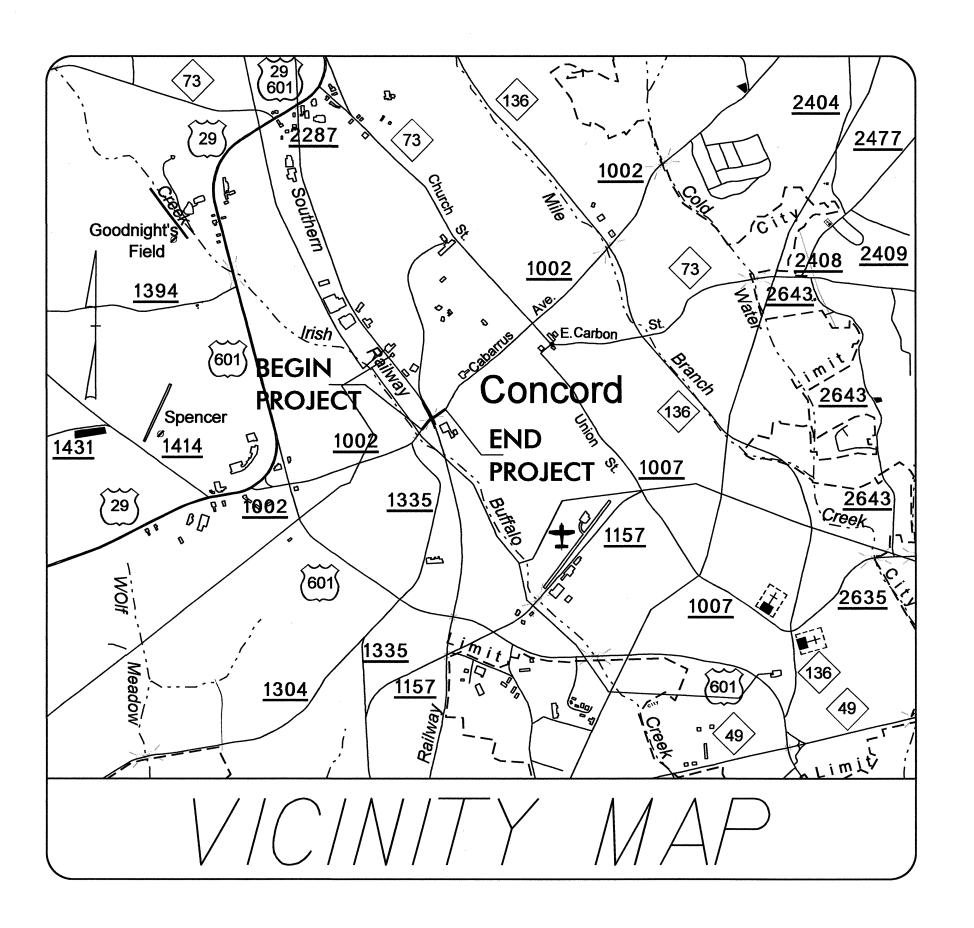
## STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## TRANSPORTATION MANAGEMENT PLAN

## CABARRUS COUNTY





# WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

## N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY) PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

G. L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER

J. W. WOOLARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

M. S. ISHAK TRAFFIC CONTROL DESIGN ENGINEER



## INDEX OF SHEETS

SHEET NO.

TITLE

TMP-1

TITLE SHEET AND INDEX OF SHEETS

LIST OF APPLICABLE ROADWAY STANDARD DRAWING AND LEGEND TMP-1A

**GENERAL NOTES** TMP-1B

GENERAL NOTES AND PHASING TMP-1C

TEMPORARY SHORING DATA TMP-1D

TMP-1E TRAFFIC CONTROL SAFETY FENCE DETAIL

TMP-2 THRU 3B

TEMPORARY TRAFFIC CONTROL PHASE I

TEMPORARY TRAFFIC CONTROL PHASE II TMP-4 THRU 5B

M

TMP-1

APPROVED:\_ DATE: SEAL

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANAUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

#### STD. NO.

#### TITLE

1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE 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
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

SHEET NO. PROJ. REFERENCE NO. TMP-1A B-3421

## **LEGEND**

#### **GENERAL**

DIRECTION OF TRAFFIC FLOW

DIRECTION OF PEDESTRIAN TRAFFIC FLOW

----- EXIST. PVMT.

NORTH ARROW

PROPOSED PVMT.

