

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# HAYWOOD COUNTY

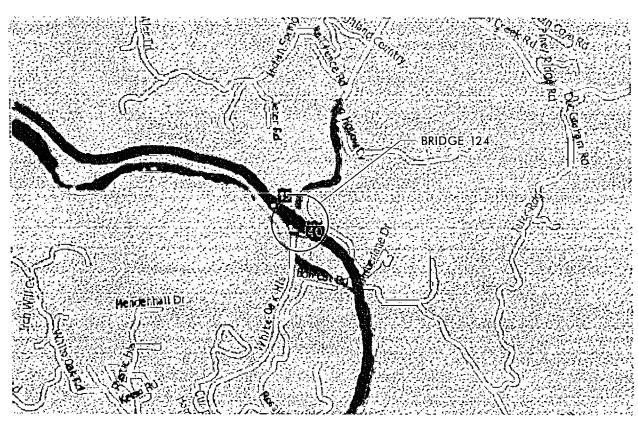
B-5207 1 45305.1.STI STM-040-1|210|17 45305.3.STI STM-040-1|210|17 PE CONST

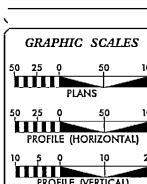
LOCATION: BRIDGE 124, I-40 EBL AND WBL OVER SR 1338, 5 MILES WEST OF JUNCTION I-40 AND US 276

TYPE OF WORK: BRIDGE DECK PRESERVATION

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S-1	PLAN OF BRIDGE
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TCPI-4	TRAFFIC CONTROL PLANS





#### PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT B-5207 = 0.000 MI. LENGTH OF STRUCTURE T.I.P. PROJECT B-5207 = 0.040 MI TOTAL LENGTH OF T.I.P. PROJECT B-5207 = 0.040 MI

PREPARED IN THE OFFICE OF: Stantec FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION 2006 STANDARD SPECIFICATIONS JOE KELVINGTON, PE PROJECT ENGINEER RIGHT OF WAY DATE: LETTING DATE: NOV. 12, 2009

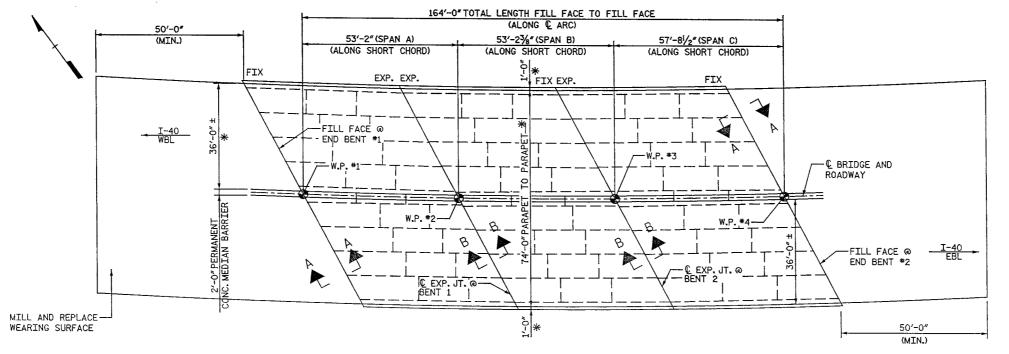




NCDOT CONTACT:

MIKE SUMMERS

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA



#### NOTES:

DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING REPAIR OF BRIDGE DECKS WITH LATEX MODIFIED CONCRETE, SEE SPECIAL PROVISIONS.

FOR HYDRO-DEMOLITION, 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, THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

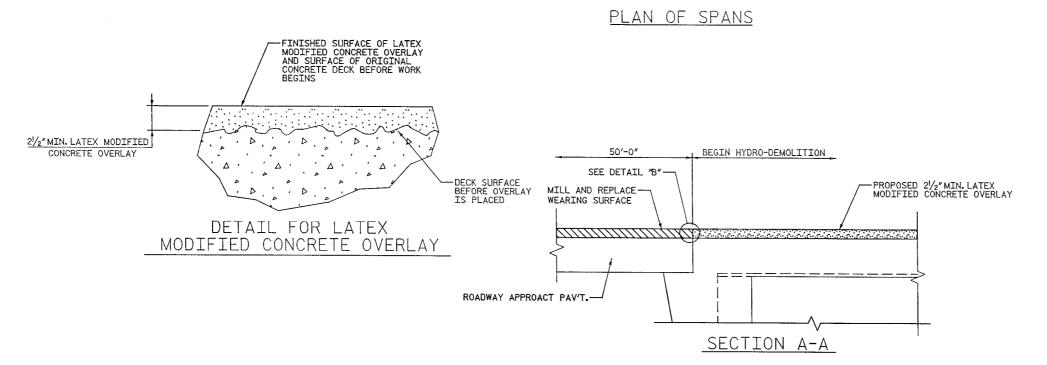
LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH.

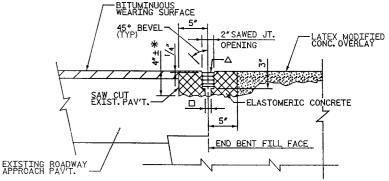
FOR LATEX MODIFIED CONCRETE - VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.

FOR SECTION B-B, SEE SHEET NO. S-4.

\*DENOTES RADIAL DIMENSION.

FOR EVAZOTE JOINT SEAL, SEE SPECIAL PROVISIONS.





#### DETAIL "B"

- △ USE 2.8125"X 2.50"UNCOMPRESSED SEAL MATERIAL

PROJECT NO. \_ HAYWOOD STATION:

PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION

SEAL 13406

DEPARTMENT OF TRANSPORTATION

PLAN OF SPANS FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 124

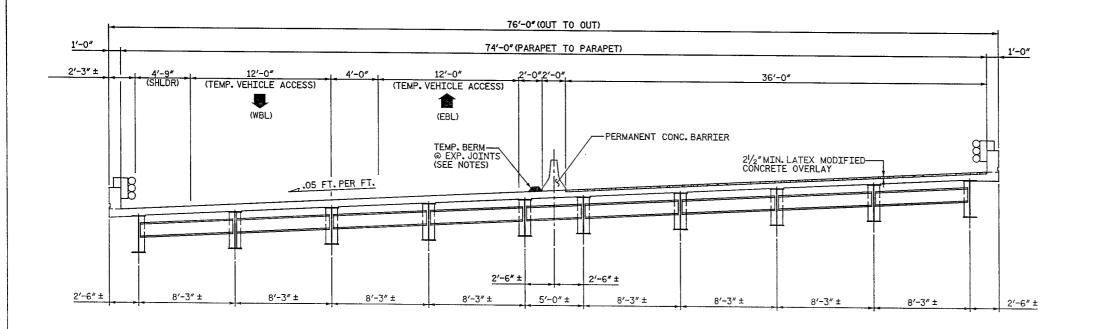
SHEET NO. REVISIONS S-1 DATE: NO. BY: DATE TOTAL SHEETS 5

