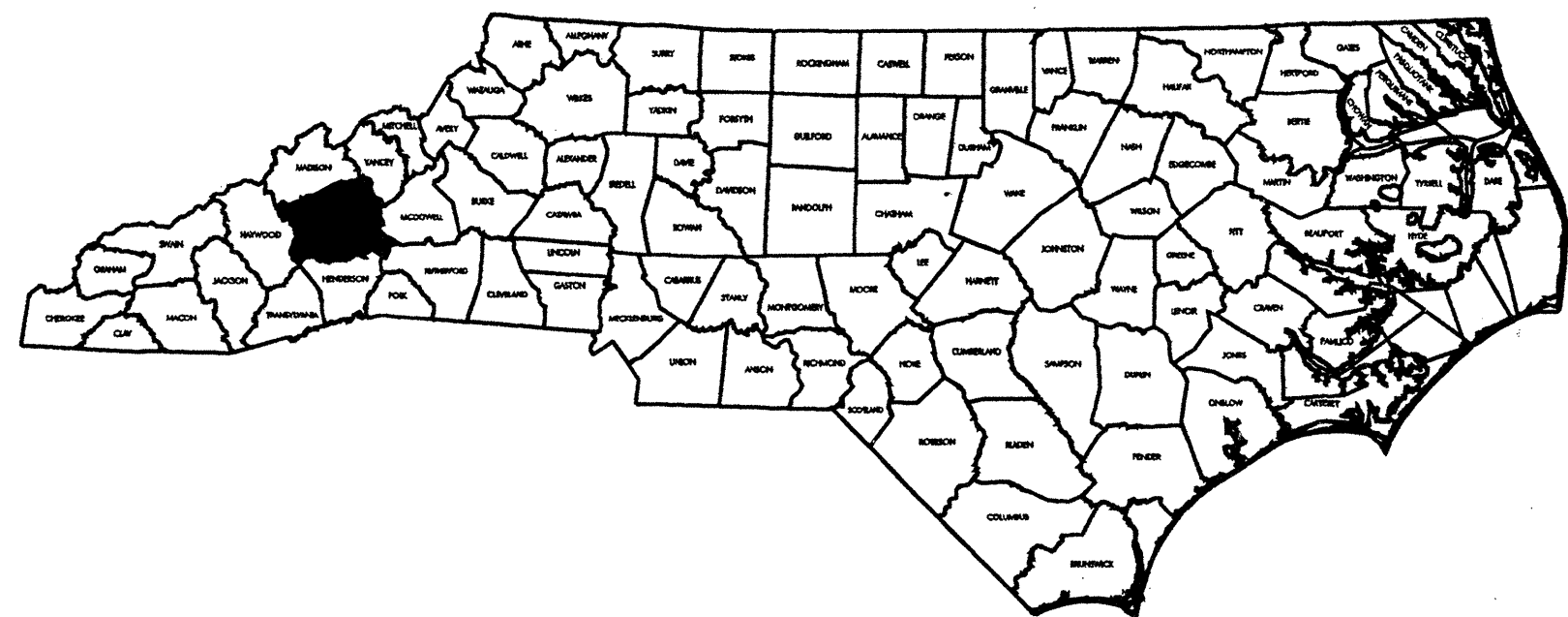


CONTRACT NO: C202473 TIP PROJECT: B-5179B

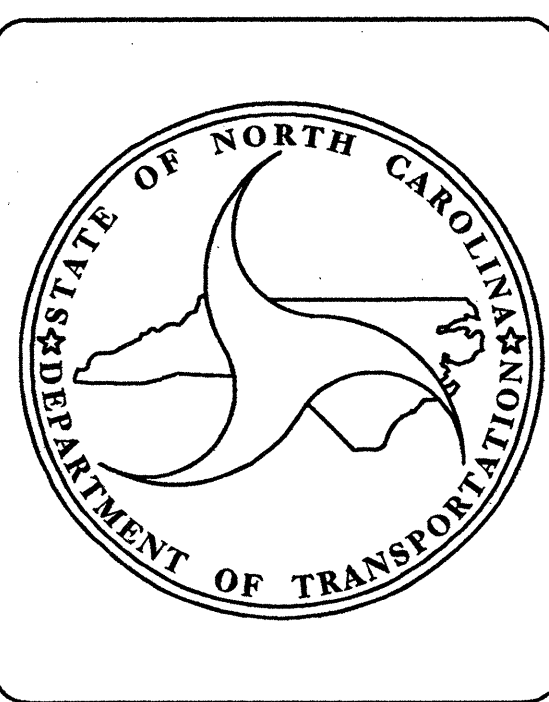
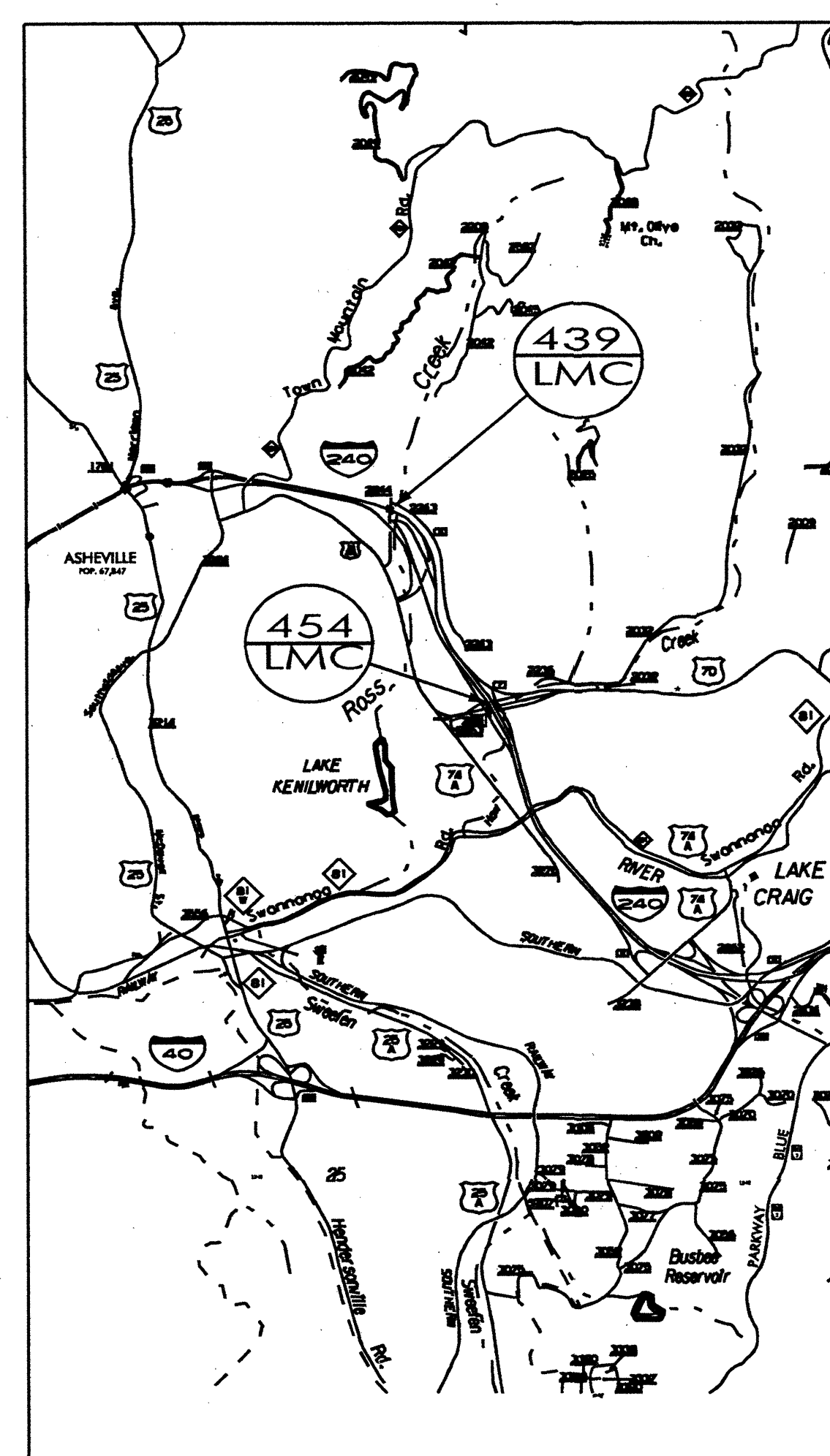
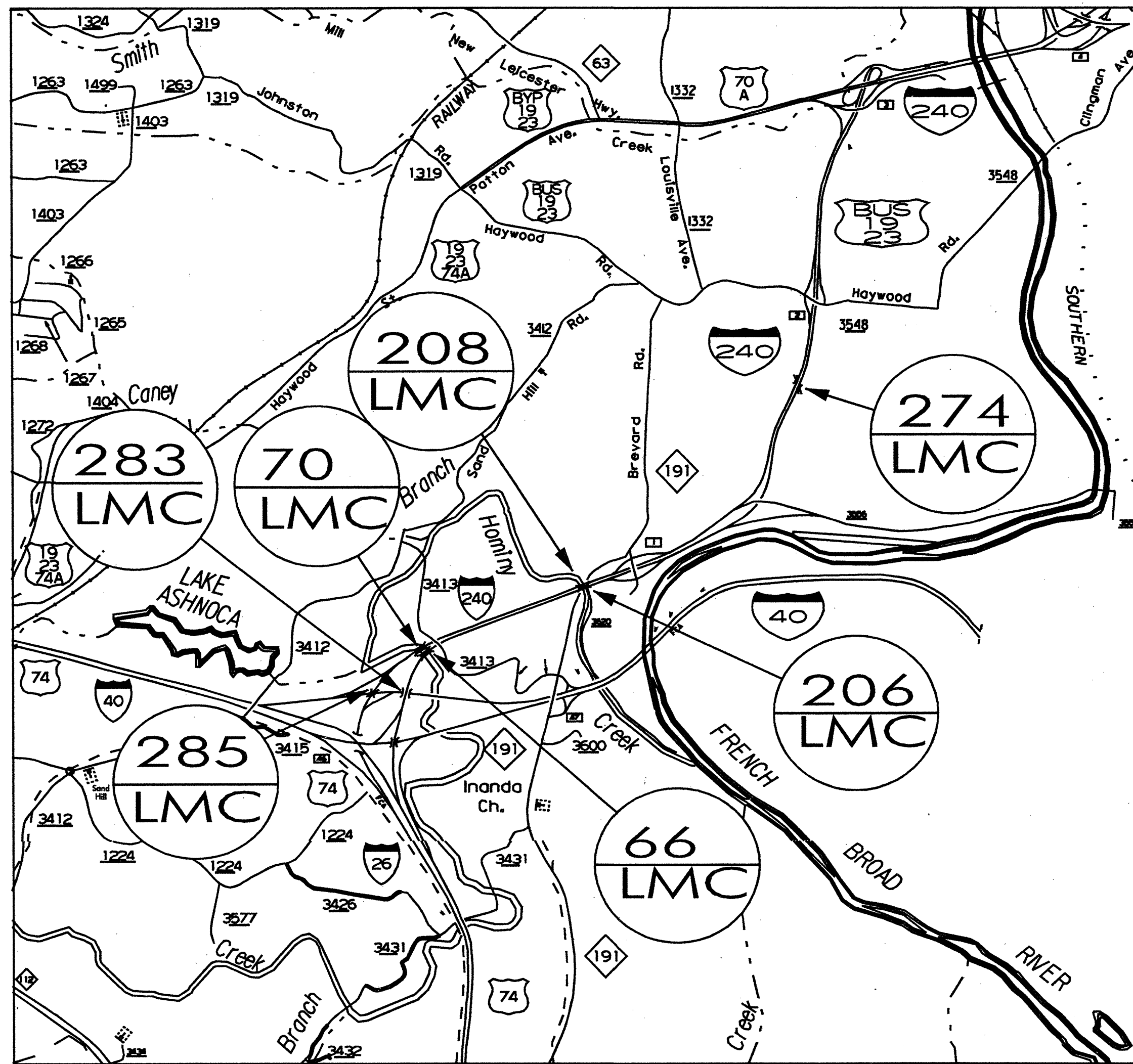


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
BUNCOMBE COUNTY

LOCATION: I-240
TYPE OF WORK: BRIDGE DECK PRESERVATION
OF BRIDGE #66, 70, 206, 208, 274, 283, 285, 439 AND #454
IN BUNCOMBE COUNTY.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5179B	1	
STATE PROJECT NO.	F.A. PROJ. NO.	DESCRIPTION	
45066.1ST1	STM-0005 (531)	PE	
45066.3ST2	STM-0005 (694)	CONSTR	

KEY: HYDRO DEMOLITION WITH LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.



PROJECT LENGTH

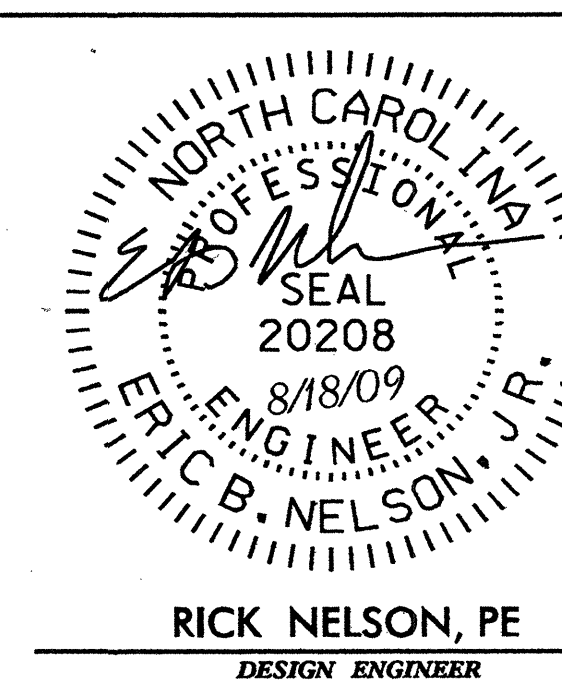
Prepared in the Office of:
BRIDGE MANAGEMENT UNIT
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

LETTING DATE:
DECEMBER 15, 2009

DAN HOLDERMAN, PE
STATE BRIDGE
MANAGEMENT ENGINEER

MIKE SUMMERS
BRIDGE MANAGEMENT
PROJECT MANAGER



RICK NELSON, PE
DESIGN ENGINEER

\$DATE\$
\$FILE\$

CONTRACT NO: **TIP PROJECT: B-5179B**

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

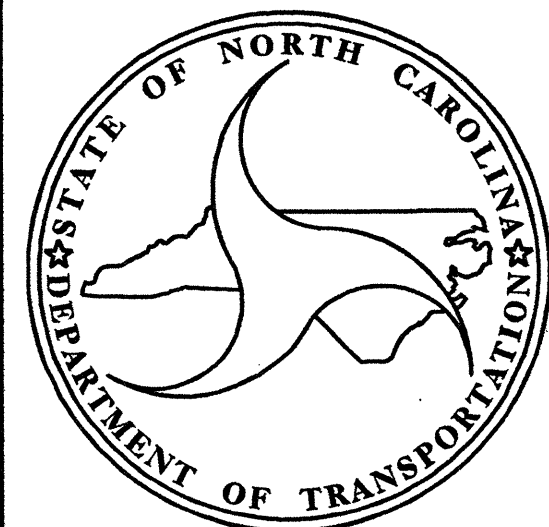
BUNCOMBE COUNTY

LOCATION: I-240
 TYPE OF WORK: BRIDGE DECK PRESERVATION
 OF BRIDGE #66, 70, 206, 208, 274, 283, 285, 439 AND #454
 IN BUNCOMBE COUNTY.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-5179B	1	1A
STATE PROJECT NO.	F.A. PROJ. NO.	DESCRIPTION	
45066.1.ST1	STM-0005 (531)	PE	
45066.3.ST2	STM-0005 (694)	CONSTR	

INDEX OF SHEETS

1	TITLE SHEET
1A	INDEX OF SHEET
2	SUMMARY OF QUANTITIES
S1 THRU S28	STRUCTURE PLANS
TCP-1 THRU TCP-11	TRAFFIC CONTROL PLANS



Prepared in the Office of:

BRIDGE MANAGEMENT UNIT
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2006 STANDARD SPECIFICATIONS

<p style="text-align: center; font-size: small;">LETTING DATE:</p> <p style="text-align: center;">December 15, 2009</p>	<p style="text-align: center;">DAN HOLDERMAN, PE</p> <p style="text-align: center; font-size: x-small;">STATE BRIDGE MANAGEMENT ENGINEER</p>
-------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------

MIKE SUMMERS
 BRIDGE MANAGEMENT
 PROJECT MANAGER

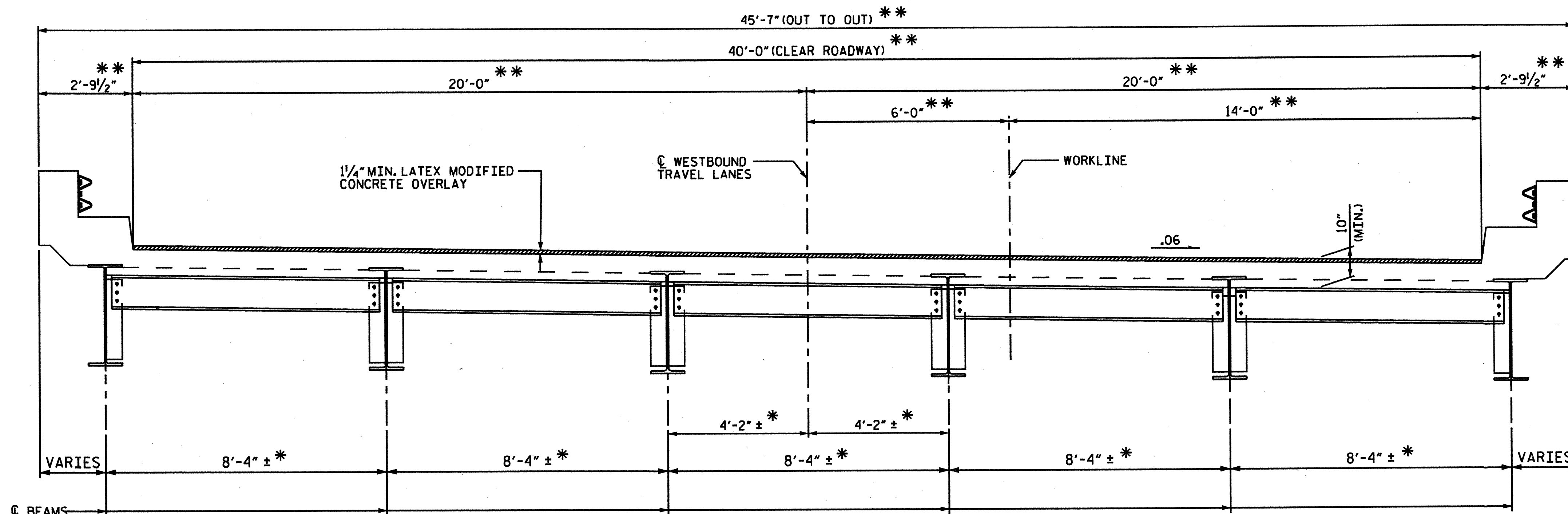
RICK NELSON, PE
 DESIGN ENGINEER

SUMMARY OF QUANTITIES

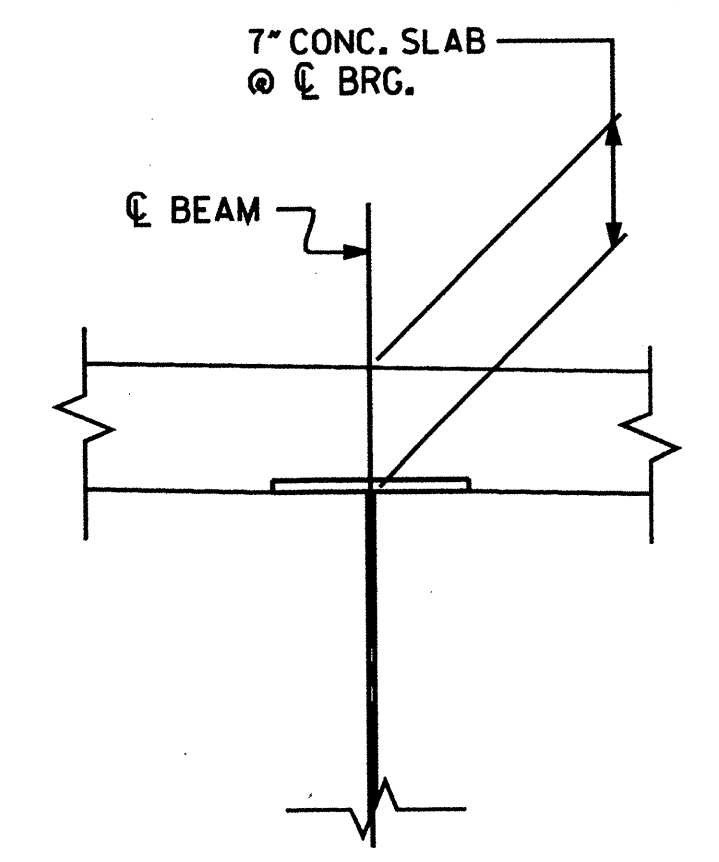
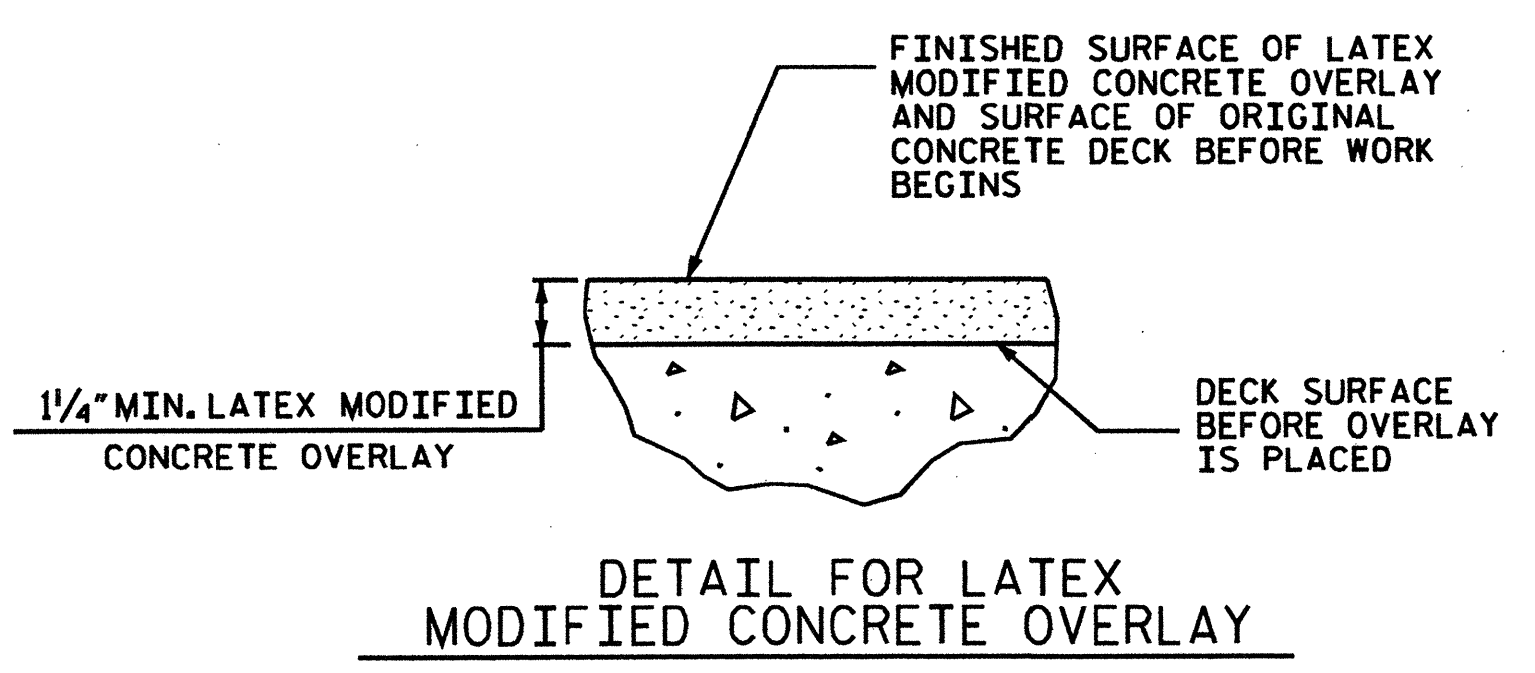
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C202473

ItemNumber	Sec #	Quantity	Unit	Description
0000100000-N	800	Lump Sum		MOBILIZATION
4400000000-E	1110	1,337	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	240	SF	WORK ZONE SIGNS (PORTABLE)
4410000000-E	1110	347	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4415000000-N	1115	6	EA	FLASHING ARROW PANELS, TYPE C
4420000000-N	1120	20	EA	CHANGEABLE MESSAGE SIGN
4430000000-N	1130	800	EA	DRUMS
4435000000-N	1135	100	EA	CONES
4445000000-E	1145	1,032	LF	BARRICADES (TYPE III)
4455000000-N	1150	4	MD	FLAGGER
4465000000-N	1160	2	EA	TEMPORARY CRASH CUSHIONS
4470000000-N	1160	2	EA	RESET TEMPORARY CRASH CUSHIONS
4480000000-N	1165	8	EA	TMIA
4485000000-E	1170	1,500	LF	PORTABLE CONCRETE BARRIER
4500000000-E	1170	1,500	LF	RESET PORTABLE CONCRETE BARRIER
4510000000-N	SP	864	HR	LAW ENFORCEMENT
4810000000-E	1205	16,013	LF	PAINT PAVEMENT MARKING LINES (4")
4820000000-E	1205	800	LF	PAINT PAVEMENT MARKING LINES (8")

ItemNumber	Sec #	Quantity	Unit	Description
4905000000-N	1253	58	EA	SNOWPLOWABLE PAVEMENT MARKERS
8161000000-E	420	70,505	SF	GROOVING BRIDGE FLOORS
8692000000-N	SP	Lump Sum		EVAZOTE JOINT SEALS
8881000000-E	SP	14	CY	GENERIC STRUCTURE ITEM CLASS AA CONCRETE
8881000000-E	SP	702	CY	GENERIC STRUCTURE ITEM LATEX MOD CONCRETE OVERLAY - VERY EARLY STRENGTH
8892000000-E	SP	909	SF	GENERIC STRUCTURE ITEM UNDER DECK CONTAINMENT
8893000000-E	SP	10,090	SY	GENERIC STRUCTURE ITEM HYDRO-DEMOLITION OF BRIDGE DECK
8893000000-E	SP	10,090	SY	GENERIC STRUCTURE ITEM PLACING & FINISHING LATEX MOD CONCRETE OVERLAY - VERY EARLY STRENGTH
8893000000-E	SP	10,090	SY	GENERIC STRUCTURE ITEM SCARIFYING BRIDGE DECK



TYP. SECTION
 (SHOWING DIAPHRAGMS AT EXPANSION JOINTS)
 * ALONG THE SKEW AT END BENTS
 ** RADIAL DIMENSIONS



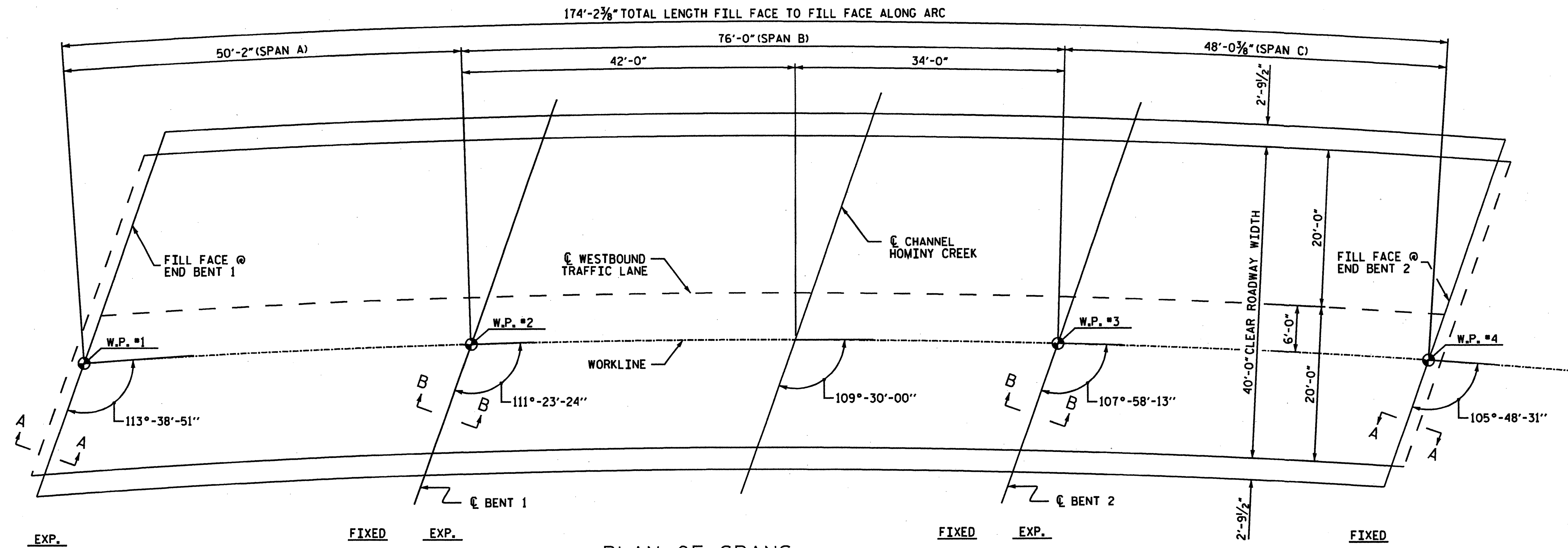
EXIST. SLAB SECTION

- NOTES:**
- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
 - THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE HYDRO-DEMOLITION OF BRIDGE DECK SPECIAL PROVISION.
 - 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
 - THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
 - FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
 - LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
 - FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
 - THE BRIDGE DECK SHALL BE TINED. NO SEPARATE PAYMENT SHALL BE MADE FOR BRIDGE DECK TINING AS THIS IS CONSIDERED INCIDENTAL TO THE PAY ITEM FOR "PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH".
 - FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 - FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

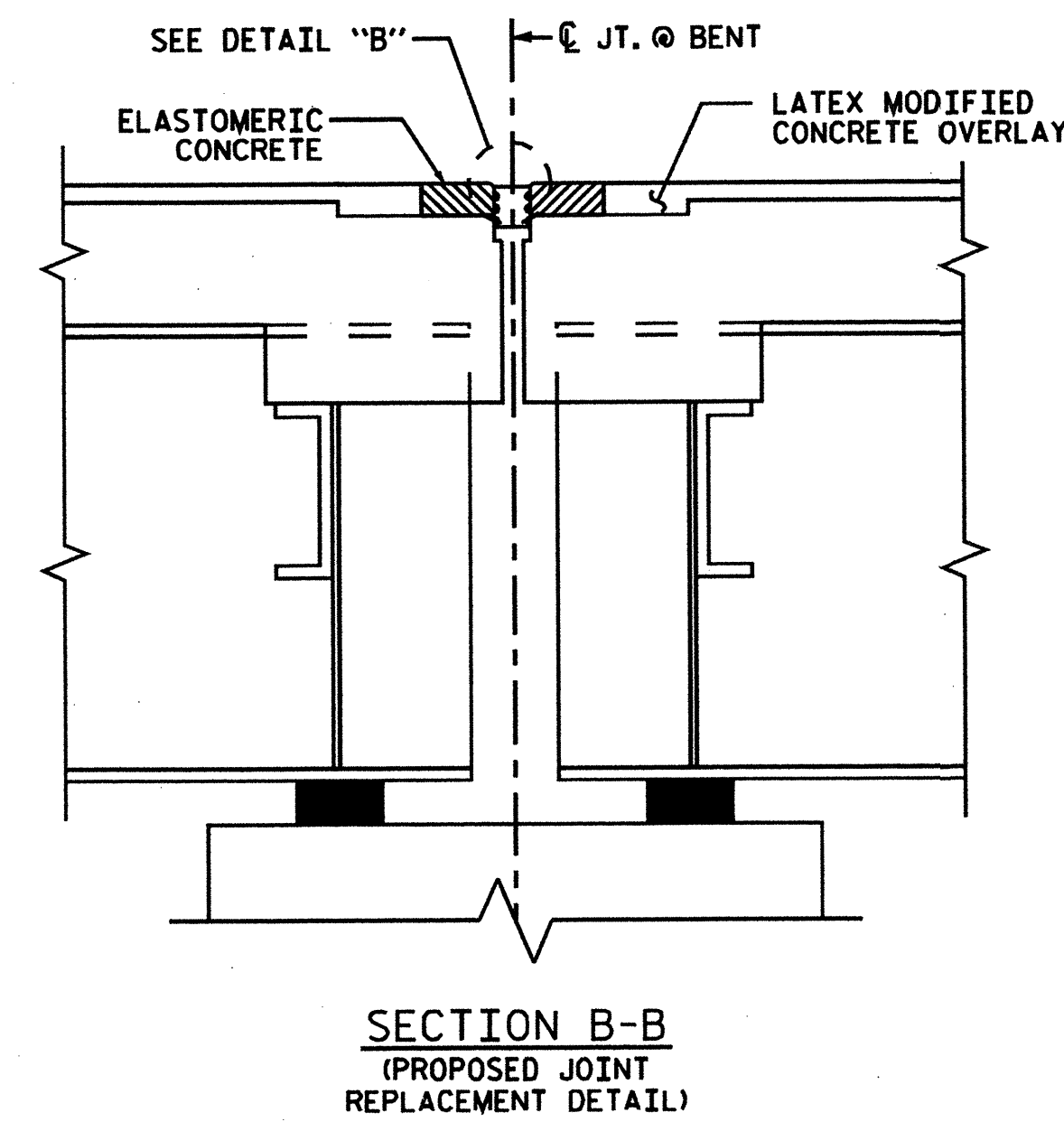
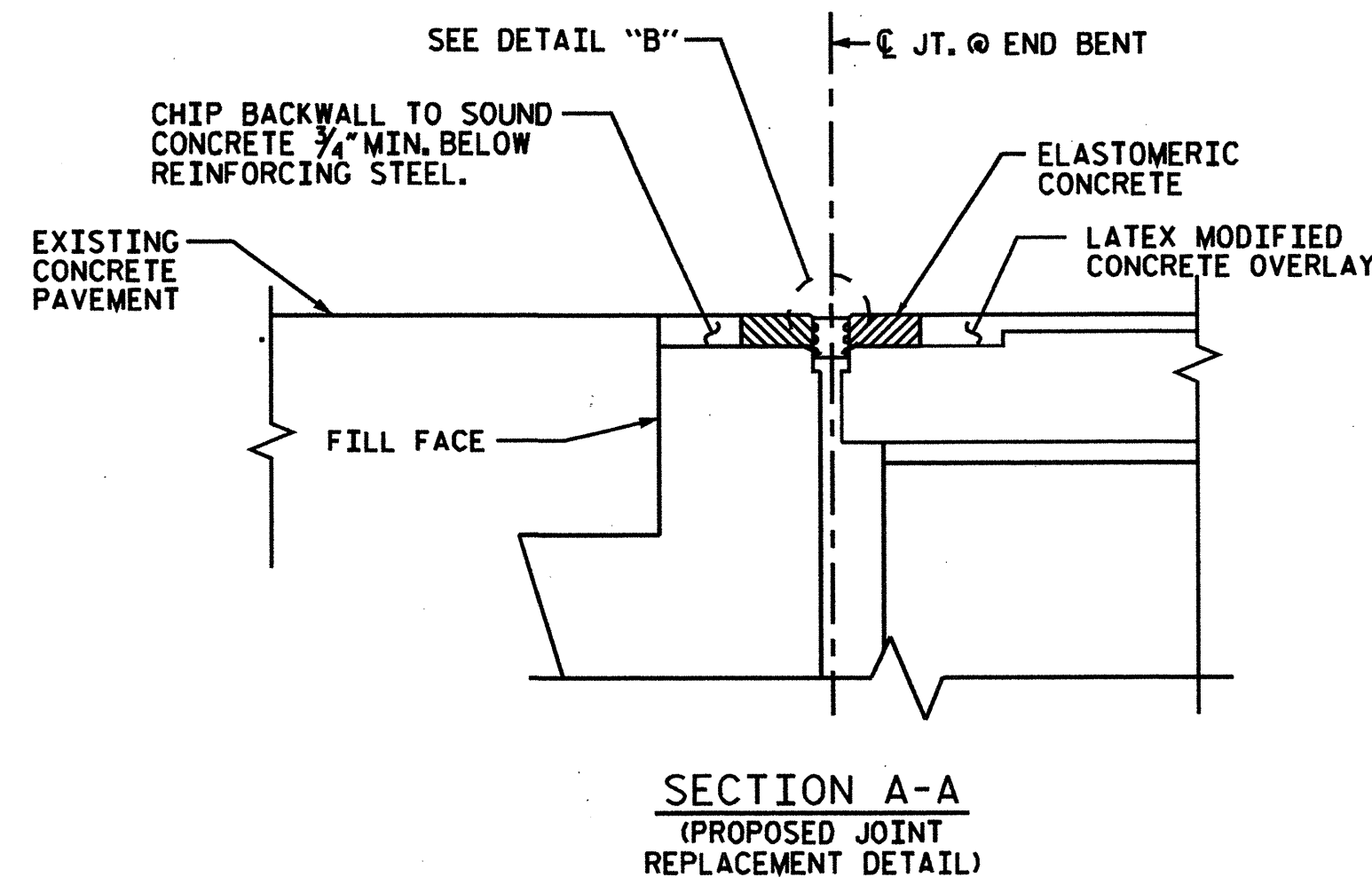
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 623+09.00 -L-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 66					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
SHEET NO.					S-1.
TOTAL SHEETS					28

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



PLAN OF SPANS



PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 623+09.00 -L-

SHEET 1 OF 2

TOTAL BILL OF MATERIAL									
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM
775	527	242	6	54	775	1	54	775	LUMP SUM

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

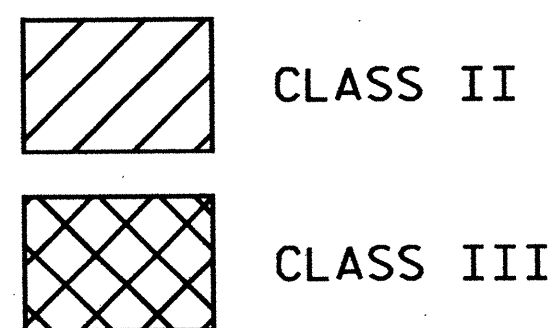
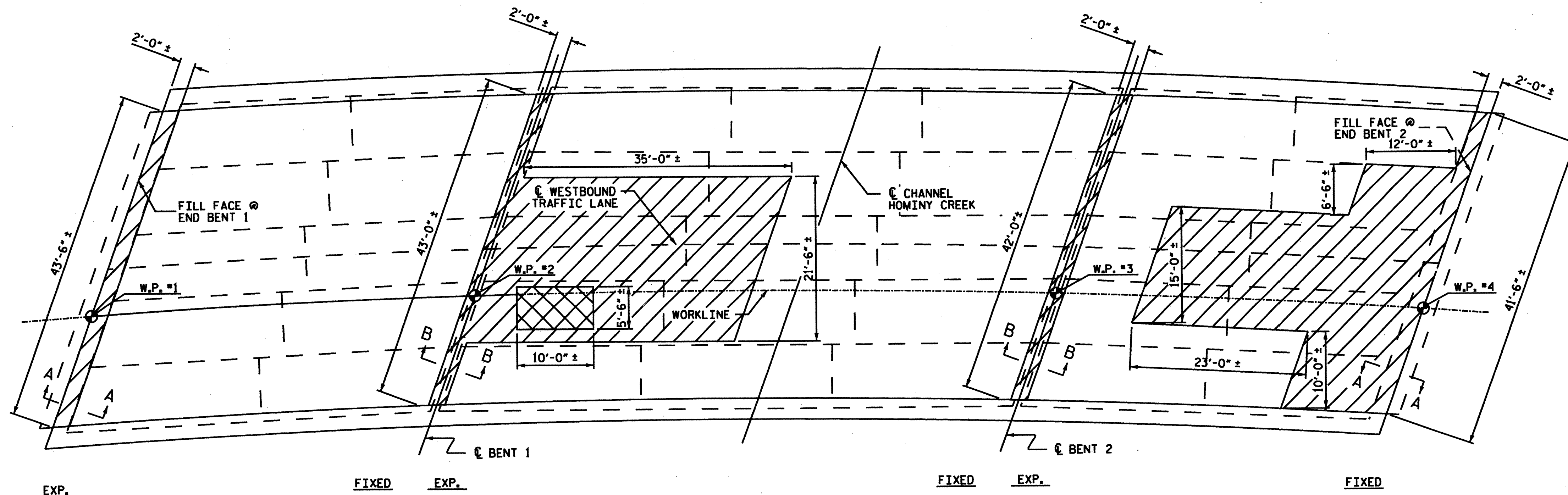
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

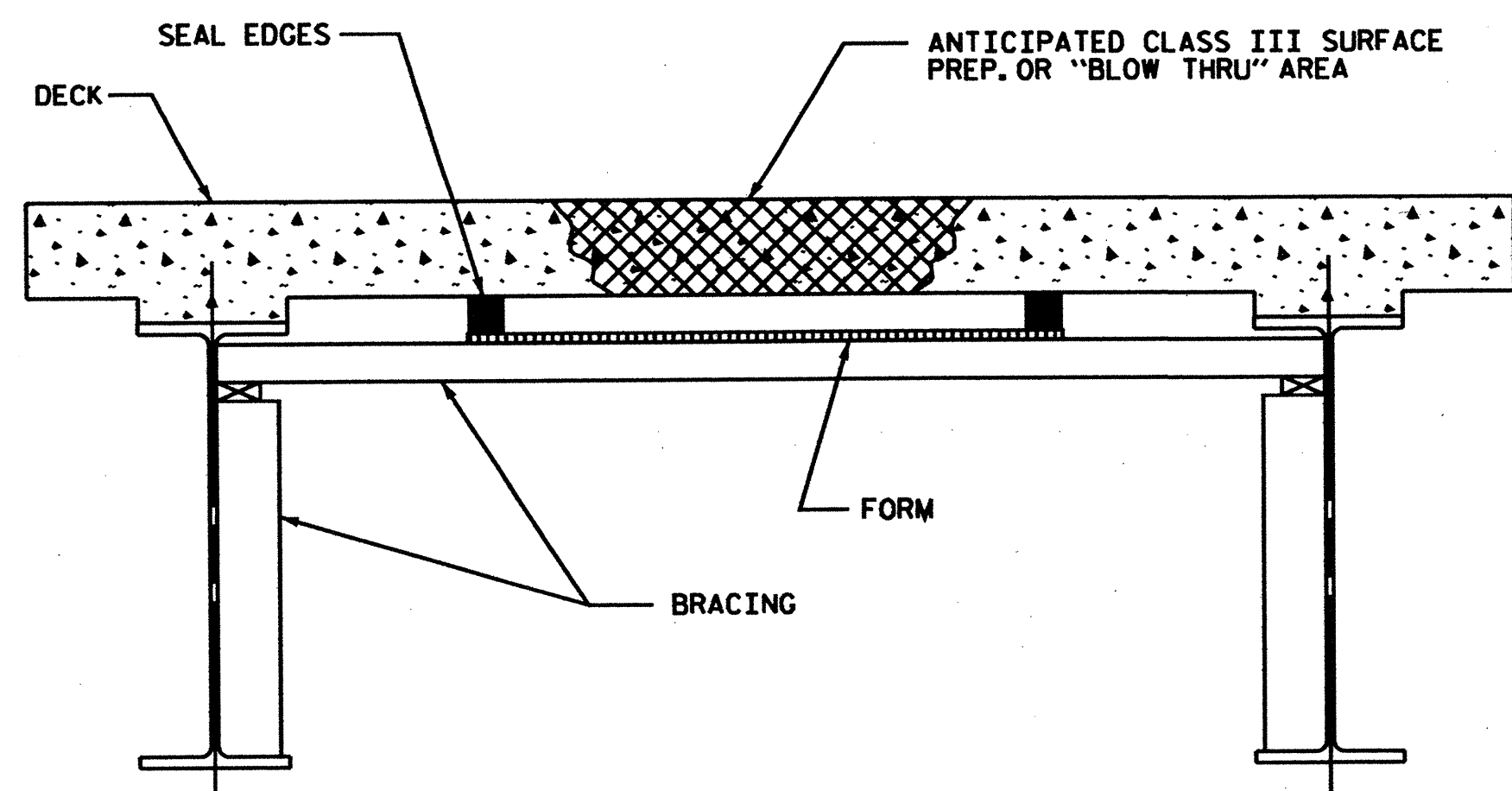
PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 66

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-2
1			3			TOTAL SHEETS 28
2			4			



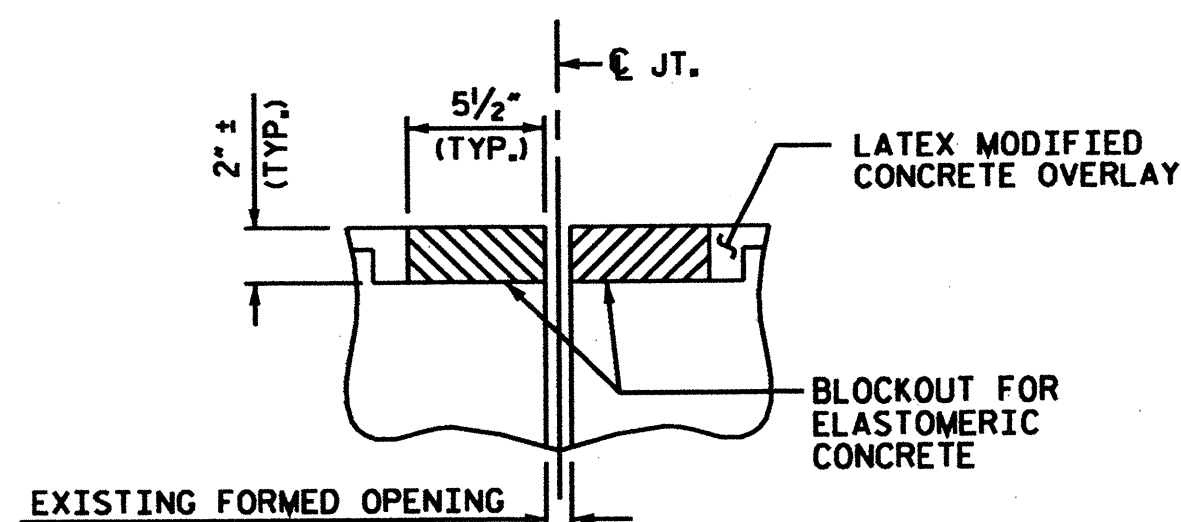
PLAN OF SPANS - DECK REPAIRS



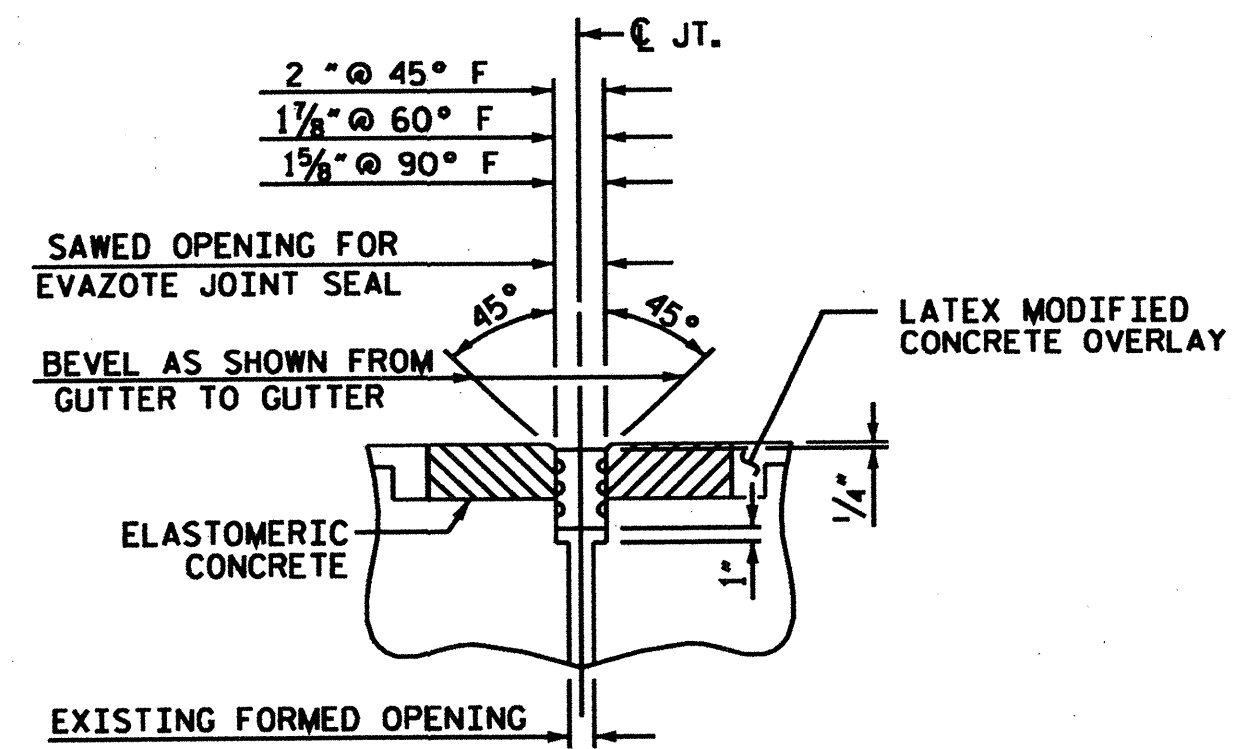
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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.

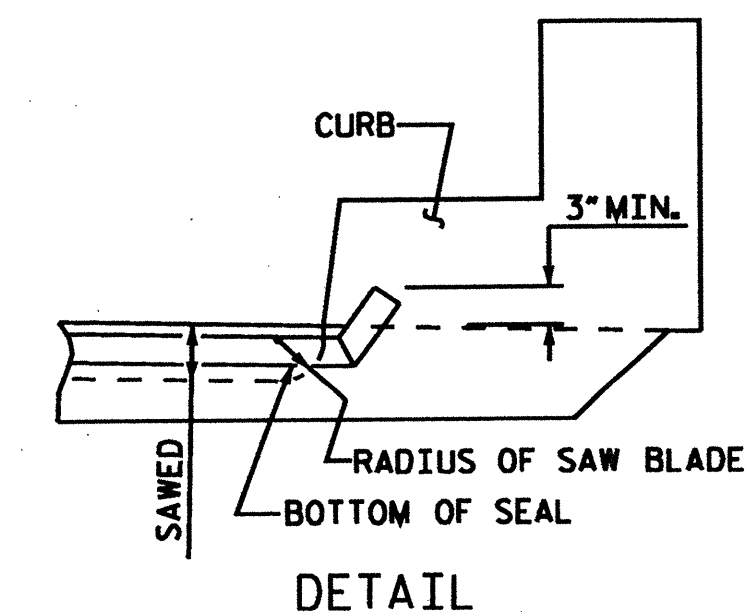


DETAIL B
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)



DETAIL B
EVAZOTE JOINT SEAL
(EXPANSION)

NOTE:
FOR FIXED JOINT, SAW CUT
WIDTH SHALL BE 1 1/4" AND
CENTERED ABOUT THE JOINT.



PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 623+09.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

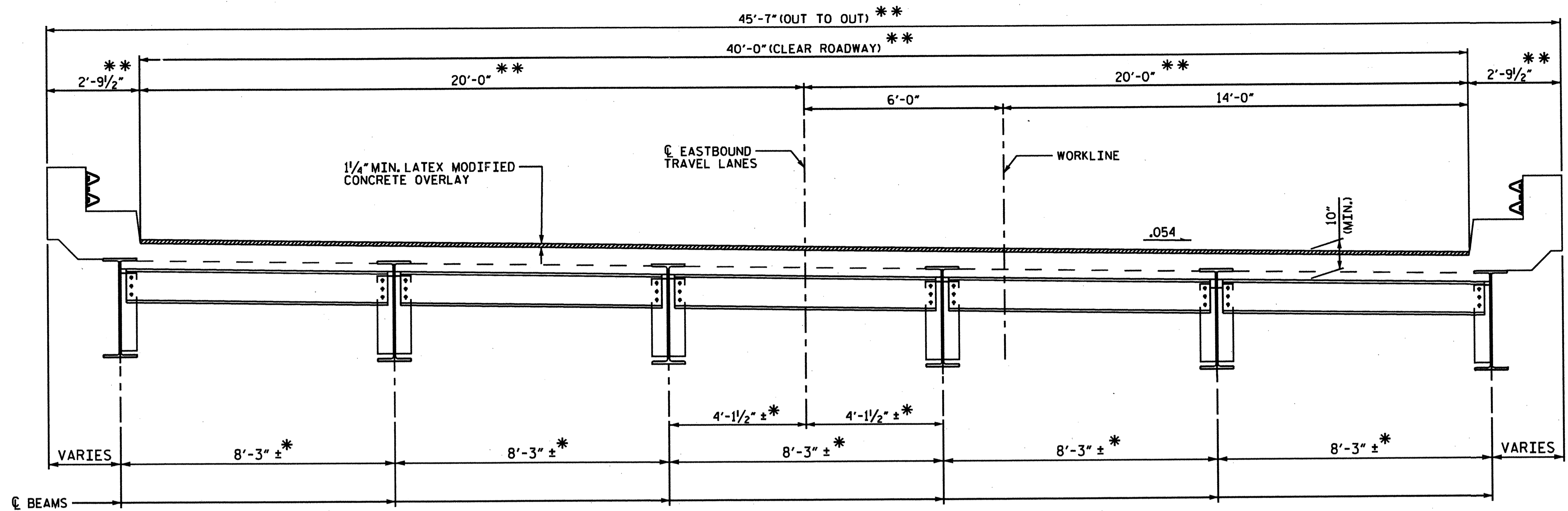
DECK REHAB. FOR BRIDGE NO. 66

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	6.5
BENT 1	6.5
BENT 2	6.5
E.B. 2	6.5
TOTAL	26.0

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-3
1			3			TOTAL SHEETS 28
2			4			

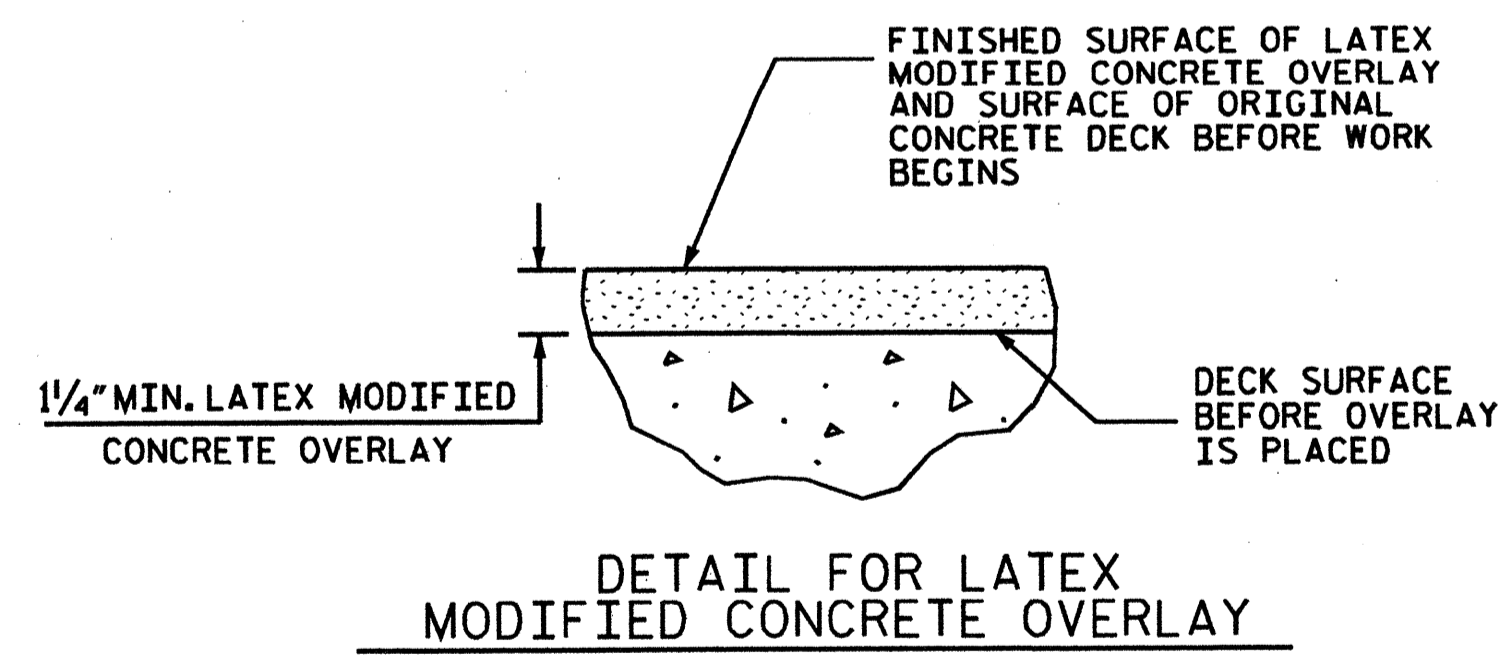
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



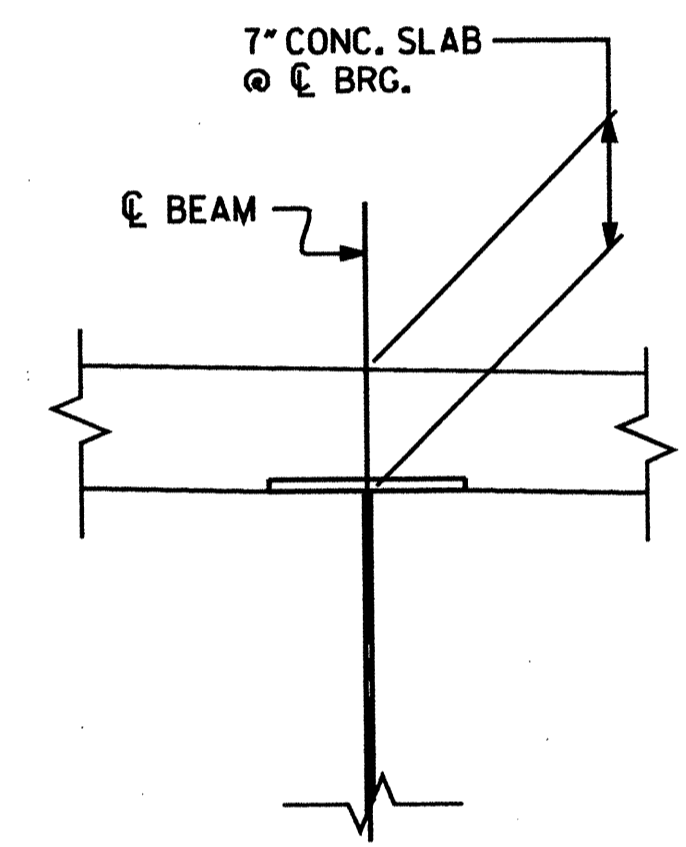
TYP. SECTION

(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)

- * ALONG THE SKEW AT END BENTS
- ** RADIAL DIMENSIONS



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY



EXIST. SLAB SECTION

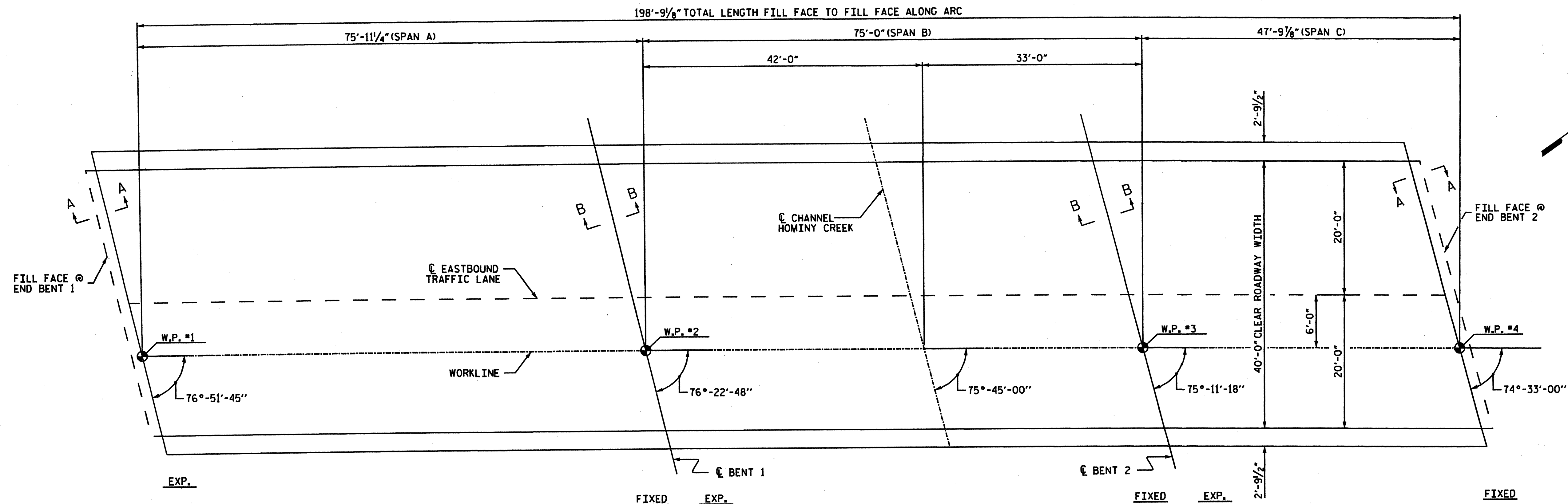
NOTES:

- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE HYDRO-DEMOLITION OF BRIDGE DECK SPECIAL PROVISION.
- 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2, FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
- LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
- FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- THE BRIDGE DECK SHALL BE TINED, NO SEPARATE PAYMENT SHALL BE MADE FOR BRIDGE DECK TINDING AS THIS IS CONSIDERED INCIDENTAL TO THE PAY ITEM FOR "PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH".
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

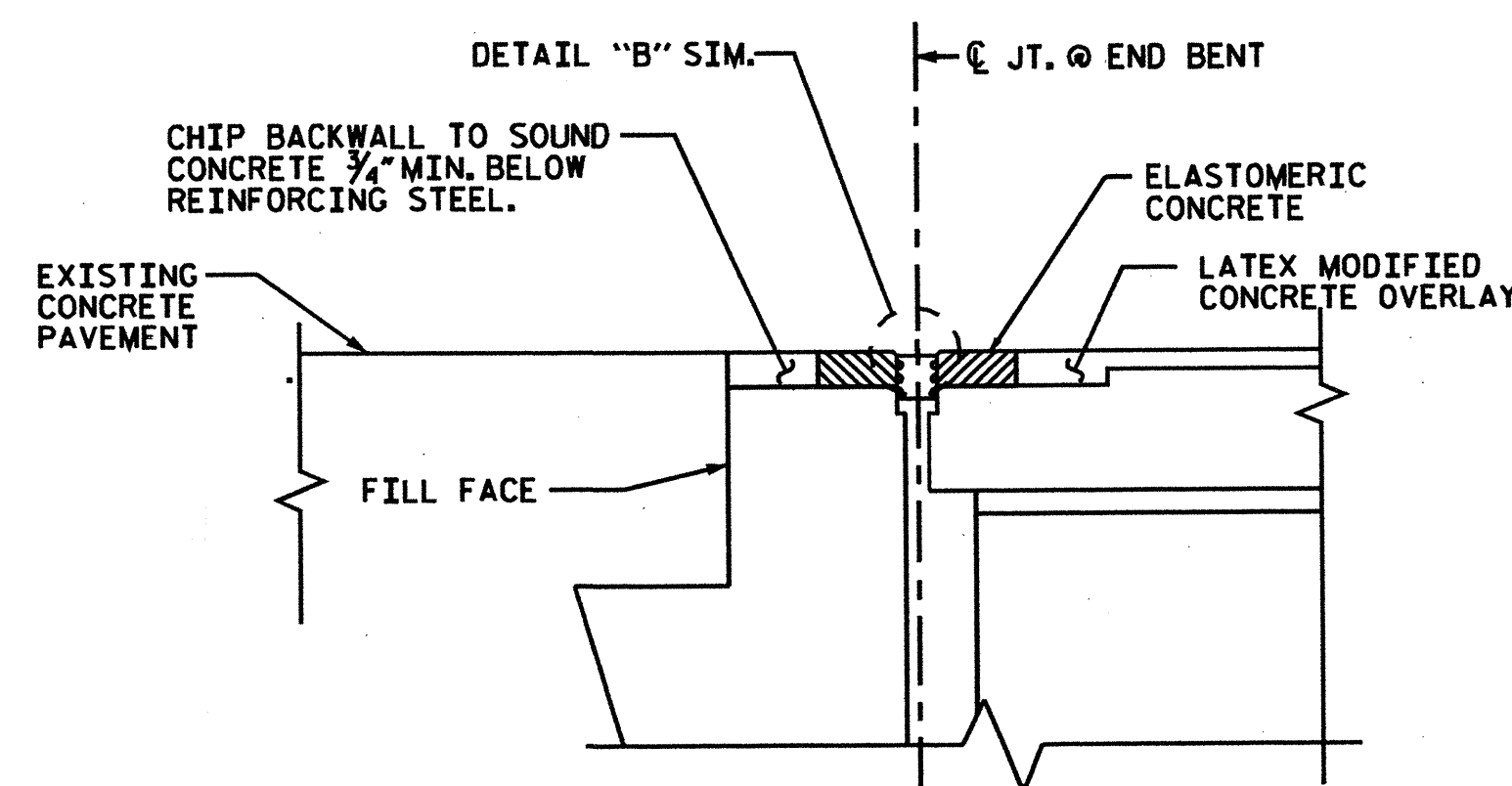
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 630+62.50 -L-

STATE OF NORTH CAROLINA					
DEPARTMENT OF TRANSPORTATION					
RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 70					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO. S-4
					TOTAL SHEETS 28

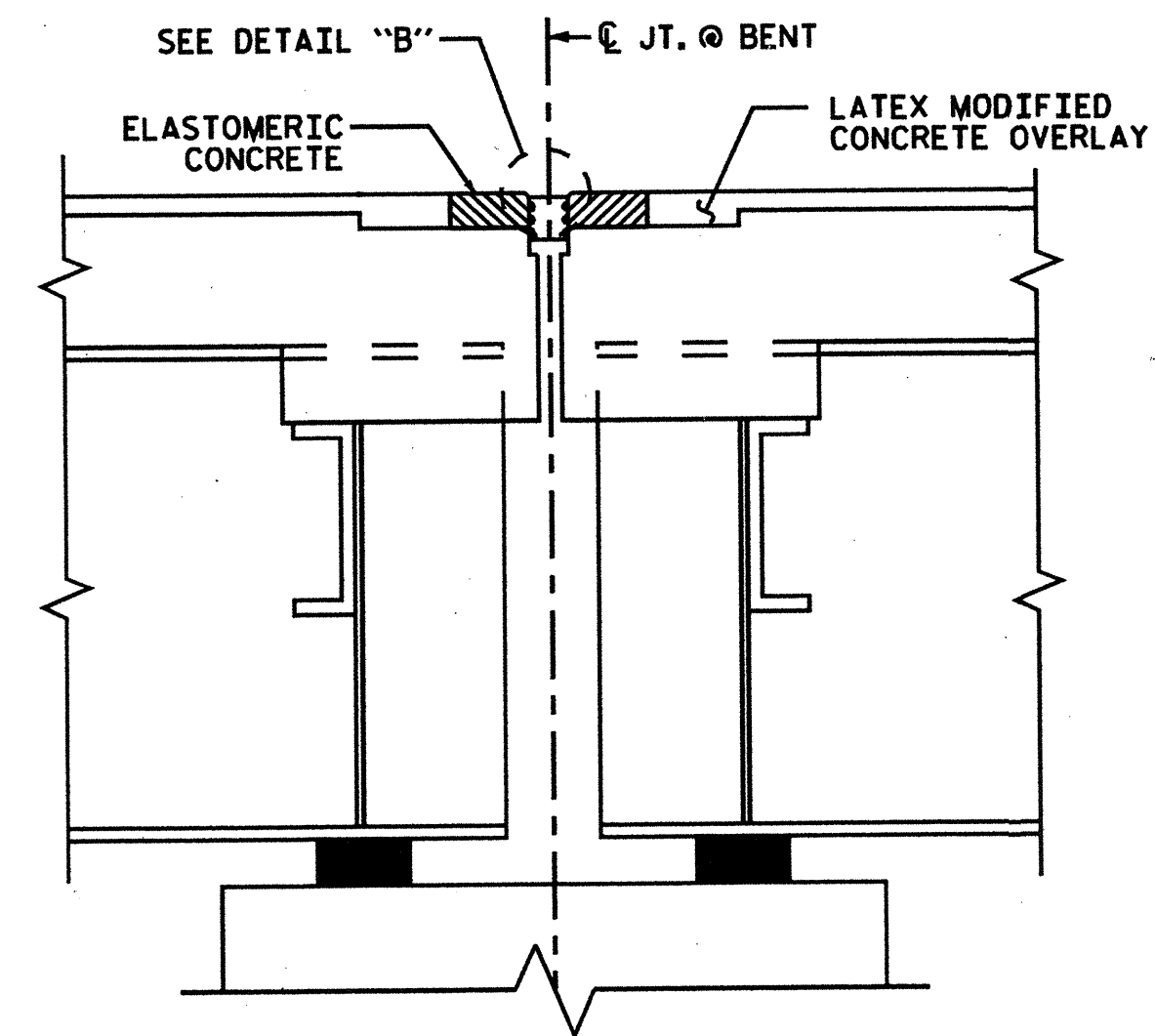
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



PLAN OF SPANS



SECTION A-A
(PROPOSED JOINT REPLACEMENT DETAIL)



SECTION B-B
(PROPOSED JOINT REPLACEMENT DETAIL)

TOTAL BILL OF MATERIAL

SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM
885	647	208	30	270	885	4	62	885	LUMP SUM

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09

PROJECT NO. B-5179B
 BUNCOMBE COUNTY
 STATION: 630+62.50 -L-

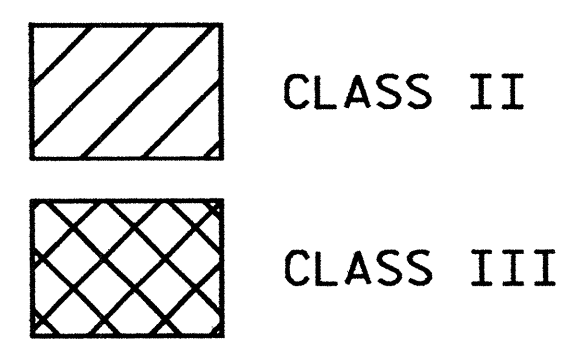
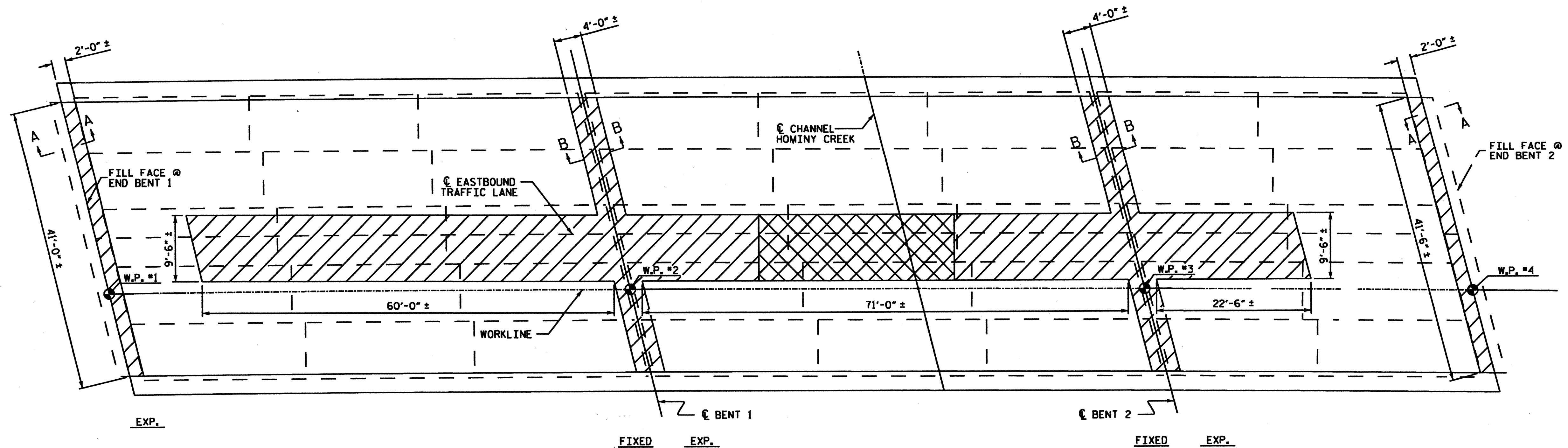
SHEET 1 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

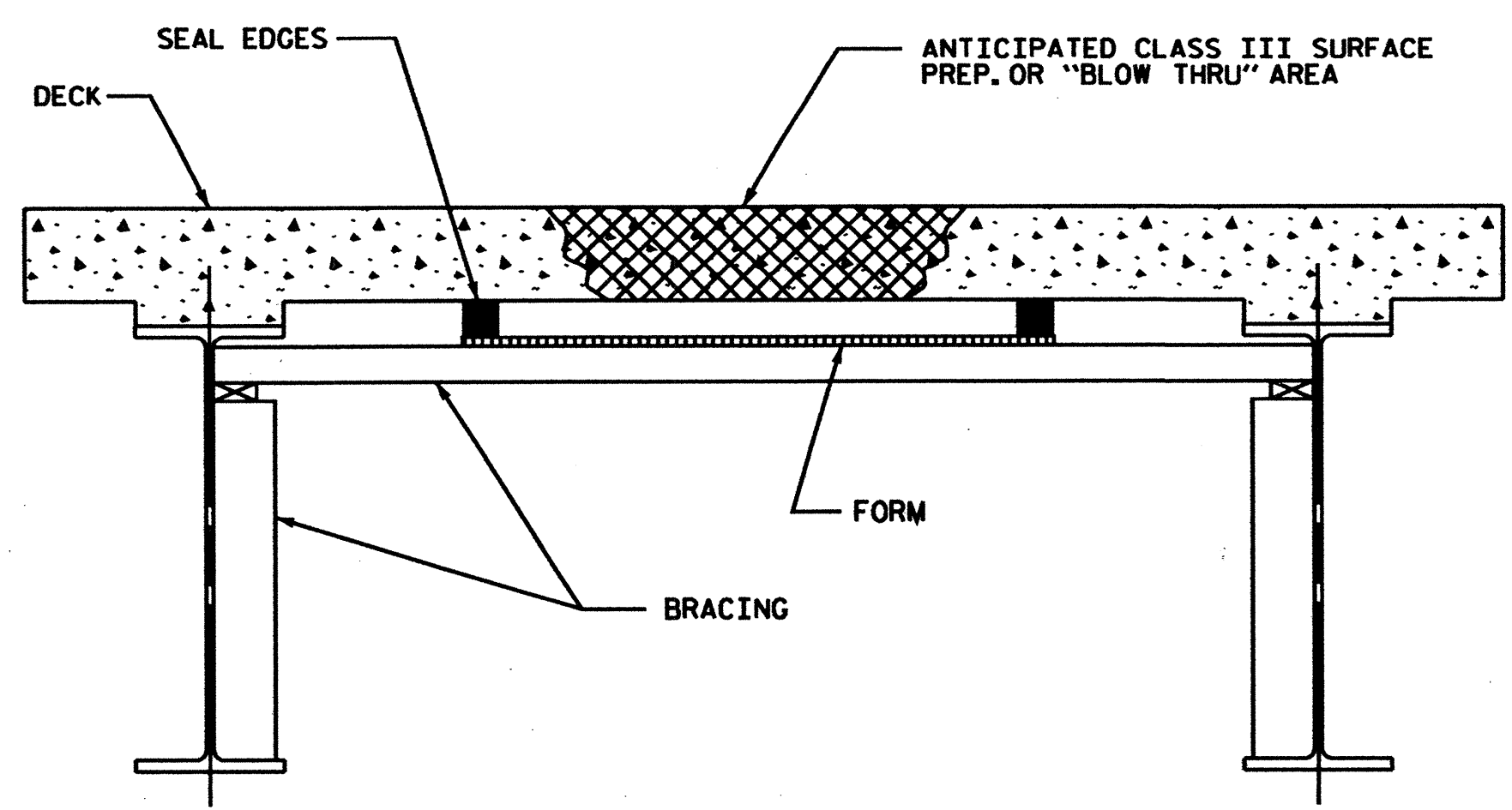
PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 70

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-5
1			3			TOTAL SHEETS
2			4			28



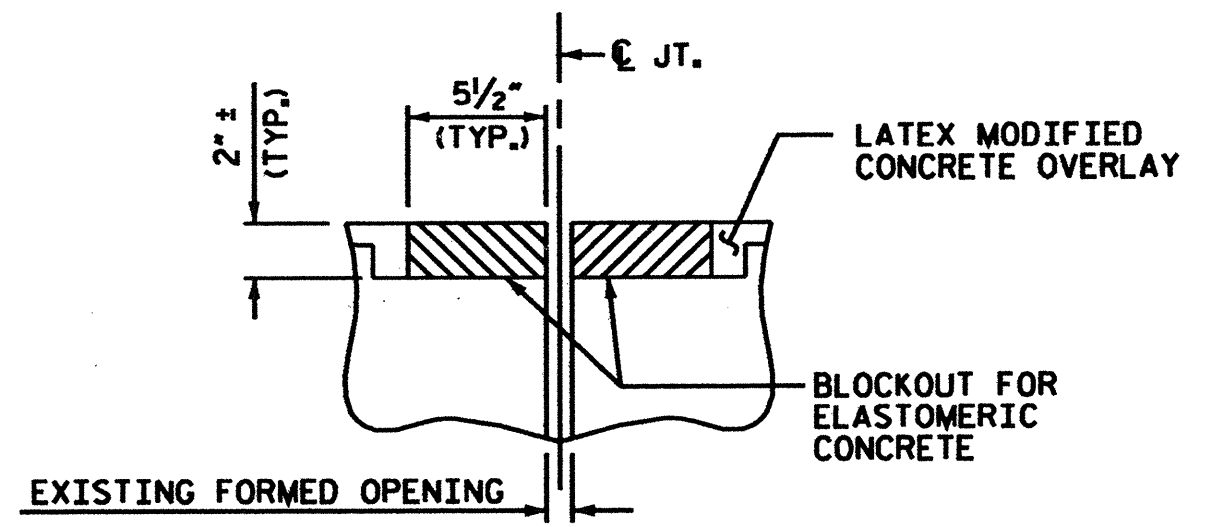
PLAN OF SPANS - DECK REPAIRS



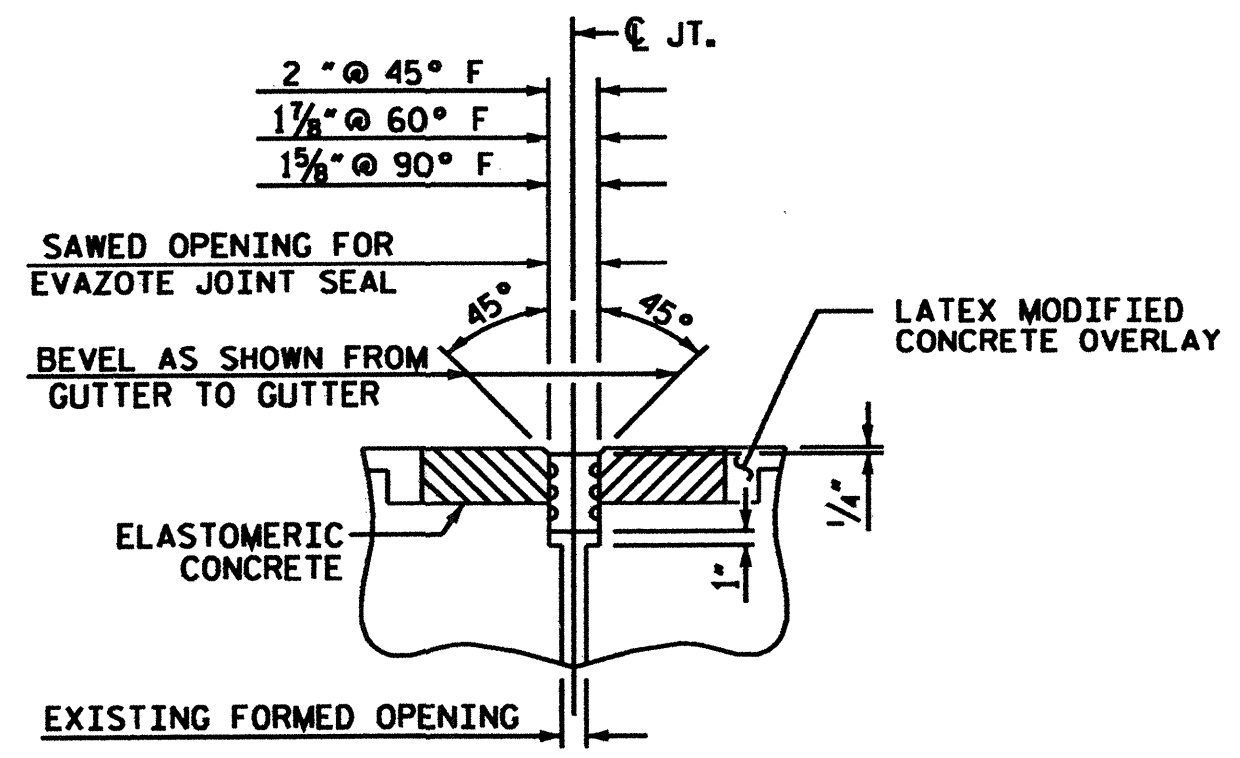
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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

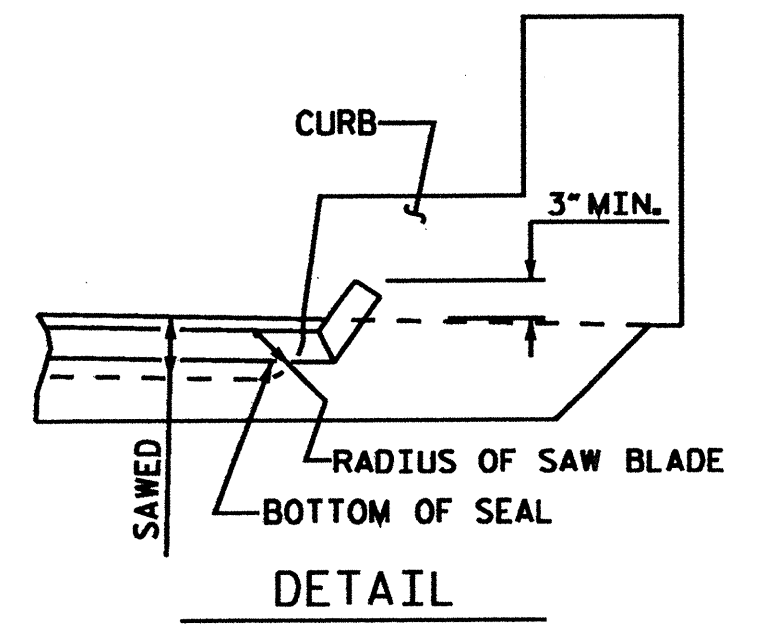
SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.



DETAIL B
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)



DETAIL B
EVAZOTE JOINT SEAL
(EXPANSION)



DETAIL

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	6.3
BENT 1	6.3
BENT 2	6.3
E.B. 2	6.3
TOTAL	25.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 630+62.50 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

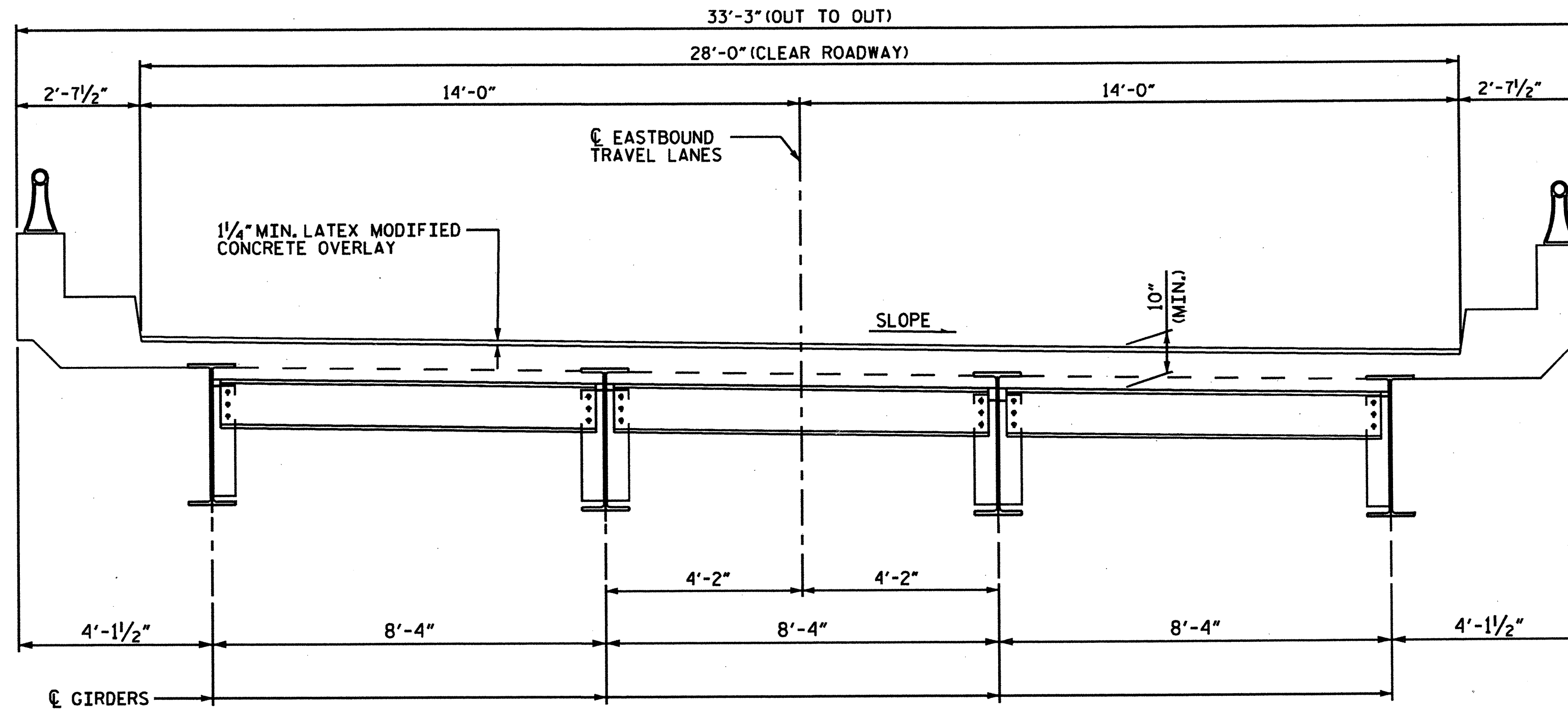
PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 70

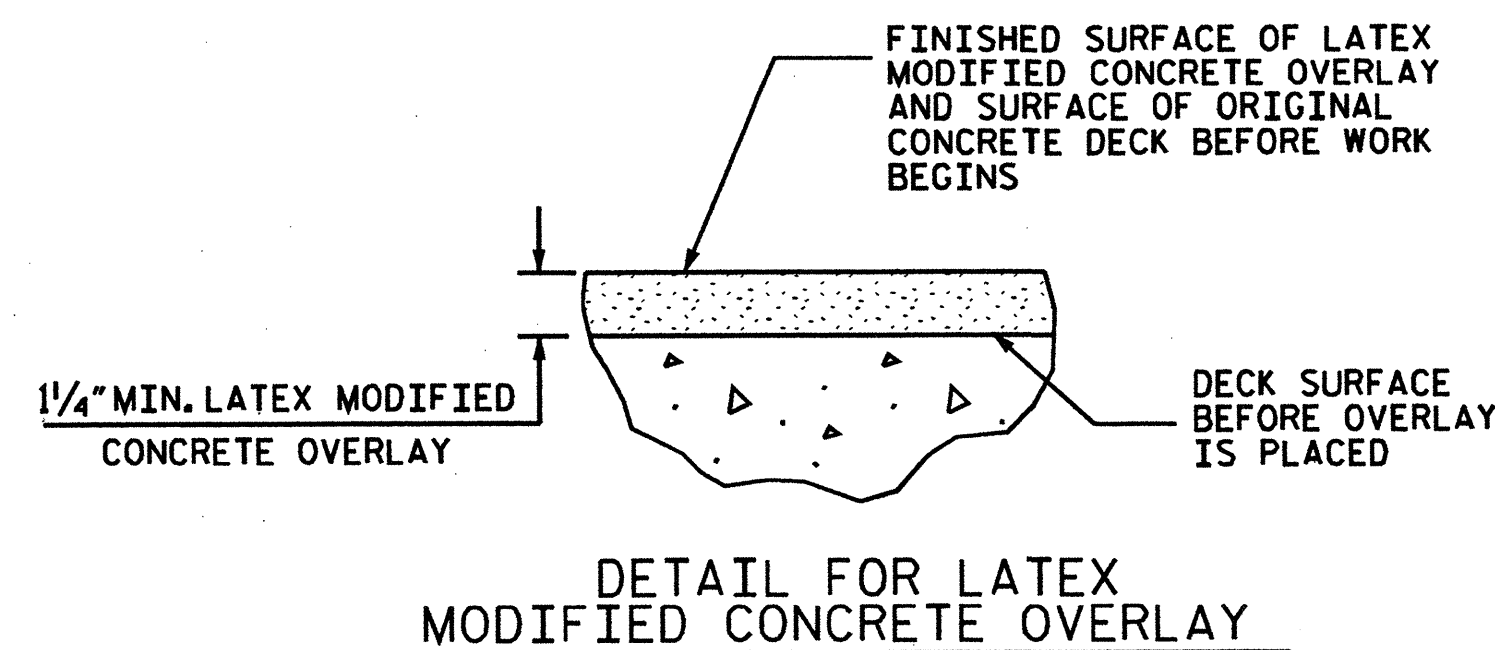
REVISIONS				SHEET NO.
NO.	BY	DATE	NO.	DATE
1			3	
2			4	

S-6
 TOTAL SHEETS 28

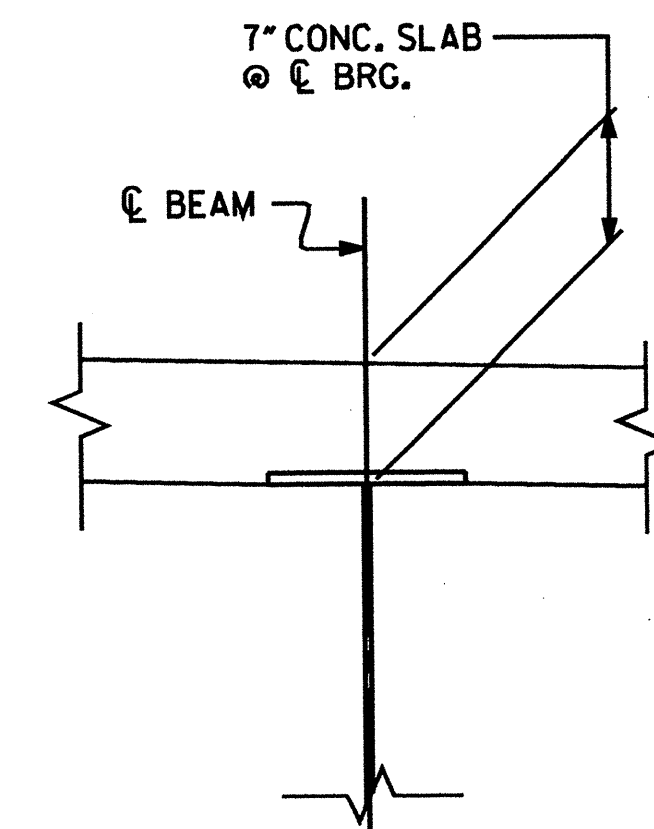
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



TYP. SECTION
(SHOWING PARTIAL DIAPHRAGMS AT EXPANSION JOINTS)



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY



EXIST. SLAB SECTION

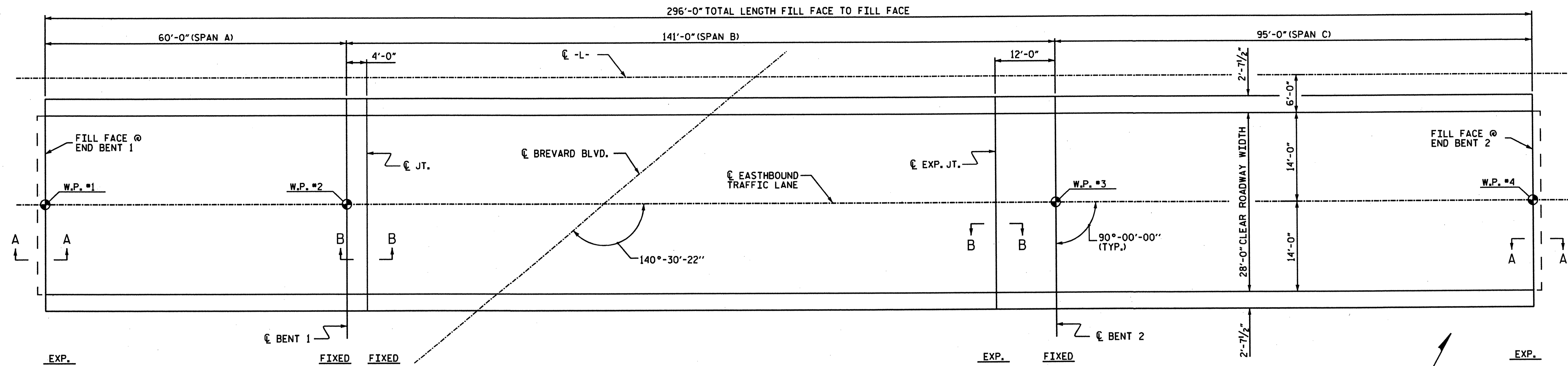
NOTES:

- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "HYDRO-DEMOLITION OF BRIDGE DECK" SPECIAL PROVISION.
- 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2, FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
- LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
- FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

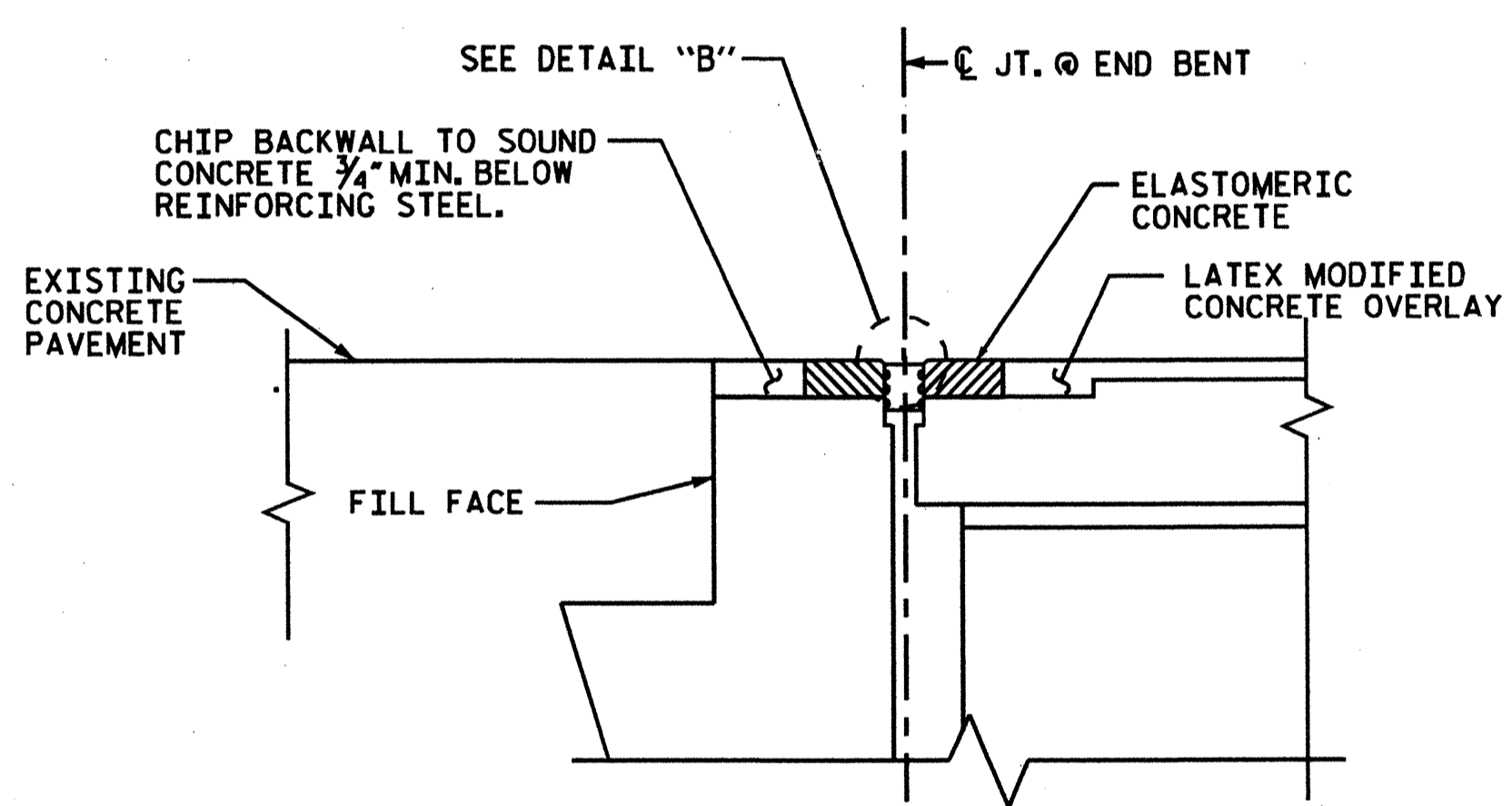
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-

STATE OF NORTH CAROLINA					
DEPARTMENT OF TRANSPORTATION					
RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 206					
REVISIONS					SHEET NO.
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
					5-7
					TOTAL SHEETS
					28

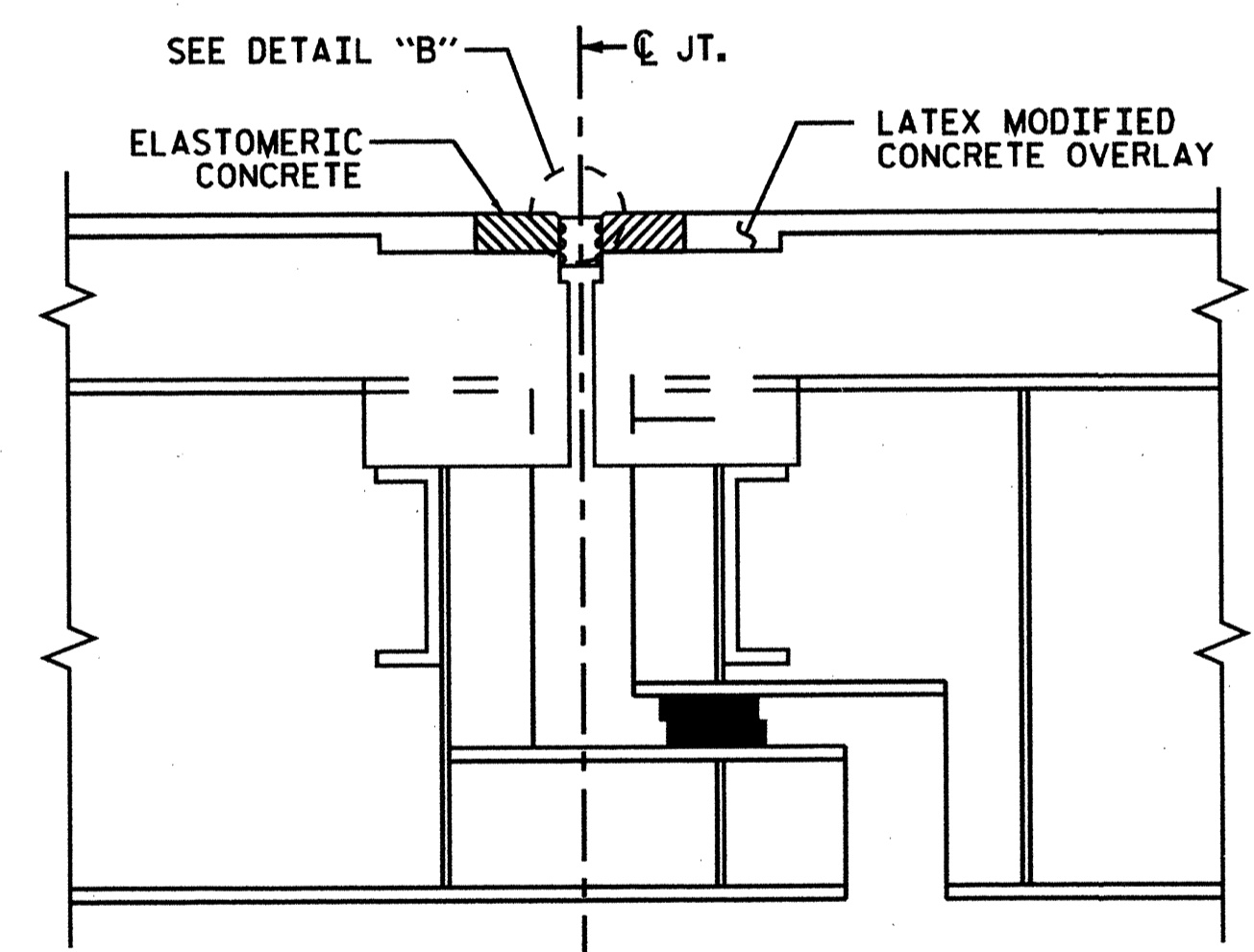
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



PLAN OF SPANS



SECTION A-A
(PROPOSED JOINT REPLACEMENT DETAIL)



SECTION B-B
(PROPOSED JOINT REPLACEMENT DETAIL)

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-

SHEET 1 OF 2

TOTAL BILL OF MATERIAL										
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
920	831	86	3	27	920	0.5	64	920	LUMP SUM	7300

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09

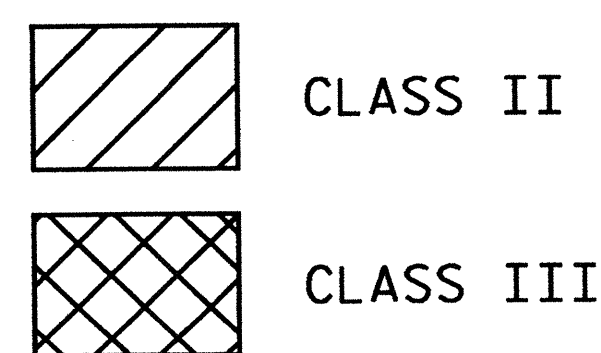
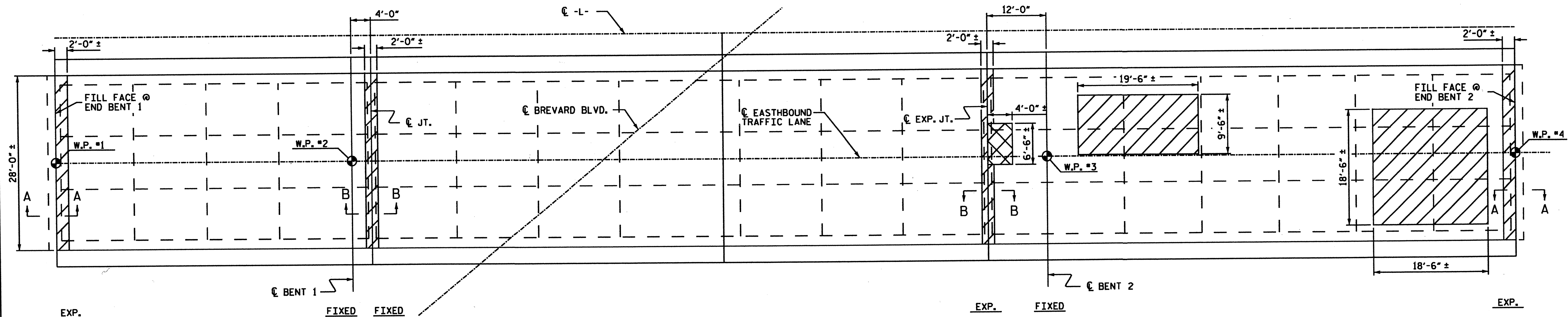
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

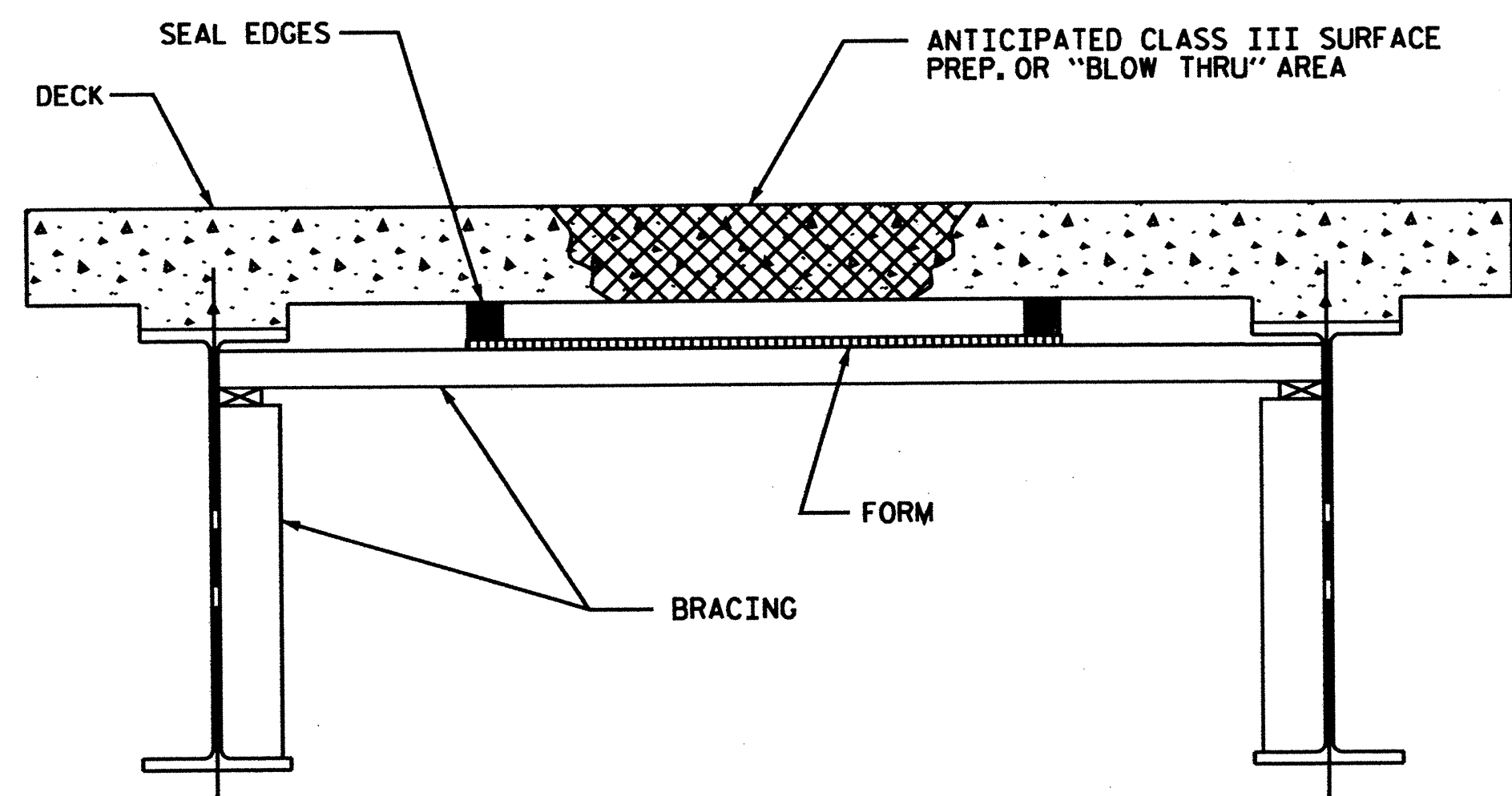
DECK REHAB. FOR BRIDGE NO. 206

REVISIONS				SHEET NO.
NO.	BY	DATE	NO.	DATE
1			3	
2			4	

S-8
 TOTAL SHEETS 28



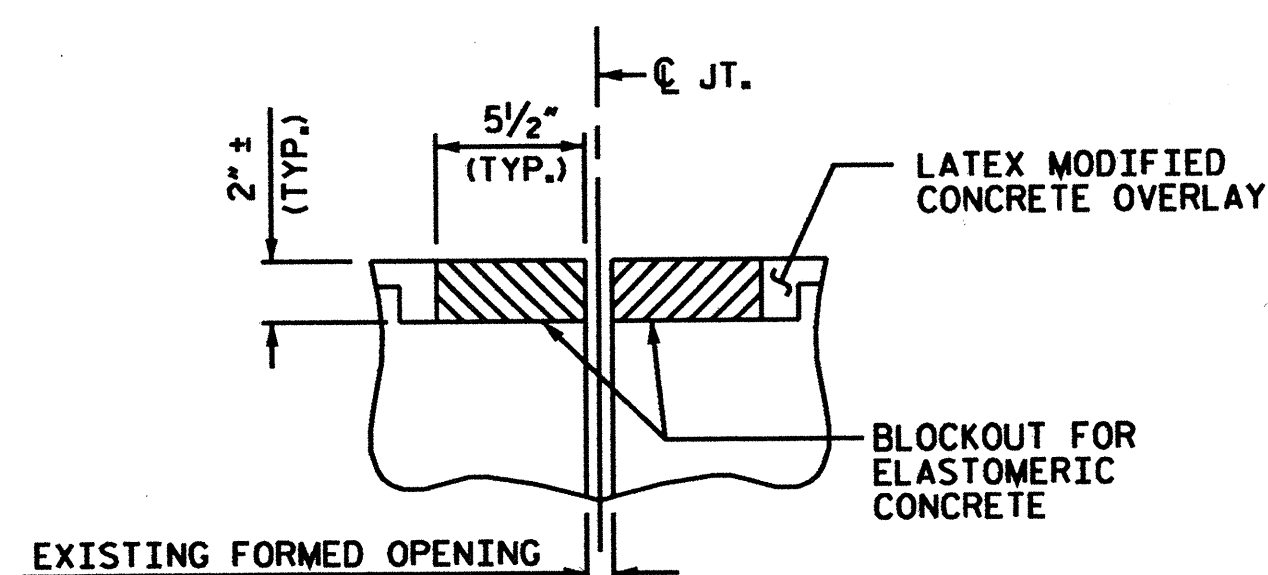
PLAN OF SPANS - DECK REPAIRS



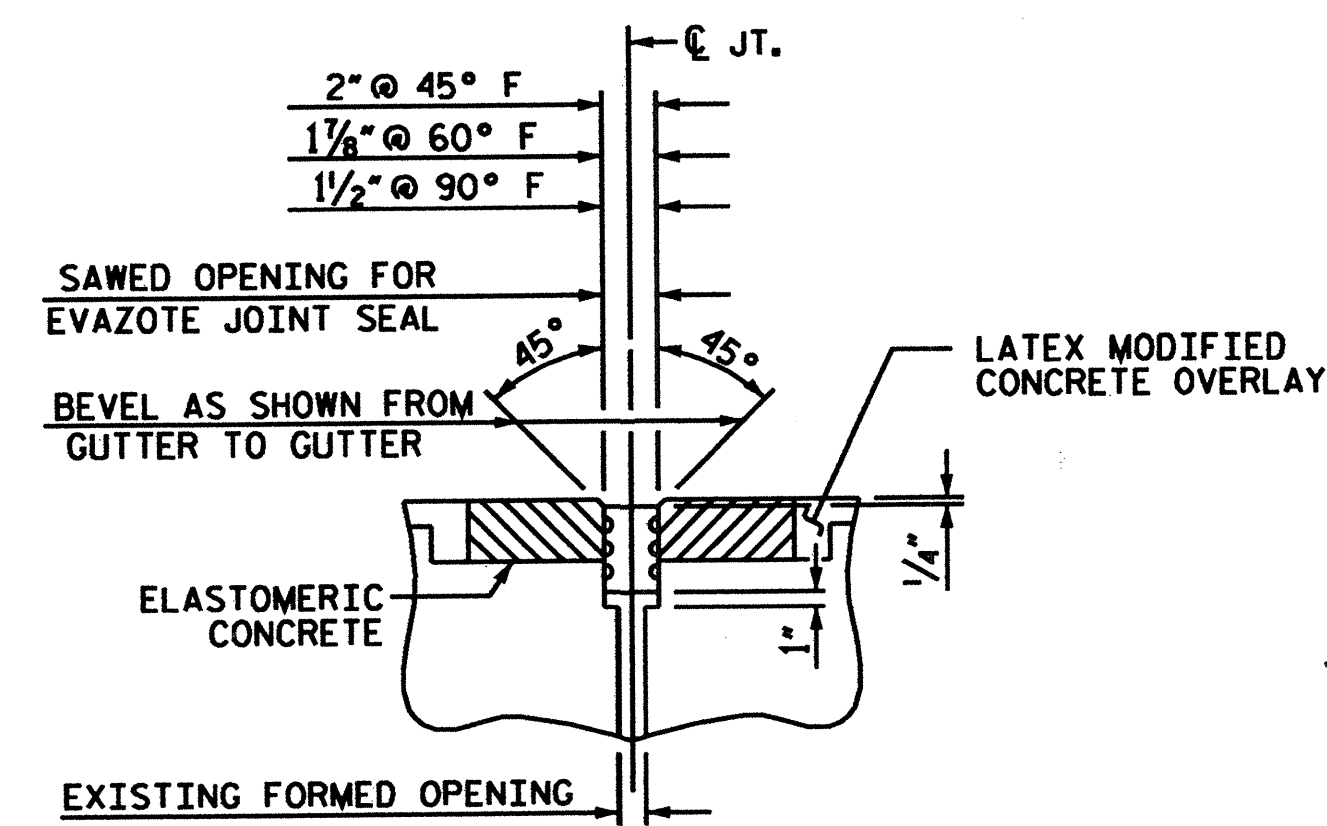
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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.