**WORK AREA** 

TEMPORARY PAVEMENT

#### TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III) 

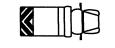
DRUM SKINNY DRUM

TEMPORARY CRASH CUSHION

FLAGGER

FLASHING ARROW PANEL (TYPE C)

LAW ENFORCEMENT



TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

CHANGEABLE MESSAGE SIGN

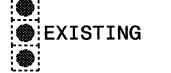
## TEMPORARY SIGNING

PORTABLE SIGN

→ STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

### SIGNALS







## PAVEMENT MARKINGS

----EXISTING LINES ----TEMPORARY LINES



### PAVEMENT MARKERS

CRYSTAL/CRYSTAL

CRYSTAL/RED

◆ YELLOW/YELLOW

## PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

#### TEMPORARY PAVEMENT MARKING

PAINT 4"

WHITE EDGELINE

YELLOW DOUBLE CENTER

WHITE MINI SKIP WHITE LANE LINE

TEMPORARY MARKERS

MH YELLOW & YELLOW

**STOPBAR** 

24' WHITE STOP BAR

**ROADWAY STANDARD** DRAWINGS & LEGEND

## GENERAL NOTES

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

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

#### TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

1. CABARRUS RD -L-

MONDAY - FRIDAY

7AM-7PM

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

#### ROAD NAME

1. CABARRUS RD -L-

#### HOLIDAY

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 7 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7 PM THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 7 AM FRIDAY AND 7 PM TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7 AM TUESDAY TO 7 PM MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME

DAY AND TIME RESTRICTIONS

DURATION AND OPERATION

1. CABARRUS ROAD -L-

7AM - 7PM

15 MINUTES FOR TRAFFIC SHIFT

DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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 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.
- I) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- J) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

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 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.

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

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

#### SIGNING

- N) 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.
- O) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- P) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

Q) 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

R) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL 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 TRAFFIC CONTROL 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 TRAFFIC CONTROL 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.

S) 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 IMPACT 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:

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45-50	20 FT
55	25 FT

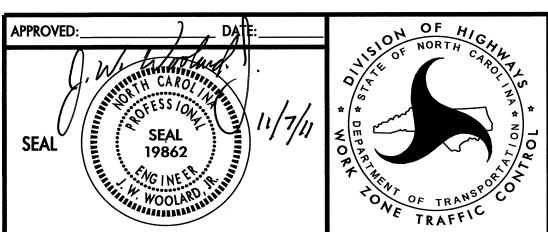
60 MPH or HIGHER

#### TRAFFIC CONTROL DEVICES

T) 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.

30 FT

- U) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- V) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (XXX FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.



GENERAL NOTES

04-N0V-20II 14:20

#### PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME

MARKING

MARKER

- 1. CABARRUS RD & Y-LINESPAINTTEMPORARY RAISED
- 2. STRUCTUREPAINTTEMPORARY RAISED
- X) 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.
- Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- AA) 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**

- BB) LAW ENFORCEMENT MAY OR SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.
- CC) ALL WHEEL CHAIR 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.
- DD) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIME 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.).

PROJ. REFERENCE NO.	SHEET NO.
B-3421	TMP-1C

## **PHASING**

### PHASE I

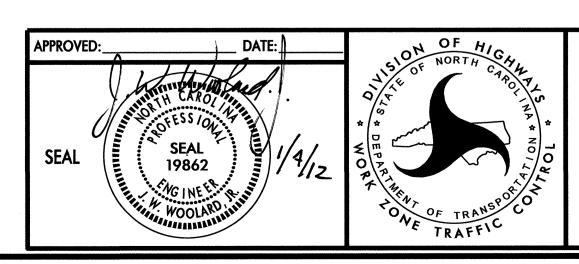
- STEP 1: USING RSD 1101.01, SHEET 3 OF 3. INSTALL WORK ZONE ADVANCE WARNING SIGNS
- STEP 2: CLOSE THE CORBAN STREET CROSS OVER AT THE RXR AND BUILD CUL DE SAC ON BOTH SIDES. SEE TMP-2 & 3
- STEP 3: USING RSD 1101.02, SHEET 1 OF 15, CONSTRUCT TEMPORARY PAVEMENT LEFT OF L UP TO THE EDGE OF EXISTING PAVEMENT FROM STA. 19+48 +/- TO STA 22+61 +/-. SEE SHEET TMP-3
- STEP 4: INSTALL TEMPORARY SIGNAL AS SHOWN IN THE SIGNAL PLANS.
- STEP 5: USING RSD 1101.02, SHEET 1 OF 15, REMOVE EXISTING PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING (PAINT) ON EXISTING ROADWAY AND Y-LINES AS SHOWN ON TCP-2 & 3.
- STEP 6: SHIFT EXISTING TRAFFIC INTO 2 LANE 2 WAY PATTERN AS SHOWN IN TCP 2 & 3.
- STEP 7: USING RSD 1101.02, SHEET 1 OF 15, INSTALL PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS AS SHOWN ON TCP-3.
- STEP 8: WHILE MAINTAINING TRAFFIC ON EXISTING ROADWAY CONSTRUCT:
  - -- SHORING FROM STA 18+75 TO STA 21+50 AS SHOWN ON TMP-3.
  - -- CONSTRUCT RETAINING WALL AS SHOWN IN THE CONSTRUCTION PLANS.
  - -- STAGE ONE PROPOSED BRIDGE, ROADWAY, SIDEWALK AND GUARDRAIL AS SHOWN ON TCP-2 & 3 FROM STA. 10+69 +/- -L- TO STA. 24+75 +/- -L-
  - -- LEFT & RIGHT SIDE OF -Y2- FROM STA. 12+61 +/- -L- TO STA. 16+27 +/- -L- AS SHOWN ON TMP-3

