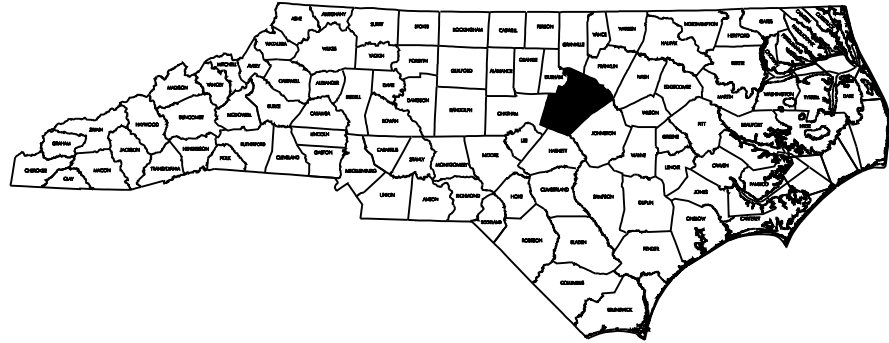
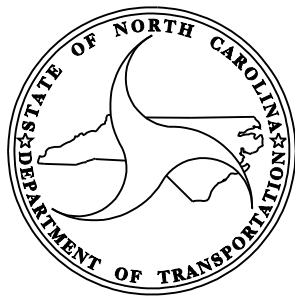


