

DESIGN DATA

LIVE LOAD:

DESIGN LOADING _____ HS20
INVENTORY RATING _____ HS-XX
OPERATIONAL RATING _____ HS-XX
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) _____ XX KIPS

TRAFFIC DATA:

STH 29
A.A.D.T. (2022) = 9,350
A.A.D.T. (2042) = 11,300

MATERIAL PROPERTIES:

CONCRETE MASONRY - OVERLAY DECKS _____ $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY - PARAPET _____ $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY - OVERLAY APPROACHES _____ $f'_c = 4,000$ P.S.I.
CONCRETE MASONRY - ALL OTHER _____ $f'_c = 3,500$ P.S.I.

HIGH-STRENGTH BAR STEEL _____ $f_y = 60,000$ P.S.I.
REINFORCEMENT, GRADE 60

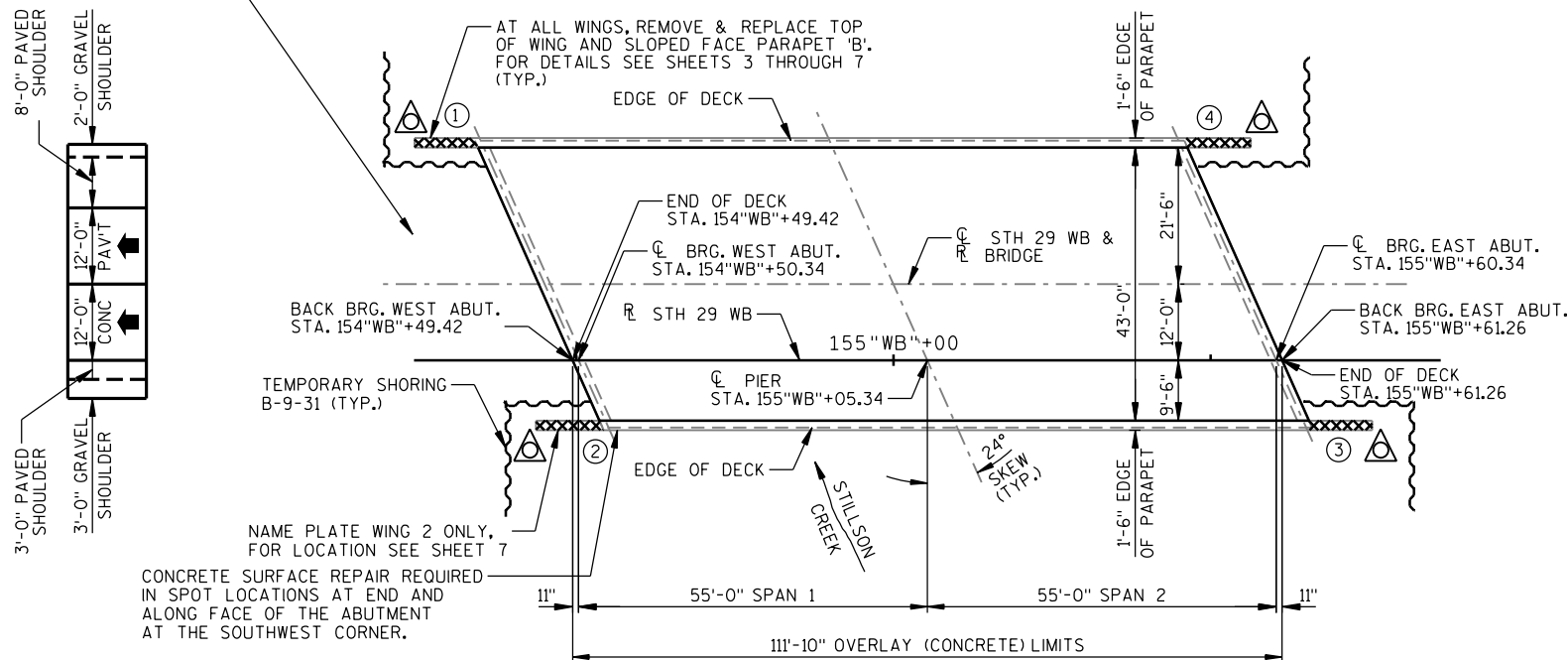
LIST OF DRAWINGS

1. REHAB GENERAL PLAN
2. TYPICAL SECTION, QUANTITIES, & NOTES
3. WING 1, WING TOP REPLACEMENT
4. WING 2, WING TOP REPLACEMENT
5. WING 3, WING TOP REPLACEMENT
6. WING 4, WING TOP REPLACEMENT
7. SLOPED FACE PARAPET 'B'

○ — INDICATES WING NUMBER

△ — INDICATES LOCATION OF PROVISION FOR THRIE BEAM GUARD ATTACHMENT AT WINGS. THE EXISTING THRIE BEAM ATTACHMENT PIECE AT THE WING TOP REPLACEMENTS SHALL BE SALVAGED AND REINSTALLED.