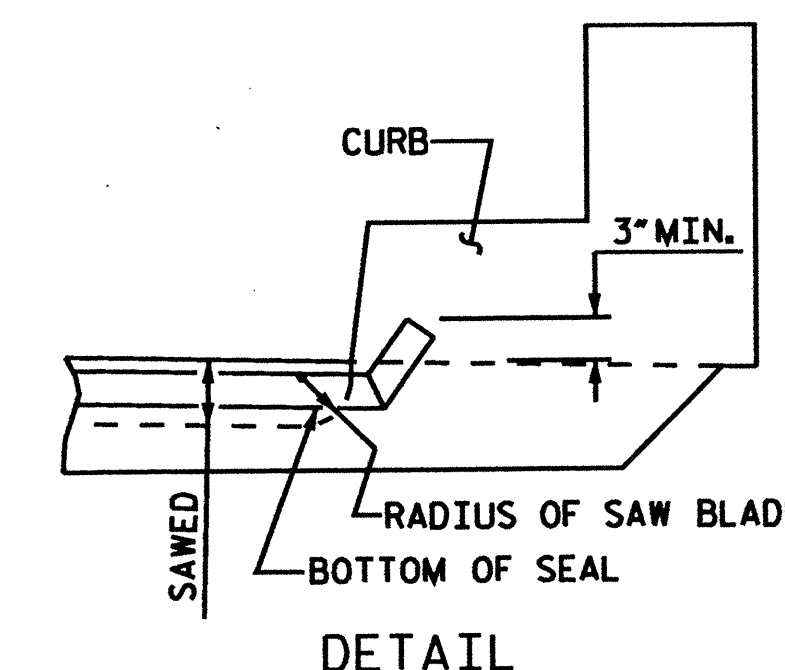


DETAIL B
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)



DETAIL B
EVAZOTE JOINT SEAL
(EXPANSION)

NOTE:
FOR FIXED JOINT, SAW CUT
WIDTH SHALL BE 1 1/8" AND
CENTERED ABOUT THE JOINT.



DETAIL

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	4.3
BENT 1	4.3
BENT 2	4.3
E.B. 2	4.3
TOTAL	17.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-

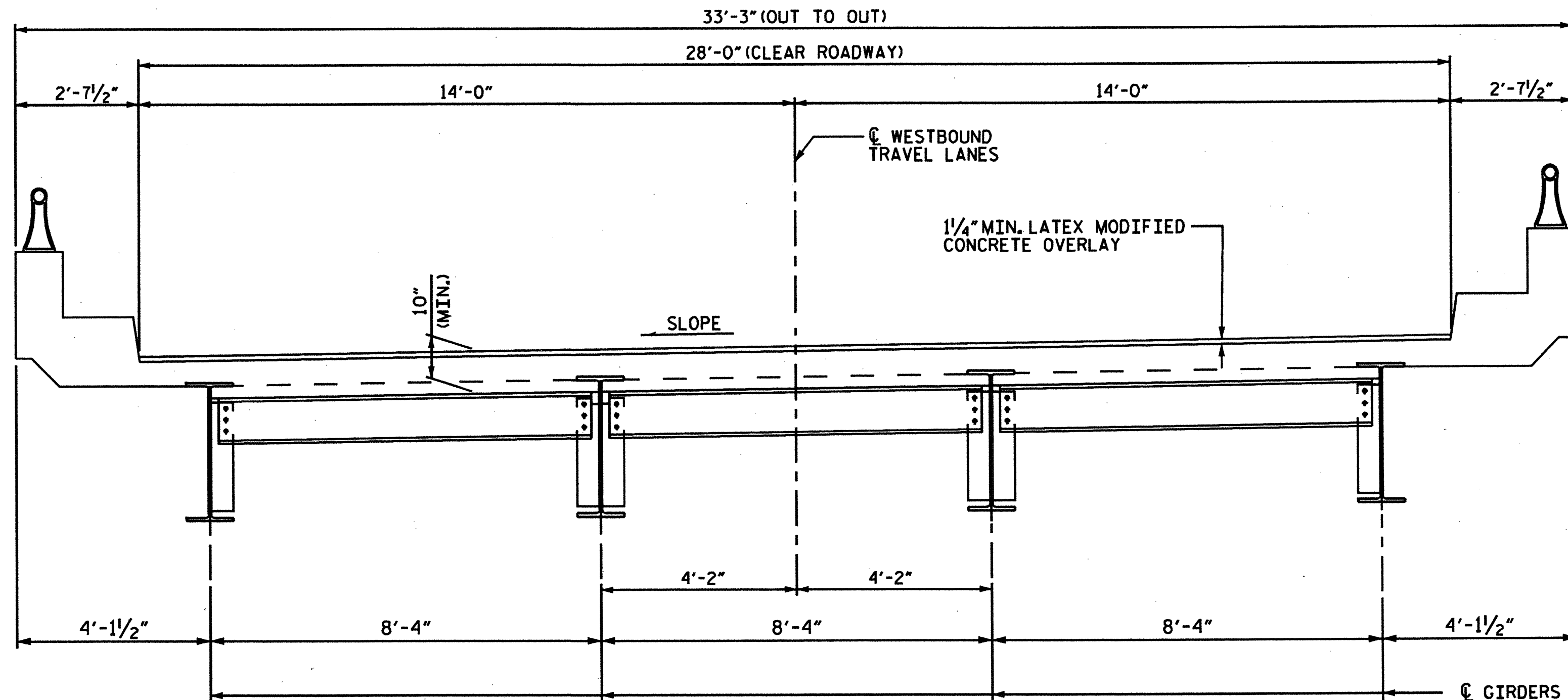
SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PLAN OF SPANS
 FOR DECK REPAIR

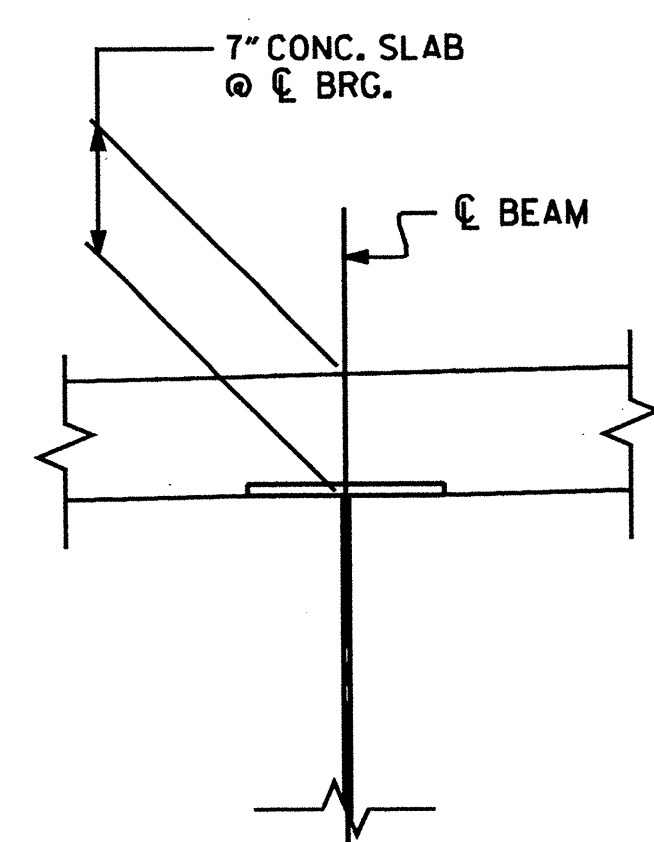
DECK REHAB. FOR BRIDGE NO. 206

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-9
1			3			TOTAL SHEETS 28
2			4			

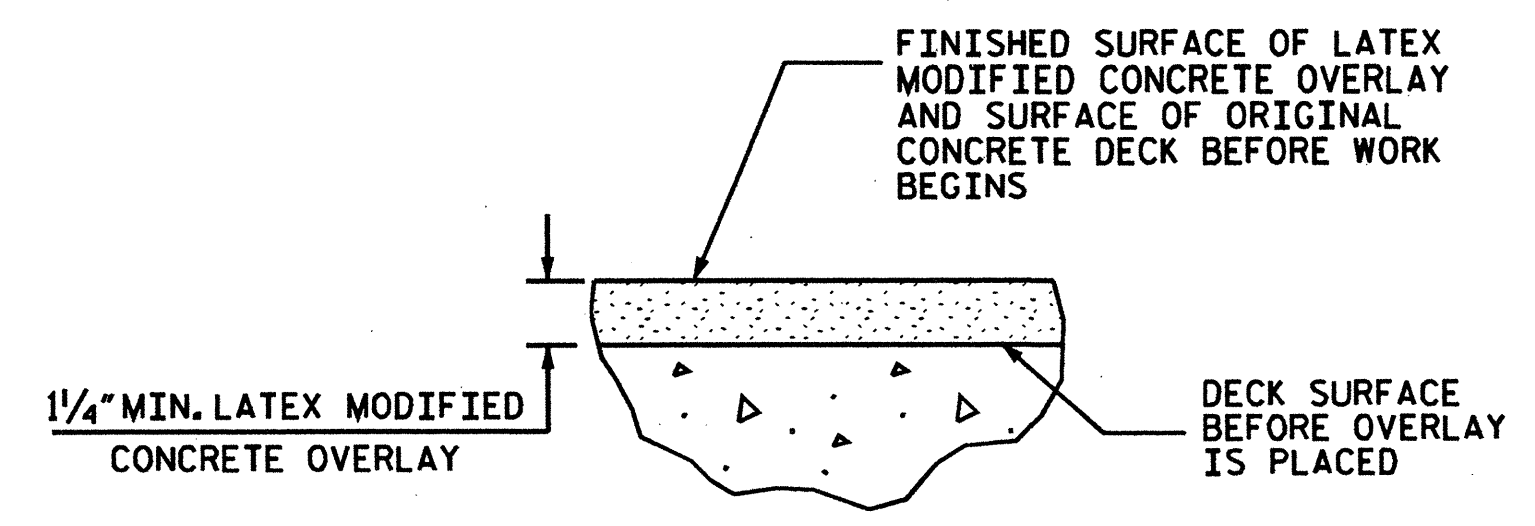
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



TYP. SECTION
(SHOWING PARTIAL DIAPHRAGMS AT EXPANSION JOINTS)



EXIST. SLAB SECTION



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

NOTES:

- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "HYDRO-DEMOLITION OF BRIDGE DECK" SPECIAL PROVISION.
- 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
- LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
- FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

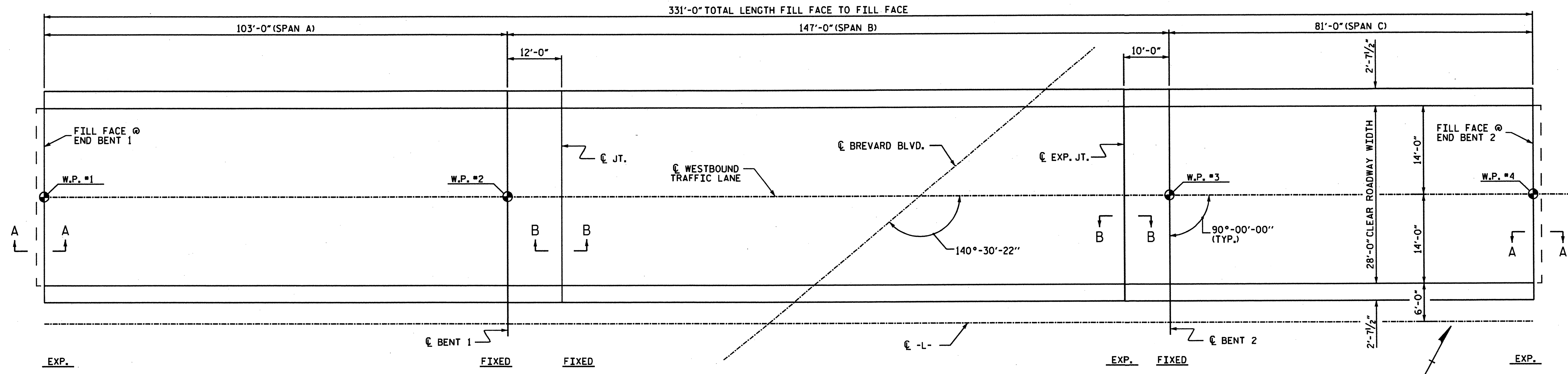
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 TYPICAL SECTION

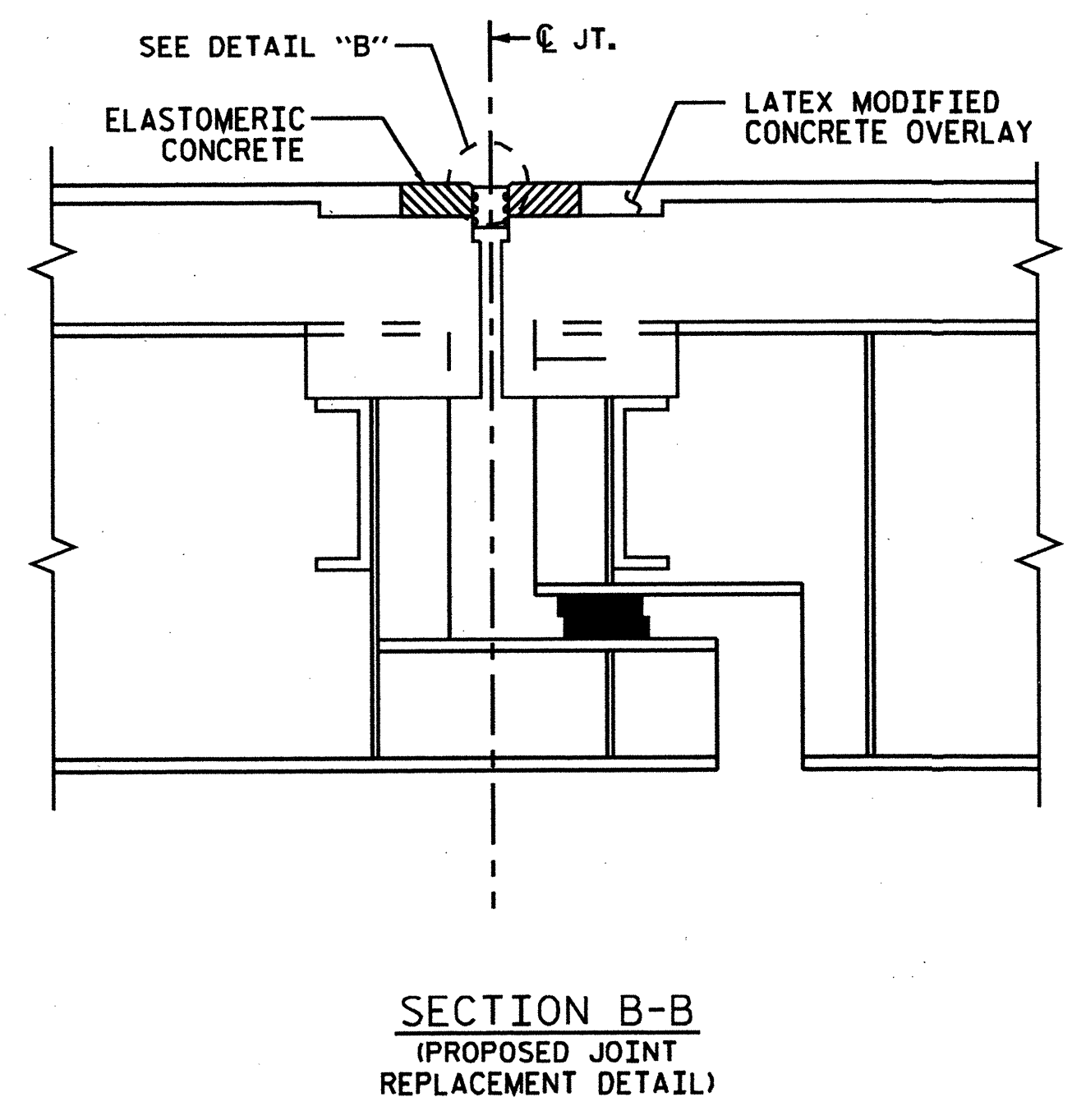
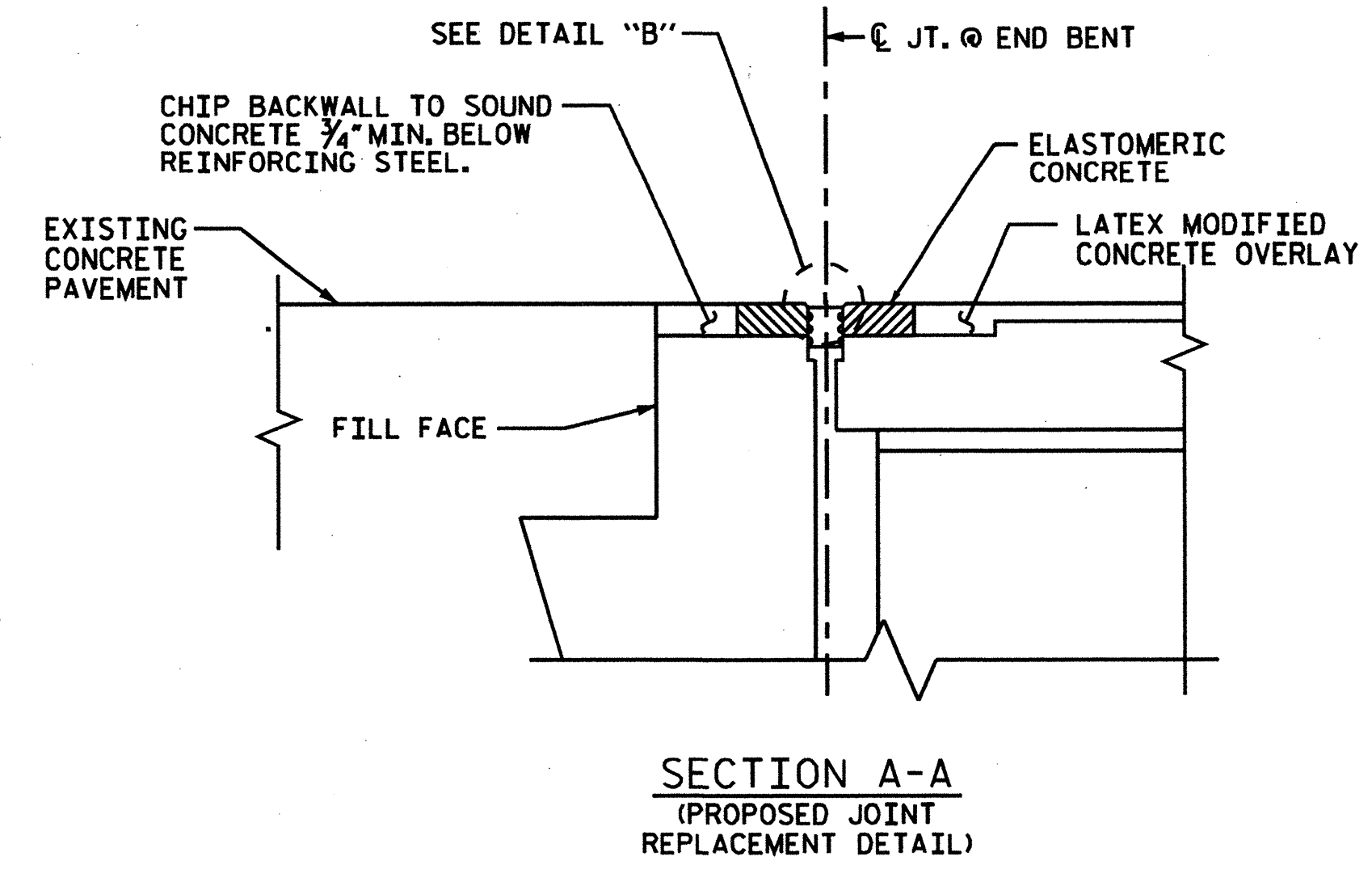
DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. S-10
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			

DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



PLAN OF SPANS



PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-
 SHEET 1 OF 2

TOTAL BILL OF MATERIAL										
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
1030	869	136	25	225	1030	3.5	72	1030	LUMP SUM	8155

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

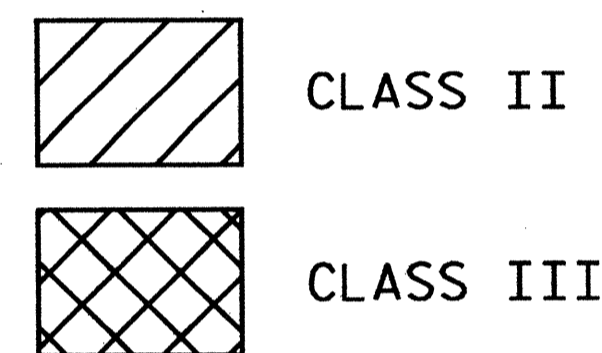
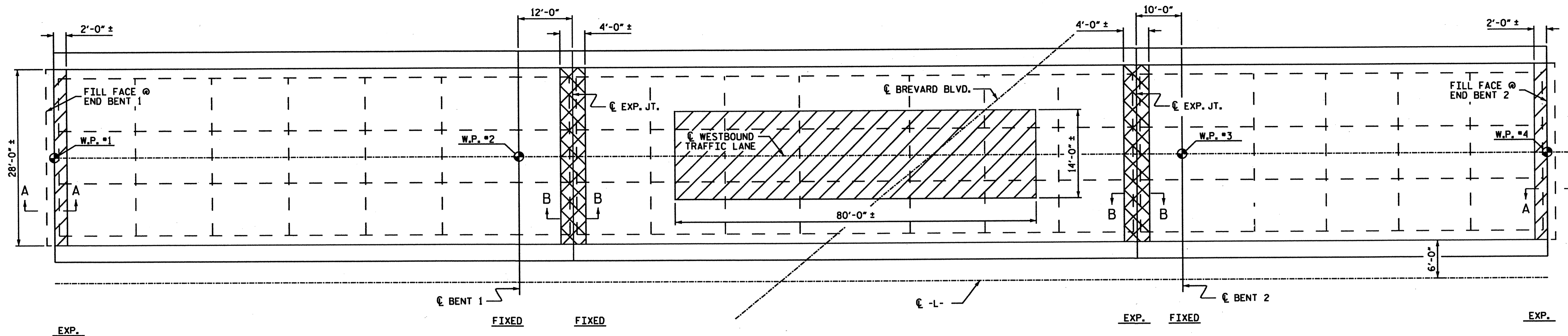
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

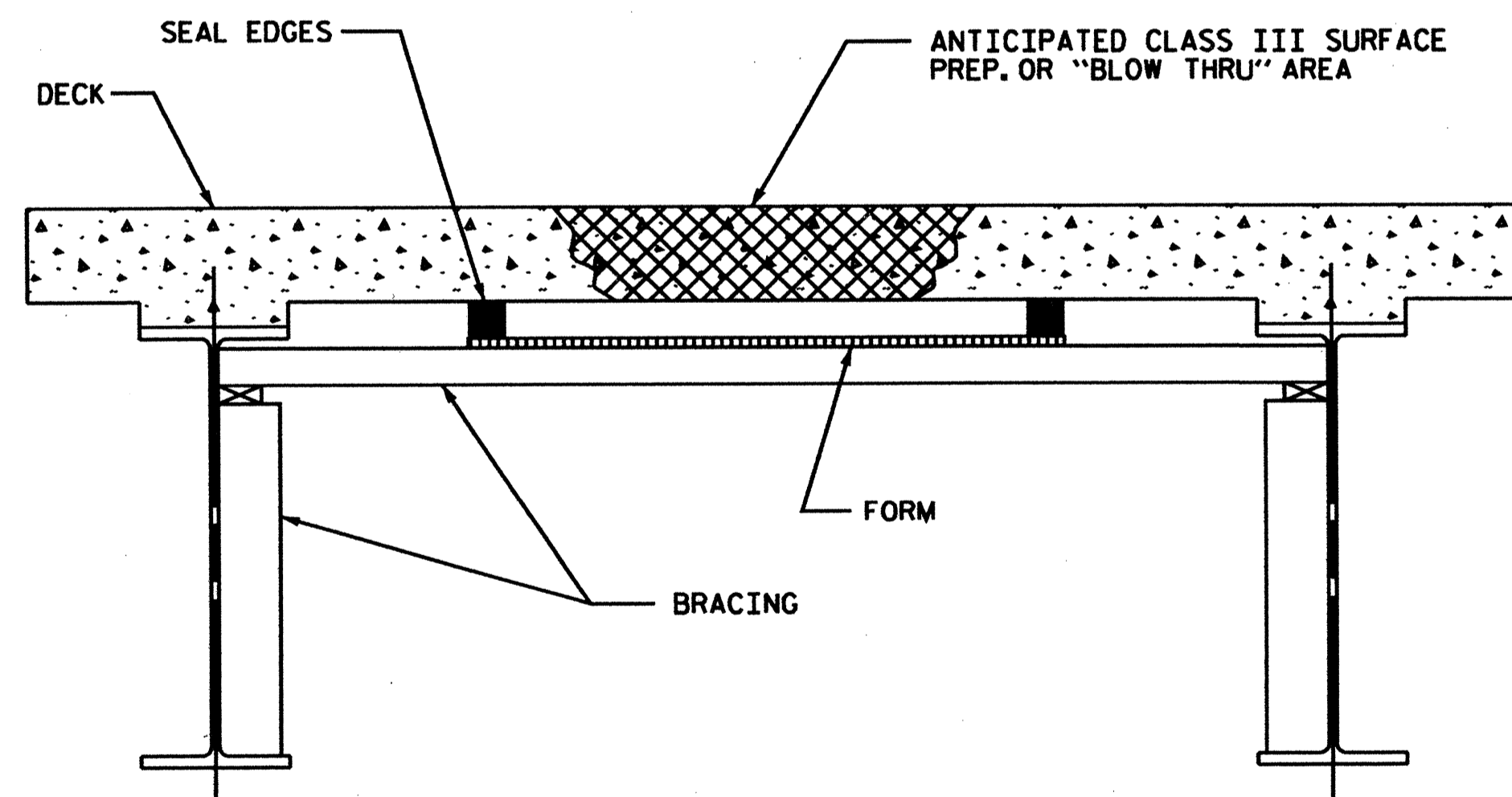
PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 208

REVISIONS						SHEET NO. 5-11
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			



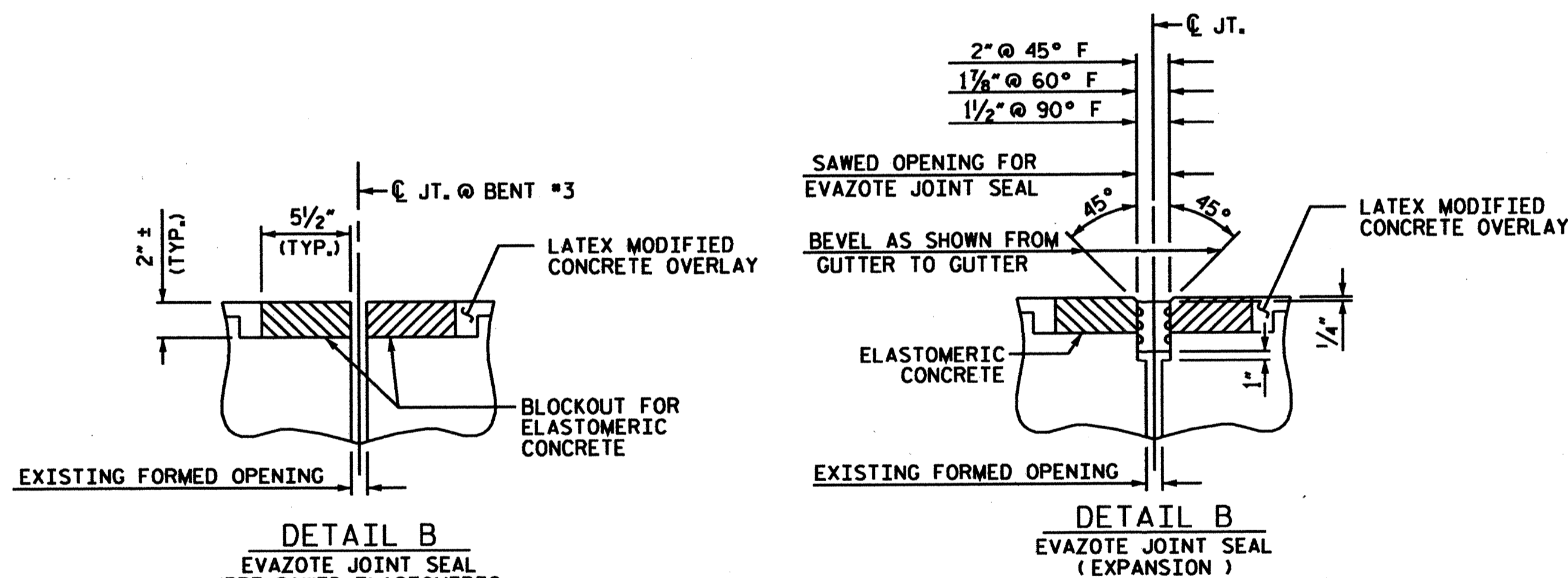
PLAN OF SPANS - DECK REPAIRS



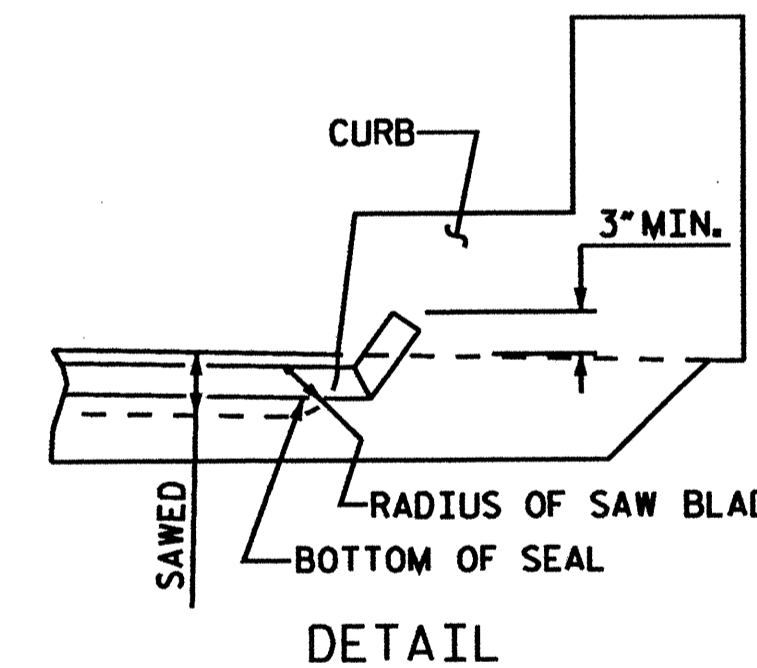
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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.



NOTE:
FOR FIXED JOINT, SAW CUT WIDTH SHALL BE 1 1/8" AND CENTERED ABOUT THE JOINT.



ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	4.3
BENT 1	4.3
BENT 2	4.3
E.B. 2	4.3
TOTAL	17.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 25+07.35 -L-

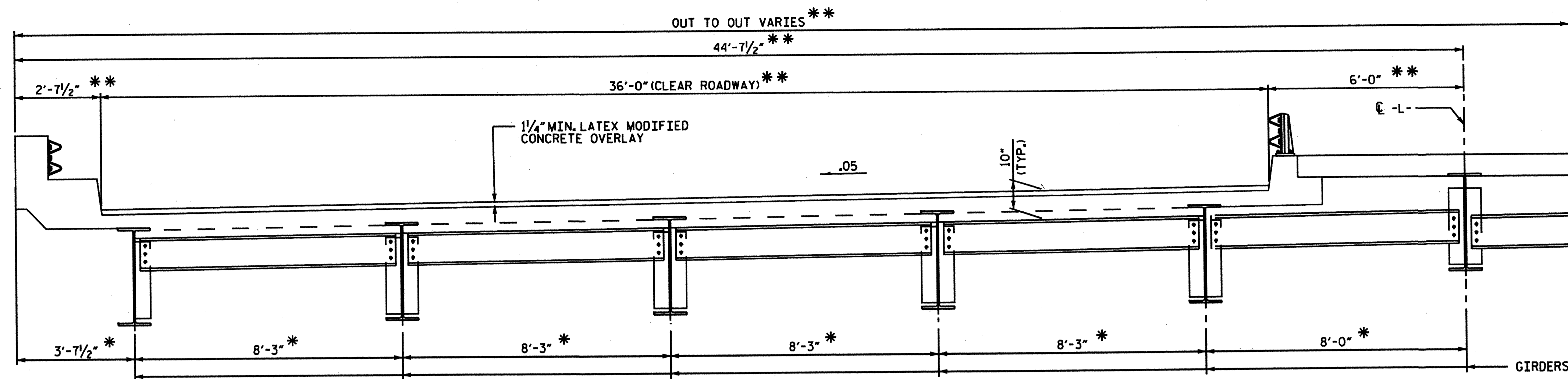
SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**PLAN OF SPANS
 FOR DECK REPAIR**

DECK REHAB. FOR BRIDGE NO. 208

REVISIONS				SHEET NO.
NO.	BY	DATE	NO.	DATE
1			3	
2			4	

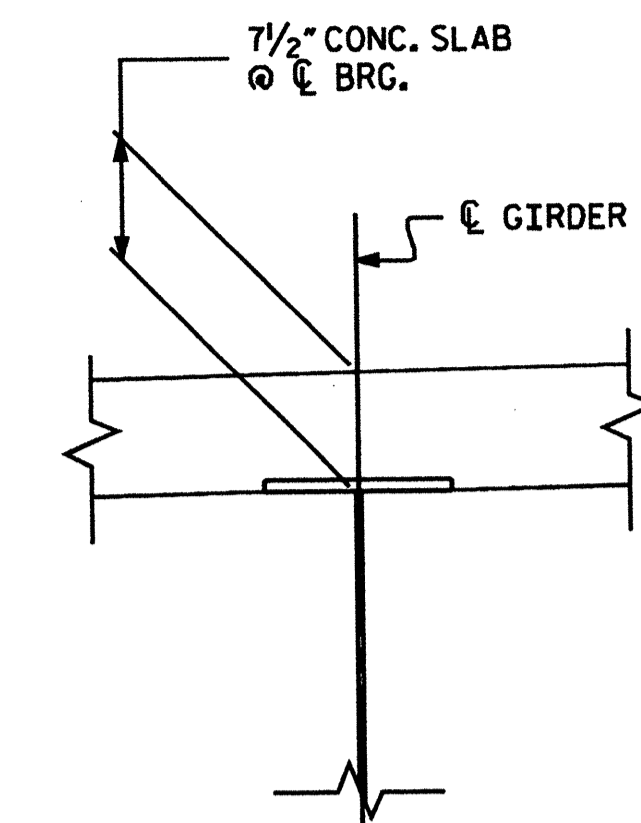
TOTAL SHEETS 28



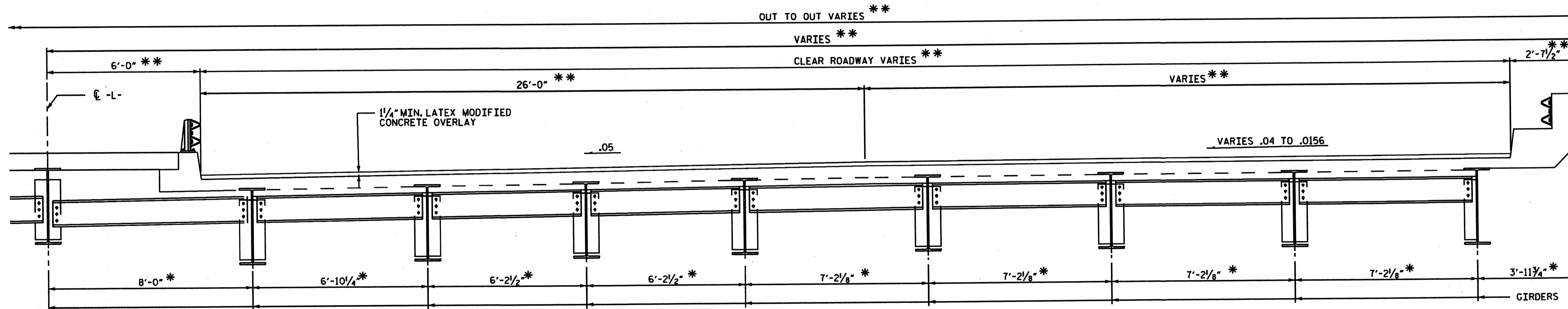
TYP. SECTION-SOUTHBOUND LANE

(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)

- * RADIAL THRU WORKPOINT
- ** RADIAL DIMENSIONS TO CL



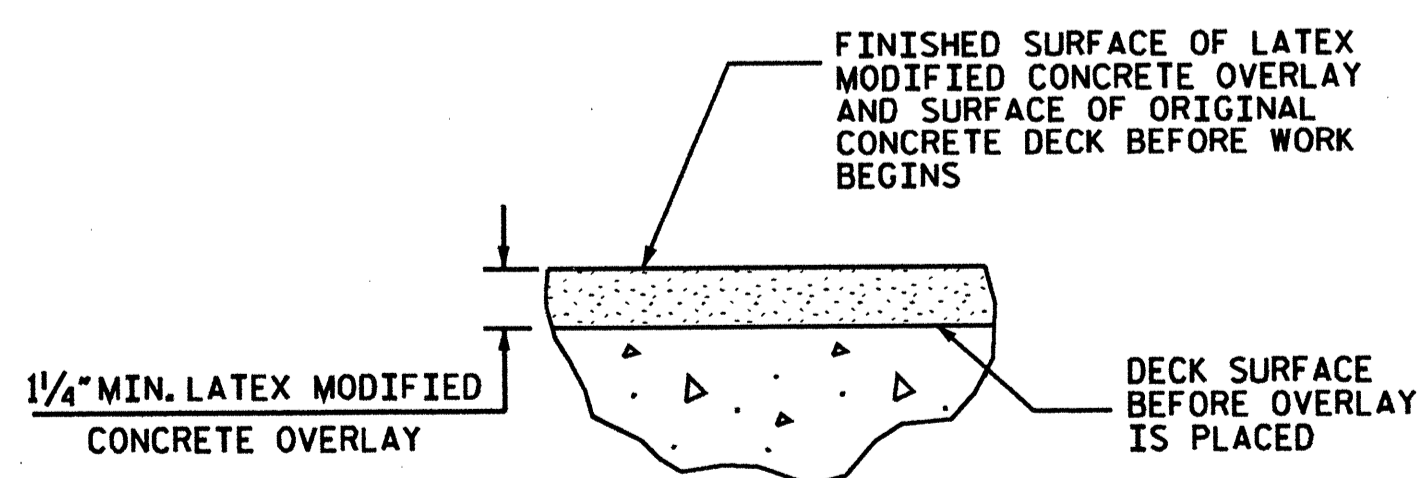
EXIST. SLAB SECTION



TYP. SECTION-NORTHBOUND LANE

(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)
(SPAN C SHOWN, SPANS A & B SIM.)

