

11-17-2023 LETTING ITEM 044

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

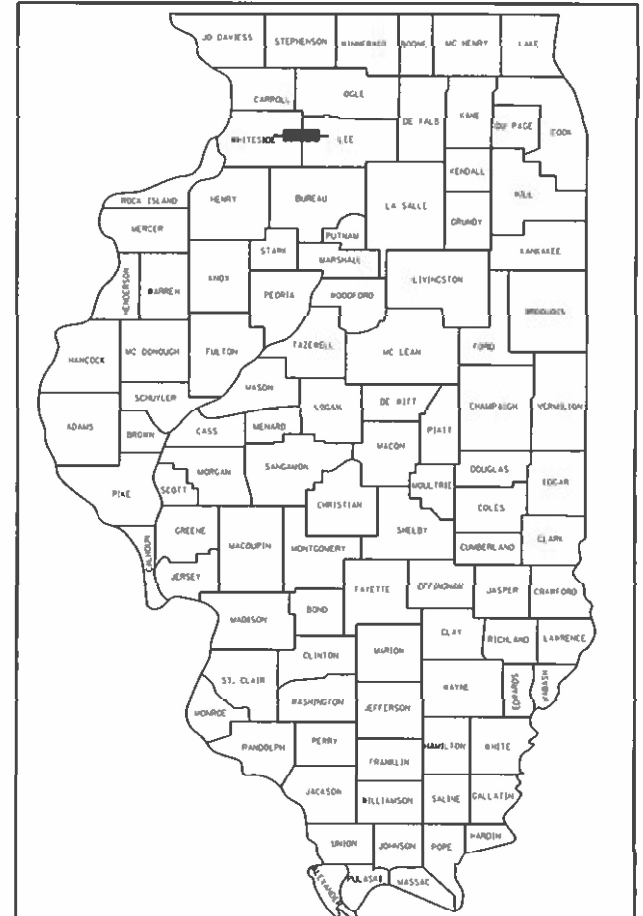
PROPOSED  
HIGHWAY PLANS

FAI ROUTE 88 (I-88)  
SECTION (195-3HB-6)BDR  
PROJECT NHPP-ARD7(099)  
TYPE of IMPROVEMENT: BRIDGE REPAIR  
SN 098-0091 US 30 OVER I-88

WHITESIDE COUNTY  
C-92-135-23

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	1
		ILLINOIS	CONTRACT NO. 64S40	

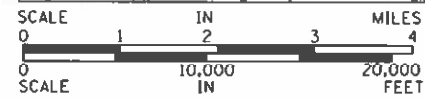
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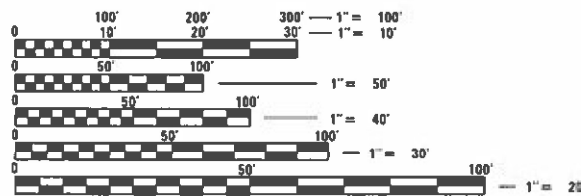
LOCATION OF SECTION INDICATED THIS: — ■ —

COLOMA & MONTMORENCY TOWNSHIP  
T21N R7E, SEC. 36, 4TH PM  
T20N R7E, SEC. 1, 4TH PM

SN 098-0091



GROSS LENGTH = 340.83 FT. = 0.065 MILE  
NET LENGTH = 340.83 FT. = 0.065 MILE



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 EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: JAMES R. PUSH, PE (630) 930-6420  
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64S40

**QUANDEL CONSULTANTS**  
161 NORTH CLARK STREET  
SUITE 2975  
CHICAGO, IL 60601  
312-634-6201  
DESIGN FIRM - PROF/STRUCT ENGINEER  
IL LIC. 184.005283-0006

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED August 25, 2023  
Deputy Director of Highways, Region Engineer  
October 13, 2023

ENGINEER OF DESIGN AND ENVIRONMENT  
October 13, 2023  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

JAMES R. PUSH  
062-048736  
LICENSED PROFESSIONAL ENGINEER  
OF ILLINOIS

James R. Push  
DATE: 08/22/2023  
JAMES R. PUSH, P.E.  
LICENSE NO.: 062-048736  
EXPIRES: NOVEMBER 30, 2023

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OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

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36 - 38	TYPICAL PAVEMENT MARKINGS (DISTRICT STD 41.1)
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## STATE STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
610001-09	SHOULDER INLET WITH CURB
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24"(600 MM) FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS $\geq$ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS $\geq$ 45 MPH
701331-05	LANE CLOSURE, 2L, 2W, WITH RUN-AROUND, FOR SPEEDS $\geq$ 45 MPH
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATION ONLY
701423-10	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEED $\geq$ 45 MPH TO 50 MPH
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS
704001-08	TEMPORARY CONCRETE BARRIER

## GENERAL NOTES

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION OPERATIONS TO THE RESIDENT ENGINEER FOR APPROVAL BEFORE THIS PROJECT IS STARTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED FOR NON-EMERGENCY WORK. THE JULIE NUMBER IS 800-892-0123.

ALL ELEVATIONS SHOWN IN PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THERE ARE NO COMMITMENTS ASSOCIATED WITH THIS PROJECT.

THE QUANTITIES INCLUDED IN THE PLANS FOR HOT-MIX ASPHALT RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

ALL SAW CUTS NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE(S):	HMA CONC SURF CSE
PG:	PG 64 -22
DESIGN AIR VOIDS:	4.0% @ N DESIGN - 50
MIXTURE COMPOSITION:	IL 9.5
FRICTION AGGREGATE:	MIX "D"
QUALITY MANAGEMENT PROGRAM:	QC / QA
SUBLOT SIZE:	N / A

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:

BITUMINOUS MATERIALS (TACK COAT)	0.05 LBS / SQ FT (ON PAVEMENT)
BITUMINOUS MATERIALS (TACK COAT)	0.025 LBS / SQ FT (FOG)
HOT-MIX ASPHALT MATERIAL	0.056 TON / SQ YD PER 1"
AGGREGATE MATERIAL	1.60 TONS / CU YD

PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

- ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH.
- ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE.
- THE DISTANCE BETWEEN YELLOW NO-PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
- CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1.

UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE.

- THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT.
- EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

MICROSILICA CONCRETE SHALL INCLUDE MACRO-SIZE, TYPE III, SYNTHETIC FIBERS MEETING THE 'BRIDGE DECK MICROSILICA CONCRETE OVERLAY' SPECIAL PROVISION.

FILENAME = 64540\_02\_GenNotes.dgn



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	DRAWN - JRP	REVISED -
PLOT SCALE = 48.0000' / in.	CHECKED - JRP	REVISED -
PLOT DATE = 8/24/2023	DATE - 08/22/2023	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	2
				<b>CONTRACT NO. 64S40</b>
ILLINOIS FED. AID PROJECT				

REV. 10/10/23

CONSTRUCTION CODE  
BRIDGE 0047  
90% FED / 10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 098-0091 WHITESIDE COUNTY
28100203	STONE RIPRAP, CLASS A2	TON	80	80
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	110	110
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	71	71
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9. 5, MIX "D", N50	TON	35	35
42100615	PAVEMENT REINFORCEMENT	SQ YD	110	110
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	416	416
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	900	900
44003100	MEDIAN REMOVAL	SQ FT	1,464	1,464
50102400	CONCRETE REMOVAL	CU YD	46.0	46.0
50157300	PROTECTIVE SHIELD	SQ YD	864	864
50300255	CONCRETE SUPERSTRUCTURE	CU YD	46.0	46.0
50300300	PROTECTIVE COAT	SQ YD	1,926	1,926
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5,740	5,740
50800530	MECHANICAL SPLICERS	EACH	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	185	185
58700300	CONCRETE SEALER	SQ FT	1,702	1,702
59000200	EPOXY CRACK INJECTION	FOOT	260	260
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	133	133
60100945	PIPE DRAINS 12"	FOOT	40	40
60500060	REMOVING INLETS	EACH	4	4

\* DENOTES SPECIALTY ITEM

FILENAME = 64540\_03\_S00.dgn



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PLOT DATE = 8/24/2023

DESIGNED - BMW  
DRAWN - BMW  
CHECKED - JRP  
DATE - 08/22/2023

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 1 OF 3 SHEETS! STA. TO STA.

F.A.1.1 RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
88	1195-3HB-6BDR	WHITESIDE	39   3
			CONTRACT NO. 64540
ILLINOIS FED. AID PROJECT			

CONSTRUCTION CODE  
BRIDGE 0047  
90% FED / 10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 098-0091 WHITESIDE COUNTY
60608700	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.06 (ABUTTING EXISTING PAVEMENT)	FOOT	900	900
60618320	CONCRETE MEDIAN SURFACE, 6 INCH	SQ FT	1,464	1,464
61000225	TYPE F INLET BOX, STANDARD 610001	EACH	4	4
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4
67100100	MOBILIZATION	L SUM	1	1
70100200	TRAFFIC CONTROL AND PROTECTION, STANDARD 701331	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	90	90
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	104	104
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	3,607	3,607
70307100	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS - TYPE IV TAPE	SQ FT	63	63
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	10,633	10,633
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	94	94
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	5,195	5,195
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1,308	1,308
X0322215	CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS	EACH	4	4
X0325748	ACRYLIC COATING	SQ YD	507	507

\* DENOTES SPECIALTY ITEM

FILENAME = 64540\_03\_S00.dgn



CONSTRUCTION CODE  
BRIDGE 0047  
90% FED / 10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SN 098-0091 WHITESIDE COUNTY
X0327773	ACCESS DOOR	EACH	2	2
X4201510	P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT (SPECIAL)	SQ YD	110	110
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	280	280
X4400223	CURB REMOVAL AND REPLACEMENT GREATER THAN 10 FEET	FOOT	80	80
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	32	32
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1,125	1,125
X6010003	PIPE DRAIN REMOVAL	FOOT	40	40
* X7820007	GUARDRAIL REFLECTORS, TYPE C (SPECIAL)	EACH	40	40
Z0001495	BRIDGE APPROACH SHOULDER REMOVAL	SQ YD	110	110
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	26	26
Z0012142	BRIDGE DECK SCARIFICATION 2 1/4"	SQ YD	1,743	1,743
Z0012164	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/2"	SQ YD	1,743	1,743
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	662	662
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	157	157
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	65	65
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1,591	1,591
Z0053750	RETROFIT CONCRETE PARAPET	FOOT	601	601
Z0062456	TEMPORARY PAVEMENT	SQ YD	280	280

\* DENOTES SPECIALTY ITEM

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CHECKED - JRP  
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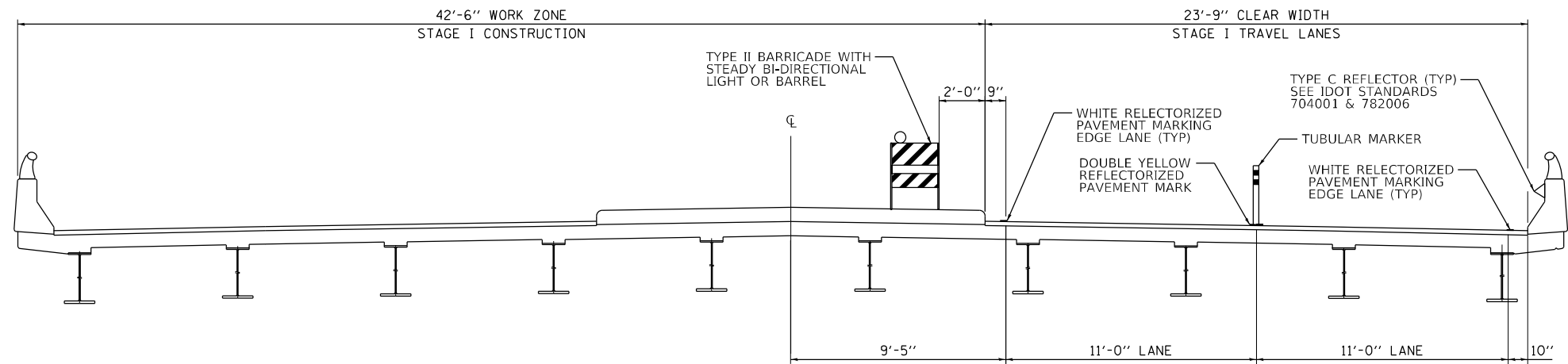
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 3 OF 3 SHEETS STA. TO STA.

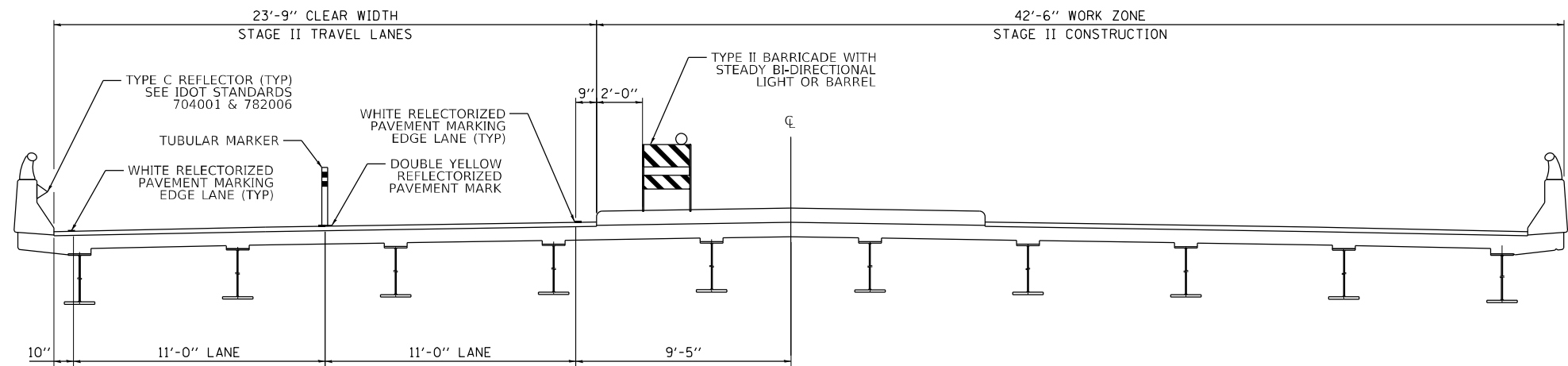
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	5
CONTRACT NO. 64S40			ILLINOIS FED. AID PROJECT	



**STAGE I – TYPICAL SECTION**

THE PROTECTIVE SHIELD SYSTEM IN ACCORDANCE WITH SECTION 501 OF THE STANDARD SPECIFICATIONS SHALL BE ERECTED PRIOR TO THE START OF ANY CONSTRUCTION WORK TO PROTECT VEHICULAR TRAFFIC ON I-88 THROUGH LANES AND SHOULDERS FROM FALLING OBJECTS. THE SYSTEM SHALL PROTECT THE BRIDGE LENGTH SHOWN ON THE PLANS. THE WIDTH TO BE PROTECTED SHALL BE THE OUT-TO-OUT WIDTH OF THE EXISTING STRUCTURE INCLUDING THE PARAPET WORK.

TRAFFIC CONTROL ON I-88 TO INSTALL AND REMOVE THE PROTECTIVE SHIELD SYSTEM SHALL BE DONE IN ACCORDANCE WITH IDOT STANDARD DRAWINGS 701400 AND 701406.



**STAGE II – TYPICAL SECTION**

MOT STAGING CROSS SECTIONS.dgn



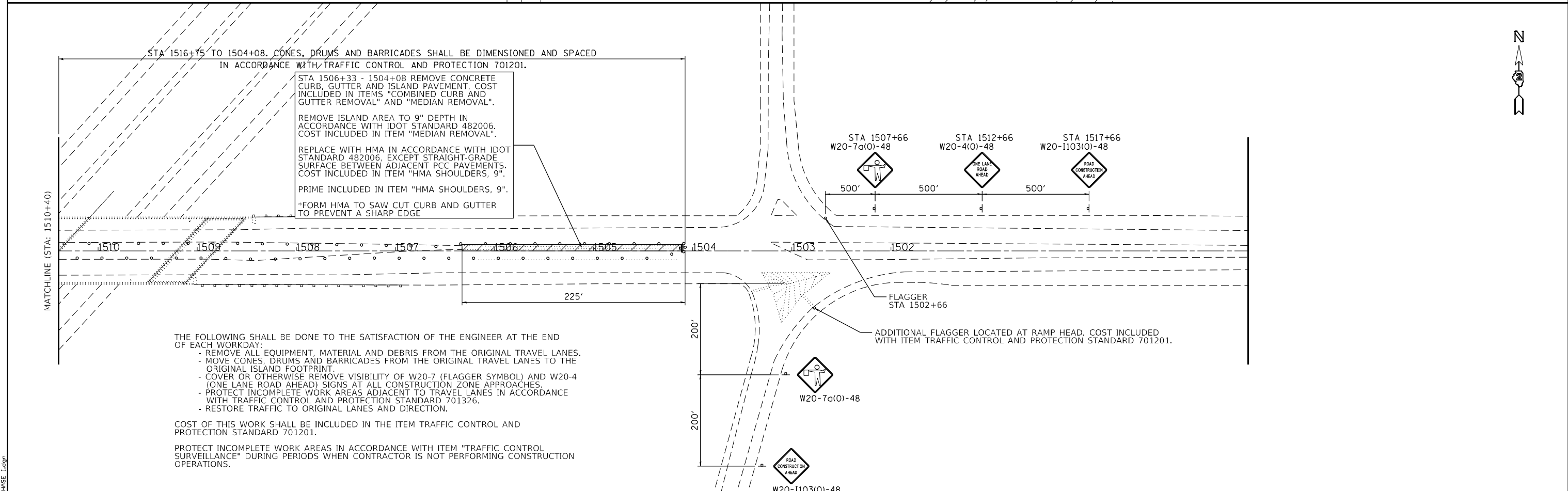
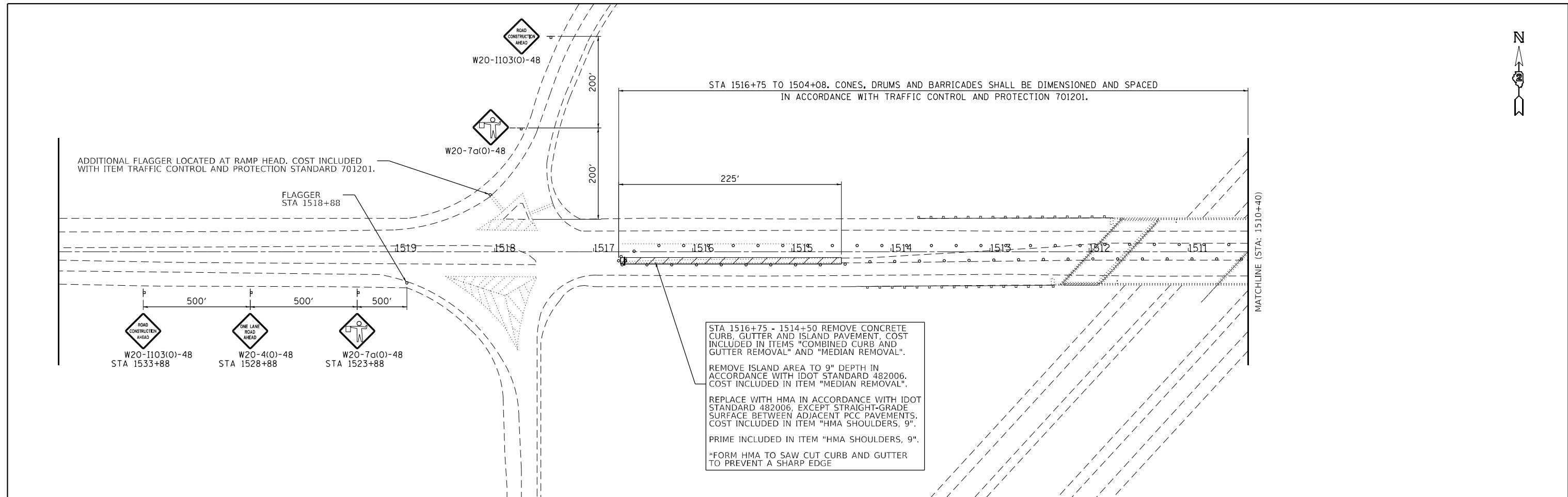
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PLOT DATE = 8/24/2023	DATE - 08/21/2023	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION TRAFFIC CONTROL SN 098-0091  
TYPICAL SECTIONS**

SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	6
<b>CONTRACT NO. 64S40</b>				
ILLINOIS FED. AID PROJECT				



- THE FOLLOWING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER AT THE END OF EACH WORKDAY:
- REMOVE ALL EQUIPMENT, MATERIAL AND DEBRIS FROM THE ORIGINAL TRAVEL LANES.
  - MOVE CONES, DRUMS AND BARRICADES FROM THE ORIGINAL TRAVEL LANES TO THE ORIGINAL ISLAND FOOTPRINT.
  - COVER OR OTHERWISE REMOVE VISIBILITY OF W20-7 (FLAGGER SYMBOL) AND W20-4 (ONE LANE ROAD AHEAD) SIGNS AT ALL CONSTRUCTION ZONE APPROACHES.
  - PROTECT INCOMPLETE WORK AREAS ADJACENT TO TRAVEL LANES IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701326.
  - RESTORE TRAFFIC TO ORIGINAL LANES AND DIRECTION.

COST OF THIS WORK SHALL BE INCLUDED IN THE ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701201.

PROTECT INCOMPLETE WORK AREAS IN ACCORDANCE WITH ITEM "TRAFFIC CONTROL SURVEILLANCE" DURING PERIODS WHEN CONTRACTOR IS NOT PERFORMING CONSTRUCTION OPERATIONS.

MOT\_PRE-STAGE PHASE 1.dgn



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 PLOT DATE = 8/24/2023

DESIGNED - BMW  
 DRAWN - BMW  
 CHECKED - JRP  
 DATE - 08/21/2023

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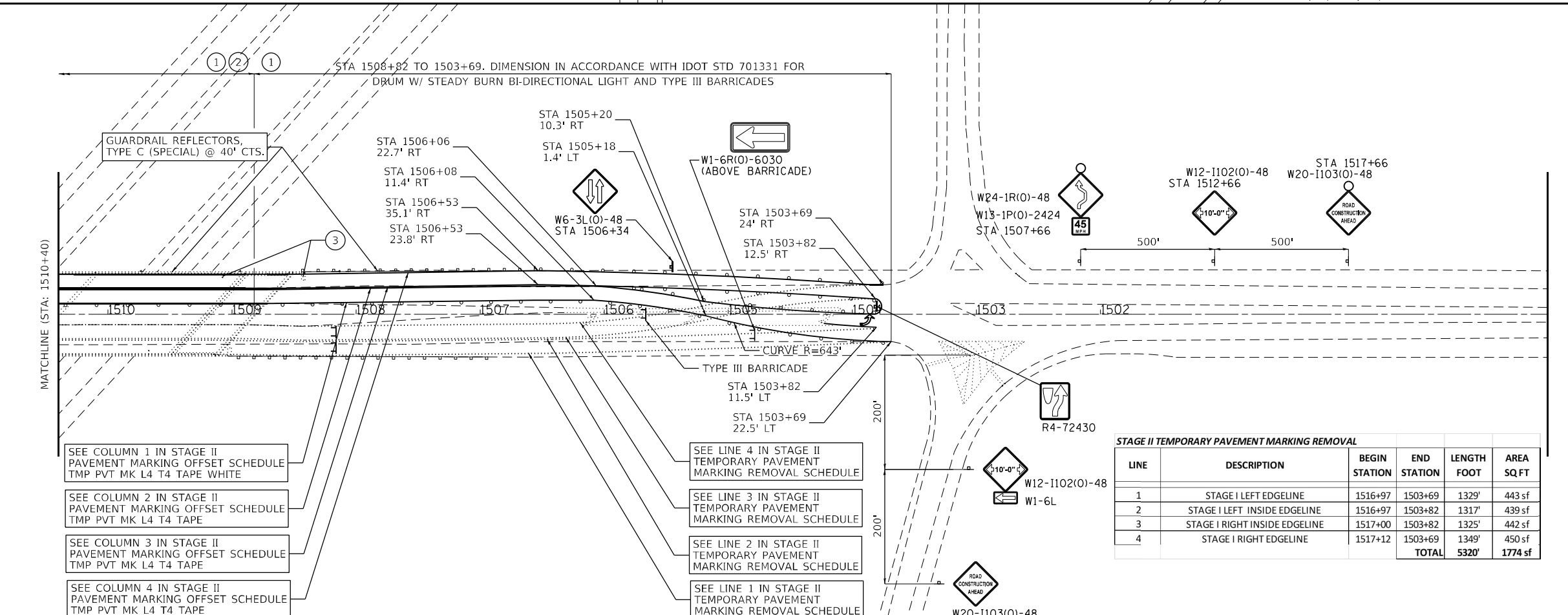
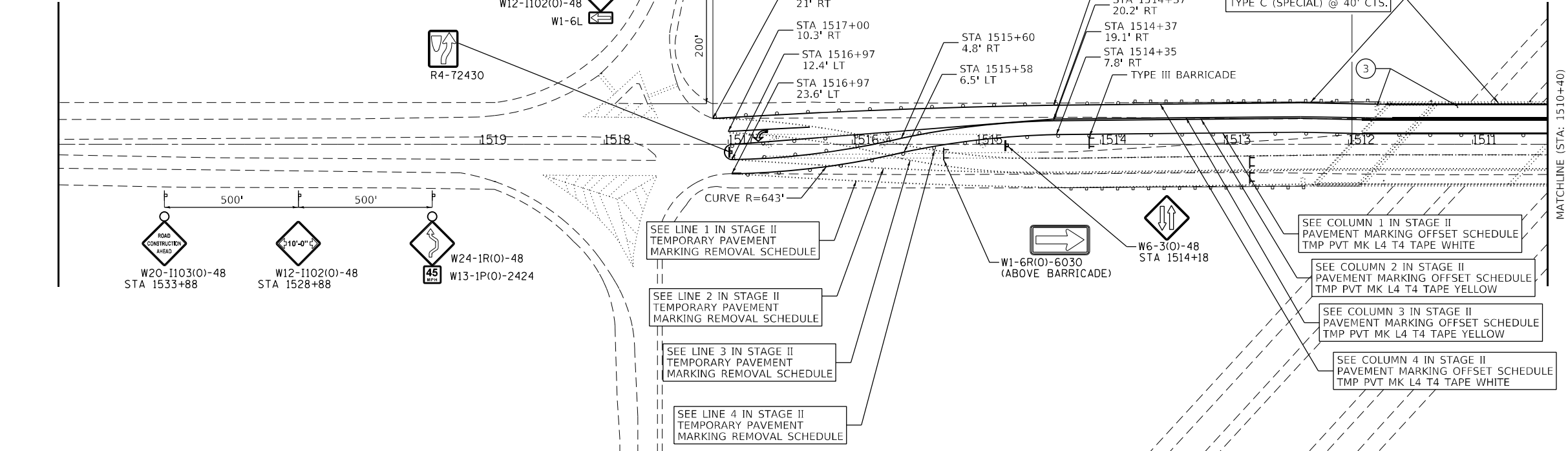
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 PRE-STAGE  
 SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	7
CONTRACT NO. 64S40			ILLINOIS FED. AID PROJECT	



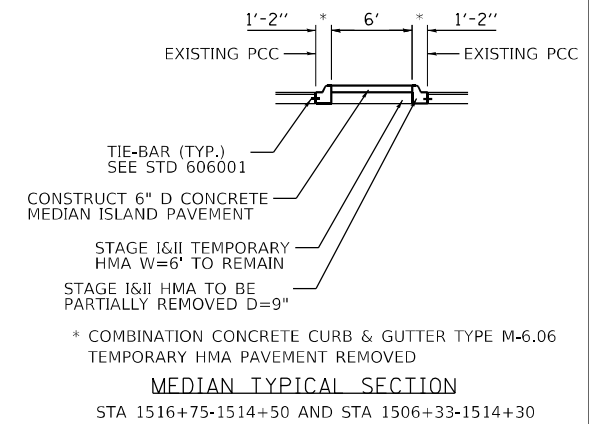
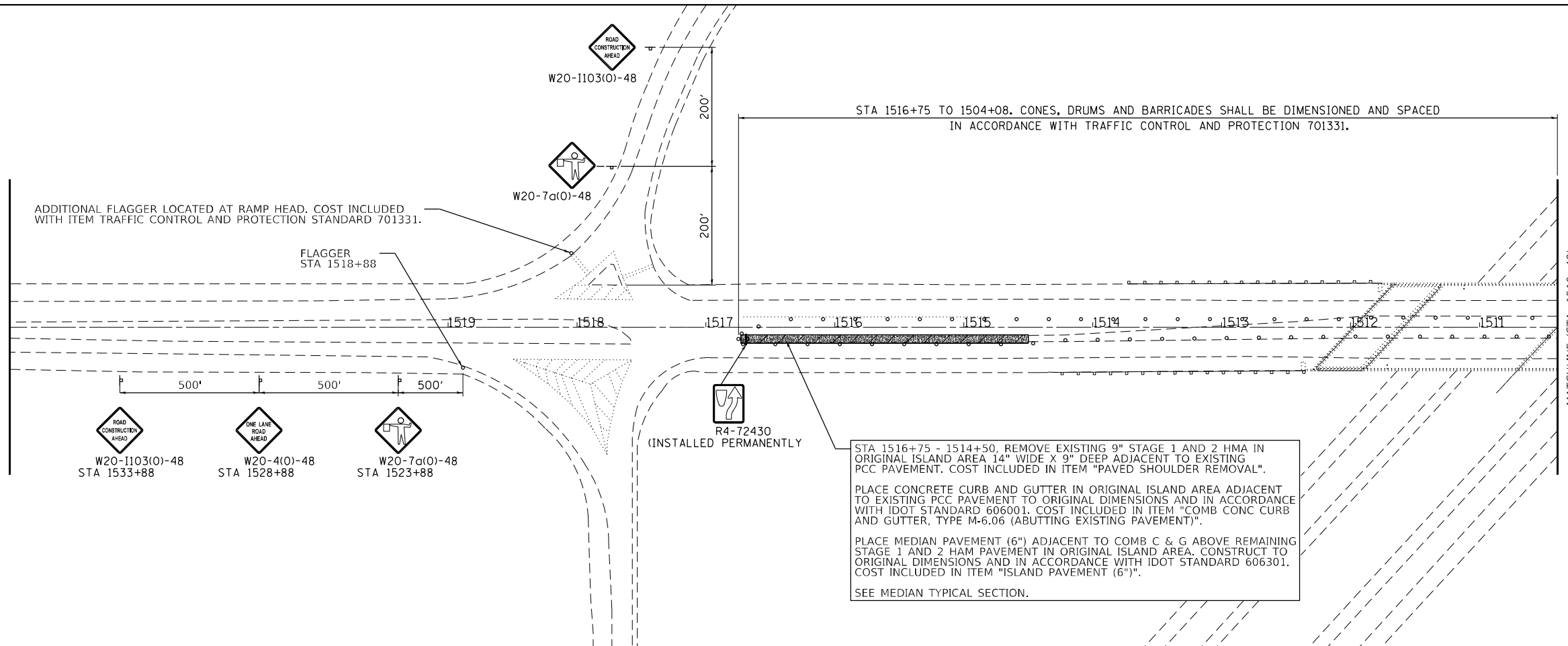


- ① STA 1517+12 TO 1511+97. LT TRAVEL LANE EDGE, DRUMS W/STEADY BURN BI-DIRECTIONAL LIGHT. RT TRAVEL LANE EDGE, MOUNT REFLECTORS TO EXIST. CONC. BRIDGE RAIL. SEE TRAFFIC CONTROL AND PROTECTION STANDARD 701331. SPACING FOR DRUMS AND REFLECTORS SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701331. COST INCLUDED IN ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701331.
- ② STA 1514+37 TO 1506+06. TUBULAR MARKERS IN ACCORDANCE WITH IDOT STD 701901 SPACED 20' AND CENTERED ALONG DOUBLE YELLOW CENTERLINE. COST INCLUDED IN ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701331.
- ③ TACK WELD STEEL PLATE TO EXISTING DRAIN GRATES. PLATE DIMENSION FOR BRIDGE DRAIN GRATE: 36"X8"X1". PLATE DIMENSION FOR APPROACH DRAIN GATE: 72"X24"X1". COST INCLUDED IN ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701326.



