

07-30-2021 LETTING ITEM 032

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9. GUARDRAIL REPLACEMENT DETAIL
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HIGHWAY STANDARDS

000001-08	701201-05
001001-02	701301-04
630001-12	701311-03
631031-17	701321-18
635001-02	701901-08
701001-02	704001-08
701006-05	782006-01
701106-02	701011-04

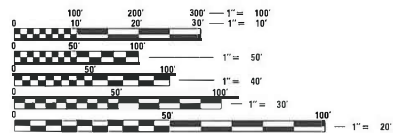
IL ROUTE 94

MAJOR COLLECTOR

ADT = 3050 (2019)

SU = 3.28% (2019)

MU = 4.26% (2019)



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: RICHARD DOTSON (309) 671-3455
PROJECT MANAGER: TRAVIS WALLENFANG (309) 671-3474
CATALOG NO. 036079-00D
CONTRACT NO. 68F78

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAS ROUTE 220 (IL 94)
SECTION (23-BR)BJR,BP,BRR
PROJECT STP-DY2E(975)
BRIDGE REPAIR
MERCER COUNTY

C-94-100-20

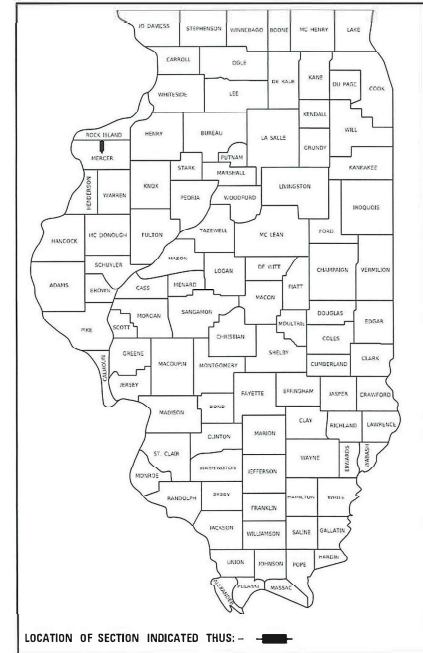
PROJECT LOCATION
S.N. 066-0007
IL 94 OVER CAMP CREEK



GROSS LENGTH = 680 FT. = 0.13 MILE
NET LENGTH = 680 FT. = 0.13 MILE

F.A.S. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	123-BR)BJR,BP,BRR	MERCER	23	1
		ILLINOIS	CONTRACT NO. 68F78	

D-94-068-20



PROJECT DESCRIPTION

Repairs to S.N. 066-0007 carrying IL 94 over Camp Creek. Includes joint replacement, bearing replacement, beam painting, and minor concrete repairs. Also includes guardrail replacement and minor drainage repair/improvements.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 07, 2021
Kensel A. Barnett ESD
REGIONAL ENGINEER

June 25, 2021 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

June 25, 2021 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made. There are no commitments for this project.

PROPERTY OWNER ACCESS REQUIREMENTS

Access must be maintained to all properties during construction per Article 107.09 unless arrangements are made in writing by the contractor with the property owners with a copy of the Engineer for short-term closures.

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- * BDE Form 2289 (Borrow Site Review)
- * BDE Form 2290 (Waste/Use Area Review)
- * A location map showing the size limits and location of the use area
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form-D4 PI0101

Please note that minimum of four weeks shall be allowed for the District to obtain the required environmental clearances and six weeks for the required borrow site environmental clearances.

ORDERING LENGTH CONFIRMATION – DRAINAGE ITEMS

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

PROJECT SPECIFIC NOTES

PIPE DRAINS

The labor and materials necessary to connect proposed Pipe Drains to the existing structures shall not be paid for separately but shall be considered included in the cost of Pipe Drains of the size specified.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND PROJECT SPECIFIC NOTES

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
270	(23-BR)BR,BP,BRR	MERCER	23	2
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				80% FEDERAL
				20% STATE
				BRIDGE
				0047
				066-0007
28100830	STONE DUMPED RIPRAP, CLASS B4	TON	93	93
28200200	FILTER FABRIC	SQ YD	132	132
50102400	CONCRETE REMOVAL	CU YD	9.9	9.9
50104650	SLOPE WALL REMOVAL	SQ YD	62.2	62.2
50105220	PIPE CULVERT REMOVAL	FOOT	124	124
50300255	CONCRETE SUPERSTRUCTURE	CU YD	9.8	9.8
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3250	3250
Z0010501	CLEANING AND PAINTING STEEL BRIDGE, NO. 1	L SUM	1	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1625	1625
50800515	BAR SPLICERS	EACH	32	32
52000110	PREFORMED JOINT STRIP SEAL	FOOT	68	68
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	12	12
52100520	ANCHOR BOLTS, 1"	EACH	24	24

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	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET 1	OF 3	SHEETS	STA.	TO STA.	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				80% FEDERAL	20% STATE
				BRIDGE	
				0047	066-0007
60100945	PIPE DRAINS 12"	FOOT	24	24	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	575	575	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	885	885	
67100100	MOBILIZATION	L SUM	1	1	
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	1400	1400	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	14	14	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	584	584	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	375	375	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
SCALE:	SHEET 2	OF 3	SHEETS STA. TO STA.

F.A.S. STATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	(23-BR)BR,BP,BRR	MERCER	23	4
CONTRACT NO. 6BF78				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				80% FEDERAL	20% STATE
				BRIDGE	
				0047	066-0007
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	375	375	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1630	1630	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	10	10	
X2810128	STONE RIPRAP, CLASS B4 (SPECIAL)	SQ YD	70	70	
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	134	134	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12	12	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	33	33	
Z0065730	SLOPE WALL SLURRY PUMPING	CU YD	19	19	
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES, NO. 1	L SUM	1	1	

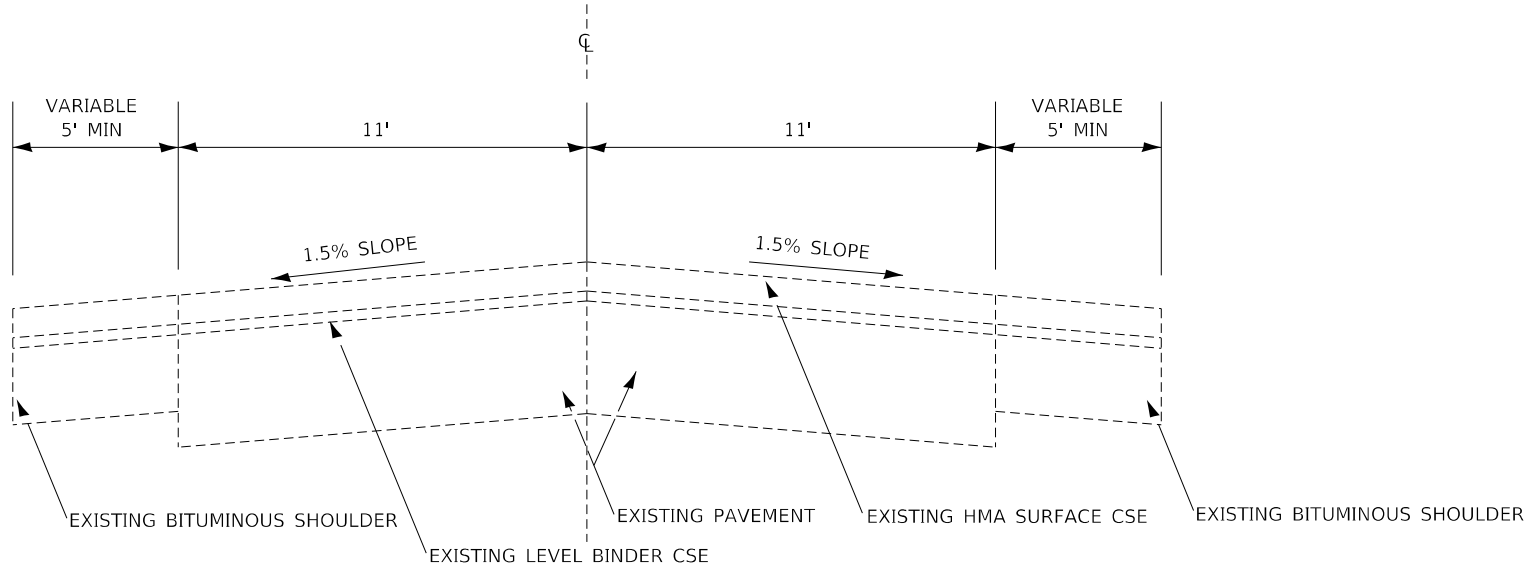
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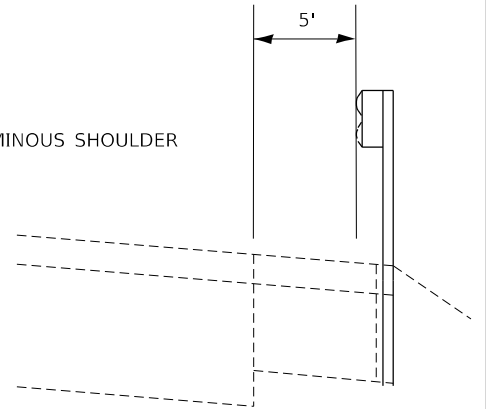
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES			
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220	(23-BR)BR,BP,BRR	MERCER	23	5
CONTRACT NO. 6BF78				
ILLINOIS FED. AID PROJECT				



TYPICAL SECTION 1
 BITUMINOUS SHOULDERS
 VARIABLE WIDTH 6'-10'
 DETERMINED LOCATION IN FIELD



GUARDRAIL
 LT FROM STA 258+76 TO STA 260+53
 RT FROM STA 257+88 TO STA 260+53
 RT FROM STA 261+83 TO STA 263+60
 LT FROM STA 261+83 TO STA 264+47

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION - IL 94			
SCALE:	SHEET 1	OF 1	SHEETS
STA.		TO STA.	