- * RADIAL THRU WORKPOINT *4
- ** RADIAL DIMENSIONS TO CL



DETAIL FOR LATEX MODIFIED CONCRETE OVERLAY

NOTES:

FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
 THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "HYDRO-DEMOLITION OF BRIDGE DECK" SPECIAL PROVISION.
 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
 THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
 LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
 FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
 FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.
 FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
 FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

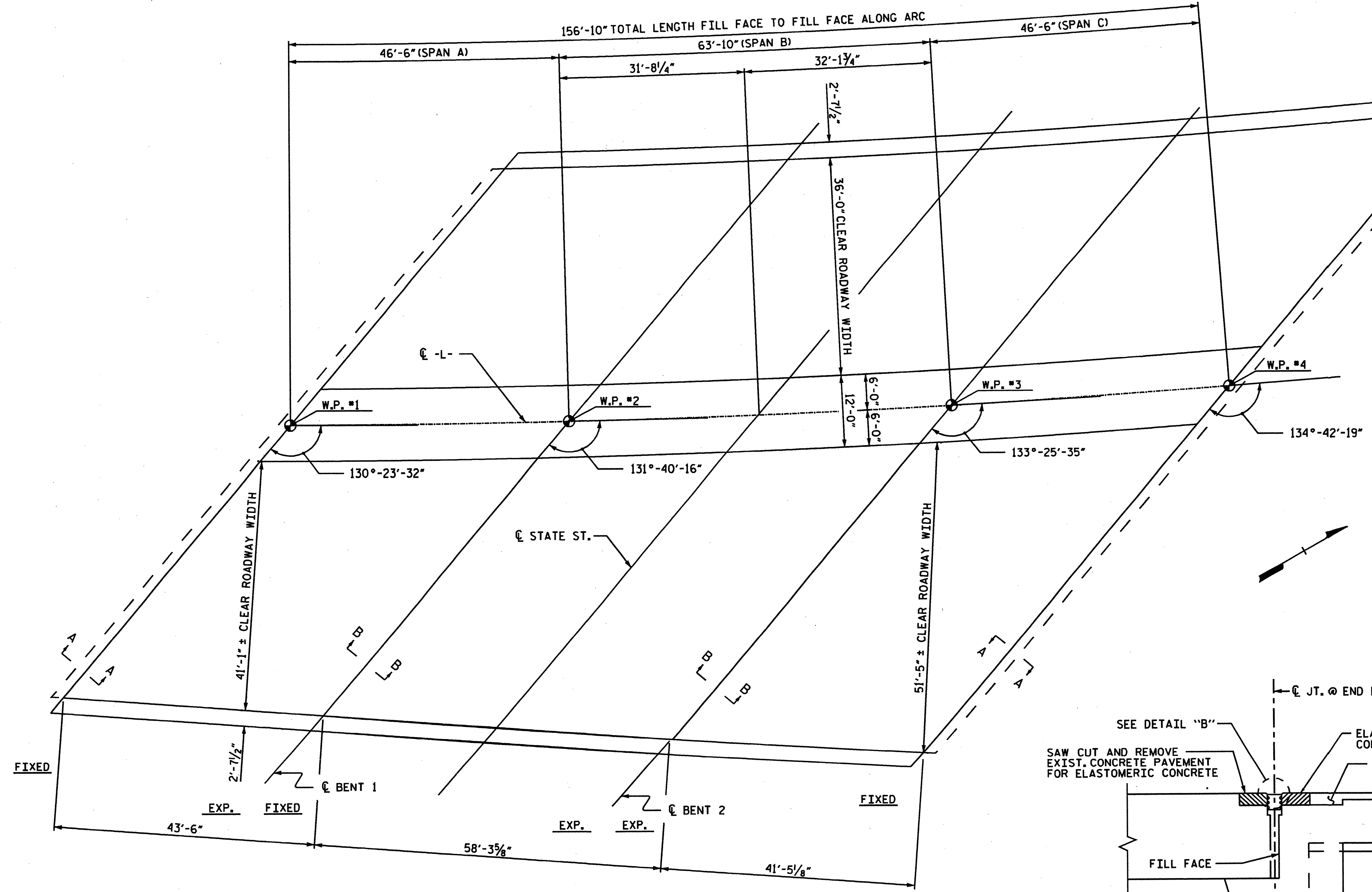
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 86+21.69 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
TYPICAL SECTION

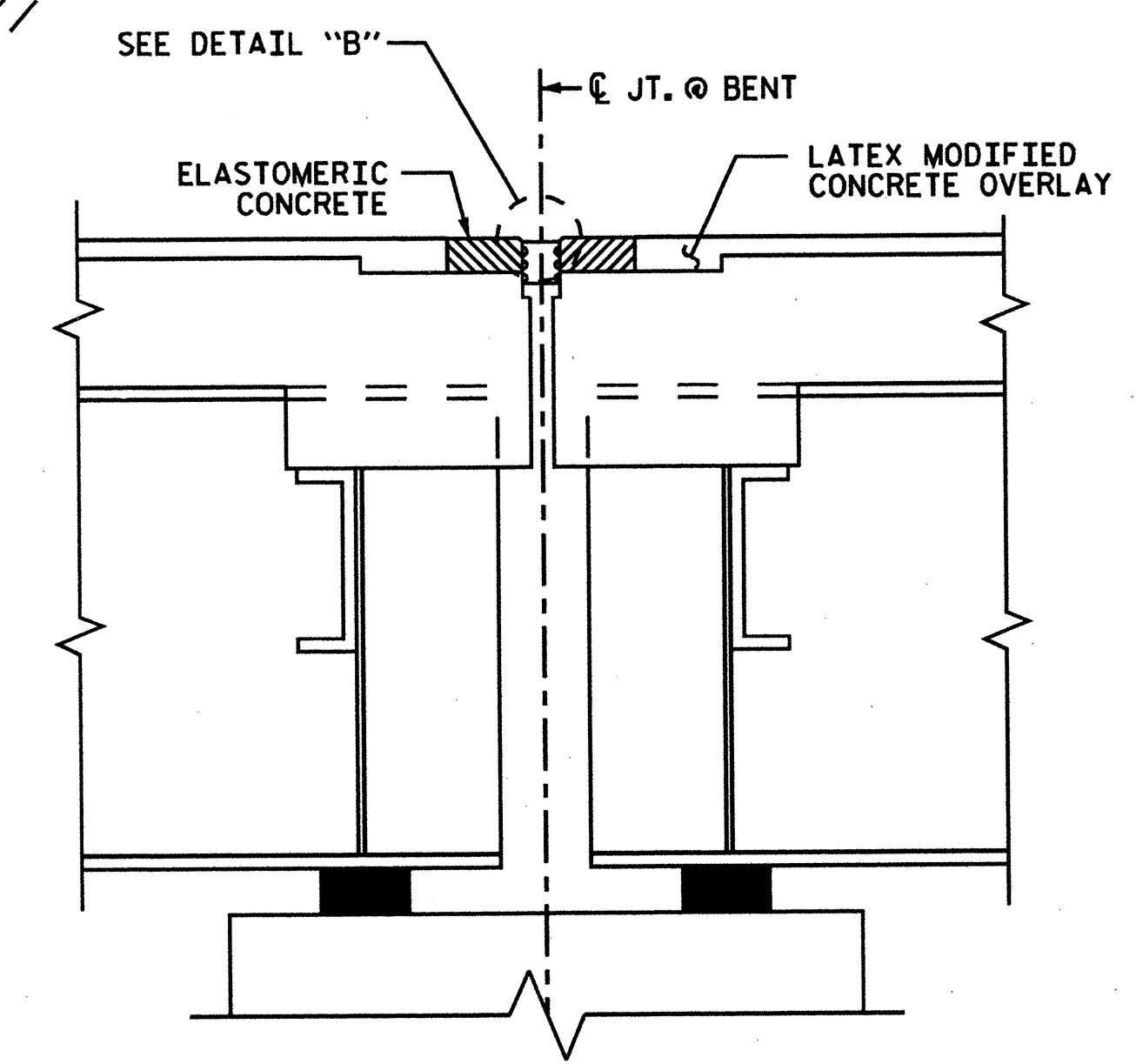
DECK REHAB. FOR BRIDGE NO. 274

REVISIONS						SHEET NO. S-13
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			

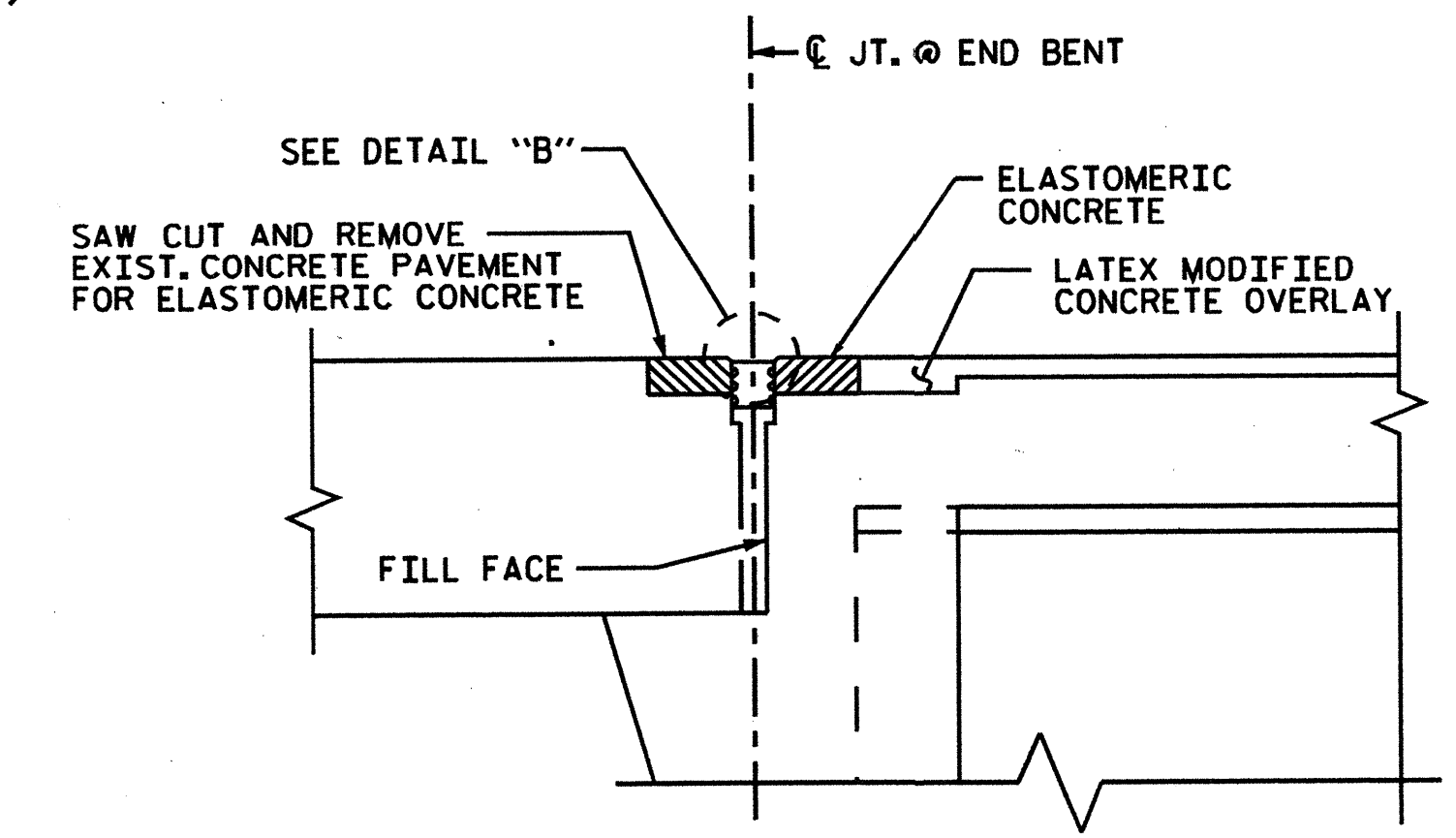
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



PLAN OF SPANS



SECTION B-B
(PROPOSED JOINT REPLACEMENT DETAIL)



SECTION A-A
(PROPOSED JOINT REPLACEMENT DETAIL)

PROJECT NO. B-5179B
BUNCOMBE COUNTY
STATION: 86+21.69 -L-

SHEET 1 OF 2

TOTAL BILL OF MATERIAL										
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
1410	975	433	2	18	1410	1	98	1410	LUMP SUM	11605

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

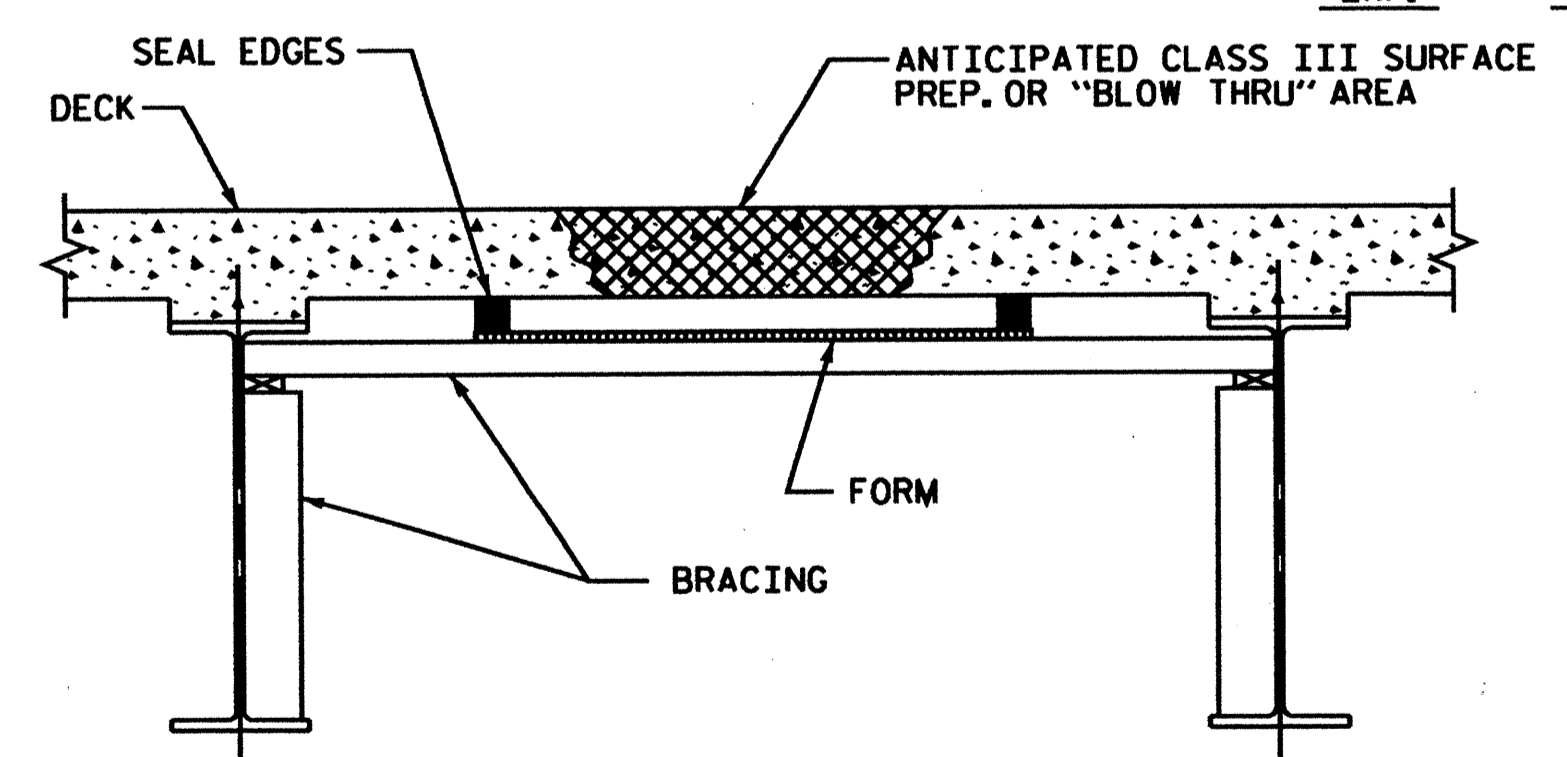
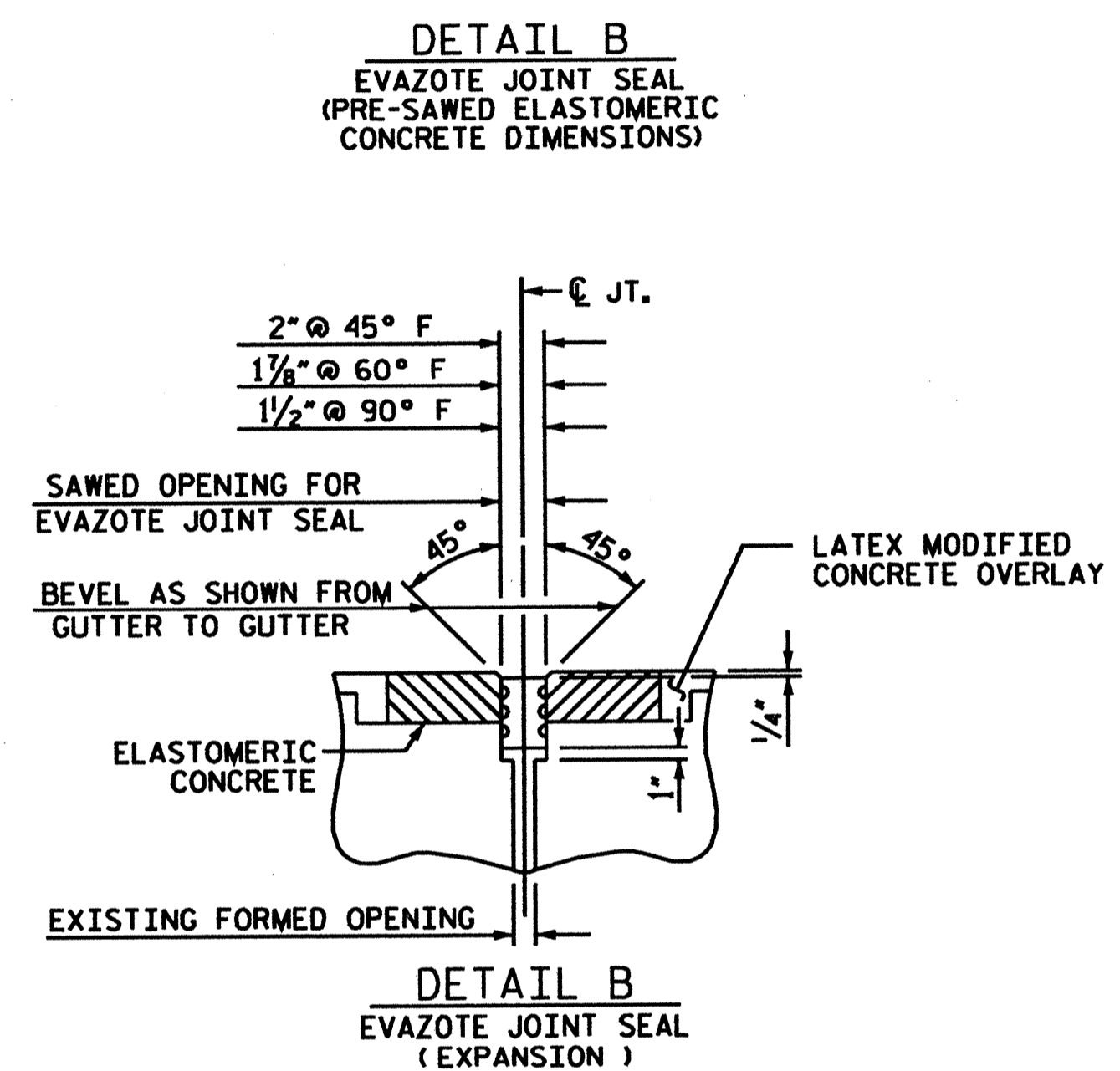
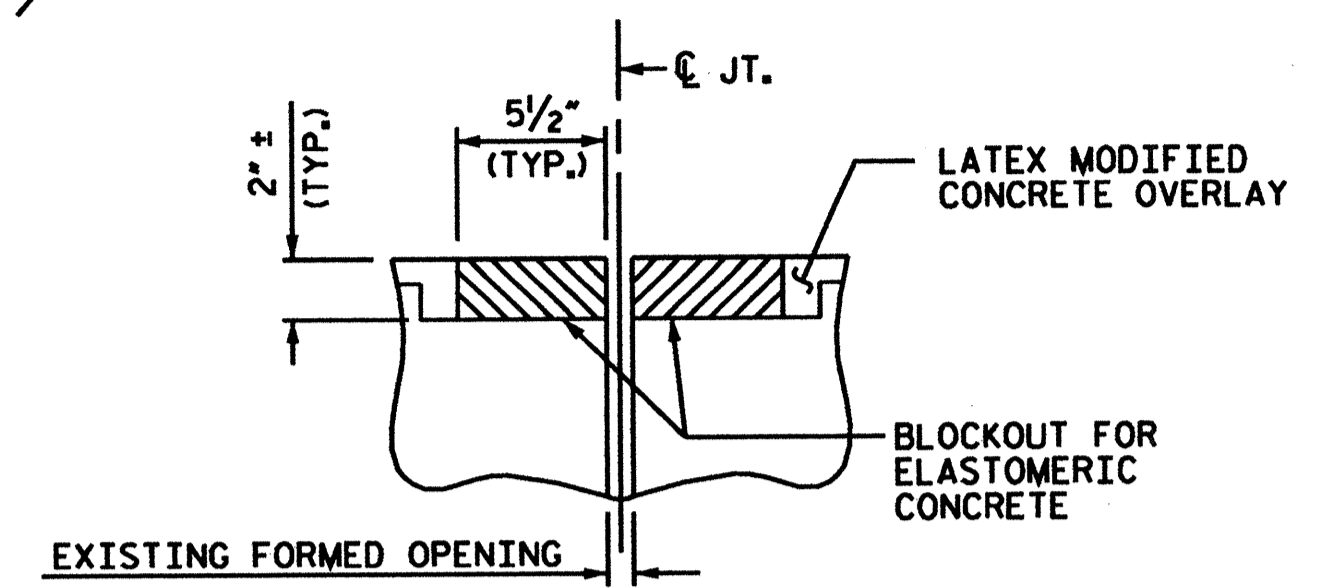
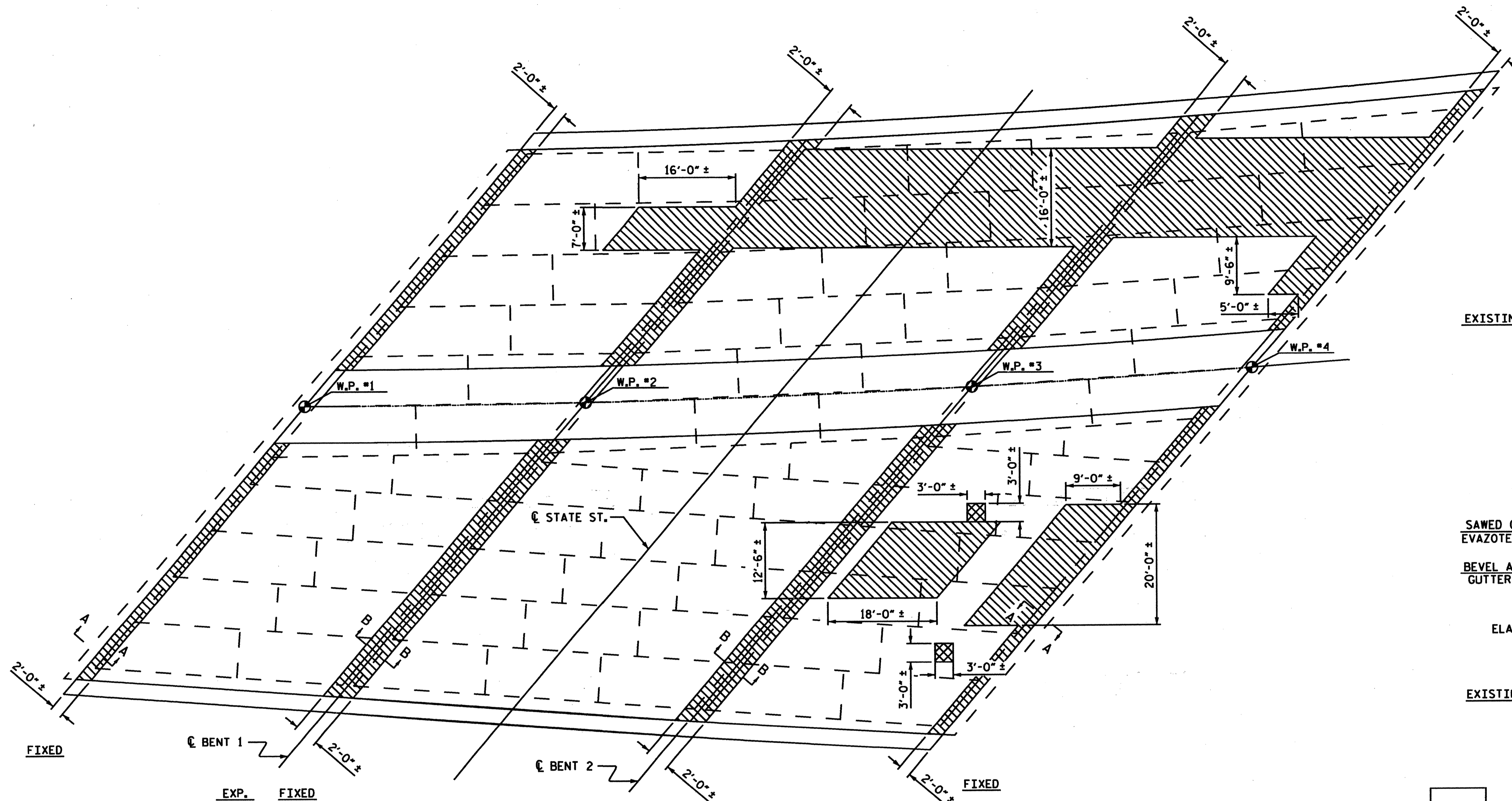
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PLAN OF SPANS
FOR DECK REPAIR

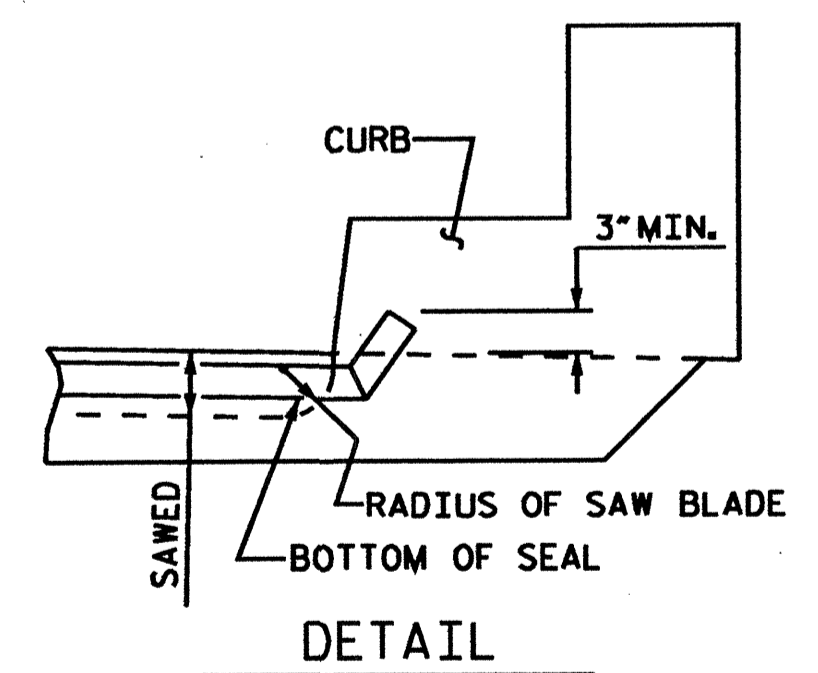
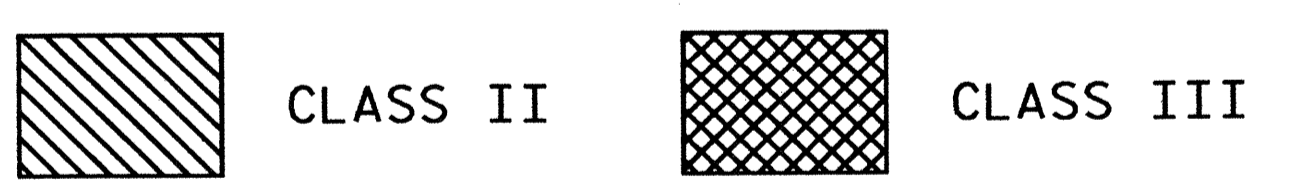
DECK REHAB. FOR BRIDGE NO. 274

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-14
1			3			TOTAL SHEETS
2			4			28

DRAWN BY: M.A. ALLEN DATE: 08-09
CHECKED BY: R.W. WRIGHT DATE: 08-09



PLAN OF SPANS - DECK REPAIRS



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.

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	15.1
BENT 1	16.0
BENT 2	17.4
E.B. 2	18.7
TOTAL	67.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 86+21.69 -L-
 SHEET 2 OF 2

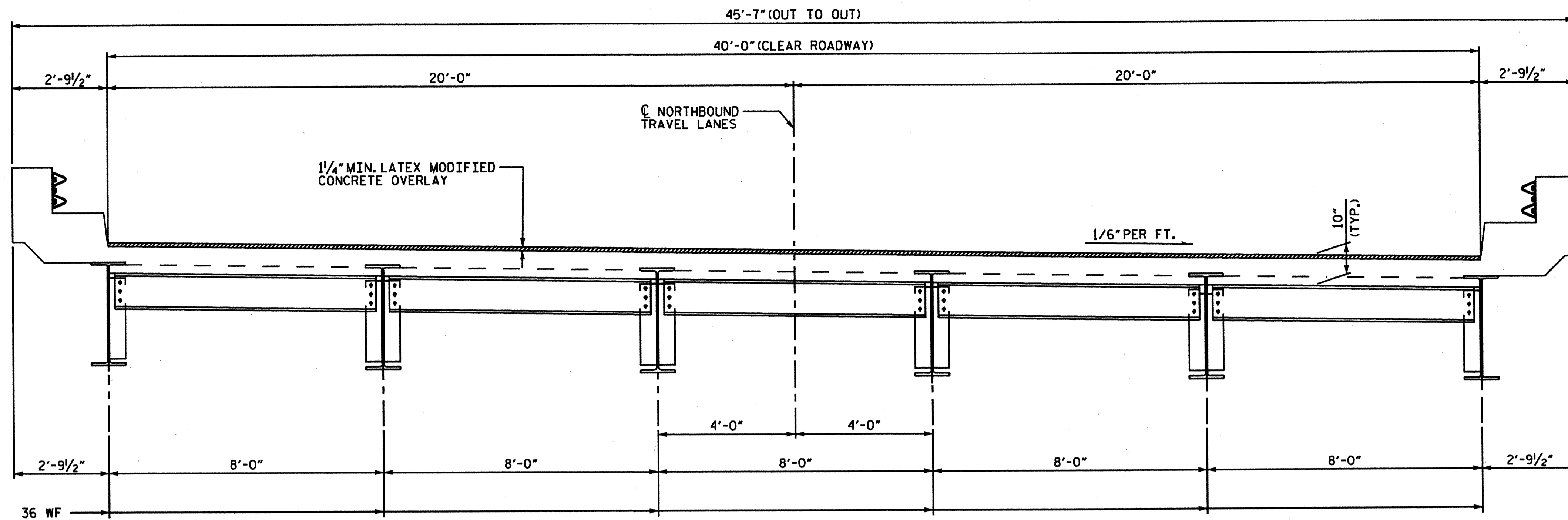
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

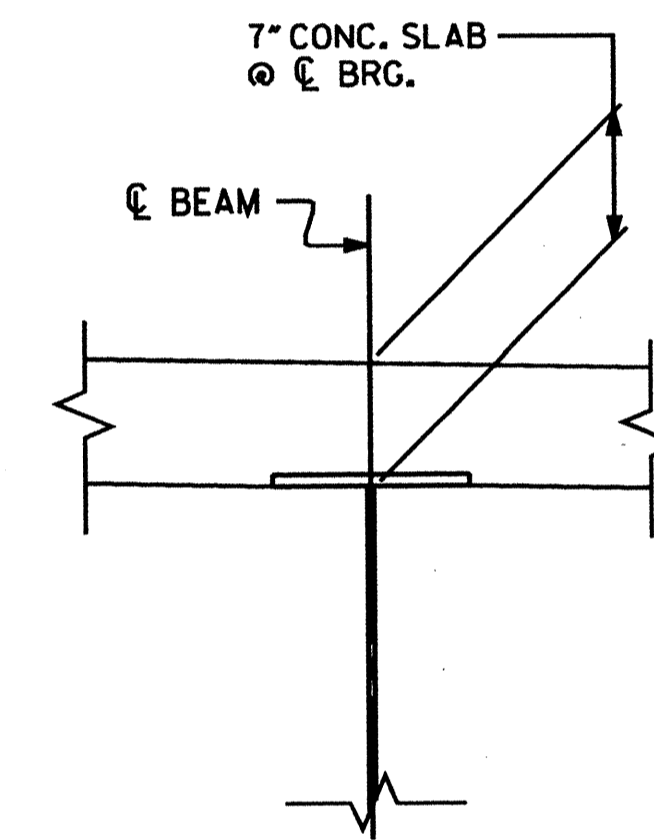
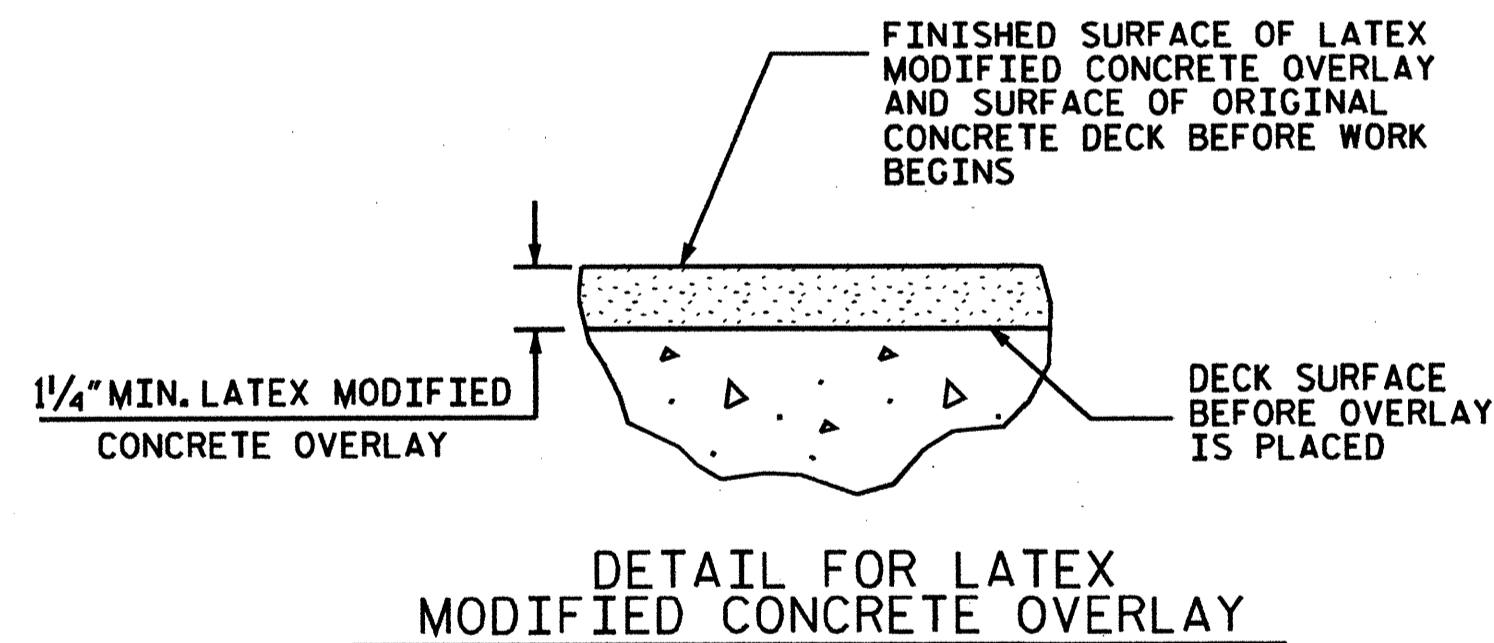
DECK REHAB. FOR BRIDGE NO. 274

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-15
1			3			TOTAL SHEETS 28
2			4			28

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



TYP. SECTION
(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)



EXIST. SLAB SECTION

NOTES:

FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.

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

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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.

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

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

FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 615+00.74 -L-

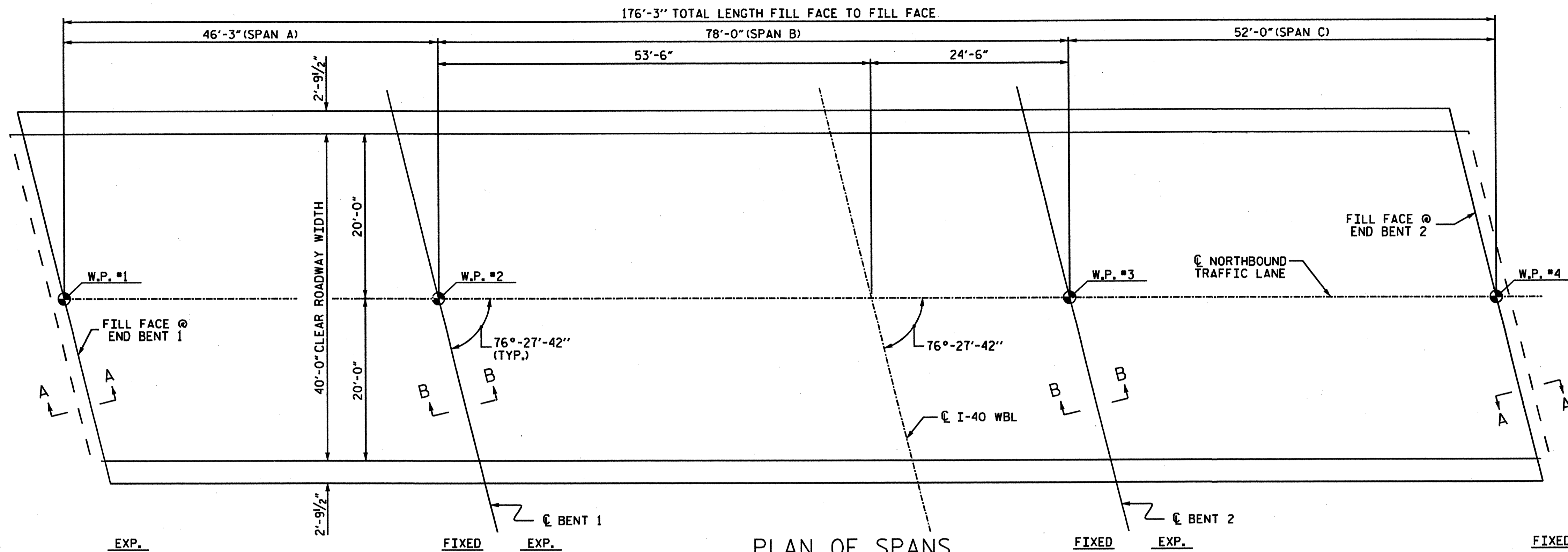
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 283

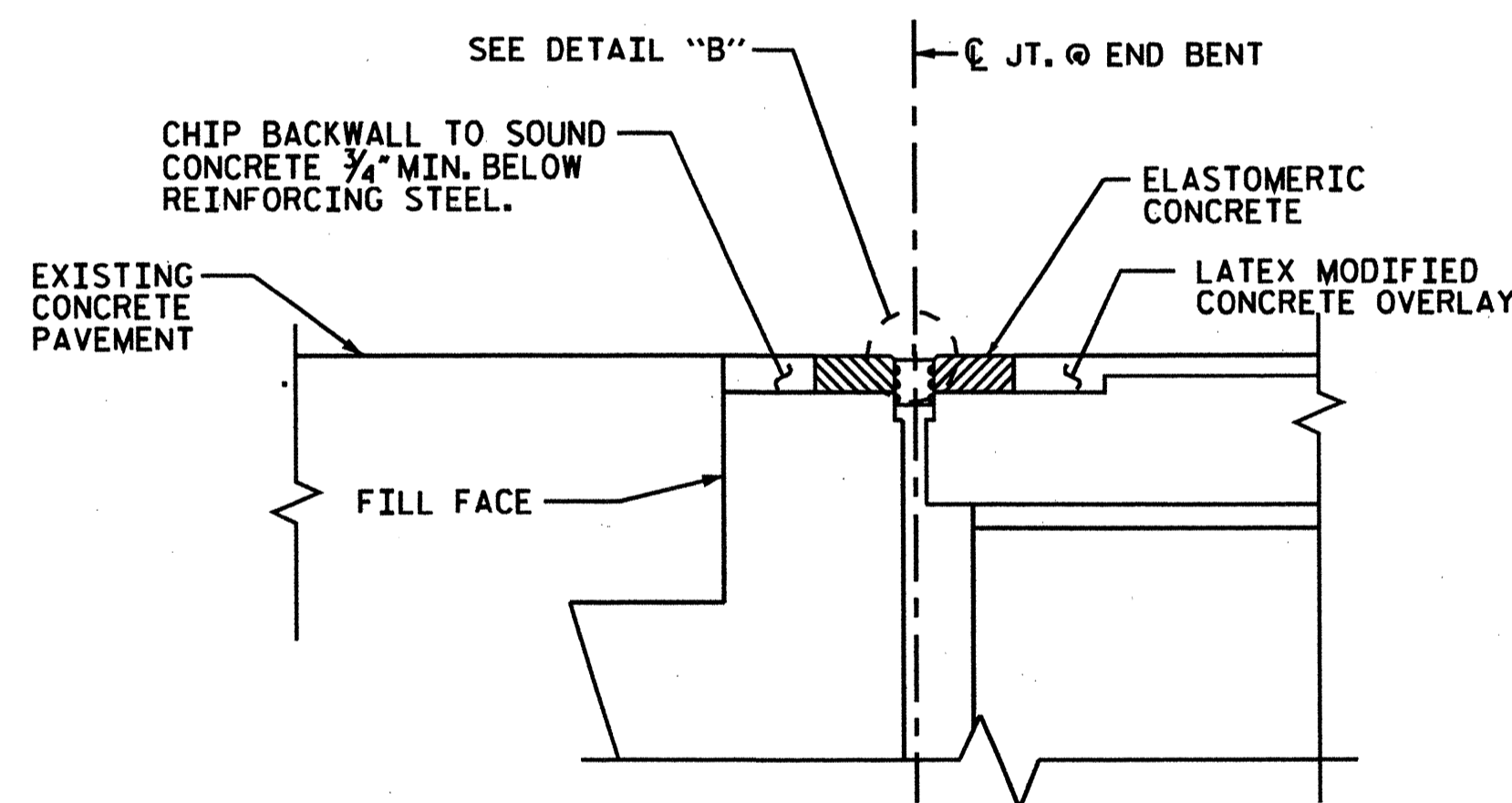
REVISIONS				SHEET NO.	
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

TOTAL SHEETS 28

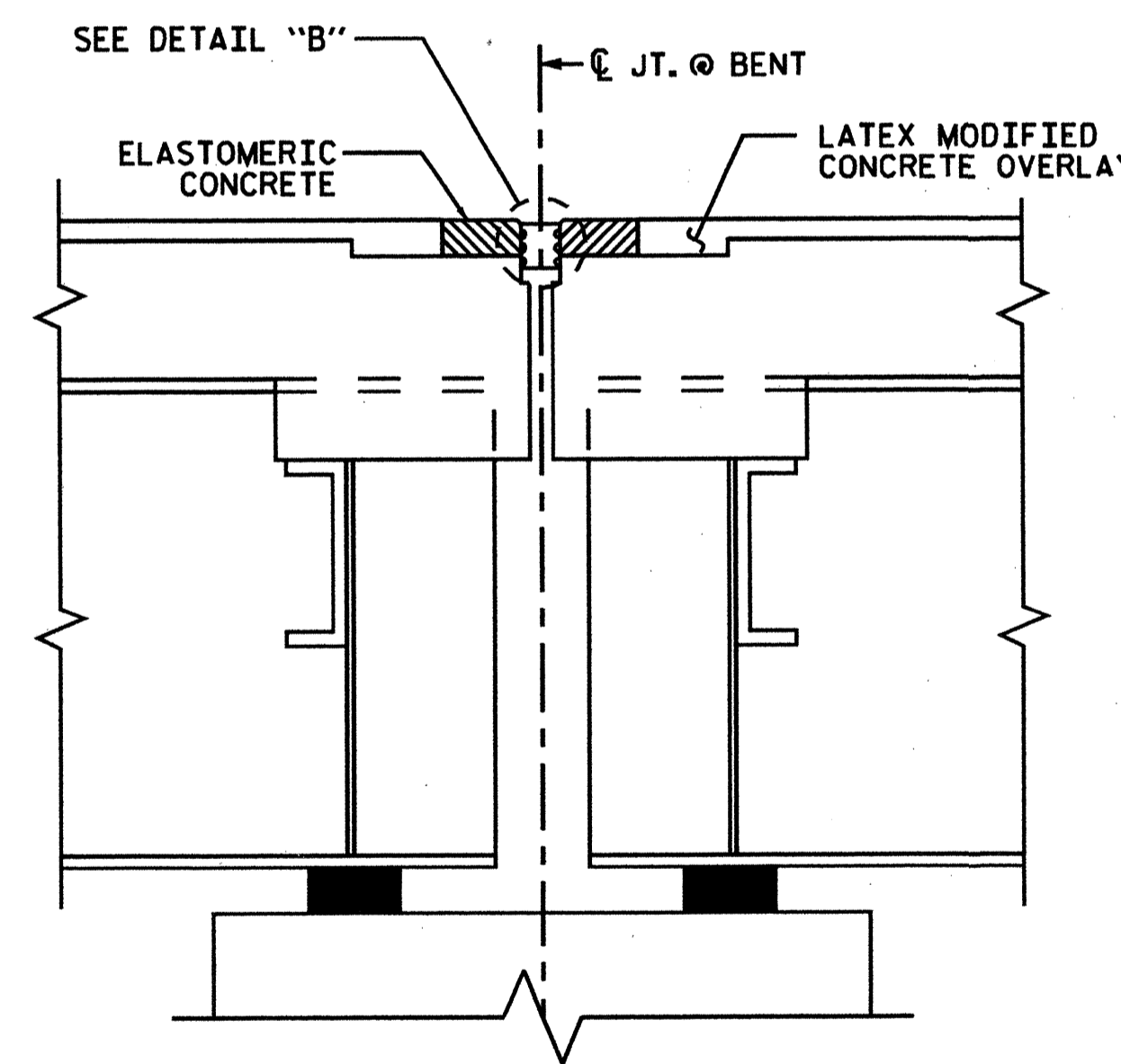
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



PLAN OF SPANS



SECTION A-A
(PROPOSED JOINT REPLACEMENT DETAIL)



SECTION B-B
(PROPOSED JOINT REPLACEMENT DETAIL)

TOTAL BILL OF MATERIAL

SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III** SURFACE PREPARATION	UNDER DECK** CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
790	506	284	0	0	790	0	55	790	LUMP SUM	6520

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

** NO LOCATIONS ARE ANTICIPATED. IF ANY LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 615+00.74 -L-

SHEET 1 OF 2

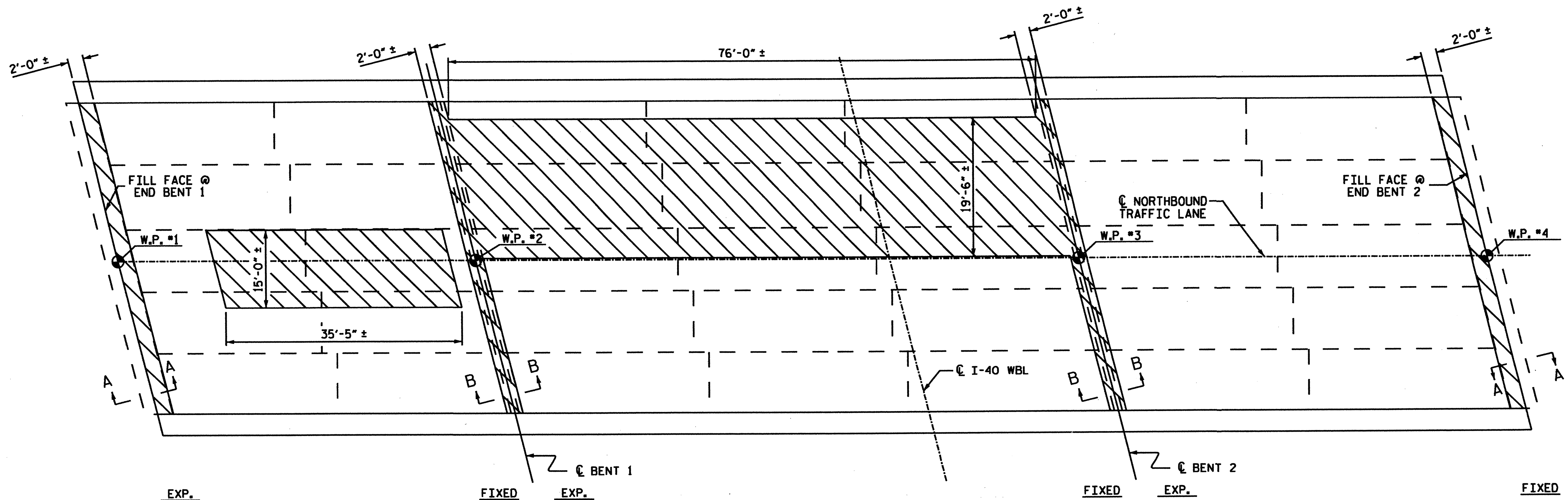
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

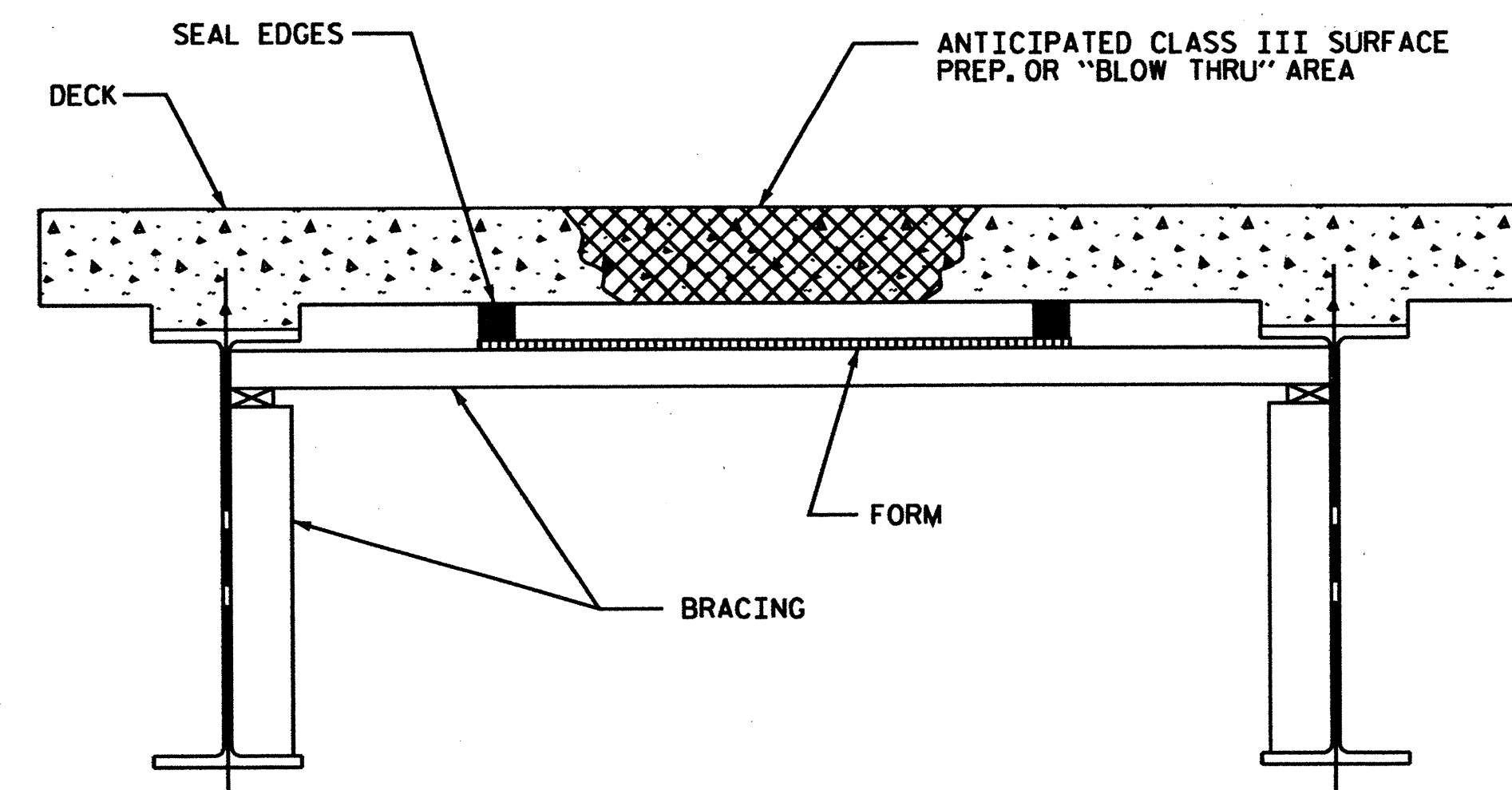
DECK REHAB. FOR BRIDGE NO. 283

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-17
1			3			TOTAL SHEETS 28
2			4			

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



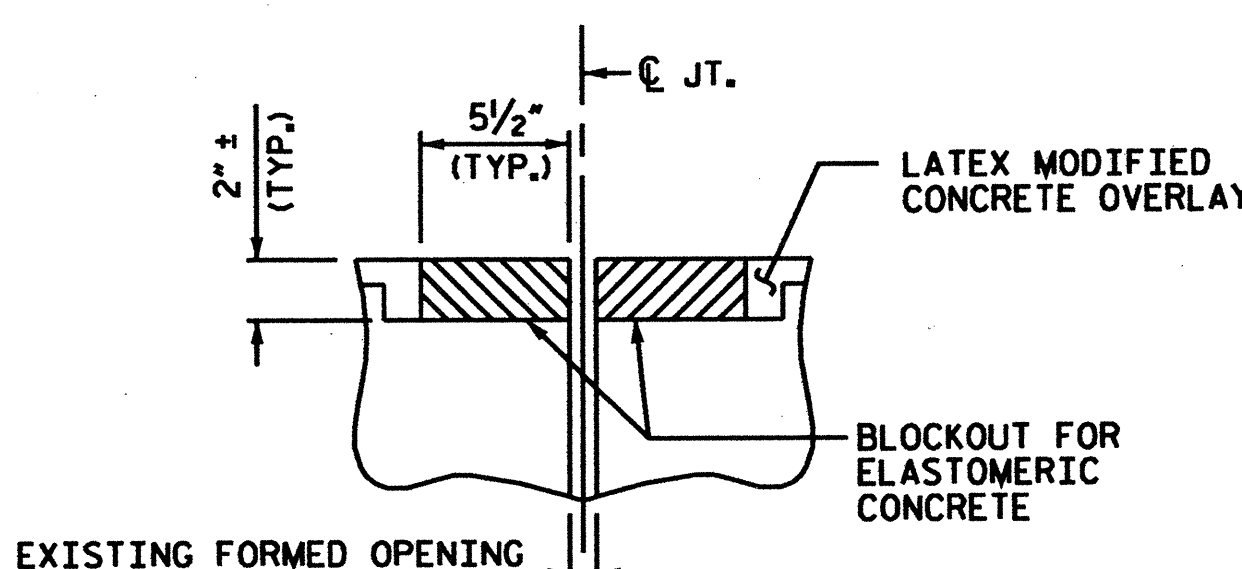
PLAN OF SPANS - DECK REPAIRS



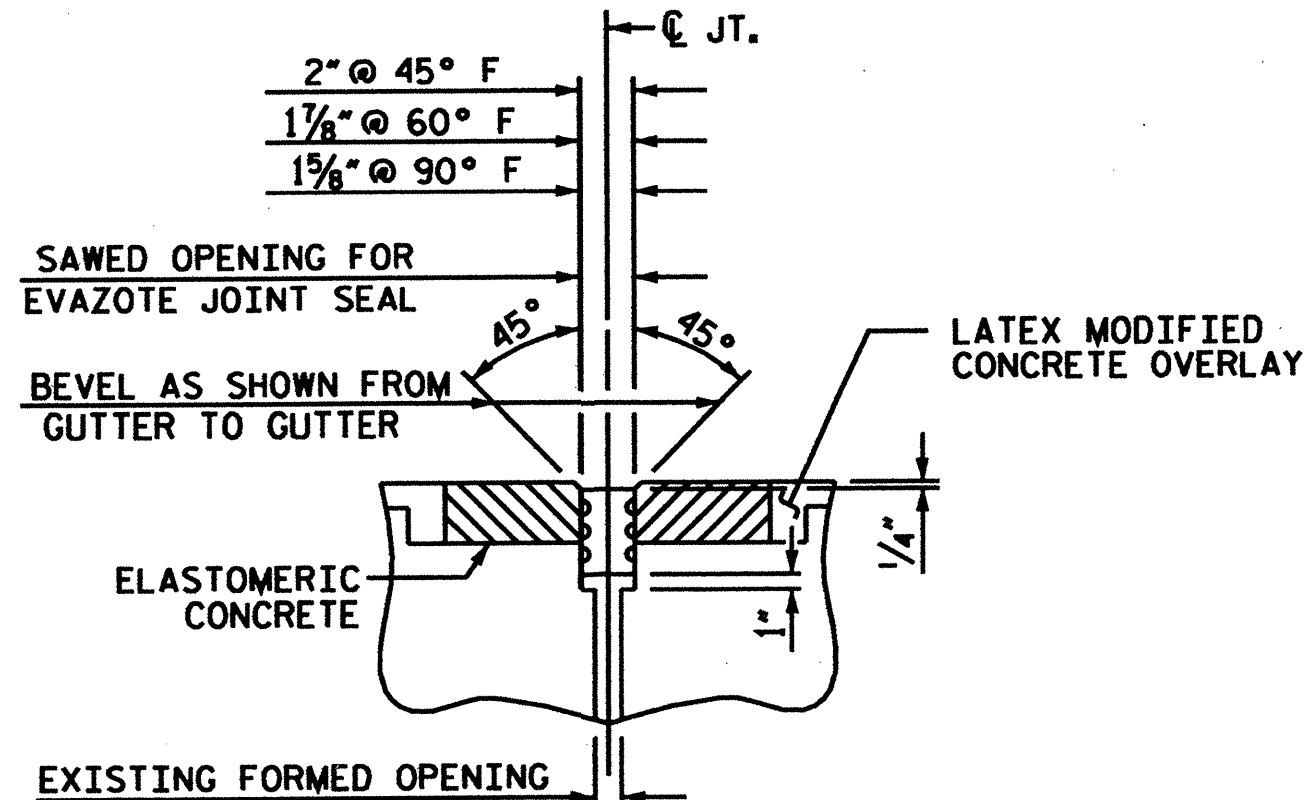
TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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.

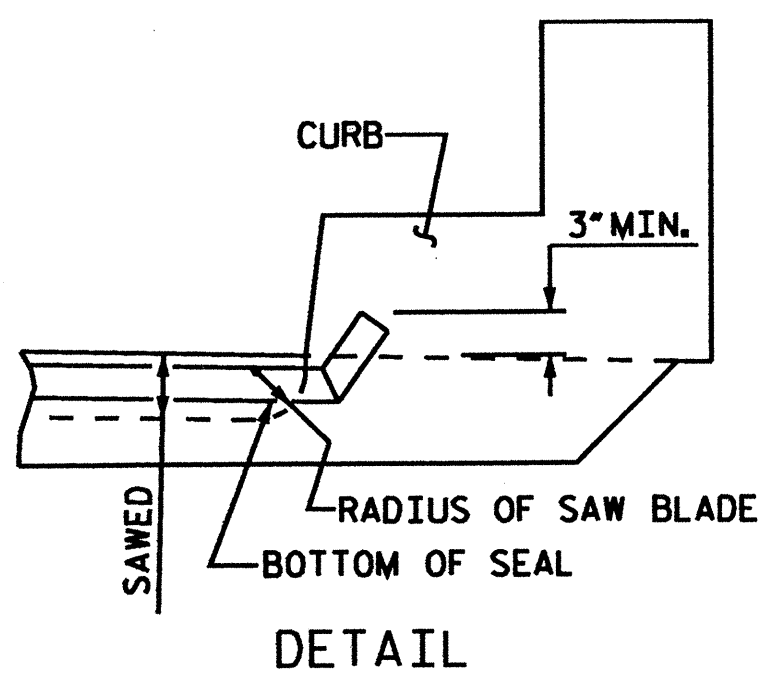


DETAIL B
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)



DETAIL B
EVAZOTE JOINT SEAL
(EXPANSION)

NOTE:
FOR FIXED JOINT, SAW CUT
WIDTH SHALL BE 1 1/4" AND
CENTERED ABOUT THE JOINT.



