A SAN CONTRACTOR OF THE SAN CONTRACTOR OF TH
TYF
BRIDGE 008

CALDWELL CO.

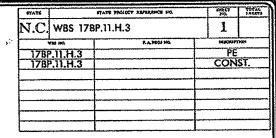
C203123

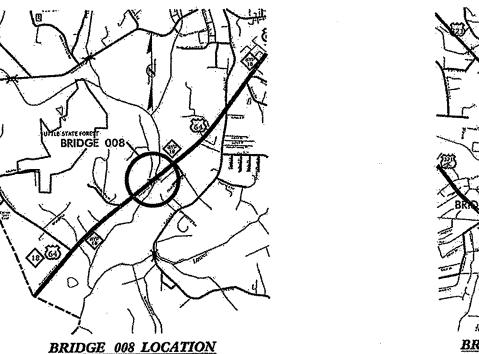
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

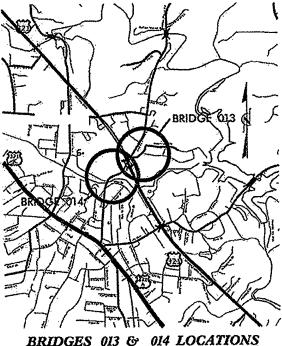
CALDWELL & WILKES COUNTIES

LOCATION: CALDWELL CO. - BRIDGE 8 ON US 64, NC 18 OVER SETZER CREEK CALDWELL CO. - BRIDGE 13 ON US 321 NBL OVER SR 1002 CALDWELL CO. - BRIDGE 14 ON US 321 SBL OVER SR 1002 WILKES CO. - BRIDGE 56 ON NC 268 OVER BEAVER CREEK

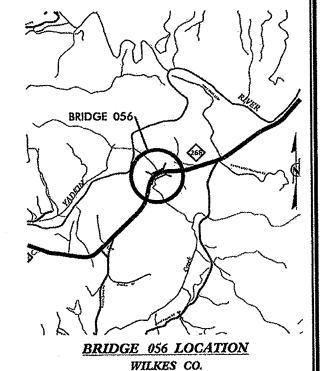
TYPE OF WORK: BRIDGE PRESERVATION: LATEX MODIFIED CONCRETE OVERLAY







BRIDGES 013 & 014 LOCATIONS
CALDWELL CO.



VICINITY MAP

PROJECT LENGTH



RIGHT OF WAY DATE:

NA.

LETTING DATE:

JULY 17, 2012

JOE KELVINGTON, PE PROJECT DESIGN ENGINEER



DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA





STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CALDWELL & WILKES COUNTIES

SHEET TOTAL NO. SHEETS N.C. WBS 17BP.11.H.3 1A PE CONST. 178P.11.H.3 178P.11.H.3

LOCATION: CALDWELL CO. – BRIDGE 8 ON US 64, NC 18 OVER SETZER CREEK CALDWELL CO. – BRIDGE 13 ON US 321 NBL OVER SR 1002 CALDWELL CO. – BRIDGE 14 ON US 321 SBL OVER SR 1002 WILKES CO. – BRIDGE 56 ON NC 268 OVER BEAVER CREEK TYPE OF WORK: BRIDGE PRESERVATION: LATEX MODIFIED CONCRETE OVERLAY

INDEX OF SHEETS

DESCRIPTION DWG. TITLE SHEET

INDEX OF SHEET **1A**

2 SUMMARY OF QUANTITIES

S-1 THRU S-7 CALDWELL CO. BRIDGE 8 PLANS CALDWELL CO. BRIDGE 13 PLANS S-8 THRU S-14 CALDWELL CO. BRIDGE 14 PLANS S-15 THRU S-21 S-22 THRU S-28 WILKES CO. BRIDGE 56 PLANS

TMP-1 THRU TMP-5

TRANSPORTATION MANAGEMENT PLANS

C203123

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE STATE PROJECT REPRESENCE NO. SHEETS TOFFAR NO. SHEETS $N.C_{\rm c}$ WBS 17BP.11.H.3

SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C203123

ItemNumber	Sec #	Quantity	Unit	Description
0000100000 11	200			MODIFICATION
0000100000-N	800	Lump Sum		MOBILIZATION
1330000000-Е	607	1,736.4	SY	INCIDENTAL MILLING
1519000000-E	610	27	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5B
1523000000-E	610	110	TON	ASPHALT CONC SURFACE COURSE, TYPE S9.5C
1575000000-E	620	8	TON	ASPHALT BINDER FOR PLANT MIX
4400000000-E	1110	320	SF	WORK ZONE SIGNS (STATIONARY)
4405000000-E	1110	388	SF	WORK ZONE SIGNS (PORTABLE)
4415000000-N	1115	1	EA	FLASHING ARROW BOARD
4422000000-N	1120	30	DAY	PORTABLE CHANGEABLE MESSAGE SIGN (SHORT TERM)
4430000000-N	1130	175	EA	DRUMS
4435000000-N	1135	20	EA	CONES
4450000000-N	1150	256	HR	FLAGGER
4480000000-N	1165	1	EA	TMA
4847000000-E	1205	1,725	LF	POLYUREA PAVEMENT MARKING LINES (4", *********) (STANDARD GLASS BEADS)
4905000000-N	1253	12	EA	SNOWPLOWABLE PAVEMENT MARKERS
8161000000-E	420	15,958	SF	GROOVING BRIDGE FLOORS
8692000000-N	SP	Lump Sum		FOAM JOINT SEALS
8881000000-E	SP	114.5	CY	GENERIC STRUCTURE ITEM LATEX MOD CONC OVERLAY - VERY EARLY STRENGTH
889300000-E	SP	2,083.8	SY	GENERIC STRUCTURE ITEM HYDRO-DEMOLITION OF BRIDGE DECK
8893000000-E	SP	2,083.8	SY	GENERIC STRUCTURE ITEM PLACING & FINISHING LATEX MOD CONC OVERLAY VERY EARLY STRENGTH
889300000-E	SP	2,083.8	SY	GENERIC STRUCTURE ITEM SCARIFYING BRIDGE DECK

TIP PROJECT:17BP.11.H

215025

TRACT:

SallSERNAMESS&®

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF THE BRIDGE.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

BRIDGE 8 ON US 64, NC 18

LOCATION: BRIDGE 130008, US 64, NC 18 OVER SETZER CREEK 0.3 MILES NORTHEAST OF JUNCTION WITH SR 1388

				TOTAL	BILL	OF MAT	ERIAL				
INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	CLASS I * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	SURFACE	HYDRO- DEMOLITION OF BRIDGE DECK	CLASS AA CONCRETE	LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY~ VERY EARLY STRENGTH	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF.COURSE TYPE S9.5C
SO.YDS.	SOLYDS,	SO.YDS.	SO.YDS,	SO.YDS.	sa.yos.	CU.YDS.	CU.YDS.	so.yds.	LUMP SUM	SO.FT.	TON
433.3	373.4	0	5.3	0	373.4	0	17.9	373.4	LUMP SUM	2,788	35

NO SEPARATE MEASUREMENT OR PAYMENT FOR THESE ITEMS WILL BE MADE, ALL COSTS FOR THIS WORK

*QUANTITIES ARE ESTIMATES FROM BEST AVAILABLE DATA, AND SHOULD BE CONSIDERED FOR INFORMATION PURPOSES ONLY, IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE TYP, "BLOW THRU" CONTAINMENT AND FORMWORK DETAIL. SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HYDRO-DEMOLITION.

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY STATION:___

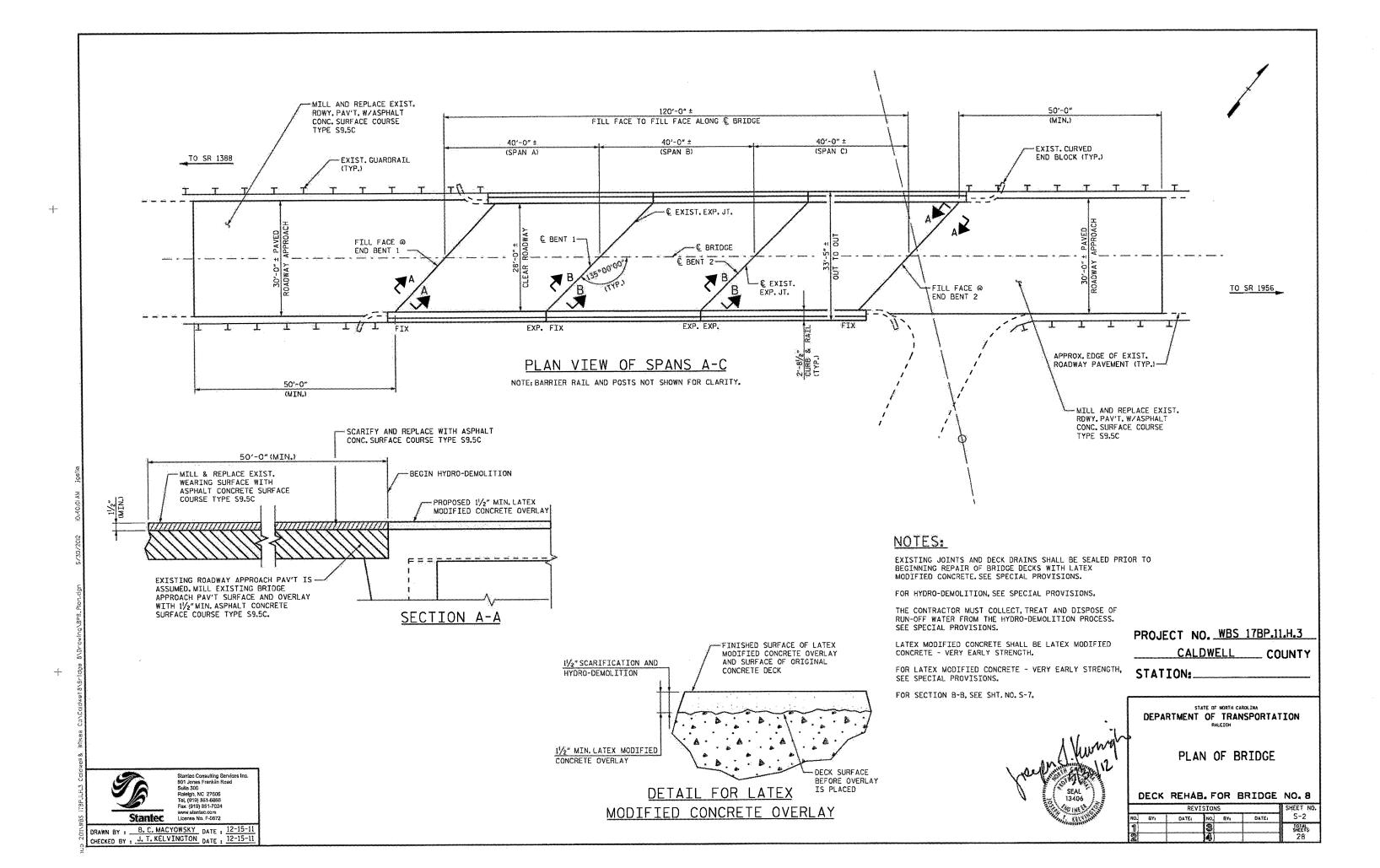
STATE OF MORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOCATION SKETCH AND TOTAL BILL OF MATERIAL

DECK REHAB. FOR BRIDGE NO. 8

BYI DATEA NO. BYI DATEA S-1		REVI:	10	NS		SHEET NO.	
3 8265	844	DATEs	NO.	BYr	DATEs	S-1	
			3			SIECTS	
4) 28			4			28	

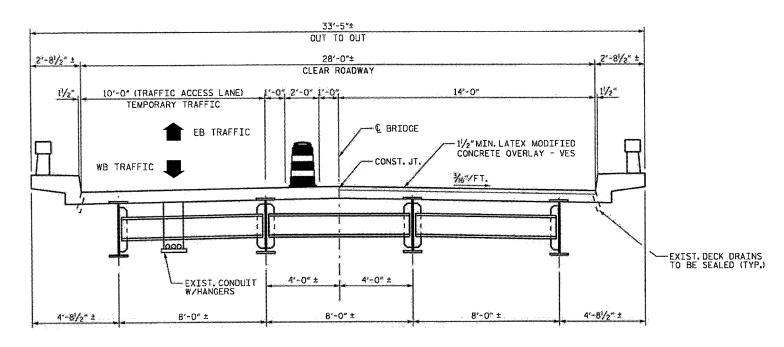
DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11



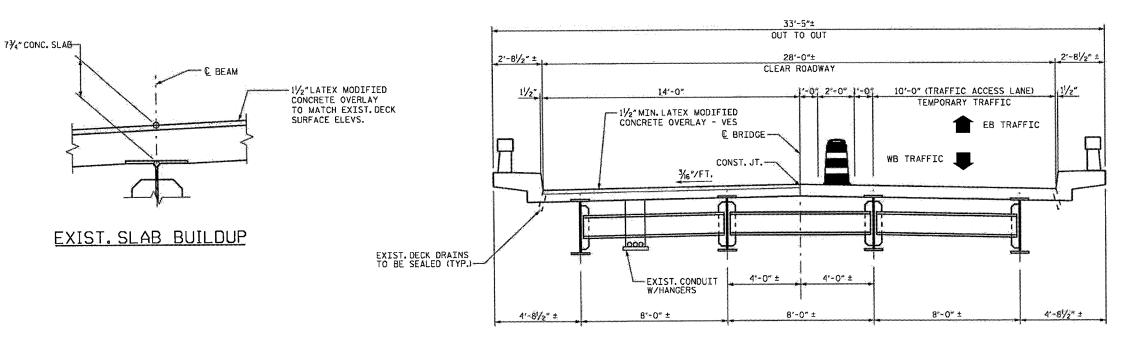
"VES" DENOTES VERY EARLY STRENGTH.