F.A.S. SITE = 220	SECTION = (23-BR)BR, BP, BR	COUNTY = MERCER	TOTAL SHEETS = 23	SHEET NO. = 6
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				

MOBILIZATION	
LOCATION	L SUM
JOBSITE	1

CHANGEABLE MESSAGE SIGN	
LOCATION	CAL DAYS
JOBSITE	14

**TWO SIGNS AT 7 DAYS EACH IN ADVANCE OF PROJECT START*

TRAFFIC CONTROL & PROTECTION								
	TC&P, STANDARD 701201	TC&P, STANDARD 701321	TEMPORARY CONCRETE BARRIER	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	IMPACT ATTN. TEMPORARY (NON-REDIRECTIVE) TL3	RELOCATE TCB	RELOCATE IMPACT ATTENUATORS
LOCATION	L SUM	L SUM	FT	EACH	EACH	EACH	FT	EACH
IL ROUTE 94	1	1	375	1	6	2	375	2

PAVEMENT MARKING BLACKOUT TAPE			
LOCATION	MARKING TYPE	5"	SHORT TERM PAVT MARKING REMOVAL
		FOOT	SQ FT
STA 257+60.63 TO 258+20.63	NO PASSING	60	25
STA 257+60.63 TO 264+55.22	SKIP DASH CL	180	75.0
STA 258+20.63 TO 264+45.31	EDGE LINE (STAGE 1)	625	260.5
STA 258+50.87 TO 263+85.23	EDGE LINE (STAGE 2)	535	223.0
TOTAL		1400	584

PAVEMENT MARKINGS SCHEDULE					
LOCATION	LENGTH	PAINT PAVEMENT MARKING 4 INCH			
		SOLID WHITE	SOLID YELLOW	SKIP DASH YELLOW	
STATION	FOOT	FOOT	FOOT	FOOT	
STA 257+60.63 TO STA 264+55.22 RT/LT	695	1390			
STA 257+60.63 TO STA 264+55.22	695		60	180	
TOTAL			1630		

SOUTHWEST SLOPEWALL TREATMENT						
LOCATION	Length	Width	SLOPEWALL REMOVAL	FILTER FABRIC	STONE DUMPED RIPRAP B4	SLOPEWALL SLURRY PUMPING
	FT	FT	SQ YD	SQ YD	TON	CU YD
SW Slopewall	28	20	62.2	62.2	93.3	9

LOCATION	PIPE CULVERT REMOVAL	PIPE DRAIN 12"	STONE RIPRAP, CLASS B4 (SPECIAL)	FILTER FABRIC	SLOPEWALL SLURRY PUMPING
	FT	FT	SQ YD	SQ YD	CU YDS
SW Approach	44	6	16.7	16.7	-
SE Approach	37	6	24.7	24.7	-
NW Approach	24	6	16	16	3.33
NE Approach	19	6	12.7	12.7	6.67
TOTAL	124	24	70.1	70.1	10.00

PROPOSED GUARDRAIL SCHEDULE										
LOCATION				LENGTH OF NFFD	SPBGR TY A 6FT POSTS	TR BAR TRM TY 1 SPL TAN	TR BAR TRM TY6	GUARDRAIL AGG EROS CONTROL	GUARDRAIL RFF TY A	TERMINAL MARKER - DA
STA.	TO	STA.	LT/RT	FT	FT	EACH	EACH	TON	EACH	EACH
258+71.4	TO	260+46.4	LT	158.5	100	1	1	27	2	1
257+83.9	TO	260+46.4	RT	250	187.5	1	1	40	3	1
261+89.3	TO	264+51.8	LT	250	187.5	1	1	40	3	1
261+89.3	TO	263+64.3	RT	158.5	100	1	1	27	2	1
TOTAL				817	575	4	4	134	10	4

**LENGTH OF NEED MEASURED FROM END OF PARAPET*

GUARDRAIL REMOVAL SCHEDULE				
LOCATION				GUARDRAIL REMOVAL
STA.	TO	STA.	LT/RT	FT
258+76	TO	260+53.5	LT	177.5
257+88.5	TO	260+53.5	RT	265
261+83	TO	264+48	LT	265
261+83	TO	263+60.5	RT	177.5
TOTAL				885

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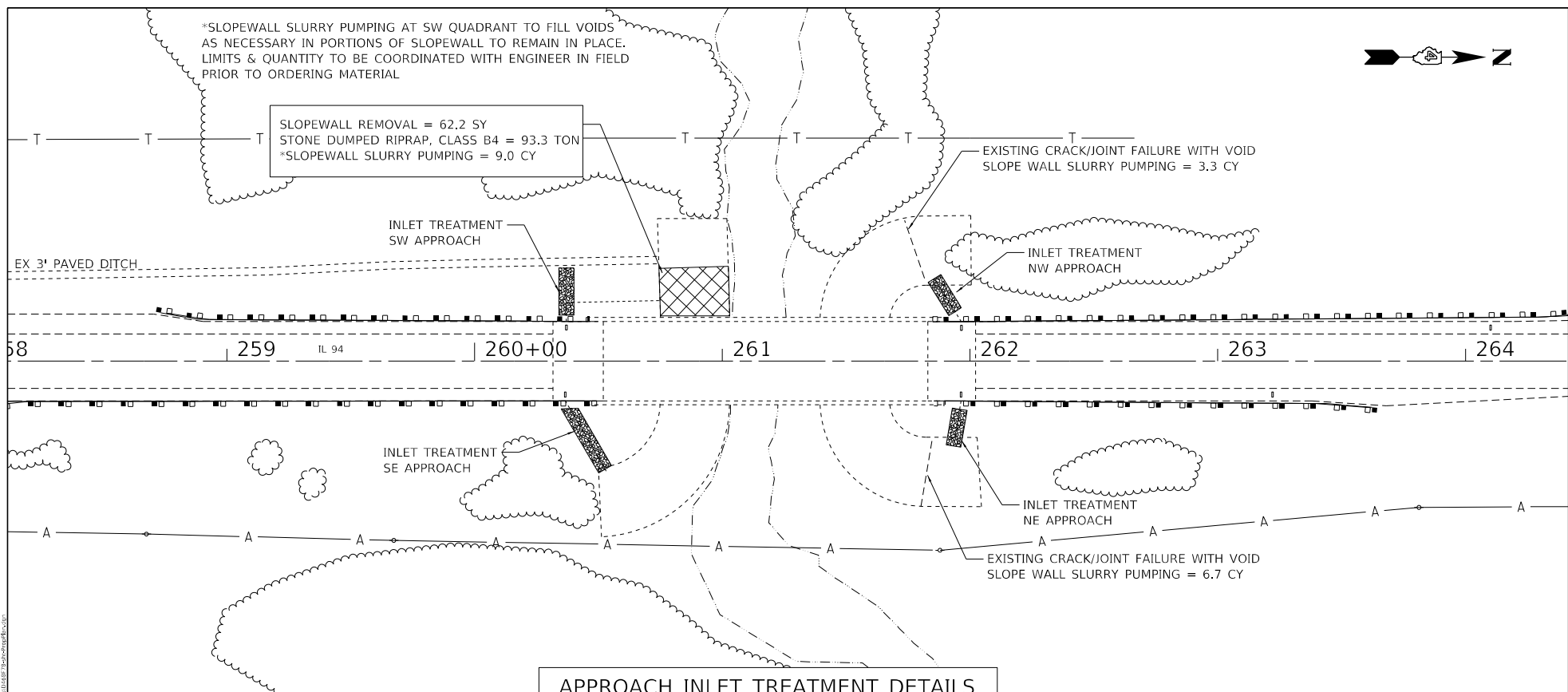
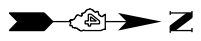
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

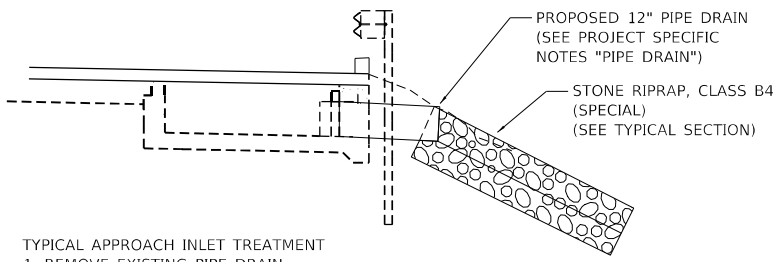
SCHEDULE OF QUANTITIES

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	(23-BR)BR,BP,BBR	MERCER	23	7
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				

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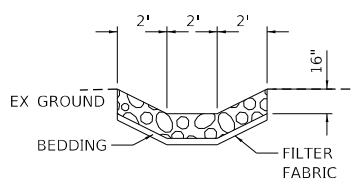


APPROACH INLET TREATMENT DETAILS



- TYPICAL APPROACH INLET TREATMENT**
1. REMOVE EXISTING PIPE DRAIN
 2. INSTALL PROPOSED PIPE DRAIN OUTLET TO SLOPE
 3. CONSTRUCT STONE RIPRAP DITCH AS SHOWN OR DIRECTED BY ENGINEER

STONE RIPRAP, CLASS B4 (SPECIAL) TYPICAL



LOCATION	PIPE CULVERT REMOVAL	PIPE DRAIN 12"	STONE RIPRAP, CLASS B4 (SPECIAL)	FILTER FABRIC	SLOPEWALL SLURRY PUMPING
	FT	FT	SQ YD	SQ YD	CU YDS
SW Approach	44	6	16.7	16.7	-
SE Approach	37	6	24.7	24.7	-
NW Approach	24	6	16	16	3.33
NE Approach	19	6	12.7	12.7	6.67
TOTAL	124	24	70.1	70.1	10.00

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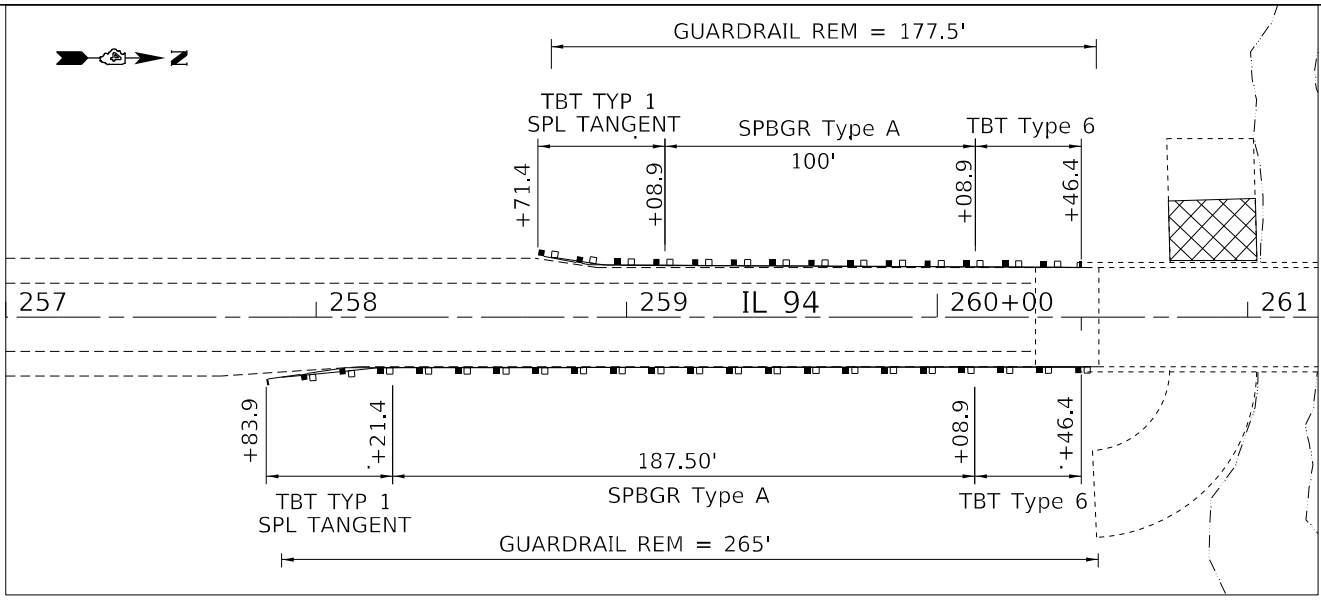
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

