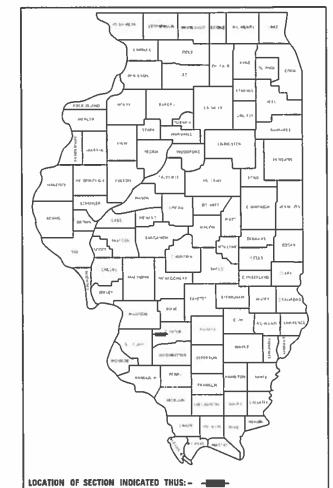
01-18-2019 LETTING ITEM 073

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.S. SECTION COUNTY TOTAL SHEET SHEET NO. 1780 26BDR-BJR 1 CUNTON 27 1 1 11LIPNOIS CONTRACT NO. 76M03

D-98-008-19



TRAFFIC DATA

2015 ADT = 5250 (ACTUAL) 2020 ADT = 5500 (ESTIMATED) 2040 ADT = 6700 (ESTIMATED) SU = 3.8% MU = 1.9%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UBMITTED Oct 26 20 18

ENGWIEER OF BESIGN AND ENVIRO

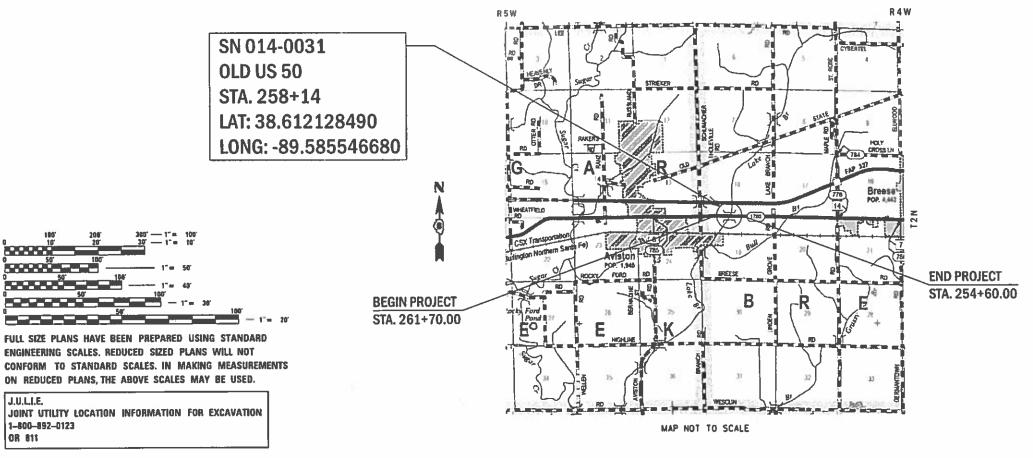
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROPOSED HIGHWAY PLANS

FAS ROUTE 1780 (OLD US 50) SECTION 26BDR-BJR-1

BRIDGE & JOINT REPAIR CLINTON COUNTY

C-98-011-19



PROJECT ENGINEER: HERVE GELIN
PROJECT MANAGER: ALVIN NIEVES-ROSARIO

0

(618) 346-3179 (618) 346-3141 GROSS LENGTH = 710 FT. = 0.134 MILE NET LENGTH = 710 FT. = 0.134 MILE

CONTRACT NO. 76M03

INDEX OF SHEETS

- COVER SHEET
- INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS
- SUMMARY OF QUANTITIES 3-4.
 - SCHEDULES OF QUANTITIES
- TYPICAL SECTIONS & BUTT JOINT DETAIL
- WIDE LOAD SIGNING 7. 8-10. STAGING PLANS 11-27. STRUCTURE PLANS

HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREA OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM EDGE OF
	PAVEMENT
701011-04	OFF-DD ODEDATIONS 21 2W DAY ONLY

701011-04	OFF-RD	OPERATIONS,	2L,	2W,	DAY	ONLY

701201-05 LANE CLOSURE, 2 LANE, 2 WAY, DAY ONLY, FOR

SPEEDS >45 MPH

701301-04 LANE CLOSURE, 2 LANE, 2 WAY, SHORT TIME

OPERATIONS

701306-04 LANE CLOSURE, 2 LANE, 2 WAY, SLOW MOVING OPERATIONS, DAY ONLY, FOR SPEEDS >45 MPH

701311-03 LANE CLOSURE, 2 LANE, 2 WAY, MOVING OPERATIONS,

DAY ONLY

701321-17 LANE CLOSURE, 2 LANE, 2 WAY, BRIDGE REPAIR WITH

BARRIER

701326-04 LANE CLOSURE, 2 LANE, 2 WAY, PAVEMENT WIDENING

FOR SPEEDS >45 MPH

701901-08 TRAFFIC CONTROL DEVICES

TEMPORARY CONCRETE BARRIER 704001-08 780001-05 TYPICAL PAVEMENT MARKINGS

781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT

MARKERS

782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING

DETAILS

GENERAL NOTES

1. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

UTILITY	ABOVE GROUND	BELOW GROUND
*AT&T ILLINOIS (COMMUNICATIONS)	Х	Х
*VILLAGE OF AVISTON (WATER & SANITARY SEWER)		Х
*ST. ROSE PUBLIC WATER DISTRICT (WATER & SANITARY SEWER)		Х

MEMBERS OF J.U.L.I.E. (800)-892-0123 OR 811 ARE INDICATED BY *. NON J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- 2. THE CONTRACTOR AND ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING AND TOPOGRAPHY SHOWN IN THE PLANS WERE CREATED USING RECORD PLANS AND FIELD MEASUREMENTS MADE BY DESIGN PERSONNEL. BOTH SHALL BE ASSUMED TO BE APPROXIMATE.
- 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 4. THE THICKNESS OF THE BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED, SUCH AS ON THE NORTH APPROACH.
- 5. THE PROPOSED PAVEMENT MARKING SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKING, AS DIRECTED BY THE ENGINEER.
- 6. ANY SEEDING REQUIRED OUTSIDE THE CONSTRUCTION LIMITS WILL NOT BE PAID FOR SEPERATELY AND CONSIDERED AS A CONTRACTOR'S EXPENSE.
- 7. COMPACTION OF ASPHALT UNDER THE GUARDRAIL MUST MEET TESTING REQUIREMENTS.
- 8. IT IS INTENDED FOR THE EXISTING GUARDRAIL TO REMAIN IN PLACE DURING HMA WIDENING PLACEMENT. DAMAGE CAUSED BY WIDENING EXCAVATION/HMA PLACEMENT SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	SURFACE	SHOULDER ≥ 2.25"	SHOULDER < 2.25"
AC/PG	PG 64-22	PG 64-22	PG 64-22
RAP %(MAX)	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0% @ Ndes=30	4.0% @ Ndes=30
MIX COMPOSITION			
(GRADATION)	IL 9 . 5	IL 19.OL	IL 9 . 5L
FRICTION AGG	MIXTURE D		
QUALITY MGMT			
PROGRAM	QC/QA	QC/QA	QC/QA

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LBS/SQ YD/IN (59.8 KG/SQ M/25 MM THICKNESS)

JSER NAME = davidsonmw DESIGNED -REVISED DRAWN REVISED HECKED REVISED PLOT DATE = 11/7/2018 REVISED DATE

STATE OF ILLINOIS

INDEX OF SHEETS, HIGHWAY STANDARDS, **GENERAL NOTES AND COMMITMENTS** SHEET 1 OF 1 SHEETS STA. N/A TO STA, N/A

SECTION COUNTY 1780 26BDR-BJR-1 CLINTON 27 2 CONTRACT NO. 76M03

DEPARTMENT OF TRANSPORTATION SCALE: N/A **COMMITMENTS**

NONE

			100%	CONSTR. CODE
			STATE	RURAL
				BR I DGE
CODE			TOTAL	0059
NO.	ITEM	UNIT	QUANTITY	014-0031
20200500	EARTH EXCAVATION (WIDENING)	CU YD	103	103
31102500	SUBBASE GRANULAR MATERIAL, TYPE C 8"	SQ YD	231	231
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	724	724
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	158	158
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	200	200
40600990	TEMPORARY RAMP	SQ YD	29	29
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	30	30
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	19	19
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	167	167
50102400	CONCRETE REMOVAL	CU YD	6.2	6.2
			""	3,12
50300100	FLOOR DRAINS	EACH	6	6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	6.3	6.3
50300260	BRIDGE DECK GROOVING	SQ YD	345	345
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4640	4640

			STATE	RURAL
				BR I DGE
CODE			TOTAL	0059
NO.	ITEM	UNIT	QUANTITY	014-0031
50800515	BAR SPLICERS	EACH	109	109
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	745	745
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	691	691
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	48	48
70300520	PAVEMENT MARKING TAPE, TYPE 111 4"	FOOT	2000	2000
70400100	TEMPORARY CONCRETE BARRIER	FOOT	346	346
				REV

USER NAME = davidsonmw DESIGNED REVISED REVISED DRAWN PLOT SCALE = 100.0000 ' / in. CHECKED -REVISED PLOT DATE = 10/23/2018 DATE REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES SHEET 1 OF 2 SHEETS STA. N/A

TO STA. N/A

SCALE: N/A

REV. - MS

COUNTY TOTAL SHEET NO.

CLINTON 27 3 SECTION 1780 26BDR-BJR-1 CONTRACT NO. 76M03

CONSTR. CODE

100%

				100%	CONSTR. COD
				STATE	RURAL
					BRIDGE
	CODE			TOTAL	0059
	NO.	ITEM	UNIT	QUANT I TY	014-0031
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	346	346
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	180	180
*	78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	237	237
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	2	2
*	78100300	REPLACEMENT REFLECTOR	EACH	6	6
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	26	26
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	21	21
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	2	2
	X5030304	CONCRETE WEARING SURFACE, 4"	SQ YD	345	345
	X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	4431	4431
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	667	667
	X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	58	58
				1	

			100% STATE	CONSTR. CODE RURAL
CODE NO.	ITEM	UNIT	TOTAL QUANT I TY	BR I DGE 0059 014 - 0031
X7200200	WIDE LOAD SIGNING	L SUM	1	1
Z0012140	BRIDGE DECK SCARIFICATION 2"	SQ YD	345	345
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	1.6	1.6
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	94.1	94.1

* SPECIALTY ITEM

REV. - MS

USER NAME = davidsonmw	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED	REVISED
PLOT DATE = 10/23/2018	DATE	REVISED

					F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SUMMARY OF QUANTITIES						1780 26BDR-BJR-1		CLINTON	27	4
								CONTRAC	T NO. 7	6M03
SCALE: N/A	SHEET 2	OF 2	SHEETS	STA. N/A	TO STA. N/A		ILLINOIS FEI	D. AID PROJECT		

FOR STAGING TYPICAL, SEE SHEET NUMBER 17 OF 27 & 19 OF 27.