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

FOR TRAFFIC CONTROL AND CONSTRUCTION PHASING, SEE TRANSPORTATION MANAGEMENT PLANS.



TYPICAL SECTION (SPANS A. B. C)



CALDWELL COUNTY STATION:_

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PROJECT NO. WBS 17BP.11.H.3

BRIDGE TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 8

S-3 DATE: NO. BY: DATE

TYPICAL SECTION (SPANS A. B. C)

Siantec Consulting Services Inc. 801 Jones Franklin Road Suite St01 Haleigh, NC 27608 Tel. (919) 851-8865 Fax. (919) 861-7024 www.siantec.com

DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

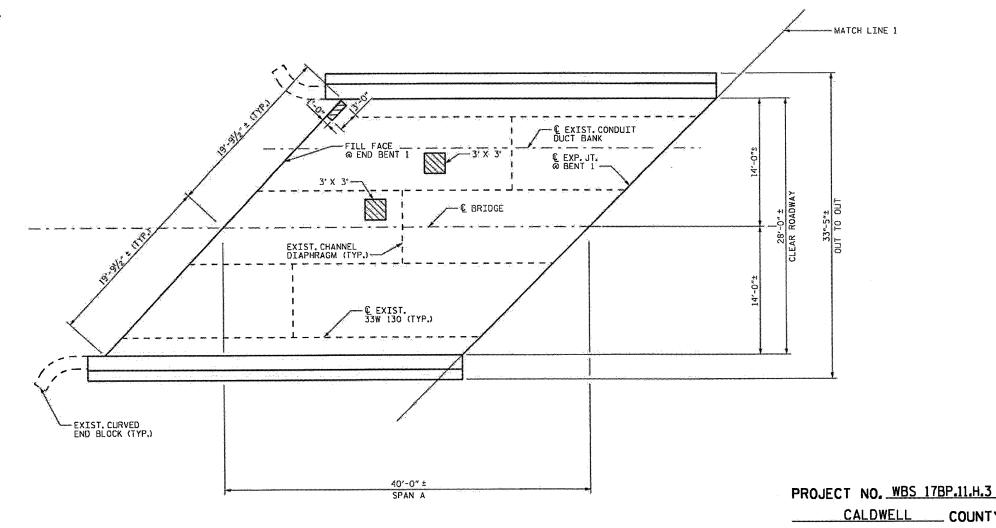
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SO. YD. OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L'X W' = LENGTH OF AREA PARALLEL TO € BRIDGE X WIDTH OF AREA PERPENDICULAR TO € BRIDGE.

PLAN OF SPAN A - DECK REPAIRS

NOTE: EXIST, CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STATION:__

DECK REPAIR DETAILS SPAN A

____ COUNTY

DECK REHAB. FOR BRIDGE NO. 8

	REV	ISIONS	S		SHEET NO.
BYs	DATE	NO.	BY:	DATE	S-4
		33			IOTAL SHEETS
	•••••	14			28

Stantec Consulting Services Inc. 801 Jones Franklin Road Sulta 300 Suita 300 Raleigh, NC 27600 Tel. (919) 851-8666 Fax. (919) 851-7024 www.slantec.com

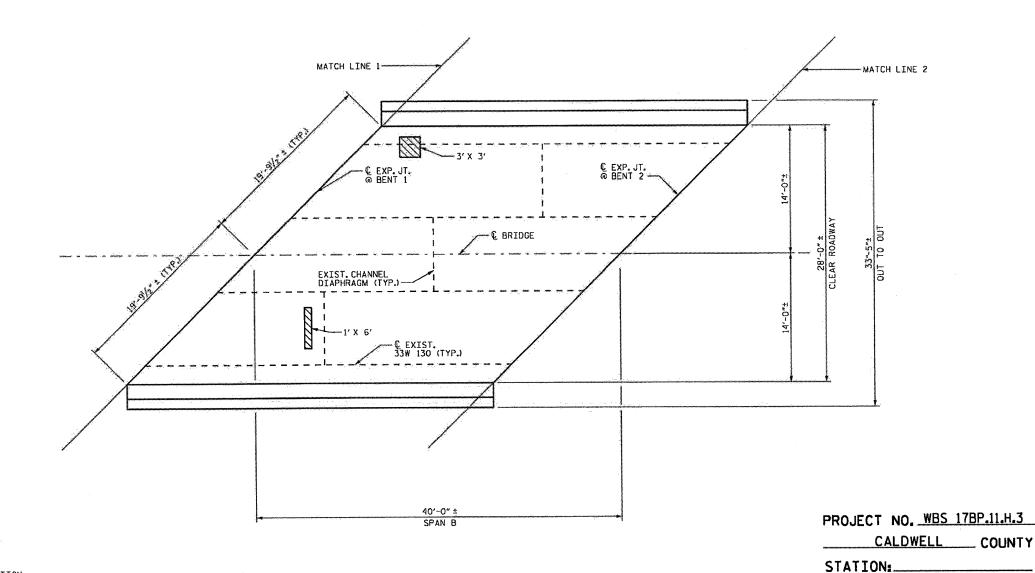
DRAWN BY : B. C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ.YD.OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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.



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L'X W'= LENGTH OF AREA PARALLEL TO € BRIDGE X WIDTH OF AREA PERPENDICULAR TO € BRIDGE.

PLAN OF SPAN B - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

STATE OF HORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

DECK REPAIR DETAILS SPAN B

DECK REHAB. FOR BRIDGE NO. 8

	REVIS	SION	IS		SHEET NO.
BY	DATEs	NO.	BYe	DATE:	S-5
		3			TOTAL SECTS
		4			28

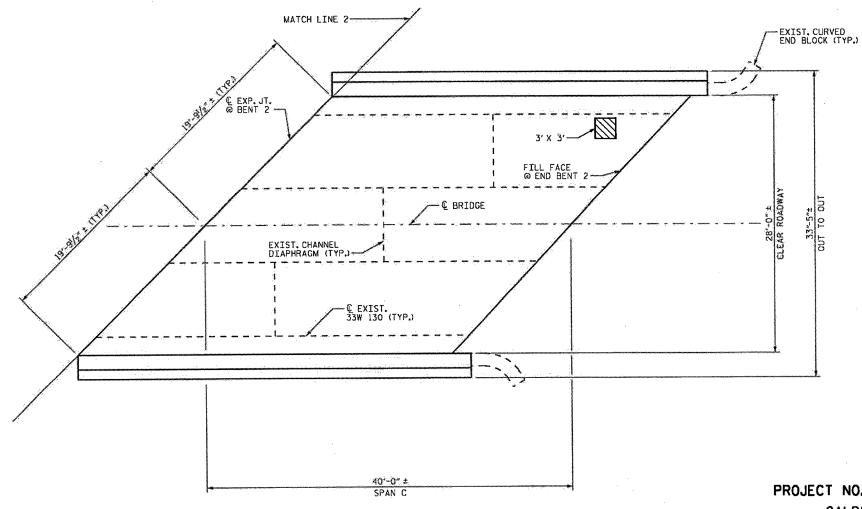
DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11
CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SO, YD, OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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.



CLASS II SURFACE PREPARATION

CLASS III SURFACE PREPARATION

L'X W' = LENGTH OF AREA PARALLEL TO & BRIDGE X WIDTH OF AREA PERPENDICULAR TO C BRIDGE. PLAN OF SPAN C - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY

STATION:_

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

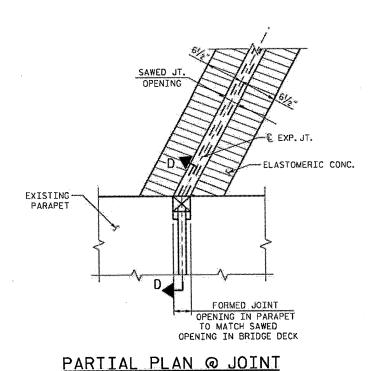
DECK REPAIR DETAILS SPAN C

DECK REHAB. FOR BRIDGE NO. 8

	REVIS	OI	NS		SHEET NO.	
87:	DATE	NO.	BYı	DATE	S-6	
		3			JOSA SARCES	
		4			28	

Stantee Consulting Services Inc. 801 Jones Franklin Road Suite 300 Sulte 300 Raleigh, NC 27606 Tel. (919) 851-8856 Fax. (919) 851-7024 www.sterdec.com License No. F-0872

DRAWN BY: B. C. MACYOWSKY DATE: 12-15-11 CHECKED BY: J. T. KELVINGTON DATE: 12-15-11



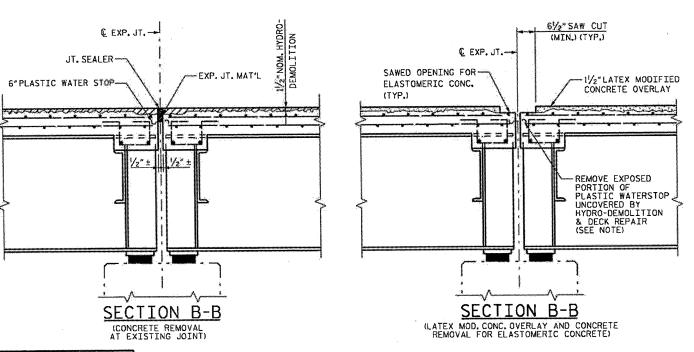
(TYP. @ INTERIOR BENTS)

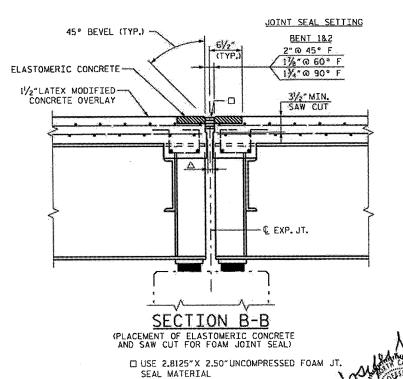
TOP OF CURB - FOAM JOINT SEAL _3½″DEEP SAW CUT APPROX. SAW CUT LINE ELASTOMERIC CONCRETE SECTION D-D

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

ELASTOMERIC CONCRETE LOCATION OTY 5.0 C.F. 5.0 C.F.

TOTAL ELASTOMERIC CONC. = 10.0 C.F. TOTAL ELASTOMERIC CONC. = 0.40 C.Y.





Δ1"EXISTING JOINT OPENING

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY STATION:_

DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT DETAILS

DECK REHAB. FOR BRIDGE NO. 8

	REV]	SION	S		SHEET NO.
8Yı	DATE:	NO.	BY	DATE:	\$-7
		3			TOTAL SECTS
		4			28

Staniar Consulting Services (no. 801 Jones Franklin Road Suite 300 Raleign, NC 27606 Tel. (319) 851-5856 Fax. (919) 851-7024 www.stanica.com

License No. F-C672

DRAWN BY: B. C. MACYOWSKY DATE: 12-15-11
CHECKED BY: J. T. KELVINGTON DATE: 12-15-11

* FROM BEST AVAILABLE INFORMATION.

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

ALL EXPOSED EXISTING JOINT SEAL MATERIALS ARE TO BE COMPLETELY REMOVED.

FLOOR, DIMENSIONS SHOWN ARE APPROXIMATE, CONTRACTOR SHALL SCARIFY AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF THE BRIDGE.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

BRIDGE 13 ON US 321 NB

LOCATION: BRIDGE 130013, US 321 NBL ACROSS SR 1002 125 FT. SOUTHWEST OF JUNCTION WITH SR 1763

FOR BRIDGE 14, US 321 SBL SEE SHTS. S-17 THRU S-24.

				TOTAL	BILL OF	MATER	RIAL				
INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	CLASS I * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	SURFACE		CLASS AA [*] CONCRETE	LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5C
SO.YDS.	SO.YDS.	SO.YDS.	SQ.YDS.	SO.YDS.	SO.YDS.	CU.YDS.	CU.YDS.	SQ.YDS.	LUMP SUM	SO.FT.	TON
566.0	751.2	. 0	10.5	0	751.2	0	35 . 8	751.2	LUMP SUM	5,895	45

INFORMATION PURPOSES ONLY, IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE TYP. "BLOW THRU" CONTAINMENT AND FORMWORK DETAIL. NO SEPARATE MEASUREMENT OR PAYMENT FOR THESE ITEMS WILL BE MADE, ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HYDRO-DEMOLITION.

