

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
180	(06-1HB)BP-2	BUREAU	12	1
		ILLINOIS	CONTRACT NO. 66J43	

1. COVER SHEET
2. GENERAL NOTES
- 3 - 4. SUMMARY OF QUANTITIES
5. TYPICAL SECTION
6. TRAFFIC CONTROL AND PROTECTION, STANDARD 701400 (SPECIAL)
7. TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)
- 8 - 11. EXISTING STRUCTURE DETAILS: FOR INFORMATION ONLY
12. PAVEMENT MARKING DETAILS

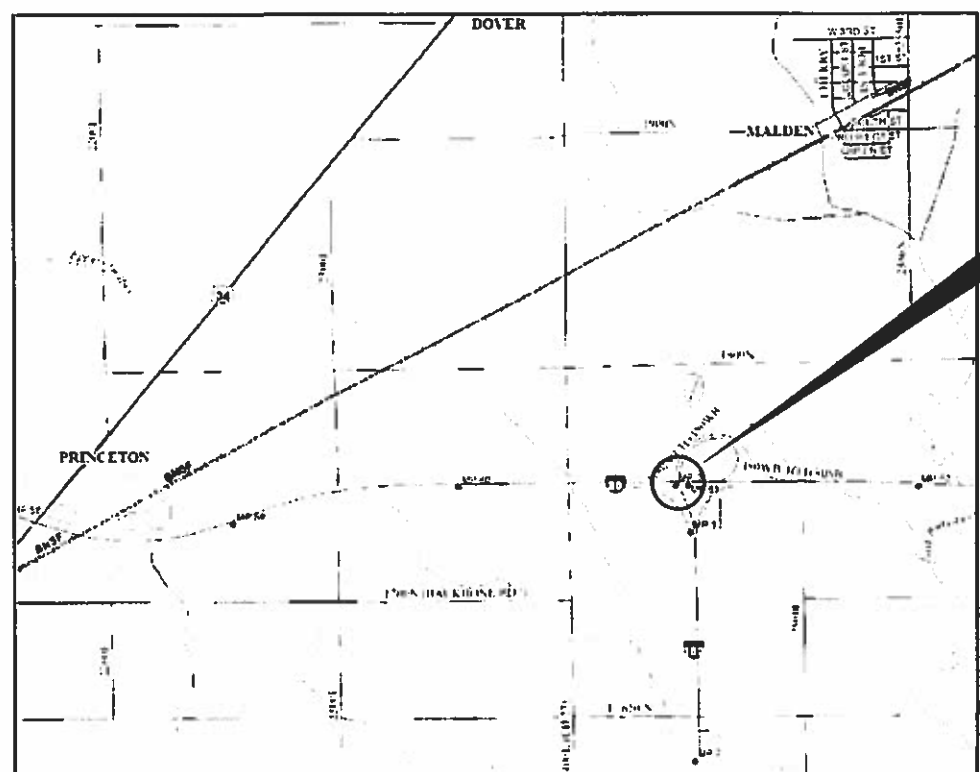
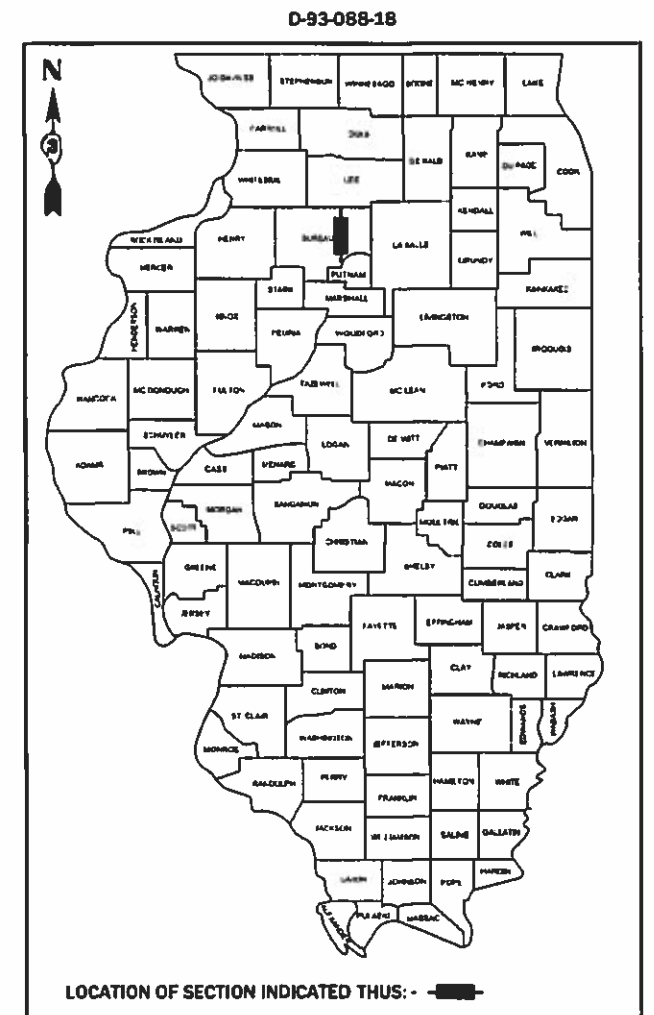
PROPOSED HIGHWAY PLANS

F.A.I. ROUTE 180 (I-180) SECTION (06-1HB)BP-2 PROJECT NHPP-MA4I(741) BRIDGE PAINTING BUREAU COUNTY

C-93-093-18

STANDARDS

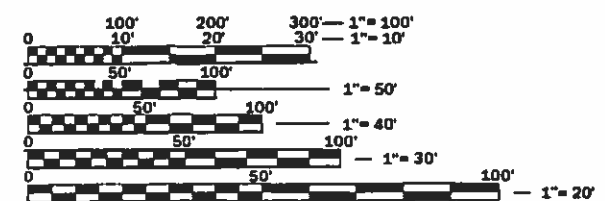
- | | |
|-----------|--|
| 000001-07 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 701101-05 | OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701106-02 | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY |
| 701201-05 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH |
| 701411-09 | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEEDS ≥ 45 MPH |
| 701426-09 | LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH |
| 701428-01 | TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY |
| 701901-08 | TRAFFIC CONTROL DEVICES |
| 704001-08 | TEMPORARY CONCRETE BARRIER |
| 780001-05 | TYPICAL PAVEMENT MARKINGS |
| 782006 | GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS |
| 701001-02 | OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY |
| 701006-05 | OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24" (600 mm) FROM PAVEMENT EDGE |
| 701301-04 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701400-09 | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY |
| 701402-12 | LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER |



PROJECT LOCATION

STRUCTURE NO. 'S
006-0038 (NB) & 006-0039 (SB)
CARRYING F.A.I. 180 (I-180)
OVER F.A.I. 80 (I-80)
4 MILES EAST OF PRINCETON

FUNCTIONAL CLASSIFICATION	
RURAL - INTERSTATE F.A.I. ROUTE 180 (I-180) 2017 ADT = 2300 P.V. 45.9% S.U. 5.2% M.U. 48.9%	RURAL - INTERSTATE F.A.I. ROUTE 80 (I-80) 2017 ADT = 20,200 P.V. 58.1% S.U. 3.8% M.U. 38.1%



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: JOE KANNEL, P.E.
UNIT CHIEF: RON WOODSHANK
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66J43

STRUCTURE NO. 006-0038
GROSS LENGTH = 206.51 FT. = 0.039 MILE
NET LENGTH = 206.51 FT. = 0.039 MILE

STRUCTURE NO. 006-0039
GROSS LENGTH = 205.95 FT. = 0.039 MILE
NET LENGTH = 205.95 FT. = 0.039 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 10-18-2018
[Signature]
REGIONAL ENGINEER