TIP PROJECT: B-4700Z

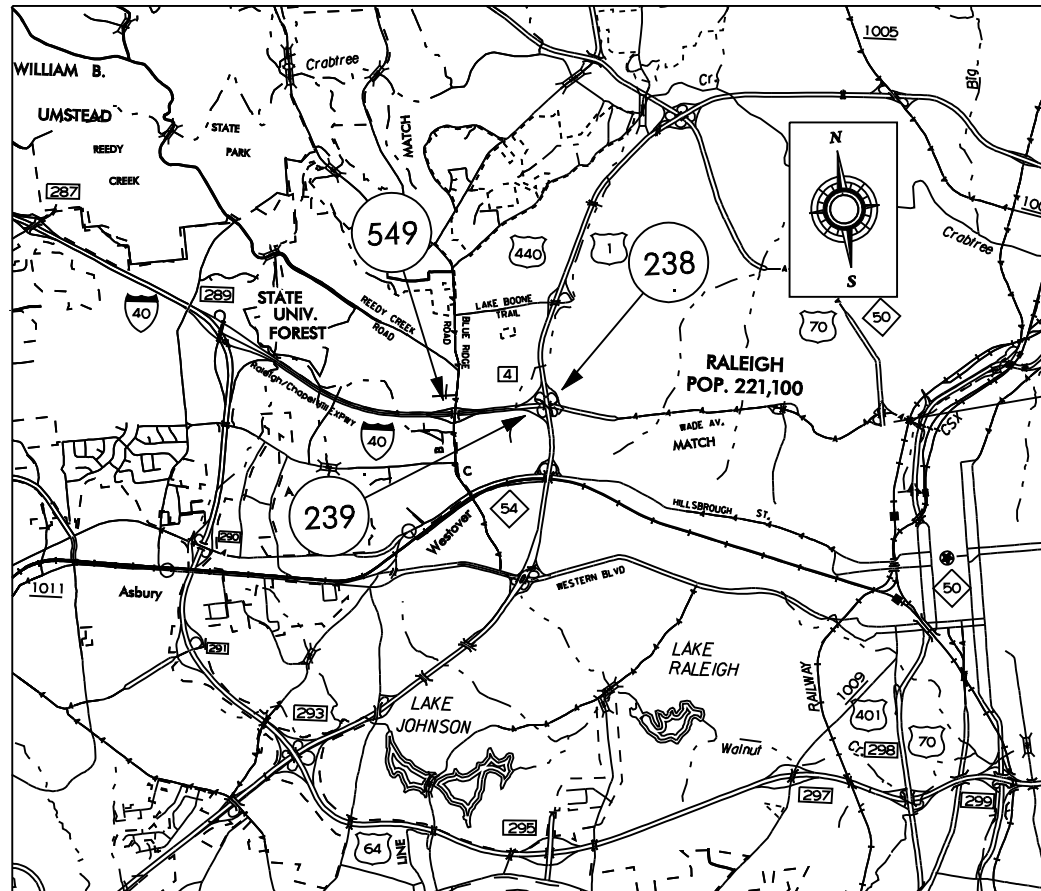
CONTRACT NO. D000037



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

LOCATION: I-440
TYPE OF WORK: BRIDGE PRESERVATION: CLEANING & PAINTING OF
BRIDGE #238, #239, & #549 IN WAKE CO.



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4700Z	1	
STATE PROJECT NO.	F.A. PROJ. NO.	DESCRIPTION	
36727.1.1	BRNHS-000S(604)	PE	
36727.5.25	BRNHS-000S(370)	CONSTR	

PROJECT LENGTH

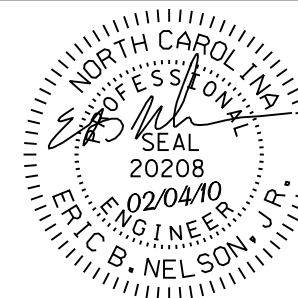
Prepared In the Office of:
BRIDGE MANAGEMENT UNIT
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

LETTING DATE:
MARCH 18, 2010

DAN HOLDERMAN, PE
STATE BRIDGE
MANAGEMENT ENGINEER

MIKE SUMMERS
BRIDGE MANAGEMENT
PROJECT MANAGER



RICK NELSON, PE
DESIGN ENGINEER

TIP PROJECT: B-4700Z

WBS 36727.3.25

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
TRAFFIC CONTROL

WAKE COUNTY

LOCATION: BRIDGE NO.S 238, 239, AND 549.

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE PAINTING

STATE PROJECT REFERENCE NO. SHEET NO.

B-4700Z

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)
— POLICE
— FLAGGER

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:

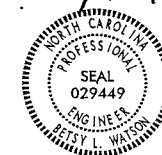
STD. NO.	TITLE
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR

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	VICINITY MAP AND PROJECT PHASING
TCP-4	DETAIL FOR TYPICAL RIGHT AND LEFT LANE CLOSURES
TCP-5	BRIDGE #238 & #239 LANE CLOSURE FOR WADE AVE. EASTBOUND OUTSIDE LANES
TCP-6	BRIDGE #238 & #239 LANE CLOSURE FOR WADE AVE. WESTBOUND INSIDE LANE
TCP-7	BRIDGE #238 & #239 LANE CLOSURE FOR WADE AVE. WESTBOUND OUTSIDE LANES

APPROVED: *Betsy L. Watson*

DATE: 2/12/10



PLAN PREPARED BY:



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Raleigh, NC
27606
Tel. 919.851.6866
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www.stantec.com

BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER

GEORGE KARAGEORGE

TRAFFIC CONTROL DESIGNER

GENERAL NOTES

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

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

LANE CLOSURE TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	6:00 A.M.-9:00 P.M. MONDAY THRU SUNDAY (EVERY DAY)

