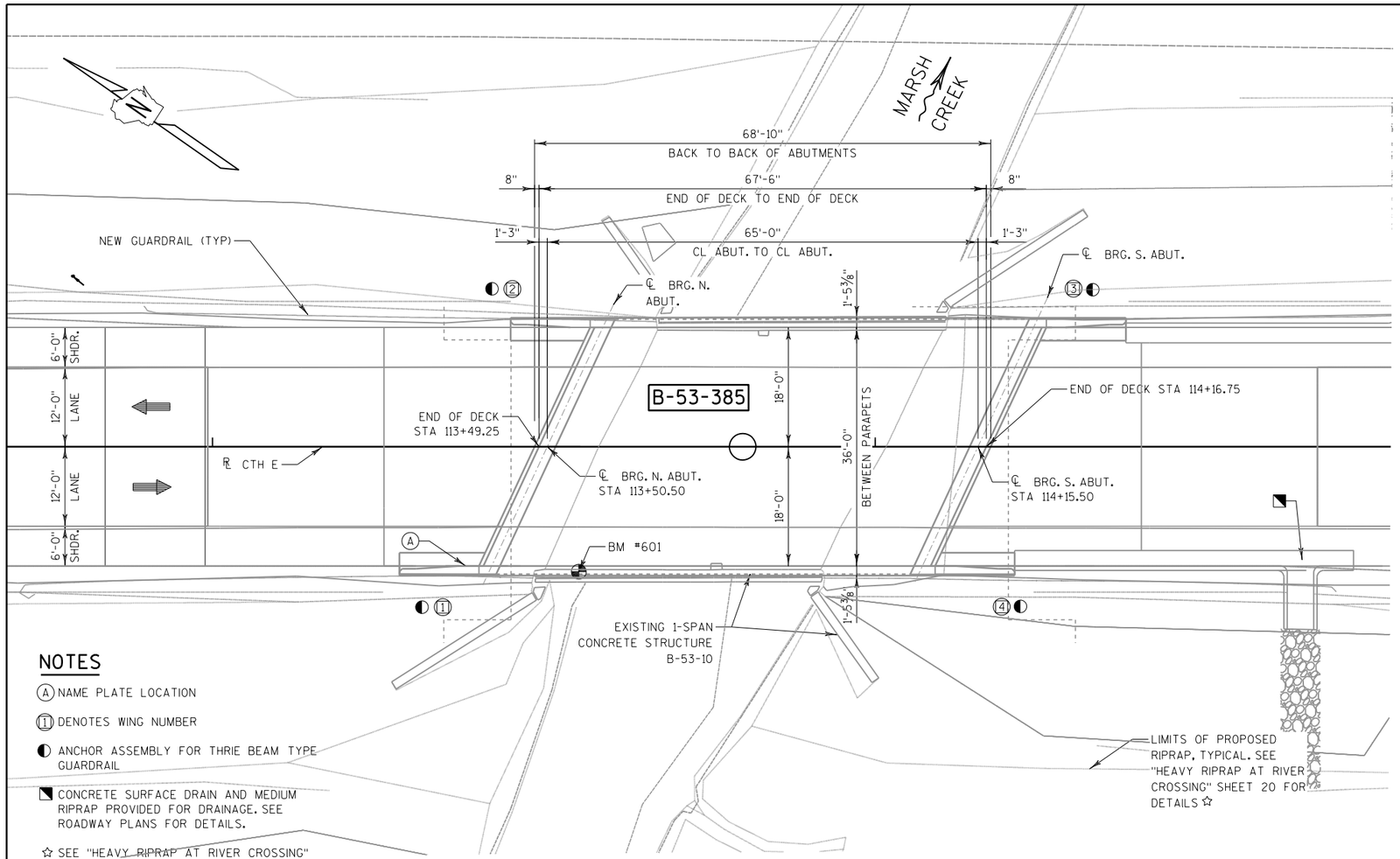


NOTES

Ⓐ NAME PLATE LOCATION

① DENOTES WING NUMBER

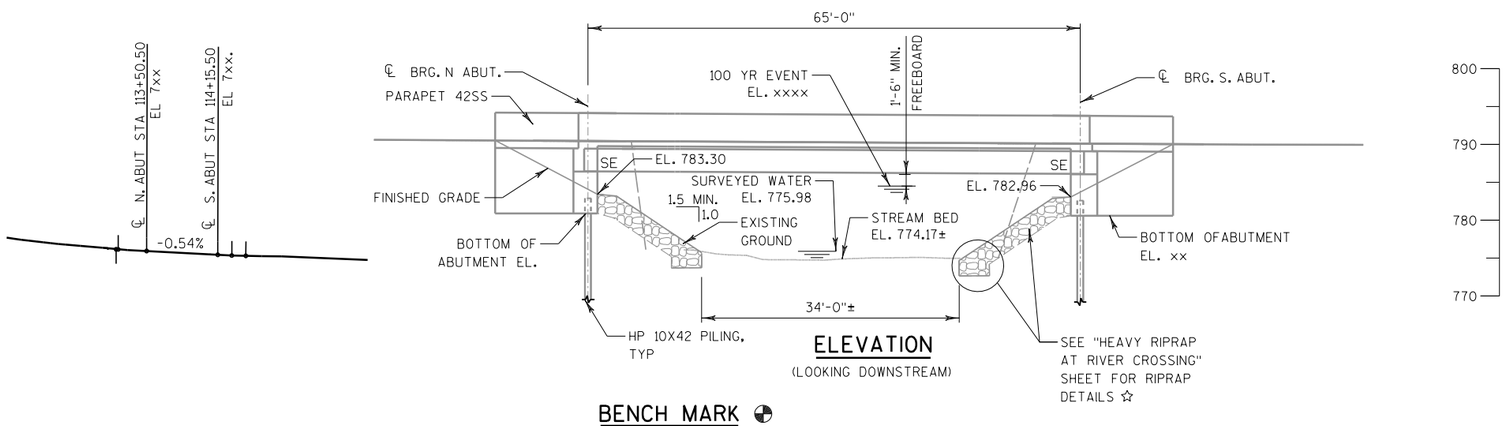
◐ ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARDRAIL

◥ CONCRETE SURFACE DRAIN AND MEDIUM RIPRAP PROVIDED FOR DRAINAGE. SEE ROADWAY PLANS FOR DETAILS.

☆ SEE "HEAVY RIPRAP AT RIVER CROSSING" SHEET FOR DETAILS. REMOVE ALL EXISTING CONCRETE RIPRAP PRIOR TO INSTALLING NEW RIPRAP. NEW CONCRETE RIPRAP NOT ALLOWED.

PLAN

SINGLE SPAN 36" PRESTRESSED GIRDERS



ELEVATION

(LOOKING DOWNSTREAM)

OUTSIDE THE LIMITS OF CONSTRUCTION THE PROFILE IS A GRAPHICAL REPRESENTATION OF EXISTING CONDITIONS AND IS FOR INFORMATION ONLY. SEE ROADWAY PLANS FOR DETAILS.

BENCH MARK

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
601	820+94.56	28.5' LEFT	ALUM. DISK IN SW DECK CORNER	1181.83

STATE PROJECT NUMBER

5334-00-70

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.XY
OPERATING RATING: RF = 1.YZ
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF

MATERIAL PROPERTIES:
CONCRETE MASONRY
SUPERSTRUCTURE ..... f'c = 4,000 psi
ALL OTHER ..... f'c = 3,500 psi

BAR STEEL REINFORCEMENT,
HIGH STRENGTH, GRADE 60 ..... fy = 60,000 psi

36-INCH PRESTRESSED GIRDERS,
CONCRETE MASONRY ..... f'c = 8,000 psi
..... f'ci = 6,800 psi

