

11-08-2019 LETTING ITEM 001

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60R67		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**FUNCTIONAL CLASSIFICATION:** MINOR ARTERIAL

2014 ADT = 24,800  
DESIGN SPEED: 30 M.P.H.  
SPEED LIMIT: 30 M.P.H.

HBM ENGINEERING GROUP, LLC  
ROBERT T. BORO, P.E.  
\*062-043749

*Robert Boro*



DATE: 8/01/2019

SIGNATURE AND SEAL  
APPLY TO DRAWINGS:  
1-16 AND 19

EXPIRATION DATE: 11-30-2021

HBM ENGINEERING GROUP, LLC  
MOUSSA A. ISSA, PH.D., P.E., S.E.  
\*081-005738

*Moussa A. Issa*



DATE: 8/01/2019

SIGNATURE AND SEAL  
APPLY TO DRAWINGS:  
31-50

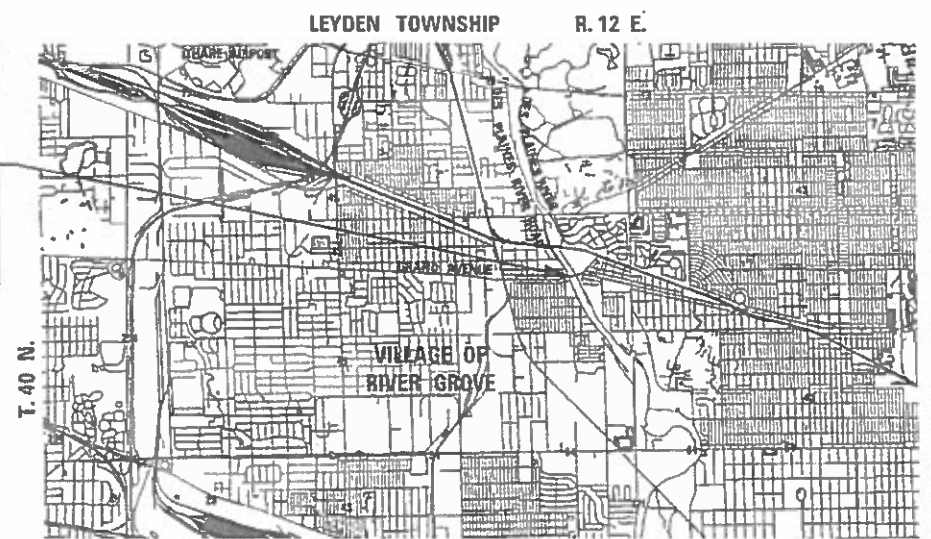
EXPIRATION DATE: 11-30-2020

**PROPOSED  
HIGHWAY PLANS**  
F.A.U. RTE. 1376 : GRAND AVENUE  
OVER DES PLAINES RIVER  
SECTION: 136A-BR(11)  
PROJECT: STP-LOHM(568)  
BRIDGE DECK OVERLAY, BRIDGE JOINT REPAIR AND  
TRAFFIC SIGNAL MODIFICATION  
COUNTY: COOK  
C-91-200-12

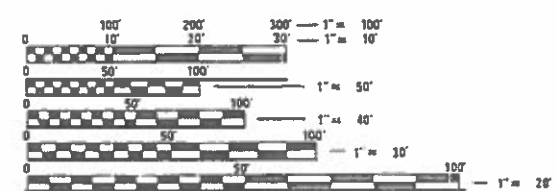


PROJECT LOCATED IN THE  
VILLAGE OF RIVER GROVE

PROJECT BEGINS  
STA. 15 + 55  
BRIDGE  
S.N. 016-0855  
PROJECT ENDS  
STA. 19 + 59.94



GROSS LENGTH OF PROJECT = 405 FEET = 0.077 MILES  
NET LENGTH OF PROJECT = 405 FEET = 0.077 MILES



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 LOCATING INFORMATION FOR EXCAVATORS  
1-800-892-0123  
OR 811

DISTRICT ONE - DESIGN  
PROJECT MANAGER : FAWAD AQUEEL, PE, PTOE (847) 705-0247

CONTRACT NO. 60R67



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
SUBMITTED *August 6, 2019*  
*Paul A. [Signature]*  
REGISTRAR ENGINEER  
*Oct 4, 2019*  
ENGINEER OF DESIGN AND ENVIRONMENT  
*Oct 4, 2019*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION  
3

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OF THE STATE OF ILLINOIS

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**LIST OF HIGHWAY STANDARDS**

STANDARD NO.	DESCRIPTION
000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420001-09	PAVEMENT JOINTS
424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-05	MID-BLOCK CURB RAMPS FOR SIDEWALKS
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN SINGLE LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
878001-10	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

**COMMITMENTS**

NONE

**GENERAL NOTES**

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 NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGE OF RIVER GROVE

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM I.D.O.T. FIELD MAINTENANCE ENGINEERS. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

SIDEWALK RAMPS MODIFICATIONS WITHIN THE LIMITS OF THE PROJECT SHALL CONFORM TO THE APPLICABLE HIGHWAY STANDARDS INCLUDED IN THE PLANS.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS. RAISED REFLECTIVE PAVEMENT MARKERS ARE NOT ALLOWED TO BE PLACED ON THE BRIDGE DECK

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

THE RESIDENT ENGINEER SHALL CONTACT KYLIE VOGRIN, AREA TRAFFIC FIELD ENGINEER, AT KYLIE.VOGRIN@ILLINOIS.GOV AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

ANY SIGNAGE, PAVEMENT MARKINGS AND REFLECTORS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

THE APPROACH SLABS SHALL HAVE THE GUTTER OVERLAID WITH HMA TO THE FACE OF THE CURB.

THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A 404 PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE 404 PERMIT IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER USACE PERMITS.

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, CONTRACTOR SHALL NOTIFY THE VILLAGE OF RIVER GROVE AND THE REDSPEED ILLINOIS, LLC PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF RIVER GROVE  
 2621 NORTH THATCHER AVENUE RIVER GROVE, IL 60171  
 (708) 453-8000

REDSPEED ILLINOIS, LLC 400 EISENHOWER LANE  
 LOMBARD, IL 60148  
 (630) 317-5700

THE VILLAGE OF RIVER GROVE OR REDSPEED ILLINOIS, LLC SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION.

THE CONTRACTOR SHALL CONTACT THE FOREST PRESERVE DISTRICT OF COOK COUNTY (FPDCC) AT (708) 771-1192 OR AT (800) 870-3666 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK THAT REQUIRES THE CLOSURE OF THE DES PLAINES RIVER TRAIL FOR WORK ON THE UNDERPASS.

THE CONSTRUCTION RESIDENT ENGINEER SHALL CONTACT PACE PRIOR TO START OF CONSTRUCTION TO TEMPORARILY RELOCATE THE BUS STOPS EFFECTED BY THE ADA SIDEWALK WORK.

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

MODEL: Defaul  
 FILE NAME: P:\17105746 IDOT District 1\1710 11 Grand Ave @ DesPlaines River\CADD\_Sheets\I17105746-SHT02-GenNotes.dgn



USER NAME = Stoyanka.Kotorokova	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
PLOT SCALE = 40.00' / in.	CHECKED - RTB	REVISED -
PLOT DATE = 8/14/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES  
 GRAND AVENUE OVER DES PLAINES RIVER**

SCALE: 40.00' / in. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	2
				CONTRACT NO. 60R67
		ILLINOIS	FED. AID PROJECT	

MODEL: Default  
 FILE NAME: P11710-746 DOT District 11WO 11 Grand Ave @ DesPlaines RiverCADD Sheets\Civil\160667-SHT03-SQ01.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
20200100	EARTH EXCAVATION	CU YD	17	17	
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	38	38	
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	1	1	
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	1	1	
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	1	1	
* 25200110	SODDING, SALT TOLERANT	SQ YD	38	38	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	350		350
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	490		490
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	8		8
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	77		77
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1227	1227	
* 42400800	DETECTABLE WARNINGS	SQ FT	89	89	
44000156	HOT-MIX ASPHALT SURFACE REMOVAL, 1 3/4"	SQ YD	42		42
44000600	SIDEWALK REMOVAL	SQ FT	1094	1094	

\* SPECIALTY ITEM  
 \*\* 0042

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SQ YD	18		18
50102400	CONCRETE REMOVAL	CU YD	21.3		21.3
50104000	BRIDGE RAIL REMOVAL	FOOT	60		60
50300255	CONCRETE SUPERSTRUCTURE	CU YD	22.2		22.2
50300260	BRIDGE DECK GROOVING	SQ YD	967		967
50300300	PROTECTIVE COAT	SQ YD	1203	188	1015
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	2470		2470
50800105	REINFORCEMENT BARS	POUND	270		270
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3080		3080
50800515	BAR SPLICERS	EACH	26		26
50900105	ALUMINUM RAILING, TYPE L	FOOT	60		60
52000110	PREFORMED JOINT STRIP SEAL	FOOT	140		140
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	33		33
54003000	CONCRETE BOX CULVERTS	CU YD	1.1		1.1

SCALE: 40.0000' / in		SHEET 1 OF 5 SHEETS		STA. TO STA.	
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
1376	136A-BR(11)	COOK	59	3	
CONTRACT NO. 60R67					
[ ILLINOIS ] FED. AID PROJECT					



USER NAME = Ken.drabant	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - RTB	REVISED -
PLOT DATE = 8/14/2019	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
 GRAND AVENUE OVER DES PLAINES RIVER

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
59000200	EPOXY CRACK INJECTION	FOOT	6		6
60255500	MANHOLES TO BE ADJUSTED	EACH	2	1	1
60403700	LIDS, TYPE 1, OPEN LID	EACH	1	1	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	28	28	
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2	
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1	
* 66901002	ON-SITE MONITORING OF REGULATED SUBSTANCES	CAL DA	10	10	
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6		6
67100100	MOBILIZATION	L SUM	1.0	0.5	0.5
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	80		80
70300900	PAVEMENT MARKING TAPE, TYPE IV - LETTERS AND SYMBOLS	SQ FT	21		21
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	4480		4480

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
70300906	PAVEMENT MARKING TAPE, TYPE IV 6"	FOOT	232		232
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	28		28
70400100	TEMPORARY CONCRETE BARRIER	FOOT	287.5		287.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	425		425
70600240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1		1
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1		1
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2		2
70600340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2		2
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2590	2590	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	851	851	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	97	97	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	116	116	
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	28	28	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	505	505	

\* SPECIALTY ITEM  
\*\* 0042

MODEL: D:\dgn\... FILE NAME: P:\1710-746 DOT District 1\1710-11 Grand Ave @ DesPlaines River\CADD\_Sheets\CURB\1710-5002.dgn



USER NAME = Ken.drabant	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
PLOT SCALE = 40,0000 ' / in.	CHECKED - RTB	REVISED -
PLOT DATE = 8/14/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
GRAND AVENUE OVER DES PLAINES RIVER**

SCALE: 40,0000 ' / in. SHEET 2 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	4
CONTRACT NO. 60R67			ILLINOIS FED. AID PROJECT	



CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	91	91	
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	9	9	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	12	
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	30		30
78100300	REPLACEMENT REFLECTOR	EACH	87	87	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	24		24
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	12		12
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	51	51	
* 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	27	27	
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	36	36	
* 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	298	298	
* 81400100	HANDHOLE	EACH	1	1	
* 81400200	HEAVY-DUTY HANDHOLE	EACH	1	1	
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1240	1240	

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1275	1275	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	690	690	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1385	1385	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	975	975	
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	500	500	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8	8	
* 87900200	DRILL EXISTING HANDHOLE	EACH	9	9	
* 88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8	8	
* 88600100	DETECTOR LOOP, TYPE I	FOOT	100	100	
* 88800100	PEDESTRIAN PUSH-BUTTON	EACH	8	8	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	2	2	
89501150	RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2	2	
* 89502200	MODIFY EXISTING CONTROLLER	EACH	1	1	

MODEL D:\dgn\... FILE NAME: P:\17105-746 DOT District 1\17105-11 Grand Ave @ DesPlaines River\CADD\_Sheets\CADD\17105-5003.dgn



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PLOT DATE = 8/14/2019		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
GRAND AVENUE OVER DES PLAINES RIVER

SCALE: 40,0000 ' / in. SHEET 3 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	5
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

MODEL: Default  
FILE NAME: P11710-746 DOT District 11WO 11 Grand Ave @ DesPlaines RiverCADD Sheets\Civil\160667-SHT05-S004.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4500	4500	
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1	
89502376	REBUILD EXISTING HANDHOLE	EACH	2	2	
89502380	REMOVE EXISTING HANDHOLE	EACH	5	5	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	2	2	
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1	
X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	112		112
X0327638	STREAM GAUGE	EACH	1		1
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1998	1998	
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	6		6
* X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2	2	
* X2700003	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	80	80	
* X2700004	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 7"	FOOT	80	80	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.2	0.8

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				80% FED 20% STATE	
				SAFETY	BRIDGE
				0021	0059
				URBAN	S.N. 016-0855
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	1687		1687
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	18		18
* X8100105	CONDUIT SPLICE	EACH	1	1	
X8780010	CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER	FOOT	8	8	
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SQ YD	18		18
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	2		2
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	2460		2460
Z0001905	STRUCTURAL STEEL REPAIR	POUND	1310		1310
Z0004562	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	234	234	
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	963		963
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	963		963
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	579		579
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	39		39
Z0015550	DEBRIS REMOVAL	CU YD	13		13



USER NAME = Ken.drabant	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
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PLOT DATE = 8/14/2019	DATE - 08/09/2019	REVISED -

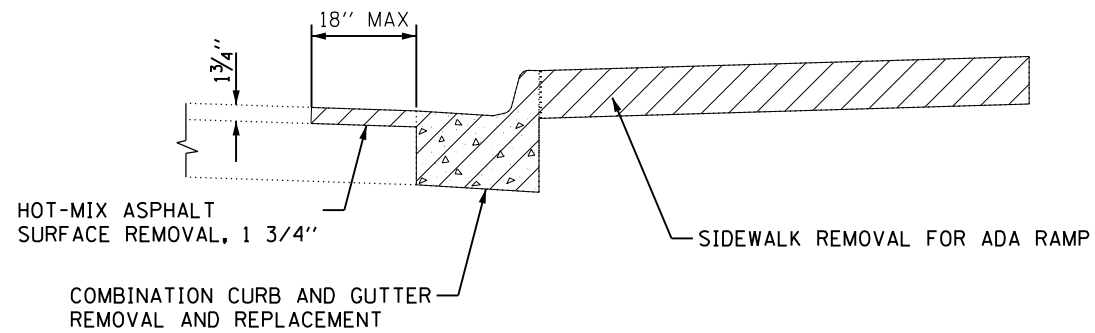
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES  
GRAND AVENUE OVER DES PLAINES RIVER**

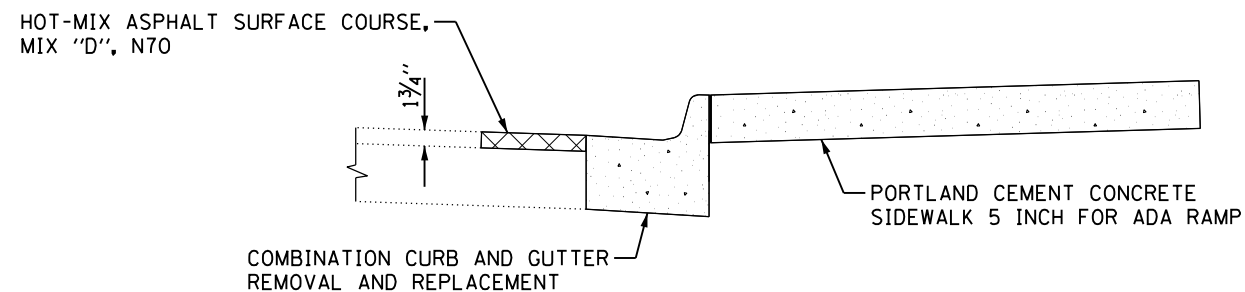
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	6
			CONTRACT NO. 60R67	
[ ILLINOIS ] FED. AID PROJECT				





REMOVAL SECTION FOR ADA RAMPS



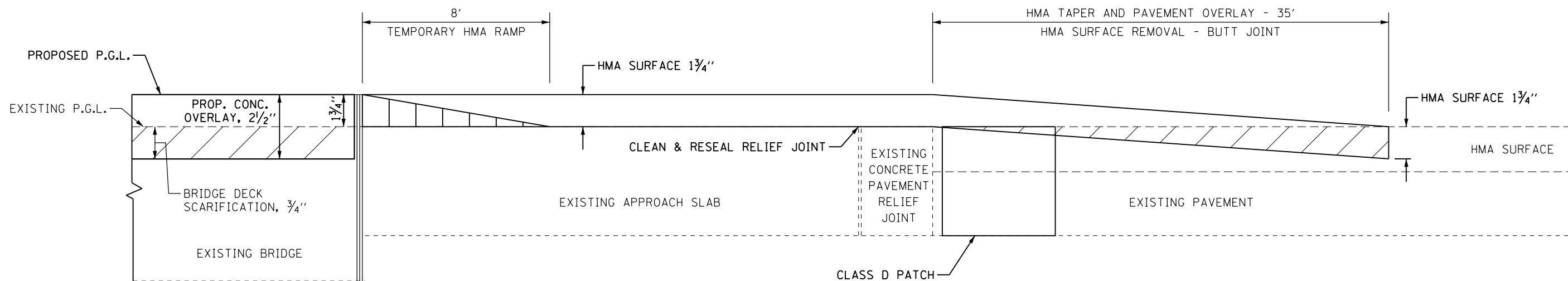
PROPOSED SECTION FOR ADA RAMPS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		OMP
MIXTURE TYPE	AIR VOIDS @ Ndes	
APPROACH AND BUTT JOINT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR.	OC/OA
PATCHING		
CLASS D PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.	OC/OA

OMP DESIGNATIONS:  
 QUALITY CONTROL/QUALITY ASSURANCE (OC/OA);  
 QUALITY CONTROL FOR PERFORMANCE (QCP);  
 PAY FOR PERFORMANCE (PFP)

NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/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. FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.
3. SEE BUTT JOINT AND HMA TAPER DETAILS FOR ADDITIONAL NOTES AND DETAILS.



APPROACH PAVEMENT HMA OVERLAY DETAIL

STA. 16+82.86 TO STA. 17+40.86  
 STA. 19+01.94 TO STA. 19+59.94

MODEL: D:\p1\17105746.DOT\Bldg\11\WO\_11\_Grand\_Ave\_@\_DesPlaines\_River\CADD\_Sheets\CUILD\60R67-SHT08-TYP.dgn  
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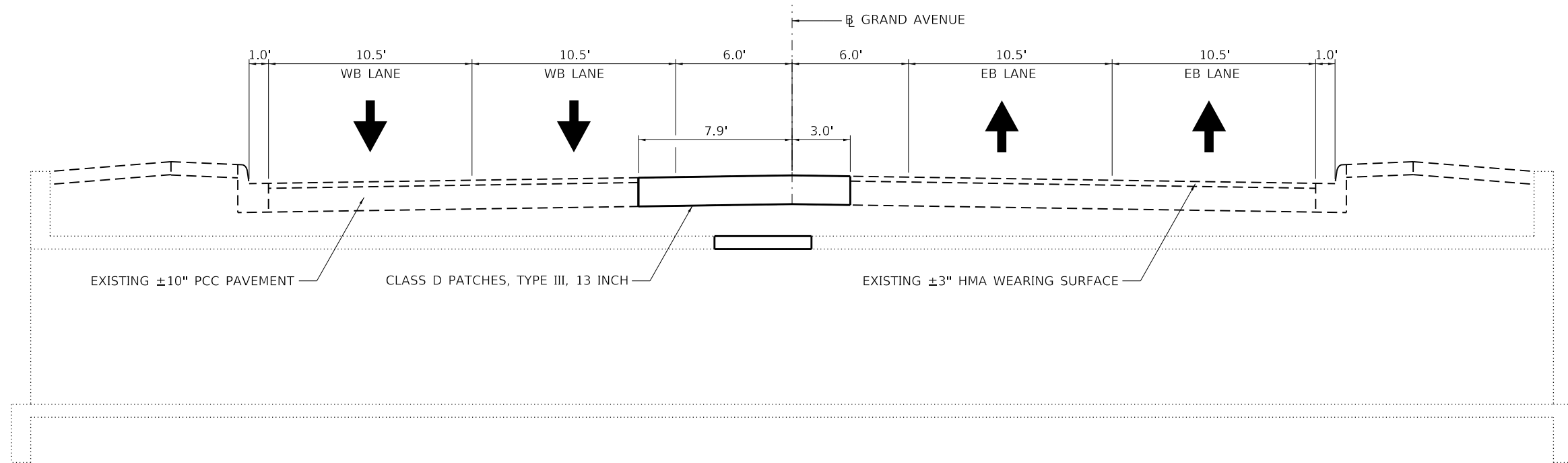
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	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND DETAILS  
 GRAND AVENUE OVER DES PLAINES RIVER

SCALE: 40.00' / in. SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	8
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



**TYPICAL SECTION**  
ABOVE CULVERT

MODEL: D:\64bit  
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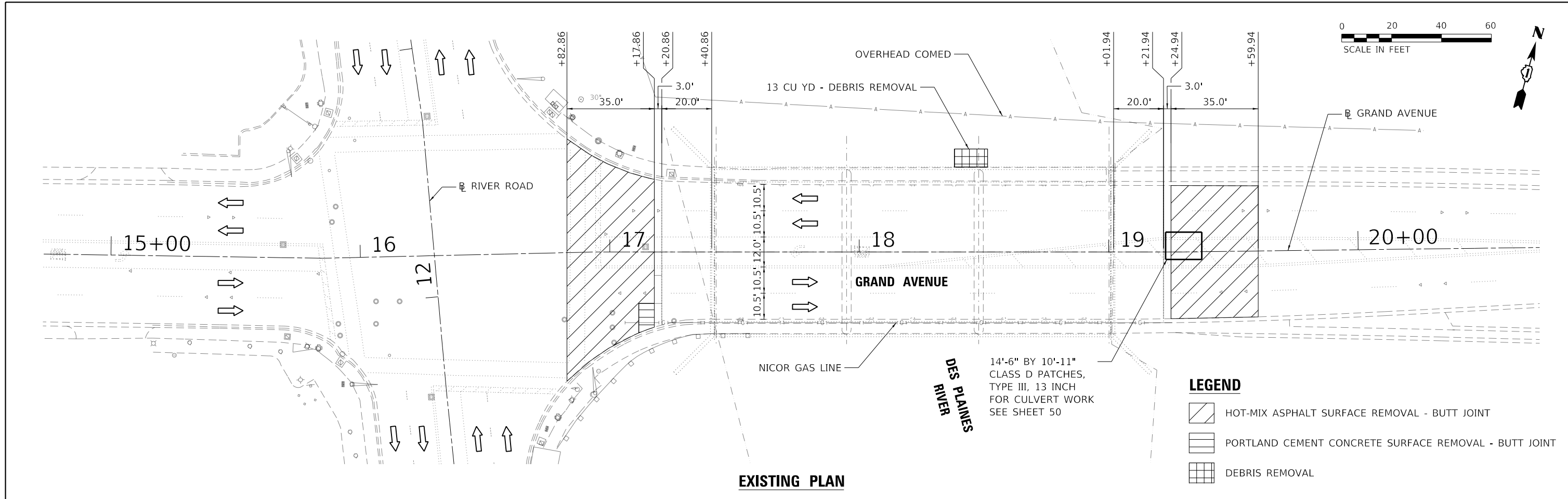
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PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

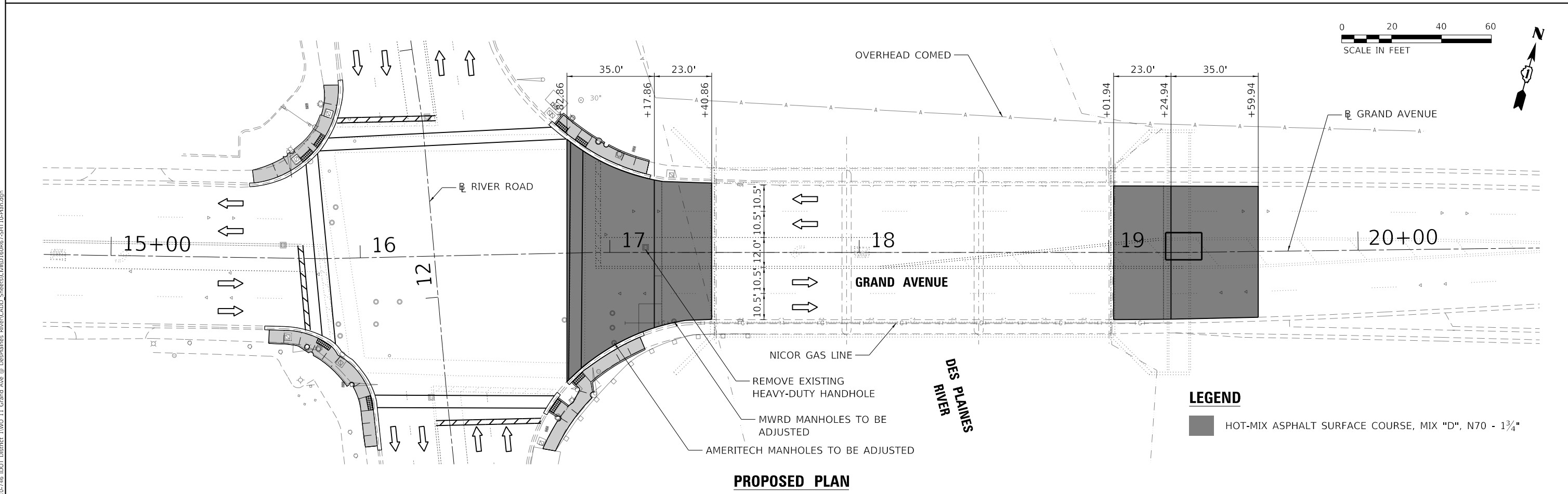
**MAINTENANCE OF TRAFFIC TYPICAL SECTIONS AND NOTES  
GRAND AVENUE OVER DES PLAINES RIVER**

SCALE: 40.00' / in. SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	9
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



**EXISTING PLAN**



**PROPOSED PLAN**

MODEL: D:\p1\17105-746 (DOT) District: 11\1710\_11 Grand Ave @ DesPlaines River\CADD\_Sheets\CADD\_SHEET10\_Plan.dgn  
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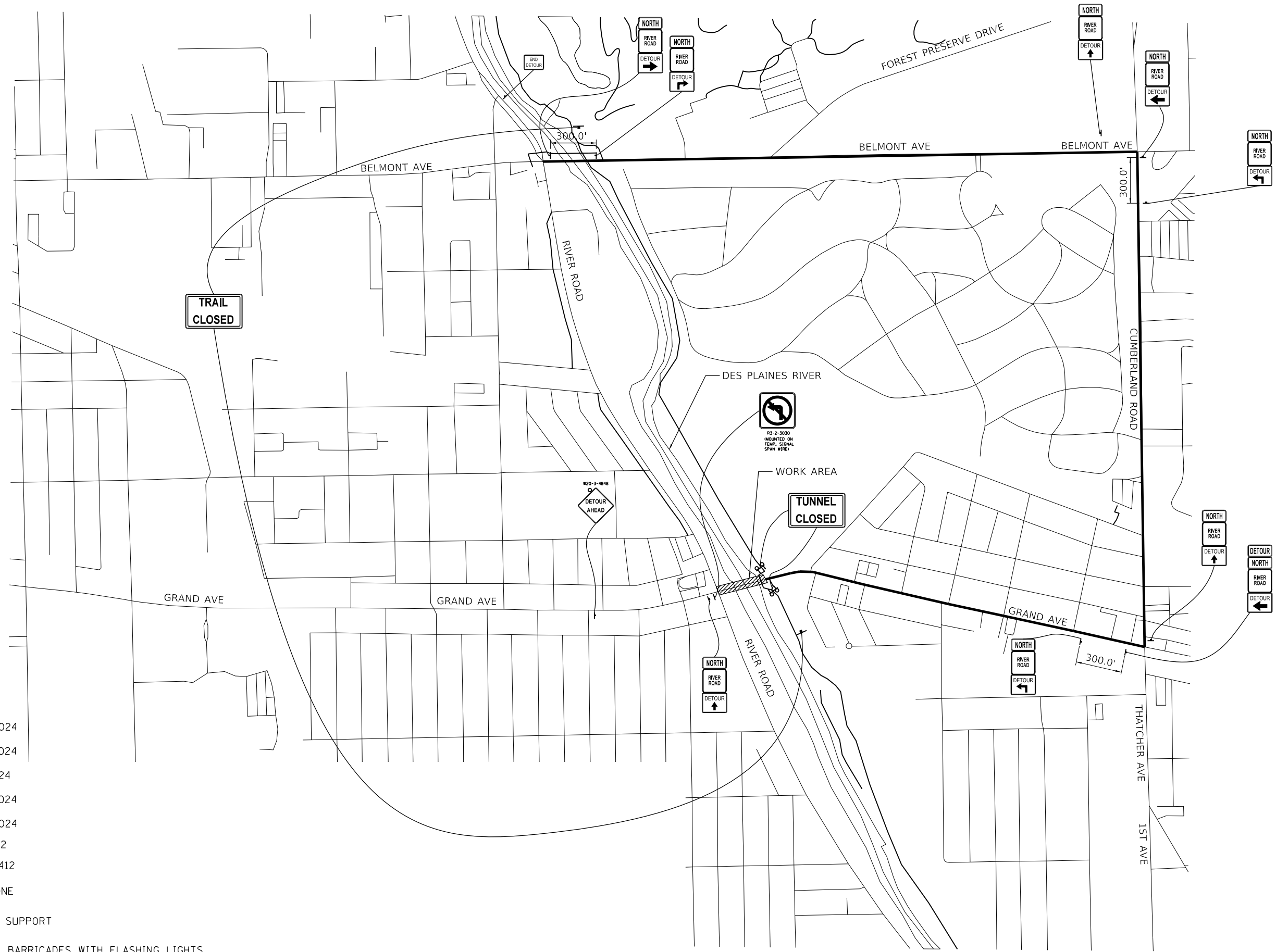
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PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**











<b>EXISTING AND PROPOSED PLAN</b>			
<b>GRAND AVENUE OVER DES PLAINES RIVER</b>			
SCALE: 40.00' / in.	SHEET 1	OF 1 SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	10
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				





**LEGEND**

-  M4-9R-3024
-  M4-9L-3024
-  M4-9-3024
-  M4-9L-3024
-  M4-9R-3024
-  M3-1-2412
-  M4-8A-2412
-  WORK ZONE
-  SIGN ON SUPPORT
-  TYPE III BARRICADES WITH FLASHING LIGHTS

MODEL: D:\dgn\...  
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	DRAWN - #DETR	REVISED -
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PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETOUR PLAN - EB GRAND AVE TO NB RIVER RD  
GRAND AVENUE OVER DES PLAINES RIVER**  
 SCALE: 200.00' / in. SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	12
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



**SUGGESTED STAGING**

**PRESTAGE**

PERFORM CULVERT REPAIRS ON EQUESTRIAN CULVERT

**STAGE I**

SCARIFY BRIDGE ON WESTBOUND HALF OF BRIDGE, PLACE LATEX CONCRETE OVERLAY AND REPAIR BRIDGE JOINTS.

**STAGE II**

SCARIFY BRIDGE ON EASTBOUND HALF OF BRIDGE, PLACE LATEX CONCRETE OVERLAY AND REPAIR BRIDGE JOINTS.

OVERLAY APPROACH SLABS AND EXISTING PAVEMENT AT THE END OF STAGE II.

**SUGGESTED MAINTENANCE OF TRAFFIC**

**PRESTAGE**

CLOSE INSIDE WESTBOUND LANE AND MEDIAN AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN UTILIZING HIGHWAY STANDARD 701606.

MAINTAIN EASTBOUND TRAFFIC LANES.

REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS AND REFLECTORS.

**STAGE I**

CLOSE WESTBOUND LANES AND MEDIAN AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN UTILIZING HIGHWAY STANDARD 701606.

MAINTAIN TWO-LANE TWO-WAY TRAFFIC ON EASTBOUND PAVEMENT ACROSS BRIDGE.

REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS AND REFLECTORS.

**STAGE II**

CLOSE TWO EASTBOUND LANES AND MEDIAN AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLAN UTILIZING HIGHWAY STANDARD 701606.

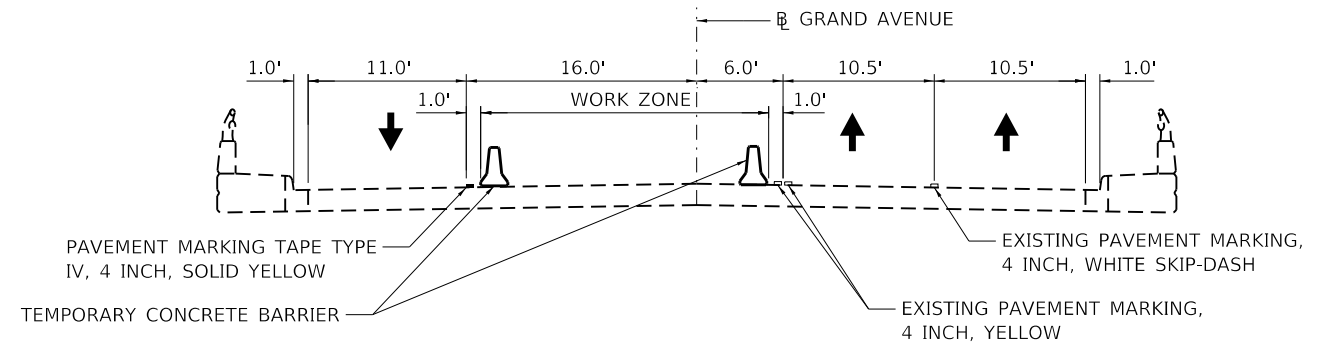
MAINTAIN TWO-LANE TWO-WAY TRAFFIC ON WESTBOUND PAVEMENT ACROSS BRIDGE.

REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS AND REFLECTORS.

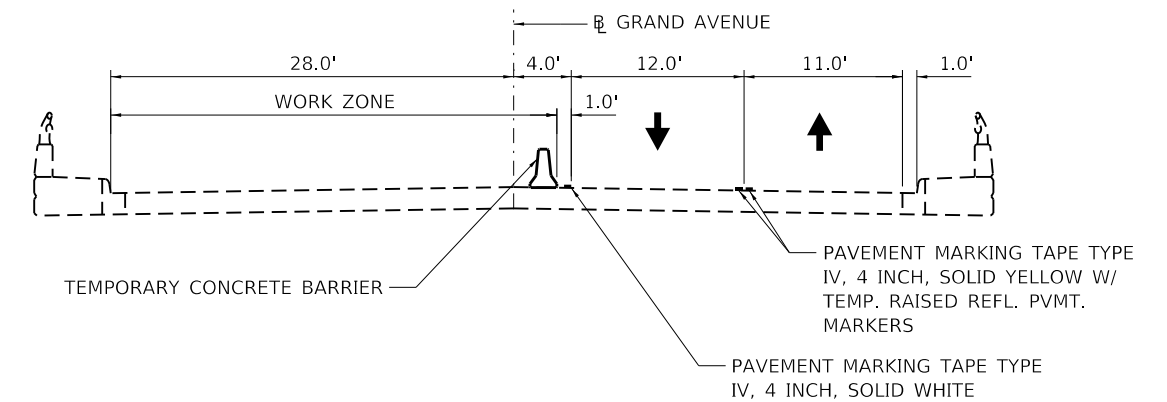
USE LANE CLOSURES TO OVERLAY APPROACH SLABS AND PAVEMENT AT THE END OF STAGE II UTILIZING HIGHWAY STANDARD 701606 AND 701701.

**GENERAL NOTES**

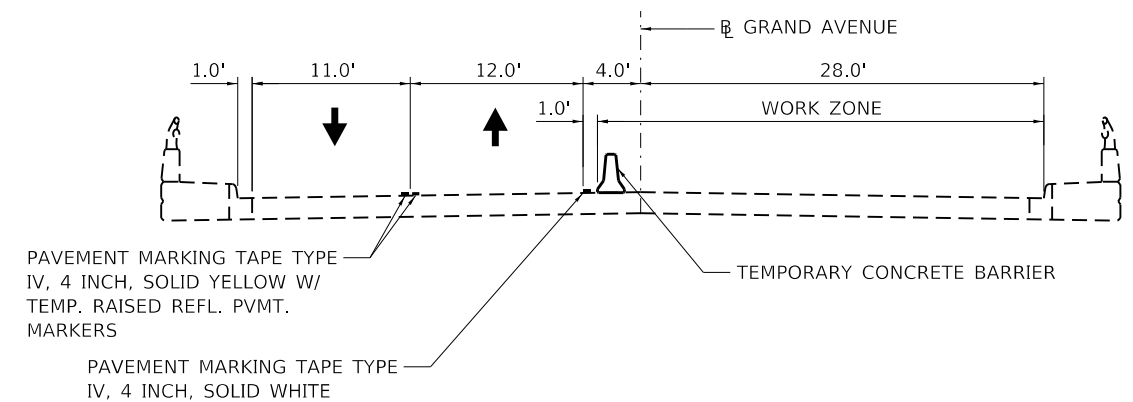
1. THE CONTRACTOR SHALL NOT MOUNT SIGNS ON EXISTING SIGNS.
2. CONTRACTOR SHALL MAINTAIN SATISFACTORY INGRESS AND EGRESS TO ADJACENT PROPERTIES THROUGHOUT THE CONSTRUCTION.
3. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV.
4. REMOVAL OF TEMPORARY PAVEMENT MARKINGS SHALL BE PAID FOR AS TEMPORARY PAVEMENT MARKING REMOVAL.
5. EXISTING, CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED. THIS WORK SHALL BE PAID FOR AS PAVEMENT MARKING REMOVAL-WATER BLASTING.
6. THE EXISTING PAVEMENT MARKINGS THAT HAVE BEEN REMOVED SHALL BE REPLACED IN-KIND. CONTRAST PREFORMED PLASTIC PAVEMENT MARKINGS, TYPE B SHALL BE PLACED ON CONCRETE SURFACES.
7. THERMOPLASTIC PAVEMENT MARKING SHALL BE PLACED ON HOT-MIX ASPHALT SURFACES.
8. USE SUGGESTED TRAFFIC CONTROL AND PROTECTION PLAN IN CONJUNCTION WITH STANDARD 701606 AND APPLICABLE PORTIONS OF DISTRICT ONE STANDARD TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS. ADDITIONAL SIGNAGE MAY BE REQUIRED BY THE RESIDENT ENGINEER.
9. ALL WORK AND SIGNAGE IN THE PLANS SHALL BE INCLUDED IN THE PAY ITEM FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL) UNLESS OTHERWISE PROVIDED IN THE PLANS.
10. A MONO-DIRECTIONAL FLASHING AMBER BEACON SHALL BE MOUNTED ON THE FIRST TWO WARNING SIGNS ON EACH APPROACH DURING HOURS OF DARKNESS.
11. TEMPORARY CONCRETE BARRIER SHALL BE PLACED AS SHOWN ON THE SUGGESTED TRAFFIC CONTROL AND PROTECTION PLAN AND IN CONJUNCTION WITH STANDARD 704001.