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

ROAD NAME	HOLIDAY
ALL ROADS	
	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 9:00 P.M. DECEMBER 31st TO 6:00 A.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 A.M. THE FOLLOWING TUESDAY.
	3) FOR EASTER, BETWEEN THE HOURS OF 9:00 P.M. THURSDAY AND 6:00 A.M. MONDAY.
	4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 9:00 P.M. FRIDAY TO 6:00 A.M. TUESDAY.
	5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 9:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY; THEN BETWEEN THE HOURS OF 9:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.
	6) FOR LABOR DAY, BETWEEN THE HOURS OF 9:00 P.M. FRIDAY AND 6:00 A.M. TUESDAY.
	7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 9:00 P.M. TUESDAY TO 6:00 A.M. MONDAY.
	8) FOR CHRISTMAS, BETWEEN THE HOURS OF 9:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
	9) FOR THE WEEK OF THE STATE FAIR, BETWEEN THE HOURS OF 9:00 A.M. - MIDNIGHT DAILY.
	10) FOR EVENTS AT CARTER-FINLEY STADIUM FROM 4 HOURS BEFORE THE EVENT TO 3 HOURS AFTER THE EVENT.
	11) FOR EVENTS AT THE RBC CENTER AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) 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.
- E) 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 ACCORDING TO THE TRAFFIC CONTROL PLANS, UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- F) 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.
- G) 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.
- H) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON WADE AVENUE.


