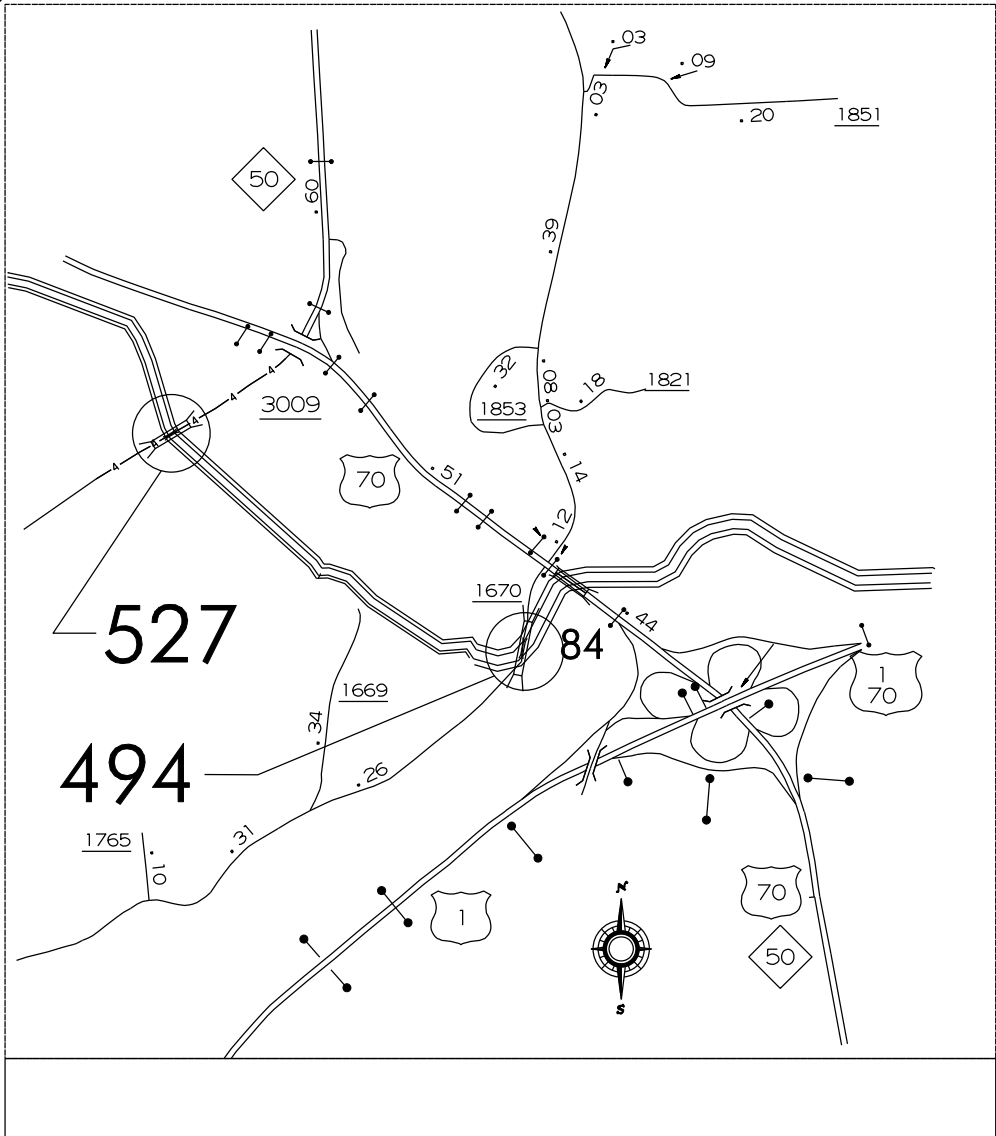


WBS BK-5101 T

CONTRACT #D0000073



INDEX OF SHEETS	
1	TITLE SHEET
S1 - S7	STRUCTURE PLANS
TCP1 - TCP8	TRAFFIC CONTROL PLANS

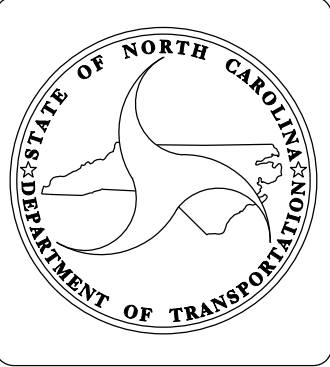
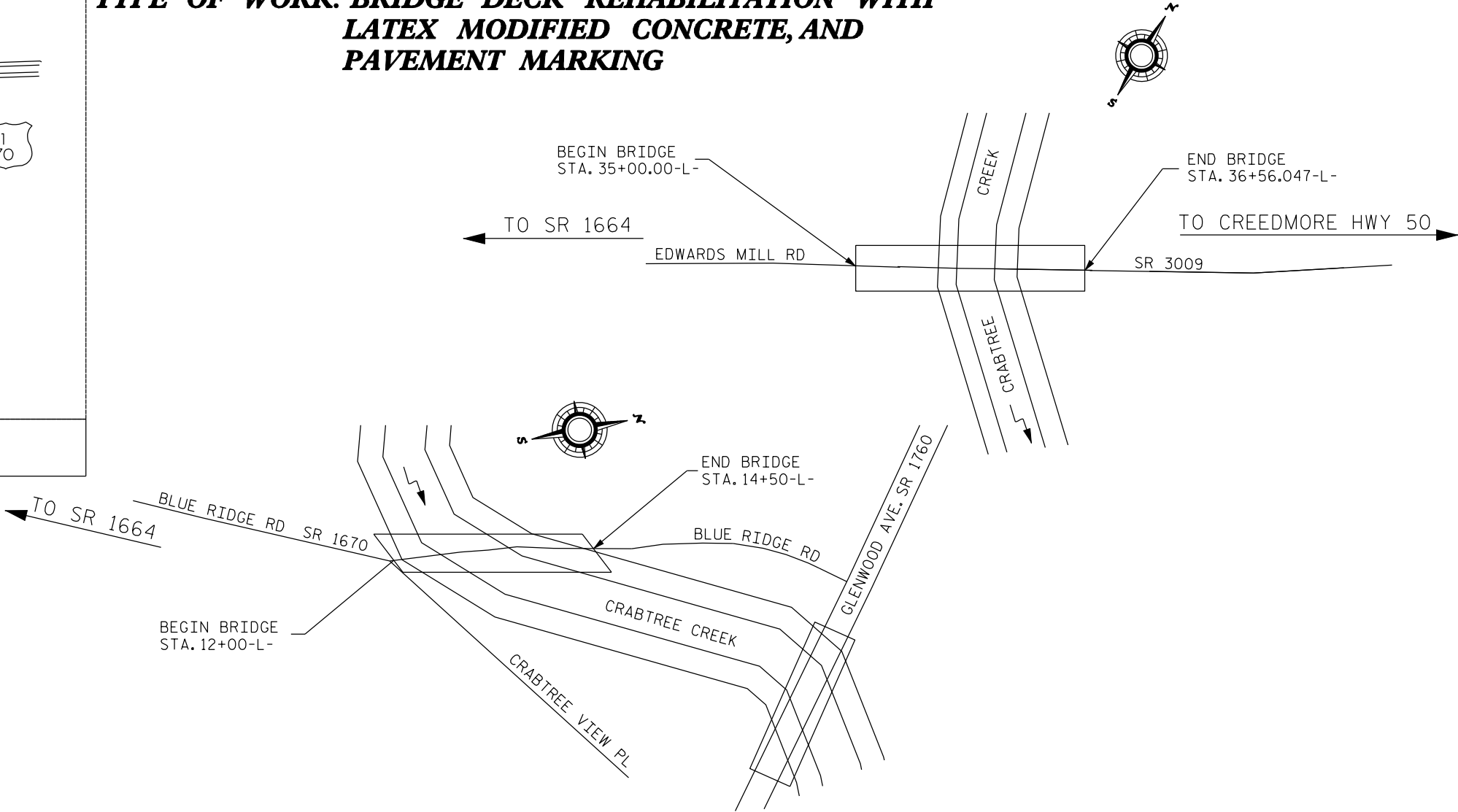
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

LOCATION: BRIDGE #527, ON SR 3009 (EDWARDS MILL RD),
OVER CRABTREE CREEK
BRIDGE #494, ON SR 1670 (BLUE RIDGE RD),
OVER CRABTREE CREEK

TYPE OF WORK: BRIDGE DECK REHABILITATION WITH
LATEX MODIFIED CONCRETE, AND
PAVEMENT MARKING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BK-5101 T	1	16
STATE PROJ. NO.		F.A. PROJ. NO.	DESCRIPTION
42579.1.1			PE
42579.3.18			CONST



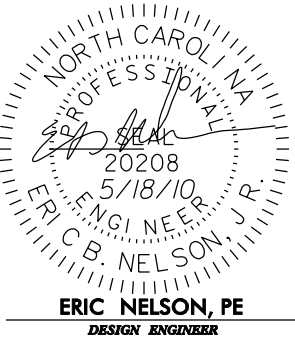
DESIGN DATA

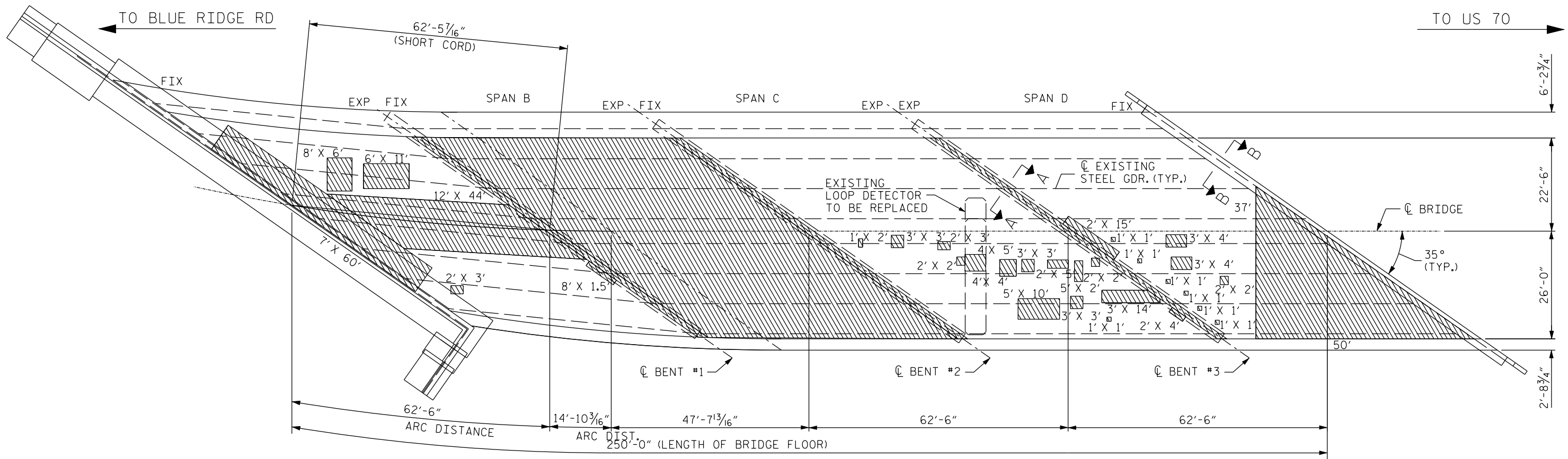
BRIDGE 527
ADT 2007 = 20000
BRIDGE 494
ADT 2007 = 18000

PROJECT LENGTH

BRIDGE #527
LENGTH STRUCTURE PROJECT = .061 MILE
BRIDGE #494
LENGTH STRUCTURE PROJECT = .047 MILE

Prepared in the Office of:
DIVISION OF BRIDGE MANAGEMENT
2006 STANDARD SPECIFICATIONS
LETTING DATE:
AUGUST 19, 2010
DAN HOLDERMAN, PE
PROJECT ENGINEER





- APPROX. AREA: CLASS II REPAIR
- APPROX. AREA: CLASS III REPAIR
- APPROX. TEST BORING LOCATION

NOTES

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE VERY EARLY STRENGTH,SEE SPECIAL PROVISIONS.

