

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

D-91-388-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN THE CITY OF CHICAGO

# PROPOSED HIGHWAY PLANS

FAI ROUTE 94: I-94 (NB) BISHOP FORD EXPWY  
OVER STONY ISLAND AVE. (SB)  
SECTION 1212-BR(15)  
BRIDGE REPAIRS, BRIDGE JOINT REPAIR  
COOK COUNTY



LOCATION OF SECTION INDICATED THUS: ———

**TRAFFIC DATA**

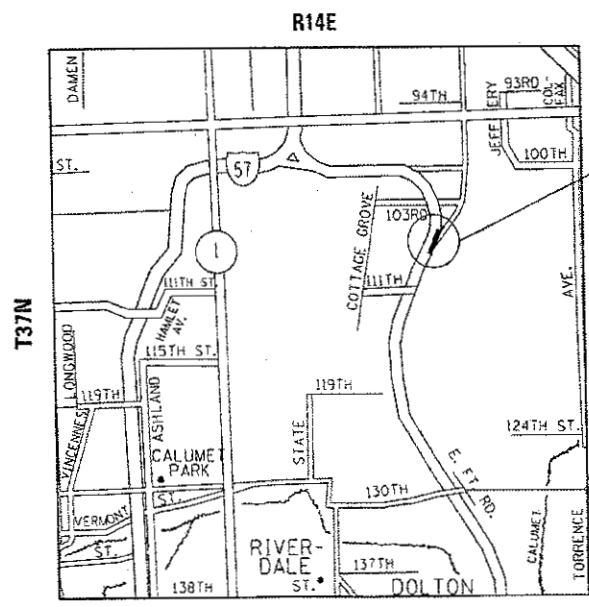
**I-94 (NB) BISHOP FORD EXPWY**

2016 ADT = 61,850 (I-94 (NB) ON STRUCTURE)  
2016 ADT = 123,700 (I-94)  
SPEED LIMIT = 55 MPH

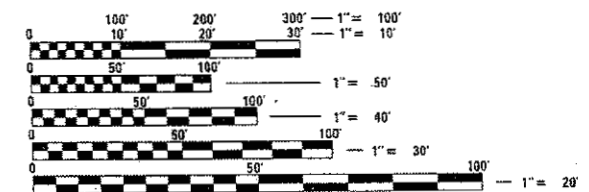
**STONY ISLAND (SB)**

2016 ADT = 35,300  
SPEED LIMIT = 45 MPH

C-91-388-15



IMPROVEMENT LOCATION  
SN 016-0153



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.

C.U.A.N  
CHICAGO UTILITY ALERT NETWORK  
1-312-744-7000

PROJECT ENGINEER: J. ALAIN MIDY (847) 221-3056  
PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

GROSS LENGTH = 177.33 FT. = 0.034 MILE  
NET LENGTH = 177.33 FT. = 0.034 MILE

CONTRACT NO. 62B13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
SUBMITTED February 7, 2018  
*Anthony J. Quigley* REGIONAL ENGINEER  
*Mark J. ...* ENGINEER OF DESIGN AND ENVIRONMENT  
*Paul P. ...* DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

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**STATE STANDARDS**

- 635001-02 REFLECTOR MARKER AND MOUNTING DETAILS
- 642001-02 SHOULDER RUMBLE STRIPS, 16 IN.
- 643001-02 SAND MODULE IMPACT ATTENUATORS
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5M TO 24" (600 MM) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
- 701400-09 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701401-11 LANE CLOSURE, FREEWAY/ EXPRESSWAY
- 701402-12 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
- 701428-01 TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
- 701901-07 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER

**GENERAL NOTES**

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT NETWORK) AT (312)744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF CHICAGO
3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
4. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
5. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
7. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
8. THE ENGINEER SHALL CONTACT PATRIC HARRIS, AREA TRAFFIC FIELD ENGINEER, AT (708) 597-9800 OR PATRICE.HARRIS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
9. THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE (BRIDGE INSPECTORS).
10. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
11. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
12. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS
13. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.

**HMA MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT SHOULDERS		
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70, (IL 9.5 mm)	4% @ 70 GYR	QC/QA
QMP DESIGNATION: QUALITY CONTROL/ QUALITY ASSURANCE (QC/QA)		

**NOTE:**

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD. / IN.  
 THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS / SBR PG 76 -22" AND FOR NON POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.  
 FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.  
 QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

FILE NAME =	USER NAME = pyzranovskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS AND GENERAL NOTES</b>				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
path\11084EBID\INTEG\Illinois.gov\FWIDOT\Documents\1007\Office\Dist\1\Projects\138\Drawings\Design\138B15-shr-gennote.dgn		CHECKED -	REVISED -		94	1212-BR(15)	COOK	31	2				
PLOT SCALE = 100.0000' / in.		DATE -	REVISED -		CONTRACT NO. 62B13								
PLOT DATE = 1/17/2018					ILLINOIS FED. AID PROJECT								

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0047				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	214	214				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	53.2	53.2				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	475	475				
44200553	CLASS A PATCHES, TYPE II, 10 INCH	SQ YD	10	10				
50102400	CONCRETE REMOVAL	CU YD	24.5	24.5				
50300255	CONCRETE SUPERSTRUCTURE	CU YD	20.1	20.1				
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2950	2950				
50800515	BAR SPLICERS	EACH	24	24				
52000110	PREFORMED JOINT STRIP SEAL	FOOT	165	165				
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	3201	3201				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3				
67100100	MOBILIZATION	LSUM	1	1				
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	8675	8675				
70300905	PAVEMENT MARKING TAPE, TYPE IV 5"	FOOT	1380	1380				
70300912	PAVEMENT MARKING TAPE, TYPE IV 12"	FOOT	340	340				

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		0047				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	362.5	362.5				
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	362.5	362.5				
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	1	1				
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	1	1				
78003110	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 4"	FOOT	3980	3980				
78003120	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5"	FOOT	650	650				
78003150	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 12"	FOOT	80	80				
*78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	530	530				
*78008220	POLYUREA PAVEMENT MARKING TYPE I - LINE 5"	FOOT	80	80				
*78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	112	112				
*78100300	REPLACEMENT REFLECTOR	EACH	188	188				
*78200011	BARRIER WALL Reflectors, TYPE C	EACH	13	13				

FILE NAME =	USER NAME = pjr200808170	DESIGNED -	REVISED -
OFFICE =	OFFICE =	CHECKED -	REVISED -
PLLOT SCALE = 1/8" = 1' / IN.	DATE = 2/18/2008		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**1-94 (NB) BISHOP FORD OVER STONEY ISLAND AVE. (SB) SN 016-0153**  
**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE. 94	SECTION 1212-BR(15)	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 3
CONTRACT NO. 62B13				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

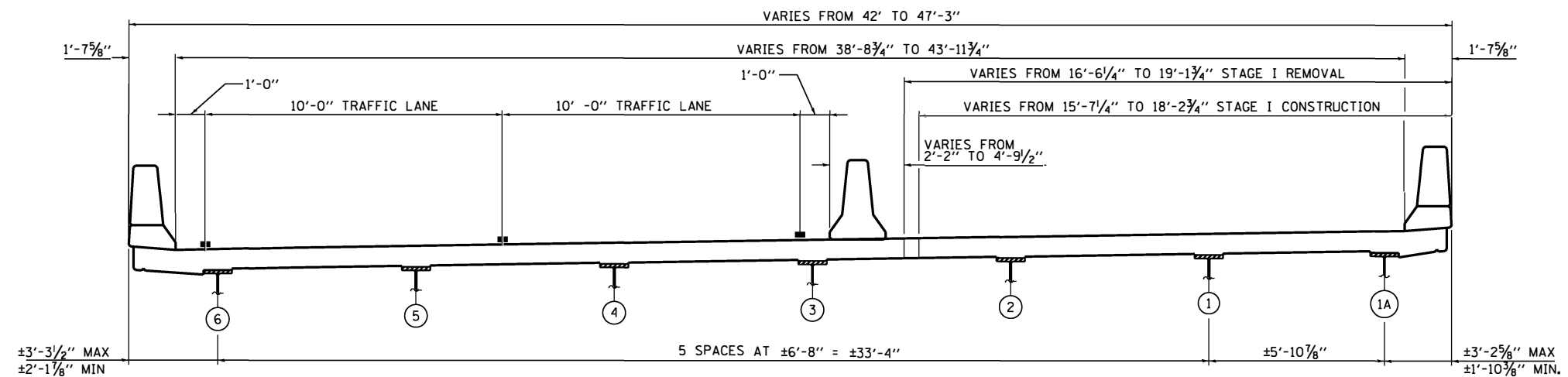
\* Specialty Item

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	0047						CODE NO	ITEM	UNIT	TOTAL QUANTITIES						
* 81200270	CONDUIT EMBEDDED IN STRUCTURE, 4" DIA., PVC	FOOT	14	14															
X0327980	PAVEMENT MARKING REMOVAL - WATER	SO FT	2770	2770															
	BLASTING																		
* X1400256	JUNCTION, BOX TYPE J, 41" X 12" X 9"	EACH	1	1															
X5870015	BRIDGE DECK CONCRETE SEALER	SO FT	8984	8984															
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1															
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	1	1															
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	3262	3262															
* X8570001	SMART TRAFFIC MONITORING SYSTEM	CAL DA	30	30															
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	3	3															
X0900047	PREFORMED JOINT SEAL, 3"	FOOT	165	165															

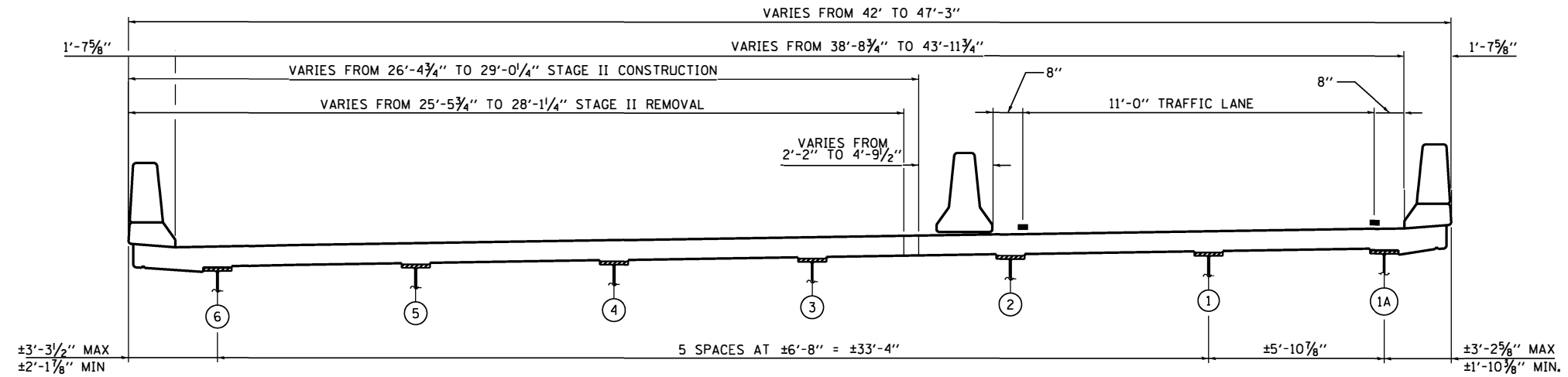
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FILE NAME =	USER NAME = pyz20m08170	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION 1-94 (NB) BISHOP FORD OVER STONEY ISLAND AVE. (SB) SN: 016-0153 SUMMARY OF QUANTITIES	SCALE: SHEET NO. 2 OF 2 SHEETS STA. TO STA.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Office/Dir/rd/Proj/sect/CD/DB/Design/Draw/Sheet/Title	Office/Dir/rd/Proj/sect/CD/DB/Design/Draw/Sheet/Title	CHECKED -	REVISED -			94	1212-BR(15)	COOK	31	4	
PLOT SCALE = 100,000 / 1 in.	DATE -	DATE -	DATE -			CONTRACT NO. 62813					
PLOT DATE = 1/18/2018						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

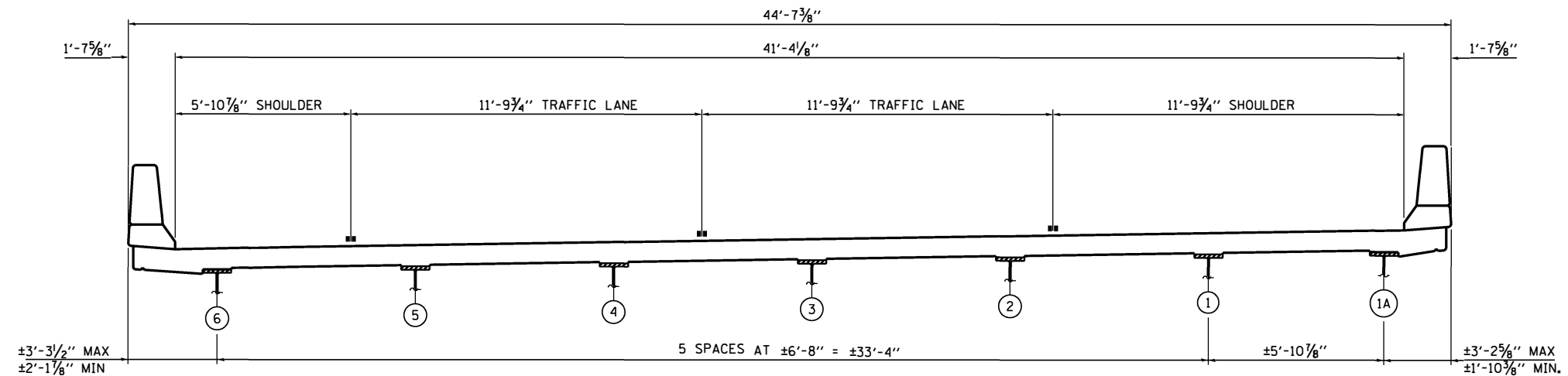
\* Specialty Items



**CROSS SECTION  
STAGE I**

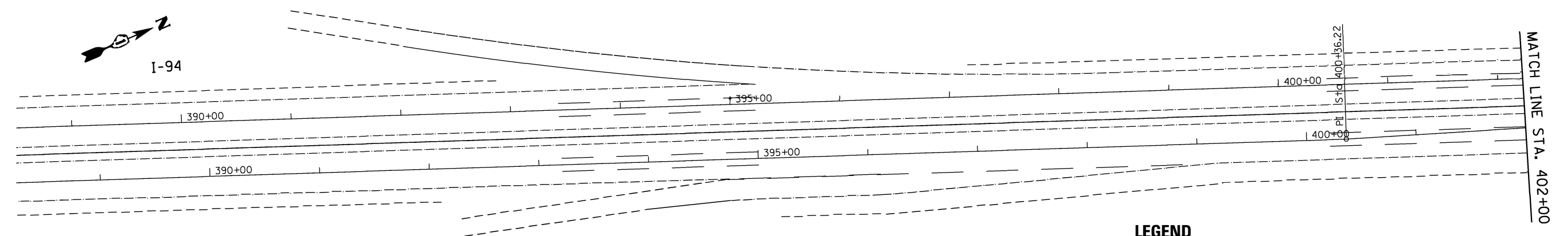
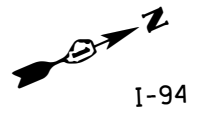


**CROSS SECTION  
STAGE II**



**CROSS SECTION  
FINAL**

FILE NAME =	USER NAME = pyzenowski	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGING TYPICAL CROSS SECTIONS I-94 BISHOP FORD OVER STONEY ISLAND AVE SB 016-0153</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw\11084EBIDINTEG.illinois.gov\PIWDD\Documents\DOT Offices\District 1\Projects\DI388\Drawings\Design\DI38815-sh-t-Stage 1.dgn		REVISION				94	1212-BR(15)	COOK	31	5	
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -			<b>CONTRACT NO. 62B13</b>					
	PLOT DATE = 1/18/2018	DATE -	REVISED -			SCALE:	SHEET 1	OF 5 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

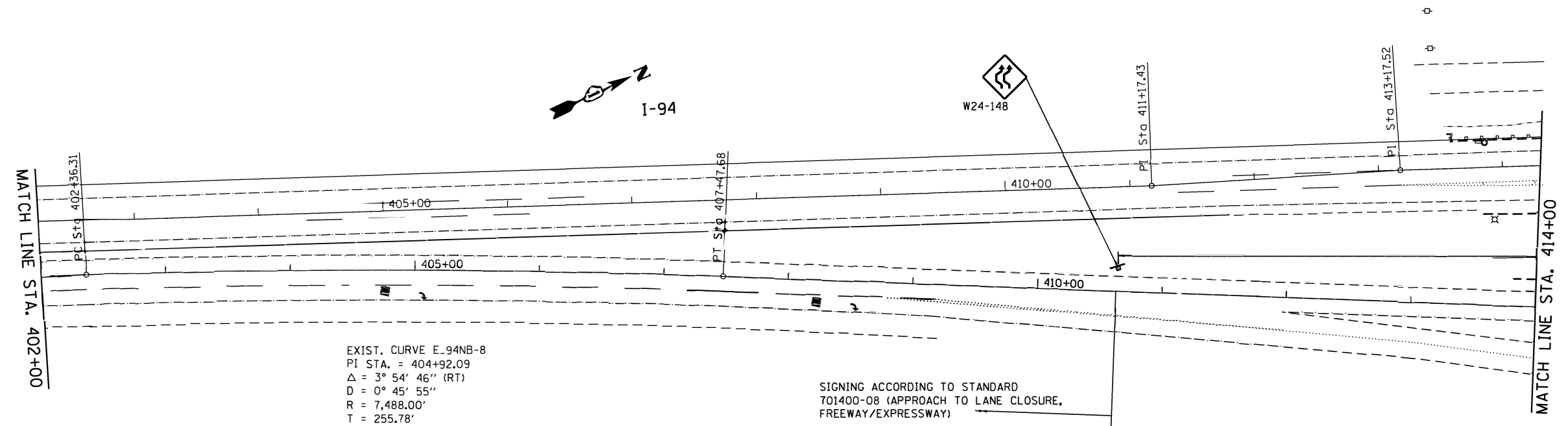


**NOTES:**

- ① PAVEMENT MARKING TAPE, TYPE IV - 4" YELLOW
- ② PAVEMENT MARKING TAPE, TYPE IV - 4" WHITE
- ③ PAVEMENT MARKING TAPE, TYPE IV - 5", SKIP DASH, WHITE
- ④ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, YELLOW
- ⑤ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, WHITE

**LEGEND**

- Work area
- Temporary concrete barrier
- Impact attenuator
- Arrow board
- Direction indicator barricade with steady burn monodirectional light
- Portable changeable message sign
- Type II barricade, drum, or vertical barricade with monodirectional flashing light
- Type III Barricade with flashing lights











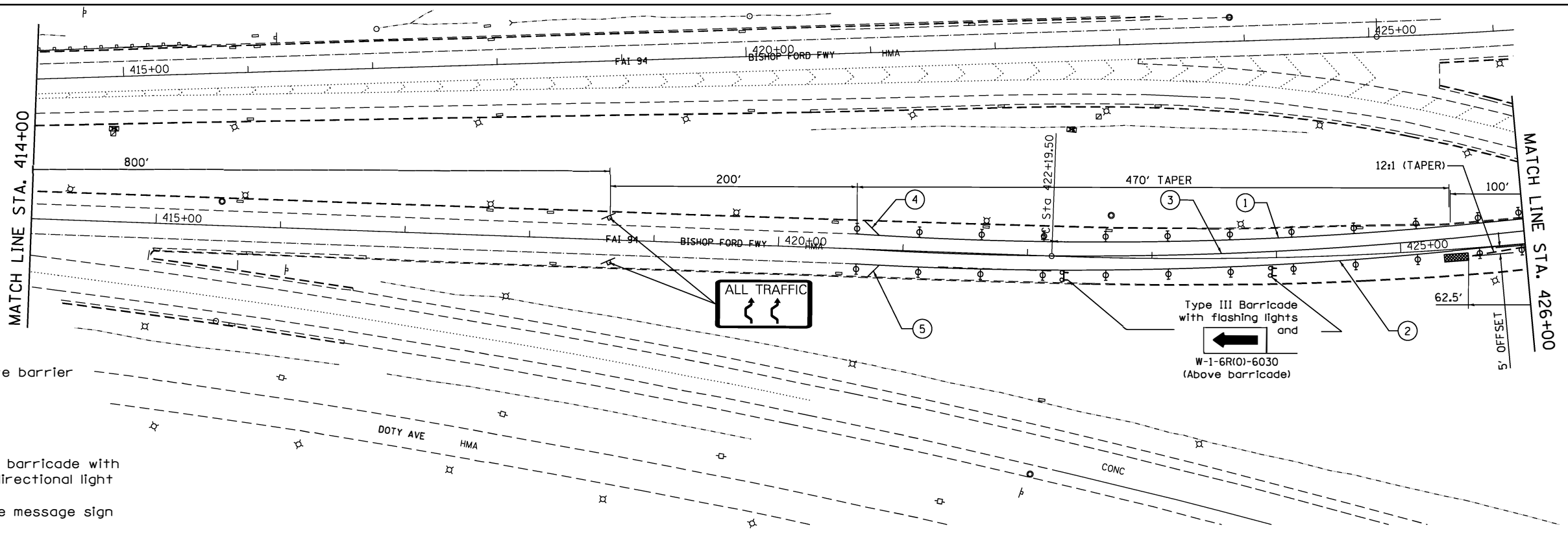
EXIST. CURVE E-94NB-8  
 PI STA. = 404+92.09  
 $\Delta = 3^\circ 54' 46''$  (RT)  
 $D = 0^\circ 45' 55''$   
 $R = 7,488.00'$   
 $T = 255.78'$   
 $L = 511.37'$   
 $E = 4.37'$   
 $e = \text{-----}$   
 $T.R. = \text{-----}$   
 $S.E. RUN = \text{-----}$   
 P.C. STA. = 402+36.31  
 P.T. STA. = 407+47.68

SIGNING ACCORDING TO STANDARD  
 701400-08 (APPROACH TO LANE CLOSURE,  
 FREEWAY/EXPRESSWAY)

FILE NAME =	USER NAME = pyzenowski-b	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC (STAGE 1) I 94 NB (BISHOP FORD) OVER STONEY ISLAND AVE. SB</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\DI38815-sh-t-Stage 1.dgn	DRAWN -	REVISED -	94			1212-BR(15)	COOK	31	6	
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 62B13							
Default	DATE -	REVISED -	SCALE: 1" = 50'			SHEET 2 OF 5 SHEETS	STA. TO STA.	(ILLINOIS) FED. AID PROJECT		

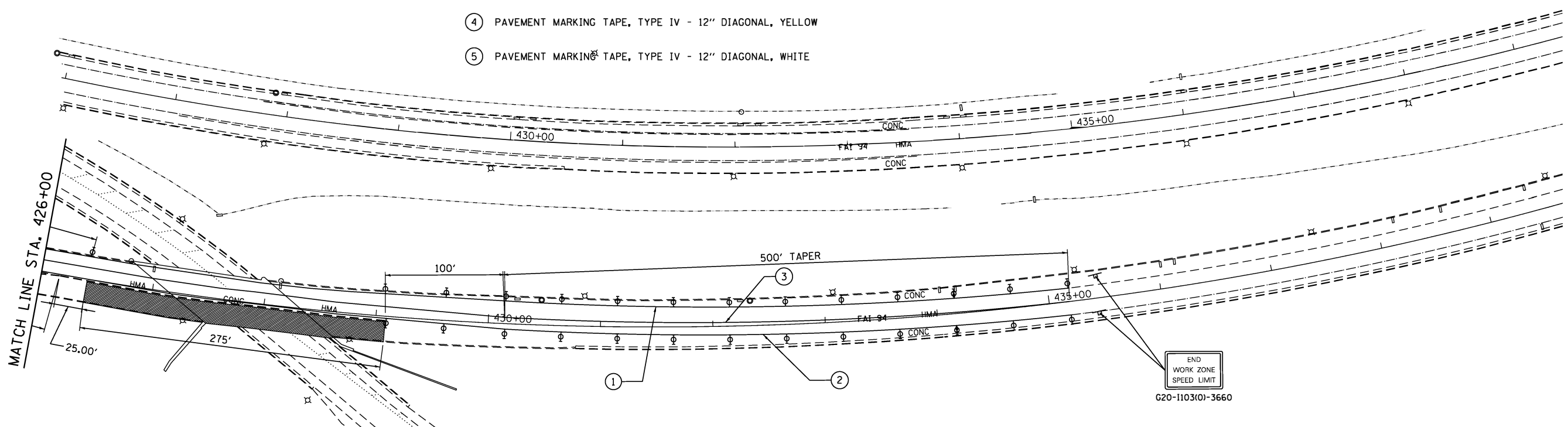
**LEGEND**

-  Work area
-  Temporary concrete barrier
-  Impact attenuator
-  Arrow board
-  Direction indicator barricade with steady burn monodirectional light
-  Portable changeable message sign
-  Type II barricade, drum, or vertical barricade with monodirectional flashing light
-  Type III Barricade with flashing lights

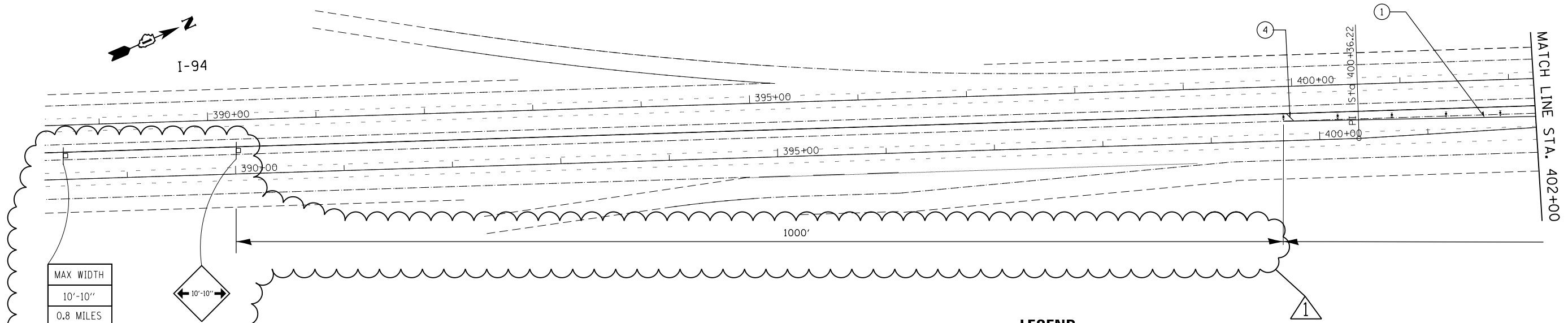


**NOTES:**

- ① PAVEMENT MARKING TAPE, TYPE IV - 4" YELLOW
- ② PAVEMENT MARKING TAPE, TYPE IV - 4" WHITE
- ③ PAVEMENT MARKING TAPE, TYPE IV - 5", SKIP DASH, WHITE
- ④ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, YELLOW
- ⑤ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, WHITE



FILE NAME =	USER NAME = pyrozenowski	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC (STAGE 1) 194 NB (BISHOP FORD) OVER STONEY ISLAND AVE. SB</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
						94	1212-BR(15)	COOK	31	7	
						CONTRACT NO. 62B13					
						ILLINOIS FED. AID PROJECT					
Default	PLOT DATE = 1/19/2018	DATE -	REVISED -	SCALE: 1" = 50'	SHEET 3 OF 5 SHEETS	STA.	TO STA.				