**TYPICAL SECTION – PRESTAGE**



**TYPICAL SECTION – STAGE I**



**TYPICAL SECTION – STAGE II**

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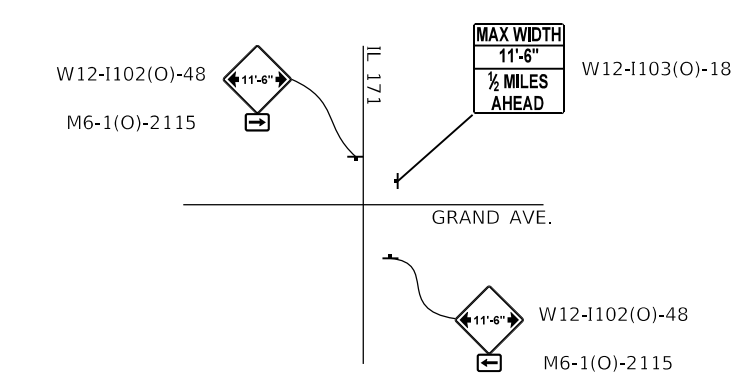
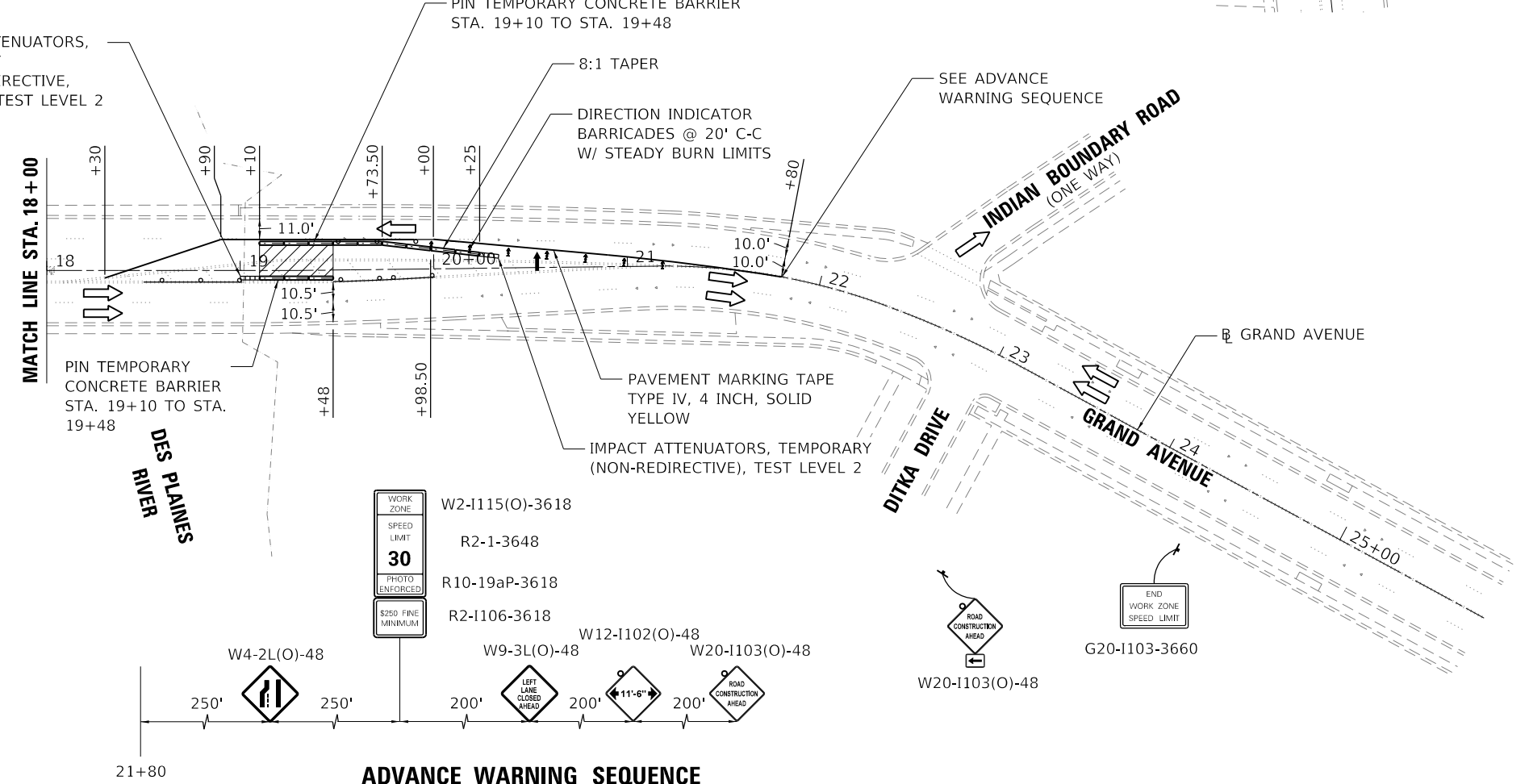
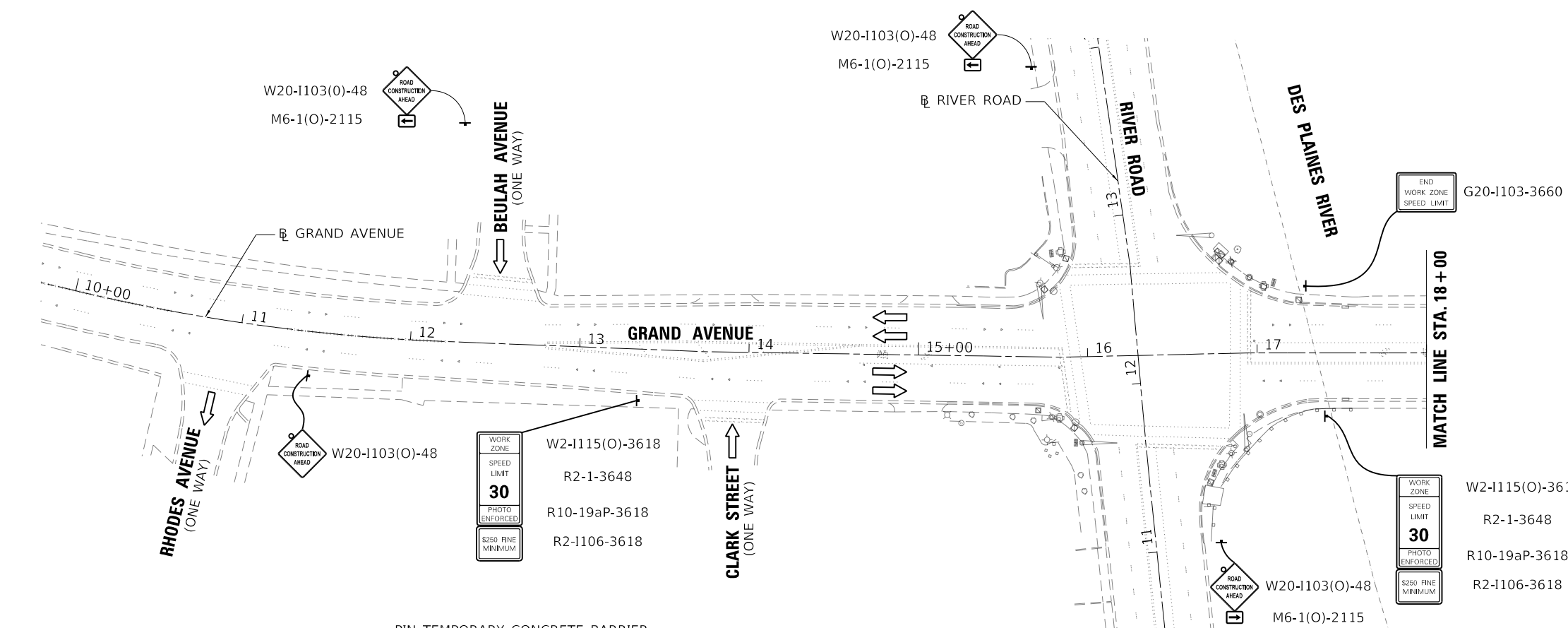
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PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC TYPICAL SECTIONS AND NOTES  
GRAND AVENUE OVER DES PLAINES RIVER**

SCALE: 40.00' / in. SHEET 1 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	13
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



**LEGEND**

- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- DIRECTION OF TRAFFIC
- ARROW BOARD
- SIGN
- DIRECTION INDICATOR BARRIAD WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADES WITH FLASHING LIGHTS
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT  
50' SPACES ON TANGENT  
25' SPACES ON TAPER  
10' SPACES ON CURVE

MODEL: D:\p1\17105-746\DOT\Direct\11W0\_11\_Grand\_Ave\_DesPlaines\_River\CADD\_Sheets\CUIRD160867-51114\_Prestage.dgn



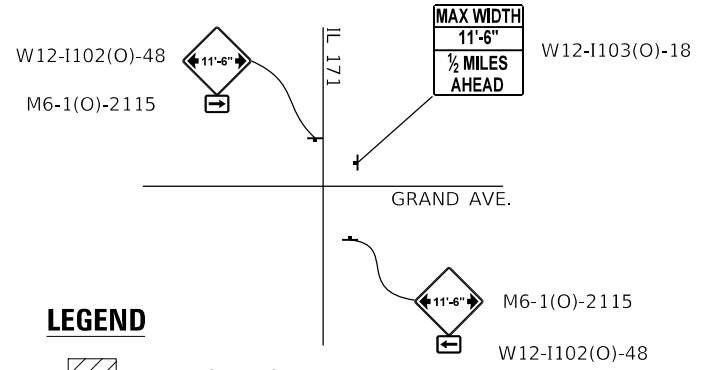
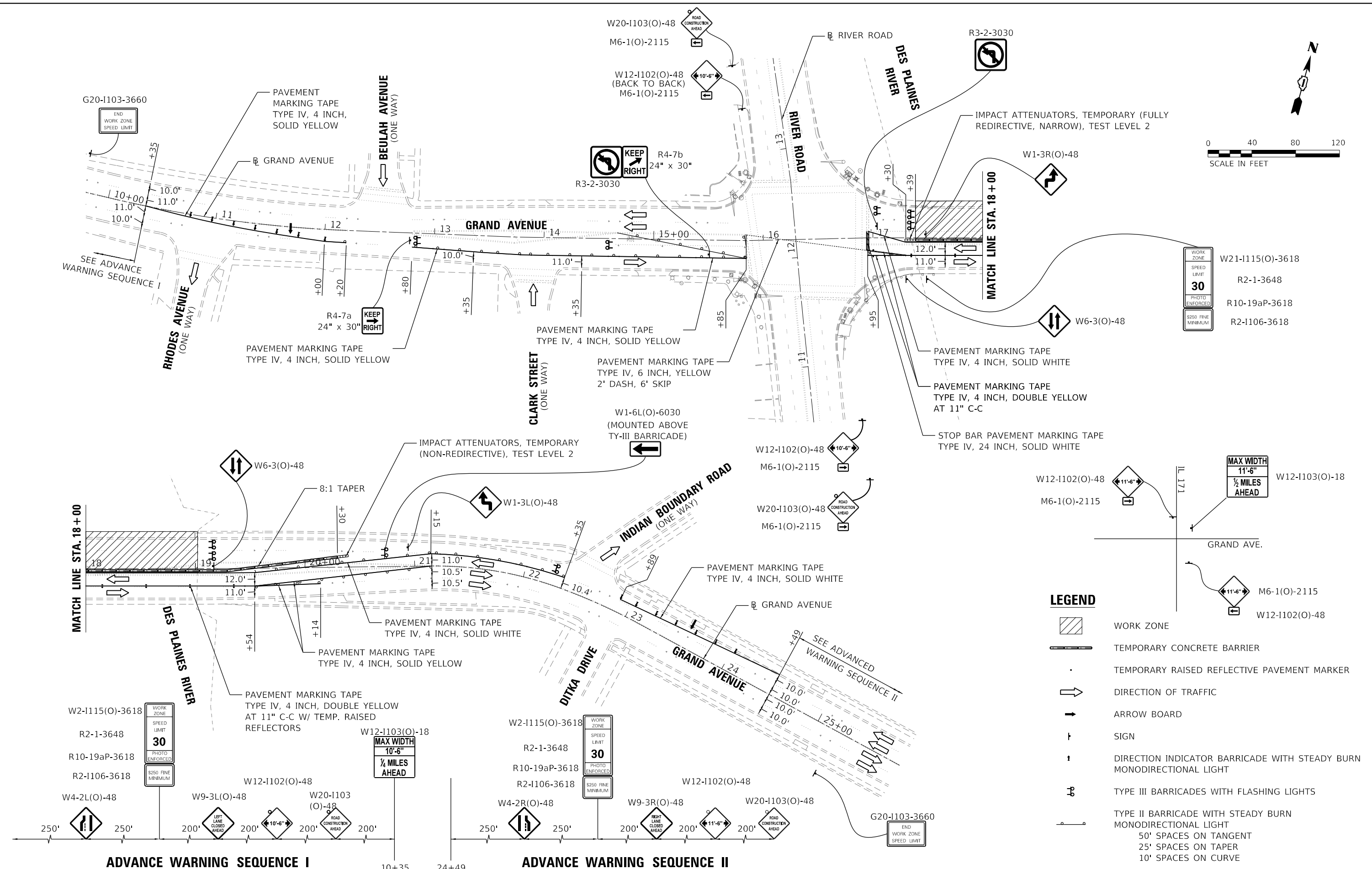
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PLOT DATE = 8/13/2019	CHECKED - RTB	REVISED -
	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC PRESTAGE  
GRAND AVENUE OVER DES PLAINES RIVER**

SCALE: 80.00' / in. SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	14
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



**LEGEND**

- WORK ZONE
- TEMPORARY CONCRETE BARRIER
- TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER
- DIRECTION OF TRAFFIC
- ARROW BOARD
- SIGN
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADES WITH FLASHING LIGHTS
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT  
50' SPACES ON TANGENT  
25' SPACES ON TAPER  
10' SPACES ON CURVE

W2-1115(O)-3618  
R2-1-3648  
R10-19aP-3618  
R2-1106-3618

WORK ZONE
SPEED LIMIT
30
PHOTO ENFORCED
S250 FINE MINIMUM

W12-1103(O)-18

MAX WIDTH
10'-6"
1/2 MILES AHEAD

W2-1115(O)-3618  
R2-1-3648  
R10-19aP-3618  
R2-1106-3618

WORK ZONE
SPEED LIMIT
30
PHOTO ENFORCED
S250 FINE MINIMUM



USER NAME = ken.drabant	DESIGNED - KJD	REVISED -
PLOT SCALE = 80.00' / in.	DRAWN - KJD	REVISED -
PLOT DATE = 8/13/2019	CHECKED - RTB	REVISED -
	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

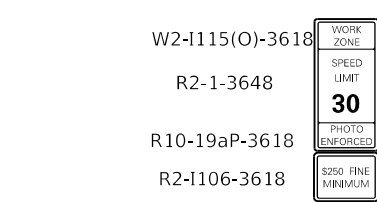
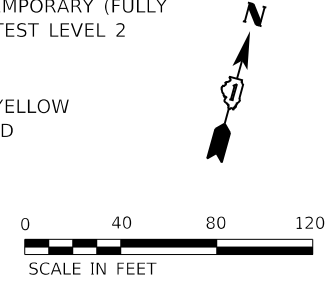
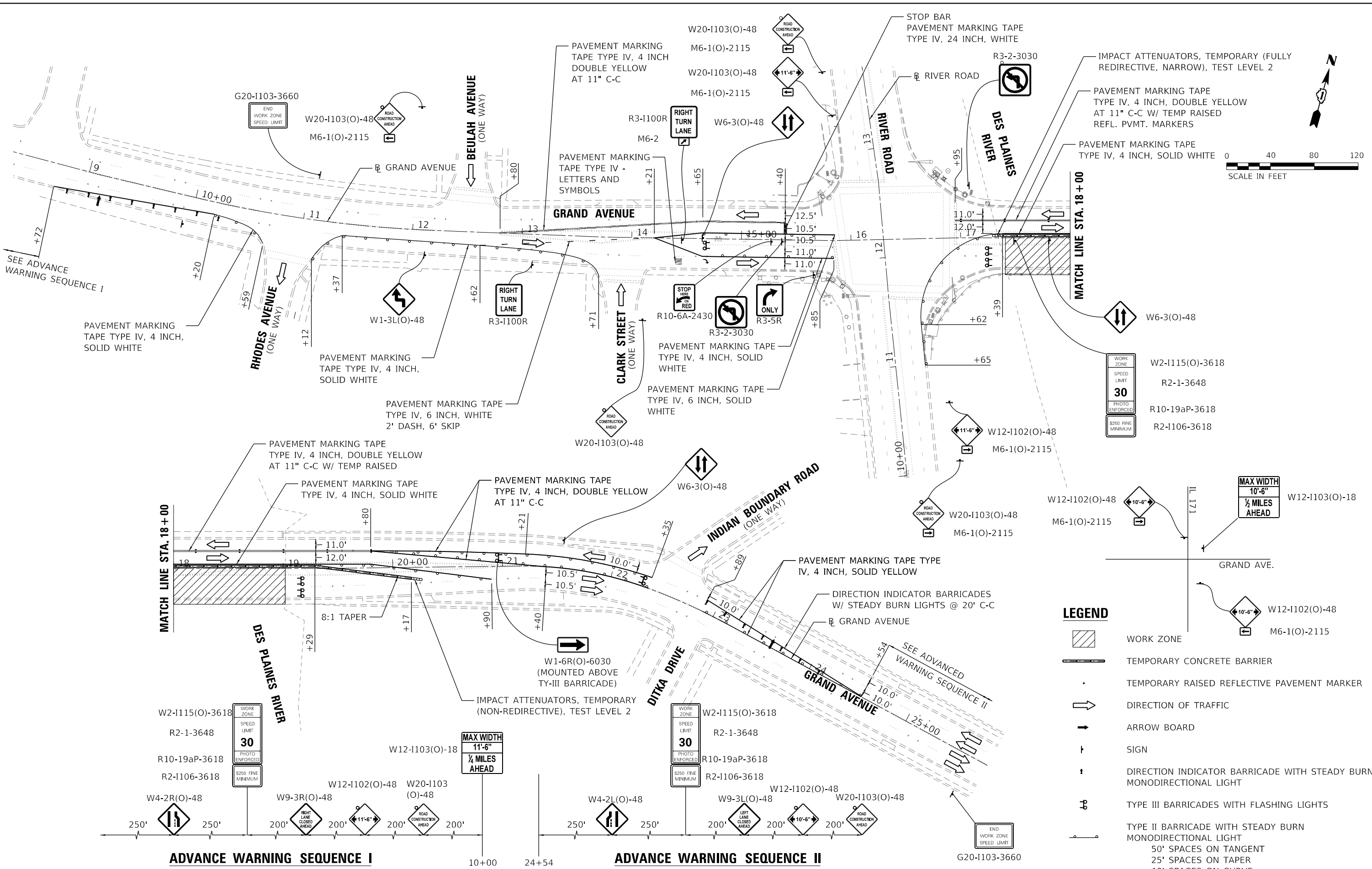
MAINTENANCE OF TRAFFIC STAGE I  
GRAND AVENUE OVER DES PLAINES RIVER

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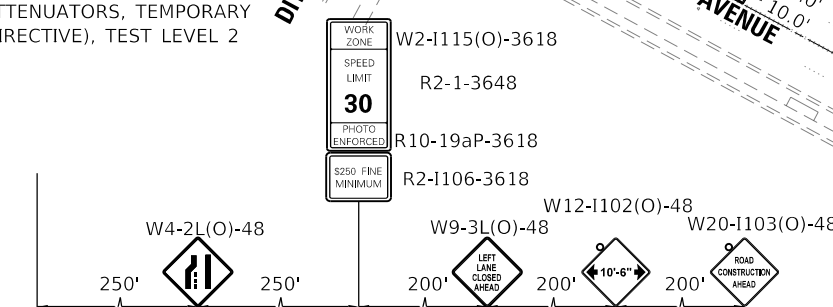
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	15
				CONTRACT NO. 60R67
				ILLINOIS FED. AID PROJECT

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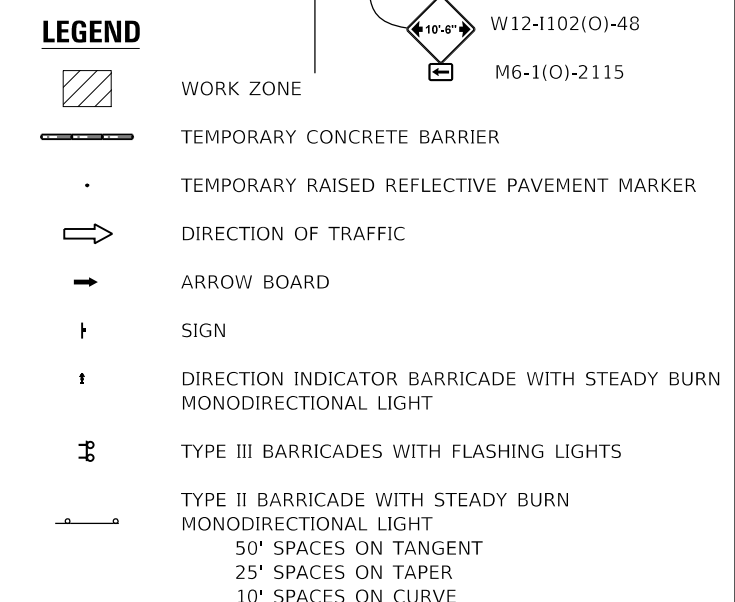
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**ADVANCE WARNING SEQUENCE I**



**ADVANCE WARNING SEQUENCE II**



USER NAME = ken.drabant	DESIGNED - KJD	REVISED -
	DRAWN - KJD	REVISED -
PLOT SCALE = 80.00' / in.	CHECKED - RTB	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC STAGE II  
 GRAND AVENUE OVER DES PLAINES RIVER

SCALE: 80.00' / in. SHEET 4 OF 4 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	16
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

**NORTHWEST QUADRANT**

**NORTHEAST QUADRANT**

DES PLAINES RIVER RD

GRAND AVE






MODEL: Default  
 FILE: \\nortel1\pub\harcourt\dot\illinois\pwr\pwr\DOT\Documents\1376\1376A-BR(11)\Traffic\1376A-BR(11)-SOD.dwg

**NOTE:**  
 GUTTER FLAG SLOPE IS 5% UNLESS NOTED OTHERWISE

REFERENCE BENCH MARK ELEV 625.143  
 BENCHMARK: SURVEY DISK AT BRIDGE HEADWALL  
 LOCATION: NE CORNER OF INTERSECTION

REFERENCE BENCH MARK ELEV 625.143  
 BENCHMARK: SURVEY DISK AT BRIDGE HEADWALL  
 LOCATION: NE CORNER OF INTERSECTION

LEGEND	
	EXISTING LENGTH
	PROPOSED SIDE CURB
	EXISTING ELEVATION/SLOPE
	PROPOSED SIDEWALK
	DETECTABLE WARNINGS
	SIDEWALK REMOVAL REPLACE W/TOPSOIL & SOD

USER NAME = plascencal	DESIGNED - RR	REVISED -
	DRAWN - RR	REVISED -
PLOT SCALE = 10.0000' / in.	CHECKED - LP	REVISED -
PLOT DATE = 7/24/2019	DATE - 12/14/2018	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

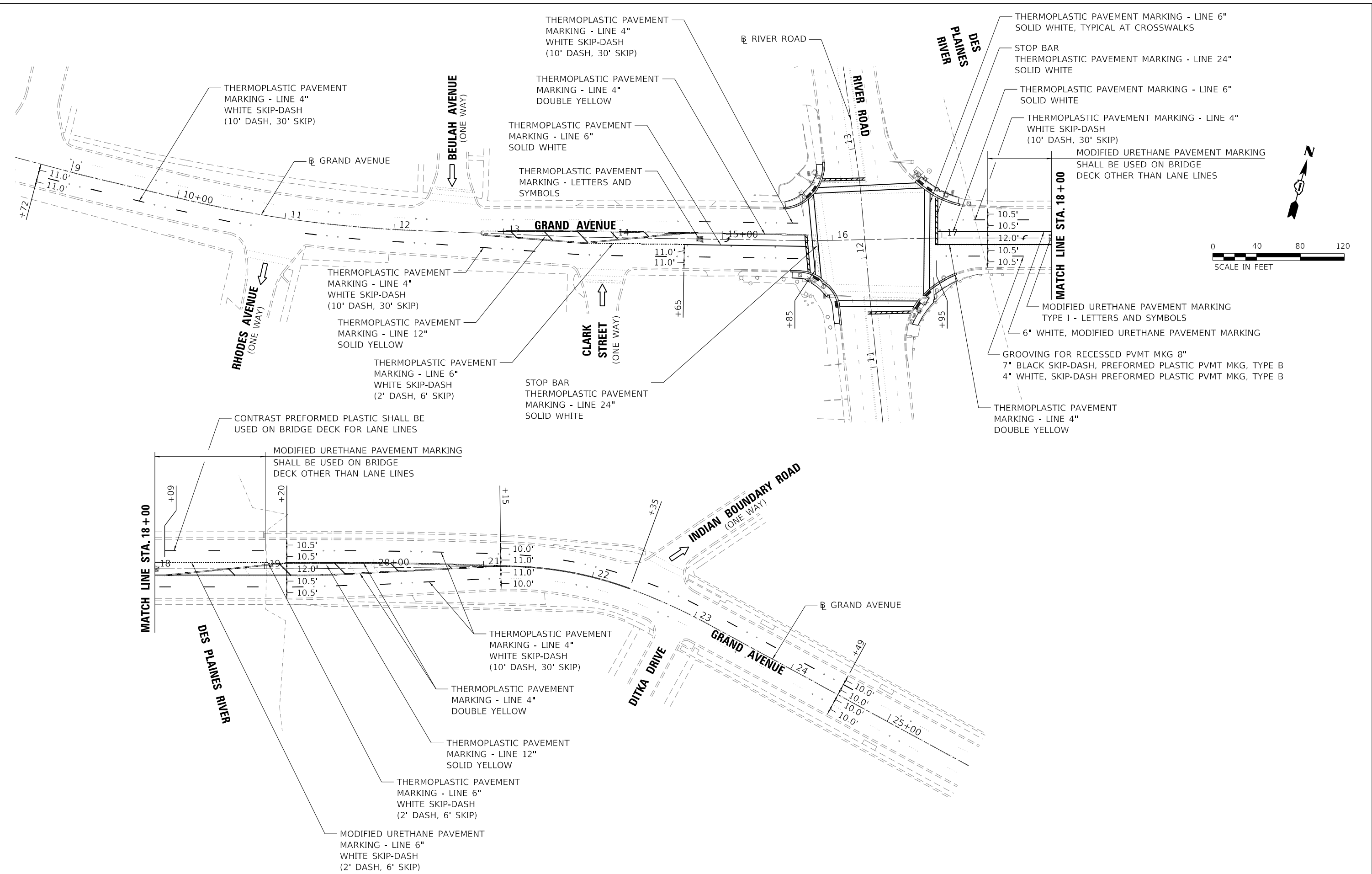
**ADA SIDEWALK DETAILS  
 GRAND AVENUE AT DES PLAINES RIVER ROAD**

SCALE: 1"=5' SHEET 1 OF 2 SHEETS STA. - TO STA. -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	17
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



MODEL: D:\p\17105746\DOT\BPRDCT\11\VO\_11\_Grand\_Ave\_@\_DesPlaines\_River\CADD\_Sheets\CADD160R67-SHT19\_PMK.dgn



USER NAME = ken.drabant	DESIGNED - KJD	REVISED -
PLOT SCALE = 80.00' / in.	DRAWN - KJD	REVISED -
PLOT DATE = 8/13/2019	CHECKED - RTB	REVISED -
	DATE - 08/09/2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PAVEMENT MARKING PLAN			
GRAND AVENUE OVER DES PLAINES RIVER			
SCALE: 80.00' / in.	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	19
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

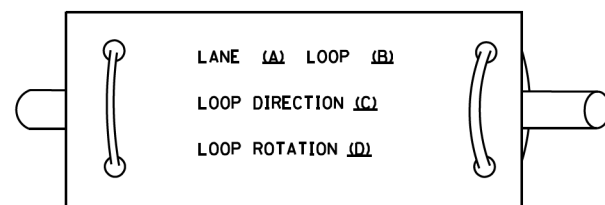




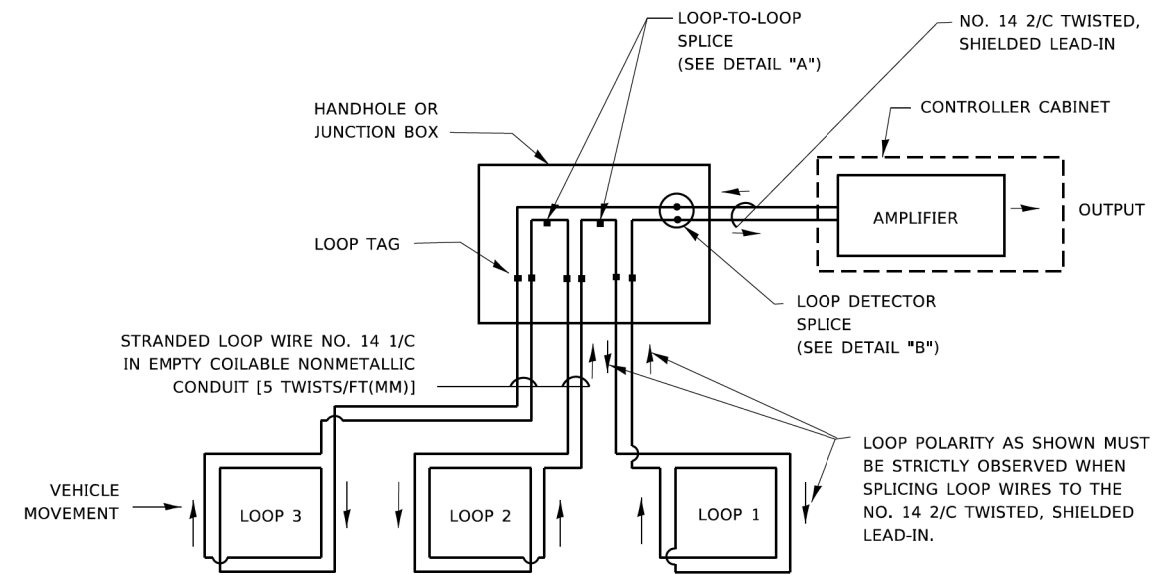
**LOOP DETECTOR NOTES**

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

**LOOP LEAD-IN CABLE TAG**

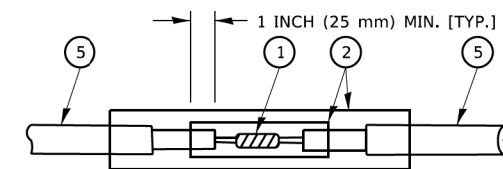


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

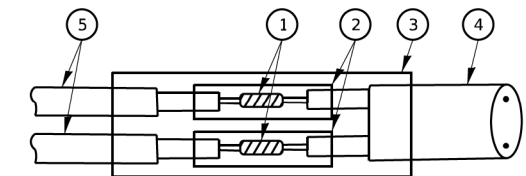


**DETECTOR LOOP WIRING SCHEMATIC**

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

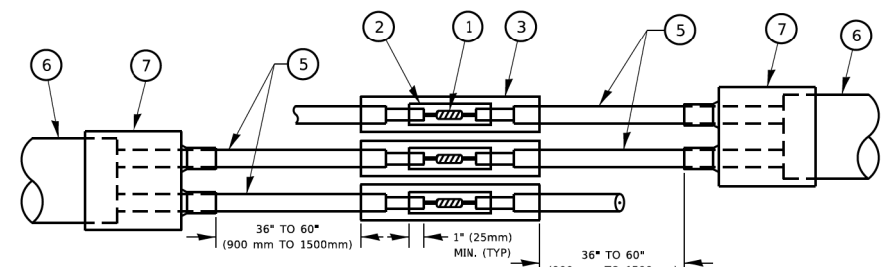


DETAIL "A"  
LOOP-TO-LOOP SPLICE

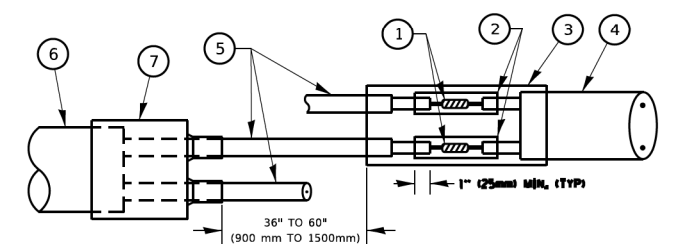


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PREFORMED LOOP
- 6 XL POLYOLEFIN 2 CONDUCTOR
- 7 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

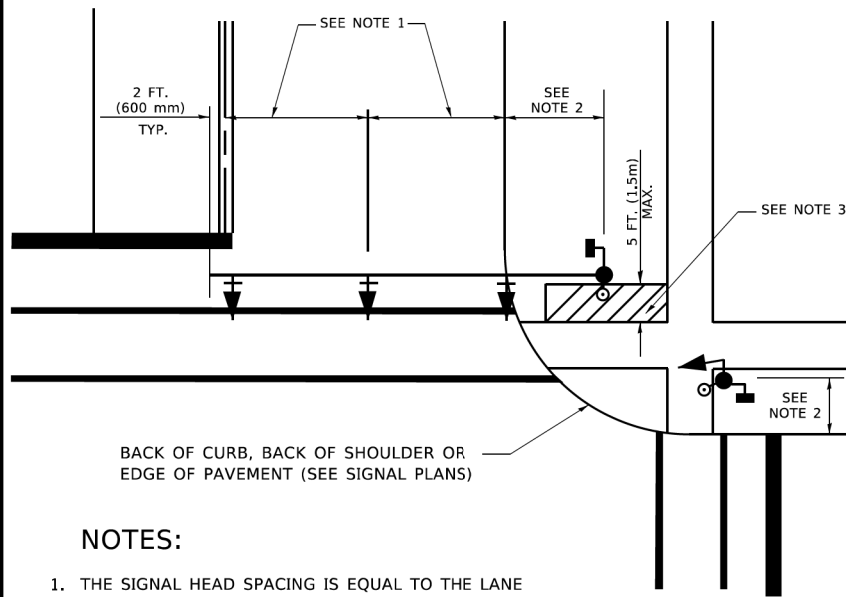
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.U. RTE. 1376	SECTION 136A-BR(11)	COUNTY COOK	TOTAL SHEETS 59	SHEET NO. 21
TS-05		CONTRACT NO. 60R67		
ILLINOIS FED. AID PROJECT				

**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST**

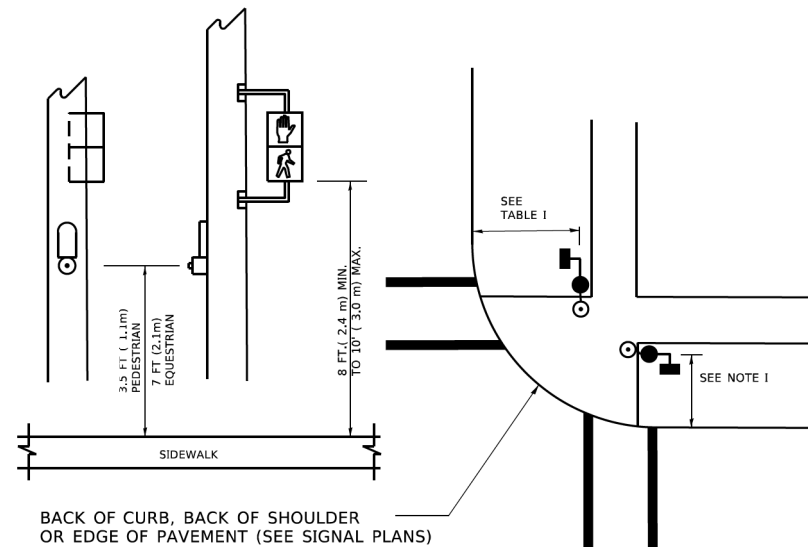
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



**NOTES:**

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

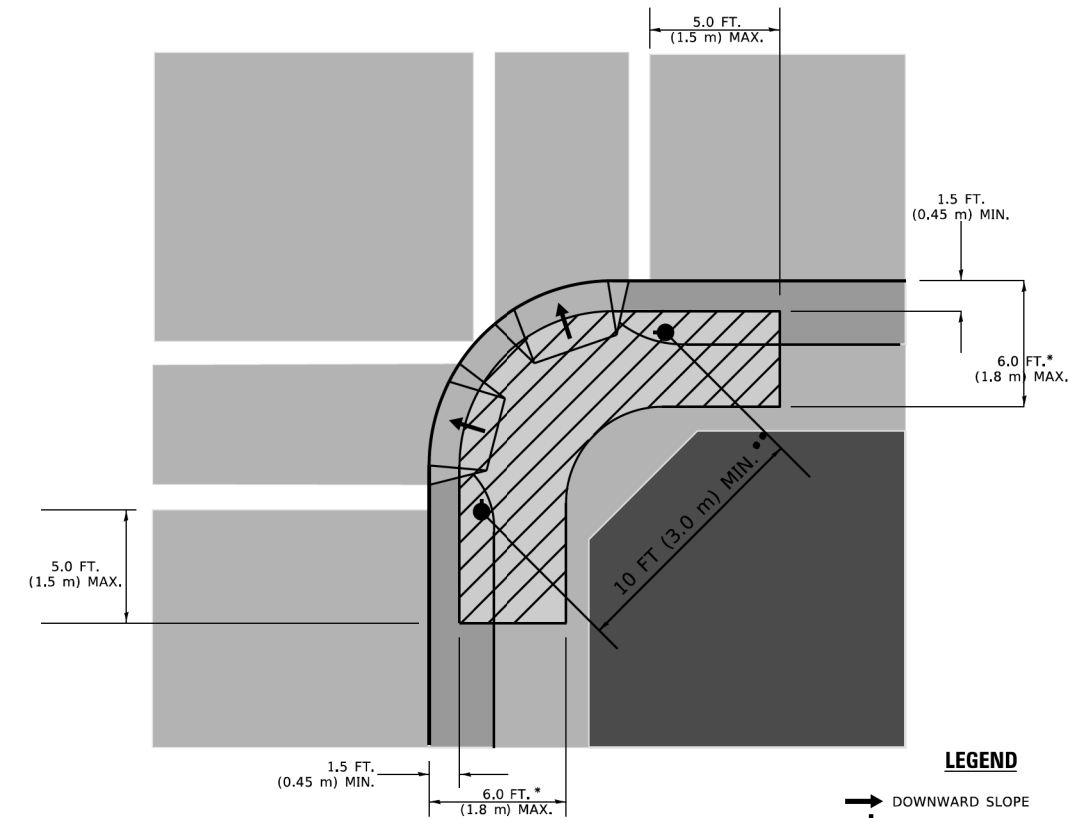
**PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST**



**NOTES:**

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

**RECOMMENDED PUSHBUTTON LOCATIONS**



**LEGEND**

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

**NOTES:**

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

**TRAFFIC SIGNAL EQUIPMENT OFFSET**

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

**NOTES:**

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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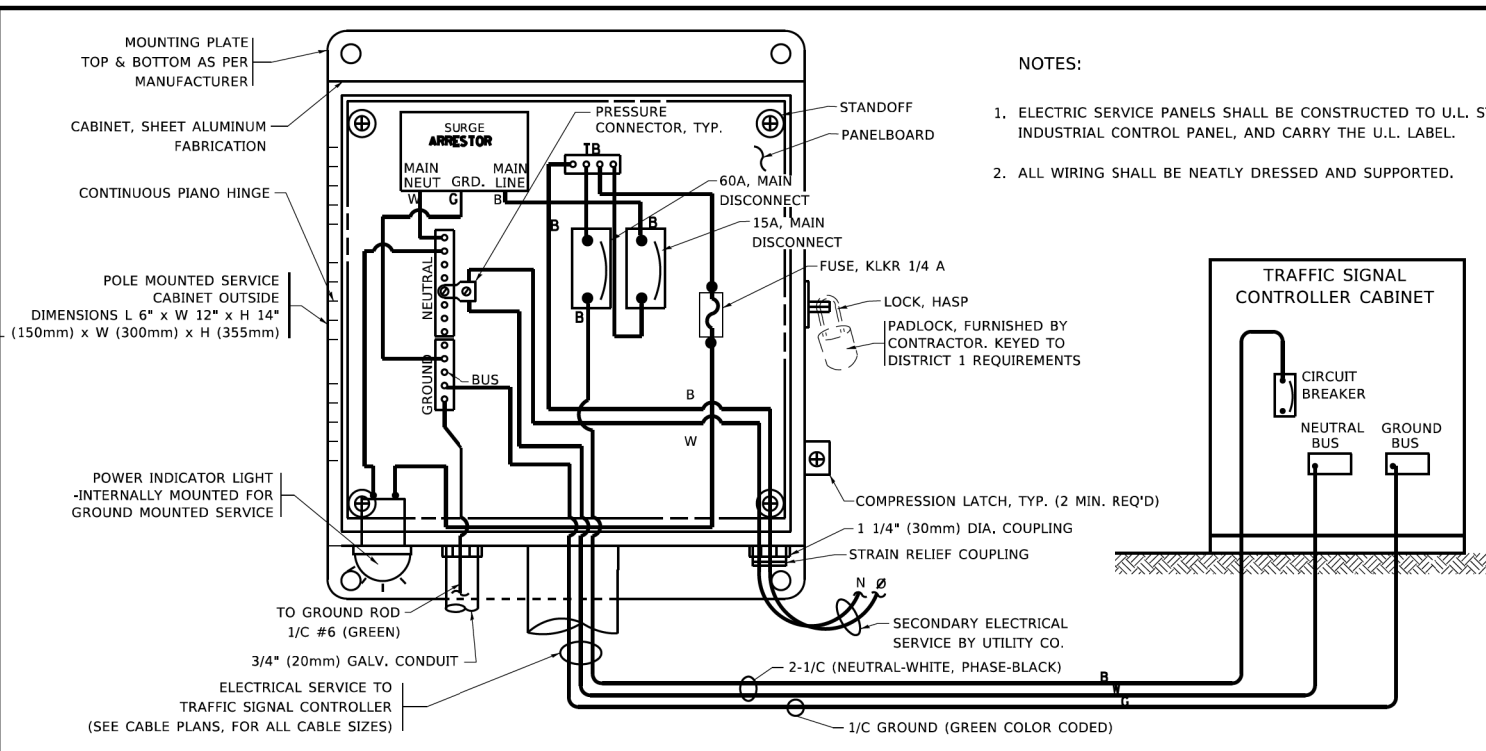
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