Dec 7 2018
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

Dec 7 2018
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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 WORK; HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
2. STRUCTURE NO. 006-0038 (NB) SHALL BE DESIGNATED AS "LOCATION 1". STRUCTURE NO. 006-0039 (SB) SHALL BE DESIGNATED AS "LOCATION 2".
3. THE EXISTING STRUCTURAL STEEL CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THE PROJECT.
4. THE SSPC-QP1 AND SSPC-QP2 "PAINTING CONTRACTOR CERTIFICATIONS" WILL BE REQUIRED FOR THIS PROJECT.
5. A MINIMUM OF TWO AIR MONITORS SHALL BE REQUIRED FOR EACH STRUCTURE. THE CONTRACTOR SHALL FURNISH AND INSTALL THE MONITORS AS SHOWN ON PLAN DETAILS. (SEE THE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES".)
6. CLEANING AND PAINTING OF EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES" AND AS SPECIFIED BELOW.
 - a) ALL EXISTING STRUCTURAL STEEL, (INCLUDING BEAMS, DIAPHRAGMS, CROSS/LATERAL FRAMING WHEN PRESENT, BEARING ASSEMBLIES AND ALL OTHER ASSOCIATED STEEL COMPONENTS SHALL BE CLEANED PER THE REQUIREMENTS OF "NEAR WHITE BLAST CLEANING - SSPC-SP-10".
 - b) ALL EXISTING STRUCTURAL STEEL, (INCLUDING BEAMS, DIAPHRAGMS, CROSS/LATERAL FRAMING WHEN PRESENT, BEARING ASSEMBLIES AND ALL OTHER ASSOCIATED STEEL COMPONENTS SHALL BE PAINTED PER THE REQUIREMENTS OF "PAINT SYSTEM 1 - OZ/E/U".
 - 1) THE FINAL FINISH COAT FOR ALL INTERIOR STRUCTURAL STEEL SHALL BE "GRAY, MUNSELL NO. 5B 7/1".
 - 2) FINISH COAT FOR EXTERIOR FACE, BOTTOM FLANGE AND BEARING ASSEMBLIES OF THE FASCIA BEAMS SHALL BE "GREEN, MUNSELL NO. 7.5G 1/2".
7. THE CONTRACTOR SHALL BE REQUIRED TO SECURE WASTE CONTAINERS THAT REMAIN ON THE JOB SITE. THIS WILL ENTAIL THAT ALL WASTE CONTAINERS CAN NOT BE MOVED OR OPENED DURING NON-WORKING HOURS.
8. WORKING DAYS SHALL BE CHARGED UNTIL THE CONTRACTOR/SUBCONTRACTOR LISCENSED TO DISPOSE OF LEAD PAINT RESIDUES HAS REMOVED THE WASTE MATERIAL FROM THE JOB SITE ACCORDING TO ALL FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES. IF THE LISCENSED CONTRACTOR OR SUBCONTRACTOR FAILS TO DISPOSE OF THE LEAD PAINT RESIDUES ON OR BEFORE THE SPECIFIED COMPLETION DATE, LIQUIDATED DAMAGES SHALL BE CHARGED PER CALENDAR DAY ACCORDING TO ARTICLE 108.09 OF THE STANDARD SPECIFICATIONS UNTIL SUCH TIME THAT ALL PAINT RESIDUE MATERIALS HAVE BEEN PROPERLY REMOVED AND DISPOSED OF.

COMMITMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

SUPERVISING CONSTRUCTION FIELD ENGINEER

RESIDENT ENGINEER / TECHNICIAN

START & END DATES
OF CONSTRUCTION:

INSPECTORS:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: Don Beauil
DISTRICT STUDIES & PLANS ENGINEER

DATE: 10-18-18

EXAMINED BY: Kyle Vidgaur
DISTRICT CONSTRUCTION ENGINEER

Michael A. Short
DISTRICT MATERIALS ENGINEER

Tom H. Hagan
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = woodshankr	DESIGNED - JW	REVISED -
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	PLOT SCALE = 100.0000 / in.	CHECKED - RW	REVISED -
Default	PLOT DATE = 8/10/2018	DATE - 04/30/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
180	(06-1HB)BP-2		12	2
CONTRACT NO. 66J43				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE PAINTING	
				90% FEDERAL BRIDGE	10% STATE BRIDGE
				0047	0047
				S.N. 006-0038	S.N. 006-0039
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2	1	1
70400100	TEMPORARY CONCRETE BARRIER	FOOT	425	425	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1275	425	850
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	1	1	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3	1	2
Δ 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	3410	1705	1705
Δ 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	920	460	460
X0325969	PORTABLE, VEHICLE MOUNTED CHANGEABLE MESSAGE BOARD	CAL DA	325	162.5	162.5
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1500	750	750
X2700001	TEMPORARY RUMBLE STRIPS (SPECIAL)	EACH	4	2	2
X5067501	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 1	L SUM	1	1	
X5067502	BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 2	L SUM	1		1
X7010208	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	1	0.5	0.5

Δ SPECIALTY ITEMS

FILE NAME =	USER NAME = woodshank1	DESIGNED - JW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 100.0000' / in.	CHECKED - RW	REVISIONS -		CONTRACT NO. 66J43			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 8/10/2018	DATE - 05/14/2018	REVISIONS -		SCALE:	SHEET 1	OF 2	SHEETS	STA.	TO STA.		

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				BRIDGE PAINTING	
				90% FEDERAL BRIDGE	10% STATE BRIDGE
				0047	0047
				S.N. 006-0038	S.N. 006-0039
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1

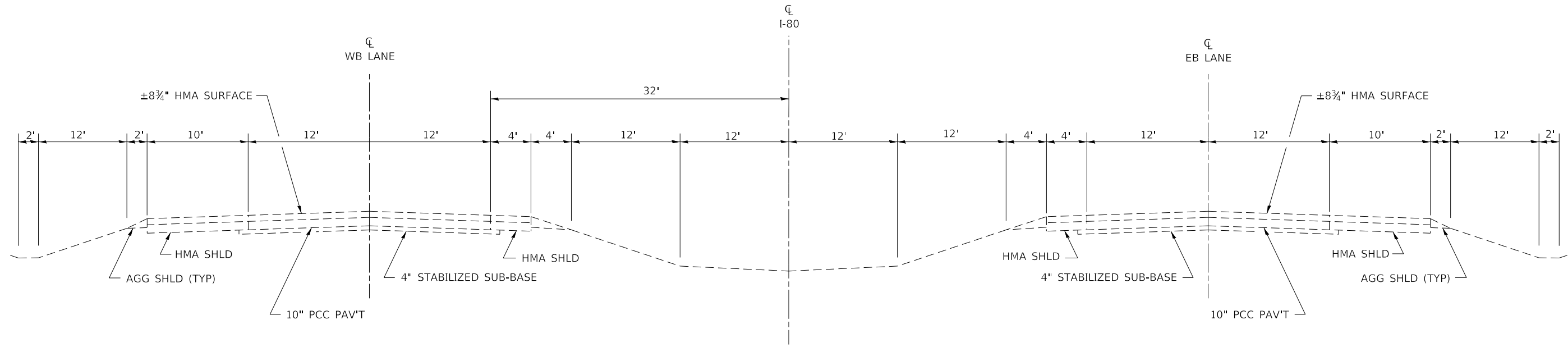
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	PLOT DATE = 8/10/2018		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

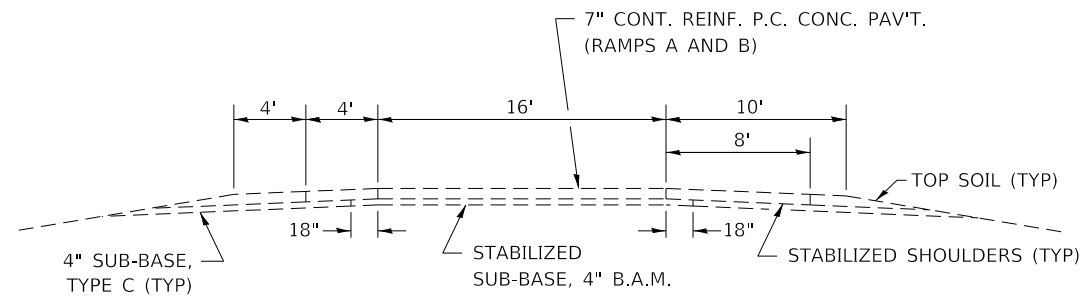
SUMMARY OF QUANTITIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 66J43	
		ILLINOIS FED. AID PROJECT		