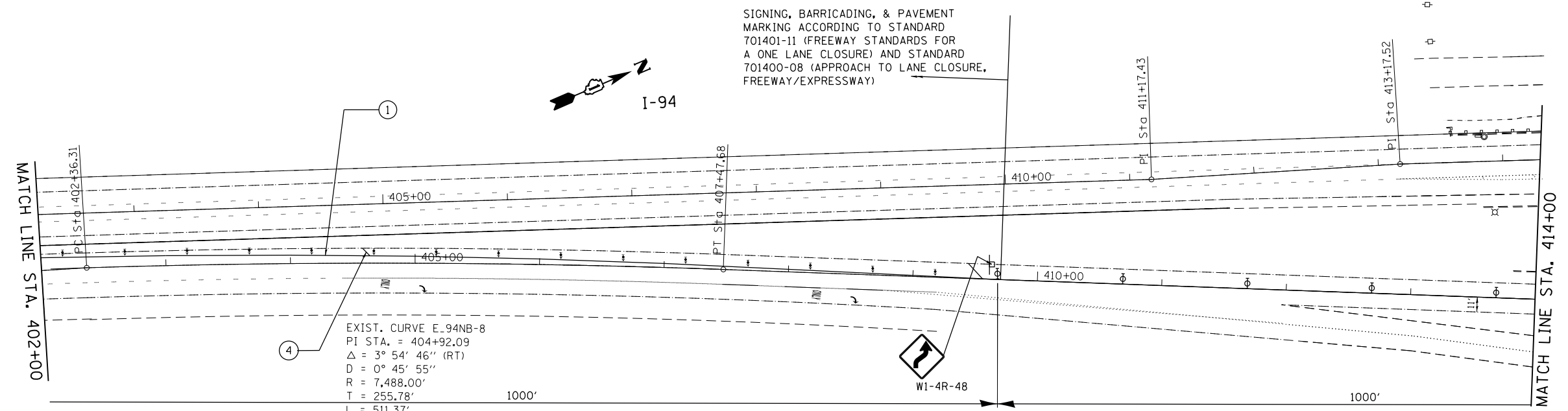


**NOTES:**

- ① PAVEMENT MARKING TAPE, TYPE IV - 4" YELLOW
- ② PAVEMENT MARKING TAPE, TYPE IV - 4" WHITE
- ③ PAVEMENT MARKING TAPE, TYPE IV - 5", 30' SKIP, 10' DASH, WHITE
- ④ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, YELLOW
- ⑤ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, WHITE

**LEGEND**

- Work area
- Temporary concrete barrier
- Impact attenuator, (non-redirective), test level 3
- Arrow board
- Direction indicator barricade with steady burn monodirectional light
- Portable changeable message sign
- Type II barricade, drum, or vertical barricade with monodirectional flashing light
- Type III Barricade with flashing lights



SIGNING, BARRICADING, & PAVEMENT MARKING ACCORDING TO STANDARD 701401-11 (FREEWAY STANDARDS FOR A ONE LANE CLOSURE) AND STANDARD 701400-08 (APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY)









EXIST. CURVE E\_94NB-8  
 PI STA. = 404+92.09  
 $\Delta = 3^\circ 54' 46''$  (RT)  
 $D = 0^\circ 45' 55''$   
 $R = 7,488.00'$   
 $T = 255.78'$   
 $L = 511.37'$   
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 $S.E. RUN = \text{-----}$   
 $P.C. STA. = 402+36.31$   
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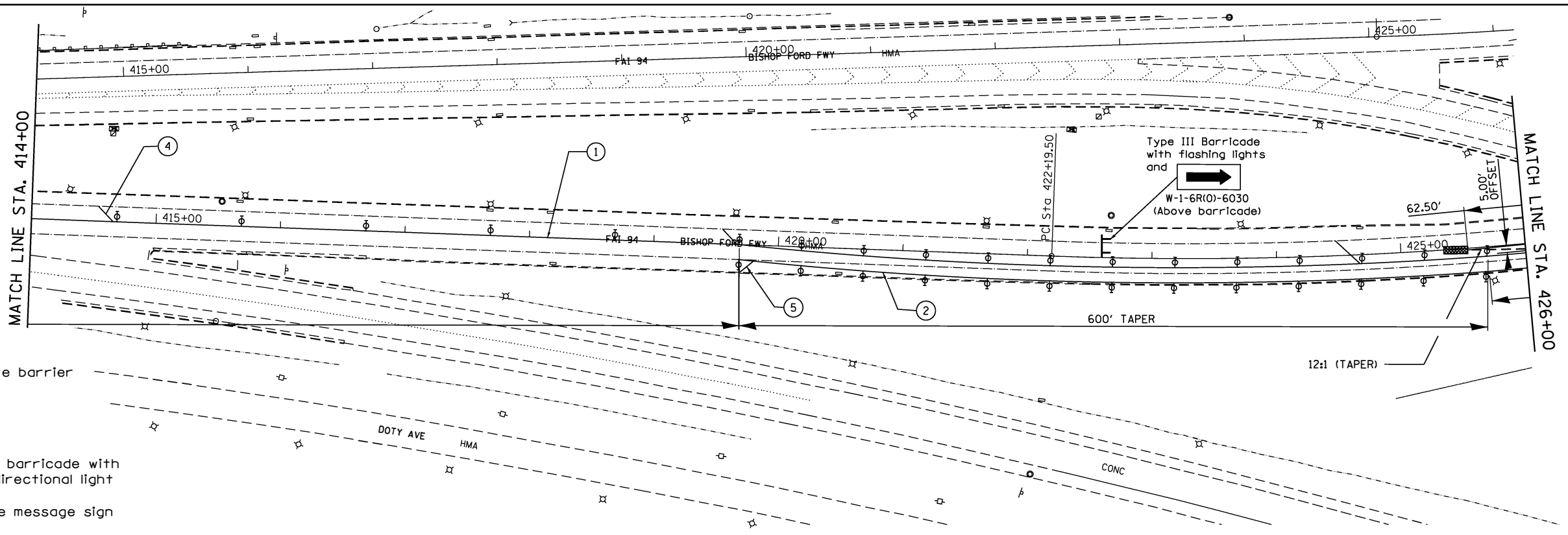
3/23/18 RP

FILE NAME =	USER NAME = pyrzenowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC (STAGE 2) I 94 NB (BISHOP FORD) OVER STONEY ISLAND AVE. SB</b>	F.A.I. R.E. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\1\084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT Offices\District 1\Projects\DI388\Drawings\Design\DI38815-sht-Stage 1.dgn	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			94	1212-BR(15)	COOK	31	8
Default	PLOT DATE = 3/23/2018	DATE -	REVISED -			CONTRACT NO. 62B13			ILLINOIS FED. AID PROJECT	
						SCALE: 1" = 50'	SHEET 2 OF 5 SHEETS	STA. TO STA.		



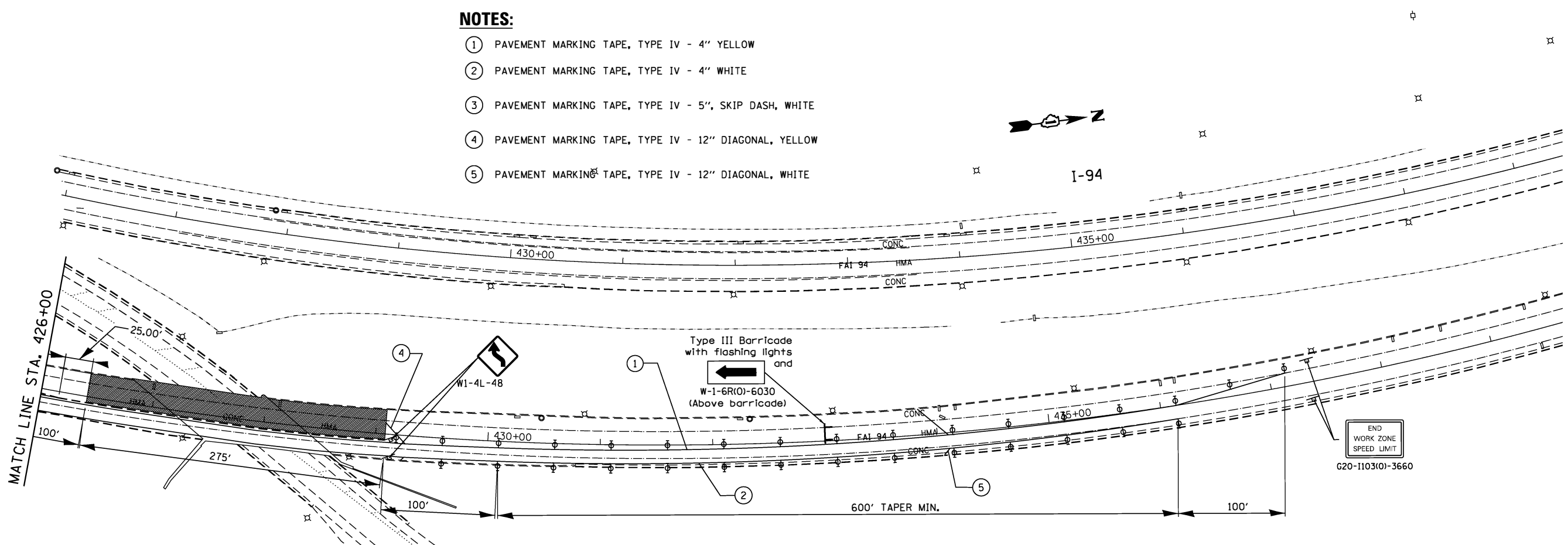
**LEGEND**

-  Work area
-  Temporary concrete barrier
-  Impact attenuator
-  Arrow board
-  Direction indicator barricade with steady burn monodirectional light
-  Portable changeable message sign
-  Type II barricade, drum, or vertical barricade with monodirectional flashing light
-  Type III Barricade with flashing lights



**NOTES:**

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- ② PAVEMENT MARKING TAPE, TYPE IV - 4" WHITE
- ③ PAVEMENT MARKING TAPE, TYPE IV - 5", SKIP DASH, WHITE
- ④ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, YELLOW
- ⑤ PAVEMENT MARKING TAPE, TYPE IV - 12" DIAGONAL, WHITE



FILE NAME =	USER NAME = pyzenowski	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC (STAGE 2) I 94 NB (BISHOP FORD) OVER STONEY ISLAND AVE. SB</b>	F.A.I. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
						94	1212-BR(15)	COOK	31	9
						CONTRACT NO. 62B13				
Default	PLOT DATE = 1/19/2018	DATE -	REVISI	SCALE: 1" = 50'	SHEET 3 OF 5 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

**Existing Structure:** This bridge (S.N. 016-0153), built in 1960, is a single span riveted plate girder bridge with a reinforced concrete deck and bituminous overlay. The span length is 113'-5<sup>7</sup>/<sub>8</sub>" along the reference line and the total length back to back of abutments 122'-4<sup>3</sup>/<sub>4</sub>". The roadway is constructed on a horizontal curve with a 3015.71 foot radius. The structure is skewed 57°7'32" right relative to the tangent of S.B. Stony Island Avenue. The closed abutments and parallel wingwalls are supported on pile foundations.

Traffic is to be maintained utilizing stage construction.

No salvage.

**LOADING**

HS20-44 & ALTERNATE ORIGINAL CONSTRUCTION (1960)

Allow 50 #/sq. ft. for wearing surface.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

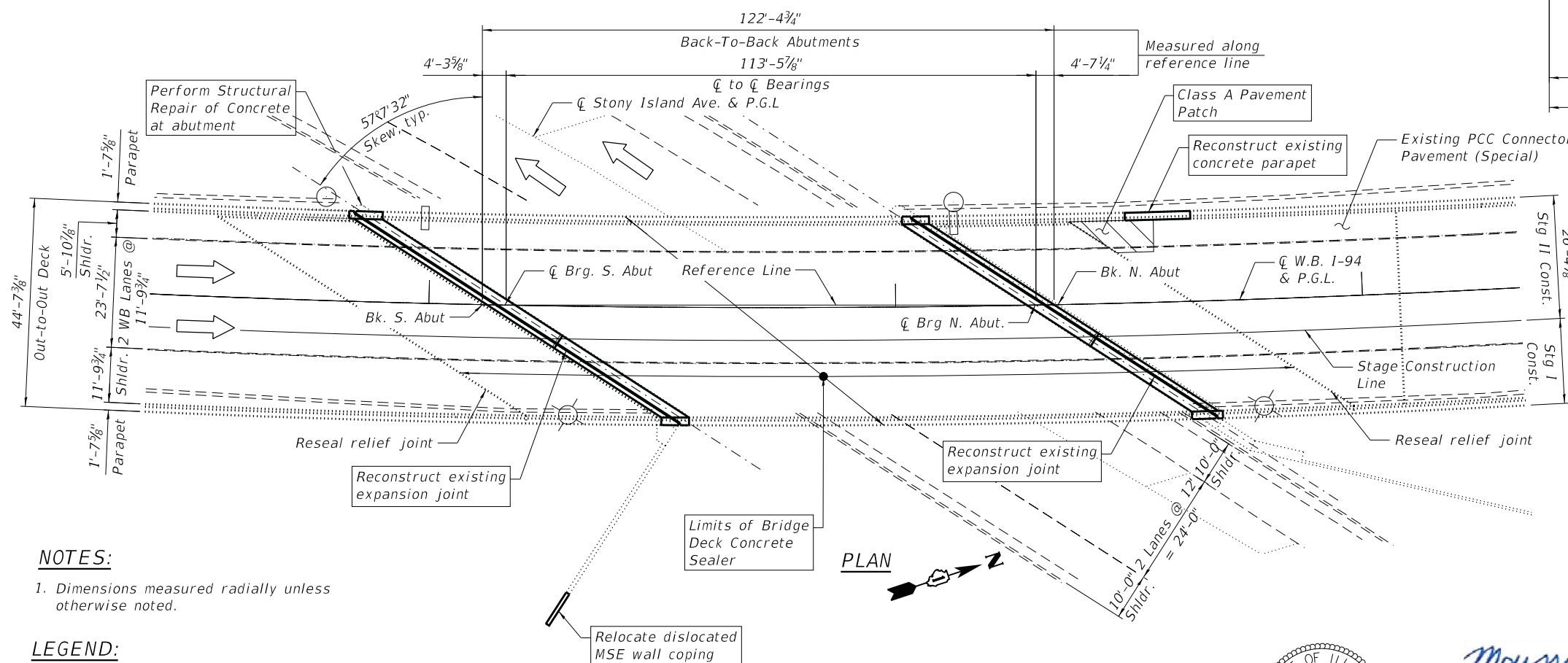
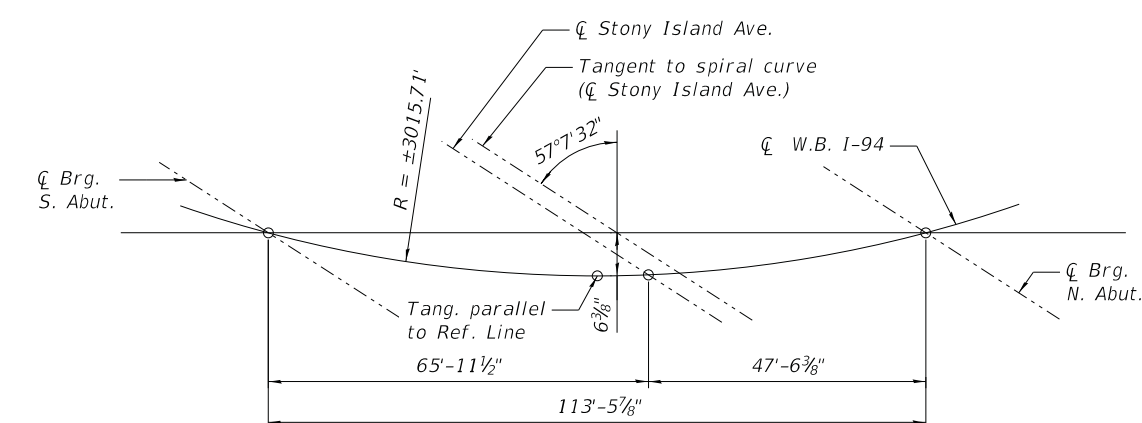
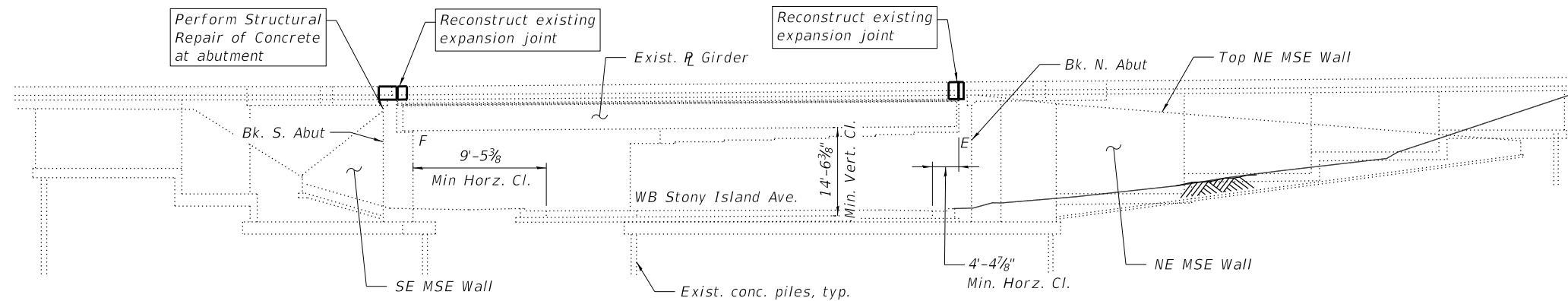
ORIGINAL CONSTRUCTION  
1996 AASHTO, 1997 and 1998 Interims.  
1995 Seismic Retrofitting Manual for Highway Bridges (FHWA-RD-94-052)

**DESIGN STRESSES**

ORIGINAL CONSTRUCTION  
f'c = 3,500 psi (Concrete)  
fy = 20,000 psi (Reinforcement)

**SCOPE OF WORK**

1. Reconstruct transverse expansion joints at the south and north abutments with preformed joint strip seal.
2. Remove existing 4" PJS relief joints and replace with silicone joint seal.
3. Remove and replace portion of parapet at the Northwest Wingwall.
4. Relocate the dislocated MSE Wall Cap to its original location and anchor it to the top of the MSE Wingwall.
5. Perform structural concrete repairs at the South Abutment.
6. Class A Patch in PCC Connector pavement adjacent to the north approach slab.
7. Perform deck sealing.

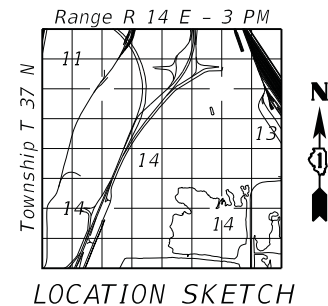


**NOTES:**

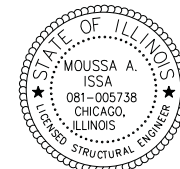
1. Dimensions measured radially unless otherwise noted.

**LEGEND:**

- ➔ Traffic Direction
- ▨ Approach Slab Repair (Full Depth)



**GENERAL PLAN & ELEVATION**  
W.B. F.A.I. ROUTE 94 OVER  
S.B. STONY ISLAND AVENUE  
SECTION 1212-BR(15)  
COOK COUNTY  
STATION 363+69.95  
S.N. 016-0153



Signed **Moussa A. Issa**  
Dr. Moussa A. Issa, S.E. Il. Lic. No. 081-005738  
Expires 11-30-2018  
Date **2/8/18** For Sheets S-01 Thru S-15

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PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE = 2/8/2018	DATE - 2/8/2018	REVISED -

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DRAWN - AMI	REVISED -
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DATE - 2/8/2018	REVISED -

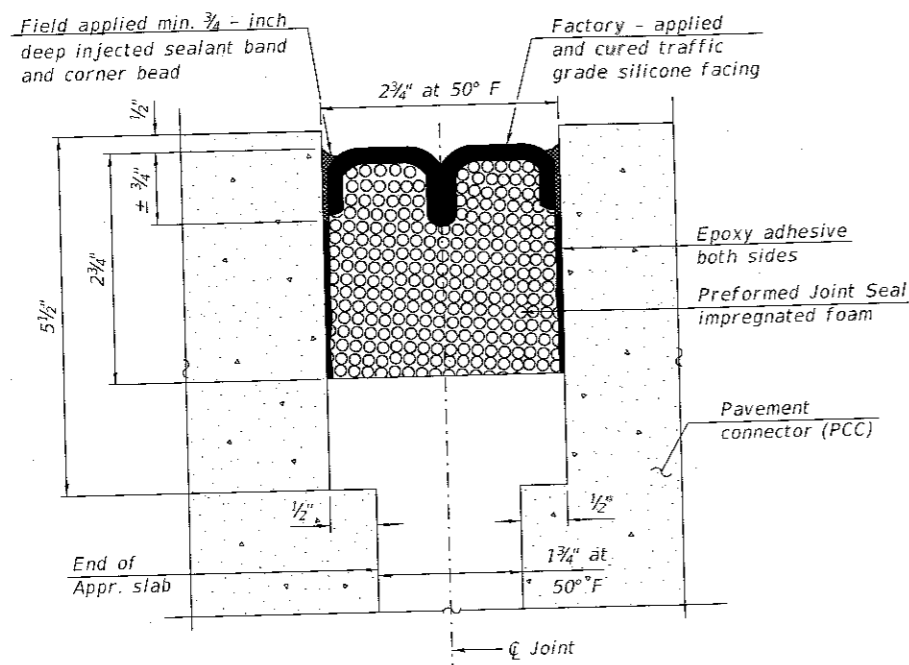
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET S-01 OF S-15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	10
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

**GENERAL NOTES**

- 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.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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.
- The contractor shall take necessary precautions to insure that no debris will endanger or interfere with traffic on the roadway beneath the bridge according to Article 107.09 (or 107.12) of the Standard Specifications. This work will not be paid for separately, but shall be included in the contract unit price for the appropriate pay item involved and no additional compensation will be allowed.
- Concrete superstructure shall have a seven day minimum cure.
- Existing pavement markings shall be temporarily covered prior to application of the deck surface treatment, to prevent the material from being applied to the markings and to protect the reflective properties of the markings. The temporary covering material used shall be such that it will not affect the markings reflectively when removed after application of the deck surface treatment and prior to opening to traffic. Cost included with Bridge Deck Concrete Sealer.
- Bridge Deck Concrete Sealer shall be applied to the bridge deck, inside faces and top faces of parapets within the limits shown on Sheet S-01.
- The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.



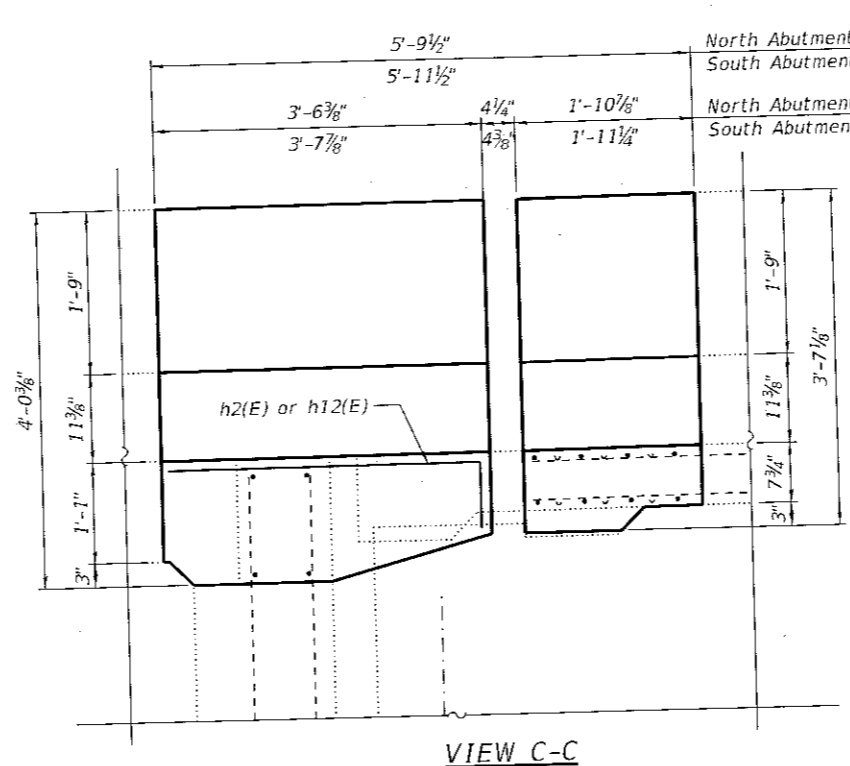
**PREFORMED JOINT SEALER DETAIL**

**INDEX OF SHEETS**

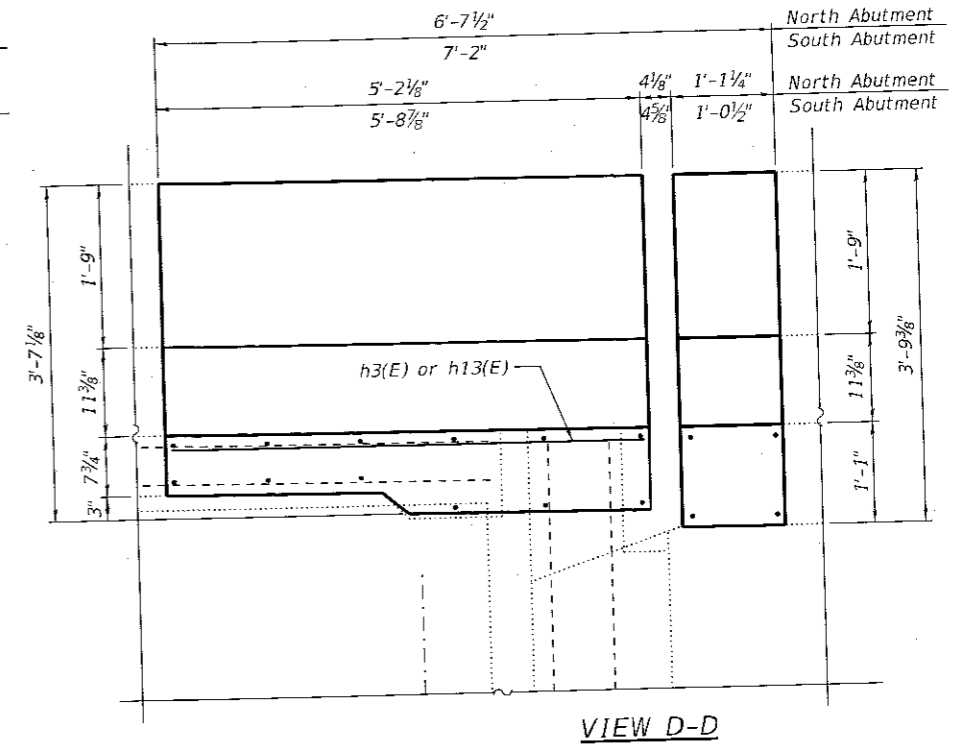
SHEET NO.	DESCRIPTION
S-01	GENERAL PLAN & ELEVATION
S-02	GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
S-03	STAGE CONSTRUCTION SEQUENCE
S-04	SOUTH ABUTMENT JOINT REMOVAL AND REPLACEMENT
S-05	NORTH ABUTMENT JOINT REMOVAL AND REPLACEMENT
S-06	PREFORMED JOINT STRIP SEAL
S-07	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S-08	NORTH APPROACH SLAB REPAIRS
S-09	SOUTH ABUTMENT REPAIRS
S-10	SOUTHEAST MSE WALL REPAIRS
S-11	EXISTING NORTH APPROACH SLAB
S-12	EXISTING BRIDGE APPROACH PAVEMENT
S-13	JUNCTION BOX TYPE J (SHEET 1 OF 3)
S-14	JUNCTION BOX TYPE J (SHEET 2 OF 3)
S-15	JUNCTION BOX TYPE J (SHEET 3 OF 3)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Class A Patches, Type II, 10 Inch	SQ YD	10	-	10
Concrete Removal	CU YD	24.5	-	24.5
Concrete Superstructure	CU YD	20.1	-	20.1
Reinforcement Bars, Epoxy Coated	POUND	2,950	-	2,950
Bar Splicers	EACH	24	-	24
Preformed Joint Seal, 3"	FOOT	165	-	165
Preformed Joint Strip Seal	FOOT	165	-	165
Conduit Embedded In Structure, 4" Dia., PVC	FOOT	14	-	14
Junction, Box Type J, 41" x 12" x 9"	EACH	1	-	1
Bridge Deck Concrete Sealer	SQ FT	8,984	-	8,984
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT	-	3	3



**VIEW C-C**



**VIEW D-D**

**NOTE:**

- For locations of Views C-C and D-D, see Sheets S-04 and S-05.