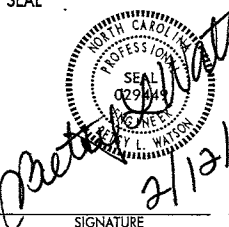
SIGNING

- I) ENSURE ALL SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

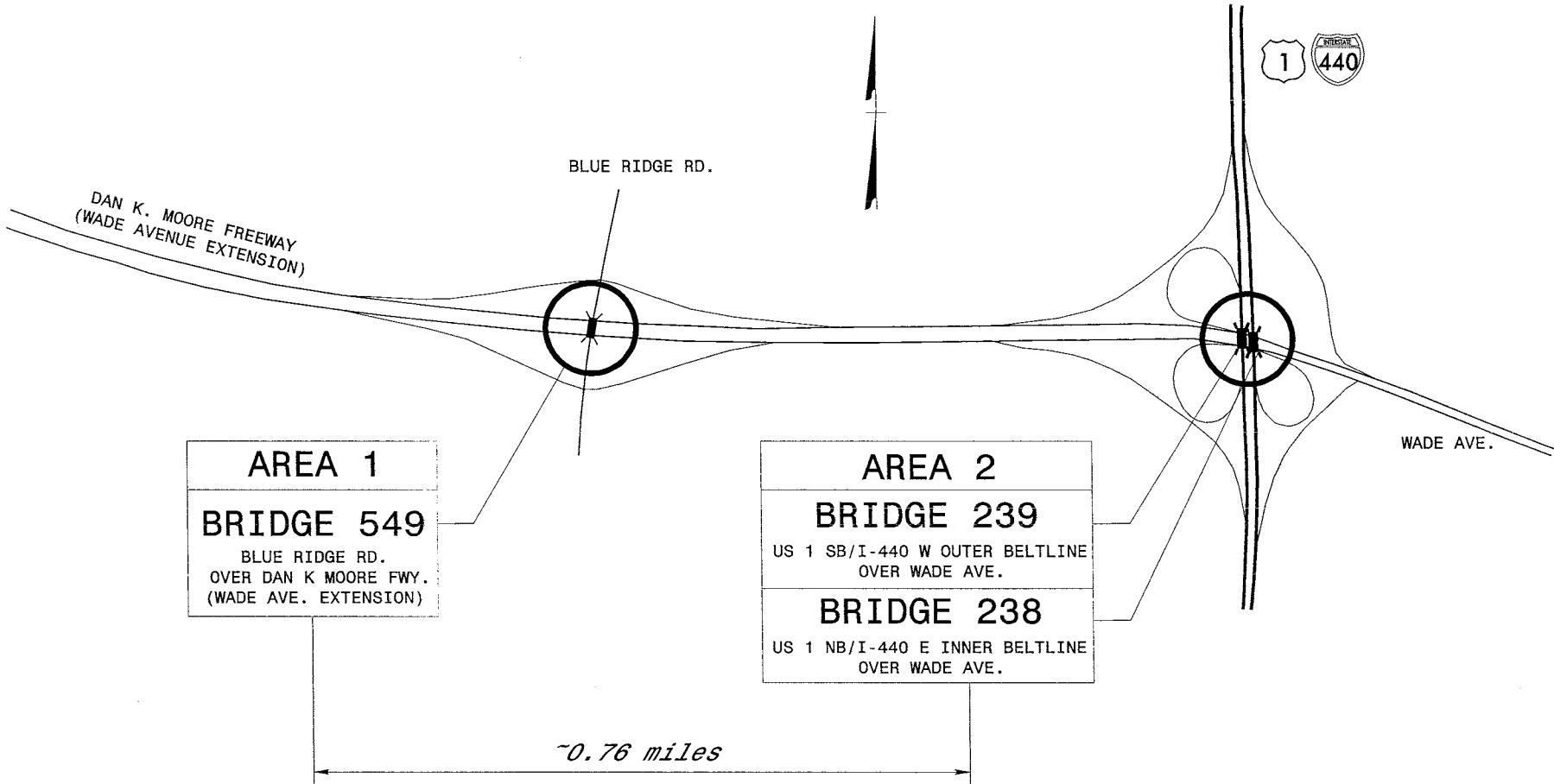
MISCELLANEOUS

- J) DO NOT PERFORM WORK FROM THE ROADWAY ON TOP OF THE STRUCTURE.
- K) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- L) ALL DIMENSIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- M) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

2/12/2010 Wake\TCP\Plan Sheets\B-4700Z.tcp-psd-02.dgn
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 Stantec <small>Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.6886 Fax. 919.851.7024 www.stantec.com</small>	SEAL  2/12/10	PROJECT NOTES GENERAL NOTES																			
		<table><tr><td>SCALE:</td><td>NONE</td></tr><tr><td>DATE:</td><td>FEB. 2010</td></tr><tr><td>DWG. BY:</td><td>GK</td></tr><tr><td>DESIGN BY:</td><td>GK</td></tr><tr><td>REVIEWED BY:</td><td>BLW</td></tr></table>	SCALE:	NONE	DATE:	FEB. 2010	DWG. BY:	GK	DESIGN BY:	GK	REVIEWED BY:	BLW	<table><tr><td colspan="2">REVISIONS</td></tr><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>	REVISIONS							
SCALE:	NONE																				
DATE:	FEB. 2010																				
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REVISIONS																					

WAKE COUNTY



TRAFFIC CONTROL PHASING

PERFORM BRIDGE PAINTING OPERATIONS AS SHOWN IN THE CONTRACT AND CONSTRUCTION PLANS. PERFORM WORK IN ACCORDANCE WITH "NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES-JULY 2006".

DO NOT WORK IN AREAS 1 AND 2 SIMULTANEOUSLY

DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON WADE AVENUE.

AREA 1-BRIDGE # 549 BLUE RIDGE RD. OVER WADE AVE.

WHEN WORKING ON BRIDGE #549 USE TEMPORARY RIGHT OR LEFT LANE CLOSURES ACCORDING TO SHEET TCP-4.

AREA 2 BRIDGE #238 AND BRIDGE #239

CLOSE LANES AS FOLLOWS ON WADE AVE. DURING BRIDGE WORK:

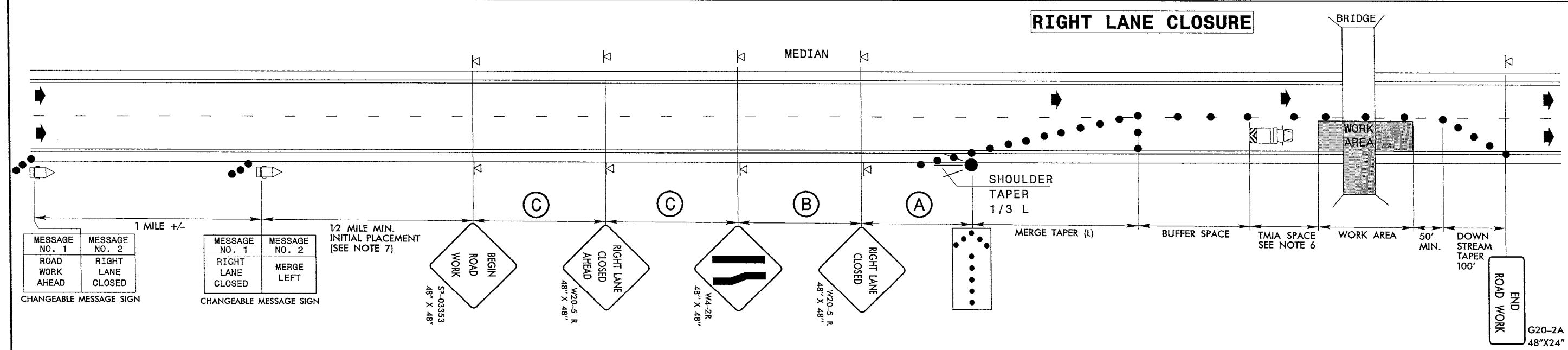
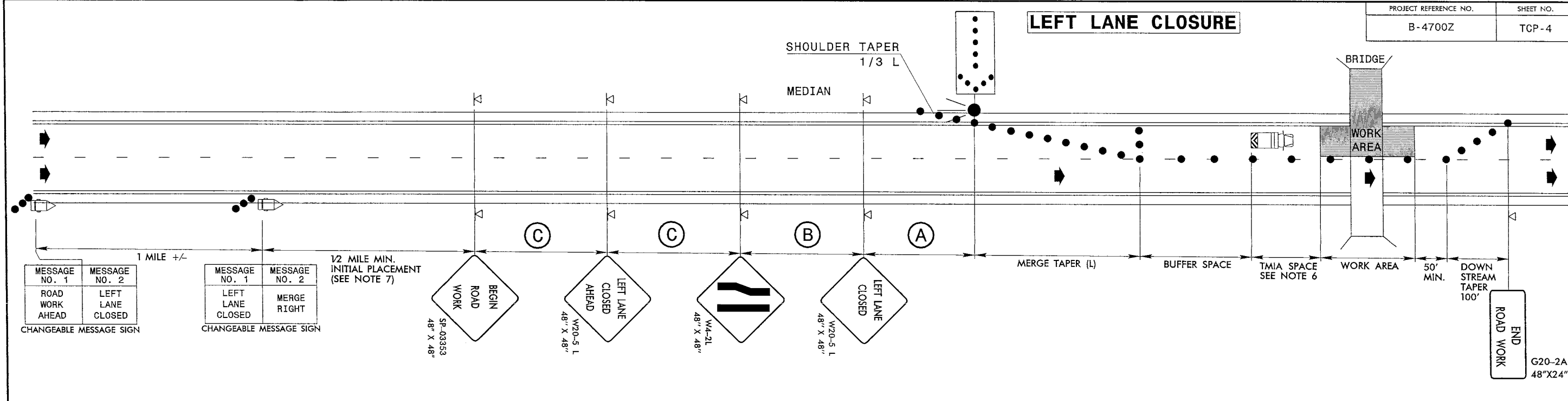
- WADE AVE. EASTBOUND INSIDE LANE, REFER TO SHEET TCP-4 FOR LEFT LANE CLOSURE.
- WADE AVE. EASTBOUND OUTSIDE LANES, REFER TO SHEET TCP-5.
- WADE AVE. WESTBOUND INSIDE LANES, REFER TO SHEET TCP-6 .
- WADE AVE. WESTBOUND OUTSIDE LANES, REFER TO SHEET TCP-7.