	SHOULDER SCHEDULE											
STATION		STATION	EARTH EXCAVATION (WIDENING)		SUBBASE GRANULAR MATERIAL TYPE C, 8"	BITUMINOUS MATERIAL (TACK COAT)	HOT-MIX ASPHALT SHOULDER, 8'	AGGREGATE WEDGE SHOULDER, TYPE B				
			(CU YD)	(POUND)	(SQ YD)	(POUND)	(SQ YD)	(TON)				
256+37.25 LT		257+62.25 LT	26	181	58	9	42	4.6				
258+65.75 LT		259+90.75 LT	26	181	58	9	42	4.6				
256+37.25 RT		257+62.25 RT	26	181	58	9	42	4.6				
258+65.75 RT		259+90.75 RT	26	181	58	9	42	4.6				
TOTAL			103	724	231	38	167	19				

	STAGING SCHEDULE												
STAGE	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 3	IMPACT ATTENUATORS, RELOACATE (FULLY REDIRECTIVE, NARROW) TEST LEVEL 3	PAVEMENT MARKING TAPE, TYPE III, 4"	TEMPORARY PAVEMENT MARKING LINE, 6"	TEMPORARY PAVEMENT MARKING LINE, 24"	PAVEMENT MARKING BLACKOUT TAPE, 5"	TEMPORARY PAVEMENT MARKING REMOVAL	TEMPORARY RUMBLE STRIPS			
	(FOOT)	(FOOT)	(EACH)	(EACH)	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(SQ FT)	(EACH)			
I	346	0	2	0	1000	346	24	443	333	6			
ΙΙ	0	346	0	2	1000	346	24	303	333	6			
TOTAL	346	346	2	2	2000	691	48	745	667	12			

SUGGESTED SEQUENCE OF CONSTRUCTION

PRE-STAGE I:

REMOVE EXISTING AGG WEDGE SHOULDER.

CONSTRUCT HMA SHOULDER, 8" WITH SUBBASE GRANULAR MATERIAL, TYPE C, 8".

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION, STANDARD 701326.

WIDE LOAD SIGNING SHALL BE ERECTED PRIOR TO STAGE I CONSTRUCTION.

STAGE I:

SETUP TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.

SEE STANDARD 701321 FOR DETAILS NOT SHOWN ON PLANS.

PERFORM ALL STRUCTURAL WORK FOR STAGE I. SEE STRUCTURE PLANS.

PERFORM ANY ADDITIONAL/NECESSARY WORK FOR STAGE I CONSTRUCTION.

STAGE II:

RELOCATE TRAFFIC CONTROL AND PROTECTION, STANDARD 701321.

SEE STANDARD 701321 FOR DETAILS NOT SHOWN ON PLANS.

PERFORM ALL STRUCTURAL WORK FOR STAGE II. SEE STRUCTURE PLANS.

PERFORM ANY ADDITIONAL/NECESSARY WORK FOR STAGE II CONSTRUCTION.

STAGE III & IV:

SETUP TRAFFIC CONTROL AND PROTECTION, STANDARD 701306.

CONSTRUCT HMA SURFACE COURSE, 2".

APPLY PAVEMENT MARKINGS UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701311.

PERFORM ANY ADDITIONAL WORK REQUIRED.

	RESUI	RFACING SCHEDULE	
STAGE	BITUMINOUS MATERIALS (TACK COAT) 0.05 LB/SF	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
	(POUND)	(SQ YD)	(TON)
111	60	100	15
IV	60	100	15
TOTAL	120	200	30

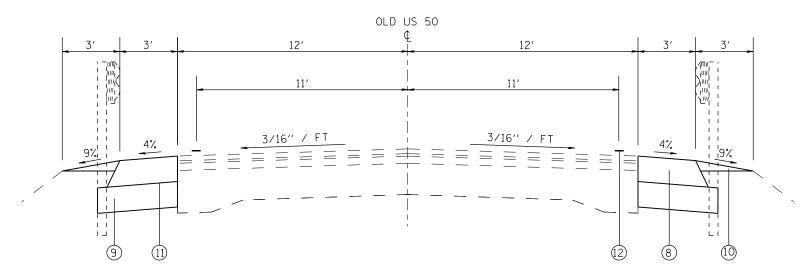
	PAVEMENT MARKING SCHEDULE												
			PREFORMED PLASTIC THERMOPLASTIC PAVEMENT MARKING, TYPE B - LINE 4"			RAISED REFLECTIVE PAVEMENT MARKERS							
			WHITE	YELLOW	WHITE	YELLOW	REMOVE	REPLACE	REPLACE				
STATION	ТО	STATION	N SOLID SKIP SOLID SKIP REFLECTOR ONLY	REFLECTOR ONLY	ENTIRE RRPM	AMBER							
			(FC	OT)	(FOOT)		(EACH)						
254+67.25		257+22.25					3	3		3			
257+22.25		257+62.25			80	10	1		1	1			
257+62.25		258+65.75	207	30									
258+65.75		259+05.75			80	10	1		1	1			
258+05.75		261+60.75					3	3		3			
TOTAL		207	30	160	20	8	6	2	8				

USER NAME = davidsonmw	DESIGNED -	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0086 / in.	CHECKED -	REVISED
PLOT DATE = 11/7/2018	DATE	REVISED

		A.S. TE	SECTION	COUNTY	TOTAL SHEETS	
SCHEDULE OF QUANTITIES	1	780	26BDR-BJR-1	CLINTON	27	5
				CONTRACT	NO. 76	5M03
SCALE: N/A SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A			ILLINOIS FED. A	ID PROJECT		

EXISTING TYPICAL SECTION

STA. 256+37.25 TO 257+62.25 STA. 258+65.75 TO 259+90.75



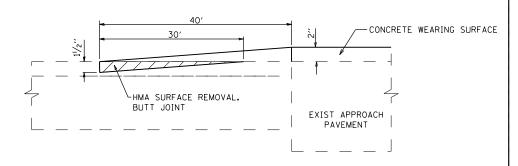
PROPOSED TYPICAL SECTION

STA. 256+37.25 TO 257+62.25 STA. 258+65.75 TO 259+90.75

LEGEND

SHEET 1

- 1) EXISTING PAVEMENT
- (2) EXISTING RESURFACING
- (3) EXISTING TURF SHOULDER
- (4) EXISTING PAVEMENT MARKINGS
- 5 EXISTING SURFACE COURSE
- 6 EXISTING LEVELING BINDER
- (7) EXISTING AGG WEDGE SHOULDER, TYPE B
- (8) PROPOSED HOT-MIXED APHALT SHOULDER, 8"
- 9 PROPOSED SUBBASE GRANULAR MATERIAL, TYPE C, 8"
- (10) PROPOSED AGG WEDGE SHOULDER, TYPE B
- (11) PROPOSED BITUMINOUS MATERIAL (PRIME COAT)
- (12) PROPOSED THERMOPLASTIC PAVEMENT MARKING, 4"



BUTT JOINT DETAIL

NOTE: THE BUTT JOINT EXTENDS ACROSS THE WIDENING AS WELL AS THE PAVEMENT.

USER NAME = davidsonmw	DESIGNED	REVISED
	DRAWN	REVISED
PLOT SCALE = 100.0043 ' / in.	CHECKED	REVISED
PLOT DATE = 10/12/2018	DATE	REVISED

TYPICAL SECTIONS &				SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
BUTT JOINT DETAIL		1780	1780 26BDR-BJR-1		CLINTON	27	6	
BUTT JUINT DETAIL			CONTRACT NO. 7				NO. 76	5M03
OF 1 CHEETC	CTA NI/A	TO CTA NI/A		u i miore	:			

NOTES:

- 1. ALL SIGNS REQUIRED ON THIS SHEET WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
- THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL GIVE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS TWO WEEKS NOTICE FOR SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HEIGHTS, AND SHALL RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLAPE AT (618)394-2189.
- THE ABOVE NOTED WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR WIDE LOAD SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.
- 5. SIGN SPACING WILL BE 400' OR TO FIT FIELD CONDITIONS.

JSER NAME = davidsonmw

PLOT SCALE = 100.0000 ' / in.

PLOT DATE = 10/12/2018

DESIGNED -

DRAWN

DATE

CHECKED

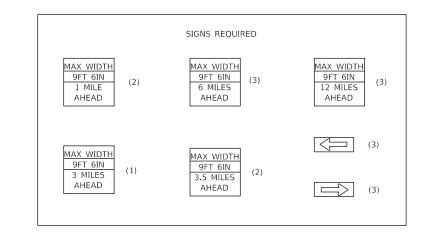
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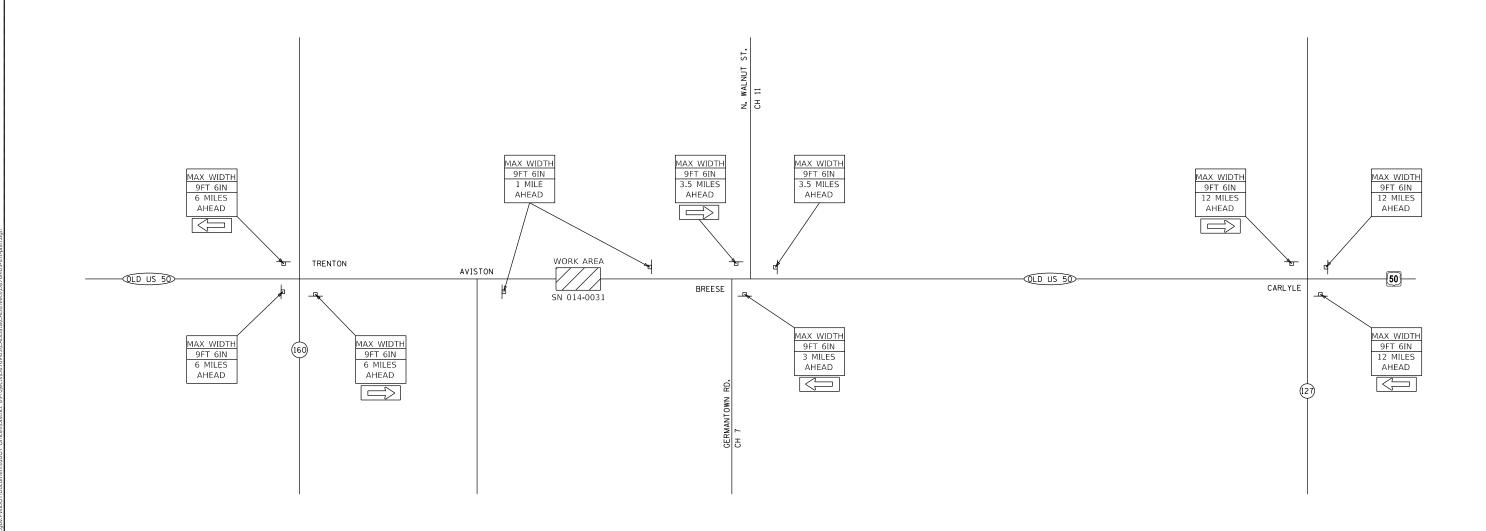
REVISED

REVISED

REVISED

6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.





