

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED  
HIGHWAY PLANS

FAS ROUTE 1412 (IL 94)  
SECTION [106BC-1;108(C,(VB,VC)NRS)]BRR  
PROJECT STP-EMF4(038)  
IDOT D4 BRIDGE PRESERVATION  
HENDERSON COUNTY

C-94-058-24

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	1
ILLINOIS		CONTRACT NO. 68J12		

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482006-03	HMA SHOULDER ADJACENT TO RIGID PAVEMENT
483001-06	PCC SHOULDER
630001-13	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
701006-05	OFF-RD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-RD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701321-19	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701901-10	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT 4 DETAILS

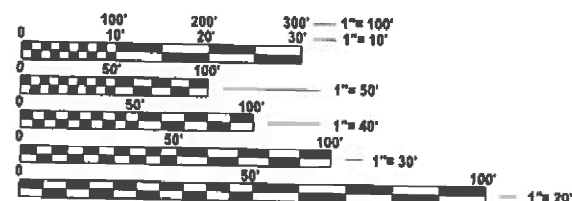
406101	BUTT JOINTS
630101	GUARDRAIL EROSION CONTROL TREATMENTS
780001	TYPICAL PAVEMENT MARKINGS

TRAFFIC DATA

SN 036-0041	
IL-94 OVER JINKS HOLLOW CREEK	
2023 ADT	575
MU%	3.13%
SU%	6.70%
POSTED SPEED LIMIT	55 MPH

SN 036-0043	
IL-94 OVER HENDERSON CREEK	
2023 ADT	275
MU%	10.18%
SU%	5.45%
POSTED SPEED LIMIT	55 MPH

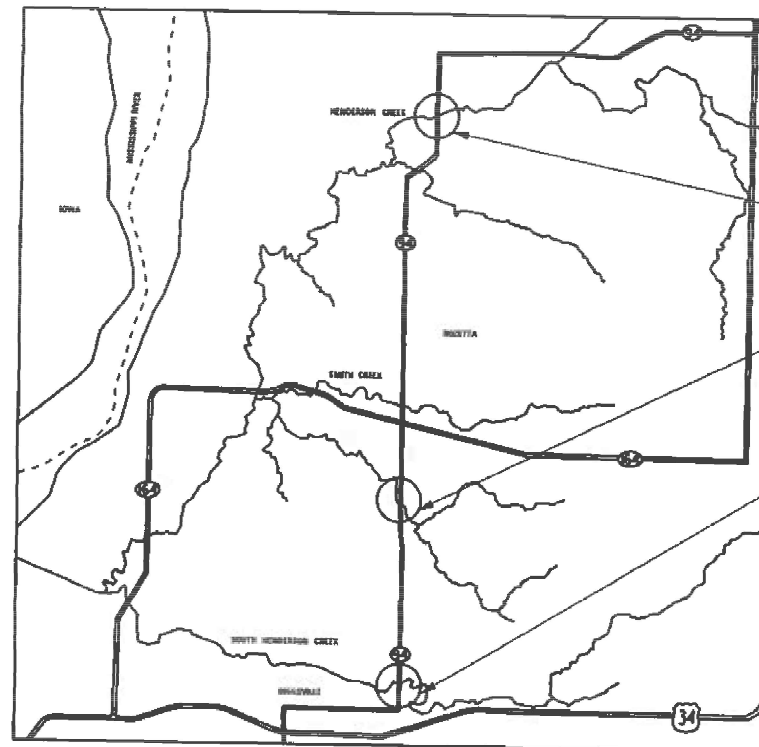
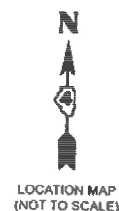
SN 036-0047	
IL-94 OVER BNSF, SOUTHERN HENDERSON CREEK, AND ARTHUR STREET	
2023 ADT	950
MU%	5.26%
SU%	7.37%
POSTED SPEED LIMIT	35 MPH



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

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

PROJECT ENGINEER DAVID BROVIK (309)671-3493  
PROJECT MANAGER ELIAS ELDERZI (309)671-3482  
CATALOG NO. 036505-00D  
CONTRACT NO. 68J12



SN 036-0043  
STA. 341+43.50 TO STA. 348+97.17

SN 036-0041  
STA. 756+76.82 TO  
STA. 761+14.33

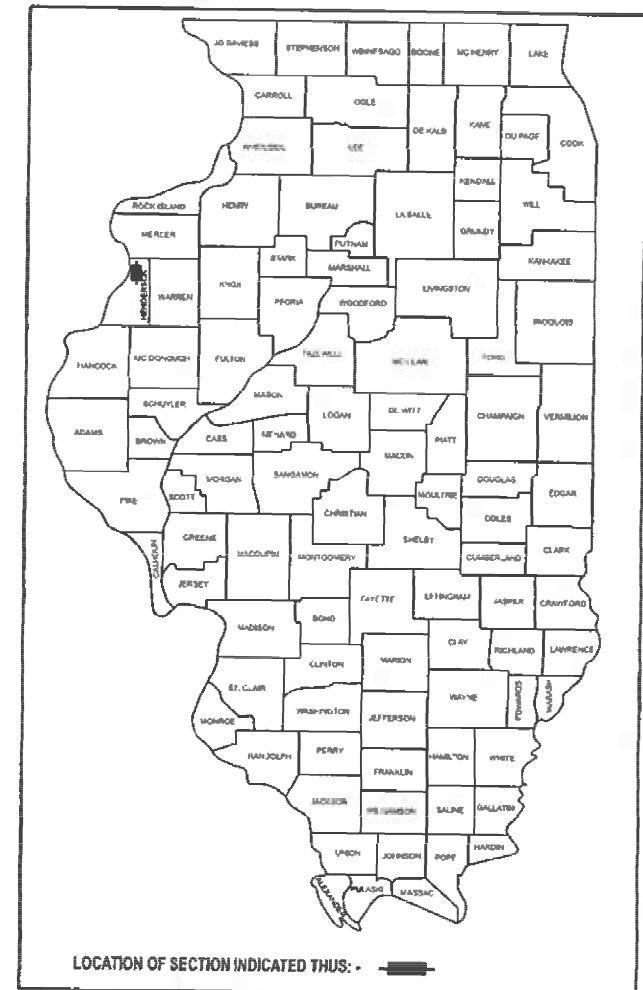
SN 036-0047  
STA. 923+16.10 TO  
STA. 932+39.29



ERIC J. MESCHÉWSKI ILLINOIS P.E. 062-065709  
EXPIRES 11/30/2025  
SIGNATURE AND SEAL APPLY TO ALL SHEETS  
EXCEPT AS NOTED BELOW:  
SHEETS 34-73

5/2/2025  
DATE

D-94-036-24



THE WORK TO BE PERFORMED UNDER THIS CONTRACT CONSISTS OF BRIDGE DECK MICROSILICA CONCRETE OVERLAY, BRIDGE JOINT REPLACEMENT, HMA (MIX "D") BUTT JOINT, MINOR RESURFACING, TRAFFIC CONTROL, PAVEMENT MARKING, AND ALL INCIDENTAL AND COLLATERAL WORK NECESSARY TO COMPLETE THE PROJECT.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 9 20 25  
Eric J. Meschewski  
REGIONAL ENGINEER

June 27 20 25  
Eric J. Meschewski  
ENGINEER OF DESIGN AND ENVIRONMENT

June 27 20 25  
Eric J. Meschewski  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

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PC:204 00

204.00

EFFECTIVE JUNE 1, 1999

REVISED NOVEMBER 1, 2020

## ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (BORROW SITE REVIEW)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM - D4 P10101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

## GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOURS NOTIFICATION IS REQUIRED.
2. THE MATERIAL USED FOR CONSTRUCTION OF PERMANENT AGGREGATE DRIVEWAYS SHALL BE GRAVEL OR CRUSHED STONE, AS DIRECTED BY THE ENGINEER, TO REPLACE IN KIND THE EXISTING AGGREGATE DRIVEWAYS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS REQUIREMENT, BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE PAY ITEM FOR THE AGGREGATE AS SPECIFIED ON THE PLANS.
3. AFTER PLACEMENT OF THE BRIDGE DECK OVERLAY, THE RESIDENT ENGINEER SHALL NOTIFY THE DISTRICT BRIDGE MAINTENANCE ENGINEER OF THE "AS CONSTRUCTED" MILLING DEPTH AND OVERLAY THICKNESS FOR UPDATING THE ILLINOIS HIGHWAY INFORMATION SYSTEM.
4. BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.
5. PRIOR TO ROUTING TRAFFIC ONTO THE SHOULDERS AS SHOWN IN THE STAGING PLANS, THE CONTRACTOR SHALL SECURE GRATINGS ON SHOULDER INLETS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL PAY ITEM.
6. THE RESIDENT ENGINEER SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE PAVEMENT MARKINGS.
7. CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE HOT-MIX ASPHALT SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.
8. AFTER PLACEMENT OF THE BRIDGE DECK OVERLAY, THE RESIDENT ENGINEER SHALL NOTIFY THE DISTRICT BRIDGE MAINTENANCE ENGINEER OF THE "AS CONSTRUCTED" MILLING DEPTH AND OVERLAY THICKNESS FOR UPDATING THE ILLINOIS HIGHWAY INFORMATION SYSTEM.
9. THE ENGINEER SHALL DETERMINE ANY PROFILE ADJUSTMENTS REQUIRED ON THE APPROACH PAVEMENTS AND APPROACH ROADWAYS TO ADDRESS SETTLED APPROACH PAVEMENT. ESTIMATE BUTT JOINT AND HMA OVERLAY LIMITS ARE PROVIDED IN THE PLANS.
10. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE OF STAGING AREA OR REMOVAL LINES SHOWN ON PLANS SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
12. THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS, PAVEMENT PATCHING, OR DRAINAGE ADJUSTMENT PRIOR TO MILLING OR RESURFACING.
13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
14. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH SECTION 201 OF THE STANDARD SPECIFICATIONS.
15. THE RESIDENT ENGINEER SHALL CONTACT THE IDOT AREA TRAFFIC ENGINEER A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT.
16. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH SHALL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
17. GRATES AND DRAINAGE STRUCTURES ON SHOULDERS SHALL BE SECURED BEFORE TRAFFIC IS SHIFTED ONTO THEM.

## TEMPORARY TRAFFIC SIGNAL NOTES

1. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH STANDARD 701321 EXCEPT WHEN MODIFIED ON THESE PLAN SHEETS.
2. THE CONTRACTOR SHALL INSTALL EITHER DETECTOR LOOPS OR MICROWAVE DETECTORS FOR USE WITH THE TEMPORARY TRAFFIC SIGNALS IN ACCORDANCE WITH HIGHWAY STANDARD 701321.
3. THE ENGINEER OF TRAFFIC SHALL APPROVE ALL TIMING PARAMETERS.
4. THE CONTRACTOR SHALL CONTACT TONY BRIDSON, DISTRICT 4 TRAFFIC SIGNAL TECHNICIAN, AT (309) 672-4464, FORTY-EIGHT (48) HOURS PRIOR TO SIGNAL TURN-ON.
5. ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" DIAMETER LED LENSES.
6. THE TEMPORARY TRAFFIC SIGNAL HEADS SHALL BE PLACED AT THE LOCATIONS INDICATED ON THE PLAN SHEETS OR AS DIRECTED BY THE ENGINEER.
7. THE TEMPORARY TRAFFIC SIGNAL INSTALLATION SHALL CONFORM TO ALL MUTCD STANDARDS.
8. A MINIMUM OF 2 SIGNAL HEADS ARE REQUIRED PER APPROACH.
9. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH REFLECTORIZED BACKPLATES.
10. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLY WITH THESE REQUIREMENTS AND PLAN SHEET DETAILS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE TEMPORARY BRIDGE SIGNAL INSTALLATION. THERE WILL BE NO ADDITIONAL COMPENSATION.

## MAINTENANCE OF TRAFFIC NOTES

1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING THE EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS, BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE MOT PLANS.
3. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE MOT PAVEMENT MARKINGS SHALL BE REMOVED. ALL TEMPORARY PAVEMENT MARKINGS WHICH CONFLICT WITH THE NEXT STAGE SHALL BE REMOVED. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED BY COMPLETION OF THE PROJECT.
4. ALL TRAFFIC CONTROL DEVICES USED FOR MOT, AS DETAILED IN THE PLANS OR HIGHWAY STANDARDS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN THE MOT SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
5. ALL EXISTING SIGNS WITHIN MOT LIMITS WHICH ARE OBSCURED BY OR CONFLICT WITH CONSTRUCTION OPERATIONS AND MOT, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
6. A FULL-DEPTH SAW CUT SHALL BE REQUIRED BETWEEN PAVEMENT, CURB, AND/OR GUTTER TO REMAIN AND PAVEMENT, CURB AND/OR GUTTER TO BE REMOVED PRIOR TO BEGINNING OF REMOVAL WORK. COST TO BE INCLUDED WITH APPLICABLE REMOVAL ITEMS.
7. THE PAY ITEM "BARRIER WALL REFLECTORS, TYPE C" IS INTENDED SOLELY TO BE USED FOR REFLECTOR APPLICATIONS ON PERMANENT AND EXISTING CONCRETE BARRIER AND IS NOT TO BE USED FOR TEMPORARY CONCRETE BARRIER WHERE THE TYPE C REFLECTOR IS CONSIDERED INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER PER HIGHWAY STANDARD 704001.
8. DUE TO PROPOSED TEMPORARY WIDTH RESTRICTIONS, THE CONTRACTOR MUST CONTACT THE IDOT D4 TRAFFIC CONTROL SUPERVISOR 21 DAYS IN ADVANCE OF BEGINNING WORK.

### JOB-SPECIFIC NOTES

1. ALL DAMAGE DUE TO THE CONTRACTOR OPERATION TO PAVEMENT AND RPM'S OUTSIDE THE REMOVAL LIMITS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

### POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

SURFACE TYPE	RESIDUAL RATE (POUND/SQ FT)
MILLED (HMA OR PCC)	0.08
EXISTING PAVEMENT	0.08
FOG COAT (BETWEEN LIFTS)	0.08



HOT-MIX ASPHALT MIXTURE REQUIREMENTS

The following mixture requirements are applicable for this project:					
Location(s):	Mainline	Mainline	Mainline	Shoulder	Shoulder
Mixture Use(s):	Poly Surface 1.5"	Poly Binder 1.5"	Class D Patch	Shoulders (All Lifts)	HMA Pavement Widening
AC/PG:	PG 70-28	PG 70-28	PG 70-28	PG 58-28	PG 58-22
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Mixture Gradation)	IL 9.5	IL 9.5	IL 19.0	IL 9.5	IL 19.0
Friction Aggregate:	Mix D	N/A	N/A	Mix D	N/A
Quality Management Program:	QCQA	QCQA	QCQA	QCQA	QCQA
MTD:	No	No	No	No	No
<p>Note: 1) Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal maximum aggregate size, unless otherwise approved by the Engineer.</p> <p>2) For design purposes, mixture weight for all mixes is determined to be 112.0 lb/s.y./in., unless otherwise noted.</p> <p>3) Sublot sizes for PFP and QCP mixes will be 10 00 tons, unless otherwise agreed to by the Engineer and the paving contractor.</p>					

MODEL: HVA Mixture Requirements  
FILE NAME: X:\QH\2023\20230256-06\Design\CADD\Row\Sheets\Other\D468.112\H468.112-sh-h-gennote.dgn

MODEL: SQO 01  
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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION	CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				BRIDGE	BRIDGE	BRIDGE
				0047	0047	0047
				S.N. 036-0041	S.N. 036-0043	S.N. 036-0047
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	6	4	2	
28100109	STONE RIPRAP, CLASS A5	SQ YD	14	14		
28200200	FILTER FABRIC	SQ YD	14	14		
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	221	159	62	
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	2,011	534	748	729
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1,300	404	424	472
40600990	TEMPORARY RAMP	SQ YD	215	67	68	80
40603205	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	TON	101.0	28.7	32.6	39.7
40604160	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	124.2	33.5	54.7	36.0
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1.5"	SQ YD	298		231	67
44000300	CURB REMOVAL	FOOT	198	60	60	78
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	82			82
44004250	PAVED SHOULDER REMOVAL	SQ YD	212	168	44	
44201833	CLASS D PATCHES, TYPE IV, 15 INCH	SQ YD	43	43		

GR

AEF

8501 W. Higgins Road, Suite 280

Chicago, Illinois 60634 (773) 399-0162

USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/20/2025	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: N/A	SHEET 1 OF 6 SHEETS	STA. N/A	TO STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	4
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

MODEL: SOQ.02  
FILE NAME: X:\01H\2023\202302256-06\Design\CADD\Drawn\Sheets\Other\0468\12\0468\12-shs-SOQ.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION	CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				BRIDGE	BRIDGE	BRIDGE
				0047	0047	0047
				S.N. 036-0041	S.N. 036-0043	S.N. 036-0047
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	74	74		
48300300	PORTLAND CEMENT CONCRETE SHOULDERS 8"	SQ YD	132	85	47	
50102400	CONCRETE REMOVAL	CU YD	12.7		6.3	6.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	14.6		7.3	7.3
50300260	BRIDGE DECK GROOVING	SQ YD	2,745	387	1053	1305
50300300	PROTECTIVE COAT	SQ YD	3,640	466	1428	1746
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,960		980	980
50800515	BAR SPLICERS	EACH	24		12	12
52000110	PREFORMED JOINT STRIP SEAL	FOOT	136		68	68
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	15.0	1.0	14.0	
60260100	INLET TO BE ADJUSTED	EACH	8		4	4
60600605	CONCRETE CURB, TYPE B	FOOT	198	60	60	78
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	82			82
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1,105	311	429	365

\*= SPECIALTY ITEM



8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-0162

USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/20/2025	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
SCALE: N/A	SHEET 2 OF 6 SHEETS	STA. N/A	TO STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	5
		CONTRACT NO. 68J12		
		ILLINOIS   FED. AID PROJECT		



MODEL: SQO.03  
FILE NAME: X:\O\H\2023\20230225-06\Design\CADD\Drawn\Sheets\Other\0468\12\0468\12-shs-SQO.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION	CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				BRIDGE	BRIDGE	BRIDGE
				0047	0047	0047
				S.N. 036-0041	S.N. 036-0043	S.N. 036-0047
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	12	4	4	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	10	4	4	2
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	2			2
63200310	GUARDRAIL REMOVAL	FOOT	1,884	580	670	634
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12.0	4.0	4.0	4.0
67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.33
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	3	1	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.33	0.33	0.33
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.33	0.33	0.33
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	0.33	0.33	0.33
70106700	TEMPORARY RUMBLE STRIPS	EACH	18	6	6	6
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	180.00	60.00	60.00	60.00
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	3	1	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	42.00	14.00	14.00	14.00

\*= SPECIALTY ITEM

MODEL: SOQ 04  
FILE NAME: X:\O\H\2023\202302256-06\Design\CADD\Rdwy\Sheets\Other\0468\12\0468\12-shs-SOQ.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION	CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				BRIDGE	BRIDGE	BRIDGE
				0047	0047	0047
				S.N. 036-0041	S.N. 036-0043	S.N. 036-0047
70300100	SHORT TERM PAVEMENT MARKING	FOOT	810	225	255	330
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	280	80	90	110
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	10,840	3,000	3,400	4,440
70307210	TEMPORARY PAVEMENT MARKING - LINE 24"- TYPE IV TAPE	FOOT	144	48	48	48
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,750.0	400.0	600.0	750.0
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,750.0	400.0	600.0	750.0
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	2	2	2
70600352	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE,NARROW), TEST LEVEL 3	EACH	6	2	2	2
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	12	4	4	4
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	6,290	1,960	2,400	1,930
* 78001180	PAINT PAVEMENT MARKING - LINE 24"	FOOT	15			15
* 78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	36	12	12	12
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	66	20	20	26
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2,400	800	800	800

\*= SPECIALTY ITEM

MODEL: SQO.05  
FILE NAME: X:\O\H\2023\202302256-06\Design\CADD\Drawn\Sheets\Other\0468\12\0468\12-shs-SQO.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION	CODE	
				80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
				BRIDGE	BRIDGE	BRIDGE
				0047	0047	0047
				S.N. 036-0041	S.N. 036-0043	S.N. 036-0047
X0325748	ACRYLIC COATING	SQ YD	23		16	7
X0325749	FIBER WRAP	SQ FT	143		143	
X0326444	SURFACE FILLER (SPECIAL)	GALLON	3	1	1	1
X4404400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	53	53		
X5030550	PROTECTIVE COAT (SPECIAL)	SQ YD	1,313	135	535	643
X5060700	CLEANING AND PAINTING BEARINGS	EACH	22		12	10
X5230172	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	2			2
* X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	28			28
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	300.0	90.0	108.0	102.0
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	3,596	466	1,411	1,719
Z0012162	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/4"	SQ YD	3,596	466	1,411	1,719
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.33	0.33	0.33
Z0041895	POLYMER CONCRETE	CU FT	2.9	2.9		
Z0043800	PRECAST PRESTRESSED CONCRETE I-BEAM REPAIR	SQ FT	6		6	

\*= SPECIALTY ITEM

GR

AEF

8501 W. Higgins Road, Suite 280

Chicago, Illinois 60634 (773) 399-002

USER NAME	= 2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/20/2025	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES					
SCALE:	N/A	SHEET 5	OF 6	SHEETS	STA. N/A TO STA. N/A

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	8
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				





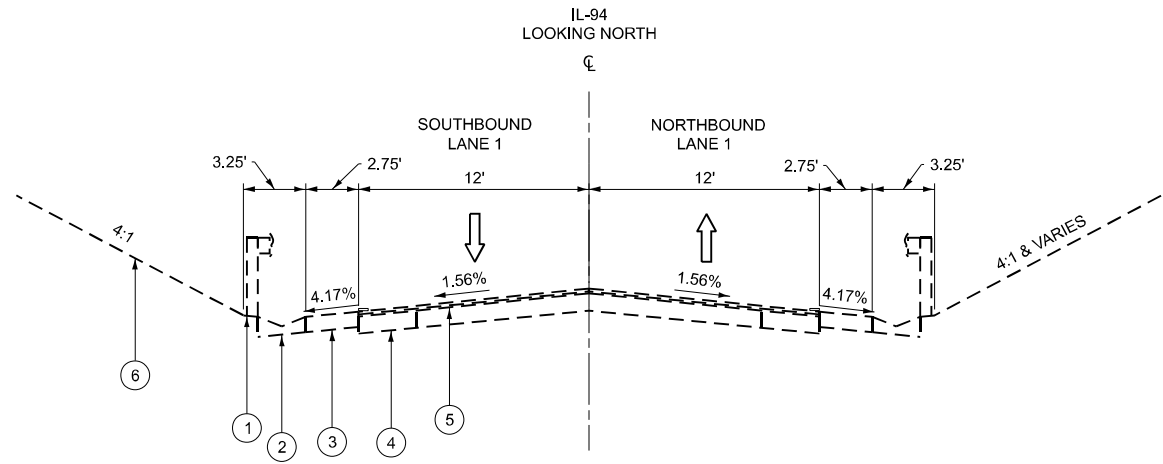
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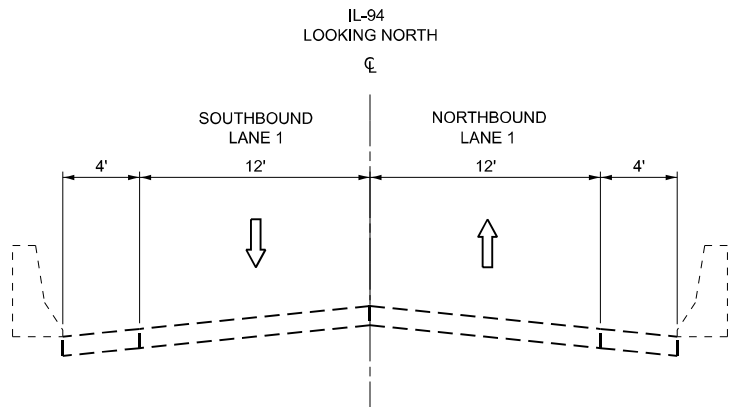
- 1 EXISTING PAVEMENT
- 2 EXISTING BITUMINOUS OVERLAY 3"
- 3 EXISTING SURFACE COURSE 1 1/4"
- 4 EXISTING LEVEL BINDER 3/4"
- 5 EXISTING 8" BASE COURSE
- 6 EXISTING AGGREGATE SHOULDER

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	10
		CONTRACT NO. 68J12		
ILLINOIS		FED. AID PROJECT		

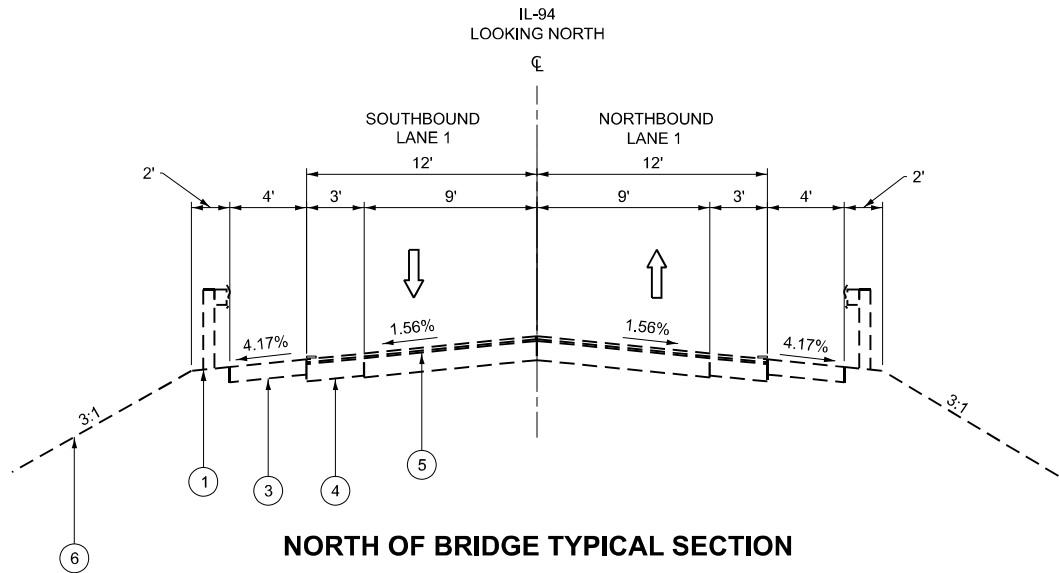


SOUTH OF BRIDGE TYPICAL SECTION



BRIDGE TYPICAL SECTION

SEE NOTE 1



NORTH OF BRIDGE TYPICAL SECTION

NOTES

1. BRIDGE TYPICAL SECTION PROVIDED FOR ROADWAY REFERENCE ONLY AND IS NOT INTENDED TO BE REPRESENTATIVE OF THE STRUCTURE ITSELF.

LEGEND

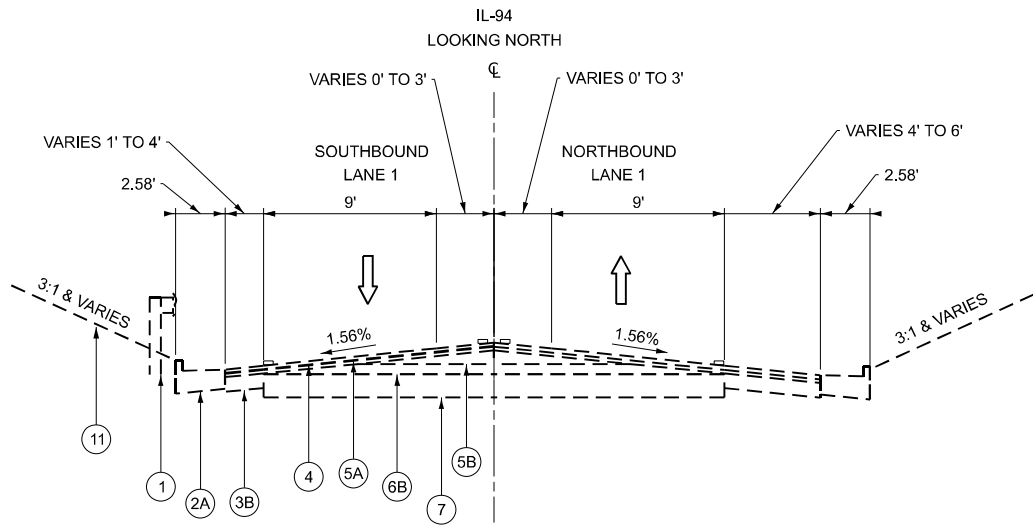
- 1 GUARDRAIL
- 2 CONCRETE GUTTER, TYPE "B", MODIFIED
- 3 BITUMINOUS SHOULDER, 8"
- 4 BITUMINOUS CONCRETE BASE COURSE, 9"
- 5 BITUMINOUS OVERLAY, SURFACE COURSE MIX C, CL. I, TY. 3, 1 1/2" AND LEVELING BINDER TYPE 3, 1"
- 6 EXISTING EARTH EMBANKMENT

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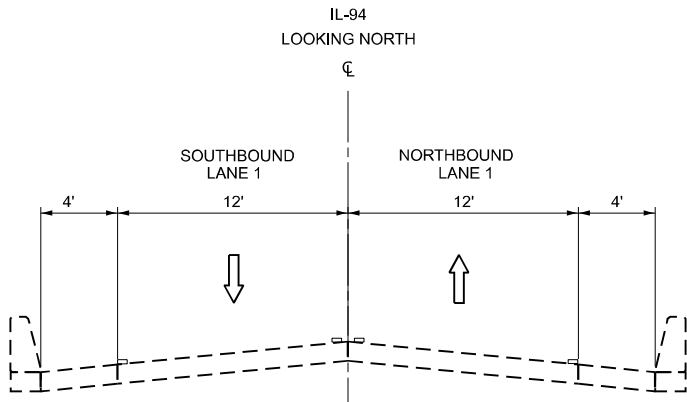
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		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/8/2025	DATE	-	REVISED	-

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	11
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



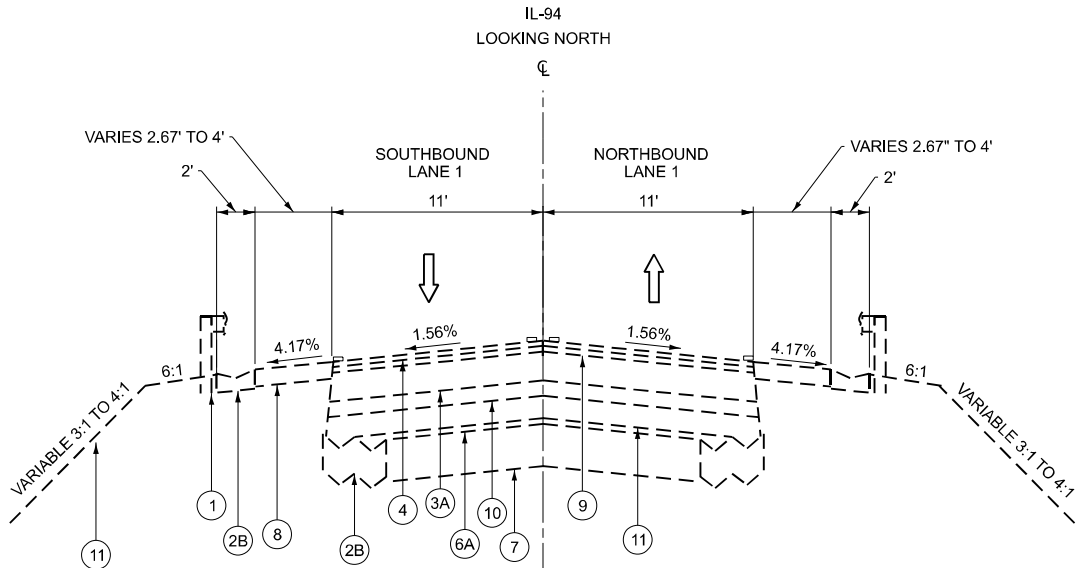


SOUTH OF BRIDGE TYPICAL SECTION



BRIDGE TYPICAL SECTION

SEE NOTE 1



NORTH OF BRIDGE TYPICAL SECTION

NOTES

1. BRIDGE TYPICAL SECTION PROVIDED FOR ROADWAY REFERENCE ONLY AND IS NOT INTENDED TO BE REPRESENTATIVE OF THE STRUCTURE ITSELF.

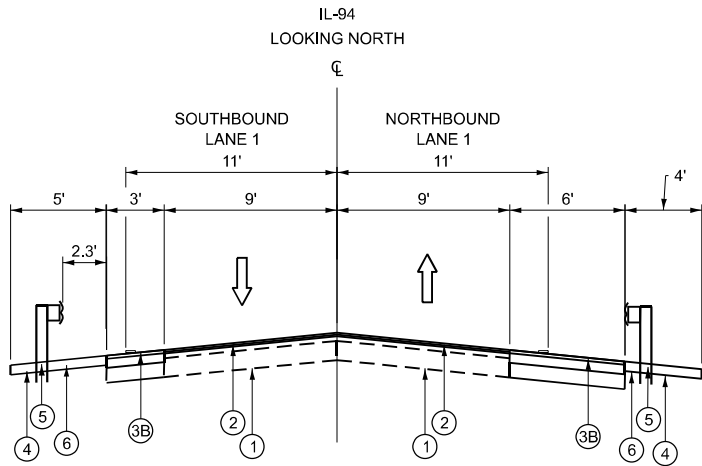
LEGEND

- 1 GUARDRAIL  
2A CONCRETE CURB AND GUTTER  
2B CONCRETE GUTTER, TY. B  
3A BITUMINOUS BASE COURSE, 8"  
3B BITUMINOUS BASE COURSE, 9"  
4 BITUMINOUS SURFACE COURSE CLASS I, MIX C, TY. 2 (1 1/2")  
5A LEVELING BINDER TY. 2 (1")  
5B LEVELING BINDER TY. 2 (VARIES 0" TO 2")  
6A BITUMINOUS CONCRETE OVERLAY (3")  
6B BITUMINOUS CONCRETE OVERLAY (3" AND VARIES)  
7 PCC PAVEMENT - 9"-6"-9"  
8 HMA SHOULDER  
9 BITUMINOUS CONCRETE BINDER COURSE, TY. 2 (1 1/2")  
10 SUB-BASE GRANULAR MATERIAL, TY. A, (4" OR VAR 6" TO 16")  
11 EARTH EMBANKMENT OR SUB-BASE GRANULAR MATERIAL, TY. A

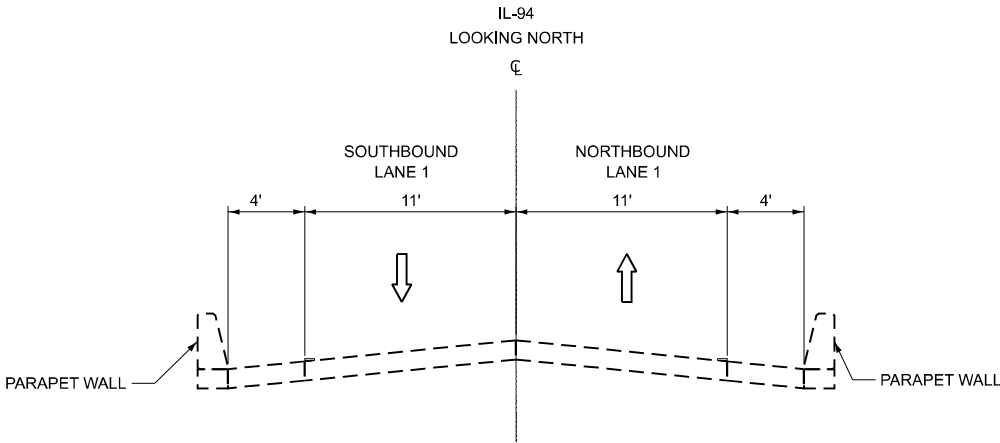
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USER NAME	= 2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/8/2025	DATE	-	REVISED	-

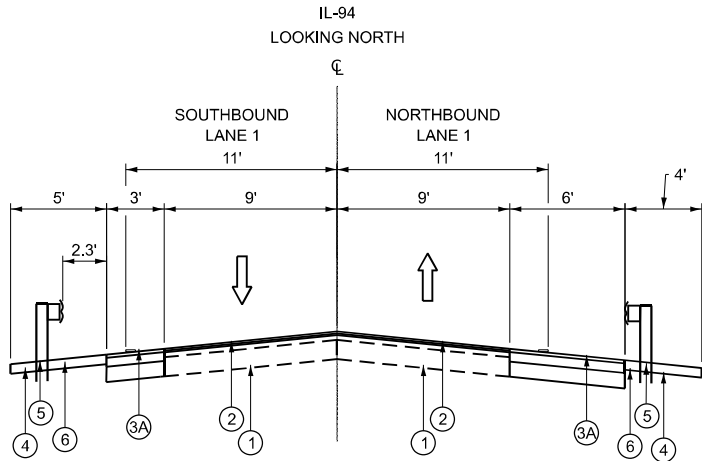
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	12
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



**SOUTH OF BRIDGE  
TYPICAL SECTION**



**BRIDGE TYPICAL SECTION**



**NORTH OF BRIDGE  
TYPICAL SECTION**

**NOTES**

1. SEE ROADWAY PLANS FOR LOCATIONS FOR NEW GUARDRAIL AND SHOULDERS.
2. SEE BUTT JOINT SHEETS FOR BUTT JOINT CONSTRUCTION DETAILS.
3. MATCH EXISTING LANE CROSS SLOPE.

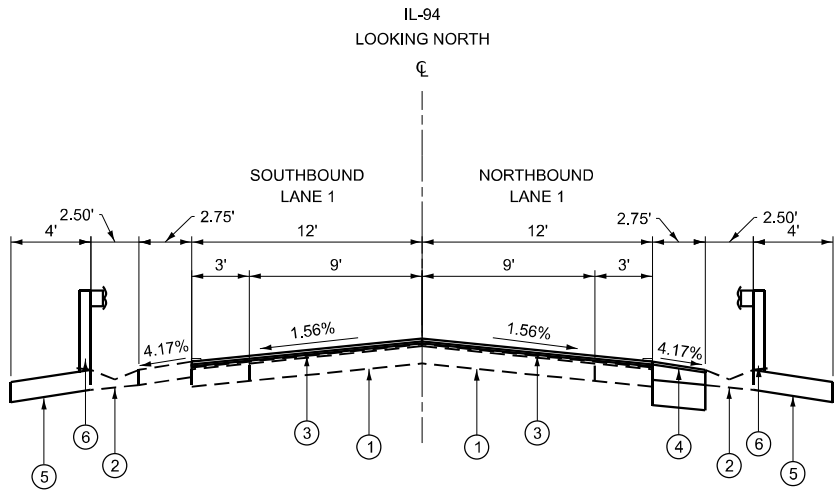
**LEGEND**

- ① EXISTING PAVEMENT
- ② POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1½")  
POLYMERIZED HOT-MIX ASPHALT BINDER CORSE, IL-9.5, N50 (1½")  
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- ③A EXCAVATING AND GRADING EXISTING SHOULDER  
HOT-MIX ASPHALT SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
- ③B EXCAVATING AND GRADING EXISTING SHOULDER  
PORTLAND CEMENT CONCRETE SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
- ④ GUARDRAIL AGGREGATE EROSION CONTROL
- ⑤ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑥ PROPOSED AGGREGATE SHOULDER

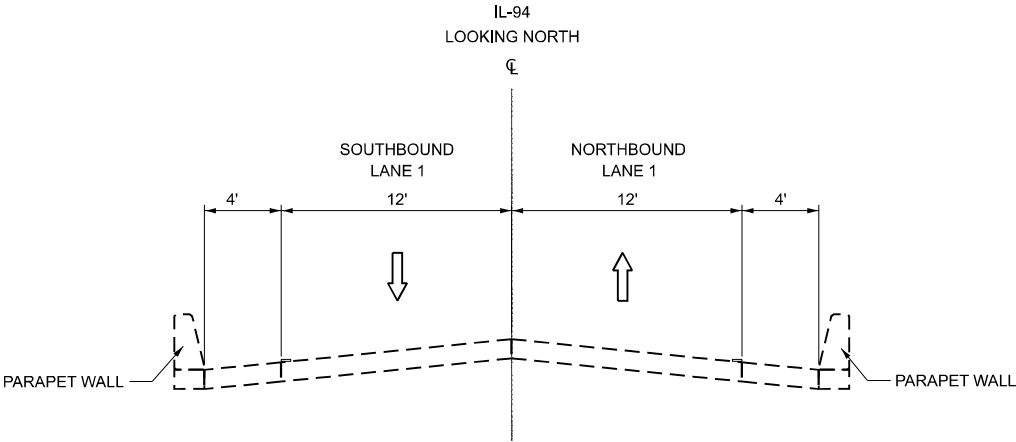
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USER NAME	= 2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/8/2025	DATE	-	REVISED	-

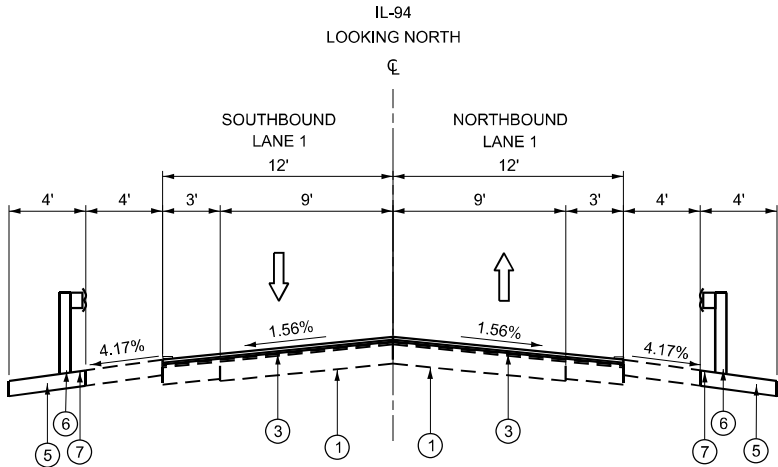
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108{C,(VB,VC)NRS}}BRR	HENDERSON	81	13
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



SOUTH OF BRIDGE TYPICAL SECTION



BRIDGE TYPICAL SECTION



NORTH OF BRIDGE TYPICAL SECTION

NOTES

- SEE ROADWAY PLANS FOR LOCATIONS FOR NEW GUARDRAIL AND SHOULDERS.
- SEE BUTT JOINT SHEETS FOR BUTT JOINT CONSTRUCTION DETAILS.

LEGEND

- ① EXISTING PAVEMENT
- ② EXISTING CONCRETE GUTTER, TYPE B (SPECIAL)
- ③ POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1½")  
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50 (1½")  
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- ④ EXCAVATING AND GRADING EXISTING SHOULDER  
PORTLAND CEMENT CONCRETE SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
- ⑤ GUARDRAIL AGGREGATE EROSION CONTROL
- ⑥ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑦ PROPOSED AGGREGATE SHOULDER

MODEL: SN 036-0043  
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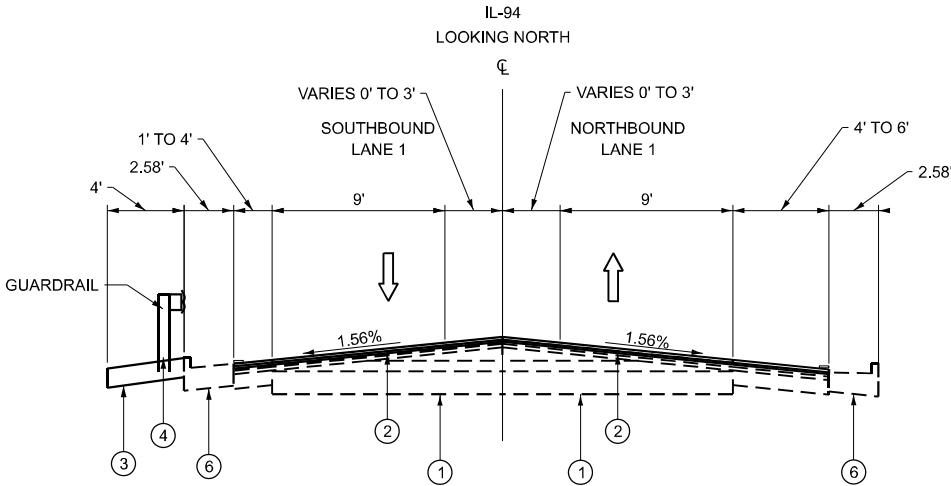
USER NAME	2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/8/2025	DATE	-	REVISED	-

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	14
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

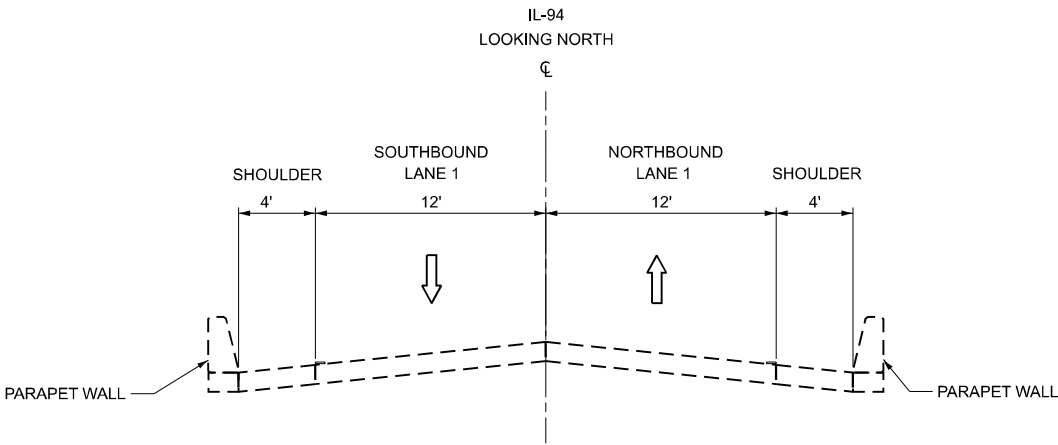


NOTES

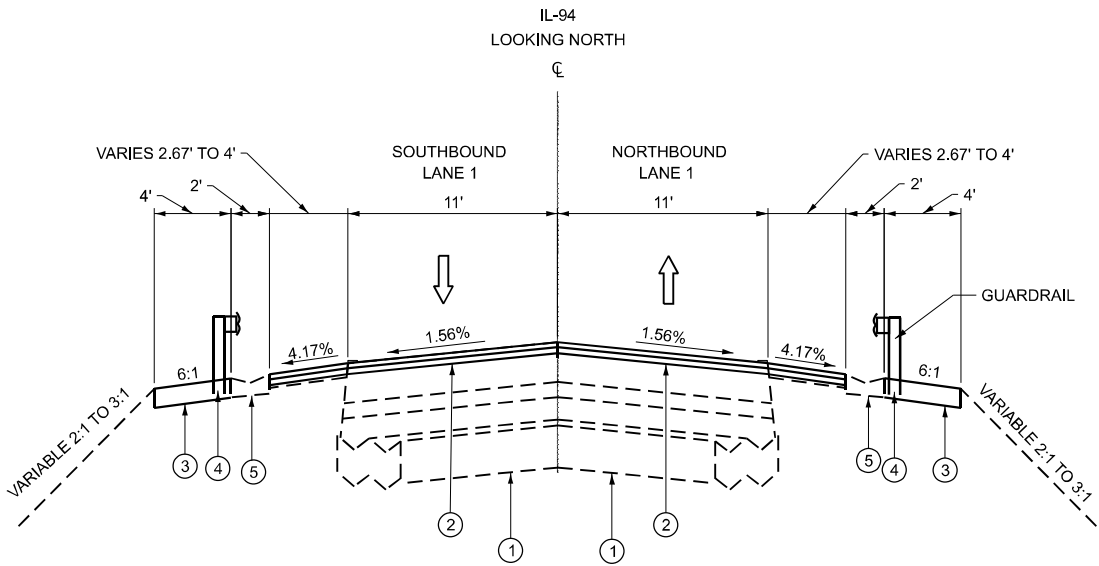
1. SEE ROADWAY PLANS FOR LOCATIONS FOR NEW GUARDRAIL AND SHOULDERS.
2. SEE BUTT JOINT SHEETS FOR BUTT JOINT CONSTRUCTION DETAILS.



