

010

# PROPOSED HIGHWAY PLANS

**DESIGN DESIGNATION**  
**IL 38: MINOR ARTERIAL**

**ADT (YEAR)**  
**IL 38            8,850 (2016)**

DESIGN	SPEED (POSTED SPEED)
IL 38	55 MPH (55 MPH)

**FAP ROUTE 567: IL 38  
OVER UPRR  
BRIDGE REHABILITATION  
SECTION 5VB-BR  
PROJECT: STP 9TDR (419)  
KANE COUNTY  
C-91-278-16**

**IMPROVEMENT LOCATED IN  
UNINCORPORATED VIRGIL TOWNSHIP**

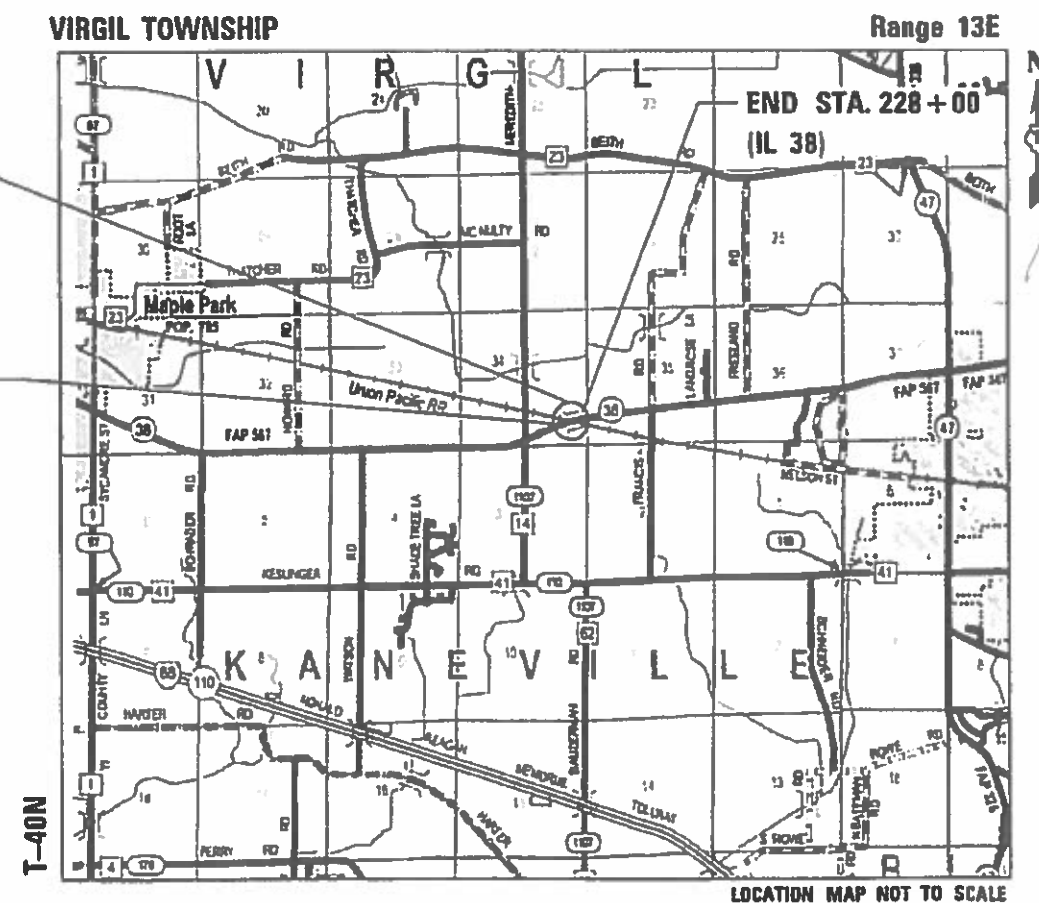
**IMPROVEMENT LOCATION  
IL 38 OVER UPRR  
STRUCTURE NO. 045-0009**

**BEGIN STA. 220+00 (IL 38)**



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**




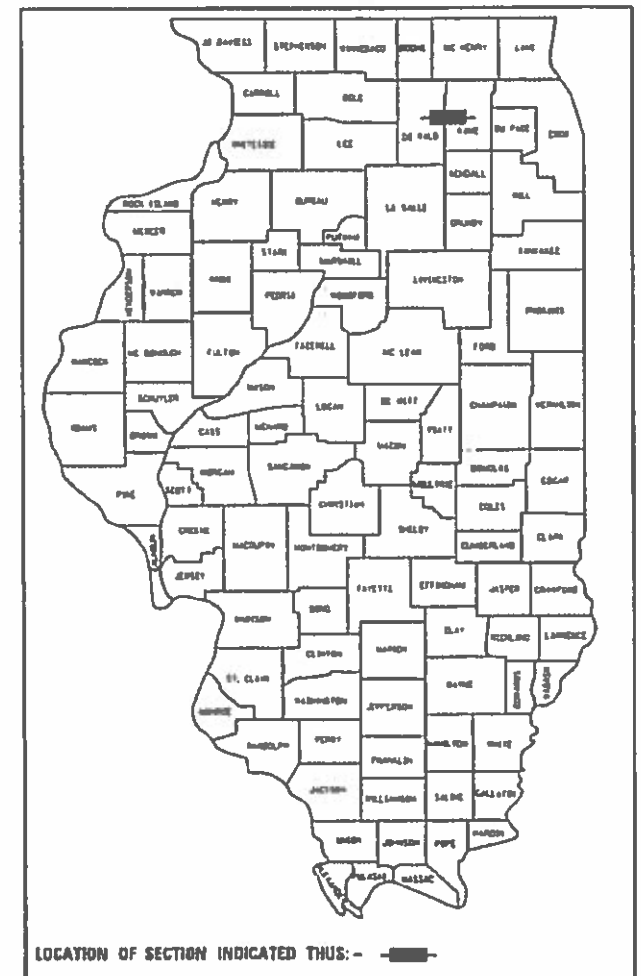
GROSS LENGTH = 800 FT. = 0.15 MILE  
NET LENGTH = 800 FT. = 0.15 MILE

**PROJECT ENGINEER:**  
**PROJECT MANAGER: MR. FAWAD AQUEEL, P.E. (847) 705-4247**  
**CONTRACT NO. 62C14**

**COLLINS ENGINEERS**  
123 N. WACKER DR., SUITE 900  
CHICAGO, IL 60606  
(312) 704-9300  
ILLINOIS PROFESSIONAL DESIGN FIRM  
LICENSE NO. 084-000993

F.A.P. NTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	SVB-BR	KANE	73	1
	ILLINOIS	CONTRACT NO. 62C14		

P-91-259-14  
D-91-278-16



COLLINS ENGINEERS, INC.  
 JASON SCHNEIDER, P.E., S.E.  
 NO. 081-007245  
 EXP. 11/30/2020



COLLINS ENGINEERS, INC  
ZACHARY TANNER, P.E.  
NO. 062-068502  
EXPIRES 11-30-2019

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 6 2018

Anthony A. Amadio / MS  
REGIONAL ENGINEER

Feb 1 2019

Scott A. [Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

Feb 1 2019

Paul C. [Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

FILE NAME = 1\102003\_PTB\_182\_84\102031.0 - IL\_3B OVER-UPRR\CADD\CADD\_Sheets\1162C14-wht-gnnnotes.dgn

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS, GENERAL NOTES AND HIGHWAY STANDARDS
3-9	SUMMARY OF QUANTITIES
10-11	TYPICAL SECTIONS
12	REMOVAL PLAN
13	ROADWAY PLAN & PROFILE
14	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS - STAGE I
15	MAINTENANCE OF TRAFFIC STAGE I
16	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS - STAGE II
17	MAINTENANCE OF TRAFFIC STAGE II
18	EROSION CONTROL PLAN
19	PAVEMENT MARKING & LANSCAPING PLAN
20-26	TEMPORARY LIGHTING AND TRAFFIC SIGNALS
27-66	STRUCTURAL PLANS SN 045-0009
67-68	EXISTING AND PROPOSED CROSS SECTIONS
69	BD-32 BUTT JOINT AND HMA TAPER DETAILS
70	BD-55 RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY
71	TC-11 RAISED REFLECTIVE PAVEMENT MARKER (SNOW-PLOW RESISTANT)
72	TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
73	TC-22 ARTERIAL ROAD INFORMATION SIGN

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420406-	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB
482001-02	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-15	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-02	DELINEATORS
642006	SHOULDER RUMBLE STRIPS, 8 IN.
643001-02	SAND MODULE IMPACT ATTENUATORS
666001-01	RIGHT-OF-WAY MARKERS
667101-02	PERMANENT SURVEY MARKERS
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >=45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >=45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701316-12	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS >= 45 MPH
701321-17	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720006-04	SIGN PANEL ERECTION DETAILS
725001-01	OBJECT AND TERMINAL MARKERS
728001-01	TELESCOPING STEEL SIGN SUPPORT
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKINGS
782001-01	CURB REFLECTORS
782006	GUARDRAIL AND BARIER WALL REFLECTOR MOUNTING DETAILS

GENERAL NOTES:

- 1
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES (48 HOUR NOTICE IS REQUIRED).
- 2
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE RIGHT-OF-WAY OR PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE ENGINEER.
- 3
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES AND THE VILLAGE OF RICHTON PARK.
- 4
- 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIAN ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED LARGER ITEM OF SPECIFIED WORK.
- 5
- PRIOR TO EMBANKMENT PLACEMENT, ALL VEGETATION, LOOSE MATERIAL. AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. ANY EMBANKMENT WIDENING ON EXISTING SLOPES SHOULD BE BENCHED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 6
- BEFORE BEGINNING ANY WORK THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 7
- FOR WORK OUTSIDE THE LIMITS OF THE STRUCTURE, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- 8
- THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.
- 9
- THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 1 TRAFFIC CONTROL SUPERVISOR, AT 847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 10
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
- 11
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 12
- THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER. WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM ALL THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE, INCLUDING PAVEMENT. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. COORDINATION WITH ALL AGENCIES INVOLVED IS REQUIRED.
- 13
- DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
- 14
- DRAINAGE AND UTILITY ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 15
- THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, DON CHIARUGI, AT donchiarugi@illinois.gov A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT MARKINGS.
- 16
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 17
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
- 18
- DO NOT SCALE PLANS FOR CONSTRUCTION PURPOSES.
- 19
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)".
- 20
- ONE CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED AT EACH END OF THE PROJECT. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER BEFORE PLACEMENT OF THE CHANGEABLE MESSAGE SIGNS.

GENERAL NOTES (CONT.):

- 21
- THE CONTRACTOR SHALL TAKE WHATEVER PRECAUTIONS WHICH MAY BE NECESSARY TO PROTECT THE PROPERTY OF THE VARIOUS PUBLIC UTILITIES WHICH MAY BE LOCATED UNDERGROUND OR ABOVE GROUND, AT OR ADJACENT TO THE SITE OF THIS IMPROVEMENT. HE WILL BE REQUIRED TO REPAIR OR REPLACE AT HIS OWN EXPENSE, OR BEAR THE COST, TO REPAIR OR REPLACE, ANY PUBLIC UTILITY PROPERTY WHICH HAS BEEN DAMAGED THROUGH HIS EFFORTS.
- 22
- OVERHEAD WIRES ARE NOT INSULATED AND EXTRA CAUTION AND VIGILANCE SHALL BE ADHERED TO WHEN WORKING NEARBY. CONTRACTORS SHALL ALWAYS USE CAUTION WHILE OPERATING CRANES AND OR OTHER EQUIPMENT NEAR OVERHEAD ELECTRICAL FACILITIES. THE OCCUPATIONAL HEALTH AND SAFETY ORGANIZATION (OSHA) RULES REQUIRE THAT WORKERS AND EQUIPMENT SHALL NOT APPROACH WITHIN TEN (10) FEET AWAY OF OVERHEAD ELECTRICAL EQUIPMENT WITHOUT APPROPRIATE SUPPLEMENTAL PROTECTION. BE CERTAIN THAT ALL WORKERS ON THIS PROJECT HAVE BEEN FULLY TRAINED AND CONFORM TO OSHA RULES AND OTHER APPLICABLE GUIDELINES REGARDING WORKING SAFELY AROUND ELECTRICAL POWER LINES.
- 23
- BEFORE ORDERING FLOOR DRAINS AN SCUPPERS, THE CONTRACTOR SHALL REVIEW THE EXISTING FIELD CONDITIONS AND THE DRAINAGE SCHEDULES FOUND IN THE PLANS FOR THE LENGTH AND QUANTITY REQUIRED.
- 1
- WITHIN THESE NOTES, THE UNION PACIFIC RAILROAD SHALL BE REFERRED TO AS THE "RAILROAD".
- 2
- A CONTRACTOR'S RIGHT-OF-ENTRY PERMIT IS REQUIRED BEFORE ANY WORK CAN COMMENCE ON RAILROAD PROPERTY. THE COST TO OBTAIN THIS PERMIT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 3
- NO DISRUPTIONS OF RAILROAD OPERATIONS WILL BE PERMITTED.
- 4
- ALL WORK WITHIN 25 FEET OF THE NEAREST TRACK WILL REQUIRE A RAILROAD FLAGMAN. TO SCHEDULE A FLAGMAN FOR WORK ON A COMMUTER LINE, CALL CANDICE MILLER AT (312) 496-4738, A MINIMUM 72 HOURS IN ADVANCE OF START OF WORK. TO SCHEDULE A FLAGMAN FOR WORK ON FREIGHT LINES, CALL DARYL CLARK AT (708) 649-5273, A MINIMUM OF 72 HOURS IN ADVANCE OF START OF WORK.
- 5
- RAILROAD UTILITIES ARE NOT INCLUDED UNDER JULIE. CALL UPRR "CALL BEFORE YOU DIG" (CBYD) AT (800) 336-9193 AND CANDICE MILLER AT (312) 496-4738 FOR LOCATES.
- 6
- FIBER OPTICS MAY BE PRESENT IN THIS AREA. CALL (800) 336-9193 TO COORDINATE ANY REQUIRED PROTECTION OR RELOCATION, PRIOR TO CONSTRUCTION.
- 7
- RAILROAD REVIEW AND APPROVAL OF SHORING, DEMOLITION, ERECTION, AND FALSEWORK IS REQUIRED.
- 8
- ERECTION OVER THE RAILROAD'S RIGHT-OF-WAY SHALL BE DESIGNED TO CAUSE NO INTERRUPTIONS TO RAILROAD'S OPERATIONS. ERECTION OVER THE RAILROAD'S TRACK SHALL BE DEVELOPED SUCH THAT IT ENABLES THE TRACKS(S) TO REMAIN OPEN TO TRAIN TRAFFIC PER RAILROAD'S REQUIREMENTS.
- 9
- MINIMUM CONSTRUCTION CLEARANCE ENVELOPE OF 21 FEET VERTICAL ABOVE THE PLANE OF TOP-OF-RAIL AND 12 FEET HORIZONTAL AT RIGHT ANGLE FROM CENTERLINE OF TRACK SHALL BE MAINTAINED AT ALL TIME DURING CONSTRUCTION.
- 10
- FALSEWORK CLEARANCE SHALL COMPLY WITH THE RAILROAD'S MINIMUM CONSTRUCTION CLEARANCE ENVELOPE.
- 11
- FOR RAILROAD COORDINATION PLEASE REFER TO THE RAILROAD MINIMUM REQUIREMENTS AS PART OF SPECIAL PROVISIONS.
- 12
- THE PROPOSED OVERPASS PROJECT SHALL NOT CHANGE THE QUANTITY AND/OR CHARACTERISTICS OF THE FLOW IN THE RAILROAD DITCHES AND/OR DRAINAGE STRUCTURES.
- 13
- UNLESS OTHERWISE NOTED IN THE PLANS OR CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL SURVEY THE TOP OF RAIL OF EACH RAILROAD TRACK A MINIMUM OF 1000-FT NORTH AND SOUTH OF THE IL-38 CENTERLINE IN 50' INCREMENTS BEFORE BEGINNING CONSTRUCTION, AND COMPARE IT TO THE ALIGNMENT AND THE TOP OF RAIL PROFILES. ALL DISCREPANCIES BETWEEN SURVEY AND PLANS SHALL BE NOTED AND BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE RAILROAD PRIOR TO CONSTRUCTION. IN ADDITION, UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL MEASURE THE RESULTING HORIZONTAL AND VERTICAL CLEARANCES AND SUBMIT THEM TO THE ENGINEER FOR REVIEW AND INCLUSION IN THE RECORD DRAWINGS. THIS WORK SHALL BE INCLUDED IN THE COST OF CONSTRUCTION LAYOUT.
- 14
- THE CONTRACTOR SHALL SUBMIT A PROPOSED METHOD OF EROSION AND SEDIMENT CONTROL AND HAVE THE METHOD APPROVED BY THE RAILROAD.
- 15
- NO DRAINAGE SHALL BE DISCHARGED ONTO THE RAILROAD'S RIGHT-OF-WAY.
- 16
- ALL SHORING SYSTEMS THAT IMPACT THE RAILROAD'S OPERATIONS AND/OR SUPPORTS THE RAILROAD'S EMBANKMENT SHALL BE DESIGNED AND CONSTRUCTED PER THE CURRENT RAILROAD GUIDELINES FOR TEMPORARY SHORING.
- 17
- ALL DEMOLITIONS WITHIN THE RAILROAD'S RIGHT-OF-WAY AND/OR DEMOLITION THAT MAY IMPACT THE RAILROAD'S TRACKS OR OPERATIONS SHALL BE IN COMPLIANCE WITH THE RAILROAD'S DEMOLITION GUIDELINES.
- 18
- RAILROAD REQUIREMENTS DO NOT ALLOW WORK WITHIN 50 FEET OF TRACK CENTERLINE WHEN A TRAIN PASSES THE WORK SITE AND ALL PERSONNEL MUST CLEAR THE AREA WITHIN 25 FEET OF THE TRACK CENTERLINE AN SECURE ALL EQUIPMENT.

<div><div><div>COLLINS</div><div>ENGINEERS</div><div>INC</div></div><div><div>123 North Wacker Drive</div><div>Suite 900</div><div>Chicago, IL 60606</div><div>(312) 704-9300</div><div>www.collinsengr.com</div></div></div>	USER NAME = aseiber	DESIGNED – ZJT	REVISED –	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 38 OVER UNION PACIFIC RAILROAD INDEX OF SHEETS, GENERAL NOTES, AND HIGHWAY STANDARDS			F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / 1in.	DRAWN – ZJT	REVISED –					567	5VB-BR	KANE	73	2
	PLOT DATE = 12/13/2018	CHECKED – CEI	REVISED –		SCALE:			SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 62C14	
		DATE –	REVISED –					ILLINOIS FED. AID PROJECT				

FILE NAME = I:\18383 PTB 182 84\18383.18 - IL 38 over UPRR\CADD\CADD Sheets\0162C14-sht-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL	
				20% STATE	
				BRIDGE	
				0013	
				RURAL	
20200100	EARTH EXCAVATION	CU YD	150	150	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	257	257	
25000300	SEEDING, CLASS 3	ACRE	0.25	0.25	
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	307	307	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	163	163	
28000305	TEMPORARY DITCH CHECKS	FOOT	100	100	
28000400	PERIMETER EROSION BARRIER	FOOT	759	759	
28000510	INLET FILTERS	EACH	2	2	
28001200	TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	307	307	
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	394	394	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	535	535	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	34	34	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	56	56	
42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	352	352	

FILE NAME = I:\18303.PTB.182.84\18303.18 - IL 38 over UPRR\CADD\CADD Sheets\0162C14-shr-SDD.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	
				BRIDGE	
				0013 RURAL	
42001300	PROTECTIVE COAT	SQ YD	51	51	
44000100	PAVEMENT REMOVAL	SQ YD	336	336	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	638	638	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	275	275	
44004250	PAVED SHOULDER REMOVAL	SQ YD	246	246	
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	214	214	
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	83	83	
50102400	CONCRETE REMOVAL	CU YD	15.3	15.3	
50104650	SLOPE WALL REMOVAL	SQ YD	463	463	
50104720	REMOVAL OF EXISTING CONCRETE DECK	EACH	1	1	
50157300	PROTECTIVE SHIELD	SQ YD	474	474	
50300100	FLOOR DRAINS	EACH	4	4	
50300225	CONCRETE STRUCTURES	CU YD	20.9	20.9	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	502.2	502.2	



FILE NAME = I:\18303.PTB.182.84\18303.18 - IL 38 over UPRR\CADD\CADD Sheets\0162C14-sh1-500.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL	
				20% STATE	
				ROADWAY	
				0006	
				RURAL	
50300300	PROTECTIVE COAT	SQ YD	2254	2254	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	95.9	95.9	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	87120	87120	
50500505	STUD SHEAR CONNECTORS	EACH	5814	5814	
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	173980	173980	
50800515	BAR SPLICERS	EACH	1685	1685	
51100100	SLOPE WALL 4 INCH	SQ YD	513	513	
51500100	NAME PLATES	EACH	1	1	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6	6	
52100520	ANCHOR BOLTS, 1"	EACH	26	26	
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	150	150	
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	217	217	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	400	400	

\*= SPECIALTY ITEM

FILE NAME = I:\18303.PTB 182 84\18303.18 - IL 38 over UPRR\CADD\Sheets\0162C14-sh1-SDD.dgn

				CONSTRUCTION CODE	
				80% FEDERAL	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	20% STATE	
				BRIDGE	
				0013	
				RURAL	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	474	474	
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	285	285	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12	
67100100	MOBILIZATION	L SUM	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	270	270	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	3775	3775	
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	48	48	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	800	800	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	800	800	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1623	1623	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	2087	2087	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	12	

\*= SPECIALTY ITEM

<b>COLLINS ENGINEERS INC.</b> 123 North Wacker Drive Suite 900 Chicago, IL 60606 (312) 704-9300 www.collinsengr.com	USER NAME = oseiber	DESIGNED - ZJT	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>IL 38 OVER UNION PACIFIC RAILROAD</b> <b>SUMMARY OF QUANTITIES</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ZJT	REVISED -				567	5VB-BR	KANE	73	6
	PLOT SCALE = 100.0000' / 1in.	CHECKED - CEI	REVISED -				CONTRACT NO. 62C14				
	PLOT DATE = 12/13/2018	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 4 OF 7 SHEETS		STA.		TO STA.					

FILE NAME = H:\0303 PTB 182 84\030318 - IL 38 over UPRR\CADD\CADD Sheets\0162C14-sh1-SDD.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL	
				20% STATE	
				ROADWAY	
				0006	
				RURAL	
* 78100300	REPLACEMENT REFLECTOR	EACH	20	20	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	4	4	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	128	128	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	12	12	
89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
X0325201	SHOULDER RUMBLE STRIP REMOVAL	SQ YD	73	73	
X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	1	
X0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	278	278	
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	1056	1056	
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	168	168	
X0900052	PREFORMED JOINT SEAL 1 1/2"	FOOT	280	280	
X0900063	PREFORMED JOINT SEAL 3"	FOOT	93.5	93.5	
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1367	1367	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	

\*= SPECIALTY ITEM

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		DRAWN - ZJT	REVISED -				567	5VB-BR	KANE	73	7
	PLOT SCALE = 100.0000' / 1in.	CHECKED - CEI	REVISED -				CONTRACT NO. 62C14				
	PLOT DATE = 12/6/2018	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 5 OF 7 SHEETS		STA.		TO STA.					

FILE NAME = I:\18383 PTB 182 84\18383.18 - IL 38 over UPRR\CADD\CADD Sheets\0162C14-sh1-SDD.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	
				BRIDGE	
				0013 RURAL	
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1355	1355	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	336	336	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	6	6	
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	87200	87200	
Z0004552	APPROACH SLAB REMOVAL	SQ YD	143	143	
Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1	1	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	2779	2779	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0018010	DRAINAGE SCUPPERS, DS-33	EACH	6	6	
Z0018800	DRAINAGE SYSTEM	L SUM	1	1	
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1606	1606	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	2	

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		DRAWN - ZJT	REVISED -				567	5VB-BR	KANE	73	8
	PLOT SCALE = 100.0000' / 1in.	CHECKED - CEI	REVISED -				CONTRACT NO. 62C14				
	PLOT DATE = 12/6/2018	DATE -	REVISED -				ILLINOIS FED. AID PROJECT				
				SCALE:		SHEET 6 OF 7 SHEETS	STA. TO STA.				

FILE NAME = I:\0303 PTB 182 04\0303.10 - IL 38 over UPRR\CADD\CADD\_Sheets\01E2C14-sht-S00.dgn

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<div><div><div>COLLINS ENGINEERS</div></div><div><div>123 North Wacker Drive Suite 900 Chicago, IL 60606 (312) 704-9300 www.collinsengr.com</div></div></div>	USER NAME = esser	DESIGNED - ZJT	REVISED -	<div>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</div>	<div>IL 38 OVER UNION PACIFIC RAILROAD SUMMARY OF QUANTITIES</div>				F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100.0000 ' / in.	DRAWN - ZJT	REVISED -						567	5VB-BR	KANE	73	9
	PLOT DATE = 12/13/2018	CHECKED - CEI	REVISED -		CONTRACT NO. 62C14								
		DATE -	REVISED -		SCALE:	SHEET 7 OF 7 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

FILE NAME = I:\10303 PTB 182 04\1030310 - IL 38 over UPRR\CADD\CADD\_Sheets\1062C14-sh1-type.dgn

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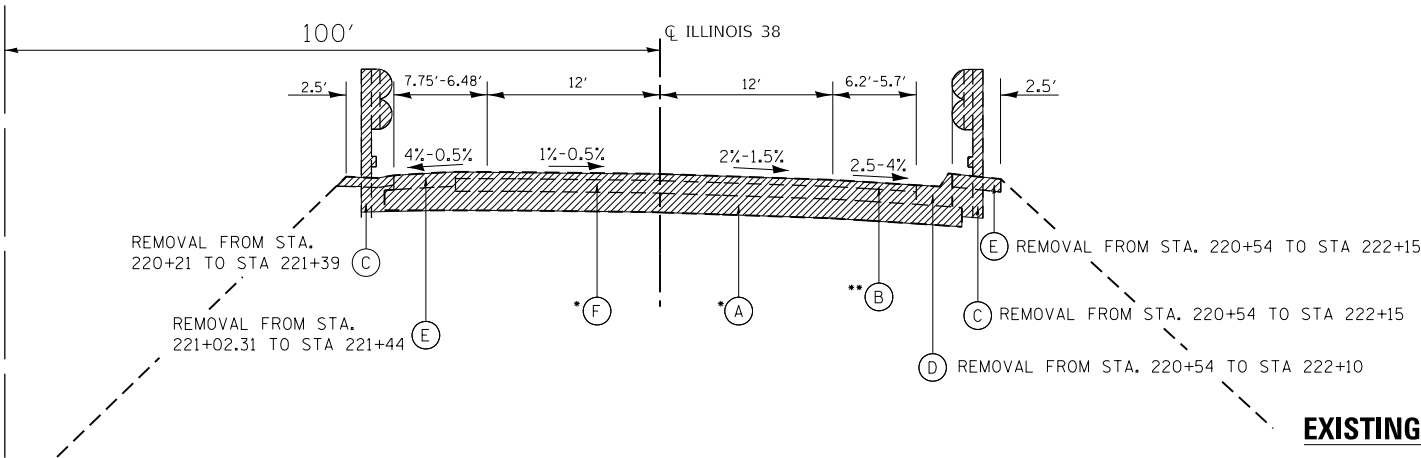
PLOT SCALE = 20.0000' / in.

PLOT DATE = 12/6/2018

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR Voids	QMP
RESURFACING:		
HMA SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.	QC/QA
HOT-MIX ASPHALT SHOULDERS, 8":		
HMA BINDER COURSE, IL-19.0,N70, 8"	4% @ 70 GYR.	QC/QA
PAVEMENT CONNECTOR:		
HMA SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.	QC/QA
HMA BINDER COURSE, IL-19.0, N70 (2 1/4" MIN.)	4% @ 70 GYR.	QC/QA
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)		

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



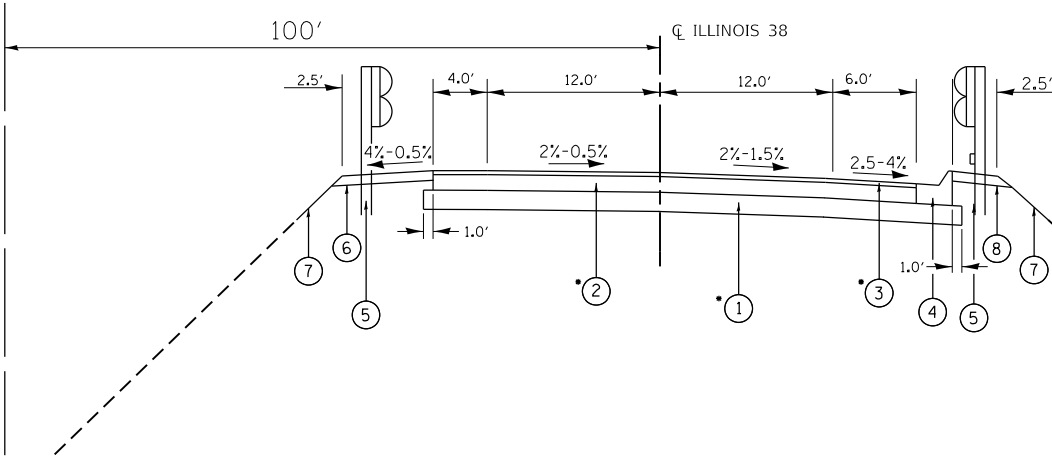
EXISTING TYPICAL SECTION  
ILLINOIS ROUTE 38

- STA. 220+00 to STA. 221+61.72  
PAVEMENT REMOVAL & REMOVAL OF AGGREGATE
- SUBGRADE OCCURS FROM STA. 221+02.31 TO STA. 221+61.72.
- HOT-MIX ASPHALT SURFACE REMOVAL, 1.75" OCCURS FROM STA. 220+00.00 TO STA. 221+02.31.

EXISTING LEGEND:

- A EXIST. AGGREGATE SUBGRADE
- B EXIST. HMA OVERLAY
- C EXIST. GUARDRAIL
- D EXIST. 6.18 CURB AND GUTTER
- E EXIST. PAVED SHOULDER
- F EXIST. PCC PAVEMENT

TO BE REMOVED



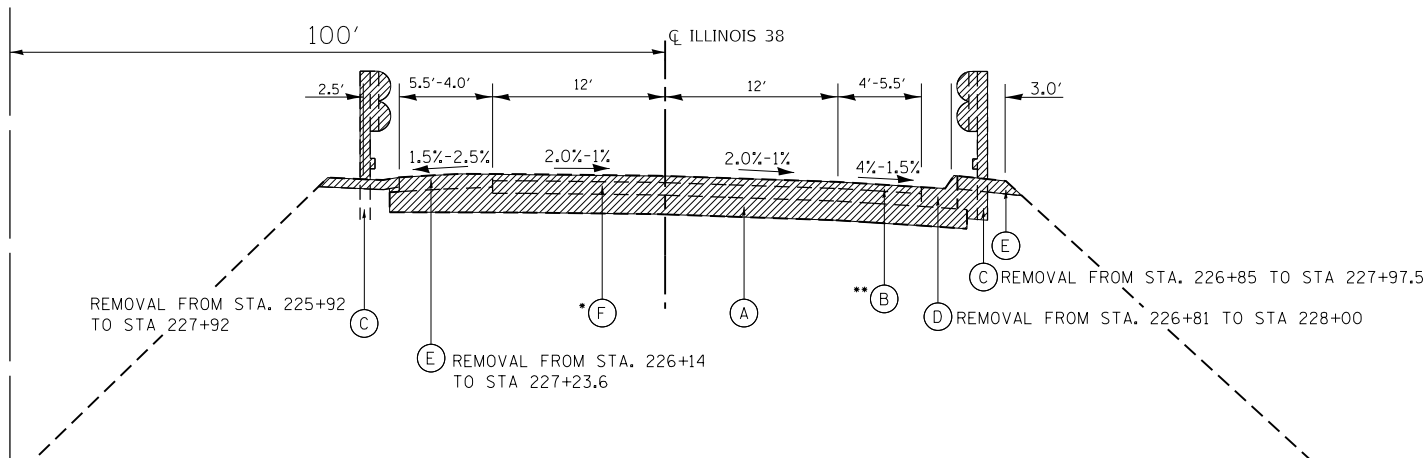
PROPOSED TYPICAL SECTION  
ILLINOIS ROUTE 38

- STA. 220+00 to STA. 221+47.72
- PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12 INCH AND PROPOSED PAVEMENT CONNECTOR (HMA) SHALL ONLY OCCUR FROM STA. 221+02.31 TO STA. 221+47.72.

PROPOSED LEGEND:

- 1 PROP. AGG SUBGRADE IMP 12
- 2 PROP. HMA BINDER COURSE (2 1/4" MIN.)
- 3 PROP. HMA SURFACE COURSE, 1 1/2"
- 4 PROP. 6.18 CURB AND GUTTER
- 5 PROP. GUARDRAIL
- 6 PROP. AGGREGATE SHLDS B 6
- 7 PROP. HD EROS CONTR BLANKET  
PROP. SEEDING, CL 3
- 8 PROP. HMA ASPHALT SHOULDERS, 8"

<div>FILE NAME</div> <div><div><div>COLLINS ENGINEERS INC</div><div>123 North Wacker Drive Suite 900 Chicago, IL 60606 (312) 704-9300 www.collinsengr.com</div></div></div>	USER NAME = aseiber	DESIGNED - ZJT	REVISED -	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>IL 38 OVER UNION PACIFIC RAILROAD</div> <div>TYPICAL SECTIONS</div>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20.0000 ' / in.	DRAWN - ZJT	REVISED -						567	5VB-BR	KANE	73	10
	PLOT DATE = 12/6/2018	CHECKED - CEI	REVISED -		CONTRACT NO. 62C14								
					SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	




**EXISTING TYPICAL SECTION**  
**ILLINOIS ROUTE 38**

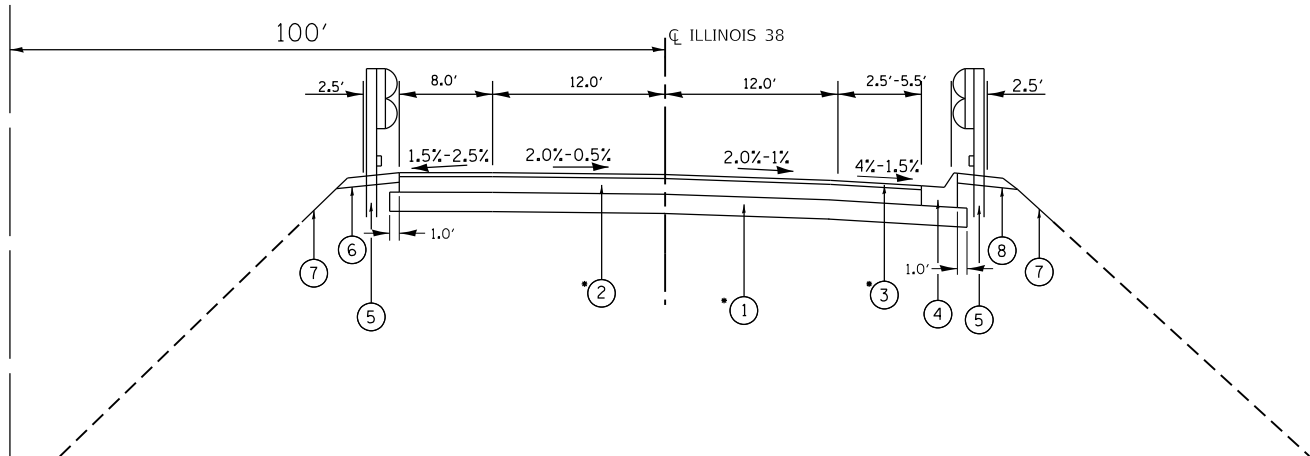
STA. 226+81 to STA. 228+00

- PAVEMENT REMOVAL & REMOVAL OF AGGREGATE SUBGRADE OCCURS FROM STA. 226+58.33 TO STA. 227+23.61.
- \*\* HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4" OCCURS FROM STA. 227+23.61 TO STA. 228+00.

**EXISTING LEGEND:**

- (A) EXIST. AGGREGATE SUBGRADE
- (B) EXIST. HMA OVERLAY
- (C) EXIST. GUARDRAIL
- (D) EXIST. 6.18 CURB AND GUTTER
- (E) EXIST. PAVED SHOULDER
- (F) EXIST. PCC PAVEMENT

 TO BE REMOVED



**PROPOSED TYPICAL SECTION**  
**ILLINOIS ROUTE 38**

STA. 226+69.12 to STA. 228+00

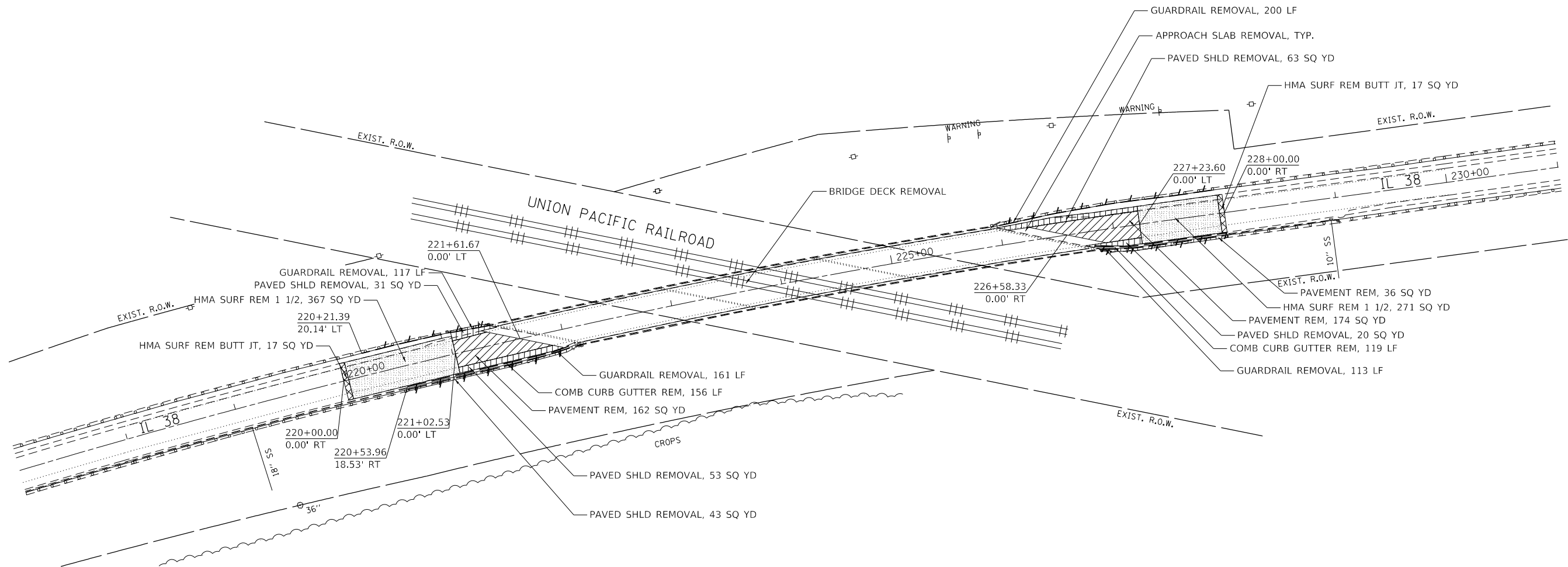
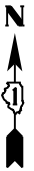
- PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12 INCH AND PROPOSED PAVEMENT CONNECTOR (HMA) SHALL ONLY OCCUR FROM STA. 226+69.12 TO STA. 227+23.61.

**PROPOSED LEGEND:**

- (1) PROP. AGG SUBGRADE IMP 12
- (2) PROP. HMA BINDER COURSE (2 1/4" MIN.)
- (3) PROP. HMA SURFACE COURSE, 1 1/2"
- (4) PROP. 6.18 CURB AND GUTTER
- (5) PROP. GUARDRAIL
- (6) PROP. AGGREGATE SHLDS B 6
- (7) PROP. HD EROS CONTR BLANKET  
PROP. SEEDING, CL 3
- (8) PROP. HMA ASPHALT SHOULDERS, 8"

FILE NAME = I:\10303 PTB 182 04\1030310 - IL 38 over UPRR\CADD\CADD\_Sheets\1162C14-sh1-type.dgn

<div>FILE NAME</div> <div><div><div><div><div>COLLINS ENGINEERS</div><div>INC.</div></div><div><div>123 North Wacker Drive</div><div>Suite 900</div><div>Chicago, IL 60606</div><div>(312) 704-9300</div><div>www.collinsengr.com</div></div></div></div></div>	USER NAME = aseiber	DESIGNED - ZJT	REVISED -	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>IL 38 OVER UNION PACIFIC RAILROAD</div> <div>TYPICAL SECTIONS</div>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 20.0000' / in.	CHECKED - CEI	REVISED -					567	5VB-BR	KANE	73	11
	PLOT DATE = 12/6/2018	DATE -	REVISED -					CONTRACT NO. 62C14				
					SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	



LEGEND

- HMA SURF REM BUTT JT
- PAVEMENT REMOVAL
- LINEAR REMOVAL ITEM
- PAVED SHOULDER REMOVAL
- HMA SURF REM 1 1/2"

FILE NAME = I:\10303 PTB 182 04\1030310 - IL 38 over UPRR\CADD\Sheets\1162C14-shld-removal.dgn

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PLOT DATE = 12/6/2018	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

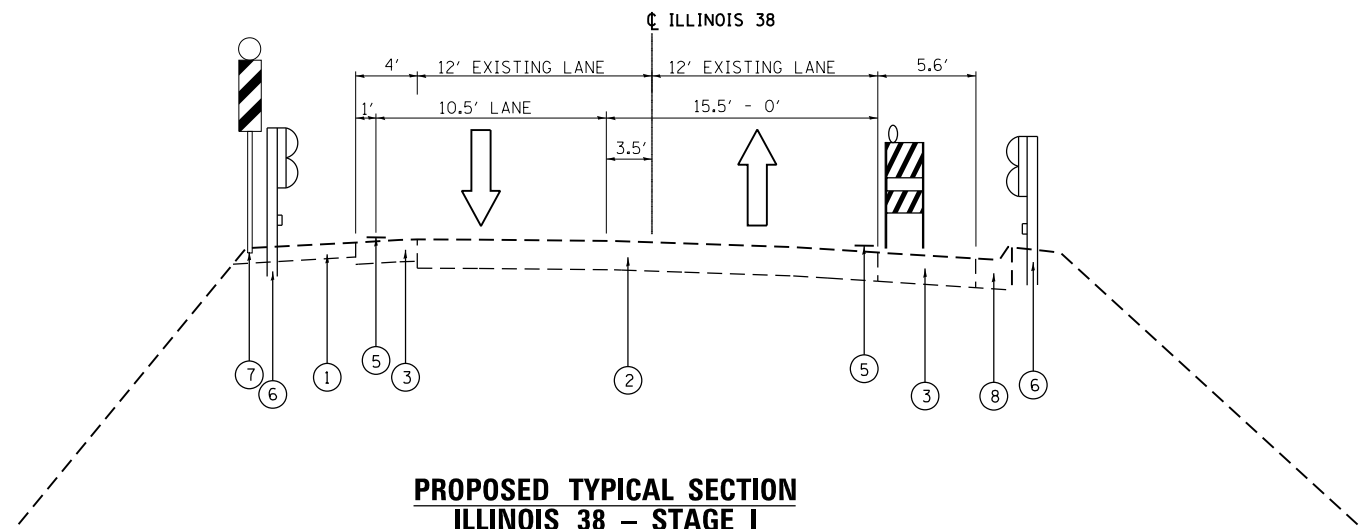
IL 38 OVER UNION PACIFIC RAILROAD REMOVAL PLAN			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	12
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



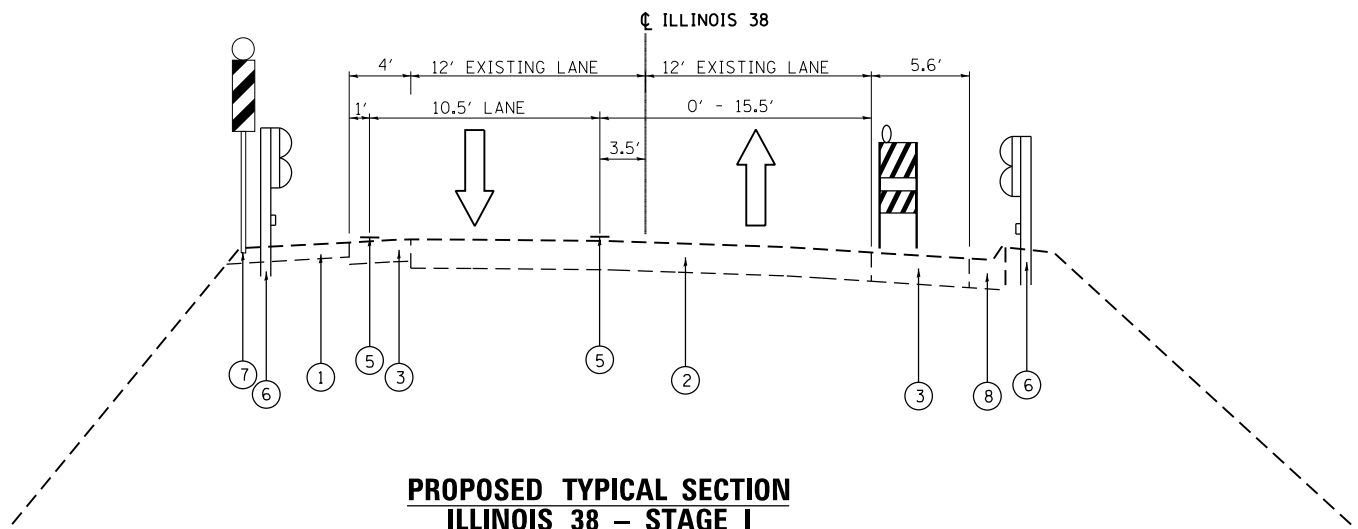
<b>PROFILE</b>	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
NOTE BOOK _____	GRADES CHECKED _____		
NO. _____	B.M. NOTED _____		
	STRUCTURE NOTATIONS CHK'D _____		

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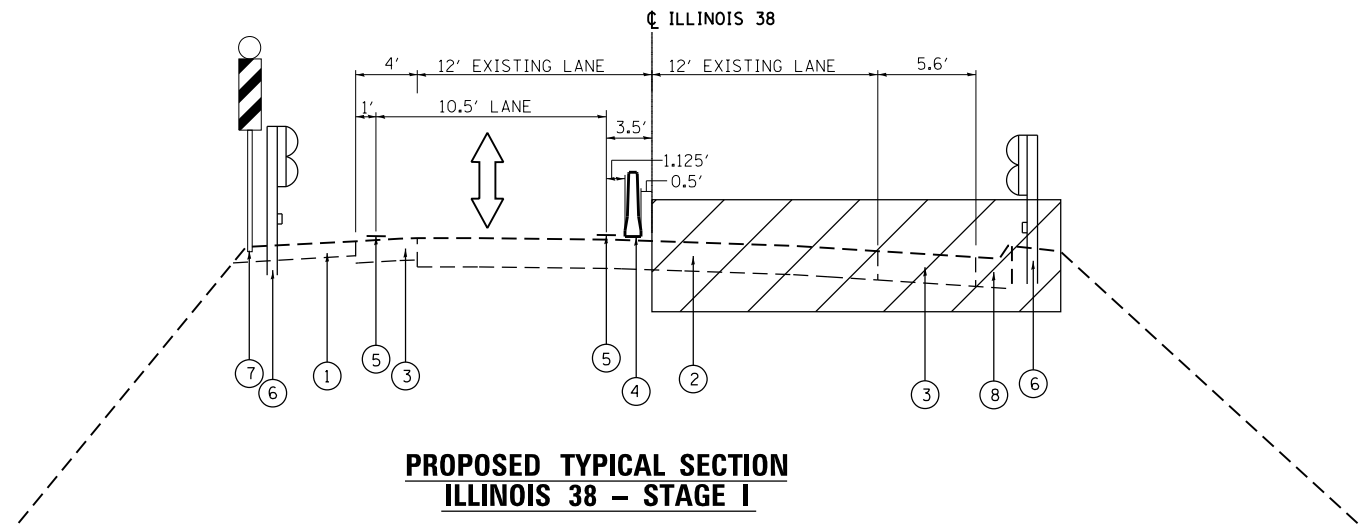
**PROPOSED TYPICAL SECTION  
ILLINOIS 38 – STAGE I**

STA. 218+60 TO STA. 220+52  
DRUMS FROM STA. 216+50 - 229+23  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15



**PROPOSED TYPICAL SECTION  
ILLINOIS 38 – STAGE I**

STA. 227+78 TO STA. 229+23  
DRUMS FROM STA. 216+50 - 229+23  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15



**PROPOSED TYPICAL SECTION  
ILLINOIS 38 – STAGE I**

STA. 220+52 TO STA. 227+78  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15  
SEE STRUCTURAL SHEETS FOR STAGING BETWEEN STA. 221+47 - STA. 226+69

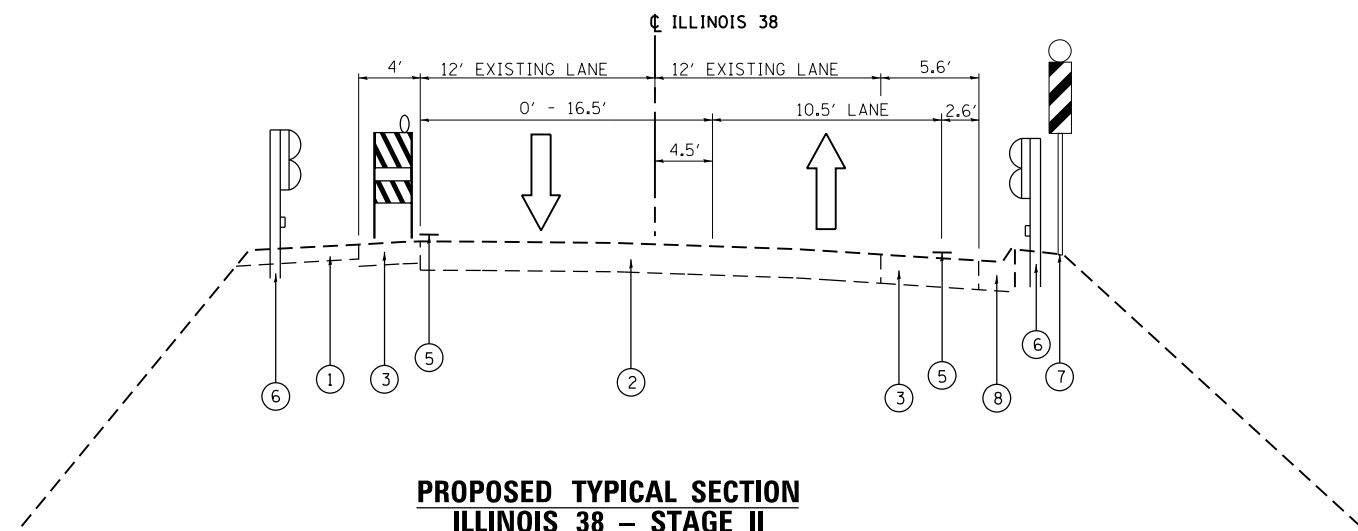
**PROPOSED LEGEND:**

- ① EXIST. AGGREGATE SHOULDER
- ② EXIST. HMA PAVEMENT
- ③ EXIST. PAVED SHOULDER
- ④ TEMPORARY CONCRETE BARRIER
- ⑤ PAVEMENT MARKING TAPE, TYPE IV 4" WHITE
- ⑥ EXIST. GUARDRAIL
- ⑦ DOUBLE VERTICAL PANEL
- ⑧ EXIST. 6.18 CURB AND GUTTER