#### PHASE II

- STEP 1: AWAY FROM TRAFFIC, PLACE TEMPORARY PAVEMENT MARKINGS AND ANCHORED PORTABLE CONCRETE BARRIER ON PROPOSED -L-AS SHOWN ON TCP-4 & 5.
- STEP 2: INSTALL TEMPORARY SIGNAL AS SHOWN IN THE SIGNAL PLANS
- STEP 3: USING RSD 1101.02, SHEET 1 OF 15, AND WORKING IN A CONTINUOUS MANNER, CONSTRUCT TIE INS ON -L- FROM STA 10+69 TO STA 14+75 AND FROM STA 21+50 TO STA 25+00. PLACE REMAINING TEMPORARY PAVEMENT MARKINGS AS SHOWN ON TCP-4 & 5. SHIFT TRAFFIC TO PROPOSED -L- AND CLOSE EXISTING ROADWAY TO TRAFFIC.
- STEP 4: USING RSD 1101.02, SHEET 1 OF 15 AS NEEDED:
  - -- REMOVE EXISTING ROADWAY AND STRUCTURE.
  - -- COMPLETE STAGE II CONSTRUCTION OF STRUCTURE, ROADWAY AND GUARDRAIL AS SHOWN TCP-4 & 5
  - -- INSTALL FINAL SIGNAL.

#### PHASE III

- STEP 1: USING RSD 1101.02, SHEET 1 OF 15 AS NEEDED, REMOVE PORTABLE CONCRETE BARRIER AND TEMPORARY CRASH CUSHIONS.
- STEP 2: USING RSD 1101.02, SHEET 1 OF 15, PLACE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKINGS AND MARKERS, AND PLACE TRAFFIC IN THE FINAL PATTERN.
- STEP 3: REMOVE ALL TRAFFIC CONTROL DEVICES, AND ADVANCE WARNING SIGNS.



GENERAL NOTES & PHASING

proj/TIPProjects-B\B342I\Traffic\TrafficControl\tcp\Final Traffic Design\Revised Fol 244740

PROJ. REFERENCE NO. SHEET NO. TMP-1D B-3421

The Geotechnical Engineering Unit recommends placing the following notes on Plans for the referenced project.

Temporary Shoring No. 1 (-L- STA 19+10 +/- TO STA 21+75 +/-)

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

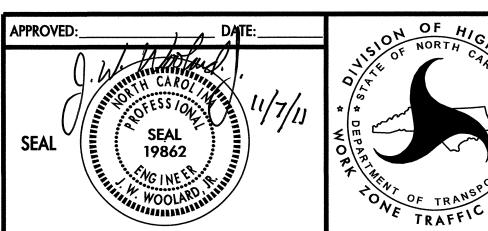
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRCUTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION 19+10 +/- -L-, 6.5 FT. LEFT OF -L-CL-, TO STATION 21+75 -L-, 6.5 FT. LEFT OF -L-CL-, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUND ELEVATION:

UNIT WEIGHT  $(\gamma)$  = 120 PCF FRICTION ANGLE  $(\phi)$  = 30 DEGREES COHESION, (c) = 0 PSF

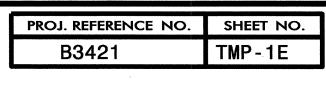
LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 19+10 +/- -L-, 6.5 FT. LEFT OF -L-CL-, TO STATION 21+75 +/-, 6.5 FT. LEFT OF -L-CL-. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

