

DESIGN DATA

LIVE LOAD: _____
DESIGN LOADING _____ HS20
INVENTORY RATING _____ HSXX
OPERATING RATING _____ HSXX
WISCONSIN STANDARD PERMIT _____
VEHICLE (WIS-SPV) _____ XXX KIPS

MATERIAL PROPERTIES:

CONCRETE SUPERSTRUCTURE _____ $f'_c = 4,000$ PSI
CONCRETE SUBSTRUCTURE _____ $f'_c = 3,500$ PSI
CONCRETE MASONRY OVERLAY DECKS _____ $f'_c = 4,000$ PSI
HIGH STRENGTH BAR STEEL _____
REINFORCEMENT (GRADE 60) _____ $f_y = 60,000$ PSI

TRAFFIC DATA

USH 53
A.D.T. (2023) = 7,320
DESIGN SPEED = 80 MPH

CARLSON SCHOOL RD
A.D.T. (1988) = 3,430
DESIGN SPEED = 60 MPH

LEGEND

* LOCATION OF ANCHOR ASSEMBLIES FOR THRIE BEAM ATTACHMENT.

(X) DENOTES WINGWALL NUMBER.

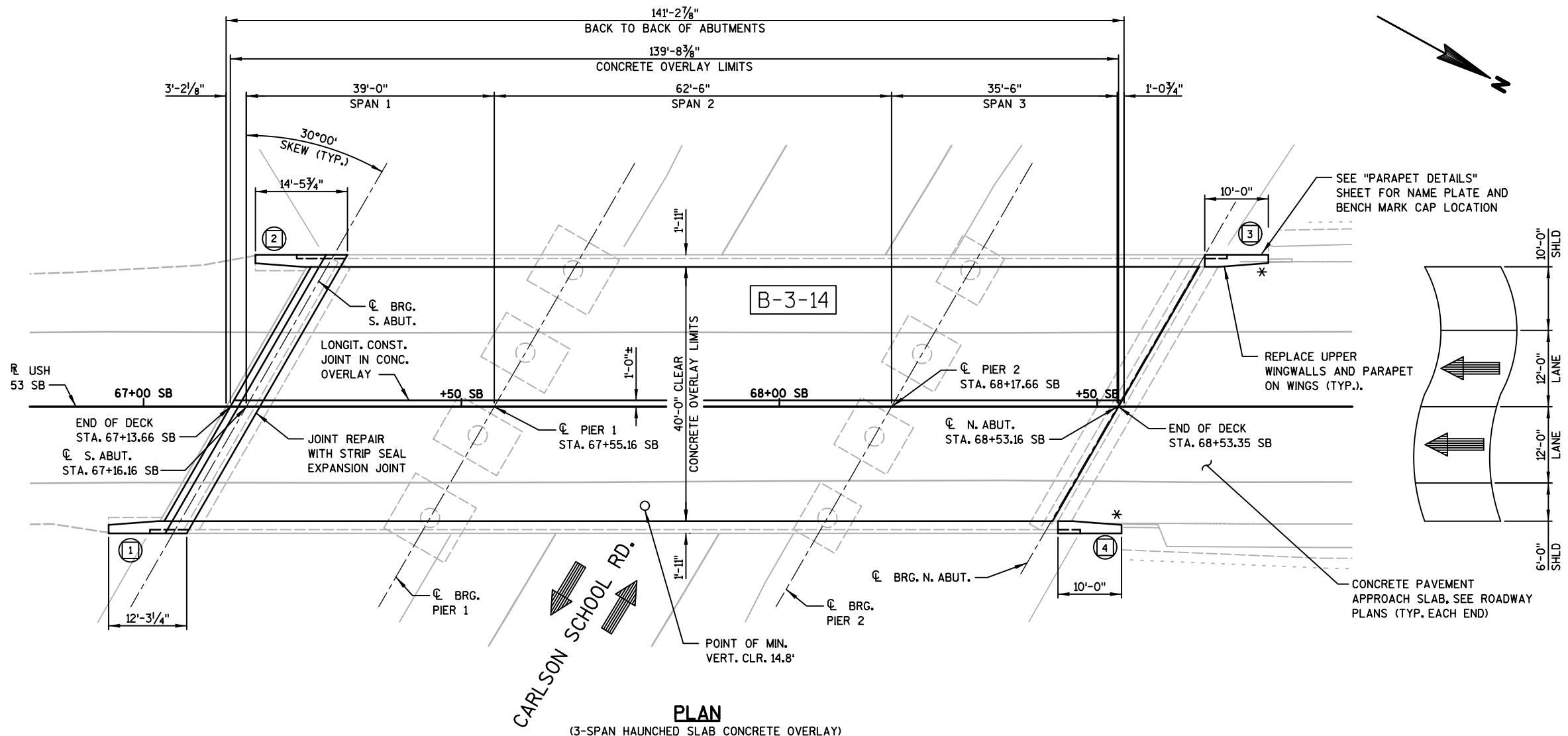
▲ MIN. VERTICAL CLEARANCE TAKEN FROM HSI SITE.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTIONS & QUANTITIES
3. CONSTRUCTION STAGING