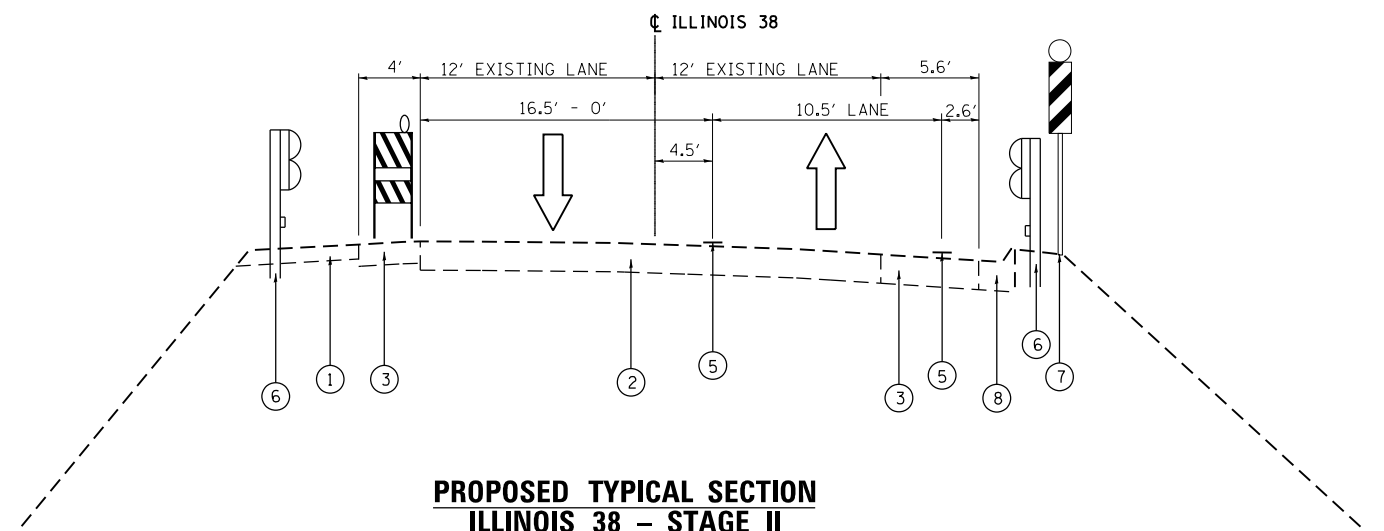


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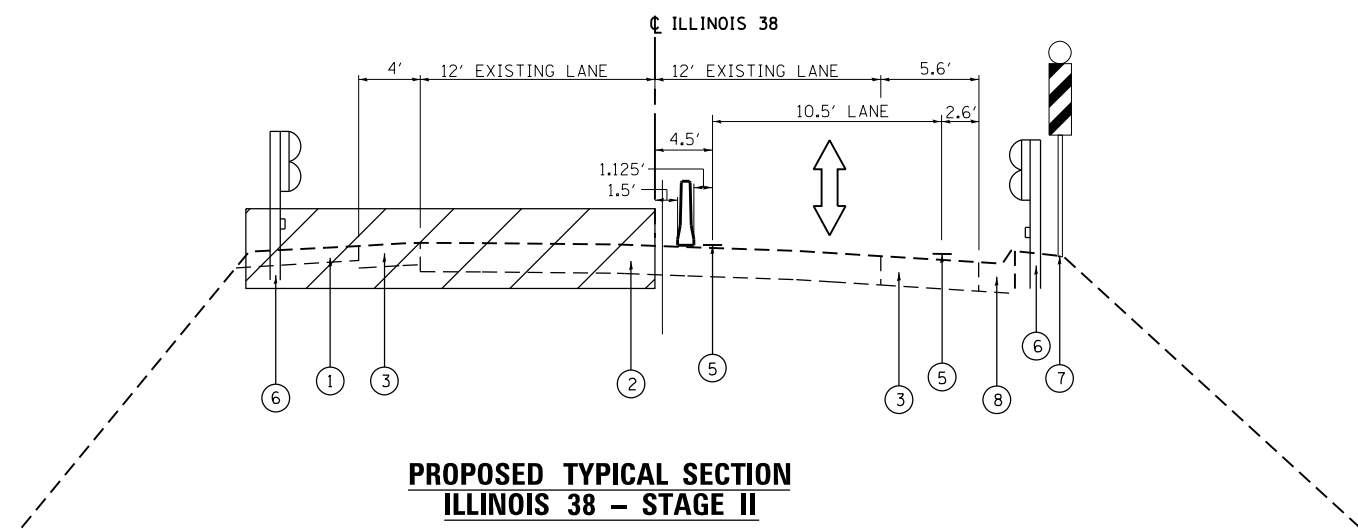




STA. 219+10 TO STA. 220+52  
DRUMS FROM STA. 219+10 - 231+73  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15



STA. 227+80 TO STA. 229+73  
DRUMS FROM STA. 219+10 - 231+73  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15



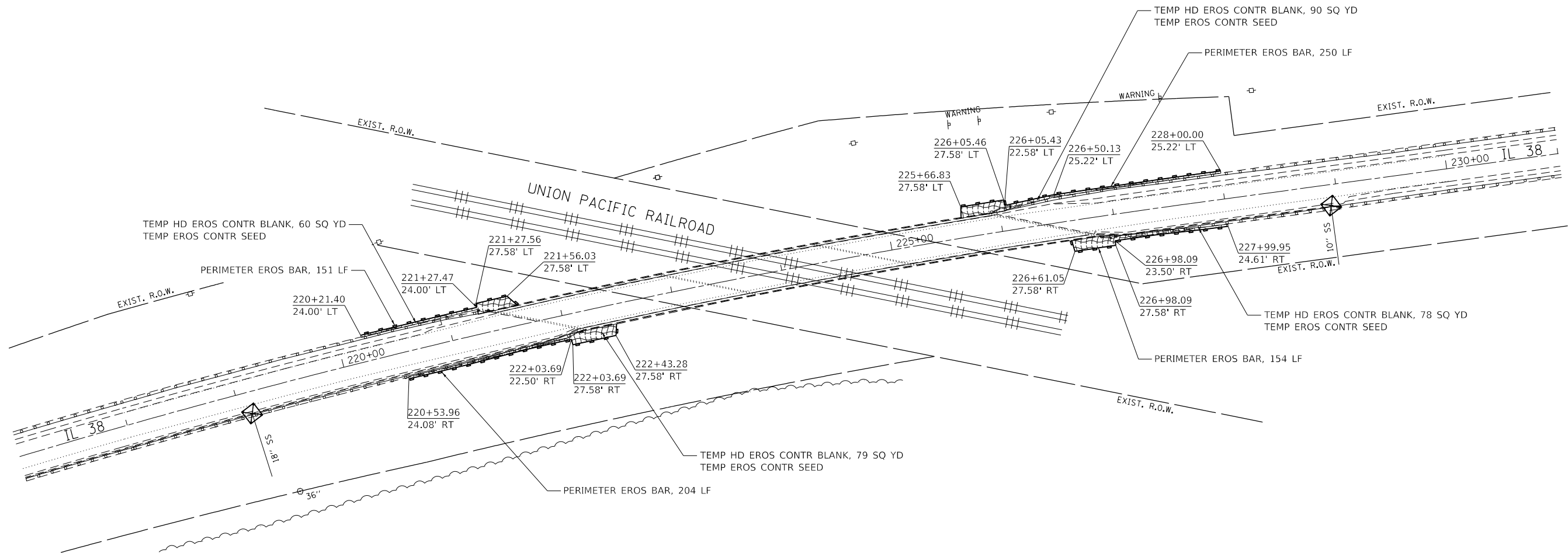
STA. 220+52 TO STA. 227+80  
CONCRETE BARRIER FROM STA. 220+15 - STA. 228+15  
SEE STRUCTURAL SHEETS FOR STAGING BETWEEN STA. 221+47 - STA. 226+69

**PROPOSED LEGEND:**




- ① EXIST. AGGREGATE SHOULDER
- ② EXIST. HMA PAVEMENT
- ③ EXIST. PAVED SHOULDER
- ④ TEMPORARY CONCRETE BARRIER
- ⑤ PAVEMENT MARKING TAPE, TYPE IV 4" WHITE
- ⑥ EXIST. GUARDRAIL
- ⑦ DOUBLE VERTICAL PANEL
- ⑧ EXIST. 6.18 CURB AND GUTTER







### LEGEND

-  TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET  
TEMPORARY EROSION CONTROL SEEDING
-  PERIMETER EROSION BARRIER
-  INLET FILTERS

FILE NAME = I:\10203 PTB 182 04\1020310 - IL 38 over UPRR\CADD\CA00.Sheets\1062C14-sh1-Erosion.dgn

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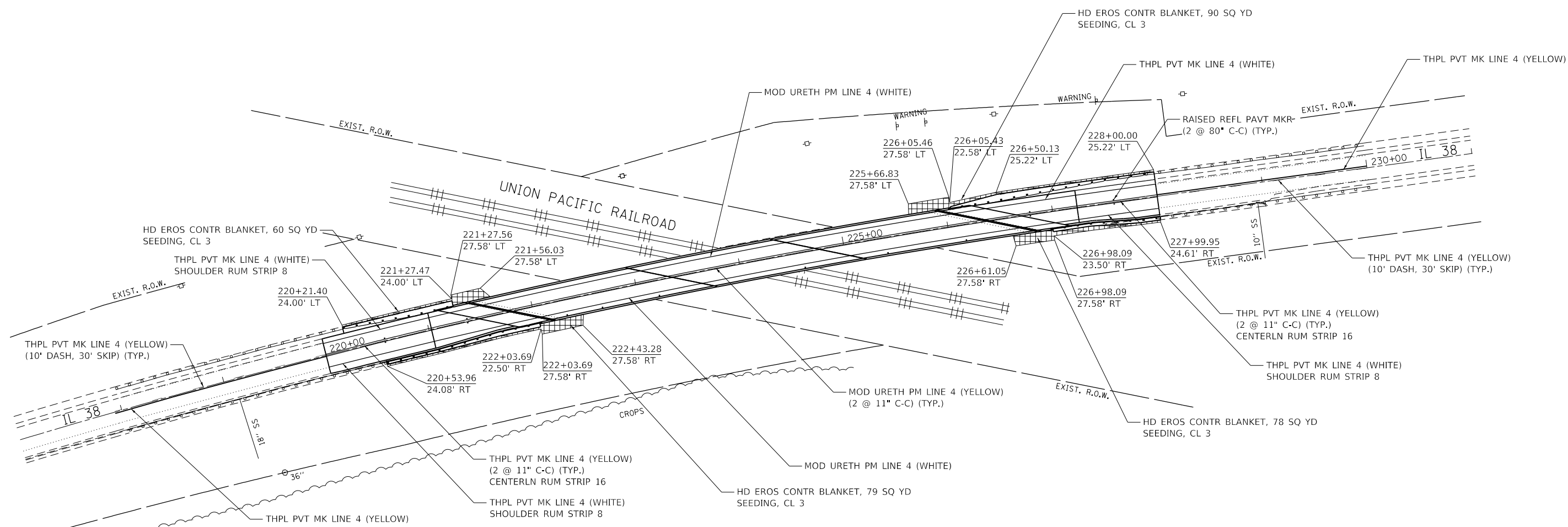
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DRAWN - ZJT	REVISED -	
PLOT SCALE = 100.0000' / 1" =	CHECKED - CEI	REVISED -
PLOT DATE = 12/6/2018	DATE -	REVISED -

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

**IL 38 OVER UNION PACIFIC RAILROAD**  
**EROSION CONTROL PLAN**

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	18
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				




NOTES:

1. REFER TO DISTRICT ONE DETAILS TC-11 AND TC-13 FOR ADDITIONAL INFORMATION.
2. ALL PAVEMENT MARKINGS ON CONCRETE SURFACE SHALL BE MODIFIED URETHANE.
3. ALL PAVEMENT MARKINGS ON HMA SURFACE SHALL BE THERMOPLASTIC.

FILE NAME = I:\0303 PTB 182 04\0303.10 - IL 38 over UPRR\CADD\_Sheets\DI62C14-sht-PMK & LNDSCP.dgn

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	DRAWN - ZJT	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - CEJ	REVISED -
PLOT DATE = 1/8/2019	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**IL 38 OVER UNION PACIFIC RAILROAD  
PAVEMENT MARKING & LANDSCAPING PLAN**

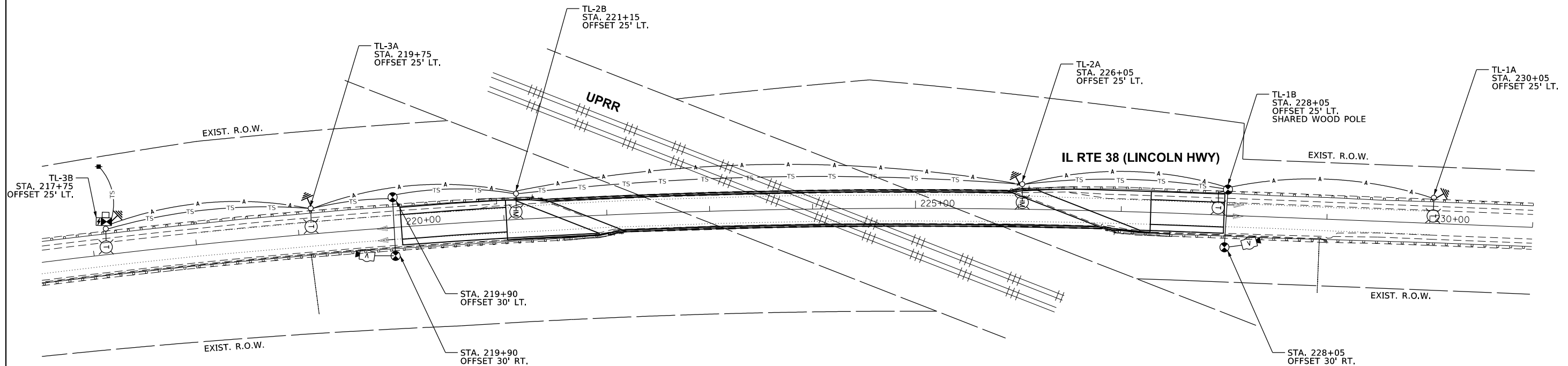
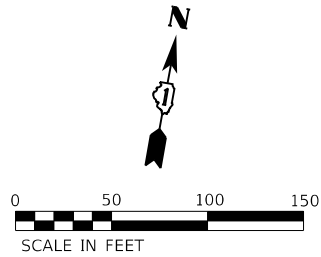
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	19
		CONTRACT NO. 62C1		
ILLINOIS LEAD AID PROJECT				

**(NOT TO SCALE)**

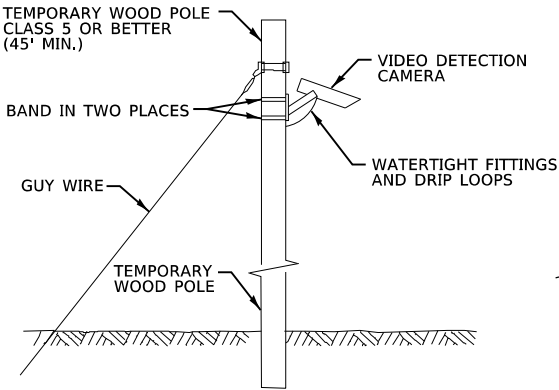
TS SHT NO. 1





**NOTES FOR TEMPORARY LIGHTING**

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.



**TEMPORARY LIGHTING LEGEND**

- 400 W, 120V, MCIII HPS, WITH PHOTO CELL 15' M.A. 50' MH ON WOOD POLE CLASS 4
- 750 W, 120V, MCIII HPS, WITH PHOTO CELL, 20' M.A. 90' MH ON WOOD POLE CLASS 2
- 3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A TEMPORARY LIGHTING UNIT NUMBER-ONE CIRCUIT A
- GROUND ROD 5/8" DIA. X 10'
- COMBINATION LIGHTING TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TS TEMPORARY SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING ANG SIGNAL IL RTE 38 (LINCOLN HWY)			
SCALE: 1"=50'	SHEET	OF	SHEETS
STA.		TO STA.	

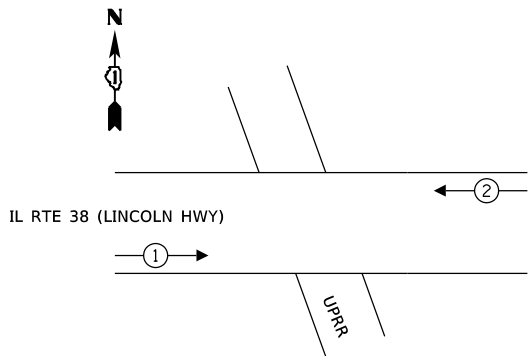
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	21
CONTRACT NO. 62C14				
ILLINOIS		FED. AID PROJECT		

MODEL: Default  
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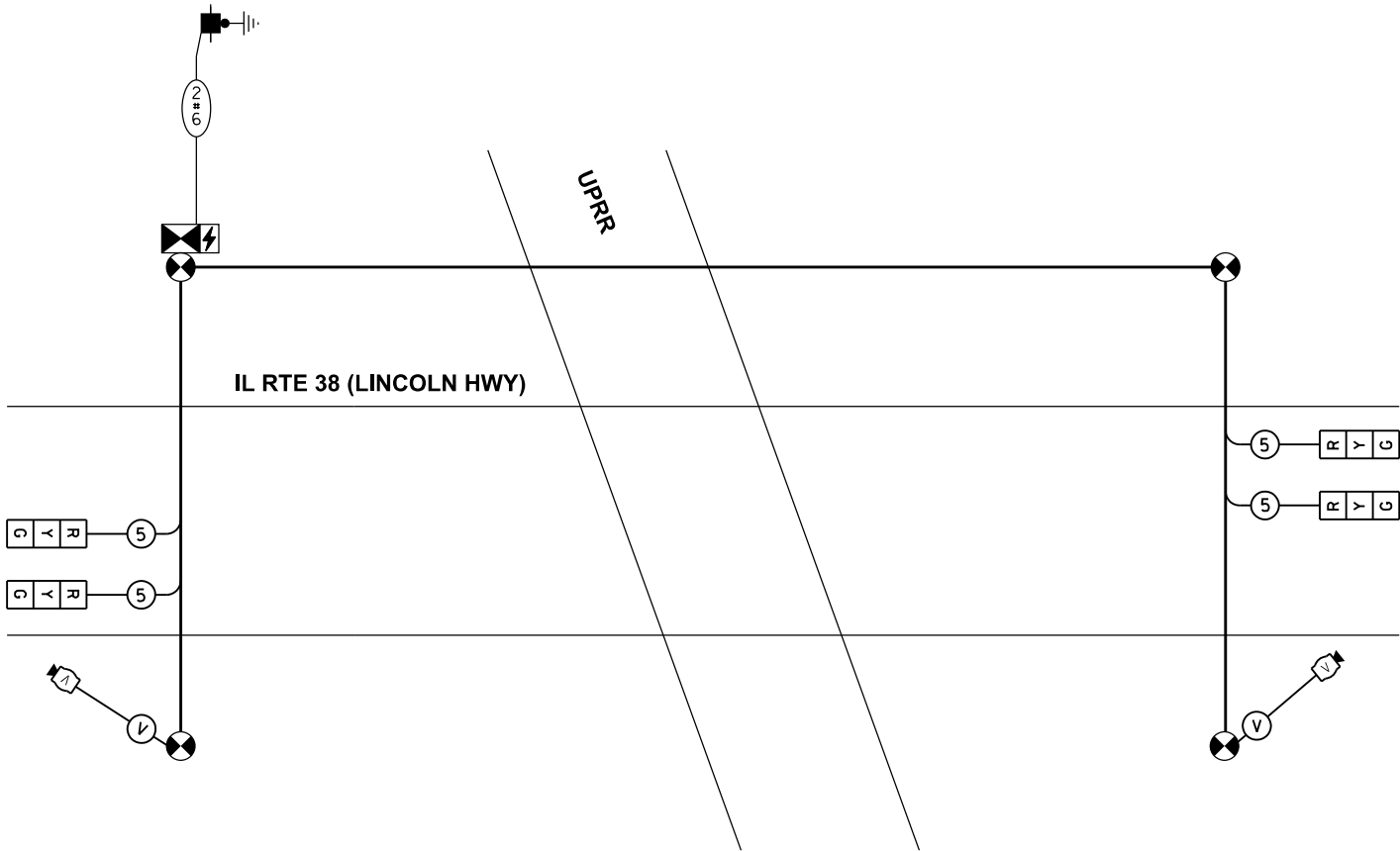
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PLOT DATE = 10/8/2018	CHECKED - KP	REVISED -



TEMPORARY CONTROLLER SEQUENCE



- LEGEND:
- PROTECTED PHASE
  - PROTECTED/PERMITTED PHASE
  - PEDESTRIAN PHASE
  - OL OVERLAP



CABLE PLAN  
N.T.S.

SCHEDULE OF QUANTITIES FOR TEMPORARY LIGHTING

QUANTITY	UNIT	ITEM
1300	FOOT	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE
5	EACH	REMOVAL OF TEMPORARY LIGHTING UNITS
1	EACH	REMOVAL OF ELECTRIC SERVICE INSTALLATION
1	EACH	TEMPORARY ELECTRIC SERVICE CONNECTION
1	EACH	TEMPORARY ELECTRIC SERVICE INSTALLATION
3	EACH	TEMPORARY WOOD POLE, 60 FT. CLASS 4, 15 FT. MAST ARM
2	EACH	TEMPORARY WOOD POLE, 100 FT., CLASS 4, 20 FT. MAST ARM
1	EACH	COMBINATION POLE MOUNTED ELECTRIC SERVICE BOX
4	EACH	TEMPORARY LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 W. TYPE II DISTRIBUTION
2	EACH	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 750 WATT
6	EACH	GROUND ROD, 5/8" DIA. X 10 FEET

NOTE:  
THESE QUANTITIES ARE FOR ESTIMATING PURPOSE ONLY.THESE ITEMS WILL BE PAID UNDER "TEMPORARY LIGHTING FOR SINGLE LANE STAGING". THE TEMPORARY TRAFFIC SIGNAL ITEMS NOT INCLUDED IN THE PAY ITEM "TEMPORARY LIGHTING FOR SINGLE LANE STAGING" SHALL BE PART OF PAY ITEM "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION".

SCHEDULE OF QUANTITIES FOR TEMPORARY TRAFFIC SIGNALS

QUANTITY	UNIT	ITEM
1	EACH	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION
2	EACH	TEMPORARY TRAFFIC SIGNAL TIMING

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT D1 STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

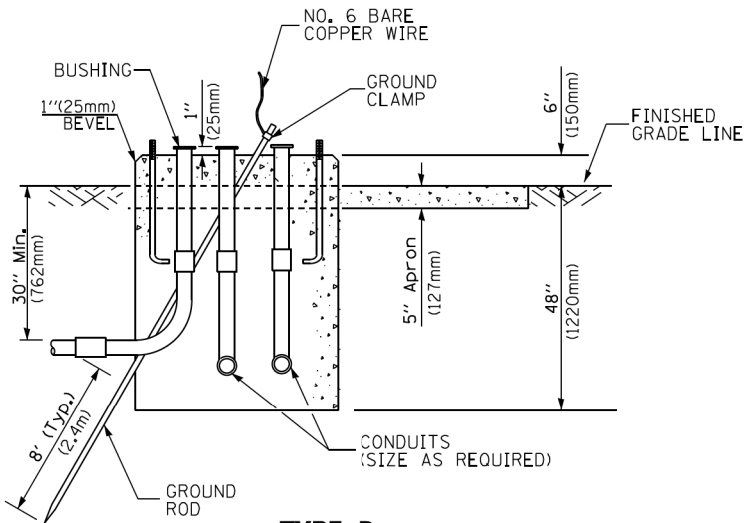
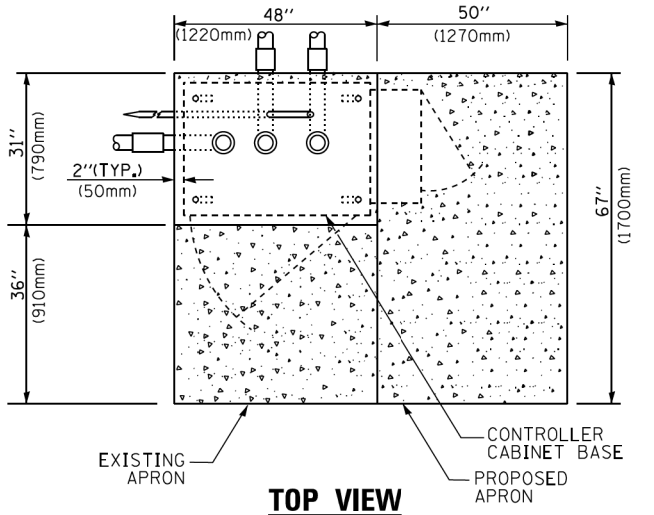
THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

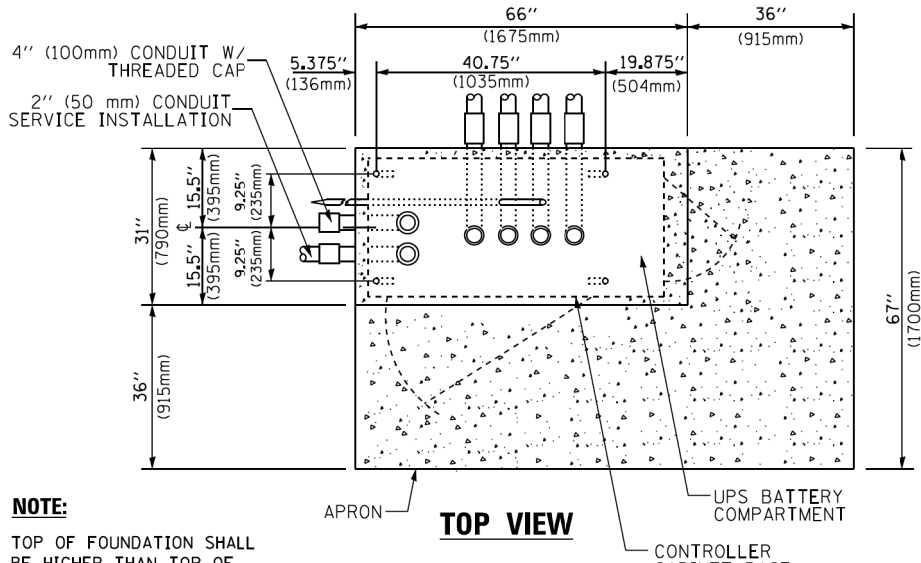
TEMPORARY CABLE PLAN AND  
TEMPORARY PHASE DESIGNATION DIAGRAM  
IL RTE 38 (LINCOLN HWY)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	22
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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

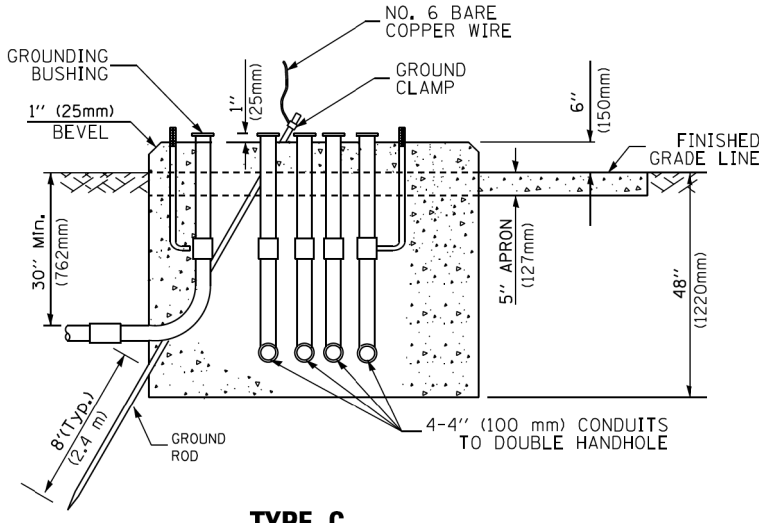


**TYPE D**  
**FOR GROUND MOUNTED**  
**CONTROLLER CABINET**  
**AND UPS BATTERY CABINET**

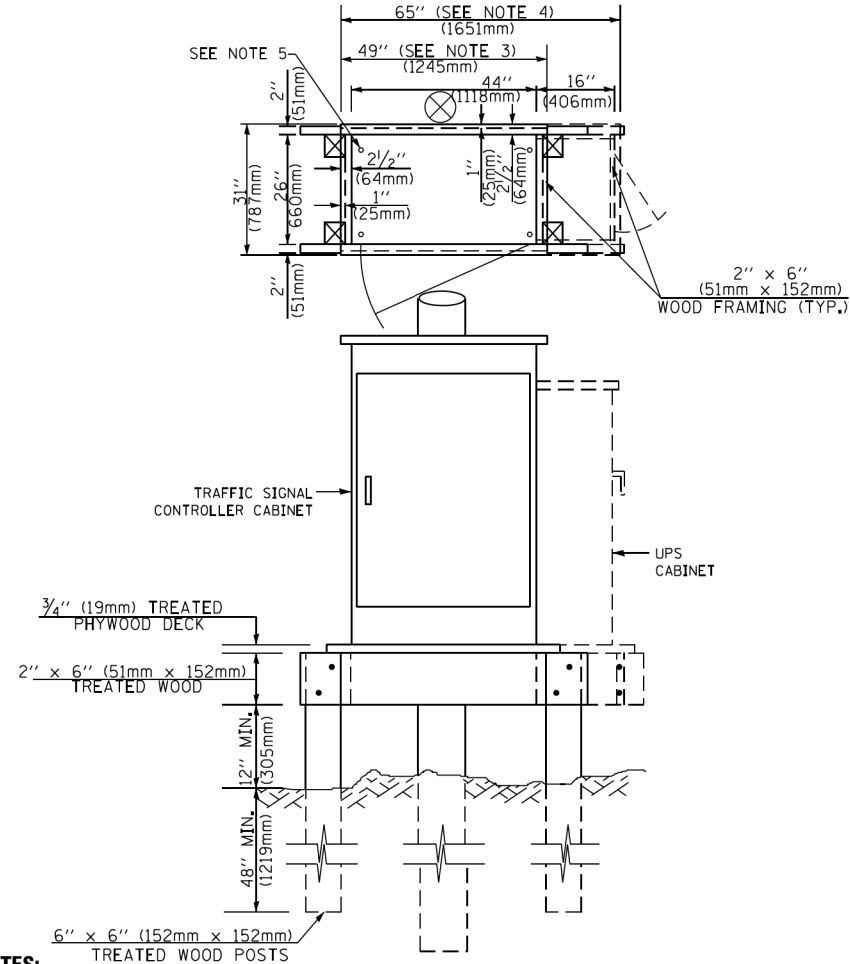


**NOTE:**

TOP OF FOUNDATION SHALL  
BE HIGHER THAN TOP OF  
DOUBLE HANDHOLE



**TYPE C**  
**FOR GROUND MOUNTED**  
**SUPER P (TYPE IV) AND SUPER R (TYPE V)**  
**CONTROLLER CABINETS**



**NOTES:**

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

**TEMPORARY SIGNAL CONTROLLER**  
**WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK**

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

**VERTICAL CABLE LENGTH**

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

**DEPTH OF FOUNDATION**

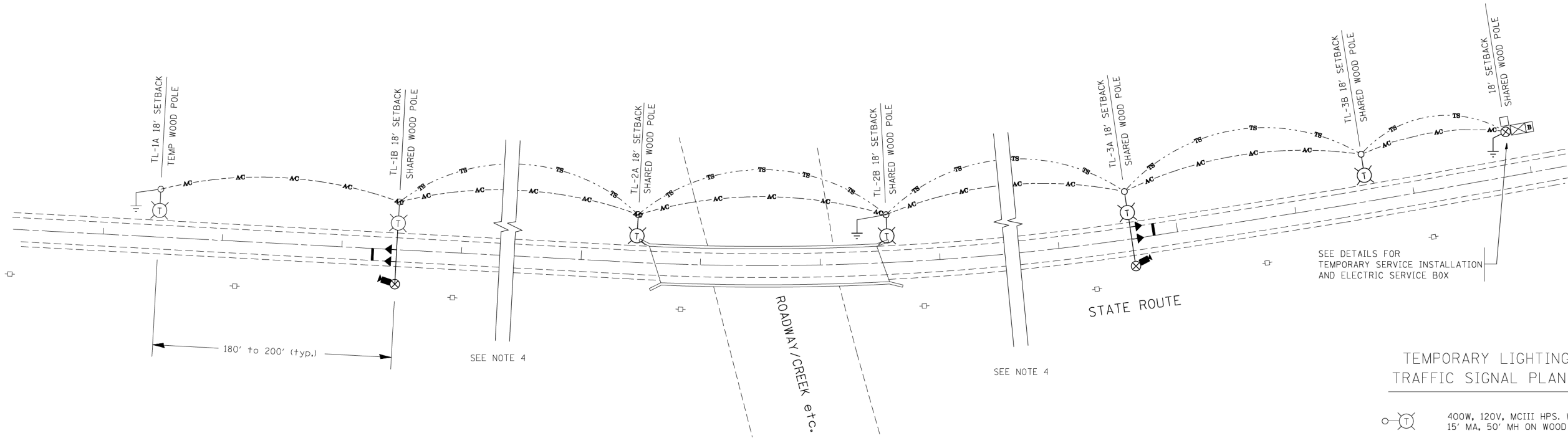
MAST ARM LENGTH	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

FILE NAME =	USER NAME = pascencia	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default		CHECKED -	REVISED -					TS-05		CONTRACT NO. 62C14		
		DATE -	REVISED -		SCALE: NONE	SHEET 5	OF 7 SHEETS	STA.	TO STA.	ILLINOIS   FED. AID PROJECT		



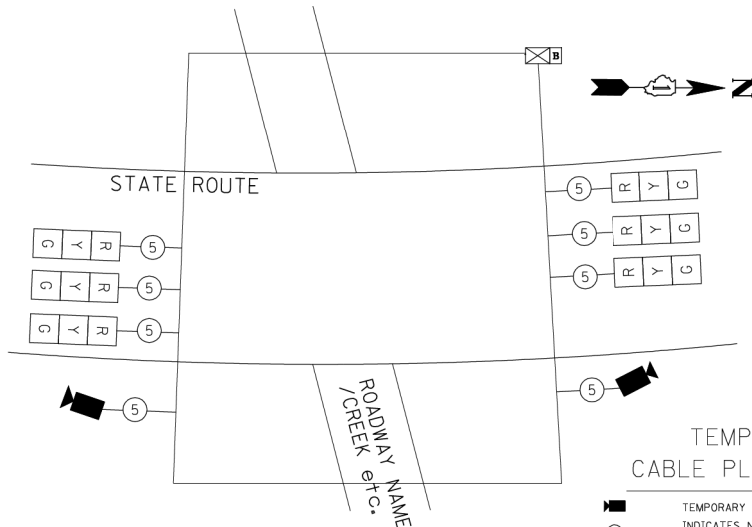
TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS  
NOT TO SCALE

GENERAL NOTES:

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE, DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
- THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

TEMPORARY LIGHTING AND  
TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V, MCII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
- 3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A
- 
- 
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- 
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- 



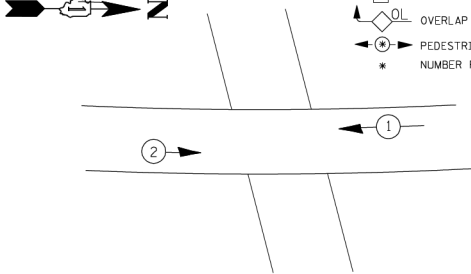
TEMPORARY CABLE PLAN (TYPICAL)  
NOT TO SCALE

TEMPORARY  
CABLE PLAN LEGEND

- TEMPORARY VIDEO DETECTOR
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- 

TEMPORARY PHASE  
DESIGNATION DIAGRAM LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- 



TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)  
NOT TO SCALE

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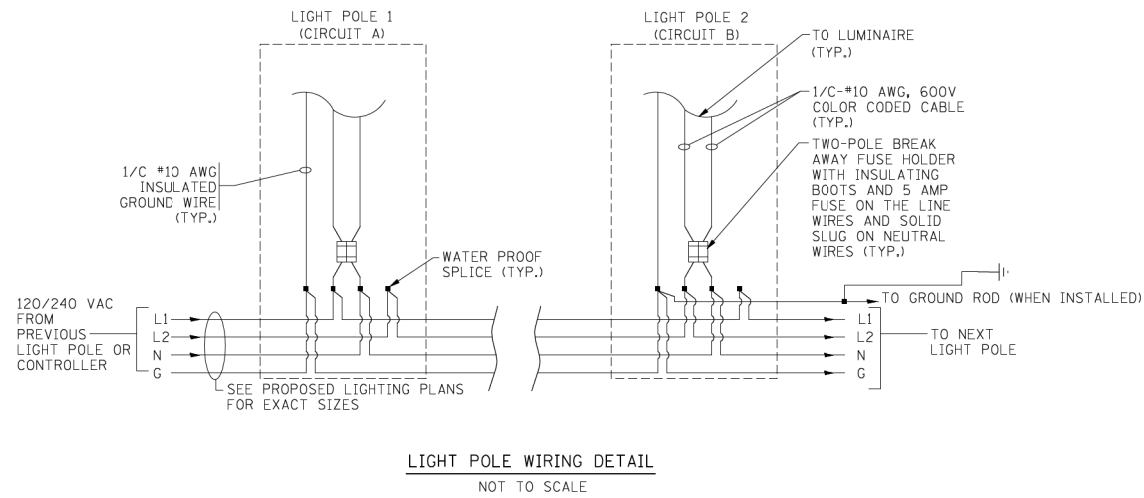
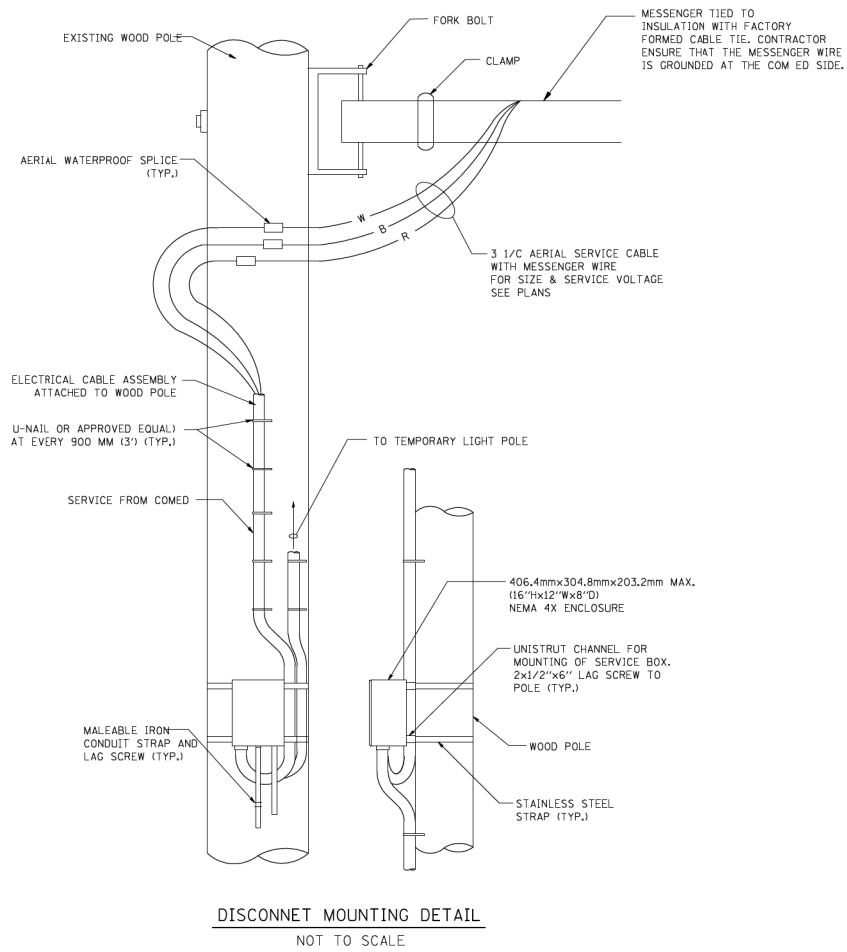
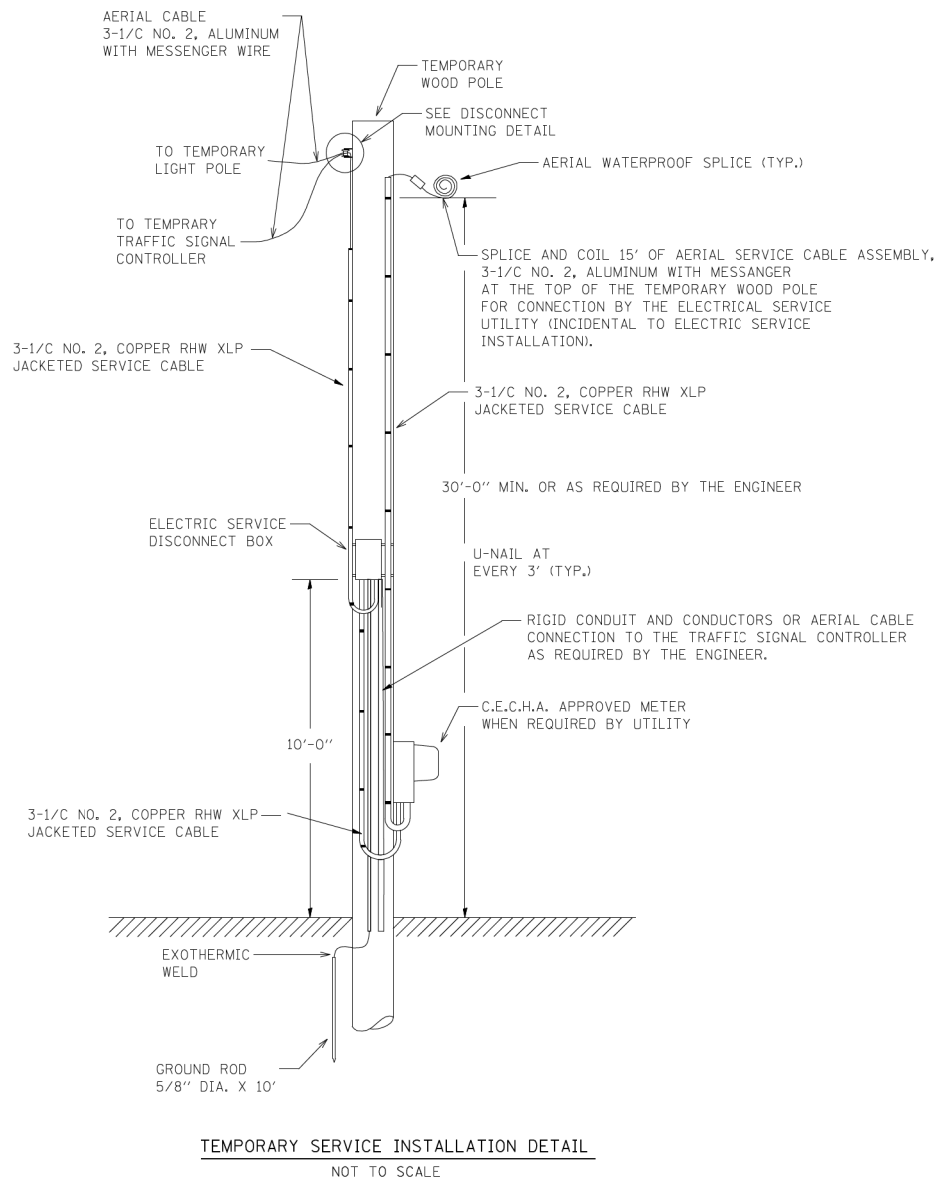
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND TRAFFIC SIGNALS  
FOR SINGLE LANE STAGING

SCALE: NONE SHEET NO. 1 OF 3 SHEETS STA. TO STA.

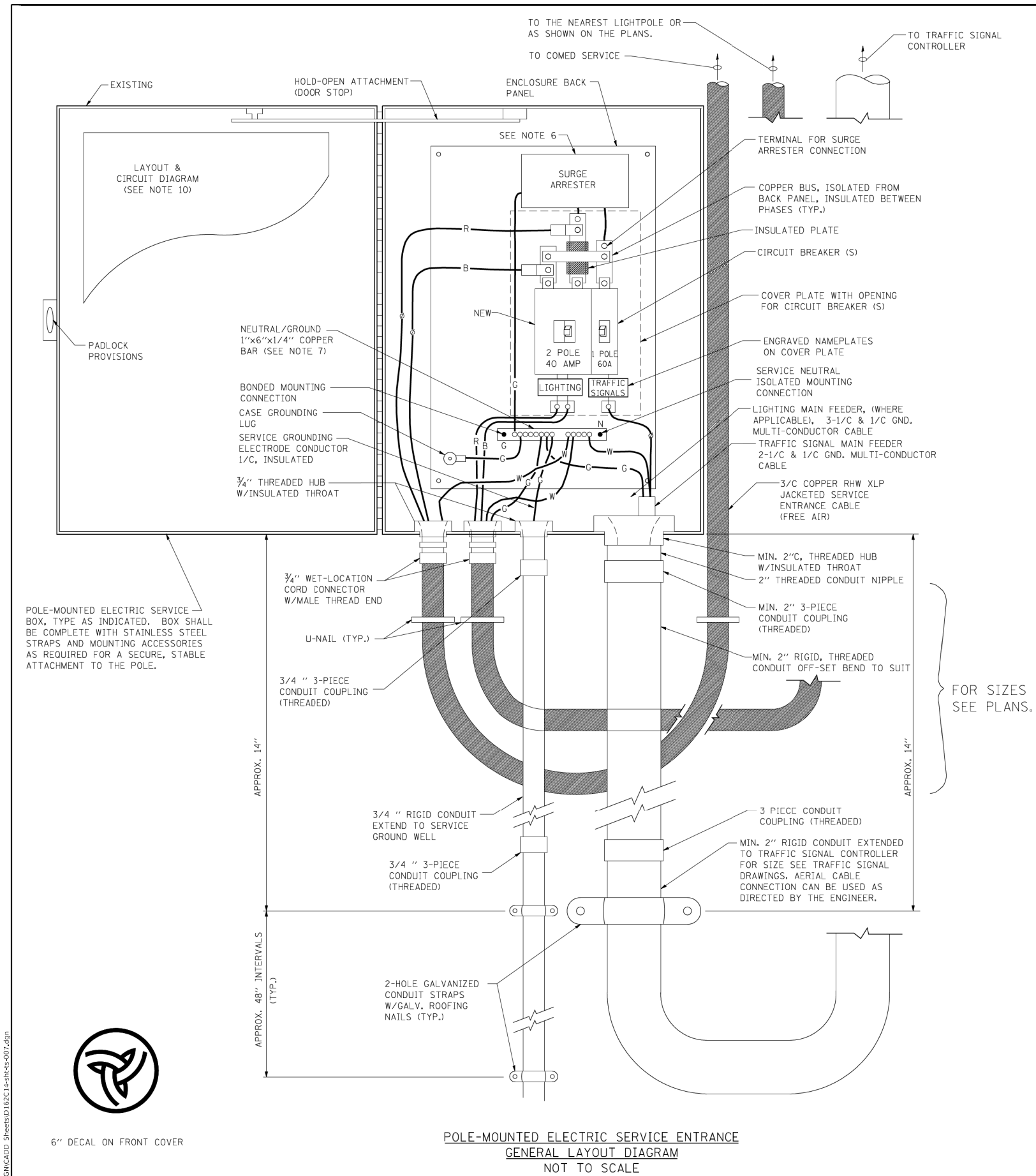
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567	5VB-BR	KANE	73	24
BE-805		CONTRACT NO. 62C14		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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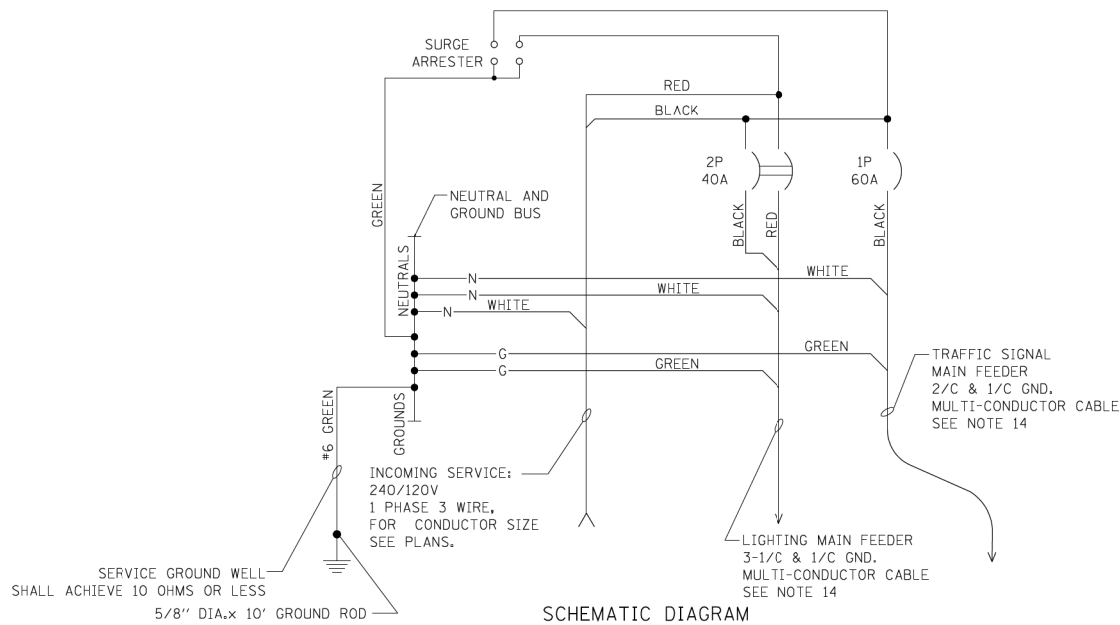
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NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOP/C-PMK12, OR APPROVED EQUAL.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CM0V230L065XST OR APPROVED EQUAL.
- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



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PLOT DATE = 1/14/2010	DATE - 01/14/10	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND TRAFFIC SIGNALS  
FOR SINGLE LANE STAGING

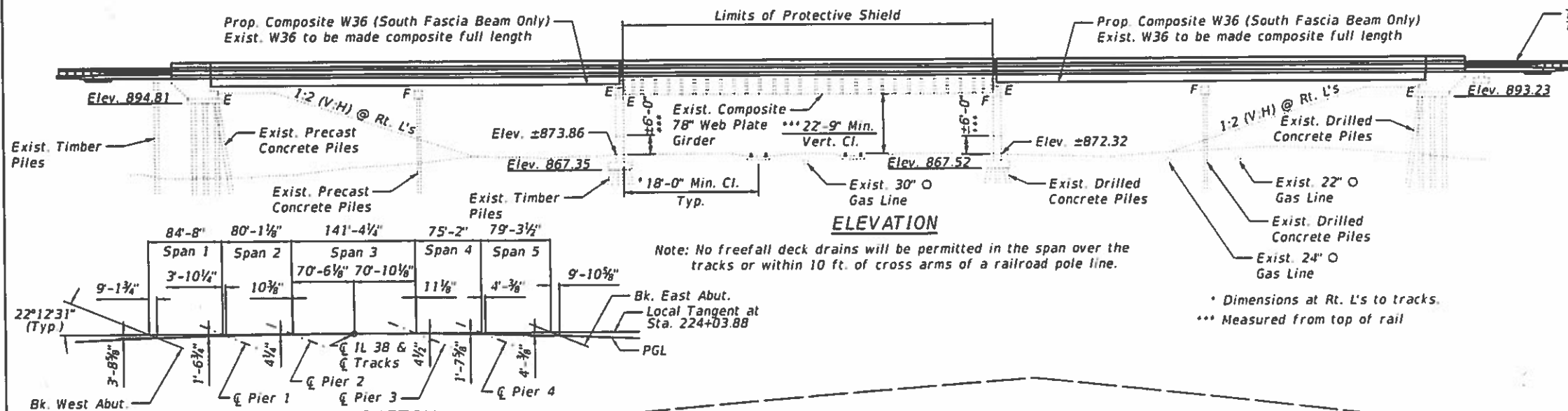
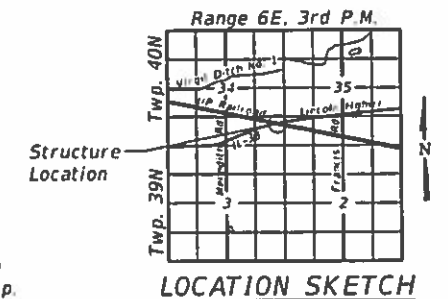
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	KANE	73	26
BE-805		CONTRACT NO. 62C14		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

*Existing Structure:* S.N. 045-0009 was originally constructed in 1964 under Contract 23330, Section 5VB. The structure is a five span bridge, consisting of two-span continuous rolled wide-flange beams for Spans 1-2 and 4-5, and single span plate girders for the middle span. The existing structure measures 460'-7" back-to-back of abutments along the tangent (see Curve Data note) and 35'-8" out-to-out deck. The piers and abutments are skewed at approximately 68° angle.