SEE SPECIAL PROVISIONS FOR SURFACE PREPARATION.

FOR HYDRO-DEMOLITION,SEE SPECIAL PROVISIONS .

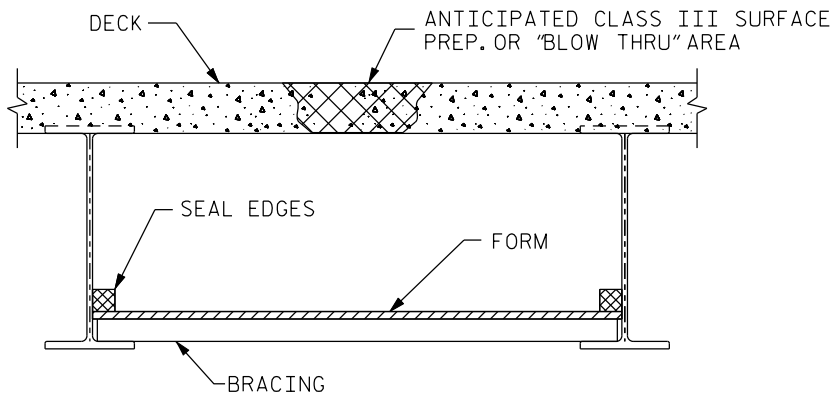
FOR UNDER DECK CONTAINMENT SEE SPECIAL PROVISIONS.

THE CONTRACTOR MUST COLLECT,TREAT AND DISPOSE OF RUN -OFF WATER FROM THE HYDRO- DEMOLITION PROCESS, SEE SPECIAL PROVISIONS.

THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE.

FOR EVAZOTE JOINT SEALS,SEE SPECIAL PROVISIONS.

SEE SPEICAL PROVISIONS FOR TRAFFIC DETECTOR LOOP.

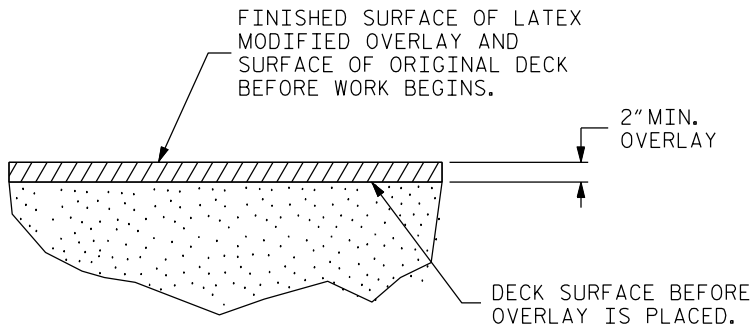


TYP. "BLOW THRU"CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORM WORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COST FOR INSTALLING AND REMOVING FORM WORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

TOTAL BILL OF MATERIAL									
** SCARIFYING BRIDGE DECK	* CLASS I SURFACE PREPARATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO-DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOOR	ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	C.Y.	SQ.YDS.	LUMP SUM	SQ. FT.	TONS
6635	673	598	0	1271	106	1271	LUMP SUM	11436	70

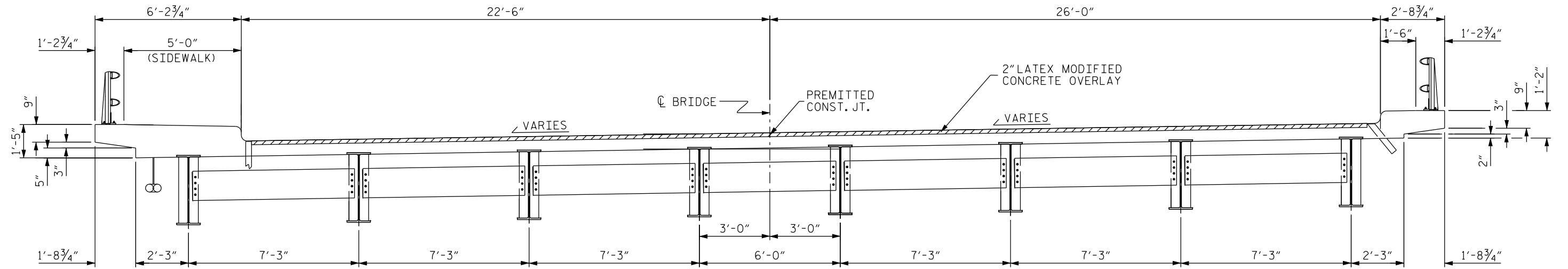
* QUANTITY SHOWN IS FOR INFORMATION ONLY. ** INCLUDES APPROACH MILLING.

PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 494

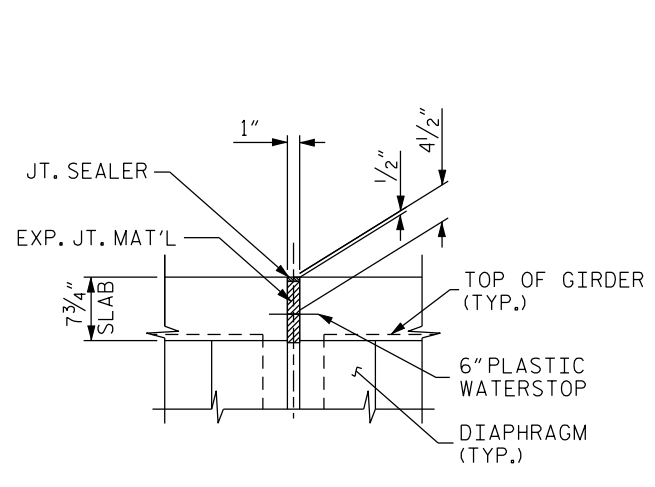
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PLAN VIEW OF BRIDGE
#494 ON SR 1670
OVER CRABTREE CREEK
48'-6" CL. ROADWAY 35° SKEW

REVISIONS					SHEET NO. S-1
NO.	BY	DATE	NO.	BY	
1			3		TOTAL SHEETS 7
2			4		

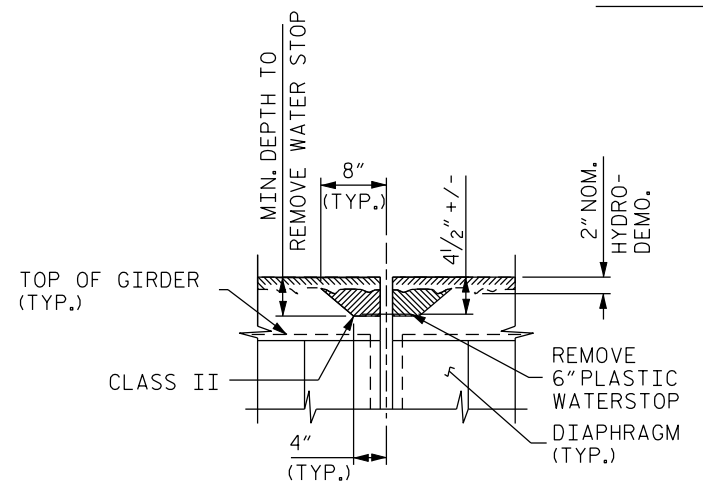
DRAWN BY: CLB DATE: 4/10
CHECKED BY: AGA DATE: 4/10



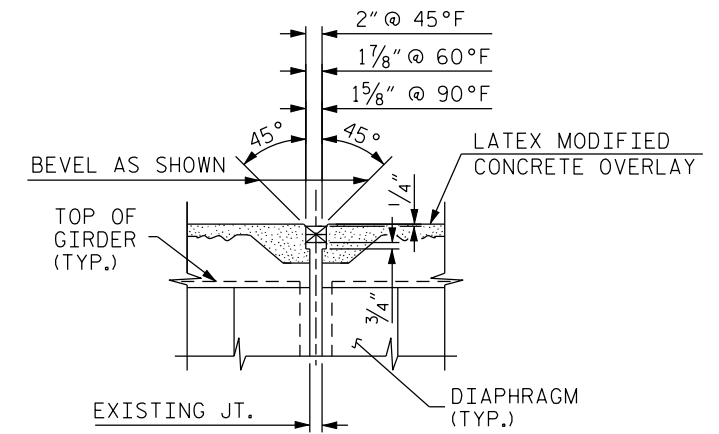
TYPICAL SECTION



SECTION A-A
(EXISTING JOINT)



SECTION A-A
(MINIMUM EXISTING
JOINT DEMOLITION)



SECTION A-A
(PROPOSED EVAZOTE
JOINT SEAL EXPANSION)

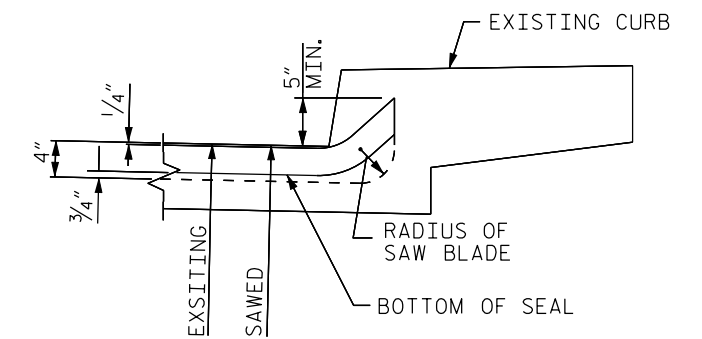
NOTES

FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.

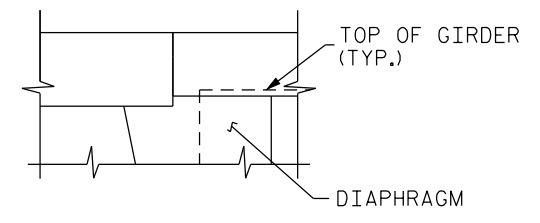
THE INSTALLED EVAZOTE JOINT SEALS SHALL BE WATERTIGHT.

NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT BENTS.

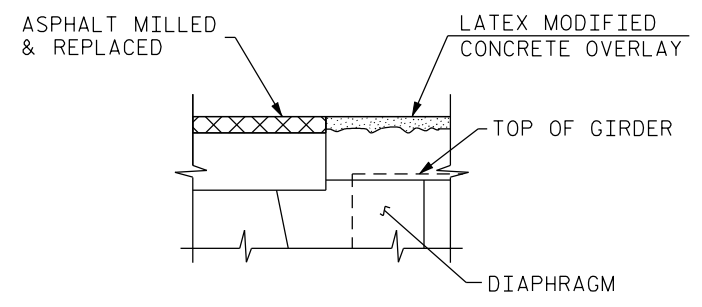
THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE EVAZOTE JOINT SEAL IN LIEU OF SAWING THE JOINT.