B. MATERIAL DECK\*\*
SCARIFICATION ASPHALT CONC. SURFACE COURSE TYPE S9.5B EVAZOTE JOINT SEA DEMOLITION SQ.YDS. SQ.YDS. SQ.YDS. SQ.YDS. SQ.YDS. CU.YDS. CU.YDS. SQ.YDS. LUMP SUM SQ.FT. TON 177.7 241.6 1.385.7 18.3 146.8 1385.8 LUMP SUM 10,372 103

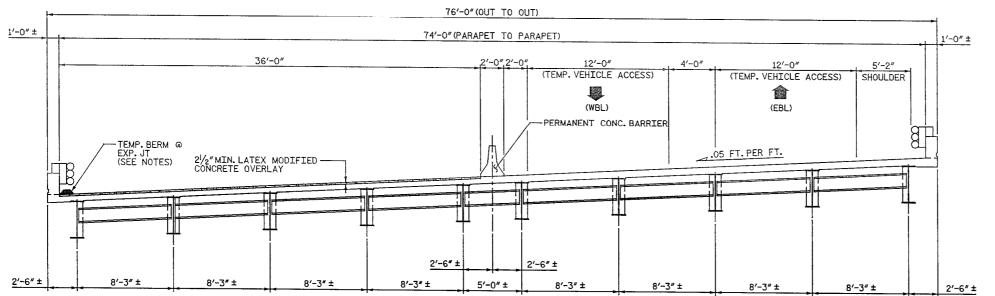
\* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

DRAWN BY : J. L. HENNEKES DATE : 11-02-09
CHECKED BY : J. T. KELVINGTON DATE : 11-02-09

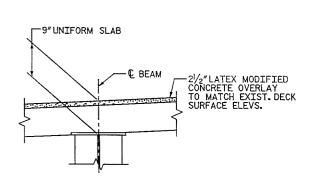
<sup>\*\*</sup> INCLUDES MILLING OF ROADWAY PAVEMENT.



## TYP. SECTION - STAGE I CONSTRUCTION



TYP. SECTION - STAGE II CONSTRUCTION



NOTES:

WATER & CONCRETE SLURRY FROM HYDRO-DEMOLITION SHALL NOT BE ALLOWED TO DRAIN ACROSS TRAVEL LANES. CONTRACTOR SHALL PROVIDE A METHOD TO CONTROL THE WATER.

EXIST. SLAB BUILDUP

ALL HORIZONTAL DIMENSIONS SHOWN ARE RADIAL.

PROJECT NO.\_\_\_\_ B-5207 HAYWOOD COUNTY STATION:\_

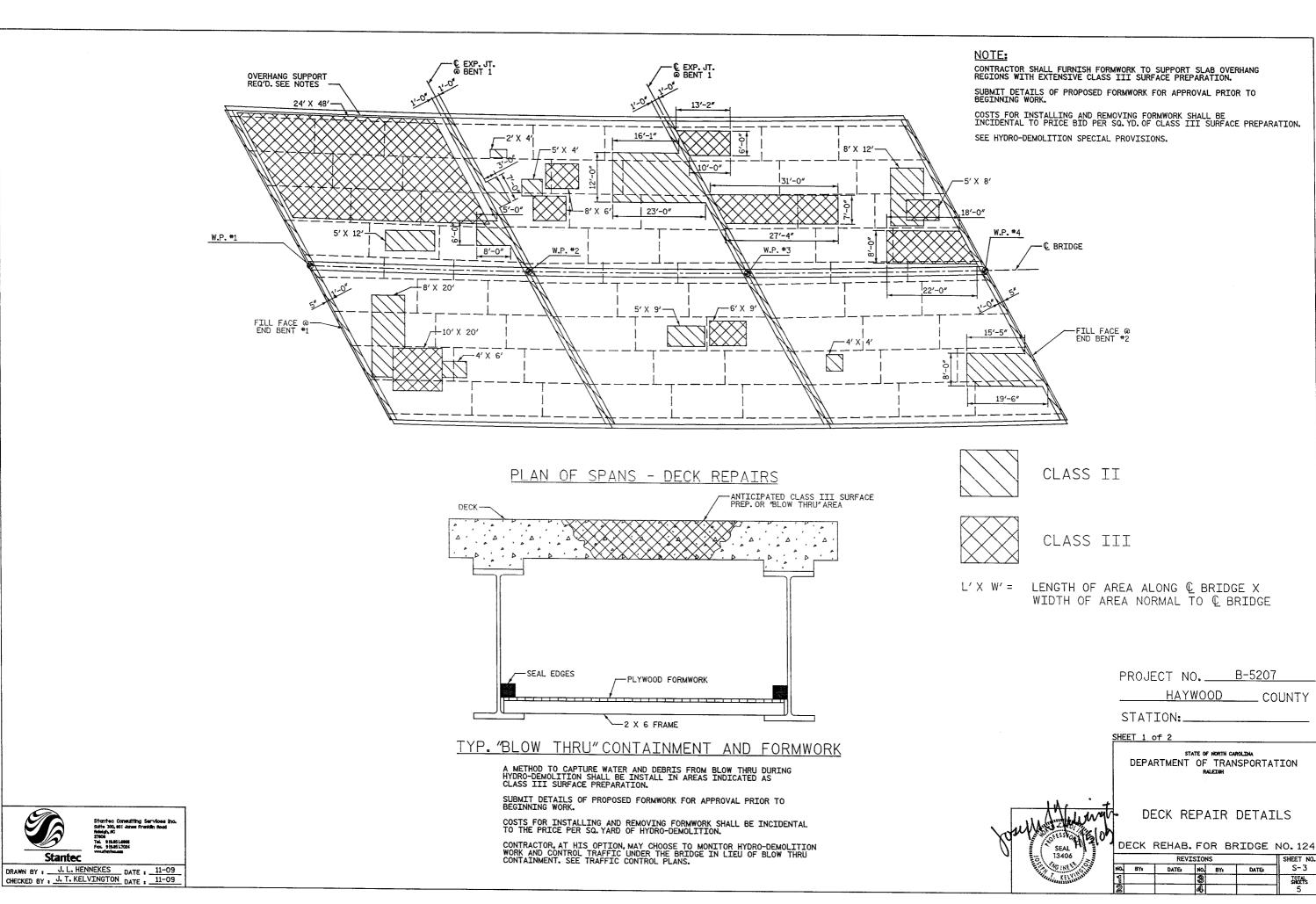
> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

> > TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 124

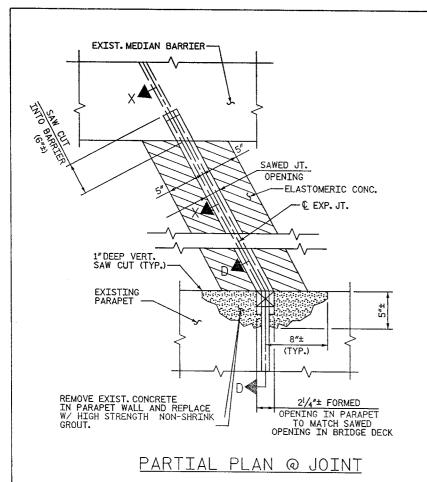
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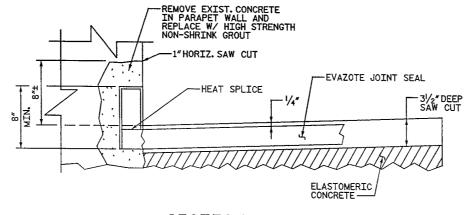
Stantec DRAWN BY : J. L. HENNEKES DATE : 11-02-09 CHECKED BY : T. R. DUDECK DATE : 11-02-09



SHEET NO.

S-3





### SECTION D-D

CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.

FOR HIGH STRENGTH GROUT, SEE SPECIAL PROVISIONS.

HIGHT STRENGTH GROUT SHALL BE APPROVED BY THE ENGINEER.

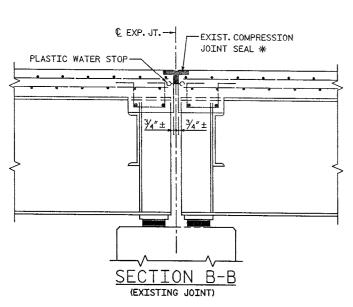


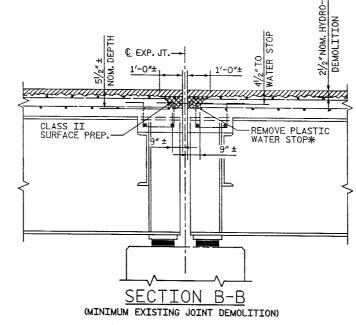
LOCATION	QTY
END BENT 1	21.8 C.F.
BENT 1	29.7 C.F.
BENT 2	29.5 C.F.
END BENT 2	21.2 C.F.
TOTAL ELAST	OMERTO CONC. =

TOTAL ELASTOMERIC CONC. = 3.8 C.Y.

EXISTING MEDIAN BARRIER LIMIT OF SAW CUT IN BARRIER \_\_EVAZOTE JOINT SEAL HEAT SPLICE--ELASTOMERIC CONC.

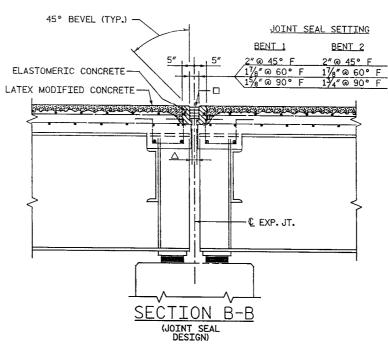
SECTION X-X





NOTE: RETAIN ALL EXIST. REINF. STEEL CLEAN AND REPAIR AS REQ'D

\* REMOVE EXIST. COMP. JT. SEAL MAT'L. AS WELL AS EPOXY MORTOR OR ASPHALT CONC. COMPLETELY FROM JOINT AREA.



☐ USE 2.8125"X 2.50"UNCOMPRESSED EVAZOTE JT. SEAL MATERIAL △ 1"FORMED OPENING

B-5207 PROJECT NO. \_ HAYWOOD \_\_\_ COUNTY STATION:\_

DEPARTMENT OF TRANSPORTATION

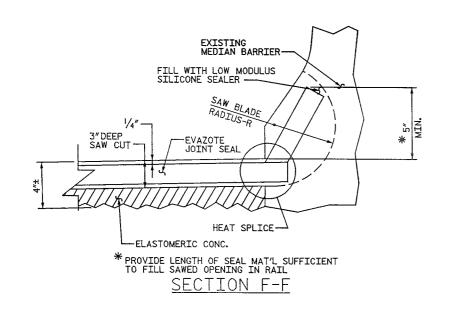
EXPANSION JOINT DETAILS

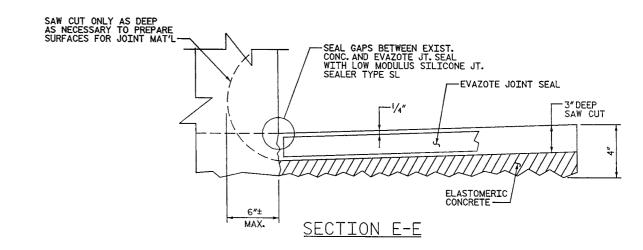
DECK REHAB. FOR BRIDGE NO. 124

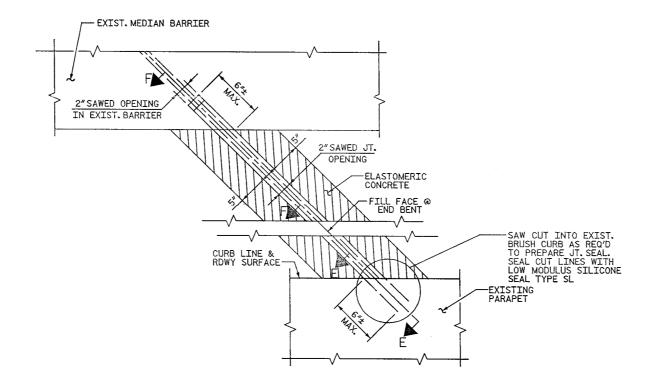
REVISIONS S- 4 BYz DATE: NO. BY: DATE SHEETS 5

Stanten Consulting Services inc. Suite 300, 801 Janes Franklin Road Rodeligh, NC

Stantec DRAWN BY : B. J. ELLIOT DATE : 11-02-09
CHECKED BY : J. T. KELVINGTON DATE : 11-02-09







PARTIAL PLAN @ END BENT #1

(END BENT #2 SIMILAR)

SEE SHT. NO. S-1, DETAIL B, FOR CROSS SECTION THRU JOINT AREA

PROJECT NO. B-5207 HAYWOOD COUNTY STATION:\_

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

END BENT JOINT SEAL DETAILS

DECK REHAB. FOR BRIDGE NO. 124

REVISIONS			SHEET NO.		
	DATE	NO.	BYs	DATEs	S-5
		3			TOTAL
		4			] 5

Stantec DRAWN BY : J. L. HENNEKES DATE : 11-02-09 CHECKED BY : J. T. KELVINGTON DATE : 11-02-09

# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. B-5207 TCP-1

# PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

# HAYWOOD COUNTY

LOCATION: BRIDGE 124 ON I-40 OVER SR 1338 FINES CREEK RD.

