

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
I-2102	TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
FORSYTH COUNTY**

I-2102

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 JANUARY 2002 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
1101.05	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 PANELS
1135.01	CONES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
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1250.01	PAVEMENT MARKER SPACING
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1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
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1267.01	FLEXIBLE DELINEATOR INSTALLATION
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- CRYSTAL/CRYSTAL PAVEMENT MARKER
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 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

TIP PROJECT:

24-JAN-2005 14:25
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wjacas AT TETC193479

APPROVED:	PLAN PREPARED BY: N.C.D.O.T. TRAFFIC CONTROL, MARKING & DELINEATION UNIT
DATE: 1/24/05	
SEAL 	J. S. BOURNE, P.E. TRAFFIC CONTROL ENGINEER
	M. MCDIARMID, P.E. TRAFFIC CONTROL PROJECT ENGINEER
	CHRIS HOWARD TRAFFIC CONTROL PROJECT DESIGN ENGINEER
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PROJECT NOTES

PROJ. REFERENCE NO. I-2102	SHEET NO. TCP-02
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GENERAL NOTES

A) 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 UNDESIRABLE 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.

TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1. I-40	MONDAY THRU SUNDAY 6:00 A.M. TO 9:00 A.M. MONDAY THRU SUNDAY 3:00 P.M. TO 7:00 P.M..

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

ROAD NAME	HOLIDAY
1. I-40	
	FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31ST TO 9:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A SATURDAY OR A SUNDAY, THEN UNTIL 9:00 P.M. THE FOLLOWING TUESDAY.
	FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 9:00 P.M. MONDAY.
	FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
	FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE DAY AFTER INDEPENDENCE DAY.
	IF INDEPENDENCE DAY IS ON A SATURDAY OR SUNDAY, THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
	FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
	FOR THANKSGIVING, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 9:00 P.M. MONDAY.
	FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 P.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.
	FOR FESTIVAL OF LIGHTS OCCURRING AT TANGLEWOOD PARK, BEGINNING 1 HOUR BEFORE THE START AND 1 HOUR AFTER THE END OF THE FESTIVAL OF LIGHTS.
	FOR ANY EVENT THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1. SR 1101	
2. RAMP A AND RAMP D	

E) DO NOT STOP TRAFFIC OR CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
1. I-40	MONDAY 5:00 A.M. TO FRIDAY 11:00 P.M. SATURDAY AND SUNDAY 5:00 A.M. TO 11:00 P.M. (EACH DAY)

F) DO NOT STOP TRAFFIC FOR MORE THAN 6 HOURS AS FOLLOWS:

ROAD NAME	OPERATION
1. I-40	PLACEMENT OF GIRDERS AND EXISTING STRUCTURE REMOVAL

G) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR OTHERWISE DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

H) 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.

I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 40 FT (12m) OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING TEMPORARY SHOULDER CLOSURE DETAIL (TCP-14) UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

J) 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.

K) 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.

L) DO NOT WORK SIMULTANEOUSLY, ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION, ON A TWO-LANE, TWO-WAY ROAD.

M) 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.

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

PAVEMENT EDGE DROP OFF REQUIREMENTS

O) 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.

P) DO NOT EXCEED A DIFFERENCE OF 2 INCHES (50mm) 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

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

SIGNING

R) 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.

S) PROVIDE PERMANENT SIGNING.

T) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.

U) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.

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

W) INSTALL BLACK ON ORANGE "BUMP" SIGNS (W8-1) 500 FT (150m) IN ADVANCE OF THE UNEVEN AREA.

TRAFFIC BARRIER

X) INSTALL MOVEABLE/PORTABLE CONCRETE BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE MOVEABLE/PORTABLE CONCRETE 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.

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

Y) PROTECT THE APPROACH END OF MOVEABLE/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.

OFFSET THE APPROACH END OF MOVEABLE/PORTABLE CONCRETE BARRIER A MINIMUM OF 40 FT (12m) FROM ONCOMING TRAFFIC OR PROTECT AT ALL TIMES BY A TEMPORARY CRASH CUSHION.

INSTALL MOVEABLE/PORTABLE CONCRETE BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE MOVEABLE/PORTABLE CONCRETE 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 CLOSED THE SECTION OF THE ROADWAY UNTIL THE BARRIER CAN BE PLACED OR AFTER BARRIER IS REMOVED.

TRAFFIC CONTROL DEVICES

Z) WHEN USING ROADWAY STANDARD NO. 1101.02, SHEET 1 OF 7, DRUMS MAY BE USED IN LIEU OF CONES ON SR 1101 AND ALL -Y- LINES EXCEPT -Y4- (I-40).

AA) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT (3m) ON-CENTER IN RADIUS, AND 3 FT (1m) OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT.

BB) 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.

CC) PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 300 FT (90m) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
1. SR 1101	THERMOPLASTIC	SNOWPLOWABLE
2. SR 1101 (PROP. STRUCTURE)	COLD APP. PLASTIC	RAISED
3. I-40	THERMOPLASTIC	SNOWPLOWABLE
4. SR 1100	THERMOPLASTIC	NONE
5. SR 3602	THERMOPLASTIC	NONE
6. RAMP A, B, C AND D	THERMOPLASTIC	SNOWPLOWABLE

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

ROAD NAME	MARKING	MARKER
1. SR 1101	PAINT	RAISED
2. SR 1101 (PROP. STRUCTURE)	TEMP. TAPE	RAISED
3. I-40	PAINT	RAISED
4. SR 1100	PAINT	NONE
5. SR 3602	PAINT	NONE
6. RAMP A, B, C AND D	PAINT	NONE

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

GG) REPLACE ANY PAVEMENT MARKINGS THAT HAVE BEEN DAMAGED BY THE END OF EACH DAY'S OPERATION.

HH) TRACE THE EDGE OF PROPOSED MONOLITHIC ISLANDS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO INSTALLATION OF A PROPOSED MONOLITHIC ISLAND.

II) 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

JJ) NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION BY OTHERS IS REQUIRED.

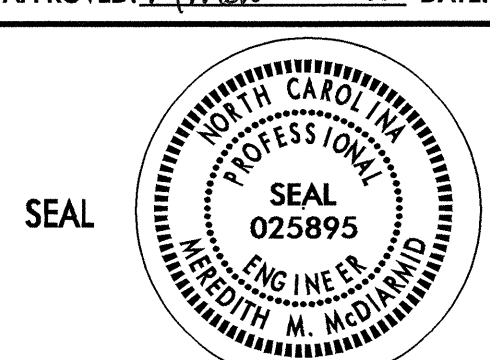
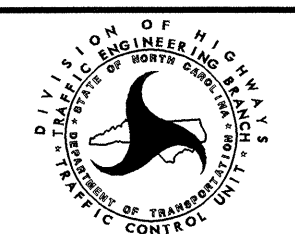
KK) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

MISCELLANEOUS

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

MM) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS 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 (150m) AND 1000 FT (300m) RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

NN) PLACE DRUMS TO DELINEATE EXISTING AND PROPOSED ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION.

APPROVED: <i>W. McBurnid</i> DATE: <i>03/04</i>		<h2 style="margin: 0;">PROJECT NOTES</h2>	
	SCALE: NONE		REVISIONS
	DATE: 03/04		
	DWG. BY: WAJ		
	DESIGN BY: WAJ		
REVIEWED BY: CBH			CADD FILE 12102 TCP02.DGN

PHASING NOTES

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-3

PHASE I

- STEP 1:
- INSTALL WORK ZONE ADVANCE WARNING SIGNS ALONG SR 1101 (HARPER ROAD) -L- AND I-40 -Y4-. (SEE TCP-21 AND TCP-22)
- STEP 2:
- A. - CLOSE SOUTHBOUND LANE OF -L- FROM STA. 7+75+/- -L- TO STA. 18+05+/- -L- AS SHOWN ON SHEET TCP-5.
- B. - BEGIN CONSTRUCTION OF SB PROPOSED -L- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7 FROM: (SEE SHEET TCP-5 AND TCP-6, TYPICAL 1)
- STA. 10+00+/- -L- TO STA. 16+50+/- -L-
 - STA. 17+30+/- -L- TO STA. 18+76+/- -L-
 - STA. 22+63+/- -L- TO STA. 23+47+/- -L-
 - STA. 24+30+/- -L- TO STA. 38+42+/- -L-
- INSTALL TEMPORARY GUARDRAIL ALONG SR 1101 (HARPER ROAD) -L- FROM STA. 18+05+/- -L- TO STA. 19+48+/- -L- AND FROM STA. 22+10+/- -L- TO STA. 23+15+/- -L- USING ROADWAY STANDARD 1101.02 SHEET 1 OF 7. THEN INSTALL TEMPORARY SHORING ALONG SR 1101 (HARPER ROAD) -L- FROM STA. 18+65+/- -L- TO STA. 19+25+/- -L- AND FROM STA. 22+10+/- -L- TO STA. 22+65+/- -L-. IF CONSTRUCTION AREA DOES NOT ALLOW, INSTALL SHORING THEN GUARDRAIL IN A CONTINUOUS MANNER UNTIL COMPLETE. (SEE TCP- 6, TYPICAL SECTION 2)

NOTE: ONCE TEMPORARY GUARDRAIL AND SHORING ARE INSTALLED ON -L- (SR 1101), AS STATED ABOVE, BEGIN CONSTRUCTING END BENTS 1 & 2 UP TO BUT NOT INCLUDING PLACEMENT OF GIRDERS. (SEE SHEET TCP-9)

- USE ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 3, 6 AND 7 OF 7, AND TEMPORARY SHOULDER CLOSURE DETAIL SHOWN ON SEE TCP-23 FOR THE FOLLOWING WORK:
- CONSTRUCT WIDENING ALONG EXISTING WB I-40 (-Y4-) FROM STA.12+20+/- -Y4- TO STA. 27+74+/- -Y4- AND WEDGE INTO EXISTING I-40 FOR A SMOOTH TRANSITION (SEE SHEET TCP-6 & 7, TYPICAL 3)
 - STRENGTHEN SHOULDER ALONG WB I-40 -Y4- FROM STA 27+74 +/- -Y4- TO STA 43+00 +/- -Y4- (SEE SHEET TCP-6 & 7, TYPICAL 3)
 - CONSTRUCT WIDENING ALONG EB I-40 -Y4- FROM STA 11+60 +/- -Y4- TO STA. 23+38 +/- -Y4- AND WEDGE WIDENING INTO EXISTING I-40 FOR A SMOOTH TRANSITION (SEE SHEET TCP-6 & 7, TYPICAL 3).
 - STRENGTHEN SHOULDER ALONG EB I-40 -Y4- FROM STA 23+38 +/- -Y4- TO STA 40+40 +/- -Y4- (SEE SHEET TCP-6 & 7, TYPICAL 3).
- USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 AND 3 OF 7, BEGIN CONSTRUCTING PROPOSED RAMP B (-RPB-) UP TO EDGE AND ELEVATION OF EXISTING -L- AND -Y4- FROM: (SEE SHEET TCP-6 AND 7)
- STA. 0+00 +/- -RPB- TO STA. 5+20 +/- -RPB-
 - STA. 7+20 +/- -RPB- TO STA.13+10 +/- -RPB-
- USING ROADWAY STANDARD DRAWING NUMBER 1101.02 SHEET 1 AND 3 OF 7, BEGIN CONSTRUCTING PROPOSED RAMP C (-RPC-) FROM STA 0+00 +/- -RPC- TO STA. 13+50+/- -RPC- AND TEMPORARY GRADE FROM 13+50+/- -RPC- TO STA. 16+91+/- -RPC- UP TO EDGE AND ELEVATION OF EXISTING -L- AND -Y4- (SEE SHEET TCP-6 AND 7).
- BEGIN CONSTRUCTING PROPOSED -Y1- USING ROADWAY STANDARD 1101.02 SHEET 1 OF 7, FROM STA. 10+00+/- -Y1- TO STA. 28+66+/- -Y1- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE. DO NOT CONSTRUCT NB CURB & GUTTER FROM STA. 10+00+/- -Y1- TO STA. 14+10+/- -Y1- (SEE SHEET TCP-8).
- BEGIN CONSTRUCTION OF -Y2- AND -Y3-
- STEP 3:
- A. - PLACE PAINT PAVEMENT MARKINGS AND TEMPORARY MARKERS FOR EB AND WB I-40 TRAFFIC SHIFT FROM STA. 31+85+/- -Y4- TO STA. 39+55+/- -Y4- USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 7 AND SHIFT TRAFFIC (SEE SHEET TCP-9, TYPICAL 4).
- B. - USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 3, 6 AND 7 OF 7 INSTALL PORTABLE CONCRETE BARRIER FROM STA 33+15 +/- TO STA 38+25 +/- ALONG -Y4- WB AND EB MEDIAN AND REMOVE EXISTING MEDIAN GUARDRAIL FROM WB I-40 (-Y4-) FROM STA 33+15 +/- -Y4- TO STA 39+55 +/- -Y4- AND EB I-40 (-Y4-) FROM STA 31+85 +/- -Y4- TO STA 38+25 +/- -Y4-. INSTALL TEMPORARY GUARDRAIL ALONG I-40 (-Y4-) MEDIAN EB FROM STA 31+85 +/- -Y4- TO STA 33+15 +/- -Y4- AND WB FROM STA 39+55 +/- -Y4- TO STA 38+25 +/- -Y4- TO TIE-IN WITH PORTABLE CONCRETE BARRIER AND EXISTING GUARDRAIL. IF TEMPORARY GUARDRAIL CANNOT BE COMPLETED IN A CONTINUOUS MANNER, PROTECT THE END WITH APPROVED TMIA UNTIL THE NEXT WORKING DAY OF GUARDRAIL COMPLETION (SEE TCP-9, TYPICAL 4).
- C. - INSTALL TEMPORARY SHORING ALONG I-40 (-Y4-) FROM STA 35+08 +/- -Y4- TO STA 36+32 +/- -Y4-. (SEE SHEET TCP-9).
- D. - BEGIN CONSTRUCTING INTERIOR BENT 1.
- E. - RELOCATE SIGNAL POLES AT THE INTERSECTION OF SR 1101 (HARPER ROAD) -L- AND RAMP A -RPA- USING FLAGGERS (SEE TRAFFIC SIGNAL PLANS).

- STEP 4:
- A. - USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, COMPLETE CONSTRUCTION OF -Y1- FROM STA. 10+00+/- -Y1- TO STA. 28+66+/- -Y1- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE AND TIE-IN TO EXISTING -L- FOR A SMOOTH TRANSITION USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7. DO NOT CONSTRUCT NB CURB & GUTTER FROM STA. 10+00+/- -Y1- TO STA. 14+10+/- -Y1-. CONSTRUCT ENTIRE PORTION OF -Y2- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE AND MAINTAIN ACCESS AT ALL TIMES. (SEE SHEET TCP-8)
- B. - REVISE TRAFFIC SIGNAL AT THE INTERSECTION OF SR 1101 (HARPER ROAD) -L- AND RAMP A (-RPA-) FOR EXISTING -Y1- CLOSURE AND SHIFT TRAFFIC ON NEWLY CONSTRUCTED -Y1- AND -Y2- AND CLOSE EXISTING SR 1100 TO TRAFFIC (SEE SHEET TCP-10).
- C. - CONSTRUCT CURB & GUTTER ALONG NB -Y1- FORM STA. 10+00+/- -Y1- TO STA. 14+10+/- -Y1- USING ROADWAY STANDARD DRAWING NUMBER 1101.02 SHEET 1 OF 7.
- BORE AND JACK PROPOSED WATER PIPE ALONG -L- FROM STA 16+20 +/- TO STA 24+10 +/- WITH A 66 FT LEFT OFFSET (SEE UTILITY CONSTRUCTION PLANS).
 - BEGIN REMOVING EXISTING PAVEMENT ON SR 1100 ACCORDING TO CONSTRUCTION PLANS.

PHASE I (CON'T)

- STEP 5:
- USING ROADWAY STANDARD 1101.02 SHEET 1 AND 3 OF 7 CONSTRUCT RAMP A (-RPA-) FROM STA. 0+00+/- (-RPA-) TO STA. 4+71+/- (-RPA-) UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE AND EXCLUDING CONCRETE ISLAND. USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7. COMPLETE CONSTRUCTION OF -RPB- FROM STA. 0+00+/- (-RPB-) TO STA. 13+57+/- (-RPB-) UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE. TRANSITION RAMP A, RAMP B AND -L- TO EXISTING ROADWAY FOR A SMOOTH TRANSITION. PLACE "BUMP" (WB-1) SIGNS 350 FEET PRIOR TO -L- TRANSITION. PLACE PAVEMENT MARKINGS, REVISE TRAFFIC SIGNAL AND OPEN -RPB- TO TRAFFIC. (SEE SIGNAL PLANS AND TCP-10, INSET A)
 - COMPLETE CONSTRUCTION OF RAMP C FROM STA 0+00+/- -RPC- TO STA. 13+50+/- -RPC- UP TO BUT NOT INCLUDING FINAL SURFACE COURSE AND TIE-IN TO EXISTING I-40 USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 7. CONSTRUCT TEMPORARY TIE-IN OF RAMP C FROM STA. 13+50+/- -RPC- TO STA. 16+91+/- -RPC- UP TO EDGE AND ELEVATION OF EXISTING PAVEMENT USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7. PLACE PAINT PAVEMENT MARKINGS AND KEEP RAMP C CLOSED TO TRAFFIC.
 - COMPLETE CONSTRUCTION OF STAGE 1 OF END BENTS 1 & 2 AND INTERIOR BENT 1 OF PROPOSED STRUCTURE UP TO BUT NOT INCLUDING THE PLACEMENT OF GIRDERS OVER I-40 (SEE STRUCTURE PLANS).

COMPLETE THE WORK REQUIRED IN PHASE I, STEP 6 A AND B WITHIN 3 CONSECUTIVE NIGHTS FROM FRIDAY THRU SUNDAY FROM 11:00 P.M. TO 5:00 A.M. EACH DAY (SEE INTERMEDIATE CONTRACT TIME 2 AND LIQUIDATED DAMAGES)

- STEP 6:
- A. - OPEN RAMP C TO TRAFFIC (SEE SHEET TCP-11)
- B. - USING ROADWAY STANDARD DRAWING 1101.03 SHEET 7 OF 9 AND POLICE, SET SIGNALS TO FLASH MODE AT THE INTERSECTION OF RAMP A, RAMP B AND -L-. CLOSE I-40 AND DIRECT EXISTING I-40 TRAFFIC TO RAMP A, B, C AND D AND PLACE GIRDERS. SECURE THE GIRDERS AT THE END OF EACH WORK PERIOD AS DIRECTED BY THE ENGINEER. PLACE TRAFFIC BACK ON EXISTING I-40, RESET SIGNALS AND CLOSE RAMP C TO TRAFFIC WHEN NOT PLACING GIRDERS. (SEE SHEET TCP-11)


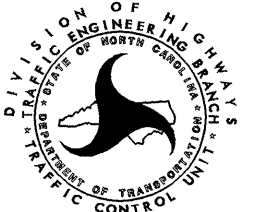
- STEP 7:
- COMPLETE ENTIRE STAGE 1 OF PROPOSED STRUCTURE AND PLACE PORTABLE CONCRETE BARRIER FROM: STA. 16+75+/- -L- TO STA. 23+25+/- -L- (SEE CONSTRUCTION PLANS AND TCP-12, TYPICAL 5)
 - COMPLETE CONSTRUCTION OF PROPOSED SB -L- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7 FROM: (SEE SHEET TCP-12)
 - STA. 10+00+/- -L- TO STA. 18+76+/- -L-
 - STA. 22+63+/- -L- TO STA. 23+47+/- -L-
 - STA. 24+30+/- -L- TO STA. 38+42+/- -L- - COMPLETE RAMP C -RPC- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE BUT KEEP CLOSED TO TRAFFIC FROM: STA. 13+50+/- -RPC- TO STA. 16+91+/- -RPC- (SEE SHEET TCP-12)

COMPLETE THE WORK REQUIRED IN PHASE I, STEP 8, A THRU G WITHIN 21 CONSECUTIVE DAYS. (SEE INTERMEDIATE CONTRACT TIME 4 AND LIQUIDATED DAMAGES)

- STEP 8:
- COMPLETE THE WORK REQUIRED IN PHASE I, STEP 8, A THRU C WITHIN 24 CONSECUTIVE HOURS. (SEE INTERMEDIATE CONTRACT TIME 4A AND LIQUIDATED DAMAGES)
- NOTE: WORK IN A CONTINUOUS MANNER IN STEP 8, A THRU C UNTIL WORK IS COMPLETE
- A. - PLACE PAINT PAVEMENT MARKINGS AND TEMPORARY MARKERS ON NEWLY CONSTRUCTED SB -L- AND TIE-IN WITH EXISTING MARKINGS (SEE SHEETS TCP-13, TCP-14 AND TCP-15).
- B. - REMOVE LANE CLOSURE FROM STA. 8+50+/- -L- TO STA. 17+08+/- -L- AND SHIFT EXISTING SR 1101 HARPER ROAD TRAFFIC ONTO NEWLY CONSTRUCTED SB -L- IN A TWO LANE-TWO WAY TRAFFIC PATTERN.
- C. - USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 7, REVISE SIGNAL AT RAMP B/A AND -L- INTERSECTION AND PLACE PAINT PAVEMENT MARKINGS AND MARKERS AND TIE IN WITH MARKINGS ON SB -L-. (SEE SIGNAL PLANS AND TCP-14)
- D. - INSTALL OFF-SITE DETOUR SIGNS FOR RAMP D CLOSURE AS SHOWN ON SHEET TCP-20 AND CLOSE RAMP D TO TRAFFIC.
- E. - CONSTRUCT PROPOSED RAMP D FROM STA. 0+00+/- -RPD- TO STA. 4+10+/- -RPD- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE, EXCLUDING CURB AND GUTTER, AND TIE IN WITH PROPOSED SB -L-. (SEE SHEET TCP-14)
- F. - REMOVE PORTABLE CONCRETE BARRIER (PCB) FROM STA. 16+75 +/- -L- TO STA. 18+76 +/- -L- AND RESET CRASH CUSHION.
- G. - OPEN -RPD- TO TRAFFIC. SEE SHEET TCP-16 FOR -RPD- DRUM AND BARRICADE PLACEMENT.

* THE LIQUID DAMAGES FOR INTERMEDIATE CONTRACT TIMES 4 AND 4A ARE NOT CUMULATIVE.