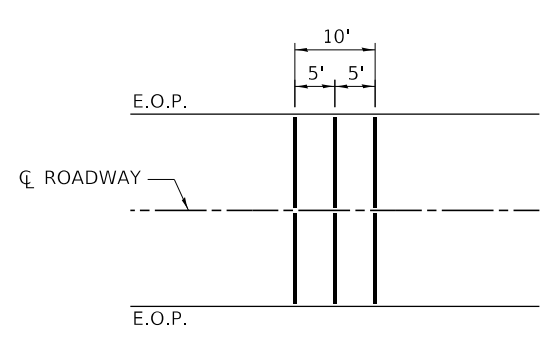
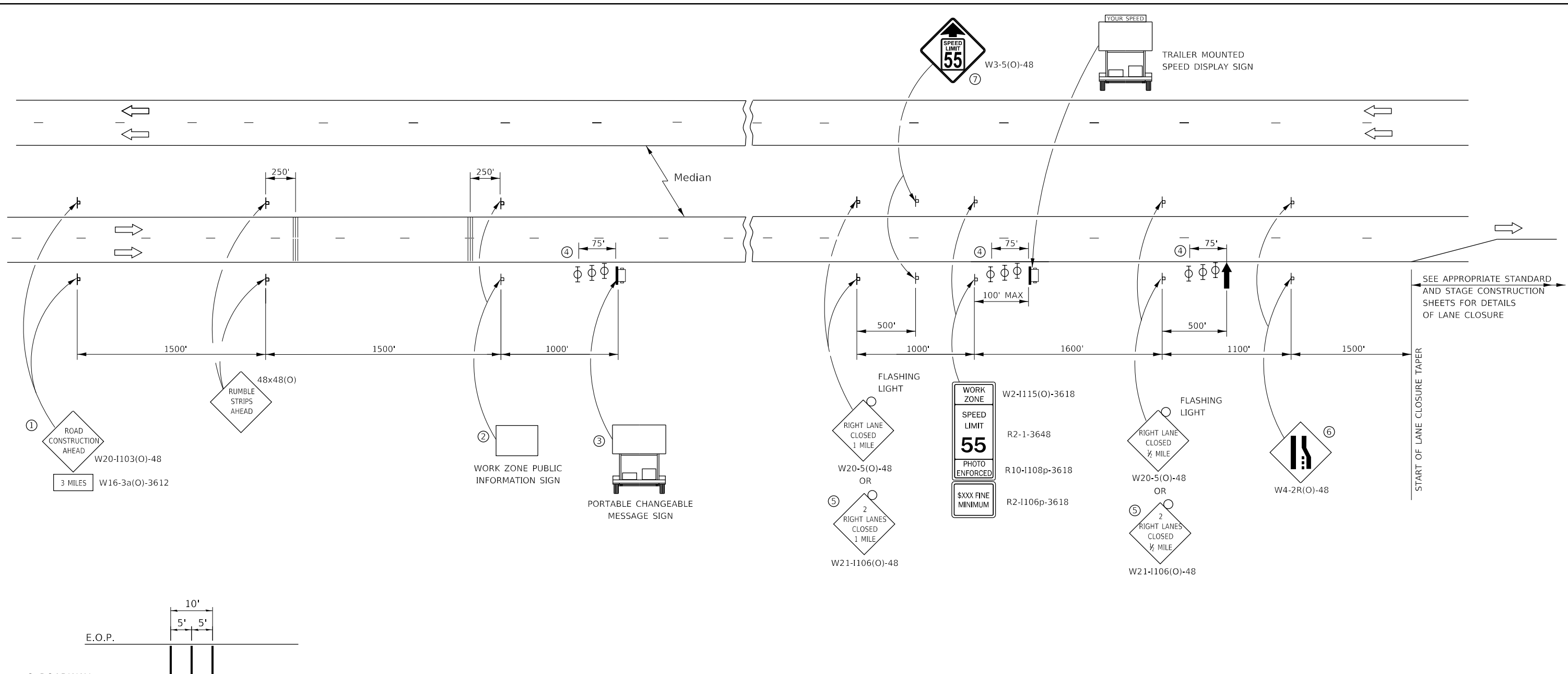


**TYPICAL SECTION
I-80**



**TYPICAL SECTION
I-180 AT I-80
INTERCHANGE RAMPS A AND B**

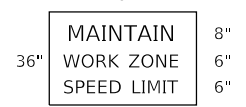
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\$MODELNAME\$		CHECKED - RW	REVISED -		CONTRACT NO. 66J43							
		DATE - 04/30/2018	REVISED -		SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT



TEMPORARY RUMBLE STRIP (SPECIAL)

- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:
"RIGHT LANE CLOSED" / " x MILES AHEAD"
"LEFT LANE CLOSED" / " x MILES AHEAD"
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.
- ⑦ THIS SIGN SHALL ONLY BE USED IF THE EXISTING SPEED LIMIT IS GREATER THAN 65 MPH.

- ⑧ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS.



- ↑ ARROW BOARD
- ☐ PORTABLE CHANGEABLE MESSAGE SIGN
- ⊥ SIGN
- ⊕ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT
- ↘ LANE DROP ARROW - SEE STANDARD 780001
- ▤ TEMPORARY RUMBLE STRIPS (SPECIAL) (SEE DETAIL & SPECIAL PROVISION)

GENERAL NOTE:

THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

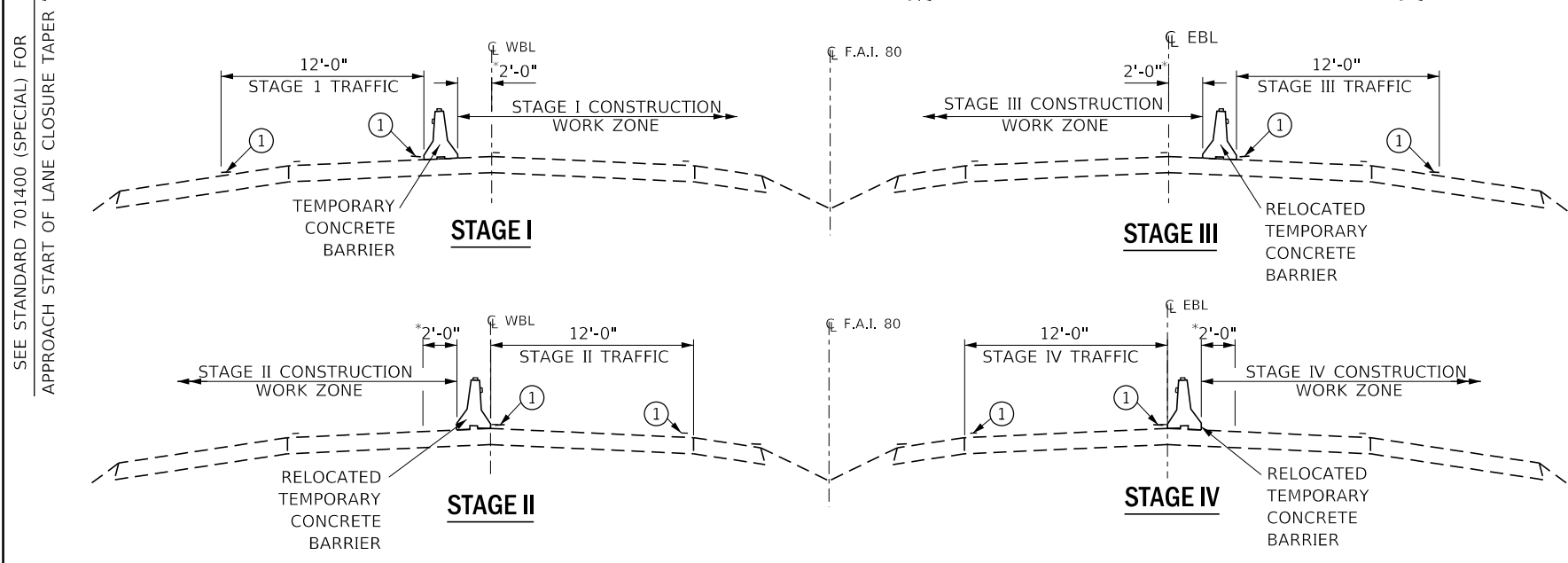
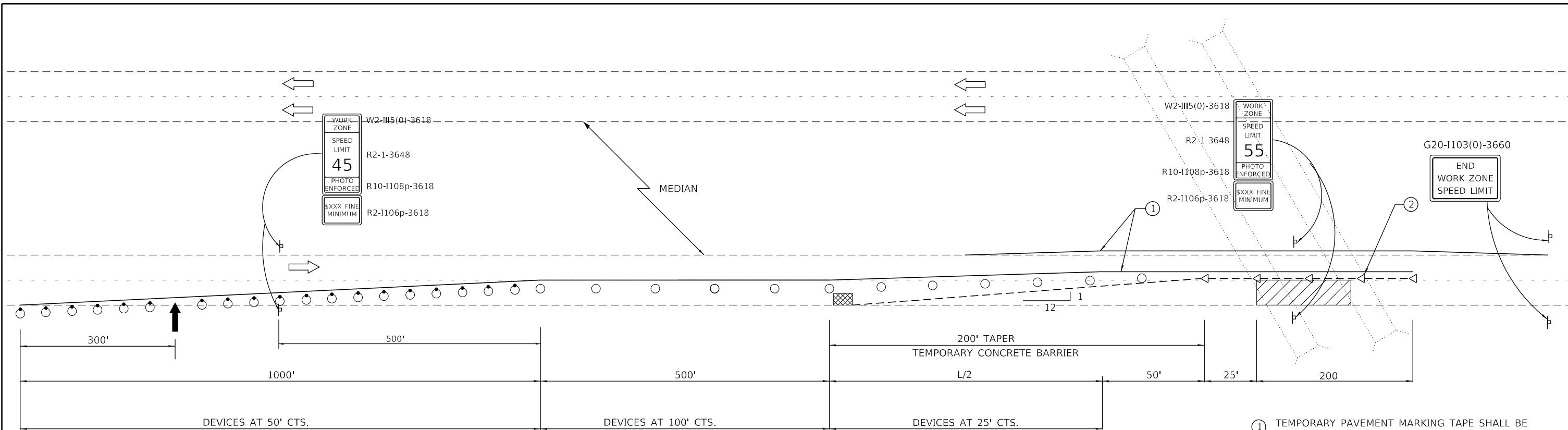
WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