SOUTH OF BRIDGE CROSS SECTION



BRIDGE TYPICAL SECTION



NORTH OF BRIDGE CROSS SECTION

LEGEND

- ① EXISTING PAVEMENT
- ② POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50 (1½")  
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50 (1½")  
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- ③ GUARDRAIL AGGREGATE EROSION CONTROL
- ④ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑤ EXISTING CONCRETE GUTTER, TY. B
- ⑥ EXISTING CONCRETE CURB AND GUTTER

MODEL: SN 036-0047  
FILE NAME: X:\CH\2023\20230225\6-06\Design\CADD\Draw\Sheets\Plan\468.112\468.112-sh-TypicalProp.dgn

**GRÄEF**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-012

USER NAME	2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/8/2025	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS  
SN 036-0047 IL-94 OVER BNSF RR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	15
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

	EXCAVATING AND GRADING EXISTING SHOULDER	AGGREGATE SUBGRADE IMPROVEMENT, 12"	POLYMERIZED BITUMINOUS MATERIAL (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	POLYMERIZED HOT- MIX ASPHALT BINDER COURSE, IL- 9.5, N50	POLYMERIZED HOT- MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	HOT-MIX ASPHALT SURFACE REMOVAL, 1.5"	CLASS D PATCHES, TYPE IV, 15 INCH	HOT-MIX ASPHALT SHOULDERS, 8"	PORTLAND CEMENT CONCRETE SHOULDERS, 8"	PAVEMENT REMOVAL (SPECIAL)
	20200600	30300112	40600295	40600982	40603205	40604160	44000155	44201833	48203029	48300300	X4404400
LOCATION	(UNIT)	(SQ YD)	(POUND)	(SQ YD)	(TON)	(TON)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)
SN 036-0041											
NW QUADRANT	0.83	37.0	133	102.5	7.2	8.4			36.9		13.3
NE QUADRANT	0.83	37.0	133	102.5	7.2	8.4			36.9		13.3
SW QUADRANT	1.07	48.0	134	99.5	7.2	8.4				48	13.3
SE QUADRANT	0.84	37.0	134	99.5	7.2	8.4				37	13.3
SUBTOTAL	4	159	534	404	28.7	33.5	0	0	74	85	53
SN 036-0043											
NW QUADRANT			318	121	8.5	28.7	231				
NE QUADRANT			145	107	8.5	8.5					
SW QUADRANT			142	98	7.9	8.8					
SE QUADRANT	2.00	62.0	142	98	7.9	8.8				47	
SUBTOTAL	2	62	748	424	32.6	54.7	231	0	0	47	0
SN 036-0047											
NW QUADRANT			157	109	9.2	4.6					
NE QUADRANT			157	109	9.2	4.6					
SW QUADRANT			207	127	10.7	13.4	33.5	21.5			
SE QUADRANT			207	127	10.7	13.4	33.5	21.5			
SUBTOTAL	0	0	729	472	39.7	36.0	67	43	0	0	0
GRAND TOTALS	6	221	2011	1300	101.0	124.2	298	43	74	132	53

	STONE RIPRAP, CLASS A5	FILTER FABRIC
	28100109	28200200
LOCATION	(SQ YD)	(SQ YD)
SN 036-0041		
SWQUADRANT	14	14
SUBTOTAL	14	14
SN 036-0043		
SWQUADRANT		
SUBTOTAL	0	0
SN 036-0047		
SWQUADRANT		
SUBTOTAL	0	0
GRAND TOTALS	14	14

	TEMPORARY RAMP
	40600990
LOCATION	(SQ YD)
SN 036-0041	
NORTH APPROACH	33
SOUTH APPROACH	33
SUBTOTAL	66
SN 036-0043	
NORTH APPROACH	33
SOUTH APPROACH	36
SUBTOTAL	69
SN 036-0047	
NORTH APPROACH	33
SOUTH APPROACH	47
SUBTOTAL	80
GRAND TOTALS	215

	CURB REMOVAL	COMBINATION CURB AND GUTTER REMOVAL	CONCRETE CURB, TYPE B	COMBINATION CONCRETE CURB AND GUTTER, TYPE B- 6.24
	44000300	44000500	60600605	60605000
LOCATION SN 036-0041	(FOOT)	(FOOT)	(FOOT)	(FOOT)
NW QUADRANT	15.0		15.0	
NE QUADRANT	15.0		15.0	
SW QUADRANT	15.0		15.0	
SE QUADRANT	15.0		15.0	
SUBTOTAL	60	0	60	0
SN 036-0043				
NW QUADRANT	15.0		15.0	
NE QUADRANT	15.0		15.0	
SW QUADRANT	15.0		15.0	
SE QUADRANT	15.0		15.0	
SUBTOTAL	60	0	60	0
SN 036-0047				
NW QUADRANT	15.0		15.0	
NE QUADRANT	15.0		15.0	
SW QUADRANT	15.0	81.8	15.0	81.8
SE QUADRANT	33.0		33.0	
SUBTOTAL	78	82	78	82
GRAND TOTALS	198	82	198	82

	PAVED SHOULDER REMOVAL
	44004250
LOCATION	(SQ YD)
SN 036-0041	
NW QUADRANT	37
NE QUADRANT	37
SW QUADRANT	48
SE QUADRANT	46
SUBTOTAL	168
SN 036-0043	
SE QUADRANT	44
SUBTOTAL	44
SN 036-0047	
SUBTOTAL	0
GRAND TOTALS	212

MODEL: Schedules of Quantities 02  
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GUARDRAIL SCHEDULE

	STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	GUARDRAIL REMOVAL	TERMINAL MARKER - DIRECT APPLIED	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	GUARDRAIL AGGREGATE EROSION CONTROL
	63000001 (FOOT)	63100085 (EACH)	63100167 (EACH)	63100169 (EACH)	63200310 (FOOT)	72501000 (EACH)	X6330725 (FOOT)	Z0001002 (TON)
LOCATION SN 036-0041								
NW QUADRANT	40.2	1	1		97.7	1		17
NE QUADRANT	40.2	1	1		97.4	1		17
SW QUADRANT	210.5	1	1		98.6	1		14
SE QUADRANT	19.6	1	1		286.2	1		42
SUBTOTAL SN 036-0043	311	4	4	0	580	4		90
NW QUADRANT	195.6	1	1		263.8	1		40
NE QUADRANT	80.9	1	1		146.3	1		23
SW QUADRANT	67.0	1	1		124.3	1		21
SE QUADRANT	85.5	1	1		135.5	1		24
SUBTOTAL SN 036-0047	429	4	4	0	670	4		108
NW QUADRANT	197.9	1	1		261.8	1		40
NE QUADRANT	128.3	1	1		186.5	1		30
SW QUADRANT	38.1	1		1	96.8	1		17
SE QUADRANT		1		1	88.8	1	27.5	15
SUBTOTAL	365	4	2	2	634	4	28	102
GRAND TOTALS	1105	12	10	2	1884	12	28	300

TEMPORARY BRIDGE TRAFFIC SIGNALS  
SCHEDULE

	TEMPORARY BRIDGE TRAFFIC SIGNALS
	70106500 (EACH)
LOCATION SN 036-0041	
ENTIRE LOCATION	1
SUBTOTAL SN 036-0043	1
ENTIRE LOCATION	1
SUBTOTAL SN 036-0047	1
ENTIRE LOCATION	1
SUBTOTAL	1
GRAND TOTALS	3

TRAFFIC CONTROL AND PROTECTION STANDARDS SCHEDULES

	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326
	70100405 (EACH)	70100450 (L SUM)	70100460 (L SUM)	70100500 (L SUM)
LOCATION SN 036-0041				
ENTIRE LOCATION	1	0.33	0.33	0.33
SUBTOTAL SN 036-0043	1	0.33	0.33	0.33
ENTIRE LOCATION	1	0.33	0.33	0.33
SUBTOTAL SN 036-0047	1	0.33	0.33	0.33
ENTIRE LOCATION	1	0.33	0.33	0.33
SUBTOTAL	1	0.33	0.33	0.33
GRAND TOTALS	3	1	1	1

FIELD OFFICE SCHEDULE

	ENGINEER'S FIELD OFFICE, TYPE A
	67000400 (CAL MO)
LOCATION SN 036-0041	
ENTIRE LOCATION	4.0
SUBTOTAL SN 036-0043	4.0
ENTIRE LOCATION	4.0
SUBTOTAL SN 036-0047	4.0
ENTIRE LOCATION	4.0
SUBTOTAL	4.0
GRAND TOTALS	12.0

MOBILIZATION SCHEDULE

	MOBILIZATION
	67100100 (L SUM)
LOCATION SN 036-0041	
ENTIRE LOCATION	0.33
SUBTOTAL SN 036-0043	0.33
ENTIRE LOCATION	0.33
SUBTOTAL SN 036-0047	0.33
ENTIRE LOCATION	0.33
SUBTOTAL	0.33
GRAND TOTALS	1

TRAFFIC CONTROL SURVEILLANCE  
SCHEDULE

	TRAFFIC CONTROL SURVEILLANCE
	70103815 (CAL DA)
LOCATION SN 036-0041	
ENTIRE LOCATION	60.00
SUBTOTAL SN 036-0043	60.00
ENTIRE LOCATION	60.00
SUBTOTAL SN 036-0047	60.00
ENTIRE LOCATION	60.00
SUBTOTAL	60.00
GRAND TOTALS	180.00

TEMPORARY RUMBLE STRIPS  
SCHEDULE

	TEMPORARY RUMBLE STRIPS
	70106700 (EACH)
LOCATION SN 036-0041	
ENTIRE LOCATION	6
SUBTOTAL SN 036-0043	6
ENTIRE LOCATION	6
SUBTOTAL SN 036-0047	6
ENTIRE LOCATION	6
SUBTOTAL	6
GRAND TOTALS	18

CHANGEABLE MESSAGE SIGN  
SCHEDULE

	CHANGEABLE MESSAGE SIGN
	70107025 (CAL DA)
LOCATION SN 036-0041	
ENTIRE LOCATION	14.00
SUBTOTAL SN 036-0043	14.00
ENTIRE LOCATION	14.00
SUBTOTAL SN 036-0047	14.00
ENTIRE LOCATION	14.00
SUBTOTAL	14.00
GRAND TOTALS	42.00

PAVEMENT MARKING SCHEDULE

	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	TEMPORARY PAVEMENT MARKING - LINE 24" - TYPE IV TAPE	PAINT PAVEMENT MARKING - LINE 4"	PAINT PAVEMENT MARKING - LINE 24"	PAVEMENT MARKING REMOVAL - WATER BLASTING
	70300100	70300150	70307120	70307210	78001110	78001180	78300202
LOCATION	(FOOT)	(SQ FT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(SQ FT)
SN 036-0041							
ENTIRE LOCATION	225	80	3000	48	1960	0	800
SUBTOTAL	225	80	3000	48	1960	0	800
SN 036-0043							
ENTIRE LOCATION	255	90	3400	48	2400	0	800
SUBTOTAL	255	90	3400	48	2400	0	800
SN 036-0047							
ENTIRE LOCATION	330	110	4440	48	1930	15	800
SUBTOTAL	330	110	4440	48	1930	15	800
GRAND TOTALS	810	280	10840	144	6290	15	2400

TEMPORARY CONCRETE BARRIER SCHEDULE

	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE, NARROW), TEST LEVEL 3
	70400100	70400200	70600251	70600352
LOCATION	(FOOT)	(FOOT)	(EACH)	(EACH)
SN 036-0041				
STAGE 1	400.0		2	
STAGE 2		400.0		2
SUBTOTAL	400.0	400.0	2	2
SN 036-0043				
STAGE 1	600.0		2	
STAGE 2		600.0		2
SUBTOTAL	600.0	600.0	2	2
SN 036-0047				
STAGE 1	750.0		2	
STAGE 2		750.0		2
SUBTOTAL	750.0	750.0	2	2
GRAND TOTALS	1750.0	1750.0	6	6

BARRIER WALL REFLECTORS,  
TYPE C SCHEDULE

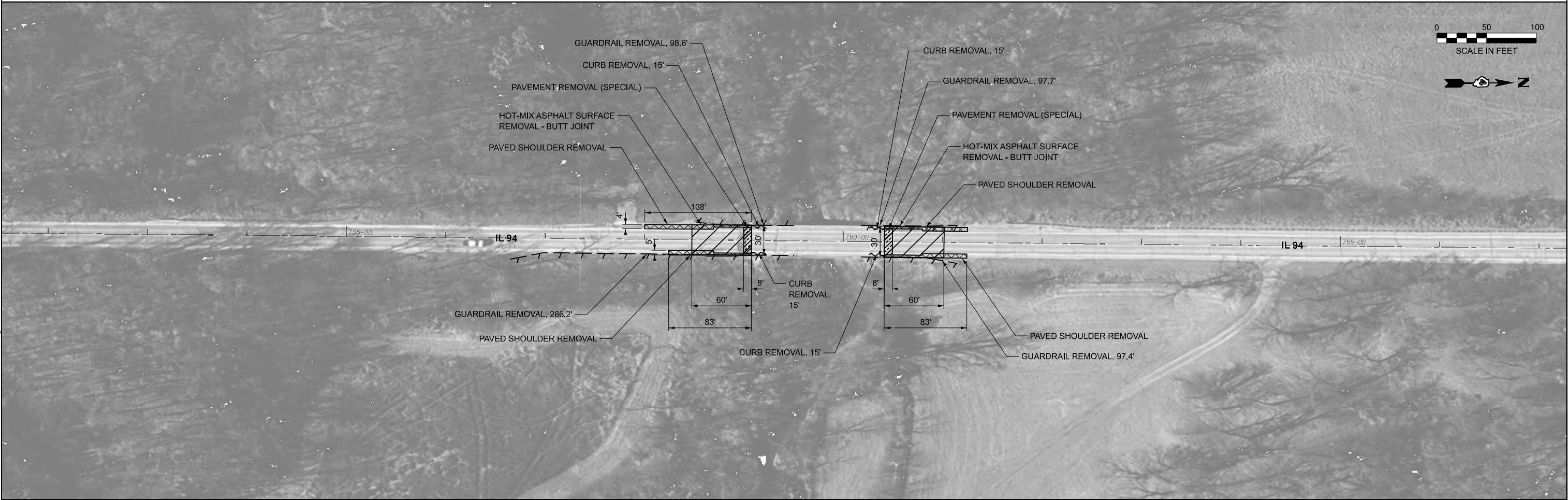
	BARRIER WALL REFLECTORS, TYPE C
	78200011
LOCATION	(EACH)
SN 036-0041	
ENTIRE LOCATION	20
SUBTOTAL	20
SN 036-0043	
ENTIRE LOCATION	20
SUBTOTAL	20
SN 036-0047	
ENTIRE LOCATION	20
SUBTOTAL	20
GRAND TOTALS	60

CONSTRUCTION LAYOUT  
SCHEDULE

	CONSTRUCTIO N LAYOUT
	20013798
LOCATION	(L SUM)
SN 036-0041	
ENTIRE LOCATION	0.33
SUBTOTAL	0.33
SN 036-0043	
ENTIRE LOCATION	0.33
SUBTOTAL	0.33
SN 036-0047	
ENTIRE LOCATION	0.33
SUBTOTAL	0.33
GRAND TOTALS	1

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REMOVAL LEGEND

- HMA SURFACE REMOVAL, BUTT JOINT
- HMA SURFACE REMOVAL
- PAVEMENT REMOVAL (SPECIAL) - SEE DETAIL
- PAVED SHOULDER REMOVAL
- GUARDRAIL REMOVAL
- CURB REMOVAL



USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/8/2025	DATE -	REVISED -

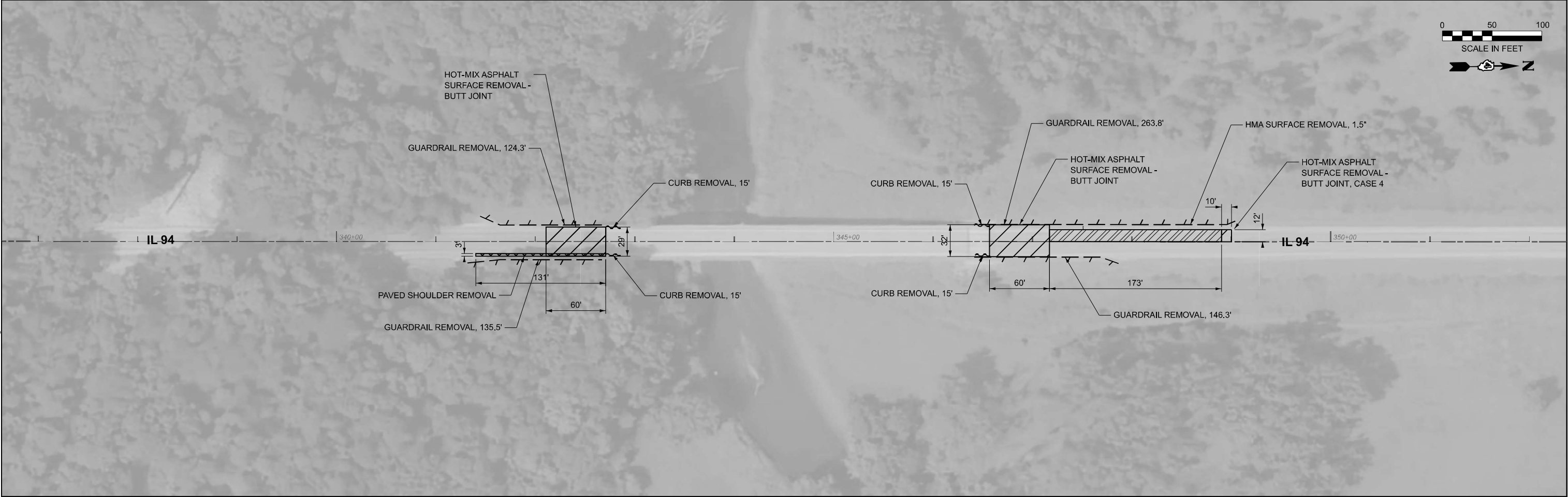
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN  
SN 036-0041 IL-94 OVER JINKS HOLLOW CREEK

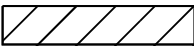

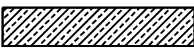
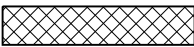
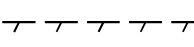
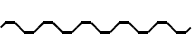
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	19
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
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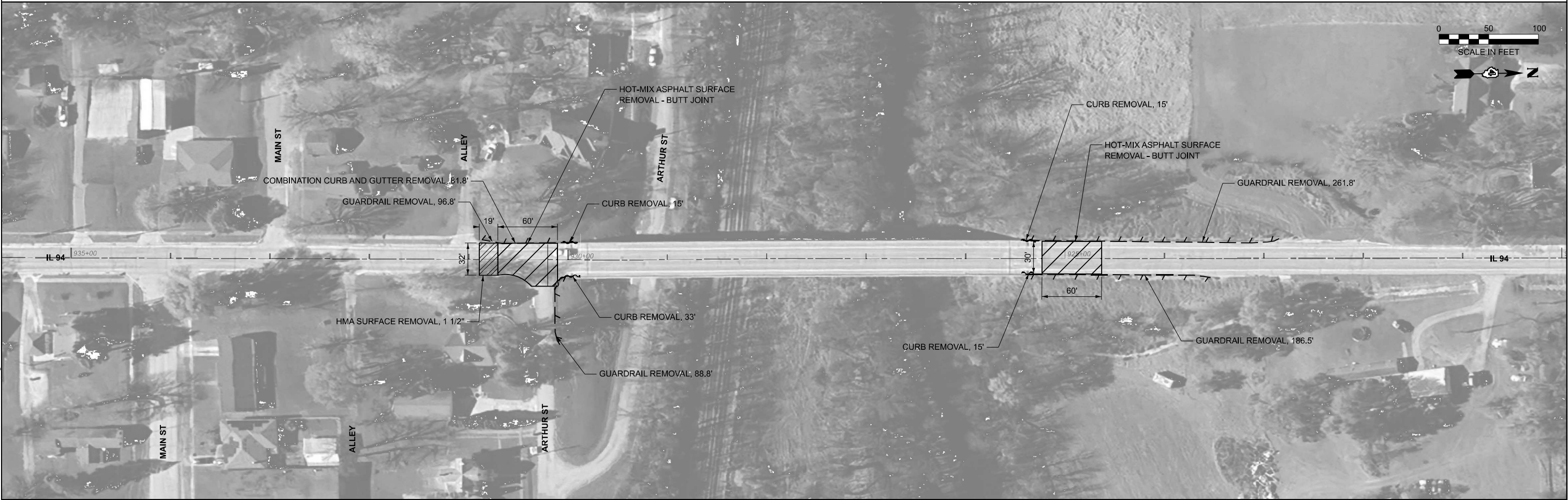


REMOVAL LEGEND

-  — HMA SURFACE REMOVAL, BUTT JOINT
-  — HMA SURFACE REMOVAL
-  — PAVEMENT REMOVAL (SPECIAL) - SEE DETAIL
-  — PAVED SHOULDER REMOVAL
-  — GUARDRAIL REMOVAL
-  — CURB REMOVAL

<div><div>GR<sup>ā</sup>EF</div><div>8501 W. Higgins Road, Suite 280 Chicago, Illinois 60634 (773) 399-012</div></div>	USER NAME = 2189		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL PLAN SN 036-0043 IL-94 OVER HENDERSON CREEK			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN -	REVISED -					1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	20
			CHECKED -	REVISED -					CONTRACT NO. 68J12				
	PLOT DATE = 5/8/2025		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	



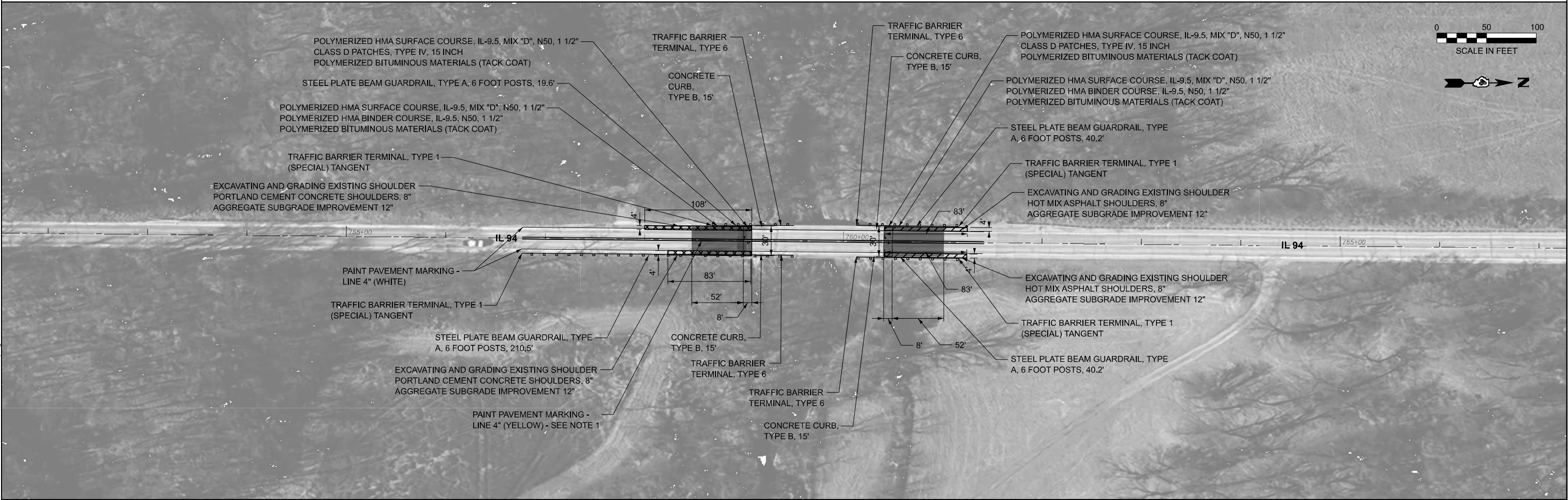


REMOVAL LEGEND

- HMA SURFACE REMOVAL, BUTT JOINT
- HMA SURFACE REMOVAL
- PAVEMENT REMOVAL (SPECIAL) - SEE DETAIL
- PAVED SHOULDER REMOVAL
- GUARDRAIL REMOVAL
- CURB REMOVAL

MODEL: Default  
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 8501 W. Higgins Road Suite 280 Chicago, Illinois 60634 (773) 399-012	USER NAME = 2189		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REMOVAL PLAN SN 036-0047 IL-94 OVER BNSF			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN -	REVISED -					1412	{106BC-1;108{C,(VB,VC)NRS}}BRR	HENDERSON	81	21
			CHECKED -	REVISED -					CONTRACT NO. 68J12				
	PLOT DATE = 5/8/2025		DATE -	REVISED -		SCALE:	SHEET	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



PROPOSED LEGEND

- POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
POLYMERIZED HMA BINDER COURSE, IL-9.5, N50 1 1/2"  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
CLASS D PATCHES, TYPE IV, 15 INCH  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
- STEEL PLATE BEAM GUARDRAIL
- EXCAVATING AND GRADING EXISTING SHOULDER  
HOT-MIX ASPHALT SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
- EXCAVATING AND GRADING EXISTING SHOULDER  
PORTLAND CEMENT CONCRETE SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"

NOTES

- THE RESIDENT ENGINEER SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE PAVEMENT MARKINGS
- PAVEMENT REMOVAL (SPECIAL) SHALL BE FULL DEPTH SAW CUT.

MODEL: Default  
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8501 W. Higgins Road Suite 280  
Chicago, Illinois 60634 (773) 399-012

USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/8/2025	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED PLAN  
SN 036-0041 IL-94 OVER JINKS HOLLOW CREEK

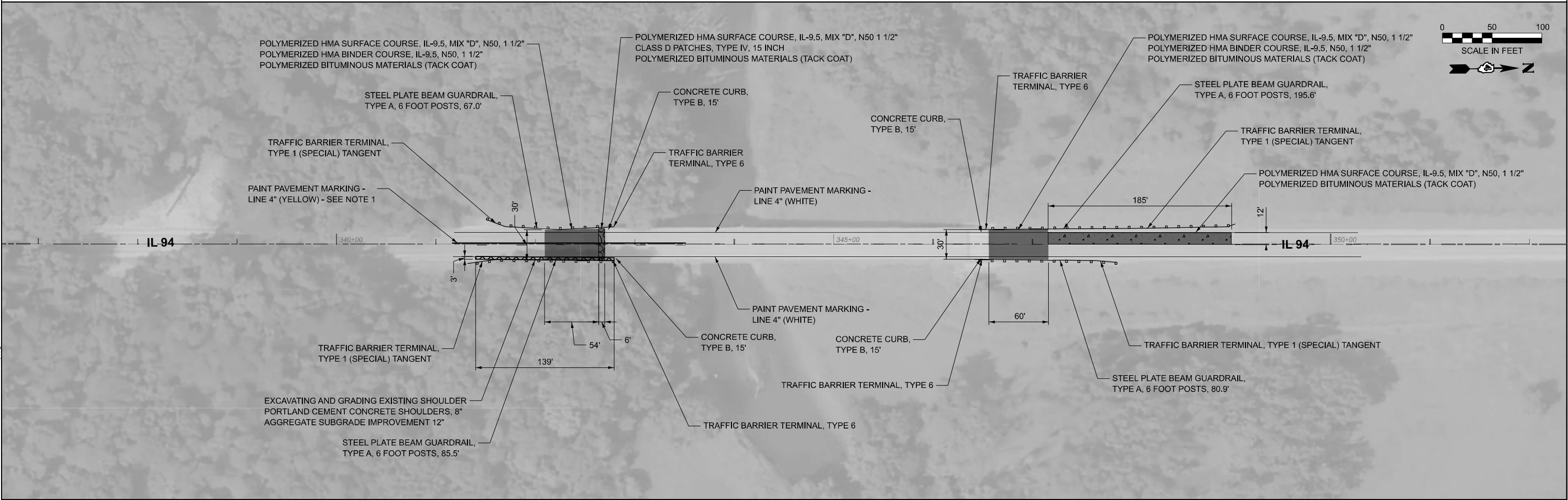
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CONTRACT NO. 68J12				

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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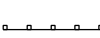

ILLINOIS	FED. AID PROJECT
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MODEL: Default  
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**PROPOSED LEGEND**

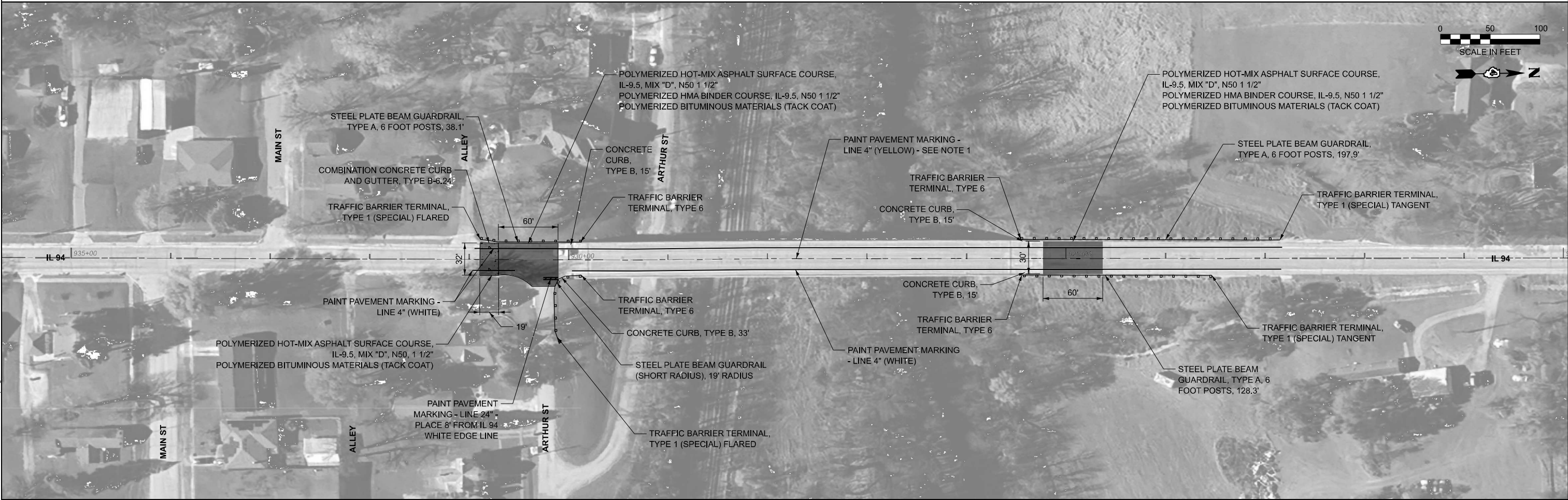
-  POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
POLYMERIZED HMA BINDER COURSE, IL-9.5, N50 1 1/2"  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
-  POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
-  EXCAVATING AND GRADING EXISTING SHOULDER  
PORTLAND CEMENT CONCRETE SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
-  STEEL PLATE BEAM GUARDRAIL
-  POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
CLASS D PATCHES, TYPE IV, 15 INCH  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)

**NOTES**




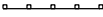
- THE RESIDENT ENGINEER SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE PAVEMENT MARKINGS
- INSTALL A 6' PATCH TO COVER THE HOLE IN THE ASPHALT PAVEMENT SOUTH OF THE SOUTH APPROACH SLAB

USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/8/2025	DATE -	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	23
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



PROPOSED LEGEND

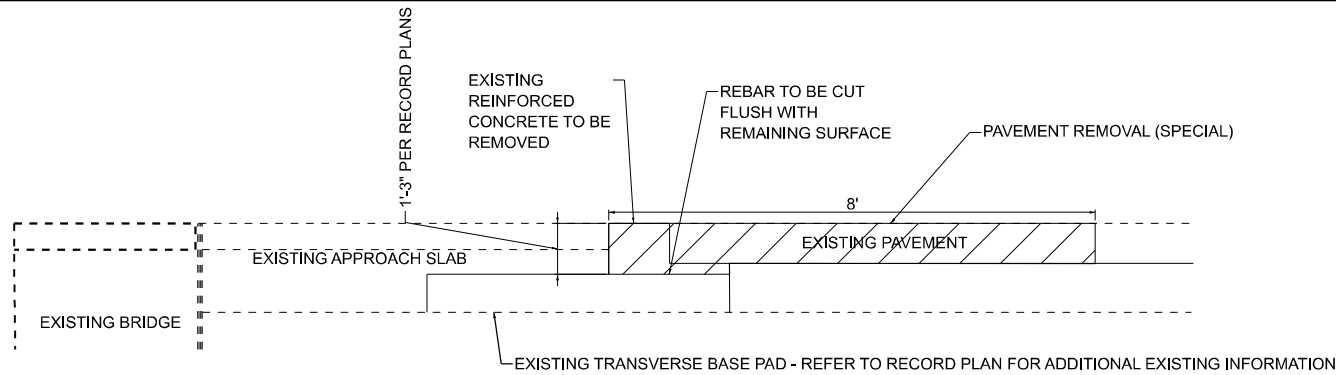
-  — POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
POLYMERIZED HMA BINDER COURSE, IL-9.5, N50 1 1/2"  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
-  — POLYMERIZED HMA SURFACE COURSE, IL-9.5, MIX "D", N50 1 1/2"  
POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)
-  — EXCAVATING AND GRADING EXISTING SHOULDER  
HOT-MIX ASPHALT SHOULDERS, 8"  
AGGREGATE SUBGRADE IMPROVEMENT 12"
-  — STEEL PLATE BEAM GUARDRAIL

NOTES

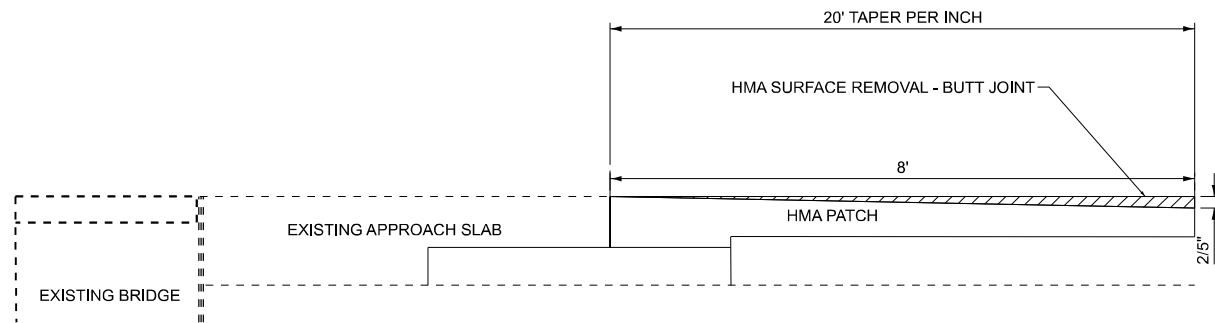
- THE RESIDENT ENGINEER SHALL CONTACT OPERATIONS TO VERIFY THE LOCATION OF NO PASSING ZONES PRIOR TO PLACEMENT OF CENTERLINE PAVEMENT MARKINGS.

MODEL: Default  
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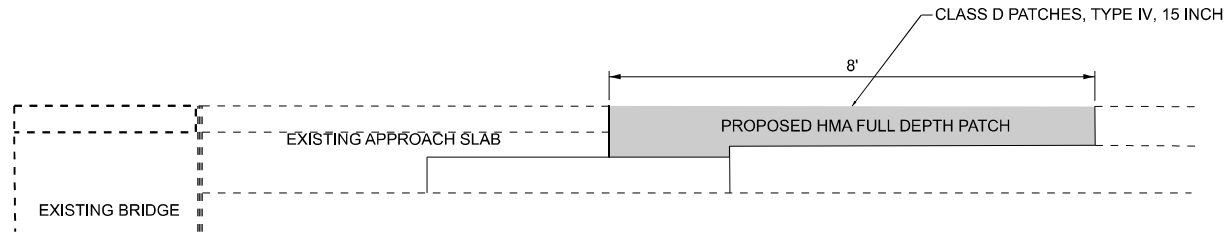
<div><div>GR&amp;EF</div><div>8501 W. Higgins Road Suite 280 Chicago, Illinois 60634 (773) 399-012</div></div>	USER NAME = 2189		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED PLAN SN 036-0047 IL-94 OVER BNSF			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN -	REVISED -					1412	[106BC-1;108[C,(VB,VC)NRS]]BRR	HENDERSON	81	24
			CHECKED -	REVISED -					CONTRACT NO. 68J12				
	PLOT DATE = 5/8/2025		DATE -	REVISED -		SCALE:	SHEET	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



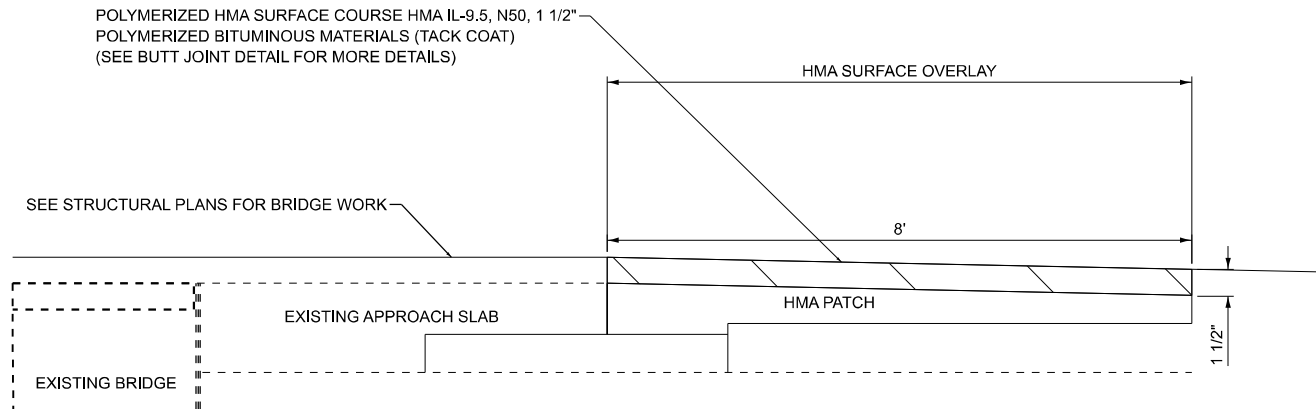
OPERATION 1 - PAVEMENT REMOVAL - SPECIAL (DETAIL) - N.T.S.



OPERATION 3 - HMA SURFACE REMOVAL - BUTT JOINT- N.T.S.



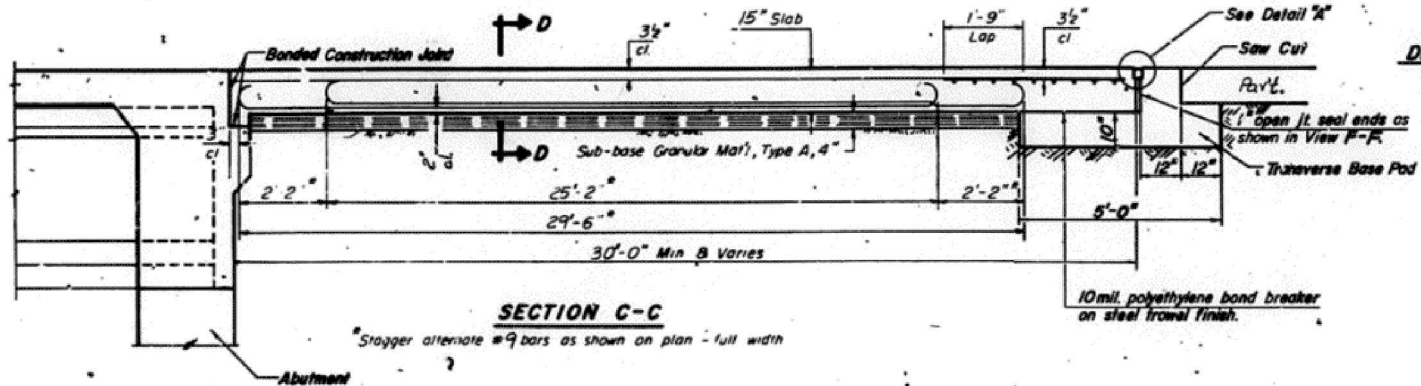
OPERATION 2 - PROPOSED HMA FULL DEPTH PATCH - N.T.S.



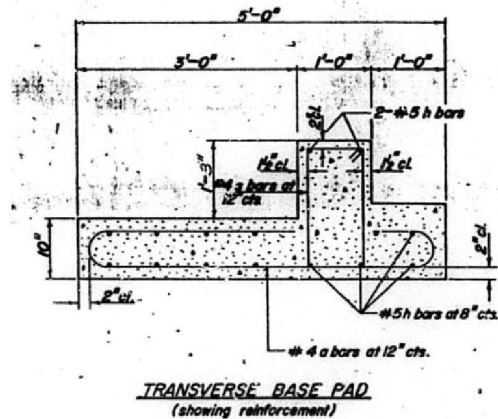
OPERATION 4 - HMA SURFACE OVERLAY - N.T.S.

NOTES

1. REFER TO BUTT JOINT DETAIL FOR THE AREA BEYOND THE LIMITS OF PAVEMENT REMOVAL (SPECIAL)



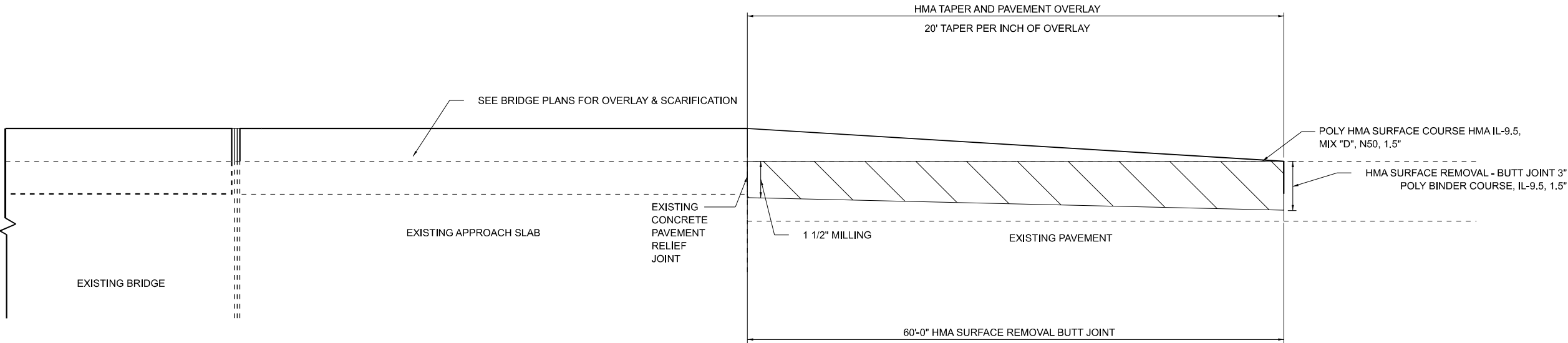
CONTRACT 88028 - APPROACH SLAB CONDITION (SPECIAL)



CONTRACT 88028 - TRANVERSE BASE PAD DETAIL

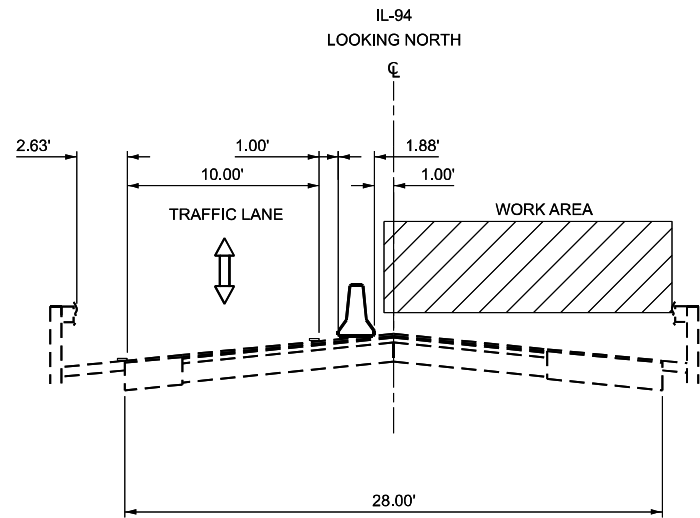
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<div>GR&amp;EF</div> <div>8501 W. Higgins Road, Suite 280 Chicago, Illinois 60634 (773) 399-012</div>	USER NAME = 2189		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT REMOVAL SPECIAL		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN -	REVISED -		SN 036-0041		1412	{106BC-1;108(C,(VB,VC)NRS)}BRR	HENDERSON	81	25
	PLOT DATE = 5/8/2025		CHECKED -	REVISED -				CONTRACT NO. 68J12				
			DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT				

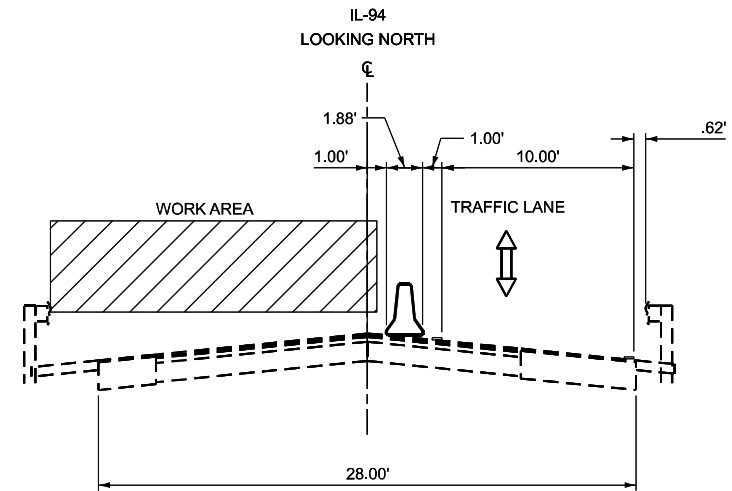


BUTT JOINT OVERLAY DETAIL

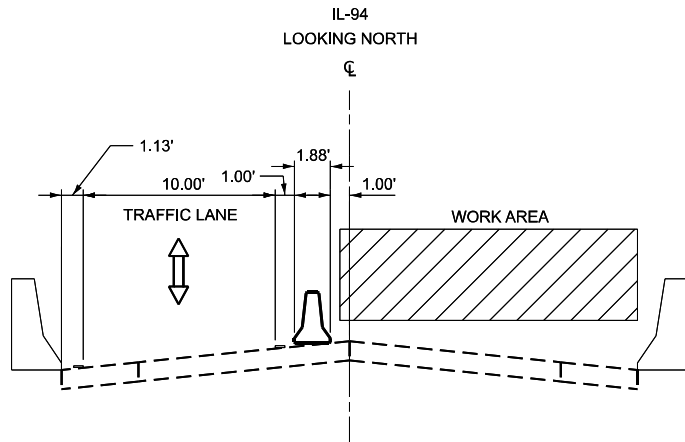
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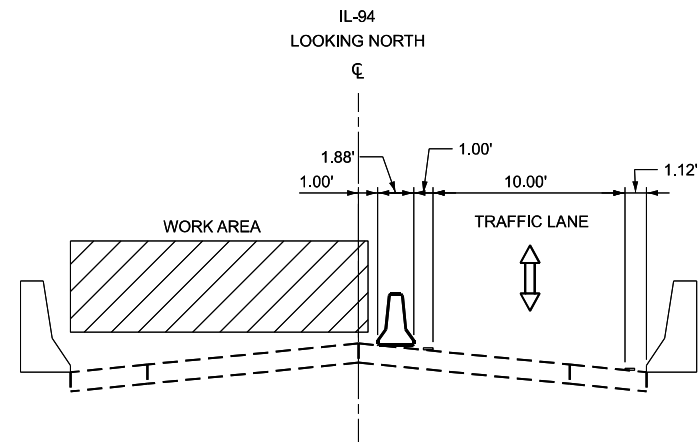
SOUTH OF BRIDGE STAGE 1