* QUANTITIES ARE ESTIMATES FROM BEST AVAILABLE DATA, AND SHOULD BE CONSIDERED FOR

PROJECT NO. WBS 178P.11.H.3 CALDWELL COUNTY STATION:__

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
RALEIGH

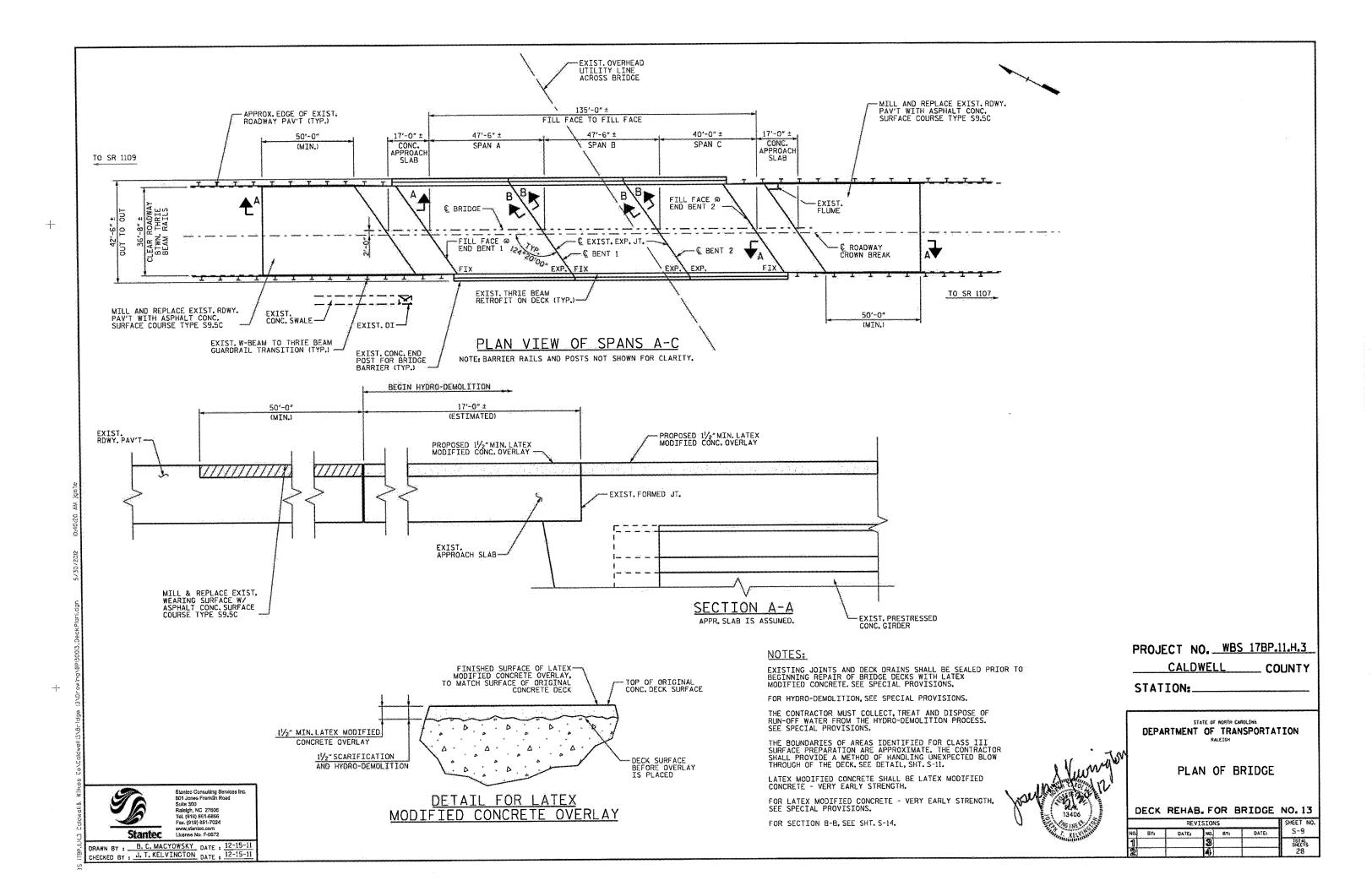
LOCATION SKETCH AND TOTAL BILL OF MATERIAL

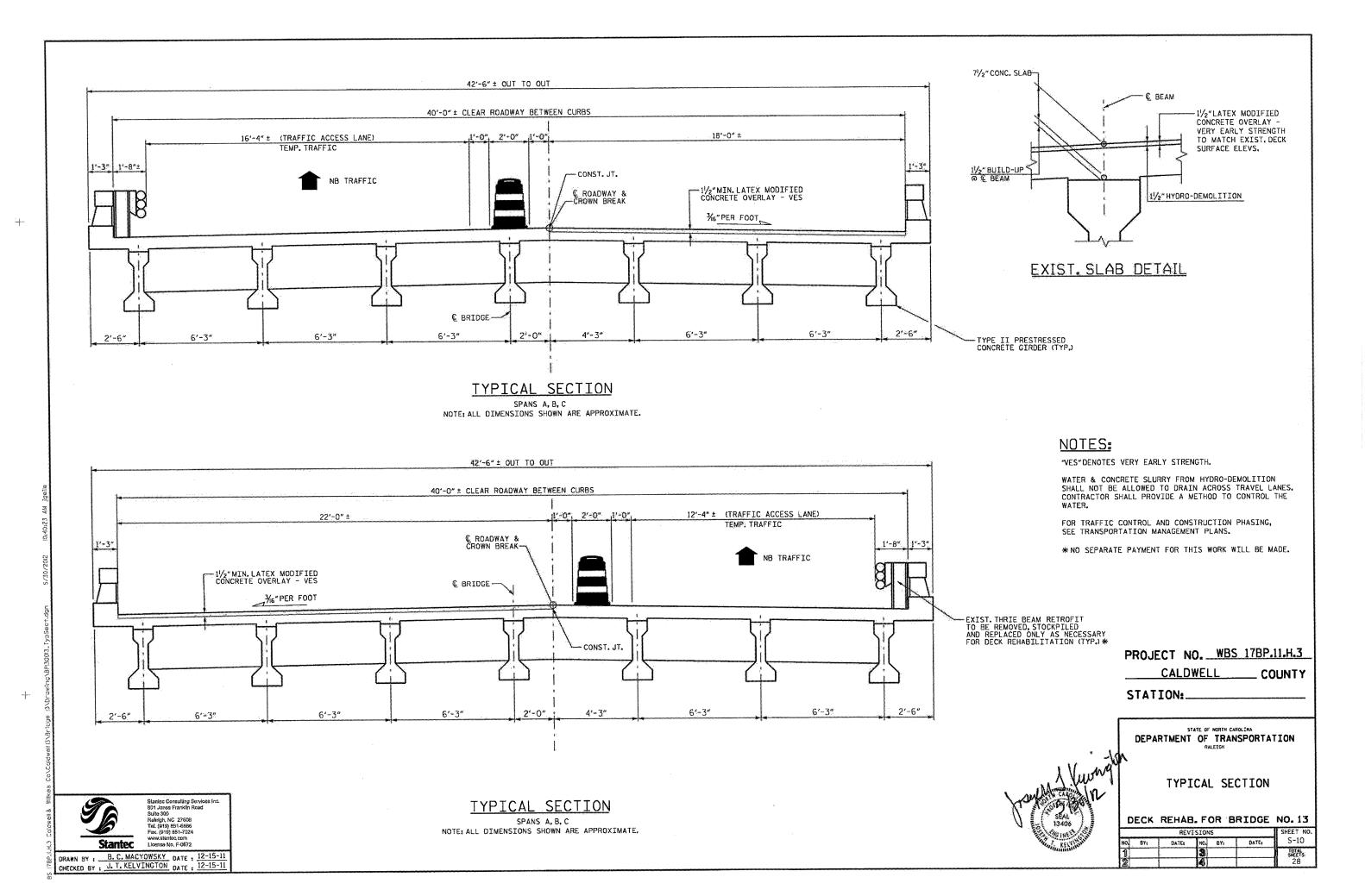
DECK REHAB. FOR BRIDGE NO. 13

	REV	ISION	S		SHEET NO.
BY:	DATES	NO.	BYI	DATE	S-8
		3			TOTAL SHEETS
		4			28

Sulte 390 Ratelgh, NC 27606 Tet (919) 851-8866 Fax. (919) 851-7024 www.stanticc.com License No. F-0872

DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J.T. KELVINGTON DATE : 12-15-11





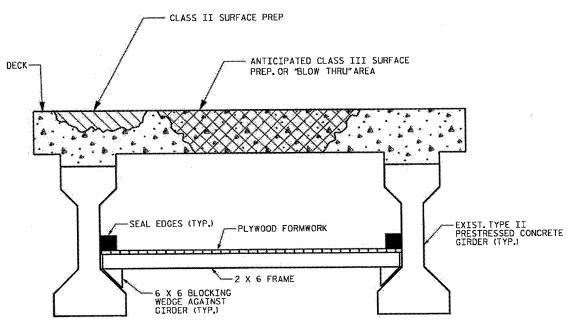
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SO. YD. OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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 ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.



BEGIN APPR. SLAB

-INTERMEDIATE DIAPHRAGM (TYP.) C TYPE II PRESTRESSED CONCRETE GIRDER (TYP.) 17*-0* MATCH LINE 1 PLAN OF SPAN A - DECK REPAIRS

47'-6" ± SPAN A

€ EXP. JT.

@ BENT 1

- € ROADWAY & CROWN BREAK

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

TYP. "BLOW THRU" CONTAINMENT AND FORMWORK

CLASS II SURFACE PREPARATION

CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO © BRIDGE X WIDTH OF AREA PERPENDICULAR TO © BRIDGE.

-FILL FACE @ END BENT 1

-C BRIDGE

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROJECT NO. WBS 17BP.11.H.3

STATION:___

CALDWELL COUNTY

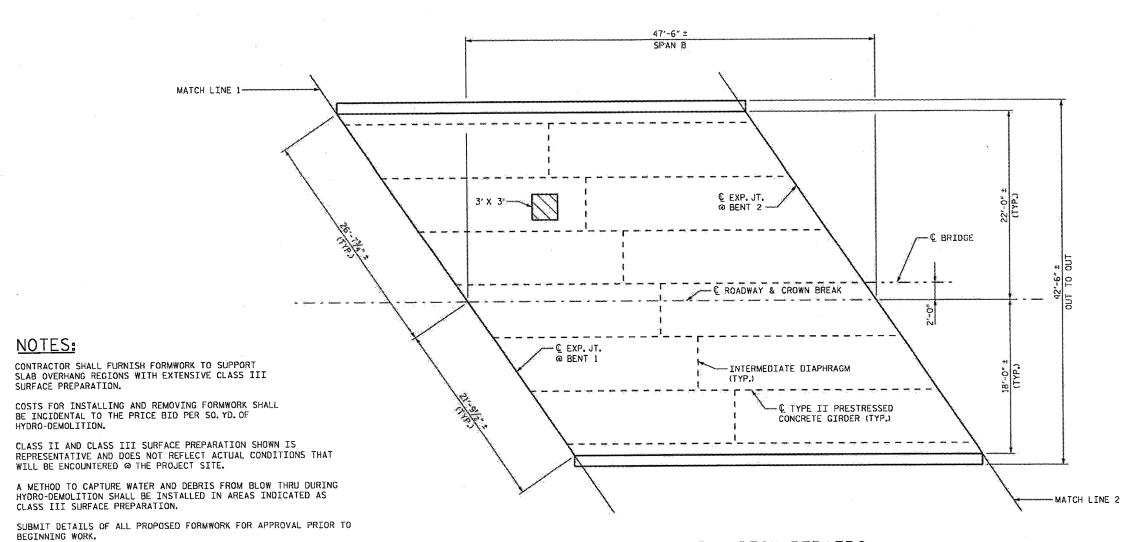
DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 13

REVISIONS S-11 DATE

Startise Consulting Services Inc 8D1 Jones Franklin Road Sults 300 Rakigh, NC 27506 Tel. (919) 851-7024 www.slanklec.com

DRAWN BY: B.C. MACYOWSKY DATE: 12-15-11
CHECKED BY: J.T. KELVINGTON DATE: 12-15-11



PLAN OF SPAN B - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

CLASS II SURFACE PREPARATION

CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO & BRIDGE X WIDTH OF AREA PERPENDICULAR TO & BRIDGE.

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY STATION:___

STATE OF MORTH CAROLINA

DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 13

		REVIS	TO	NS		SHEET NO.
)	BYs	DATE	NO.	8Yı	DATE	S-12
ĺ			93			SOLAL SECTS
			4			28

Stance Consulling Services Inc. 801 Jones Franklin Road Suite 300 Sulte 300 Raleigh, NC 27606 Tel. (919) 651-6666 Fax. (919) 651-7024 www.stantec.com License No. F-6672 DRAWN BY : B. C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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 ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

PLAN OF SPAN C - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

CLASS II SURFACE PREPARATION

CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO C BRIDGE X
WIDTH OF AREA PERPENDICULAR TO C BRIDGE.

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY STATION:__

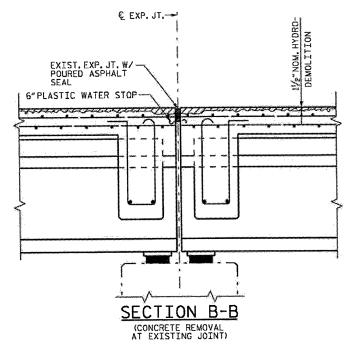
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 13

	SHEET NO.				
BYs	DATE	NO.	BYe	DATE	S-13
		3			TOTAL SPECTS
		4		1	28

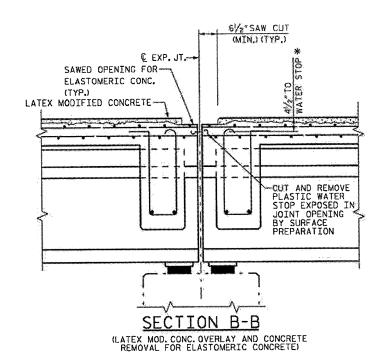
Stantec DRAWN BY: B.C. MACYOWSKY DATE: 12-15-11
CHECKED BY: J.T. KELVINGTON DATE: 12-15-11

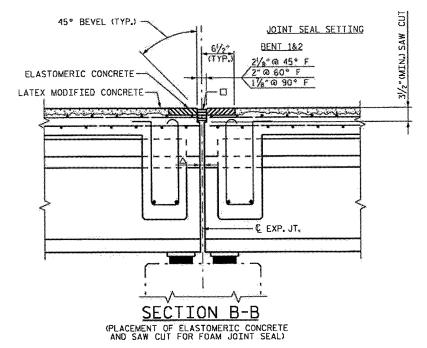


* FROM BEST AVAILABLE INFORMATION.