STAGE II PAVEMENT MARKING OFFSET SCHEDULE				
COLUMN	1	2	3	4
STATION	LEFT EDGELINE	LEFT INSIDE EDGELINE	RIGHT INSIDE EDGELINE	RIGHT EDGELINE
1517+12				21' RT
1517+00			10.3' RT	21.6' RT
1516+97	23.6' LT	12.4' LT	10.5' RT	21.8' RT
1516+00	14.9' LT	3.3' LT	15.3' RT	26.6' RT
1515+00	3.3' RT	14.8' RT	18.8' RT	30.1' RT
1514+00	8.1' RT	19.4' RT	20.5' RT	31.8' RT
1513+00	9.1' RT	20.4' RT	21.5' RT	32.8' RT
1512+00	8.7' RT	20.0' RT	21.5' RT	32.8' RT
1511+00	8.5' RT	19.8' RT	20.8' RT	32.1' RT
1510+00	8.5' RT	19.8' RT	20.8' RT	32.1' RT
1509+00	8.5' RT	19.8' RT	20.8' RT	32.1' RT
1508+00	9.5' RT	20.8' RT	21.8' RT	33.1' RT
1507+00	10.8' RT	22.1' RT	23.1' RT	34.4' RT
1506+00	10.8' RT	22.1' RT	22.8' RT	34.1' RT
1505+00	5.8' LT	5.5' RT	19.2' RT	30.5' RT
1504+00	20.7' LT	9.4' LT	13.5' RT	24.8' RT
1503+82	22.8' LT	11.5' LT	12.5' RT	24.0' RT
1503+69	22.5' LT			24.0' RT
<b>TOTAL LENGTH</b>	<b>1334'</b>	<b>1322'</b>	<b>1319'</b>	<b>1338'</b>

STAGE II TEMPORARY PAVEMENT MARKING REMOVAL					
LINE	DESCRIPTION	BEGIN STATION	END STATION	LENGTH FOOT	AREA SQ.FT
1	STAGE I LEFT EDGELINE	1516+97	1503+69	1329'	443 sf
2	STAGE I LEFT INSIDE EDGELINE	1516+97	1503+82	1317'	439 sf
3	STAGE I RIGHT INSIDE EDGELINE	1517+00	1503+82	1325'	442 sf
4	STAGE I RIGHT EDGELINE	1517+12	1503+69	1349'	450 sf
	<b>TOTAL</b>			<b>5320'</b>	<b>1774 sf</b>

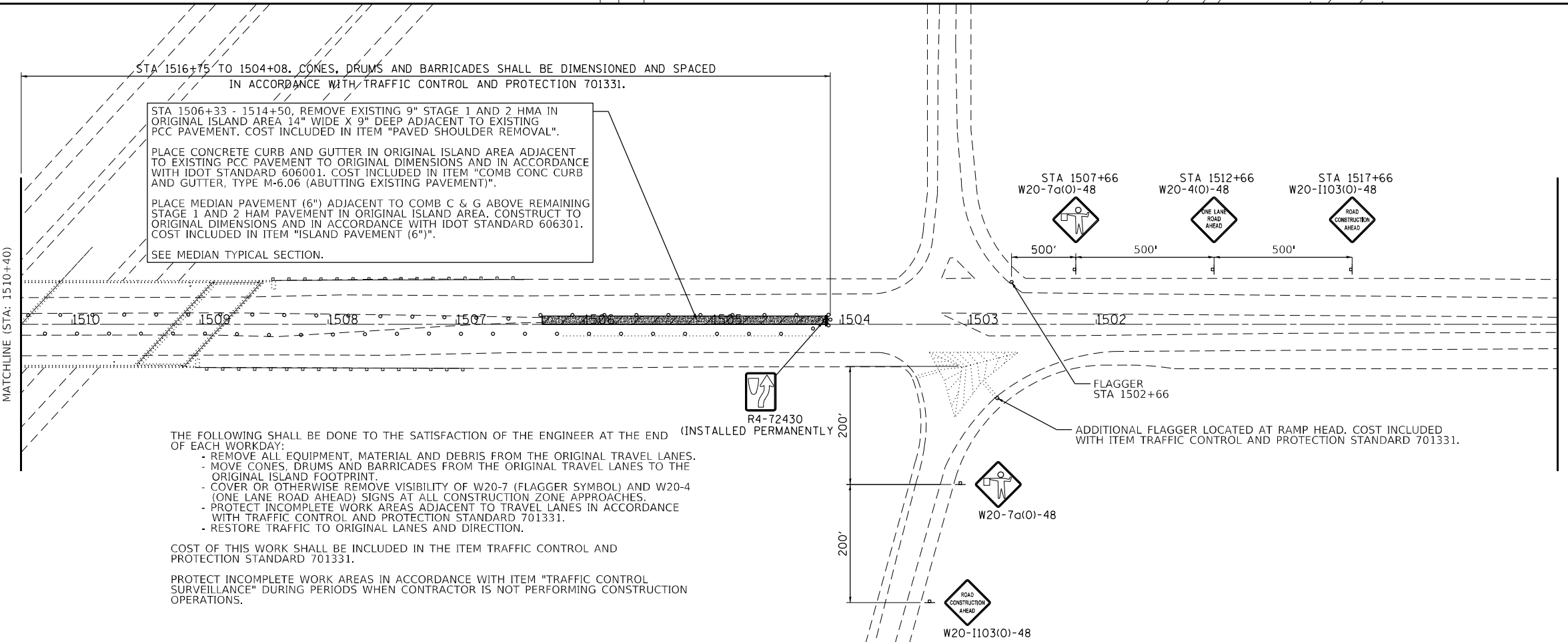


STA 1516+75 - 1514+50, REMOVE EXISTING 9" STAGE 1 AND 2 HMA IN ORIGINAL ISLAND AREA 14" WIDE X 9" DEEP ADJACENT TO EXISTING PCC PAVEMENT. COST INCLUDED IN ITEM "PAVED SHOULDER REMOVAL".

PLACE CONCRETE CURB AND GUTTER IN ORIGINAL ISLAND AREA ADJACENT TO EXISTING PCC PAVEMENT TO ORIGINAL DIMENSIONS AND IN ACCORDANCE WITH IDOT STANDARD 606001. COST INCLUDED IN ITEM "COMB CONC CURB AND GUTTER, TYPE M-6.06 (ABUTTING EXISTING PAVEMENT)".

PLACE MEDIAN PAVEMENT (6") ADJACENT TO COMB C & G ABOVE REMAINING STAGE 1 AND 2 HAM PAVEMENT IN ORIGINAL ISLAND AREA. CONSTRUCT TO ORIGINAL DIMENSIONS AND IN ACCORDANCE WITH IDOT STANDARD 606301. COST INCLUDED IN ITEM "ISLAND PAVEMENT (6")".

SEE MEDIAN TYPICAL SECTION.



STA 1506+33 - 1514+50, REMOVE EXISTING 9" STAGE 1 AND 2 HMA IN ORIGINAL ISLAND AREA 14" WIDE X 9" DEEP ADJACENT TO EXISTING PCC PAVEMENT. COST INCLUDED IN ITEM "PAVED SHOULDER REMOVAL".

PLACE CONCRETE CURB AND GUTTER IN ORIGINAL ISLAND AREA ADJACENT TO EXISTING PCC PAVEMENT TO ORIGINAL DIMENSIONS AND IN ACCORDANCE WITH IDOT STANDARD 606001. COST INCLUDED IN ITEM "COMB CONC CURB AND GUTTER, TYPE M-6.06 (ABUTTING EXISTING PAVEMENT)".

PLACE MEDIAN PAVEMENT (6") ADJACENT TO COMB C & G ABOVE REMAINING STAGE 1 AND 2 HAM PAVEMENT IN ORIGINAL ISLAND AREA. CONSTRUCT TO ORIGINAL DIMENSIONS AND IN ACCORDANCE WITH IDOT STANDARD 606301. COST INCLUDED IN ITEM "ISLAND PAVEMENT (6")".

SEE MEDIAN TYPICAL SECTION.

- THE FOLLOWING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER AT THE END OF EACH WORKDAY:
- REMOVE ALL EQUIPMENT, MATERIAL AND DEBRIS FROM THE ORIGINAL TRAVEL LANES.
  - MOVE CONES, DRUMS AND BARRICADES FROM THE ORIGINAL TRAVEL LANES TO THE ORIGINAL ISLAND FOOTPRINT.
  - COVER OR OTHERWISE REMOVE VISIBILITY OF W20-7 (FLAGGER SYMBOL) AND W20-4 (ONE LANE ROAD AHEAD) SIGNS AT ALL CONSTRUCTION ZONE APPROACHES.
  - PROTECT INCOMPLETE WORK AREAS ADJACENT TO TRAVEL LANES IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701331.
  - RESTORE TRAFFIC TO ORIGINAL LANES AND DIRECTION.

COST OF THIS WORK SHALL BE INCLUDED IN THE ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701331.

PROTECT INCOMPLETE WORK AREAS IN ACCORDANCE WITH ITEM "TRAFFIC CONTROL SURVEILLANCE" DURING PERIODS WHEN CONTRACTOR IS NOT PERFORMING CONSTRUCTION OPERATIONS.

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PLOT DATE = 8/24/2023

DESIGNED - BMW  
DRAWN - BMW  
CHECKED - JRP  
DATE - 08/21/2023

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION TRAFFIC CONTROL SN 098-0091  
POST-STAGE

SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.

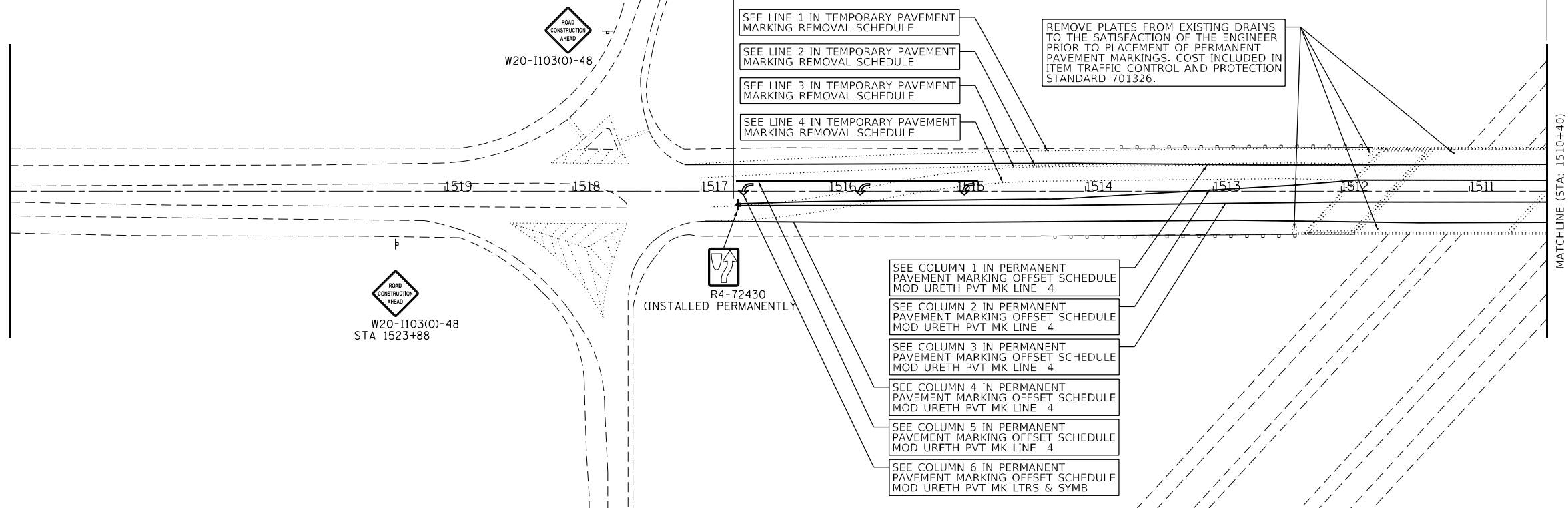
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88	(195-3HB-6)BDR	WHITESIDE	39	10
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				



STA 1516+75 TO 1504+08. CONES, DRUMS AND BARRICADES SHALL BE DIMENSIONED AND SPACED IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION 701326.

- SEE LINE 1 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 2 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 3 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 4 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE

REMOVE PLATES FROM EXISTING DRAINS TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS. COST INCLUDED IN ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701326.

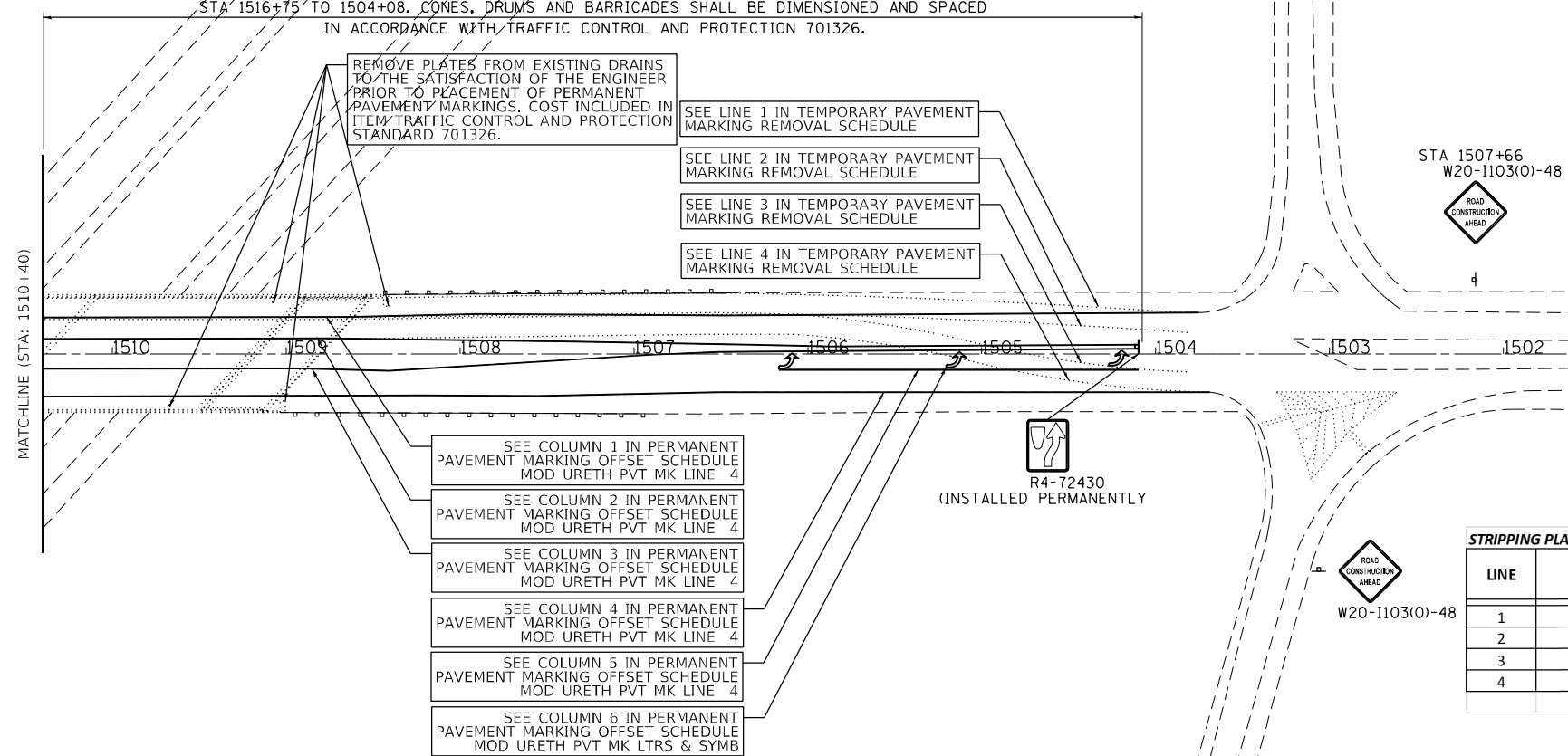


- SEE COLUMN 1 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 2 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 3 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 4 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 5 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 6 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LTRS & SYMB

STA 1516+75 TO 1504+08. CONES, DRUMS AND BARRICADES SHALL BE DIMENSIONED AND SPACED IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION 701326.

REMOVE PLATES FROM EXISTING DRAINS TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS. COST INCLUDED IN ITEM TRAFFIC CONTROL AND PROTECTION STANDARD 701326.

- SEE LINE 1 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 2 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 3 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE
- SEE LINE 4 IN TEMPORARY PAVEMENT MARKING REMOVAL SCHEDULE



- SEE COLUMN 1 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 2 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 3 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 4 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 5 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LINE 4
- SEE COLUMN 6 IN PERMANENT PAVEMENT MARKING OFFSET SCHEDULE MOD URETH PVT MK LTRS & SYMB

STRIPPING PLAN PAVEMENT MARKING OFFSET SCHEDULE						
COLUMN	1	2	3	4	5	6
STATION	RIGHT EDGELINE WHITE	RIGHT ISLAND EDGE YELLOW	LEFT ISLAND EDGE YELLOW	LEFT EDGELINE WHITE	TURN LANE LINE WHITE	LEFT TURN ARROW
1517+12.5	20.8' RT					
1516+93	20.8' RT			23.6' LT		
1516+72.5	20.9' RT	9.9' LT	11.4' LT	23.8' LT	7.9' RT	15.6 SF
1515+76	21.3' RT	7.9' LT	11.4' LT	24.4' LT	7.9' RT	15.6 SF
1514+95	21.5' RT	7.0' LT	11.4' LT	24.5' LT	7.9' RT	15.6 SF
1514+83.5	21.5' RT	6.9' LT	11.4' LT	24.3' LT	7.9' RT	
1514+21	21.7' RT	6.2' LT	11.4' LT	23.8' LT		
1511+89	20.6' RT	8.6' RT	8.5' LT	24.1' LT		
1508+41	21.7' RT	8.5' RT	9.7' LT	24.1' LT		
1506+32.5	22.3' RT	5.2' RT	1.2' RT	22.2' LT		
1506+17	22.4' RT	4.9' RT	1.4' RT	22.2' LT	9.1' LT	
1506+09	22.4' RT	4.7' RT	1.4' RT	22.2' LT	9.1' LT	15.6SF
1505+13	23.0' RT	4.6' RT	2.2' RT	22.2' LT	9.1' LT	15.6 SF
1504+19	23.6' RT	5.1' RT	3.0' RT	22.2' LT	9.1' LT	15.6 SF
1504+10	23.7' RT	5.1' RT	3.1' RT	22.2' LT	9.1' LT	
1503+75	23.9' RT			22.2' LT		
1503+68				22.2' LT		
<b>TOTAL LENGTH</b>	<b>1338'</b>	<b>1264'</b>	<b>1264'</b>	<b>1329'</b>	<b>396'</b>	<b>94 SF</b>

\*OFFSET AROUND ISLAND FOOTPRINT IN ACCORDANCE WITH IDOT STD 780001 & AS SHOWN IN PLANS.  
DIMENSIONS LEFT TURN ARROWS WITHIN TURN LANE IN ACCORDANCE WITH IDOT STANDARD 780001.

STRIPPING PLAN TEMPORARY PAVEMENT MARKING REMOVAL - WATER BLASTING					
LINE	DESCRIPTION	BEGIN STATION	END STATION	LENGTH FOOT	AREA SQ FT
1	STAGE II LEFT EDGELINE	1516+97	1503+69	1334'	445 sf
2	STAGE II LEFT INSIDE EDGELINE	1516+97	1503+82	1322'	441 sf
3	STAGE II RIGHT INSIDE EDGELINE	1517+00	1503+82	1319'	440 sf
4	STAGE II RIGHT EDGELINE	1517+12	1503+69	1338'	446 sf
<b>TOTAL</b>				<b>5313'</b>	<b>1771 sf</b>



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PLOT DATE = 8/24/2023

DESIGNED - BMW  
DRAWN - BMW  
CHECKED - JRP  
DATE - 08/21/2023

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION TRAFFIC CONTROL SN 098-0091  
PERMANENT STRIPING PLAN

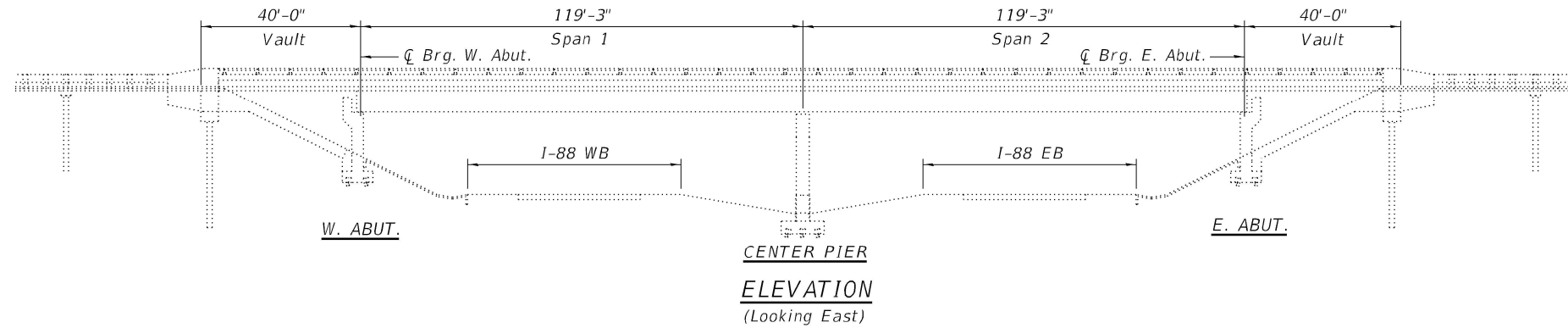
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	11
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

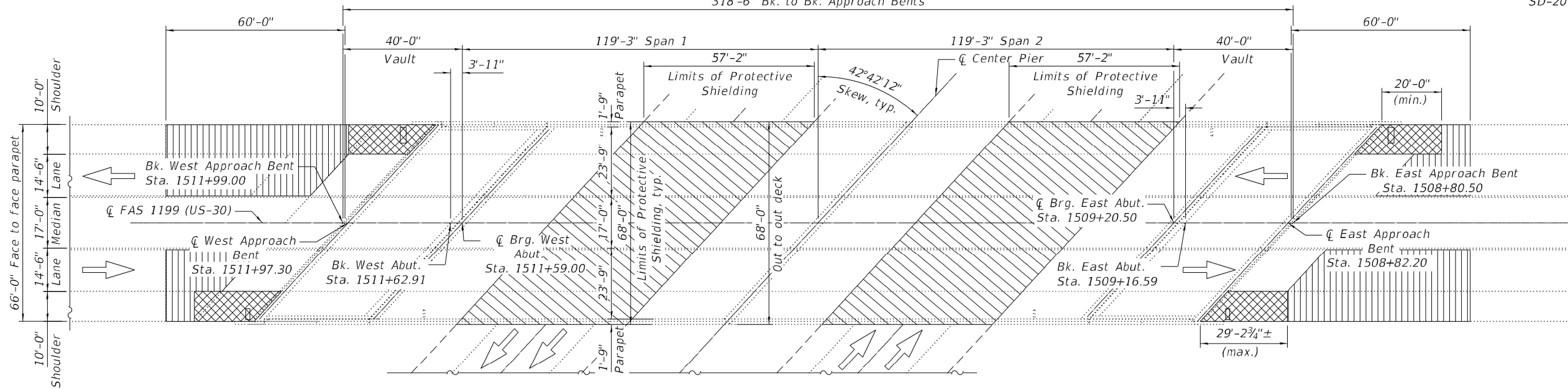
Existing Structure 098-0091, originally built in 1972, as a two-span continuous steel superstructure with vaulted abutments and a multi-column trapezoidal pier. The back to back length is 318'-6" and the out to out width is 68'-0". Joint repair along with a concrete overlay were performed in 1999. The structure is to be rehabilitated as shown in the plans utilizing staged construction to maintain traffic.

**INDEX OF SHEETS**

- SD-01 General Plan & Elevation
- SD-02 General Notes & Bill of Materials
- SD-03 Stage Construction Cross Section
- SD-04 Stage Construction Deck Overlay Plan
- SD-05 Joint Removal & Replacement Detail 1
- SD-06 Joint Removal & Replacement Detail 2
- SD-07 Joint Removal & Replacement Detail 3
- SD-08 Joint Removal & Replacement Detail 4
- SD-09 Bar Splicer Detail
- SD-10 Approach Slab & Approach Shoulder Details
- SD-11 Shoulder Inlet Adjustment 1
- SD-12 Shoulder Inlet Adjustment 2
- SD-13 Retrofit Concrete Parapet Detail 1
- SD-14 Retrofit Concrete Parapet Detail 2
- SD-15 Parapet Repair
- SD-16 Median Repair Plan
- SD-17 Deck & Approach Slab Repair Plan
- SD-18 Substructure Repair Details
- SD-19 Vaulted Abutment Erosion Repair
- SD-20 Vaulted Abutment Door Replacement



318'-6" Bk. to Bk. Approach Bents



**PLAN**

**SCOPE OF WORK**

1. Provide protective shielding within limits as indicated in the plans.
2. Scarify 2 1/4" from bridge deck slab, including vaulted spans and approach slabs. See Sheet SD-04.
3. Remove existing expansion joints at abutments and replace with preformed joint strip seal assemblies. See Sheets SD-05 thru SD-08.
4. Perform partial and full depth deck slab repair, where shown. Perform partial and full depth approach slab repair, where shown. See Sheet SD-17.
5. Remove existing metal railing and construct concrete parapet retrofit. See Sheets SD-13 and SD-14.
6. Perform structural concrete repairs to parapet face where shown. See Sheet SD-15. Perform structural concrete repairs to median, and remove and replace parts of concrete median. See Sheet SD-16.
7. Construct 2 1/2" microsilica concrete overlay on bridge deck slab, including vaulted spans and approaches as shown. See Sheet SD-04.
8. Clean existing scuppers.
9. Perform 1/4" diamond grind and deck grooving to bridge deck slab, including vaulted slabs and approaches.
10. Perform structural concrete repairs to vaulted abutments. See Sheet SD-18.
11. Repair erosion within vaulted abutments with CSLM and riprap as indicated in the plans. See Sheet SD-19.
12. Replace existing vault doors with new hinged metal door. See Sheet SD-20.
13. Apply Concrete Sealer to substructure as noted in the plans.
14. Apply Protective Coat to the parapets, reconstructed joints, and new deck overlays, as noted in the plans.

**DESIGN SPECIFICATIONS**

2002 AASHTO LRFD Bridge Design Specifications for Highway Bridges (Proposed)

**LEGEND**

- Limits of Protective Shielding
- Limits of Bridge Approach Shoulder Pavement Removal & Replacement, See Sheet SD-10
- Limits of HMA Removal & Replacement - 1 1/2" See Sheet SD-10

**DESIGN STRESSES**

**FIELD UNITS (PROPOSED)**

f'c = 4,000 psi (Superstructure)  
 fy = 60,000 psi (Reinforcement)  
 fy = 36,000 psi (M270 Grade 36)

**FIELD UNITS (EXISTING)**

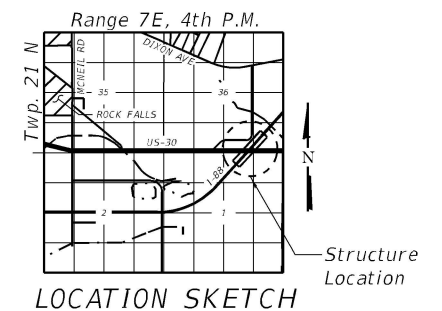
f'c = 3,000 psi (Deck)  
 f'c = 3,500 psi (Approach Slab, Parapet, Median, Sub)  
 fy = 40,000 psi (Reinforcement)  
 fy = 36,000 psi (M270 Grade 36)

**LOADING HS 20-44**

Existing and proposed loading



Jeffrey P. Bucholc  
 Date: 10/05/2023  
 Expires 11/30/2024



**GENERAL PLAN AND ELEVATION**

**FAS 1199 (US 30) OVER I-88**  
**SECTION 195-3(RS) & BDR**  
**STRUCTURE NO. 098-0091**

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION**  
**US-30 OVER I-88 - SN 098-0091**

SHEET 1 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	12
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

- 1) 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2) Reinforcement bars designated (E) shall be epoxy coated.
- 3) Prior to pouring the new concrete deck, all heavy or loose rust, 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 the pay item covering removal of the existing concrete.
- 4) 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".
- 5) Bars noted thus, 3 x 2 -#5 indicates 3 lines of bars with 2 lengths of bars per line.
- 6) The Contractor shall exercise care during removal of existing joints to ensure that deck slab beams, girders, and diaphragms integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the deck slab, beams, girders, and diaphragms caused by their operation as directed by the Engineer at no additional cost to the Department.
- 7) All exposed concrete edges shall have a 3/4" x 45° chamfer, except where shown.
- 8) Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.
- 9) Concrete Sealer shall be applied to the areas of substructure repair, abutment backwalls, and abutment seats. All surfaces to be sealed shall be cleaned thoroughly prior to sealer application. Cost included with Concrete Sealer.
- 10) Protective Coat shall be applied to the top and inside faces of the parapet extensions, new or repaired parapets, new concrete deck adjacent to repaired deck joints, and new microsilica concrete overlays.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A2	Ton	0	80	80
Subbase Granular Material, Type B, 4"	Sq. Yd.	110	0	110
Bituminous Materials (Tack Coat)	Pound	71	0	71
Hot-Mix Asphalt Surface Course, 1L-9.5, Mix "D", N50	Ton	35	0	35
Pavement Reinforcement	Sq. Yd.	110	0	110
Hot-Mix Asphalt Surface Removal, 1 1/2"	Sq. Yd.	416	0	416
Hot-Mix Asphalt Surface Removal, Variable Depth	Sq. Yd.	32	0	32
Concrete Removal	Cu. Yd.	46	0	46
Protective Shield	Sq. Yd.	864	0	864
Concrete Superstructure	Cu. Yd.	46	0	46
Protective Coat	Sq. Yd.	1,926	0	1,926
Reinforcement Bars, Epoxy Coated	Pound	5,810	0	5,810
Mechanical Splicers	Each	48	0	48
Preformed Joint Strip Seal	Foot	185	0	185
Concrete Sealer	Sq. Ft.	0	1,702	1,702
Epoxy Crack Injection	Foot	102	158	260
Controlled Low-Strength Material	Cu. Yd.	0	133	133
Pipe Drains 12"	Foot	40	0	40
Type F Inlet Box, Standard 610001	Each	4	0	4
Cleaning Bridge Scuppers and Downspouts	Each	4	0	4
Pipe Drain Removal	Foot	40	0	40
Access Door	Each	0	2	2
P.C. Concrete Bridge Approach Shoulder Pavement (Special)	Sq. Yd.	110	0	110
Curb Removal and Replacement	Foot	80	0	80
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,125	0	1,125
Bridge Approach Shoulder Removal	Sq. Yd.	110	0	110
Approach Slab Repair (Full Depth)	Sq. Yd.	26	0	26
Bridge Deck Scarification 2 "	Sq. Yd.	1,743	0	1,743
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	1,743	0	1,743
Structural Repair of Concrete (Depth ≤ 5 inches)	Sq. Ft.	534	128	662
* Structural Repair of Concrete (Depth > 5 inches)	Sq. Ft.	37	120	157
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	65	0	65
Diamond Grinding (Bridge Section)	Sq. Yd.	1,591	0	1,591
Retrofit Concrete Parapet	Foot	601	0	601
Acrylic Coating	Sq. Yd.	507	0	507

\* Deck Slab Repair areas are estimated and will be field verified and approved by the engineer prior to starting patching

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

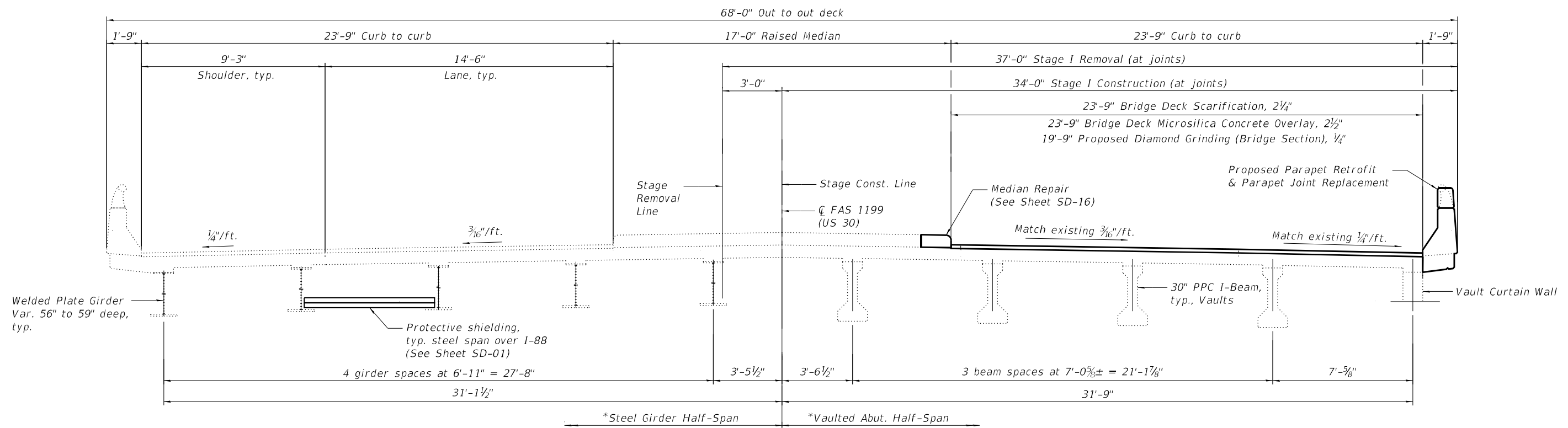
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US-30 OVER I-88 - SN 098-0091**

SHEET 2 OF 20 SHEETS

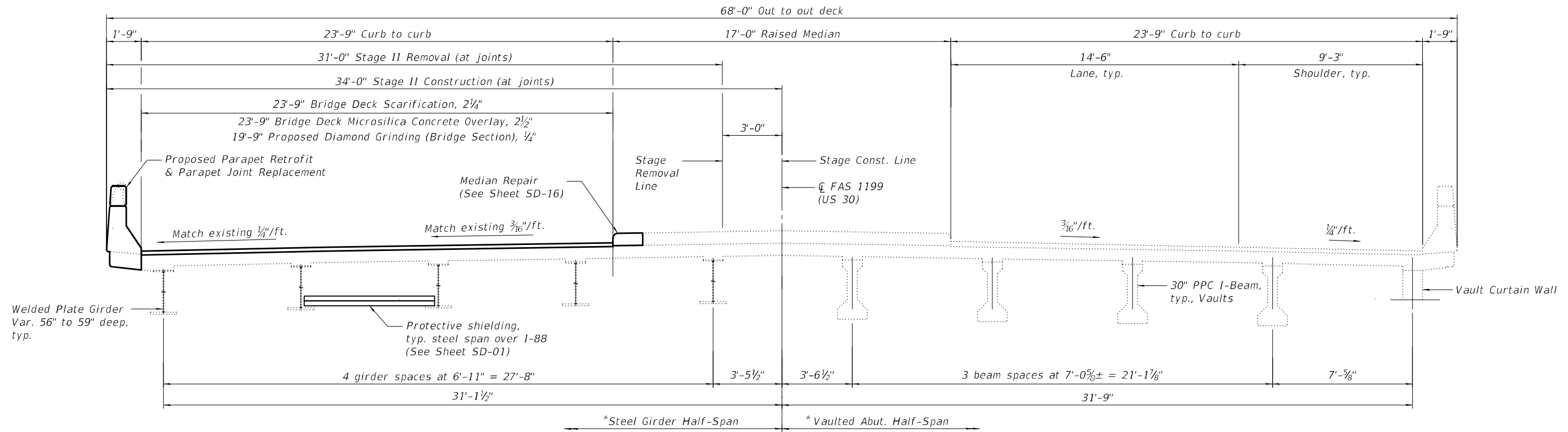
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CONTRACT NO. 64S40				
			ILLINOIS	FED. AID PROJECT

SD-02

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**STAGE I REMOVAL AND CONSTRUCTION**  
 (Half superstructure cross-sections, looking east)



**STAGE II REMOVAL AND CONSTRUCTION**  
 (Half superstructure cross-sections, looking east)  
 \* Symmetric about C



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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