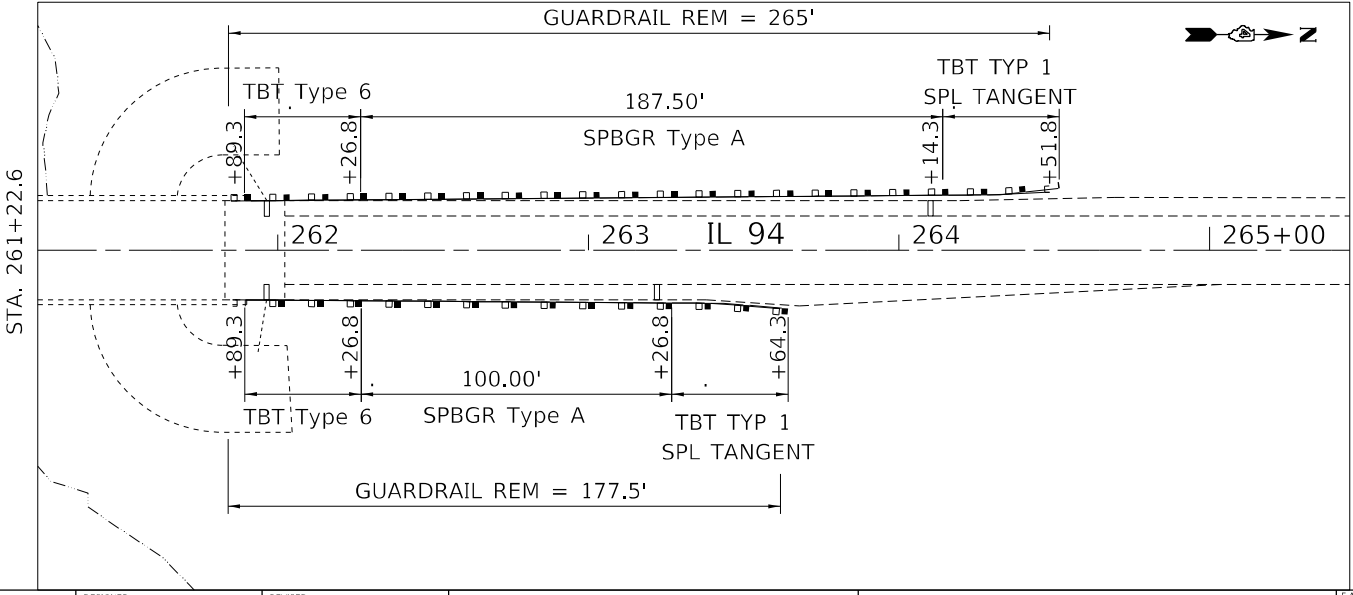
PLAN VIEW

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.S. SITE: 220	SECTION: (23-BR)BR, BP, BRR	COUNTY: MERCER	TOTAL SHEETS: 23	SHEET NO.: 8
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				



STA. 261+22.6



STA. 261+22.6

MOORE, David
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GUARDRAIL REPLACEMENT DETAIL	
SCALE:	SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.S. SITE = 220	SECTION = (23-BR)BR,BP,BRR	COUNTY = MERCER	TOTAL SHEETS = 23	SHEET NO. = 9
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				

Benchmark:  at SW corner of bridge on the curb
 STA. 260+54, Elev. 694.09

Existing Structure No. 066-0007:
 The existing structure is a 3 continuous spans of 27" deep Steel I-Beams supporting a cast in place concrete deck constructed in 1960 as Section 23-BR. The superstructure is supported by reinforced concrete pier bents, abutments and reinforced concrete piers on steel girders. It has an out-to-out deck width of 35'-2" and a 130'-1" back to back abutment length.

Traffic to be maintained utilizing stage construction. No salvage.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd	9.8
Concrete Superstructure	Cu. Yd	9.8
Furnishing and Erecting Structural Steel	Pound	3,250
Reinforcement Bars, Epoxy Coated	Pound	1,625
Bar Splitters	Each	32
Preformed Joint Strip Seal	Foot	68
Elastomeric Bearing Assembly, Type I	Each	12
Anchor Bolts, 1"	Each	24
Jack and Remove Existing Bearings	Each	12
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L. Sum	1
Cleaning and Painting Steel Bridge No. 1	L. Sum	1
Structural Repair of Concrete (Depth Equal to or Less than 5')	Sq. Ft.	33

GENERAL NOTES

The deck surfaces shall have its final lined according to article 420.09 (b) (1) of the Standard Specifications. Cost included with Concrete Superstructures.

All structural steel shall be AASHTO M-270 grade 36, unless otherwise noted.

Existing structure steel that will be in contact with new structure steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Surface Areas of Existing Steel Structures."

The SSPC-QP1 and SSPC-QP-Z "Painter Certifications" will be required for this project.

A minimum of one monitor shall be required. The Contractor shall furnish and install the monitor as directed by the Engineer. See Special Provisions for "Containment and Disposal of Lead Paint Cleaning Residues."

Reinforcement bars designated (E) shall be epoxy coated.

Cost of Removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Steel.

Diaphragms connection holes shall be 1/16" diameter for 3/8" diameter bolts. Two hardened head washers shall be required at diaphragm connections.

Prior to pouring the new concrete deck, all heavy and loose mill scale and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in Concrete Removal.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work. The contractor will be paid for the quantity actually furnished at the unit price bid for work.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 30°Fahrenheit.

Cleaning and painting of the existing structure steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures." All beams within 3 feet (measured along beam) of the deck joints shall be cleaned per SSPC-SP10 Near White Blast Cleaning and painted with Paint System 1-02/E/U color - Gray Munsell No. 5B 7/1. Existing diaphragms at both abutments will be replaced and are excluded from the cleaning requirements.

The cleaning areas of the structural steel shall be painted per the requirements of "painting system 1-02/E/U." The final finish coat shall be "interstate green, Munsell No. 7.5 G 1/2."

All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provision for "Hot-Dip Galvanizing for Structural Steel."

Fasteners shall be high strength bolts. Bolts shall be 3/8" Ø with open holes 1/16" Ø unless noted otherwise.

The existing structural steel coating contains lead. The contractor shall appropriate precautions to deal with the presence of lead on this project.

INDEX OF SHEETS

1. General Plan and Elevation
2. Cross Section & Stage Construction
3. Joint Details - North Abutment
4. Joint Details - South Abutment
5. Bearing Details- North Abutment
6. Bearing Details- South Abutment
7. Girder/Diaphragm Repair
8. Parapet Repairs
9. Performed Joint Strip Seal
10. Bar Splicer Assembly & Mechanical Splicer Details
11. Concrete Repair Detail Abutments
12. Concrete Repair Detail Piers 1 & 2

ELEVATION

Remove Performed
Expansion Joint &
Replace with strip seal

Bk. S. Abut.
Sta. 260+52.76

€ Pier #1
Sta. 260+93.47

€ Channel

€ Pier #2
Sta. 261+42.14

Remove Performed
Expansion Joint &
Replace with strip seal

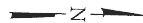
Bk. N. Abut.
Sta. 261+82.85

€ Structure
Sta. 261+17.80
Cr. Elev 690.67

€ IL Rte. 94

Stage Removal Line

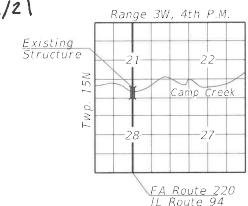
Stage Constr. Line



PLAN

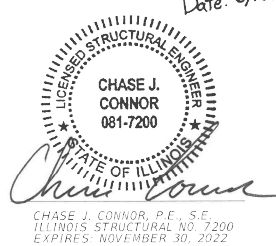
SCOPE OF WORK

1. Setup traffic control with drums
2. Perform joint reconstructions
3. Perform beam end repairs
4. Replace bearings at abutments
5. Switch stages and repeat
6. Perform Slope/wall repair




LOCATION SKETCH

BRIDGE REPAIRS
ILLINOIS ROUTE 94
OVER CAMP CREEK
MERCER COUNTY
STATION 261+17.80
STRUCTURE NO. 066-0007



MODEL: D:\in\ch...
 FILE NAME: X:\Projects\CampCreek\1382\0351.DOT\Dist 4 - WD 6 - IL 94 Bridge\066-0007\Briegr_Plans\0660007-001.pgs&app
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	Hurst-Rosche, Inc.	USER NAME =	DESIGNED - CMV	REVISED -
		PLOT SCALE =	CHECKED - CJC	REVISED -
		PLOT DATE =	DRAWN - LO	REVISED -
			CHECKED - CMV	REVISED -

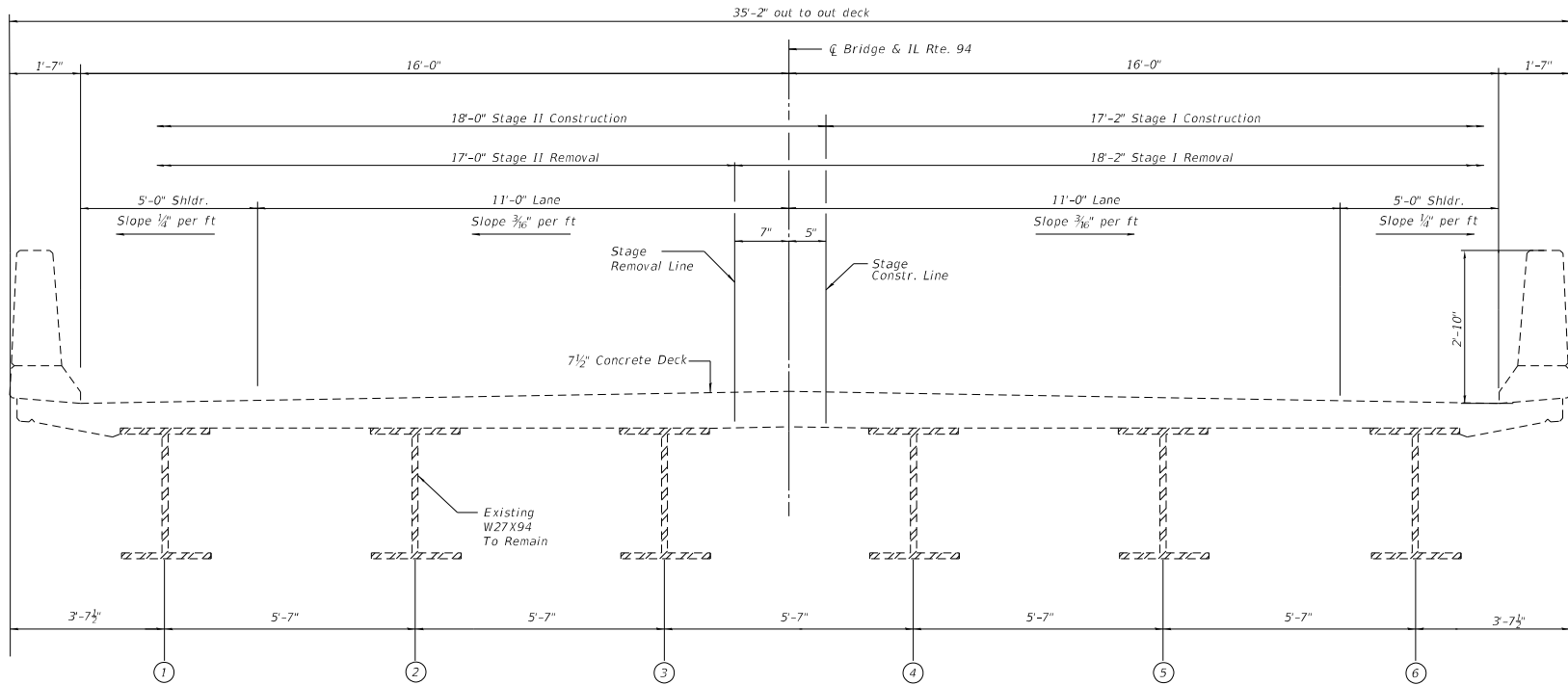
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
 STRUCTURE NO. 066-0007

