

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

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

STATE PROJECT REFERENCE NO. B - 2 5 1 5	SHEET NO. TCP-1
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ROADWAY STANDARD DRAWINGS

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

STD. NO.	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
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU-LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

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TCP-3	PHASING
TCP-4	PHASES I & II DETAILS
TCP-4A	PEDESTRIAN DETOURS
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TCP-9	DETOUR SIGNAGE
TCP-10	CHANGEABLE MESSAGE SIGNS SUGGESTED MESSAGES
TCP-11	ADVANCE WORK ZONE WARNING SIGNS
PM-1	PAVEMENT MARKING PLAN
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LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE III BARRICADE
 - CONE
 - DRUM SKINNY DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - WATER FILLED BARRIER
 - CHANGEABLE MESSAGE SIGN
 - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - POLICE
 - FLAGGER
- PAVEMENT MARKINGS**
- PAVEMENT MARKING SYMBOLS

B-2515

TIP PROJECT:

25-FEB-2009 07:46 \\dot\dfs\dot\Pro\proj\projects-b\2515\traffic\trafficcontrol\top\off-site detour 2 phase concept\b-2515-tc-top_tcp-1.dgn KBroadwell AT WZTC23745

APPROVED: DATE:	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
SEAL 	J. S. BOURNE, PE TRAFFIC CONTROL ENGINEER
	G. L. GETTIER, PE TRAFFIC CONTROL PROJECT ENGINEER
	J. W. GILSTRAP TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	KEN BROADWELL <i>KPB</i> TRAFFIC CONTROL DESIGN ENGINEER

GENERAL NOTES

PROJ. REFERENCE NO. B-2515	SHEET NO. TCP-2
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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 AS DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

- A) 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

- B) 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.
- 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.

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.

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

PAVEMENT EDGE DROP OFF REQUIREMENTS

- G) 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.

- H) 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) 200 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- J) 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.
- K) PROVIDE PERMANENT SIGNING.
- L) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- M) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

- P) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADIUS, 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.
- Q) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
1. ALL ROADS	POLYUREA	NONE

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

ROAD NAME	MARKING	MARKER
1. BILTMORE AVE./ HENDERSONVILLE RD. (-L-)	COLD APPLIED PLASTIC (TYPE 4)	NONE
2. THOMPSON ST. (-Y1-)	PAINT	NONE

- T) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

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

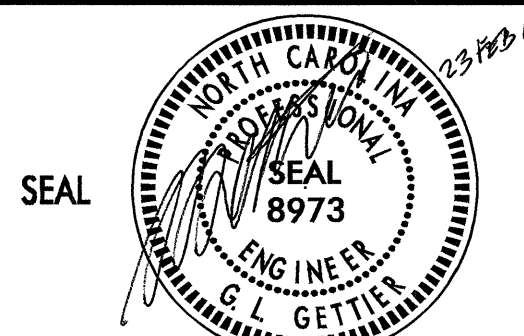
TEMPORARY/FINAL SIGNALS

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

MISCELLANEOUS

- W) POLICE MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.
- X) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

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APPROVED: _____ DATE: _____	<h2 style="margin: 0;">GENERAL NOTES</h2>										
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SCALE: NONE	REVISIONS										
DATE: 11/08											
DWG. BY: KPB											
DESIGN BY: KPB											
REVIEWED BY: JWG											

PHASING

PROJ. REFERENCE NO. B-2515	SHEET NO. TCP-3
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CONTRACTOR SHALL COMPLETE PHASE I (SEE INTERMEDIATE CONTRACT TIME SPECIAL PROVISIONS).

NOTE: RESTRICTION FOR PHASE I:

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1. BILTMORE AVE. (-L-)	MON.-SUN. 6AM-9PM
2. THOMPSON ST. (-Y1-)	MON.-SUN. 6AM-9PM

B) DO NOT CLOSE ROADS DURING PHASE I AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
1. BILTMORE AVE. (-L-)	MON.-SUN. 6AM-9PM
2. THOMPSON ST. (-Y1-)	ANYTIME

PHASE I

STEP 1: - CONTRACTOR SHALL PLACE ADVANCE WORK ZONE WARNING SIGNS ALONG BILTMORE AVE/HENDERSONVILLE RD (-L-) AND THOMPSON RD (-Y1-) AND ALL OTHER -Y- LINES (SEE SHEET TCP-11).

- PLACE CHANGEABLE MESSAGE SIGNS WITH MESSAGES AS SHOWN ON SHEETS TCP-9 & TCP-10.

- RE-TIME/ADJUST EXISTING SIGNALS AS DESCRIBED IN THE SIGNAL PLANS.

STEP 2: - CONTRACTOR SHALL USE TYPE III BARRICADES AND CLOSE -Y2- (SWANNANOVA RIVER RD/NC 81E) AND SET UP & BEGIN USING STAGING AREAS 1, 2 & 3 (SEE SHEET TCP-6).

NOTE: THERE IS NO DETOUR SIGNAGE FOR THE SWANNANOVA RIVER RD/NC 81E (-Y2-) CLOSURE.

- CONTRACTOR SHALL, AWAY FROM TRAFFIC, CONSTRUCT THE PAVED AREA FOR THE ASAKA RESTAURANT DRIVE-THRU IN A MANNER THAT DOES NOT DISRUPT THE RESTAURANT OPERATION (SEE CONSTRUCTION PLANS AND SHEET TCP-6).

-- AT THE COMPLETION OF CONSTRUCTION PLACE DRUMS & TYPE III BARRICADES TO EXPAND STAGING AREA 3 (SEE SHEET TCP-7).

- CONTRACTOR SHALL, AWAY FROM TRAFFIC, BEGIN CONSTRUCTION OF THE TEMPORARY PEDESTRIAN BRIDGE (SEE CONSTRUCTION PLANS, STRUCTURE PLANS AND SHEET TCP-6).

- CONTRACTOR SHALL PLACE TEMPORARY SIGNAGE AS SHOWN ON SHEETS TCP-4, TCP-5, TCP-9 & TCP-10.

STEP 3: - CONTRACTOR SHALL, USING NIGHTLY ROAD CLOSURES AND THE OFF-SITE DETOUR WITH MODIFIED MESSAGES ON THE CHANGEABLE MESSAGE SIGNS AS SHOWN ON SHEETS TCP-4, TCP-5, TCP-7, TCP-9 & TCP-10 (NOTE: AT THE END OF EACH WORK PERIOD THE CONTRACTOR SHALL OPEN BILTMORE AVE. (-L-) AND EXISTING SIDEWALKS TO TRAFFIC.):

-- CLOSE LEFT OR RIGHT SIDEWALK AS REQUIRED & DETOUR PEDESTRIANS TO OTHER SIDE OF BRIDGE (SEE SHEET TCP-4A, DETAILS "A" & "B").

-- CONSTRUCT PROPOSED BRIDGE MICRO PILE CONSTRUCTION, ETC. AND RELOCATION OF UTILITIES AS REQUIRED (SEE CONSTRUCTION PLANS, STRUCTURE PLANS AND SHEET TCP-7).

-- CONSTRUCT RIGHT SIDE OF PROPOSED BILTMORE AVE. (-L-) FROM STA. 11+40 +/- -L- TO STA. 13+34 +/- -L- AND USING RSD 1101.02 SHEET 1 OF 9, OR AS DIRECTED BY THE ENGINEER, CONSTRUCT PROPOSED THOMPSON ST. (-Y1-) UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE CONSTRUCTION PLANS AND SHEET TCP-7). PLACE TEMPORARY PAVEMENT MARKINGS (PAINT) FOR FINAL PATTERN AS SHOWN ON SHEET TCP-8.

NOTE: WHEN CONSTRUCTING DRAINAGE STRUCTURES ADJACENT TO TRAFFIC, INSTALL TEMPORARY STEEL PLATES, AS DIRECTED BY THE ENGINEER. MAY WORK EACH LOCATION INDEPENDENTLY OR CONCURRENTLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WORK IN A CONTINUOUS MANNER TO PERFORM THE WORK IN THE FOLLOWING SEQUENCE, STEPS 'A' THRU 'E'.

A: CLOSE THE APPROPRIATE TRAVEL LANE TO TRAFFIC USING ROADWAY STANDARD DRAWING NO. 1101.02 SHEET 1 OF 9.

B: CONSTRUCT PROPOSED STRUCTURE OR INSTALL PRE-CAST DRAINAGE STRUCTURE AS SHOWN IN THE CONSTRUCTION PLANS AND COVER WITH STEEL PLATES TO PROTECT STRUCTURE DURING CURING.