SEE SPECIAL PROVISIONS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = woodshank1	DESIGNED - JW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION, STANDARD 701400 (SPECIAL)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw\01\084EB\INTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\0366\43\CADData\66J43-cover.dgn		DRAWN - JW	REVISED -			180	(06-1H)BP-2	BUREAU	12	6	
Default	PLOT SCALE = 100,0000' / in.	CHECKED - RW	REVISED -			CONTRACT NO. 66J43					
	PLOT DATE = 7/25/2018	DATE - 04/30/2018	REVISED -			SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	



- ① TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND ALONG-SIDE THE WORK AREA. THE RIGHT EDGE LINE SHALL BE WHITE AND THE LEFT EDGE LINE SHALL BE YELLOW.
- ② BARRIER WALL/GUARDRAIL MARKERS AT 25' (7.6 M). MARKERS ON RIGHT SHALL BE CRYSTAL AND MARKERS ON LEFT SHALL BE AMBER.

GENERAL NOTES

THIS STANDARD IS USED WHERE AT ANY TIME ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES WILL ENCR OACH ON THE PAVEMENT OR ON THE SHOULDER WITHIN 24 (600) OF THE EDGE OF PAVEMENT FOR DAYLIGHT OPERATION EXCEEDING ONE DAY AND WHERE TEMPORARY CONCRETE BARRIER IS UTILIZED.

THIS STANDARD MUST ALWAYS BE USED IN COMBINATION WITH STANDARD 701400.

WHEN WORK IS BEING PERFORMED IN THE LEFT LANE, THE SET UP WOULD BE A MIRROR IMAGE TO WHAT IS SHOWN.

TEMPORARY CONCRETE BARRIER SHALL BE ACCORDING TO STANDARD 704001.

CALCULATE L AS FOLLOWS:

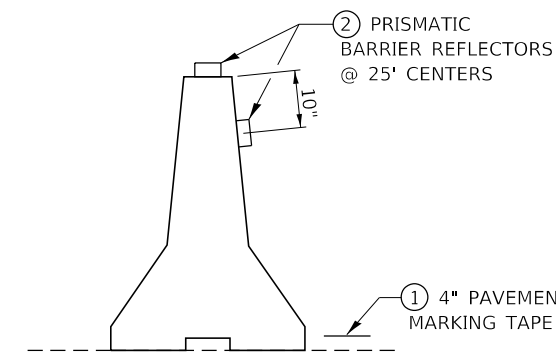
NORMAL POSTED SPEED	FORMULAS
45 MPH OR MORE	ENGLISH $L=(W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS).
S = NORMAL POSTED SPEED IN MPH (KM/H).

SYMBOLS

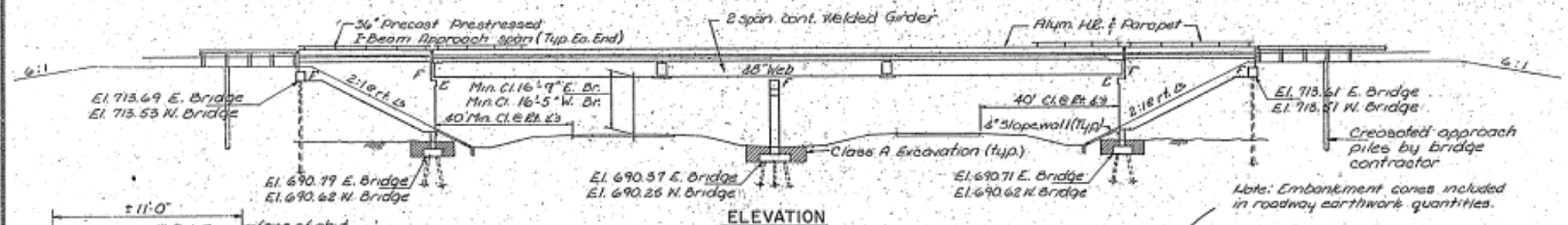
- ARROW BOARD
- WORK AREA
- SIGN
- TRAFFIC CONTROL DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TRAFFIC CONTROL DRUM
- TEMPORARY CONCRETE BARRIER
- MONODIRECTIONAL BARRIER WALL/GUARDRAIL MARKER
- IMPACT ATTENUATOR

*NO EQUIPMENT OR MATERIALS SHALL ENCR OACH WITHIN AN DISTANCE OF 2'-0" AS MEASURED FROM THE BASE OF THE TEMPORARY CONCRETE BARRIER TO THE CL OF ROADWAY



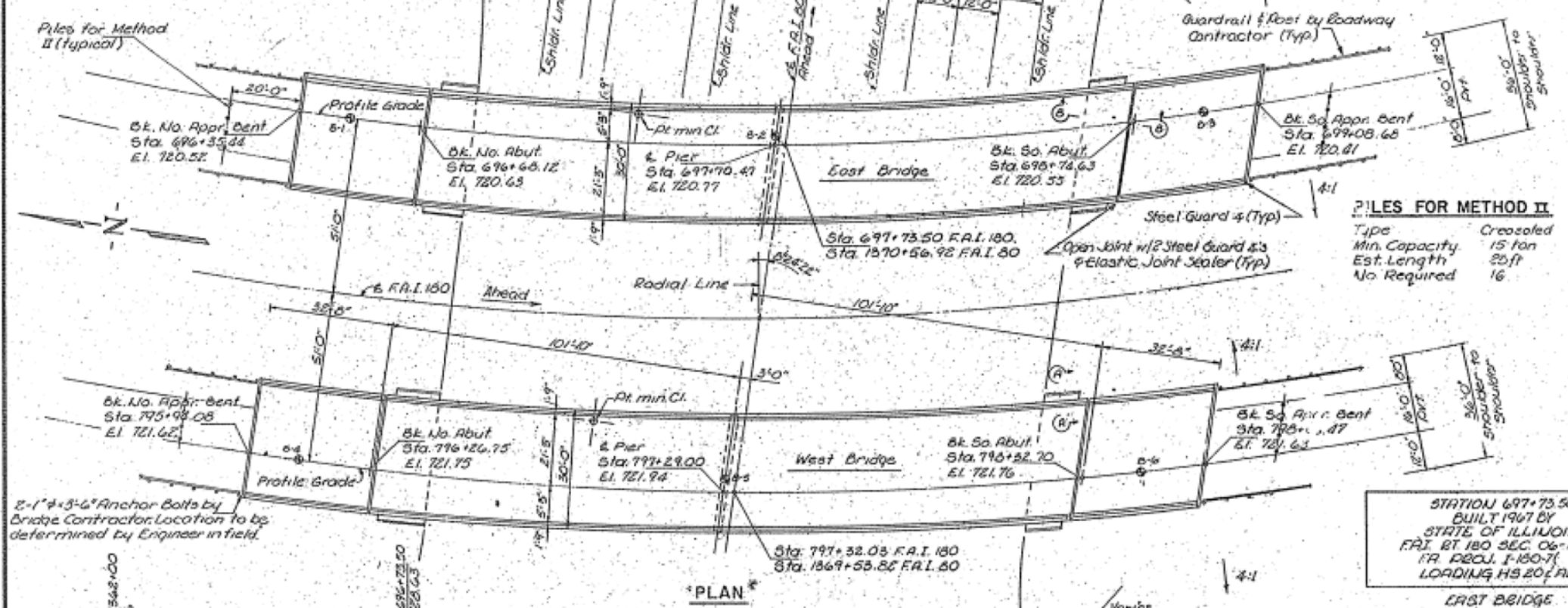
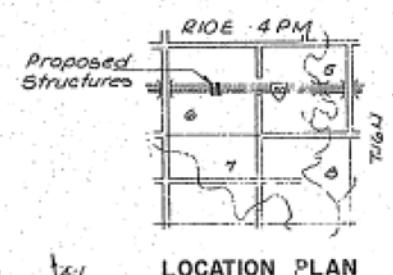
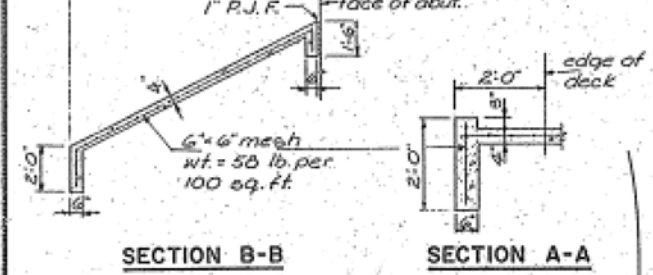
TEMPORARY CONCRETE BARRIER