**BAR h2(E) or h12(E)**

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 PLOT DATE = 3/5/2018

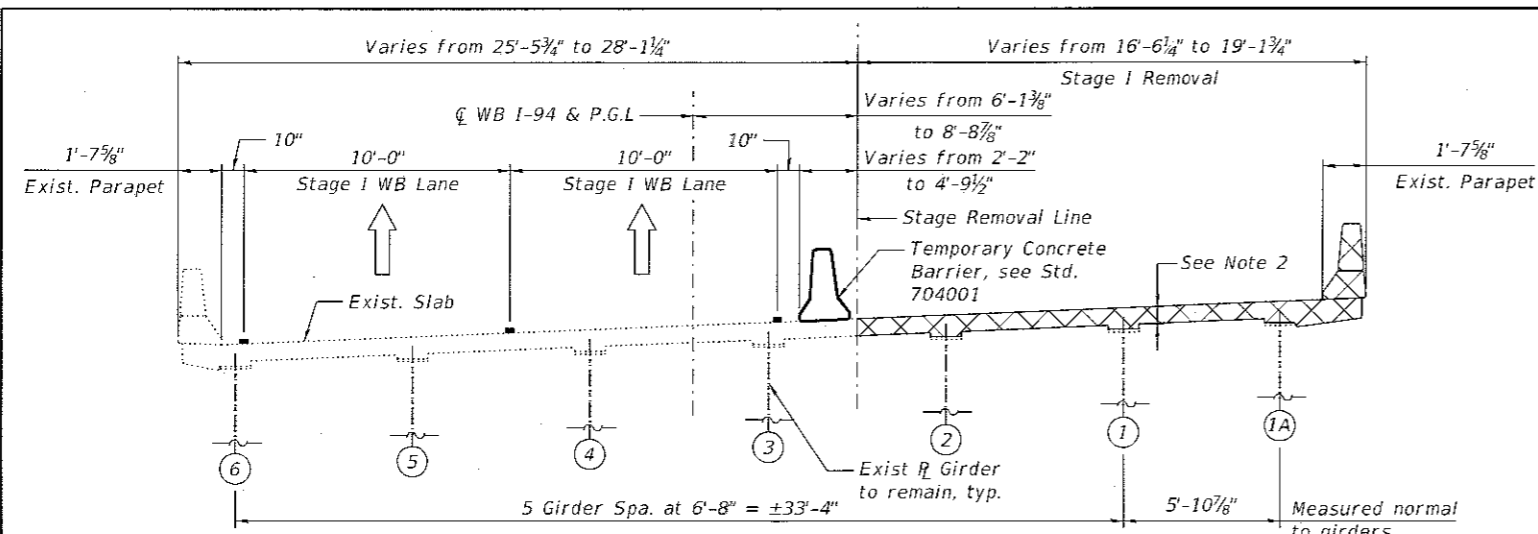
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 DRAWN - AMI  
 CHECKED - MI, LAB  
 DATE - 3/5/2018  
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 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

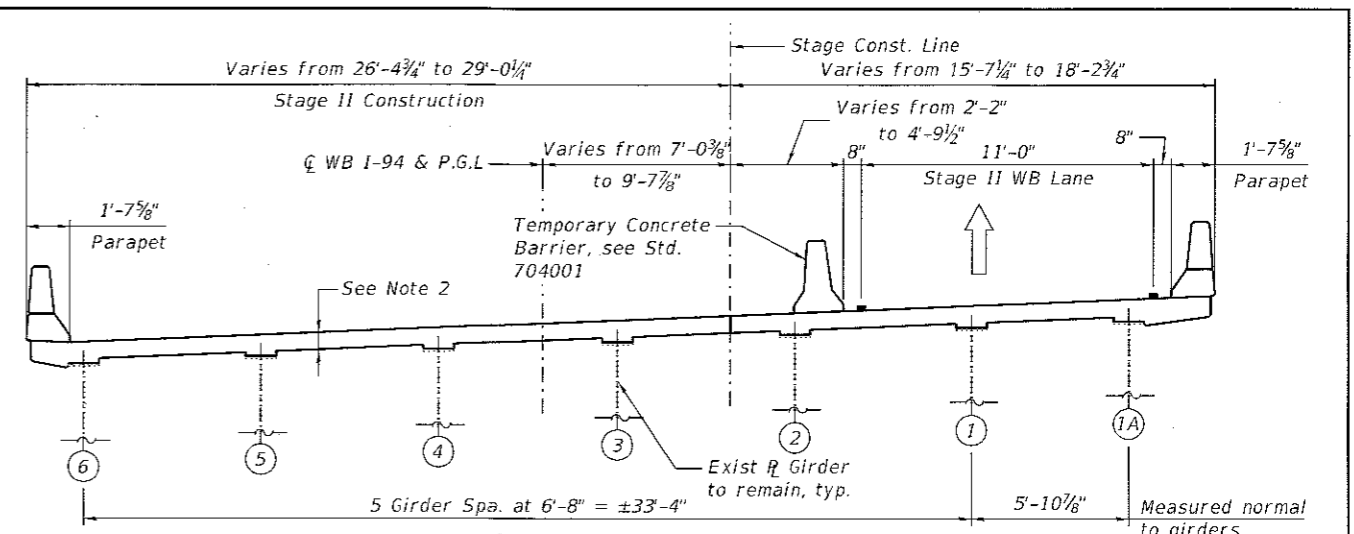
**GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL  
 WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153**

SCALE: SHEET S-02 OF S-15 SHEETS STA. TO STA.

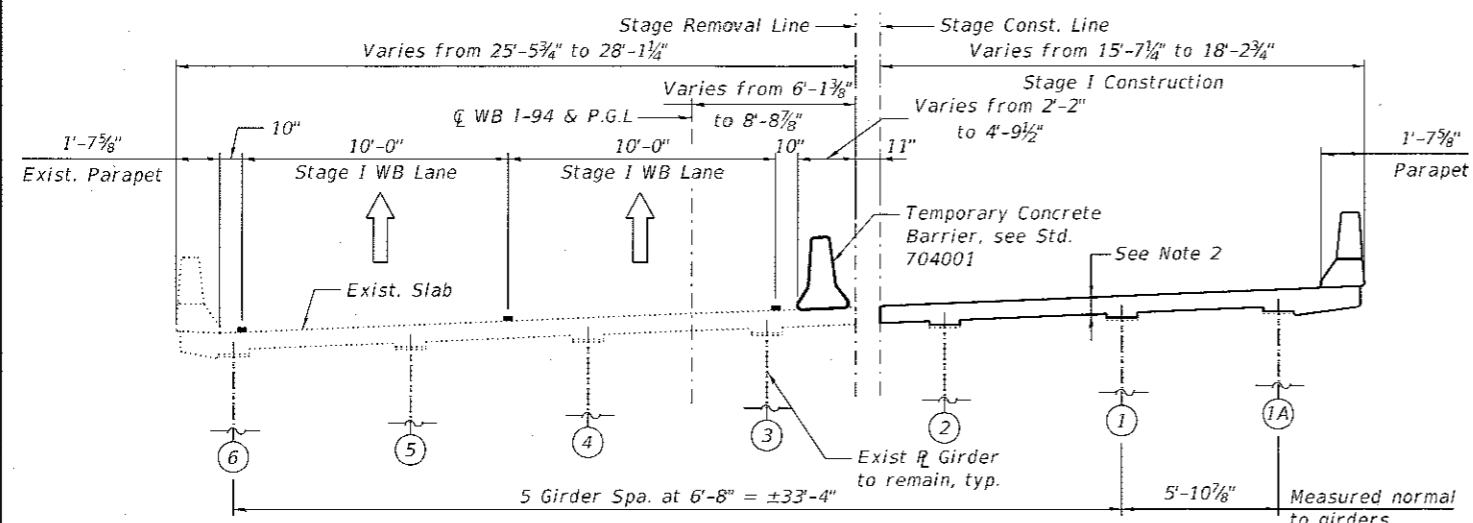
F.A.P. RILEY	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	11
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				



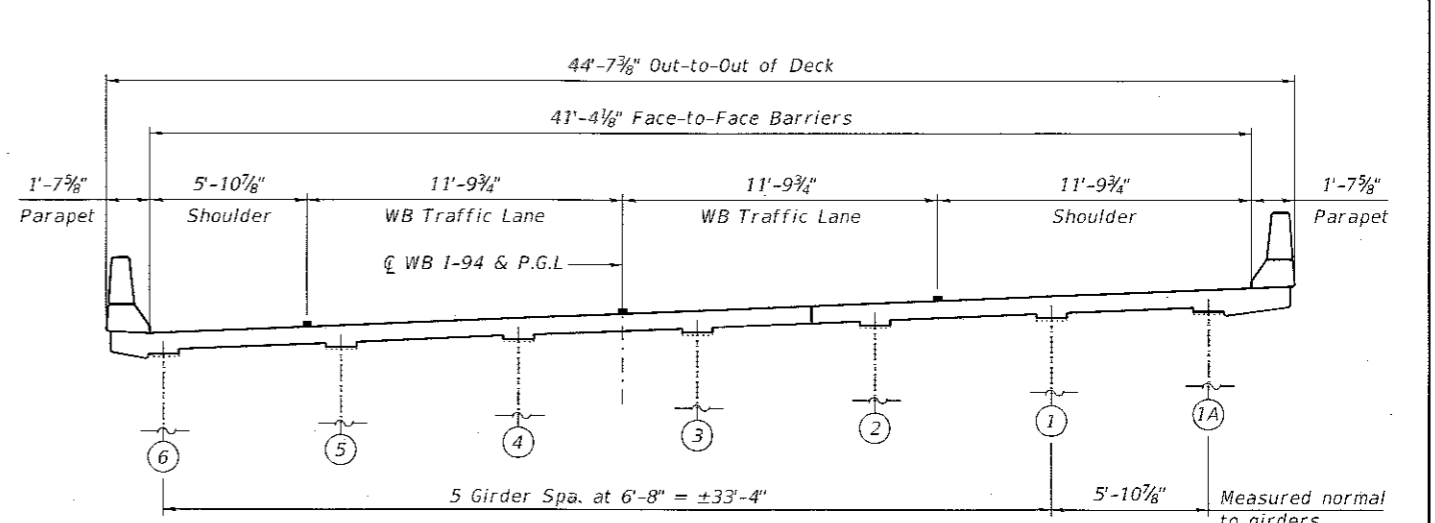
**STAGE I REMOVAL**  
(Expansion Joint Removal)  
(Looking Upstation)



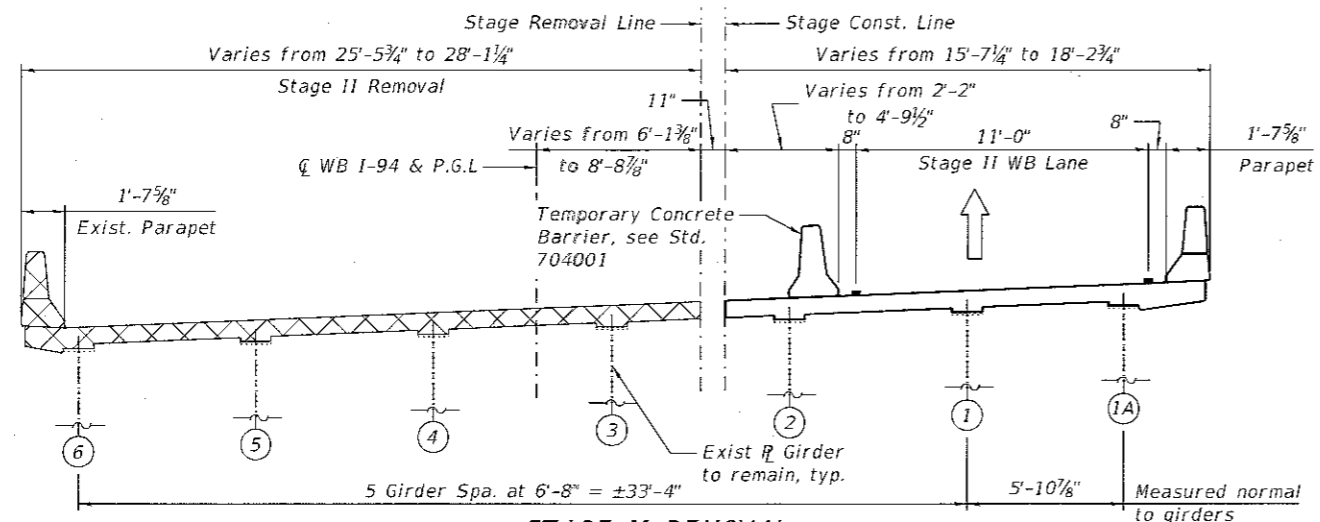
**STAGE II CONSTRUCTION**  
(Expansion Joint Construction)  
(Looking Upstation)



**STAGE I CONSTRUCTION**  
(Expansion Joint Construction)  
(Looking Upstation)



**FINAL CROSS SECTION**  
(Looking Upstation)



**STAGE II REMOVAL**  
(Expansion Joint Removal)  
(Looking Upstation)

**LEGEND:**



**NOTES:**

1. All dimensions are measured radially unless noted otherwise.
2. For limits of bridge and approach slab joint removal see Sheets S-04 and S-05.

FILE PATH = SFILES



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PLOT DATE = 3/5/2018	DATE - 3/5/2018	REVISED -

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

<b>STAGE CONSTRUCTION SEQUENCE</b>	
<b>WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153</b>	
SCALE:	SHEET S-03 OF S-15 SHEETS STA. TO STA.

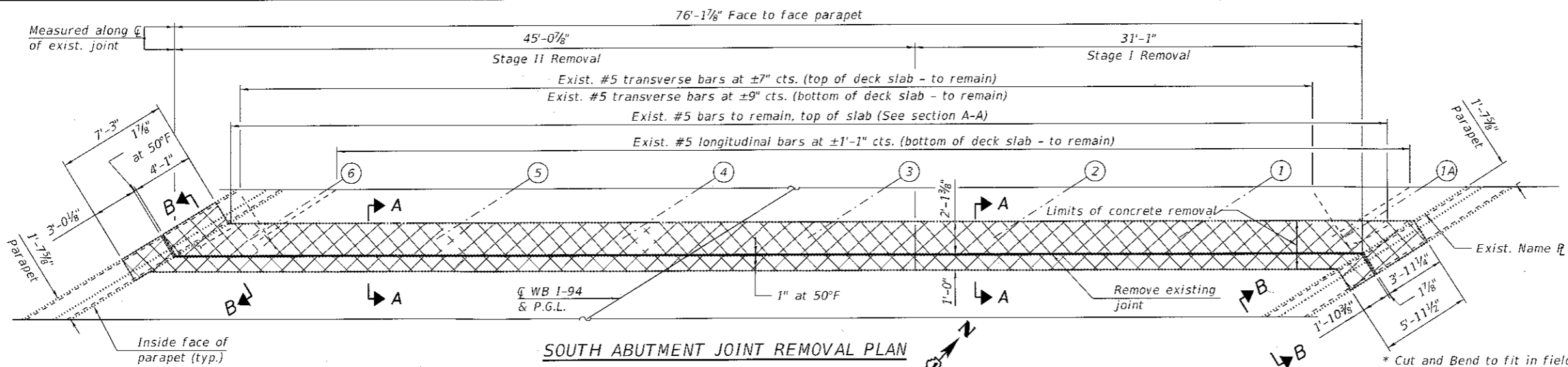
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94	1212-BR(15)	COOK	31	12
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

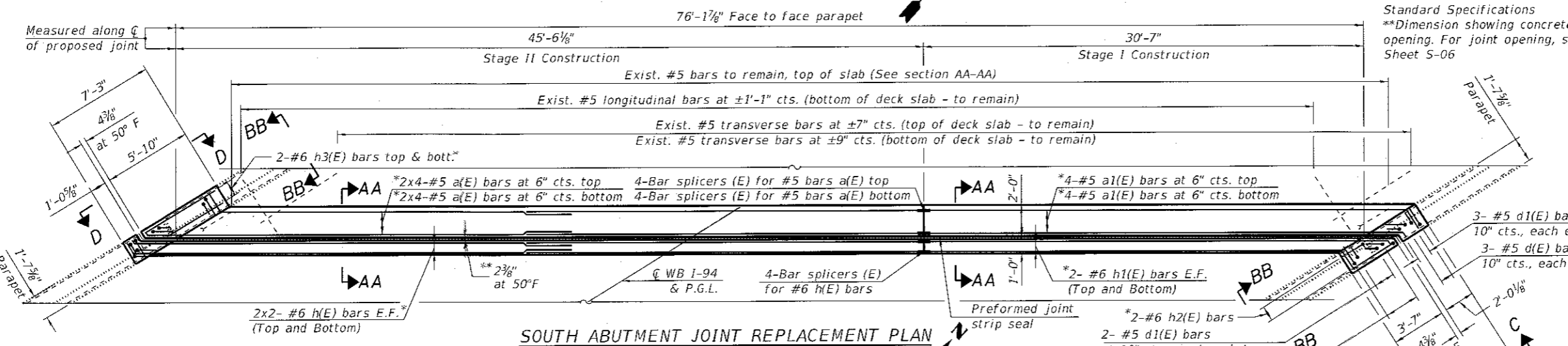
Bar	No.	Size	Length	Shape
a(E)	16	#5	26'-11"	—
a1(E)	8	#5	33'-5"	—
d(E)	10	#5	4'-0"	⌋
d1(E)	10	#5	3'-11"	⌋
h(E)	8	#6	27'-11"	—
h1(E)	4	#6	30'-2"	—
h2(E)	2	#6	3'-10"	—
h3(E)	4	#6	5'-4"	—
Concrete Removal		Cu. Yd.	10.6	
Concrete Superstructure		Cu. Yd.	10.3	
Reinforcement Bars, Epoxy Coated		Pound	1,380	

**NOTES:**

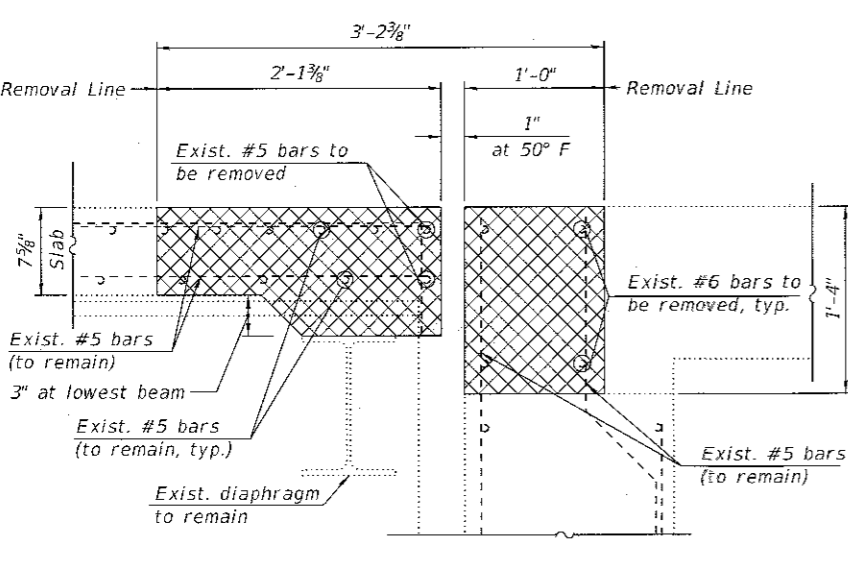
- For General Notes, Total Bill of Material and Sections C-C and D-D, see Sheet S-02.
- For preformed joint strip seal details, see Sheet S-06.
- For bar splicer details, see Sheet S-07.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system.
- The Contractor is responsible to protect the existing conduit and junction box embedded in the east parapet during removal and construction. Any damage to the existing conduit and junction box shall be repaired by the Contractor at his or her expense at no charge to IDOT.



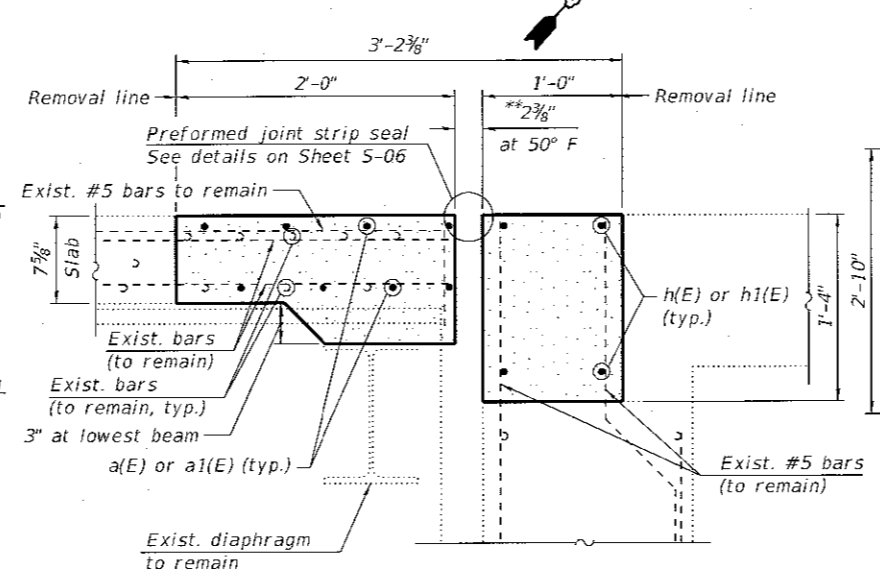
**SOUTH ABUTMENT JOINT REMOVAL PLAN**



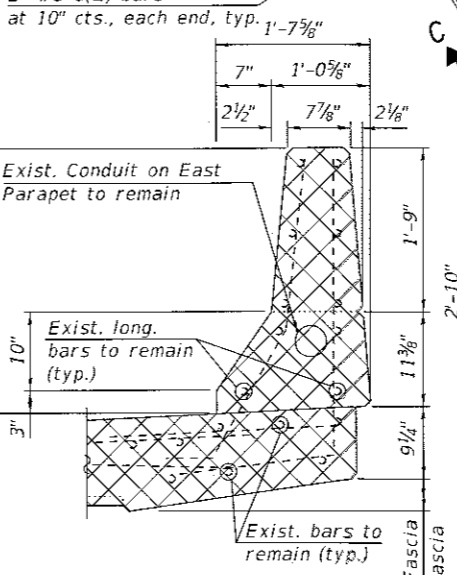
**SOUTH ABUTMENT JOINT REPLACEMENT PLAN**



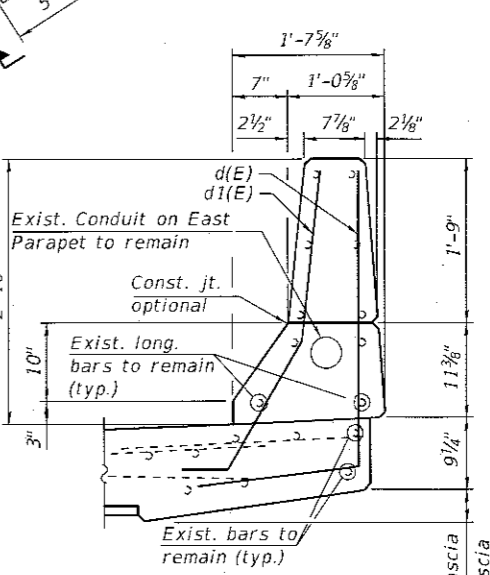
**SECTION A-A**



**SECTION AA-AA**



**SECTION B-B (Parapet Removal)**



**SECTION BB-BB (Parapet Replacement)**

**LEGEND**

	Concrete Removal
E.F.	Each Face

**BAR d1(E)**

**BAR d(E)**

FILE PATH = S:\FILES



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 PLOT SCALE =  
 PLOT DATE = 2/21/2018

DESIGNED - MAA  
 DRAWN - HMI  
 CHECKED - MI, LAB  
 DATE - 2/21/2018

REVISED - 02/21/2018 LAB  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT JOINT REMOVAL AND REPLACEMENT  
 WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153**

SCALE: SHEET S-04 OF S-15 SHEETS STA. TO STA.

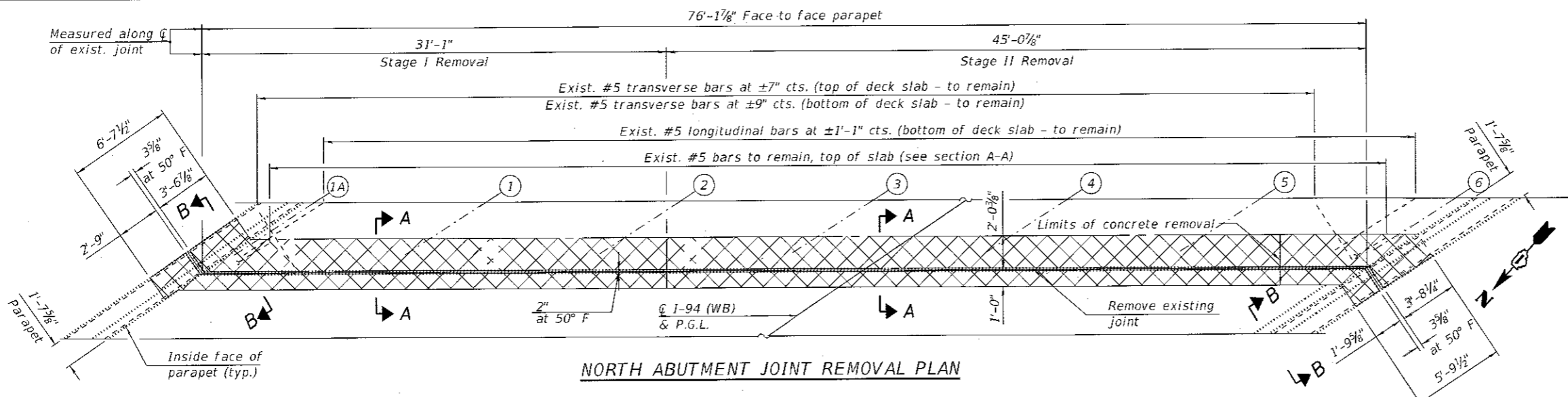
F.A.P. RTE. 94 SECTION 1212-BR(15) COUNTY COOK TOTAL SHEETS 31 SHEET NO. 13 CONTRACT NO. 62B13 ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

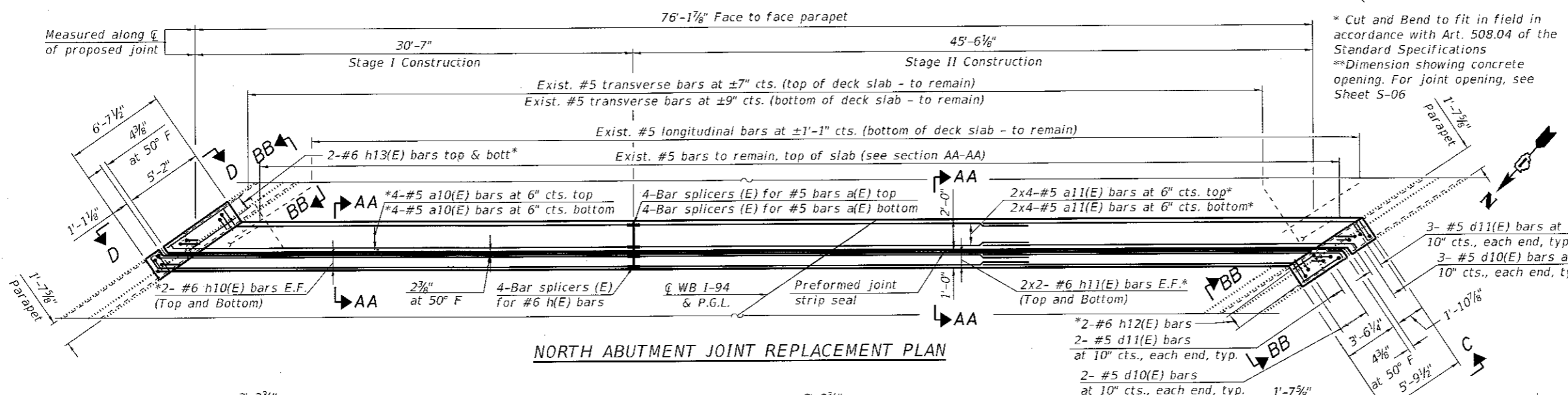
Bar	No.	Size	Length	Shape
a10(E)	8	#5	30'-2"	—
a11(E)	8	#5	26'-4"	—
d10(E)	10	#5	4'-0"	⌋
d11(E)	10	#5	3'-11"	⌋
h10(E)	4	#6	31'-9"	—
h11(E)	8	#6	24'-9"	—
h12(E)	2	#6	3'-10"	—
h13(E)	4	#6	5'-4"	—
Concrete Removal		Cu. Yd.	9.9	
Concrete Superstructure		Cu. Yd.	9.8	
Reinforcement Bars, Epoxy Coated		Pound	1,310	

**NOTES:**

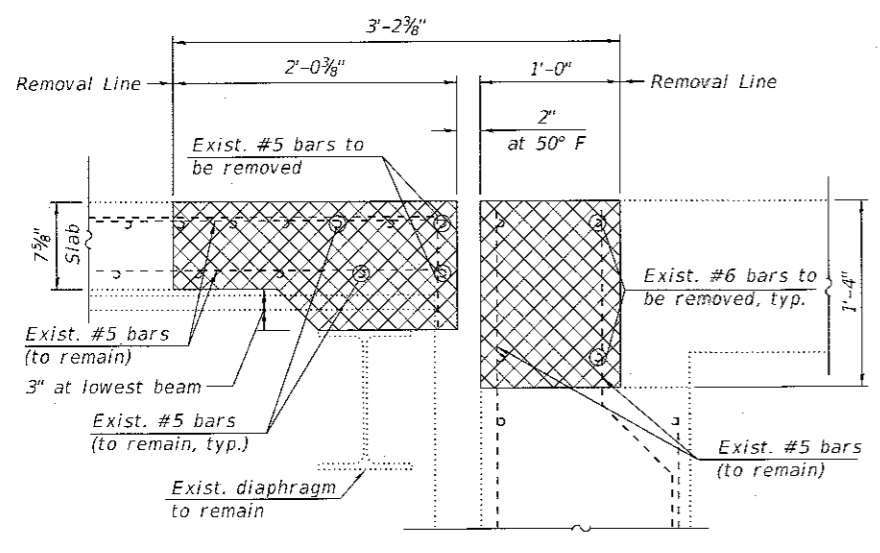
- For General Notes, Total Bill of Material Sections C-C and D-D, and additional bar diagrams, see Sheet S-02.
- For preformed joint strip seal details, see Sheet S-06.
- For bar splicer details, see Sheet S-07.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened 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.
- The Contractor is responsible to protect the existing conduit and junction box embedded in the east parapet during removal and construction. Any damage to the existing conduit and junction box shall be repaired by the Contractor at his or her expense at no charge to IDOT.