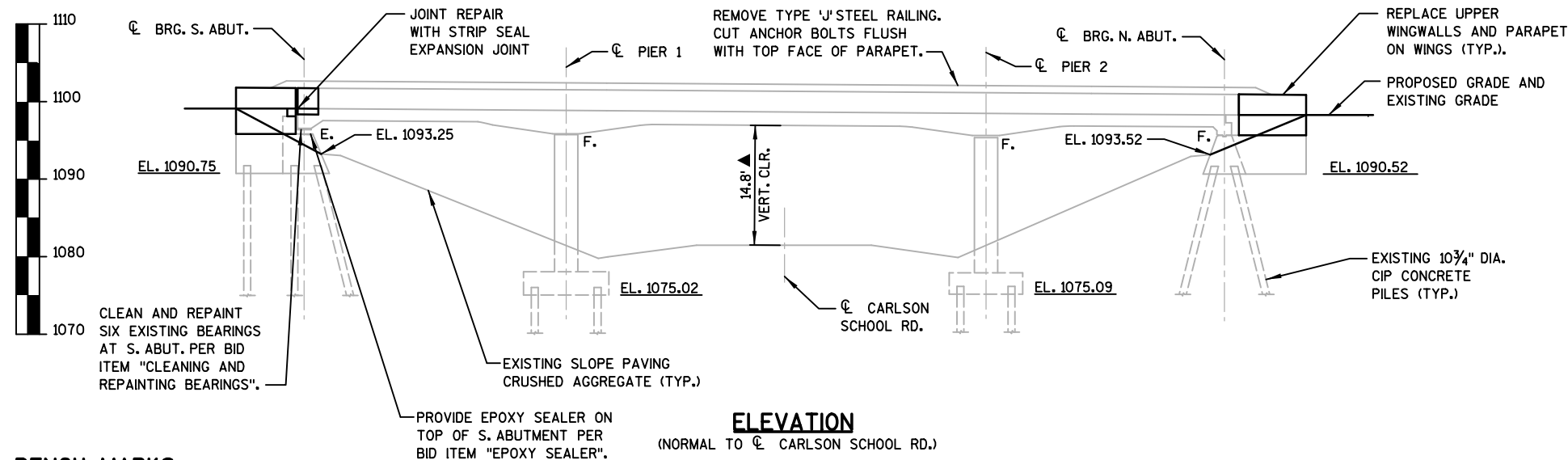
STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT:
WILLIAM DREHER (608) 266-8489
DESIGN CONSULTANT CONTACT:
BRETT OFTEDAHL (608) 251-4843



PLAN

(3-SPAN HAUNCHED SLAB CONCRETE OVERLAY)