FILE NAME =	USER NAME = woodshank1	DESIGNED - JW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTORL AND PROTECTION, STANDARD 701402 (SPECIAL)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default	PLOT DATE = 8/10/2018	DATE - 04/27/2018	REVISED -			CONTRACT NO. 66J43					
						ILLINOIS FED. AID PROJECT					



GENERAL NOTES

COARSE AGGREGATE TO BE USED IN PARAPET HANDRAILS AND END POST MUST BE FREE OF CHERT, FLINT, LIMONITE, LIGNITE AND SOFT SANDSTONE.
 THE CONCRETE FLOOR SLAB SHALL BE FINISHED IN ACCORDANCE WITH ART. 51.1907 THE STANDARD SPECIFICATIONS.
 SLOPE WALL SHALL BE REINFORCED WITH 6" x 6" WESH WEIGHING #56 PER 100 SQ. FT.
 ALL STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. DESIGNATION A-36.
 ALL REINFORCEMENT BARS SHALL BE LAPPED 20 DIA. UNLESS OTHERWISE SHOWN.
 ALL WELDING SHALL CONFORM TO THE CURRENT A.C.S. FOR WELDED HIGHWAY AND RAILWAY BRIDGES OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL PROVISIONS.
 ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.
 EXPOSED SURFACES OF THE EXPANDED METAL DEVICES, INACCESSIBLE AFTER ERECTION SHALL RECEIVE TWO SHOP COATS OF RED LEAD PAINT. ALL OTHER SURFACES SHALL BE GIVEN ONE SHOP COAT OF RED LEAD PAINT. ANCHOR STUDS AND SHEAR CONNECTORS SHALL NOT BE PAINTED.
 EXPANSION DEVICES ARE INCLUDED IN THE QUANTITY OF STRUCTURAL STEEL, EST. WT. 4490 LBS.
 EXCEPT AS OTHERWISE PROVIDED, ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RED LEAD PAINT AND TWO FIELD COATS OF ALUMINUM PAINT. SEE ARTICLE 55.1 TO 55.5 INCLUSIVE OF THE STANDARD SPECIFICATIONS.
 THE CONTRACTOR SHALL DRIVE 10 CONCRETE TEST PILES IN PERMANENT LOCATIONS, ONE EACH IN THE NORTH ABUTMENT, EAST BRIDGE AND THE SOUTH ABUTMENT, WEST BRIDGE AS DIRECTED BY THE ENGINEER BEFORE BEGINNING THE REMAINDER OF THE PILES.
 ALL PILES SHALL BE DRIVEN TO REQUIRED CAPACITIES OR REFUSAL.
 RIVETS 3/4" P, OPEN HOLES 13/16" D, UNLESS OTHERWISE NOTED.
 HIGH STRENGTH STEEL BOLTS MAY BE SUBSTITUTED FOR FIELD RIVETS.
 ALL GIRDERS TO BE ASSEMBLED IN THE SHOP IN PROPER POSITION. LEAVE ASSEMBLED IN SHOP FOR INSPECTION.
 PERMANENT FORMS NOT PERMITTED IN FORMING CONCRETE FLOOR.
 EXCAVATION FOR PORTIONS OF STRUCTURES IN THE ENBANKMENTS SHALL NOT BE CLASSIFIED.
 STUD SHEAR CONNECTORS ON THE BEAM FLANGES SHALL BE PLACED IN THE FIELD AFTER THE STEEL HAS BEEN ERECTED AND THE DECK FORMS ARE IN PLACE.
 FLANGE SHEAR CONNECTOR ARE INCLUDED IN THE QUANTITY OF STRUCTURAL STEEL. N.A. ER REQUIRED: 4. ESTIMATED WT. 3560 LBS.



PILES FOR METHOD II

Type	Crested
Min. Capacity	15 tons
Est. Length	25ft
No. Required	16

For stakeout diagram see sheet no. 12 of 13.

TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL
Class A Excavation for Structures	Cu Yds	418	418
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 36"	Lin. Ft.	-	-
Class X Concrete	Cu Yds	510.8	510.8
Protective Coat	Sq. Yds	-	-
Furnishing & Erecting Structural Steel	Lbs.	450,610	450,610
Aluminum Handrail	Lin. Ft.	-	-
Reinforcement Bars	Lbs.	40,470	40,470
Furnishing Crested Piles	Lin. Ft.	400	400
Driving Timber Piles	Lin. Ft.	400	400
Furnishing Metal Pile Shells, 12"	Lin. Ft.	3824	3824
Test Piles (Metal Shell)	Each	2	2
Driving & Filling Shells	Lin. Ft.	3824	3824
Name Plates	Each	-	-
Slope Wall (4")	Sq. Yds	275	275
Preformed Elastic Joint Sealer	Lin. Ft.	-	-
Bridge Seal Sealant	Lump Sum	-	-

STATION 697+73.50
 BUILT 1967 BY
 STATE OF ILLINOIS
 F.A.I. RT. 180 SEC. 06-1HB
 (F.A. PROJ. I-180-7)
 LOADING HS 20/ALT.
 EAST BRIDGE

STATION 797+32.03
 BUILT 1967 BY
 STATE OF ILLINOIS
 F.A.I. RT. 180 SEC. 06-1HB
 (F.A. PROJ. I-180-7)
 LOADING HS 20/ALT.
 WEST BRIDGE

LETTERING FOR NAME PLATES
 See Std. 2113

DESIGN STRESSES

Precast Prestressed Units
 f_c = 1400 p.s.i. (super & sub)
 f_c = 20,000 p.s.i. (reinf.)
 f_c = 20,000 p.s.i. (struct.)
 V_c = 75 p.s.i. (Flgs.)
 n = 10
 Allow 25% for future wearing surface
 k = 1/200 composite
 Loading HS20-44 & A11

CURVE DATA F.A.I. 180

	East Bridge	West Bridge
PT	Sta. 700+00	Sta. 800+00
Δ	107°11'50"	107°11'50"
D	6,350.62'	5,495.5'
L	1,491.12'	1,381.94'
T	1,225.67'	1,364.20'
R	908.93'	1005.93'
S.E.	.05%	.05%