C: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.

D: WHEN PROPERLY CURED, CLOSE THE APPROPRIATE TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 1 OF 9. BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).

E: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

- CONSTRUCT TEMPORARY SIDEWALKS FOR ON-SITE PEDESTRIAN DETOUR AS REQUIRED TO TEMPORARY PEDESTRIAN BRIDGE AND COMPLETE CONSTRUCTION OF THE TEMPORARY PEDESTRIAN BRIDGE BEGUN IN PHASE I, STEP 2.

STEP 1: - CONTRACTOR SHALL, USING A ROAD CLOSURE AND OFF-SITE DETOUR WITH MODIFIED MESSAGES ON THE CHANGEABLE MESSAGE SIGNS AS SHOWN ON SHEETS TCP-4, TCP-5, TCP-8, TCP-9 & TCP-10:

-- CLOSE SIDEWALKS ON BOTH SIDES OF BILTMORE AVE. (-L-) AND DETOUR PEDESTRIANS TO THE EAST SIDE OF BILTMORE AVE. (-L-), AROUND STAGING AREAS 1 & 2 (AS DIRECTED BY THE ENGINEER) AND ACROSS THE TEMPORARY PEDESTRIAN BRIDGE (SEE SHEET TCP-4A, DETAIL "C").

-- REMOVE EXISTING BRIDGE & CONSTRUCT PROPOSED BRIDGE WITH BRIDGE RAILS AND SIDEWALKS (SEE CONSTRUCTION PLANS, STRUCTURE PLANS AND SHEET TCP-8).

-- CONSTRUCT PROPOSED BILTMORE AVE. (-L-) AND SWANNANOVA RIVER RD. (-Y2-) (INCLUDING PROPOSED SIDEWALKS, C&G AND DRAINAGE) UP TO, AND INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STA. 11+51 +/- -L- TO STA. 17+65 +/- -L- AND FROM STA. 10+34 +/- -Y2- TO STA. 12+17.82 -Y2- (SEE CONSTRUCTION PLANS AND SHEET TCP-8).

NOTE: WHEN CONSTRUCTING DRAINAGE STRUCTURES ADJACENT TO TRAFFIC, INSTALL TEMPORARY STEEL PLATES, AS DIRECTED BY THE ENGINEER. MAY WORK EACH LOCATION INDEPENDENTLY OR CONCURRENTLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WORK IN A CONTINUOUS MANNER TO PERFORM THE WORK IN THE FOLLOWING SEQUENCE, STEPS 'A' THRU 'E'.

A: CLOSE THE APPROPRIATE TRAVEL LANE TO TRAFFIC USING ROADWAY STANDARD DRAWING NO. 1101.02 SHEETS 1 OF 9.

B: CONSTRUCT PROPOSED STRUCTURE OR INSTALL PRE-CAST DRAINAGE STRUCTURE AS SHOWN IN THE CONSTRUCTION PLANS AND COVER WITH STEEL PLATES TO PROTECT STRUCTURE DURING CURING.

C: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.

D: WHEN PROPERLY CURED, CLOSE THE APPROPRIATE TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEETS 1 OF 9. BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT (SEE CONSTRUCTION PLANS).

E: OPEN TRAVEL LANE TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

STEP 2: - CONTRACTOR SHALL:

-- CONTRACTOR SHALL, USING RSD 1101.02 SHEET 1 OF 9, OR AS DIRECTED BY THE ENGINEER, PAVE THE FINAL LAYER OF SURFACE COURSE ON THOMPSON ST. (-Y1-) (SEE CONSTRUCTION PLANS).

-- PLACE FINAL PAVEMENT MARKINGS (POLYUREA) AND OPEN TO THE FINAL TRAFFIC PATTERN (SEE SHEET PM-1).

-- CONTRACTOR SHALL REMOVE TEMPORARY PEDESTRIAN BRIDGE AND RE-TIME/ADJUST EXISTING SIGNALS AS DESCRIBED IN THE SIGNAL PLANS.

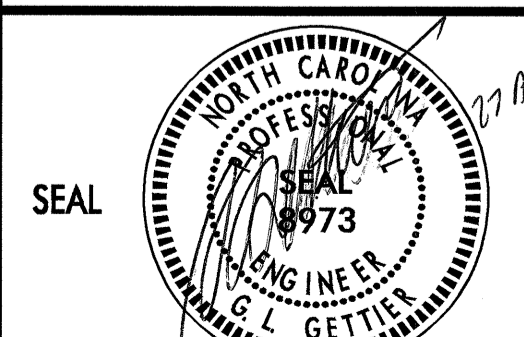

-- CONTRACTOR SHALL REMOVE ALL REMAINING TEMPORARY TRAFFIC CONTROL DEVICES.

PHASE II

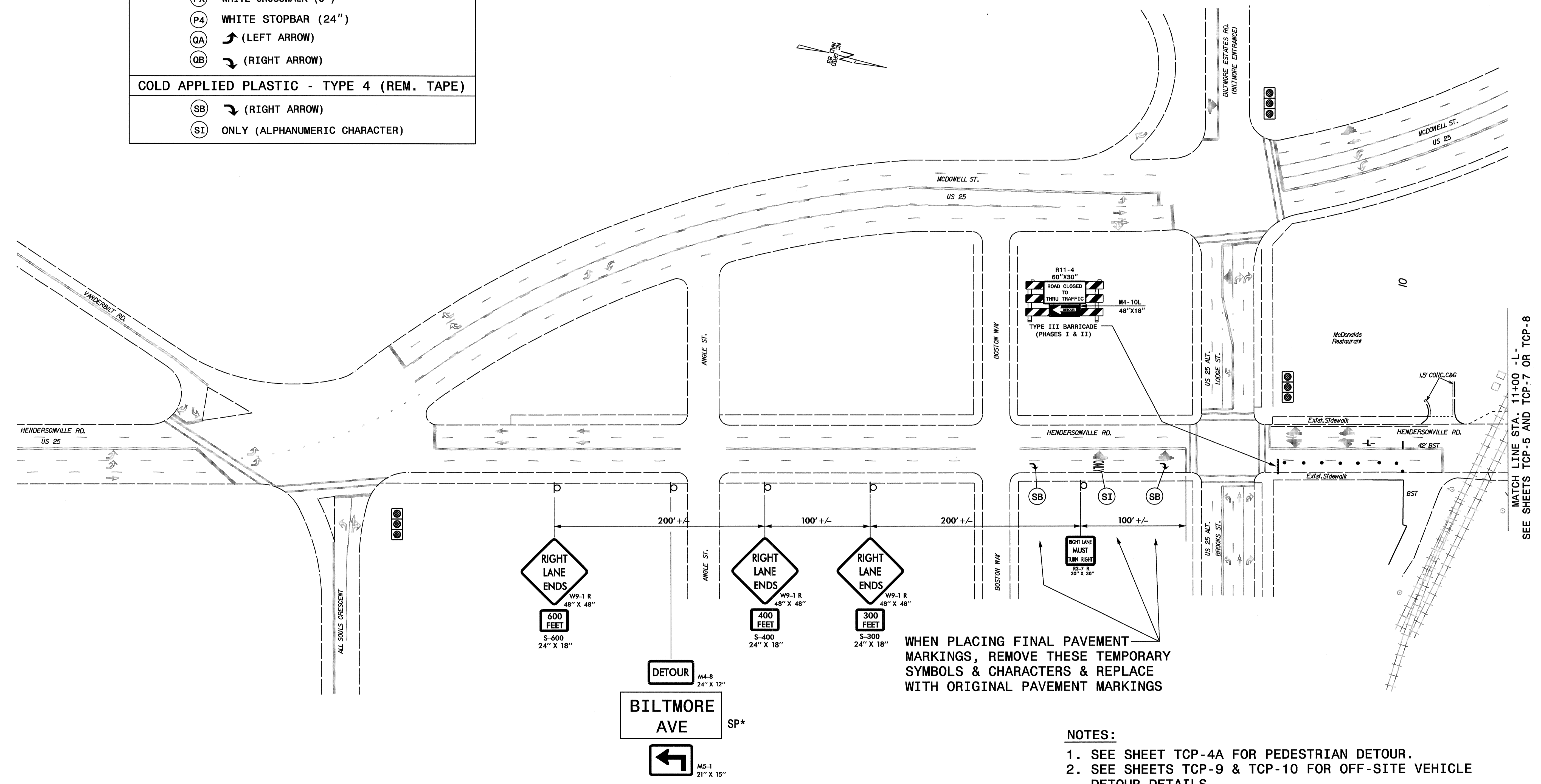
NOTE: RESTRICTION FOR PHASE II:

A) DO NOT CLOSE ROADS DURING PHASE II AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
1. THOMPSON ST. (-Y1-)	ANYTIME

APPROVED:	DATE:	<h1 style="margin: 0;">PHASING</h1>	
	SCALE: NONE		REVISIONS
	DATE: 11/08		
	DWG. BY: KPB		
	DESIGN BY: KPB		
	REVIEWED BY: JWG		

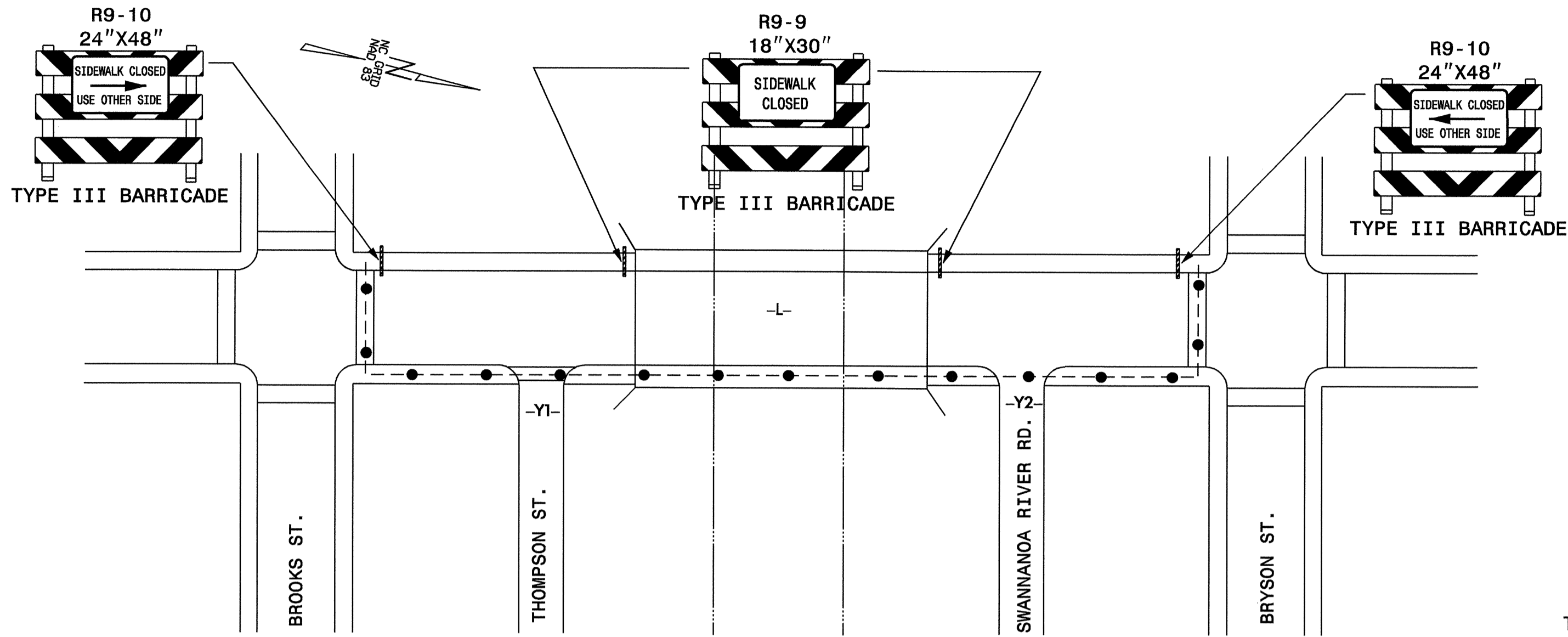
TEMPORARY PAVEMENT MARKING LEGEND	
PAINT	
(PD)	2 FT. WHITE MINISKIP (4")
(PE)	WHITE SOLID LANE LINE (4")
(PI)	YELLOW DOUBLE CENTER (4")
(PX)	WHITE CROSSWALK (8")
(P4)	WHITE STOPBAR (24")
(QA)	↖ (LEFT ARROW)
(QB)	↗ (RIGHT ARROW)
COLD APPLIED PLASTIC - TYPE 4 (REM. TAPE)	
(SB)	↗ (RIGHT ARROW)
(SI)	ONLY (ALPHANUMERIC CHARACTER)



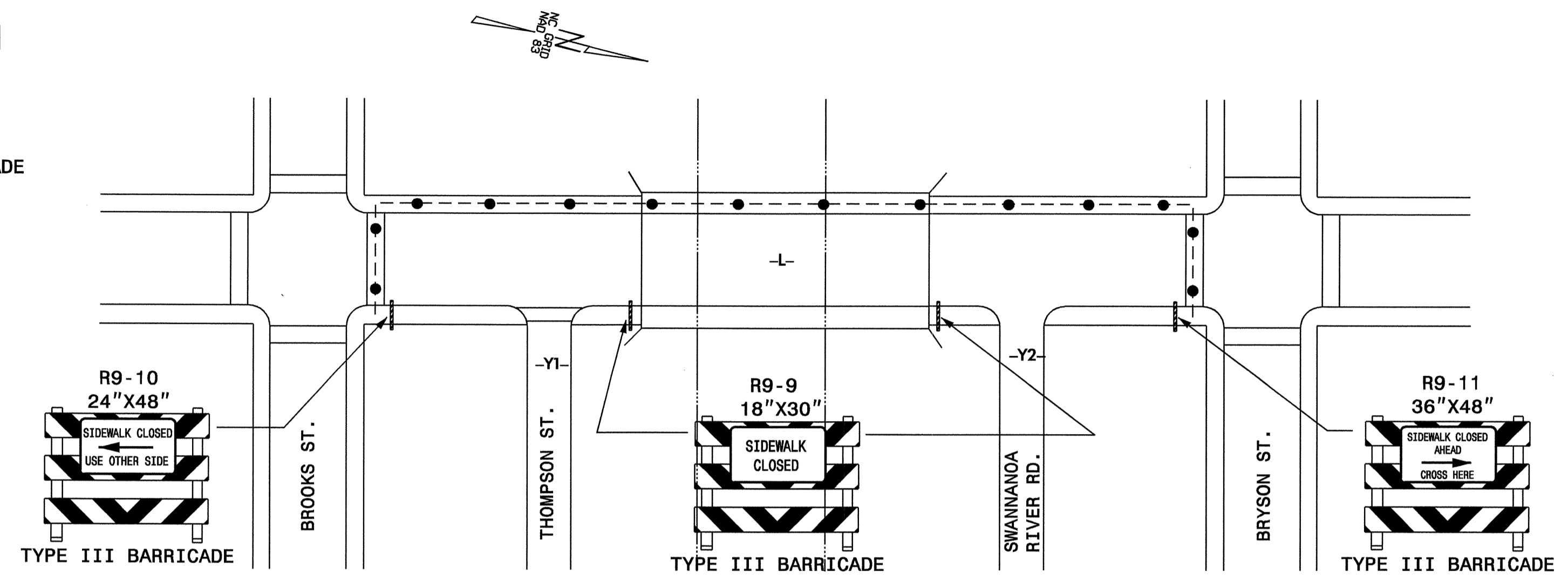
- NOTES:**
- SEE SHEET TCP-4A FOR PEDESTRIAN DETOUR.
 - SEE SHEETS TCP-9 & TCP-10 FOR OFF-SITE VEHICLE DETOUR DETAILS.
 - SEE SHEET SD-1 FOR SPECIAL SIGN DESIGN.

