DAAR ENGINEERING, INC.

PROJECT: _____

DESCRIPTION: USH 41 over Apple Creek
B-5-53 (NB) & B-5-80 (SB)

DATE: _____

SHEET ____ OF ____

CALC. BY: _____

CHECKED BY: _____

Existing structures are 40' x 132' steel Girders

Widen 20' in median = 20' x .02 = 0.4' B-5-80 SB

Widen 20' in median = 20' x .01 = 0.2' B-5-53 NB

Raise Profile on US41 SB by 0.4' to maintain clearance over high water elevation

Raise Profile on US41 NB by 0.2' to maintain clearance over high water elevation

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 NB		**Maintainer:** STATE HIGHWAY DEPT		**Structure No:** B-05-0053
Feature Under: APPLE CREEK		**Sect/Twn/Rng:** S27 T22N R19E		
Location: 3.4M N JCT CTH JJ		**County:** BROWN(05	**Municipality:** TOWN-WRIGHTSTOWN(05040)	
Inv Rating: HS21	**Rdwy Width (ft):** 40.0	**Deck Width (ft):** 43.0	**Existing Posting:**	
Oper Rating: HS35	**Total Length (ft):** 132.1	**Deck Area(ft2):** 5680	**ADT On:** 41600 **Yr:** 2006	**ADT Under:** **Yr:**

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-10-11					05-03-10	
Frequency	24					24	
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	**Measurement (in):** 2.0	**Date:** 05-05-98	**Deck Surface Type:** BITUMINOUS	
Section Loss	**File Meas. (%):**	**File Insp. Date:** 05-03-10	**Insp. Measurement (%):**	**Describe:**
Re-rate for load capacity?		**Reason:**		**Date Last Rated:** 12-24-03

Expansion Joints

Location	Type	Temp: File Insp. Date	File Insp. (in)	New Insp. (in)

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)			
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT STEEL	DECK GIRDER		63.5
CONT STEEL	DECK GIRDER		63.5

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1963	NEW STRUCTURE	C016	C016
1986	PAINTING		
1989	REPAIR SUBSTR		
1992	REPAIR SUBSTR		
1992	REPAIR DECK	PLAN	
1994	PAINT RAILING		
1997	BITUMINOUS OV	PLAN	
2003	BITUMINOUS OV	PLAN	

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment		
Other		

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	**Team Member(s) Name(s) Printed:**	
Team Leader Signature:	**Inspection Date:** 10-10-11	**Inspection Agency:** STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	**District/Local Manager Signature:**	**Review Date:**

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	13 / 4	Conc Deck/AC Ovl	SF	5680		5680			
X	107 / 2	Paint Stl Opn Girder	LF	770		420	350		
	Reverse camber in girders.								
X	172 / 4	Painted Steel Diaphr	EA	30		26	4		
X	205 / 3	R/Conc Column	EA	2	2				
X	215 / 3	R/Conc Abutment	LF	85	85				
X	234 / 4	R/Conc Cap	LF	39	39				
X	313 / 4	Fixed Bearing	EA	6	6				
X	322 / 4	Bituminous Approach	EA	2	2				
X	333 / 4	Combin Bridge Railing	LF	291		216	75		
X	342 / 2	RipRap Slope Protect	EA	2	1	1			
	North slope protection settled slightly.								
X	359 / 4	Und Dk Surf Sm Flag	EA	1		1			
	Wet areas starting to show								
X	400 / 3	Concrete Wingwall	EA	4	3	1			
	Crack @ top of SE wingwall @ railing connection.								
X	405 / 2	Drainage	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Deck - Patching
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment: w/asphalt (2 - 10'X12' areas in Rt lane, 1 - 4'X4' area in Lt lane)

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	5	5	Culvert	N	N
Superstructure	6	6	Channel	8	8
Substructure	7	7	Waterway	9	9

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-053
USH 41 NB over APPLE CREEK

LOCATION

(3) Municipality:	TOWN-WRIGHTSTOWN(05040)
(16) Latitiude(° ' "):	44°21'18.46"N
(17) Longitude(° ' "):	88°11'16.41"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	0
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	X-NO TRAFFIC -ONE WAY TRAFFIC -TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	132.1
(50) Sidewalk Width(ft):	Left: 0.0 / Right: 0.0
(50) Curb Width(ft):	
(52) Culvert Barrel Length(ft):	
(34) Skew:	Angle(°): 0 / Direction: -RIGHT FORWARD -LEFT FORWARD

(51) Bridge Roadway(ft):	Cardinal Width	Non-Cardinal Width
(52) Deck(ft):	40.0	40.0
(32) Approach Roadway(ft):	43.0	43.0
	40	0

(47) Minimum Horizontal(ft):	Cardinal Under Clearance	Non-Cardinal Under Clearance
(55) Minimum Right Lateral(ft):		
(55) Minimum Left Lateral(ft):		

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE

Outer Rail:

Left	Right	Type
		TYPE F (TWO SQUARE TUBES) - STEEL(8)
		TYPE F (3 SQUARE TUBES) - STEEL(65)
		TYPE F (4 SQUARE TUBES) - STEEL(72)
		TYPE M-STEEL 3 SQUARE TUBES(93)
		SLOPED FACE PARAPET LF(91)
		SLOPED FACE PARAPET HF(92)
		VERTICAL FACE PARAPET TYPE A(74)
		TYPE W-THRIE BEAM(79)
		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
X	X	OTHER(99) (Please specify) **Left:** TYPE A ROADWAY - STEEL(1) **Right:** TYPE A ROADWAY - STEEL(1)

Transition Type:

	CONT GUARD RAIL
	NO APP GRDRL
	NO ATTACHMENT
4	22 MM(7/8") BOLT (Please enter quantity)
	25 MM(1") BOLT (Please enter quantity)
	OTHER (Please specify)

Guardrail Termination Type:

X	(01) ENERGY ABSORBING TERMINAL/EAT
	(02) TURN DOWN
	(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:

	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 SB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-0080
Feature Under: APPLE CREEK		Sect/Twn/Rng: S27 T22N R19E		
Location: 2.4M S JCT CTH S		County: BROWN(05	Municipality: TOWN-WRIGHTSTOWN(05040)	
Inv Rating: HS18	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS31	Total Length (ft): 125.8	Deck Area(ft2): 5409	ADT On: 41600 Yr: 2006	ADT Under: Yr:

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-10-11					05-03-10	
Frequency	24					24	
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 05-03-10	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 02-07-03

Expansion Joints

Location	Type	Temp: File Insp. Date	File Insp. (in)	New Insp. (in)

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)			
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT STEEL	DECK GIRDER		62.0
CONT STEEL	DECK GIRDER		62.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1987	NEW STRUCTURE	C272	C272
2003	BITUMINOUS OV	PLAN	

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment		
Other		

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-10-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	13 / 4	Conc Deck/AC Ovl	SF	5409		5409			
	Impending pothole at north abutment in outside lane								
X	106 / 2	Unpnt Stl Opn Girder	LF	510		510			
	CorTen								
X	107 / 2	Paint Stl Opn Girder	LF	100		100			
X	171 / 4	Unpainted Steel Diap	EA	20		20			
X	205 / 3	R/Conc Column	EA	2	2				
X	215 / 3	R/Conc Abutment	LF	85	80	5			
X	234 / 4	R/Conc Cap	LF	39	39				
X	313 / 4	Fixed Bearing	EA	5	5				
X	322 / 4	Bituminous Approach	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	291	241	50			
X	342 / 2	RipRap Slope Protect	EA	2	2				
X	359 / 4	Und Dk Surf Sm Flag	EA	1		1			
X	400 / 3	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Deck - Patching
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment: w/asphalt (2 - 5'X12' areas in Rt lane)

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	6	6	Culvert	N	N
Superstructure	6	6	Channel	8	8
Substructure	7	7	Waterway	9	8

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-080
USH 41 SB over APPLE CREEK

LOCATION

(3) Municipality:	TOWN-WRIGHTSTOWN(05040)
(16) Latitiude(° ' "):	44°21'18.00"N
(17) Longitude(° ' "):	88°11'18.00"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	0
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	X-NO TRAFFIC -ONE WAY TRAFFIC -TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	125.8	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	40
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):		
(55) Minimum Right Lateral(ft):		
(55) Minimum Left Lateral(ft):		

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
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(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
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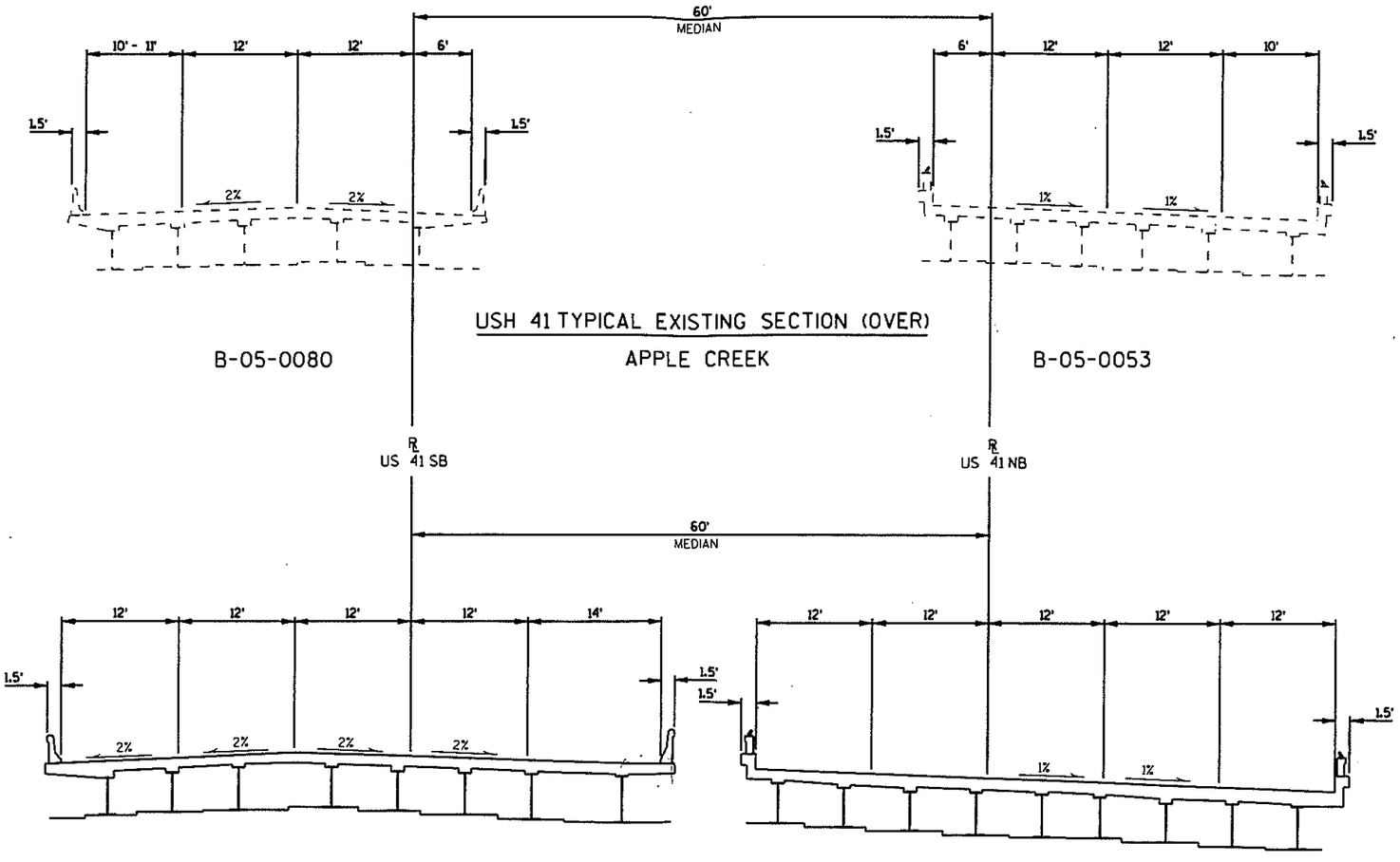
Outer Rail:	Left	Right	Type
			TYPE F (TWO SQUARE TUBES) - STEEL(8)
			TYPE F (3 SQUARE TUBES) - STEEL(65)
			TYPE F (4 SQUARE TUBES) - STEEL(72)
			TYPE M-STEEL 3 SQUARE TUBES(93)
			SLOPED FACE PARAPET LF(91)
			SLOPED FACE PARAPET HF(92)
			VERTICAL FACE PARAPET TYPE A(74)
			TYPE W-THRIE BEAM(79)
			TYPE H ON VERTICAL PARAPET(80)
			TIMBER(38)
	X	X	OTHER(99) (Please specify) **Left:** NJ SLOPING PARAPET(61) **Right:** NJ SLOPING PARAPET(61)
Transition Type:			CONT GUARD RAIL
			NO APP GRDRL
			NO ATTACHMENT
	5		22 MM(7/8") BOLT (Please enter quantity)
			25 MM(1") BOLT (Please enter quantity)
			OTHER (Please specify)
Guardrail Termination Type:	X		(01) ENERGY ABSORBING TERMINAL/EAT
			(02) TURN DOWN
			(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

2



USH 41 TYPICAL EXISTING SECTION (OVER)

B-05-0080 APPLE CREEK B-05-0053

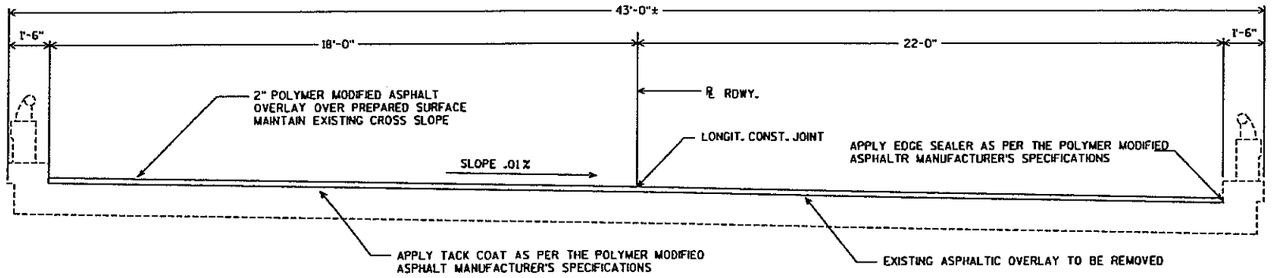
DESIRABLE PROPOSED SECTION (OVER)

B-05-0080 APPLE CREEK B-05-0053

(NEW BRIDGES)

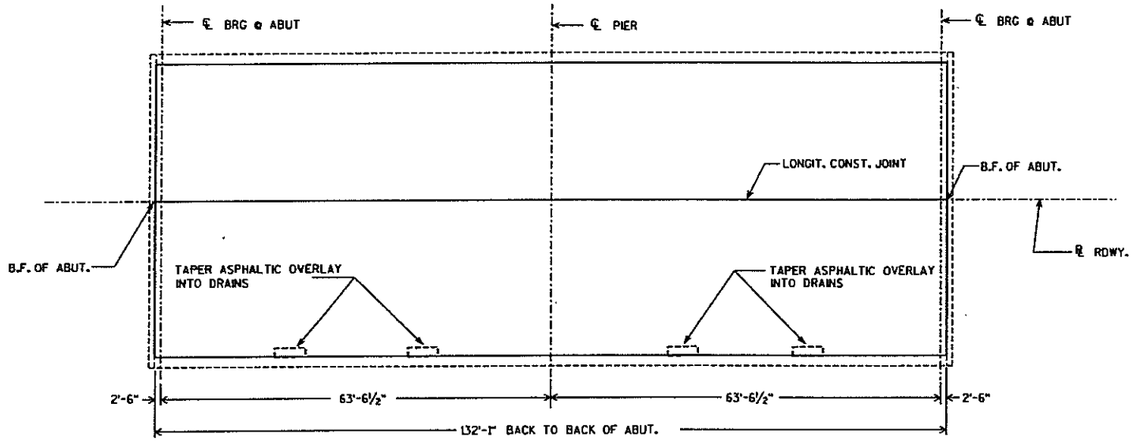
PROJECT NO: 1130-31-00	HWY: US 41	COUNTY: WINNEBAGO/ OUTAGAMIE	TYPICAL SECTIONS	SHEET 20	E

STATE PROJECT NUMBER	SHEET NO.
1133-08-71	70



CROSS SECT. THRU RDWY.

LOOKING NORTH



PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND INSPECTION REPORTS.

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOP OF EXISTING DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR ESTABLISHING OVERLAY THICKNESS FOR ACCURATE RATINGS AND POINT OF MINIMUM THICKNESS.

ANY EXCAVATION REQ'D. TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT ABUTS. IS INCIDENTAL TO THE BID ITEM, "POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT".

PREPARATION OF THE DECKS HALL BE AS PER POLYMER MODIFIED ASPHALT MANUFACTURER'S SPECIFICATIONS.

DESIGN DATA

LIVE LOAD:

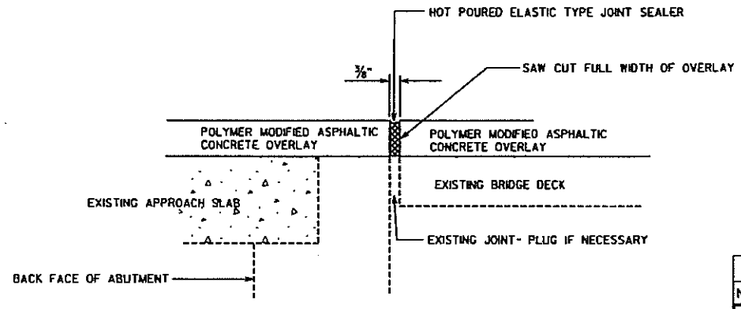
INVENTORY RATING; HS-
OPERATIONAL RATING; HS - ___
MAXIMUM STANDARD PERMIT VEHICLE LOAD = ___ Kips

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE f'c = 4,000 P.S.I.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	TOTAL
REMOVING ASPHALTIC SURFACE	S.Y.	587
POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT	TON	65
PREPARATION DECKS TYPE 1	S.Y.	12
PREPARATION DECKS TYPE 2	S.Y.	12
SAWING PAVEMENT DECK PREPARATION AREA	L.F.	30
CONCRETE MASONRY DECK PATCHING	C.Y.	2

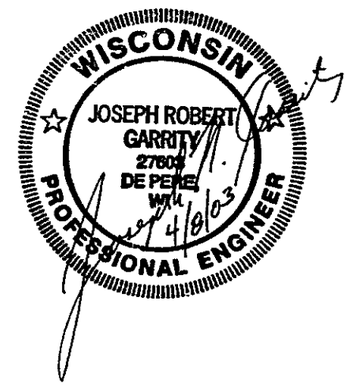


JOINT DETAILS AT BACKFACE OF ABUTMENTS

NOTE: JOINT SEALER AND SAW CUT CONSIDERED PART OF PRICE BID FOR POLYMER MODIFIED ASPHALT.

LIST OF DRAWINGS

1. GENERAL PLAN



BRIDGE OFFICE CONTACT:
GERRY ANDERSON (608) 266-8488

SEH INC CONTACT:
CHRIS BLUM, P.E.
(608) 274-2020
6418 NORMANDY LANE, #100, MADISON, WI 53719

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-53

USH 41 OVER APPLE CREEK

COUNTY: BROWN		TOWN: WRIGHTSTOWN	
DESIGN SPEC.: AASHTO 2000		LOAD: HS20	CONST. SPEC.WIS 1996
DESIGNED BY CJB	DESIGN CK'D. RG	DRAWN BY NJA	PLANS CK'D. CJB

APPROVED Gerald Anderson KAB 4/16/03
CHIEF BRIDGE DESIGN ENGINEER — DATE

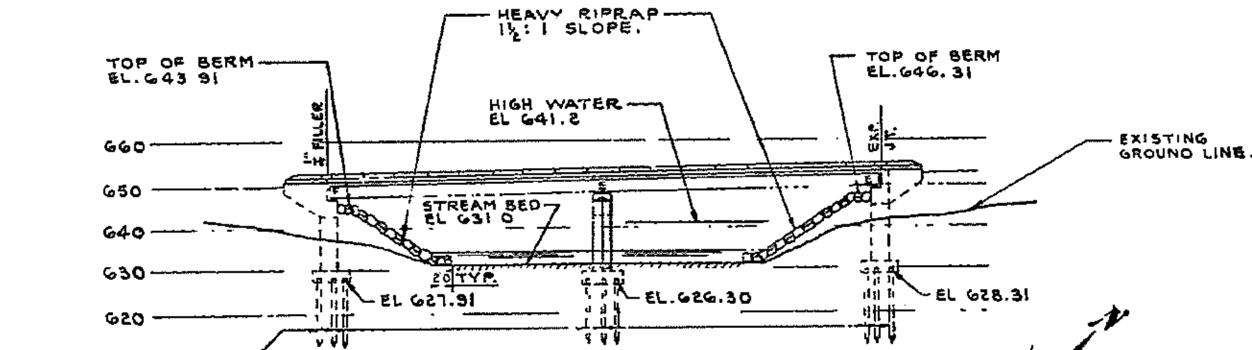
GENERAL PLAN

SHEET 1 OF 1

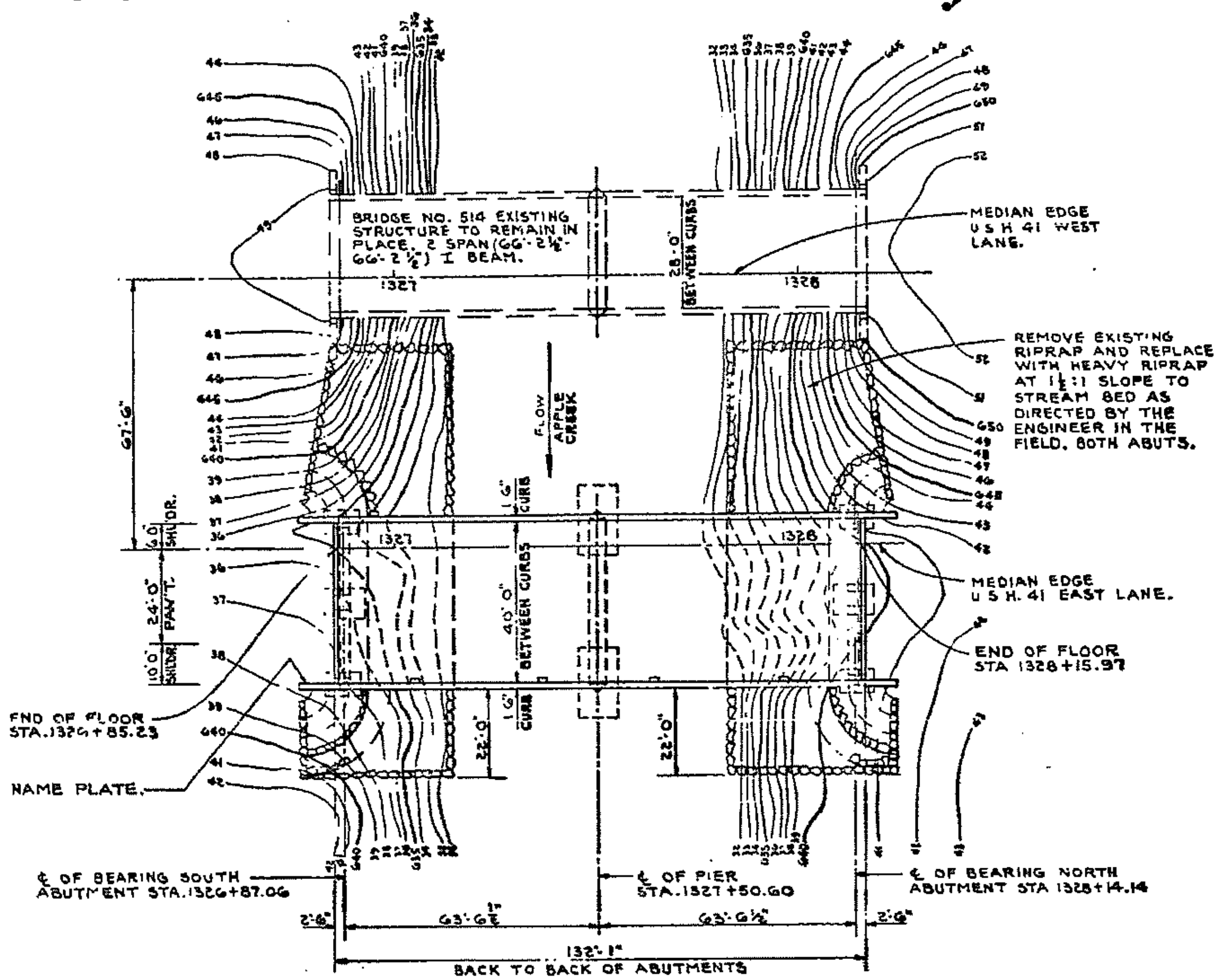
PLANS RECEIVED

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44.

FILE NAME : E:\TRANS\WIDOT\0023.00-01(41)\STRUCT\B553G1.DGN PLOT DATE: 04/08/2003 PLOT TIME12:24:15 PM



ELEVATION

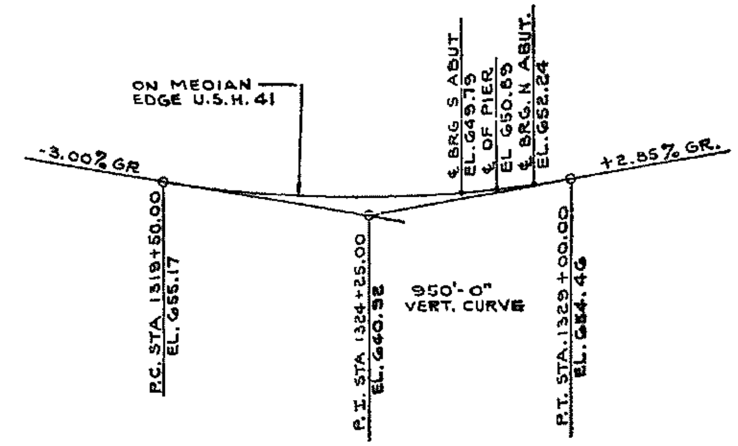


PLAN

NEW STRUCTURE: 2 SPAN (63'-6½", 63'-6½")
I BEAM ON R.C SPILL THRU ABUTMENTS AND R.C COLUMN PIER.

BENCH MARK

NO	STATION	DESCRIPTION	ELEVATION
315	1323+50.00	SPIKE IN 18" ASH 360' RT	640.64



GRADE LINE ON MEDIAN EDGE
U.S.H. 41 EAST LANE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL CONCRETE MASONRY SHALL BE GRADE "AA" (f_c=1,400 p.s.i.)

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SHOWN OR NOTED.

IMBED ALL BAR STEEL REINFORCEMENT 2" UNLESS OTHERWISE SHOWN.

THE PILING AT THE ABUTMENTS SHALL BE UNTREATED TIMBER PILING ESTIMATED 20'-0" LONG AND DRIVEN TO A MAXIMUM BEARING VALUE OF 24 TONS PER PILE.

THE PILING AT THE PIER SHALL BE UNTREATED TIMBER PILING ESTIMATED 20'-0" LONG AND DRIVEN TO A MAXIMUM BEARING VALUE OF 24 TONS PER PILE.

THE TOP AND SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN IN PLAN AND ELEVATION ON THIS SHEET AND IN SECTION "A3" ON SHEET X26359 AND SECTION "C3" ON SH.X26361.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW ABUTMENTS SHALL BE BACKFILLED WITH GRANULAR BACKFILL. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS SPECIFIED FOR "EXCAVATION FOR STRUCTURES".

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" AND "GRANULAR BACKFILL" FOR BOTH ABUTMENTS SHALL BE THE EXISTING GROUND LINE.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE PIER SHALL BE THE EXISTING STREAM BED.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATION.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER-STRUCTURE	SOUTH ABUTMENT	PIER	NORTH ABUT-MENT	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	—	130	90	160	380
GRANULAR BACKFILL	C.Y.	—	130	—	160	290
CONCRETE MASONRY	C.Y.	156.3	70.5	92.4	72.9	392.1
BAR STEEL REINFORCEMENT	Lbs	50,750	5,450	10,340	5,670	72,210
STRUCTURAL CARBON STEEL	Lbs	16,780	—	—	—	16,780
STRUCTURAL LOW-ALLOY STEEL	Lbs	93,820	—	—	—	93,820
LUBRICATED BRONZE PLATES	Lbs	154	—	—	—	154
BEARING PADS	S.F.	21	—	—	—	21
* UNTREATED TIMBER TEST PILING	LUMP SUM	—	—	—	—	1
UNTREATED TIMBER PILING, DEL.	L.F.	—	460	720	460	1,640
UNTREATED TIMBER PILING, DRIVEN	L.F.	—	460	720	460	1,640
FLOOR DRAINS (TYPE "A")	EACH	4	—	—	—	4
STEEL RAILING, TYPE "A"	L.F.	295	—	—	—	295
HEAVY RIPRAP	C.Y.	—	230	—	270	500
NON BID ITEMS						
⅛" AL OR ZN PLATES	S.F.	16	—	—	—	16
FILLER	SIZE	¼"	—	—	—	¼"

* DRIVE ONE UNTREATED TIMBER TEST PILE 25'-0" LONG AT LOCATION OF EACH ABUTMENT.

LIST OF DRAWINGS

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

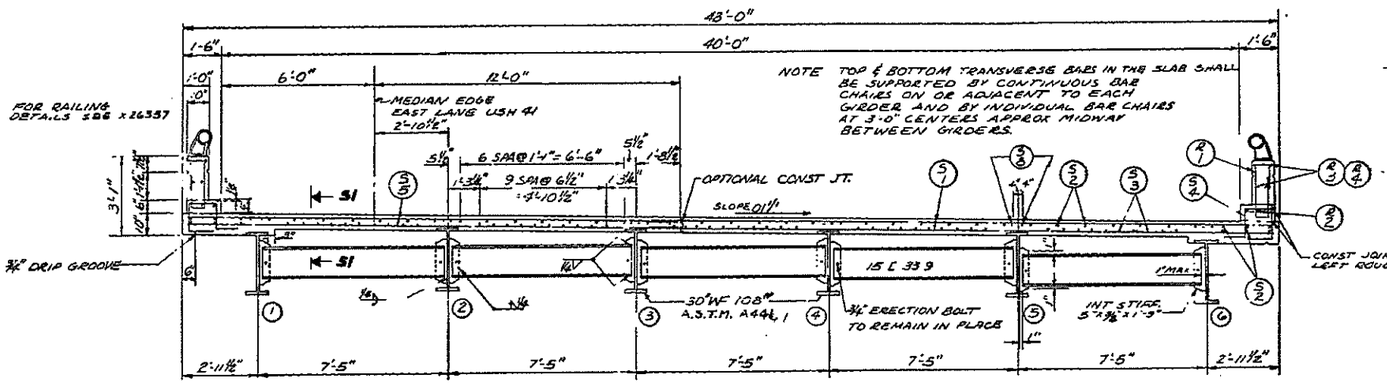
CO. BROWN TWN. WRIGHTSTOWN STA. 1327+50.60
SECTION 27 TOWN 22 N RANGE 19 E
DESIGN SPEC A.A.S.H.O. 1961 LOADING H20-S16 CONST. SPEC. 1963
DATE 11-21-'62 DESIGN J. B. DRAWN W.K. CKD W.G.
RECOMMENDED H.B. Schultz BRIDGE ENGINEER
APPROVED E.C. Roellig STATE HIGHWAY ENGINEER

STRUCTURE B-5-53 SHEET 1 OF 9

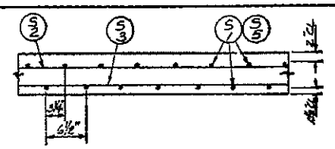
X 26353

FORM E-B-12-62

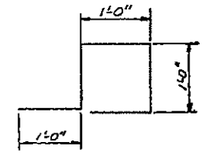
B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
	F03-2(70)	6	13



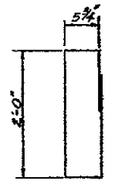
CROSS SECTION THRU RDWY



SECTION S1

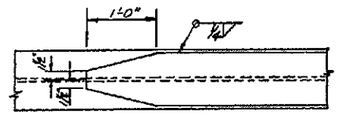


DETAIL A



DETAIL B

DETAIL C

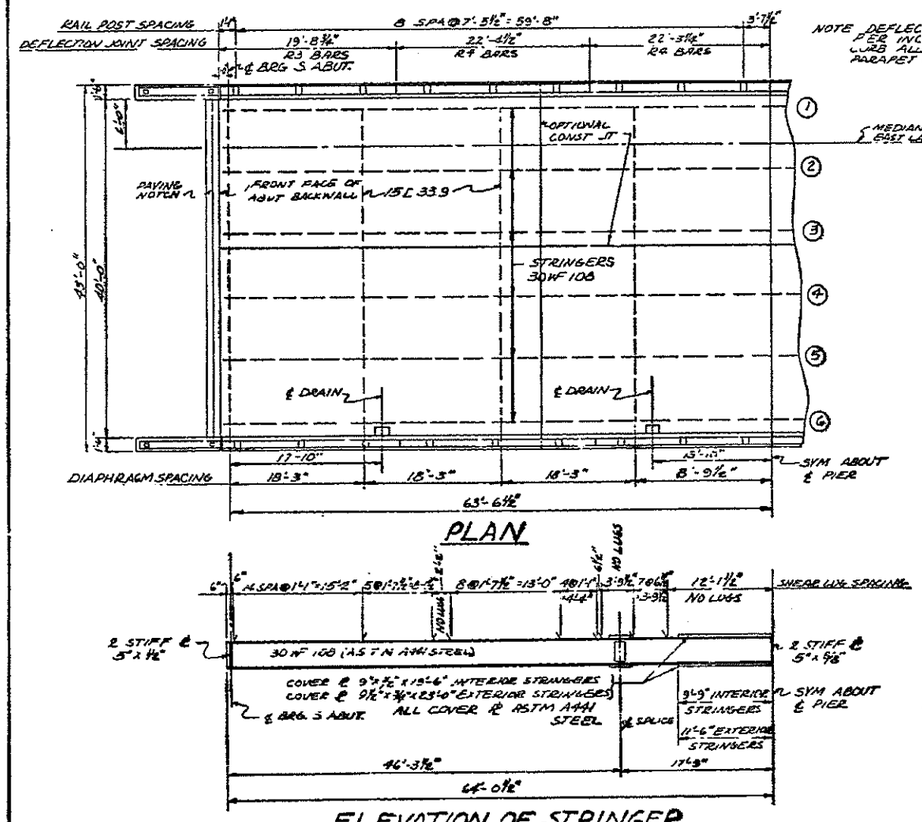


COVER PLATE DETAIL

BILL OF BARS 50,750#

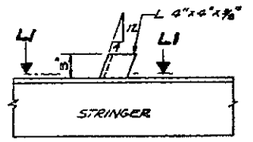
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET
	S1	475	6	25'-0	6½	SLAB-TRANS - TOP & BOT	
	S2	188	5	38-0	1-1	" LONG. - TOP (CANT TOP) & BOT	
	S3	200	5	38-0	6½	" " - BOTT	
	S4	344	5	4-9	9	SLAB & CURB - TRANS	A
	S5	475	6	18-3	6½	" TRANS - TOP & BOTT	
	S6	60	5	2-6	1-6	DIAPHRAM AT ABUTS.	C
	S7	10	4	7-0	SHOWN	" " "	
	S8	12	5	15-0	8"	SLAB AT STRINGERS - SKEW AT PIER	
	R1	344	5	6-0	9	PARAPET & CURB - TRANS	B
	R2	16	5	82-9	SHOWN	CURB - LONG.	
	R3	16	5	19-3	"	PARAPET - LONG.	
	R4	32	5	22-0	"	" "	

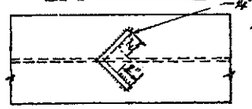


PLAN

ELEVATION OF STRINGER



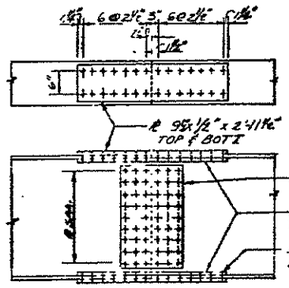
ELEVATION



NOTE ALL SHEAR LUGS TO BE OF A.S.T.M. A 36 STEEL

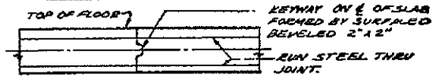
SECTION L1

SHEAR LUG DETAIL



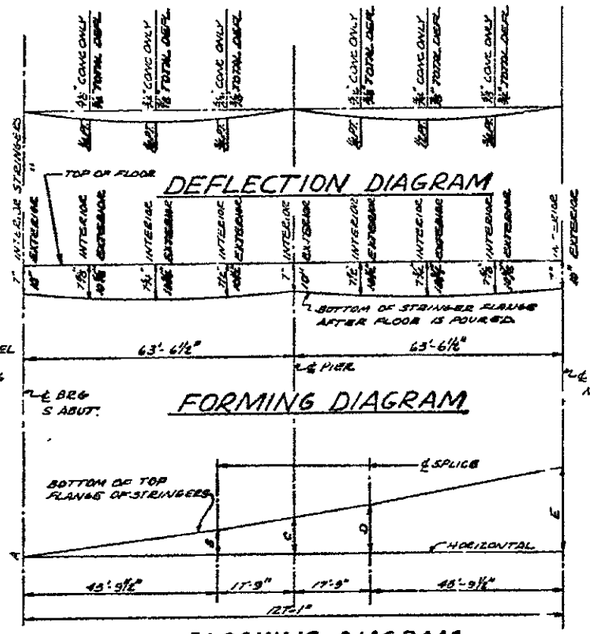
NOTE: ALL SPLICE ℄ SHALL BE MADE OF STEEL CONFORMING TO ASTM SPECIFICATIONS TYPE A36

SPLICE DETAIL



NOTE: OPTIONAL CONST. JOINTS MAY BE OMITTED SUBJECT TO APPROVAL OF THE ENGINEER.

