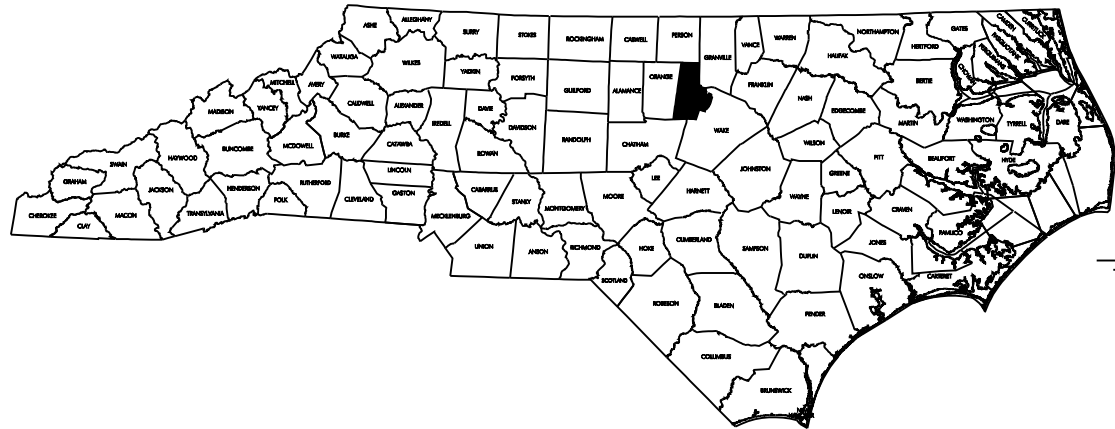


CONTRACT NO. D000076 TIP PROJECT: BK-5102F

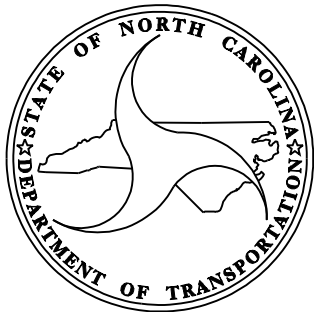
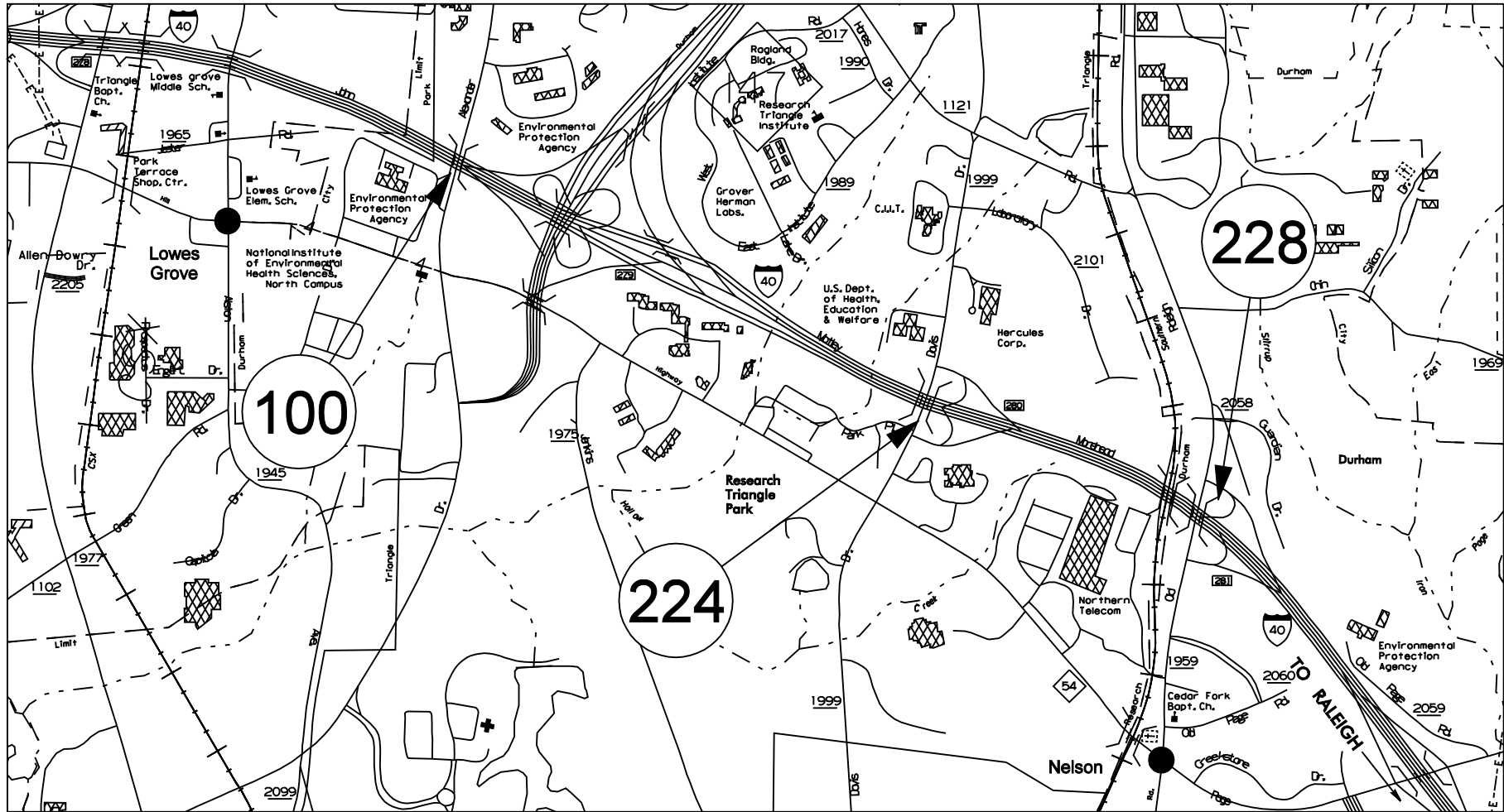


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

DURHAM COUNTY

LOCATION: SR 2028, SR 1999, SR 1959
TYPE OF WORK: BRIDGE PRESERVATION: CLEANING
AND PAINTING OF BRIDGES #100, #224, AND #228
IN DURHAM COUNTY.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BK-5102F	1	1
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42580.1.1	?	P.E.	
42580.3.6	?	CONST	



DESIGN DATA

PROJECT LENGTH

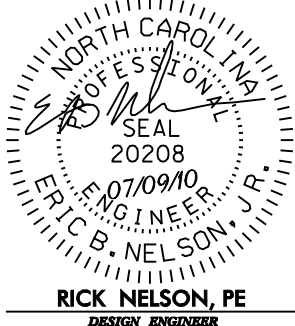
Prepared In the Office of:
BRIDGE MANAGEMENT UNIT
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

LETTING DATE:
AUGUST 19, 2010

DAN HOLDERMAN, PE
STATE BRIDGE
MANAGEMENT ENGINEER

MIKE SUMMERS
BRIDGE MANAGEMENT
PROJECT MANAGER



8/17/2010
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dkarageorge

TIP PROJECT: BK-5102F

WBS 42580.3.6

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
TRAFFIC CONTROL

DURHAM COUNTY

LOCATION: BRIDGE NO.S 100, 224, AND 228.

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE PAINTING

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
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1145.01	BARRICADES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY DRUMS

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND INDEX OF SHEETS
TCP-2	GENERAL NOTES
TCP-3	TRAFFIC CONTROL PHASING
TCP-4	BRIDGE #100 I-40 EAST CLOSURE OF RIGHT LANE & EXIT 279A
TCP-4A	BRIDGE #100 I-40 EAST DETOUR ROUTE FOR EXIT 279A
TCP-5	BRIDGE #100 I-40 WEST CLOSURE OF RIGHT LANE & EXIT 5B FROM NC 147 N
TCP-5A	BRIDGE #100 DETOUR ROUTE FOR EXIT 5B FROM NC 147 NORTH TO I-40 WEST
TCP-6	BRIDGE #100 CLOSURE OF RAMP FROM NC 147 SOUTH TO I-40 WEST
TCP-6A	BRIDGE #100 DETOUR ROUTE FOR RAMP FROM NC 147 SOUTH TO I-40 WEST
TCP 7-7A	BRIDGE #224 I-40 EAST CLOSURE OF LEFT TWO LANES
TCP-8-8A	BRIDGE #224 I-40 EAST CLOSURE OF RIGHT TWO LANES AND EXIT 280 TO DAVIS DR.
TCP-8B	BRIDGE #224 DETOUR ROUTE FOR I-40 EAST EXIT 280
TCP-9	BRIDGE #224 I-40 WEST CLOSURE OF RIGHT LANE & ENTRANCE LOOP FROM DAVIS DR.
TCP-9A	BRIDGE #224 DETOUR ROUTE FOR ENTRANCE LOOP FROM DAVIS DR. TO I-40 WEST
TCP-10	BRIDGE #228 I-40 EAST CLOSURE OF RIGHT LANE AND EXIT 281 TO MIAMI BLVD.
TCP-10A	BRIDGE #228 DETOUR ROUTE FOR I-40 EAST EXIT 281 TO MIAMI BLVD.
TCP-11	BRIDGE #228 I-40 WEST CLOSURE OF RIGHT LANE & ENTRANCE LOOP FROM MIAMI BLVD.
TCP-11A	BRIDGE #228 DETOUR ROUTE FOR ENTRANCE LOOP FROM MIAMI BLVD. TO I-40 WEST
TCP-12	SINGLE LANE CLOSURES
TCP-13	DOUBLE LANE CLOSURES
TCP-14	TRIPLE LEFT LANE CLOSURE

STATE PROJECT REFERENCE NO.	SHEET NO.
BK-5102F	TCP-1

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- WORK AREA

TRAFFIC CONTROL DEVICES

- TYPE III BARRICADE
- CONE
- DRUM SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- PORTABLE CONCRETE BARRIER
- TEMPORARY CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- LAW ENFORCEMENT
- FLAGGER