APPROVED: _____	DATE: _____	PHASES I & II DETAILS	SCALE: NONE						
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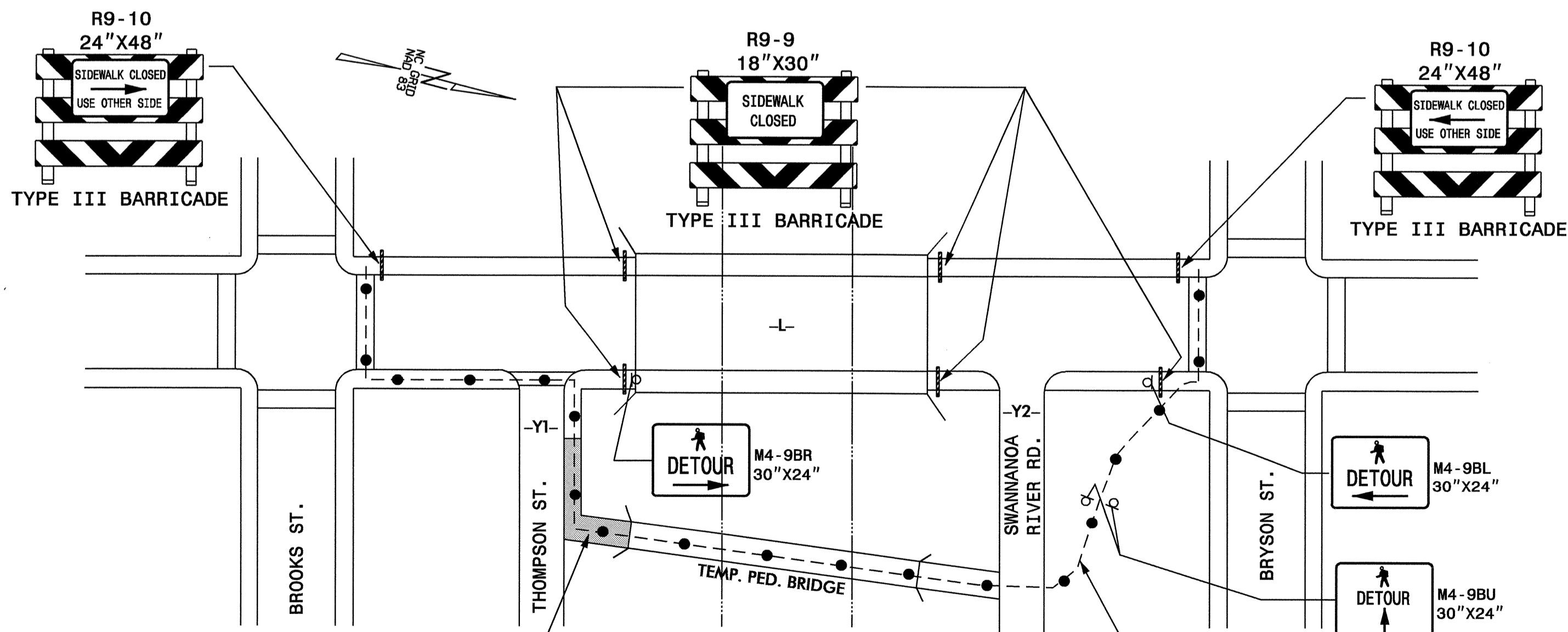
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 KBRoadwell AT WZTC23745



DETAIL "A"
PHASE I (LEFT SIDE CLOSED)
 (SEE SHEET TCP-7 FOR TCP)



DETAIL "B"
PHASE I (RIGHT SIDE CLOSED)
 (SEE SHEET TCP-7 FOR TCP)



TEMPORARY ASPHALT SIDEWALK,
 PROP. 3" OF S9.5C OR AS
 DIRECTED BY THE ENGINEER

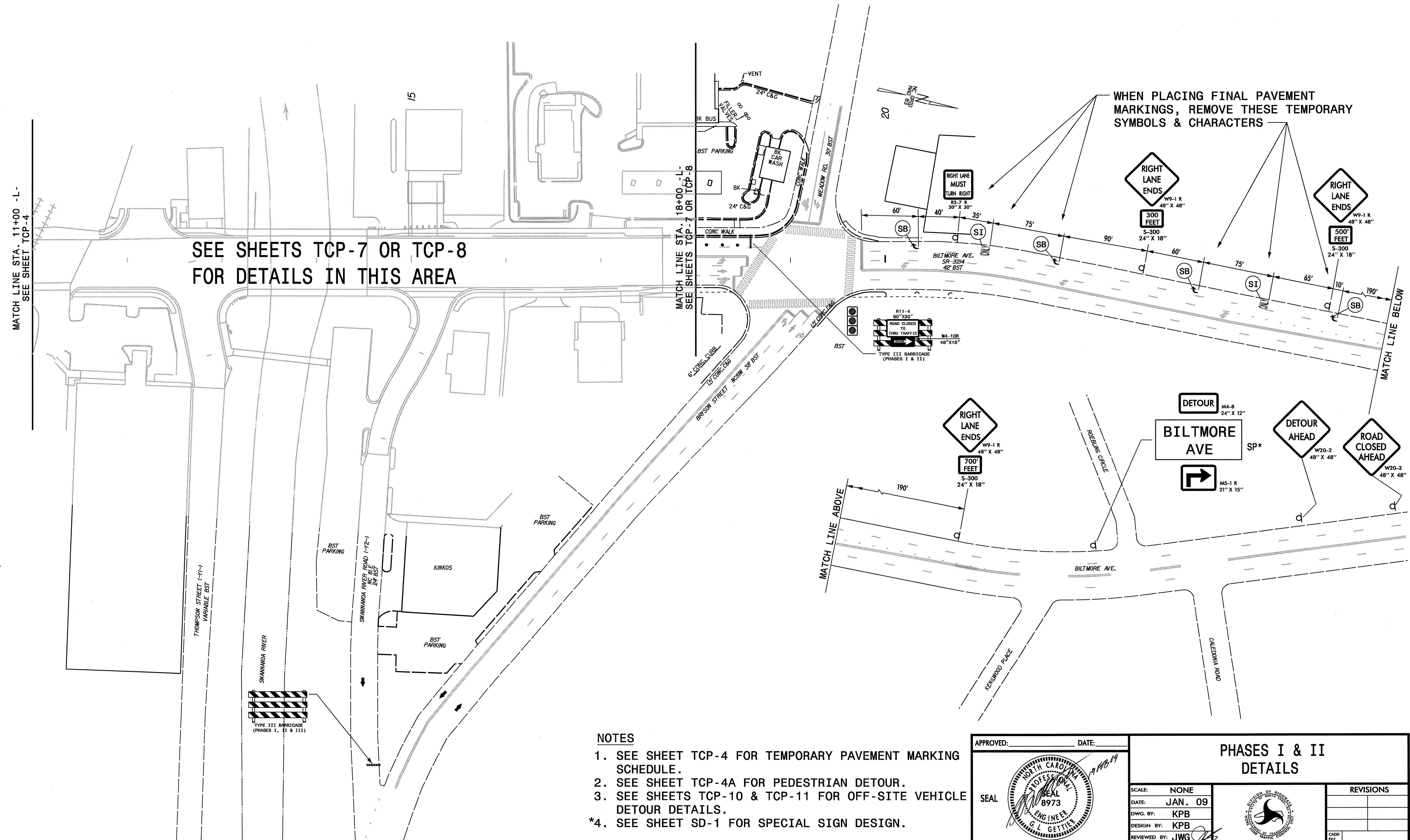
ROUTE PEDESTRIANS AROUND WORK AREA
 AND STAGING AREA USING DELINEATION &
 PROTECTION DEVICES AS DIRECTED BY THE
 ENGINEER

DETAIL "C"
PHASE II (BOTH SIDES CLOSED)
 (SEE SHEET TCP-8)

LEGEND
 - - - - - PEDESTRIAN DETOUR ROUTE

APPROVED: _____ DATE: _____	PEDESTRIAN DETOURS		REVISIONS	
			SCALE: NONE	
	DATE: JAN. 09			
	DWG. BY: KPB DESIGN BY: KPB REVIEWED BY: JWG			