**No salvage.**

1. Remove and replace existing deck, hatch blocks and approach slabs.
2. Modify wingwalls to accommodate widened approach slab.
3. Remove and replace south fascia beam in Spans 1-2 and 4-5.
4. Make existing girders composite in Spans 1-2 and 4-5.
5. Remove and replace end diaphragms at the abutments and Piers 2 & 3.
6. Miscellaneous steel repairs as required.
7. Remove and replace expansion joints at the abutments and Piers 2 & 3.
8. Remove and replace expansion bearings for Span 3 plate girders at Pier 2.
9. Clean and paint structural steel at the joints, including the bearings.
10. Perform substructure and slopewall repairs.



**CURVE DATA**  
P.I. Sta. = 218+16.16  
 $\Delta = 16^\circ 03' 00''$  (RT)  
 $D = 0^\circ 50' 11''$   
 $R = 6,850.83'$   
 $T = 965.87'$   
 $L = 1919.08'$   
 $E = 67.75'$   
 $SE = 2\%$   
P.C. Sta. = 208+50.29  
P.T. Sta. = 227+69.38

**Notes:**  
Curve Data based on field survey dated 4/10/2018. Dimensions along tangent and offset sketch revised accordingly from existing plans. Contractor shall field verify beam lengths prior to ordering materials.

**LOADING HS20-44**  
Allow 50#/sq. ft. for future wearing surface.

## SEISMIC DATA

Seismic Performance Category (SPC) = A  
Horizontal Bedrock Acceleration Coefficient (A) = 0.035g  
Site Coefficient (S) = 1.0

### DESIGN SPECIFICATIONS

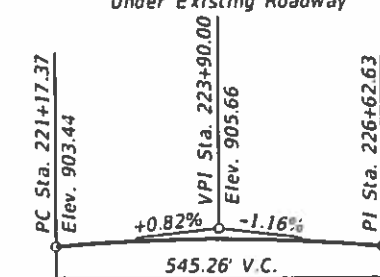
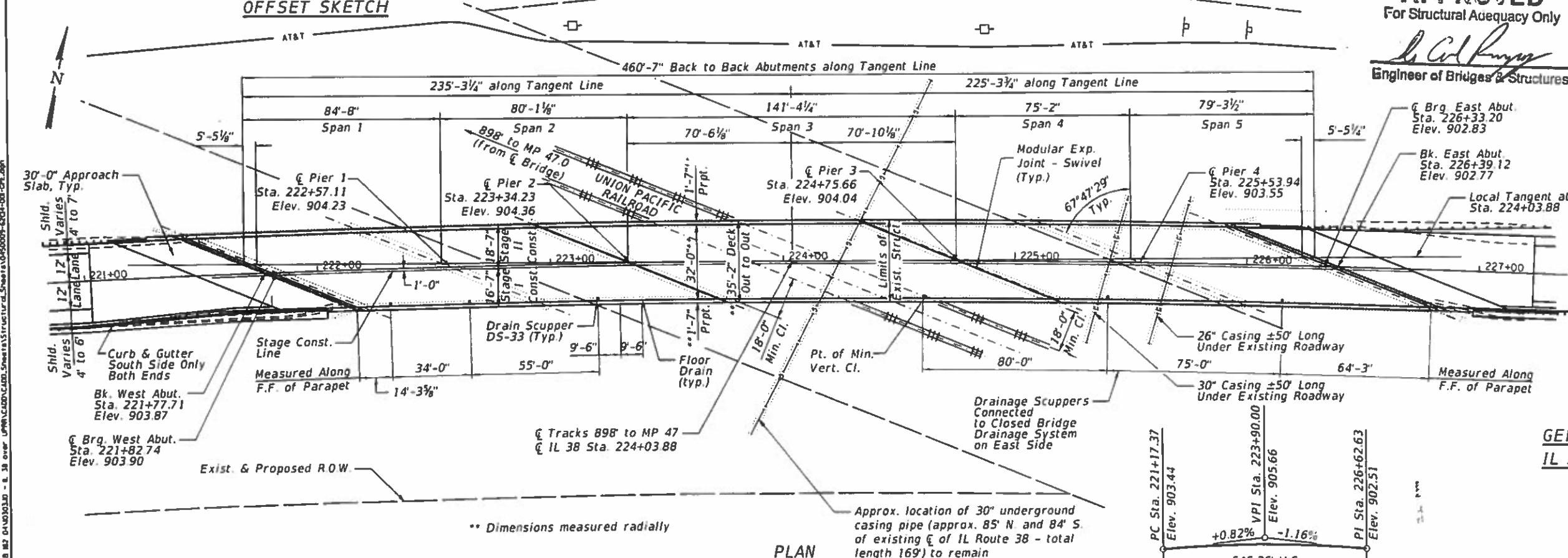
**2002 AASHTO Standard Specifications  
for Highway Bridges. (17th Edition)**

### DESIGN STRESSES

FIELD UNITS (Existing)  
 $f'_c = 3,500$  psi  
 $f_y = 40,000$  psi (Reinforcement)  
 $F_y = 36,000$  psi (M270 Grade 36)

## DESIGN STRESSES

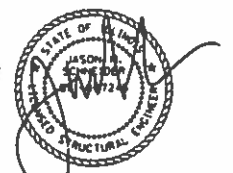
FIELD UNITS (Proposed)  
 $f'_c = 4,000$  psi (Superstructure)  
 $f'_c = 3,500$  psi (Substructure)  
 $f_y = 60,000$  psi (Reinforcement)  
 $F_y = 50,000$  psi (M270 Grade 50)



### PROFILE GRADE

(Along G IL-38 Lincoln Hwy.)

GENERAL PLAN AND ELEVATION  
IL 38 (LINCOLN HIGHWAY) OVER  
UNION PACIFIC RAILROAD  
F.A.P. RTE. 567  
SECTION 5VB-BR  
KANE COUNTY  
STATION 224+03.88  
STRUCTURE NO. 045-0009



COLLINS ENGINEERS, INC.  
JASON SCHNEIDER, P.E., S.E.  
NO. DB1-007245  
EXP. 11/30/2020

USER NAME *	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE *	DRAWN - PRH	REVISED -
PLOT DATE * 12/5/2018	CHECKED - RSD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**GENERAL PLAN AND ELEVATION**  
**STRUCTURE NO. 045-0009**

SHEET NO. 5-1 OF 5-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	SVB-BR	COOK	73	27
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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INDEX OF SHEETS

S-1	General Plan and Elevation
S-2	General Notes, Index of Sheets and Total Bill of Material
S-3	Stage Construction Details
S-4	Temporary Concrete Barrier for Stage Construction
S-5 to S-8	Top of Slab Elevations
S-9 to S-10	Top of Approach Slab Elevations
S-11	Superstructure - Spans 1 & 2
S-12 to S-13	Superstructure Details - Spans 1 & 2
S-14	Superstructure - Span 3
S-15	Superstructure Details - Span 3
S-16	Superstructure - Spans 4 & 5
S-17 to S-18	Superstructure Details - Spans 4 & 5
S-19 to S-21	Bridge Approach Slab Details
S-22	Concrete Parapet Slipforming Option
S-23	Steel Framing Plan - Spans 1 & 2
S-24	Structural Steel Details - Spans 1 & 2
S-25	Steel Framing Plan - Span 3
S-26	Steel Framing Plan - Spans 4 & 5
S-27	Structural Steel Details - Spans 4 & 5
S-28	Drainage System Details
S-29	Drainage Scupper, DS-33
S-30	Bearing Details
S-31	West Abutment Repairs
S-32	East Abutment Repairs
S-33	Abutment Details
S-34	Slopedwall Repair Details
S-35 to S-38	Pier Details
S-39	Bar Splicer Assembly and Mechanical Splicer Details
S-40	Parapet Details at Preformed Joint Seal

GENERAL NOTES

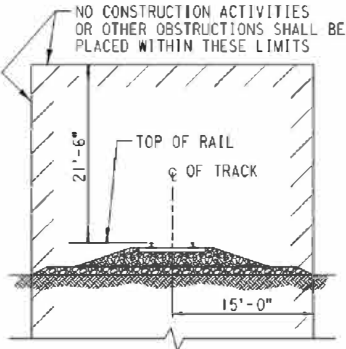
1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts ¾" dia., holes 13⁄16" dia., unless otherwise noted.
2. All structural steel shall be AASHTO M270 Gr. 36, unless otherwise noted.
3. Calculated weight of Structural Steel = 26,280 pounds (Gr. 36)  
= 60,840 pounds (Gr. 50)
4. No field welding is permitted except as specified in the contract documents.
5. The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
8. 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 in. 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.
9. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
10. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
11. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1⁄8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
12. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
13. The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
14. All new fasteners shall be high strength bolts. Holes shall be subpunched or subdrilled 11⁄16" dia. and reamed in the field 13⁄16" dia. for ¾" dia. bolts, unless otherwise noted. Holes shall be subpunched or subdrilled 13⁄16" dia. and reamed in the field to 15⁄16" dia. or 7⁄8" dia. bolts, unless otherwise noted.
15. Existing structural steel that will be in contact with new structural steel shall be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
16. All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

GENERAL NOTES (cont.)

17. Cleaning and painting of the existing structural steel shall be as specified in the Special Provision for "Cleaning and Painting Existing Structural Steel Structures". All beams, bearings and other structural steel within 10 feet (measured along the beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC-SP15.
18. The Contractor shall mark the top surface of the existing deck to identify the location and limits of the top flanges of the girders prior to the commencement of deck removal operation. Care shall be taken not to damage the existing girders. When girder is damaged by deck removal operations, it is the Contractor's responsibility to repair the damage at his/her own expense, as approved by the Engineer.
19. All designated areas to be cleaned per Near White Blast Cleaning or Commercial Grade Power Tool Cleaning shall be painted according to the requirements of paint system 1 - OZ/E/U. The color of the final finish coat for the interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8.

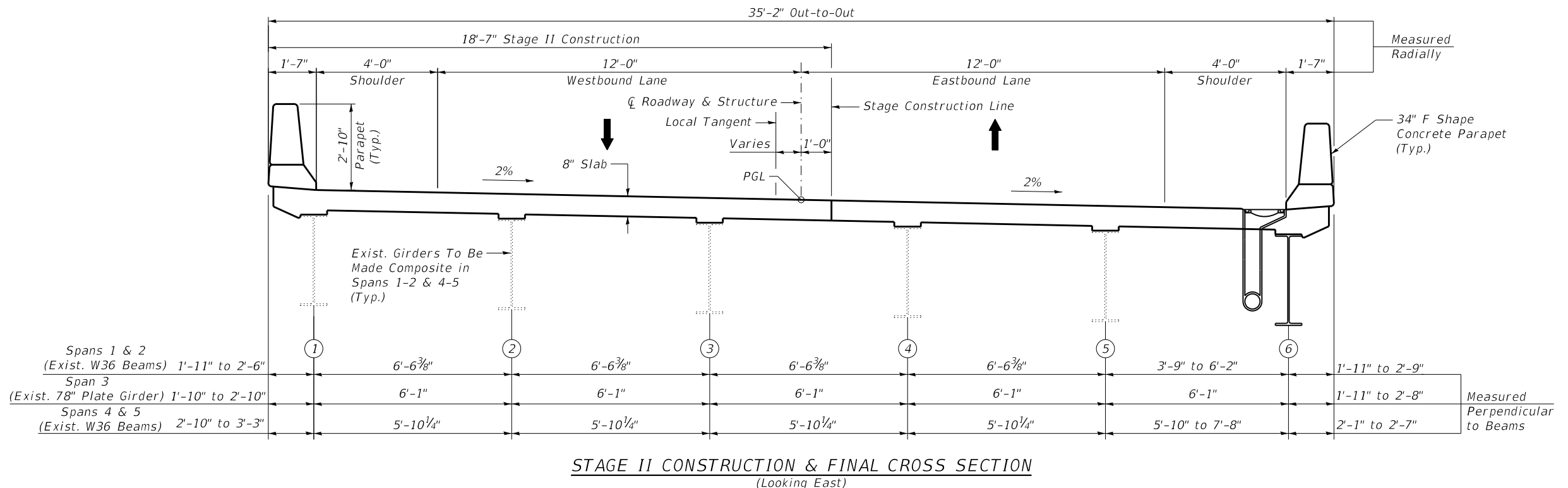
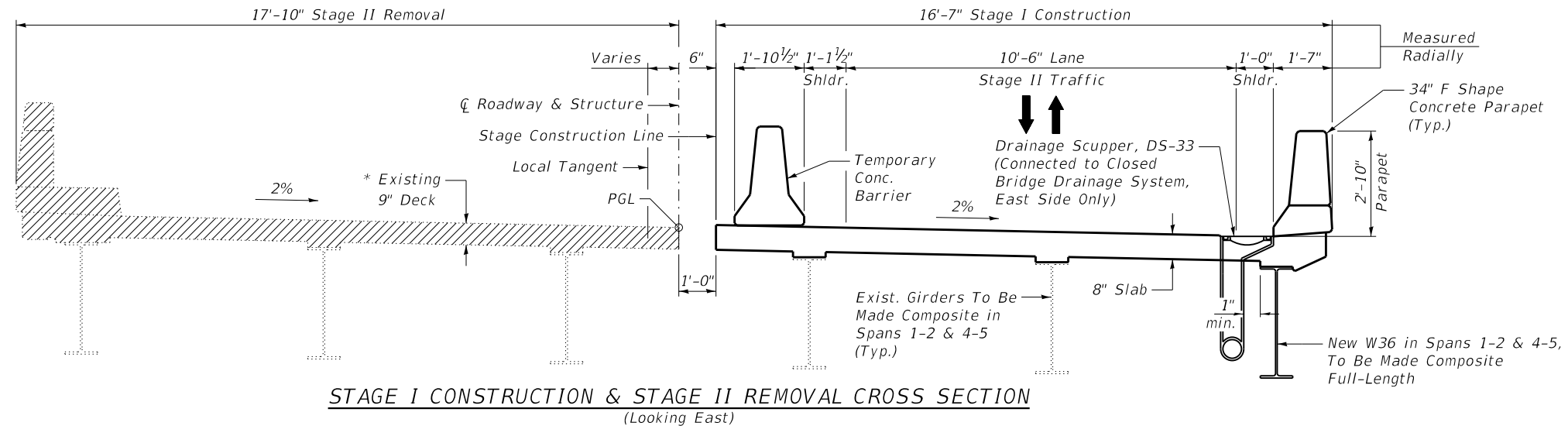
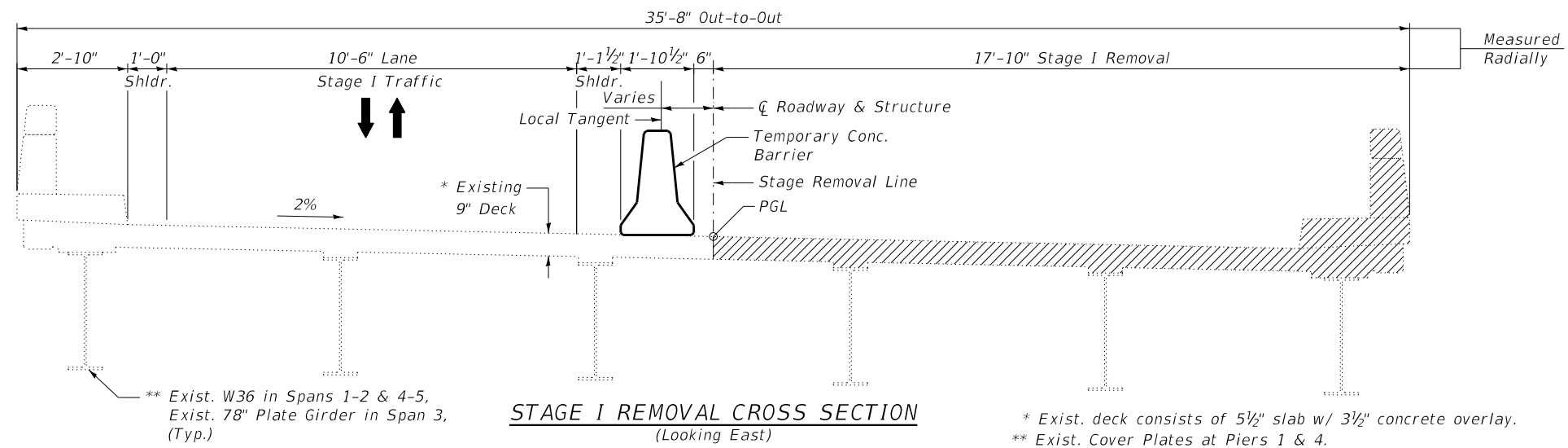
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu. Yd.		257	257
Concrete Removal	Cu. Yd.		15.3	15.3
Slope Wall Removal	Sq. Yd.		463	463
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq. Yd.	474		474
Floor Drains	Each	4		4
Concrete Structures	Cu. Yd.		20.9	20.9
Concrete Superstructure	Cu. Yd.	502.2		502.2
Protective Coat	Sq. Yd.	2,254		2,254
Concrete Superstructure (Approach Slab)	Cu. Yd.	95.9		95.9
Furnishing and Erecting Structural Steel	Pound	87,120		87,120
Stud Shear Connectors	Each	5,814		5,814
Cleaning and Painting Structural Steel, Location 1	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound	168,630	5,350	173,980
Bar Splicers	Each	1455	230	1,685
Slope Wall 4 Inch	Sq. Yd.		513	513
Name Plates	Each	1		1
Elastomeric Bearing Assembly, Type I	Each	6		6
Anchor Bolts, 1"	Each	26		26
Controlled Low Strength Material	Cu. Yd.		150	150
Preformed Joint Seal 1½"	Foot	280		280
Preformed Joint Seal 3"	Foot	93.5		93.5
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,367		1,367
Jack and Remove Existing Bearings	Each	6		6
Structural Steel Removal	Pound	87,200		87,200
Containment and Disposal of Lead Paint Cleaning Residues	L. Sum	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 inches)	Sq. Ft.		2,779	2,779
Drainage Scuppers, DS-33	Each	6		6
Drainage System	L. Sum	1		1
Diamond Grinding (Bridge Section)	Sq. Yd.	1,606		1,606



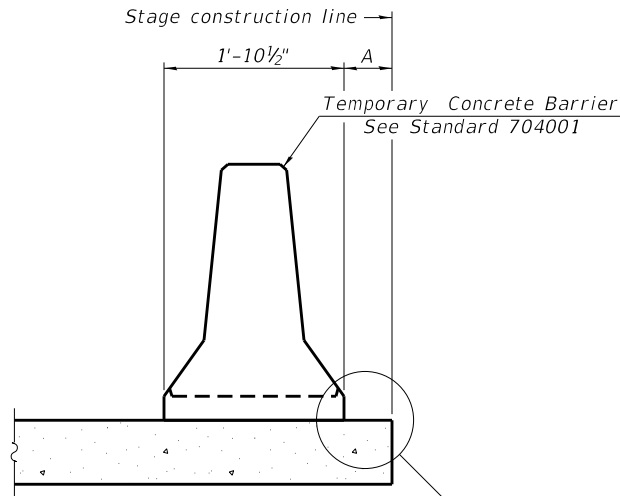
MINIMUM CONSTRUCTION CLEARANCE ENVELOPE  
(NORMAL TO RAILROAD)





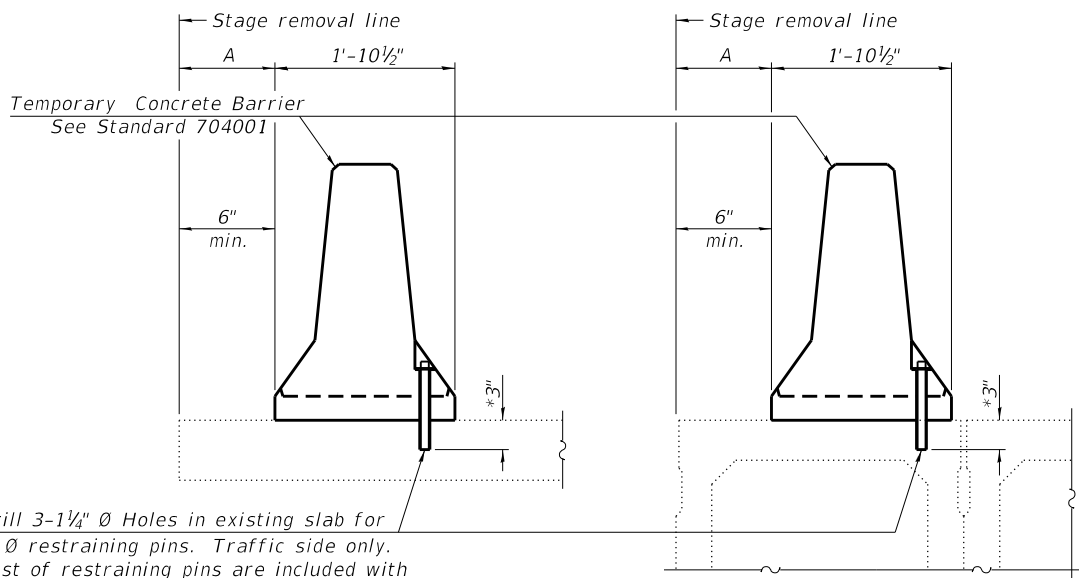
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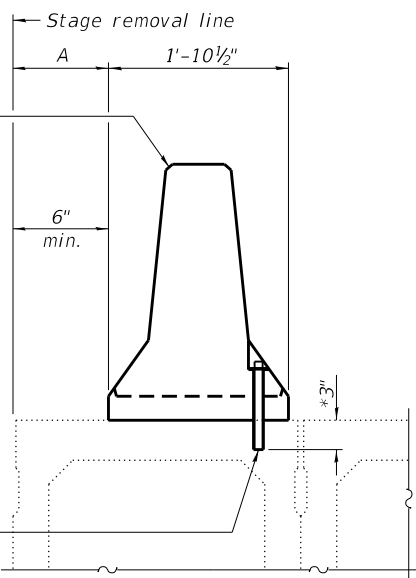
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



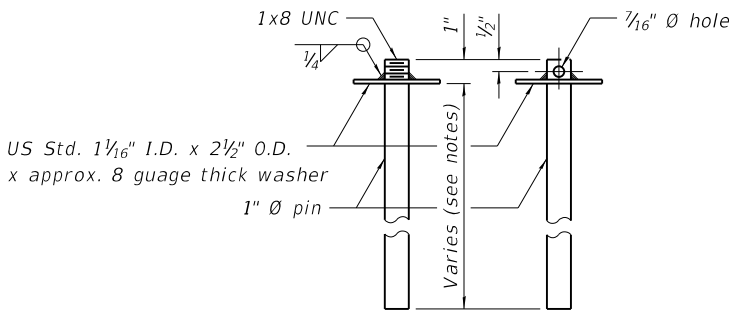
Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

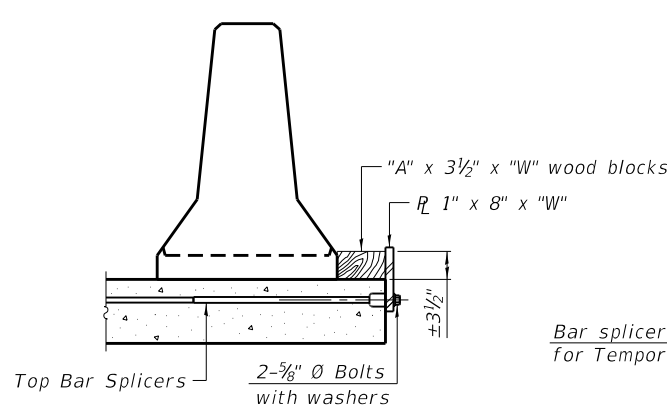


\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

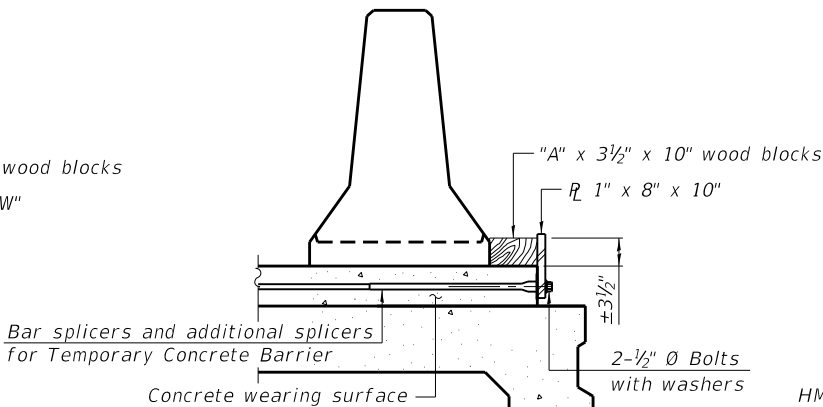
EXISTING DECK BEAM



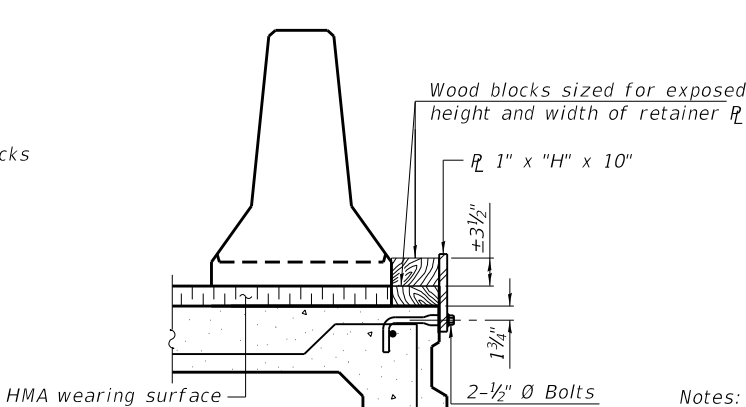
RESTRAINING PIN



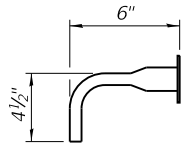
DETAIL I



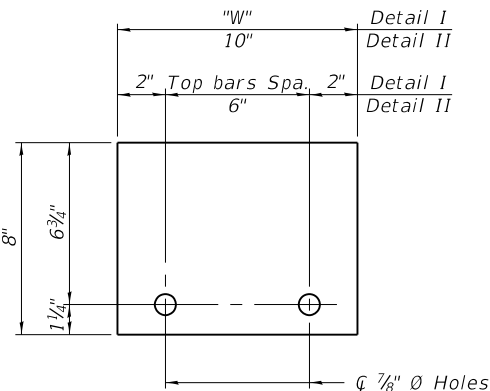
DETAIL II



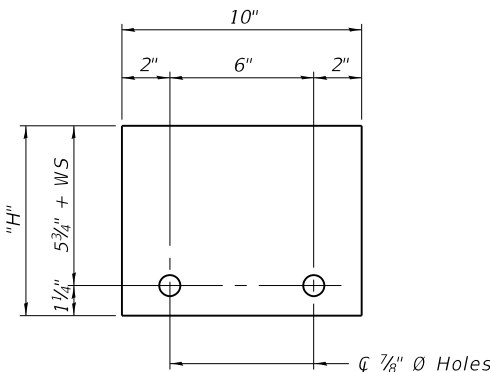
DETAIL III



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  $\bar{C}$  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.

R-27

8-11-2017

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 04-00090

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

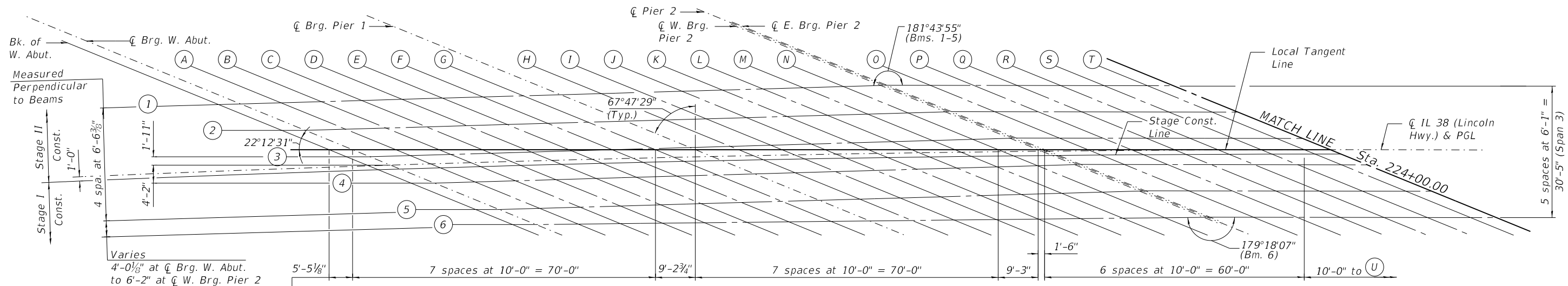
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
STRUCTURE NO. 045-0009

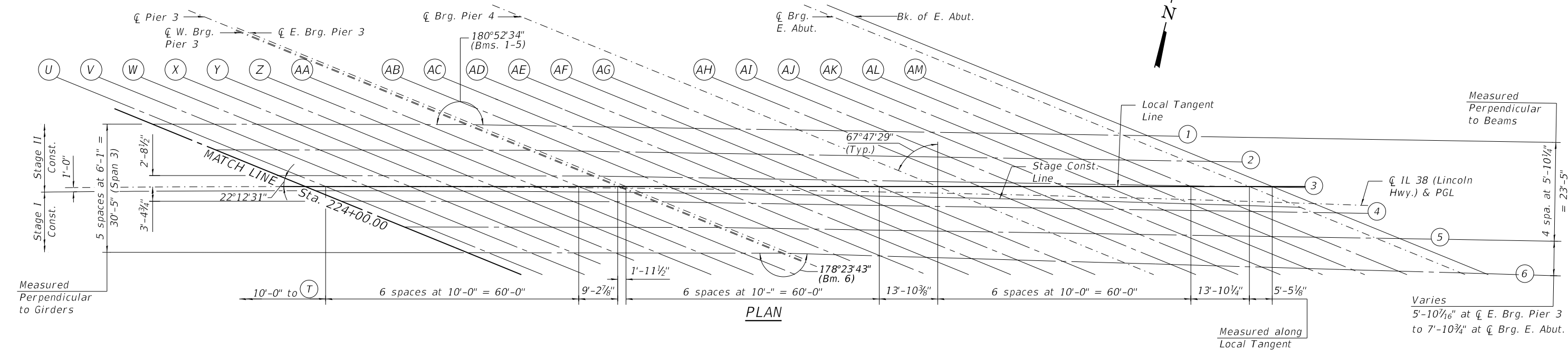
SHEET NO. S-4 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	30
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

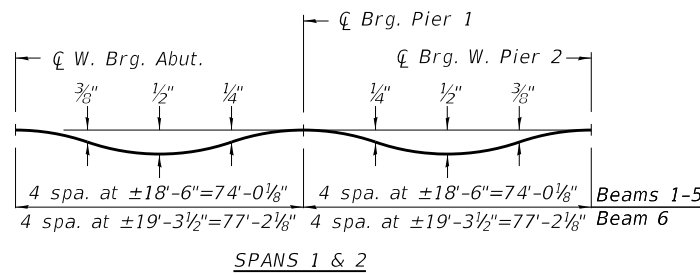
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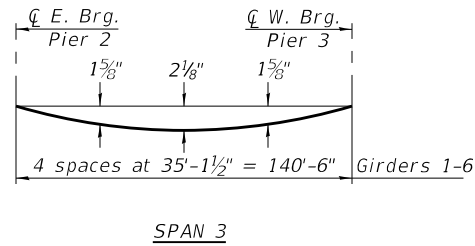
PLAN



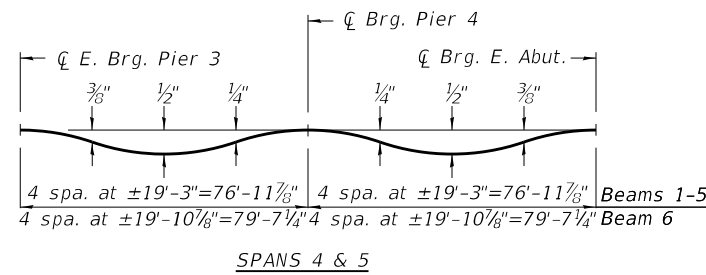
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SPANS 1 & 2



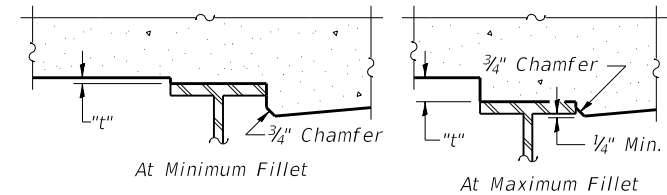
SPAN 3



SPANS 4 & 5

DEAD LOAD DEFLECTION DIAGRAMS  
(Includes weight of concrete only.)

Note:  
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S-6 thru S-8.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets S-6 thru S-8, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

Sheet 1 of 4

**COLLINS ENGINEERS**  
1111 N. BROAD ST.  
CHICAGO, IL 60607  
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WWW.COLLINS-ENGINEERS.COM

USER NAME =	DESIGNED - RSD	REVISD -
	CHECKED - AMS	REVISED -
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PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-0009**

SHEET NO. S-5 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	31
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+43.27	-15.53	903.95	903.95
Q Brg. W. Abut.	221+48.66	-15.33	903.98	903.98
A	221+57.98	-15.26	904.05	904.07
B	221+67.31	-15.20	904.11	904.14
C	221+76.63	-15.15	904.16	904.20
D	221+85.95	-15.12	904.22	904.26
E	221+95.28	-15.10	904.27	904.30
F	222+04.60	-15.09	904.31	904.33
G	222+13.93	-15.09	904.36	904.37
Q Brg. Pier 1	222+22.54	-15.11	904.40	904.40
H	222+31.86	-15.14	904.44	904.44
I	222+41.19	-15.18	904.47	904.49
J	222+50.51	-15.23	904.51	904.53
K	222+59.83	-15.30	904.54	904.57
L	222+69.16	-15.38	904.57	904.60
M	222+78.48	-15.47	904.59	904.62
N	222+87.80	-15.57	904.61	904.63
Pier 2 - W. Brg.	222+96.43	-15.68	904.63	904.63
Pier 2 - E. Brg.	222+97.81	-15.71	904.64	904.64
O	223+07.82	-15.55	904.65	904.69
P	223+17.83	-15.40	904.65	904.74
Q	223+27.83	-15.27	904.66	904.78
R	223+37.84	-15.15	904.66	904.81
S	223+47.85	-15.05	904.66	904.82
T	223+57.86	-14.96	904.65	904.83
U	223+68.54	-14.89	904.64	904.83
V	223+78.55	-14.83	904.63	904.81
W	223+88.56	-14.79	904.62	904.78
X	223+98.57	-14.76	904.60	904.74
Y	224+08.58	-14.75	904.57	904.69
Z	224+18.59	-14.75	904.55	904.63
AA	224+28.60	-14.76	904.52	904.56
Pier 3 - W. Brg.	224+37.98	-14.79	904.49	904.49
Pier 3 - E. Brg.	224+40.06	-14.75	904.48	904.48
AB	224+50.46	-14.64	904.44	904.47
AC	224+60.85	-14.55	904.40	904.44
AD	224+71.25	-14.47	904.35	904.40
AE	224+81.65	-14.41	904.30	904.34
AF	224+92.04	-14.37	904.24	904.28
AG	225+02.44	-14.34	904.18	904.20
Q Brg. Pier 4	225+16.86	-14.33	904.10	904.10
AH	225+27.26	-14.34	904.03	904.04
AI	225+37.65	-14.36	903.96	903.98
AJ	225+48.05	-14.40	903.88	903.92
AK	225+58.45	-14.46	903.81	903.85
AL	225+68.84	-14.53	903.73	903.77
AM	225+79.24	-14.62	903.64	903.69
Q Brg. E. Abut.	225+93.64	-14.77	903.52	903.52
Bk E. Abut.	225+99.29	-14.84	903.47	903.47

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+57.96	-8.87	903.92	903.92
Q Brg. W. Abut.	221+63.35	-8.69	903.95	903.95
A	221+72.68	-8.64	904.01	904.03
B	221+82.02	-8.60	904.06	904.10
C	221+91.35	-8.57	904.12	904.16
D	222+00.68	-8.56	904.16	904.21
E	222+10.02	-8.56	904.21	904.24
F	222+19.35	-8.57	904.25	904.27
G	222+28.68	-8.59	904.29	904.30
Q Brg. Pier 1	222+37.30	-8.63	904.33	904.33
H	222+46.63	-8.68	904.36	904.37
I	222+55.97	-8.74	904.40	904.42
J	222+65.30	-8.81	904.43	904.46
K	222+74.63	-8.90	904.45	904.49
L	222+83.96	-9.00	904.48	904.52
M	222+93.30	-9.11	904.50	904.53
N	223+02.63	-9.23	904.51	904.53
Pier 2 - W. Brg.	223+11.26	-9.36	904.53	904.53
Pier 2 - E. Brg.	223+12.64	-9.39	904.53	904.53
O	223+22.66	-9.25	904.54	904.58
P	223+32.67	-9.13	904.54	904.62
Q	223+42.69	-9.02	904.54	904.65
R	223+52.71	-8.92	904.53	904.68
S	223+62.73	-8.84	904.53	904.69
T	223+72.74	-8.78	904.52	904.69
U	223+83.49	-8.72	904.50	904.68
V	223+93.51	-8.69	904.49	904.66
W	224+03.53	-8.67	904.46	904.63
X	224+23.56	-8.67	904.41	904.56
Y	224+23.56	-8.67	904.41	904.53
Z	224+33.58	-8.69	904.38	904.46
AA	224+43.60	-8.73	904.35	904.39
Pier 3 - W. Brg.	224+52.93	-8.78	904.31	904.31
Pier 3 - E. Brg.	224+55.02	-8.74	904.31	904.31
AB	224+65.43	-8.66	904.26	904.28
AC	224+75.83	-8.59	904.21	904.25
AD	224+86.24	-8.54	904.16	904.20
AE	224+96.64	-8.50	904.10	904.14
AF	225+07.05	-8.48	904.04	904.07
AG	225+17.45	-8.47	903.98	903.99
Q Brg. Pier 4	225+31.88	-8.49	903.88	903.88
AH	225+42.29	-8.52	903.81	903.82
AI	225+52.70	-8.57	903.73	903.76
AJ	225+63.10	-8.63	903.65	903.69
AK	225+73.51	-8.71	903.57	903.62
AL	225+83.91	-8.81	903.48	903.53
AM	225+94.32	-8.92	903.39	903.44
Q Brg. E. Abut.	226+08.73	-9.10	903.26	903.26
Bk E. Abut.	226+14.38	-9.18	903.21	903.21

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+72.68	-2.25	903.88	903.88
Q Brg. W. Abut.	221+78.07	-2.09	903.91	903.91
A	221+87.42	-2.05	903.96	903.99
B	221+96.76	-2.03	904.01	904.05
C	222+06.10	-2.03	904.06	904.11
D	222+15.44	-2.03	904.11	904.15
E	222+24.78	-2.05	904.15	904.18
F	222+34.13	-2.08	904.19	904.21
G	222+43.47	-2.13	904.22	904.23
Q Brg. Pier 1	222+52.09	-2.18	904.25	904.25
H	222+61.43	-2.25	904.28	904.29
I	222+70.78	-2.33	904.31	904.33
J	222+80.12	-2.42	904.34	904.37
K	222+89.46	-2.53	904.36	904.40
L	222+98.80	-2.65	904.38	904.42
M	223+08.14	-2.78	904.39	904.43
N	223+17.48	-2.92	904.40	904.42
Pier 2 - W. Brg.	223+26.12	-3.07	904.41	904.41
Pier 2 - E. Brg.	223+27.50	-3.11	904.42	904.42
O	223+37.52	-2.99	904.42	904.46
P	223+47.55	-2.89	904.42	904.50
Q	223+57.58	-2.80	904.41	904.52
R	223+67.60	-2.72	904.40	904.54
S	223+77.63	-2.67	904.39	904.55
T	223+87.66	-2.62	904.37	904.55
U	223+98.47	-2.59	904.35	904.53
V	224+08.49	-2.58	904.33	904.51
W	224+18.52	-2.58	904.31	904.47
X	224+28.55	-2.60	904.28	904.42
Y	224+38.58	-2.63	904.24	904.36
Z	224+48.60	-2.67	904.21	904.29
AA	224+58.63	-2.73	904.17	904.21
Pier 3 - W. Brg.	224+67.92	-2.80	904.13	904.13
Pier 3 - E. Brg.	224+70.01	-2.77	904.12	904.12
AB	224+80.42	-2.71	904.07	904.09
AC	224+90.83	-2.66	904.02	904.05
AD	225+01.25	-2.63	903.96	904.00
AE	225+11.66	-2.62	903.89	903.93
AF	225+22.08	-2.62	903.83	903.86
AG	225+32.49	-2.63	903.76	903.77
Q Brg. Pier 4	225+46.94	-2.69	903.66	903.66
AH	225+57.35	-2.74	903.58	903.59
AI	225+67.76	-2.81	903.50	903.52
AJ	225+78.18	-2.90	903.41	903.45
AK	225+88.59	-3.00	903.33	903.37
AL	225+99.01	-3.12	903.23	903.28
AM	226+09.42	-3.25	903.14	903.19
Q Brg. E. Abut.	226+23.85	-3.47	903.00	903.00
Bk E. Abut.	226+29.50	-3.56	902.94	902.94

Sheet 2 of 4

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IL 38 & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+77.71	0.00	903.87	903.87
Q Brg. W. Abut.	221+82.74	0.00	903.90	903.90
A	221+92.03	0.00	903.95	903.97
B	222+01.34	0.00	904.00	904.03
C	222+10.68	0.00	904.04	904.09
D	222+20.06	0.00	904.09	904.13
E	222+29.46	0.00	904.13	904.16
F	222+38.89	0.00	904.16	904.18
G	222+48.35	0.00	904.20	904.20
Q Brg. Pier 1	222+57.11	0.00	904.23	904.23
H	222+66.63	0.00	904.25	904.26
I	222+76.18	0.00	904.28	904.30
J	222+85.76	0.00	904.30	904.33
K	222+95.37	0.00	904.32	904.36
L	223+05.02	0.00	904.33	904.38
M	223+14.69	0.00	904.34	904.38
N	223+24.40	0.00	904.35	904.37
Pier 2 - W. Brg.	223+33.41	0.00	904.36	904.36
Pier 2 - E. Brg.	223+34.88	0.00	904.36	904.36
O	223+44.65	0.00	904.36	904.40
P	223+54.46	0.00	904.36	904.44
Q	223+64.31	0.00	904.35	904.46
R	223+74.19	0.00	904.34	904.48
S	223+84.10	0.00	904.33	904.49
T	223+94.05	0.00	904.31	904.49
U	224+04.83	0.00	904.29	904.47
V	224+14.85	0.00	904.26	904.44
W	224+24.91	0.00	904.24	904.40
X	224+35.01	0.00	904.20	904.35
Y	224+45.14	0.00	904.17	904.28
Z	224+55.31	0.00	904.13	904.21
AA	224+65.51	0.00	904.09	904.13
Pier 3 - W. Brg.	224+74.98	0.00	904.04	904.04
Pier 3 - E. Brg.	224+76.99	0.00	904.03	904.03
AB	224+87.28	0.00	903.98	904.00
AC	224+97.60	0.00	903.92	903.96
AD	225+07.97	0.00	903.86	903.91
AE	225+18.38	0.00	903.80	903.84
AF	225+28.83	0.00	903.73	903.76
AG	225+39.32	0.00	903.66	903.67
Q Brg. Pier 4	225+53.94	0.00	903.55	903.55
AH	225+64.53	0.00	903.47	903.48
AI	225+75.16	0.00	903.38	903.41
AJ	225+85.84	0.00	903.29	903.33
AK	225+96.56	0.00	903.19	903.24
AL	226+07.33	0.00	903.09	903.14
AM	226+18.14	0.00	902.99	903.04
Q Brg. E. Abut.	226+33.20	0.00	902.83	902.83
Bk E. Abut.	226+39.12	0.00	902.77	902.77

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+79.95	1.00	903.86	903.86
Q Brg. W. Abut.	221+84.98	1.00	903.89	903.89
A	221+94.28	1.00	903.94	903.96
B	222+03.60	1.00	903.99	904.03
C	222+12.95	1.00	904.03	904.08
D	222+22.33	1.00	904.08	904.12
E	222+31.74	1.00	904.12	904.15
F	222+41.18	1.00	904.15	904.17
G	222+50.65	1.00	904.18	904.19
Q Brg. Pier 1	222+59.42	1.00	904.21	904.21
H	222+68.95	1.00	904.24	904.25
I	222+78.51	1.00	904.26	904.28
J	222+88.09	1.00	904.28	904.32
K	222+97.72	1.00	904.30	904.34
L	223+07.37	1.00	904.32	904.36
M	223+17.05	1.00	904.33	904.36
N	223+26.77	1.00	904.33	904.35
Pier 2 - W. Brg.	223+35.79	1.00	904.34	904.34
Pier 2 - E. Brg.	223+37.26	1.00	904.34	904.34
O	223+47.05	1.00	904.34	904.38
P	223+56.87	1.00	904.33	904.41
Q	223+66.72	1.00	904.33	904.44
R	223+76.61	1.00	904.32	904.46
S	223+86.53	1.00	904.30	904.47
T	223+96.49	1.00	904.29	904.46
U	224+07.29	1.00	904.26	904.44
V	224+17.32	1.00	904.24	904.41
W	224+27.39	1.00	904.21	904.37
X	224+37.50	1.00	904.18	904.32
Y	224+47.64	1.00	904.14	904.25
Z	224+57.82	1.00	904.10	904.18
AA	224+68.04	1.00	904.05	904.10
Pier 3 - W. Brg.	224+77.50	1.00	904.01	904.01
Pier 3 - E. Brg.	224+79.51	1.00	904.00	904.00
AB	224+89.81	1.00	903.95	903.97
AC	225+00.15	1.00	903.89	903.93
AD	225+10.53	1.00	903.83	903.87
AE	225+20.95	1.00	903.76	903.80
AF	225+31.41	1.00	903.70	903.72
AG	225+41.92	1.00	903.62	903.63
Q Brg. Pier 4	225+56.55	1.00	903.51	903.51
AH	225+67.15	1.00	903.43	903.44
AI	225+77.80	1.00	903.34	903.36
AJ	225+88.49	1.00	903.25	903.29
AK	225+99.22	1.00	903.15	903.20
AL	226+10.00	1.00	903.05	903.09
AM	226+20.83	1.00	902.94	902.99
Q Brg. E. Abut.	226+35.91	1.00	902.79	902.79
Bk E. Abut.	226+41.84	1.00	902.72	902.72

Sheet 3 of 4



USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 045-0009

SHEET NO. S-7 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	33
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	221+87.42	4.33	903.84	903.84
Q Brg. W. Abut.	221+92.82	4.49	903.86	903.86
A	222+02.17	4.50	903.91	903.93
B	222+11.53	4.50	903.96	903.99
C	222+20.88	4.49	904.00	904.04
D	222+30.23	4.46	904.04	904.08
E	222+39.58	4.43	904.08	904.11
F	222+48.93	4.37	904.11	904.13
G	222+58.28	4.31	904.14	904.15
Q Brg. Pier 1	222+66.91	4.24	904.17	904.17
H	222+76.26	4.15	904.19	904.20
I	222+85.61	4.05	904.22	904.24
J	222+94.96	3.93	904.24	904.27
K	223+04.31	3.81	904.25	904.30
L	223+13.66	3.67	904.27	904.31
M	223+23.01	3.52	904.28	904.32
N	223+32.36	3.35	904.29	904.31
Pier 2 - W. Brg.	223+41.01	3.19	904.29	904.29
Pier 2 - E. Brg.	223+42.38	3.15	904.29	904.29
O	223+52.42	3.24	904.29	904.33
P	223+62.45	3.32	904.28	904.36
Q	223+72.49	3.39	904.27	904.39
R	223+82.52	3.44	904.26	904.40
S	223+92.56	3.48	904.24	904.41
T	224+02.60	3.50	904.22	904.40
U	224+13.47	3.51	904.20	904.38
V	224+23.51	3.50	904.17	904.35
W	224+33.54	3.47	904.14	904.30
X	224+43.58	3.43	904.11	904.25
Y	224+53.61	3.38	904.07	904.18
Z	224+63.65	3.31	904.03	904.11
AA	224+73.68	3.23	903.98	904.03
Pier 3 - W. Brg.	224+82.93	3.14	903.94	903.94
Pier 3 - E. Brg.	224+85.02	3.17	903.93	903.93
AB	224+95.44	3.21	903.87	903.90
AC	225+05.86	3.23	903.81	903.85
AD	225+16.29	3.24	903.75	903.79
AE	225+26.71	3.23	903.68	903.72
AF	225+37.13	3.21	903.61	903.64
AG	225+47.56	3.17	903.54	903.55
Q Brg. Pier 4	225+62.01	3.09	903.43	903.43
AH	225+72.44	3.01	903.34	903.35
AI	225+82.86	2.91	903.26	903.28
AJ	225+93.28	2.80	903.17	903.21
AK	226+03.70	2.68	903.07	903.12
AL	226+14.12	2.54	902.98	903.02
AM	226+24.55	2.38	902.88	902.93
Q Brg. E. Abut.	226+38.99	2.14	902.73	902.73
Bk E. Abut.	226+44.64	2.03	902.67	902.67

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	222+02.19	10.89	903.78	903.78
Q Brg. W. Abut.	222+07.60	11.04	903.81	903.81
A	222+16.96	11.03	903.85	903.87
B	222+26.32	11.01	903.89	903.92
C	222+35.68	10.97	903.93	903.97
D	222+45.04	10.93	903.97	904.00
E	222+54.40	10.87	904.00	904.02
F	222+63.76	10.80	904.03	904.04
G	222+73.12	10.71	904.06	904.06
Q Brg. Pier 1	222+81.76	10.62	904.08	904.08
H	222+91.12	10.52	904.10	904.11
I	223+00.48	10.39	904.12	904.14
J	223+09.83	10.26	904.13	904.17
K	223+19.19	10.11	904.15	904.19
L	223+28.55	9.95	904.16	904.20
M	223+37.91	9.78	904.16	904.20
N	223+47.26	9.59	904.17	904.19
Pier 2 - W. Brg.	223+55.92	9.41	904.17	904.17
Pier 2 - E. Brg.	223+57.29	9.37	904.17	904.17
O	223+67.34	9.44	904.16	904.20
P	223+77.38	9.50	904.15	904.23
Q	223+87.43	9.54	904.13	904.25
R	223+97.47	9.57	904.11	904.26
S	224+07.52	9.59	904.09	904.25
T	224+17.56	9.59	904.07	904.24
U	224+28.50	9.57	904.03	904.21
V	224+38.54	9.54	904.00	904.18
W	224+48.59	9.49	903.97	904.13
X	224+58.63	9.43	903.93	904.07
Y	224+68.68	9.36	903.88	904.00
Z	224+78.72	9.27	903.84	903.92
AA	224+88.77	9.16	903.79	903.83
Pier 3 - W. Brg.	224+97.96	9.06	903.74	903.74
Pier 3 - E. Brg.	225+00.05	9.08	903.73	903.73
AB	225+10.49	9.10	903.67	903.69
AC	225+20.92	9.10	903.60	903.64
AD	225+31.35	9.08	903.53	903.58
AE	225+41.78	9.05	903.46	903.50
AF	225+52.22	9.00	903.39	903.41
AG	225+62.65	8.94	903.31	903.32
Q Brg. Pier 4	225+77.12	8.83	903.19	903.19
AH	225+87.55	8.72	903.10	903.11
AI	225+97.98	8.61	903.01	903.04
AJ	226+08.41	8.47	902.91	902.96
AK	226+18.84	8.33	902.81	902.87
AL	226+29.27	8.16	902.71	902.76
AM	226+39.70	7.98	902.61	902.66
Q Brg. E. Abut.	226+54.15	7.70	902.45	902.45
Bk E. Abut.	226+59.81	7.59	902.39	902.39