OPT. LONGITUDINAL AND TRANSVERSE FLOOR JOINT



DEFLECTION DIAGRAM

FORMING DIAGRAM

BLOCKING DIAGRAM

DIMENSION	A	B	C	D	E
ALL STRINGERS	0	0'-9½	1'-1¾	1'-3½	2'-5½

STATE HIGHWAY COMMISSION OF WISCONSIN

SUPERSTRUCTURE

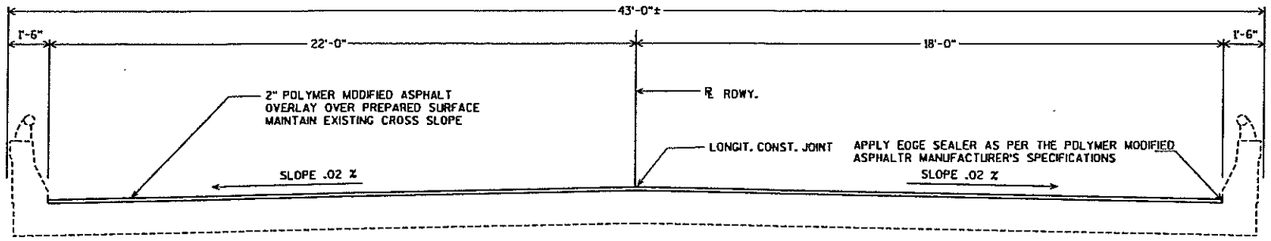
DESIGN SPEC. AASHO '61 | LOADING H20-S16 | CONST. TYPE 1963

DATE 11 21 62 DESIGN J.B. | DRAWN R.L.P. | CKD W.G.

STRUCTURE B-5-53 | SHEET 2 OF 9

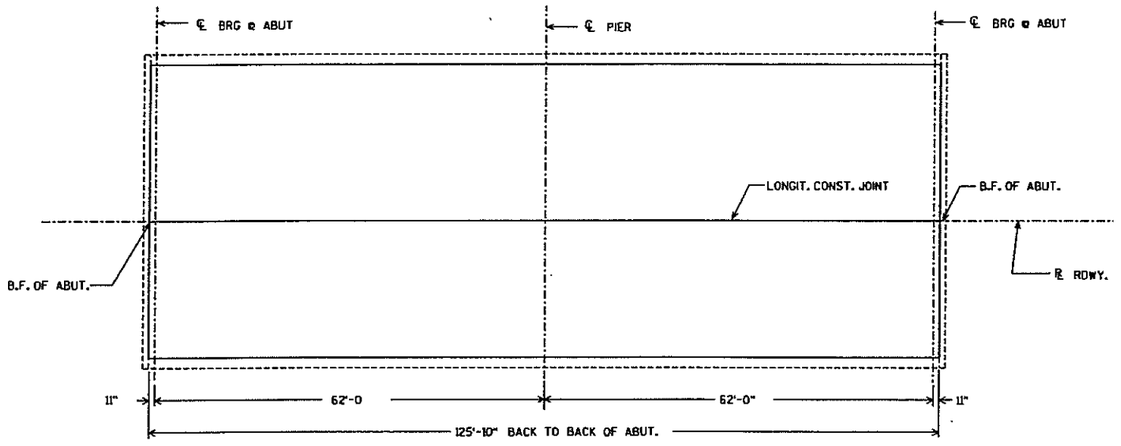
X 26354

STATE PROJECT NUMBER	SHEET NO.
1133-08-71	71



CROSS SECT. THRU RDWY.

LOOKING NORTH



PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND INSPECTION REPORTS.

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOP OF EXISTING DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR ESTABLISHING OVERLAY THICKNESS FOR ACCURATE RATINGS AND POINT OF MINIMUM THICKNESS.

ANY EXCAVATION REQ'D. TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT ABUTS. IS INCIDENTAL TO THE BID ITEM, "POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT".

PREPARATION OF THE DECKS HALL BE AS PER POLYMER MODIFIED ASPHALT MANUFACTURER'S SPECIFICATIONS.

DESIGN DATA

LIVE LOAD:

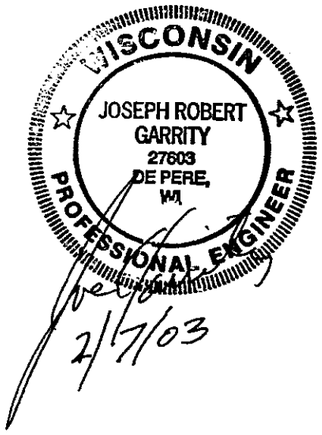
INVENTORY RATING; HS-
OPERATIONAL RATING; HS - ---
MAXIMUM STANDARD PERMIT VEHICLE LOAD = --- Kips

ULTIMATE DESIGN STRESSES:

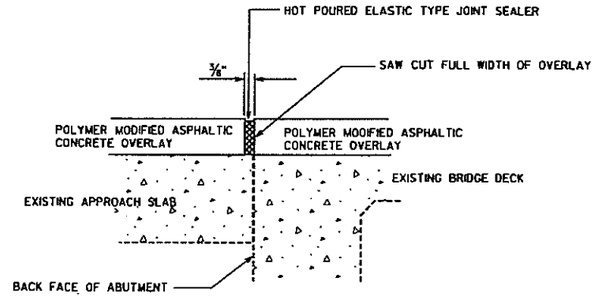
CONCRETE MASONRY SUPERSTRUCTURE f'c = 4,000 P.S.I.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	TOTAL
POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT	TON	62
PREPARATION DECKS TYPE 1	S.Y.	13
PREPARATION DECKS TYPE 2	S.Y.	13
SAWING PAVEMENT DECK PREPARATION AREA	L.F.	30
CONCRETE MASONRY DECK PATCHING	C.Y.	2



2/7/03



JOINT DETAILS AT BACKFACE OF ABUTMENTS

NOTE: JOINT SEALER AND SAW CUT CONSIDERED PART OF PRICE BID FOR POLYMER MODIFIED ASPHALT.

LIST OF DRAWINGS

1 GENERAL PLAN

BRIDGE OFFICE CONTACT:
GERRY ANDERSON (608) 266-8488

SEH INC CONTACT:
CHRIS BLUM, P.E.
(608) 274-2020
6418 NORMANDY LANE, #100, MADISON, WI 53719

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-80

USH 41 OVER APPLE CREEK

COUNTY	TOWN	
BROWN	WRIGHTSTOWN	
DESIGN SPEC. AASHTO 2000	LOAD HS20	CONST. SPEC. WIS 1996
DESIGNED BY CJB / DESIGN CK'D. RG	DRAWN BY NJA	PLANS CK'D. CJB

APPROVED YH Anderson 04-07-03
CHIEF BRIDGE DESIGN ENGINEER DATE

GENERAL PLAN

SHEET 1 OF 1

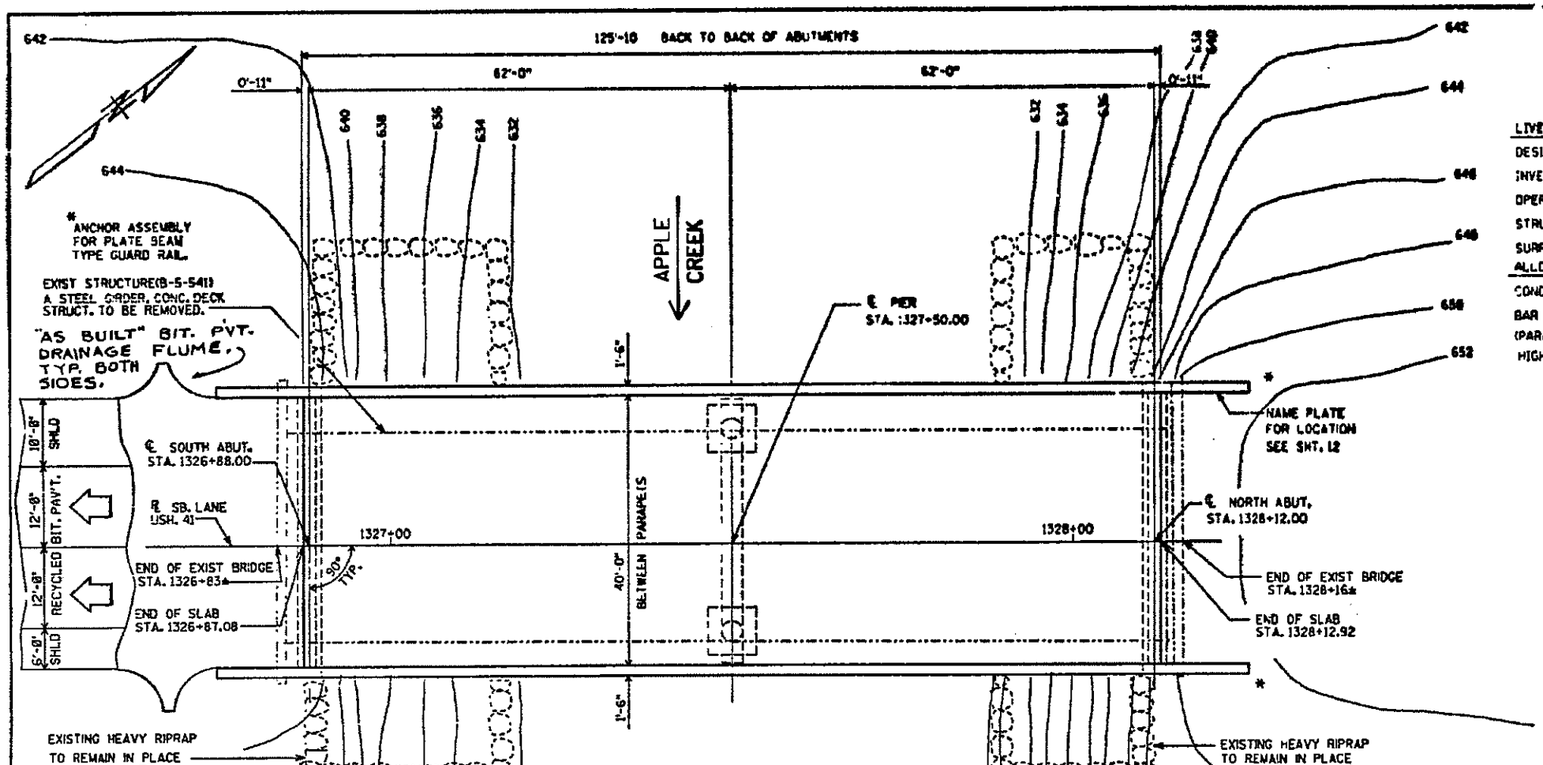
PLANS RECEIVED

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,

FILE NAME : E:\TRANS\WIDOT\0023.00-01(41)\STRUCT\B580G1.DGN PLOT DATE: 02/07/2003 PLOT TIME08:18:14 AM

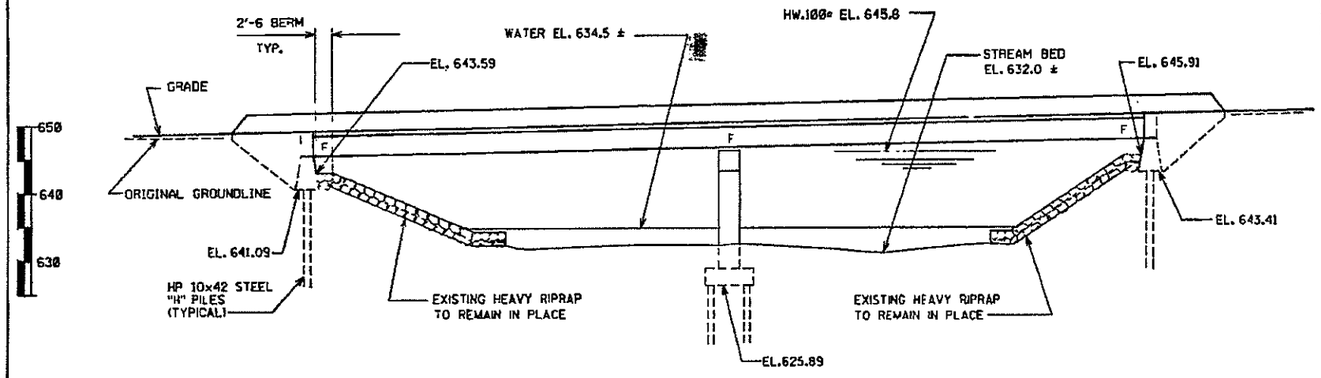
TYPE CODE = X078

STATE PROJECT NUMBER	SHEET NO.
1131-6-71	8.0



PLAN B-5-80

2 SPAN - STEEL GIRDERS



ELEVATION

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HS 20

INVENTORY RATING: HS 20

OPERATIONAL RATING: HS 43

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ALLOWABLE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'_c = 4,000 P.S.I. ALL OTHER — f'_c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — f_y = 60,000 P.S.I.

(PARAPET AND TOP LAYER SLAB STEEL SHALL BE EPOXY COATED.)

HIGH STRENGTH STRUCTURAL STEEL (A.S.T.M. A588, UNPAINTED) TO AND INCLUDING 4" THICK — f_s = 27,000 P.S.I.

FOUNDATION DATA

SUBSTRUCTURES TO BE SUPPORTED ON HP 10x42 STEEL "H" PILING
EST. LENGTH @ S. ABUT.= 65'-0, EST. LENGTH @ N. ABUT.= 70'-0,
DRIVEN TO A MIN. BRG. VALUE OF 50 TONS / PILE @ ABUTS.
EST. LENGTH @ PIER = 50'-0,
DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE @ PIER.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q / 100=5,000 c.f.s.

VEL.= 4.4 f.p.s.

HW.= EL. 645.8

WATERWAY AREA= 1150 SQ. FT.

DRAINAGE AREA= 47 SQ. MI.

OVERTOPPING RD = NA

TRAFFIC VOLUME

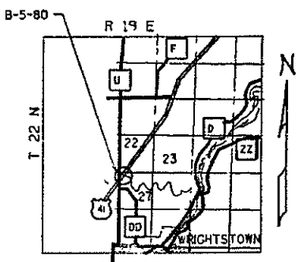
USH. 41

A.D.T.=20,000 (1988)

R.D.S.=55 M.P.H.

LIST OF DRAWINGS

AS BUILT PLAN
DATE 7-'88 BY W.K.



LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-80

USH. 41 (SB. LANE) OVER APPLE CREEK

COUNTY	BROWN	TOWN/~~CITY/VILLAGE~~	WRIGHTSTOWN
DESIGN SPEC.	AASHTO 1985	LOAD	HS20
CONST. SPEC.	1981		
DESIGNED BY	WV	DESIGN CK'D.	BA
DRAWN BY	JHG	PLANS CK'D.	FWG

APPROVED Stanley J. Woods — STATE BRIDGE ENGINEER — DATE 8-18-86

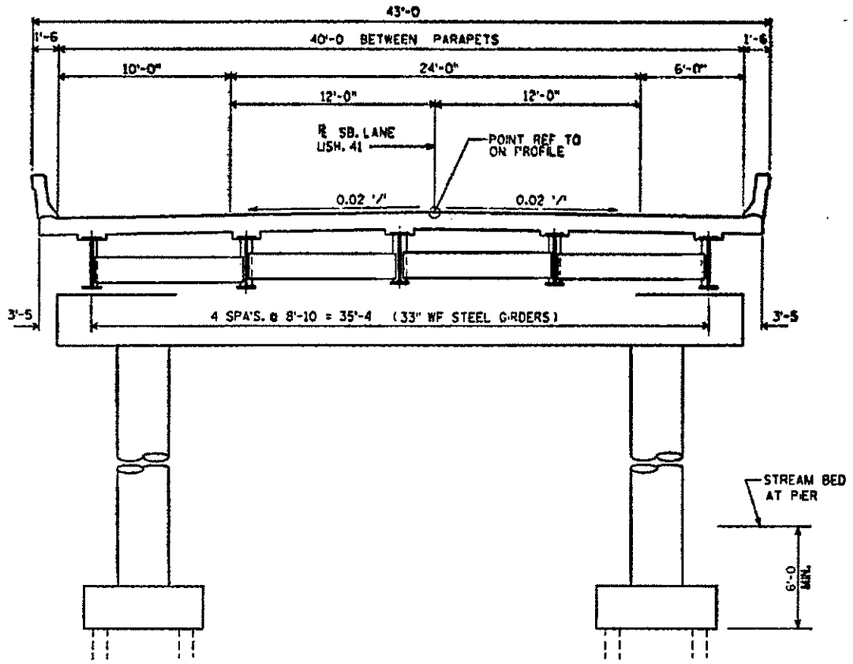
GENERAL PLAN

SHEET 1 OF 12

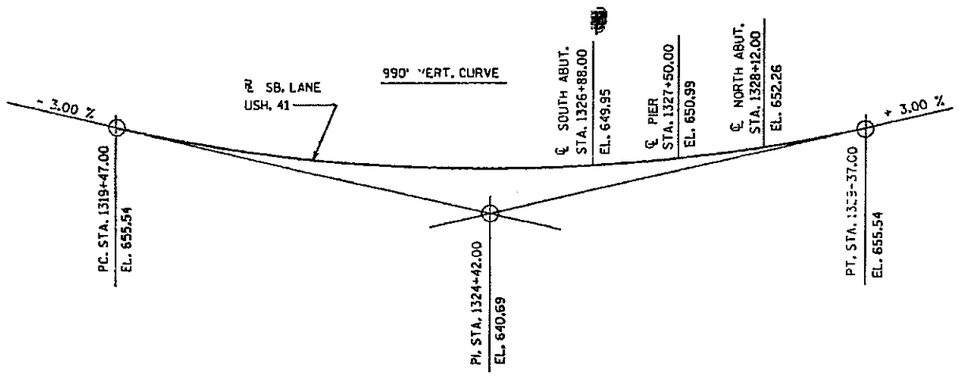
X 79253

JD 1131-06-00

STATE PROJECT NUMBER	SHEET NO.
1131-6-71	8.1



CROSS SECTION THRU ROADWAY LOOKING NORTH



PROFILE GRADE LINE, SB. LANE USH. 41

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER FRICTION TYPE HIGH-TENSILE STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

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

ALL STRUCTURAL STEEL TO BE A588 UNPAINTED UNLESS SHOWN OR NOTED OTHERWISE.

THE STREAMBED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	S.ABUT.	PIER	N.ABUT.	SUPER.	TOTAL
REMOVING OLD BRIDGE, STATION 1327+50±	L.S.	———	———	———	———	1
EXCAVATION FOR STRUCTURES, B-5-80	L.S.	———	———	———	———	1
GRANULAR BACKFILL	C.Y.	———	———	———	———	120
CONCRETE MASONRY, BRIDGES	C.Y.	34	46	34	164	278
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LBS.	2,370	6,000	2,370	19,190	29,930
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT	LBS.	260	———	260	21,020	21,340
HIGH STRENGTH STRUCTURAL STEEL	LBS.	———	———	———	101,690	101,690
ANCHOR ASSEMBLY FOR BEAM GUARD	EA.	———	———	2	———	2
BEARING PADS, ELASTOMERIC	S.F.	———	———	———	7	7
STEEL PILING, DELIVERED & DRIVEN, HP 10 INCH 42 POUND	L.F.	455	600	490	———	1545
BEARING PADS	S.F.	———	———	———	7	7
PROTECTIVE SURFACE TREATMENT	GAL	———	———	———	40	40
NON BID ITEMS						
FILLER	SIZE	¾"	———	¾"	———	¾"
ALUMINUM OR ZINC PLATE	S.F.	———	———	———	22	22
POLYVINYL CHLORIDE WATERSTOP	L.F.	47	———	47	———	94

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-80

CONST. SPEC. 1981	DRAWN BY JHG	PLANS CKD. FWG

CROSS SECTION & QUANTITIES

SHEET 2 OF 12

X79254

DAAR ENGINEERING, INC.

PROJECT: _____

DESCRIPTION: USH 41 over Apple Creek
B-5-53 (NB) & B-5-80 (SB)

DATE: _____

SHEET ____ OF ____

CALC. BY: _____

CHECKED BY: _____

Existing structures are 40'x132' steel Girders

Widen 20' in Median = 20' x .02 = 0.4' B-5-80 SB

Widen 20' in median = 20' x .01 = 0.2' B-5-53 NB

Raise Profile on US41 SB by 0.4' to maintain clearance over high water elevation

Raise Profile on US41 NB by 0.2' to maintain clearance over high water elevation

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 NB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-0053
Feature Under: APPLE CREEK		Sect/Twn/Rng: S27 T22N R19E		
Location: 3.4M N JCT CTH JJ		County: BROWN (05	Municipality: TOWN-WRIGHTSTOWN (05040)	
Inv Rating: HS21	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS35	Total Length (ft): 132.1	Deck Area(ft2): 5680	ADT On: 41600 Yr: 2006	ADT Under: Yr:

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-10-11					05-03-10	
Frequency	24					24	
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 2.0	Date: 05-05-98	Deck Surface Type: BITUMINOUS	
Section Loss	File Meas. (%):	File Insp. Date: 05-03-10	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 12-24-03

Expansion Joints

Location	Type	Temp: File Insp. Date	File Insp. (in)	New Insp. (in)

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)			
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT STEEL	DECK GIRDER		63.5
CONT STEEL	DECK GIRDER		63.5

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1963	NEW STRUCTURE	C016	C016
1986	PAINTING		
1989	REPAIR SUBSTR		
1992	REPAIR SUBSTR		
1992	REPAIR DECK	PLAN	
1994	PAINT RAILING		
1997	BITUMINOUS OV	PLAN	
2003	BITUMINOUS OV	PLAN	

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment		
Other		

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-10-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	13 / 4	Conc Deck/AC Ovl	SF	5680		5680			
X	107 / 2	Paint Stl Opn Girder	LF	770		420	350		
	Reverse camber in girders.								
X	172 / 4	Painted Steel Diaphr	EA	30		26	4		
X	205 / 3	R/Conc Column	EA	2	2				
X	215 / 3	R/Conc Abutment	LF	85	85				
X	234 / 4	R/Conc Cap	LF	39	39				
X	313 / 4	Fixed Bearing	EA	6	6				
X	322 / 4	Bituminous Approach	EA	2	2				
X	333 / 4	Combin Bridge Railing	LF	291		216	75		
X	342 / 2	RipRap Slope Protect	EA	2	1	1			
	North slope protection settled slightly.								
X	359 / 4	Und Dk Surf Sm Flag	EA	1		1			
	Wet areas starting to show								
X	400 / 3	Concrete Wingwall	EA	4	3	1			
	Crack @ top of SE wingwall @ railing connection.								
X	405 / 2	Drainage	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Deck - Patching
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment: w/asphalt (2 - 10'X12' areas in Rt lane, 1 - 4'X4' area in Lt lane)

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	5	5	Culvert	N	N
Superstructure	6	6	Channel	8	8
Substructure	7	7	Waterway	9	9

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-053
USH 41 NB over APPLE CREEK

LOCATION

(3) Municipality:	TOWN-WRIGHTSTOWN(05040)
(16) Latitiude(° ' "):	44°21'18.46"N
(17) Longitude(° ' "):	88°11'16.41"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	0
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	X-NO TRAFFIC -ONE WAY TRAFFIC -TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	132.1	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):		
(55) Minimum Right Lateral(ft):		
(55) Minimum Left Lateral(ft):		

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
Outer Rail:	Left / Right	Type
		TYPE F (TWO SQUARE TUBES) - STEEL(8)
		TYPE F (3 SQUARE TUBES) - STEEL(65)
		TYPE F (4 SQUARE TUBES) - STEEL(72)
		TYPE M-STEEL 3 SQUARE TUBES(93)
		SLOPED FACE PARAPET LF(91)
		SLOPED FACE PARAPET HF(92)
		VERTICAL FACE PARAPET TYPE A(74)
		TYPE W-THRIE BEAM(79)
		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
	X / X	OTHER(99) (Please specify) **Left:** TYPE A ROADWAY - STEEL(1) **Right:** TYPE A ROADWAY - STEEL(1)
Transition Type:		CONT GUARD RAIL
		NO APP GRDRL
		NO ATTACHMENT
	4	22 MM(7/8") BOLT (Please enter quantity)
		25 MM(1") BOLT (Please enter quantity)
		OTHER (Please specify)
Guardrail Termination Type:		
	X	(01) ENERGY ABSORBING TERMINAL/EAT
		(02) TURN DOWN
		(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:	
	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 SB		**Maintainer:** STATE HIGHWAY DEPT		**Structure No: B-05-0080**
Feature Under: APPLE CREEK		**Sect/Twn/Rng:** S27 T22N R19E		
Location: 2.4M S JCT CTH S		**County:** BROWN(05	**Municipality:** TOWN-WRIGHTSTOWN(05040)	
Inv Rating: HS18	**Rdwy Width (ft):** 40.0	**Deck Width (ft):** 43.0	**Existing Posting:**	
Oper Rating: HS31	**Total Length (ft):** 125.8	**Deck Area(ft2):** 5409	**ADT On:** 41600 **Yr:** 2006	**ADT Under:** **Yr:**

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-10-11					05-03-10	
Frequency	24					24	
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	**Measurement (in):** 0.0	**Date:**	**Deck Surface Type:** CONCRETE	
Section Loss	**File Meas. (%):**	**File Insp. Date:** 05-03-10	**Insp. Measurement (%):**	**Describe:**
Re-rate for load capacity?		**Reason:**		**Date Last Rated:** 02-07-03

Expansion Joints

Location	Type	Temp: File Insp. Date	File Insp. (in)	New Insp. (in)

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)			
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT STEEL	DECK GIRDER		62.0
CONT STEEL	DECK GIRDER		62.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1987	NEW STRUCTURE	C272	C272
2003	BITUMINOUS OV	PLAN	

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment		
Other		

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	**Team Member(s) Name(s) Printed:**	
Team Leader Signature:	**Inspection Date:** 10-10-11	**Inspection Agency:** STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	**District/Local Manager Signature:**	**Review Date:**

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	13 / 4	Conc Deck/AC Ovl	SF	5409		5409			
	Impending pothole at north abutment in outside lane								
X	106 / 2	Unpnt Stl Opn Girder	LF	510		510			
	CorTen								
X	107 / 2	Paint Stl Opn Girder	LF	100		100			
X	171 / 4	Unpainted Steel Diap	EA	20		20			
X	205 / 3	R/Conc Column	EA	2	2				
X	215 / 3	R/Conc Abutment	LF	85	80	5			
X	234 / 4	R/Conc Cap	LF	39	39				
X	313 / 4	Fixed Bearing	EA	5	5				
X	322 / 4	Bituminous Approach	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	291	241	50			
X	342 / 2	RipRap Slope Protect	EA	2	2				
X	359 / 4	Und Dk Surf Sm Flag	EA	1		1			
X	400 / 3	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Deck - Patching
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment: w/asphalt (2 - 5'X12' areas in Rt lane)

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	6	6	Culvert	N	N
Superstructure	6	6	Channel	8	8
Substructure	7	7	Waterway	9	8

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-080
USH 41 SB over APPLE CREEK

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Left	Right	Type
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		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
X	X	OTHER(99) (Please specify) **Left:** NJ SLOPING PARAPET(61) **Right:** NJ SLOPING PARAPET(61)

Transition Type:

	CONT GUARD RAIL
	NO APP GRDRL
	NO ATTACHMENT
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	25 MM(1") BOLT (Please enter quantity)
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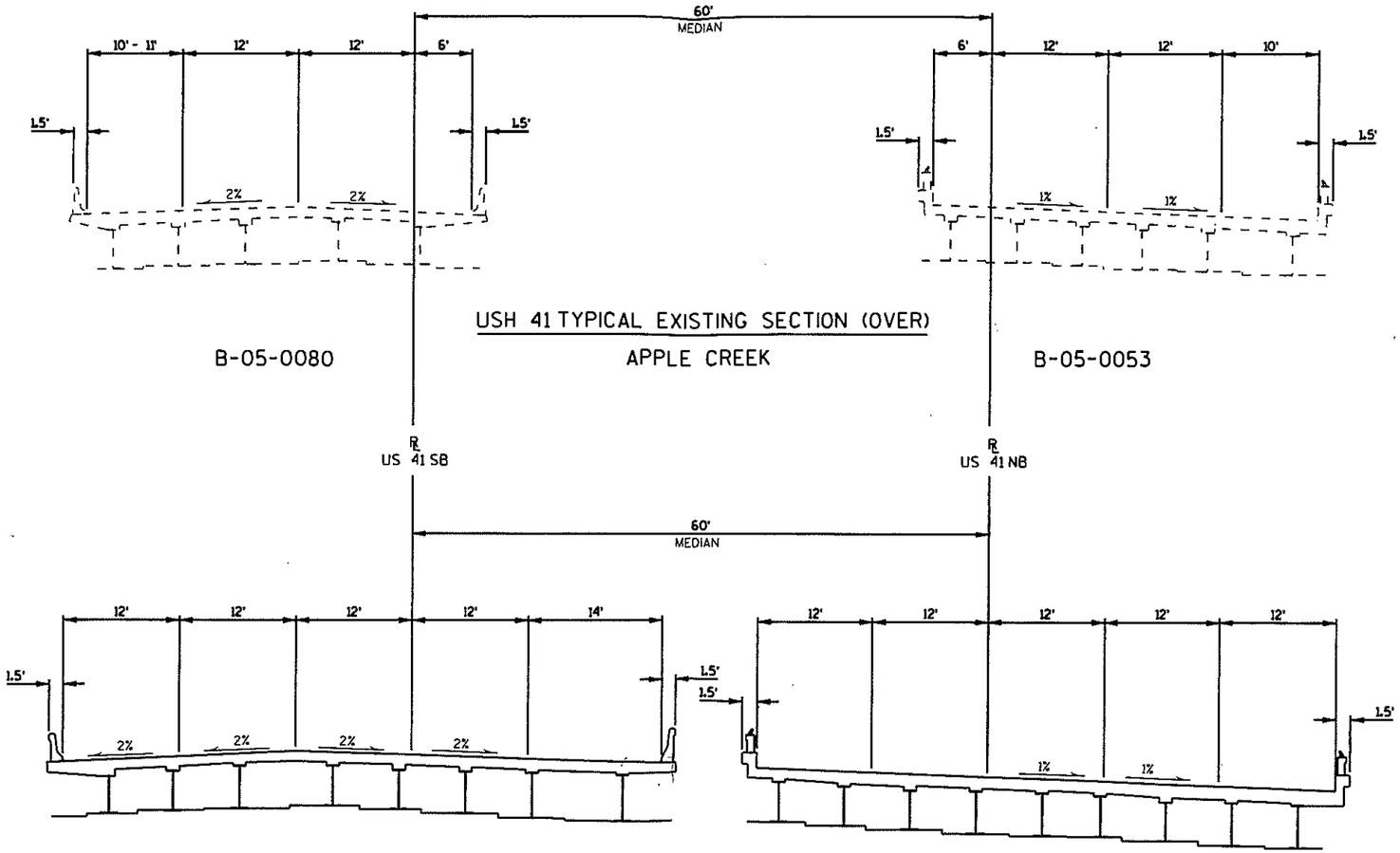


USH 41 TYPICAL EXISTING SECTION (OVER)

B-05-0080 APPLE CREEK B-05-0053

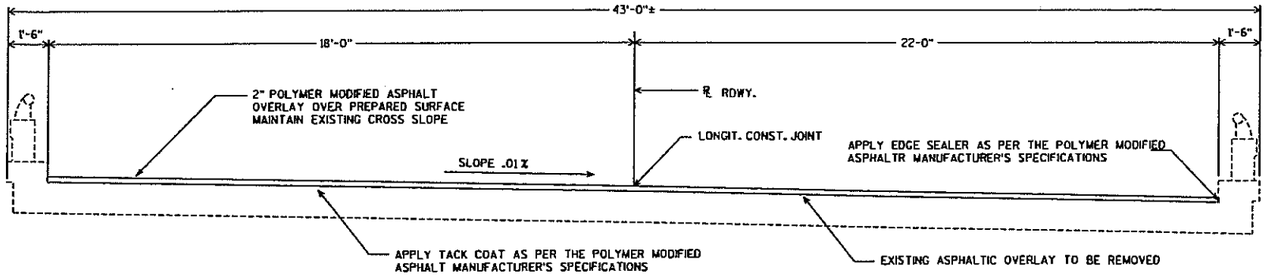
DESIRABLE PROPOSED SECTION (OVER)

B-05-0080 APPLE CREEK B-05-0053

(NEW BRIDGES)

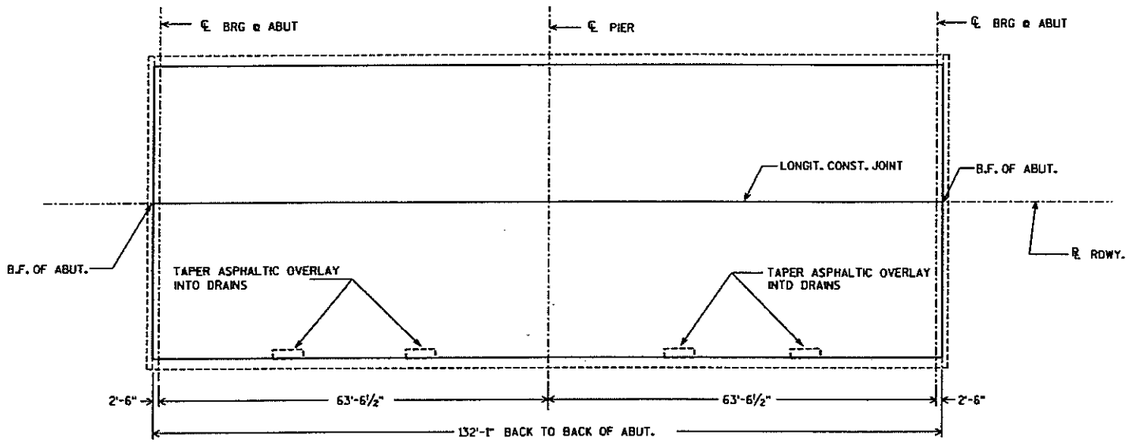
PROJECT NO: 1130-31-00	HWY: US 41	COUNTY: WINNEBAGO/ OUTAGAMIE	TYPICAL SECTIONS	SHEET 20	E

STATE PROJECT NUMBER	SHEET NO.
1133-08-71	70



CROSS SECT. THRU RDWY.

LOOKING NORTH



PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND INSPECTION REPORTS.

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOP OF EXISTING DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR ESTABLISHING OVERLAY THICKNESS FOR ACCURATE RATINGS AND POINT OF MINIMUM THICKNESS.

ANY EXCAVATION REQ'D. TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT ABUTS. IS INCIDENTAL TO THE BID ITEM, "POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT".

PREPARATION OF THE DECKS HALL BE AS PER POLYMER MODIFIED ASPHALT MANUFACTURER'S SPECIFICATIONS.

DESIGN DATA

LIVE LOAD:

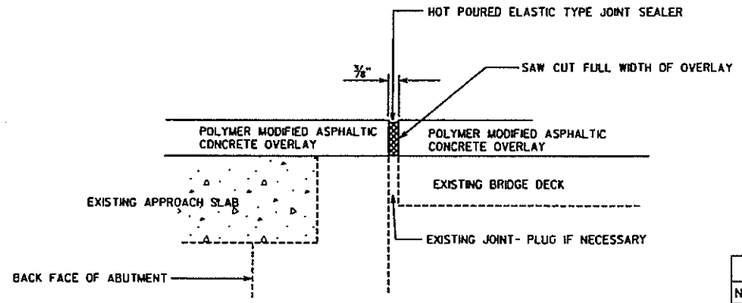
INVENTORY RATING; HS-
OPERATIONAL RATING; HS - ---
MAXIMUM STANDARD PERMIT VEHICLE LOAD = --- Kips

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE f'c = 4,000 P.S.I.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	TOTAL
REMOVING ASPHALTIC SURFACE	S.Y.	587
POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT	TON	65
PREPARATION DECKS TYPE 1	S.Y.	12
PREPARATION DECKS TYPE 2	S.Y.	12
SAWING PAVEMENT DECK PREPARATION AREA	L.F.	30
CONCRETE MASONRY DECK PATCHING	C.Y.	2



JOINT DETAILS AT BACKFACE OF ABUTMENTS

NOTE: JOINT SEALER AND SAW CUT CONSIDERED PART OF PRICE BID FOR POLYMER MODIFIED ASPHALT.