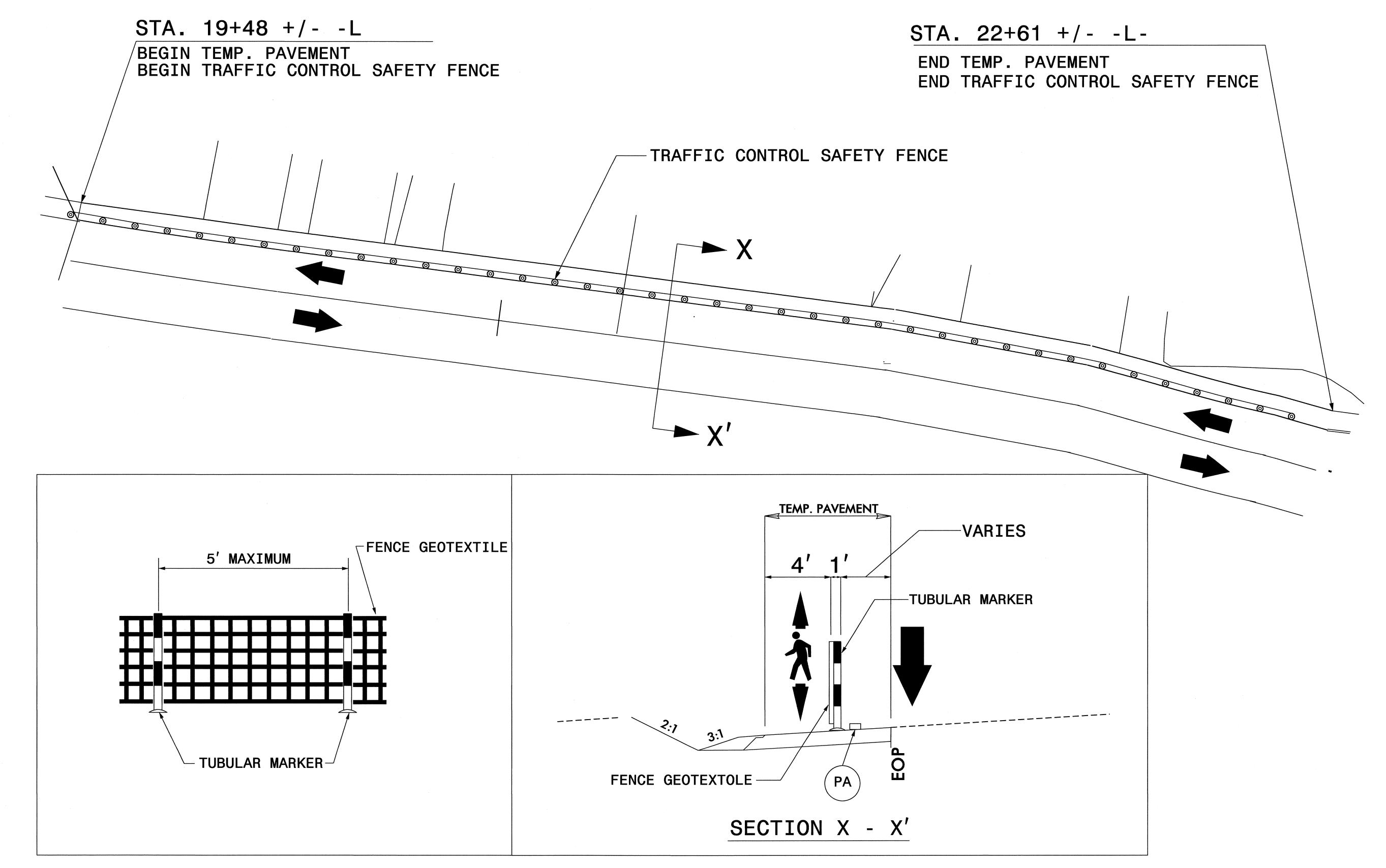
> THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC SECTION ON NOV 04, 2011, BY PROFESSIONAL ENGINEER JOHN FARGHER. (SEAL # 023480)