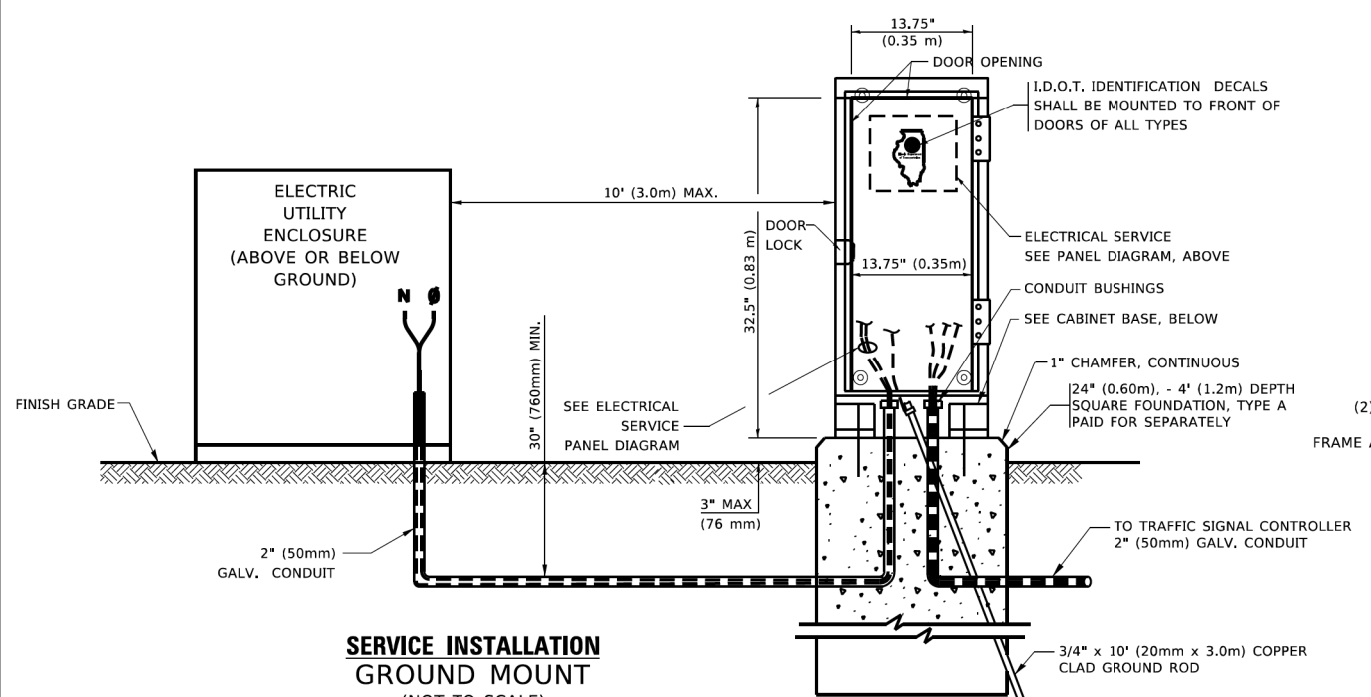
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

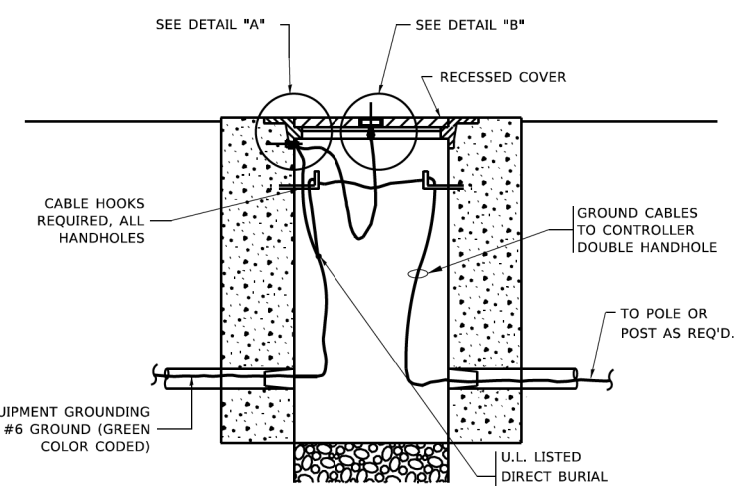
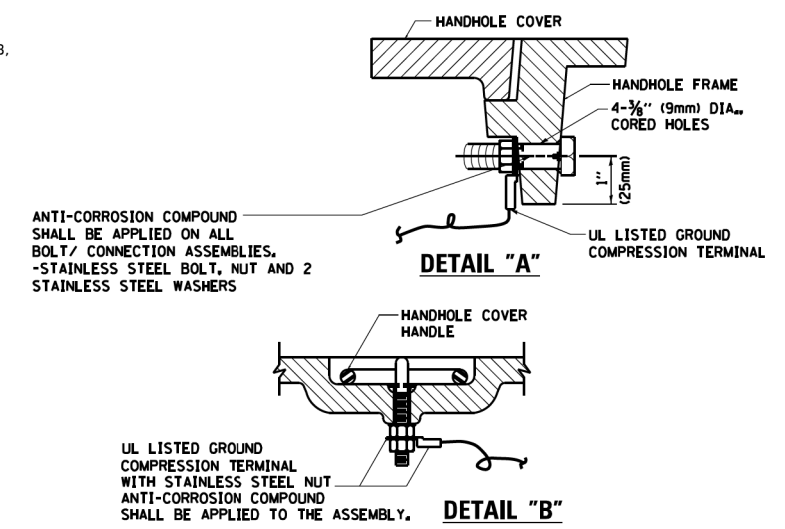
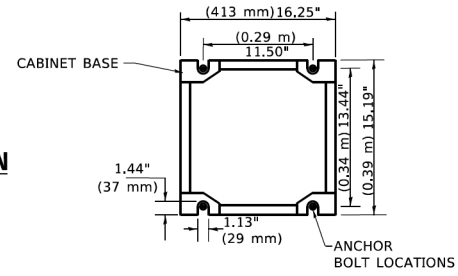
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>TS-05</b>		CONTRACT NO. 60R67		
ILLINOIS FED. AID PROJECT				



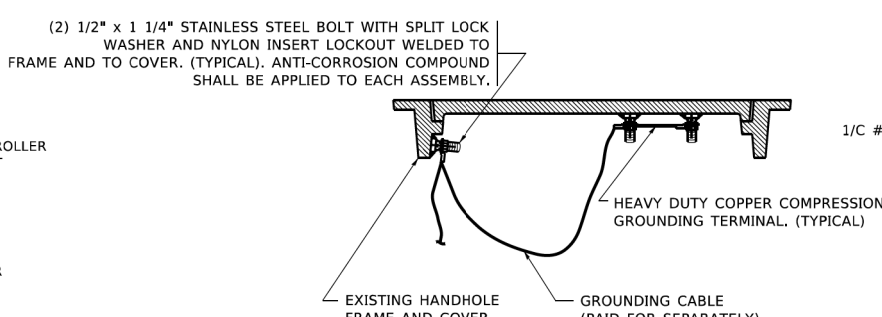
**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)**  
**SERVICE INSTALLATION POLE MOUNT (SHOWN)**  
 (NOT TO SCALE)



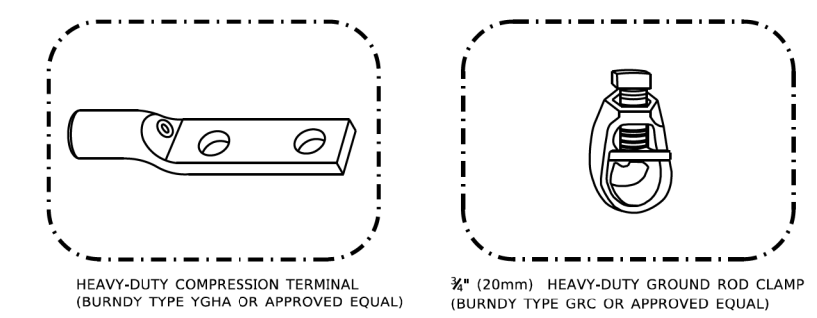
**CABINET - BASE BOLT PATTERN**  
 (NOT TO SCALE)



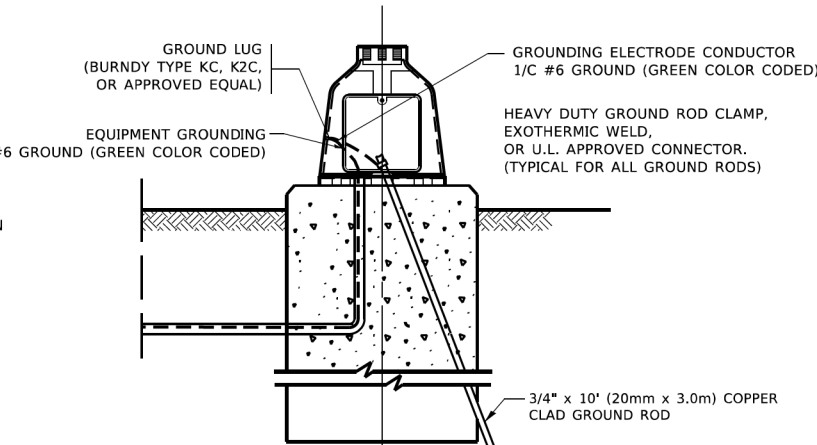
**HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)



**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**  
 (NOT TO SCALE)



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
  - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
  - 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
  - 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
  - 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**MAST ARM POLE /POST-GROUNDING DETAIL**  
 (NOT TO SCALE)

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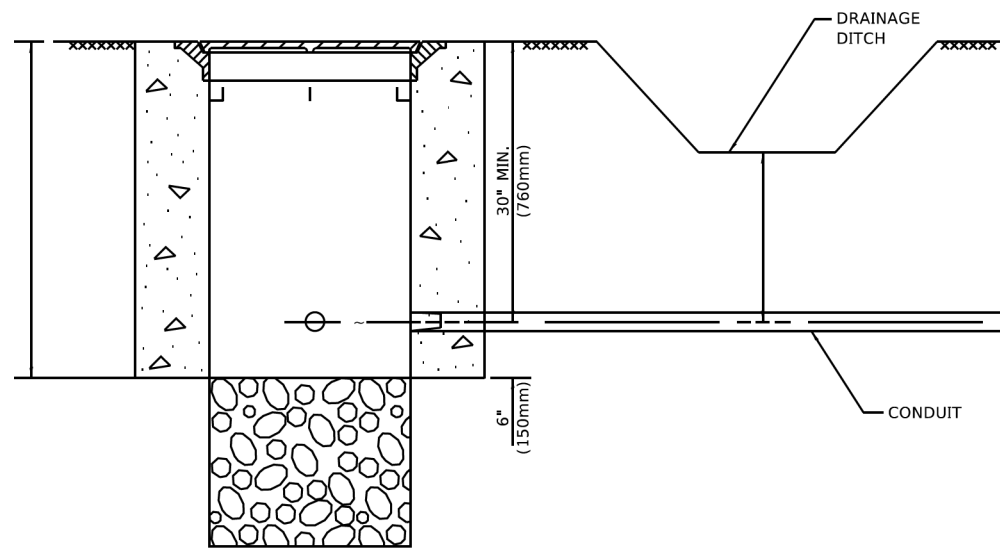
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE**  
**STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	23
<b>TS-05</b>		CONTRACT NO. 60R67		
ILLINOIS FED. AID PROJECT				

SCALE: NONE SHEET 4 OF 7 SHEETS STA. TO STA.

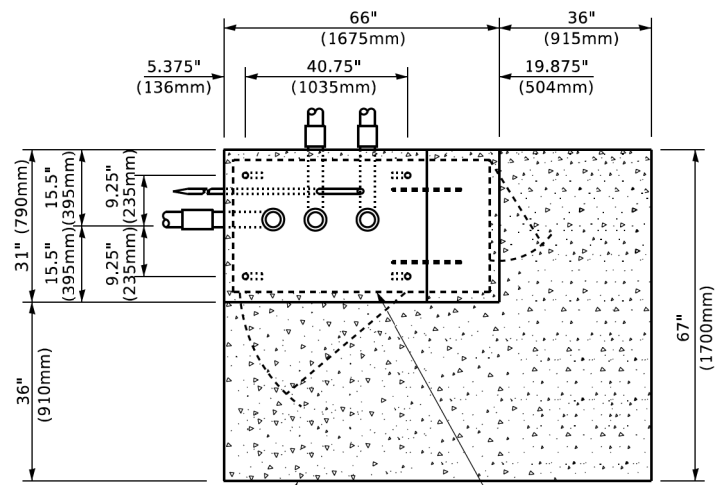




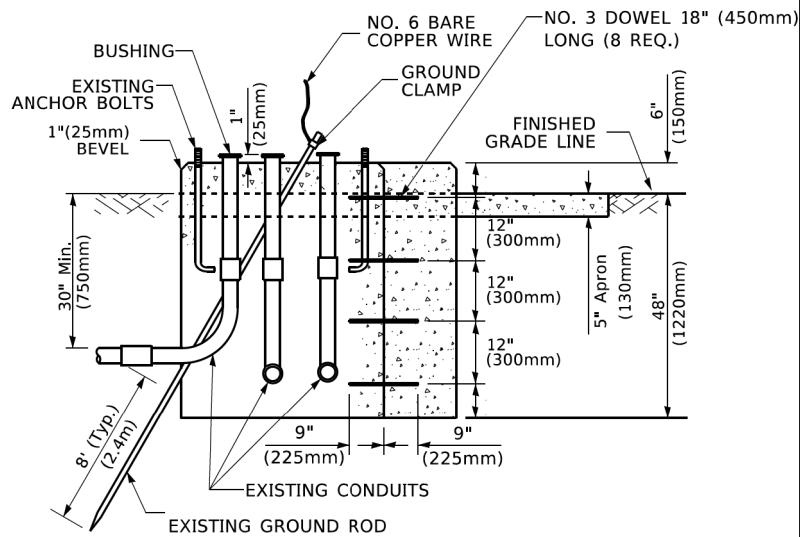
**NOTES:**

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

**HANDHOLE WITH MINIMUM CONDUIT DEPTH**  
(NOT TO SCALE)



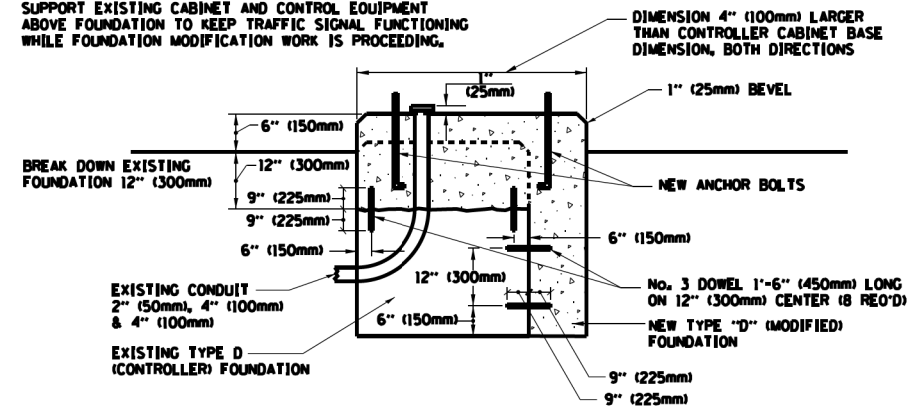
**TOP VIEW**  
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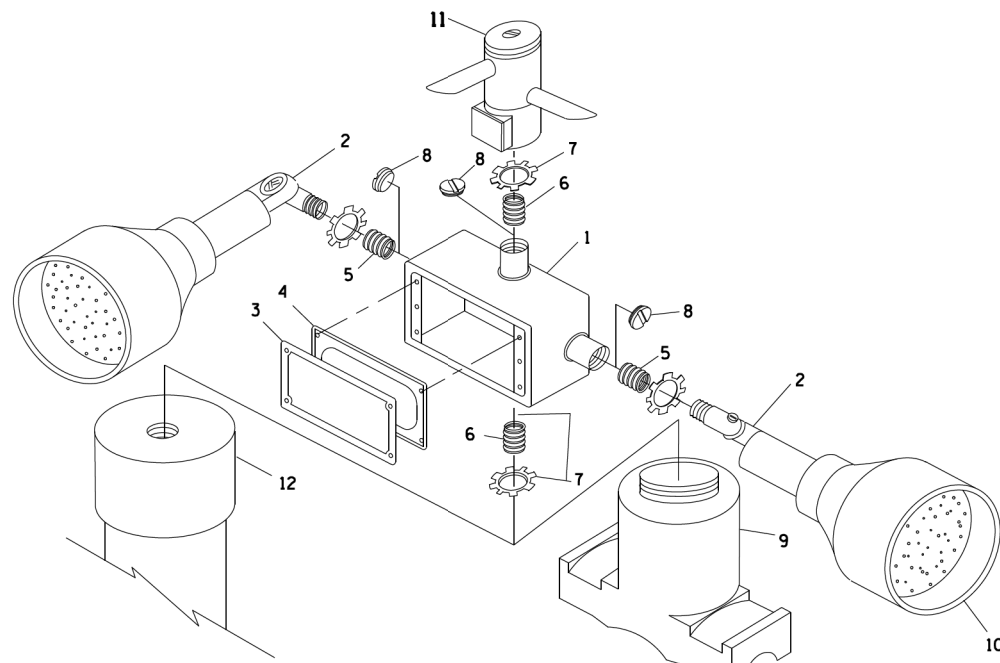
**MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION**  
(NOT TO SCALE)

**NOTE:**

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



**MODIFY EXISTING TYPE "D" FOUNDATION**



**POST CAP MOUNT**

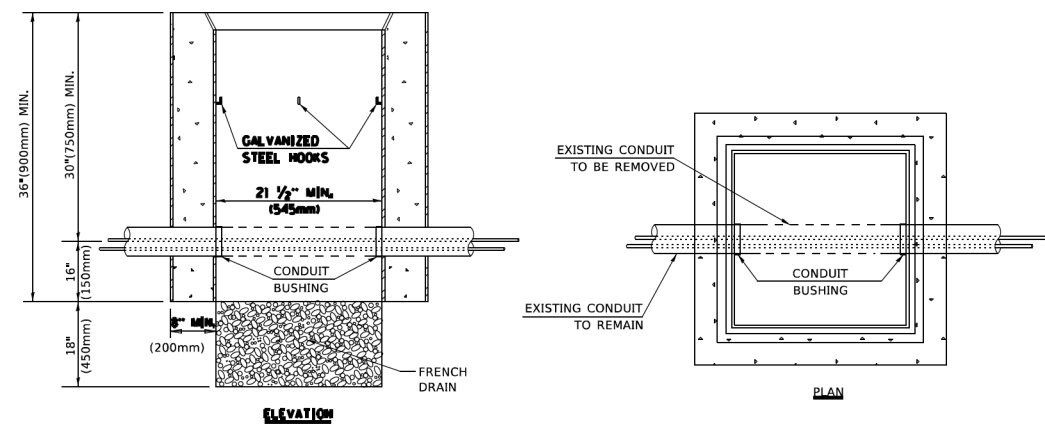
**MAST ARM MOUNT**

**EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL**

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

**NOTES:**

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT  
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT  
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



**NOTES:**

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

**HANDHOLE TO INTERCEPT EXISTING CONDUIT**

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

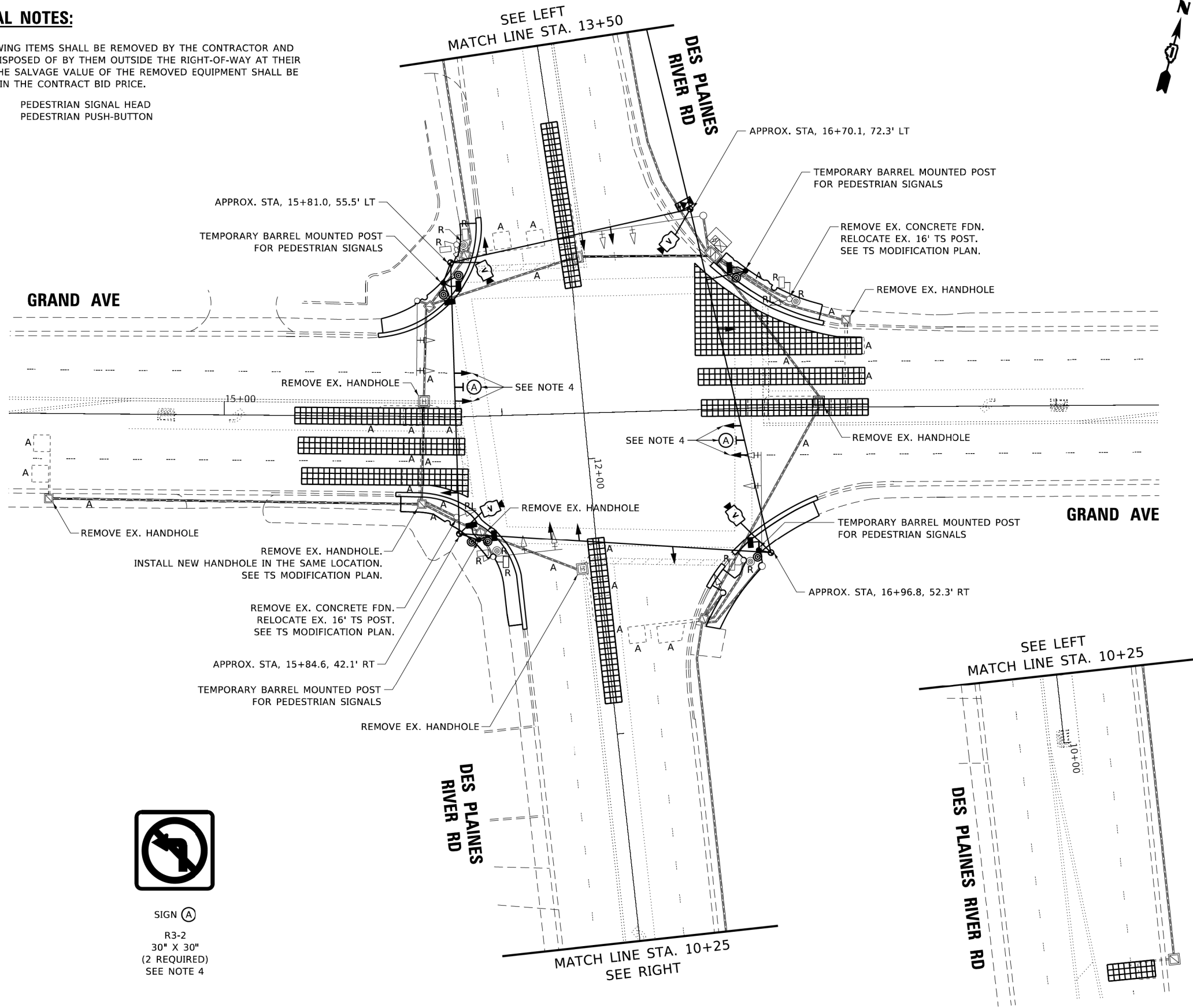
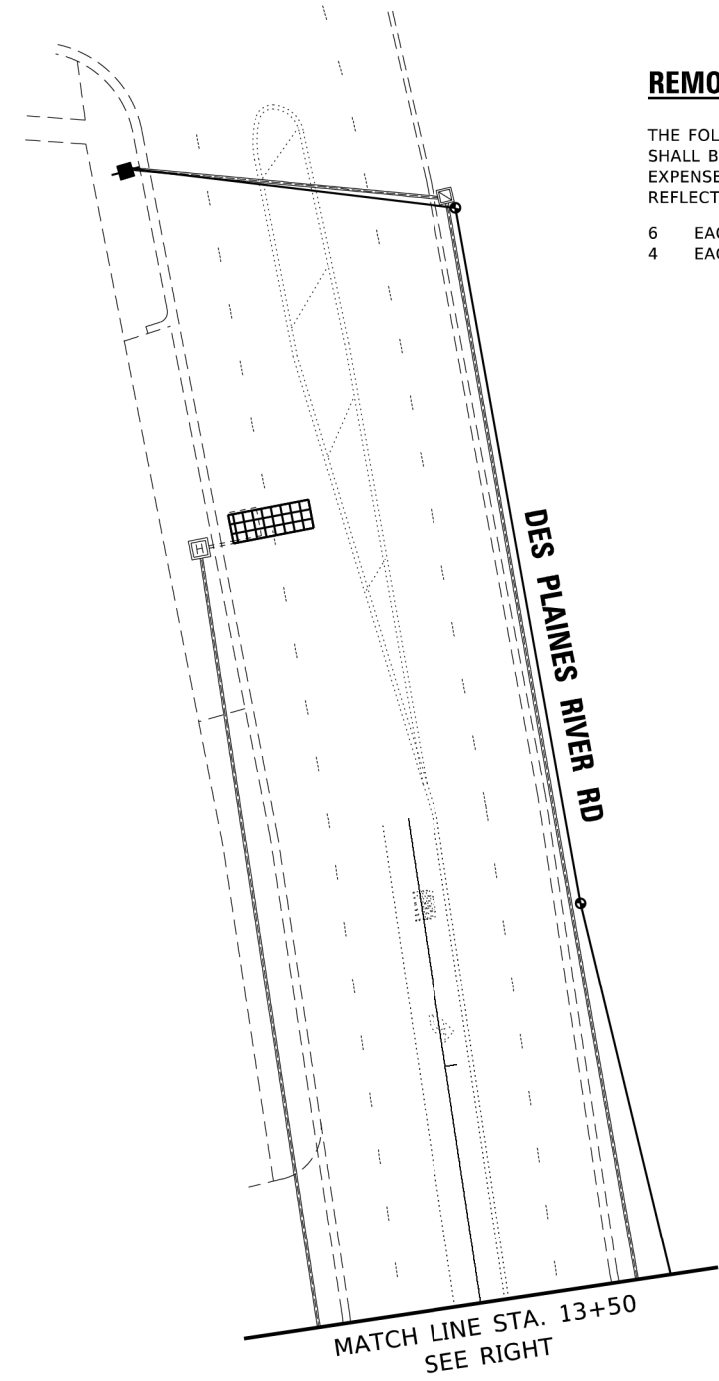
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	25
TS-05		CONTRACT NO. 60R67		
ILLINOIS FED. AID PROJECT				



**REMOVAL NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 6 EACH PEDESTRIAN SIGNAL HEAD
- 4 EACH PEDESTRIAN PUSH-BUTTON



**CONSTRUCTION NOTES:**

1. GENERAL LOCATIONS FOR THE BARREL MOUNTED POSTS FOR THE PEDESTRIAN SIGNAL EQUIPMENT HAVE BEEN PROVIDED. ADDITIONAL BARREL MOUNTED POSTS MAY BE NEEDED IN ORDER TO MAINTAIN ADA COMPLIANCE. THE PEDESTRIAN SIGNAL EQUIPMENT SHALL BE BAGGED AND DISCONNECTED WHEN NOT IN USE.
2. THE LOCATIONS FOR THE TEMPORARY SIGNAL HEADS ARE SHOWN FOR THE PRE-STAGE CONDITION. THE TEMPORARY SIGNAL HEADS SHALL BE RELOCATED TO MATCH THE LANE LINES PER THE MOT PLANS.
3. ALL EXISTING CABLE IN THE SOUTHEAST, SOUTHWEST, AND NORTHWEST QUADRANT SHALL BE REMOVED. NEW CABLE SHALL BE INSTALLED THROUGH THE PROPOSED CONDUIT SYSTEM.
4. THE LEFT TURN SIGNAL INDICATIONS SHALL BE BAGGED AND DISCONNECTED DURING STAGES 1 AND 2 WHEN THE LEFT TURN MOVEMENTS ARE RESTRICTED FOR GRAND AVE. A R3-2 SIGN SHALL BE PROVIDED FOR EACH DIRECTION.



SIGN (A)  
R3-2  
30" X 30"  
(2 REQUIRED)  
SEE NOTE 4

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC SIGNAL INSTALLATION PLAN AND  
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PLAN  
DES PLAINES RIVER RD AND GRAND AVE

TS 4985

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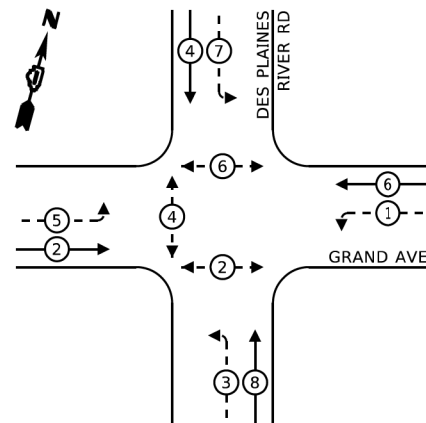
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	27
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



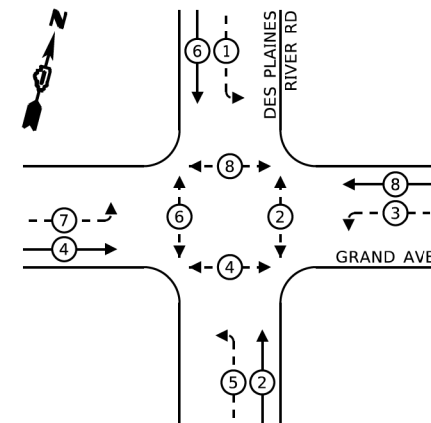




**EXISTING CONTROLLER SEQUENCE**



**PROPOSED CONTROLLER SEQUENCE**



**LEGEND:**

- ← \* → PROTECTED PHASE
- ← \* - - PROTECTED/PERMITTED PHASE
- ← \* → PEDESTRIAN PHASE

**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	51
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	27
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	36
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	298
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,240
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,275
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	690
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,385
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	975
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	500
CONCRETE FOUNDATION, TYPE A	FOOT	8
DRILL EXISTING HANDHOLE	EACH	9
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
DETECTOR LOOP, TYPE 1	FOOT	100
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	2
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4,500
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
CONDUIT SPLICE	EACH	1
CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER	FOOT	8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2

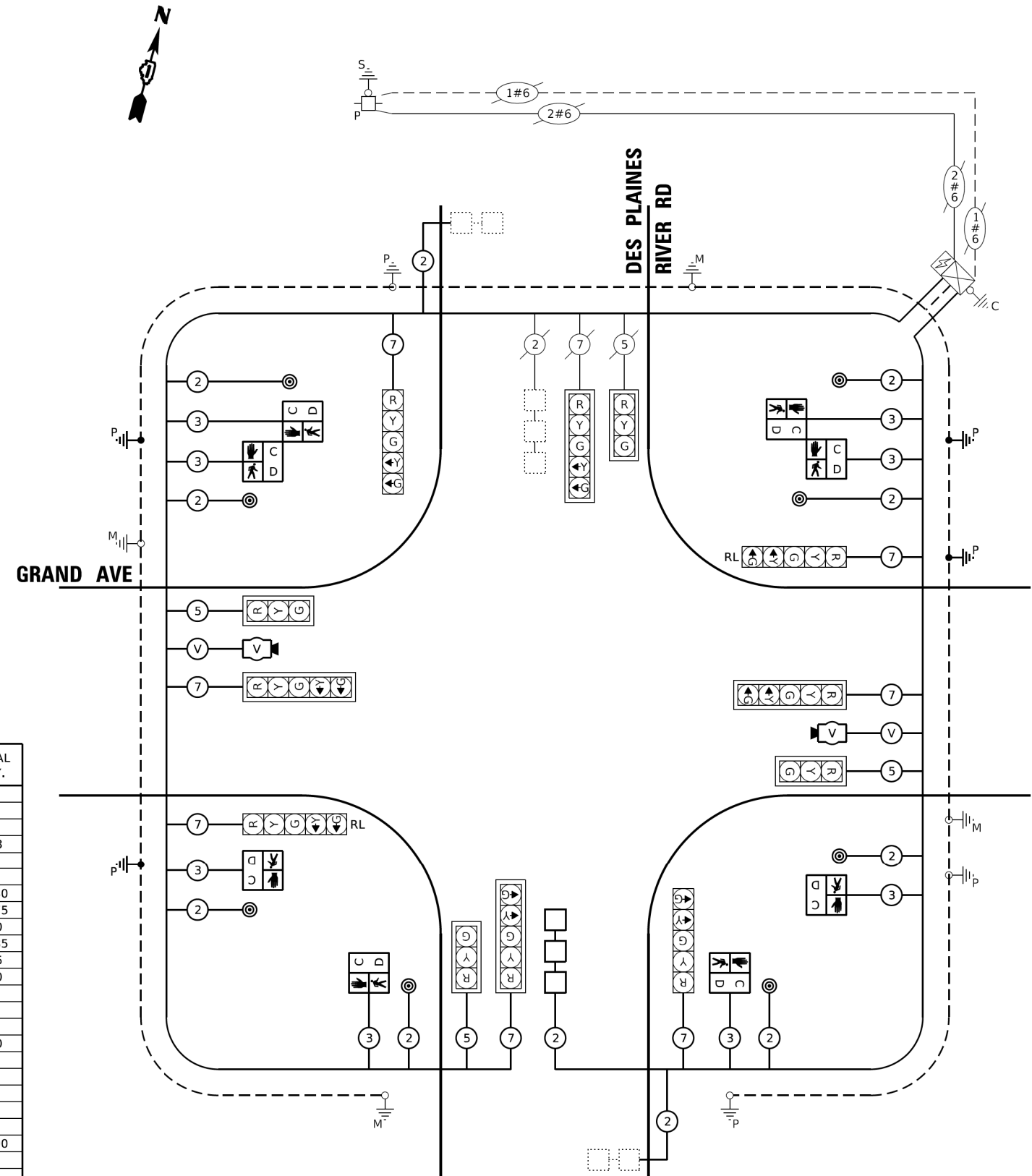
**TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	-	-	-	-
<b>TOTAL =</b>				<b>593.8</b>

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: JOE STACHO  
PHONE: (630) 424-5704  
COMPANY: COMMONWEALTH EDISON  
ACCOUNT NUMBER: ---



**CABLE PLAN**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN, PHASE DESIGNATION DIAGRAM,  
AND SCHEDULE OF QUANTITIES  
DES PLAINES RIVER RD AND GRAND AVE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	30

CONTRACT NO. 60R67

TS 4985

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PLOT SCALE =	40.0000" / 1"
PLOT DATE =	7/25/2019

SCALE: SHEET OF SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT



**GENERAL NOTES:**

- No field welding is permitted except as specified in the Contract Documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck for expansion joints reconstruction and deck slab repairs, 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.
- 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.
- Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50 °F.
- Bars noted thus, 3x2- #5, indicates 3 lines of #5 bars with 2 lengths of bars per line.
- All exposed concrete edges shall have a 3/4"x45° chamfer except where shown otherwise.
- All new fasteners shall be ASTM A325, Type 1 hot -dipped galvanized bolts. Holes shall be 13/16" dia. for 3/4" dia. bolts, and 15/16" dia. for 7/8" dia. bolts, unless otherwise noted.
- All Structural Steel shall conform to AASHTO M270 Grade 50 unless otherwise noted.
- Synthetic fibers shall be added to the Bridge Deck Latex Concrete Overlay. See Special Provisions.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- All new structural steel and repair assemblies shall be hot-dip galvanized. See Special Provision for "Hot-Dip Galvanizing For Structural Steel".
- It shall be the Contractor's responsibility to temporarily support the existing 4" φ gas line between Beams 11 and 12, and all other utilities interfering with proposed work, as required. All existing gas line/utility hangers suspended from, and/or embedded in, the existing deck shall be re-installed as required. Cost included with Deck Slab Repair (Full Depth, Type II).
- The Contractor shall exercise extreme caution during removal and construction operations to avoid damaging the existing 4" φ gas line between Beams 11 and 12 and all other utilities. Any damage to the existing 4" φ gas line and/or other utilities caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
- Debris shall be removed from the tops of pier caps, tops of abutment caps, and within the channel as specified by the Engineer and shall be included in the cost of Debris Removal. Quantities are estimated and actual quantities and locations will be determined in the field, at the time of construction, by the Engineer.

**INDEX OF SHEETS**

- SI-01 General Plan and Elevation
- SI-02 General Notes, Index of Sheets & Total Bill of Material
- SI-03 Stage Construction (Sheet 1 of 2)
- SI-04 Stage Construction (Sheet 2 of 2)
- SI-05 Temporary Concrete Barrier For Stage Construction
- SI-06 Deck Repair Plan
- SI-07 Drainage Scupper, DS-11
- SI-08 Parapet and Railing Repairs
- SI-09 Aluminum Railing, Type L
- SI-10 W. Abut. Expansion Joint Removal & Reconstruction
- SI-11 E. Abut. Expansion Joint Removal & Reconstruction
- SI-12 Prefomed Joint Strip Seal - Sidewalk (Sheet 1 of 3)
- SI-13 Prefomed Joint Strip Seal - Sidewalk (Sheet 2 of 3)
- SI-14 Prefomed Joint Strip Seal - Sidewalk (Sheet 3 of 3)
- SI-15 Framing Plan
- SI-16 Structural Steel Repairs
- SI-17 West and East Abutment Repairs
- SI-18 Pier 2 Repairs
- SI-19 Bar Splicer Assembly and Mechanical Splicer Details

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Concrete Removal	CU YD	21.3	-	21.3
Bridge Rail Removal	FOOT	60	-	60
Concrete Superstructure	CU YD	22.2	-	22.2
Bridge Deck Grooving	SQ YD	96.7	-	96.7
Protective Coat	SQ YD	1015	-	1015
Furnishing And Erecting Structural Steel	POUND	2470	-	2470
Reinforcement Bars, Epoxy Coated	POUND	3080	-	3080
Bar Splicers	EACH	26	-	26
Aluminum Railing, Type L	FOOT	60	-	60
Prefomed Joint Strip Seal	FOOT	140	-	140
Epoxy Crack Injection	FOOT	6	-	6
Clean & Reseal Relief Joint	FOOT	112	-	112
Stream Gauge	EACH	-	1	1
Approach Slab Repair (Full Depth)	SQ YD	18	-	18
Approach Slab Repair (Partial Depth)	SQ YD	2	-	2
Structural Steel Removal	POUND	2460	-	2460
Structural Steel Repair	POUND	1310	-	1310
Bridge Deck Latex Concrete Overlay, 2 1/2 Inches	SQ YD	96.3	-	96.3
Bridge Deck Scarification 3/4"	SQ YD	96.3	-	96.3
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	5	574	579
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	SQ FT	0	39	39
Deck Slab Repair (Full Depth, Type II)	SQ YD	11	-	11
Drainage Scuppers, Ds-11	EACH	18	-	18

**SCOPE OF WORK:**

- Perform 3/4" Bridge Deck Scarification.
- Perform deck slab and Approach slab repairs as required.
- Reconstruct bridge deck expansion joints at West and East Abutments and install new prefomed joint strip seals.
- Remove and Replace Existing Drainage Scuppers.
- Perform Parapet Repairs and Partial Removal/Replacement of Railing as required.
- Apply a 2 1/2" Bridge Deck Latex Concrete Overlay on Bridge Deck and 1 3/4" Hot-Mix Asphalt (HMA) Overlay on Approach Slabs.
- Perform Bridge Deck Grooving.
- Apply Protective Coat to the top and inside faces of parapets, sidewalks, reconstructed transverse expansion joints and to the surface of the new overlay.
- Clean and reseal relief joints.
- Perform Structural Steel Beam End Repairs and diaphragm removal/replacement at the locations shown in the Plans.
- Perform Structural Repair of Concrete to the Abutments and Pier 2.
- Install Stream Gauge at Southeast Wingwall.
- Clean bridge seats and remove channel debris.
- Repaint Lane Markings on the Top of Deck. See Roadway Plans.