LIST OF DRAWINGS

1. GENERAL PLAN

WISCONSIN
JOSEPH ROBERT GARRITY
27603
DE PERE, WI
4/8/03
PROFESSIONAL ENGINEER

BRIDGE OFFICE CONTACT:
GERRY ANDERSON (608) 266-8488

SEH INC CONTACT:
CHRIS BLUM, P.E.
(608) 274-2020
6418 NORMANDY LANE, #100, MADISON, WI 53719

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-53

USH 41 OVER APPLE CREEK

COUNTY	TOWN	
BROWN	WRIGHTSTOWN	
DESIGN SPEC. AASHTO 2000	LOAD HS20	CONST. SPEC.WIS 1996
DESIGNED BY CJB / DESIGN CK'D. RG	DRAWN BY NJA	PLANS CK'D. CJB

APPROVED Gerald Anderson KOB 4/16/03
CHIEF BRIDGE DESIGN ENGINEER — DATE

GENERAL PLAN

SHEET 1 OF 1

PLANS RECEIVED

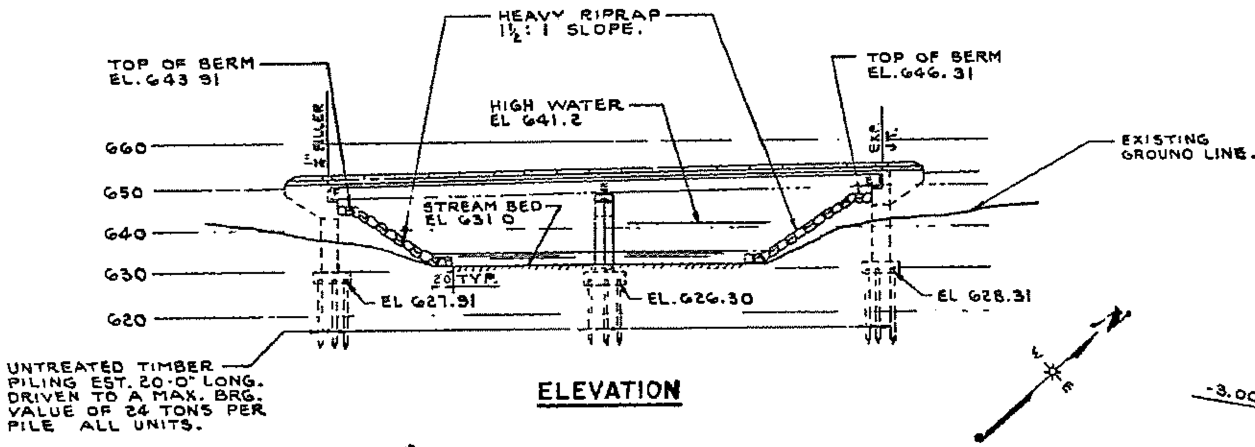
16-SEP-1997 12:48 ScreenScan

FORM E-B-11-62

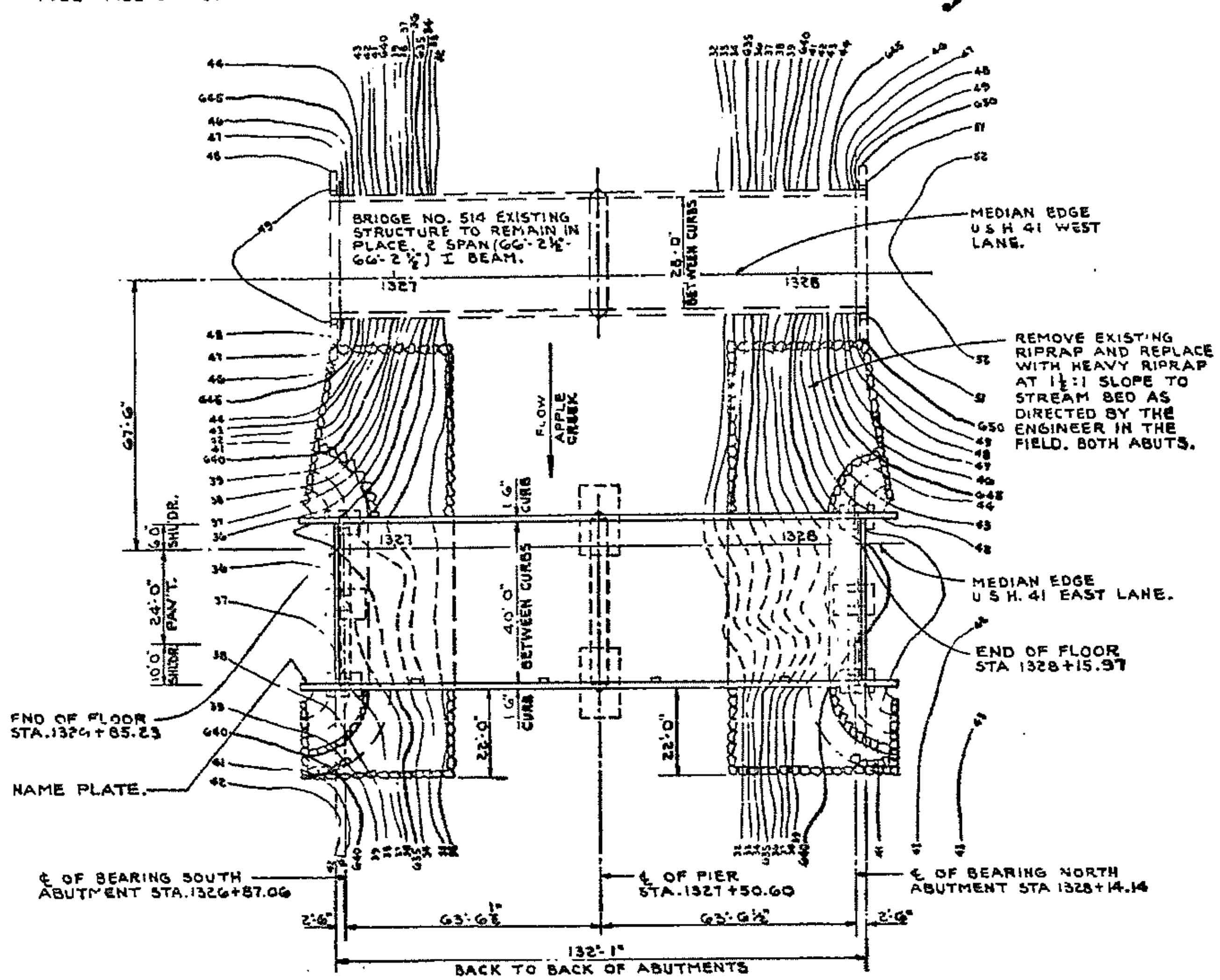
COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	FEDERAL	B P R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
5.1	3.2	23.34		4	F03-2(70)	5	13

BENCH MARK

NO	STATION	DESCRIPTION	ELEVATION
315	1323+50.00	SPIKE IN 18" ASH 360' RT	640.64

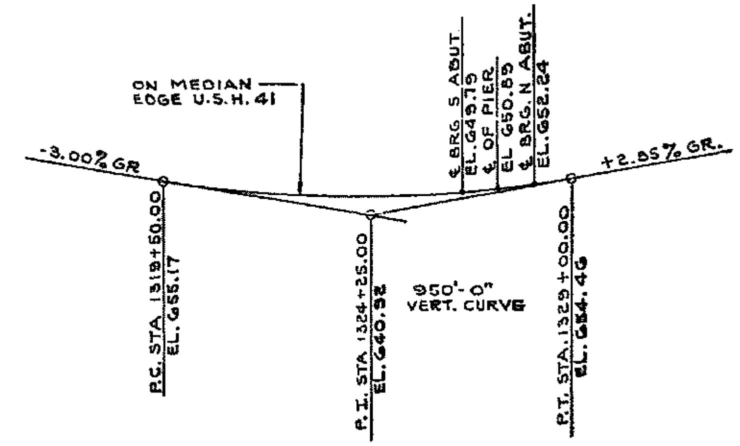


ELEVATION



PLAN

NEW STRUCTURE: 2 SPAN (63'-6½", 63'-6½") I BEAM ON R.C. SPILL THRU ABUTMENTS AND R.C. COLUMN PIER.



GRADE LINE ON MEDIAN EDGE U.S.H. 41 EAST LANE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALL CONCRETE MASONRY SHALL BE GRADE "AA" (f_c=1,400 p.s.i.)

BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SHOWN OR NOTED.

IMBED ALL BAR STEEL REINFORCEMENT 2" UNLESS OTHERWISE SHOWN.

THE PILING AT THE ABUTMENTS SHALL BE UNTREATED TIMBER PILING ESTIMATED 20'-0" LONG AND DRIVEN TO A MAXIMUM BEARING VALUE OF 24 TONS PER PILE.

THE PILING AT THE PIER SHALL BE UNTREATED TIMBER PILING ESTIMATED 20'-0" LONG AND DRIVEN TO A MAXIMUM BEARING VALUE OF 24 TONS PER PILE.

THE TOP AND SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AS SHOWN IN PLAN AND ELEVATION ON THIS SHEET AND IN SECTION "A3" ON SHEET X26359 AND SECTION "C3" ON SH. X26361.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW ABUTMENTS SHALL BE BACKFILLED WITH GRANULAR BACKFILL. PAYMENT WILL BE MADE ONLY FOR MATERIAL ACTUALLY PLACED WITHIN THE LIMITS SPECIFIED FOR "EXCAVATION FOR STRUCTURES".

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" AND "GRANULAR BACKFILL" FOR BOTH ABUTMENTS SHALL BE THE EXISTING GROUND LINE.

UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" FOR THE PIER SHALL BE THE EXISTING STREAM BED.

THE SUPERSTRUCTURE SHALL BE TREATED WITH WATER SOLUBLE SILICONE IN ACCORDANCE WITH SECTION 502.3.13 OF THE STANDARD SPECIFICATION.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER-STRUCTURE	SOUTH ABUTMENT	PIER	NORTH ABUTMENT	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.	—	130	90	160	380
GRANULAR BACKFILL	C.Y.	—	130	—	160	290
CONCRETE MASONRY	C.Y.	156.3	70.5	92.4	72.9	392.1
BAR STEEL REINFORCEMENT	Lbs	50,750	5,450	10,340	5,670	72,210
STRUCTURAL CARBON STEEL	Lbs	16,780	—	—	—	16,780
STRUCTURAL LOW-ALLOY STEEL	Lbs	93,820	—	—	—	93,820
LUBRICATED BRONZE PLATES	Lbs	154	—	—	—	154
BEARING PADS	S.F.	21	—	—	—	21
* UNTREATED TIMBER TEST PILING	LUMP SUM	—	—	—	—	1
UNTREATED TIMBER PILING, DEL.	L.F.	—	460	720	460	1,640
UNTREATED TIMBER PILING, DRIVEN	L.F.	—	460	720	460	1,640
FLOOR DRAINS (TYPE "A")	EACH	4	—	—	—	4
STEEL RAILING, TYPE "A"	L.F.	295	—	—	—	295
HEAVY RIPRAP	C.Y.	—	230	—	270	500
NON BID ITEMS						
1/8" AL OR ZN PLATES	S.F.	16	—	—	—	16
FILLER	SIZE	1/4"	—	—	—	1/4"

* DRIVE ONE UNTREATED TIMBER TEST PILE 25'-0" LONG AT LOCATION OF EACH ABUTMENT.

LIST OF DRAWINGS

REVISED

STATE HIGHWAY COMMISSION OF WISCONSIN

GENERAL PLAN

CO. BROWN | TOWN WRIGHTSTOWN | STA. 1327+50.80

SECTION 27 | TOWN 22 N | RANGE 19 E

DESIGN SPEC. A.A.S.H.O. 1961 | LOADING H20-S16 | CONST. SPEC. 1962

DATE 11-21-'62 | DESIGN J. S. | DRAWN W. K. | CKD W. G.

RECOMMENDED H. B. Schultz, BRIDGE ENGINEER

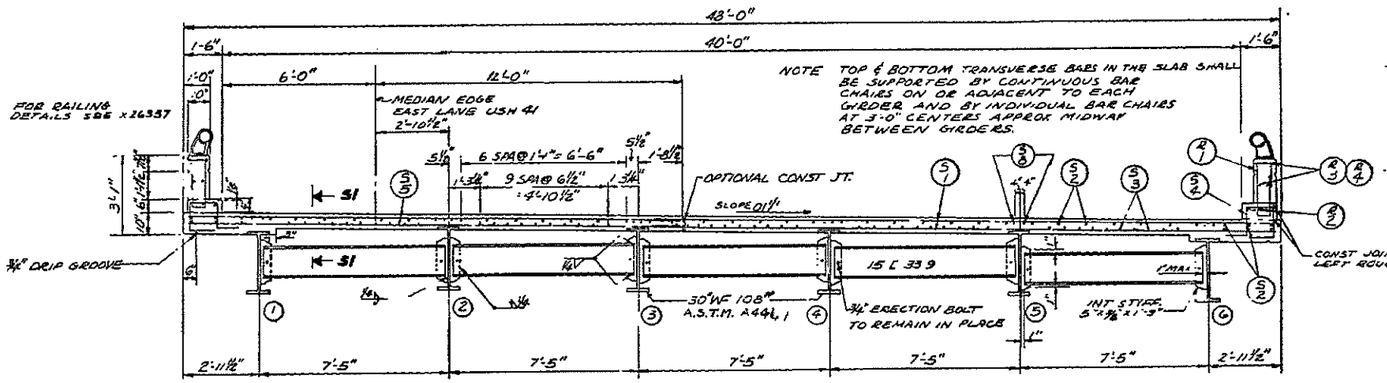
APPROVED E. G. Roettiger, STATE HIGHWAY ENGINEER

STRUCTURE B-5-53 | SHEET 1 OF 9

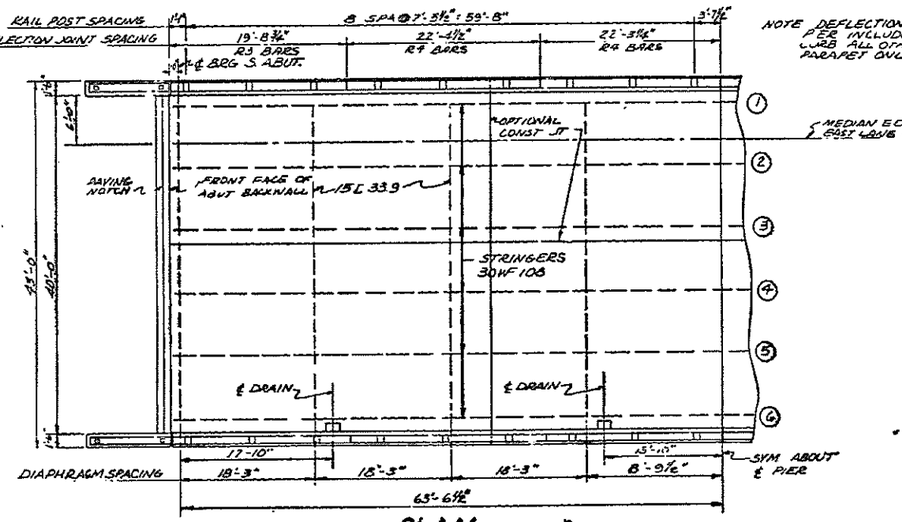
X 26353

FORM E-B-12-62

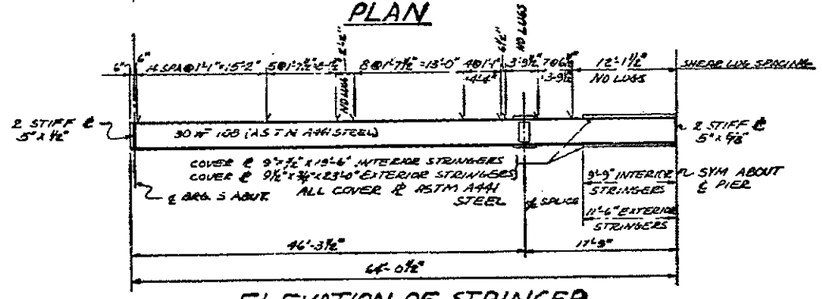
B & R DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	F03-2(70)	6	13



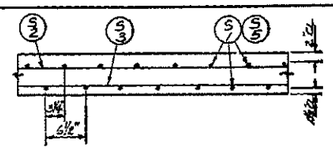
CROSS SECTION THRU RDWY



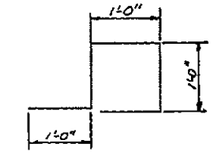
PLAN



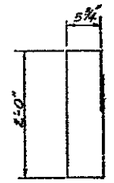
ELEVATION OF STRINGER



SECTION S1

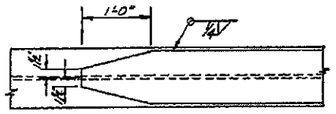


DETAIL A

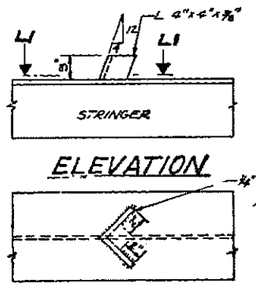


DETAIL B

DETAIL C



COVER PLATE DETAIL

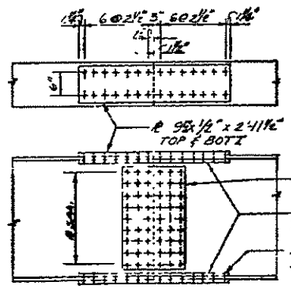


ELEVATION

NOTE ALL SHEAR LUGS TO BE OF A.S.T.M. A 36 STEEL

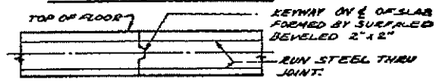
SECTION L1

SHEAR LUG DETAIL



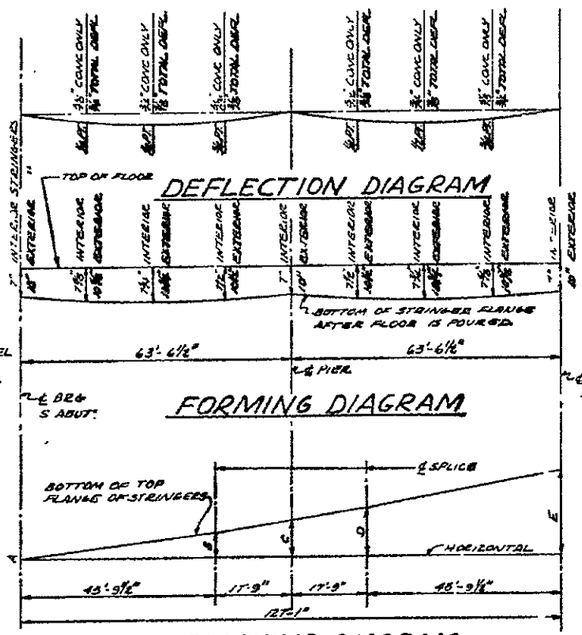
NOTE: ALL SPLICE ℄'S SHALL BE MADE OF STEEL CONFORMING TO ASTM SPECIFICATIONS TYPE A 36

SPLICE DETAIL



NOTE: OPTIONAL CONST. JOINTS MAY BE OMITTED SUBJECT TO APPROVAL OF THE ENGINEER.

OPT. LONGITUDINAL AND TRANSVERSE FLOOR JOINT



DEFLECTION DIAGRAM

FORMING DIAGRAM

BLOCKING DIAGRAM

BILL OF BARS 50,750#

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET
	S1	475	6	25'-0	6½	SLAB - TRANS - TOP ℄ BOT	
	S2	188	5	33-0	1'-1	" LONG - TOP ℄ GRAT TOP ℄ BOT	
	S3	200	5	33-0	6½	" " - BOTT	
	S4	348	5	4-9	9	SLAB ℄ CURB - TRANS	A
	S5	475	6	19-3	6½	" TRANS - TOP ℄ BOTT	
	S6	60	5	2-6	1-6	DIAPHRAM AT ABUTS.	C
	S7	10	4	7-0	SHOWN	" " "	
	S8	12	5	15-0	8"	SLAB AT STRINGERS - SYM AT PIER	
	R1	348	5	6-0	9	PARAPET ℄ CURB - TRANS	B
	R2	16	5	32-9	SHOWN	CURB - LONG.	
	R3	16	5	19-3	"	PARAPET - LONG.	
	R4	32	5	22-0	"	" "	

DIMENSION	A	B	C	D	E
ALL STRINGERS	0	0'-9⅝	1'-1⅜	1'-5⅞	2'-3½

STATE HIGHWAY COMMISSION OF WISCONSIN

SUPERSTRUCTURE

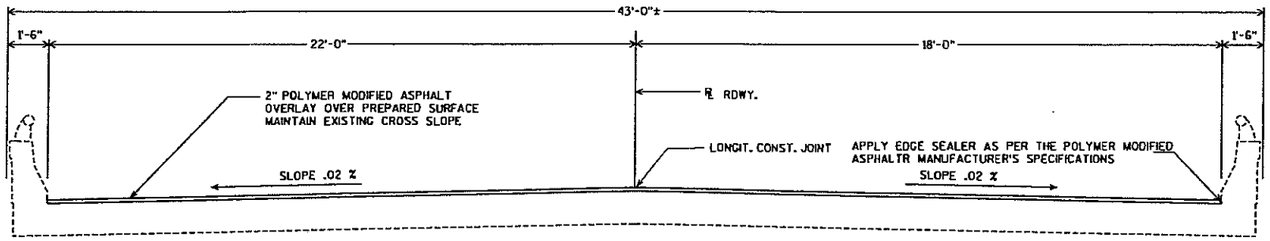
DESIGN SPEC AASHO '61 | LOADING H20-S16 | CONST SPEC 1963

DATE 11 21 62 | DESIGN J B | DRAWN R L P | CHD W G

STRUCTURE B-5-53 | SHEET 2 OF 9

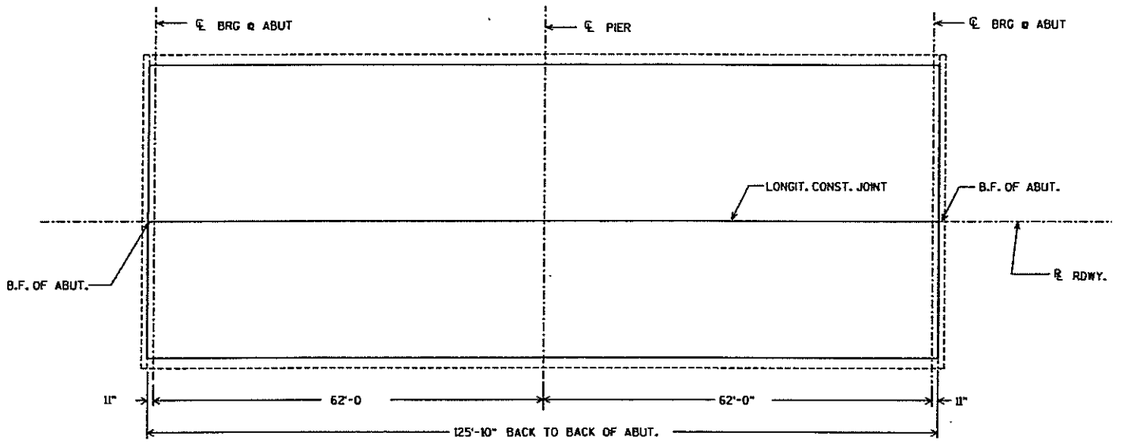
X 26354

STATE PROJECT NUMBER	SHEET NO.
1133-08-71	71



CROSS SECT. THRU RDWY.

LOOKING NORTH



PLAN

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND INSPECTION REPORTS.

PROFILE GRADE LINE SHALL BE DETERMINED BASED ON A MINIMUM OVERLAY THICKNESS OF 2" PLACED ABOVE THE DECK SURFACE AFTER CLEANING. EXPECTED AVERAGE OVERLAY THICKNESS IS 2". IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

TOP OF EXISTING DECK ELEVATIONS SHALL BE DETERMINED FROM A FIELD SURVEY AT LOCATIONS DEEMED NECESSARY FOR ESTABLISHING OVERLAY THICKNESS FOR ACCURATE RATINGS AND POINT OF MINIMUM THICKNESS.

ANY EXCAVATION REQ'D. TO COMPLETE THE OVERLAY OR THE PAVING BLOCK AT ABUTS. IS INCIDENTAL TO THE BID ITEM, "POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT".

PREPARATION OF THE DECKS HALL BE AS PER POLYMER MODIFIED ASPHALT MANUFACTURER'S SPECIFICATIONS.

DESIGN DATA

LIVE LOAD:

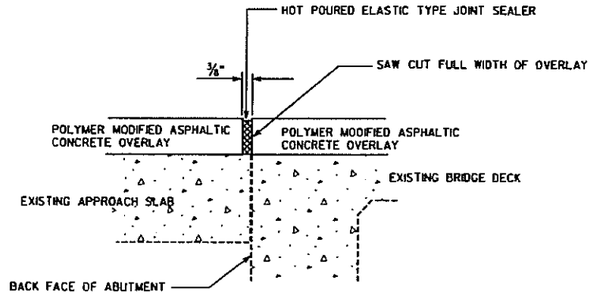
INVENTORY RATING; HS-
OPERATIONAL RATING; HS - ---
MAXIMUM STANDARD PERMIT VEHICLE LOAD = --- Kips

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SUPERSTRUCTURE f'c = 4,000 P.S.I.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	TOTAL
POLYMER MODIFIED ASPHALTIC CONCRETE PAVEMENT	TON	62
PREPARATION DECKS TYPE 1	S.Y.	13
PREPARATION DECKS TYPE 2	S.Y.	13
SAWING PAVEMENT DECK PREPARATION AREA	L.F.	30
CONCRETE MASONRY DECK PATCHING	C.Y.	2



JOINT DETAILS AT BACKFACE OF ABUTMENTS

NOTE: JOINT SEALER AND SAW CUT CONSIDERED PART OF PRICE BID FOR POLYMER MODIFIED ASPHALT.

LIST OF DRAWINGS

1. GENERAL PLAN

WISCONSIN
JOSEPH ROBERT GARRITY
27603
DE PERE, WI
PROFESSIONAL ENGINEER
2/7/03

BRIDGE OFFICE CONTACT:
GERRY ANDERSON (608) 266-8488

SEH INC CONTACT:
CHRIS BLUM, P.E.
(608) 274-2020
6418 NORMANDY LANE, #100, MADISON, WI 53719

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-80

USH 41 OVER APPLE CREEK

COUNTY	TOWN	
BROWN	WRIGHTSTOWN	
DESIGN SPEC. AASHTO 2000	LOAD HS20	CONST. SPEC. WIS 1996
DESIGNED BY CJB / DESIGN CK'D. RG	DRAWN BY NJA	PLANS CK'D. CJB

APPROVED YH Anderson 04-07-03
CHIEF BRIDGE DESIGN ENGINEER — DATE

GENERAL PLAN

SHEET 1 OF 1

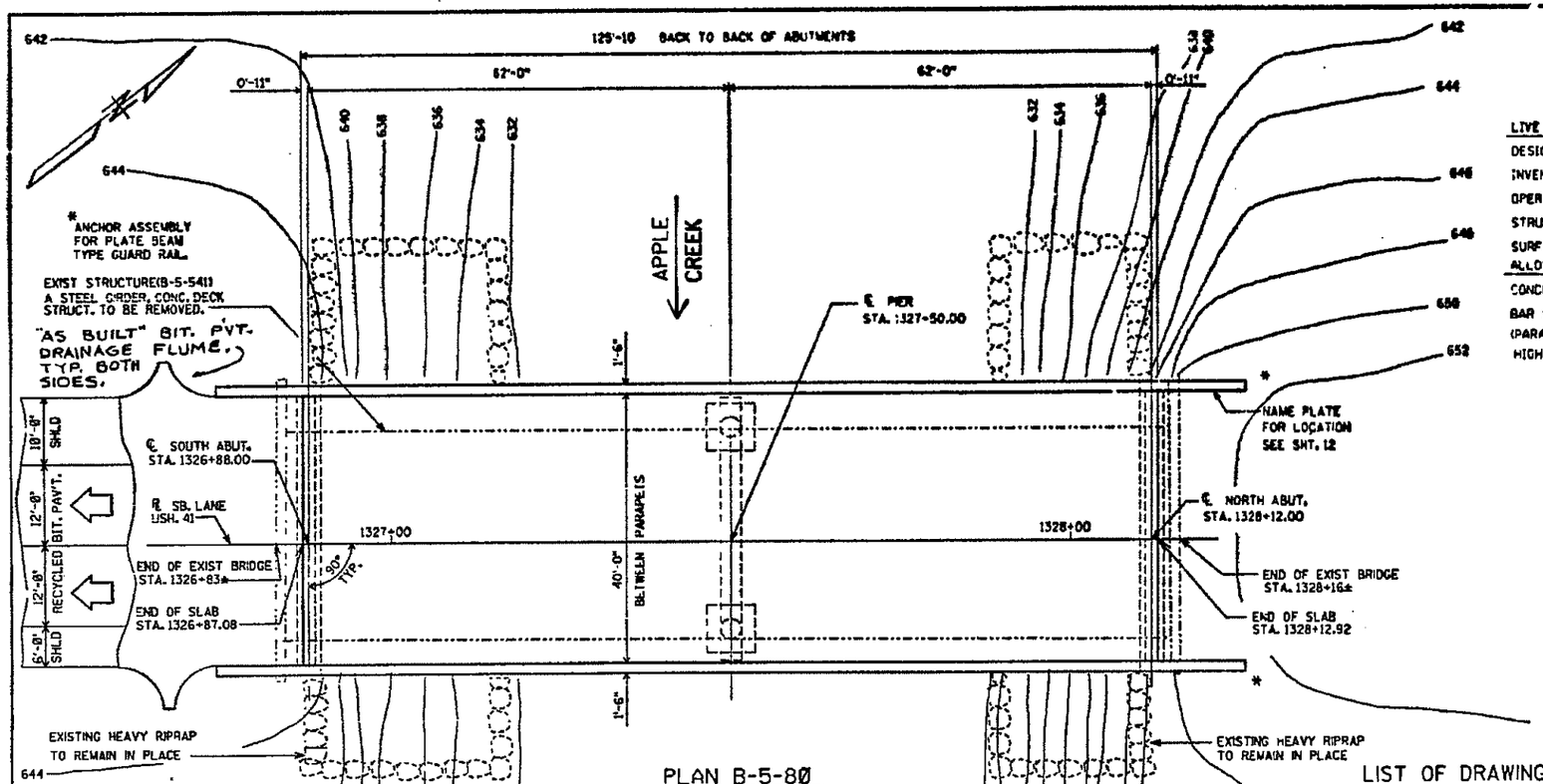
PLANS RECEIVED

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,

FILE NAME : E:\TRANS\WIDOT\0023.00-01(41)\STRUCT\B58001.DGN PLOT DATE: 02/07/2003 PLOT TIME 08:18:14 AM

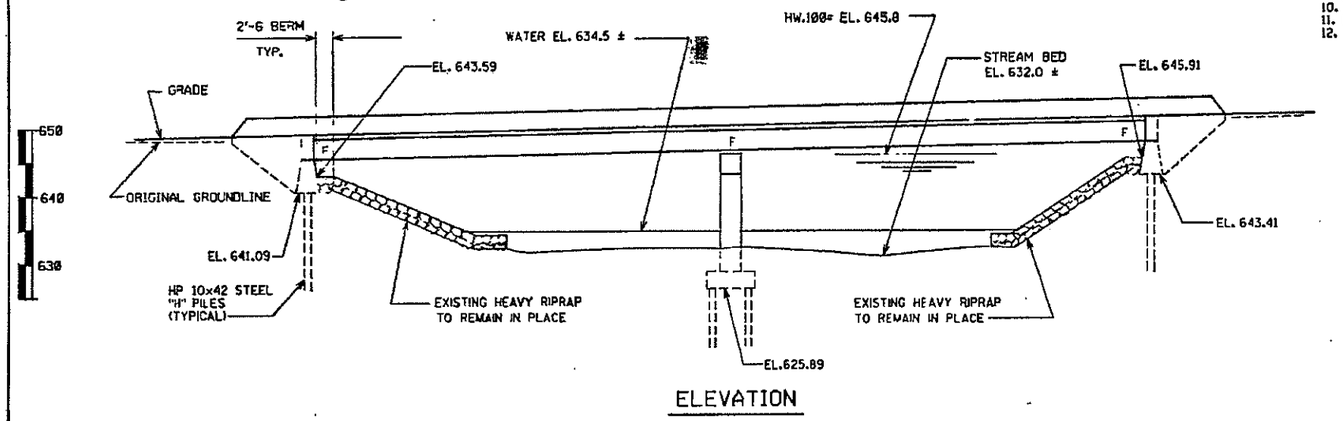
TYPE CODE = X078

STATE PROJECT NUMBER	SHEET NO.
1131-6-71	8.0



PLAN B-5-80

2 SPAN - STEEL GIRDERS



ELEVATION

DESIGN DATA

LIVE LOAD:
DESIGN RATING: HS 20
INVENTORY RATING: HS 20
OPERATIONAL RATING: HS 43
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.
ALLOWABLE DESIGN STRESSES:
CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
(PARAPET AND TOP LAYER SLAB STEEL SHALL BE EPOXY COATED.)
HIGH STRENGTH STRUCTURAL STEEL (A.S.T.M. A588, UNPAINTED) TO AND INCLUDING 4" THICK — fa = 27,000 P.S.I.

FOUNDATION DATA

SUBSTRUCTURES TO BE SUPPORTED ON HP 10x42 STEEL "H" PILING
EST. LENGTH @ S. ABUT.= 65'-0, EST. LENGTH @ N. ABUT.= 70'-0.
DRIVEN TO A MIN. BRG. VALUE OF 50 TONS / PILE @ ABUTS.
EST. LENGTH @ PIER = 50'-0.
DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE @ PIER.

HYDRAULIC DATA

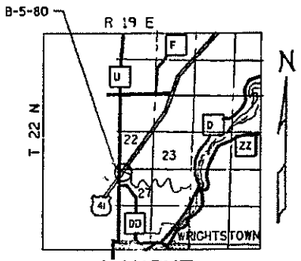
100 YEAR FREQUENCY
Q / 100=5,000 c.f.s.
VEL.= 4.4 f.p.s.
HW.= EL. 645.8
WATERWAY AREA= 1150 SQ. FT.
DRAINAGE AREA= 47 SQ. MI.
OVERTOPPING RD = NA

LIST OF DRAWINGS

TRAFFIC VOLUME

USH. 41
A.D.T.=20,000 (1988)
R.D.S.=55 M.P.H.

AS BUILT PLAN
DATE 7-'88 BY W.K.



LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-80

USH. 41 (SB. LANE) OVER APPLE CREEK

COUNTY	BROWN	TOWN/CITY/VILLAGE	WRIGHTSTOWN
DESIGN SPEC.	AASHTO 1985	LOAD	HS20
CONST. SPEC.	1981		
DESIGNED BY	WV	DESIGN CK'D.	BA
DRAWN BY	JHG	PLANS CK'D.	F-W-G

APPROVED Stanley W. Woods — STATE BRIDGE ENGINEER — DATE 8-18-88

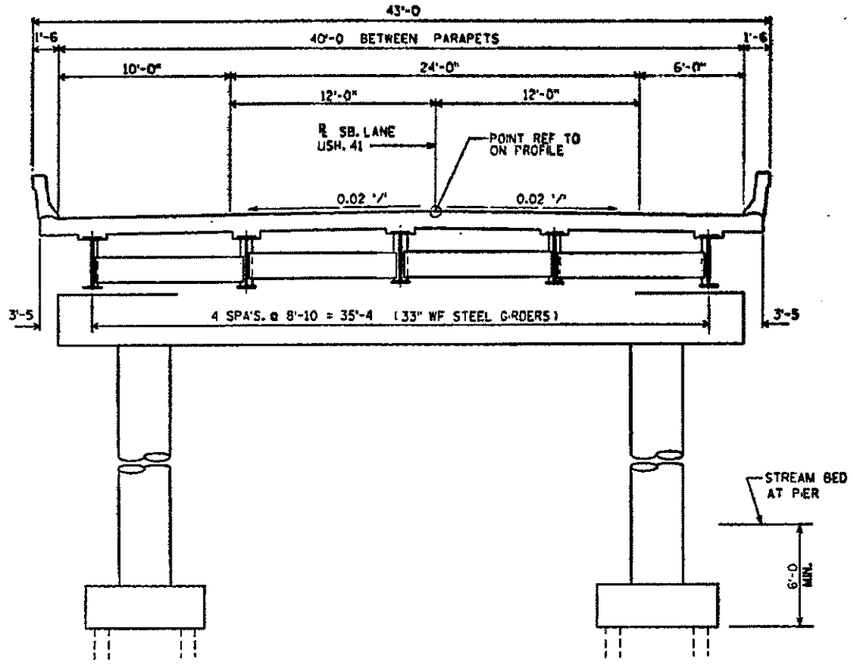
GENERAL PLAN

SHEET 1 OF 12

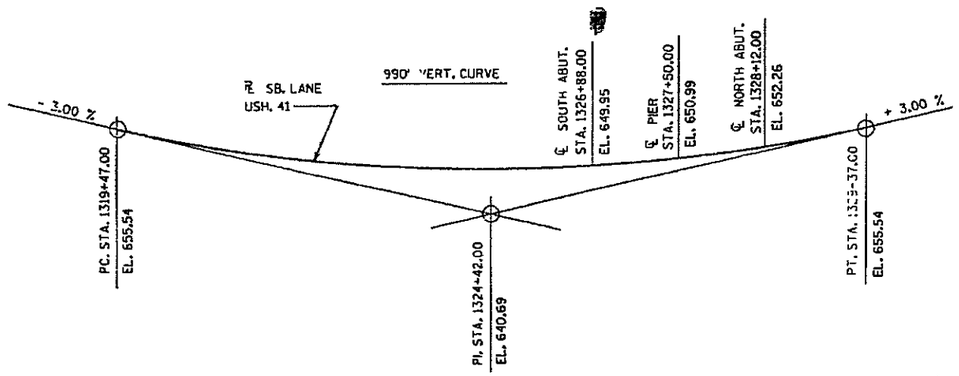
X79253

ID 1131-06-00

STATE PROJECT NUMBER	SHEET NO.
1131-6-71	8.1



CROSS SECTION THRU ROADWAY LOOKING NORTH



PROFILE GRADE LINE, SB. LANE USH. 41

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER FRICTION TYPE HIGH-TENSILE STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

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

ALL STRUCTURAL STEEL TO BE A588 UNPAINTED UNLESS SHOWN OR NOTED OTHERWISE.