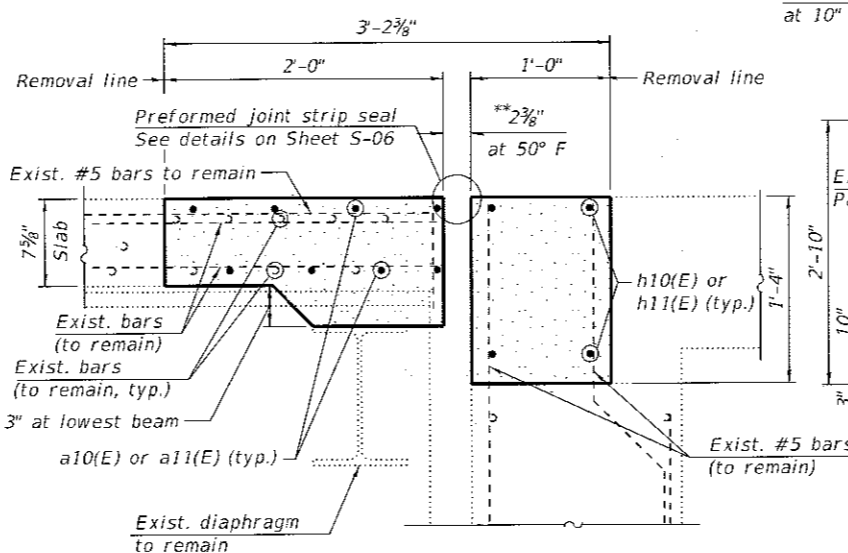
**NORTH ABUTMENT JOINT REMOVAL PLAN**



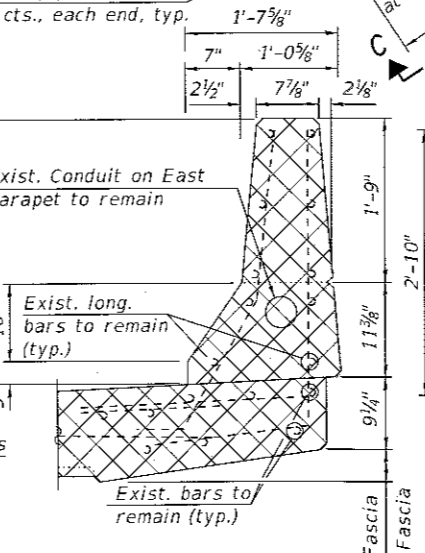
**NORTH ABUTMENT JOINT REPLACEMENT PLAN**



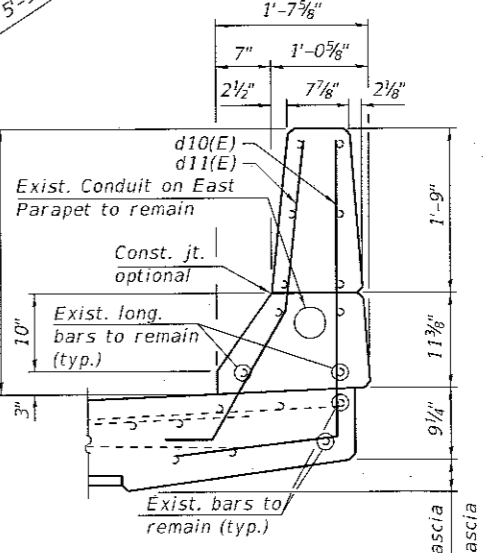
**SECTION A-A**



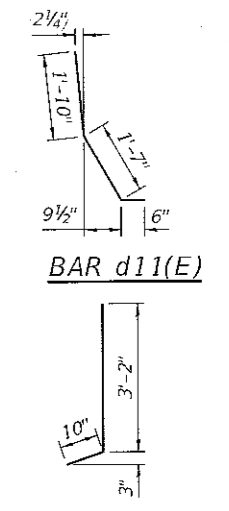
**SECTION AA-AA**



**SECTION B-B (Parapet Removal)**



**SECTION BB-BB (Parapet Replacement)**



**LEGEND**

- Concrete Removal
- E.F. Each Face



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 PLOT DATE = 2/21/2018

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 DRAWN - HMI  
 CHECKED - MI, LAB  
 DATE - 2/21/2018

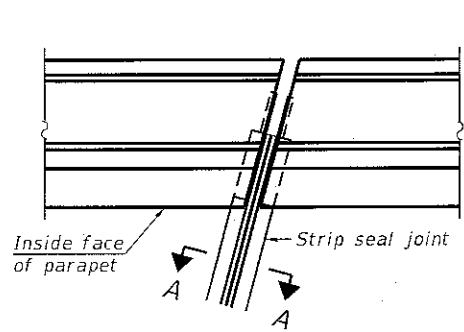
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

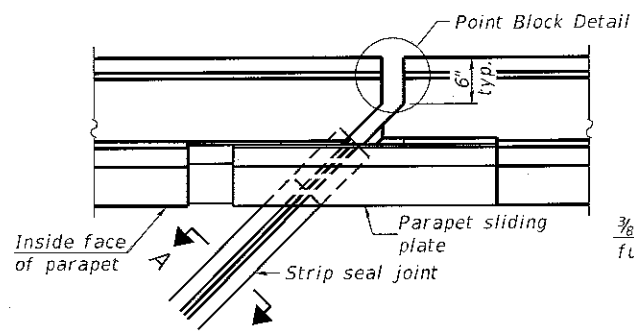
**NORTH ABUTMENT JOINT REMOVAL AND REPLACEMENT**  
**WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153**

SCALE: SHEET S-05 OF S-15 SHEETS STA. TO STA.

F.A.P. RTE. 94 SECTION 1212-BR(15) COUNTY COOK TOTAL SHEETS 31 SHEET NO. 14 CONTRACT NO. 62B13 ILLINOIS FED. AID PROJECT

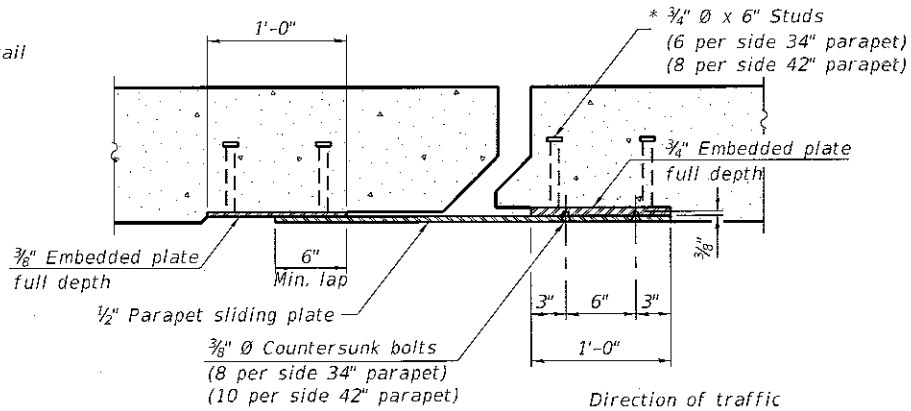


FOR SKEWS  $\leq 30^\circ$

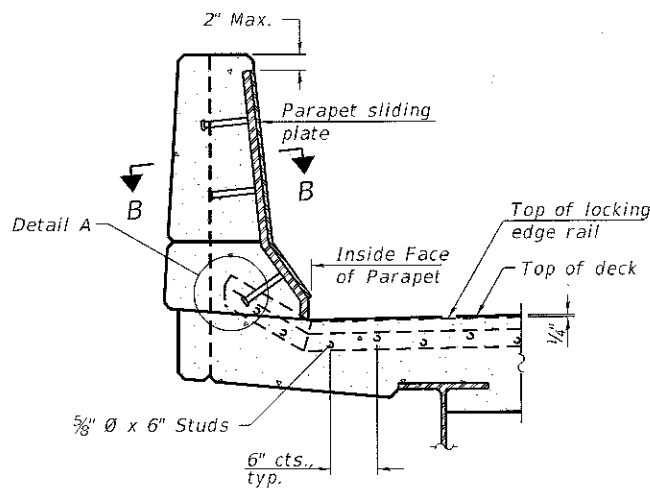


FOR SKEWS  $> 30^\circ$

PLAN AT PARAPET

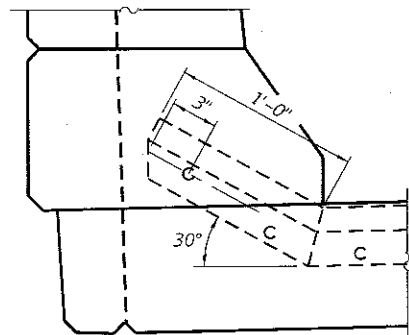


SECTION B-B

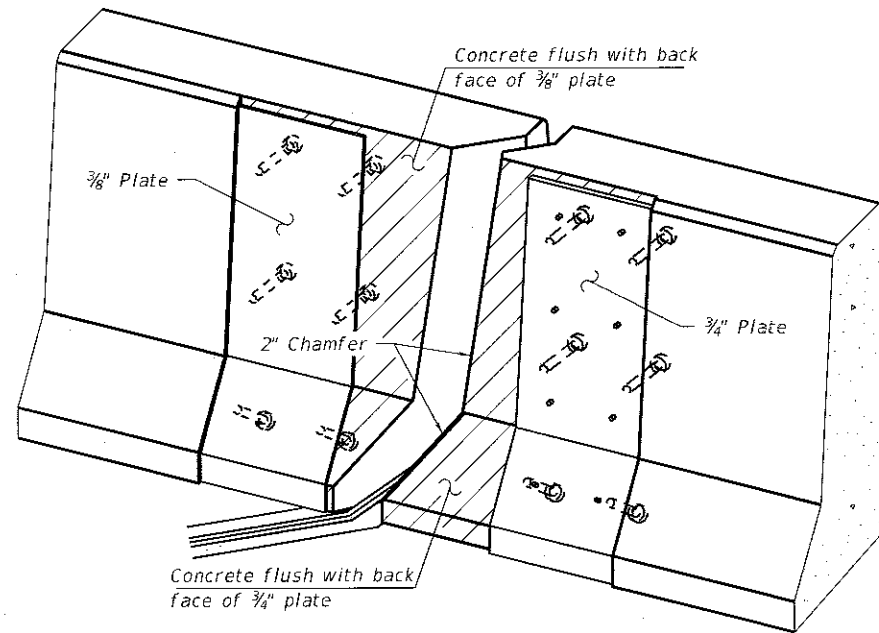


ELEVATION AT PARAPET

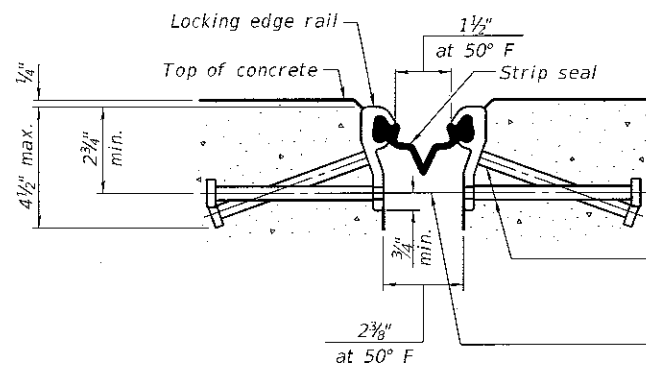
(Skews  $> 30^\circ$  shown. Skews  $\leq 30^\circ$  similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW  
(Showing embedded plates only)

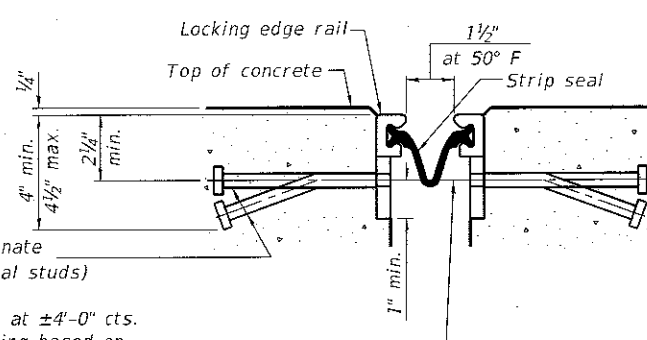


SHOWING ROLLED RAIL JOINT

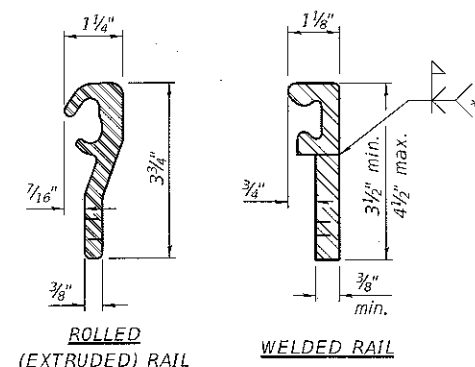
\*  $3/8"$   $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
 $3/8"$   $\phi$  threaded rods in  $7/16"$   $\phi$  holes at  $\pm 4'-0"$  cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be 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.

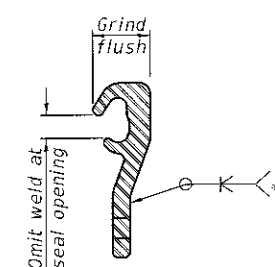


SHOWING WELDED RAIL JOINT



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	165

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.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $3/16"$  and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

FILE PATH = S:\EJ-SS

EJ-SS

8-11-17

**HBM**  
ENGINEERING GROUP, LLC

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 PLOT DATE = 3/5/2018

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 DRAWN - HMI  
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 DATE - 3/5/2018

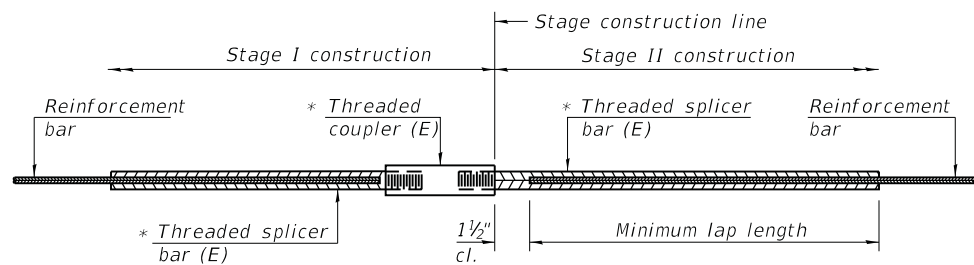
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 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
 WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153

SCALE: SHEET 5-06 OF 5-15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	15
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

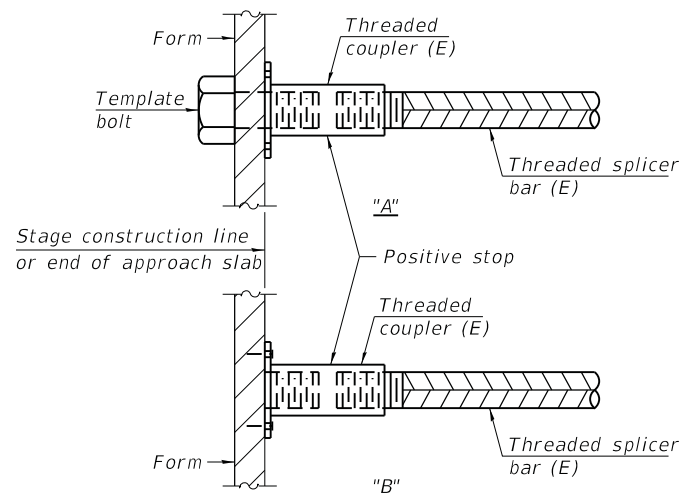


**STANDARD BAR SPLICER ASSEMBLY**

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

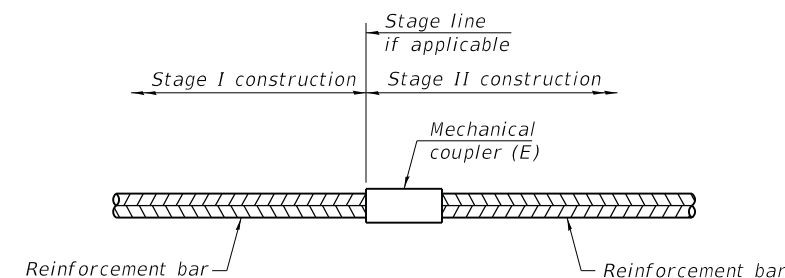
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
South Exp. Joint (Deck)	#5	8	3'-6"
North Exp. Joint (Deck)	#5	8	3'-6"
South Abut Hatch	#6	4	4'-0"
North Abut Hatch	#6	4	4'-0"



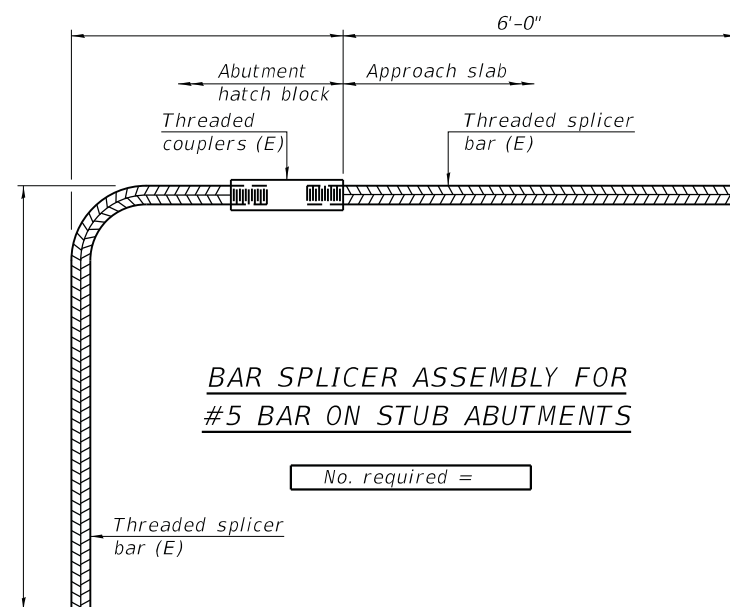
**INSTALLATION AND SETTING METHODS**

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



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. 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.

FILE PATH = \$FILEL\$

BSD-1

2-17-2017



S07-Bar Splicers.dgn	DESIGNED - HMI	REVISED -
USER NAME = lisa.buntin	DRAWN - HMI	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE = 2/8/2018	DATE - 2/8/2018	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153

SCALE: SHEET S-07 OF S-15 SHEETS STA. TO STA.

F.A.P. RTE. 94	SECTION 1212-BR(15)	COUNTY COOK	TOTAL SHEETS 31	SHEET NO. 16
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

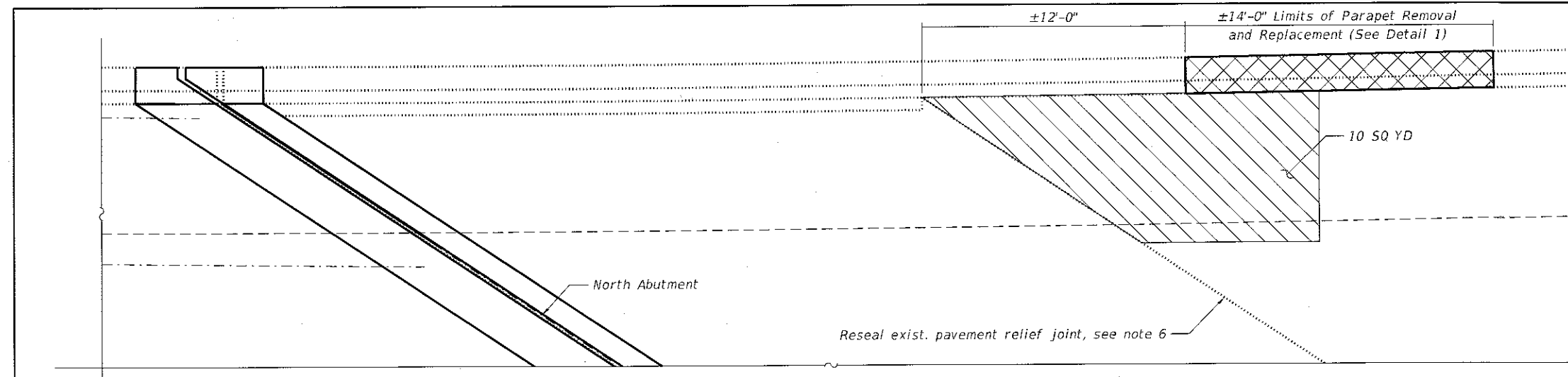


**BILL OF MATERIAL**

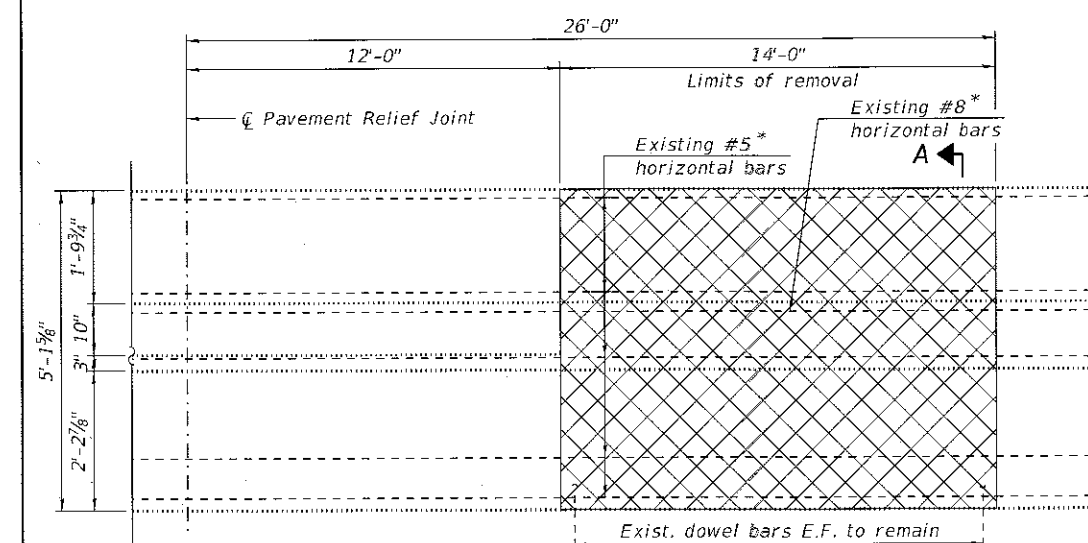
Bar	No.	Size	Length	Shape
e20(E)	8	#5	13'-8"	—
e21(E)	2	#8	13'-8"	—
Class A Patches, Type II, 10 Inch			SQ YD	10
Concrete Removal			CU YD	4.0
Concrete Superstructure			CU YD	4.0
Reinforcement Bars, Epoxy Coated			POUND	250
Conduit Embedded In Structure, 4" Dia., PVC			FOOT	14
Junction, Box Type J, 41" x 12" x 9"			EACH	1

**NOTES**

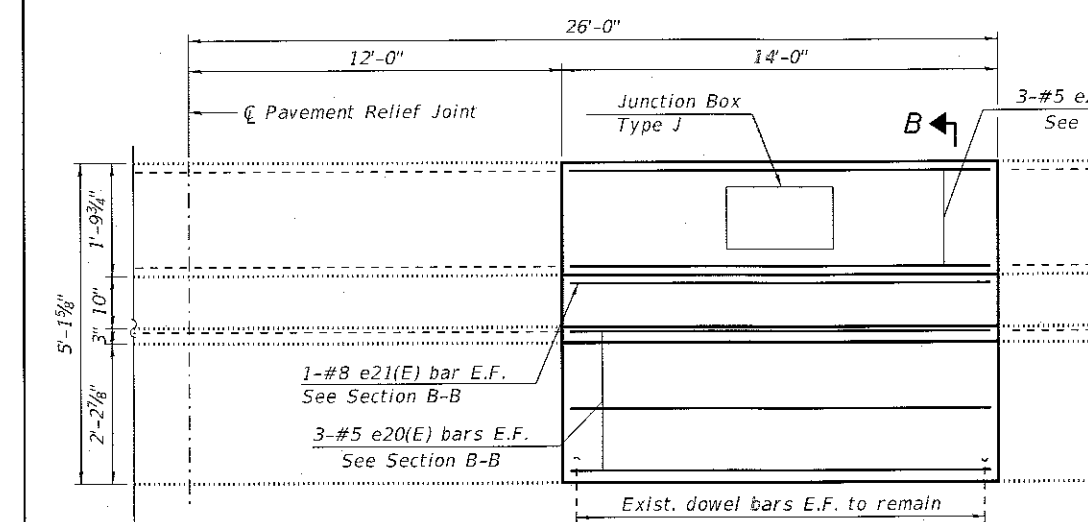
- For General Notes and Total Bill of Material, see Sheet S-02.
- The Contractor is responsible to remove, support and reinstall all existing utilities interfering with the work. Cost shall be included with Concrete Superstructure (Approach Slab).
- Existing reinforcement bars extending into the removal areas 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.
- Cost of removal of existing junction box shall be included in Concrete Removal.
- For Junction Box, see Sheets S-13 thru S-15.
- Remove existing PJS and replace with a Preformed Bridge Joint Seal; see detail on Sheet S-02. Cost of removal of existing PJS is included in the cost of the new Preformed Jt Seal.



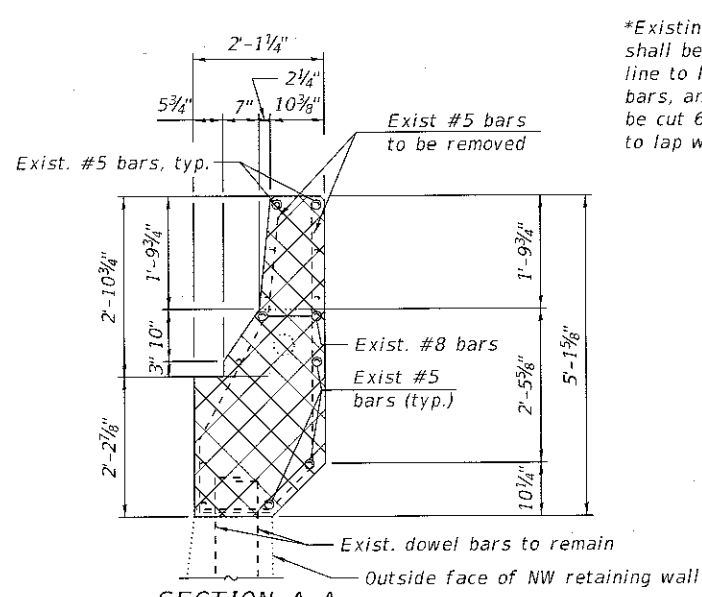
**PARTIAL NORTH APPROACH PLAN**



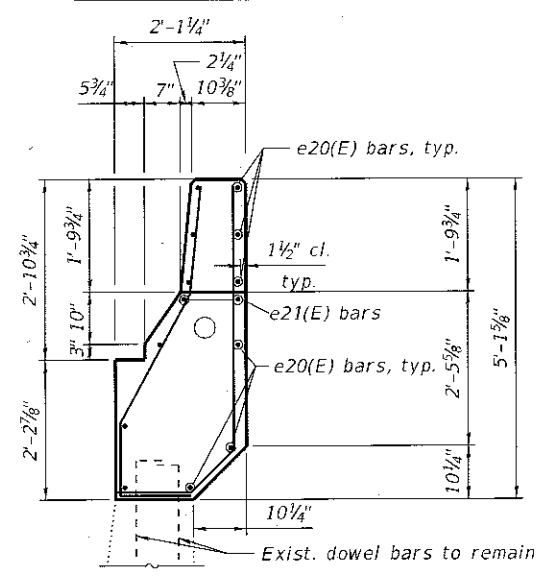
**DETAIL 1 REMOVAL ELEVATION**  
(Looking West)



**DETAIL 1 CONSTRUCTION ELEVATION**  
(Looking West)



**SECTION A-A**



**SECTION B-B**

\*Existing #5 reinforcement bars shall be cut 3'-1" from the removal line to lap with new reinforcement bars, and existing #8 bars shall be cut 6'-9" from the removal line to lap with new bars.