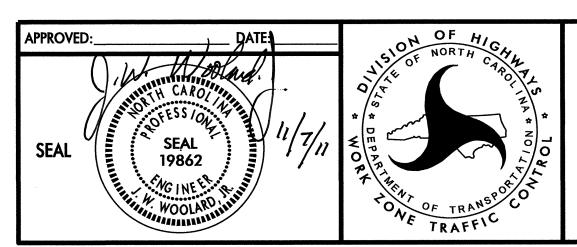




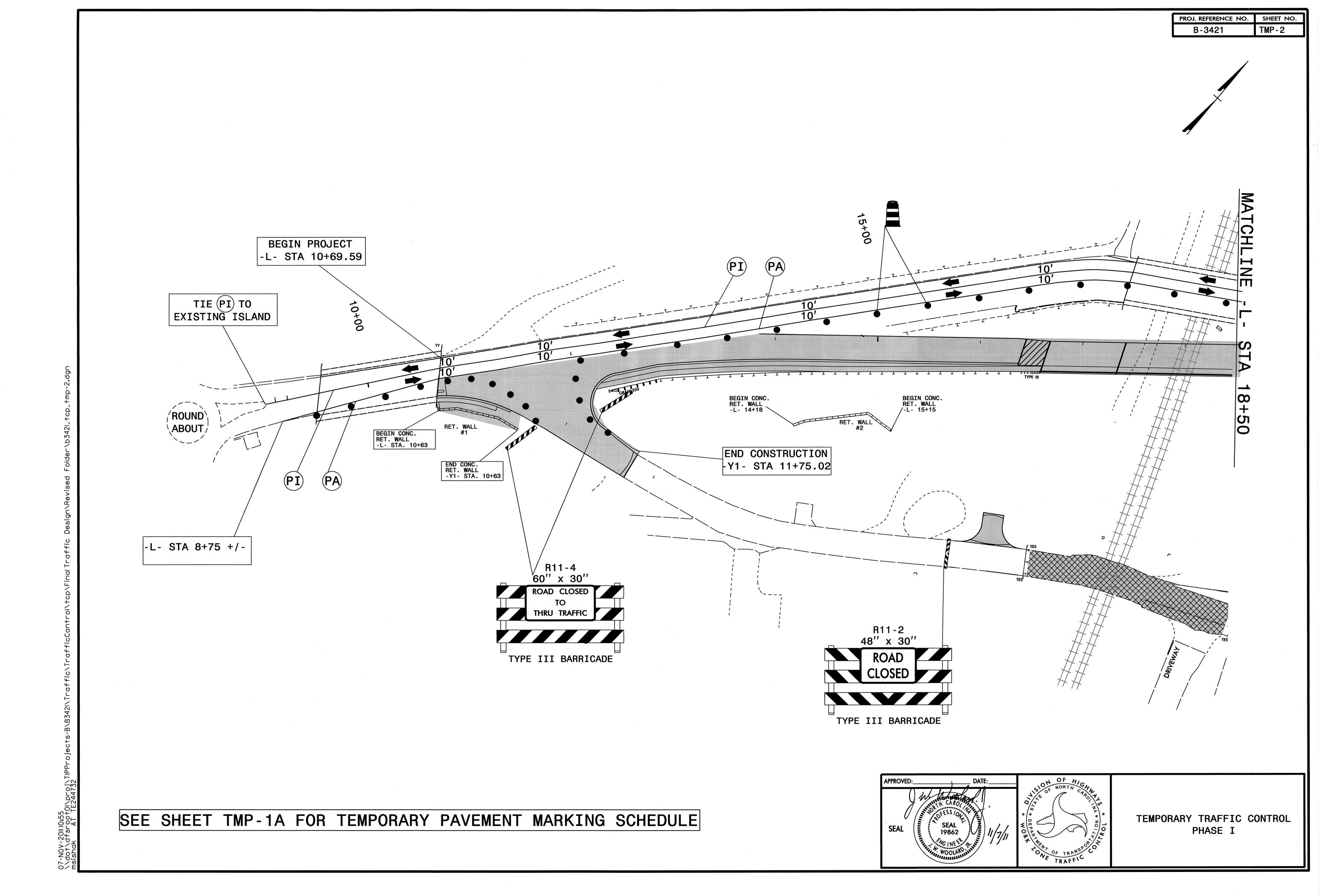
TEMPORARY SHORING DATA

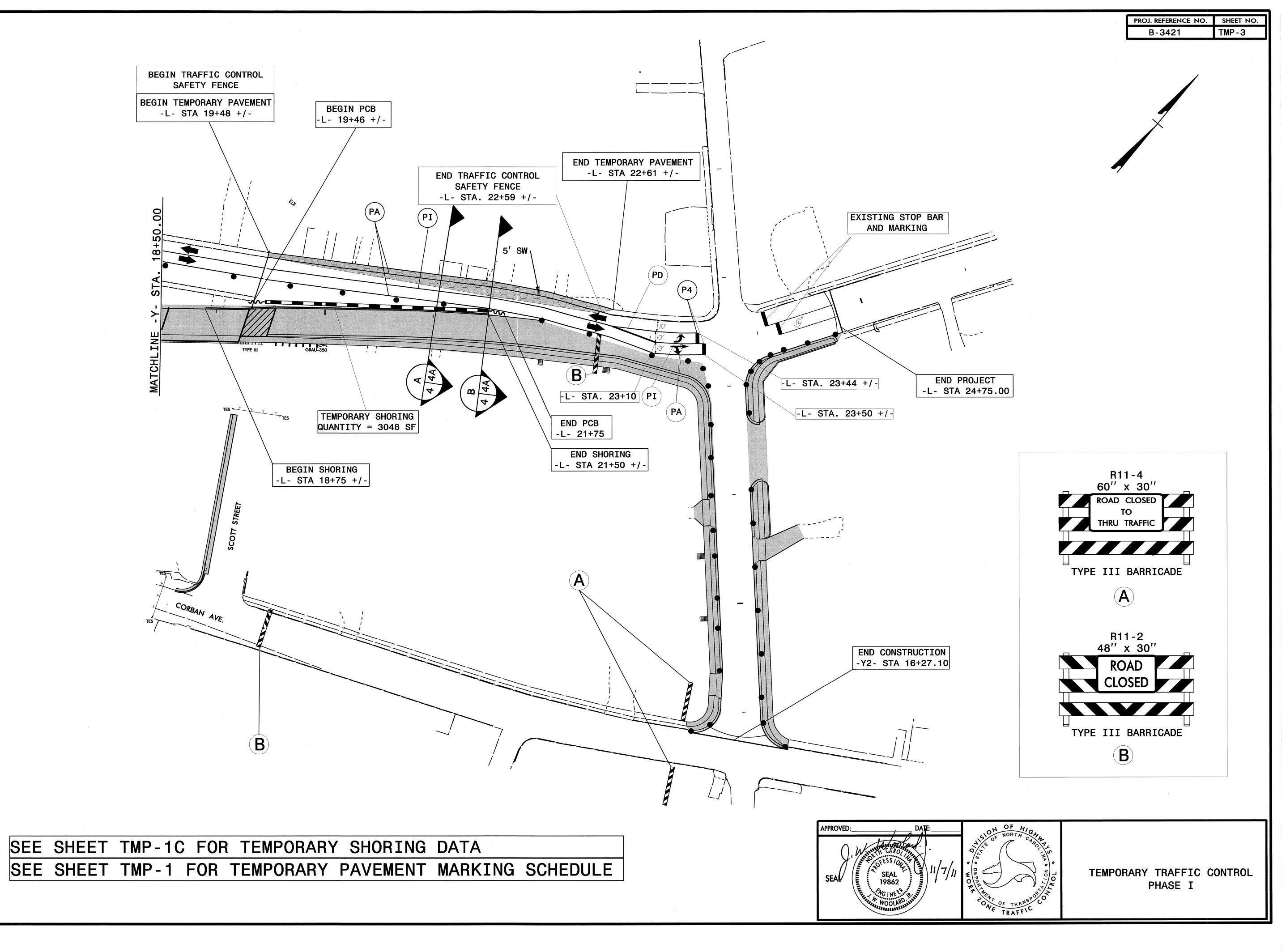




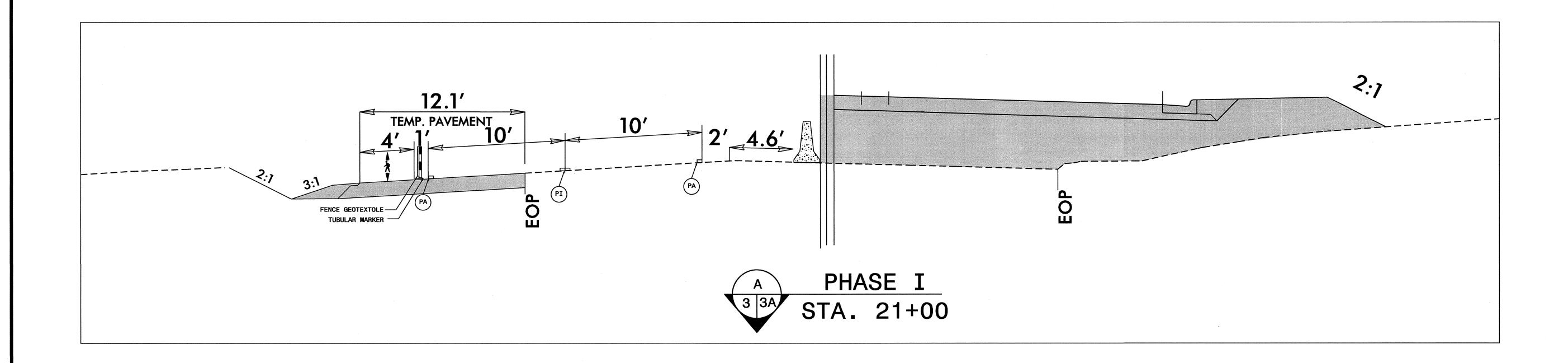


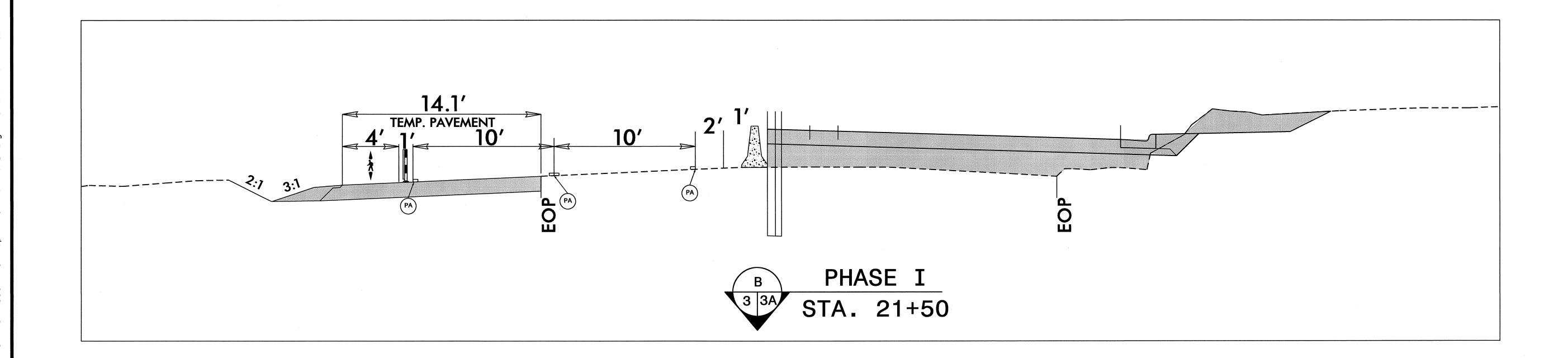
TRAFFIC CONTROL SAFETY FENCE

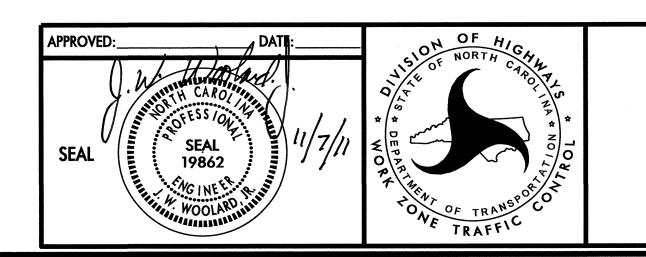




PROJ. REFERENCE NO.	SHEET NO.
B-3421	TMP-3A



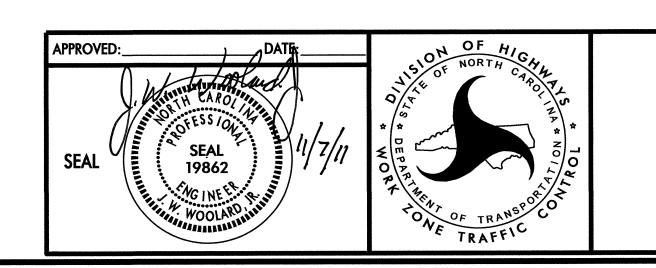




TEMPORARY TRAFFIC CONTROL PHASE I

PROJ. REFERENCE NO. B-3421 END CONSTRUCTION -Y3- STA 10+71.22.59 BEGIN ANCHORED PCB -L- STA 15+75 +/-BEGIN PROJECT -L- STA 10+69.59 -L- STA 9+05 +/-