THE STREAMBED SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	S.ABUT.	PIER	N.ABUT.	SUPER.	TOTAL
REMOVING OLD BRIDGE, STATION 1327+50±	L.S.	———	———	———	———	1
EXCAVATION FOR STRUCTURES, B-5-80	L.S.	———	———	———	———	1
GRANULAR BACKFILL	C.Y.	———	———	———	———	120
CONCRETE MASONRY, BRIDGES	C.Y.	34	46	34	164	278
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LBS.	2,370	6,000	2,370	19,190	29,930
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT	LBS.	260	———	260	21,020	21,540
HIGH STRENGTH STRUCTURAL STEEL	LBS.	———	———	———	101,690	101,690
ANCHOR ASSEMBLY FOR BEAM GUARD	EA.	———	———	2	———	2
BEARING PADS, ELASTOMERIC	S.F.	———	———	———	7	7
STEEL PILING, DELIVERED & DRIVEN, HP 10 INCH 42 POUND	L.F.	455	600	490	———	1545
BEARING PADS	S.F.	———	———	———	7	7
PROTECTIVE SURFACE TREATMENT	GAL	———	———	———	40	40
NON BID ITEMS						
FILLER	SIZE	¾"	———	¾"	———	¾"
ALUMINUM OR ZINC PLATE	S.F.	———	———	———	22	22
POLYVINYL CHLORIDE WATERSTOP	L.F.	47	———	47	———	94

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-80

CONST. SPEC. 1981	DRAWN BY JHG	PLANS CKD. FWG

CROSS SECTION & QUANTITIES

SHEET 2 OF 12

X79254

Vertical Clearance for Construction of New Bridges, Replacement Bridges, and Bridges on which the Superstructure is being replaced [1]

Overpass Facility →	Freeway, Expressway, or STH		Railroad[4], CTH, Town Road, Local Road, or Street	Pedestrian or Shared-use Structures	Sign Structures[2]
Underpass Facility ↓	Interchange	Grade Separation			
Non-arterial either STH, CTH, Town Road, Local Road, or Street	15'-9" Desirable 15'-3" Minimum	15'-3" Desirable 14'-9" Minimum		16'- 9" Desirable 16'-3" Minimum	18'-3" Minimum
Arterial either CTH, Town Road, Local Road, or Street (**excludes** freeway and expressway; also excludes arterial STH)	16'-9" Desirable 16'-3" Minimum	15'-3" Desirable 14'-9" Minimum		17'- 9" Desirable 17'-3" Minimum	
Freeway[3] or Expressway or arterial STH	16'-9" Desirable 16'-4" Minimum			17'- 9" Desirable 17'-4" Minimum	
Railroad[4,5,6,7]	23'-0" Minimum to 23'-3½" Maximum				

General notes:

1 Vertical clearance is needed for the entire roadway width (critical point; to include traveled way, auxiliary lanes, turn lanes, and shoulders), according to the above table.

Vertical clearance for railroads is measured from the top of rail and is required over an area 8 feet 6 inches from the track centerline on each side of a railroad track.

Do not exceed the desirable vertical clearance shown unless justified. Depending on topography and other specific situations vertical clearance for any structure may be greater than that shown when justified. Some things to consider are: over height loads traveling on the roadway; the level of development in the area, the projected growth in traffic volume and importance of the roadway, and the possibility of reclassification.

2 See LRFD Bridge Manual Chapter 39 (http://on.dot.wi.gov/dtid_bos/extranet/structures/LRFD/LRFDManualIndex.htm) and LRFD Standard Details 39.02 and 39.10 for design considerations and requirements for vertical clearance on new and replacement Sign Structures.

3 See FDM 11-44-1 for vertical clearance guidance specific to Interstate freeways.

4 Consult with the Region Railroad Coordinator if the over-passing or under-passing facility is either a railroad or a "rails-to-trails" trail; or if a structure is owned by a railroad company.

5 A vertical clearance <23'-0" requires both an approved Exception to Standards (see FDM 11-1-2 and FDM 11-1-4) and early coordination with BTLR R&H, Railroads and Harbors Section (RHS) through the Region Railroad Coordinator. The Exception to Standards shall contain documentation that the Office of the Commissioner of Railroads (OCR) has been petitioned.

See Chapter 17 for additional information.

6 Provide justification for a vertical clearance >23'-3 ½" to the RHS.

7 Vertical clearance less than 23'-0" may be acceptable or desirable in certain situations, such as for spur tracks, lead tracks, some branch lines and even mainline tracks when other impediments to 23'-0" exist. Review such situations with the Railroad Project Coordination Engineer in RHS. Early coordination with RHS is required.

DAAR ENGINEERING, INC.

PROJECT: _____ DATE: _____

DESCRIPTION: USH 41 over Little Rapids Road, B-5-165 (SB) & B-5-200 (NB) SHEET ____ OF ____

CALC. BY: _____

CHECKED BY: _____

Existing structures are 40'x86' 45" Girders Single Span 81'

V.C = 15.03' (SB) & 15.03' NB Desided = 15.25'

Widen USH 41 by 20' in median on both structures

20' x .02 = 0.4' → 14.63' V.C.

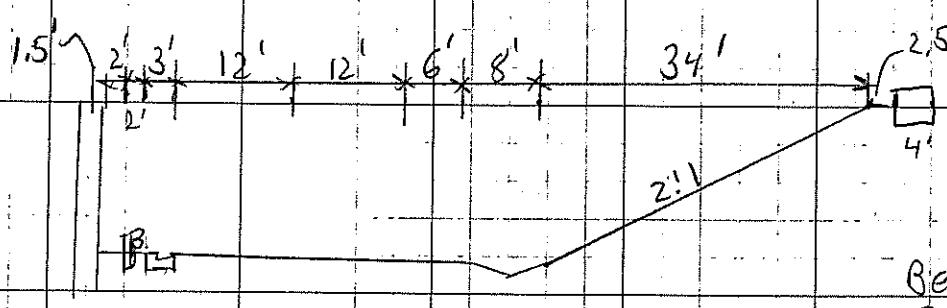
15.25 - 14.63 = 0.62' adjustment to profile

Proposed structure to include expansion of side road, - 2 spans

Existing = 2 - 12' lanes with 8' shldrs

Proposed = 4 - 12' lanes with 6' shldrs & 14' clear zone

Proposed Typical Half Section (Little Rapids Road)



Pier	1.5'
offset	2.0'
Beam Guard	2.0'
C & G	3.0'
2-12' lanes	24.0'
14' clear zone	14.0'
slope Paving	34.0'
Abutment	2.5'
	4.0'
	82' Span

36M Girders

9" less = +0.75'

VC = 15.03
-0.40
+0.75
15.38'

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 SB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-165
Feature Under: LITTLE RAPIDS RD		Sect/Twn/Rng: S11 T22N R19E		
Location: 4.5M S JCT CTH EE		County: BROWN(05	Municipality: TOWN-LAWRENCE(05024)	
Inv Rating: HS23	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS44	Total Length (ft): 86.2	Deck Area(ft2): 3706	ADT On: 44400 Yr: 2006	ADT Under: 0 Yr: 2000

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-17-11						
Frequency	24						
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 10-07-09	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 02-16-99

Expansion Joints

Location	Type	File Insp. Date	File Insp. (in)	New Insp. (in)
		Temp:	50	50
NORTH AB	STRIPSEA		1.5	1.0
SOUTH AB	STRIPSEA		1.2	1.0

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	15.03	10-17-00	
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
PREST CONCRET	DECK GIRDER		81.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
2000	NEW STRUCTURE		

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control	Y	
Access Equipment	Y	
Other	Y	

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-17-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected

Ck	Elem./Env.	Description	Unit	Total QTY.	Quantity in Condition States				
					1	2	3	4	5
X	26 / 4	Conc Deck/Coatd Bars	SF	3706	3706				
X	109 / 3	P/S Conc Open Girder	LF	495	494	1			
	Small spall on west girder								
X	172 / 3	Painted Steel Diaphr	EA	10	10				
X	215 / 4	R/Conc Abutment	LF	86	82	4			
	CS-2 (N Abut 2" & S Abut 2")								
X	300 / 4	Strip Seal Exp Joint	LF	82	82				
X	310 / 4	Elastomeric Bearing	EA	12	12				
X	321 / 4	R/Conc Approach Slab	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	170	90	80			
	Vertical cracks and scaling on the bottom edge of railing.								
X	342 / 2	RipRap Slope Protect	EA	2	2				
X	358 / 4	Deck Cracking SmFlag	EA	1	1				
X	359 / 4	Und Dk Surf Sm Flag	EA	1	1				
X	400 / 4	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Expansion Joints - Clean
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

Maintenance Item:
Amount: **Date(MM-DD-YY):**
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	7	7	Culvert	N	N
Superstructure	7	8	Channel	N	N
Substructure	7	7	Waterway	N	N

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-165
USH 41 SB over LITTLE RAPIDS RD

LOCATION

(3) Municipality:	TOWN-LAWRENCE(05024)
(16) Latitiude(° ' "):	44°23'49.38"N
(17) Longitude(° ' "):	88°09'14.27"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	2
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	86.2	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):	40.0	
(55) Minimum Right Lateral(ft):	8.0	
(55) Minimum Left Lateral(ft):	8.0	

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
Outer Rail:	Left	Right	Type
			TYPE F (TWO SQUARE TUBES) - STEEL(8)
			TYPE F (3 SQUARE TUBES) - STEEL(65)
			TYPE F (4 SQUARE TUBES) - STEEL(72)
			TYPE M-STEEL 3 SQUARE TUBES(93)
			SLOPED FACE PARAPET LF(91)
			SLOPED FACE PARAPET HF(92)
			VERTICAL FACE PARAPET TYPE A(74)
			TYPE W-THRIE BEAM(79)
			TYPE H ON VERTICAL PARAPET(80)
			TIMBER(38)
	X	X	OTHER(99) (Please specify) Left: NJ SLOPING PARAPET(61) Right: NJ SLOPING PARAPET(61)
Transition Type:			CONT GUARD RAIL
			NO APP GRDRL
			NO ATTACHMENT
	5		22 MM(7/8") BOLT (Please enter quantity)
			25 MM(1") BOLT (Please enter quantity)
			OTHER (Please specify)
Guardrail Termination Type:	X		(01) ENERGY ABSORBING TERMINAL/EAT
			(02) TURN DOWN
			(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 NB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-200
Feature Under: LITTLE RAPIDS RD		Sect/Twn/Rng: S11 T22N R19E		
Location: 6.6M N JCT CTH JJ		County: BROWN(05	Municipality: TOWN-LAWRENCE(05024)	
Inv Rating: HS23	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS44	Total Length (ft): 85.0	Deck Area(ft2): 3655	ADT On: 44400 Yr: 2006	ADT Under: 0 Yr: 2000

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-17-11						
Frequency	24						
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 10-07-09	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 12-14-99

Expansion Joints

Location	Type	Temp: / File Insp. Date	50 / File Insp. (in)	50 / New Insp. (in)
NORTH AB	STRIPSEA		1.4	1.0
SOUTH AB	STRIPSEA		2.0	1.2

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	15.03	10-17-00	
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
PREST CONCRET	DECK GIRDER		81.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
2000	NEW STRUCTURE		

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control	Y	
Access Equipment	Y	
Other	Y	

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-17-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	26 / 4	Conc Deck/Coatd Bars	SF	3655	3655				
X	109 / 3	P/S Conc Open Girder	LF	495	495				
X	172 / 3	Painted Steel Diaphr	EA	10	10				
X	215 / 4	R/Conc Abutment	LF	82	78	4			
	CS-2 (N Abut 2" & S Abut 2")								
X	300 / 4	Strip Seal Exp Joint	LF	82	82				
X	310 / 4	Elastomeric Bearing	EA	12	12				
X	321 / 4	R/Conc Approach Slab	EA	2	2				
	Shoulders settled off ends of the approach slab								
X	331 / 4	Conc Bridge Railing	LF	170	144	26			
X	342 / 2	RipRap Slope Protect	EA	2		2			
	Both slopes settled on west end								
X	358 / 4	Deck Cracking SmFlag	EA	1	1				
X	359 / 4	Und Dk Surf Sm Flag	EA	1	1				
X	400 / 4	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Expansion Joints - Clean
Amount: Date(YYYY-MM-DD):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	7	7	Culvert	N	N
Superstructure	8	8	Channel	N	N
Substructure	7	7	Waterway	N	N

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-200
USH 41 NB over LITTLE RAPIDS RD

LOCATION

(3) Municipality:	TOWN-LAWRENCE(05024)
(16) Latitiude(° ' "):	44°23'47.95"N
(17) Longitude(° ' "):	88°09'13.57"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	2
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	85.0	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):	40.0	
(55) Minimum Right Lateral(ft):	8.0	
(55) Minimum Left Lateral(ft):	8.0	

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE

Outer Rail:

Left	Right	Type
		TYPE F (TWO SQUARE TUBES) - STEEL(8)
		TYPE F (3 SQUARE TUBES) - STEEL(65)
		TYPE F (4 SQUARE TUBES) - STEEL(72)
		TYPE M-STEEL 3 SQUARE TUBES(93)
		SLOPED FACE PARAPET LF(91)
		SLOPED FACE PARAPET HF(92)
		VERTICAL FACE PARAPET TYPE A(74)
		TYPE W-THRIE BEAM(79)
		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
X	X	OTHER(99) (Please specify) **Left:** NJ SLOPING PARAPET(61) **Right:** NJ SLOPING PARAPET(61)

Transition Type:

	CONT GUARD RAIL
	NO APP GRDRL
	NO ATTACHMENT
5	22 MM(7/8") BOLT (Please enter quantity)
	25 MM(1") BOLT (Please enter quantity)
	OTHER (Please specify)

Guardrail Termination Type:

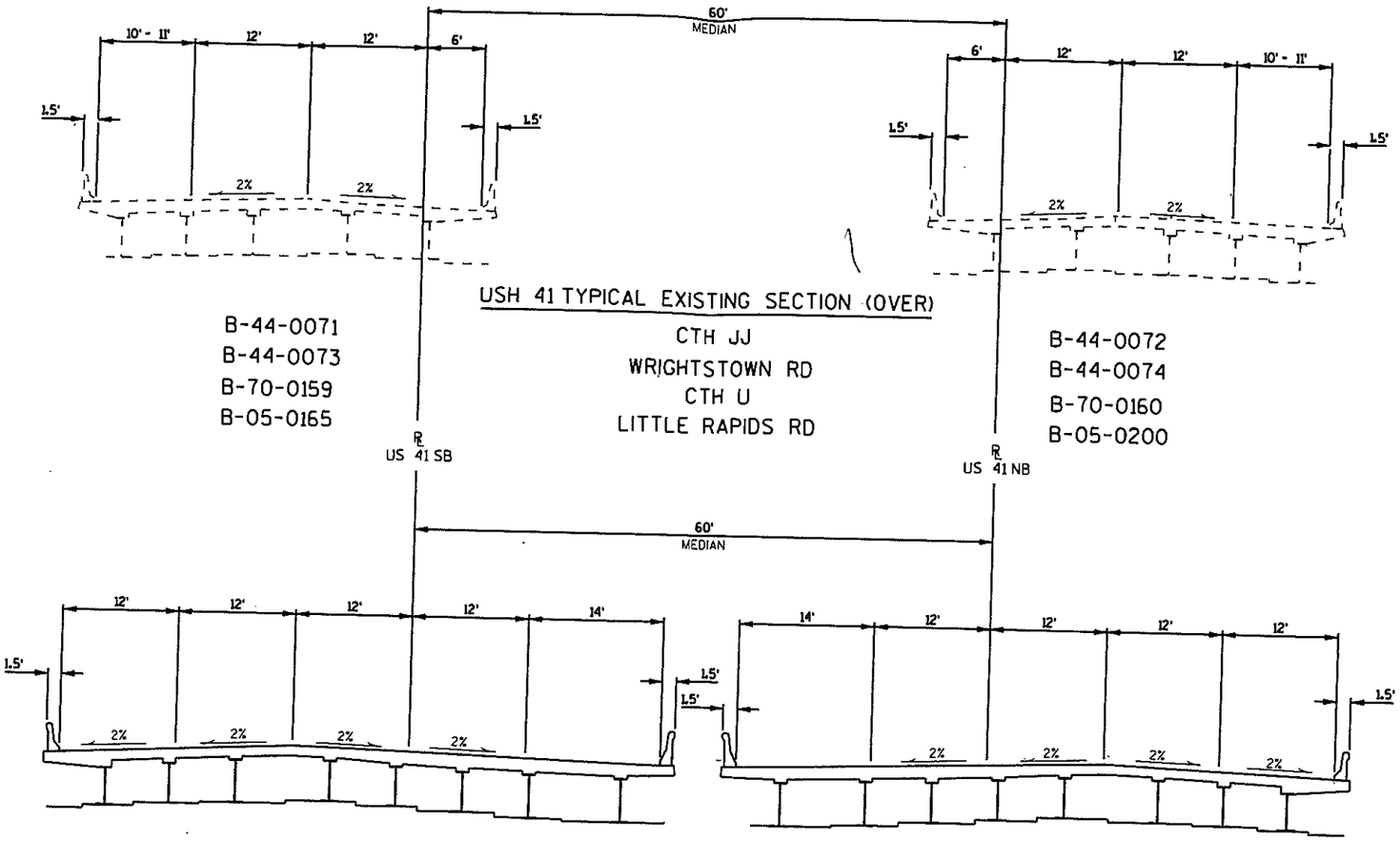
X	(01) ENERGY ABSORBING TERMINAL/EAT
	(02) TURN DOWN
	(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:

	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

2



USH 41 TYPICAL EXISTING SECTION (OVER)

B-44-0071
B-44-0073
B-70-0159
B-05-0165

CTH JJ
WRIGHTSTOWN RD
CTH U
LITTLE RAPIDS RD

B-44-0072
B-44-0074
B-70-0160
B-05-0200

DESIRABLE PROPOSED SECTION (OVER)

B-44-0071
B-44-0073
B-70-0159
B-05-0165

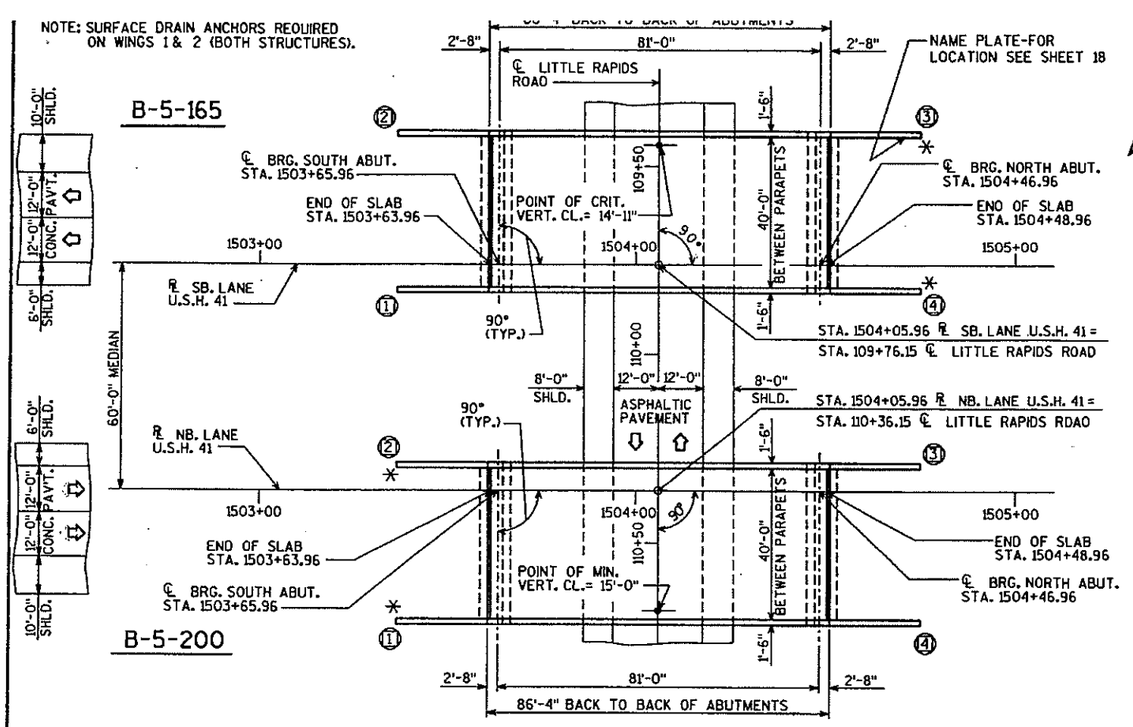
CTH JJ
WRIGHTSTOWN RD
CTH U
LITTLE RAPIDS RD
(NEW BRIDGES)

B-44-0072
B-44-0074
B-70-0160
B-05-0200

PROJECT NO: 1130-31-00	HWY: US 41	COUNTY: WINNEBAGO/ OUTAGAMIE	TYPICAL SECTIONS	SHEET 19	E

FILE NAME : J:\44386\t1\Short Term Solutions\Amendment #5\DAAR\120726\TYICAL SECTIONS_bridges.dgn
PLOT DATE : 7/26/2012 PLOT BY : maryoung PLOT NAME : $FILE$ PLOT SCALE : 15:1

NOTE: SURFACE DRAIN ANCHORS REQUIRED ON WINGS 1& 2 (BOTH STRUCTURES).

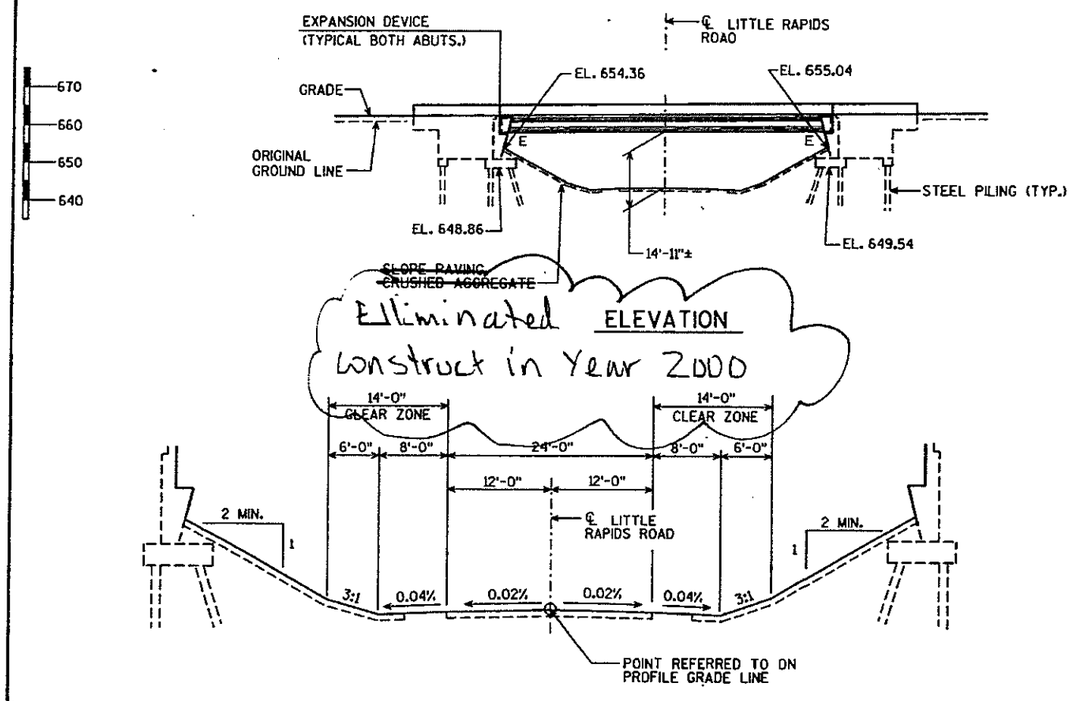


PLAN

SINGLE SPAN-45" PRESTRESSED GIRDERS

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

⬡ INDICATES WING NUMBER



TYPICAL SECTION THRU LITTLE RAPIDS ROAD

DESIGN DATA

LIVE LOAD:

DESIGN RATING; HS-20
INVENTORY RATING; HS-23
OPERATIONAL RATING; HS-44
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

45" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 6,000 P.S.I.
STRANOS-½" ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATED 55'-0" LONG.

TRAFFIC VOLUME

U.S.H. 41	LITTLE RAPIDS ROAD
A.D.T.=36,330 (2018)	A.D.T.=180 (2018)
R.D.S.=70 M.P.H.	R.D.S.=45 M.P.H.

BENCH MARK

NO.	STATION	DESCRIPTION		ELEV.
16	1507+00	P.K. NAIL IN 20" MAPLE	200' RT	661.04
17	1511+50	P.M. SW. CORNER MEN. STONE FIRE DEPT.	225'RT.	662.98

LIST OF DRAWINGS

BRIDGE OFFICE CONTACTS :
KENT BAHLER (608) 266-8490
JACK KLEMM (608) 266-5093

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-165

U.S.H. 41 OVER LITTLE RAPIDS ROAD

COUNTY BROWN		TOWN/~~CITY/VILLAGE~~ LAWRENCE	
DESIGN SPEC. AASHTO 1994		LOAD HS-20	CONST. SPEC. 1989
DESIGNED BY V.T.	DESIGN CK'D. J.S.H.	DRAWN BY C.M.F.	PLANS CK'D. J.C.K.

APPROVED: Gerald H. Anderson 12-02-98
CHIEF STRUCTURAL DESIGN ENGINEER — DATE

GENERAL PLAN

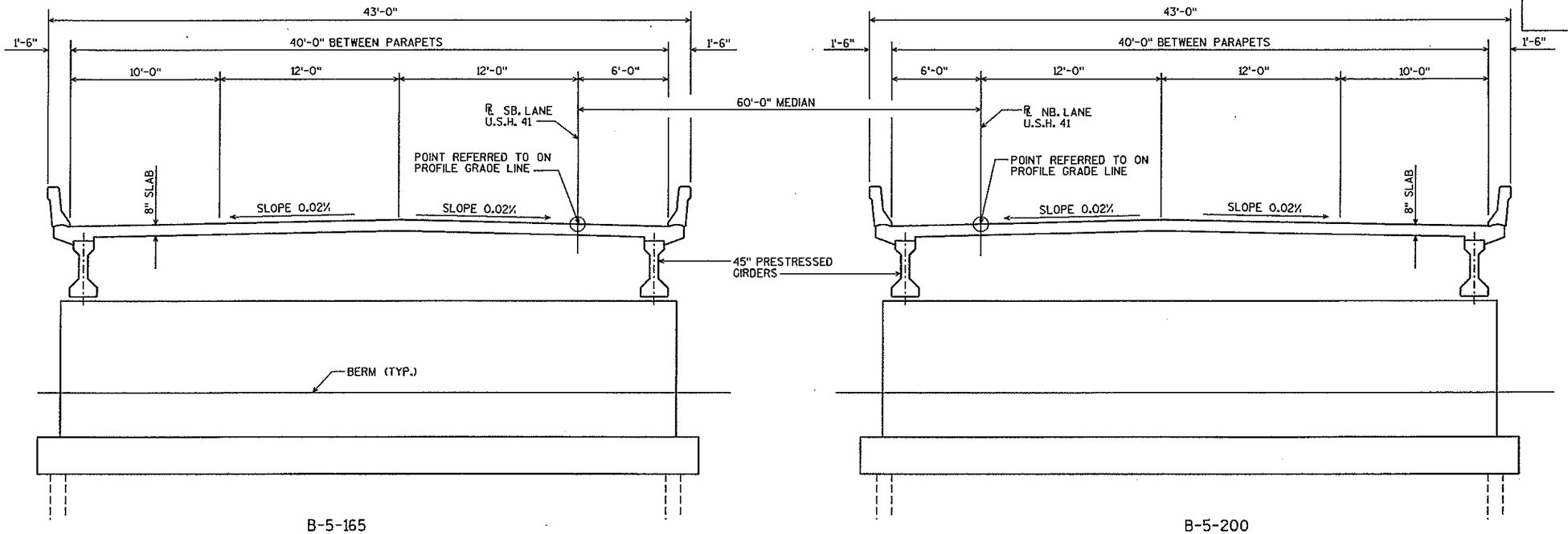
SHEET 1 OF 19

DATE: APRIL '95

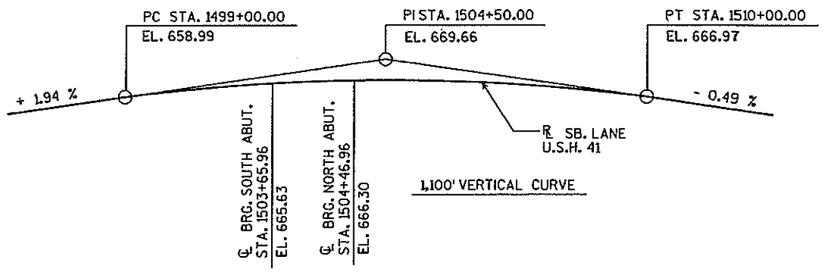
I.D. 1131-08-00

FILE= BR_B05165:165GP.DGN

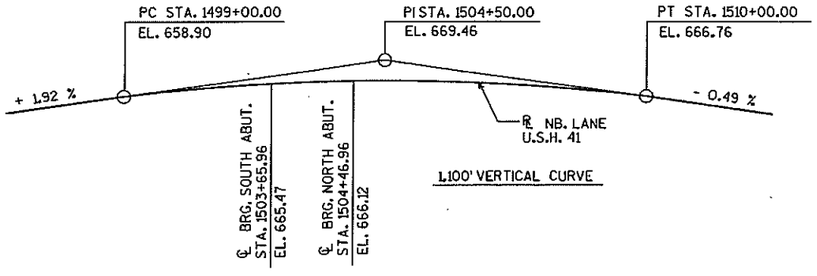
STATE PROJECT NUMBER	SHEET NO.
1131-08-74	8.6



CROSS SECTION THRU ROADWAY LOOKING NORTH

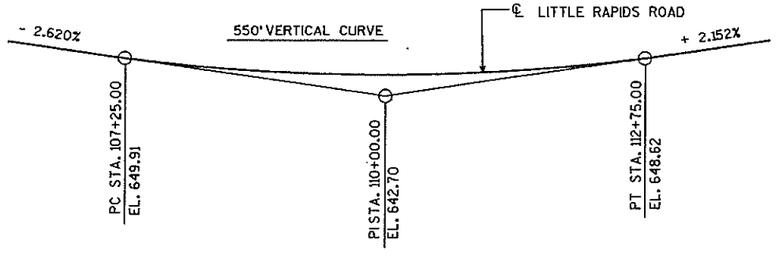


SOUTHBOUND LANE
(B-5-165)



NORTHBOUND LANE
(B-5-200)

PROFILE GRADE LINE U.S.H. 41



PROFILE GRADE LINE LITTLE RAPIDS ROAD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-165

CONST. SPEC. 1989	DRAWN BY C.M.F.	PLANS CK'D. J.E.K.

CROSS SECTION & PROFILES

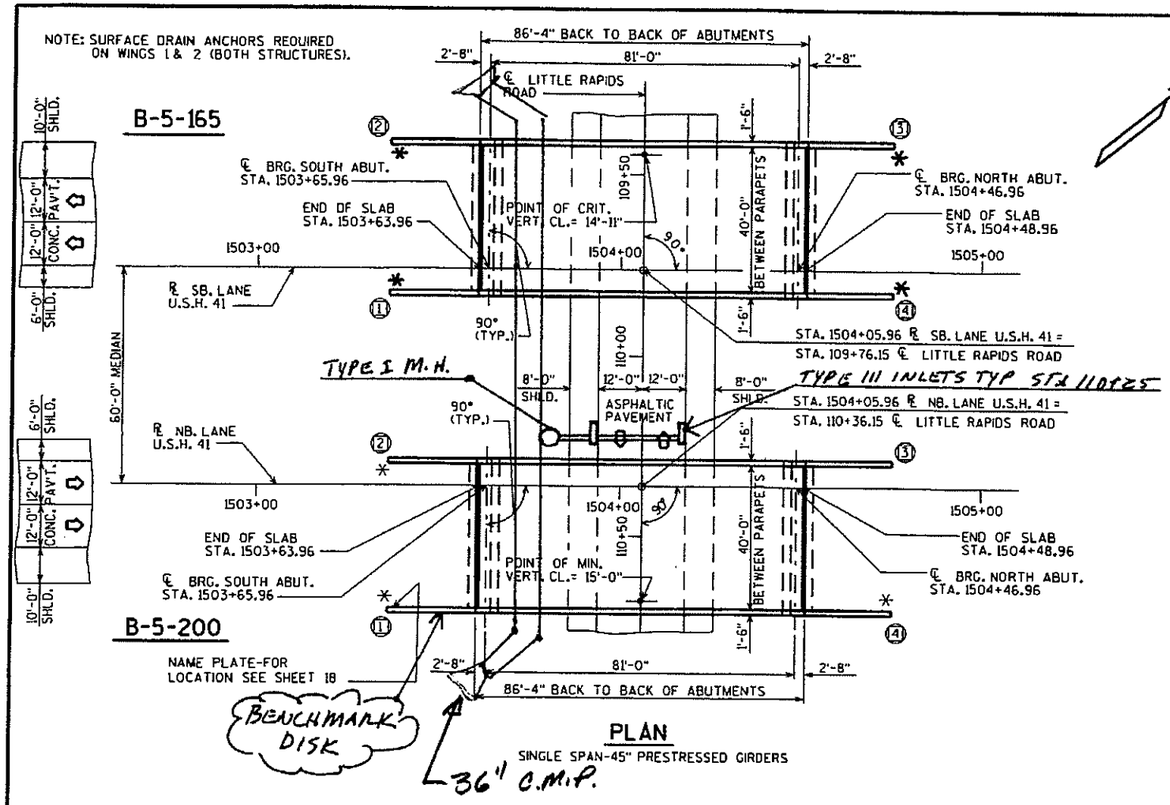
SHEET 2

SCALE = 4

TYPE CODE = X281

STATE PROJECT NUMBER	SHEET NO.
1131-08-76	8.1

NOTE: SURFACE DRAIN ANCHORS REQUIRED ON WINGS 1 & 2 (BOTH STRUCTURES).

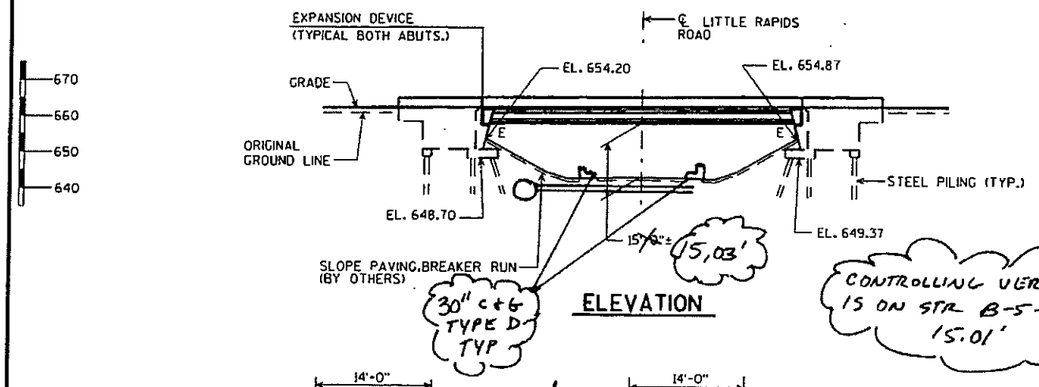


PLAN

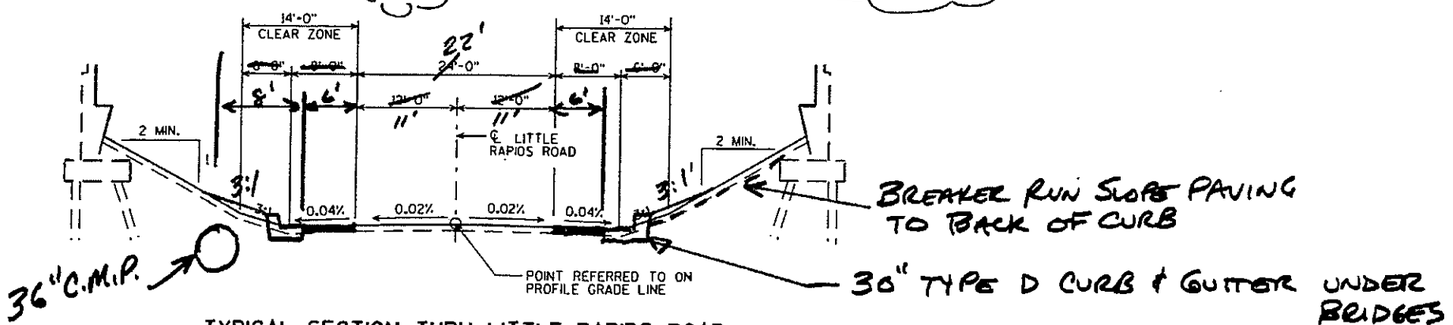
SINGLE SPAN-45" PRESTRESSED GIRDERS

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

⬡ INDICATES WING NUMBER



ELEVATION



TYPICAL SECTION THRU LITTLE RAPIDS ROAD

DESIGN DATA

LIVE LOAD:

DESIGN RATING; HS-20
INVENTORY RATING; HS-23
OPERATIONAL RATING; HS-44
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4.000 P.S.I. ALL OTHER — f'c = 3.500 P.S.I.