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

ALL EXPOSED EXISTING JOINT SEAL MATERIALS ARE TO BE COMPLETELY REMOVED.

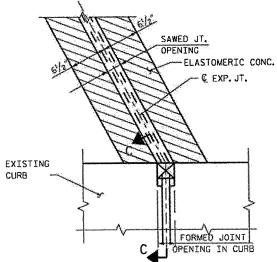




USE 2.8125"X 2.50"UNCOMPRESSED FOAM JT. SEAL MATERIAL AT BENT 1 AND BENT 2 △ 1"EXISTING JOINT OPENING

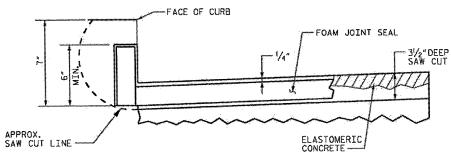
ELASTOMERI	C CONCRETE
LOCATION	OTY
BENT 1	6.05 C.F.
BENT 2	6.05 C.F.

TOTAL ELASTOMERIC CONC. = 12.1 C.F. TOTAL ELASTOMERIC CONC. = 0.4 C.Y.



PARTIAL PLAN @ JOINT

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



SECTION F-F

INTERIOR BENT JOINT SEAL DETAILS

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PROJECT NO. WBS 17BP.11.H.3

COUNTY

CALDWELL

STATION:__

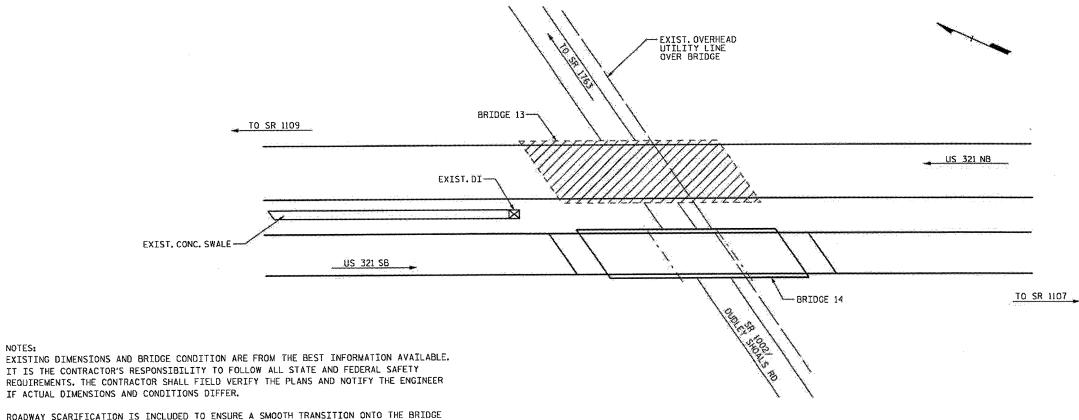
DECK REHAB. FOR BRIDGE NO. 13

	REVISION	ONS .		SHEET NO.	
8Y: 1	ATE: NO	O GYI	DATE	5-14	
	3	3		SHEETS	
]4	l)		28	

Stanice Consulting Services Inc. 801 Jones Franklin Road Sulfs 300 Raileigh, NC 27606 Tel, (319) 851-8686 Fax, (319) 851-6704 www.slankec.com Liberise No. F-0672

DRAWN BY : B. C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

(TYP. @ BENTS 1 & 2)



BRIDGE 14 ON US 321 SB

LOCATION: BRIDGE 130014, US 321 SBL ACROSS SR 1002 150 FT. SOUTHWEST OF JUNCTION WITH SR 1763

FOR BRIDGE 13. US 321 NBL SEE SHTS. S-9 THRU S-16.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS,

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FLOOR, DIMENSIONS SHOWN ARE APPROXIMATE, CONTRACTOR SHALL SCARIFY AS REQUIRED

TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF THE BRIDGE.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

4-3		·	4	TOTAL E	BILL OF M	MATER					
INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	CLASS I * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	CLASS III * SURFACE PREPARATION	DEMONTETON	CLASS AA [*] CONCRETE	LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	PLACING & FINISHING LATEX MODIFIED CONCRETE OVERLAY- VERY EARLY STRENGTH	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.5C
SO.YDS.	SQ.YDS.	SO.YDS.	SO.YDS.	SQ.YDS.	SO.YDS.	CU.YDS.	CU.YDS _*	sa.yds.	LUMP SUM	SQ.FT.	TON
370.7	525,8	0	9.6	0	525.8	0	39,5	525.8	LUMP SUM	3,983	30

** QUANTITIES ARE ESTIMATES FROM BEST AVAILABLE DATA, AND SHOULD BE CONSIDERED FOR INFORMATION PURPOSES ONLY, IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE TYP. "BLOW THRU" CONTAINMENT AND FORMWORK DETAIL. NO SEPARATE MEASUREMENT OR PAYMENT FOR THESE ITEMS WILL BE MADE, ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HYDRO-DEMOLITION.

Stantac Consulting Services Inc. 801 Jones Franklin Road Sulta 300 Raleigh, NC 27608 Tel. (919) 851-7024 WWW.slantac.com License No. F-0672

DRAWN BY : B. C. MACYOWSKY DATE : 12-15-11
CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

WAR THE TANK THE THE TANK THE

PROJECT NO. WBS 17BP.11.H.3

CALDWELL COUNTY

STATION:

STATE OF NORTH CAROLINA

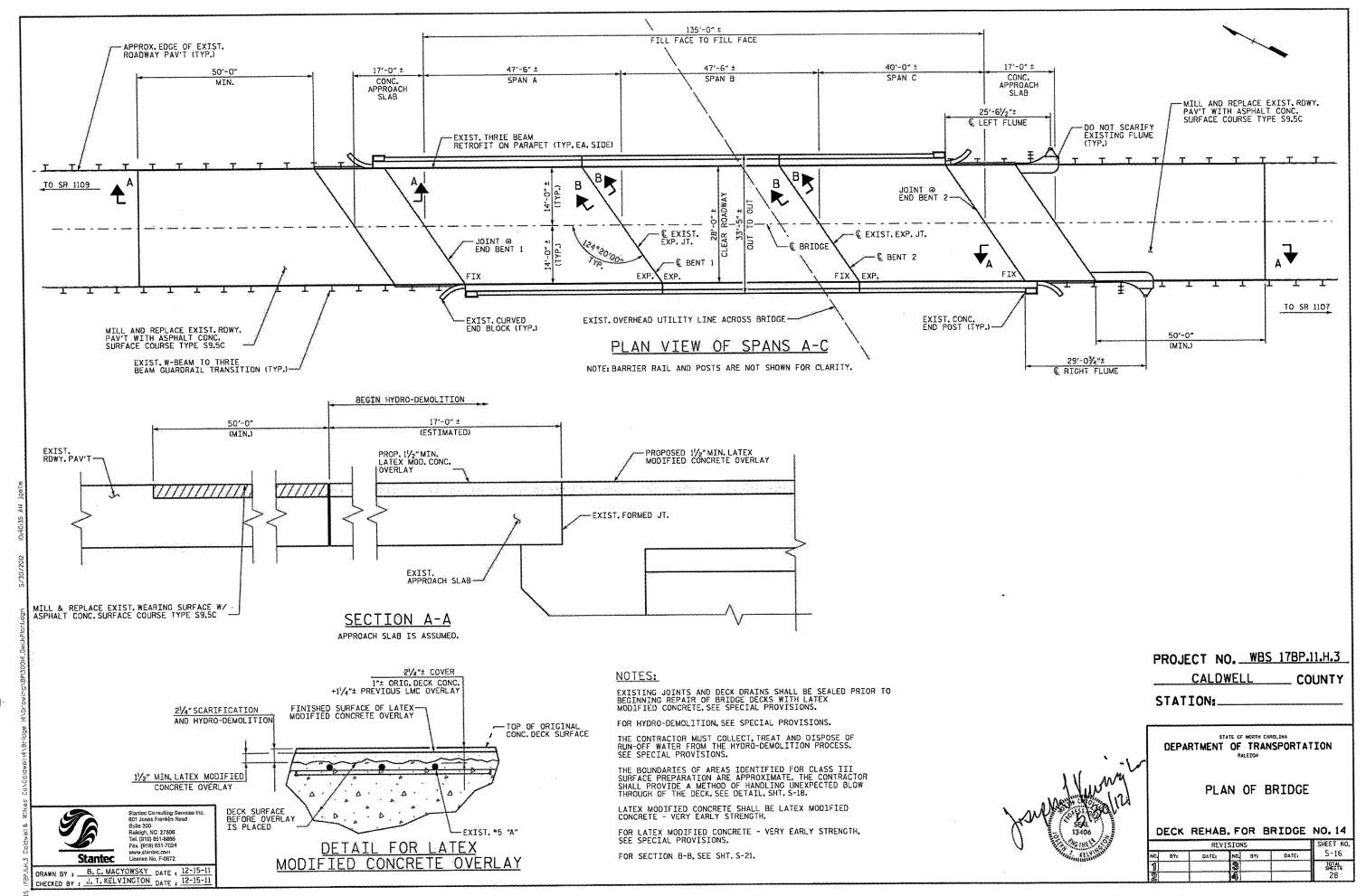
DEPARTMENT OF TRANSPORTATION

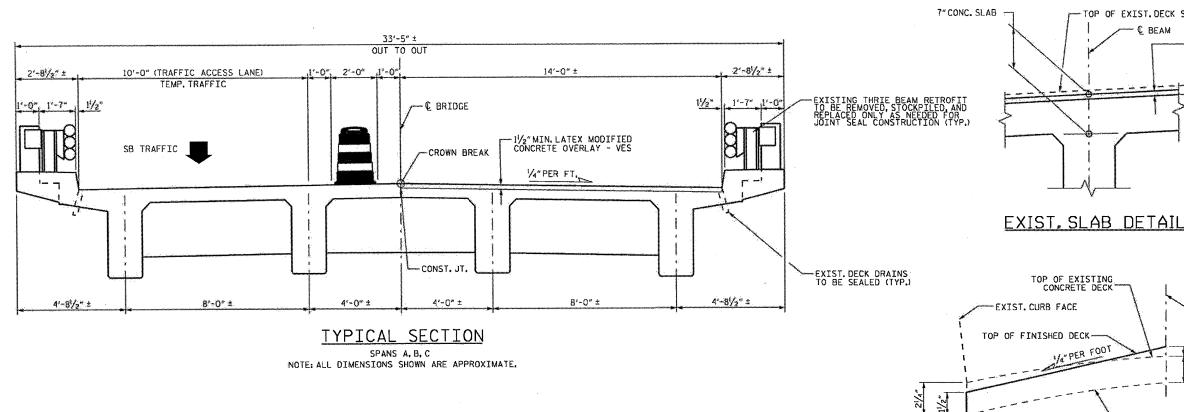
RAIETCH

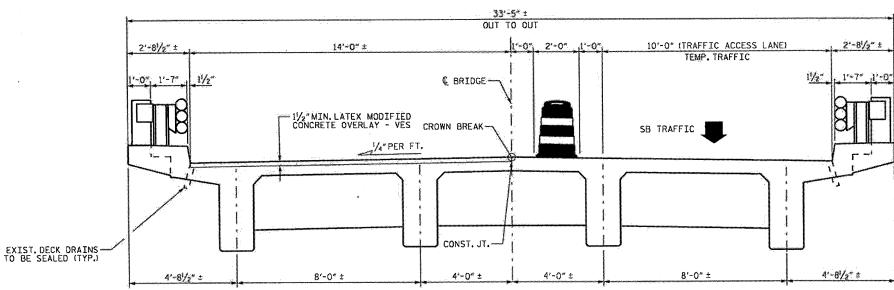
LOCATION SKETCH AND TOTAL BILL OF MATERIAL

DECK REHAB. FOR BRIDGE NO. 14

	REVIS	SIO	NS		SHEET NO.
BYt	DATE	NO.	871	OATE:	S-15
		3			TOTAL SHEETS
		4			28

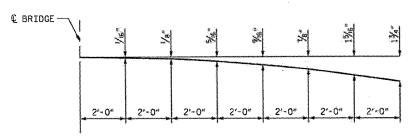






TYPICAL SECTION

SPANS A. B. C NOTE: ALL DIMENSIONS SHOWN ARE APPROXIMATE.



EXISTING CROWN DIAGRAM NOTE: DIAGRAM SYMMETRICAL ABOUT BRIDGE C.

NOTES:

"VES" DENOTES VERY EARLY STRENGTH.