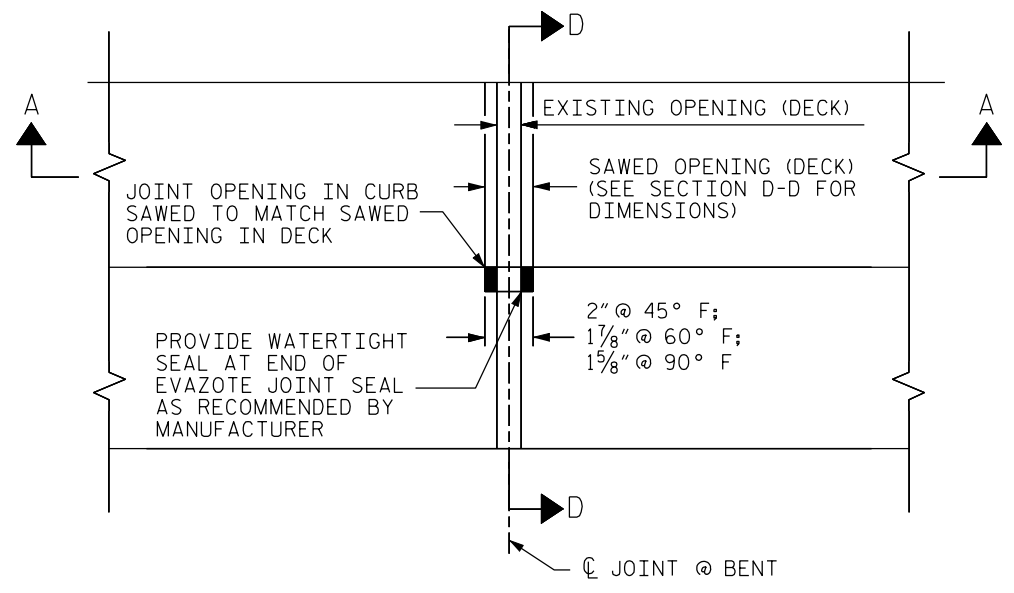
SECTION D-D



SECTION B-B
(EXISTING JOINT)



SECTION B-B
(PROPOSED JOINT)



PLAN

PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 494

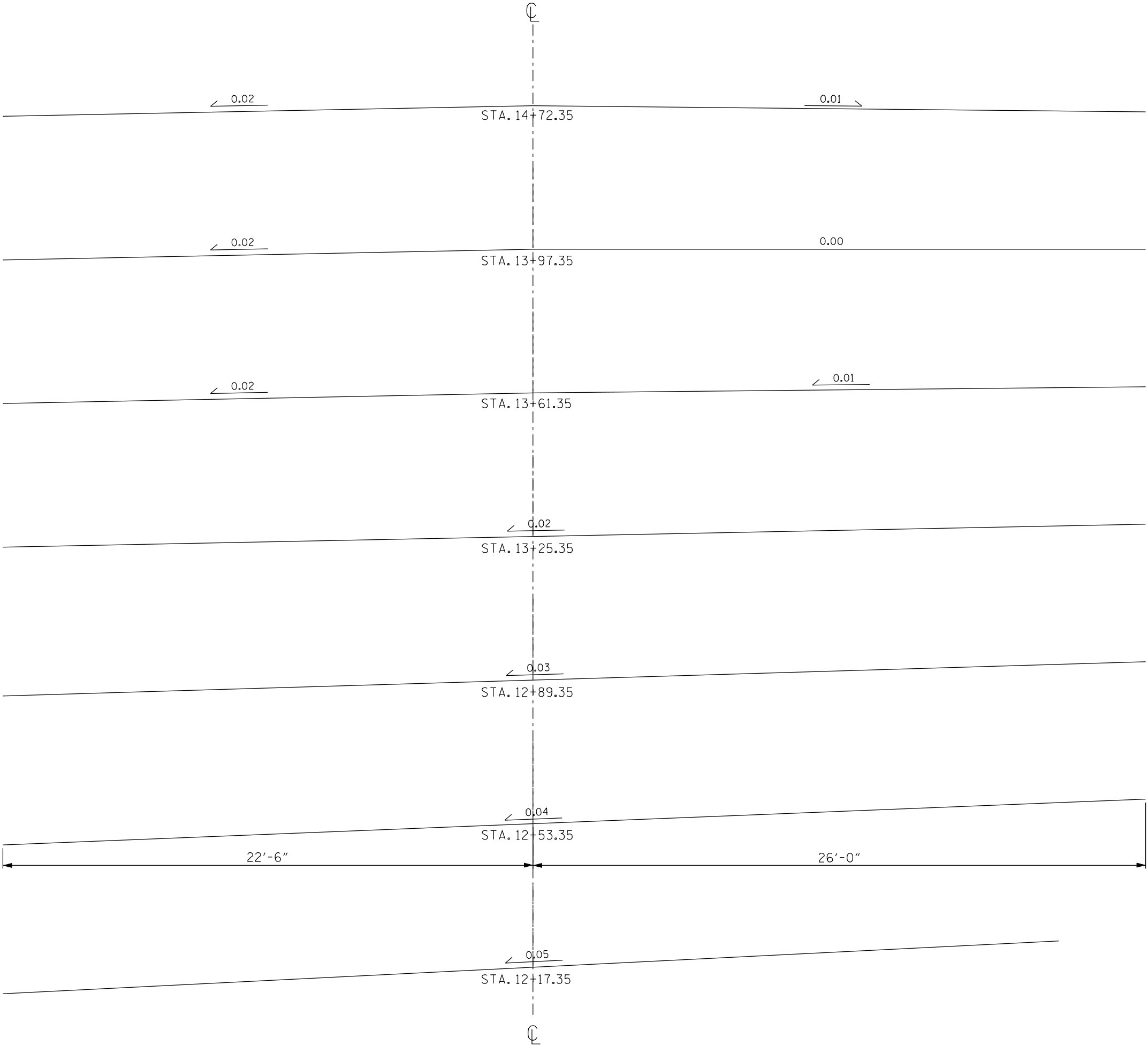
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION OF
BRIDGE #494 ON

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			S-2
2			4			
TOTAL SHEETS						7

DRAWN BY: CLB DATE: 01/10
CHECKED BY: AGA DATE: 01/10

*****USERNAME***** *****SYSTEM*****



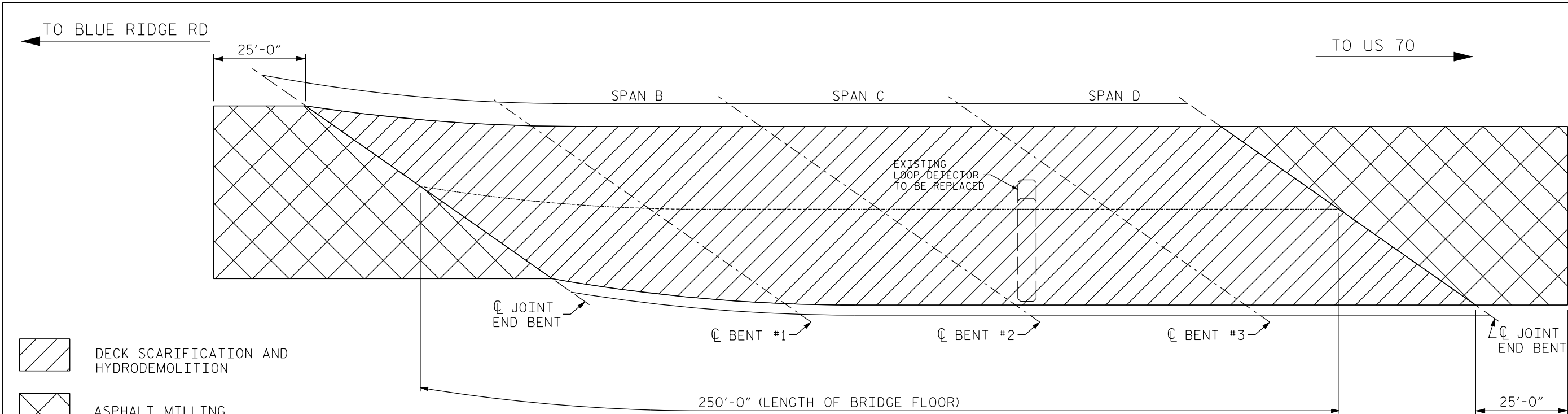
DRAWN BY: CLB DATE: 01/10
CHECKED BY: AGA DATE: 01/10

PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 494

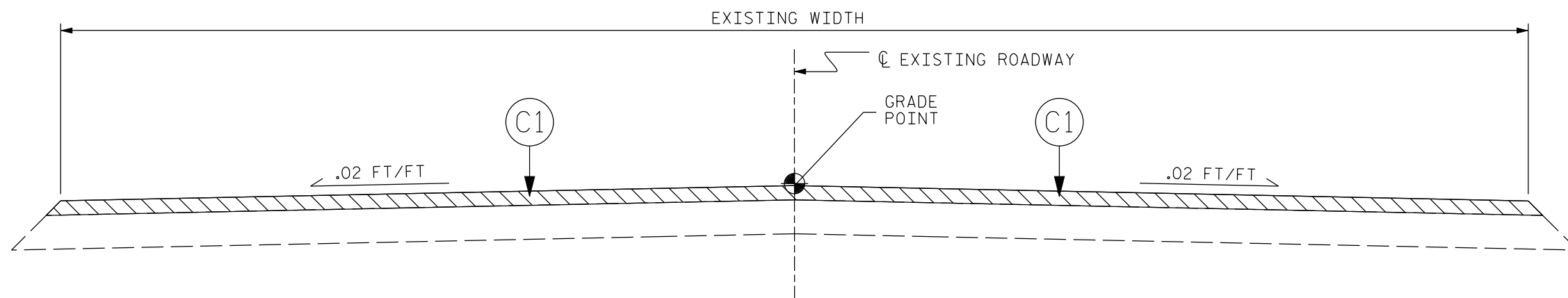
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CROWN GRADE
DIAGRAM

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-3
1			3			TOTAL SHEETS
2			4			7

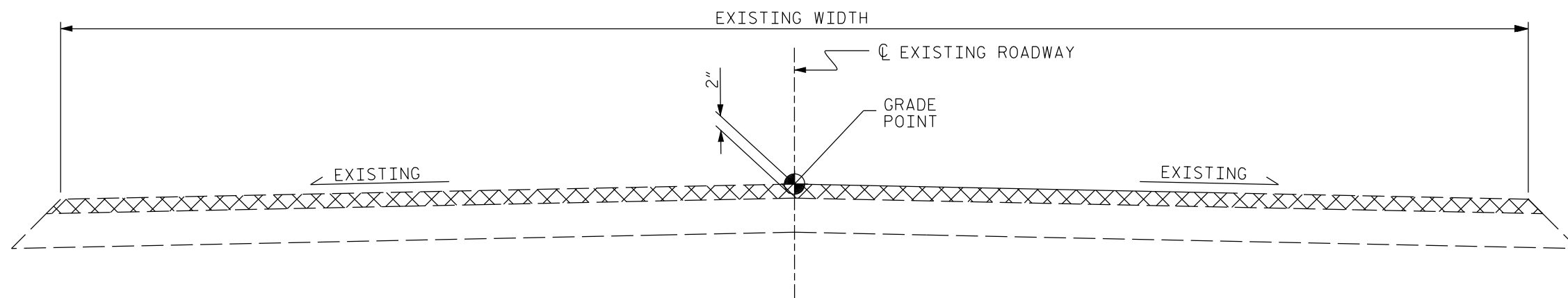


PLAN



TYPICAL ROADWAY SECTION

C1	PROPOSED VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE SF 9.5C AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1" IN DEPTH OR GREATER THAN 1 1/2" IN DEPTH.
----	--



TYPICAL ROADWAY MILLING SECTION
(MILL TO 2" DEPTH)