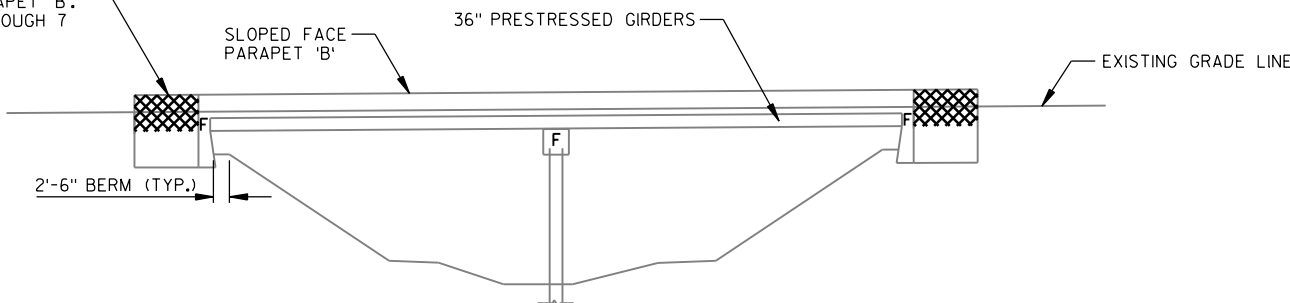
CONCRETE OVERLAY AT WEST
APPROACH SLAB, MATCH
PROPOSED GRADE AT ENDS.



PLAN

(REHAB - CONCRETE OVERLAY AND WING REPAIRS ON EXISTING TWO SPAN PRESTRESSED CONCRETE GIRDER)

AT ALL WINGS, REMOVE & REPLACE TOP
OF WING AND SLOPED FACE PARAPET 'B'.
FOR DETAILS SEE SHEETS 3 THROUGH 7
(TYP.)



ELEVATION

(LOOKING NORTH)

DESIGN CONTACT:

KYLE BUSCH
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BRIDGE OFFICE CONTACT:

WILLIAM DREHER
(608) 266-8489

NO.	DATE	REVISION	BY
MSA ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 1702 Pankratz St Madison, WI 53704 (608) 242-7779 www.msa-ps.com © MSA Professional Services, Inc.			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-9-31			
STH 29 WB OVER STILLSON CREEK			
COUNTY	CHIPPewa	TOWN/CITY/VILLAGE	LAFAYETTE
DESIGN SPEC. REHABILITATION - N/A			
DESIGNED BY	XXX	DESIGN CK'D. XXX	DRAWN BY SSD
REHAB GENERAL PLAN			PLANS CK'D. KHB
SHEET 1 OF 7			

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

SEE ROAD PLANS FOR TRAFFIC CONTROL.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN.

IMPROVEMENTS INCLUDE DECK REPAIRS, ABUTMENT SURFACE REPAIRS, REPLACEMENT OF THE WING TOP AND PARAPET AT ALL WINGS, CLEANING PARAPETS, CONCRETE DECK OVERLAY, AND CONCRETE APPROACH OVERLAY AT THE WEST APPROACH.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE, B-9-31, A TWO SPAN, 111.83' PRESTRESSED CONCRETE GIRDER BRIDGE SET ON CONCRETE SILL ABUTMENTS AND A CONCRETE COLUMN BENT PIER.

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".

PREPARATION APPROACHES ARE AS DETERMINED BY THE ENGINEER AND SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY APPROACHES".

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

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

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE ENTIRE BRIDGE DECK UNDER THE BID ITEM "CLEANING DECKS".

A MINIMUM OF 1-INCH OF CONCRETE SHALL BE REMOVED FROM THE WEST APPROACH SLAB UNDER THE BID ITEM "CLEANING APPROACHES".

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

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1 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.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES BAR SIZE.