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

FOR TRAFFIC CONTROL AND CONSTRUCTION PHASING, SEE TRANSPORTATION MANAGEMENT PLANS.

BRIDGE CROSS SLOPE SCHEMATIC FOR

DECK OVERLAY

PROJECT NO. WBS 17BP.11.H.3 CALDWELL COUNTY STATION:_

-TOP OF EXIST. DECK SURFACE

1/2"MIN, LATEX MODIFIED CONCRETE OVERLAY -VERY EARLY STRENGTH

2'/4" NOM. HYDRO-DEMOLITION

- € SYMMETRICAL ABOUT & BRIDGE

-NOMINAL DECK SURFACE AFTER DECK SCARIFICATION AND HYDRO-DEMOLITION

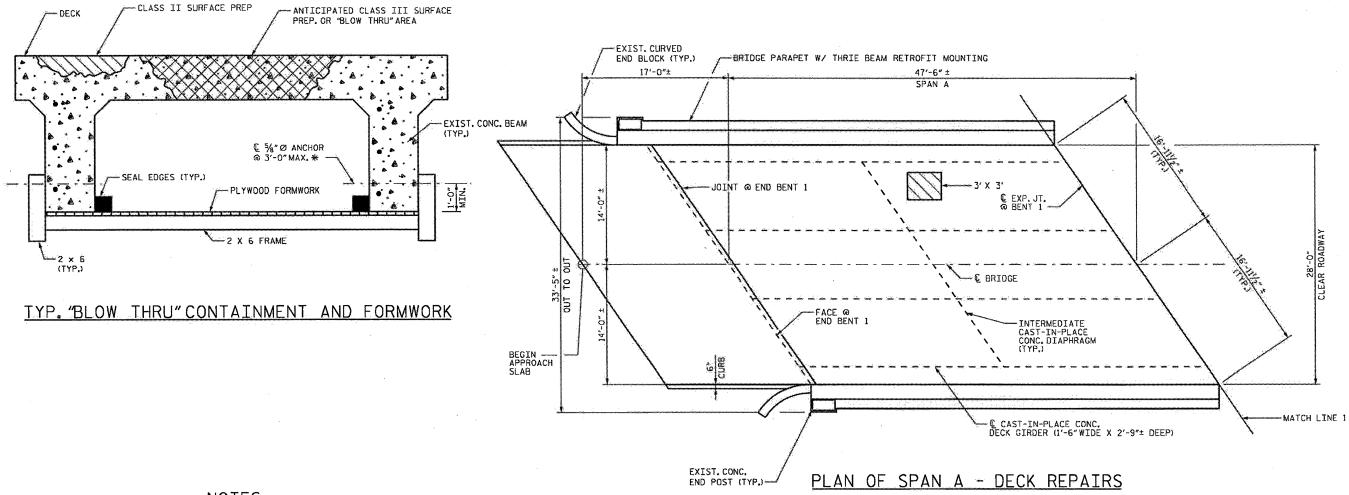
STATE OF MORTH CARDLINA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

DECK REHAB. FOR BRIDGE NO. 14

REVISIONS S-17 DATE DATE

DRAWN BY: B, C, MACYOWSKY DATE: 12-15-11 CHECKED BY: J. T. KELVINGTON DATE: 12-15-11



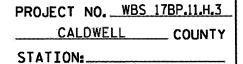
CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ. YD. OF

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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 ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO & BRIDGE X WIDTH IF AREA PERPENDICULAR TO & BRIDGE.

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.



Stantec Consulting Services Inc. 801 Jones Franklin Road Sulie 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 651-7024 License No. F-0672

DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11 DEPARTMENT OF TRANSPORTATION
RALETGH

DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 14

		SHEET NO.				
0.	87:	DATE	NO.	6Y1	DATE	S-18
			3			10TAL SHEETS
			4)			28

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SO, YD. OF HYDRO DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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 ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

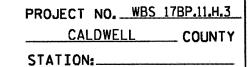
PLAN OF SPAN B - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

CLASS II SURFACE PREPARATION

CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO & BRIDGE X WIDTH IF AREA PERPENDICULAR TO & BRIDGE.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION RALEIGH

DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 14

	SHEET NO.					
NO.	841	DATE	NO.	BYi	DATE:	5-19
1			3			JOIAL SECTS
2			4			28

DRAWN BY : B.C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11

CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SO. YD. OF

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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 ALL PROPOSED FORMWORK FOR APPROVAL PRIOR TO BEGINNING WORK.

PLAN OF SPAN C - DECK REPAIRS

NOTE: EXIST. CONC. BARRIER AND POSTS ARE NOT SHOWN FOR CLARITY.

CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L X W = LENGTH OF AREA PARALLEL TO & BRIDGE X WIDTH IF AREA PERPENDICULAR TO & BRIDGE. PROJECT NO. WBS 17BP.11.H.3 CALDWELL _ COUNTY STATION:__

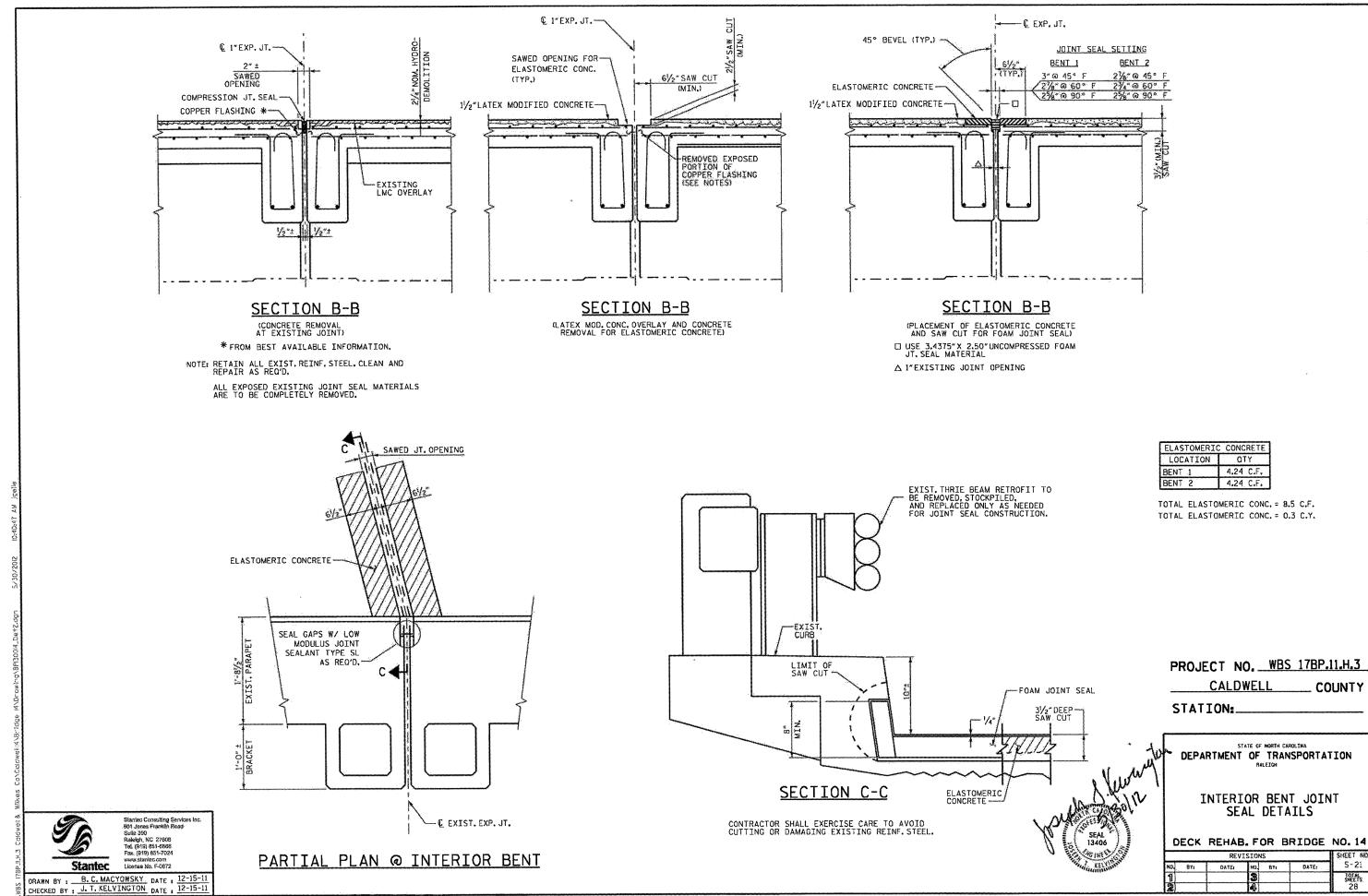
DEPARTMENT OF TRANSPORTATION

DECK REPAIR DETAILS

DECK REHAB. FOR BRIDGE NO. 14

	REVIS	SIO	NS .		SHEET NO.	ŀ
8Yı	DATE	NO.	BYt	DATEs	S-20	
		3			101 AL SHEETS	
		4			28	

DRAWN BY : B. C. MACYOWSKY DATE : 12-15-11 CHECKED BY : J. T. KELVINGTON DATE : 12-15-11



EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS. THE CONTRACTOR SHALL FIELD VERIFY THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

ROADWAY SCARIFICATION IS INCLUDED TO ENSURE A SMOOTH TRANSITION ONTO THE BRIDGE FLOOR, DIMENSIONS SHOWN ARE APPROXIMATE, CONTRACTOR SHALL SCARIFY AS REQUIRED TO PROVIDE A SMOOTH TRANSITION TO THE ROADWAY AT BOTH ENDS OF THE BRIDGE.

FOR FOAM JOINT SEALS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

BRIDGE 56 ON NC 268

LOCATION: BRIDGE 960056, NC 268 ACROSS BEAVER CREEK 0.6 MILES WEST OF JUNCTION WITH SR 1136

		· horacing	4	TOTAL	BILL 0	F MAT	ERIAL				
INCIDENTAL MILLING	SCARIFYING BRIDGE DECK	CLASS I * SURFACE PREPARATION	CLASS II * SURFACE PREPARATION	CLASS III * SURFACE PREPARATION	HYDRO- DEMOLITION OF BRIDGE DECK	CLASS AA* CONCRETE	LATEX MODIFIED CONCRETE OVERLAY-VERY EARLY STRENGTH	PLACING & FINISHING LATEX MOD.CONC. OVERLAY- VERY EARLY STRENGTH	FOAM JOINT SEALS	GROOVING BRIDGE FLOORS	ASPHALT CONC. SURF. COURSE TYPE S9.58
SQ.YDS.	SO.YDS.	SO.YDS.	SQ.YDS.	SQ.YDS.	SO,YDS.	CU.YDS.	CU.YDS.	SQ.YDS.	LUMP SUM	SO.FT.	TON
366.4	433.4	0	5.3	0	433.4	0	21.3	433.4	LUMP SUM	3,292	27

* QUANTITIES ARE ESTIMATES FROM BEST AVAILABLE DATA. AND SHOULD BE CONSIDERED FOR INFORMATION PURPOSES ONLY, IF ANY CLASS III LOCATIONS ARE ENCOUNTERED PRIOR TO OR DURING HYDRO-DEMOLITION, SEE TYP. "BLOW THRU" CONTAINMENT AND FORMWORK DETAIL. NO SEPARATE MEASUREMENT OR PAYMENT FOR THESE ITEMS WILL BE MADE. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HYDRO-DEMOLITION.