Minimum Bar Laps	
Bar	Lap
#5	3'-1"
#8	6'-9"

**LEGEND**

- Concrete Removal
- Class A Patch

FILE PATH = REFILES



SBB-North Approach Slab.dgn  
 USER NAME = lisa.buntin  
 PLOT SCALE =  
 PLOT DATE = 3/5/2018

DESIGNED - MAA  
 DRAWN - MAA  
 CHECKED - MI, LAB  
 DATE - 3/5/2018

REVISED - 03/05/2018 LAB  
 REVISED -  
 REVISED -  
 REVISED -

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

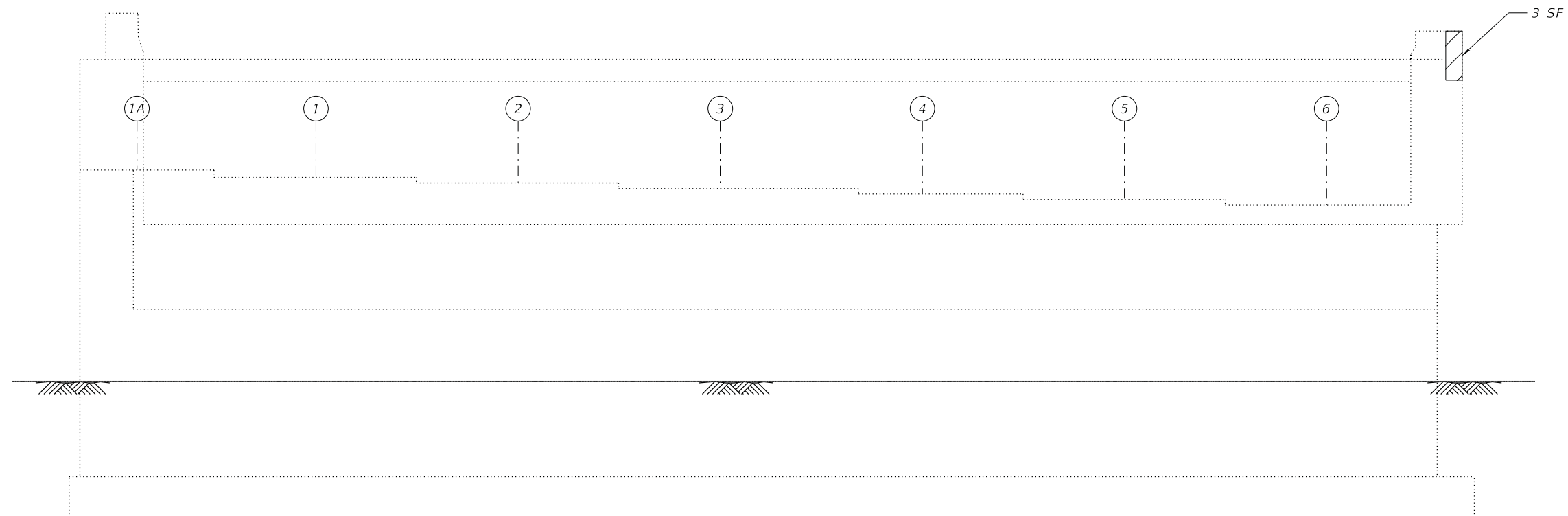
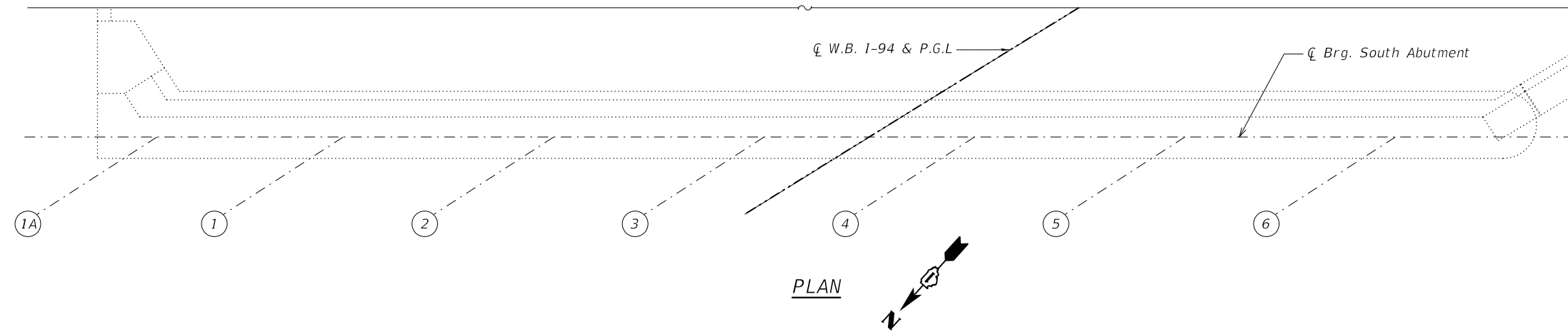
**NORTH APPROACH SLAB REPAIRS**  
**WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO.016-0153**

SCALE: SHEET S-08 OF S-15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	17
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	3



**LEGEND:**

Structural Repair of Concrete  
(Depth Equal to or Less than 5")

**NOTES:**

- For General Notes and Total Bill of Material, see Sheet S-02.
- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired and the type(s) of repairs to be used will be determined by the Engineer in the field at the time of construction.
- The Contractor is responsible to remove, support and reinstall all existing utilities interfering with the work. Cost shall be included with Structural Repair of Concrete (Depth Equal to or Less Than 5").

FILE PATH = \$FILEL\$



S09-South Abutment.dgn	DESIGNED - WM	REVISED -
USER NAME = lisa.buntin	DRAWN - AMI	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE = 2/8/2018	DATE - 2/8/2018	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

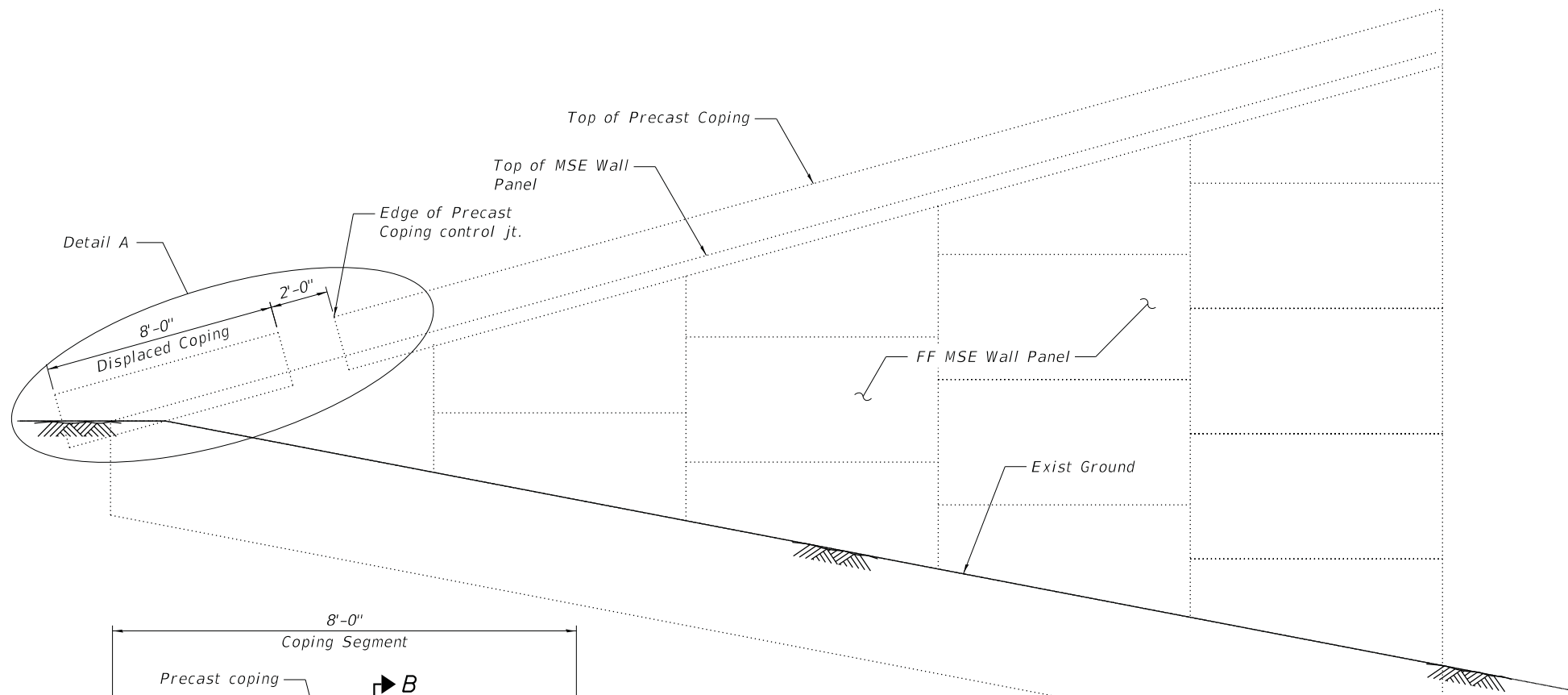
**SOUTH ABUTMENT REPAIRS  
WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153**

SCALE: SHEET S-09 OF S-15 SHEETS STA. TO STA.

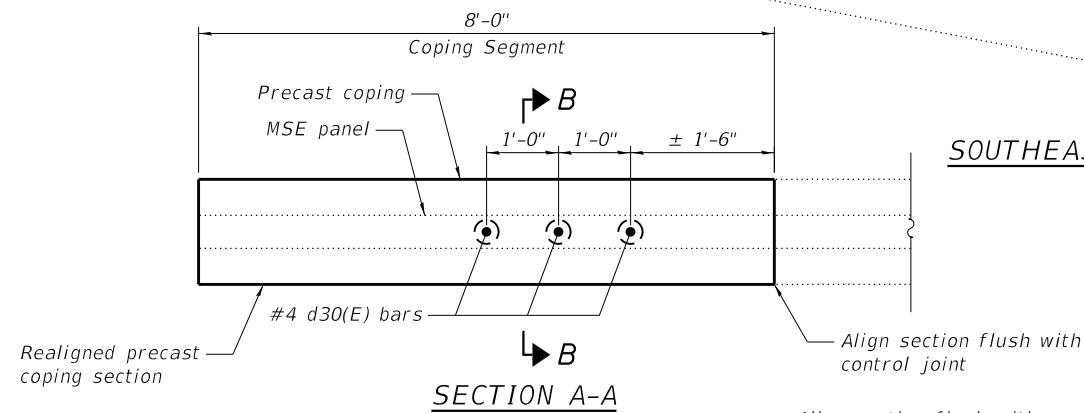
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	18
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

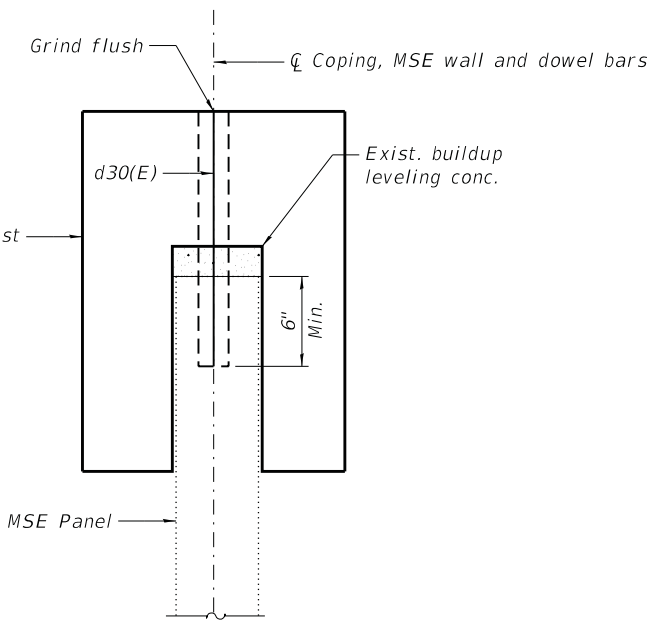
Bar	No.	Size	Length	Shape
d30(E)	3	#4	1'-5"	—
Reinforcement Bars, Epoxy Coated			Pound	10



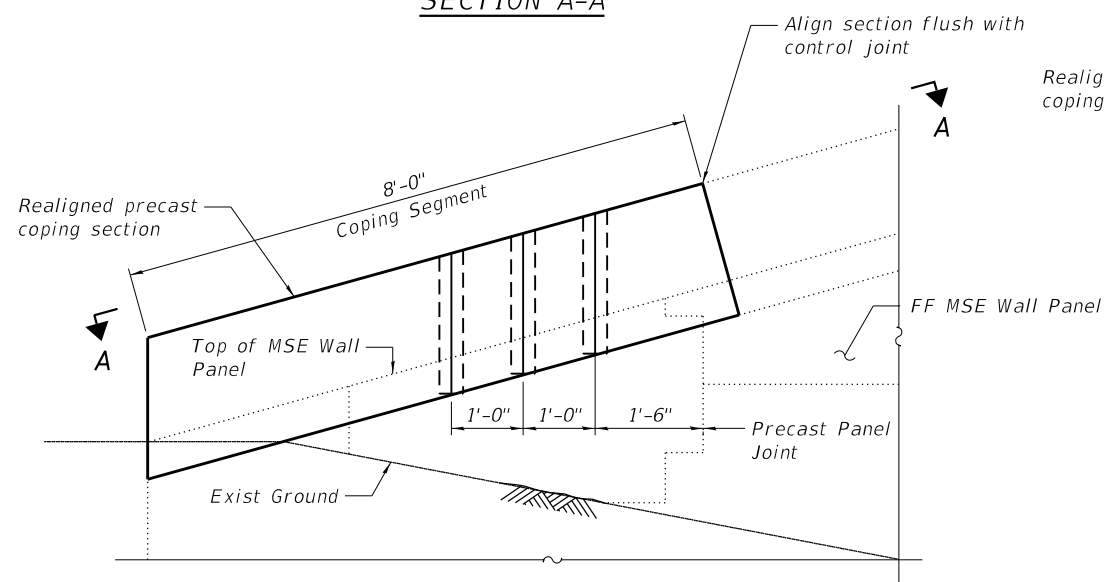
**SOUTHEAST MSE WALL ELEVATION**  
(Looking Southwest)



**SECTION A-A**



**SECTION B-B**



**DETAIL A**

**SUGGESTED REPAIR SEQUENCE:**

1. Realign the displaced precast coping to meet flush with the edge of precast coping control joint.
2. Locate the precast cruciform panel joint below the precast coping control joint as shown in Detail A.
3. Measure normal to this panel joint (as shown in Detail A) and locate, on top of the coping, the locations for the proposed dowel bars.
4. Drill holes level thru the coping and into the MSE panel.
5. Place reinforcement bars and epoxy grout into drilled hole.
6. Grind reinforcement bars and excess grout flush with the top of coping.

**NOTES:**

1. For General Notes and Total Bill of Material, see Sheet S-02.
2. Epoxy grout d30(E) bars according to Article 584 of The Standard Specification. Drill to miss existing reinforcement. The epoxy grout and method of application should be approved by the Engineer.
3. Cost of grinding dowel reinforcement flush with coping shall be included in the cost for Reinforcement Bars (Epoxy Coated).

FILE PATH = \$FILEL\$



S18-MSE Wall Repair.dgn  
 USER NAME = lisa.buntin  
 PLOT SCALE =  
 PLOT DATE = 2/8/2018

DESIGNED - WM  
 DRAWN - WM  
 CHECKED - MI, LAB  
 DATE - 2/8/2018

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

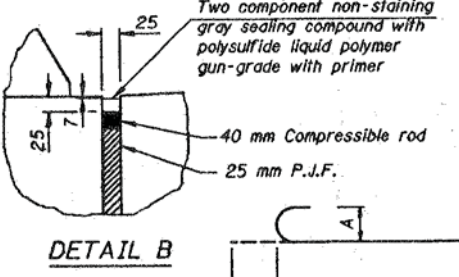
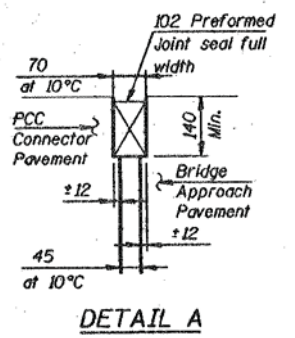
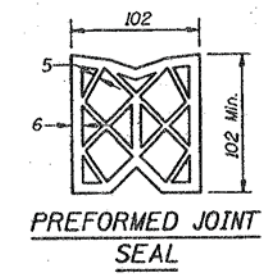
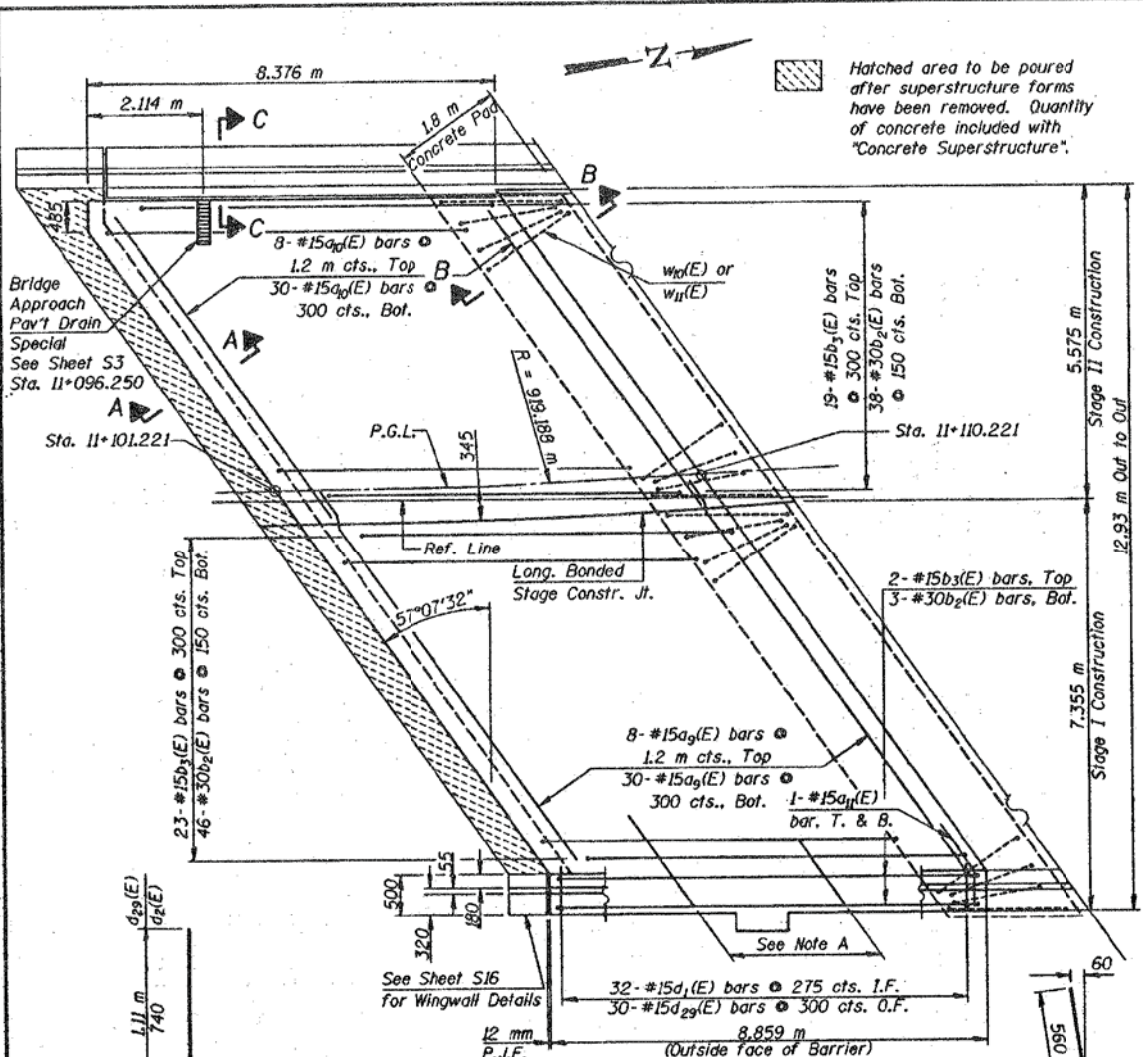
**SOUTHEAST MSE WALL REPAIRS  
 WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153**

SCALE: SHEET S-10 OF S-15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	19
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				

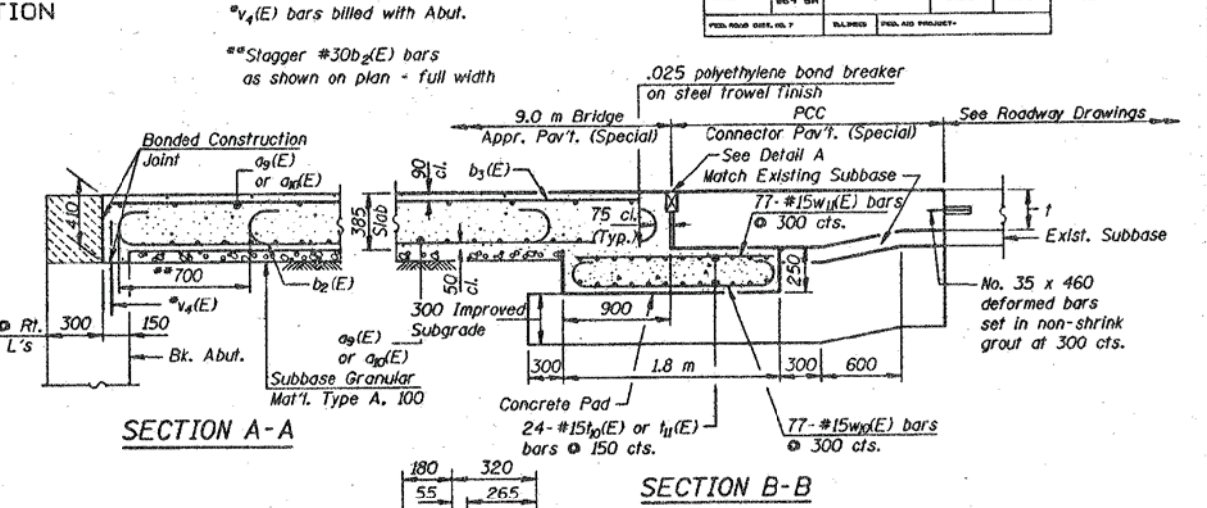
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE	DESIGN	CHECK	DATE	SHEET NO.	OF
F.A.I. 94	1999-069 BR	COOK	325	151	927 SHEETS



BARS  $b_2(E)$  AND  $w_{10}(E)$

BAR	A	B	C
$b_2(E)$	300	390	8.15 m
$w_{10}(E)$	130	180	1.70 m



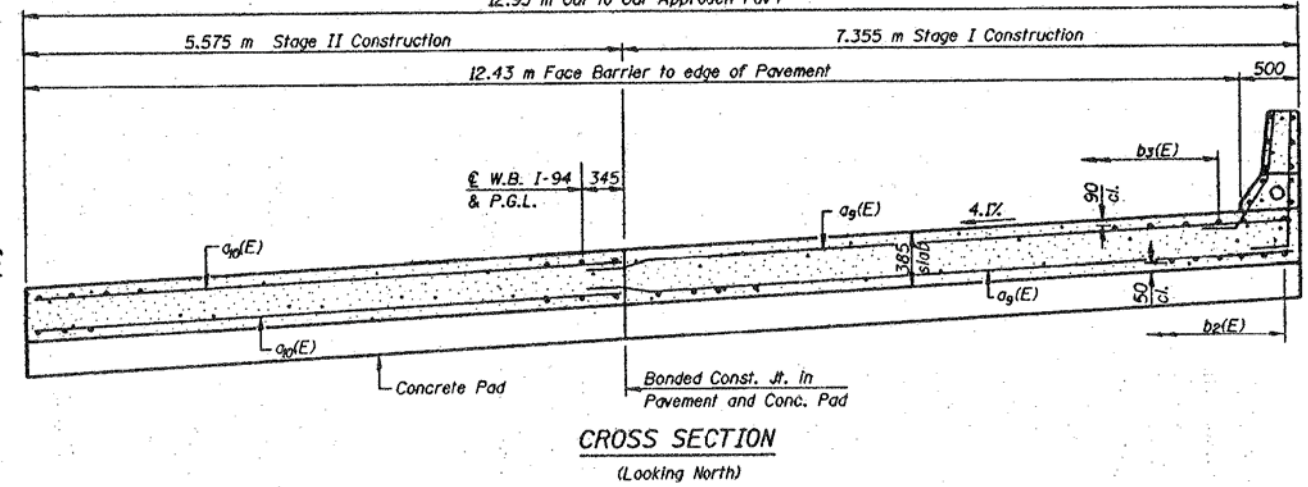
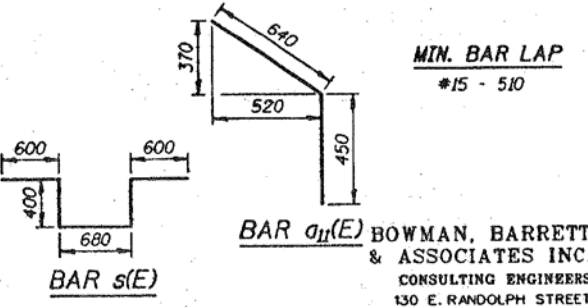
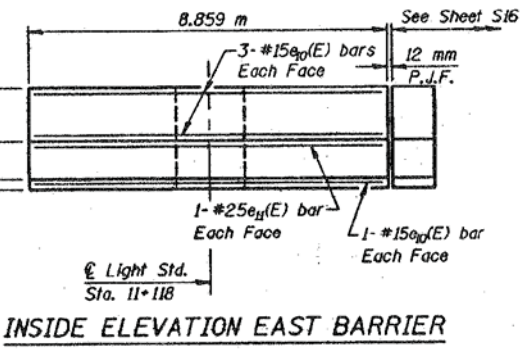
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
$a_9(E)$	38	#15	14.06	—
$a_{10}(E)$	38	#15	9.16	—
$a_{11}(E)$	2	#15	1.09	—
$a_{29}(E)$	13	#20	1.65	—
$a_{33}(E)$	7	#25	1.65	—
$b_2(E)$	87	#30	8.93	—
$b_3(E)$	44	#15	8.90	—
$d_1(E)$	32	#15	1.19	—
$d_2(E)$	3	#20	1.34	—
$d_{29}(E)$	30	#15	1.56	—
$e_{10}(E)$	8	#15	8.75	—
$e_{11}(E)$	2	#25	8.75	—
$s(E)$	5	#20	2.68	—
$h_{10}(E)$	24	#15	14.15	—
$h_{11}(E)$	24	#15	9.20	—
$w_{10}(E)$	77	#15	2.06	—
$w_{11}(E)$	77	#15	1.70	—

Reinforcement bars designated (E) shall be epoxy coated.

Reinforcement bars, tie bars, improved subgrade, sub-base, bond breaker P.J.F., compressible rod, sealing compound and concrete pad (including reinforcement) will be included in the cost of "Bridge Approach Pavement (Special)".

For pay items and quantities see Roadway Plans. See Standard 420401 for details not shown. See Sheet S8 for Light Pole Plan and details.



BARS  $d_2(E)$  &  $d_{29}(E)$

Note A:  
Place 13-#20<sub>a2</sub>(E) @ 150 cts., Top and 7-#25<sub>a3</sub>(E) bars @ 300 cts., Bott. centered about Light Std. and spaced btwn.  $a_9(E)$  bars.