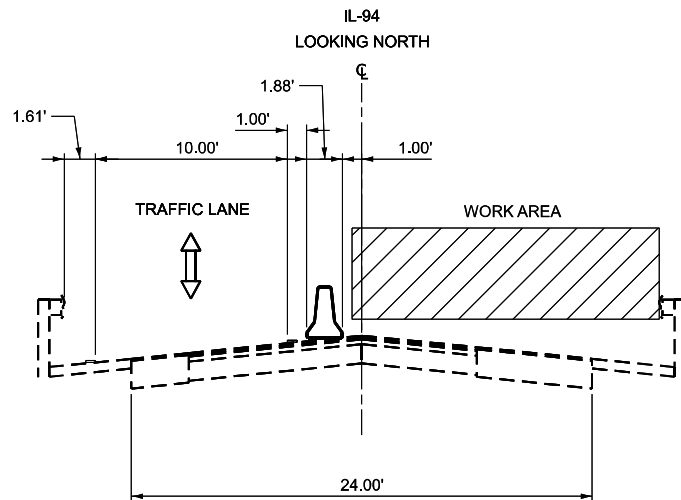
SOUTH OF BRIDGE STAGE 2



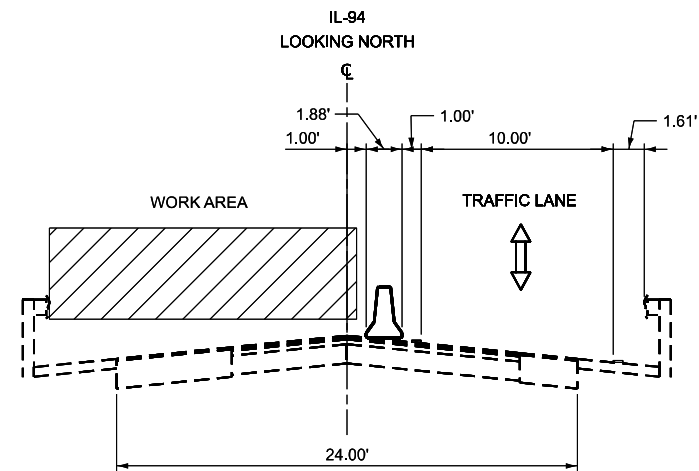
BRIDGE STAGE 1



BRIDGE STAGE 2



NORTH OF BRIDGE STAGE 1

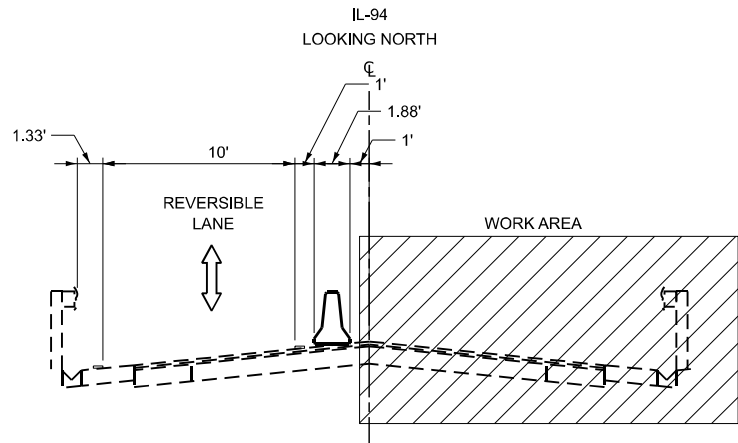


NORTH OF BRIDGE STAGE 2

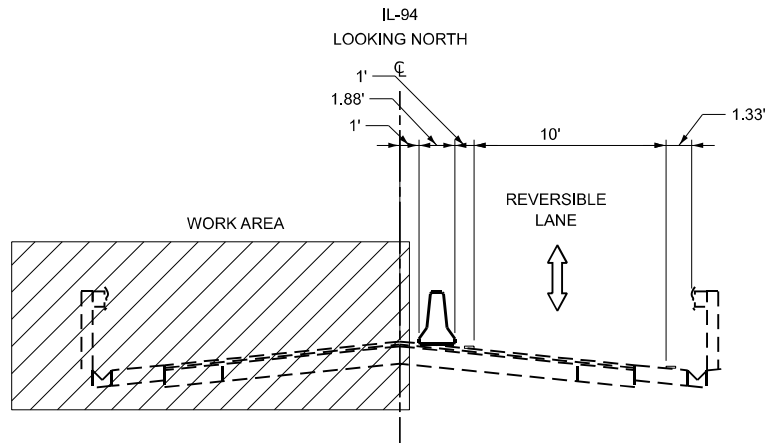
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USER NAME	= 2189	DESIGNED	-	REVISED	-
		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	= 5/8/2025	DATE	-	REVISED	-

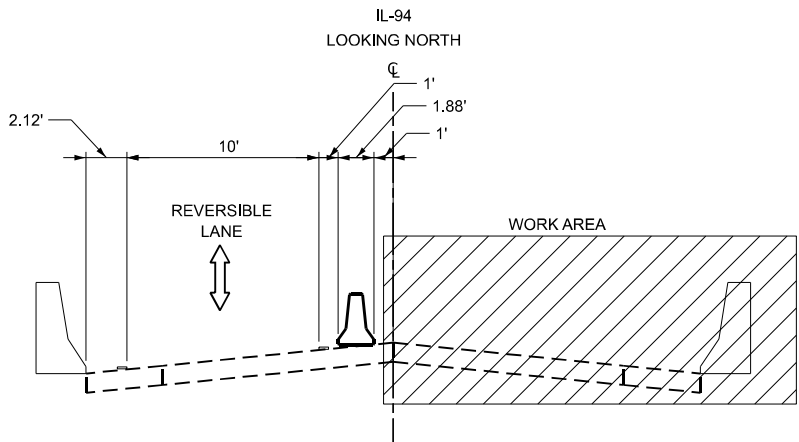
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	{106BC-1;108[C,(VB,VC)NRS]}BRR	HENDERSON	81	27
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



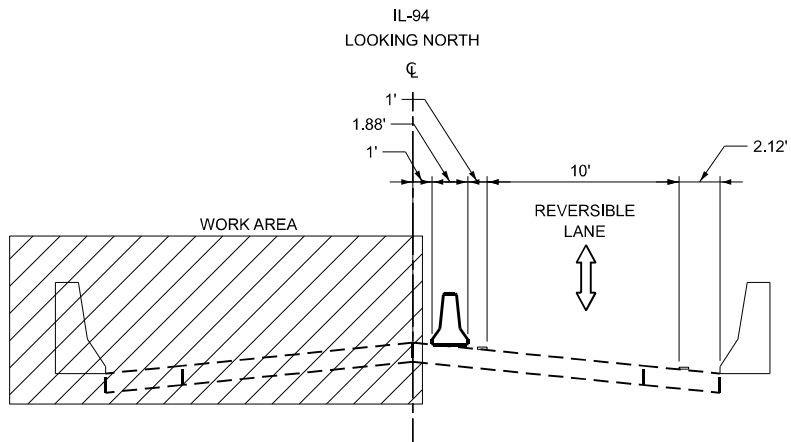
SOUTH OF BRIDGE STAGE 1



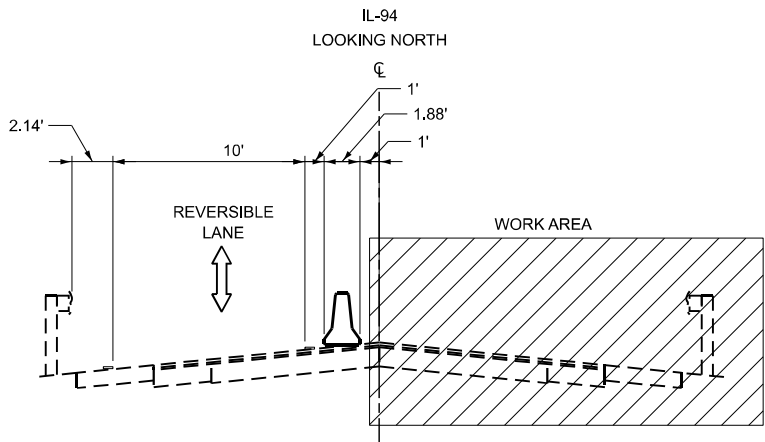
SOUTH OF BRIDGE STAGE 2



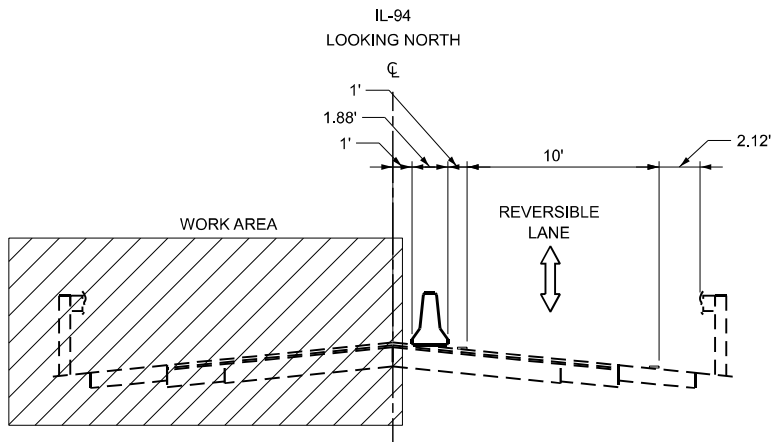
BRIDGE  
STAGE 1



BRIDGE  
STAGE 2



NORTH OF BRIDGE STAGE 1

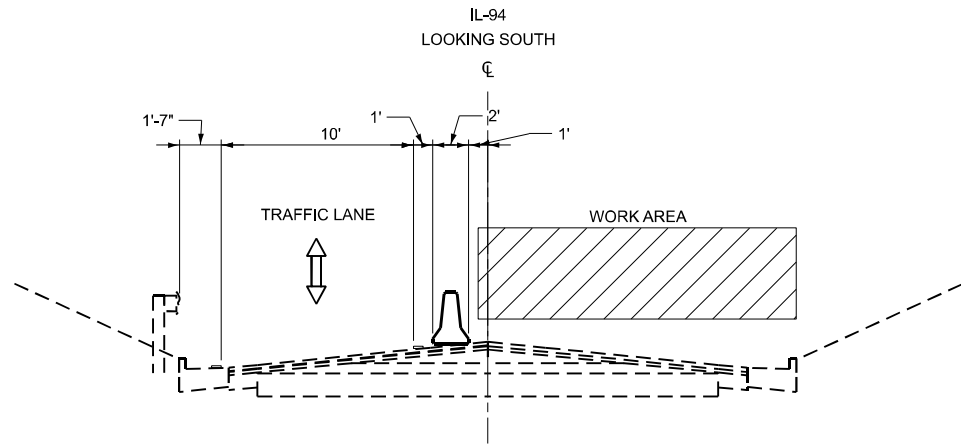


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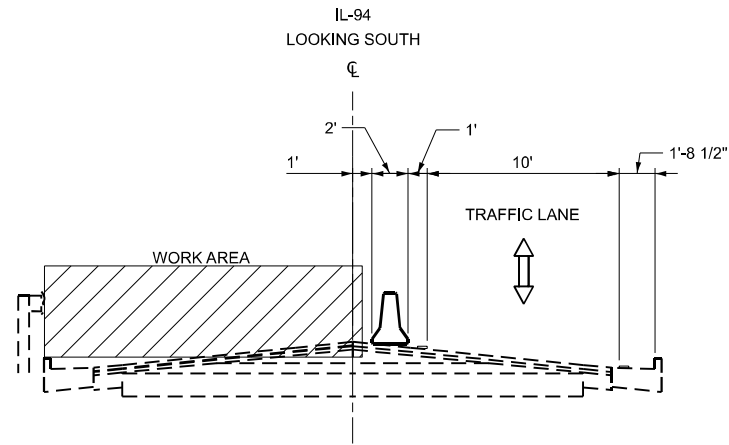
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		DRAWN	-	REVISED	-
		CHECKED	-	REVISED	-
PLOT DATE	5/8/2025	DATE	-	REVISED	-

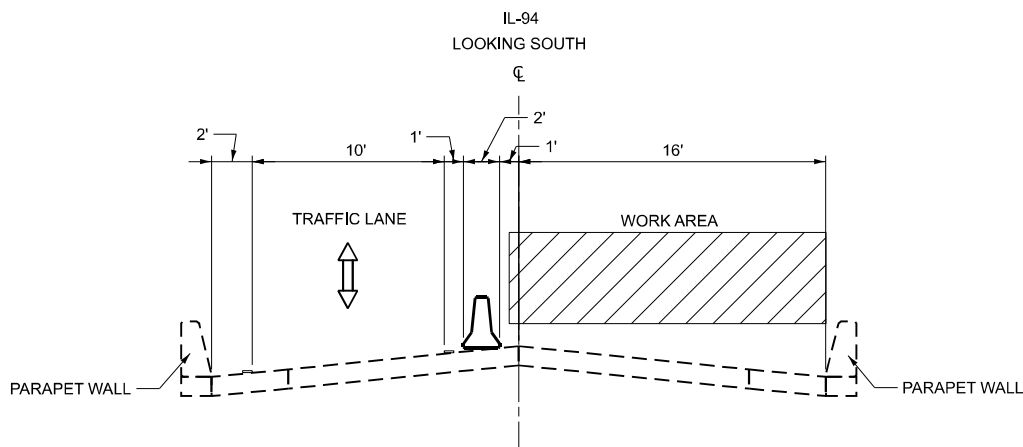
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CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



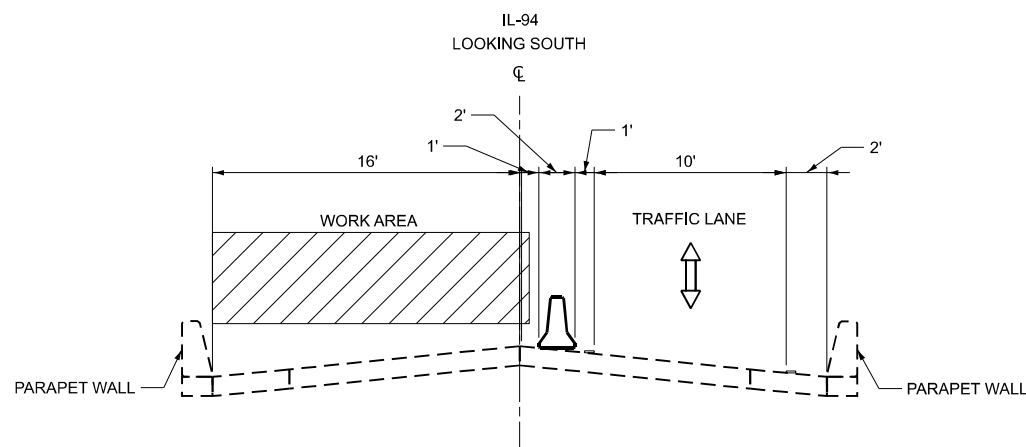
SOUTH OF BRIDGE STAGE 1



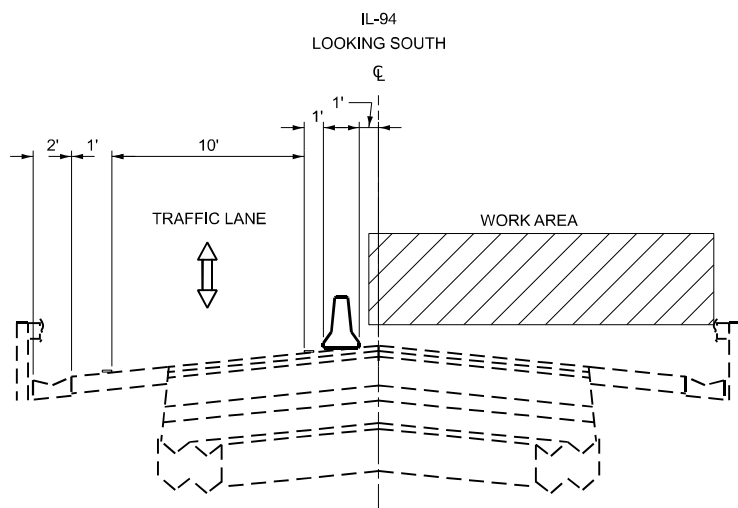
SOUTH OF BRIDGE STAGE 2



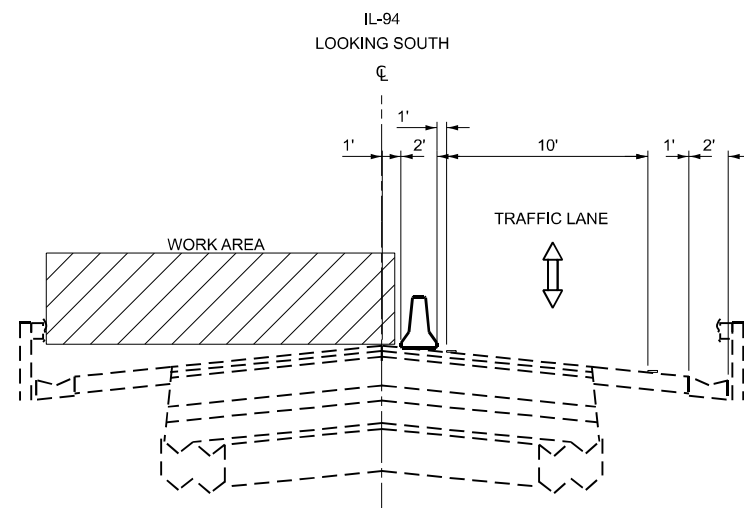
BRIDGE STAGE 1



BRIDGE STAGE 2



NORTH OF BRIDGE STAGE 1

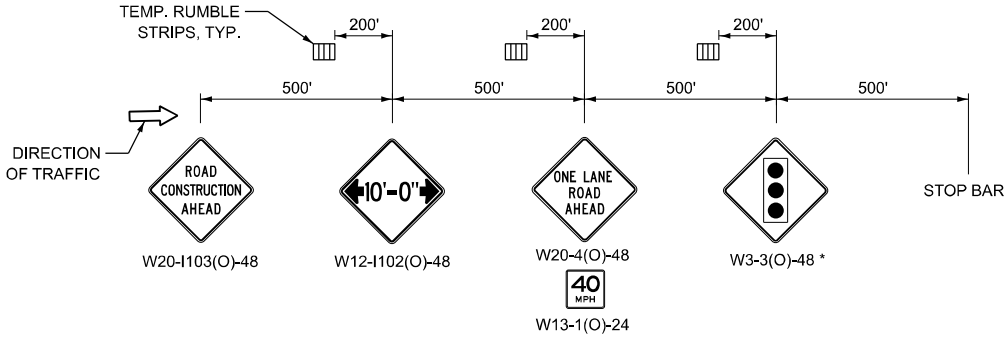


NORTH OF BRIDGE STAGE 2

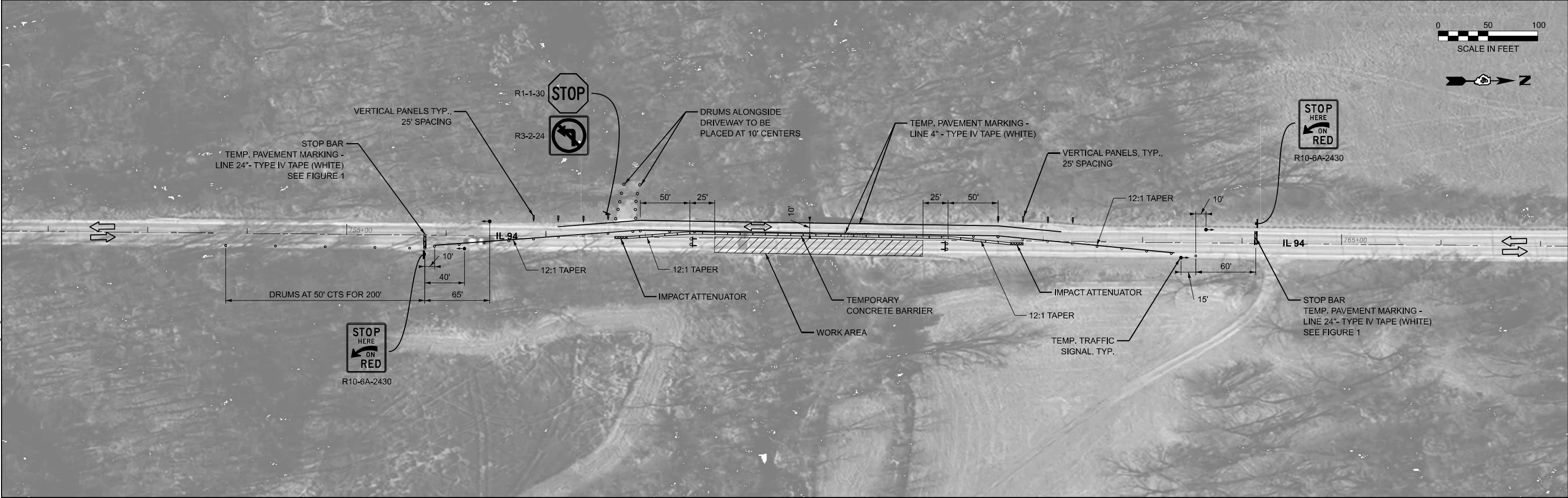
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FIGURE 1 - ADVANCE SIGNAGE PLAN



\* SIGN TO BE PLACED ON BOTH SIDES OF ROAD



LEGEND

- WORK AREA
- DRUM
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR
- TRAFFIC SIGNAL
- DOUBLE VERTICAL PANEL (SEE DETAIL IN STD. 701321-19)
- TYPE III BARRICADE WITH FLASHING LIGHTS
- SIGN
- TEMPORARY RUMBLE STRIP

NOTES

- TYPE III BARRICADES ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
- DRUMS SHALL BE PLACED AT 25' CENTER-TO-CENTER UNLESS OTHERWISE SPECIFIED.
- FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701316-14.

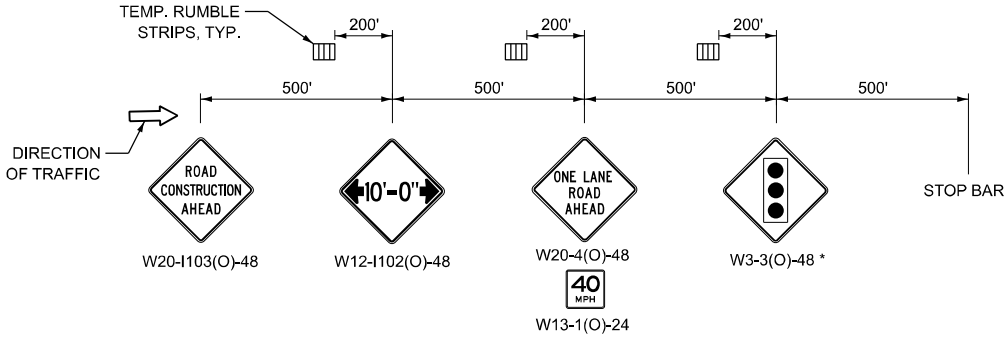
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	CHECKED -	REVISED -
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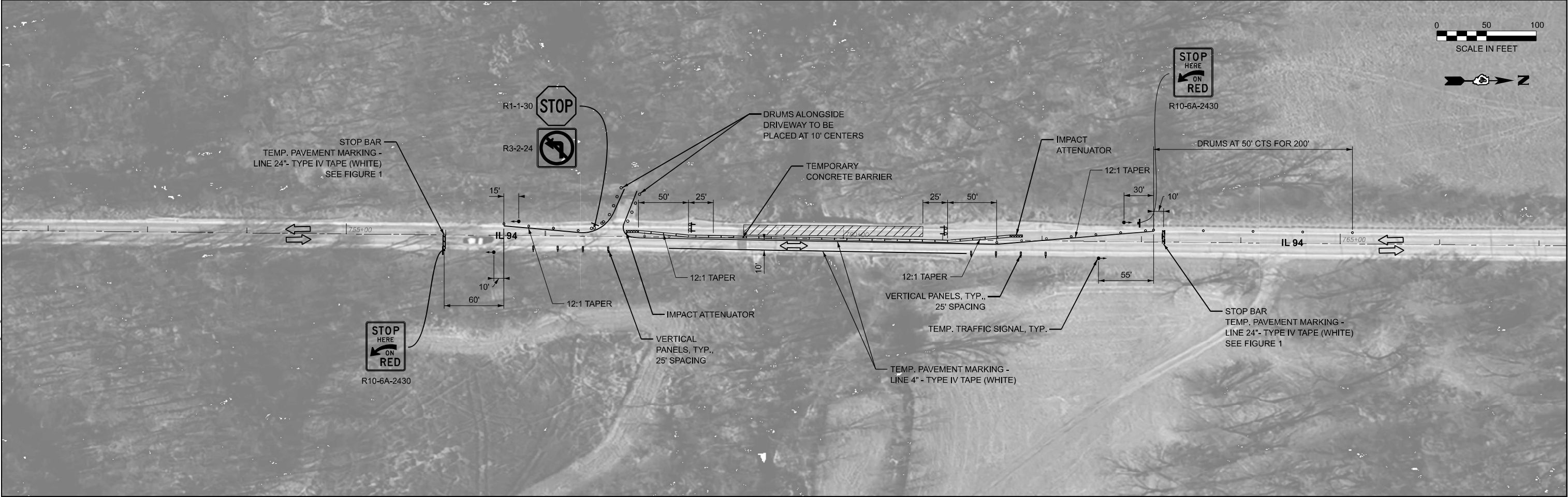
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1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	30
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



FIGURE 1 - ADVANCE SIGNAGE PLAN



\* SIGN TO BE PLACED ON BOTH SIDES OF ROAD



LEGEND

- |  |  |  |                        |
|--|--|--|------------------------|
|  | WORK AREA  |  | SIGN                   |
|  | DRUM   |  | TEMPORARY RUMBLE STRIP |
|  | TEMPORARY CONCRETE BARRIER                           |  | DETECTOR LOOPS         |
|  | IMPACT ATTENUATOR                                    |  |                        |
|  | TRAFFIC SIGNAL                                       |  |                        |
|  | DOUBLE VERTICAL PANEL (SEE DETAIL IN STD. 701321-19) |  |                        |
|  | TYPE III BARRICADE WITH FLASHING LIGHTS              |  |                        |

NOTES

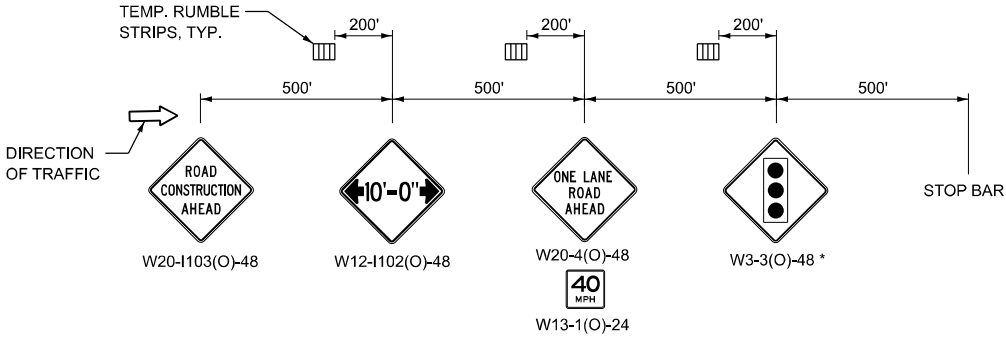
- TYPE III BARRICADES ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
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- FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701316-14.

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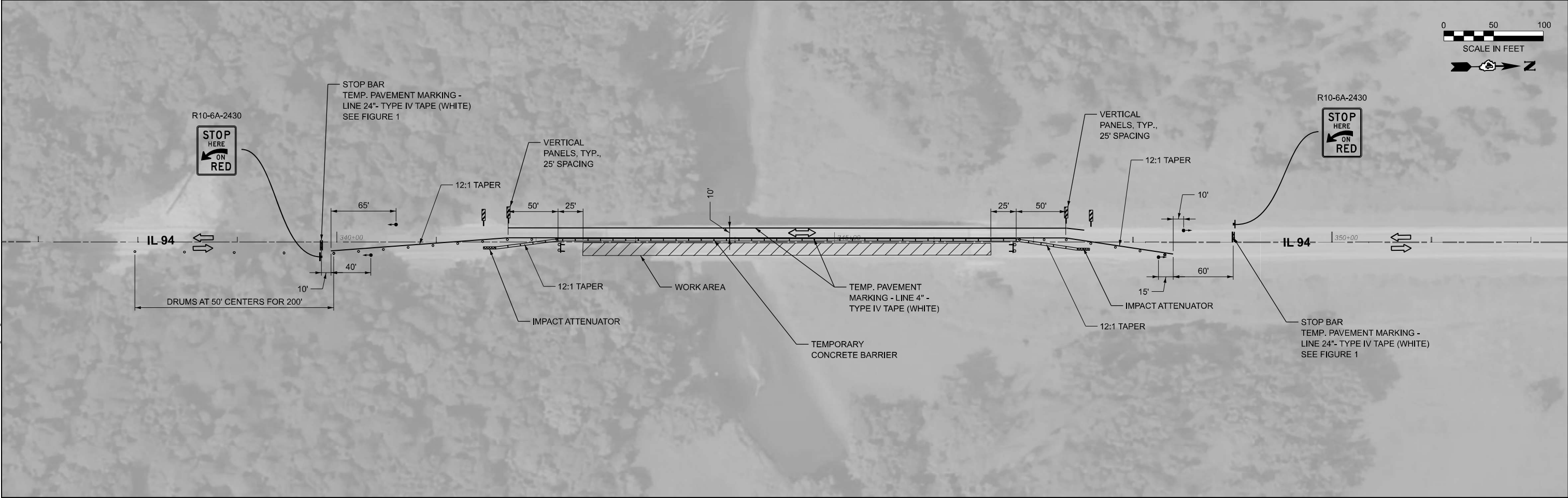
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F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	31
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

FIGURE 1 - ADVANCE SIGNAGE PLAN



\* SIGN TO BE PLACED ON BOTH SIDES OF ROAD



LEGEND

- WORK AREA
- DRUM
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR (NON- REDIRECTIVE, NARROW), TEST LEVEL 3
- TEMPORARY TRAFFIC SIGNAL
- DOUBLE VERTICAL PANEL (SEE DETAIL)
- TYPE III BARRICADE WITH FLASHING LIGHTS
- SIGN
- TEMPORARY RUMBLE STRIP

NOTES

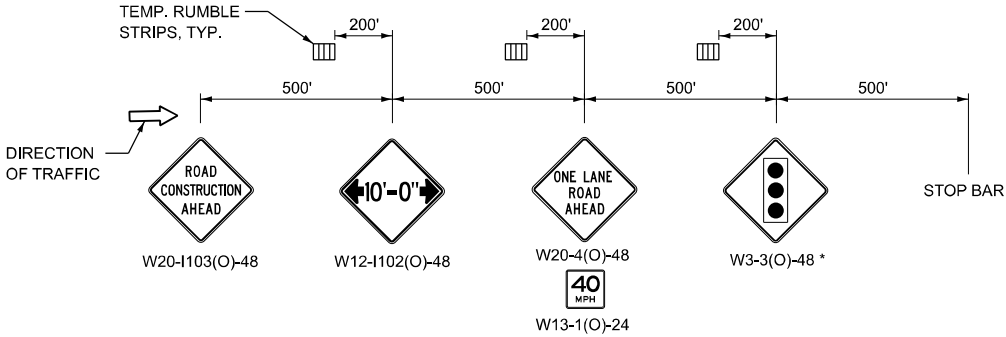
- TYPE III BARRICADES ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
- DRUMS SHALL BE PLACED AT 25' CENTER-TO-CENTER UNLESS OTHERWISE SPECIFIED.
- FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701321-19.

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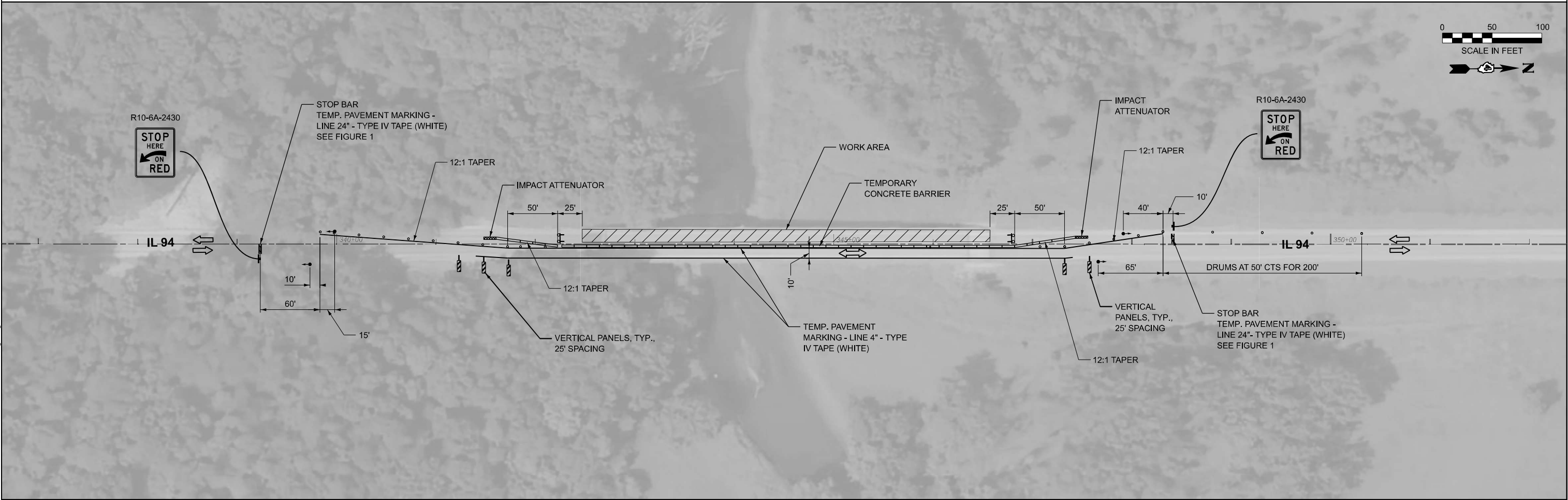
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	CHECKED -	REVISED -
PLOT DATE = 5/8/2025	DATE -	REVISED -

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	32
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

FIGURE 1 - ADVANCE SIGNAGE PLAN



\* SIGN TO BE PLACED ON BOTH SIDES OF ROAD



LEGEND

- |  |  |  |                        |
|--|--|--|------------------------|
|  | WORK AREA  |  | SIGN                   |
|  | DRUM   |  | TEMPORARY RUMBLE STRIP |
|  | TEMPORARY CONCRETE BARRIER                                 |  |                        |
|  | IMPACT ATTENUATOR (NON- REDIRECTIVE, NARROW), TEST LEVEL 3 |  |                        |
|  | TEMPORARY TRAFFIC SIGNAL                                   |  |                        |
|  | DOUBLE VERTICAL PANEL (SEE DETAIL)                         |  |                        |
|  | TYPE III BARRICADEWITH FLASHING LIGHTS                     |  |                        |

NOTES

- TYPE III BARRICADES ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
- DRUMS SHALL BE PLACED AT 25' CENTER-TO-CENTER UNLESS OTHERWISE SPECIFIED.
- FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701321-19.

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PLOT DATE = 5/8/2025	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

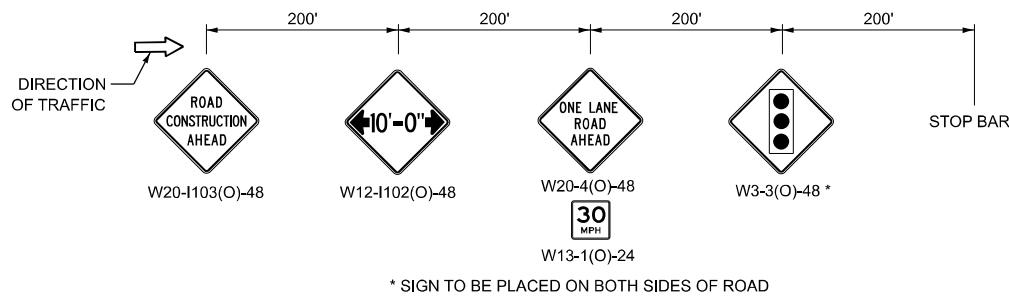
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SN 036-0043 IL-94 OVER HENDERSON CREEK

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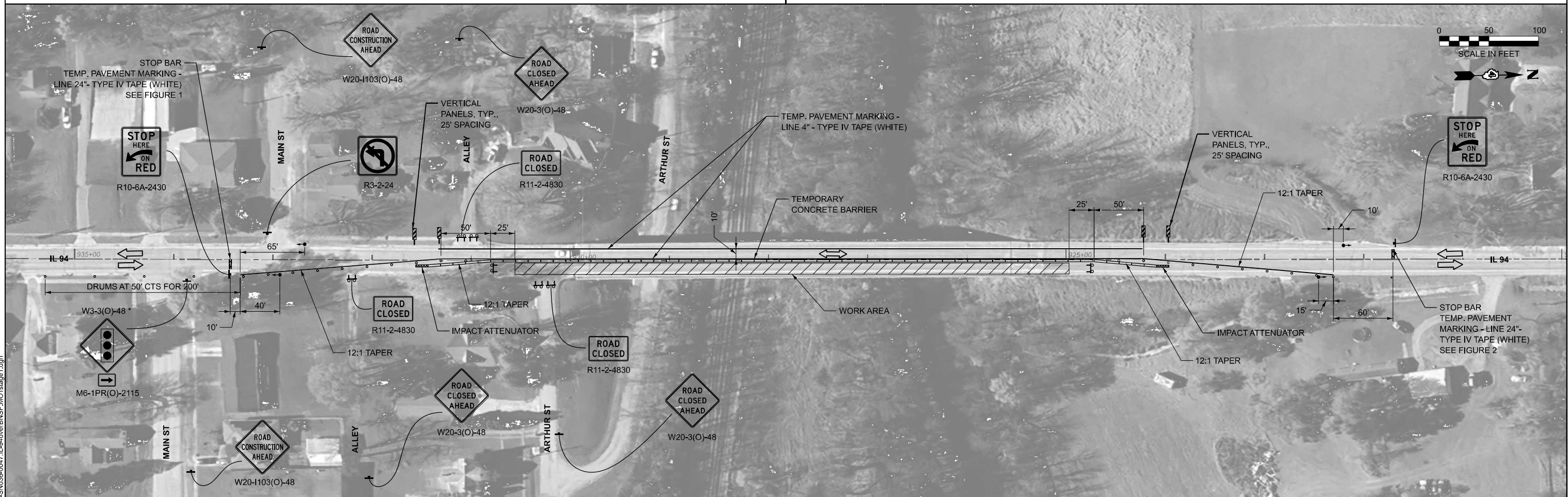
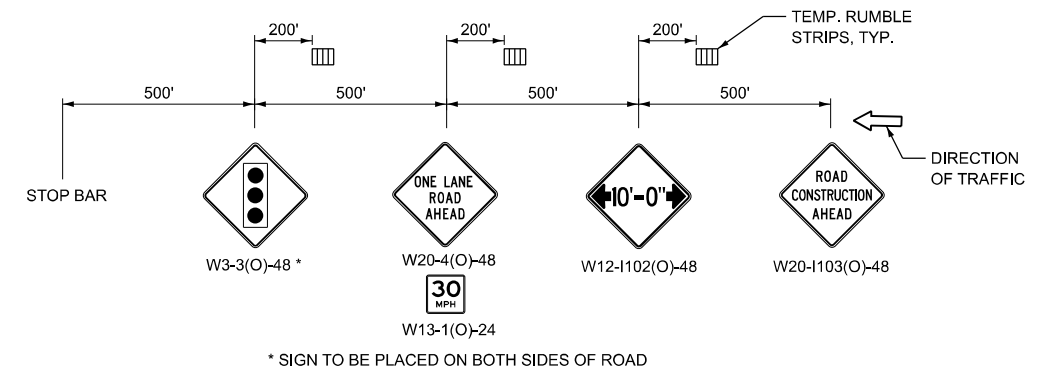
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1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	33
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				












**FIGURE 1 - ADVANCE SIGNAGE PLAN, NORTHBOUND**



**FIGURE 2 - ADVANCE SIGNAGE PLAN, SOUTHBOUND**



## LEGEND

	WORK AREA		SIGN
	DRUM		TEMPORARY RUMBLE STRIP
	TEMPORARY CONCRETE BARRIER		
	IMPACT ATTENUATOR (NON- REDIRECTIVE, NARROW), TEST LEVEL 3		
	TEMPORARY TRAFFIC SIGNAL		
	DOUBLE VERTICAL PANEL (SEE DETAIL)		
	TYPE III BARRICADE WITH FLASHING LIGHTS		

## NOTES

1. TYPE III BARRICADES ON MAINLINE IL-94 ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
2. DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
3. DRUMS SHALL BE PLACED AT 25' CENTER-TO-CENTER UNLESS OTHERWISE SPECIFIED.
4. FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701316-14.
5. THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY DIMENSIONS AND MAKE FIELD ADJUSTMENTS TO CONSTRUCTION LAYOUT AND MAINTENANCE OF TRAFFIC WHERE NECESSARY DUE TO SPACE CONSTRAINTS WITHOUT COMPROMISING ON PUBLIC SAFETY.

FIGURE 1 - ADVANCE SIGNAGE PLAN, NORTHBOUND

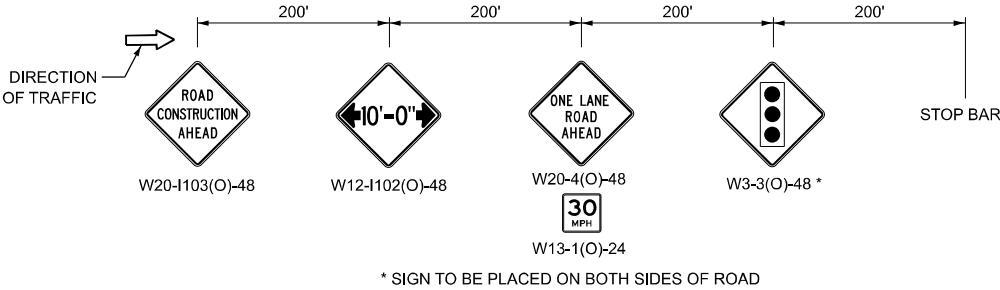
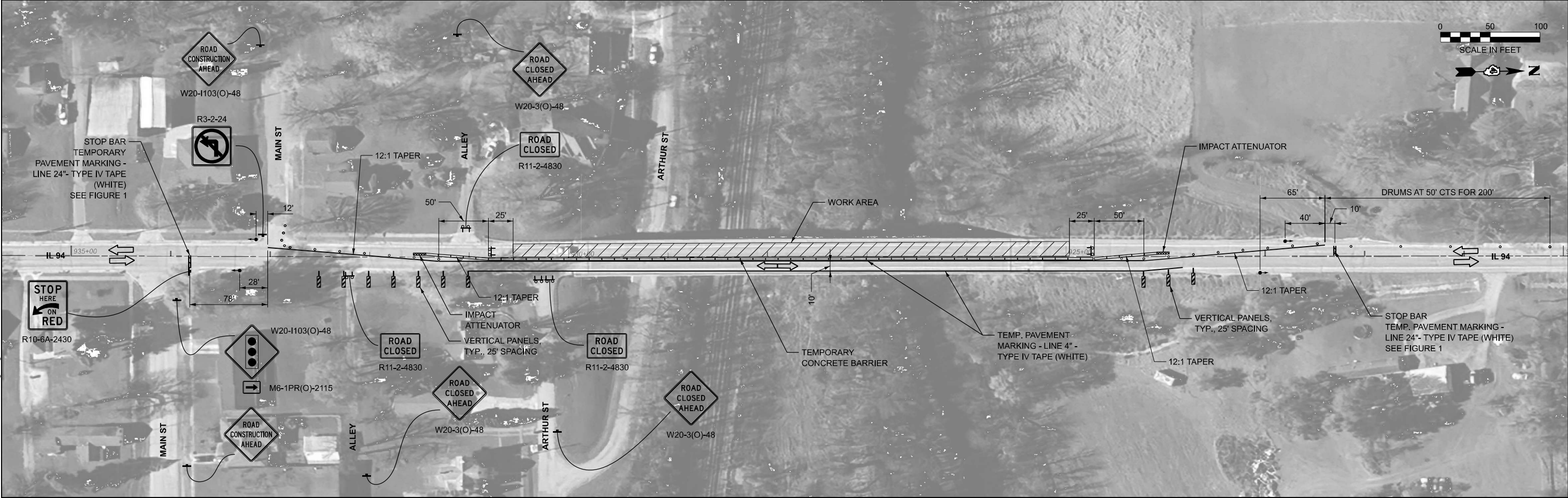
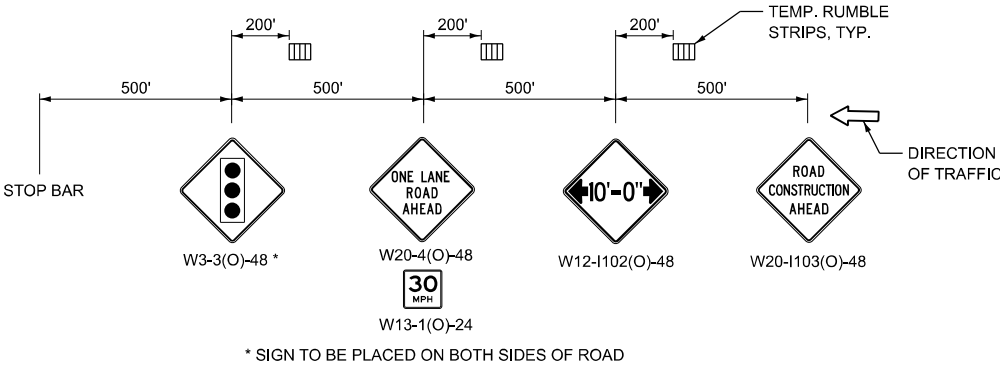


FIGURE 2 - ADVANCE SIGNAGE PLAN, SOUTHBOUND



LEGEND

- WORK AREA
- DRUM
- TEMPORARY CONCRETE BARRIER
- IMPACT ATTENUATOR (NON- REDIRECTIVE, NARROW), TEST LEVEL 3
- TEMPORARY TRAFFIC SIGNAL
- DOUBLE VERTICAL PANEL (SEE DETAIL)
- TYPE III BARRICADE WITH FLASHING LIGHTS
- SIGN
- TEMPORARY RUMBLE STRIP

NOTES

- TYPE III BARRICADES ON MAINLINE IL-94 ARE TO BE IN PLACE WHEN NO WORK IS BEING PERFORMED.
- DRUMS WITHIN LANE CLOSURE TAPERS SHALL HAVE STEADY BURNING BI-DIRECTIONAL LIGHTS
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- FOR ADDITIONAL REQUIRED DETAILS, SEE IDOT STANDARD 701316-14.
- THE RESIDENT ENGINEER AND CONTRACTOR SHALL VERIFY DIMENSIONS AND MAKE FIELD ADJUSTMENTS TO CONSTRUCTION LAYOUT AND MAINTENANCE OF TRAFFIC WHERE NECESSARY DUE TO SPACE CONTRAINTS WITHOUT COMPROMISING ON PUBLIC SAFETY.