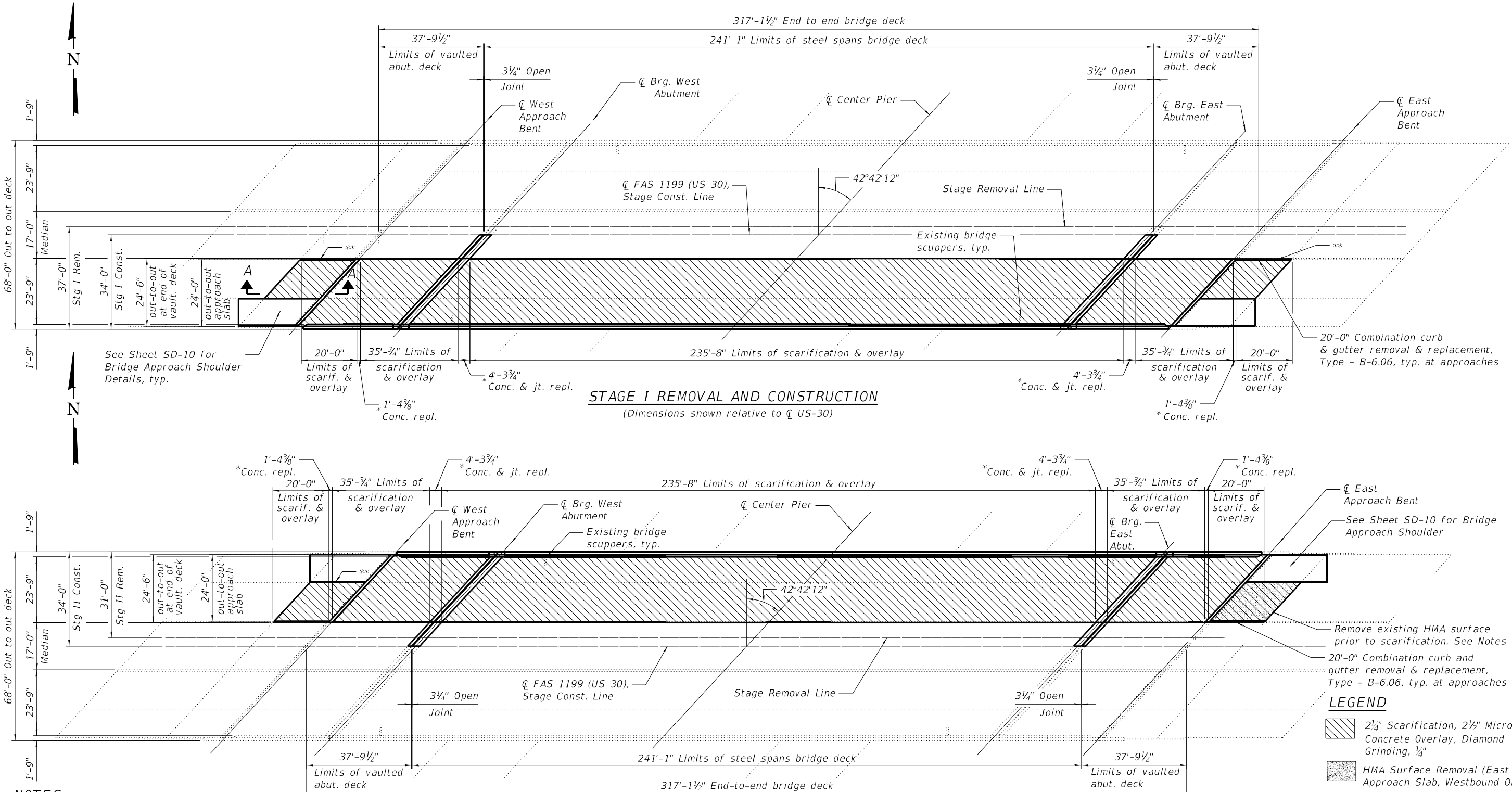
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**US-30 OVER I-88 - SN 098-0091**

SHEET 3 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	14
CONTRACT NO. 64S40			ILLINOIS FED. AID PROJECT	

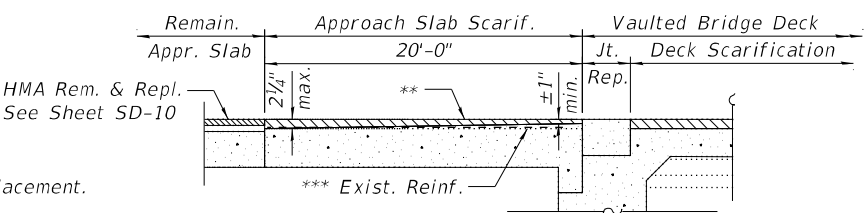
SD-03

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**STAGE I REMOVAL AND CONSTRUCTION**  
 (Dimensions shown relative to  $\bar{C}$  US-30)

**STAGE II REMOVAL AND CONSTRUCTION**  
 (Dimensions shown relative to  $\bar{C}$  US-30)



**SECTION A-A SCARIFICATION ON APPROACH SLABS**

**LEGEND**

	2 1/4" Scarification, 2 1/2" Microsilica Concrete Overlay, Diamond Grinding, 1/4"
	HMA Surface Removal (East Approach Slab, Westbound Only)

**BILL OF MATERIAL**

Item	Unit	Total
Hot-Mix Asphalt Surface Removal, Variable Depth	Sq. Yd.	32
Bridge Deck Scarification 2 1/4"	Sq. Yd.	1,743
Bridge Deck Microsilica Concrete Overlay 2 1/2"	Sq. Yd.	1,743
Cleaning Bridge Scuppers & Downspouts	Each	4
Diamond Grinding (Bridge Section)	Sq. Yd.	1,591
Protective Coat	Sq. Yd.	1,926
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,125
Curb Removal and Replacement	Foot	80

**NOTES:**

- \* See Sheets SD-05 thru SD-07 for abutment joint replacement details.
  - \*\* Bridge depth scarification, variable depth as shown. Typ. at approach slabs. Paid for as Bridge Deck Scarification, 2 1/4". Microsilica Overlay on Approach Slabs should provide smooth transition from HMA to bridge deck.
  - \*\*\* 2" clear cover assumed. Exist. rebar to remain undisturbed.
- See Sheet SD-17 for deck and approach partial and full depth repairs.  
 See Sheet SD-10 for additional approach repairs.

**GENERAL NOTES:**

1. All drainage scuppers must be protected during concrete scarification and concrete overlay placement.
  2. Use of hand tools is required while working around drainage scuppers.
  3. Hand finish of overlay material is required around scuppers.
- The cost is included in the Bridge Deck Microsilica Concrete Overlay pay item.



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PLOT DATE =	CHECKED - DYS	REVISED -

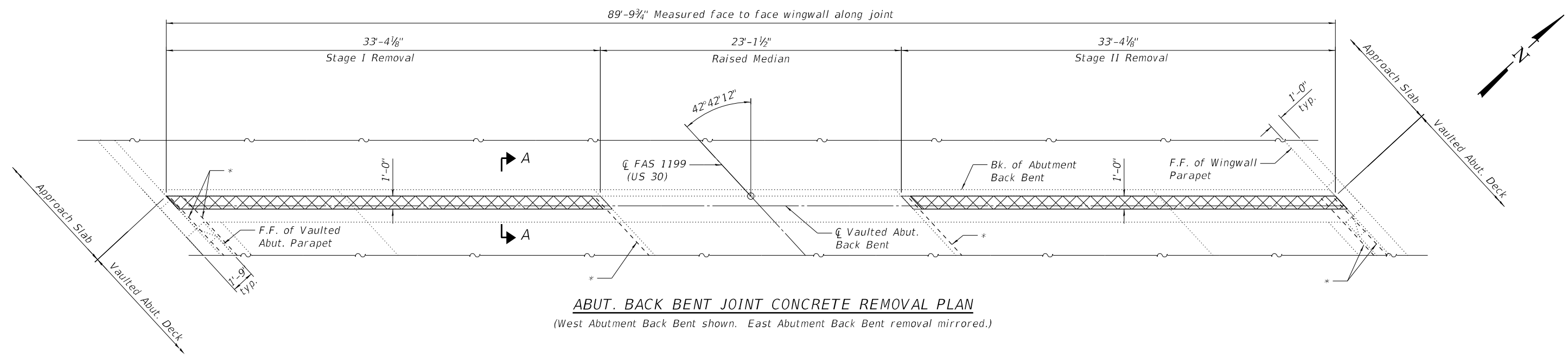
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DECK OVERLAY PLAN  
 US-30 OVER I-88 - SN 098-0091**

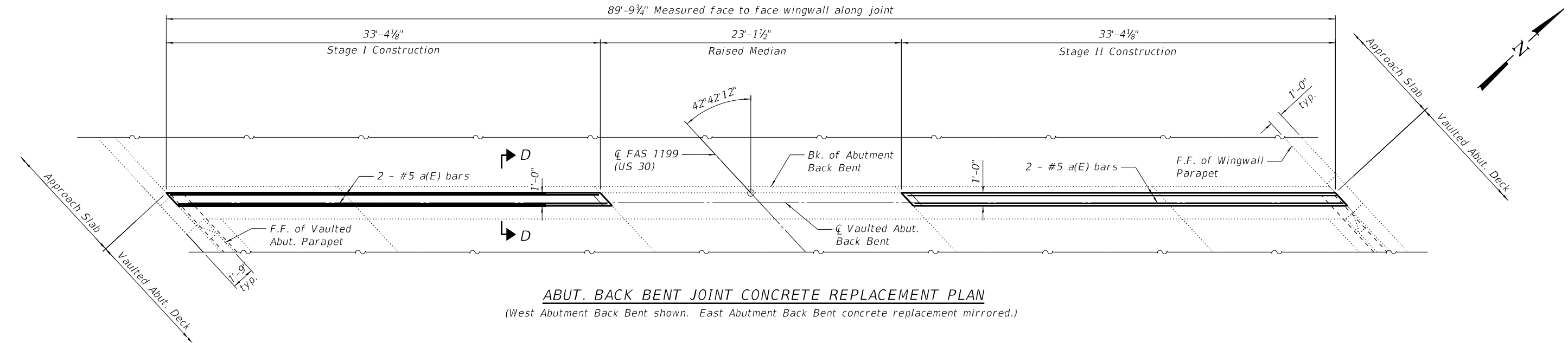
SHEET 4 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	15
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

MODEL: Joint Detail 1 Sheet  
 FILE NAME: C:\Users\Brady\OneDrive - QEI\QCDoc\Consult\Projects\2112\_IDOT\_D2\_Var\Var\Bridges\400\Work\Work Order 14110-CADD\098-0091 - US 30 over I-88\SD5 - Joint Removal & Replacement Detail 1.dgn



**ABUT. BACK BENT JOINT CONCRETE REMOVAL PLAN**  
 (West Abutment Back Bent shown. East Abutment Back Bent removal mirrored.)



**ABUT. BACK BENT JOINT CONCRETE REPLACEMENT PLAN**  
 (West Abutment Back Bent shown. East Abutment Back Bent concrete replacement mirrored.)

**NOTES:**

\* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See Sheet SD-07 for Bill of Material, bar details and sections.  
 For Overlay details see Deck Overlay Plan on Sheets SD-04.  
 For deck and approach repair details, see Sheet SD-16.

Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

**LEGEND:**

 Concrete Removal



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	CHECKED - DYS	REVISED -
PLOT SCALE =	DRAWN - JRT	REVISED -
PLOT DATE =	CHECKED - DYS	REVISED -

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BACK BENT JOINT REPLACEMENT DETAILS  
 US-30 OVER I-88 - SN 098-0091

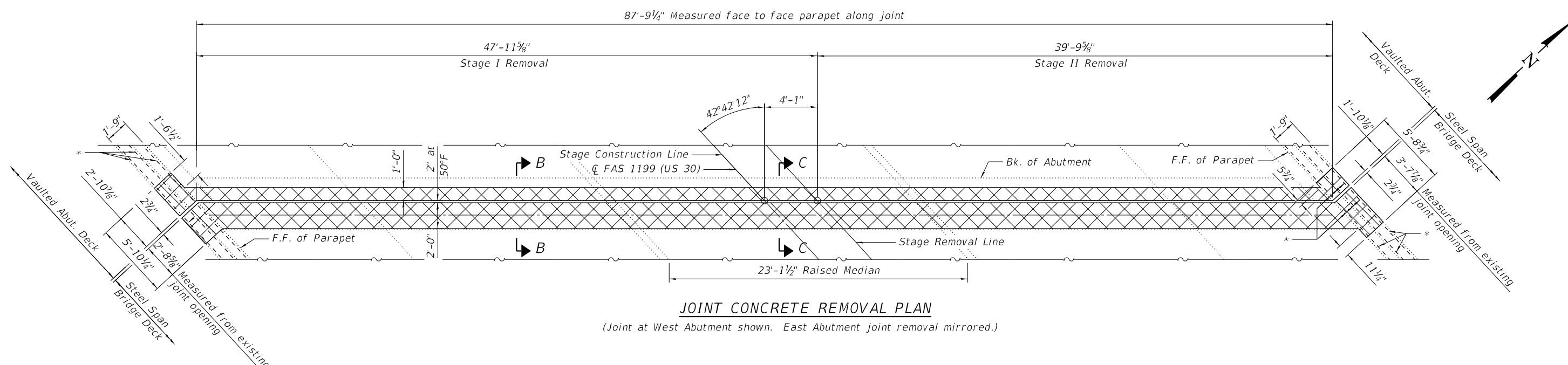
SHEET 5 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	16
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

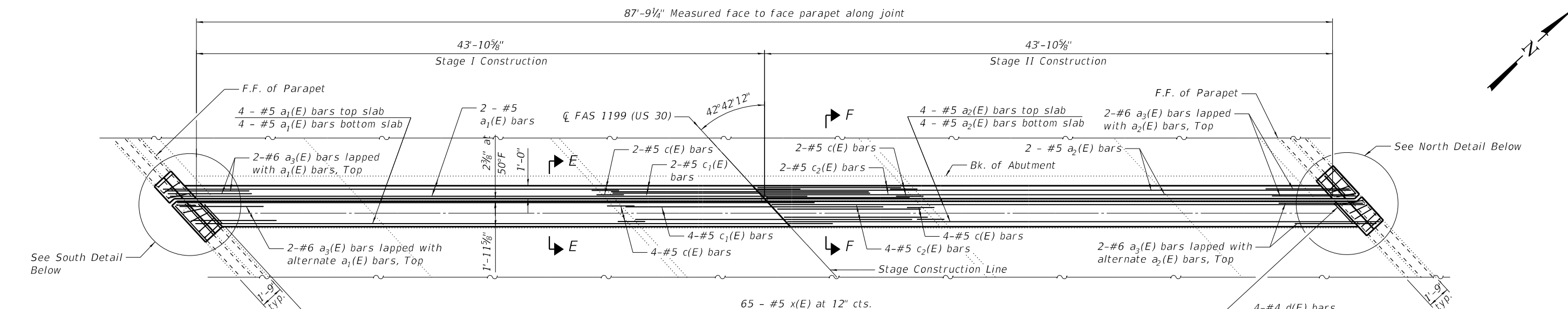
SD-05



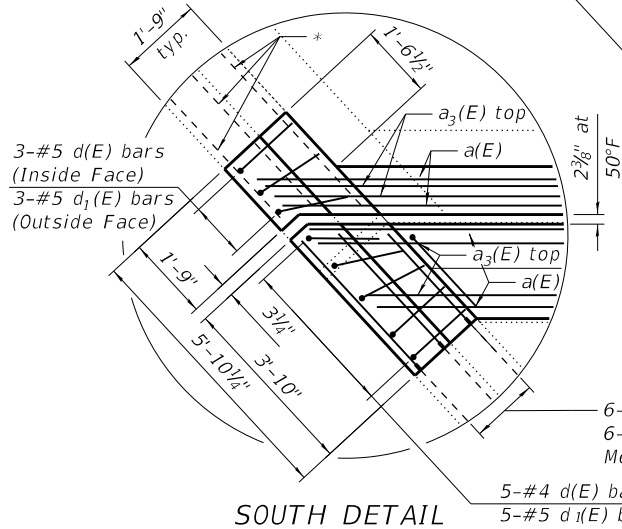
MODEL: Joint Removal Replacement Sheet  
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 10/12/2023 2:34:04 PM



**JOINT CONCRETE REMOVAL PLAN**  
 (Joint at West Abutment shown. East Abutment joint removal mirrored.)



**JOINT CONCRETE REPLACEMENT PLAN**  
 (Joint at West Abutment shown. East Abutment joint removal mirrored.)



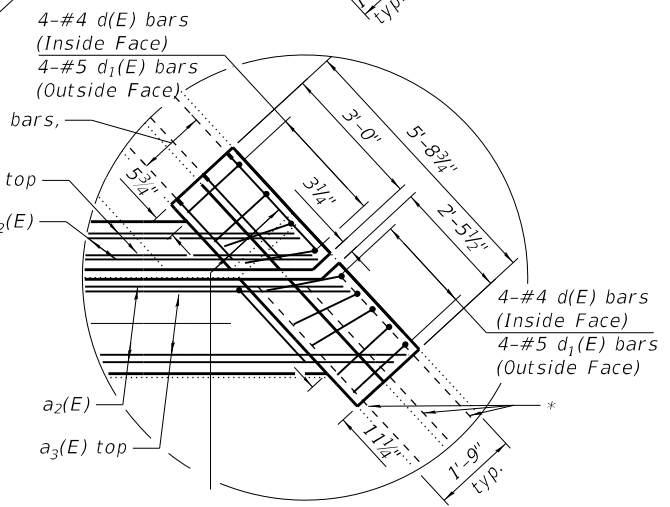
**SOUTH DETAIL**

**MINIMUM LAP SPLICES**  
 #5 bar - 3'-7"

**NOTES:**

- \* Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
- See Sheet SD-07 for Bill of Material, bar details and sections. For Overlay details see Deck Overlay Plan on Sheet SD-04. See Sheet SD-08 for joint seal details.
- Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- Existing reinforcement that does not fit into the new parapet configuration shall be trimmed to allow for min. concrete cover in new layout or cut, ground flush with the concrete and coated with epoxy paint.

**LEGEND:**



**NORTH DETAIL**



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PLOT DATE =	DRAWN - JRT	REVISED -
	CHECKED - DYS	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

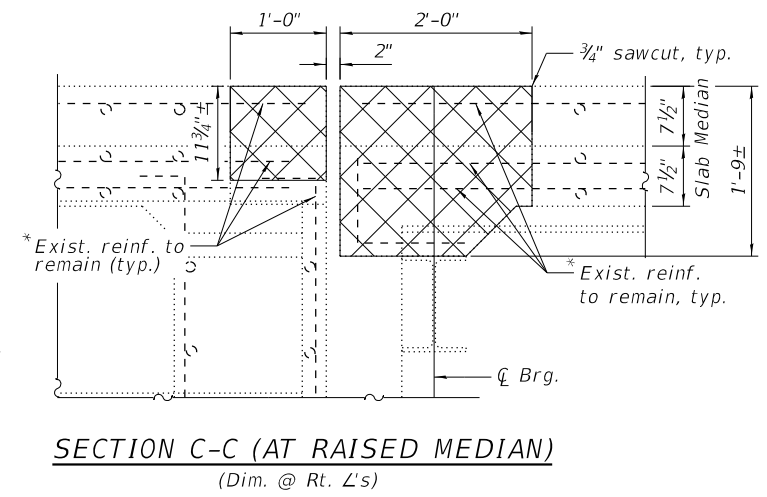
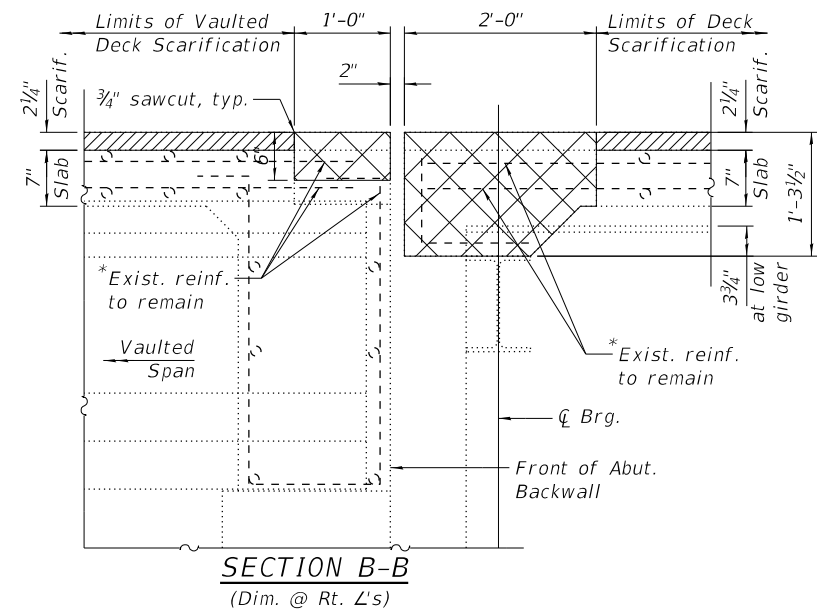
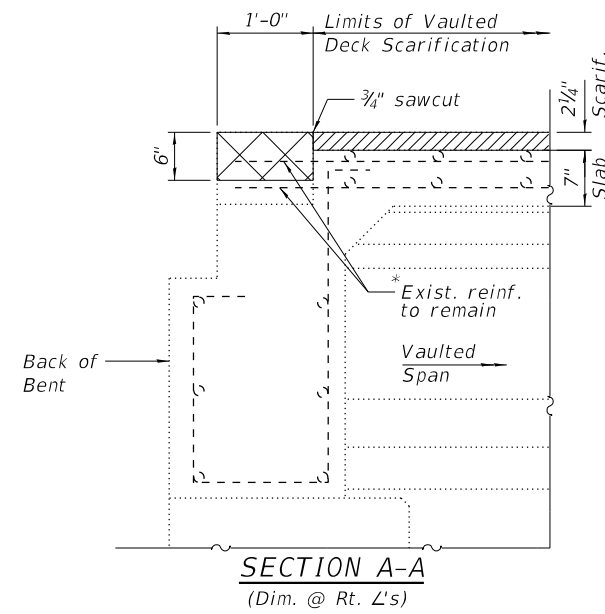
**ABUTMENT JOINT REMOVAL & REPLACEMENT DETAILS**  
**US-30 OVER I-88 - SN 098-0091**

SHEET 6 OF 20 SHEETS

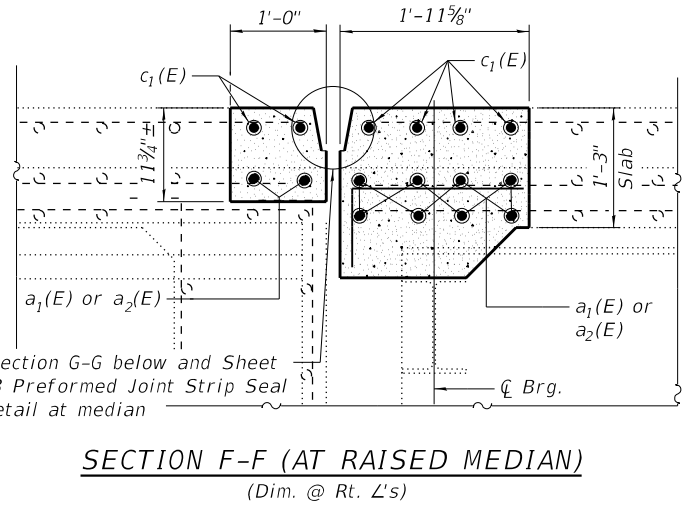
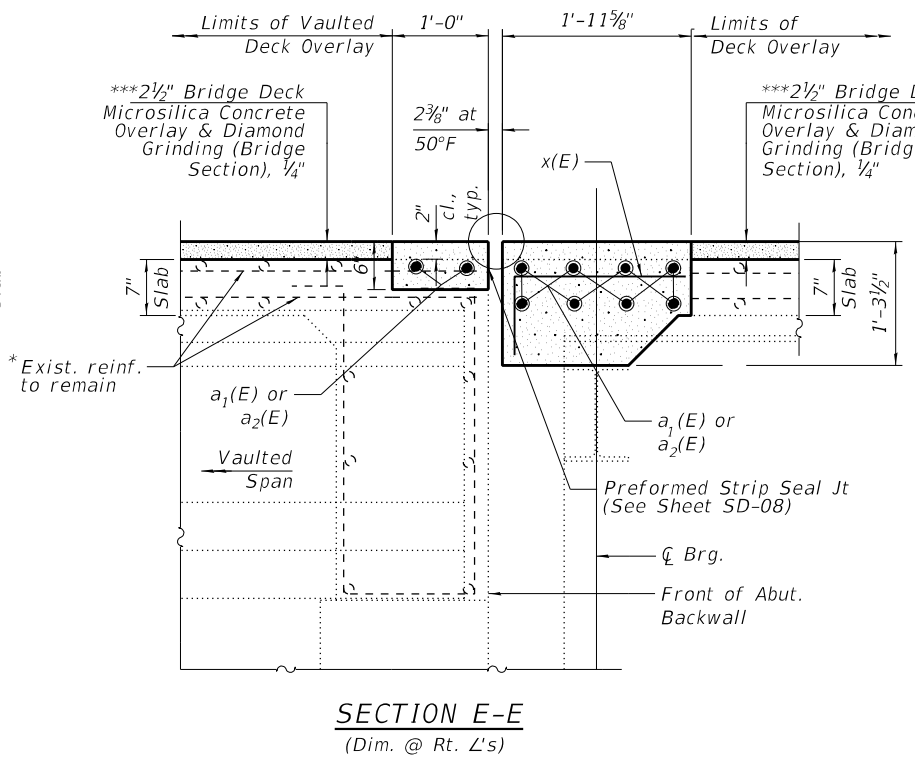
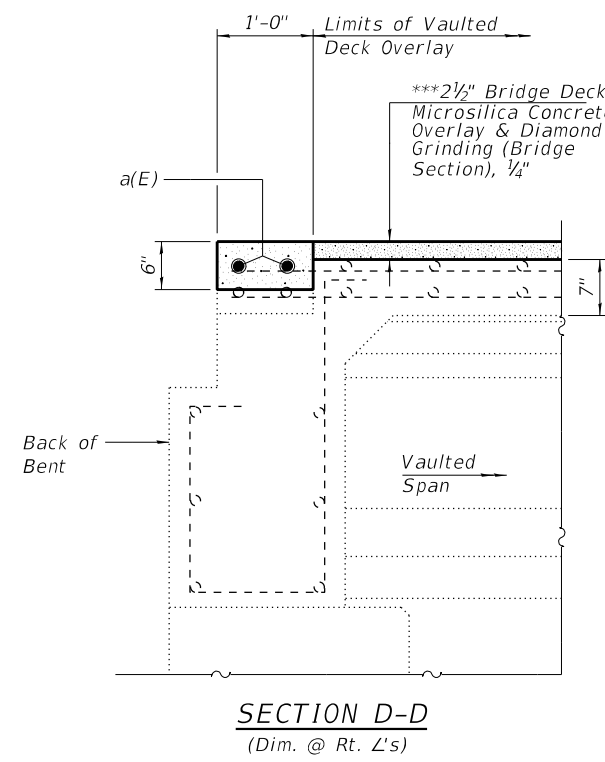
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	17
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-06

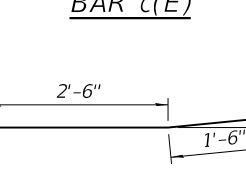
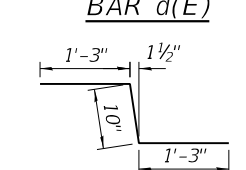
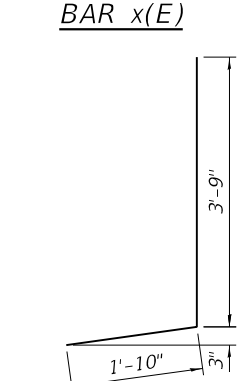
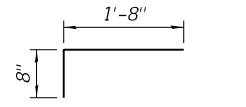
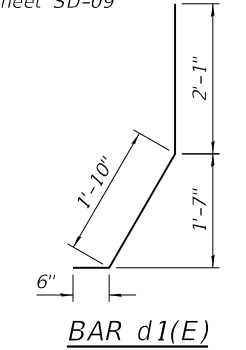
MODEL: Joint Cross-Sections Sheet  
 FILE NAME: C:\Users\Brady\OneDrive - QEI\QDoc\QConsult\Projects\2112\_IDOT\_D2\_Var-Var Bridge\400-Work\Work Order 1\410-CADD\098-0091 - US\_30 over I-88\SD7- Joint Removal & Replacement Detail 3.dgn  
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BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a(E)	16	#5	31'-4"	
a1(E)	20	#5	47'-3"	
a2(E)	20	#5	43'-9"	
a3(E)	16	#6	4'-0"	
b(E)	24	#4	3'-9"	
c(E)	24	#5	3'-4"	
c1(E)	12	#5	14'-11"	
c2(E)	12	#5	11'-5"	
d(E)	32	#4	5'-7"	
d1(E)	32	#5	4'-5"	
e(E)	24	#5	3'-9"	
x(E)	130	#5	2'-4"	
Concrete Removal			Cu. Yd.	28
Concrete Superstructure			Cu. Yd.	28
Mechanical Splicers			Each	48
Reinforcement Bars, Epoxy Coated			Pound	4,650

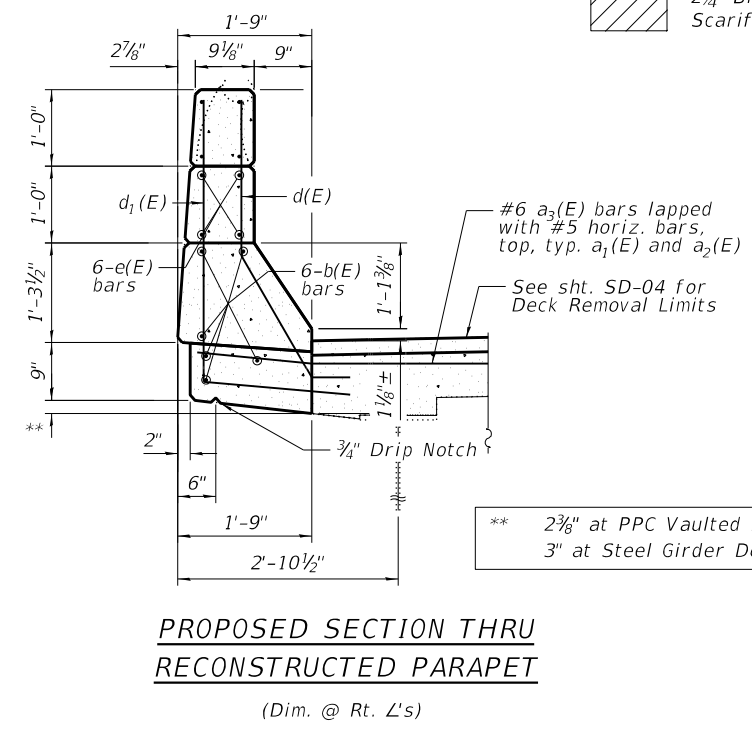
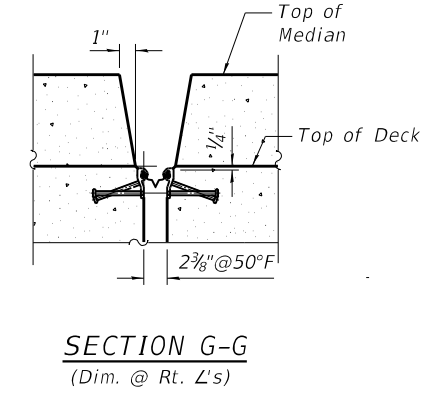
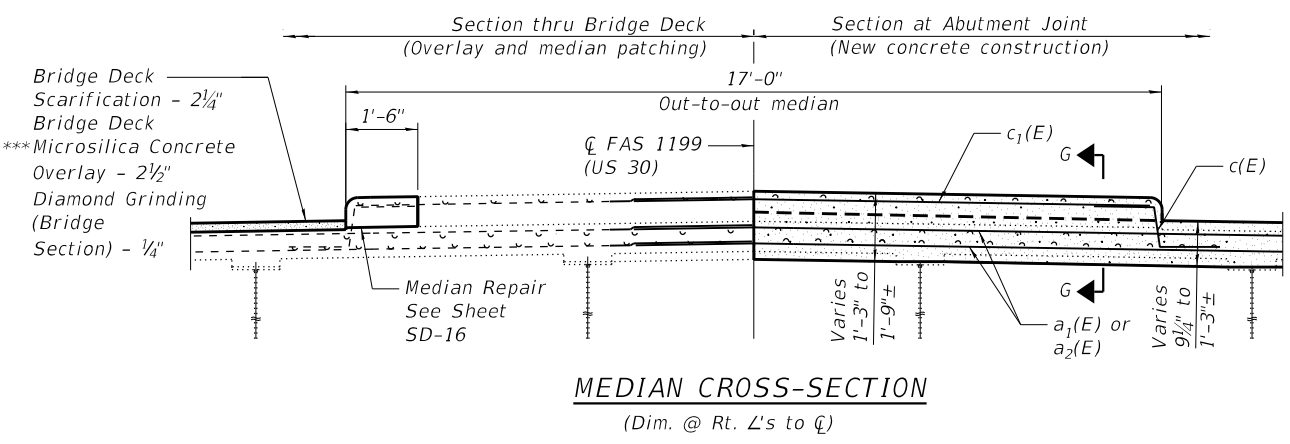


- NOTES:**
- See Sheets SD-05 and SD-06 for reinforcement plan details.
  - Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
  - Prior to 1/4" grinding



**LEGEND**

	Concrete Removal
	2 1/4" Bridge Deck Scarification



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	CHECKED - DYS	REVISED -

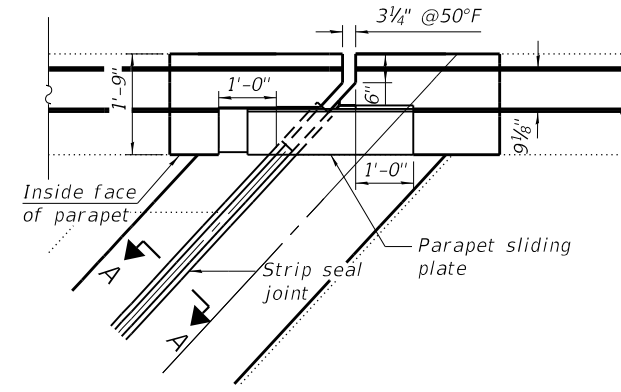
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

JOINT AND MEDIAN REPLACEMENT DETAILS  
US-30 OVER I-88 - SN 098-0091

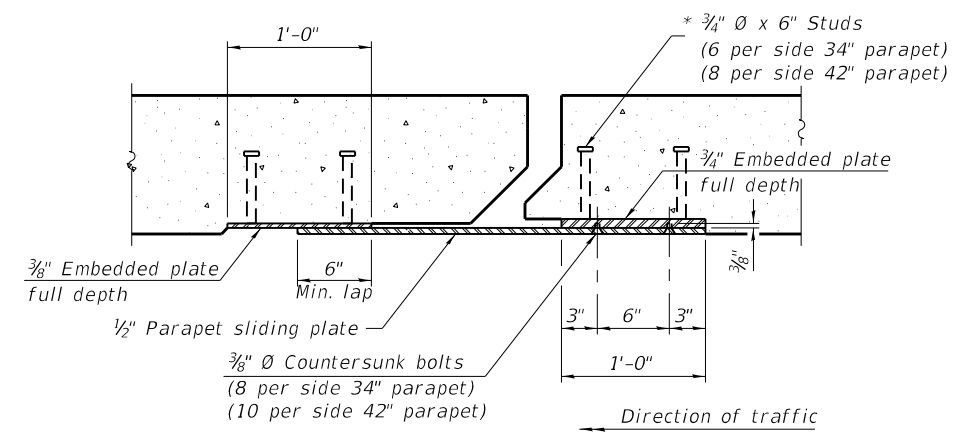
SHEET 7 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	18
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

MODEL: Strip Seal Joint Detail  
 FILE NAME: C:\Users\Brady\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var-Var Bridge\400-Work\Work Order 1\410-CADD\098-0091 - US 30 over I-88\SD8 - Joint Removal & Replacement Detail 4.dgn  
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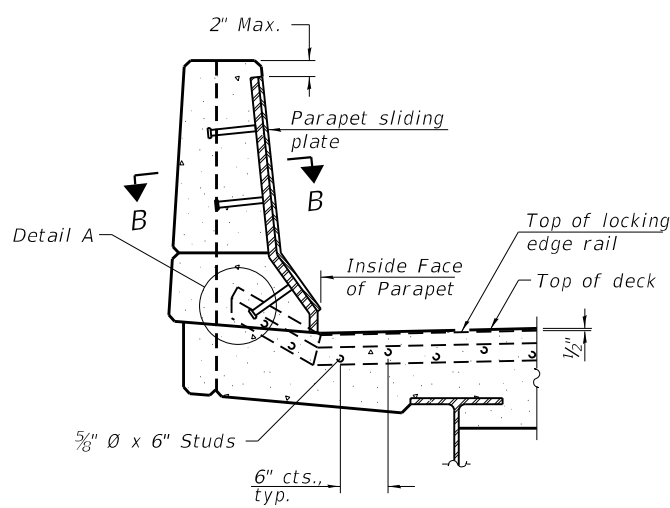


FOR SKEWS > 30°  
**PLAN AT PARAPET**

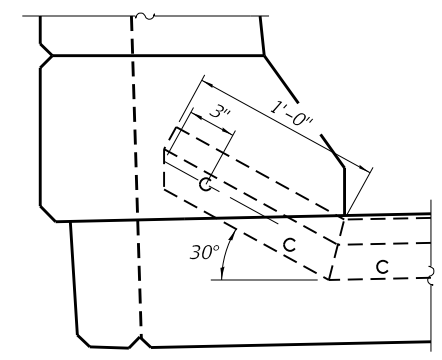


**SECTION B-B**

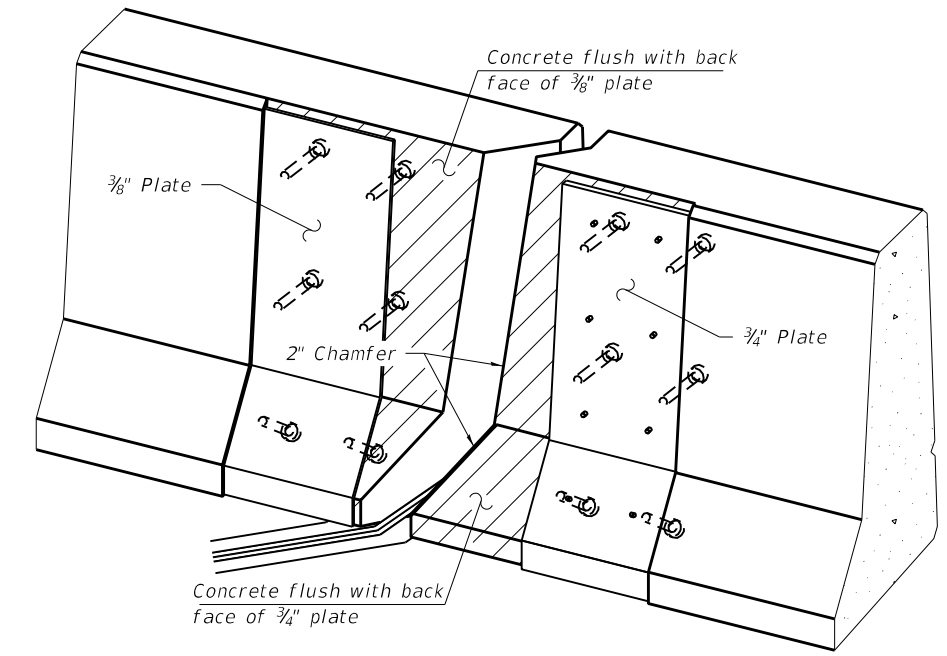
**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.  
 The manufacturer's recommended installation methods shall be followed.