STATION:___ STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PROJECT NO. WBS 17BP.11.H.3

COUNTY

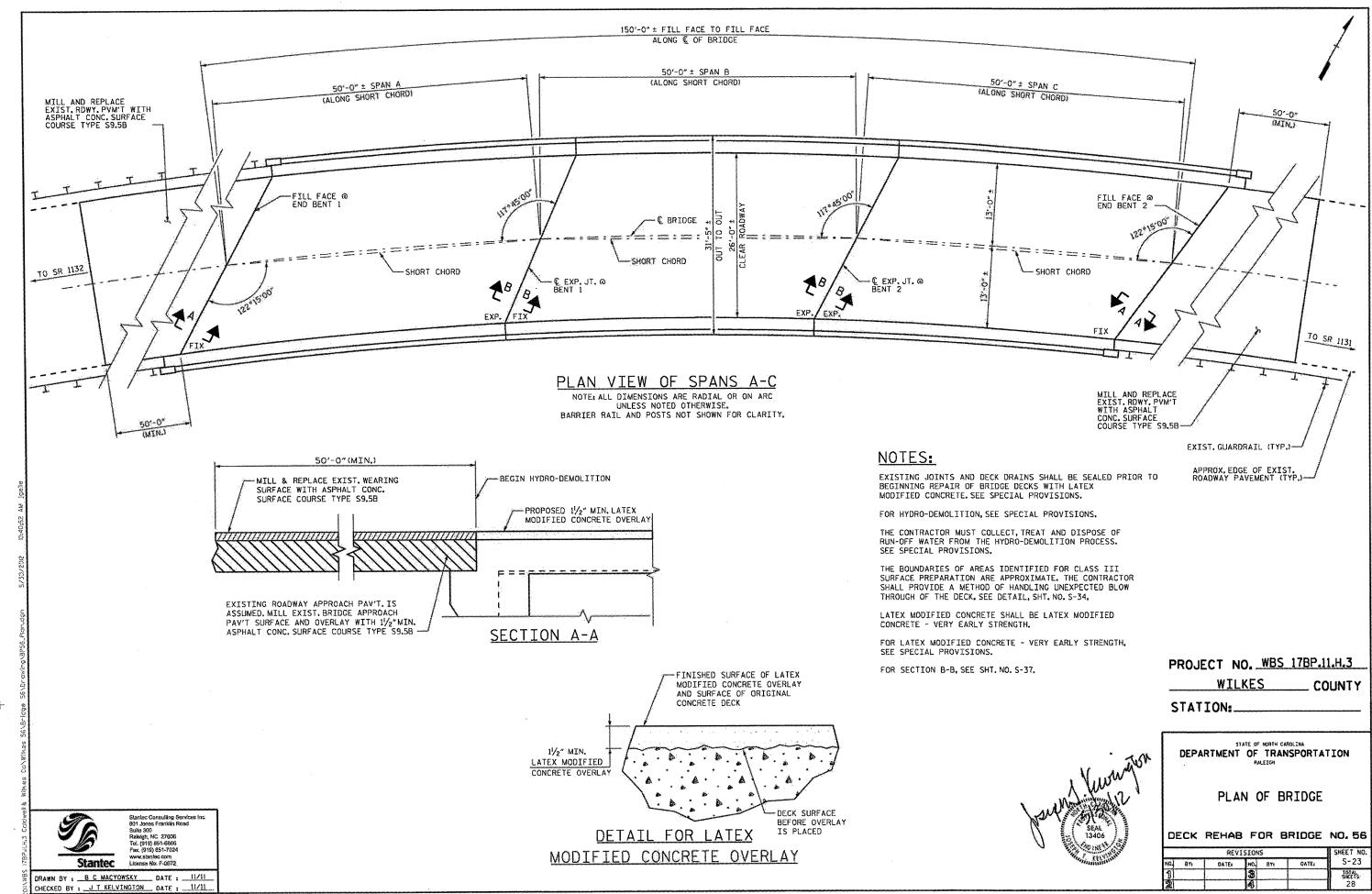
WILKES

LOCATION SKETCH AND TOTAL BILL OF MATERIAL

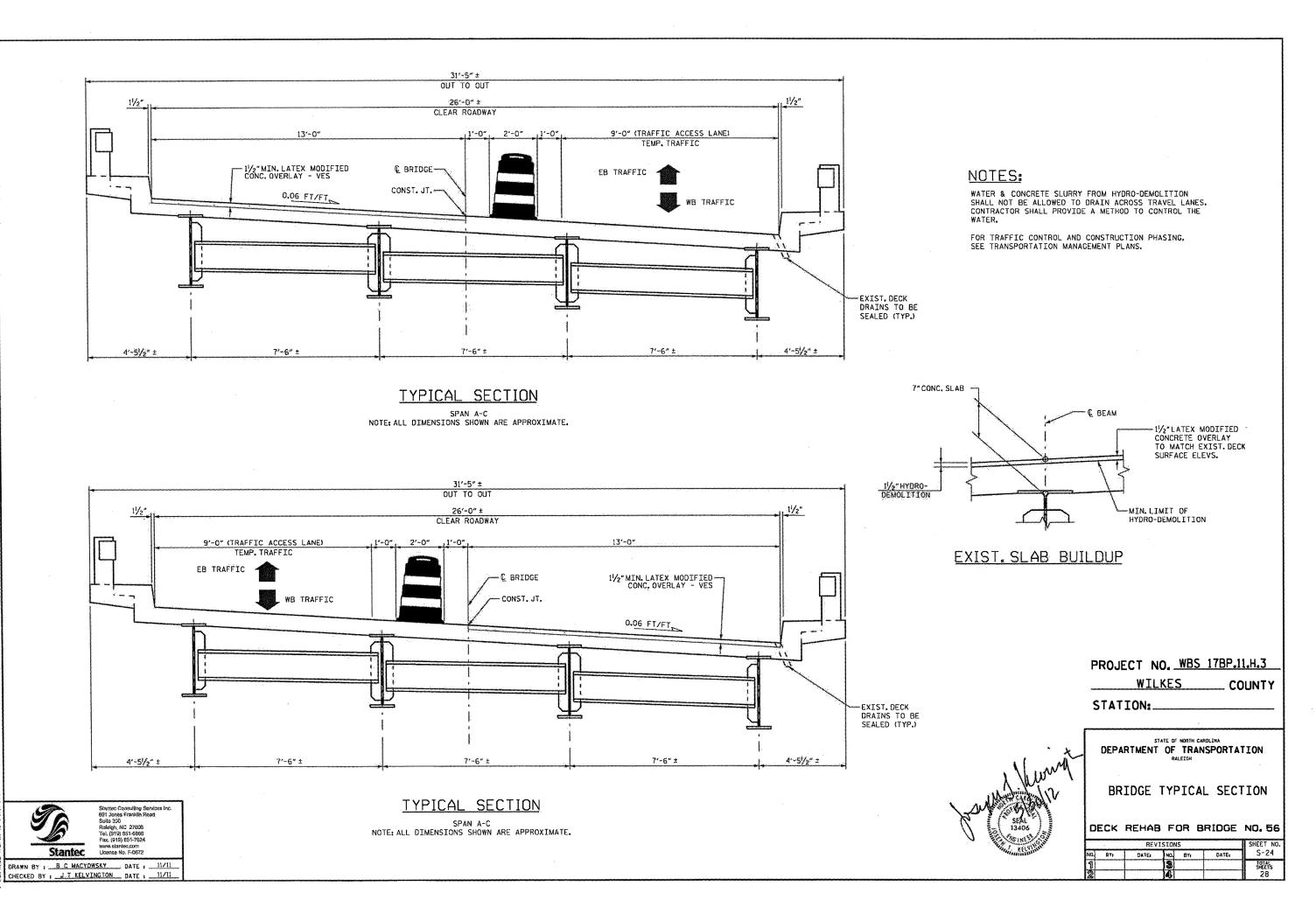
DECK REHAB FOR BRIDGE NO. 56

.,	REVIS	IO	NS		SHEET NO.
8Yı	DATE	NO.	BYs	DATE	S-22
		3			TOTAL SHEETS
		4			28

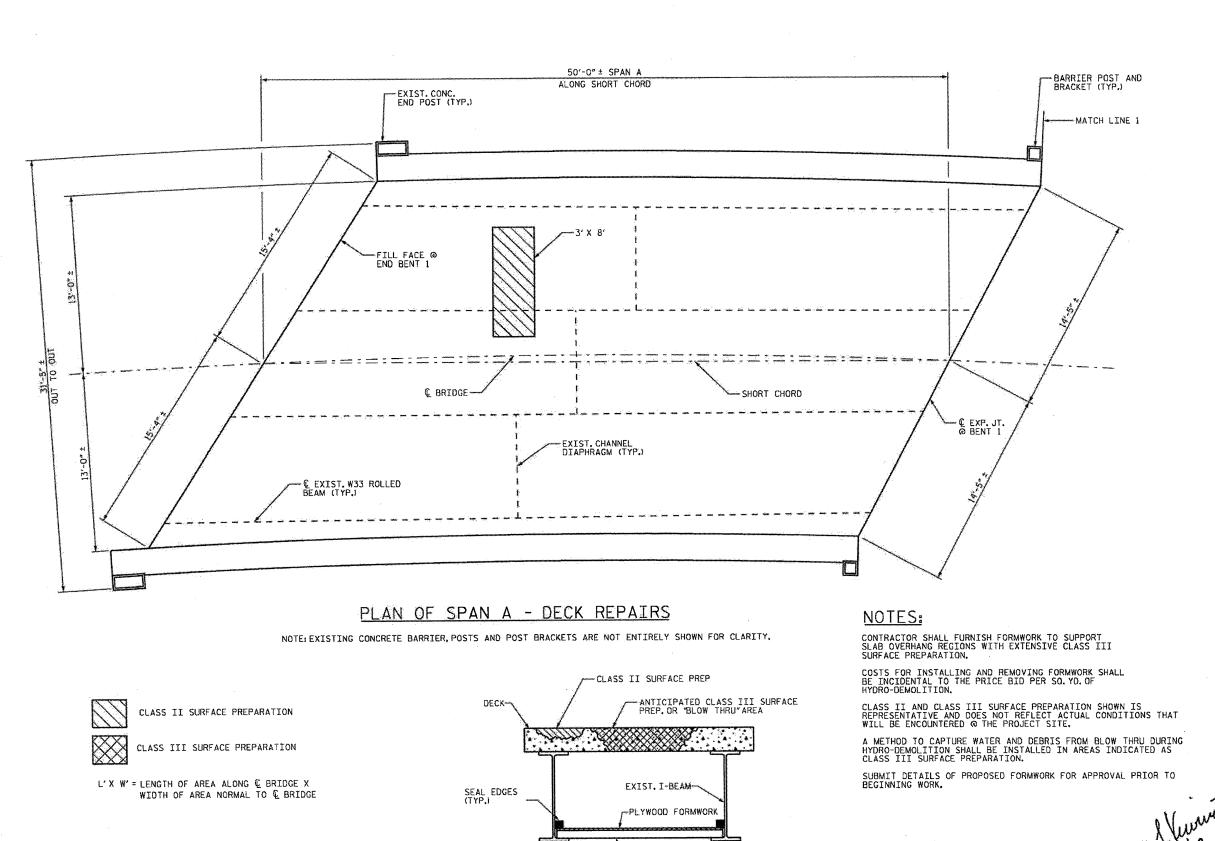
DRAWN BY: B C MACYOWSKY DATE: 11/11
CHECKED BY: J T KELVINGTON DATE: 11/11



-



, 56\Bridge S6\Orawing\BPS6_TYP.dgn



2 X 6 FRAME

TYP. "BLOW THRU" CONTAINMENT

AND FORMWORK

Stantec Consulting Services Inc. 801 Jones Franklin Road Sults 300 Raleigh, NC 27606 Tel. (919) 851-8560 Fax. (919) 851-7024 www.stanies.com

Stantec

ORAWN BY: B C MACYOWSKY DATE: 11/11
CHECKED BY: J T KELVINGTON DATE: 11/11

www.