BAR STEEL, REINFORCEMENT, GRADE 60 — fy = 60.000 P.S.I.

45" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 6.000 P.S.I.
STRANDS-½" ø WITH ULTIMATE TENSILE STRENGTH OF 270.000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE.
SOUTH ABUT. ESTIMATED 65'-0" LONG.
NORTH ABUT. ESTIMATED 60'-0" LONG.

TRAFFIC VOLUME

U.S.H. 41	LITTLE RAPIDS ROAD
A.D.T.=36,330 (2018)	A.D.T.=180 (2018)
R.D.S.=70 M.P.H.	R.D.S.=45 M.P.H.

BENCH MARK

NO.	STATION	DESCRIPTION		ELEV.
16	1507+00	P.K. NAIL IN 20" MAPLE	200' RT	661.04
17	1511+50	P.M. SW. CORNER MEN. STONE FIRE DEPT.	225' RT.	662.98

LIST OF DRAWINGS

BRIDGE OFFICE CONTACTS :
KENT BAHLER (608) 266-8490
JACK KLEMM (608) 266-5093

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-200

U.S.H. 41 OVER LITTLE RAPIDS ROAD

COUNTY BROWN	TOWN/~~CITY~~/~~VILLAGE~~ LAWRENCE
DESIGN SPEC. AASHTO 1994	LOAD HS-20 CONST. SPEC. 1989
DESIGNED BY V.T. DESIGN CHD. J.S.H.	DRAWN BY C.M.F. PLANS CK'D. J.C.K.

APPROVED: [signature] CHIEF STRUCTURAL DESIGN ENGINEER 10-12-99 DATE

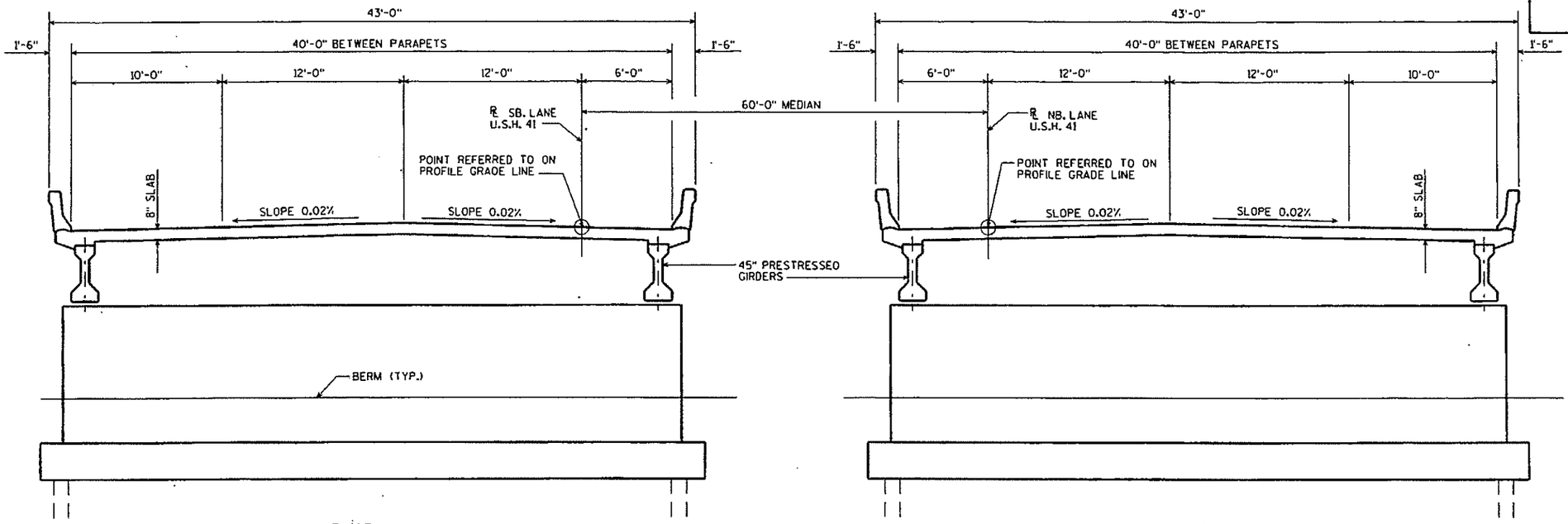
GENERAL PLAN

SHEET 1 OF 19

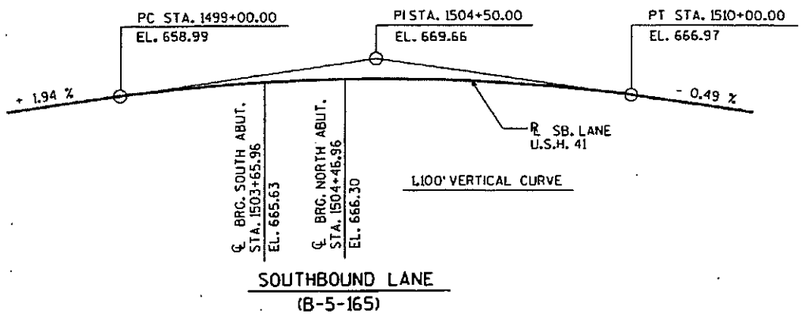
DATE: APRIL '95

FILE= BR_B05200200GP.DGN

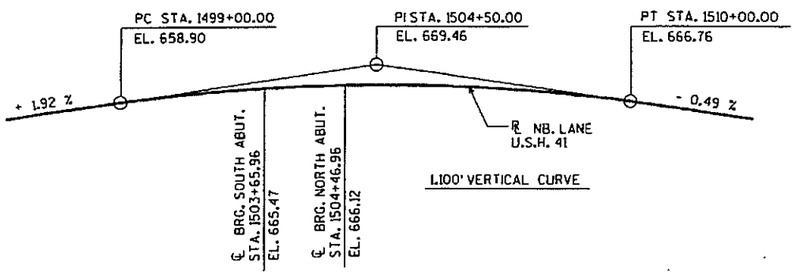
STATE PROJECT NUMBER	SHEET NO.
1131-08-76	8.2



CROSS SECTION THRU ROADWAY LOOKING NORTH

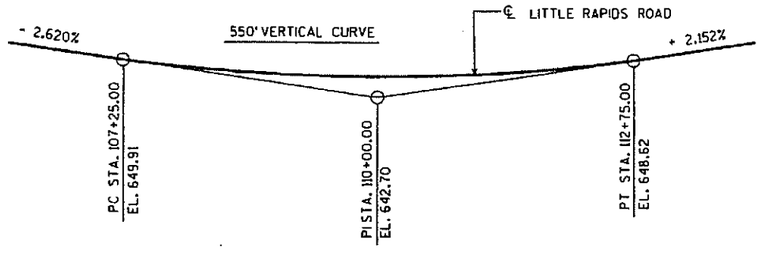


SOUTHBOUND LANE
(B-5-165)



NORTHBOUND LANE
(B-5-200)

PROFILE GRADE LINE U.S.H. 41



PROFILE GRADE LINE LITTLE RAPIDS ROAD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-200

CONST. SPEC. 1989	DRAWN BY C.M.F.	PLANS CK'D. J.C.K.

CROSS SECTION & PROFILES

SHEET 2

SCALE = 4

D-O 100 & 200 over Little Rapids Road

Vertical Clearance for Construction of New Bridges, Replacement Bridges, and Bridges on which the Superstructure is being replaced [1]

Overpass Facility →	Freeway, Expressway, or STH		Railroad[4], CTH, Town Road, Local Road, or Street	Pedestrian or Shared-use Structures	Sign Structures[2]
Underpass Facility ↓	Interchange	Grade Separation			
Non-arterial either STH, CTH, Town Road, Local Road, or Street	15'-9" Desirable 15'-3" Minimum	15'-3" Desirable 14'-9" Minimum		16'- 9" Desirable 16'-3" Minimum	18'-3" Minimum
Arterial either CTH, Town Road, Local Road, or Street (**excludes** freeway and expressway; also excludes arterial STH)	16'-9" Desirable 16'-3" Minimum	15'-3" Desirable 14'-9" Minimum		17'- 9" Desirable 17'-3" Minimum	
Freeway[3] or Expressway or arterial STH	16'-9" Desirable 16'-4" Minimum			17'- 9" Desirable 17'-4" Minimum	
Railroad[4,5,6,7]	23'-0" Minimum to 23'-3½" Maximum				

General notes:

1 Vertical clearance is needed for the entire roadway width (critical point; to include traveled way, auxiliary lanes, turn lanes, and shoulders), according to the above table.

Vertical clearance for railroads is measured from the top of rail and is required over an area 8 feet 6 inches from the track centerline on each side of a railroad track.

Do not exceed the desirable vertical clearance shown unless justified. Depending on topography and other specific situations vertical clearance for any structure may be greater than that shown when justified. Some things to consider are: over height loads traveling on the roadway; the level of development in the area, the projected growth in traffic volume and importance of the roadway, and the possibility of reclassification.

2 See LRFD Bridge Manual Chapter 39 (http://on.dot.wi.gov/dtid_bos/extranet/structures/LRFD/LRFDManualIndex.htm) and LRFD Standard Details 39.02 and 39.10 for design considerations and requirements for vertical clearance on new and replacement Sign Structures.

3 See FDM 11-44-1 for vertical clearance guidance specific to Interstate freeways.

4 Consult with the Region Railroad Coordinator if the over-passing or under-passing facility is either a railroad or a "rails-to-trails" trail; or if a structure is owned by a railroad company.

5 A vertical clearance <23'-0" requires both an approved Exception to Standards (see FDM 11-1-2 and FDM 11-1-4) and early coordination with BTLR R&H, Railroads and Harbors Section (RHS) through the Region Railroad Coordinator. The Exception to Standards shall contain documentation that the Office of the Commissioner of Railroads (OCR) has been petitioned.

See Chapter 17 for additional information.

6 Provide justification for a vertical clearance >23'-3 ½" to the RHS.

7 Vertical clearance less than 23'-0" may be acceptable or desirable in certain situations, such as for spur tracks, lead tracks, some branch lines and even mainline tracks when other impediments to 23'-0" exist. Review such situations with the Railroad Project Coordination Engineer in RHS. Early coordination with RHS is required.

DAAR ENGINEERING, INC.

PROJECT: _____ DATE: _____

DESCRIPTION: USH 41 over Little Rapids Road, B-5-165 (SB) & B-5-200 (NB) SHEET ____ OF ____

CALC. BY: _____

CHECKED BY: _____

Existing structures are 40'x86' 45" Girders Single Span 81'

V.C = 15.03' (SB) & 15.03' NB Desired = 15.25'

Widen USH 41 by 20' in median on both structures

20' x .02 = 0.4' → 14.63' V.C.

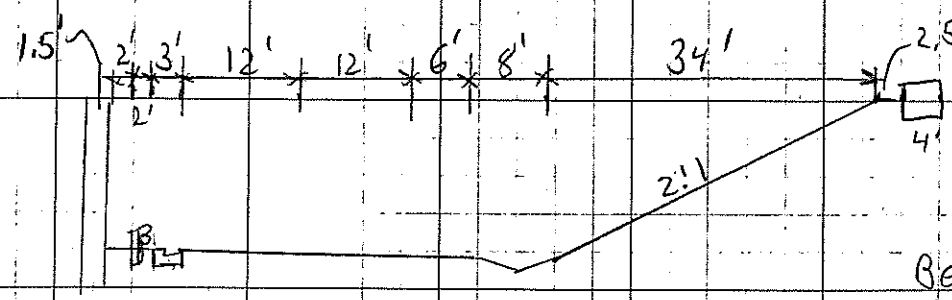
15.25 - 14.63 = 0.62' adjustment to profile

Proposed structure to include expansion of side road, -2 spans

Existing = 2-12' lanes with 8' shldrs

Proposed = 4-12' lanes with 6' shldrs & 14' clear zone

Proposed Typical Half Section (Little Rapids Road)



Pier offset	1.5'
Beam Guard	2.0'
C & G	2.0'
2-12' lanes	3.0'
14' clear zone	24.0'
slope Paving	14.0'
Abutment	34.0'
	2.5'
	4.0'
	87' span
	36M Girders
9" less	= +0.75'

VC = 15.03
-0.40
+0.75
15.38'

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 SB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-165
Feature Under: LITTLE RAPIDS RD		Sect/Twn/Rng: S11 T22N R19E		
Location: 4.5M S JCT CTH EE		County: BROWN (05	Municipality: TOWN-LAWRENCE (05024)	
Inv Rating: HS23	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS44	Total Length (ft): 86.2	Deck Area(ft2): 3706	ADT On: 44400 Yr: 2006	ADT Under: 0 Yr: 2000

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-17-11						
Frequency	24						
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 10-07-09	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 02-16-99

Expansion Joints

Location	Type	Temp: File Insp. Date	50 File Insp. (in)	50 New Insp. (in)
NORTH AB	STRIPSEA		1.5	1.0
SOUTH AB	STRIPSEA		1.2	1.0

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	15.03	10-17-00	
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
PREST CONCRET	DECK GIRDER		81.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
2000	NEW STRUCTURE		

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control	Y	
Access Equipment	Y	
Other	Y	

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-17-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected

Ck	Elem./Env.	Description	Unit	Total QTY.	Quantity in Condition States 1	2	3	4	5
X	26 / 4	Conc Deck/Coatd Bars	SF	3706	3706				
X	109 / 3	P/S Conc Open Girder	LF	495	494	1			
	Small spall on west girder								
X	172 / 3	Painted Steel Diaphr	EA	10	10				
X	215 / 4	R/Conc Abutment	LF	86	82	4			
	CS-2 (N Abut 2" & S Abut 2")								
X	300 / 4	Strip Seal Exp Joint	LF	82	82				
X	310 / 4	Elastomeric Bearing	EA	12	12				
X	321 / 4	R/Conc Approach Slab	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	170	90	80			
	Vertical cracks and scaling on the bottom edge of railing.								
X	342 / 2	RipRap Slope Protect	EA	2	2				
X	358 / 4	Deck Cracking SmFlag	EA	1	1				
X	359 / 4	Und Dk Surf Sm Flag	EA	1	1				
X	400 / 4	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Expansion Joints - Clean
Amount: Date(YYYY-MM-DD):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	7	7	Culvert	N	N
Superstructure	7	8	Channel	N	N
Substructure	7	7	Waterway	N	N

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-05-165
USH 41 SB over LITTLE RAPIDS RD

LOCATION

(3) Municipality:	TOWN-LAWRENCE(05024)
(16) Latitiude(° ' "):	44°23'49.38"N
(17) Longitude(° ' "):	88°09'14.27"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	2
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	86.2	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):	40.0	
(55) Minimum Right Lateral(ft):	8.0	
(55) Minimum Left Lateral(ft):	8.0	

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE	
Outer Rail:	Left / Right	Type
		TYPE F (TWO SQUARE TUBES) - STEEL(8)
		TYPE F (3 SQUARE TUBES) - STEEL(65)
		TYPE F (4 SQUARE TUBES) - STEEL(72)
		TYPE M-STEEL 3 SQUARE TUBES(93)
		SLOPED FACE PARAPET LF(91)
		SLOPED FACE PARAPET HF(92)
		VERTICAL FACE PARAPET TYPE A(74)
		TYPE W-THRIE BEAM(79)
		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
X	X	OTHER(99) (Please specify) **Left:** NJ SLOPING PARAPET(61) **Right:** NJ SLOPING PARAPET(61)
Transition Type:		CONT GUARD RAIL
		NO APP GRDRL
		NO ATTACHMENT
5		22 MM(7/8") BOLT (Please enter quantity)
		25 MM(1") BOLT (Please enter quantity)
		OTHER (Please specify)
Guardrail Termination Type:	X	(01) ENERGY ABSORBING TERMINAL/EAT
		(02) TURN DOWN
		(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: USH 41 NB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-05-200
Feature Under: LITTLE RAPIDS RD		Sect/Twn/Rng: S11 T22N R19E		
Location: 6.6M N JCT CTH JJ		County: BROWN(05	Municipality: TOWN-LAWRENCE(05024)	
Inv Rating: HS23	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS44	Total Length (ft): 85.0	Deck Area(ft2): 3655	ADT On: 44400 Yr: 2006	ADT Under: 0 Yr: 2000

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	10-17-11						
Frequency	24						
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 10-07-09	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 12-14-99

Expansion Joints

Location	Type	Temp: File Insp. Date	50 File Insp. (in)	50 New Insp. (in)
NORTH AB	STRIPSEA		1.4	1.0
SOUTH AB	STRIPSEA		2.0	1.2

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	15.03	10-17-00	
Min. Veritcal Clearance Under (non-Cardinal)			
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
PREST CONCRET	DECK GIRDER		81.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
2000	NEW STRUCTURE		

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control	Y	
Access Equipment	Y	
Other	Y	

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 10-17-11	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected

Ck	Elem./Env.	Description	Unit	Total QTY.	Quantity in Condition States				
					1	2	3	4	5
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X	109 / 3	P/S Conc Open Girder	LF	495	495				
X	172 / 3	Painted Steel Diaphr	EA	10	10				
X	215 / 4	R/Conc Abutment	LF	82	78	4			
	CS-2 (N Abut 2" & S Abut 2")								
X	300 / 4	Strip Seal Exp Joint	LF	82	82				
X	310 / 4	Elastomeric Bearing	EA	12	12				
X	321 / 4	R/Conc Approach Slab	EA	2	2				
	Shoulders settled off ends of the approach slab								
X	331 / 4	Conc Bridge Railing	LF	170	144	26			
X	342 / 2	RipRap Slope Protect	EA	2		2			
	Both slopes settled on west end								
X	358 / 4	Deck Cracking SmFlag	EA	1	1				
X	359 / 4	Und Dk Surf Sm Flag	EA	1	1				
X	400 / 4	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Expansion Joints - Clean
Amount: Date(YYYY-MM-DD):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
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Superstructure	8	8	Channel	N	N
Substructure	7	7	Waterway	N	N

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B-05-200
USH 41 NB over LITTLE RAPIDS RD

LOCATION

(3) Municipality:	TOWN-LAWRENCE(05024)
(16) Latitiude(° ' "):	44°23'47.95"N
(17) Longitude(° ' "):	88°09'13.57"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	2
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	85.0	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
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Outer Rail:

Left	Right	Type
		TYPE F (TWO SQUARE TUBES) - STEEL(8)
		TYPE F (3 SQUARE TUBES) - STEEL(65)
		TYPE F (4 SQUARE TUBES) - STEEL(72)
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		SLOPED FACE PARAPET LF(91)
		SLOPED FACE PARAPET HF(92)
		VERTICAL FACE PARAPET TYPE A(74)
		TYPE W-THRIE BEAM(79)
		TYPE H ON VERTICAL PARAPET(80)
		TIMBER(38)
X	X	OTHER(99) (Please specify) **Left:** NJ SLOPING PARAPET(61) **Right:** NJ SLOPING PARAPET(61)

Transition Type:

	CONT GUARD RAIL
	NO APP GRDRL
	NO ATTACHMENT
5	22 MM(7/8") BOLT (Please enter quantity)
	25 MM(1") BOLT (Please enter quantity)
	OTHER (Please specify)

Guardrail Termination Type:

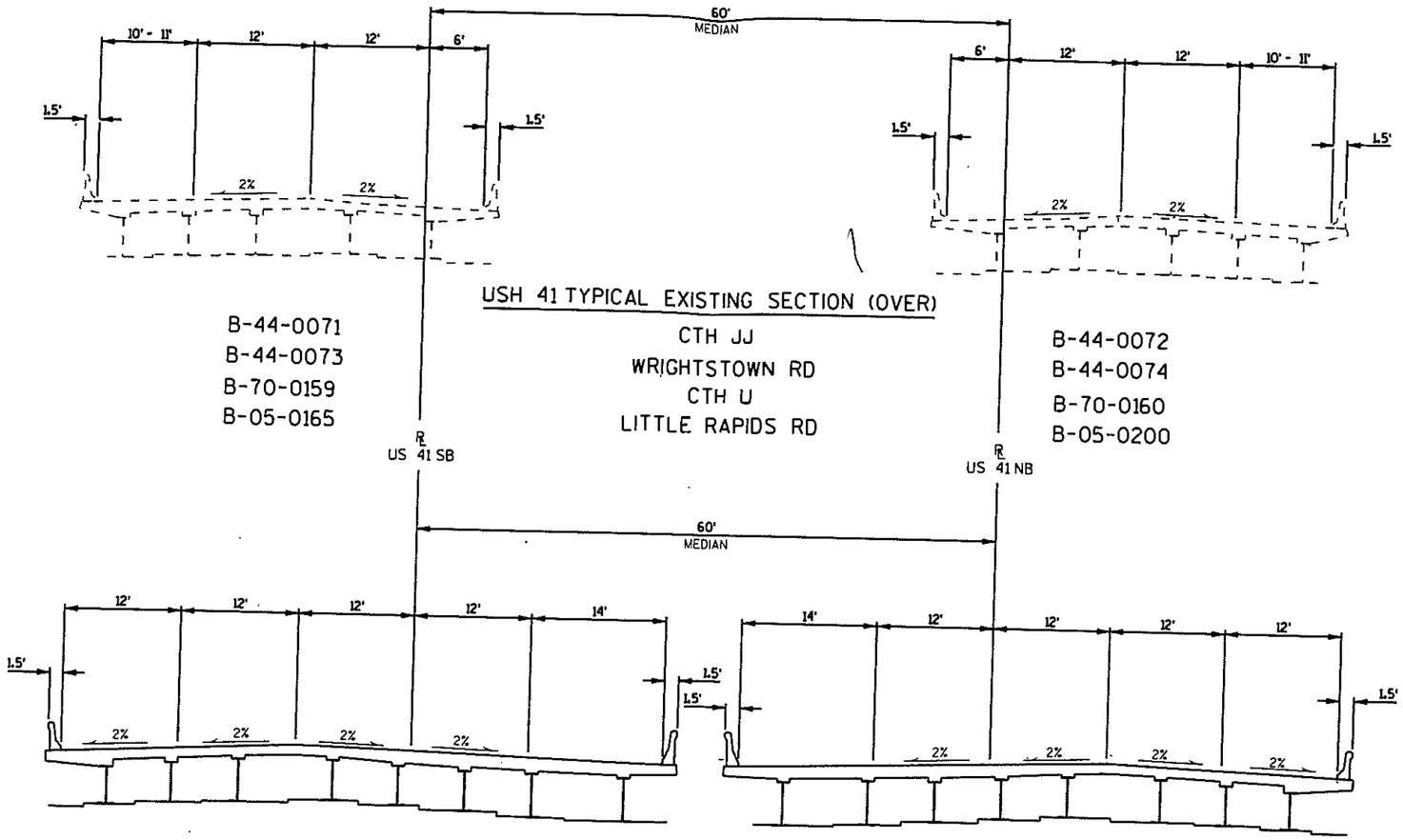
X	(01) ENERGY ABSORBING TERMINAL/EAT
	(02) TURN DOWN
	(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:

	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

2



USH 41 TYPICAL EXISTING SECTION (OVER)

B-44-0071
B-44-0073
B-70-0159
B-05-0165

CTH JJ
WRIGHTSTOWN RD
CTH U
LITTLE RAPIDS RD

B-44-0072
B-44-0074
B-70-0160
B-05-0200

DESIRABLE PROPOSED SECTION (OVER)

B-44-0071
B-44-0073
B-70-0159
B-05-0165

CTH JJ
WRIGHTSTOWN RD
CTH U
LITTLE RAPIDS RD
(NEW BRIDGES)

B-44-0072
B-44-0074
B-70-0160
B-05-0200

PROJECT NO: 1130-31-00	HWY: US 41	COUNTY: WINNEBAGO/ OUTAGAMIE	TYPICAL SECTIONS	SHEET 19	E

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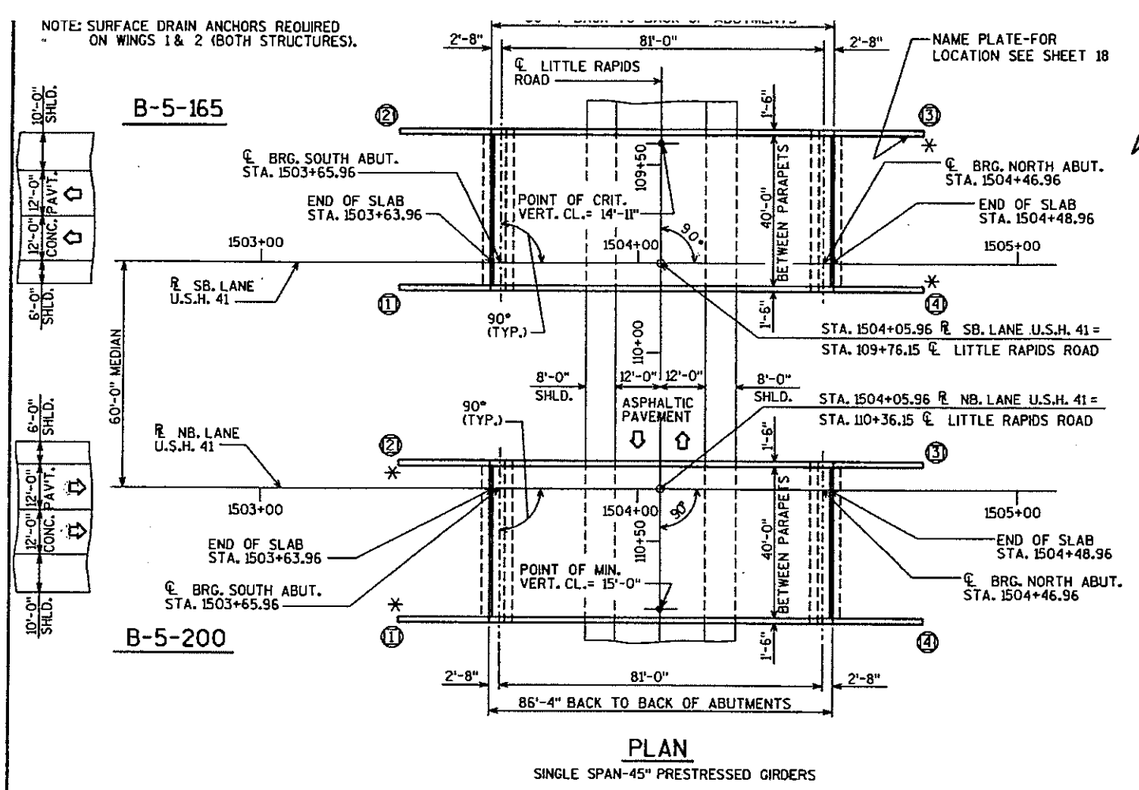
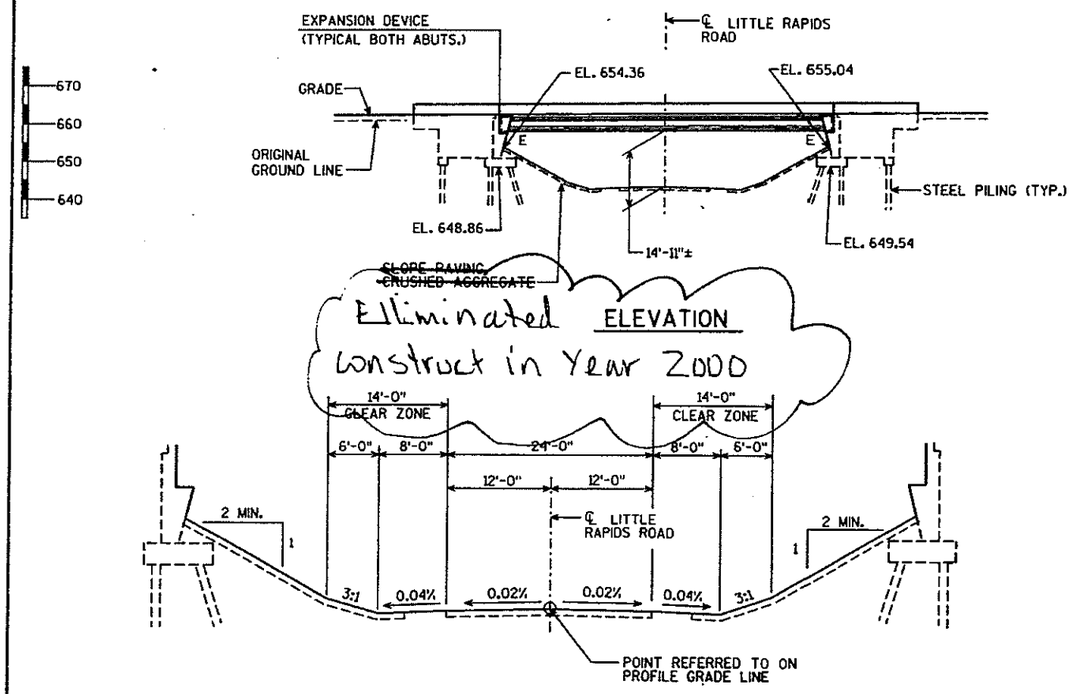


PLAN

SINGLE SPAN-45" PRESTRESSED GIRDERS

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

(1) INDICATES WING NUMBER



TYPICAL SECTION THRU LITTLE RAPIDS ROAD

DESIGN DATA

LIVE LOAD:

DESIGN RATING; HS-20
INVENTORY RATING; HS-23
OPERATIONAL RATING; HS-44
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

45" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 6,000 P.S.I.
STRANDS-½" ϕ WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X42 STEEL PILING DRIVEN TO A MINIMUM BEARING VALUE OF 55 TONS PER PILE. ESTIMATED 55'-0" LONG.

TRAFFIC VOLUME

U.S.H. 41	LITTLE RAPIDS ROAD
A.D.T.=36,330 (2018)	A.D.T.=180 (2018)
R.D.S.=70 M.P.H.	R.D.S.=45 M.P.H.

BENCH MARK

NO.	STATION	DESCRIPTION	ELEV.
16	1507+00	P.K. NAIL IN 20" MAPLE 200'RT	661.04
17	1511+50	P.M. SW. CORNER MEN. STONE FIRE DEPT. 225'RT.	662.98

LIST OF DRAWINGS

BRIDGE OFFICE CONTACTS :
KENT BAHLER (608) 266-8490
JACK KLEMM (608) 266-5093

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-165

U.S.H. 41 OVER LITTLE RAPIDS ROAD

COUNTY BROWN		TOWN/~~CITY/VILLAGE~~ LAWRENCE	
DESIGN SPEC. AASHTO 1994		LOAD HS-20	CONST. SPEC. 1989
DESIGNED BY V.T.	DESIGN CK'D. J.S.H.	DRAWN BY C.M.F.	PLANS CK'D. J.C.K.

APPROVED Gerald H. Anderson 12-02-98
CHIEF STRUCTURAL DESIGN ENGINEER DATE

GENERAL PLAN

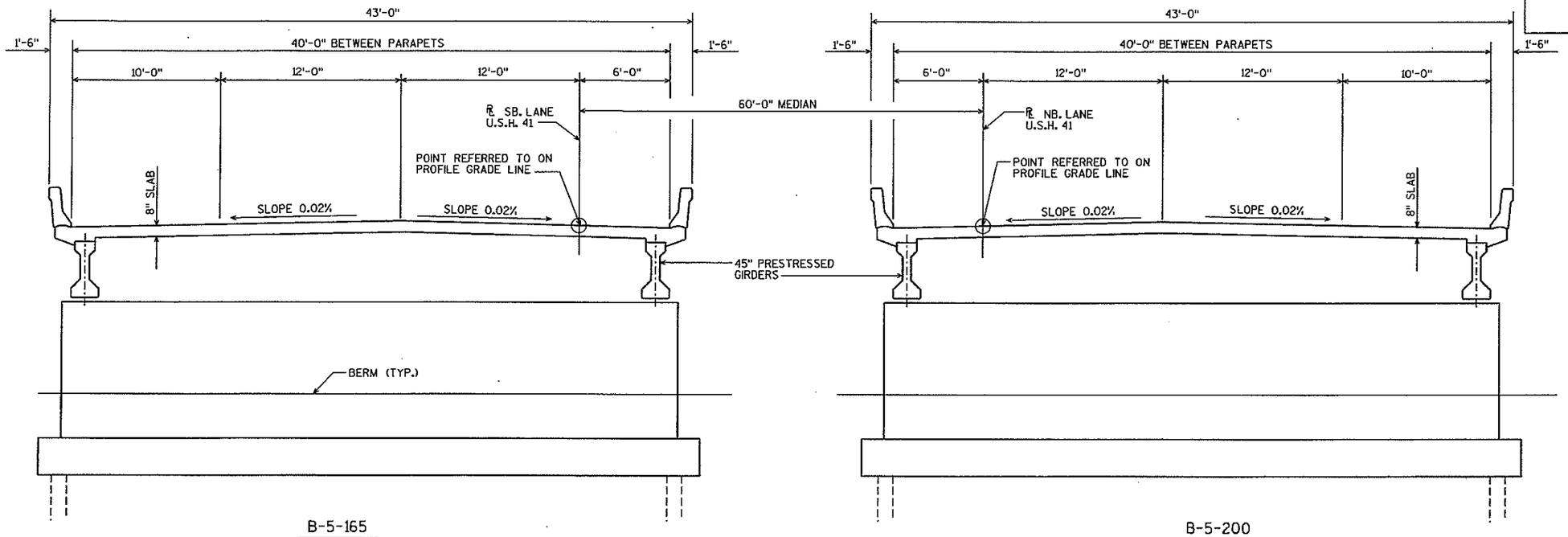
SHEET 1 OF 19

DATE: APRIL '95

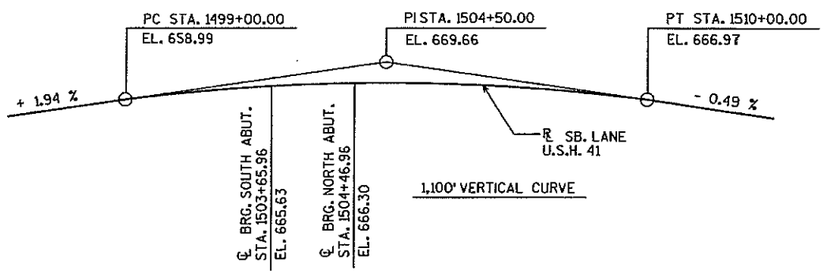
FILE= BR_B05165:165GP.DGN

I.D. 1131-08-00

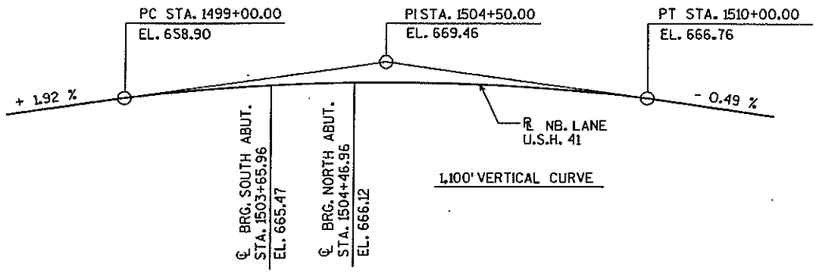
STATE PROJECT NUMBER	SHEET NO.
1131-08-74	8.6



CROSS SECTION THRU ROADWAY LOOKING NORTH

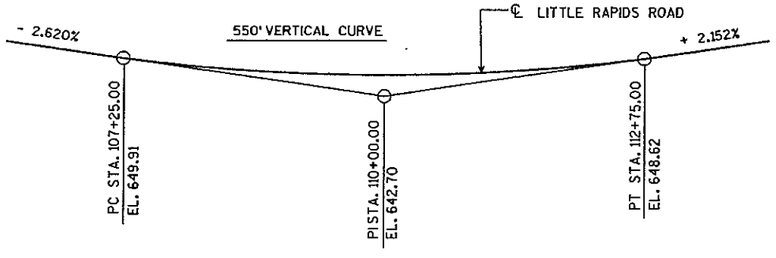


SOUTHBOUND LANE
(B-5-165)



NORTHBOUND LANE
(B-5-200)

PROFILE GRADE LINE U.S.H. 41



PROFILE GRADE LINE LITTLE RAPIDS ROAD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-165

CONST. SPEC. 1989	DRAWN BY C.M.F.	PLANS CK'D. J.E.K.