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**GR****AEF**

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Chicago, Illinois 60634 (773) 399-012

USER NAME = 2189	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 5/8/2025	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

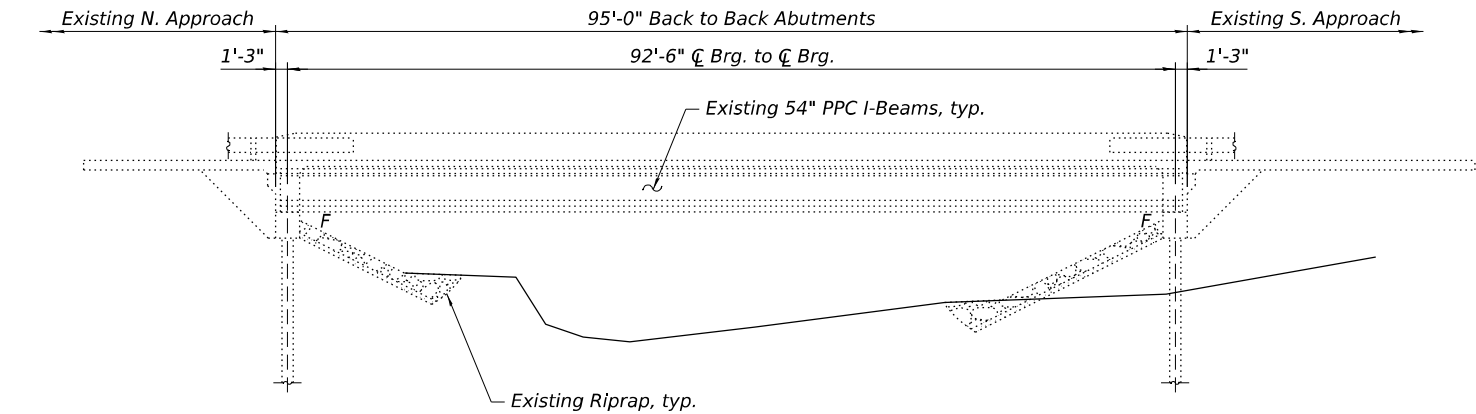
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SN 036-0047 IL-94 OVER BNSF

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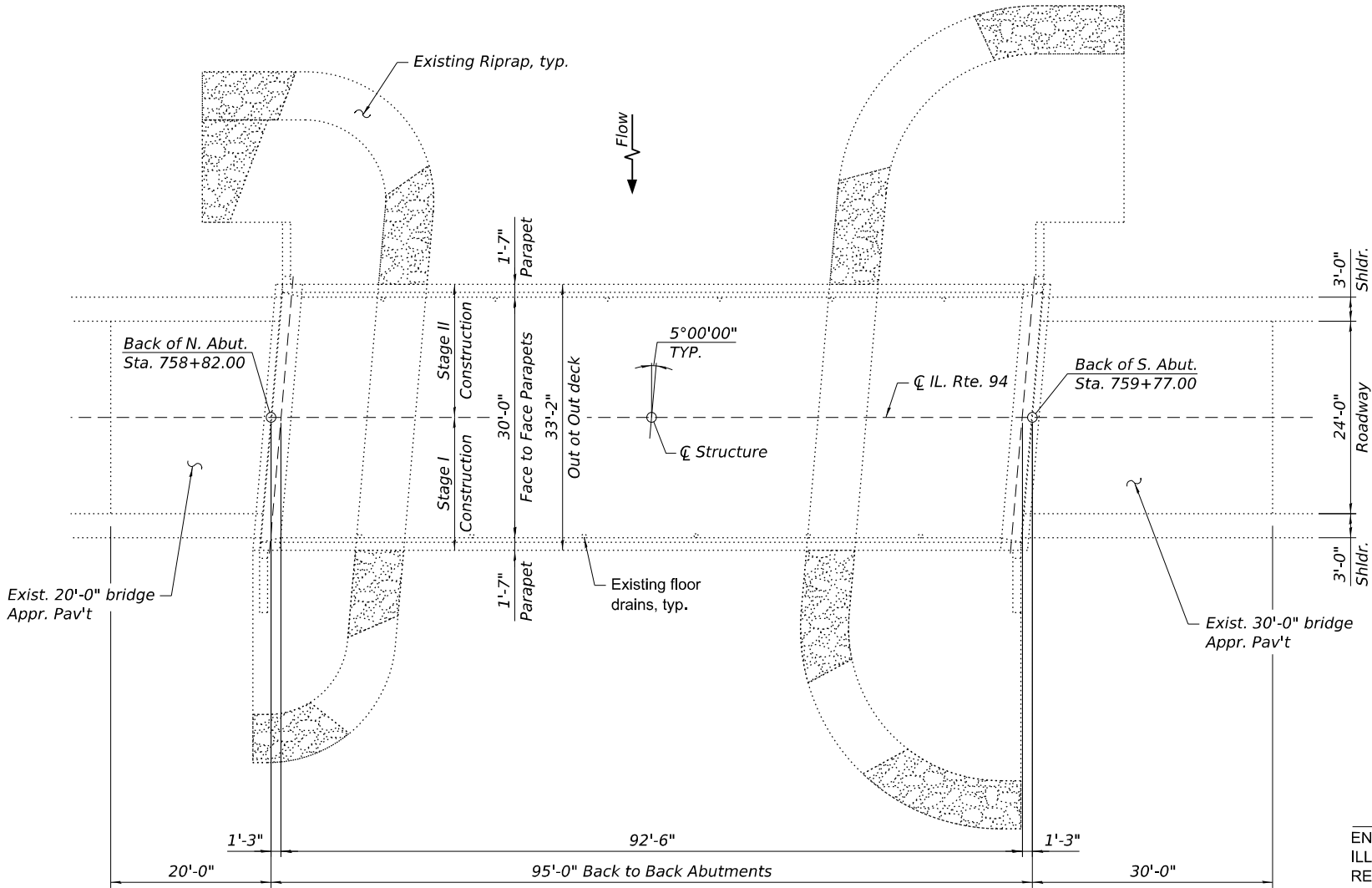
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1412	[106BC-1;108(C,(VB,VC)NRS)]BRR	HENDERSON	81	35
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

Existing Description: SN 036-0041 was originally built in 1988. The structure has a back-to-back length of 95'-0" and an out-to-out width of 33'-2". The superstructure consists of a 7½" thick reinforced concrete slab supported on single span 54" PPC I-beam superstructure of span length 92'-6". The substructure consists of reinforced concrete integral abutments supported on metal shell piles.

No Salvage. Traffic will be maintained utilizing stage construction.



ELEVATION



PLAN

LOADING HS20-44

Existing and Proposed

DESIGN SPECIFICATIONS

1983, 1984 and 1985 AASHTO Standard Specifications with 1986 Interims

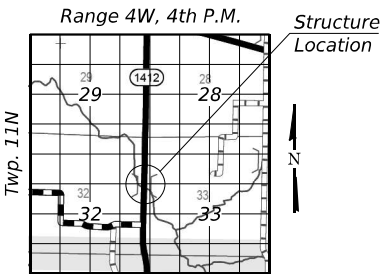
DESIGN STRESSES

FIELD UNITS (EXIST. CONST.)

$f_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$  (Reinforcement)  
 $f_c = 6,000 \text{ psi}$  (PPC I-Beams)  
 $f_{ci} = 5,000 \text{ psi}$  (PPC I-Beams)  
 $f_s = 270,000 \text{ psi}$  (½" Ø Strands)  
 $f_{si} = 189,000 \text{ psi}$  (½" Ø Strands)

FIELD UNITS (PROP. CONST.)

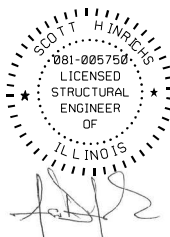
$f_c = 4,000 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$  (Reinforcement)



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
ILL. RTE. 94 OVER JINKS HOLLOW CREEK

S.B.I. RTE. 94  
HENDERSON COUNTY  
STRUCTURE NO. 036-0041



ENGINEER FULL NAME: SCOTT HINRICHS DATE: 05-02-2025  
ILLINOIS REGISTERED ENGINEER NO. 081-005750  
REGISTRATION EXPIRES 11. 30, 2026

MODEL: \$MODELNAME\$.S  
FILE NAME: X:\OH\2023\20230256-06\Design\CADD\Structures\Sheets\Plan\SN-036-0041\0360041-48\12-01-GPE.dgn

**GRÄEF**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-0042

USER NAME =	DESIGNED - JTB	REVISED -
	CHECKED - CG	REVISED -
PLOT SCALE =	DRAWN - DCP	REVISED -
PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 5 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBR	HENDERSON	81	36
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1.

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
2.

The protective coat shall be applied to the top of the Microsilica Concrete Overlay after deck overlay has properly cured.
3.

The protective coat (Special) shall be applied to all surfaces of the parapets. See detail on sheet 5 of 5.
4.

Surface Filler (Special) shall be applied according to Special Provisions.
5.

The void beneath the west shoulder of the south approach slab shall be filled with Controlled Low-Strength Material (CLSM) per the direction of the Engineer.
6.

The minimum thickness of concrete overlay shall be 2¼" and varies as required to adjust for the existing profile grade and beam camber.

INDEX OF SHEETS

1.

General Plan & Elevation
2.

General Data
3.

Stage Construction Details
4.

Temporary Concrete Barrier
5.

Deck Overlay Plan.

SCOPE OF WORK

1.

Scarify ¾" from the bridge deck and approach slabs.
2.

Apply a 2¼" Microsilica concrete overlay on the bridge deck and approach slabs.
3.

Perform Bridge Deck Grooving on the deck and approach slabs within the traffic lanes.
4.

Apply Protective Coat to the surface of the new overlay.
5.

Apply Protective Coat (Special) and Surface Filler (Special) to all faces of the parapets.
6.

Fill void beneath the west shoulder of the south approach slab with Controlled Low-Strength Material.
7.

Perform Concrete Polymer edge at the end south and north approach slabs.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bridge Deck Grooving	Sq Yd	387	-	387
Protective Coat	Sq Yd	466	-	466
Controlled Low-Strength Material	Cu Yd	-	1	1
Surface Filler (Special)	Gallon	1	-	1
Protective Coat (Special)	Sq Yd	135	-	135
Bridge Deck Scarification 3/4"	Sq Yd	466	-	466
Bridge Deck Microsilica Concrete Overlay, 2 1/4" Inches	Sq Yd	466	-	466
Polymer Concrete	Cu Ft	2.9	-	2.9

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 036-0041

SHEET 2 OF 5 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBRR	HENDERSON	81	37
		CONTRACT NO. 68J12		
		ILLINOIS	FED. AID PROJECT	

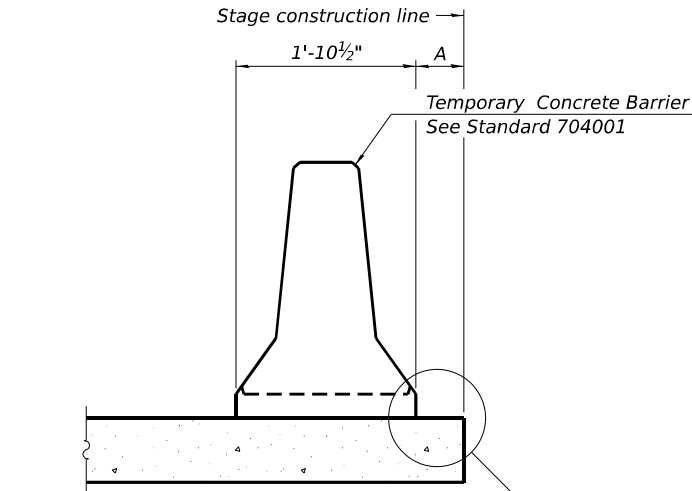


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Chicago, Illinois 60634 (773) 399-012

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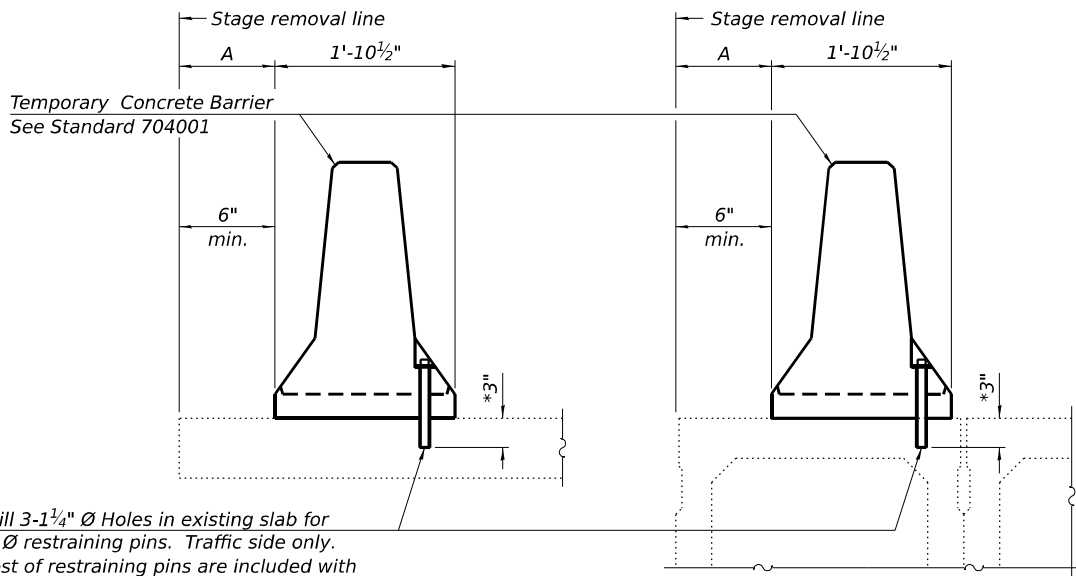






When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

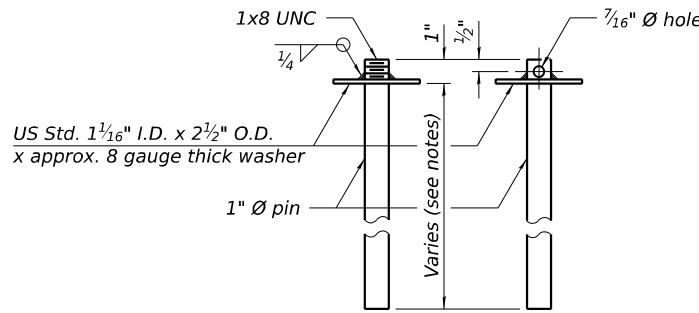


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

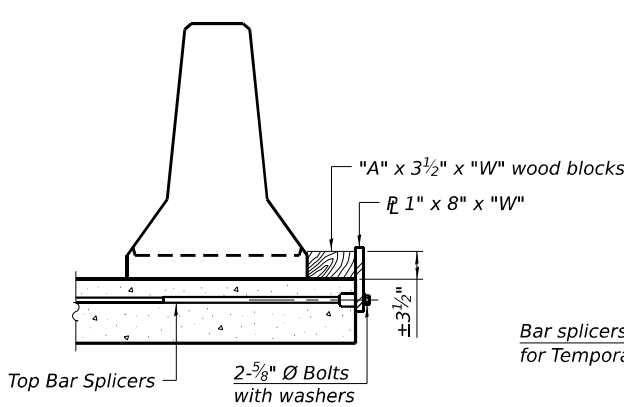
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

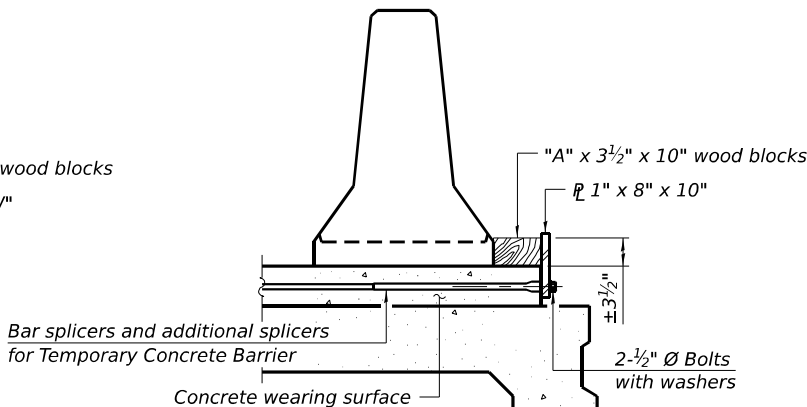


RESTRAINING PIN

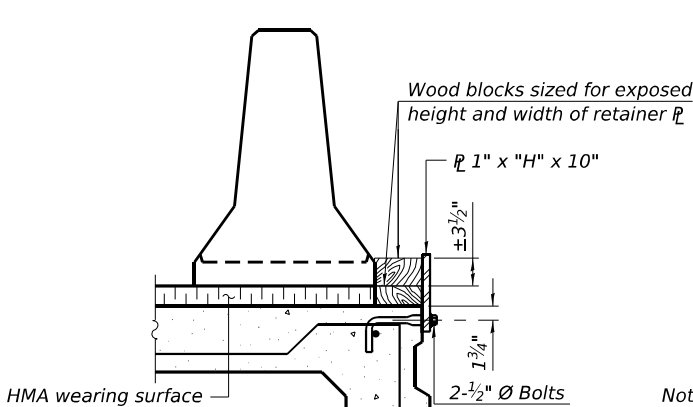
SECTIONS THRU SLAB OR DECK BEAM



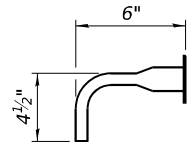
DETAIL I



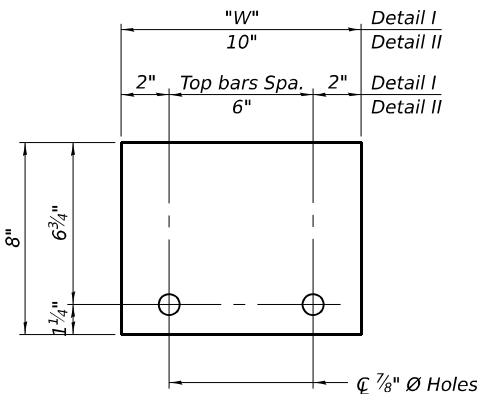
DETAIL II



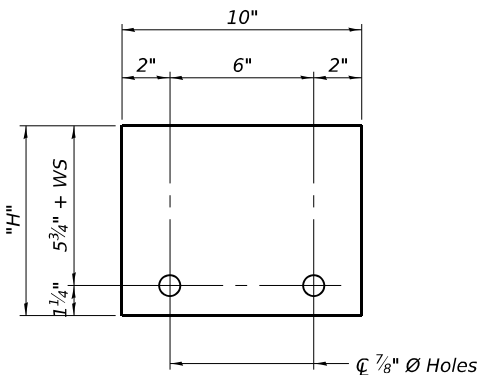
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER  $\frac{1}{8}$  1" x 8" x "W"  
(Detail I and II)



STEEL RETAINER  $\frac{1}{8}$  1" x "H" x 10"  
(Detail III)

Notes:  
Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate  $\frac{1}{2}$  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 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

5-15-2023

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Chicago, Illinois 60634 (773) 399-012

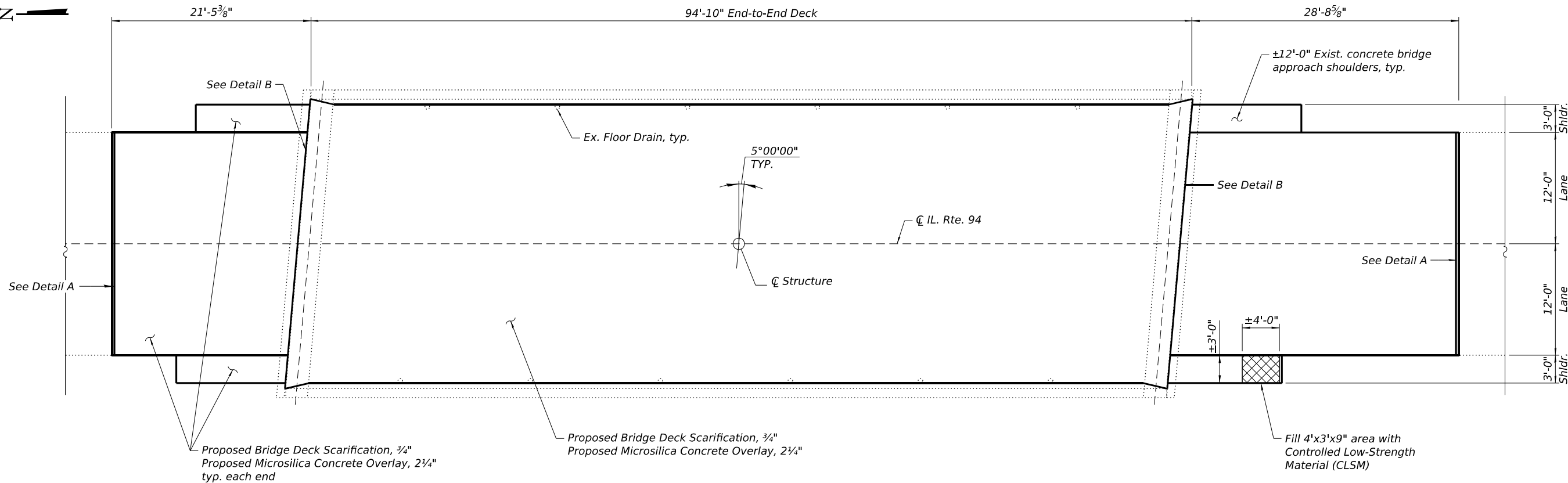
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	CHECKED - CG	REVISED -
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PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

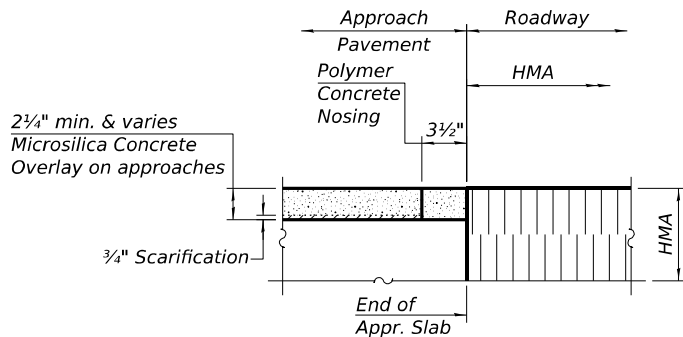
TEMPORARY CONCRETE BARRIER  
STRUCTURE NO. 036-0041

SHEET 4 OF 5 SHEETS

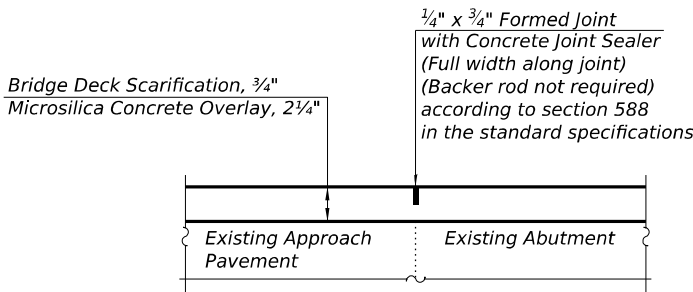
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94	106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	39
				CONTRACT NO. 68J12
		ILLINOIS	FED. AID PROJECT	



PLAN




DETAIL A



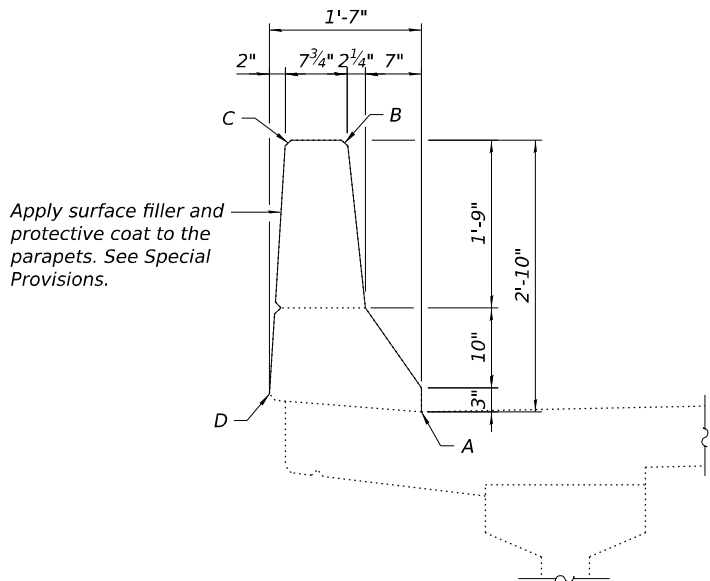
DETAIL B

LEGEND

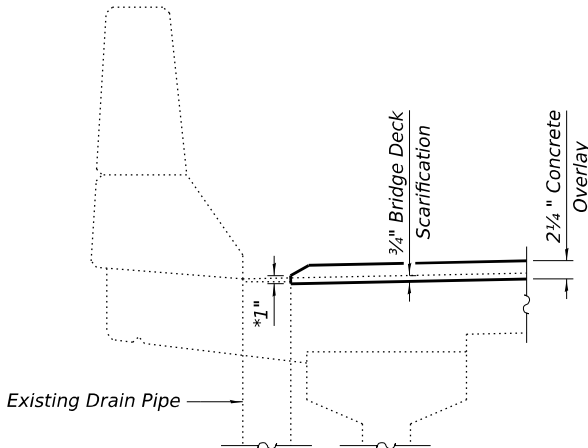
 Controlled Low-Strength Material

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Grooving	Sq Yd	387
Protective Coat	Sq Yd	466
Controlled Low-Strength Material	Cu Yd	1
Surface Filler (Special)	Gallon	1
Protective Coat (Special)	Sq Yd	135
Bridge Deck Scarification 3/4"	Sq Yd	466
Bridge Deck Microsilica Concrete Overlay, 2 1/4 Inches	Sq Yd	466
Polymer Concrete	Cu Ft	2.9

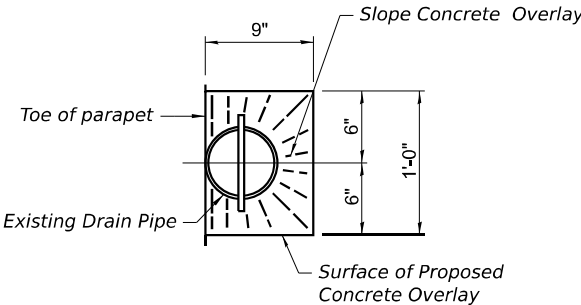


PARAPET DETAIL



FLOOR DRAIN PRESERVATION

\* Minimum thickness overlay at edge of drain = 1"



TOP PLAN OF FLOOR DRAIN

Note:  
Protective Coat (Special) to cover from point A through points B, C, and D of the existing parapet.

MODEL: Default  
FILE NAME: X:\012023\202302256-06\Design\CADD\Structures\Sheets\Plan\SN-036-004-1\0360041-48J12-005-DEK.dgn

Existing Description: SN 036-0043 was originally built in 1991. Scour countermeasures were installed at the bridge in 2001. The structure has a back-to-back length of 362'-0" and an out-to-out width of 35'-2". The superstructure consists of a 7½" thick reinforced concrete slab supported on four-span continuous 54" PPC I-beams of span lengths 73'-0, 105'-6", 105'-6" and 73'-0". The substructure consists of reinforced concrete abutments and solid wall piers supported on steel h-piles.

Traffic will be maintained utilizing stage construction.

No salvage.

LOADING HS20-44

Existing and Proposed

DESIGN SPECIFICATIONS

1989 AASHTO Standard Specifications  
with 1983 Seismic Guidelines

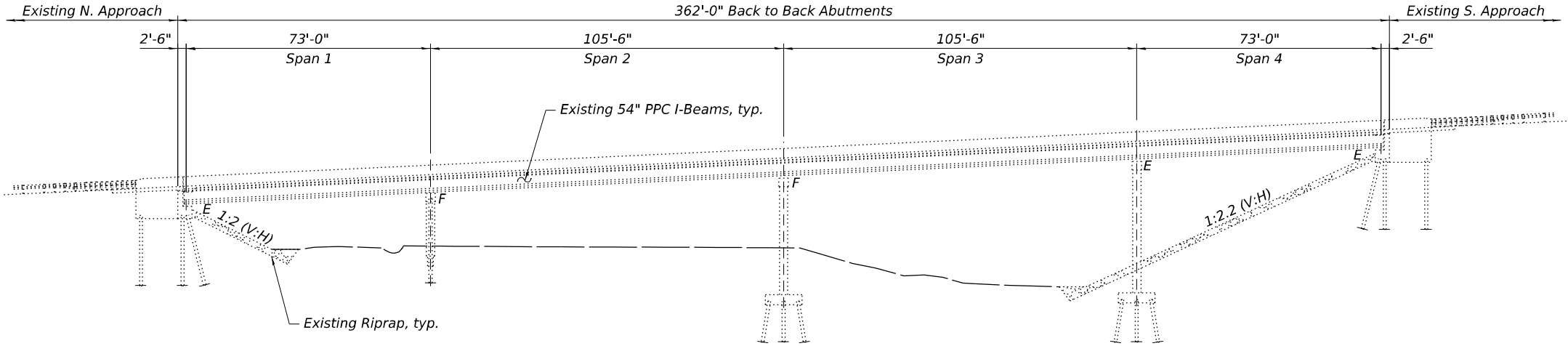
DESIGN STRESSES

FIELD UNITS (EXIST. CONST.)

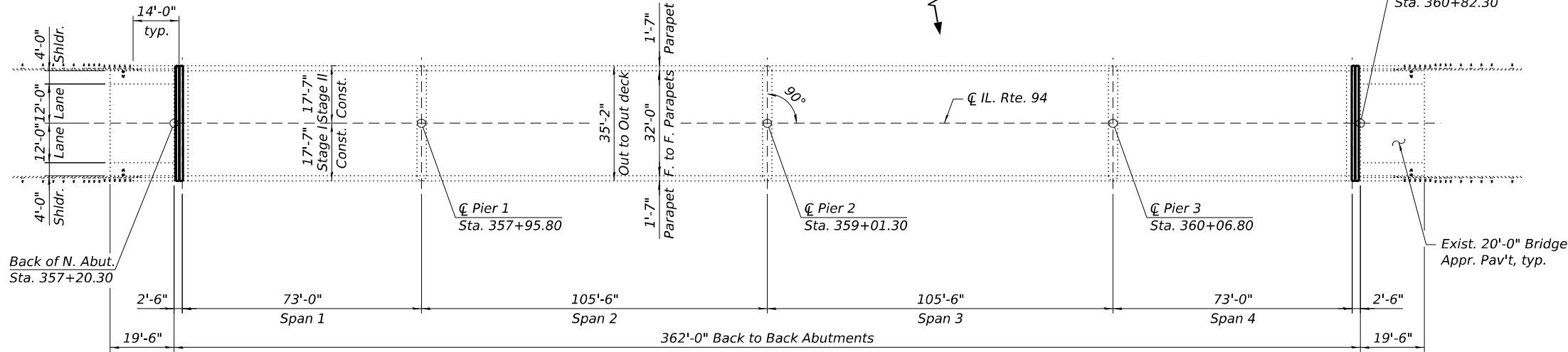
f<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>c</sub> = 6,000 psi (PPC I-Beams)  
f<sub>ci</sub> = 4,300 psi (PPC I-Beams)  
f<sub>s</sub> = 270,000 psi (½" Ø Strands)  
f<sub>si</sub> = 189,000 psi (½" Ø Strands)

FIELD UNITS (PROP. CONST.)

f<sub>c</sub> = 4,000 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)



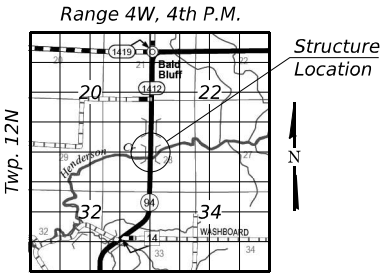
ELEVATION



PLAN



ENGINEER FULL NAME: SCOTT HINRICHS DATE: 05-02-2025  
ILLINOIS REGISTERED ENGINEER NO. 081-005750  
REGISTRATION EXPIRES 11. 30, 2026



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
F.A.S. RTE. 1412 (ILL. RTE.94) OVER  
HENDERSON CREEK  
HENDERSON COUNTY  
STRUCTURE NO. 036-0043

MODEL: \$MODELNAME\$  
FILE NAME: X:\01\2023\202302256-06\Design\CADD\Structures\Sheets\Plan\SN-036-0043\0360043-48\12-001-GPE.dgn

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PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	41
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPCSP3 standards). 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 paid for according to Article 109.04 of the Standard Specifications. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
3. Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.
4. Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system at the contractor’s expense.
5. The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.
6. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
7. The protective coat shall be applied to the top of the Microsilica Concrete Overlay after deck overly has properly cured.
8. The protective coat (Special) shall be applied to all surfaces of the parapets.
9. Surface Filler (Special) shall be applied according to Special Provisions.
10. The voids beneath the east and west shoulder of the north approach slab shall be filled with Controlled Low-Strength Material (CLSM) per the direction of the Engineer.
11. The minimum thickness of concrete overlay shall be 2¼" and varies as required to adjust for the existing profile grade and beam camber.
12. The steel components of all expansion bearings at the abutments shall be blasted and painted according to the Special Provision "Cleaning and Painting Bearings. All bearings shall be cleaned per Near White Blast Cleaning (SSPC-SP10). The designated areas cleaned per Near White Blast Cleaning (SSPC-SP10) shall be painted according to the requirements of Organic Zinc-Rich Epoxy/Urethane. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No. 5B 7/1.
13. Containment of cleaning residue is required to control nuisance dust. See special provisions.
14. See Special Provisions for "FRP Strengthening for PPC I-Beam Repairs".
15. See Special Provisions for "Precast Prestressed Concrete I-Beam Repair".
16. Acrylic coating shall be placed over Fiber Wrap repairs.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier
5. Bridge Deck Repairs Plan.
6. Drainage Adjustment Details
7. East Parapet Repairs
8. West Parapet Repairs
- 9-10. North Abutment Expansion Joint Details I & II
- 11-12. South Abutment Expansion Joint Details I & II
13. Preformed Joint Strip Seal
14. Framing Plan and PPC I-Beam Repairs
15. Bearing Details
16. Bar Splicer Assembly and Mechanical Splicer Details
17. Existing Plans Reference Sheet

SCOPE OF WORK

1. Scarify ¾” from the bridge deck and approach slabs.
2. Remove and reconstruct expansion joints at north and south abutments, and install new Preformed Joint Strip Seals.
3. Adjust drainage inlets.
4. Apply a 2¼” Microsilica concrete overlay on the bridge deck and approach slabs.
5. Perform Bridge Deck Grooving on traffic lanes.
6. Perform concrete repairs of the bridge parapets.
7. Apply Protective Coat to the reconstructed transverse expansion joints and to the top of the Microsilica Concrete Overlay.
8. Apply Protective Coat (Special) and Surface Filler (Special) to all faces of the parapets.
9. Fill voids beneath the east and west shoulders of the north approach slab with Controlled Low-Strength Material (CLSM).
10. Cleaning and Painting Bearings at north and south abutments.
11. Precast prestressed concrete I-beam repair followed by fiber wrap repair of all spalling, delamination, or failed existing beam repairs beyond the front face of the bearing of PPC Beams.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	6.3	-	6.3
Concrete Superstructure	Cu Yd	7.3	-	7.3
Bridge Deck Grooving	Sq Yd	1,053	-	1,053
Protective Coat	Sq Yd	1,428	-	1,428
Reinforcement Bars, Epoxy Coated	Pound	980	-	980
Bar Splicers	Each	12	-	12
Preformed Joint Strip Seal	Foot	68	-	68
Controlled Low-Strength Material	Cu Yd	-	14	14
Inlet to be Adjusted	Each	4	-	4
Acylic Coating	Sq Yd	16	-	16
FRP Strengthening for PPC I-Beam Repairs	Sq Ft	143	-	143
Surface Filler (Special)	Gallon	1	-	1
Protective Coat (Special)	Sq Yd	535	-	535
Cleaning and Painting Bearings	Each	12	-	12
Bridge Deck Scarification ¾"	Sq Yd	1,411	-	1,411
Bridge Deck Microsilica Concrete Overlay 2¼"	Sq Yd	1,411	-	1,411
Precast Prestressed Concrete I-beam Repair	Sq Ft	6	-	6

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 036-0043

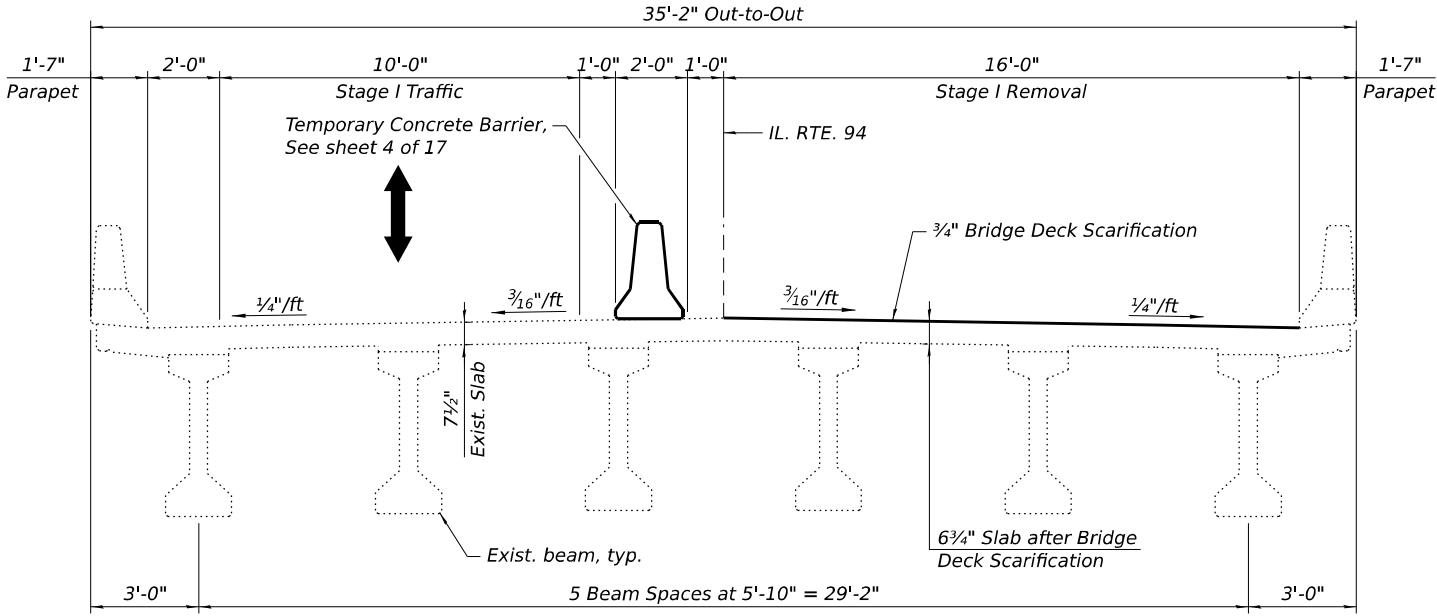
SHEET 2 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 68J12		
		ILLINOIS	FED. AID PROJECT	

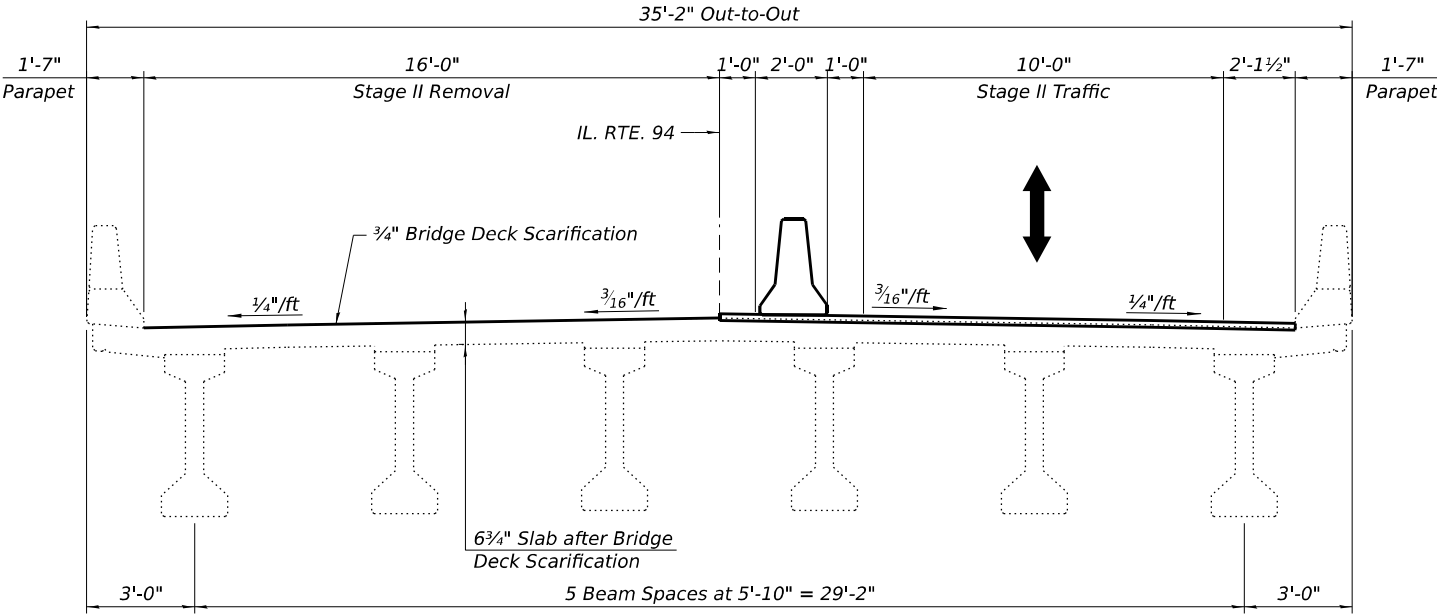


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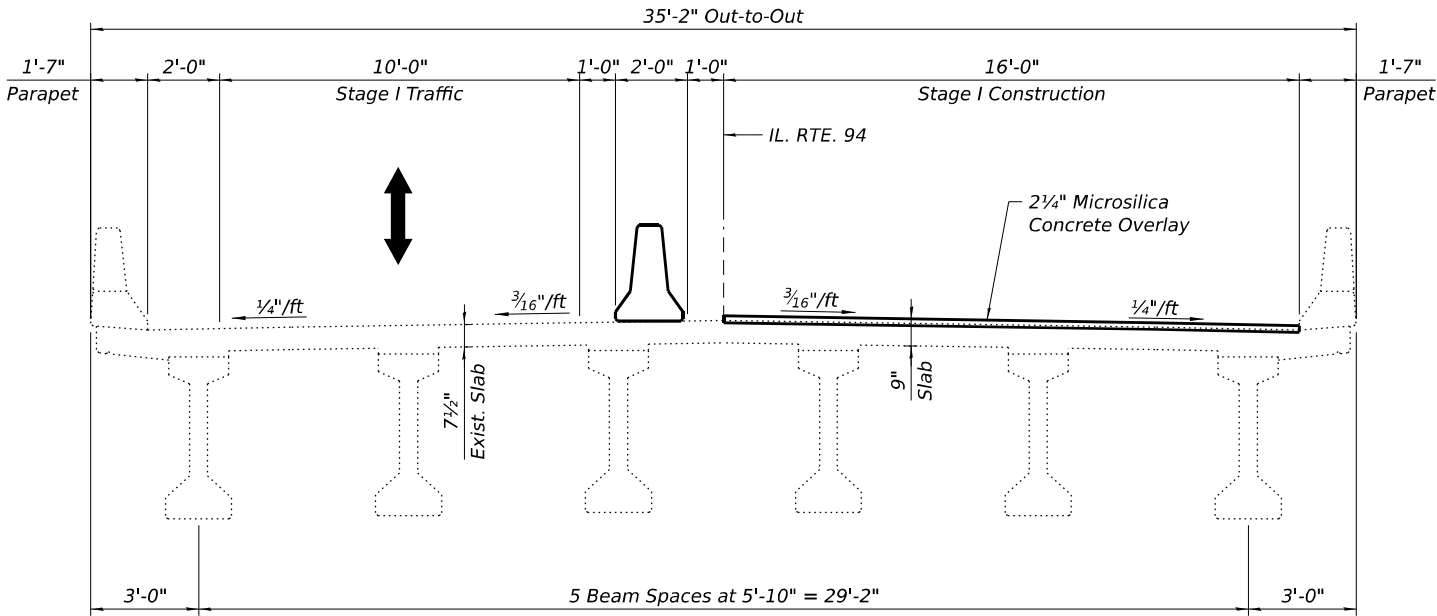
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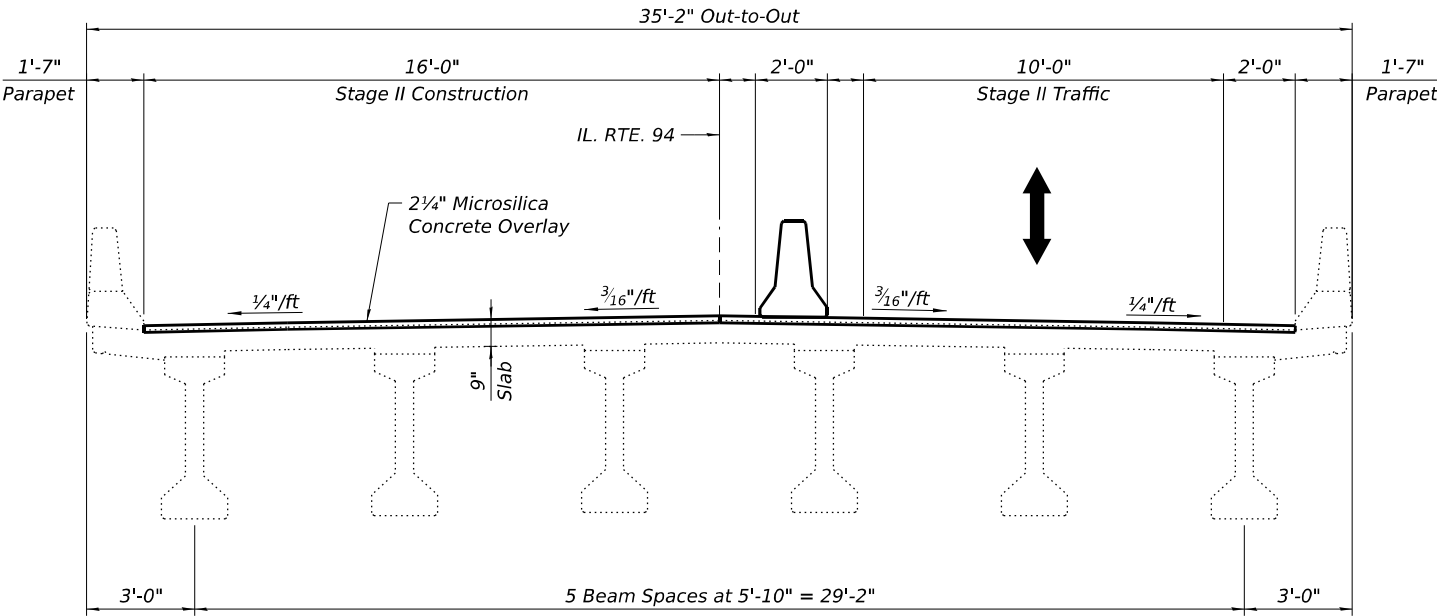
**STAGE I REMOVAL**  
(Looking South)



**STAGE II REMOVAL**  
(Looking South)



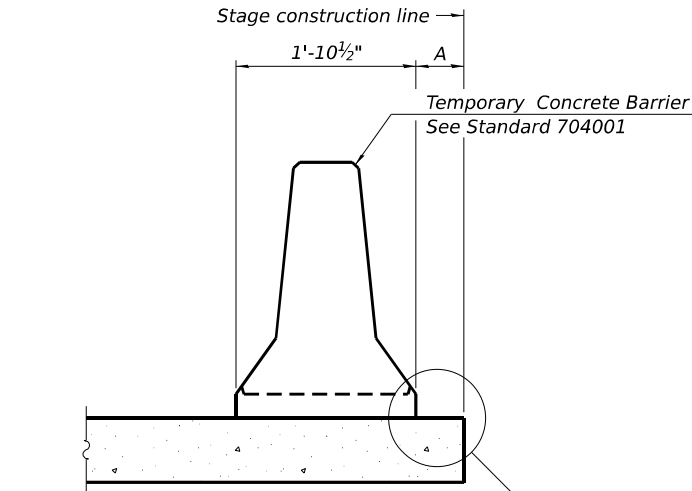
**STAGE I CONSTRUCTION**  
(Looking South)



**STAGE II CONSTRUCTION**  
(Looking South)

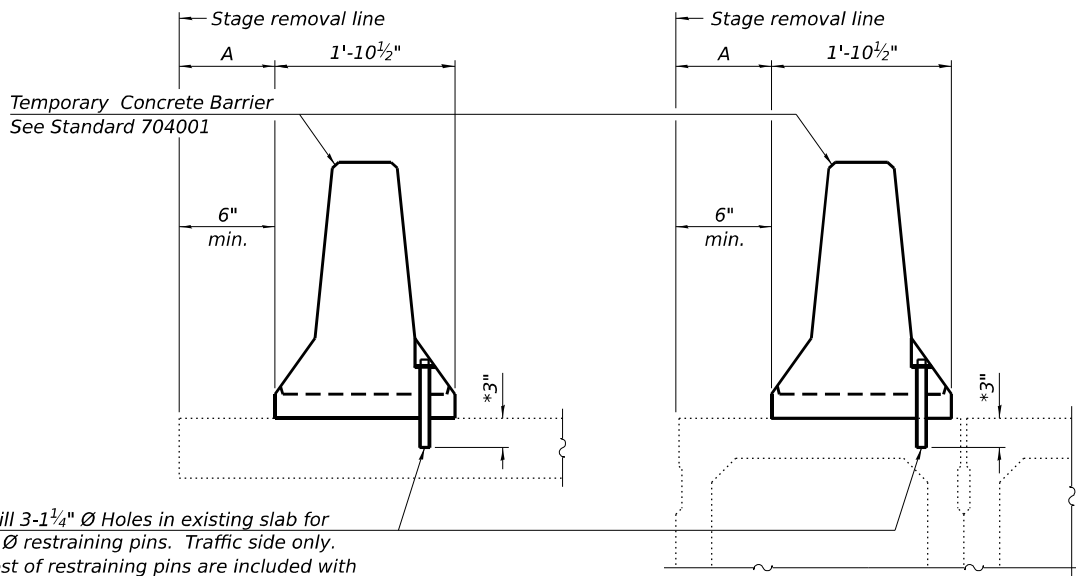
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<div><div>GR<sup>®</sup>AEF</div><div>8501 W. Higgins Road, Suite 280 Chicago, Illinois 60634 (773) 399-0182</div></div>	USER NAME =		DESIGNED - JTB	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>STAGE CONSTRUCTION DETAILS STRUCTURE NO. 036-0043</div>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE =		CHECKED - SH	REVISED -				CONTRACT NO. 68J12					
	PLOT DATE =							ILLINOIS FED. AID PROJECT					
			SHEET 3 OF 17 SHEETS										