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

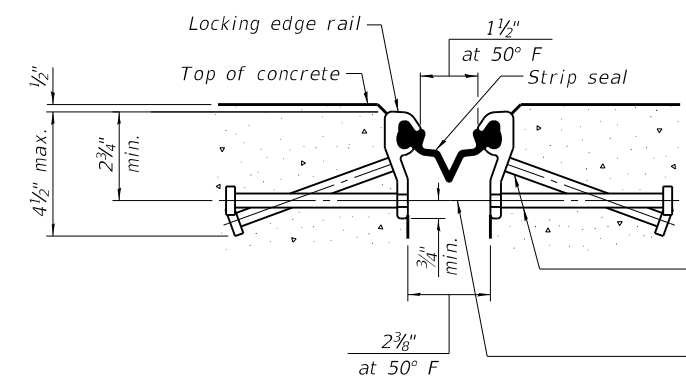


**DETAIL A**



**TRIMETRIC VIEW**  
 (Showing embedded plates only)

\*\*\* Prior to 1/4" Grinding

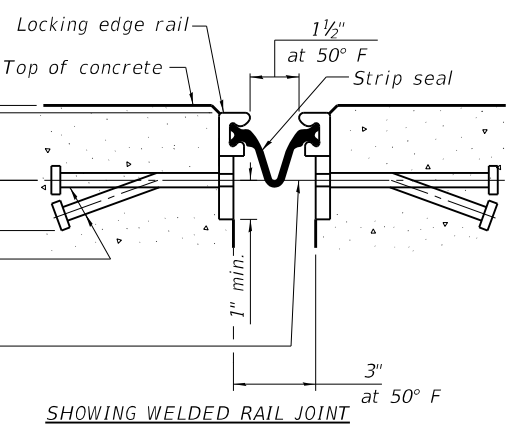


**SHOWING ROLLED RAIL JOINT**

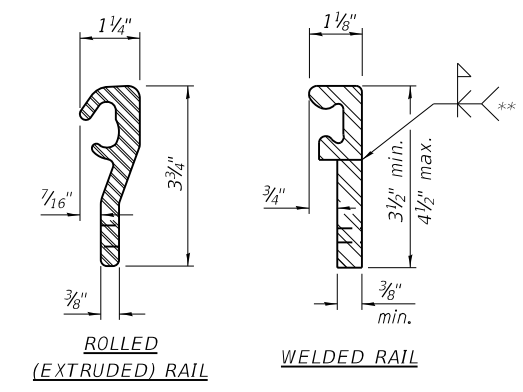
\* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates 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.

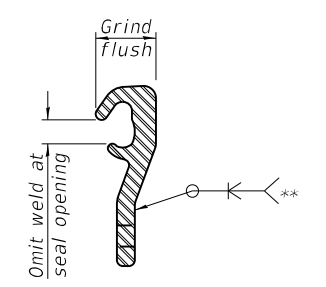


**SHOWING WELDED RAIL JOINT**



**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	185



USER NAME =	DESIGNED - JRT	REVISED -
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PLOT DATE =	DRAWN - JRT	REVISED -
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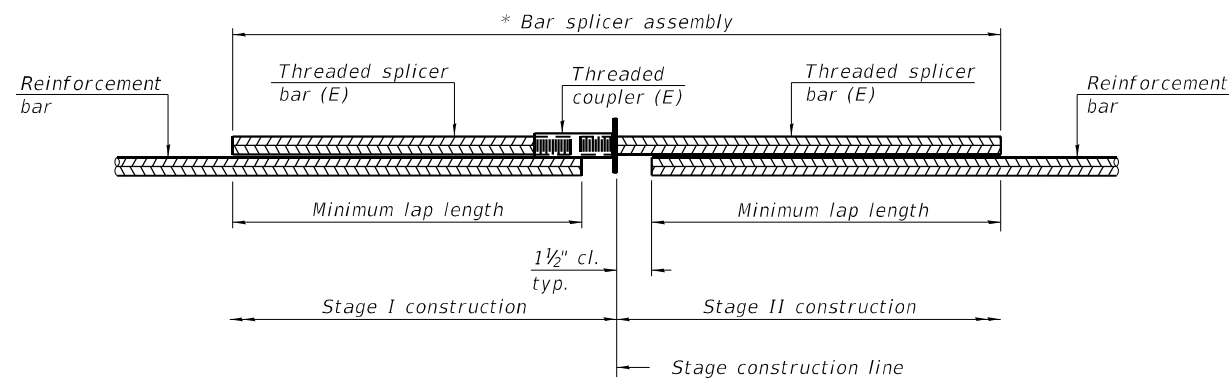
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
US-30 OVER I-88 - SN 098-0091

SHEET 8 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	19
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-08



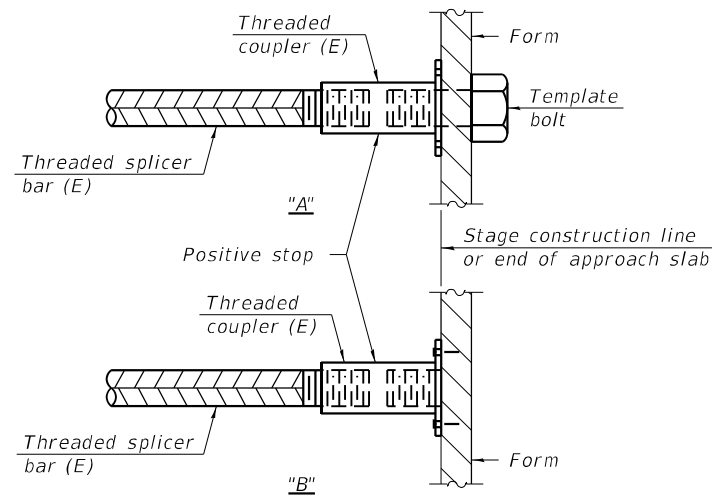
**STANDARD BAR SPLICER ASSEMBLY PLAN**

(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
N/A	N/A	N/A	N/A

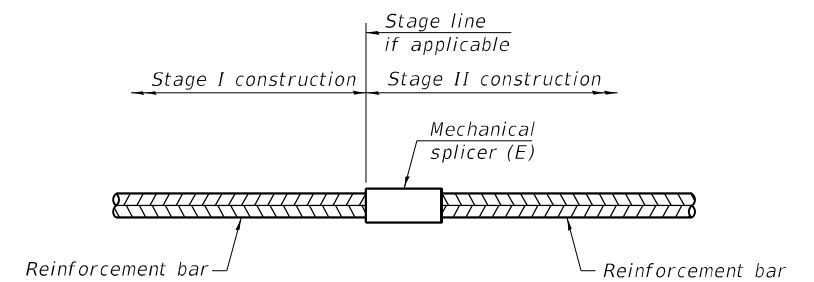


**INSTALLATION AND SETTING METHODS**

"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
E Abut Joint, N Parapet	#4	6
E Abut Joint, N Parapet	#5	6
E Abut Joint, S Parapet	#4	6
E Abut Joint, S Parapet	#5	6
W Abut Joint, N Parapet	#4	6
W Abut Joint, N Parapet	#5	6
W Abut Joint, S Parapet	#4	6
W Abut Joint, S Parapet	#5	6

**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: Bar Splice Details  
FILE NAME: C:\Users\jpush\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var\Bridges\400-Work\Work Order 1410-CADD\098-0091 - US 30 over I-88\SD-Par\_Splicer Detail (DOT Standard Drawing).dgn

BSD-1

1-1-2020



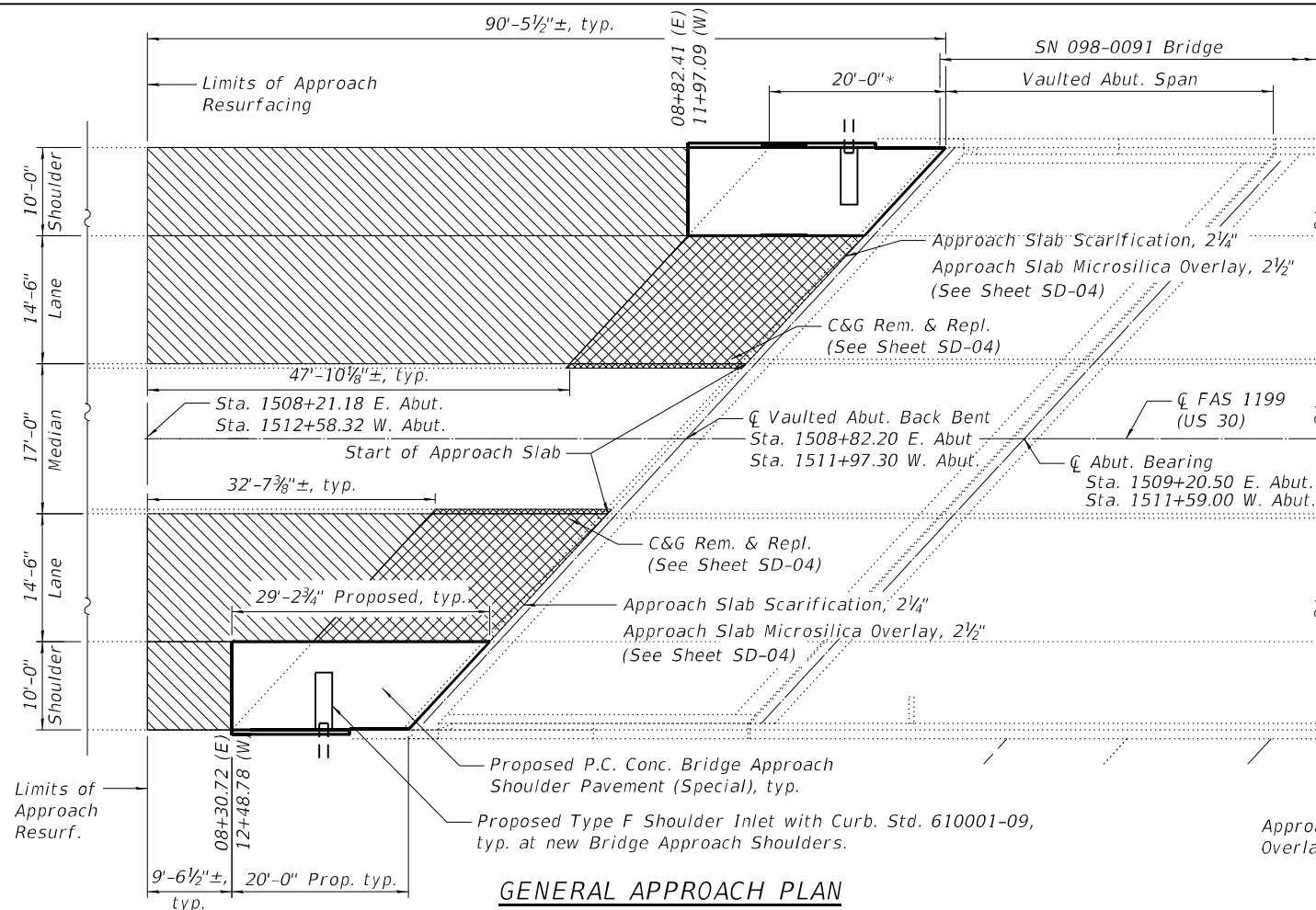
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PLOT DATE =	CHECKED - JRT	REVISED -

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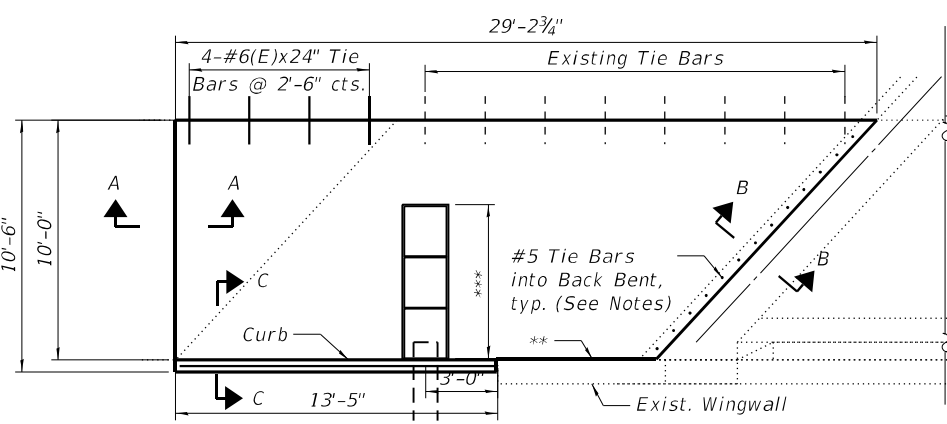
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
US-30 OVER I-88 - SN 098-0091

SHEET 09 OF 20 SHEETS

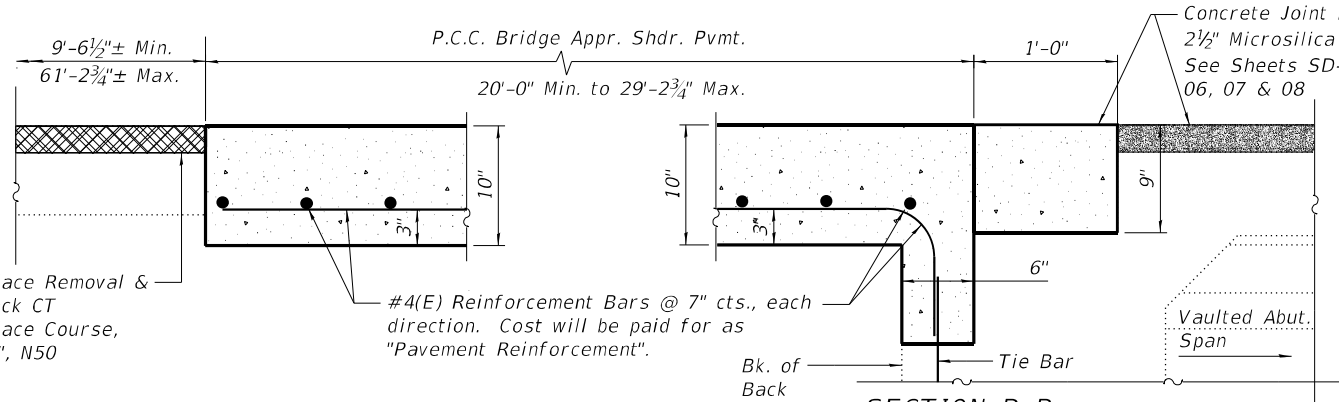
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	20
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64S40	



**GENERAL APPROACH PLAN**



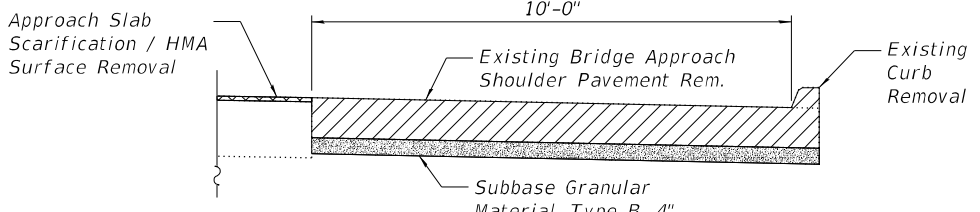
**P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT PLAN**



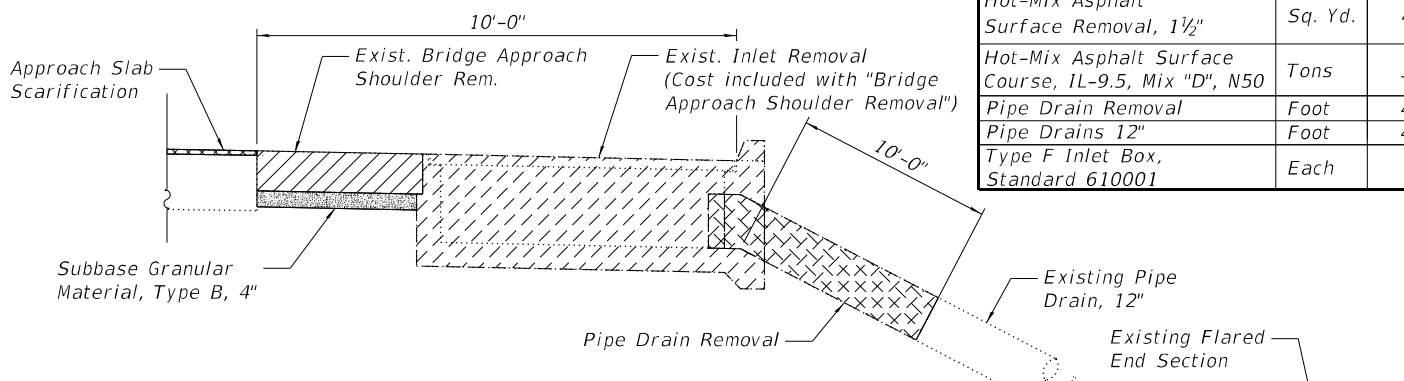
**SECTION A-A**

**SECTION B-B**

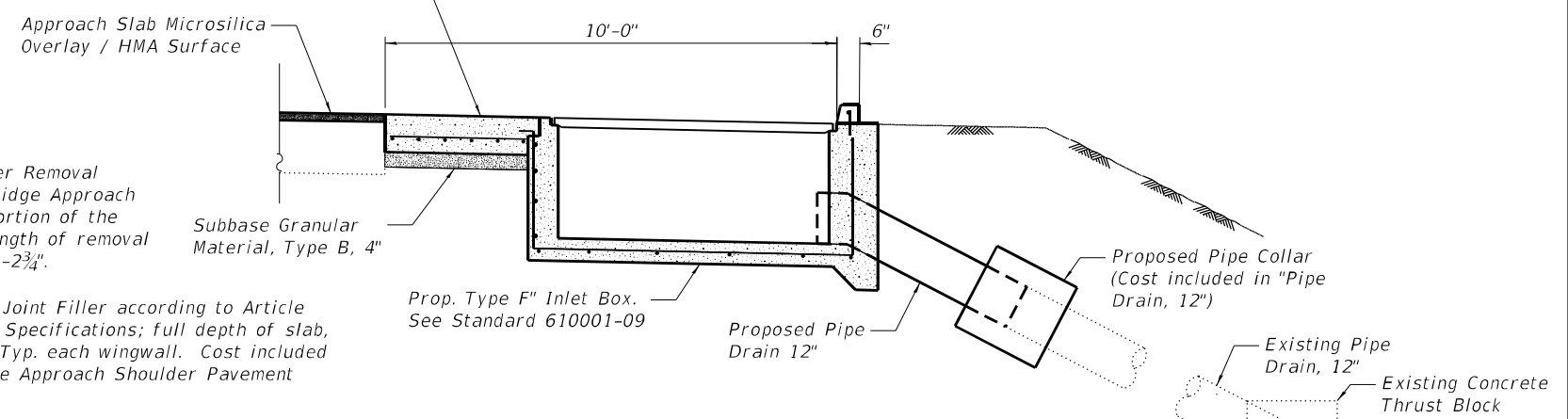
(Dimensions shown normal to joint)



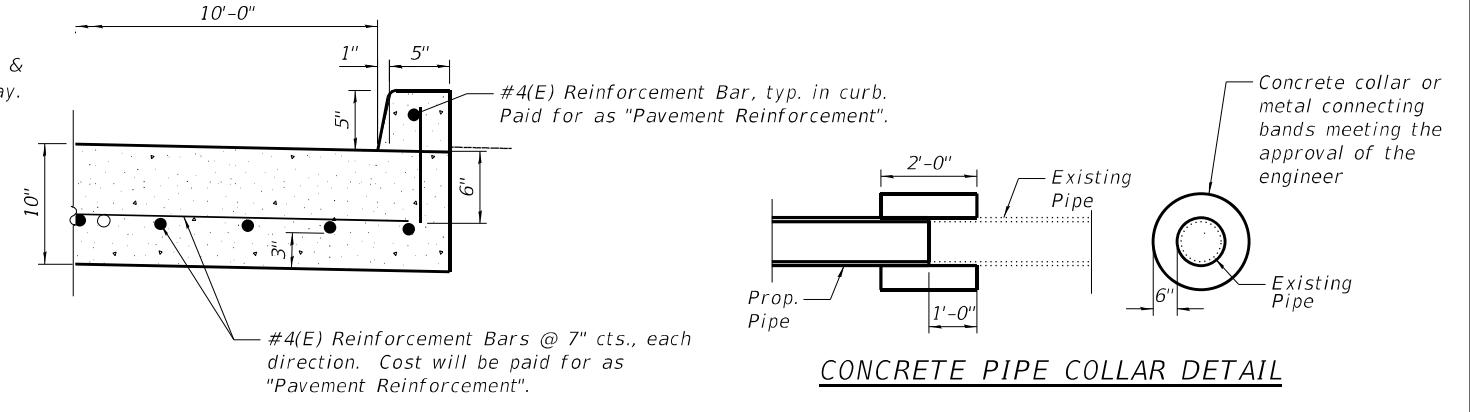
**SECTION THU APPROACH SHOULDER SHOWING REMOVAL**



**SECTION THRU APPROACH SHOULDER  
SHOWING INLET REMOVAL**



**SECTION THRU APPROACH SHOULDER  
SHOWING PROPOSED INLET**



**CONCRETE PIPE COLLAR DETAIL**

**SECTION C-C**

**BILL OF MATERIAL**

Item	Unit	Total
Subbase Granular Material, Type B, 4"	Sq. Yd.	110
Bridge Approach Shoulder Removal	Sq. Yd.	110
P.C. Concrete Bridge Approach Shoulder Pavement (Special)	Sq. Yd.	110
Pavement Reinforcement	Sq. Yd.	110
BIT MATLS (Tack Coat)	Pound	71
Hot-Mix Asphalt Surface Removal, 1 1/2"	Sq. Yd.	416
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D", N50	Tons	35
Pipe Drain Removal	Foot	40
Pipe Drains 12"	Foot	40
Type F Inlet Box, Standard 610001	Each	4

- Notes:**
- \* Bridge Approach Shoulder Removal includes existing PCC Bridge Approach Shoulder along with a portion of the bituminous shoulder. Length of removal varies from 20'-0" to 29'-2 3/4".
  - \*\* 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of wingwall. Typ. each wingwall. Cost included with "P.C. Concrete Bridge Approach Shoulder Pavement (Special)".
  - \*\*\* Type F Inlet Box
- Tie Bar cost included with "P.C. Concrete Bridge Approach Shoulder Pavement (Special)"

MODEL: GPE  
 FILE NAME: C:\Users\pushone\OneDrive - DEIQ\Documents\Projects\2112\_IDOT\_D2\_Var\Var\Bridge\400-Work\Work Order 11410-CADD\098-0091 - US 30 over I-88\SD10 - Approach Details.dgn  
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	CHECKED - DYS	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

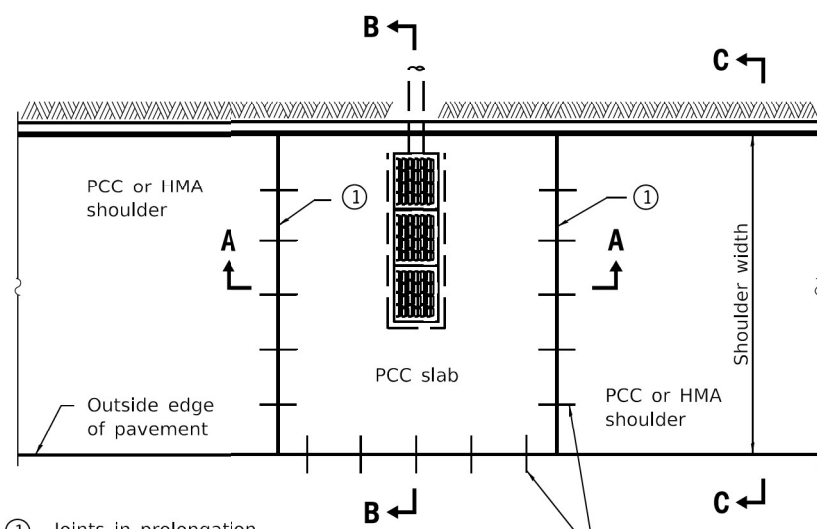
**BRIDGE APPROACH AND APPROACH SHOULDER PAVT. DETAILS  
US-30 OVER I-88 - SN 098-0091**

SHEET 10 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	21
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-10

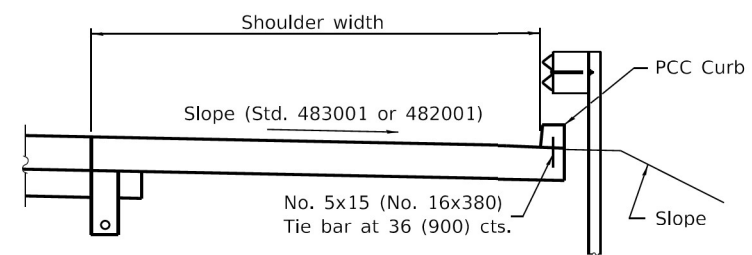
MODEL: Shoulder Inlet Adjustment  
 FILE NAME: C:\Users\push\OneDrive - QEI\QDoc\Projects\2112\_IDOT\_D2\_Var\Bridges\400-Work\Work Order 1410-CADD\098-0091 - US 30 over I-88\SD11 - 61001 Shoulder Inlet Adjustment (IDOT Standard Drawing) - Sheet Ldgn



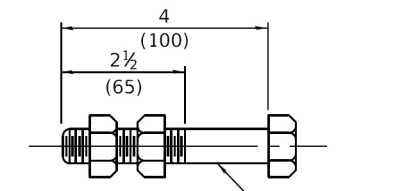
① Joints in prolongation with existing joints in pavements.

**PLAN**

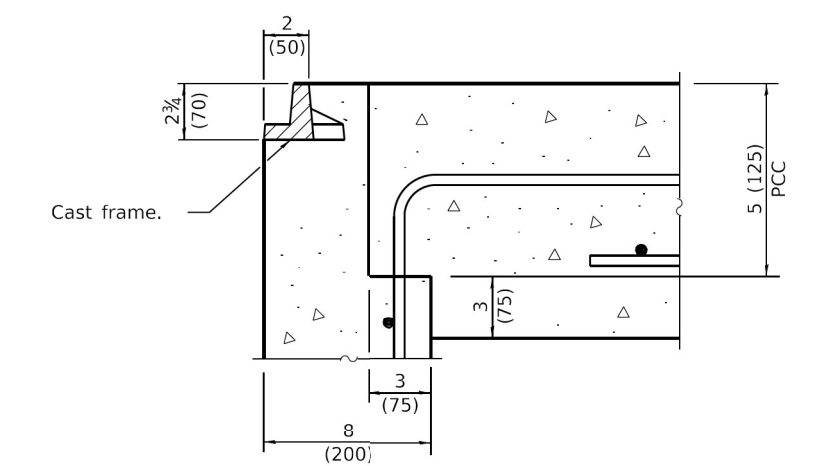
No. 6x30 (No. 19x750) Tie bars or expansion anchor ties at 36 (900) cts.



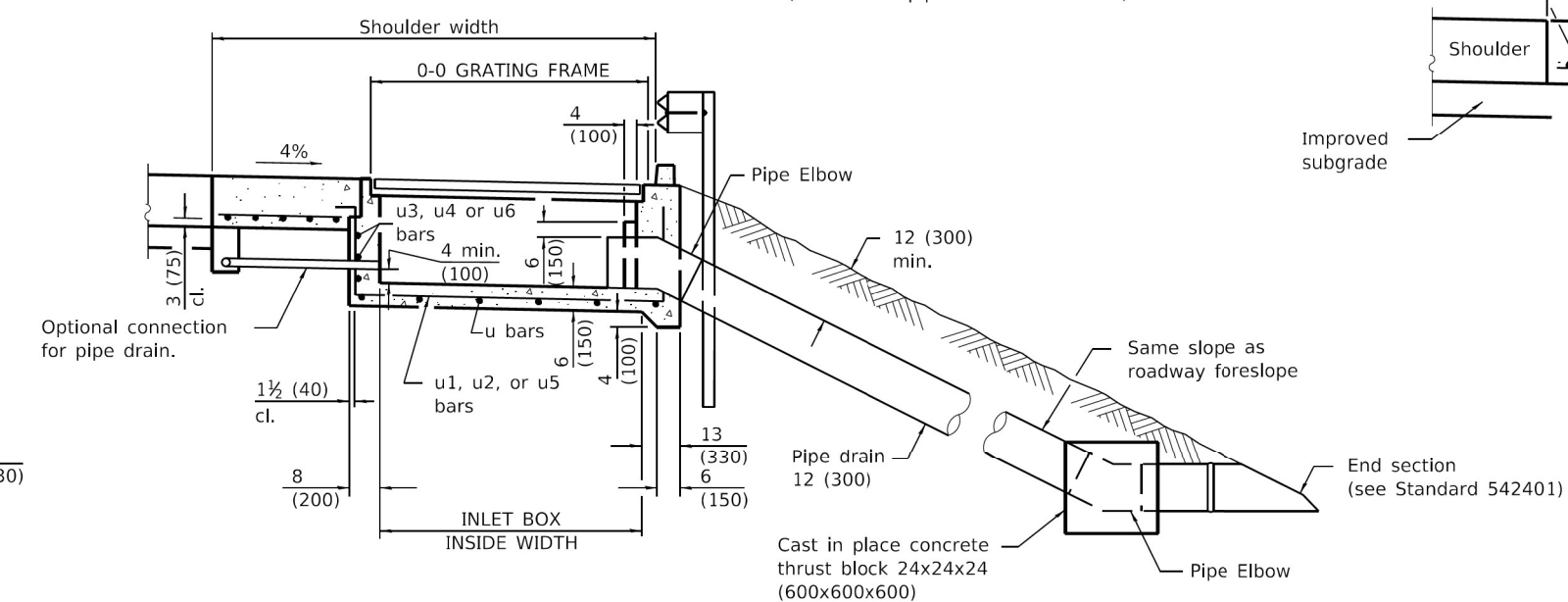
**SECTION C-C**



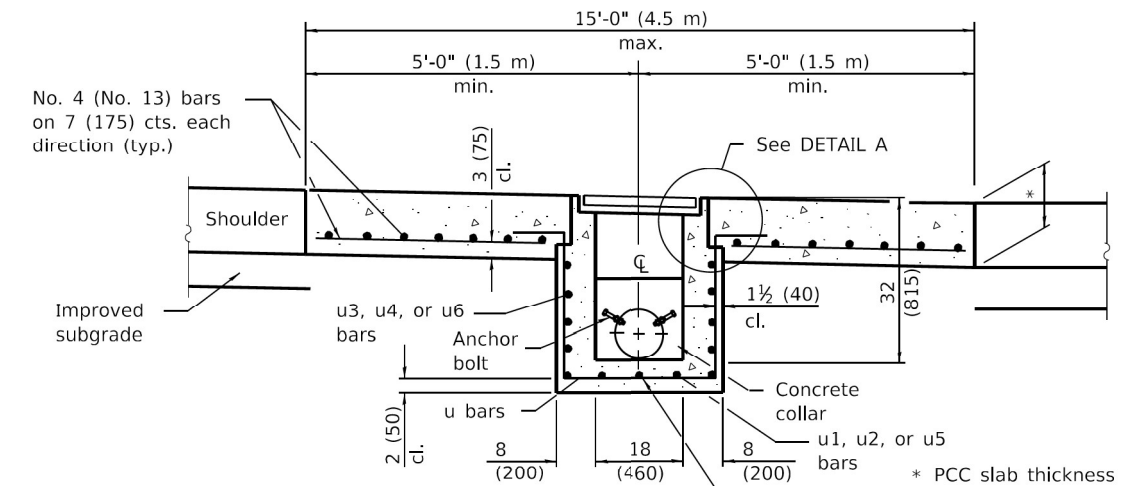
**ANCHOR BOLT**  
(Used to tie pipe to concrete collar)



**DETAIL A**

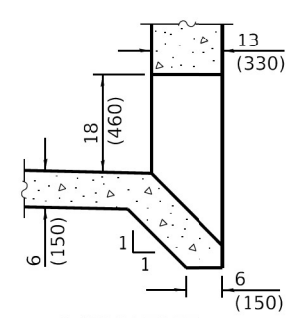


**SECTION B-B**



**SEC. A-A**

\* PCC slab thickness same as adjacent shoulder.