AT THE END OF EACH DAY'S OPERATIONS MOVE EQUIPMENT TO STAGING AREA AT LEAST 40 FEET AWAY FROM ANY TRAVEL LANES AS APPROVED BY THE ENGINEER AND REMOVE LANE CLOSURES. WHEN NOT BEING USED TO CLOSE A LANE, DRUMS MAY EITHER BE TOTALLY REMOVED OR BE MOVED TO OUTSIDE OF SHOULDER SUCH THAT THEY DO NOT CLOSE THE SHOULDER.

UPON COMPLETION OF THE PROJECT, REMOVE ALL TRAFFIC CONTROL DEVICES.

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2/12/2010
katiecamp

 Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com	SEAL 	VICINITY MAP & TRAFFIC CONTROL PHASING									
	SIGNATURE <i>Matthew L. Watson</i>	DATE 2/12/10	SCALE: NONE DATE: FEB. 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>							



NOTES

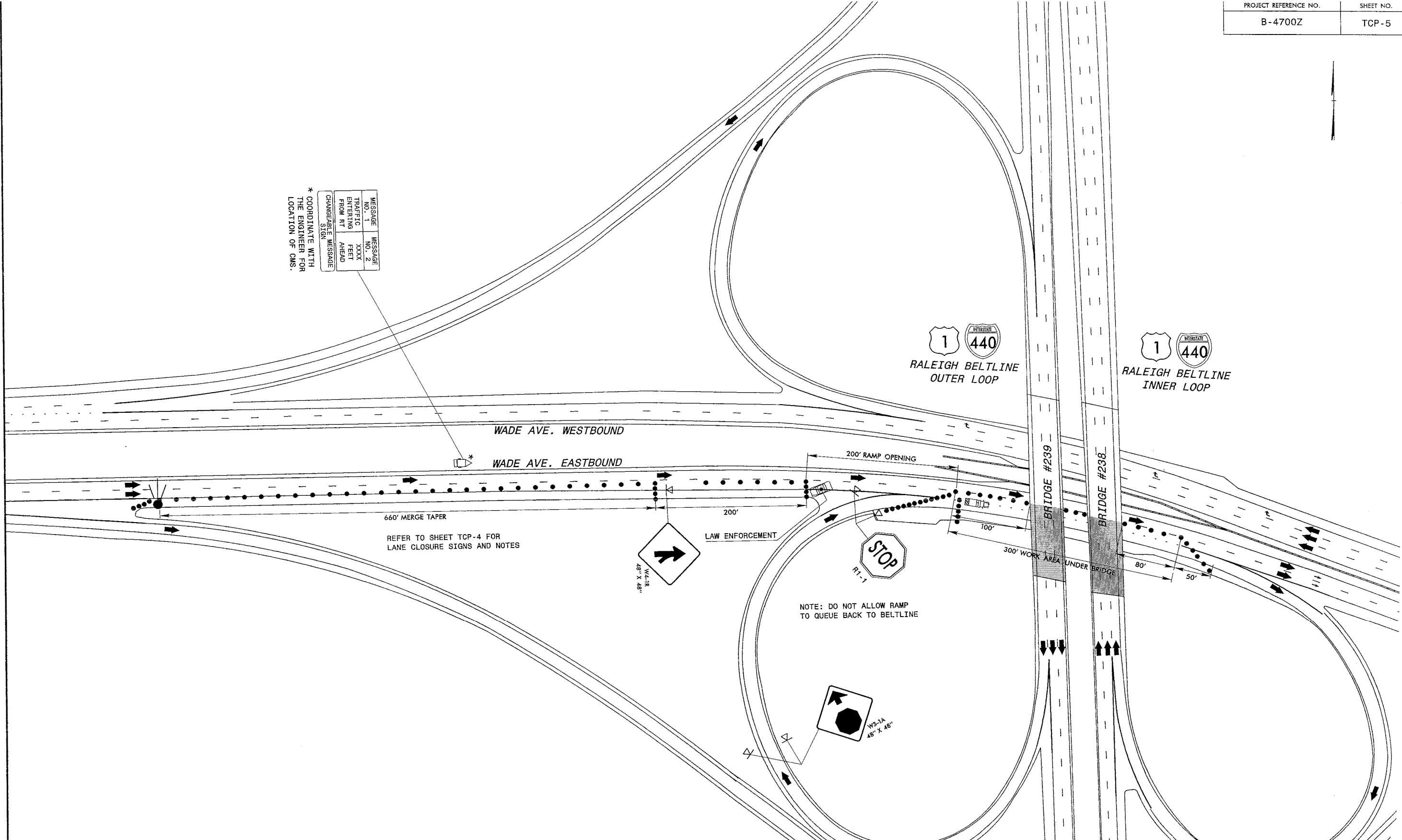
1. USE THIS TYPICAL DRAWING FOR LANE CLOSURES ALONG WADE AVE. ASSOCIATED WITH BRIDGE NUMBERS 238, 239, AND 549 AS INDICATED IN THE TRAFFIC CONTROL PHASING.
2. PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR 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).
3. 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.
4. REFER TO STD. 1101.11 SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
5. 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.
6. 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.
7. PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE FROM ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC AND MOVE CMS APPROXIMATELY 1/2 MILE IN CONJUNCTION WITH ANTICIPATED BACKUP.

 Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27605 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com	SEAL 	TYPICAL LANE CLOSURES	SCALE: NONE		REVISIONS
	SIGNATURE <i>Gregory L. Watson</i> DATE 2/12/10		DATE: FEB. 2010		
			DWG. BY: GK		
			DESIGN BY: GK		
			REVIEWED BY: BLW		
					CADD FILE



MESSAGE NO. 1	MESSAGE NO. 2
TRAFFIC ENTERING FROM RT	XXXX FEET AHEAD
CHANGEABLE MESSAGE SIGN	

* COORDINATE WITH THE ENGINEER FOR LOCATION OF CMS.



2/12/2010
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kieskamp

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SEAL

BRIDGES #238 & #239

WADE AVE. EASTBOUND
OUTSIDE LANE CLOSURES

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

REVISIONS	

CADD FILE

PLACE CMS 500' IN ADVANCE OF THE LANE CLOSURE SIGNS.
IF NEEDED, RELOCATE AS DIRECTED BY THE ENGINEER.

MESSAGE NO. 1	MESSAGE NO. 2
ROAD WORK AHEAD	LEFT LANE CLOSED
CHANGEABLE MESSAGE SIGN	

LEFT LANE CLOSED AHEAD
W20-S L
48" X 48"

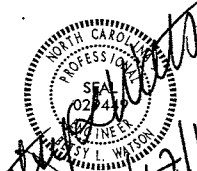
LEFT LANE CLOSED
W20-S L
48" X 48"

25
AHEAD
W24-L R
48" X 24"

LEFT LANE CLOSED
W20-S L
48" X 48"

2/12/2010 Wake\TCP\Plan Sheets\B-4700Z_tcp.psh.06.dgn
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SIGNATURE
DATE 2/12/10