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
1110.01	STATIONARY WORK ZONE SIGNS
1145.01	BARRICADES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS

## INDEX OF SHEETS

#### SHEET NO.

TITLE

TCP-1 LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, & INDEX OF SHEETS

TCP-2 GENERAL NOTES, PHASING, VICINITY MAP

TCP 3-3D PHASE I I-40 EASTBOUND DECK PRESERVATION

TCP 4-4C PHASE II I-40 WESTBOUND DECK PRESERVATION

## **LEGEND**

#### **GENERAL**

DIRECTION OF TRAFFIC FLOW

EXISTING PAVEMENT

- 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

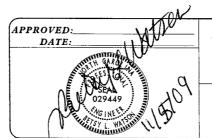
TEMPORARY CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

LAW ENFORCEMENT

FLAGGER



PLAN PREPARED BY:



Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Ralieigh, NC 27606 Tel. 919.851,8866 Fax, 919.851,7024 www.stantec.com

BETSY L. WATSON, PE

TRAFFIC CONTROL ENGINEER GEORGE KARAGEORGE TRAFFIC CONTROL DESIGNER

GENERAL NOTES

PROJECT REFERENCE NO. SHEET NO. B-5207 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.

- A) INTERSTATE 40 THROUGH THE AREA OF THIS PROJECT IS CLOSED TO PUBLIC TRAFFIC DUE TO ROCK SLIDE INCIDENT NEAR THE TENNESSEE BORDER. CONSTRUCTION VEHICLES WILL BE USING I-40 TO ACCESS THE ROCK SLIDE AREA FOR CLEAN-UP. IN ADDITION, LOCAL TRAFFIC WILL BE USING ONE SIDE OF I-40 FOR ACCESS TO EXITS 15 AND 7.
- B) THIS PROJECT IS LET TO CONTRACT SIMULTANEOUSLY WITH OTHER PROJECTS IN THE AREA WHILE I-40 IS CLOSED TO PUBLIC THROUGH TRAVEL.
- C) COORDINATE WITH THE CONTRACTOR(S) OF THE OTHER ONGOING BRIDGE PRESERVATION PROJECTS AND THE CONTRACTOR OF THE ROCK SLIDE CLEAN-UP.
- D) UPON COMPLETION OF THE BRIDGE DECK OVERLAYS REPLACE THE EXISTING PAVEMENT MARKINGS ON I-40 WITH POLYUREA MARKINGS.

TRAFFIC CONTROL PHASING

NOTE: THE CONTRACTOR OF THIS PROJECT WILL BE THE MAJOR TRAFFIC CONTROL COORDINATOR ALONG THE I-40 CORRIDOR BETWEEN EXITS 15 AND 20. IT WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO IMPLEMENT AND MAINTAIN ALL TRAFFIC CONTROL DEVICES RELATED TO THE TWO-LANE, TWO-WAY OPERATION OF I-40 BETWEEN EXITS 15 AND 20.

PHASE I (SEE SHEETS TCP-3, 3A, 3B, 3C, AND 3D)

COORDINATE WITH ADJACENT PROJECT CONTRACTORS AND INSTALL ALL TRAFFIC CONTROL DEVICES AND DIRECT ALL CONSTRUCTION AND LOCAL TRAFFIC TO THE I-40 WESTBOUND SIDE, OPERATING IN A TWO-LANE, TWO-WAY TRAFFIC PATTERN BETWEEN EXITS 15 AND 20. ENSURE THAT NO EB VEHICLES ENTER THE WESTBOUND SIDE OF I-40 UNTIL ALL DEVICES ARE IN PLACE AT BOTH INTERCHANGES 15 AND 20 AND THE STRETCH OF I-40 IN BETWEEN.

WITH I-40 CLOSED TO PUBLIC THROUGH TRAFFIC AND CONSTRUCTION/LOCAL TRAFFIC USING I-40 WESTBOUND SIDE, CONSTRUCT BRIDGE #124 DECK PRESERVATION ON THE I-40 EASTBOUND SIDE.

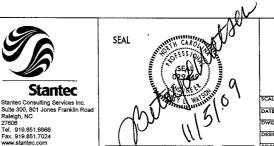
UPON COMPLETION OF BRIDGE #124 DECK PRESERVATION ON THE EASTBOUND SIDE OF I-40, COORDINATE WITH THE ADJACENT PROJECT CONTRACTORS OF BRIDGE NO.S 142 AND 171. ENSURE THE 1-40 EASTBOUND DECK PRESERVATION FOR ALL THREE BRIDGES #124, #142 AND #171 IS COMPLETE BEFORE BEGINNING THE I-40 WESTBOUND SIDE IN PHASE II.

PHASE II (SEE SHEET TCP-4, 4A, 4B, AND 4C)

UPON COMPLETION OF THE DECK PRESERVATION FOR THE I-40 EASTBOUND SIDE FOR BRIDGE NO.S 124, 142 AND 171, COORDINATE WITH OTHER CONTRACTORS INCLUDING THE ROCK SLIDE CONTRACTOR AND SWITCH CONSTRUCTION/LOCAL TRAFFIC TO THE I-40 EASTBOUND SIDE OPERATING IN A TWO-LANE, TWO-WAY TRAFFIC PATTERN BETWEEN EXITS 15 AND 20. ENSURE THAT NO EB VEHICLES ENTER THE WB LANES OF I-40 ONCE REMOVAL OF DEVICES HAS BEGUN ON THE WB SIDE. ENSURE THAT NO WB VEHICLES ENTER THE EB LANES OF I-40 UNTIL ALL DEVICES ARE IN PLACE.

CONSTRUCT BRIDGE #124 DECK PRESERVATION ON THE I-40 WESTBOUND SIDE.