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abut.	222+10.61	14.61	903.75	903.75
Q Brg. W. Abut.	222+16.04	14.75	903.77	903.77
A	222+25.80	14.91	903.81	903.83
B	222+35.56	15.05	903.85	903.88
C	222+45.33	15.17	903.88	903.92
D	222+55.09	15.29	903.91	903.94
E	222+64.85	15.39	903.94	903.96
F	222+74.61	15.47	903.96	903.98
G	222+84.38	15.54	903.99	903.99
Q Brg. Pier 1	222+93.39	15.60	904.00	904.00
H	223+03.16	15.64	904.02	904.03
I	223+12.92	15.67	904.03	904.05
J	223+22.68	15.69	904.04	904.08
K	223+32.45	15.69	904.04	904.09
L	223+42.21	15.68	904.04	904.10
M	223+51.97	15.65	904.04	904.09
N	223+61.74	15.61	904.04	904.06
Pier 2 - W. Brg.	223+70.77	15.57	904.03	904.03
Pier 2 - E. Brg.	223+72.23	15.55	904.03	904.03
O	223+82.29	15.61	904.02	904.06
P	223+92.34	15.64	904.00	904.08
Q	224+02.39	15.66	903.98	904.10
R	224+12.45	15.67	903.96	904.11
S	224+22.50	15.66	903.93	904.10
T	224+32.56	15.64	903.90	904.08
U	224+43.56	15.60	903.86	904.05
V	224+53.61	15.55	903.82	904.01
W	224+63.66	15.48	903.78	903.95
X	224+73.72	15.40	903.74	903.89
Y	224+83.77	15.30	903.69	903.81
Z	224+93.82	15.19	903.64	903.73
AA	225+03.88	15.06	903.59	903.63
Pier 3 - W. Brg.	225+13.02	14.94	903.54	903.54
Pier 3 - E. Brg.	225+15.09	14.95	903.52	903.52
AB	225+25.89	15.08	903.45	903.47
AC	225+36.69	15.19	903.37	903.41
AD	225+47.49	15.29	903.30	903.34
AE	225+58.30	15.37	903.21	903.25
AF	225+69.10	15.44	903.12	903.15
AG	225+79.90	15.48	903.03	903.04
Q Brg. Pier 4	225+94.88	15.52	902.90	902.90
AH	226+05.68	15.53	902.80	902.81
AI	226+16.48	15.52	902.69	902.73
AJ	226+27.28	15.49	902.59	902.65
AK	226+38.08	15.44	902.47	902.54
AL	226+48.88	15.38	902.36	902.42
AM	226+59.68	15.30	902.24	902.29
Q Brg. E. Abut.	226+74.65	15.17	902.07	902.07
Bk E. Abut.	226+80.51	15.10	902.00	902.00

Sheet 4 of 4

NORTH EDGE OF SHOULDER

<i>Location</i>	<i>Station</i>	<i>Offset</i>	<i>Theoretical Grade Elevations</i>
<i>W. End W. Appr. Slab Pvmnt.</i>	<i>221+12.53</i>	<i>- 16.00</i>	<i>903.72</i>
<i>A1</i>	<i>221+22.50</i>	<i>- 16.00</i>	<i>903.80</i>
<i>A2</i>	<i>221+32.37</i>	<i>- 16.00</i>	<i>903.88</i>
<i>E. End W. Appr. Slab Pvmnt.</i>	<i>221+42.23</i>	<i>- 16.00</i>	<i>903.95</i>

IL 38 & PGL

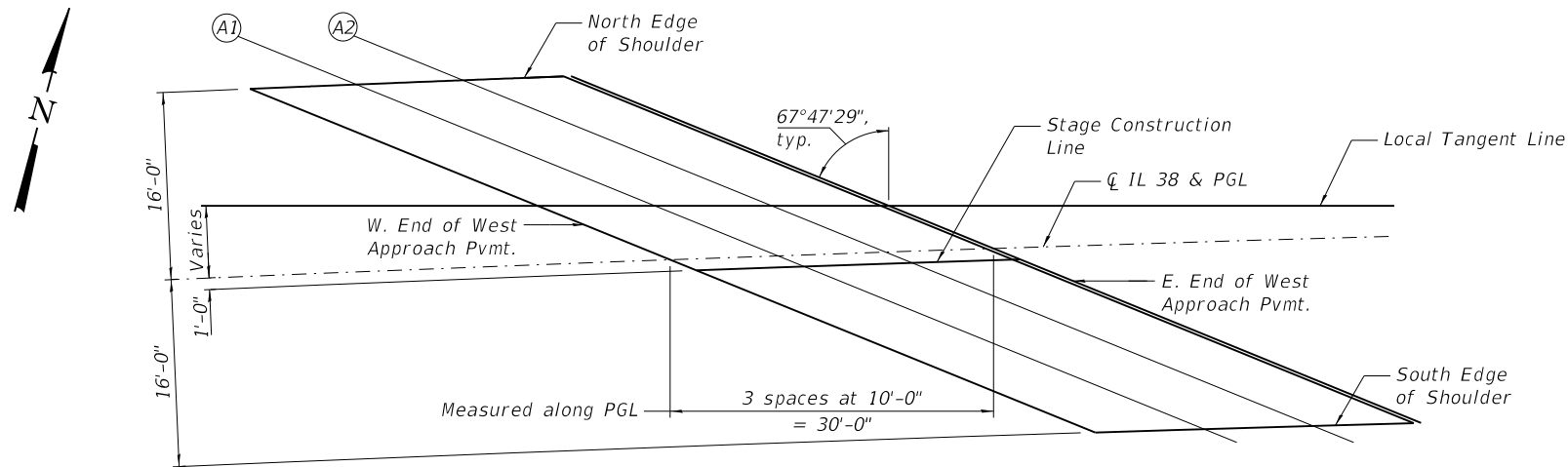
<i>Location</i>	<i>Station</i>	<i>Offset</i>	<i>Theoretical Grade Elevations</i>
<i>W. End W. Aprpr. Slab Pvmnt.</i>	<i>221+47.72</i>	<i>0.00</i>	<i>903.67</i>
<i>A1</i>	<i>221+57.72</i>	<i>0.00</i>	<i>903.74</i>
<i>A2</i>	<i>221+67.72</i>	<i>0.00</i>	<i>903.80</i>
<i>E. End W. Aprpr. Slab Pvmnt.</i>	<i>221+77.72</i>	<i>0.00</i>	<i>903.87</i>

STAGE CONSTRUCTION LINE

<i>Location</i>	<i>Station</i>	<i>Offset</i>	<i>Theoretical Grade Elevations</i>
<i>W. End W. Aprpr. Slab Pvmt.</i>	<i>221+49.93</i>	<i>1.00</i>	<i>903.67</i>
<i>A1</i>	<i>221+59.93</i>	<i>1.00</i>	<i>903.73</i>
<i>A2</i>	<i>221+69.93</i>	<i>1.00</i>	<i>903.80</i>
<i>E. End W. Aprpr. Slab Pvmt.</i>	<i>221+79.93</i>	<i>1.00</i>	<i>903.86</i>

*SOUTH EDGE OF SHOULDER*

<i>Location</i>	<i>Station</i>	<i>Offset</i>	<i>Theoretical Grade Elevations</i>
<i>W. End W. Aprpr. Slab Pvmt.</i>	<i>221+83.48</i>	<i>16.00</i>	<i>903.58</i>
<i>A1</i>	<i>221+93.48</i>	<i>16.00</i>	<i>903.64</i>
<i>A2</i>	<i>222+03.63</i>	<i>16.00</i>	<i>903.69</i>
<i>E. End W. Aprpr. Slab Pvmt.</i>	<i>222+13.78</i>	<i>16.00</i>	<i>903.74</i>



PLAN  
West Approach Slab

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab Pvmt.	225+96.20	-16.00	903.52
A3	226+06.01	-16.00	903.43
A4	226+15.82	-16.00	903.33
E. End E. Appr. Slab Pvmt.	226+25.62	-16.00	903.23

CL IL 38 & PGL

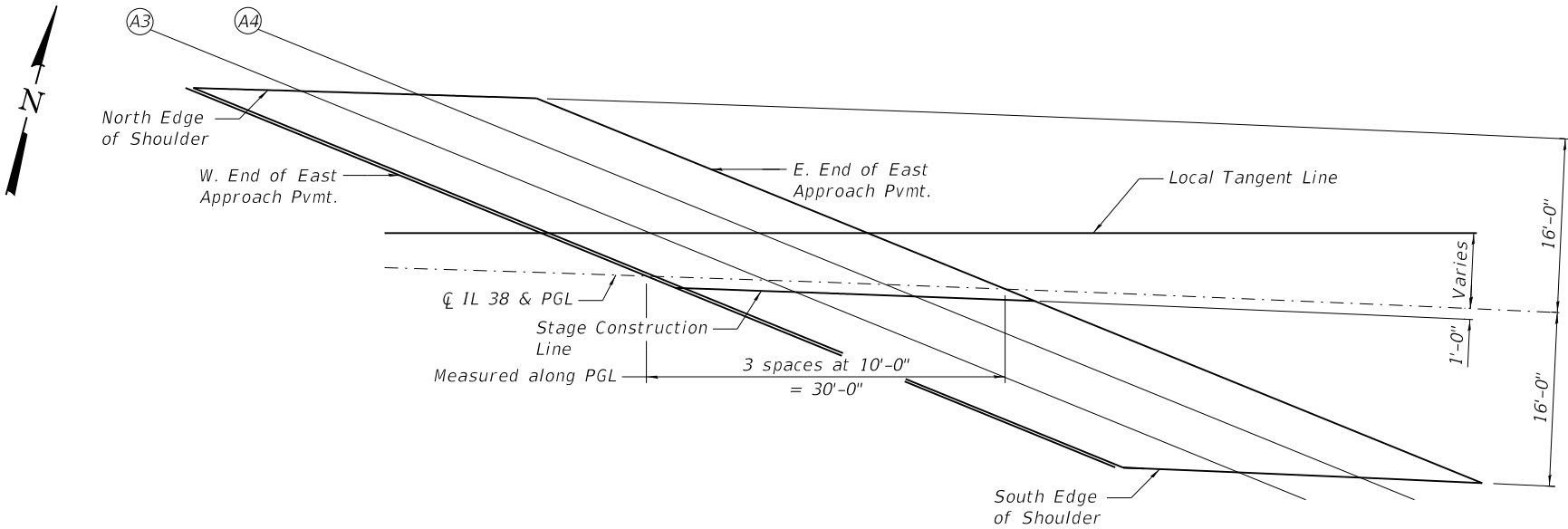
Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab Pvmt.	226+39.120	0.00	902.77
A3	226+49.12	0.00	902.66
A4	226+59.12	0.00	902.55
E. End E. Appr. Slab Pvmt.	226+69.12	0.00	902.44

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab Pvmt.	226+41.84	1.00	902.72
A3	226+51.85	1.00	902.61
A4	226+61.86	1.00	902.50
E. End E. Appr. Slab Pvmt.	226+71.87	1.00	902.38

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. Appr. Slab Pvmt.	226+83.00	16.00	901.95
A3	226+93.20	16.00	901.84
A4	227+03.40	16.00	901.72
E. End E. Appr. Slab Pvmt.	227+13.61	16.00	901.60



PLAN  
East Approach Slab

12/6/2018 5:04 PM I:\D303 PTB\B2 04\0303\JO - IL 38 over UPRR\CADD\CADD\_Sheets\Structural\_Sheets\0450009-62C14-00-105-elevations.e-cappc.dgn

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 04-00090

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

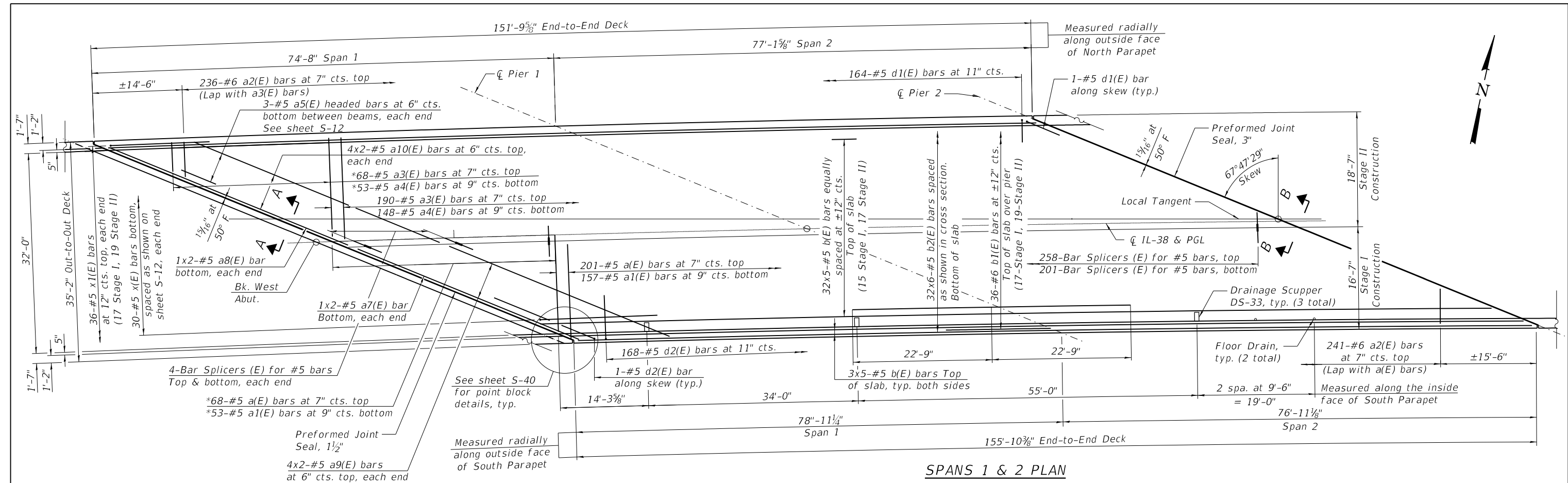
**TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 045-0009**

SHEET NO. S-10 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	36
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



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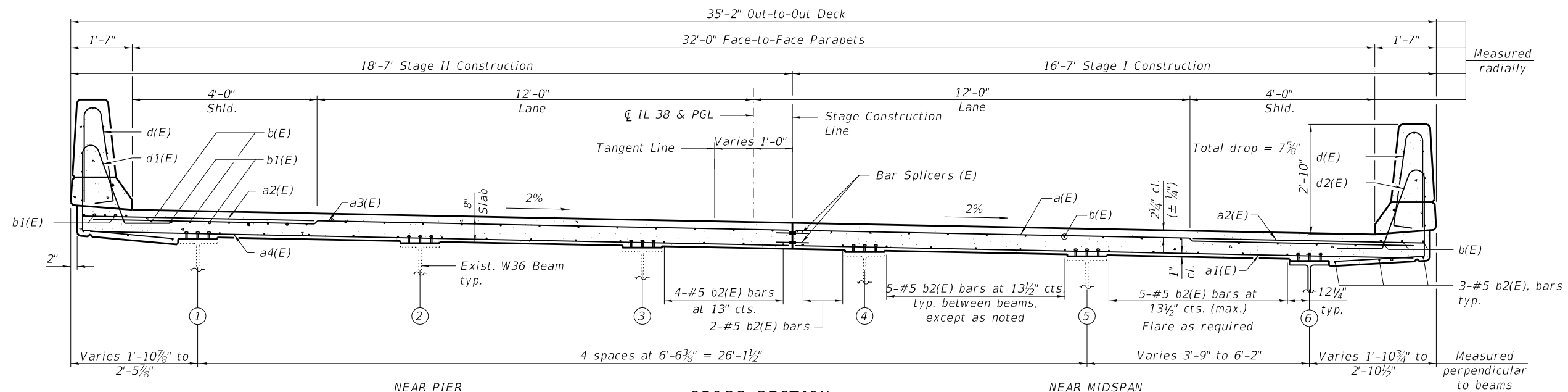


#### MINIMUM BAR LAP

#5 bar = 3'-0"  
#6 bar = 3'-7"

\* Order a(E), a1(E), a3(E) & a4(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes:  
See sheet S-13 for superstructure details and Bill of Material.  
See sheet S-12 for sections A-A & B-B.  
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



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ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-00090

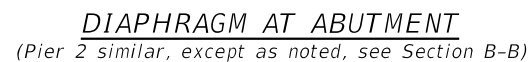
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PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

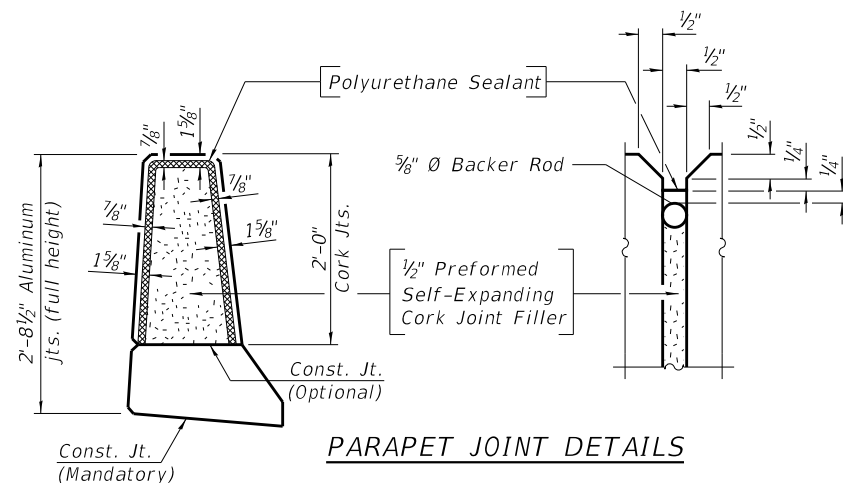
SUPERSTRUCTURE - SPANS 1 & 2  
STRUCTURE NO. 045-0009

SHEET NO. S-11 OF S-40 SHEETS

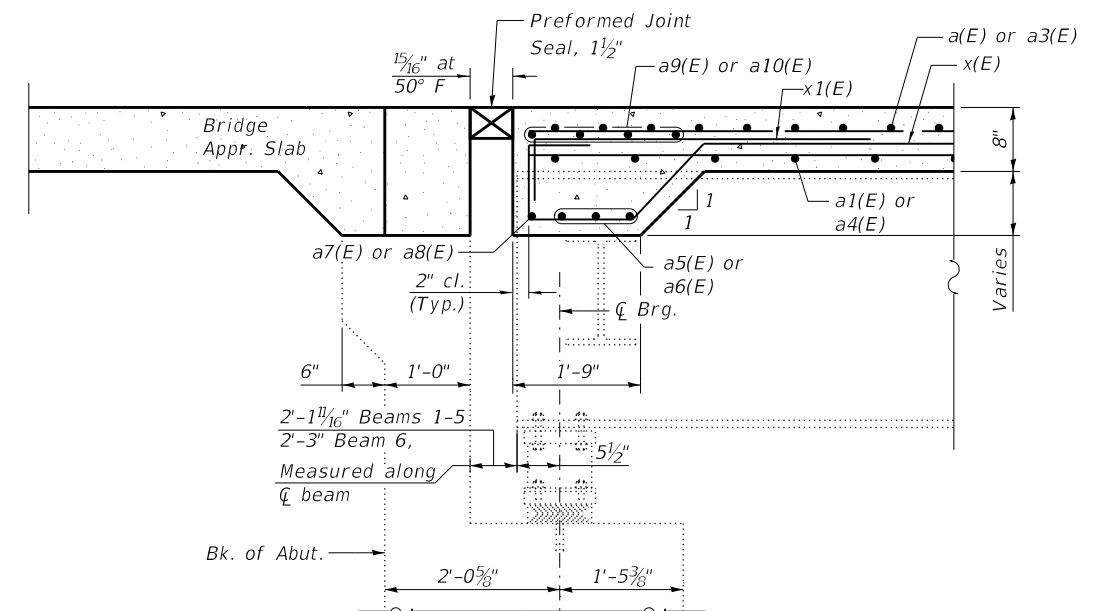
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	37
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



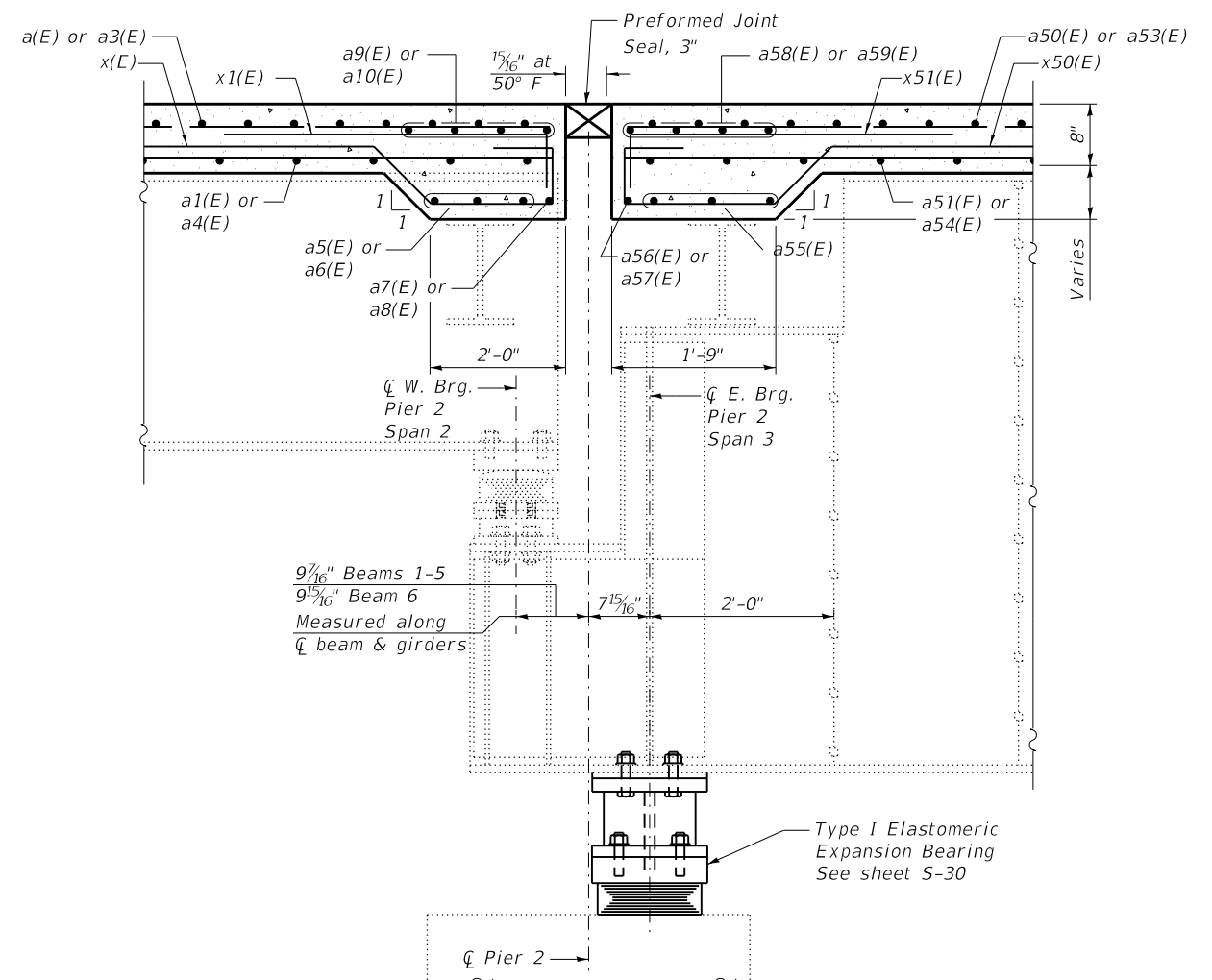
See sheet S-13 for superstructure details and Bill of Material.  
The x(E) bars shall be placed parallel to the beams. Spacing for  
these bars shall be at right angles to the beams.



Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



Note: Dimensions measured at Rt. L's  
Unless otherwise noted



*Note: Dimensions measured at Rt. L's  
Unless otherwise noted*

Sheet 1 of 2

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

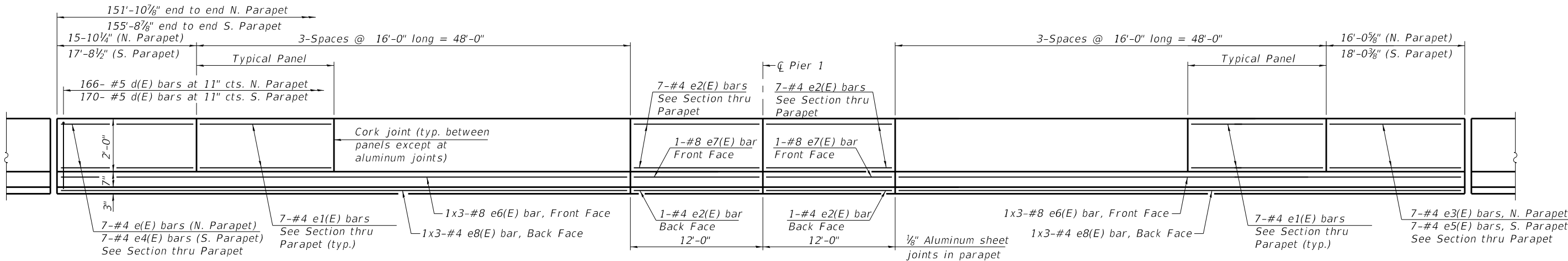
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS – SPANS 1 & 2**  
**STRUCTURE NO. 045-0009**

SHEET NO. S-12 OF S-40 SHEETS

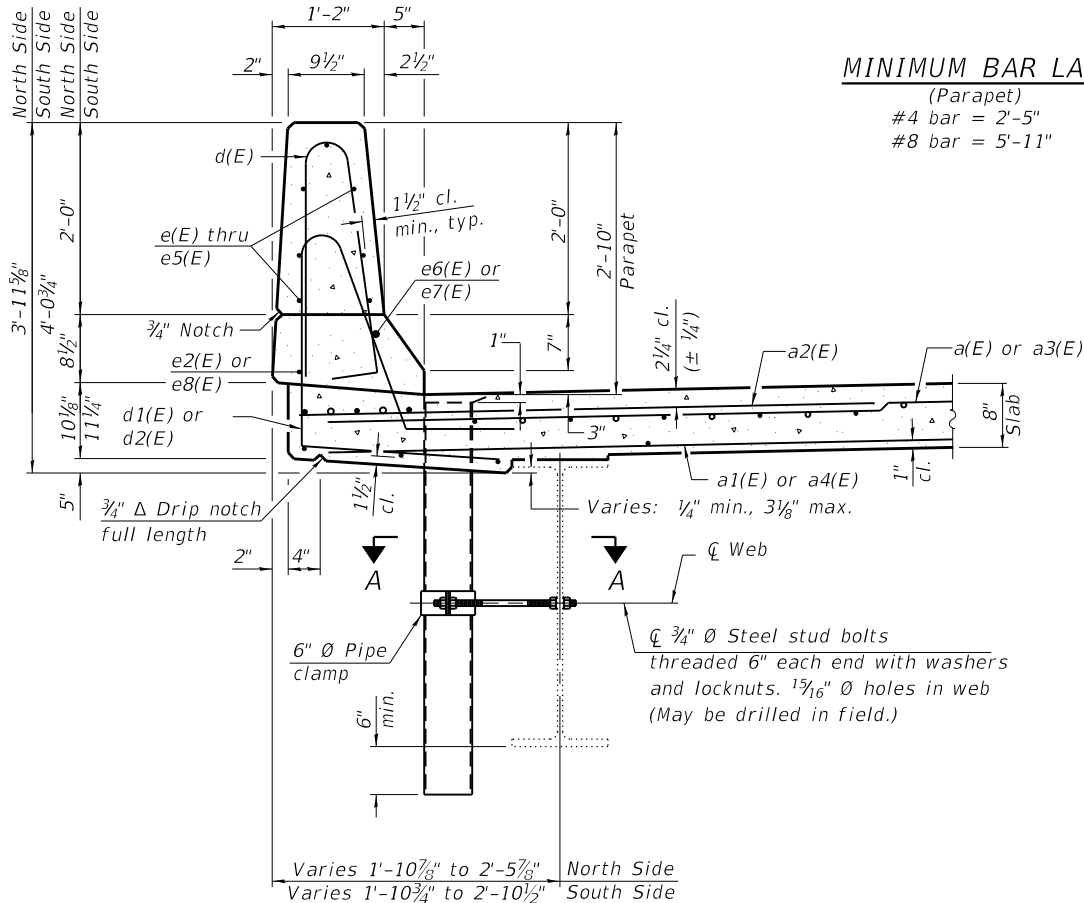
F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	38
		CONTRACT NO. 62C14		
		ILLINOIS FED. AID PROJECT		

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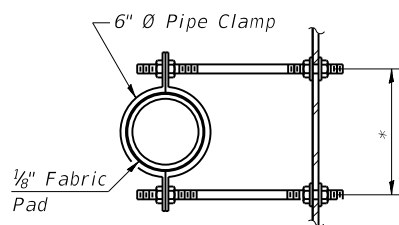
### INSIDE ELEVATION OF PARAPET

All dimensions measured radially along inside face of parapet



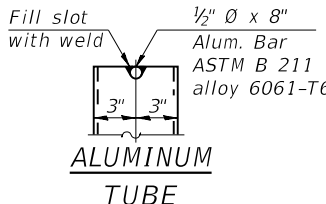
### SECTION THRU PARAPET

at Floor Drain  
Span 2, Southside Only

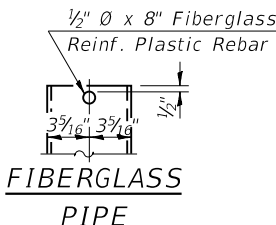


### SECTION A-A

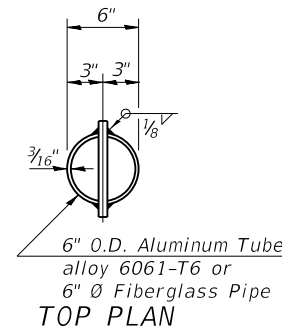
\* Dimension as required by Pipe Clamp



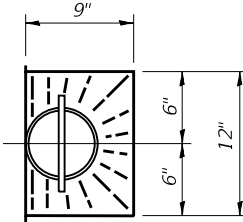
### ALUMINUM TUBE



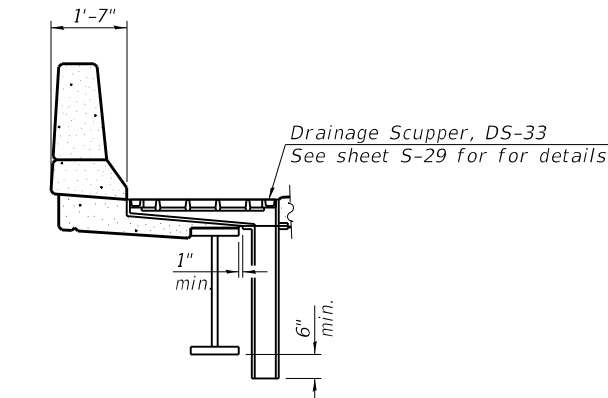
### FIBERGLASS PIPE



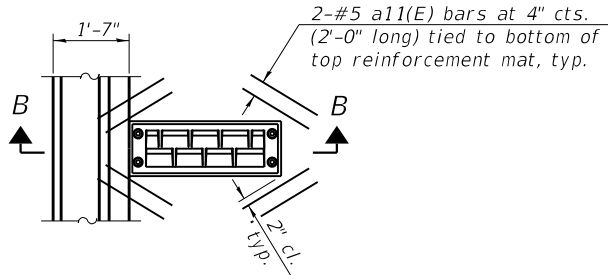
(Showing Aluminum Tube)



### TOP PLAN

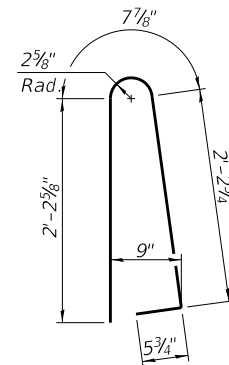


### SECTION B-B

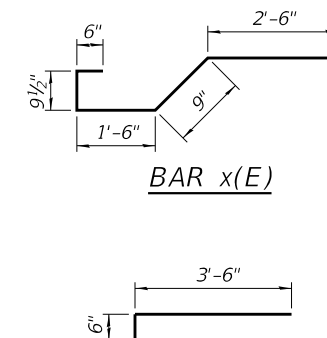


### PLAN

Note: Cut longitudinal reinforcement to clear drainage scuppers.



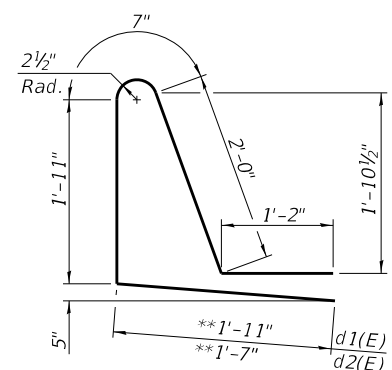
### BAR d(E)



### BAR x(E)



### BAR x1(E)



### BAR d1(E) OR d2(E)

\*\*Cut to fit

### SUPERSTRUCTURE

### BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	269	#5	16'-1"	—
a1(E)	210	#5	15'-9"	—
a2(E)	477	#6	6'-6"	—
a3(E)	258	#5	18'-1"	—
a4(E)	201	#5	17'-9"	—
a5(E)	27	#5	15'-7"	—
a6(E)	3	#5	8'-8"	—
a7(E)	4	#5	20'-4"	—
a8(E)	4	#5	22'-9"	—
a9(E)	16	#5	22'-3"	—
a10(E)	16	#5	24'-7"	—
a11(E)	24	#5	2'-0"	—
b(E)	190	#5	33'-7"	—
b1(E)	36	#6	45'-6"	—
b2(E)	192	#5	28'-6"	—
d(E)	336	#5	5'-7"	—
d1(E)	166	#5	7'-7"	—
d2(E)	170	#5	7'-3"	—
e(E)	7	#4	15'-6"	—
e1(E)	84	#4	15'-8"	—
e2(E)	32	#4	11'-8"	—
e3(E)	7	#4	15'-9"	—
e4(E)	7	#4	17'-5"	—
e5(E)	7	#4	17'-8"	—
e6(E)	12	#8	25'-11"	—
e7(E)	4	#8	11'-8"	—
e8(E)	12	#4	23'-7"	—
x(E)	60	#5	5'-10"	—
x1(E)	72	#5	4'-0"	—
Reinforcement Bars, Epoxy Coated			Pound	45,340
Concrete Superstructure			Cu. Yd.	167.3
Floor Drains			Each	4
Protective Coat			Sq. Yd.	674
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	408
Preformed Joint Seal, 1 1/2"			Foot	93.5
Preformed Joint Seal, 3"			Foot	93.5
Diamond Grinding (Bridge Section)			Sq. Yd.	479

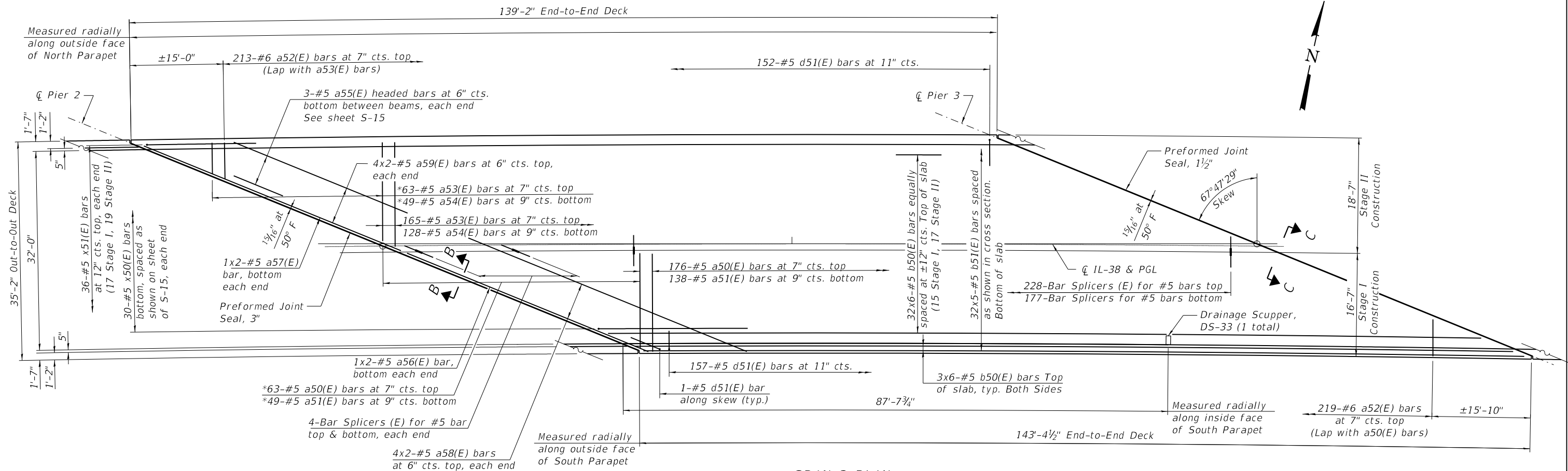
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

Sheet 2 of 2

USER NAME =	DESIGNED - RSD	REVISED -
PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	39
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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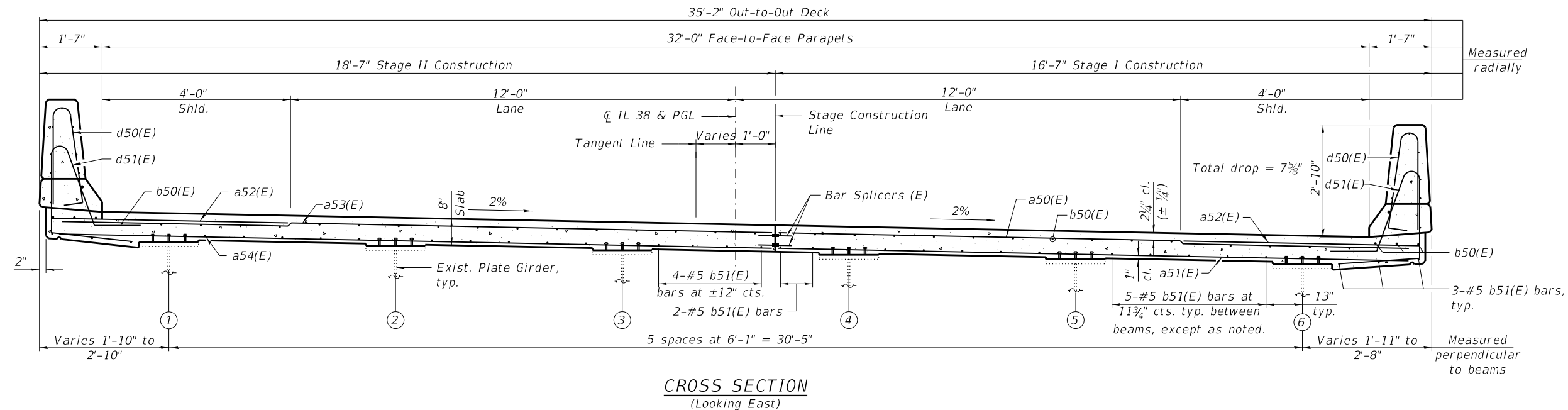


SPAN 3 PLAN

**MINIMUM BAR LAP**  
#5 bar = 3'-0"

\* Order a50(E), a51(E), a53(E) & a54(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

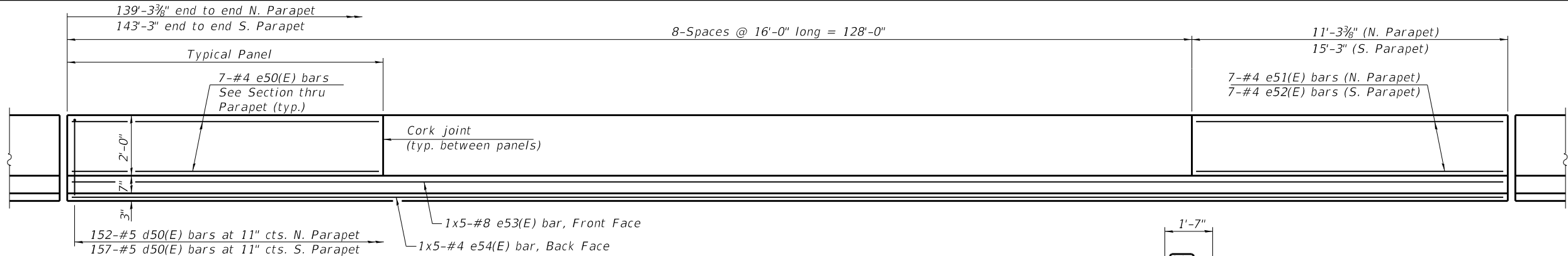
Notes:  
See sheet S-12 for Section B-B.  
See sheet S-15 for superstructure details and Bill of Material.  
See sheet S-17 for Section C-C.  
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



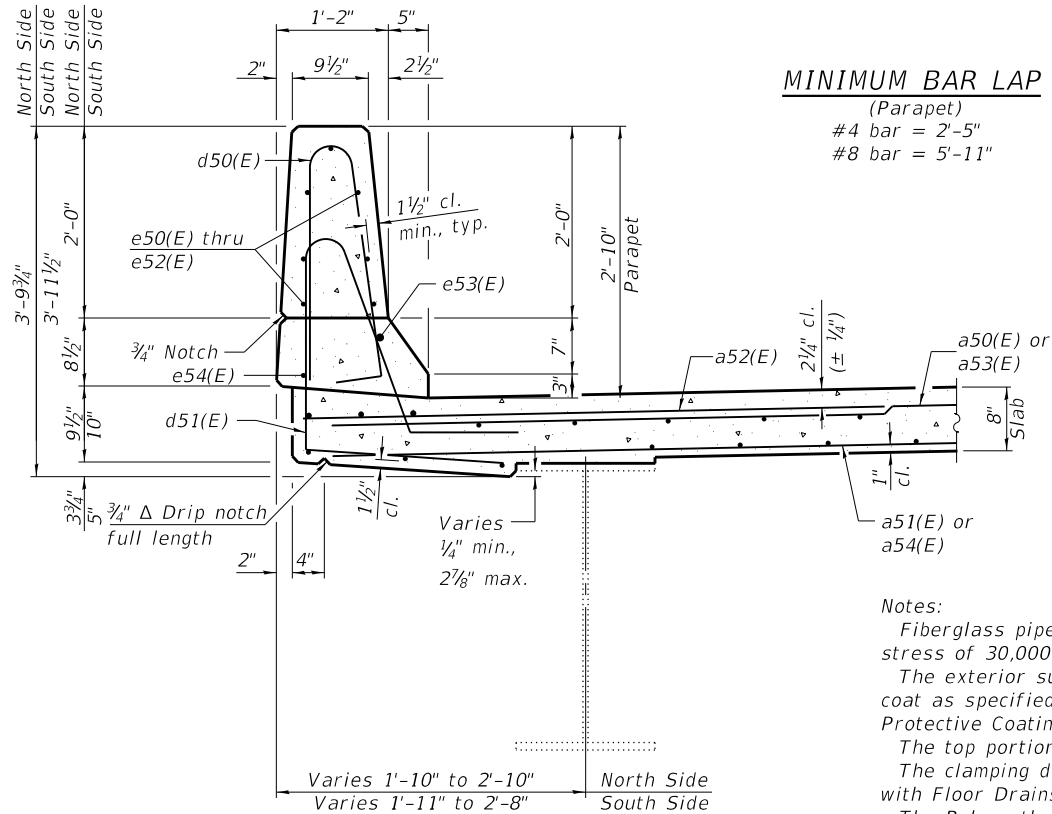
**CROSS SECTION**  
(Looking East)

<div><div><div>COLLINS ENGINEERS</div><div>ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO.045-0009</div></div><div><div>131 N. Bagley Dr.</div><div>DeKalb, IL 60015</div><div>TEL: 815-317-7400</div><div>FAX: 815-317-7400</div><div>www.collins-engineers.com</div></div></div>	USER NAME =	DESIGNED - RSD	REVISED -	<div>STATE OF ILLINOIS</div> <div>DEPARTMENT OF TRANSPORTATION</div>	<div>SUPERSTRUCTURE - SPAN 3</div> <div>STRUCTURE NO.045-0009</div>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - AMS	REVISED -			567	5VB-BR	COOK	73	40
	PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -			CONTRACT NO. 62C14				
		CHECKED - RSD	REVISED -			SHEET NO. S-14 OF S-40 SHEETS				
						ILLINOIS FED. AID PROJECT				

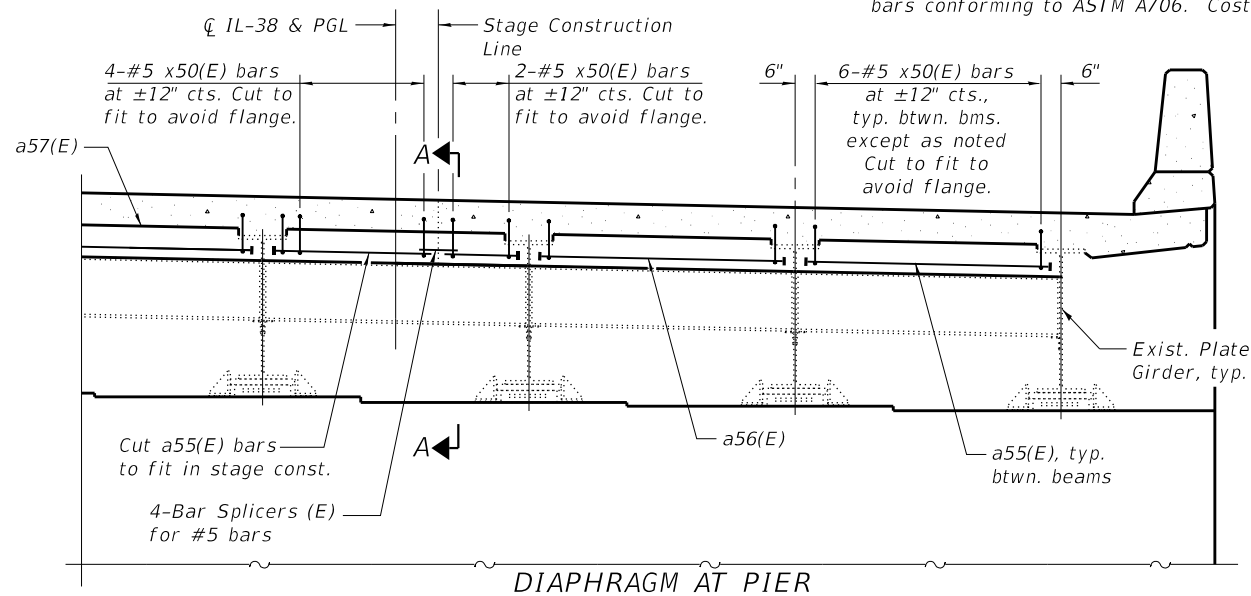
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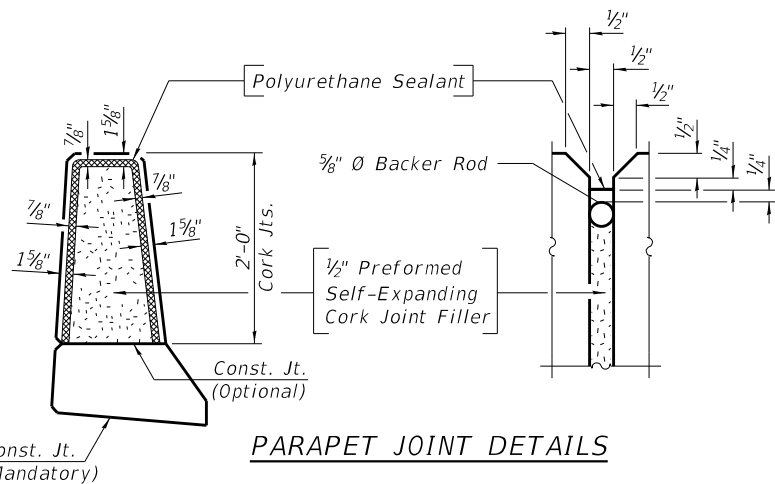
**INSIDE ELEVATION OF PARAPET**  
All dimensions measured radially along inside face of parapet



**SECTION THRU PARAPET**

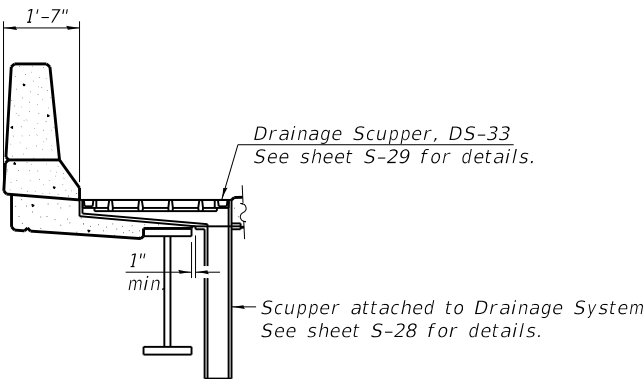


**DIAPHRAGM AT PIER**

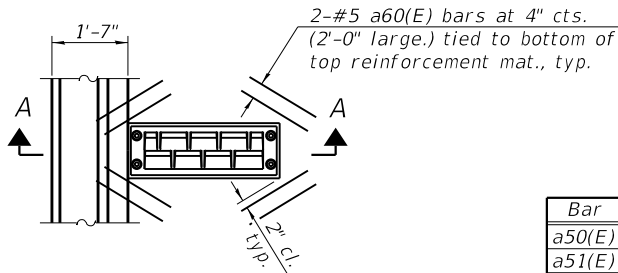


**PARAPET JOINT DETAILS**

Notes:  
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.  
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.  
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.  
The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.  
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.  
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



**SECTION A-A**



**PLAN**

Note: Cut longitudinal reinforcement to clear drainage scuppers.