DETAIL

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	6.3
BENT 1	6.3
BENT 2	6.3
E.B. 2	6.3
TOTAL	25.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 615+00.74 -L-

SHEET 2 OF 2

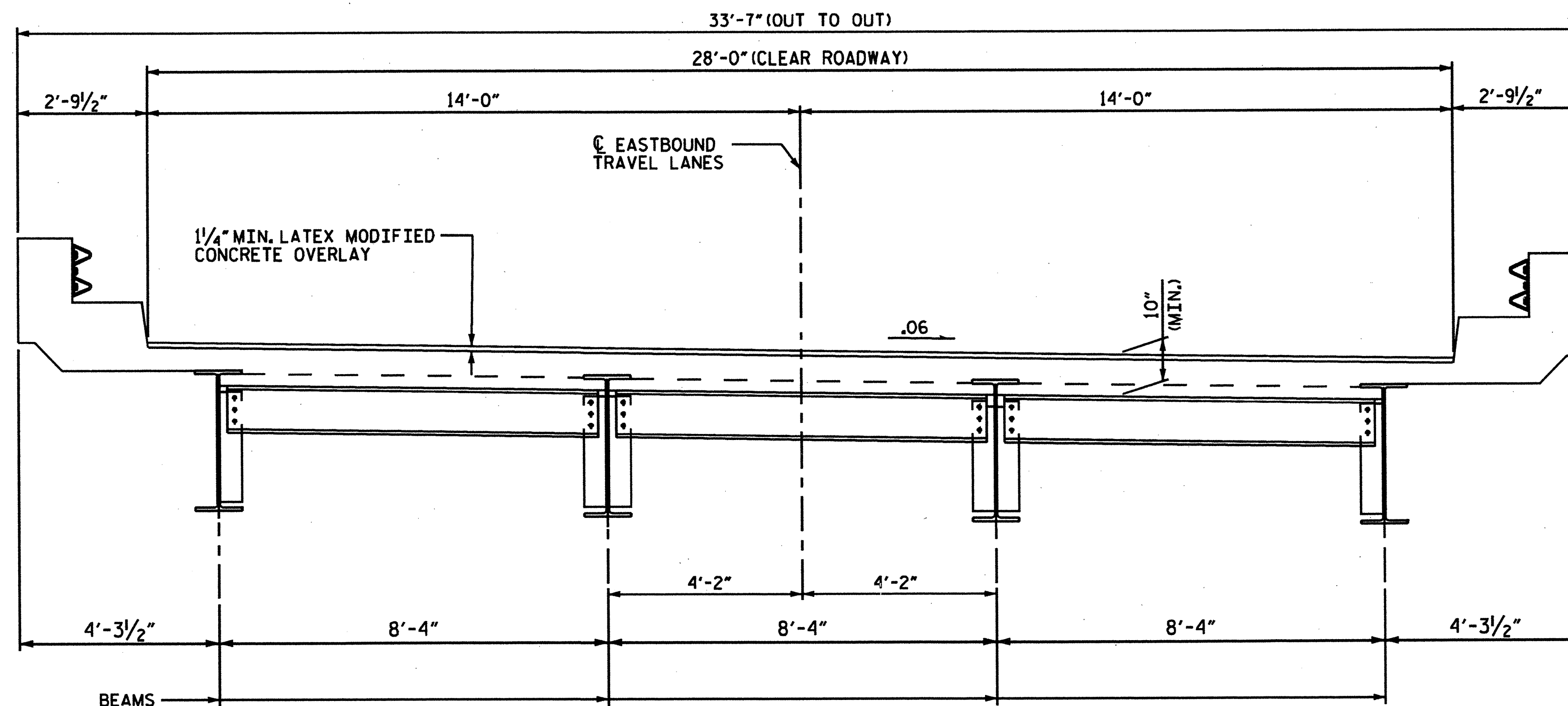
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

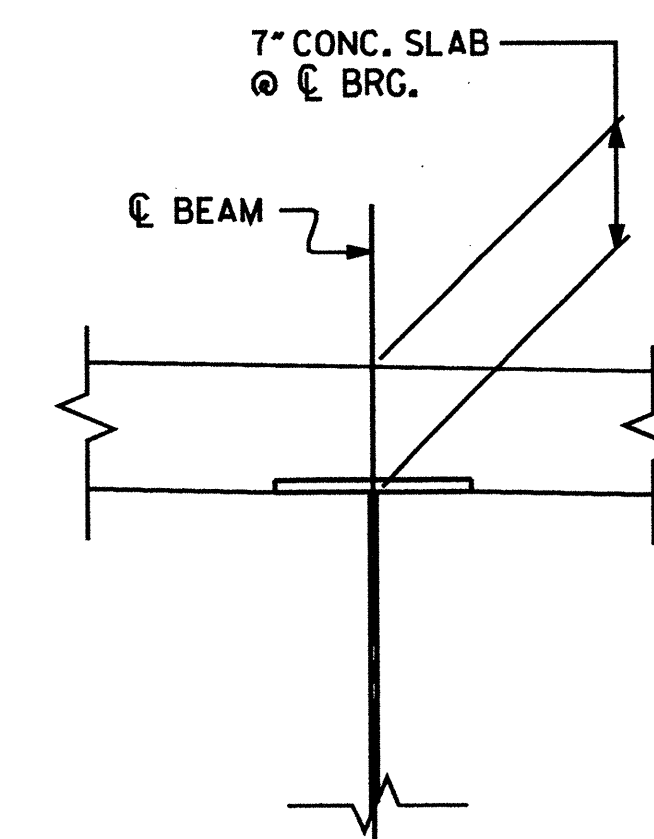
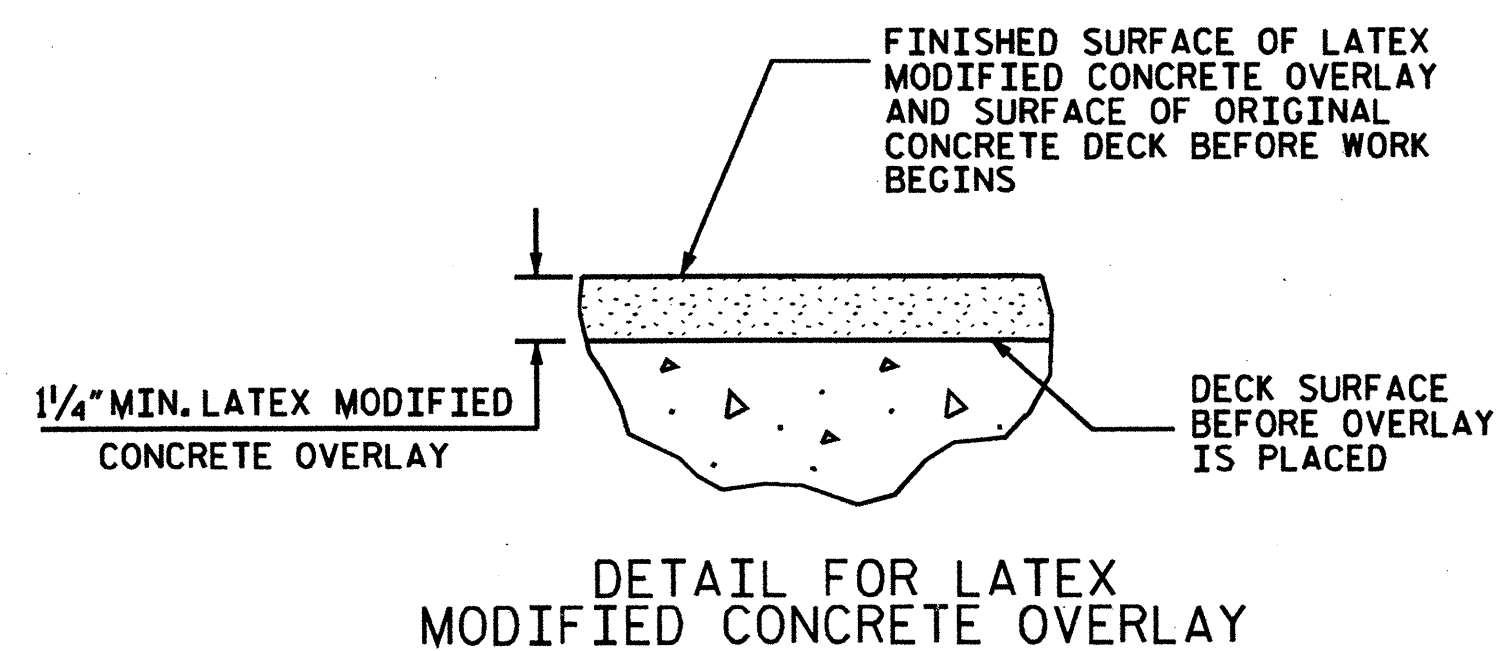
DECK REHAB. FOR BRIDGE NO. 283

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

SHEET NO. S-18
 TOTAL SHEETS 28



TYP. SECTION
(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)



EXIST. SLAB SECTION

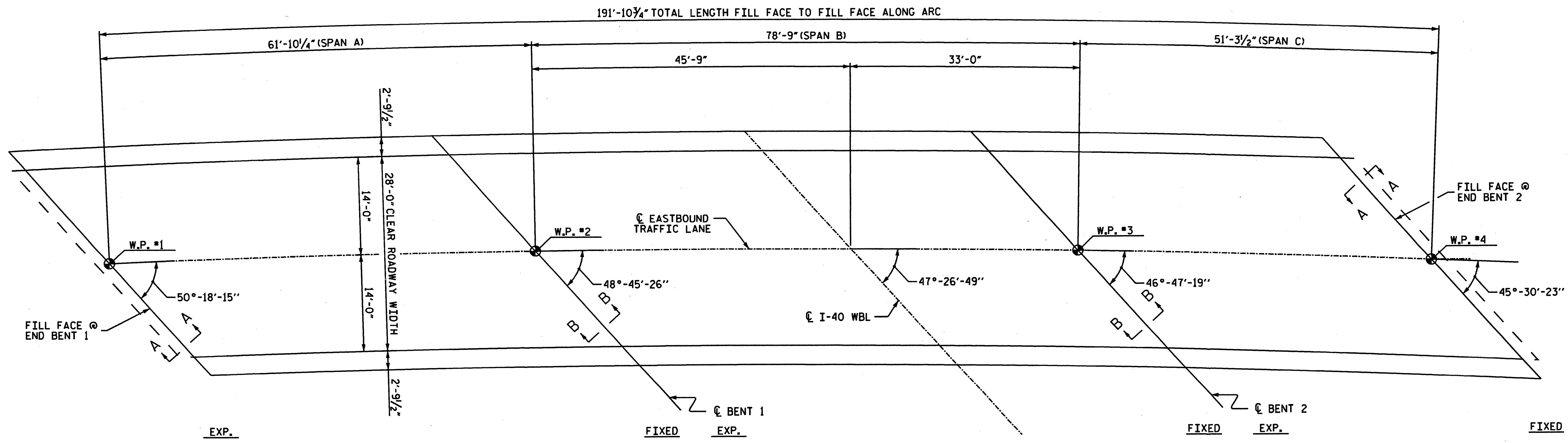
NOTES:

- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "HYDRO-DEMOLITION OF BRIDGE DECK" SPECIAL PROVISION.
- 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. SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT END BENTS 1 & 2 AND BENTS 1&2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
- LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
- FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

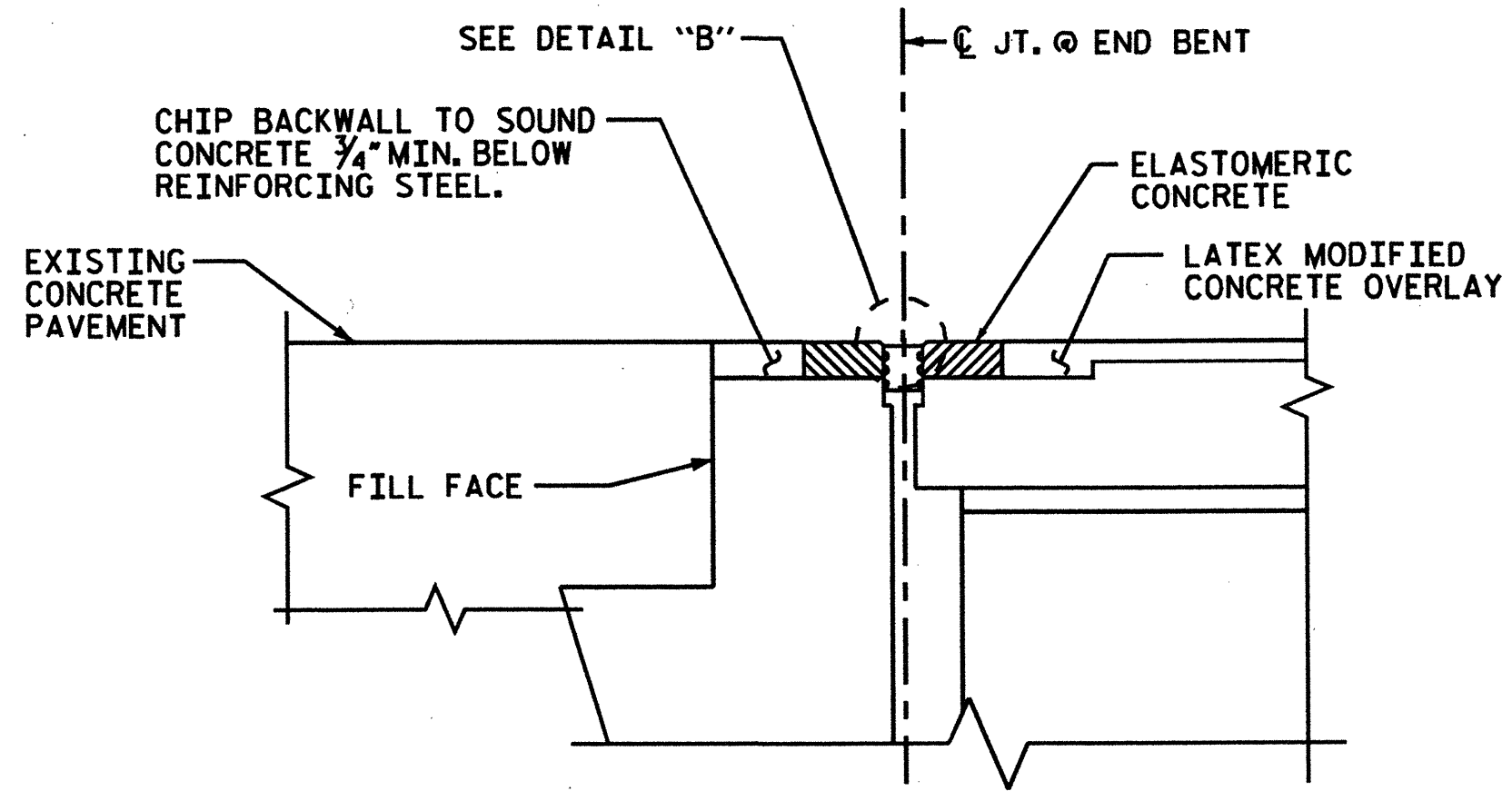
PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 617+63.12 -L-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
TYPICAL SECTION					
DECK REHAB. FOR BRIDGE NO. 285					
REVISIONS					SHEET NO.
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		
					TOTAL SHEETS 28

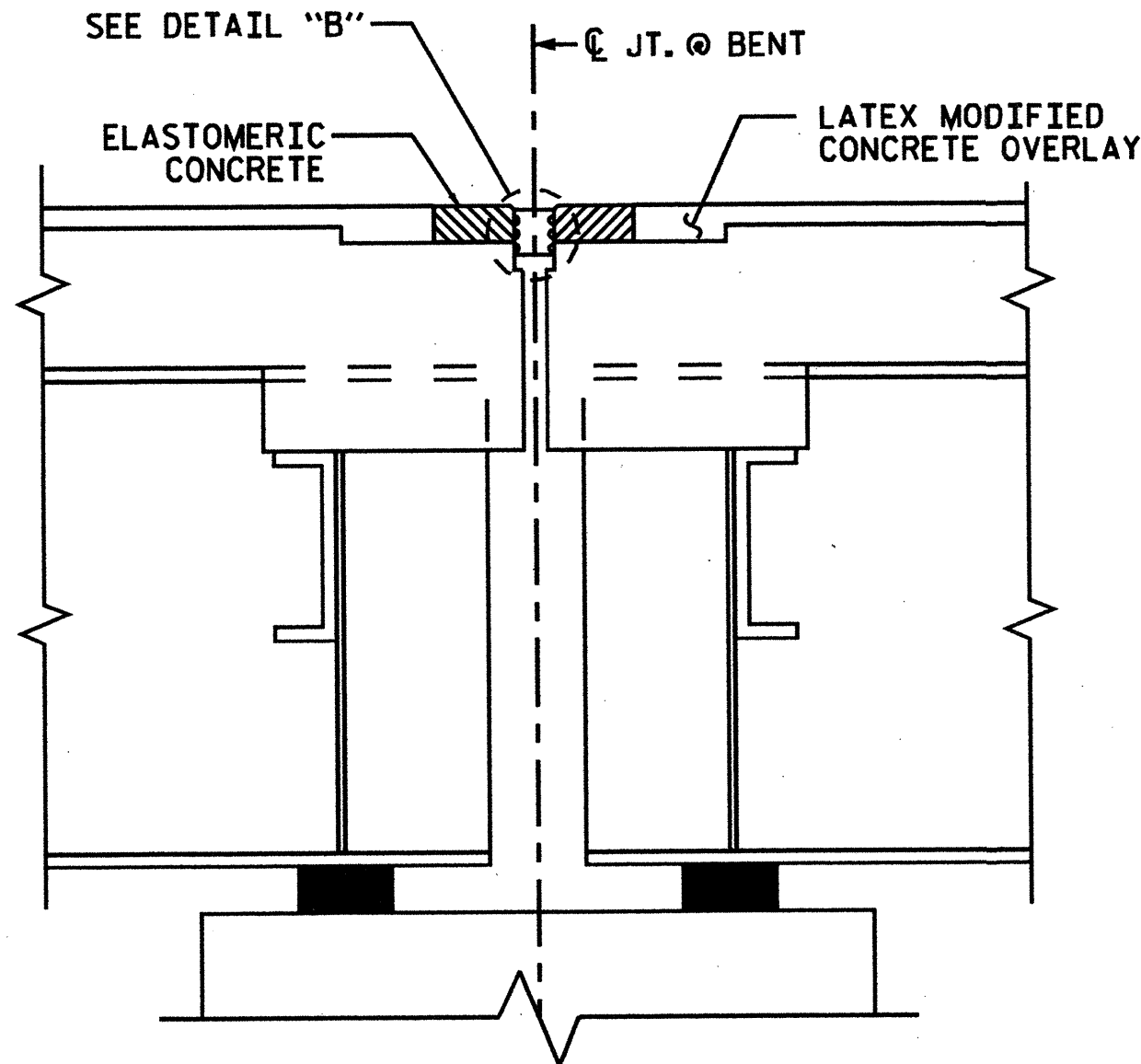
DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09



PLAN OF SPANS



SECTION A-A
(PROPOSED JOINT REPLACEMENT DETAIL)



SECTION B-B
(PROPOSED JOINT REPLACEMENT DETAIL)

TOTAL BILL OF MATERIAL

SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III** SURFACE PREPARATION	UNDER DECK CONTAINMENT**	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
600	508	92	0	0	600	0	42	600	LUMP SUM	4800

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

** NO LOCATIONS ARE ANTICIPATED. IF ANY LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 617+63.12 -L-

SHEET 1 OF 2

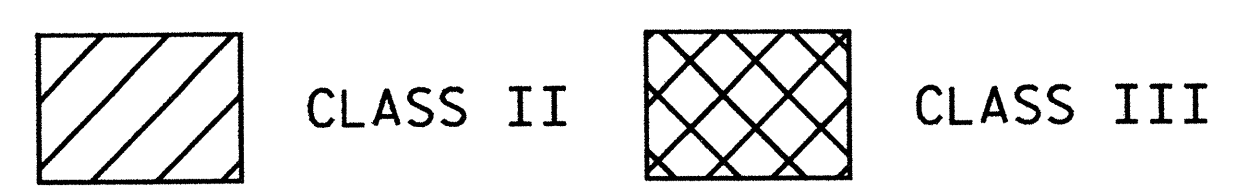
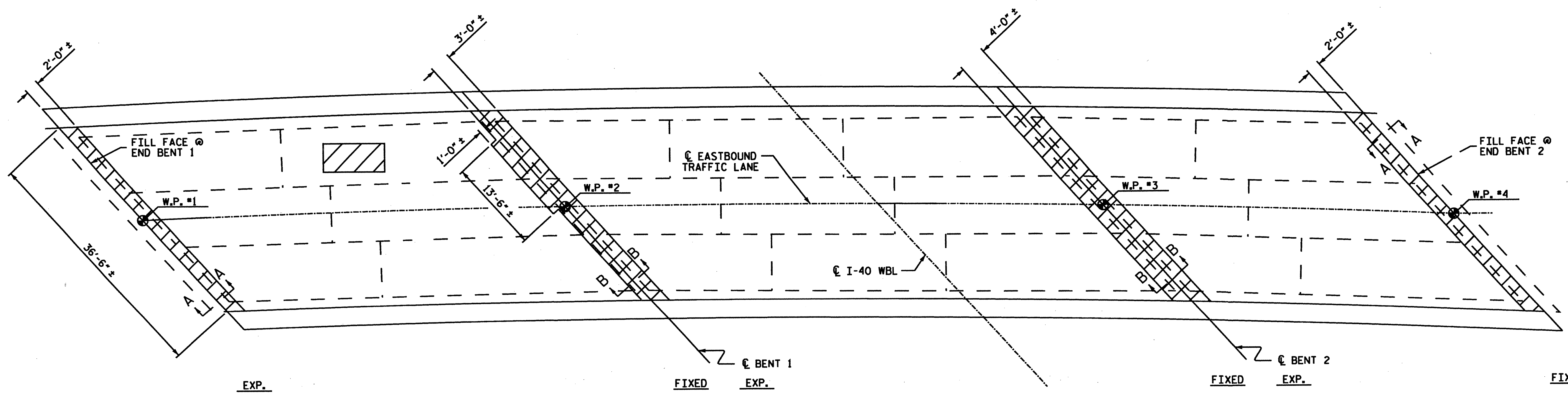
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

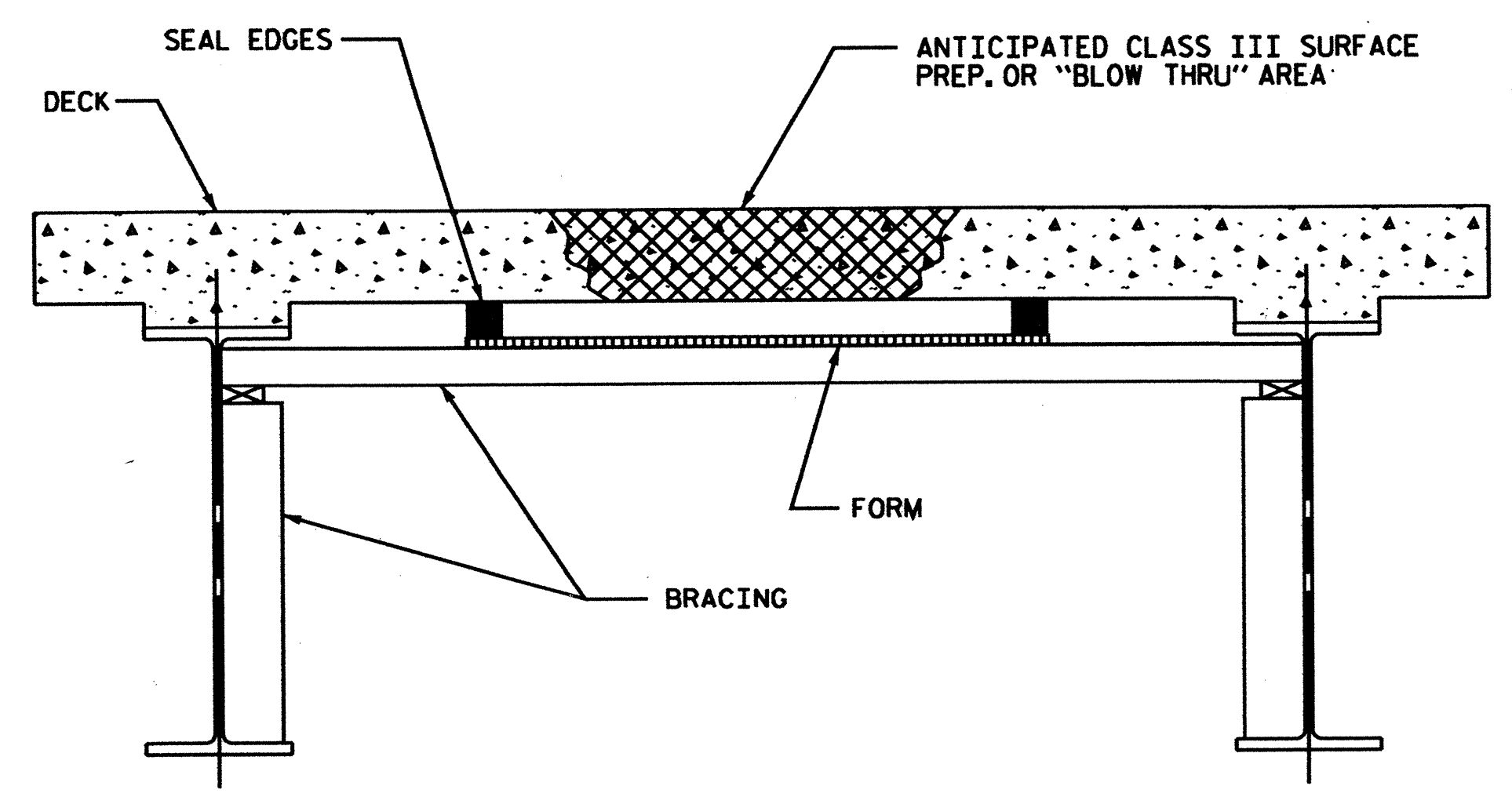
DECK REHAB. FOR BRIDGE NO. 285

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-20
1			3			TOTAL SHEETS
2			4			28

DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09

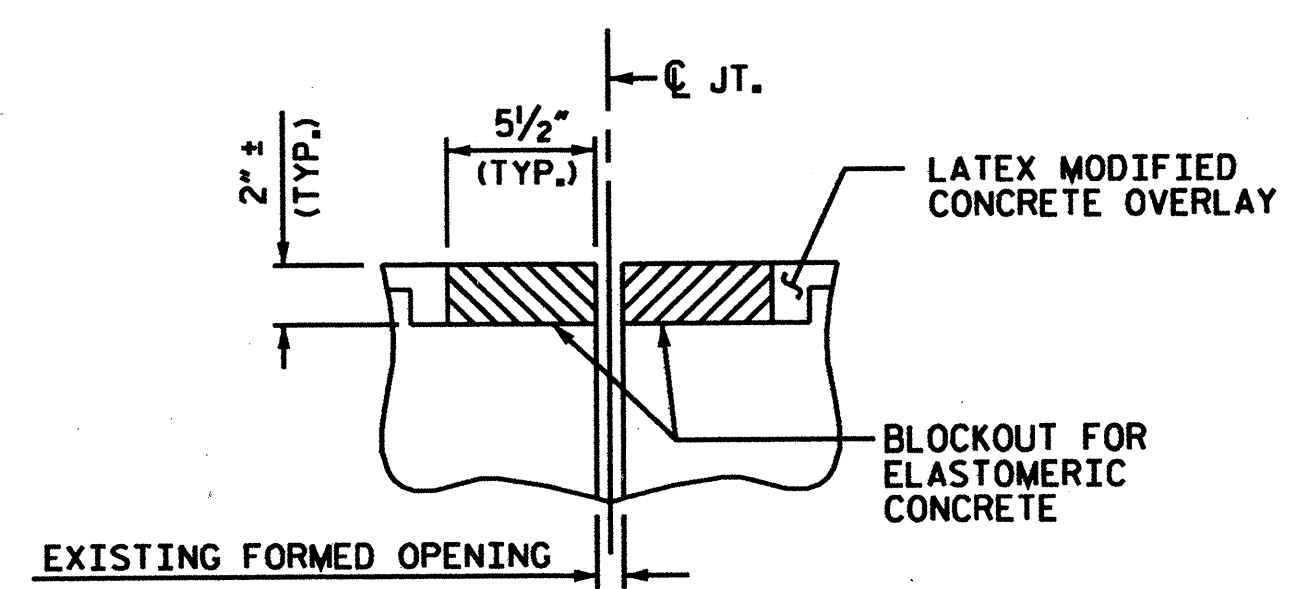


PLAN OF SPANS - DECK REPAIRS

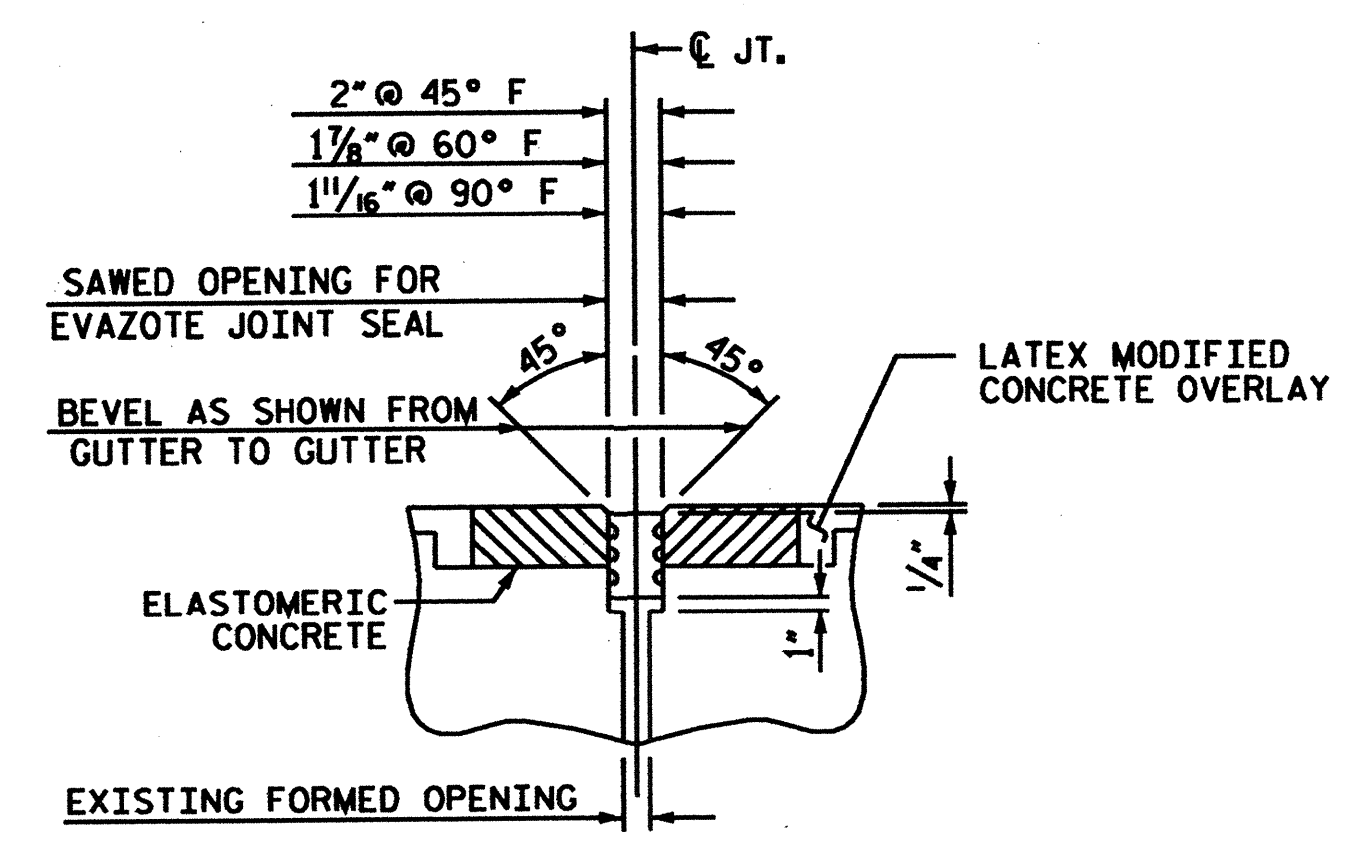


TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

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.

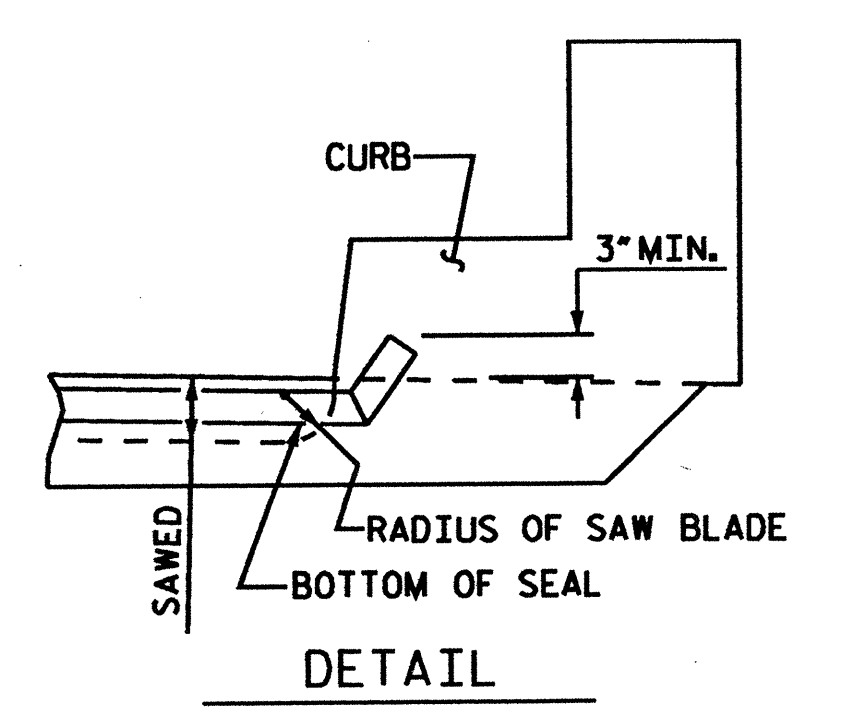


DETAIL B
 EVAZOTE JOINT SEAL
 (PRE-SAWED ELASTOMERIC
 CONCRETE DIMENSIONS)



DETAIL B
 EVAZOTE JOINT SEAL
 (EXPANSION)

NOTE:
 FOR FIXED JOINT, SAW CUT
 WIDTH SHALL BE 1 1/8" AND
 CENTERED ABOUT THE JOINT.



DETAIL

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
E.B. 1	5.8
BENT 1	5.8
BENT 2	5.8
E.B. 2	5.8
TOTAL	23.2

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 617+63.12 -L-

SHEET 2 OF 2

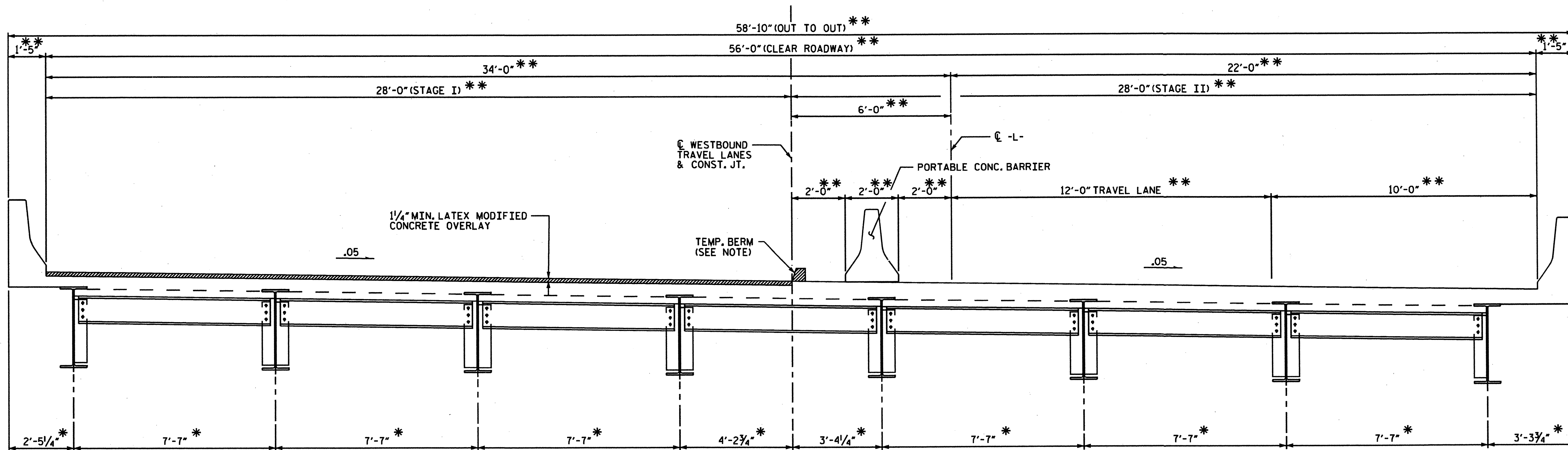
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 285

REVISIONS						SHEET NO. S-21
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			

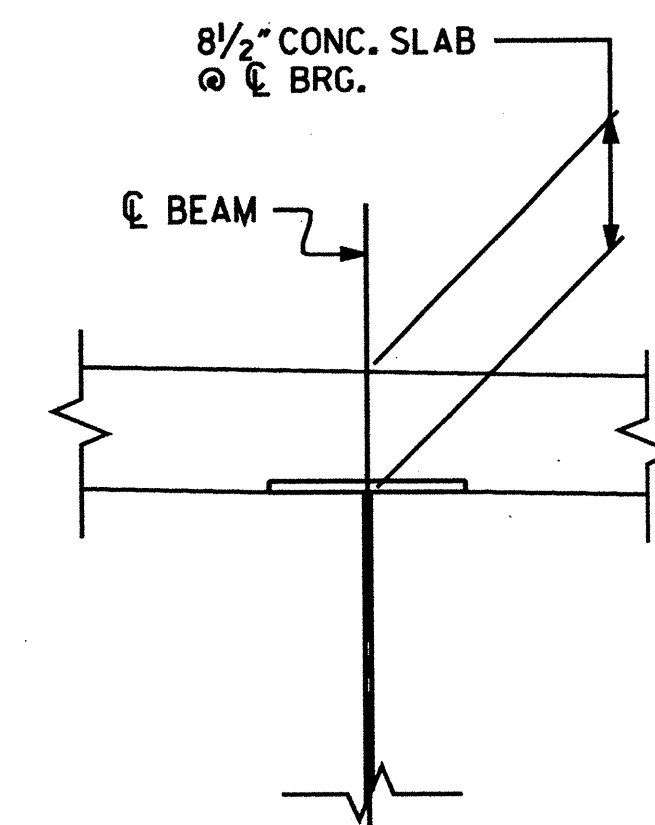
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



TYP. SECTION - STAGE I

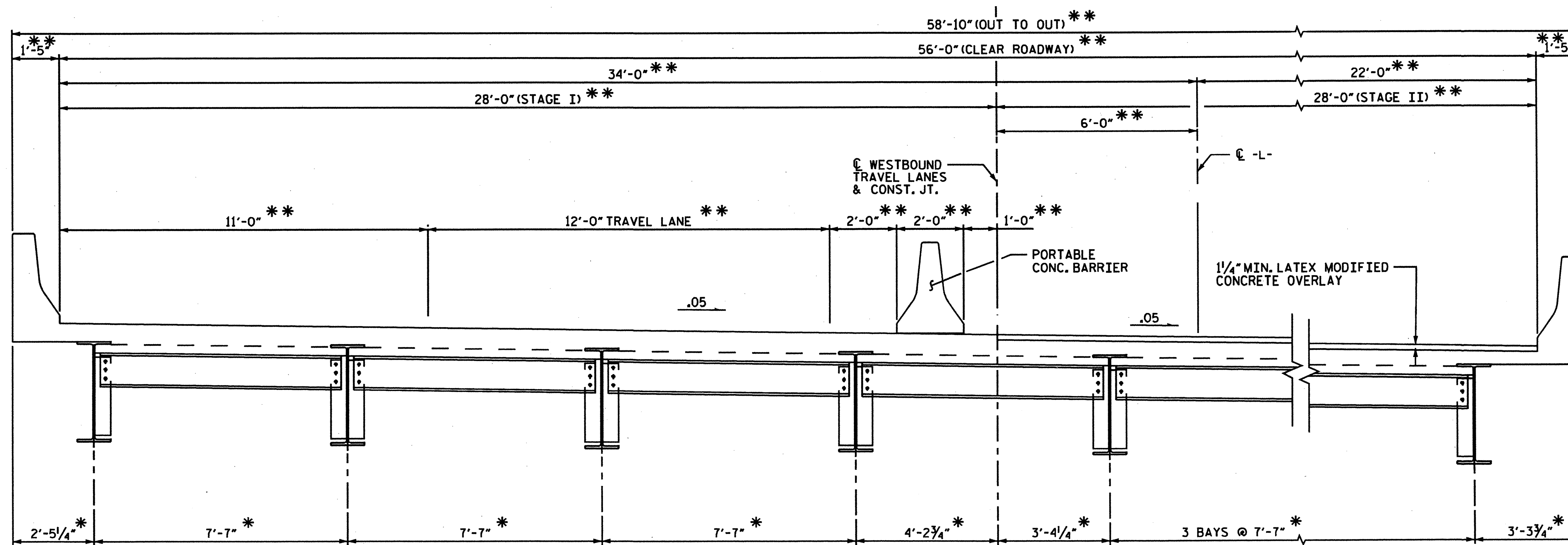
(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)
* RADIAL THRU WORKPOINT
** RADIAL DIMENSIONS

NOTE:
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 SECTION

PROJECT NO. B-5179B
BUNCOMBE COUNTY
STATION: 57+41.24 -L-



TYP. SECTION - STAGE II

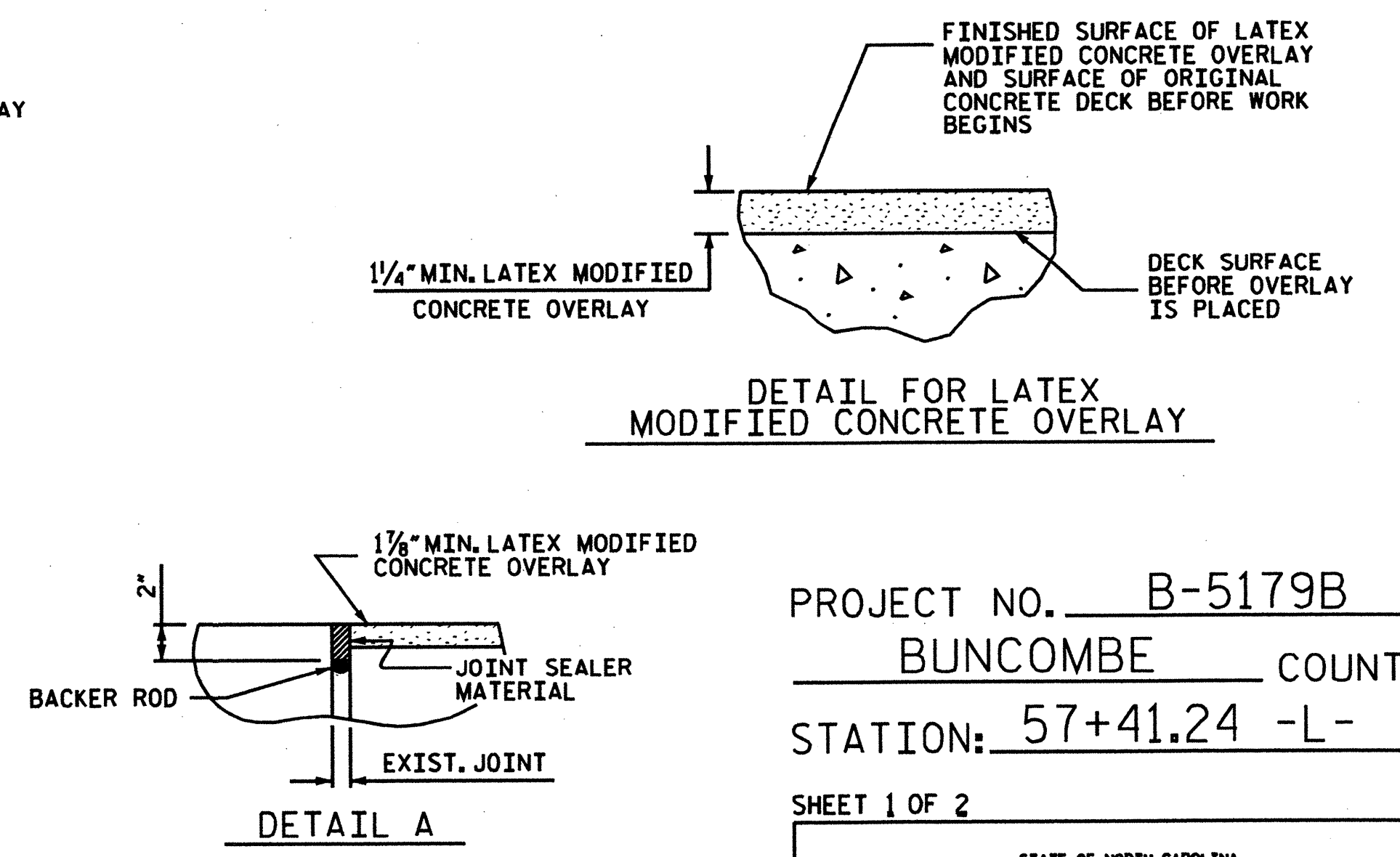
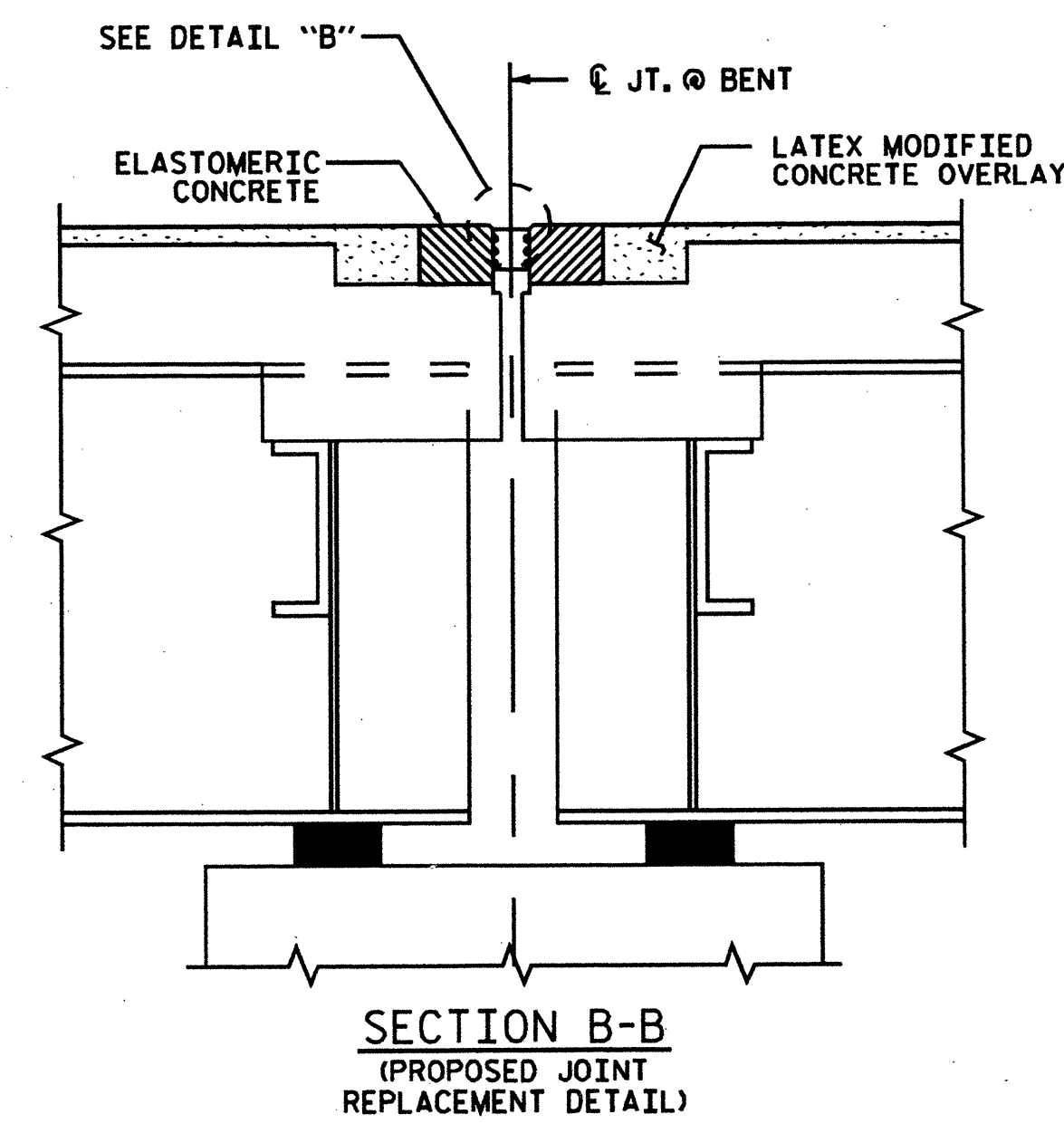
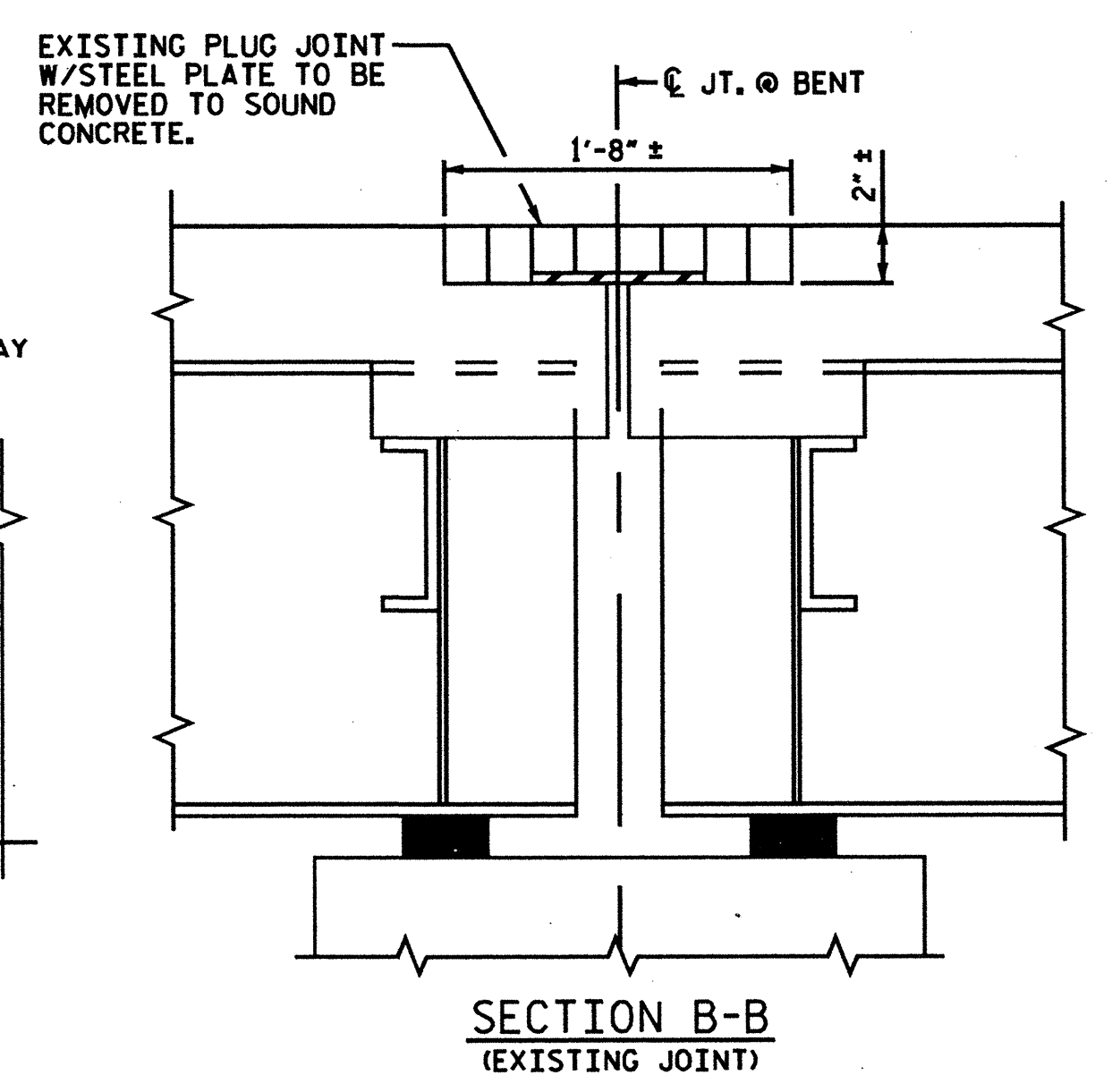
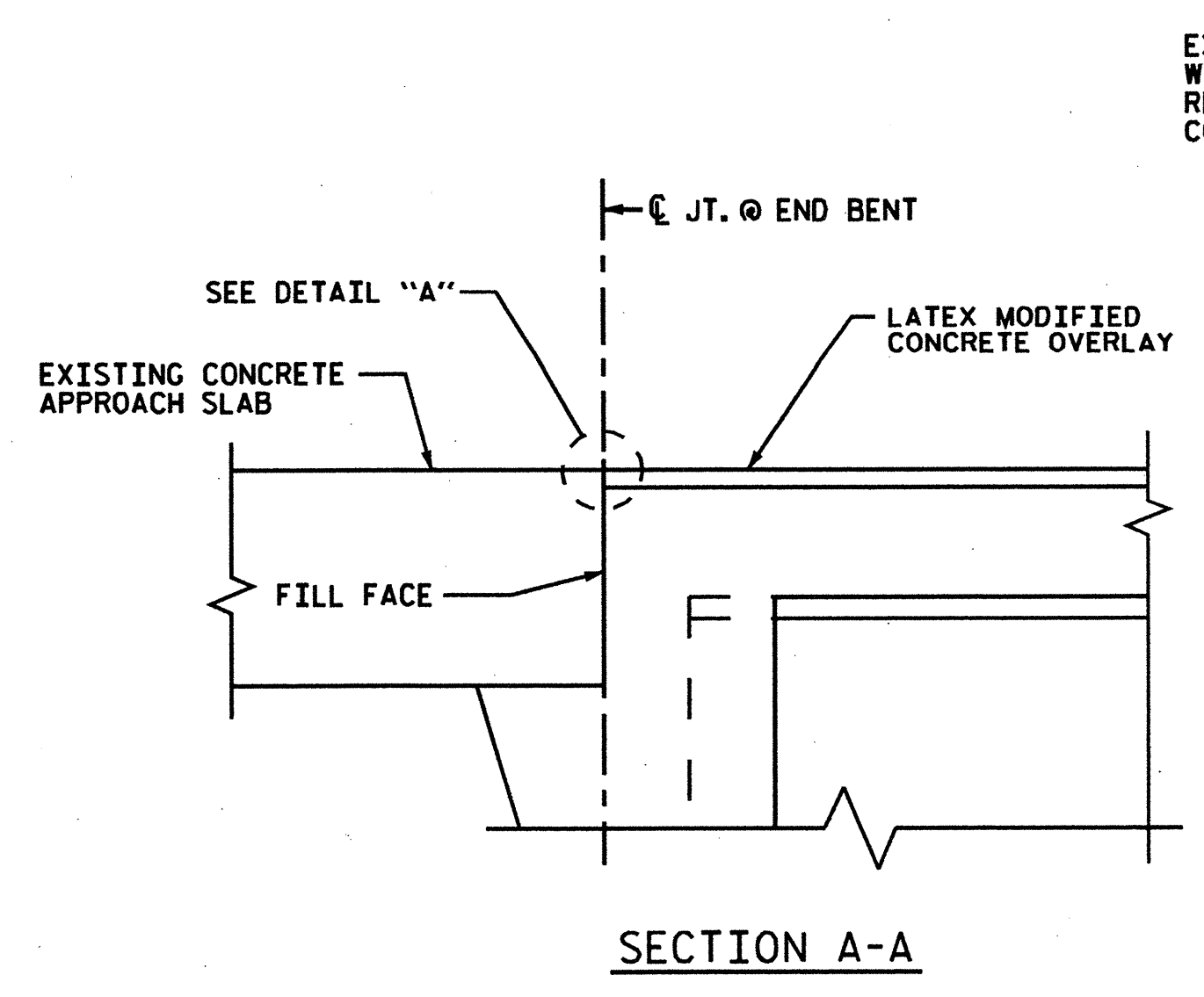
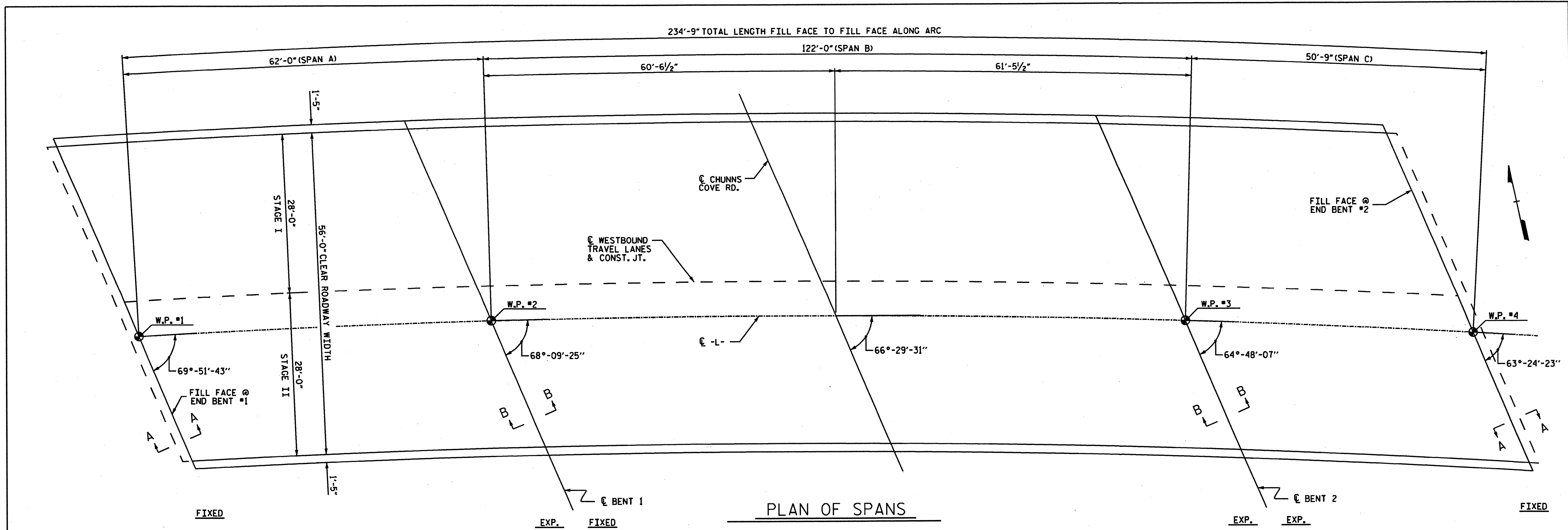
(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)
* RADIAL THRU WORKPOINT
** RADIAL DIMENSIONS