**BOX OUTLET WHEN PRECAST**

**GENERAL NOTES**

- See Standard 420001 for joint details not shown.
- See Standard 630001 for details of guardrail not shown.
- All exposed edges of the inlet, except the upper perimeter, shall be beveled 3/4 (20).
- For placement of drainage elements on existing construction with existing rigid pavement, substitute expansion anchor ties for tie bars.
- For nonrigid pavements or monolithic construction of PCC slab and shoulder, omit tie bars.
- All dimensions are in inches (millimeters) unless otherwise shown.

INLET TYPE	SHOULDER WIDTH	O-O GRATING FRAME	INLET BOX INSIDE WIDTH	INLET BOX INSIDE LENGTH
Type E	8' (2.4 m)	4'-4" (1.325 m)	3'-11" (1.195 m)	18 (460)
Type F	10' (3.0 m)	6'-5" (1.960 m)	6'-0" (1.830 m)	18 (460)
Type G	5' (1.5 m) or less	27 (690)	22 (560)	18 (460)

DATE	REVISIONS
1-1-21	Revised Section B-B, precast box outlet, anchor bolts, rebar and curb details. Added pipe elbows and WWR note.
1-1-18	Changed tie bar spacing to 36 (900) cts.

**SHOULDER INLET WITH CURB**

**STANDARD 610001-09**

(Sheet 1 of 2)

Illinois Department of Transportation

PASSED January 1, 2021  
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



USER NAME =	DESIGNED - KCM	REVISED -
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PLOT DATE =	DRAWN - KCM	REVISED -
	CHECKED - JRT	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

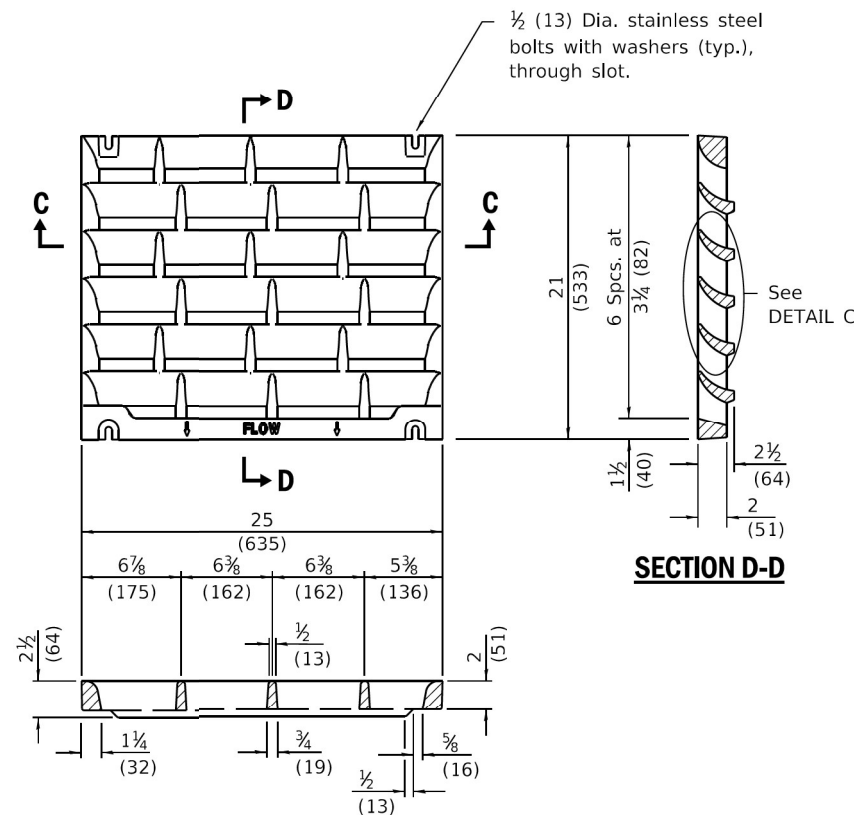
STANDARD 610001-09  
 US-30 OVER I-88 - SN 098-0091

SHEET 11 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	22
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-11

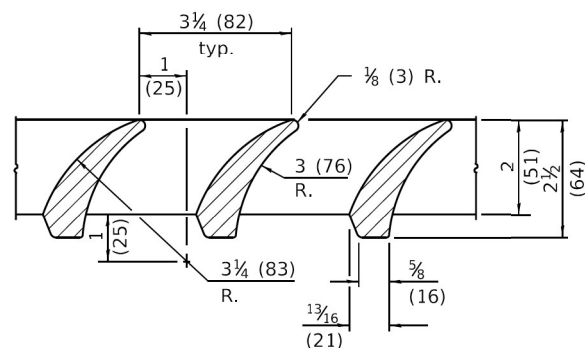
MODEL: Shoulder Inlet Adjustment  
 FILE NAME: C:\Users\jpush\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var\_Bridge\400-Work\Work Order 11410-CADD\098-0091 - US 30 over I-88\SD12 - 61001 Shoulder Inlet Adjustment (IDOT Standard Drawing) - Sheet 11.dgn



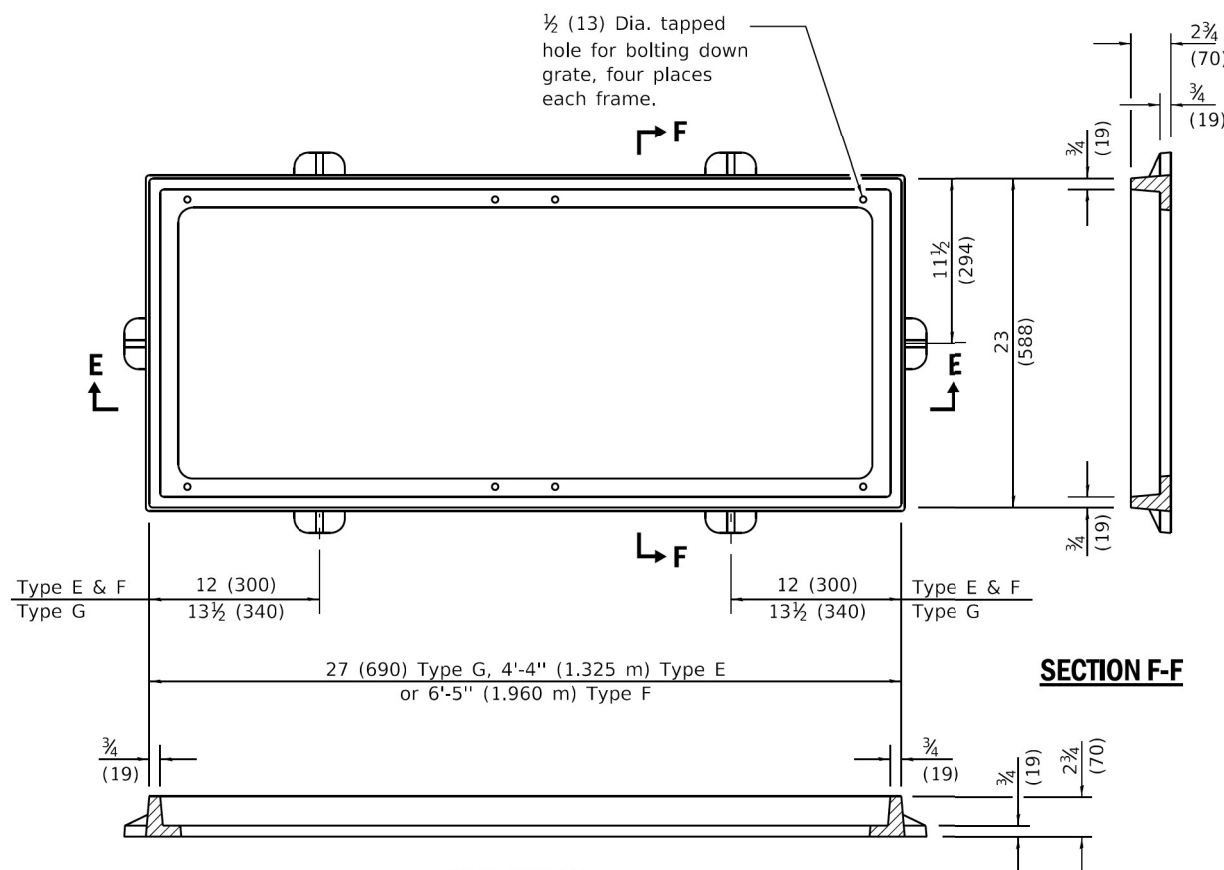
**SECTION C-C**

**DETAIL OF CAST GRATE**

Type G requires 1 grate  
 Type E requires 2 grates  
 Type F requires 3 grates



**DETAIL C**

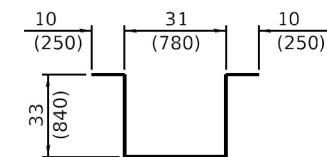


**SECTION E-E**

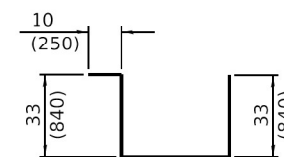
**DETAIL OF CAST FRAME**

(Type E shown)

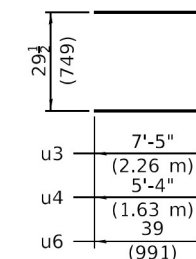
**SECTION F-F**



**BAR u**



**BARS u1, u2, & u5**



**BARS u3, u4 & u6**

**INLET BOX**

REQUIRED MATERIAL			
TYPE F			
Bar	Qty.	Size	Length
u	8	No. 4 (No.13)	9'-9" (2.96 m)
u1	3	No. 4 (No.13)	13'-9" (4.19 m)
u3	4	No. 4 (No.13)	17'-3 1/2" (5.27 m)
Concrete	cu. yds. (m³)	1.7 (1.3)	
Reinf. bars	lbs. (kg)	126 (57.2)	
Grating	sq. ft. (m²)	10.9 (1.02)	
TYPE E			
Bar	Qty.	Size	Length
u	6	No. 4 (No.13)	9'-9" (2.96 m)
u2	3	No. 4 (No.13)	11'-8" (3.56 m)
u4	4	No. 4 (No.13)	13'-1 1/2" (4.00 m)
Concrete	cu. yds. (m³)	1.3 (1.0)	
Reinf. bars	lbs. (kg)	98 (44.5)	
Grating	sq. ft. (m²)	7.3 (0.68)	
TYPE G			
Bar	Qty.	Size	Length
u	4	No. 4 (No.13)	9'-9" (2.69 m)
u5	3	No. 4 (No.13)	9'-7" (2.92 m)
u6	4	No. 4 (No.13)	8'-11 1/2" (2.73 m)
Concrete	cu. yds. (m³)	0.5 (0.4)	
Reinf. bars	lbs. (kg)	70 (31.8)	
Grating	sq. ft. (m²)	3.6 (0.34)	

**NOTES**

Welded wire reinforcement (WWR) may be used in lieu of reinforcement bars. Only one layer of WWR is permitted to avoid congestion.

**SHOULDER INLET WITH CURB**

(Sheet 2 of 2)

**STANDARD 61001-09**

Illinois Department of Transportation

PASSED January 1, 2021  
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2021  
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97



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PLOT DATE =	DRAWN - KCM	REVISED -
	CHECKED - JRT	REVISED -

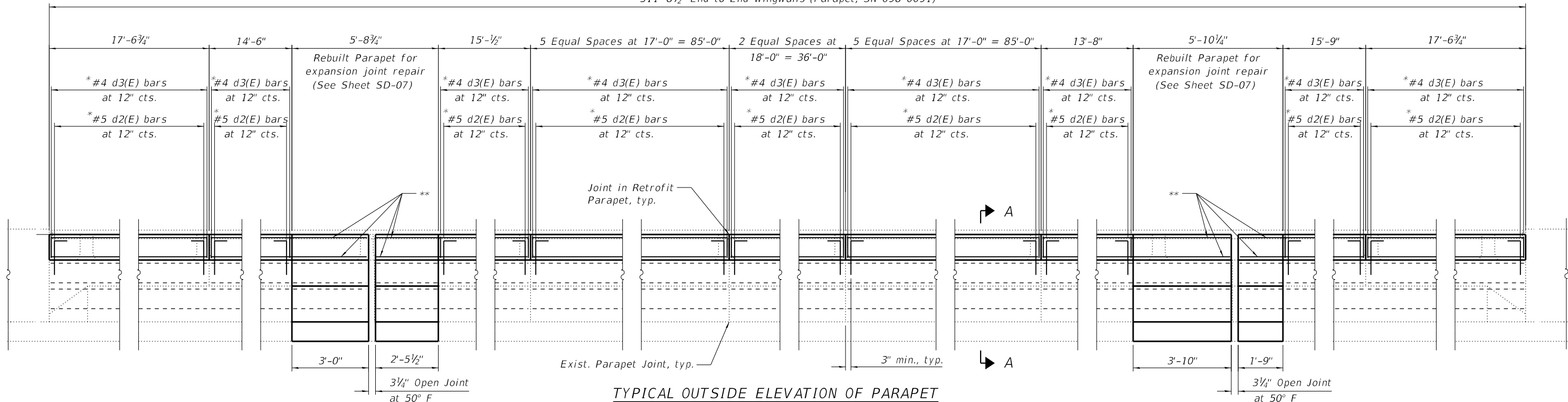
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STANDARD 61001-09  
 US-30 OVER I-88 - SN 098-0091

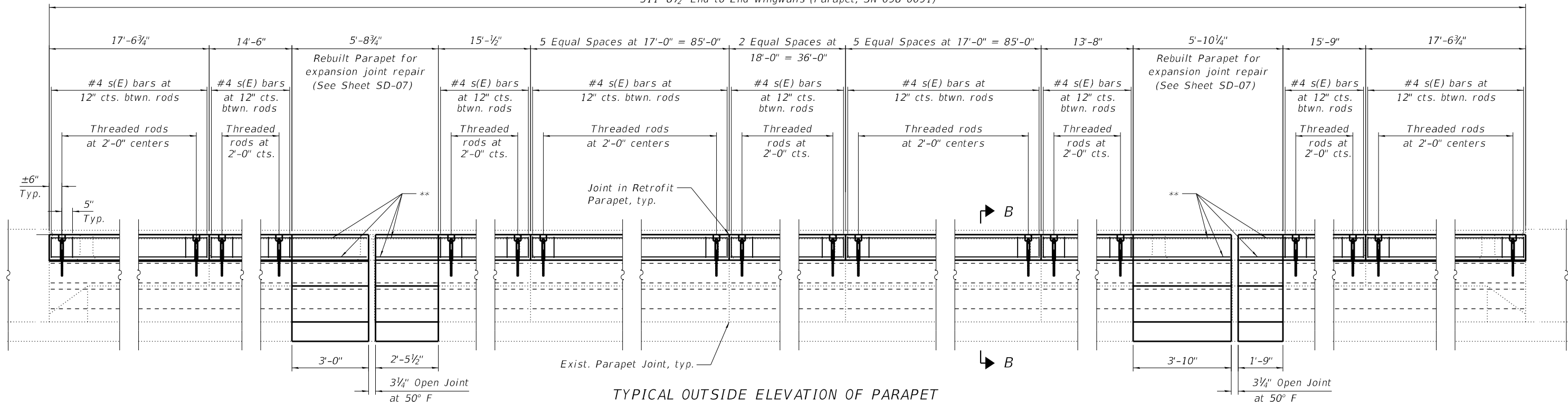
SHEET 12 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	23
ILLINOIS FED. AID PROJECT				

SD-12



**TYPICAL OUTSIDE ELEVATION OF PARAPET**  
(Cast-in-Place Alternate)  
(North Parapet outside face shown, South Parapet mirrored)



**TYPICAL OUTSIDE ELEVATION OF PARAPET**  
(Precast Alternate)  
(North Parapet outside face shown, South Parapet mirrored)

\* Epoxy grout d(E) bars in 7/8" x 9" (min.) holes. The grout and the method of application shall be approved by the department. (See Section 584 of the Standard Specifications). Cost included with "Retrofit Concrete Parapet".

\*\* New reinforcement bars shall extend into Rebuilt Parapet for Expansion Joint Repairs. Cost for reinforcement included with Retrofit Concrete Parapet, typ.

For Notes, Bill of Material, Sections A-A & B-B, and reinf. bending diagrams, see sheet SD-14.

MODEL: Parapet - Elevation Sheet  
FILE NAME: C:\Users\Brady\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var-Var Bridge\400-Work\Work Order 1\110-CADD\098-0091 - US\_30 over I-88\SD13 - Retrofit Concrete Parapet - Detail 1.dgn



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

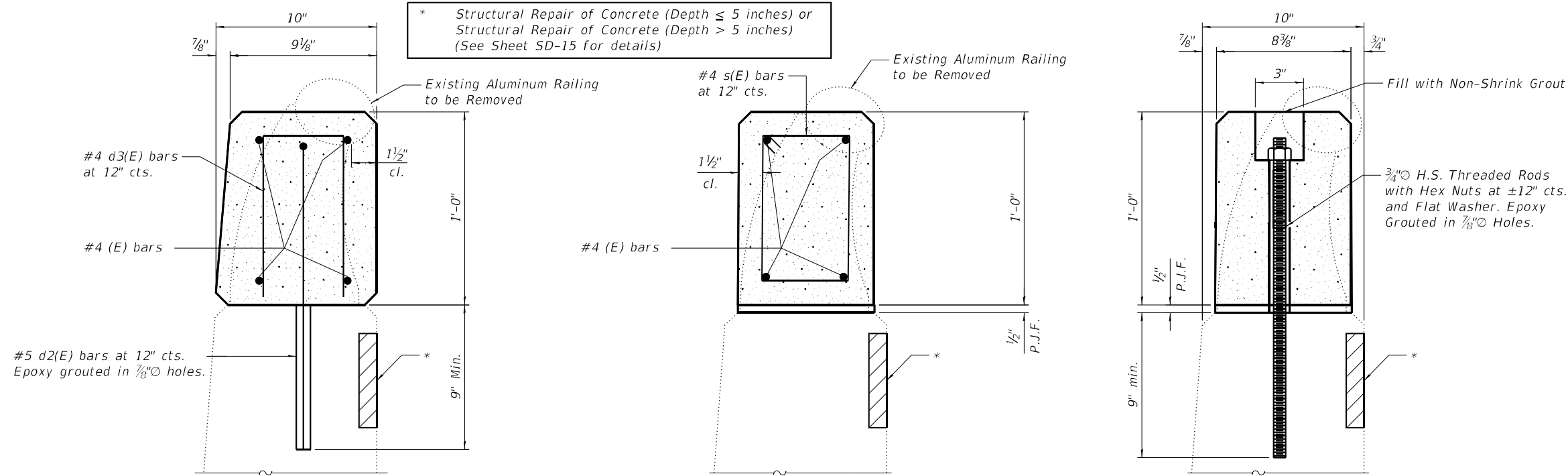
**RETROFIT CONCRETE PARAPET DETAILS  
US-30 OVER I-88 - SN 098-0091**

SHEET 13 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	24
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64S40	



MODEL: Parapet Elevation Sheet  
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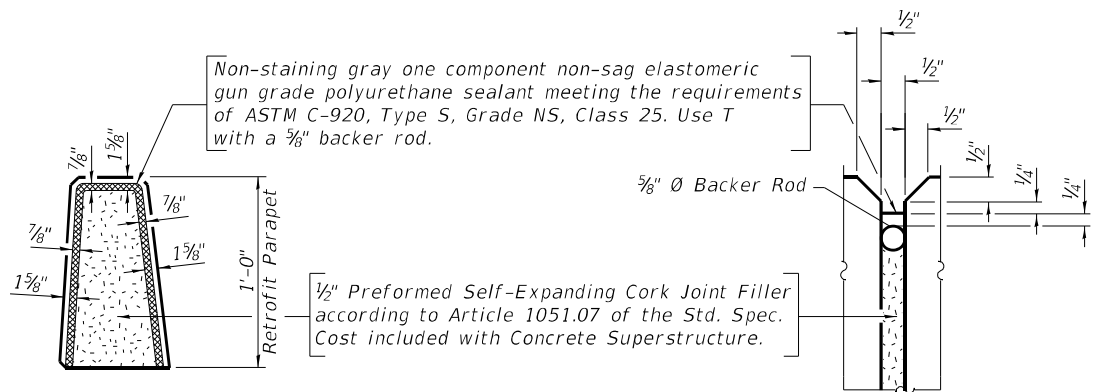
SECTION A-A

SECTION B-B  
(Showing Reinforcement)

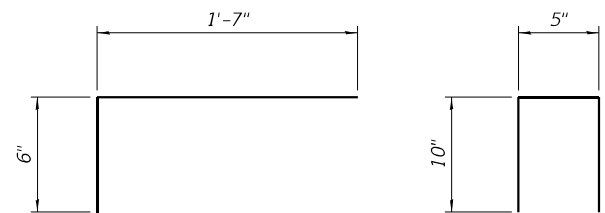
SECTION B-B  
(Showing Attachment)

NOTES

- Class SI Concrete shall be used throughout for Cast-in-Place option.
- Class PC Concrete shall be used throughout for Precast option.
- All exposed edges shall be chamfered 3/4".
- Cost of all materials, labor and equipment to complete the work as detailed and as specified in the Special Provisions shall be included in the cost of "Retrofit Concrete Parapet".
- The Contractor shall use the capsule or adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these rods in pre-drilled holes according to the manufacturer's recommendation and procedures.
- The capsule or adhesive cartridge shall be sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amount of adhesive chemical. The threaded rod stud with nut & washers shall conform to ASTM A307.
- Epoxy grout d(E) bars in 7/8" x 9" (min.) holes. The grout and the method of application shall be approved by the department. (See Section 584 of the Standard Specifications). Cost included with "Retrofit Concrete Parapet".
- Retrofit Concrete Parapet shall be used on both sides of the structure over the full length of the structure, less portions poured with expansion joint replacement.
- The existing railings shall be removed and disposed of according to Article 501.05 of the Standard Specifications. Cost included with Retrofit Concrete Parapet.
- Acrylic Coating to be applied to inside face, outside face, and top surface of the existing and reconstructed parapet, including at joint reconstruction.

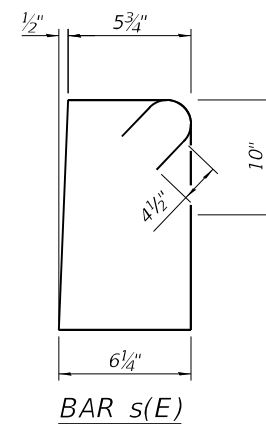


PARAPET JOINT DETAILS



BAR d2(E)

BAR d3(E)



BAR s(E)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Retrofit Concrete Parapet	Foot	601
Acrylic Coating	Sq Yd	507



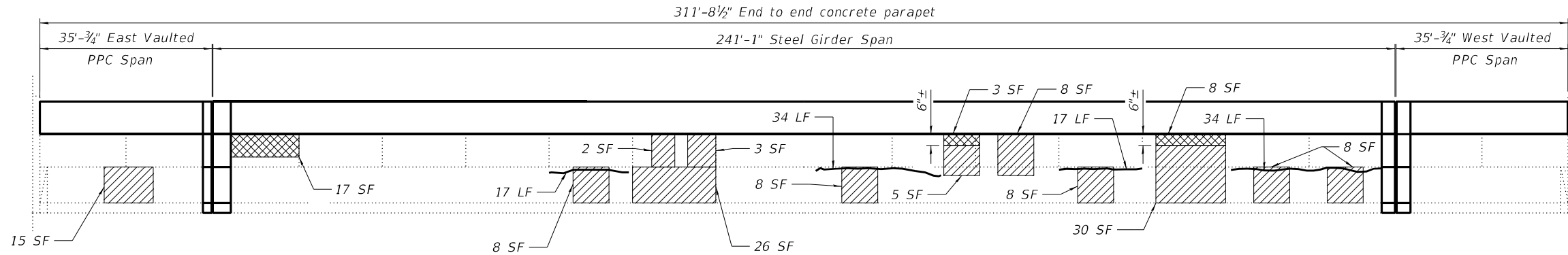
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

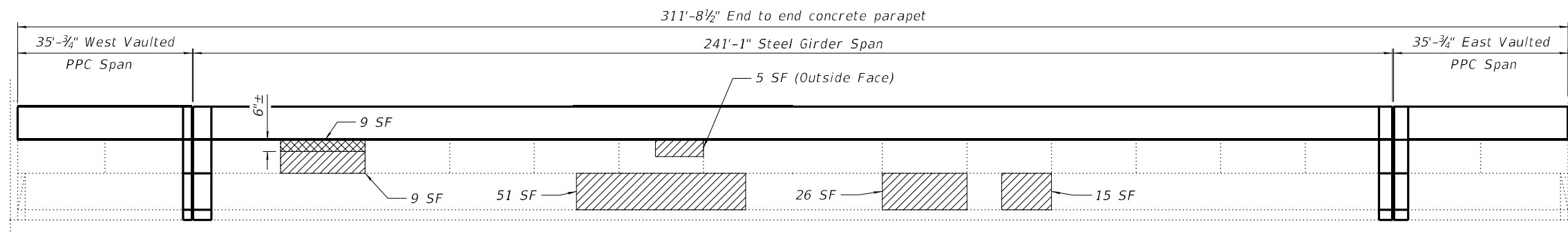
RETROFIT CONCRETE PARAPET DETAILS  
US-30 OVER I-88 - SN 098-0091

SHEET 14 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64S40	



**SOUTH PARAPET REPAIRS**  
(Inside face, looking South)



**NORTH PARAPET REPAIRS**  
(Inside face, looking North)

**LEGEND**

- Structural Repair of Concrete (Depth ≤ 5 inches)
- Structural Repair of Concrete (Depth > 5 inches)
- Epoxy Crack Injection

**NOTES:**

Parapet Condition Survey performed on 09/16/2021.

Quantities of Structural Repair of Concrete on Parapet Elevations called out represent repairs on the inside face of the parapet unless otherwise marked.

Quantities for Structural Repair of Concrete (Depth ≤ 5 inches) & Structural Repair of Concrete (Depth > 5 inches) at the parapets are estimated. Areas to be repaired shall be determined in the field by the Engineer and areas and final quantities marked on the As-Built plans.

**BILL OF MATERIAL**

Item	Unit	Total
Structural Repair of Concrete (Depth ≤ 5 inches)	Sq. Ft.	235
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	37
Epoxy Crack Injection	Foot	102

SD-15

MODEL: Parapet Elevation Sheet  
FILE NAME: C:\Users\jpush\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var\Var Bridge\400-Work\Work Order 1\410-CADD\098-0091 - US 30 over I-88\SD15- Parapet Repair.dgn



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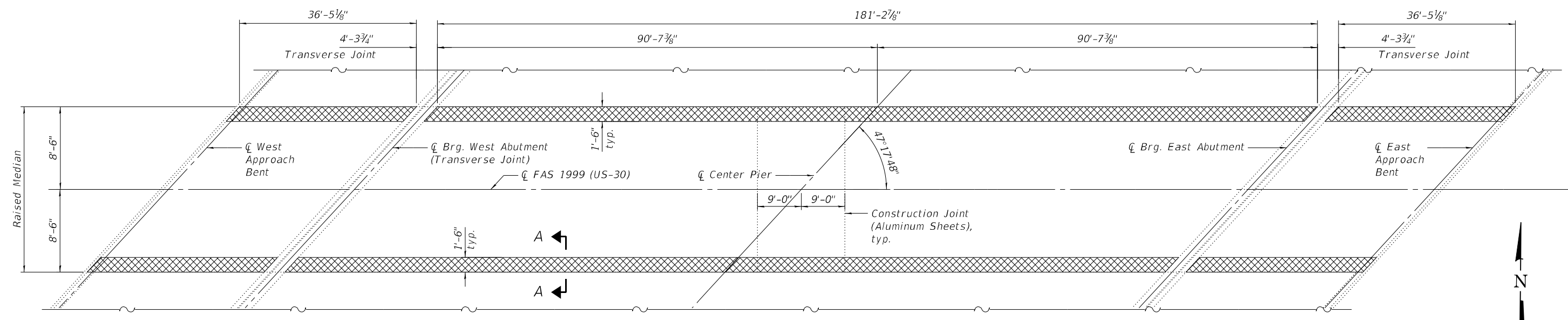
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PARAPET & MEDIAN REPAIR DETAILS  
US-30 OVER I-88 - SN 098-0091**

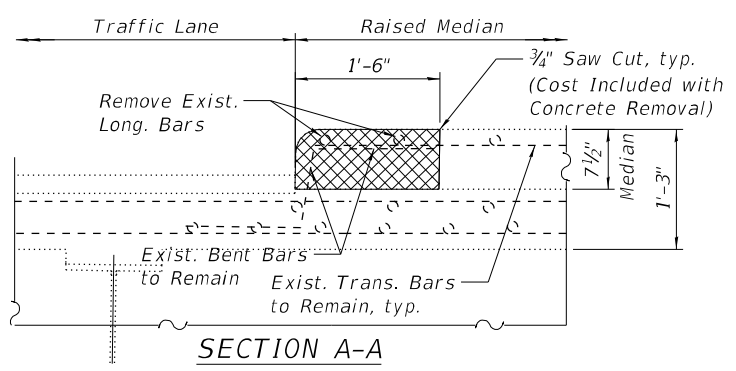
SHEET 15 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	26
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64S40	

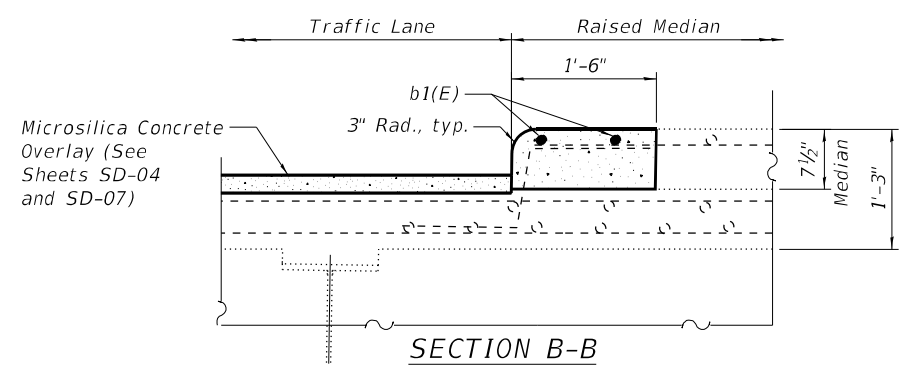
MODEL: Median Plan Sheet  
 FILE NAME: C:\Users\jpush\OneDrive - QEI\Documents\Projects\2112\_IDOT\_D2\_Var\Var\Bridges\400-Work\Work Order 1410-CADD\098-0091 - US 30 over I-88\SD16- Median Removal & Repair.dgn  
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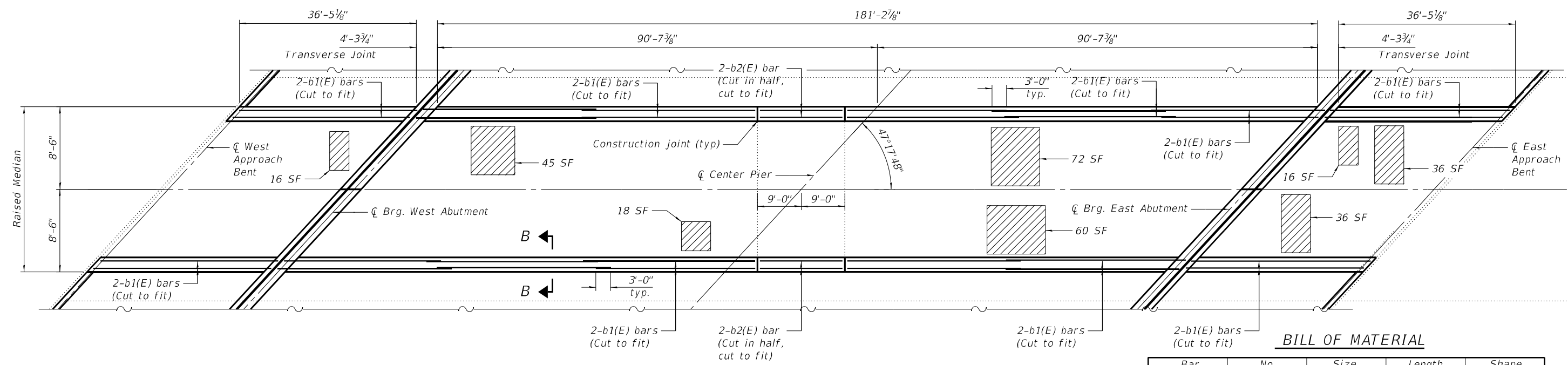
**MEDIAN CONCRETE REMOVAL PLAN**  
(Not to scale)



**SECTION A-A**



**SECTION B-B**



**MEDIAN CONCRETE REPAIR PLAN**  
(Not to scale)

**LEGEND**

- Structural Repair of Concrete (Depth ≤ 5 inches)
- Concrete Removal

**MIN. BAR LAP**  
#5 Bar = 3'-0"

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
b1(E)	28	#5	37'-1"	—	
b2(E)	4	#5	17'-8"	—	
Item				Unit	Total
Structural Repair of Concrete (Depth ≤ 5 inches)				Sq. Ft.	299
Reinforcement Bars, Epoxy Coated				Pound	1,160
Concrete Removal				Cu. Yd.	18.0
Concrete Superstructure				Cu. Yd.	18.0

**NOTES:**

Median Condition Survey performed on 09/16/2021.