SEE SHEET TMP-X FOR TEMPORARY PAVEMENT MARKING SCHEDULE

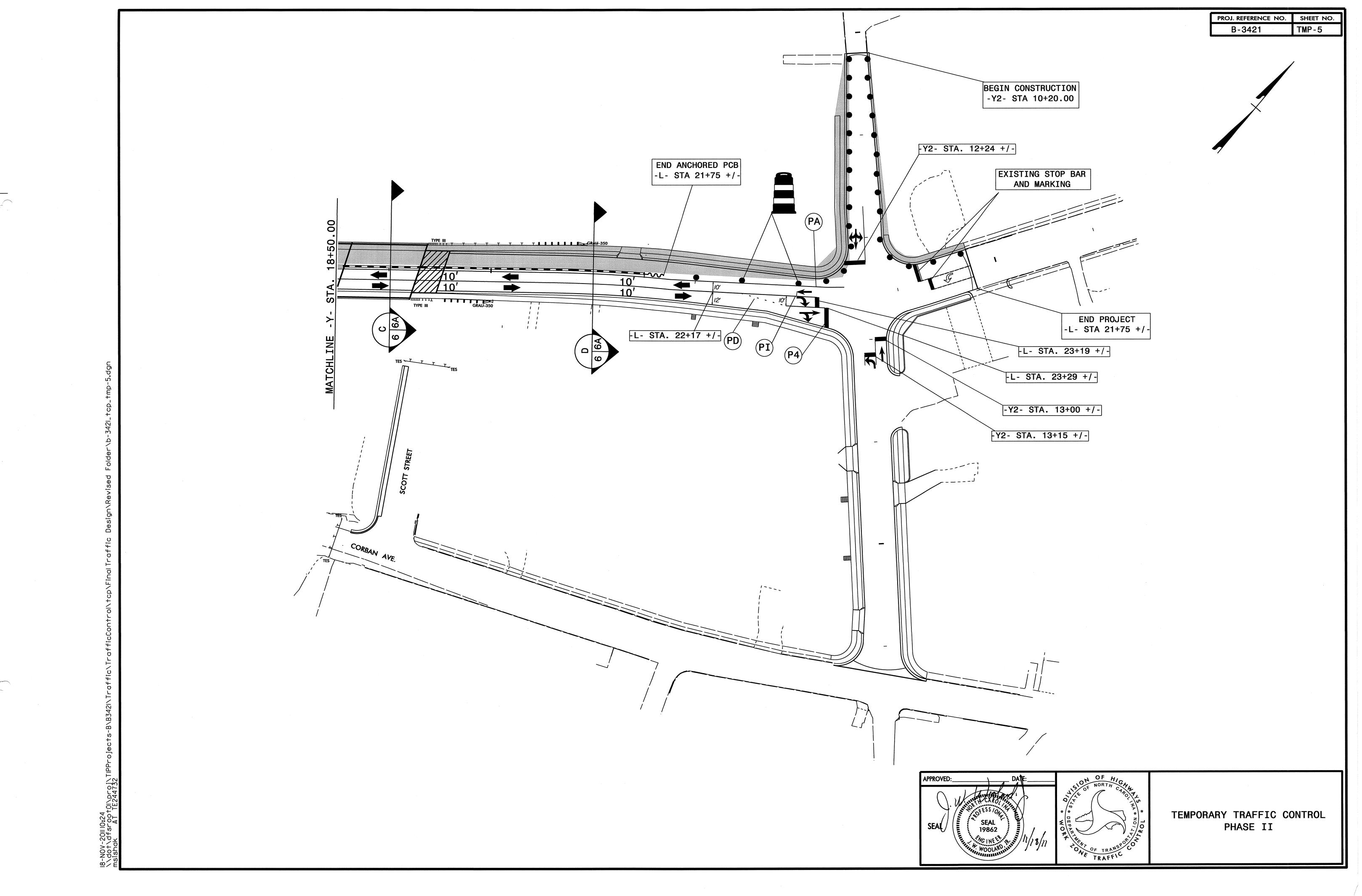


TEMPORARY TRAFFIC CONTROL PHASE II

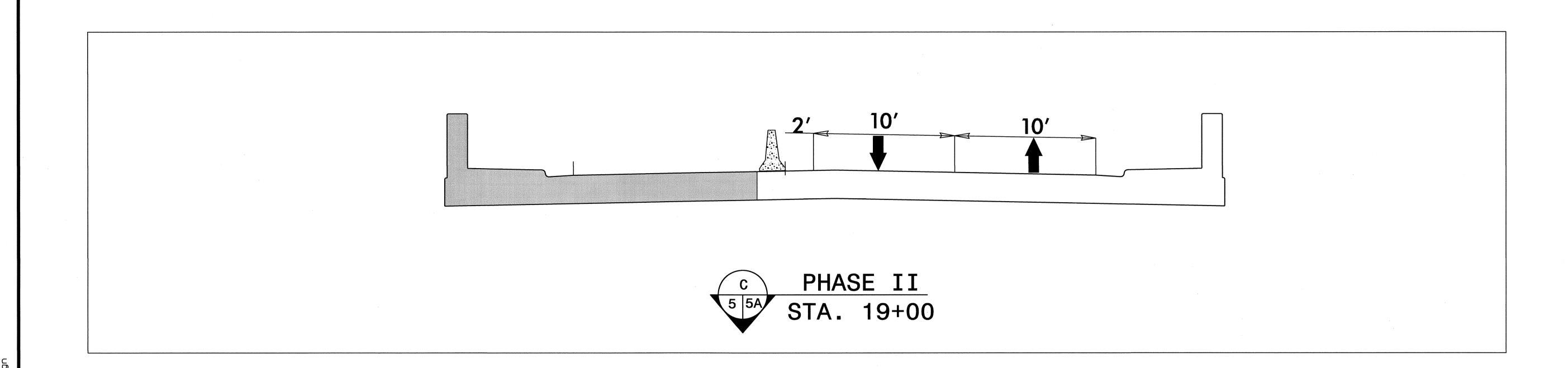
SHEET NO.

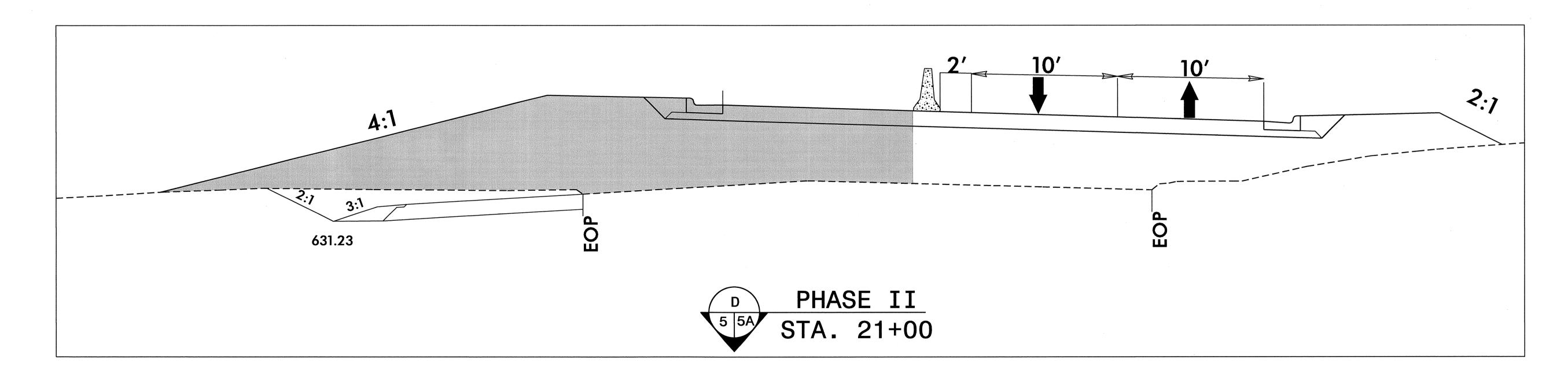
TMP-4

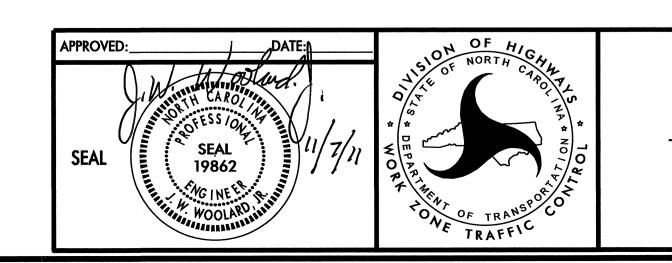
\\\dot\dfsrootOl\proj\TIPProjec msishak AT TF244732



	PROJ. REFERENCE NO.	SHEET NO.
Γ	B-3421	TMP-5A







TEMPORARY TRAFFIC CONTROL PHASE II

!OII II:02 fsrootOI\proj\TIPProjects-B\B342I\Traffic\TrafficControl\tcp\Final Traff