MODEL: \$MODELNAME\$

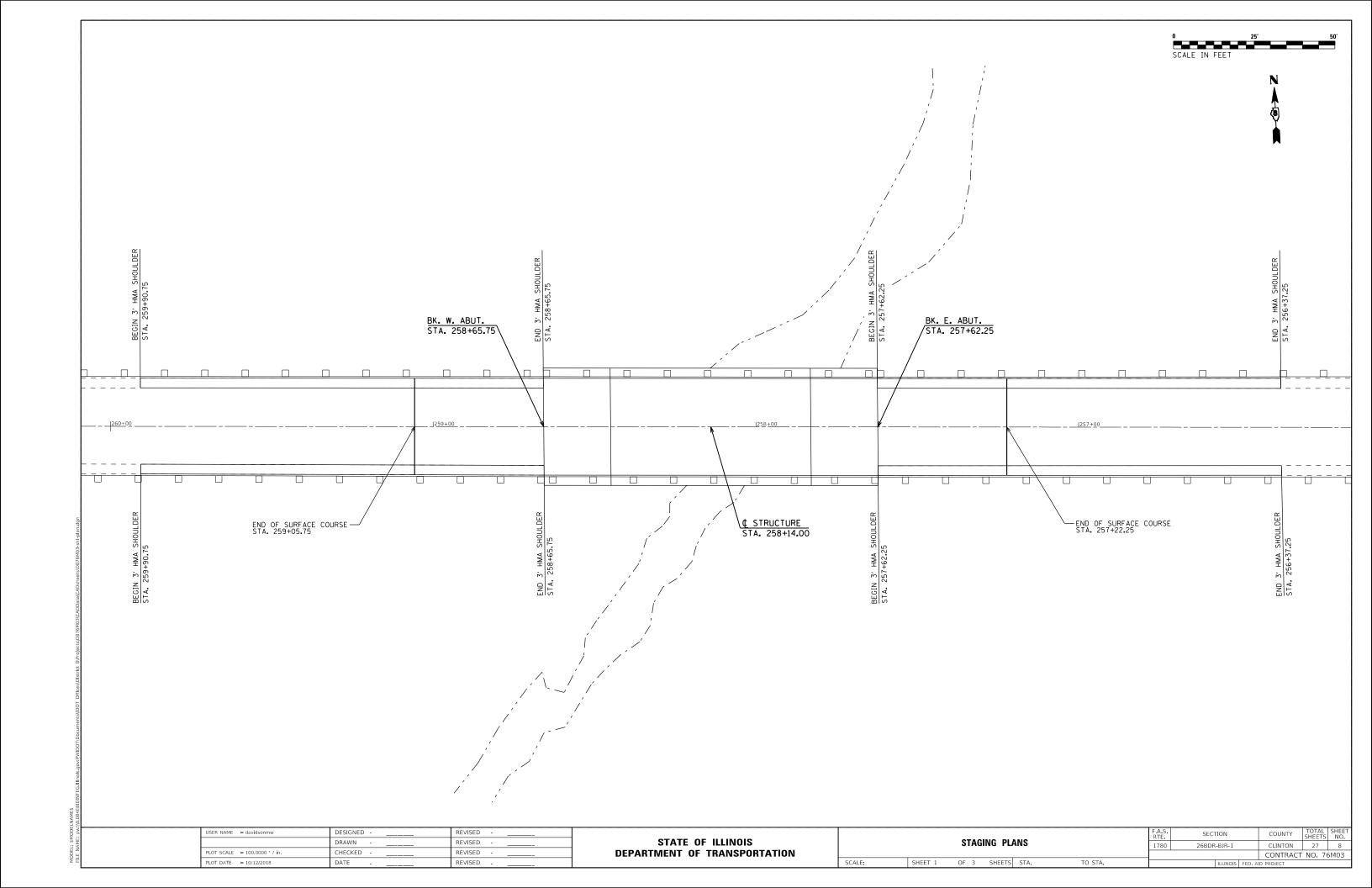
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