Quantities for Structural Repair of Concrete (Depth ≤ 5 inches) at the median is estimated. Areas to be repaired shall be determined in the field by the Engineer and areas and final quantities marked on the As-Built plans.

For overlay details see Sheet SD-04.



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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

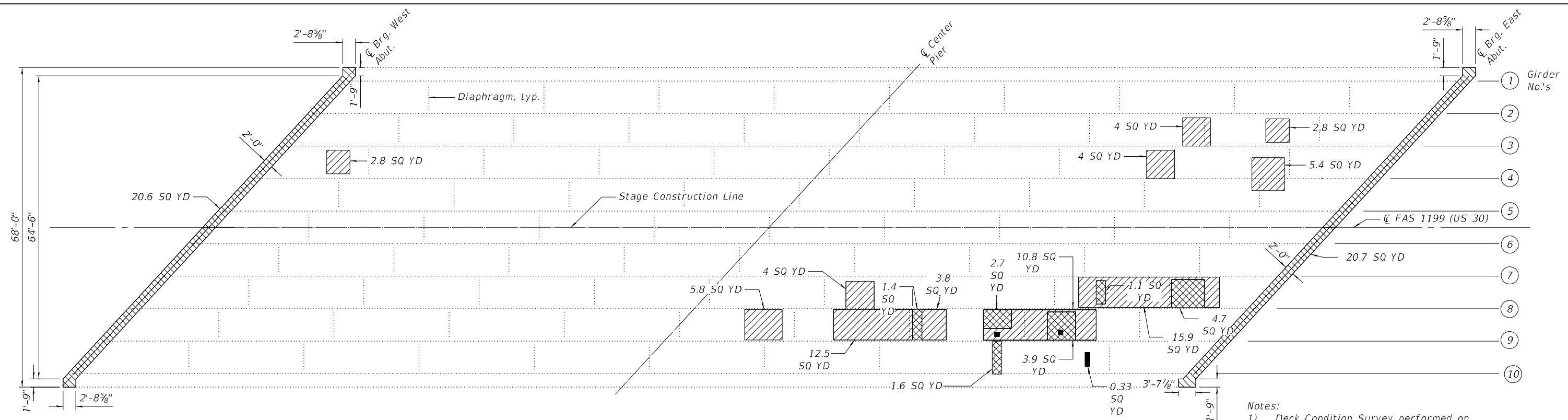
**PARAPET & MEDIAN REPAIR DETAILS**  
**US-30 OVER I-88 - SN 098-0091**

SHEET 16 OF 20 SHEETS

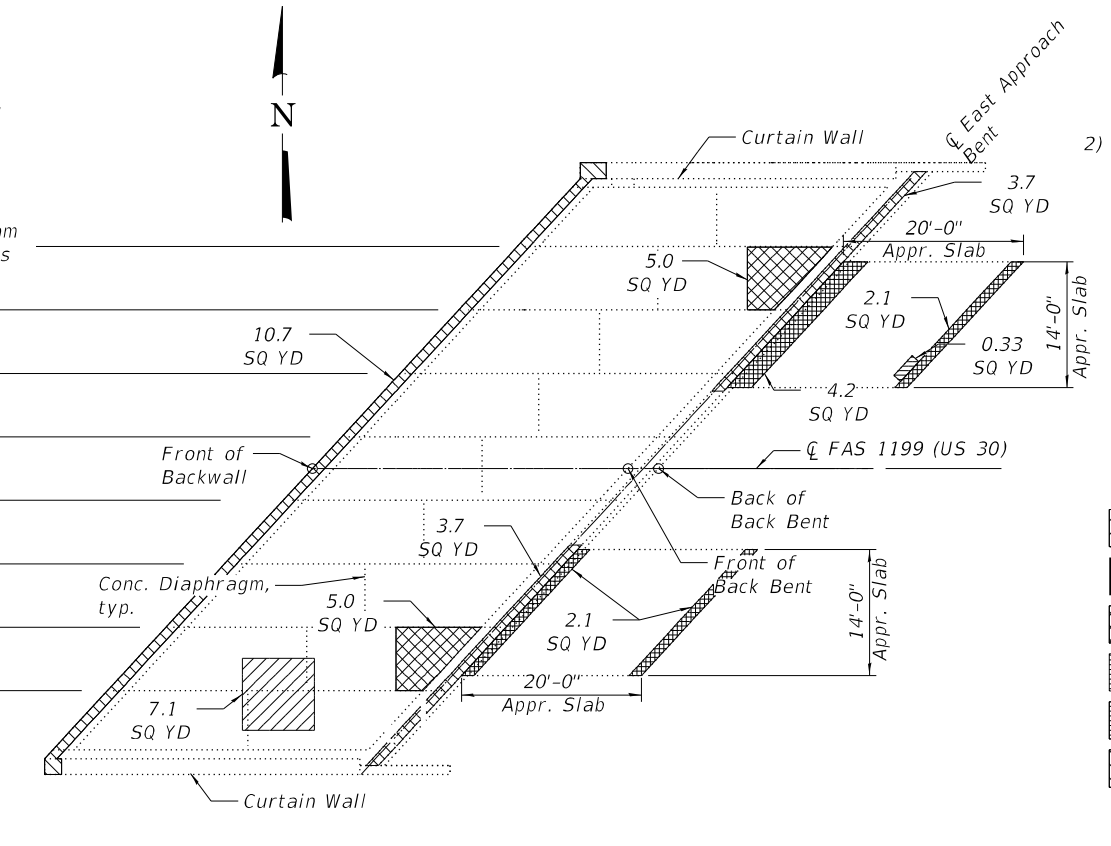
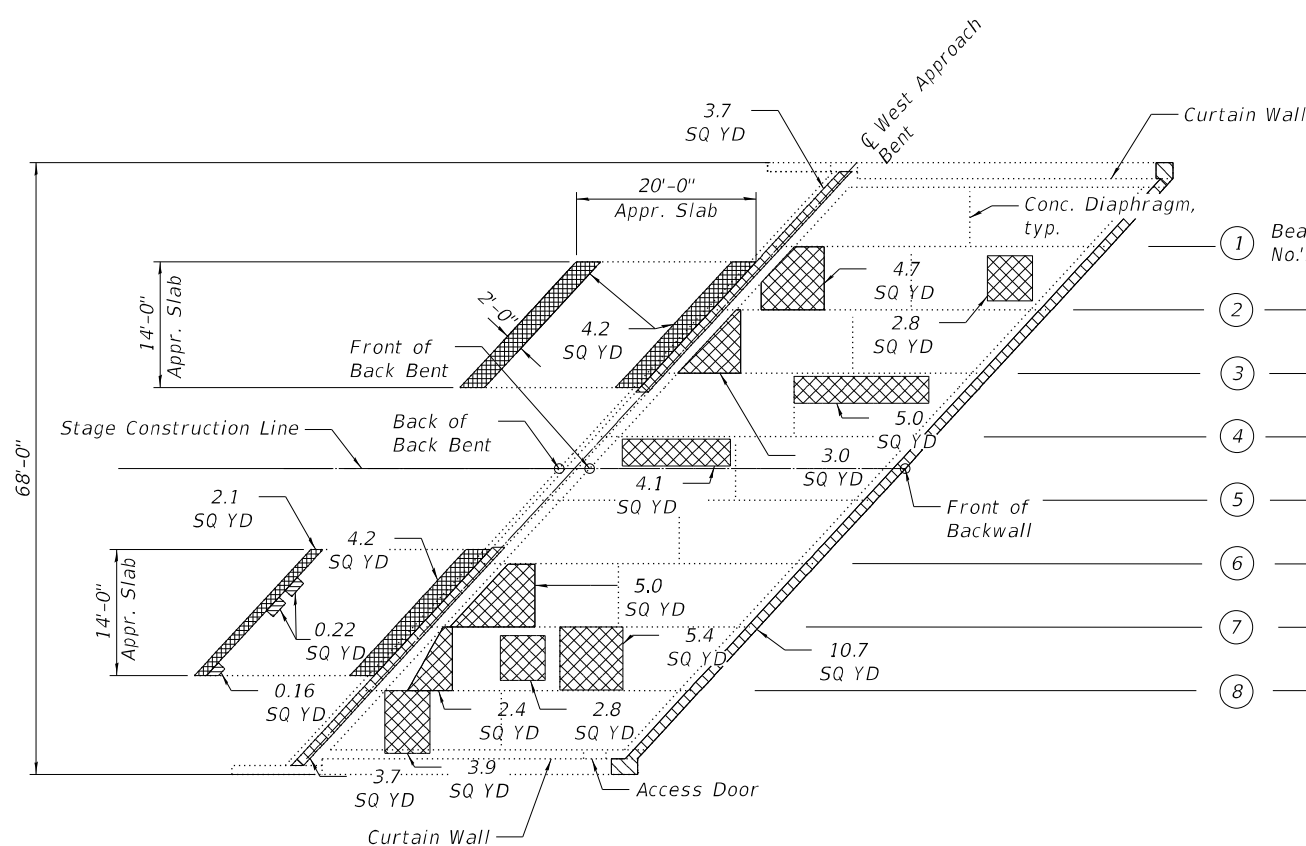
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	27
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-16

MODEL: Full Depth Patching Sheet  
 FILE NAME: C:\Users\jpushh\OneDrive - QEI\Documents\Projects\2112\_IDOT\_D2\_Var\Var Bridge\400-Work\Work Order 1410-CADD\098-0091 - US 30 over I-88\SD17 - Deck Repair Plan.dgn  
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- Notes:
- Deck Condition Survey performed on Oct 2021. There is an estimated 79 sq. yards of Partial Depth Deck Slab Repair and an estimated 1 sq. yard of Partial Depth Approach Slab Repair required. Partial Depth repairs shall be included with Bridge Deck Scarification. See special provision for Bridge Deck Microsilica Concrete Overlay. Repair of the existing deck and approach slabs shall include but may not be limited to the areas shown. The actual areas to be repaired will be determined by the Engineer at the time of construction. The Engineer shall show actual locations of repairs on As-Built plans.



**LEGEND**

- Deck Slab Repair (Partial) (For Info Only)
- Existing Full Depth Repair
- Deck Slab Repair (Full Depth - Type II)
- Approach Slab Repair (Partial) (For Info Only)
- Approach Slab Repair (Full Depth)
- Joint Repair, See Sheets SD-05 thru SD-07

**BILL OF MATERIAL**

Item	Unit	Total
Deck Slab Repair (Full Depth - Type II)	Sq. Yd.	65
Approach Slab Repair (Full Depth)	Sq. Yd.	26



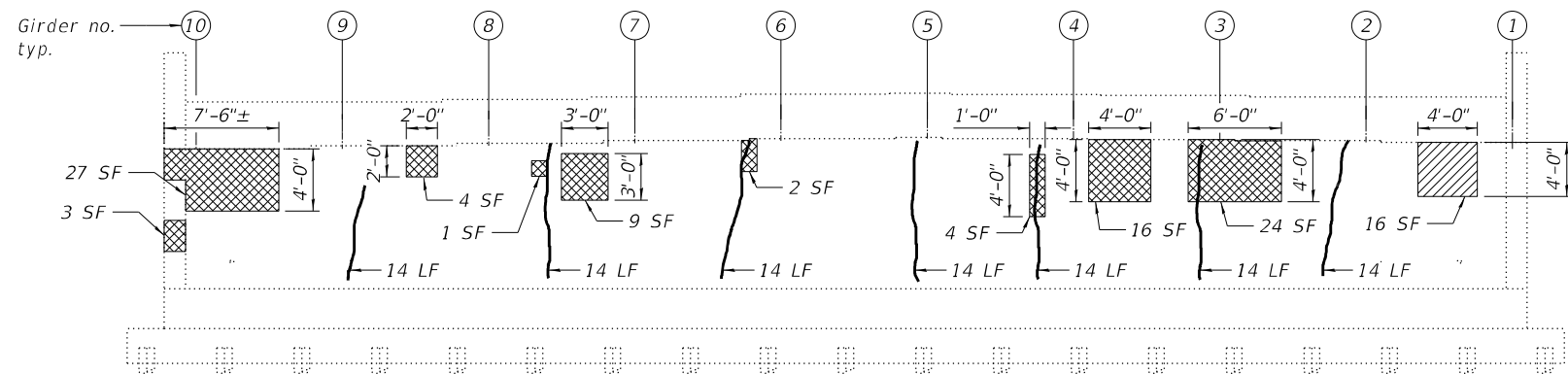
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	CHECKED - DYS	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

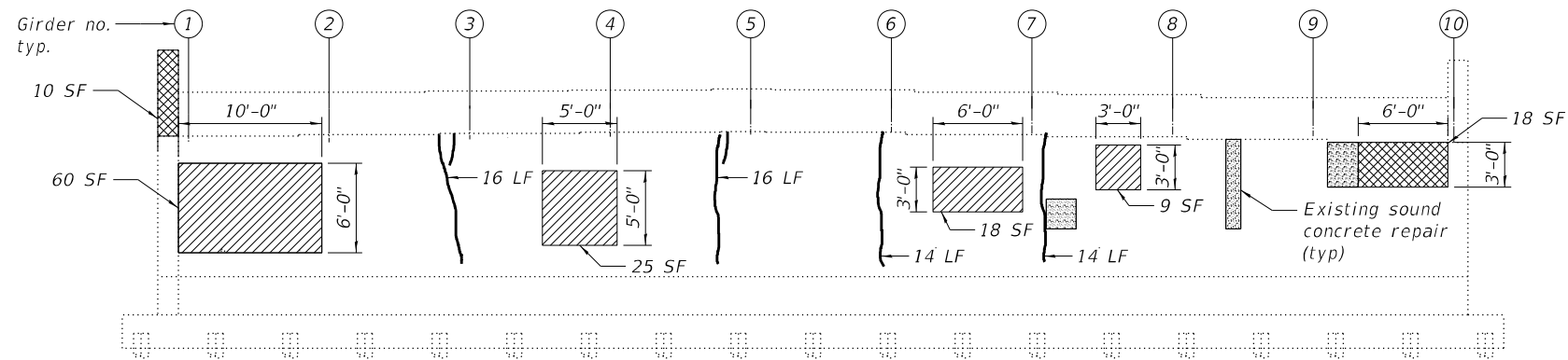
DECK AND APPROACH SLAB PATCHING DETAILS  
 US-30 OVER I-88 - SN 098-0091

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	28
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

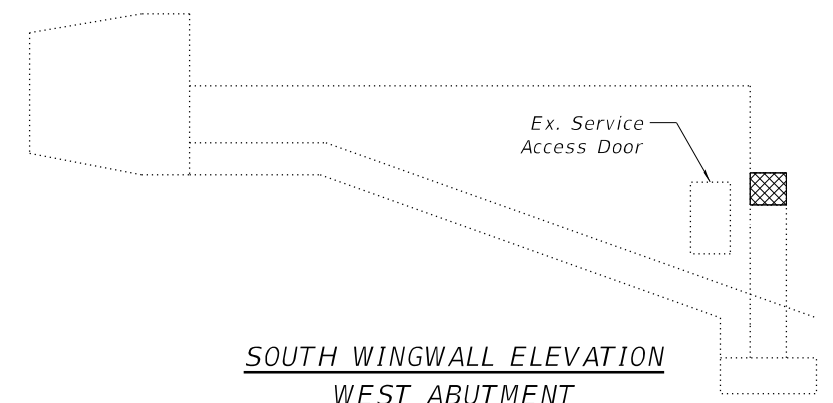
MODEL: Approach Slab II  
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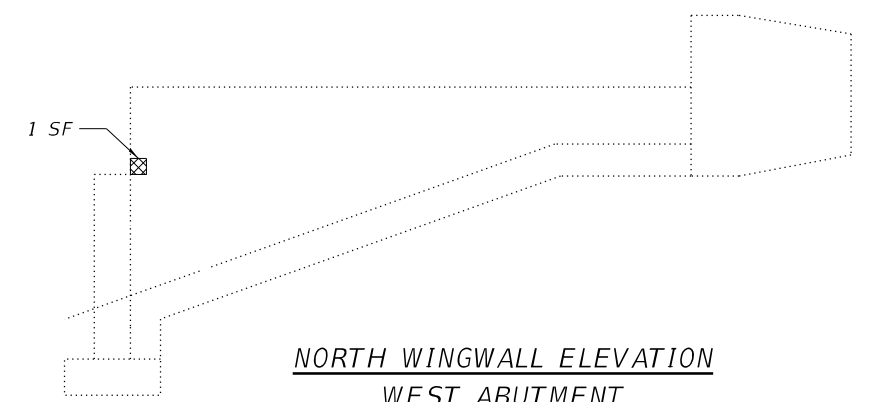
**WEST ABUTMENT ELEVATION**  
(Looking West)



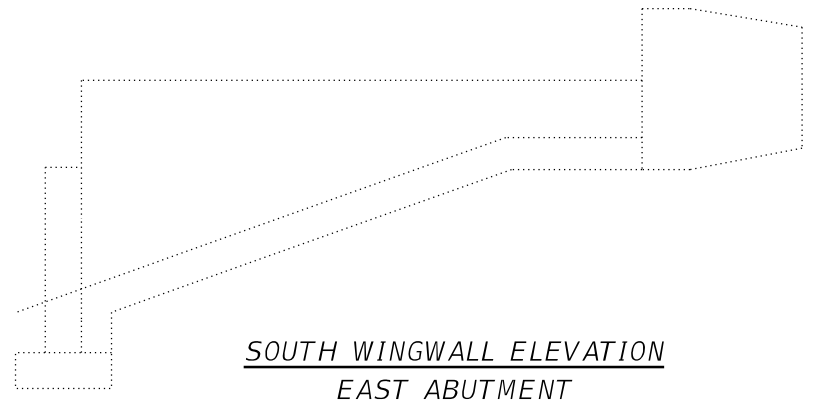
**EAST ABUTMENT ELEVATION**  
(Looking East)



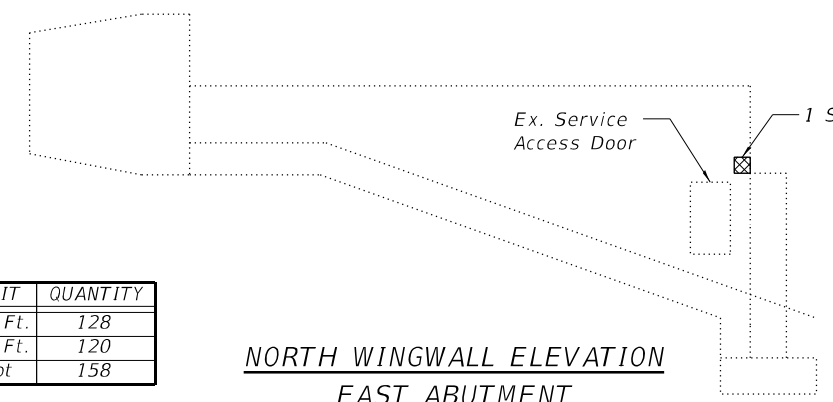
**SOUTH WINGWALL ELEVATION WEST ABUTMENT**  
(Looking North)



**NORTH WINGWALL ELEVATION WEST ABUTMENT**  
(Looking South)



**SOUTH WINGWALL ELEVATION EAST ABUTMENT**  
(Looking North)



**NORTH WINGWALL ELEVATION EAST ABUTMENT**  
(Looking South)

**NOTES:**

- Areas shown for Structural Repair of Concrete are estimated. Actual area should be determined by the Engineer at the time of repair.

**LEGEND**

- Structural Repair of Concrete, ≤5"
- Structural Repair of Concrete, >5"
- Epoxy Crack Injection
- Existing Sound Concrete Repair

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete, ≤5"	Sq. Ft.	128
Structural Repair of Concrete, >5"	Sq. Ft.	120
Epoxy Crack Injection	Foot	158



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	CHECKED - JRT	REVISED -

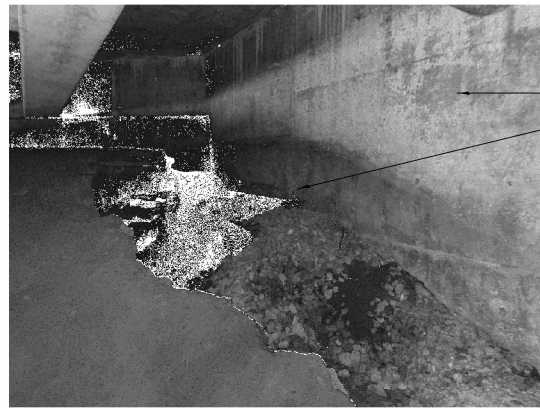
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR DETAILS  
US-30 OVER I-88 - SN 098-0091

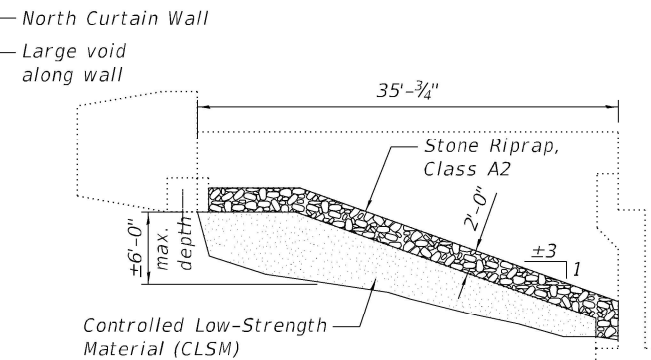
SHEET 18 OF 20 SHEETS

F.A.I. RTE. 88	SECTION (195-3HB-6)BDR	COUNTY WHITESIDE	TOTAL SHEETS 39	SHEET NO. 29
CONTRACT NO. 64S40				
ILLINOIS FED. AID PROJECT				

SD-18



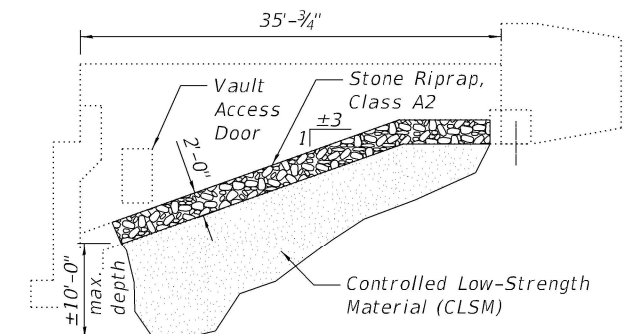
**PHOTO 1**  
Inside West Abutment Vault



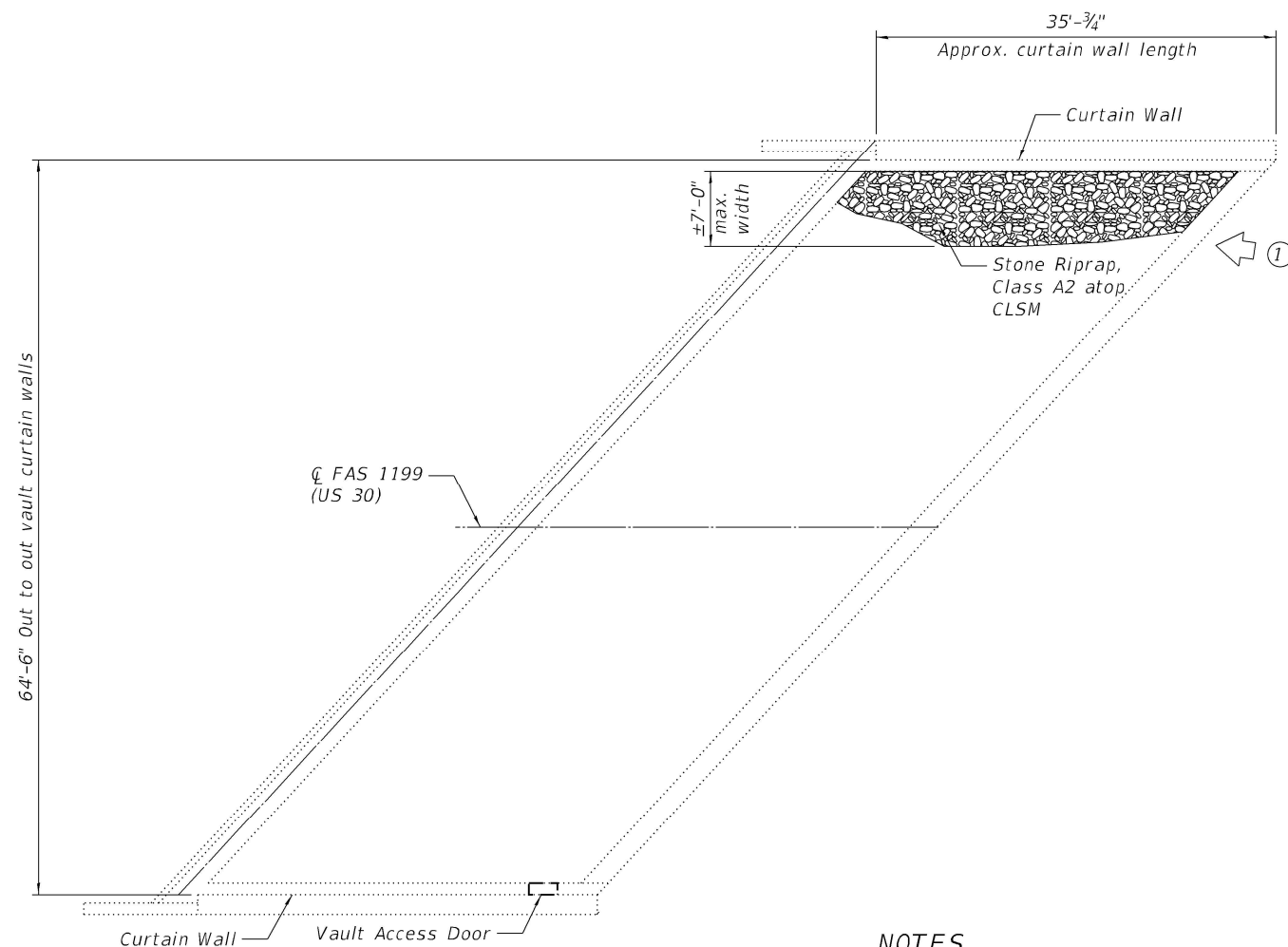
**WEST ABUTMENT VAULT CURTAIN WALL ELEVATION**  
(Inside face of north wall shown, looking north)



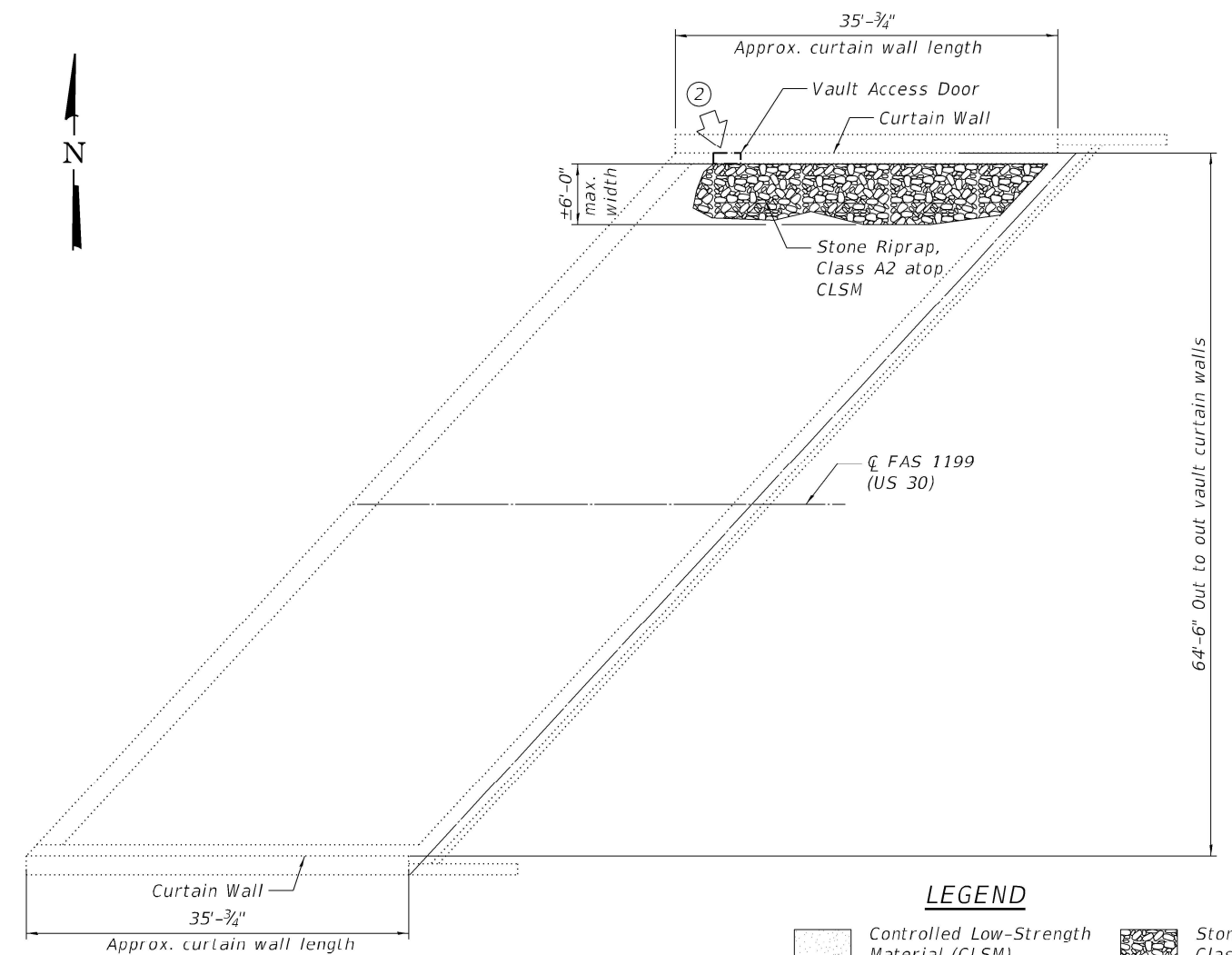
**PHOTO 2**  
Inside East Abutment Vault



**EAST ABUTMENT VAULT CURTAIN WALL ELEVATION**  
(Inside face of north wall shown, looking north)



**WEST ABUTMENT VAULT INTERIOR PLAN**



**EAST ABUTMENT VAULT INTERIOR PLAN**

**NOTES**

Controlled Low-Strength Material will be placed prior to placing Stone Riprap, Class A2.

Care shall be taken not to damage the vault interior during riprap placement.