SHEET 1 OF 12 SHEETS

F.A.S. R/S	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	231BR-1	MERCER	23	19

CONTRACT NO. 68F78



CROSS SECTION
(Looking North)

MODEL: SMODELNAMES
FILE NAME: STILLES



Hurst-Rosche, Inc.
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 617-532-3359
JOB NO. 192-2050

USER NAME =	DESIGNED - CMV	REVISED -
	CHECKED - CJC	REVISED -
PLOT SCALE =	DRAWN - LO	REVISED -
PLOT DATE =	CHECKED - CMV	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

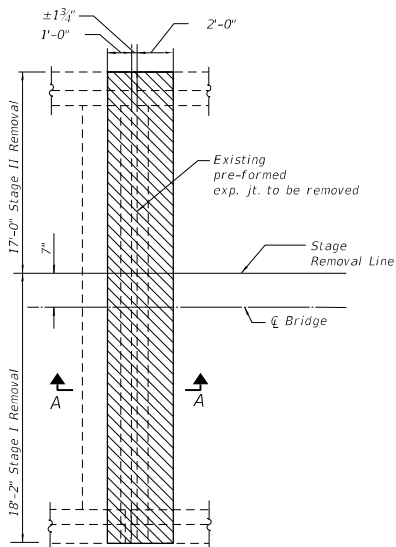
CROSS SECTION & STAGE CONSTRUCTION
STRUCTURE NO. 066-0007

F.A.S. SITE:	SECTION	COUNTY	TOTAL SHEETS
220	23/BIBR-1	MERCER	23
			11

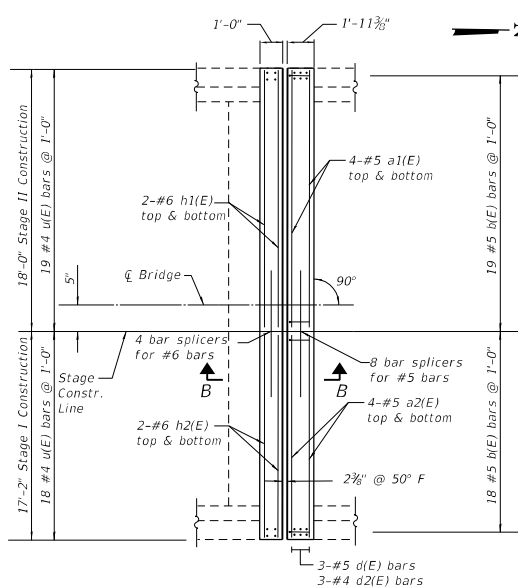
CONTRACT NO. 68F78

SHEET 2 OF 12 SHEETS

ILLINOIS FED. AID PROJECT



JOINT REMOVAL PLAN



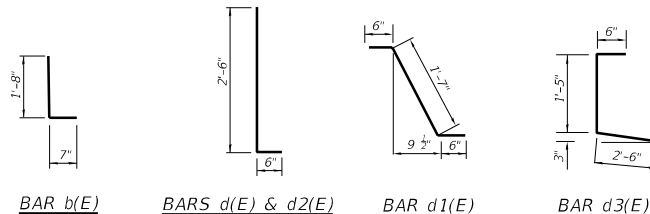
JOINT PLAN

NOTES:

1. Removal of existing expansion joint shall be included in the cost of concrete removal.
2. A 6"x6" Blockout will be permitted in the base of the parapet at the expansion joint in order to facilitate joint seal installation.
3. The contractor shall use extreme care during concrete removal so as not to damage the Wide Flange Steel Beams.
4. In parapet/joint removal areas, existing reinforcement bars shown are to be cleaned and incorporated into new construction.

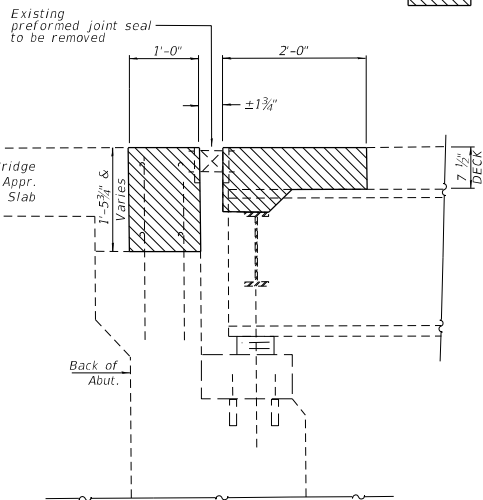
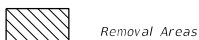
BILL OF MATERIAL (SOUTH JOINT)

BAR	#	SIZE	LENGTH	SHAPE
a1(E)	8	#5	17'-8"	
a2(E)	8	#5	16'-10"	
h1(E)	4	#6	17'-8"	
h2(E)	4	#6	16'-10"	
d(E)	8	#5	3'-0"	
d1(E)	10	#5	2'-7"	
d2(E)	8	#4	3'-0"	
d3(E)	10	#4	4'-5"	
b(E)	37	#5	2'-3"	
u(E)	37	#4	2'-9"	
Concrete Removal		Cu. Yd.	4.5	
Concrete Superstructure		Cu. Yd.	4.5	
Reinforcement Bars, Epoxy Coated		Pound	750	

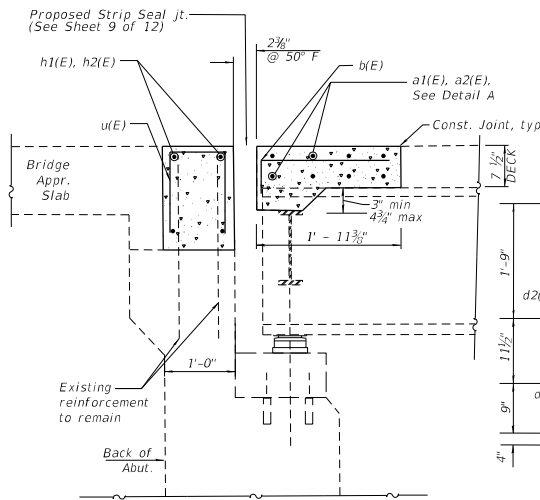


BAR b(E) BARS d(E) & d2(E) BAR d1(E) BAR d3(E)

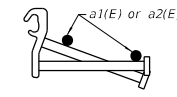
LEGEND



JOINT REMOVAL SECTION A-A



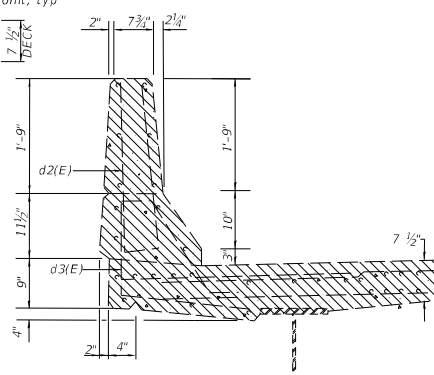
JOINT SECTION B-B



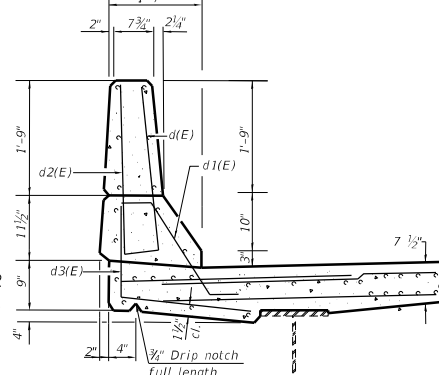
DETAIL A - a1(E) & a2(E) TOP MAT PLACEMENT



BAR u(E)



PARAPET REMOVAL CROSS SECTION



PARAPET REPLACEMENT CROSS SECTION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOINT DETAILS - SOUTH ABUTMENT
STRUCTURE NO. 066-0007

SHEET 3 OF 12 SHEETS

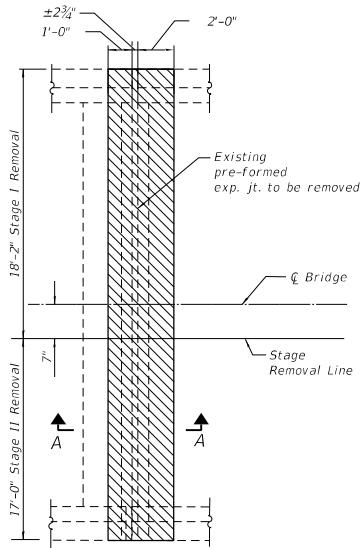
F.A.S. SHEET	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23(B)R-1	MERCER	23	12

CONTRACT NO. 68F78

MODEL: Default
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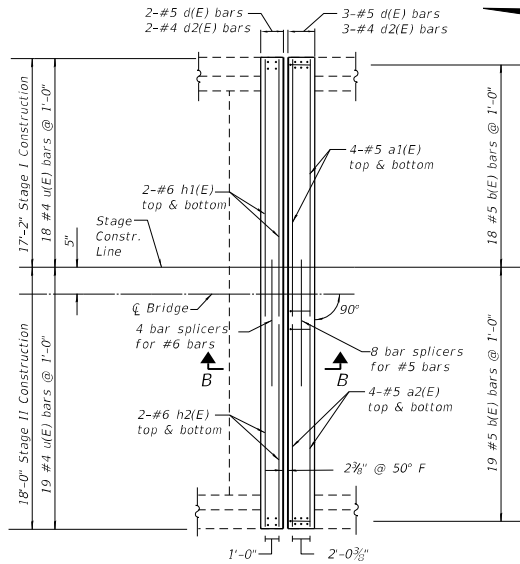
HR Hurst-Rosche, Inc.
1400 E. TREMONT ST.
MILLSBORO, IL
PH: 317.532.3859
JOB NO. 192-2050

USER NAME	DESIGNED - CJC	REVISED -
PLOT SCALE	CHECKED - CMV	REVISED -
PLOT DATE	DRAWN - UJ	REVISED -
	CHECKED - CJC	REVISED -



JOINT REMOVAL PLAN

LEGEND



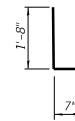
JOINT PLAN

NOTES:

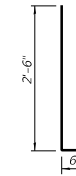
1. Removal of existing expansion joint shall be included in the cost of concrete removal.
2. A 6'x6" Blockout will be permitted in the base of the parapet at the expansion joint in order to facilitate joint seal installation.
3. The contractor shall use extreme care during concrete removal so as not to damage the Wide Flange Steel Beams.
4. In parapet/joint removal areas, existing reinforcement bars shown are to be cleaned and incorporated into new construction.