PROJECT NO. WBS 17BP.11.H.3

COUNTY

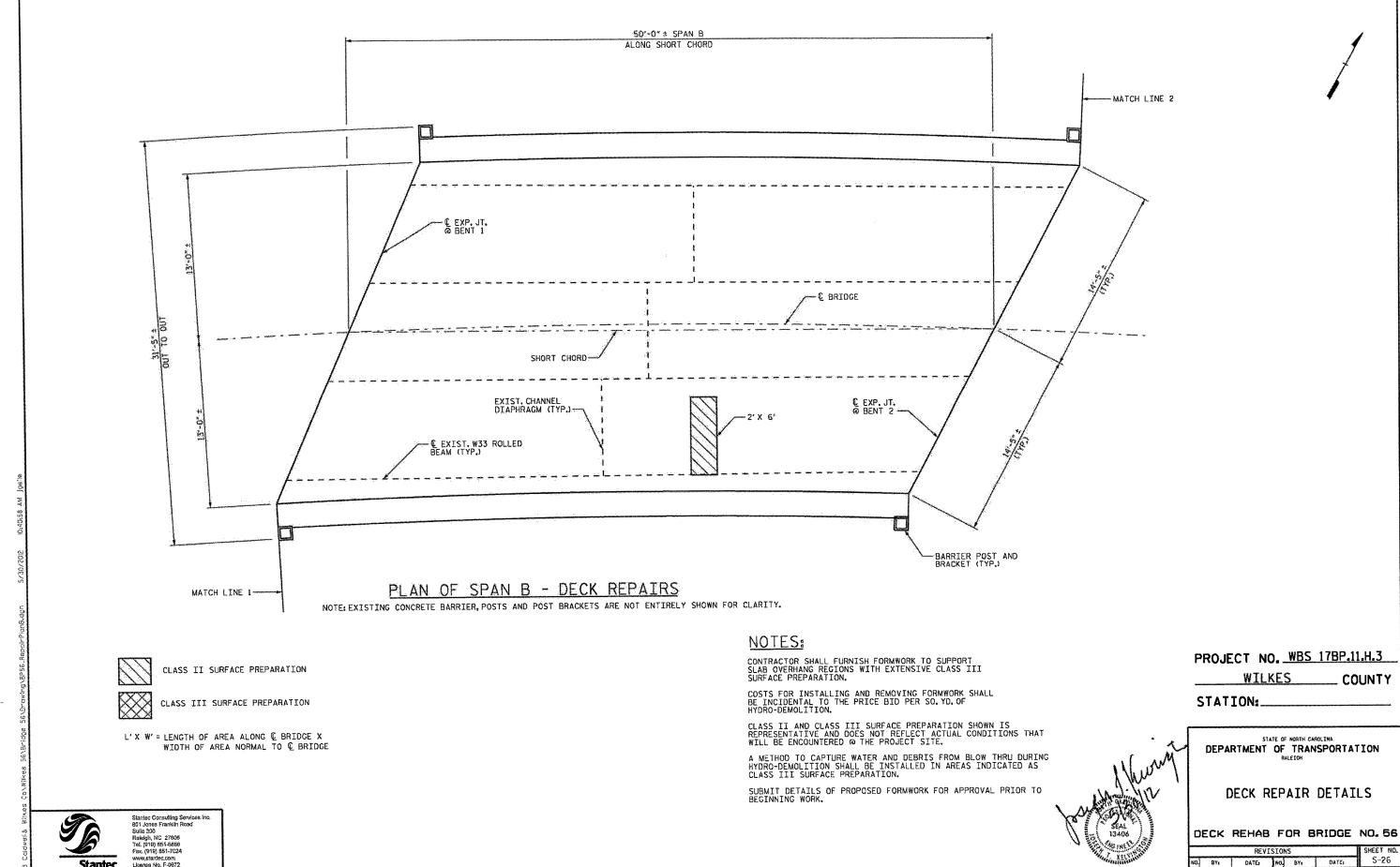
WILKES

STATION:_

STATE OF NORTH CARDLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

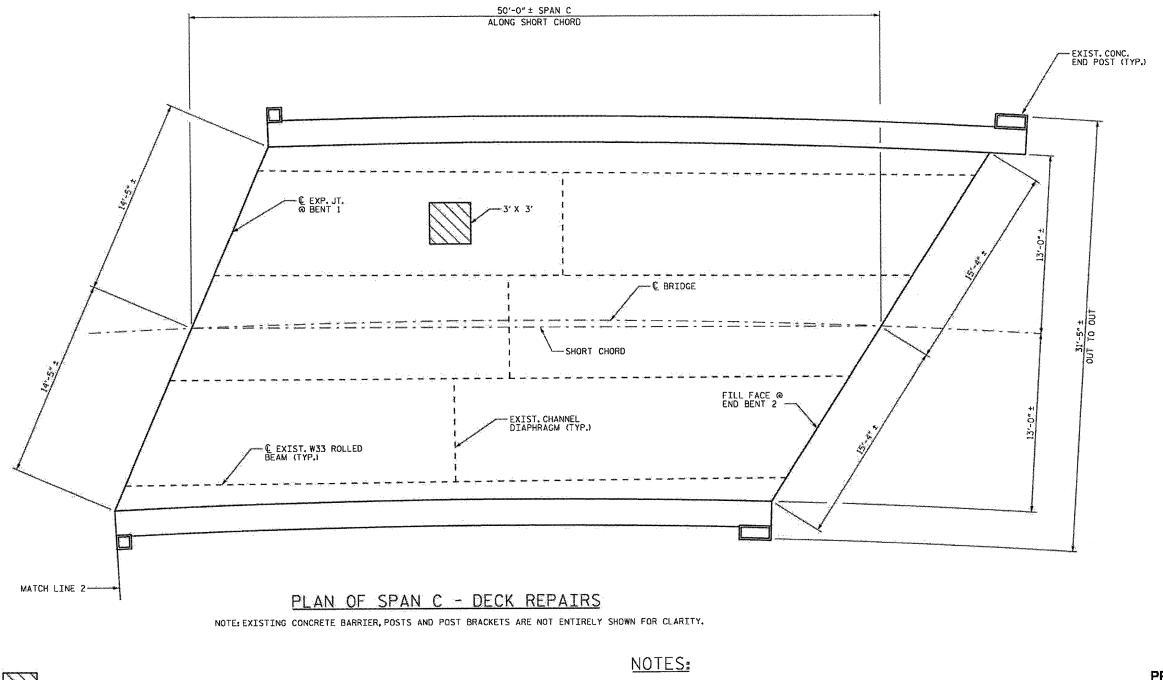
DECK REPAIR DETAILS

DECK REHAB FOR BRIDGE NO. 56



DRAWN BY : B C MACYOWSKY DATE : 11/11

CHECKED BY : J T KELVENGTON DATE : 11/11



CLASS II SURFACE PREPARATION



CLASS III SURFACE PREPARATION

L'X W' = LENGTH OF AREA ALONG & BRIDGE X WIDTH OF AREA NORMAL TO & BRIDGE CONTRACTOR SHALL FURNISH FORMWORK TO SUPPORT SLAB OVERHANG REGIONS WITH EXTENSIVE CLASS III SURFACE PREPARATION.

COSTS FOR INSTALLING AND REMOVING FORMWORK SHALL BE INCIDENTAL TO THE PRICE BID PER SQ, YD, OF HYDRO-DEMOLITION.

CLASS II AND CLASS III SURFACE PREPARATION SHOWN IS REPRESENTATIVE AND DOES NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED @ THE PROJECT SITE.

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.

PROJECT NO. WBS 17BP.11.H.3 WILKES COUNTY

STATION:

DEPARTMENT OF TRANSPORTATION

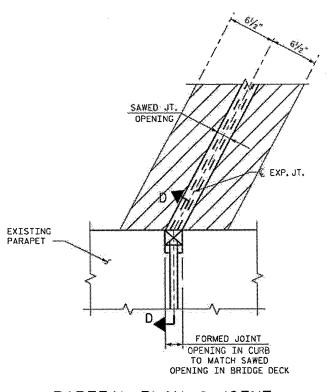
DECK REPAIR DETAILS

DECK REHAB FOR BRIDGE NO. 56

		MEAT:	710	NS		SUCCE INC.
NO.	BYı	DATE	NO.	BYt	DATE	S-27
1			3			JALAN,
2			4].		28

Stantec Consulting Services Inc. 801 Jones Franklin Road Sulte 300 Raieligh, NC 27606 Tel. (919) 851-5866 Fax. (919) 851-7024 www.stantec.com License No. F-0872

DRAWN BY : B.C. MACYOWSKY DATE : 11/11 CHECKED BY : J T KELVINGTON DATE : 11/11



TOP OF CURB-FOAM JOINT SEAL 31/2" DEEP SAW CUT ··· 1/4" -ELASTOMERIC CONCRETE SAW CUT LIMIT-EXIST. CONCRETE-

SECTION D-D

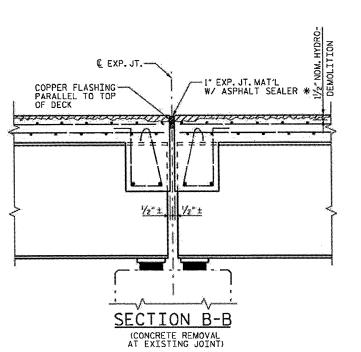
CONTRACTOR SHALL EXERCISE CARE TO AVOID CUTTING OR DAMAGING EXISTING REINF. STEEL.

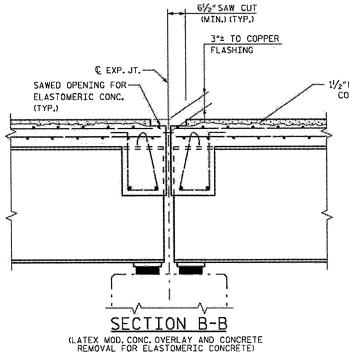
ELASTOMER	RIC CONCRETE
LOCATION	ату
BENT 1	5.8 C.F.
BENT 2	5.8 C.F.

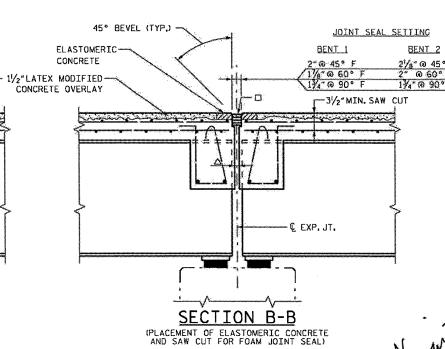
TOTAL ELASTOMERIC CONC. = 11.6 C.F. TOTAL ELASTOMERIC CONC. = 0.43 C.Y.

PARTIAL PLAN @ JOINT

(TYP. @ INTERIOR BENT AND END BENTS)







☐ USE 2.8125"X 2.00"UNCOMPRESSED JT. SEAI

△ EXISTING 1" FORMED OPENING

MATERIAL.

PROJECT NO. WBS 17BP-11.H.3

WILKES COUNTY

STATION:

STATE OF MORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGN

EXPANSION JOINT DETAILS

DECK REHAB FOR BRIDGE NO. 56

REVISIONS S-28 DATE: NO. BY: DATE

* FROM BEST AVAILABLE INFORMATION.

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

ALL EXPOSED EXISTING JOINT SEAL MATERIALS ARE TO BE COMPLETELY REMOVED.

Stanlec Consulting Services Inc. 681 Jones Franklin Road Suite 300 Suite 300 Raleigh, NC 27606 Tel. (819) 851-5866 Fax. (919) 851-7024 www.stantec.com License No. F-0072

DRAWN BY : B C MACYDWSKY DATE : 11/11 CHECKED BY : J. T. KELVINGTON DATE 1 11/11

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CALDWELL & WILKES COUNTIES

DIVISION 11



BRIDGE PRESERVATION

CALDWELL BRIDGE #8 – US 64/NC 18 OVER SETZER CREEK CALDWELL BRIDGE #13 – US 321 NORTHBOUND OVER SR 1002 CALDWELL BRIDGE #14 – US 321 SOUTHBOUND OVER SR 1002

WILKES BRIDGE #56 - NC 268 OVER BEAVER CREEK

INDEX OF SHEETS

TMP-1

SHEET NO.

TITLE

MP-1 TITLE SHEET, INDEX OF SHEETS, & TRAFFIC MANAGEMENT

STRATEGY

TMP-1A LEGEND & LIST OF ROADWAY STANDARD DRAWINGS

TMP-2 GENERAL NOTES

TMP-3 PHASIN

TMP-4 CALDWELL BR. #13 US 321 NB WORK AREA

CALDWELL BR. #13 US 321 NB WORK AREA

WBS 17BP.11.H.3

TRAFFIC MANAGEMENT STRATEGY

PROPOSED BRIDGE WORK WILL BE PERFORMED USING TIME RESTRICTED LANE CLOSURES.



PLAN PREPARED FOR NCDOT BRIDGE MANAGEMENT UNIT
RALEIGH, NC





PLAN PREPARED BY:
Stantec Consulting Services Inc.
801 Jones Franklin Road-Suite 3

el. 919.851.6866 ax. 919.851.7024

BETSY L. WATSON, P.E.

TOACETO ENGINEE

GEORGE KARAGEORGE

SR. TRANSPORTATION DESIGNER



,/29/2012);\Traffic\Traf† :cullen

LEGEND

DIRECTION OF TRAFFIC FLOW

DIRECTION OF PEDESTRIAN TRAFFIC FLOW WORK AREA PAVEMENT REMOVAL NORTH ARROW TYPE III BARRICADE CONE CHANGEABLE MESSAGE SIGN (CMS) FLASHING ARROW BOARD (TYPE C) ••••• LAW ENFORCEMENT TRUCK MOUNTED ATTENUATOR (TMA) PORTABLE CONCRETE BARRIER (PCB) -- TEMPORARY CRASH CUSHION TEMPORARY SHORING WORK ZONE SIGN-PORTABLE - WORK ZONE SIGN-STATIONARY WORK ZONE SIGN-STATIONARY OR PORTABLE **SIGNALS** PROPOSED TEMPORARY EXISTING PAVEMENT MARKINGS EXISTING PAVEMENT MARKING (GRAY) - - - - - MINI-SKIP LINES ----- SOLID LINES PAVEMENT MARKING SYMBOLS ↑ ↑ ↑ PAVEMENT MARKING SYMBOLS EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW) ONLY PAVEMENT MARKING ALPHANUMERIC CHARACTERS

PAVEMENT MARKERS

CRYSTAL/CRYSTAL
CRYSTAL/RED

♦ YELLOW/YELLOW

PROJ. REFERENCE NO.	SHEET NO.
17BP.11.H.3	TMP-1A

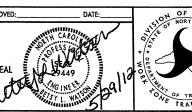
ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)



Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. (919) 851-8866 Fax. (919) 851-7024 www.stantec.com



LEGEND

ጲ

ROADWAY STANDARD DRAWINGS

GENERAL NOTES

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

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

LANE CLOSURE TIME RESTRICTIONS

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

ROAD NAME

DAY AND TIME RESTRICTIONS

US 321

6:00 A.M. - 7:00 P.M. MONDAY THRU SUNDAY (EVERYDAY)

NC 268 US 64/NC 18 6:00 A.M.-9:00 A.M. MONDAY THRU FRIDAY 4:00 P.M.-7:00 P.M. MONDAY THRU FRIDAY

HOLIDAY & HOLIDAY WEEKEND LANE CLOSURE TIME RESTRICTIONS

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND HOLIDAY WEEKENDS AS FOLLOWS:

ROAD NAME ALL ROADS

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

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) LANE CLOSURES ARE REQUIRED WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN ANY PORTION OF A TRAVEL LANE. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- D) INSTALL ALL LANE CLOSURES ACCORDING TO THE PLANS, ROADWAY STANDARD DRAWINGS (1101.02), OR AS DIRECTED BY THE ENGINEER.
- E) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER. COVER OR LAY DOWN SIGNS, AND TURN OFF ARROW BOARDS AND MESSAGE BOARDS.
- F) INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC. REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- G) UNLESS OTHERWISE SHOWN IN THE PLANS, PLACE ARROW BOARDS ON THE ROADWAY SHOULDER. IF SHOULDERS DO NOT EXIST, PLACE ARROW BOARDS WITHIN THE MERGE TAPER BEHIND THE CHANNELIZING DEVICES OF THE LANE CLOSURE. IF NEEDED, EXTEND LANE CLOSURES TO PROVIDE STOPPING SIGHT DISTANCE TO THE ARROW BOARD (REFER TO ROADWAY STANDARD DRAWING 1101.11 SHEET 2).
- H) PLACE LANE CLOSURE DRUMS IN TAPERS AT A MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT (MPH). ALONG BUFFER SPACES AND WORK AREAS SPACE DRUMS AT A MAXIMUM SPACING EQUAL IN FEET TO TWICE THE POSTED SPEED LIMIT (MPH). IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION. CHANNELIZING DEVICES SHOULD BE LATERALLY OFFSET 3 FT INSIDE THE CLOSED LANE AS ROOM PERMITS.
- I) WHENEVER TAPERS ARE TO BE USED IN CLOSE PROXIMITY TO AN INTERCHANGE RAMP, CROSSROADS, CURVES, OR OTHER INFLUENCING FACTORS. THE LENGTH OF THE STANDARD TAPERS MAY BE ADJUSTED.