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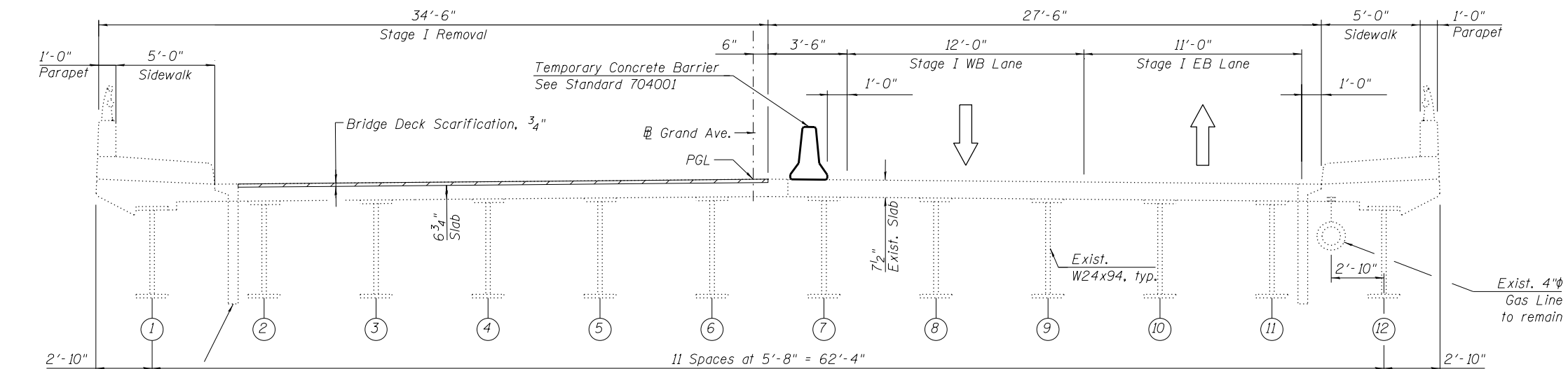
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

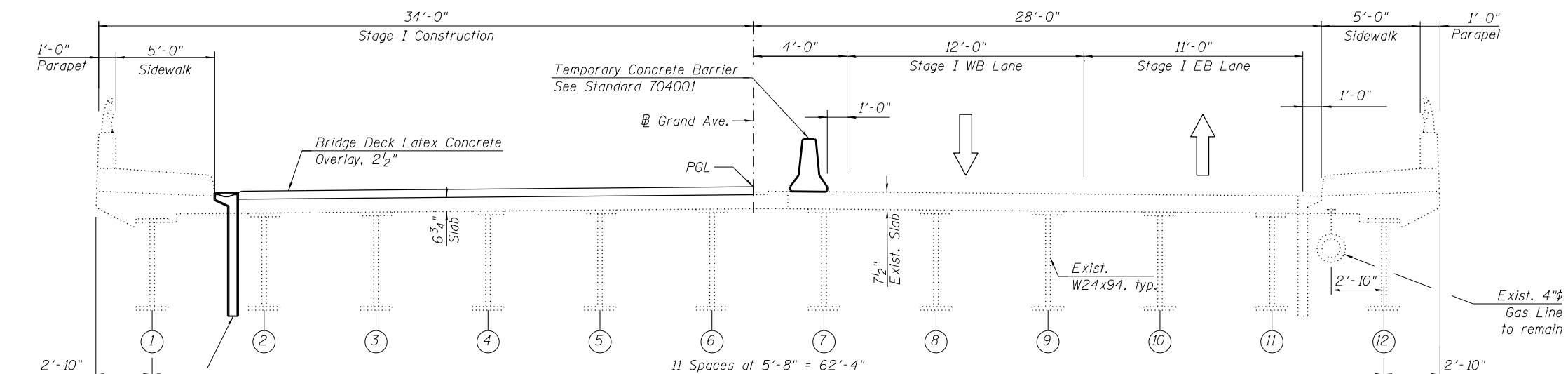
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**STRUCTURE NO. 016-0855**  
SHEET SI-02 OF SI-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 60R67	

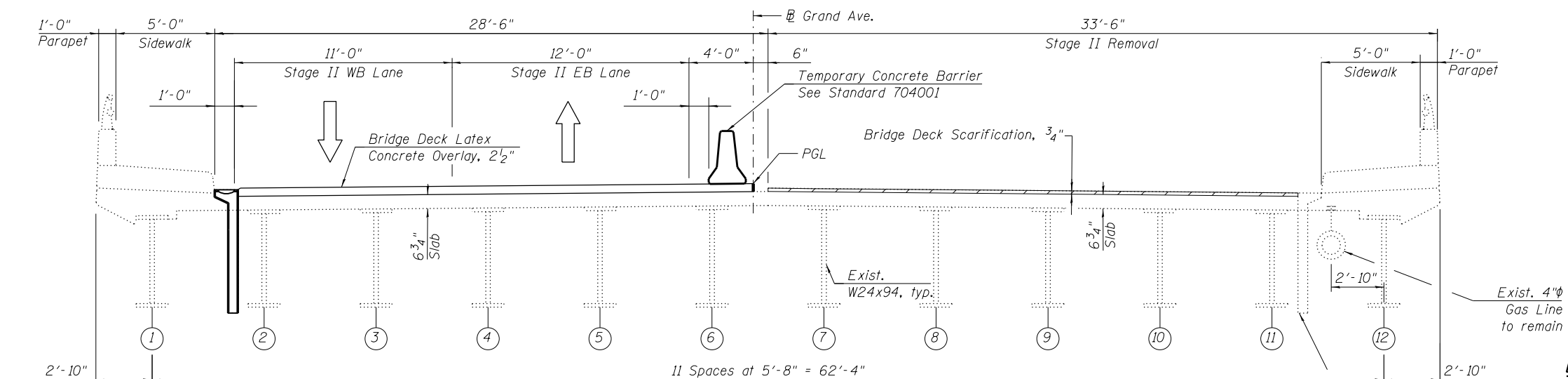
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**STAGE I REMOVAL**  
(Looking East)



**STAGE I CONSTRUCTION**  
(Looking East)



**STAGE II REMOVAL**  
(Looking East)

**LEGEND**  
 Bridge Deck Scarification  
 Exist. Drainage Scupper to be removed and replaced



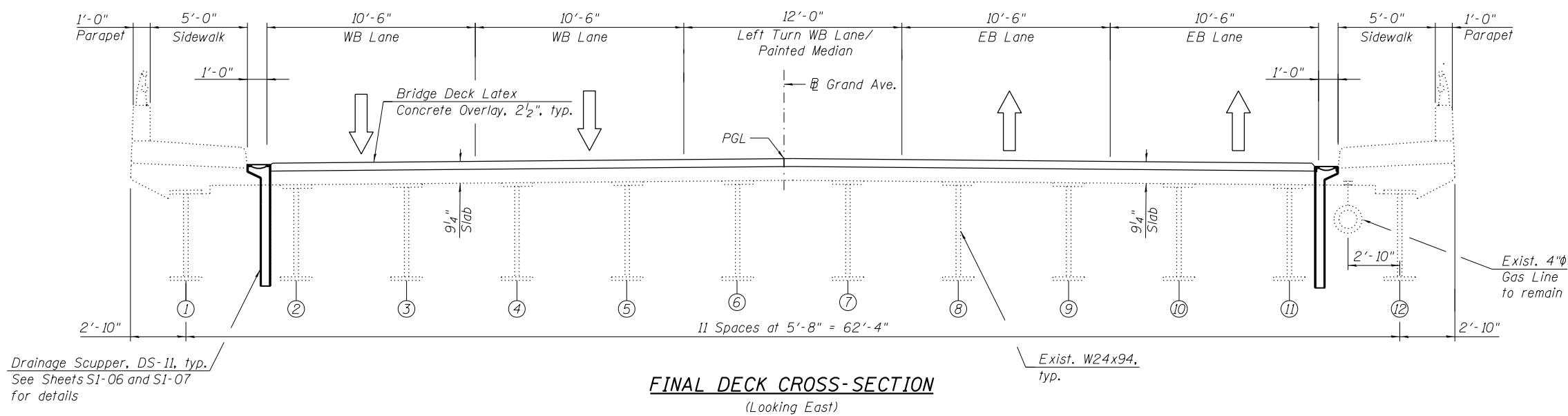
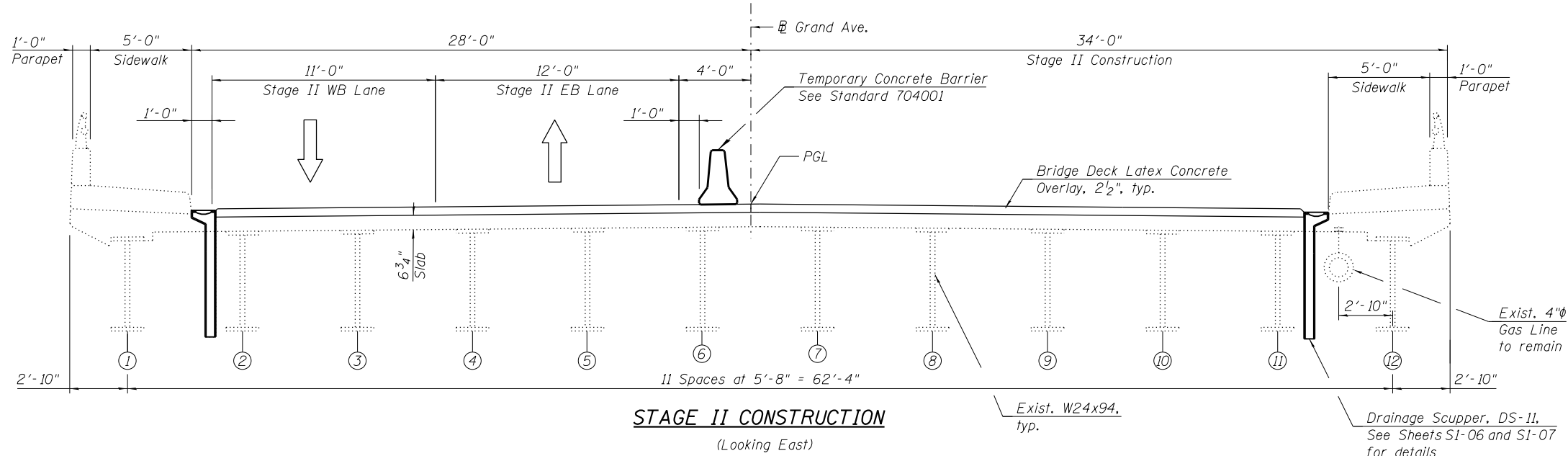
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DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**STAGE CONSTRUCTION (SHEET 1 OF 2)**  
**STRUCTURE NO. 016-0855**  
 SHEET S1-03 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	33
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



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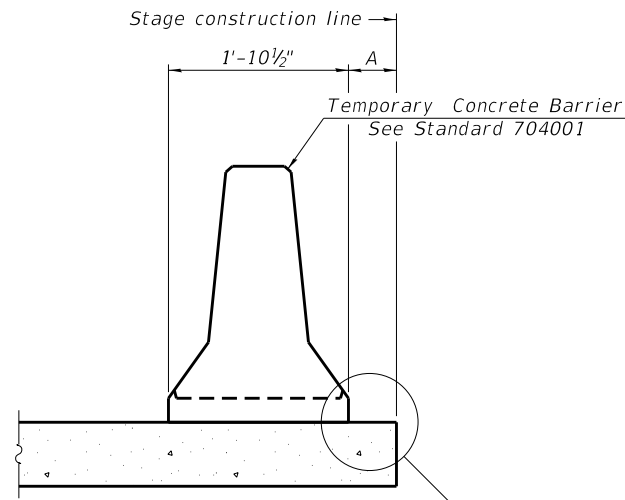
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION (SHEET 2 OF 2)  
STRUCTURE NO. 016-0855**

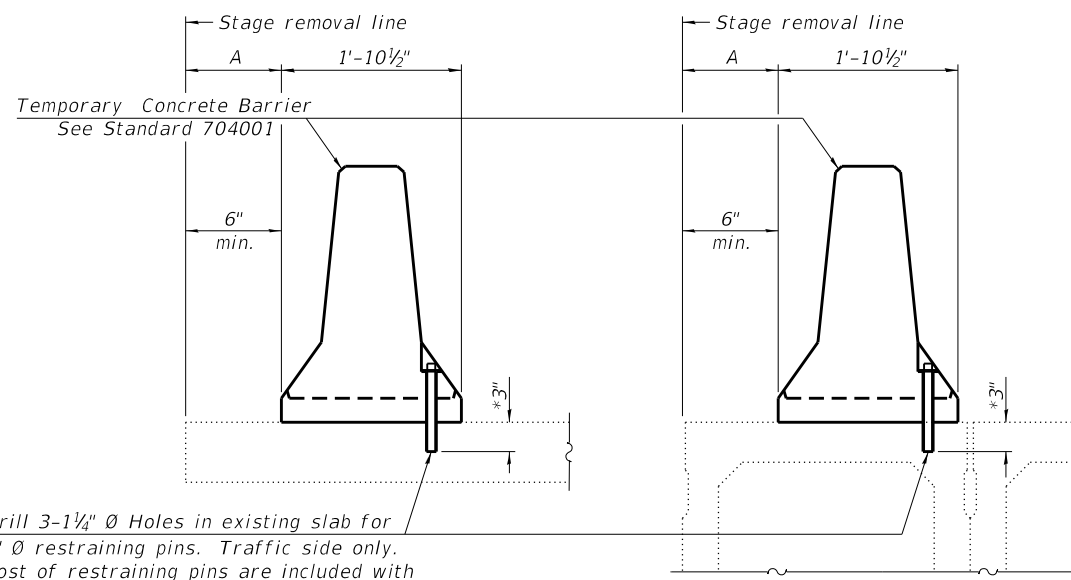
SHEET S1-04 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	34
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				



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".

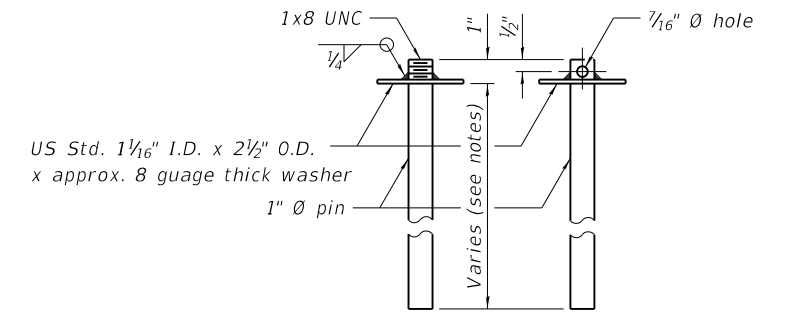
NEW SLAB OR NEW DECK BEAM



Drill 3-1/4" 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".

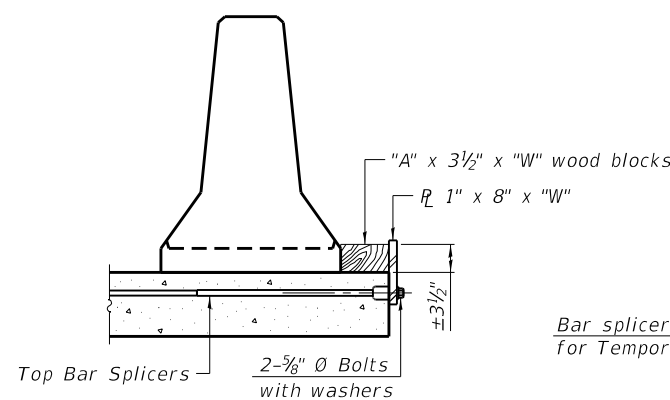
EXISTING SLAB

EXISTING DECK BEAM

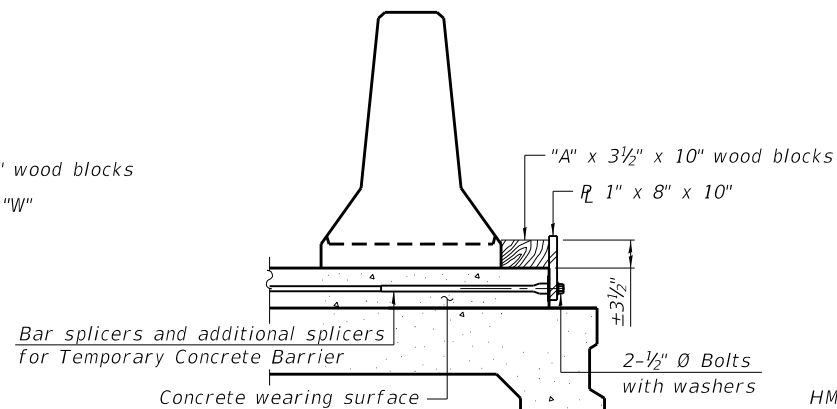


RESTRAINING PIN

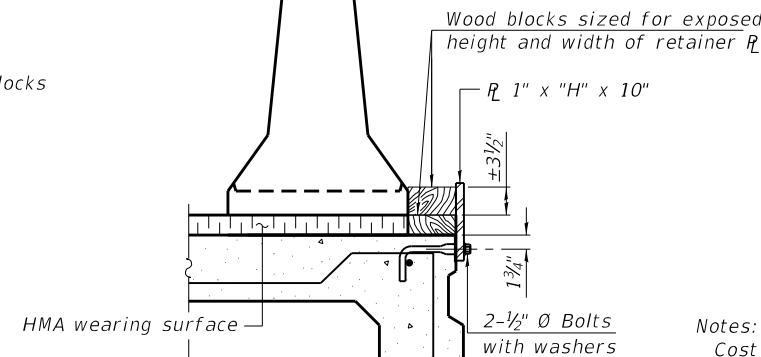
SECTIONS THRU SLAB OR DECK BEAM



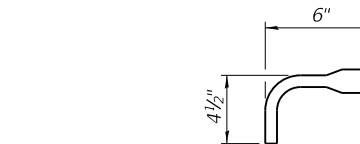
DETAIL I



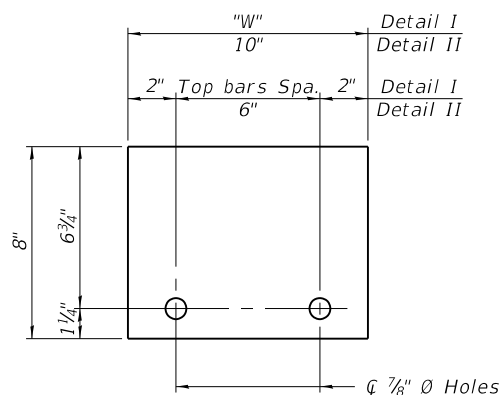
DETAIL II



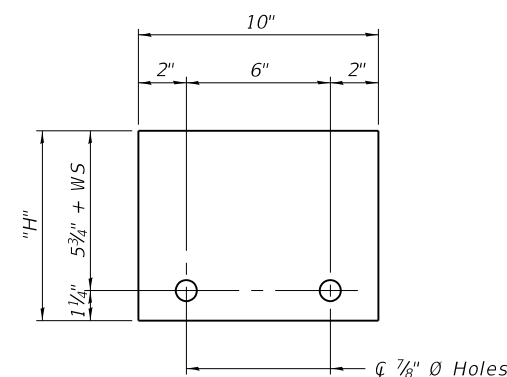
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



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

Notes:  
 Cost of retainer assembly is included with Temporary Concrete Barrier.  
 A retainer assembly shall be located at the approximate  $\frac{1}{2}$  of each temporary concrete barrier.  
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.  
 When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

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

R-27

8-11-2017



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 PLOT DATE = 8/13/2019

DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION  
 STRUCTURE NO. 016-0855

SHEET S1-05 OF S1-19 SHEETS

F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

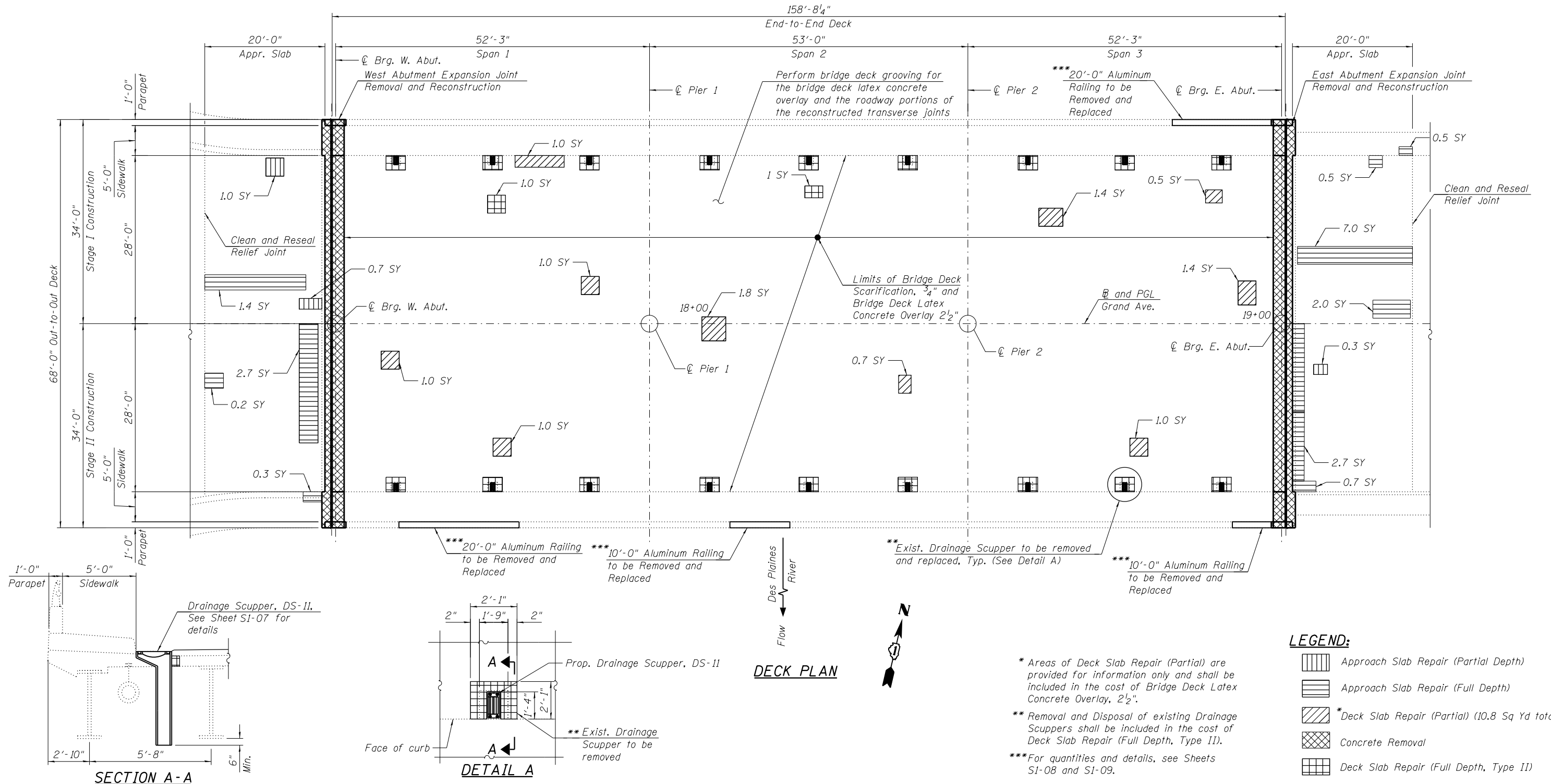
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**NOTES:**

1. Areas of deck repair shown are estimated. The Engineer shall show actual locations of deck repairs at the time of construction.
2. For West and East Abutments Expansion Joint removal and reconstruction, see Sheets S1-10 and S1-11, respectively.
3. Protective coat shall be applied to top and inside face of parapets, sidewalks, reconstructed transverse joint areas and the surface of the new overlay.
4. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost incidental to Concrete Removal.
5. The Contractor shall exercise extreme caution during Concrete Removal to avoid damaging the steel beams and diaphragms to remain. Any damage to the existing steel beams and/or diaphragms to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Deck Grooving	Sq Yd	967
Protective Coat	Sq Yd	963
Clean & Reseal Relief Joint	Foot	112
Approach Slab Repair (Full Depth)	Sq Yd	18
Approach Slab Repair (Partial Depth)	Sq Yd	2
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq Yd	963
Bridge Deck Scarification 3/4"	Sq Yd	963
Deck Slab Repair (Full Depth, Type II)	Sq Yd	11



**LEGEND:**

- Approach Slab Repair (Partial Depth)
- Approach Slab Repair (Full Depth)
- \*Deck Slab Repair (Partial) (10.8 Sq Yd total)
- Concrete Removal
- Deck Slab Repair (Full Depth, Type II)

\* Areas of Deck Slab Repair (Partial) are provided for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, 2 1/2".

\*\* Removal and Disposal of existing Drainage Scuppers shall be included in the cost of Deck Slab Repair (Full Depth, Type II).

\*\*\* For quantities and details, see Sheets S1-08 and S1-09.

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 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

DECK REPAIR PLAN  
 STRUCTURE NO. 016-0855

SHEET S1-06 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60R67				

ILLINOIS FED. AID PROJECT



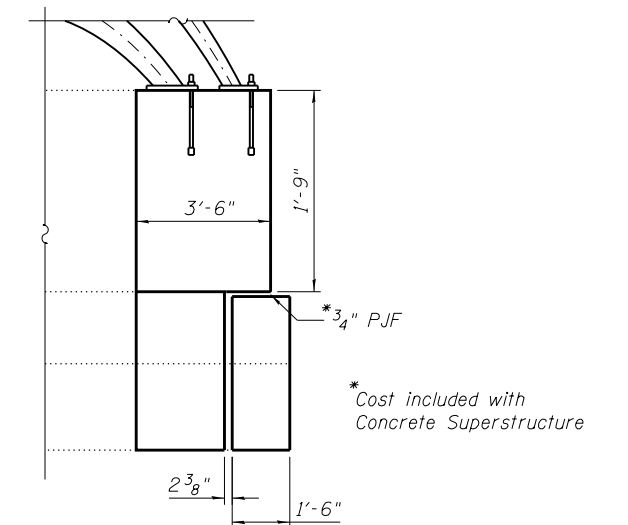
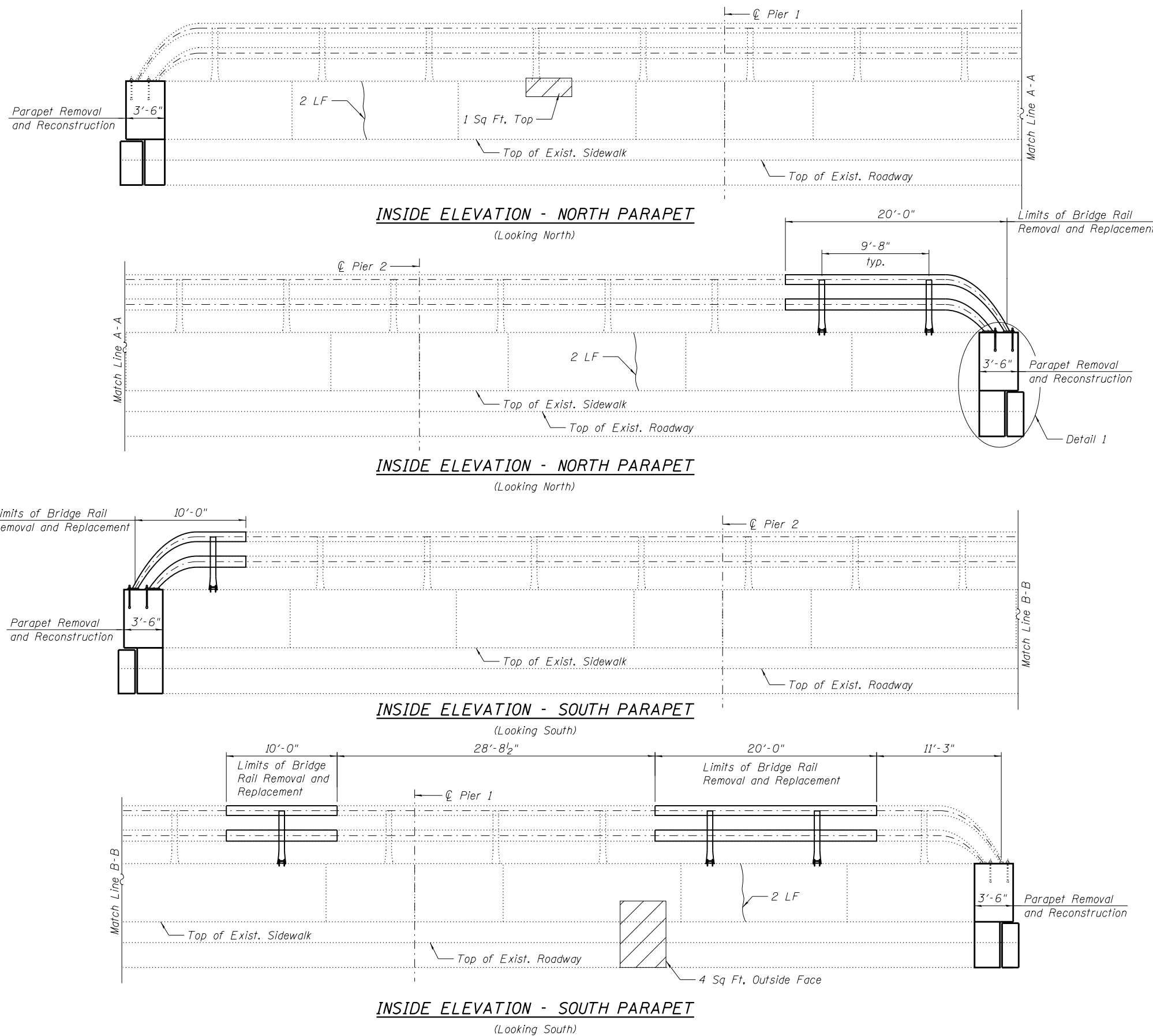


**BILL OF MATERIAL**

Item	Unit	Quantity
Bridge Rail Removal	Foot	60
Epoxy Crack Injection	Foot	6
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	5

**NOTES:**

- For Aluminum Railing details, see Sheet S1-09.
- For parapet removal and reconstruction, see Sheets S1-10 and S1-11.
- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.
- The Contractor shall be responsible to remove, support and reinstall all existing utilities interfering with the work. Cost included with Structural Repair of Concrete (Depth Equal to or Less than 5 inches).



**DETAIL 1**

**LEGEND:**

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Epoxy Crack Injection

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PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

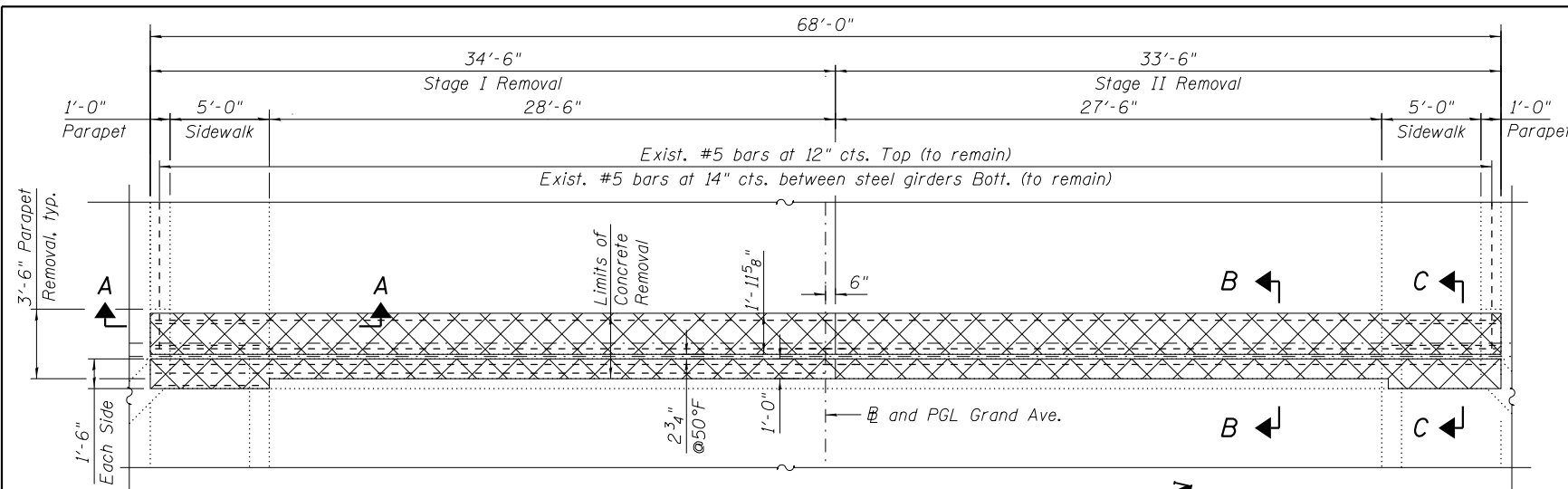
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PARAPET AND RAILING REPAIRS  
STRUCTURE NO. 016-0855**

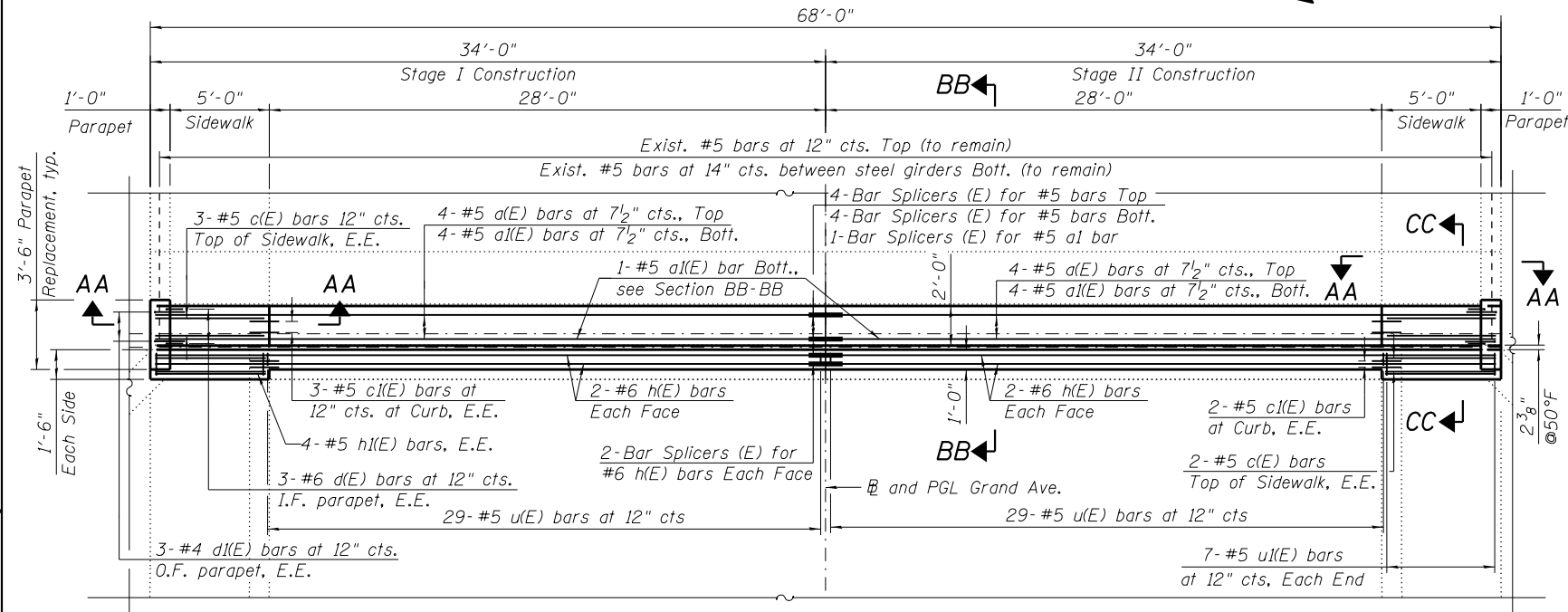
SHEET S1-08 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	38
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