NOT TO SCALE

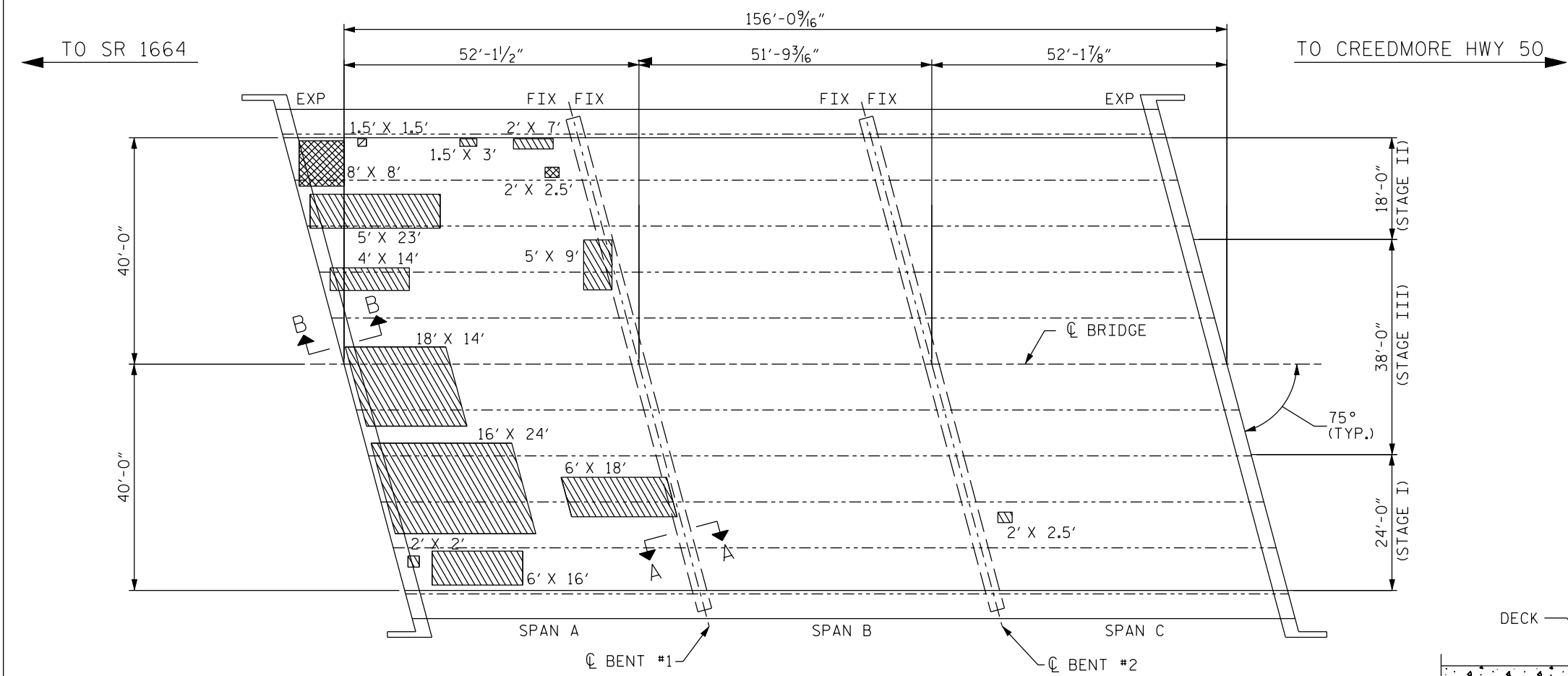
DRAWN BY: CLB DATE: 5/10
CHECKED BY: EBN DATE: 5/10

PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 494

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

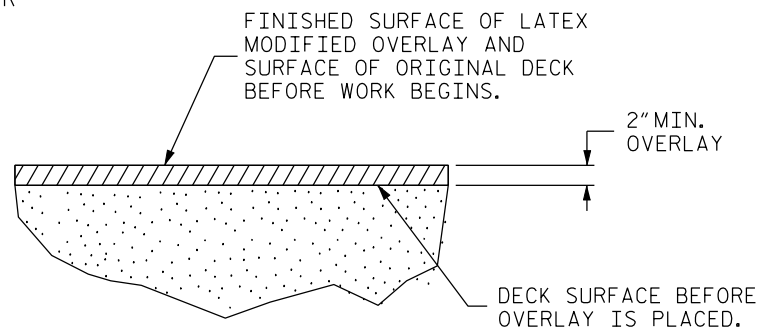
ROADWAY TYPICAL
SECTION AND
MILLING DETAILS

REVISIONS						SHEET NO. S-4
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 7
2			4			

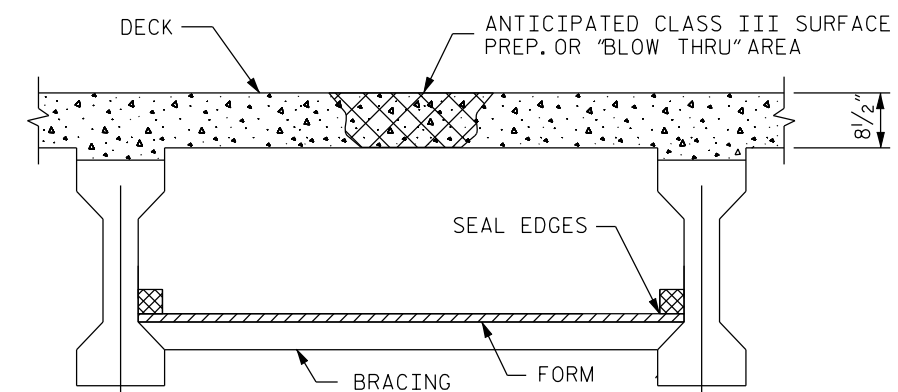


PLAN VIEW

- APPROX. AREA: CLASS II REPAIR
- APPROX. AREA: CLASS III REPAIR



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.

SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

COST FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE PER SQ. YARD OF HYDRO-DEMOLITION.

NOTES

- FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- SEE SPECIAL PROVISIONS FOR SURFACE PREPARATION.
- FOR HYDRO-DEMOLITION, SEE SPECIAL PROVISIONS .
- FOR UNDER DECK CONTAINMENT SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN -OFF WATER FROM THE HYDRO- DEMOLITION PROCESS, SEE SPECIAL PROVISIONS.
- BRIDGE DECK DRIANS SHALL BE PLUGGED DURING HYDRODEMOLITION PROCEES.
- THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS III SURFACE PREPARATION ARE APPROXIMATE.
- FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.
- BRIDGE DECK DRIANS SHALL BE PLUGGED DURING HYDRODEMOLITION PROCESS. SEE HYDRODEMOLITION SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

* SCARIFYING BRIDGE DECK	* CLASS I SURFACE PREPARATION	* CLASS II SURFACE PREPARATION	* CLASS III SURFACE PREPARATION	HYDRO- DEMOLITION OF BRIDGE DECK	LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOOR	PAVEMENT MARKING
SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	SQ.YDS.	C.Y.	SQ.YDS.	LUMP SUM	SQ. FT.	LF
1387	1261	118	8	1387	96	1387	LUMP SUM	12,484	LF

* QUANTITY SHOWN IS FOR INFORMATION ONLY.

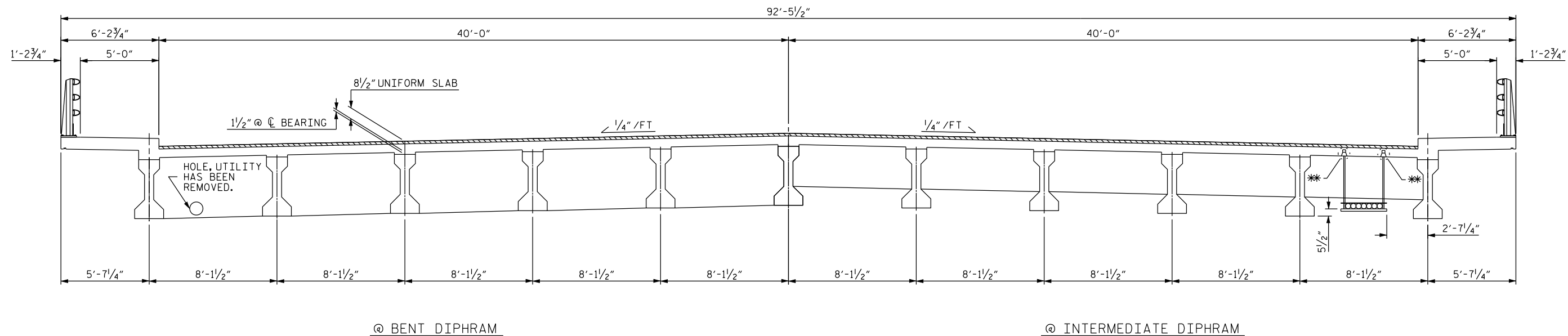
PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REHAB BRIDGE NO. 527

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PLAN VIEW OF BRIDGE
#527 ON SR 3009
OVER CRABTREE CREEK

REVISIONS						SHEET NO. S-5
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 7
2			4			

DRAWN BY : CLB
CHECKED BY : EBN
DATE : 05/10
DATE : 05/10

*****SYSTEM*****
*****USERNAME*****



* SURFACE PREPARATION AT UTILITY HANGER LOCATIONS SHALL NOT EXPOSE HANGER INSERTS. DEPTH OF CUT AT THESE LOCATIONS CAN BE ADJUSTED TO INSURE INSERTS ARE NOT EXPOSED.

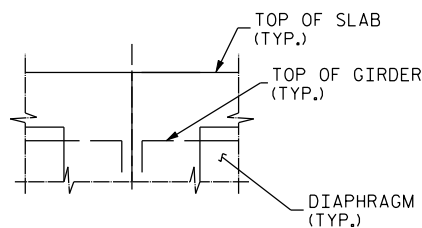
NOTES

FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.

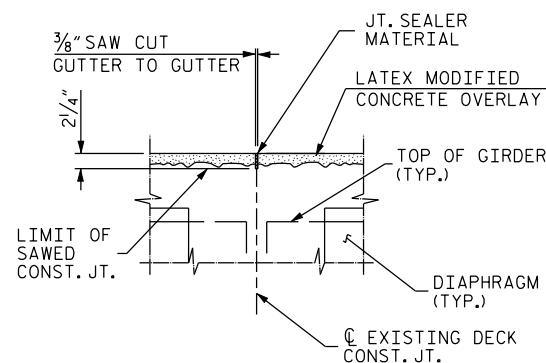
THE INSTALLED EVAZOTE JOINT SEALS SHALL BE WATERTIGHT.

NOMINAL UNCOMPRESSED SEAL WIDTH OF EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT BENTS.

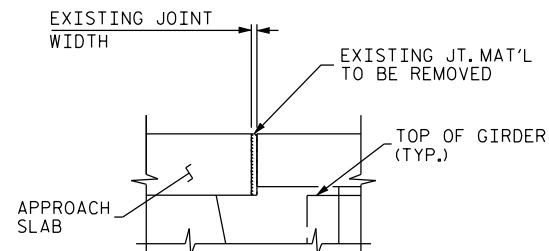
THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINT FOR THE EVAZOTE JOINT SEAL IN LIEU OF SAWING THE JOINT.