31-AUG-2004 07:28
0:\TCP\Wayne_Plans\12102-TCP03.dgn
WJaccas AT 1E1093479

APPROVED: <i>W. W. [Signature]</i> DATE: 02/10/04		PHASING NOTES	
SEAL 	SCALE: NONE		REVISIONS
	DATE: 03/04		
	DWG. BY: WAJ		
	DESIGN BY: WAJ		
REVIEWED BY: CBH			CADD FILE 12102 TCP03.DGN

PHASING NOTES

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-4

PHASE II

STEP 1:

COMPLETE THE WORK REQUIRED IN PHASE II, STEP 1 A WITHIN SIX CONSECUTIVE WEEKENDS FROM FRIDAY THRU SUNDAY 11:00 P.M. TO 5:00 A.M. EACH DAY (SEE INTERMEDIATE CONTRACT TIME 5 AND LIQUIDATED DAMAGES)

- A. - USING ROADWAY STANDARD DRAWING NUMBER 1101.03 SHEET 7 OF 9 AND POLICE COMPLETE THE FOLLOWING: (SEE SHEET TCP-16)
 - SET SIGNAL TO FLASH MODE AT THE INTERSECTION OF RAMP A, RAMP B AND -L-
 - OPEN RAMP C (-RPC-) TO TRAFFIC.
 - CLOSE ONE DIRECTION OF I-40 OR ENTIRE I-40 (AS REQUIRED) AND DIRECT EXISTING I-40 TRAFFIC TO RAMP A, B, C AND D.
 - REMOVE EXISTING STRUCTURE.
 - PLACE TRAFFIC BACK ON EXISTING I-40, RESET SIGNALS AND CLOSE RAMP C TO TRAFFIC WHEN NOT PLACING GIRDERS.
- B. - USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7, BEGIN CONSTRUCTION OF PROPOSED NB SR 1101 (HARPER ROAD) -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM: (SEE SHEET TCP-17, 18 AND 19)
 - STA. 07+37+/- -L- TO STA. 18+76+/- -L-
 - STA. 22+63+/- -L- TO STA. 23+94+/- -L-
 - STA. 25+00+/- -L- TO STA. 38+41+/- -L-
- COMPLETE CONSTRUCTION OF STAGE II OF PROPOSED STRUCTURE UP TO BUT NOT INCLUDING THE PLACEMENT OF GIRDERS OVER I-40. (SEE CONSTRUCTION STRUCTURE PLANS)

STEP 2:

COMPLETE THE WORK REQUIRED IN PHASE II, STEP 2 A AND B WITHIN 3 CONSECUTIVE NIGHTS FROM FRIDAY THRU SUNDAY FROM 11:00 P.M. TO 5:00 A.M. EACH DAY (SEE INTERMEDIATE CONTRACT TIME 6 AND PROJECT SPECIAL PROVISIONS)

- A. - OPEN RAMP C TO TRAFFIC
- B. - USING ROADWAY STANDARD DRAWING 1101.03 SHEET 7 OF 9 AND POLICE, SET SIGNAL LOCATED AT RAMP A, RAMP B AND -L-, TO FLASH. CLOSE I-40 AND DIRECT EXISTING I-40 TRAFFIC TO RAMP A, B, C AND D AND PLACE GIRDERS ALONG NB OF STRUCTURE (USE THE TRAFFIC CONTROL AS SHOWN ON SHEET TCP -16). SECURE THE GIRDERS AT THE END OF EACH WORK PERIOD AS DIRECTED BY THE ENGINEER. WHEN NOT PLACING GIRDERS, PLACE TRAFFIC BACK ON EXISTING I-40, RESET SIGNAL AND CLOSE RAMP C TO TRAFFIC.

STEP 3:

- COMPLETE CONSTRUCTION OF STAGE II OF STRUCTURE.

NOTE: ONCE STAGE II OF STRUCTURE IS COMPLETE, USE ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 7 TO REMOVE PORTABLE CONCRETE BARRIER ON SR 1101 (HARPER ROAD) -L- AND REPLACE WITH DRUMS.

- INSTALL PROPOSED SIGNS (701, 702 AND 703) ALONG I-40 USING ROADWAY STANDARD DRAWING 1101.02 SHEET 3, 5, 6 AND 7 OF 7.

STEP 4:

- USE ROADWAY STANDARD 1101.02 SHEET 1 OF 7 LEAVE -L- TRAFFIC IN THE CURRENT TWO LANE-TWO WAY TRAFFIC PATTERN AND PLACE FINAL LAYER OF SURFACE COURSE, INCLUDING CONCRETE ISLAND ON PROPOSED -L- AND PLACE INTERM PAINT PAVEMENT MARKINGS FOR FINAL PATTERN FROM: (SEE SHEET PM-1 THRU PM-4)
 - STA 7+37+/- -L- TO STA 38+42+/- -L-
- USING SHEET TCP-23 AND FLAGGERS, COMPLETE CONSTRUCTION OF RAMP A AND RAMP D UP TO AND INCLUDING FINAL LAYER OF SURFACE COURSE AND INCLUDING PROPOSED CONCRETE ISLANDS ON RAMP D (-RPD-) AND RAMP A (-RPA-).
- USING ROADWAY STANDARD DRAWING 1101.02, SHEET 3 OF 7, INSTALL MEDIAN GUARDRAIL THAT WAS REMOVED IN PHASE I STEP 2, B AND REMOVE PORTABLE CONCRETE BARRIER AND TEMPORARY GUARDRAIL FROM WB AND EB I-40 MEDIAN.
- USING SHEET TCP-23 AND FLAGGERS, PLACE FINAL LAYER OF SURFACE COURSE ON RAMP C (-RPC-) FROM:
 - STA. 0+00+/- -RPC- TO STA. 16+91+/- -RPC-
- ONCE THE FINAL LAYER OF SURFACE COURSE HAS BEEN PLACED AT THE INTERSECTION OF -L-, RAMP A AND RAMP B, PLACE INTERM PAINT PAVEMENT MARKINGS AND REVISE SIGNAL TO FINAL PATTERN. COVER SIGNAL HEADS FOR LANES NOT OPEN TO TRAFFIC.

NOTE: ONCE THE INTERM PAVEMENT MARKING FOR THE FINAL PATTERN IS PLACED, SHIFT TRAFFIC TO THE FINAL PATTERN.

- PLACE FINAL LAYER OF SURFACE COURSE ON -Y1- AND -Y2-.

PHASE II (CON'T)

STEP 5:

- USING ROADWAY STANDARD DRAWING 1101.02, SHEET 3 OF 7, PLACE FINAL LAYER OF SURFACE COURSE ON EB AND WB I-40 -Y4- FROM STA 31+85 +/- TO STA 39+55 +/-, REPLACE ORIGINAL MARKING AND MARKERS, AND SHIFT TRAFFIC BACK TO ORIGINAL PATTERN.

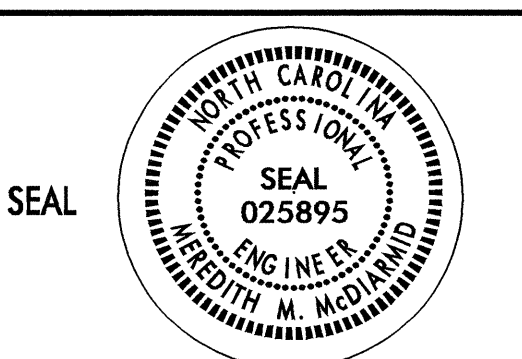
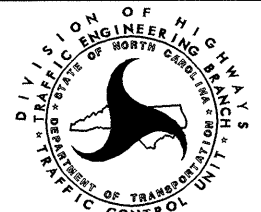
STEP 6:

- USING ROADWAY STANDARD 1101.02 SHEET 2 AND 3 OF 7, PLACE FINAL PAVEMENT MARKINGS (THERMOPLASTIC) AND SNOWPLOWABLE MARKERS ON -L-. PLACE THERMOPLASTIC ON -Y1- AND -Y2-. (SEE SHEET PM-4)

STEP 7:

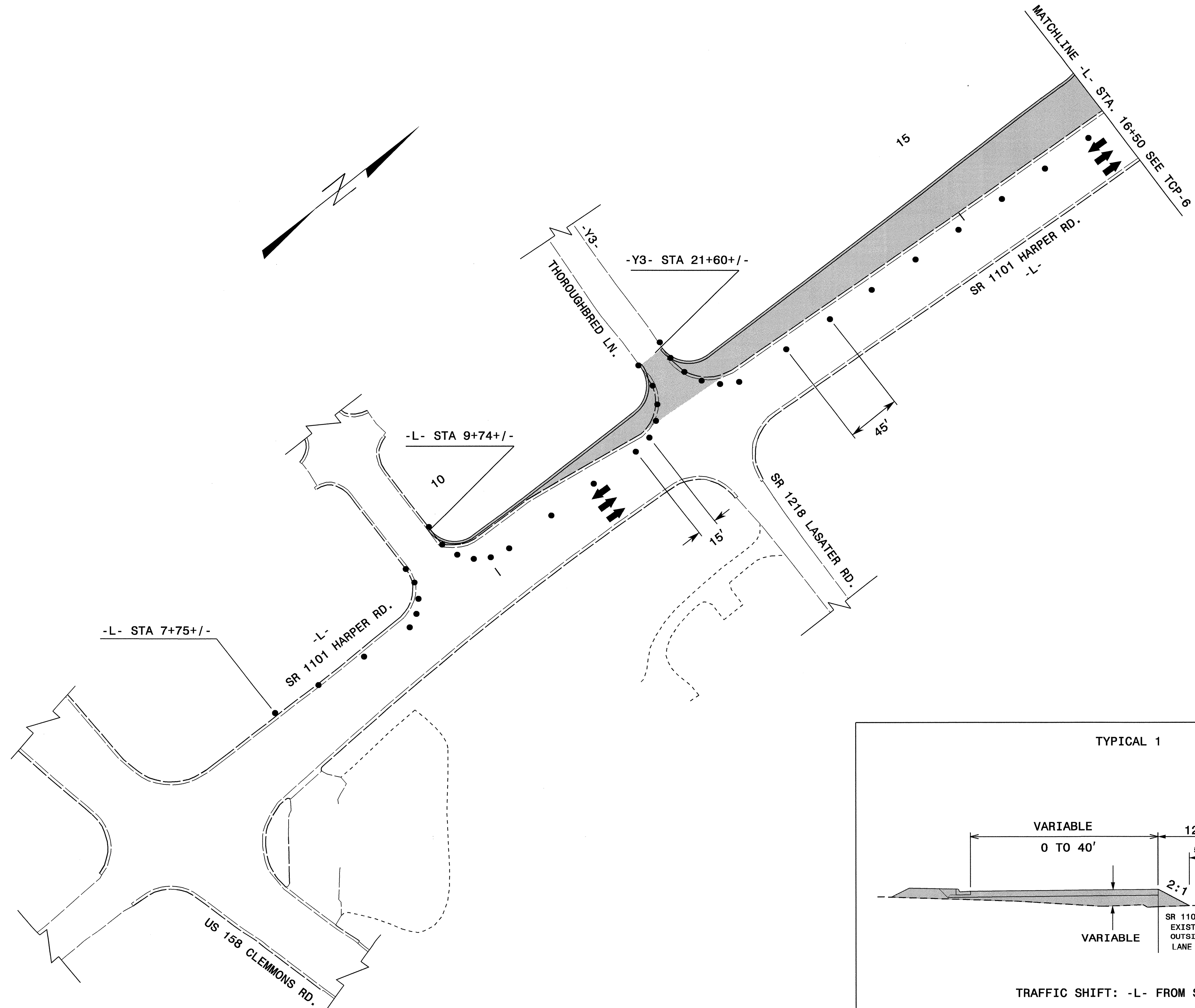
- REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.

16-AUG-2004 09:08
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wjlccas AT 11:03:47

APPROVED: <i>M. McQuinn</i> DATE: <i>2/16/04</i>				<h3>PHASING NOTES</h3>	
SCALE:	NONE				REVISIONS
DATE:	03/04				
DWG. BY:	WAJ				
DESIGN BY:	WAJ				
REVIEWED BY:	CBH				

WIDENING OF SB HARPER ROAD (SR 1101)

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-5



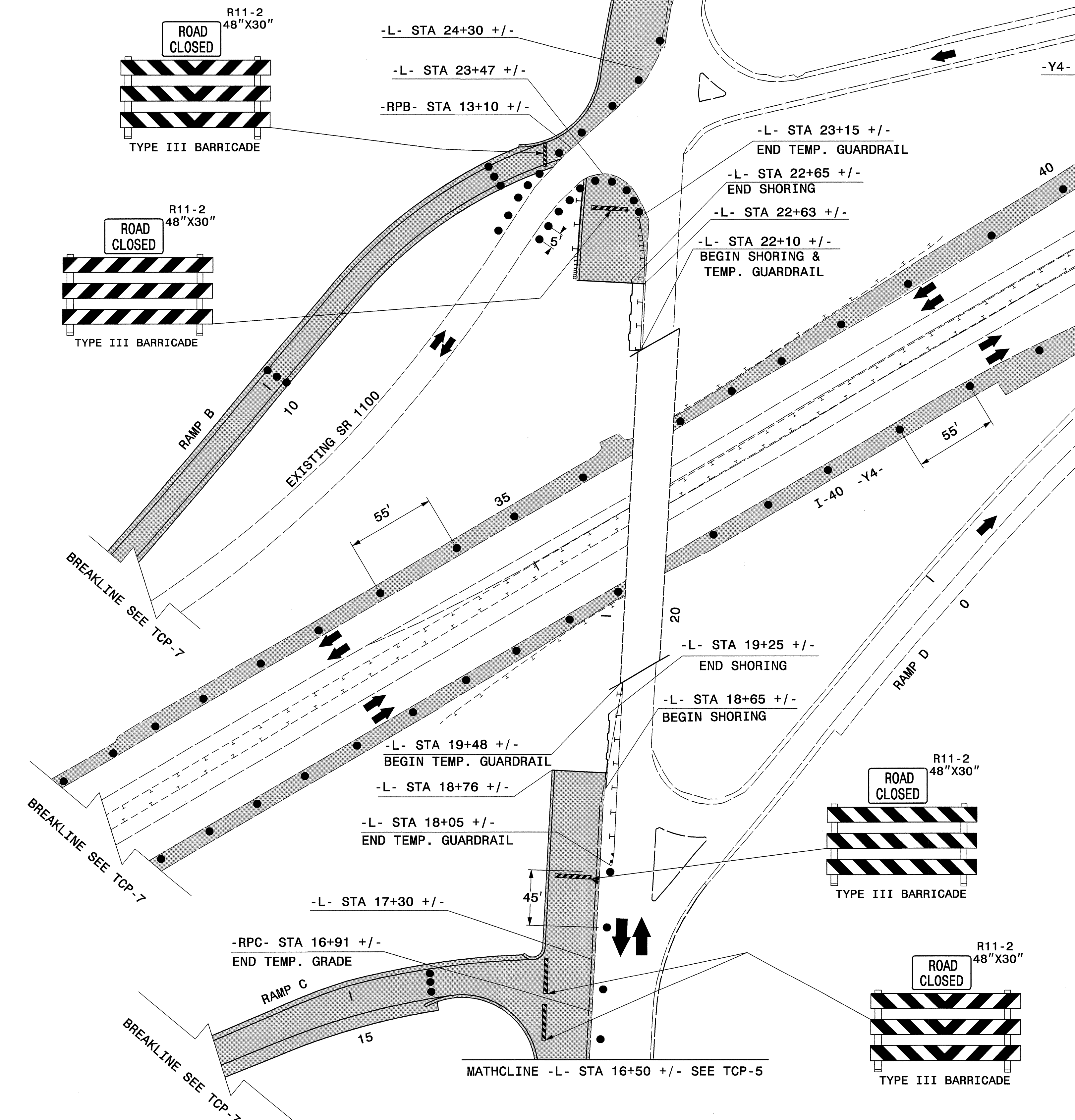
I2-AUC-2004.16:54
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 WJ0505 AT 11:03:47

FOR DESIGN OF TEMPORARY SHORING, USE THE FOLLOWING SOIL PARAMETERS:

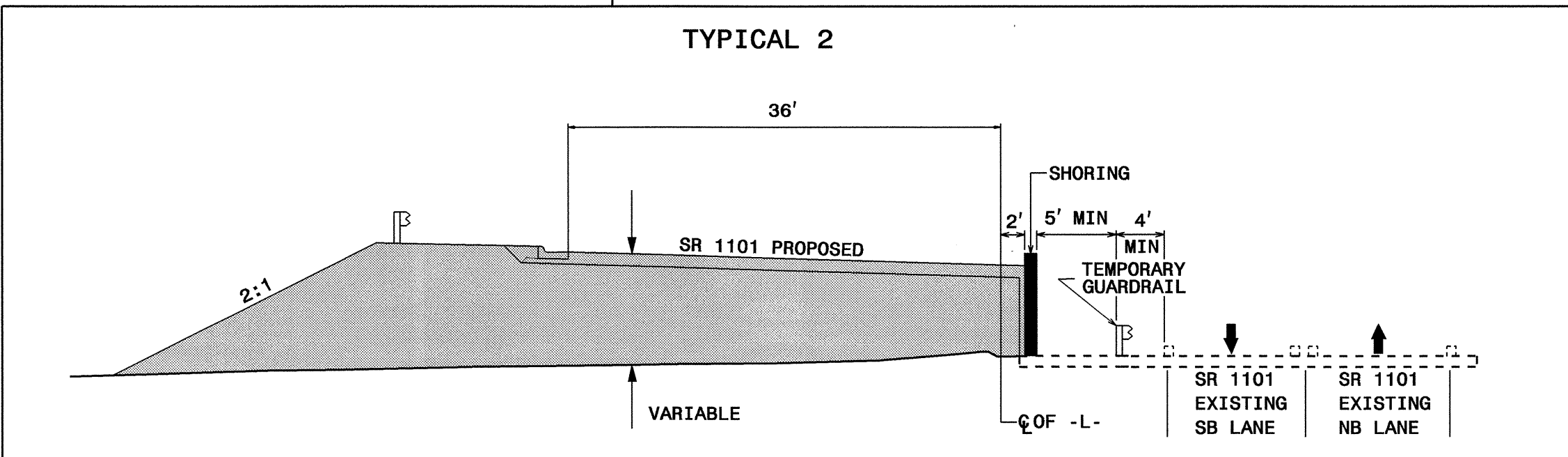
UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ pcf
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 57.6$ pcf
 FRICTION ANGLE, $\phi = 30^\circ$
 COHESION, $c = 0$ psf

PROPOSED HARPER ROAD CONSTRUCTION & I-40 WIDENING.

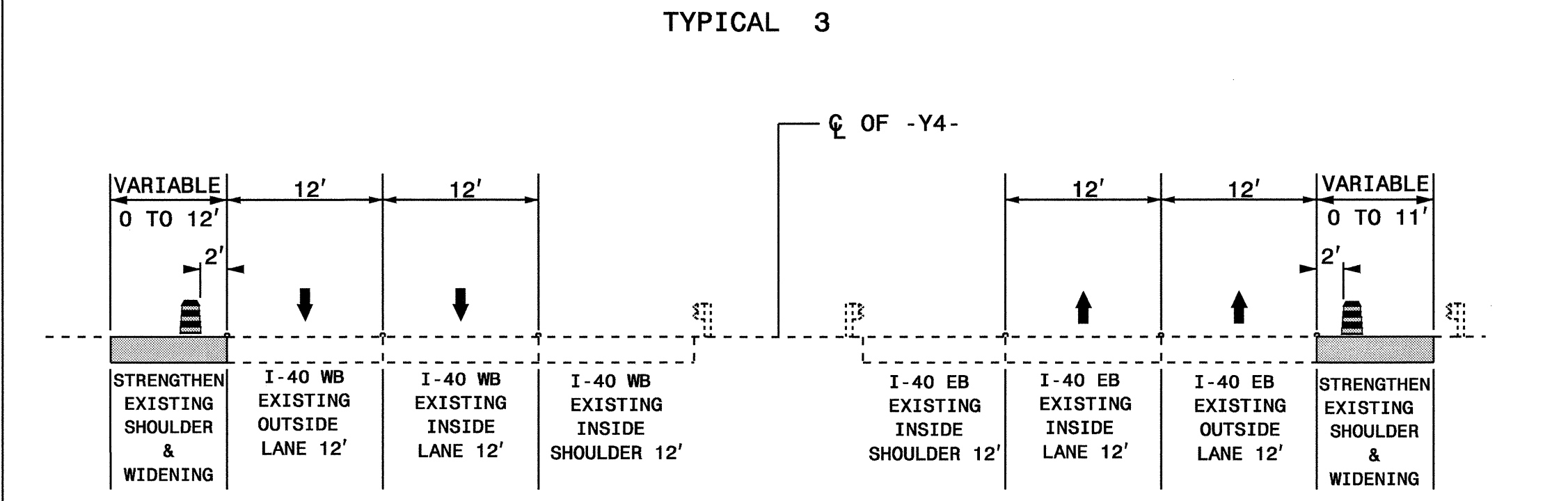
PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-6



- NOTES:**
- PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
 - PAVEMENT MARKERS ARE TO BE SPACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS.
 - SEE PM-1 FOR PAVEMENT MARKING SYMBOL DESCRIPTION.



SHORING: -L- FROM STA 18+65 +/- TO STA 19+25 +/- AND STA 22+10 +/- TO STA 22+65 +/-
 TEMP. GUARDRAIL: -L- FROM STA 18+05 +/- TO STA 19+48 +/- AND STA 22+10 +/- TO STA 23+15 +/-



I-40 (-Y4-) WB FROM STA 12+20 +/- TO STA 43+00 +/-
 I-40 (-Y4-) EB FROM STA 11+60 +/- TO STA 40+40 +/-

APPROVED: *M. McClanahan* DATE: 03/04
 SEAL

PHASE 1: STEP 2

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DATE: 03/04										
DWG. BY: WAJ										
DESIGN BY: WAJ										