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 439

REVISIONS						SHEET NO. 5-22
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			

DRAWN BY: M.A. ALLEN DATE: 08-09
CHECKED BY: R.W. WRIGHT DATE: 08-09



PROJECT NO. B-5179B

BUNCOMBE COUNTY

STATION: 57+41.24 -L-

SHEET 1 OF 2

TOTAL BILL OF MATERIAL										
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	EVAZOTE JOINT SEALS	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	LUMP SUM	SO. FT.
1460	1174	258	28	252	1460	4	101	1460	LUMP SUM	12400

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

DRAWN BY: M.A. ALLEN DATE: 08-09

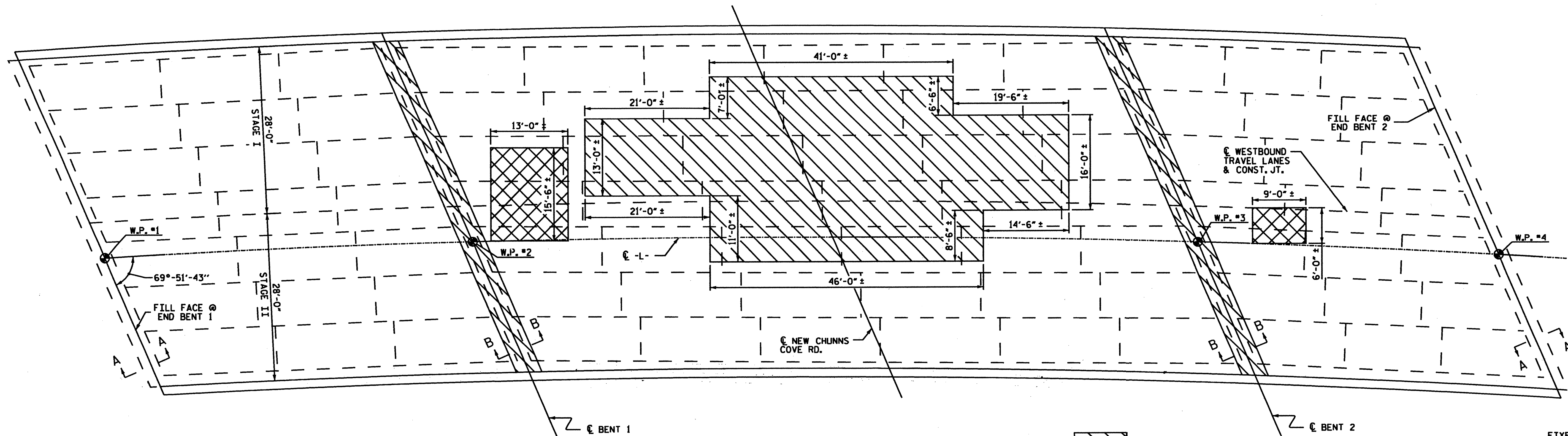
CHECKED BY: R.W. WRIGHT DATE: 08-09

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

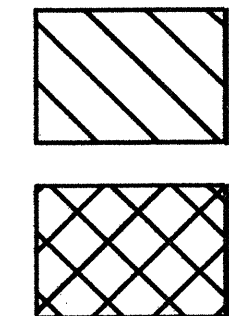
PLAN OF SPANS
FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 439

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	5-23
1			3			TOTAL SHEETS 28
2			4			

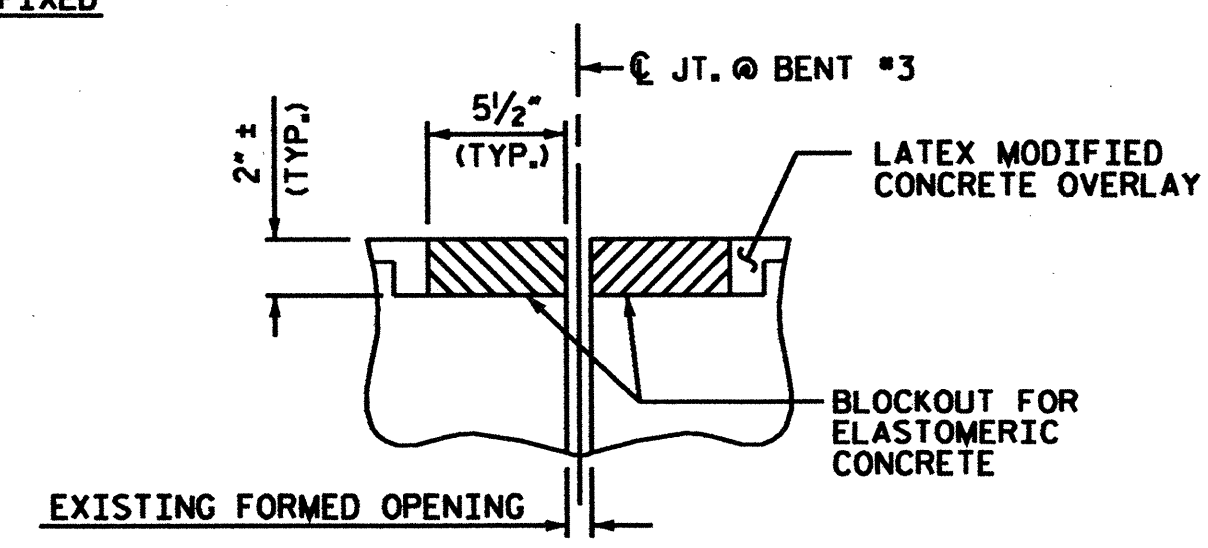


PLAN OF SPANS - DECK REPAIRS

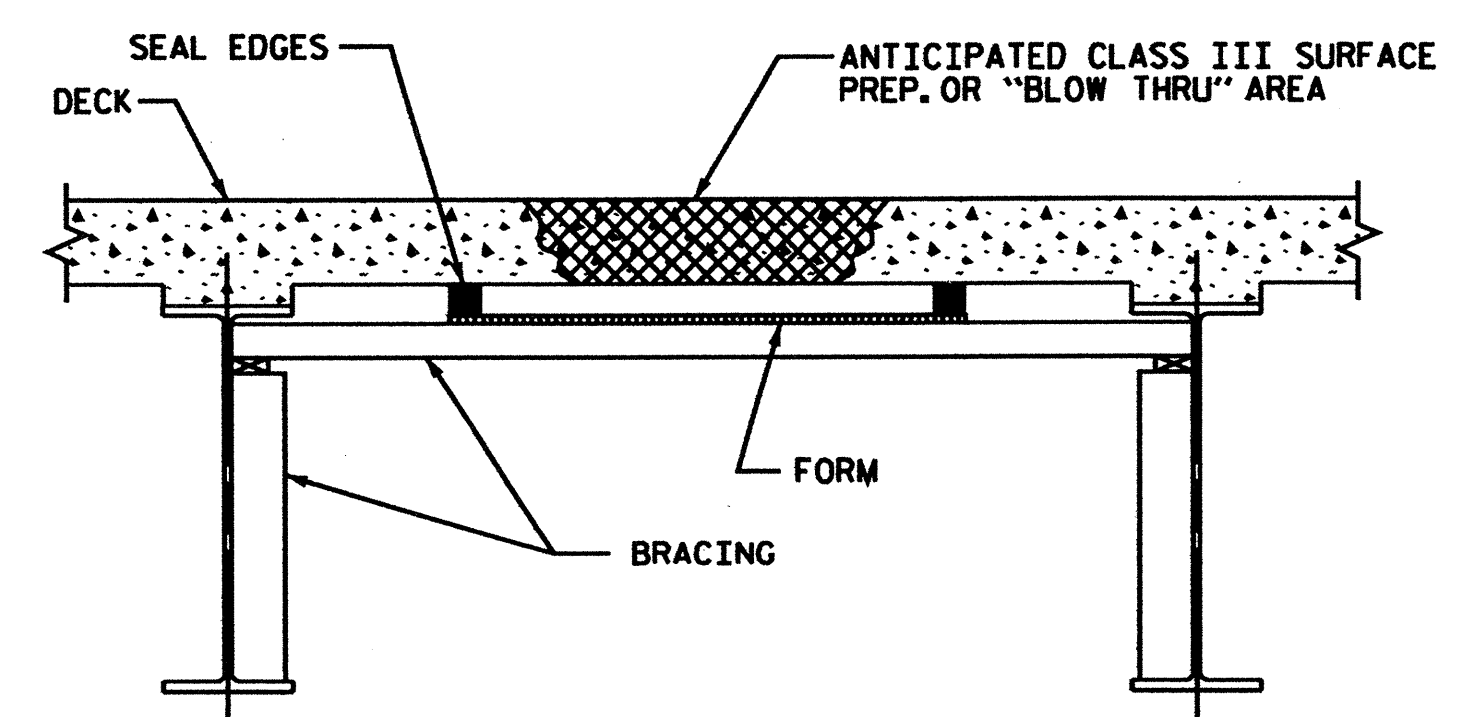


CLASS II
CLASS III

FIXED EXP. FIXED EXP. EXP. EXP.

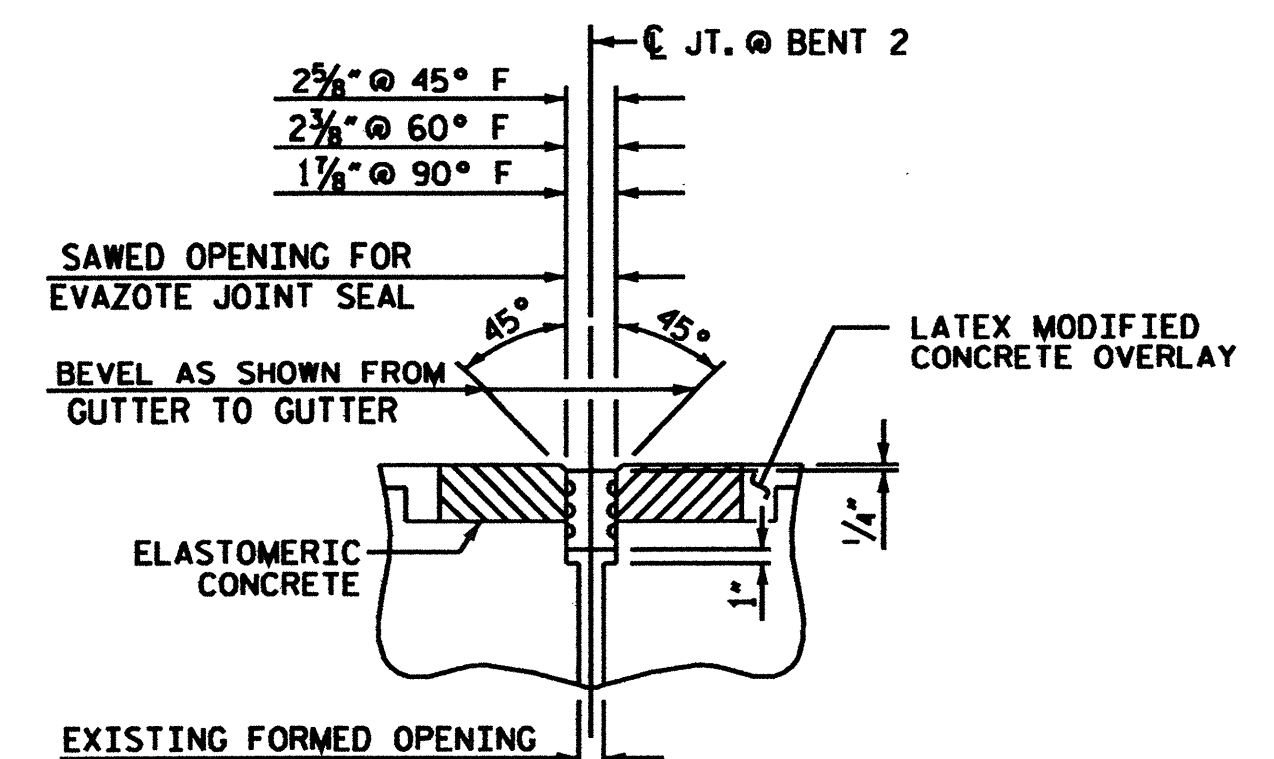
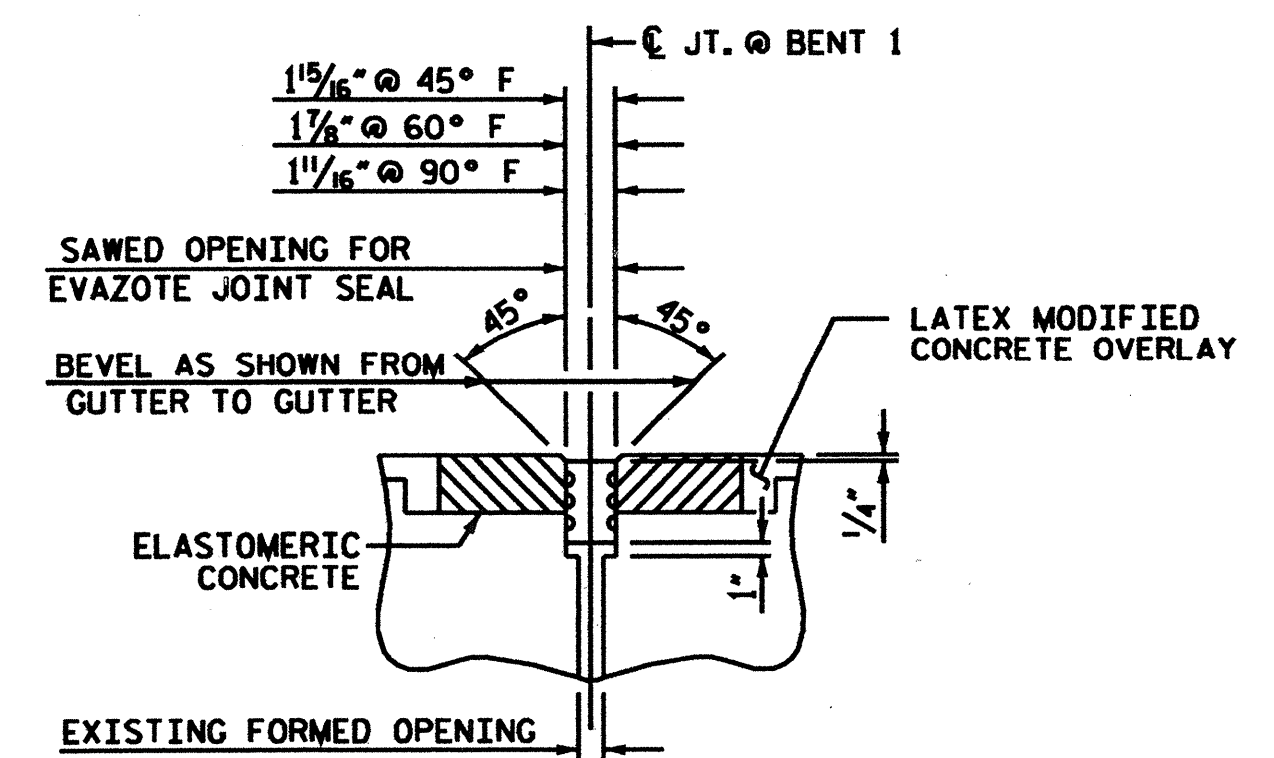


DETAIL B
EVAZOTE JOINT SEAL
(PRE-SAWED ELASTOMERIC
CONCRETE DIMENSIONS)



TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

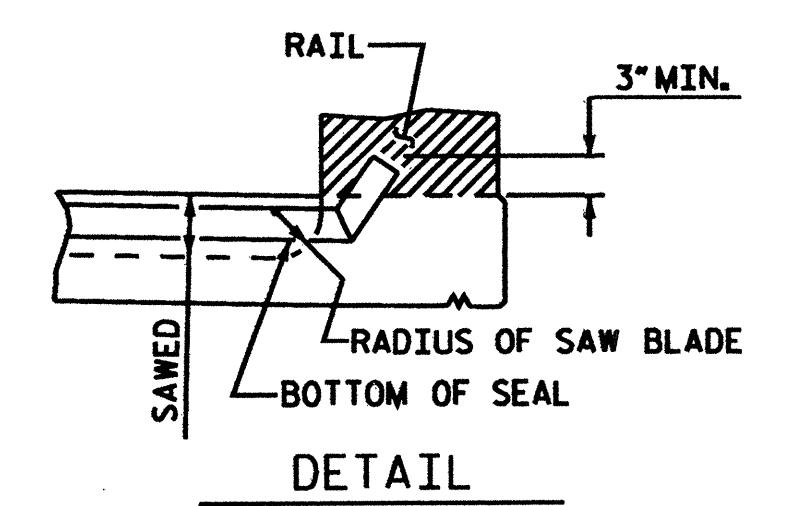
A METHOD TO CAPTURE WATER AND DEBRIS FROM BLOW THRU DURING HYDRO-DEMOLITION SHALL BE INSTALLED IN AREAS INDICATED AS CLASS III SURFACE PREPARATION.
SUBMIT DETAILS OF PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.



DETAIL B
EVAZOTE JOINT SEAL
(EXPANSION)

NOTES:

- FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.
- THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "HYDRO-DEMOLITION OF BRIDGE DECK" SPECIAL PROVISION.
- 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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.
- THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE EVAZOTE JOINT SEAL SHALL BE 2 1/2" AT BENT 1 & 3 3/8" AT BENT 2. FOR EVAZOTE JOINT SEALS, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR JOINT REPAIR, SEE SPECIAL PROVISIONS.
- LATEX MODIFIED CONCRETE SHALL BE LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH.
- FOR LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH, SEE SPECIAL PROVISIONS.
- FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.



DETAIL

ELASTOMERIC CONCRETE	
BENT NO.	ELASTOMERIC CONCRETE * (CU. FT.)
BENT 1	9.5
BENT 2	9.5
TOTAL	19.0

* BASED ON THE MINIMUM BLOCKOUT SHOWN.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 57+41.24 -L-

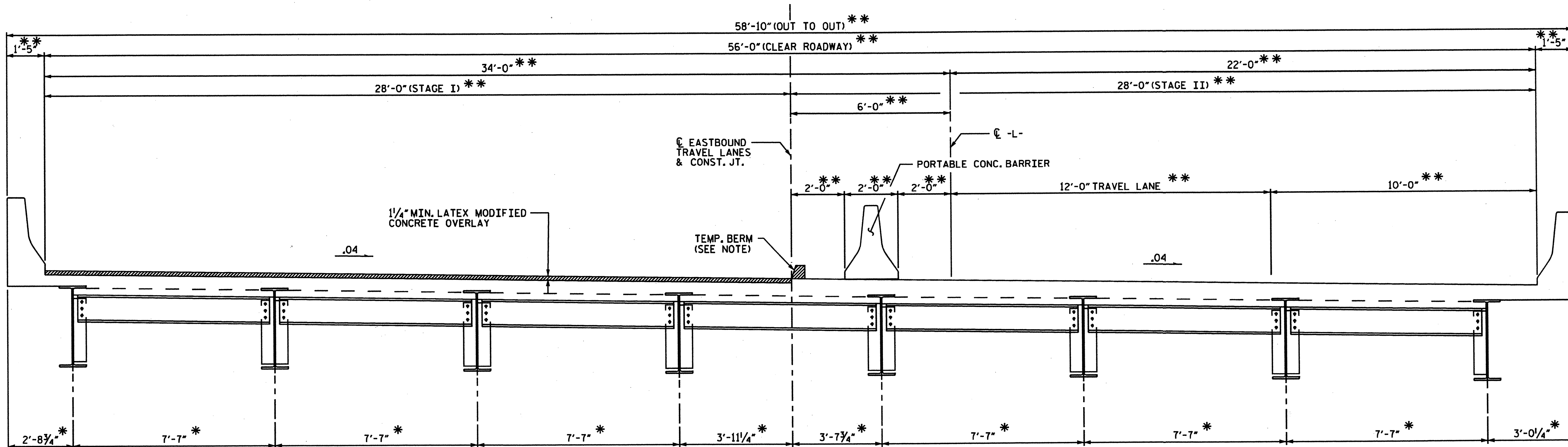
SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 439

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-24
1			3			TOTAL SHEETS 28
2			4			

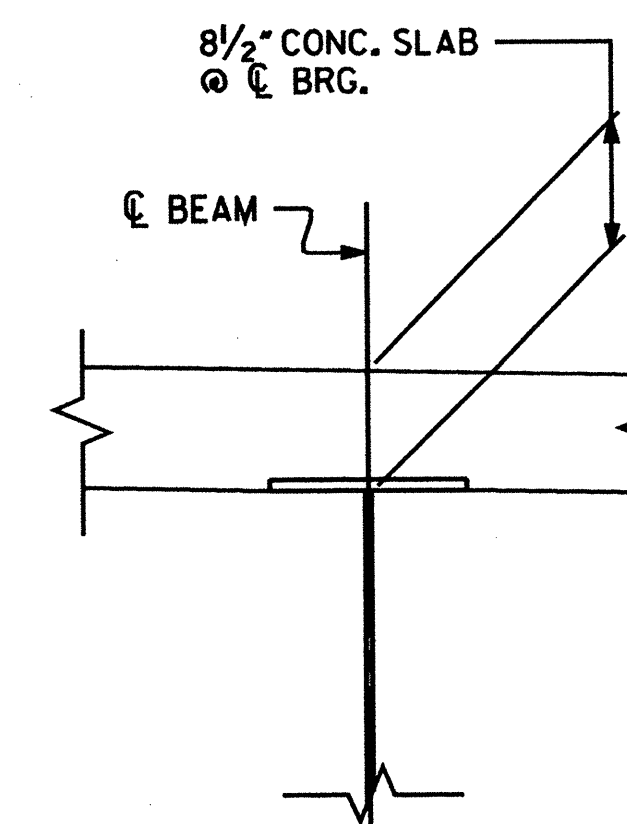


TYP. SECTION - STAGE I

(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)

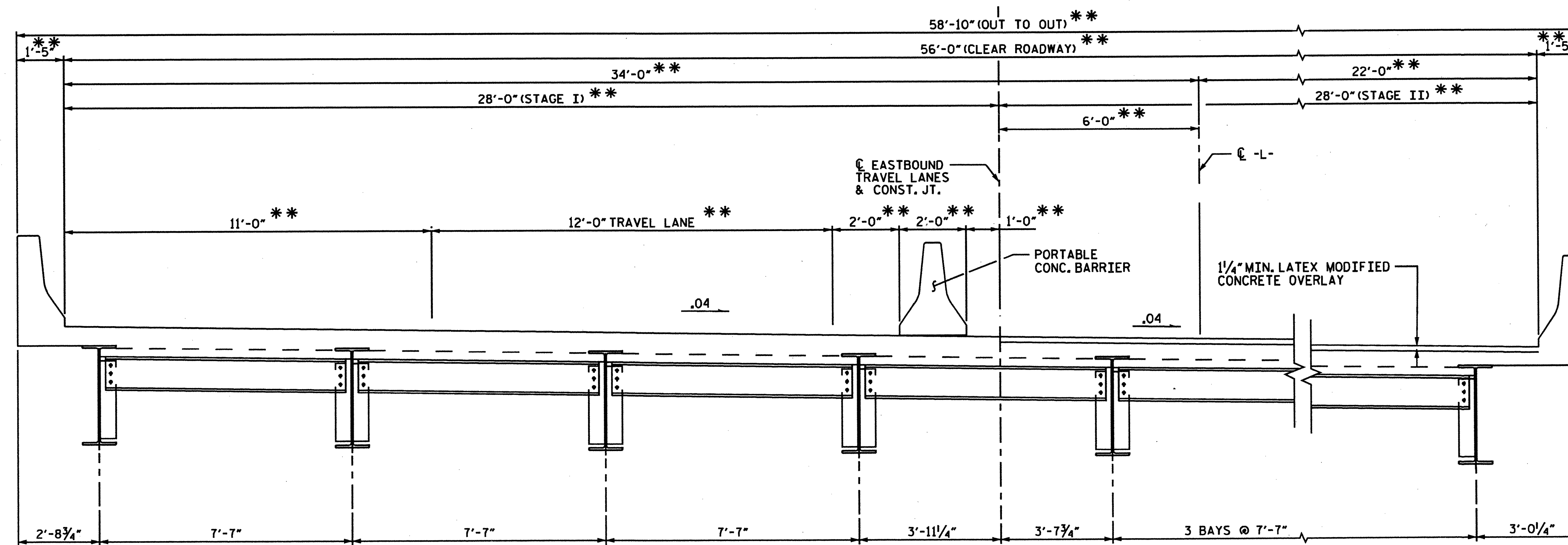
- * RADIAL THRU WORKPOINT
- ** RADIAL DIMENSIONS

NOTE:
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 SECTION

PROJECT NO. B-5179B
BUNCOMBE COUNTY
STATION: 111+34.20 -L-



TYP. SECTION - STAGE II

(SHOWING DIAPHRAGMS AT EXPANSION JOINTS)

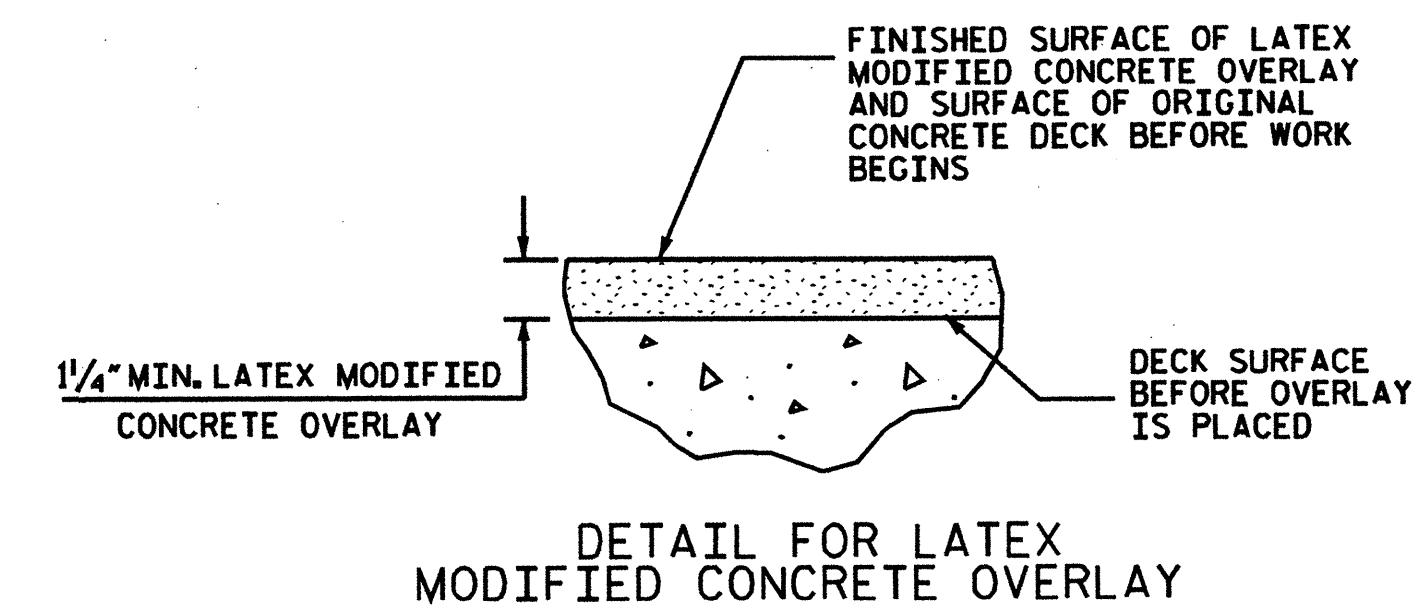
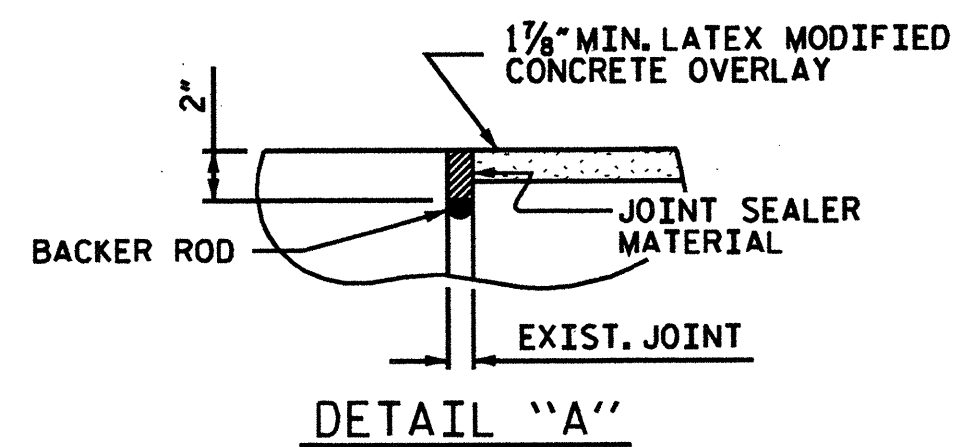
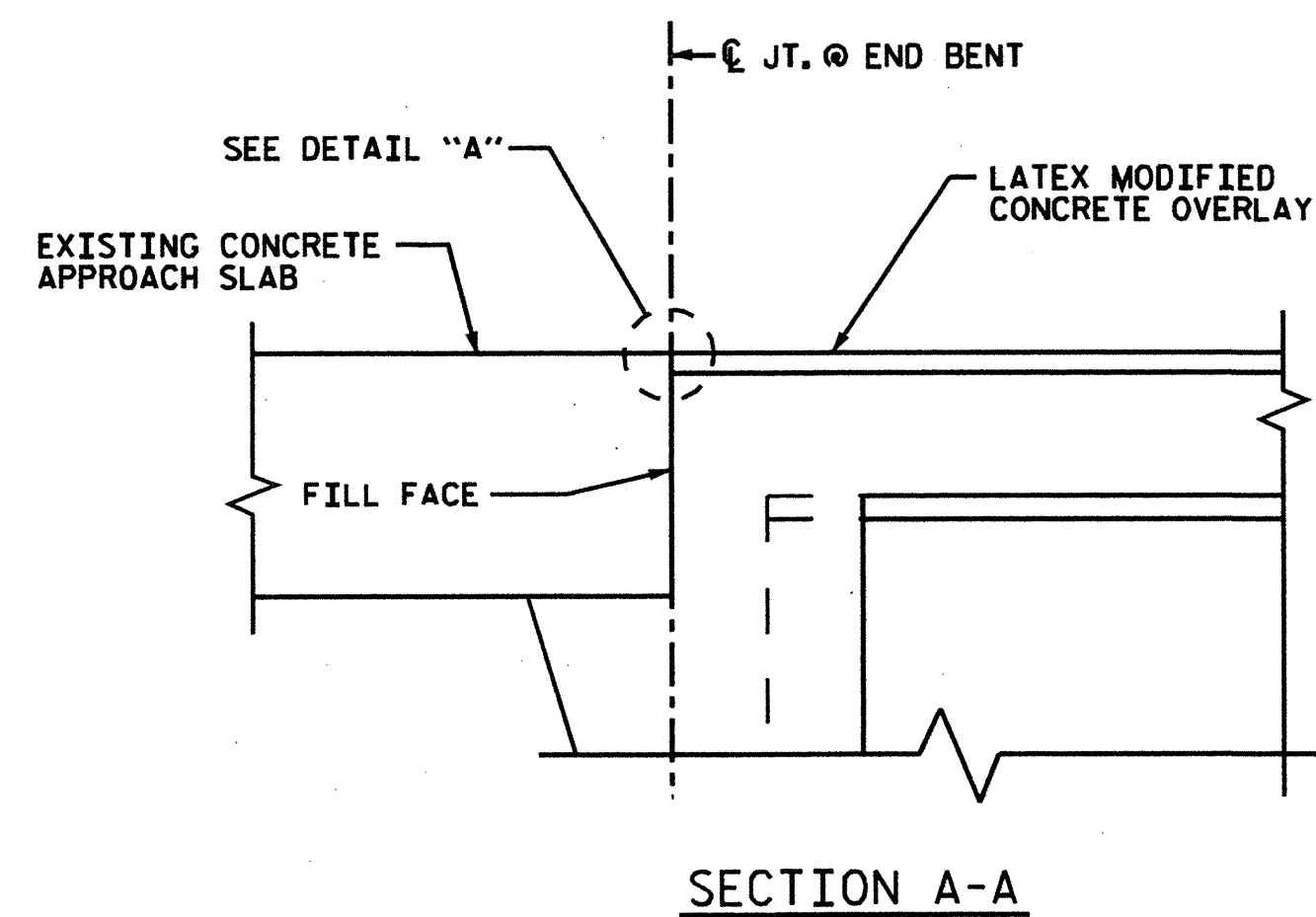
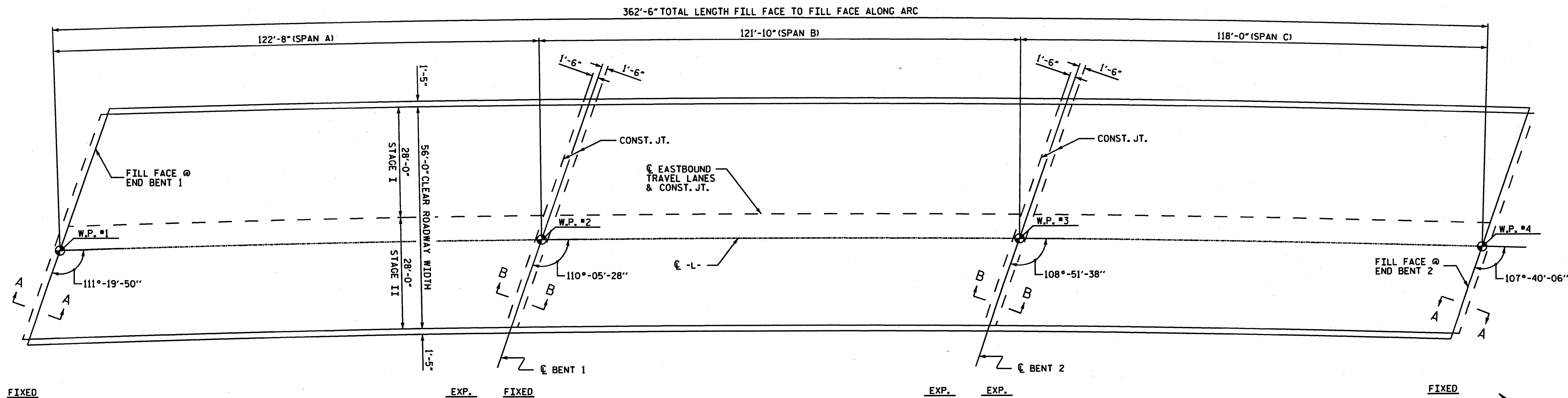
- * RADIAL THRU WORKPOINT
- ** RADIAL DIMENSIONS

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 454

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	S-25
1			3			TOTAL SHEETS
2			4			28

DRAWN BY: M.A. ALLEN DATE: 08-09
CHECKED BY: R.W. WRIGHT DATE: 08-09



PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 111+34.20 -L-

SHEET 1 OF 3

TOTAL BILL OF MATERIAL									
SCARIFYING BRIDGE DECK	CLASS I* SURFACE PREPARATION	CLASS II* SURFACE PREPARATION	CLASS III* SURFACE PREPARATION	UNDER DECK CONTAINMENT	HYDRO-DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING AND FINISHING OF LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH	GROOVING BRIDGE FLOORS
SO. YDS.	SO. YDS.	SO. YDS.	SO. YDS.	SO. FT.	SO. YDS.	CU. YDS.	CU. YDS.	SO. YDS.	SO. FT.
2220	2035	178	7	63	2220	0	154	2220	18820

* QUANTITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

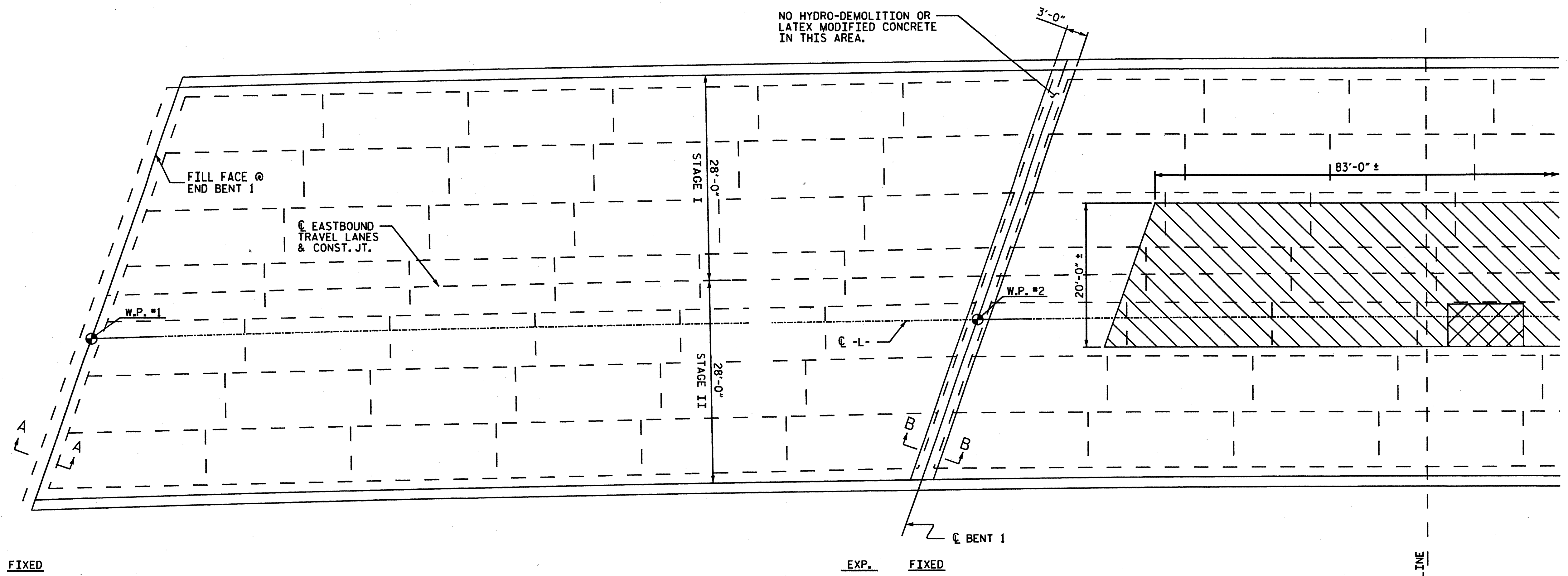
DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 454

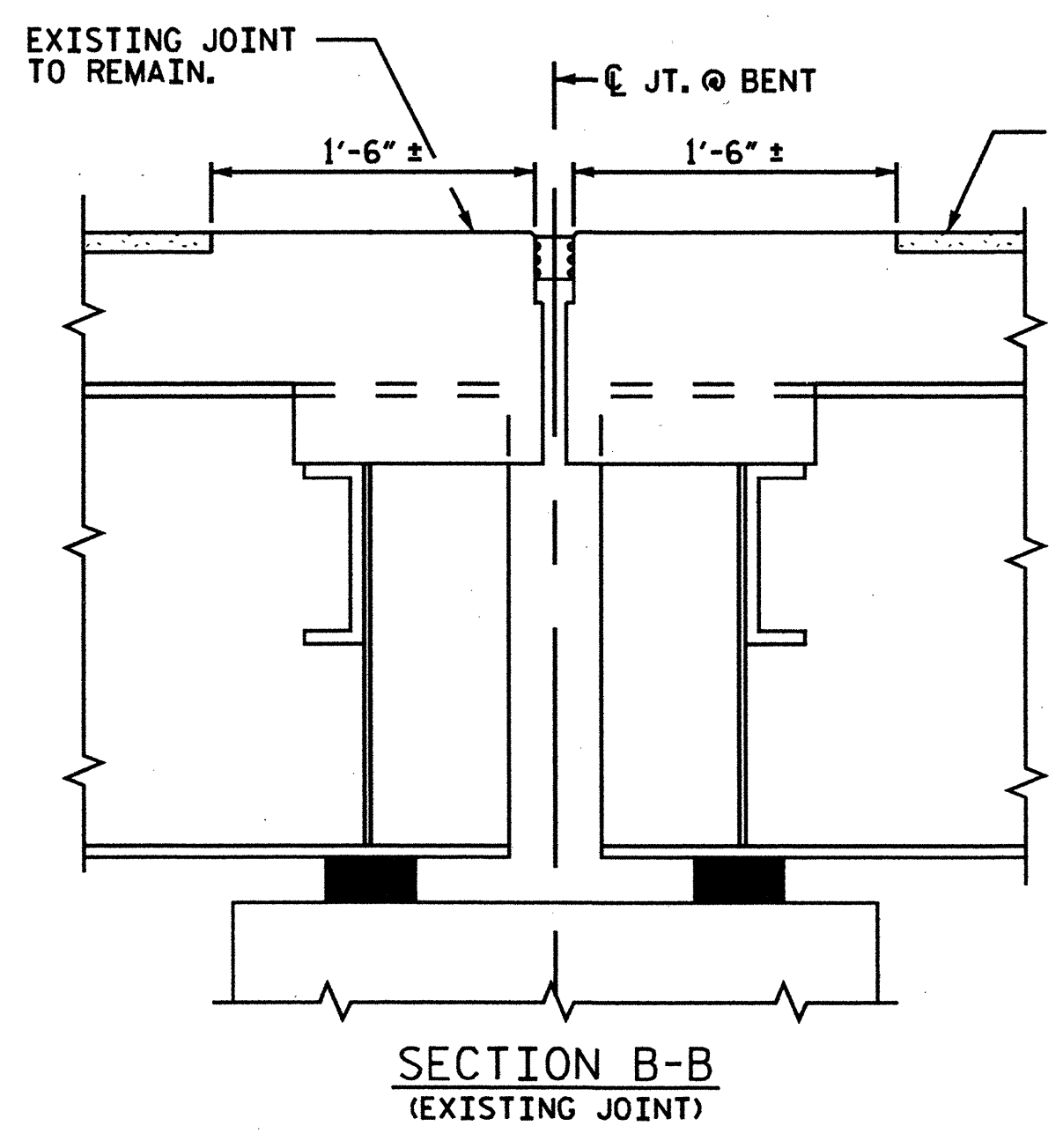
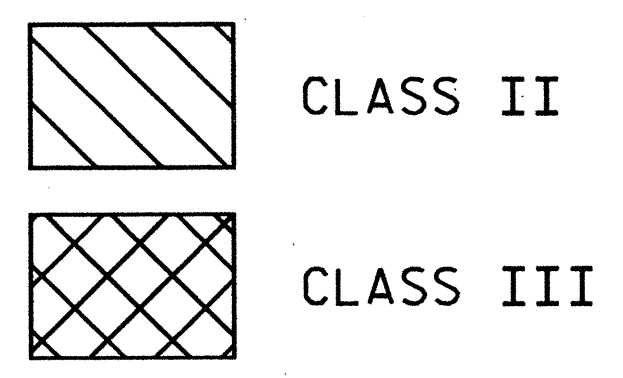
REVISIONS						SHEET NO.	
NO.	BY	DATE	NO.	BY	DATE	S-26	
1			3			TOTAL SHEETS	
2			4			28	



FIXED

EXP. FIXED

MATCHLINE



SECTION B-B
(EXISTING JOINT)

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 111+34.20 -L-

SHEET 2 OF 3

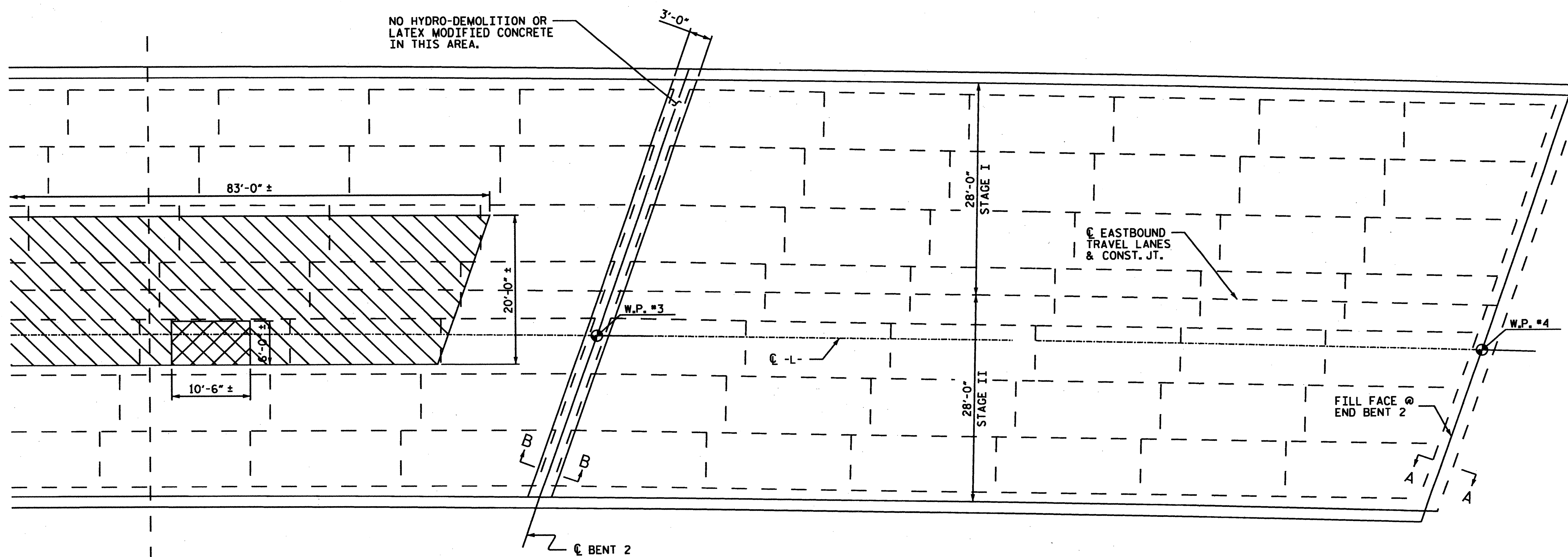
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 454

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	5-27
1			3			TOTAL SHEETS 28
2			4			

DRAWN BY: M.A. ALLEN DATE: 08-09
 CHECKED BY: R.W. WRIGHT DATE: 08-09



NO HYDRO-DEMOLITION OR LATEX MODIFIED CONCRETE IN THIS AREA.

83'-0" ±

20'-0" ±

10'-6" ±

3'-0"

28'-0" STAGE I

28'-0" STAGE II

C EASTBOUND TRAVEL LANES & CONST. JT.

W.P. #3

W.P. #4

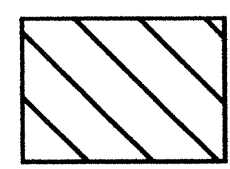
FILL FACE @ END BENT 2

BENT 2

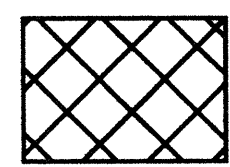
EXP. EXP.