APPROVED: DATE: 8/17/10



PLAN PREPARED BY:



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27606
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Fax. 919.851.7024
www.stantec.com

BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER

GEORGE KARAGEORGE

TRAFFIC CONTROL DESIGNER

8/17/2010
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gkara@george

GENERAL NOTES

PROJECT REFERENCE NO.	SHEET NO.
BK-5102F	TCP-2

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

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

LANE CLOSURE TIME RESTRICTIONS

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

DAY AND TIME RESTRICTIONS

SINGLE LANE CLOSURES	6:00 A.M.-9:00 P.M. MONDAY THRU SUNDAY
DOUBLE LANE CLOSURES	6:00 A.M.-10:00 P.M. MONDAY THRU SUNDAY
TRIPLE LANE CLOSURES	6:00 A.M.-11:00 P.M. MONDAY THRU SUNDAY

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

ROAD NAME
ALL ROADS

HOLIDAY

- 1) FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2) FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 11:00 P.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 11:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 11:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 11:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 11:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 11:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 11:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 11:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 11:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) LANE CLOSURES ARE REQUIRED WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN ANY PORTION OF A TRAVEL LANE. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
 - D) INSTALL ALL LANE CLOSURES ACCORDING TO THE TRAFFIC CONTROL PLAN, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
 - E) 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.
 - F) INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
 - G) 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.
 - H) 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 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 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING


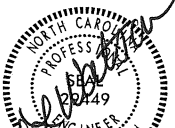
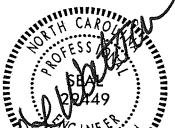

- J) PROVIDE SIGNING AND DEVICES FOR ROAD CLOSURES ACCORDING TO THE TRAFFIC CONTROL PLAN. COVER OR REMOVE ALL SIGNS AND DEVICES FOR ROAD CLOSURES WHEN NOT IN EFFECT.
- K) PROVIDE OFFSITE DETOUR ROUTE SIGNING AS SHOWN IN THE TRAFFIC CONTROL PLANS. COVER OR REMOVE OFFSITE DETOUR SIGNING WHEN THE DETOUR IS NOT IN OPERATION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- M) SPACE CHANNELIZING DEVICES ALONG WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH). USE A 10 FT SPACING IN RADII OR WHEN THEY ARE USED TO CLOSE A DRIVEWAY OR ROADWAY. IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION.
- CHANNELIZING DEVICES SHOULD BE Laterally OFFSET 3 FT FROM THE EDGE OF A TRAVELWAY AS ROOM PERMITS.
- WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- N) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.
 - O) WHEN CLOSING A ROADWAY OR DRIVEWAY PLACE TYPE III BARRICADES COMPLETELY ACROSS THE ROADWAY OR FROM CURB TO CURB. ATTACH BARRICADE MOUNTED "ROAD CLOSED" SIGN R11-2 AT ALL CLOSURE LOCATIONS. IF LOCAL TRAFFIC IS TO BE MAINTAINED STAGGER THE BARRICADES TO ALLOW ACCESS.
 - P) PLACE ARROW PANELS ON THE ROADWAY SHOULDER. IF SHOULDERS DO NOT EXIST, PLACE ARROW PANELS WITHIN THE MERGE TAPER BEHIND THE CHANNELIZING DEVICES OF THE LANE CLOSURE.
 - Q) DO NOT INSTALL SIGNS OR OTHER TRAFFIC CONTROL DEVICES ON OR PARTIALLY BLOCKING SIDEWALKS OR ANY OTHER FACILITIES OPEN TO PEDESTRIANS.

MISCELLANEOUS

- R) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- S) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- T) PLACE ALL CHANGEABLE MESSAGE SIGNS AS NEEDED IN THE LOCATIONS AND WITH THE WORD MESSAGES AS SHOWN IN THE TCP OR AS DIRECTED BY THE ENGINEER TO PROVIDE ADVANCE WARNING TO THE PUBLIC DURING CONSTRUCTION.
- U) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- V) DO NOT PERFORM WORK FROM THE ROADWAY ON TOP OF ANY BRIDGE.

 Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27609 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	SEAL  8/17/10	GENERAL NOTES									
	 SIGNATURE DATE	SCALE: NONE DATE: AUG 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW		REVISIONS <table><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>							

TRAFFIC CONTROL PHASING

PERFORM BRIDGE PAINTING OPERATIONS USING THE FOLLOWING WORK ZONE TRAFFIC CONTROL METHODS:

DO NOT WORK AT MORE THAN ONE BRIDGE LOCATION AT A TIME.

DO NOT INSTALL MORE THAN 1 LANE CLOSURE AT A TIME.

WHEN WORKING OVER I-40 USE LANE CLOSURES AND RAMP CLOSURES AS DESCRIBED BELOW.

BRIDGE NO. 100 - TW ALEXANDER DR. OVER I-40 AND NC 147S RAMP

I-40 EB WORK AREAS

FOR PAINT OPERATIONS OVER THE I-40 EAST LEFT TWO LANES, USE DOUBLE LEFT LANE CLOSURES [TCP-13].

FOR PAINT OPERATIONS OVER THE I-40 EAST RIGHT LANE AND EXIT LANE, USE A RIGHT LANE CLOSURE WITH CLOSURE OF EXIT 279A [TCP-4, TCP-12].

DETOUR EXIT 279A TRAFFIC VIA EXIT 280, TO DAVIS DR. SB, TO NC 54 WEST, TO T.W. ALEXANDER DR. [TCP-4A].

I-40 WB WORK AREAS

FOR PAINT OPERATIONS OVER THE I-40 WEST LEFT TWO LANES, USE DOUBLE LEFT LANE CLOSURES [TCP-13].

FOR PAINT OPERATIONS OVER THE I-40 WEST RIGHT LANE, USE RIGHT LANE CLOSURE WITH CLOSURE OF ENTRANCE LOOP FROM NC 147 NORTH. EXIT LOOP FROM I-40 WEST TO NC 147 SOUTH REMAINS OPEN [TCP-5, TCP-12].

DETOUR I-40 WEST ENTRANCE LOOP FROM 147 NORTH, TO CORNWALLIS RD. INTERCHANGE, TO 147 SOUTH TO I-40 WEST [TCP-5A].

RAMP FROM NC 147 SOUTH TO I-40 WEST

FOR PAINT OPERATIONS OVER THE RAMP COMING FROM NC 147 SOUTH TO I-40 WEST, CLOSE THE RAMP [TCP-6].

DETOUR TRAFFIC FROM NC 147 SOUTH RAMP VIA T.W. ALEXANDER DR. NB, TO NC 54 WEST, TO NC 55 WEST, TO I-40 WEST [TCP-6A].

BRIDGE NO. 224 - DAVIS DR. OVER I-40

I-40 EB WORK AREAS

FOR PAINT OPERATIONS OVER THE I-40 EAST LEFT TWO LANES, USE A DOUBLE LEFT LANE CLOSURE THROUGH LEFT ENTRANCE RAMP FROM NC 147 SOUTH [TCP-7, TCP-7A, TCP-13].

FOR PAINT OPERATIONS OVER THE I-40 EAST RIGHT TWO LANES AND EXIT LANE, USE A DOUBLE RIGHT LANE CLOSURE WITH CLOSURE OF EXIT 280 [TCP-8, TCP-8A, TCP-13].

DETOUR EXIT 280 TRAFFIC VIA EXIT 281, TO MIAMI BLVD. SB, TO NC 54 WEST, TO DAVIS DR. [TCP-8B].

I-40 WB WORK AREAS

FOR PAINT OPERATIONS OVER THE I-40 WEST LEFT THREE LANES, USE TRIPLE LEFT LANE CLOSURES [TCP-14].

FOR PAINT OPERATIONS OVER THE I-40 WEST RIGHT LANE AND ENTRANCE LOOP LANE, USE A RIGHT LANE CLOSURE WITH CLOSURE OF ENTRANCE LOOP FROM DAVIS DR. [TCP-9, TCP-12].

DETOUR ENTRANCE LOOP TRAFFIC TO CORNWALLIS RD. WB, TO NC 147 SOUTH, TO I-40 WEST [TCP-9A]. SB DAVIS DR. TRAFFIC MAY USE NC 54 WEST TO NC 55 WEST TO I-40 WEST PER EXISTING I-40 TRAILBLAZING SIGNS.

BRIDGE NO. 228 - MIAMI BLVD. OVER I-40

I-40 EB WORK AREAS

FOR PAINT OPERATIONS OVER THE I-40 EAST LEFT THREE LANES, USE TRIPLE LEFT LANE CLOSURES [TCP-14].

FOR PAINT OPERATIONS OVER THE I-40 EAST RIGHT LANE AND EXIT LANE, USE A RIGHT LANE CLOSURE WITH CLOSURE OF EXIT 281 [TCP-10, TCP-12].

DETOUR EXIT 281 TRAFFIC VIA EXIT 282, TO PAGE RD. SB, TO SLATER RD., TO MIAMI BLVD. [TCP-10A].