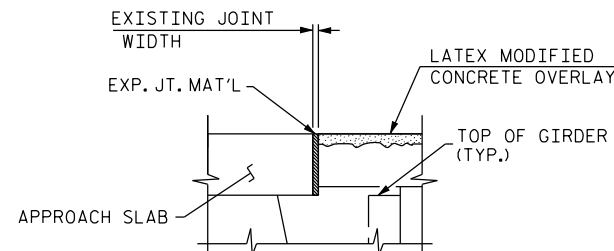
SECTION A-A
(EXISTING JOINT)



SECTION A-A
(PROPOSED JOINT)

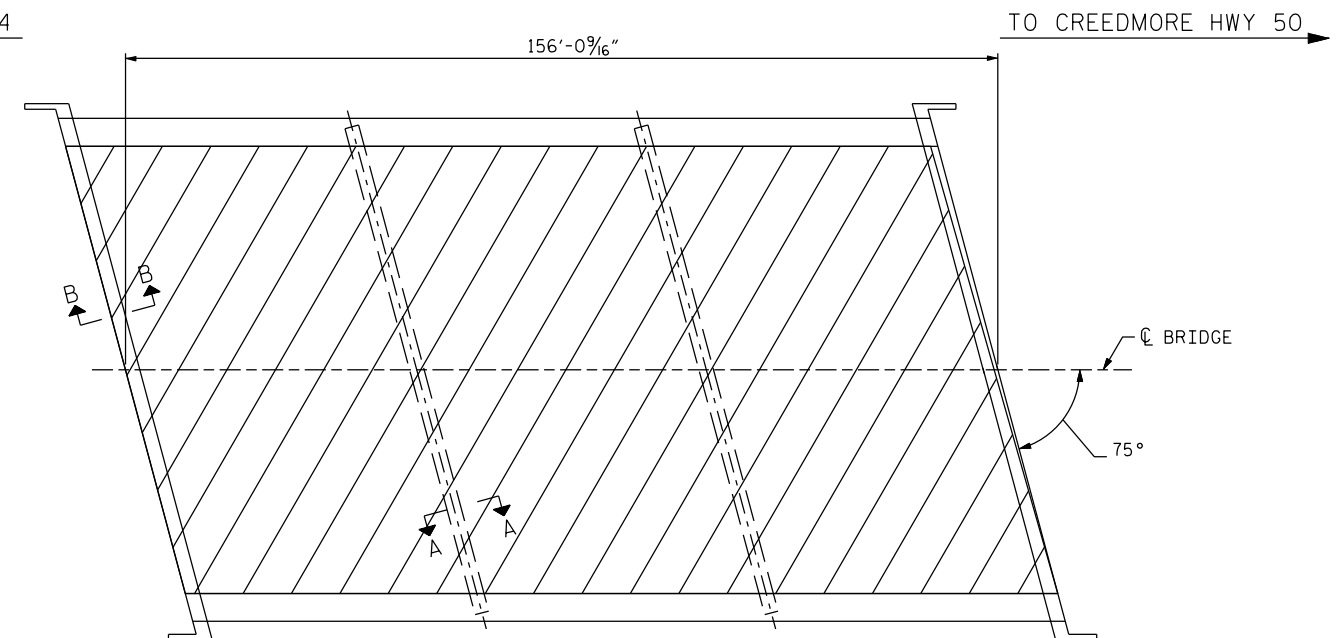


SECTION B-B
(EXISTING JOINT)



SECTION B-B
(PROPOSED JOINT)

TO SR 1664



BRIDGE 527

PLAN



DECK SCARIFICATION
AND HYDRODEMOLITION

DECK SCARIFICATION

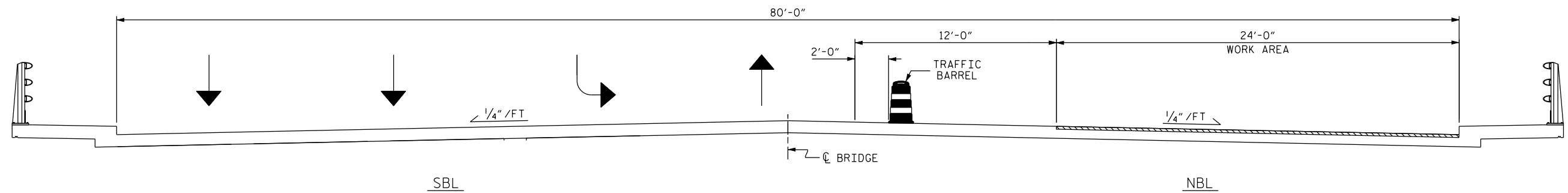
PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 527

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
TYPICAL SECTION
JOINT DETAILS
&
DECK SCARIFICATION

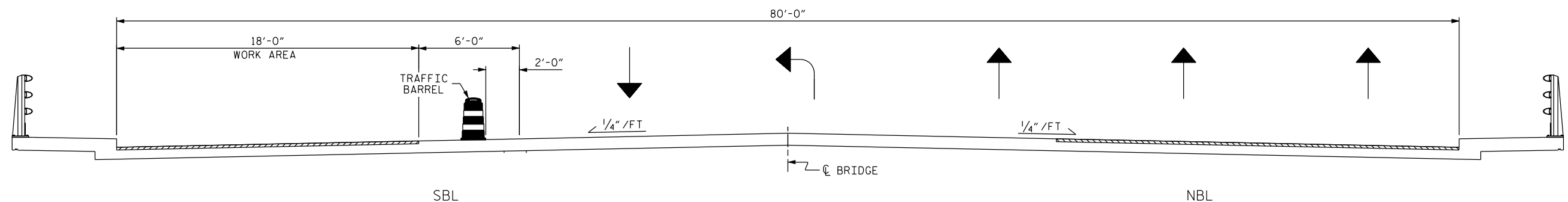
REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			S-6
2			4			
TOTAL SHEETS						7

DRAWN BY: CLB DATE: 05/10
CHECKED BY: EBN DATE: 05/10

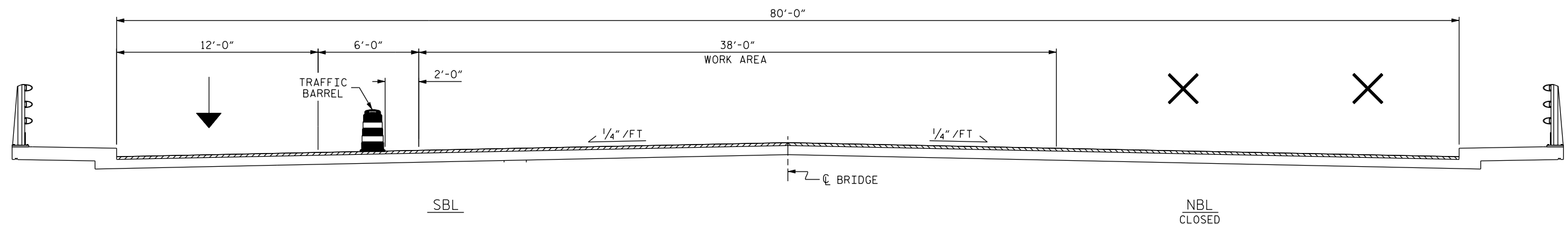
*****USERNAME***** *****SYTIME*****



TYPICAL SECTION
(STAGE I)



TYPICAL SECTION
(STAGE II)



TYPICAL SECTION
(STAGE III)

PROJECT NO. BK-5101 T
COUNTY: WAKE
DECK REPAIR BRIDGE NO. 527

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STAGING OF
BRIDGE #527

DRAWN BY: CLB DATE: 05/10
CHECKED BY: EBN DATE: 05/10

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-7
1			3			TOTAL SHEETS
2			4			7

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
TRAFFIC CONTROL

WAKE COUNTY

LOCATION: BRIDGE NO. 494 BLUE RIDGE RD. OVER CRABTREE CREEK
AND BRIDGE NO. 527 CREEDMOOR RD. OVER CRABTREE CREEK

TYPE OF WORK: TRAFFIC CONTROL FOR BRIDGE DECK PRESERVATION

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
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING
1253.01	SNOWPLOWABLE RAISED PAVEMENT MARKERS

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 4-4A	AREA 1-BRIDGE #527 CREEDMOOR RD.-PHASE I
TCP-5	AREA 1-BRIDGE #527 CREEDMOOR RD.-PHASE II
TCP 6-6B	AREA 1-BRIDGE #527 CREEDMOOR RD.-PHASE III
TCP-7	AREA 2-BRIDGE #494 BLUE RIDGE RD.-ROAD CLOSURE
TCP-8	AREA 2-BRIDGE #494 BLUE RIDGE RD.-DETOUR ROUTE


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
 CHANGEABLE MESSAGE SIGN
 TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 LAW ENFORCEMENT (LAW)
 FLAGGER

APPROVED: 
DATE: 6/18/10



PLAN PREPARED BY:



Stantec Consulting Services Inc.
Suite 300, 801 Jones Franklin Road
Raleigh, NC
27606
Tel: 919.851.8868
Fax: 919.851.7024
www.stantec.com

BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER

GEORGE KARAGEORGE

TRAFFIC CONTROL DESIGNER

WBS 42579.3.18

BK-5101T

GENERAL NOTES

PROJECT REFERENCE NO.	SHEET NO.
BK-5101T	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.

TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	6:00 A.M.-7:00 P.M. MONDAY THRU SATURDAY 10:00 A.M.-7:00 P.M. 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 7:00 P.M. JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 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 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
BLUE RIDGE RD.	6:00 A.M.-7:00 P.M. MONDAY THRU SATURDAY 10:00 A.M.-7:00 P.M. SUNDAY

LANE AND SHOULDER CLOSURE REQUIREMENTS

- D) 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.
- E) 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.
- F) 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.
- G) 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.
- H) 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.

TRAFFIC CONTROL DEVICES

- I) 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.
- J) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY AT A MAXIMUM SPACING OF 500 FT WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.
- K) 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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- M) 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.
- N) 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.
- O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

PAVEMENT MARKINGS AND MARKERS


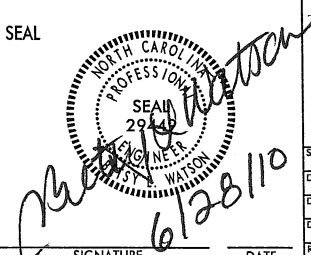

- P) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE TO REPLACE THE EXISTING PAVEMENT MARKINGS.

ROAD NAME	MARKING	MARKER
CREEDMOOR RD.	POLYUREA	NONE
BLUE RIDGE RD.	POLYUREA	NONE

MISCELLANEOUS

- Q) USE LAW ENFORCEMENT TO DIRECT TRAFFIC AND ENFORCE ROAD CLOSURES. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.
- R) MAINTAIN SIDEWALK ACCESS AT ALL TIMES, UNLESS OTHERWISE SHOWN IN THE TRAFFIC CONTROL PLAN, OR ALLOWED 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) MAINTAIN DRIVEWAY ACCESS AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY ENGINEER.
- U) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.
- V) COORDINATE AND INFORM CRABTREE VALLEY MALL AND SURROUNDING BUSINESSES OF THE PLANNED BRIDGE WORK OPERATIONS, AS DIRECTED BY THE ENGINEER.

6/28/2010 10:01:11 AM s:\projects\BK-5101\Drawings\TCP\Plan Sheets\BK-5101T-tc-psh_02.dgn gkarageorge

 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	GENERAL NOTES	
	DATE JUNE 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW	 SCALE: NONE REVISIONS	CADD FILE

TRAFFIC CONTROL PHASING

PROJECT REFERENCE NO.	SHEET NO.
BK-5101T	TCP-3

THIS PROJECT CONSISTS OF TWO AREAS OF CONSTRUCTION:

AREA 1-BRIDGE #527 CREEDMOOR RD.

AREA 2-BRIDGE #494 BLUE RIDGE RD.