ELEVATION

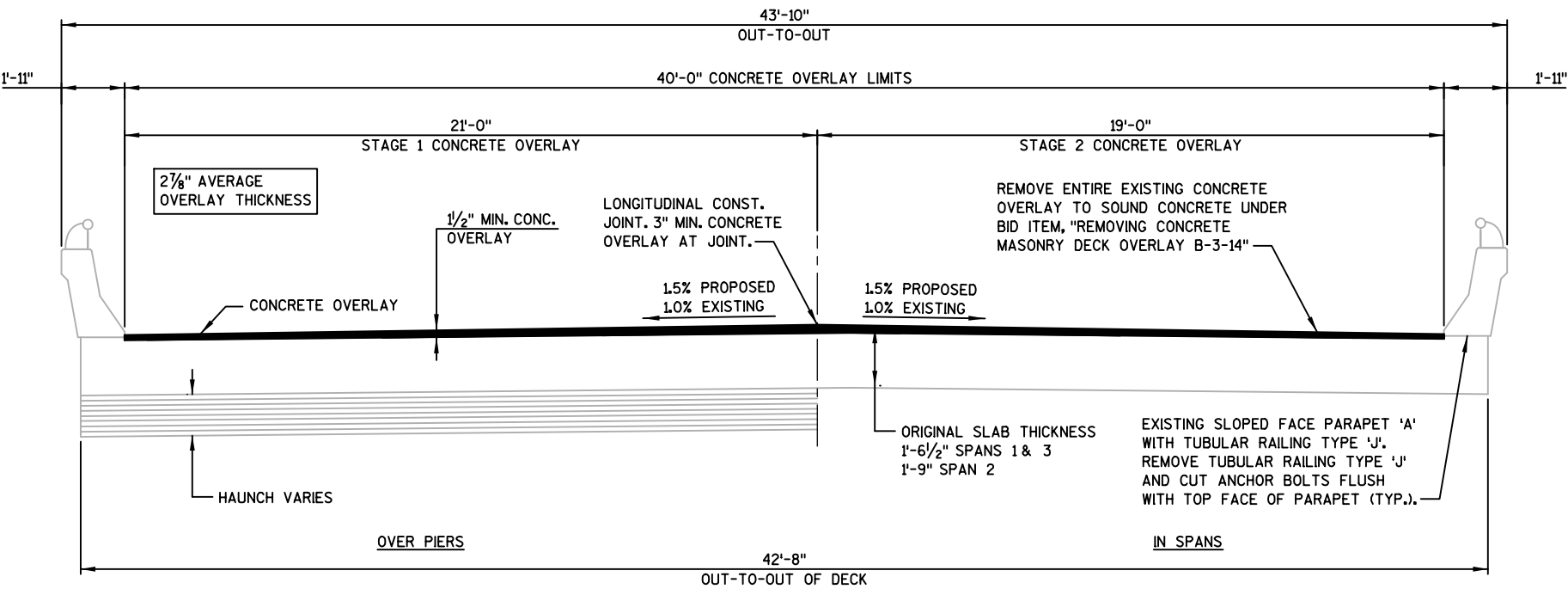
(NORMAL TO CL CARLSON SCHOOL RD.)

BENCH MARKS

BM NO.	COORDINATES	DESCRIPTION	ELEV.
BM 1	Y: 62,128.59 X: 354,745.03	NW CORNER BRIDGE DECK B-3-24 (CTH I)	1065.33
BM 2	Y: 61,303.85 X: 355,782.67	NW CORNER BRIDGE DECK B-3-20 (CHETEK RIVER)	1043.96
BM 3	Y: 66,181.31 X: 349,955.75	NW CORNER BRIDGE DECK B-3-26 (KNAPP STREET)	1077.68

NOTE: BENCH MARKS ARE OUTSIDE OF PLAN EXTENTS. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.

NO.	DATE	REVISION	BY
 910 WEST WINGRA DRIVE MADISON, WISCONSIN 53715 (608)-251-4843 (608) 251-8655 FAX WWW.STRAND.COM			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		CHIEF STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE B-3-14			
USH 53 SB OVER CARLSON SCHOOL RD.			
COUNTY	BARRON	TOWN/CITY/VILLAGE	DOVRE
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	EJC	DESIGN CK'D. BMO	DRAWN BY DTH PLANS CK'D. BMO
GENERAL PLAN			SHEET 1 OF 3



TYPICAL CROSS SECTION
(LOOKING NORTH)

GENERAL NOTES

THE PROPOSED WORK INCLUDES CLEANING AND REPAINTING BEARINGS, EPOXY SEALING TOP OF S. ABUT., REMOVING EXISTING CONCRETE OVERLAY, PLACING A NEW CONCRETE OVERLAY, JOINT REPLACEMENT AT SOUTH ABUTMENT, CONCRETE SURFACE REPAIR AT ABUTMENTS AND PARAPETS, CLEANING PARAPETS, AND REPLACING UPPER WINGWALLS.

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND SUBSEQUENT REHABILITATION PLANS.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED. ALL STATIONS ARE IN FEET.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR STEEL SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL CONCRETE REMOVAL NOT COVERED WITH A CONCRETE OVERLAY SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

PIGMENTED SURFACE SEALER SHALL BE APPLIED TO THE TOP, ENDS, AND ROADWAY FACES OF EXISTING CONCRETE PARAPET AFTER ALL WORK IS COMPLETED FOR "CLEANING PARAPETS" AND "CONCRETE SURFACE REPAIR" BID ITEMS.

PARAPETS SHALL BE CLEANED PER "CLEANING PARAPETS" BID ITEM.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

THE ORIGINAL CONCRETE OVERLAY SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "REMOVING CONCRETE MASONRY DECK OVERLAY B-3-14".

AFTER REMOVAL OF THE EXISTING CONCRETE OVERLAY AND PRIOR TO NEW CONCRETE WORK, THE ENTIRE BRIDGE DECK SHALL BE CLEANED PER BID ITEM, "CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY".