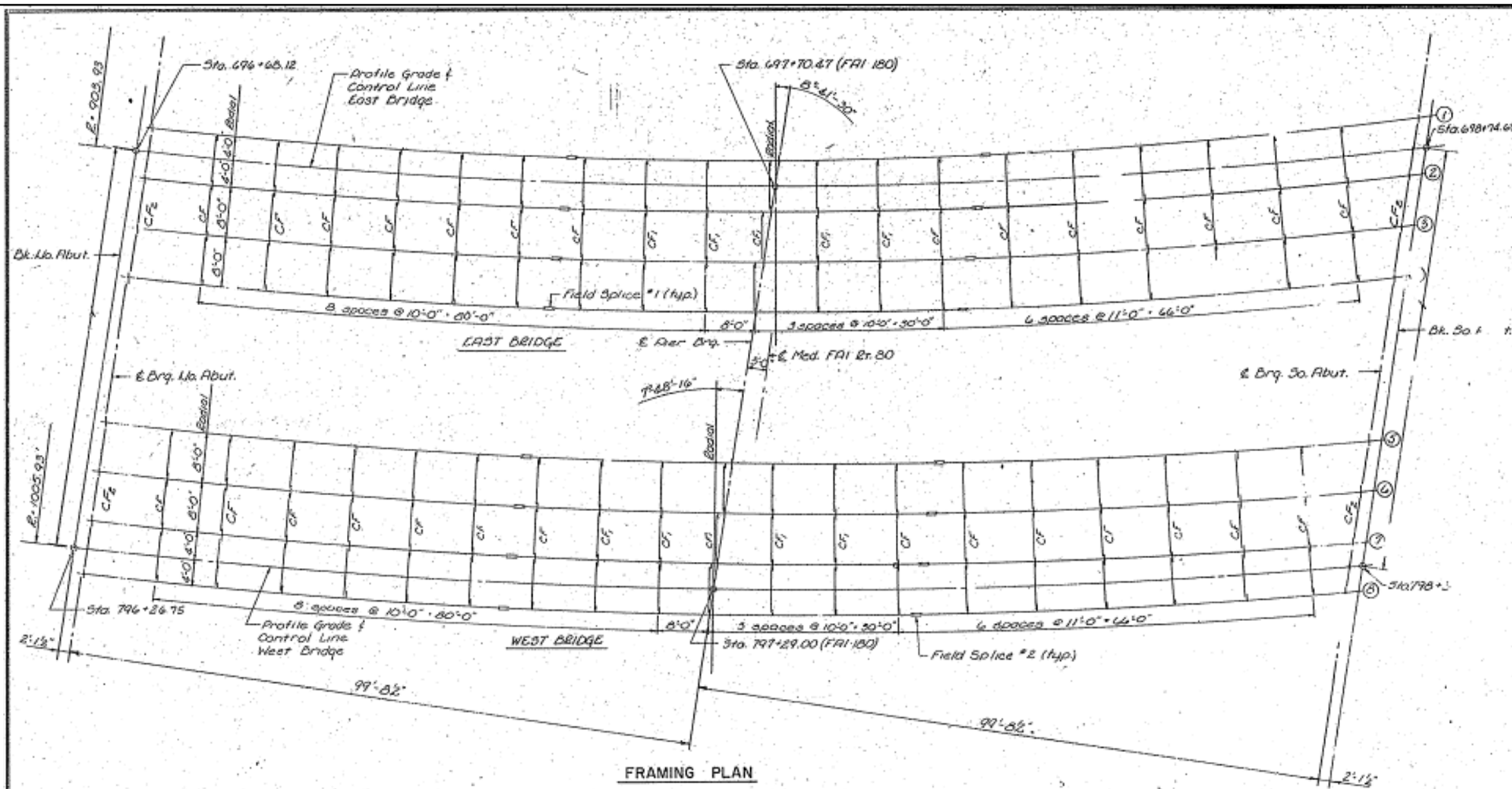
GRADE - F.A.I. 80

GRADE - F.A.I. 180

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 FOR THE ENGINEER ONLY
 6/22/67



GENERAL PLAN & ELEVATION
 PROJ. I-180-7 ()
 F.A.I. RT. 180 SEC. 06-1HB
 BUREAU COUNTY
 EAST BRIDGE STA. 697+73.50
 WEST BRIDGE STA. 797+32.03

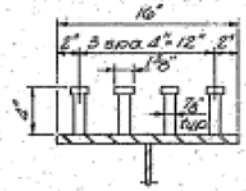


TOP OF WEB ELEVATION

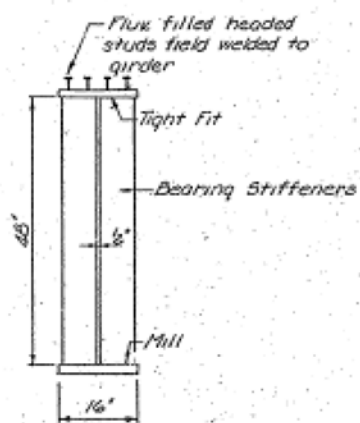
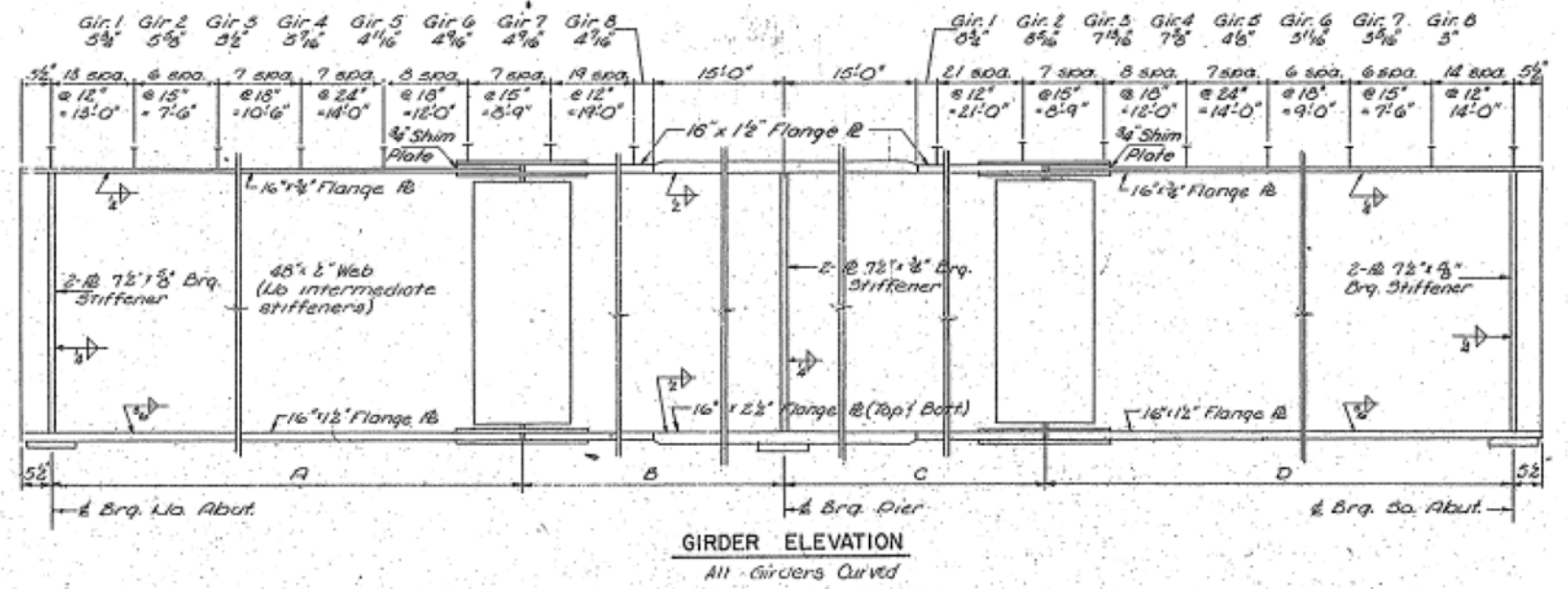
Girder Number	E. Brq. No. Abut.	E. Splice No. 1	E. Pier	W. Splice No. 2	W. Brq. No. Abut.
1	719.581	719.553	719.540	719.526	719.498
2	720.220	720.192	720.179	720.165	720.137
3	720.859	720.831	720.818	720.804	720.776
4	721.498	721.470	721.457	721.443	721.415
5	719.615				719.415
6	720.062				720.062
7	720.701				720.701
8	721.340				721.340

GIRDER LENGTHS

Gir. No.	A	B	C	D
1	67'-5 3/8"	52'-9 3/8"	52'-11 3/8"	69'-0"
2	67'-5 3/8"	52'-9 3/8"	52'-11 3/8"	68'-11 3/8"
3	67'-5 3/8"	52'-9 3/8"	52'-11 3/8"	68'-11 3/8"
4	67'-5 3/8"	52'-9 3/8"	52'-11 3/8"	68'-10 3/8"
5	67'-4 3/8"	52'-8 3/8"	52'-10 3/8"	68'-0 3/8"
6	67'-4 3/8"	52'-8 3/8"	52'-10 3/8"	68'-0"
7	67'-4 3/8"	52'-8 3/8"	52'-10 3/8"	68'-7 3/8"
8	67'-4 3/8"	52'-8 3/8"	52'-10 3/8"	68'-7 3/8"



Notes:
 Granular or solid flux filled studs shall be used. Stud shear connectors shall be automatically welded to the top flange in the field after the steel has been erected and the deck forms are in place. All stud welds shall be made in accordance with recommendations of the manufacturer. Studs located on top of splice plates shall be positioned to miss rivets, as directed by the Engineer.