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

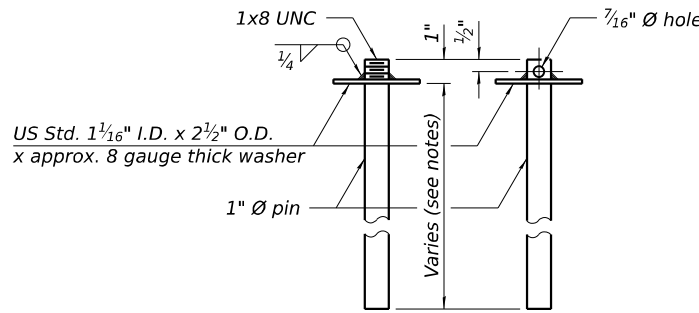


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

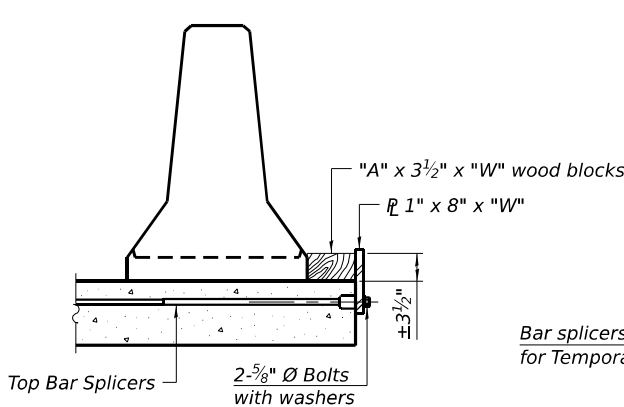
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

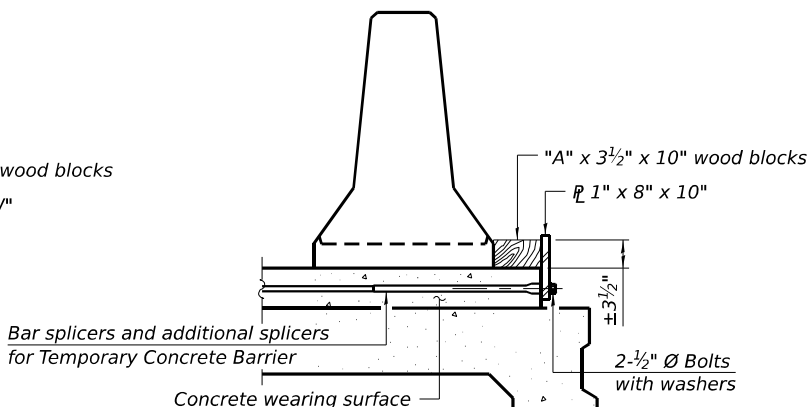


RESTRAINING PIN

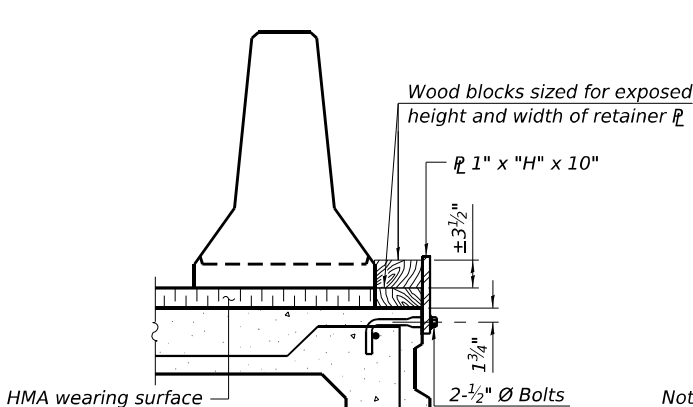
SECTIONS THRU SLAB OR DECK BEAM



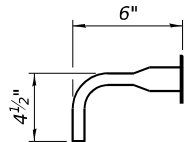
DETAIL I



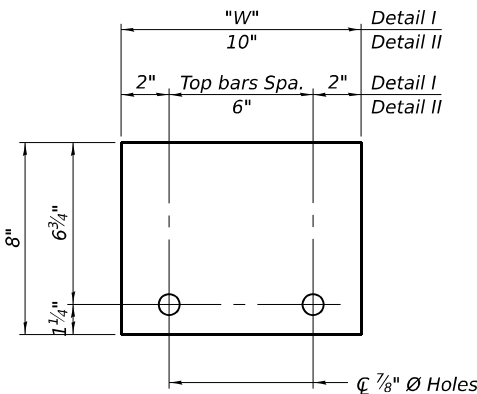
DETAIL II



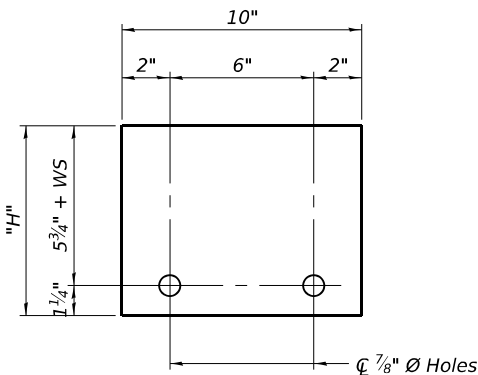
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"  
(Detail I and II)



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

Notes:  
Cost of retainer assembly is included with Temporary Concrete Barrier.  
A retainer assembly shall be located at the approximate C 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 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

5-15-2023

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PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER  
STRUCTURE NO. 036-0043

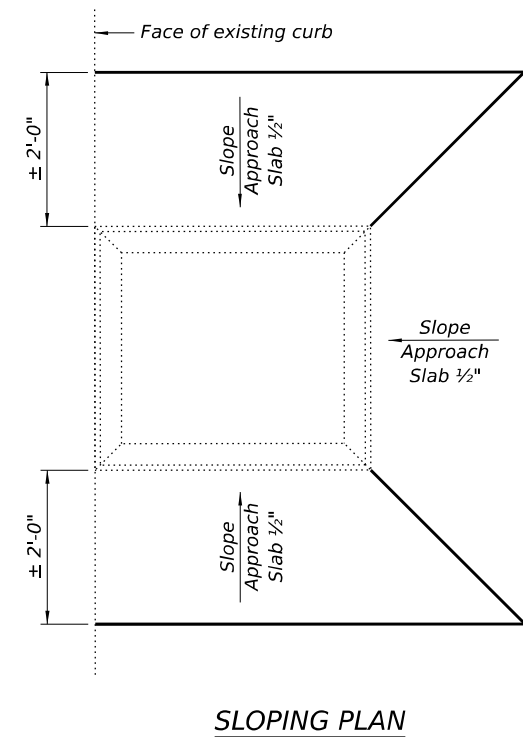
SHEET 4 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,(VB,VC)NRS)IBRR	HENDERSON	81	44
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



- ### BILL OF MATERIAL

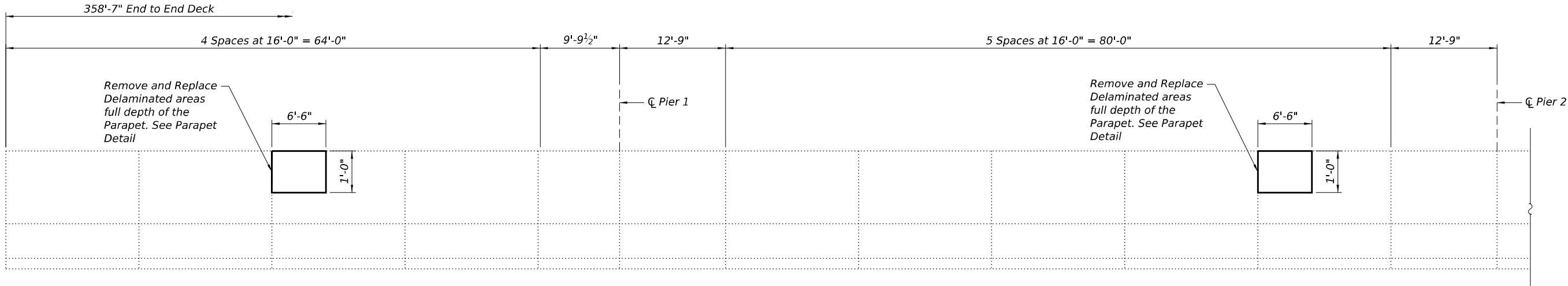
ITEM	UNIT	QUANTITY
Concrete Superstructure	Cu Yd	0.6
Bridge Deck Grooving	Sq Yd	1,053
Protective Coat	Sq Yd	1,428
Inlet to be Adjusted	Each	4
Controlled Low-Strength Material	Cu Yd	14
Surface Filler (Special)	Gallon	1
Protective Coat (Special)	Sq Yd	535
Bridge Deck Scarification 3/4"	Sq Yd	1,411
Bridge Deck Microsilica Concrete Overlay, 2 3/4 Inches	Sq Yd	1,411



Notes:

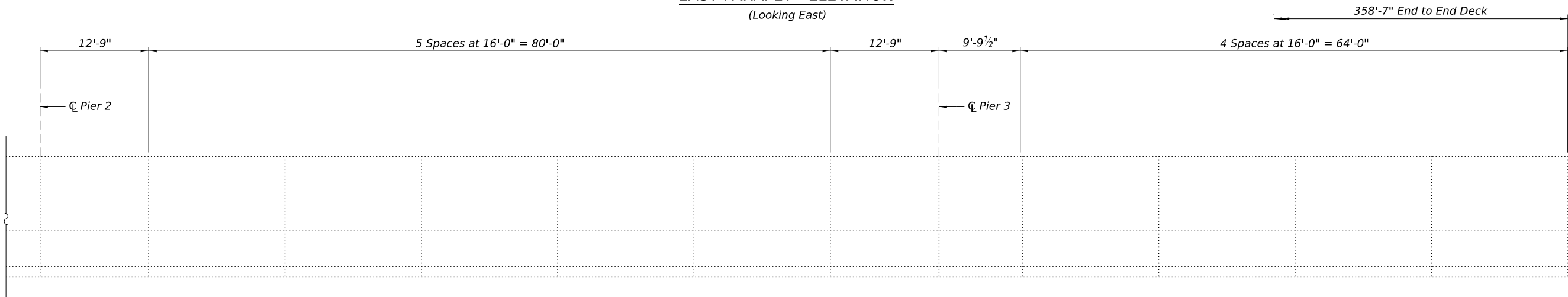
- All structural steel shall be AASHTO M270 Grade 36. The adjusting inlet ring and adjusting scupper ring shall be galvanized.
- All dimensions shall be field measured, verified, and adjusted as appropriate prior to shop drawings preparation. Contractor shall mark red line as-built plans.
- Shop drawings for proposed Steel  $\bar{r}$  Frame Extension shall be submitted for approval prior to fabrication.
- Contractor shall ensure that no damage is done to existing grates to be reused.
- Cost of all labor and materials necessary to remove existing grates, install Steel  $\bar{r}$  Frame Extensions and reinstall grates is included in the cost per unit each for Inlet to be Adjusted.
- Refer to Bridge Approach Pavement Drain Standard 2324 for existing details.
- Contractor to provide new grates if existing are missing.
- Cost of new grates included in the cost per unit each for Inlet to be Adjusted.





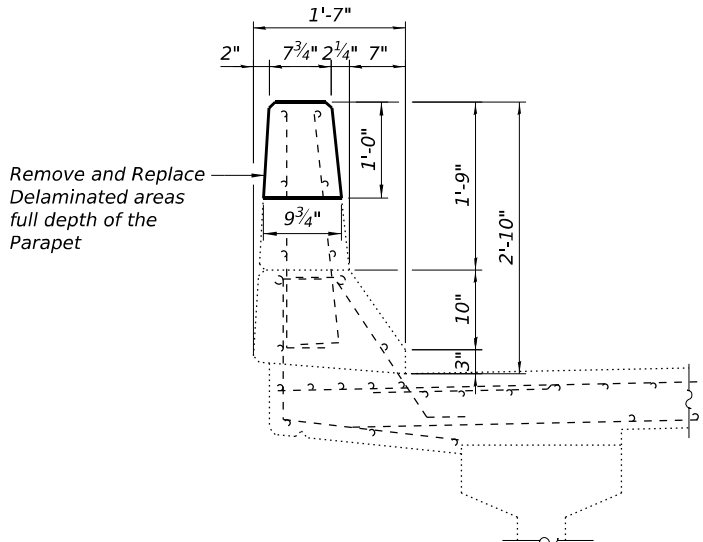
**EAST PARAPET - ELEVATION**

(Looking East)



**EAST PARAPET - ELEVATION**

(Looking East)




**PARAPET DETAIL**

**Notes:**

1. 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.

**LEGEND**

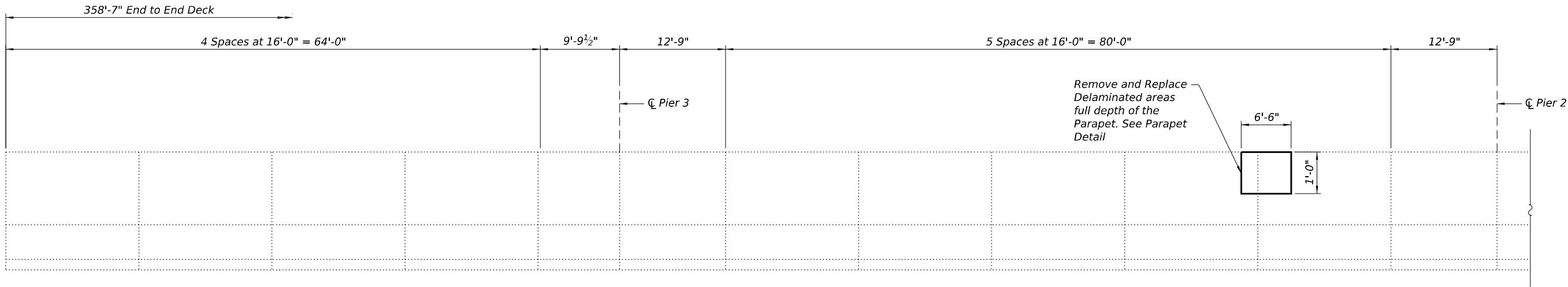
 Concrete Removal and Concrete Superstructure

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	0.4
Concrete Superstructure	Cu Yd	0.4

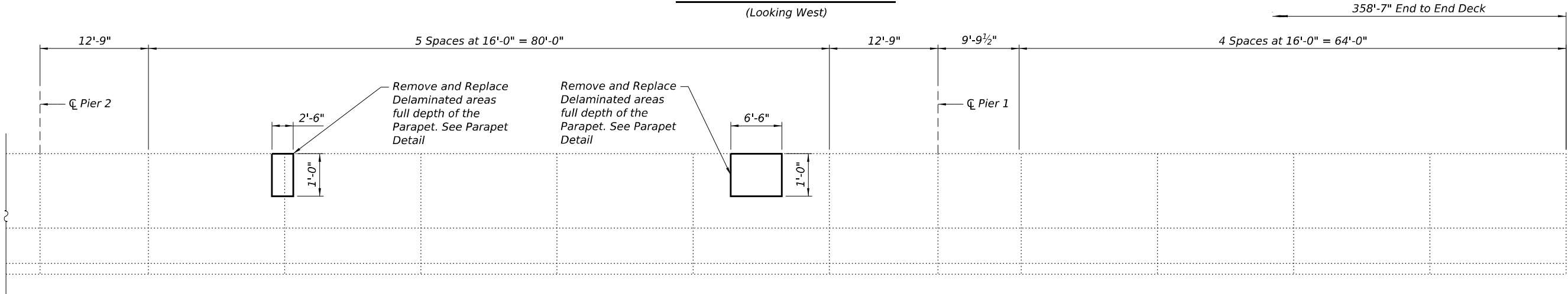
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		CHECKED - CG	REVISED -			94	1106BC-1;108(C,(VB,VC)NRS))BRR	HENDERSON	81	47
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	PLOT DATE =	CHECKED - SH	REVISED -			ILLINOIS FED. AID PROJECT				
	SHEET 7 OF 17 SHEETS									



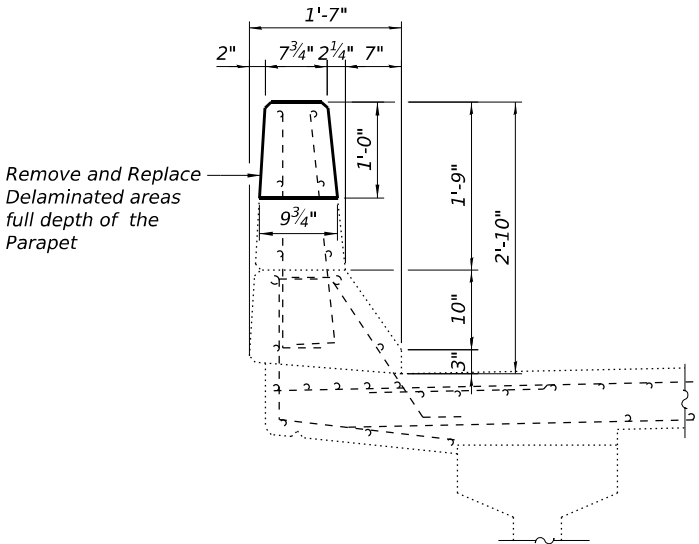
**WEST PARAPET - ELEVATION**

(Looking West)



**WEST PARAPET - ELEVATION**

(Looking West)




**PARAPET DETAIL**

**Notes:**

1. 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.

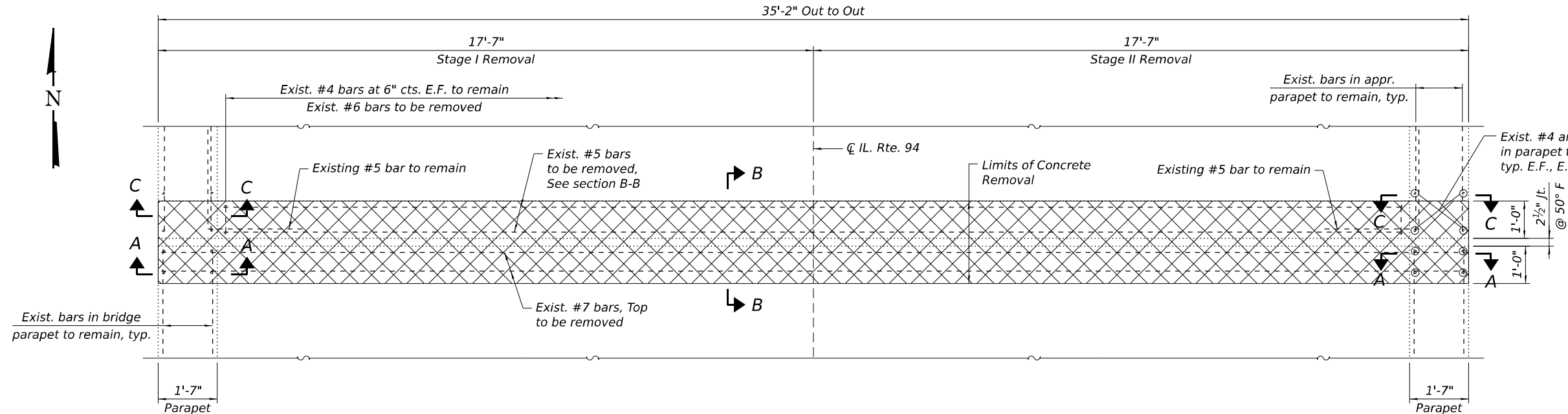
**LEGEND**

 Concrete Removal and Concrete Superstructure

**BILL OF MATERIAL**

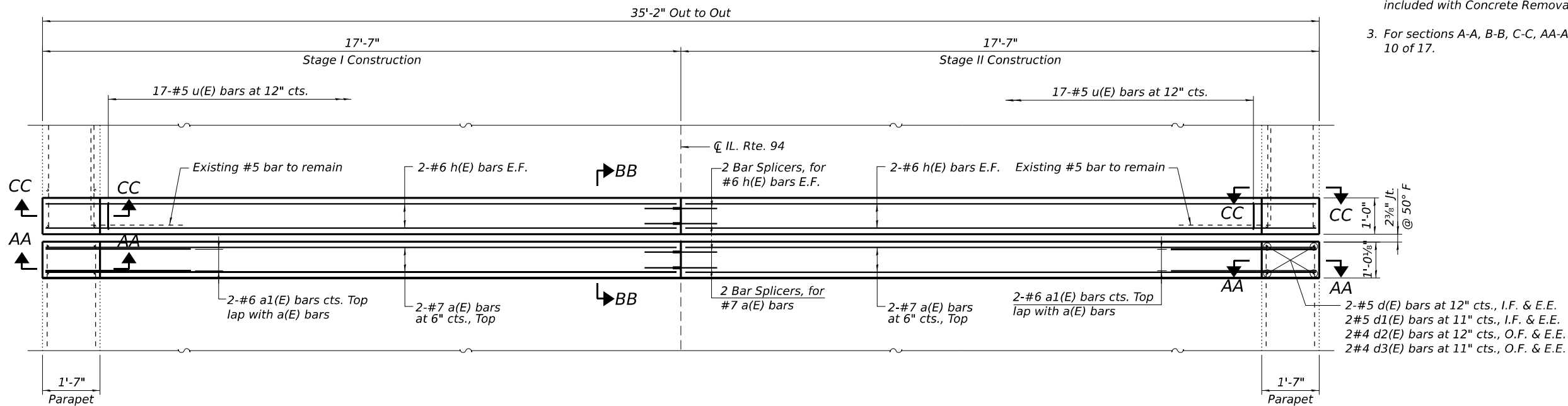
ITEM	UNIT	QUANTITY
Concrete Removal	Cu Yd	0.5
Concrete Superstructure	Cu Yd	0.5

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NORTH ABUTMENT JOINT REMOVAL PLAN

- Notes:
- Any reinforcement bars that are to remain that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
  - Existing longitudinal and vertical reinforcement bars remaining and extending into the removal areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
  - For sections A-A, B-B, C-C, AA-AA, BB-BB and CC-CC, see sheet 10 of 17.



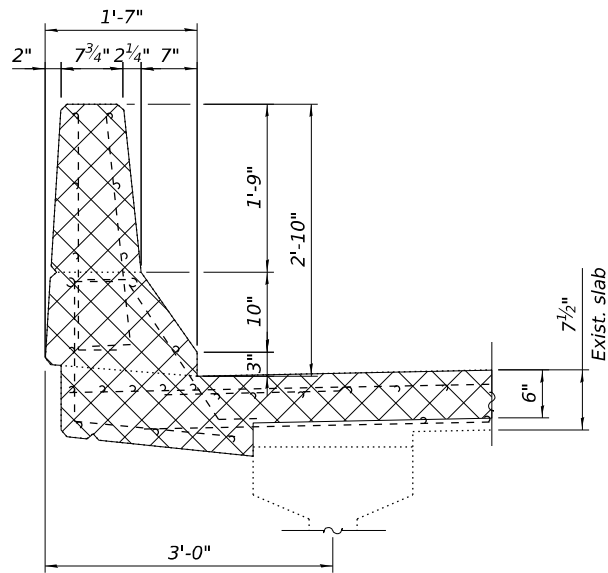
NORTH ABUTMENT JOINT RECONSTRUCTION PLAN

**LEGEND**

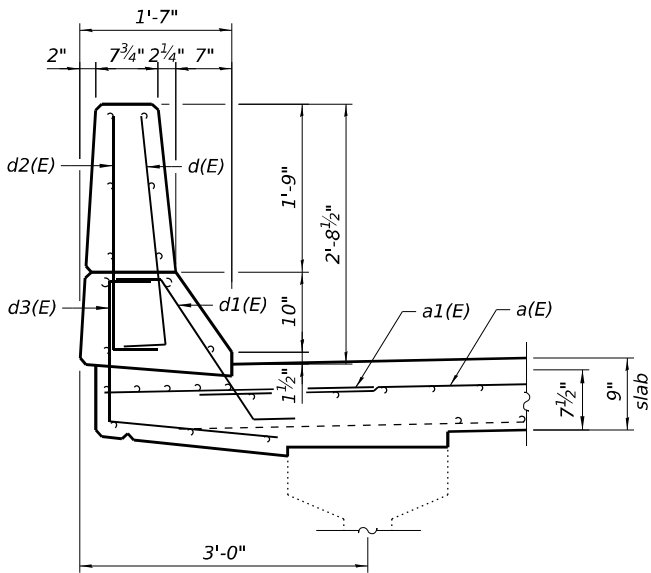
 Concrete Removal

I.F. Inside Face  
O.F. Outside Face  
E.E. Each End  
E.F. Each Face

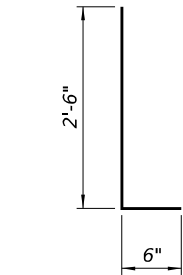
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SECTION A-A

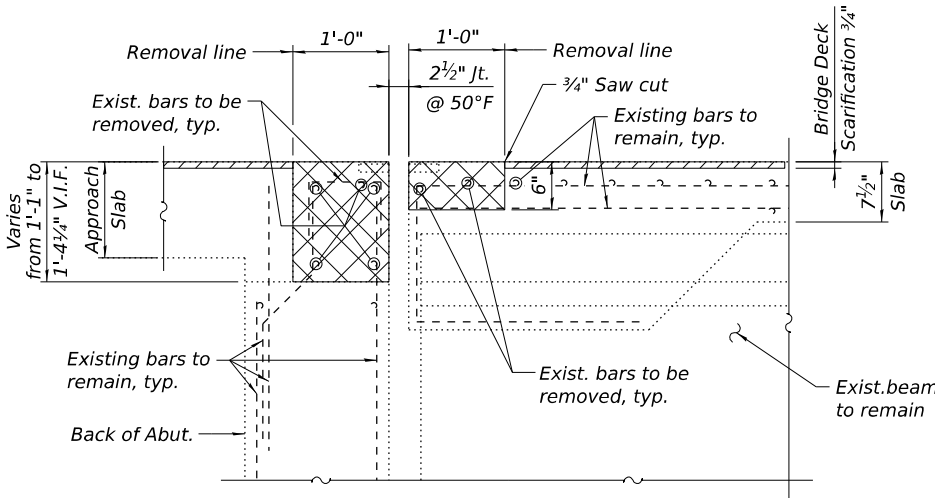


SECTION AA-AA

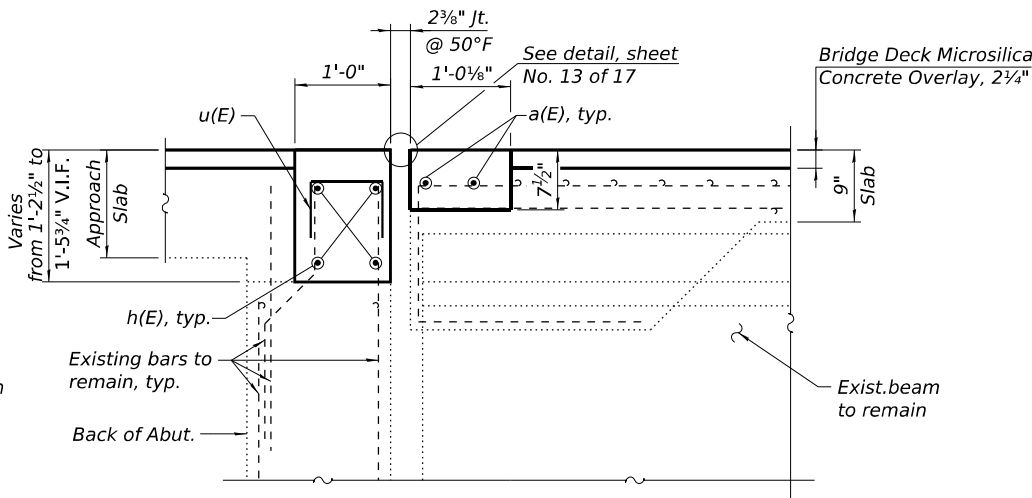


BARS d(E) & d2(E)

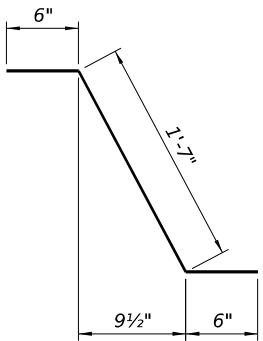
BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a(E)	4	#7	17'-3"	—
a1(E)	4	#6	6'-6"	—
d(E)	4	#5	3'-0"	┐
d1(E)	4	#5	2'-7"	┐
d2(E)	4	#4	3'-0"	┐
d3(E)	4	#4	3'-1"	┐
h(E)	8	#6	17'-3"	—
u(E)	34	#5	1'-11"	┐
Concrete Removal			Cu. Yd.	2.7
Concrete Superstructure			Cu. Yd.	3.2
Reinforcement Bars, Epoxy Coated			Pound	490



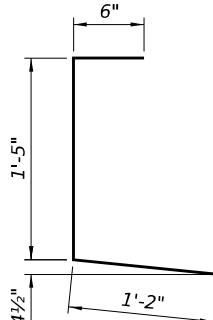
SECTION B-B



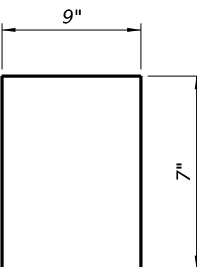
SECTION BB-BB



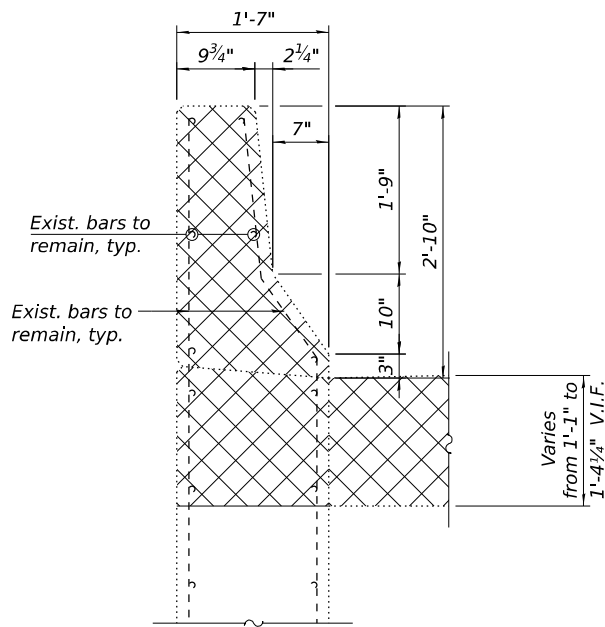
BAR d1(E)



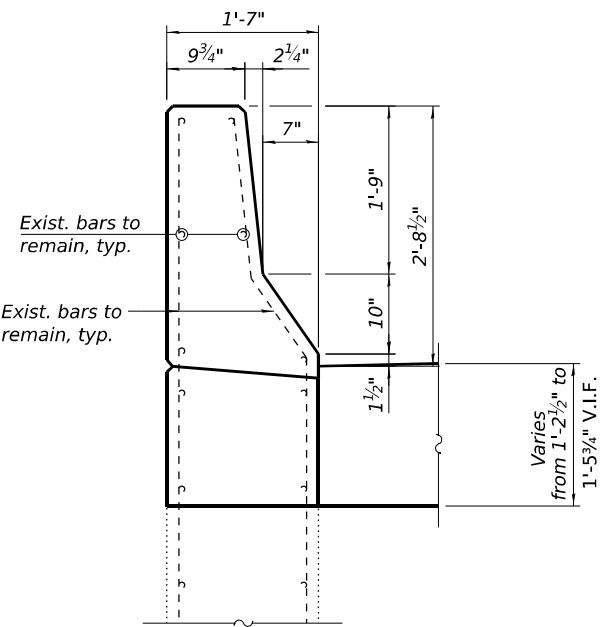
BAR d3(E)



BAR u(E)



SECTION C-C



SECTION CC-CC

- Notes:
- For Preformed Joint Strip Seal details, see sheet 13 of 17.
  - For Bar Splicer Assembly details, see sheet 16 of 17.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.
  - Removal of Existing Expansion Joint will not be paid for separately but will be included in the cost of Concrete Removal.

LEGEND

	Concrete Removal
I.F.	Inside Face
O.F.	Outside Face
E.E.	Each End
E.F.	Each Face

MODEL: Default  
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**GRAEF**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-082

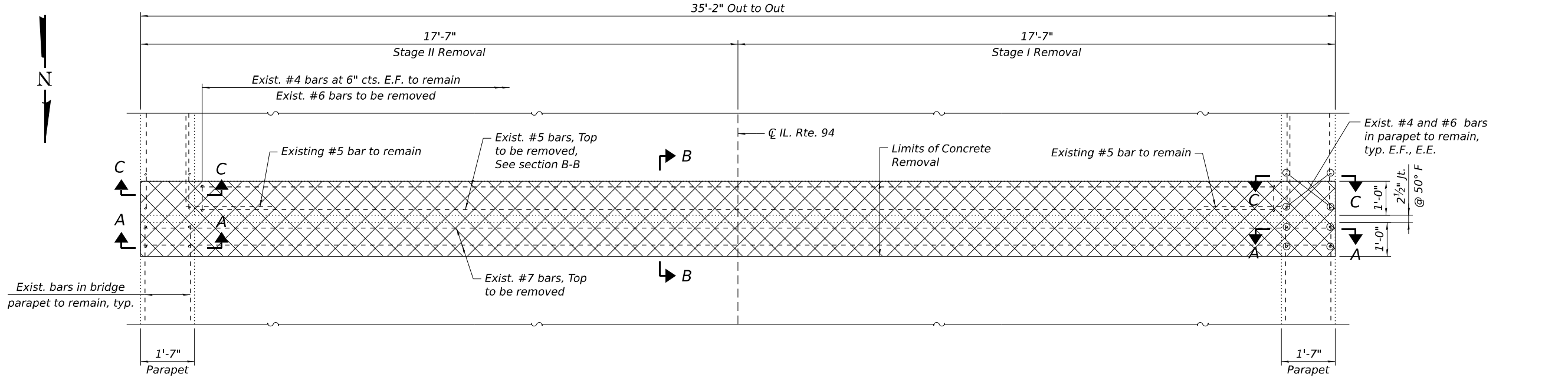
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PLOT SCALE =	CHECKED - CG	REVISED -
PLOT DATE =	DRAWN - DCP	REVISED -
	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT EXPANSION JOINT DETAILS II  
STRUCTURE NO. 036-0043

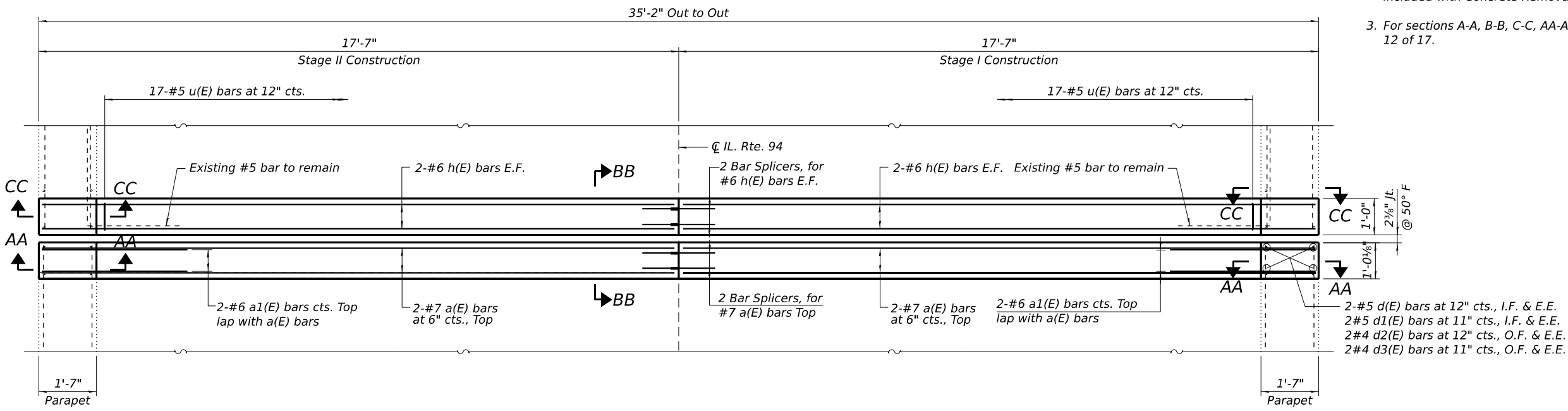
SHEET 10 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	106BC-1;108(C,(VB,VC)NRS)BRR	HENDERSON	81	50
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



**SOUTH ABUTMENT JOINT REMOVAL PLAN**

- Notes:
- Any reinforcement bars that are to remain that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
  - Existing longitudinal and vertical reinforcement bars remaining and extending into the removal areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
  - For sections A-A, B-B, C-C, AA-AA, BB-BB and CC-CC, see sheet 12 of 17.

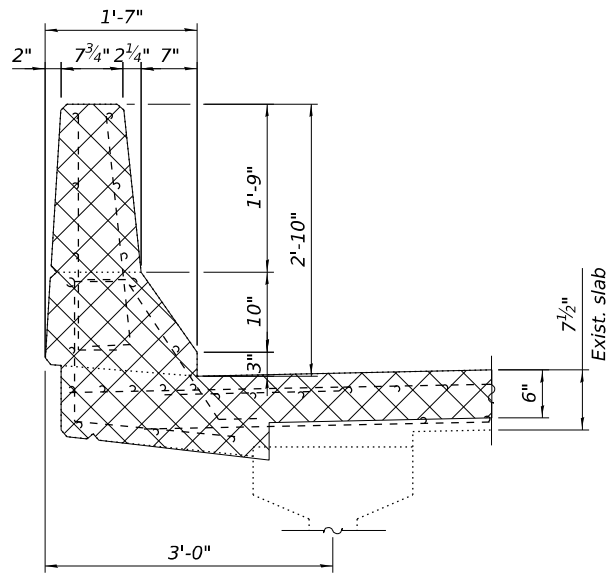


**SOUTH ABUTMENT JOINT RECONSTRUCTION PLAN**

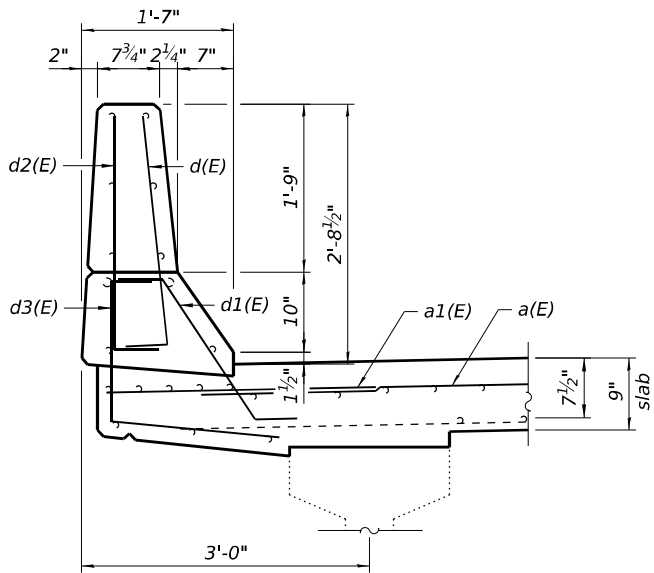
**LEGEND**

- Concrete Removal
- I.F. Inside Face  
O.F. Outside Face  
E.E. Each End  
E.F. Each Face

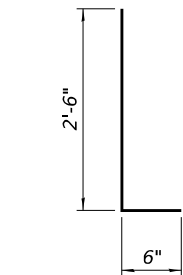
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SECTION A-A



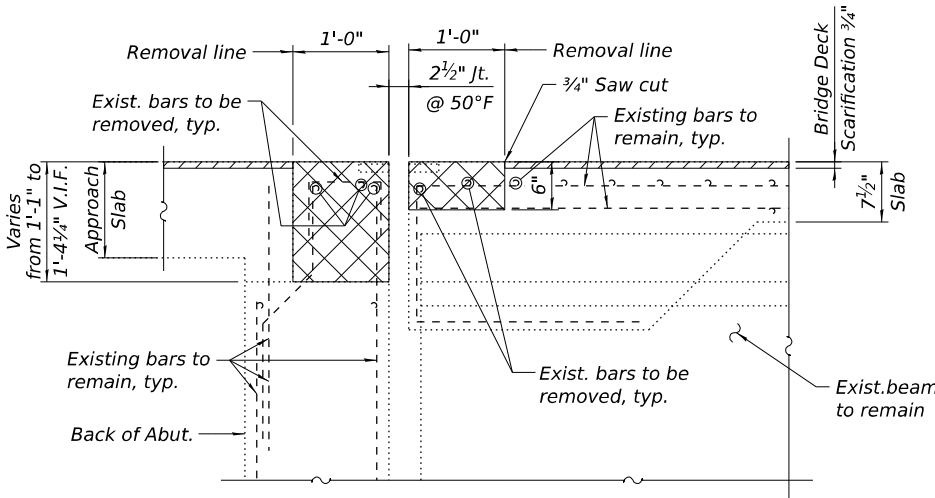
SECTION AA-AA



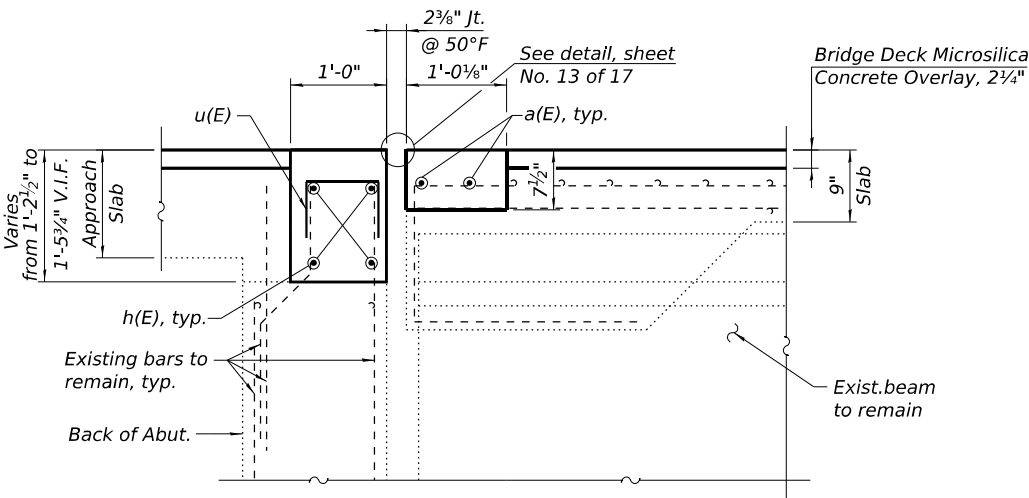
BARS d(E) & d2(E)

**BILL OF MATERIAL**

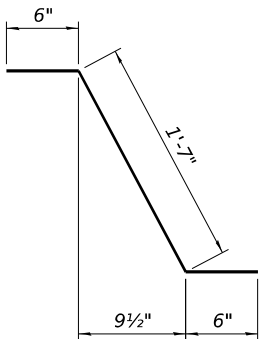
Bar	No.	Size	Length	Shape
a(E)	4	#7	17'-3"	—
a1(E)	4	#6	6'-6"	—
d(E)	4	#5	3'-0"	┐
d1(E)	4	#5	2'-7"	┐
d2(E)	4	#4	3'-0"	┐
d3(E)	4	#4	3'-1"	┐
h(E)	8	#6	17'-3"	—
u(E)	34	#5	1'-11"	┐
Concrete Removal			Cu. Yd.	2.7
Concrete Superstructure			Cu. Yd.	3.2
Reinforcement Bars, Epoxy Coated			Pound	490



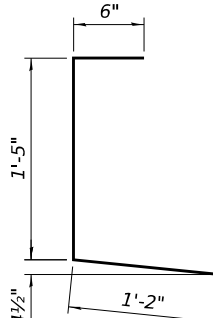
SECTION B-B



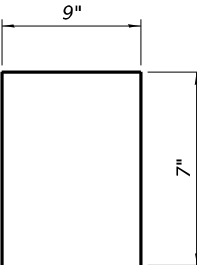
SECTION BB-BB



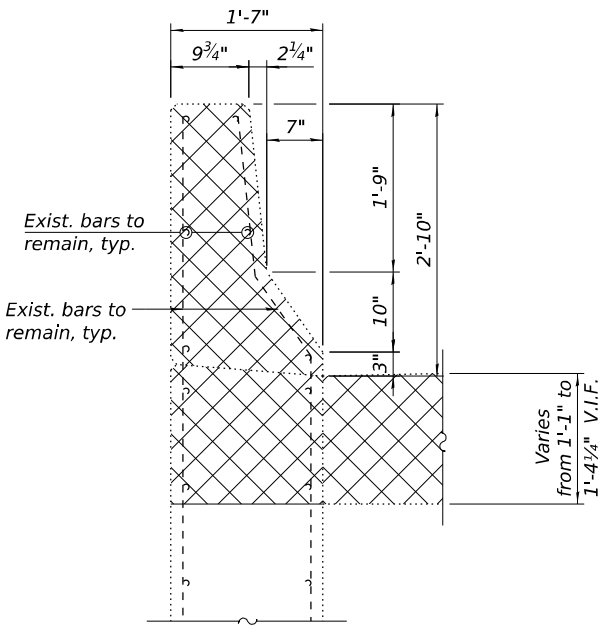
BAR d1(E)



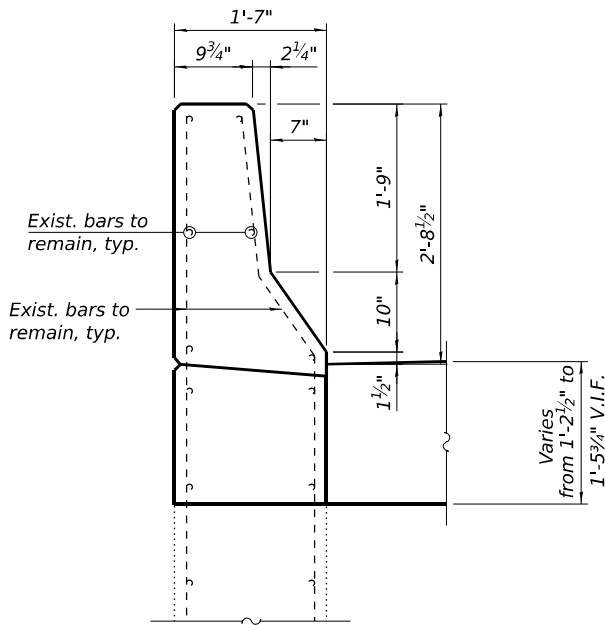
BAR d3(E)



BAR u(E)



SECTION C-C



SECTION CC-CC

- Notes:
- For Preformed Joint Strip Seal details, see sheet 13 of 17.
  - For Bar Splicer Assembly details, see sheet 16 of 17.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.
  - Removal of Existing Expansion Joint will not be paid for separately but will be included in the cost of Concrete Removal.