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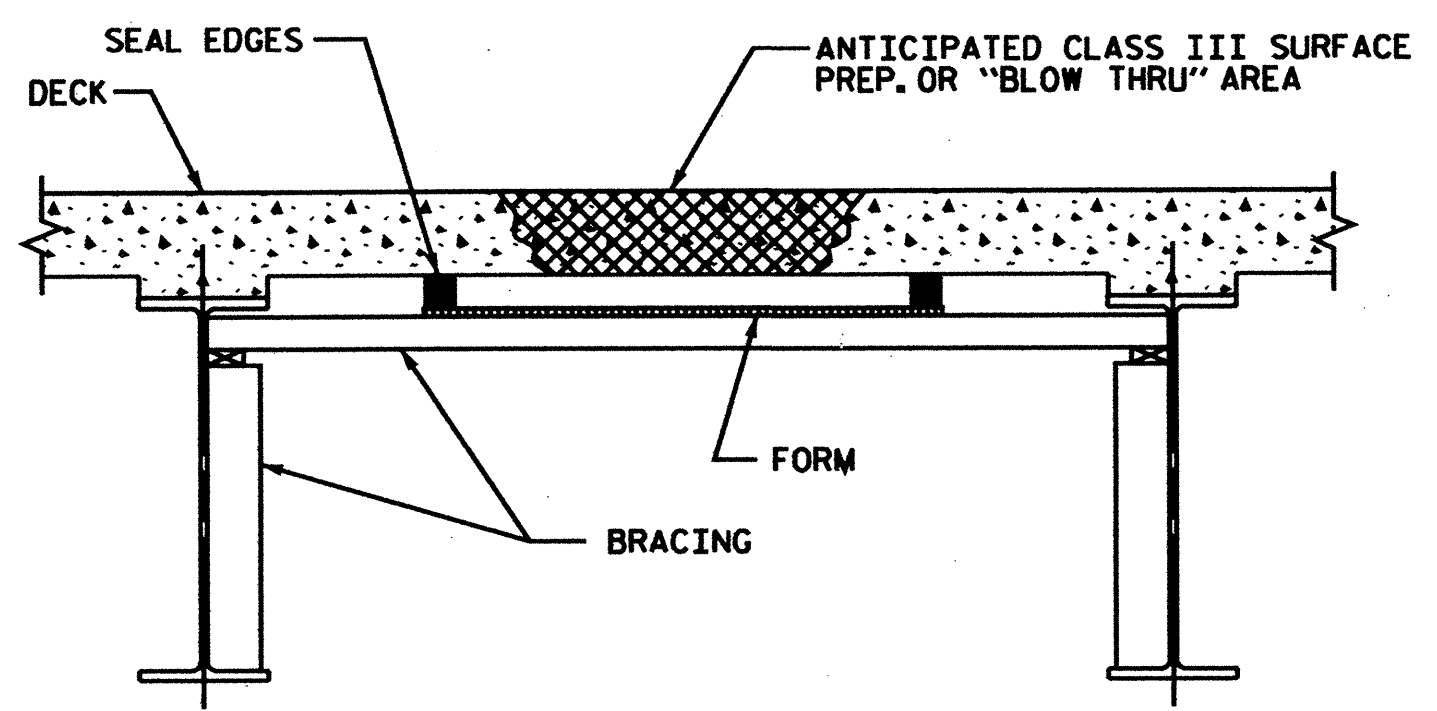
MATCHLINE



CLASS II



CLASS III



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.

NOTES:

FOR HYDRO-DEMOLITION OF BRIDGE DECK, SEE SPECIAL PROVISIONS.

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

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, SEE "TYP. "BLOW THRU" CONTAINMENT AND FORMWORK" DETAIL.

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

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

FOR GROOVING BRIDGE FLOORS INFORMATION, SEE "LATEX MODIFIED CONCRETE-VERY EARLY STRENGTH" SPECIAL PROVISION.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

PROJECT NO. B-5179B
BUNCOMBE COUNTY
 STATION: 111+34.20 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PLAN OF SPANS
 FOR DECK REPAIR

DECK REHAB. FOR BRIDGE NO. 454

REVISIONS						SHEET NO. S-28
NO.	BY	DATE	NO.	BY	DATE	
1			3			TOTAL SHEETS 28
2			4			

DRAWN BY : M.A. ALLEN DATE : 08-09
 CHECKED BY : R.W. WRIGHT DATE : 08-09

TIP PROJECT: B-5179B CONTRACT NO. C202311

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-5179B	TCP-1

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION BUNCOMBE COUNTY

LOCATION: BRIDGES 66, 70, 206, 208, 274, 283, 285, 439 AND 454 ALONG I-240

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
1101.03	TEMPORARY ROAD 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
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
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, 2A	GENERAL NOTES
TCP-3, 3A	PROJECT PHASING
TCP-4	OVERVIEW AND VICINITY MAP
TCP-5	I-240 E DETOUR #1 BRIDGES 66, 206, 274, 283
TCP-5A	I-240 E DETOUR #1, SHEET 2
TCP-6	I-240 E DETOUR #2 BRIDGES 66, 206, 283
TCP-7	I-240 W DETOUR #1 BRIDGES 70, 208, 274, 285
TCP-7A	I-240 W DETOUR #1, SHEET 2
TCP-8	I-240 W DETOUR #2 BRIDGES 70, 208, 285
TCP-9	BRIDGE #439 REHAB I-240 W
TCP-9A	BRIDGE #439 - RAMP CLOSURE
TCP-10	BRIDGE #454 REHAB I-240 E
TCP-10A	BRIDGE #454 REHAB - RAMP CLOSURE
TCP-11	WORK ZONE ADVANCE WARNING SIGNS

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - 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
- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
 - YELLOW/YELLOW PAVEMENT MARKER
 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

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<p>APPROVED: </p> <p>DATE: <u>October 6, 2009</u></p> <div style="text-align: center;"> </div>	<p>PLAN PREPARED BY:</p> <div style="text-align: center;"> </div> <p style="font-size: x-small;">Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com</p> <hr/> <p>BETSY L. WATSON, PE TRAFFIC CONTROL ENGINEER</p> <hr/> <p>GEORGE KARAGEORGE TRAFFIC CONTROL DESIGNER</p>
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GENERAL NOTES

TRAFFIC BARRIER

P) ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE TEMPORARY BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

PLACE TEMPORARY BARRIER NO CLOSER THAN 2 FT. FROM A TRAVEL LANE, UNLESS OTHERWISE SHOWN IN THE PLAN. A 1 FOOT OFFSET MAY BE USED IF 2 FT. IS NOT ATTAINABLE, AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

Q) PROTECT THE APPROACH END OF PORTABLE CONCRETE BARRIER AT ALL TIMES INCLUDING DURING INSTALLATION AND REMOVAL OF THE BARRIER. PROTECT APPROACH END BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

TRAFFIC CONTROL DEVICES

R) UNLESS OTHERWISE NOTED IN THE PLANS, SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

S) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

T) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

U) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS SHOWN IN THE PAVEMENT MARKING PLAN.

V) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON FINAL LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT (2 APPS)	SNOWPLOWABLE

W) REPLACE ALL PAVEMENT MARKINGS AND MARKERS BEFORE RE-OPENING LANES TO TRAFFIC.

MISCELLANEOUS

X) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.

Y) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC CONTROL PLAN AND PHASING ARE APPROXIMATE; FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

Z) THE CONTRACTOR IS TO FURNISH, INSTALL, MAINTAIN, RELOCATE AND REMOVE CHANGEABLE MESSAGE SIGNS DURING VARIOUS STAGES OF CONSTRUCTION AT THE DISCRETION OF THE ENGINEER TO ADEQUATELY INFORM MOTORISTS OF CHANGING WORK ZONE CONDITIONS.

AA) 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.

BB) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE INCLUDING THE FOLLOWING AREAS OF CONCERN:

A. LANE CLOSURE RESTRICTIONS.

B. DETOURS OFFSITE AND ONSITE.

C. AREAS OF CONSTRICTED HORIZONTAL CLEARANCES (NARROW LANES OR LANES BORDERED WITH EITHER PCB AND/OR GUARDRAIL).


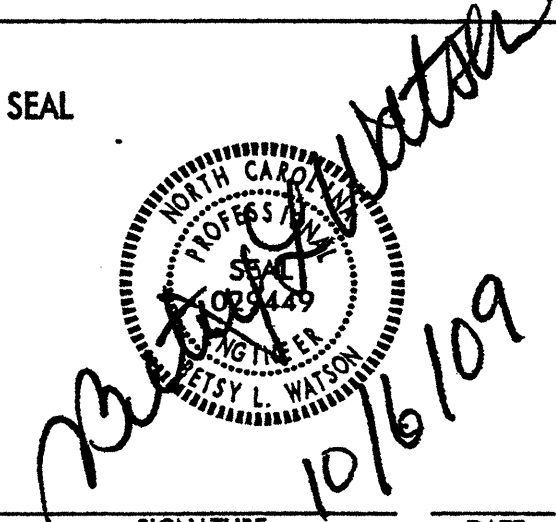

CC) COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING ANY DETOURS:

-SIGNAL TIMINGS ALONG AFFECTED LOCAL ROUTES HAVE BEEN ADJUSTED.

-HAR AND DMS MESSAGES HAVE BEEN PREPARED/IMPLEMENTED.

-NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED.

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 Stantec 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  SIGNATURE _____ DATE 10/6/09	GENERAL NOTES							
	SCALE: NONE DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW 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>						

THE TRAFFIC CONTROL PHASING FOR THIS PROJECT IS DIVIDED INTO 4 AREAS OF CONSTRUCTION

AREA 1 - BRIDGES #283, 66, 206 AND 274 ON I-240 EASTBOUND

AREA 2 - BRIDGES #285, 70, 208 AND 274 ON I-240 WESTBOUND

AREA 3 - BRIDGE #439 I-240 WESTBOUND

AREA 4 - BRIDGE #454 I-240 EASTBOUND

THE FOLLOWING RESTRICTIONS APPLY TO WORK PERFORMED IN THESE AREAS.

-WHEN WORKING IN AREA 1 DO NOT WORK IN ANY OTHER AREAS.

-WHEN WORKING IN AREA 2 DO NOT WORK IN ANY OTHER AREAS.

-WORK IN AREAS 3 AND 4 MAY BE PERFORMED SIMULTANEOUSLY.

INSTALL WORK ZONE ADVANCE WARNING SIGNS PRIOR TO ANY CONSTRUCTION OPERATIONS (TCP-11).

AREA 1 BRIDGES 283, 66, 206, AND 274 - EASTBOUND DIRECTION
SEE SHEET TCP-4 FOR OVERVIEW

STEP 1: BEGIN PREPARATION OF TRAFFIC CONTROL DEVICES FOR IMPLEMENTATION IN NEXT STEP. INSTALL CHANGEABLE MESSAGE SIGNS AS WILL BE REQUIRED FOR ROAD CLOSURES AND PUBLIC INFORMATION.

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION
COMPLETE THE WORK REQUIRED OF AREA 1- STEPS 2A, 2B AND 2C IN A CONTINUOUS OPERATION WITHIN A PERIOD OF ONE WEEKEND BETWEEN THE HOURS OF FRIDAY 6:00 P.M. AND THE FOLLOWING MONDAY AT 6:00 A.M..

STEP 2A: INSTALL TRAFFIC CONTROL DEVICES TO IMPLEMENT I-240 EASTBOUND DETOUR #1 AND CLOSE I-240 EASTBOUND AS SHOWN ON SHEET TCP-5, 5A.

STEP 2B: CONSTRUCT BRIDGE PRESERVATION FOR BRIDGE NO. 274 EASTBOUND DIRECTION.

WORK ON BRIDGES 283, 66, AND 206 EASTBOUND MAY BE PERFORMED DURING THIS DETOUR, HOWEVER, ANY WORK THAT IS BEGUN MUST BE COMPLETED SUCH THAT ALL LANES ARE REOPENED TO TRAFFIC BY THE END OF THIS INTERMEDIATE CONTRACT TIME.

STEP 2C: REMOVE TRAFFIC CONTROL DEVICES FOR DETOUR AND OPEN I-240 EASTBOUND TO THE NORMAL TRAFFIC PATTERN.

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION
COMPLETE THE WORK REQUIRED OF AREA 1- STEPS 3A, 3B AND 3C IN TWO CONTINUOUS OPERATIONS WITHIN A PERIOD OF TWO WEEKENDS BETWEEN THE HOURS OF FRIDAY 6:00 P.M. AND THE FOLLOWING MONDAY AT 6:00 A.M.. DURING THE TIME BETWEEN THE TWO WEEKENDS, RE-OPEN ALL LANES TO THE NORMAL TRAFFIC PATTERN. THE ABOVE MENTIONED TWO WEEKENDS DO NOT HAVE TO BE CONSECUTIVE.

STEP 3A: INSTALL TRAFFIC CONTROL DEVICES TO IMPLEMENT I-240 EASTBOUND DETOUR #2 AND CLOSE I-240 EASTBOUND AS SHOWN ON SHEET TCP-6.

STEP 3B: CONSTRUCT BRIDGE PRESERVATION FOR BRIDGE NO.S 66, 206 AND 283.

STEP 3C: REMOVE TRAFFIC CONTROL DEVICES FOR DETOUR AND OPEN I-240 EASTBOUND TO THE NORMAL TRAFFIC PATTERN.

AREA 2 BRIDGES 208, 70, 285, AND 274 - WESTBOUND DIRECTION
SEE SHEET TCP-4 FOR OVERVIEW

STEP 1: BEGIN PREPARATION OF TRAFFIC CONTROL DEVICES FOR IMPLEMENTATION IN NEXT STEP. INSTALL CHANGEABLE MESSAGE SIGNS AS WILL BE REQUIRED FOR ROAD CLOSURES AND PUBLIC INFORMATION.

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION
COMPLETE THE WORK REQUIRED OF AREA 2- STEPS 2A, 2B AND 2C IN A CONTINUOUS OPERATION WITHIN A PERIOD OF ONE WEEKEND BETWEEN THE HOURS OF FRIDAY 6:00 P.M. AND THE FOLLOWING MONDAY AT 6:00 A.M..

STEP 2A: INSTALL TRAFFIC CONTROL DEVICES TO IMPLEMENT I-240 WESTBOUND DETOUR #1 AND CLOSE I-240 WESTBOUND AS SHOWN ON SHEET TCP-7, 7A.

STEP 2B: CONSTRUCT BRIDGE PRESERVATION FOR BRIDGE NO. 274 WESTBOUND DIRECTION.

WORK ON BRIDGES 208, 70, AND 285 WESTBOUND MAY BE PERFORMED DURING THIS DETOUR, HOWEVER, ANY WORK THAT IS BEGUN MUST BE COMPLETED SUCH THAT ALL LANES ARE REOPENED TO TRAFFIC BY THE END OF THIS INTERMEDIATE CONTRACT TIME.

STEP 2C: REMOVE TRAFFIC CONTROL DEVICES FOR DETOUR AND OPEN I-240 WESTBOUND TO THE NORMAL TRAFFIC PATTERN.


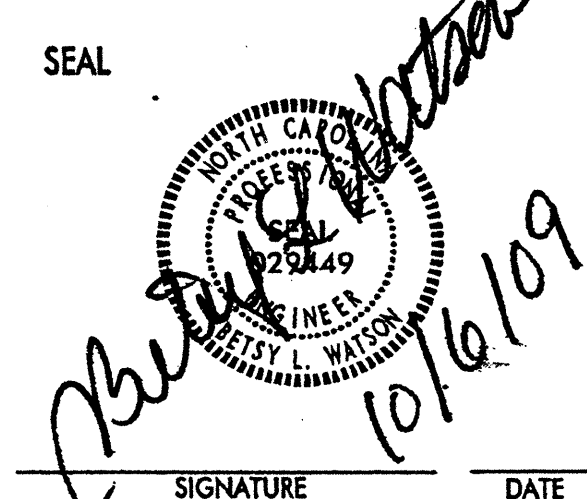
INTERMEDIATE CONTRACT TIME SPECIAL PROVISION
COMPLETE THE WORK REQUIRED OF AREA 2- STEPS 3A, 3B AND 3C IN TWO CONTINUOUS OPERATIONS WITHIN A PERIOD OF TWO WEEKENDS BETWEEN THE HOURS OF FRIDAY 6:00 P.M. AND THE FOLLOWING MONDAY AT 6:00 A.M.. DURING THE TIME BETWEEN THE TWO WEEKENDS, RE-OPEN ALL LANES TO THE NORMAL TRAFFIC PATTERN. THE ABOVE MENTIONED TWO WEEKENDS DO NOT HAVE TO BE CONSECUTIVE.

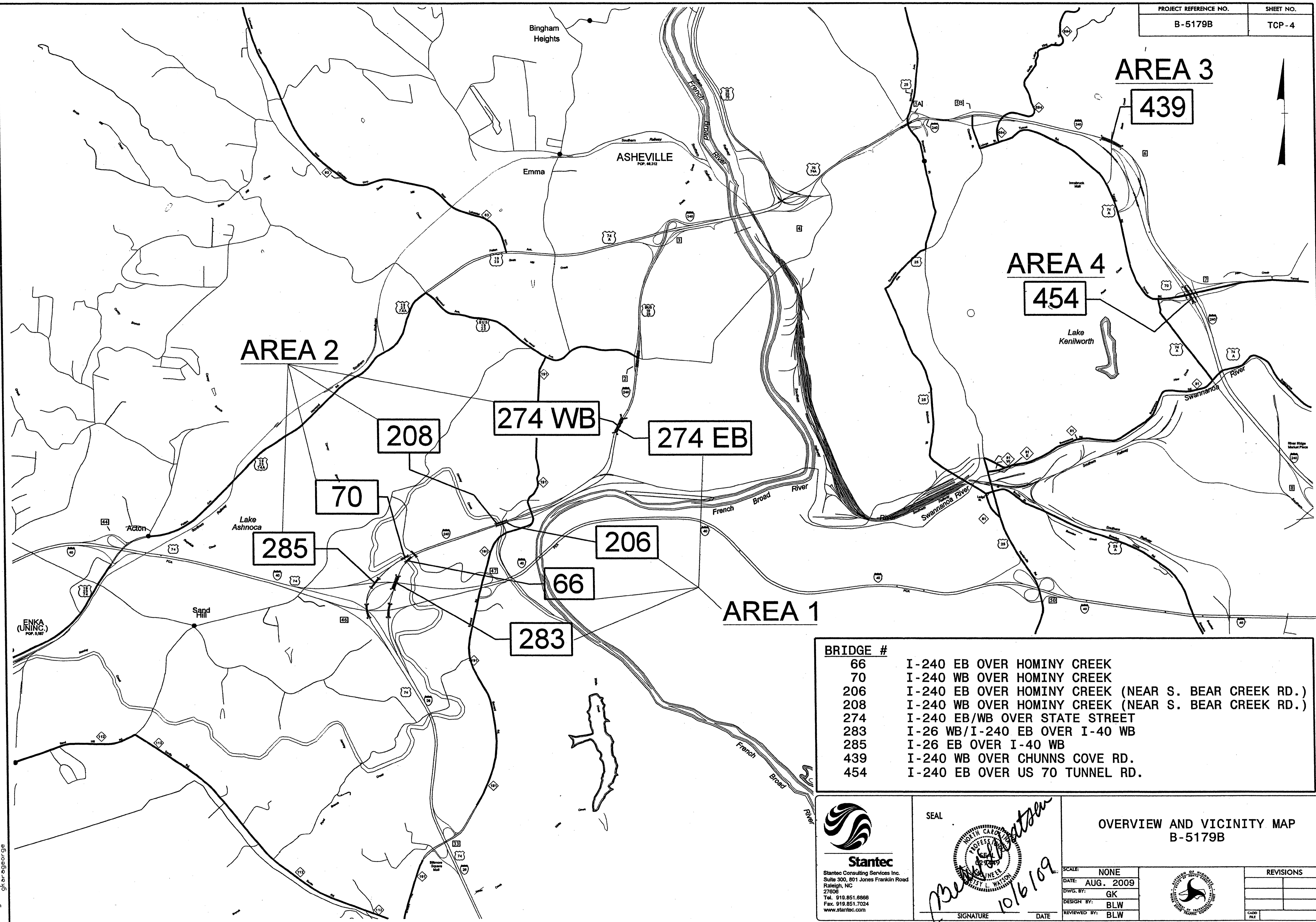
STEP 3A: INSTALL TRAFFIC CONTROL DEVICES TO IMPLEMENT I-240 WESTBOUND DETOUR #2 AND CLOSE I-240 WESTBOUND AS SHOWN ON SHEET TCP-8.

STEP 3B: CONSTRUCT BRIDGE PRESERVATION FOR BRIDGE NO.S 208, 70 AND 285.

STEP 3C: REMOVE TRAFFIC CONTROL DEVICES FOR DETOUR AND OPEN I-240 WESTBOUND TO THE NORMAL TRAFFIC PATTERN.

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 <p>Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com</p>	<p>SEAL</p> 	<p>TRAFFIC CONTROL PHASING AREA 1 AND AREA 2</p>					
		<p>SCALE: NONE DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW</p>	<p>REVISIONS</p> <table border="1"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>				



BRIDGE #	Description
66	I-240 EB OVER HOMINY CREEK
70	I-240 WB OVER HOMINY CREEK
206	I-240 EB OVER HOMINY CREEK (NEAR S. BEAR CREEK RD.)
208	I-240 WB OVER HOMINY CREEK (NEAR S. BEAR CREEK RD.)
274	I-240 EB/WB OVER STATE STREET
283	I-26 WB/I-240 EB OVER I-40 WB
285	I-26 EB OVER I-40 WB
439	I-240 WB OVER CHUNNS COVE RD.
454	I-240 EB OVER US 70 TUNNEL RD.

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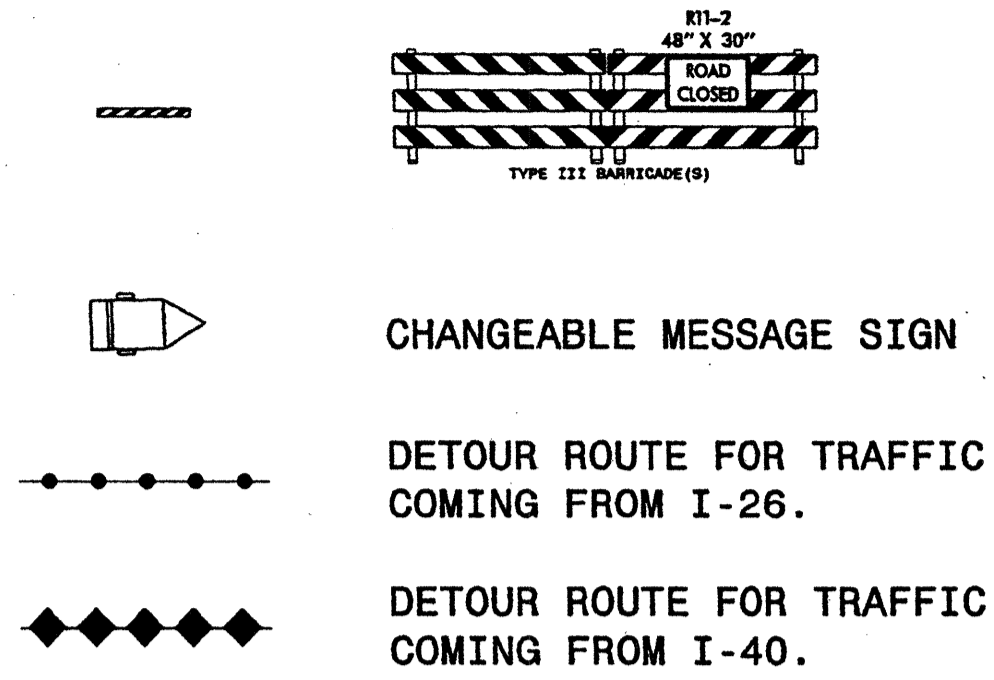
Ashley L. Watson
 10/6/09
 SIGNATURE DATE

OVERVIEW AND VICINITY MAP
B-5179B

SCALE:	NONE
DATE:	AUG. 2009
DWG. BY:	GK
DESIGN BY:	BLW
REVIEWED BY:	BLW

REVISIONS

LEGEND



APPROXIMATE LOCATION OF CMS FOR LEFT LANE CLOSURE. SEE RSD 1101.02 SHEET 3 OF 9 FOR PLACEMENT AND MESSAGES.

USE RSD 1101.02, SHEET 3 OF 9 TO CLOSE LEFTMOST OF THE 3 EB LANES OF I-40 E IN ADVANCE OF EXIT 46B.

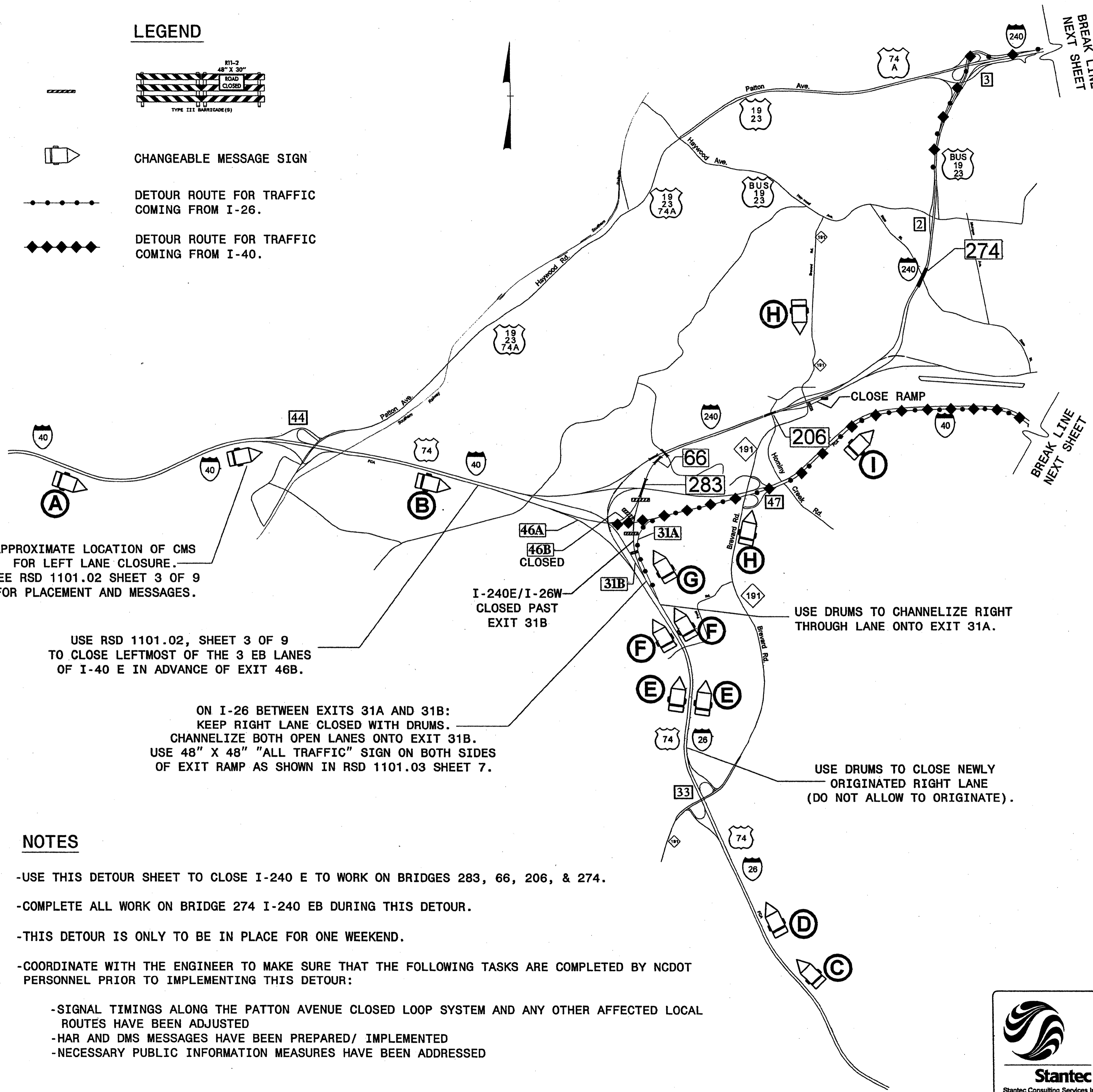
ON I-26 BETWEEN EXITS 31A AND 31B: KEEP RIGHT LANE CLOSED WITH DRUMS. CHANNELIZE BOTH OPEN LANES ONTO EXIT 31B. USE 48" X 48" "ALL TRAFFIC" SIGN ON BOTH SIDES OF EXIT RAMP AS SHOWN IN RSD 1101.03 SHEET 7.

USE DRUMS TO CHANNELIZE RIGHT THROUGH LANE ONTO EXIT 31A.

USE DRUMS TO CLOSE NEWLY ORIGINATED RIGHT LANE (DO NOT ALLOW TO ORIGINATE).

NOTES

- USE THIS DETOUR SHEET TO CLOSE I-240 E TO WORK ON BRIDGES 283, 66, 206, & 274.
- COMPLETE ALL WORK ON BRIDGE 274 I-240 EB DURING THIS DETOUR.
- THIS DETOUR IS ONLY TO BE IN PLACE FOR ONE WEEKEND.
- COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING THIS DETOUR:
 - SIGNAL TIMINGS ALONG THE PATTON AVENUE CLOSED LOOP SYSTEM AND ANY OTHER AFFECTED LOCAL ROUTES HAVE BEEN ADJUSTED
 - HAR AND DMS MESSAGES HAVE BEEN PREPARED/ IMPLEMENTED
 - NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED



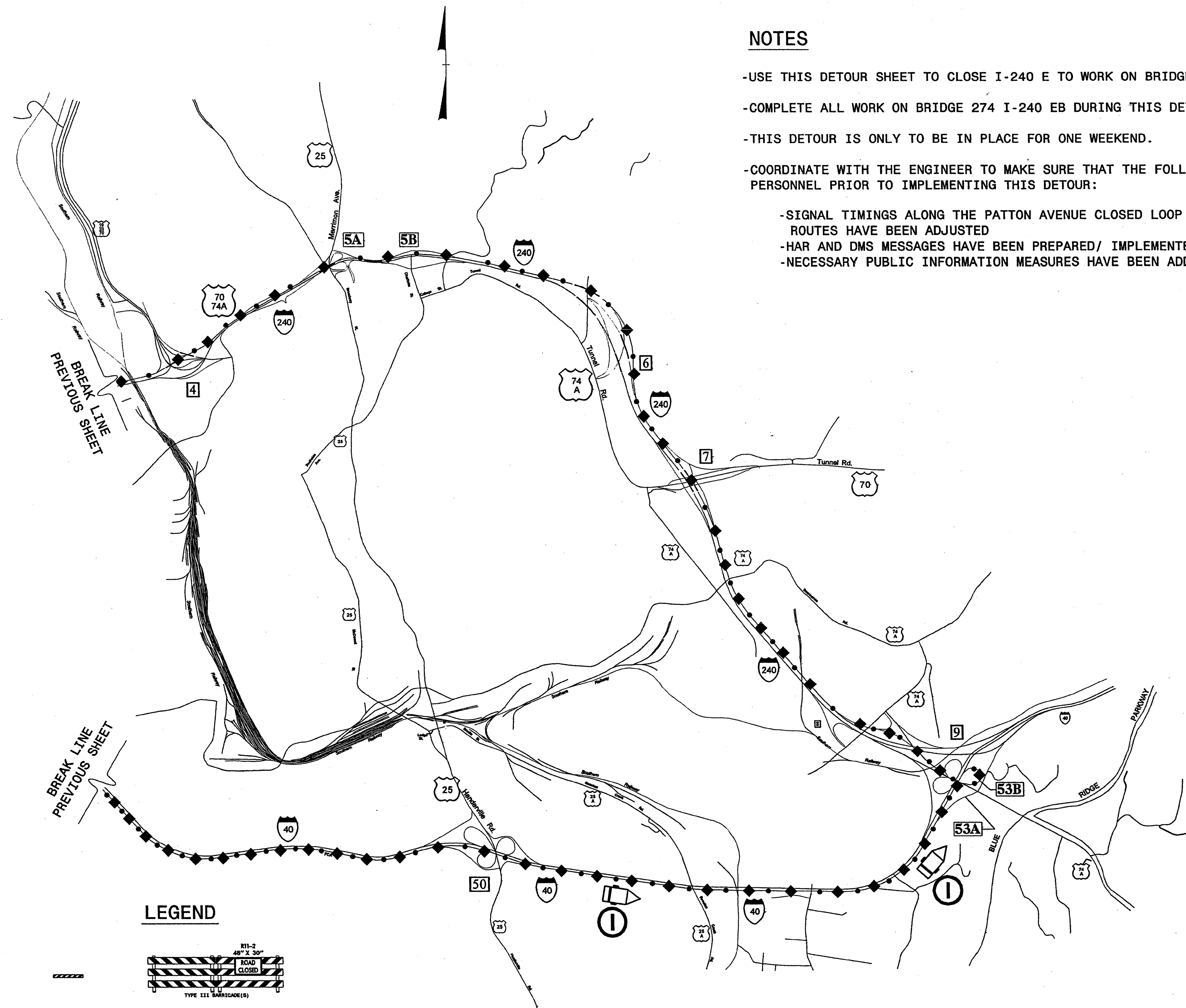
A	MESSAGE NO. 1 I-240 E/ I-26 W CLOSED	MESSAGE NO. 2 USE ALT ROUTE	B	MESSAGE NO. 1 EXIT 46B CLOSED	MESSAGE NO. 2 USE EXIT 53B
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
C	MESSAGE NO. 1 I-240 E/ I-26 W CLOSED	MESSAGE NO. 2 2 MILES AHEAD	D	MESSAGE NO. 1 RT LANE MUST USE EXIT 31A	MESSAGE NO. 2 2 MILES AHEAD
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
E	MESSAGE NO. 1 I-240 E/ I-26 W CLOSED	MESSAGE NO. 2 USE EXIT 31A I-40 E	F	MESSAGE NO. 1 RT LANE MUST USE EXIT 31A	MESSAGE NO. 2 RT LANE EXIT ONLY
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
G*	MESSAGE NO. 1 ALL TRAFFIC	MESSAGE NO. 2 USE EXIT 31B	H	MESSAGE NO. 1 I-240 E CLOSED	MESSAGE NO. 2 USE I-40E TO EXIT 53B
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
*PLACE ALONG I-26 W AFTER EXIT 31A AND IN ADVANCE OF EXIT 31B.					
I	MESSAGE NO. 1 I240 E/ I26 W TRAFFIC	MESSAGE NO. 2 USE EXIT 53B			
CHANGEABLE MESSAGE SIGN					

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<p>Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel: 919.851.8888 Fax: 919.851.7024 www.stantec.com</p>	SEAL	<p>I-240 EAST DETOUR #1 BRIDGES 283, 66, 206, & 274</p>	SCALE: NONE		REVISIONS			
	<p><i>Blaine Blawie</i> 10/6/09</p>		<p>DATE: AUG. 2009</p> <p>DWGS. BY: GK</p> <p>DESIGN BY: BLW</p> <p>REVIEWED BY: BLW</p>		<table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>			

NOTES

- USE THIS DETOUR SHEET TO CLOSE I-240 E TO WORK ON BRIDGES 283, 66, 206, & 274.
- COMPLETE ALL WORK ON BRIDGE 274 I-240 EB DURING THIS DETOUR.
- THIS DETOUR IS ONLY TO BE IN PLACE FOR ONE WEEKEND.
- COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING THIS DETOUR:
 - SIGNAL TIMINGS ALONG THE PATTON AVENUE CLOSED LOOP SYSTEM AND ANY OTHER AFFECTED LOCAL ROUTES HAVE BEEN ADJUSTED
 - HAR AND DMS MESSAGES HAVE BEEN PREPARED/ IMPLEMENTED
 - NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED



①

MESSAGE NO. 1	MESSAGE NO. 2
I-240 E/ I-26 W TRAFFIC	USE EXIT 53B
CHANGEABLE MESSAGE SIGN	

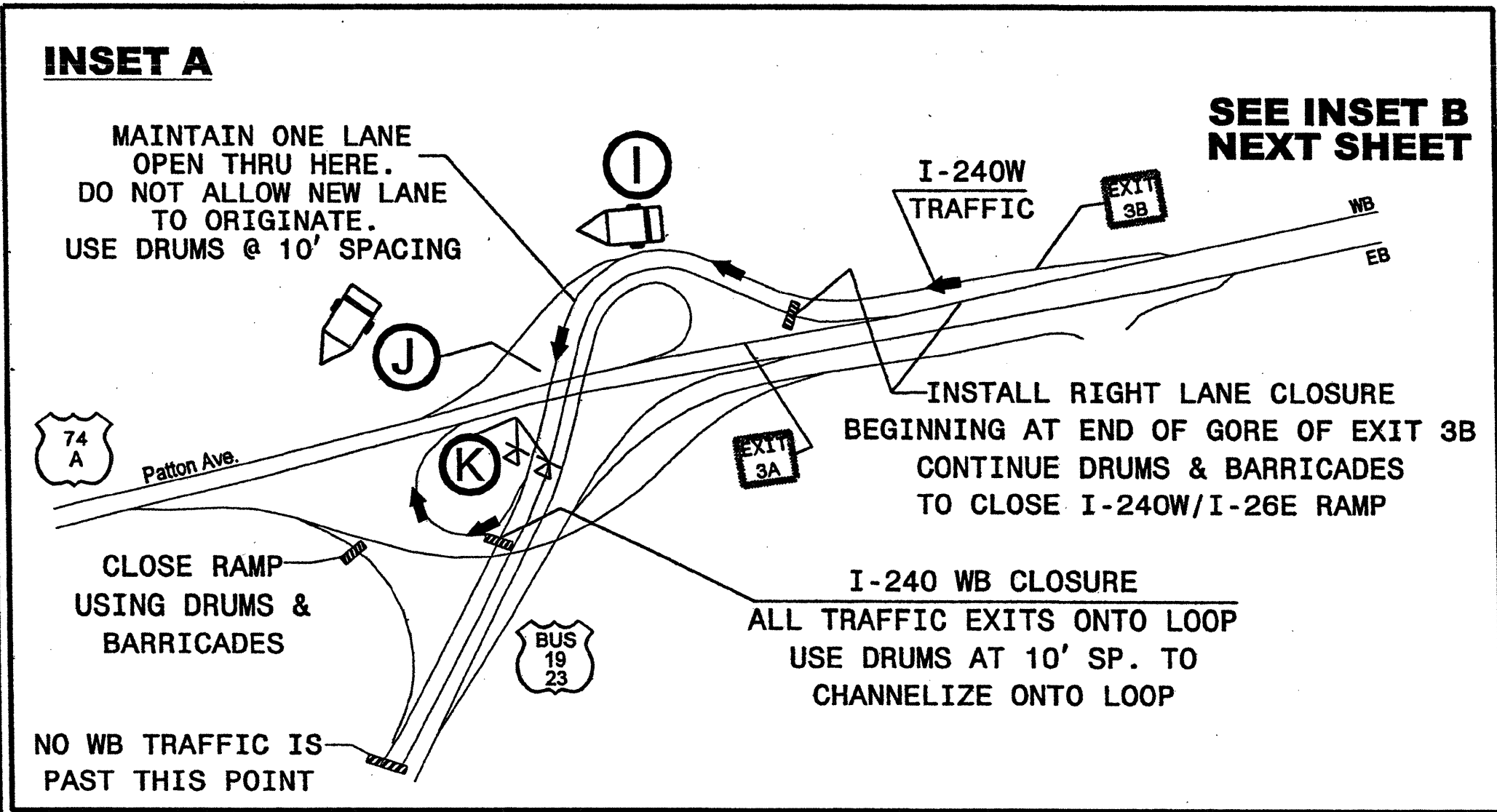
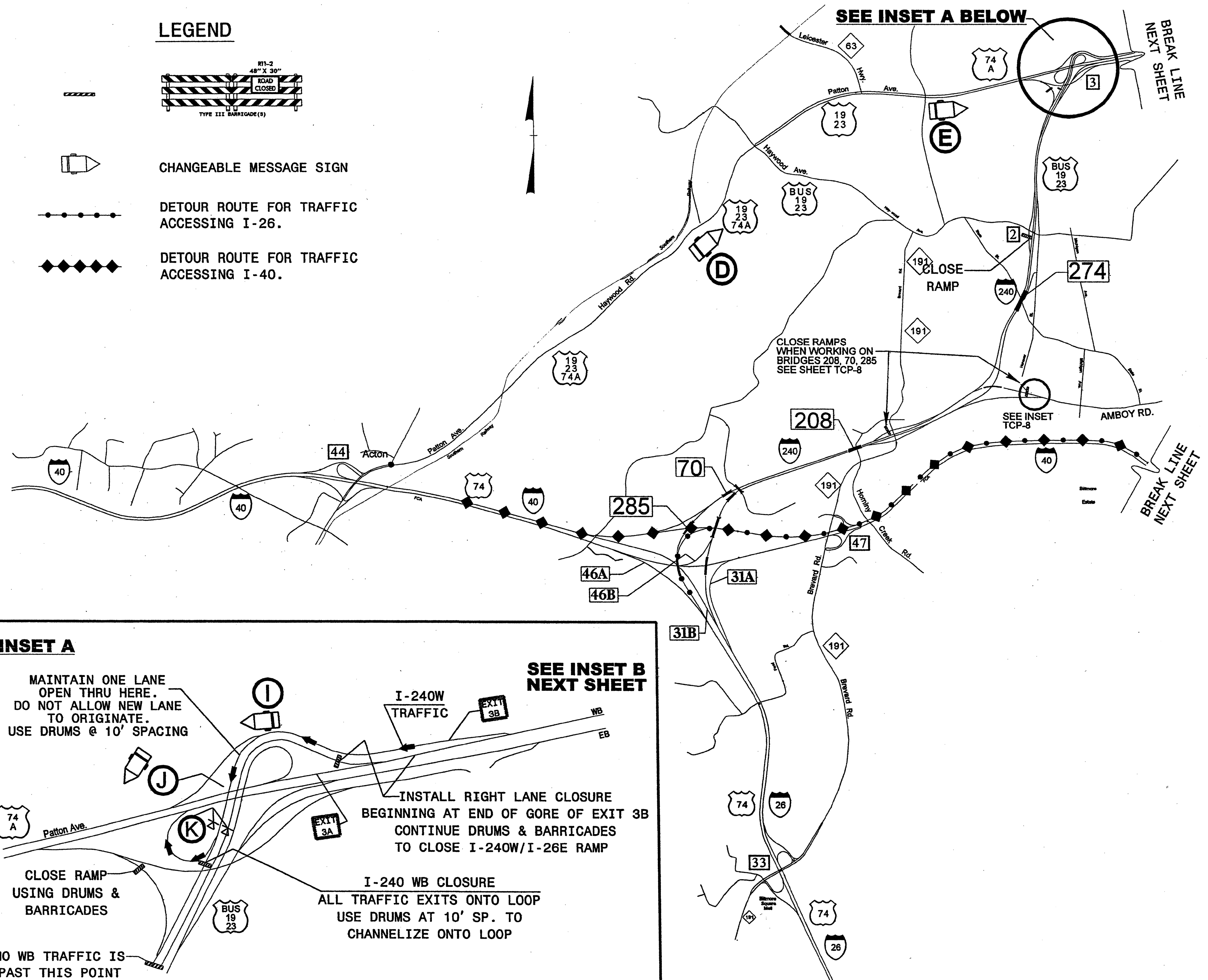
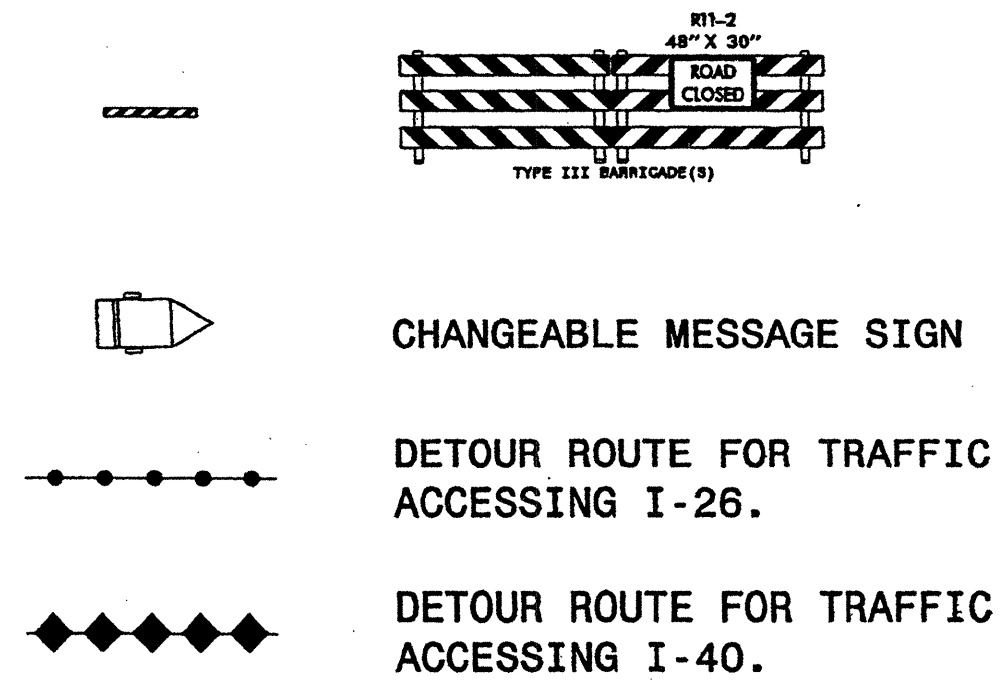
LEGEND

- TYPE III BARRIAGE(S)
- CHANGEABLE MESSAGE SIGN
- DETOUR ROUTE FOR TRAFFIC COMING FROM I-26.
- DETOUR ROUTE FOR TRAFFIC COMING FROM I-40.

I:\projects\2008\B-5179B_tcp\plansheets\B5179B_tcp_psh_05A_240EB_detour_1_sheet2.dgn
 10/2/2008 10:51:17 AM
 tcp\plansheets\B5179B_tcp_psh_05A_240EB_detour_1_sheet2.dgn
 gk@stantec.com

 Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27608 Tel. 919.851.6868 Fax. 919.851.7024 www.stantec.com	SEAL 	I-240 EAST DETOUR #1 BRIDGES 283, 66, 206, & 274							
	SIGNATURE DATE	SCALE: NONE DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW 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>					

LEGEND



NOTES

- USE THIS DETOUR SHEET TO CLOSE I-240 W TO WORK ON BRIDGES 285, 70, 208, & 274.
- COMPLETE ALL WORK ON BRIDGE 274 I-240 WB DURING THIS DETOUR.
- THIS DETOUR IS ONLY TO BE IN PLACE FOR ONE WEEKEND.
- COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING THIS DETOUR:
 - SIGNAL TIMINGS ALONG THE PATTON AVENUE CLOSED LOOP SYSTEM AND ANY OTHER AFFECTED LOCAL ROUTES HAVE BEEN ADJUSTED
 - HAR AND DMS MESSAGES HAVE BEEN PREPARED/ IMPLEMENTED
 - NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED

(A)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED AHEAD	USE I-240 E TO I-40W

CHANGEABLE MESSAGE SIGN

(B)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED	USE I-240 E TO I-40W

CHANGEABLE MESSAGE SIGN

(C)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W DETOURED TRAFFIC	USE EXIT 9 I-40 W

CHANGEABLE MESSAGE SIGN

(D)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED AHEAD	USE ALT ROUTE

CHANGEABLE MESSAGE SIGN

(E)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED AHEAD	USE I-240 E TO I-40W

CHANGEABLE MESSAGE SIGN

(F)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W DETOURED TRAFFIC	USE I-240 E TO I-40W

CHANGEABLE MESSAGE SIGN

(G)*

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED	PAST PATTON AVENUE

CHANGEABLE MESSAGE SIGN

(H)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W CLOSED	USE EXIT 3B

CHANGEABLE MESSAGE SIGN

*PLACE SIGN (G) ALONG ROUTES HAVING AN INTERCHANGE WITH I-240 AS DIRECTED BY THE ENGINEER.

(I)

MESSAGE NO. 1	MESSAGE NO. 2
I-240 W KEEP LEFT	CAUTION REDUCE SPEED

CHANGEABLE MESSAGE SIGN

(J)

MESSAGE NO. 1	MESSAGE NO. 2
ALL TRAFFIC EXIT	REDUCE SPEED

CHANGEABLE MESSAGE SIGN



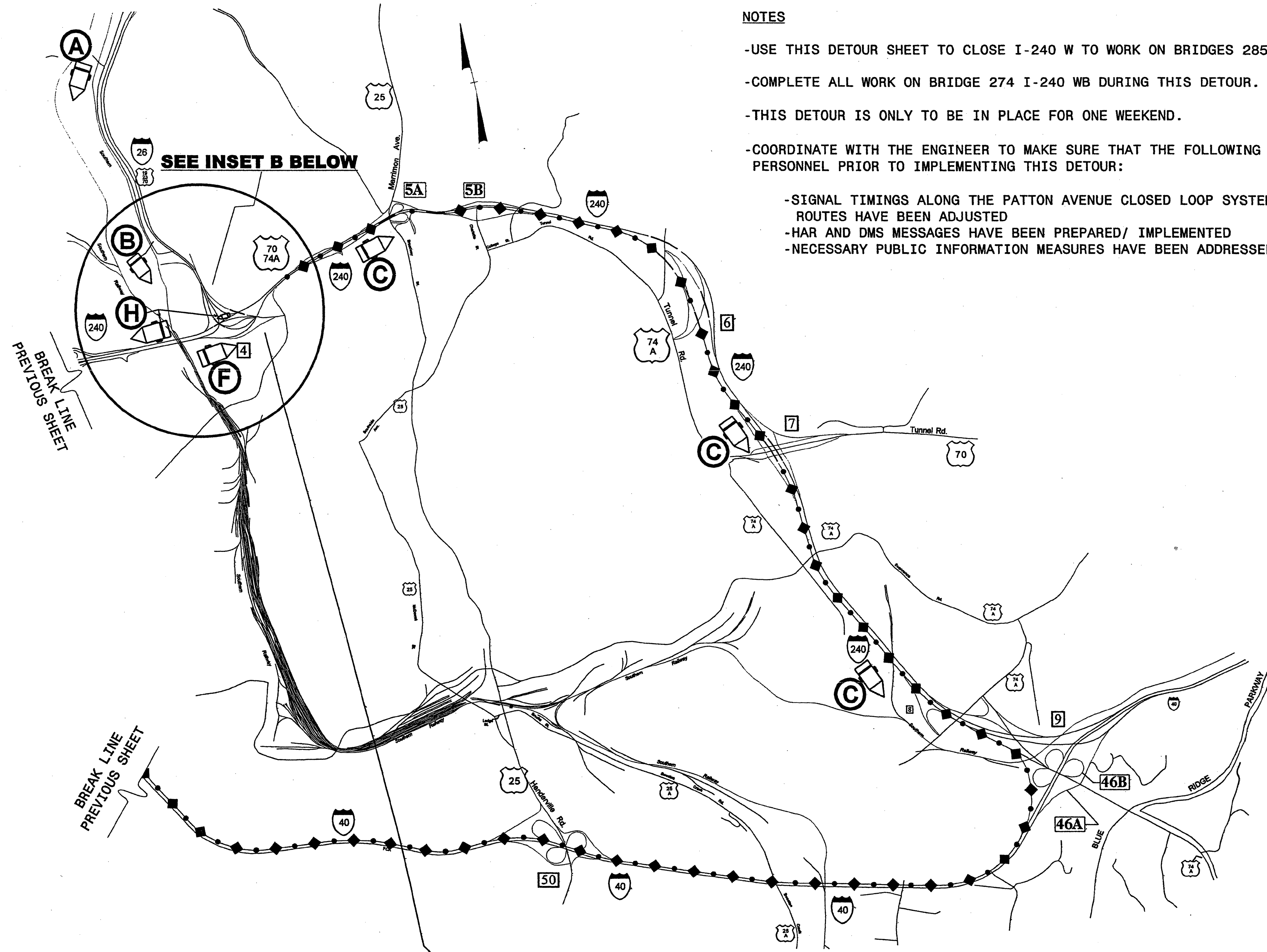
SP03355
48" X 48"
DUAL MOUNTED

10/6/2009 10:16:20 AM f:\c:\p\ref\B-5179B TCP\PLANS\B5179B.tcp.psh.07.240WB_detour.1.sheet.dgn gkarageorge

 Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.8888 Fax. 919.851.7024 www.stantec.com	SEAL 	I-240 WEST DETOUR #1 BRIDGES 285, 70, 208, & 274						
	SCALE: NONE DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW 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>						

NOTES

- USE THIS DETOUR SHEET TO CLOSE I-240 W TO WORK ON BRIDGES 285, 70, 208, & 274.
- COMPLETE ALL WORK ON BRIDGE 274 I-240 WB DURING THIS DETOUR.
- THIS DETOUR IS ONLY TO BE IN PLACE FOR ONE WEEKEND.
- COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING THIS DETOUR:
 - SIGNAL TIMINGS ALONG THE PATTON AVENUE CLOSED LOOP SYSTEM AND ANY OTHER AFFECTED LOCAL ROUTES HAVE BEEN ADJUSTED
 - HAR AND DMS MESSAGES HAVE BEEN PREPARED/ IMPLEMENTED
 - NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED



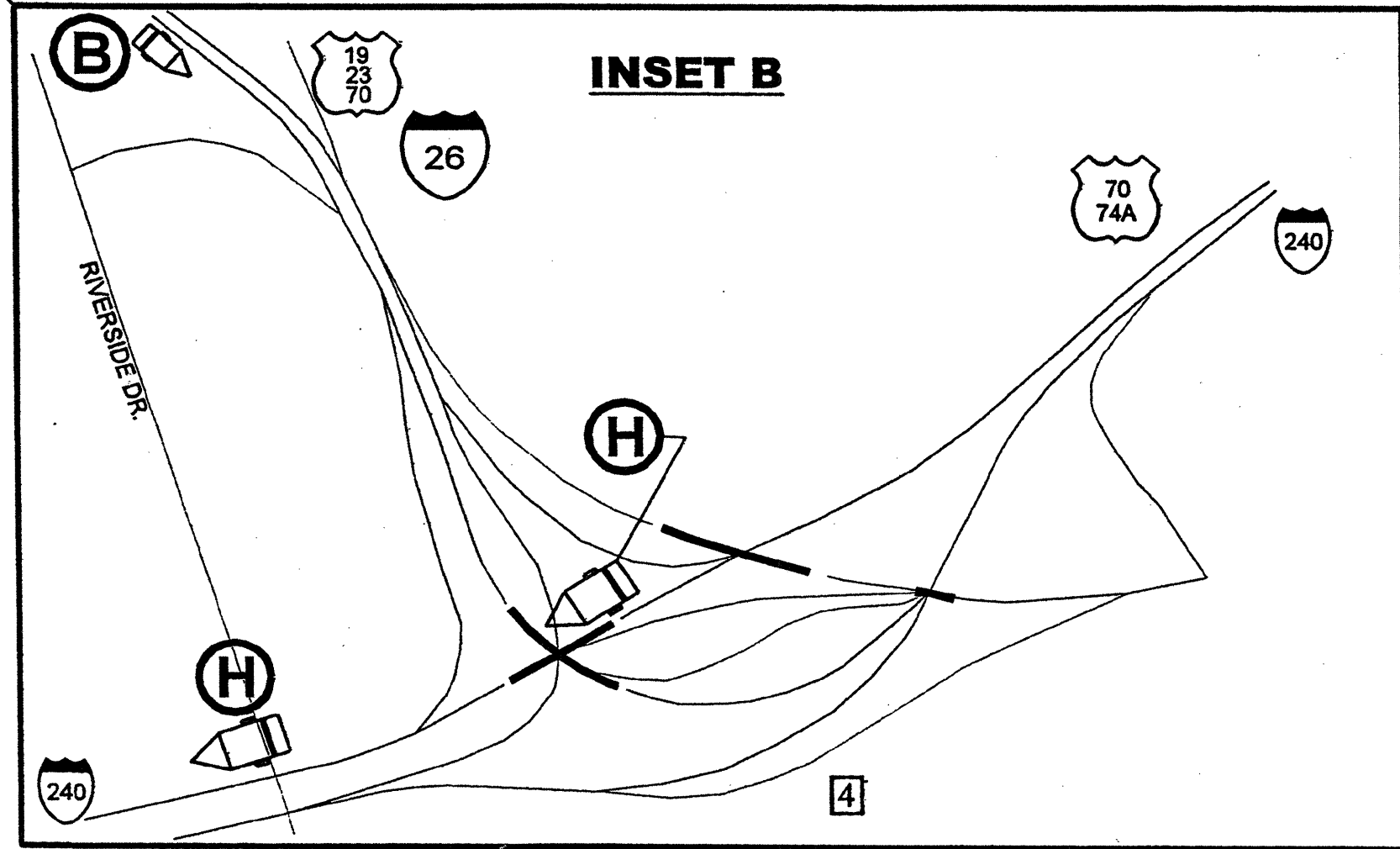
A	MESSAGE NO. 1	MESSAGE NO. 2	B	MESSAGE NO. 1	MESSAGE NO. 2
	I-240 W CLOSED AHEAD	USE I-240 E TO I-40W		I-240 W CLOSED	USE I-240 E TO I-40W
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
C	MESSAGE NO. 1	MESSAGE NO. 2	D	MESSAGE NO. 1	MESSAGE NO. 2
	I-240 W DETOURED TRAFFIC	USE EXIT 9 I-40 W		I-240 W CLOSED AHEAD	USE ALT ROUTE
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
E	MESSAGE NO. 1	MESSAGE NO. 2	F	MESSAGE NO. 1	MESSAGE NO. 2
	I-240 W CLOSED AHEAD	USE I-240 E TO I-40W		I-240 W DETOURED TRAFFIC	USE I-240 E TO I-40W
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	
G*	MESSAGE NO. 1	MESSAGE NO. 2	H	MESSAGE NO. 1	MESSAGE NO. 2
	I-240 W CLOSED	PAST PATTON AVENUE		I-240 W CLOSED	USE EXIT 3B
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	

*PLACE SIGN (G) ALONG ROUTES HAVING AN INTERCHANGE WITH I-240 AS DIRECTED BY THE ENGINEER.