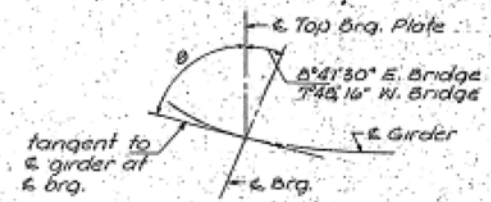
Note: All structural steel shall conform to ASTM designation A36.

STRUCTURAL STEEL
 FAI RT. 180 SEC. 06-1HB
 BUREAU COUNTY
 EAST BRIDGE STA. 697+73.50
 WEST BRIDGE STA. 797+32.03

APPROVED
 STATE ENGINEER
 DEPARTMENT OF BRIDGE & TRAFFIC STRUCTURES
 6/22/67



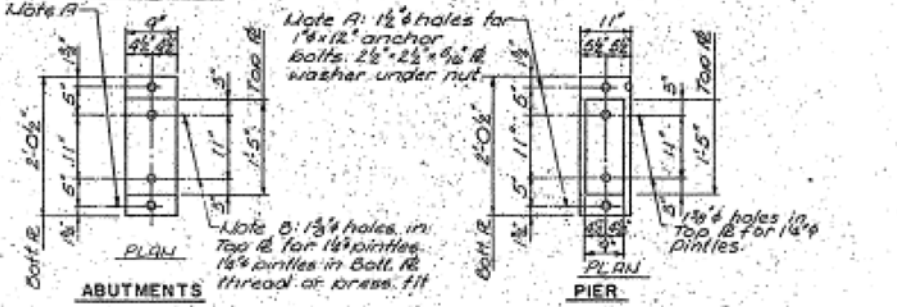
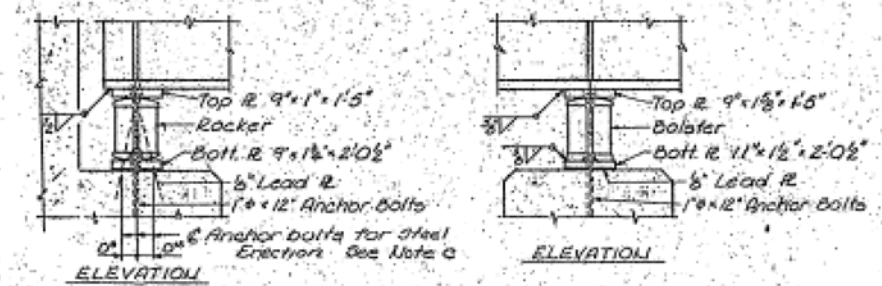
FOR INFORMATION ONLY



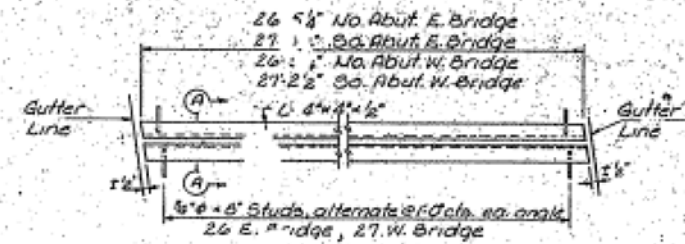
TOP BEARING PLATE LOCATION

ANGLE θ

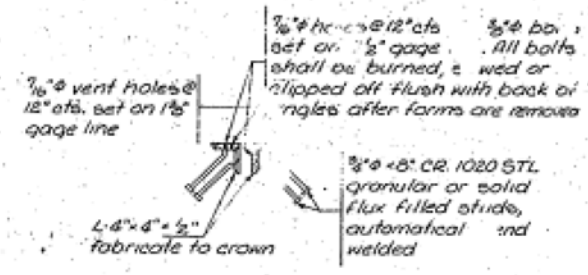
Girder Number	E. Brg. No. Abut.	E. Brg. Pier	E. Brg. So. Abut.
1	05°39'20"	00°02'20"	96°51'55"
2	05°36'13"	09°57'41"	96°23'40"
3	03°37'00"	09°53'07"	96°15'35"
4	03°35'40"	09°48'07"	96°07'30"
5	04°20'24"	00°09'36"	96°05'47"
6	04°19'28"	00°05'48"	95°58'58"
7	04°16'20"	00°01'53"	95°50'15"
8	04°17'20"	09°58'08"	95°43'38"



BEARING DETAILS

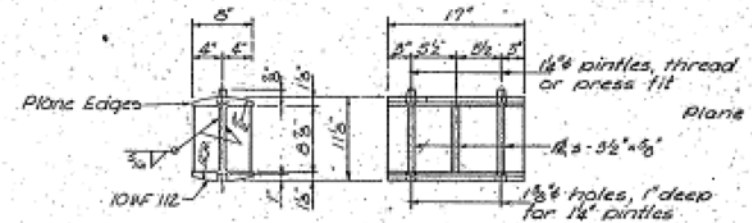


PLAN TREATMENTS

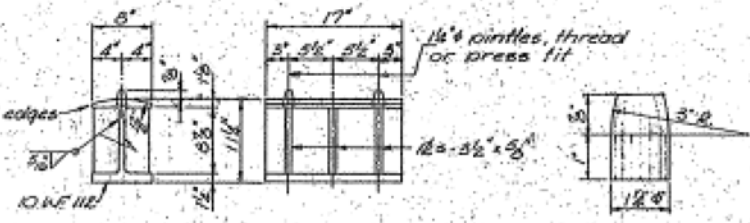


SECTION A

ROADWAY GUARD ANGLE DETAILS



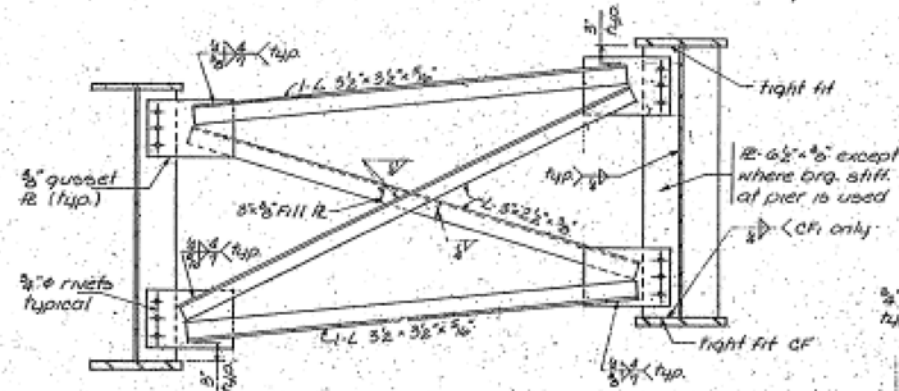
ROCKER DETAILS



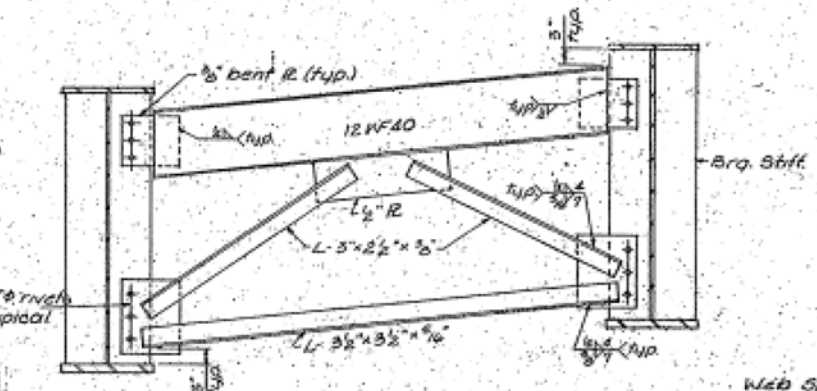
BOLSTER DETAILS

PINTLE

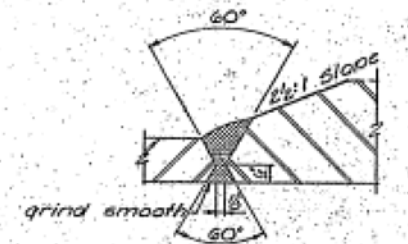
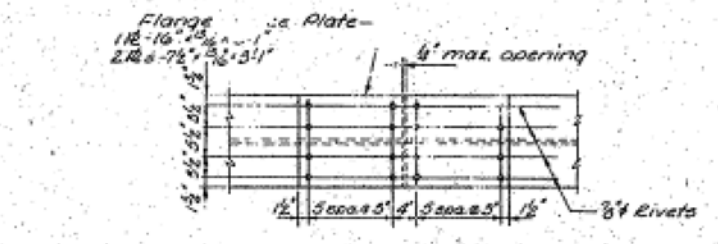
Note C: D** = 5" per each 100' of contraction for every 15' fall below the normal temp. of 50°F. D** = 5" per each 100' of expansion for every 15' rise above the normal temp. of 50°F. After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place.