**LEGEND**

	Concrete Removal
I.F.	Inside Face
O.F.	Outside Face
E.E.	Each End
E.F.	Each Face

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**GRÄEF**  
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Chicago, Illinois 60634 (773) 399-082

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PLOT SCALE =	CHECKED - CG	REVISED -
PLOT DATE =	DRAWN - DCP	REVISED -
	CHECKED - SH	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT EXPANSION JOINT DETAILS II  
STRUCTURE NO. 036-0043**

SHEET 12 OF 17 SHEETS

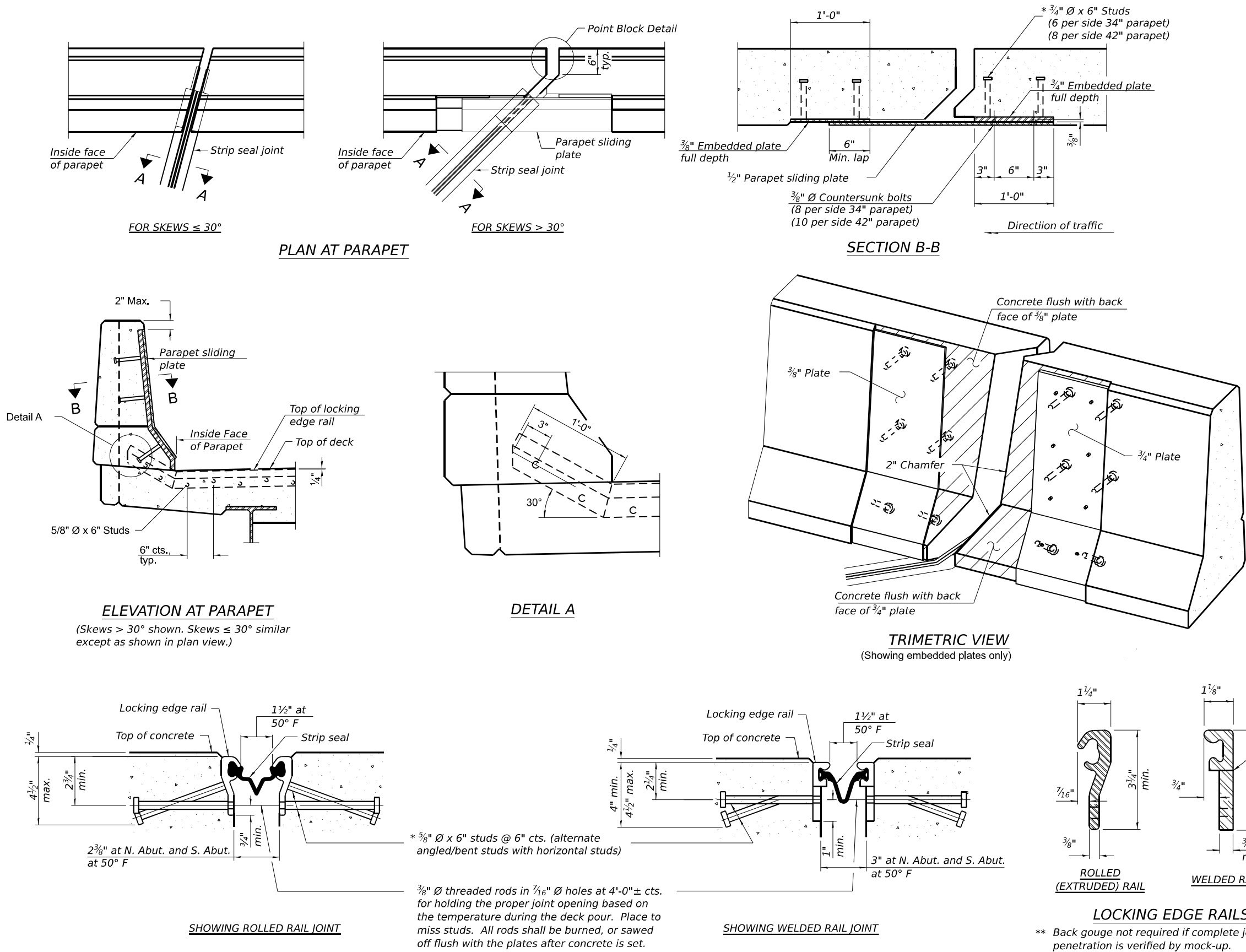
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94	1106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	52
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

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PLOT DATE =	CHECKED - SH	REVISED -

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBRR	HENDERSON	81	53
				CONTRACT NO. 68J12
				ILLINOIS FED. AID PROJECT



Notes:

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". 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  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

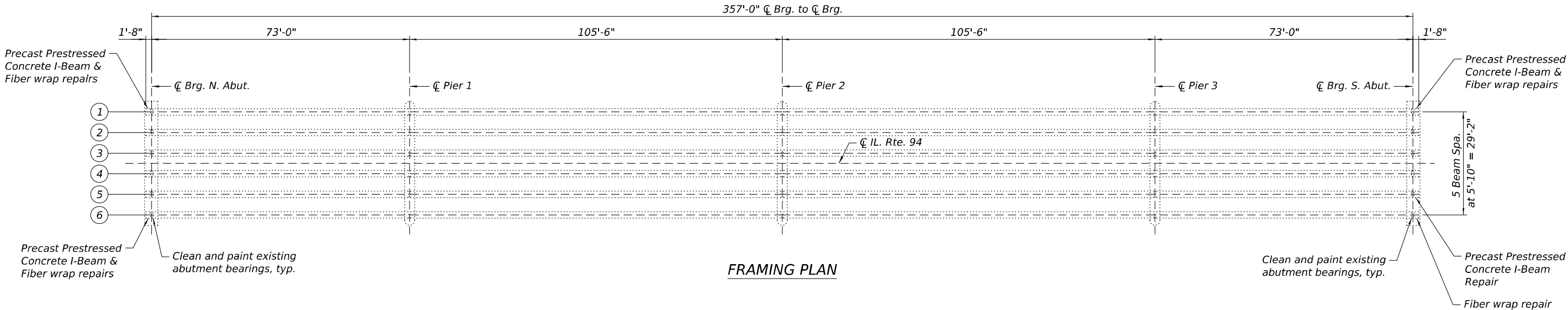
The manufacturer's recommended installation methods shall be followed.

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

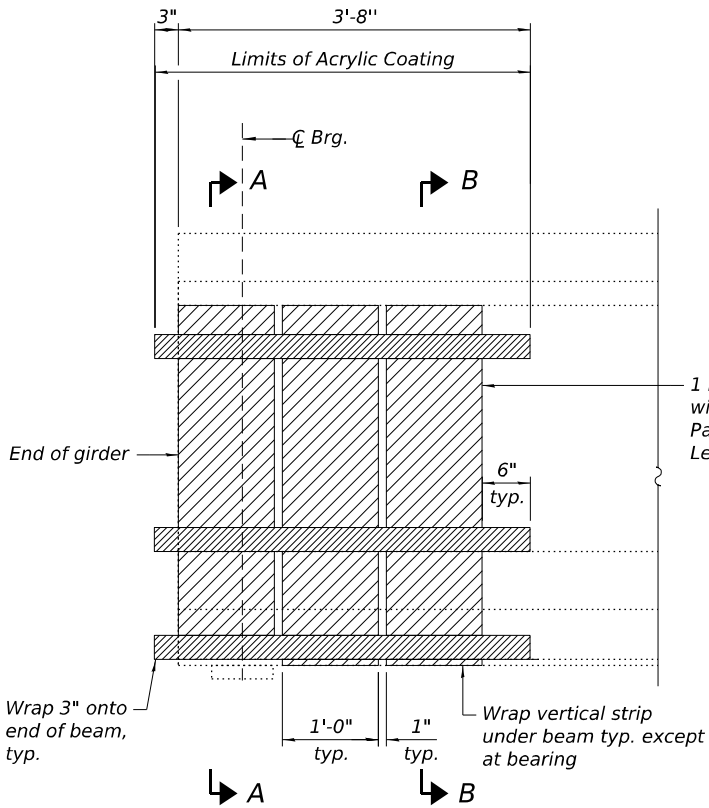
The Maximum space between locking edge rail segments shall be  $c$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

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

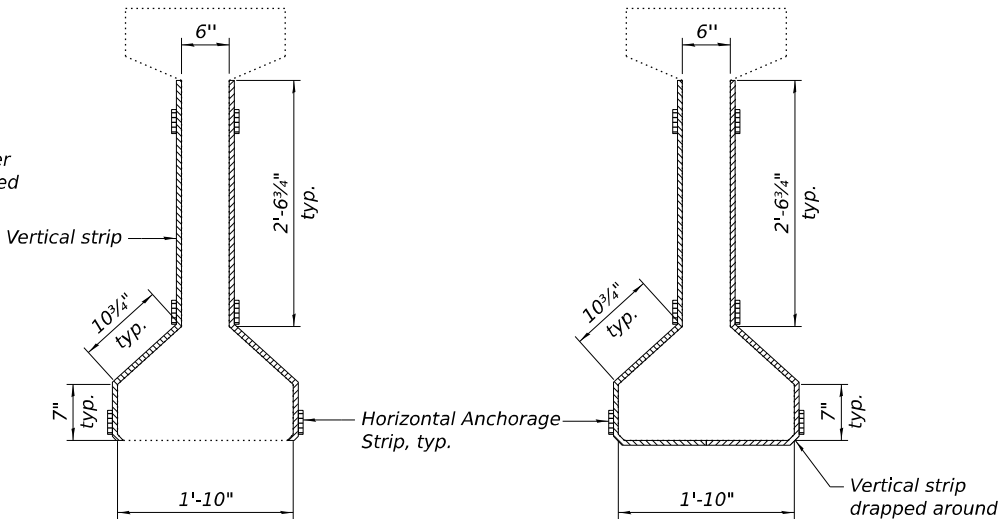
34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on 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.



FRAMING PLAN

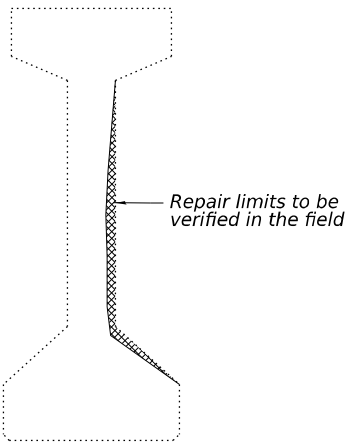


FIBER WRAP REPAIR DETAIL  
(Beam 1 and 6 both abutments)



SECTION A-A

SECTION B-B



PPCI-BEAM END REPAIR DETAIL

Location of PPC I-Beam Repair	Estimated Repair Area
South Abutment Beam 1	3 Sq Ft
South Abutment Beam 5	1 Sq Ft
North Abutment Beam 1	1 Sq Ft
North Abutment Beam 6	1 Sq Ft

LEGEND

- Fiber Wrap Repair
- Horizontal Anchorage Strip
- Precast Prestressed Concrete I-Beam Repair

Notes:

- See Sheet 15 of 17 for bearing details.
- Quantities and limits of repairs shown are estimated for bidding purposes only. The actual areas to be repaired, will be determined by the engineer in the field at the time of construction.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Acrylic Coating	Sq Yd	16
Fiber Wrap	Sq Ft	143
Cleaning and Painting Bearings	Each	12
Precast Prestressed Concrete I-Beam Repair	Sq Ft	6

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**GR&E**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-0182

USER NAME =	DESIGNED - JTB	REVISED -
	CHECKED - CG	REVISED -
PLOT SCALE =	DRAWN - DCP	REVISED -
PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN AND PPC I-BEAM REPAIRS  
STRUCTURE NO. 036-0043

SHEET 14 OF 17 SHEETS

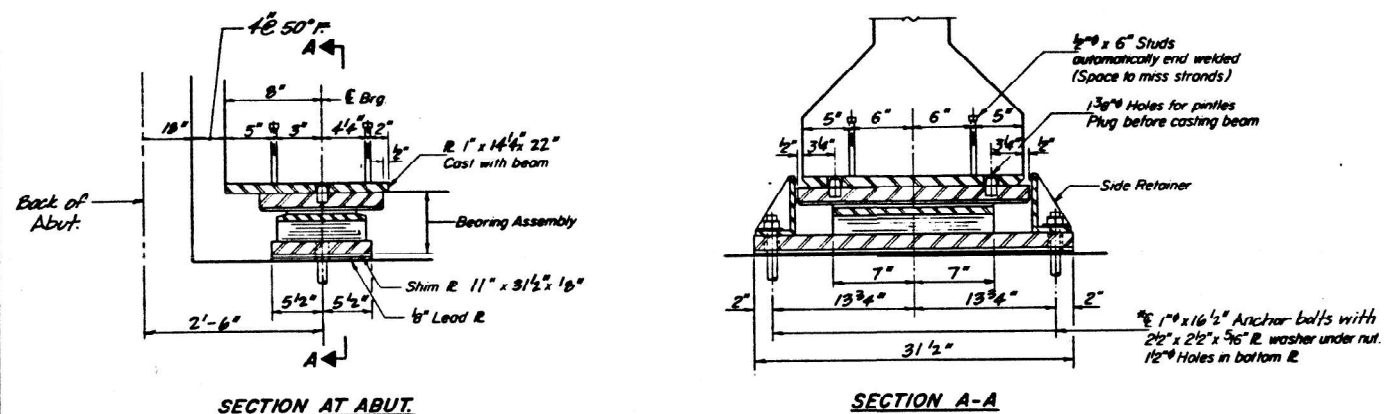
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



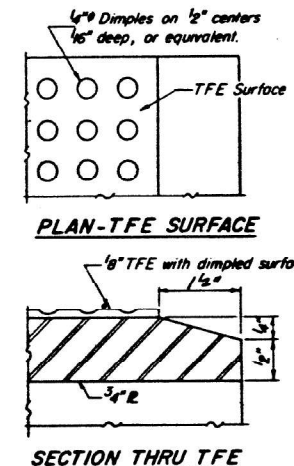
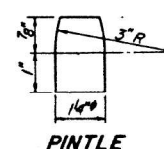
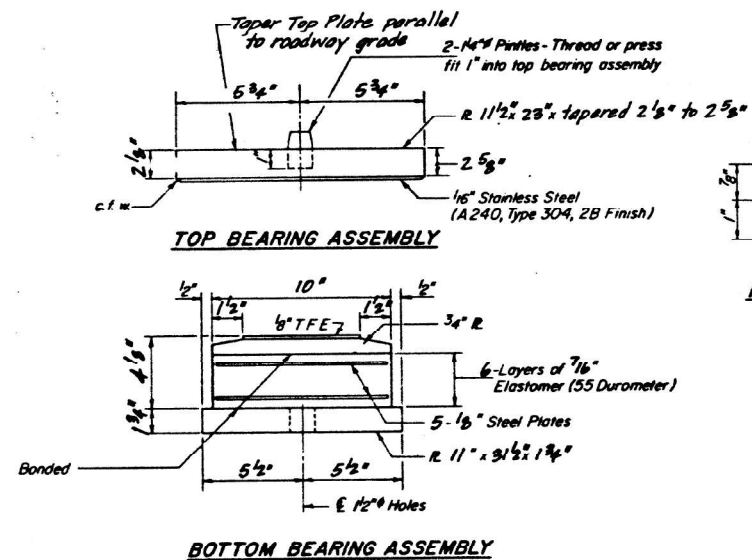
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.L. 94 P.A. 1412	(106B-1)BR	HENDERSON	69	34
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 9  
SHEETS 19



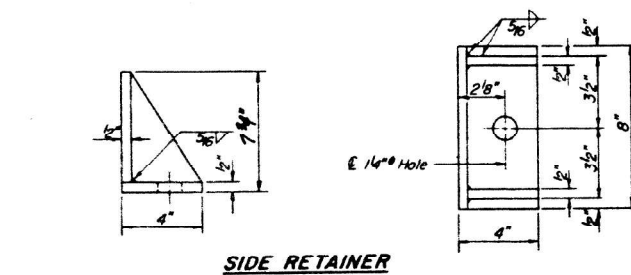
TYPE II TFE ELASTOMERIC EXP. BRG.



Note: After beams have been erected holes of expansion bearings shall be drilled and anchor bolts grouted in place. See Sheet #19 for anchor bolt installation.

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

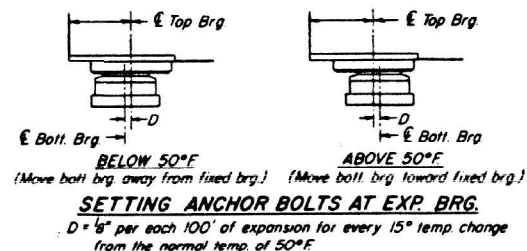
Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



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

DESIGNED	P.J.L.	EXAMINED	
CHECKED		PASSED	
DRAWN	L.T.W.	APPROVED	
CHECKED	P.J.L.		

PI-2E-2 12-31-85



FOR INFORMATION ONLY

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	12

ELASTOMERIC BEARINGS AT BOTH ABUTMENTS

ILLINOIS ROUTE 94 OVER  
HENDERSON CREEK  
F.A.S. RTE. 1412 SECTION (106B-1)BR  
HENDERSON COUNTY  
STA. 359+01.30  
STRUCTURE NUMBER 036-0043

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

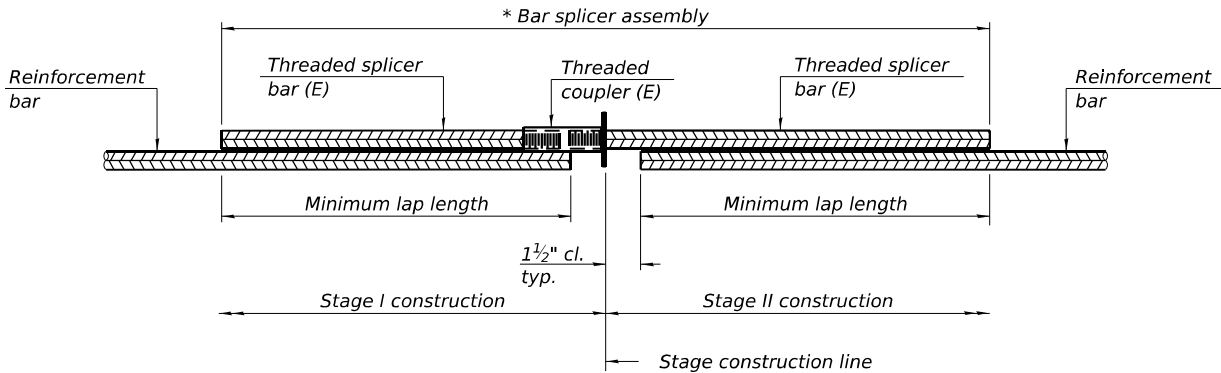
BEARING DETAILS  
STRUCTURE NO. 036-0043

SHEET 15 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	(106B-1;108(C,VB,VC)NRS)BR	HENDERSON	81	55
				CONTRACT NO. 68J12

ILLINOIS FED. AID PROJECT

USER NAME =	DESIGNED - JTB	REVISED -
PLOT SCALE =	CHECKED - CG	REVISED -
PLOT DATE =	DRAWN - DCP	REVISED -
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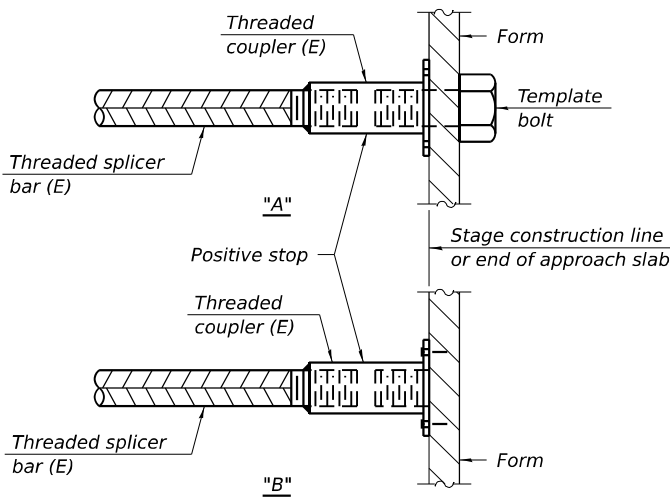
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1½" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
North Abutment	#6	4	3'-7"
Exp. Jt.	#7	2	4'-8"
South Abutment	#6	4	3'-7"
Exp. Jt.	#7	2	4'-8"

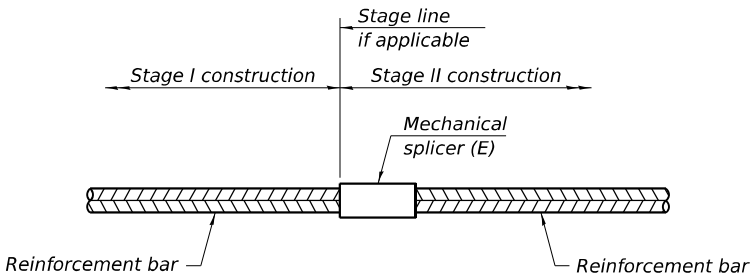


INSTALLATION AND SETTING METHODS

"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.

BSD-1

5-15-2023

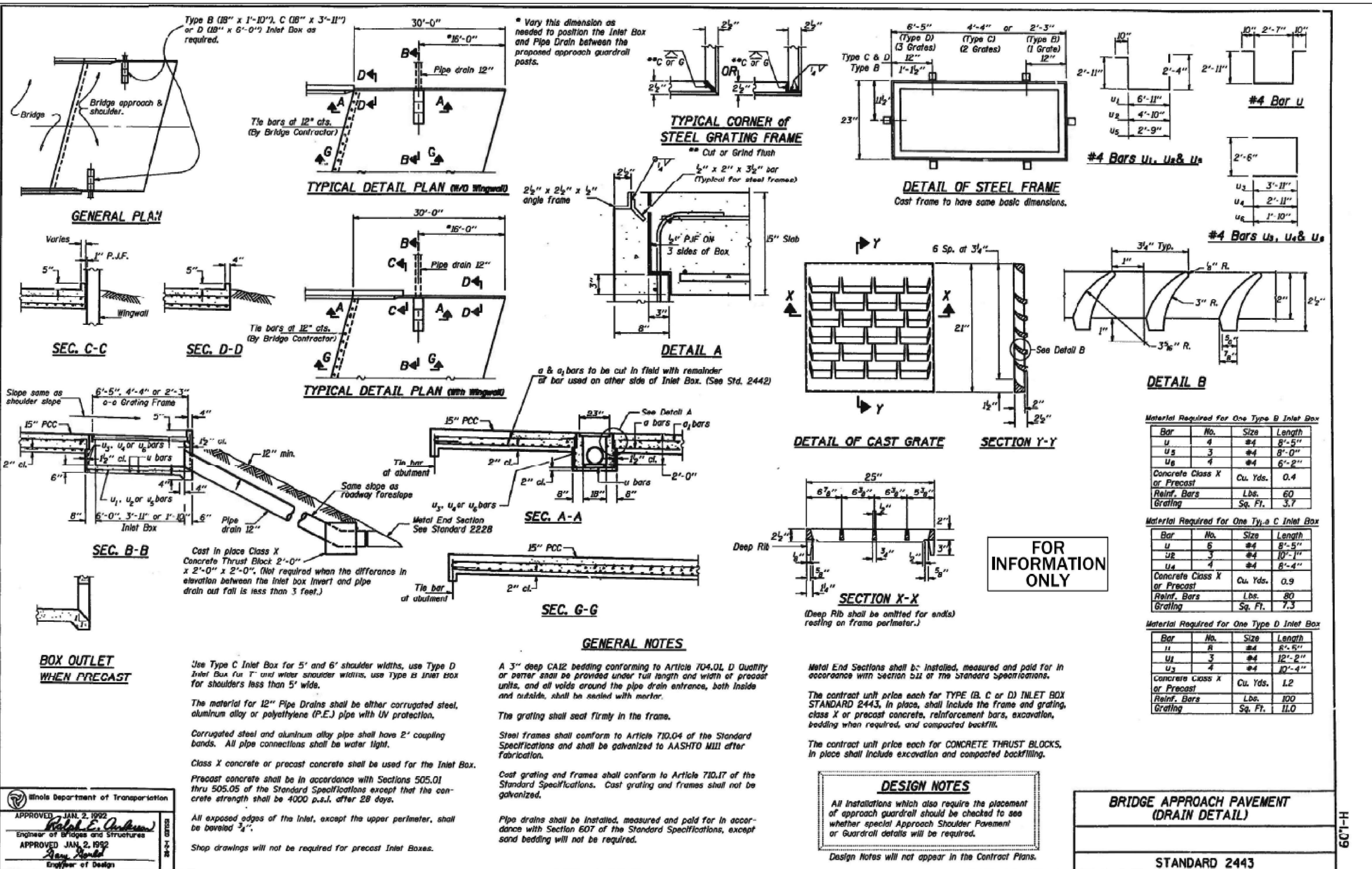
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 036-0043

SHEET 16 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBRR	HENDERSON	81	56
		CONTRACT NO. 68J12		
		ILLINOIS	FED. AID PROJECT	

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Illinois Department of Transportation  
APPROVED JAN. 2, 1992  
Engineer of Bridges and Structures  
APPROVED JAN. 2, 1992  
Engineer of Design

GR&E 8501 W. Higgins Road, Suite 280 Chicago, Illinois 60634 (773) 399-0082	USER NAME =	DESIGNED - JTB	REVISED -
	PLOT SCALE =	CHECKED - CG	REVISED -
	PLOT DATE =	DRAWN - DCP	REVISED -
		CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS REFERENCE SHEET  
STRUCTURE NO. 036-0043  
SHEET 17 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,VB,VC)NRS)BRR	HENDERSON	81	57
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

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Existing Description: SN 036-0047 was originally built in 1995. The structure has a back-to-back length of 432'-8" and an out-to-out width of 35'-2". The superstructure consists of a 7½" thick reinforced concrete slab supported on five-span continuous 48" PPC I-beams of span lengths 84'-7", 86'-0", 86'-0", 86'-0" and 84'-7". The substructure consists of reinforced concrete abutments founded on steel h-piles and solid wall piers supported on drilled caissons and spread footings.

Traffic will be maintained utilizing stage construction.

NO SALVAGE:

LOADING HS20-44

Existing and Proposed

DESIGN SPECIFICATIONS

1992 AASHTO Standard Specifications  
with 1993 Interims

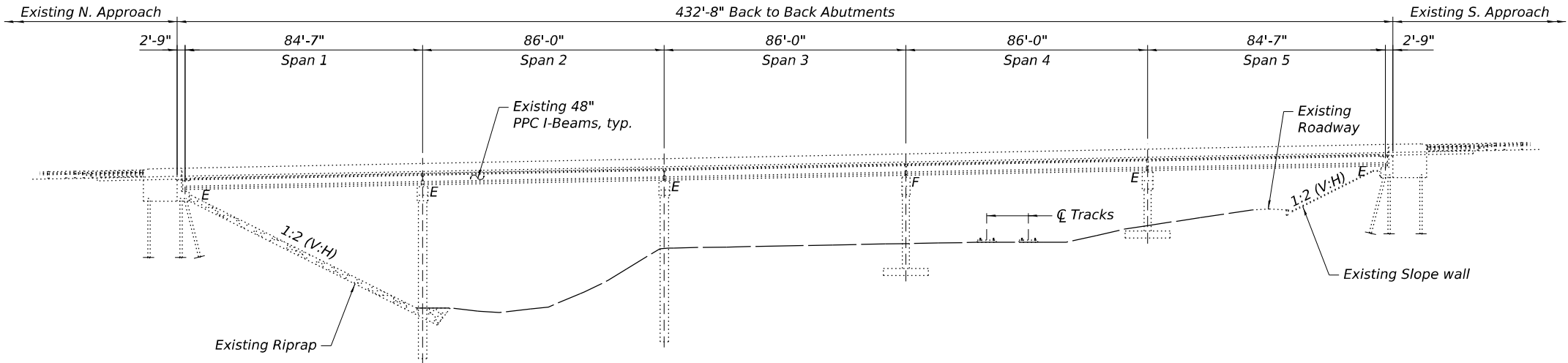
DESIGN STRESSES

FIELD UNITS (EXIST. CONST.)

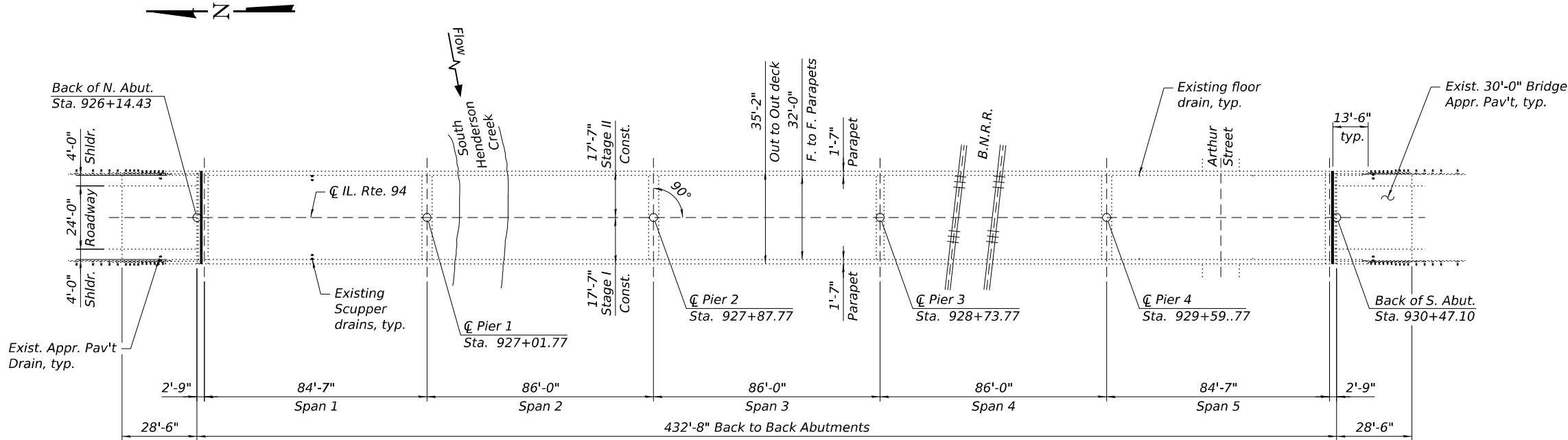
f<sub>c</sub> = 3,500 psi (Concrete)  
f<sub>c</sub> = 4,000 psi (Caissons)  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>c</sub> = 6,000 psi (PPC I-Beams)  
f<sub>ci</sub> = 5,000 psi (PPC I-Beams)  
f<sub>s</sub> = 270,000 psi (½" Ø Strands)  
f<sub>si</sub> = 201,960 psi (½" Ø Strands)

FIELD UNITS (PROP. CONST.)

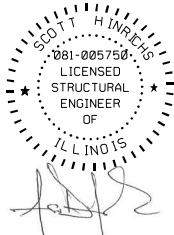
f<sub>c</sub> = 4,000 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)



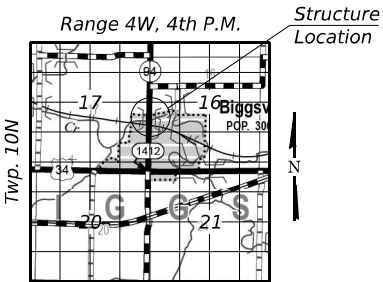
ELEVATION



PLAN



ENGINEER FULL NAME: SCOTT HINRICHS DATE: 05-02-2025  
ILLINOIS REGISTERED ENGINEER NO. 081-005750  
REGISTRATION EXPIRES 11. 30, 2026



LOCATION SKETCH

GENERAL PLAN & ELEVATION  
F.A.S. RTE. 1412 (ILL. RTE.94) OVER  
SOUTH HENDERSON CREEK AND  
BURLINGTON NORTHERN RAILROAD  
HENDERSON COUNTY  
STRUCTURE NO. 036-0047

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Chicago, Illinois 60634 (773) 399-0042

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)BRR	HENDERSON	81	58
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1.

Reinforcement bars designated (E) shall be epoxy coated.
2.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPCSP3 standards). 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 paid for according to Article 109.04 of the Standard Specifications. As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
3.

Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.
4.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system at the contractor’s expense.
5.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.
6.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
7.

The protective coat shall be applied to the top of the Microsilica Concrete Overlay after deck overlay has properly cured.
8.

The protective coat (Special) shall be applied to all surfaces of the existing parapets.
9.

Surface Filler (Special) shall be applied according to Special Provisions.
10.

The minimum thickness of concrete overlay shall be 2¼" and varies as required to adjust for the existing profile grade and beam camber.
11.

The steel components of all expansion bearings at the abutments shall be blasted and painted according to the Special Provision "Cleaning and Painting Bearings." All bearings shall be cleaned per Near White Blast Cleaning (SSPC-SP10). The designated areas cleaned per Near White Blast Cleaning (SSPC-SP10) shall be painted according to the requirements of Organic Zinc-Rich Epoxy/Urethane. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No. 5B 7/1.
12.

Containment of cleaning residue is required to control nuisance dust. See special provisions.

INDEX OF SHEETS

1.

General Plan and Elevation
2.

General Data
3.

Stage Construction Details
4.

Temporary Concrete Barrier
5.

Bridge Deck Repair Plan
6.

Drainage Adjustment Details
- 7-8.

North Abutment Expansion Joint Details I & II
- 9-10.

South Abutment Expansion Joint Details I & II
11.

Preformed Joint Strip Seal
12.

Framing Plan and PPC I-Beam Repairs
13.

Bearing Details
14.

Bar Splicer Assembly and Mechanical Splicer Details
- 15-17.

Existing Plans Reference Sheet

SCOPE OF WORK

1.

Scarify ¾” from the bridge deck and approach slabs
2.

Remove and reconstruct expansion joints at north and south abutments, and install new Preformed Joint Strip Seals.
3.

Adjust drainage inlets and scuppers.
4.

Apply a 2¼” Microsilica concrete overlay on the bridge deck and approach slabs.
5.

Perform Bridge Deck Grooving on traffic lanes.
6.

Perform concrete repairs of the approach slab curbs.
7.

Apply Protective Coat to the reconstructed transverse expansion joints and to the top of the Microsilica Concrete Overlay.
8.

Apply Protective Coat (Special) and Surface Filler (Special) to all faces of the parapets.
9.

Cleaning and Painting Bearings.
10.

Apply acrylic coating to bottom flange of exterior girder ends.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	6.4	-	6.4
Concrete Superstructure	Cu Yd	7.3	-	7.3
Bridge Deck Grooving	Sq Yd	1,305	-	1,305
Protective Coat	Sq Yd	1,746	-	1,746
Reinforcement Bars, Epoxy Coated	Pound	980	-	980
Bar Splicers	Each	12	-	12
Preformed Joint Strip Seal	Foot	68	-	68
Inlet to be Adjusted	Each	4	-	4
Acrylic Coating	Sq Yd	7	-	7
Surface Filler (Special)	Gallon	1	-	1
Protective Coat (Special)	Sq Yd	643	-	643
Cleaning and Painting Bearings	Each	10	-	10
Bridge Deck Scarification ¾"	Sq Yd	1,719	-	1,719
Bridge Deck Microsilica Concrete Overlay 2¼"	Sq Yd	1,719	-	1,719
Drainage Scuppers to be Adjusted	Each	2	-	2

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 036-0047

SHEET 2 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBRR	HENDERSON	81	59
			CONTRACT NO. 68J12	
		ILLINOIS	FED. AID PROJECT	

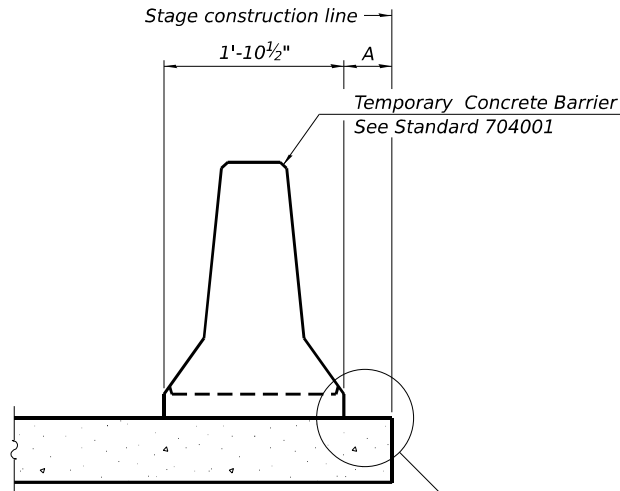
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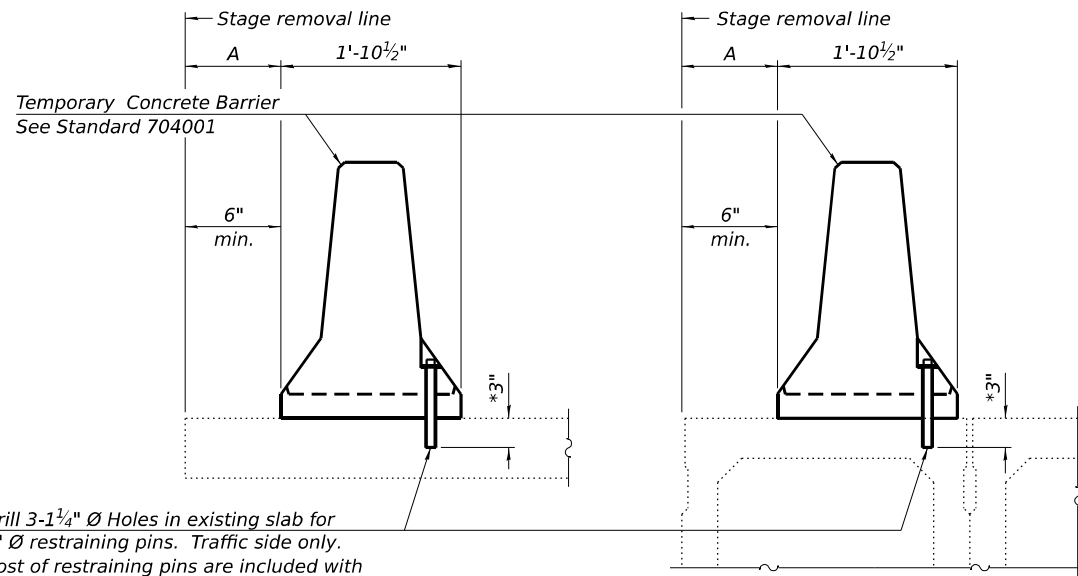


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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

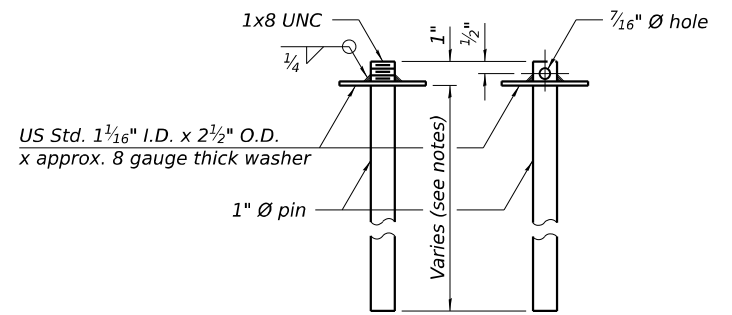


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

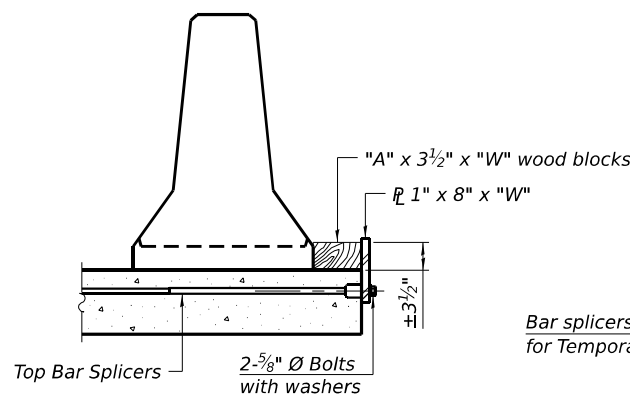
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

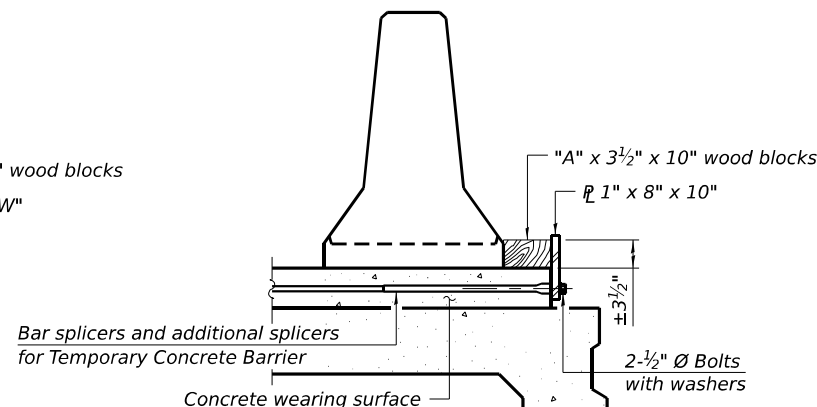


RESTRAINING PIN

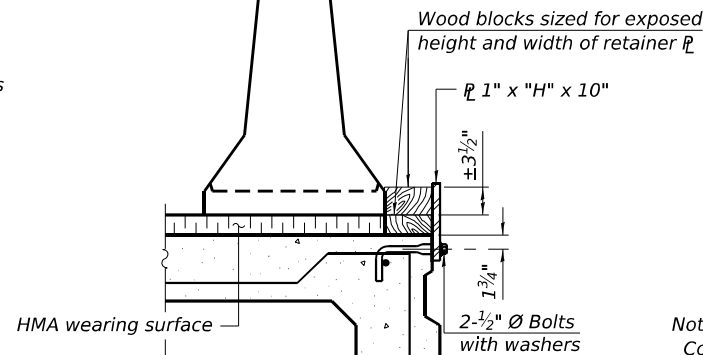
SECTIONS THRU SLAB OR DECK BEAM



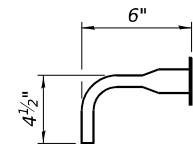
DETAIL I



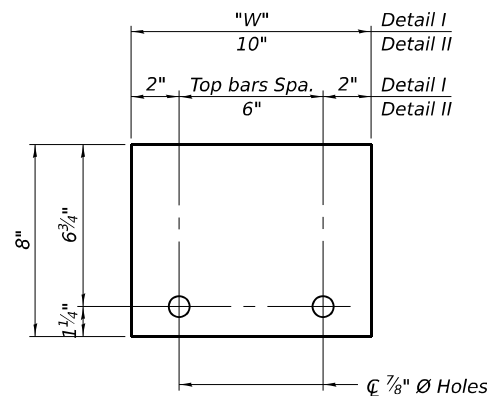
DETAIL II



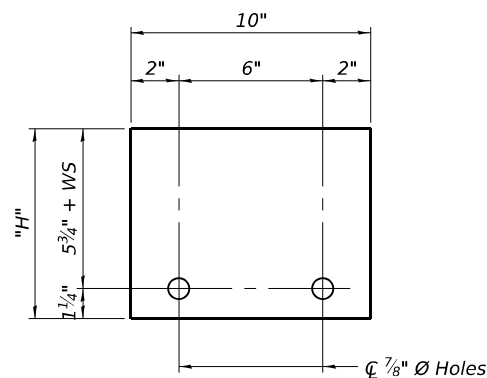
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER R 1" x 8" x "W"  
(Detail I and II)



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

Notes:  
Cost of retainer assembly is included with Temporary Concrete Barrier.  
A retainer assembly shall be located at the approximate C 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 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27

5-15-2023

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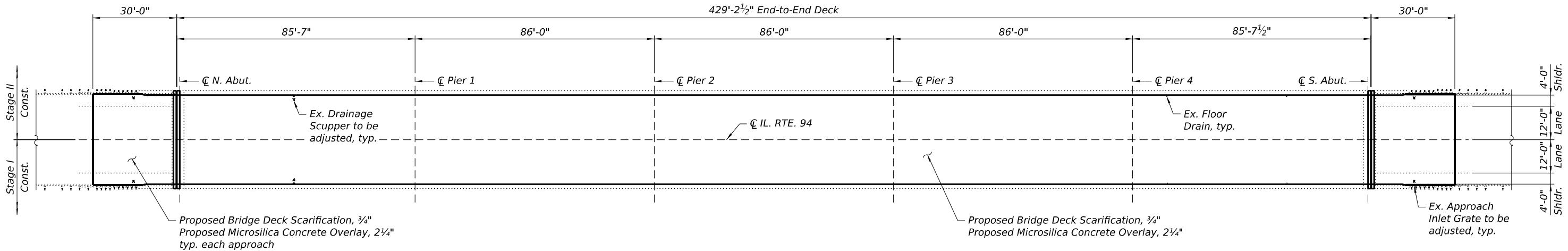
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DEPARTMENT OF TRANSPORTATION

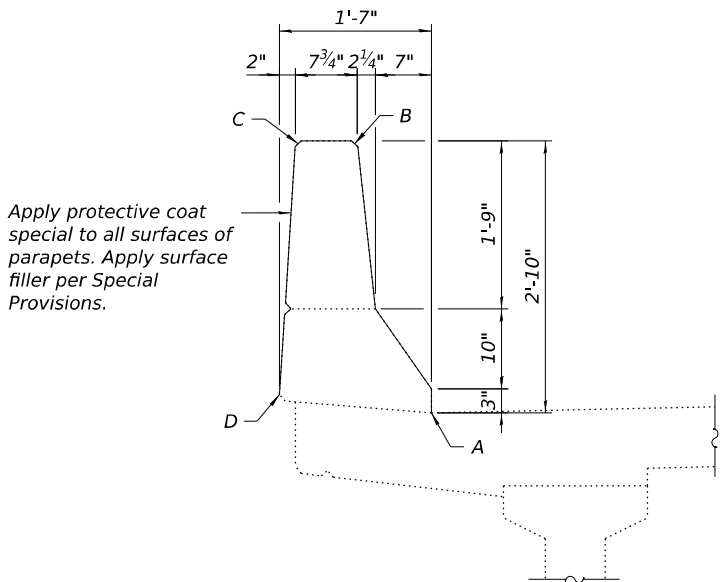
TEMPORARY CONCRETE BARRIER  
STRUCTURE NO. 036-0047

SHEET 4 OF 17 SHEETS

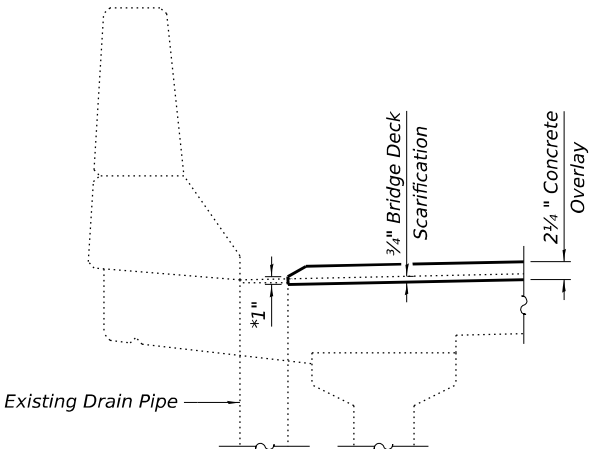
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				CONTRACT NO. 68J12
				ILLINOIS FED. AID PROJECT



PLAN

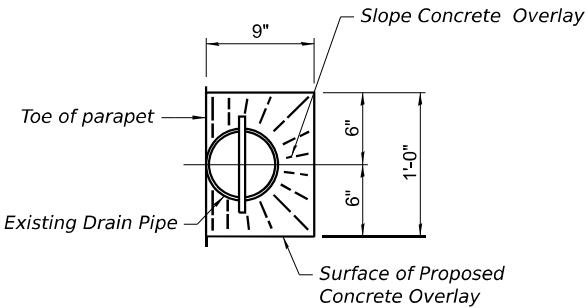


PARAPET DETAIL



FLOOR DRAIN PRESERVATION

\* Minimum thickness of overlay  
at edge of drain = 1"



TOP PLAN OF FLOOR DRAIN

- Notes:
- See Sheet 6 of 17 for drainage adjustment details.
  - Bridge approach scarification and bridge approach microsilica concrete overlay included in bridge deck scarification and microsilica concrete overlay.
  - Protective Coat (Special) to cover from point A through points B, C, and D of the parapet.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Grooving	Sq Yd	1,305
Protective Coat	Sq Yd	1,746
Inlet to be Adjusted	Each	4
Surface Filler (Special)	Gallon	1
Protective Coat (Special)	Sq Yd	643
Bridge Deck Scarification 3/4"	Sq Yd	1,719
Bridge Deck Microsilica Concrete Overlay, 2 1/4 Inches	Sq Yd	1,719
Drainage Scuppers to be Adjusted	Each	2

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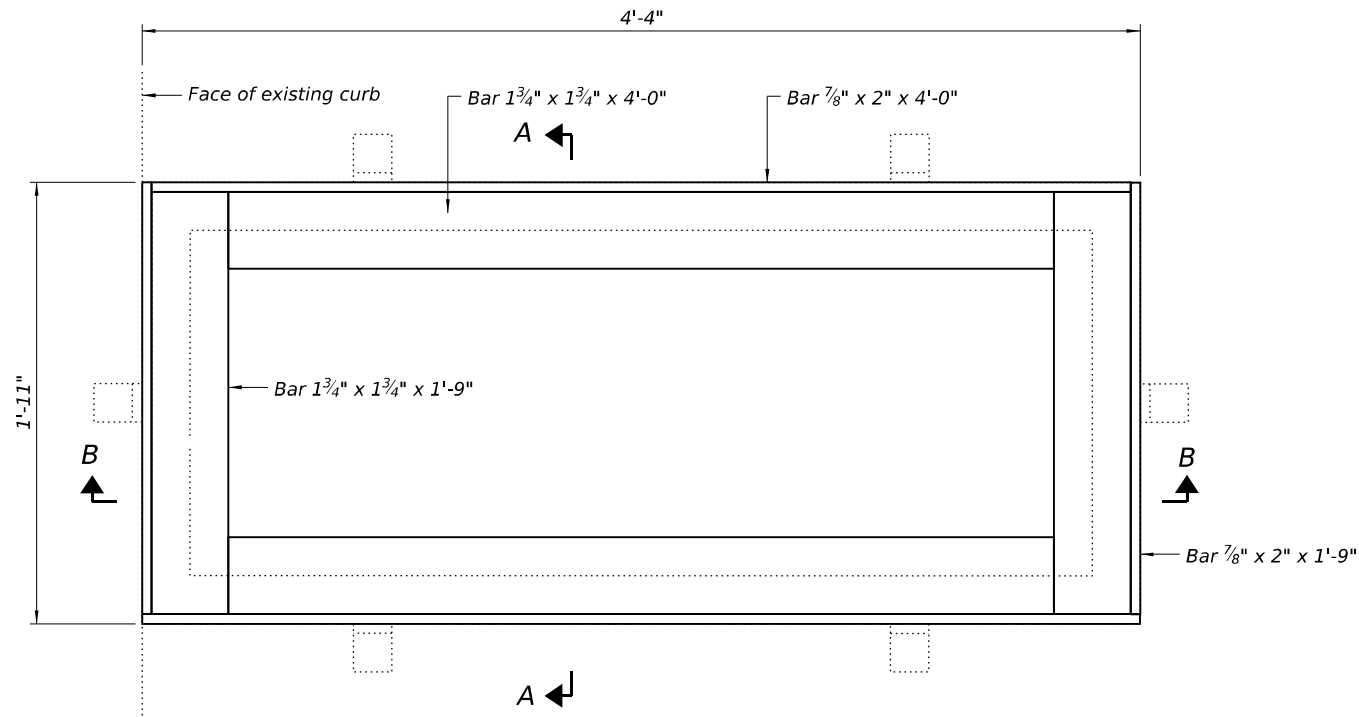
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK REPAIR PLANS  
STRUCTURE NO. 036-0047