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a50(E)	239	#5	16'-1"	—
a51(E)	187	#5	15'-9"	—
a52(E)	432	#6	6'-6"	—
a53(E)	228	#5	18'-1"	—
a54(E)	177	#5	17'-9"	—
a55(E)	30	#5	15'-7"	—
a56(E)	4	#5	20'-5"	—
a57(E)	4	#5	25'-9"	—
a58(E)	16	#5	23'-5"	—
a59(E)	16	#5	25'-9"	—
a60(E)	8	#5	2'-0"	—
b50(E)	228	#5	26'-5"	—
b51(E)	160	#5	31'-1"	—
d50(E)	309	#5	5'-7"	⏏
d51(E)	313	#5	7'-3"	⏏
e50(E)	112	#4	15'-8"	—
e51(E)	7	#4	10'-11"	—
e52(E)	7	#4	14'-11"	—
e53(E)	10	#8	33'-5"	—
e54(E)	10	#4	30'-7"	—
x50(E)	60	#5	5'-10"	⏏
x51(E)	72	#5	4'-0"	⏏
Reinforcement Bars, Epoxy Coated			Pound	39,120
Concrete Superstructure			Cu. Yds.	153.8
Protective Coat			Sq. Yd.	620
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	374
Diamond Grinding (Bridge Section)			Sq. Yd.	440

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - SPAN 3  
STRUCTURE NO. 045-0009**

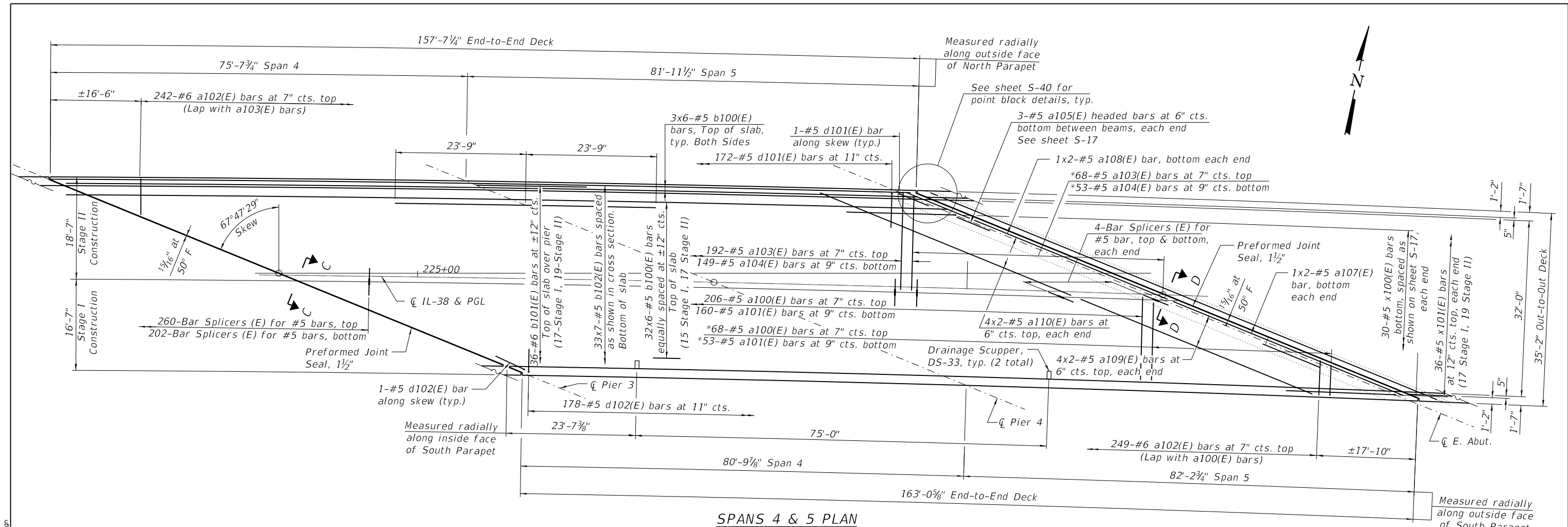
SHEET NO. S-15 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	41
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-0009

USER NAME =	DESIGNED - RSD	REVISED -
PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

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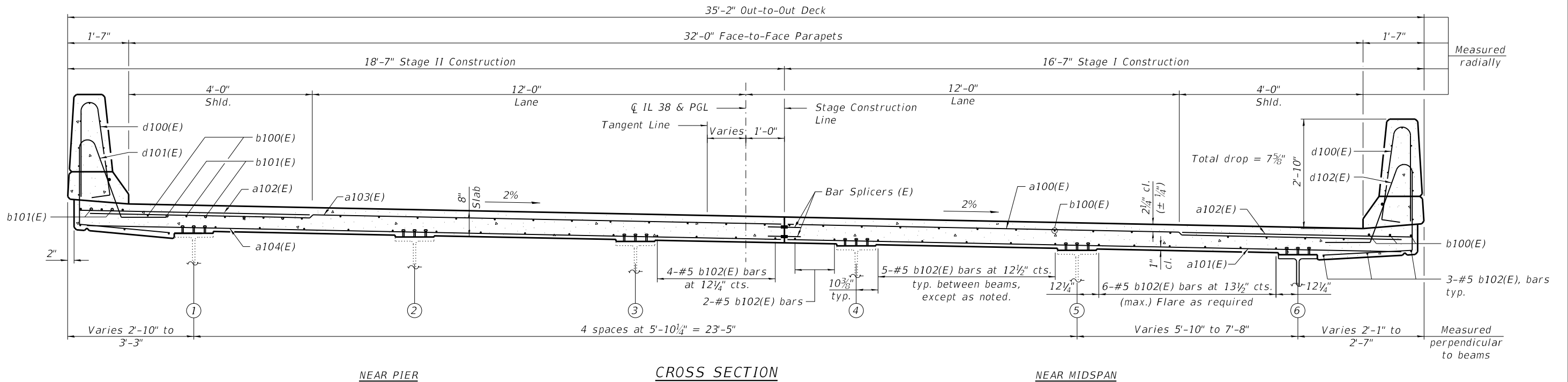


SPANS 4 & 5 PLAN

MINIMUM BAR LAP  
#5 bar = 3'-0"  
#6 bar = 3'-7"

\* Order a100(E), a101(E), a103(E) & a104(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes:  
See sheet S-18 for superstructure details and Bill of Material.  
See sheet S-17 for sections C-C & D-D.  
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION  
(Looking East)

NEAR MIDSPAN

NEAR PIER

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-00090

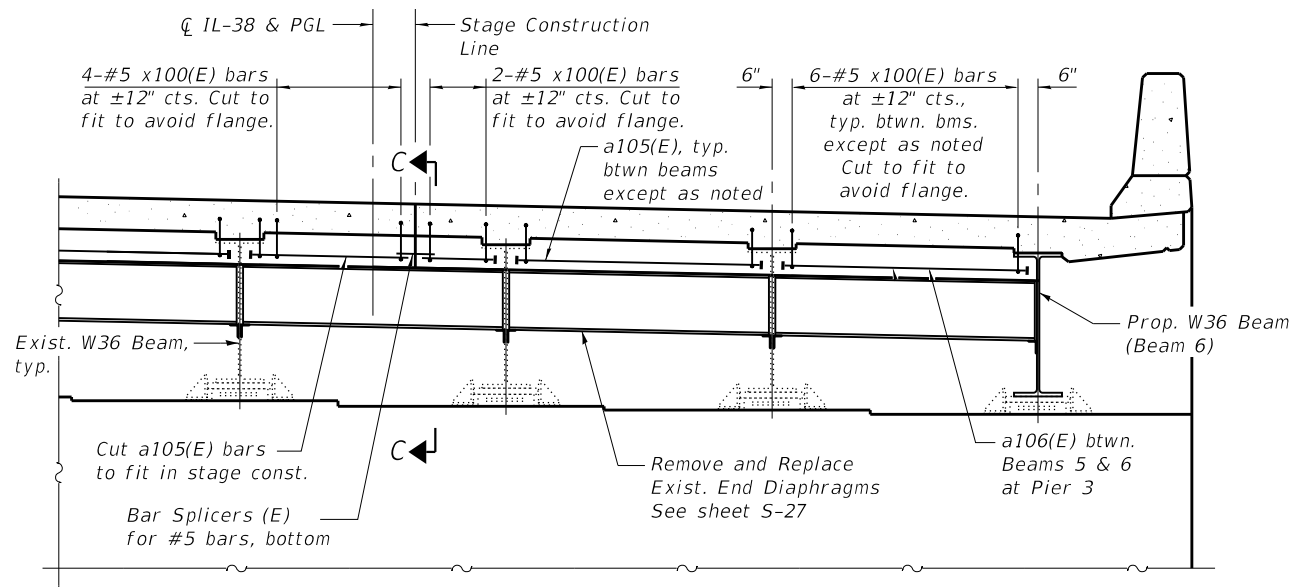
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PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE - SPANS 4 & 5  
STRUCTURE NO. 045-0009

SHEET NO. S-16 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	42
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

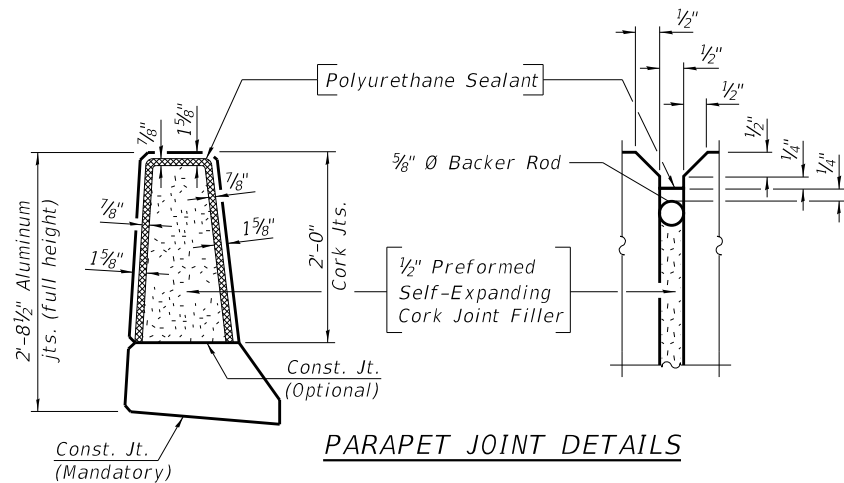


### DIAPHRAGM AT ABUTMENT

(Pier 3 similar, except as noted, see Section D-D)

#### Notes:

See sheet S-18 for superstructure details and Bill of Material.  
The x100(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.



### PARAPET JOINT DETAILS

#### Notes:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings Spec. SSPC-SP1 prior to painting.

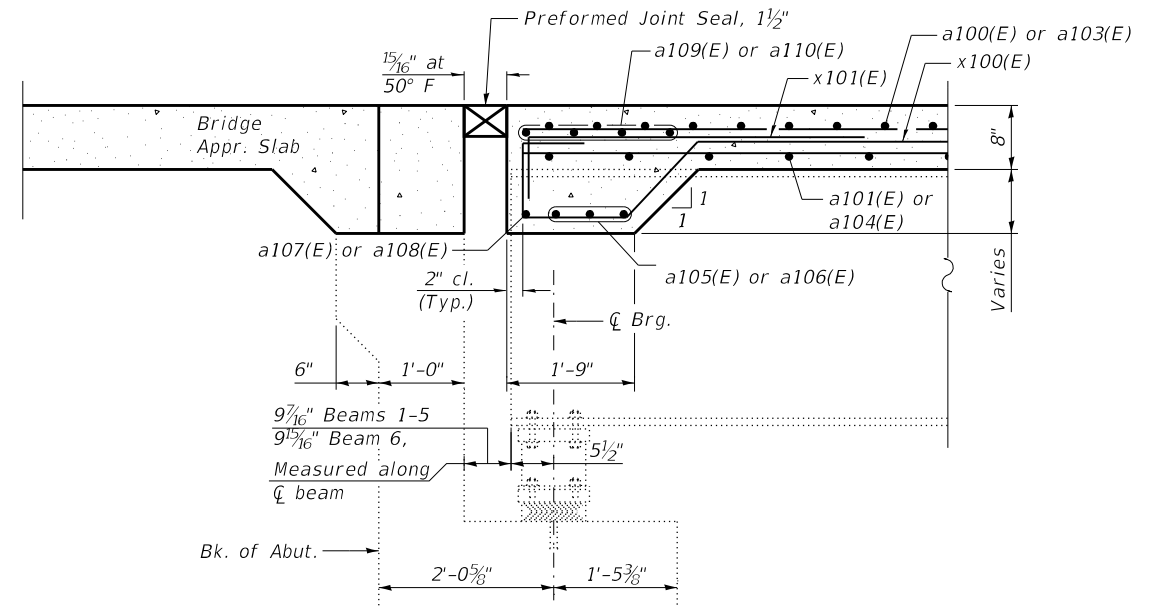
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

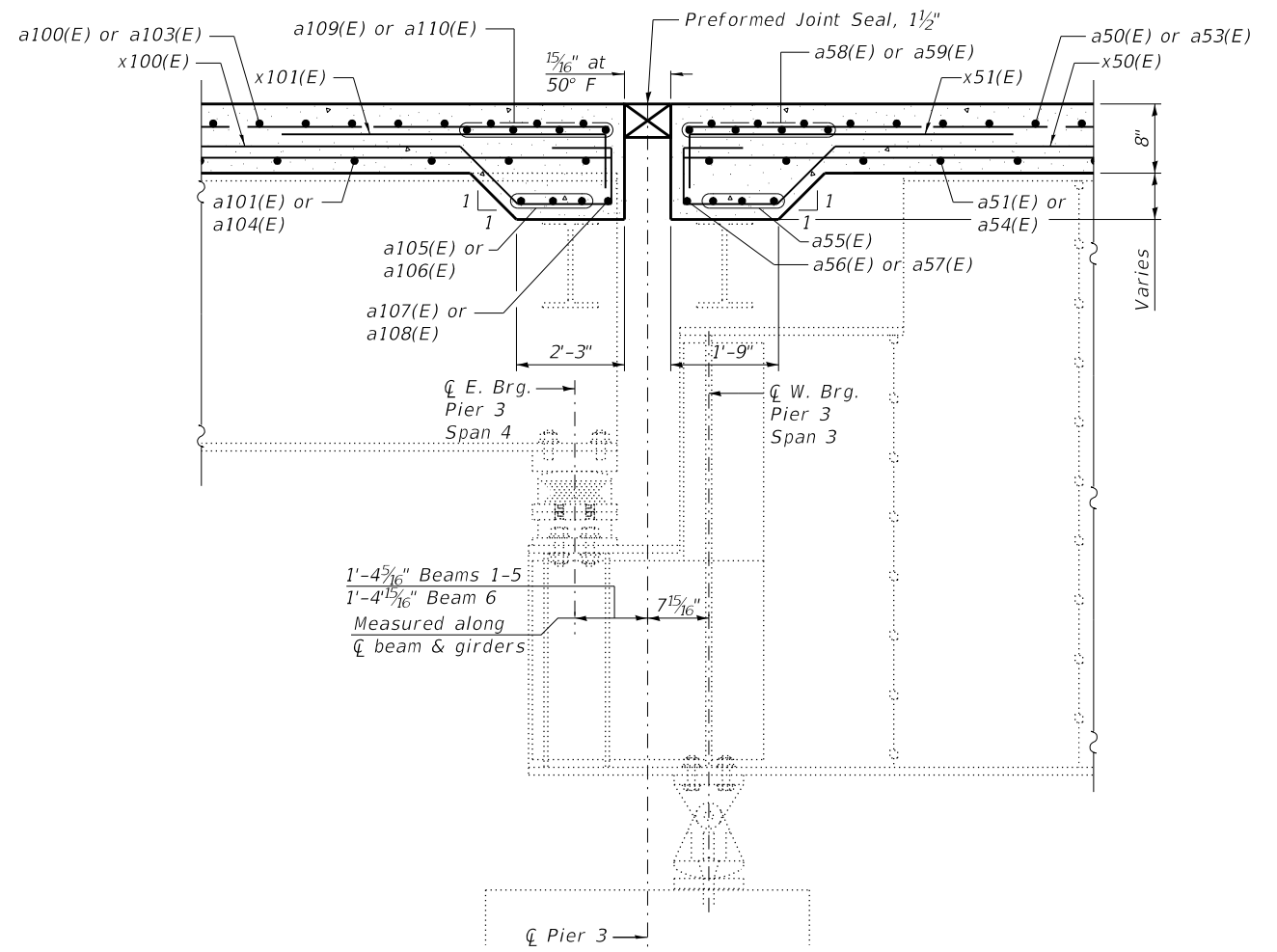
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



### SECTION D-D

Note: Dimensions measured at Rt. L's



### SECTION C-C

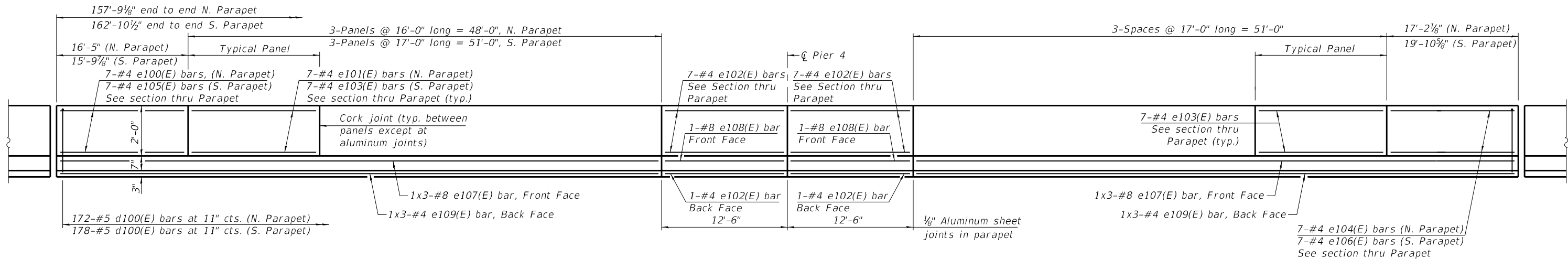
Note: Dimensions measured at Rt. L's

Sheet 1 of 2

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

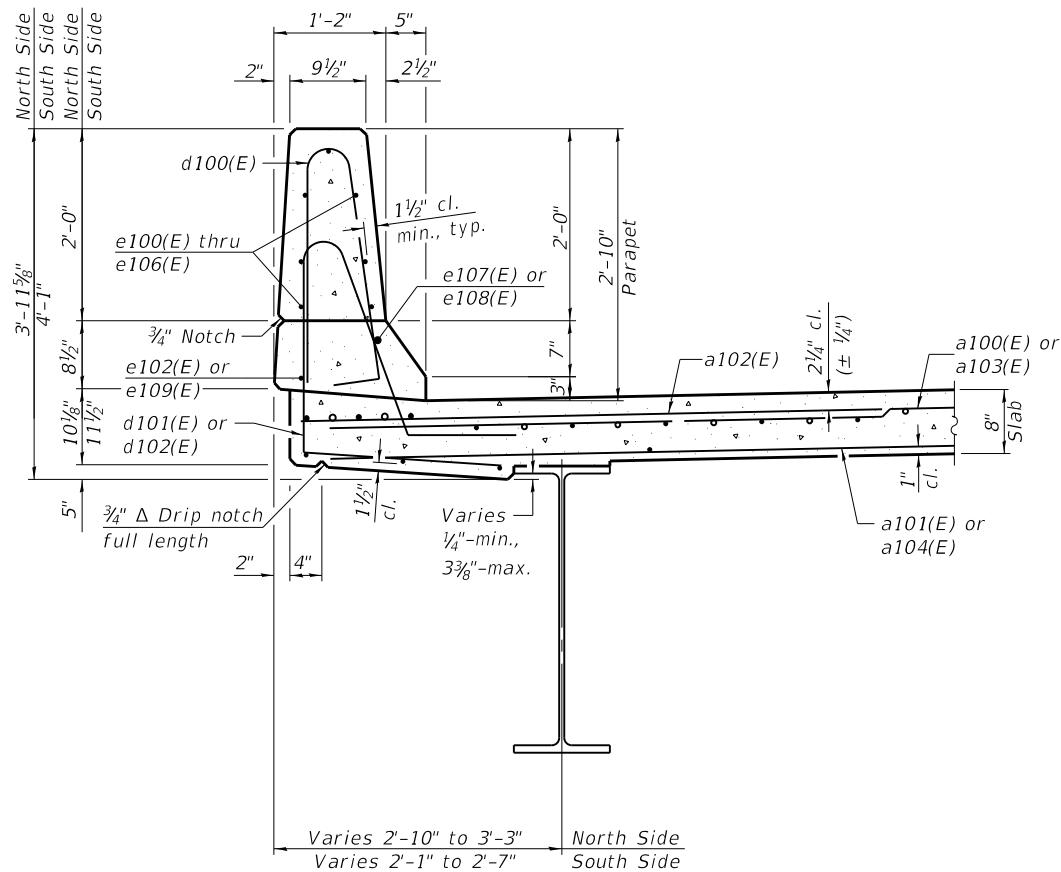
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	43
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

12/6/2018 5:42:21 PM I:\ND303\PTB\B2 04\0303\JO - IL 38 over UPRR\CADD\CADD\_Sheets\Structure\Sheet\0450009-62C14-018-superstructure\tdls-4-5-1.dgn

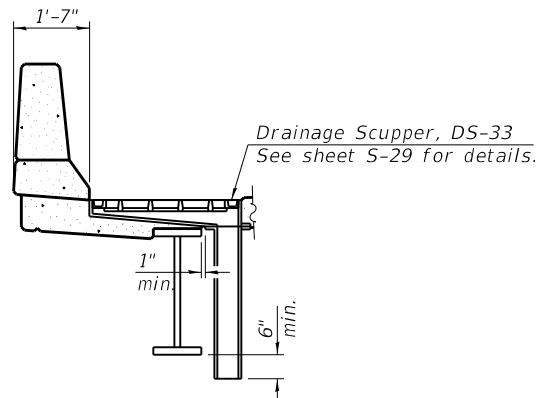


**MINIMUM BAR LAP**  
(Parapet)  
#4 bar = 2'-5"  
#8 bar = 5'-11"

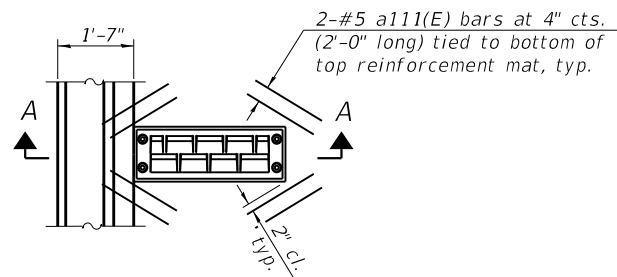
**INSIDE ELEVATION OF PARAPET**  
All dimensions measured radially along inside face of parapet



**SECTION THRU PARAPET**

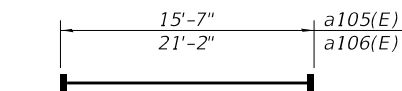


**SECTION A-A**

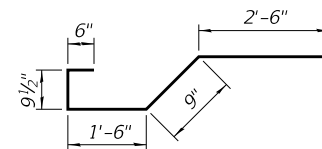


**PLAN**

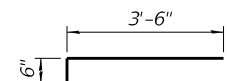
Note: Cut longitudinal reinforcement to clear drainage scuppers.



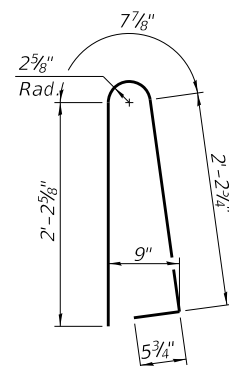
**BAR a105(E) or a106(E)**  
(Headed)



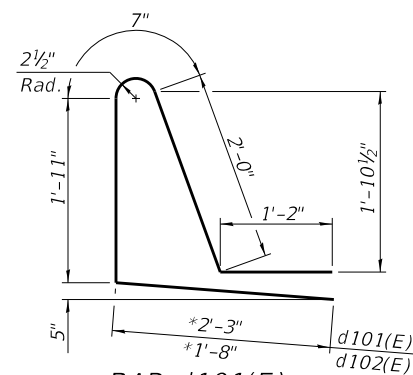
**BAR x100(E)**



**BAR x101(E)**



**BAR d100(E)**



**BAR d101(E) or BAR d102(E)**  
\*Cut to fit

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a100(E)	274	#5	15'-11"	—
a101(E)	213	#5	15'-3"	—
a102(E)	491	#6	6'-6"	—
a103(E)	260	#5	17'-11"	—
a104(E)	202	#5	17'-3"	—
a105(E)	27	#5	15'-7"	—
a106(E)	3	#5	21'-2"	—
a107(E)	4	#5	22'-8"	—
a108(E)	4	#5	23'-3"	—
a109(E)	16	#5	25'-0"	—
a110(E)	16	#5	27'-11"	—
a111(E)	16	#5	2'-0"	—
b100(E)	228	#5	29'-8"	—
b101(E)	36	#6	47'-6"	—
b102(E)	231	#5	25'-10"	—
d100(E)	350	#5	5'-7"	—
d101(E)	174	#5	7'-11"	—
d102(E)	180	#5	7'-4"	—
e100(E)	7	#4	16'-1"	—
e101(E)	21	#4	15'-8"	—
e102(E)	32	#4	12'-3"	—
e103(E)	63	#4	16'-8"	—
e104(E)	7	#4	16'-10"	—
e105(E)	7	#4	15'-6"	—
e106(E)	7	#4	19'-7"	—
e107(E)	12	#8	27'-6"	—
e108(E)	4	#8	12'-3"	—
e109(E)	12	#4	25'-2"	—
x100(E)	60	#5	5'-10"	—
x101(E)	72	#5	4'-0"	—
Reinforcement Bars, Epoxy Coated			Pound	46,960
Concrete Superstructure			Cu. Yd.	174.4
Protective Coat			Sq. Yd.	702
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	425
Preformed Joint Seal, 1 1/2"			Foot	186.5
Diamond Grinding (Bridge Section)			Sq. Yd.	499

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

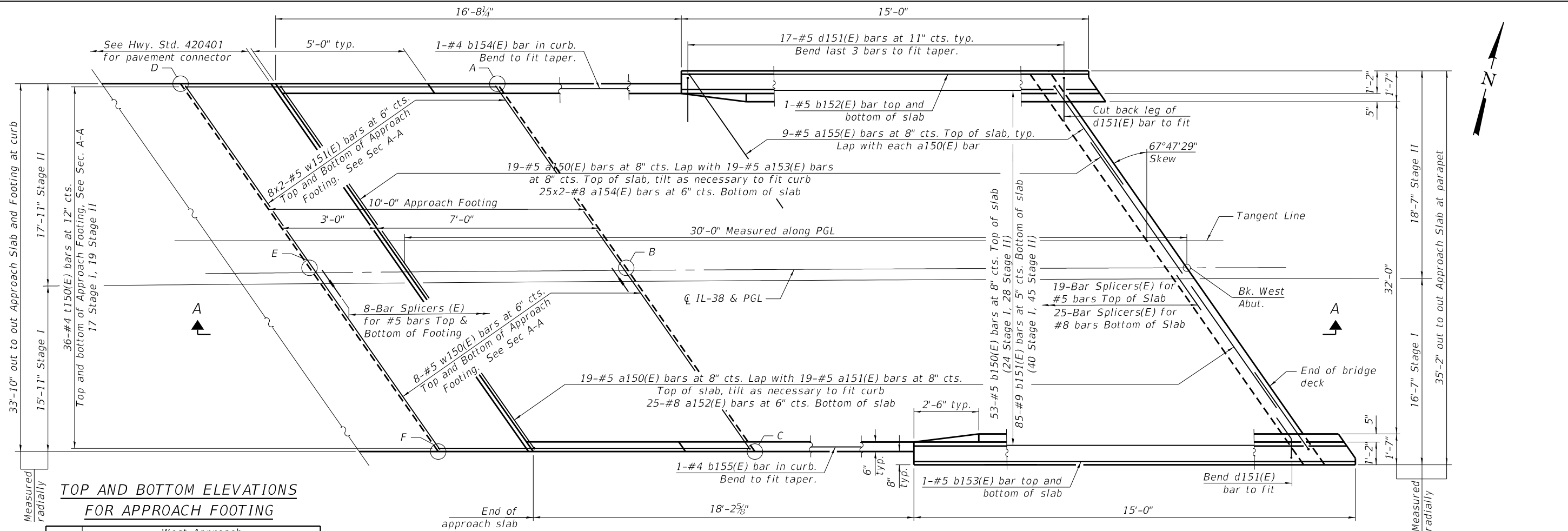
Sheet 2 of 2

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PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	44
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



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TOP AND BOTTOM ELEVATIONS  
FOR APPROACH FOOTING

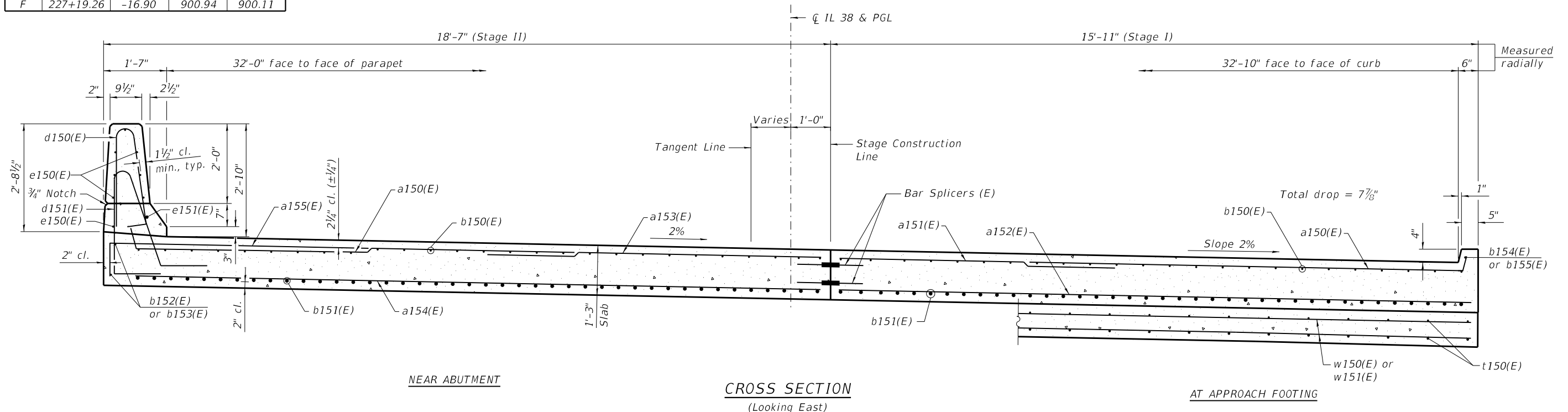
West Approach				
Point	Station	Offset	Top	Bottom
A	226+16.27	-16.91	902.10	901.26
B	226+62.08	0.00	901.27	900.43
C	227+08.99	16.92	900.39	899.55
D	226+26.16	16.91	901.32	900.49
E	226+72.15	0.00	901.15	900.32
F	227+19.26	-16.90	900.94	900.11

WEST APPROACH PLAN

Notes:  
See sheet S-21 for Section A-A.  
Bars indicated thus 1 x 2-#8 etc. indicates  
1 line of bars with 2 lengths per line.

MINIMUM BAR LAPS

#5 = 3'-4"  
#8 = 4'-9"



NEAR ABUTMENT

CROSS SECTION  
(Looking East)

AT APPROACH FOOTING

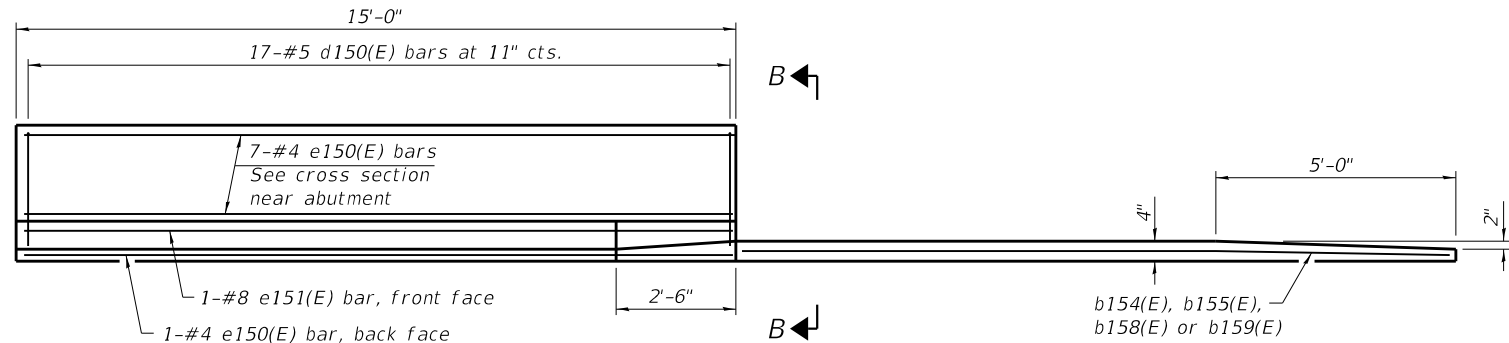
Sheet 1 of 3

USER NAME =	DESIGNED - RSD	REVISED -
PLOT SCALE =	CHECKED - AMS	REVISED -
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	CHECKED - RSD	REVISED -

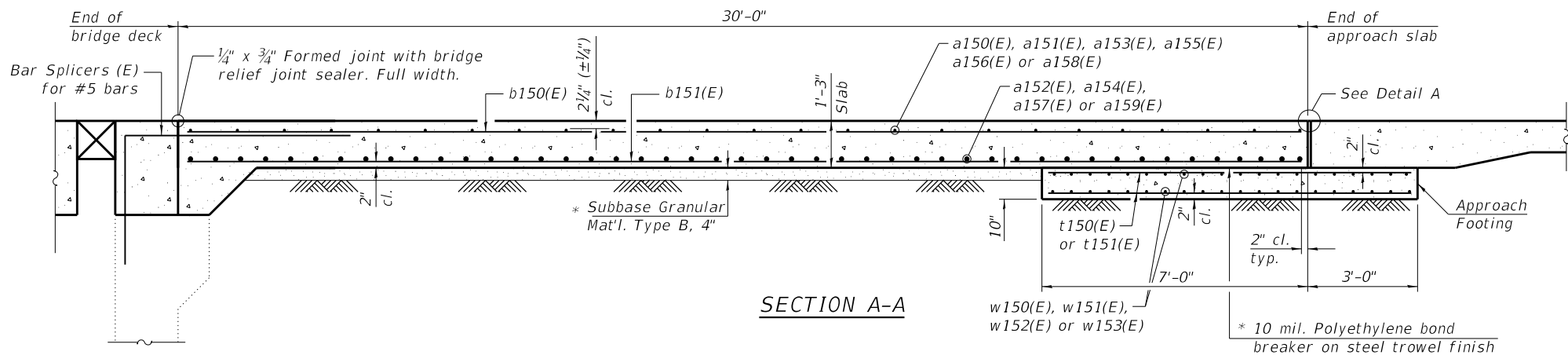
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567	5VB-BR	COOK	73	45
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



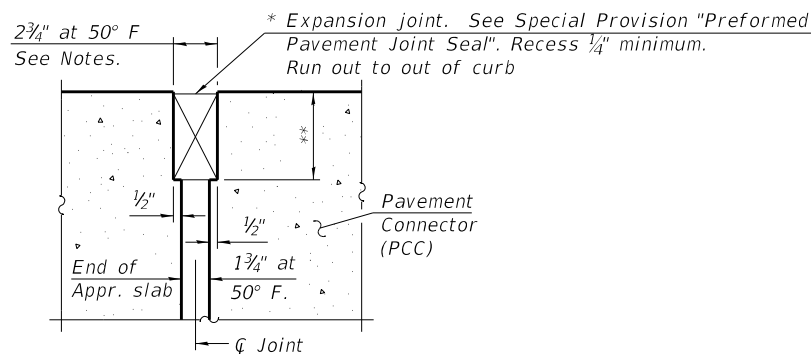
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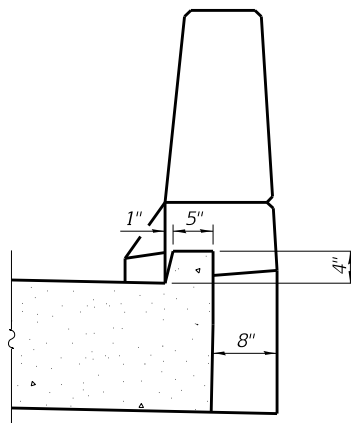
INSIDE ELEVATION OF PARAPET AND CURB



SECTION A-A



DETAIL A  
(@ Rt. L's)



VIEW B-B

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.

Parapet concrete shall be paid for as Concrete Superstructure.

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

For Approach Slab Removal, see Roadway Plans.

TWO APPROACHES  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a150(E)	70	#5	25'-5"	
a151(E)	19	#5	16'-10"	
a152(E)	25	#8	38'-5"	
a153(E)	19	#5	21'-2"	
a154(E)	50	#8	23'-10"	
a155(E)	36	#5	7'-4"	
a156(E)	16	#5	25'-3"	
a157(E)	42	#8	25'-10"	
a158(E)	16	#5	30'-2"	
a159(E)	42	#8	28'-4"	
b150(E)	106	#5	29'-8"	
b151(E)	170	#9	29'-8"	
b152(E)	2	#5	11'-2"	
b153(E)	2	#5	13'-4"	
b154(E)	1	#4	16'-4"	
b155(E)	1	#4	17'-11"	
b156(E)	2	#5	13'-1"	
b157(E)	2	#5	10'-4"	
b158(E)	1	#4	17'-5"	
b159(E)	1	#4	17'-9"	
d150(E)	68	#5	5'-7"	
d151(E)	68	#5	7'-8"	
e150(E)	32	#4	14'-8"	
e151(E)	4	#8	14'-8"	
t150(E)	144	#4	9'-8"	
w150(E)	16	#5	38'-5"	
w151(E)	32	#5	23'-1"	
w152(E)	32	#5	25'-2"	
w153(E)	32	#5	27'-7"	
Concrete Superstructure		Cu. Yd.	6.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	95.9	
Concrete Structures		Cu. Yd.	20.9	
Reinforcement Bars, Epoxy Coated		Pound	41,320	
Protective Coat		Sq. Yd.	258	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	160	
Diamond Grinding (Bridge Section)		Sq. Yd.	188	

BAR d150(E)

BAR d151(E)

BAR a150(E)

BAR a155(E)

Sheet 3 of 3

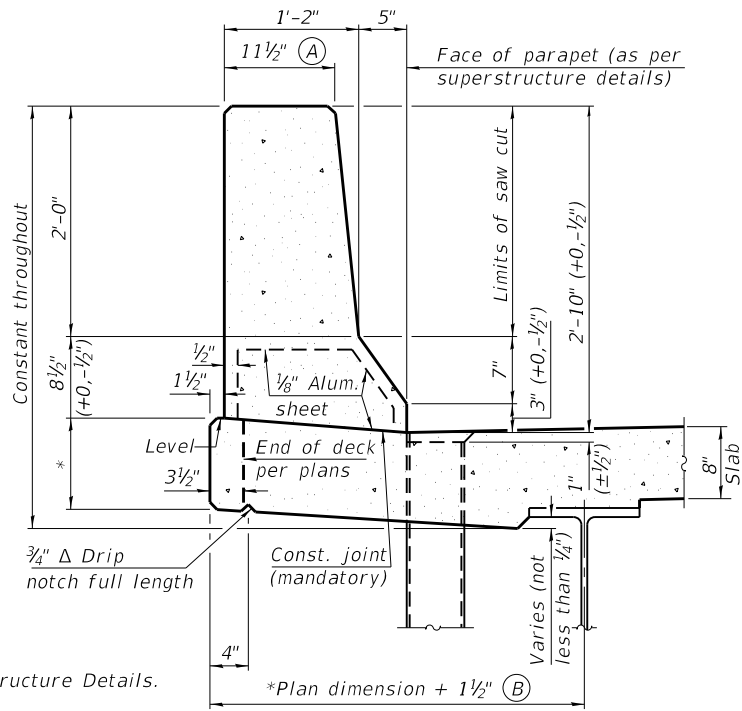
\* Cost included with Concrete Superstructure (Approach Slab).

\*\* Per manufacturer recommendations

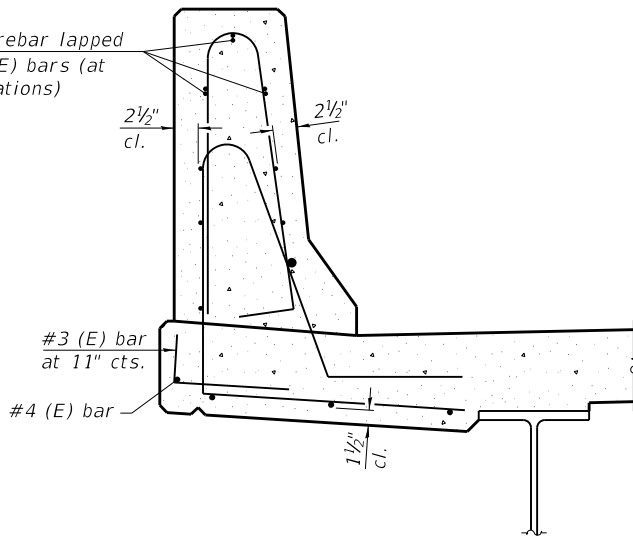
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	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	47
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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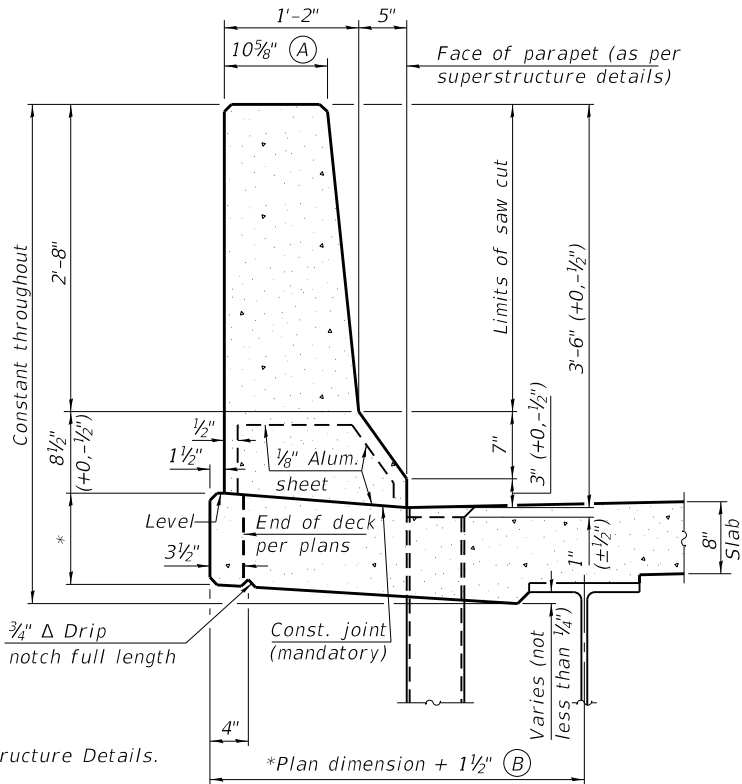


34" F SHAPE PARAPET SECTION  
(Showing dimensions)

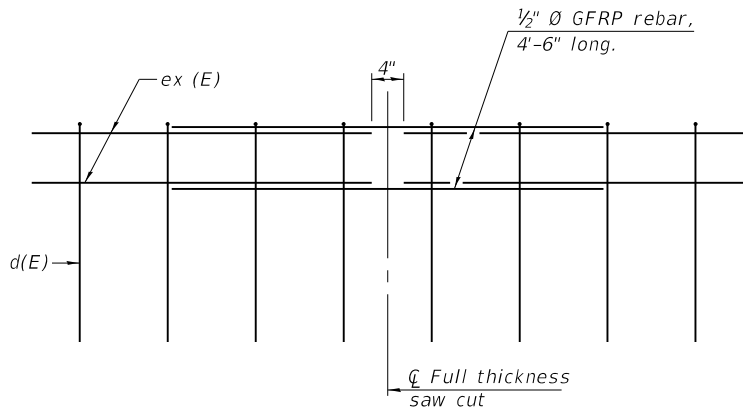


SECTION

(34" parapet shown - 42" parapet similar)  
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



42" F SHAPE PARAPET SECTION  
(Showing dimensions)

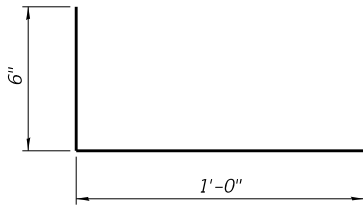


GFRP REBAR STIFFENING DETAIL

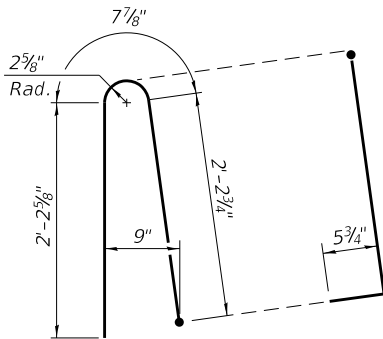
(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler. Steel superstructure shown. Other superstructure types similar.

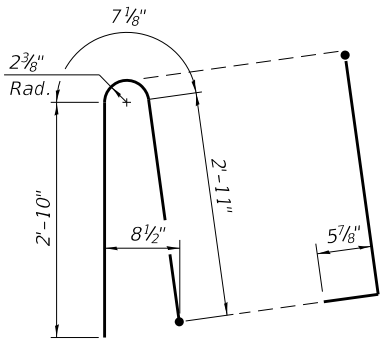


#3 (E) BAR



ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



ALTERNATE BAR d(E)

(For 42" parapet when conduit is present)

SFP 34-42

2-17-2017

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-0009

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -
PLOT SCALE =		
PLOT DATE = 12/6/2018		

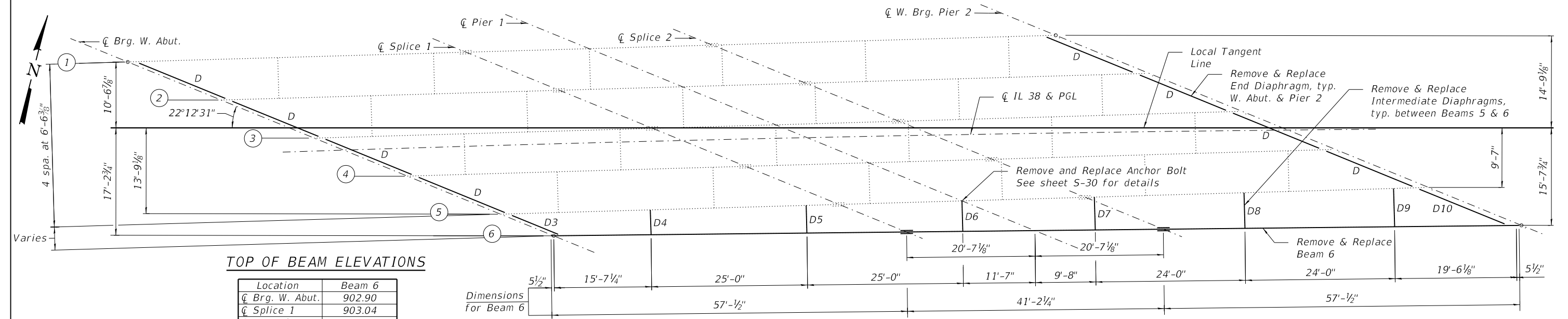
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION  
STRUCTURE NO. 045-0009

SHEET NO. S-22 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	48
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

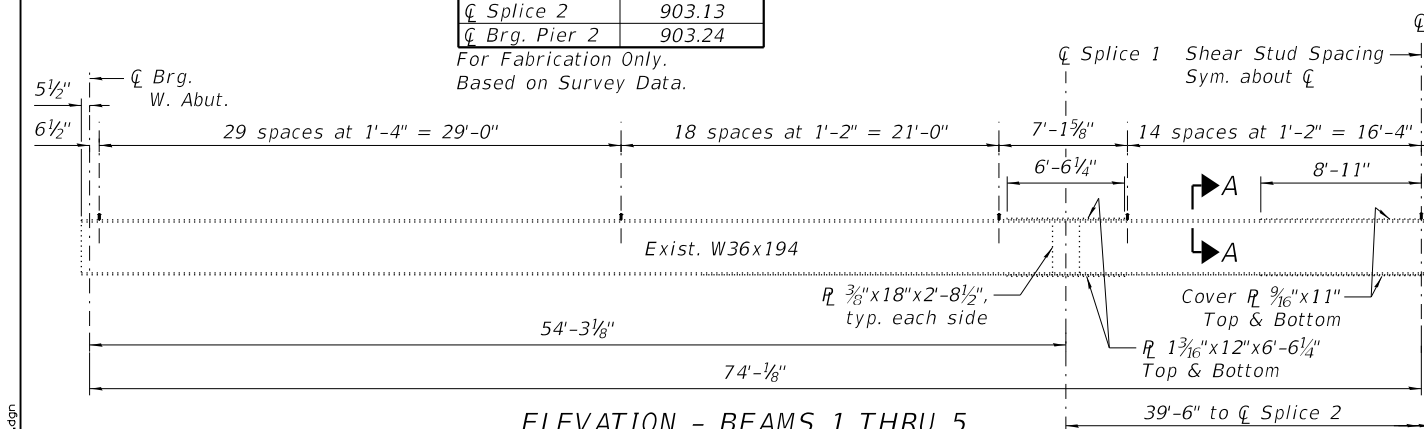
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TOP OF BEAM ELEVATIONS

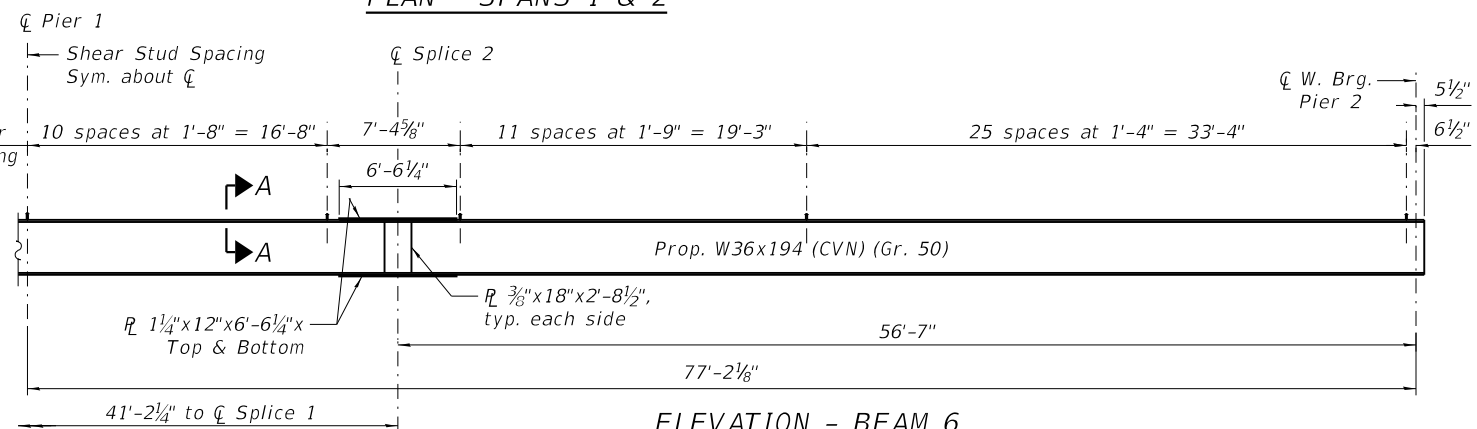
Location	Beam 6
Cl Brg. W. Abut.	902.90
Cl Splice 1	903.04
Cl Brg. Pier 1	903.06
Cl Splice 2	903.13
Cl Brg. Pier 2	903.24

For Fabrication Only,  
Based on Survey Data.



ELEVATION - BEAMS 1 THRU 5

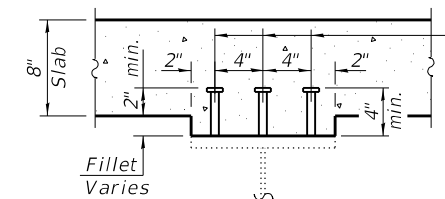
PLAN - SPANS 1 & 2



ELEVATION - BEAM 6

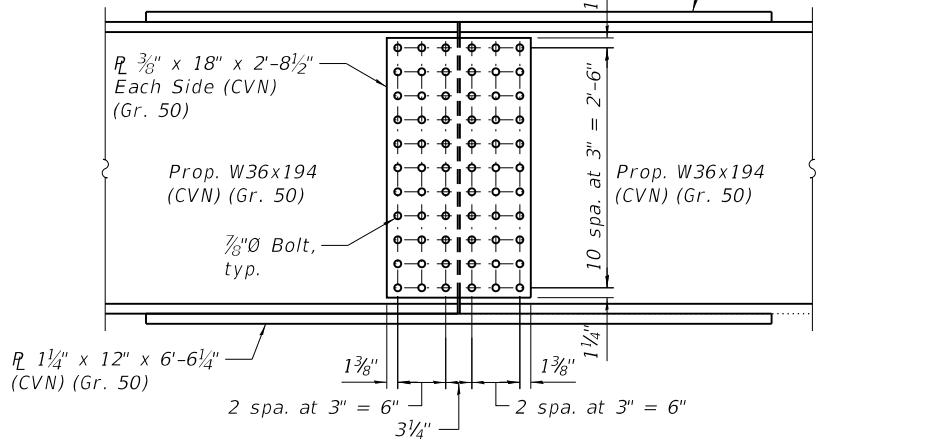
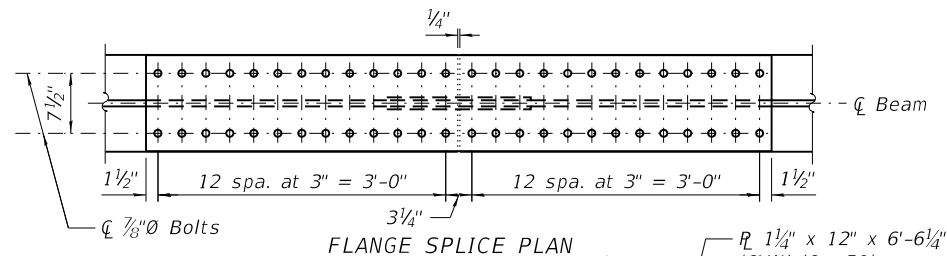
Notes:  
For Diaphragm Details, see sheet S-24.  
"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.

3/4"Ø Granular or solid  
flux filled headed studs,  
automatically end welded to  
flange. (2160 Required)



SECTION A-A

Exist. Beam shown  
Proposed Beam similar



ELEVATION  
FIELD SPLICE DETAIL

INTERIOR GIRDER MOMENT TABLE			
	0.4 Sp. 1 or 0.6 Sp. 2	Pier 1	
Is	(in <sup>4</sup> )	12,100	16,348
Ic(n)	(in <sup>4</sup> )	27,976	19,240
Ic(3n)	(in <sup>4</sup> )	20,505	19,240
Ss	(in <sup>3</sup> )	663	869
Sc(n)	(in <sup>3</sup> )	913	930
Sc(3n)	(in <sup>3</sup> )	825	930
Pl	(k/')	0.88	0.92
MPl	(k)	322	648
sPl	(k/')	0.42	0.42
MsPl	(k)	155	303
Ml	(k)	499	432
MIM	(k)	125	109
S3 [Ml + I]	(k)	1,041	901
Ma	(k)	1,973	2,407
Mu	(k)		
fsPl non-comp	(ksi)	5.8	8.9
fsPl (comp)	(ksi)	2.3	3.9
fs S3 [Ml + MI]	(ksi)	13.7	11.6
fs (Overload)	(ksi)	21.8	24.5
fs (Total)	(ksi)	28.3	31.8
VR	(k)	50.1	

INTERIOR GIRDER REACTION TABLE				
	W. Abut.	Pier 1	Pier 2	
$R_{\bar{p}}$	(k)	35.6	122.9	35.5
$R_{\bar{t}}$	(k)	36.1	50.9	36.1
$R_{\bar{t}}$	(k)	9.1	12.8	9.1
$R_{Total}$	(k)	80.8	186.6	80.7

\* Compact section

\*\* Braced non-compact and partially braced section

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total and Overload) due to non-composite dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total and Overload) due to short-term composite live loads (in.<sup>4</sup> and in.<sup>3</sup>).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

Pl: Un-factored non-composite dead load (kips/ft.).