SECTION C-C

DESIGNED	EPC
CHECKED	BLU
DRAWN	LT
CHECKED	SF

DATE: 05-03-00

FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING NORTH APPROACH SLAB  
WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	20
CONTRACT NO. 62B13				

HBM  
ENGINEERING GROUP, LLC

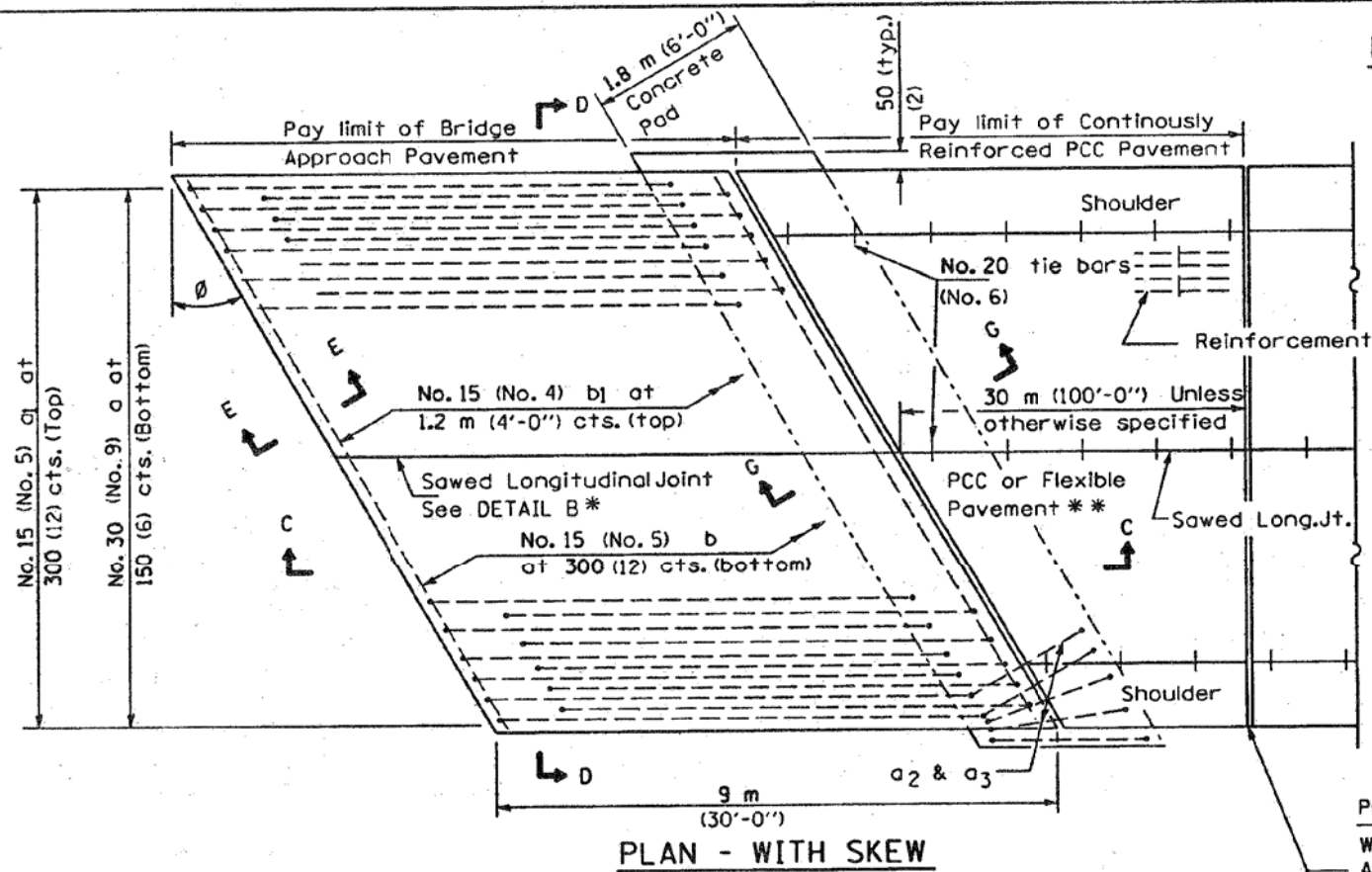
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USER NAME = lisa.buntin	DRAWN - LAB	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE = 2/8/2018	DATE - 2/8/2018	REVISED -

SCALE: SHEET S-11 OF S-15 SHEETS STA. TO STA.

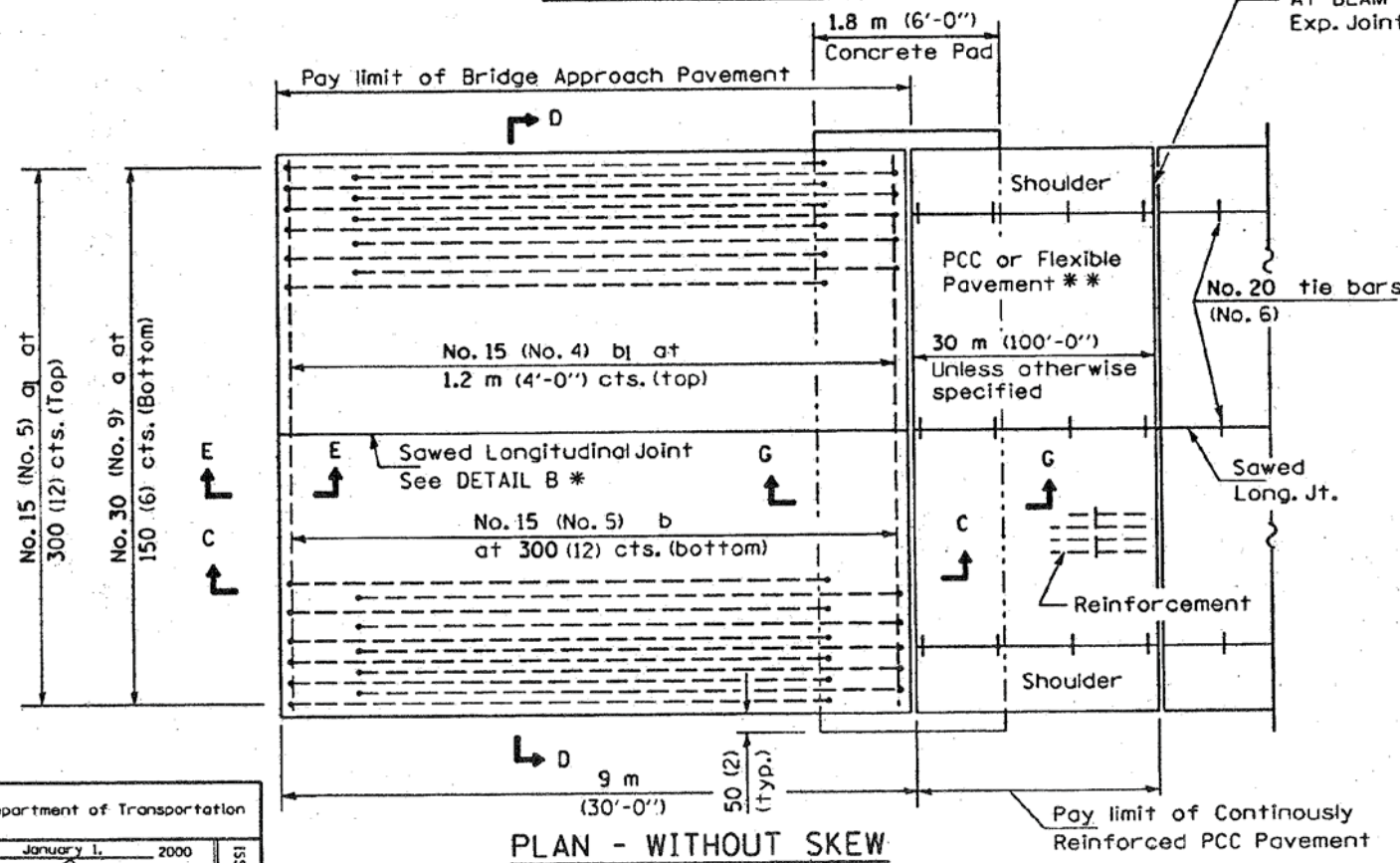
ILLINOIS FED. AID PROJECT

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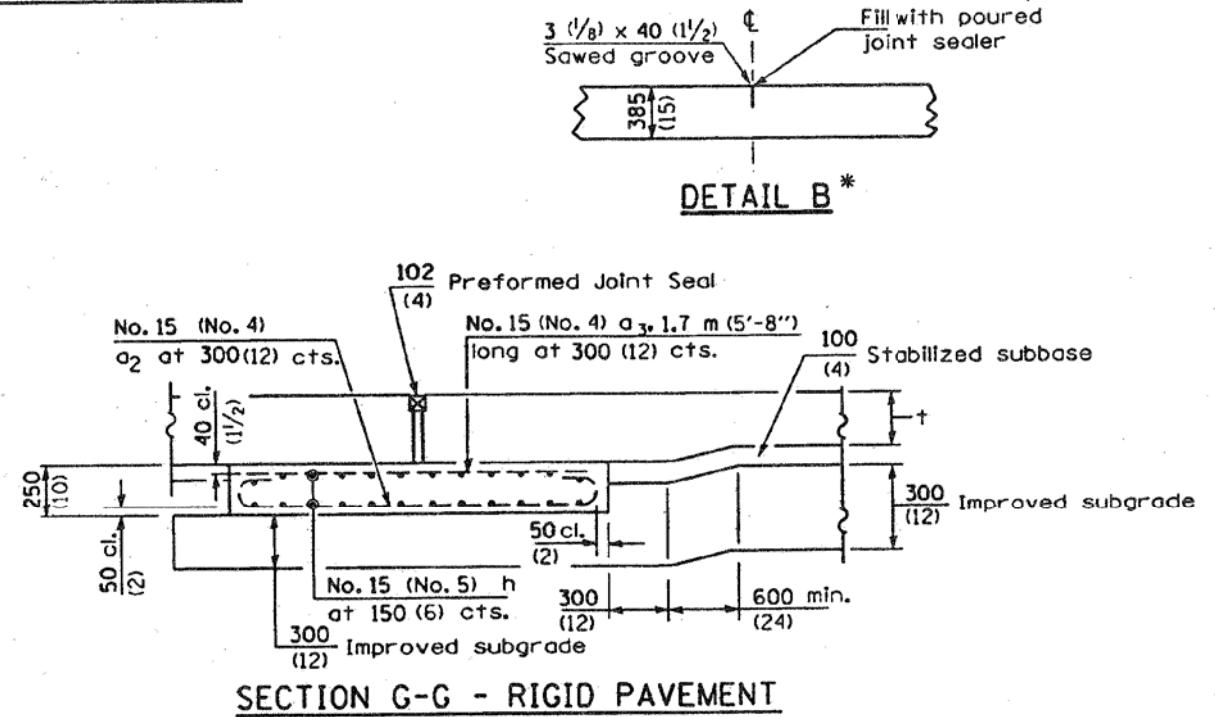
**NEW CONSTRUCTION**



**PLAN - WITH SKEW**

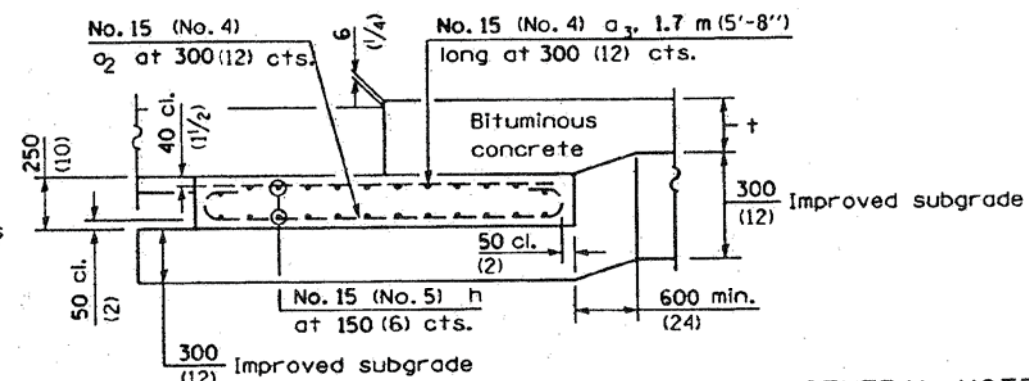


**PLAN - WITHOUT SKEW**



**SECTION G-G - RIGID PAVEMENT**

PCC Pavement only:  
Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 75 (3)  
Exp. Joint as detailed on Standard 420001.



**SECTION G-G - FLEXIBLE PAVEMENT**

**GENERAL NOTES**

THICKNESS- "t" = Thickness of Pavement.  
See Standard 421001 for reinforcement details not shown.  
See Standard 420001 for details of joints not shown.  
All dimensions are in millimeters (Inches) unless otherwise shown.

DATE	REVISIONS
1-1-00	Added Sheet 4, Parapet Details. Removed note from Sheet 3.
1-1-98	Rev. ref. to Std 2443 to 609006. Added "(top)" & "(bottom)" to pg.1

**BRIDGE APPROACH PAVEMENT**

(Sheet 1 of 4)

**STANDARD 420401-02**

Illinois Department of Transportation  
 APPROVED January 1, 2000  
*Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES  
 APPROVED January 1, 2000  
*Bill Hunter*  
 ENGINEER OF DESIGN AND ENVIRONMENT

\* Saw  $\phi$  or lane edge if poured two or more lane widths at a time.  
 \*\* Omit Reinforcement, tie bars and sawed Long. Jt. for Flexible Pavement.

FOR INFORMATION ONLY



S12-Exist Bridge Approach Pavement.dgn  
 USER NAME = isa.buntin  
 PLOT SCALE =  
 PLOT DATE = 2/8/2018

DESIGNED - LAB  
 DRAWN - LAB  
 CHECKED - MI  
 DATE - 2/8/2018

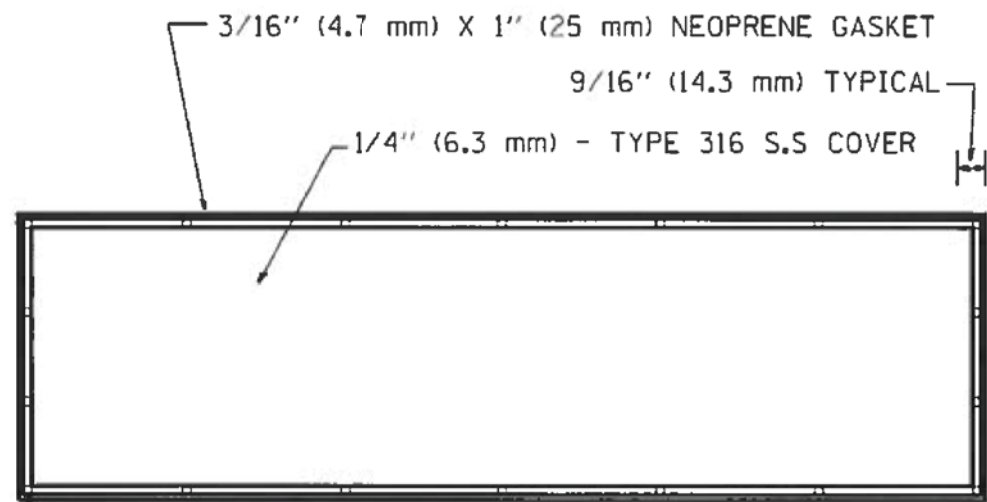
REVISED -  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE APPROACH PAVEMENT  
 WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153  
 SCALE: SHEET S-12 OF 5-15 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	21

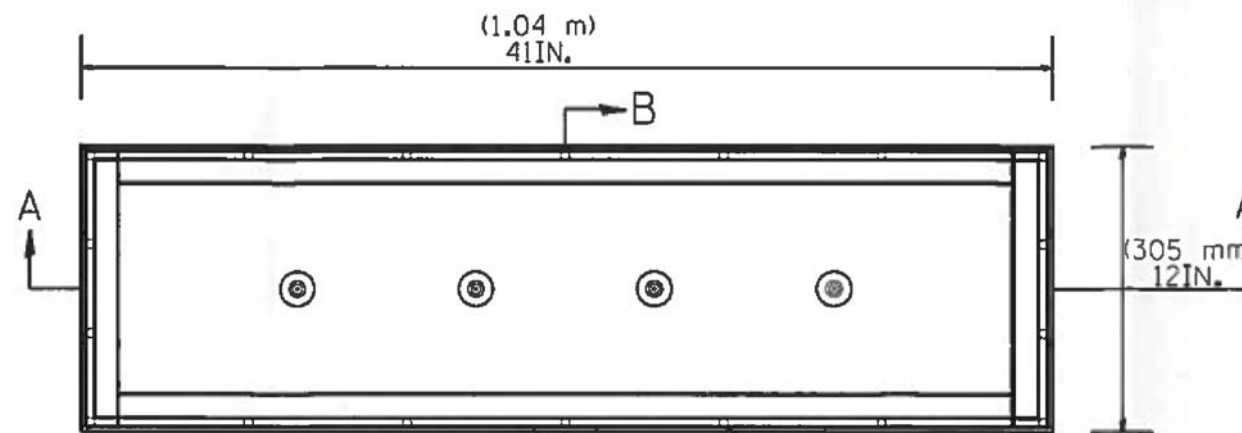
CONTRACT NO. 62B13  
 ILLINOIS FED. AID PROJECT



DRILL AND COUNTERSINK TOP OF COVER FOR  
 3/8" (9.5 mm) 16 X 3/4" (19 mm)  
 FLAT HEAD STAINLESS STEEL SLOTTED SCREWS

**BACK VIEW**

**STAINLESS STEEL COVER WITH NEOPRENE GASKET**



2.625IN. (67 mm) DIA. FOR  
 2IN. (50.0 mm) GS-CONDUIT

3/8 IN. (9.5 mm)-16 TAP

**TOP VIEW**

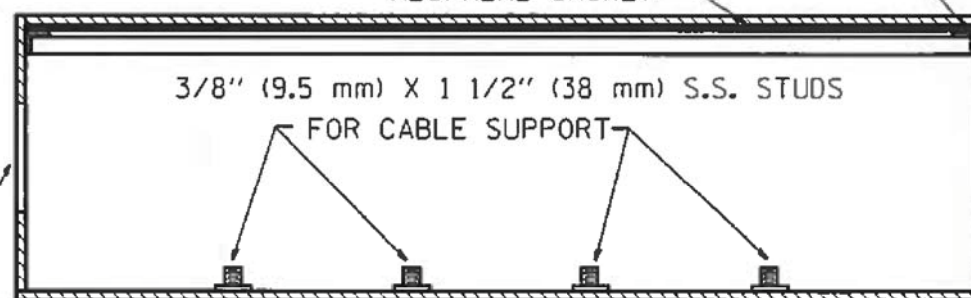
**STAINLESS STEEL JUNCTION BOX TYPE "J"**



**SIDE VIEW**

**STAINLESS STEEL COVER**

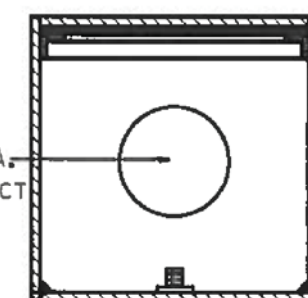
1" (25 mm) X 1" (25 mm) X 1/4" (63 mm) S.S. ANGLE  
 CONTINUOUSLY WELDED AND LEAKPROOF  
 NEOPRENE GASKET



4.625" (117 mm) DIA.  
 FOR 4" (100 mm) PVC DUCT

**SIDE VIEW SECTION A-A**

(305 mm)  
 12IN.



4.625" (117 mm) DIA.  
 FOR 4" (100 mm) PVC DUCT

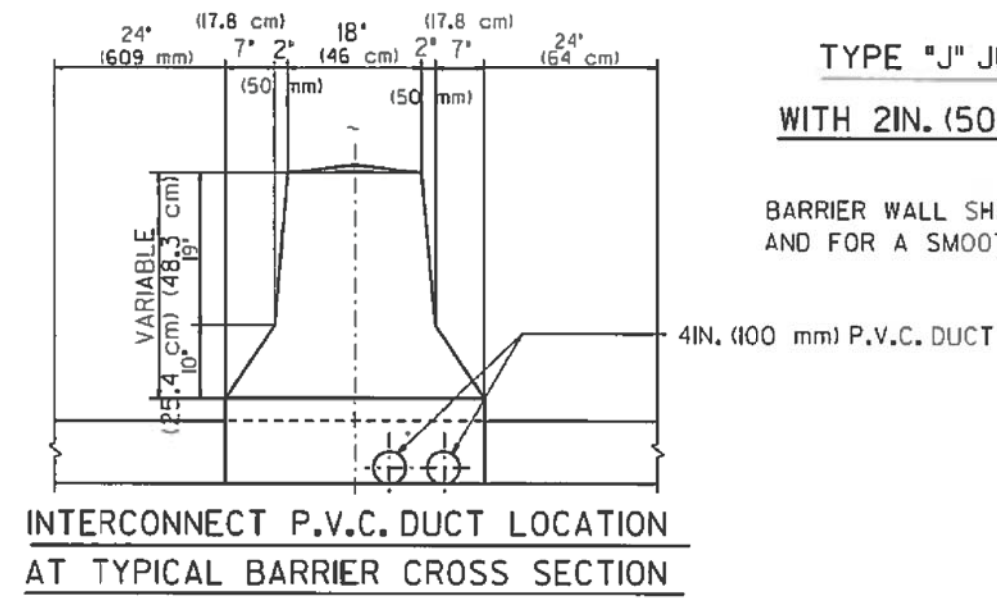
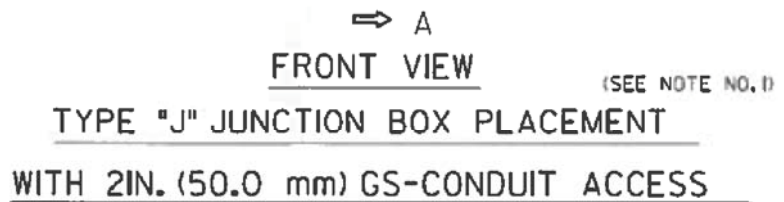
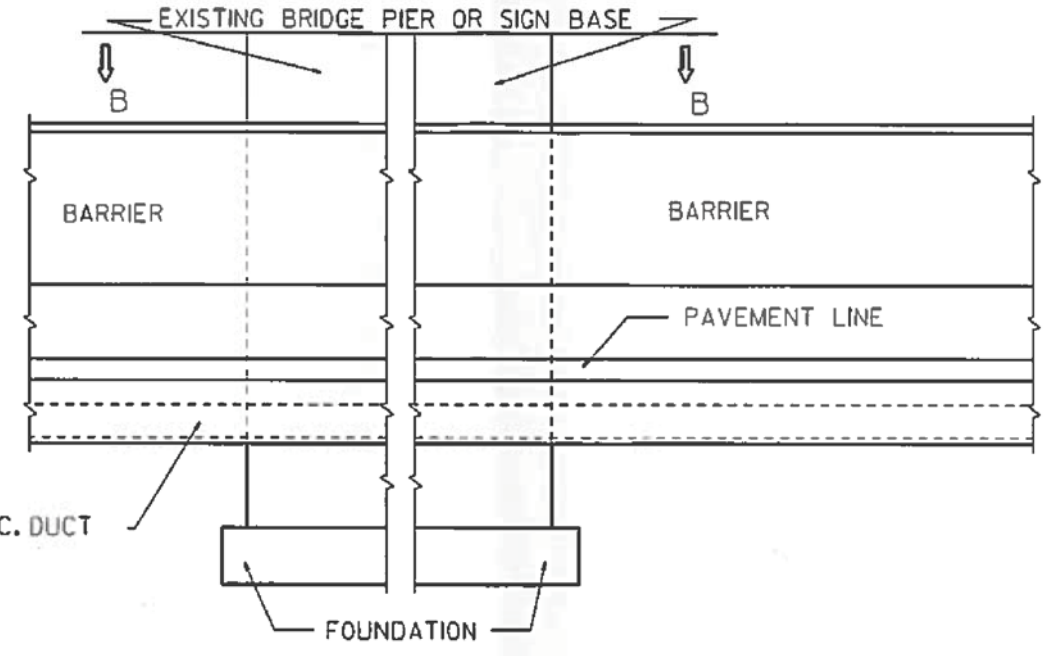
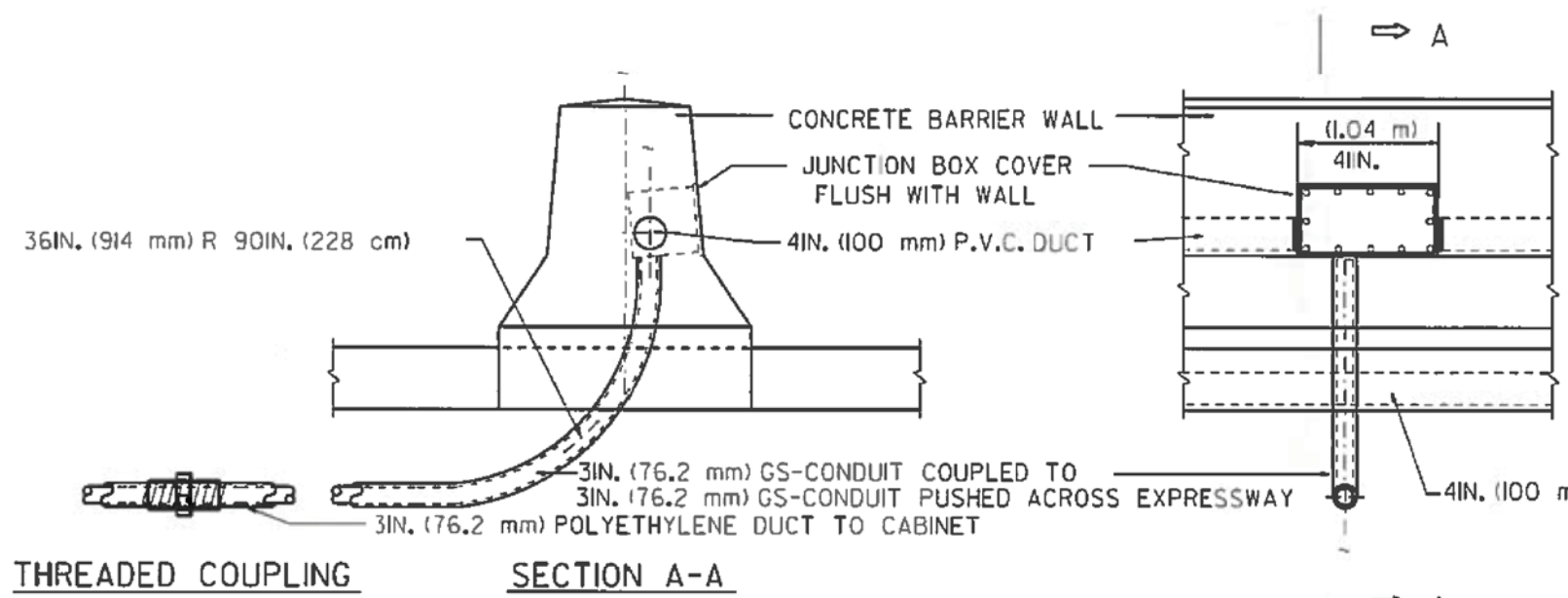
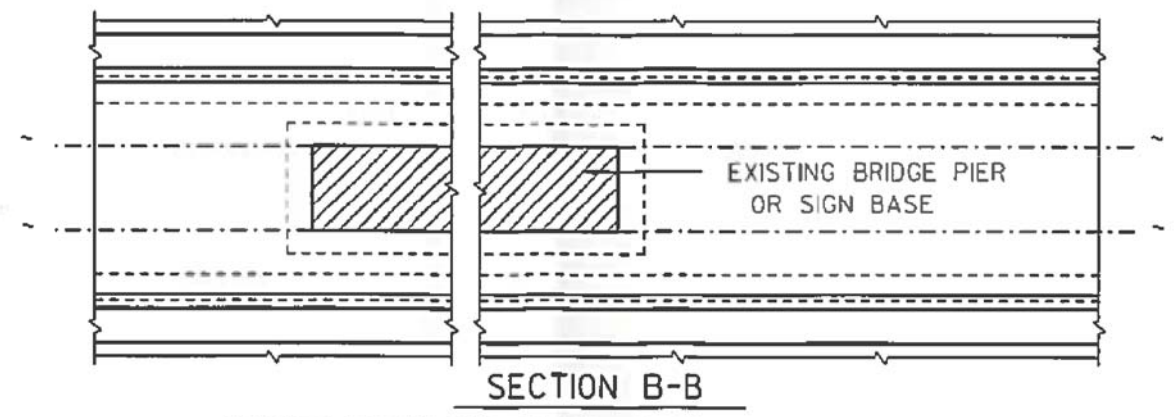
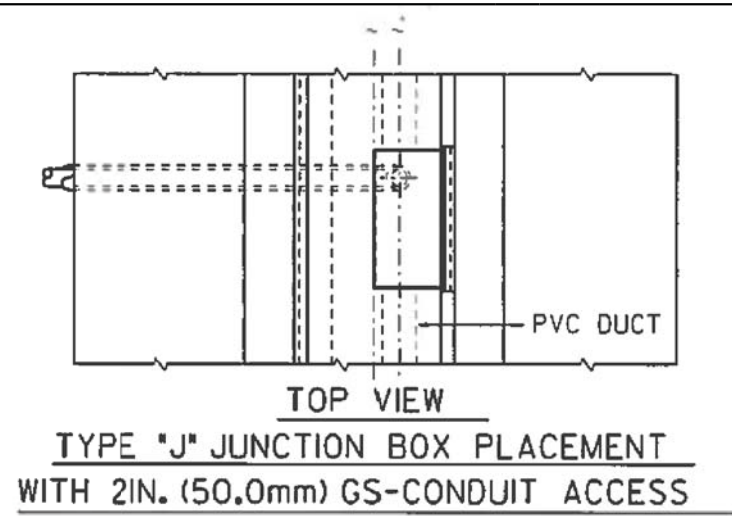
**SIDE VIEW SECTION B-B**

**NOTE:**

JUNCTION BOX TO BE CONSTRUCTED OF  
 1/4 IN. (6.3 mm) TYPE 316 STAINLESS STEEL  
 ALL WELDS SHALL BE CONTINUOUS AND LEAKPROOF  
 ALL COVERS SHALL BE UNIVERSAL IN FIT.

BARRIER WALL SHALL BE GAPPED A MINIMUM OF 15FT. (4.57 m) FOR PROPER PLACEMENT OF JUNCTION BOX TYPE "J" AND  
 FOR A SMOOTH TRANSITION OF 4IN. (100 mm) PVC SURVEILLANCE DUCT(S) FROM BARRIER WALL FOOTER INTO JUNCTION BOX.