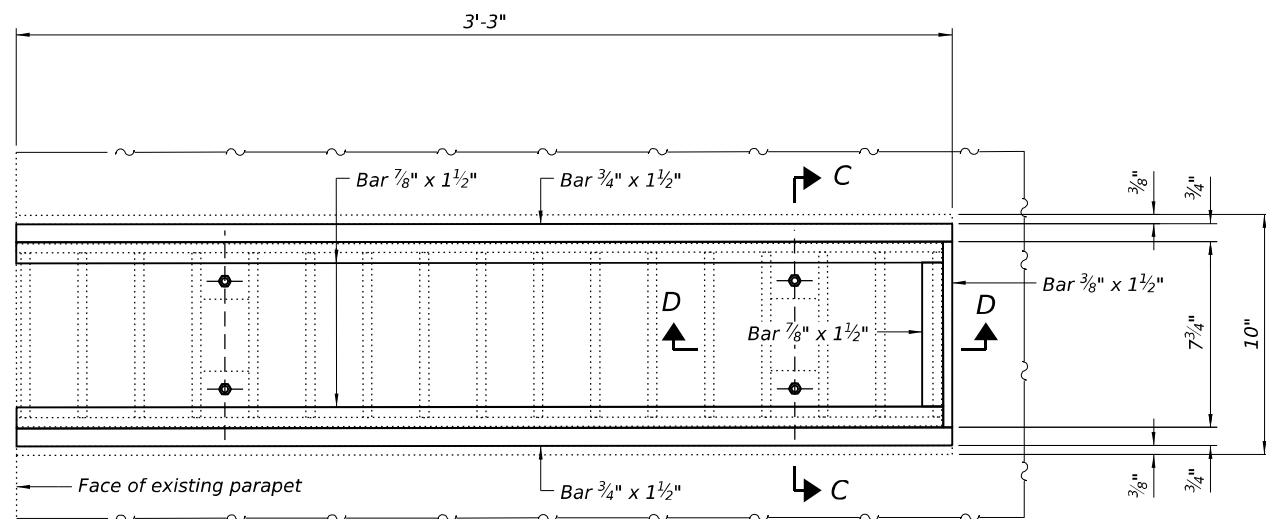
SHEET 5 OF 17 SHEETS

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				CONTRACT NO. 68J12
				ILLINOIS FED. AID PROJECT

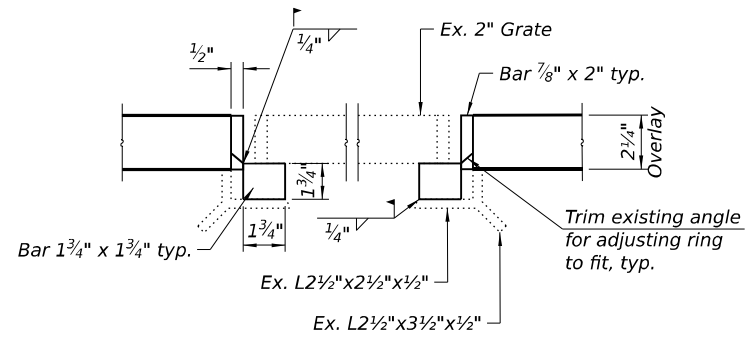




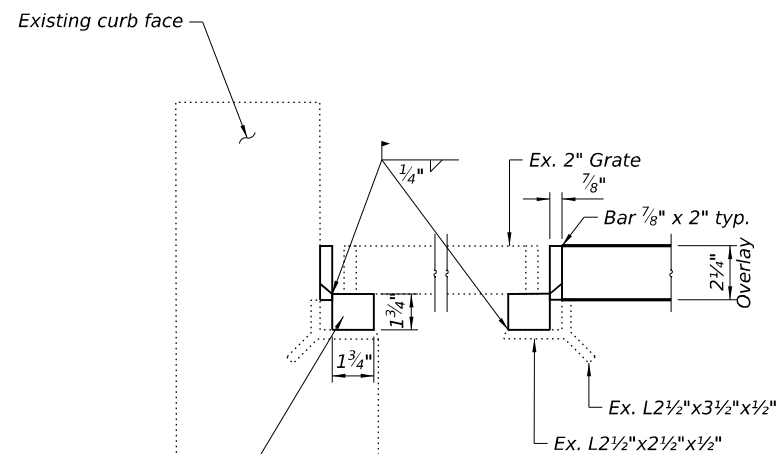
APPROACH INLET PLAN



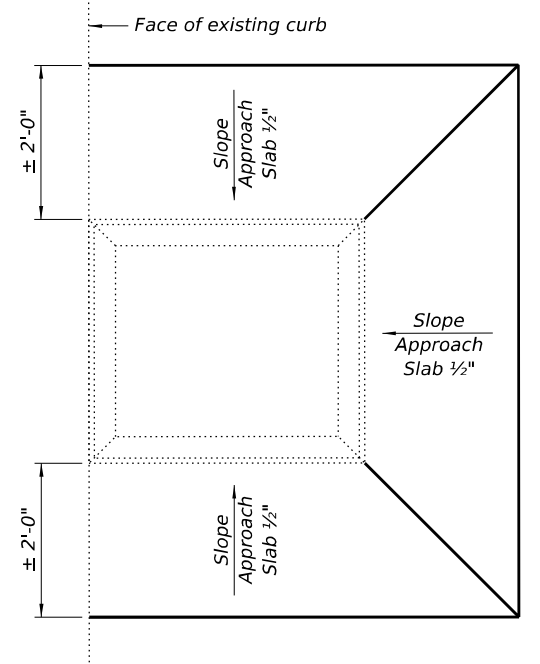
DRAINAGE SCUPPER PLAN



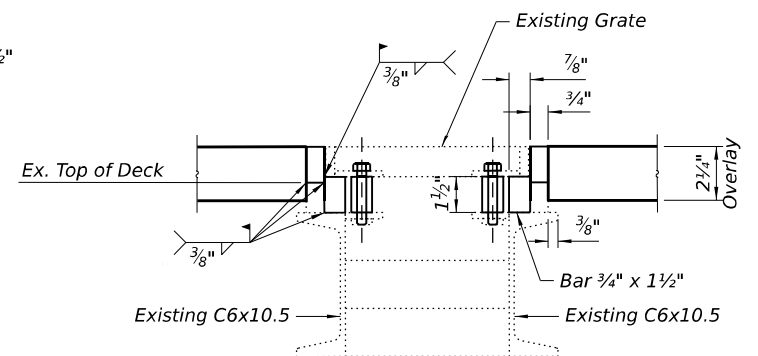
SECTION A-A



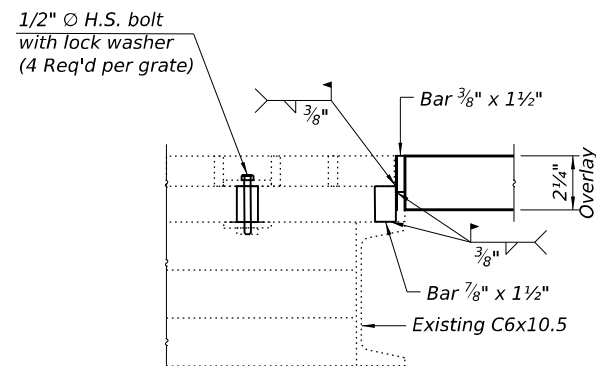
SECTION B-B



SLOPING PLAN



SECTION C-C

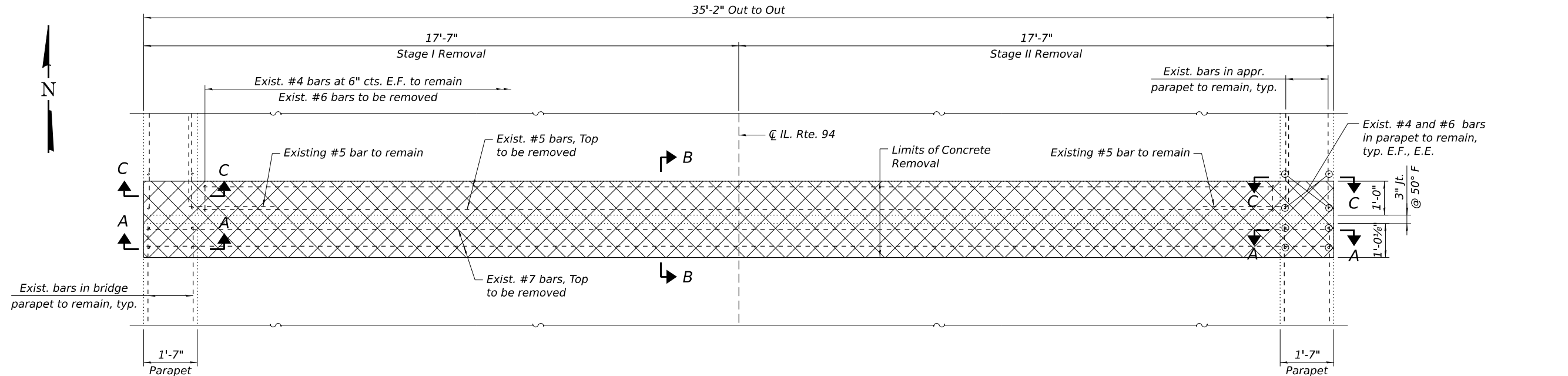


SECTION D-D

Notes:  
 All structural steel shall be AASHTO M270 Grade 36. The adjusting inlet ring and adjusting scupper ring shall be galvanized. Bolts shall be 1/2" Ø, AASHTO M164 Type I, mechanically galvanized. All dimensions shall be field measured, verified, and adjusted as appropriate prior to shop drawings preparation. Contractor shall mark red line as-built plans.  
 Shop drawings for proposed Steel R Frame Extension and proposed adjusting scupper ring shall be submitted for approval prior to fabrication.  
 Contractor shall ensure that no damage is done to existing grates to be reused.  
 Cost of all labor and materials necessary to remove existing grates, install Steel R Frame Extensions and reinstall grates is included in the cost per unit each for Inlet to be Adjusted.  
 Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, Inlet all adjusting scupper rings and reinstall grates is included in the cost per unit each for Drainage Scuppers to be Adjusted.  
 Refer to Bridge Approach Pavement Drain Standard 2324 for existing details.  
 Contractor to provide new grates if existing are missing. Cost of new grates included in the cost per unit each for Inlet to be Adjusted.

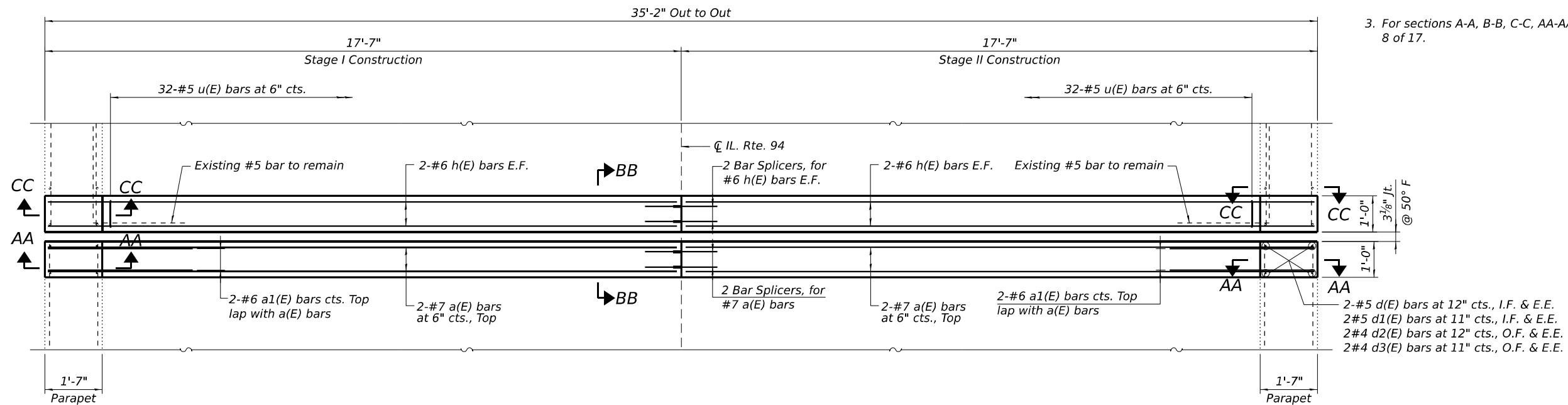
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<div><div>GR<sup>2</sup>EF</div><div>8501 W. Higgins Road, Suite 280 Chicago, Illinois 60634 (773) 399-0102</div></div>	USER NAME =		DESIGNED - JTB	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>DRAINAGE ADJUSTMENT DETAILS STRUCTURE NO. 036-0047</div>	F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.			
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	PLOT DATE =		CHECKED - SH	REVISED -											
SHEET 6 OF 17 SHEETS												ILLINOIS		FED. AID PROJECT	




NORTH ABUTMENT JOINT REMOVAL PLAN

- Notes:
- Any reinforcement bars that are to remain that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
  - Existing longitudinal and vertical reinforcement bars remaining and extending into the removal areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
  - For sections A-A, B-B, C-C, AA-AA, BB-BB and CC-CC, see sheet 8 of 17.



NORTH ABUTMENT JOINT RECONSTRUCTION PLAN

LEGEND

-  Concrete Removal
- I.F. Inside Face  
O.F. Outside Face  
E.E. Each End  
E.F. Each Face

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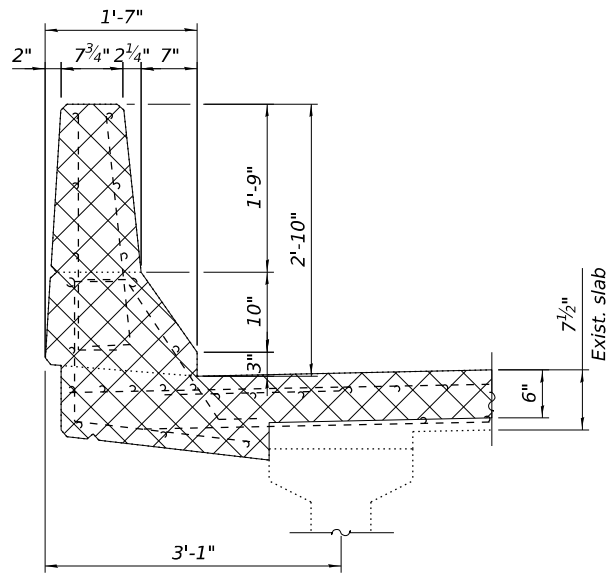
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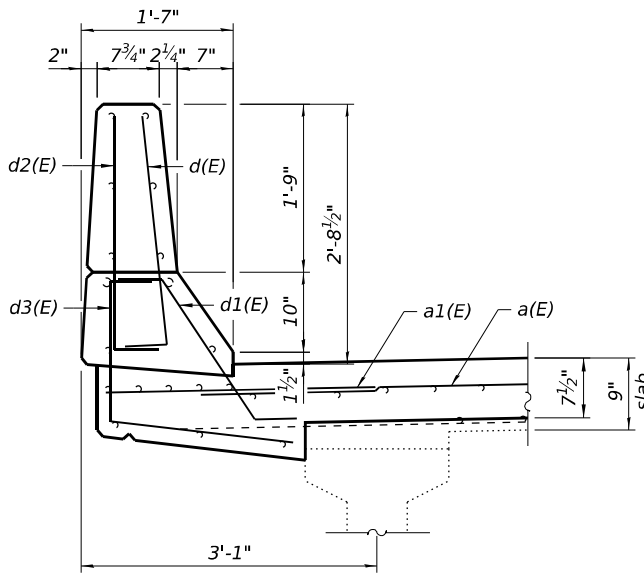
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STRUCTURE NO. 036-0047

SHEET 7 OF 17 SHEETS

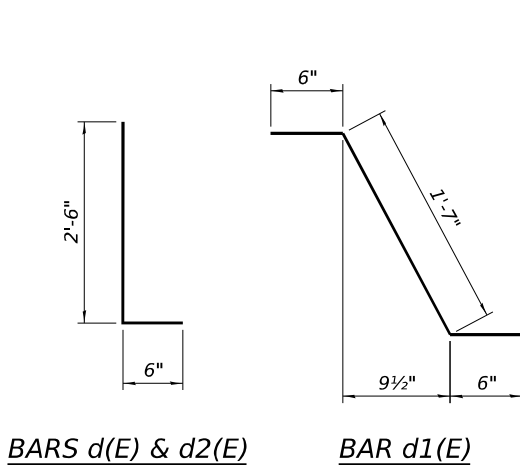
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94	1106BC-1;108(C,(VB,VC)NRS)IBRR	HENDERSON	81	64
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



SECTION A-A



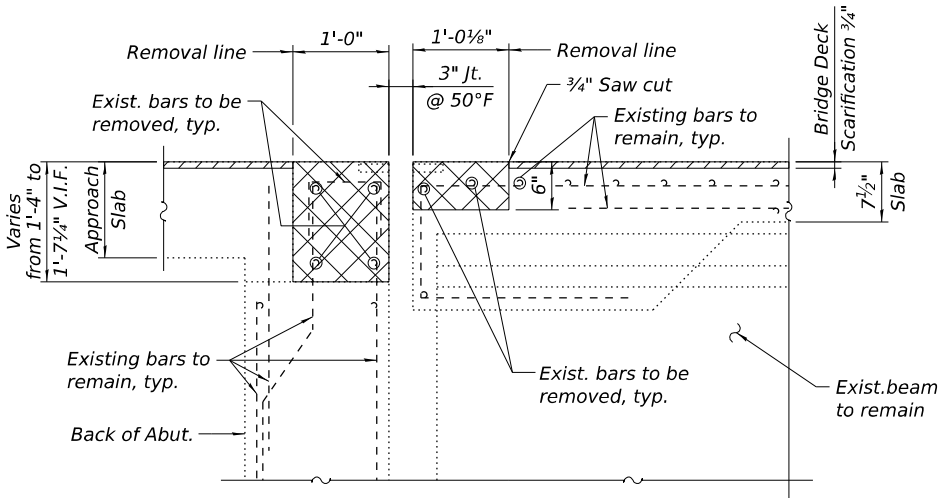
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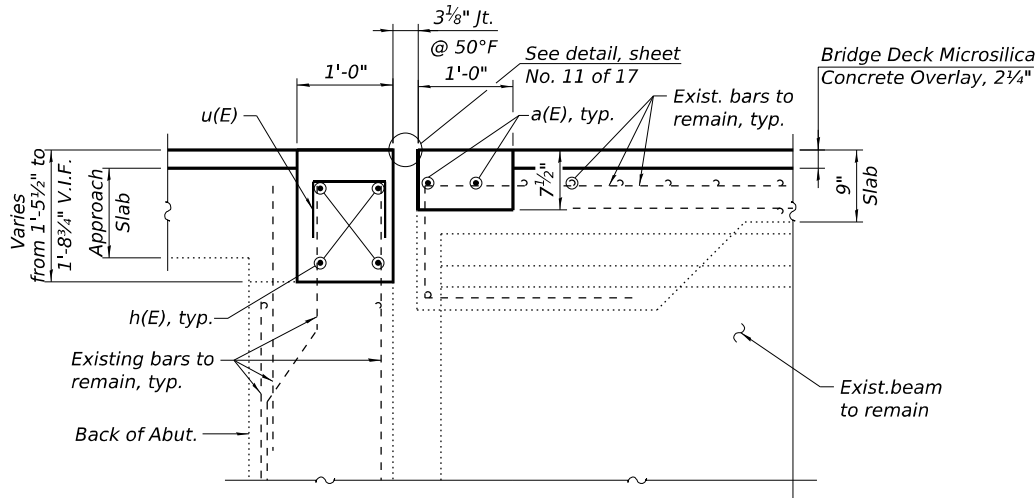
BARS d(E) & d2(E)

BAR d1(E)

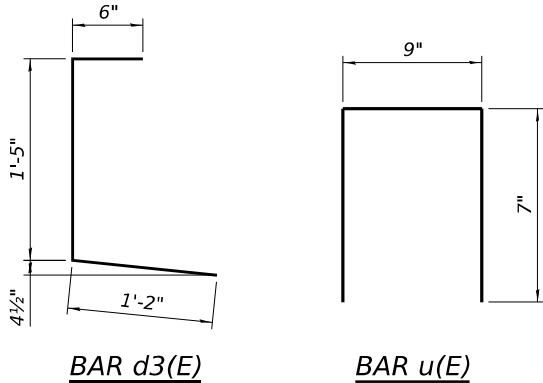
BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a(E)	4	#7	17'-3"	
a1(E)	4	#6	6'-6"	
d(E)	4	#5	3'-0"	
d1(E)	4	#5	2'-7"	
d2(E)	4	#4	3'-0"	
d3(E)	4	#4	3'-1"	
h(E)	8	#6	17'-3"	
u(E)	64	#5	1'-11"	
Concrete Removal			Cu. Yd.	3.2
Concrete Superstructure			Cu. Yd.	3.3
Reinforcement Bars, Epoxy Coated			Pound	490



SECTION B-B

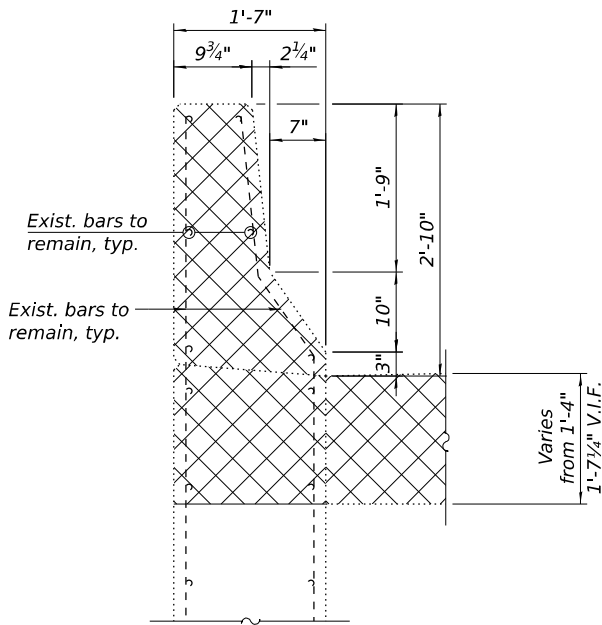


SECTION BB-BB

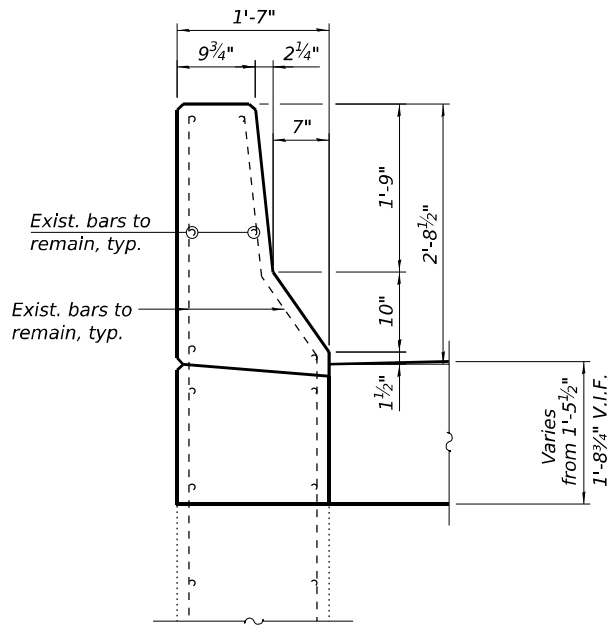


BAR d3(E)

BAR u(E)



SECTION C-C



SECTION CC-CC

- Notes:
- For Preformed Joint Strip Seal details, see sheet 11 of 17.
  - For Bar Splicer Assembly details, see sheet 14 of 17.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.
  - Removal of Existing Expansion Joint will not be paid for separately but will be included in the cost of Concrete Removal.

LEGEND

	Concrete Removal
I.F.	Inside Face
O.F.	Outside Face
E.E.	Each End
E.F.	Each Face

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**GRAEF**  
8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-082

USER NAME =	DESIGNED - JTB	REVISED -
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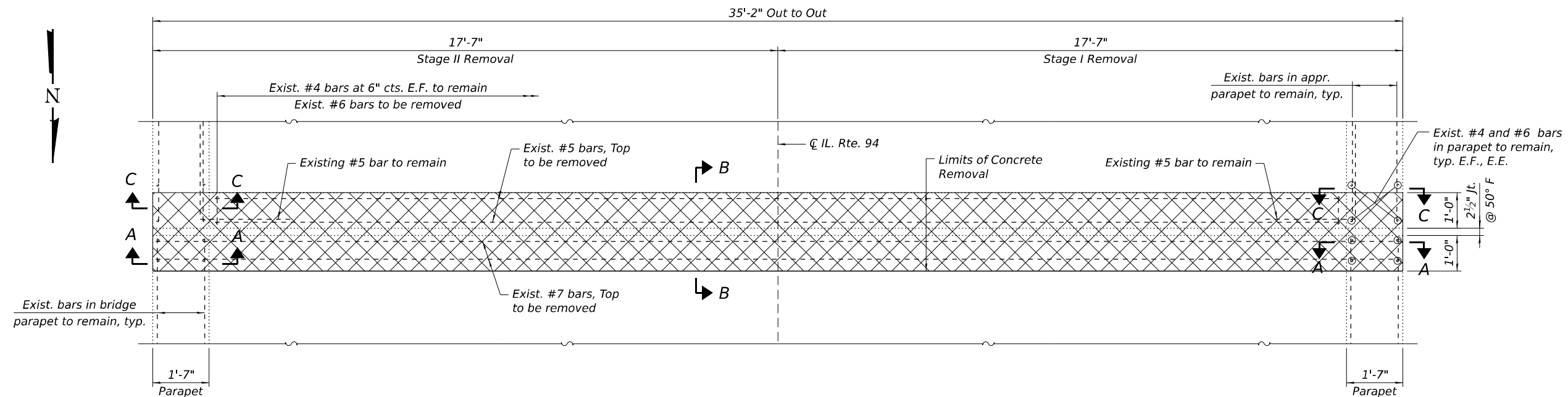
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT EXPANSION JOINT DETAILS II  
STRUCTURE NO. 036-0047

SHEET 8 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	65
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

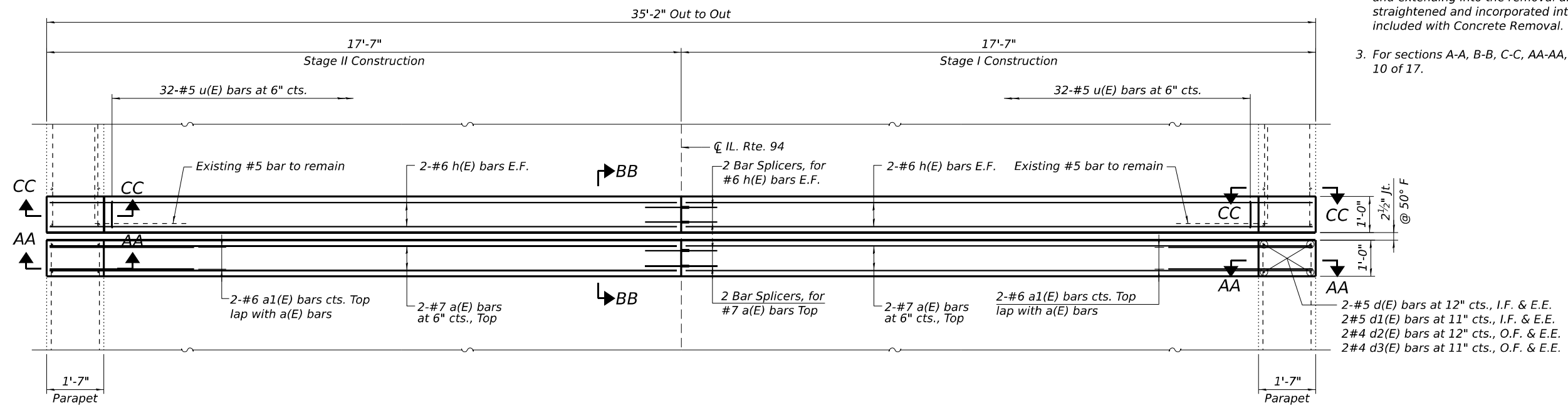
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*SOUTH ABUTMENT JOINT REMOVAL PLAN*

Notes:

1. Any reinforcement bars that are to remain 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.
2. Existing longitudinal and vertical reinforcement bars remaining and extending into the removal areas shall be cleaned, straightened and incorporated into the new construction. Cost included with Concrete Removal.
3. For sections A-A, B-B, C-C, AA-AA, BB-BB and CC-CC, see sheet 10 of 17.

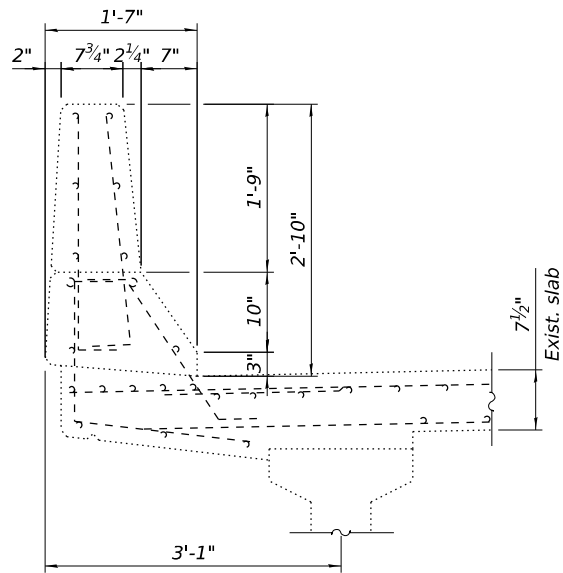


*SOUTH ABUTMENT JOINT RECUNSTRUCTION PLAN*

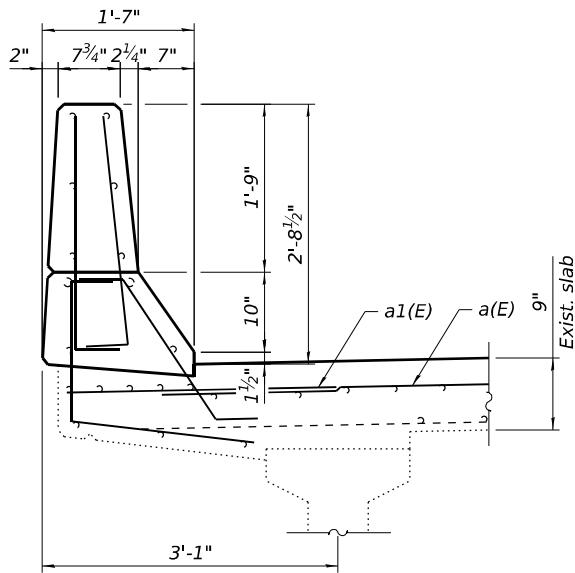
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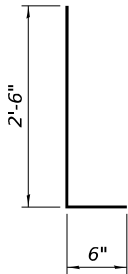
I.F. Inside Face  
O.F. Outside Face  
E.E. Each End  
E.F. Each Face



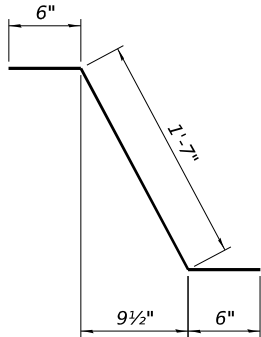
SECTION A-A



SECTION AA-AA

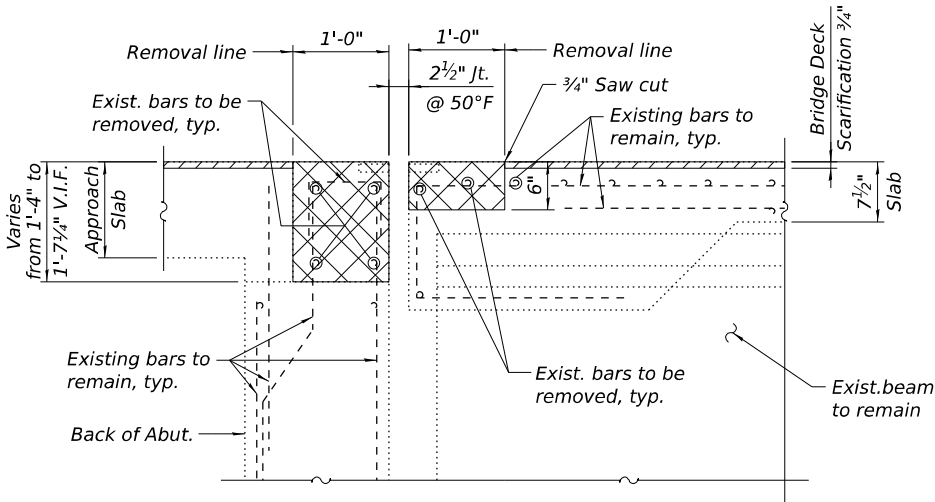


BARS d(E) & d2(E)

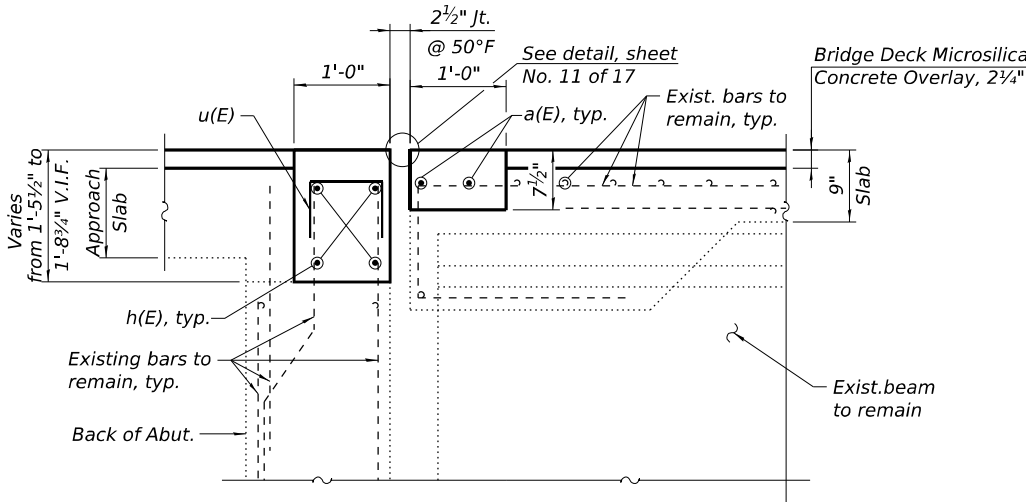


BAR d1(E)

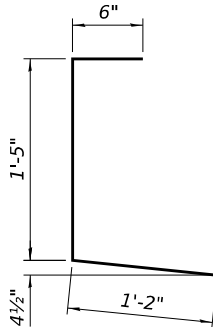
BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
a(E)	4	#7	17'-3"	
a1(E)	4	#6	6'-6"	
d(E)	4	#5	3'-0"	
d1(E)	4	#5	2'-7"	
d2(E)	4	#4	3'-0"	
d3(E)	4	#4	3'-1"	
h(E)	8	#6	17'-3"	
u(E)	64	#5	1'-11"	
Concrete Removal			Cu. Yd.	3.2
Concrete Superstructure			Cu. Yd.	3.4
Reinforcement Bars, Epoxy Coated			Pound	490



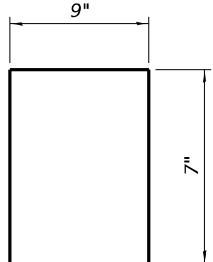
SECTION B-B



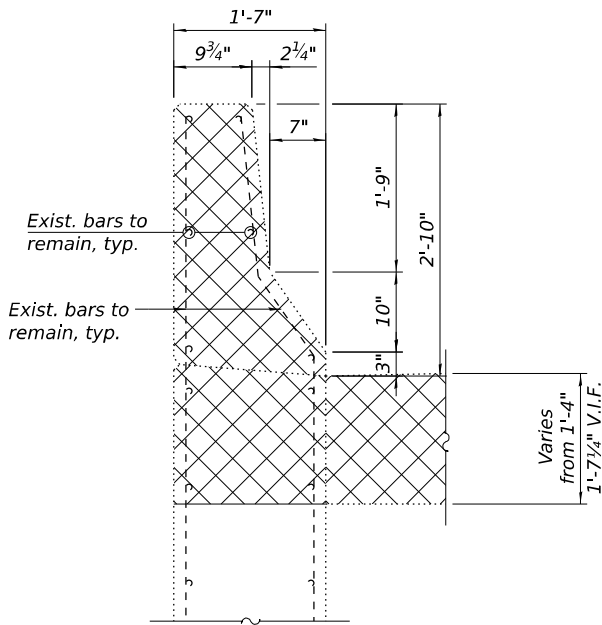
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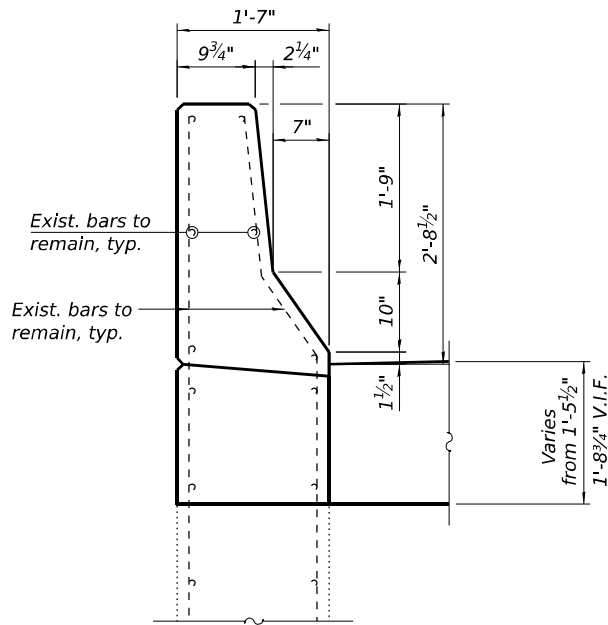
BAR d3(E)



BAR u(E)



SECTION C-C



SECTION CC-CC

- Notes:
- For Preformed Joint Strip Seal details, see sheet 11 of 17.
  - For Bar Splicer Assembly details, see sheet 14 of 17.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.
  - Removal of Existing Expansion Joint will not be paid for separately but will be included in the cost of Concrete Removal.

LEGEND

	Concrete Removal
I.F.	Inside Face
O.F.	Outside Face
E.E.	Each End
E.F.	Each Face

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PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT EXPANSION JOINT DETAILS II  
STRUCTURE NO. 036-0047

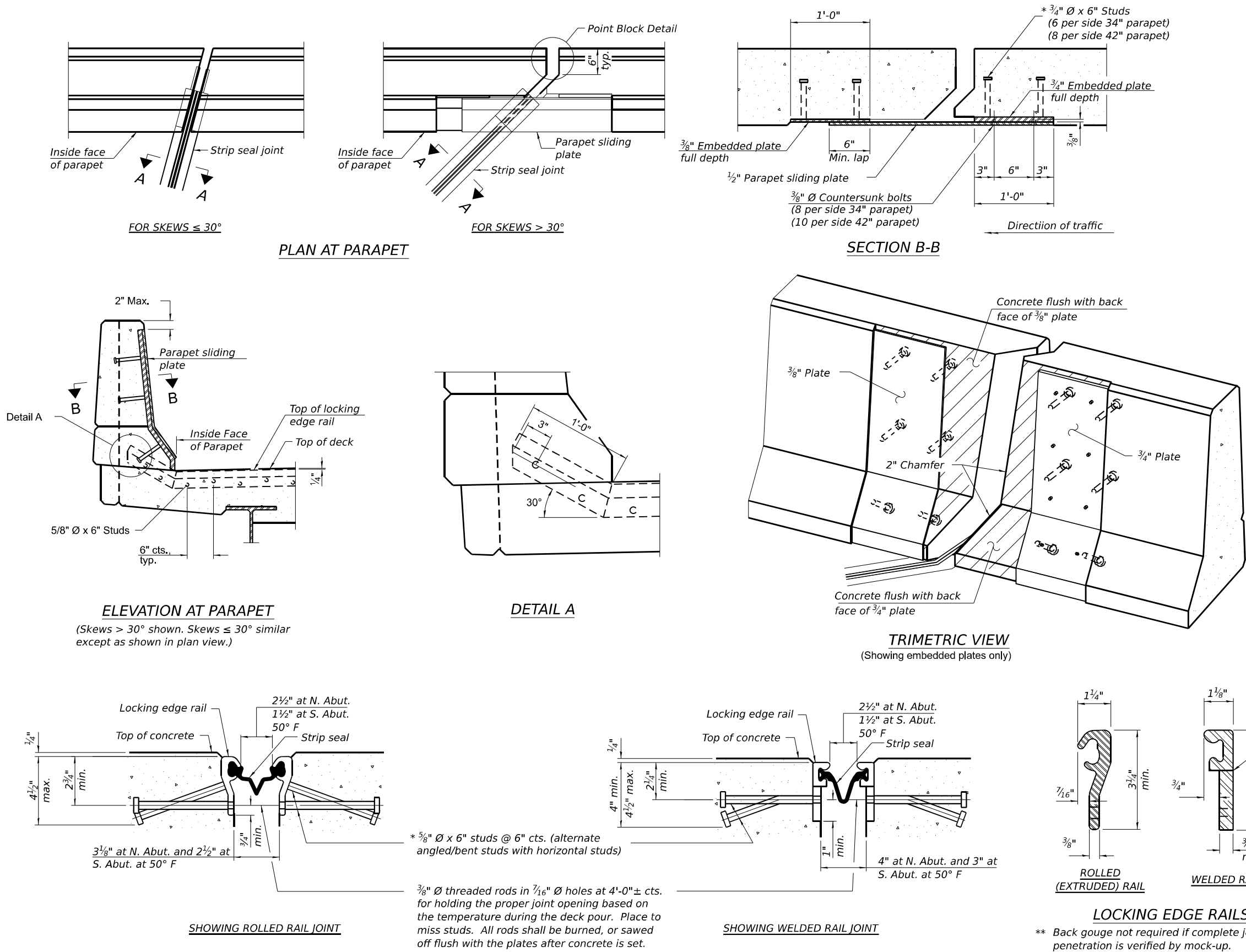
SHEET 10 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,(VB,VC)NRS)IBRR	HENDERSON	81	67
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

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PLOT DATE =	DRAWN - DCP	REVISED -
	CHECKED - SH	REVISED -

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)JBRR	HENDERSON	81	68
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



**Notes:**

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". 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  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

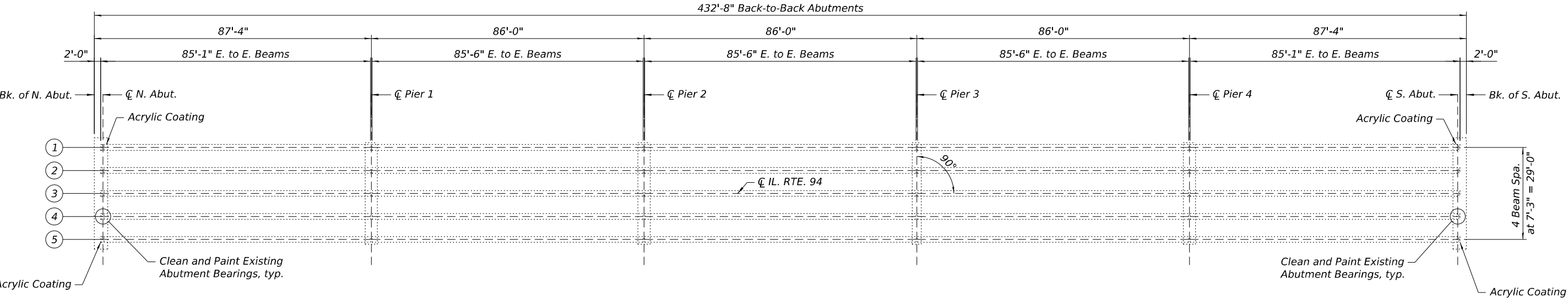
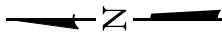
The manufacturer's recommended installation methods shall be followed.

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

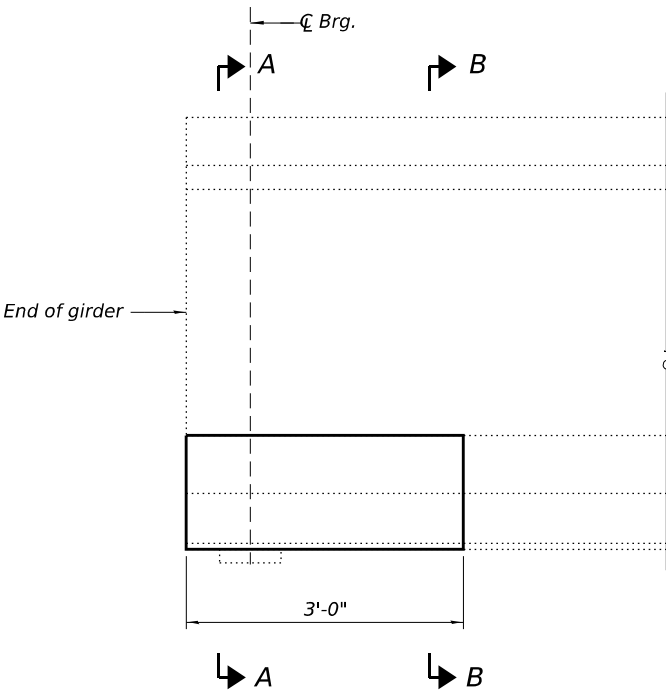
The Maximum space between locking edge rail segments shall be  $c$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

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

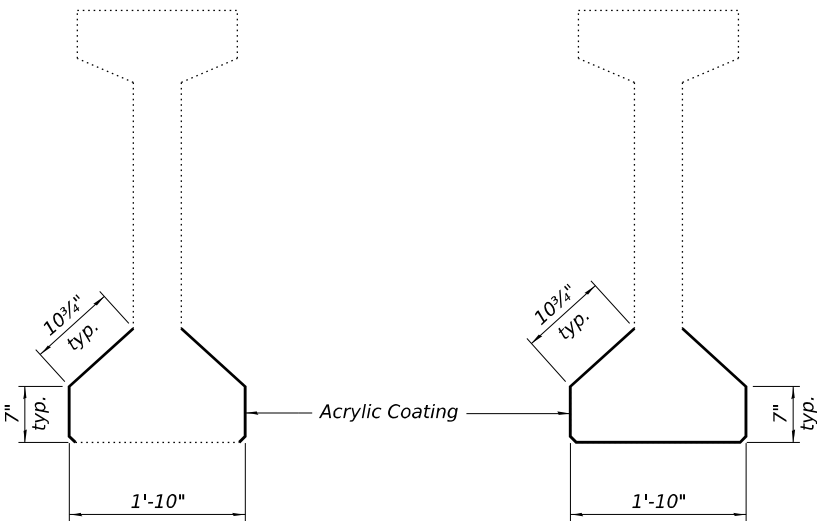
34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on 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.