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 kbrodwell AT WZTC23745

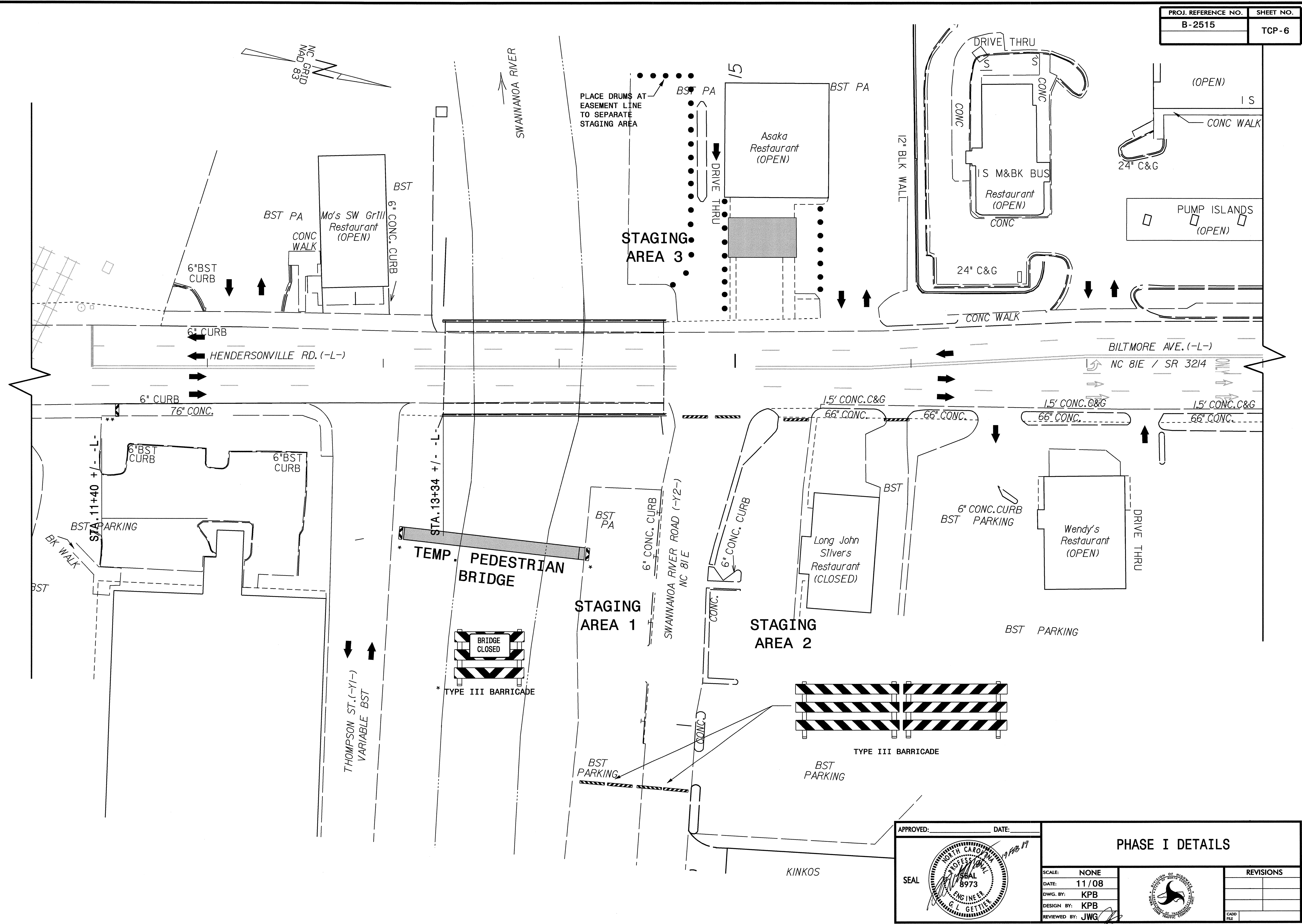


- NOTES**
1. SEE SHEET TCP-4 FOR TEMPORARY PAVEMENT MARKING SCHEDULE.
 2. SEE SHEET TCP-4A FOR PEDESTRIAN DETOUR.
 3. SEE SHEETS TCP-10 & TCP-11 FOR OFF-SITE VEHICLE DETOUR DETAILS.
 - *4. SEE SHEET SD-1 FOR SPECIAL SIGN DESIGN.

APPROVED: _____	DATE: _____	PHASES I & II DETAILS	
SCALE: NONE	DATE: JAN. 09		REVISIONS
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REVIEWED BY: JWG			

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 kbroadwell AT WZT231745

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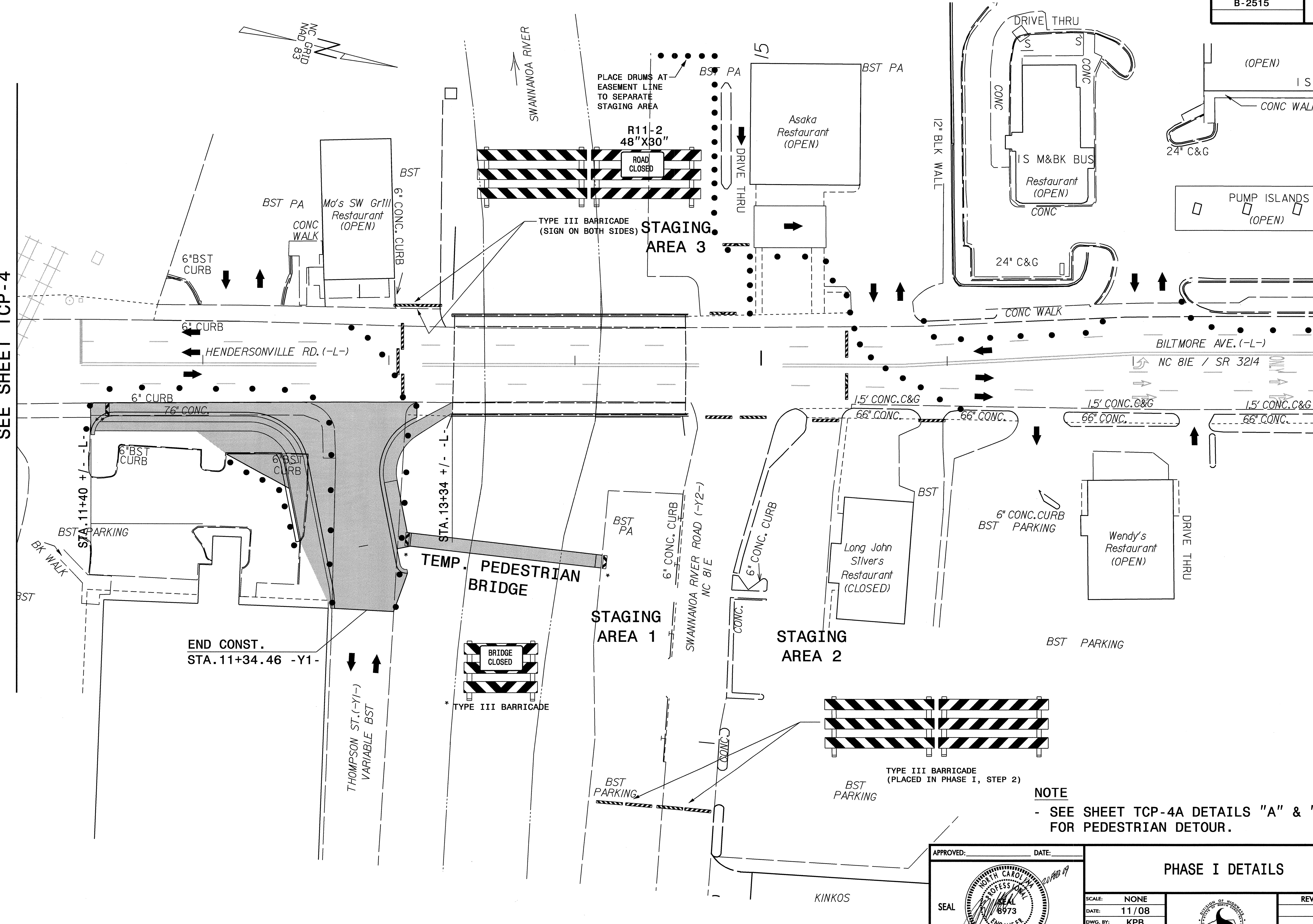
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SEAL

PHASE I DETAILS	
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DATE: 11/08	
DWG. BY: KPB	
DESIGN BY: KPB	
REVIEWED BY: JWG	
CADD FILE	

MATCH LINE STA. 11+00 -L-
SEE SHEET TCP-4

MATCH LINE STA. 18+00 -L-
SEE SHEET TCP-5



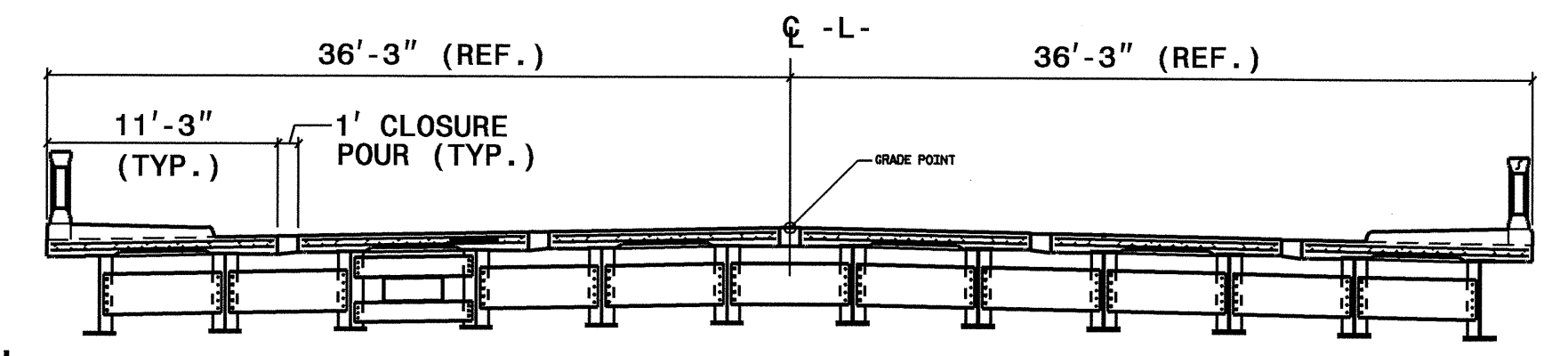
NOTE
- SEE SHEET TCP-4A DETAILS "A" & "B"
FOR PEDESTRIAN DETOUR.