DO NOT WORK IN AREA 1 AND AREA 2 SIMULTANEOUSLY. COMPLETE THE WORK OF ONE AREA BEFORE BEGINNING WORK IN THE OTHER AREA.

AREA 1-BRIDGE #527 CREEDMOOR RD.

PHASE I

STEP 1:
APPROXIMATELY ONE WEEK PRIOR TO CONSTRUCTION OPERATIONS INSTALL CHANGEABLE MESSAGE SIGNS TO PORTRAY MESSAGES GIVING ADVANCE WARNING TO THE PUBLIC OF UPCOMING ROAD WORK CONDITIONS.

STEP 2:
INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON SHEET TCP 4-4A. BEHIND THE LANE CLOSURE PERFORM BRIDGE DECK WORK. USE THE SAME TRAFFIC CONTROL METHOD AS SHOWN ON TCP 4-4A WHEN WORKING IN EACH OF THE TWO NORTHBOUND RIGHT OUTER LANES OF CREEDMOOR RD.

PERFORM ONLY THE AMOUNT OF HYDRO-DEMOLITION THAT CAN BE OVERLAYED BEFORE LANES ARE RE-OPENED TO TRAFFIC.

BEFORE RE-OPENING LANES TO TRAFFIC REPLACE OBLITERATED EXISTING PAVEMENT MARKINGS INITIALLY WITH PAINT.

PHASE II

INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON SHEET TCP-5. BEHIND THE LANE CLOSURE PERFORM BRIDGE DECK WORK FOR THE SOUTHBOUND RIGHT OUTER LANE OF CREEDMOOR RD.

PERFORM ONLY THE AMOUNT OF HYDRO-DEMOLITION THAT CAN BE OVERLAYED BEFORE LANES ARE RE-OPENED TO TRAFFIC.

BEFORE RE-OPENING LANES TO TRAFFIC REPLACE OBLITERATED EXISTING PAVEMENT MARKINGS INITIALLY WITH PAINT.

PHASE III

INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON SHEET TCP 6-6A. BEHIND THE LANE AND ROAD CLOSURE PERFORM BRIDGE DECK WORK FOR THE INTERIOR LANES OF NORTH AND SOUTHBOUND CREEDMOOR RD. USE THE SAME TRAFFIC CONTROL METHOD FOR EACH OF THE INTERIOR LANES OF CREEDMOOR RD.

PERFORM ONLY THE AMOUNT OF HYDRO-DEMOLITION THAT CAN BE OVERLAYED BEFORE LANES ARE RE-OPENED TO TRAFFIC.

BEFORE RE-OPENING LANES TO TRAFFIC REPLACE OBLITERATED EXISTING PAVEMENT MARKINGS.

UPON COMPLETION OF BRIDGE DECK WORK, PLACE FINAL PAVEMENT MARKINGS. FINAL PAVEMENT MARKINGS MAY BE INSTALLED UPON COMPLETION OF BOTH BRIDGES IN AREAS 1 AND 2.

AREA 2-BRIDGE #494 BLUE RIDGE RD.

PHASE I

STEP 1:
APPROXIMATELY ONE WEEK PRIOR TO CONSTRUCTION OPERATIONS, INSTALL CHANGEABLE MESSAGE SIGNS TO PORTRAY MESSAGES GIVING ADVANCE WARNING TO THE PUBLIC OF UPCOMING ROAD WORK CONDITIONS.

INTERMEDIATE CONTRACT TIME

COMPLETE THE WORK OF AREA 2-PHASE I-STEP 2 WITHIN TWELVE (12) ROAD CLOSURE PERIODS.

STEP 2:
INSTALL OFF-SITE DETOUR ROUTE SIGNS (TCP-8) THEN INSTALL ROAD CLOSURE TRAFFIC CONTROL DEVICES AND CLOSE BLUE RIDGE RD. AT BRIDGE #494 (TCP-7).


BEHIND NIGHTLY ROAD CLOSURES, PERFORM ALL BRIDGE DECK WORK.

PERFORM ONLY THE AMOUNT OF HYDRO-DEMOLITION THAT CAN BE OVERLAYED BEFORE LANES ARE RE-OPENED TO TRAFFIC.

BEFORE RE-OPENING LANES TO TRAFFIC, REPLACE OBLITERATED EXISTING PAVEMENT MARKINGS.

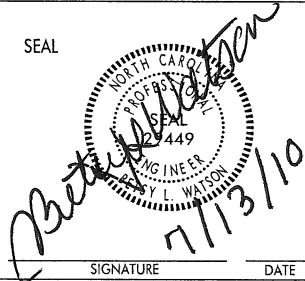
UPON COMPLETION OF BRIDGE DECK WORK, PLACE FINAL PAVEMENT MARKINGS. FINAL PAVEMENT MARKINGS MAY BE INSTALLED UPON COMPLETION OF BOTH BRIDGES IN AREAS 1 AND 2.

7/13/2010 11:11 AM s:\projects\BK-5101T\Traffic Control\Plan Sheets\TCP\Plan Sheets\BK-5101T-tc-ph-03.dgn gkarageorge



Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-8868
Fax. (919) 851-7024
www.stantec.com
License No. F-0672


SEAL

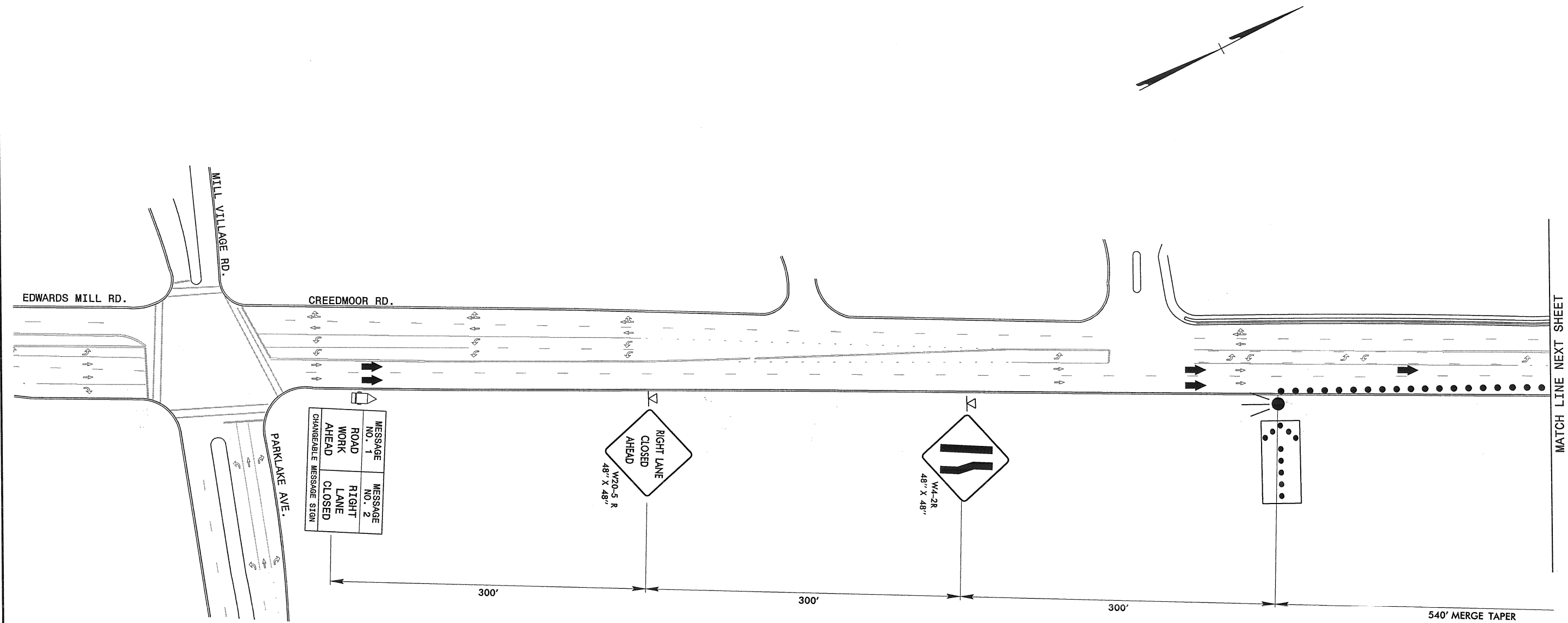


Betty L. Watson
7/13/10

SIGNATURE DATE

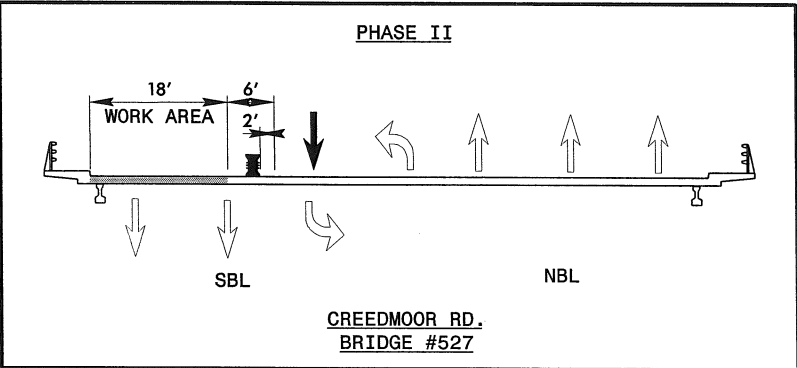
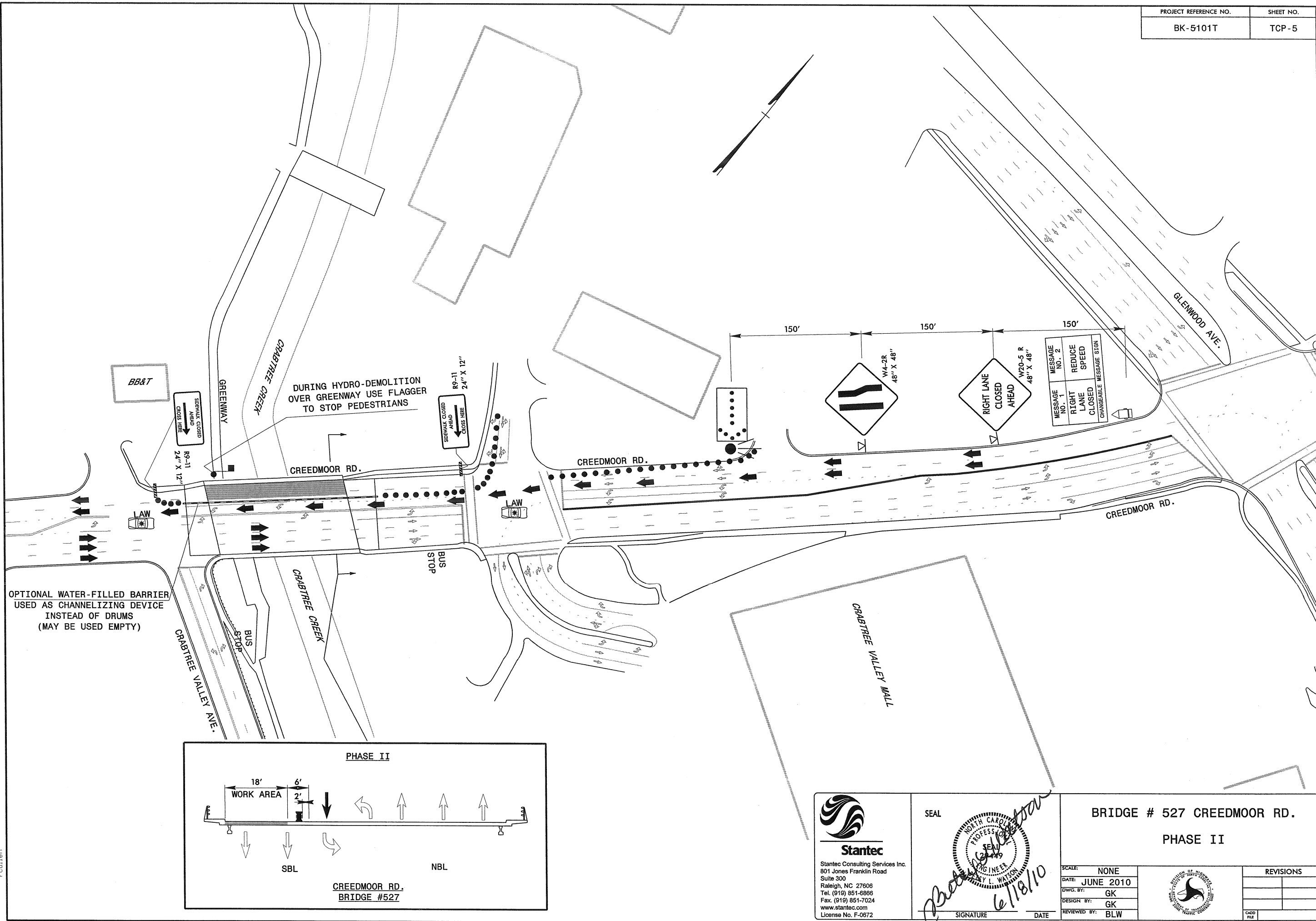
TRAFFIC CONTROL PHASING