0.5" DIA. PRESTRESSING STRANDS .... f's = 270,000 psi

HYDRAULIC DATA
100 YEAR FREQUENCY:
DRAINAGE AREA = 0.0 SQ. MI.
WATERWAY AREA = 000 SQFT
VELOCITY = 0.00 FPS
Q(100) = 000 CFS
HIGH WATER (100) EL. = 000.00
ROADWAY OVERTOPPING FREQUENCY = N/A
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY:
Q(2) = 000 CFS
HIGH WATER (2) EL. = 0000.00
VELOCITY = 0.00 FPS

FOUNDATION DATA:
ABUTMENTS TO BE SUPPORTED ON HP 10X42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS * PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC EQUATION. ESTIMATED 80 FEET LONG. PILE POINTS ARE REQUIRED.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA:
CTH E:
ADT = 3,164 (2023)
ADT = 3,495 (2043)
RDS = 60 MPH

LIST OF DRAWINGS

*** NOT INCLUDED IN PRELIMINARY PLAN

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE: AARON BONK (608) 261-0261
CONSULTANT: MIKE RADTKE (414) 347-1607

PRELIMINARY PLANS

NO.	DATE	REVISION	BY

emcs inc
1300 W. Canal Street, Suite 200
Milwaukee, WI 53233
414.347.1607 Fax 414.347.1347

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ _____
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-53-385

CTH E OVER MARSH CREEK

COUNTY	ROCK	TOWN	JANESVILLE
DESIGN SPEC.	AASHTO LRFD BRIDGE DESIGN SPEC.		
DESIGNED BY	MDR	DESIGN CK'D.	JRM
DRAWN BY	RJK	PLANS CK'D.	MDR

GENERAL PLAN & ELEVATION

SHEET 1 OF 20

8

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STATE PROJECT NUMBER
5334-00-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NAVD 88 DATUM (2012 ADJUSTMENT).

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

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

ALL REINFORCING BARS ARE ENGLISH DESIGNATION AND THE FIRST DIGIT OF A 3-DIGIT BAR MARK OR FIRST TWO DIGITS OF A 4-DIGIT BAR MARK SIGNIFY THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE $\frac{3}{4}$" UNLESS OTHERWISE NOTED.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES B-53-385".

AT THE BACKFACE OF THE ABUTMENTS, ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 20 AND IN THE ABUTMENT DETAILS.

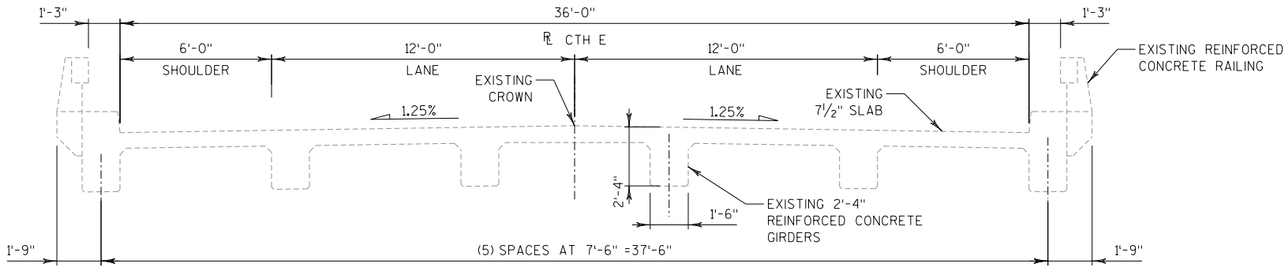
EXISTING BRIDGE B-53-10 IS A SIMPLE SPAN CAST-IN-PLACE GIRDER BRIDGE WITH AN OVERALL WIDTH OF 41'-0" AND AN OVERALL LENGTH OF 43'-0" AND IS TO BE REMOVED IN ITS ENTIRETY.

☆ APPLY PROTECTIVE SURFACE TREATMENT TO THE TOP OF BRIDGE DECK AND TO THE TOP AND SIDE OF THE APPROACH SLAB NOTCH.

APPLY PIGMENTED SURFACE SEALER TO THE TOP AND INSIDE FACES OF PARAPETS.