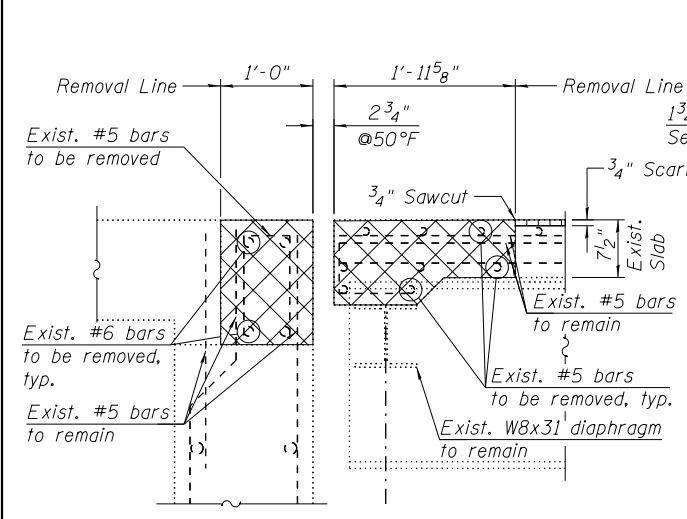




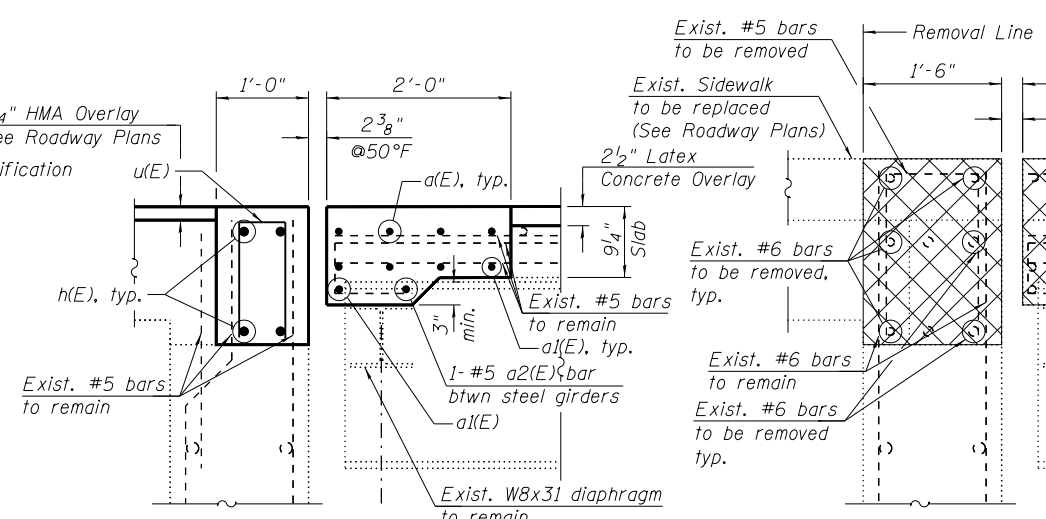
WEST ABUTMENT JOINT REMOVAL PLAN



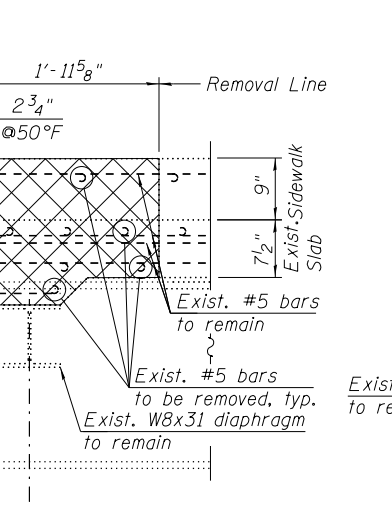
WEST ABUTMENT JOINT RECONSTRUCTION PLAN



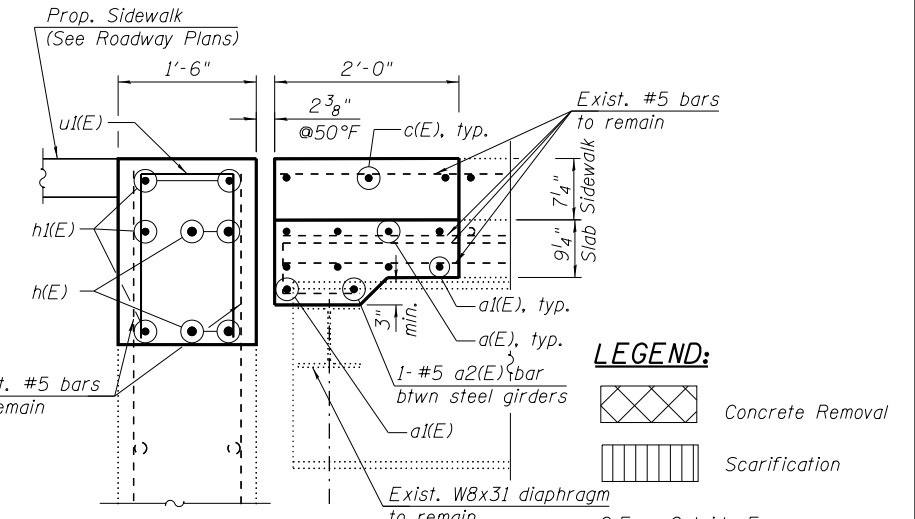
SECTION B-B



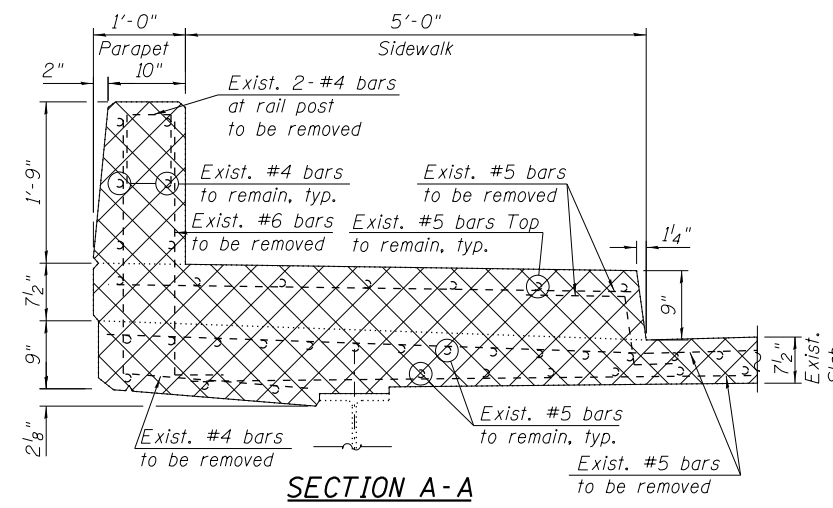
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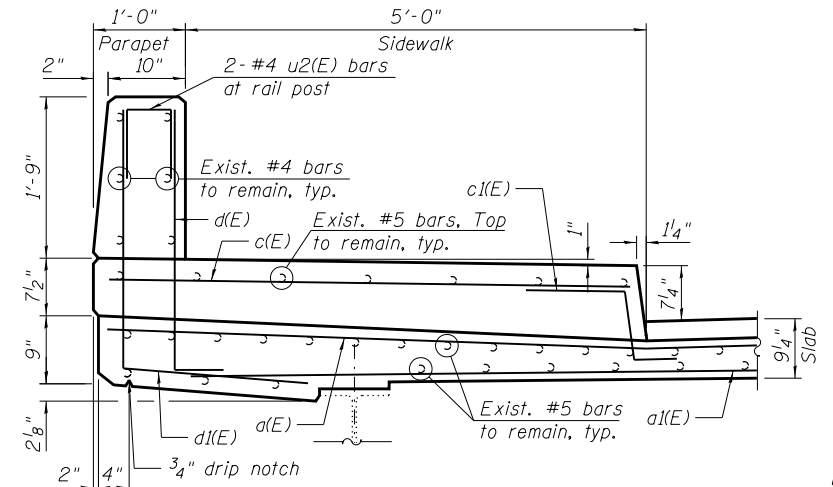
SECTION C-C



SECTION CC-CC



SECTION A-A

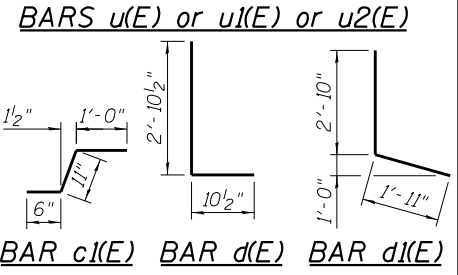


SECTION AA-AA

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	8	#5	33'-9"	—
a1(E)	10	#5	32'-9"	—
a2(E)	11	#5	5'-3"	—
c(E)	10	#5	5'-8"	—
c1(E)	10	#5	2'-5"	┘
d(E)	6	#6	3'-9"	L
d1(E)	6	#4	4'-9"	L
h(E)	8	#6	33'-9"	—
h1(E)	8	#5	5'-4"	—
u(E)	58	#5	3'-0"	┘
u1(E)	14	#5	4'-10"	┘
u2(E)	8	#4	2'-0"	┘
Concrete Removal			Cu. Yd.	10.1
Concrete			Cu. Yd.	11.1
Superstructure			Sq. Yd.	26
Protective Coat				
Reinforcement Bars, Epoxy Coated			Pound	1,540

Bar	A	B
u(E)	8"	1'-2"
u1(E)	1'-2"	1'-10"
u2(E)	6"	9"



- NOTES:**
- For preformed joint strip seal details, see Sheets S1-12 thru S1-14.
  - For Bar Splicer Assembly details, see Sheet S1-19.
  - Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

**LEGEND:**

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

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0160855-60R67-009-WAbutJ.t.dgn  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

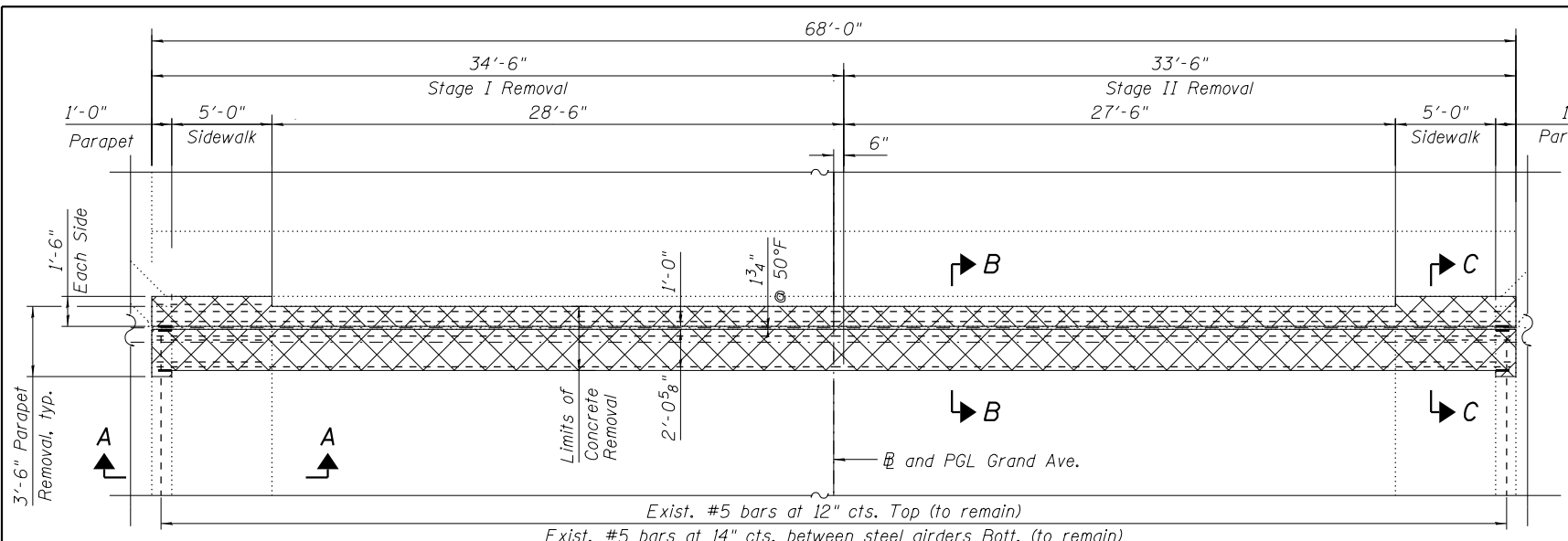
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 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

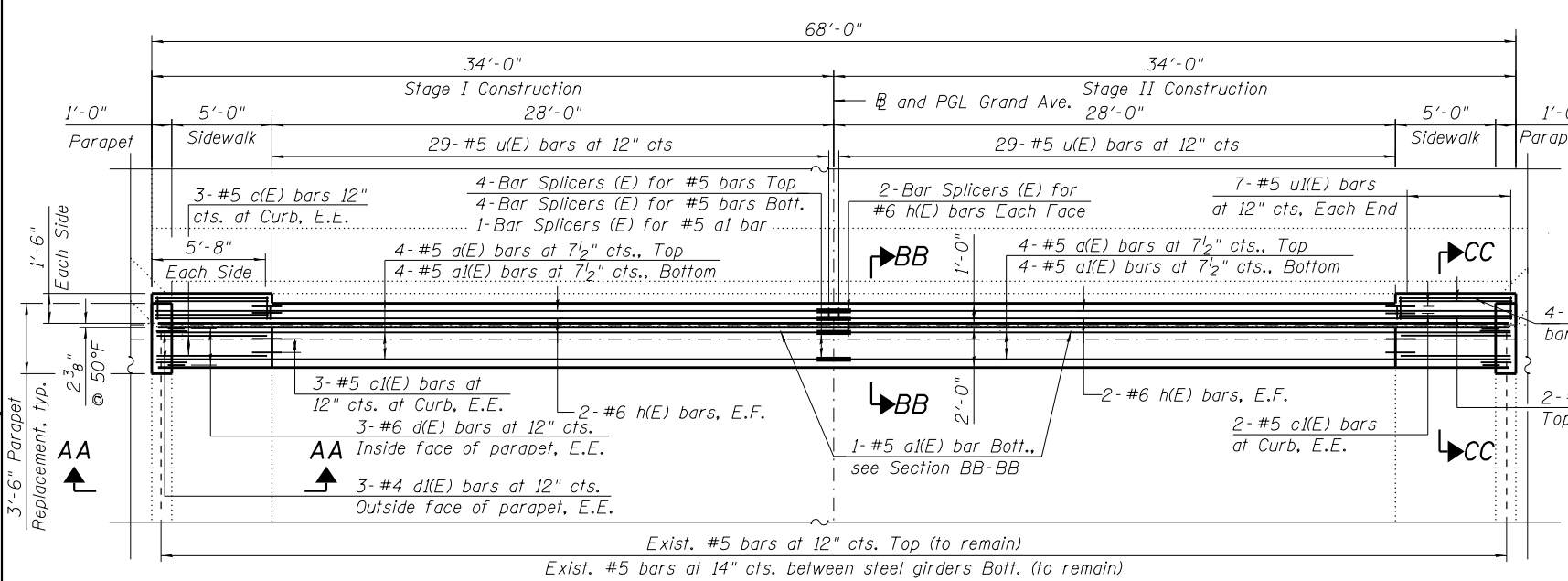
W. ABUT. EXPANSION JOINT REMOVAL & RECONSTRUCTION  
 STRUCTURE NO. 016-0855

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	40

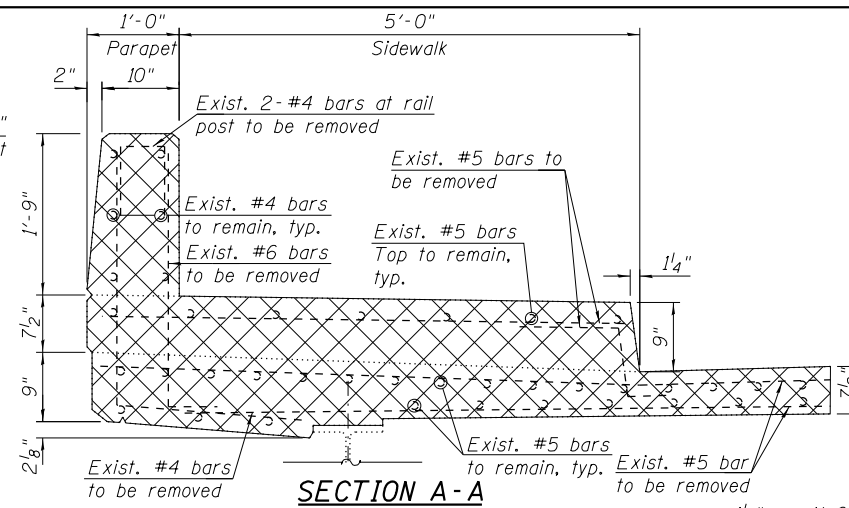
CONTRACT NO. 60R67



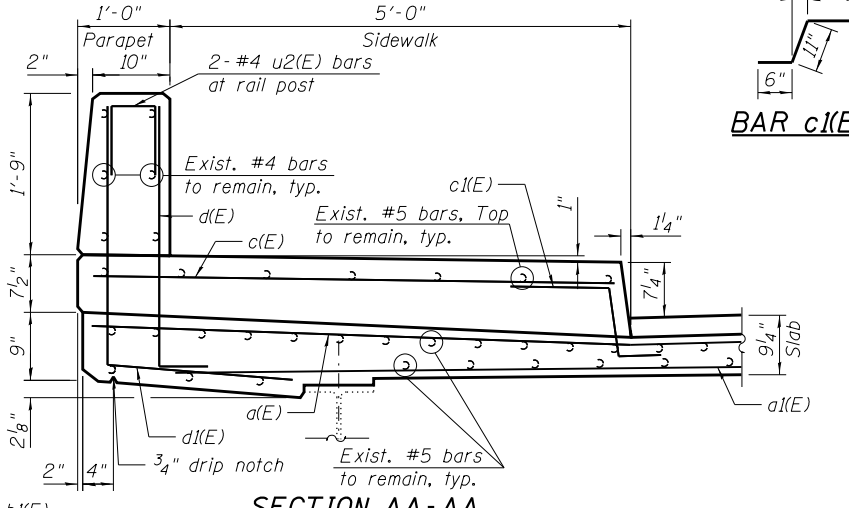
**EAST ABUTMENT JOINT REMOVAL PLAN**



**EAST ABUTMENT JOINT RECONSTRUCTION PLAN**



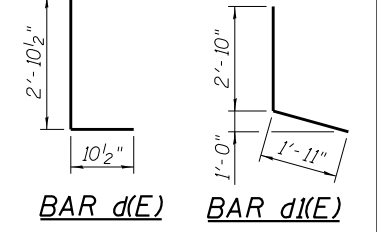
**SECTION A-A**



**SECTION AA-AA**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	8	#5	33'-9"	—
a1(E)	10	#5	32'-9"	—
a2(E)	11	#5	5'-3"	—
c(E)	10	#5	5'-8"	—
c1(E)	10	#5	2'-5"	J
d(E)	6	#6	3'-9"	L
d1(E)	6	#4	4'-9"	L
h(E)	8	#6	33'-9"	—
h1(E)	8	#5	5'-4"	—
u(E)	58	#5	3'-0"	□
u1(E)	14	#5	4'-10"	□
u2(E)	8	#4	2'-0"	□
Concrete Removal			Cu. Yd.	10.1
Concrete Superstructure			Cu. Yd.	11.1
Protective Coat			Sq. Yd.	26
Reinforcement Bars, Epoxy Coated			Pound	1,540

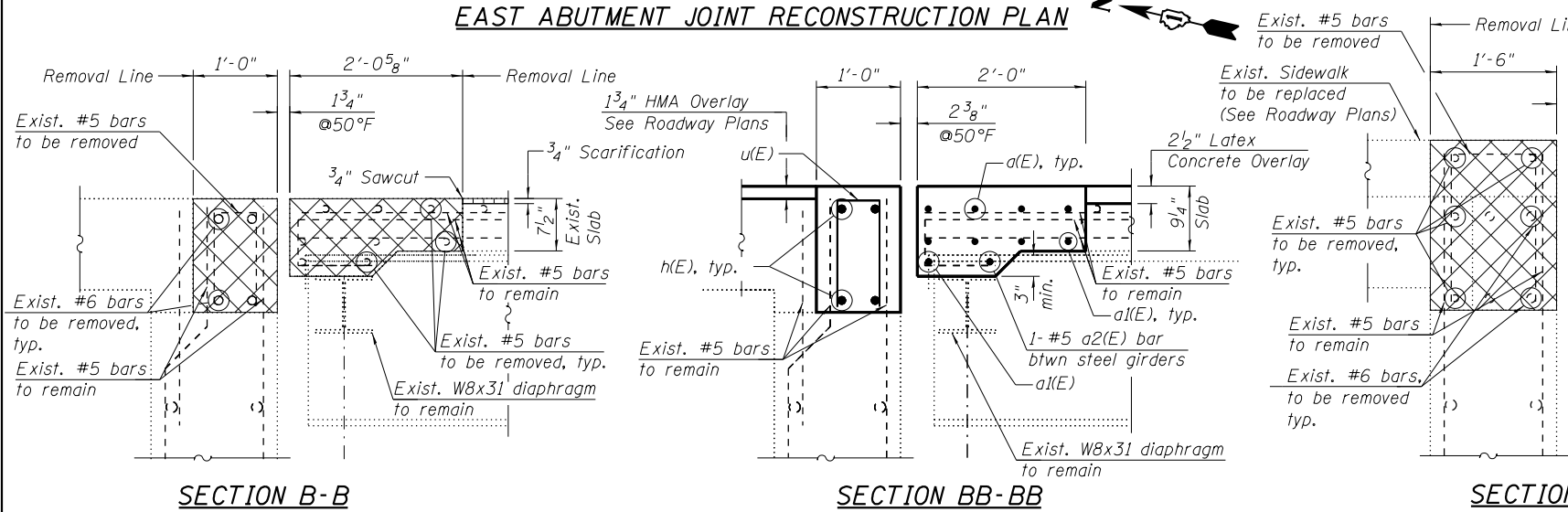


**NOTES:**

1. For preformed joint strip seal details, see Sheets S1-12 thru S1-14.
2. For Bar Splicer Assembly details, see Sheet S1-19.
3. Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Bar	A	B
u(E)	8"	1'-2"
u1(E)	1'-2"	1'-10"
u2(E)	6"	9"

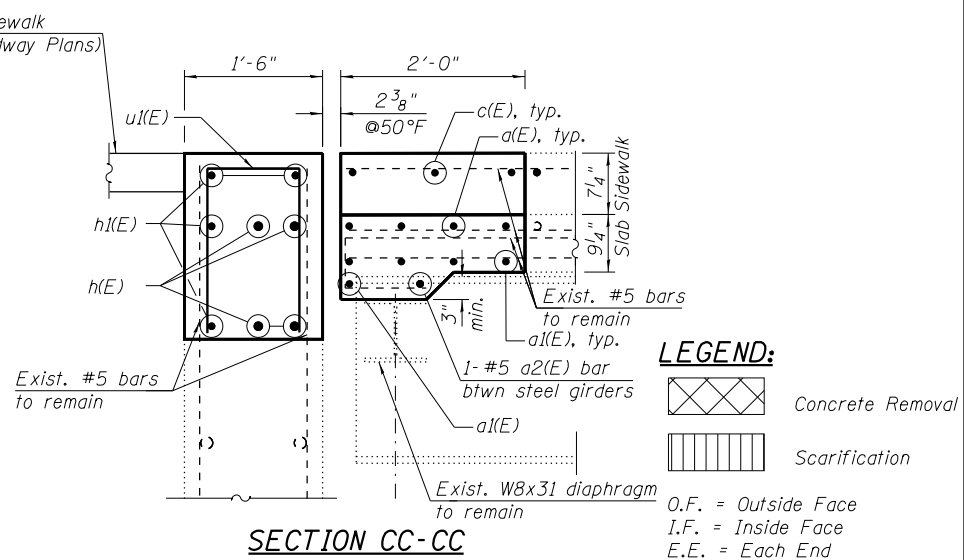
**BARS u(E) or u1(E) or u2(E)**



**SECTION B-B**

**SECTION BB-BB**

**SECTION C-C**



**SECTION CC-CC**

**LEGEND:**

- Concrete Removal (hatched pattern)
- Scarification (vertical lines)
- O.F. = Outside Face
- I.F. = Inside Face
- E.E. = Each End

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0160855-60R67-010-EA-but.jcd  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

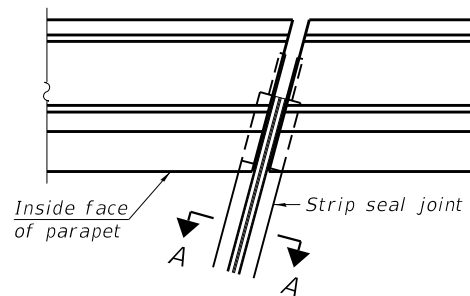
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

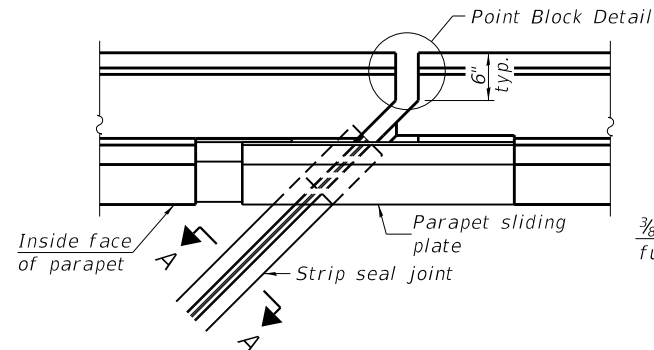
**E. ABUT. EXPANSION JOINT REMOVAL & RECONSTRUCTION  
 STRUCTURE NO. 016-0855**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	41

CONTRACT NO. 60R67

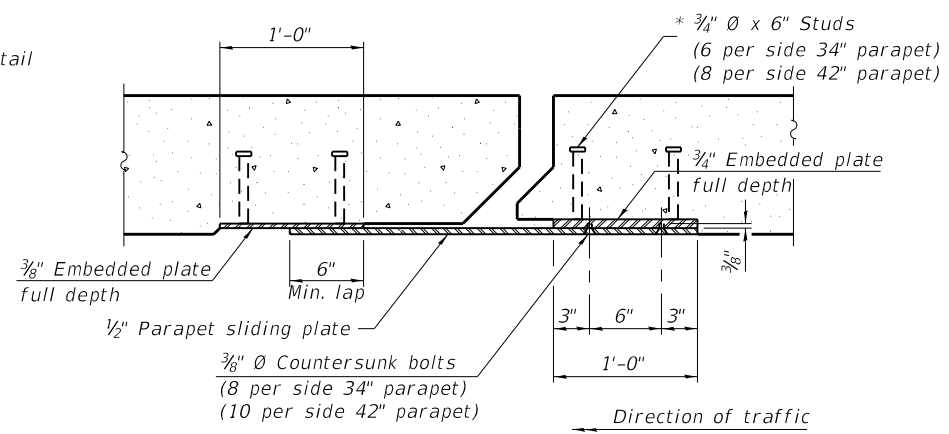


FOR SKEWS  $\leq 30^\circ$

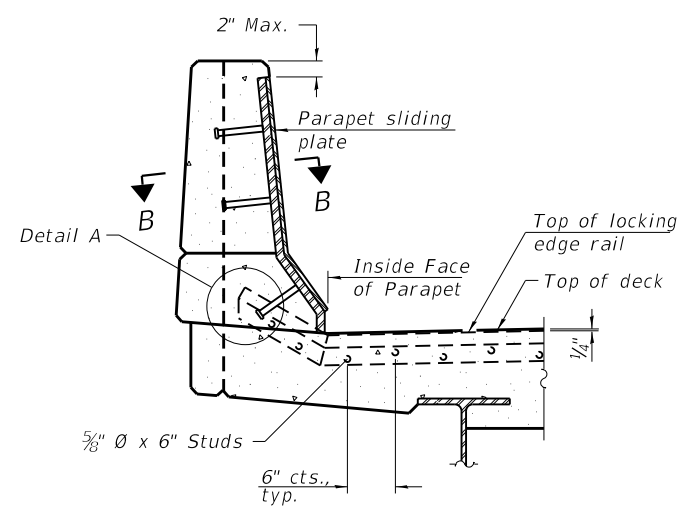


FOR SKEWS  $> 30^\circ$

**PLAN AT PARAPET**

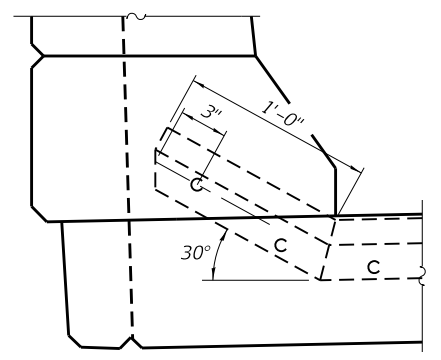


**SECTION B-B**

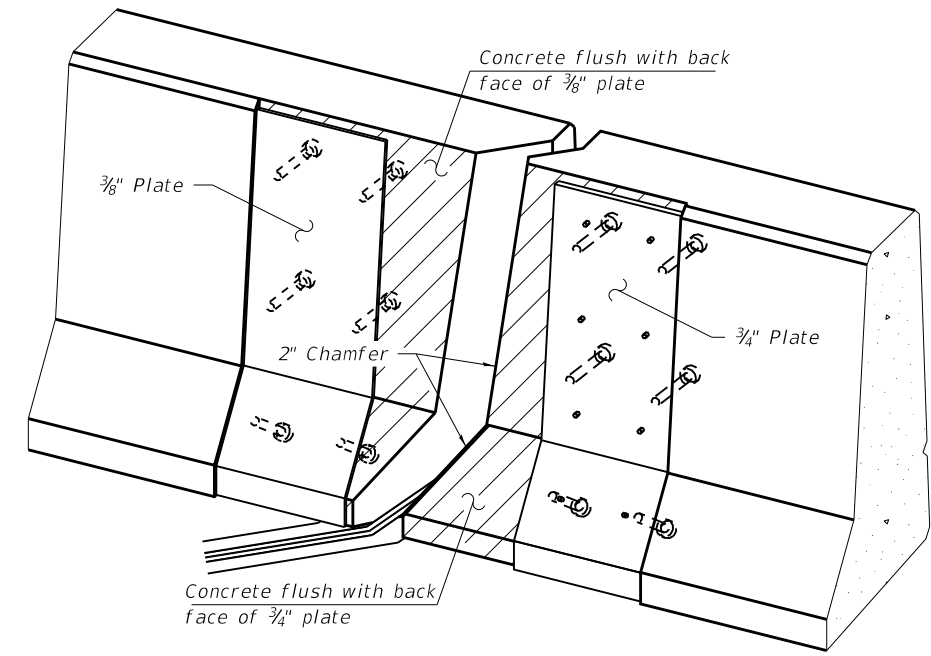


**ELEVATION AT PARAPET**

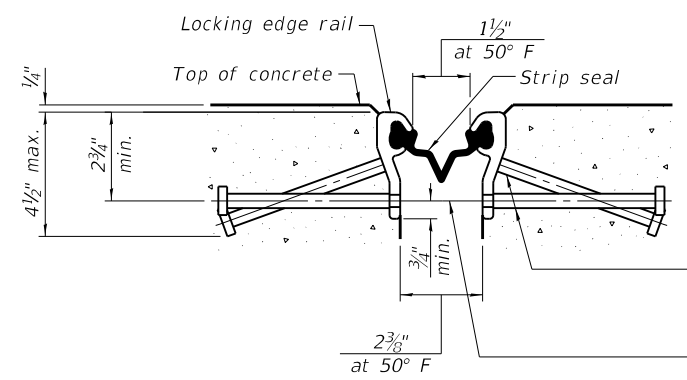
(Skews  $> 30^\circ$  shown. Skews  $\leq 30^\circ$  similar except as shown in plan view.)



**DETAIL A**

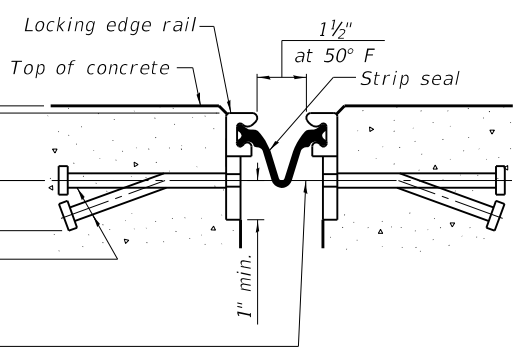


**TRIMETRIC VIEW**  
(Showing embedded plates only)



**SHOWING ROLLED RAIL JOINT**

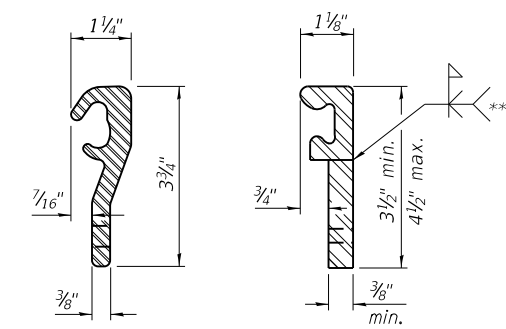
\*  $\frac{5}{8}$ "  $\emptyset$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
 $\frac{3}{8}$ "  $\emptyset$  threaded rods in  $\frac{7}{16}$ "  $\emptyset$  holes at  $\pm 4$ -0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



**SHOWING WELDED RAIL JOINT**

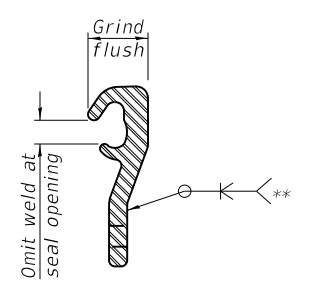
**SECTION A-A**

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



**LOCKING EDGE RAILS**

\*\* Back gouge not required if complete joint penetration is verified by mock-up.



**LOCKING EDGE RAIL SPLICE**

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.  
 The manufacturer's recommended installation methods shall be followed.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
 The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.  
 The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.  
 Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.  
 34" F-shape barrier shown, 42" F-shape similar as noted.  
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	140

EJ-SS-S

8-11-17

(Sheet 1 of 3)



0160855-60R67-011-JointStripSeal1.dgn  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

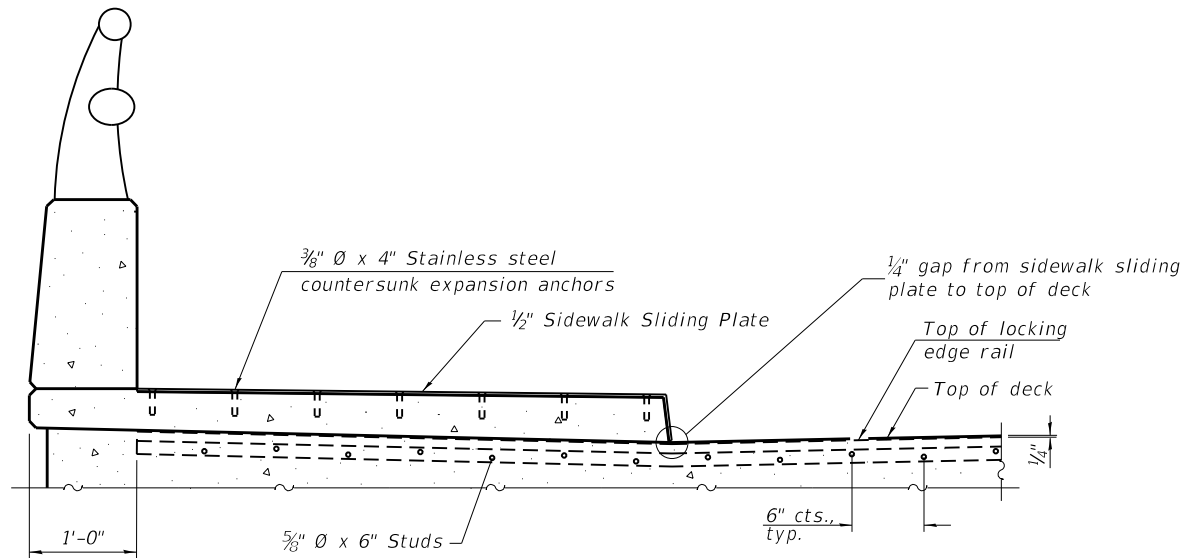
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 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

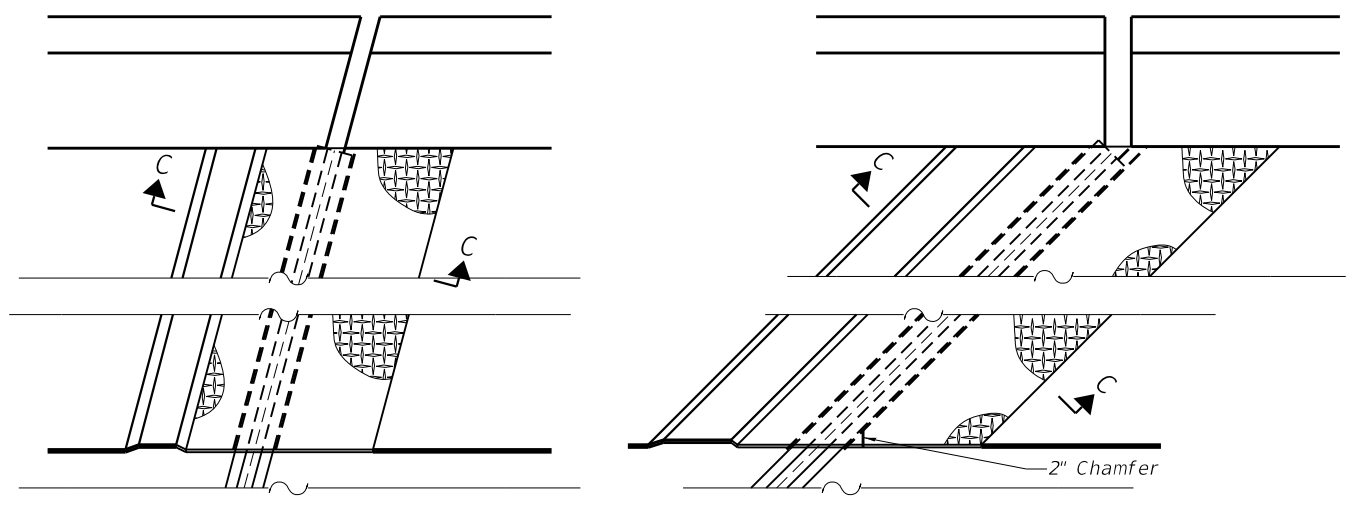
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 PREFORMED JOINT STRIP SEAL - SIDEWALK (SHT 1 OF 3)  
 STRUCTURE NO. 016-0855  
 SHEET S1-12 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	42
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

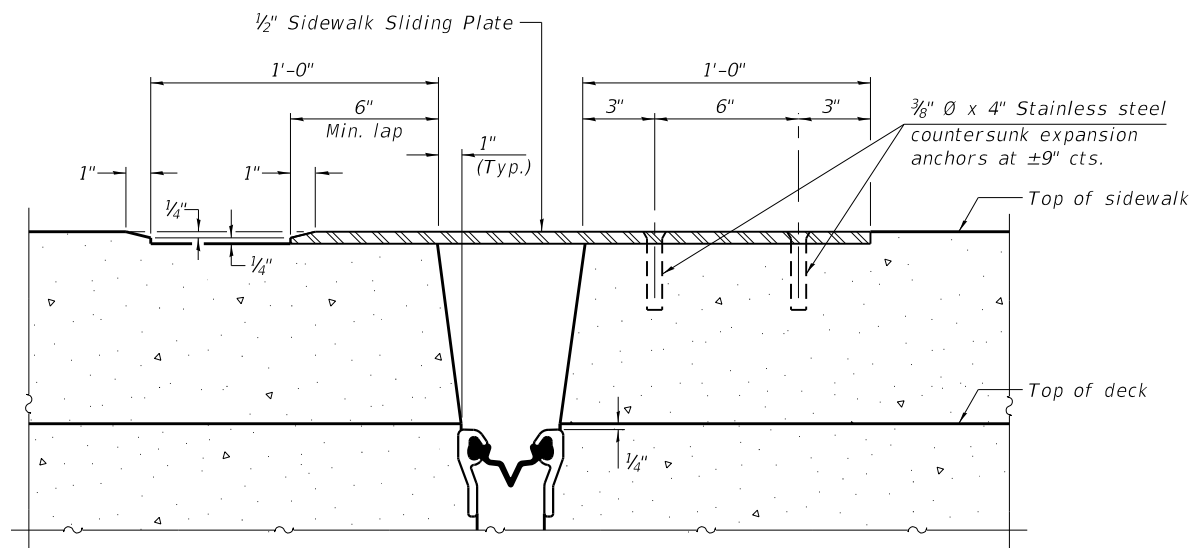
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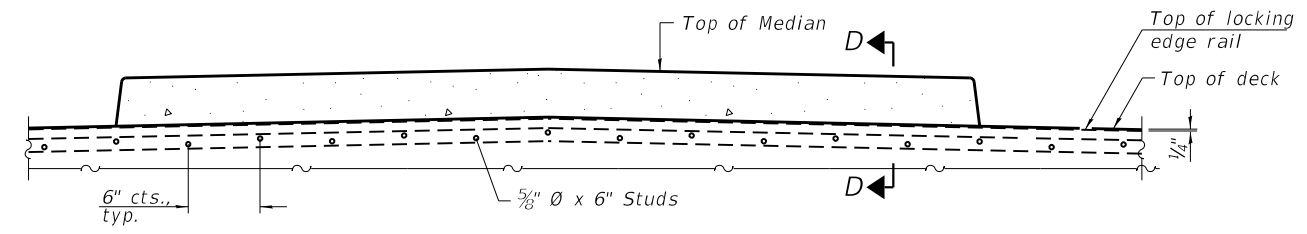
ELEVATION AT RAISED SIDEWALK



PLAN AT RAISED SIDEWALK

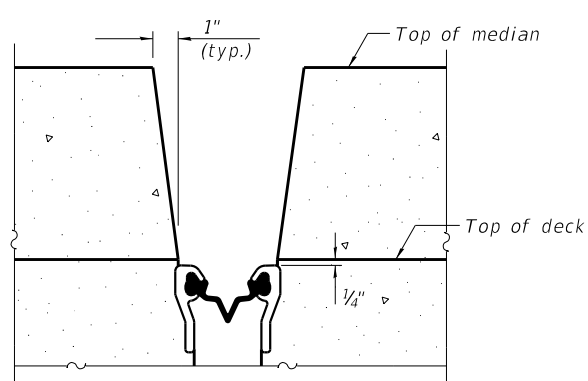


SECTION C-C

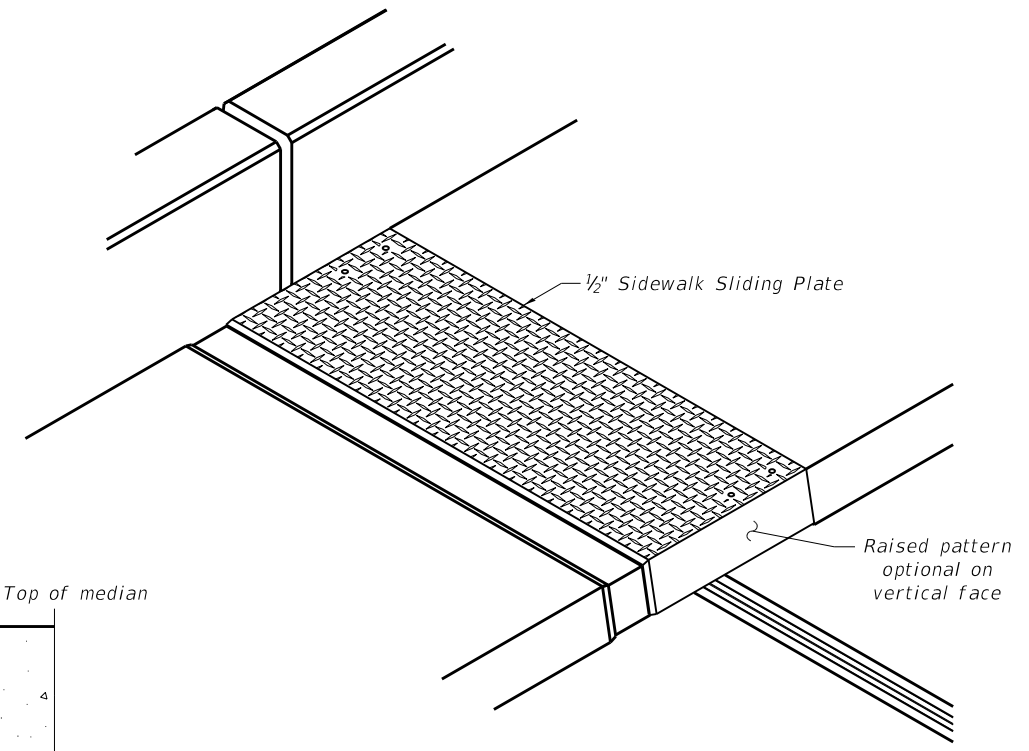


ELEVATION AT MEDIAN

For skews  $> 30^\circ$ , chamfer acute corners 2" similar to sidewalk.