CROSS SECTION & PROFILES

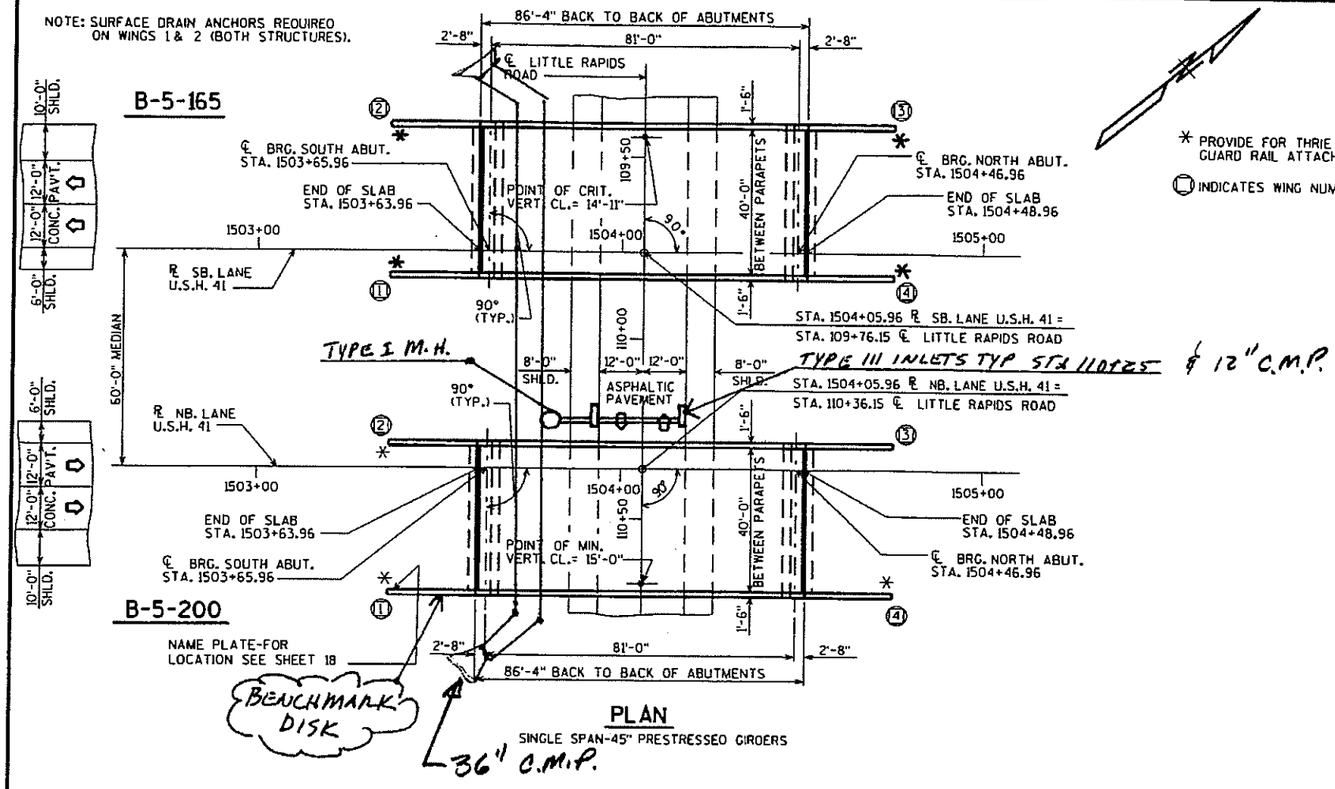
SHEET 2

SCALE = 4

TYPE CODE = X281

STATE PROJECT NUMBER	SHEET NO.
1131-08-76	8.1

NOTE: SURFACE DRAIN ANCHORS REQUIRED ON WINGS 1 & 2 (BOTH STRUCTURES).

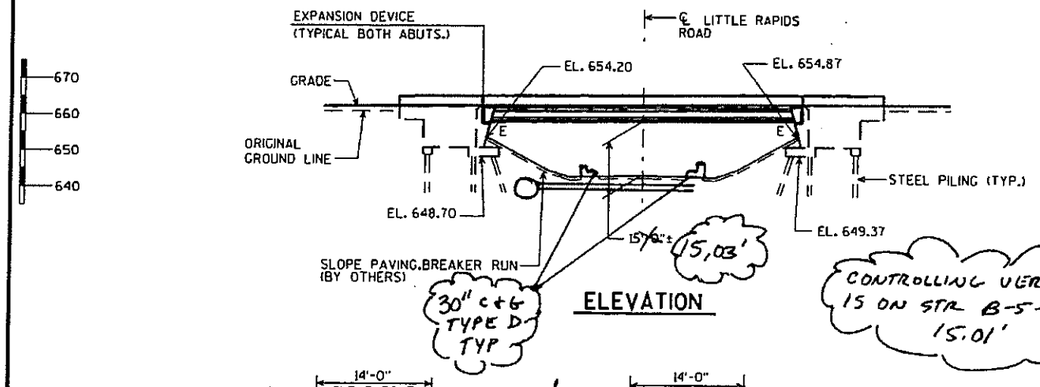


PLAN

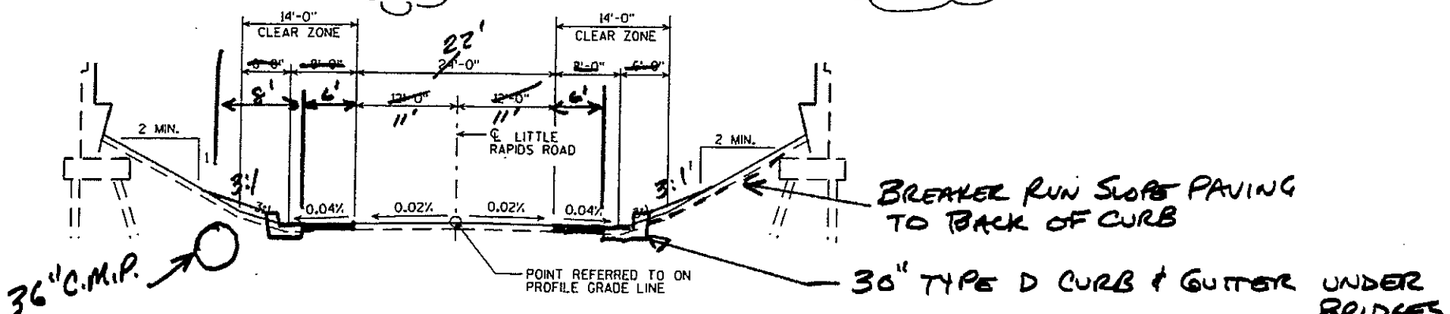
SINGLE SPAN-45" PRESTRESSED GIRDERS

* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

(11) INDICATES WING NUMBER



ELEVATION



TYPICAL SECTION THRU LITTLE RAPIDS ROAD

DESIGN DATA

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INVENTORY RATING; HS-23
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NORTH ABUT. ESTIMATED 60'-0" LONG.

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BENCH MARK

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LIST OF DRAWINGS

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-200

U.S.H. 41 OVER LITTLE RAPIDS ROAD

COUNTY BROWN		TOWN/~~CITY~~/~~VILLAGE~~ LAWRENCE	
DESIGN SPEC. AASHTO 1994		LOAD HS-20	CONST. SPEC. 1989
DESIGNED BY V.T.	DESIGN CHD. J.S.H.	DRAWN BY C.M.F.	PLANS CK'D. J.C.K.

APPROVED: [signature] 10-12-99
CHIEF STRUCTURAL DESIGN ENGINEER DATE

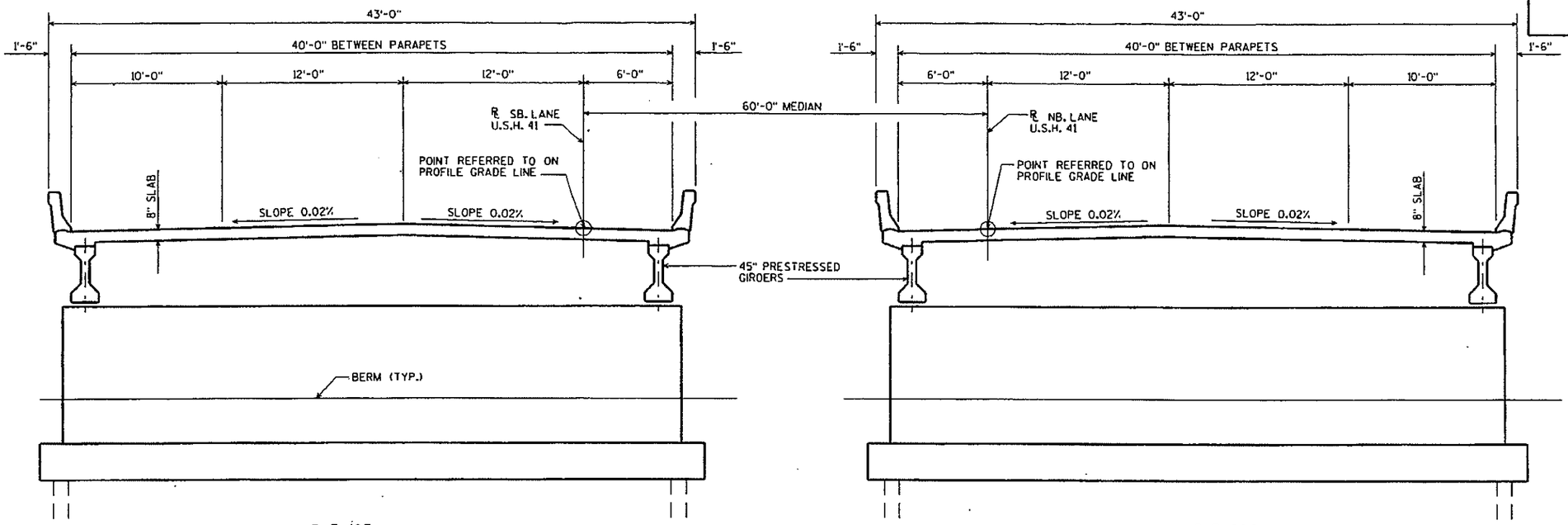
GENERAL PLAN

SHEET 1 OF 19

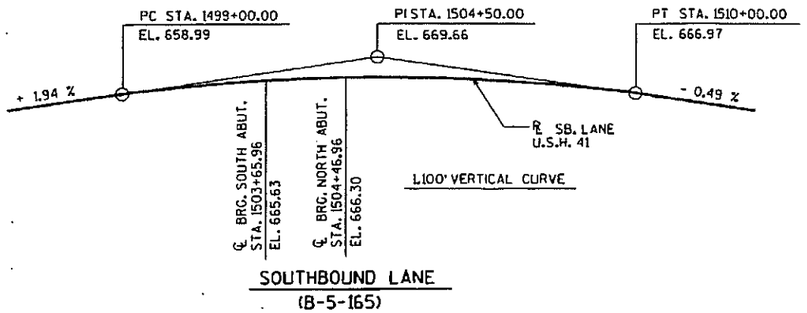
DATE: APRIL '95

FILE= BR_B05200:200GP.DGN

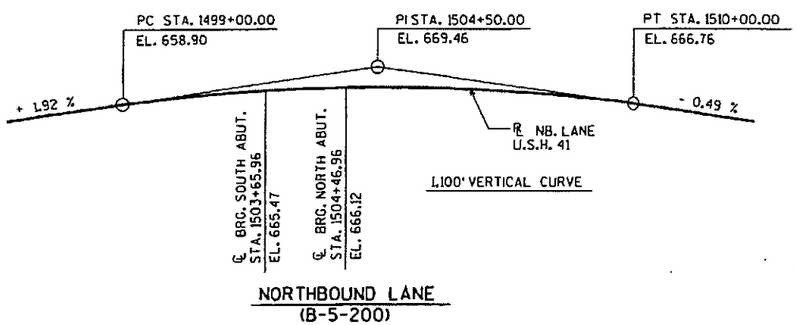
STATE PROJECT NUMBER	SHEET NO.
1131-08-76	8.2



CROSS SECTION THRU ROADWAY LOOKING NORTH

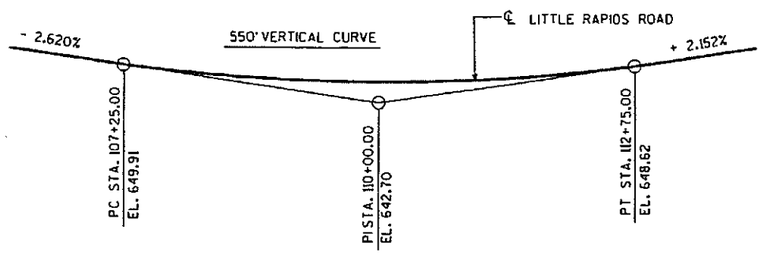


SOUTHBOUND LANE
(B-5-165)



NORTHBOUND LANE
(B-5-200)

PROFILE GRADE LINE U.S.H. 41



PROFILE GRADE LINE LITTLE RAPIDS ROAD

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

STRUCTURE B-5-200

CONST. SPEC. 1989	DRAWN BY C.M.F.	PLANS CK'D. S.C.K.

CROSS SECTION & PROFILES

SHEET 2

SCALE = 4

ME-101-1204

RETAINING WALLS (2) PLACED ALONG US 41 SB ~~BETWEEN~~ OUTSIDE SHOULDER BETWEEN MAINLINE AND AMERICAN DRIVE ARE PLACED WITH TRI-COUNTY RECONSTRUCTION PROJECT AND ARE ASSUMED PLACED IN POSITION TO COMPLEMENT US 41 RECONSTRUCTION PROJECT.

RETAINING WALL ALONG US 41 NB OUTSIDE SHOULDER BETWEEN MAINLINE ~~AND~~ EHLERS RD. ~~ARE~~ IS PLACED WITH TRI-COUNTY RECONSTRUCTION PROJECT AND ~~ARE~~ IS ASSUMED PLACED IN POSITION TO COMPLEMENT US 41 RECONSTRUCTION PROJECT.

RETAINING WALL ALONG US 41 NB OUTSIDE SHOULDER NEAR JACOBSEN RD. EAST ABUTMENT ~~ARE~~ IS PLACED WITH TRI-COUNTY RECONSTRUCTION PROJECT AND ~~ARE~~ IS ASSUMED PLACED IN POSITION TO COMPLEMENT US 41 RECONSTRUCTION PROJECT.

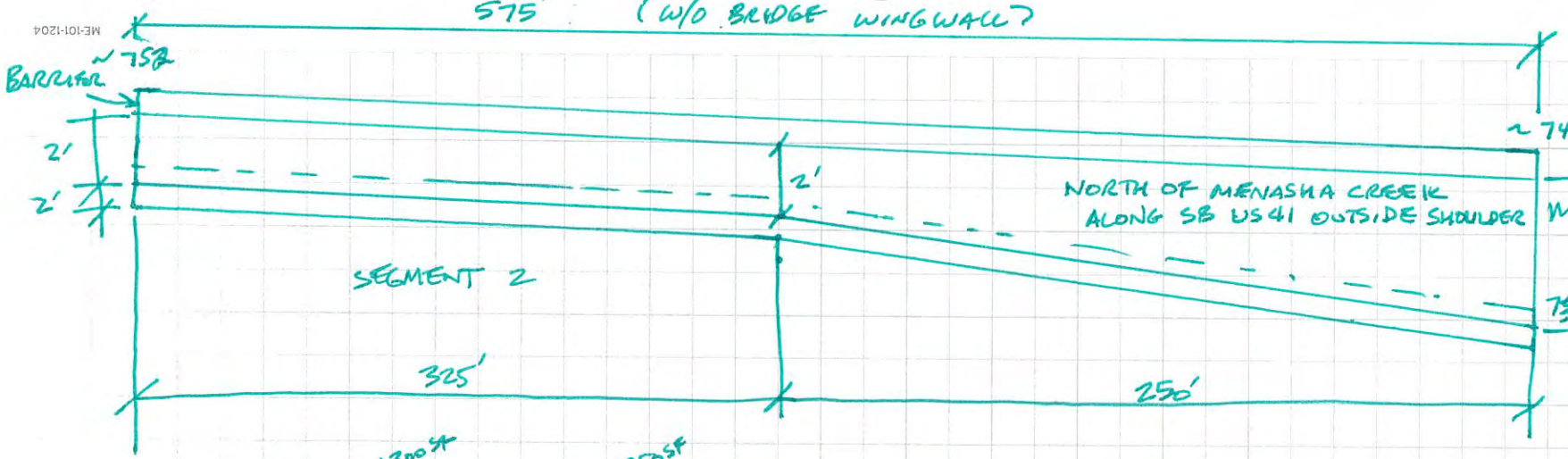
RETAINING WALL ALONG US 41 NB OUTSIDE SHOULDER NEAR MENASHA CREEK BRIDGE IS PLACED WITH TRI-COUNTY RECONSTRUCTION PROJECT AND IS ASSUMED PLACED IN POSITION TO COMPLEMENT US 41 RECONSTRUCTION PROJECT.

FOR: SEGMENT 1 | JOB NO: | SHEET NO:

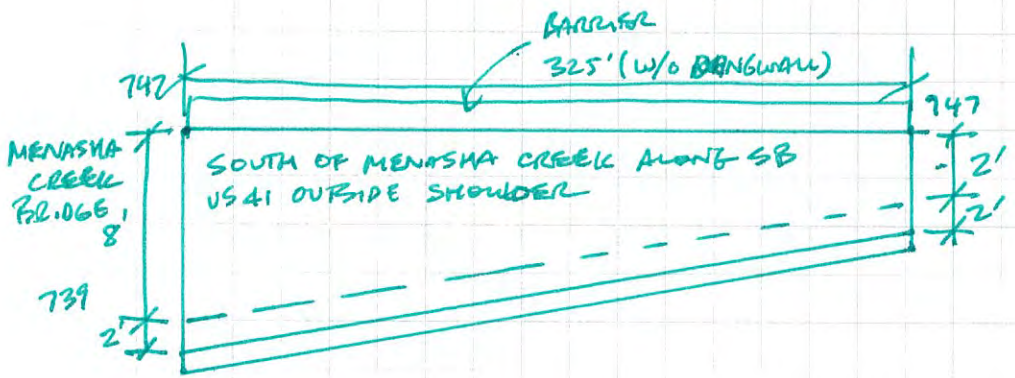
MADE BY: | CHECKED BY: | BACKCHECKED BY:

DATE: | DATE: | DATE:

HNTB



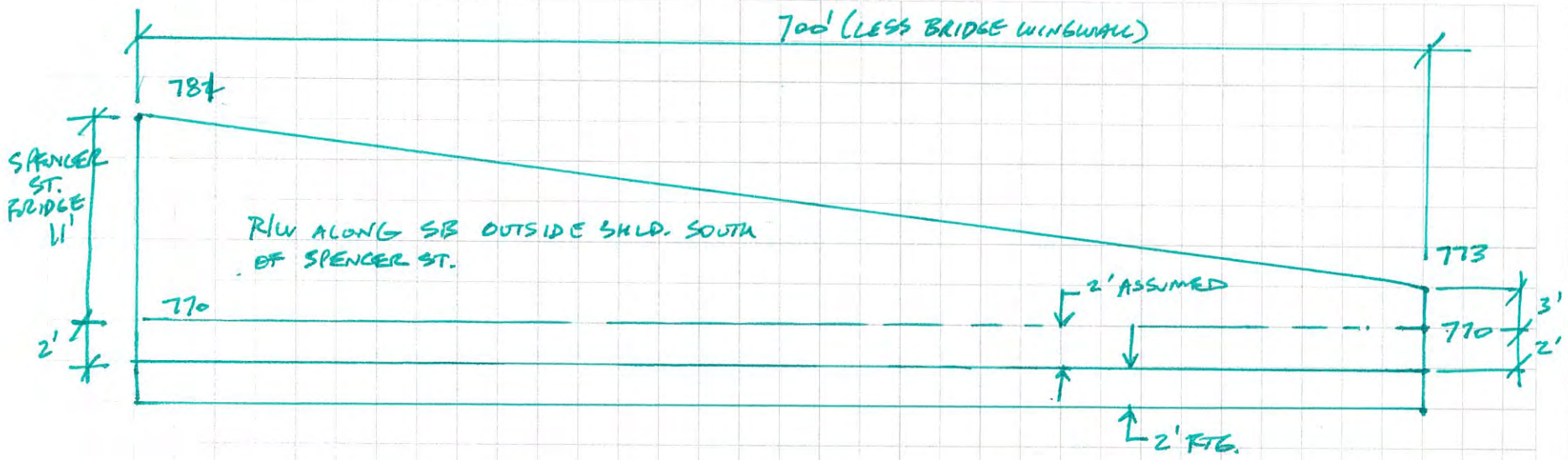
$$\left[325'(4') + 250'\left(\frac{4'+10'}{2}\right)\right](1.2) = 3660\ SF$$



$$325'\left(\frac{4+10'}{2}\right)(2) = 2730\ SF$$

FOR: SEGMENTS 1 & 2 JOB NO: SHEET NO:
MADE BY: CHECKED BY: BACKCHECKED BY:
DATE: DATE: DATE:

HNTB



$700' \left(\frac{13' + 5'}{2} \right)$

$= 6300 SF$

FOR: SEGMENT 2 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

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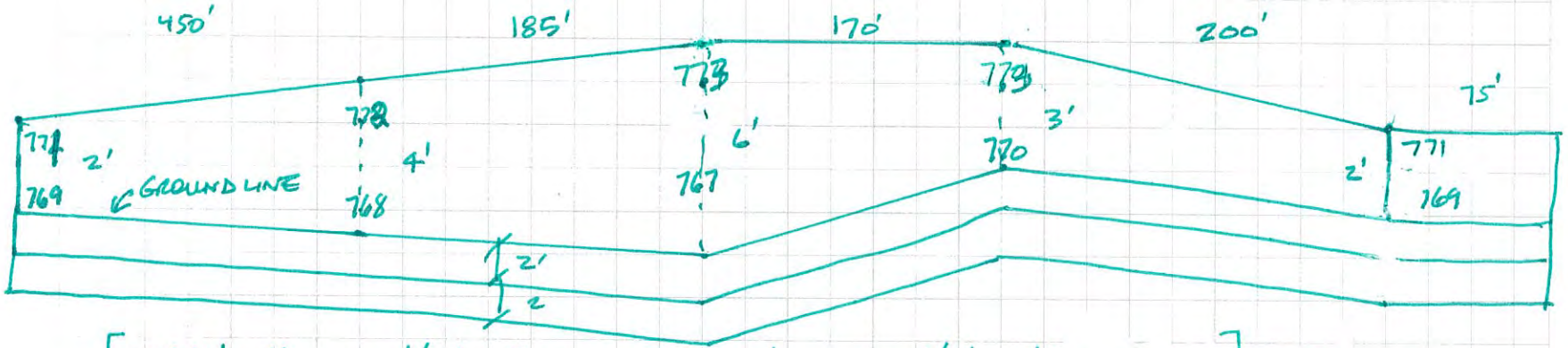
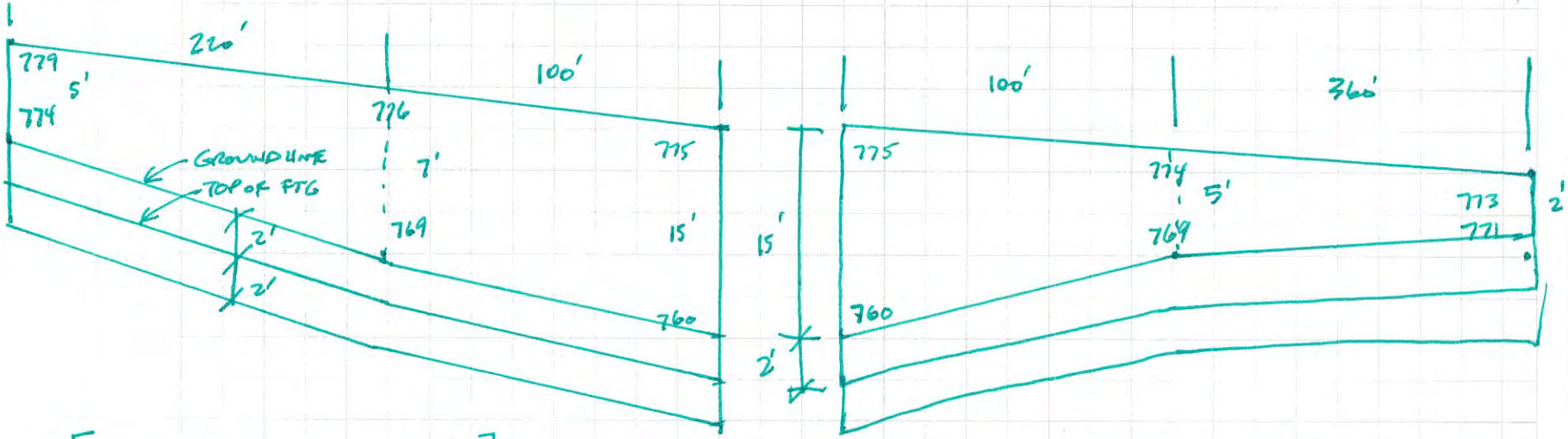
ME-101-1204

ALONG SB US 41 OUTSIDE SHOULDER AT MUD CREEK



$$\left[450'\left(\frac{4'+6'}{2}\right) + 185'\left(\frac{6'+8'}{2}\right) + 170'\left(\frac{8'+5'}{2}\right) + 200'\left(\frac{5'+4'}{2}\right) + 75(4')\right](1.2) \quad 7020\ SF$$

2250 SF 1295 SF 1105 SF 900 SF 300 SF



$$\left[220'\left(\frac{7'+9'}{2}\right) + 100'\left(\frac{9'+17'}{2}\right)\right](1.2) = 3672\ SF$$

1760 SF 1300 SF

$$\left[100'\left(\frac{17'+7'}{2}\right) + 360'\left(\frac{7'+4'}{2}\right)\right](1.2) = 3816\ SF$$

1200 1980

FOR: SEGMENT 2 JOB NO: SHEET NO:

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DATE: DATE: DATE:

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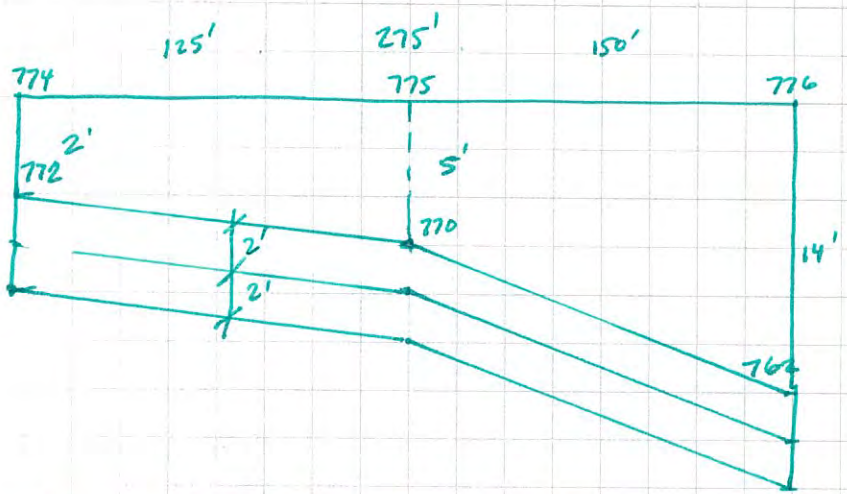
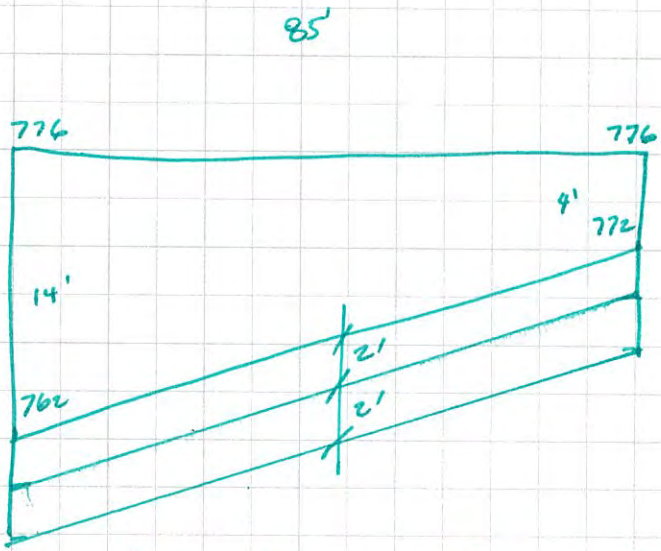


RETAINING WALL SOUTH OF MUD CREEK
BOX CULVERT ALONG 41 NB MAINLINE

$$\left[(125)\left(\frac{4'+7'}{2}\right) + 150'\left(\frac{7'+16'}{2}\right)\right](1.2) = 2900\,SF$$

687.5 1725

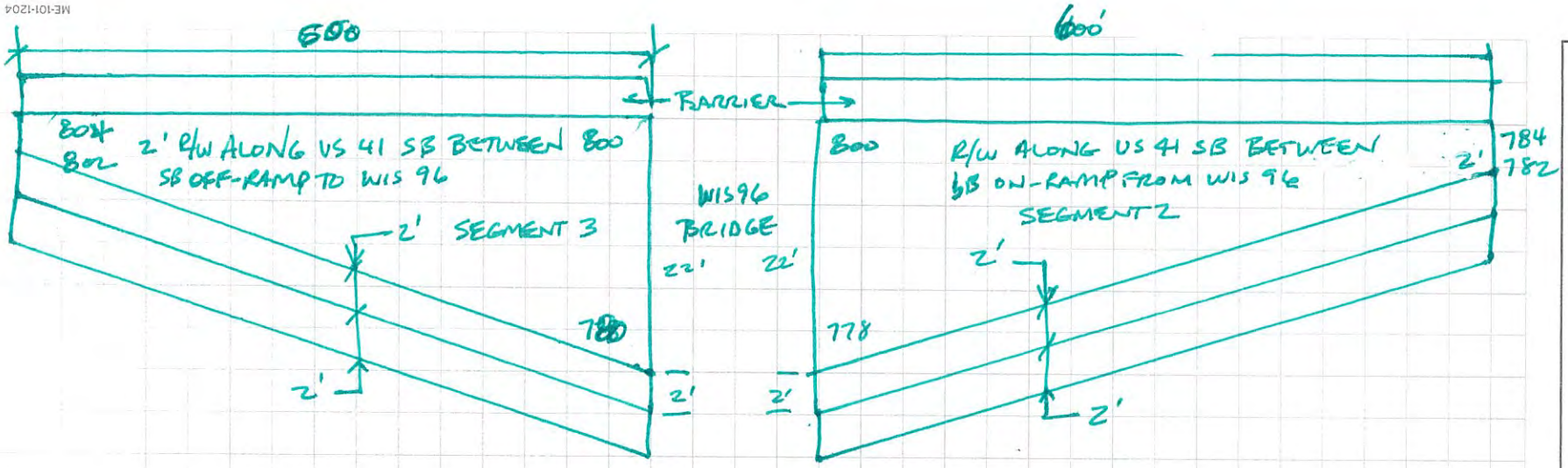


RETAINING WALL NORTH OF MUD CREEK
BOX CULVERT ALONG 41 NB MAINLINE

$$(85)'\left(\frac{4'+6'}{2}\right)(1.2) = 1122\,SF$$

FOR: SEGMENT 2 JOB NO: SHEET NO:
MADE BY: CHECKED BY: BACKCHECKED BY:
DATE: DATE: DATE:

HNTB



$$\left[600'\left(\frac{24'+4'}{2}\right)\right](1.2) = 10080\ SF$$

$$\left[600'\left(\frac{24'+4'}{2}\right)\right](1.2) = 10080\ SF$$

RETAINING WALLS ALONG US 41 NB BETWEEN MAINLINE AND OFF- AND ON-RAMPS ARE SIMILAR. ASSUME SIMILAR S.F.

FOR: SEGMENTS 2 & 3 JOB NO: SHEET NO:
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DATE: DATE: DATE:

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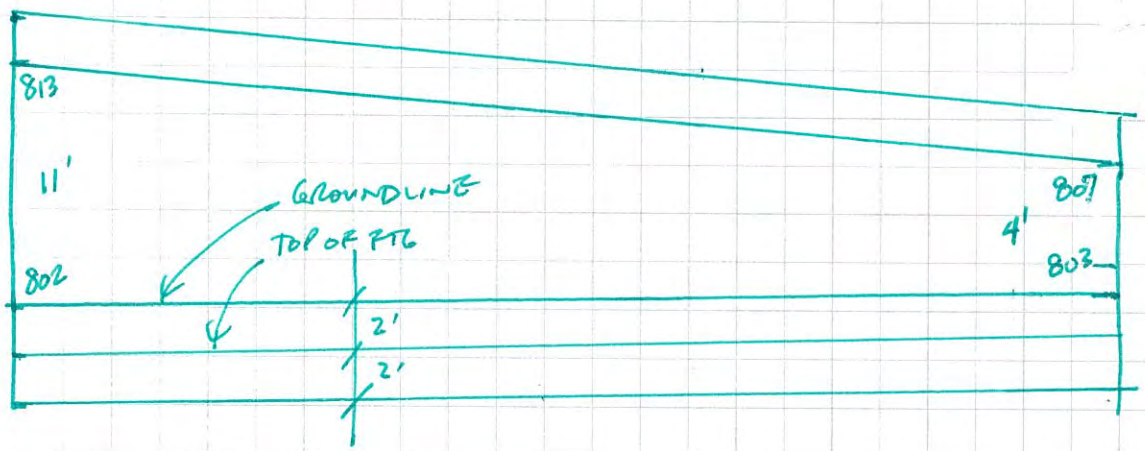
ME-101-1204

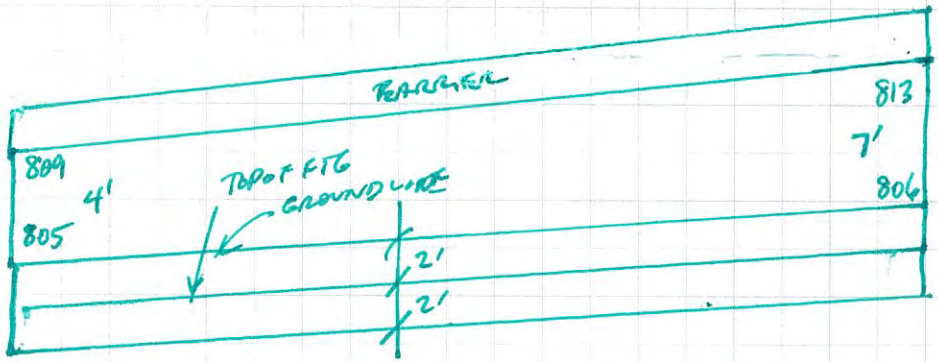
925'



$$\left[925'\left(\frac{13'+6'}{2}\right)\right] = 8787.5\ SF \approx 8788\ SF$$

725'

LOCATED SOUTH OF FOX VALLEY RR ALONG US 41 SB AND NORTH OF US 41 SB OFF-RAMP TO WIS 96.



$$\left[725'\left(\frac{9'+6'}{2}\right)\right](1.2) = 6525\ SF$$

LOCATED SOUTH OF FOX VALLEY RR ALONG US 41 NB AND NORTH OF US 41 NB ON-RAMP FROM WIS 96.

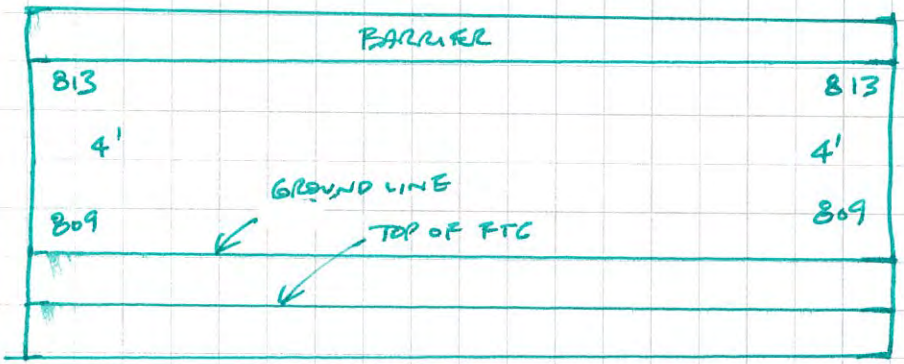
FOR: SEGMENT 3 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

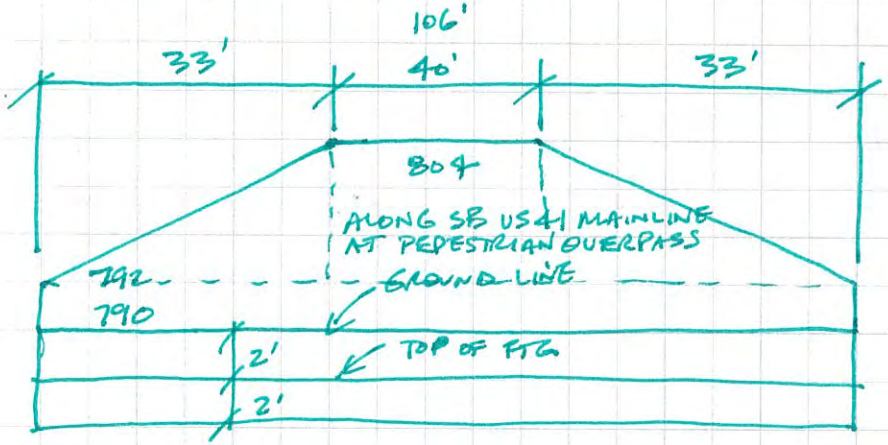
DATE: DATE: DATE:

HNTB

300'



(300')(4') = 1200 SF



RET. WALL LOCATED NORTH OF FOX VALLEY RR ALONG USH 41 SB OUTSIDE SHOULDER.

$$\left[(2)(33)(12)(\tfrac{1}{2}) + (12)(40) + (4)(106)\right] = 1300\ SF$$

396 480 424

RET. WALL IS LOCATED AT PEDESTRIAN BRIDGE OVER US 41 NB & SB MAINLINE. ASSUME ANOTHER 1300 SF FOR NB SIDE.