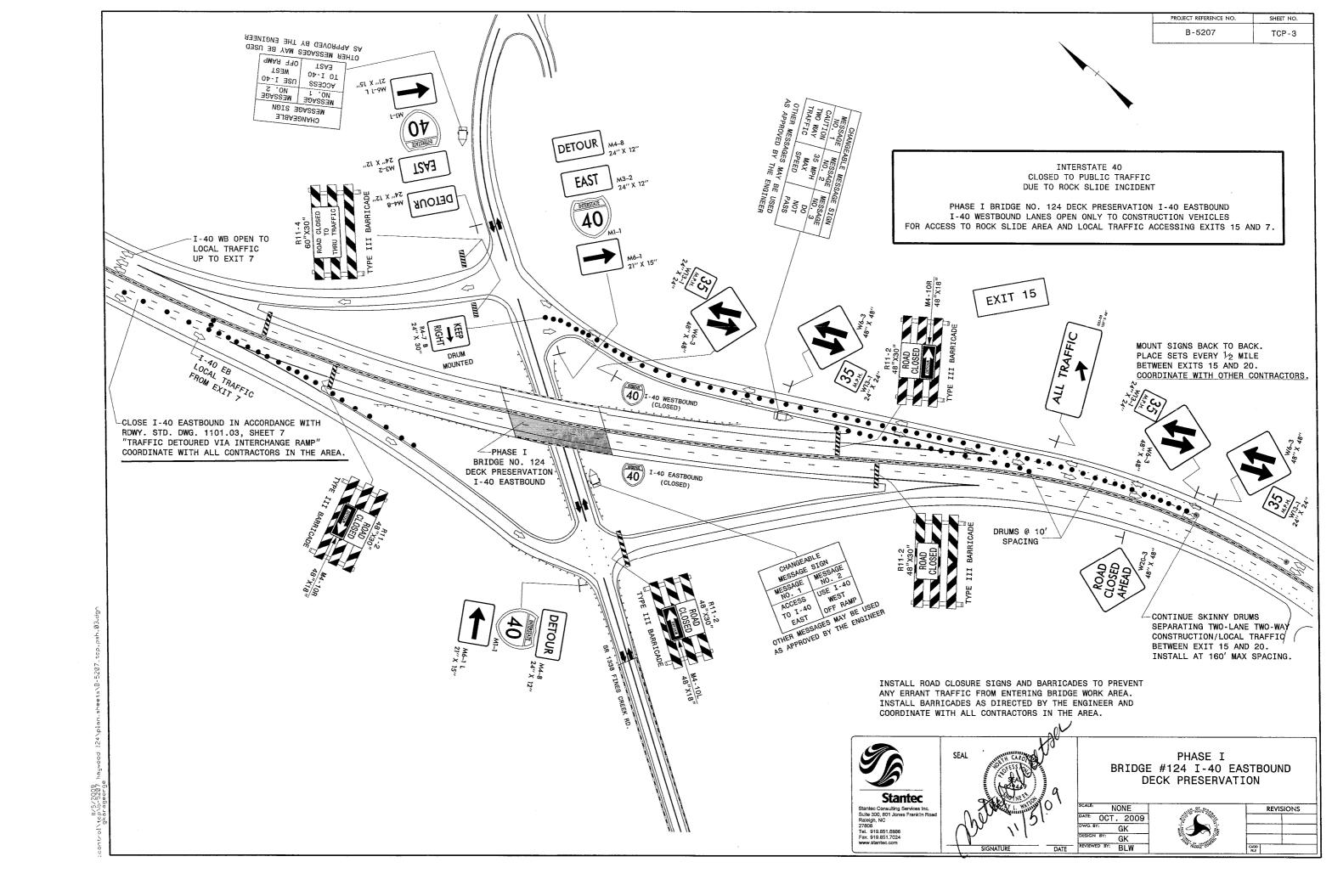
UPON COMPLETION OF BRIDGE #124 DECK PRESERVATION ON THE WESTBOUND SIDE OF I-40, COORDINATE WITH THE ADJACENT PROJECT CONTRACTORS. UPON COMPLETION OF THE BRIDGE DECK PRESERVATIONS FOR ALL THREE BRIDGES NO.S 124, 142, AND 171, REMOVE DEVICES IN ORDER TO ELIMINATE THE TWO-WAY, TWO-LANE TRAFFIC CONDITION BETWEEN EXITS 15 AND 20. COORDINATE WITH NCDOT AND ROCKSLIDE CONTRACTOR TO ENSURE THAT PROPER DEVICES ARE CONTINUALLY IN PLACE ON WB ON-RAMPS AT INTERCHANGES 15 AND 20 TO LIMIT ENTERING VEHICLES TO CONSTRUCTION AND LOCAL TRAFFIC