SECTION D-D  
(at Rt. L's)



TRIMETRIC VIEW

(Sheet 2 of 3)

EJ-SS-S

8-11-17



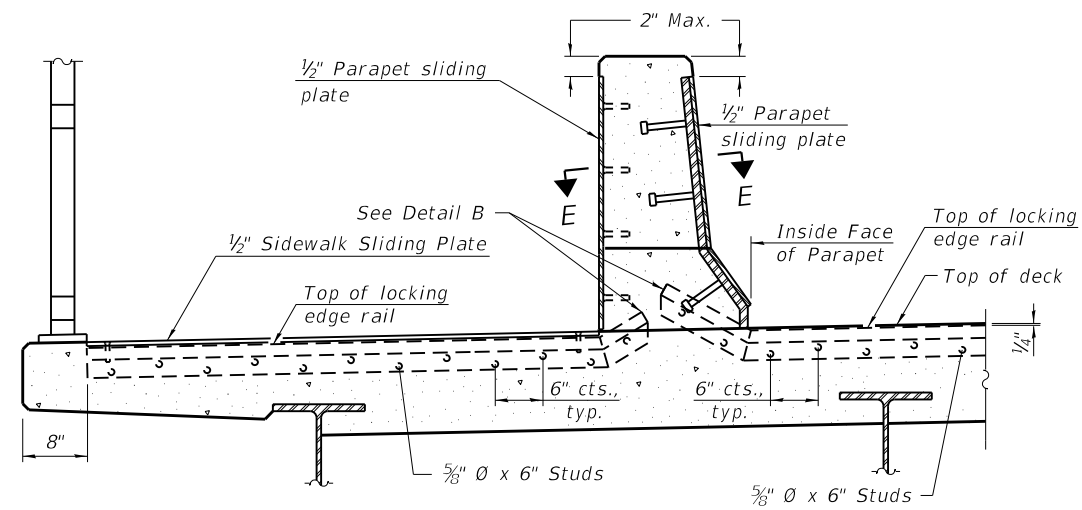
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USER NAME = ken.drobant	DRAWN - MAA, JJS, EK	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK (SHT 2 OF 3)  
STRUCTURE NO. 016-0855

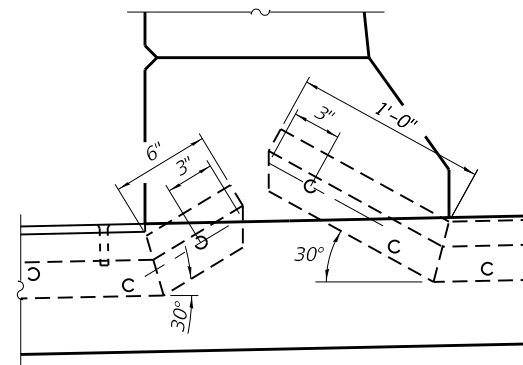
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	43
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

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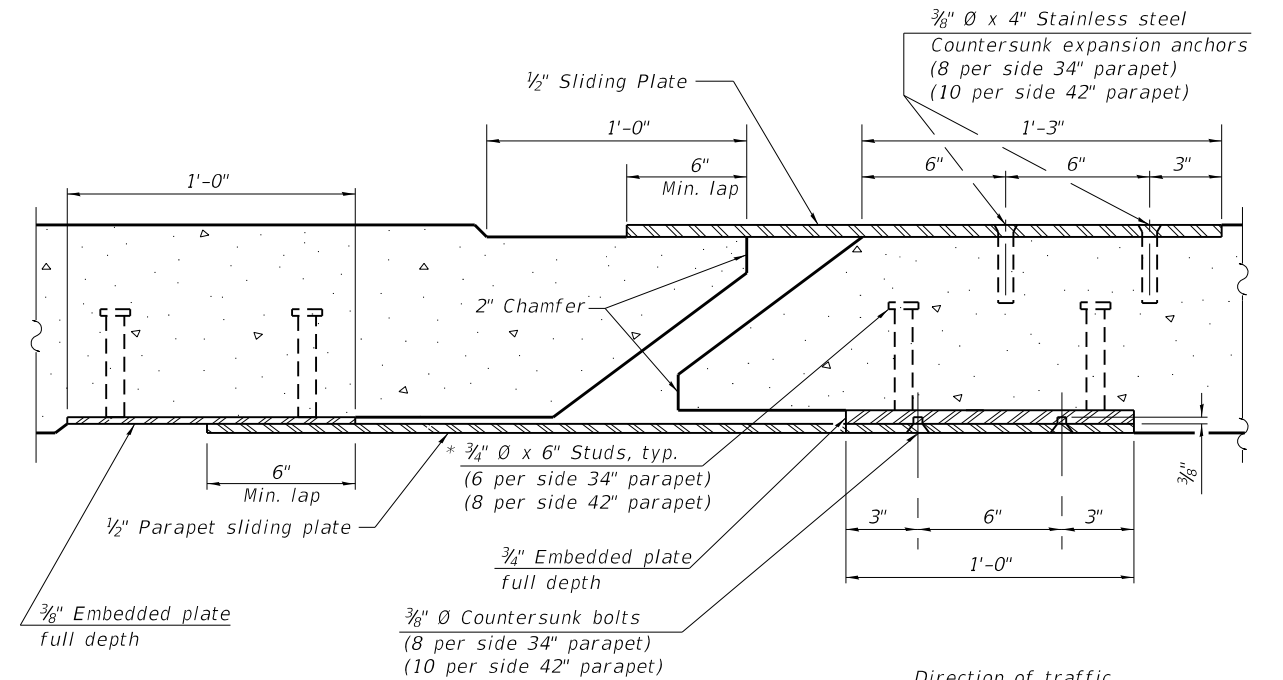


**ELEVATION AT DECK LEVEL SIDEWALK**

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

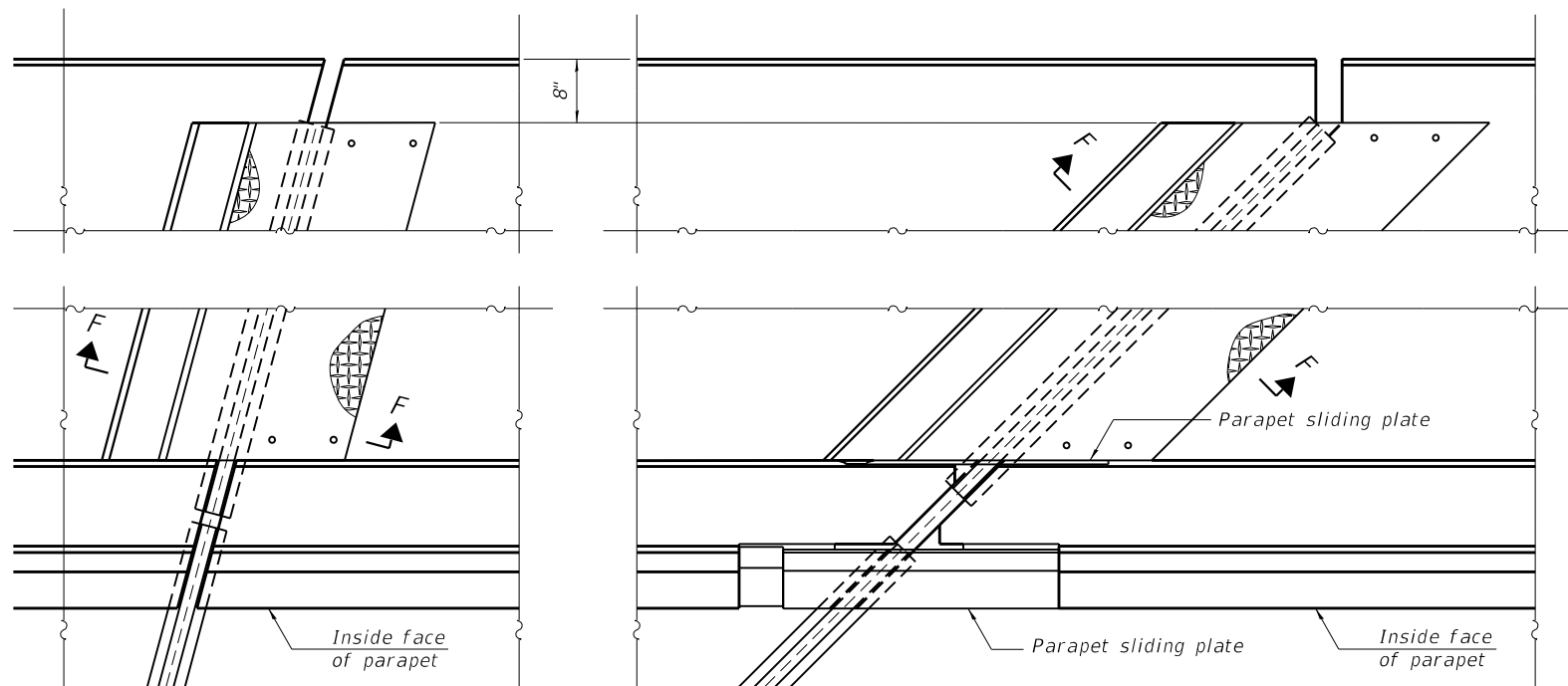


**DETAIL B**



**SECTION E-E**

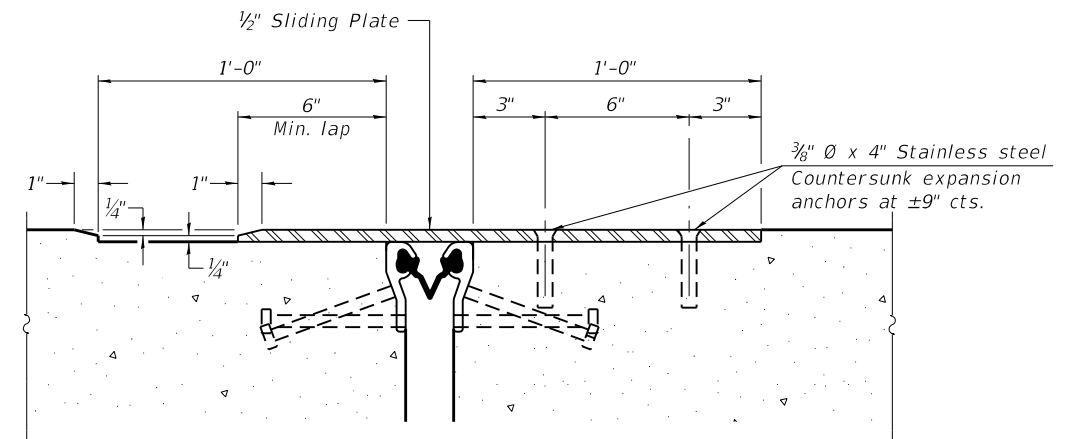
Direction of traffic



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

**PLAN AT DECK LEVEL SIDEWALK**



**SECTION F-F**

EJ-SS-S

8-11-17

(Sheet 3 of 3)



0160855-60R67-013-JointStripSeal3.dgn  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL - SIDEWALK (SHT 3 OF 3)  
 STRUCTURE NO. 016-0855

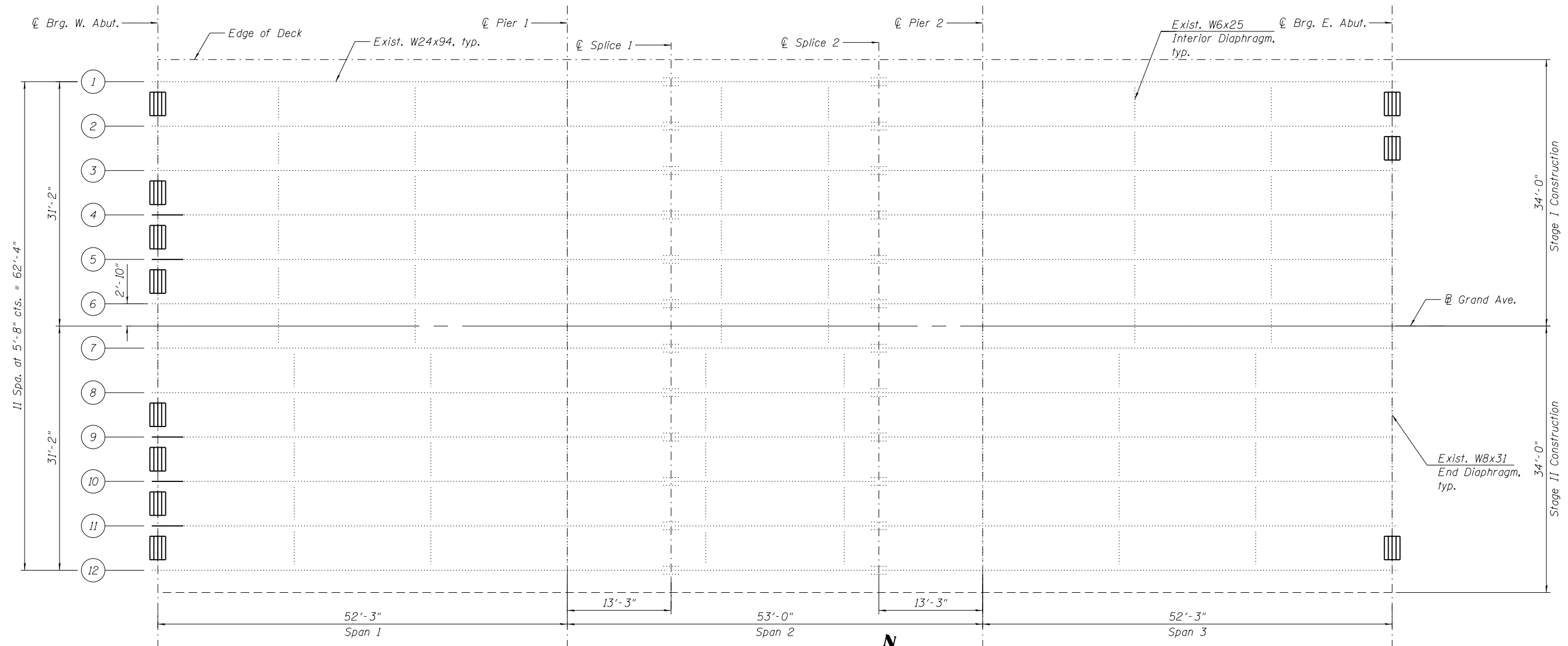
SHEET S1-14 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	44
CONTRACT NO. 60R67				

ILLINOIS FED. AID PROJECT

FILE PATH = P:\1710-746 IDOT District 1\NO 11 Grand Ave @ DepJames River\CADD\_Sheets\Structural\0160855-60R67-013-JointStripSeal3.dgn





**FRAMING PLAN**



**NOTES:**

1. All work is to be performed utilizing staged construction. See Sheets S1-03 and S1-04 for details.
2. For Beam End Repairs, Diaphragm Removal and Replacement Details, and Bill of Material, see Sheet S1-16.

**LEGEND:**

- Remove and Replace Existing Diaphragm
- Perform Beam End Plating

FILE PATH = P:\1710-746 IDOT District 1\NO 11 Grand Ave @ DepJames River\CADD\Sheets\Structural\0160855-60R67-014-FramingPlan.dgn



0160855-60R67-014-FramingPlan.dgn	DESIGNED - JJS, MAA	REVISED -
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PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

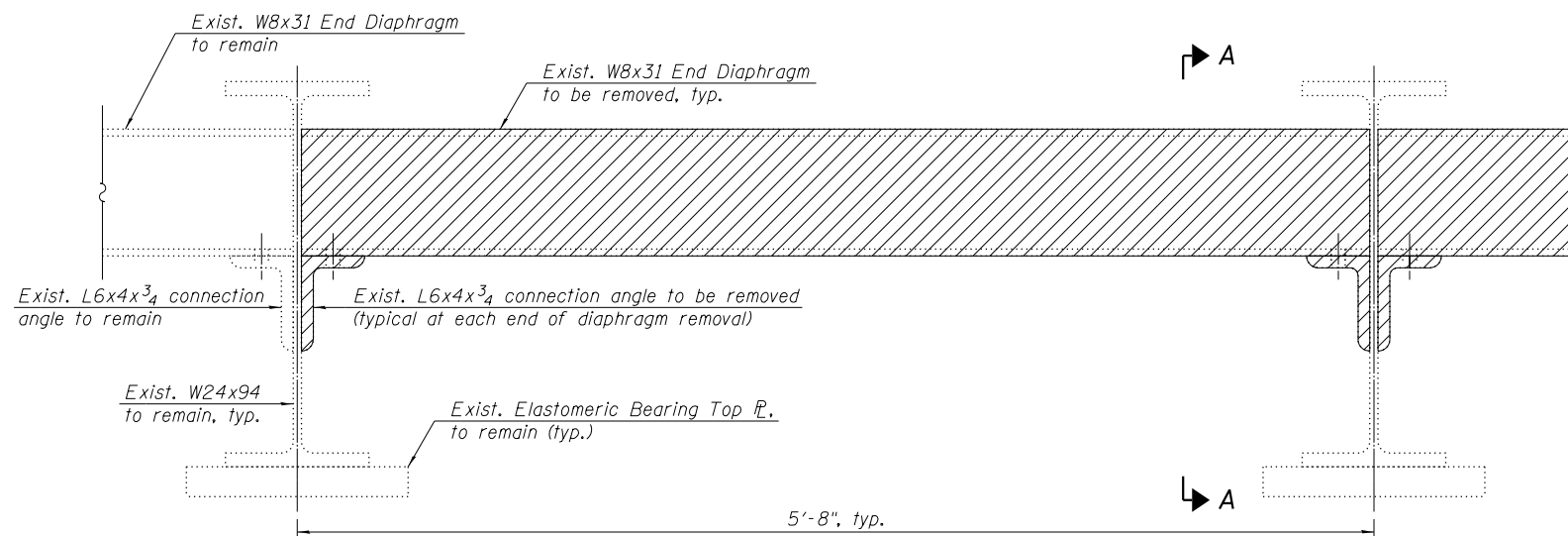
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN  
STRUCTURE NO. 016-0855**

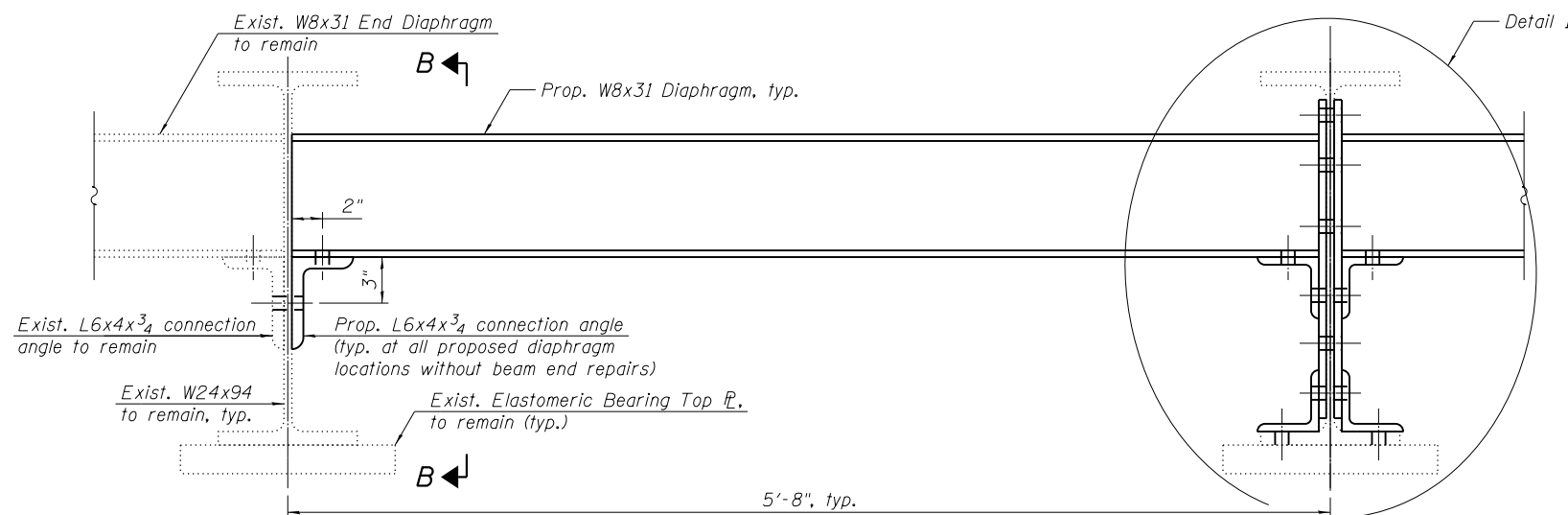
SHEET S1-15 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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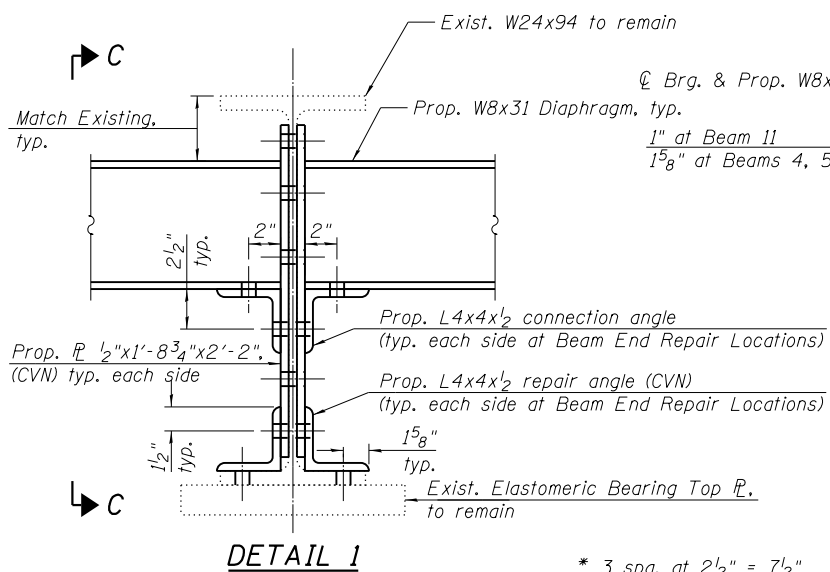
ILLINOIS FED. AID PROJECT



**EXISTING END DIAPHRAGM**

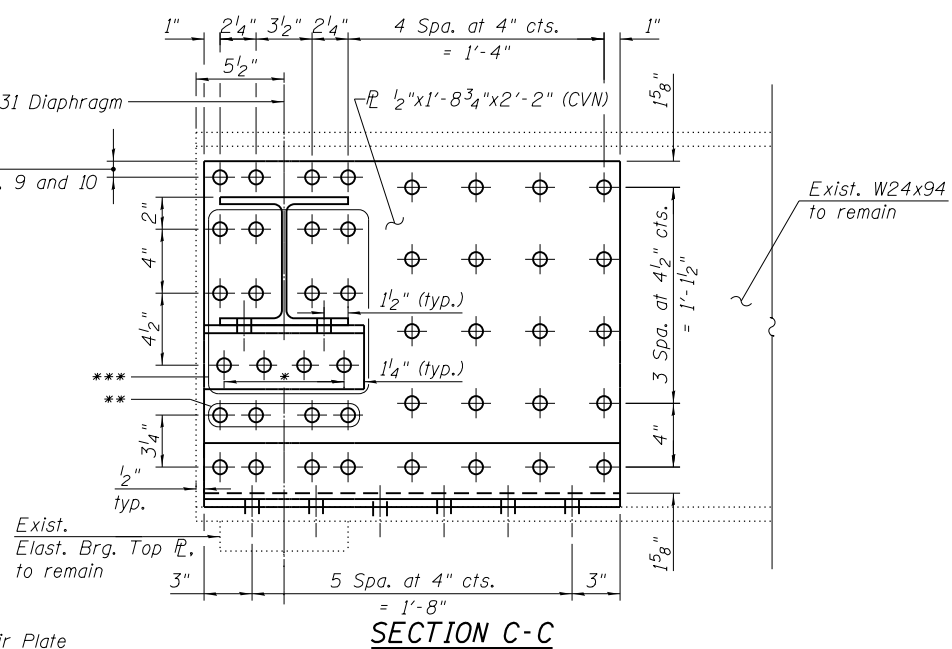


**PROPOSED END DIAPHRAGM**

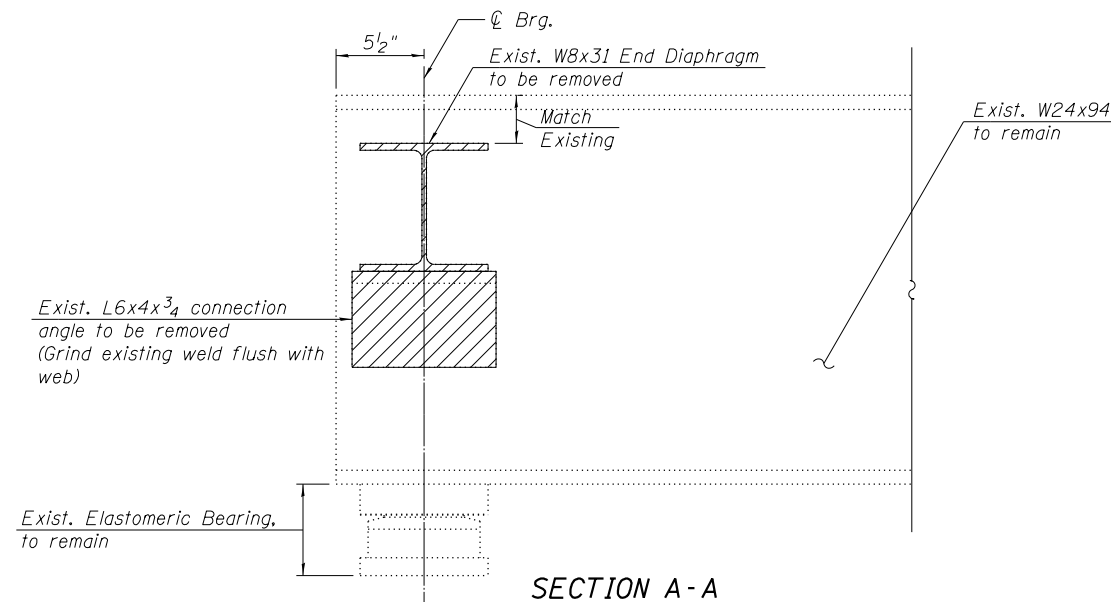


**DETAIL 1**

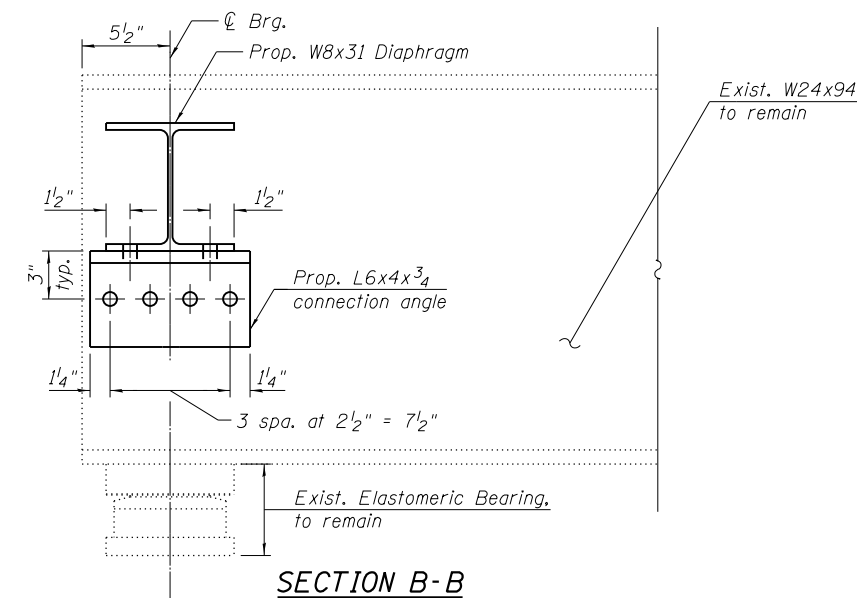
\* 3 spa. at 2 1/2" = 7 1/2"  
 \*\* At Beam 11 Only  
 \*\*\* Field Drill Holes in Repair Plate



**SECTION C-C**



**SECTION A-A**



**SECTION B-B**

**NOTES:**

- For locations of Diaphragm Removal/Replacement and Beam End Repairs, see Sheet S1-15.
- All proposed beam end repair plates and bottom flange repair angles shall conform to the requirements of AASHTO M270 Grade 50. All proposed diaphragms and their connection angles shall conform to the requirements of AASHTO M270 Grade 36.
- Diaphragm connection holes shall be 15/16" φ for 3/4" φ bolts. Two hardened washers shall be required at all diaphragm connections and all oversized holes.
- Existing diaphragm and clip angle removal shall be paid for as Structural Steel Removal.
- All proposed beam end repair plates, bottom flange repair angles, and associated bolts and fasteners shall be paid for as Structural Steel Repair. All proposed diaphragms, connection angles and associated bolts, plate washers and fasteners shall be paid for as Furnishing and Erecting Structural Steel.
- Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	2,470
Structural Steel Removal	Pound	2,460
Structural Steel Repair	Pound	1,310

**LEGEND:**

Structural Steel Removal

FILE PATH = P:\1710-746 1101 District 11001 District 11001 Grand Ave @ DepJames River\CADD\_Sheets\Structural\0160855-60867-015-SteelRepairs.dgn



0160855-60867-015-SteelRepairs.dgn  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

DESIGNED - JJS, MAA  
 DRAWN - MAA, JJS, EK  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

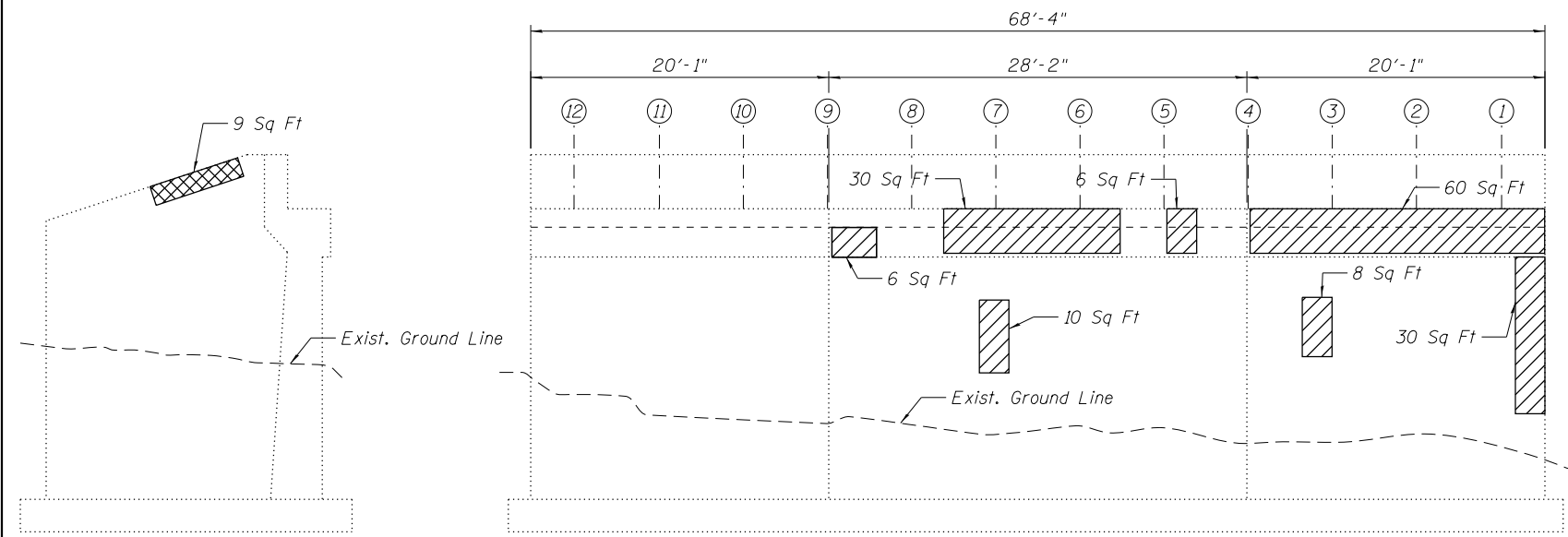
**STRUCTURAL STEEL REPAIRS  
 STRUCTURE NO. 016-0855**

SHEET S1-16 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	46
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

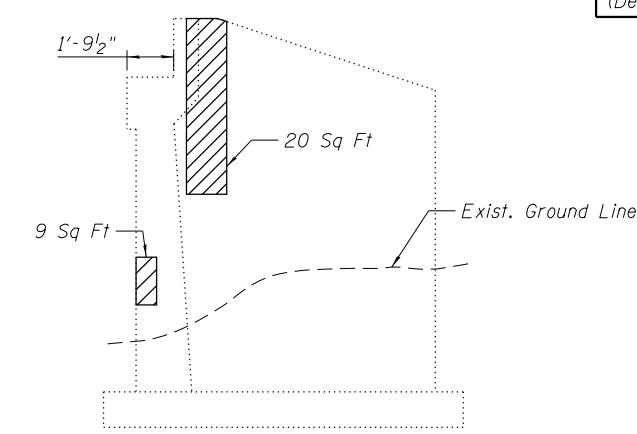
**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal To or Less Than 5 Inches)	Sq Ft	406
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft	39

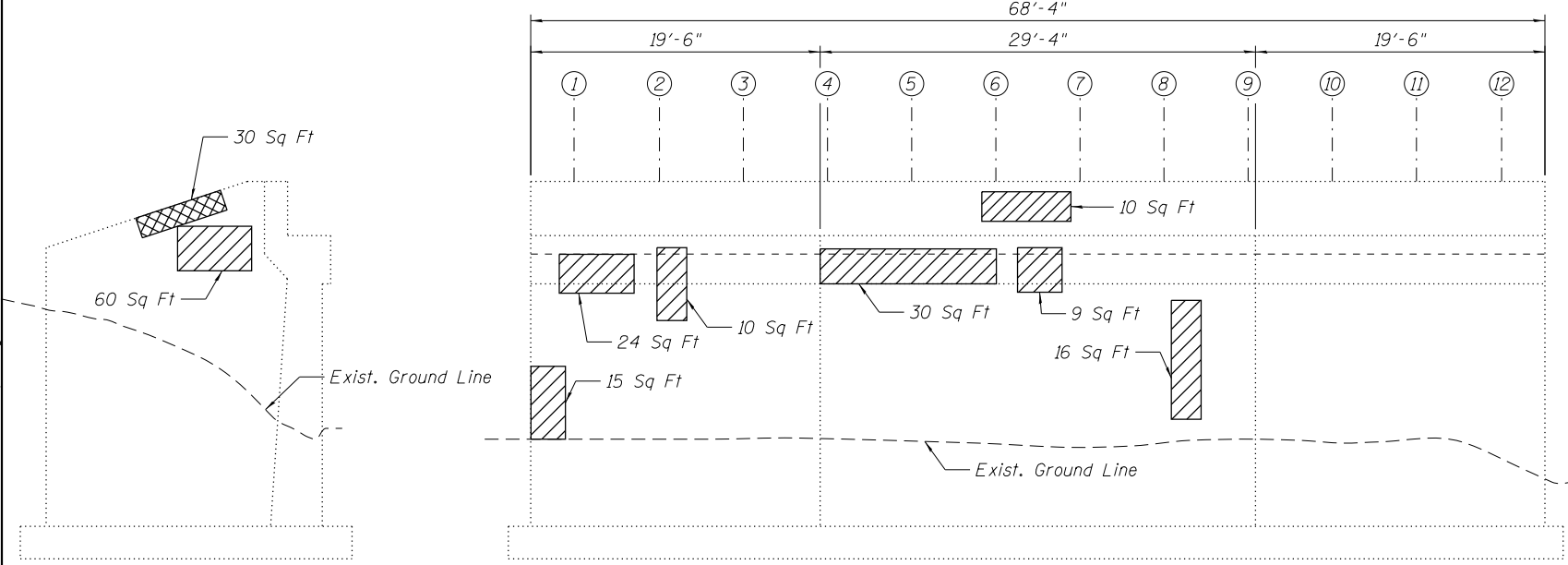


**ELEVATION - WEST ABUTMENT**  
(Looking West)

**SOUTH WINGWALL**  
(Looking North)

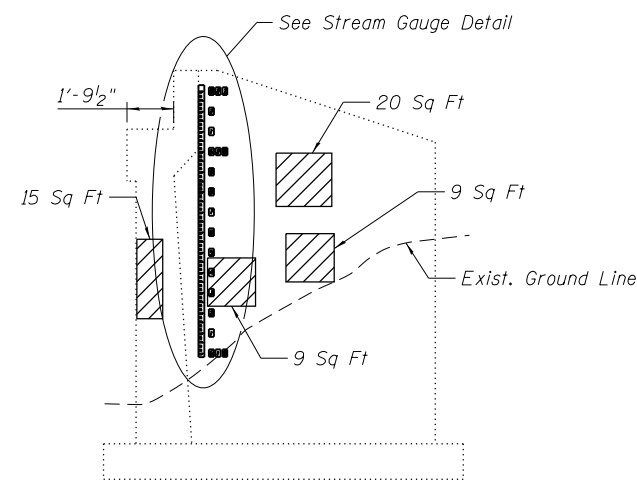


**NORTH WINGWALL**  
(Looking South)

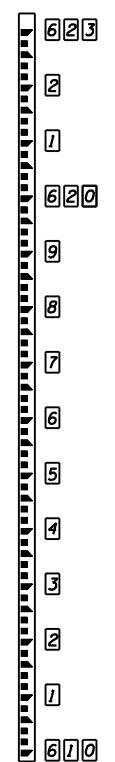


**ELEVATION - EAST ABUTMENT**  
(Looking East)

**NORTH WINGWALL**  
(Looking South)



**SOUTH WINGWALL**  
(Looking North)



**STREAM GAUGE DETAIL**

**STREAM GAUGE NOTES:**

All plates shall be fastened to the wingwall with 1/4"φx1 1/4"-long masonry screws with a hex washer head at every hole on every plate.