CROSS FRAME CF & CF1



CROSS FRAME CF2



FLANGE WELDING DETAIL

Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel. Est. Wt. = 9340 lbs.

APPROVED
ILLINOIS DEPARTMENT OF TRANSPORTATION
6/22/17

Note: All structural steel shall conform to ASTM designation A36.

STRESS TABLE

Location	Moments* - Ft. Kips				Lateral Moment Flange Stress, %		Reactions - Kips				
	0.4 Span	Pier	0.4 Span	Pier	0.4 Span	Pier	Abuts		Pier		
Girders Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.	Int.	Ext.
D.L.	912	1100	1856	2100	0.36	0.65	390	58.6	124.3	190.0	
L.L.	912	846	979	652	0.45	0.81	48.7	106.7	87.0	51.0	
Imp.	210	800	225	149			10	0.08	11.2	10.8	20.0
Total	2034	2166	3040	2901	1.11	0.90	489	116.1	283.0	263.0	

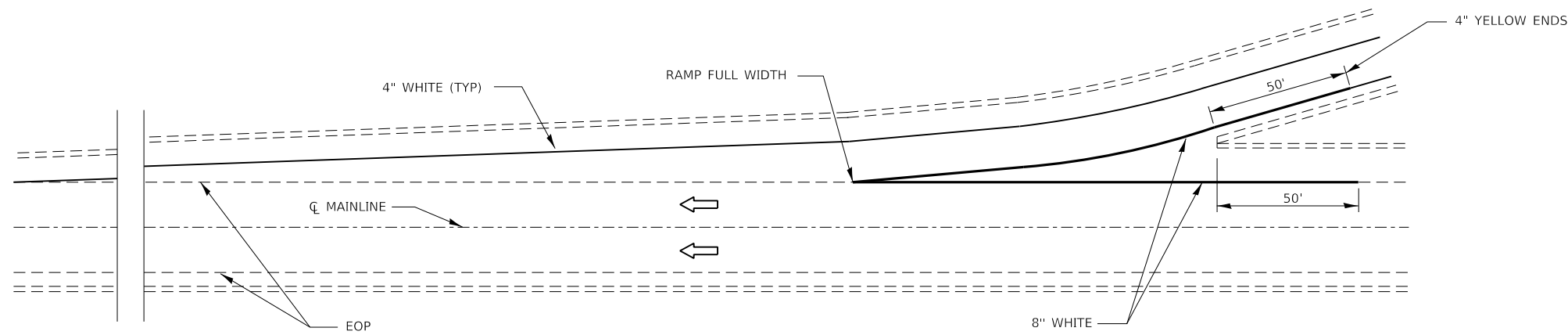
PROPERTIES

Steel Section	Composite Section
I _x 53,600 in ⁴	I _c 60870 in ⁴
S _x 2100 in ³	S _{xc} 3120 in ³
S _{cy} 2100 in ³	S _{yc} 1590 in ³
I _y 106.7 in ⁴	I _{cy} 32.0 in ⁴
S _y 106.7 in ³	S _{cy} 64.0 in ³

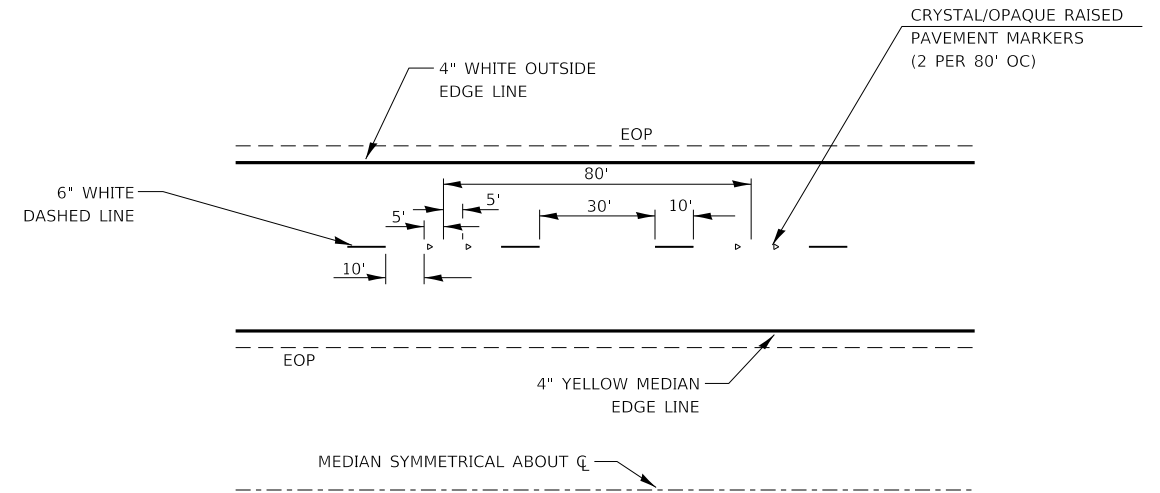
- D.L. Dead Load
- L.L. Live Load
- Imp. Impact
- I_x Moment of Inertia Steel Section at Pier
- S_x Section Modulus Top Steel Section at Pier
- S_{xc} Section Modulus Bottom Steel Section at Pier
- S_{cy} Section Modulus Top Flange Steel Section at Pier
- S_{yc} Section Modulus Bottom Flange Steel Section at Pier
- I_c Moment of Inertia Composite Section
- I_{cy} Section Modulus Top Composite Section
- S_{xc} Section Modulus Bottom Composite Section
- S_{yc} Section Modulus Top Flange Composite Section
- S_{cy} Section Modulus Bottom Flange Composite Section

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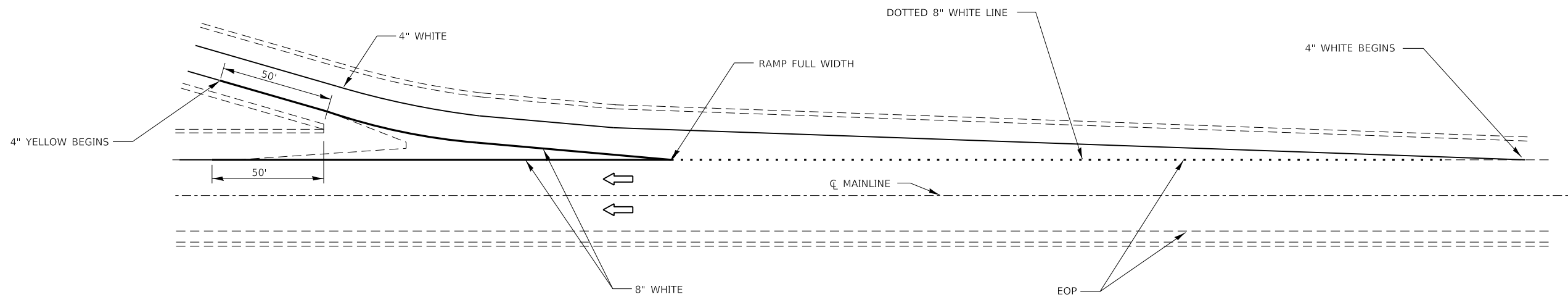
STRUCTURAL STEEL
F.A.I. RT. 180 SEC. 06-118B
BUREAU COUNTY
EAST BRIDGE STA. 697+73.50
WEST BRIDGE STA. 797+32.03



TYPICAL PAVEMENT MARKING FOR ENTRANCE RAMP TERMINALS



TYPICAL PAVEMENT MARKINGS



TYPICAL PAVEMENT MARKINGS FOR EXIT RAMP TERMINALS

FILE NAME =	USER NAME = woodyerjp	DESIGNED - JW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKINGS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\woodyerjp\d0561300\66J43-cover.dgn	DRAWN - JW	REVISED -	180					(06-1HB)BP-2	BUREAU	12	12	
\$MODELNAME\$	PLOT SCALE = 100.0000' / in.	CHECKED - RW	REVISED -		CONTRACT NO. 66J43			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 7/20/2018	DATE - 04/27/2018	REVISED -		SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.		