I:\5179B\T\CP\PLANSHEETS\B5179B.TCP\psht_07A_240WB_detour1_sheet2.dgn

LEGEND

- ROAD CLOSED (TYPE III BARRICADE(S))
- CHANGEABLE MESSAGE SIGN
- DETOUR ROUTE FOR TRAFFIC COMING FROM I-26.
- DETOUR ROUTE FOR TRAFFIC COMING FROM I-40.



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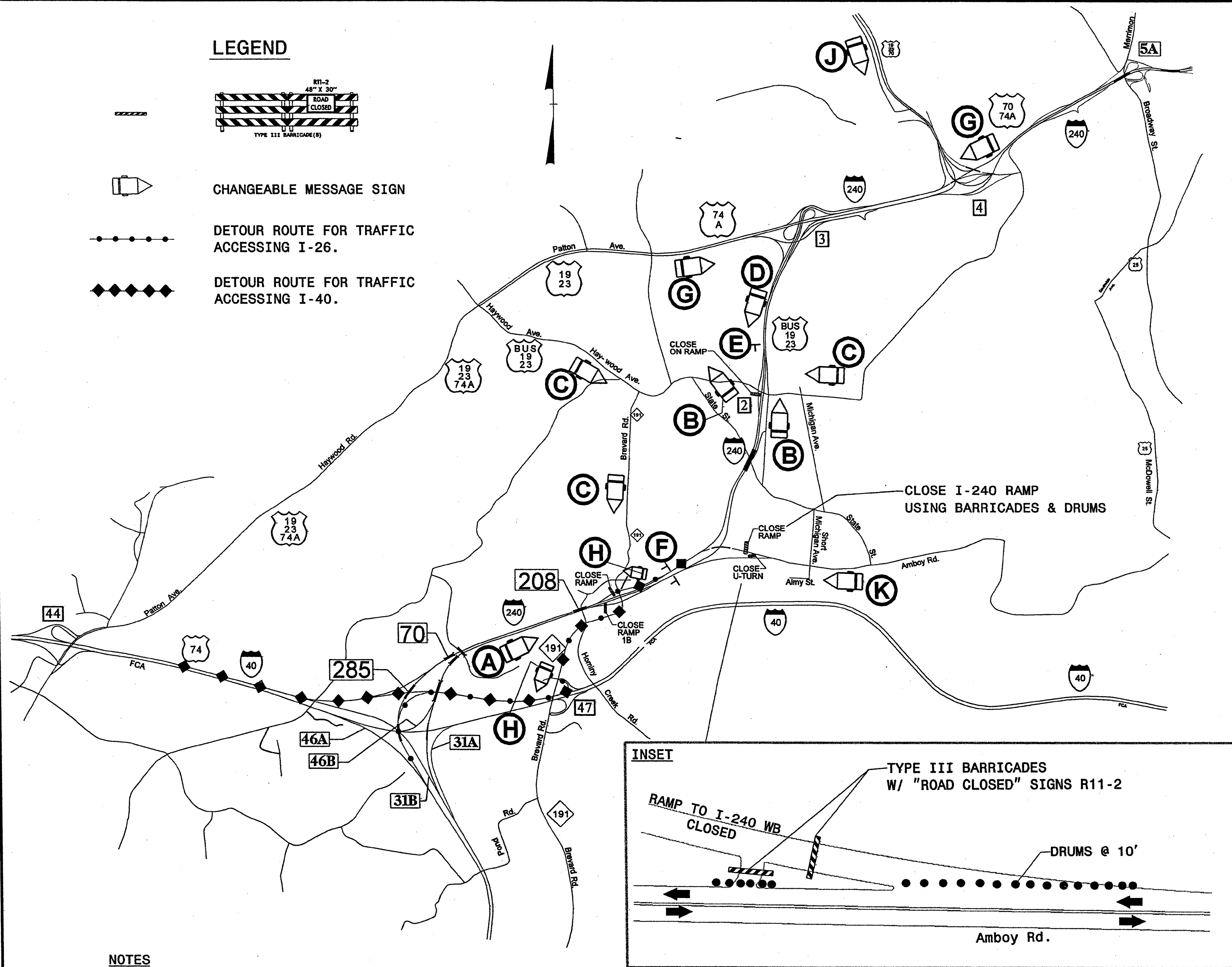
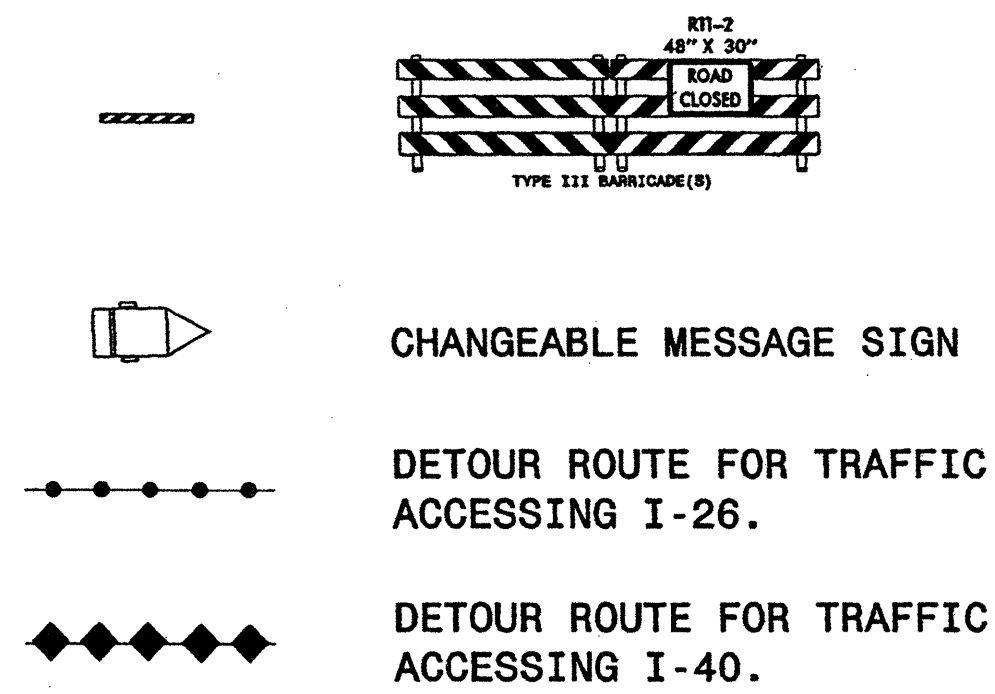
SEAL

Gregory L. Watson
 10/6/09
 SIGNATURE DATE

**I-240 WEST
 DETOUR #1
 BRIDGES 285, 70, 208, & 274**

SCALE:	NONE		<table border="1"> <tr> <th colspan="2">REVISIONS</th> </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									
REVISIONS													
DATE:	AUG. 2009												
DWG. BY:	GK												
DESIGN BY:	BLW												
REVIEWED BY:	BLW												

LEGEND



NOTES

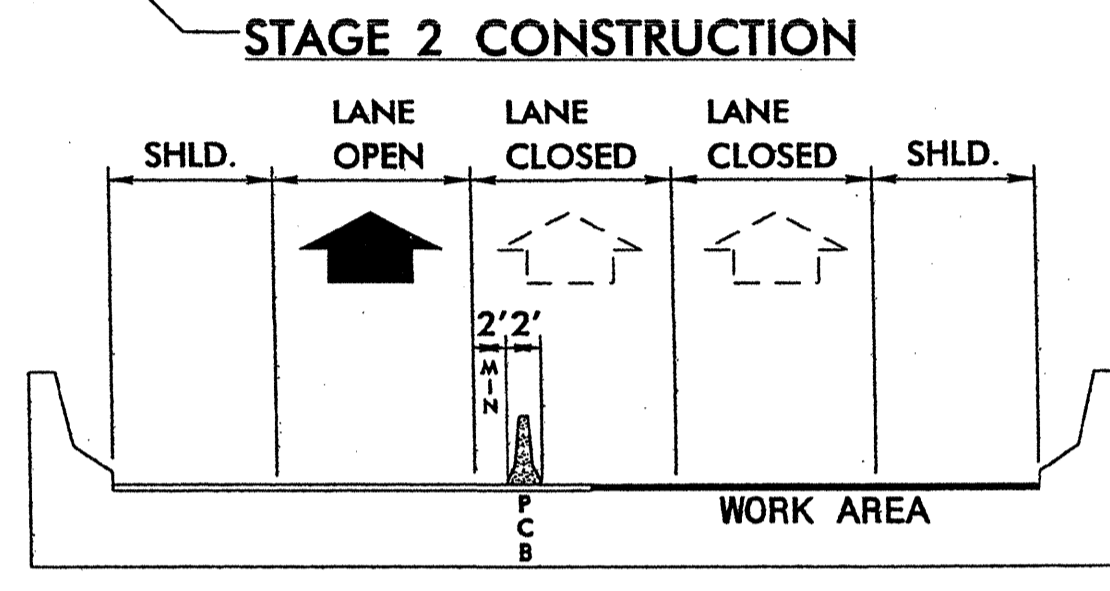
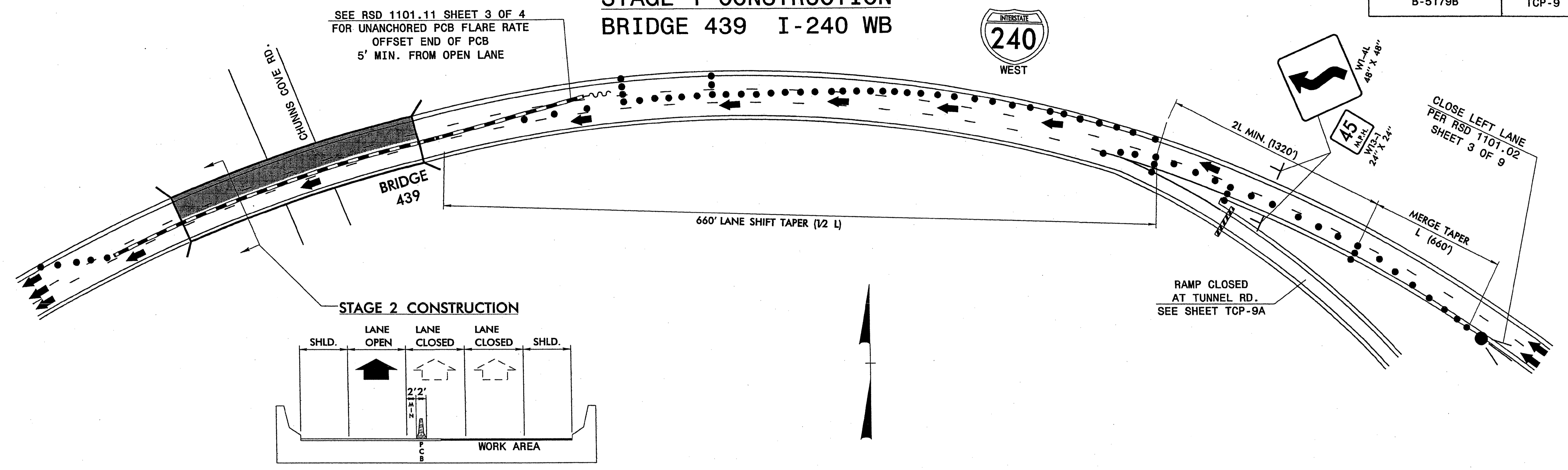
- USE THIS DETOUR SHEET TO CLOSE I-240 W TO WORK ON BRIDGES 285, 70, AND 208.
- COMPLETE ALL WORK ON BRIDGE 274 I-240 WB BEFORE IMPLEMENTING THIS DETOUR.
- USE THE I-240 W DETOUR #1 SHOWN ON SHEETS TCP-7, 7A DURING WORK ON BRIDGE 274.
- USE RSD 1101.03 SHEET 7 OF 9 TO CLOSE I-240 WB AT EXIT 1B (NC 191). CMS (D), AND SIGNS (E) AND (F) ARE SHOWN FOR REPRESENTATION PURPOSES. ALL OTHER SIGNS, DEVICES, AND NOTES ON RSD 1101.03 SHEET 7 ALSO APPLY.
- COORDINATE WITH THE ENGINEER TO MAKE SURE THAT THE FOLLOWING TASKS ARE COMPLETED BY NCDOT PERSONNEL PRIOR TO IMPLEMENTING THIS DETOUR:
 - SIGNAL TIMINGS ALONG THE PATTON AVENUE CLOSED LOOP SYSTEM AND ANY OTHER AFFECTED LOCAL ROUTES SUCH AS NC 191 HAVE BEEN ADJUSTED
 - HAR AND DMS MESSAGES HAVE BEEN PREPARED/ IMPLEMENTED
 - NECESSARY PUBLIC INFORMATION MEASURES HAVE BEEN ADDRESSED

(A)	MESSAGE NO. 1 EXIT 1B CLOSED	MESSAGE NO. 2 USE EXIT 2	(B)	MESSAGE NO. 1 TO NC 191 <-----	MESSAGE NO. 2
(C)	MESSAGE NO. 1 I-240 W/ I-26 E CLOSED	MESSAGE NO. 2 USE NC191 TO I-40 W	(D)	MESSAGE NO. 1 ROAD CLOSED AHEAD	MESSAGE NO. 2 ALL TRAFFIC EXIT
(E)	ALL TRAFFIC EXIT 2 MILES		(F)	ALL TRAFFIC ↑	
(G)	MESSAGE NO. 1 I-240 W CLOSED AT NC191	MESSAGE NO. 2 USE ALT ROUTE	(H)	MESSAGE NO. 1 TO I240W TO I26 E <-----	MESSAGE NO. 2 TURN LEFT HERE
(I)	MESSAGE NO. 1 I-240 W I-26 E <-----	MESSAGE NO. 2 TURN LEFT HERE	(J)	MESSAGE NO. 1 240W/26E CLOSED AT NC191	MESSAGE NO. 2 USE ALT ROUTE
(K)	MESSAGE NO. 1 I-240 RAMP CLOSED	MESSAGE NO. 2 USE ALT ROUTE			

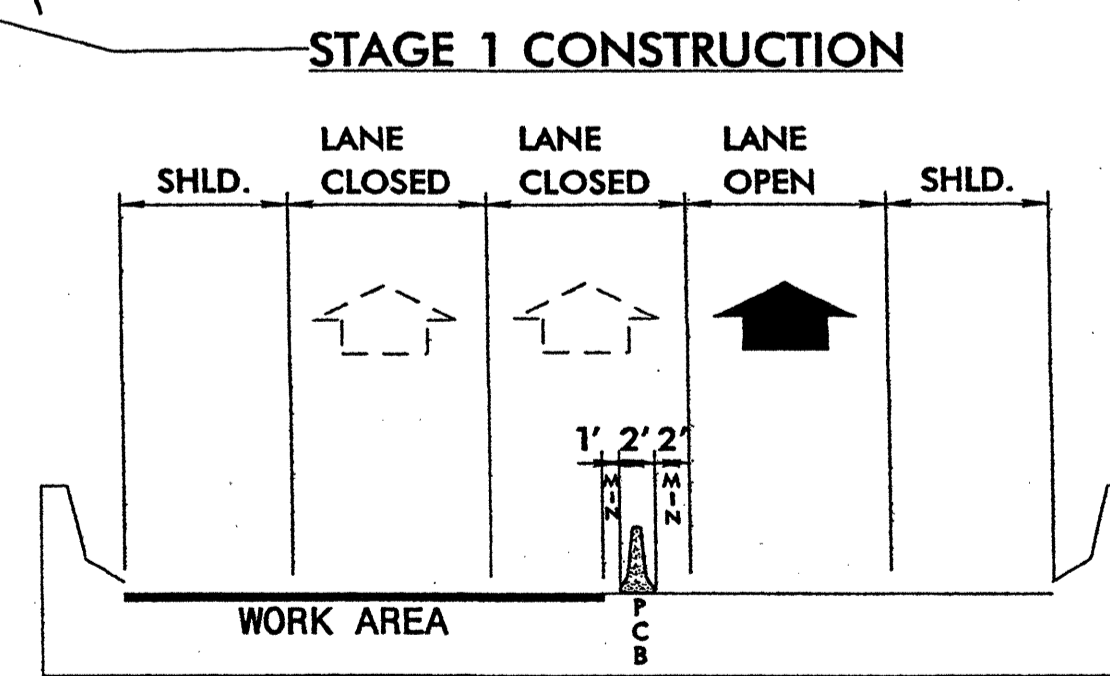
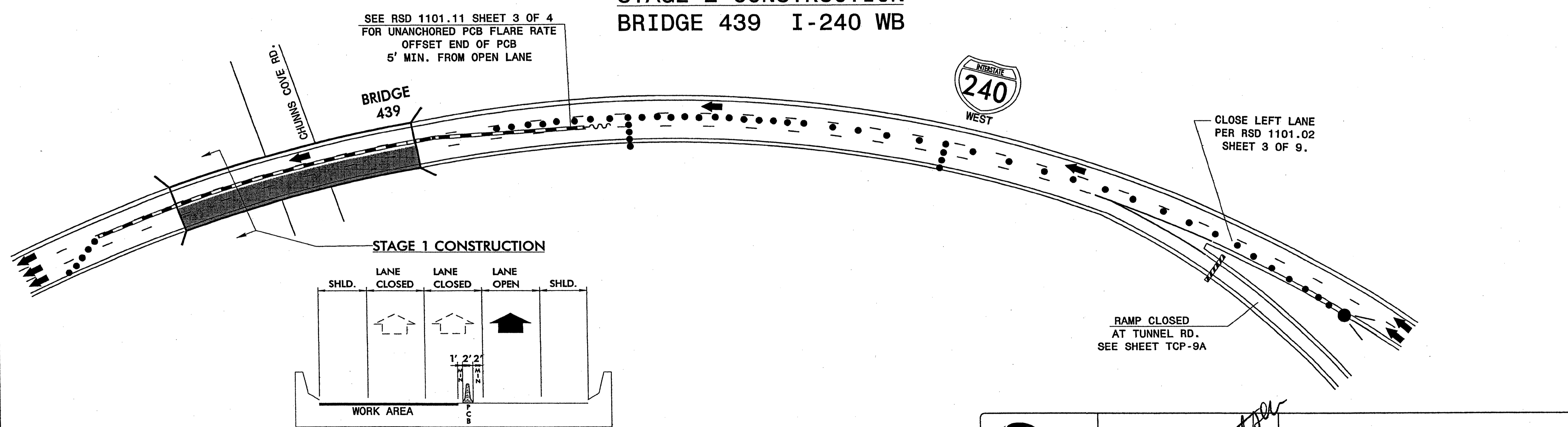
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<p>Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.8898 Fax. 919.851.7024 www.stantec.com</p>	SEAL	<p>I-240 WEST DETOUR #2 BRIDGES 285, 70, & 208</p>	SCALE: NONE		REVISIONS	
	<p>10/6/09</p>		<p>DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW</p>		<table border="1"> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	

STAGE 1 CONSTRUCTION BRIDGE 439 I-240 WB

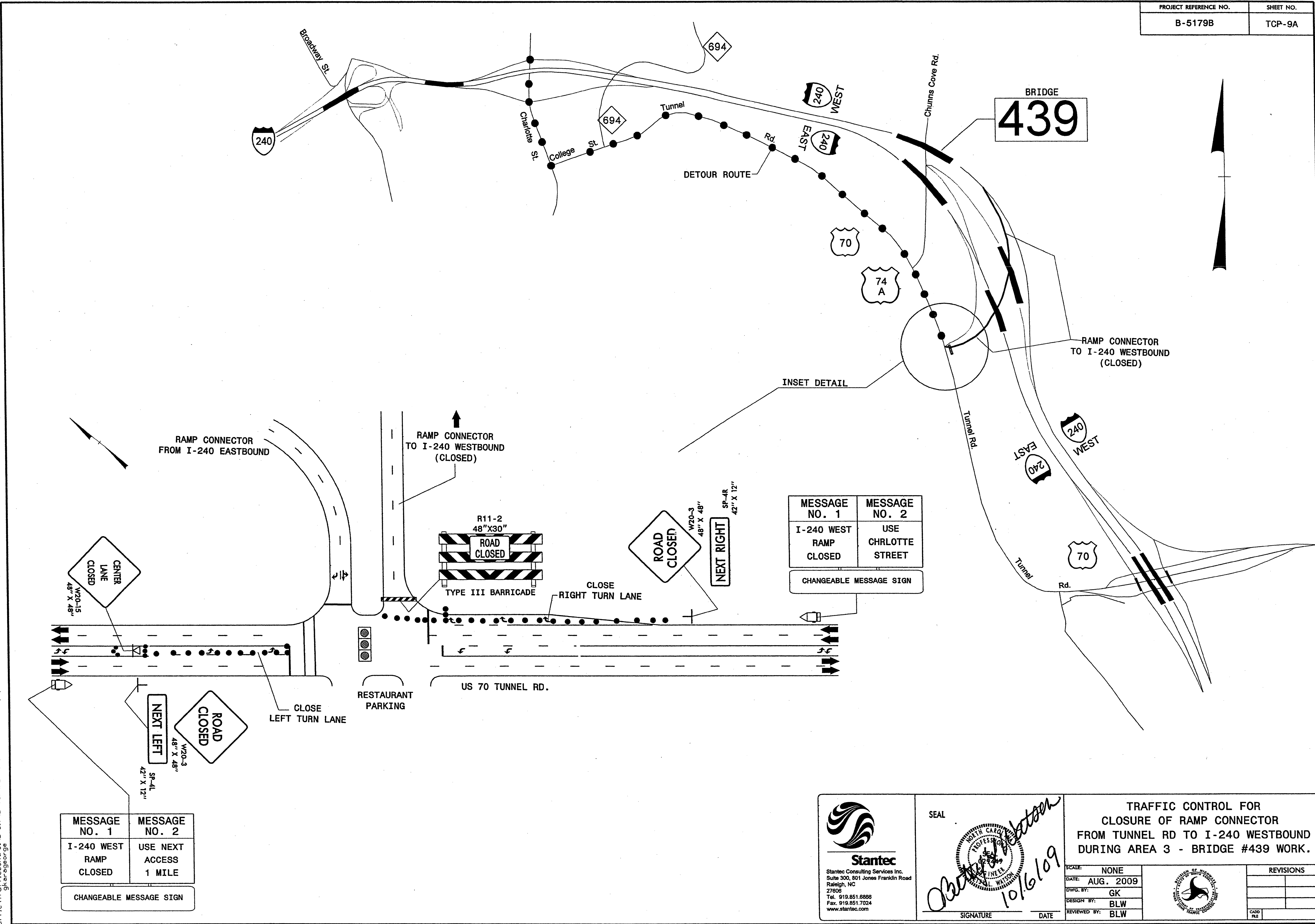


STAGE 2 CONSTRUCTION BRIDGE 439 I-240 WB



10/2/2009
 es:\gn\ref\trafficcontrol\B-5179b_tcp\plansheets\B5179b_tcp.psh_09_439.dgn
 gk\george

<p>Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.8868 Fax. 919.851.7024 www.stantec.com</p>	SEAL	<p><i>Kelly L. Watson</i> 10/6/09</p>	TRAFFIC CONTROL FOR AREA 3 - BRIDGE #439 I-240 WESTBOUND	
	SCALE: NONE DATE: AUG. 2009 DWG. BY: GK DESIGN BY: BLW REVIEWED BY: BLW		SIGNATURE DATE	REVISIONS



10/6/2009 10:51:57 AM TCP\PLANSHEETS\B5179B_tcp_psh_09A_439_RAMP_CLOSURE.dgn
 914599079

MESSAGE NO. 1	MESSAGE NO. 2
I-240 WEST RAMP CLOSED	USE NEXT ACCESS 1 MILE
CHANGEABLE MESSAGE SIGN	

MESSAGE NO. 1	MESSAGE NO. 2
I-240 WEST RAMP CLOSED	USE CHARLOTTE STREET
CHANGEABLE MESSAGE SIGN	

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 Fax. 919.851.7024
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Robert Watson
 10/6/09
 SIGNATURE DATE

TRAFFIC CONTROL FOR
 CLOSURE OF RAMP CONNECTOR
 FROM TUNNEL RD TO I-240 WESTBOUND
 DURING AREA 3 - BRIDGE #439 WORK.

SCALE:	NONE
DATE:	AUG. 2009
DWG. BY:	GK
DESIGN BY:	BLW
REVIEWED BY:	BLW

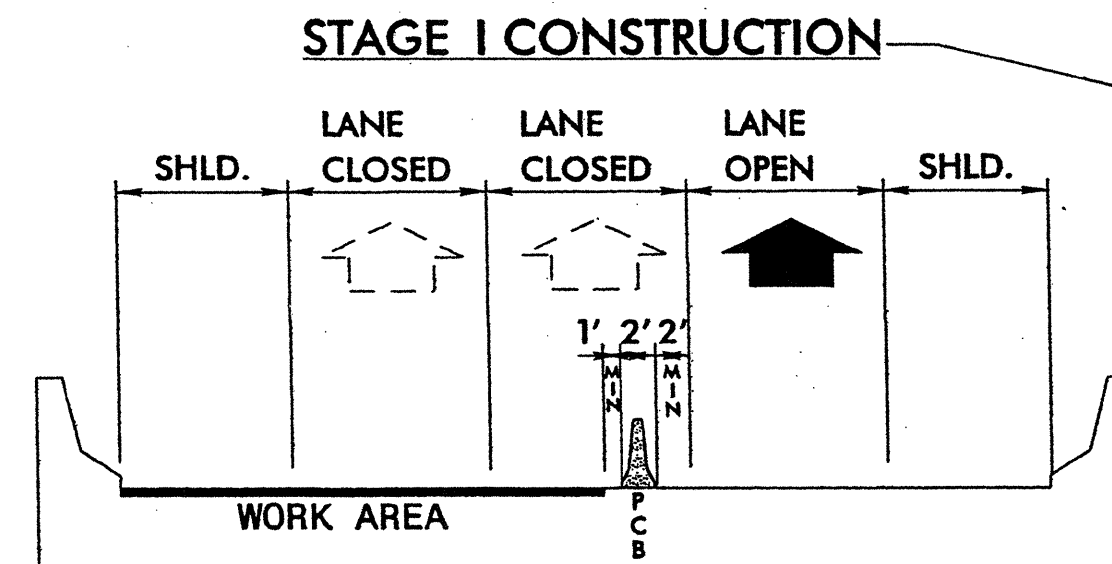
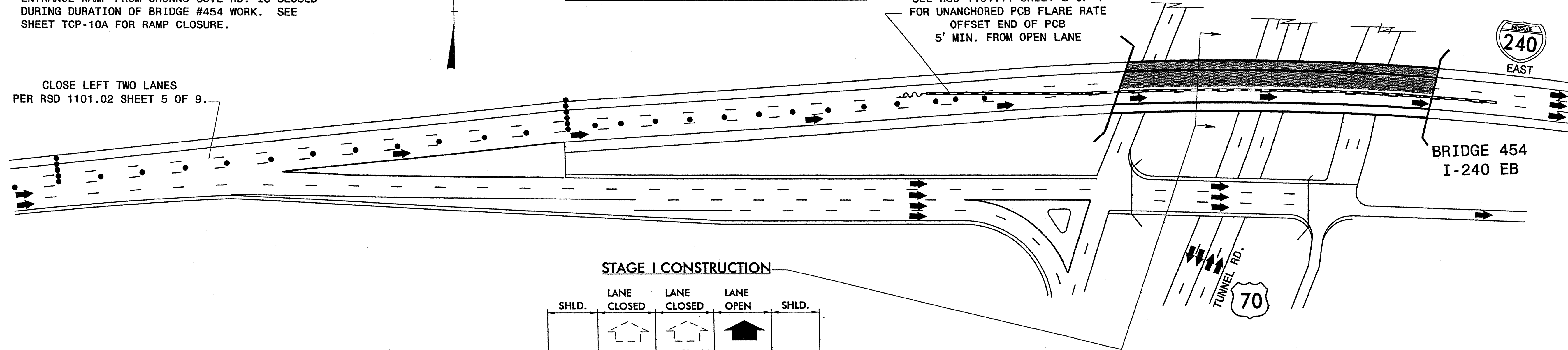
REVISIONS

STAGE 1 CONSTRUCTION BRIDGE 454 I-240 EB

NOTE:
ENTRANCE RAMP FROM CHUNNS COVE RD. IS CLOSED
DURING DURATION OF BRIDGE #454 WORK. SEE
SHEET TCP-10A FOR RAMP CLOSURE.

SEE RSD 1101.11 SHEET 3 OF 4
FOR UNANCHORED PCB FLARE RATE
OFFSET END OF PCB
5' MIN. FROM OPEN LANE

CLOSE LEFT TWO LANES
PER RSD 1101.02 SHEET 5 OF 9.

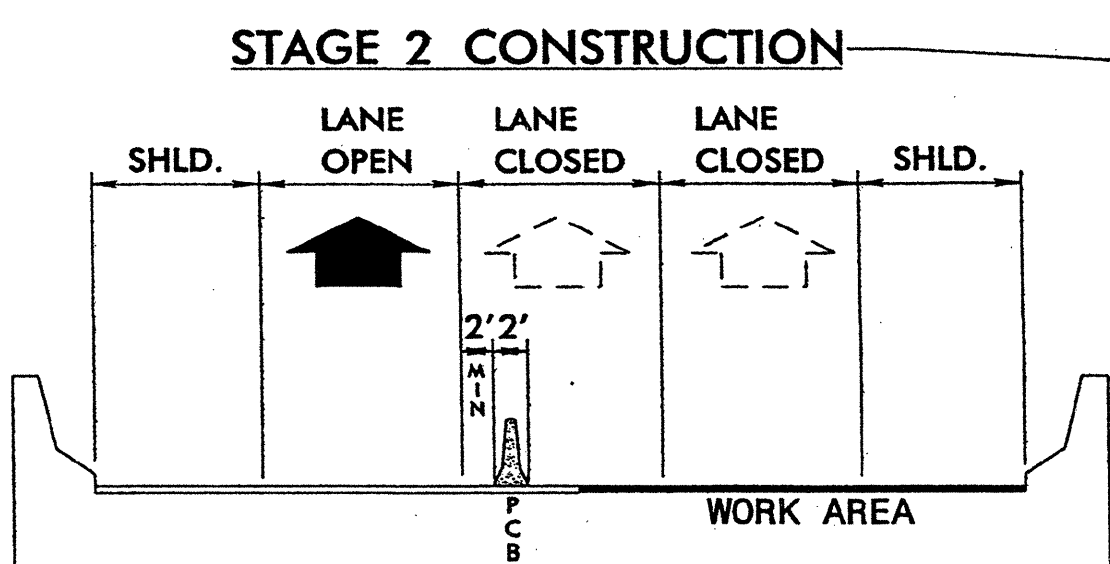
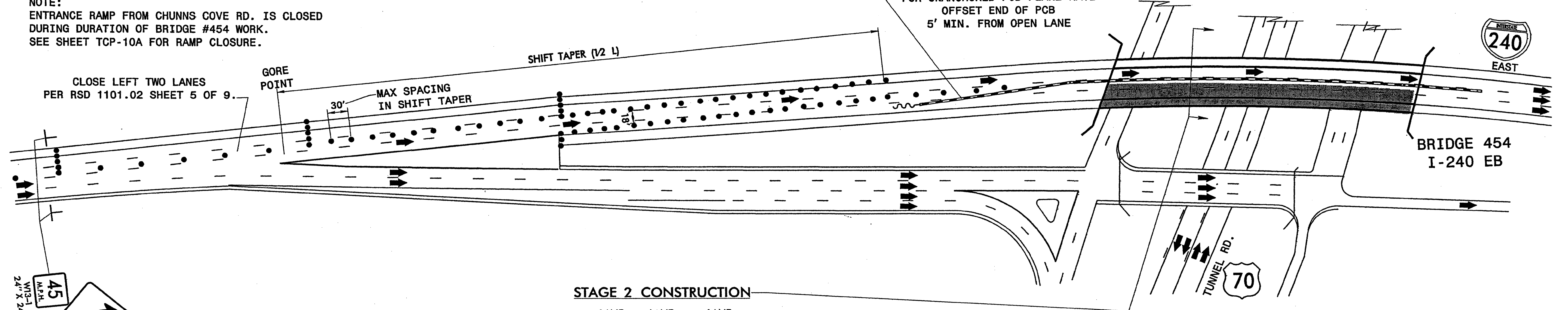


STAGE 2 CONSTRUCTION BRIDGE 454 I-240 EB

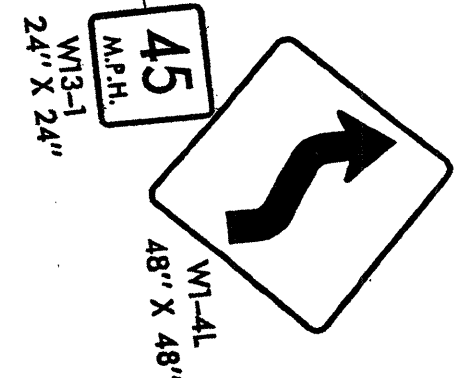
NOTE:
ENTRANCE RAMP FROM CHUNNS COVE RD. IS CLOSED
DURING DURATION OF BRIDGE #454 WORK.
SEE SHEET TCP-10A FOR RAMP CLOSURE.

SEE RSD 1101.11 SHEET 3 OF 4
FOR UNANCHORED PCB FLARE RATE
OFFSET END OF PCB
5' MIN. FROM OPEN LANE

CLOSE LEFT TWO LANES
PER RSD 1101.02 SHEET 5 OF 9.



I:\2009\control\B-5179b_tcp.plansheets\B5179B_tcp_psh_10_454.dgn
 gkarageorge



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Gregory L. Watson
10/6/09

SIGNATURE DATE

TRAFFIC CONTROL FOR
AREA 4 - BRIDGE #454
I-240 EASTBOUND

SCALE:	NONE
DATE:	AUG. 2009
DWG. BY:	GK
DESIGN BY:	BLW
REVIEWED BY:	BLW

REVISIONS	

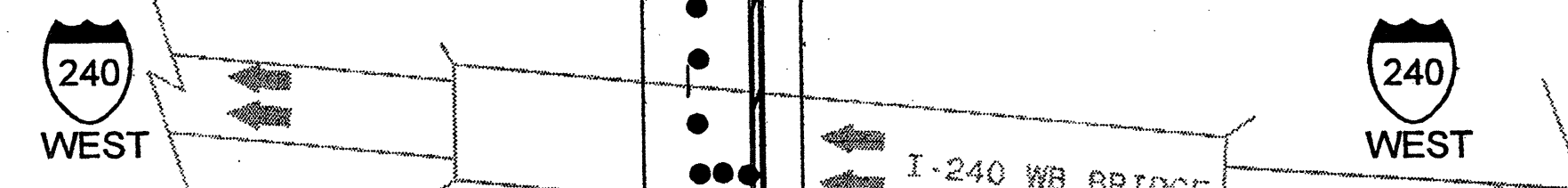
CARD FILE

MESSAGE NO. 1	MESSAGE NO. 2
I-240 EB RAMP CLOSED	FOLLOW US 70 TO I-240

CHANGEABLE MESSAGE SIGN

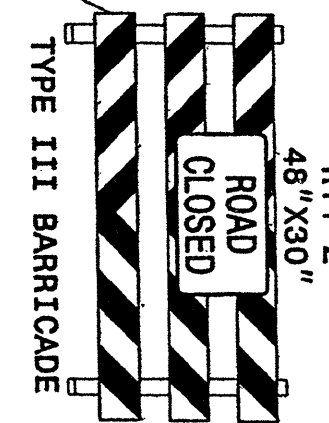
42" X 12" SP-4L
NEXT LEFT

48" X 48" W20-3
ROAD CLOSED



CLOSE LEFT TURN LANE

RAMP FROM I-240 WESTBOUND



RAMP CONNECTOR TO I-240 EASTBOUND (CLOSED)

240 EAST

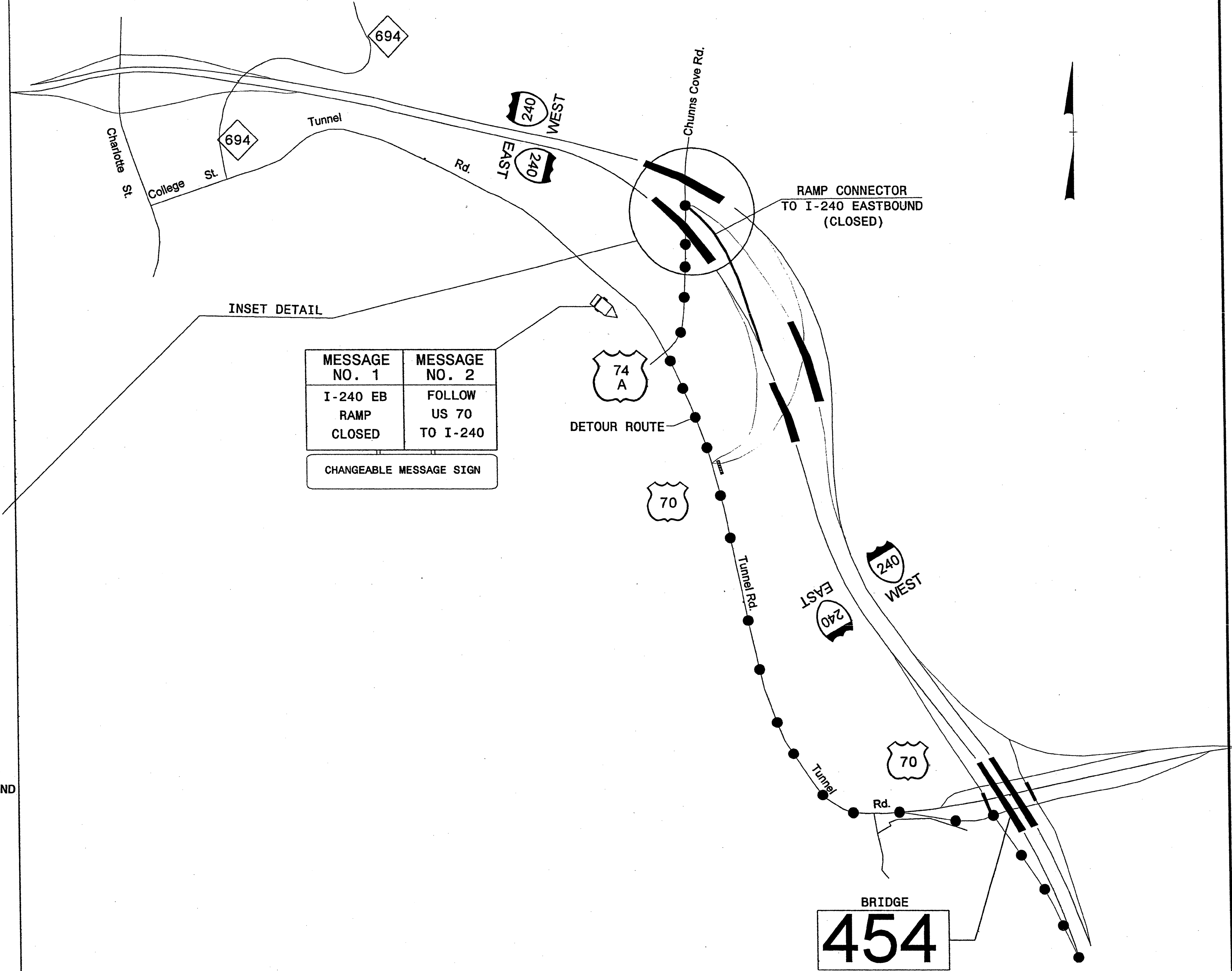
CHUNNS COVE RD.

ROAD CLOSED

42" X 12" SP-4R
NEXT RIGHT

240 EAST

I-240 EB BRIDGE



MESSAGE NO. 1	MESSAGE NO. 2
I-240 EB RAMP CLOSED	FOLLOW US 70 TO I-240

CHANGEABLE MESSAGE SIGN

74 A

DETOUR ROUTE

70

240 EAST

240 WEST

BRIDGE 454

10/6/2009 10:18:51 AM B-5179B TCP\PLANSHEETS\B5179B-tcp-psh-10a-454-RAMP_CLOSURE.dgn
 gfanter

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SEAL

Paul J. Watson
 10/6/09

SIGNATURE DATE

TRAFFIC CONTROL FOR CLOSURE OF RAMP CONNECTOR FROM CHUNNS COVE RD. TO I-240 EASTBOUND DURING BRIDGE #454 WORK.

SCALE: NONE
 DATE: AUG. 2009
 DWG. BY: GK
 DESIGN BY: BLW
 REVIEWED BY: BLW

REVISIONS

CARD FILE

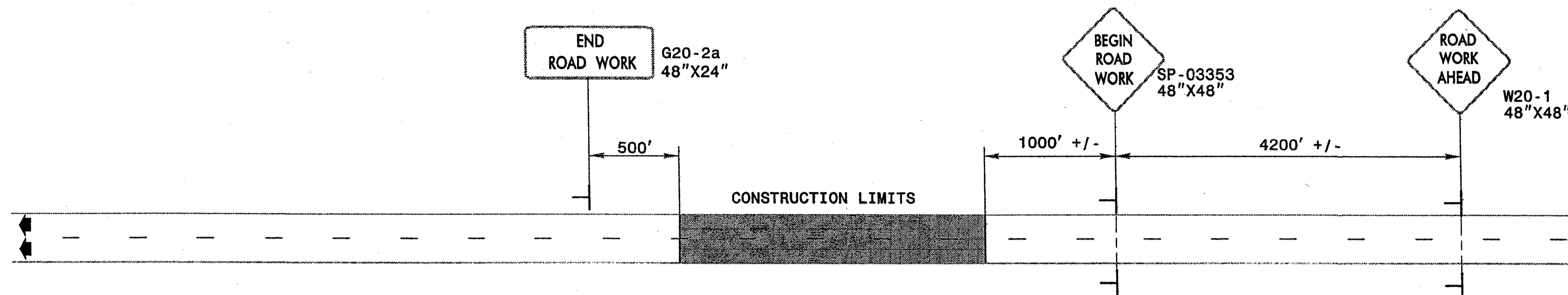
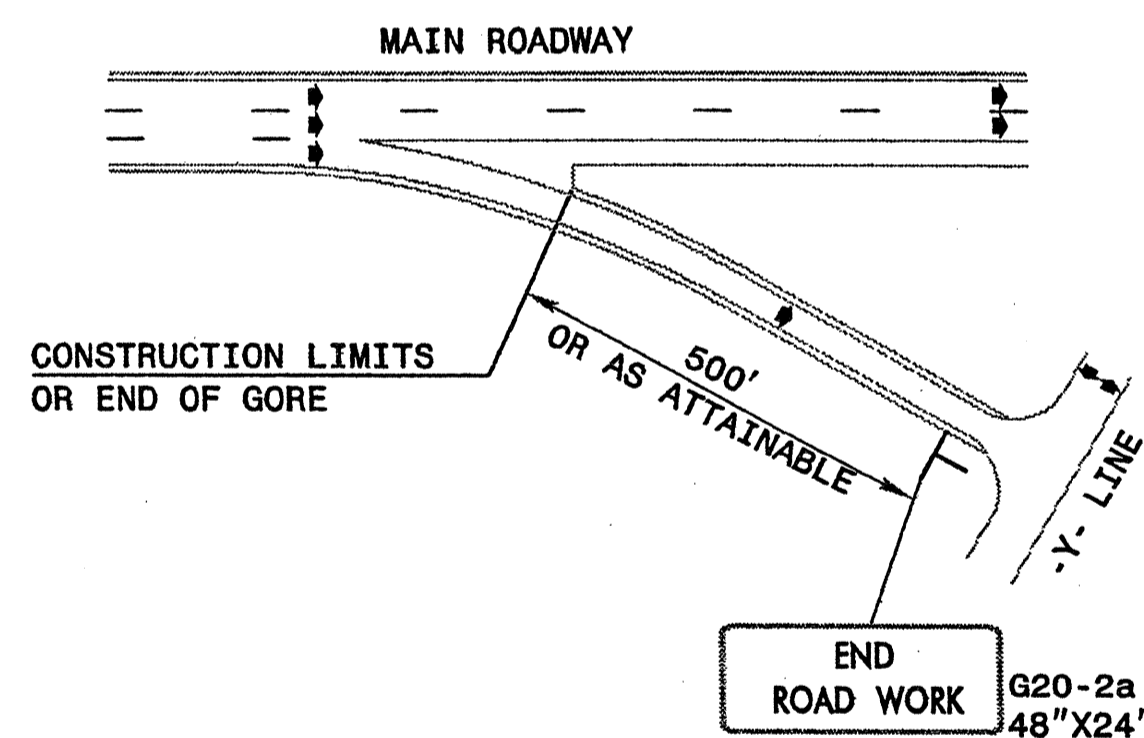


FIGURE B

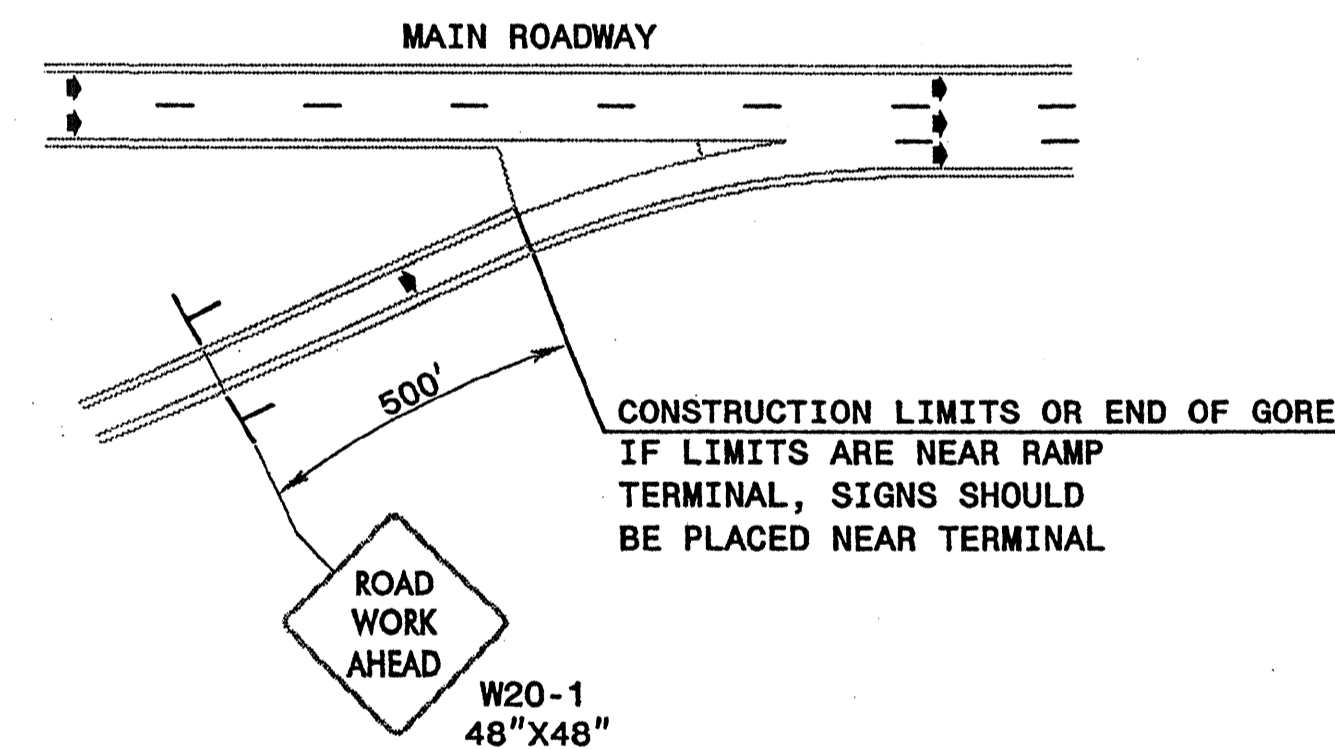
EXIT RAMP



NOTE:
SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG INTERSECTING -Y- LINE. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

FIGURE C

ENTRANCE RAMP



NOTES:

- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- FOR UNDIVIDED ROADWAYS SIGNS ARE NOT REQUIRED ON THE LEFT SIDE OF EACH APPROACH.

I:\2009\control\B-5179B_tcp.psh.11.ADVWARN.dgn

<p>Stantec Stantec Consulting Services Inc. Suite 300, 801 Jones Franklin Road Raleigh, NC 27606 Tel. 919.851.8866 Fax. 919.851.7024 www.stantec.com</p>	SEAL	<p>WORK ZONE ADVANCE WARNING SIGNS</p>																
				<table border="1"> <tr> <td>SCALE:</td> <td>NONE</td> <td rowspan="4"> </td> <td>REVISIONS</td> </tr> <tr> <td>DATE:</td> <td>AUG. 2009</td> <td>03/04</td> </tr> <tr> <td>DWG. BY:</td> <td>GK</td> <td></td> </tr> <tr> <td>DESIGN BY:</td> <td>BLW</td> <td></td> </tr> <tr> <td>REVIEWED BY:</td> <td>BLW</td> <td></td> <td></td> </tr> </table>	SCALE:	NONE		REVISIONS	DATE:	AUG. 2009	03/04	DWG. BY:	GK		DESIGN BY:	BLW		REVIEWED BY:
SCALE:	NONE		REVISIONS															
DATE:	AUG. 2009		03/04															
DWG. BY:	GK																	
DESIGN BY:	BLW																	
REVIEWED BY:	BLW																	
SIGNATURE		DATE																