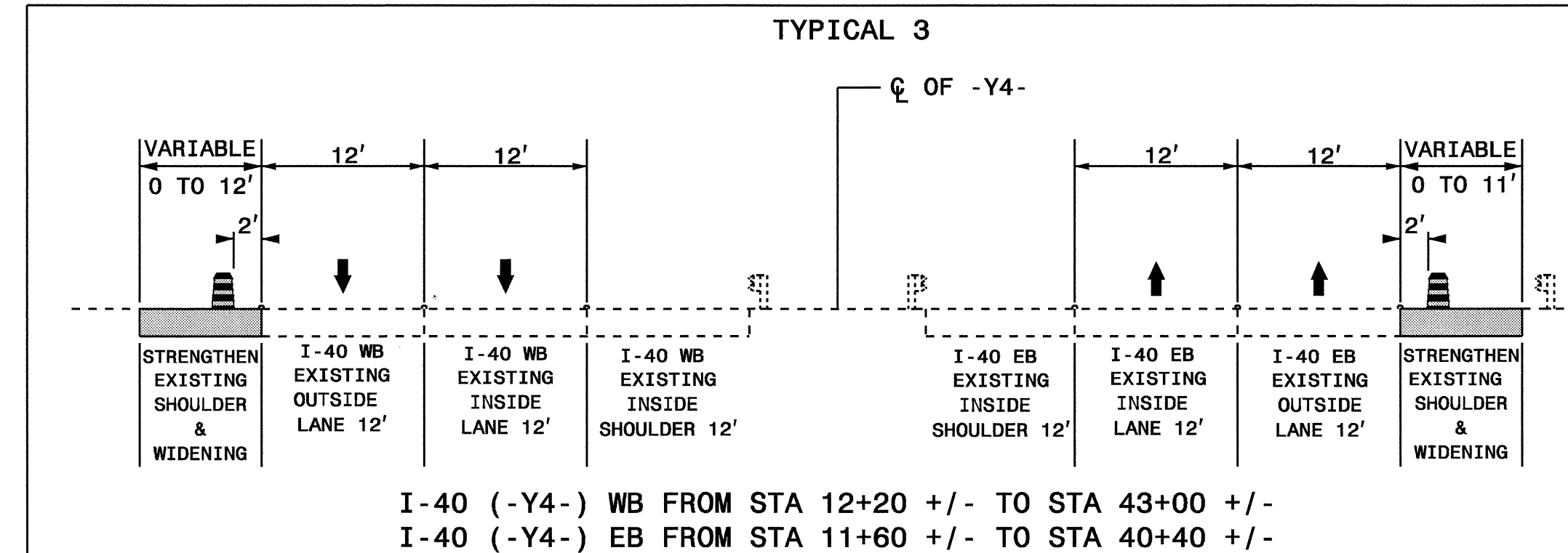
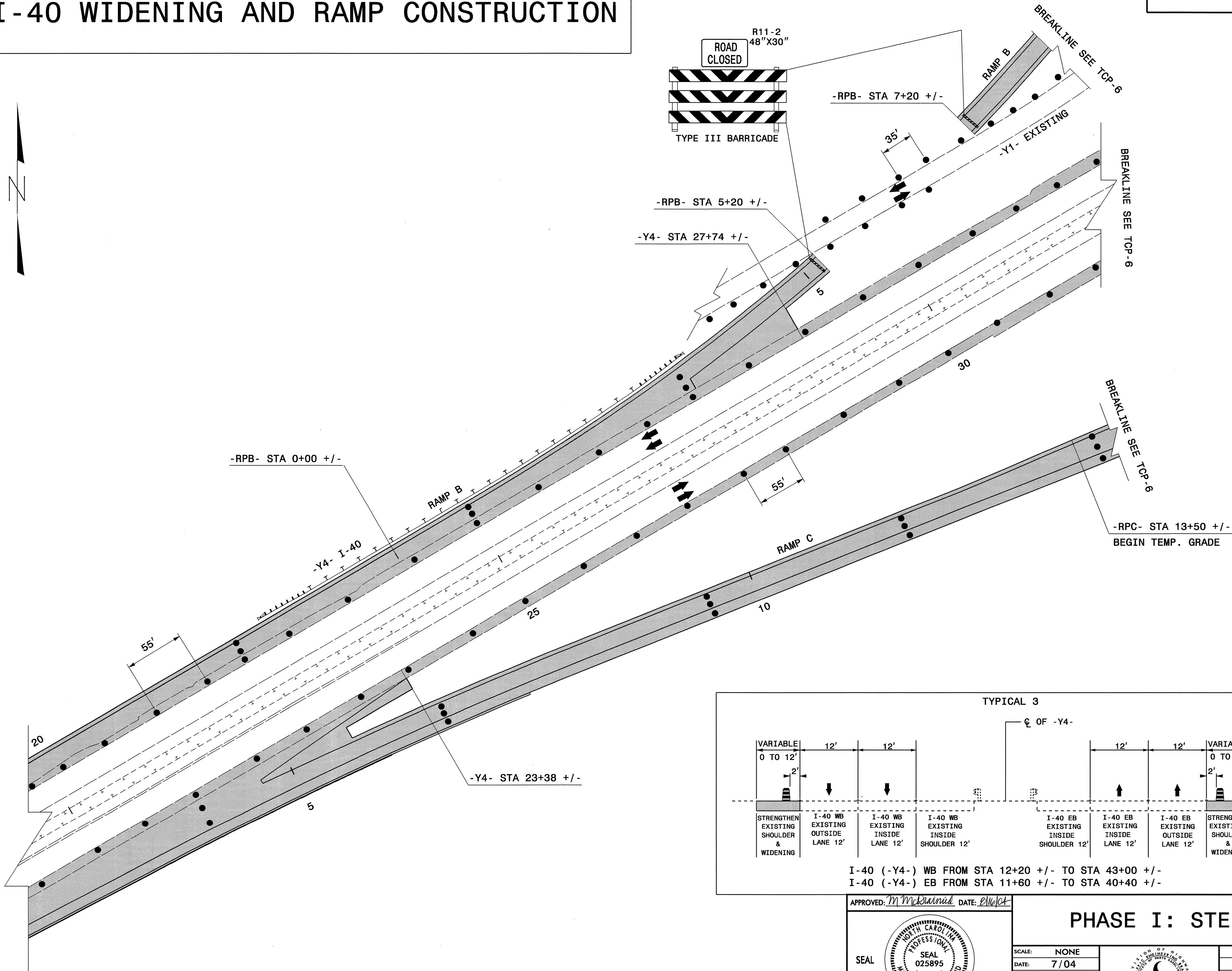
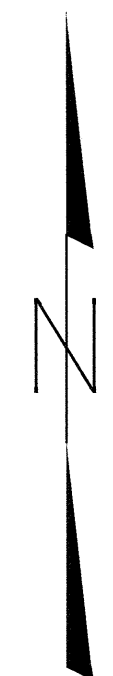
REVIEWED BY: CBH

CADD FILE: I2102 TCP06.DGN

I2-AUC-2004.16:55
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 WLOGS AT TELC193479

PROPOSED I-40 WIDENING AND RAMP CONSTRUCTION

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-7

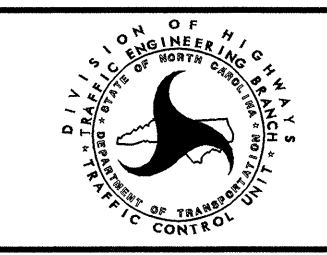


APPROVED: *M. McDaniel* DATE: *7/04*



PHASE I: STEP 2

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 DATE: 7/04
 DWG. BY: WAJ
 DESIGN BY: WAJ
 REVIEWED BY: CBH

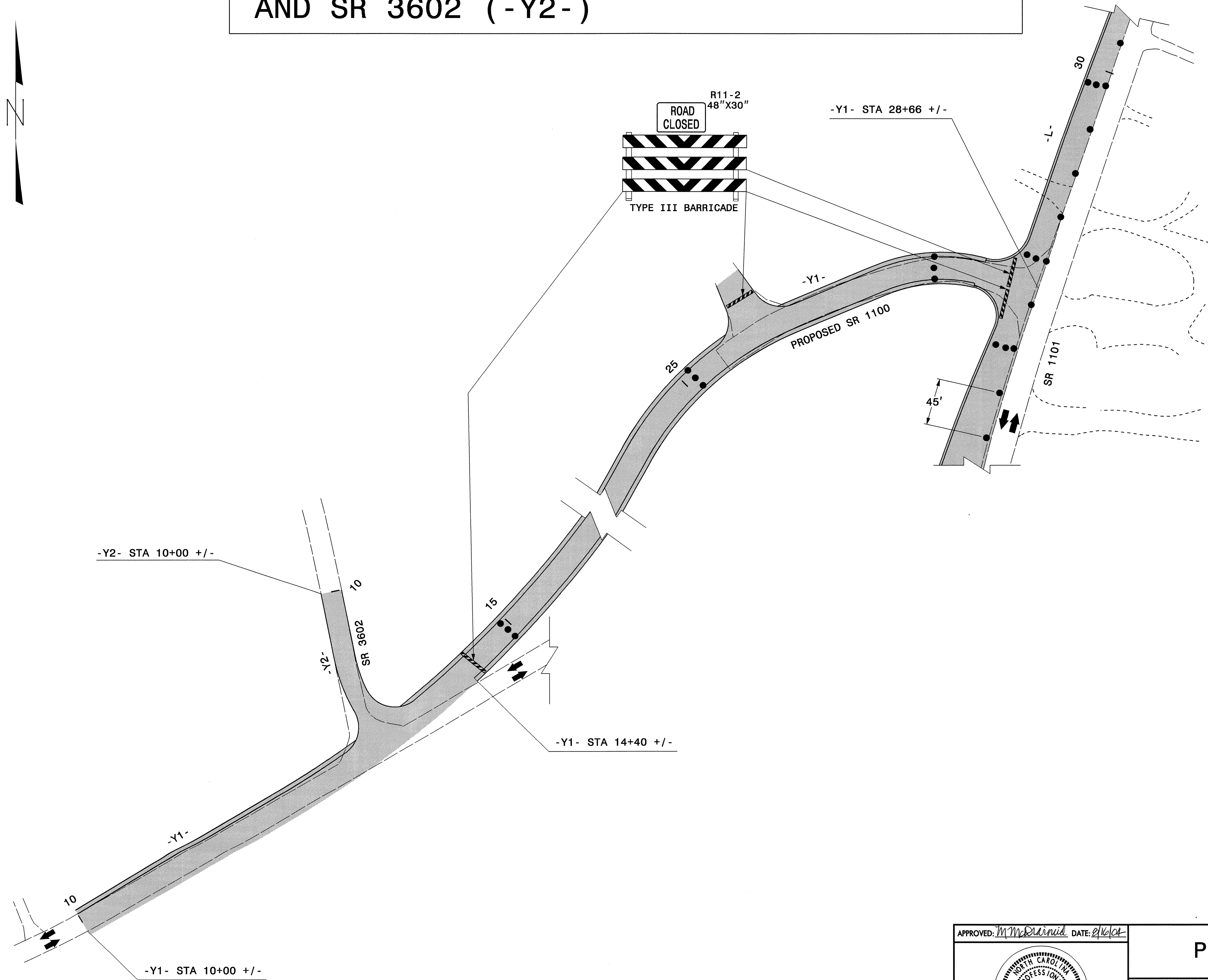


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I2-AUC-2004 16:56
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 WJOGS AT 11:09:3479

CONSTRUCTION OF RELOCATED SR 1100 (-Y1-) AND SR 3602 (-Y2-)

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-8



I2-AUG-2004 16:56
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WJocas AT 11/19/04

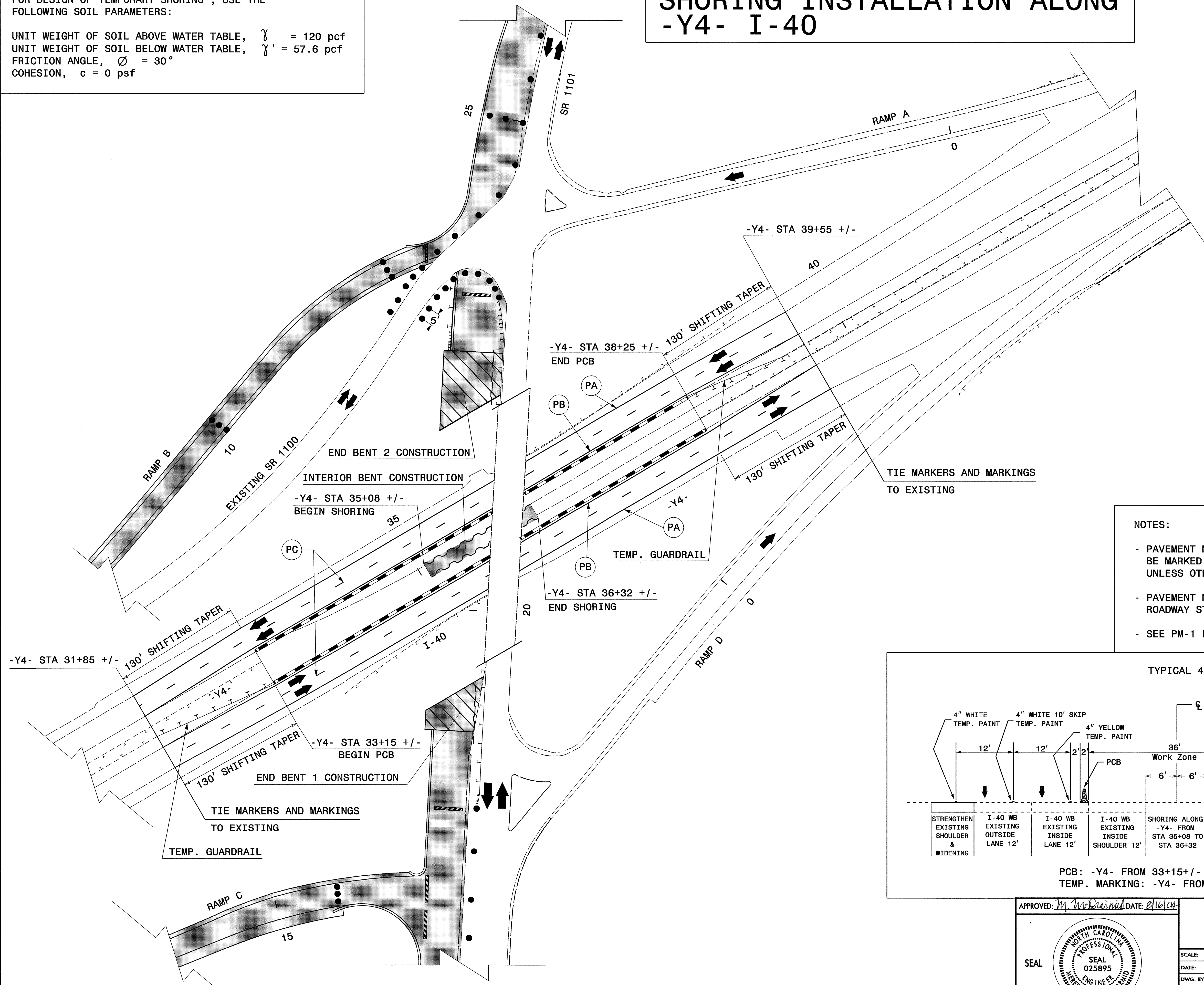
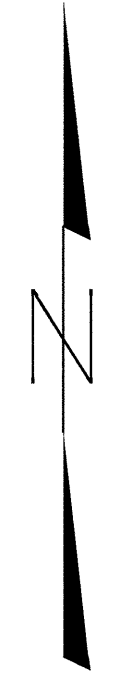
APPROVED: <i>M. McBurnid</i> DATE: <i>2/16/04</i>	PHASE 1: STEP 2	
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	DWG. BY: WAJ	
	DESIGN BY: WAJ	
REVIEWED BY: CBH	REVISIONS	
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FOR DESIGN OF TEMPORARY SHORING, USE THE FOLLOWING SOIL PARAMETERS:

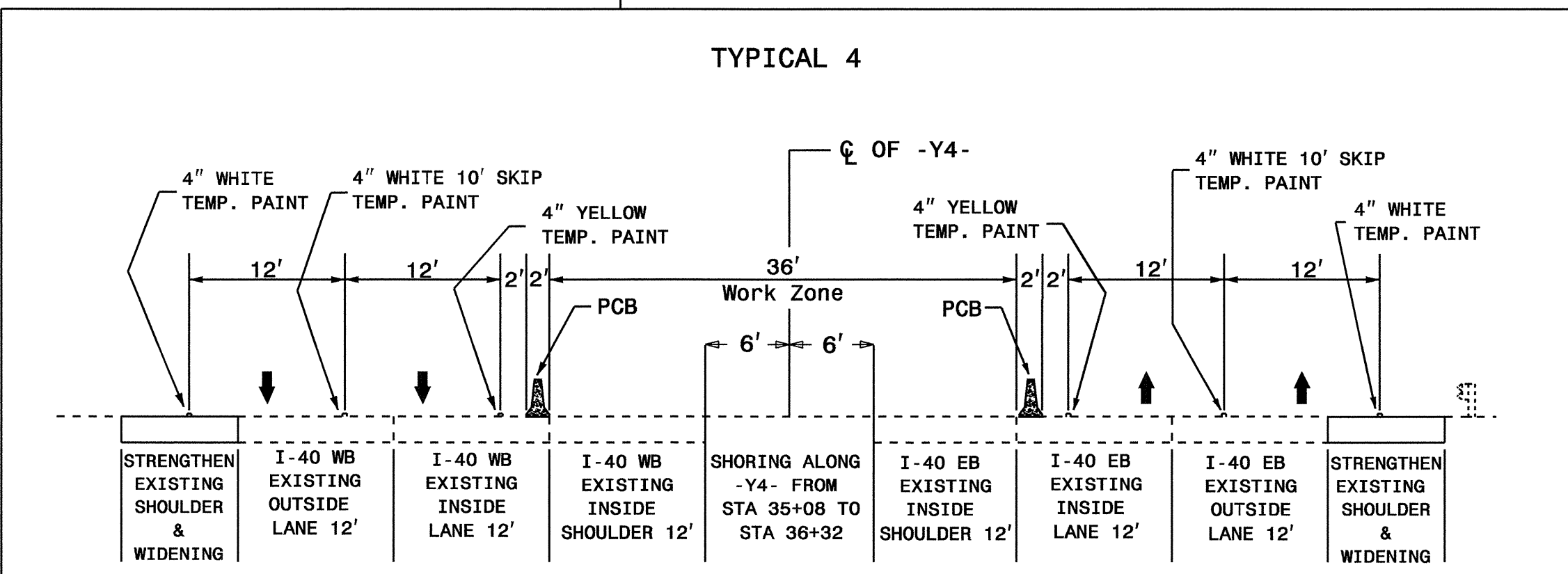
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 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 57.6$ pcf
 FRICTION ANGLE, $\phi = 30^\circ$
 COHESION, $c = 0$ psf

SHORING INSTALLATION ALONG -Y4- I-40

PROJ. REFERENCE NO. I-2102	SHEET NO. TCP-9
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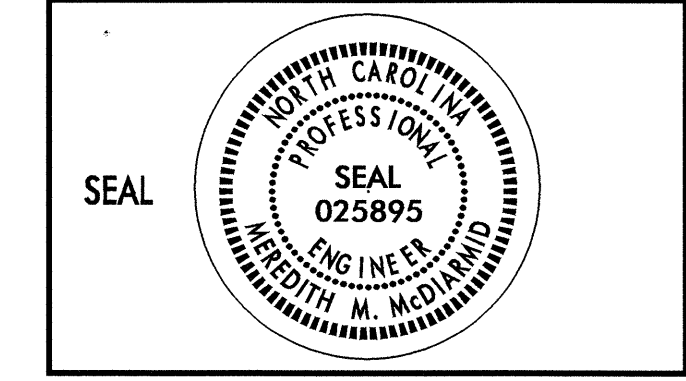


- NOTES:
- PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
 - PAVEMENT MARKERS ARE TO BE SPACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS.
 - SEE PM-1 FOR PAVEMENT MARKING SYMBOL DESCRIPTION.



PCB: -Y4- FROM 33+15 +/- TO STA 38+25 +/-
 TEMP. MARKING: -Y4- FROM 31+85 +/- TO STA 39+55 +/-

APPROVED: *M. McQuinn* DATE: *01/04*



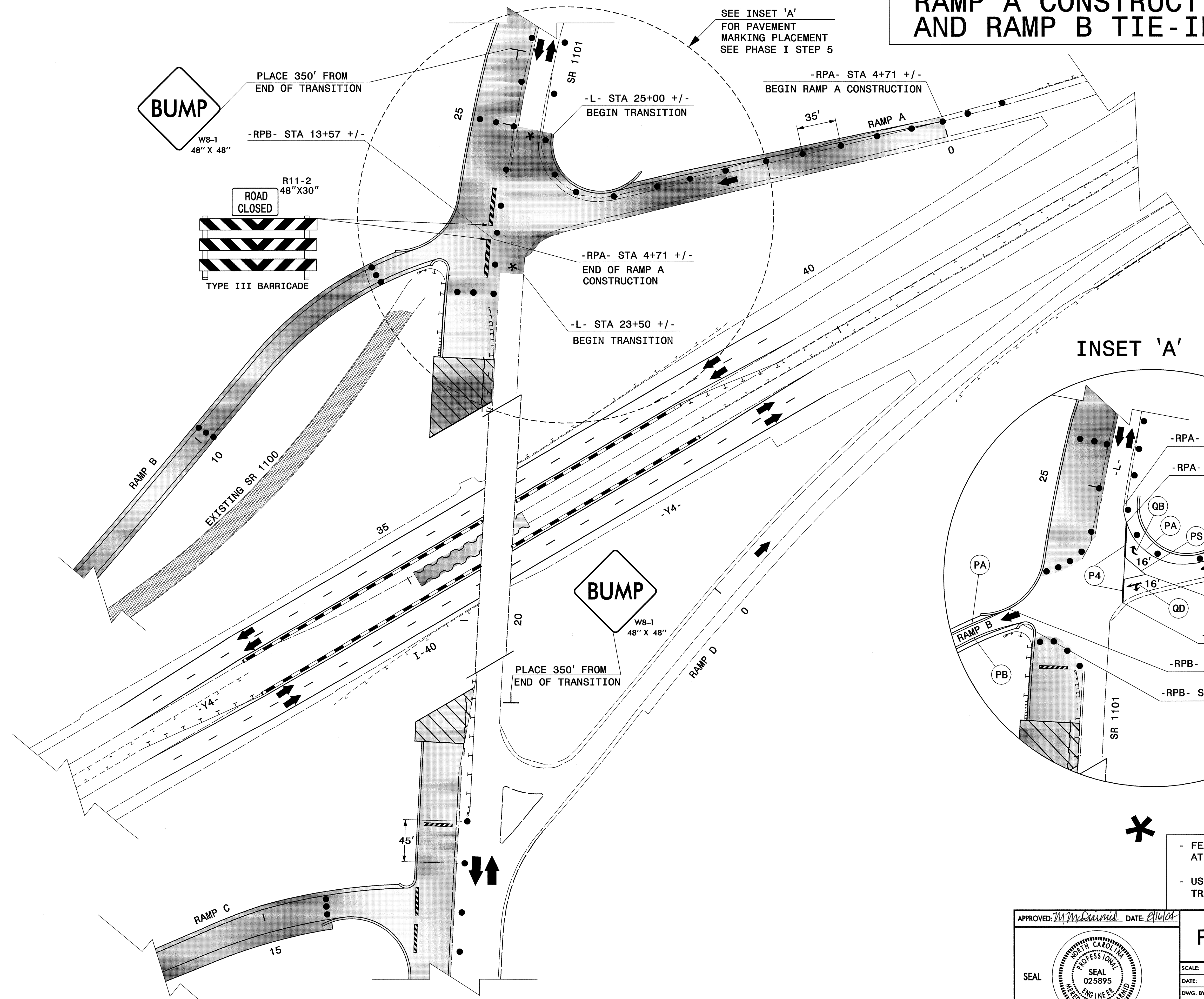
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DATE: 03/04										
DWG. BY: WAJ										
DESIGN BY: WAJ										
REVIEWED BY: CBH	CADD FILE: I2102 TCP09.DGN									

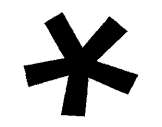
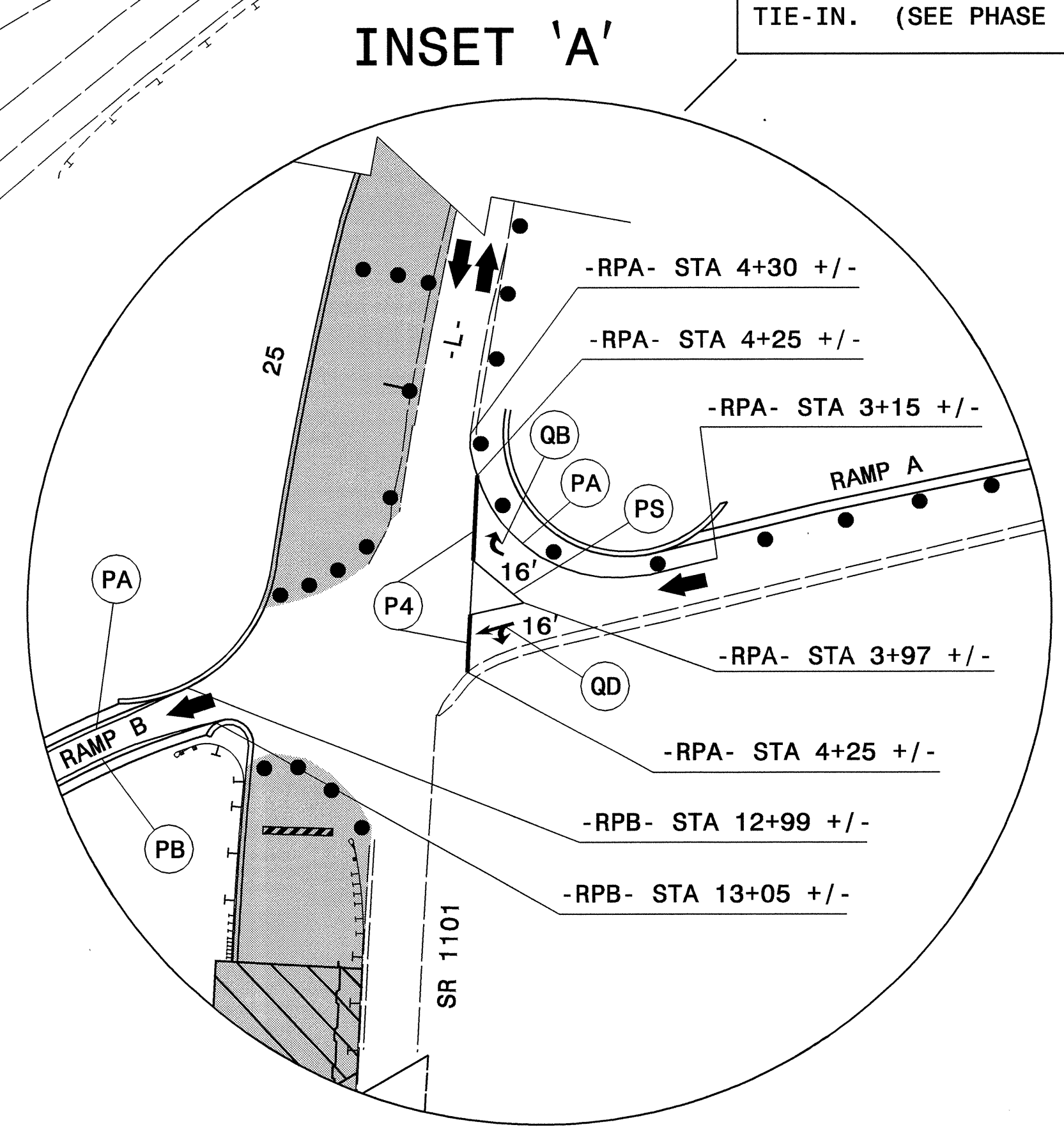
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 wjacobs AT IETC193479

RAMP A CONSTRUCTION AND RAMP B TIE-IN

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-10



NOTE:
PLACE PAVEMENT MARKING ACCORDING TO INSET 'A' AFTER -RPB-, -RPA-, AND -L- TIE-IN. (SEE PHASE I STEP 5)



- FEATHER TRANSITION FROM PROPOSED TO EXISTING AT -L- STA 23+50 +/- AND -L- STA 25+00 +/-.