CLEAN AND FILL EXISTING LONGITUDINAL AND TRANSVERSE CRACKS IN DECK (AFTER DECK PREPARATION AND PRIOR TO CONCRETE OVERLAY) WITH PENETRATING EPOXY AS DIRECTED BY THE FIELD ENGINEER PER BID ITEM, "CRACK SEALING EPOXY".

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS 1/2-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

PREPARATION DECKS TYPE 1, PREPARATION DECKS TYPE 2, AND FULL-DEPTH DECK REPAIR AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER. DECK PREPARATION AND FULL-DEPTH DECK REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ANY EXCAVATION REQUIRED TO COMPLETE THE OVERLAY OR JOINT REPAIRS AT THE ABUTMENTS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1/2" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN 1/2", CONTACT THE STRUCTURES DESIGN SECTION.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE INCLUDED WITH BID ITEM "EXPANSION DEVICE B-3-14".

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWING. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR, 1972.

PERFORM CONCRETE SURFACE REPAIR AS DIRECTED BY THE FIELD ENGINEER. QUANTITY SHOWN IS APPROXIMATE.

BEVEL ALL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

AT ABUTMENTS, ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.

AFTER CLEANING, BEARINGS AT SOUTH ABUTMENT SHALL BE PAINTED AMS STANDARD COLOR NO. 26293 (LIGHT GRAY).

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	S. ABUT	N. ABUT.	SUPERSTRUCTURE	TOTAL	UNIT
203.0200	REMOVING OLD STRUCTURE STA. 67+80 SB	---	---	---	1	LS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-3-14	---	---	---	1	LS
210.1500	BACKFILL STRUCTURE TYPE A	---	---	---	0	TON
502.0100	CONCRETE MASONRY BRIDGES	---	---	---	0	CY
502.0717.S	CRACK SEALING EPOXY	---	---	---	0	LF
502.3101	EXPANSION DEVICE B-3-14	---	---	---	0	LF
502.3200	PROTECTIVE SURFACE TREATMENT	---	---	---	0	SY
502.3210	PIGMENTED SURFACE SEALER	---	---	---	0	SY
502.4205	ADHESIVE ANCHORS NO. 5 BAR	---	---	---	0	EACH
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	---	---	---	0	LB
509.0301	PREPARATION DECKS TYPE 1	---	---	70	70	SY
509.0302	PREPARATION DECKS TYPE 2	---	---	35	35	SY
509.0505.S	CLEANING DECKS TO REAPPLY CONCRETE MASONRY OVERLAY	---	---	---	0	SY
509.1000	JOINT REPAIR	---	---	---	0	SY
509.1500	CONCRETE SURFACE REPAIR	3	3	240	246	SF
509.2000	FULL-DEPTH DECK REPAIR	---	---	2	2	SY
509.2500	CONCRETE MASONRY OVERLAY DECKS	---	---	---	0	CY
509.9005.S	REMOVING CONCRETE MASONRY DECK OVERLAY B-3-14	---	---	---	0	SY
509.9050.S	CLEANING PARAPETS	---	---	---	0	LF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	---	---	---	0	SY
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	---	---	---	0	EACH
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	---	---	---	0	SY
SPV.0060.XX	CLEANING AND PAINTING BEARINGS	6	---	---	6	EACH
SPV.0180.XX	EPOXY SEALER	---	---	---	0	SY
	NON-BID ITEMS					
	FILLER	---	---	---	1/2", 3/4"	SIZE