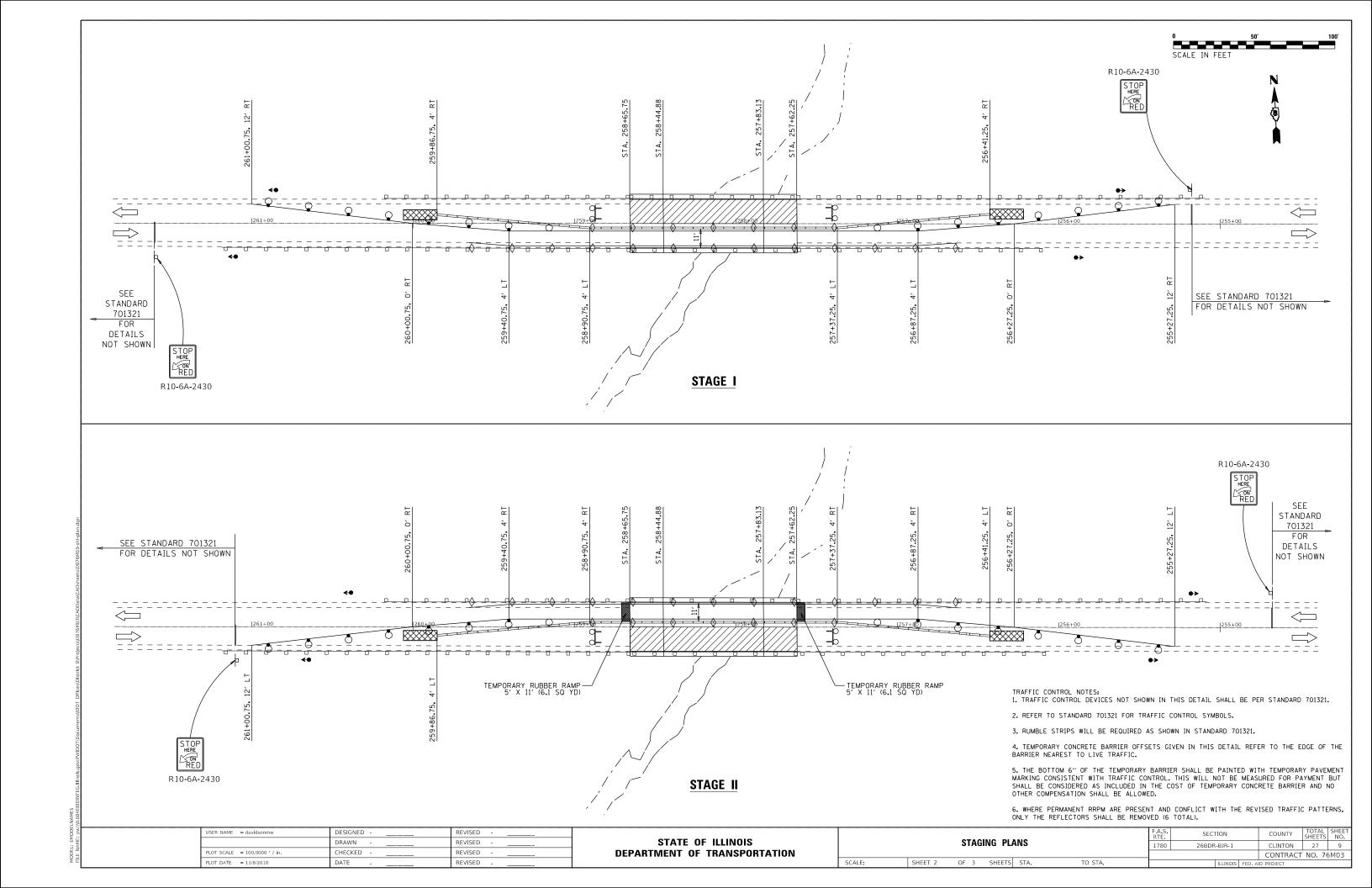
WIDE LOAD SIGNING

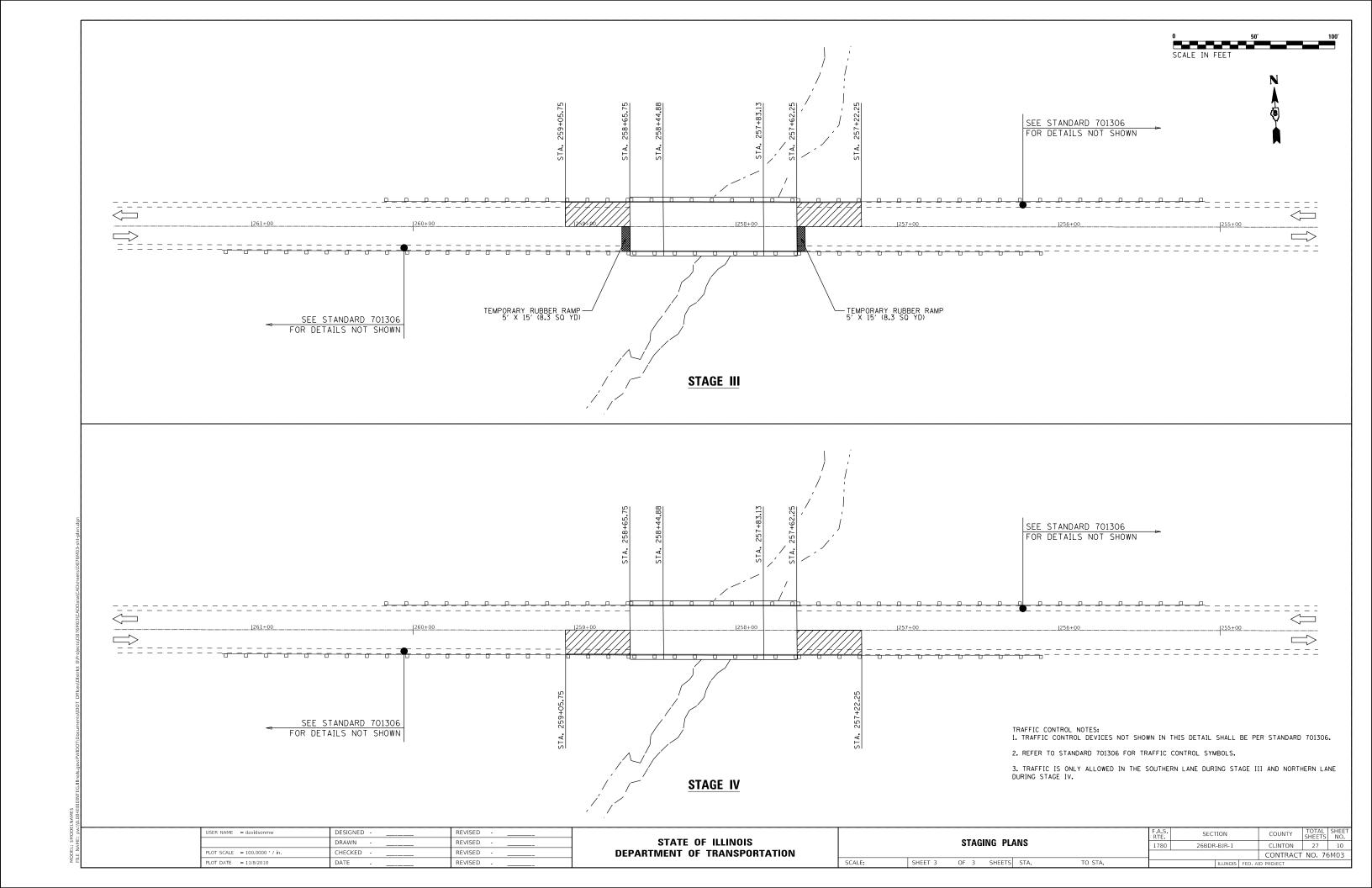
SHEET 1 OF 1 SHEETS STA. N/A

TO STA. N/A

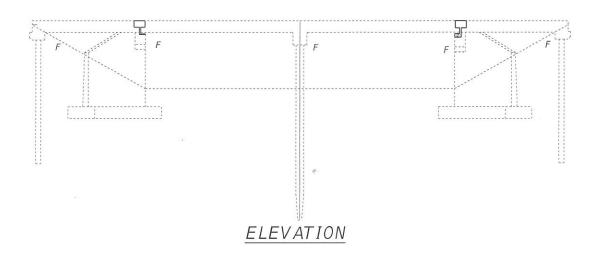
SCALE: N/A

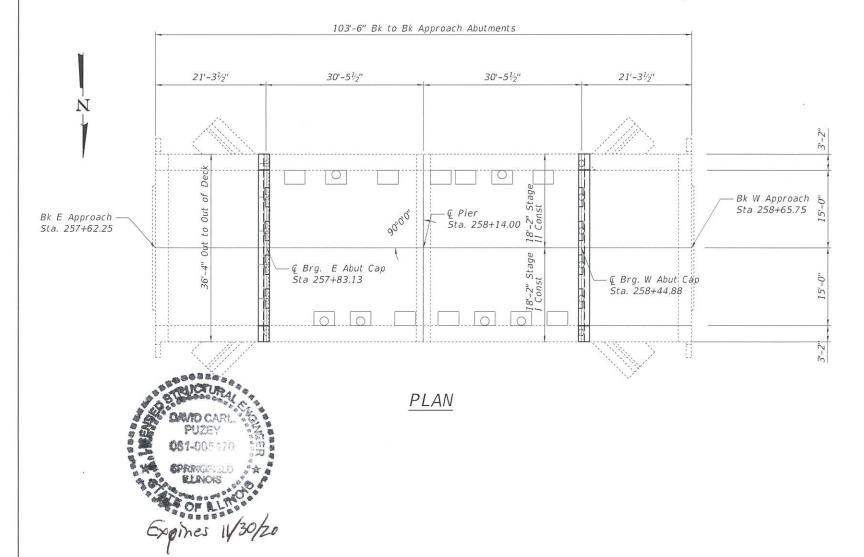






Existing Structure: SN 014-0031 was built in 1922. In 1958, the 1 span superstructure was removed and replaced with a 4 span slab superstructure under SBI Rt 12. A center pier and Bk approach bents were added. Also: in 1996, the HMA was removed and replaced with microsilica under a Day Labor project. A steel bridge rail (Curb Mounted-2399) was also added.





GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

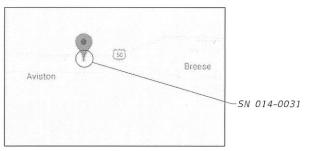
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall 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

Existing reinforcement bars extending into removal area shall be cleaned, straightened and incorporated into the new construction. 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".

Concrete sealer shall be placed on existing concrete on top/inside faces of curbs (full length) and the top/bottom/inside faces of the concrete bridge rail (full length) . Cost included in "Bridge Deck Concrete Sealer".

Protective Coat shall be placed on the new concrete wearing surface & the new concrete on top/inside faces of the curbs. Cost included in "Bridge Deck Concrete Sealer".

The concrete for Deck Slab Repair (Partial) shall be placed with the "Concrete Wearing Surface, 4".



SCOPE OF WORK

- -Remove slab ends in zig-zag pattern
- as shown in plans and replace solid. -Remove 2" of microsilica and replace with 4" minimum Concrete Wearing
- Surface (CWS) -Eliminate formed deck drains and replace remaining ones with round floor drains.

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi fy = 60,000 psi (Reinforcement)

SHEET INDEX

- 1) General Plan and Elevation
- 2) Ex X-Sec (E Abut)
- 3) Ex Plan View (E Abut)
- 4) Ex X-Sec (W. Abut)
- 5) Ex Plan View (W Abut) 6) Ex Jt Rem
- 7) Prop X-Sec (E Abut) 8) Prop Plan View (E Abut)
- 9) Prop X-Sec (W Abut)
- 10) Prop Plan View (W Abut)
- 11) Prop Jt Details
- 12 Conc Wearing Surface Plan

SHEET NO. 1 OF 17 SHEETS

- 13) Concrete Bridge Rail & Post Removal
- 14) Drain Details
- 15) Temporary Concrete Barrier
- 16) Bar Splicers
- 17) For Information Only- Ex Conc Bridge Rail & Post

LOCATION SKETCH

FLOOR DRAIN REPLACEMENT

Existing drains & adjacent concrete to be removed and replaced with 6" circular drains and full depth patch. (See sheet 14 of 17 for details)

FLOOR DRAIN ELIMINATION

Existing drains & adjacent concrete to be removed and replaced with full depth patch.

(See sheet 14 of 17 for details)

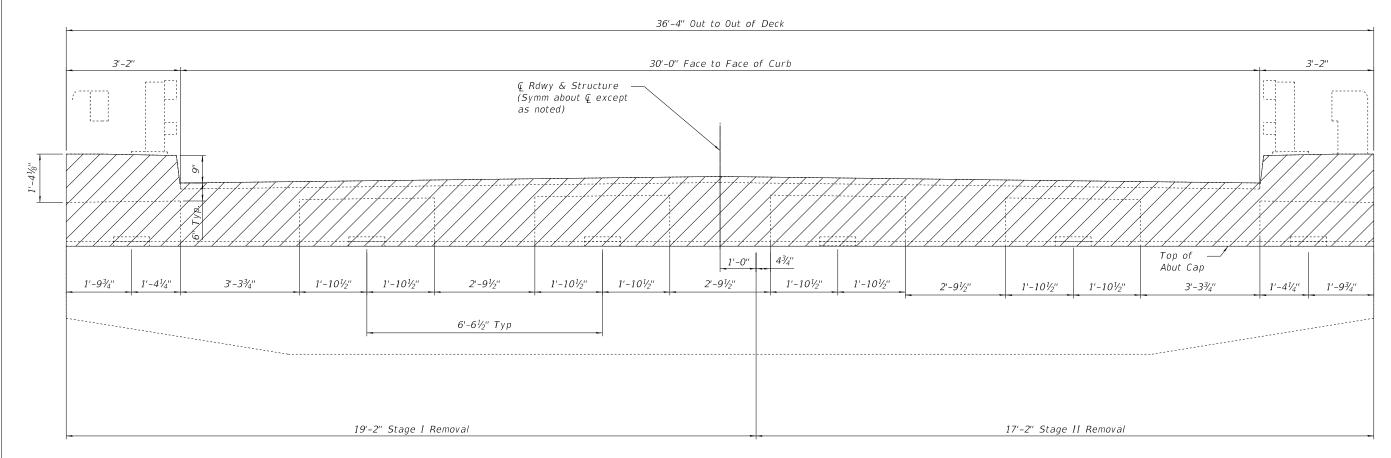
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	6.2
Concrete Superstructure	Cu. Yd.	6.3
Bridge Deck Grooving	Sq. Yd.	345
Reinforcement Bars, Epoxy Coated	Pound	4640
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	1.6
Deck Slab Repair (Partial)	Sq. Yd.	94.1
Concrete Wearing Surface, 4"	Sq. Yd.	345
Bridge Deck Concrete Sealer	Sq. Ft.	4431
Bridge Deck Scarification 2"	Sq. Yd.	345
Bar Splicers	Each	109
Floor Drains	Each	6

- * Including bridge & approach spans
- ** The quantity of deck slab repair is estimated. The engineer in the field shall determine the actual quantity and locations.

SECTION GENERAL PLAN & ELEVATION (Old US 50 over Lake Branch) CLINTON 27 11 SN 014-0031 CONTRACT NO. 76M03

DESIGNED - AYV 11/29/2018 CHECKED -JSB DRAWN - AYV REVISED CHECKED - JSB



EXISTING CROSS SECTION

(Looking East)

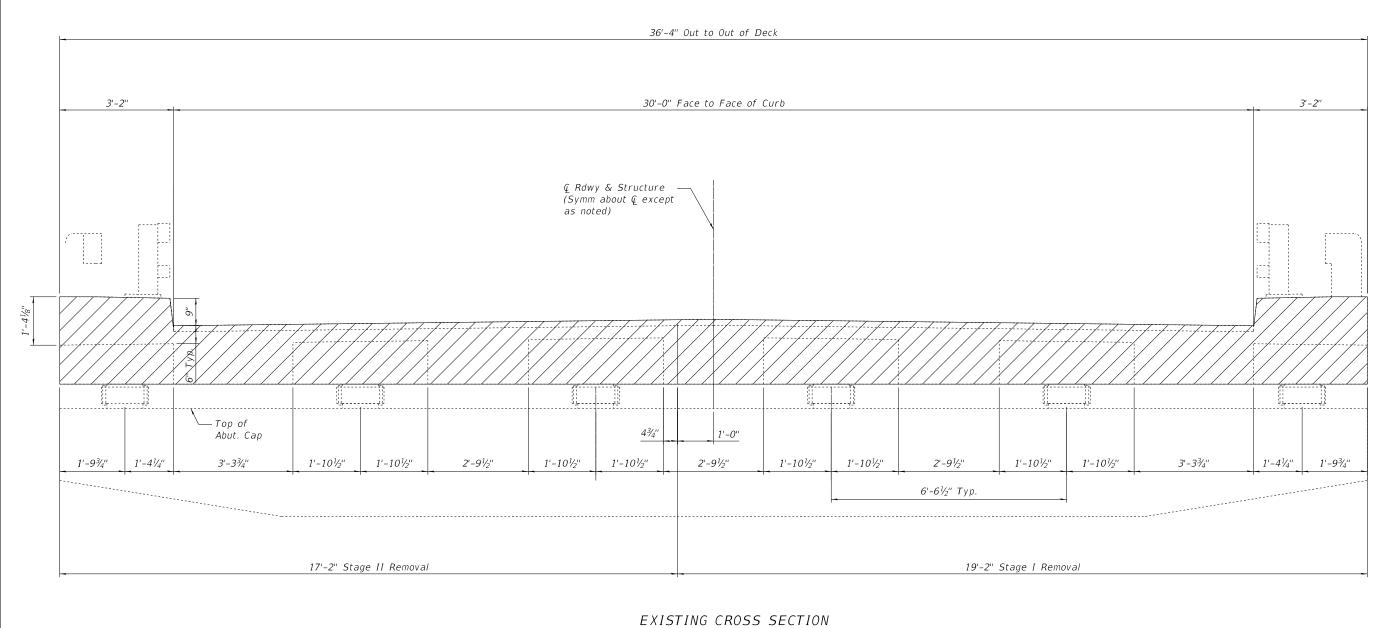
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DESIGNED - AYV		DATE -		EXISTING CROSS SECTION (E Abut)	F.A.S. SECTION	COUNTY TOTAL SHEET SHEETS NO.
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DRAWN - AYV	PASSED	REVISED	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 76M03
CHECKED - JSB	ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 2 OF 17 SHEETS	ILLINOIS FED.	. AID PROJECT

-Z-© Rdwy & Structure — (Symm about © except as noted) 19'-2" Stage I Removal 17'-2" Stage II Removal 1'-0'' **▶** B **▶** C **▶** A \vdash_B **▶** C 1'-9¾'' 5 Spaces at $6'-6\frac{1}{2}" = 32'-8\frac{1}{2}"$ 1'-9¾'' 36'-4" Out to Out of Deck EXISTING PLAN See sheet 6 of 17 for Bill Of Material & Sections A-A, B-B & C-C.