- USE "BUMP" SIGNS 350' FROM THE END OF THE TRANSITION.

APPROVED: *M. McDaniel* DATE: *01/04*

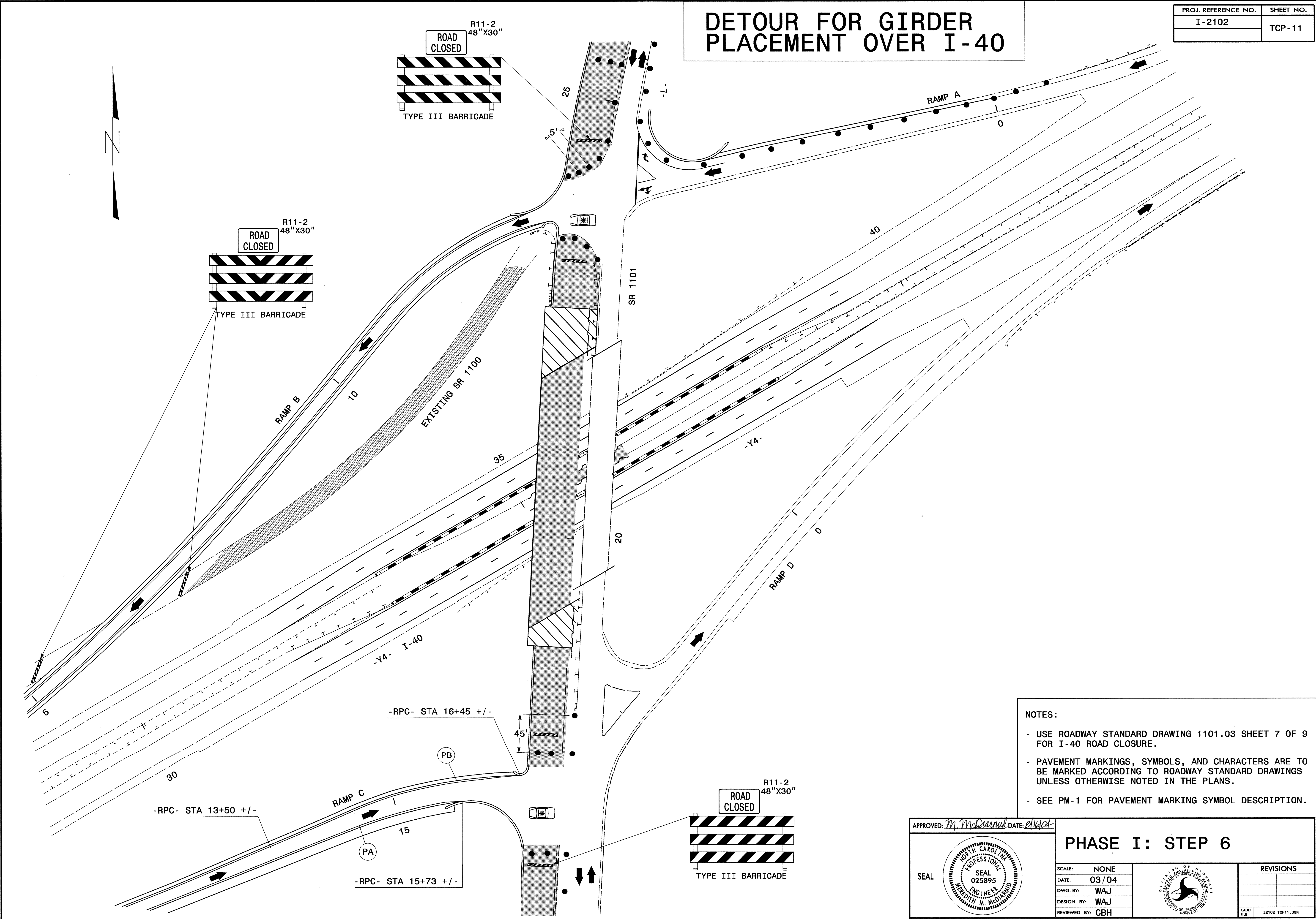
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DWG. BY: WAJ	DESIGN BY: WAJ			REVIEWED BY: CBH					

P:\AUG-2004\17-06
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 WJAOCS AT 11:10:34 AM

DETOUR FOR GIRDER PLACEMENT OVER I-40

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-11



- NOTES:**
- USE ROADWAY STANDARD DRAWING 1101.03 SHEET 7 OF 9 FOR I-40 ROAD CLOSURE.
 - PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
 - SEE PM-1 FOR PAVEMENT MARKING SYMBOL DESCRIPTION.

APPROVED: *M. McDermott* DATE: *2/16/04*

SEAL

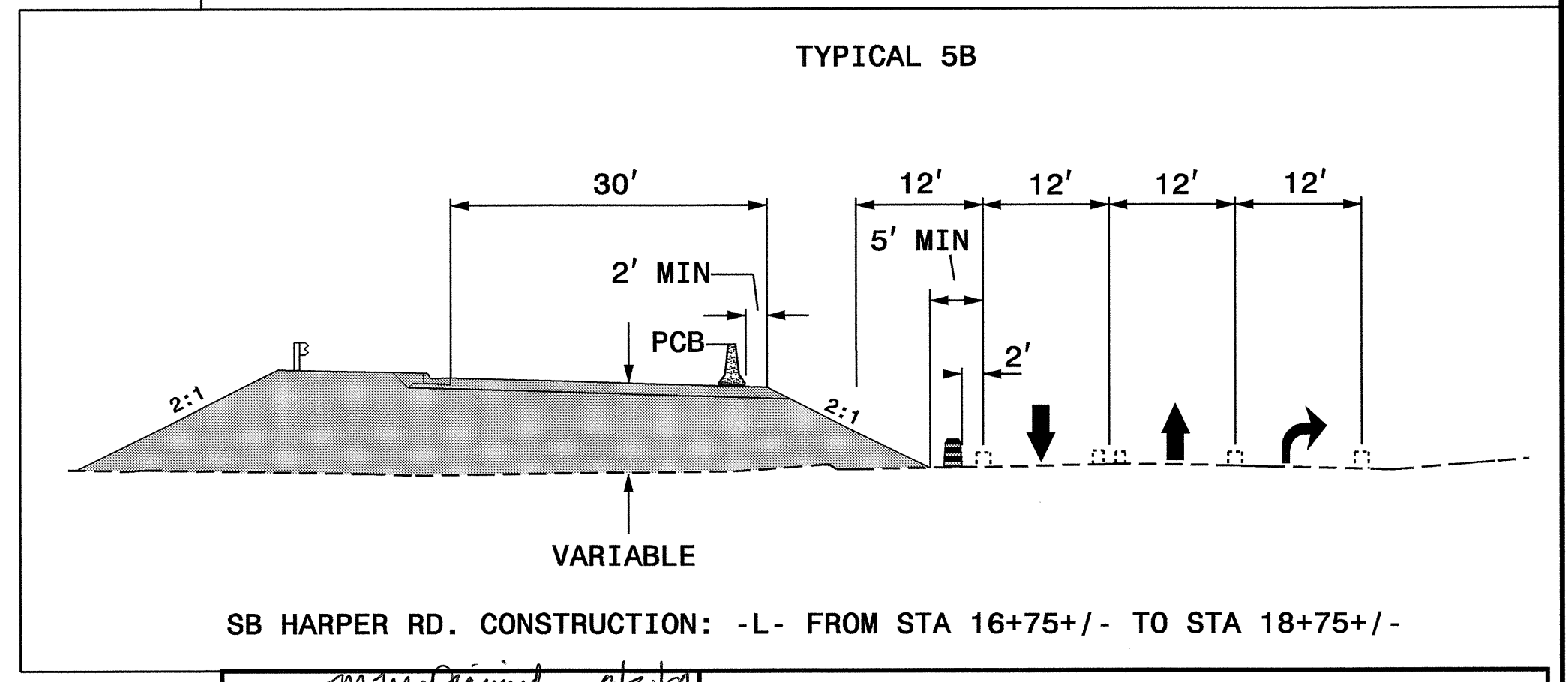
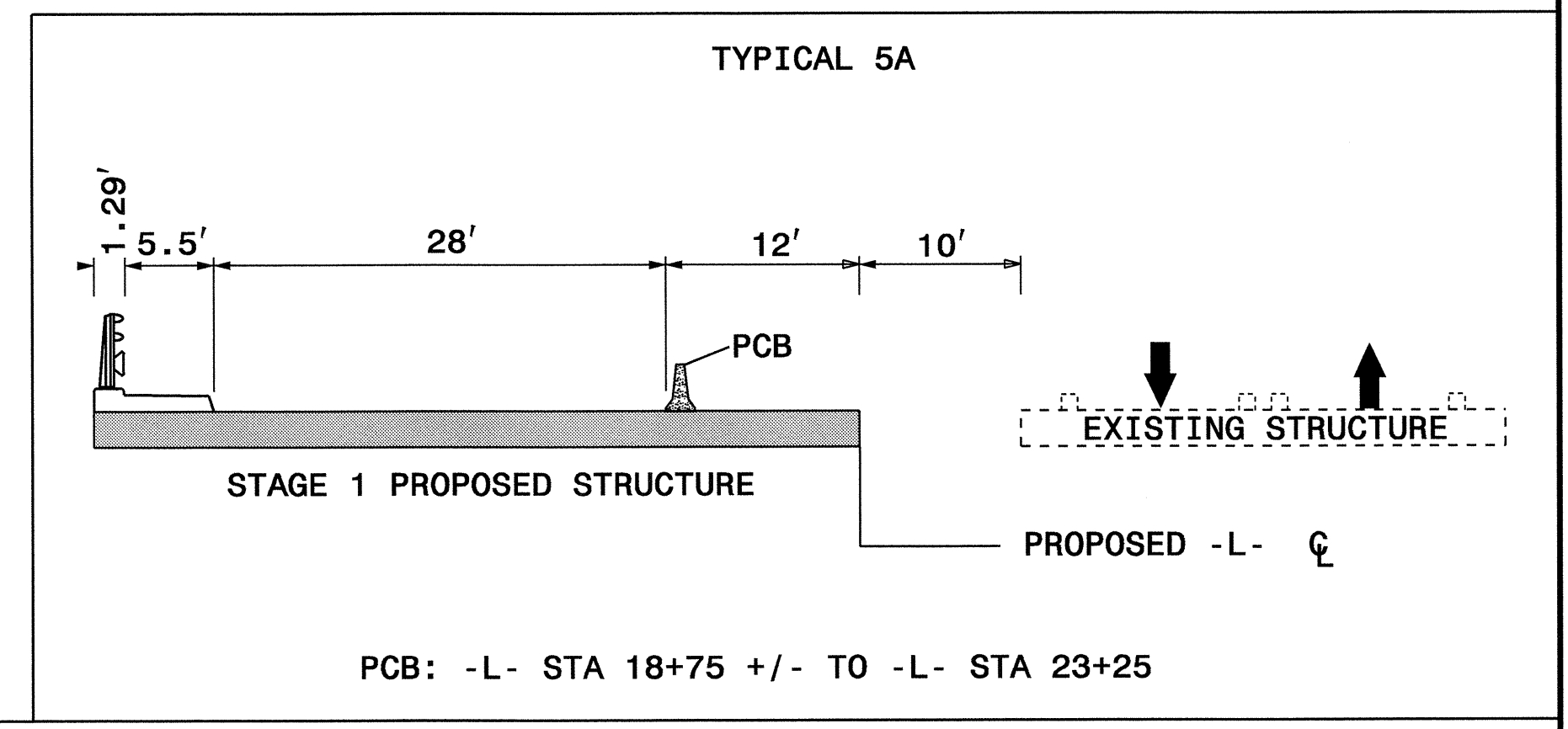
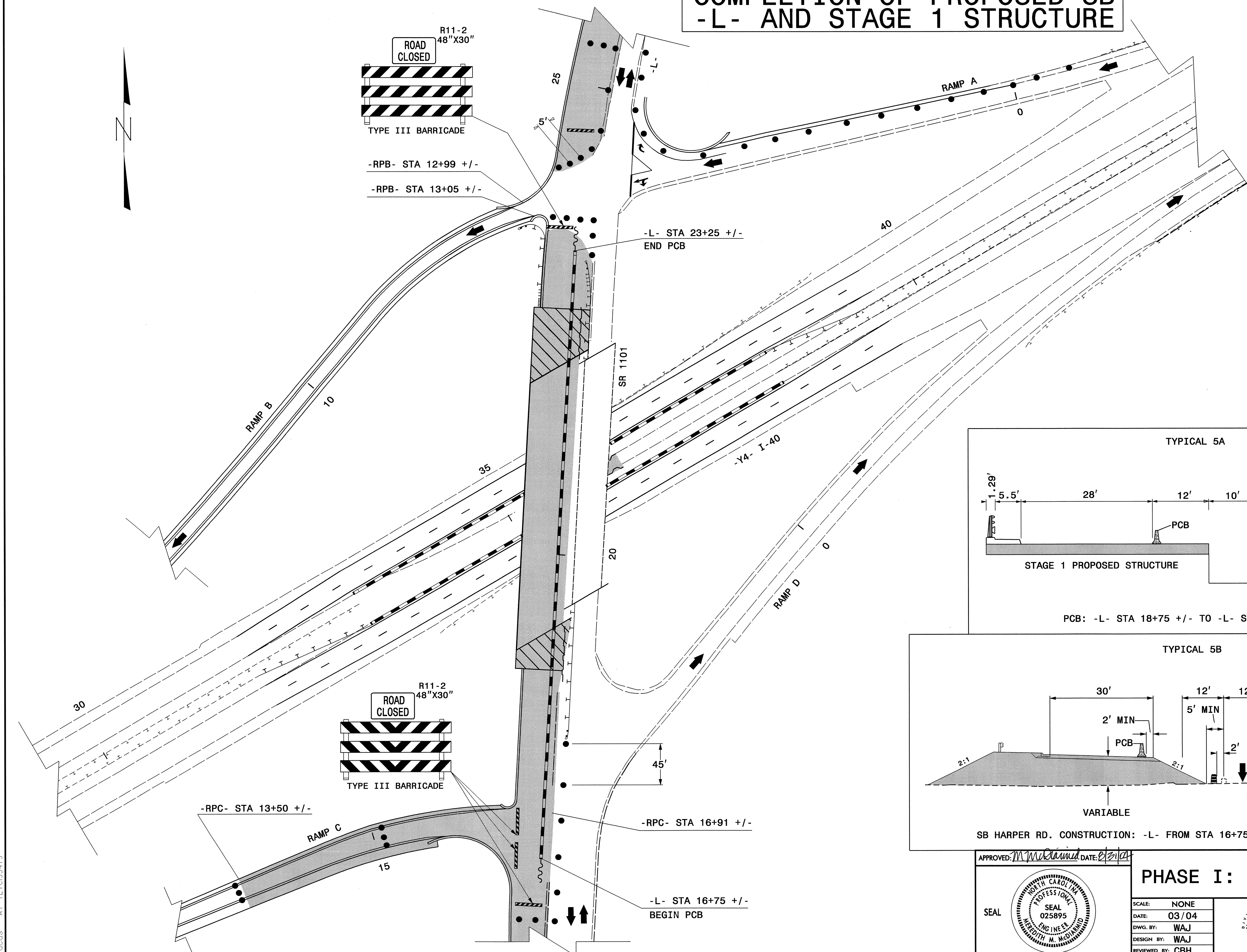
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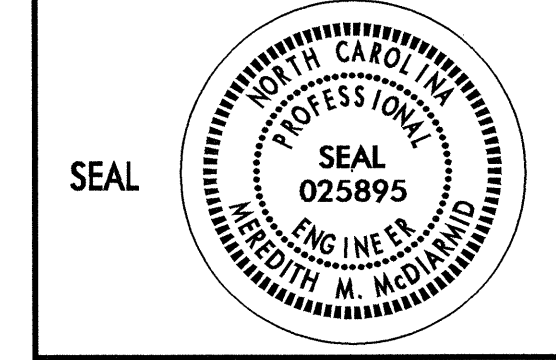
12-AUG-2004 17:06
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COMPLETION OF PROPOSED SB -L- AND STAGE 1 STRUCTURE

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-12

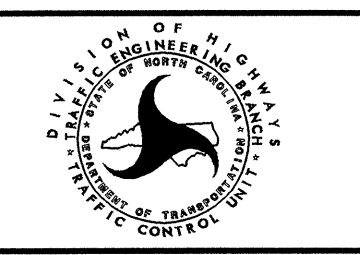


APPROVED: *M. McQuinn* DATE: 2/2/04



PHASE I: STEP 7

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 REVIEWED BY: CBH

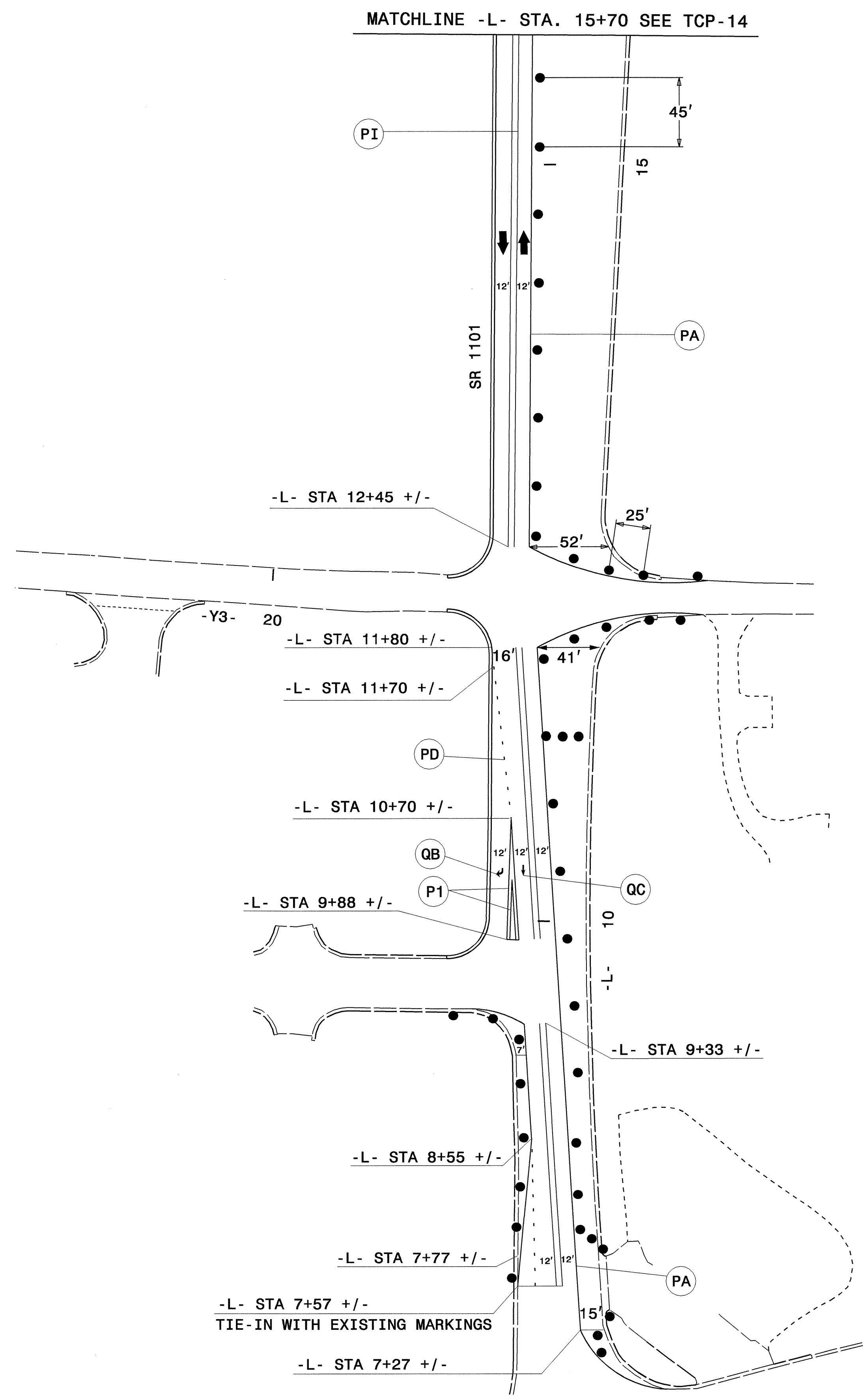


REVISIONS	

30-AUG-2004 17:11
 G:\TCP\Wayne_Plan\2102_TCP12.dgn
 wjaccas AT TET103479

INTERMEDIATE TRAFFIC PATTERN

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-13



NOTES:

- PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
- PAVEMENT MARKERS ARE TO BE SPACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS.
- SEE PM-1 FOR PAVEMENT MARKING SYMBOL DESCRIPTION.