I-40 WB WORK AREAS

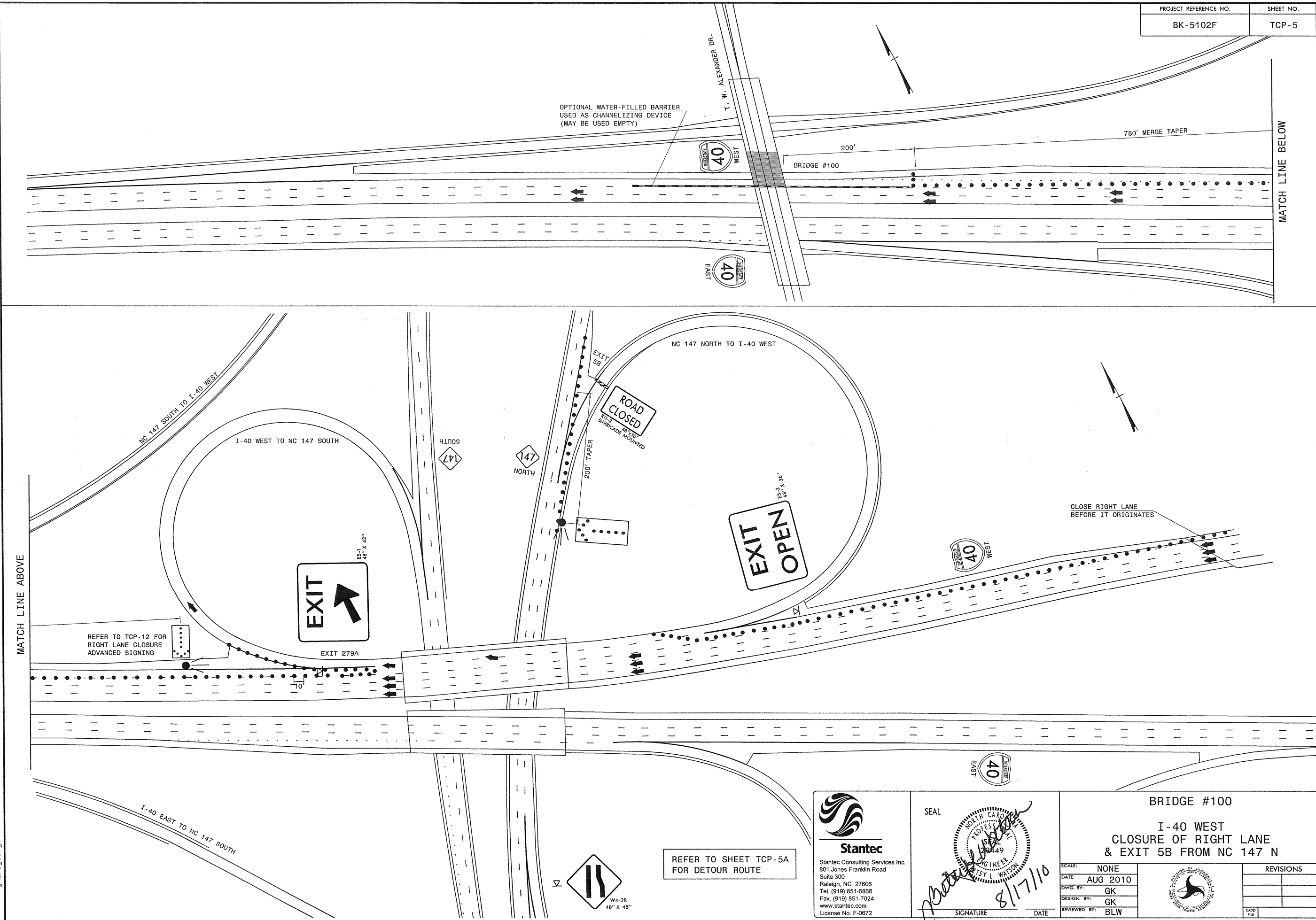
FOR PAINT OPERATIONS OVER THE I-40 WEST LEFT THREE LANES, USE TRIPLE LEFT LANE CLOSURES [TCP-14].

FOR PAINT OPERATIONS OVER THE I-40 WEST RIGHT LANE AND ENTRANCE LOOP LANE, USE A RIGHT LANE CLOSURE WITH CLOSURE OF ENTRANCE LOOP FROM MIAMI BLVD. [TCP-11, TCP-12].

DETOUR ENTRANCE LOOP TRAFFIC FROM MIAMI BLVD. USING CORNWALLIS RD. WB, OR NC 54 WEST, TO DAVIS DR., TO I-40 WEST [TCP-11A].

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	SCALE: NONE DATE: AUG 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW		REVISIONS



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SIGNATURE

DATE

BRIDGE #100

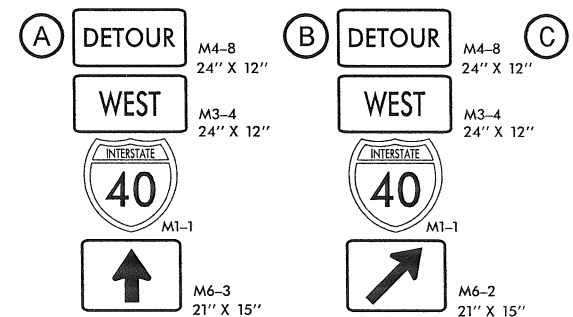
I-40 WEST
CLOSURE OF RIGHT LANE
& EXIT 5B FROM NC 147 N