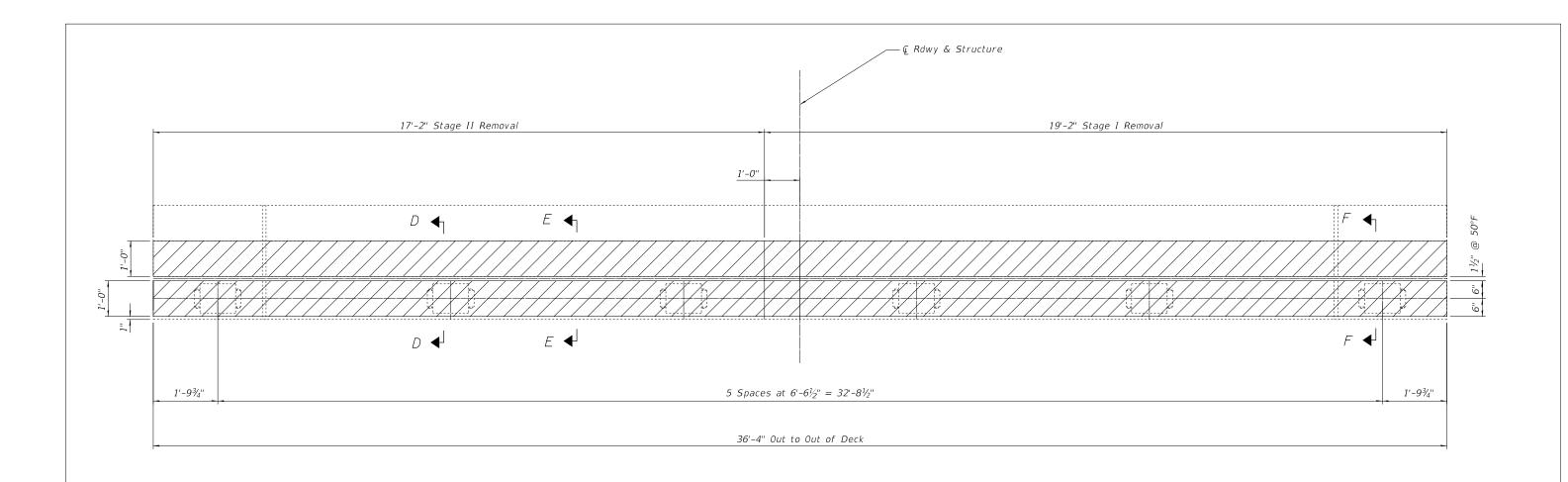
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(Looking West)

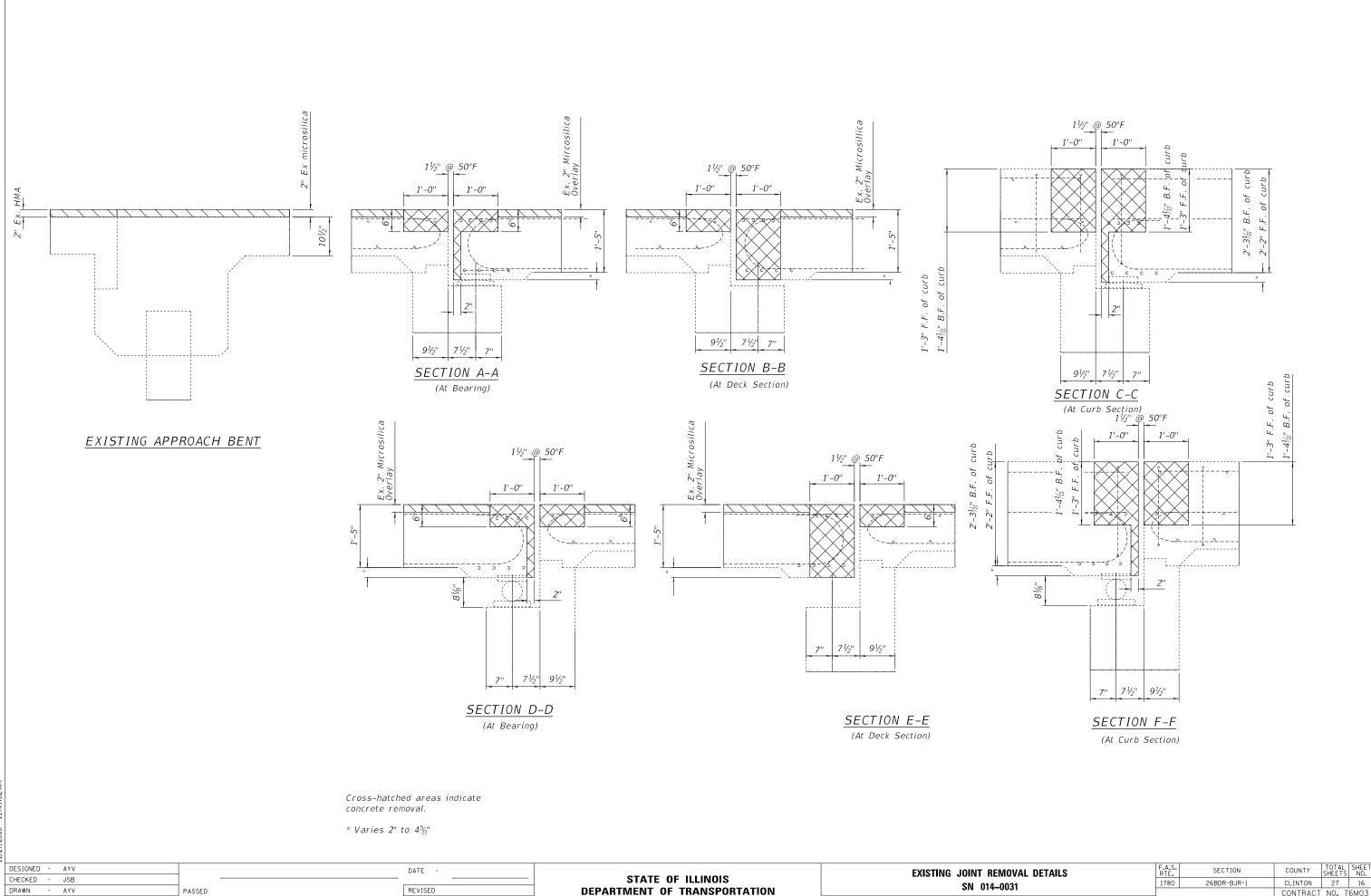
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EXISTING PLAN

See sheet 6 of 17 for Bill of Material & Sections D-D, E-E & F-F

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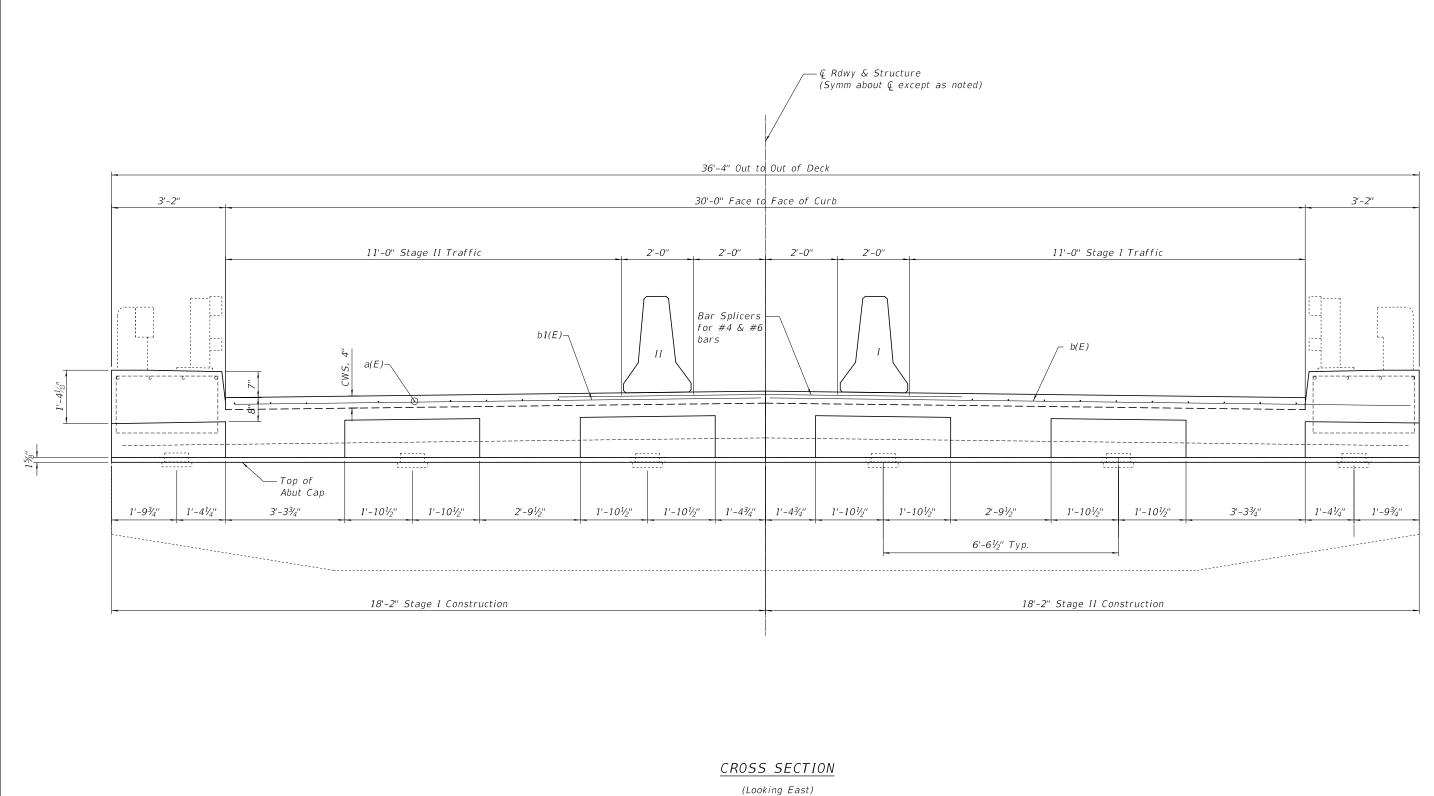
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ENGINEER OF BRIDGES AND STRUCTURES