FILE PATH = \$FILEL\$



BARRIER WALL SHALL BE GAPPED A MINIMUM OF 15FT. (4.57 m) FOR PROPER PLACEMENT OF JUNCTION BOX TYPE "J" AND FOR A SMOOTH TRANSITION OF 4IN. (100 mm) PVC SURVEILLANCE DUCT(S) FROM BARRIER WALL FOOTER INTO JUNCTION BOX.

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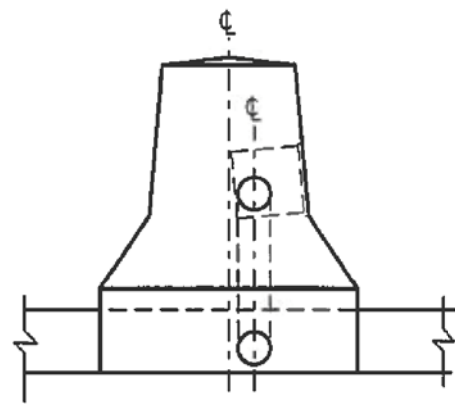
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PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE = 2/8/2018	DATE - 2/8/2018	REVISED -

DESIGNED - LAB	REVISED -
DRAWN - LAB	REVISED -
CHECKED - MI	REVISED -
DATE - 2/8/2018	REVISED -

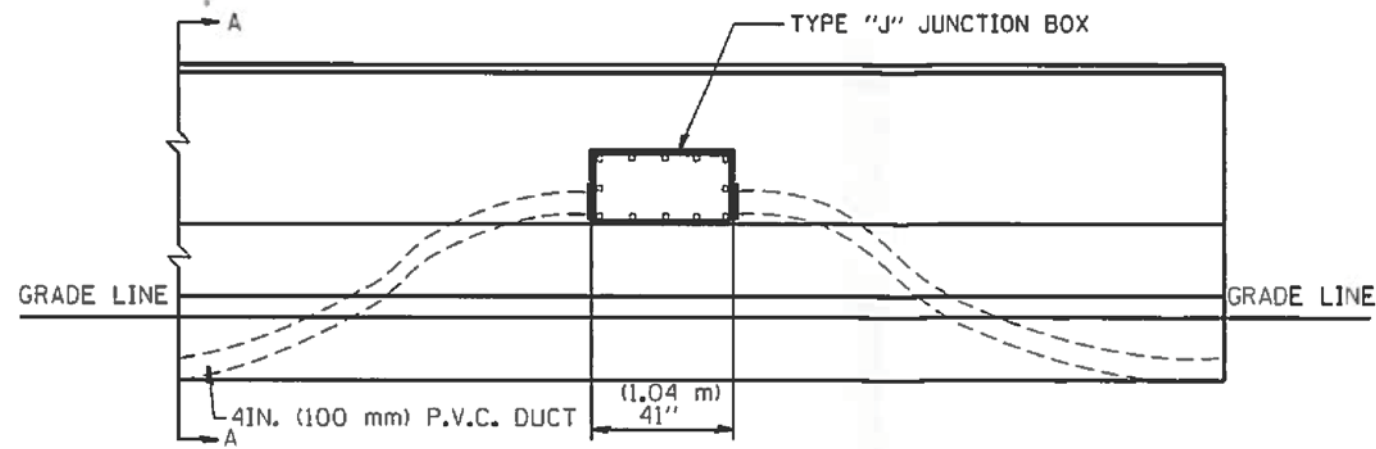
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

JUNCTION BOX TYPE J (SHEET 2 OF 3)	
WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153	
SCALE:	SHEET S-14 OF S-15 SHEETS STA. TO STA.

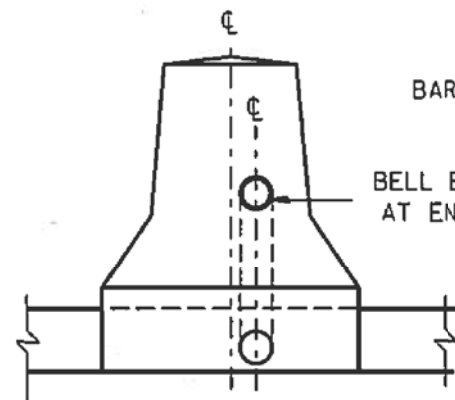
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	23
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				



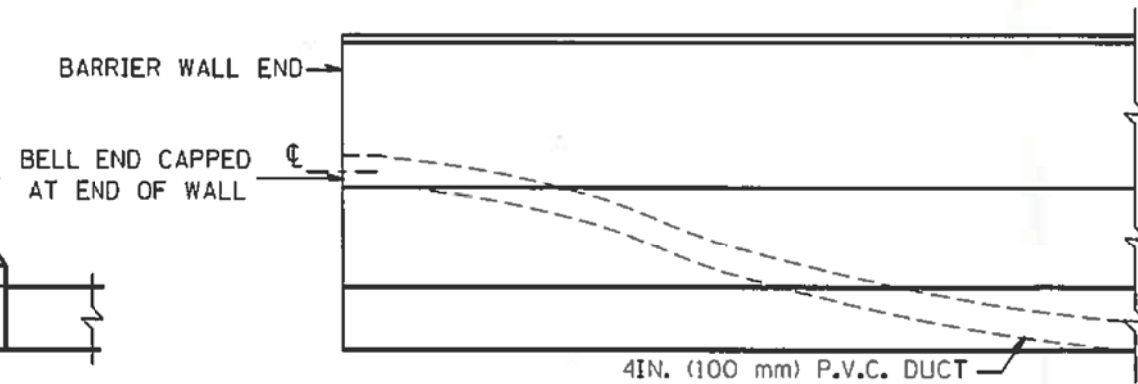
**SECTION A-A**



**ELEVATION  
BARRIER WALL DUCT DETAIL  
1500FT. (457.2 m) INTERVAL**

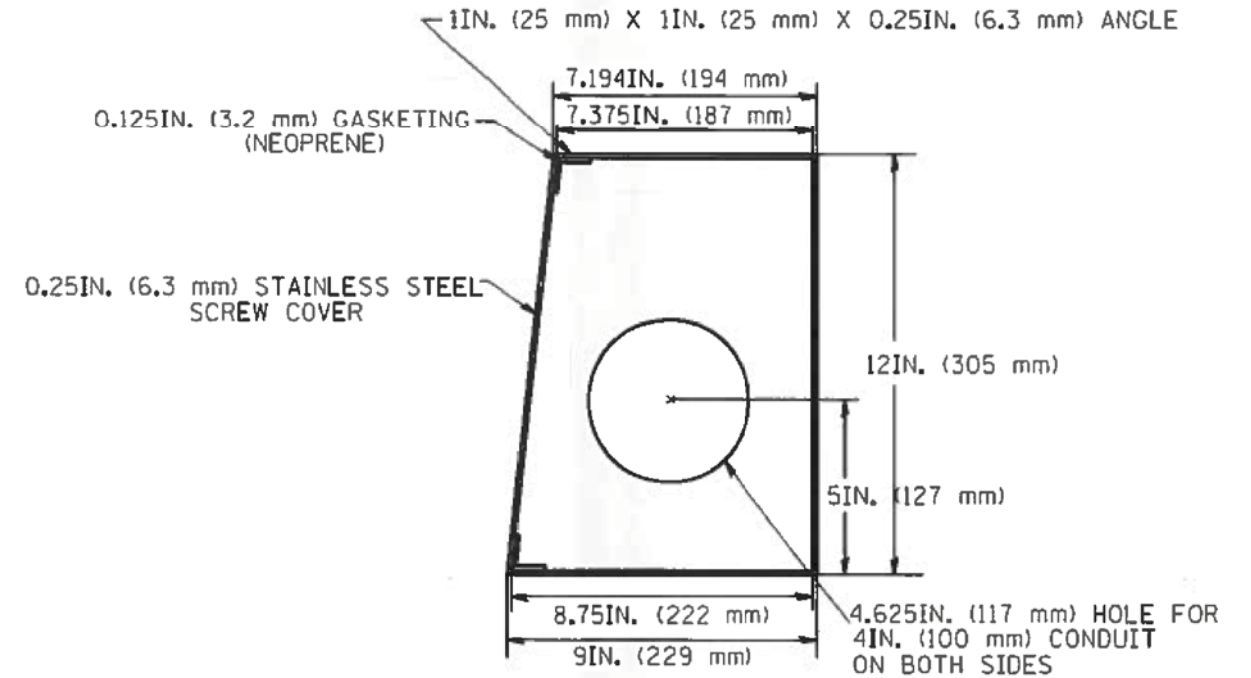


**END VIEW**



**ELEVATION**

**END OF BARRIER WALL DUCT DETAIL**



**SIDE VIEW**

**SPECIAL JUNCTION BOX TYPE "J" TO BE  
INSTALLED IN BARRIER WALL TYPE "2" ONLY**

ALL WELDS SHALL BE CONTINUOUS AND LEAK PROOF  
BOX AND COVER SHALL BE 0.25IN. (6.4 mm) TYPE 316 STAINLESS STEEL

BARRIER WALL SHALL BE GAPPED A MINIMUM OF 15FT. (4.57 m) FOR PROPER PLACEMENT OF JUNCTION BOX TYPE "J"  
AND FOR A SMOOTH TRANSITION OF 4IN. (100 mm) PVC SURVEILLANCE DUCT(S) FROM BARRIER WALL FOOTER INTO JUNCTION BOX.

FILE PATH = \$FILEL\$

**HBM**  
ENGINEERING GROUP, LLC

S15-Junction Box 3.dgn  
USER NAME = lisa.buntin  
PLOT SCALE =  
PLOT DATE = 2/8/2018

DESIGNED - LAB  
DRAWN - LAB  
CHECKED - MI  
DATE - 2/8/2018

REVISED -  
REVISED -  
REVISED -  
REVISED -

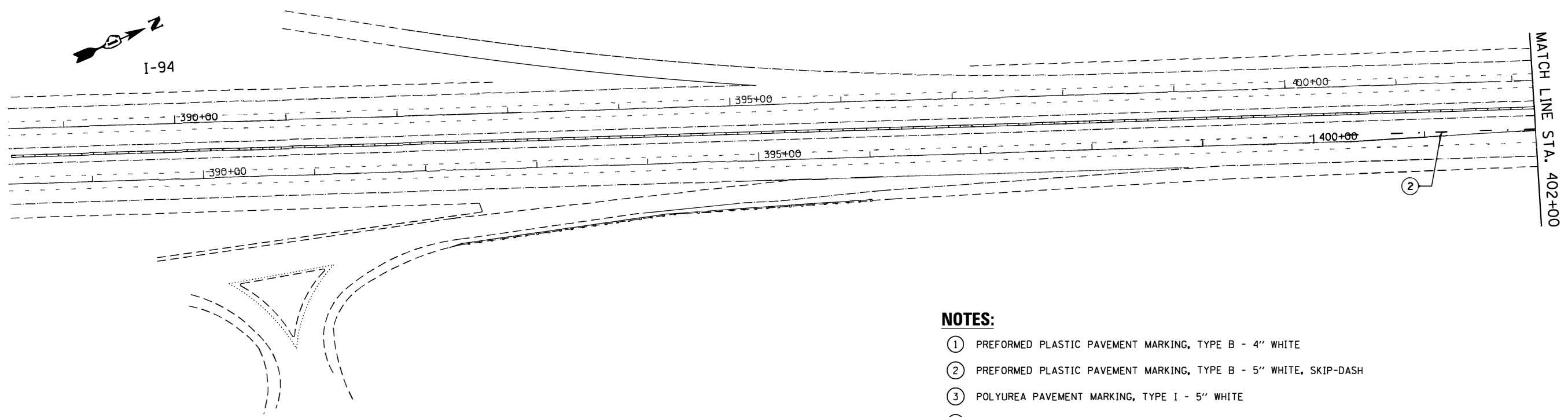
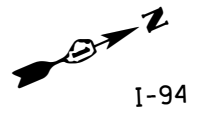
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

JUNCTION BOX TYPE J (SHEET 3 OF 3)  
WB I-94 OVER SB STONY ISLAND AVENUE STRUCTURE NO. 016-0153

SCALE: SHEET S-15 OF S-15 SHEETS STA. TO STA.

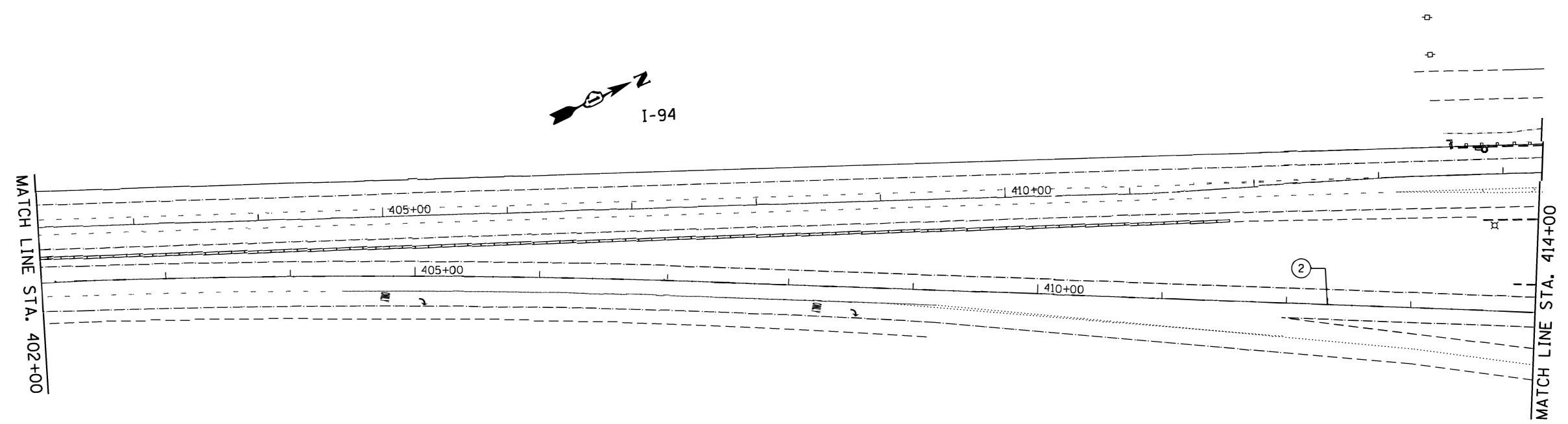
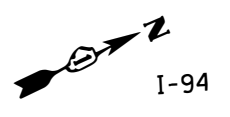
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	24
CONTRACT NO. 62B13				
ILLINOIS FED. AID PROJECT				



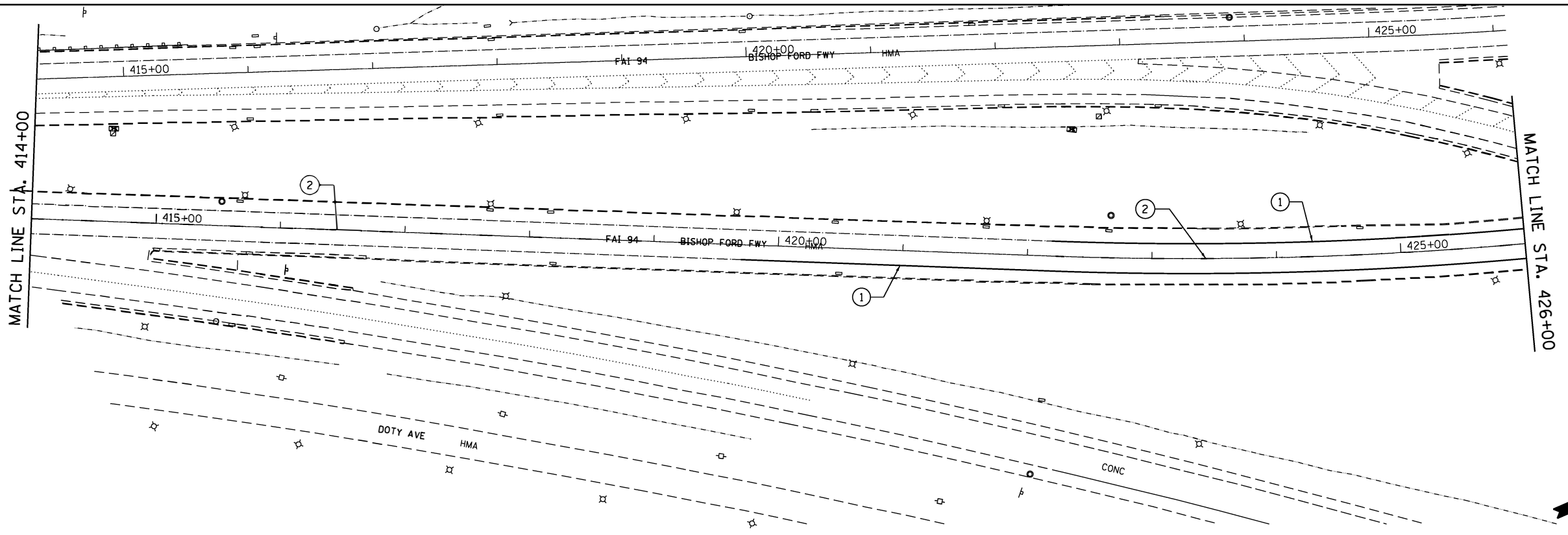


**NOTES:**

- ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - 4" WHITE
- ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - 5" WHITE, SKIP-DASH
- ③ POLYUREA PAVEMENT MARKING, TYPE I - 5" WHITE
- ④ POLYUREA PAVEMENT MARKING, TYPE I - 5" WHITE, SKIP-DASH

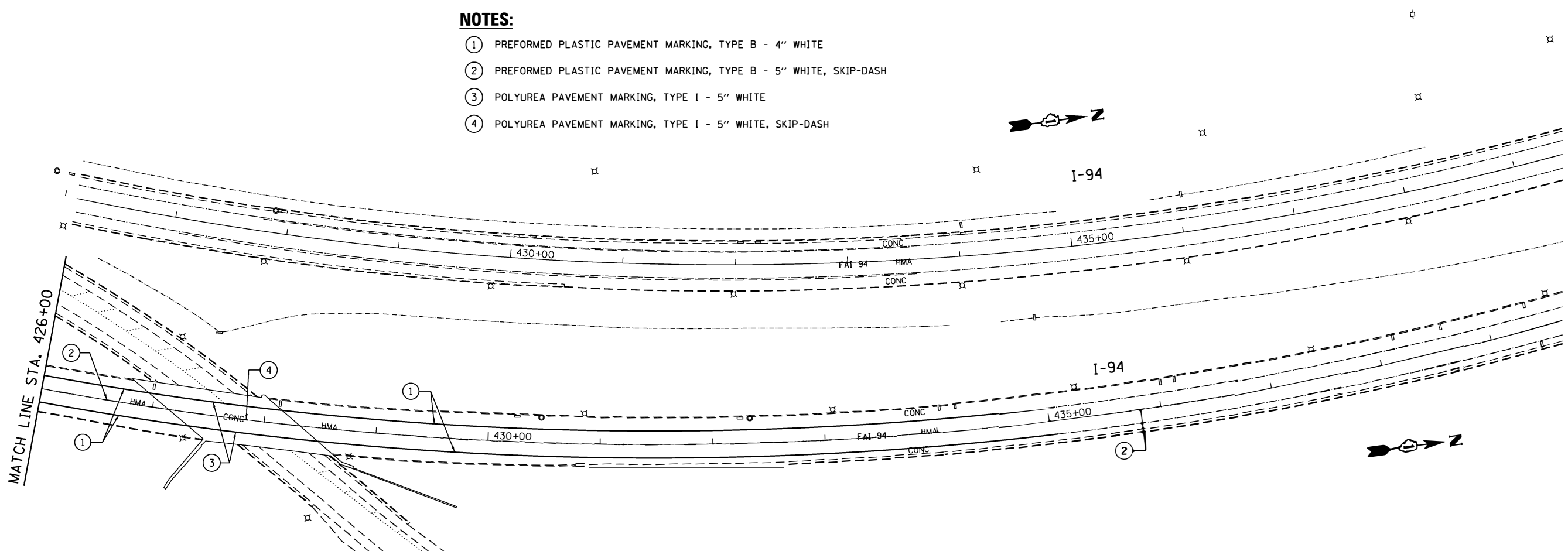


FILE NAME = p:\11\084EBIDINTEG\Illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI388\Drawings\Design\DI38815-sh1-Stage 1.dgn	USER NAME = pyzenowski	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FINAL PAVEMENT MARKING</b>		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		<b>I 94 NB (BISHOP FORD) OVER STONEY ISLAND AVE. SB</b>		94	1212-BR(15)	COOK	31	25
Default	PLOT DATE = 1/18/2018	DATE -	REVISED -		SCALE: 1" = 50'	SHEET 2 OF 5 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 62B13		



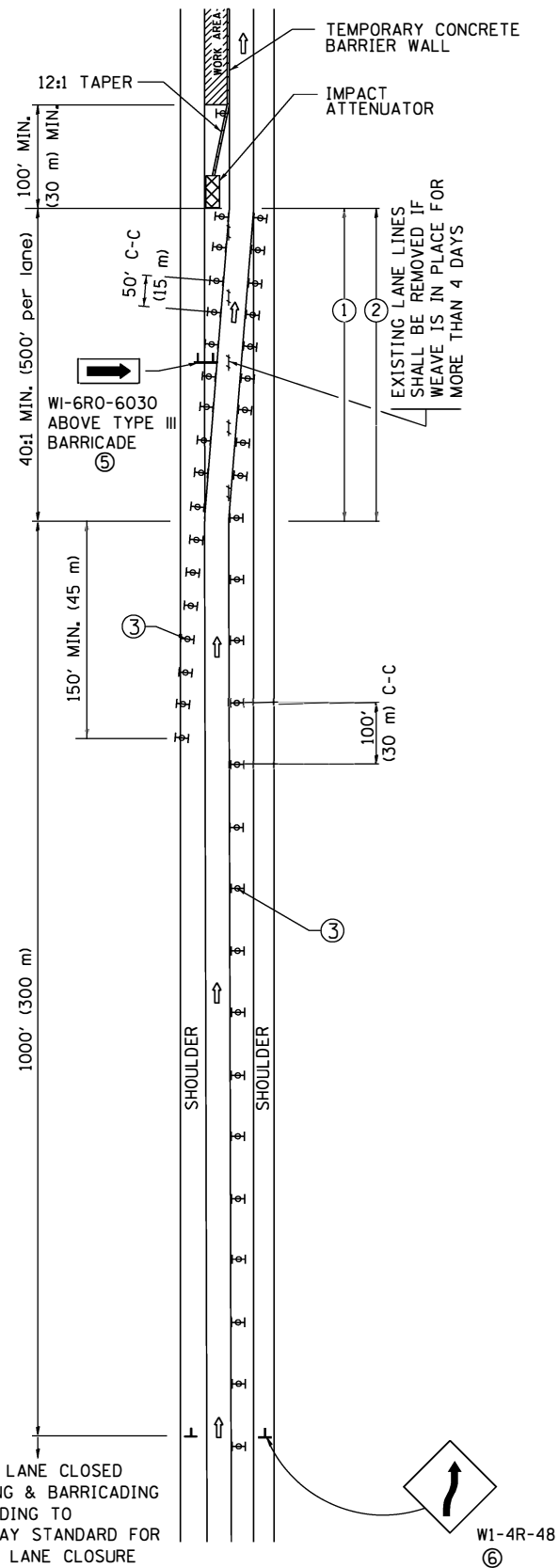
**NOTES:**

- ① PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - 4" WHITE
- ② PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - 5" WHITE, SKIP-DASH
- ③ POLYUREA PAVEMENT MARKING, TYPE I - 5" WHITE
- ④ POLYUREA PAVEMENT MARKING, TYPE I - 5" WHITE, SKIP-DASH

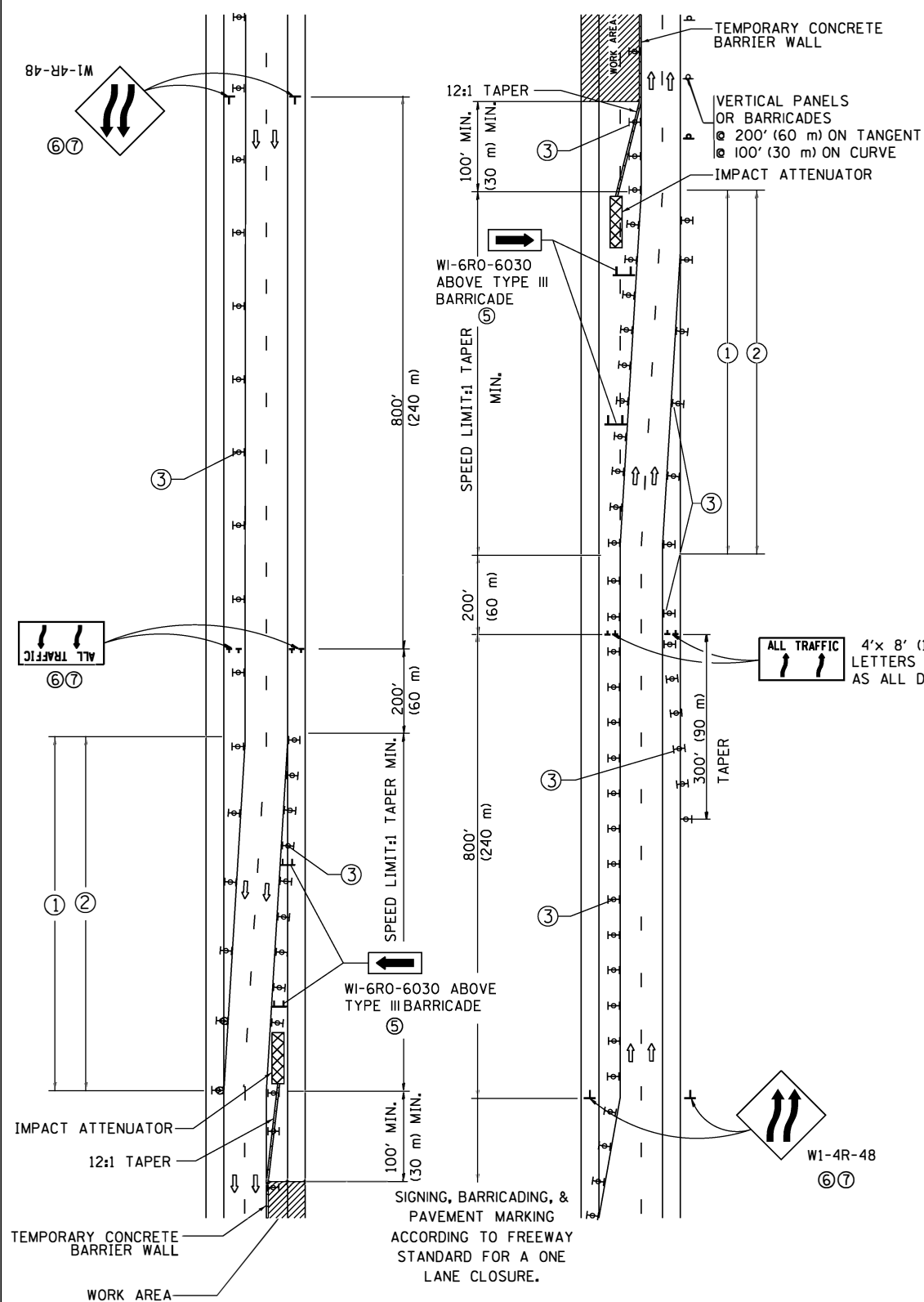


FILE NAME =	USER NAME = pyrozenowski	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FINAL PAVEMENT MARKING</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\DI388\Drawings\Design\DI38815-shr-Stage 1.dgn		REVISION	REVISION		94	1212-BR(15)	COOK	31	26			
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISION	REVISION		CONTRACT NO. 62B13							
Default	DATE -	REVISION	REVISION		SCALE: 1" = 50'	SHEET 3	OF 5 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

# SINGLE LANE WEAVE



# MULTI-LANE WEAVE



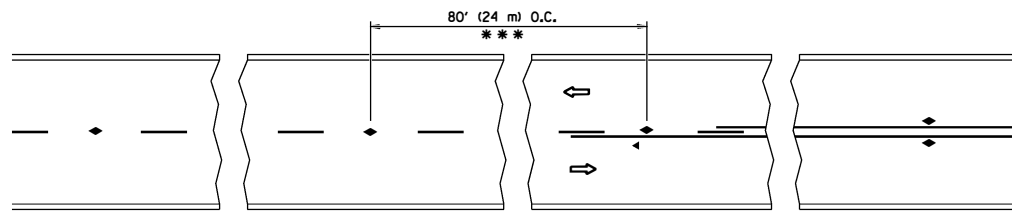
- GENERAL NOTES**
- EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.
  - CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.
  - PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
  - ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
  - TYPE III BARRICADES MAY BE OMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.
  - WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.
  - THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

4'x 8' (1.2 m x 2.4 m); 1 (25) BORDER; 10 (250) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.