APPROVED: _____ DATE: _____

SEAL

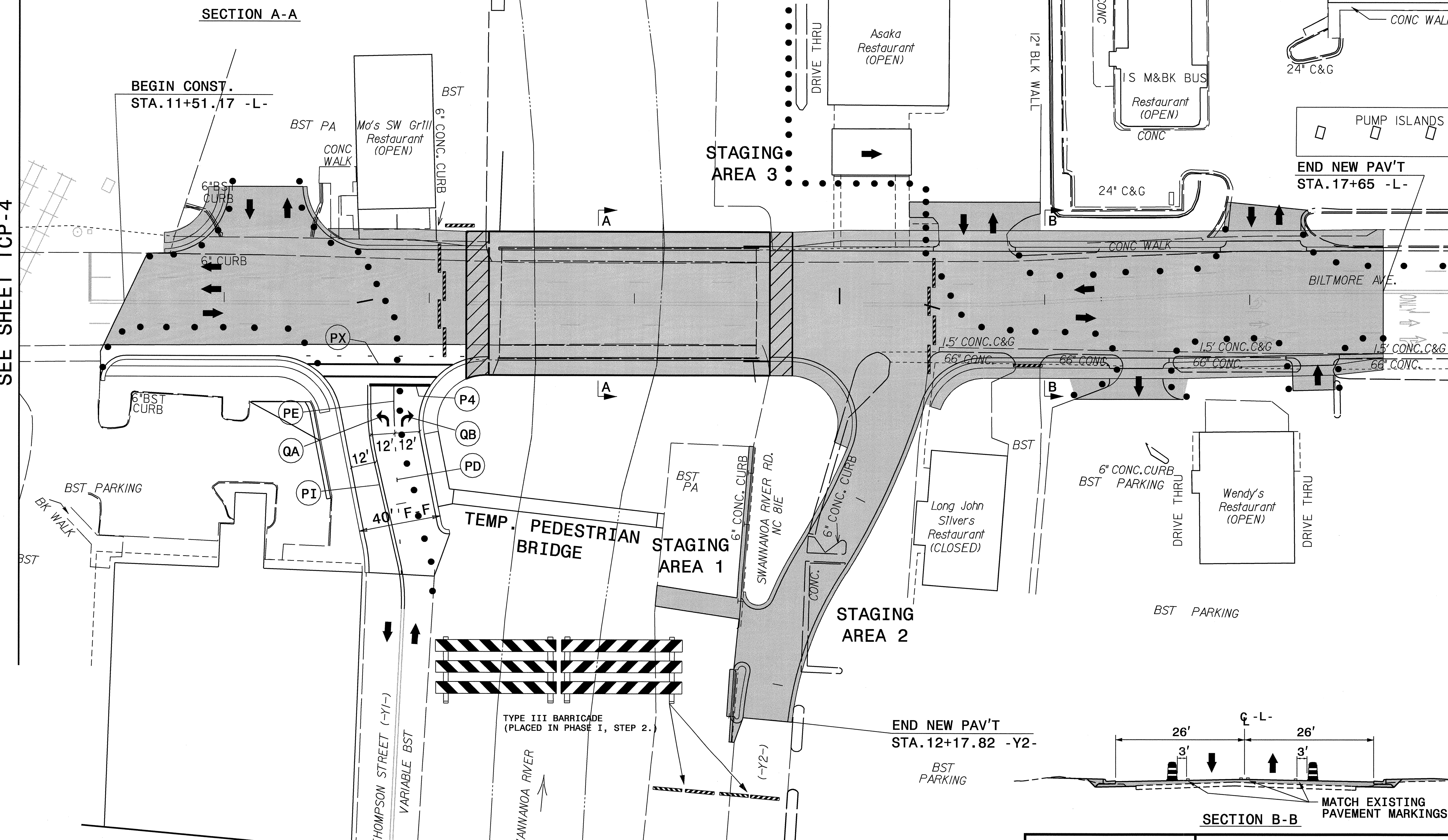
PHASE I DETAILS	
SCALE: NONE	REVISIONS
DATE: 11/08	
DWG. BY: KPB	
DESIGN BY: KPB	
REVIEWED BY: JWG	

20-FEB-2009 10:06
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 Kbrodwell AT WZTC23745



MATCH LINE STA. 11+00 -L-
SEE SHEET TCP-4

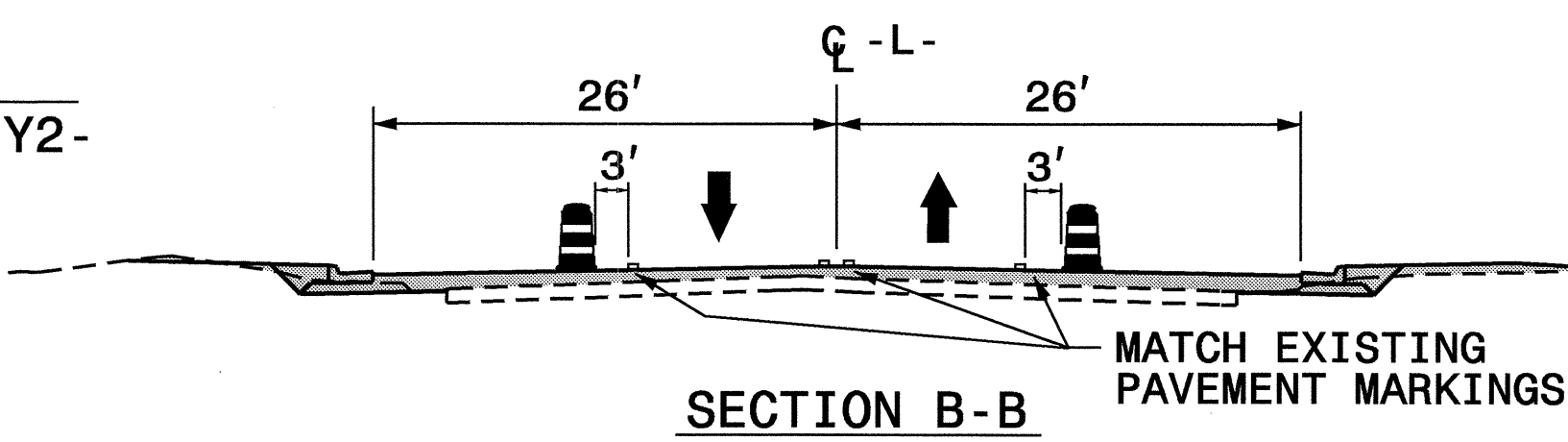
MATCH LINE STA. 18+00 -L-
SEE SHEET TCP-5