MPl: Un-factored moment due to non-composite dead load (kip-ft.).

sPl: Un-factored long-term composite (superimposed) dead load (kips/ft.).

MsPl: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

Ml: Un-factored live load moment (kip-ft.).

MI: Un-factored moment due to impact (kip-ft.).

Ma: Factored design moment (kip-ft.).

1.3 [MPl + MsPl + 5/8 (Ml + MI)]

Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

fs (Overload): Sum of stresses as computed from the moments below (ksi).

MPl + MsPl + 5/8 (Ml + MI)

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).

1.3 [MPl + MsPl + 5/8 (Ml + MI)]

VR: Maximum l + impact shear range within the composite portion of the span for stud shear connector design (kips).

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN - SPANS 1 & 2  
STRUCTURE NO. 045-0009

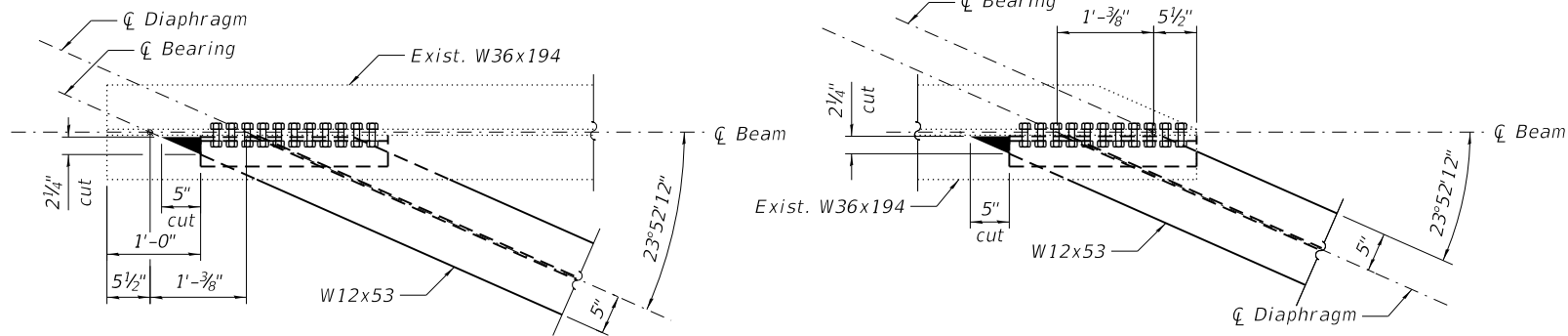
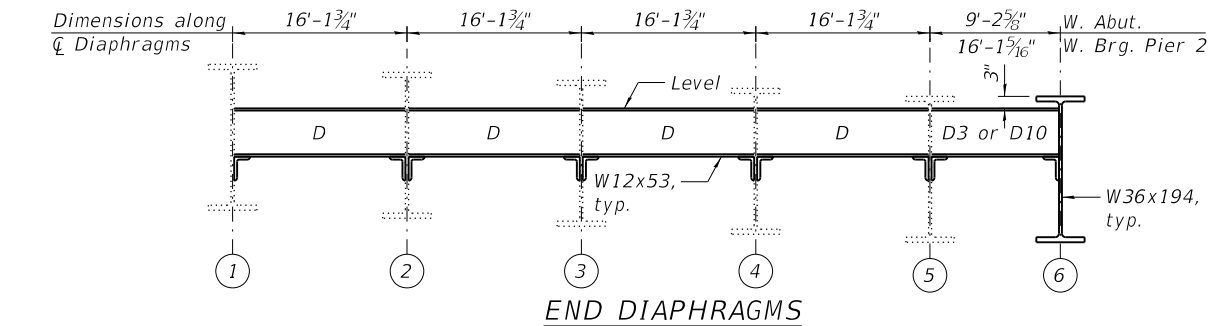
SHEET NO. S-23 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	49
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

**COLLINS ENGINEERS**  
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CHICAGO, IL 60607  
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FAX: (312) 467-1001  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-0009

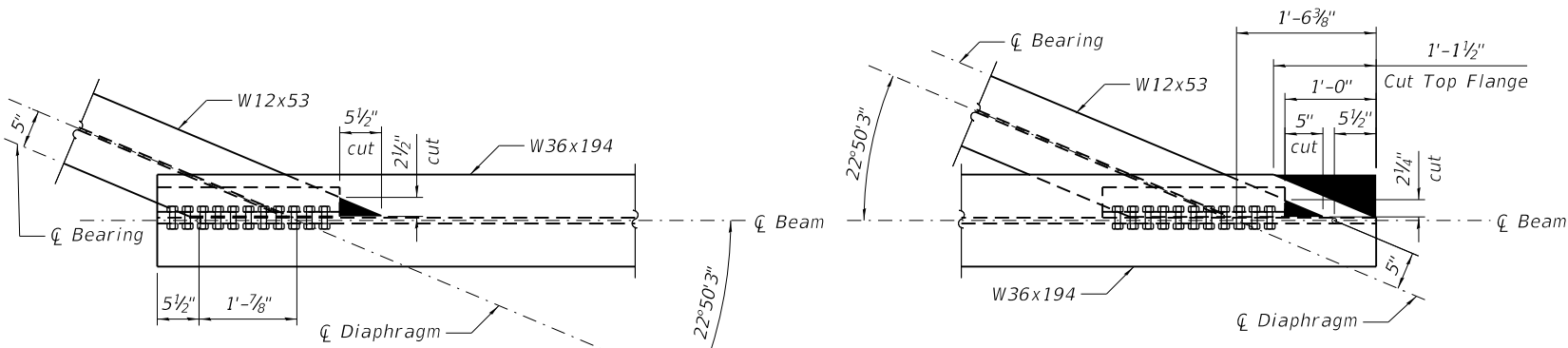
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CHECKED - AMS	REVISED -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

12/6/2018 5:46:28 PM I:\ND303 PTB\B2 04\0303\JO - IL 38 over UPRR\CADD\CADD\_Sheets\Structural\Sheet\0450009-62C14-024-steel details-Sp1-2.dgn



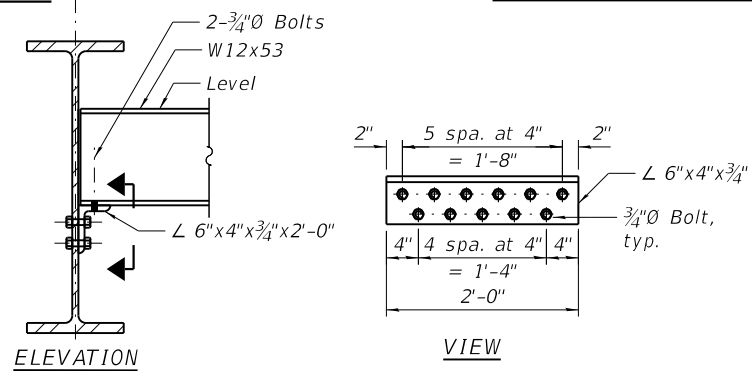
**END DIAPHRAGM CONNECTION  
FOR BEAM 1 AT WEST ABUTMENT**

**END DIAPHRAGM CONNECTION  
FOR BEAM 1 AT PIER 2**



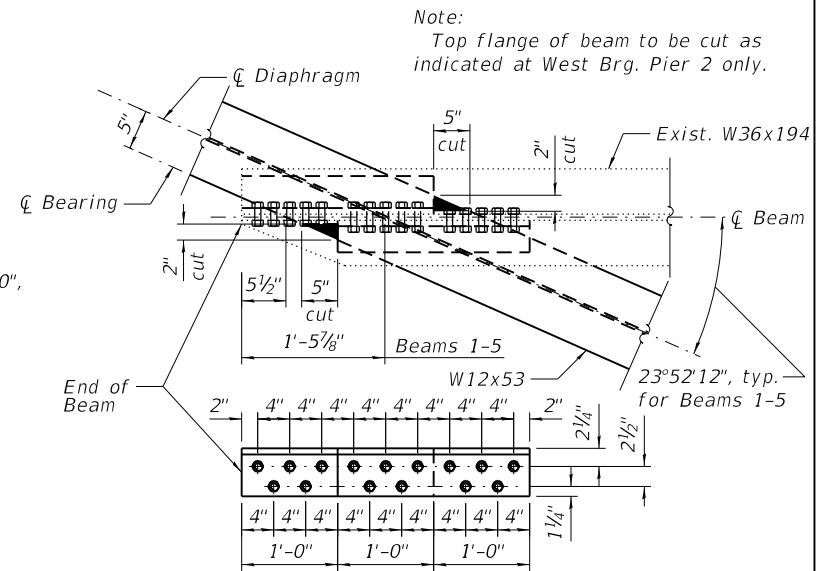
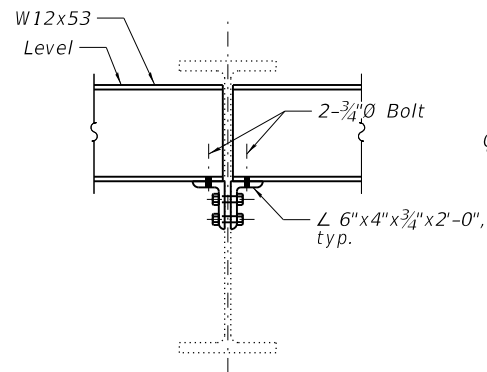
**END DIAPHRAGM CONNECTION  
FOR BEAM 6 AT WEST ABUTMENT**

**END DIAPHRAGM CONNECTION  
FOR BEAM 6 AT PIER 2**



**END DIAPHRAGM SEAT ANGLE DETAIL  
FOR BEAMS 1 & 6 AT WEST ABUTMENT**

End Diaphragm Seat Angle for Beams 1 and 6  
at West Brg. Pier 2 similar



**END DIAPHRAGM CONNECTION  
FOR BEAMS 2 THRU 5 AT WEST ABUTMENT**

Diaphragm connection for Beams 2 thru 5  
at West Brg. Pier 2 similar by 180° rotation  
except as noted.

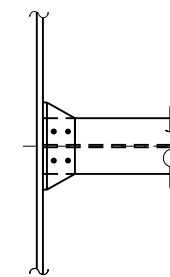
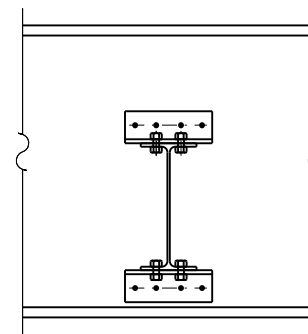
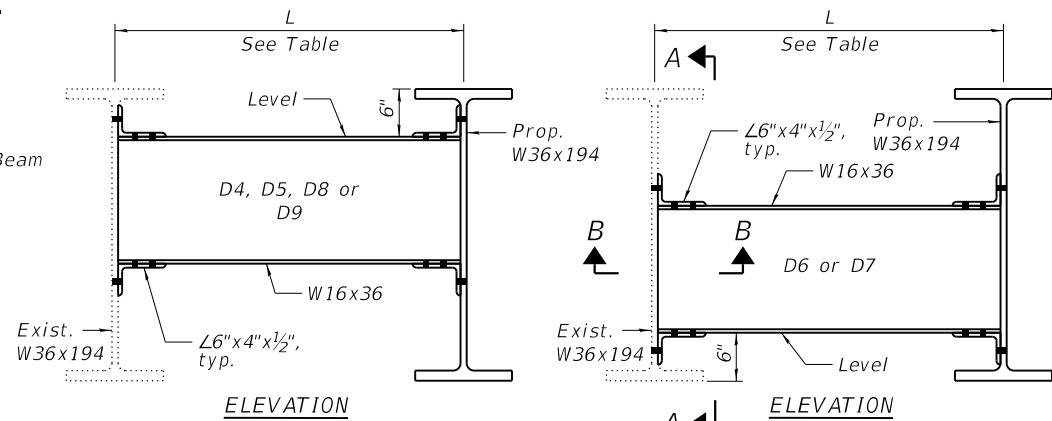


TABLE	
Diaphragm	L
D4	4'-0 $\frac{1}{8}$ "
D5	4'-5 $\frac{9}{16}$ "
D6	4'-1"
D7	5'-3 $\frac{3}{8}$ "
D8	5'-8 $\frac{3}{16}$ "
D9	6'-2"

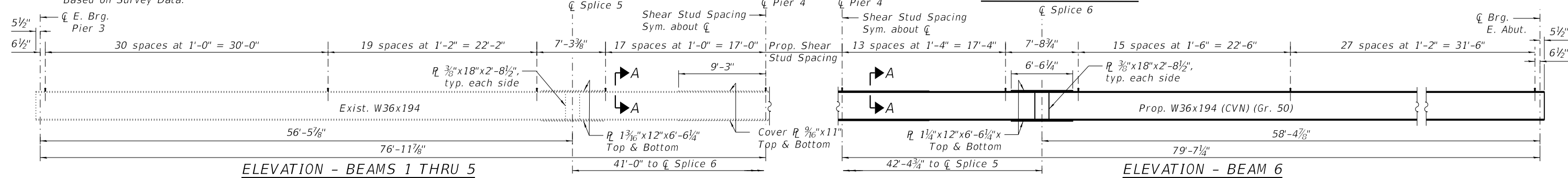
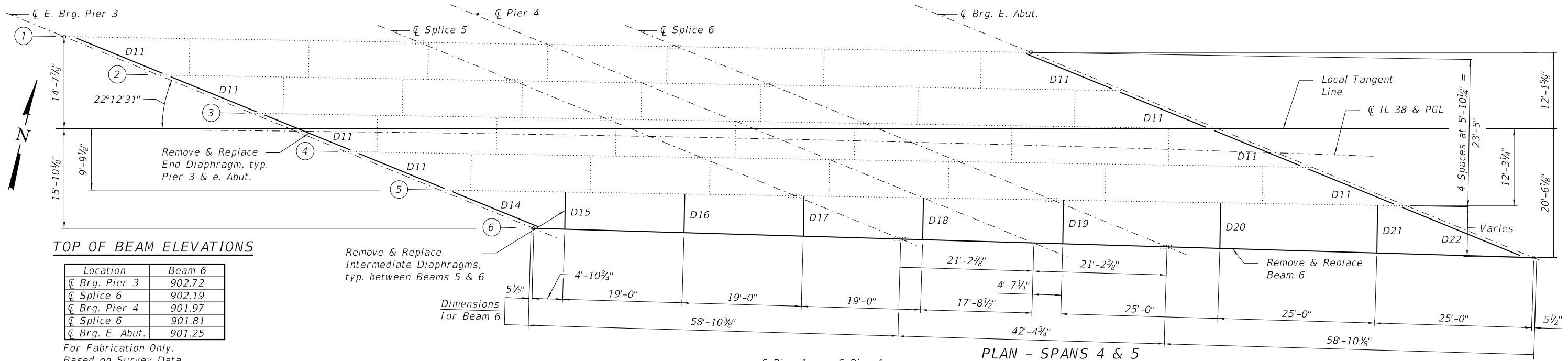
**INTERIOR DIAPHRAGMS**  
Typical all diaphragms. Angle locations vary, see Elevation.

USER NAME =	DESIGNED - RSD	REVISD -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	50
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



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INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 4 or 0.6 Sp. 5	Pier 4
$I_s$	(in <sup>4</sup> )	12,100	16,348
$I_c(n)$	(in <sup>4</sup> )	27,191	19,025
$I_c(3n)$	(in <sup>4</sup> )	19,870	19,025
$S_s$	(in <sup>3</sup> )	663	869
$S_c(n)$	(in <sup>3</sup> )	905	926
$S_c(3n)$	(in <sup>3</sup> )	816	926
$\bar{P}$	(k/')	0.88	0.92
$M\bar{P}$	(k')	323	649
$s\bar{P}$	(k/')	0.42	0.42
$M_s\bar{P}$	(k')	168	328
$M_L$	(k')	470	413
$MIM$	(k')	116	102
$\bar{S}_3 [M_L + I]$	(k')	977	859
$Ma$	(k')	1,909	2,387
$Mu$	(k')		
$fs\bar{P}_{non-comp}$	(ksi)	5.8	9.0
$fs\bar{P}_{(comp)}$	(ksi)	2.5	4.2
$fs\bar{S}_3 [M_L + M_I]$	(ksi)	13.0	11.1
$fs (Overload)$	(ksi)	21.3	24.3
$fs (Total)$	(ksi)	27.6	31.7
$VR$	(k)	45.1	

INTERIOR GIRDER REACTION TABLE				
		Pier 3	Pier 4	E. Abut.
$R_{\bar{P}}$	(k)	35.6	121.4	35.5
$R_L$	(k)	32.5	46.9	32.5
$R_I$	(k)	8.0	11.6	8.0
$R_{Total}$	(k)	76.1	179.9	76.0

\* Compact section

\*\* Braced non-compact and partially braced section

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $fs(Total)$  and  $Overload$  due to non-composite dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $fs(Total)$  and  $Overload$  due to short-term composite live loads (in.<sup>4</sup> and in.<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $fs(Total)$  and  $Overload$  due to long-term composite (superimposed) dead loads (in.<sup>4</sup> and in.<sup>3</sup>).

$\bar{P}$ : Un-factored non-composite dead load (kips/ft.).

$M\bar{P}$ : Un-factored moment due to non-composite dead load (kip-ft.).

$s\bar{P}$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s\bar{P}$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

$M_L$ : Un-factored live load moment (kip-ft.).

$M_I$ : Un-factored moment due to impact (kip-ft.).

$Ma$ : Factored design moment (kip-ft.).

$1.3 [M\bar{P} + M_s\bar{P} + \frac{2}{3} (M_L + M_I)]$

$Mu$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

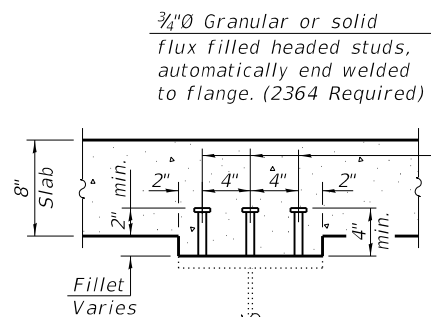
$fs (Overload)$ : Sum of stresses as computed from the moments below (ksi).

$M\bar{P} + M_s\bar{P} + \frac{2}{3} (M_L + M_I)$

$fs (Total)$ : Sum of stresses as computed from the moments below on non-compact section (ksi).

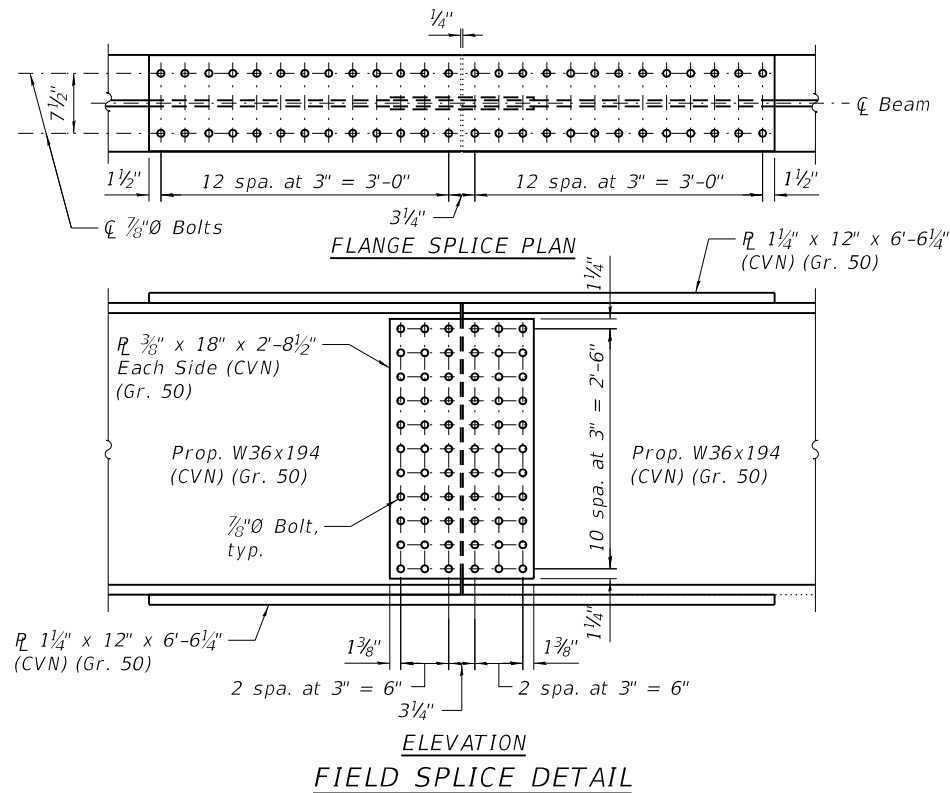
$1.3 [M\bar{P} + M_s\bar{P} + \frac{2}{3} (M_L + M_I)]$

$VR$ : Maximum  $L + impact$  shear range within the composite portion of the span for stud shear connector design (kips).

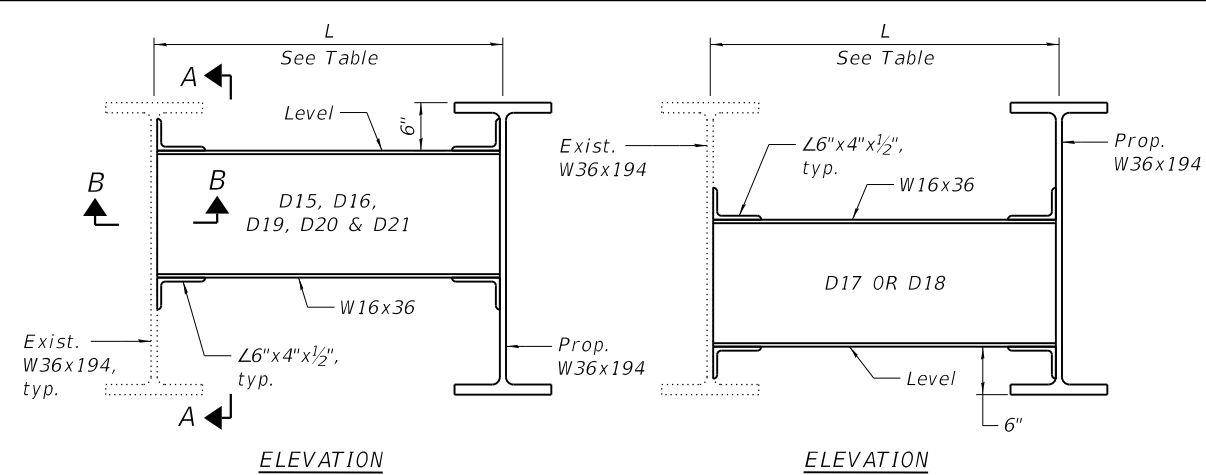


SECTION A-A  
Exist. Beam shown  
Proposed Beam similar

Note:  
For Diaphragm Details, see sheet S-27.  
"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.

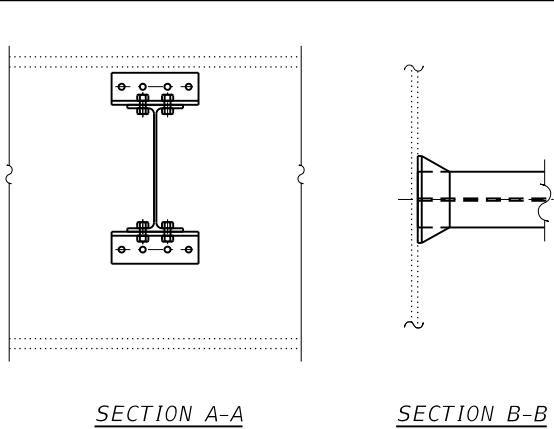






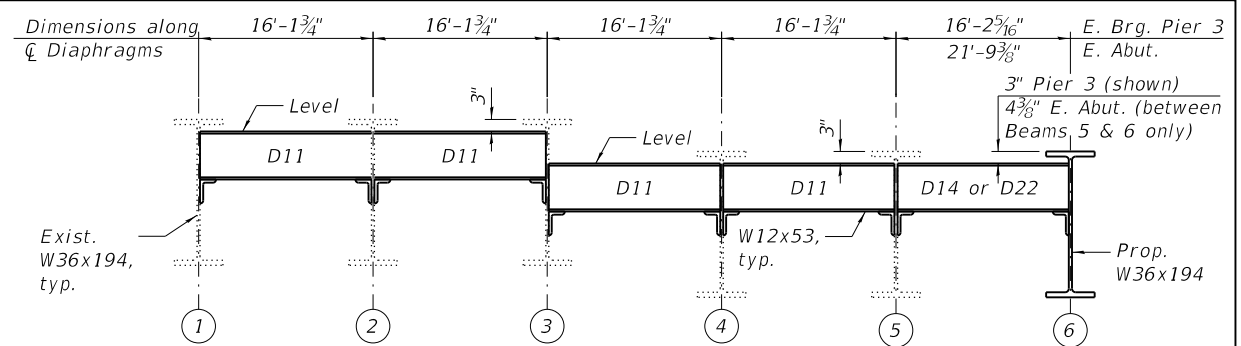
INTERIOR DIAPHRAGMS

TABLE	
Diaphragm	L
D15	5'-11 <sup>3</sup> / <sub>16</sub> "
D16	6'-2 <sup>1</sup> / <sub>8</sub> "
D17	6'-5"
D18	6'-7 <sup>7</sup> / <sub>8</sub> "
D19	6'-11 <sup>5</sup> / <sub>16</sub> "
D20	7'-3 <sup>1</sup> / <sub>8</sub> "
D21	7'-7"

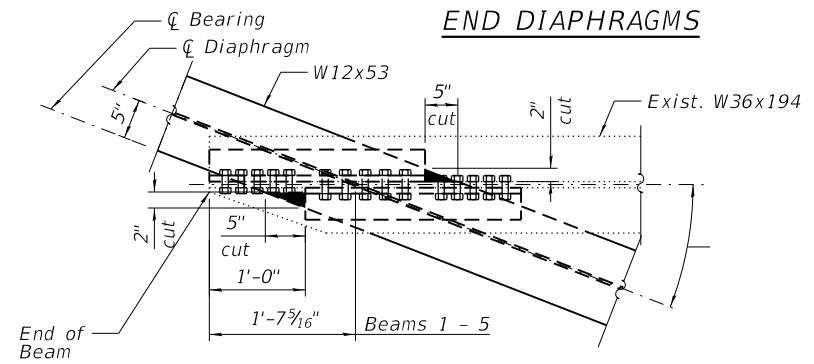


INTERIOR DIAPHRAGMS

Typical all diaphragms. Angle locations vary, see Elevation.

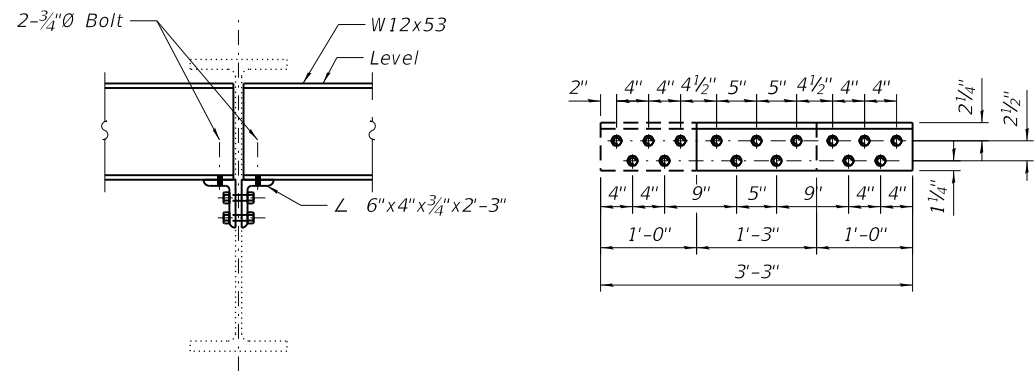


END DIAPHRAGMS



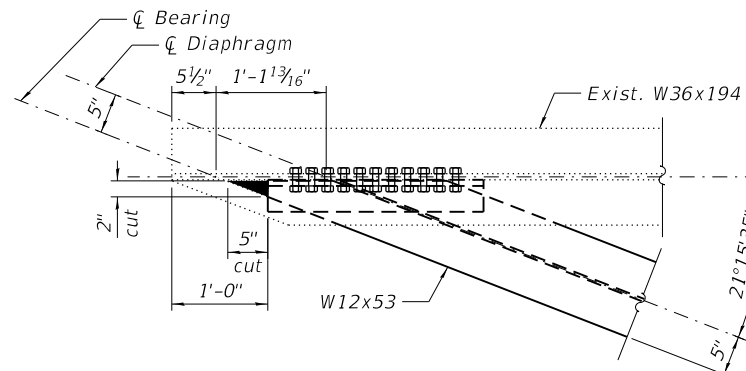
END DIAPHRAGM CONNECTION FOR BEAMS 2 THRU 5 AT PIER 3

Diaphragm connection at East Abutment similar by 180° rotation.

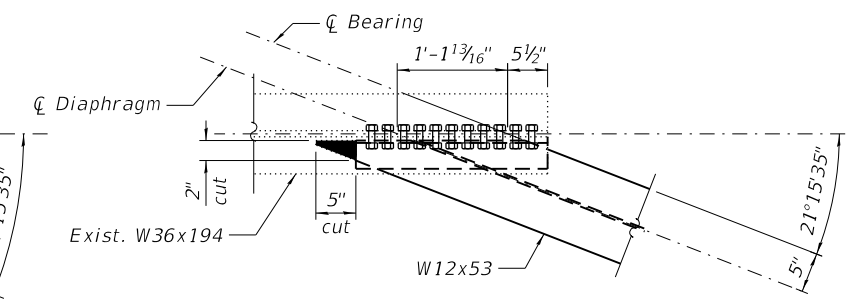


DETAIL OF END DIAPHRAGM SEAT ANGLE FOR BEAMS 2, 4 & 5 AT PIER 3

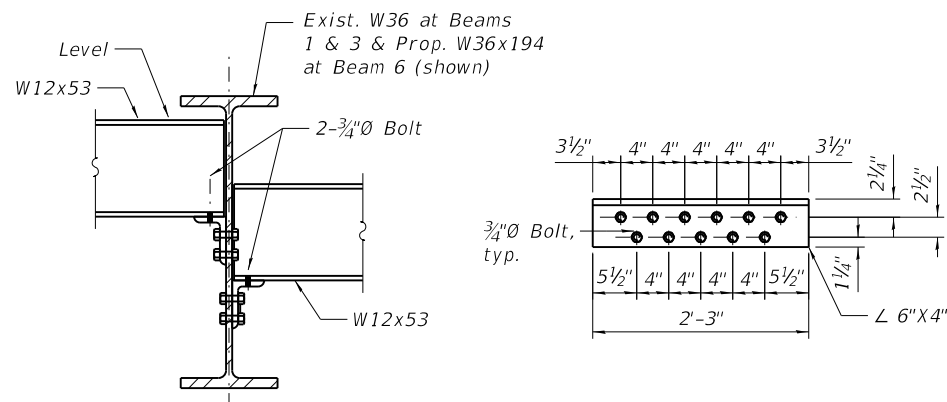
End Diaphragm Seat Angle for Beams 2 & 4 at East Abutment similar by 180° rotation.



END DIAPHRAGM CONNECTION FOR BEAM 1 AT PIER 3

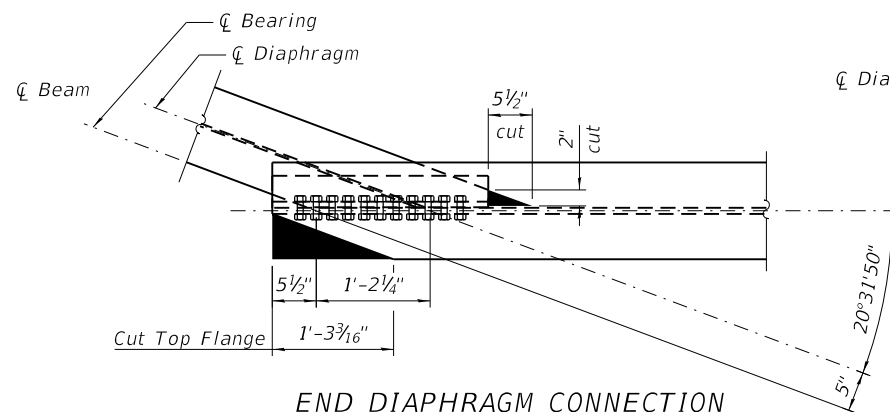


END DIAPHRAGM CONNECTION FOR BEAM 1 AT EAST ABUTMENT

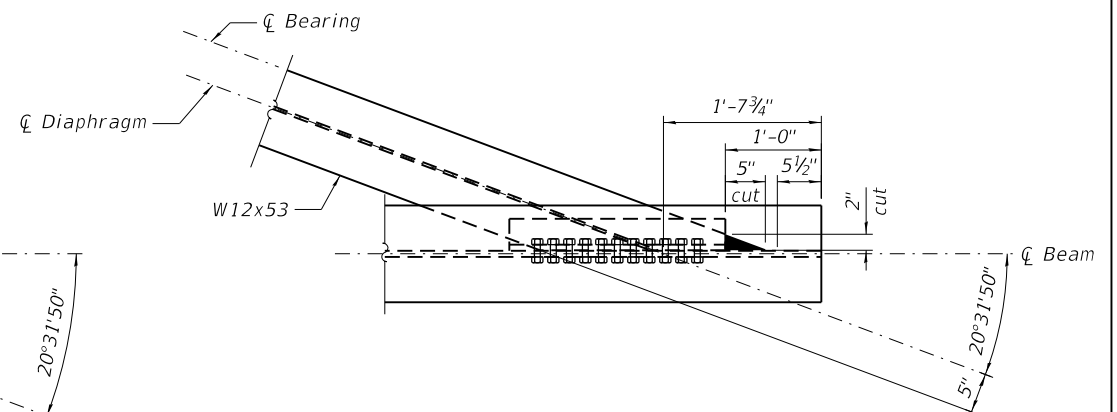


DETAIL OF END DIAPHRAGM SEAT ANGLE FOR BEAMS 1, 3 & 6 AT PIER 3

End Diaphragm Seat Angle for Beams 1, 3, 5 & 6 at E. Abutment similar.



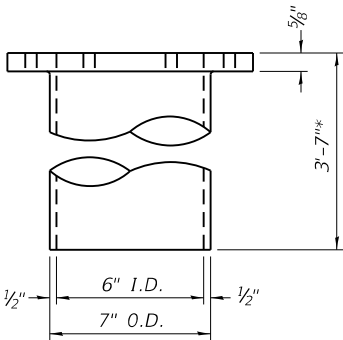
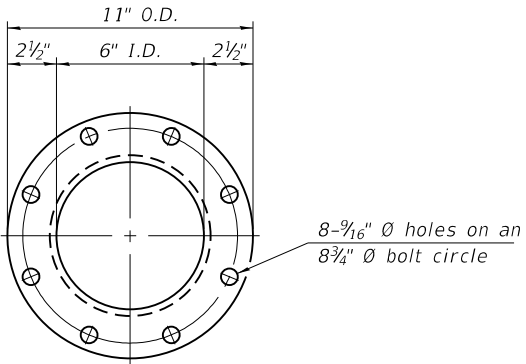
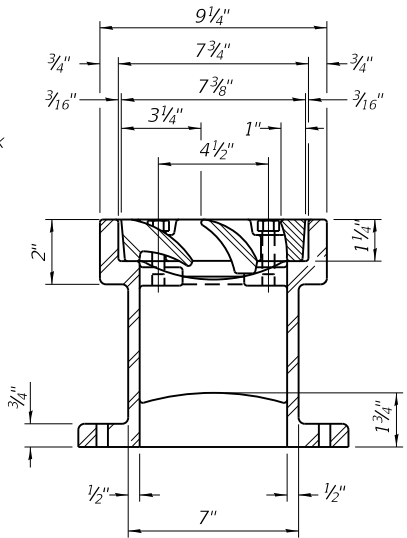
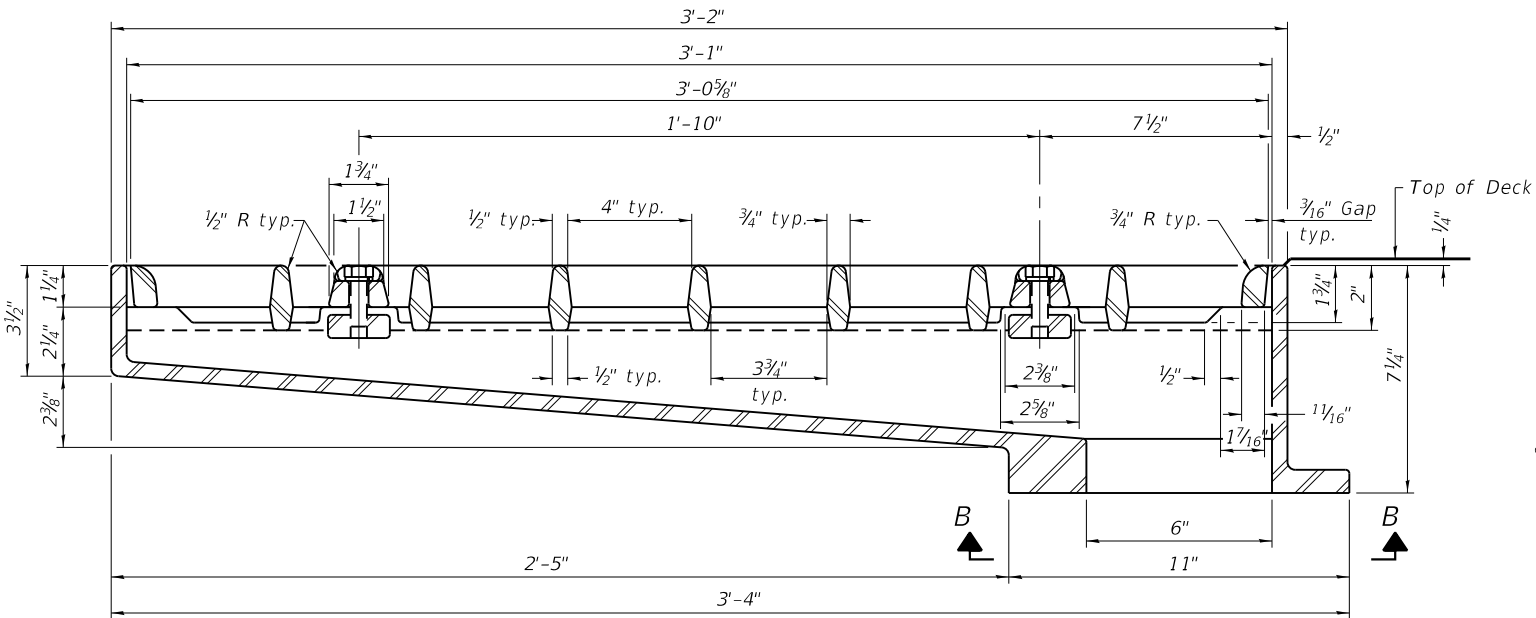
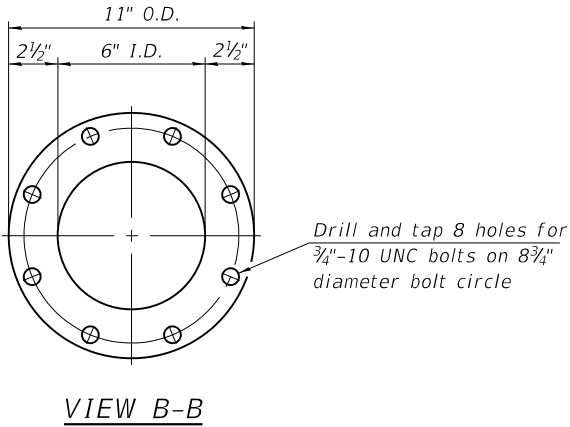
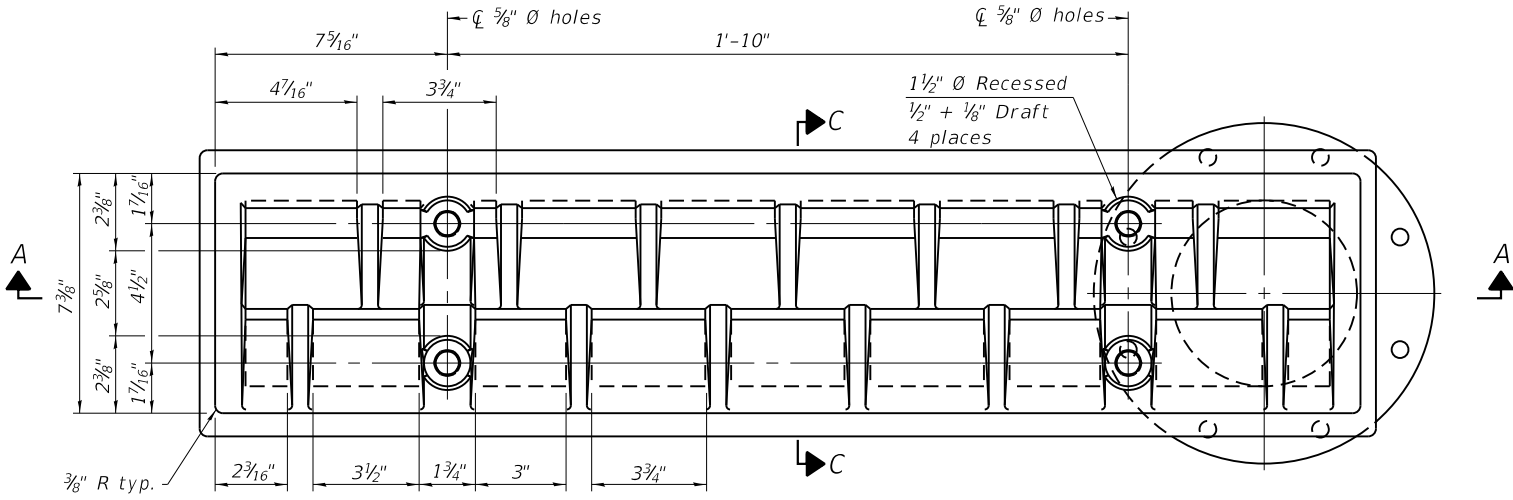
END DIAPHRAGM CONNECTION FOR BEAM 6 AT PIER 3



END DIAPHRAGM CONNECTION FOR BEAM 6 AT EAST ABUTMENT



Notes:  
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.  
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.  
Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.  
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.  
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.  
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-33.  
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

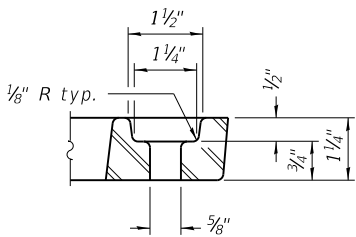


**DOWNSPOUT**

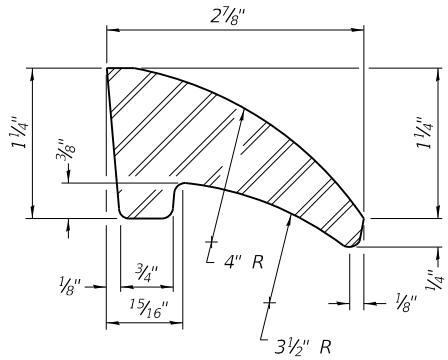
\*Except for scupper in Span 3.  
See sheet S-28 for Drainage System details.

**BILL OF MATERIAL**

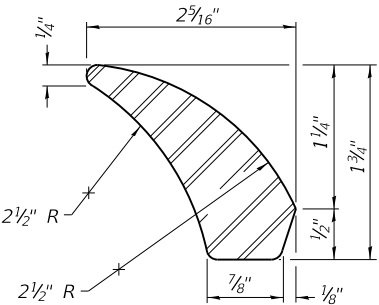
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	6



**BOLT HOLE DETAIL**



**FIRST VANE DETAIL**



**SECOND VANE DETAIL**

DS-33

2-17-2017

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-0009

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PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

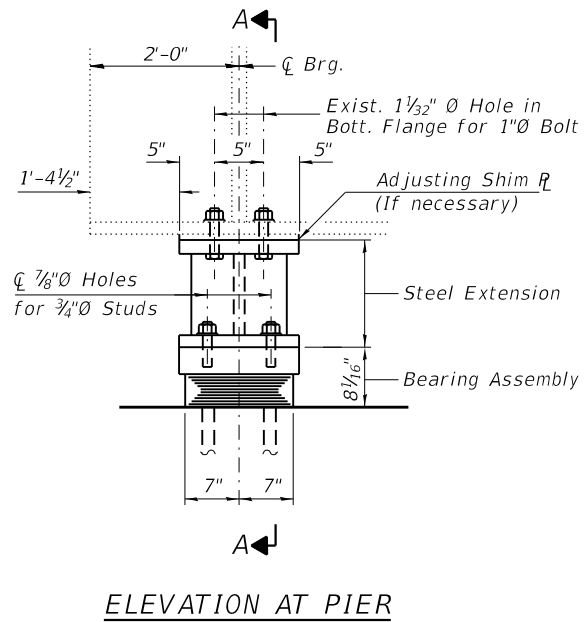
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER, DS-33  
STRUCTURE NO. 045-0009**

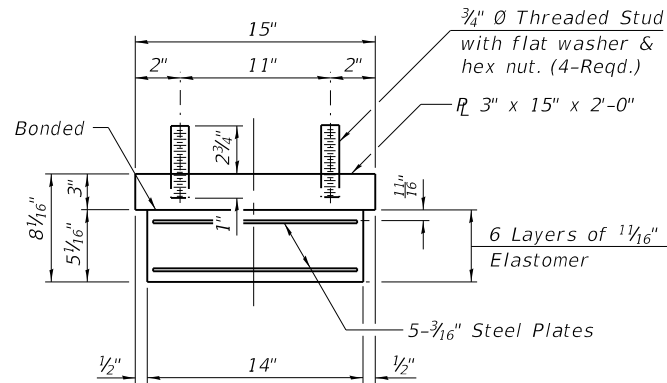
SHEET NO. S-29 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	55
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

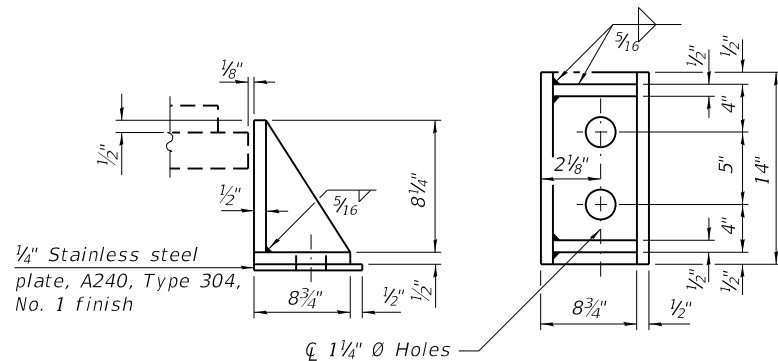
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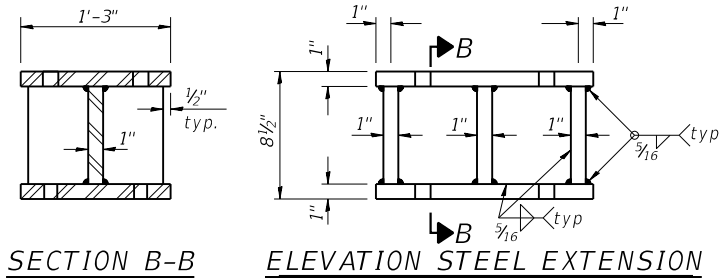
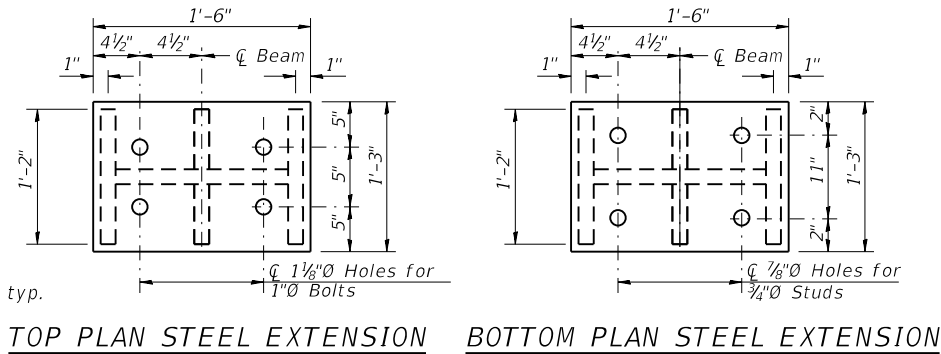
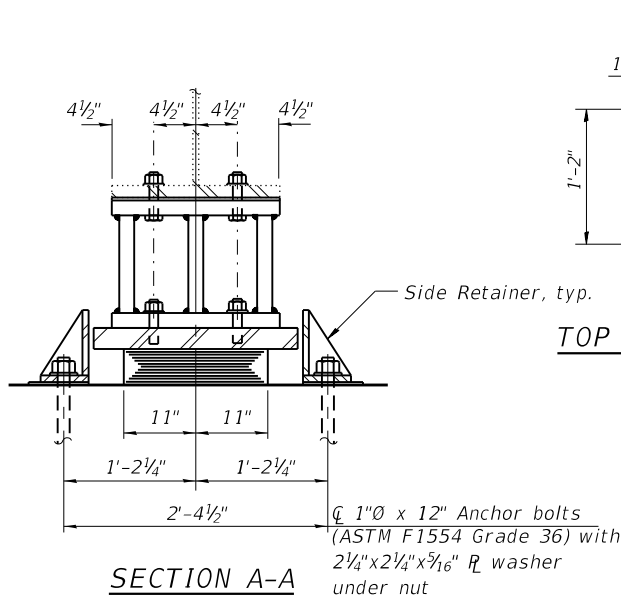
**TYPE I ELASTOMERIC EXP. BRG.**  
Span 3 Girders at E. Brg. Pier 2 (6 Req'd.)



Note:  
Shim plates shall not be placed under Bearing Assembly.

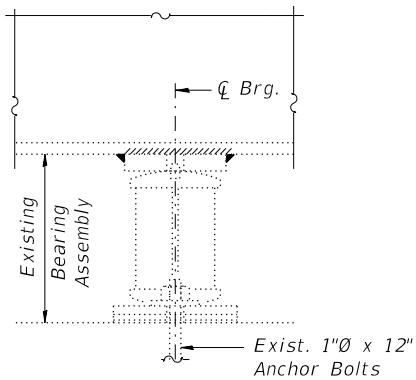


**SIDE RETAINER**  
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

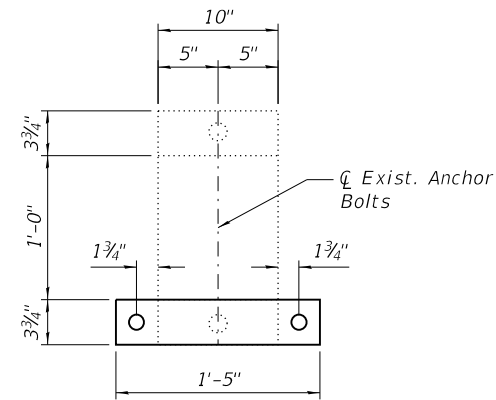


**FABRICATED STEEL EXTENSION**  
(6 Required)

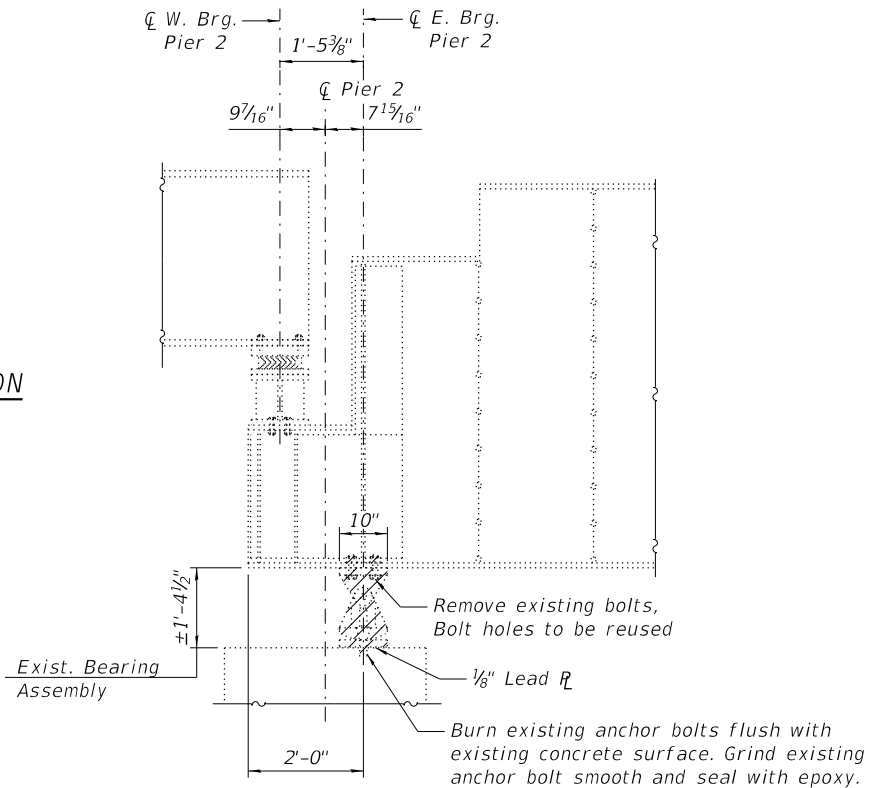
Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.  
Weight of steel extensions, shim plates, and connection bolts are included with Furnishing and Erecting Structural Steel.  
The overall depth dimension for the new bearing and steel extension shall match the total depth of the replaced existing bearing. Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.  
Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



**ELEVATION AT PIER**



**ANCHOR BOLT REPLACEMENT**  
(Beam 5 at Pier 1)

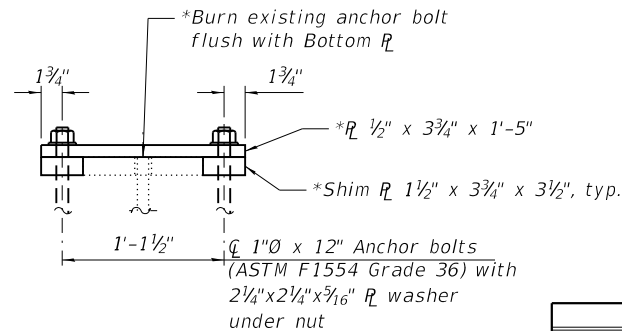


**EXISTING BEARING REMOVAL DETAIL**

Girders at E. Brg. Pier 2  
Cost included with Jack and Remove Existing Bearing (6 Req'd.)