BILL OF MATERIAL
(NORTH JOINT)

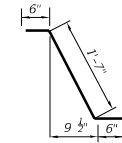
BAR	#	SIZE	LENGTH	SHAPE	
a1(E)	8	#5	17'-8"		
a2(E)	8	#5	16'-10"		
h1(E)	4	#6	17'-8"		
h2(E)	4	#6	16'-10"		
d(E)	8	#5	3'-0"		
d1(E)	10	#5	2'-7"		
d2(E)	8	#4	3'-0"		
d3(E)	10	#4	4'-5"		
b(E)	37	#5	2'-3"		
u(E)	37	#4	2'-9"		
Concrete Removal				Cu. Yd.	4.6
Concrete Superstructure				Cu. Yd.	4.6
Reinforcement Bars, Epoxy Coated				Pound	760



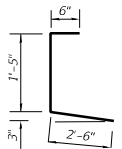
BAR b(E)



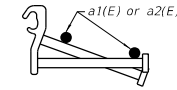
BARS d(E) & d2(E)



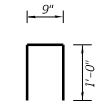
BAR d1(E)



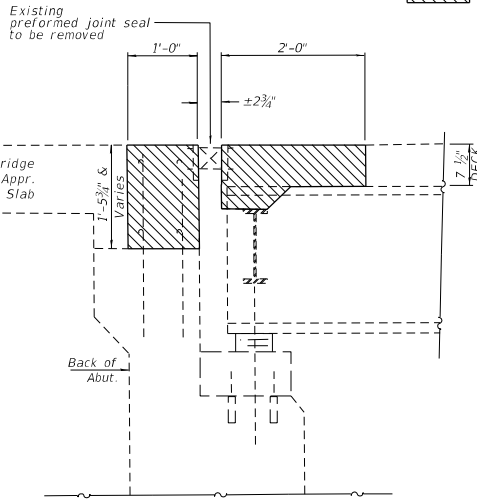
BAR d3(E)



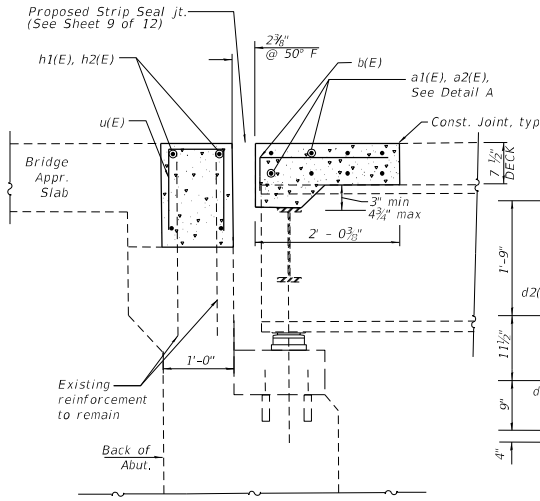
DETAIL A - a1(E) & a2(E)
TOP MAT PLACEMENT



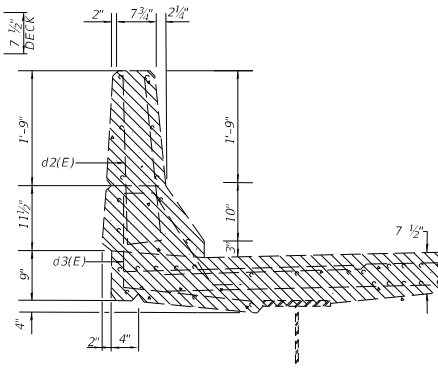
BAR u(E)



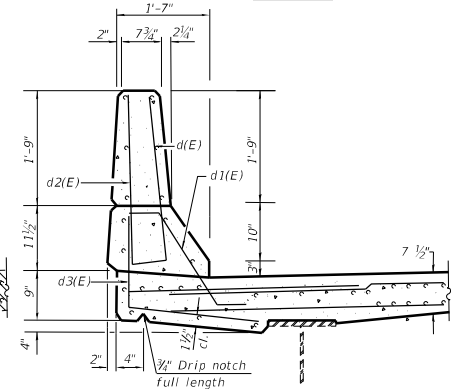
JOINT REMOVAL SECTION A-A



JOINT SECTION B-B



PARAPET REMOVAL CROSS SECTION



PARAPET REPLACEMENT CROSS SECTION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

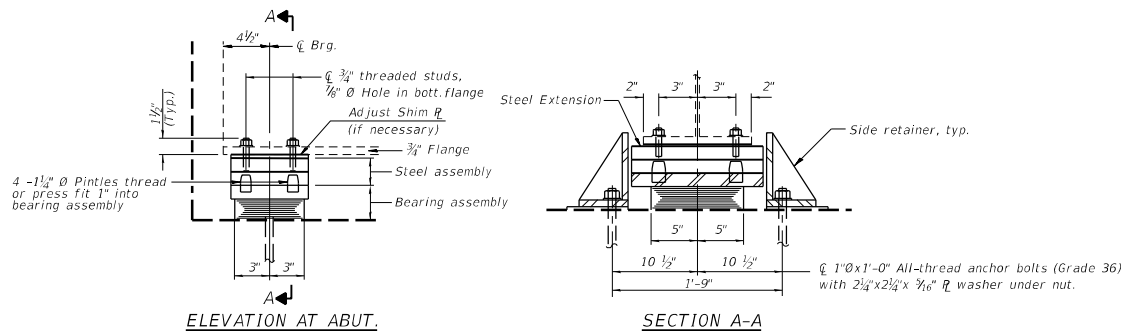
JOINT DETAILS - NORTH ABUTMENT
STRUCTURE NO. 066-007

SHEET 4 OF 12 SHEETS

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEET NO.
220	23(B)R-1	MERCER	23 13
			CONTRACT NO. 68F78

MODEL: HR
FILE NAME: Hurst-Rosche, Inc.
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 317.532.8559
JOB NO. 192-2050

USER NAME	DESIGNED - CJC	REVISED -
PLOT SCALE	CHECKED - CMV	REVISED -
PLOT DATE	DRAWN - UJ	REVISED -
	CHECKED - CJC	REVISED -



TYPE I ELASTOMERIC EXP. BRG.

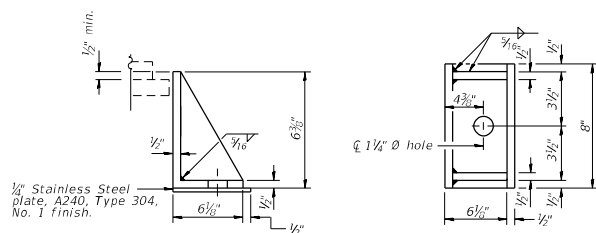
Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer approved alternate material) of grades and dimensions specified. ASTM A307 grade C anchor bolts may be used in lieu of ASTM F1554 grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of Standard Specifications.

Side retainers and 1/2" stainless steel plates required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 The minimum jack capacity required is 35 tons.
 Existing diaphragm removal and reinstallation may be required to facilitate drilling holes, cost to be included with Jack and Remove Existing Bearings.
 Prior to ordering any materials, the contractor shall verify in the field all bearings height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

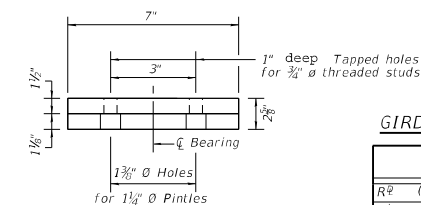
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. new steel extensions, connection bolts, fill plates and shim plates are included in Furnishing and Erecting Structural Steel.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

All fill plates, shim plates, side retainers, and anchor bolts material shall be hot dip galvanized.



SIDE RETAINER
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



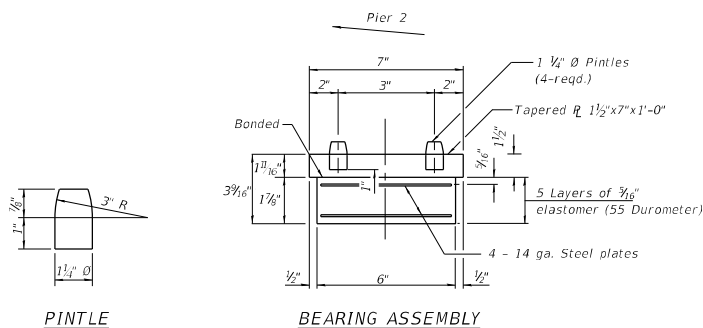
ELEVATION STEEL EXTENSION

GIRDER REACTIONS

	North Abutment
R ^o (k)	14.1
R _t (k)	26.2
Imp. (k)	7.9
RTotal (k)	48.2

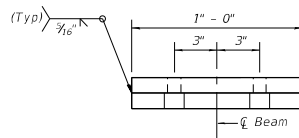
BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	770
Elastomeric Bearing Assembly, Type I	Each	6
Anchor Bolts 1"	Each	12
Jack and Remove Existing Bearings	Each	6



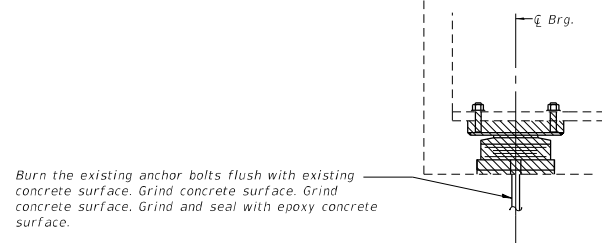
PINTLE

BEARING ASSEMBLY



END VIEW STEEL EXTENSION

Note: Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.