NOTES

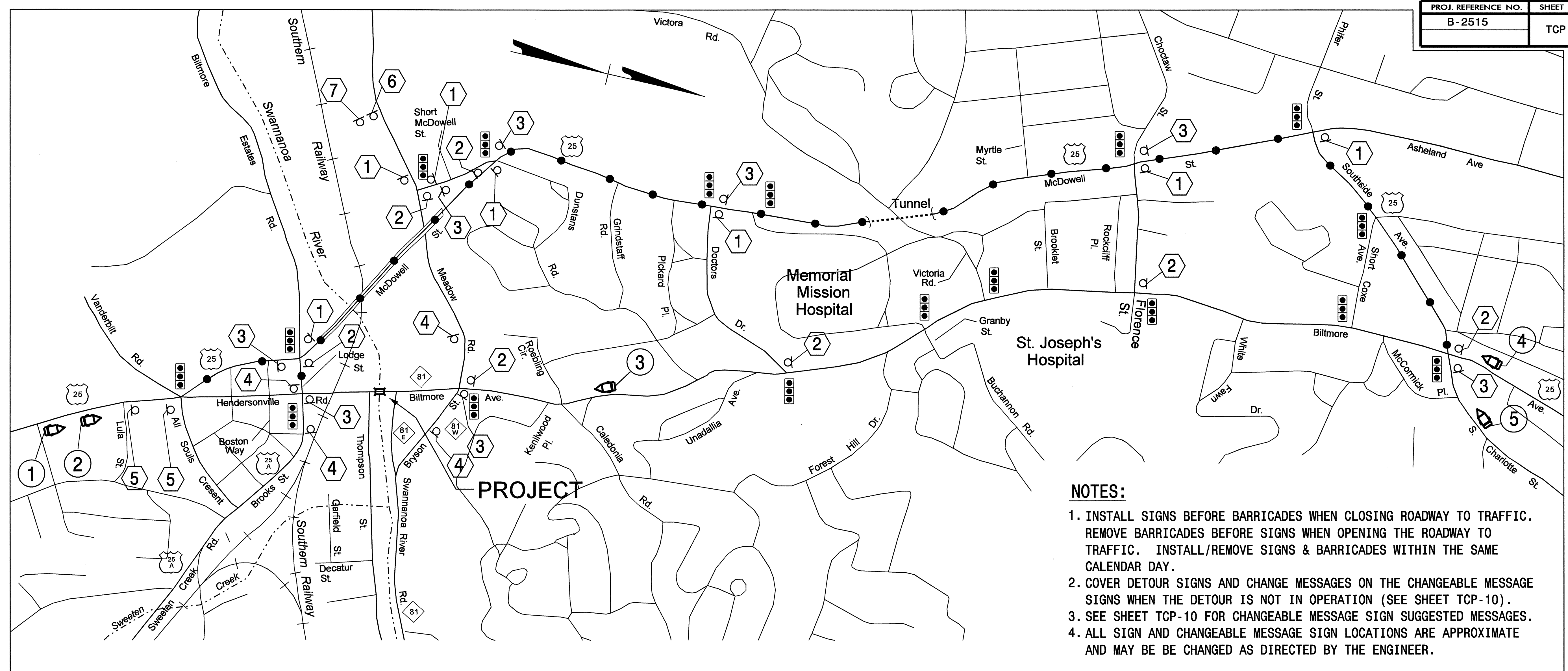
1. SEE SHEET TCP-4 FOR TEMPORARY PAVEMENT MARKING SCHEDULE.
2. SEE SHEET TCP-4A DETAIL "C" FOR PEDESTRIAN DETOUR.

MATCH LINE SEE SHEET TCP-6

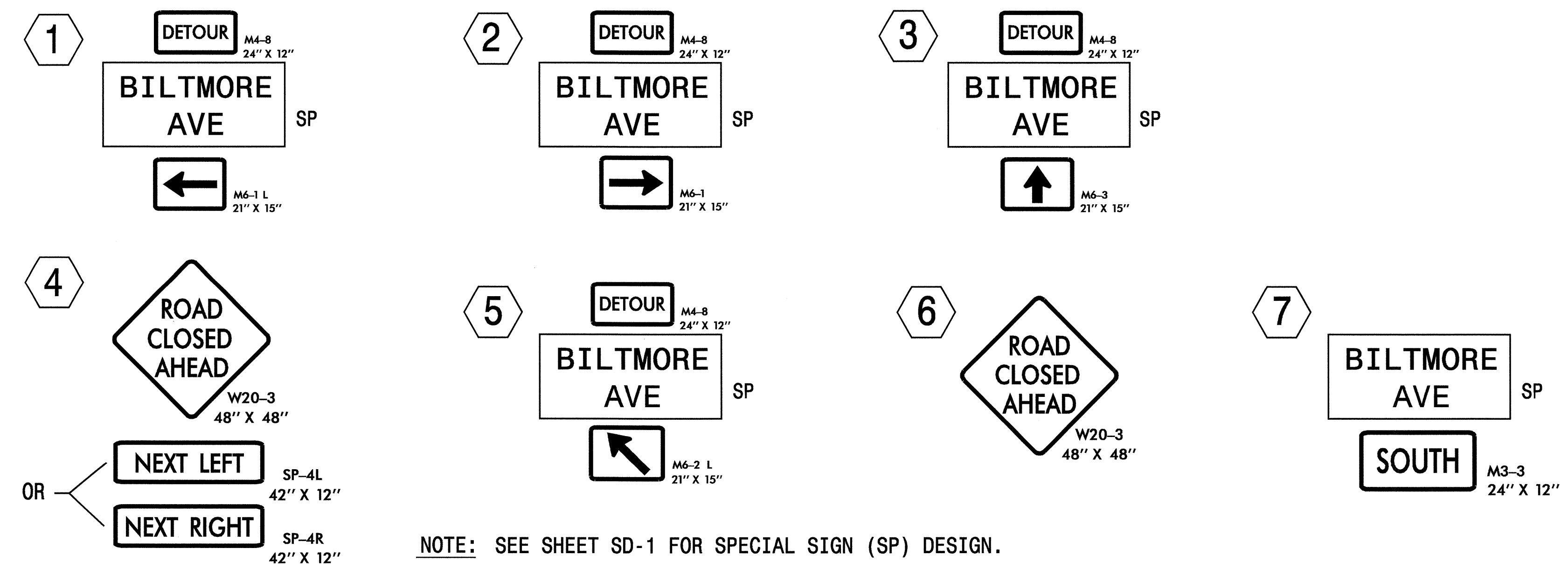


APPROVED: _____	DATE: _____	PHASE II DETAILS	
SCALE: NONE	DATE: 11/08		REVISIONS
DWG. BY: KPB	DESIGN BY: KPB		
REVIEWED BY: JWGC			

19-FEB-2009 15:17
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kbr\cadwell AT WZTC23745



- NOTES:**
1. INSTALL SIGNS BEFORE BARRICADES WHEN CLOSING ROADWAY TO TRAFFIC. REMOVE BARRICADES BEFORE SIGNS WHEN OPENING THE ROADWAY TO TRAFFIC. INSTALL/REMOVE SIGNS & BARRICADES WITHIN THE SAME CALENDAR DAY.
 2. COVER DETOUR SIGNS AND CHANGE MESSAGES ON THE CHANGEABLE MESSAGE SIGNS WHEN THE DETOUR IS NOT IN OPERATION (SEE SHEET TCP-10).
 3. SEE SHEET TCP-10 FOR CHANGEABLE MESSAGE SIGN SUGGESTED MESSAGES.
 4. ALL SIGN AND CHANGEABLE MESSAGE SIGN LOCATIONS ARE APPROXIMATE AND MAY BE BE CHANGED AS DIRECTED BY THE ENGINEER.



NOTE: SEE SHEET SD-1 FOR SPECIAL SIGN (SP) DESIGN.

- LEGEND**
- EXISTING SIGNAL (REF.)
 - CHANGEABLE MESSAGE SIGN (CMS)
 - STATIONARY/PORTABLE SIGN
 - TYPE III BARRICADE


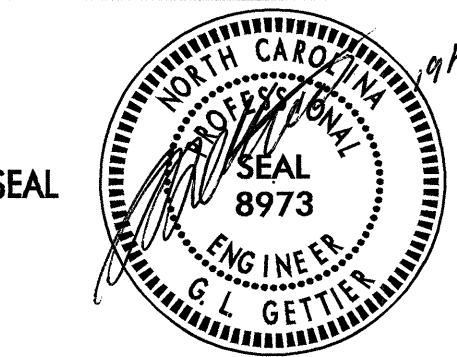
APPROVED: _____ DATE: _____	DETOUR SIGNAGE	
	SCALE: NONE	
	DATE: 1/09	
	DWG. BY: KPB	
	DESIGN BY: KPB	
REVIEWED BY: JWG	REVISIONS	