SCALE: NONE
DATE: AUG 2010
DWG. BY: GK
DESIGN BY: GK
REVIEWED BY: BLW

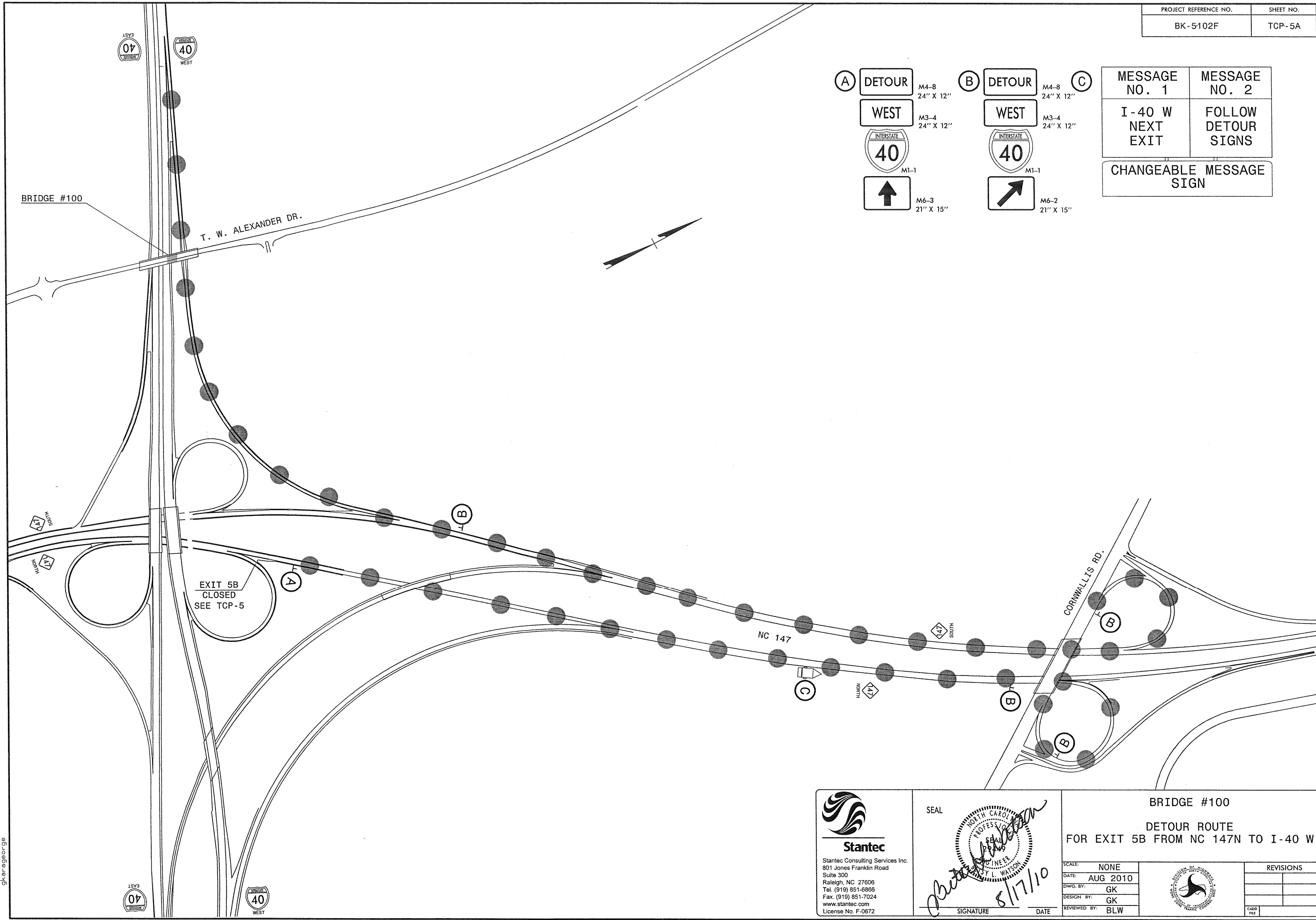


REVISIONS

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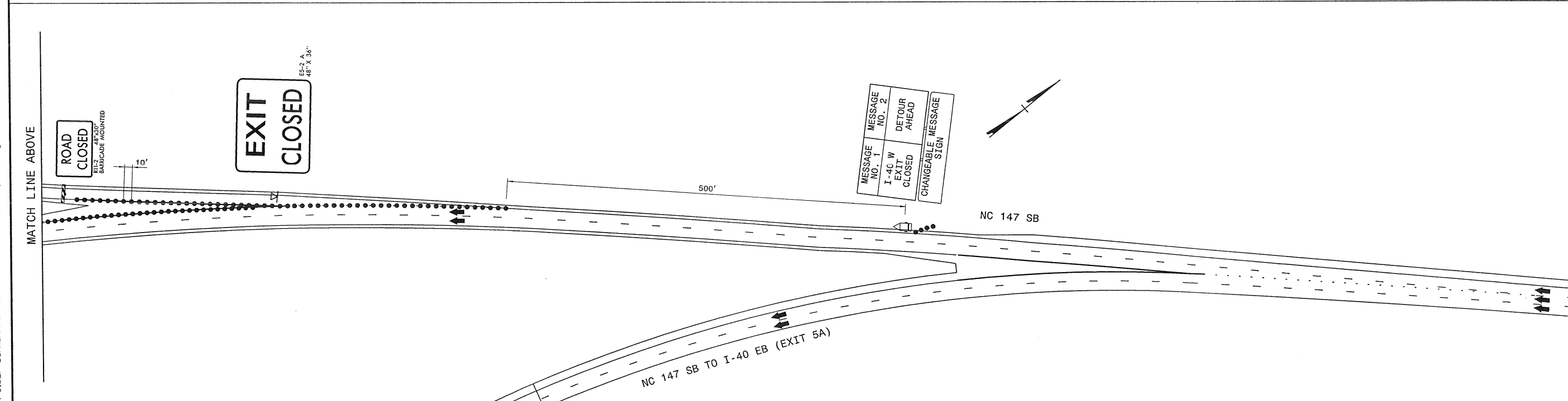
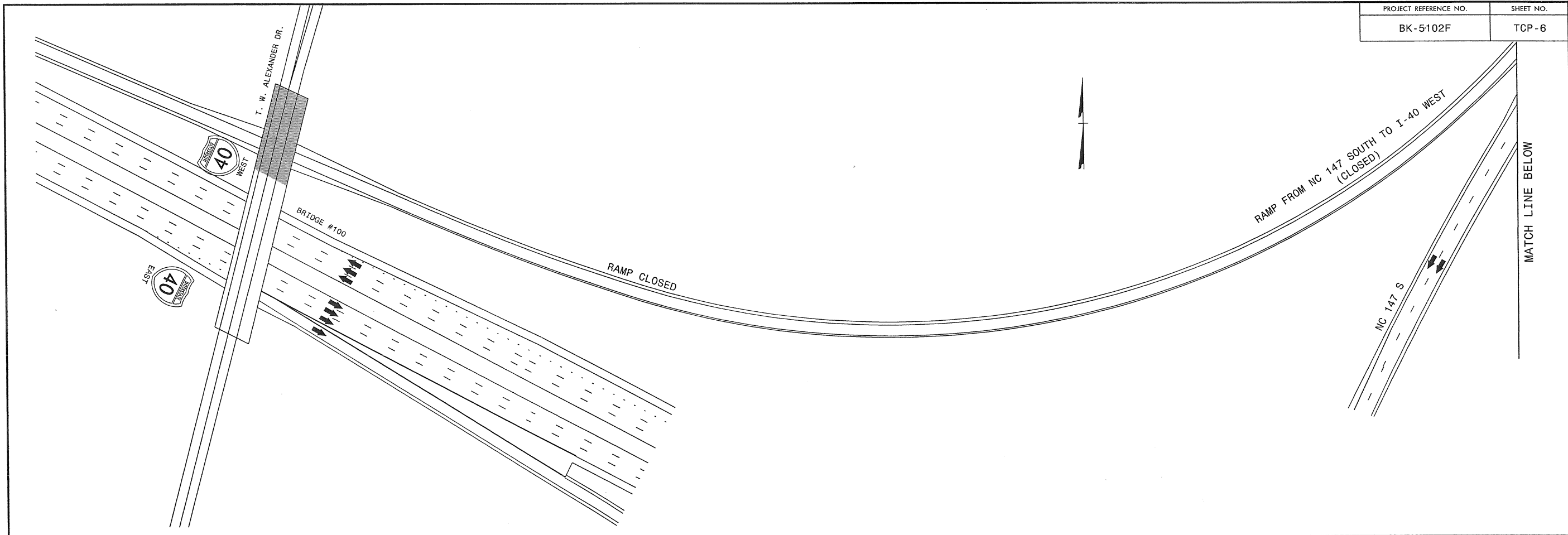


MESSAGE NO. 1	MESSAGE NO. 2
I-40 W NEXT EXIT	FOLLOW DETOUR SIGNS
CHANGEABLE MESSAGE SIGN	



8/17/2010
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		SCALE: NONE DATE: AUG 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW	 REVISIONS <table border="1"><tr><th>NO.</th><th>DESCRIPTION</th></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>	NO.	DESCRIPTION				
NO.	DESCRIPTION								



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8/17/2010
George

REFER TO SHEET TCP-6A
FOR DETOUR ROUTE

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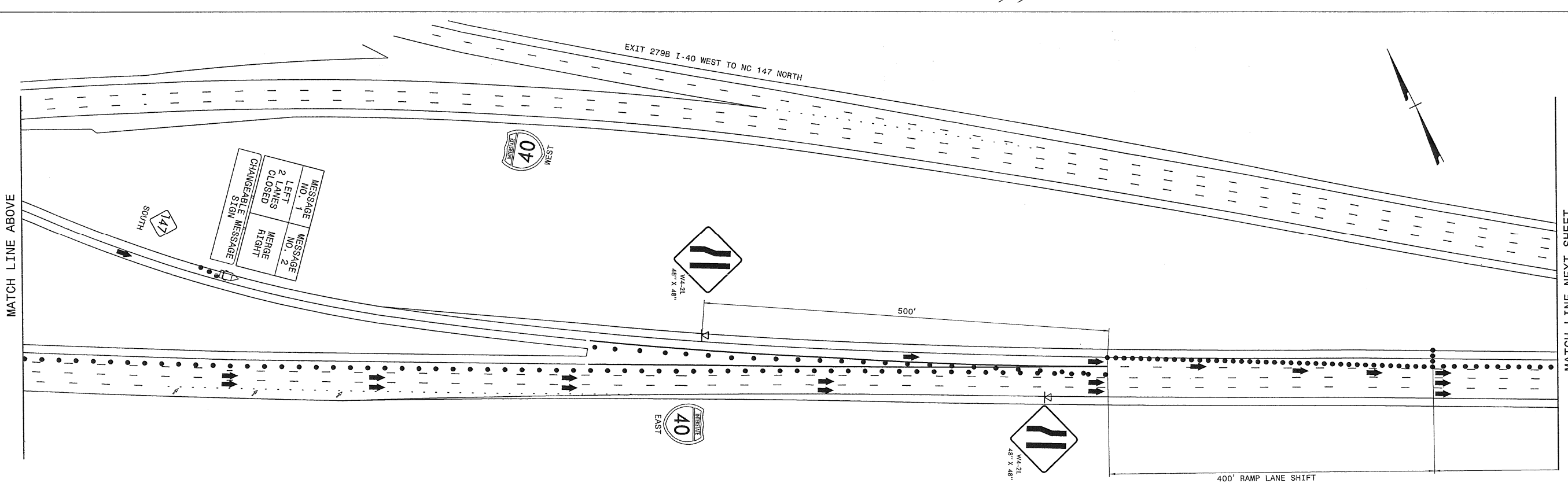
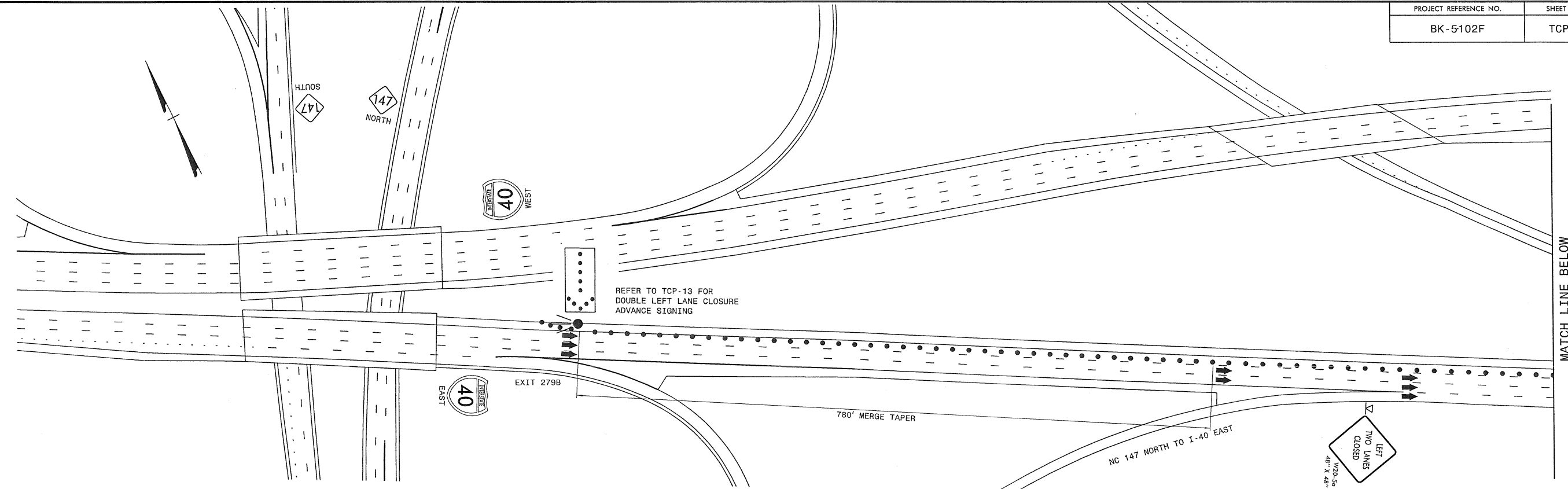
SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
8/17/10
SIGNATURE DATE