- SYMBOLS**
- DIRECTION OF TRAFFIC
  - WORK AREA
  - SIGN ON PORTABLE OR PERMANENT SUPPORT
  - TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
  - TEMPORARY CONCRETE BARRIER WALL
  - IMPACT ATTENUATOR
  - W24-1-48

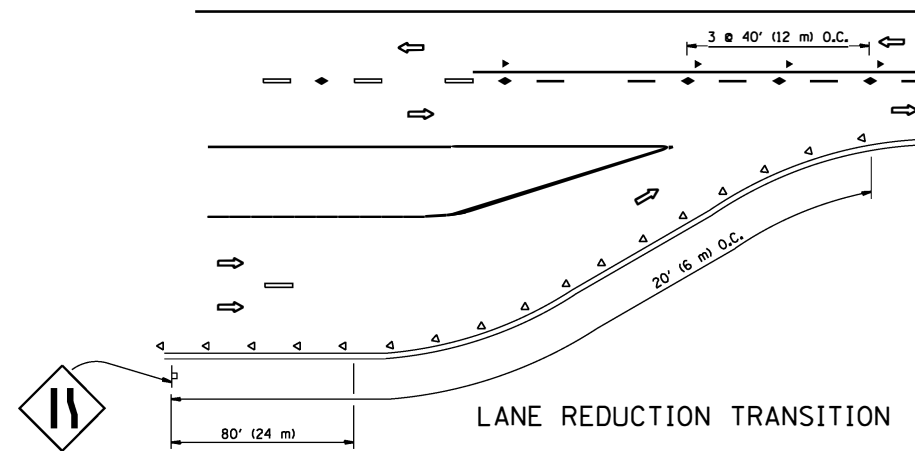
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = pyzenowski	DESIGNED - DWS	REVISED - JAF 02-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE &amp; MULTI-LANE WEAVE</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBID\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 1\Projects\01388\Drawings\Design\DistStd.dgn			REVISED - SPB 01-07		94	1212-BR(15)	COOK	31	27			
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - SPB 12-09			<b>TC-09</b>		<b>CONTRACT NO. 62B13</b>					
PLOT DATE = 1/18/2018	DATE - 02-87	REVISED - MD 06-13			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

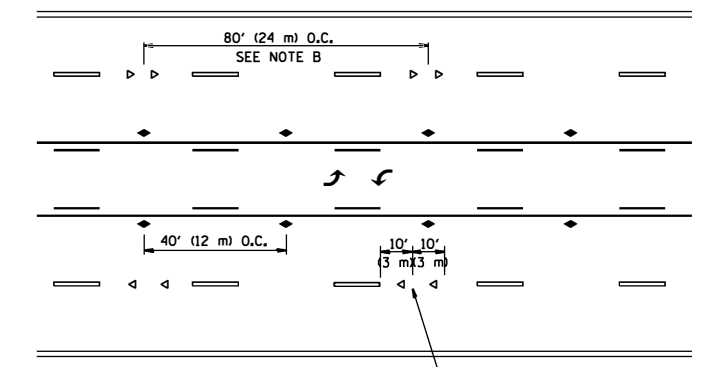


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

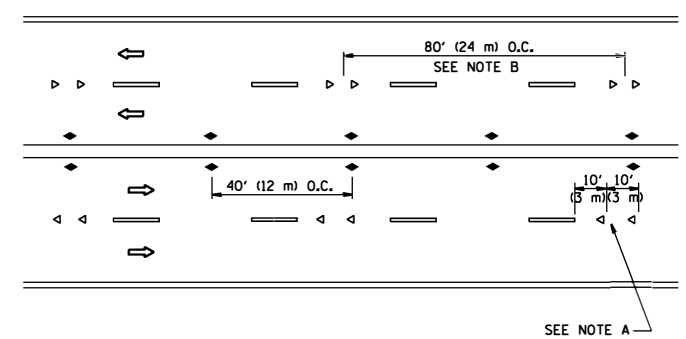
TWO-LANE/TWO-WAY



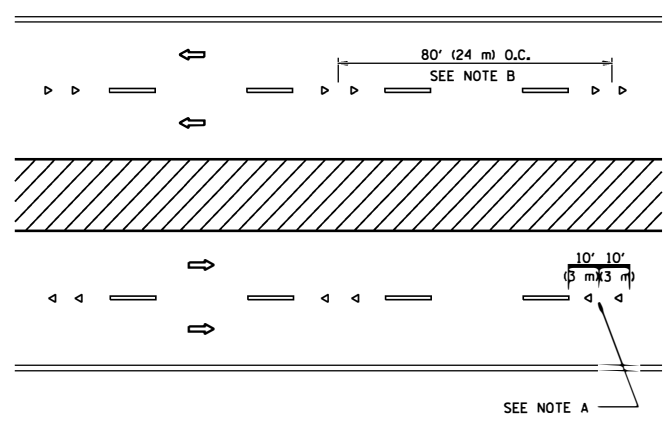
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

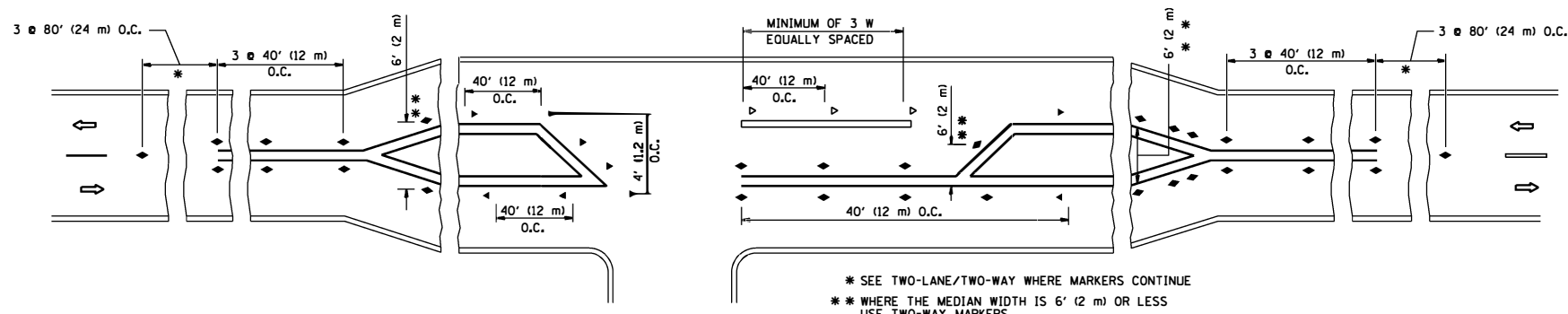
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

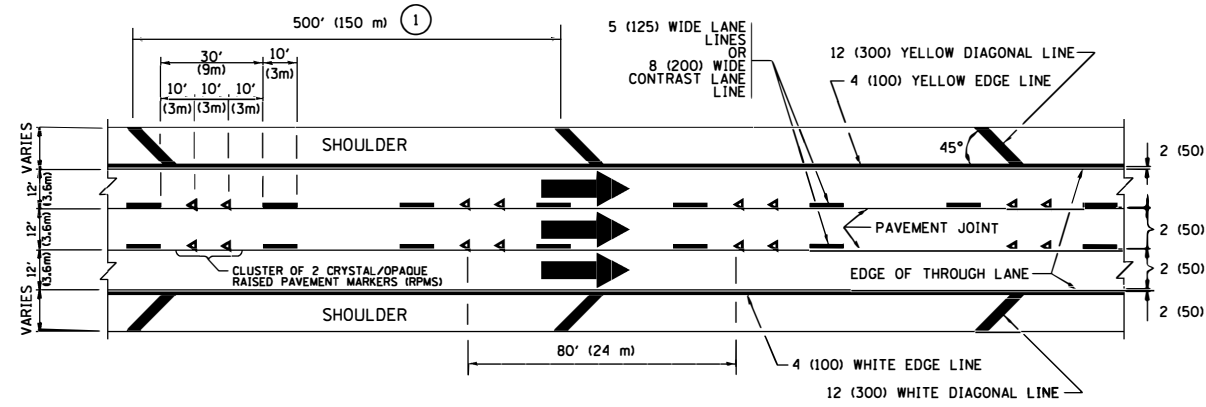


LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

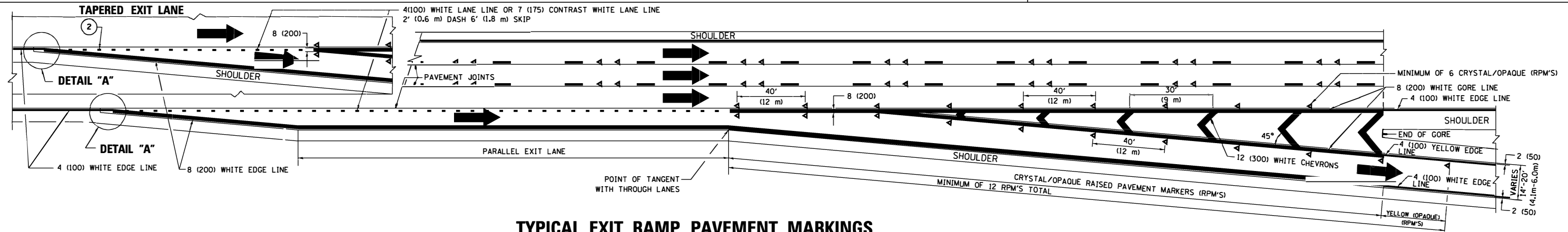
FILE NAME =	USER NAME = pyzenowski	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\1388\Drawings\Design\DistStd.dgn		REVISOR - T. RAMMACHER 03-12-99	REVISED - T. RAMMACHER 01-06-00					94	1212-BR(15)	COOK	31	28
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00	REVISED - C. JUXTUS 09-09-09		<b>TC-11</b>			<b>CONTRACT NO. 62B13</b>				
PLOT DATE = 1/18/2018	DATE -	REVISED - C. JUXTUS 09-09-09			SCALE: NONE			SHEET NO. 1 OF 1 SHEETS STA. TO STA.				



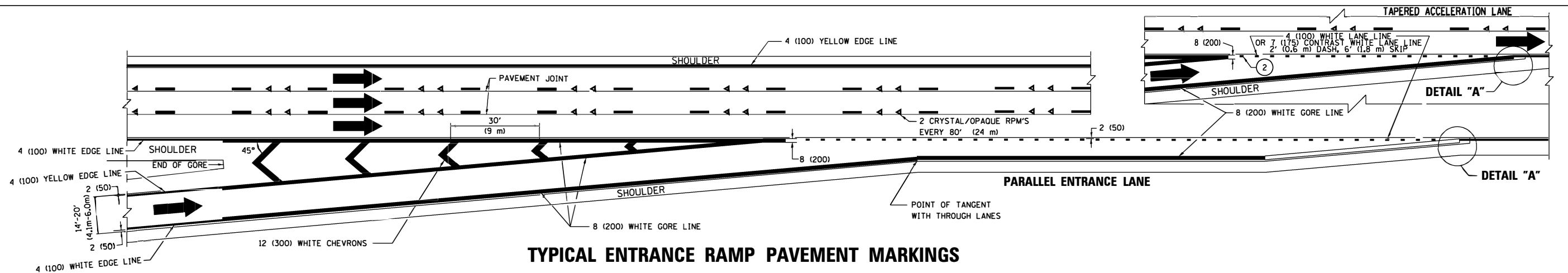
**TYPICAL EDGE LINES & LANE LINES**

**PAVEMENT MARKING MATERIALS**

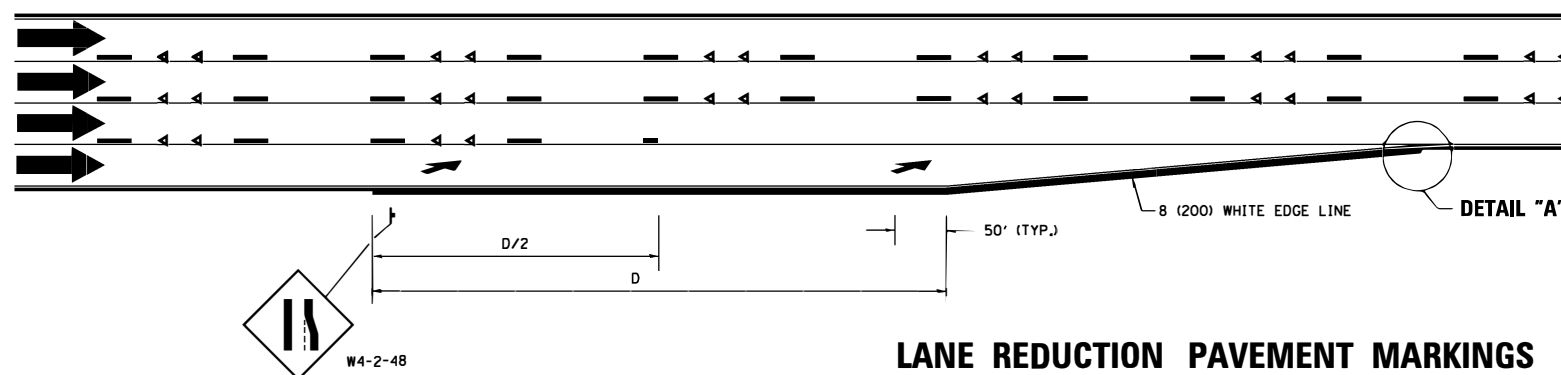
1. THERMOPLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON HMA PAVEMENTS.
2. POLYUREA OR MODIFIED URETHANE PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON PCC PAVEMENTS.
3. PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, INLAID OR GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENTS.
4. CONTRAST PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON PCC PAVEMENT.



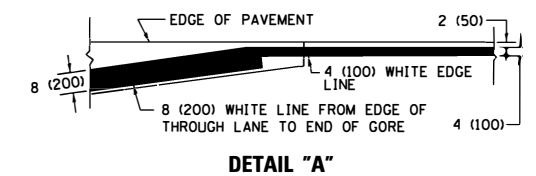
**TYPICAL EXIT RAMP PAVEMENT MARKINGS**



**TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS**

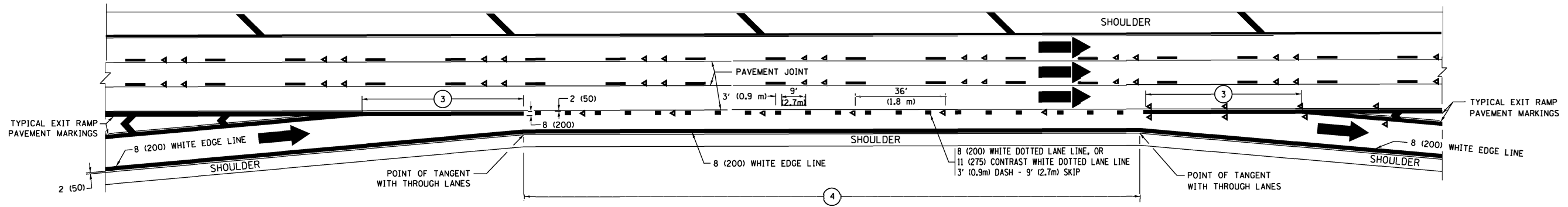


**LANE REDUCTION PAVEMENT MARKINGS**

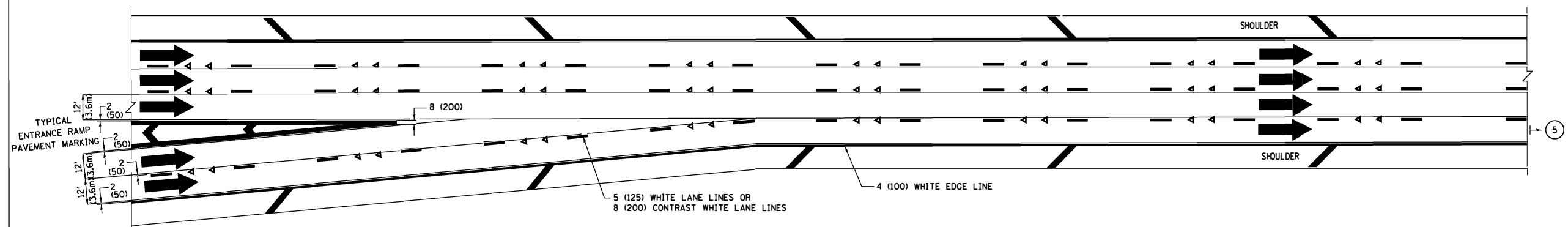


**NOTES:**

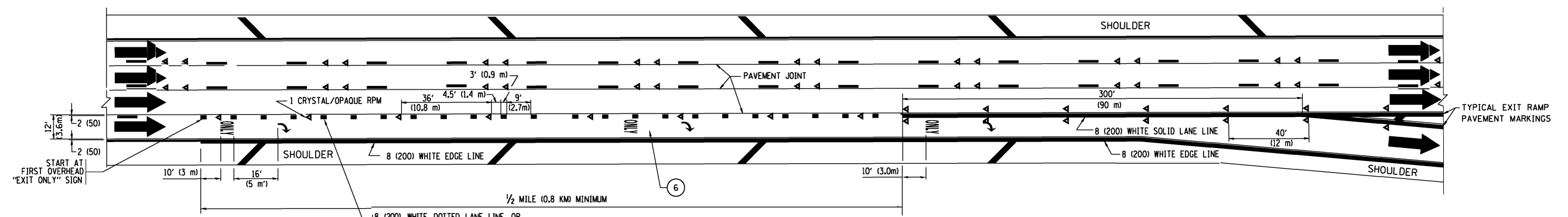
- ① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
- ② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.



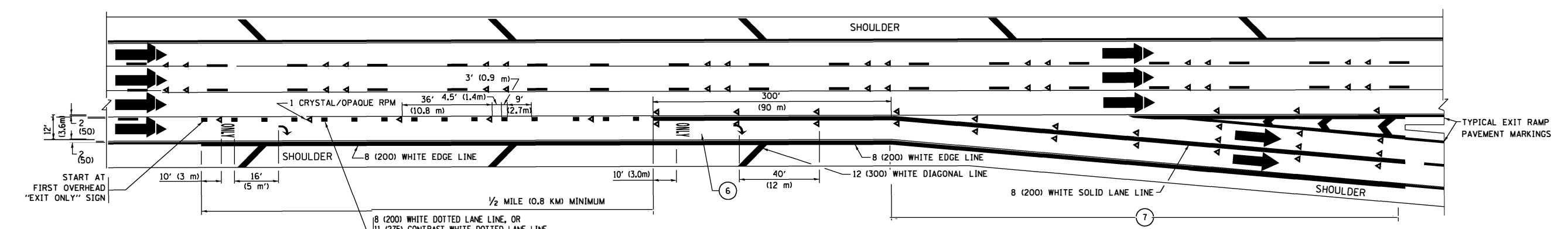
**AUXILIARY LANE MARKINGS**



**TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS**



**EXIT ONLY LANE MARKINGS**



**EXIT ONLY WITH OPTION LANE MARKINGS**

- NOTES:**
- ③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
  - ④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
  - ⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
  - ⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.
  - ⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

FILE NAME =	USER NAME = pyzzenowskirb	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
pw\11084EBID\INTEC\illinois.gov\PIWIDOT\Documents\DOT Offices\District 1\Projects\138\BRM\State\Design\DistStd.dgn			REVISED - S.P.B. 01-07
Default	PLOT SCALE = 100.0499' / in.	CHECKED -	REVISED - S.P.B. 01-10
	PLOT DATE = 1/18/2018	DATE - 01-90	REVISED - M.D. 09-17

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

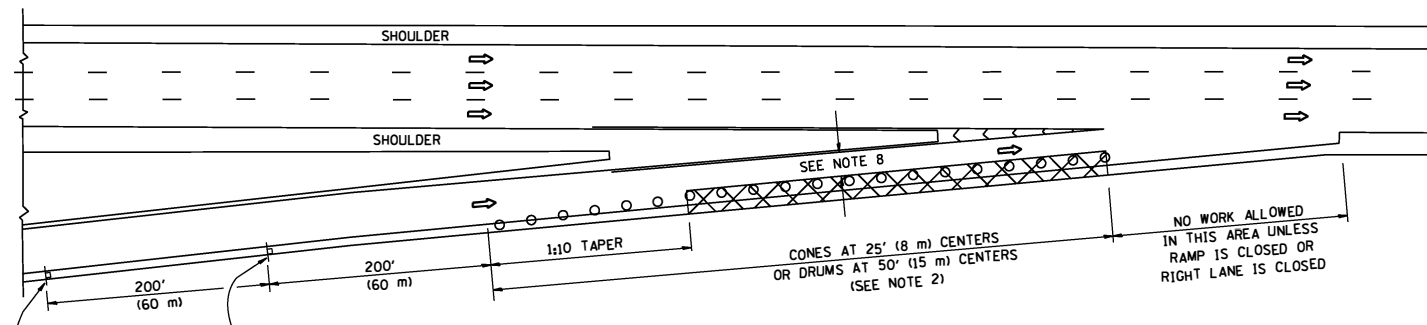
**MULTI-LANE FREEWAY  
PAVEMENT MARKING DETAILS**

SCALE: NONE	SHEET 2	OF 2 SHEETS	STA.	TO STA.
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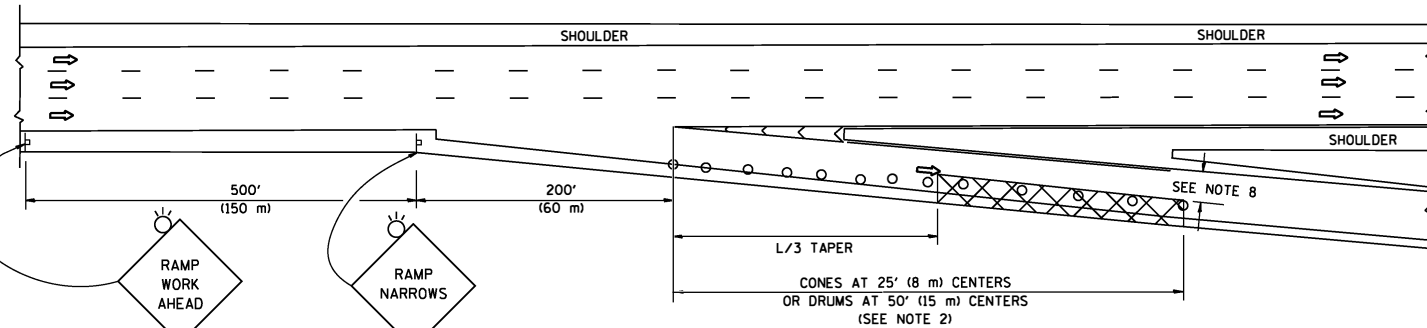
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	30
TC-12		CONTRACT NO. 62B13		
ILLINOIS FED. AID PROJECT				

PARTIAL RAMP CLOSURE DETAILS

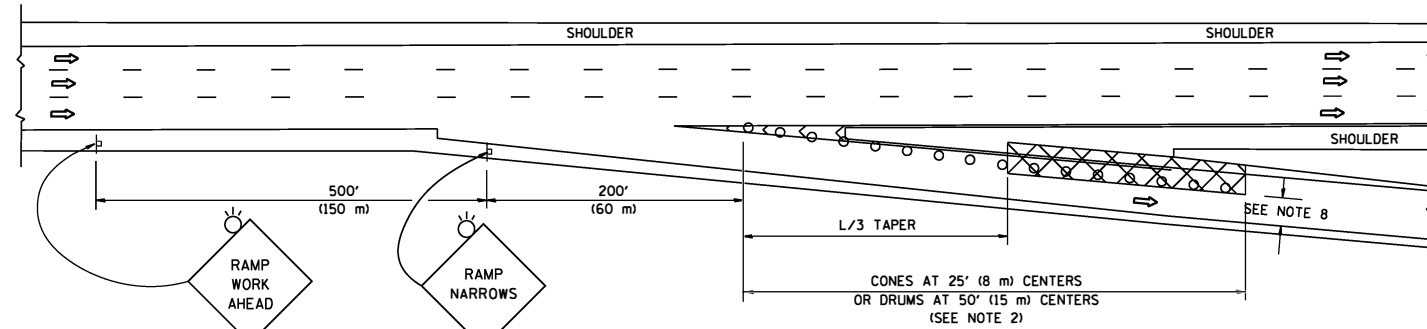
SHOULDER CLOSURE DETAILS



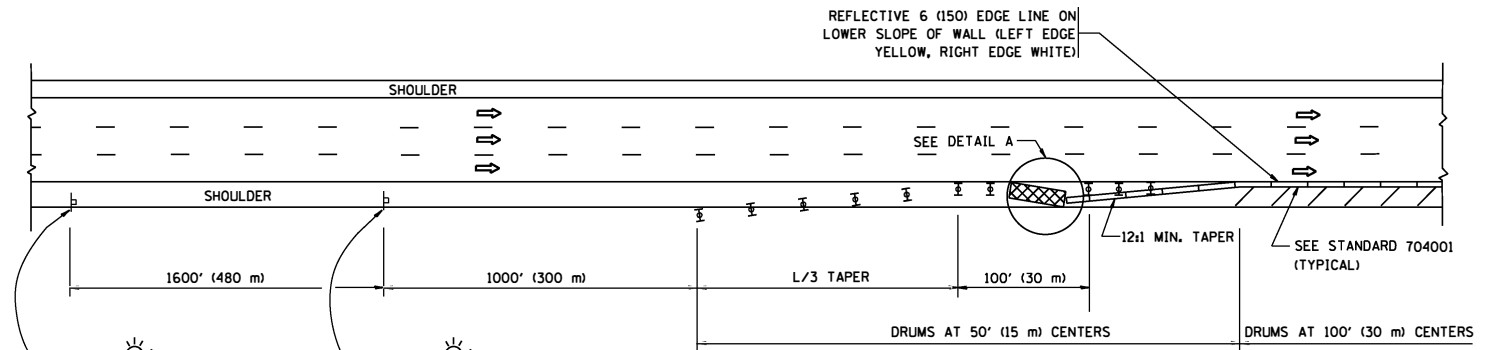
TYPICAL ENTRANCE RAMP



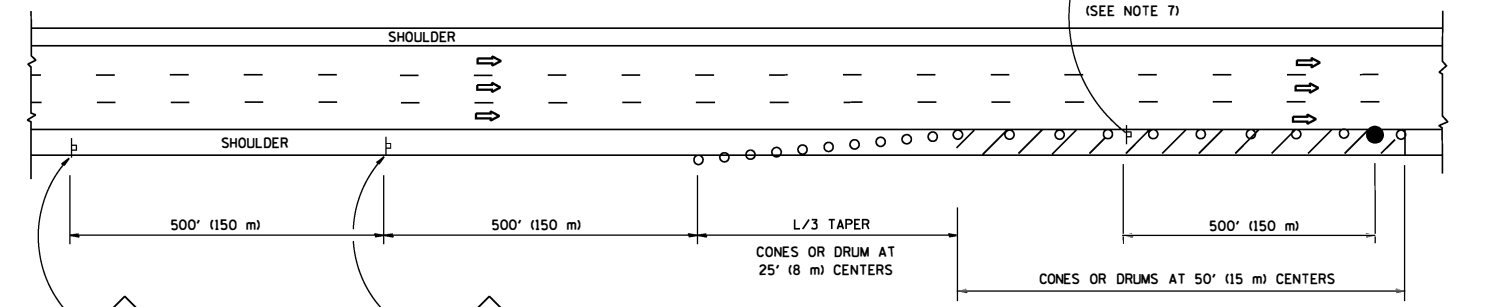
TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

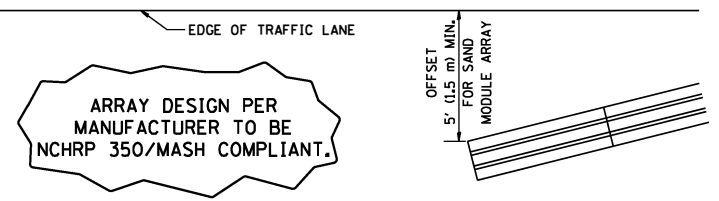


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:  
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCR OACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"  
 IMPACT ATTENUATOR, TEMPORARY  
 (SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:  

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH
	$L = 0.65(W)(S)$ $L = (W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS)  
 S = NORMAL POSTED SPEED MPH (KM/H)
2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTICLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCR OACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION  
 16' MIN. WIDTH CURVE SECTION.

FILE NAME =	USER NAME = pyrzenowski	DESIGNED -	REVISED - S.P.B. 01-07
pw\11084EBIDINTEC\111nois.gov\PIDOT\Documents\DOT Offices\District 1\Projects\01388\Drawings\Design\DWG\Std.dgn			REVISED - S.P.B. 12-09
Default	PLOT SCALE = 100.0499' / in.	CHECKED -	REVISED - M.D. 06-13
	PLOT DATE = 1/18/2018	DATE - 11-96	REVISED - M.D. 01-18

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY  
 SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1212-BR(15)	COOK	31	31
TC-17		CONTRACT NO. 62B13		
ILLINOIS FED. AID PROJECT				