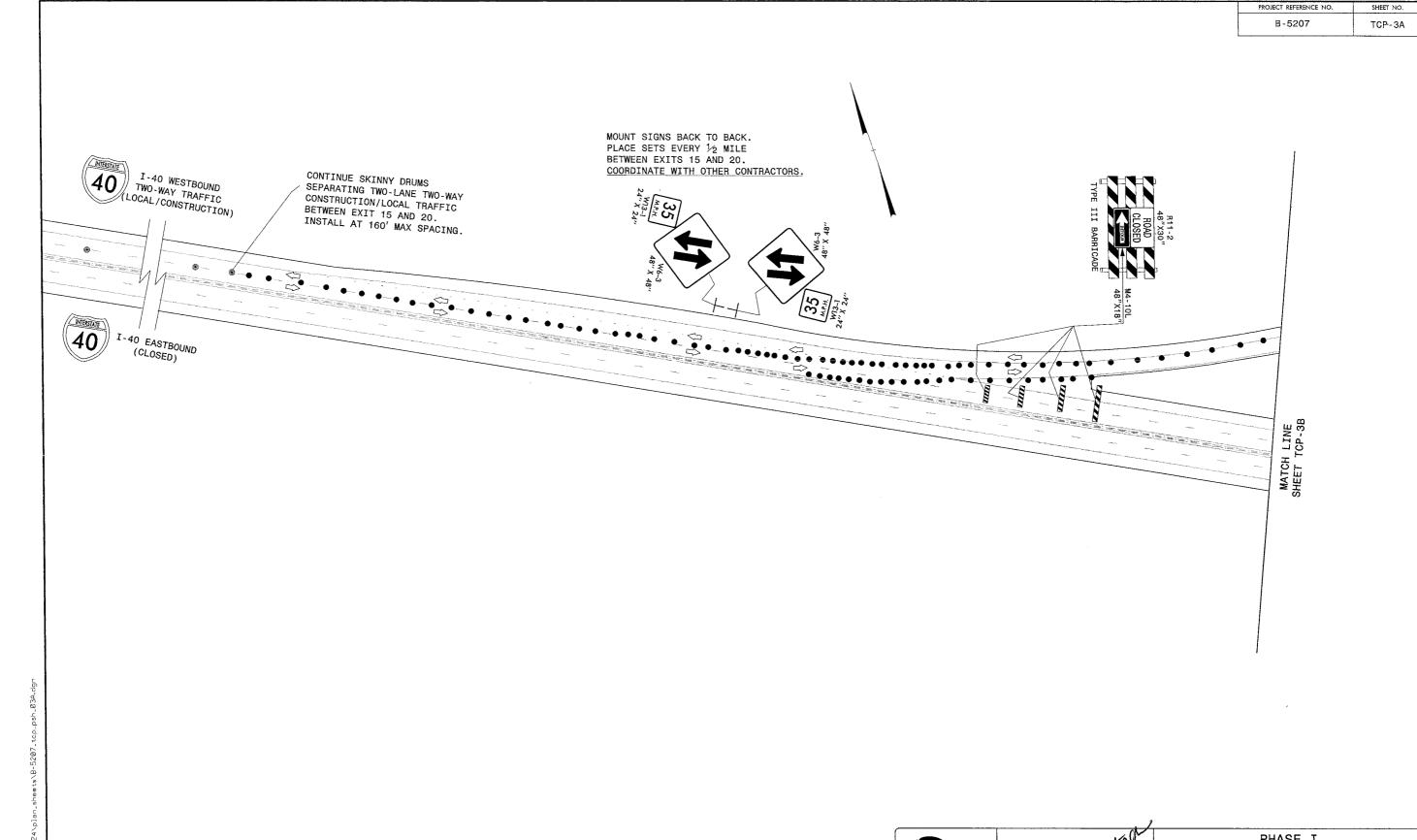


#### **GENERAL NOTES** TRAFFIC CONTROL PHASING

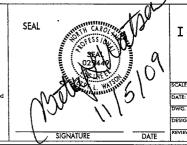
NONE OCT. 2009 DWG. BY GK DESIGN BY: GK

REVISIONS





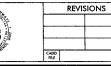


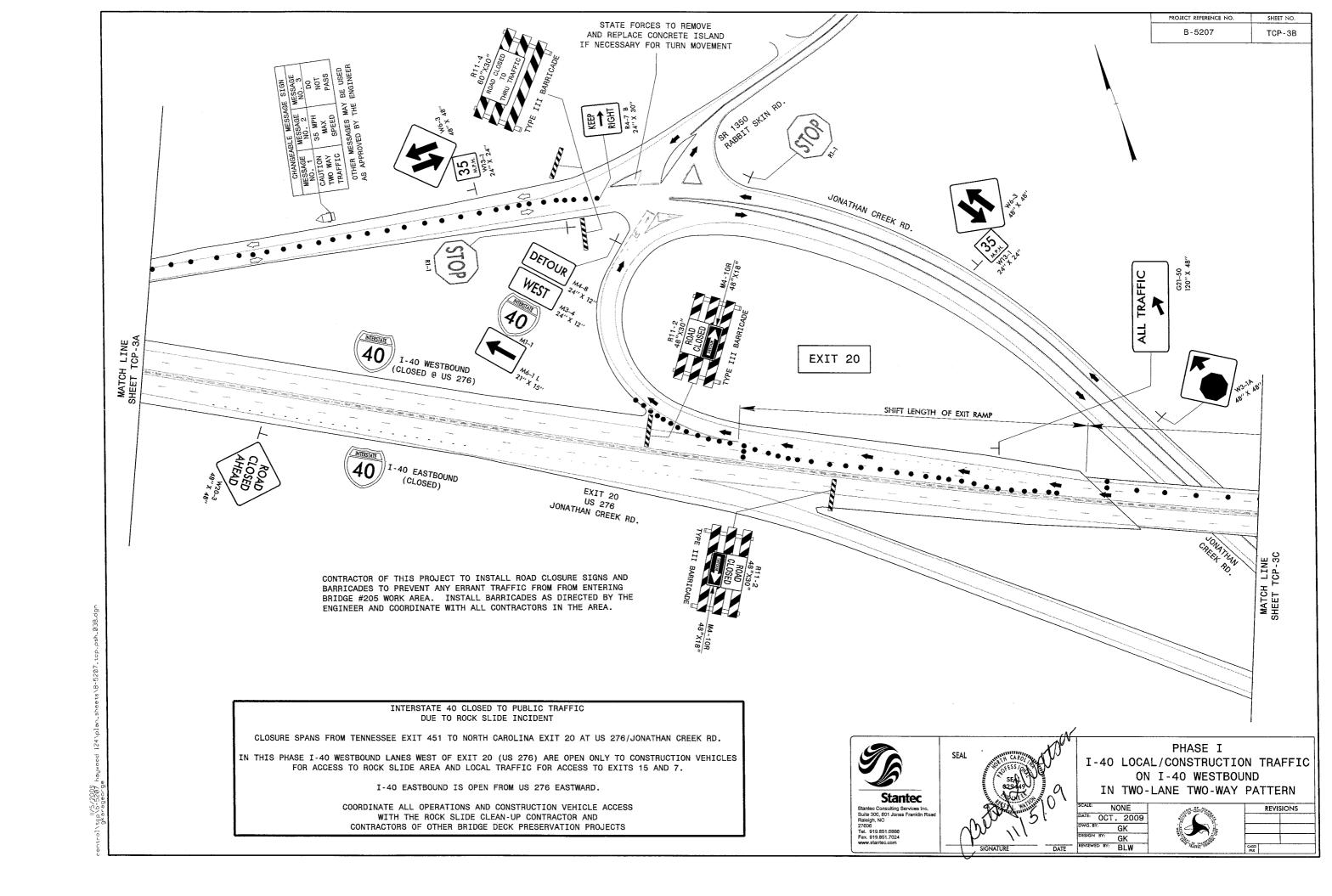


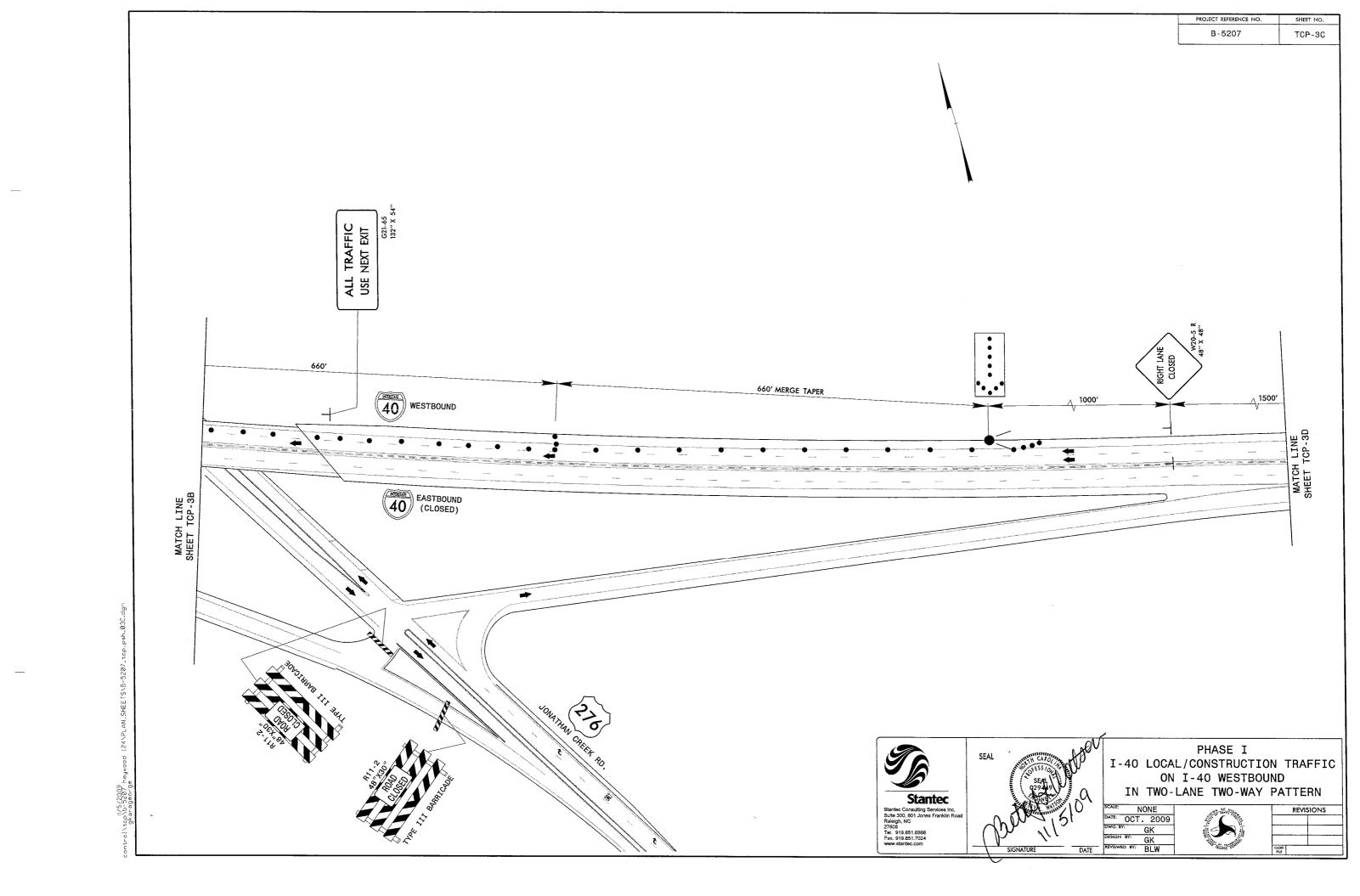