BRIDGE #100
CLOSURE OF RAMP
FROM NC 147 SOUTH TO I-40 WEST

SCALE:	NONE
DATE:	AUG 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

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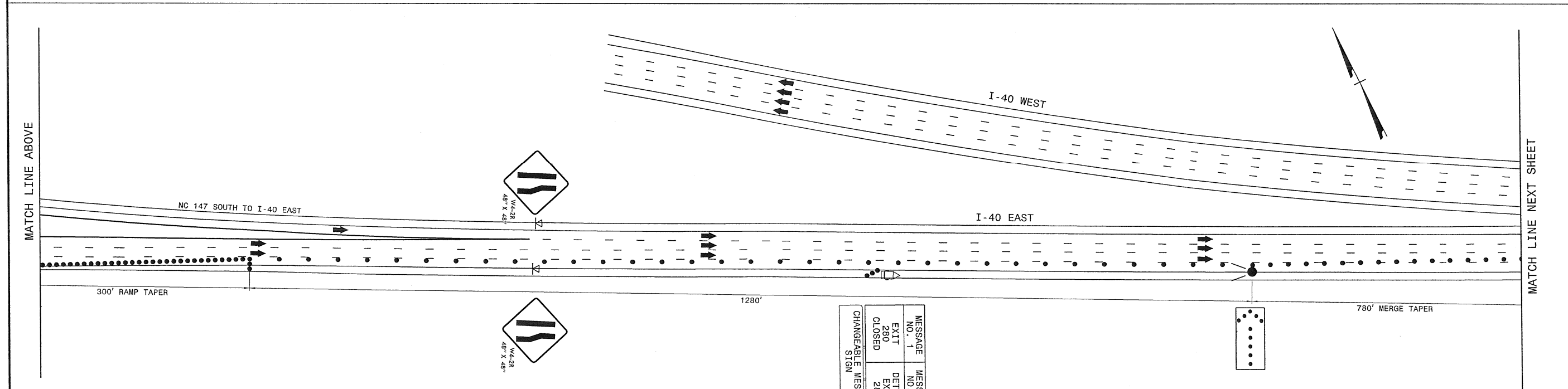
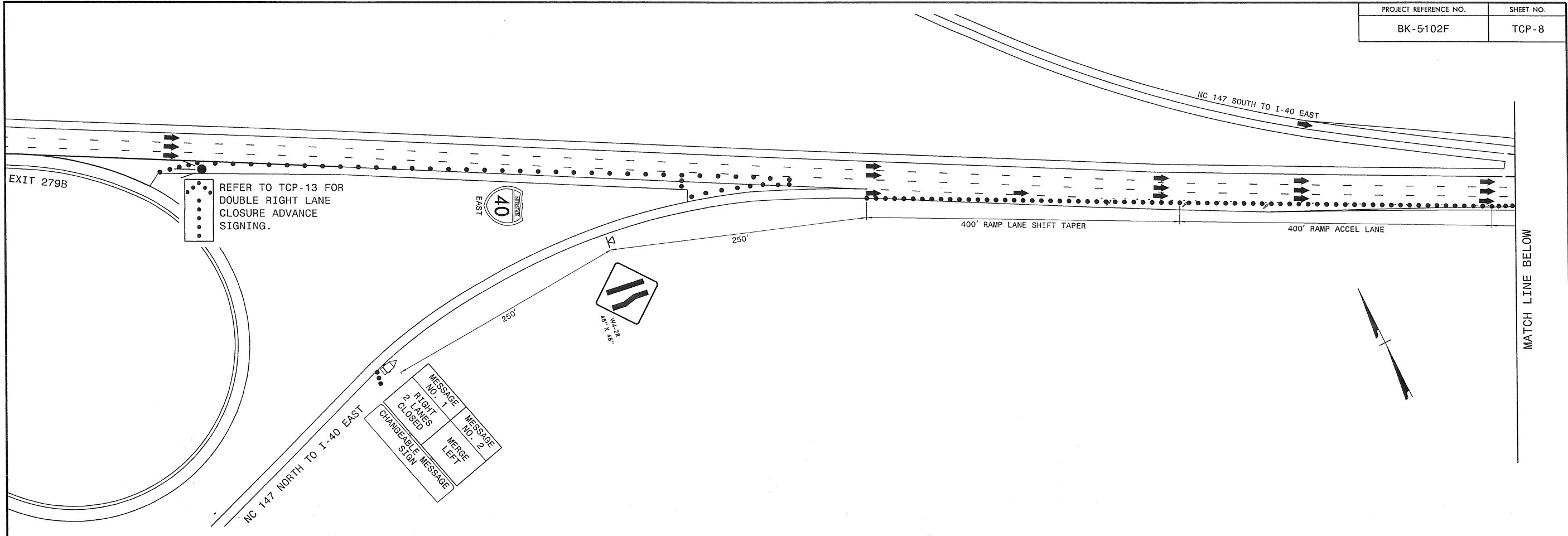
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SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
2010
WATSON
8/17/10
SIGNATURE
DATE

BRIDGE #224
I-40 EAST
CLOSURE OF LEFT TWO LANES

SCALE: NONE		REVISIONS
DATE: AUG 2010		
DWG. BY: GK		
DESIGN BY: GK		
REVIEWED BY: BLW		

CADD FILE



REFER TO SHEET TCP-8B FOR DETOUR ROUTE

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www.stantec.com
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SEAL

Professional Engineer

8/17/10

SIGNATURE

DATE

BRIDGE #224

I-40 EAST
CLOSURE OF RIGHT TWO LANES
AND EXIT 280 TO DAVIS DR.

SCALE: NONE

DATE: AUG 2010

DWG. BY: GK

DESIGN BY: GK

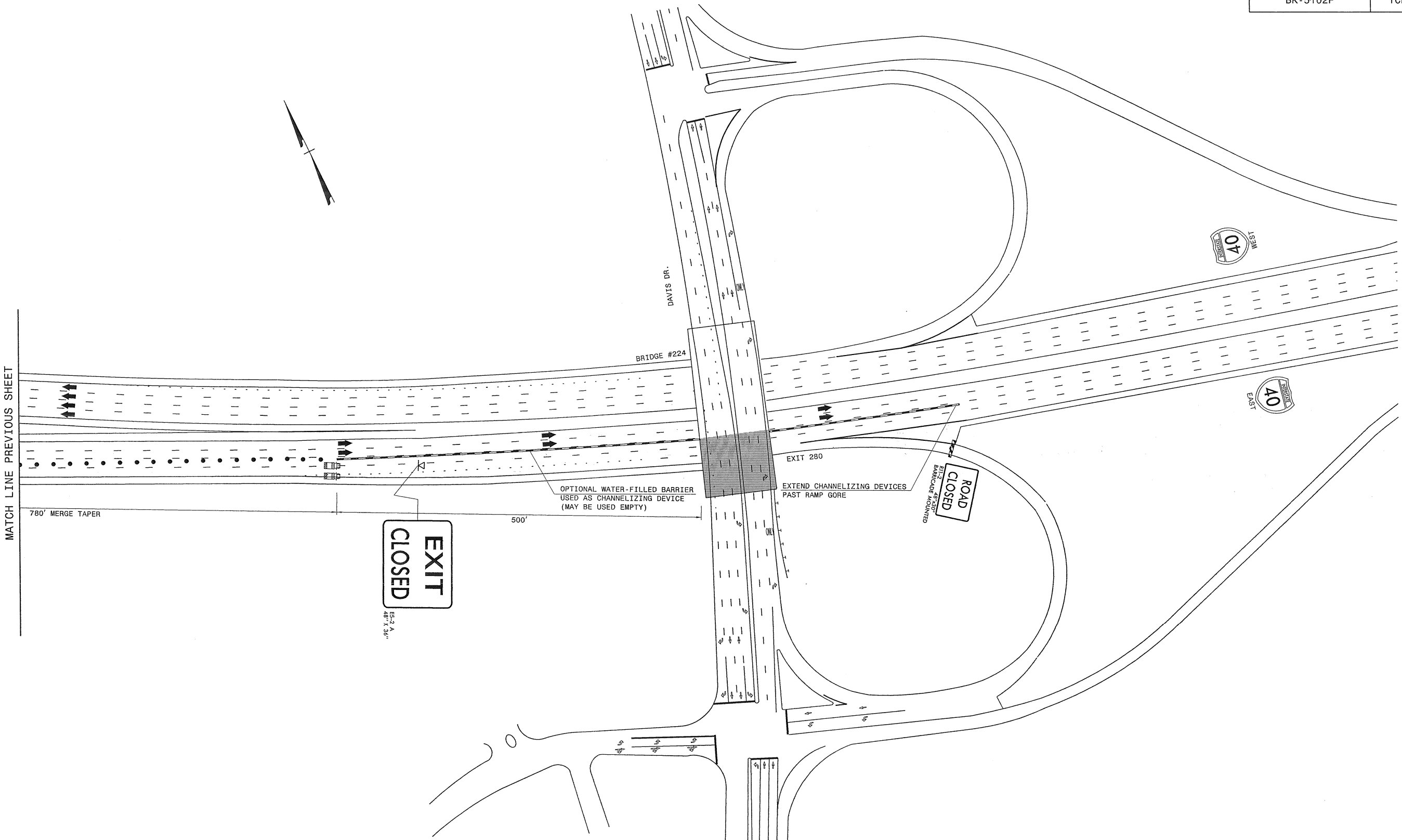
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NO.	DESCRIPTION

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gkorgeorge



U:\TrafficControl\BK-5102F Durham\TCP\Plan Sheets\BK-5102F.tc-psd.dgn
8/17/2010
gkorgeorge

REFER TO SHEET TCP-8B
FOR DETOUR ROUTE

Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-8866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
SYLWATSON
8/17/10
SIGNATURE DATE

BRIDGE #224		
I-40 EAST CLOSURE OF RIGHT TWO LANES AND EXIT 280 TO DAVIS DR.		
SCALE: NONE		REVISIONS
DATE: AUG 2010		
DWG. BY: GK		
DESIGN BY: GK		
REVIEWED BY: BLW		

(A) DETOUR

M4-8
24" X 12"

M6-3
21" X 15"

↑

(B) DETOUR

M4-8
24" X 12"

M6-2
21" X 15"

↗

(C) DETOUR

M4-8
24" X 12"

M6-1 L
21" X 15"