The Contractor must determine exact elevation of the Gauge Plates in the field, and install Gauge Plates within a tolerance of 1/4".

Gauge Plates shall be 3 1/2"-wide porcelain-enameled iron plates with black graduated markings in feet and tenths, unnumbered.

Number Plates shall be 2"x3" white porcelain-enameled iron plates with black numbers.

Gauge plates and Number plates shall be "WaterMark" Style "E" or approved equivalent.

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the example above.

**NOTE:**

1. Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.

**LEGEND:**

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- Structural Repair of Concrete (Depth Greater Than 5 Inches)

FILE PATH = P:\1710-746 IDOT District 1\NO 11 Grand Ave @ DepJames River\CADD\Sheets\Structural\016-AbutRepairs.dgn



0160855-60R67-016-AbutRepairs.dgn	DESIGNED - JJS, MAA	REVISED -
USER NAME = ken.drobant	DRAWN - MAA, JJS, EK	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

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

**WEST AND EAST ABUTMENT REPAIRS**  
**STRUCTURE NO. 016-0855**

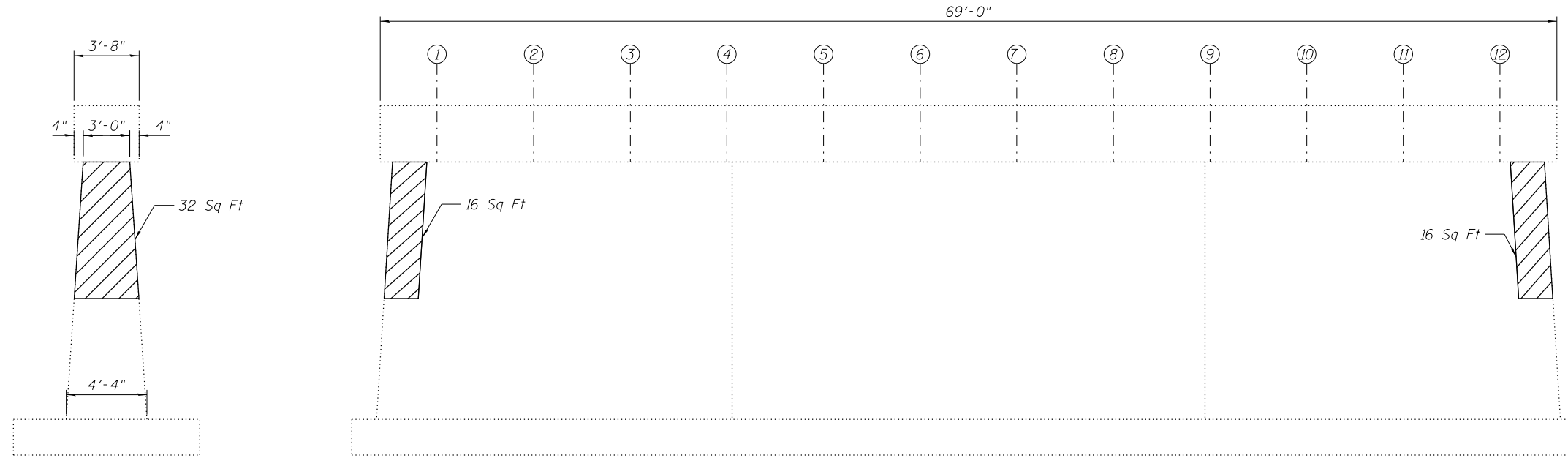
SHEET S1-17 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	47
CONTRACT NO. 60R67				

ILLINOIS FED. AID PROJECT

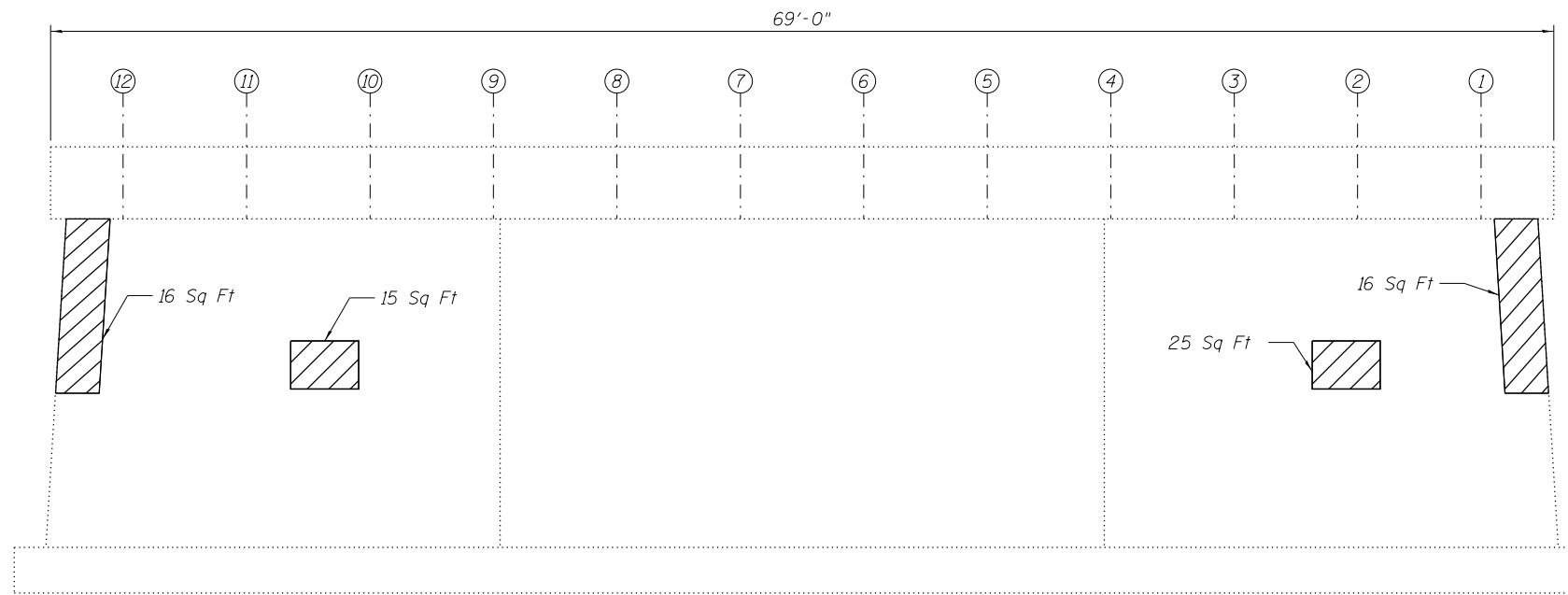
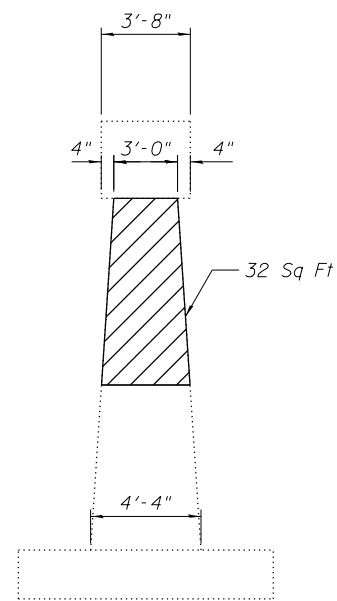
**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal To or Less Than 5 Inches)	Sq Ft	168



**PIER 2 - WEST ELEVATION**  
(Looking East)

**END VIEW**  
(Looking South)




**PIER 2 - EAST ELEVATION**  
(Looking West)

**END VIEW**  
(Looking North)

**NOTE:**

1. Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.

**LEGEND**

 Structural Repair of Concrete  
(Depth Equal to or Less Than 5 Inches)

FILE PATH = F:\1710-746 IDOT District 1\NO 11 Grand Ave @ DepJames River\CADD\_Sheets\Structural\0160855-60R67-018-Pier2repair.dgn



0160855-60R67-018-Pier2repair.dgn	DESIGNED - JJS, MAA	REVISED -
USER NAME = ken.drobant	DRAWN - MAA, JJS, EK	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

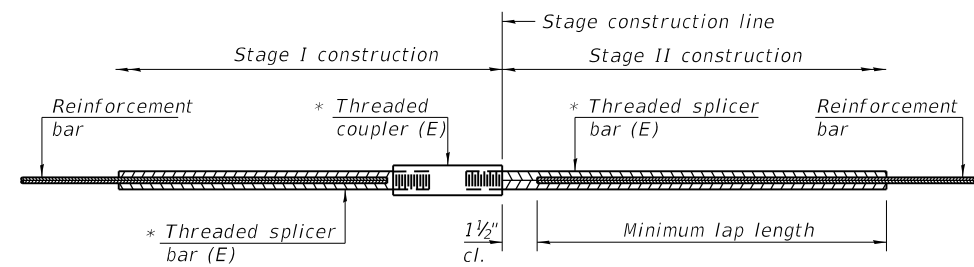
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PIER 2 REPAIRS**  
**STRUCTURE NO. 016-0855**

SHEET S1-18 OF S1-19 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	48
CONTRACT NO. 60R67				

ILLINOIS FED. AID PROJECT

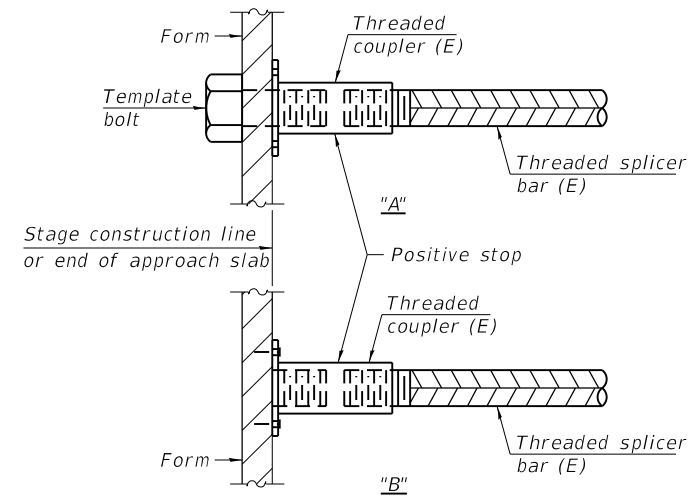


**STANDARD BAR SPLICER ASSEMBLY**

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

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

Location	Bar size	No. assemblies required	Minimum lap length
E. Abutment	#5	9	3'-6"
	#6	4	4'-0"
W. Abutment	#5	9	3'-6"
	#6	4	4'-0"

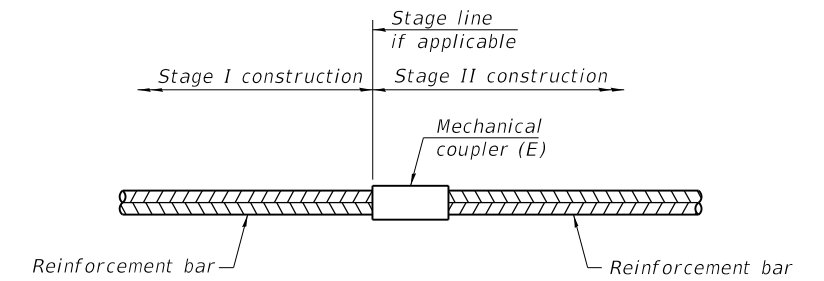


**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.

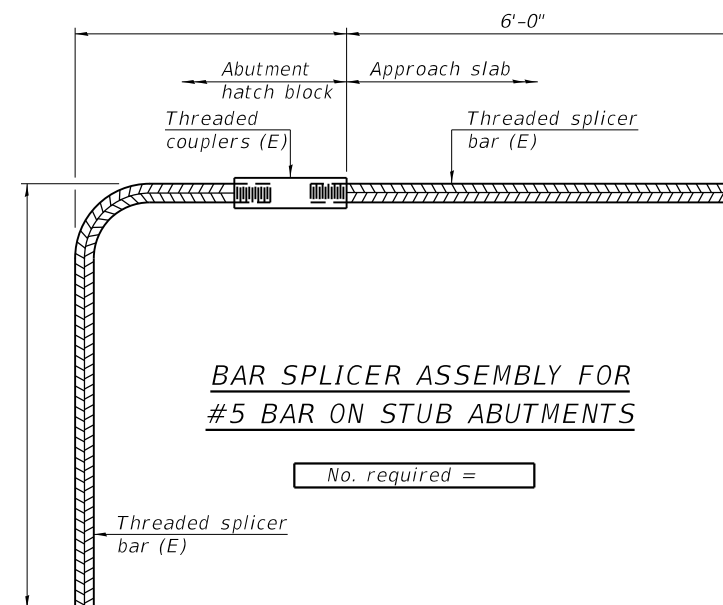
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



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

No. required =

**NOTES**

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

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

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

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

BSD-1 2-17-2017



0160855-60R67-020-BarSplicers.dgn	DESIGNED - JJS, MAA	REVISED -
USER NAME = ken.drobant	DRAWN - MAA, JJS, EK	REVISED -
PLOT SCALE =	CHECKED - MI, MAI	REVISED -
PLOT DATE = 8/13/2019	DATE - 08/09/2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 016-0855

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	49
CONTRACT NO. 60R67				

SHEET S1-19 OF S1-19 SHEETS

ILLINOIS FED. AID PROJECT

FILE PATH = P:\1710-746 IDOT District 1\NO II Grand Ave @ DepJames River\CADD Sheets\Structural\0160855-60R67-020-BarSplicers.dgn

**INDEX OF SHEETS:**

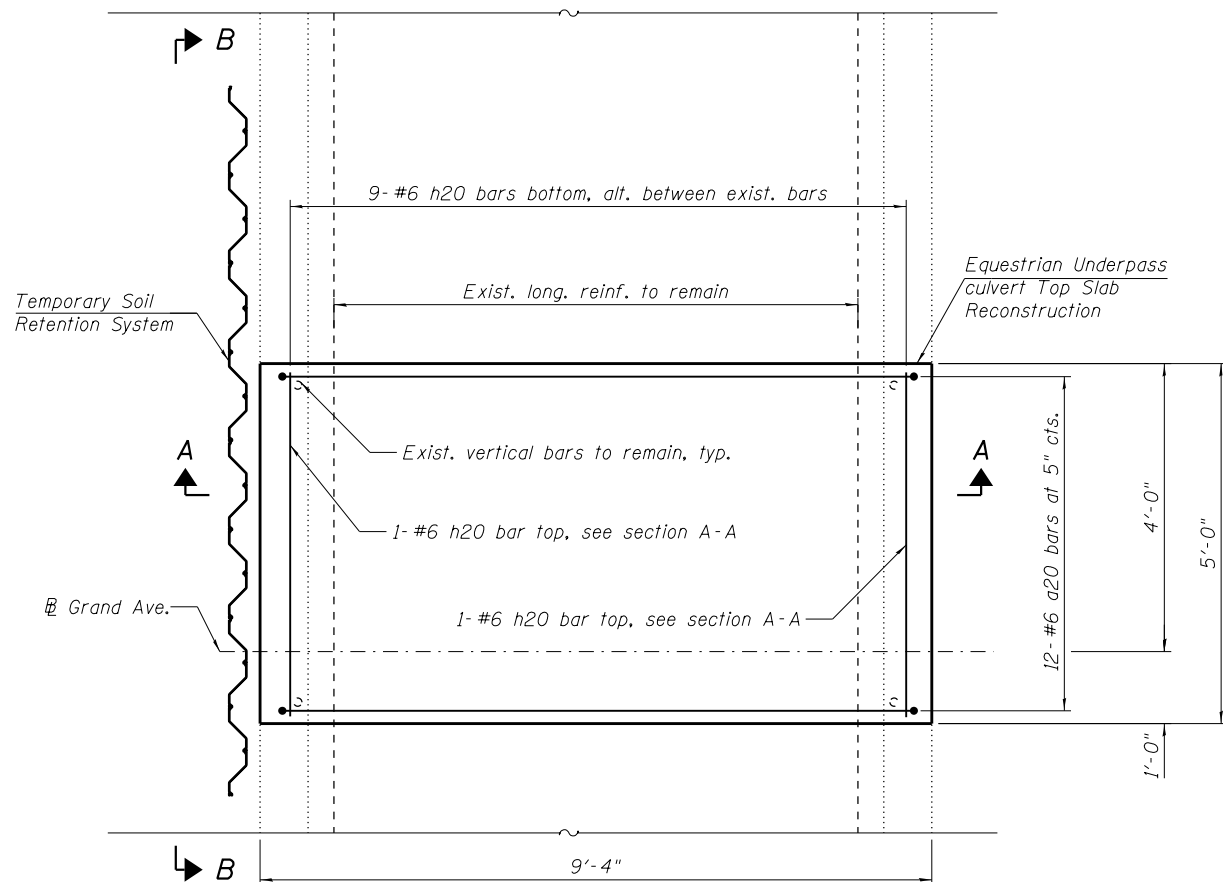
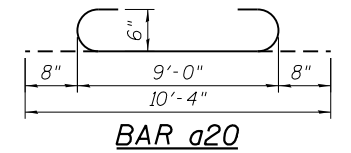
S2-01 Equestrian Underpass Culvert Repair

**TOTAL BILL OF MATERIAL**

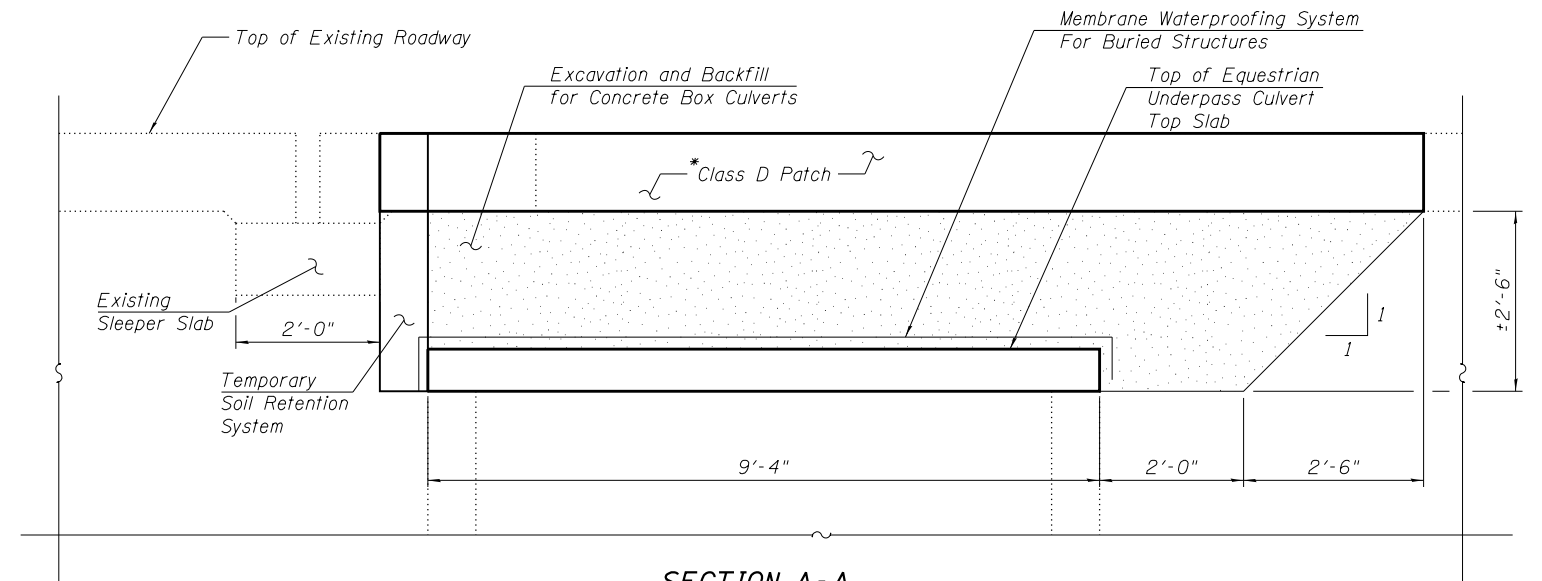
Bar	No.	Size	Length	Shape
a20	12	#6	10'-4"	
h20	11	#6	4'-8"	
Concrete Removal			Cu. Yd.	1.1
Reinforcement Bars			Pound	270
Temporary Soil Retention System			Sq. Ft.	33
Concrete Box Culverts			Cu. Yd.	1.1
Membrane Waterproofing System For Buried Structures			Sq. Yd.	6

**NOTES:**

- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field-verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- Cost of the temporary timber blockings is included in the cost of Concrete Removal.



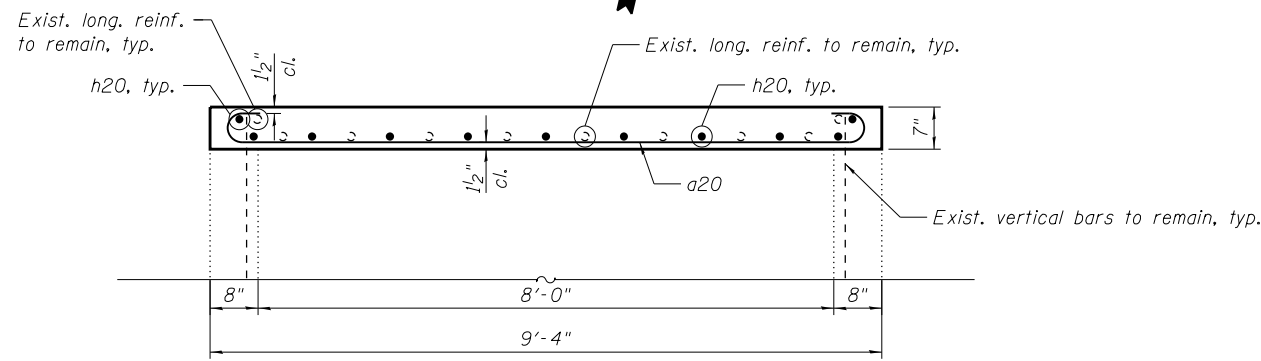
**PLAN**



**SECTION A-A**

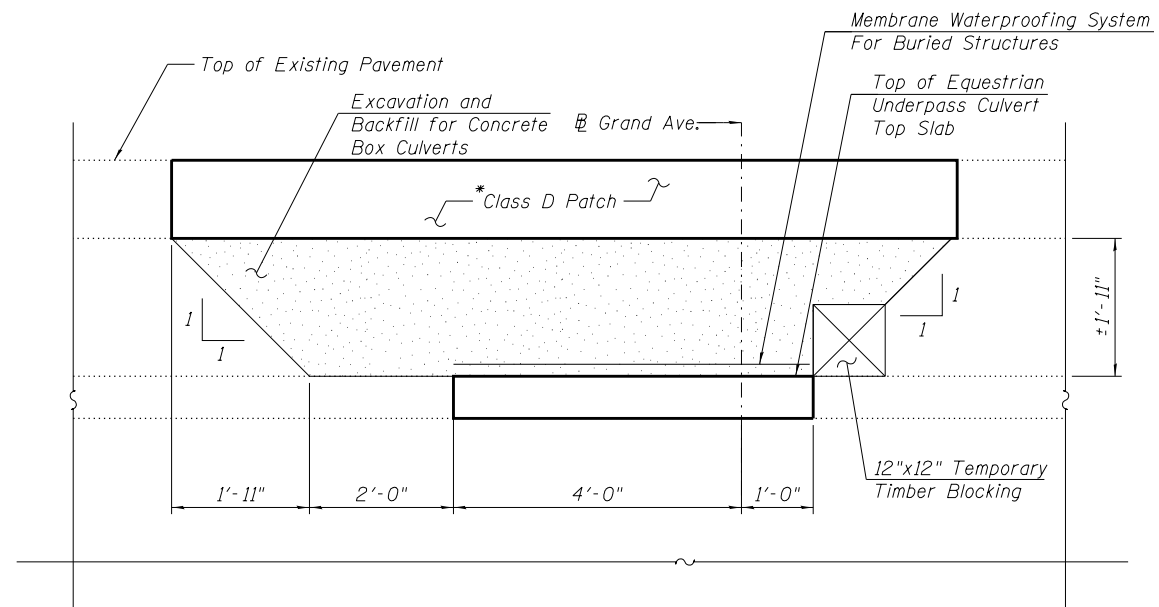
(Reinforcement not shown for clarity)

\*For details and quantities, see Civil Plans.



**SECTION A-A**

(Showing reinforcement)



**SECTION B-B**

(Reinforcement not shown for clarity)

**TEMPORARY SOIL RETENTION SYSTEM**

FILE PATH = P:\1710-746 IDOT District 1\NO 11 Grand Ave @ DepJames River\CADD\_Sheets\Structural\0160855-6067-019-CulvertRepair.dgn



0160855-6067-019-CulvertRepair.dgn  
 USER NAME = ken.drobant  
 PLOT SCALE =  
 PLOT DATE = 8/13/2019

DESIGNED - LAB, MI  
 DRAWN - LAB  
 CHECKED - MI, MAI  
 DATE - 08/09/2019

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EQUESTRIAN UNDERPASS CULVERT REPAIR

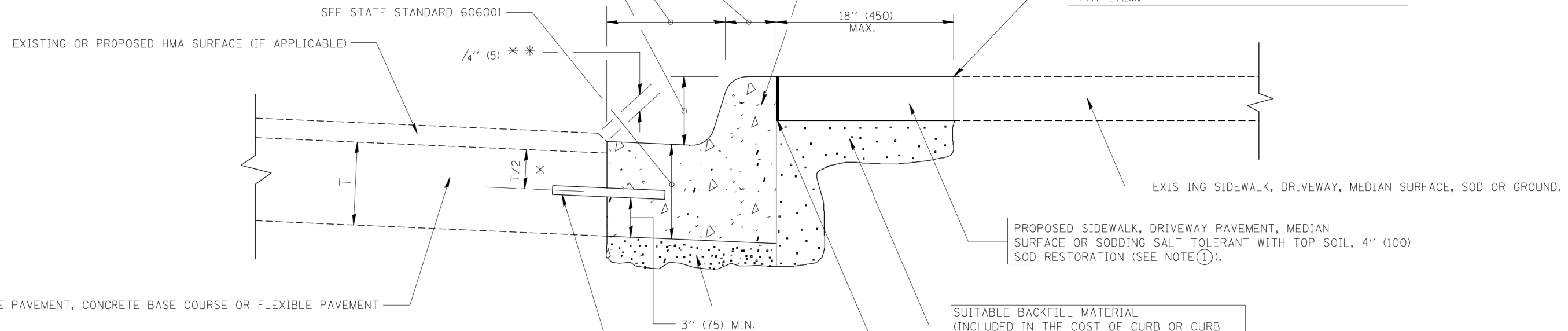
SHEET S2-01 OF S2-01 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	50
CONTRACT NO. 60R67				
ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.



PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**  
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

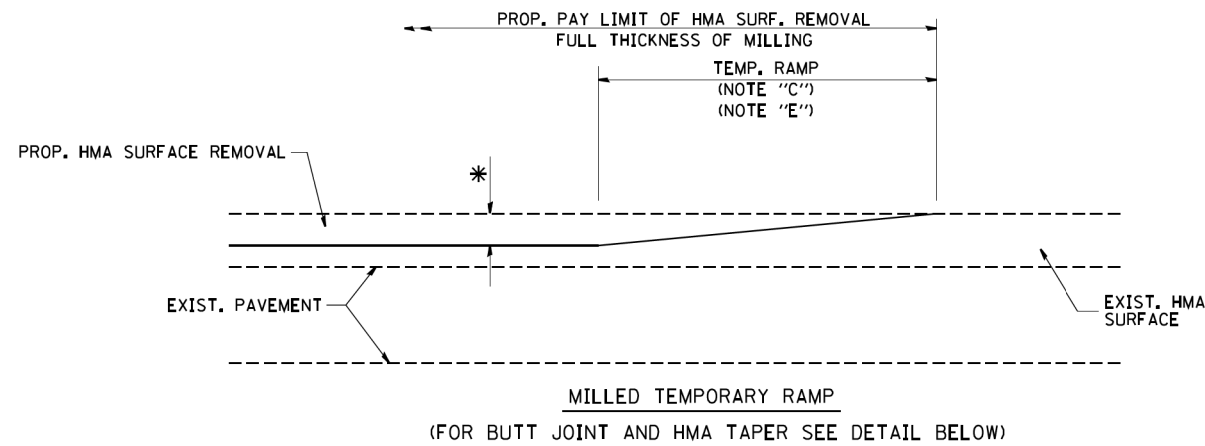
- \* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.  
SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.
- ② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED
- ③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

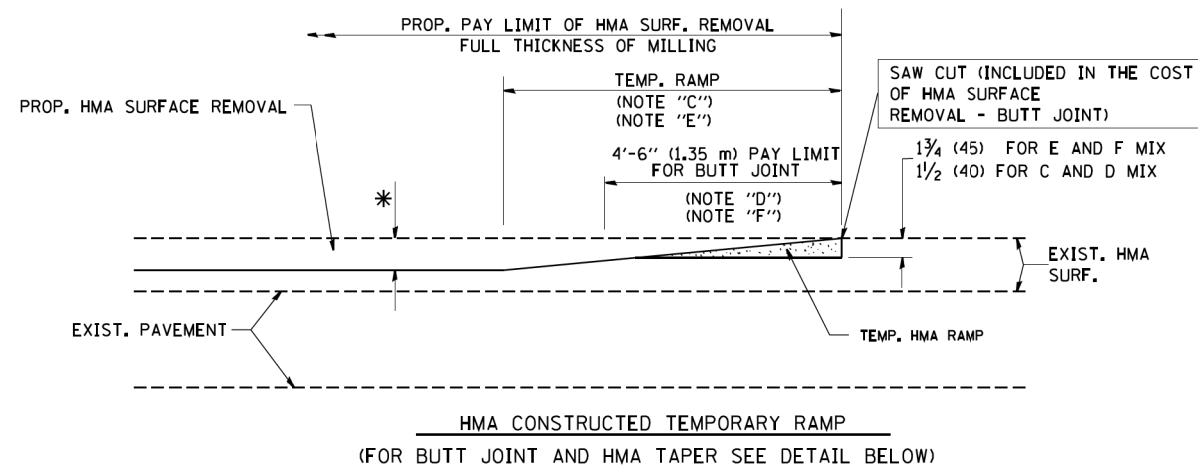
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = drivkasgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\p\work\p\dot\drivkasgn\d0108315\bc24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97			1376	136A-BR(11)	COOK	59	51	
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01			<b>BD600-06 (BD-24)</b>		CONTRACT NO. 60R67			
	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT



MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

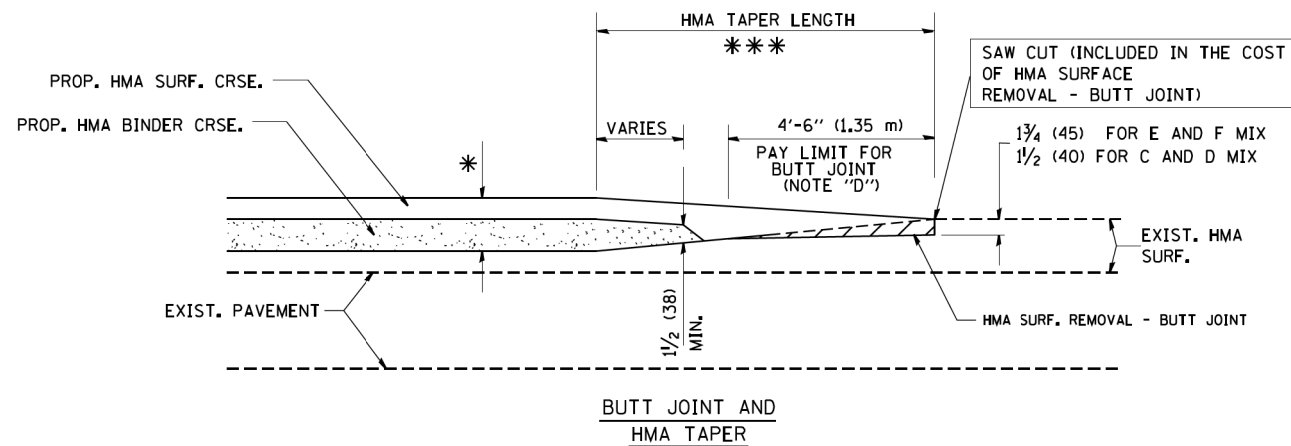
**OPTION 1**



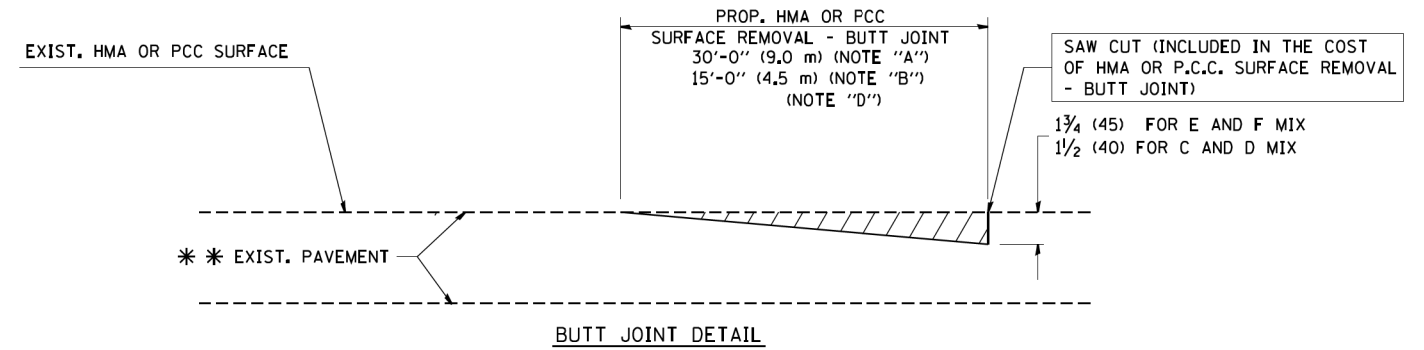
HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

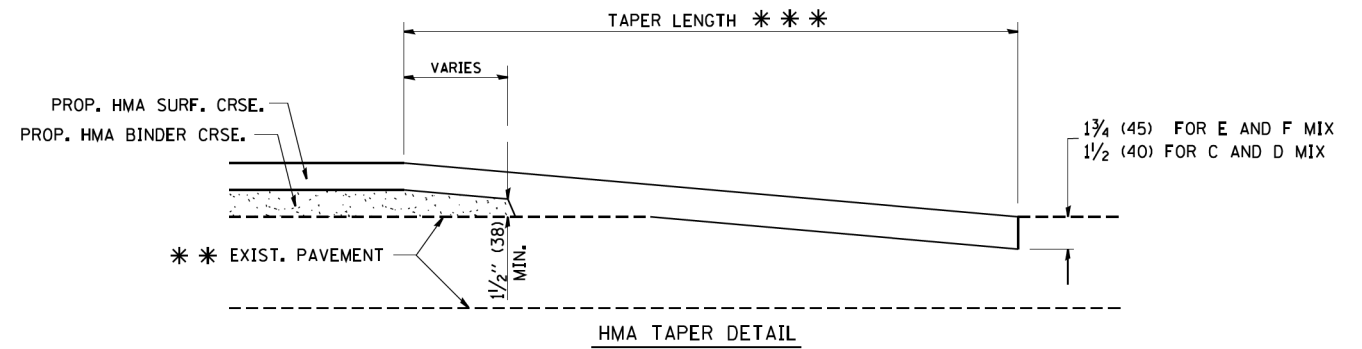
**TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**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:\distata\22x34\bd32.dgn

USER NAME = gegl1enobt  
PLOT SCALE = 50.0000' / IN.  
PLOT DATE = 1/4/2008

DESIGNED - M. DE YONG  
DRAWN -  
CHECKED -  
DATE - 06-13-90

REVISED - R. SHAH 10-25-94  
REVISED - A. ABBAS 03-21-97  
REVISED - M. GOMEZ 04-06-01  
REVISED - R. BORO 01-01-07

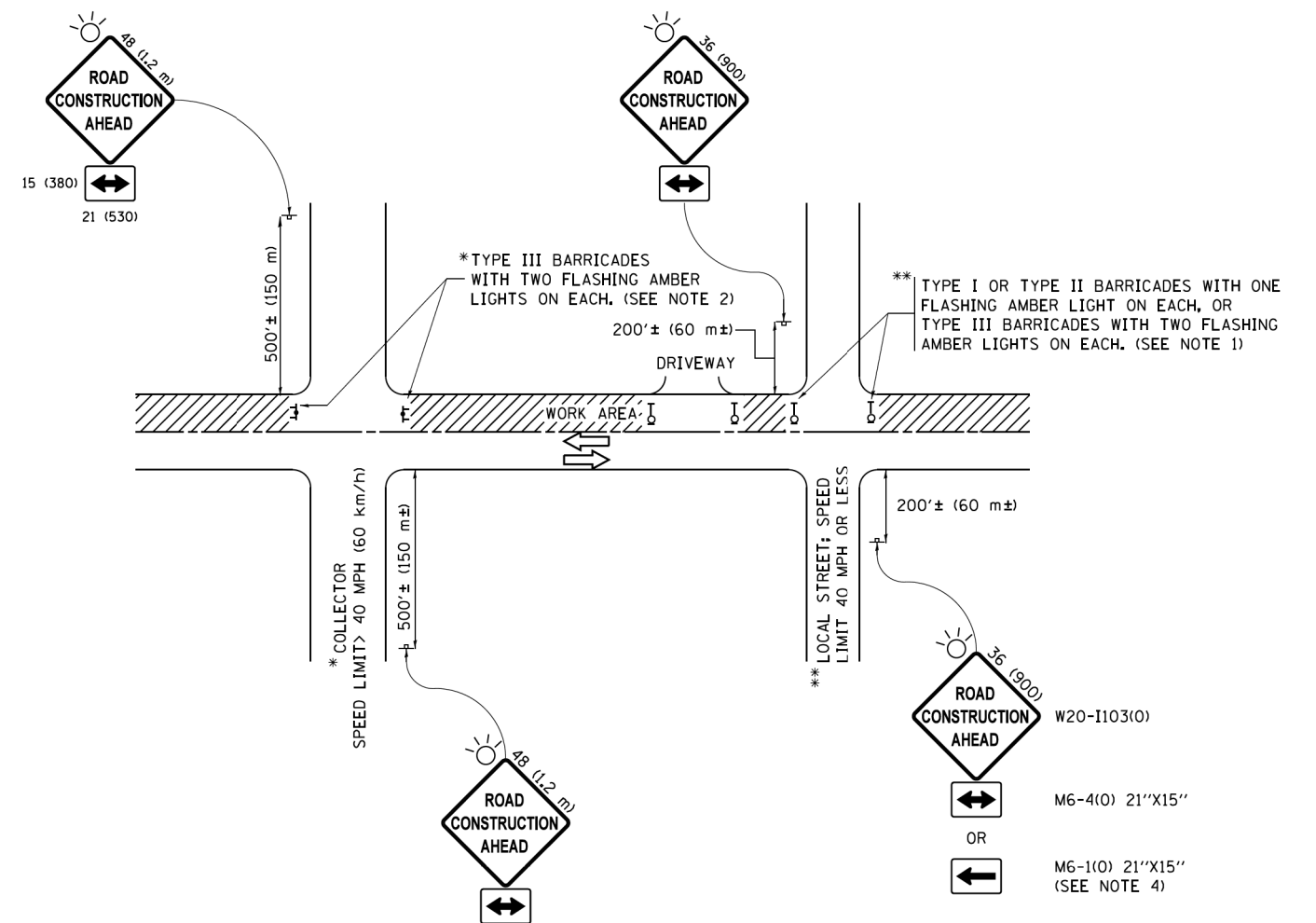
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	52
<b>BD400-05 BD32</b>		<b>CONTRACT NO. 60R67</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				





**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

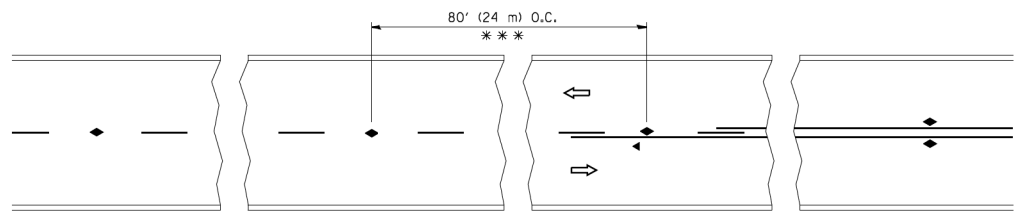
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Default	PLOT SCALE = 50,000' / 1" =	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

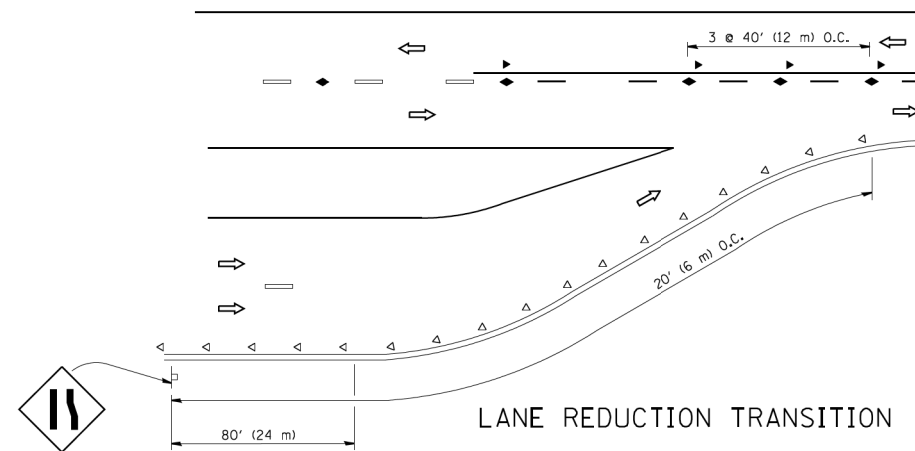
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>TC-10</b>			<b>CONTRACT NO. 60R67</b>	
ILLINOIS FED. AID PROJECT				

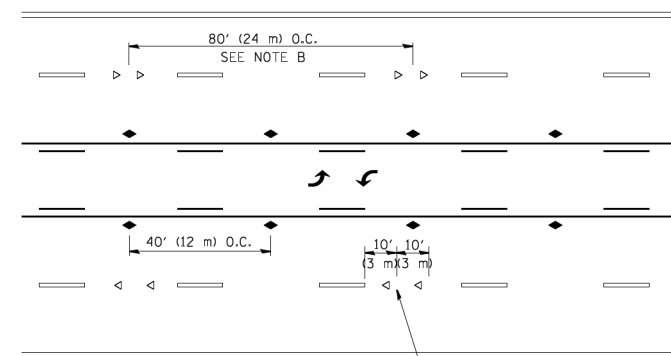


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

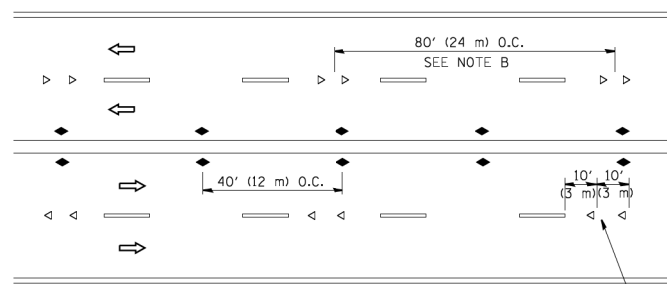
TWO-LANE/TWO-WAY



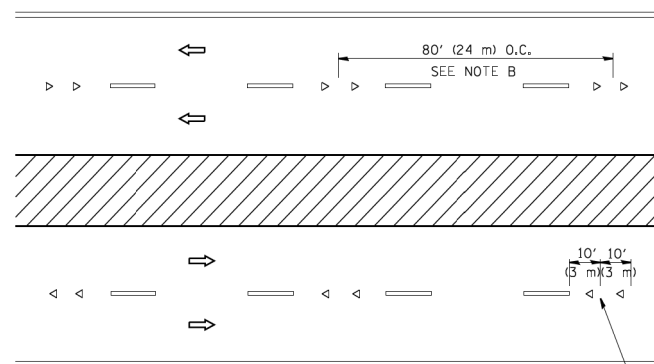
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

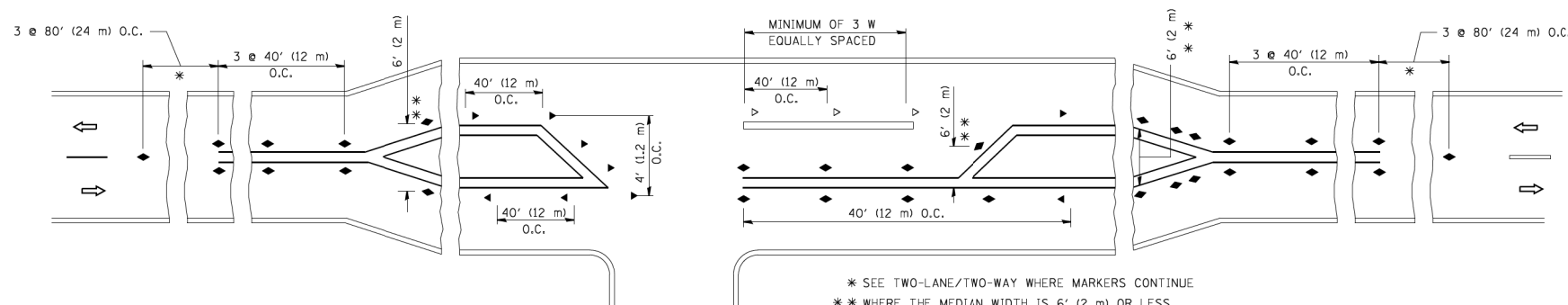
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



\* 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.