FOR: SEGMENT 3 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

HNTB

365'

185'

175'

115'

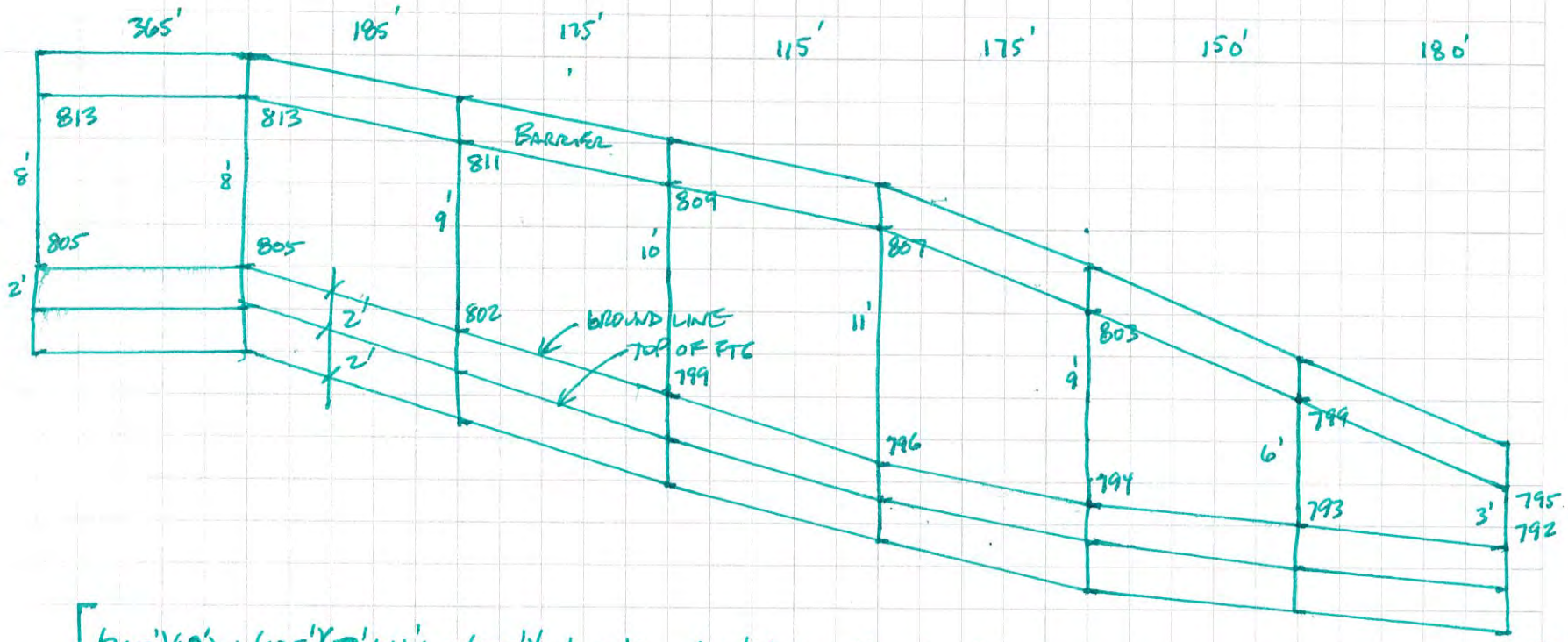
175'

150'

180'

8'	8'	9'	10'	11'	9'	6'	3'
813'	813'	811'	809'	807'	~~805'~~ 803	~~801'~~ 799'	~~801'~~ 795'

ME-101-1204



$$\left[(365')(10') + (185')\left(\frac{10'+11'}{2}\right) + (175')\left(\frac{11'+12'}{2}\right) + (115')\left(\frac{12'+13'}{2}\right) + (175')\left(\frac{13'+11'}{2}\right) + (150')\left(\frac{11'+8'}{2}\right) + (180')\left(\frac{8'+5'}{2}\right)\right](1.2) = 16485 \text{ SF}$$

3650 SF | 1942.5 | 2012.5 | 1437.5 | 2100 | 1425 | 1170

RETAINING WALL IS LOCATED NORTH OF FOX VALLEY RR ALONG VS41 NB MAINLINE OUTSIDE SHOULDER AND SOUTH OF PEDESTRIAN TRAIL OVERPASS BRIDGE.

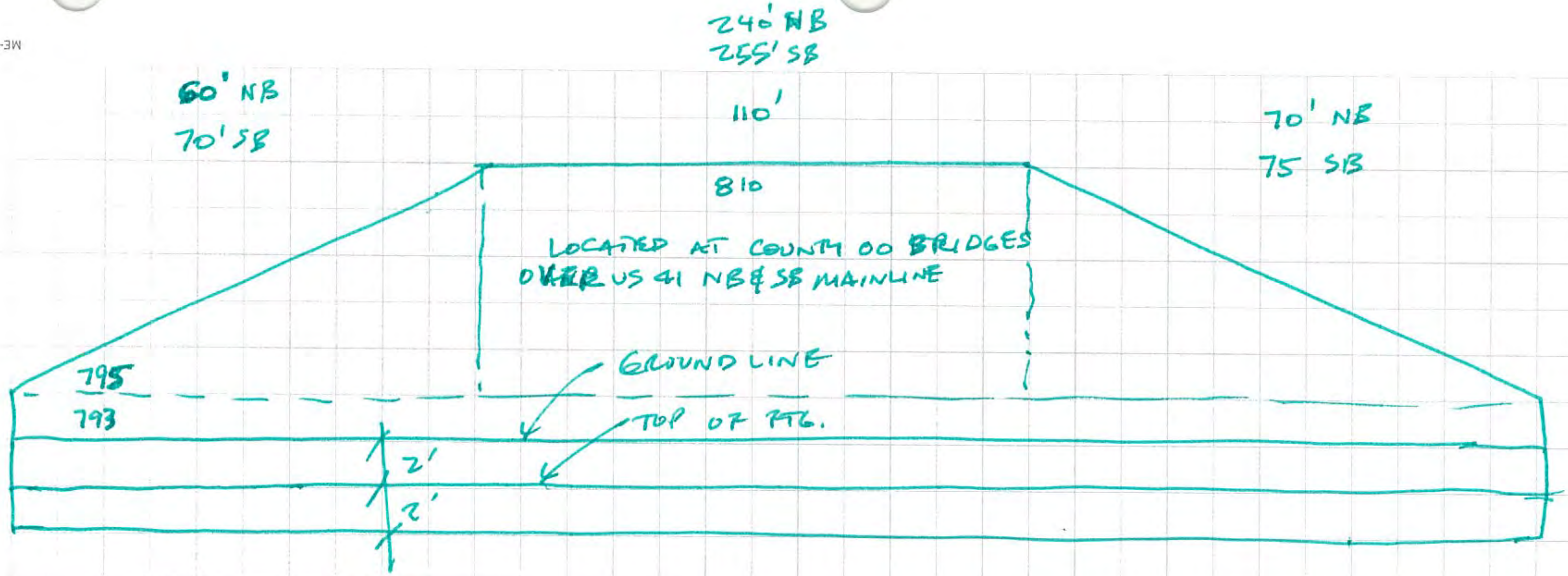
FOR: SEGMENT 3 | JOB NO: | SHEET NO:

MADE BY: | CHECKED BY: | BACKCHECKED BY:

DATE: | DATE: | DATE:

HNTB

FOR: SEGMENT 4
JOB NO:
SHEET NO:
MADE BY:
CHECKED BY:
BACKCHECKED BY:
DATE:
DATE:
DATE:



NB: $\left[(15')(60')(\tfrac{1}{2}) + (15')(70')(\tfrac{1}{2}) + (15)(110) + (4')(240') \right] = 3585\ SF$

450 525 1650 960

SB: $\left[(15')(70')(\tfrac{1}{2}) + (15)(75)(\tfrac{1}{2}) + (15)(110') + (4')(255) \right] = 3757.5 \sim 3758\ SF$

525 562.5 1650 1020

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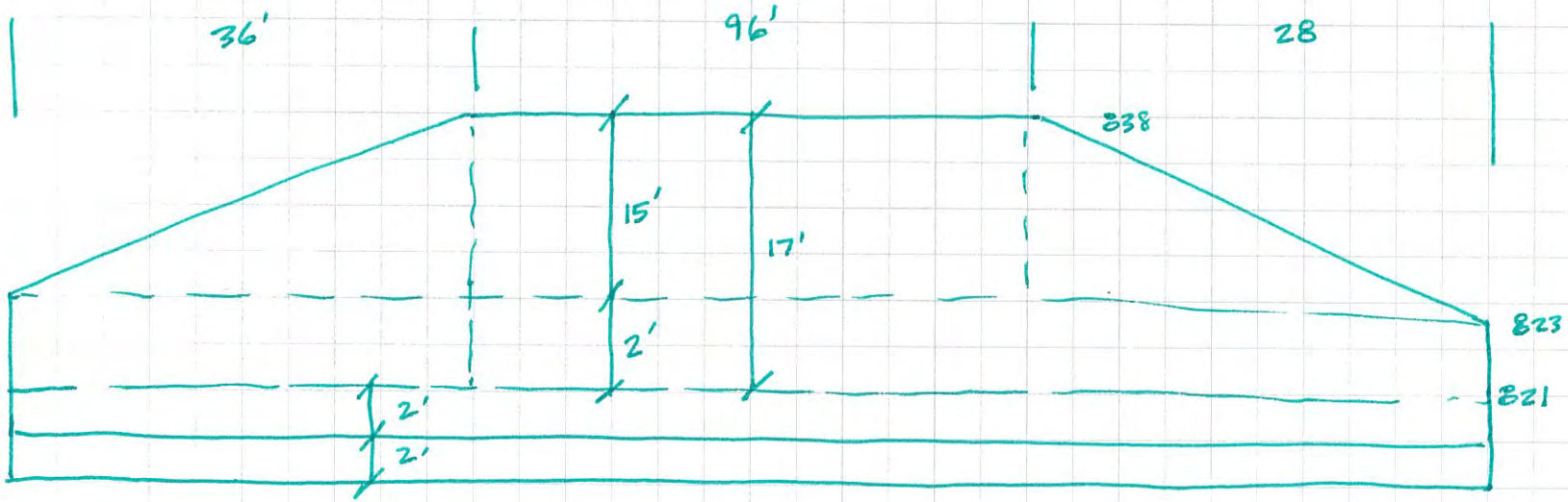
RETAINING WALL AT WIS 47 BRIDGES OVER US 41 SB MAINLINE



$$\left[(96)(15') + (36)(15)(\tfrac{1}{2}) + (28)(15)(\tfrac{1}{2}) + (4)(160) \right] = 2560\ SF$$

1440 270 210 640

FOR: SEGMENT 4 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

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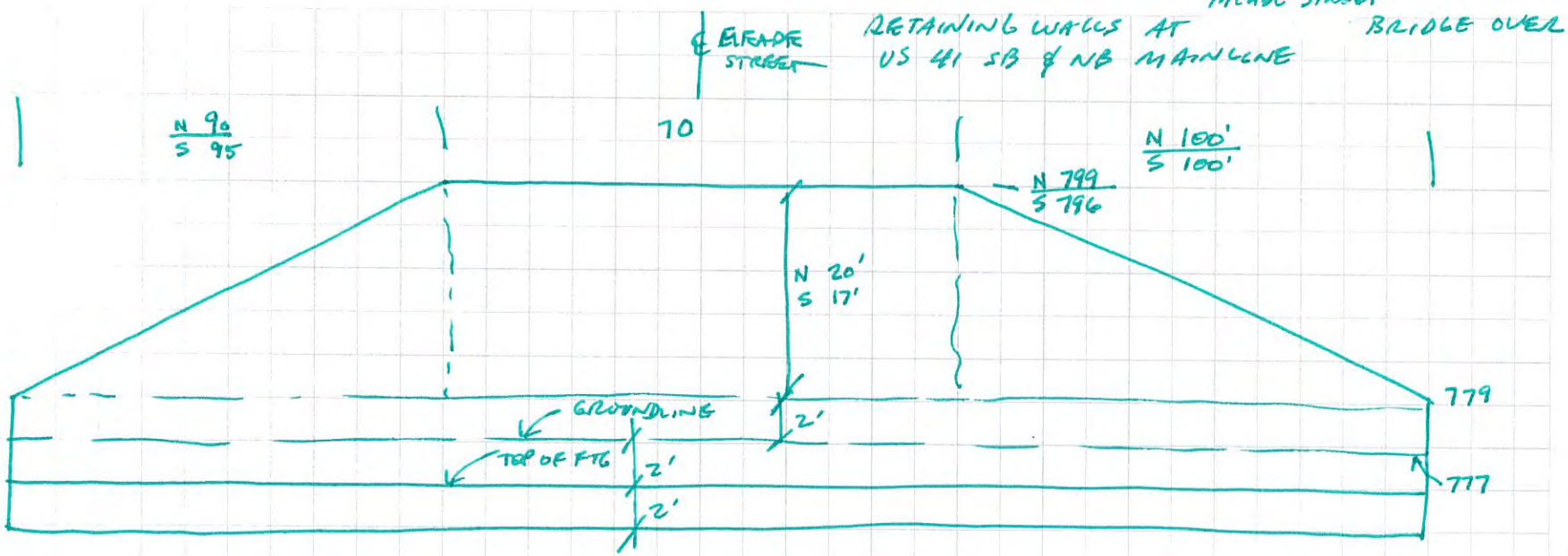
ME-101-1204

MEADE STREET BRIDGE OVER

RETAINING WALLS AT US 41 SB & NB MAINLINE



N: $\left[(70)(20) + (90)(20)(\tfrac{1}{2}) + (100)(20)(\tfrac{1}{2}) + (4)(260) \right] = 4340$ SF

(1400 + 900 + 1000 + 1040)

S: $\left[(70)(17) + (95)(17)(\tfrac{1}{2}) + (100)(17)(\tfrac{1}{2}) + 4(265) \right] = 3907.5 \sim 3908$ SF

(1190 + 807.5 + 850 + 1060)

FOR: SEGMENT 4 JOB NO: SHEET NO:

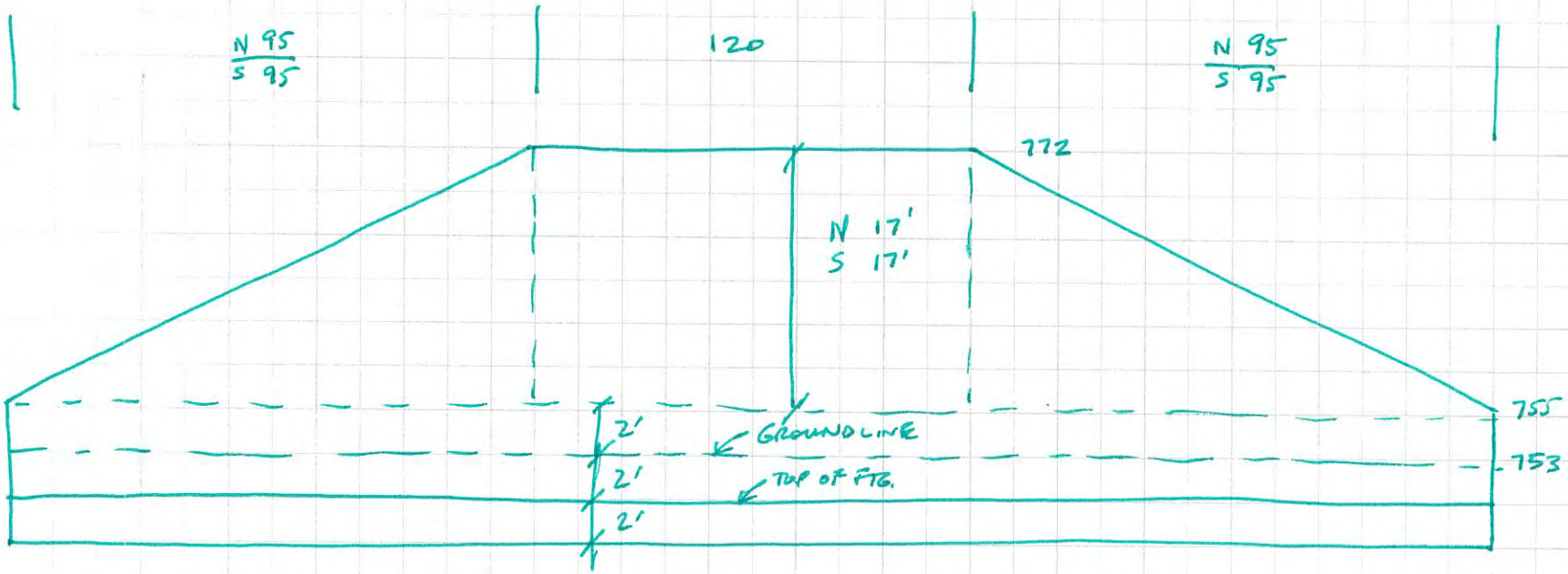
MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

HNTB

ME-101-1204

RETAINING WALLS UNDER COLLECTOR E ALONG US#1 NB & SB MAINLINE



$$N = S = \left[(17)(120) + (95)(17)\left(\tfrac{1}{2}\right)(2) + (4)(310) \right] = 4895 \text{ SF}$$

2040 1615 1240

FOR: SEGMENT 5 JOB NO: SHEET NO:

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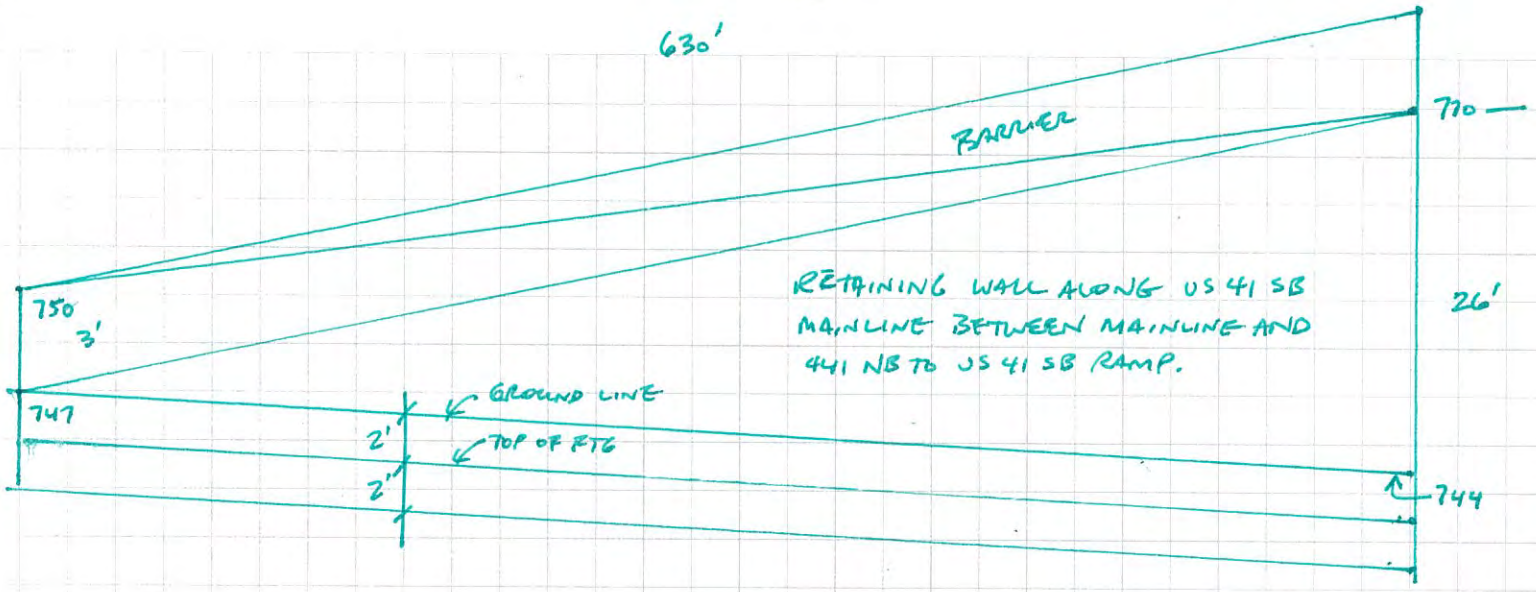
DATE: DATE: DATE:

HNTB



$$\left[\frac{(630')(28' + 5')}{2} \right] (1.2) = 12,474 \text{ SF}$$

RAMP AT OUTSIDE SHOULDER OF 441 NB TO US 41 SB RAMP IS SIMILAR IN SQ. FT.

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MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

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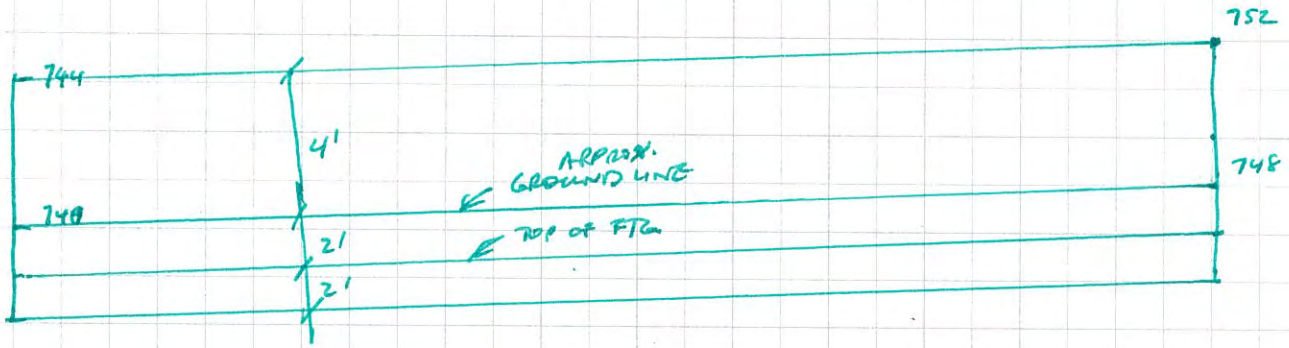
RETAINING WALL ALONG OUTSIDE OF AUXILIARY LANE (US 41 SB)

2200'



$(6')(2200')(1.2) = 15{,}840$ SF

FOR: SEGMENT 5 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

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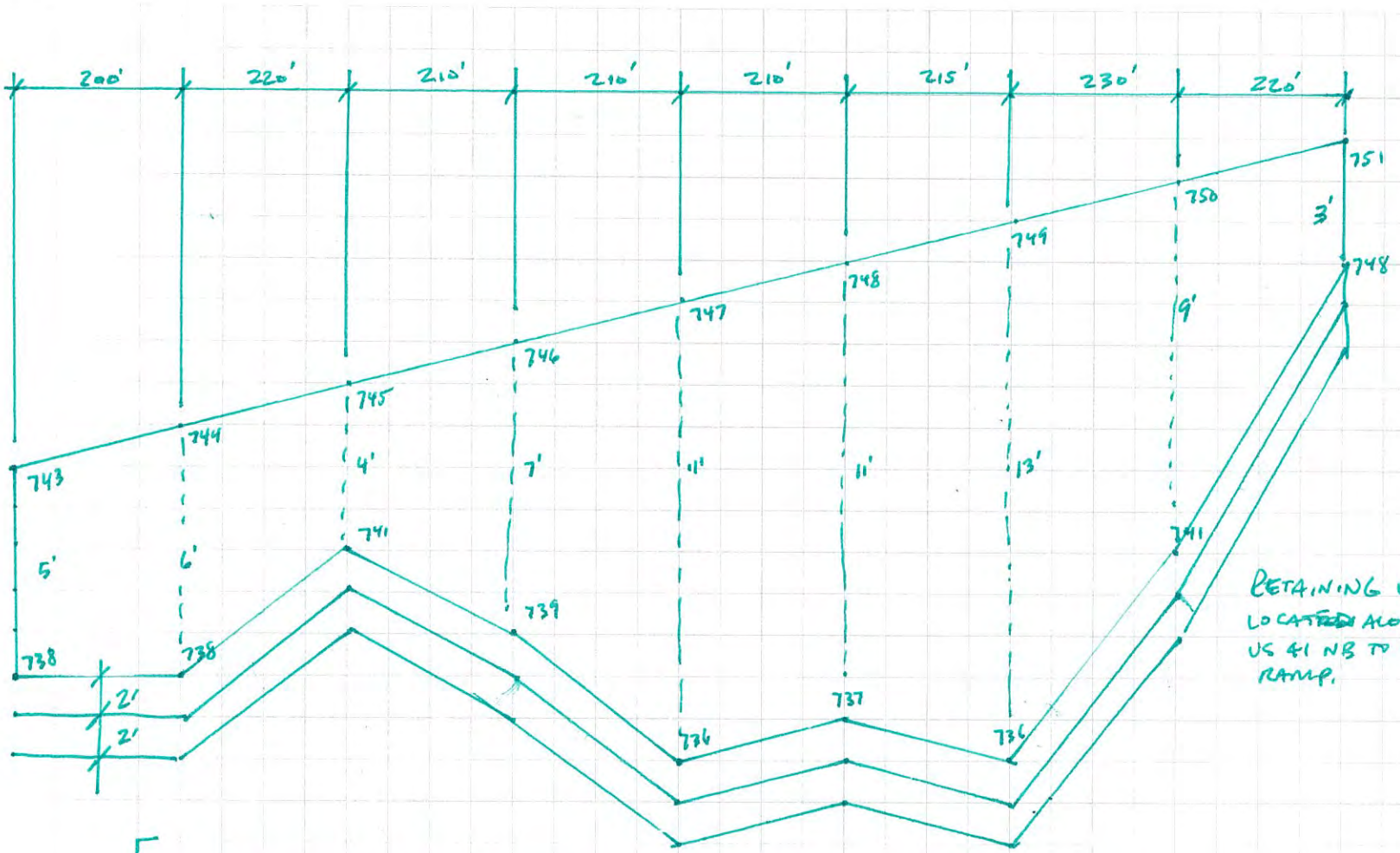

RETAINING WALL IS LOCATED ALONG OUTSIDE OF US 41 NB TO WIS 441 SB RAMP.

$$\left[(200')\left(\frac{7'+8'}{2}\right) + (220)\left(\frac{8'+6'}{2}\right) + (210)\left(\frac{6'+9'}{2}\right) + (210)\left(\frac{9'+13'}{2}\right) + (210)(13) + (215)\left(\frac{13'+15'}{2}\right) + (230)\left(\frac{15+11}{2}\right) + (220)\left(\frac{11'+5'}{2}\right)\right](1.2) = 20,898$$

1500 1540 1575 2310 2730 3010 2990 1760

FOR: SEGMENT 5 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

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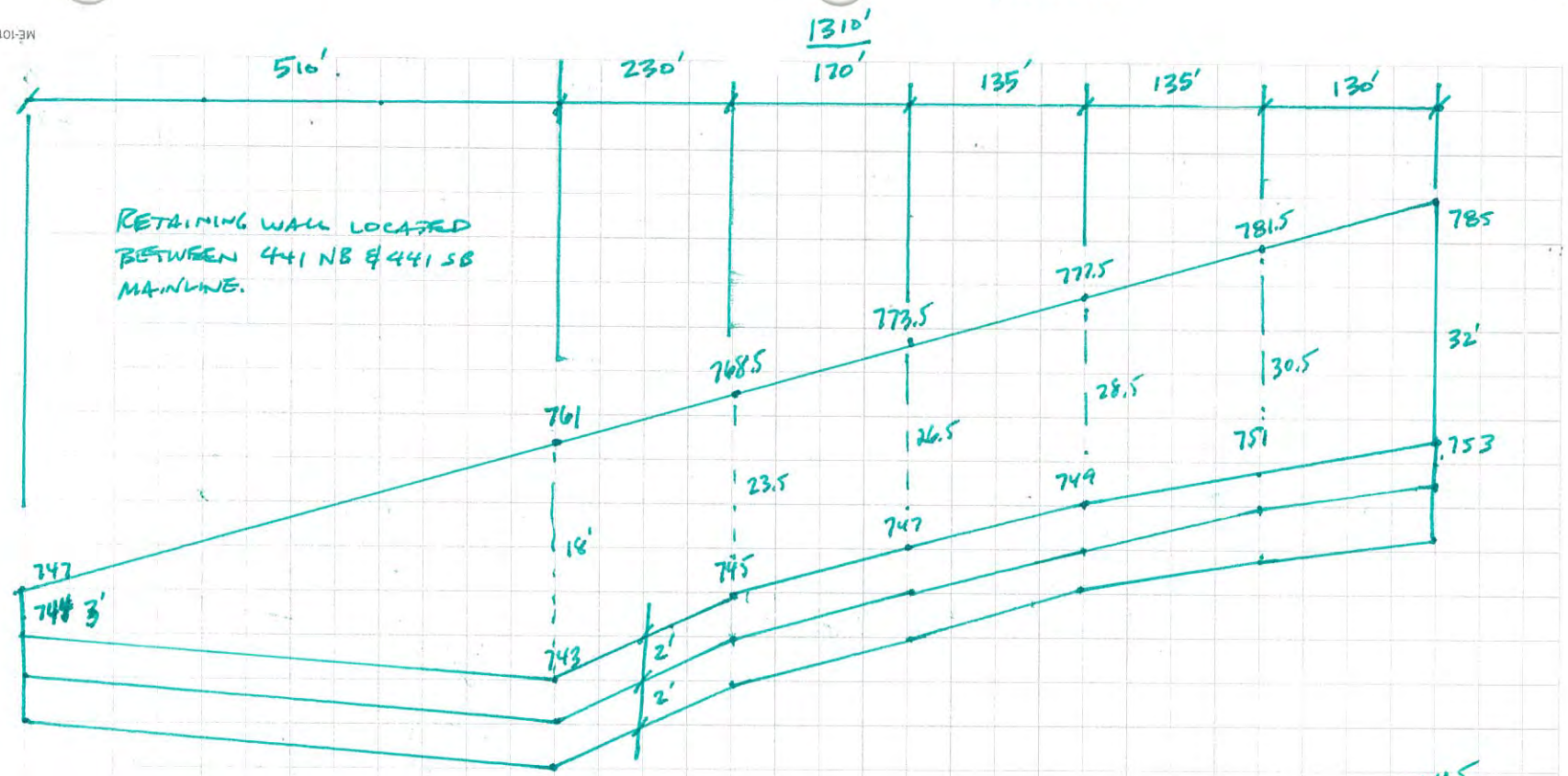
2.9% ~ 3%



28,784.5

$$\left[(510)\left(5'+\frac{20'}{2}\right)+(230')\left(\frac{20'+25.5'}{2}\right)+(170')\left(\frac{25.5+28.5}{2}\right)+(135)\left(\frac{28.5+30.5}{2}\right)+135'\left(\frac{30.5+32.5}{2}\right)+130'\left(\frac{32.5+34}{2}\right)\right](1.2) = 34,541\ SF$$

6375 5232.5 4590 4012 4252.5 4322.5

FOR: SEGMENT 5 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

HNTB

ME-101-1204

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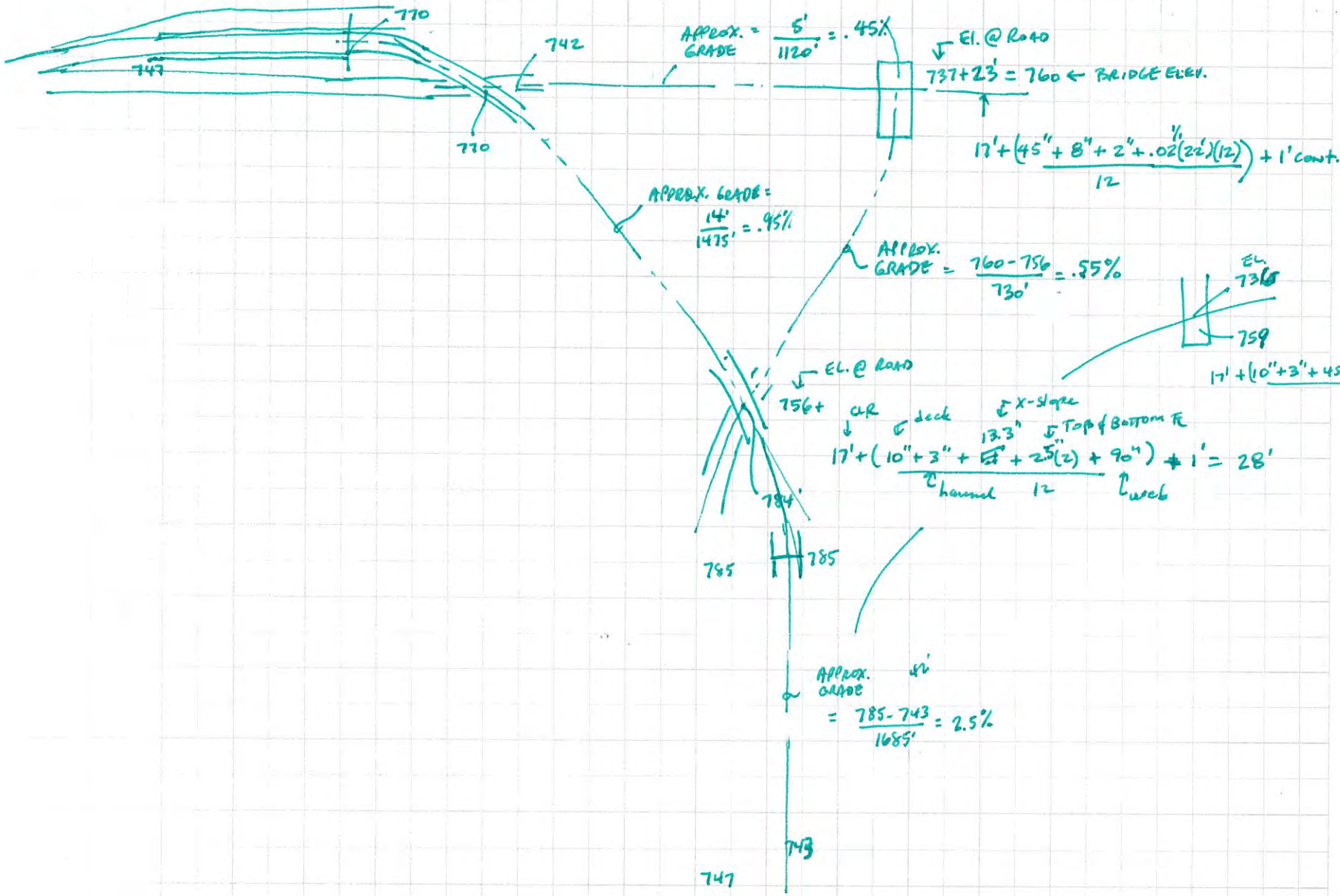

FOR: SEGMENT 5

JOB NO:

SHEET NO:

MADE BY:

DATE:

CHECKED BY:

DATE:

BACKCHECKED BY:

DATE:

HNTB

1400' ≈32

85' 200' 200' 200' 200' 200' 200

777 775 774 764 757 750 743 738

1' 29' 24' 25' 24' 20' 13' 2'

776 746 747 739 733 730 730 736

2'

$\frac{100}{4150} \times \frac{8}{360}$ 8.675°

$\frac{1321}{4150}$ =

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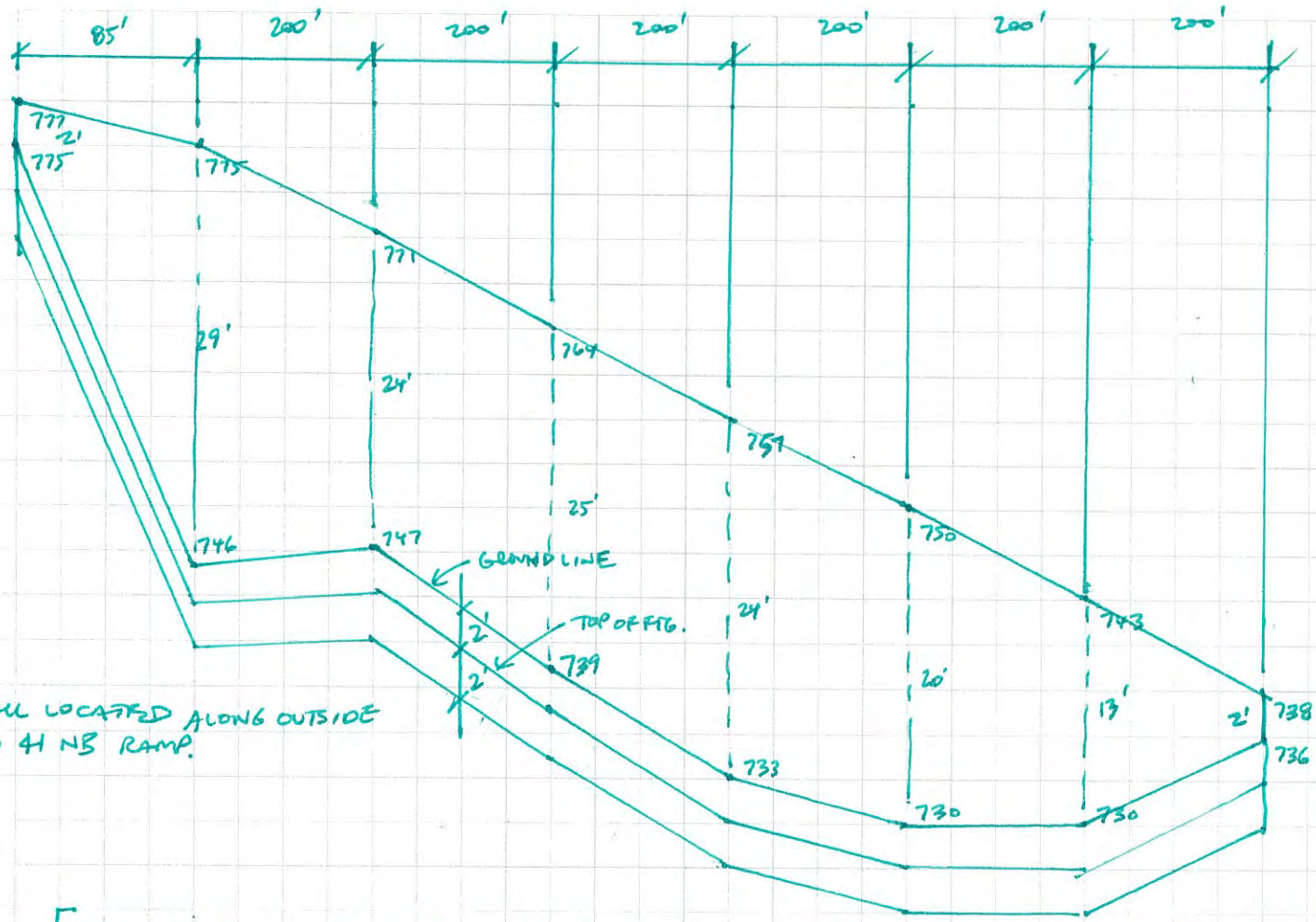


RETAINING WALL LOCATED ALONG OUTSIDE OF 441 NB TO 41 NB RAMP.

$$\left[(85')\left(\frac{4'+31'}{2}\right)+(200')\left(\frac{31'+26'}{2}\right)+(200')\left(\frac{26'+27'}{2}\right)+(200')\left(\frac{27'+26'}{2}\right)+(200')\left(\frac{26'+22'}{2}\right)+(200')\left(\frac{22'+15'}{2}\right)+200'\left(\frac{15'+4'}{2}\right)\right](1/2)=33825\ SF$$

1487.5 5700 5300 5300 4800 3700 1900

FOR: SEGMENT 5 JOB NO: SHEET NO:

MADE BY: CHECKED BY: BACKCHECKED BY:

DATE: DATE: DATE:

HNTB

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: STH 441		Maintainer: STATE HIGHWAY DEPT		Structure No: B-44-126
Feature Under: STH 96-FOX RIVER-CN		Sect/Twn/Rng: S19 T21N R18E		
Location: 0.5M N JCT CTH Z		County: OUTAGAMI	Municipality: TOWN-GRAND CHUTE(44020)	
Inv Rating: HS29	Rdwy Width (ft): 80.0	Deck Width (ft): 87.0	Existing Posting:	
Oper Rating: HS48	Total Length (ft): 1626.1	Deck Area(ft2): 141470	ADT On: 42500 Yr: 2004	ADT Under: 9900 Yr: 2004

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	07-17-12			05-13-08			
Frequency	24			60			
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 07-19-10	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated:

Expansion Joints

Location	Type	Temp: File Insp. Date	83 File Insp. (in)	90 New Insp. (in)
NORTH AB	A3-400SE		0.8	1.0
SOUTH AB	A3-400SE		0.7	0.5
HINGE 1	D-600		3.4	3.0
HINGE 2	D-600		3.6	3.6

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	27.9		
Min. Veritcal Clearance Under (non-Cardinal)	27.9		
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT STEEL	DECK GIRDER		130.0
CONT STEEL	DECK GIRDER		162.0
CONT STEEL	DECK GIRDER		162.0
CONT STEEL	DECK GIRDER		162.0
CONT STEEL	DECK GIRDER		162.0

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1989	NEW STRUCTURE	C333	C333
1990	NEW SUBSTRUCT	C333	
1991	STEEL FABRICA	PLAN	C333
1991	NEW SUBSTRUCT	C333	
1992	NEW DECK	C333	
1994	REPAIR JOINTS		
2008	NEW EXPANSION		

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment	Y	Reach-all and bo
Other		

Inspector Information

Team Leader Name and No. Printed: Lahm, Jason G (3011)	Team Member(s) Name(s) Printed: Jim Kast, Todd Harrison, Jim M	
Team Leader Signature:	Inspection Date: 07-17-12	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected

Ck	Elem./Env.	Description	Unit	Total QTY.	Quantity in Condition States 1	2	3	4	5
X	26 / 4	Conc Deck/Coatd Bars	SF	141471		141471			
	Numerous transverse cracks. Most are leaching.								
X	107 / 4	Paint Stl Opn Girder	LF	12998	9098	2500	1200	200	
	Distress showing up on the two inside girders and top of bottom flange on west side outside girder. At hinge 2, the paint is very distressed with feckled rust. The west side middle hinge is distressed the most.								
X	172 / 4	Painted Steel Diaphr	EA	492	410	58	24		
X	205 / 4	R/Conc Column	EA	20	16	2	2		
	Heavy random areas of poor consolidation from 1 foot above to 6 inches below the waterline with 2 inch typical and 6 inch max pennetration on Piers 4E, 4W, 5E and 5W.								
X	215 / 4	R/Conc Abutment	LF	172	142	30			
	Vertical cracks, shallow spalls @ backwall S. abutment								
X	300 / 4	Strip Seal Exp Joint	LF	164	164				
X	303 / 4	Modular Joint	LF	164	164				
X	311 / 4	Moveable Bearing	EA	48	44	4			
	At pier # 4, 2 inside bearings beginning to rust and 2 at N abutment.								
X	313 / 4	Fixed Bearing	EA	48	44	4			
	Anchor bolts pulling out. Nuts are not down								
X	321 / 4	R/Conc Approach Slab	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	6557	100	6298	159		
	Thor-o-seal comming off, scaled thoughout except were patched. NW bottom edge cracked off (2 ft long)								
X	342 / 4	RipRap Slope Protect	EA	2	2				
	North slope paving is beginning to erode due to water coming over north backwall.								
X	358 / 4	Deck Cracking SmFlag	EA	1		1			
X	359 / 4	Und Dk Surf Sm Flag	EA	1			1		
	Leaching								

Element Inspection (X) Check Elements Inspected

Ck	Elem./Env.	Description	Unit	Total QTY.	Quantity in Condition States 1	2	3	4	5
X	361 / 4	Scour Smart Flag	EA	1	1				
	Channel depressions exist at all submerged piers but additional degradation does not appear to be occuring.								
X	400 / 4	Concrete Wingwall	EA	4	4				
X	405 / 4	Drainage	EA	16	16				
	partly plugged								
X	416 / 2	Utilities	EA	1	1				
	PVc for navigatiopn lights is broken between center railing of NB and SB lanes.								