① - Photo Number & Orientation

**LEGEND**

- Controlled Low-Strength Material (CLSM)
- Stone Riprap, Class A2

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Controlled Low-Strength Material	Cu. Yd.	133
Stone Riprap, Class A2	Tons	80

MODEL: Stage Construction Details  
FILE NAME: C:\Users\jpushh\OneDrive - QEI\QDoc\Projects\2112\_IDOT\_D2\_Var\Var Bridge\400-Work\Work Order 1410-CADD\098-0091 - US 30 over I-88\SD19 - Erosion Details.dgn



USER NAME =	DESIGNED - JRT	REVISED -
PLOT SCALE =	CHECKED - DYS	REVISED -
PLOT DATE =	DRAWN - JRT	REVISED -
	CHECKED - DYS	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EROSION REPAIR INSIDE VAULTED ABUTMENTS  
US-30 OVER I-88 - SN 098-0091**

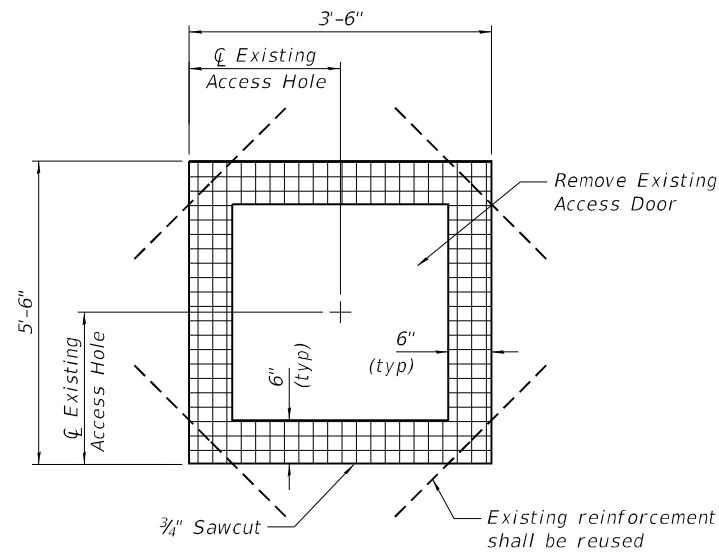
SHEET 19 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	30
CONTRACT NO. 64S40				

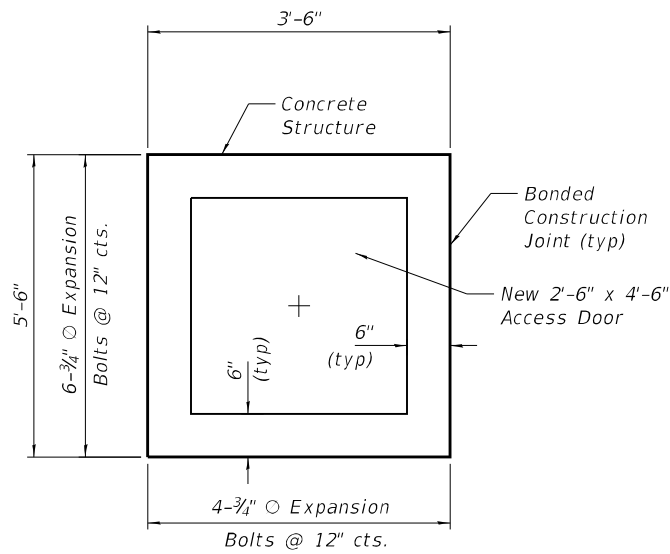
SD-19

ILLINOIS FED. AID PROJECT

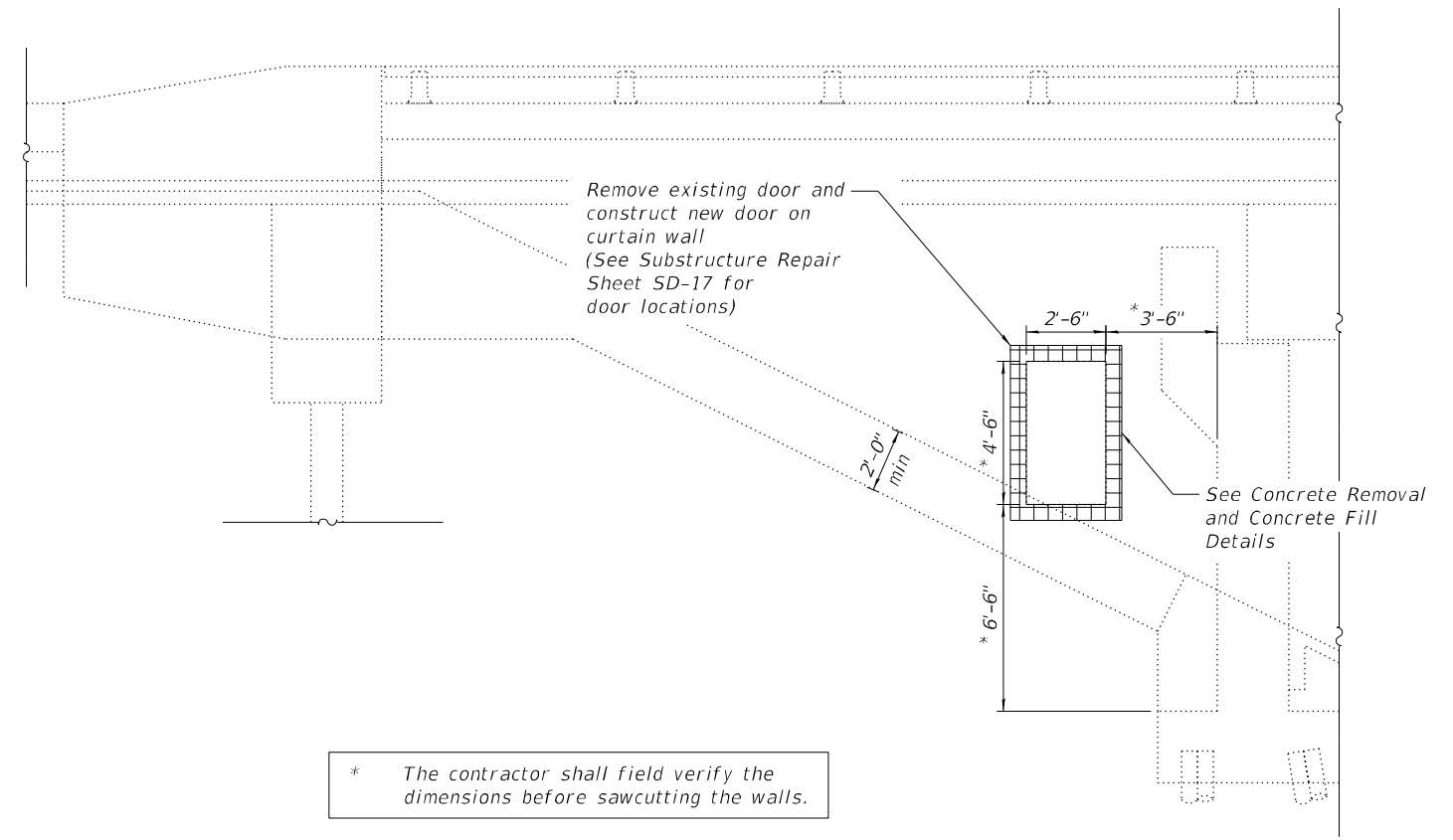
MODEL: General Plan Elevation  
 FILE NAME: C:\Users\jpush\OneDrive - QEI\QDoc\Consult\Projects\2112\_IDOT\_D2\_Var\Var\Bridge\400-Work\Work Order 11410-CADD\098-0091 - US 30 over I-88\SD20-Service Access Door Replacement.dgn  
 8/24/2023 11:40:48 AM



**CONCRETE REMOVAL AT EXISTING ACCESS DOOR**

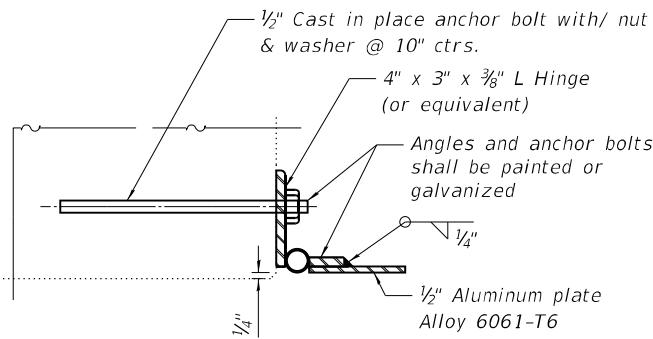


**CONCRETE FILL AT EXISTING ACCESS DOOR**

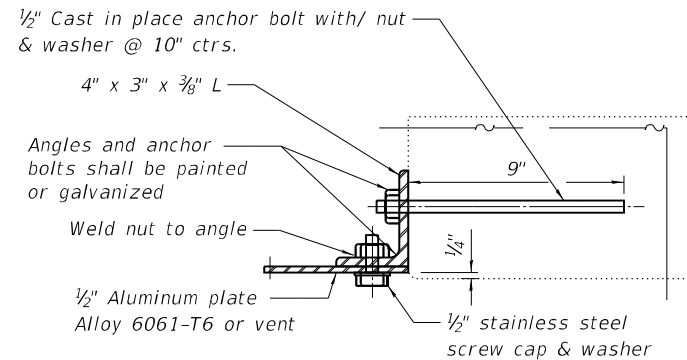


**CURTAIN WALL SIDE ELEVATION**  
 (SW Curtain Wall shown, NE Curtain Wall similar)

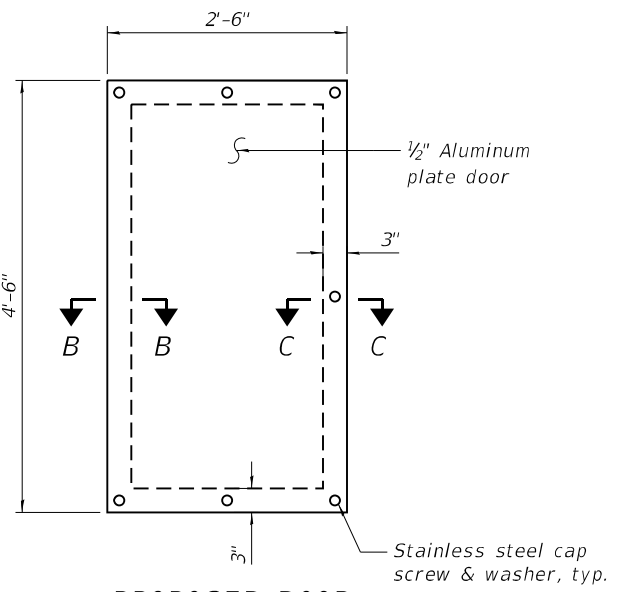
\* The contractor shall field verify the dimensions before sawcutting the walls.



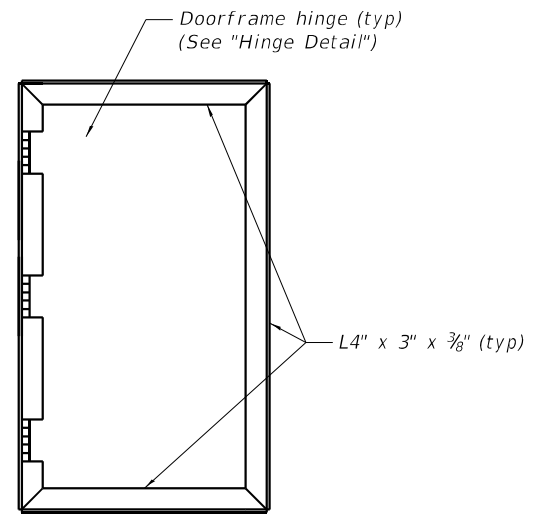
**SECTION B-B**  
 3" Leg of 4" x 3" L hinge  
 3 req'd per door



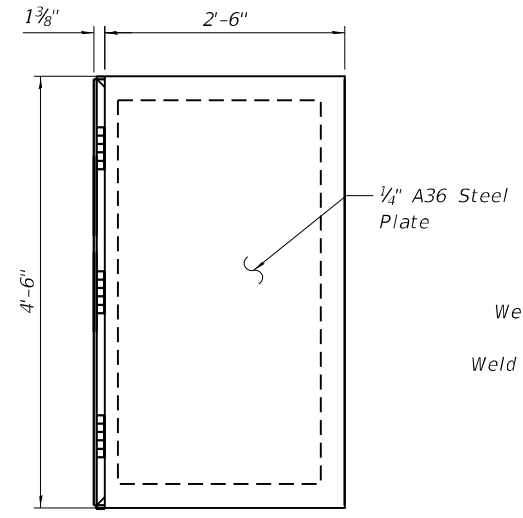
**SECTION C-C**  
 3" Leg of 4" x 3" L  
 5 Req'd per door  
 4 Req'd per vent



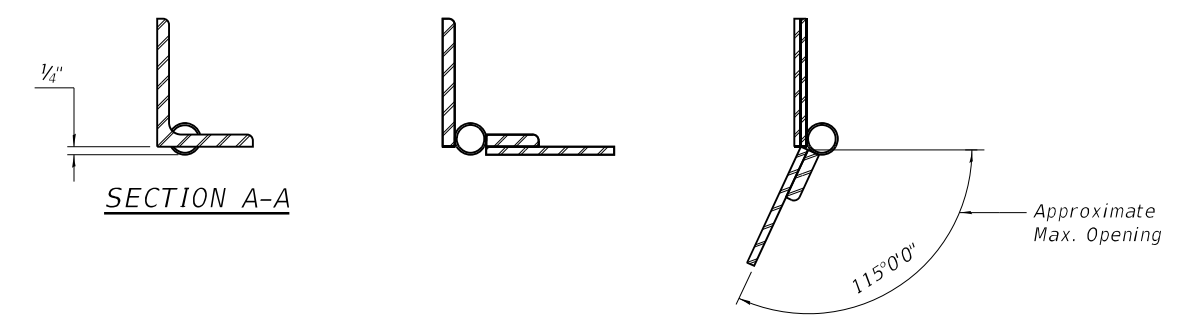
**PROPOSED DOOR**



**FRAME**



**FRAME WITH COVER**



**SECTION A-A**

**LEGEND:**

Concrete Removal for Access Door

**NOTES:**

- Remove and Replace Concrete, along with removal of the existing access door costs included in cost of "Access Door."
- Expansion bolts shall be 3/4" diameter hooked bolts & shall extend 9" min. into concrete. Cost included in cost of "Access Door"

**BILL OF MATERIAL**

Item	Unit	Quantity
Access Door	Each	2



USER NAME =	DESIGNED - KCM	REVISED -
PLOT SCALE =	CHECKED - JRT	REVISED -
PLOT DATE =	DRAWN - KCM	REVISED -
	CHECKED - JRT	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**VAULTED ABUTMENT DOOR DETAIL  
 US-30 OVER I-88 - SN 098-0091**

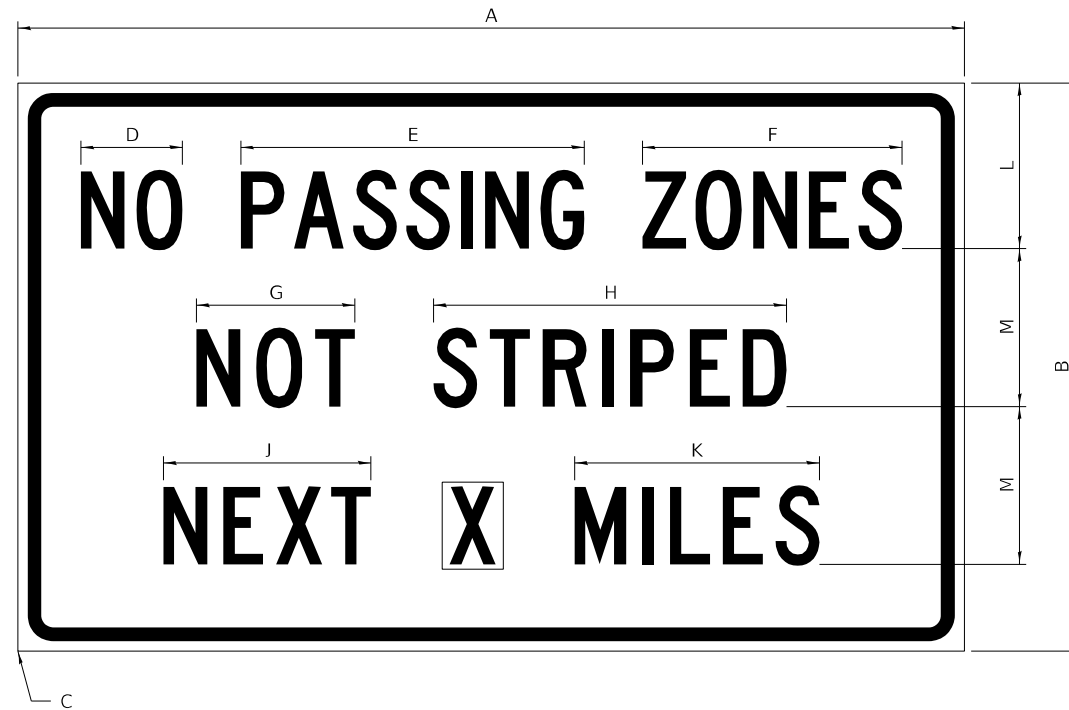
SHEET 20 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	31
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64S40	

SD-20

# WORK ZONE SIGN DETAILS

**ILLINOIS STANDARD G20-I100**



COLOR    LEGEND AND BORDER    BLACK    NON-REFLECTORIZED  
 BACKGROUND    ORANGE    REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

**GENERAL NOTES**

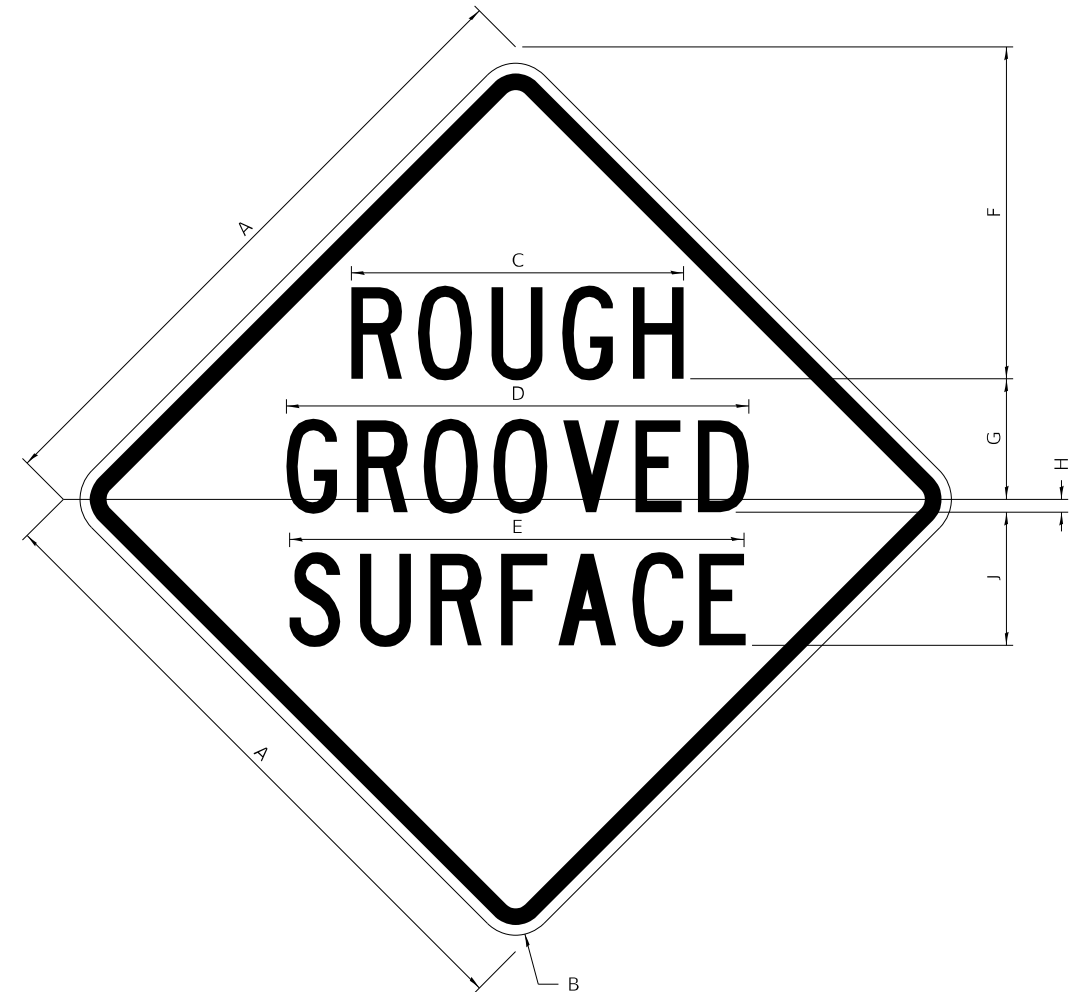
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

**ILLINOIS STANDARD W8-I107**



COLOR    LEGEND AND BORDER    BLACK    NON-REFLECTORIZED  
 BACKGROUND    ORANGE    REFLECTORIZED

SIGN SIZE	DIMENSIONS								
	A	B	C	D	E	F	G	H	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

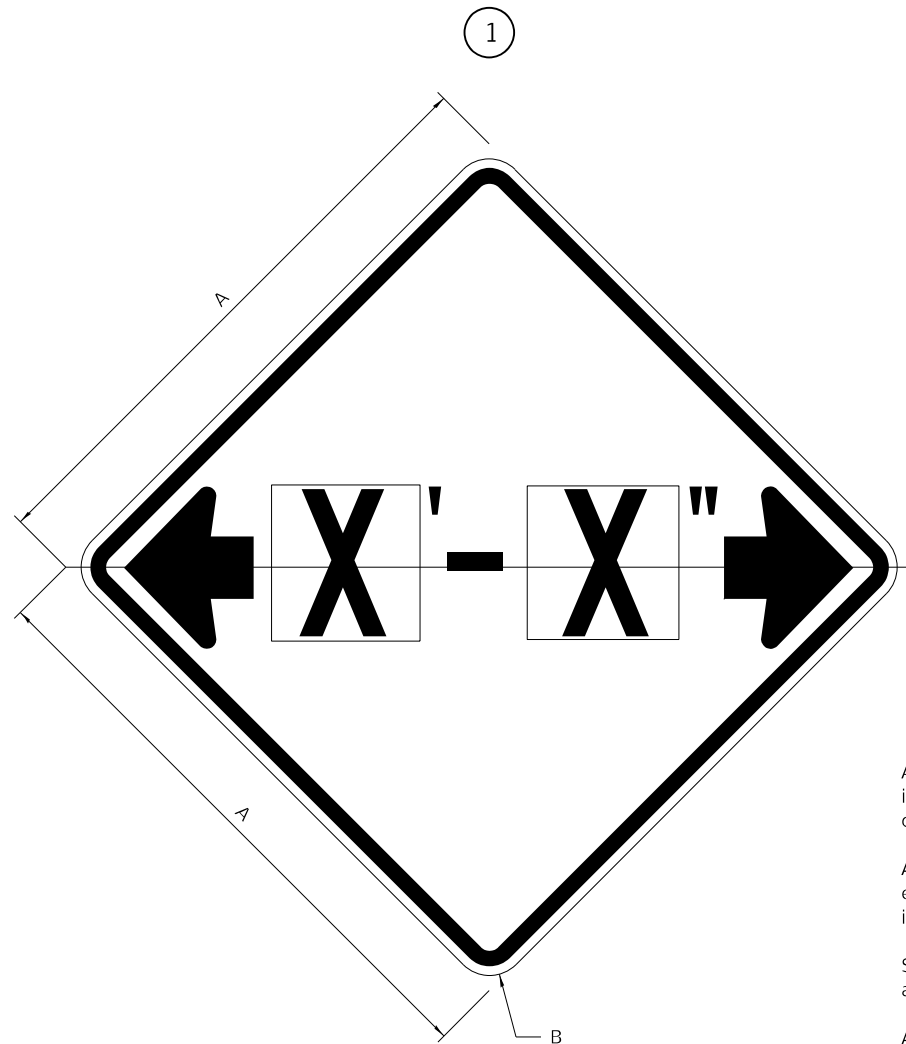
Sign not to scale

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -					88	(195-3HB-6)BDR	WHITESIDE	39	32
	PLOT DATE = 8/24/2023	CHECKED -	REVISED -					CONTRACT NO. 64540				
				SCALE: N.T.S.			SHEET 1 OF 4 SHEETS		STA. TO STA.		ILLINOIS FED. AID PROJECT	

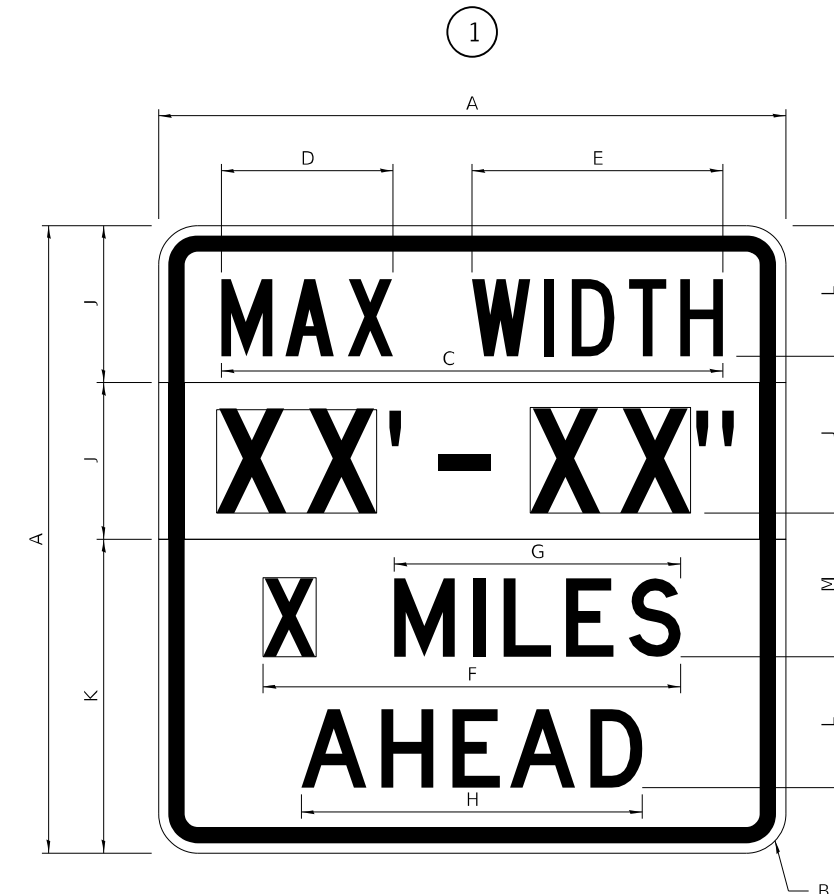


# WORK ZONE SIGN DETAILS

## ILLINOIS STANDARD W12-I102



## ILLINOIS STANDARD W12-I103



### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR LEGEND AND BORDER BACKGROUND BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

① Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

COLOR LEGEND AND BORDER BACKGROUND BLACK WHITE FL ORANGE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

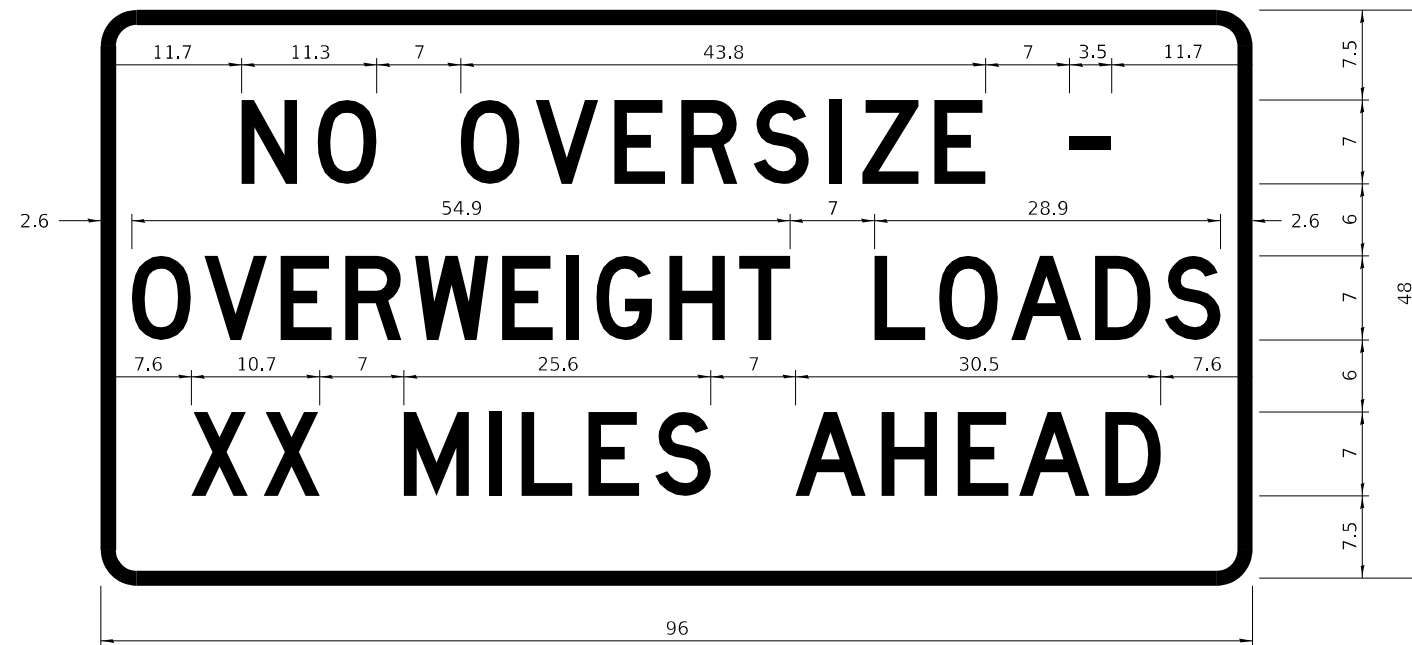
XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.I. RTE. 88	SECTION (195-3HB-6)BDR	COUNTY WHITESIDE	TOTAL SHEETS 39	SHEET NO. 33
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET 2 OF 4 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		CONTRACT NO. 64540		
	PLOT DATE = 8/24/2023	DATE -	REVISED -									

# WORK ZONE SIGN DETAILS

## ROAD CLOSED TO OVERSIZED LOADS

## STOP LINE SIGN FOR TEMPORARY SIGNALS



COLOR	LEGEND AND BORDER BACKGROUND	BLACK ORANGE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	--------------	---------------------------------

COLOR	LEGEND AND BORDER BACKGROUND	BLACK WHITE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	-------------	---------------------------------

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;  
 [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;  
 Table of letter and object lefts.

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

Sign not to scale

### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

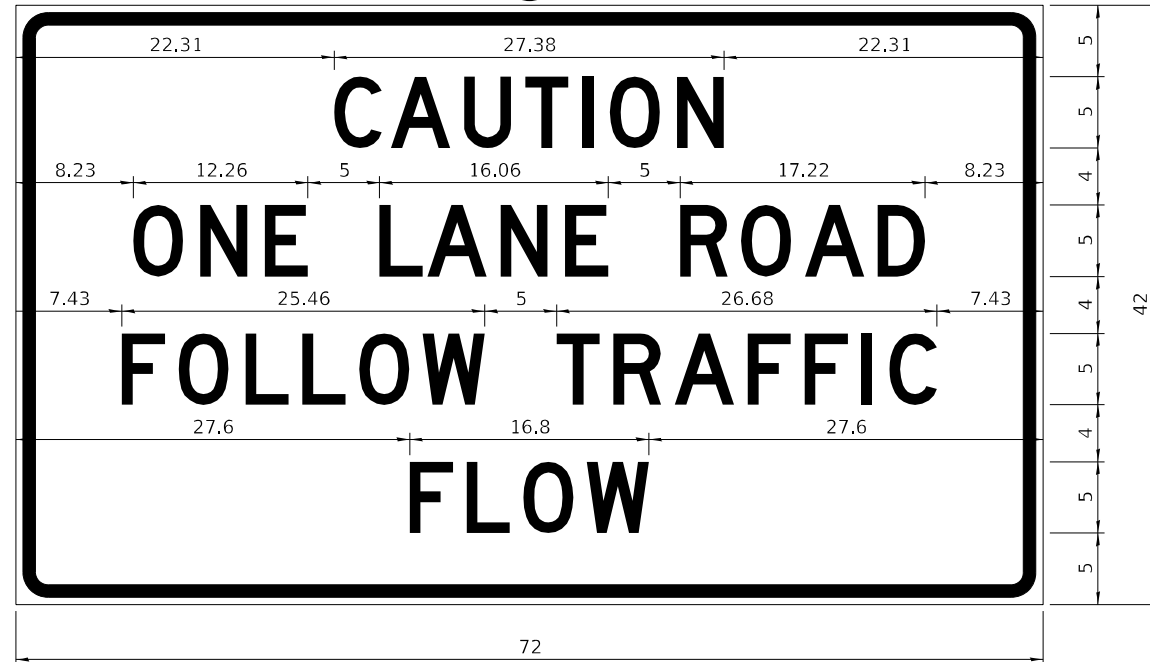
All dimensions are in inches unless otherwise noted.

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -		88	(195-3HB-6)BDR	WHITESIDE	39	34			
PLOT DATE = 8/24/2023	CHECKED -	REVISED -	SCALE: N.T.S.	SHEET 3	OF 4	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 64540			

**ENTRANCE SIGN FOR USE  
WITH TEMPORARY SIGNALS**

**WORK ZONE SIGN DETAILS**

②



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;  
[CAUTION] D; [ONE LANE ROAD] D;  
[FOLLOW TRAFFIC] D; [FLOW] D

② This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

**Table Of Widths And Spaces**

22.31	C	3.36	0.62	A	4.18	0.94	U	3.36	0.94	T	3.04	0.94	I	0.78	1.17	O	3.52	1.17	N	3.36	22.31
-------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	-------

8.23	O	3.51	1.17	N	3.36	1.18	E	3.04
------	---	------	------	---	------	------	---	------

5.00	L	3.05	0.31	A	4.18	0.94	N	3.36	1.17	E	3.05
------	---	------	------	---	------	------	---	------	------	---	------

5.00	R	3.36	0.93	O	3.52	0.94	A	4.18	0.93	D	3.36	8.23
------	---	------	------	---	------	------	---	------	------	---	------	------

7.43	F	3.04	0.94	O	3.52	1.17	L	3.04	0.94	L	3.05	0.94	O	3.51	0.94	W	4.37
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------

5.00	T	3.05	0.94	R	3.36	0.94	A	4.18	0.93	F	3.05	0.94	F	3.04	0.94	I	0.78	1.18	C	3.35	7.43
------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------	---	------	------

27.60	F	3.05	0.94	L	3.04	0.94	O	3.52	0.93	W	4.38	27.60
-------	---	------	------	---	------	------	---	------	------	---	------	-------

Sign not to scale

**GENERAL NOTES**

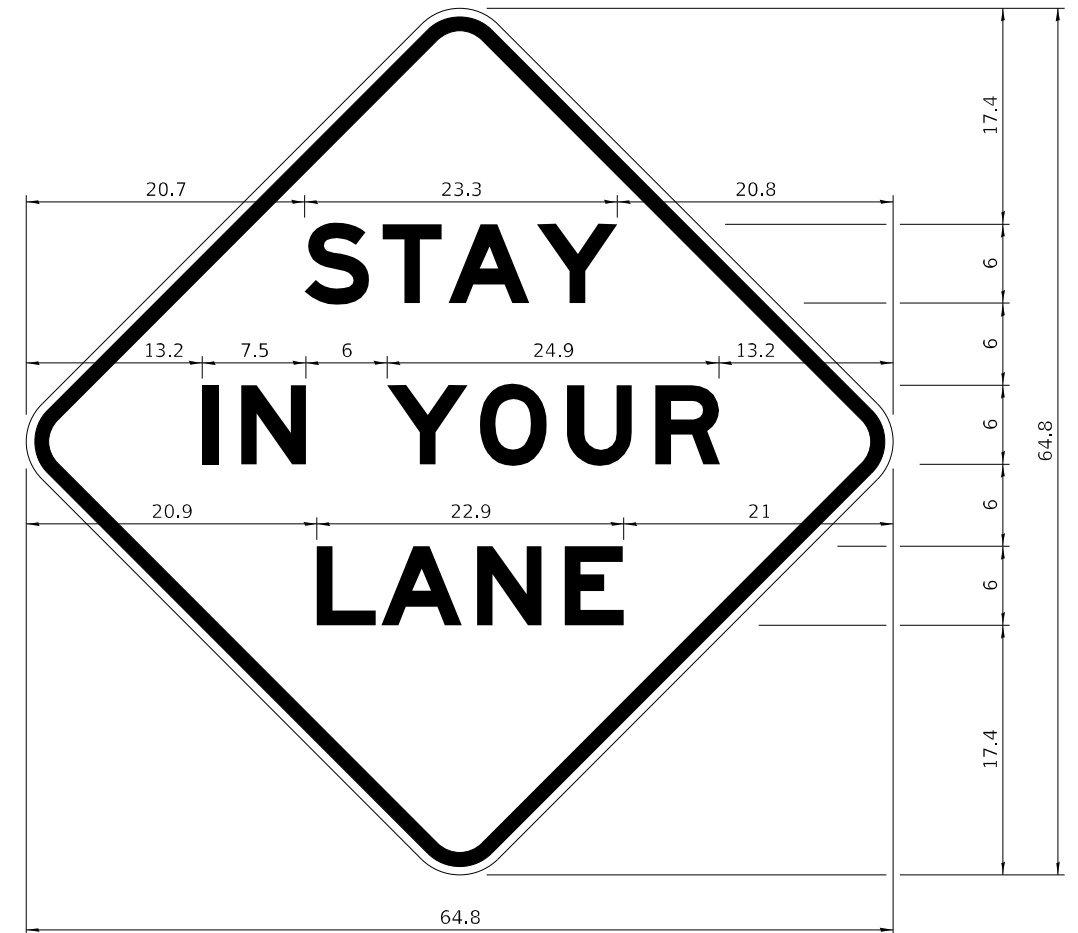
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

**STAY IN YOUR LANE**



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;  
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

**Table of Letter and Object Lefts**

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

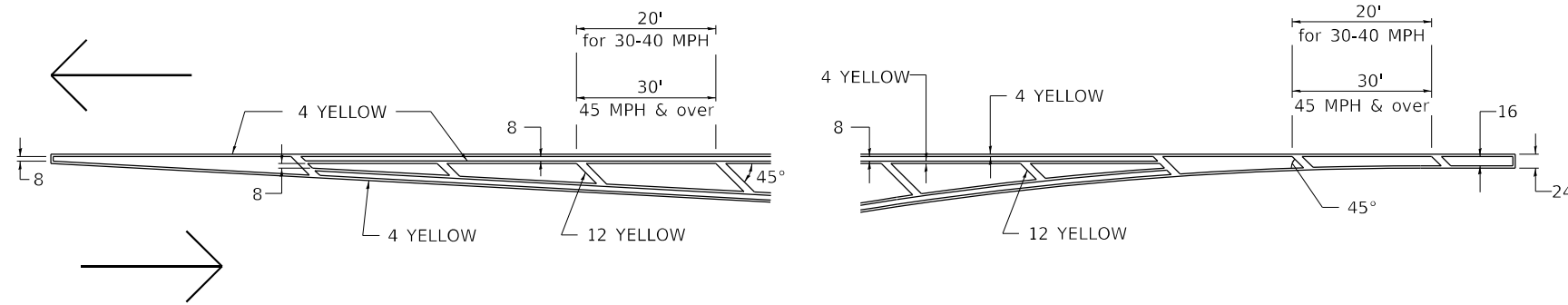
L	A	N	E
20.9	25.8	33.1	39.4

Sign not to scale

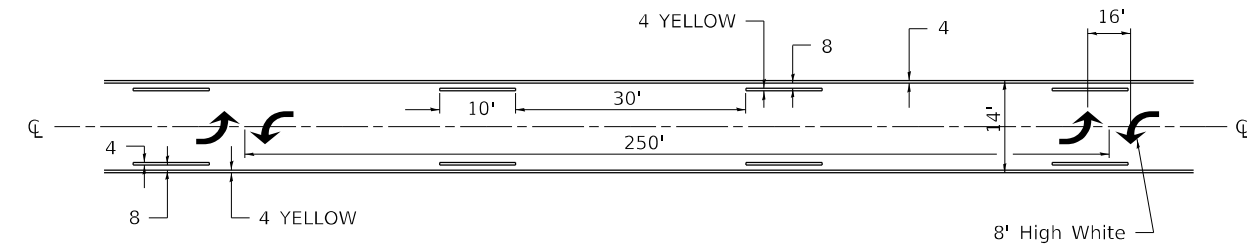
FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 3-02-16	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -		88	(195-3HB-6)BDR	WHITESIDE	35				
	PLOT DATE = 8/24/2023	CHECKED -	REVISED -		CONTRACT NO. 64540			ILLINOIS FED. AID PROJECT				
	DATE -	REVISED -	SCALE: N.T.S.		SHEET 4 OF 4 SHEETS	STA.	TO STA.					