EXISTING BEARING REMOVAL DETAIL

Cost is included with jack & remove existing bearings.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS - NORTH ABUTMENT
 STRUCTURE NO. 066-0007

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23(B)BR-1	MERCER	23	14

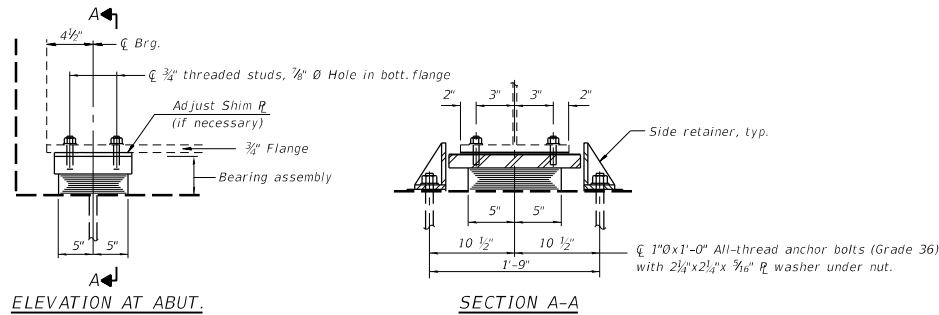
SHEET 5 OF 12 SHEETS

ILLINOIS FED-AID PROJECT
 CONTRACT NO. 68F78

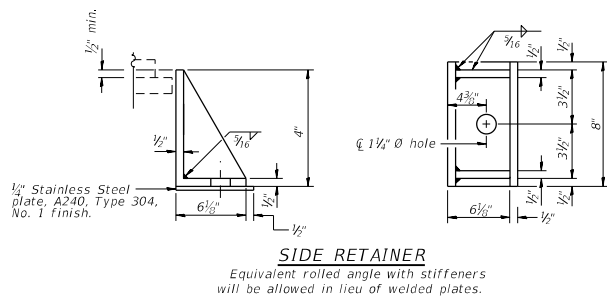
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 6/24/2021 9:38:35 AM

HR Hurst-Rosche, Inc.
 1490 E. TREMONT ST.
 HILLSBORO, IL
 PH: 617.532.3959
 JOB NO. 192-2050

USERNAME =	DESIGNED - CJC	REVISED -
CHECKED - CV	REVISOR -	
PLOTSCALE =	DRAWN - LU	REVISOR -
PLOTDATE =	CHECKED - CJC	REVISOR -



TYPE I ELASTOMERIC EXP. BRG.

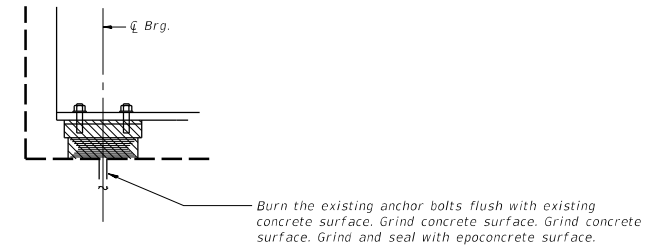
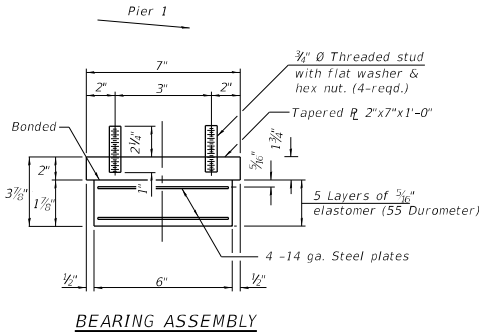


GIRDER REACTIONS

	South Abutment
R ^o (k)	14.1
R _t (k)	26.2
Imp. (k)	7.9
RTotal (k)	48.2

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	80
Elastomeric Bearing Assembly, Type 1	Each	6
Anchor Bolts 1"	Each	12
Jack and Remove Existing Bearings	Each	6



EXISTING BEARING REMOVAL DETAIL

Cost is included with jack & remove existing bearings.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS - SOUTH ABUTMENT
STRUCTURE NO. 066-0007**

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23(B)BR-1	MERCER	23	15

SHEET 6 OF 12 SHEETS

ILLINOIS FED. AID PROJECT CONTRACT NO. 68F78

USER NAME =	DESIGNED - CJC	REVISIONS -
CHECKED - CV		
PLOT SCALE =	DRAWN - LU	REVISIONS -
PLOT DATE =	CHECKED - CJC	REVISIONS -

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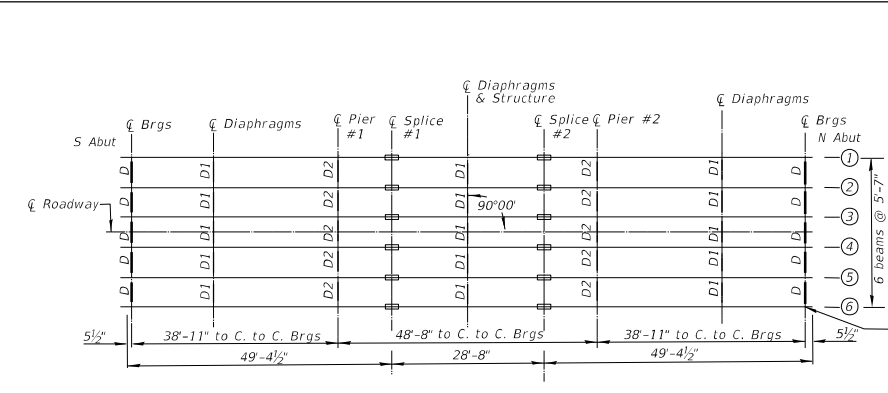
HR
 Hurst-Rosche, Inc.
 1400 E. TREMONT ST.
 HILLSBORO, IL
 PH: 617-532-3959
 JOB NO. 192-2050

USER NAME =	DESIGNED - CJC	REVISIONS -
CHECKED - CV	DRAWN - LU	REVISIONS -
PLOT SCALE =	CHECKED - CJC	REVISIONS -
PLOT DATE =		

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GIRDER/DIAPHRAGM REPAIR
 STRUCTURE NO. 066-007**

F.A.S. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23/BBR-1	MERCER	23	16
CONTRACT NO. 68F78				



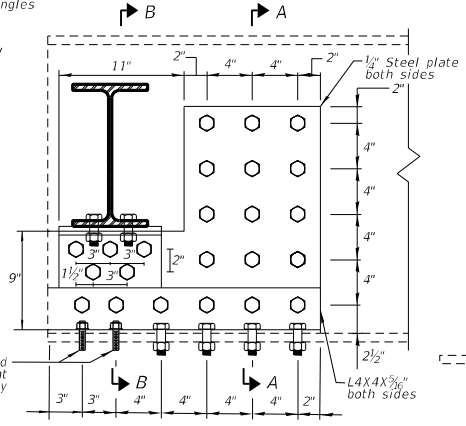
EXISTING FRAMING PLAN
 (All beams W27X94)

Notes:
 1. Replace End Diaphragms D at abutments only.

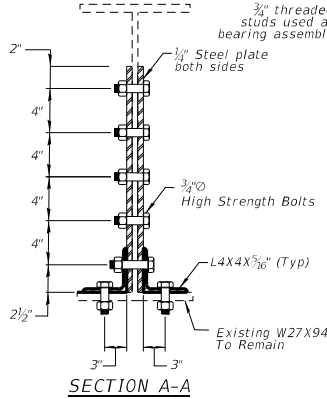
Notes:
 New steel diaphragm, angles, and new plates for beam repair shall be paid for as Furnishing and Erecting Structural Steel.
 New steel diaphragm, angles, and new plates for beam repair shall be hot dipped galvanized.
 Field drill holes in vertical legs of new clip angles and corresponding holes in the repair plates using existing holes as template.
 Field drill in existing steel using holes in new steel as template at all other locations.

BILL OF MATERIAL

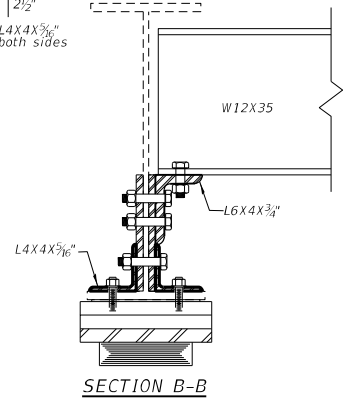
ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	2,400
Cleaning and Painting Steel Bridge No. 1	L Sum	1



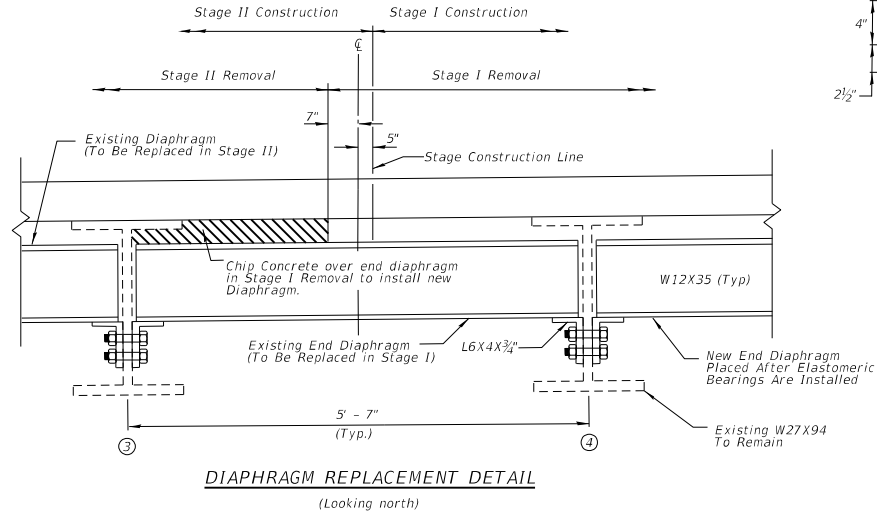
BEAM WEB REPAIR DETAIL
 (At north abutment on beam 6 only)



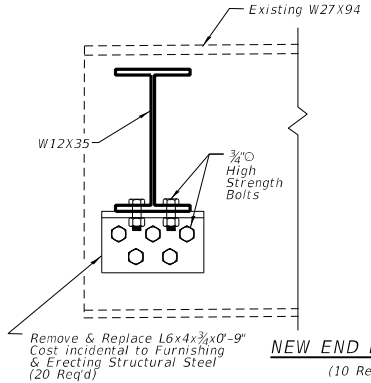
SECTION A-A



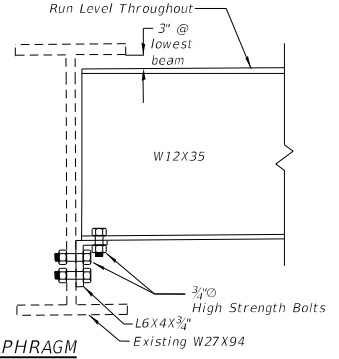
SECTION B-B



DIAPHRAGM REPLACEMENT DETAIL
 (Looking north)



NEW END DIAPHRAGM
 (10 Required)

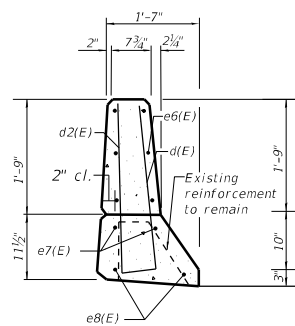


BILL OF MATERIAL

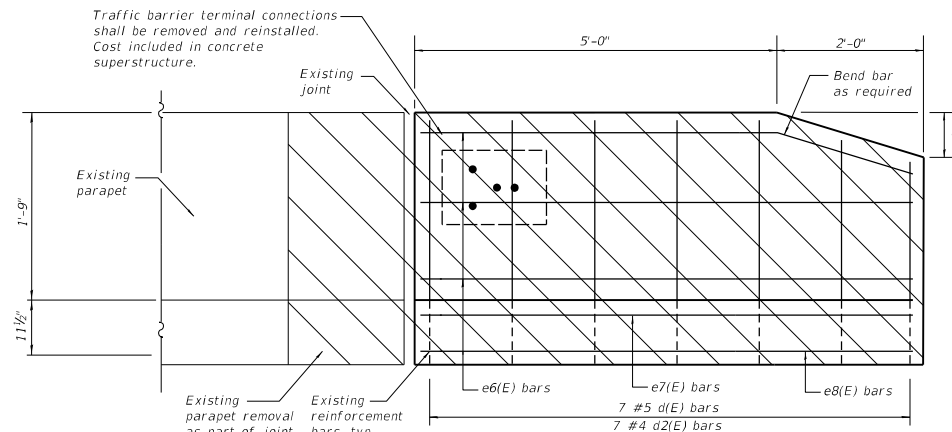
Bar	No.	Size	Length	Shape
d(E)	7	#5	3'-0"	=====
d2(E)	7	#4	3'-0"	=====
e6(E)	6	#4	6'-8"	=====
e7(E)	2	#8	6'-8"	=====
e8(E)	2	#5	6'-8"	=====
Concrete Removal			Cu. Yd.	0.8
Concrete Superstructure			Cu. Yd.	0.8
Reinforcement Bars, Epoxy Coated			Pound	115

*See sheet 3 of 10 for bending diagrams.