i	PHASE 1
	I-40 LOCAL/CONSTRUCTION TRAFFIC
	ON I-40 WESTBOUND
	IN TWO-LANE TWO-WAY PATTERN

SCALE:	NO	NE	
DATE:		2009	
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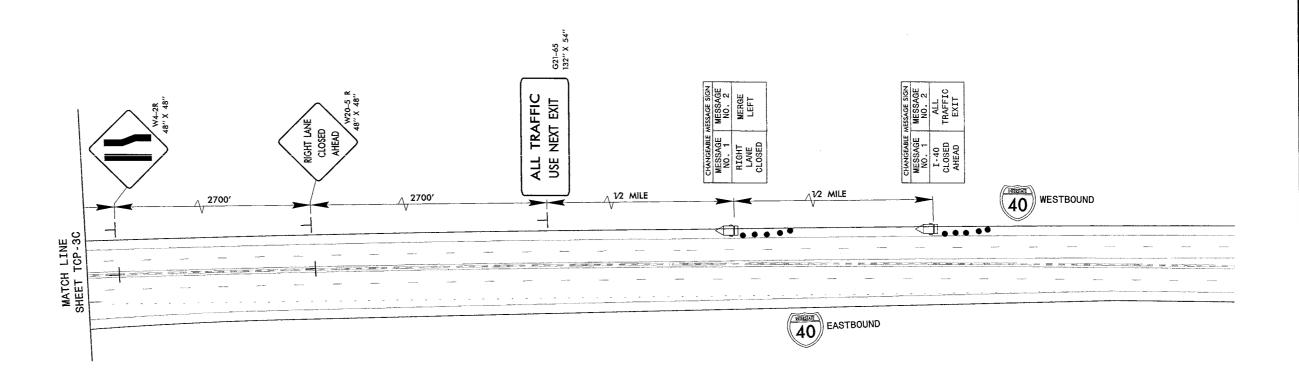




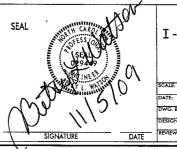


PROJECT REFERENCE NO. SHEET NO.