ⓑ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

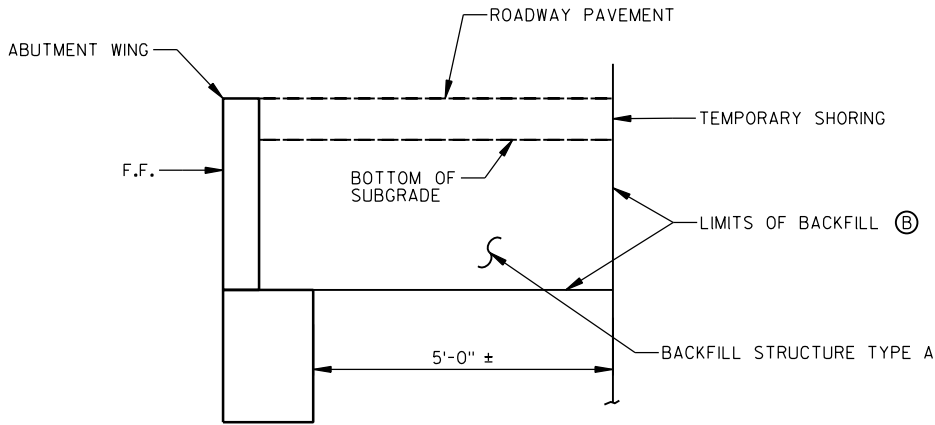
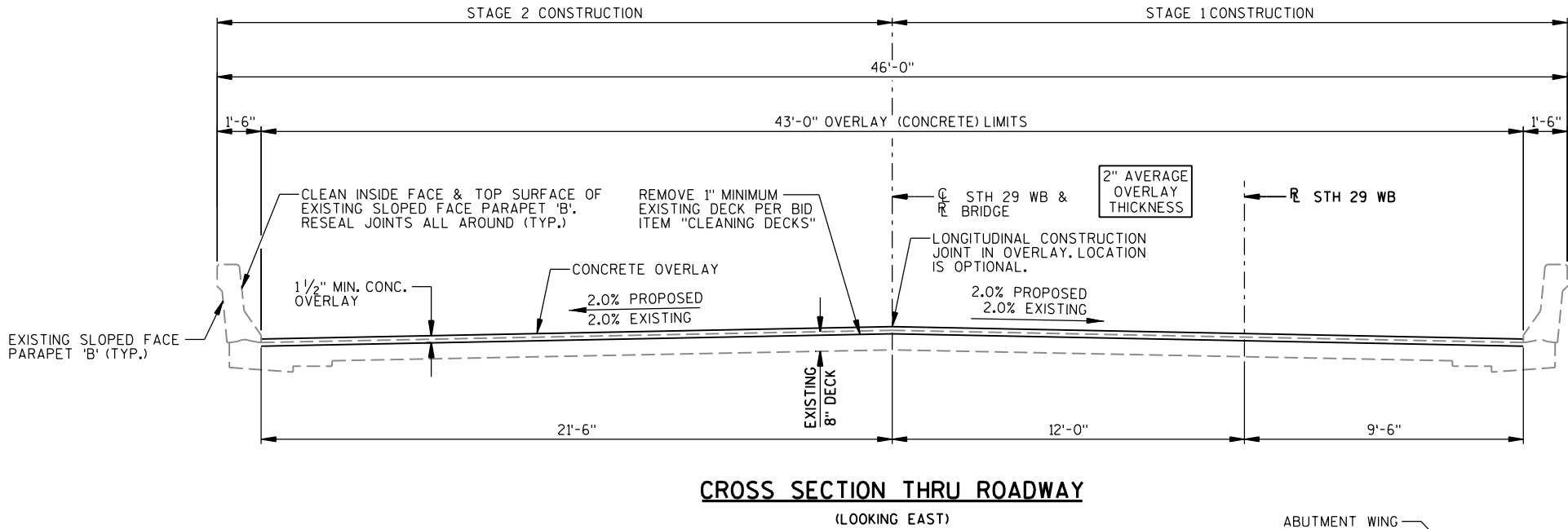
AT THE BACK FACE OF WING, ALL VOLUME EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE TYPE A.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE SHALL SHOW THE ORIGINAL CONSTRUCTION YEAR OF 1966. SUPPLYING AND INSTALLING NAME PLATE IS INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES".

CLEAN PARAPETS AND APPLY PIGMENTED SURFACE SEALER TO THE TOP AND ROADWAY FACE OF THE PARAPET.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE ABUTMENTS.

F.F. - FRONT FACE B.F. - BACK FACE



TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEM	UNIT	WEST ABUT.	EAST ABUT.	SUPER	TOTAL
203.0225.S.01	DEBRIS CONTAINMENT B-9-31	LS	-	-	-	1
206.1000.01	EXCAVATION FOR STRUCTURES BRIDGES B-9-31	LS	-	-	-	1
ⓑ 210.1500	BACKFILL STRUCTURE TYPE A	TON	20	20	-	40
502.0100	CONCRETE MASONRY BRIDGES	CY	4	4	4	12
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	530	530
502.3210	PIGMENTED SURFACE SEALER	SY	-	-	104	104
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	52	52	-	104
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	600	600	800	2000
* 509.0200	PREPARATION APPROACHES	SY	6	-	-	6
* 509.0301	PREPARATION DECKS TYPE 1	SY	-	-	26	26
* 509.0302	PREPARATION DECKS TYPE 2	SY	-	-	10	10
509.0500	CLEANING DECKS	SY	-	-	530	530
509.0600	CLEANING APPROACHES	SY	120	-	-	120
** 509.1500	CONCRETE SURFACE REPAIR	SF	15	-	-	15
* 509.2000	FULL-DEPTH DECK REPAIR	SY	-	-	1	1
509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	-	-	32	32
509.2600	CONCRETE MASONRY OVERLAY APPROACHES	CY	6	-	-	6
509.9050.S	CLEANING PARAPETS	LF	-	-	262	262
511.1200.01	TEMPORARY SHORING B-9-31	SF	250	250	-	500
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	6	-	12
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	50	50	-	100
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	-	-	4	4
NON-BID ITEMS						
	FILLER	SIZE				1/2"

* QUANTITY LISTED IS AN ESTIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION OF ALL DECK AND APPROACH REPAIR LOCATIONS WITH THE ENGINEER.

** CONCRETE SURFACE REPAIR SHALL BE USED FOR NEEDED REPAIRS. LOCATIONS AND LIMITS OF REPAIR SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-9-31			
DRAWN BY SSD		PLANS CK'D. KHB	
TYPICAL SECTION, QUANTITIES, & NOTES		SHEET 2 OF 7	