APPROVED: <i>M. McManis</i> DATE: <i>03/04</i>	PHASE I: STEP 8							
	SCALE: NONE							
	DATE: 03/04							
	DWG. BY: WAJ							
	DESIGN BY: WAJ							
REVIEWED BY: CBH	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS					
REVISIONS								
<small>CADD FILE 12102 TCP13.DGN</small>								

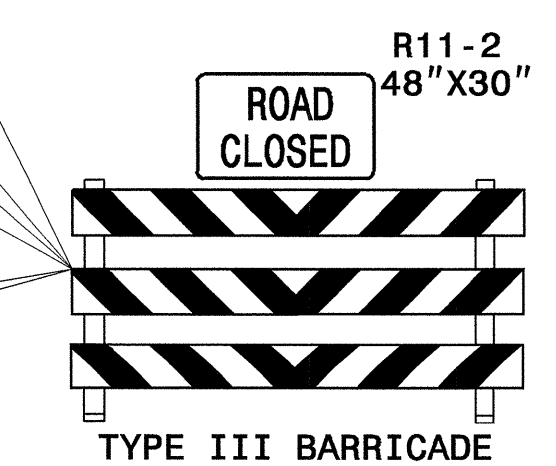
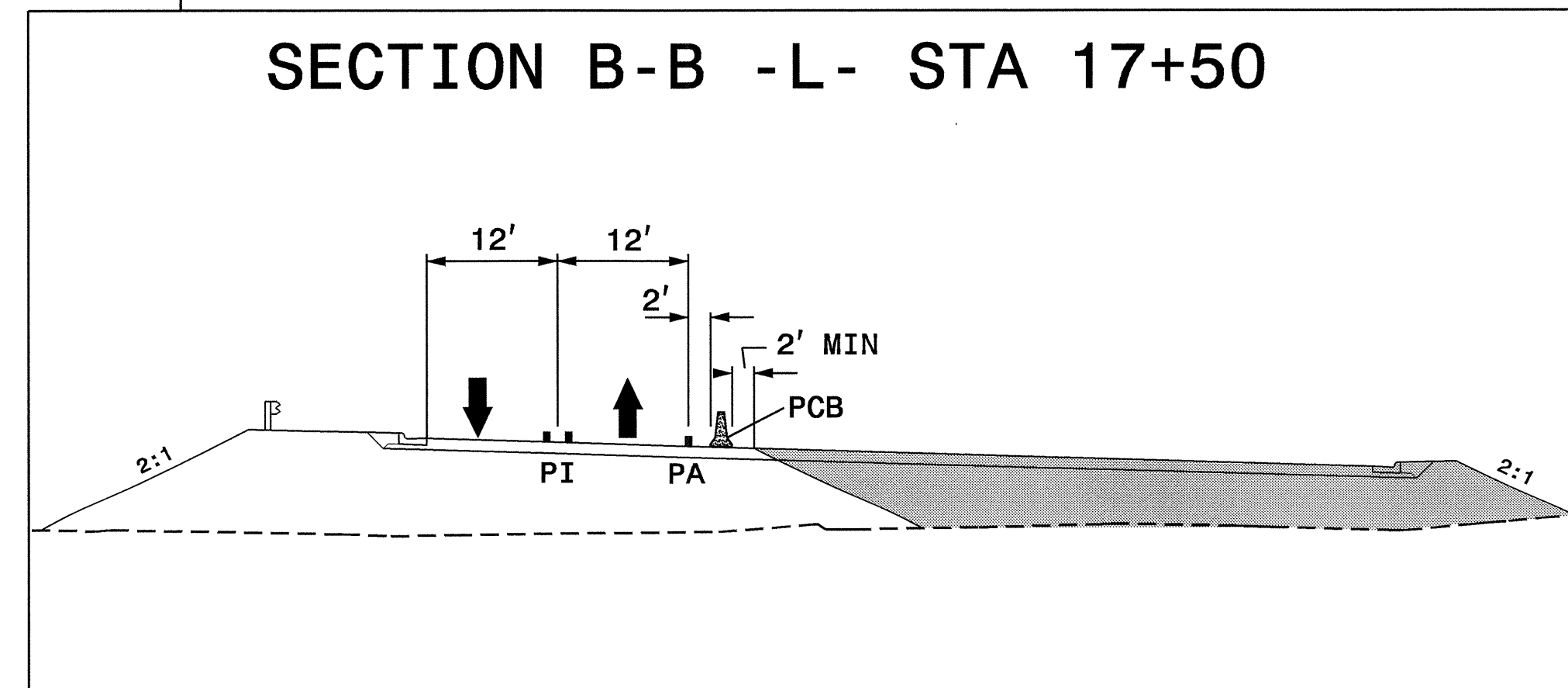
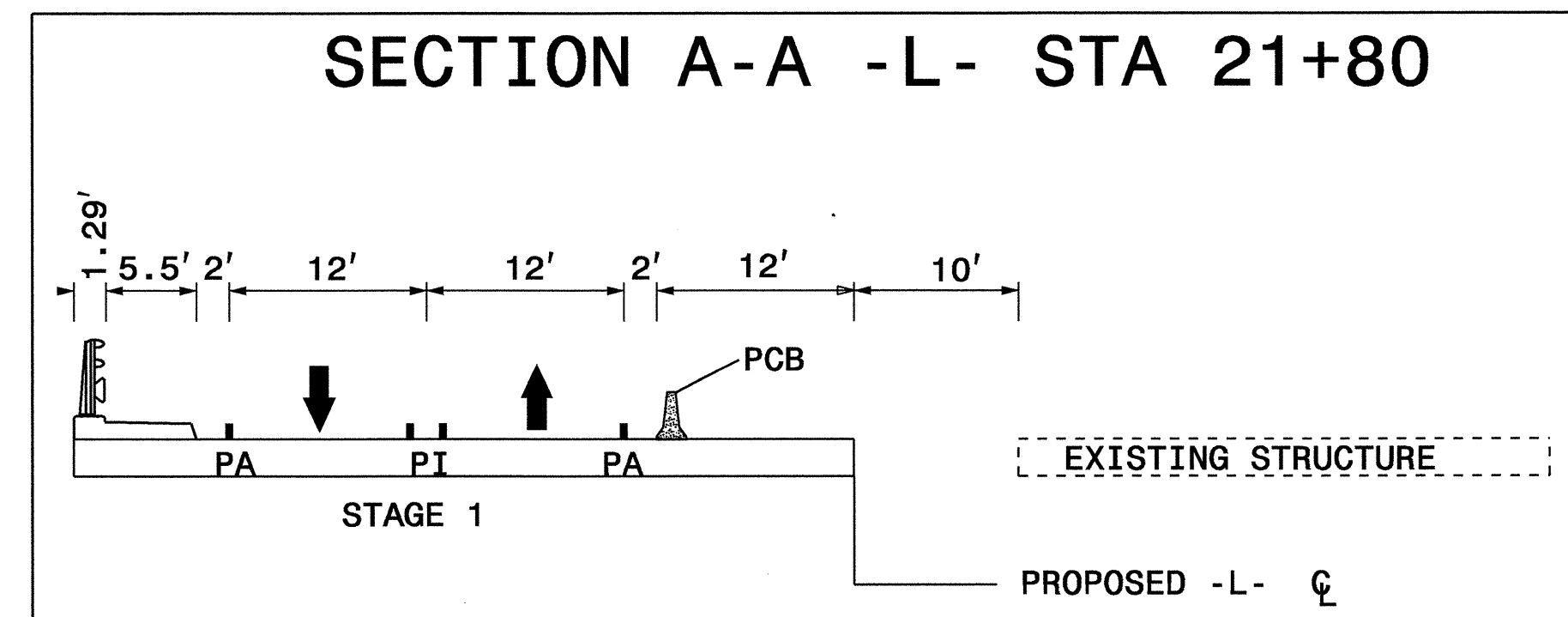
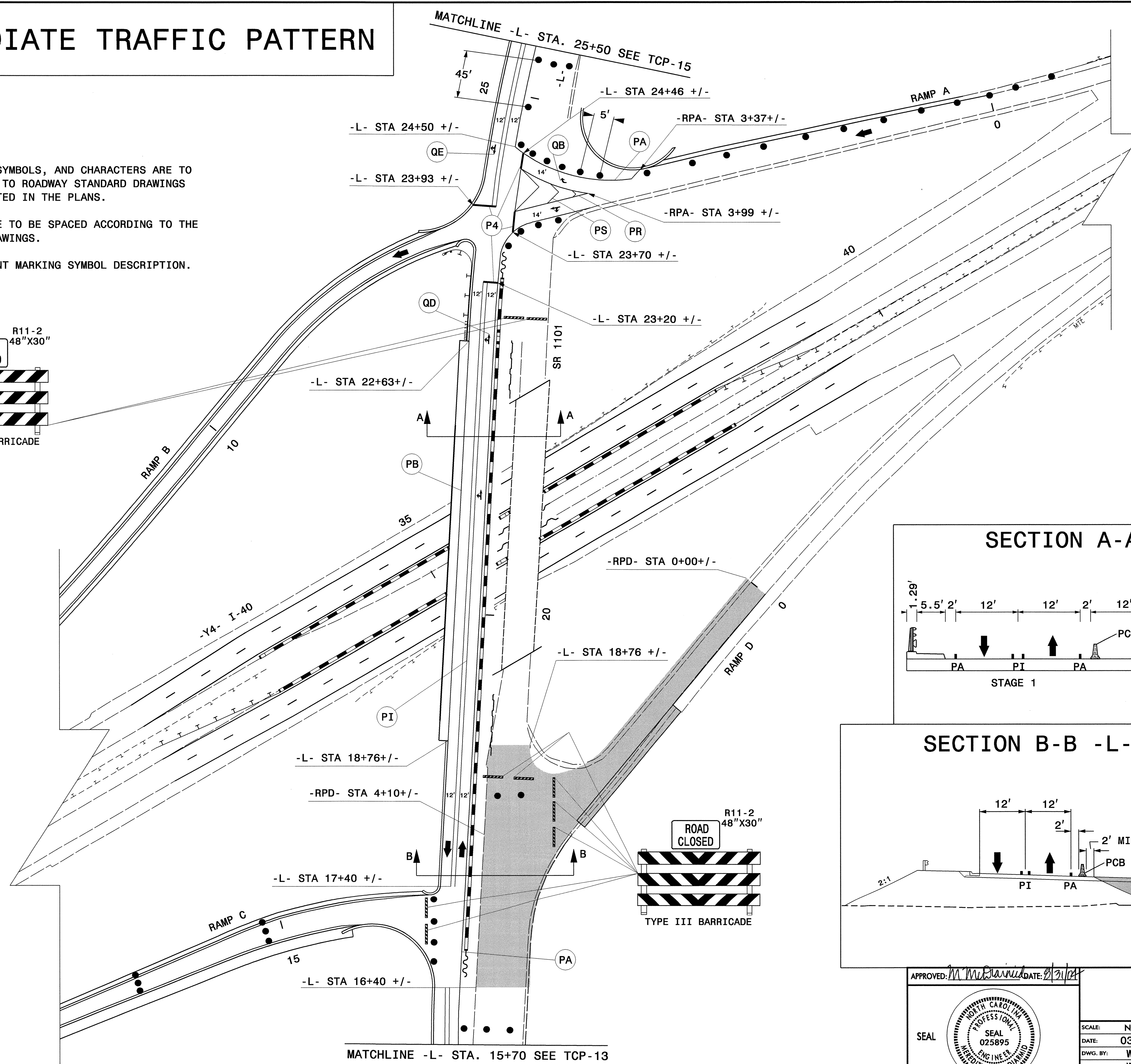
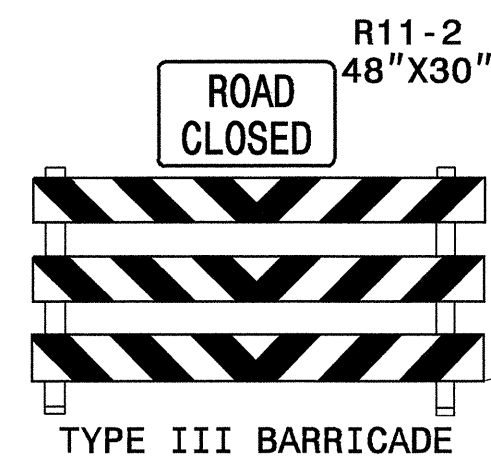
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 06-TCP-Work\Plans\12102-TCP13.dgn
 W10006 AT 121023479

INTERMEDIATE TRAFFIC PATTERN

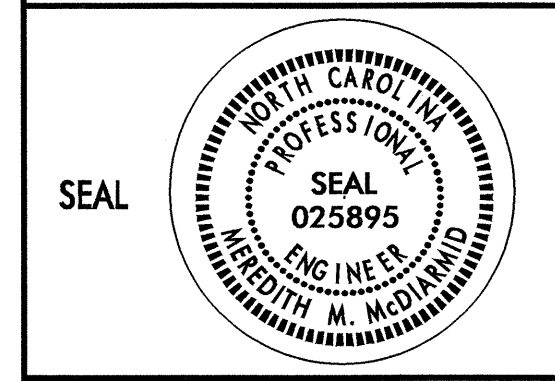
PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-14

NOTES:

- PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
- PAVEMENT MARKERS ARE TO BE SPACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS.
- SEE PM-1 FOR PAVEMENT MARKING SYMBOL DESCRIPTION.

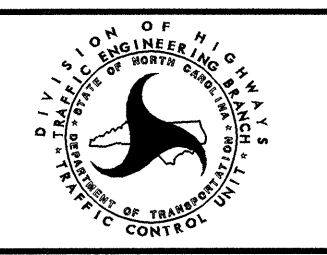


APPROVED: *M. M. [Signature]* DATE: 03/04



PHASE I: STEP 8

SCALE:	NONE
DATE:	03/04
DWG. BY:	WAJ
DESIGN BY:	WAJ
REVIEWED BY:	CBH

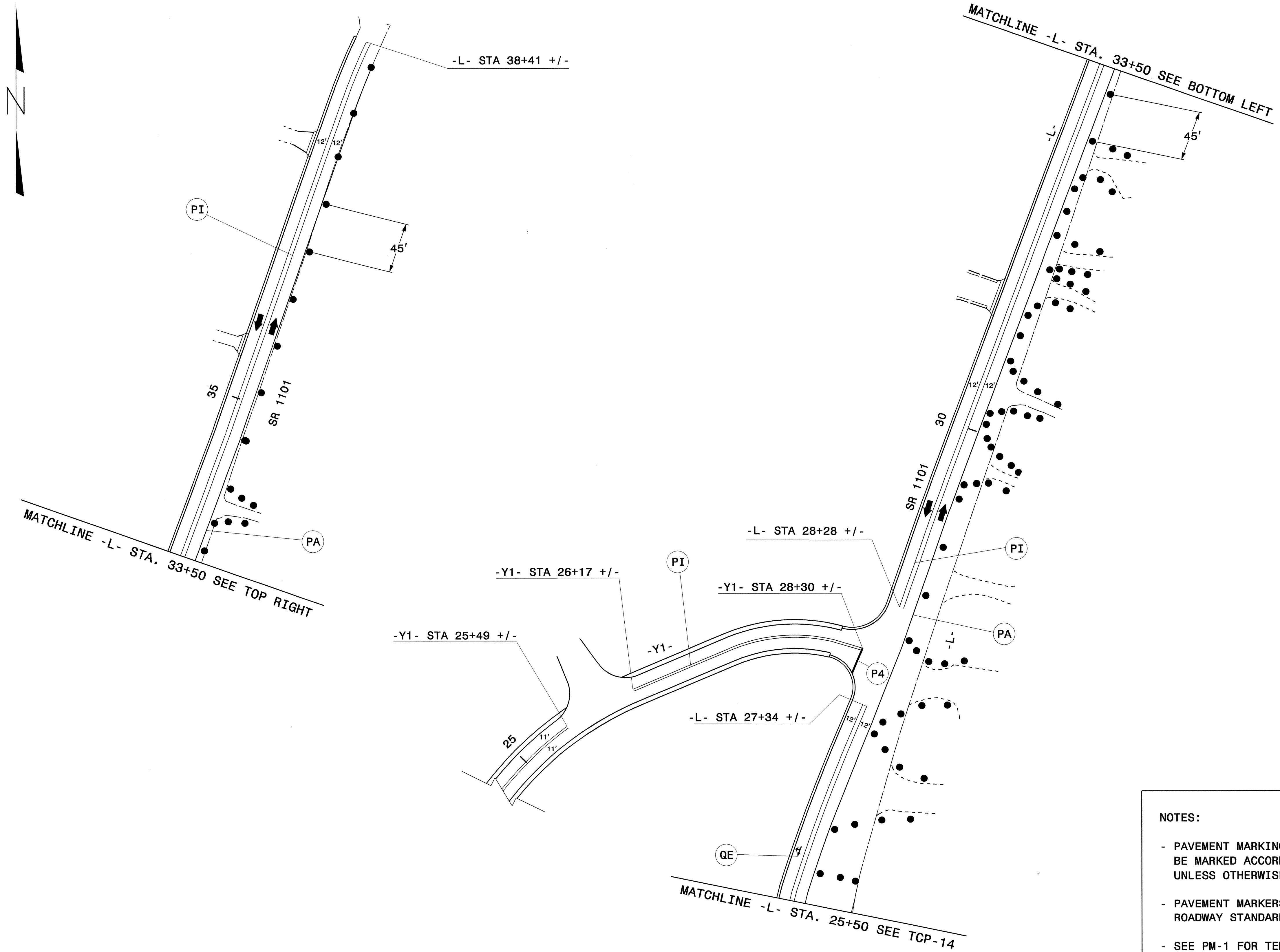


REVISIONS	

30-AUG-2004 17:11
C:\TCP-Wayne\LE\032419
WJccas AT-LE\032419

INTERMEDIATE TRAFFIC PATTERN

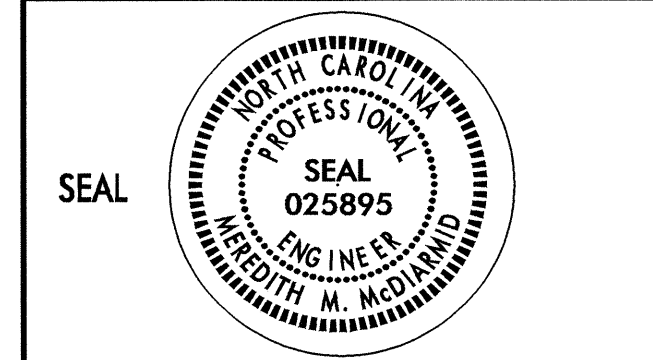
PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-15



NOTES:

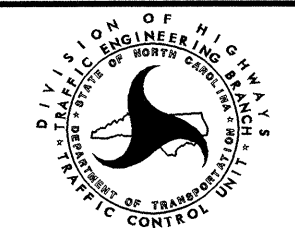
- PAVEMENT MARKINGS, SYMBOLS, AND CHARACTERS ARE TO BE MARKED ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE NOTED IN THE PLANS.
- PAVEMENT MARKERS ARE TO BE SPACED ACCORDING TO THE ROADWAY STANDARD DRAWINGS.
- SEE PM-1 FOR TEMPORARY PAVEMENT MARKING SYMBOL DESCRIPTION.

APPROVED: *M. Madril* DATE: *2/10/04*



PHASE I: STEP 8

SCALE: NONE
 DATE: 03/04
 DWG. BY: WAJ
 DESIGN BY: WAJ
 REVIEWED BY: CBH

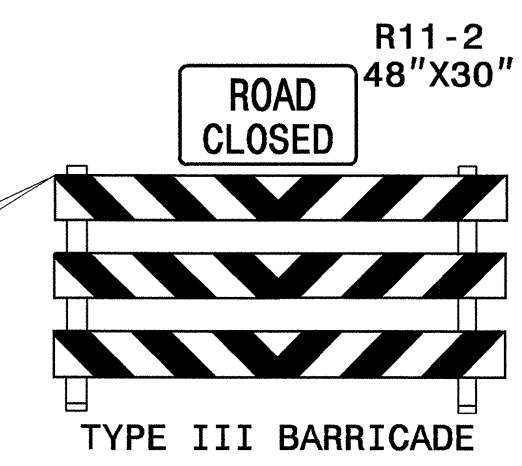
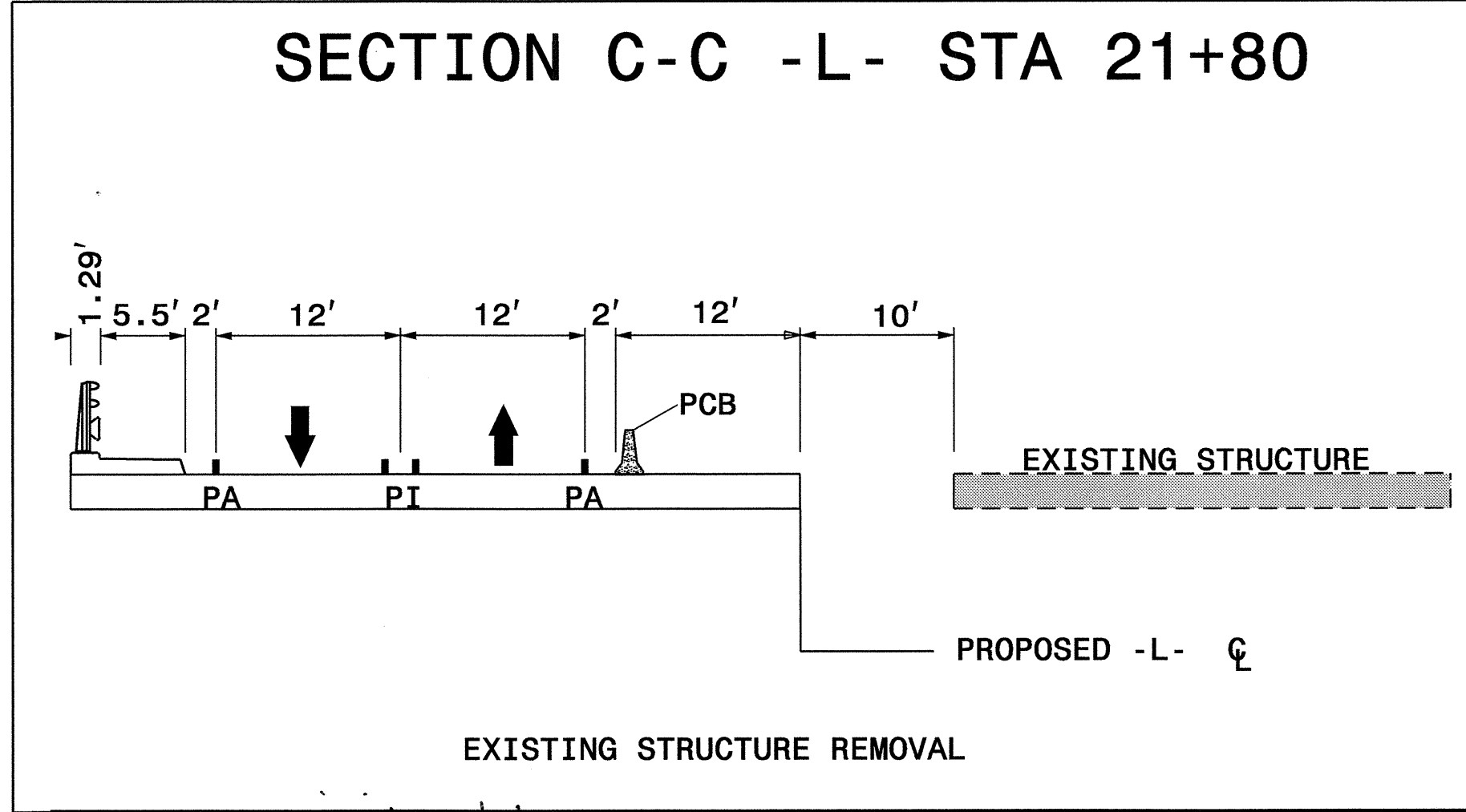
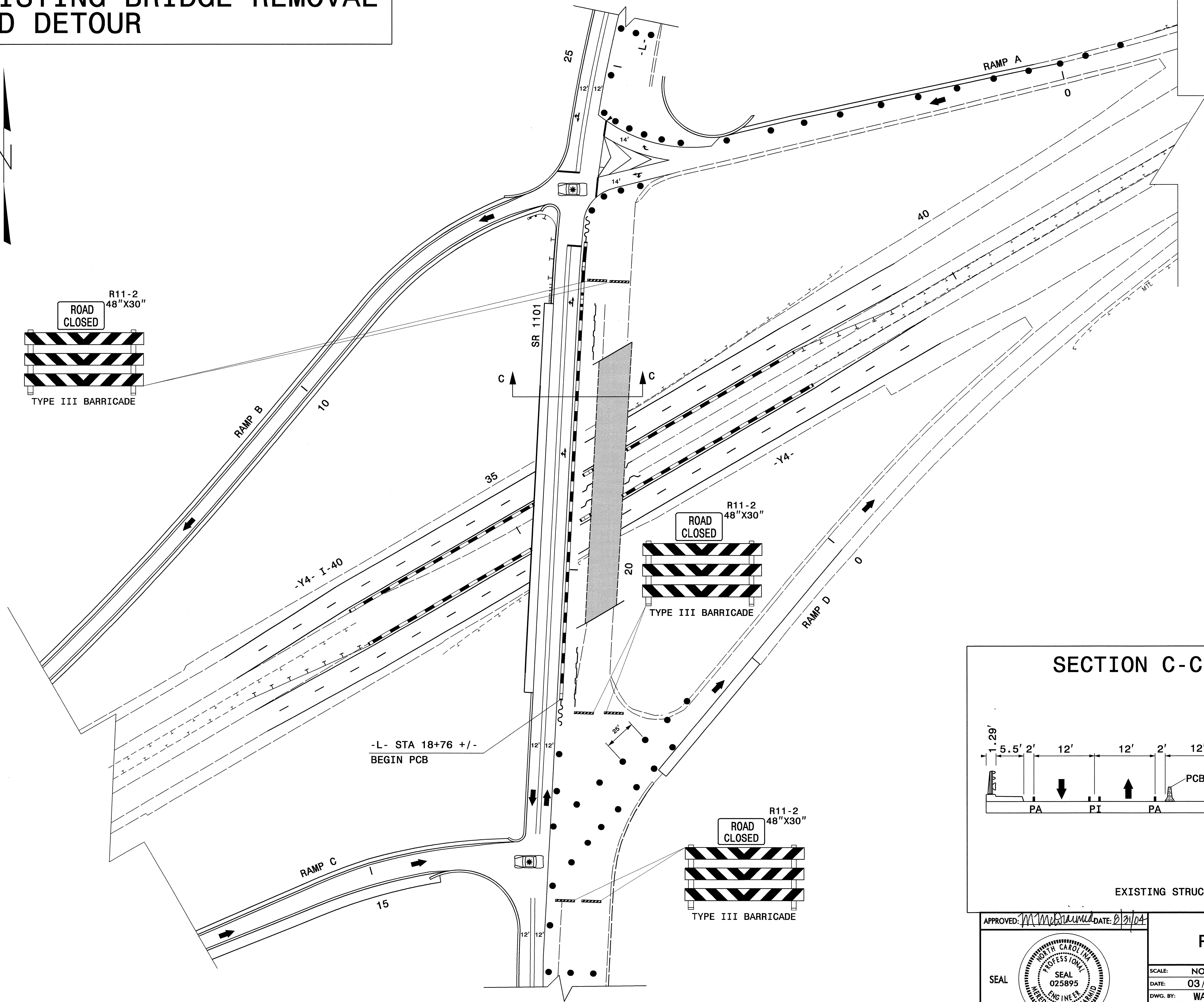
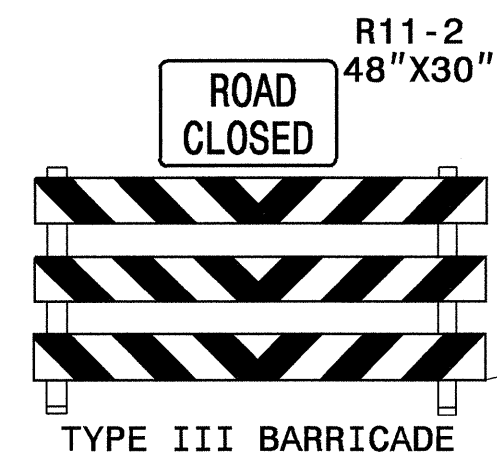