Notes:
 Existing reinforcement bars extending into removal shall be cleaned, straightened and incorporated into the new construction.
 Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with concrete removal.
 All reinforcement bars shall be cut in field to fit existing shape and clearance.



SECTION THRU PARAPET



EAST PARAPET ELEVATION

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 6/17/2021 9:01:00 AM

HR
 Hurst-Rosche, Inc.
 1400 E. TREMONT ST.
 HILLSBORO, IL
 PH: 317.532.3359
 JOB NO. 192-2050

USER NAME =	DESIGNED - CJC	REVISD -
CHECKED - CMV	REVISD -	
PLOT SCALE =	DRAWN - LW	REVISD -
PLOT DATE =	CHECKED - CJC	REVISD -

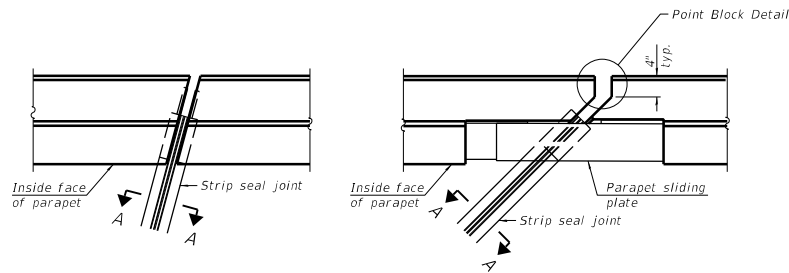
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PARAPET REPAIRS
 STRUCTURE NO. 066-0007**

SHEET 8 OF 12 SHEETS

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23(B)BR-1	MERCER	23	17
			CONTRACT NO. 68F78	

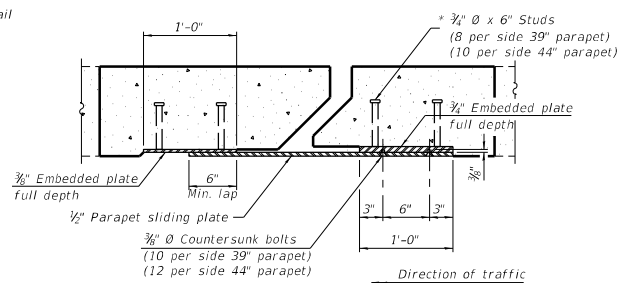
ILLINOIS FED. AID PROJECT



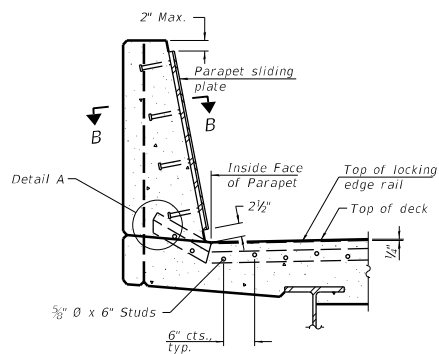
FOR SKEWS ≤ 30°

FOR SKEWS > 30°

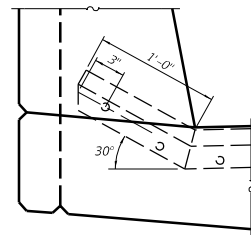
PLAN AT PARAPET



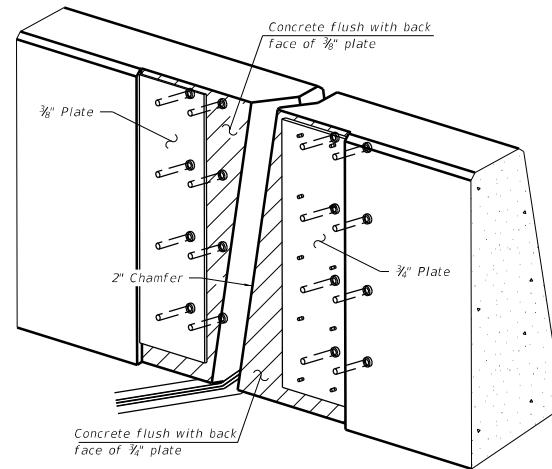
SECTION B-B



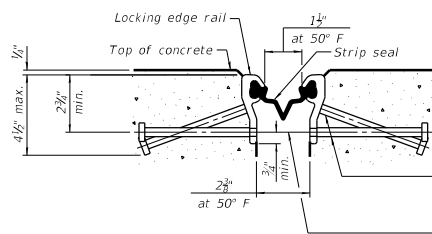
SECTION AT PARAPET
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



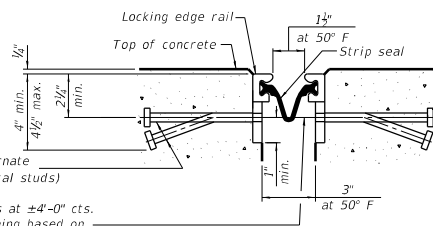
DETAIL A



TRIMETRIC VIEW
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

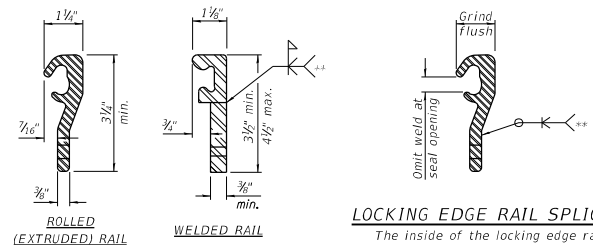


SHOWING WELDED RAIL JOINT

* 3/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPlice

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	68

MODEL: SMODELNAMES
FILE NAME: STILLES

EJ-SS

1-1-2020

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PLOTDATE =	DRAWN - LU	REVISION -
	CHECKED - CJC	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

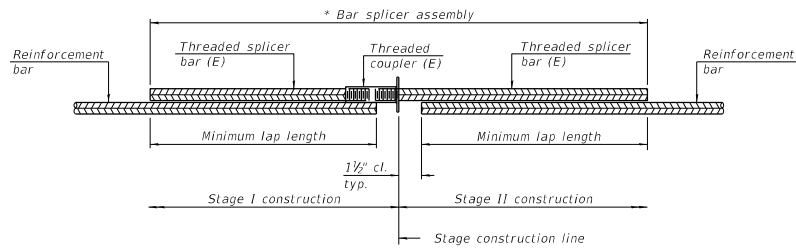
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 066-007

SHEET 9 OF 12 SHEETS

F.A.S. SITE:	SECTION	COUNTY	TOTAL SHEETS
220	23(B)BR-1	MERCER	23 18
			CONTRACT NO. 68F78

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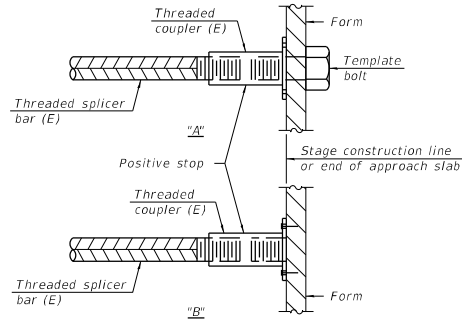


STANDARD BAR SPLICER ASSEMBLY PLAN
(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
North Abutment	#5	8	3'-6"
North Abutment	#6	8	4'-0"
South Abutment	#5	8	3'-6"
South Abutment	#6	8	4'-0"

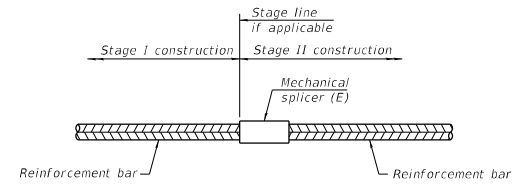


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODEL: SMODELNAMES
FILE NAME: STILLS

BSD-1

1-1-2020

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HILLSBORO, IL
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JOB NO. 192-2050

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PLOT SCALE =	DRAWN - LU	REVISIONS -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

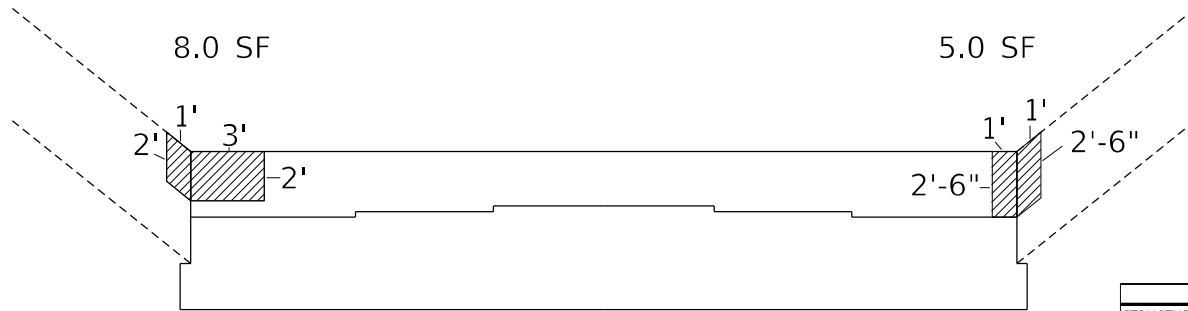
BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS
STRUCTURE NO. 066-0007