BRIDGES #238 & #239
WADE AVE. WESTBOUND
INSIDE LANE CLOSURES

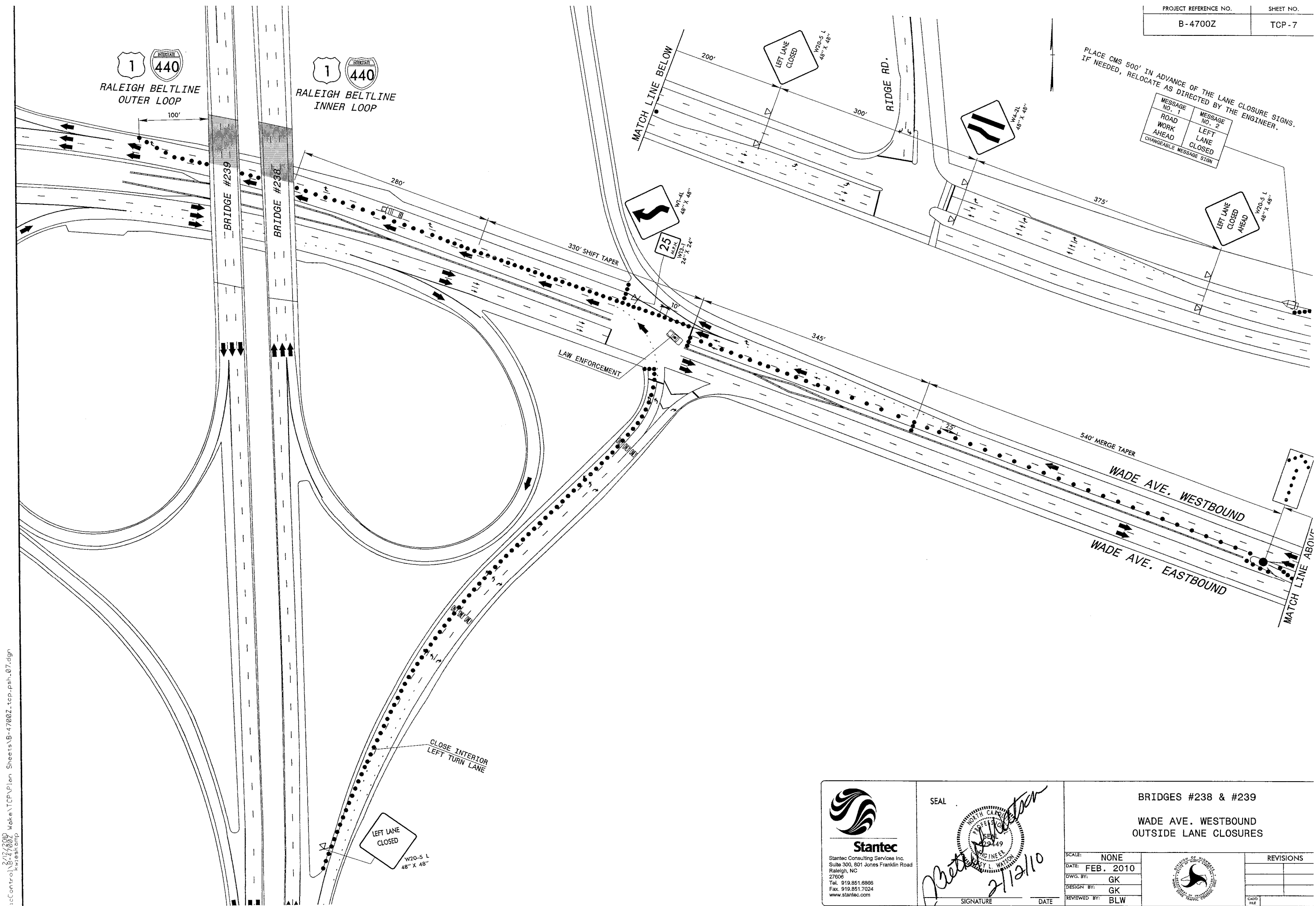
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DESIGN BY:	GK
REVIEWED BY:	BLW



REVISIONS	

PLACE CMS 500' IN ADVANCE OF THE LANE CLOSURE SIGNS.
IF NEEDED, RELOCATE AS DIRECTED BY THE ENGINEER.

MESSAGE NO. 1	MESSAGE NO. 2
ROAD WORK AHEAD	LEFT LANE CLOSED
CHANGEABLE MESSAGE SIGN	



2/12/2010 Wake\TCP\Plan Sheets\B-4700Z-tcp-ps1-07.dgn
Krieskamp

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SEAL

Robert L. Watson
2/12/10

SIGNATURE DATE

BRIDGES #238 & #239
WADE AVE. WESTBOUND
OUTSIDE LANE CLOSURES

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



REVISIONS