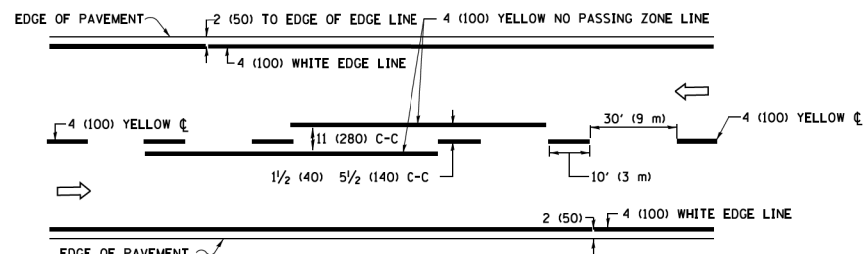
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

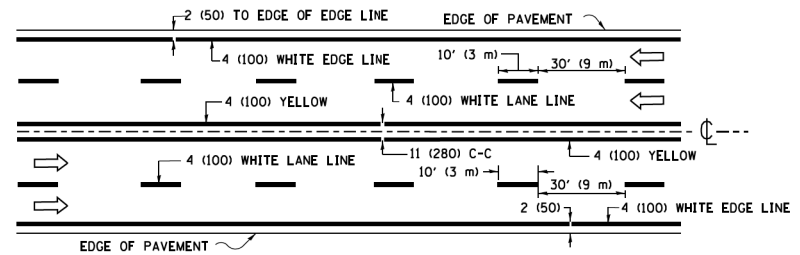
TYPICAL APPLICATIONS  
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

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

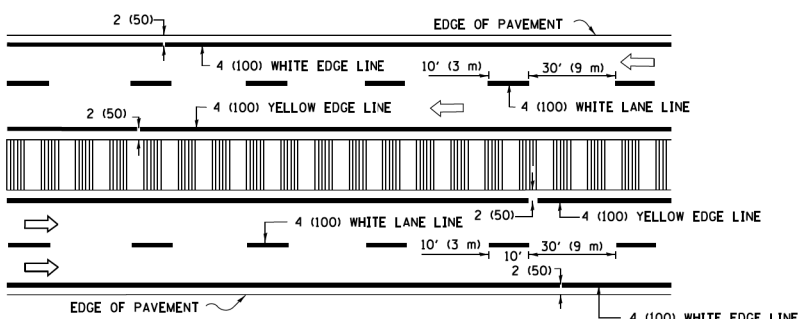
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	54
TC-11		CONTRACT NO. 60R67		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

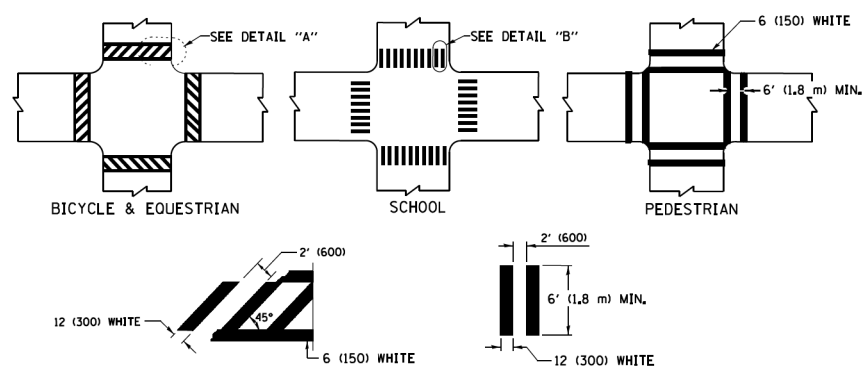


**MULTI-LANE UNDIVIDED**



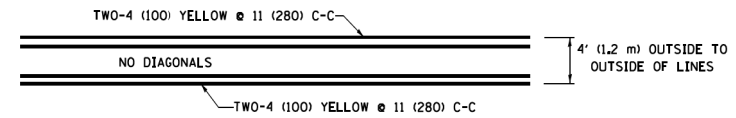
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

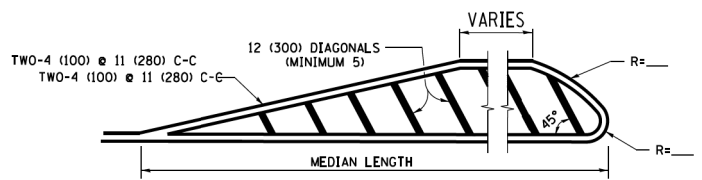


**TYPICAL CROSSWALK MARKING**

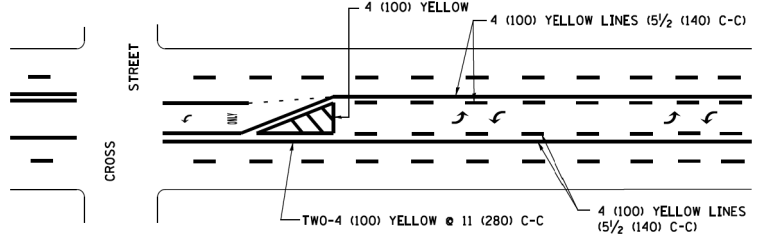
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



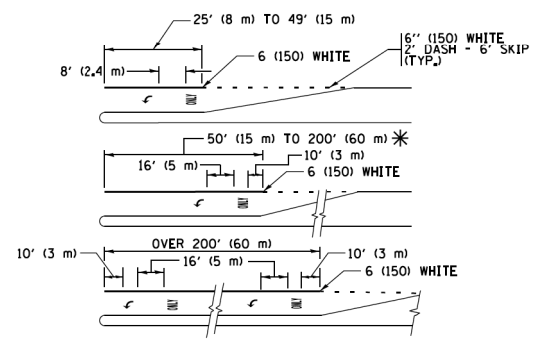
**4' (1.2 m) WIDE MEDIANS ONLY**



**MEDIANS OVER 4' (1.2 m) WIDE**



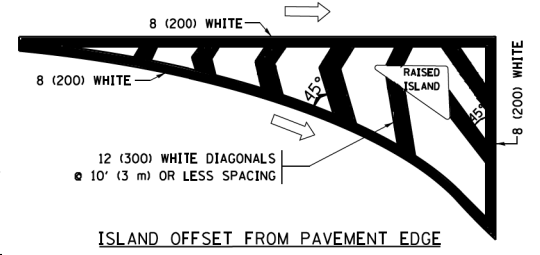
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**



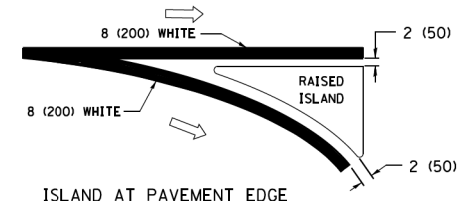
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)

\* 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**

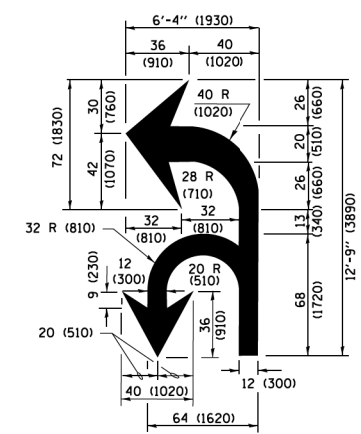


**ISLAND OFFSET FROM PAVEMENT EDGE**

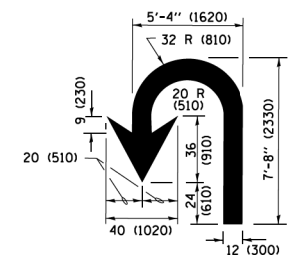


**ISLAND AT PAVEMENT EDGE**

**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.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 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 (30 MPH (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) LETTERS; 16 (400) LINE FOR "X"
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.

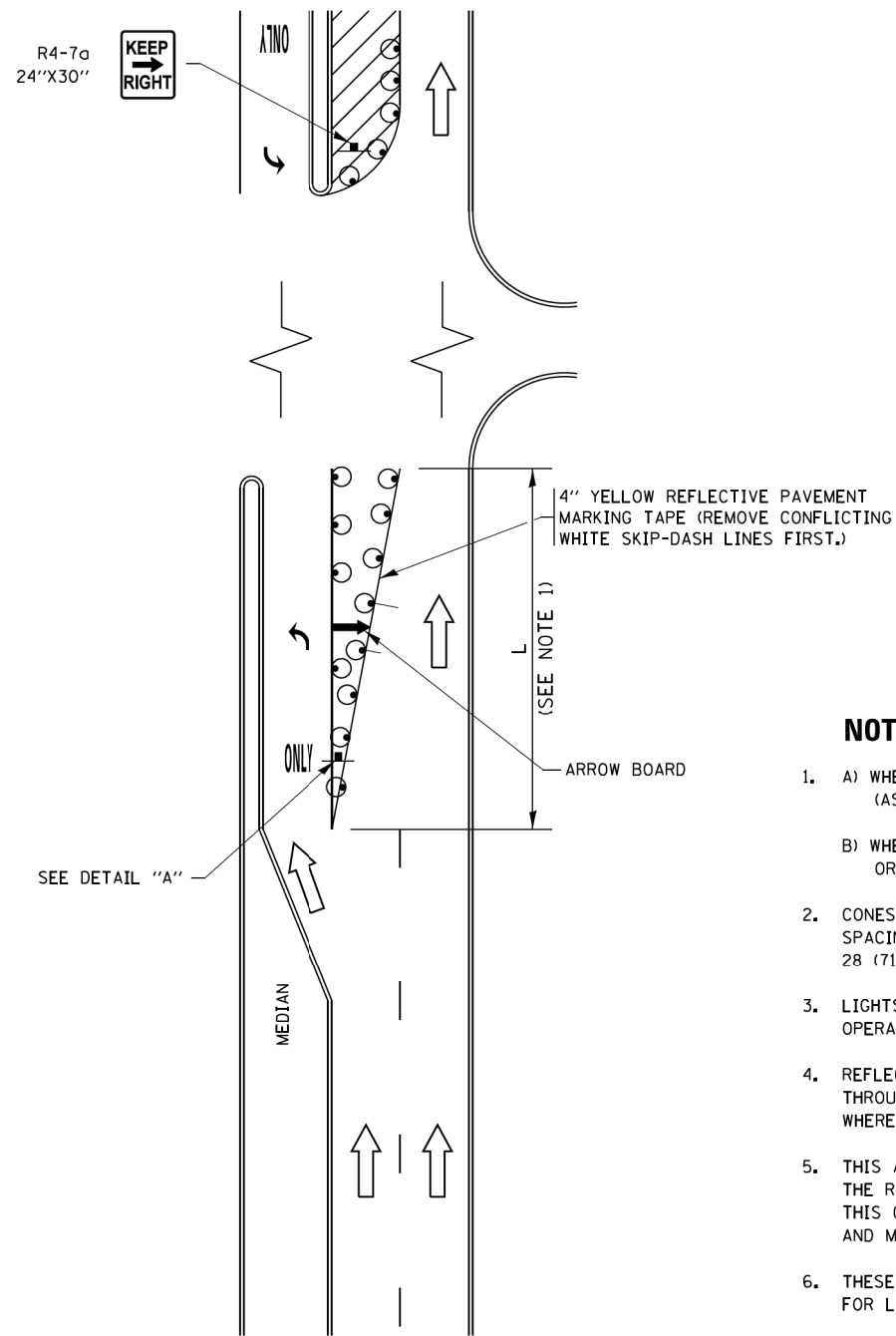
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	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

<b>DISTRICT ONE</b>			
<b>TYPICAL PAVEMENT MARKINGS</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

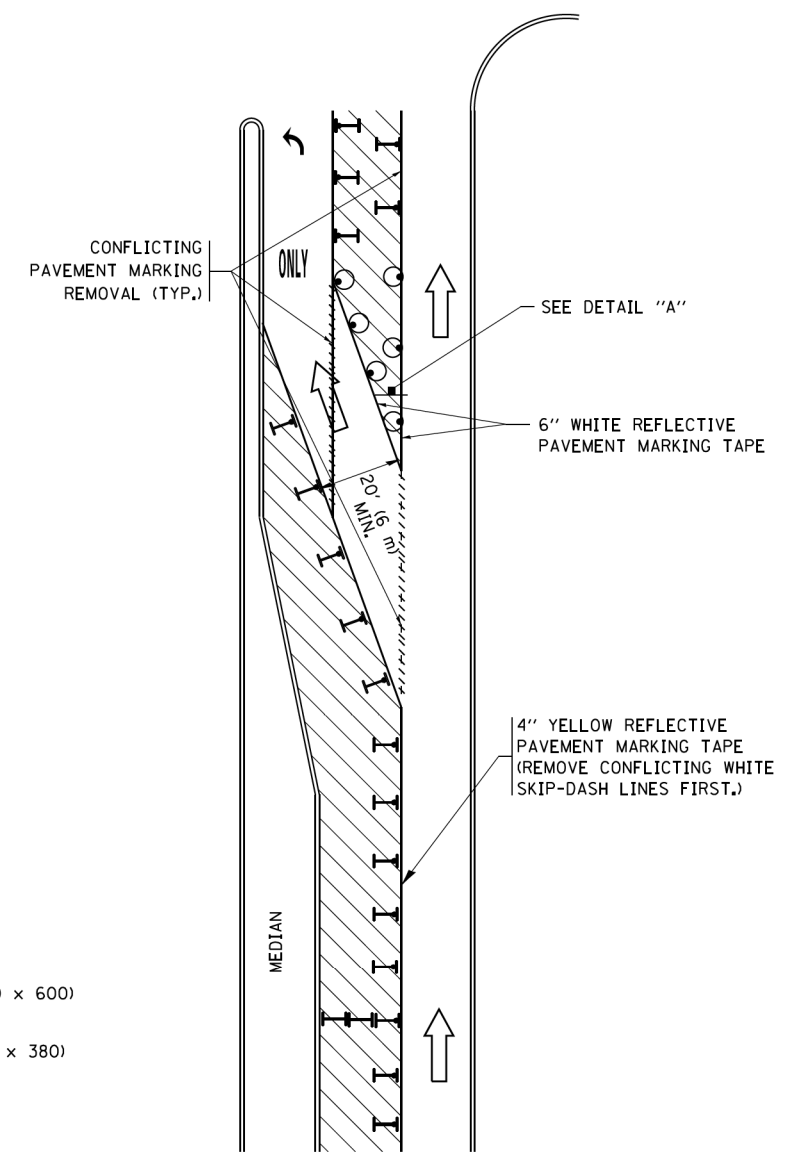
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	55
<b>TC-13</b>		<b>CONTRACT NO. 60R67</b>		
ILLINOIS FED. AID PROJECT				

# TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



**FIGURE 1**

# TURN BAY ENTRANCE WITHIN A LANE CLOSURE



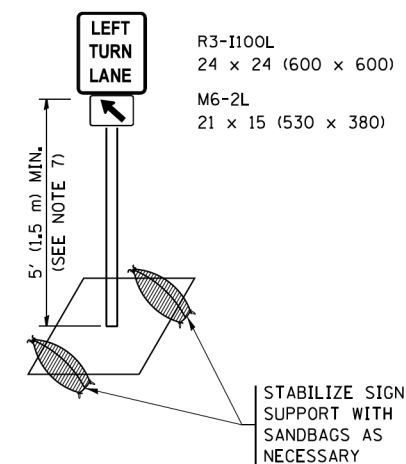
**FIGURE 2**

### LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- ARROW BOARD
- TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- DRUM WITH STEADY BURN LIGHT
- SIGN ASSEMBLY
- TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

### NOTES:

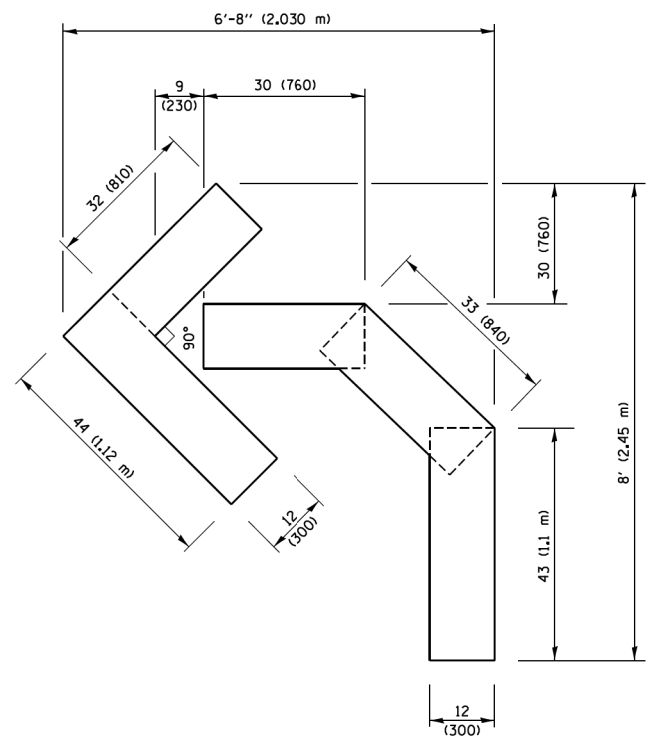
1. A) WHEN "L" IS  $\leq$  THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.  
B) WHEN "L" IS  $>$  THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



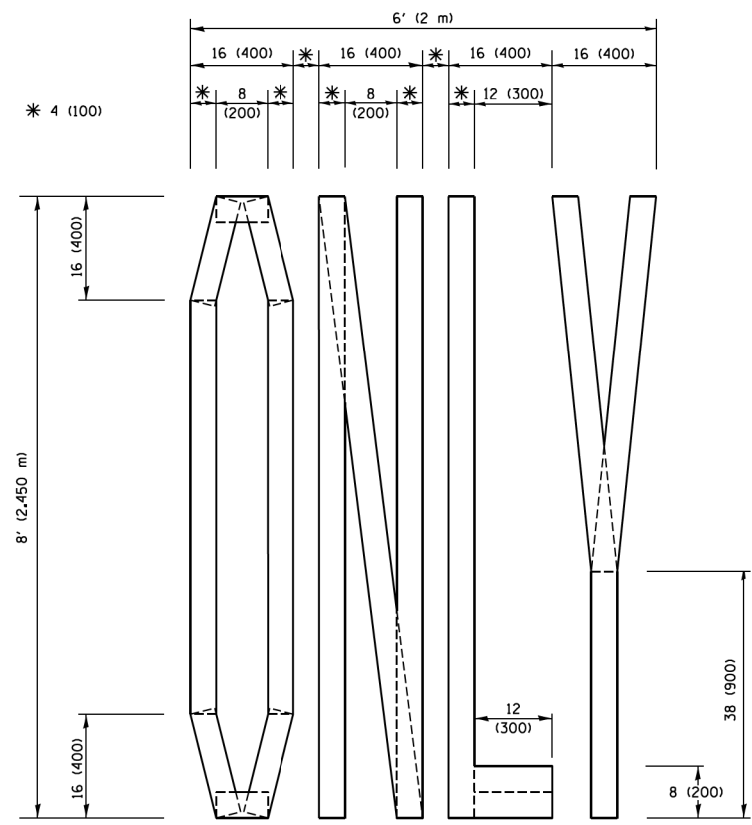
**DETAIL A**

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

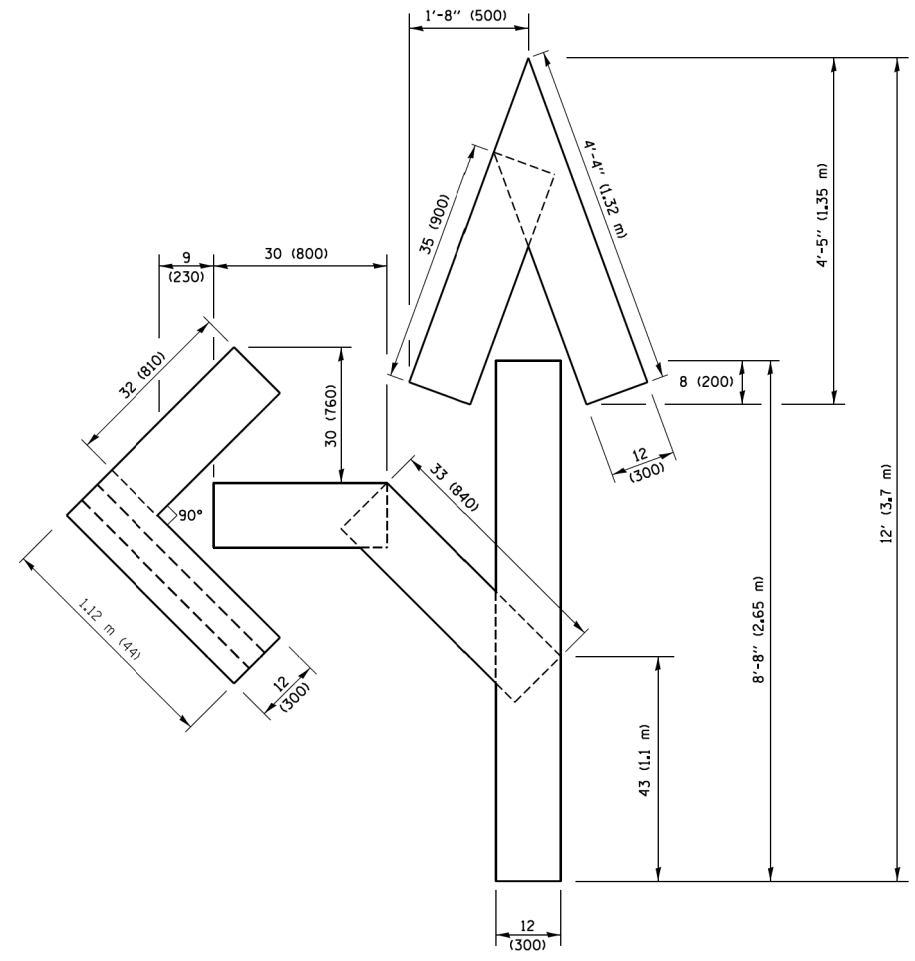
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Default	Default	REVISED - A. HOUSEH 10-07-95	REVISED - A. SCHUETZE 07-01-13					1376	136A-BR(11)	COOK	59	56
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	PLOT DATE = 9/15/2016	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



**QUANTITY**  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.41 sq. m)

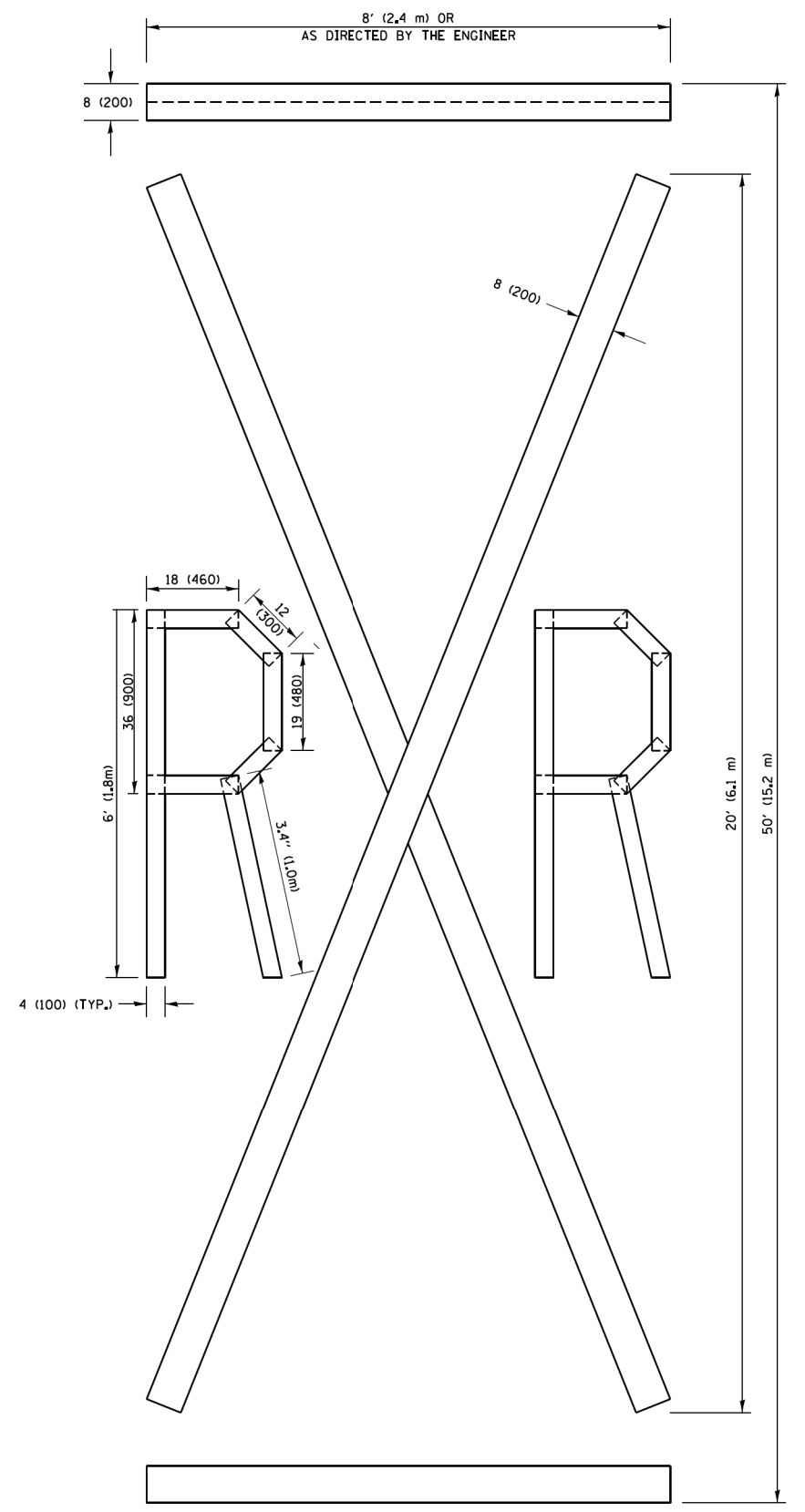


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



**QUANTITY**  
 4 (100) LINE = 82.5 ft. (25.1 m)  
 27.5 sq. ft. (2.53 sq. m)

**NOTE:**  
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



**QUANTITY**  
 4 (100) LINE = 225.9 ft. (68.9 m)  
 75.3 sq. ft. (6.99 sq. m)

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


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PLOT DATE = 9/15/2016		DATE -	REVISED -A. SCHUETZE 09-15-16


**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**


<b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	57
<b>TC-16</b>		<b>CONTRACT NO. 60R67</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**ROUTE MARKERS**

 FOR U.S. ROUTES  
M1-40-2424

 FOR ILLINOIS ROUTES  
M1-50-2424

 R.R. UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

 M5-1L-2115

 M5-1R-2115

 M6-1-2115

 M6-1-2115


 M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

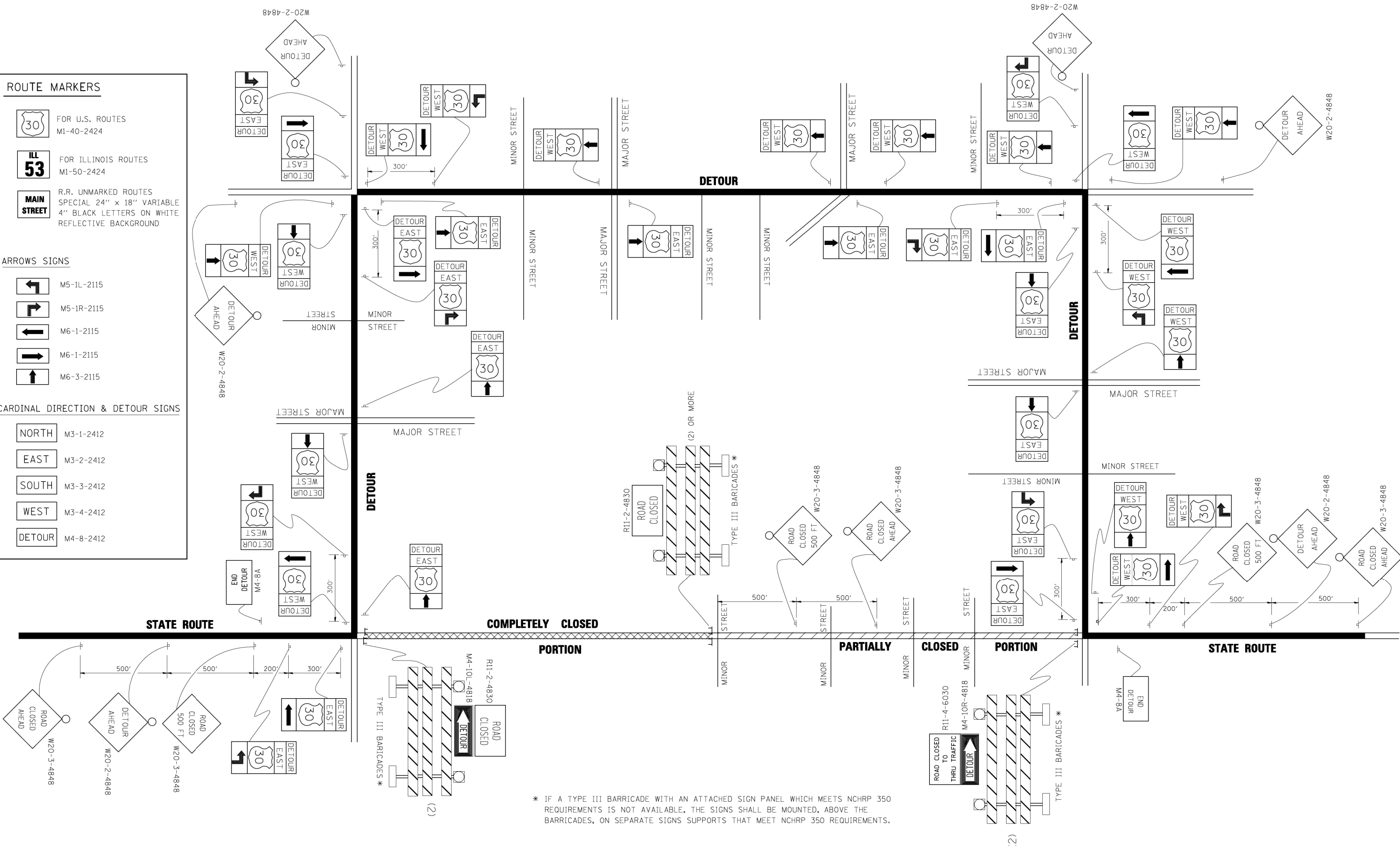
 NORTH M3-1-2412

 EAST M3-2-2412

 SOUTH M3-3-2412

 WEST M3-4-2412

 DETOUR M4-8-2412



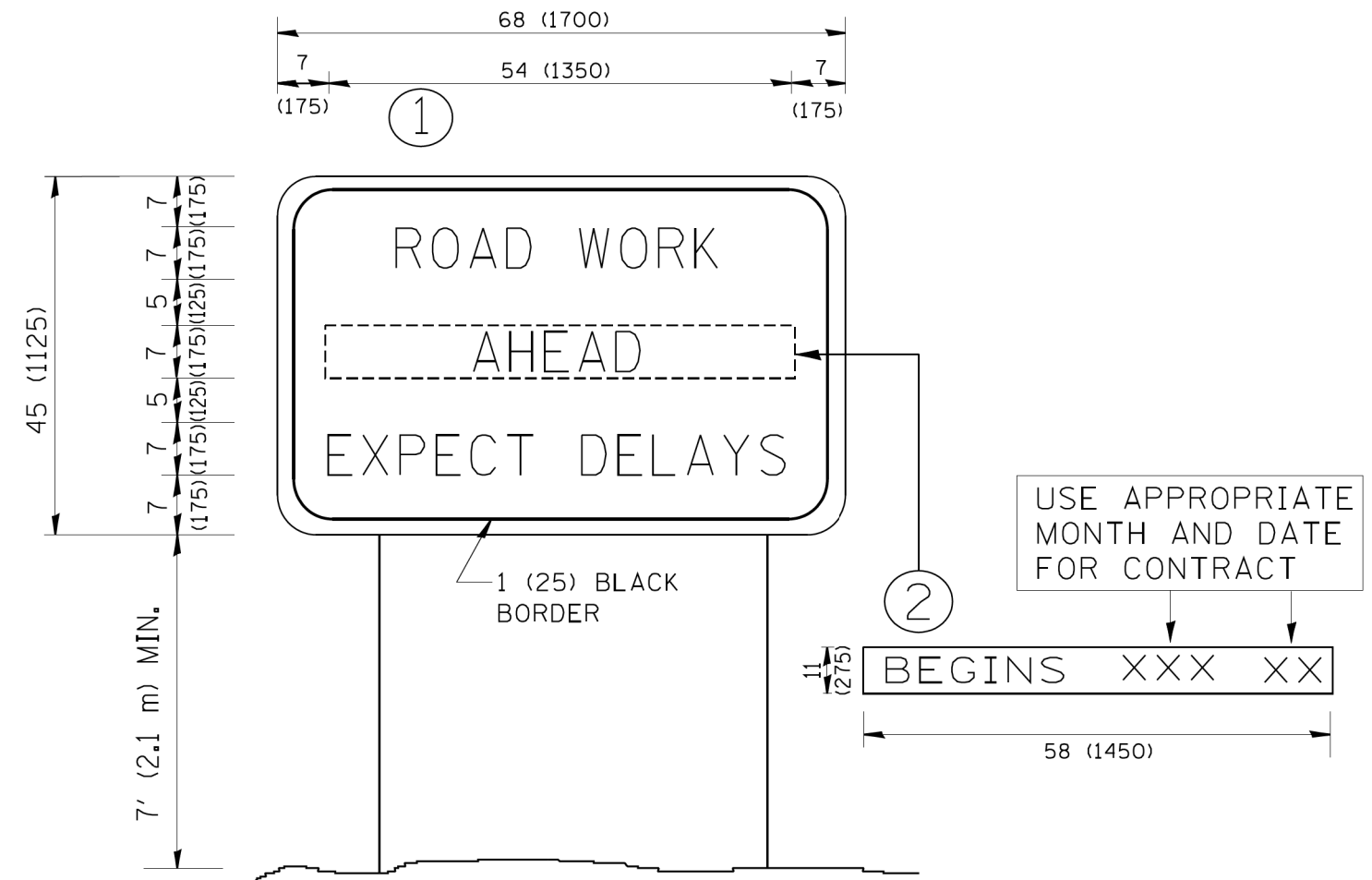
\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

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	PLOT SCALE = 49.9999' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/14/2009	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	58
TC-21		CONTRACT NO. 60R67		
FED. ROAD DIST. NO. 1 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 = gegl1enobt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1376	136A-BR(11)	COOK	59	59
TC-22		CONTRACT NO. 60R67		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				