REVISIONS	

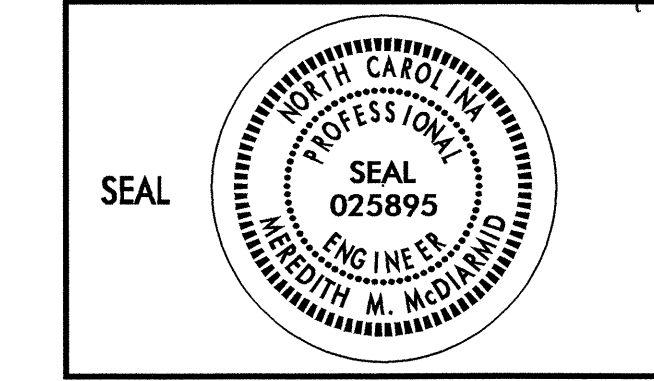
12-AUG-2004 17:07
 TCP-WayTb
 W:\0506 AT-LEI\03479
 Plans\12102-TCP15.dgn

EXISTING BRIDGE REMOVAL AND DETOUR

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-16

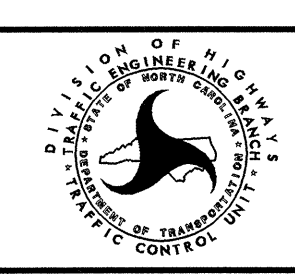


APPROVED: *M. McDaniel* DATE: 02/04



PHASE II: STEP 1

SCALE: NONE
DATE: 03/04
DWG. BY: WAJ
DESIGN BY: WAJ
REVIEWED BY: CBH

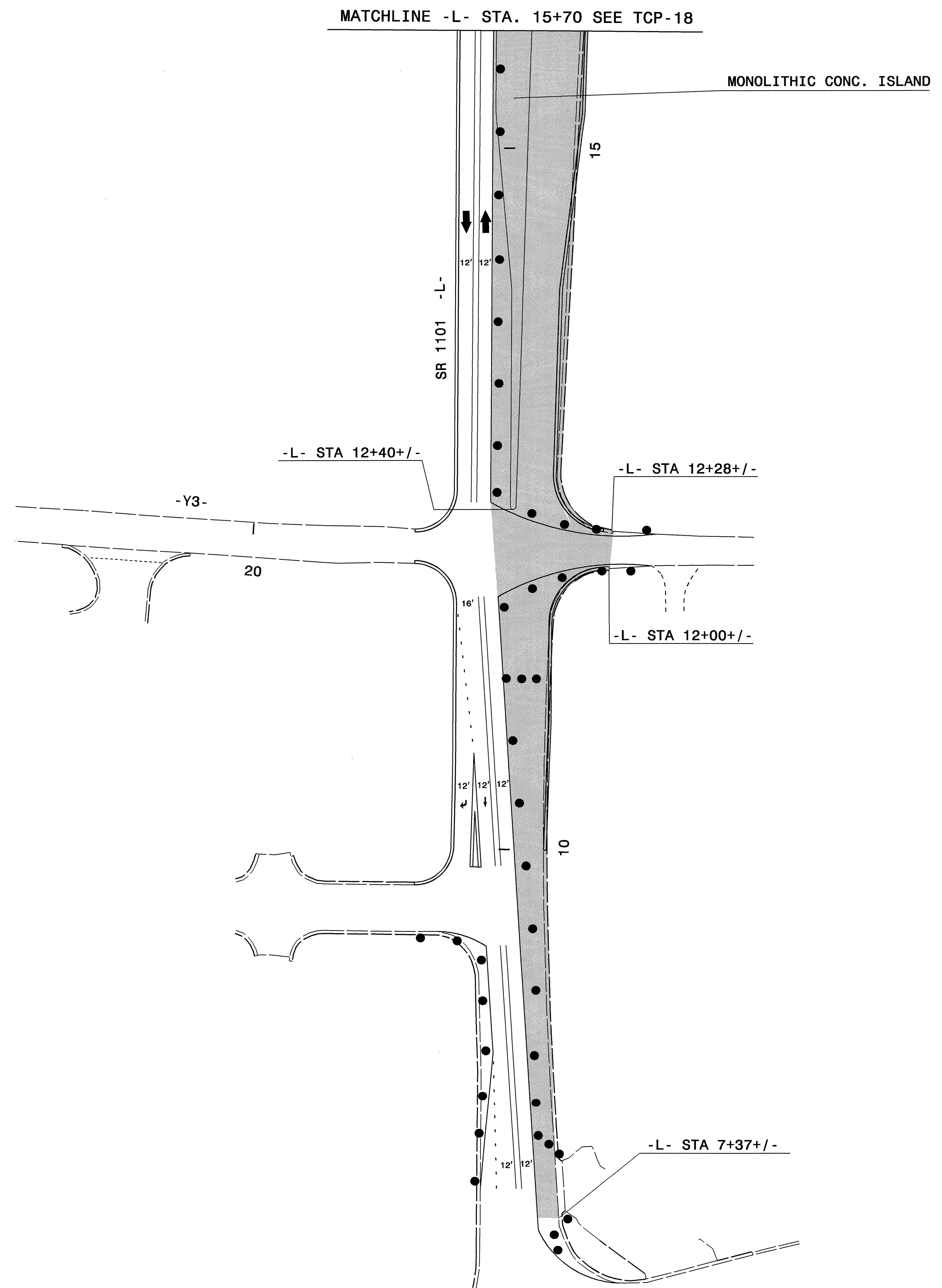


REVISIONS	

30-AUG-2004 Trill
 0:\TCP\Wayne_Plans\I2102_TCP16.dgn
 wjacobs AT TETCO93479

NB SR 1101 (-L-) WIDENING

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-17

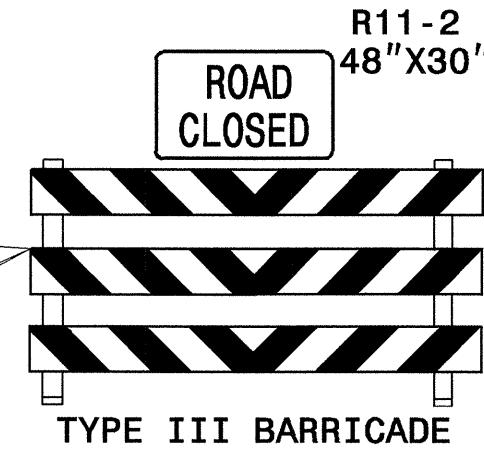
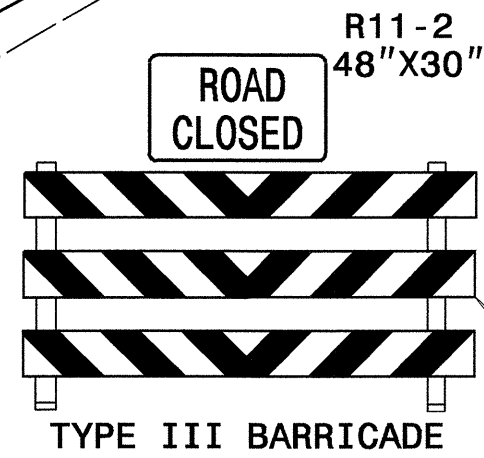
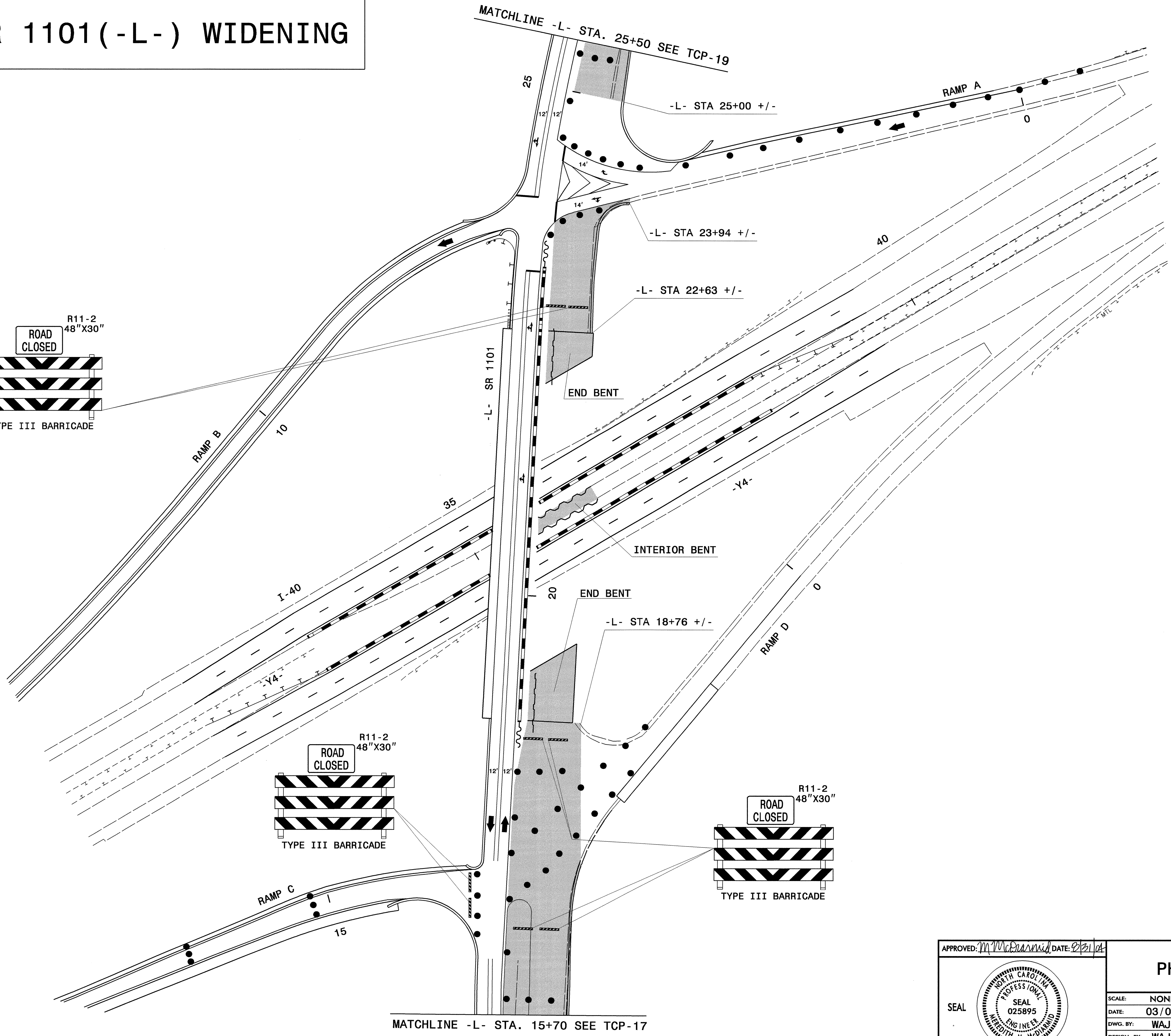
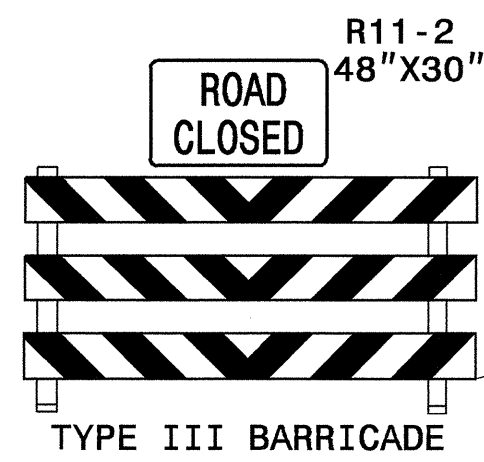


P:\AUG-2004\1747
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 WJGGS AT TEL033479

APPROVED: <i>M. McManis</i> DATE: <i>01/04</i>	PHASE II: STEP 1									
	SCALE: NONE									
	DATE: 03/04									
	DESIGN BY: WAJ									
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CADD FILE	I2102 TCP17.DGN									

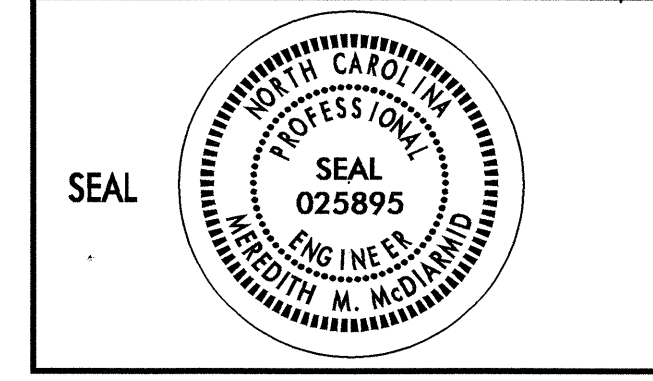
NB SR 1101(-L-) WIDENING

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-18



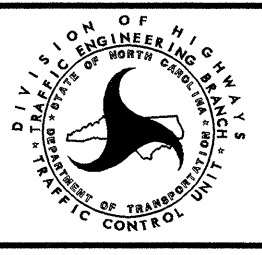
30-AUG-2004 17:11
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 wjacobs AT TELC193479

APPROVED: *M. McDermid* DATE: *03/04*



PHASE II: STEP 1

SCALE:	NONE
DATE:	03/04
DWG. BY:	WAJ
DESIGN BY:	WAJ
REVIEWED BY:	CBH

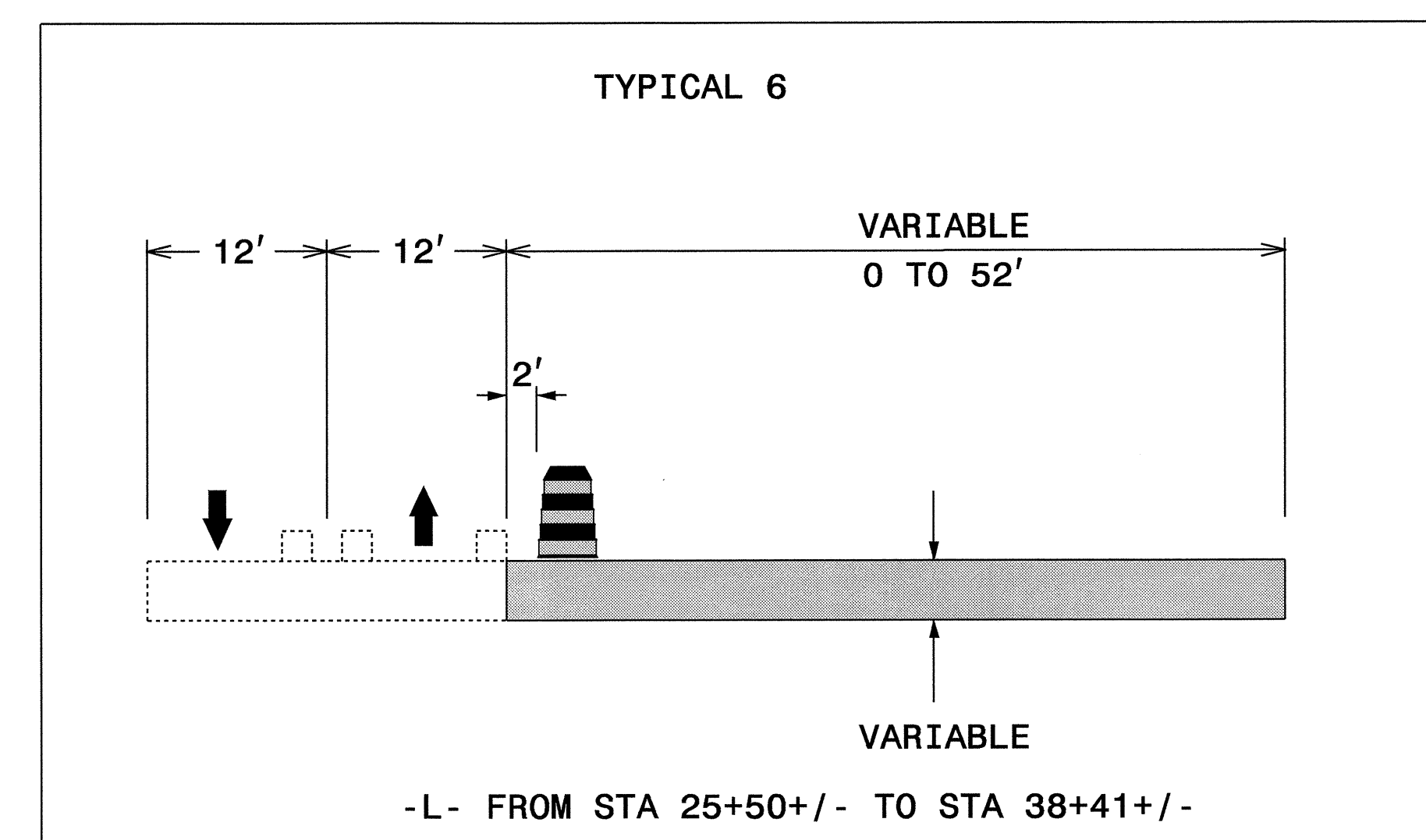
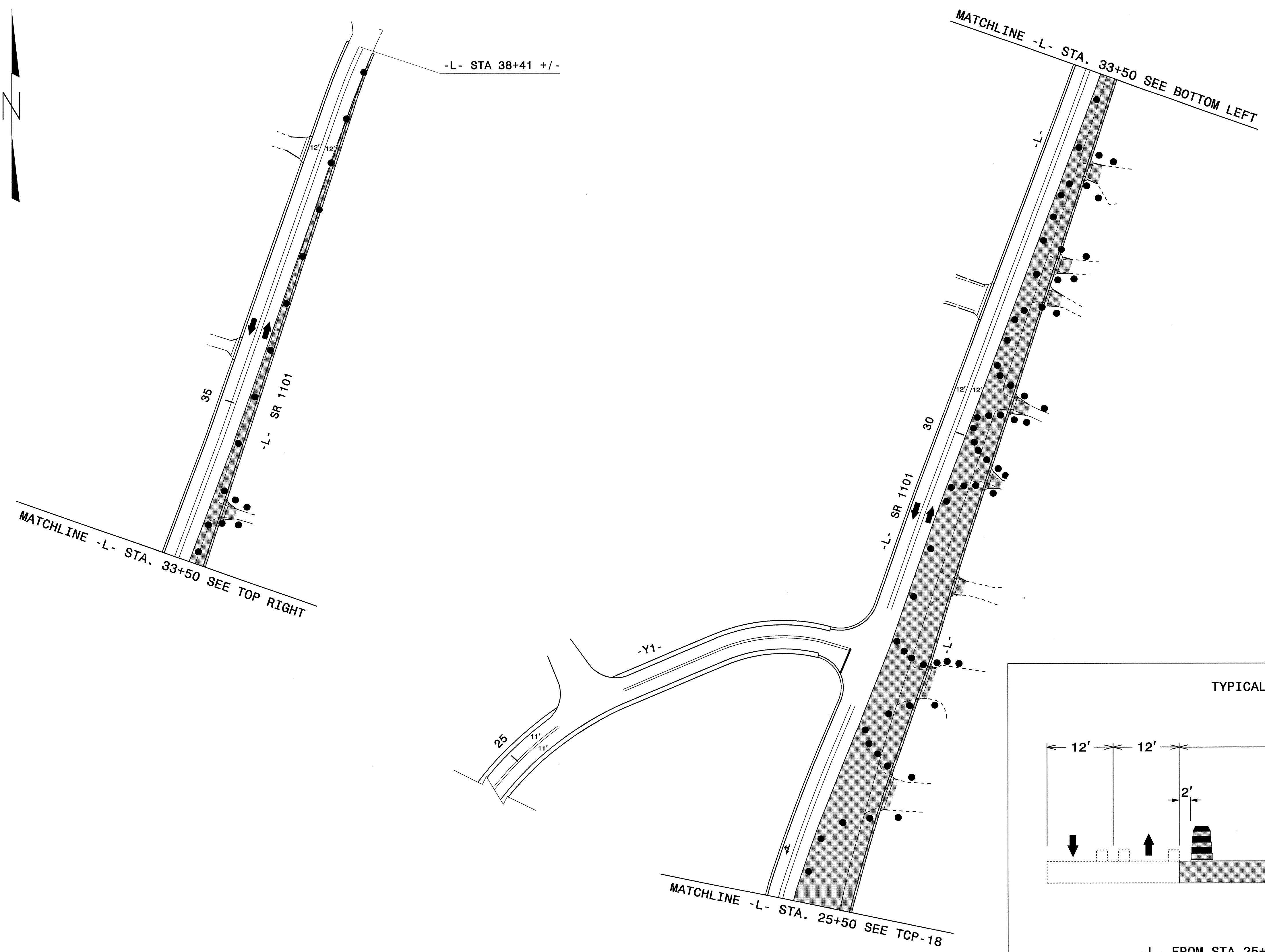