←

(D) DETOUR

M4-8
24" X 12"

M6-1
21" X 15"

→

(E) END
DETOUR

M4-8 A
24" X 18"

(F)

MESSAGE
NO. 1

DAVIS DR
USE NEXT
EXIT

MESSAGE
NO. 2

FOLLOW
DETOUR
SIGNS

CHANGEABLE MESSAGE
SIGN

8/17/2010
U:\TrafficControl\BK-5102F Durham\TCP\Plan Sheets\BK-5102F - to-psht_08B.dgn
gkorogorog

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SEAL

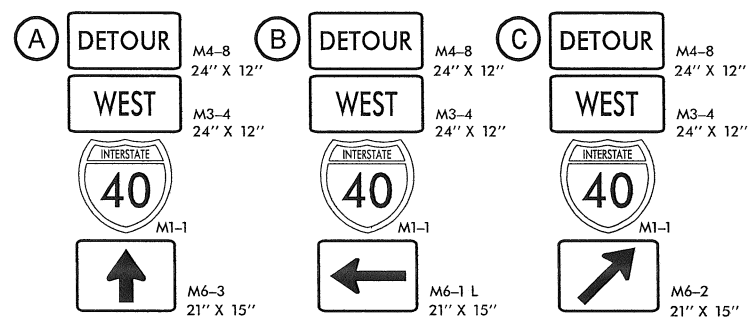
SIGNATURE
DATE

BRIDGE #224
DETOUR ROUTE
FOR I-40 EAST EXIT 280

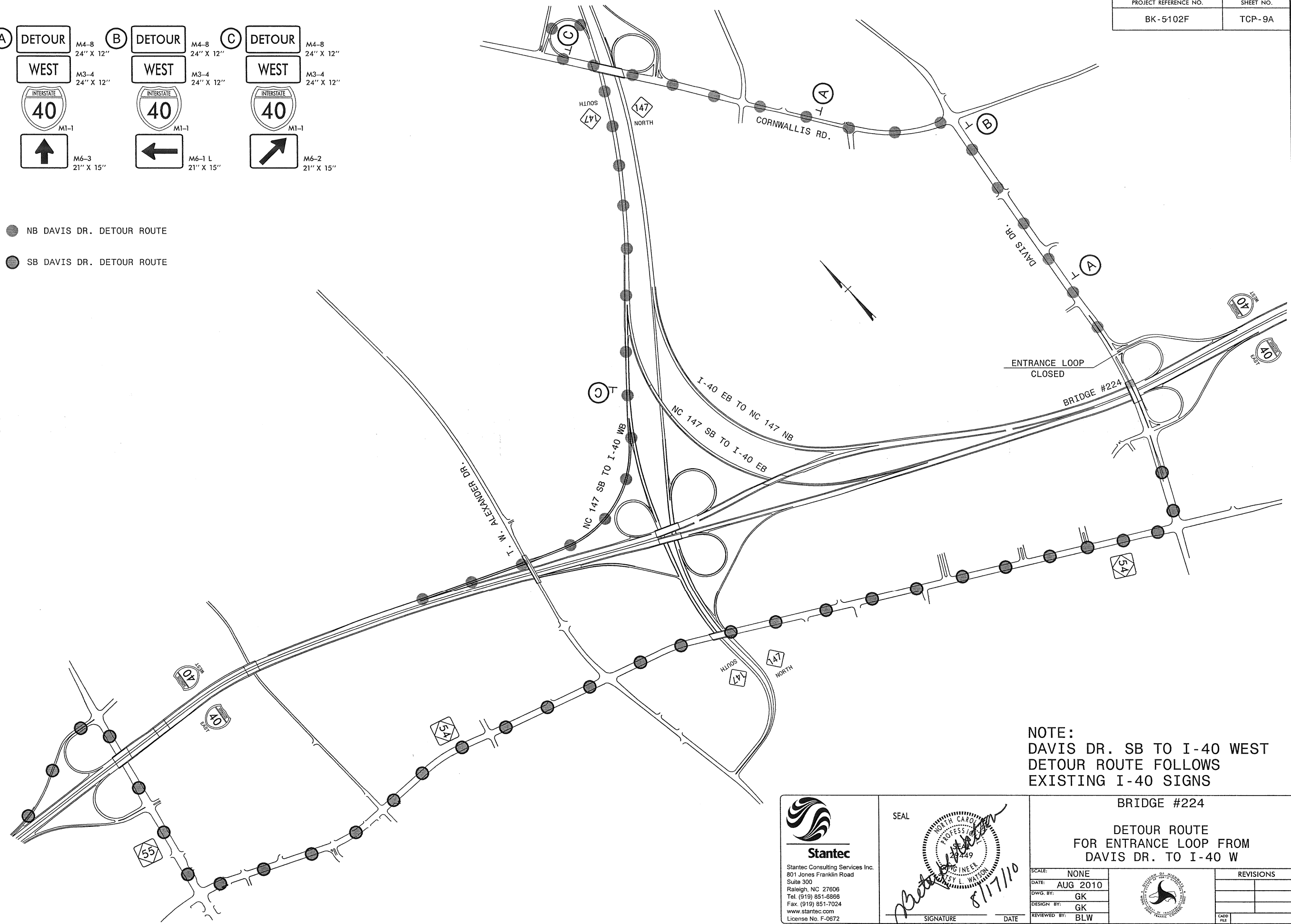
SCALE:	NONE
DATE:	AUG 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	

CADD
FILE



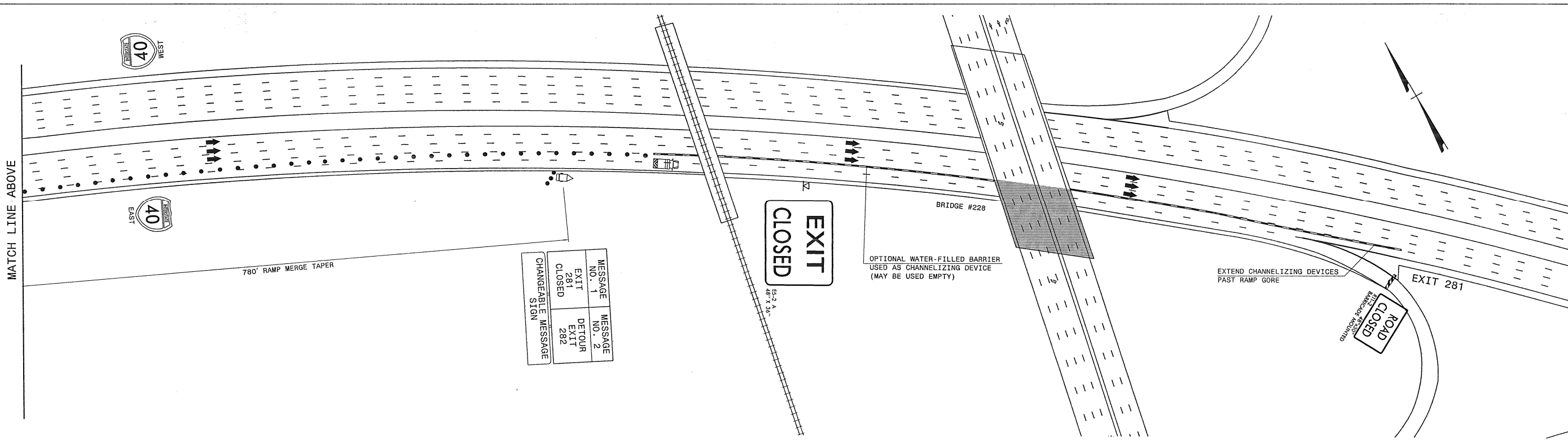
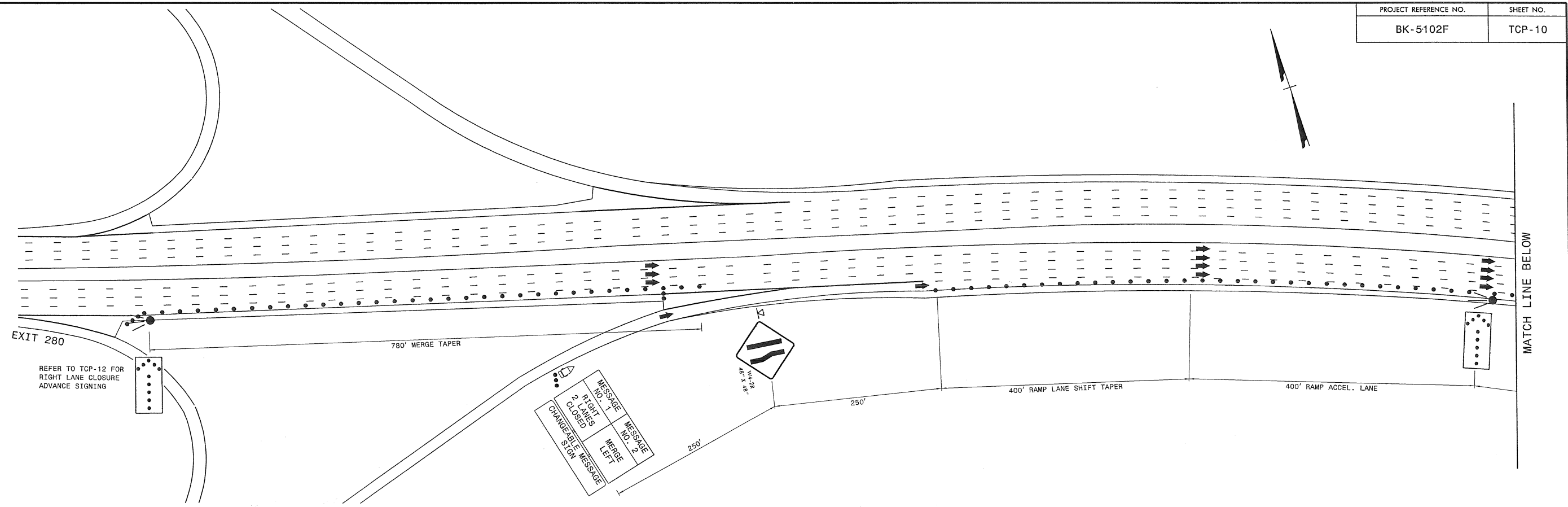
● NB DAVIS DR. DETOUR ROUTE
● SB DAVIS DR. DETOUR ROUTE