FRAMING PLAN



LIMIT OF ACRYLIC COATING  
(Beam 1 and 5 exterior ends)



SECTION A-A

SECTION B-B

LEGEND

Acrylic Coating

Notes:  
See Sheet 13 of 17 for bearing details.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Acrylic Coating	Sq Yd	7
Cleaning and Painting Bearings	Each	10

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**GR&E**  
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Chicago, Illinois 60634 (773) 399-0102

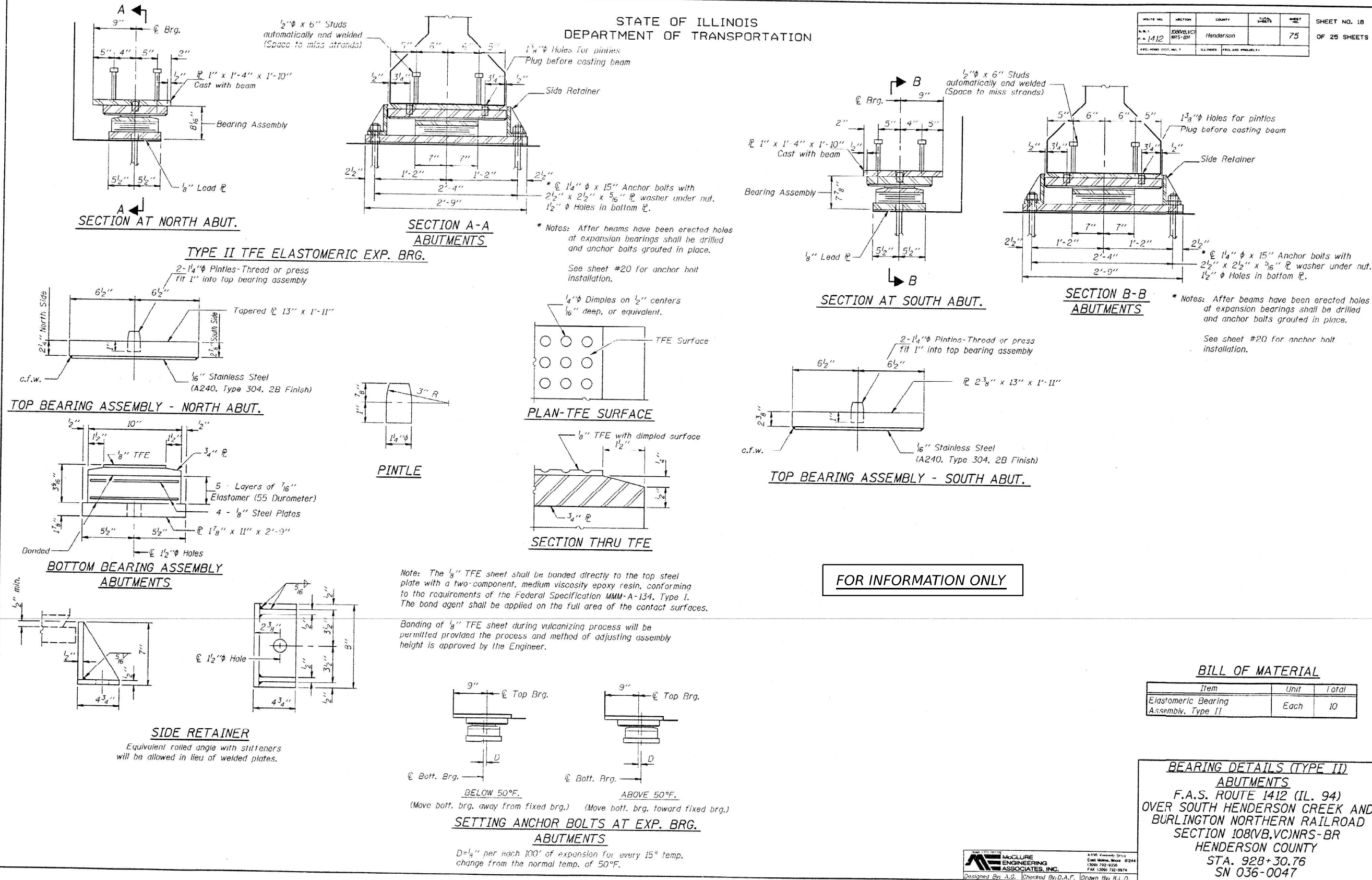
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

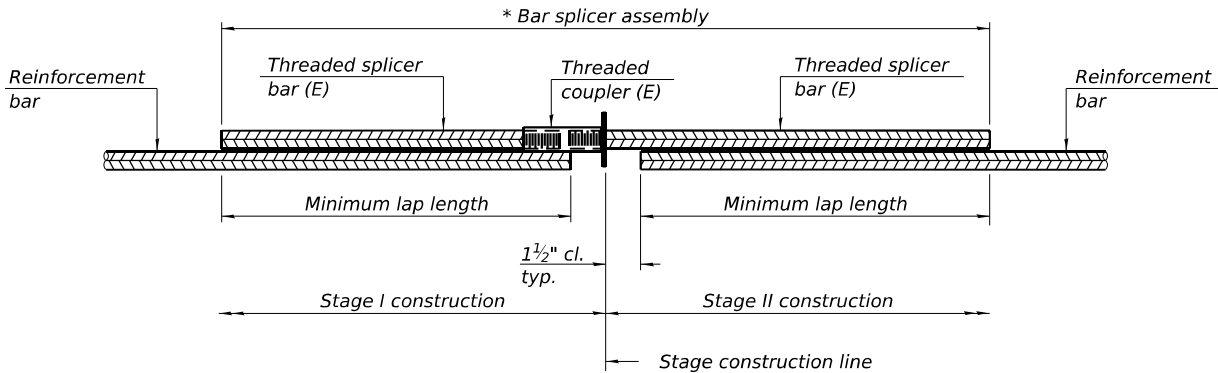
BEARING DETAILS  
STRUCTURE NO. 036-0047

McCLURE  
ENGINEERING  
ASSOCIATES, INC.  
Designed By: A.B. Checked By: D.A.F. Drawn By: R.L.D.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	70
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				







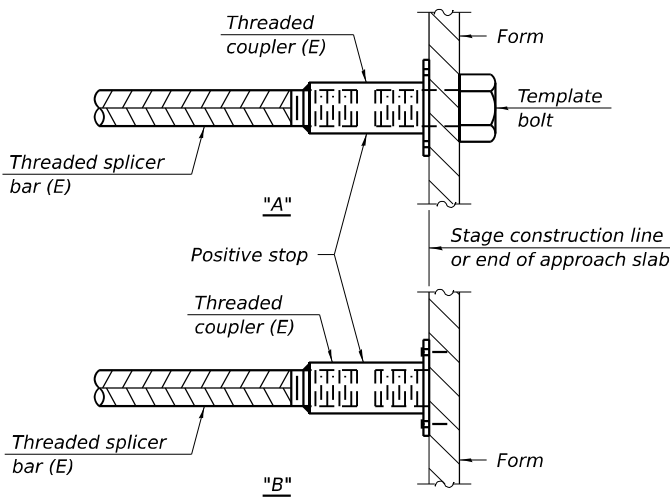
**STANDARD BAR SPLICER ASSEMBLY PLAN**

Only bar splicer assemblies as presented on the approved QPL list may be used.

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

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

Location	Bar size	No. assemblies required	Minimum lap length
North Abutment	#6	4	3'-7"
Exp. Jt.	#7	2	4'-8"
South Abutment	#6	4	3'-7"
Exp. Jt.	#7	2	4'-8"

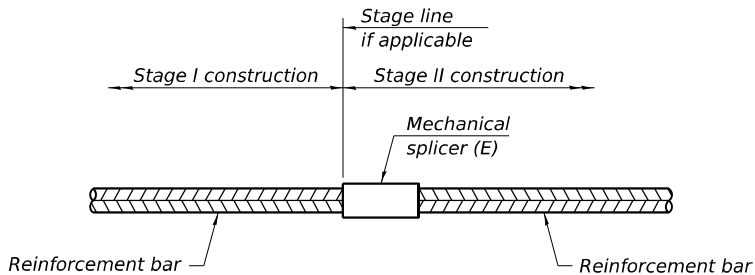


**INSTALLATION AND SETTING METHODS**

"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.

BSD-1

5-15-2023

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 036-0047

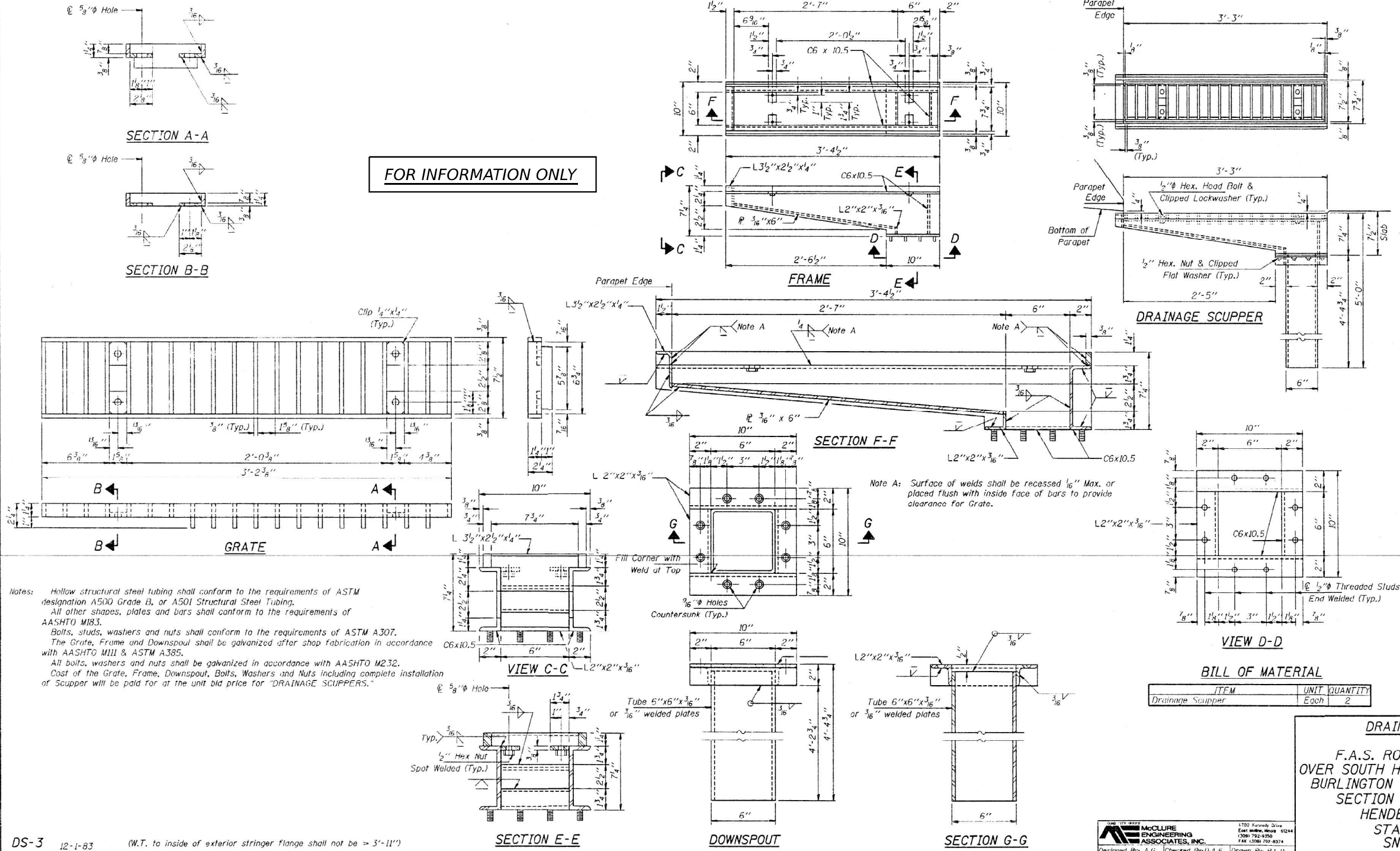
SHEET 14 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1;108(C,(VB,VC)NRS)IBRR	HENDERSON	81	71
		CONTRACT NO. 68J12		
		ILLINOIS	FED. AID PROJECT	

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SHEET NO.	COUNTY	TOTAL SHEETS	SHEET NO.
1412	78	Henderson	78	78
SHEET NO. 21 OF 25 SHEETS				



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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS REFERENCE SHEET  
STRUCTURE NO. 036-0047

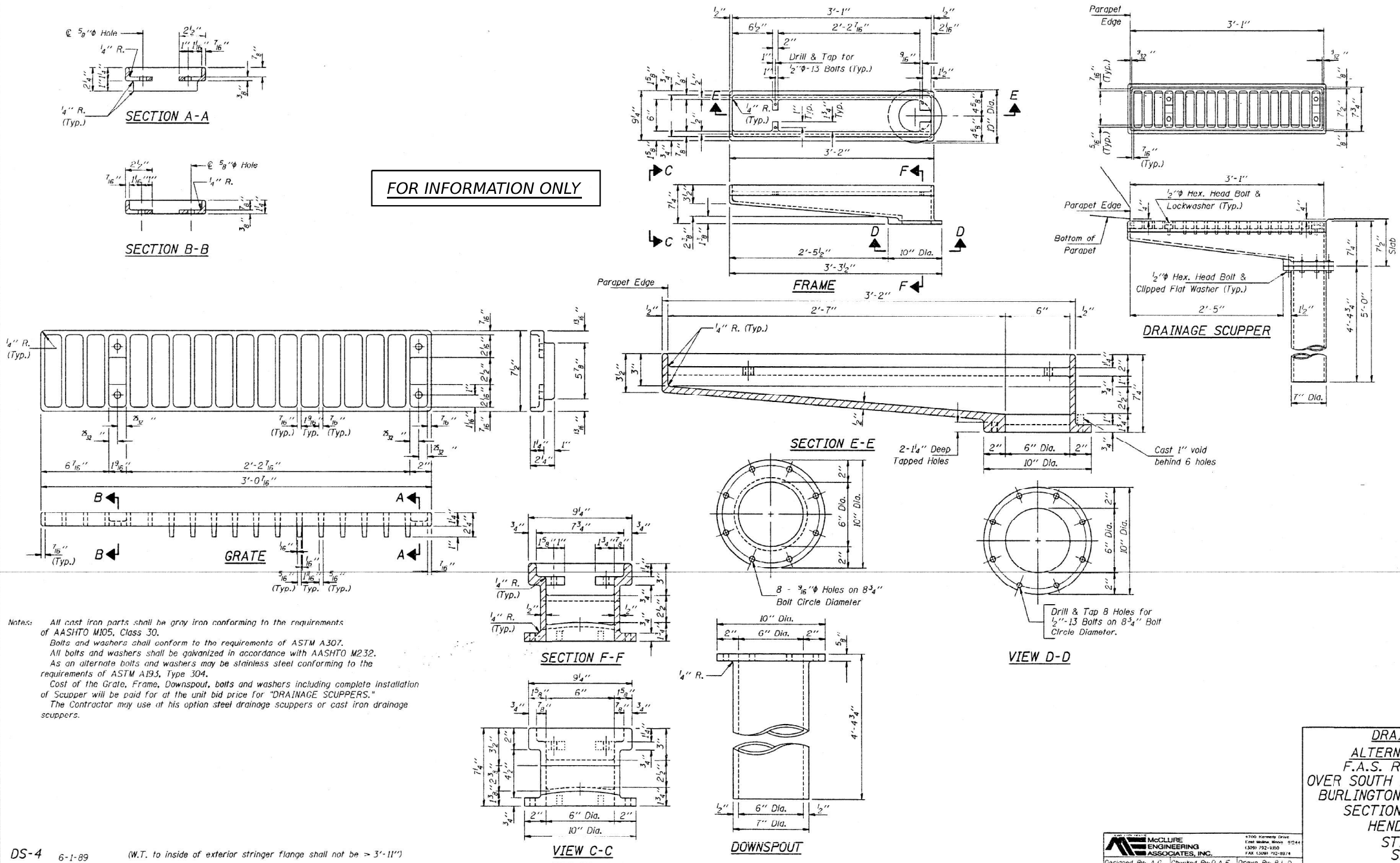
SHEET 15 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,(VB,VC)NRS)BRR	HENDERSON	81	72
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1412	108(VB,VC)NRS-BR	Henderson	79	79
FED. ROAD DIST. NO. 7				
ILLINOIS FED. AID PROJECT				

SHEET NO. 22  
OF 25 SHEETS



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8501 W. Higgins Road, Suite 280  
Chicago, Illinois 60634 (773) 399-0182

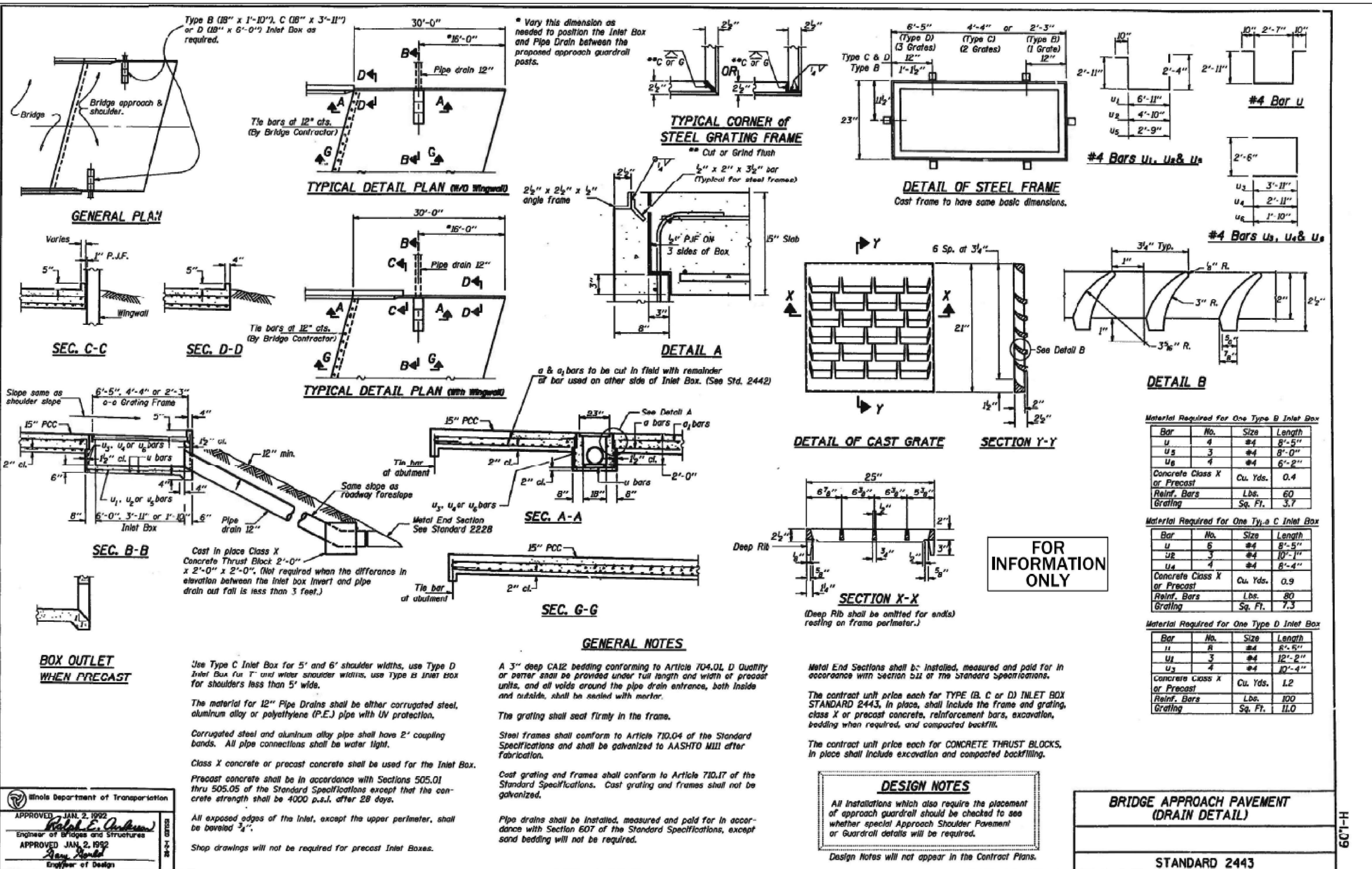
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	CHECKED - SH	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS REFERENCE SHEET  
STRUCTURE NO. 036-0047

SHEET 16 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	106BC-1:108(C,VB,VC)NRS)BRR	HENDERSON	81	73
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation  
APPROVED JAN. 2, 1992  
Engineer of Bridges and Structures  
APPROVED JAN. 2, 1992  
Engineer of Design

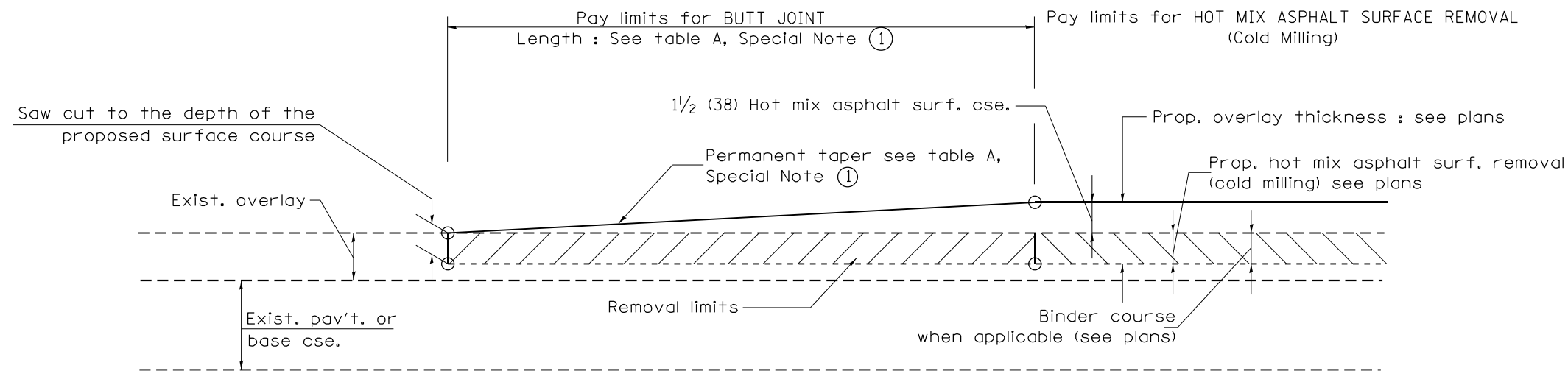
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS REFERENCE SHEET  
STRUCTURE NO. 036-0047  
SHEET 17 OF 17 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1106BC-1:108(C,VB,VC)NRS)BRR	HENDERSON	81	74
CONTRACT NO. 68J12				
ILLINOIS FED. AID PROJECT				

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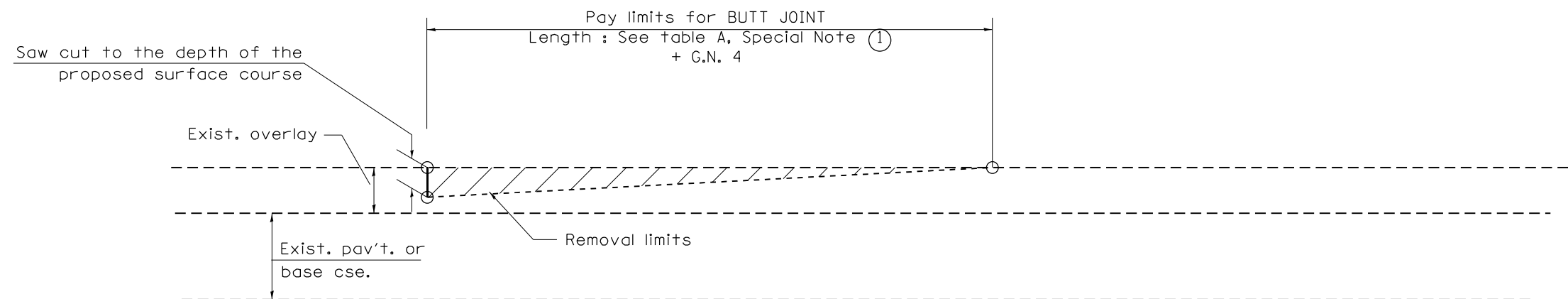
**CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)**

**TABLE A  
TAPER RATES**

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	BUTT JOINT TAPER RATE	1:480	1:240
②	TEMPORARY RAMP TAPER RATE	1:80	1:40

**GENERAL NOTES**

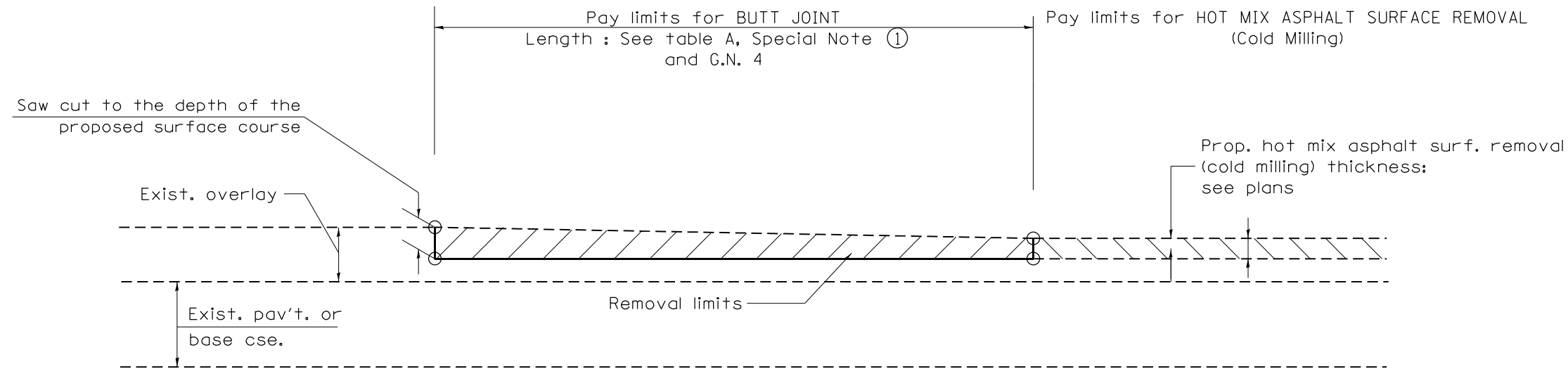
1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.



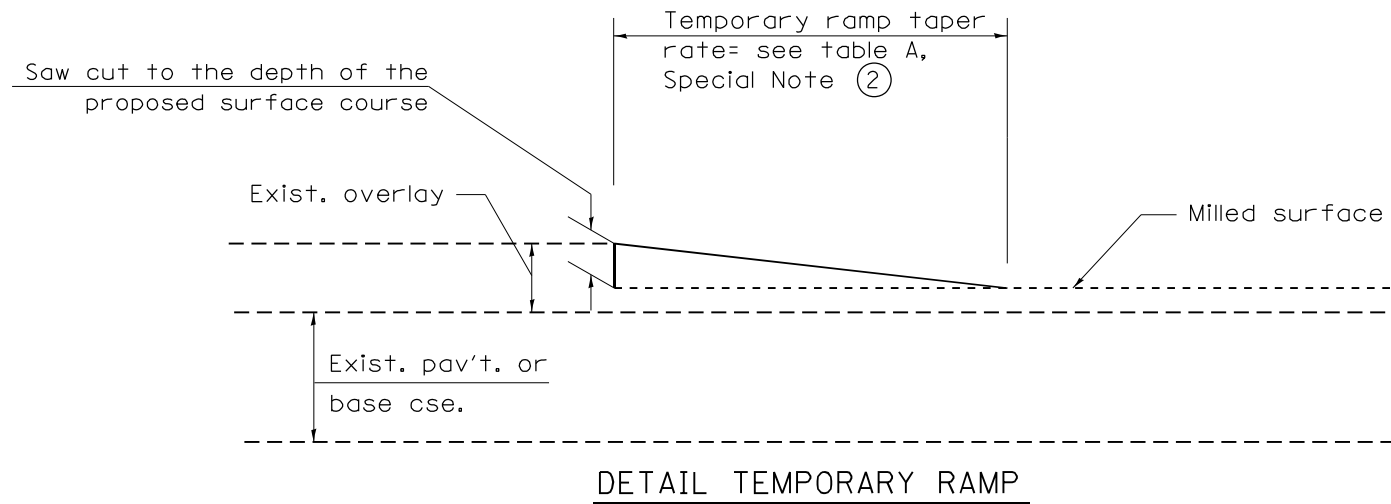
**CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)**

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

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04-01-97	CORRECTION TO DEPTH	J.A.	04-12-16	MINOR CORRECTIONS	R.D.							81	75
09-15-05	REVISED DESIGNER NOTE	M.M.A.	02-14-17	ADDED NOTE 5	R.D.								
10-16-06	REVISED TO 2007 SPEC.	M.A.	07-16-19	Wording and Spelling corrections	R.D.								
										CONTRACT NO.			
										FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

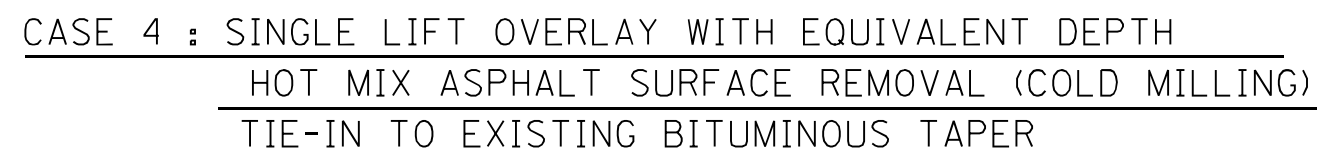


**CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)  
TIE-IN TO EXISTING BITUMINOUS TAPER**



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

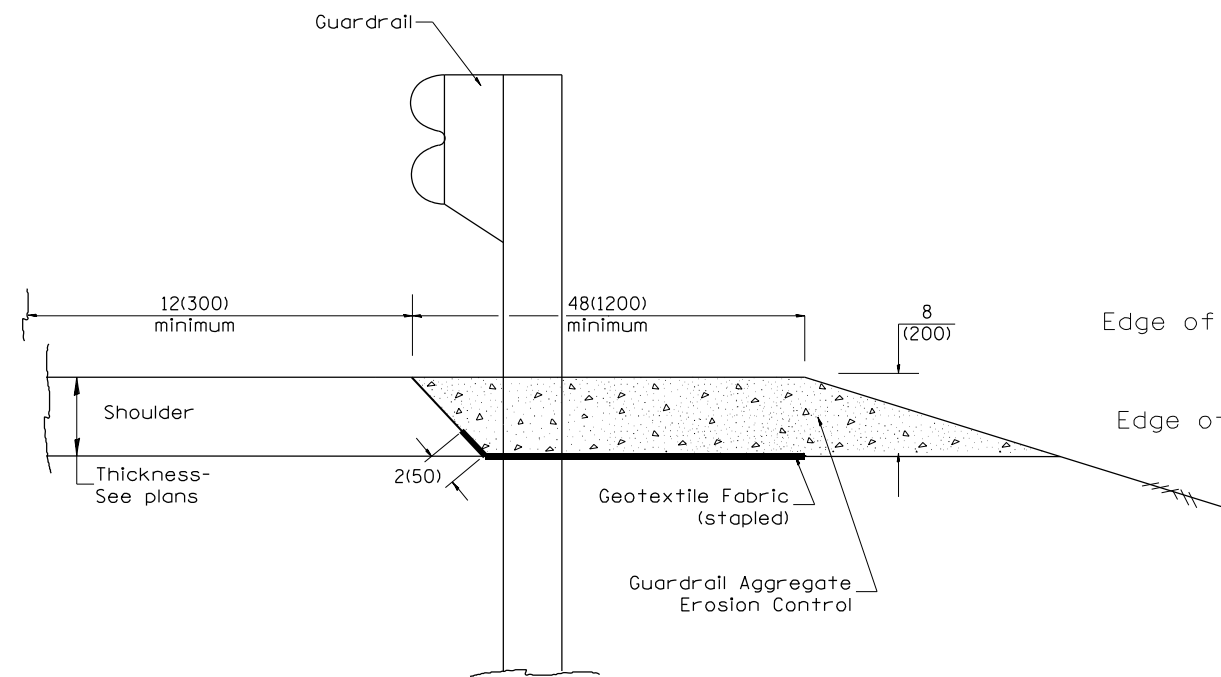
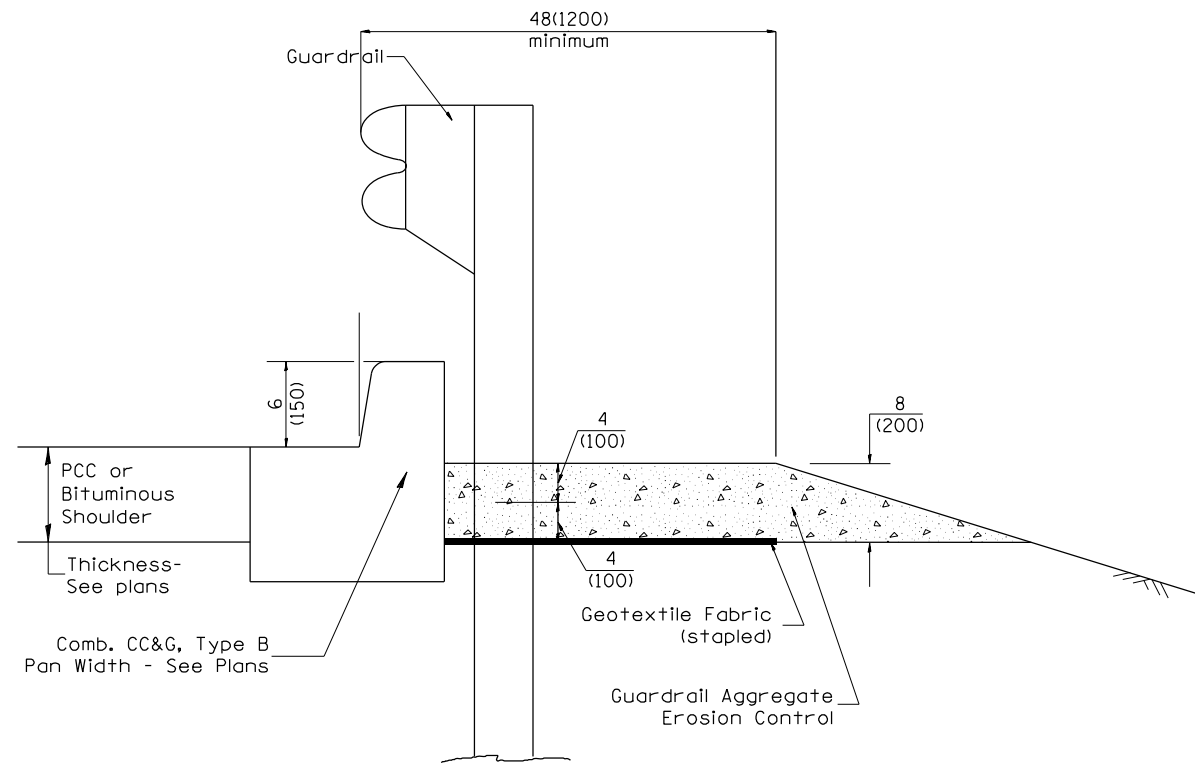
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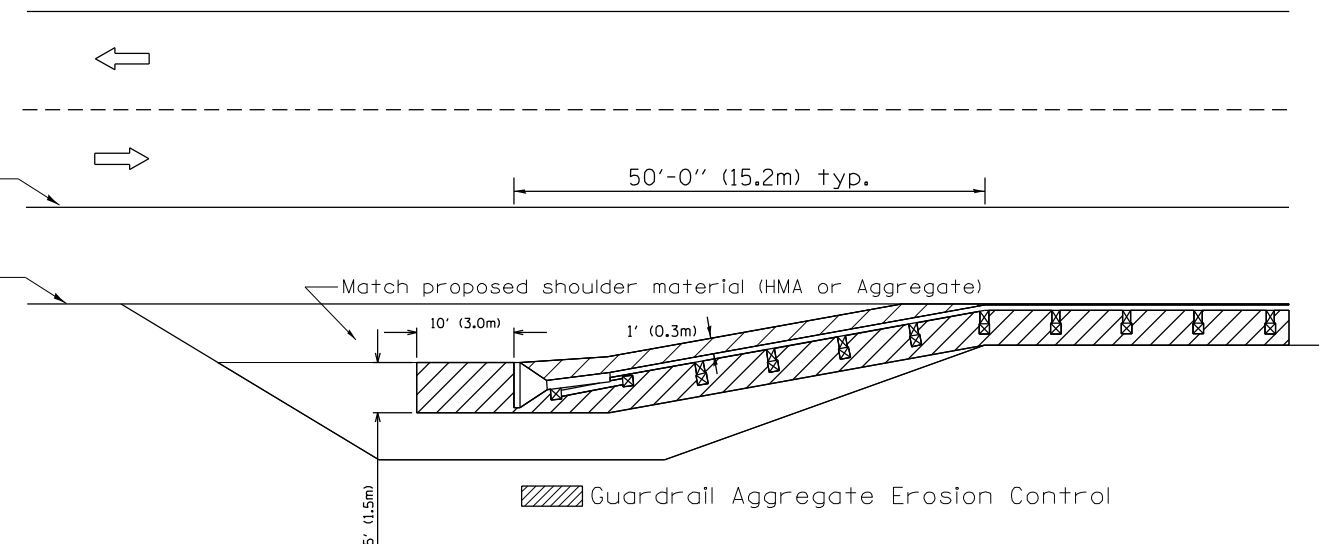


DESIGNER NOTES:

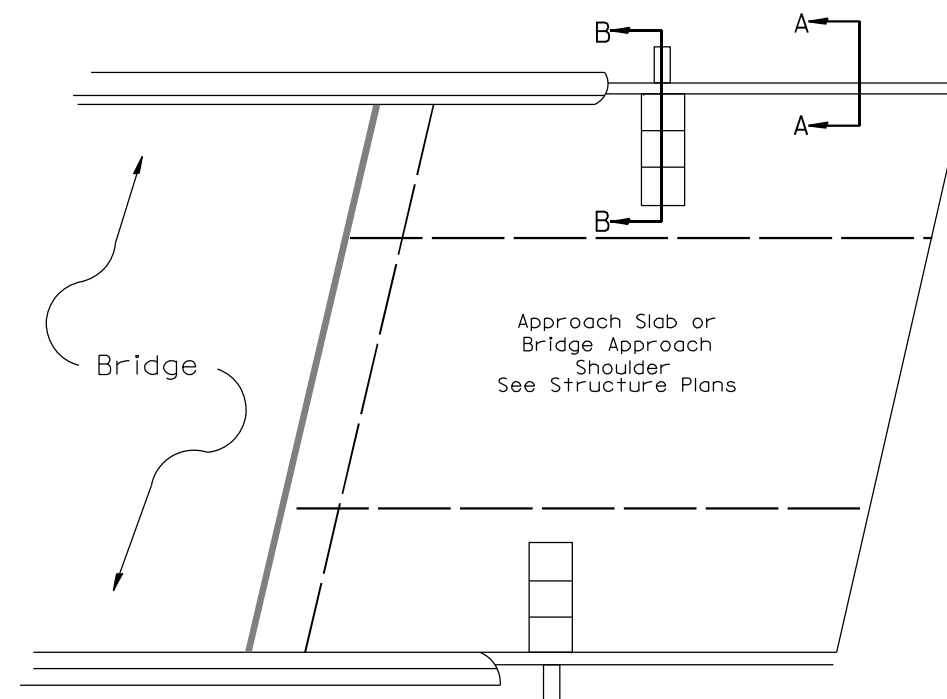
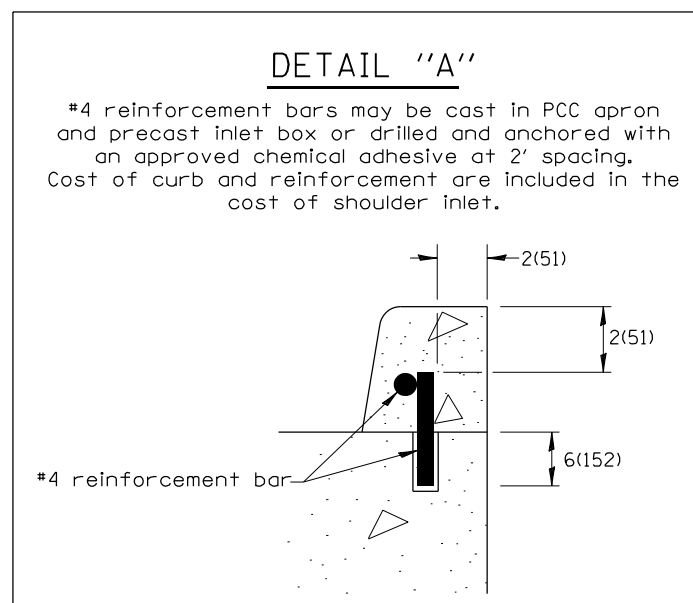
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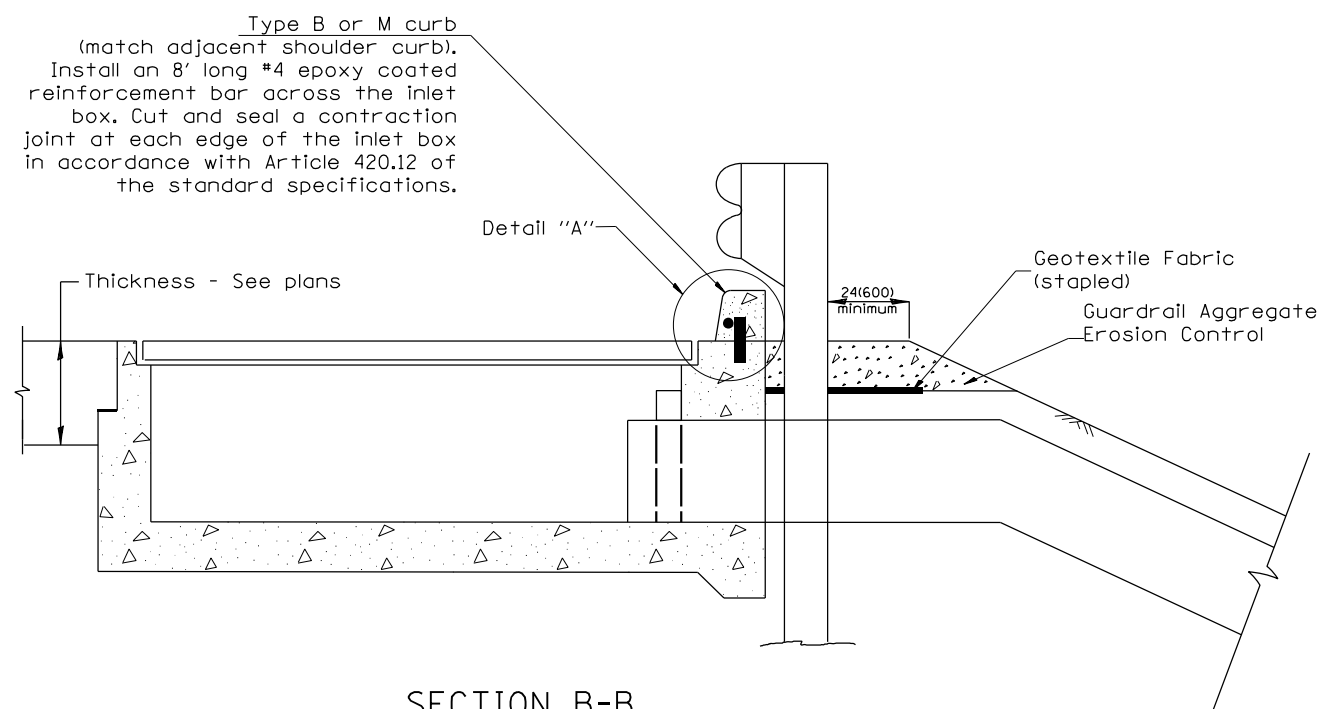
1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
  - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
  - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



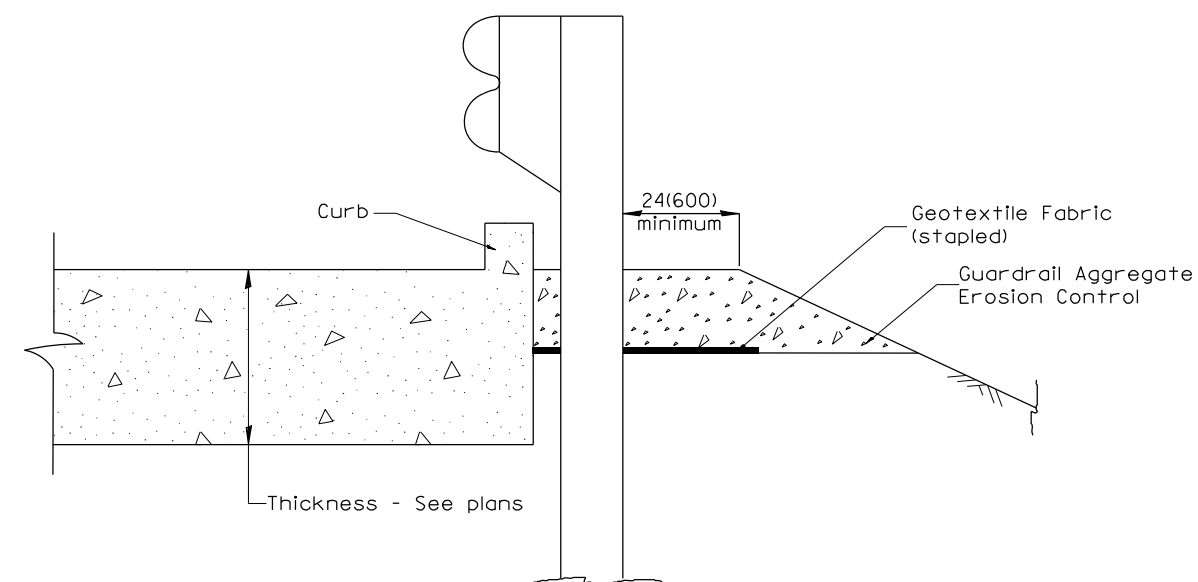




**PLAN VIEW**  
**APPROACH SLAB OR SHOULDER PLACEMENT**



**SECTION B-B**  
**TYPICAL SECTION AT INLETS**  
**TYPE E, F & G (HIGHWAY STANDARD 610001)**



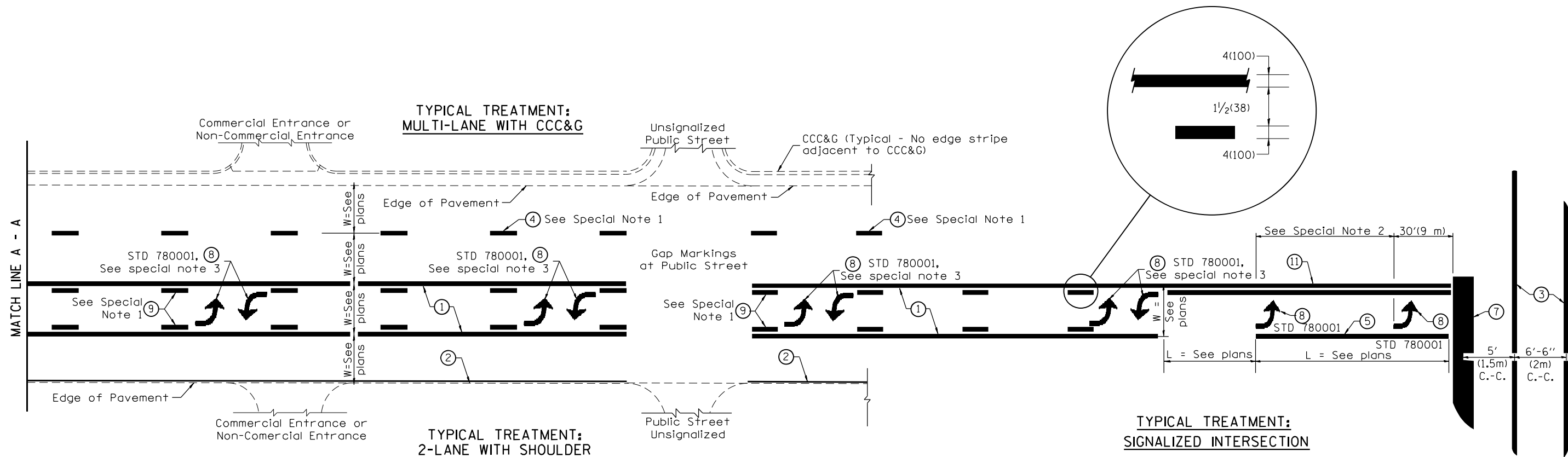
**SECTION A-A**  
**TYPICAL SECTION WITH BRIDGE APPROACH CURB**

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

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NOT TO SCALE

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



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

**TYPICAL PAVEMENT MARKING LEGEND**

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

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

**SPECIAL NOTES**

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

**GENERAL NOTES**

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

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS	SHT. 1 OF 2 CADD STD. 780001-D4	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.	2/29/16	ADDED GROOVING AREAS	R.D.							81	80			
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.	07-16-19	SPELLING CORRECTIONS	R.D.											
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.														
NOT TO SCALE									CONTRACT NO.							
									FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