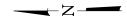
CONTRACT NO. 76MO3

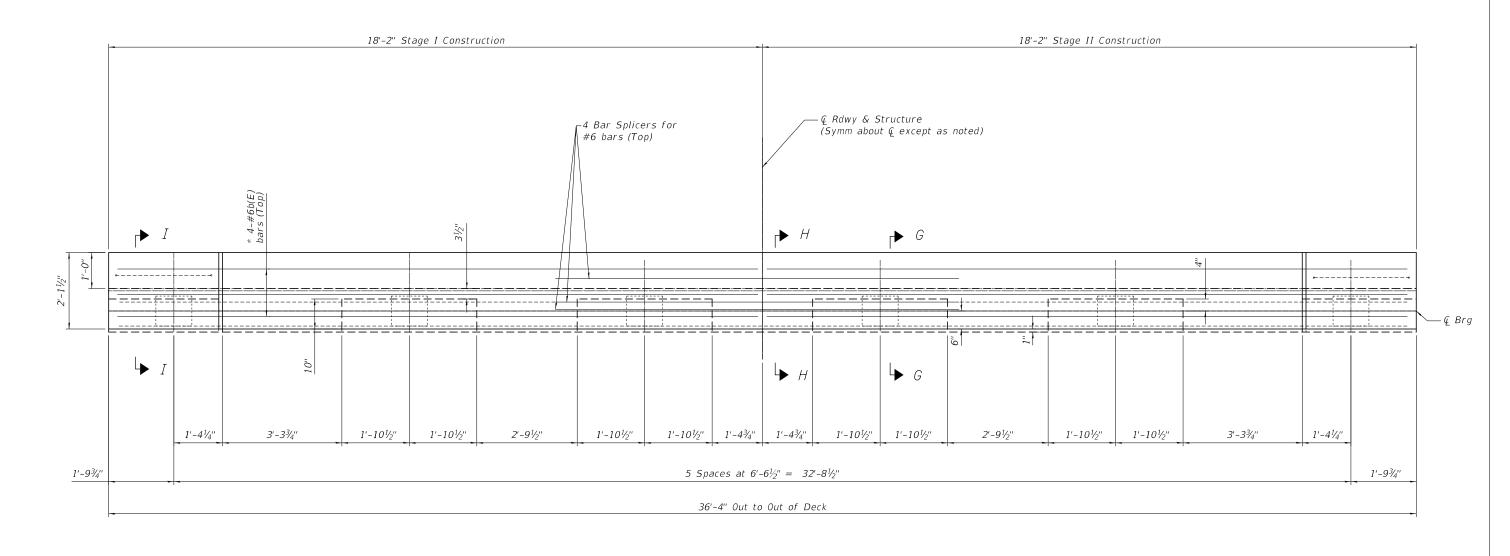
SHEET NO. 6 OF 17 SHEETS

CHECKED - JSB



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PLAN

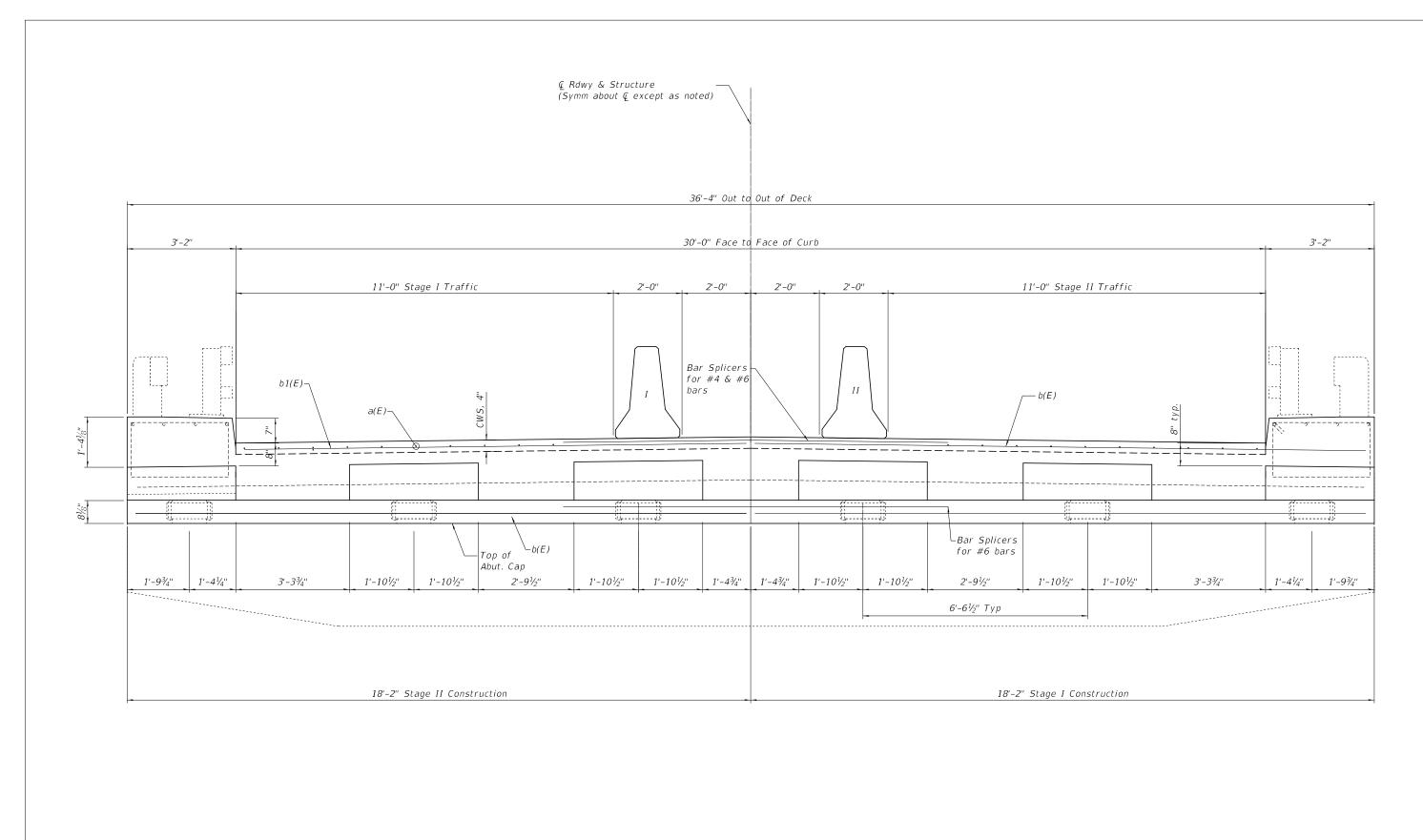
Note:

See sheet 11 of 17 for Bill of Material & Sections G-G, H-H & I-I.

* See Cross Sections on sheet 11 of 17 for placement.

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EXISTING CROSS SECTION

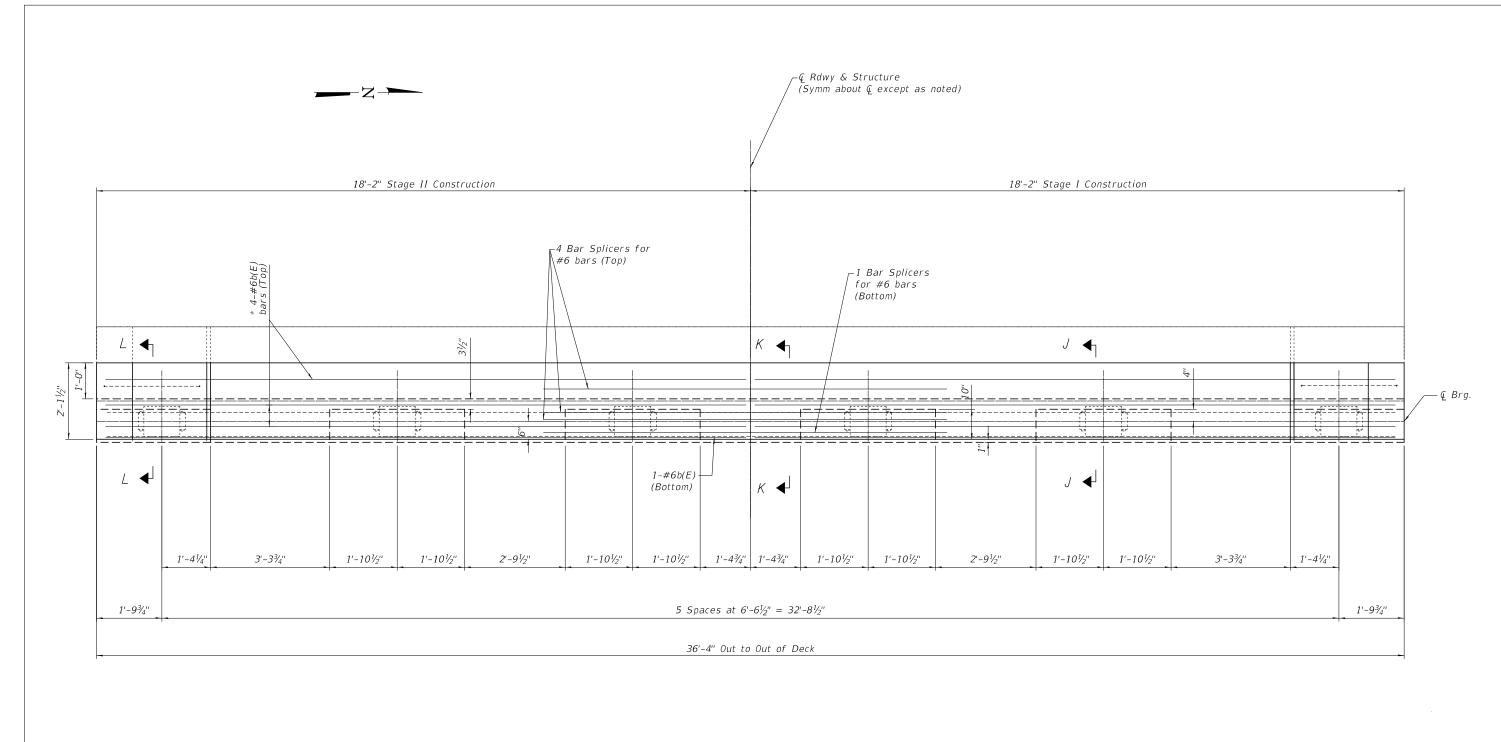
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F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT	NO. 7	6M03
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PLAN