REVISIONS	

CADD FILE I2102 TCP18.DGN

NB HARPER ROAD (SR 1101) WIDENING

PROJ. REFERENCE NO.	SHEET NO.
I-2102	TCP-19



APPROVED: *M. McBurnid* DATE: *2/16/04*

SEAL

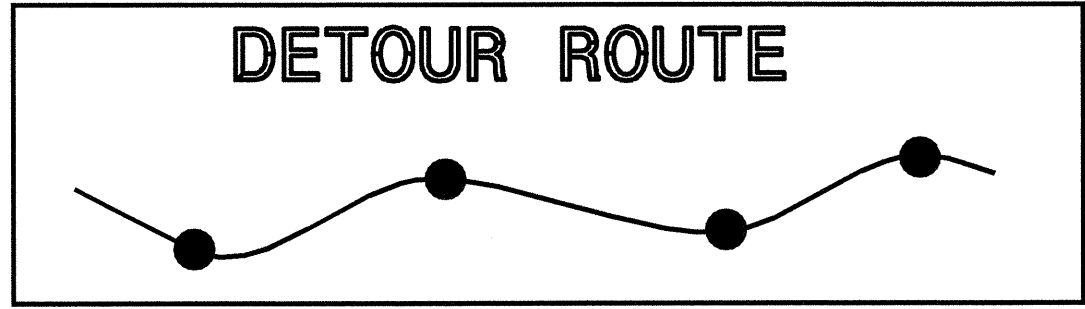
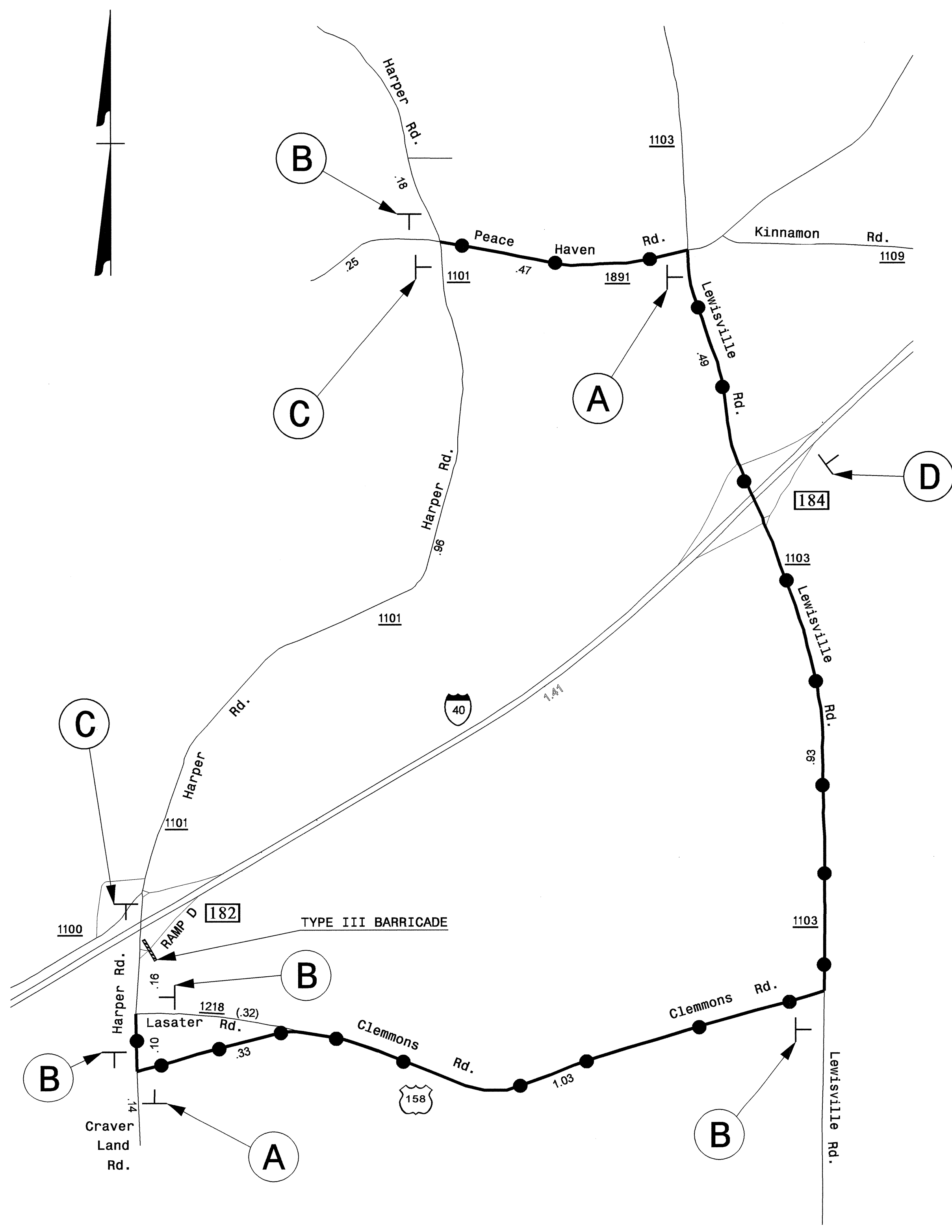
PHASE II: STEP 1

SCALE: NONE		REVISIONS
DATE: 03/04		
DWG. BY: WAJ		
DESIGN BY: WAJ		
REVIEWED BY: CBH		

CADD FILE: I2102 TCP19.DGN

I2-AUG-2004 11:07
 G:\TOP\Wayne\Plans\I2102-TCP19.dgn
 WJacoas AT TET103479

I-40 EAST DETOUR MAP



A

TO M4-5
24" X 12"

EAST M3-2
24" X 12"

INTERSTATE 40 M1-1

→ M6-1
21" X 15"

B

TO M4-5
24" X 12"

EAST M3-2
24" X 12"

INTERSTATE 40 M1-1

← M6-1 L
21" X 15"

C

TO M4-5
24" X 12"

EAST M3-2
24" X 12"

INTERSTATE 40 M1-1

↑ M6-3
21" X 15"

D

END DETOUR M4-8 A
24" X 18"

12-AUG-2004 17:07
 G:\TCP\NW\9199\Plans\2102-TCP20-DETOUR MAP.dgn
 WJ005 AT 110193479

APPROVED: *M. McBurned* DATE: *6/16/04*

DETOUR MAP

SCALE: NONE		REVISIONS
DATE: 06/04		
DWG. BY: WAJ		
DESIGN BY: WAJ		

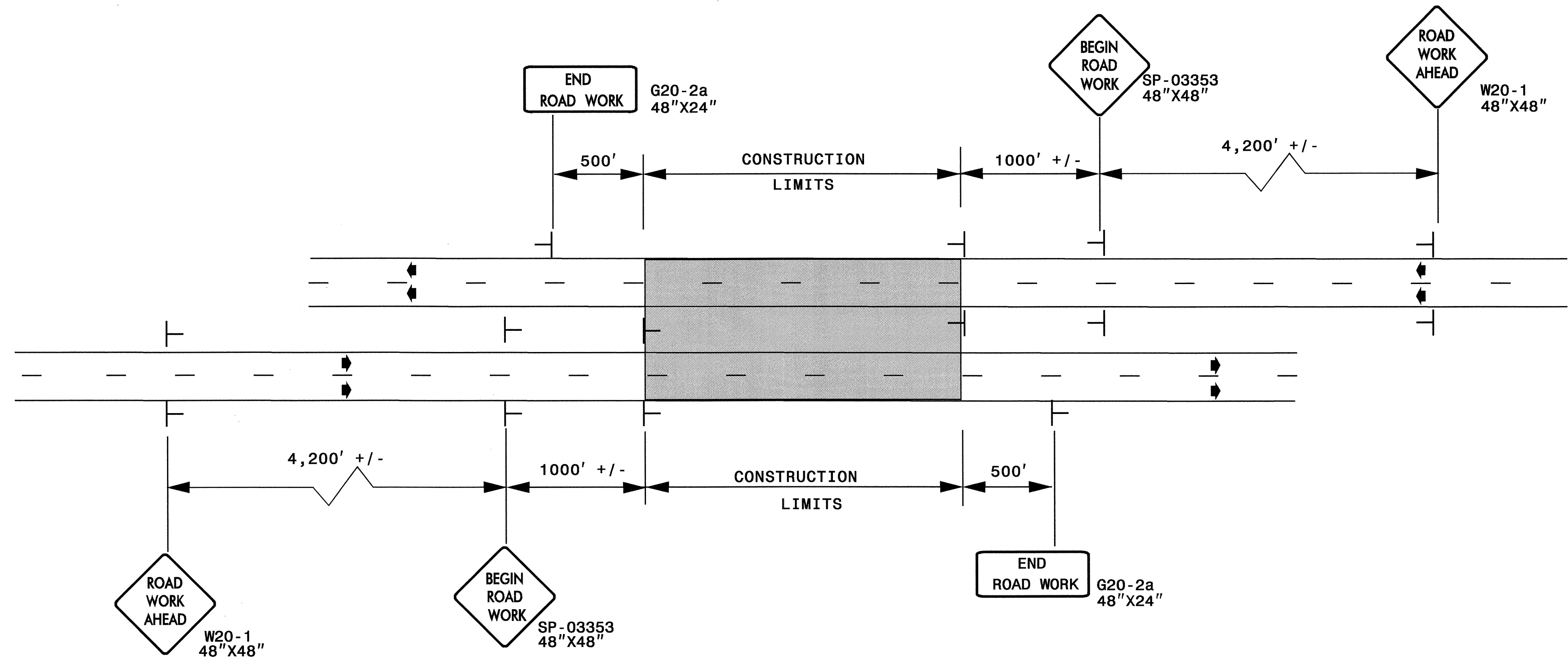
REVIEWED BY: CBH

CADD FILE: I2102_TCP20_DETOUR_MAP.DGN

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

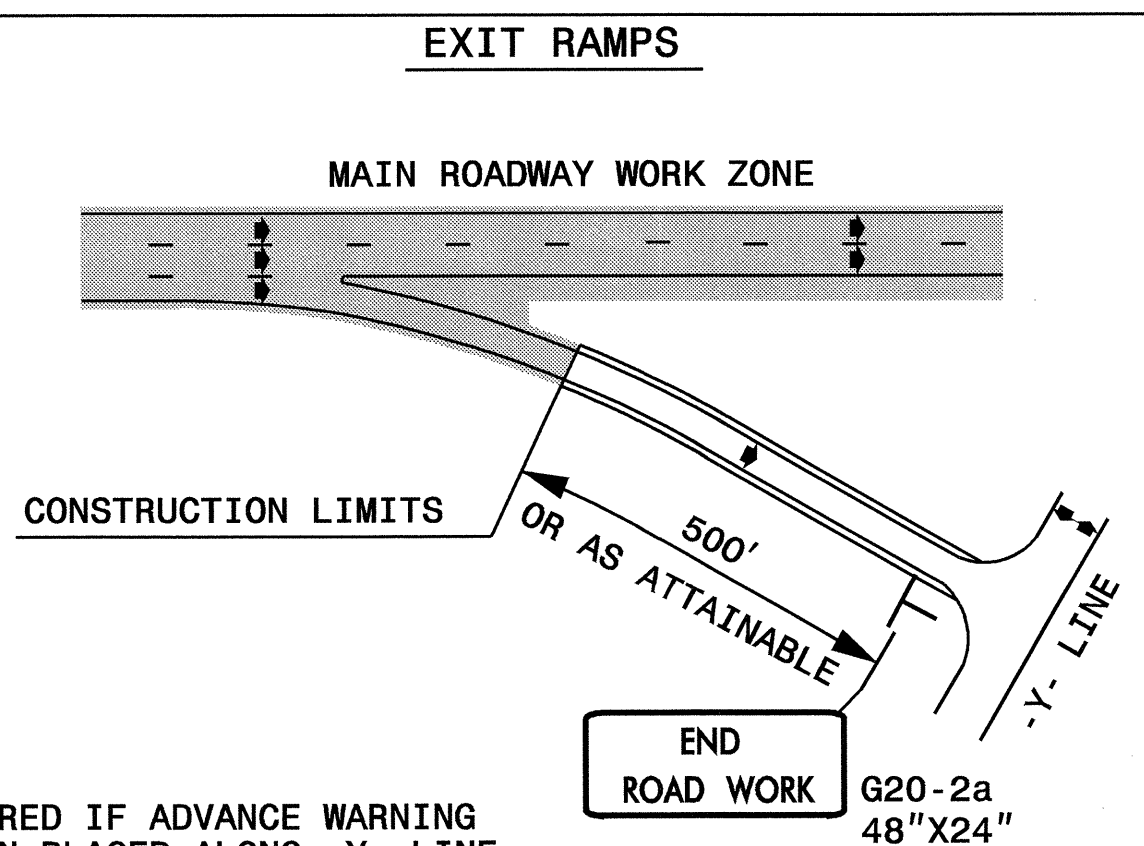
PROJ. REFERENCE NO. I-2102	SHEET NO. TCP-21
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DETAIL A



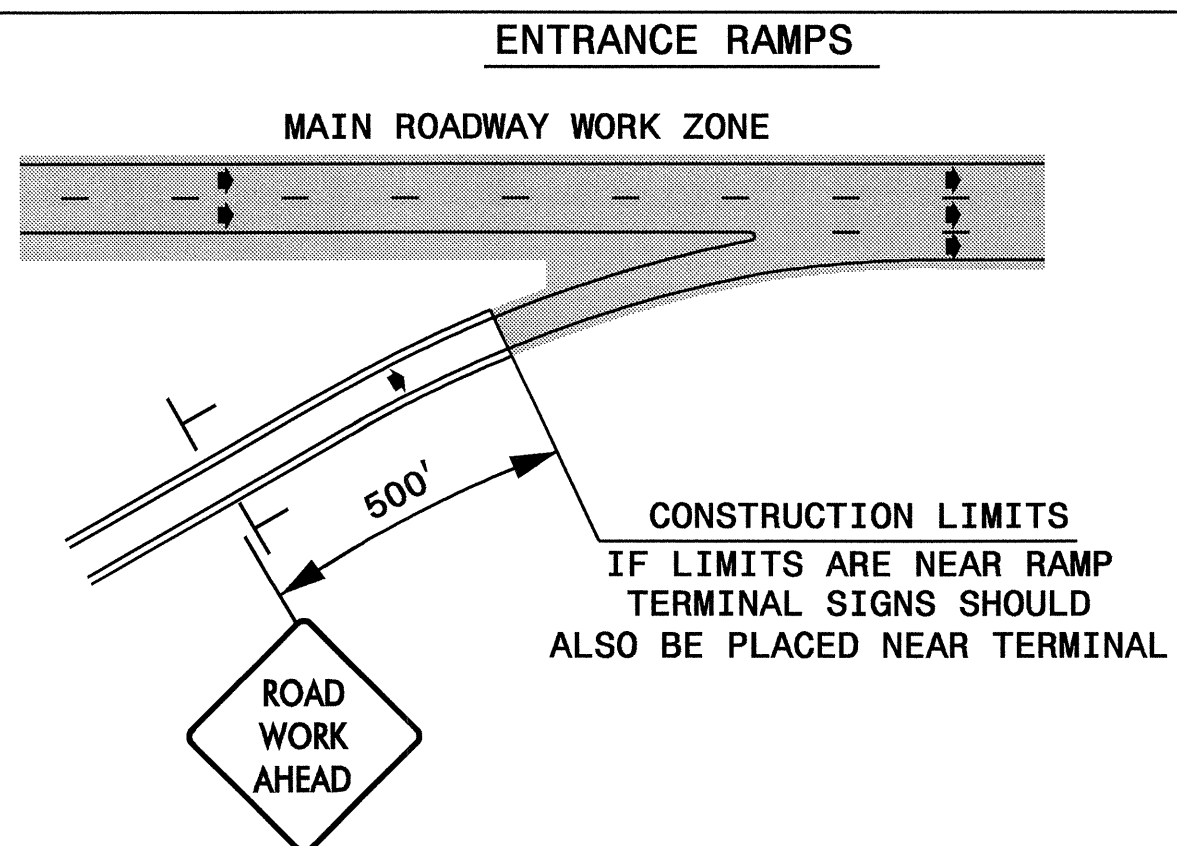
LEGEND	
	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW

DETAIL B

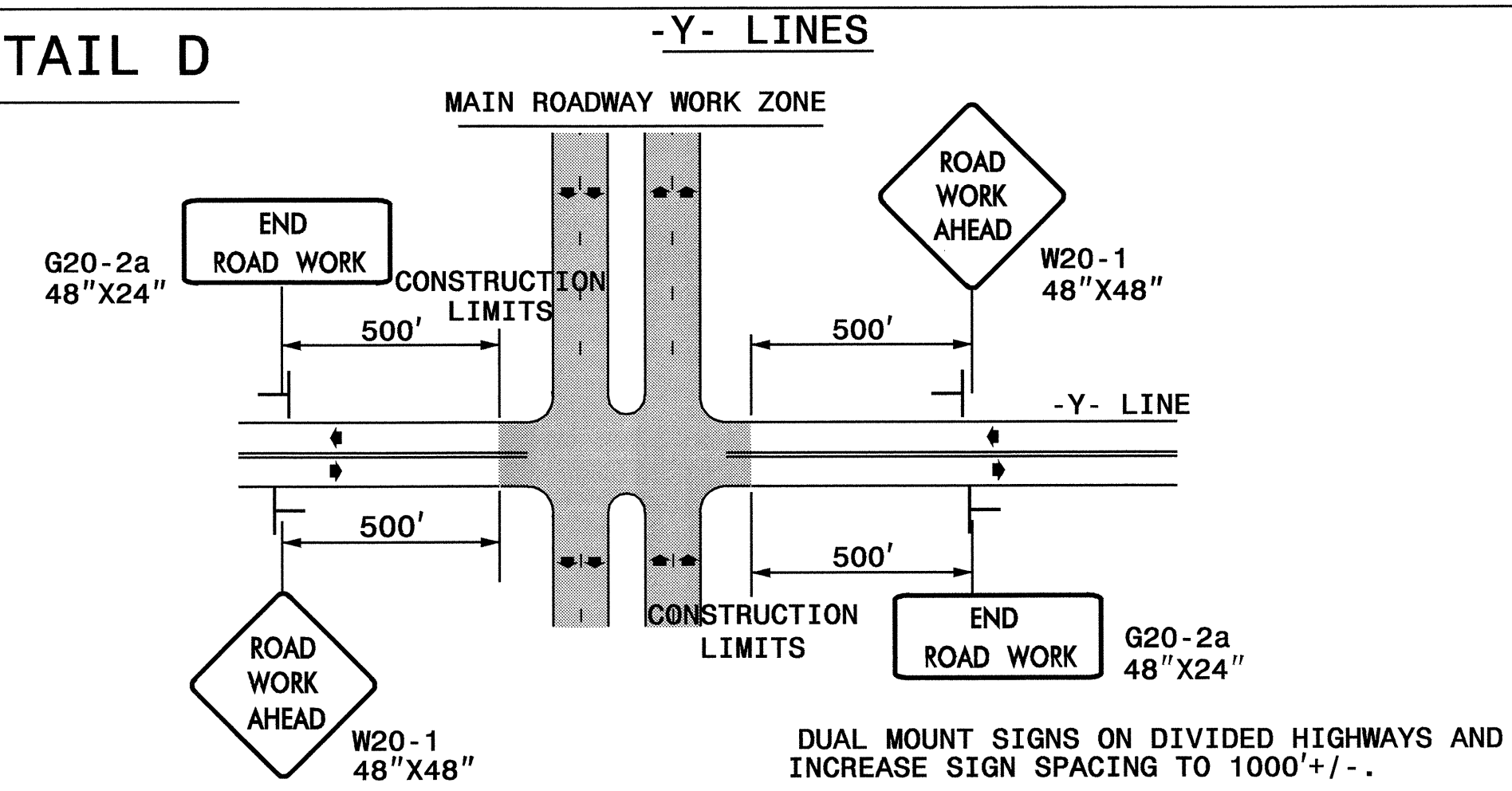


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



DETAIL D



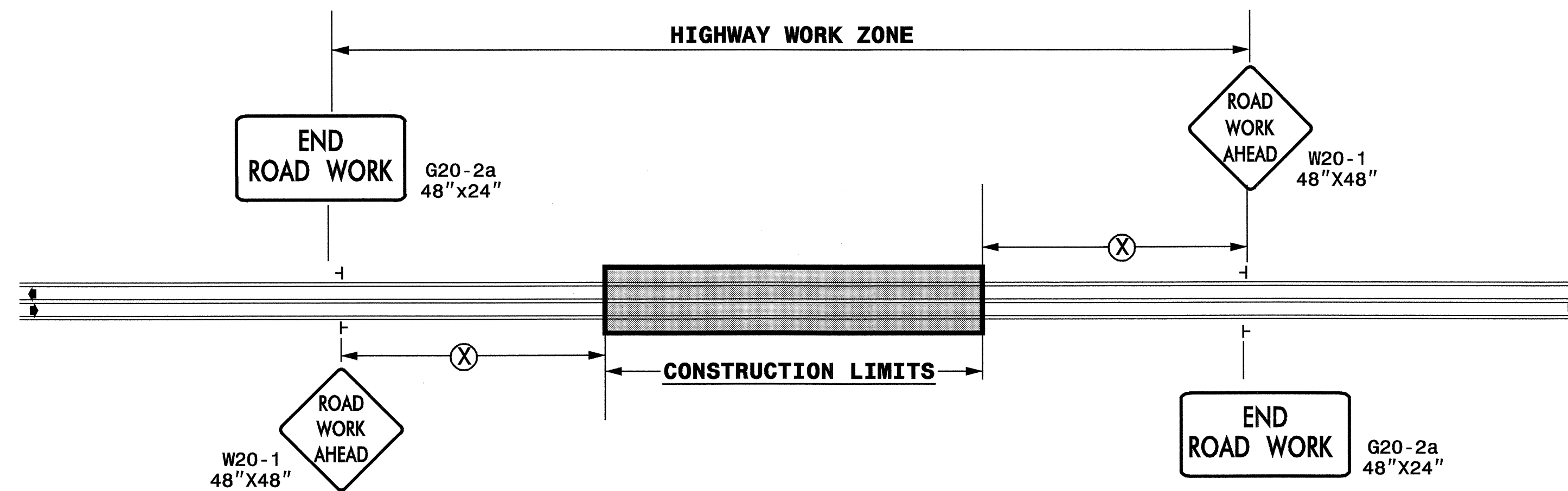
GENERAL NOTES

- 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.