F.A.S. SITE:	SECTION	COUNTY	TOTAL SHEETS
220	23(B)BR-1	MERCER	23 19
			CONTRACT NO. 68F78

SHEET 10 OF 12 SHEETS

ILLINOIS FED. AID PROJECT

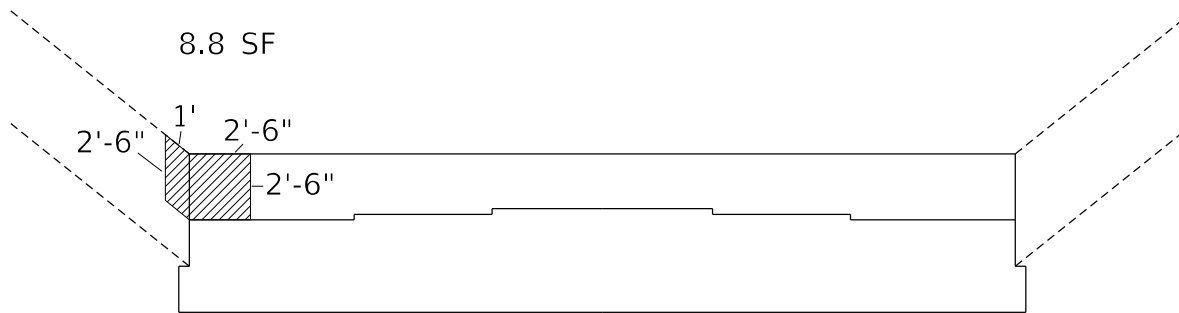
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NORTH ABUTMENT

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	13



SOUTH ABUTMENT

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	FT	8.8

NOTE: 25% CONTINGENCY ADDED TO FINAL TOTAL QUANTITY OF "STRUCTURAL REPAIR OF CONCRETE"

MODEL: SMODEL\MANES
FILE NAME: 8FILES

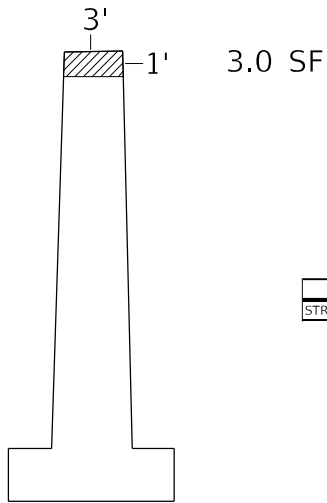
HR
Hurst-Rosche, Inc.
1400 E. TREMONT ST.
HILLSBORO, IL
PH: 517.532.2859
JOB NO. 192-2050

USERNAME =	DESIGNED - IDOT 04	REVISED -
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PLOT SCALE =	DRAWN - IDOT 04	REVISED -
PLOT DATE =	CHECKED - CJC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE REPAIR DETAILS ABUTMENTS
STRUCTURE NO. 066-0007**

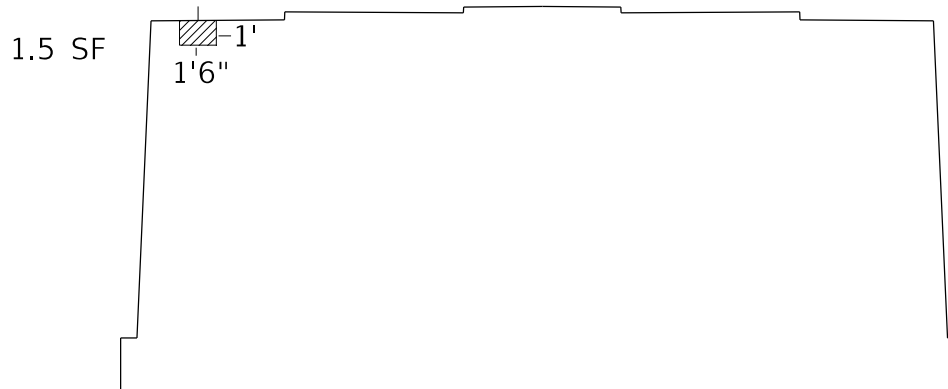
F.A.S. DIST. 220	SECTION 23(B)BR-1	COUNTY MERCER	TOTAL SHEETS 23	SHEET NO. 20
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68F78	



PIER 1 WEST END – FACING EAST

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	3



PIER 2 – FACING NORTH

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	1.5

NOTE: 25% CONTINGENCY ADDED TO FINAL TOTAL QUANTITY OF "STRUCTURAL REPAIR OF CONCRETE"

MODEL: SMOELMANES
FILE NAME: 8FILES

HR
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HILLSBORO, IL
PH: 517.532.2859
JOB NO. 192-2050

USERNAME =	DESIGNED - IDOT 04	REVISED -
	CHECKED - CJC	REVISED -
PLOT SCALE =	DRAWN - IDOT 04	REVISED -
PLOT DATE =	CHECKED - CJC	REVISED -

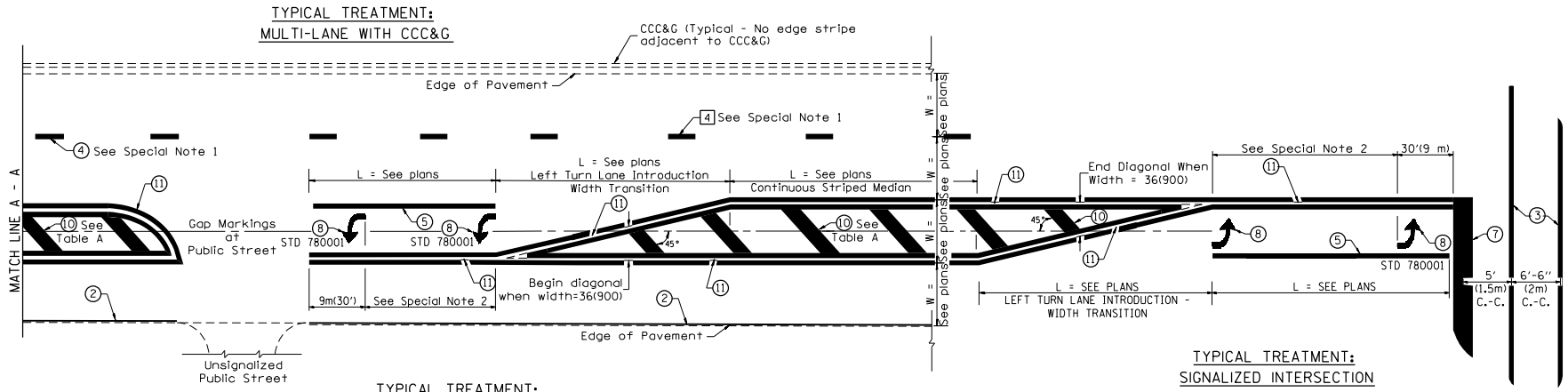
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CONCRETE REPAIR DETAILS PIERS 1 & 2
STRUCTURE NO. 066-0007**

F.A.S. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	23(B)BR-1	MERCER	23	21
CONTRACT NO. 68F78				

SHEET 12 OF 12 SHEETS

ILLINOIS FED. AID PROJECT



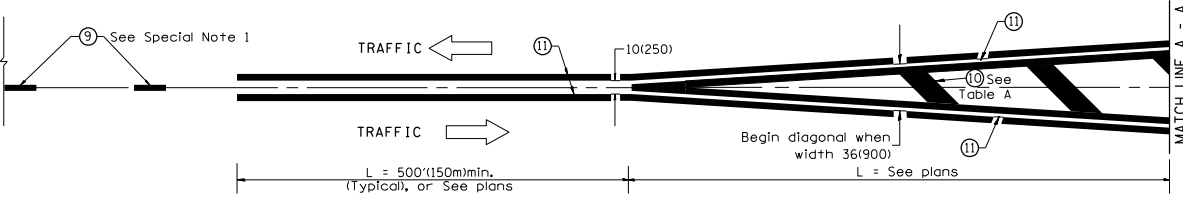
TYPICAL MEDIAN TRANSITIONS

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

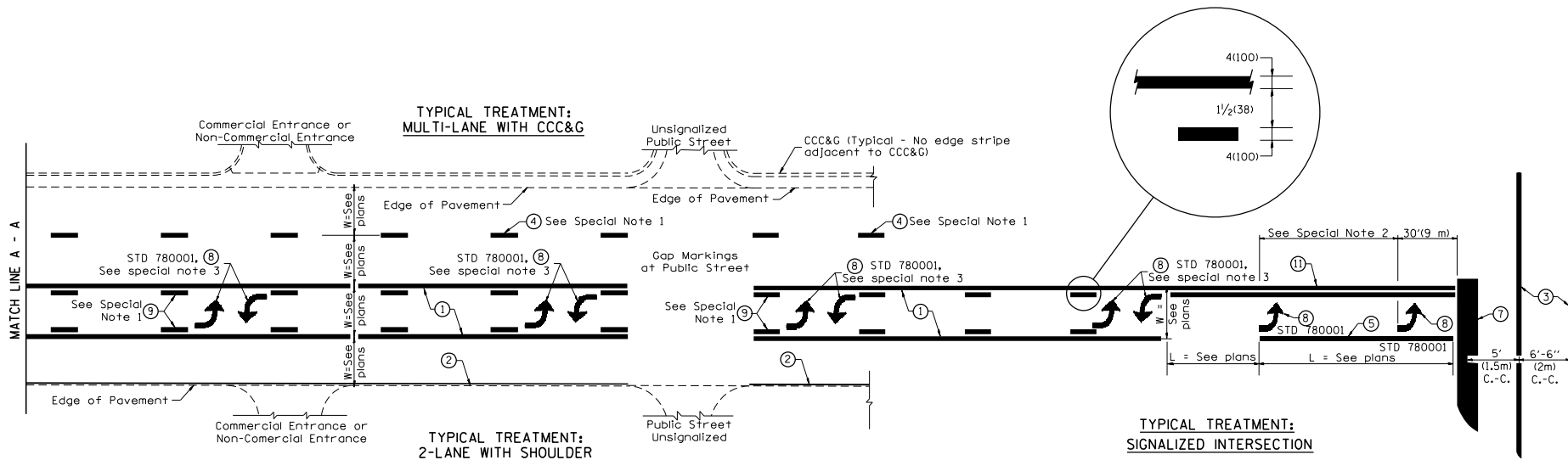
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.
3. Refer to Article 780.13 for letter, number and symbol areas (sq. ft.)
4. Areas are grooved 1" beyond each edge for the following symbols:
 - Through Arrow= 14.8 sq. ft.
 - Large Left or Right Arrow= 21.9 sq. ft.
 - 2 Arrow Combination Left (or Right) and Through= 34.9 sq. ft.
 - Wrong Way Arrow= 29.5 sq. ft.
 - Railroad Crossing Symbol= 69.8 sq. ft.
 (For further information, refer to BDE Special Provision: Grooving for Recessed Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.O.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.	07-16-19	SPELLING CORRECTIONS	R.O.
08-02	ADD CROSSWALK DIMNS. WITH T.S.	M.A.			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

TYPICAL PAVEMENT MARKINGS

SHT. 1 OF 2
CADD STD. 780001-D4

F.A.S. P.S.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
220	(23-BRIBJR,BP,BRR	MERCER	23	23
CONTRACT NO. 68F78				
ILLINOIS FED. AID PROJECT				