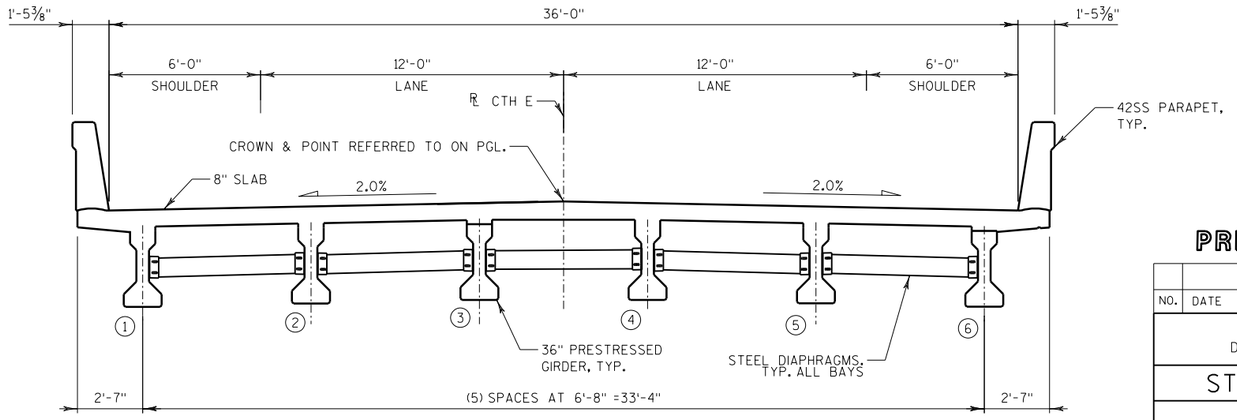
TOTAL ESTIMATED QUANTITIES

	BID ITEM NO.	BID ITEMS	UNIT	SOUTH ABUT.	NORTH ABUT.	SUPER	TOTAL
	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA 113+50	LS	-	-	-	1
	206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-53-385	LS	-	-	-	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	180	180	-	360
	502.0100	CONCRETE MASONRY BRIDGES	CY	46	46	114	206
☆	502.3200	PROTECTIVE SURFACE TREATMENT	SY	-	-	286	286
	502.3210	PIGMENTED SURFACE SEALER	SY	12	12	67	91
	503.0136	PRESTRESSED GIRDER TYPE I 36-INCH	LF	-	-	396	396
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	5175	5175	-	10350
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1725	1725	22800	26250
	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	6	6	-	12
	506.4000	STEEL DIAPHRAGMS B-53-385	EACH	-	-	5	5
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	14	14	-	28
	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	330	360	-	690
	606.0300	RIPRAP HEAVY	CY	100	100	-	200
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	80	80	-	160
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	2	-	4
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	60	60	-	120
	645.0120	GEOTEXTILE TYPE HR	SY	150	150	-	300
		NON-BID ITEMS					
		FILLER	SIZE			1/2", 3/4"	



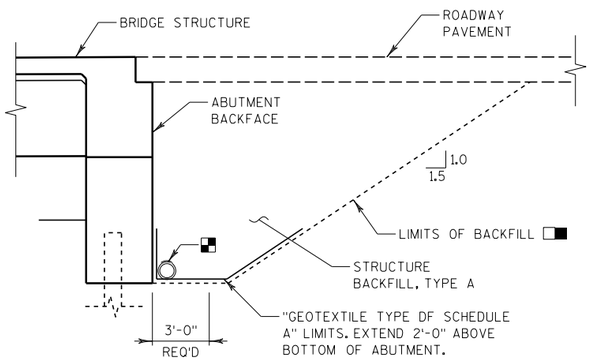
EXISTING CROSS SECTION

(LOOKING UPSTATION)



PROPOSED CROSS SECTION

(LOOKING UPSTATION)



TYPICAL SECTION THROUGH ABUTMENT

■ BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCLUDED IN BID ITEM "EXCAVATION FOR STRUCTURES BRIDGES B-53-385". LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

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PRELIMINARY PLANS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-385

DRAWN BY RJK | PLANS CK'D. MDR

CROSS SECTION AND QUANTITIES

SHEET 2 OF 20