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



s:\fcControl\BK-5101T\Wake\TCP\Plan Sheets\BK-5101T.tc-psk_04.dgn
 6/17/2010
 pcullen

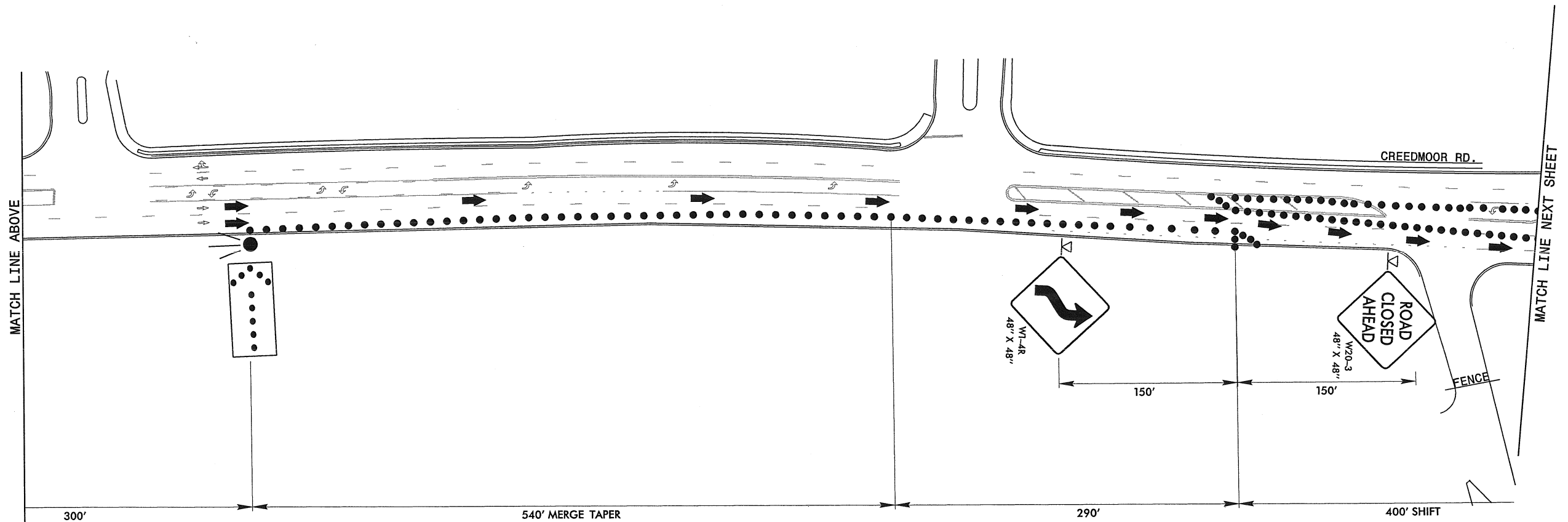
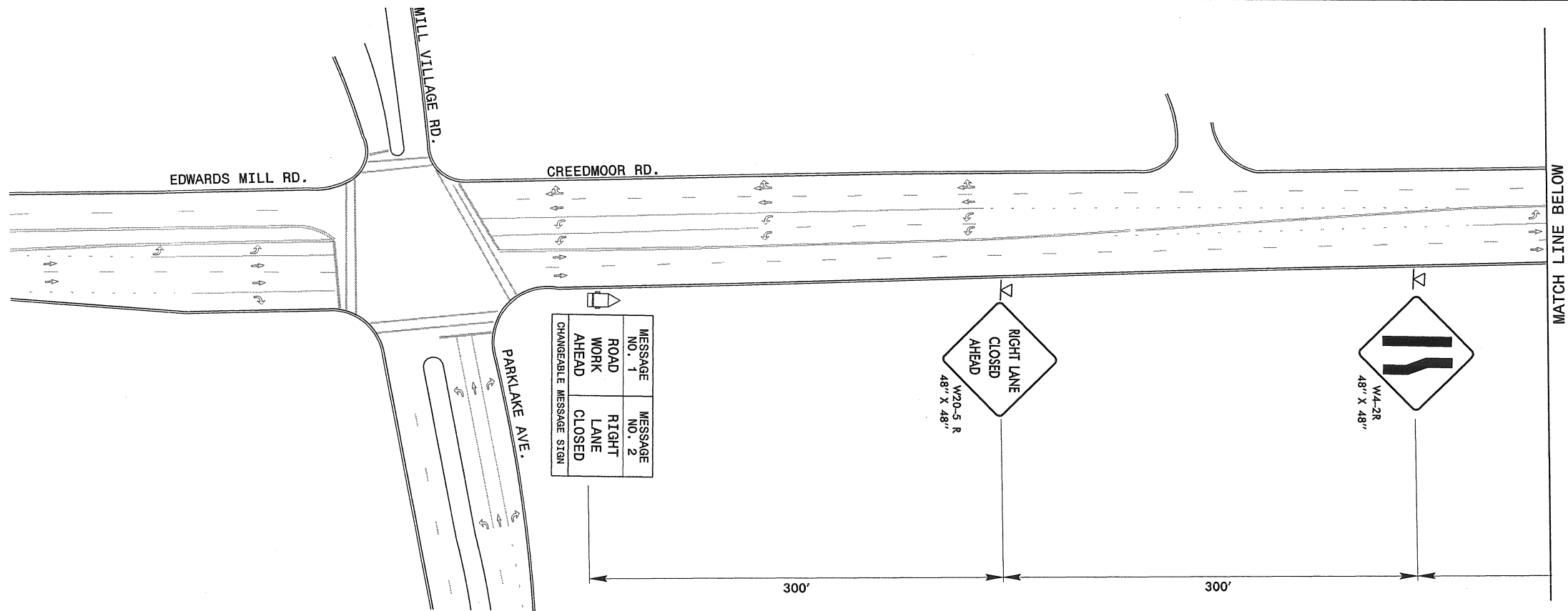
Stantec Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8868 Fax. (919) 851-7024 www.stantec.com License No. F-0672	SEAL <i>Henry L. Watson</i> 6/18/10 SIGNATURE	BRIDGE # 527 CREEDMOOR RD. PHASE I							
	SCALE: NONE DATE: JUNE 2010 DWG. BY: GK DESIGN BY: GK REVIEWED BY: BLW		REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>						



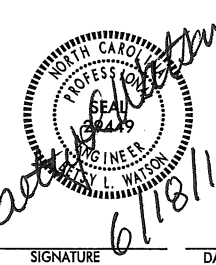
Stantec
 Stantec Consulting Services Inc.
 801 Jones Franklin Road
 Suite 300
 Raleigh, NC 27608
 Tel. (919) 851-8888
 Fax. (919) 851-7024
 www.stantec.com
 License No. F-0672

SEAL
 NORTH CAROLINA
 PROFESSIONAL ENGINEER
 L. L. WATSON
 6/18/10
 SIGNATURE DATE

BRIDGE # 527 CREEDMOOR RD.		PHASE II	
SCALE:	NONE	REVISIONS	
DATE:	JUNE 2010		
DWG. BY:	GK		
DESIGN BY:	GK		
REVIEWED BY:	BLW		



SEAL

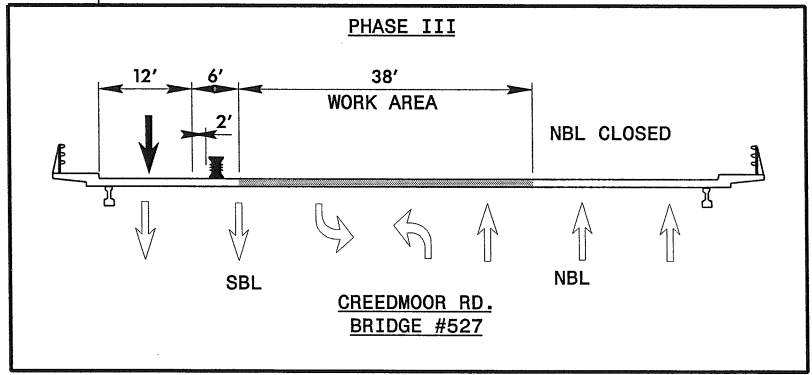
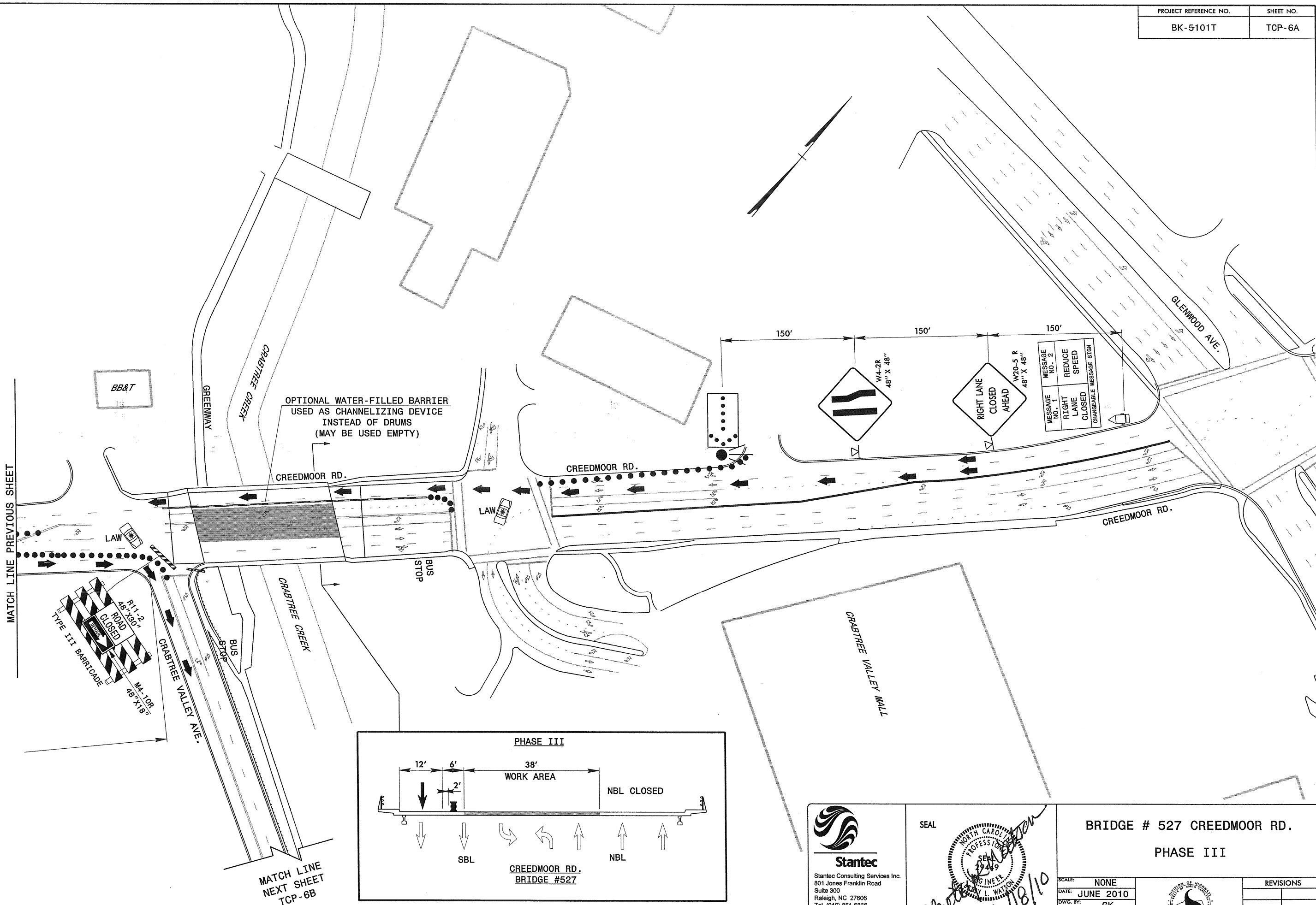