NOTE:
DAVIS DR. SB TO I-40 WEST
DETOUR ROUTE FOLLOWS
EXISTING I-40 SIGNS

 Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8866 Fax. (919) 851-7024 www.stantec.com License No. F-0672	SEAL SIGNATURE 8/17/10	BRIDGE #224	
		DETOUR ROUTE FOR ENTRANCE LOOP FROM DAVIS DR. TO I-40 W	
SCALE: NONE		REVISIONS	
DATE: AUG 2010			
DWG. BY: GK			
DESIGN BY: GK			
REVIEWED BY: BLW			
		CADD FILE	

8/17/2010
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gkorgeorge



U:\TrafficControl\BK-5102F_Durham\TCP\Plan Sheets\BK-5102F_to_psh_10.dgn
8/17/2010
gk-george

REFER TO SHEET TCP-10A FOR DETOUR ROUTE

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SEAL

Professional Engineer
NORTH CAROLINA
10449
8/17/10
SIGNATURE DATE

BRIDGE #228

**I-40 EAST
CLOSURE OF RIGHT LANE
AND EXIT 281 TO MIAMI BLVD.**

SCALE:	NONE
DATE:	AUG 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

NO.	DESCRIPTION

CADD FILE

(A) DETOUR

M4-8
24" X 12"

M6-3
21" X 15"

↑

(B) DETOUR

M4-8
24" X 12"

M6-2
21" X 15"

↗

(C) DETOUR

M4-8
24" X 12"

M6-1
21" X 15"

→

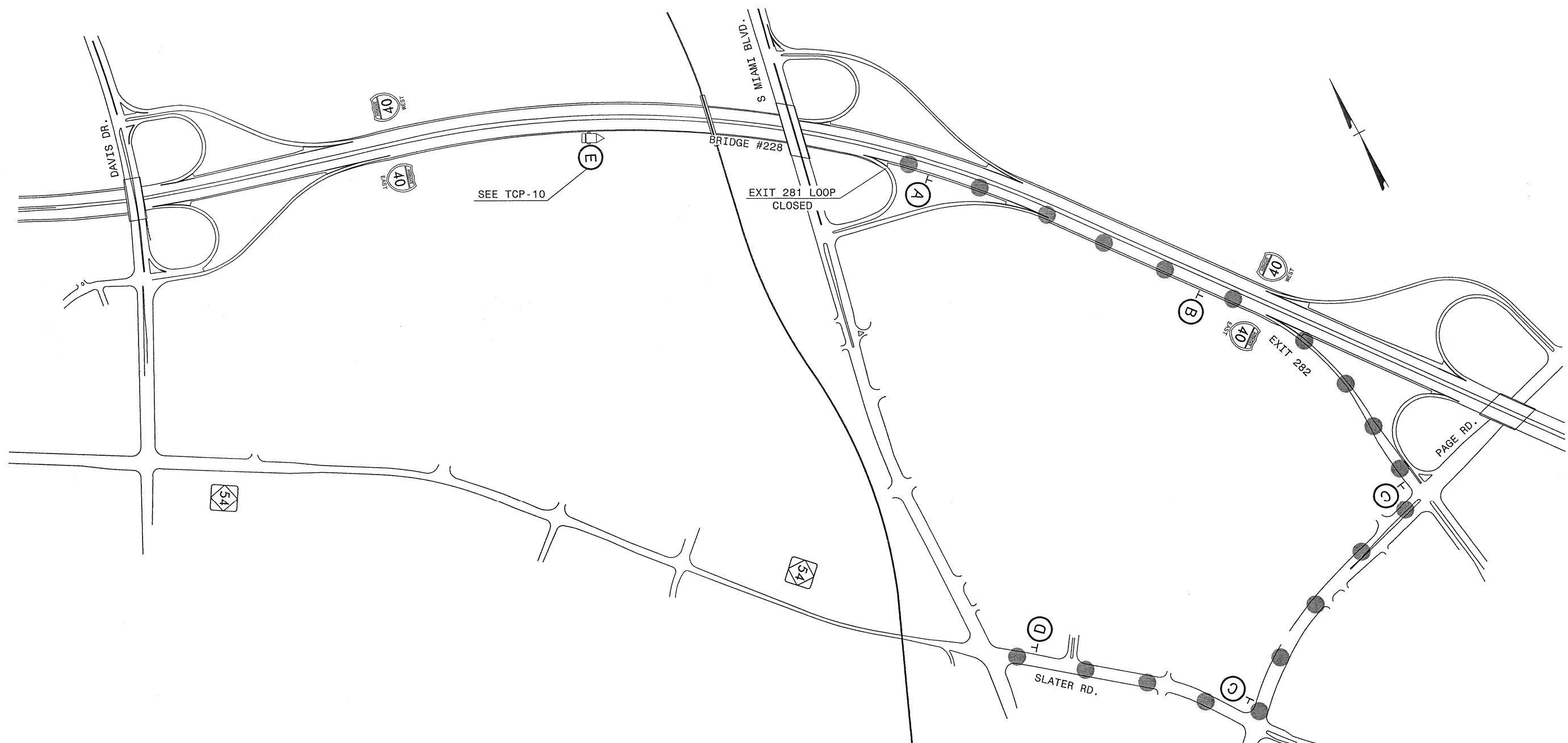
(D) END
DETOUR

M4-8 A
24" X 18"

(E)

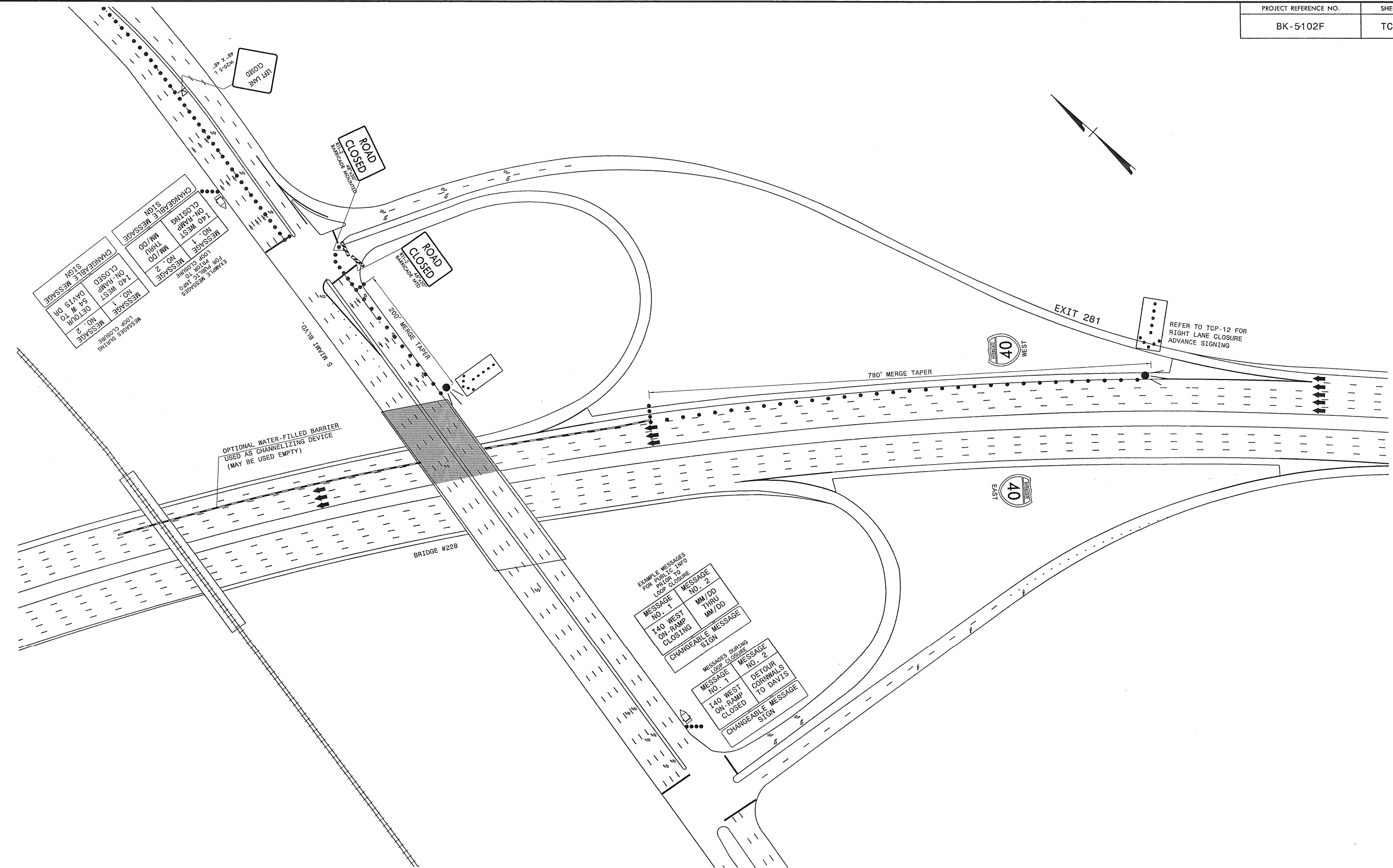
MESSAGE NO. 1	MESSAGE NO. 2
EXIT 281 CLOSED	DETOUR EXIT 282