General Inspection/Maintenance Notes

According to plans, Pier 1 is supported on HP 14 x 73 piles driven to 150 feet. The S Abutment is supported on HP 10 x 42 piles driven to 55 feet. Piers 2, 3, 4, 5 and the N. Abutment are supported on spread footings with concrete seals, which are keyed into bedrock.

Replaced all navigation lights on bridge. Top one was removed and colored LED"s were installed in the bottom only (2012).

Inspected from both sides in 2012.
Inspect from both sides in 2014.

NBI Ratings

NBI	File	New	NBI	File	New
Deck	7	7	Culvert	N	N
Superstructure	7	7	Channel	8	8
Substructure	7	7	Waterway	8	8

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item: Deck - Seal Surface Cracks
Amount: **Date(YYYY-MM-DD):**
Maintenance item comment: TK 9000 deck cracks

Maintenance Item: Deck - Clean and Sweep Deck/Drains
Amount: **Date(MM-DD-YY):**
Maintenance item comment: reseal expansion joints, also.

Maintenance Item: Misc - Cut Brush
Amount: **Date(MM-DD-YY):**
Maintenance item comment: Trim overhanging braches from private property on NE side of bridge between STH 96 and river.

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-44-126
STH 441 over STH 96-FOX RIVER-CNW RR

LOCATION

(3) Municipality:	TOWN-GRAND CHUTE(44020)
(16) Latitiude(° ' "):	44°16'31.50"N
(17) Longitude(° ' "):	88°21'18.16"W

TRAFFIC SERVICE

(28A) Lanes On:	4
(28B) Lanes Under:	4
(102) Traffic Pattern On:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	19

GEOMETRY

(49) Structure Length(ft):	1626.1	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 0	Direction: -RIGHT FORWARD -LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	80.0	80.0
(52) Deck(ft):	87.0	87.0
(32) Approach Roadway(ft):	80	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):	103.0	103.0
(55) Minimum Right Lateral(ft):	90.0	13.0
(55) Minimum Left Lateral(ft):	13.0	90.0

RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
Outer Rail:	Left	Right	Type
			TYPE F (TWO SQUARE TUBES) - STEEL(8)
			TYPE F (3 SQUARE TUBES) - STEEL(65)
			TYPE F (4 SQUARE TUBES) - STEEL(72)
			TYPE M-STEEL 3 SQUARE TUBES(93)
			SLOPED FACE PARAPET LF(91)
			SLOPED FACE PARAPET HF(92)
			VERTICAL FACE PARAPET TYPE A(74)
			TYPE W-THRIE BEAM(79)
			TYPE H ON VERTICAL PARAPET(80)
			TIMBER(38)
	X	X	OTHER(99) (Please specify) Left: NJ SLOPING PARAPET(61) Right: NJ SLOPING PARAPET(61)
Transition Type:			CONT GUARD RAIL
			NO APP GRDRL
			NO ATTACHMENT
	5		22 MM(7/8") BOLT (Please enter quantity)
			25 MM(1") BOLT (Please enter quantity)
			OTHER (Please specify)
Guardrail Termination Type:			(01) ENERGY ABSORBING TERMINAL/EAT
			(02) TURN DOWN
			(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:	(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
	(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
X	(8) GOOD- No speed reduction required

BRIDGE INSPECTION REPORT
Wisconsin Dept. of Transportion
DT2007 2003 s.84.17 Wis. Stats. Type = ROUTINE INSPECTION

Inventory Data

Feature On: STH 441 SB		Maintainer: STATE HIGHWAY DEPT		Structure No: B-44-128
Feature Under: OO		Sect/Twn/Rng: S18 T21N R18E		
Location: 0.8M S JCT USH 41		County: OUTAGAMI	Municipality: TOWN-GRAND CHUTE(44020)	
Inv Rating: HS21	Rdwy Width (ft): 40.0	Deck Width (ft): 43.0	Existing Posting:	
Oper Rating: HS42	Total Length (ft): 186.8	Deck Area(ft2): 8032	ADT On: 19500 Yr: 1990	ADT Under: 10000 Yr: 1990

Inspection Type (* = Supplemental Form Required)

	Routine Visual	Fracture Critical*	In-Depth*	UW-Dive*	UW-Surv*	UW-Probe/Visual*	Movable*
Last Insp.	08-23-12						
Frequency	24						
Recom. Freq.							
	Initial*	Damage	Interim	Load Posted	SI & A Field Review*		
Last Insp.							
Frequency	N/A						
Recom. Freq.	N/A				Item No. Needing Change		

Load Rating Information

Overburden	Measurement (in): 0.0	Date:	Deck Surface Type: CONCRETE	
Section Loss	File Meas. (%):	File Insp. Date: 08-13-10	Insp. Measurement (%):	Describe:
Re-rate for load capacity?		Reason:		Date Last Rated: 07-21-92

Expansion Joints

Location	Type	Temp: File Insp. Date	File Insp. (in)	New Insp. (in)

Signing Condition

Type of Marker	File	Y/N	Comments
Bridge Markers			
Narrow Bridge			
One Lane Road			
Vertical Clearance			
Weight Limit Post			
Other(Addl. Sign)			

Clearances(Cardinal = N or E)	File Meas. (ft.)	File Date	New Meas. (ft.)
Min. Vertical Clearance Under (Cardinal)	17.34		
Min. Veritcal Clearance Under (non-Cardinal)	17.0		
Min. Vertical Clearance On			

Structure Type

Material	Configuration	# of Spans	Overall Length (ft)
CONT PREST CO	DECK GIRDER		94.5
CONT PREST CO	DECK GIRDER		90.5

Construction/Rehabilitation History

Year	Work Performed	Plan	Shop
1993	NEW STRUCTURE	C333	C333

Inspection Information

Special Requirements	Y/N	Comments
Traffic Control		
Access Equipment		
Other		

Inspector Information

Team Leader Name and No. Printed: Weber, Dale (3007)	Team Member(s) Name(s) Printed:	
Team Leader Signature:	Inspection Date: 08-23-12	Inspection Agency: STATE HIGHWAY DEPARTMENT (1)
District/Local Manager and No. Printed:	District/Local Manager Signature:	Review Date:

Element Inspection (X) Check Elements Inspected					Quantity in Condition States				
Ck	Elem./Env.	Description	Unit	Total QTY.	1	2	3	4	5
X	26 / 4	Conc Deck/Coatd Bars	SF	8032	8032				
	Dia, trans cracks leaching.								
X	109 / 4	P/S Conc Open Girder	LF	915	915				
X	172 / 4	Painted Steel Diaphr	EA	8	8				
X	205 / 4	R/Conc Column	EA	3	3				
X	215 / 4	R/Conc Abutment	LF	88	79	9			
	Leaching between seat & backwall. CS-2 (S Abut 4' & N Abut 5')								
X	234 / 4	R/Conc Cap	LF	39	39				
X	250 / 4	Concrete Diaphragm	EA	4	3	1			
X	321 / 4	R/Conc Approach Slab	EA	2	2				
X	331 / 4	Conc Bridge Railing	LF	413	376	37			
X	340 / 4	Concrete Slope Prote	EA	1			1		
	Slope paving pulled away from North end								
X	342 / 4	RipRap Slope Protect	EA	1	1				
X	358 / 4	Deck Cracking SmFlag	EA	1	1				
X	359 / 4	Und Dk Surf Sm Flag	EA	1		1			
X	400 / 4	Concrete Wingwall	EA	4	4				

General Inspection/Maintenance Notes

Maintenance Recommendations (See standard code items & numbers)

Maintenance Item:
Amount: Date(YYYY-MM-DD):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

Maintenance Item:
Amount: Date(MM-DD-YY):
Maintenance item comment:

NBI Ratings

NBI	File	New	NBI	File	New
Deck	7	7	Culvert	N	N
Superstructure	8	8	Channel	N	N
Substructure	7	7	Waterway	N	N

STRUCTURE INVENTORY AND APPRAISAL FIELD REVIEW FORM

B-44-128
STH 441 SB over OO

LOCATION

(3) Municipality:	TOWN-GRAND CHUTE(44020)
(16) Latitiude(° ' "):	44°17'14.92"N
(17) Longitude(° ' "):	88°21'22.51"W

TRAFFIC SERVICE

(28A) Lanes On:	2
(28B) Lanes Under:	4
(102) Traffic Pattern On:	-NO TRAFFIC X-ONE WAY TRAFFIC -TWO WAY TRAFFIC
(102) Traffic Pattern Under:	-NO TRAFFIC -ONE WAY TRAFFIC X-TWO WAY TRAFFIC
(19) Detour Length(mi):	0

GEOMETRY

(49) Structure Length(ft):	186.8	
(50) Sidewalk Width(ft):	Left: 0.0	Right: 0.0
(50) Curb Width(ft):		
(52) Culvert Barrel Length(ft):		
(34) Skew:	Angle(°): 6	Direction: -RIGHT FORWARD X-LEFT FORWARD
	Cardinal Width	Non-Cardinal Width
(51) Bridge Roadway(ft):	40.0	40.0
(52) Deck(ft):	43.0	43.0
(32) Approach Roadway(ft):	40	0
	Cardinal Under Clearance	Non-Cardinal Under Clearance
(47) Minimum Horizontal(ft):	54.0	54.0
(55) Minimum Right Lateral(ft):	14.0	14.0
(55) Minimum Left Lateral(ft):	4.0	4.0

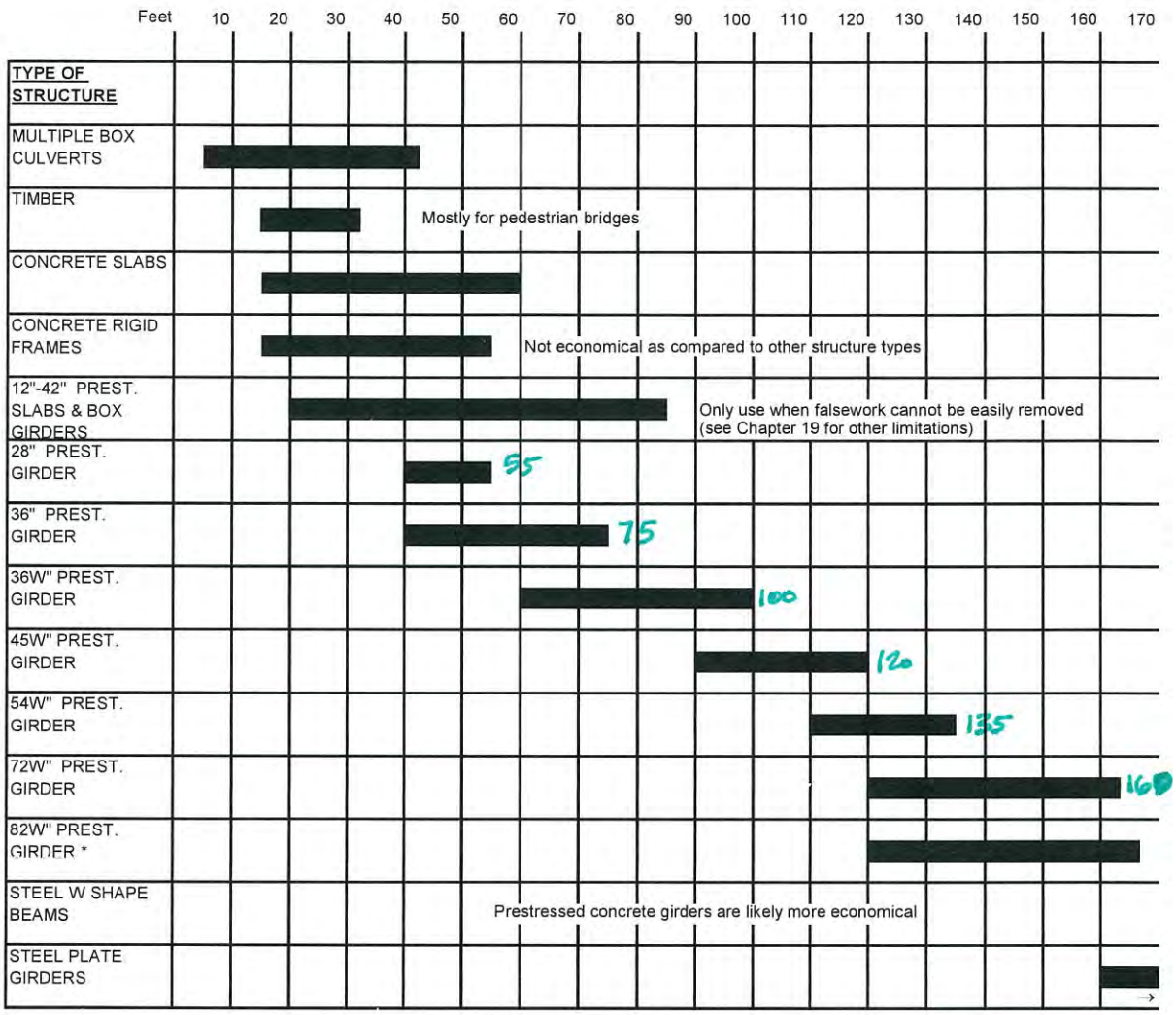
RAILING APPRAISAL

(36A) Bridge Rail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36B) Transition Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36C) Approach Guardrail Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
(36D) Guardrail Termination Adequacy:	-SUB-STANDARD X-STANDARD -NOT APPLICABLE		
Outer Rail:	Left	Right	Type
			TYPE F (TWO SQUARE TUBES) - STEEL(8)
			TYPE F (3 SQUARE TUBES) - STEEL(65)
			TYPE F (4 SQUARE TUBES) - STEEL(72)
			TYPE M-STEEL 3 SQUARE TUBES(93)
			SLOPED FACE PARAPET LF(91)
			SLOPED FACE PARAPET HF(92)
			VERTICAL FACE PARAPET TYPE A(74)
			TYPE W-THRIE BEAM(79)
			TYPE H ON VERTICAL PARAPET(80)
			TIMBER(38)
	X	X	OTHER(99) (Please specify) Left: NJ SLOPING PARAPET(61) Right: NJ SLOPING PARAPET(61)
Transition Type:			CONT GUARD RAIL
			NO APP GRDRL
			NO ATTACHMENT
	5		22 MM(7/8") BOLT (Please enter quantity)
			25 MM(1") BOLT (Please enter quantity)
			OTHER (Please specify)
Guardrail Termination Type:	X		(01) ENERGY ABSORBING TERMINAL/EAT
			(02) TURN DOWN
			(99) OTHER (Please specify)

ROADWAY ALIGNMENT APPRAISAL

(72) Approach Alignment Appraisal:		(3) INTOLERABLE- Horizontal or Vertical curvature requires a substantial reduction in vhicle operating speed
		(6) FAIR- Horizontal or Vertical curvature requires a very minor speed reduction
	X	(8) GOOD- No speed reduction required

5.2 Economic Span Lengths



*Currently there is a moratorium on the use of 82W" prestressed girders in Wisconsin

Figure 5.2-1
Economic Span Lengths

Current Conditions

o.	Bridge No.	Feature 'On'	Feature 'Under'	Girder Type	Year Built	Bridge Deck Year	** Life Expectancy	Recommend Redeck? (Y) Yes	Most Recent Overlay	Current Deck State	NBI * Deck	NBI Super	NBI Sub	SUFF. Rating	Inventory Rating (HS-##)	Actual Vertical Clearance	Desired Vertical Clearance	Distance Below Desired	Minimum Vertical Clearance	Distance Below Minimu	Vertical Clearance "Flag"	Actual Bridge Width	Desirable Bridge Width (ft)	Distance Less Than	Minimum Bridge Width (ft)	Distance Less Than	Bridge Width "Flag"	Structural Comment	Vertical Clearance Comment	Bridge Width Comment
																BRIDGE CONDITION DETAILS						FUNCTIONAL CONDITIONS								
1	B-70-0055	BREEZEWOOD LANE	USH 41	Cont. Steel	1977	1977	2027		---	ORIGINAL	6	7	7	94.5	21	16.58	16.75	0.17	16.33		X	73.8	40		40			Ready for New Concrete Overlay	Does not meet DESIRABLE CLEARANCE standards	
2	B-70-0049	USH 41 SB	CECIL ST	Prestress Conc.	1969	1969	2019	Y	---	ORIGINAL	7	8	7	98	28	14.95 (14.29)	15.25	0.30	14.75		X	71.2	56		56			Structure was widen in 1993. Recommend a bridge widen.	Does not meet DESIRABLE CLEARANCE standards	
3	B-70-0050	USH 41 NB	CECIL ST	Prestress Conc.	1969	1969	2019	Y	---	ORIGINAL	6	8	7	97	28	15.45	15.25		14.75			71.2	56		56			Structure was widen in 1993. Recommend a bridge widen.		
4	B-70-0123	USH 41 SB	WIS 114	Prestress Conc.	1993	1993	2043	Y	---	ORIGINAL	8	8	7	95.5	23	17.13	16.75		16.33			59.2	56		56			Recommend a bridge widen.		
5	B-70-0124	USH 41 NB	WIS 114	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	98	23	17.09	16.75		16.33			59.3	56		56			Recommend a bridge widen.		
6	B-70-0125	USH 41 SB	MAIN ST	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	96.2	23	15.62	16.75	1.13	16.33	0.71	X	84.5	56		56			Recommend a bridge widen and unique design to meet 'Complete Streets' criteria.	Does not meet MINIMUM CLEARANCE standards	
7	B-70-0126	USH 41 NB	MAIN ST	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	98.2	25	17.89	16.75		16.33			59.3	56		56			Recommend a bridge widen and unique design to meet 'Complete Streets' criteria.		
8	B-70-0127	USH 41 SB	NORTH ST	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	95.1	22	15.15	15.25	0.10	14.75		X	71.2	56		56			Recommend a bridge widen and unique design to meet 'Complete Streets' criteria.	Does not meet DESIRABLE CLEARANCE standards	
9	B-70-0128	USH 41 NB	NORTH ST	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	97.2	22	17.25	15.25		14.75			59.3	56		56			Recommend a bridge widen and unique design to meet 'Complete Streets' criteria.		
0	B-70-0129	USH 41 SB	CTH II	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	98	22	17.25	16.75		16.33			59	56		56			Recommend a bridge widen.		
1	B-70-0130	USH 41 NB	CTH II	Prestress Conc.	1994	1994	2044	Y	---	ORIGINAL	7	8	7	100	22	18.28	16.75		16.33			59	56		56			Recommend a bridge widen.		
2	B-70-0131	USH 41 SB	AMERICAN DRIVE / N. GREEN BAY RD.	Cont. Steel	1994	1994	2044	Y	---	ORIGINAL	7	7	7	96	21	21.49	16.75		16.33			71	56		56			Recommend a bridge widen.		
3	B-70-0132	USH 41 NB	AMERICAN DRIVE / N. GREEN BAY RD.	Cont. Steel	1994	1994	2044	Y	---	ORIGINAL	7	8	7	98	21	19.81	16.75		16.33			71	56		56			Recommend a bridge widen.		
4	B-70-0210	N. LAKE ST/ JACOBSEN RD	USH 41	Steel Girder	2001	2001	2051		---	ORIGINAL	7	8	7	98.8	27	16.24	15.25		14.75			47.6	36		36			Coating coming off base plates of fence. Base plates are starting to rust.		
6	B-70-0133	USH 41 SB	MENAHA CREEK	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	7	8	7	90.8	26	N/A	N/A		N/A			72	56		56			Recommend a bridge widen.		
7	B-70-0134	USH 41 NB	MENAHA CREEK	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	7	8	7	92.4	26	N/A	N/A		N/A			72	56		56			Recommend a bridge widen.		
8	B-70-0135	USH 41 SB	CTH BB	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	7	8	7	98	21	17.17	16.75		16.33			60	56		56			Recommend a bridge widen.		
9	B-70-0136	USH 41 NB	CTH BB	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	7	8	8	98	21	16.42	16.75	0.33	16.33		X	60	56		56			Recommend a bridge widen.	Does not meet DESIRABLE CLEARANCE standards	
0	B-44-0163	USH 41 SB	SPENCER ST	Cont. Conc.	1992	1992	2042	Y	---	ORIGINAL	8	8	8	96	27	15.25	15.25		14.75			84.6	56		56			Recommend a bridge widen.		
1	B-44-0164	USH 41 NB	SPENCER ST	Cont. Conc.	1992	1992	2042	Y	---	ORIGINAL	7	7	8	98	27	15.67	15.25		14.75			73.4	56		56			Recommend a bridge widen.		
2	B-44-0155	USH 41 SB	WIS 125	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	8	8	8	95.9	23	17.00	16.75		16.33			60	56		56			Recommend a bridge widen.		
3	B-44-0156	USH 41 NB	WIS 125	Prestress Conc.	1992	1992	2042	Y	---	ORIGINAL	7	7	8	95.9	23	17.34	16.75		16.33			60	56		56			Recommend a bridge widen.		
4	B-44-0157	USH 41 SB	WIS 96	Cont. Steel	1992	1992	2042	Y	---	ORIGINAL	7	7	8	96.7	24	16.25	16.75	0.50	16.33	0.08	X	60	56		56			Recommend a bridge widen.	Does not meet MINIMUM CLEARANCE standards	
5	B-44-0158	USH 41 NB	WIS 96	Cont. Steel	1992	1992	2042	Y	---	ORIGINAL	7	7	7	96.7	24	16.25	16.75	0.50	16.33	0.08	X	60	56		56			Recommend a bridge widen.	Does not meet MINIMUM CLEARANCE standards	
6	B-44-0162	USH 41 SB	FOX VALLEY RAILROAD	Cont. Steel	1992	1992	2042	Y	---	ORIGINAL	7	7	8	98	22	N/A	23.30		23.00			62	56		56			Recommend a bridge widen.		
7	B-44-0161	USH 41 NB	FOX VALLEY RAILROAD	Cont. Steel	1992	1992	2042	Y	---	ORIGINAL	7	8	8	98	22	N/A	23.30		23.00			62	56		56			Recommend a bridge widen.		
8	B-44-0190	BICYCLE/PEDESTRIAN	USH 41	Cont. Steel	2002	2002	2052		---	ORIGINAL	8	8	8	N/A	N/A	19.00	17.75		17.25			11.8	N/A		N/A					
9	B-44-0177	WIS 15	USH 41	Prestress Conc.	1997	1997	2047		---	ORIGINAL	7	8	8	97	22	16.54	16.75	0.21	16.33		X	51	40		38				Does not meet DESIRABLE CLEARANCE standards	
0	B-44-0178	WIS 15	USH 41	Prestress Conc.	1997	1997	2047		---	ORIGINAL	7	8	8	98	22	16.50	16.75	0.25	16.33		X	39	40	1.00	38		X		Does not meet DESIRABLE CLEARANCE standards	Does not meet DESIRABLE BRIDGE WIDTH standard
1	B-44-0024	CAPITAL DR.	USH 41	Cont. Steel	1960	1960	2010		---	ORIGINAL	8	6	7	82.4	18	16.28	15.25		14.75			32	36	4.00	36	4.00	X	Raised bridge in 2009. Recommend a new bridge.		Does not meet MINIMUM BRIDGE WIDTH standards
2	B-44-0140	CTH A	USH 41	Prestress Conc.	2005	2005	2055		---	ORIGINAL	8	8	8	91.9	21	17.25	15.25		14.75			90	44		44					
3	B-44-0020	USH 41 SB	SOO LINE	Prestress Conc.	1960	1960	2010		2006	CONC OVERLAY	7	7	6	81	30	N/A	23.30		23.00			36	40	4.00	38	2.00	X	Recommend a new bridge.		Does not meet MINIMUM BRIDGE WIDTH standards
4	B-44-0021	USH 41 NB	SOO LINE	Prestress Conc.	1960	1960	2010		2006	CONC OVERLAY	8	7	6	81	30	N/A	23.30		23.00			36	40	4.00	38	2.00	X	Recommend a new bridge.		Does not meet MINIMUM BRIDGE WIDTH standards
5	B-44-0028	USH 41 SB	GILLETT ST	Cont. Conc.	1961	1961	2011		2006	CONC OVERLAY	7	7	7	80	21	15.00	15.25	0.25	14.75		X	36	40	4.00	38	2.00	X	Recommend a new bridge.	Does not meet DESIRABLE CLEARANCE standards	Does not meet MINIMUM BRIDGE WIDTH standards
6	B-44-0029	USH 41 NB	GILLETT ST	Cont. Conc.	1961	1961	2011		2006	CONC OVERLAY	7	7	6	80	21	15.42	15.25		14.75			36	40	4.00	38	2.00	X	Recommend a new bridge.		Does not meet MINIMUM BRIDGE WIDTH standards
7	B-44-0035	WIS 47 SB	USH 41	Prestress Conc.	1961	1961	2011		1982	CONC OVERLAY	5	6	5	67.4	20	15.05	16.75	1.70	16.33	1.28	X	39	40	1.00	38		X	Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	Does not meet DESIRABLE BRIDGE WIDTH standard
8	B-44-0036	WIS 47 NB	USH 41	Prestress Conc.	1961	1961	2011		1983	CONC OVERLAY	5	5	5	67.3	21	15.16	16.75	1.59	16.33	1.17	X	39	40	1.00	38		X	Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	Does not meet DESIRABLE BRIDGE WIDTH standard
9	B-44-0171	MEADE ST	USH 41	Conc.	1996	1996	2046		---	ORIGINAL	8	8	8	95.4	22	17.06	15.25		14.75			67.6	36		36					
0	B-44-0172	CTH E (BALLARD RD)	USH 41	Prestress Conc.	1995	1995	2045		---	ORIGINAL	8	8	8	95.6	22	17.09	16.75		16.33			103.6	44		44					
1	B-44-0129	WIS 441 NB	USH 41	Cont. Steel	1993	1993	2043		---	ORIGINAL	7	6	8	100	27	16.80	16.75		16.33			43	40		38					
2	B-44-0130	WIS 441 SB	USH 41	Cont. Steel	1993	1993	2043		---	ORIGINAL	8	6	8	99	28	16.50	16.75	0.25	16.33		X	43	40		38				Does not meet DESIRABLE CLEARANCE standards	
3	B-44-0132	FRENCH RD	USH 41	Cont. Steel	1992	1992	2042		---	ORIGINAL	8	8	8	91.7	27	16.28	15.25		14.75			35	36	1.00	36	1.00	X			Does not meet MINIMUM BRIDGE WIDTH standards
4	B-44-0033	HOLLAND RD	USH 41	Prestress Conc.	1960	1960	2010		---	ORIGINAL	8	7	7	87.4	17	16.40	15.25		14.75			32	30		26			Raised bridge 21" in 2008. Recommend a new bridge.		
5	B-44-0034	VANDENBROEK RD	USH 41	Prestress Conc.	1960	1960	2010		1983	CONC OVERLAY	8	6	8	81.8	15	16.31	15.25		14.75			32	30		26			Raised bridge in 2009. Recommend a new bridge.		
6	B-44-0179	CTH N	USH 41	Conc.	2002	2002	2052		---	ORIGINAL	8	8	8	97.5	24	16.40	16.75	0.35	16.33		X	110	44		44				Does not meet DESIRABLE CLEARANCE standards	
7	B-44-0038	BUCHANAN ST	USH 41	Prestress Conc.	1961	1961	2011		1984	CONC OVERLAY	8	7	8	79.5	20	16.54	15.25		14.75			32	30		26			Raised bridge in 2009. Recommend a new bridge.		
8	B-44-0039	CTH CC	USH 41	Prestress Conc.	1961	1993	2033		1983	NEW DECK	8	7	7	76.8	16	17.03	15.25		14.75			32	36	4.00	36	4.00	X	Recommend a new bridge.		Does not meet MINIMUM BRIDGE WIDTH standards
9	B-44-0040	USH 41 NB	WIS 55	Cont. Conc.	1961	1961	2011		2009	CONC OVERLAY	8	7	7	95.1	20	15.05	16.75	1.70	16.33	1.28	X	43.3	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
0	B-44-0041	USH 41 SB	WIS 55	Cont. Conc.	1961	1961	2011		2009	CONC OVERLAY	7	7	8	93.1	21	15.56	16.75	1.19	16.33	0.77	X	43	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
1	B-44-0042	USH 41 SB	MALONEY RD	Cont. Conc.	1961	1961	2011		2009	CONC OVERLAY	7	7	8	90.6	16	15.33	15.25		14.75			43.3	40		38			Recommend a new bridge.		
2	B-44-0043	USH 41 NB	MALONEY RD	Cont. Conc.	1961	1961	2011		2009	CONC OVERLAY	7	7	7	90.6	16	15.17	15.25	0.08	14.75		X	60.1	40		38			Recommend a new bridge.	Does not meet DESIRABLE CLEARANCE standards	
3	B-44-0044	CTH J	USH 41	Prestress Conc.	1961	2010	2050		1984	NEW DECK	8	7	8	99	20	16.32	16.75	0.43	16.33	0.01	X	36.8	36		36			Raised bridge in 2010. Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
4	B-44-0071	USH 41	CTH JJ SB	Prestress Conc.	2000	2000	2050		---	ORIGINAL	7	7	7	95.4	22	15.32	16.75	1.43	16.33	1.01	X	42	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
5	B-44-0072	USH 41	CTH JJ NB	Prestress Conc.	1999	1999	2049		---	ORIGINAL	7	8	8	95.7	21	15.03	16.75	1.73	16.33	1.30	X	42.3	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
6	B-44-0073	USH 41 SB	WRIGHTSTOWN RD	Prestress Conc.	2000	2000	2050		---	ORIGINAL	7	7	7	96.4	22	15.12	16.75	1.63	16.33	1.21	X	42.3	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
7	B-44-0074	USH 41 NB	WRIGHTSTOWN RD	Prestress Conc.	2000	2000	2050		---	ORIGINAL	8	8	8	95.7	22	15.03	16.75	1.73	16.33	1.30	X	42.3	40		38			Recommend a new bridge.	Does not meet MINIMUM CLEARANCE standards	
8	B-44-0159	USH 41 SB	CTH U	Prestress Conc.	1999	1999	2049		---	ORIGINAL	8	8	7	97	22	17.68	16.75		16.33			42.3	40		38			Recommend a new bridge.		
9	B-44-0160	USH 41 NB	CTH U	Prestress Conc.	1999	1999	2049		---	ORIGINAL	8	8	7	99	22	17.68	16.75		16.33			42.3	40		38			MSE walls at NE and SE corners of abutments settling, cracking, spalling, and leaking. Recommend a new bridge.		
0	B-05-0080	USH 41 SB	APPLE CREEK	Cont. Steel	1987	1987	2037		2003	BIT OVERLAY	6	6	7	93.1	18	N/A	N/A		N/A			43	40		38			Recommend a new bridge.		
1	B-05-0053	USH 41 NB	APPLE CREEK	Cont. Steel	1963	1963	2013		2003	BIT OVERLAY	5	6	7	95	21	N/A	N/A		N/A			43	40		38			Recommend a new bridge.		
2	B-05-0162	CTH S	USH 41	Prestress Conc.	1999	1999	2049		---	ORIGINAL	7	7	8	94	21	18.50	16.75		16.33			67	44		44					
3	B-05-0165	USH 41 SB	LITTLE RAPIDS RD	Prestress Conc.	2000	2000	2050		---	ORIGINAL	7	7	7	100	23	15.03	15.25	0.22	14.75		X	43	40		38			Recommend a new bridge.	Does not meet DESIRABLE CLEARANCE standards	
4	B-05-0200	USH 41 NB	LITTLE RAPIDS RD	Prestress Conc.	2000	2000	2050		---	ORIGINAL	7	8	7	100	23	15.03	15.25	0.22	14.75		X	43	40		38			Recommend a new bridge.	Does not meet DESIRABLE CLEARANCE standards	

Represents Bridges that are recommended to be replaced.

~ Values in this spreadsheet were obtained using the Wisconsin DOT Highway Structure Information (HSI) System and National Bridge Inventory Database
~ Vertical clearance and width desired/minimum values obtained from the WisDOT FDM manual (chapters 11-35 and 11-15 Attachment 1.1)
‡ HSI = Highway Structures Information (system).
* NBI = National Bridge Index
**Life Expectancy = 50 years after Bridge was built or 40 years after New Deck
3-May-12