**NOTES - JACK AND REMOVE EXISTING BEARINGS**

- The work shall be done in accordance with the Special Provision "Jack and Remove Existing Bearings."
- Jacking and removing existing bearings, including top and bottom plates and lead plates, shall be done after deck removal is completed and before the new deck is poured. Minimum Jack size = 15 tons. R = 26 kips.
- The new bearings shall be in place and the jacks shall be lowered before the new deck is poured.



**SECTION C-C**

**BILL OF MATERIAL**

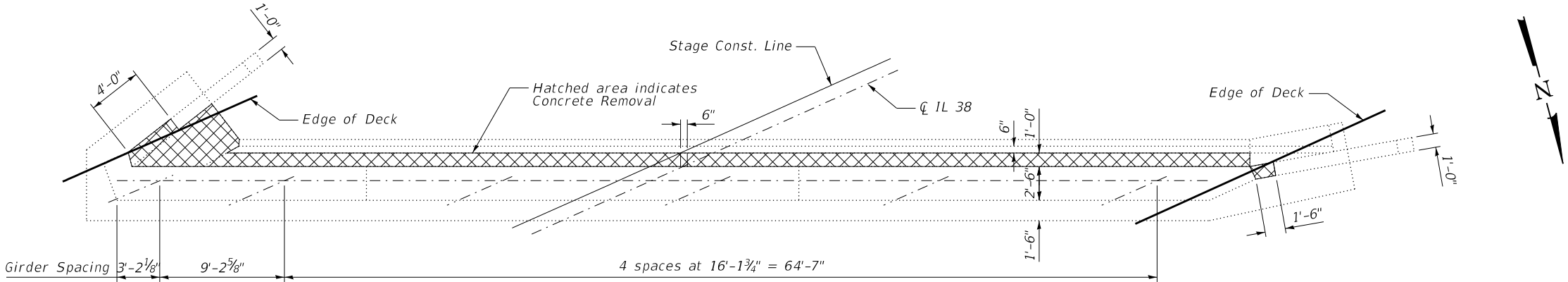
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6
Anchor Bolts, 1"	Each	26
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	1,420

USER NAME =	DESIGNED - RSD	REVISED -
PLOT SCALE =	CHECKED - AMS	REVISED -
PLOT DATE = 12/6/2018	DRAWN - PRH	REVISED -
	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	56
CONTRACT NO. 62C14				ILLINOIS FED. AID PROJECT

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	22'-11"	=====
h1(E)	8	#6	24'-9"	=====
Concrete Removal			Cu. Yd.	6.8
Reinforcement Bars, Epoxy Coated			Pound	580
Structural Repair of Concrete Depth Equal to or Less Than 5"			Sq. Ft.	24

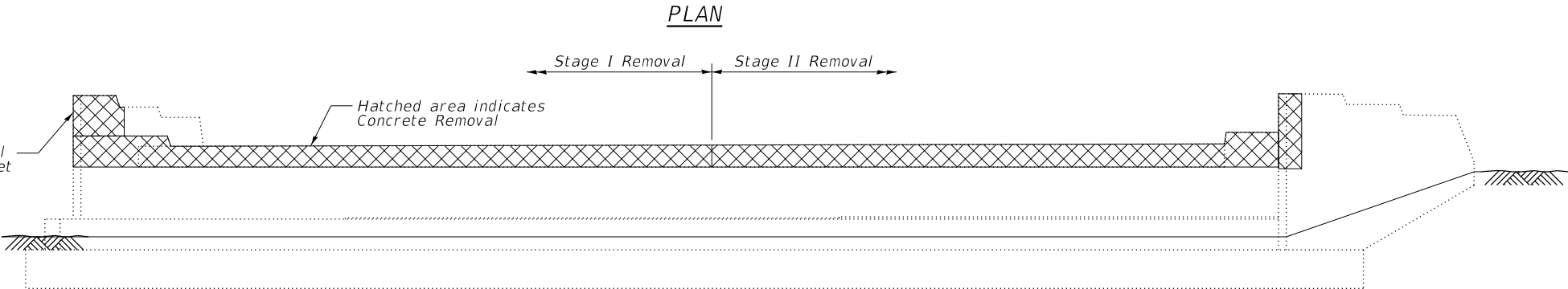


Notes:  
For Section Thru Abutment and Section Thru Wingwall, see sheet S-33.  
Existing reinforcement shall be cleaned and incorporated into new construction. Cost included in Concrete Removal.  
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with Concrete Removal.

For southwest wingwall modifications, see sheet S-33

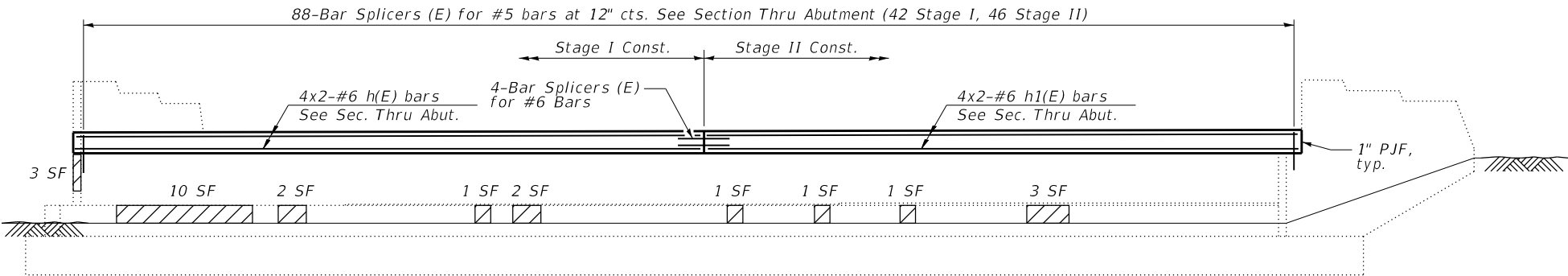
MIN. BAR LAP

#6 Bar = 4'-0"



ELEVATION - REMOVAL


Looking West



ELEVATION - PROPOSED

Looking West

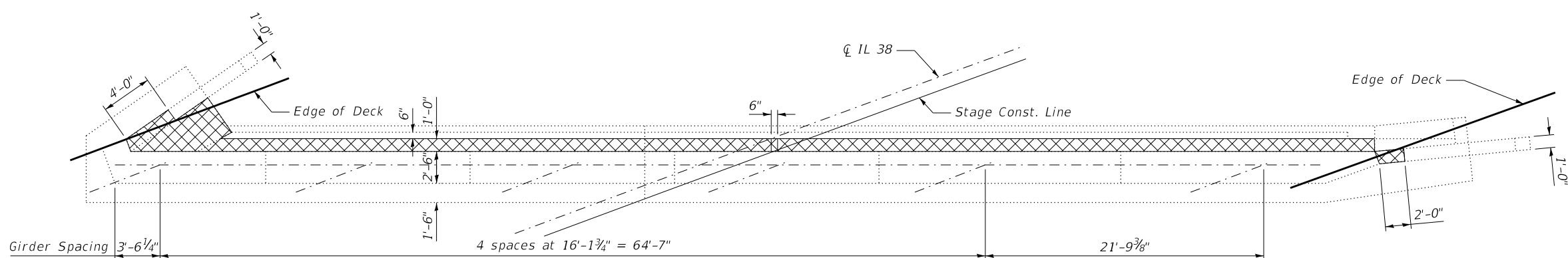
LEGEND

 Structural Repair of Concrete Depth Equal to or Less Than 5"

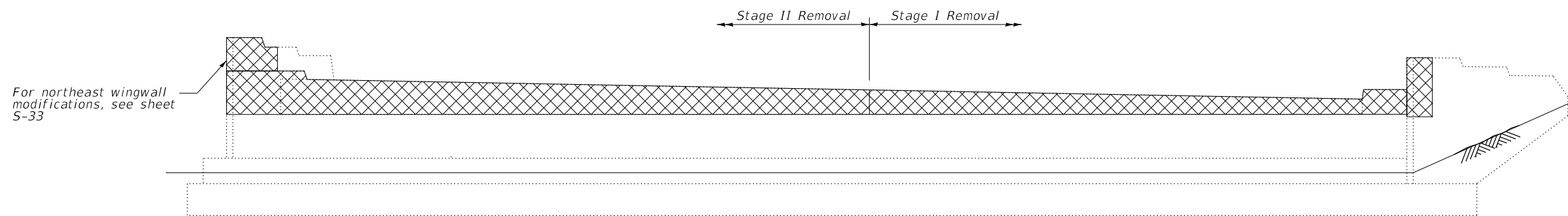
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USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

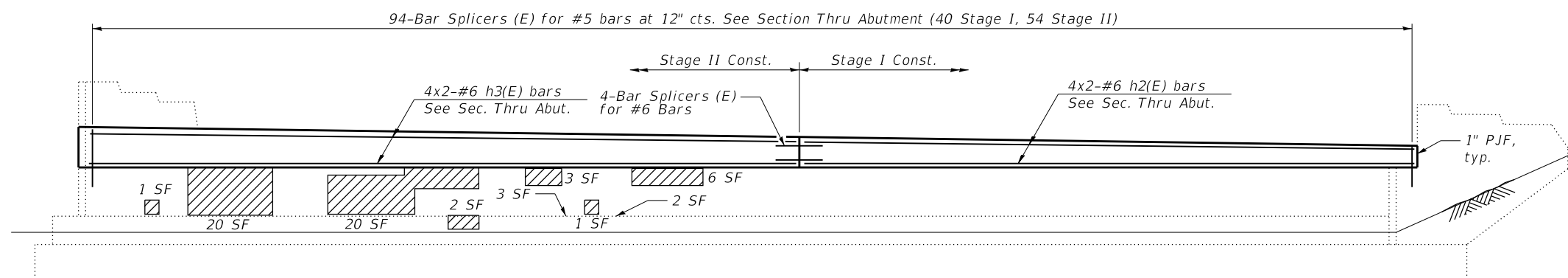
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	57
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



PLAN



ELEVATION - REMOVAL



ELEVATION - PROPOSED

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2(E)	8	#6	27'-3"	—
h3(E)	8	#6	27'-4"	—
Concrete Removal			Cu. Yd.	8.5
Reinforcement Bars, Epoxy Coated			Pound	660
Structural Repair of Concrete Depth Equal to or Less Than 5"			Sq. Ft.	58


MIN. BAR LAP

#6 Bar = 4'-0"

Notes:

For Section Thru Abutment and Wingwall, see sheet S-33.  
Existing reinforcement shall be cleaned and incorporated into new construction. Cost included in Concrete Removal.  
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with Concrete Removal.

LEGEND

 Structural Repair of Concrete Depth Equal to or Less Than 5"

12/6/2018 5:43:37 PM I:\D3033 PTB\B2 04\0303\JO - IL 38 over UPRR\CADD\CADD\_Sheets\Structural\_Sheets\0450009-62\04-032-abutrepair.dgn

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-00093

USER NAME =	DESIGNED - RSD	REVISED -
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PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

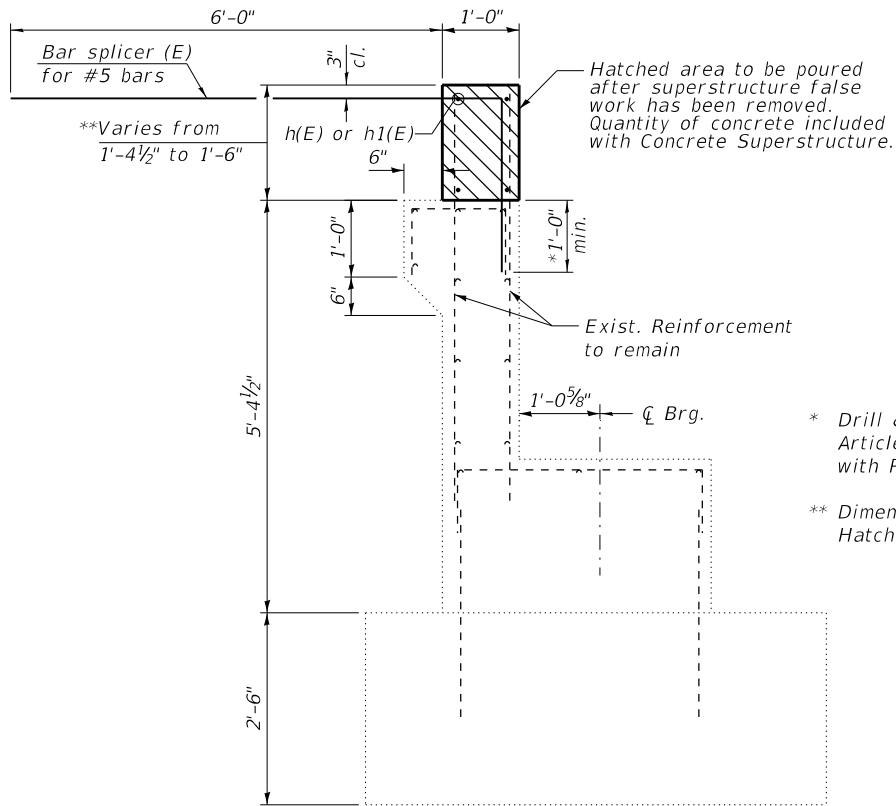
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT REPAIRS**  
**STRUCTURE NO. 045-0009**

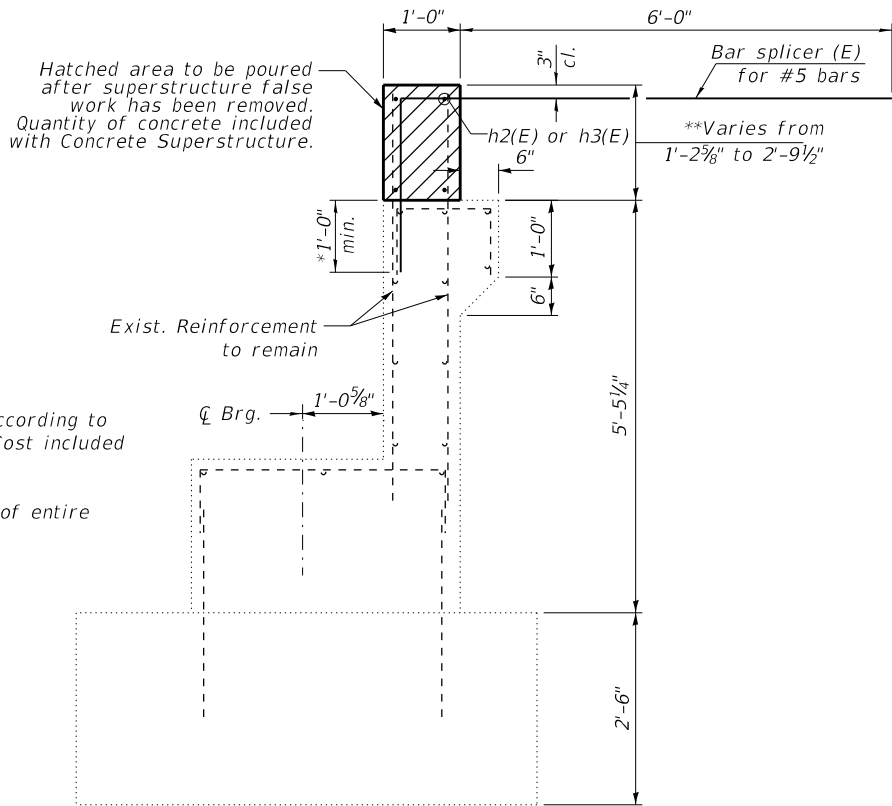
SHEET NO. S-32 OF S-40 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

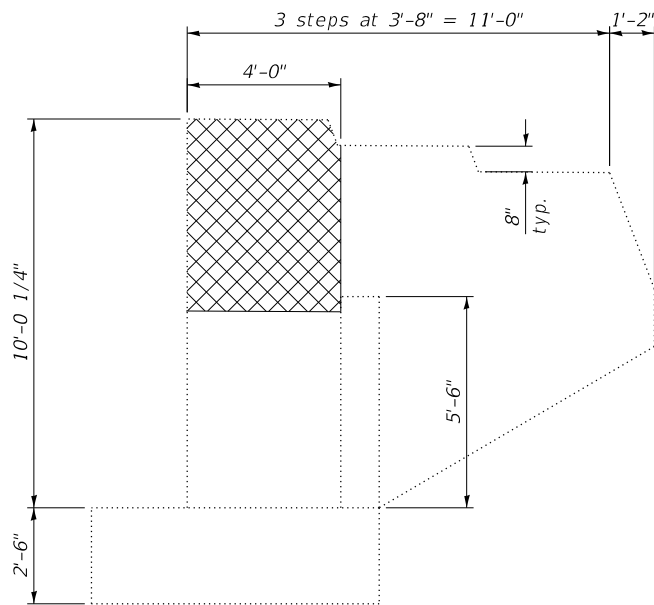
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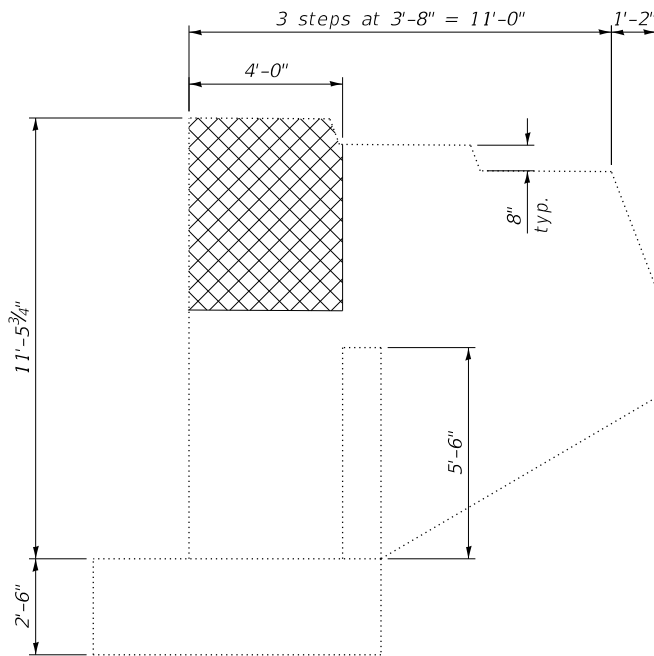
SECTION THRU WEST ABUTMENT



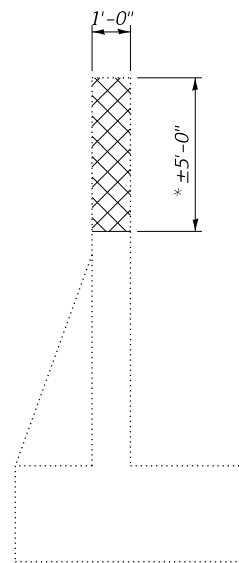
SECTION THRU EAST ABUTMENT



SOUTHWEST WINGWALL ELEVATION



NORTHEAST WINGWALL ELEVATION



\* Estimated removal height based on existing plans. Removal required to accomodate roach slab.app

SECTION THRU WINGWALL

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	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

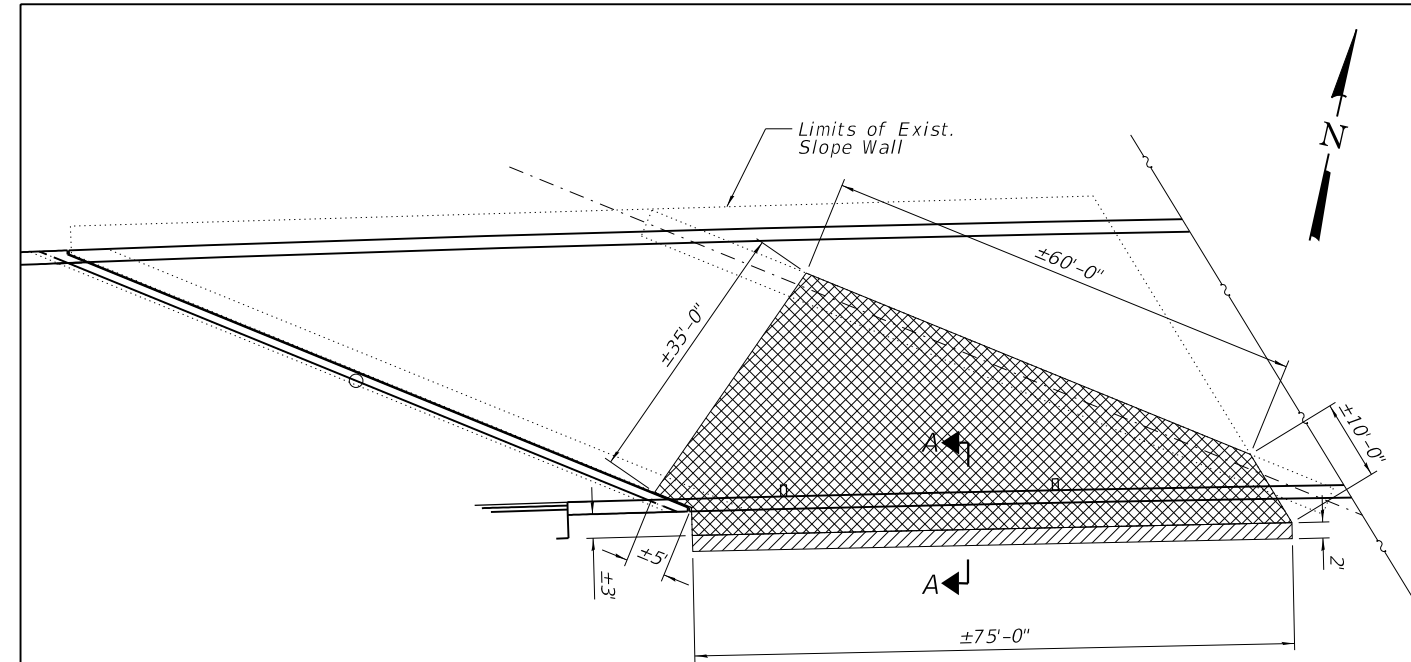
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DETAILS**  
**STRUCTURE NO. 045-0009**

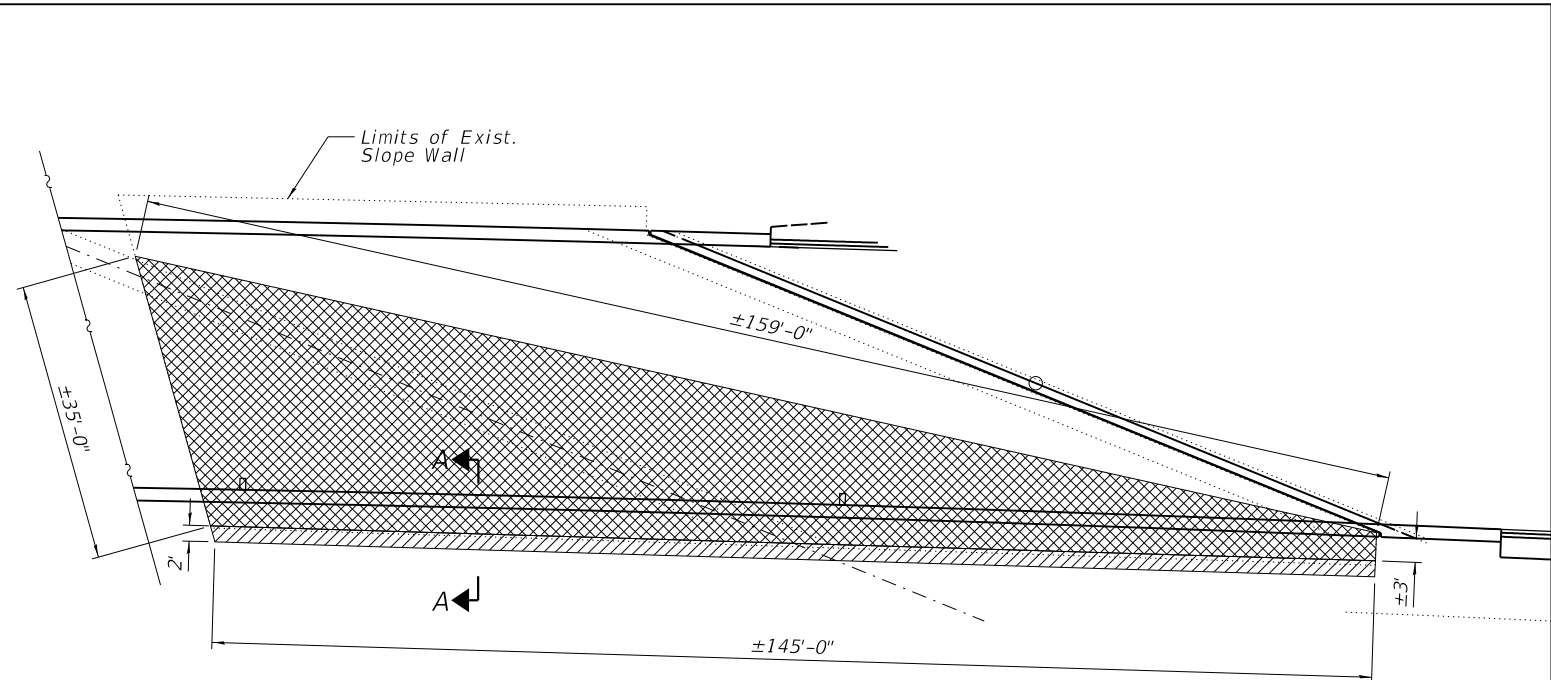
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

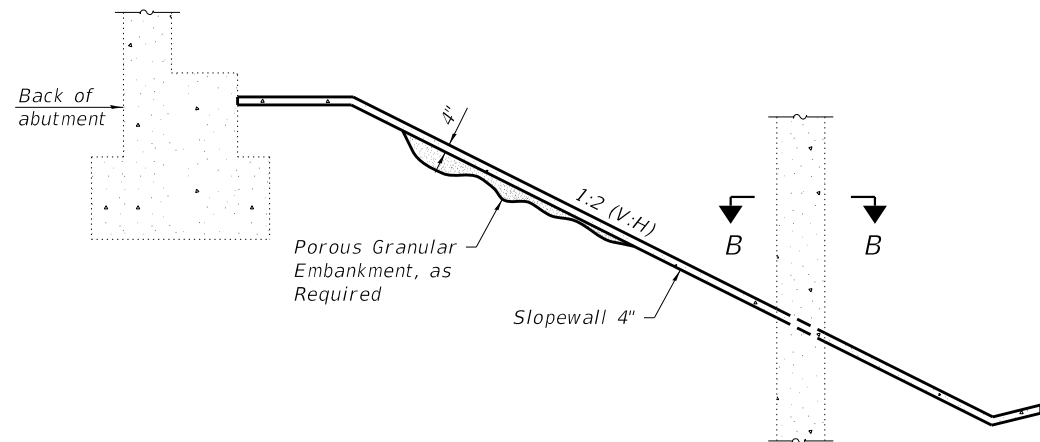
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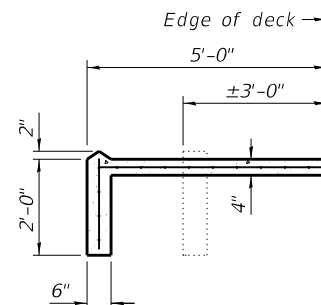
SLOPE WALL  
AT WEST ABUTMENT



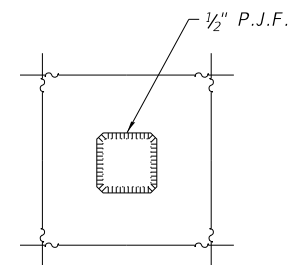
SLOPE WALL  
AT EAST ABUTMENT



SECTION THRU  
CONCRETE SLOPEWALL



SECTION A-A



SECTION B-B

BILL OF MATERIAL

SYMBOL	ITEM	UNIT	QUANTITY
	Slope Wall Removal	Sq. Yd.	463
	Slope Wall 4"	Sq. Yd.	513
	Porous Granular Embankment	Cu. Yd.	257
	Controlled Low Strength Material (CLSM)	Cu. Yd.	150

**Notes:**

All dimensions shown are along the slope wall and are not horizontal dimensions.

Slope wall shall be reinforced with welded wire fabric, 6"x6"-W4.0xW4.0, weighing 58 lbs. per 100 sq. ft. Cost included with Slope Wall 4".

Existing reinforcement shall be cleaned and incorporated into new construction. Cost included with Slope Wall Removal.

Existing and new welded wire fabric must be lapped a minimum of 6".

Excavation for the toe of the slope wall shall be included with the cost of Slope Wall 4".

Porous Granular Embankment shall be used to in-fill void areas encountered beneath slope wall. The quantity assumed 1'-6" depth for the full area of Slope Wall 4".

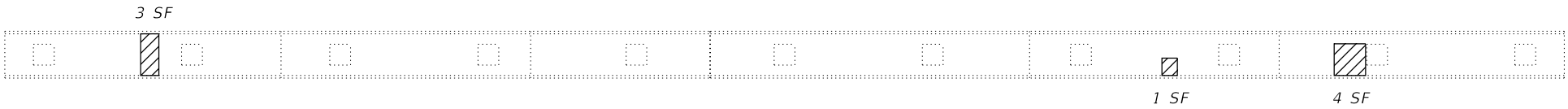
Portions of existing slope wall to remain shall be drilled and Controlled Low Strength Material placed beneath to ensure full bearing. A nominal quantity of 75 cu. yd. was assumed at each slope wall.

USER NAME =	DESIGNED - RSD	REVISED -
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PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

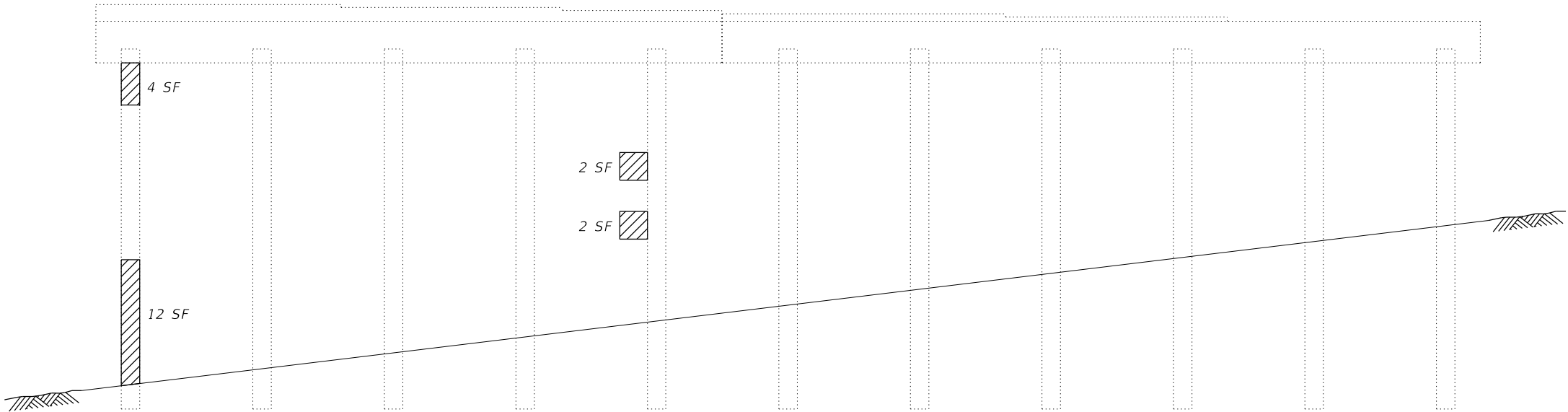
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	60
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



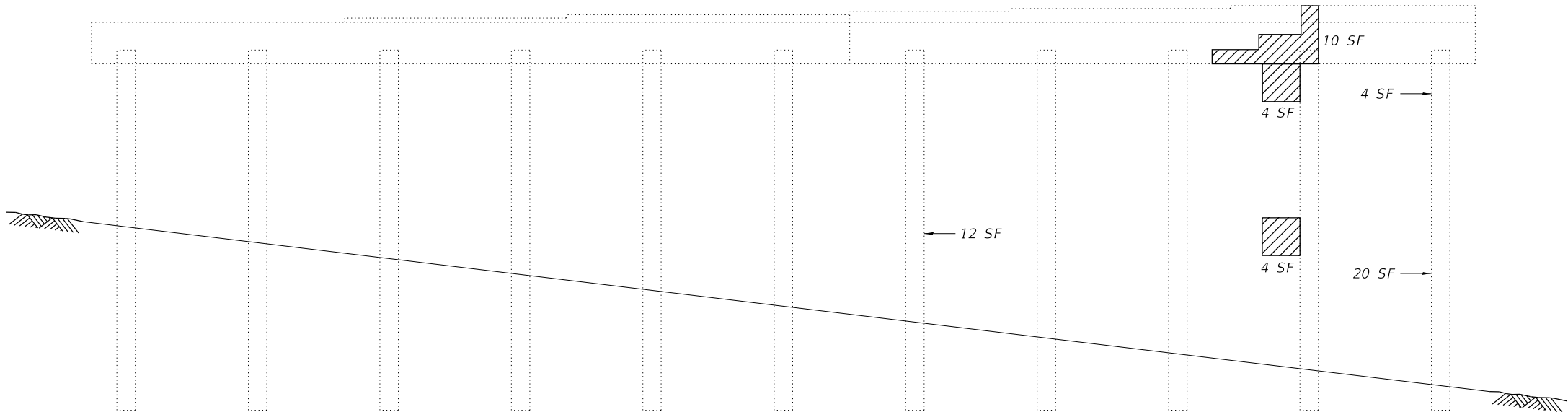
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SOFIT PLAN



PIER 1 ELEVATION  
Looking West



PIER 1 ELEVATION  
Looking East

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth Equal to or Less Than 5"	Sq. Ft.	82

Sheet 1 of 4

**COLLINS**  
**ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 045-00090

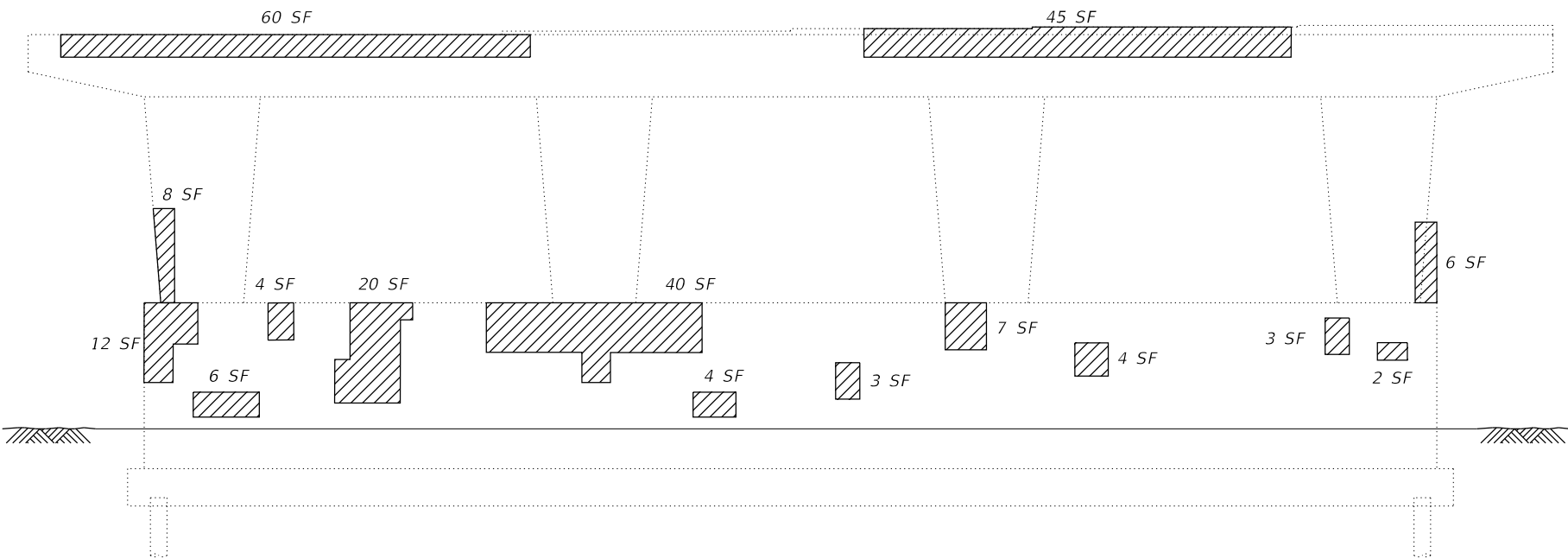
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PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

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

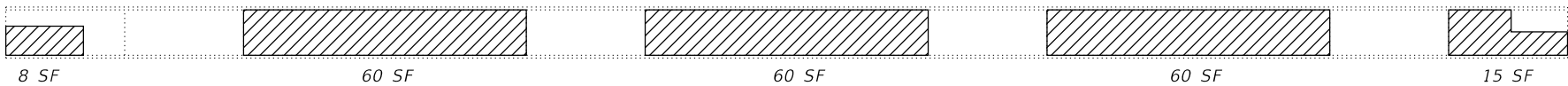
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**STRUCTURE NO. 045-0009**

SHEET NO. S-35 OF S-40 SHEETS

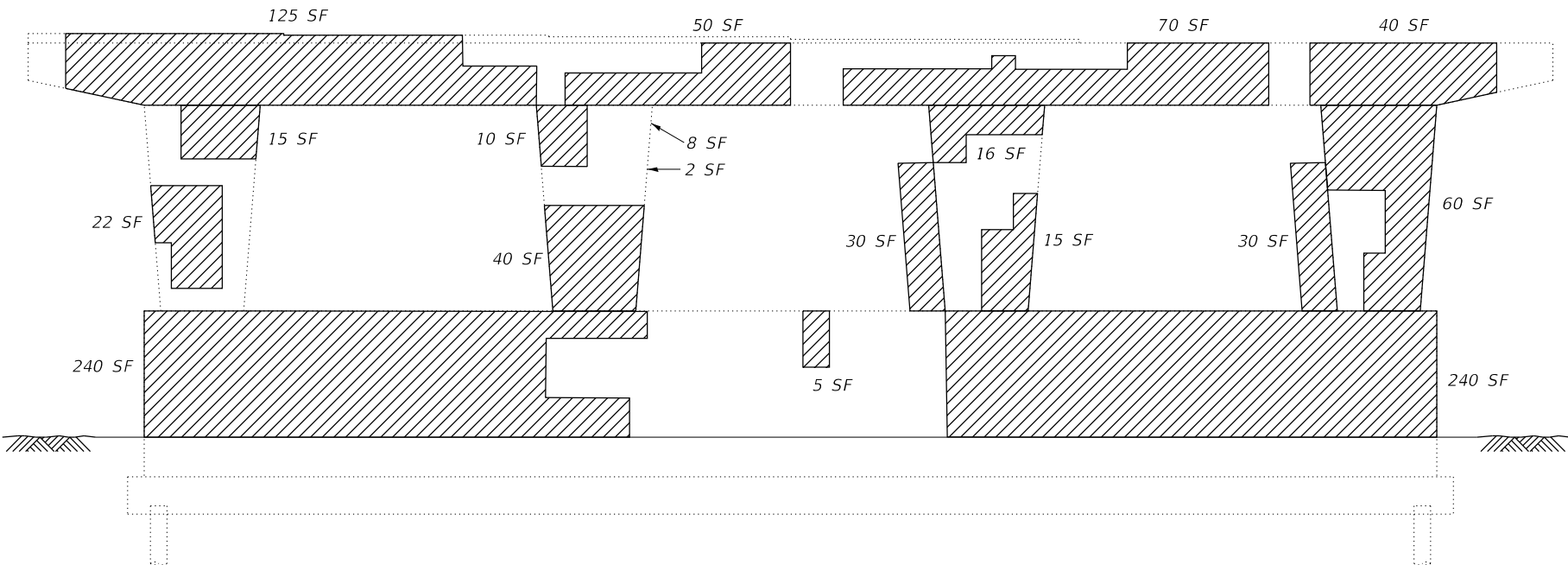
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	61
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



PIER 2 ELEVATION  
Looking West



SOFIT PLAN



PIER 2 ELEVATION  
Looking East

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth Equal to or Less Than 5"	Sq. Ft.	1,445

Sheet 2 of 4

12/6/2018 5:44 PM I:\D303 PTB\B2 04\0303\JO - IL 38 over UPRR\CADD\CADD\_Sheets\Structural\_Sheets\0450009-62C14-036-pier2repdr.dgn

**COLLINS**  
**ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO.04-008993

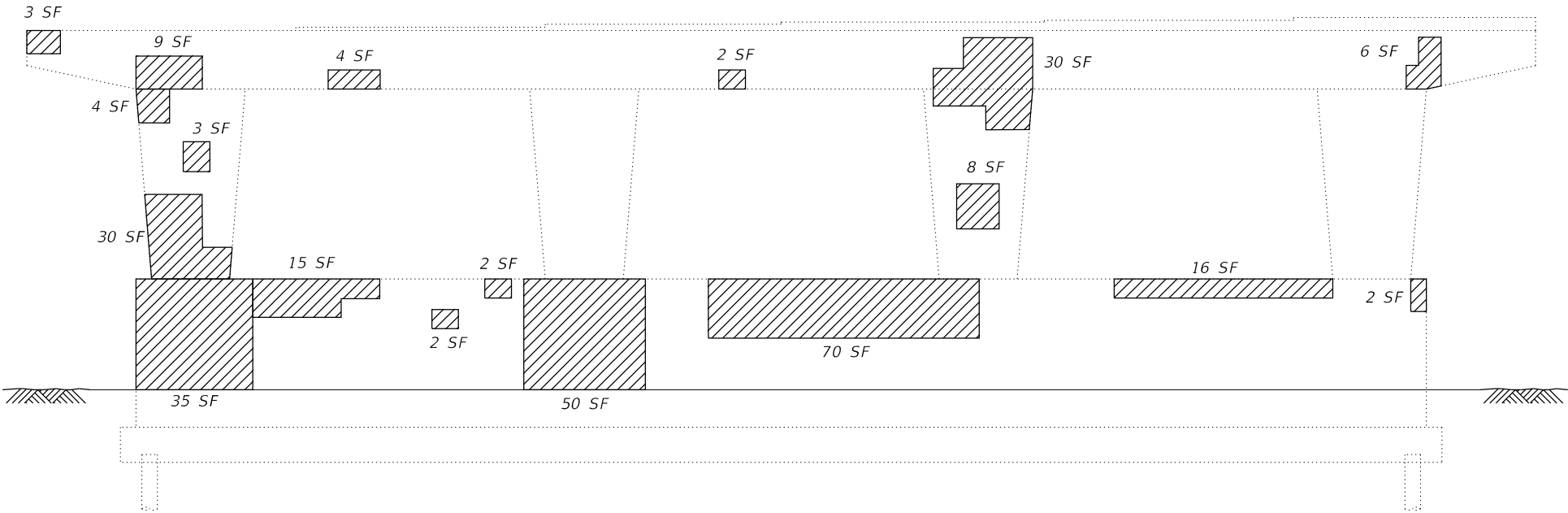
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

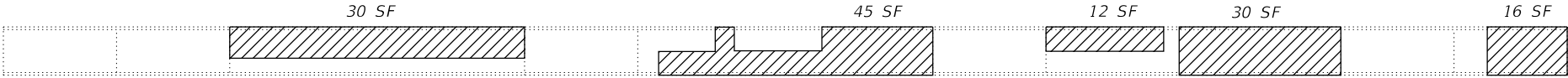
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SHEET NO. S-36 OF S-40 SHEETS

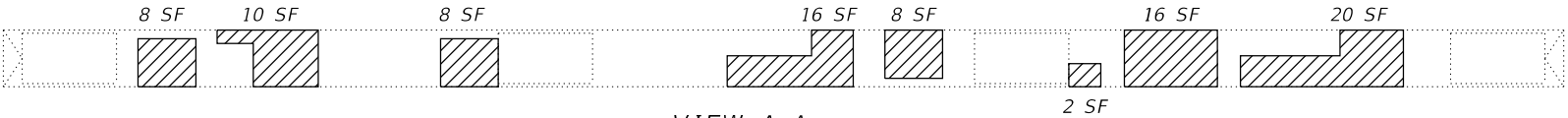
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				



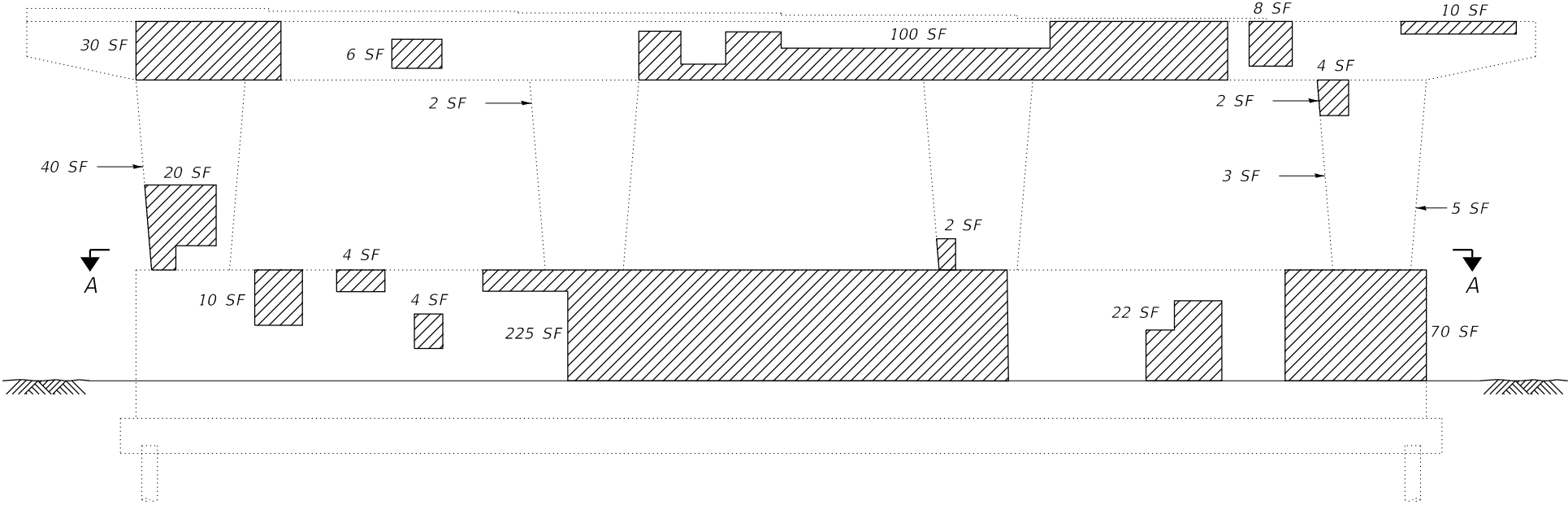
PIER 3 ELEVATION  
Looking West



SOFIT PLAN



VIEW A-A



PIER 3 ELEVATION  
Looking East

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth Equal to or Less Than 5"	Sq. Ft.	1,079

Sheet 3 of 4

12/6/2018 5:44 PM I:\D303 PTB\B2 04\0303\0 - IL 38 over UPRR\CADD\CADD\_Sheets\Structural\_Sheets\0450009-62\04-037-pier3repairs.dgn

**COLLINS**  
**ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO.04-000903

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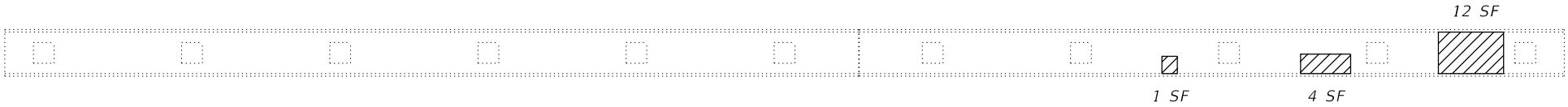
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PIER DETAILS  
STRUCTURE NO. 045-0009

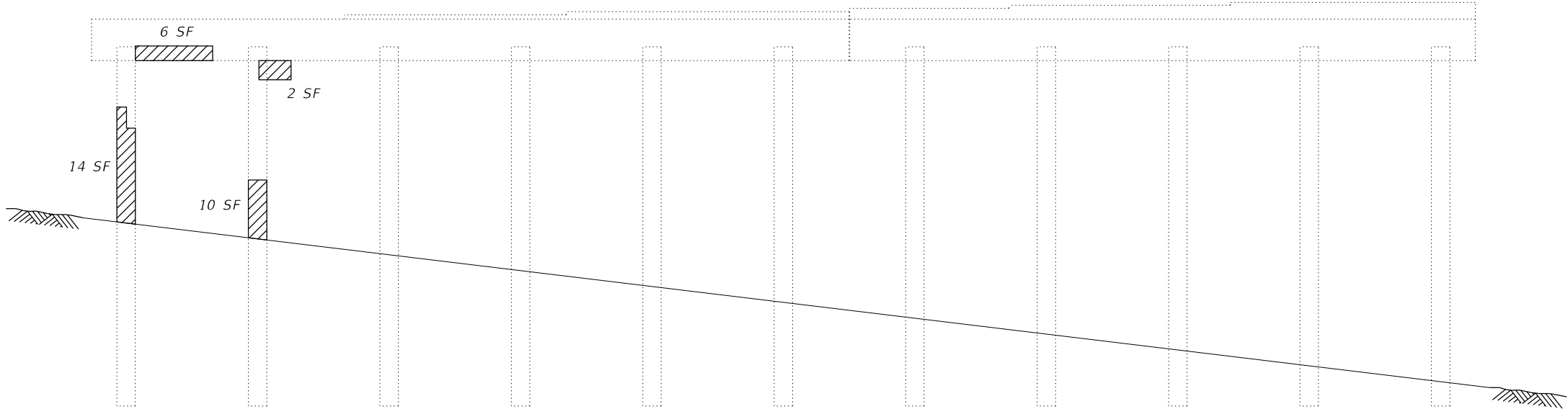
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