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

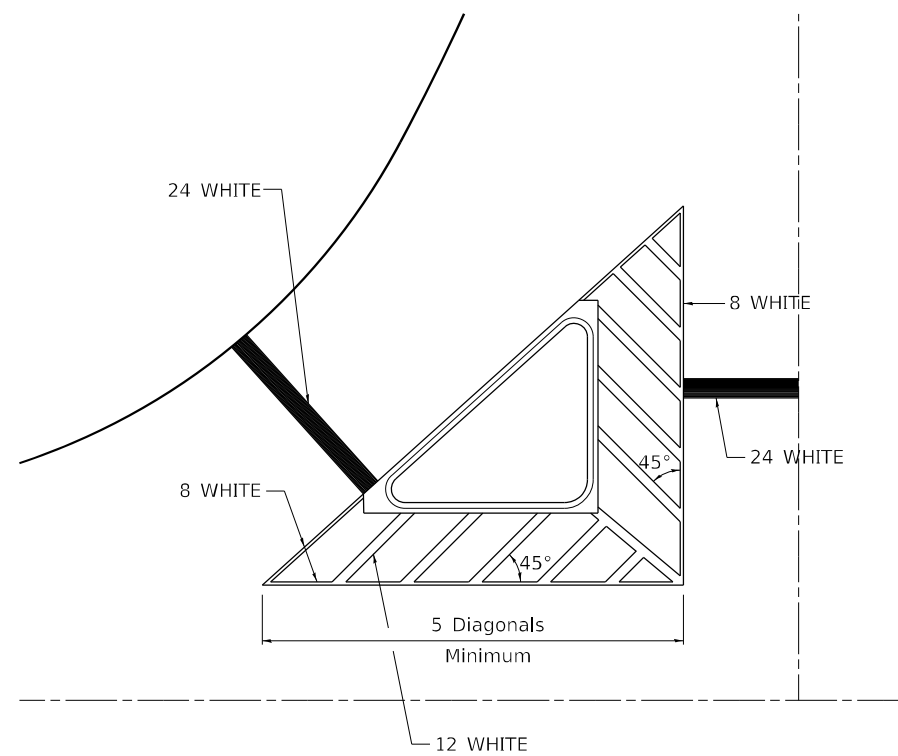


## MEDIAN PAVEMENT MARKING



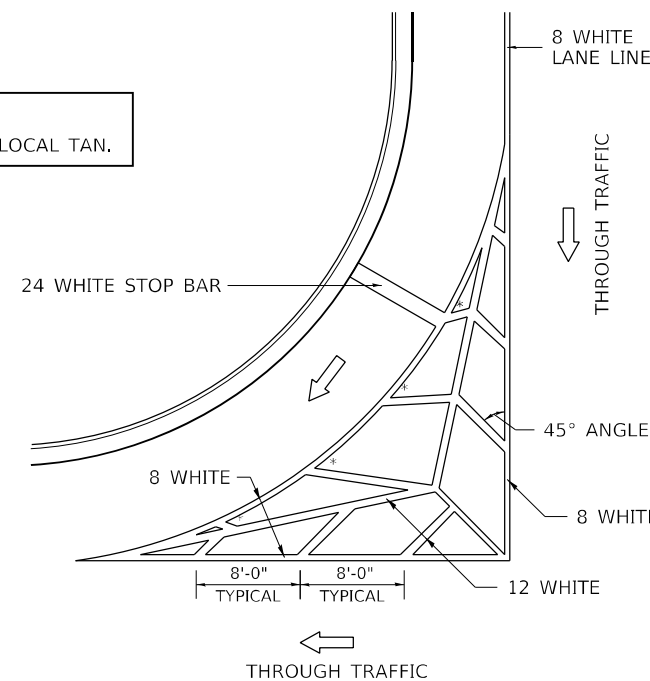
\*\* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH



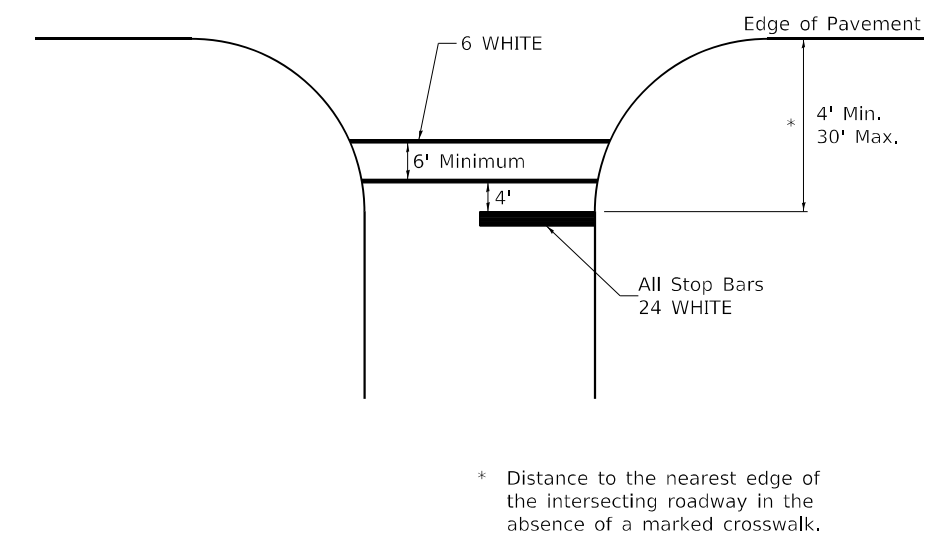
## TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:  
\* 45° TO LOCAL TAN.



## STANDARD CROSSWALK MARKING

See Schedules for Locations

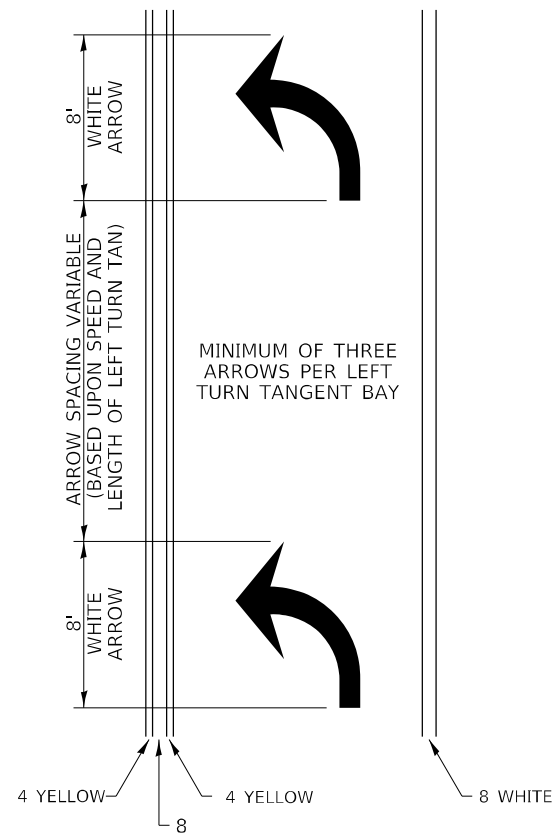


\* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.I. RTE. 88	SECTION (195-3HB-6)BDR	COUNTY WHITESIDE	TOTAL SHEETS 39	SHEET NO. 36
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - 3-05-12		SCALE: N.T.S.	SHEET 1 OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 64540				
	PLOT DATE = 8/24/2023	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

# TYPICAL PAVEMENT MARKINGS

## ARROW LAYOUT

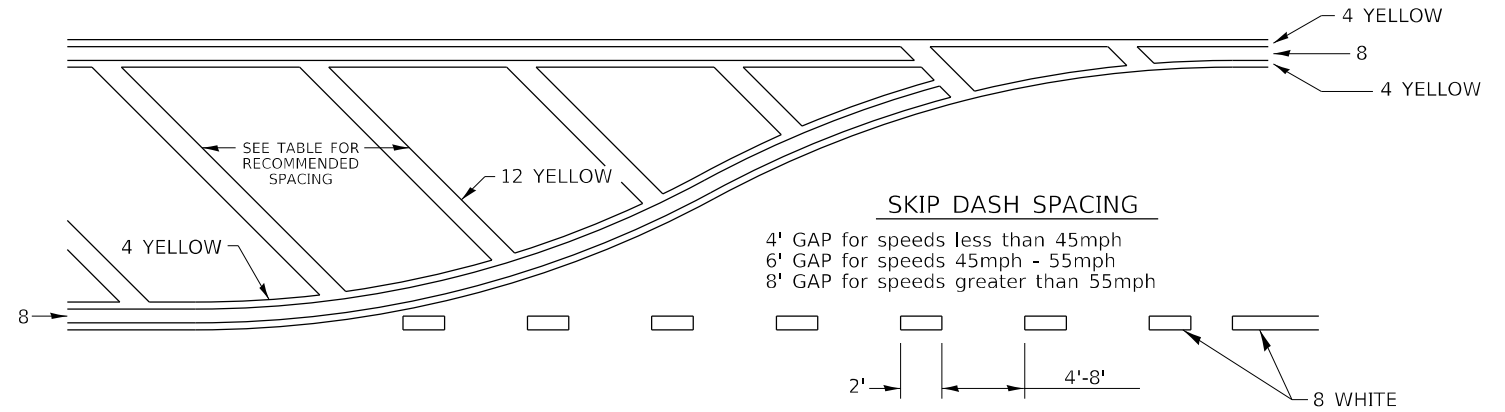


- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

6 at 40' O.C. APPROACH SIDE ONLY

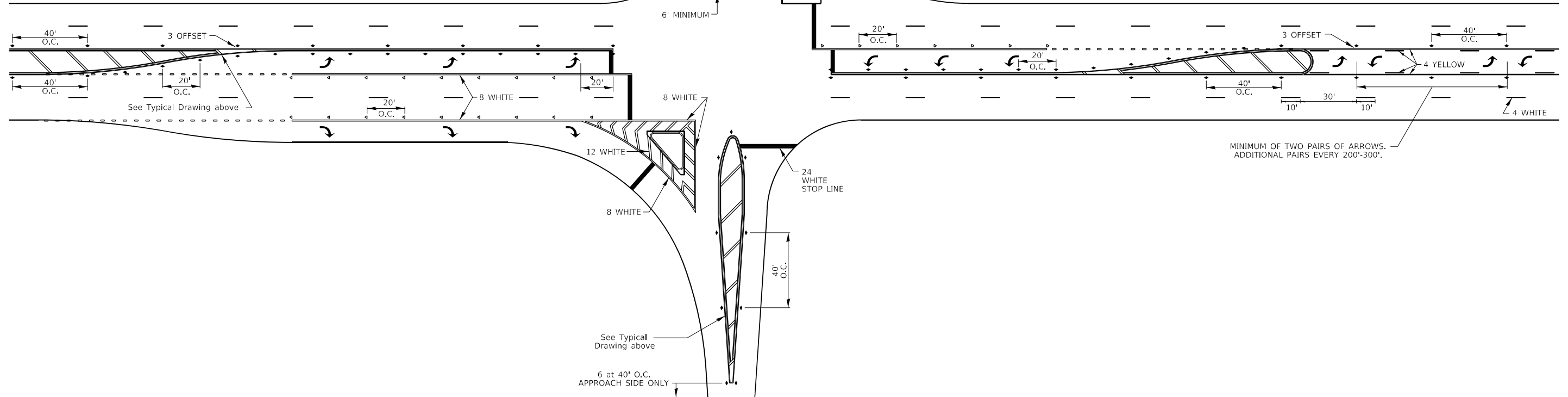
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



### RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

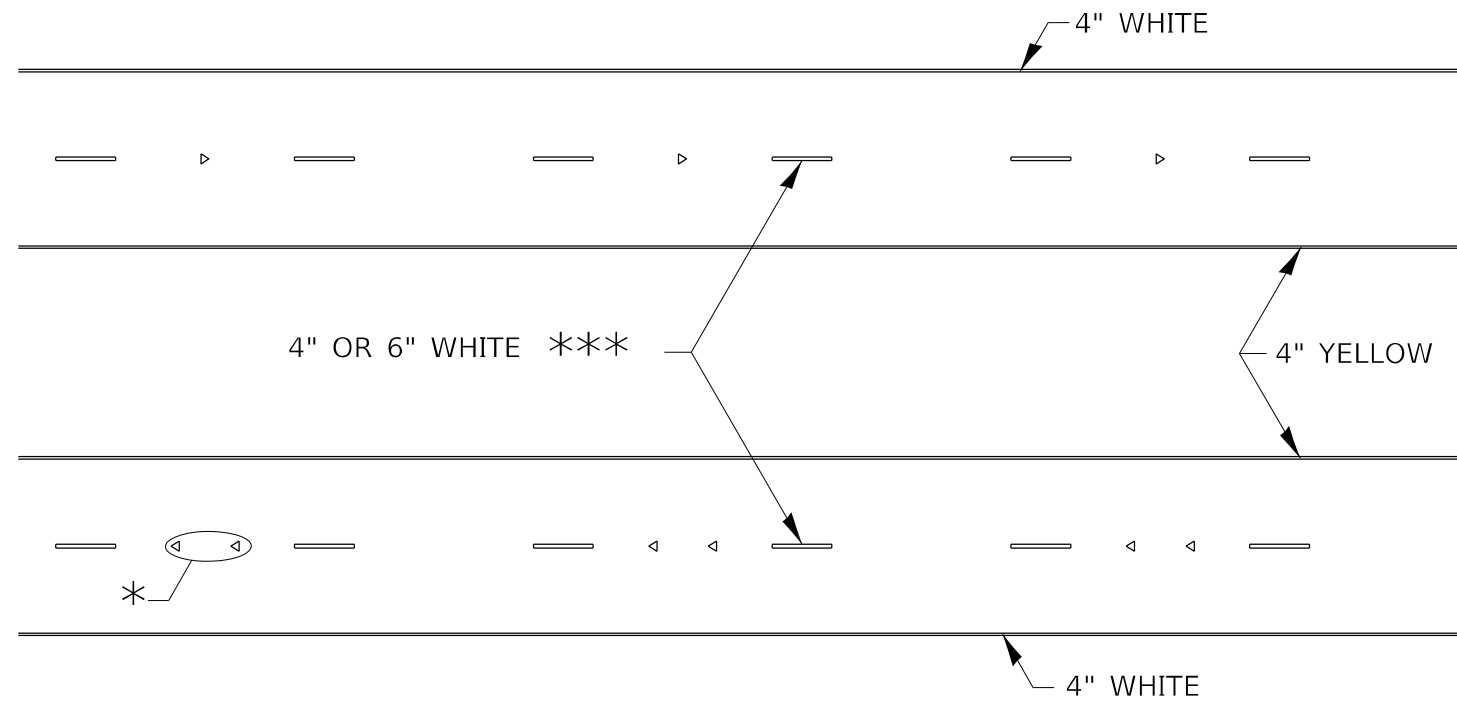
Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



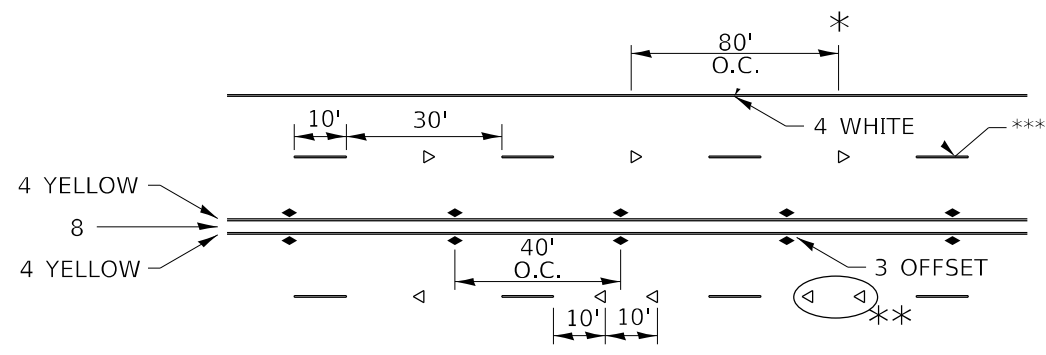
FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED - 3-05-12				88	(195-3HB-6)BDR	WHITESIDE	39	37
	PLOT DATE = 8/24/2023	CHECKED -	REVISED -		SCALE: N.T.S.	SHEET 2 OF 3 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

# TYPICAL PAVEMENT MARKINGS



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT  $\geq$  20,000.

## MULTI-LANE / DIVIDED



\* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

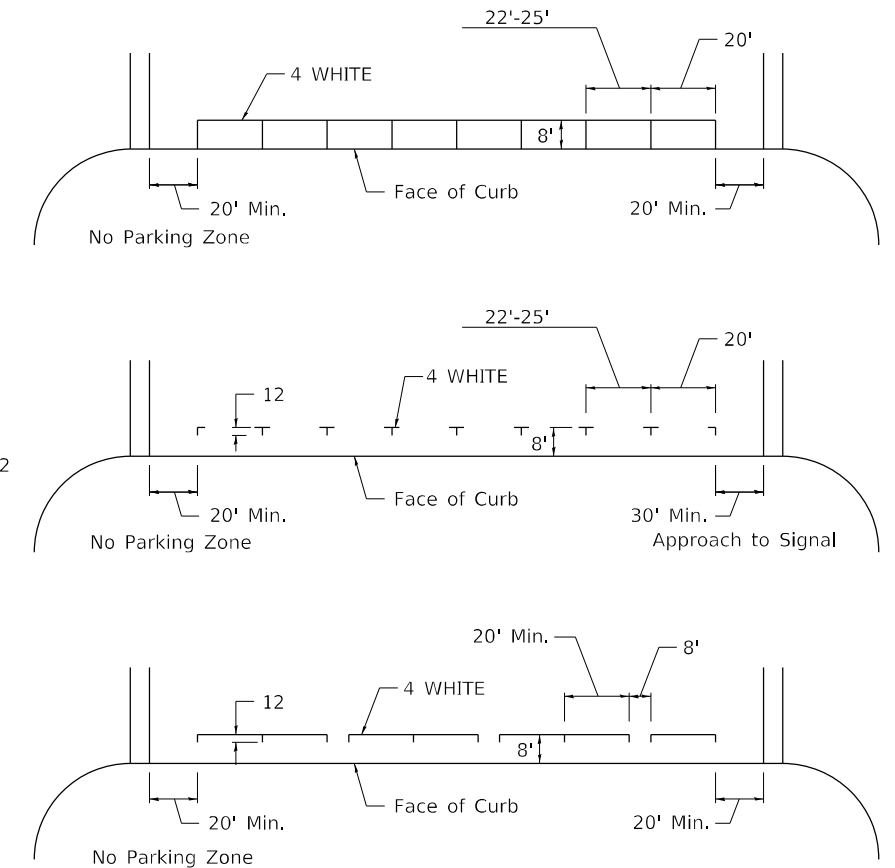
\*\* USE DOUBLE MARKERS WHEN ADT  $\geq$  20,000

\*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

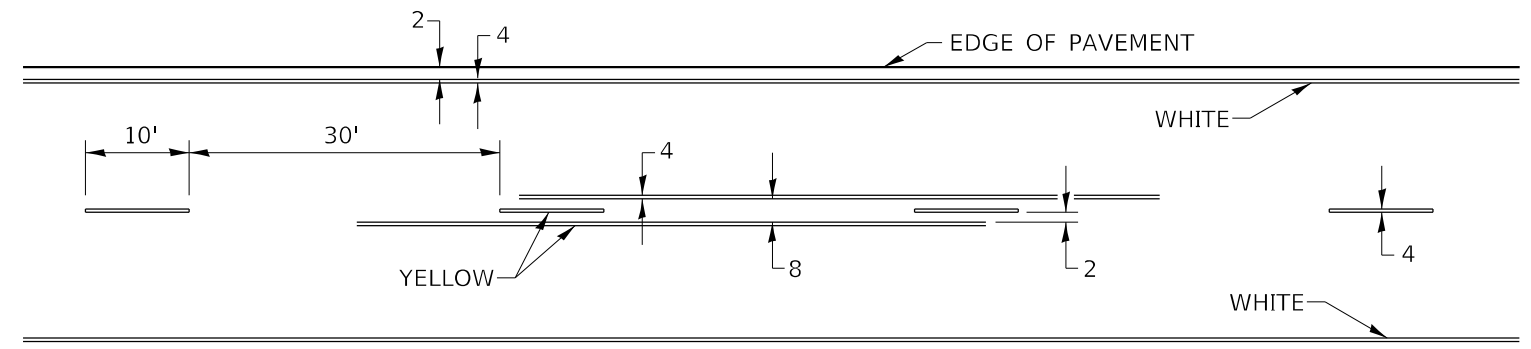
## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PARKING SPACING



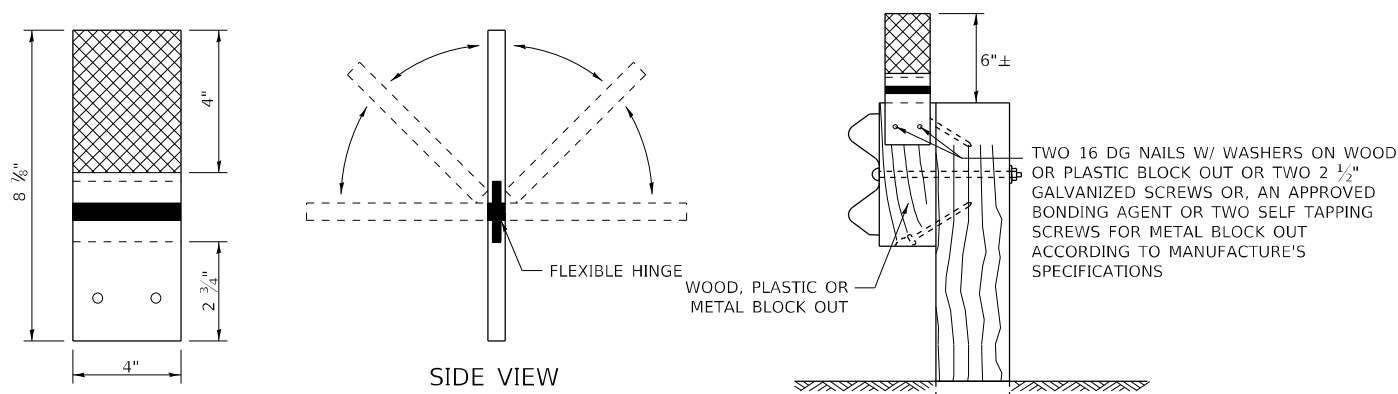
## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



## SYMBOLS

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 6-27-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED - 8-27-13					88	(195-3HB-6)BDR	WHITESIDE	39	38
	PLOT DATE = 8/24/2023	CHECKED -	REVISED - 11-28-12		SCALE: N.T.S.	SHEET 3	OF 3 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		
		DATE -	REVISED -					CONTRACT NO. 64540				

# GUARDRAIL AND BARRIER WALL REFLECTORS, TYPE C (SPECIAL)

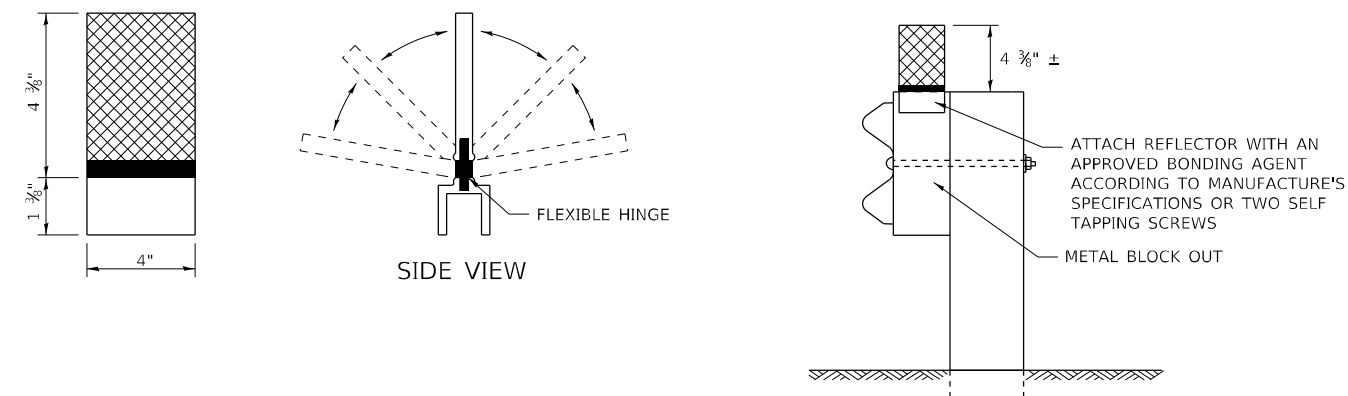


REFLECTORS SHALL BE MOUNTED DIRECTLY TO WOOD OR PLASTIC BLOCK OUTS.

REFLECTORS MOUNTED ON WOODEN OR PLASTIC BLOCK OUT SHALL BE MOUNTED USING TWO 16 DG NAILS AND TWO 3/16" WASHERS OR TWO 2 1/2" GALVANIZED SCREWS WITH WASHERS.

MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

## REFLECTORS MOUNTED ON WOOD OR PLASTIC GUARDRAIL BLOCK OUT



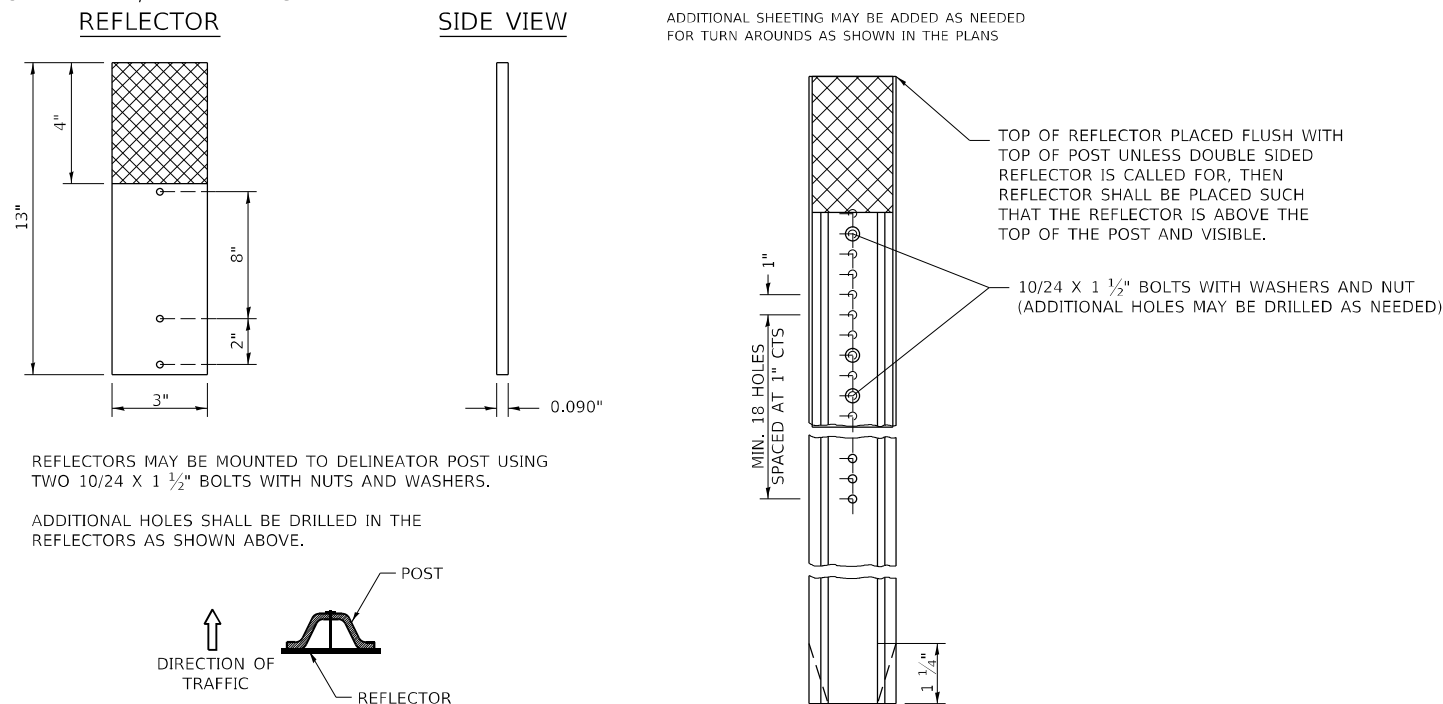
REFLECTORS SHALL BE MOUNTED DIRECTLY TO METAL BLOCK OUT.

REFLECTORS MOUNTED ON METAL BLOCK OUT SHALL BE MOUNTED USING AN APPROVED BONDING AGENT PER THE MANUFACTURE'S SPECIFICATIONS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.

MOUNTED ON A METAL GUARDRAIL BLOCK OUT

## REFLECTORS MOUNTED ON METAL GUARDRAIL BLOCK OUT

### STRAIGHT GUARDRAIL / DELINEATOR REFLECTOR



ADDITIONAL SHEETING MAY BE ADDED AS NEEDED FOR TURN AROUNDS AS SHOWN IN THE PLANS

TOP OF REFLECTOR PLACED FLUSH WITH TOP OF POST UNLESS DOUBLE SIDED REFLECTOR IS CALLED FOR, THEN REFLECTOR SHALL BE PLACED SUCH THAT THE REFLECTOR IS ABOVE THE TOP OF THE POST AND VISIBLE.

10/24 X 1 1/2" BOLTS WITH WASHERS AND NUT (ADDITIONAL HOLES MAY BE DRILLED AS NEEDED)

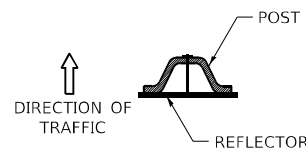
MIN. 18 HOLES SPACED AT 1" CTS

1 1/4"

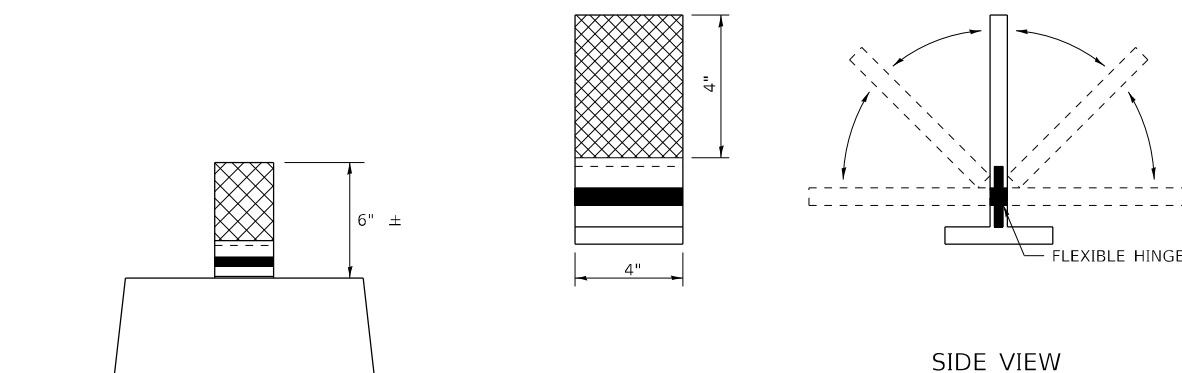
MOUNTED ON A DELINEATOR POST

REFLECTORS MAY BE MOUNTED TO DELINEATOR POST USING TWO 10/24 X 1 1/2" BOLTS WITH NUTS AND WASHERS.

ADDITIONAL HOLES SHALL BE DRILLED IN THE REFLECTORS AS SHOWN ABOVE.



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHECD AS SHOWN ABOVE.



NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS/NAILS, WASHERS OR AN APPROVED BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON CENTER BARRIER SHALL BE DOUBLE SIDE AND BOTH SIDES SHALL BE AMBER.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS SHALL BE SINGLE SIDED CRYSTAL.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

## REFLECTORS MOUNTED ON BARRIER WALL

FILE NAME: 64540_99_D2Details.dgn	USER NAME = jpush	DESIGNED -	REVISED - 4-27-23
	PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED - 6-21-21
	PLOT DATE = 8/24/2023	CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-3HB-6)BDR	WHITESIDE	39	39
			CONTRACT NO. 64540	
ILLINOIS FED. AID PROJECT				