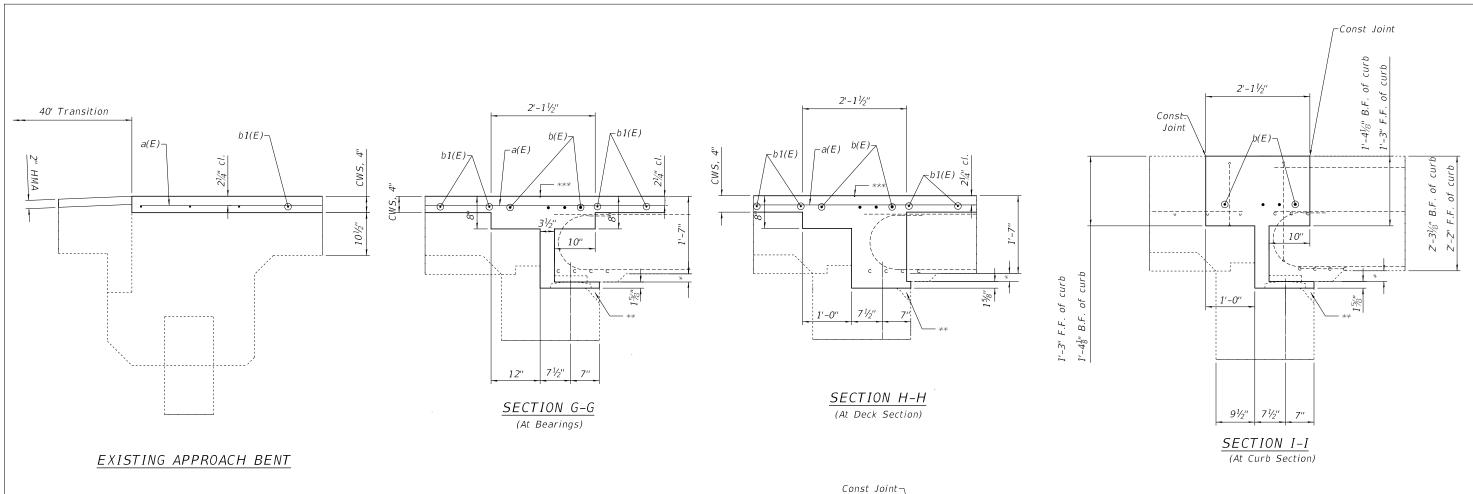
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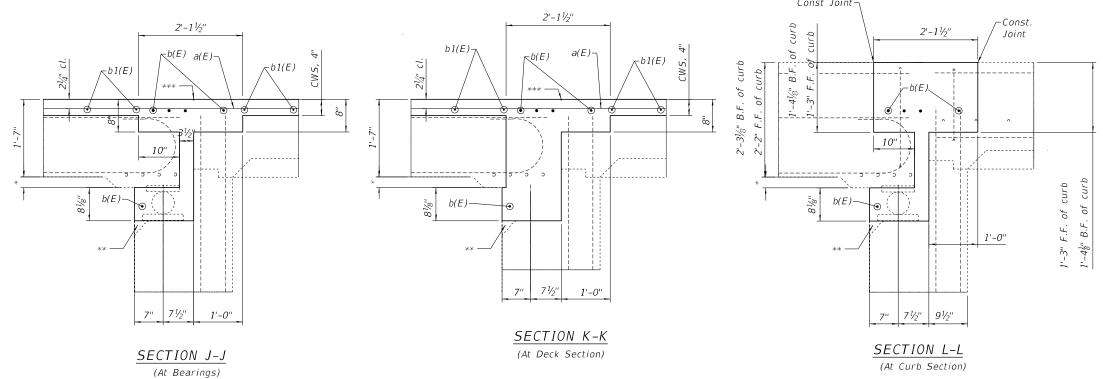
See sheet 11 of 17 for Bill of Material & Sections J-J, K-K & L-L.

* See Cross Section on sheet 11 of 17 for placement.

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Note:

Concrete superstructure and concrete wearing surface shall be place monolithically. Quantities are based on 4" Concrete Wearing Surface over the abutments.

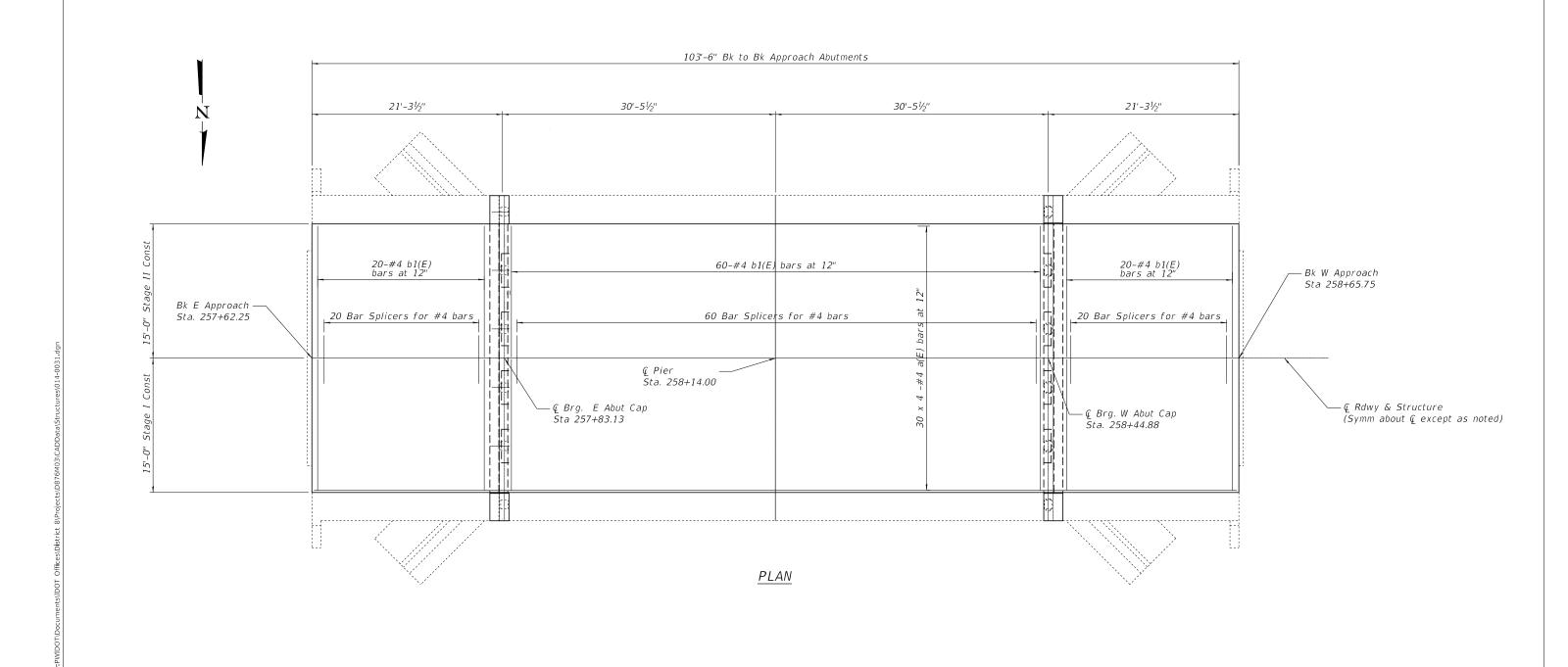
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	120	#4	27'-7"	
b(E)	18	#6	17'-9" 14'-7"	
b1(È)	200	#4	14'-/"	
Canara	oto Bor	mayal		6.2
JUILLE	ete Rer	iiovai	Cu. Yd.	0.2
Concre	ete		Cu. Yd.	6.3
Super	structu Deck	ıre	Cu. Tu.	0.5
			Sq. Yd.	345
Groovi	ng rcemei	-4		
			Pound	4640
Deck S	poxy (Slab Re	.oaceu epair	Sa. Yd.	1.6
	Depth,	- p - c	3q. ru.	1.0
Гуре І				
	Slab Re	,	Sq. Yd.	94.1
Partia	al) ete We	arina		
Surfac		arring	Sq. Yd.	345
Bridge	e Deck		Sq. Ft.	4431
Concr	ete Se	aler	· '	
Oridaa	e Deck			
	ication	2"	Sq. Yd.	345
	plicers		r a a b	109
ваг З	pricers	'	Each	109

- * Varies 2" to 45/8"
- ** Remove loose concrete. Cost included in Concrete Removal
- *** $\frac{1}{4}$ " x $\frac{3}{4}$ " formed joint with concrete joint sealer without the backer rod (Full width)

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PROPOSED JOINT DETAIL	F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SN 014-0031	1780	26BDR-BJR-1	CLINTON	27	21
314 014-0031			CONTRACT	NO. 7	6M03
SHEET NO. 11 OF 17 SHEETS		ILLINOIS FED. A	ID PROJECT		



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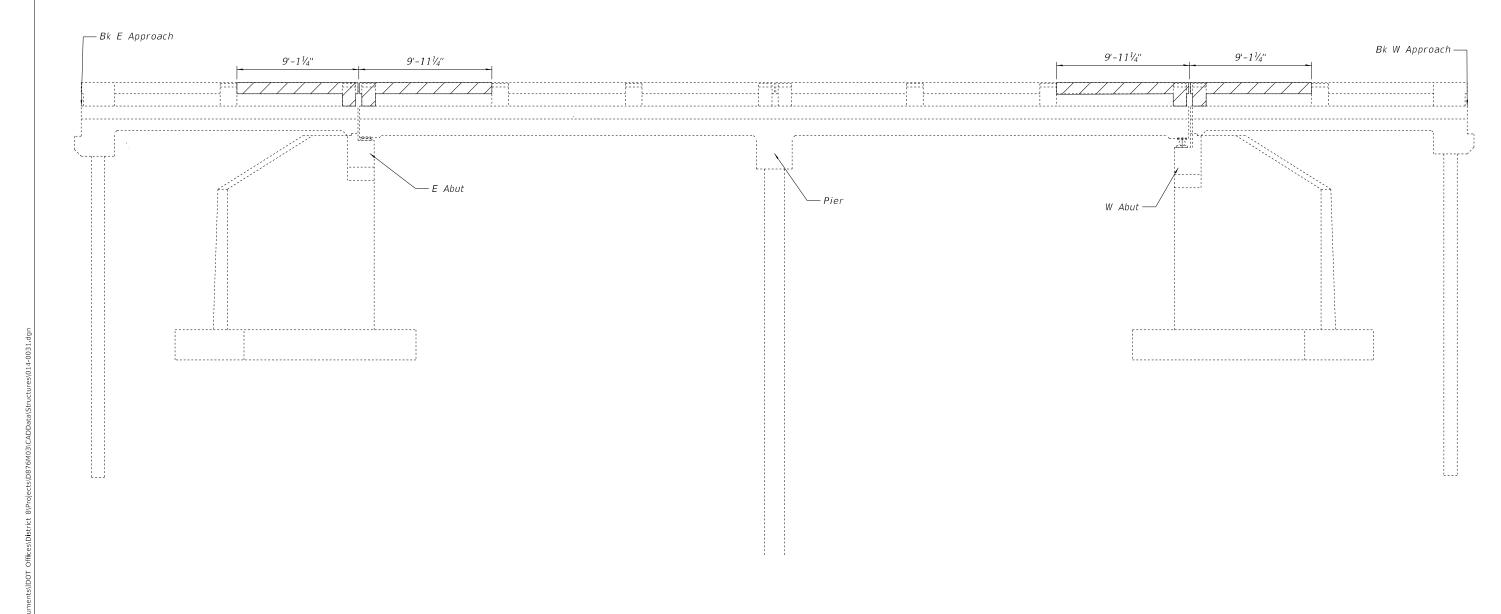
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NORTH ELEVATION