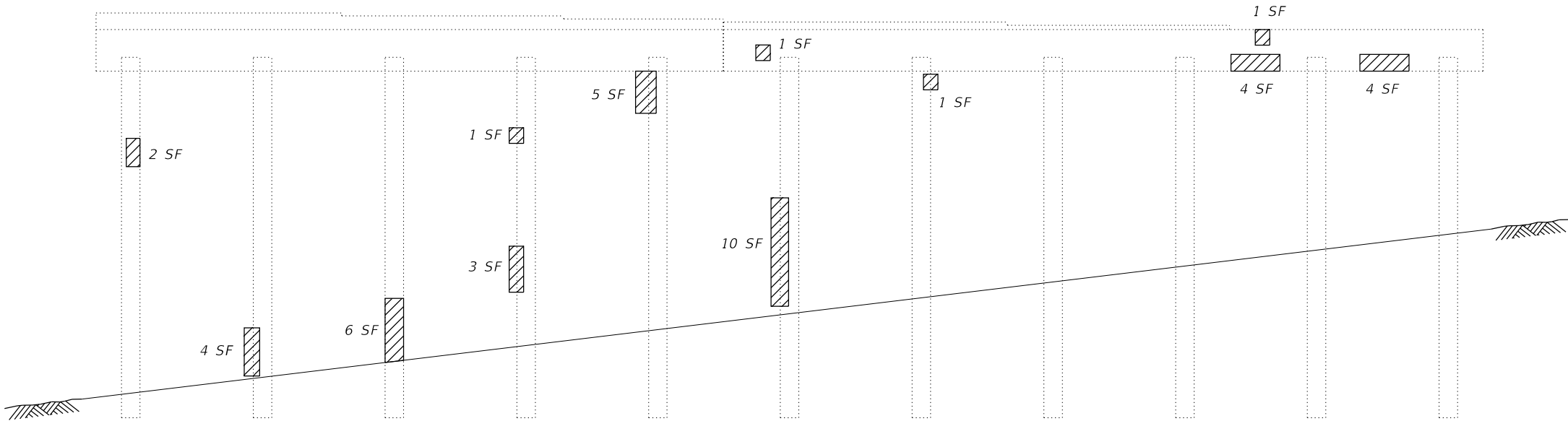
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SOFIT PLAN



PIER 4 ELEVATION  
Looking West



PIER 4 ELEVATION  
Looking East

BILL OF MATERIAL

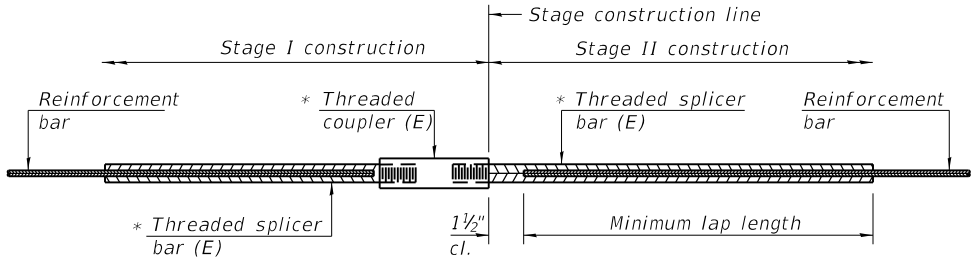
ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth Equal to or Less Than 5"	Sq. Ft.	91

Sheet 4 of 4

USER NAME =	DESIGNED - RSD	REVISED -
	CHECKED - AMS	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

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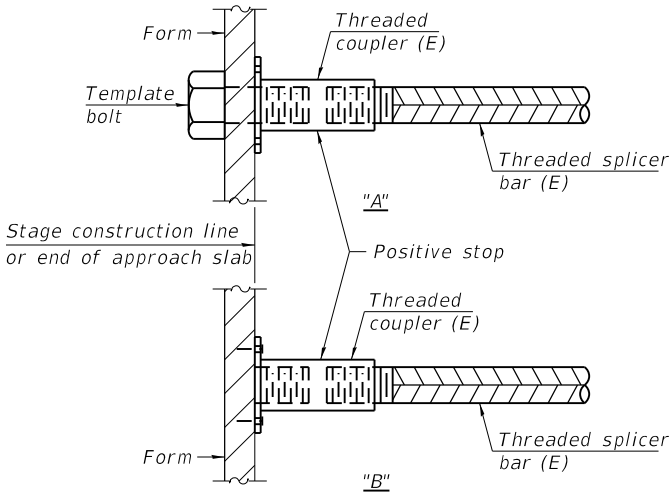


STANDARD BAR SPLICER ASSEMBLY

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

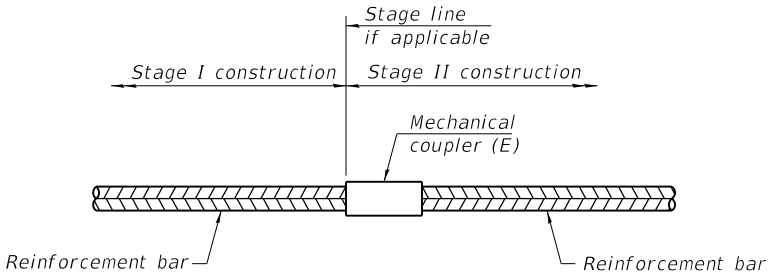
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck - Spans 1-2	#5	475	3'-0"
Deck - Span 3	#5	421	3'-0"
Deck - Spans 4-5	#5	478	3'-0"
Approach Footings	#5	32	3'-0"
Approach Slabs	#5	35	3'-4"
Approach Slabs	#8	46	4'-9"
Abutments	#6	8	4'-0"



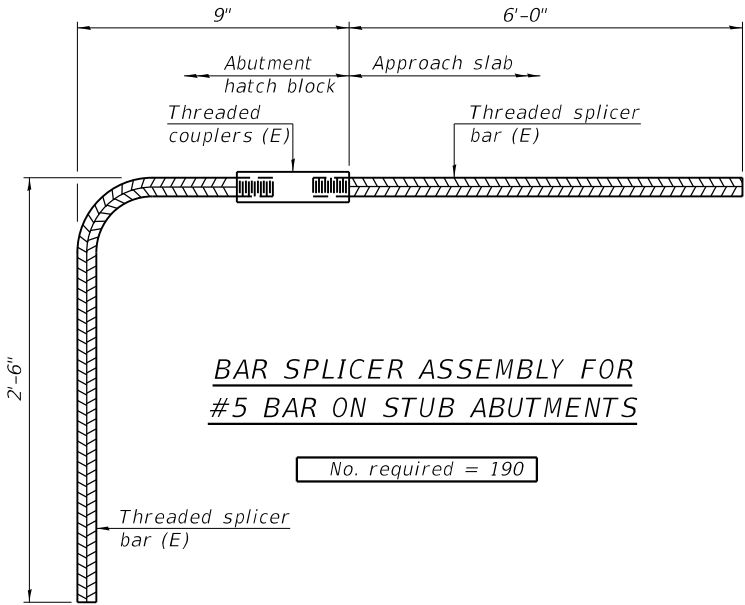
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

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

2-17-2017

**COLLINS ENGINEERS**  
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO.04-000903

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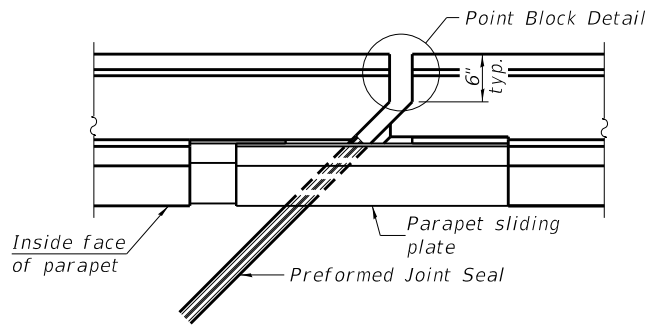
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 045-0009

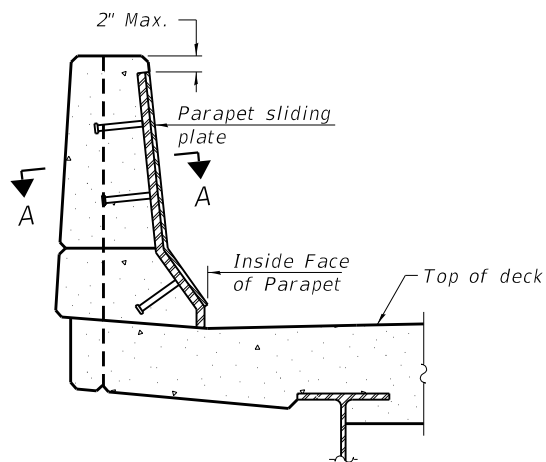
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

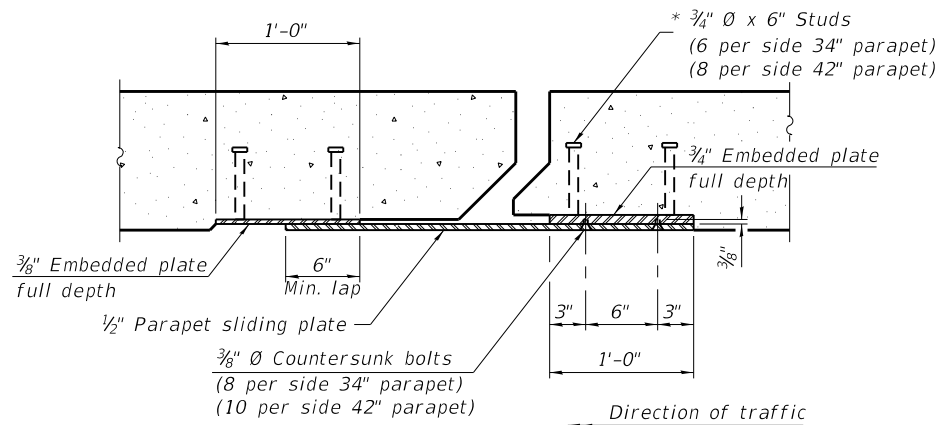
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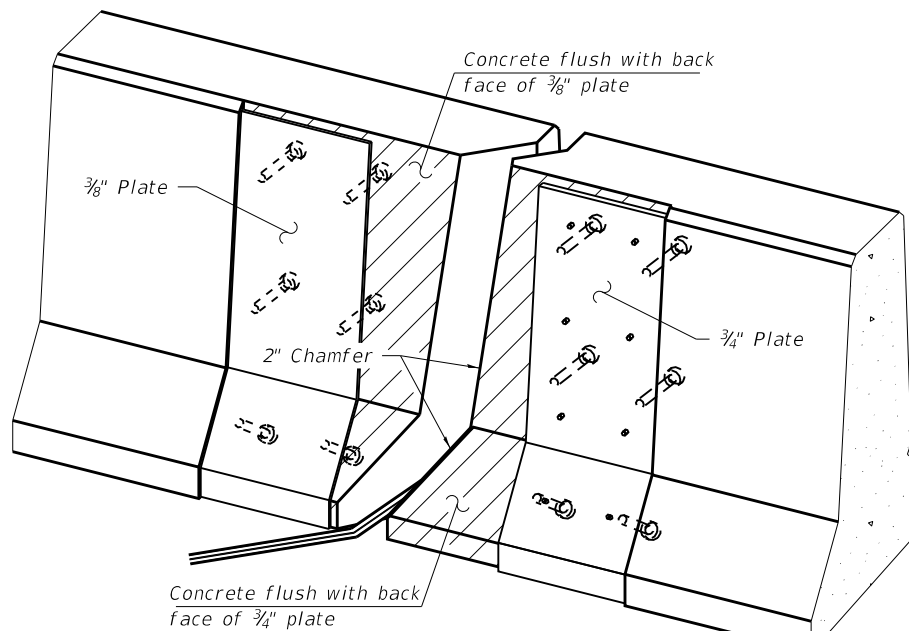
PLAN AT PARAPET



ELEVATION AT PARAPET



SECTION A-A



TRIMETRIC VIEW  
(Showing embedded plates only)

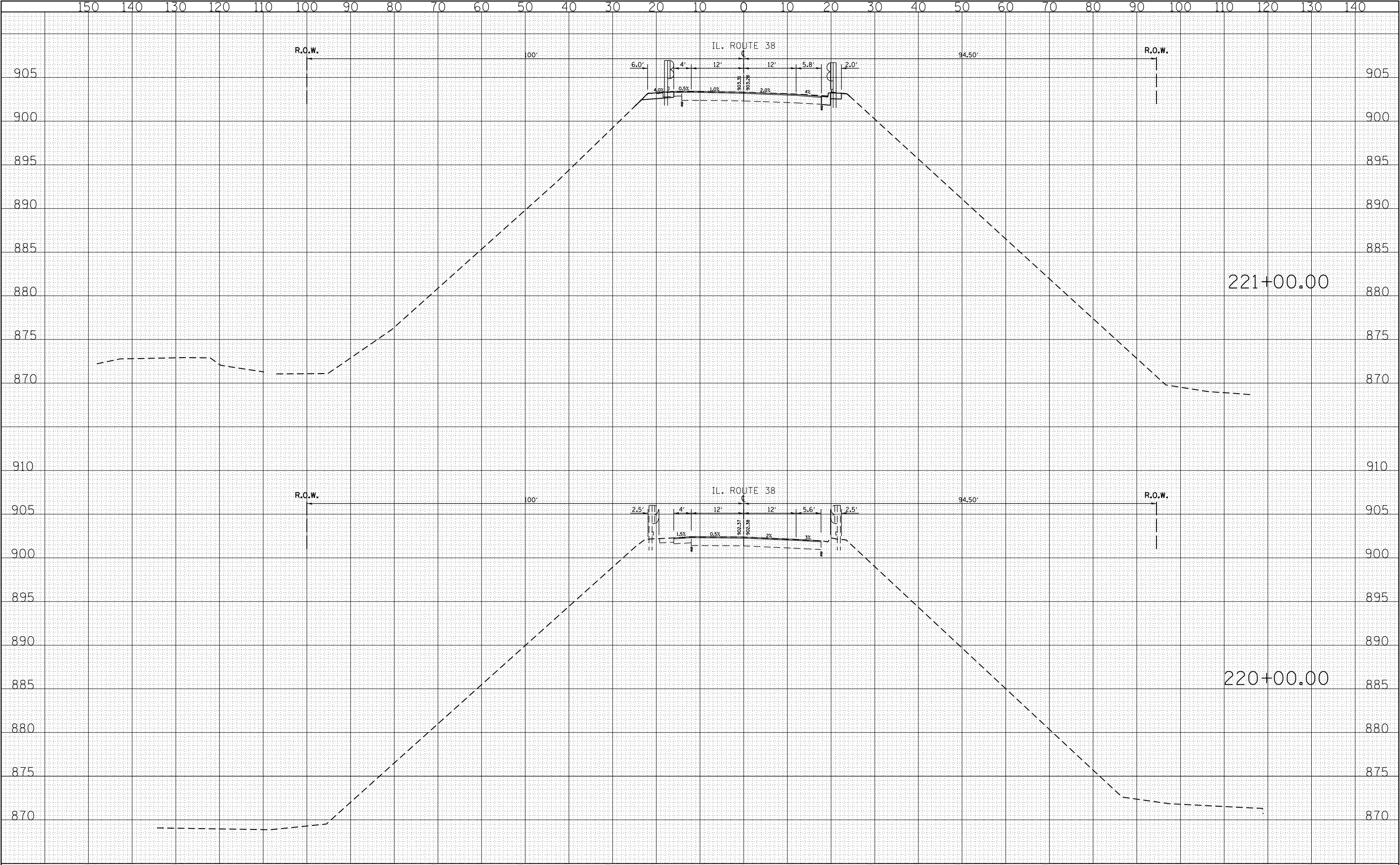
Notes:  
The manufacturer's recommended installation methods shall be followed.  
Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Seal of the specified thickness.  
34" F-shape barrier shown, 42" F-shape similar as noted.

USER NAME =	DESIGNED - RSD	REVISED -
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PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE = 12/6/2018	CHECKED - RSD	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
567	5VB-BR	COOK	73	66
CONTRACT NO. 62C14				
ILLINOIS FED. AID PROJECT				

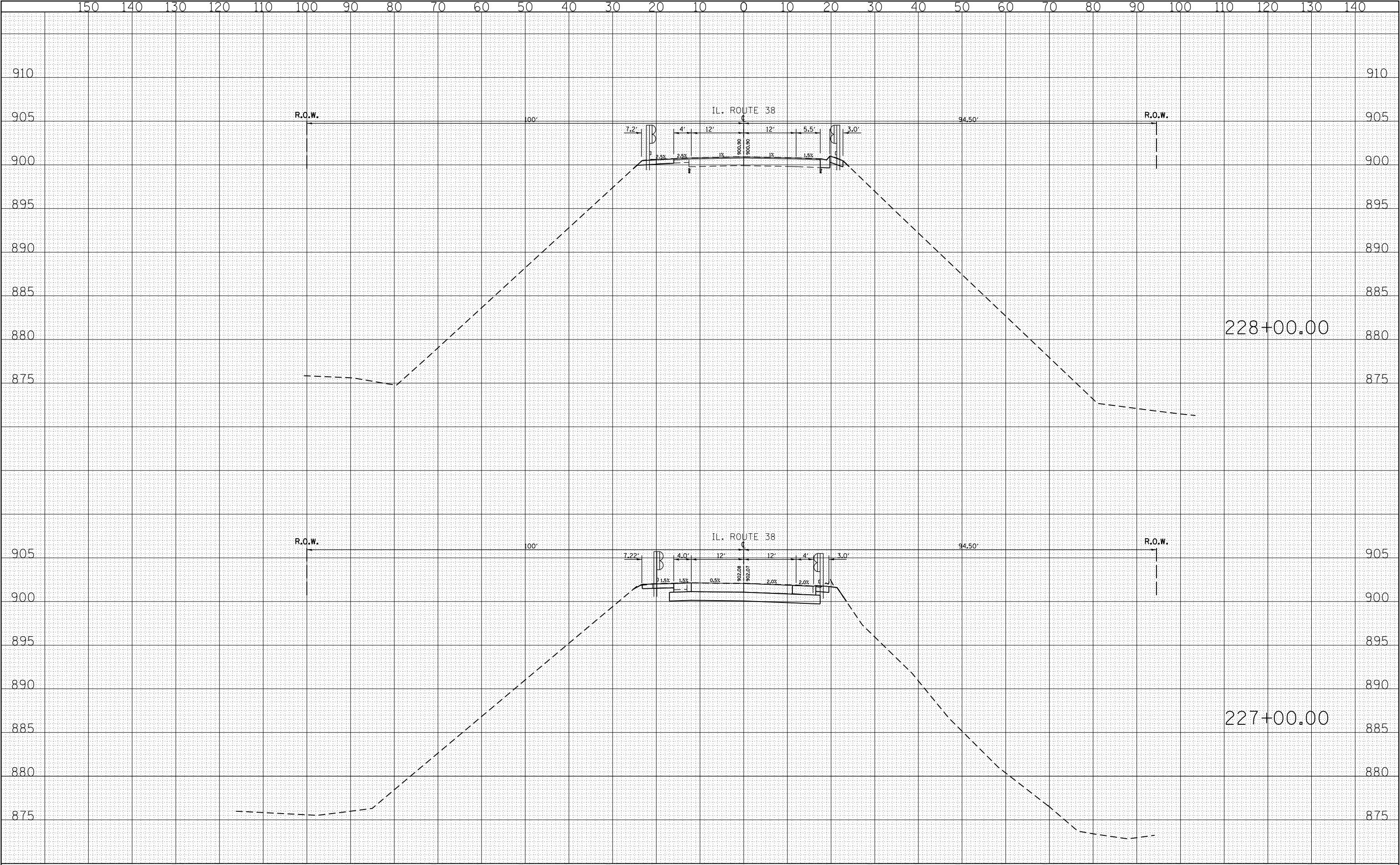
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NO.		FINL SURVEY	NOTE BOOK	

DATE	BY	SURVEYED	PLOTTED	AREAS CHECKED
NO.		ORIGINAL SURVEY	NOTE BOOK	



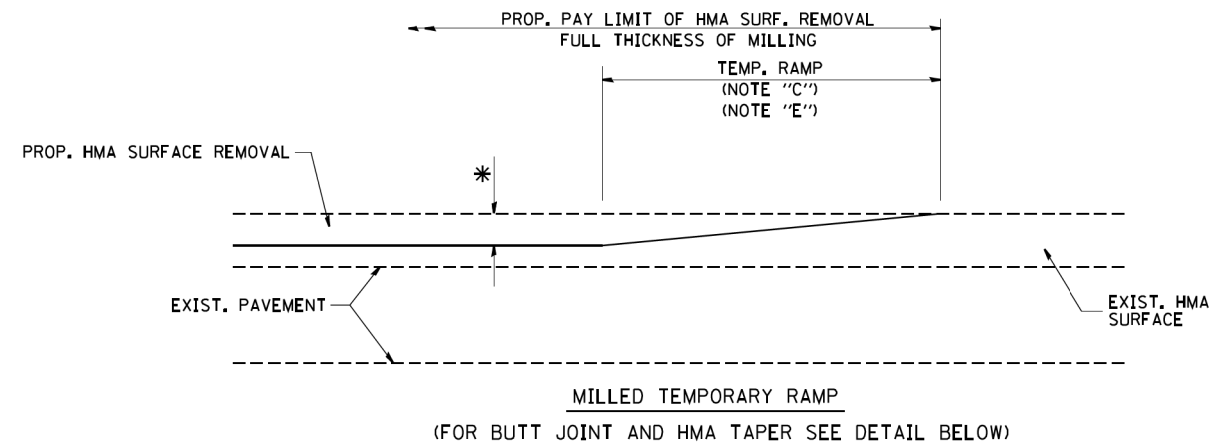
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		NO.	NO.	NO.
		NO.	NO.	NO.

DATE	BY	SURVEYED	PLOTTED	AREAS CHECKED
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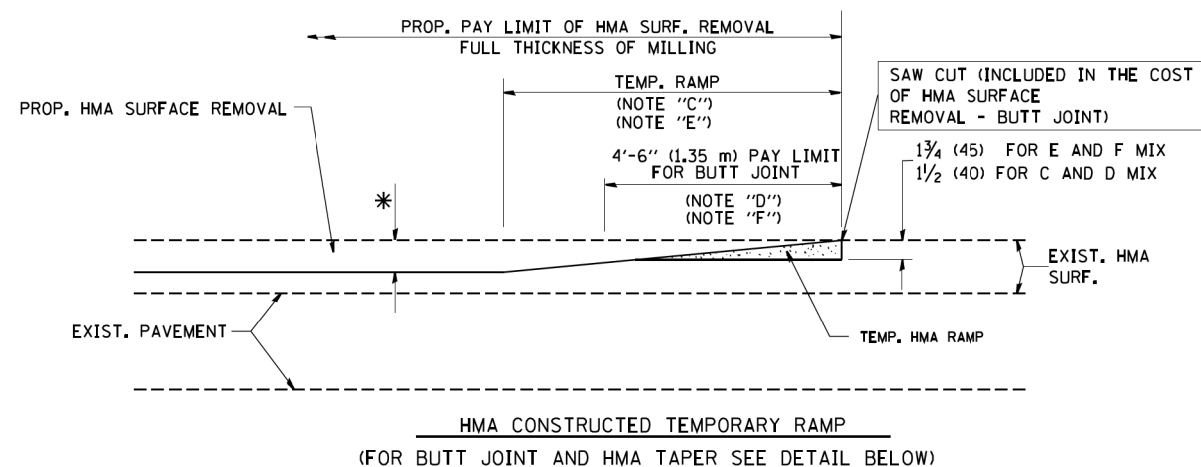


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										CONTRACT NO. 62C14			
										ILLINOIS FED. AID PROJECT			



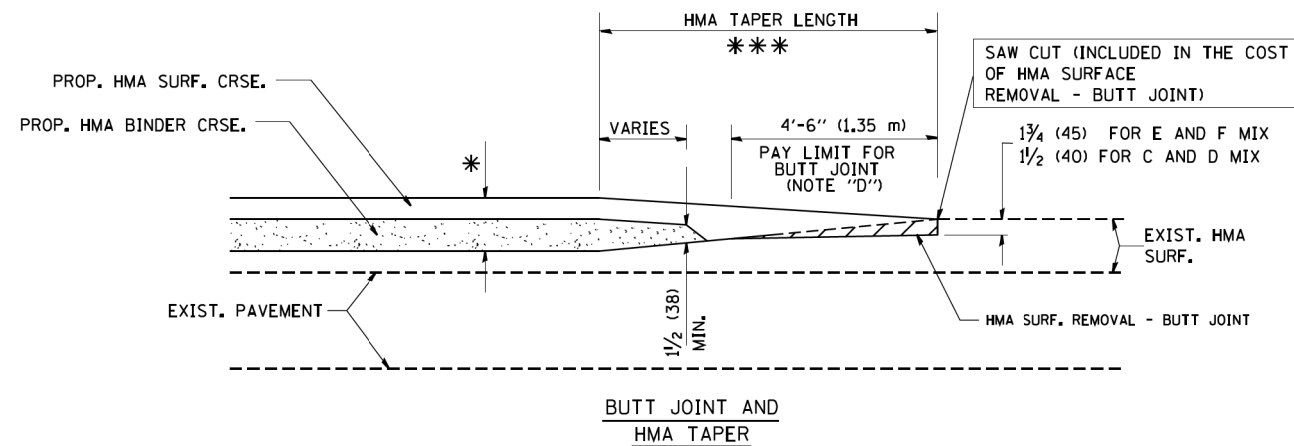


OPTION 1

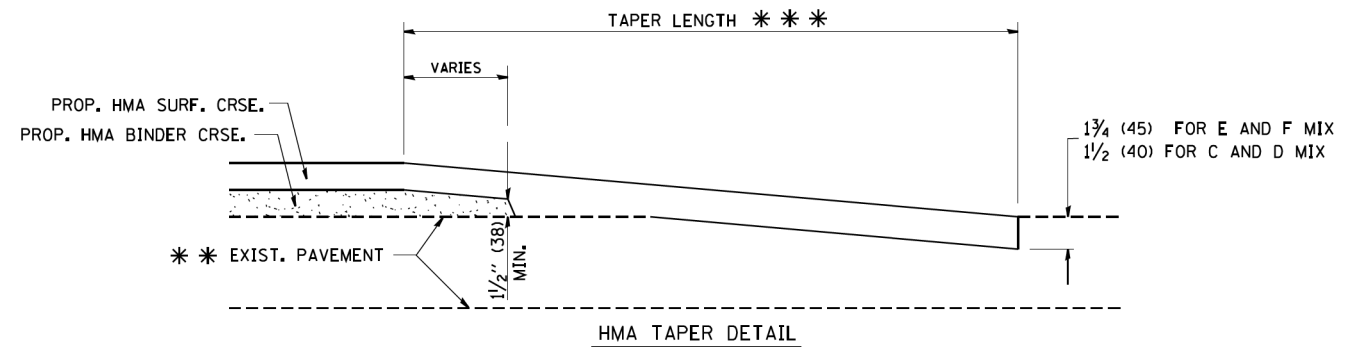
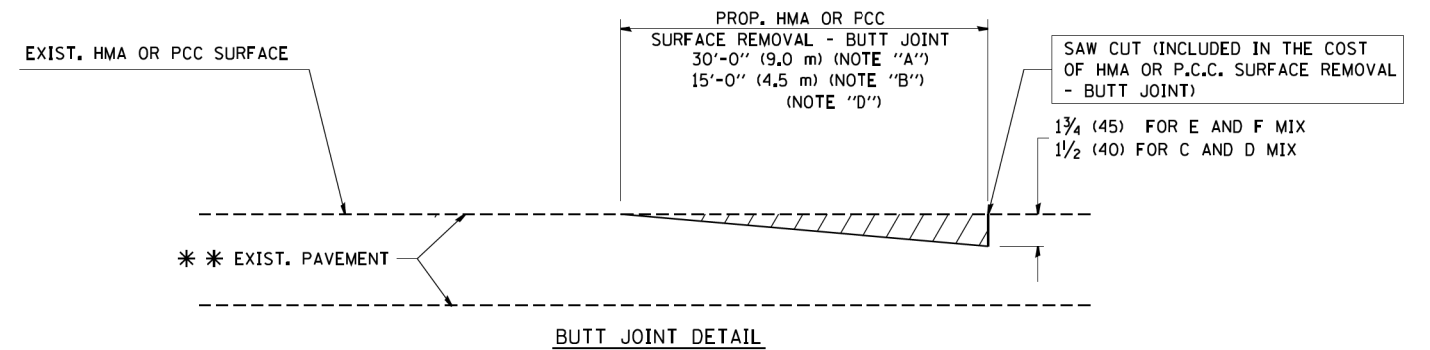


OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

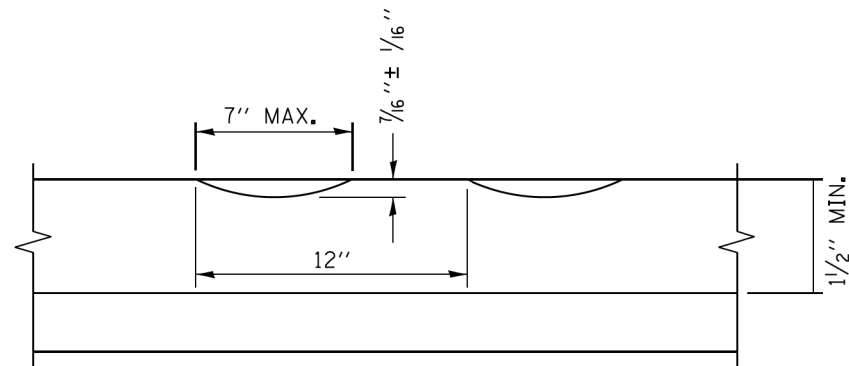
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \*\*\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

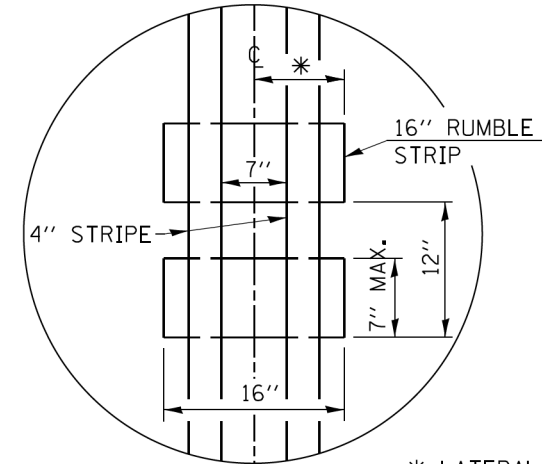
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

FILE NAME = W:\diststa\22x34\bd32.dgn	USER NAME = geglennobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97						567	5VB-BR	KANE	73	69
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01						BD400-05 BD32		CONTRACT NO. 62C14		
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.								



SECTION A-A



DETAIL B

GENERAL NOTES

CENTERLINE RUMBLE STRIPS SHALL BE CONSTRUCTED ACCORDING TO SECTION 642 ALONG THE CENTERLINE OF PAVEMENT.

SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS. RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.

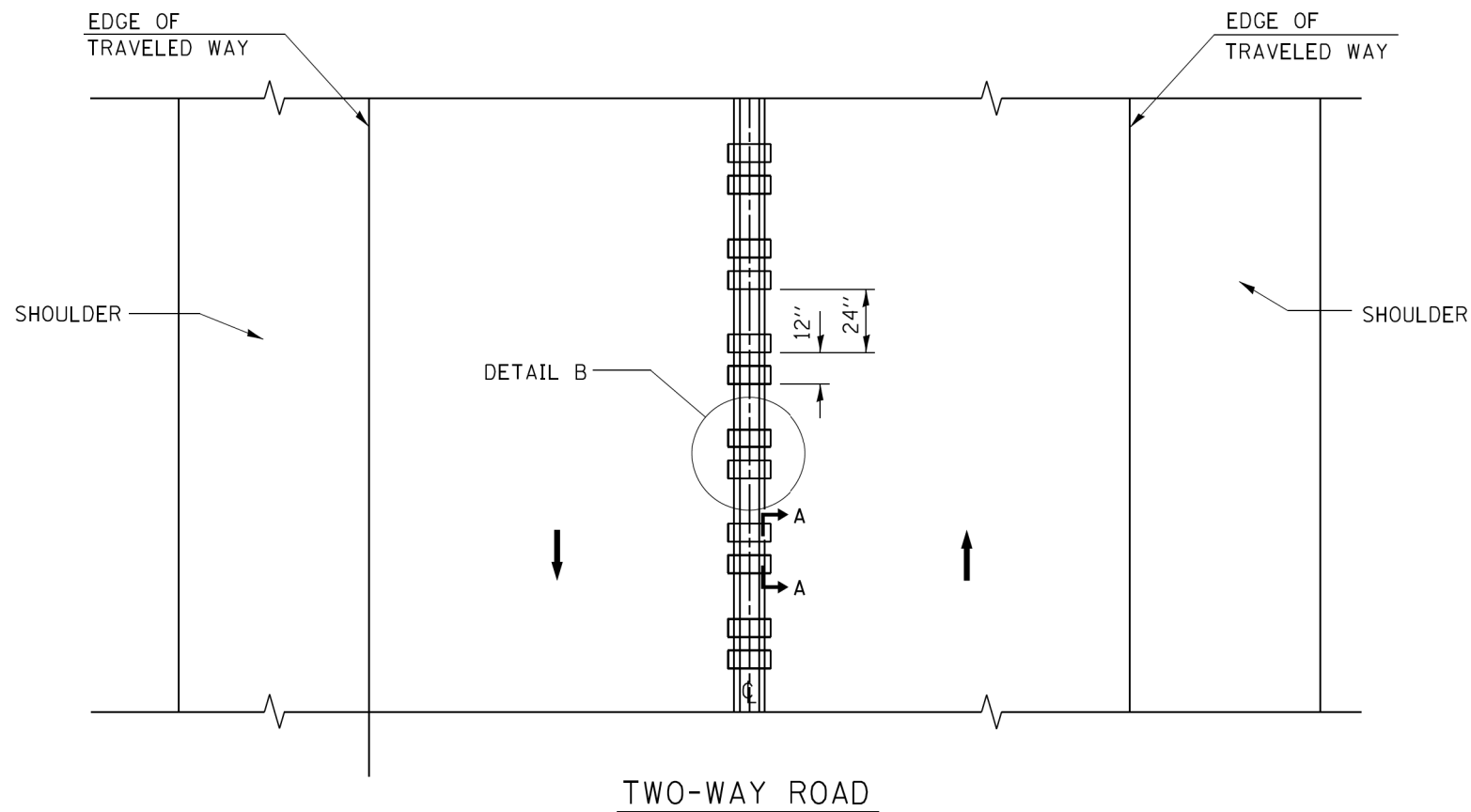
AFTER RUMBLE STRIPS ARE INSTALLED, THE PAVEMENT SURFACE SHALL BE SWEEPED CLEAN PRIOR TO THE PLACEMENT OF THE NEW PAVEMENT MARKINGS.

WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

BASIS OF PAYMENT

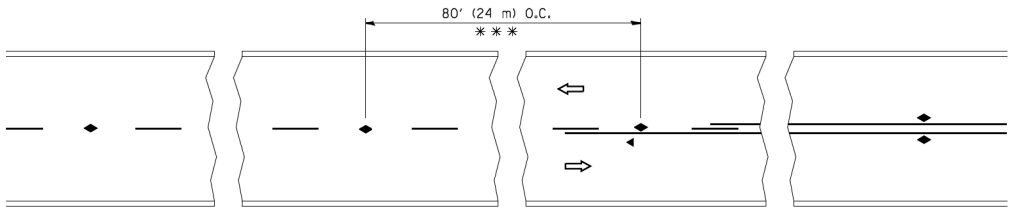
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CENTERLINE-RUMBLE STRIP OF THE WIDTH SPECIFIED.

HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPS, AND WILL BE PAID FOR SEPARATELY.



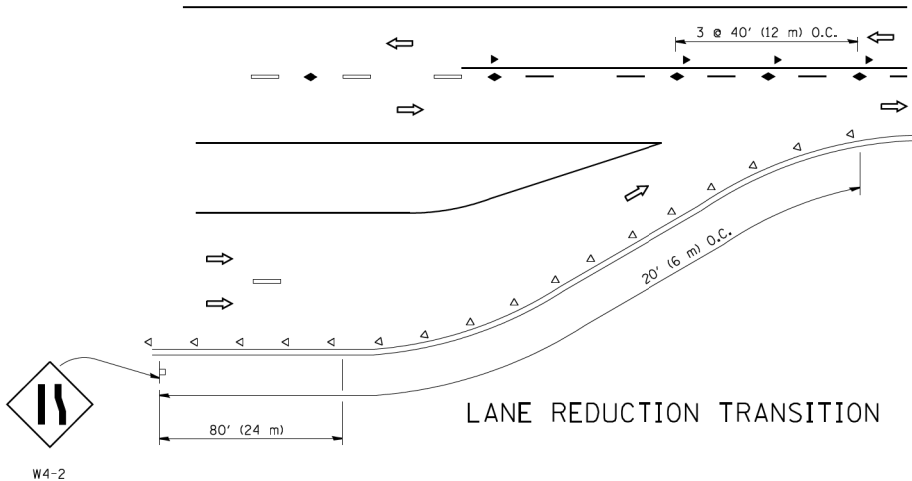
TWO-WAY ROAD

FILE NAME = c:\p\work\p\dot\gaglianob\td0108315\bd55.dgn	USER NAME = gaglianobt	DESIGNED - R. BORO	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					567	5VB-BR	KANE	73	70
	PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED -		BD 55			CONTRACT NO. 62C14				
	PLOT DATE = 8/28/2014	DATE - 08-06-2012	REVISED -		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

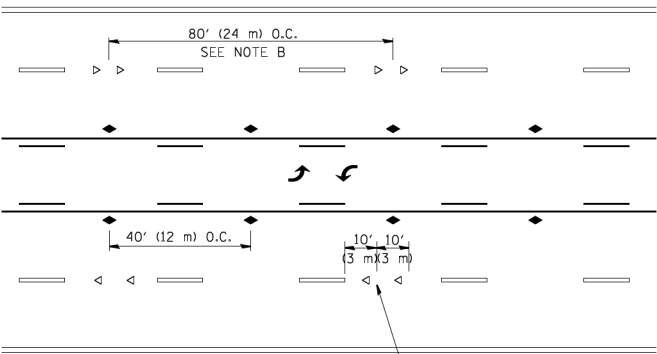


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

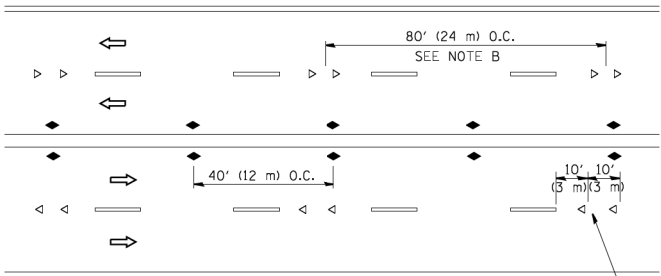


LANE REDUCTION TRANSITION



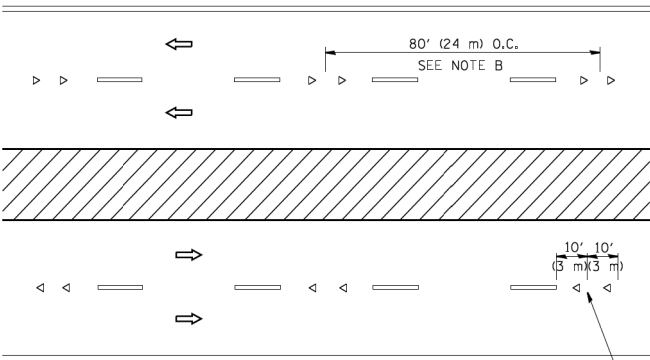
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

MULTI-LANE/DIVIDED

GENERAL NOTES

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

LANE MARKER NOTES

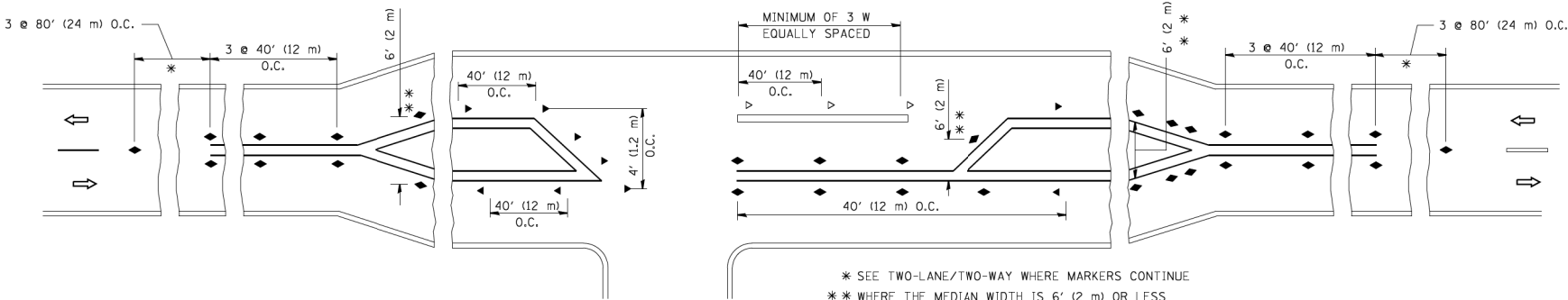
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

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

DESIGN NOTES

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

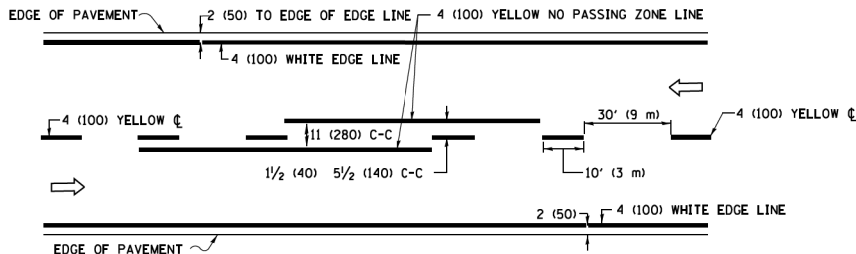


\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
\*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS  
USE TWO-WAY MARKERS.

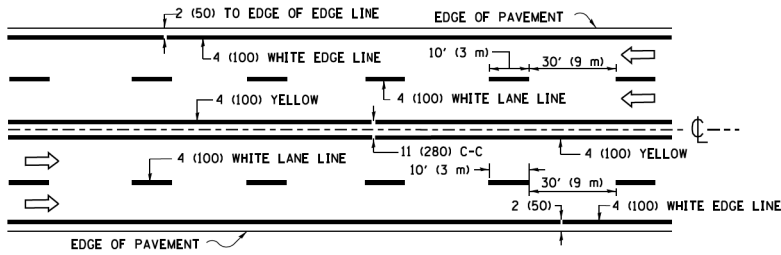
LEFT TURN

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

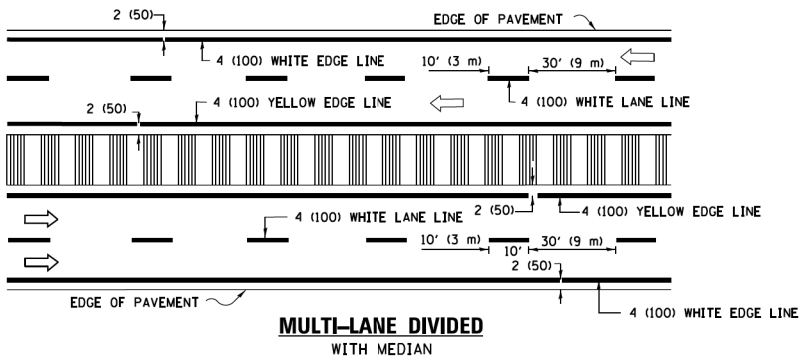
FILE NAME = c:\p\work\p\dot\leyso\d0108315\tcl1.dgn	USER NAME = leyso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - T. RAMMACHER 03-12-99					567	5VB-BR	KANE	73	71
		PLOT SCALE = 50.000' / IN.	CHECKED -		TC-11			CONTRACT NO. 62C14				
		PLOT DATE = 3/2/2011	DATE -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



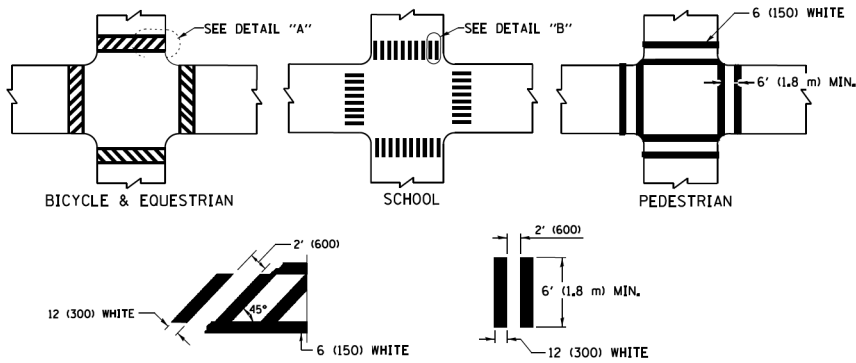
2-LANE ROADWAY



MULTI-LANE UNDIVIDED



TYPICAL LANE AND EDGE LINE MARKING

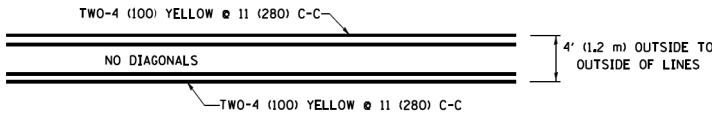


DETAIL "A"

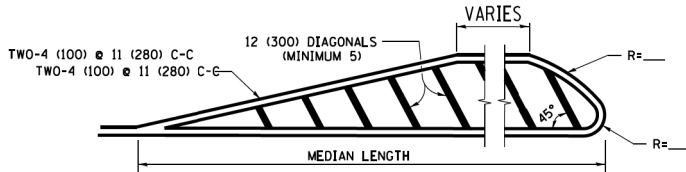
DETAIL "B"

TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

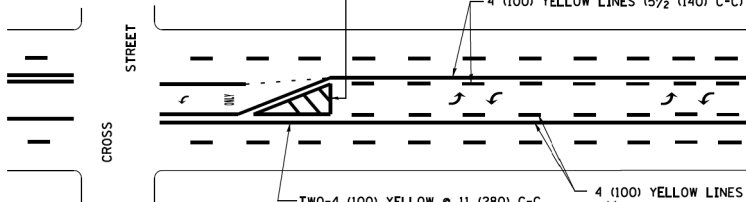


4' (1.2 m) WIDE MEDIANS ONLY

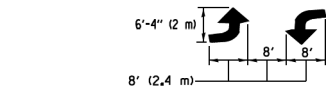


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

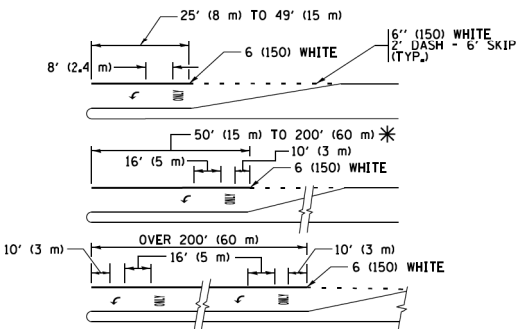


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

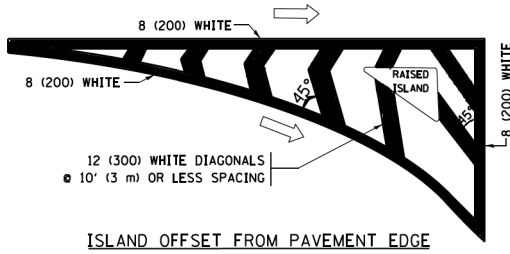


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

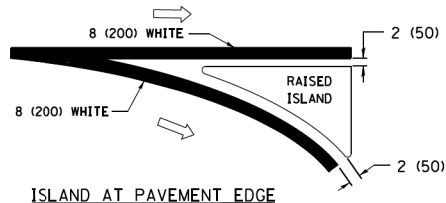
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

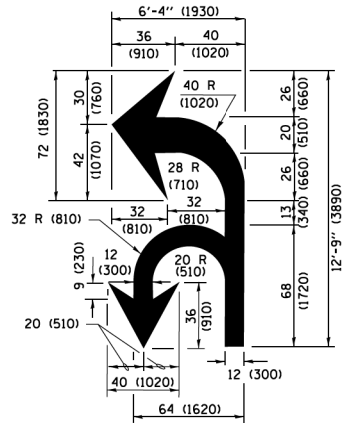


ISLAND OFFSET FROM PAVEMENT EDGE

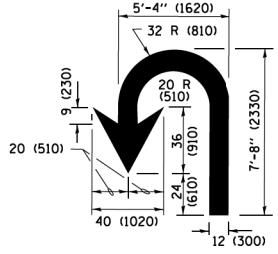


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

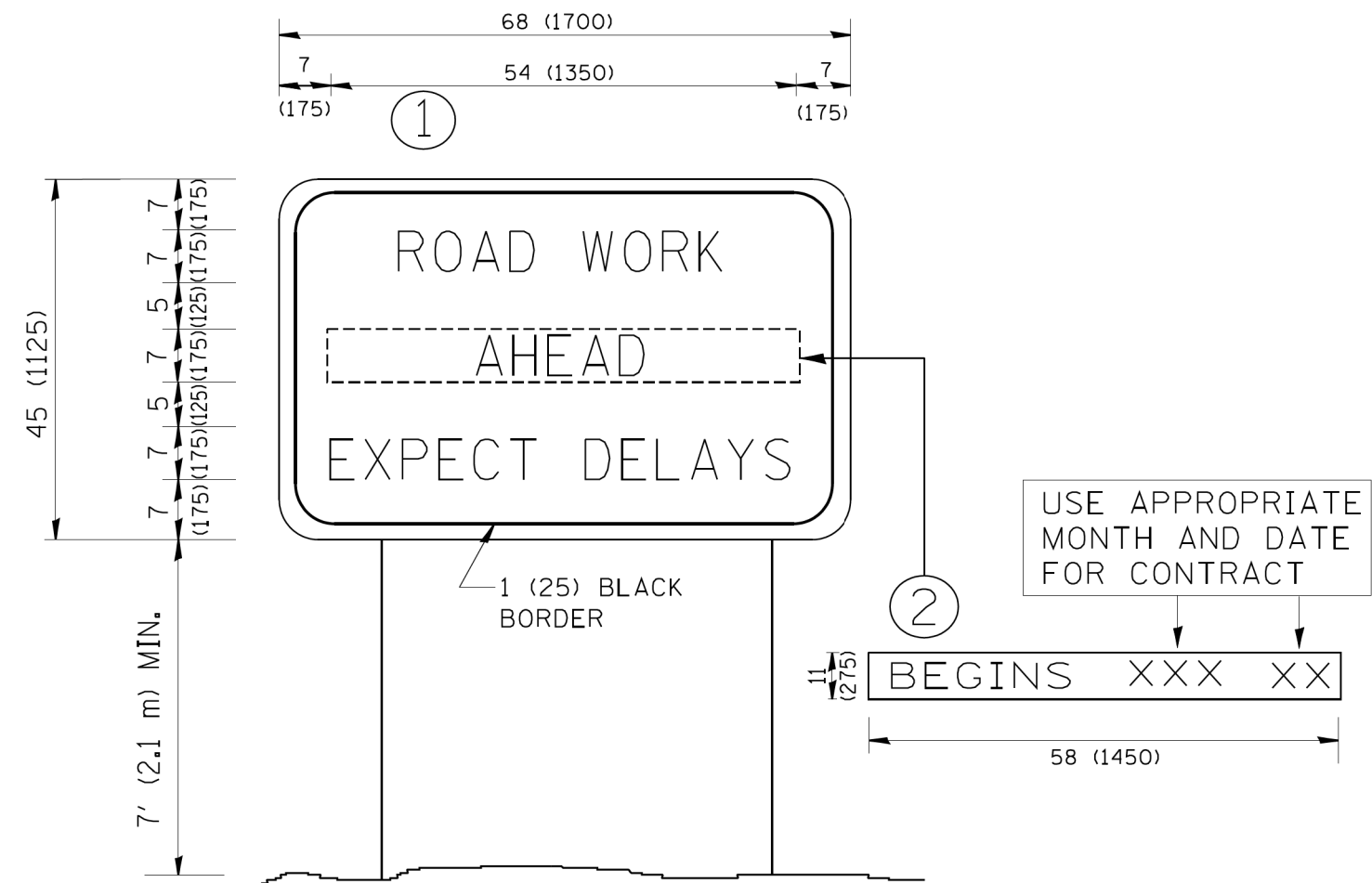
\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8' )	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = lryse	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
W:\dststd\22x34\tol3.dgn		DRAWN -	REVISED - C. JUCIUS 07-01-13		TYPICAL PAVEMENT MARKINGS			567	5VB-BR	KANE	73	72
Default	PLOT SCALE = 50,000' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15					TC-13		CONTRACT NO. 62C14		
	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16		SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.		ILLINOIS/FED. AID PROJECT	



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = geglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. MIRS 12-11-97						567	5VB-BR	KANE	73	73
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99		TC-22				CONTRACT NO. 62C14				
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1	OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			