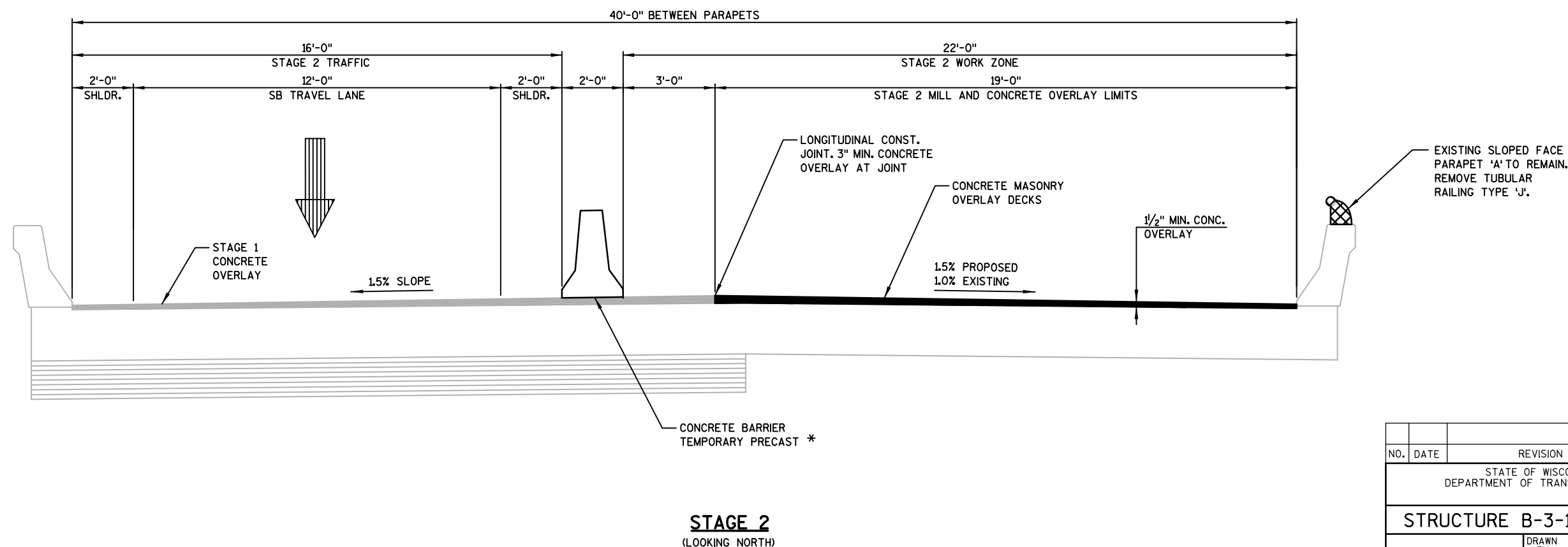
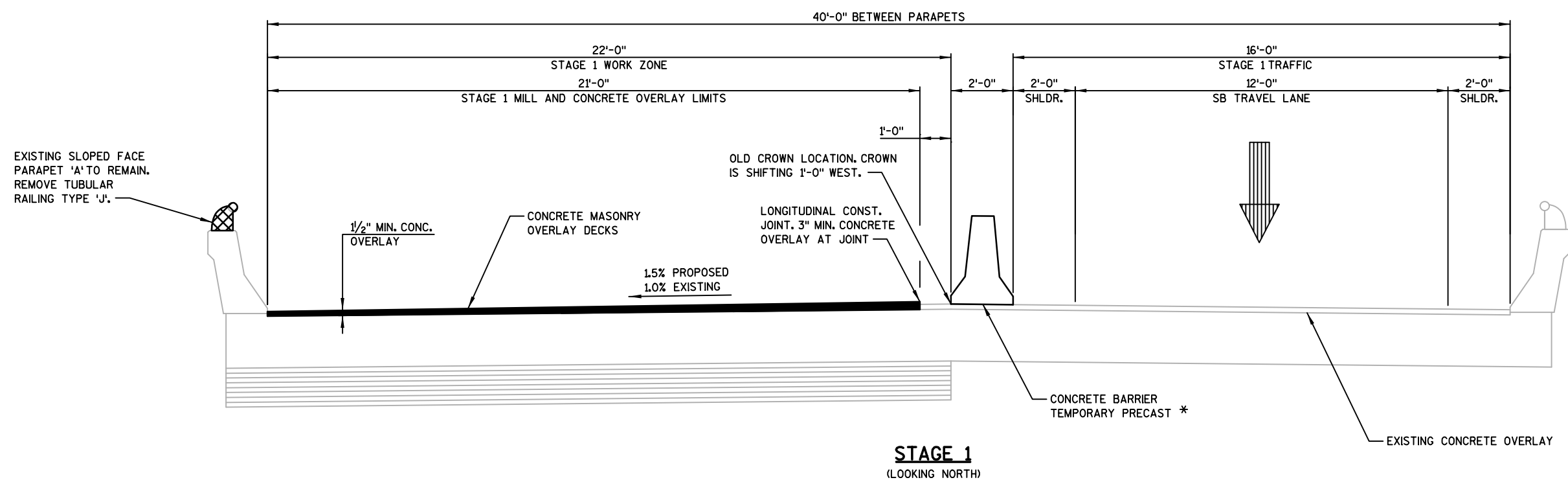
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-14			
	DRAWN BY	OTH	PLANS CK'D. BMO
CROSS SECTION AND QUANTITIES			SHEET 2 OF 3

NOTES

SEE ROADWAY PLANS FOR ADDITIONAL STAGING INFORMATION.

LEGEND

* SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-3-14			
DRAWN BY		DTH	PLANS CK'D. BMO
CONSTRUCTION STAGING		SHEET 3 OF 3	