B - 5207 TCP - 3D





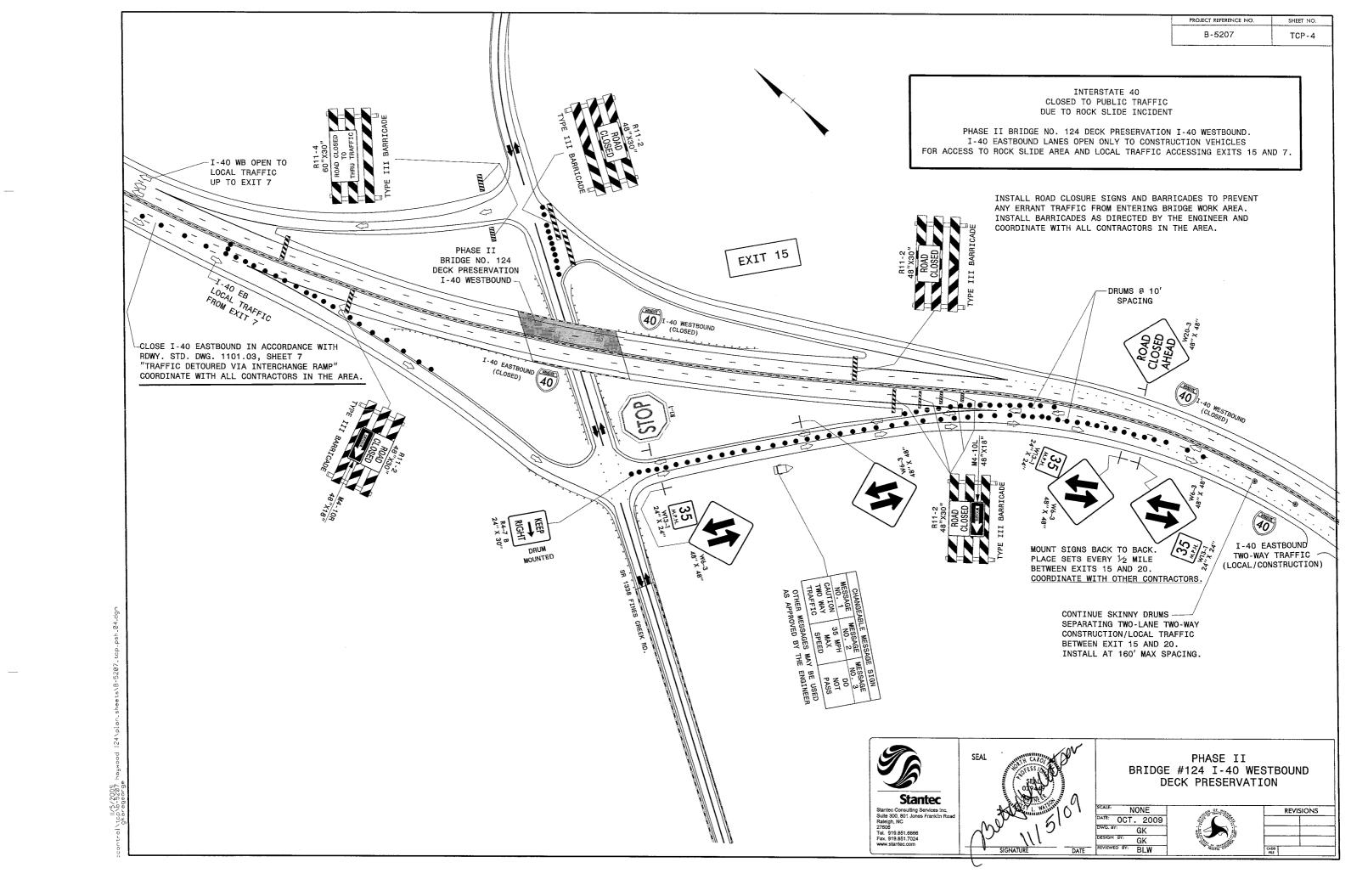


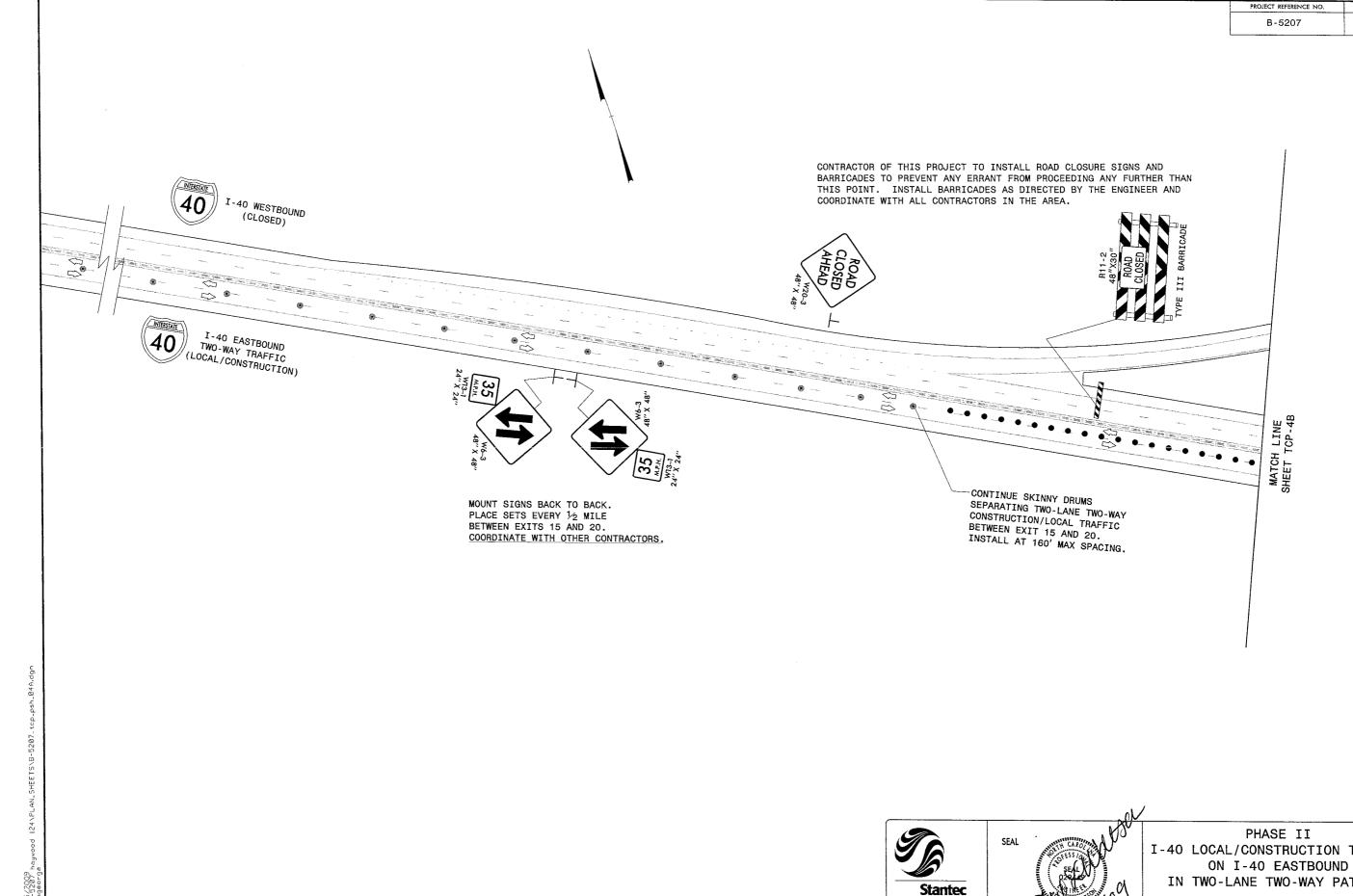
# PHASE I I-40 LOCAL/CONSTRUCTION TRAFFIC ON I-40 WESTBOUND IN TWO-LANE TWO-WAY PATTERN

CALE:	NONE	Γ
	CT. 2009	
WG. BY:	GK	
ESIGN B	"GK	
EVIEWED	BY: BLW	



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Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Re Releigh, NC 27606 Tel. 918.851.8866 Fax. 918.851.7024 www.stantec.com

I-40 LOCAL/CONSTRUCTION TRAFFIC IN TWO-LANE TWO-WAY PATTERN

SCALE:	NONE		
	Г. 2009		
DWG. BY:	GK		
DESIGN BY:	GK		
REVIEWED BY:	BLW		





SHEET NO.

TCP-4A