BRIDGE # 527 CREEDMOOR RD.
PHASE III

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




REVISIONS	
CADD FILE	





Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-0868
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

SEAL

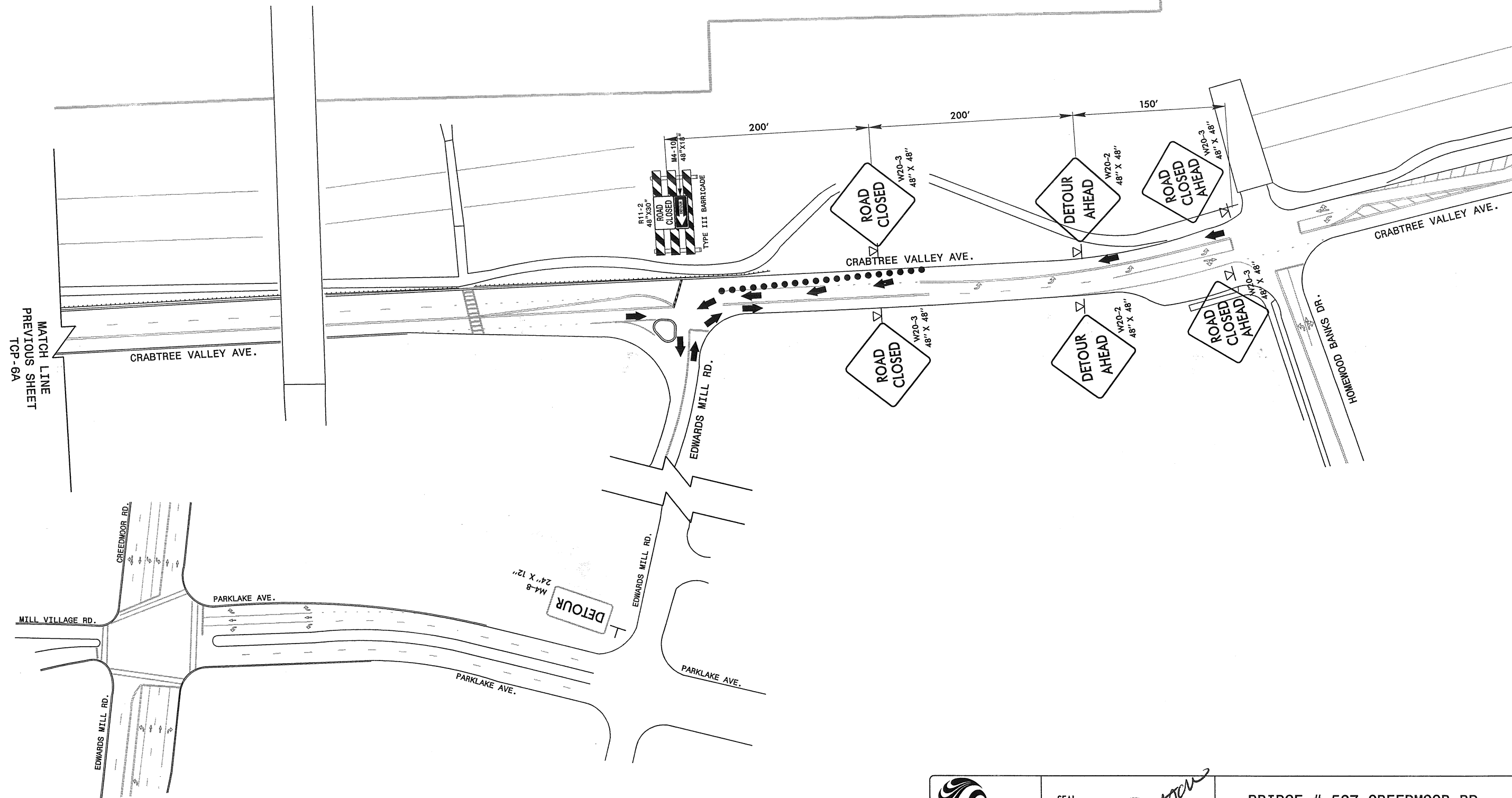

6/18/10

SIGNATURE

DATE

BRIDGE # 527 CREEDMOOR RD. PHASE III			REVISIONS	
SCALE:	NONE			
DATE:	JUNE 2010			
DWG. BY:	GK			
DESIGN BY:	GK			
REVIEWED BY:	BLW			
				
			CADD	FILE


6/17/2010
f:\Control\BK-5101T\Wake\TCP\Plan Sheets\BK-5101T.tc.psh.06A.dgn
redl



f:\c:\control\bk-5101t\Wake\TCP\Plan Sheets\BK-5101T.tc.psh, 068.dgn
6/17/2010
rcullen


Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-8886
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

SEAL


Gregory L. Watson
6/18/10
SIGNATURE DATE

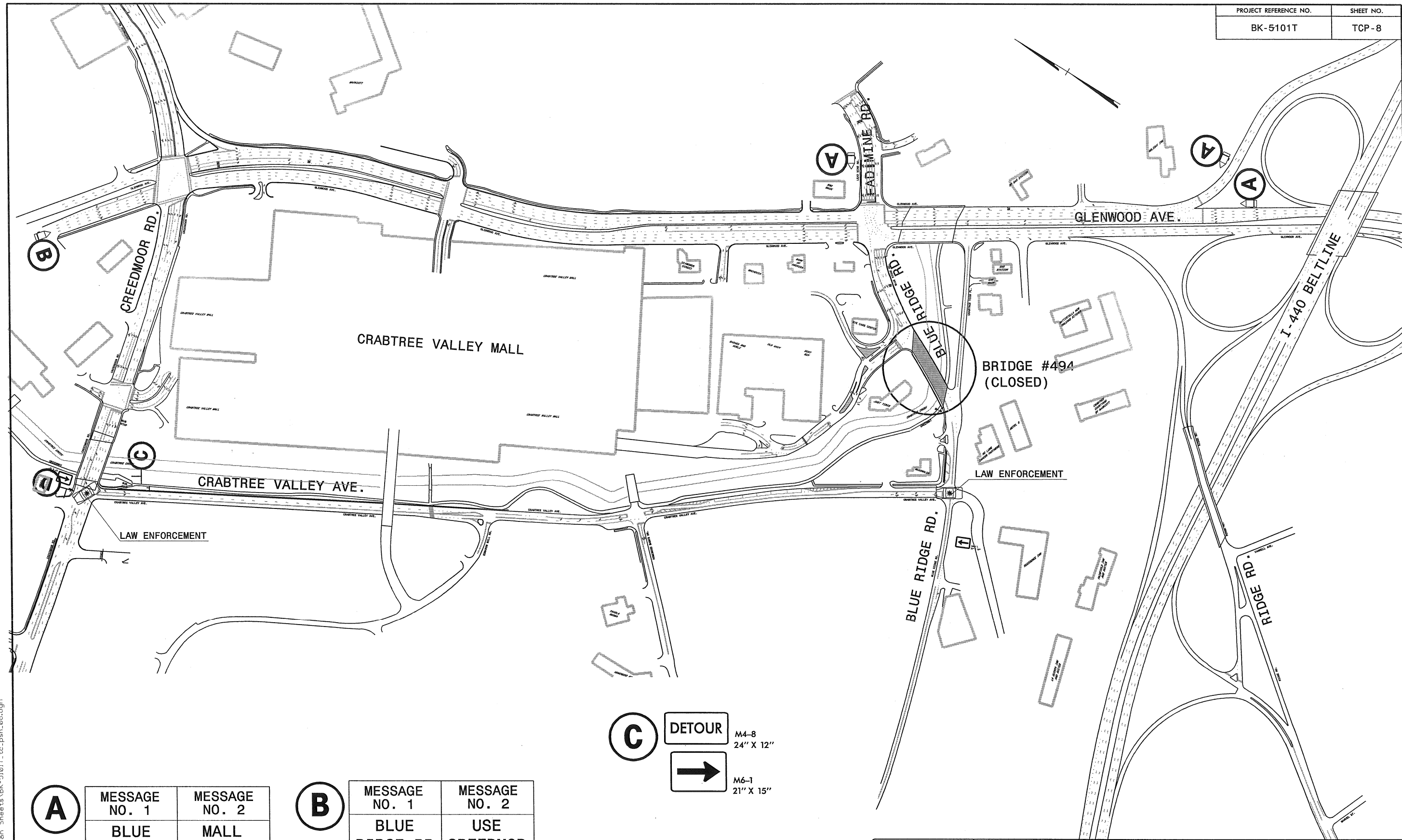
BRIDGE # 527 CREEDMOOR RD.
PHASE III

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



REVISIONS

CADD FILE



A

MESSAGE NO. 1	MESSAGE NO. 2
BLUE RIDGE RD CLOSED	MALL ENTRANCE OPEN
CHANGEABLE MESSAGE SIGN	

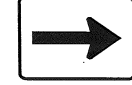
B

MESSAGE NO. 1	MESSAGE NO. 2
BLUE RIDGE RD CLOSED	USE CREEDMOR NEXT RT
CHANGEABLE MESSAGE SIGN	

C

DETOUR

M4-8
24" X 12"



M6-1
21" X 15"

D

DETOUR

M4-8
24" X 12"



M6-1 L
21" X 15"

Stantec
Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6886
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
L. WATSON
6/18/10
SIGNATURE

BRIDGE #494 BLUE RIDGE RD.
CMS & DETOUR SIGNS
DURING CLOSURE

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

6/17/2010 s:\f\ic\Control\BK-5101T\Wake\TCP\Plan Sheets\BK-5101T.tc_psh_08.dgn rculien