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 kbroadwell AT W1223745J

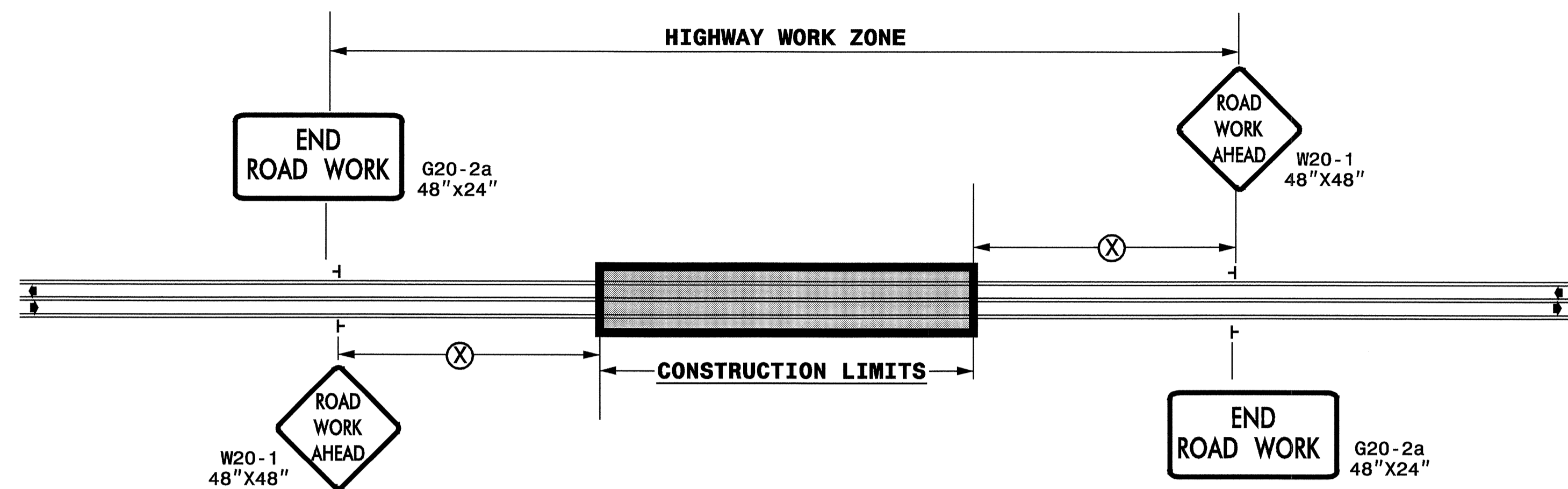
CMS	①	②	③	④	⑤
TWO WEEKS PRIOR TO FIRST NIGHTLY ROAD CLOSURE IN PHASE I	BILTMORE AVE CLOSURES ↓ BEGIN NIGHTLY (MONTH) (DAY)				
EACH DAY DURING PHASE I, 6AM TO 9PM	BILTMORE AVE TO CLOSE ↓ TONIGHT AT 9 PM				
DURING NIGHTLY ROAD CLOSURES IN PHASE I, 9PM TO 6AM	BILTMORE AVE CLOSED ↓ 1 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 0.5 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 0.3 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 1.4 MI USE DETOUR	BILTMORE SOUTH CLOSED ↓ 1.4 MI USE DETOUR
ONE WEEK PRIOR TO ROAD CLOSURE IN PHASE II	BILTMORE AVE TO CLOSE ↓ STARTING (MONTH) (DAY)		BILTMORE AVE TO CLOSE ↓ STARTING (MONTH) (DAY)	BILTMORE AVE TO CLOSE ↓ STARTING (MONTH) (DAY)	BILTMORE SOUTH TO CLOSE ↓ STARTING (MONTH) (DAY)
DURING ROAD CLOSURES IN PHASE II	BILTMORE AVE CLOSED ↓ 1 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 0.5 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 0.3 MI USE DETOUR	BILTMORE AVE CLOSED ↓ 1.4 MI USE DETOUR	BILTMORE SOUTH CLOSED ↓ 1.4 MI USE DETOUR
ALL LANES OPEN	BILTMORE AVE ↓ ALL LANES OPEN				

NOTES:
1. SEE SHEET TCP-9 FOR CHANGEABLE MESSAGE SIGN LOCATIONS.

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 kbroadwell AT WZT0237451

APPROVED: _____ DATE: _____	CHANGEABLE MESSAGE SIGNS SUGGESTED MESSAGES	SCALE: NONE		REVISIONS
		DATE: 1/09		
		DWG. BY: KPB		
		DESIGN BY: KPB		
		REVIEWED BY: JWG		

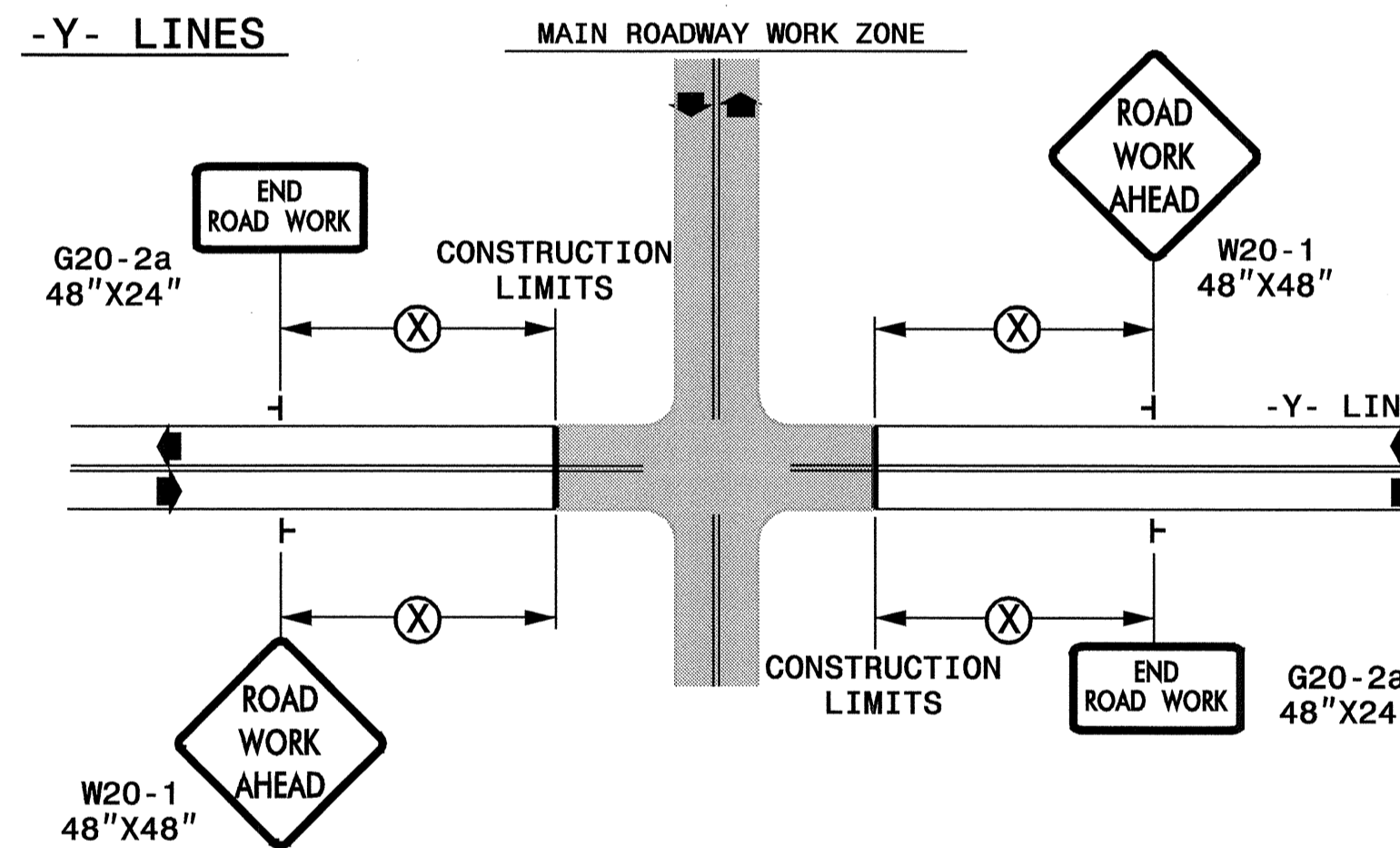
TWO-WAY UNDIVIDED ** (L-LINES)



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 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: _____ DATE: _____	<p>DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS</p>	
SCALE: NONE	REVISIONS	
DATE: 11/08	7-98	10/01
DWG. BY: KPB	10-98	03/04
DESIGN BY: KPB	01/01	11/04
REVIEWED BY: JWG	CADD FILE	

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 kbroodwell AT WZTC23745