CHANGEABLE MESSAGE
SIGN



8/17/2010
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 gborger

 Stantec <small>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672</small>	SEAL <i>Michael Watson</i> 8/17/10	BRIDGE #228 DETOUR ROUTE FOR I-40 EAST EXIT 281 TO MIAMI BLVD.								
		SCALE: NONE DATE: AUG 2010		REVISIONS <table border="1" style="width: 100%;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>						
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SIGNATURE _____ DATE _____										



8/17/2010
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gkarageorge

REFER TO SHEET TCP-11A
FOR DETOUR ROUTE

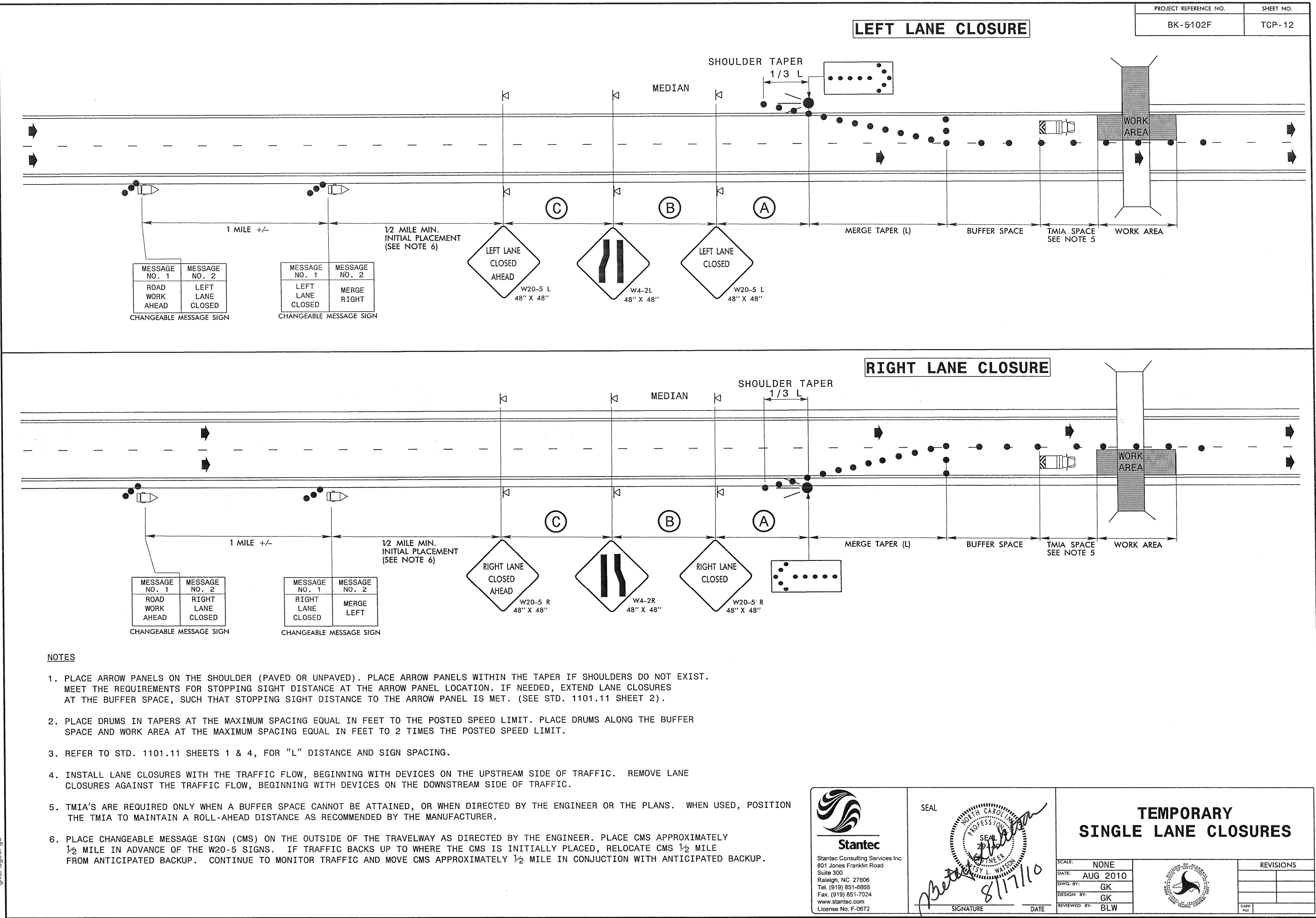
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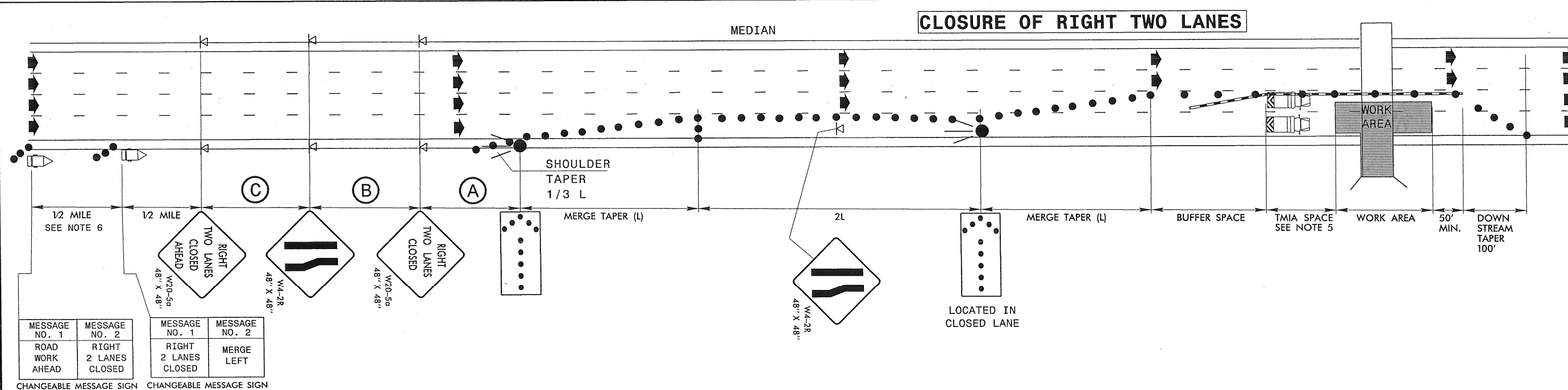
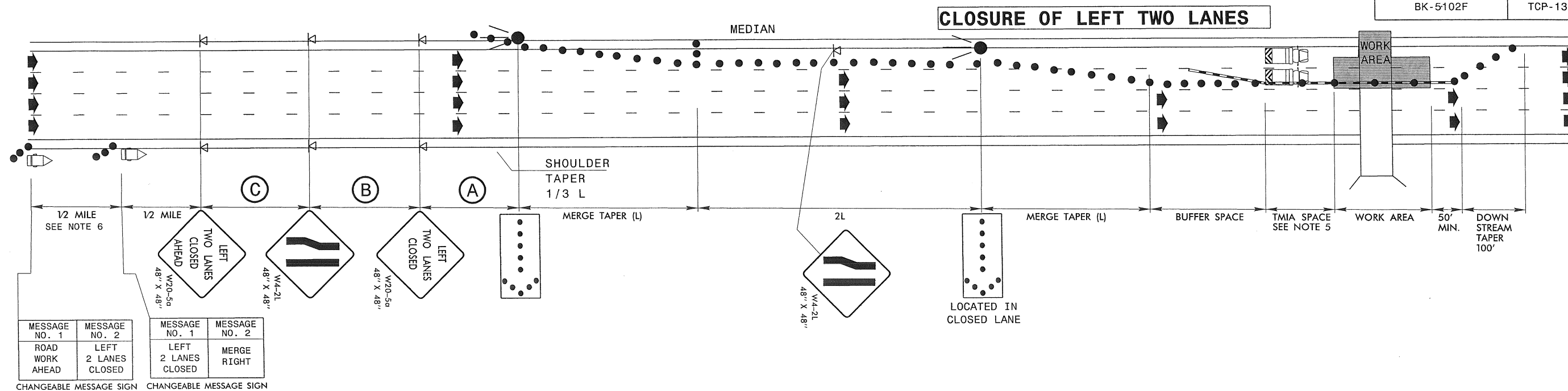
SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
2249
JERRY L. WATSON
8/17/10
SIGNATURE DATE

BRIDGE #228
I-40 WEST
CLOSURE OF RIGHT LANE
& ENTRANCE LOOP FROM MIAMI BLVD.

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REVISIONS										
DATE: AUG 2010										
DWG. BY: GK										
DESIGN BY: GK										
REVIEWED BY: BLW	CADD FILE									

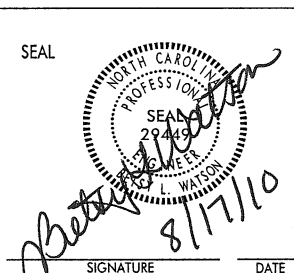
8/17/2010
U:\TrafficControl\BK-5102F Durham\TCP\Plan Sheets\BK-5102F_tcpsh_12.dgn
gkavagor





NOTES

1. PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (SEE STD. 1101.11 SHEET 2).
2. PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
3. REFER TO STD. 1101.11 SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
4. INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
5. TMIA'S ARE REQUIRED ONLY WHEN A BUFFER SPACE CANNOT BE ATTAINED, OR WHEN DIRECTED BY THE ENGINEER OR THE PLANS. WHEN USED, POSITION THE TMIA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER.
6. PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY ½ MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS ½ MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC AND MOVE CMS APPROXIMATELY ½ MILE IN CONJUNCTION WITH ANTICIPATED BACKUP.



TEMPORARY DOUBLE LANE CLOSURES

SCALE: NONE		REVISIONS	
DATE: AUG 2010			
DWG. BY: GK			
DESIGN BY: GK			
REVIEWED BY: BLW			
		CADD	