TEMPORARY TRAFFIC CONTROL DEVICES

- J) WHEN LANE CLOSURES ARE NOT IN EFFECT, PLACE CHANNELIZING DEVICES ALONG WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH). USE A 10 FT SPACING IN RADII OR WHEN THEY ARE USED TO CLOSE A DRIVEWAY OR ROADWAY. IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION.
- K) WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- L) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS IN THE LANE(S) THAT ARE CLOSED TO TRAFFIC.
- M) DO NOT INSTALL SIGNS OR OTHER DEVICES ON OR PARTIALLY BLOCKING SIDEWALKS OR ANY OTHER FACILITIES OPEN TO PEDESTRIANS.
- N) CHANGEABLE MESSAGE SIGN MESSAGES SHOWN ARE EXAMPLES. OTHER MESSAGES MAY BE USED AS CONDITIONS WARRANT. ALL MESSAGES AND LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO INCORPORATING.

PAVEMENT MARKINGS AND MARKERS

O) UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME ALL ROADS

MARKING POLYUREA PAVEMENT MARKER

(SEE NOTE BELOW)

SNOWPLOWABLE

P) FOR PAVEMENT MARKING SYMBOLS, ALPHANUMERIC CHARACTERS, DIAGONAL LINES AND STOP BARS USE THE FOLLOWING TYPE OF MARKING:

ON ASPHALT PAVEMENTS

- 1. THERMOPLASTIC HEATED IN PLACE, OR
- 2. THERMOPLASTIC EXTRUDED.

ON CONCRETE PAVEMENTS

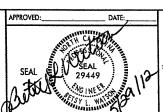
- 1. COLD APPLIED PLASTIC (TYPE 2)
- 2. THERMOPLASTIC HEATED IN PLACE (OPTIONAL)
- Q) DO NOT USE POLYUREA MARKING ON TYPE S9.5A SURFACE COURSE.

MISCELLANEOUS

- R) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.
- S) ALL DIMENSIONS AND STATIONS IN THE TRAFFIC MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- T) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

Stantec License No. F-0672

Raleigh, NC 27606 Fax. (919) 851-7024





GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
17BP.11.H.3	TMP-3

PHASING

CALDWELL CO. BRIDGE #8

PERFORM BRIDGE WORK USING FLAGGER CONTROLLED LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15.

CALDWELL CO. BRIDGE #13

PERFORM BRIDGE WORK USING LEFT AND RIGHT LANE CLOSURES PER SHEETS TMP-4,5.

CALDWELL CO. BRIDGE #14

PERFORM BRIDGE WORK USING LEFT AND RIGHT LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02 SHEET 3 OF 15.

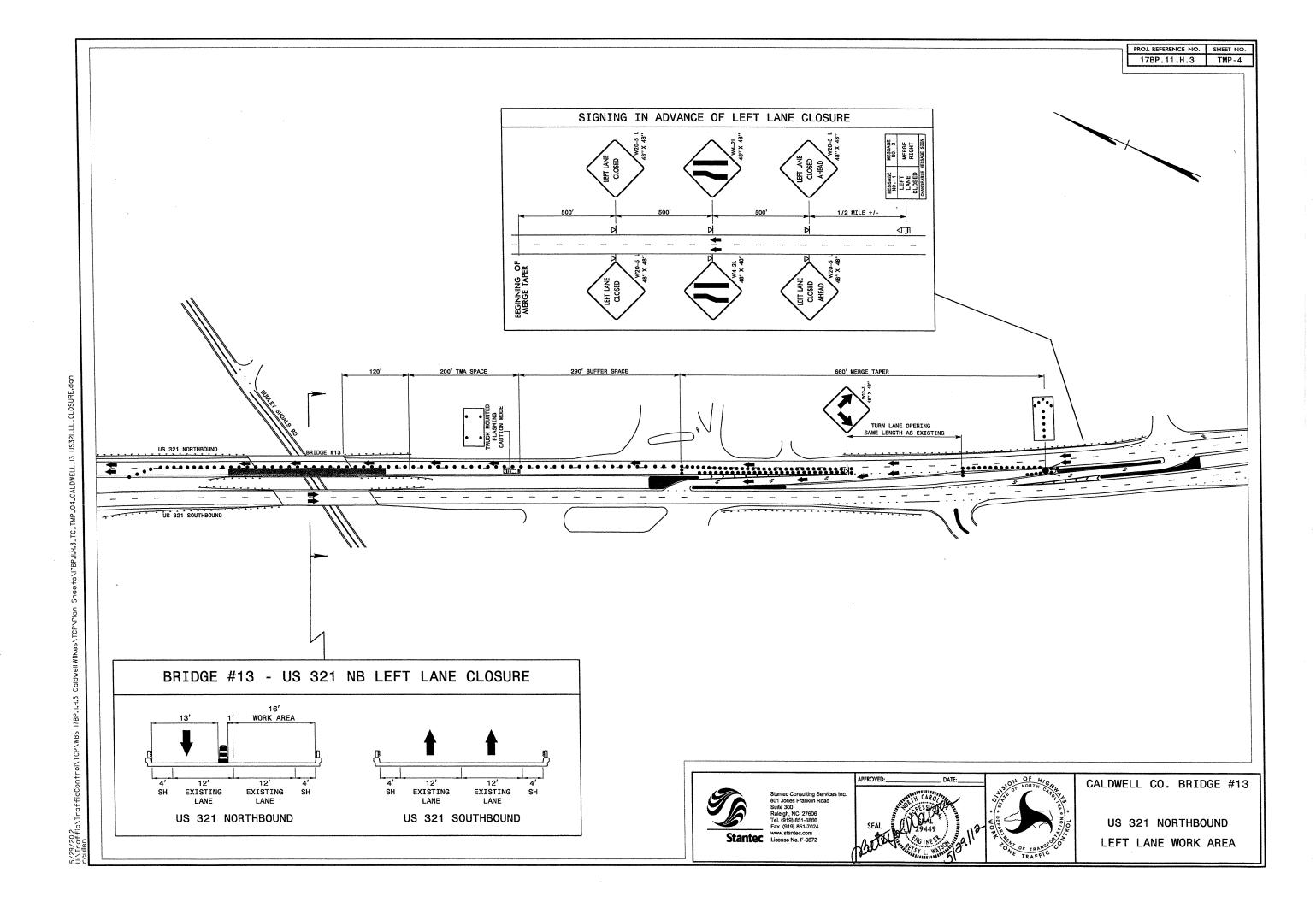
WILKES CO. BRIDGE #56

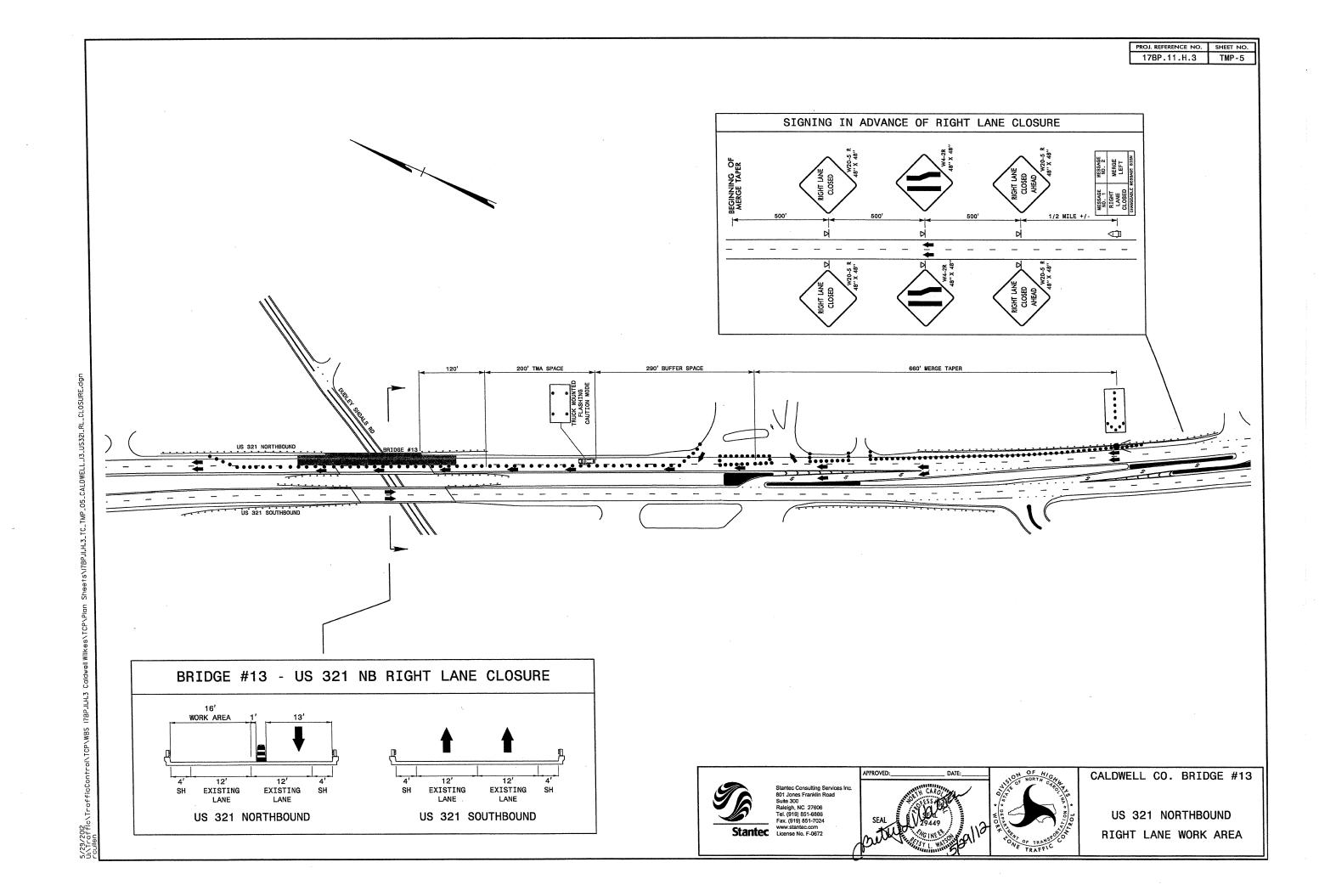
PERFORM BRIDGE WORK USING FLAGGER CONTROLLED LANE CLOSURES. REFER TO ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15.

Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672



PHASING





STANDARD NOTES

DESIGN DATA:

+

---- A.A.S.H.T.O. (CURRENT) SPECIFICATIONS ---- SEE PLANS LIVE LOAD

IMPACT ALLOWANCE ----- SEE A.A.S.H.T.O.

STRESS IN EXTREME FIBER OF

STRUCTURAL STEEL - AASHTO M270 GRADE 36 - 20,000 LBS. PER SQ. IN.

- AASHTO M270 GRADE 50W - 27,000 LBS. PER SQ. IN.

- AASHTO M270 GRADE 50 - 27.000 LBS. PER SQ. IN.

REINFORCING STEEL IN TENSION

GRADE 60 -- 24,000 LBS. PER SQ. IN.

CONCRETE IN COMPRESSION ----- 1,200 LBS. PER SQ. IN.

CONCRETE IN SHEAR STRUCTURAL TIMBER - TREATED OR

UNTREATED - EXTREME FIBER STRESS ---- 1,800 LBS. PER SQ. IN.

COMPRESSION PERPENDICULAR TO GRAIN

375 LBS. PER SQ. IN.

OF TIMBER ----EQUIVALENT FLUID PRESSURE OF EARTH ----

30 LBS. PER CU. FT.

(MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2006 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N. C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED 3/4"WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2"RADIUS WHICH IS BUILT INTO CURB FORMS, CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 1/4"FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A 1/4"RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12"INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS.
SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.
ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD
DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED
ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE
GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS
FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING
UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED
BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE
ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH
BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED
TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND
ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN
ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK,
AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE
ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES
SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND
CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE
AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL
BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE
FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS, DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE 1/8° SHEAR STUDS FOR THE %" STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - 7/8° STUDS FOR 4 - 3/4° STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF 7/8° STUDS ALONG THE BEAM AS SHOWN FOR 3/4° STUDS BASED ON THE RATIO OF 3 - 7/8° STUDS ALONG THE BEAM AS SHOWN FOR 3/4° STUDS BASED ON THE RATIO OF 3 - 7/8° STUDS STUDS FOR 4 - 3/4° STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0'.

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT THIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST 5/16" IN THICKNESS AND DO NOT EXCEED A WITH EQUAL TO THE FLANCE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/ABSHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SULTABLE MEANS TO A RADIUS OF APPROXIMATELY 1/16 INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB, METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING, CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

STD. NO. SN