APPROVED: <i>M. M. M.</i> DATE: 1/24/05	ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)	
	SCALE: NONE	REVISIONS
	DATE: 8/03	03/04
	DESIGN BY: JI	
	REVIEWED BY: MMM	

24-JAN-2005 14:25
D:\User\Dot\PROJ\05\Freeways_4lanes_or_greater.dgn
WJPCGS AT TEL03479

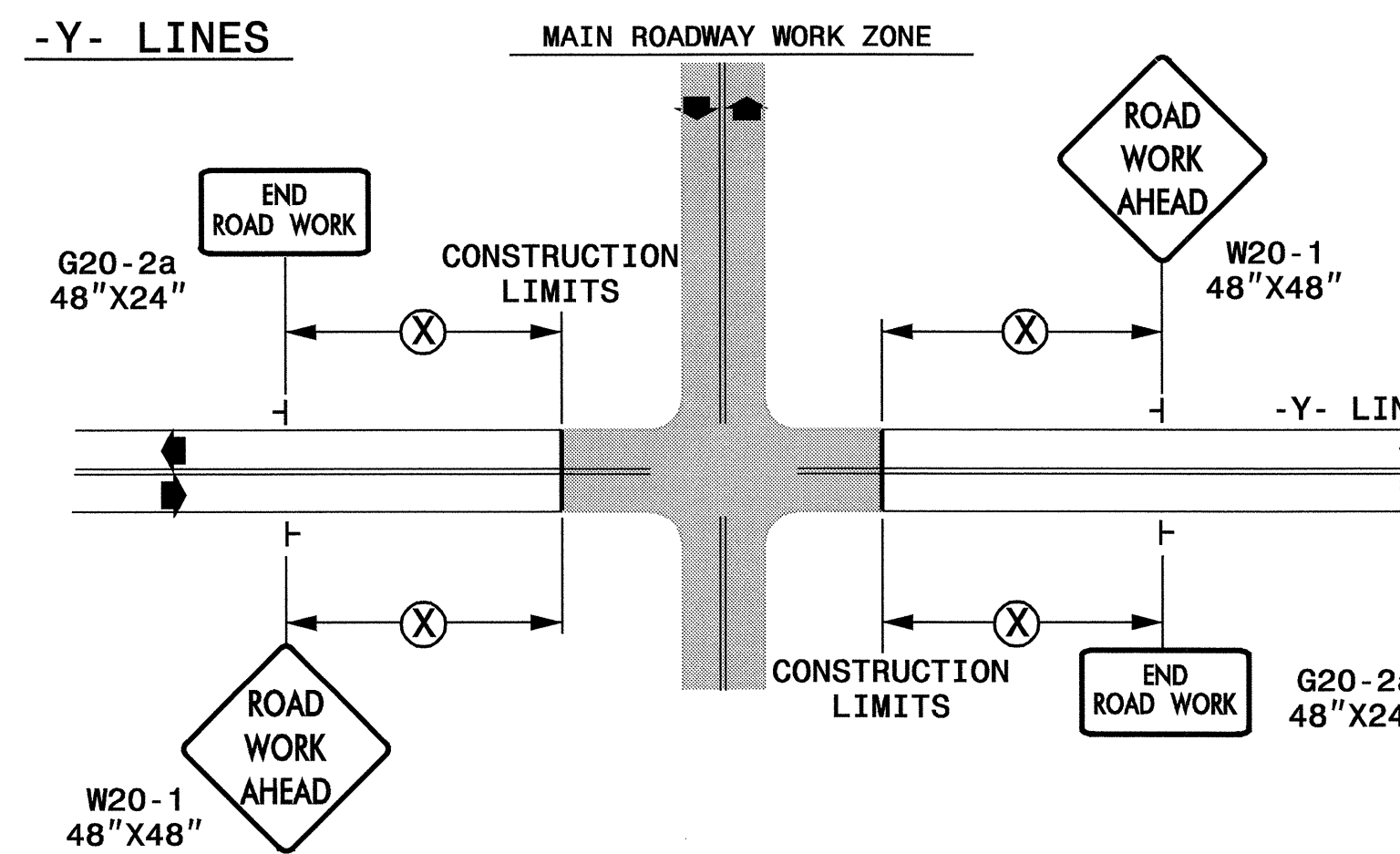
TWO-WAY UNDIVIDED ** (L-LINES)



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

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

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



DETAIL DRAWING FOR
TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

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.

LEGEND

└ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: <i>M. McDermid</i> DATE: 1/24/05	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
	SCALE: NONE	REVISIONS
	DATE:	7-98 10/01
	DWG. BY:	10-98 03/04
	DESIGN BY:	01/01 11/04
REVIEWED BY: MMM		CADD FILE

24-JAN-2005 14:25
 B:\User\Doty\PROJECT_INFO\052way_undiv.&_Urban_Frwys.dgn
 wlabos AT TETC093479

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-05

ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1
1101D04

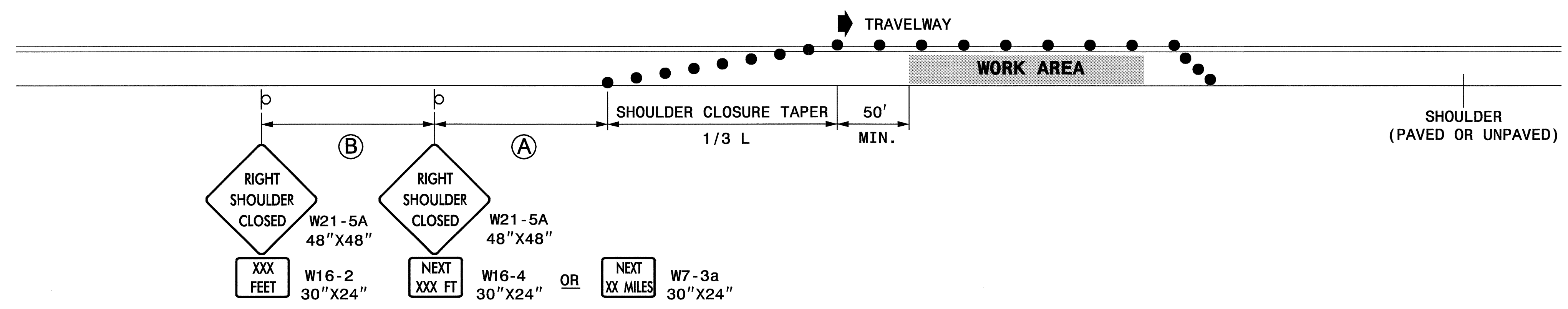
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-05

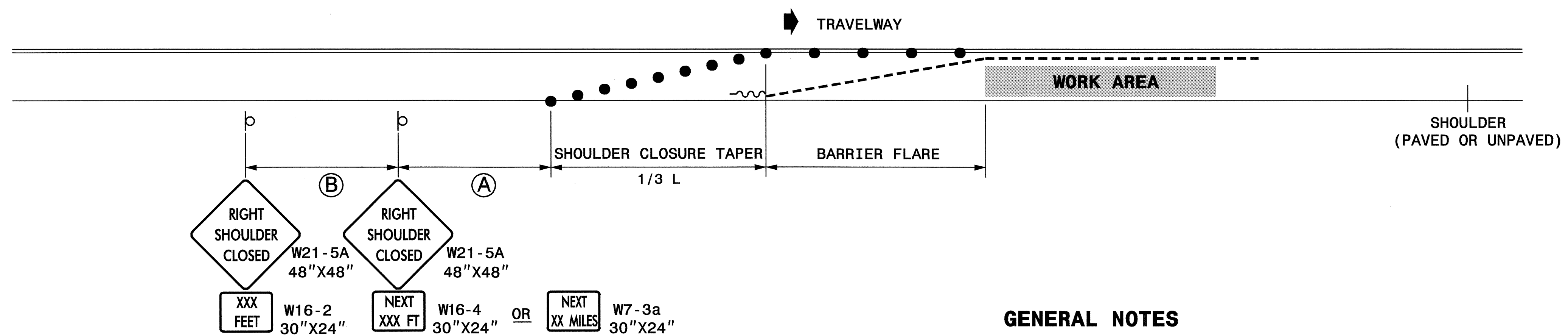
ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1
1101D04

SHOULDER CLOSURES UTILIZING DRUMS



SHOULDER CLOSURES UTILIZING TEMPORARY BARRIER



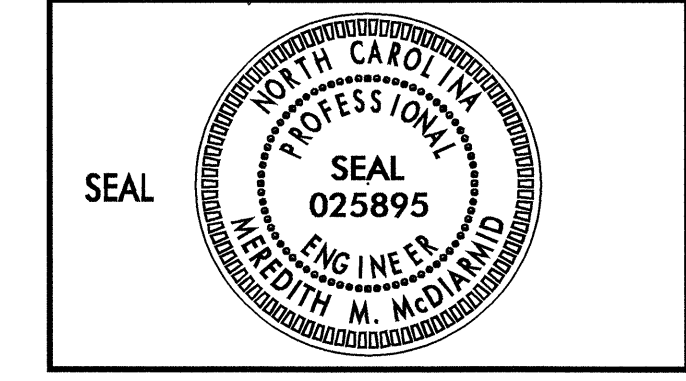
GENERAL NOTES

- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA AND BARRIER FLARE IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- FLARE THE APPROACH END OF PORTABLE CONCRETE BARRIER BEYOND THE SHOULDER AND USE A CRASH CUSHION FOR PROTECTION IF THE EXPOSED END OF THE BARRIER IS WITHIN THE "CLEAR ZONE".
- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- REFER TO STD. 1101.11 SHEETS 1, 3, & 4, FOR "L" DISTANCE, BARRIER FLARE RATES, AND SIGN SPACING.

LEGEND

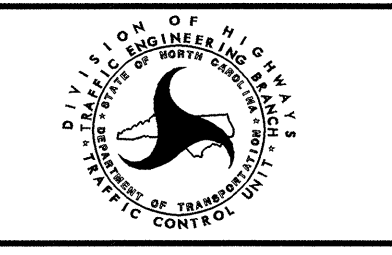
- ~ TEMPORARY CRASH CUSHION
- - - PORTABLE CONCRETE BARRIER
- DRUM
- ⊖ STATIONARY OR PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

APPROVED: *M. McDaniel* DATE: 11/24/05



**REPLACEMENT DETAIL FOR
RSD 1101.04**

SCALE: NONE
DATE: 11/04
DWG. BY: MMM
DESIGN BY: MMM
REVIEWED BY: MMM



REVISIONS

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

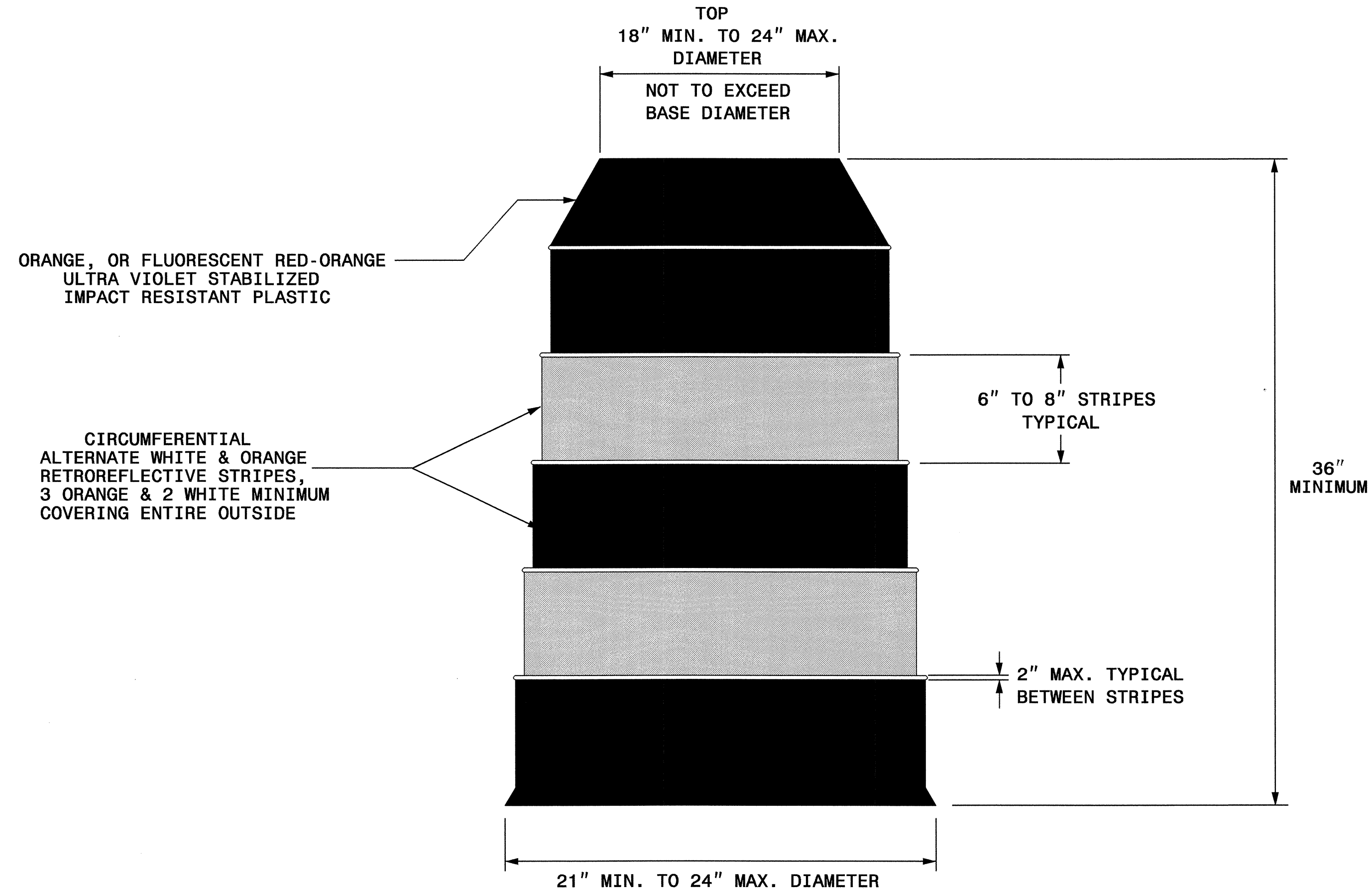
ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01

STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01



GENERAL NOTES

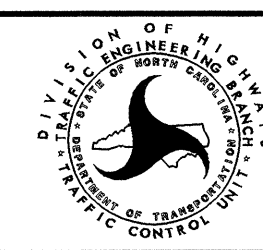
- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL BALLAST, OR PREFORMED WEIGHTED BASE BALLASTING METHODS. DO NOT PLACE BALLAST ON TOP OF THE DRUM, NOR AS TO PRESENT A HAZARD WHEN STRUCK.
- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

APPROVED: *M. M. M.* DATE: *8/02*

SEAL

**REPLACEMENT DETAIL FOR
RSD 1130.01**

SCALE: NONE
DATE: 8/02
DWG. BY: MMM
DESIGN BY: MMM
REVIEWED BY: MMM



REVISIONS	

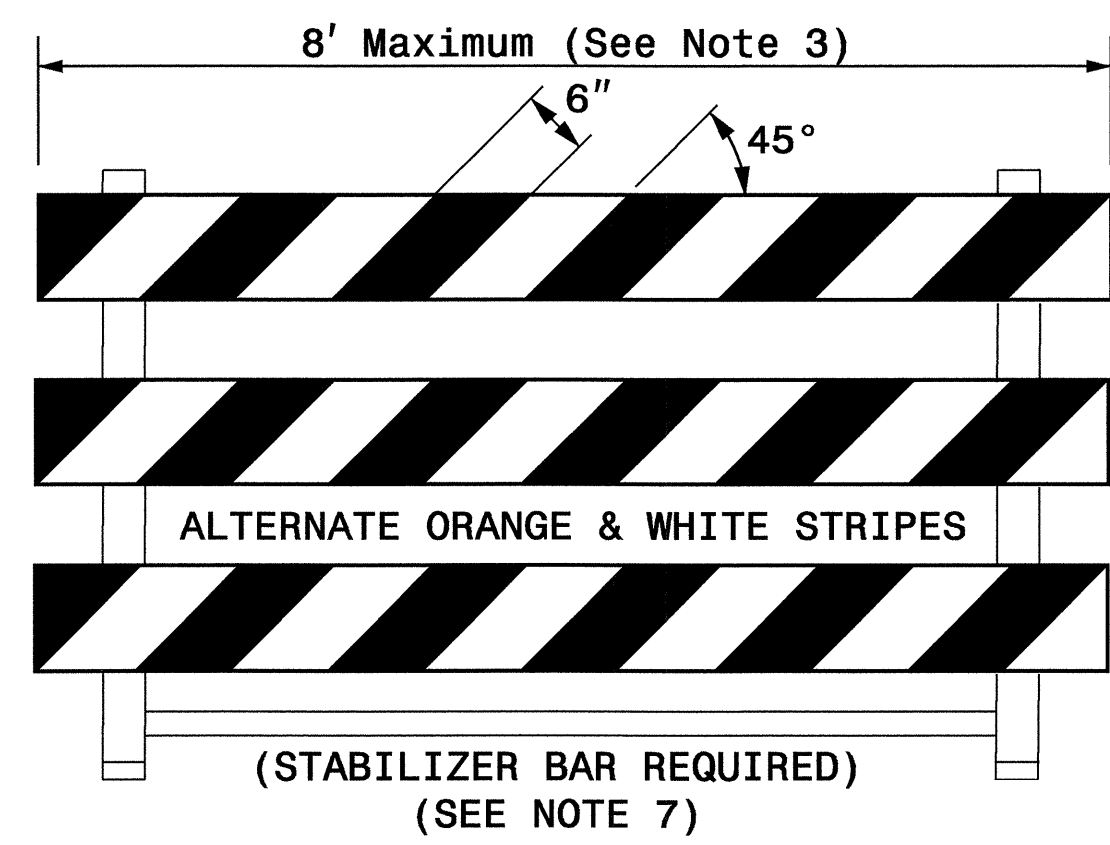
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

1-05

ENGLISH STANDARD DRAWING FOR
BARRICADES
 TYPE-III

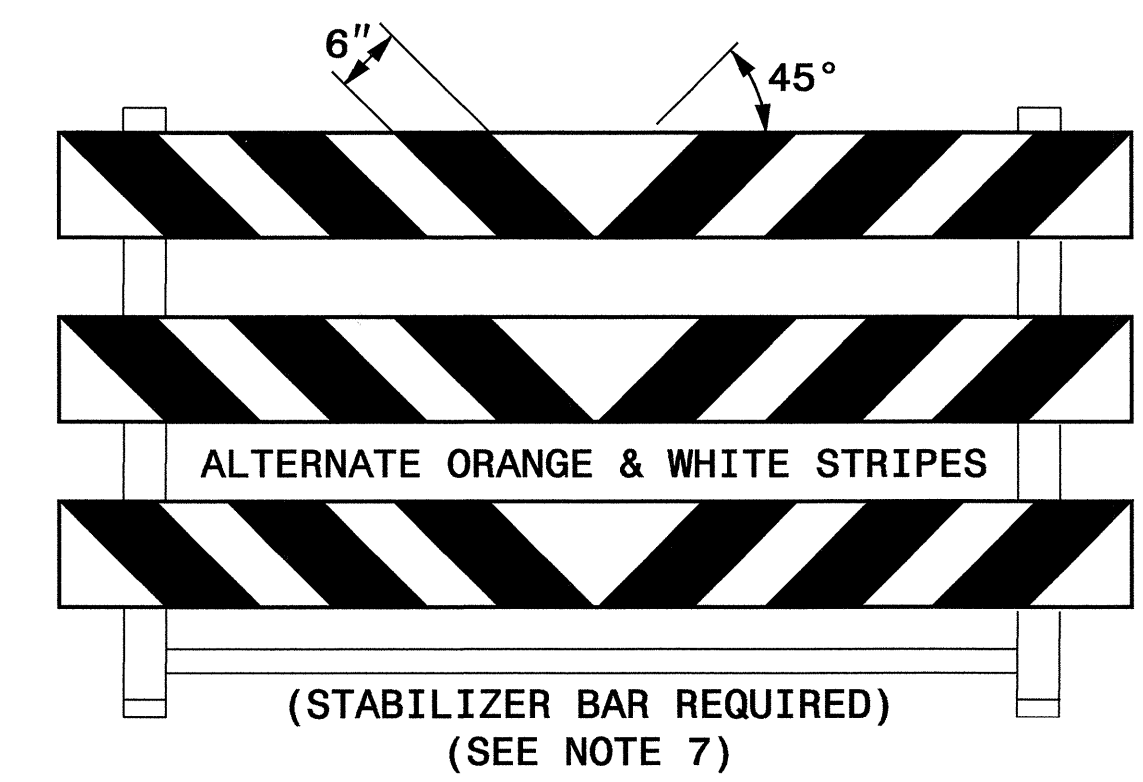
SHEET 1 OF 1
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TYPE III BARRICADE



TYPE III BARRICADE

END-OF-ROADWAY APPLICATIONS



GENERAL NOTES

- 1) HORIZONTAL RAILS FOR TYPE-III BARRICADES MAY BE HOLLOW/CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER NCDOT APPROVED RAILS. BARRICADE RAILS OF FRANGIBLE PLASTICS SUCH AS PVC MAY NOT BE USED. IF APPROVED PLASTIC TYPE RAILS ARE USED, THEY MUST BE FLAME TREATED BY THE MANUFACTURER SO THAT REFLECTIVE SHEETING MAY ADHERE PROPERLY.
- 2) BARRICADES AND BARRICADE RAILS ARE APPROVED AS A SINGLE UNIT.
- 3) BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS NCHRP 350 CRASH TESTED AND NCDOT APPROVED.
- 4) ONLY NCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE.
- 5) SIGNS MOUNTED ON BARRICADES SHOULD NOT COVER MORE THAN 50 PERCENT OF THE TOP TWO RAILS OR 33 PERCENT OF THE TOTAL AREA OF THE THREE RAILS.
- 6) USE TYPE VII, VIII OR IX SHEETING ON BOTH SIDES OF THE RAILS.
- 7) BARRICADE MUST BE NCHRP 350 AND NCDOT APPROVED WITH STABILIZER BAR OR ADEQUATE LATERAL BRACING.
- 8) ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
- 9) BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY. WHERE LOCAL TRAFFIC MUST BE MAINTAINED, THEY MAY BE PLACED IN A STAGGERED PATTERN.
- 10) STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPED DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN DETOURING. WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES. USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
- 11) SEE APPROVED PRODUCTS LIST FOR MANUFACTURERS OF APPROVED BARRICADES.
- 12) PLACE MANUFACTURER'S NAME AND FEDERAL HIGHWAY ADMINISTRATION'S NCHRP 350 APPROVAL LETTER NUMBER ON BARRICADE.
- 13) USE SANDBAGS PLACED ON THE LOWER PART OF THE FRAME FOR BALLASTING. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS STRUCK BY A VEHICLE.

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ENGLISH STANDARD DRAWING FOR
BARRICADES
 TYPE-III

SHEET 1 OF 1
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APPROVED: <i>M. McDaniel</i> DATE: 1/24/05	REPLACEMENT DETAIL FOR RSD 1145.01	
	SCALE: NONE	
	DATE: 11/04	
	DWG. BY: MMM	
	DESIGN BY: MMM	
REVIEWED BY: MMM	REVISIONS	