Removal of concrete rail & post (Cost included in Concrete Removal) (N Elev shown. S Elevation similar)

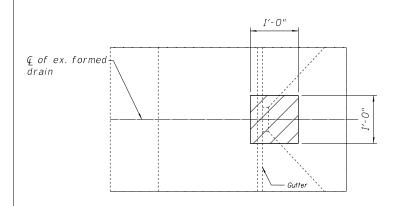
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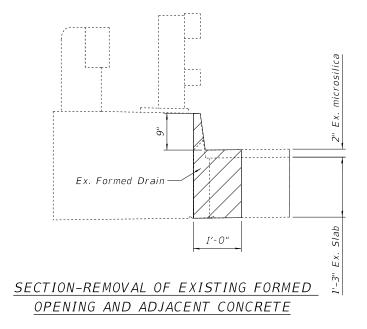
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DEPARTMENT OF TRANSPORTATION

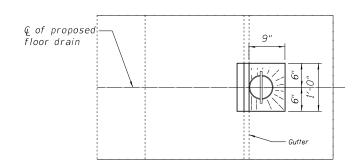
CONCRETE BRIDGE RAIL & POST REMOVAL SN 014-0031						
	SHEET 13	OF 17	SHEETS			

F.A.S. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEE NO.
1780	26BDR-BJR-1			CLINTON	27	23
				CONTRAC	CT NO. 7	'6M03
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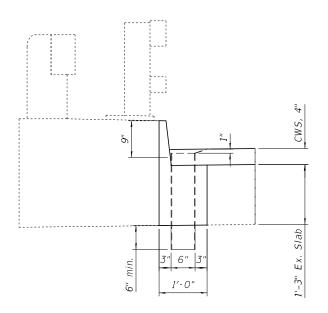
PLAN-REMOVAL OF EXISTING FORMED OPENING AND ADJACENT CONCRETE





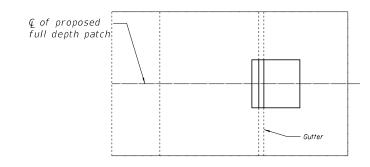
PLAN-PROPOSED FLOOR DRAIN & FULL DEPTH PATCH

(See sheet 1 of 17 for locations to replace formed drain with floor drain & full depth patch)



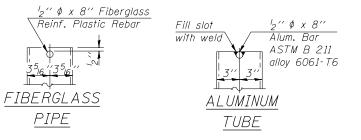
SECTION-PROPOSED FLOOR DRAIN & FULL DEPTH PATCH

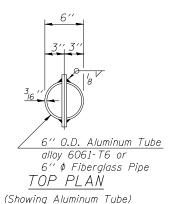
(Place top of drain 1" below top of proposed CWS)



PLAN-PROPOSED FULL DEPTH PATCH @ ELIMINATED FLOOR DRAIN

(See sheet 1 of 17 for locations to replace formed drain with full depth patch)





Notes:

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile strees of 30,000 p.s.i. minimum.

Cost of Concrete Removal and replacement is included in cost of Deck Slab Repair (Full Depth, Type II)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAIN DETAILS SN 014-0031 SHEET 14 OF 17 SHEETS
 F.A.S. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

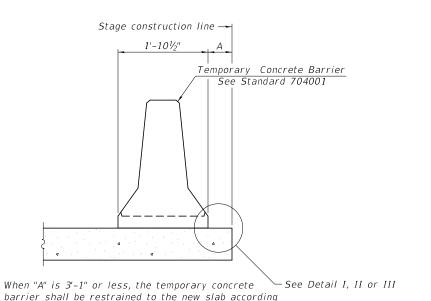
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 CONTRACT NO. 76M03

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min. min. Drill 3-11/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with

EXISTING SLAB

1'-101/5"

← Stage removal line

1x8 UNC US Std. 1½6" I.D. x 2½" O.D. x approx. 8 guage thick washer

RESTRAINING PIN

NEW SLAB OR NEW DECK BEAM

to Detail I, II or III. No restraint is required

when "A" is greater than 3'-1".

Temporary Concrete Barrier. No restraint

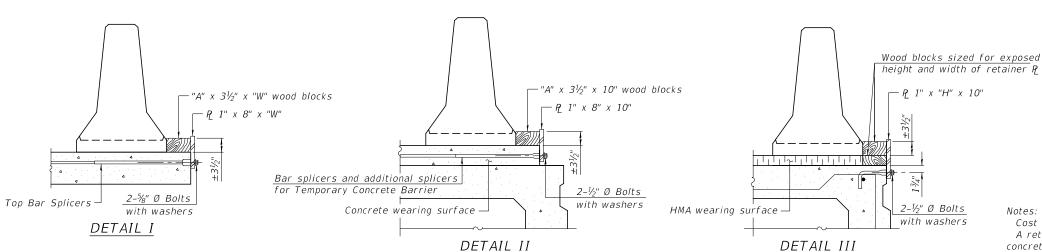
is required when "A" is greater than 3'-1".

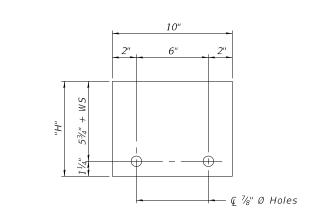
SECTIONS THRU SLAB OR DECK BEAM

Temporary Concrete Barrier

See Standard 704001

6"





← Stage removal line

1'-101/5"

* When hot-mix asphalt wearng surface is present, embedment

EXISTING DECK BEAM

shall be 3" plus the wearing surface depth.

STEEL RETAINER P 1" x "H" x 10" (Detail III)

Detail I Detail II 2" Top bars Spa., 2" Detail I Detail II - Ç 7%" Ø Holes

STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)

BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

COUNTY

CLINTON 27 25

CONTRACT NO. 76M03

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	F.A.S. RTE.	SECTION
STRUCTURE NO. 014-0031	1780	26BDR-BJR-1
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SHEET NO. 15 OF 17 SHEETS		ILLINOIS FED. A

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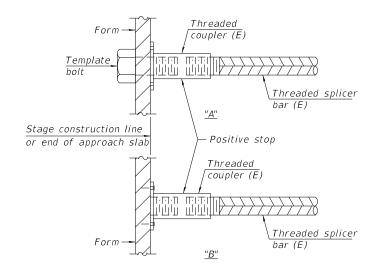
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STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

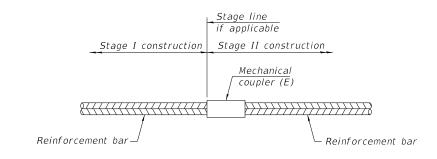
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
E. Abut	#6	4	4'-5"
W. Abut	#6	5	4'-5"
CWS	#4	100	2'-5"



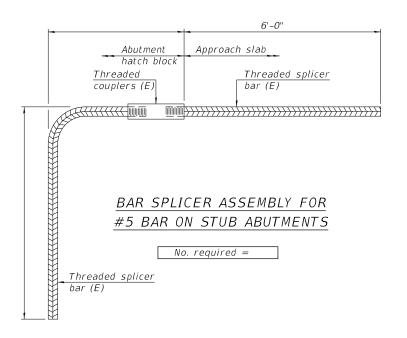
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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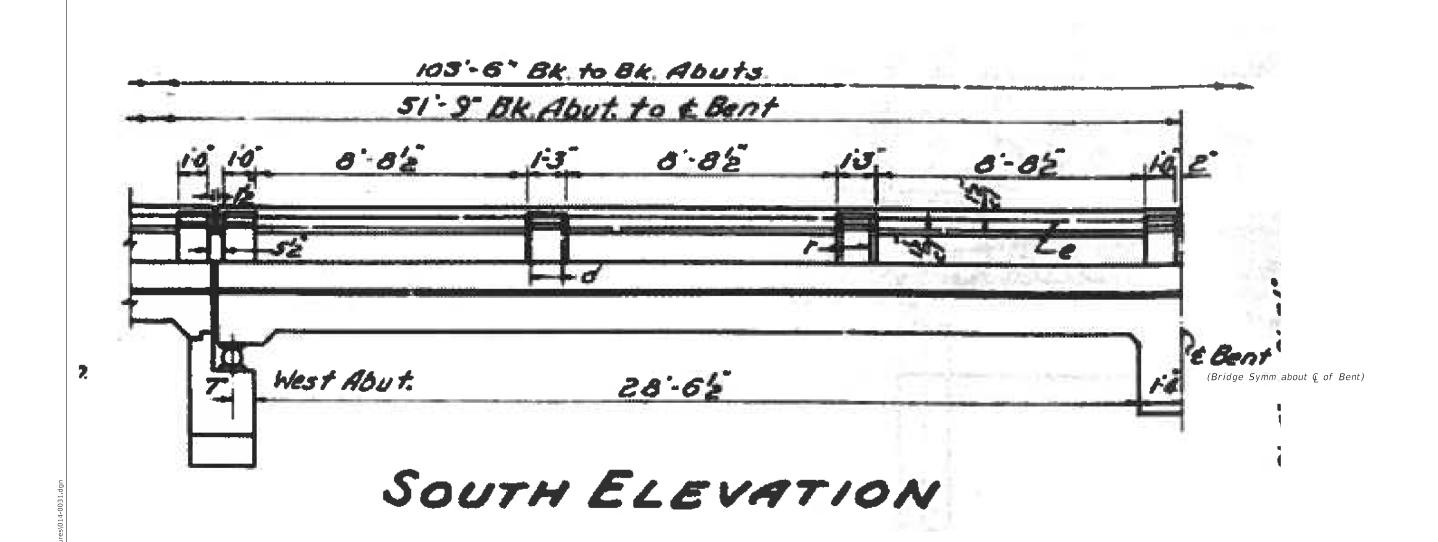
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 014–0031

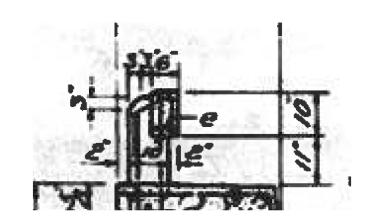
SHEET 16 OF 17 SHEETS

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FOR INFORMATION ONLY



MODEL: 0140031-76M03-017

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY - EXISTING CONC BRIDGE RAIL & POST SN 014-0031

SHEET 17 OF 17 SHEETS

 F.A.S. RTE.
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 TOTAL SHEETS NO.
 SHEET NO.

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 CONTRACT NO.
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